THIS COPY IS FOR INFORMATION ONLY. YOU MUST PURCHASE THE PROPOSAL IN ORDER TO SUBMIT A BID

HEADSTONE RAISE/REALIGN/ CLEANING & SURFACE RESTORATION

FAI – DE 10-20 Re-Bid

DELAWARE VETERANS
MEMORIAL CEMETERY
2465 CHESAPEAKE CITY ROAD
BEAR, DELAWARE

OWNER

DELAWARE COMMISSION OF VETERANS AFFAIRS 802 SILVER LAKE BLVD DOVER, DELAWARE

ARCHITECTS

DELAWARE ARCHITECTS, LLC 550 SOUTH DUPONT BOULEVARD SUITE E MILFORD, DELAWARE 302-491-6047

TABLE OF CONTENTS

PROJECT MANUAL

- A. 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.
- B. DOCUMENTS BOUND HEREWITH

DIVISION 0 - BIDDING AND CONTRACT REQUIREMENTS

ADVERTISEMENT FOR BIDS

INSTRUCTIONS TO BIDDERS

BID FORM

BID BOND

011000

PERFORMANCE BOND

PAYMENT BOND

AGREEMENT BETWEEN OWNER AND CONTRACTOR (AIA A101)

APPLICATION OF PAYMENT (SAMPLE AIA G702 & G703)

GENERAL CONDITIONS TO THE CONTRACT (AIA A201)

SUPPLEMENTARY CONDITIONS TO THE CONTRACT

GENERAL REQUIREMENTS

CONTRACTOR DEBARMENT FORM

FEDERAL PREVAILING WAGE RATES

DIVISION 1 – GENERAL REQUIREMENTS

SUMMARY

011000	
012200	UNIT PRICES
012300	ALTERNATES
012600	CONTRACT MODIFICATION PROCEDURES
012900	PAYMENT PROCEDURES
013100	PROJECT MANAGEMENT AND COORDINATION
013200	CONSTRUCTION PROGRESS DOCUMENTATION
013233	PHOTOGRAPHIC DOCUMENTATION
013300	SUBMITTAL PROCEDURES
014000	QUALITY REQUIREMENTS
014200	REFERENCES
015000	TEMPORARY FACILITIES AND CONTROLS

DELAWARE VETERANS MEMORIAL CEMETERY, BEAR, DELAWARE
HEADSTONE RAISE/REALIGN/CLEAN & SURFACE RESTORATION

016000	PRODUCT REQUIREMENTS
017300	EXECUTION
017329	CUTTING AND PATCHING
017700	CLOSEOUT PROCEDURES
017839	PROJECT RECORD DOCUMENTS

DIVISION 2 – SITE WORK

02940 RAISE, LOWER, REALIGN, RESET & CLEAN FLAT GRAVE MARKERS

INCLUDING INSTALLATION OF FLAT MARKER SUPPORT

DIVISION 3 – CONCRETE (NOT USED)

DIVISION 4 – MASONRY (NOT USED)

DIVISION 6 – WOOD AND PLASTICS
(NOT USED)

DIVISION 7 – THERMAL AND MOISTURE PROTECTION (NOT USED)

DIVISION 8 – DOORS AND WINDOWS
(NOT USED)

DIVISION 9 – FINISHES (NOT USED)

DIVISION 10 - SPECIALTIES (NOT USED)

DIVISION 11 - EQUIPMENT (NOT USED)

DIVISION 12 – FURNISHINGS (NOT USED)

DIVISION 26 - ELECTRICAL (NOT USED)

DIVISION 31 – EARTHWORK (NOT USED)

DIVISION 32- EXTERIOR IMPROVEMENTS
(NOT USED)

DIVISION 33 – UTILITIES (NOT USED)

DIVISION 46 – WATER AND WASTEWATER EQUIPMENT (NOT USED)

END OF SPECIFICATION SECTIONS

END OF TABLE OF CONTENTS

INSTRUCTIONS TO BIDDERS

TABLE OF ARTICLES

- 1. DEFINITIONS
- 2. BIDDER'S REPRESENTATION
- 3. BIDDING DOCUMENTS
- 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

ADVERTISEMENT FOR BIDS

Re-Bid

Sealed bids for **New Castle County Veterans Cemetery Headstone Raise/Realign/Clean & Surface Restoration** will be received by the Delaware Division of Facilities Management, Thomas Collins Building, 540 South DuPont Hwy., Dover, DE 19901 1:30 p.m. local time on **Thursday**, **May 31**, **2012** at which time they will be opened and read aloud in the Conference Room. A bidder bears the risk of late delivery. Any bids received after the stated time will returned unopened.

Project involves the raise/realign/clean and surface restoration of approximately 9,700 existing grave markers at the New Castle County Veterans Cemetery in Bear, Delaware.

Attention is called to construction schedule as detailed in the Bid Documents.

A **MANDATORY** Pre-Bid Meeting will be held on **May 9, 2012** at 9:00 a.m. at the New Castle County Veterans Memorial Cemetery, Bear, Delaware, for the purpose of establishing the list of subcontractors and to answer questions. 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 Division of Facilities Management, 540 S. DuPont Highway, Suite 1, Dover, DE 19901. The outer envelope should clearly indicate: "NEW CASTLE COUNTY VETERANS CEMETERY- GRAVE MARKER RAISE AND REALIGNMENT – SEALED BID – DO NOT OPEN."

Contract documents may be obtained at the office of the Architect, Delaware Architects, LLC, 550 S. DuPont Blvd., Milford, Delaware 19963, Phone (302) 491-6047, upon receipt of \$55.00 per set/non-refundable. Checks are to be made payable to "Delaware Architects, LLC."

Construction documents will be available for review at Delaware Architects, LLC, 550 S. DuPont Blvd., Milford, Delaware 19963, Milford, Delaware 19963.

Minority Business Enterprises (MBE), Disadvantaged Business Enterprises (DBE) and Women-Owned Business Enterprises (WBE) will be afforded full opportunity to submit bids on this contract and will not be subject to discrimination on the basis of race, color, national origin or sex in consideration of this award. 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.

END OF ADVERTISEMENT FOR BIDS

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 AIA Document A101, Standard Form of Agreement between Owner and Contractor where the basis of payment is a STIPULATED SUM. 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.
- 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.
- 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. Included with the Bid submission, and as a requirement to bid, a copy of the executed Joint 2.3.2 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. All required insurance certificates shall name both Joint Venturers 2.3.4 Both Joint Venturers shall sign the Bid Form and shall submit a valid Delaware Business 2.3.5 License Number with their Bid or shall state that the process of application for a Delaware Business License has been initiated. 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. Due to exceptional circumstances and for good cause shown, one or more of these 2.3.8 provisions may be waived at the discretion of the State. ASSIGNMENT OF ANTITRUST CLAIMS 2.4 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. **BIDDING DOCUMENTS ARTICLE 3:** 3.1 COPIES OF BID DOCUMENTS 3.1.1 Bidders may obtain complete sets of the Bidding Documents from Architectural/Engineering firm designated in the Advertisement or Invitation to Bid in the number and for the deposit sum, if any, stated therein. 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.

Any errors, inconsistencies or omissions discovered shall be reported to the Architect

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.

3.1.4

immediately.

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.
 - 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** Addenda will be mailed or delivered to all who are known by the Architect to have received a 3.4.1 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. Each bidder shall ascertain prior to submitting his Bid that they have received all Addenda 3.4.4 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 nonresponsive. **ARTICLE 4: BIDDING PROCEDURES** 4.1 PREPARATION OF BIDS Submit the bids on the Bid Forms included with the Bidding Documents. 4.1.1 Submit the original Bid Form for each bid. Bid Forms may be removed from the project 4.1.2 manual for this purpose. Execute all blanks on the Bid Form in a non-erasable medium (typewriter or manually in ink). 4.1.3 Where so indicated by the makeup on the Bid Form, express sums in both words and 4.1.4 figures, in case of discrepancy between the two, the written amount shall govern. Interlineations, alterations or erasures must be initialed by the signer of the Bid. 4.1.5 BID ALL REQUESTED ALTERNATES AND UNIT PRICES, IF ANY. If there is no change 4.1.6 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. Make no additional stipulations on the Bid Form and do not qualify the Bid in any other 4.1.7 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. 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.

4.2 BID SECURITY

- 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 <u>Delaware Code</u>, 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

A. The Contractor will not discriminate against any employee or applicant for employment because of race, creed, color, sex 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, color, sex 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, color, sex or national origin."

4.5 PREVAILING WAGE REQUIREMENT

- 4.5.1 Wage Provisions: In accordance with Federal Code, Title 29, Davis Bacon Act Regulations and Requirements, renovation projects whose total cost shall exceed \$2,000 for new construction, the minimum wage rates for various classes of laborers and mechanics shall be as determined by the Department of Labor based on the scheduled type of construction.
- 4.5.2 The prevailing wage shall be the wage paid to a majority of employees performing similar work as reported in the Department's annual prevailing wage survey or in the absence of a majority, the average paid to all employees reported.
- 4.5.3 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.
- 4.5.4 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.
- 4.5.5 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.
- 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 ninety (90) 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 90 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.
- 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.
- 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.
 - 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.
- 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.

- 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.
- 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. 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.
- If the successful Bidder fails to execute the required Contract and Bond, 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 Prior to receiving an award, the successful Bidder shall furnish to the Agency proof of State of Delaware Business Licensure. If the Bidder does not currently have a Business License, they may obtain an application by writing to: Division of Revenue, Carvel State Office Building, 820 French Street, Wilmington, DE 19899. A copy of the letter written to the Division of Revenue, sent with your Bid will be adequate proof for your firm to be considered for award until such time as you receive your license.
- 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 AIA Document A305, 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. If the Bidder is required by the Agency to secure a bond from other than the Bidder's usua 7.1.2 sources, changes in cost will be adjusted as provide in the Contract Documents. The Performance and Payment Bond forms used shall be the standard QMB forms 7.1.3 (attached). TIME OF DELIVERY AND FORM OF BONDS 7.2 7.2.1 The bonds shall be dated on or after the date of the Contract. The Bidder shall require the attorney-in-fact who executes the required bonds on behalf of 7.2.2 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 written on AIA Document A101, Standard Form of Agreement Between Owner and Contractor Where the Basis of Payment is a Stipulated Sum.

END OF INSTRUCTIONS TO BIDDERS

DELAWARE VETERANS MEMORIAL CEMETERY BEAR, DELAWARE

FAI No.: DE-10-20

Re-Bid BID FORM

For Bids Due: 10:	Robbins Building
	802 Silver Lake Boulevard, Suite 100 Dover, Delaware 19904
Name of Bidder:	
Delaware Business License No.:	Taxpayer ID No.:
(Other License Nos.):	
Phone No.: ()	
Fax No.: ()	\.O.
The undersigned, representing that he has read and unmade in accordance therewith, that he has visited the site under which the Work is to be performed, and that his bid described in the Bidding Documents without exception materials, plant, equipment, supplies, transport and other the aforesaid documents for the lump sum itemized belows	e and has familiarized himself with the local conditions d is based upon the materials, systems and equipment a, hereby proposes and agrees to provide all labor, er facilities required to execute the work described by
(\$	
ALTERNATES	
Alternate prices conform to applicable project specifica description of the following Alternates. An "ADD" or "DED does not apply.	
flat grave markers instead of crushed limestone. Ty powder fines up to 3/4" maximum.	ner Run) crushed stone as base material for resetting type B graded aggregate sizes ranging from crushed
Add/Deduct:(\$	
ALTERNATE No. 2: Alternate No. 2: Provide Crush	ed Concrete as base material for resetting flat grave crete graded aggregate sizes ranging from crushed
Add/Deduct:	
(\$)

BID FORM BF 1

and the price(s) submitted include any

DELAWARE VETERANS MEMORIAL CEMETERY BEAR, DELAWARE FAI No.: DE-10-20

BID FORM

UNIT PRICES

The indicated unit pricing shall include the, per row deletion or addition of 20 markers. Unit prices conform to applicable project specification section. The owner reserves the right to delete or add as many rows necessary due to the available project budget. Refer to the specifications section 01220-1, 3.1 for a complete description of the following Unit Prices:

UNIT PRICE No. 1: Raise & Realignment of Flat Markers Per Row

I/We acknowledge Addendums numbered

BID FORM

cost/schedule impact they may have.
This bid shall remain valid and cannot be withdrawn for <u>90</u> days from the date of opening of bids, and the undersigne shall abide by the Bid Security forfeiture provisions. Bid Security is attached to this Bid (if required).
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.

BID FORM BF 2

DELAWARE VETERANS MEMORIAL CEMETERY BEAR, DELAWARE FAI No.: DE-10-20

I am / We are an Individual / a Partnership / a Corporation	
Ву	Trading as
(Individual's / General Partner's / Corporate Name)	
(State of Corporation)	
Business Address:	
Witness:	Ву:
(SEAL)	(Authorized Signature) (Title)
<u>ATTACHMENTS</u>	Date:
Sub-Contractor List Non-Collusion Statement Bid Security (Others as Required by Project Manuals)	

BID FORM

DELAWARE VETERANS MEMORIAL CEMETERY BEAR, DELAWARE FAI No.: DE-10-20

BID FORM

SUBCONTRACTOR LIST

In accordance with Title 29, Chapter 6962 (d)(10)b <u>Delaware Code</u>, 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.

Subcontractor Category	Subcontractor	 	Address (City & State)
1.			
2.			
3.			
4.			
5.			
6.	%		
7.			
8.			
9.			

BID FORM BF 4

DELAWARE VETERANS MEMORIAL CEMETERY BEAR, DELAWARE FAI No.: DE-10-20

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):	ζ,Ο,	
AUTHORIZED REPRESENTATIVE (SIGNATURE):		
TITLE:		
ADDRESS OF BIDDER:	\ <u>\</u>	
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.

BID FORM BF 5

DELAWARE COMMISSION OF VETERANS AFFAIRS

BID BOND

TO ACCOMPANY PROPOSAL (Not necessary if security is used)

KNOW ALL MEN BY THESE PRESENTS T	hat:	
of	in the County of	
ofin the County ofand State ofas Principal , and		
of	in the County of and State	
of as Surety, legally a	authorized to do business in the State of Delaware	
("State"), are held and firmly unto the State	in the sum of percent not to exceed	
Dollars (\$		
) of amount of hid on Contract No.	Dollars (\$	
) of amount of bid on Contract No	to be paid to the State for the (insert State agency name) for which	
use and benefit of	bind ourselves, our and each of our heirs, executors,	
	severally for and in the whole firmly by these presents.	
administrators, and successors, jointly and t	severally for and in the whole lifting 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	(insert State agency s 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	
	be required by the terms of this Contract and approved	
by the	(insert State agency name) this Contract to	
	the date of official notice of the award thereof in	
	then this obligation shall be void or else to be and	
remain in full force and virtue.		
Social and detail this	day of in the year of our Lord	
two thousand and	day or in the year or our Lord _ (20).	
two triousarid and	_ (20).	
SEALED, AND DELIVERED IN THE		
Presence of		
	Name of Bidder (Organization)	
	, c	
Corporate By:		
Seal	Authorized Signature	
Attest		
	Title	
	Name of Surety	
) ^v	name of Surety	
Witness: By:		
	Title	

BID BOND BB - 1

DELAWARE COMMISSION OF VETERANS AFFAIRS

PERFORMANCE BOND

Bond Number:		
KNOW ALL PERSONS BY THESE PRES	ENTS, that we, _	, as principal
("Principal"), and	, a	corporation, legally
("Principal"), and authorized to do business in the State of E	Delaware, as surety	y ("Surety"), are held and firmly bound ("Owner") (insert State arency
unto the		to be paid to Owner for which
payment well and truly to be made, we d	•	
executors, administrations, successors ar	na 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 OBL		
awarded by Owner that certain contra		
, day of, 20((the "Contract"), w	hich Contract is incorporated herein by
reference, shall well and truly provide and	d furnish all materi	als, appliances and tools and perform
all the work required under and pursuan	nt to the terms an	d conditions of the Contract and the
Contract Documents (as defined in the Co		
therein provided, shall make good and	reimburse Owner	sufficient funds to pay the costs of
completing the Contract that Owner may		
Principal, and shall also indemnify and		
expenses arising out of or by reason of		
provided by the Contract; then this obligati		
and effect.		
	7	

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.

PERFORMANCE BOND PB - 1

DA LLC No. 011-024

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:	\sim
Witness or Attest: Address:		0)
	Ву:	(SEAL)
Name:	Name: Title:	
(Corporate Seal)	ζ0.	
	SURETY	
Witness or Attest: Address:	Name:	
Name:	By: Name:	(SEAL)
(Corporate Seal)	Title:	

DELAWARE COMMISSION OF VETERANS AFFAIRS

PAYMENT BOND

Bond Number:		
KNOW ALL PERSONS BY THESE principal (" Principal "), andlegally authorized to do business in the		
(\$), to be paid to Owner ,		
bind ourselves, our and each and successors and assigns, jointly and presents.		
Sealed with our seals and dated this _	day of	, 20
NOW THE CONDITION OF THIS OBL awarded by Owner that certain contra		dated the
herein by reference, shall well and truperforming labor or service in and about	uly pay all and every person fu out the performance of the worl	rnishing materials or under the Contract,
all and every sums of money due hir labor and service for which Principa		
sufficient funds to pay such costs in the	•	•
by reason of any failure or default on save harmless Owner from all costs, of	lamages and expenses arising	out of or by reason of
the performance of the Contract and obligation shall be void, otherwise to be	• .	

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**.

PAYMENT BOND PYB 1

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:		
	By:	(SEAL)
Name:	Name: Title:	(0=/ \=/
(Corporate Seal)	Title.	
	SURETY	
X	Name:	
Witness or Attest: Address:		
12	Ву:	(SEAL)
Name:	Name: Title:	
(Corporate Seal)		

PAYMENT BOND PYB 2

DRAFT AIA° Document A101™ - 2007

Standard Form of Agreement Between Owner and Contractor

where the basis of payment is a Stipulated Sum

AGREEMENT made as of the () day of () in the year () (In words, indicate day, month and year.)

BETWEEN the Owner:

(Name, legal status, address and other information)



and the Contractor:

(Name, legal status, address and other information)



for the following Project:

(Name, location and detailed description)



The Architect:

(Name, legal status, address and other information)

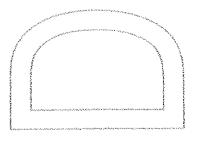


The Owner and Contractor agree as follows.

ADDITIONS AND DELETIONS:
The author of this document has added information needed for its completion.
The author may also have revised the text of the original AIA standard form.
An Additions and Deletions Report that notes added information as well as revisions to the standard form text is available from the author and should be reviewed.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

AIA Document A201 2007, General Conditions of the Contract for Construction, is adopted in this document by reference. Do not use with other general conditions unless this document is modified.



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TABLE OF ARTICLES

- 1 THE CONTRACT DOCUMENTS
- 2 THE WORK OF THIS CONTRACT
- 3 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION
- 4 CONTRACT SUM
- 5 PAYMENTS
- 6 DISPUTE RESOLUTION
- 7 TERMINATION OR SUSPENSION
- 8 MISCELLANEOUS PROVISIONS
- 9 ENUMERATION OF CONTRACT DOCUMENTS
- 10 INSURANCE AND BONDS

ARTICLE 1 THE CONTRACT DOCUMENTS

The Contract Documents consist of this Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, Addenda issued prior to execution of this Agreement, other documents listed in this Agreement and Modifications issued after execution of this Agreement, all of which form the Contract, and are as fully a part of the Contract as if attached to this Agreement or repeated herein. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations or agreements, either written or oral. An enumeration of the Contract Documents, other than a Modification, appears in Article 9.

ARTICLE 2 THE WORK OF THIS CONTRACT

The Contractor shall fully execute the Work described in the Contract Documents, except as specifically indicated in the Contract Documents to be the responsibility of others.

ARTICLE 3 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION

§ 3.1 The date of commencement of the Work shall be the date of this Agreement unless a different date is stated below or provision is made for the date to be fixed in a notice to proceed issued by the Owner. (Insert the date of commencement if it differs from the date of this Agreement or, if applicable, state that the date will be fixed in a notice to proceed.)

If, prior to the commencement of the Work, the Owner requires time to file mortgages and other-security-interests; the Owner's time requirement shall be as follows:

§ 3.2 The Contract Time shall be measured from the date of commencement.

§ 3.3 The Contractor shall achieve Substantial Completion of the entire Work not later than () days from the date of commencement, or as follows:

(Insert number of calendar days. Alternatively, a calendar date may be used when coordinated with the date of commencement. If appropriate, insert requirements for earlier Substantial Completion of certain portions of the Work.)

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[1851934297]

	Work

Substantial Completion Date

, subject to adjustments of this Contract Time as provided in the Contract Documents.

(Insert provisions, if any, for liquidated damages relating to failure to achieve Substantial Completion on time or for bonus payments for early completion of the Work.)

ARTICLE 4 CONTRACT SUM

- § 4.1 The Owner shall pay the Contractor the Contract Sum in current funds for the Contractor's performance of the Contract. The Contract Sum shall be (S) (\$ (S)), subject to additions and deductions as provided in the Contract Documents.
- § 4.2 The Contract Sum is based upon the following alternates, if any, which are described in the Contract Documents and are hereby accepted by the Owner:

 (State the numbers or other identification of accepted alternates. If the hidding or proposal documents perm

(State the numbers or other identification of accepted alternates. If the bidding or proposal documents permit the Owner to accept other alternates subsequent to the execution of this Agreement, attach a schedule of such other alternates showing the amount for each and the date when that amount expires.)

§ 4.3 Unit prices, if any:

(Identify and state the unit price; state quantity limitations, if any, to which the unit price will be applicable.)

Item Units and Limitations Price Per Unit (\$0.00)

§ 4.4 Allowances included in the Contract Sum, if any: (Identify allowance and state exclusions, if any, from the allowance price.)

Item Pric

ARTICLE 5 PAYMENTS § 5.1 PROGRESS PAYMENTS

- § 5.1.1 Based upon Applications for Payment submitted to the Architect by the Contractor and Certificates for Payment issued by the Architect, the Owner shall make progress payments on account of the Contract Sum to the Contractor as provided below and elsewhere in the Contract Documents.
- § 5.1.2 The period covered by each Application for Payment shall be one calendar month ending on the last day of the month, or as follows:
- § 5.1.3 Provided that an Application for Payment is received by the Architect not later than the () day of a month, the Owner shall make payment of the certified amount to the Contractor not later than the () day of the () month. If an Application for Payment is received by the Architect after the application date fixed above, payment shall be made by the Owner not later than () days after the Architect receives the Application for Payment. (Federal, state or local laws may require payment within a certain period of time.)
- § 5.1.4 Each Application for Payment shall be based on the most recent schedule of values submitted by the Contractor in accordance with the Contract Documents. The schedule of values shall allocate the entire Contract Sum among the various portions of the Work. The schedule of values shall be prepared in such form and supported

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by such data to substantiate its accuracy as the Architect may require. This schedule, unless objected to by the Architect, shall be used as a basis for reviewing the Contractor's Applications for Payment.

§ 5.1.5 Applications for Payment shall show the percentage of completion of each portion of the Work as of the end of the period covered by the Application for Payment.

§ 5.1.6 Subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

- .1 Take that portion of the Contract Sum properly allocable to completed Work as determined by multiplying the percentage completion of each portion of the Work by the share of the Contract Sum allocated to that portion of the Work in the schedule of values, less retainage of percent () perce
- Add that portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction (or, if approved in advance by the Owner, suitably stored off the site at a location agreed upon in writing), less retainage of percent () %);

.3 Subtract the aggregate of previous payments made by the Owner; and

.4 Subtract amounts, if any, for which the Architect has withheld or nullified a Certificate for Payment as provided in Section 9.5 of AIA Document A201–2007.

§ 5.1.7 The progress payment amount determined in accordance with Section 5.1.6 shall be further modified under the following circumstances:

- Add, upon Substantial Completion of the Work, a sum sufficient to increase the total payments to the full amount of the Contract Sum, less such amounts as the Architect shall determine for incomplete Work, retainage applicable to such work and unsettled claims; and (Section 9.8.5 of AIA Document A201–2007 requires release of applicable retainage upon Substantial Completion of Work with consent of surety, if any.)
- .2 Add, if final completion of the Work is thereafter materially delayed through no fault of the Contractor, any additional amounts payable in accordance with Section 9.10.3 of AIA Document A201–2007.

§ 5.1.8 Reduction or limitation of retainage, if any, shall be as follows:

(If it is intended, prior to Substantial Completion of the entire Work, to reduce or limit the retainage resulting from the percentages inserted in Sections 5.1.6.1 and 5.1.6.2 above, and this is not explained elsewhere in the Contract Documents, insert here provisions for such reduction or limitation.)

§ 5.1.9 Except with the Owner's prior approval, the Contractor shall not make advance payments to suppliers for materials or equipment which have not been delivered and stored at the site.

§ 5.2 FINAL PAYMENT

§ 5.2.1 Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner to the Contractor when

- .1 the Contractor has fully performed the Contract except for the Contractor's responsibility-to correct. Work as provided in Section 12.2.2 of AIA Document A201–2007, and to satisfy other requirements, if any, which extend beyond final payment; and
- .2 a final Certificate for Payment has been issued by the Architect.

§ 5.2.2 The Owner's final payment to the Contractor shall be made no later than 30 days after the issuance of the Architect's final Certificate for Payment, or as follows:

ARTICLE 6 DISPUTE RESOLUTION § 6.1 INITIAL DECISION MAKER The Architect will serve as Initial Decision Maker pursuant to Section 15.2 of AIA Document A the parties appoint below another individual, not a party to this Agreement, to serve as Initial De (If the parties mutually agree, insert the name, address and other contact information of the Initial of other than the Architect.)	cision Maker.
§ 6.2 BINDING DISPUTE RESOLUTION For any Claim subject to, but not resolved by, mediation pursuant to Section 15.3 of AIA Documenthod of binding dispute resolution shall be as follows: (Check the appropriate box. If the Owner and Contractor do not select a method of binding disputelow, or do not subsequently agree in writing to a binding dispute resolution method other than will be resolved by litigation in a court of competent jurisdiction.)	ute resolution
[Arbitration pursuant to Section 15.4 of AIA Document A201–2007 [Litigation in a court of competent jurisdiction	and an all and a strong a strong a strong as strong as strong as a
[() Other (Specify)	and the second
	and the second s
ARTICLE 7 TERMINATION OR SUSPENSION § 7.1 The Contract may be terminated by the Owner or the Contractor as provided in Article 14 of A201–2007.	of AIA Document
§ 7.2 The Work may be suspended by the Owner as provided in Article 14 of AIA Document A2	201–2007.
ARTICLE 8 MISCELLANEOUS PROVISIONS § 8.1 Where reference is made in this Agreement to a provision of AIA Document A201–2007 or Document, the reference refers to that provision as amended or supplemented by other provision Documents.	

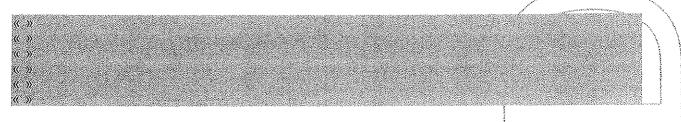
§ 8.2 Payments due and unpaid under the Contract shall bear interest from the date payment is due at the rate stated below, or in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located.

(Insert rate of interest agreed upon, if any.)

(()) % (())

§ 8.3 The Owner's representative:

(Name, address and other information)



§ 8.4 The Contractor's representative:

(Name, address and other information)

§ 8.5 Neither the Owner's nor the Cother party.	Contractor's represen	stative shall be changed	without ten days writte	en notice to the
§ 8.6 Other provisions:			included the control of the control	
«»			er en	
ARTICLE 9 ENUMERATION OF CO § 9.1 The Contract Documents, exc the sections below.			of this Agreement, are	e enumerated in
§ 9.1.1 The Agreement is this executand Contractor.	ited AIA Document	A101–2007, Standard F	Form of Agreement Be	tween Owner
§ 9.1.2 The General Conditions are Construction.	AIA Document A20	01–2007, General Condi	itions of the Contract f	òr
§ 9.1.3 The Supplementary and other	er Conditions of the	Contract:		and the second s
Document	Title	Date	Pages	
§ 9.1.4 The Specifications: (Either list the Specifications here « »	or refer to an exhibi	t attached to this Agreei	ment.)	
Section	Title	Date	Pages	
§ 9.1.5 The Drawings: (Either list the Drawings here or re	efer to an exhibit att	ached to this Agreemen	ı) (()	
Number	T	itle	Date	
§ 9.1.6 The Addenda, if any:			European announcement announcement	entranti en signi entrantica en
Number	D	ate	Pages	
Portions of Addenda relating to bid requirements are also enumerated in		re not part of the Contra	act Documents unless	the bidding
§ 9.1.7 Additional documents, if any	, forming part of th	e Contract Documents:		PARTITURE TO SERVICE T
.1 AIA Document E20 following:	1™–2007, Digital D	Pata Protocol Exhibit, if	completed by the par	ties, or the

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.2	Other documents, if any, listed below: (List here any additional documents that ar Document A201–2007 provides that bidding Instructions to Bidders, sample forms and to Documents unless enumerated in this Agree part of the Contract Documents.)	z requirements such as advertisc he Contractor's bid are not part	ement or invitation to bid, t of the Contract
			Benny (provides a grand in a bis descriptive abilitation should be adverted to the annual to the constitute
The Contract A201–2007.	INSURANCE AND BONDS or shall purchase and maintain insurance and a requirements, if any, and limits of liability j		and any and any and any and any and any and any any and any
Туре	e of insurance or bond Limit	of liability or bond amount (\$0.0	00)
This Agreeme	ent entered into as of the day and year first w	ritten above.	
OWNER (Sig	mature)	CONTRACTOR (Signature)	- September - Sept
(Printed nan		((*)) (Printed name and title)	

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AIA[®] Document G702™ - 1992

Application and Certificate for Payment

TO OWNER:	PROJECT:	DVMC - Bear	APPLICATION NO; 001 Distribution to:
			OMNER;
MCAH	VIA		CONTRACT FOR: General General CONTRACTOR:
CONTRACTOR:	ARCHITECT:		
CONTRACTOR'S APPLICATION FOR PAYMENT	AYMENT		The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and
Application is made for payment, as shown below, in connection with the Contract.	ection with the Contra	act.	Contract Documents, that all amounts have been paid by the Contractor for Work for which previous
Continuation Sheet, AIA Document G703, is attached.			Certificates for Payment were issued and payments received from the Owner, and that current
1. ORIGINAL CONTRACT SUM		\$0.00	payment shown herein is now due.
2. NET CHANGE BY CHANGE ORDERS		\$0.00	CONTRACTOR:
3. CONTRACT SUM TO DATE (Line 1 \pm 2)		\$0.00	By:
4. TOTAL COMPLETED & STORED TO DATE (Column G on G703)	G703)	\$0.00	
5. RETAINAGE:			State of:
a. 0 % of Completed Work			County of:
(Column D + E on G703: \$0.00)=)= \$0.00		Subscribed and sworm to before
b. 0 % of Stored Material			me this day of
(Column F on G703: \$0.00)=)= \$0.00		Notary Public:
Total Retainage (Lines 5a + 5b or Total in Column I of G703)	03)	\$0.00	My Commission expires:
6. TOTAL EARNED LESS RETAINAGE		\$0.00	ARCHITECT'S CERTIFICATE FOR PAYMENT
(Line 4 Less Line 5 Total)			In accordance with the Contract Documents, based on on-site observations and the data comprising
7. LESS PREVIOUS CERTIFICATES FOR PAYMENT		. \$0.00	this application, the Architect certifies to the Owner that to the bestlof the Architect's knowledge,
(Line 6 from prior Certificate)			information and belief the Work has progressed as indicated, the quality of the Work is in accordance
8. CURRENT PAYMENT DUE		\$0.00	
9. BALANCE TO FINISH, INCLUDING RETAINAGE			Land State of the Control of the Con
(Line 3 less Line 6)	80.00	0	AMOUNT CERTIFIED
		ı	(Attach explanation if amount certified differs from the amount applied. Initial all figures on this
			Application and on the Continuation Sheet that are changed to conform with the amount certified.)
CHANGE ORDER SUMMARY	ADDITIONS	DEDUCTIONS	ARCHITECT:
Total changes approved in previous months by Owner	\$0.00	\$0.00	
Total approved this Month	\$0.00		
TOTALS	\$0.00		
NET CHANGES by Change Order		\$0.00	Owner or Contractor under this Contract.

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1992 AIA® Document G703™ -

Continuation Sheet

AIA De	AIA Document G702, APPLICATION AND CERTIFICATION FOR PAYMENT,	ATION AND CERTI	FICATION FOR PAY	/MENT,		APPLICATION NO:	001	
In tabul	containing Contractor's signed certification is attached. In tabulations below, amounts are in US dollars.	refusication is attached in US dollars.	ed.			APPLICATION DATE:		T
Use Col	Use Column I on Contracts where variable retainage for line items may apply.	ere variable retainage	for line items may app	oly.		PERIOD TO:		
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(1869570934) AIA Document 6703* - 1992. Copyright © 1963, 1965, 1966, 1967, 1978, 1983 and 1992 by The American Institute of Architects. All rights reserved. WaRNING: This AIA* Document is protected by U.S. Copyright Law and International Treaties. Unauthorized reproduction or distribution of this AIA* Document, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under the law. This draft was produced by AIA software at 10:29:24 on 02/26/2010 under Order No. 0371896314_1 User Notes:

STANDARD

GENERAL CONDITIONS

OF THE

CONSTRUCTION CONTRACT

The General Conditions of this Contract are as stated in the American Institute of Architects Document AIA A201 (1997 Edition) entitled <u>General Conditions of the Contract for Construction</u> and is part of this project manual as if herein written in full.

Copies of the Document are available through the Owner.

SUPPLEMENTARY GENERAL CONDITIONS A201-1997

The following supplements modify the "General Conditions of the Contract for Construction," AIA Document A201-1997. 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.

TABLE OF ARTICLES

- GENERAL PROVISIONS
- 2. OWNER
- CONTRACTOR
- 4. ADMINISTRATION OF THE CONTRACT
- SUBCONTRACTORS
- 6. CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS
- 7. CHANGES IN THE WORK
- 8. TIME
- 9. PAYMENTS AND COMPLETION
- 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

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:

1.1.2 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.
- 1.6 OWNERSHIP AND USE OF DRAWINGS, SPECIFICATIONS AND OTHER INSTRUMENTS OF SERVICE

Delete Paragraph 1.6.1 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."

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.
- 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.

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 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 one year 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 one year 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:

- 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.

ARTICLE 4: ADMINISTRATION OF THE CONTRACT

4.2 ARCHITECT'S 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.

4.3 CLAIMS AND DISPUTES

Delete Paragraph 4.3.10 in its entirety

4.4 RESOLUTION OF CLAIMS AND DISPUTES

Delete Paragraph 4.4.5 in it entirety and replace with the following:

4.4.5 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 4.4.6 in its entirety.

4.5 MEDIATION

4.5.2 At the end of the second sentence, delete "and with the American Arbitration Association."

4.6 ARBITRATION

Delete Paragraph 4.6 and its sub-sections in its entirety.

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 <u>Delaware Code</u> § 6962(d)(10)b.3, 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.

ARTICLE 7: CHANGES IN THE WORK

(SEE ARTICLE 7: CHANGES IN WORK OF 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

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:

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.

HEADSTONE RAISE/REALIGN/CLEAN & SURFACE RESTORATION

ARTICLE 9: PAYMENTS AND COMPLETION

9.2 SCHEDULE OF VALUES

Add the following Paragraphs:

- 9.2.2 The Schedule of Values shall be submitted using AIA Document G702, Continuation Sheet to G703.
- 9.2.3 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 10% 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.

ARTICLE 10: PROTECTION OF PERSONS AND PROPERTY

10.1 SAFETY PRECAUTIONS AND PROGRAMS

Add the following Paragraphs:

- 10.1.2 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.
- 10.1.3 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:

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.

10.5 Delete Paragraphs 10.5 in its entirety.

ARTICLE 11: INSURANCE AND BONDS

11.2 OWNER'S LIABILITY INSURANCE

Delete Paragraph 11.2 in its entirety.

11.3 PROJECT MANAGEMENT PROTECTIVE LIABILITY INSURANCE

Delete Paragraph 11.3 in its entirety.

4 PROPERTY INSURANCE

Delete Paragraph 11.4 in its entirety and replace with the following:

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.

ARTICLE 12: UNCOVERING AND CORRECTION OF WORK

12.2.2 AFTER SUBSTANTIAL COMPLETION

Add the following Paragraph:

2.2.2.1.1 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.

ARTICLE 13: MISCELLANEOUS PROVISIONS

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.

END OF SUPPLEMENTARY GENERAL CONDITIONS

GENERAL REQUIREMENTS

TABLE OF ARTICLES

- 1. GENERAL PROVISIONS
- 2. OWNER
- 3. CONTRACTOR
- 4. ADMINISTRATION OF THE CONTRACT
- 5. SUBCONTRACTORS
- 6. CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS
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- 9. PAYMENTS AND COMPLETION
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- 12. UNCOVERING AND CORRECTION OF WORK
- 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 shall not begin until the Contractor is in receipt of a bonafide State of Delaware Purchase Order.
- 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, color, sex 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, color, sex 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, color, sex or national origin.

ARTICLE 2: OWNER (NOT ADDENDED)

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.
 - 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.
- 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.
- 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.
- 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, <u>Delaware Code</u>, "the Contractor shall furnish the State Tax Department within ten (10) days after award of the Contract, a statement of the total values of each contract and Subcontract, together with the names and addresses of the contracting parties "
- 3.12 PREFERENCE FOR DELAWARE LABOR
- The Contractor shall comply with all requirements set forth in Section 6962, Chapter 69, Title 29 of the <u>Delaware Code</u>.
- 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 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 materiel or performing labor in the performance of the Contract, of all sums of money due the person for such labor and materiel. (The bond shall also contain the successful bidder's guarantee to indemnify and save harmless the Stale 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 twelve months 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 pursing additional remedies as otherwise provided by law.

CONTRACT INSURANCE AND CONTRACT LIABILITY

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 three (3) years from the date of final payment under the Prime Contract and by the Subcontractor for a period of 3 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.

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;
 - Has defaulted in the performance on the portion of the work covered by the Subcontract; or
 - D. Is no longer engaged in such business.

5.2 PENALTY FOR SUBSTITUTION OF SUBCONTRACTORS

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

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

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.

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. A change in work that results in added cost to the project must be approved by VCGS prior to releasing the contractor to proceed with the work.
- 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 direct salary plus customary fringe benefits (prevailing wage rates) and documented statutory costs such as workman's compensation insurance, Social Security/Medicare, and unemployment insurance (a maximum multiplier of 1.35 times DPE).
- 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.
- In addition to the above, the General Contractor is allowed a ten percent (10%) 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 ten 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 five percent (5%) on the subcontractors work. These mark-ups shall include all costs including, but not limited to: overhead, profit, bonds, insurance, supervision, etc. 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.
- 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: 1) failure to supply the adequate labor supply ratio for the project; 2) inadequate financial resources; or, 3) poor performance on the Project.
- Upon such failure for any of the above stated reasons, the Agency that contracted for the 8.4.2 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: 1) failure to supply the adequate labor supply ratio for the project; 2) inadequate financial resources; or, 3) 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., 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 hold permanently, at its discretion, all or part of the Contractor's retainage.

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 upon AIA Document G702. There will be a five percent (5%) retainage on all Contractor's monthly invoices until completion of the project. This retainage will 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 "Article 6516, Chapter 65, Title 29 of the <u>Delaware Code</u> stipulates annualized interest 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.
- 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.

4 FINAL PAYMENT

9.4.1 Final payment, including the five percent (5%) retainage, 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: provide two original, bound, full size sets of As-built drawings with changes marked clearly in red at time of project close-out.
- 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

- 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.
- 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.
 - 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 <u>must</u> be provided directly to the Owner along with the shipping slips that include those products.
- 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.
- 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.
- 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.
- 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.
- 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 aggregate

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11.7.2 <u>Contractor's Protective Liability Insurance</u>

Minimum coverage to be:

Bodily Injury	\$ 500,000 \$1,000,000 \$1,000,000	for each person for each occurrence aggregate
Property Damage	\$ 500,000 \$500,000	for each occurrence 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 <u>guaranteeing</u> 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

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 one year 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.

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

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

- 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.
- 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

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 Delaware Archaeological Board 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 in the State Museum.

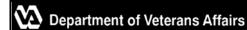
.5 WARRANTY

For a period of one year 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 one year, 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

- 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.
- "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



CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION - LOWER TIER COVERED TRANSACTIONS (Contractor)

AUTHORITY: This certification is required by the regulations implementing Executive Order 12549, Debarment and Suspension, 38 CFR Part 44.510, Participants' Responsibilities. The regulations were published as Part VII of the May 26, 1988, Federal Register (pages 191600 - 192110). Copies of the regulations may be obtained by contacting the person to whom this proposal is submitted.

CERTIFICATION: The authorized representative certifies, by submission of this form, that neither they nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

INSTRUCTIONS:

- 1. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.
- 2. The certification in this clause is a material representation of act upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available, remedies, including suspension and/or debarment.
- 3. The prospective lower tier participant shall provide immediate written notice to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- 4. The terms "covered transaction," "participant," "person," "primary covered transaction," "principle," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.
- 5. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended declared ineligible, or voluntarily excluded from participation in this covered transaction unless authorized by the department or agency with which this transaction originated.
- 6. The prospective lower tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion-Lower Tier Covered Transactions," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- 7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.
- 8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- 9. Except for transactions authorized under paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

NAME AND ADDRESS OF COMPANY:	PROJECT FAI (Federal Application Identifier) NO.
NAME OF LOWER TIER PARTICIPANT	TITLE OF LOWER TIER PARTICIPANT
SIGNATURE OF LOWER TIER PARTICIPANT	DATE SIGNED (mm/dd/yyyy)

General Decision Number: DE120010 01/06/2012 DE10

Superseded General Decision Number: DE20100013

State: Delaware

Construction Type: Highway

County: New Castle County in Delaware.

HIGHWAY CONSTRUCTION PROJECTS (excluding tunnels, building structures in rest area projects & railroad construction; bascule, suspension & spandrel arch bridges designed for commercial navigation, bridges involving marine construction; and other major bridges).

Modification Number Publication Date 01/06/2012

* SUDE2010-001 03/15/2011

	Rates	Fringes
BRICKLAYER	\$ 44.98	
CARPENTER	\$ 40.86	
CEMENT MASON/CONCRETE FINISHER.	\$ 28.11	
ELECTRICIAN Electrician Line Worker		
IRONWORKER	\$ 42.20	
LABORER	\$ 25.44	
MILLWRIGHT	\$ 16.11	
OPERATOR: Piledriver	\$ 59.23	
PAINTER	\$ 41.42	
POWER EQUIPMENT OPERATOR:	\$ 31.46	
TRUCK DRIVER		
WELDERS - Receive rate prescribe	-	orming

operation to which welding is incidental.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after

award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

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

Union Identifiers

An identifier enclosed in dotted lines beginning with characters other than "SU" denotes that the union classification and rate have found to be prevailing for that classification. Example: PLUM0198-005 07/01/2011. The first four letters, PLUM, indicate the international union and the four-digit number, 0198, that follows indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2011, following these characters is the effective date of the most current negotiated rate/collective bargaining agreement which would be July 1, 2011 in the above example.

Union prevailing wage rates will be updated to reflect any changes in the collective bargaining agreements governing the rate.

Non-Union Identifiers

Classifications listed under an "SU" identifier were derived from survey data by computing average rates and are not union rates; however, the data used in computing these rates may include both union and non-union data. Example: SULA2004-007 5/13/2010. SU indicates the rates are not union rates, LA indicates the State of Louisiana; 2004 is the year of the survey; and 007 is an internal number used in producing the wage determination. A 1993 or later date, 5/13/2010, indicates the classifications and rates under that identifier were issued as a General Wage Determination on that date.

Survey wage rates will remain in effect and will not change until a new survey is conducted.

WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- * an existing published wage determination

- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

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

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

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

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

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

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

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

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

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

END OF GENERAL DECISION

SECTION 011000 - SUMMARY

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following:
 - 1. Work covered by the Contract Documents.
 - 2. Work phases.
 - 3. Work under other contracts.
 - 4. Use of premises.
 - 5. Owner's occupancy requirements.
 - 6. Specification formats and conventions.

1.2 WORK COVERED BY CONTRACT DOCUMENTS

- A. Project Identification: Delaware Veterans Memorial Cemetery Bear, Delaware Headstone Raise/Realign/Clean& Surface Restoration, Delaware Architects, LLC, Project Number 009002, FIA No.: DE-10-20
 - 1. Project Location: 2465 Chesapeake City Road, Bear, Delaware 19701
- B. Owner: State of Delaware, Department of State, Delaware Commission of Veterans Affairs, 802 Silver Lake Boulevard, Suite 100, Dover, Delaware 19904
- C. Owner's Representative: Antonia Davila, Delaware Commission of Veterans Affairs, 802 Silver Lake Boulevard, Suite 100, Dover, Delaware 19904
- D. Architect: Delaware Architects, LLC, 550 S. DuPont Blvd., Suite E, Milford, Delaware 19963.
- E. The Work consists of the following:
 - The Work includes raise, lower, realign, reset, backfill and clean flat grave markers, install flat maker support system and renovate/re-establish turf using sod and all associated materials and associated site work.
- F. Project will be constructed under a single prime contract.

1.3 USE OF PREMISES

- A. General: Contractor shall have limited use of premises for construction operations as directed by the Owner.
- B. Use of Site: Limit use of premises to areas within the Contract limits indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.
 - Limits: Confine constructions operations to those areas as indicated on the drawings.
 - 2. Owner Occupancy: Allow for Owner occupancy of Project site and use by the public.
 - Maintain access to existing walkways, drives, parking areas, and other adjacent site amenities as well as occupied or used buildings and facilities. Do not close or obstruct walkways, or other occupied buildings or used facilities without written permission from Owner.
 - 4. Driveways and Entrances: Keep driveways and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials.
 - a. Schedule deliveries to minimize use of driveways and entrances.
 - b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.

1.4 OPERATIONS AND STORAGE AREAS

- A. Coordination of Work with the Cemetery Administrator: Burial activities at the Delaware Veterans Memorial Cemetery Bear, Delaware shall take precedence over construction activities. Construction noise during the interment services cannot disturb the burial service. To cause the least possible interference with cemetery activities, the Contractor will cease all work in areas where burials are taking place. Trucks and workmen are prohibited from passing through the service area during this period.
- B. The Contractor shall confine all operations (including storage of materials) on Cemetery premises to areas authorized or approved by the Cemetery Administrator. The Contractor shall hold and save the Delaware Commission of Veterans Affairs and the State of Delaware, its officers and agents, free and harmless from liability of any nature resulting from the Contractor's performance and/or negligence. It is understood that the Delaware Commission of Veterans Affairs and the State of Delaware shall not be held responsible for any damage to the Contractor's equipment, materials, supplies or the like which may result from vandalism, theft etc. while on site.
- C. The Contractor shall, under regulations prescribed by the Cemetery Administrator, use only established roadways.
- D. When materials are transported in performance of work, vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicle or prescribed by any Federal, State, or local law or regulation. When it is necessary to cross curbs or sidewalks, the Contractor shall protect them from damage. The Contractor shall repair or pay for the repair of any damaged curbs, sidewalks, or roads.

- E. The Cemetery Administrator shall designate working space and space available for storing materials. Unless otherwise indicated on drawings as the Contractor's "Staging Area", all working and storage space must be approved by the Cemetery Administrator prior to its use.
- F. Contract personnel are subject to the Cemetery rules of conduct. In addition to items listed elsewhere in this contract, the Contractor is responsible for ensuring that no contract work causes any committal service, ceremony, procession or visitation to be delayed, altered, or otherwise impacted in such a way that the dignity, security, or safety of the event or visit is compromised.
- G. Contractor shall execute work in such a manner as to interfere as little as possible with work being done by others. Keep roads clear of construction materials, debris, standing construction equipment and vehicles at all times. Materials and Equipment shall not be stored in other than assigned areas.

1.5 WORK RESTRICTIONS

- A. Required Stoppage of Work: All construction activities must cease during all funerals in progress including the gun salute. Owner will provide a weekly schedule of scheduled funerals.
- B. Federal Holidays: No construction related work will be allowed on Federal Holidays.

1.6 SPECIFICATION FORMATS AND CONVENTIONS

- A. Specification Format: The Specifications are organized into Divisions and Sections using the 33-division format and CSI/CSC's "MasterFormat" numbering system.
 - 1. Division 01: Sections in Division 01 govern the execution of the Work of all Sections in the Specifications.
- B. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
 - Abbreviated Language: Language used in the Specifications and other Contract Documents is abbreviated. Words and meanings shall be interpreted as appropriate. Words implied, but not stated, shall be inferred as the sense requires. Singular words shall be interpreted as plural, and plural words shall be interpreted as singular where applicable as the context of the Contract Documents indicates.
 - 2. Imperative mood and streamlined language are generally used in the Specifications. Requirements expressed in the imperative mood are to be performed by Contractor. Occasionally, the indicative or subjunctive mood may

be used in the Section Text for clarity to describe responsibilities that must be fulfilled indirectly by Contractor or by others when so noted.

a. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 011000

SECTION 012200 - UNIT PRICES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for unit prices.
- B. See Division 01 Section "Allowances" for procedures for using unit prices to adjust quantity allowances.

1.2 DEFINITIONS

A. Unit price is a price per unit of measurement for materials or services added to or deducted from the Contract Sum by appropriate modification, if estimated quantities of Work required by the Contract Documents are increased or decreased.

1.3 PROCEDURES

- A. Unit prices include all necessary material, plus cost for delivery, installation, insurance, applicable taxes, overhead, and profit.
- B. Measurement and Payment: Refer to individual Specification Sections for work that requires establishment of unit prices. Methods of measurement and payment for unit prices are specified in those Sections.
- C. Owner reserves the right to reject Contractor's measurement of work-in-place that involves use of established unit prices and to have this work measured, at Owner's expense, by an independent surveyor acceptable to Contractor.
- D. List of Unit Prices: A list of unit prices is included in Part 3. Specification Sections referenced in the schedule contain requirements for materials described under each unit price.

PART 2 PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 LIST OF UNIT PRICES

A. Unit Price No. 01 – Raise & Realign Flat Markers.

UNIT PRICES 012200 - 1

1. Description: All work and materials necessary to raise, lower, realign, reset, backfill and clean flat grave markers including marker support system and renovate/re-establish turf using sod.

2. Unit of Measurement: (1) row consisting of 20 grave sites.

END OF SECTION 012200

UNIT PRICES 012200 - 2

SECTION 012300 - ALTERNATES

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes administrative and procedural requirements for alternates.

1.2 DEFINITIONS

- A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the Bidding Requirements that may be added to or deducted from the Base Bid amount if Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
 - 1. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternate into the Work. No other adjustments are made to the Contract Sum.

1.3 PROCEDURES

- A. Coordination: Modify or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
 - 1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.
- B. Notification: Immediately following award of the Contract, notify each party involved, in writing, of the status of each alternate. Indicate if alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated modifications to alternates.
- C. Execute accepted alternates under the same conditions as other work of the Contract.
- D Schedule: A Schedule of Alternates is included at the end of this Section. See applicable Specification Sections for materials necessary to achieve the work described under each alternate.

ALTERNATES 012300 - 1

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF ALTERNATES

Alternate No. 1: Provide DelDOT Type B (Crusher Run) crushed stone as base material for resetting flat grave markers instead of crushed limestone. Type B graded aggregate sizes ranging from crushed powder fines up to 3/4" maximum.

Alternate No. 2: Provide Crushed Concrete as base material for resetting flat grave markers instead of crushed limestone. Crushed concrete graded aggregate sizes ranging from crushed powder fines up to 3/4" maximum.

END OF SECTION 012300

ALTERNATES 012300 - 2

SECTION 012600 - CONTRACT MODIFICATION PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section specifies administrative and procedural requirements for handling and processing Contract modifications.
- B. See Division 01 Section "Unit Prices" for administrative requirements for using unit prices.

1.2 MINOR CHANGES IN THE WORK

A. Architect will issue supplemental instructions authorizing Minor Changes in the Work, not involving adjustment to the Contract Sum or the Contract Time, on AIA Document G710, "Architect's Supplemental Instructions."

1.3 PROPOSAL REQUESTS

- A. Owner-Initiated Proposal Requests: Architect will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
 - 1. Proposal Requests issued by Architect are for information only. Do not consider them instructions either to stop work in progress or to execute the proposed change.
 - 2. Within time specified in Proposal Request after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
 - a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - c. Include costs of labor and supervision directly attributable to the change.
 - d. Include an updated Contractor's Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.

- B. Contractor-Initiated Proposals: If latent or unforeseen conditions require modifications to the Contract, Contractor may propose changes by submitting a request for a change to Architect.
 - Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.
 - 2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 - 3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - 4. Include costs of labor and supervision directly attributable to the change.
 - 5. Include an updated Contractor's Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
 - 6. Comply with requirements in Division 01 Section "Product Requirements" if the proposed change requires substitution of one product or system for product or system specified.
- C. Proposal Request Form: Use AIA Document G709 for Proposal Requests.

1.4 ALLOWANCES

A. Allowances are not considered as part of this contract.

1.5 CHANGE ORDER PROCEDURES

- A. A Change Order that results in added cost to the project must be approved by VCGS prior to Owner/Architect approving Change Order.
- B. On Owner's approval of a Proposal Request, Architect will issue a Change Order for signatures of Owner and Contractor on AIA Document G701.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

SECTION 012900 - PAYMENT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

A. This Section specifies administrative and procedural requirements necessary to prepare and process Applications for Payment.

1.2 SCHEDULE OF VALUES

- A. Coordination: Coordinate preparation of the Schedule of Values with preparation of Contractor's Construction Schedule.
 - 1. Correlate line items in the Schedule of Values with other required administrative forms and schedules, including Application for Payment forms with Continuation Sheets Submittals Schedule and Contractor's Construction Schedule.
 - 2. Submit the Schedule of Values to Architect at earliest possible date but no later than 15 days before the date scheduled for submittal of initial Applications for Payment.
 - 3. Subschedules: Where the Work is separated into phases requiring separately phased payments, provide subschedules showing values correlated with each phase of payment.
- B. Format and Content: Use the Project Manual table of contents as a guide to establish line items for the Schedule of Values. Provide at least one line item for each Specification Section.
 - 1. Identification: Include the following Project identification on the Schedule of Values:
 - a. Project name and location.
 - Name of Architect.
 - c. Architect's project number.
 - Contractor's name and address.
 - e. Date of submittal.
 - Submit draft of AIA Document G703 Continuation Sheets.
 - Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Coordinate with the Project Manual table of contents. Provide several line items for principal subcontract amounts, where appropriate.
 - 4. Round amounts to nearest whole dollar; total shall equal the Contract Sum.
 - 5. Provide a separate line item in the Schedule of Values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed.

- 6. Provide separate line items in the Schedule of Values for initial cost of materials, for each subsequent stage of completion, and for total installed value of that part of the Work.
- Each item in the Schedule of Values and Applications for Payment shall be complete. Include total cost and proportionate share of general overhead and profit for each item.
 - a. Temporary facilities and other major cost items that are not direct cost of actual work-in-place may be shown either as separate line items in the Schedule of Values or distributed as general overhead expense, at Contractor's option.
- 8. Schedule Updating: Update and resubmit the Schedule of Values before the next Applications for Payment when Change Orders or Construction Change Directives result in a change in the Contract Sum.

1.3 APPLICATIONS FOR PAYMENT

- A. Each Application for Payment shall be consistent with previous applications and payments as certified by Architect and paid for by Owner.
 - 1. Initial Application for Payment, Application for Payment at time of Substantial Completion, and final Application for Payment involve additional requirements.
- B. Payment Application Times: Progress payments shall be submitted to Architect by the last day of the month. The period covered by each Application for Payment is one month, ending on the last day of the month.
- C. Payment Application Forms: Use AIA Document G702 and AIA Document G703 Continuation Sheets as form for Applications for Payment.
- D. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. Architect will return incomplete applications without action.
 - 1. Entries shall match data on the Schedule of Values and Contractor's Construction Schedule. Use updated schedules if revisions were made.
 - 2. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.
- E. Transmittal: Submit 5 signed and notarized original copies of each Application for Payment to Architect by a method ensuring receipt within 24 hours. One copy shall include waivers of lien and similar attachments if required.
 - 1. Transmit each copy with a transmittal form listing attachments and recording appropriate information about application.

- F. Waivers of Mechanic's Lien: With each Application for Payment, submit waivers of mechanic's lien from every entity who is lawfully entitled to file a mechanic's lien arising out of the Contract and related to the Work covered by the payment.
 - Submit partial waivers on each item for amount requested in previous application, after deduction for retainage, on each item.
 - 2. When an application shows completion of an item, submit final or full waivers.
 - 3. Owner reserves the right to designate which entities involved in the Work must submit waivers.
 - 4. Waiver Forms: Submit waivers of lien on forms, executed in a manner acceptable to Owner.
- G. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
 - 1. List of subcontractors.
 - 2. Schedule of Values.
 - 3. Contractor's Construction Schedule (preliminary if not final).
 - 4. Schedule of unit prices.
 - 5. Submittals Schedule (preliminary if not final).
 - 6. List of Contractor's staff assignments.
 - 7. List of Contractor's principal consultants.
 - 8. Copies of building permits.
 - 9. Copies of authorizations and licenses from authorities having jurisdiction for performance of the Work.
 - 10. Initial progress report.
 - 11. Report of preconstruction conference.
 - 12. Certificates of insurance and insurance policies.
- H. Application for Payment at Substantial Completion: After issuing the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete.
 - 1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
 - 2. This application shall reflect Certificates of Partial Substantial Completion issued previously for Owner occupancy of designated portions of the Work.
- I. Final Payment Application: Submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:
 - Evidence of completion of Project closeout requirements.
 - 2. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
 - 3. Updated final statement, accounting for final changes to the Contract Sum.
 - 4. AIA Document G706, "Contractor's Affidavit of Payment of Debts and Claims."
 - 5. AIA Document G706A, "Contractor's Affidavit of Release of Liens."
 - 6. AIA Document G707, "Consent of Surety to Final Payment."
 - 7. Evidence that claims have been settled.

8. Final meter readings for utilities, a measured record of stored fuel, and similar data as of date of Substantial Completion or when Owner took possession of and assumed responsibility for corresponding elements of the Work.

9. Final, liquidated damages settlement statement.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

SECTION 013100 - PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
 - 1. Coordination Drawings.
 - 2. Project meetings.
 - 3. Requests for Interpretation (RFIs).
- B. See Division 01 Section "Multiple Contract Summary" for a description of the division of Work among separate contracts and responsibility for coordination activities not in this Section.
- C. See Division 01 Section "Execution" for procedures for coordinating general installation and field-engineering services, including establishment of benchmarks and control points.

1.2 DEFINITIONS

A. RFI: Request from Contractor seeking interpretation or clarification of the Contract Documents.

1.3 COORDINATION

- A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations, included in different Sections, that depend on each other for proper installation, connection, and operation.
 - 1 Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
 - Coordinate installation of different components with other contractors to ensure maximum accessibility for required maintenance, service, and repair.
 - 3. Make adequate provisions to accommodate items scheduled for later installation.
 - Where availability of space is limited, coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair of all components, including mechanical and electrical.

- B. Prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.
 - 1. Prepare similar memoranda for Owner and separate contractors if coordination of their Work is required.
- C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities and activities of other contractors to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
 - 1. Preparation of Contractor's Construction Schedule.
 - 2. Preparation of the Schedule of Values.
 - 3. Installation and removal of temporary facilities and controls
 - 4. Delivery and processing of submittals.
 - 5. Progress meetings.
 - 6. Preinstallation conferences.
 - 7. Project closeout activities.

1.4 SUBMITTALS

- A. Coordination Drawings: Prepare Coordination Drawings if limited space availability necessitates maximum utilization of space for efficient installation of different components or if coordination is required for installation of products and materials fabricated by separate entities.
 - 1. Content: Project-specific information, drawn accurately to scale. Do not base Coordination Drawings on reproductions of the Contract Documents or standard printed data. Include the following information, as applicable:
 - a. Indicate functional and spatial relationships of components of architectural, structural, civil, mechanical, and electrical systems.
 - b. Indicate dimensions shown on the Contract Drawings and make specific note of dimensions that appear to be in conflict with submitted equipment and minimum clearance requirements. Provide alternate sketches to Architect for resolution of such conflicts. Minor dimension changes and difficult installations will not be considered changes to the Contract.
 - Sheet Size: At least 8-1/2 by 11 inches but no larger than 30 by 40 inches.
 - 8. Number of Copies: Submit five opaque copies of each submittal. Architect will return one copy.
 - 4. Refer to individual Sections for Coordination Drawing requirements for Work in those Sections.

1.5 PROJECT MEETINGS

- A. General: Schedule and conduct meetings and conferences at Project site, unless otherwise indicated.
 - Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Owner and Architect of scheduled meeting dates and times.
 - 2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
 - 3. Minutes: Architect will record significant discussions and agreements achieved. Architect will distribute the meeting minutes to everyone concerned, including Owner, Contractor and VCGS, within five days of the meeting.
- B. Preconstruction Conference: Schedule a preconstruction conference before starting construction, at a time convenient to Owner and Architect, but no later than 15 days after execution of the Agreement. Hold the conference at Project site or another convenient location. Conduct the meeting to review responsibilities and personnel assignments.
 - 1. Attendees: Authorized representatives of Owner, Architect, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the conference. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
 - 2. Agenda: Discuss items of significance that could affect progress, including the following:
 - a. Tentative construction schedule.
 - b. Phasing.
 - c. Critical work sequencing and long-lead items.
 - d. Designation of key personnel and their duties.
 - e. Procedures for processing field decisions and Change Orders.
 - f. Procedures for RFIs.
 - g. Procedures for testing and inspecting.
 - h. Procedures for processing Applications for Payment.
 - Distribution of the Contract Documents.
 - Submittal procedures.
 - k. LEED requirements.
 - I. Preparation of Record Documents.
 - m. Use of the premises.
 - n. Work restrictions.
 - o. Owner's occupancy requirements.
 - p. Responsibility for temporary facilities and controls.
 - q. Construction waste management and recycling.
 - r. Parking availability.
 - s. Office, work, and storage areas.
 - t. Equipment deliveries and priorities.
 - u. First aid.
 - v. Security.

- w. Progress cleaning.
- x. Working hours.
- Minutes: Architect will record and distribute meeting minutes to everyone concerned, including Owner, Contractor and VCGS.
- C. Preinstallation Conferences: Conduct a preinstallation conference at Project site before each construction activity that requires coordination with other construction.
 - 1. Attendees: Installer and representatives of manufacturers and fabricators involved in or affected by the installation and its coordination or integration with other materials and installations that have preceded or will follow, shall attend the meeting. Advise Architect of scheduled meeting dates.
 - 2. Agenda: Review progress of other construction activities and preparations for the particular activity under consideration, including requirements for the following:
 - a. The Contract Documents.
 - b. Options.
 - c. Related RFIs.
 - d. Related Change Orders.
 - e. Purchases.
 - f. Deliveries.
 - g. Submittals.
 - h. Review of mockups.
 - i. Possible conflicts.
 - j. Compatibility problems
 - k. Time schedules.
 - Weather limitations.
 - m. Manufacturer's written recommendations.
 - n. Warranty requirements.
 - o. Compatibility of materials.
 - p. Acceptability of substrates.
 - q. Temporary facilities and controls.
 - r. Space and access limitations.
 - s. Regulations of authorities having jurisdiction.
 - Testing and inspecting requirements.
 - J. Installation procedures.
 - v. Coordination with other work.
 - w. Required performance results.
 - x. Protection of adjacent work.
 - y. Protection of construction and personnel.
 - 3. Record significant conference discussions, agreements, and disagreements, including required corrective measures and actions.
 - 4. Reporting: Distribute minutes of the meeting to each party present and to parties who should have been present.
 - 5. Do not proceed with installation if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of the Work and reconvene the conference at earliest feasible date.

- D. Progress Meetings: Conduct progress meetings at biweekly intervals. Coordinate dates of meetings with preparation of payment requests.
 - Attendees: In addition to representatives of Owner and Architect, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
 - 2. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
 - a. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's Construction Schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
 - 1) Review schedule for next period.
 - b. Review present and future needs of each entity present, including the following:
 - 1) Interface requirements.
 - 2) Sequence of operations.
 - 3) Status of submittals.
 - 4) Deliveries.
 - 5) Off-site fabrication.
 - 6) Access.
 - 7) Site utilization.
 - 8) Temporary facilities and controls.
 - 9) Work hours.
 - 10) Hazards and risks.
 - (1) Progress cleaning.
 - 12) Quality and work standards.
 - 13) Status of correction of deficient items.
 - 14) Field observations.
 - 15) RFIs.
 - 16) Status of proposal requests.
 - 17) Pending changes.
 - 18) Status of Change Orders.
 - 19) Pending claims and disputes.
 - 20) Documentation of information for payment requests.
 - 3. Minutes: Architect will record and distribute meeting minutes to everyone concerned, including Owner, Contractor and VCGS.
 - 4. Reporting: Distribute minutes of the meeting to each party present and to parties who should have been present.

a. Schedule Updating: Revise Contractor's Construction Schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.

1.6 REPORTING REQUIREMETNS

A. The Contractor is required to check-in with the Cemetery Director (or designee) at the Cemetery on a weekly basis (or as otherwise agreed upon). The Contractor will provide the Cemetery Director with an anticipated work schedule, and the Cemetery Director will furnish the Contractor with a schedule of funerals and/or special events. This weekly check-in is mandatory and may not be accomplished by telephone or e-mail.

1.7 REQUESTS FOR INTERPRETATION (RFIs)

- A. Procedure: Immediately on discovery of the need for interpretation of the Contract Documents, and if not possible to request interpretation at Project meeting, prepare and submit an RFI in the form specified.
 - 1. RFIs shall originate with Contractor. RFIs submitted by entities other than Contractor will be returned with no response.
 - 2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.
- B. Content of the RFI: Include a detailed, legible description of item needing interpretation and the following:
 - 1. Project name.
 - 2. Date.
 - 3. Name of Contractor.
 - 4. Name of Architect.
 - 5. RFI number, numbered sequentially.
 - 6. Specification Section number and title and related paragraphs, as appropriate.
 - 7. Drawing number and detail references, as appropriate.
 - 8. Field dimensions and conditions, as appropriate.
 - 9. Contractor's suggested solution(s). If Contractor's solution(s) impact the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
 - 10. Contractor's signature.
 - 1. Attachments: Include drawings, descriptions, measurements, photos, Product Data, Shop Drawings, and other information necessary to fully describe items needing interpretation.
- C. Hard-Copy RFIs: CSI Form 13.2A.
 - Identify each page of attachments with the RFI number and sequential page number.

- D. Architect's Action: Architect will review each RFI, determine action required, and return it. Allow seven working days for Architect's response for each RFI. RFIs received after 1:00 p.m. will be considered as received the following working day.
 - 1. The following RFIs will be returned without action:
 - a. Requests for approval of submittals.
 - b. Requests for approval of substitutions.
 - Requests for coordination information already indicated in the Contract Documents.
 - d. Requests for adjustments in the Contract Time or the Contract Sum.
 - e. Requests for interpretation of Architect's actions on submittals.
 - f. Incomplete RFIs or RFIs with numerous errors.
 - 2. Architect's action may include a request for additional information, in which case Architect's time for response will start again.
 - 3. Architect's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Division 01 Section "Contract Modification Procedures."
 - a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Architect in writing within 10 days of receipt of the RFI response.
- E. On receipt of Architect's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Architect within seven days if Contractor disagrees with response.
- F. RFI Log: Prepare, maintain, and submit a tabular log of RFIs organized by the RFI number. Submit log weekly. Include the following:
 - 1. Project name.
 - 2. Name and address of Contractor.
 - 3. Name and address of Architect.
 - 4. RFI number including RFIs that were dropped and not submitted.
 - 5. RFI description.
 - 6. Date the RFI was submitted.
 - 7. Date Architect's response was received.
 - 8. Identification of related Minor Change in the Work, Construction Change Directive, and Proposal Request, as appropriate.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

SECTION 013200 - CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:
 - 1. Contractor's Construction Schedule.
 - 2. Submittals Schedule.
 - 3. Daily construction reports.
 - 4. Monthly Progress reports.
 - 5. Field condition reports.
- B. See Division 01 Section "Payment Procedures" for submitting the Schedule of Values.
- C. See Division 01 Section "Photographic Documentation" for submitting construction photographs.

1.2 DEFINITIONS

- A. Activity: A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the construction project. Activities included in a construction schedule consume time and resources.
 - 1. Critical activities are activities on the critical path. They must start and finish on the planned early start and finish times.
 - 2. Predecessor Activity: An activity that precedes another activity in the network.
 - 3. Successor Activity: An activity that follows another activity in the network.
- B. CPM: Critical path method, which is a method of planning and scheduling a construction project where activities are arranged based on activity relationships. Network calculations determine when activities can be performed and the critical path of Project.
- C. Critical Path: The longest connected chain of interdependent activities through the network schedule that establishes the minimum overall Project duration and contains no float.
- D. Float: The measure of leeway in starting and completing an activity.
 - 1. Float time is not for the exclusive use or benefit of either Owner or Contractor, but is a jointly owned, expiring Project resource available to both parties as needed to meet schedule milestones and Contract completion date.

- E. Fragnet: A partial or fragmentary network that breaks down activities into smaller activities for greater detail.
- F. Major Area: A story of construction, a separate building, or a similar significant construction element.

1.3 SUBMITTALS

- A. Submittals Schedule: Submit three copies of schedule. Arrange the following information in a tabular format:
 - 1. Scheduled date for first submittal.
 - Specification Section number and title.
 - 3. Submittal category (action or informational).
 - 4. Name of subcontractor.
 - 5. Description of the Work covered.
 - 6. Scheduled date for Architect's final release or approval
- B. Preliminary Network Diagram: Submit two opaque copies, large enough to show entire network for entire construction period. Show logic ties for activities.
- C. Contractor's Construction Schedule: Submit two opaque copies of initial schedule, large enough to show entire schedule for entire construction period.
 - 1. Submit an electronic copy of schedule, using software indicated, on CD-R, and labeled to comply with requirements for submittals. Include type of schedule (Initial or Updated) and date on label.
- D. Daily Construction Reports: Submit two copies at weekly intervals.
- E. Monthly Construction Progress Report: Submit three copies along with Request for Payment.
- F. Field Condition Reports: Submit two copies at time of discovery of differing conditions.

1.4 COORDINATION

- A. Coordinate preparation and processing of schedules and reports with performance of construction activities and with scheduling and reporting of separate contractors.
- Coordinate Contractor's Construction Schedule with the Schedule of Values, list of subcontracts, Submittals Schedule, progress reports, payment requests, and other required schedules and reports.
 - 1. Secure time commitments for performing critical elements of the Work from parties involved.
 - 2. Coordinate each construction activity in the network with other activities and schedule them in proper sequence.

PART 2 - PRODUCTS

2.1 SUBMITTALS SCHEDULE

- A. Preparation: Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, resubmittal, ordering, manufacturing, fabrication, and delivery when establishing dates.
 - 1. Coordinate Submittals Schedule with list of subcontracts, the Schedule of Values, and Contractor's Construction Schedule.
 - 2. Submit concurrently with the first complete submittal of Contractor's Construction Schedule.

2.2 CONTRACTOR'S CONSTRUCTION SCHEDULE, GENERAL

- A. Time Frame: Extend schedule from date established for the Notice to Proceed to date of Final Completion.
 - 1. Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.
- B. Activities: Treat each story or separate area as a separate numbered activity for each principal element of the Work. Comply with the following:
 - 1. Activity Duration: Define activities so no activity is longer than 20 days, unless specifically allowed by Architect.
 - 2. Procurement Activities: Include procurement process activities for the following long lead items and major items, requiring a cycle of more than 60 days, as separate activities in schedule. Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication, and delivery.
 - 3. Submittal Review Time: Include review and resubmittal times indicated in Division 01 Section "Submittal Procedures" in schedule. Coordinate submittal review times in Contractor's Construction Schedule with Submittals Schedule.
 - 4. Startup and Testing Time: Include the appropriate number of days for startup and testing.
 - 5. Substantial Completion: Indicate completion in advance of date established for Substantial Completion, and allow time for Architect's administrative procedures necessary for certification of Substantial Completion.
 - Constraints: Include constraints and work restrictions indicated in the Contract Documents and as follows in schedule, and show how the sequence of the Work is affected.
 - 1. Phasing: Arrange list of activities on schedule by phase.
 - 2. Work under More Than One Contract: Include a separate activity for each contract.

- 3. Work by Owner: Include a separate activity for each portion of the Work performed by Owner.
- 4. Work Restrictions: Show the effect of the following items on the schedule:
 - a. Coordination with existing construction.
 - b. Limitations of continued occupancies.
 - c. Uninterruptible services.
 - d. Partial occupancy before Substantial Completion.
 - e. Use of premises restrictions.
 - f. Provisions for future construction.
 - g. Seasonal variations.
 - h. Environmental control.
- 5. Work Stages: Indicate important stages of construction for each major portion of the Work.
- D. Milestones: Include milestones indicated in the Contract Documents in schedule, including, but not limited to, the Notice to Proceed Substantial Completion, and Final Completion.
- E. Contract Modifications: For each proposed contract modification and concurrent with its submission, prepare a time-impact analysis using fragnets to demonstrate the effect of the proposed change on the overall project schedule.

2.3 CONTRACTOR'S CONSTRUCTION SCHEDULE (GANTT CHART)

- A. Bar Graph Schedule: Submit a comprehensive, fully developed, horizontal Bar Graph, Contractor's Construction Schedule within 10 days of date established for the Notice of Award. Base schedule on the Preliminary Construction Schedule and whatever updating and feedback was received since the start of Project.
- B. Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line.
 - 1. For construction activities that require 3 months or longer to complete, indicate an estimated completion percentage in 10 percent increments within time bar.

2.4 REPORTS

- A. Daily Construction Reports: Prepare a daily construction report recording the following information concerning events at Project site:
 - 1. List of subcontractors at Project site.
 - 2. Equipment at Project site.
 - 3. Material deliveries.
 - 4. High and low temperatures and general weather conditions.
 - 5. Accidents.
 - 6. Stoppages, delays, shortages, and losses.

- 7. Orders and requests of authorities having jurisdiction.
- 8. Services connected and disconnected.
- B. Monthly Construction Progress Reports: Prepare a monthly construction report to be submitted along with requests for payment. Three copies of the Monthly Construction Progress Reports shall be submitted to the Architect. The Architect will distribute report to Owner and VCGS. Monthly Construction Progress Reports shall record the following information concerning events at Project site:
 - 1. List of subcontractors at Project site.
 - 2. Equipment at Project site.
 - 3. Material deliveries.
 - 4. High and low temperatures and general weather conditions
 - Accidents.
 - 6. Stoppages, delays, shortages, and losses.
 - 7. Orders and requests of authorities having jurisdiction.
 - 8. Services connected and disconnected.
- C. Field Condition Reports: Immediately on discovery of a difference between field conditions and the Contract Documents, prepare and submit a detailed report. Submit with a request for interpretation. Include a detailed description of the differing conditions, together with recommendations for changing the Contract Documents.

PART 3 - EXECUTION

3.1 CONTRACTOR'S CONSTRUCTION SCHEDULE

- A. Contractor's Construction Schedule Updating: At monthly intervals, update schedule to reflect actual construction progress and activities. Issue schedule one week before each regularly scheduled progress meeting.
 - Revise schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the report of each such meeting.
 - 2. Include a report with updated schedule that indicates every change, including, but not limited to, changes in logic, durations, actual starts and finishes, and activity durations.
 - 3. As the Work progresses, indicate Actual Completion percentage for each activity.
- B. Distribution: Distribute copies of approved schedule to Architect Owner, separate contractors, testing and inspecting agencies, and other parties identified by Contractor with a need-to-know schedule responsibility.
 - 1. Post copies in Project meeting rooms and temporary field offices if applicable.
 - 2. When revisions are made, distribute updated schedules to the same parties and post in the same locations. Delete parties from distribution when they have

completed their assigned portion of the Work and are no longer involved in performance of construction activities.

SECTION 013233 - PHOTOGRAPHIC DOCUMENTATION

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for the following:
 - 1. Preconstruction photographs.
 - 2. Periodic construction photographs.
- B. See Division 01 Section "Closeout Procedures" for submitting digital media as Project Record Documents at Project closeout.
- C. See Division 01 Section "Demonstration and Training" for submitting videotapes of demonstration of equipment and training of Owner's personnel.

1.2 SUBMITTALS

- A. Key Plan: Submit key plan of Project Site with notation of vantage points marked for location and direction of each photograph. Indicate location (Section and Field) of construction. Include same label information as corresponding set of photographs.
- B. Construction Photographs: Submit one file of each photographic view within seven days of taking photographs.
 - 1. Format: Digital. Keep all photographic images on a CD disc on site for review.
 - 2. Identification: In a corresponding log, provide the following information keyed to each photo file:
 - a. Name of Project.
 - b. Name of Architect.
 - Name of Contractor.
 - d. Date and time of day photograph was taken if not date stamped by camera.
 - e. Description of vantage point, indicating location, direction (by compass point), and elevation or story of construction.
 - f. Unique sequential identifier.
 - Digital Images: Submit a complete set of digital image electronic files as a Project Record Document on CD-ROM. Identify electronic media with date photographs were taken. Submit images that have same aspect ratio as the sensor, uncropped.

1.3 COORDINATION

A. Auxiliary Services: Cooperate with photographer and provide auxiliary services requested, including access to Project site and use of temporary facilities, including

temporary lighting required to produce clear, well-lit photographs without obscuring shadows.

1.4 USAGE RIGHTS

A. Obtain and transfer copyright usage rights from photographer to Owner for unlimited reproduction of photographic documentation.

PART 2 - PRODUCTS

2.1 PHOTOGRAPHIC MEDIA

A. Digital Images: Provide images in uncompressed TIFF format, produced by a digital camera with minimum sensor size of 4.0 megapixels, and at an image resolution of not less than 1024 by 768 pixels.

PART 3 - EXECUTION

3.1 CONSTRUCTION PHOTOGRAPHS

- A. General: Take photographs using the maximum range of depth of field, and that are in focus, to clearly show the Work. Photographs with blurry or out-of-focus areas will not be accepted.
 - 1. Maintain key plan with each set of construction photographs that identifies each photographic location.
- B. Digital Images. Submit digital images exactly as originally recorded in the digital camera, without alteration, manipulation, editing, or modifications using image-editing software.
 - 1. Date and Time: Include date and time in filename for each image.
 - 2. Field Office Images: Maintain one set of images on CD-ROM in the field office at Project site, available at all times for reference. Identify images same as for those submitted to Architect.
- Preconstruction Photographs: Before starting construction, take, digital photographs of Project site and surrounding properties, including existing items to remain during construction, from different vantage points, as directed by Architect.
 - 1. Flag excavation areas and construction limits before taking construction photographs.
 - 2. Take a minimum of eight photographs to show existing conditions adjacent to property before starting the Work.
 - 3. Take a minimum of eight photographs of adjoining fields to accurately record physical conditions at start of construction.

- D. Periodic Construction Photographs: Take 12, digital photographs bi-weekly, with timing each month adjusted to coincide with the cutoff date associated with each Application for Payment. Select vantage points to show status of construction and progress since last photographs were taken. Photographs must accompany each monthly request for payment.
- E. Additional Photographs: Architect may issue requests for additional photographs, in addition to periodic photographs specified.
 - 1. Three days' notice will be given, where feasible.
 - 2. In emergency situations, take additional photographs within 24 hours of request.
 - 3. Circumstances that could require additional photographs include, but are not limited to, the following:
 - a. Special events planned at Project site.
 - Immediate follow-up when on-site events result in construction damage or losses.
 - c. Photographs to be taken at fabrication locations away from Project site. These photographs are not subject to unit prices or unit-cost allowances.
 - d. Substantial Completion of a major phase or component of the Work.
 - e. Extra record photographs at time of final acceptance.
 - f. Owner's request for special publicity photographs.

SECTION 013300 - SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals.
- B. See Division 01 Section "Construction Progress Documentation" for submitting schedules and reports, including Contractor's Construction Schedule.
- C. See Division 01 Section "Photographic Documentation" for submitting construction photographs.
- D. See Division 01 Section "Quality Requirements" for submitting test and inspection reports and for mockup requirements.
- E. See Division 01 Section "Closeout Procedures" for submitting warranties.
- F. See Division 01 Section "Project Record Documents" for submitting Record Drawings, Record Specifications, and Record Product Data.

1.2 DEFINITIONS

- A. Action Submittals: Written and graphic information that requires Architect's responsive action.
- B. Informational Submittals: Written information that does not require Architect's responsive action. Submittals may be rejected for not complying with requirements.

1.3 SUBMITTAL PROCEDURES

- A. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
 - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 - Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.
 - a. Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.

- B. Submittals Schedule: Comply with requirements in Division 01 Section "Construction Progress Documentation" for list of submittals and time requirements for scheduled performance of related construction activities.
- C. Processing Time: Allow enough time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Architect's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.
 - 1. Initial Review: Allow 15 days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Architect will advise Contractor when a submittal being processed must be delayed for coordination.
 - 2. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
 - 3. Resubmittal Review: Allow 15 days for review of each resubmittal.
- D. Identification: Place a permanent label or title block on each submittal for identification.
 - 1. Indicate name of firm or entity that prepared each submittal on label or title block.
 - 2. Provide a space approximately 6 by 8 inches (150 by 200 mm) on label or beside title block to record Contractor's review and approval markings and action taken by Architect.
 - 3. Include the following information on label for processing and recording action taken:
 - a. Project name.
 - b. Date.
 - c. Name and address of Architect.
 - d. Name and address of Contractor.
 - e. Name and address of subcontractor.
 - f. Name and address of supplier.
 - g. Name of manufacturer.
 - h. Submittal number or other unique identifier, including revision identifier.
 - Submittal number shall use Specification Section number followed by a decimal point and then a sequential number (e.g., 061000.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., 061000.01.A).
 - i. Number and title of appropriate Specification Section.
 - j. Drawing number and detail references, as appropriate.
 - k. Location(s) where product is to be installed, as appropriate.
 - I. Other necessary identification.
- E. Deviations: Highlight, encircle, or otherwise specifically identify deviations from the Contract Documents on submittals.

- F. Additional Copies: Unless additional copies are required for final submittal, and unless Architect observes noncompliance with provisions in the Contract Documents, initial submittal may serve as final submittal.
 - Additional copies submitted for maintenance manuals will be marked with action taken and will be returned.
- G. Transmittal: Package each submittal individually and appropriately for transmittal and handling. Transmit each submittal using a transmittal form. Architect will discard submittals received from sources other than Contractor.
 - Transmittal Form: Use AIA Document G810 or CSI Form 12.1A.
- H. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
 - 1. Note date and content of previous submittal.
 - 2. Note date and content of revision in label or title block and clearly indicate extent of revision.
 - 3. Resubmit submittals until they are marked "Approved or Approved as noted"
- I. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
- J. Use for Construction: Use only final submittals with mark indicating " Approved or Approved as noted " taken by Architect.

1.4 CONTRACTOR'S USE OF ARCHITECT'S CAD FILES

- A. General: At Contractor's written request, copies of Architect's CAD files will be provided to Contractor for Contractor's use in connection with Project, subject to the following conditions:
 - 1. Contractor must provide Delaware Architects, LLC (DALLC) with an executed release of liability form as provide by DALLC.

PART 2 - PRODUCTS

2.1 ACTION SUBMITTALS

- A. General: Prepare and submit Action Submittals required by individual Specification Sections.
- B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.

- 1. If information must be specially prepared for submittal because standard printed data are not suitable for use, submit as Shop Drawings, not as Product Data.
- 2. Mark each copy of each submittal to show which products and options are applicable.
- 3. Include the following information, as applicable:
 - a. Manufacturer's written recommendations.
 - b. Manufacturer's product specifications.
 - c. Manufacturer's installation instructions.
 - d. Manufacturer's catalog cuts.
 - e. Wiring diagrams showing factory-installed wiring.
 - f. Printed performance curves.
 - g. Operational range diagrams.
 - h. Compliance with specified referenced standards.
 - Testing by recognized testing agency.
- 4. Number of Copies: Submit three copies of Product Data, unless otherwise indicated. Architect will return two copies. Mark up and retain one returned copy as a Project Record Document.
- C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.
 - 1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
 - a. Dimensions.
 - b. Identification of products.
 - c. Fabrication and installation drawings.
 - d. Roughing-in and setting diagrams.
 - e. Wiring diagrams showing field-installed wiring, including power, signal, and control wiring.
 - f. Shopwork manufacturing instructions.
 - g. Templates and patterns.
 - h. Schedules.
 - Notation of coordination requirements.
 - Notation of dimensions established by field measurement.
 - k. Relationship to adjoining construction clearly indicated.
 - Seal and signature of professional engineer if specified.
 - m. Wiring Diagrams: Differentiate between manufacturer-installed and field-installed wiring.
 - Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches but no larger than 30 by 40 inches.
 - 3. Number of Copies: Submit two opaque (bond) copies of each submittal. Architect will return one copy.

- D. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.
 - 1. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
 - 2. Identification: Attach label on unexposed side of Samples that includes the following:
 - a. Generic description of Sample.
 - b. Product name and name of manufacturer.
 - c. Sample source.
 - d. Number and title of appropriate Specification Section
 - 3. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
 - 4. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.
 - a. Number of Samples: Submit one full set(s) of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Architect will return submittal with options selected.
 - 5. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
 - a. Number of Samples: Submit three sets of Samples. Architect will retain two Sample sets; remainder will be returned.
 - Product Schedule or List: As required in individual Specification Sections, prepare a written summary indicating types of products required for the Work and their intended location.
 - 1. Number of Copies: Submit three copies of product schedule or list, unless otherwise indicated. Architect will return two copies.
- F. Submittals Schedule: Comply with requirements specified in Division 01 Section "Construction Progress Documentation."

- G. Application for Payment: Comply with requirements specified in Division 01 Section "Payment Procedures."
- H. Schedule of Values: Comply with requirements specified in Division 01 Section "Payment Procedures."
- Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design.
 - 1. Number of Copies: Submit three copies of subcontractor list, unless otherwise indicated. Architect will return two copies.

2.2 INFORMATIONAL SUBMITTALS

- A. General: Prepare and submit Informational Submittals required by other Specification Sections.
 - 1. Number of Copies: Submit two copies of each submittal, unless otherwise indicated. Architect will not return copies.
 - 2. Certificates and Certifications: Provide a notarized statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity.
 - 3. Test and Inspection Reports: Comply with requirements specified in Division 01 Section "Quality Requirements."
- B. Coordination Drawings: Comply with requirements specified in Division 01 Section "Project Management and Coordination."
- C. Contractor's Construction Schedule: Comply with requirements specified in Division 01 Section "Construction Progress Documentation."
- D. Qualification Data. Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, names and addresses of architects and owners, and other information specified.
- E. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of Welding Procedure Specification (WPS) and Procedure Qualification Record (PQR) on AWS forms. Include names of firms and personnel certified.
- F. Installer Certificates: Prepare written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.

- G. Manufacturer Certificates: Prepare written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.
- H. Product Certificates: Prepare written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.
- I. Material Certificates: Prepare written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.
- J. Material Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.
- K. Product Test Reports: Prepare written reports indicating current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.
- L. Research/Evaluation Reports: Prepare written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project.
- M. Preconstruction Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements in the Contract Documents.
- N. Compatibility Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.
- O. Field Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.
- P. Maintenance Data: Prepare written and graphic instructions and procedures for operation and normal maintenance of products and equipment. Comply with requirements specified in Division 01 Section "Operation and Maintenance Data."
- Design Data: Prepare written and graphic information, including, but not limited to, performance and design criteria, list of applicable codes and regulations, and calculations. Include list of assumptions and other performance and design criteria and a summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Include page numbers.
- R. Manufacturer's Instructions: Prepare written or published information that documents manufacturer's recommendations, guidelines, and procedures for installing or operating

a product or equipment. Include name of product and name, address, and telephone number of manufacturer.

- S. Manufacturer's Field Reports: Prepare written information documenting factoryauthorized service representative's tests and inspections. Include the following, as applicable:
 - Statement on condition of substrates and their acceptability for installation of product.
 - 2. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
 - 3. Results of operational and other tests and a statement of whether observed performance complies with requirements.
- T. Insurance Certificates and Bonds: Prepare written information indicating current status of insurance or bonding coverage. Include name of entity covered by insurance or bond, limits of coverage, amounts of deductibles, if any, and term of the coverage.
- U. Construction Photographs: Comply with requirements specified in Division 01 Section "Photographic Documentation."
- V. Material Safety Data Sheets (MSDSs): Submit information directly to Owner; do not submit to Architect.
 - 1. Architect will not review submittals that include MSDSs and will return them for resubmittal.

2.3 DELEGATED DESIGN

- A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.
 - 1. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to Architect.
- B. Delegated-Design Submittal: In addition to Shop Drawings, Product Data, and other required submittals, submit three copies of a statement, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional.
 - Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.

PART 3 - EXECUTION

3.1 CONTRACTOR'S REVIEW

- A. Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Architect.
- B. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

3.2 ARCHITECT'S ACTION

- A. General: Architect will not review submittals that do not bear Contractor's approval stamp and will return them without action.
- B. Action Submittals: Architect will review each submittal, make marks to indicate corrections or modifications required, and return it. Architect will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action taken, as follows:
 - "Approved" or "Approved as noted" indicates "Fabrication/Installation may be undertaken. Approval does not authorize changes to the Contract Sum or Contract Time" Nor does it relieve the contractor from their responsibility for review and verification that submittal meets the requirements set forth in the construction documents.
 - 2. "Revise and Resubmit" or 'Rejected" indicates "Fabrication and/or installation MAY NOT be undertaken. In resubmitting, limit corrections to items marked.
 - 3. Review/approval neither extends nor alters any contractual obligations of the Architect/Engineer or Contractor.
- C. Informational Submittals: Architect will review each submittal and will not return it, or will return it if it does not comply with requirements. Architect will forward each submittal to appropriate party.
- Partial submittals are not acceptable, will be considered nonresponsive, and will be returned without review.
- E. Submittals not required by the Contract Documents may not be reviewed and may be discarded.

3.3 REQUIRED SUBMISSIONS

- A. Contractor to submit product literature/samples for approval of the following:
 - 1. Geo-grid System
 - 2. Crushed Stone Base Material
 - 3. Sod
 - 4. Temporary Grave Site Marker

SECTION 014000 - QUALITY REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for quality assurance and quality control.
- B. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.
 - 1. Specified tests, inspections, and related actions do not limit Contractor's other quality-assurance and -control procedures that facilitate compliance with the Contract Document requirements.
 - 2. Requirements for Contractor to provide quality assurance and -control services required by Architect, Owner, or authorities having jurisdiction are not limited by provisions of this Section.
- C. See Divisions 02 through 33 Sections for specific test and inspection requirements.

1.2 DEFINITIONS

- A. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.
- B. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that actual products incorporated into the Work and completed construction comply with requirements. Services do not include contract enforcement activities performed by Architect.
- C. Laboratory Mockups: Full-size, physical assemblies that are constructed at testing facility to verify performance characteristics.
- D. Preconstruction Testing: Tests and inspections that are performed specifically for the Project before products and materials are incorporated into the Work to verify performance or compliance with specified criteria.
- E. Product Testing: Tests and inspections that are performed by an NRTL, an NVLAP, or a testing agency qualified to conduct product testing and acceptable to authorities having jurisdiction, to establish product performance and compliance with industry standards.
- F. Source Quality-Control Testing: Tests and inspections that are performed at the source, i.e., plant, mill, factory, or shop.

- G. Field Quality-Control Testing: Tests and inspections that are performed on-site for installation of the Work and for completed Work.
- H. Testing Agency: An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.
- I. Installer/Applicator/Erector: Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-subcontractor, to perform a particular construction operation, including installation, erection, application, and similar operations.
 - Using a term such as "carpentry" does not imply that certain construction activities must be performed by accredited or unionized individuals of a corresponding generic name, such as "carpenter." It also does not imply that requirements specified apply exclusively to trades people of the corresponding generic name.
- J. Experienced: When used with an entity, "experienced" means having successfully completed a minimum of five previous projects similar in size and scope to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.

1.3 CONFLICTING REQUIREMENTS

- A. General: If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer uncertainties and requirements that are different, but apparently equal, to Architect for a decision before proceeding.
- B. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Architect for a decision before proceeding.

1.4 SUBMITTALS

- A. Qualification Data: For testing agencies specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include proof of qualifications in the form of a recent report on the inspection of the testing agency by a recognized authority.
- B. Reports: Prepare and submit certified written reports that include the following:
 - 1. Date of issue.
 - 2. Project title and number.
 - 3. Name, address, and telephone number of testing agency.
 - 4. Dates and locations of samples and tests or inspections.

- 5. Names of individuals making tests and inspections.
- 6. Description of the Work and test and inspection method.
- 7. Identification of product and Specification Section.
- 8. Complete test or inspection data.
- 9. Test and inspection results and an interpretation of test results.
- Record of temperature and weather conditions at time of sample taking and testing and inspecting.
- 11. Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
- 12. Name and signature of laboratory inspector.
- 13. Recommendations on retesting and reinspecting.
- C. Permits, Licenses, and Certificates: For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.

1.5 QUALITY ASSURANCE

- A. General: Qualifications paragraphs in this Article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.
- B. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.
- C. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- D. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- E. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system, assembly, or product that are similar to those indicated for this Project in material, design, and extent.
- F. Testing Agency Qualifications: An NRTL, an NVLAP, or an independent agency with the experience and capability to conduct testing and inspecting indicated, as documented according to ASTM E 548; and with additional qualifications specified in individual Sections; and where required by authorities having jurisdiction, that is acceptable to authorities.
 - 1. NRTL: A nationally recognized testing laboratory according to 29 CFR 1910.7.

- 2. NVLAP: A testing agency accredited according to NIST's National Voluntary Laboratory Accreditation Program.
- G. Factory-Authorized Service Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.
- H. Laboratory Mockups: Comply with requirements of preconstruction testing and those specified in individual Sections in Divisions 02 through 49.

1.6 QUALITY CONTROL

- A. Owner Responsibilities: Where quality-control services are indicated as Owner's responsibility, Owner will engage a qualified testing agency to perform these services.
 - 1. Owner will furnish Contractor with names, addresses, and telephone numbers of testing agencies engaged and a description of types of testing and inspecting they are engaged to perform.
 - 2. Costs for retesting and reinspecting construction that replaces or is necessitated by work that failed to comply with the Contract Documents will be charged to Contractor.
- B. Tests and inspections not explicitly assigned to Owner are Contractor's responsibility. Unless otherwise indicated, provide quality-control services specified and those required by authorities having jurisdiction. Perform quality-control services required of Contractor by authorities having jurisdiction, whether specified or not.
 - 1. Where services are indicated as Contractor's responsibility, engage a qualified testing agency to perform these quality-control services.
 - a. Contractor shall not employ same entity engaged by Owner, unless agreed to in writing by Owner.
 - 2. Notify testing agencies at least 24 hours in advance of time when Work that requires testing or inspecting will be performed.
 - 3. Where quality-control services are indicated as Contractor's responsibility, submit a certified written report, in duplicate, of each quality-control service.
 - 4. Testing and inspecting requested by Contractor and not required by the Contract Documents are Contractor's responsibility.
 - 5. Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.
- C. Manufacturer's Field Services: Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report results in writing as specified in Division 01 Section "Submittal Procedures."

- D. Retesting/Reinspecting: Regardless of whether original tests or inspections were Contractor's responsibility, provide quality-control services, including retesting and reinspecting, for construction that replaced Work that failed to comply with the Contract Documents.
- E. Testing Agency Responsibilities: Cooperate with Architect and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.
 - 1. Notify Architect and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
 - 2. Determine the location from which test samples will be taken and in which in-situ tests are conducted.
 - 3. Conduct and interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.
 - 4. Submit a certified written report, in duplicate, of each test, inspection, and similar quality-control service through Contractor.
 - 5. Do not release, revoke, alter, or increase the Contract Document requirements or approve or accept any portion of the Work.
 - 6. Do not perform any duties of Contractor.
- F. Associated Services: Cooperate with agencies performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:
 - 1. Access to the Work.
 - 2. Incidental labor and facilities necessary to facilitate tests and inspections.
 - 3. Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
 - 4. Facilities for storage and field curing of test samples.
 - 5. Delivery of samples to testing agencies.
 - 6. Preliminary design mix proposed for use for material mixes that require control by testing agency.
 - 7. Security and protection for samples and for testing and inspecting equipment at Project site.
- G. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and -control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.
 - 1. Schedule times for tests, inspections, obtaining samples, and similar activities.

1.7 SPECIAL TESTS AND INSPECTIONS

A. Special Tests and Inspections: Conducted by a qualified testing agency or special inspector as required by authorities having jurisdiction, as indicated in individual Specification Sections, and as follows:

- 1. Verifying that manufacturer maintains detailed fabrication and quality-control procedures and reviewing the completeness and adequacy of those procedures to perform the Work.
- 2. Notifying Architect and Contractor promptly of irregularities and deficiencies observed in the Work during performance of its services.
- 3. Submitting a certified written report of each test, inspection, and similar quality-control service to Architect with copy to Contractor and to authorities having jurisdiction.
- 4. Submitting a final report of special tests and inspections at Substantial Completion, which includes a list of unresolved deficiencies.
- 5. Interpreting tests and inspections and stating in each report whether tested and inspected work complies with or deviates from the Contract Documents.
- 6. Retesting and reinspecting corrected work.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 REPAIR AND PROTECTION

- A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.
 - 1. Provide materials and comply with installation requirements specified in other Specification Sections. Restore patched areas and extend restoration into adjoining areas with durable seams that are as invisible as possible.
- B. Protect construction exposed by or for quality-control service activities.
- C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

END OF SECTION 014000

SECTION 014200 - REFERENCES

PART 1 - GENERAL

1.1 DEFINITIONS

- A. General: Basic Contract definitions are included in the Conditions of the Contract.
- B. "Approved": When used to convey Architect's action on Contractor's submittals, applications, and requests, "approved" is limited to Architect's duties and responsibilities as stated in the Conditions of the Contract.
- C. "Directed": A command or instruction by Architect. Other terms including "requested," "authorized," "selected," "required," and "permitted" have the same meaning as "directed."
- D. "Indicated": Requirements expressed by graphic representations or in written form on Drawings, in Specifications, and in other Contract Documents. Other terms including "shown," "noted," "scheduled," and "specified" have the same meaning as "indicated."
- E. "Regulations": Laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, and rules, conventions, and agreements within the construction industry that control performance of the Work.
- F. "Furnish": Supply and deliver to Project site, ready for unloading, unpacking, assembly, installation, and similar operations.
- G. "Install": Operations at Project site including unloading, temporarily storing, unpacking, assembling, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.
- H. "Provide". Furnish and install, complete and ready for the intended use.
- I. "Project Site": Space available for performing construction activities. The extent of Project site is shown on Drawings and may or may not be identical with the description of the land on which Project is to be built.

1.2 INDUSTRY STANDARDS

- Applicability of Standards: Unless the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.
- B. Publication Dates: Comply with standards in effect as of date of the Contract Documents unless otherwise indicated.

- C. Copies of Standards: Each entity engaged in construction on Project should be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents.
 - Where copies of standards are needed to perform a required construction activity, obtain copies directly from publication source.

1.3 ABBREVIATIONS AND ACRONYMS

- A. Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities indicated in Thomson Gale's "Encyclopedia of Associations" or in Columbia Books' "National Trade & Professional Associations of the U.S."
- B. Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list.

AA Aluminum Association, Inc. (The)

AAADM American Association of Automatic Door Manufacturers

AABC Associated Air Balance Council

AAMA American Architectural Manufacturers Association

AASHTO American Association of State Highway and Transportation Officials

AATCC American Association of Textile Chemists and Colorists (The)

ABAA Air Barrier Association of America

ABMA American Bearing Manufacturers Association

ACI ACI International (American Concrete Institute)

ACPA American Concrete Pipe Association

AEIC Association of Edison Illuminating Companies, Inc. (The)

AF&PA American Forest & Paper Association

AGA American Gas Association

AGC Associated General Contractors of America (The)

AHA American Hardboard Association (Now part of CPA)

AHAM Association of Home Appliance Manufacturers

Al Asphalt Institute

AIA American Institute of Architects (The)

AISC American Institute of Steel Construction

AISI American Iron and Steel Institute

AITC American Institute of Timber Construction

ALCA Associated Landscape Contractors of America

(Now PLANET - Professional Landcare Network)

ALSC American Lumber Standard Committee, Incorporated

AMCA Air Movement and Control Association International, Inc.

ANSI American National Standards Institute

AOSA Association of Official Seed Analysts, Inc.

APA Architectural Precast Association

APA APA - The Engineered Wood Association

APA EWS APA - The Engineered Wood Association; Engineered Wood Systems

API American Petroleum Institute

ARI Air-Conditioning & Refrigeration Institute

ARMA Asphalt Roofing Manufacturers Association

ASCE American Society of Civil Engineers

ASCE/SEI American Society of Civil Engineers/Structural Engineering Institute

(See ASCE)

ASHRAE American Society of Heating, Refrigerating and Air-Conditioning Engineers

ASME ASME International

(The American Society of Mechanical Engineers International)

ASSE American Society of Sanitary Engineering

ASTM ASTM International

(American Society for Testing and Materials International)

AWCI AWCI International

(Association of the Wall and Ceiling Industry International)

AWCMA American Window Covering Manufacturers Association

(Now WCSC)

AWI Architectural Woodwork Institute

AWPA American Wood-Preservers' Association

AWS American Welding Society

AWWA American Water Works Association

BHMA Builders Hardware Manufacturers Association

BIA Brick Industry Association (The)

BICSI BICSI

BIFMA BIFMA International

(Business and Institutional Furniture Manufacturer's Association

International)

BISSC Baking Industry Sanitation Standards Committee

CCC Carpet Cushion Council

CDA Copper Development Association

CEA Canadian Electricity Association

CFFA Chemical Fabrics & Film Association, Inc.

CGA Compressed Gas Association

CIMA Cellulose Insulation Manufacturers Association

CISCA Ceilings & Interior Systems Construction Association

CISPI Cast Iron Soil Pipe Institute

SLFMI Chain Link Fence Manufacturers Institute

CRRC Cool Roof Rating Council

CPA Composite Panel Association

CPPA Corrugated Polyethylene Pipe Association

CRI Carpet & Rug Institute (The)

CRSI Concrete Reinforcing Steel Institute

CSA Canadian Standards Association

CSA CSA International

(Formerly: IAS - International Approval Services)

CSI Cast Stone Institute

CSI Construction Specifications Institute (The)

CSSB Cedar Shake & Shingle Bureau

CTI Cooling Technology Institute

(Formerly: Cooling Tower Institute)

DHI Door and Hardware Institute

EIA Electronic Industries Alliance

EIMA EIFS Industry Members Association

EJCDC Engineers Joint Contract Documents Committee

EJMA Expansion Joint Manufacturers Association, Inc.

ESD ESD Association

FIBA Federation Internationale de Basketball

(The International Basketball Federation)

FIVB Federation Internationale de Volleyball

(The International Volleyball Federation)

FM Approvals

FM Global FM Global

(Formerly: FMG - FM Global)

FMRC Factory Mutual Research

(Now FM Global)

FRSA Florida Roofing, Sheet Metal & Air Conditioning Contractors Association, Inc.

FSA Fluid Sealing Association

FSC Forest Stewardship Council

GA Gypsum Association

GANA Glass Association of North America

GRI (Now GSI)

GS Green Seal

GSI Geosynthetic Institute

HI Hydraulic Institute

HI Hydronics Institute

HMMA Hollow Metal Manufacturers Association

(Part of NAAMM)

HPVA Hardwood Plywood & Veneer Association

HPW H. P. White Laboratory, Inc.

IAS International Approval Services

(Now CSA International)

IBF International Badminton Federation

ICEA Insulated Cable Engineers Association, Inc.

ICRI International Concrete Repair Institute, Inc.

IEC International Electrotechnical Commission

IEEE Institute of Electrical and Electronics Engineers, Inc. (The)

IESNA Illuminating Engineering Society of North America

IEST Institute of Environmental Sciences and Technology

IGCC Insulating Glass Certification Council

IGMA Insulating Glass Manufacturers Alliance

Indiana Limestone Institute of America, Inc.

ISO International Organization for Standardization

ISSFA International Solid Surface Fabricators Association

ITS Intertek Testing Service NA

ITU International Telecommunication Union

KCMA Kitchen Cabinet Manufacturers Association

LMA Laminating Materials Association

(Now part of CPA)

LPI Lightning Protection Institute

MBMA Metal Building Manufacturers Association

MFMA Maple Flooring Manufacturers Association, Inc.

MFMA Metal Framing Manufacturers Association, Inc.

MH Material Handling

(Now MHIA)

MHIA Material Handling Industry of America

MIA Marble Institute of America

MPI Master Painters Institute

MSS Manufacturers Standardization Society of The Valve and Fittings Industry

Inc.

NAAMM National Association of Architectural Metal Manufacturers

NACE NACE International

(National Association of Corrosion Engineers International)

NADCA National Air Duct Cleaners Association

NAGWS National Association for Girls and Women in Sport

NAIMA North American Insulation Manufacturers Association

NBGQA National Building Granite Quarries Association, Inc.

NCAA National Collegiate Athletic Association (The)

NCMA National Concrete Masonry Association

NCPI National Clay Pipe Institute

NCTA National Cable & Telecommunications Association

NEBB National Environmental Balancing Bureau

NECA National Electrical Contractors Association

NeLMA Northeastern Lumber Manufacturers' Association

NEMA National Electrical Manufacturers Association

NETA InterNational Electrical Testing Association

NFHS National Federation of State High School Associations

NFPA NFPA

(National Fire Protection Association)

NFRC National Fenestration Rating Council

NGA National Glass Association

NHLA National Hardwood Lumber Association

NLGA National Lumber Grades Authority

NOFMA NOFMA: The Wood Flooring Manufacturers Association

(Formerly: National Oak Flooring Manufacturers Association)

NRCA National Roofing Contractors Association

NRMCA National Ready Mixed Concrete Association

NSF NSF International

(National Sanitation Foundation International)

NSSGA National Stone, Sand & Gravel Association

NTMA National Terrazzo & Mosaic Association, Inc. (The)

NTRMA National Tile Roofing Manufacturers Association

(New TRI)

NWWDA National Wood Window and Door Association

(Now WDMA)

OPL Omega Point Laboratories, Inc.

(Now ITS)

PCI Precast/Prestressed Concrete Institute

PDCA Painting & Decorating Contractors of America

PDI Plumbing & Drainage Institute

PGI PVC Geomembrane Institute

PLANET Professional Landcare Network

(Formerly: ACLA - Associated Landscape Contractors of America)

PTI Post-Tensioning Institute

RCSC Research Council on Structural Connections

RFCI Resilient Floor Covering Institute

RIS Redwood Inspection Service

SAE SAE International

SDI Steel Deck Institute

SDI Steel Door Institute

SEFA Scientific Equipment and Furniture Association

SEI/ASCE Structural Engineering Institute/American Society of Civil Engineers

(See ASCE)

SGCC Safety Glazing Certification Council

SIA Security Industry Association

SIGMA Sealed Insulating Glass Manufacturers Association

(Now IGMA)

SJI Steel Joist Institute

SMA Screen Manufacturers Association

SMACNA Sheet Metal and Air Conditioning Contractors' National Association

SMPTE Society of Motion Picture and Television Engineers

SPFA Spray Polyurethane Foam Alliance

(Formerly: SPI/SPFD - The Society of the Plastics Industry, Inc.; Spray

Polyurethane Foam Division)

SPIB Southern Pine Inspection Bureau (The)

SPRI Single Ply Roofing Industry

SSINA Specialty Steel Industry of North America

SSPC SSPC: The Society for Protective Coatings

STI Steel Tank Institute

SWI Steel Window Institute

SWRI Sealant, Waterproofing, & Restoration Institute

TCA Tile Council of America, Inc.

TIA/EIA Telecommunications Industry Association/Electronic Industries Alliance

TMS The Masonry Society

TPI Truss Plate Institute, Inc.

TPI Turfgrass Producers International

TRI Tile Roofing Institute

UL Underwriters Laboratories Inc.

UNI Uni-Bell PVC Pipe Association

USAV USA Volleyball

USGBC U.S. Green Building Council

USITT United States Institute for Theatre Technology, Inc.

WASTEC Waste Equipment Technology Association

WCLIB West Coast Lumber Inspection Bureau

WCMA Window Covering Manufacturers Association

(Now WCSC)

WCSC Window Covering Safety Council

(Formerly: WCMA - Window Covering Manufacturers Association)

WDMA Window & Door Manufacturers Association

(Formerly: NWWDA - National Wood Window and Door Association)

WI Woodwork Institute (Formerly: WIC - Woodwork Institute of California)

WIC Woodwork Institute of California

(Now WI)

WMMPA Wood Moulding & Millwork Producers Association

WSRCA Western States Roofing Contractors Association

WWPA Western Wood Products Association

C. Code Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list.

BOCA International, Inc.

(See ICC)

IAPMO International Association of Plumbing and Mechanical Officials

ICBO International Conference of Building Officials

(See ICC)

ICBO ICBO Evaluation Service, Inc.

ES

(See ICC-ES)

ICC International Code Council

ICC-ES ICC Evaluation Service, Inc.

SBCCI Southern Building Code Congress International, Inc.

(See ICC)

UBC Uniform Building Code

(See ICC)

D. Federal Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list.

CE Army Corps of Engineers

CPSC Consumer Product Safety Commission

DOC Department of Commerce

DOD Department of Defense

DOE Department of Energy

EPA Environmental Protection Agency

FAA Federal Aviation Administration

FCC Federal Communications Commission

FDA Food and Drug Administration

GSA General Services Administration

HUD Department of Housing and Urban Development

LBL Lawrence Berkeley National Laboratory

NCHR National Cooperative Highway Research Program

Ρ

(See TRB)

NIST National Institute of Standards and Technology

OSHA Occupational Safety & Health Administration

PBS Public Building Service

(See GSA)

PHS Office of Public Health and Science

RUS Rural Utilities Service

(See USDA)

SD State Department

TRB Transportation Research Board

USDA Department of Agriculture

USPS Postal Service

E. Standards and Regulations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the standards and regulations in the following list.

ADAAG Americans with Disabilities Act (ADA)

Architectural Barriers Act (ABA)

CFR Code of Federal Regulations

DOD Department of Defense Military Specifications and Standards

DSCC Defense Supply Center Columbus

(See FS)

FED-STD Federal Standard

(See FS)

FS Federal Specification

FTMS Federal Test Method Standard

(See FS)

MIL (See MILSPEC)

MIL-STD (See MILSPEC)

MILSPEC Military Specification and Standards

UFAS Uniform Federal Accessibility Standards

F. State Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list.

CBH State of California, Department of Consumer Affairs Bureau of Home Furnishings and F Thermal Insulation

CCR California Code of Regulations

CPU California Public Utilities Commission

С

TFS Texas Forest Service Forest Resource Development

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 014200

SECTION 015000 - TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes requirements for temporary utilities, support facilities and security and protection facilities.
- B. See Division 01 Section "Execution" for progress cleaning requirements.
- C. See Divisions 02 through 33 Sections for temporary heat, ventilation, and humidity requirements for products in those Sections.
- D. See Division 31 Section "Dewatering" for disposal of ground water at Project site.

1.2 USE CHARGES

- A. General: Cost or use charges for temporary facilities shall be included in the Contract Sum. Allow other entities to use temporary services and facilities without cost, including, but not limited to, Owner's construction forces, Architect, testing agencies, and authorities having jurisdiction.
- B. Water Service: Water from Owner's existing water system is available for irrigation and construction use, not cleaning of marker headstones, without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.
- C. Electric Power Service: Electric power from Owner's existing system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.

1.3 SUBMITTALS

A. Site Plan: Show temporary facilities, utility hookups, staging areas, and parking areas for construction personnel.

1.4 QUALITY ASSURANCE

- A. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.
- B. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.

1.5 PROJECT CONDITIONS

A. Temporary Use of Permanent Facilities: Installer of each permanent service shall assume responsibility for operation, maintenance, and protection of each permanent service during its use as a construction facility before Owner's acceptance, regardless of previously assigned responsibilities.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Chain-Link Fencing: Minimum 2-inch (50-mm), 0.148-inch- (3.76-mm-) thick, galvanized steel, chain-link fabric fencing; minimum 6 feet (1.8 m) high with galvanized steel pipe posts; minimum 2-3/8-inch- (60-mm-) OD line posts and 2-7/8-inch- (73-mm-) OD corner and pull posts, with 1-5/8-inch- (42-mm-) OD top rails.
- B. Portable Chain-Link Fencing: Minimum 2-inch (50-mm), 9-gage, galvanized steel, chain-link fabric fencing; minimum 6 feet (1.8 m) high with galvanized steel pipe posts; minimum 2-3/8-inch- (60-mm-) OD line posts and 2-7/8-inch- (73-mm-) OD corner and pull posts, with 1-5/8-inch- (42-mm-) OD top and bottom rails. Provide concrete bases for supporting posts.

2.2 TEMPORARY FACILITIES

- A. Field Offices, General: Prefabricated or mobile units with serviceable finishes, temperature controls, and foundations adequate for normal loading.
- B. Storage and Fabrication Sheds: Provide sheds sized, furnished, and equipped to accommodate materials and equipment for construction operations. Temporary buildings (e.g., storage sheds, shops, offices) and utilities may be erected by the Contractor only with the approval of the Contracting Officer and shall be built with labor and materials furnished by the Contractor without expense to the Owner. The temporary buildings and utilities shall remain the property of the Contractor and shall be removed by the Contractor at its own expense upon completion of the work.
- C. Fence: Before work operations begin, Contractor shall provide a chain link fence, six feet in height and no more, around the staging area. Provide gates as required for access with necessary hardware, including hasps and padlocks. Fasten fence fabric to terminal posts with tension bands and to line posts and top and bottom rails with tie wires spaced at maximum 15 inches. Bottom of fences shall extend to one inch above grade.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by progress of the Work.
- B. Provide each facility ready for use when needed to avoid delay. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

3.2 TEMPORARY UTILITY INSTALLATION

- A. General: Install temporary service or connect to existing service.
 - 1. Arrange with utility company, Owner, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services.
- B. Sewers and Drainage: Provide temporary utilities to remove effluent lawfully.
 - 1. Connect temporary sewers to private system indicated as directed by authorities having jurisdiction.
- C. Water Service: Use of Owner's existing water service facilities will be permitted, as long as facilities are cleaned and maintained in a condition acceptable to Owner. At Substantial Completion, restore these facilities to condition existing before initial use.
- D. It is the responsibility of the Contractor to provide water for the newly installed sod as part of this contract. The Contractor may utilize water provided by the Owner via the existing irrigation system, or tanks/water trucks filled offsite as necessary to transport water to areas where needed in order to complete the work required by this contract. Any water that the Contractor obtains from the cemetery will not need to be metered and will not be charged to Contractor.
 - 1. Where installations below an outlet might be damaged by spillage or leakage, provide a drip pan of suitable size to minimize water damage. Drain accumulated water promptly from pans.
- E. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking water for use of construction personnel. Comply with authorities having jurisdiction for type, number, location, operation, and maintenance of fixtures and facilities.
- F. Electric Power Service: Use of Owner's existing electric power service will be permitted, as long as equipment is maintained in a condition acceptable to Owner.
- G. Telephone Service: Provide temporary telephone service in common-use facilities for use by all construction personnel. Install one telephone line(s) for each field office.

- 1. Provide additional telephone lines for the following:
 - a. Provide a dedicated telephone line for each facsimile machine and computer in each field office.
- 2. At each telephone, post a list of important telephone numbers including police and fire departments Contractor's home office Architect's office Owner's office Principal subcontractors' field and home offices.
- 3. Provide superintendent with cellular telephone or portable two-way radio for use when away from field office.
- H. Electronic Communication Service: Provide temporary electronic communication service, including electronic mail in field office.

3.3 SUPPORT FACILITIES INSTALLATION

- A. General: Comply with the following:
 - 1. Provide incombustible construction for offices, shops, and sheds located within construction area or within 30 feet (9 m) of building lines. Comply with NFPA 241.
 - 2. Maintain support facilities until near Substantial Completion. Remove before Substantial Completion. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to Owner.
- B. Temporary Roads and Paved Areas: Contractor shall utilize existing paved and gravel roads **only**. The construction of temporary roads, paths etc. shall **not** be permitted.
- C. Traffic Controls: Comply with requirements of authorities having jurisdiction.
 - 1. Protect existing site improvements to remain including curbs, pavement, and utilities.
 - 2. Maintain access for fire-fighting equipment and access to fire hydrants.
- D. Parking: Use designated areas as shown on drawings for parking areas for construction personnel.
- E. Dewatering Facilities and Drains: Comply with requirements of authorities having jurisdiction. Maintain Project site, excavations, and construction free of water.
 - 1. Dispose of rainwater in a lawful manner that will not result in flooding Project or adjoining properties nor endanger permanent Work or temporary facilities.
 - 2. Remove snow and ice as required to minimize accumulations.
- F. Project Identification and Temporary Signs: Provide Project identification and other signs as indicated on Drawings. Install signs where indicated to inform public and individuals seeking entrance to Project. Unauthorized signs are not permitted.
 - 1. Provide temporary, directional signs for construction personnel and visitors.

- 2. Maintain and touchup signs so they are legible at all times.
- G. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction. Comply with Division 01 Section "Execution" for progress cleaning requirements.

3.4 SECURITY AND PROTECTION FACILITIES INSTALLATION

- A. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction in ways and by methods that comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
- B. Temporary Erosion and Sedimentation Control: Provide measures to prevent soil erosion and discharge of soil-bearing water runoff and airborne dust to adjacent properties and walkways, according to requirements of authorities having jurisdiction.
- C. Stormwater Control: Comply with authorities having jurisdiction. Provide barriers in and around excavations and subgrade construction to prevent flooding by runoff of stormwater from heavy rains.
- D. Tree and Plant Protection: Install temporary fencing located as indicated or outside the drip line of trees to protect vegetation from damage from construction operations. Protect tree root systems from damage, flooding, and erosion.
- E. Pest Control: Engage pest-control service to recommend practices to minimize attraction and harboring of rodents, roaches, and other pests and to perform extermination and control procedures at regular intervals so Project will be free of pests and their residues at Substantial Completion. Obtain extended warranty for Owner. Perform control operations lawfully, using environmentally safe materials.
- F. Security Enclosure and Lockup: Install substantial temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security.
- G. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.
 - 1. Temporary Enclosures: Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities.
- H. Temporary Fire Protection: Install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241.
 - 1. Prohibit smoking in construction areas.

- 2. Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition according to requirements of authorities having jurisdiction.
- Develop and supervise an overall fire-prevention and -protection program for personnel at Project site. Review needs with local fire department and establish procedures to be followed. Instruct personnel in methods and procedures. Post warnings and information.
- 4. Provide temporary standpipes and hoses for fire protection. Hang hoses with a warning sign stating that hoses are for fire-protection purposes only and are not to be removed. Match hose size with outlet size and equip with suitable nozzles.

3.5 OPERATION, TERMINATION, AND REMOVAL

- A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.
- B. Maintenance: Maintain facilities in good operating condition until removal.
 - 1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.
- C. Temporary Facility Changeover: Do not change over from using temporary security and protection facilities to permanent facilities until Substantial Completion.
- D. Termination and Removal: Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.
 - 1. Materials and facilities that constitute temporary facilities are property of Contractor. Owner reserves right to take possession of Project identification signs.
 - At Substantial Completion, clean and renovate permanent facilities used during construction period. Comply with final cleaning requirements specified in Division 01 Section "Closeout Procedures."

END OF SECTION 015000

SECTION 016000 - PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; product substitutions; and comparable products.
- B. See Division 01 Section "Closeout Procedures" for submitting warranties for Contract closeout.
- C. See Divisions 02 through 33 Sections for specific requirements for warranties on products and installations specified to be warranted.

1.2 DEFINITIONS

- A. Products: Items purchased for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
 - 1. Named Products: Items identified by manufacturer's product name, including make or model number or other designation shown or listed in manufacturer's published product literature, that is current as of date of the Contract Documents.
 - 2. New Products. Items that have not previously been incorporated into another project or facility. Products salvaged or recycled from other projects are not considered new products.
 - 3. Comparable Product: Product that is demonstrated and approved through submittal process, or where indicated as a product substitution, to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of specified product.
- B. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.
 - Basis-of-Design Product Specification: Where a specific manufacturer's product is named and accompanied by the words "basis of design," including make or model number or other designation, to establish the significant qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics for purposes of evaluating comparable products of other named manufacturers.

1.3 SUBMITTALS

- A. Substitution Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
 - 1. Substitution Request Form: Use CSI Form 13.1A.
 - 2. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
 - a. Statement indicating why specified material or product cannot be provided.
 - b. Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by Owner and separate contractors, that will be necessary to accommodate proposed substitution.
 - c. Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
 - d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
 - e. Samples, where applicable or requested.
 - f. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners.
 - g. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
 - h. Research/evaluation reports evidencing compliance with building code in effect for Project, from a model code organization acceptable to authorities having jurisdiction.
 - i. Detailed comparison of Contractor's Construction Schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating lack of availability or delays in delivery.
 - Cost information, including a proposal of change, if any, in the Contract Sum.
 - Contractor's certification that proposed substitution complies with requirements in the Contract Documents and is appropriate for applications indicated.
 - Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
 - Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within 7 days of receipt of a request for substitution. Architect will notify Contractor of acceptance or rejection of proposed substitution within 15 days of receipt of request, or 7 days of receipt of additional information or documentation, whichever is later.

- a. Form of Acceptance: Change Order.
- b. Use product specified if Architect cannot make a decision on use of a proposed substitution within time allocated.
- B. Comparable Product Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
 - Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within one week of receipt of a comparable product request. Architect will notify Contractor of approval or rejection of proposed comparable product request within 15 days of receipt of request, or 7 days of receipt of additional information or documentation, whichever is later.
 - a. Form of Approval: As specified in Division 01 Section "Submittal Procedures."
 - b. Use product specified if Architect cannot make a decision on use of a comparable product request within time allocated.
- C. Basis-of-Design Product Specification Submittal: Comply with requirements in Division 01 Section "Submittal Procedures." Show compliance with requirements.

1.4 QUALITY ASSURANCE

A. Compatibility of Options: If Contractor is given option of selecting between two or more products for use on Project, product selected shall be compatible with products previously selected, even if previously selected products were also options.

1.5 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft. Comply with manufacturer's written instructions.
- B. Delivery and Handling:
 - 1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
 - Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
 - 3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
 - 4. Inspect products on delivery to ensure compliance with the Contract Documents and to ensure that products are undamaged and properly protected.

C. Storage:

- 1. Store products to allow for inspection and measurement of quantity or counting of units.
- 2. Store materials in a manner that will not endanger Project structure.
- Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.
- 4. Store cementitious products and materials on elevated platforms.
- 5. Store foam plastic from exposure to sunlight, except to extent necessary for period of installation and concealment.
- 6. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
- 7. Protect stored products from damage and liquids from freezing.

1.6 PRODUCT WARRANTIES

- A. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.
 - 1. Manufacturer's Warranty: Preprinted written warranty published by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.
 - 2. Special Warranty: Written warranty required by or incorporated into the Contract Documents, either to extend time limit provided by manufacturer's warranty or to provide more rights for Owner.
- B. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution. Submit a draft for approval before final execution.
 - 1. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.
 - 2. Specified Form: When specified forms are included with the Specifications, prepare a written document using appropriate form properly executed.
 - 3. Refer to Divisions 2 through 16 Sections for specific content requirements and particular requirements for submitting special warranties.
- C. Submittal Time: Comply with requirements in Division 01 Section "Closeout Procedures."

PART 2 - PRODUCTS

2.1 PRODUCT SELECTION PROCEDURES

A. General Product Requirements: Provide products that comply with the Contract Documents, that are undamaged and, unless otherwise indicated, that are new at time of installation.

- 1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
- 2. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
- 3. Owner reserves the right to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
- 4. Where products are accompanied by the term "as selected," Architect will make selection.
- 5. Where products are accompanied by the term "match sample," sample to be matched is Architect's.
- 6. Descriptive, performance, and reference standard requirements in the Specifications establish "salient characteristics" of products.

B. Product Selection Procedures:

- 1. Product: Where Specifications name a single product and manufacturer, provide the named product that complies with requirements.
- 2. Manufacturer/Source: Where Specifications name a single manufacturer or source, provide a product by the named manufacturer or source that complies with requirements.
- 3. Products: Where Specifications include a list of names of both products and manufacturers, provide one of the products listed that complies with requirements.
- 4. Manufacturers: Where Specifications include a list of manufacturers' names, provide a product by one of the manufacturers listed that complies with requirements.
- 5. Available Products: Where Specifications include a list of names of both products and manufacturers, provide one of the products listed, or an unnamed product, that complies with requirements. Comply with provisions in Part 2 "Comparable Products" Article for consideration of an unnamed product.
- 6. Available Manufacturers: Where Specifications include a list of manufacturers, provide a product by one of the manufacturers listed, or an unnamed manufacturer, that complies with requirements. Comply with provisions in Part 2 "Comparable Products" Article for consideration of an unnamed product.
- 7. Product Options: Where Specifications indicate that sizes, profiles, and dimensional requirements on Drawings are based on a specific product or system, provide the specified product or system. Comply with provisions in Part 2 "Product Substitutions" Article for consideration of an unnamed product or system.
- 8. Basis-of-Design Product: Where Specifications name a product and include a list of manufacturers, provide the specified product or a comparable product by one of the other named manufacturers. Drawings and Specifications indicate sizes, profiles, dimensions, and other characteristics that are based on the product named. Comply with provisions in Part 2 "Comparable Products" Article for consideration of an unnamed product by the other named manufacturers.
- 9. Visual Matching Specification: Where Specifications require matching an established Sample, select a product that complies with requirements and matches Architect's sample. Architect's decision will be final on whether a proposed product matches.

- a. If no product available within specified category matches and complies with other specified requirements, comply with provisions in Part 2 "Product Substitutions" Article for proposal of product.
- 10. Visual Selection Specification: Where Specifications include the phrase "as selected from manufacturer's colors, patterns, textures" or a similar phrase, select a product that complies with other specified requirements.
 - a. Standard Range: Where Specifications include the phrase "standard range of colors, patterns, textures" or similar phrase, Architect will select color, pattern, density, or texture from manufacturer's product line that does not include premium items.
 - b. Full Range: Where Specifications include the phrase "full range of colors, patterns, textures" or similar phrase, Architect will select color, pattern, density, or texture from manufacturer's product line that includes both standard and premium items.

2.2 PRODUCT SUBSTITUTIONS

- A. Timing: Architect will consider requests for substitution if received within 15 days after the Notice to Proceed. Requests received after that time may be considered or rejected at discretion of Architect.
- B. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:
 - 1. Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner must assume. Owner's additional responsibilities may include compensation to Architect for redesign and evaluation services, increased cost of other construction by Owner, and similar considerations.
 - 2. Requested substitution does not require extensive revisions to the Contract Documents.
 - 3. Requested substitution is consistent with the Contract Documents and will produce indicated results.
 - 4. Substitution request is fully documented and properly submitted.
 - 5. Requested substitution will not adversely affect Contractor's Construction Schedule.
 - 6. Requested substitution has received necessary approvals of authorities having jurisdiction.
 - 7. Requested substitution is compatible with other portions of the Work.
 - 8. Requested substitution has been coordinated with other portions of the Work.
 - 9. Requested substitution provides specified warranty.

2.3 COMPARABLE PRODUCTS

- A. Conditions: Architect will consider Contractor's request for comparable product when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:
 - Evidence that the proposed product does not require extensive revisions to the Contract Documents that it is consistent with the Contract Documents and will produce the indicated results, and that it is compatible with other portions of the Work.
 - Detailed comparison of significant qualities of proposed product with those named in the Specifications. Significant qualities include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
 - 3. Evidence that proposed product provides specified warranty.
 - 4. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners, if requested.
 - 5. Samples, if requested.

PART 3 - EXECUTION (Not Used)

END OF SECTION 016000

SECTION 017300 - EXECUTION

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes general procedural requirements governing execution of the Work including, but not limited to, the following:
 - 1. Construction layout.
 - 2. Field engineering and surveying.
 - 3. General installation of products.
 - 4. Progress cleaning.
 - 5. Starting and adjusting.
 - 6. Protection of installed construction.
 - 7. Correction of the Work.
- B. See Division 01 Section "Closeout Procedures" for submitting final property survey with Project Record Documents, recording of Owner-accepted deviations from indicated lines and levels, and final cleaning.

1.2 SUBMITTALS

- A. Certificates: Submit certificate signed by land surveyor certifying that location and elevation of improvements comply with requirements.
- B. Landfill Receipts: Submit copy of receipts issued by a landfill facility, licensed to accept hazardous materials, for hazardous waste disposal.

1.3 QUALITY ASSURANCE

A. Land Surveyor Qualifications: A professional land surveyor who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing land-surveying services of the kind indicated.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

A. Existing Conditions: The existence and location of site improvements, utilities, and other construction indicated as existing are not guaranteed. Before beginning work,

investigate and verify the existence and location of mechanical and electrical systems and other construction affecting the Work.

- 1. Before construction, verify the location and points of connection of utility services.
- B. Existing Utilities: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning sitework, investigate and verify the existence and location of underground utilities and other construction affecting the Work.
 - 1. Before construction, verify the location and invert elevation at points of connection of sanitary sewer, storm sewer, and water-service piping; and underground electrical services.
 - 2. Furnish location data for work related to Project that must be performed by public utilities serving Project site.

3.2 PREPARATION

- A. Existing Utility Information: Furnish information to Owner that is necessary to adjust, move, or relocate existing utility structures, utility poles, lines, services, or other utility appurtenances located in or affected by construction. Coordinate with authorities having jurisdiction.
- B. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
- C. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.
- D. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents, submit a request for information to Architect. Include a detailed description of problem encountered, together with recommendations for changing the Contract Documents.

3.3 CONSTRUCTION LAYOUT

- A. Verification: Before proceeding to lay out the Work, verify layout information shown on Drawings, in relation to the property survey and existing benchmarks. If discrepancies are discovered, notify Architect promptly.
- B. General: Engage a licensed Professional Land Surveyor, registered in the State of Delaware, to lay out the Work using accepted surveying practices.
 - Establish benchmarks and control points to set lines and levels at each story of construction and elsewhere as needed to locate each element of Project.

- 2. Establish dimensions within tolerances indicated. Do not scale Drawings to obtain required dimensions.
- 3. Inform installers of lines and levels to which they must comply.
- 4. Check the location, level and plumb, of every major element as the Work progresses.
- Notify Architect when deviations from required lines and levels exceed allowable tolerances.
- 6. Close site surveys with an error of closure equal to or less than the standard established by authorities having jurisdiction.
- C. Site Improvements: Locate and lay out site improvements, including pavements, grading, fill and topsoil placement, utility slopes, and invert elevations.
- D. Building Lines and Levels: Locate and lay out control lines and levels for structures, building foundations, column grids, and floor levels, including those required for mechanical and electrical work. Transfer survey markings and elevations for use with control lines and levels. Level foundations and piers from two or more locations.
- E. Record Log: Maintain a log of layout control work. Record deviations from required lines and levels. Include beginning and ending dates and times of surveys, weather conditions, name and duty of each survey party member, and types of instruments and tapes used. Make the log available for reference by Architect.

3.4 FIELD ENGINEERING

- A. Reference Points: Locate existing permanent benchmarks, control points, and similar reference points before beginning the Work. Preserve and protect permanent benchmarks and control points during construction operations. A registered professional land surveyor or registered civil engineer whose services are retained and paid for by the Contractor shall be used to restore any grave section corner monuments that may be disturbed because of the Contractor's work performance.
- B. Benchmarks: Establish and maintain a minimum of two permanent benchmarks on Project site, referenced to data established by survey control points. Comply with authorities having jurisdiction for type and size of benchmark.
 - 1. Record benchmark locations, with horizontal and vertical data, on Project Record Documents.

3.5 INSTALLATION

- A. General: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.
 - 1. Make vertical work plumb and make horizontal work level.
 - 2. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.
 - 3. Conceal pipes, ducts, and wiring in finished areas, unless otherwise indicated.

- B. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.
- C. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.
- D. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.
- E. Tools and Equipment: Do not use tools or equipment that produce harmful noise levels.
- F. Templates: Obtain and distribute to the parties involved templates for work specified to be factory prepared and field installed. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing products to comply with indicated requirements.
- G. Anchors and Fasteners: Provide anchors and fasteners as required to anchor each component securely in place, accurately located and aligned with other portions of the Work
 - 1. Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by Architect.
 - 2. Allow for building movement, including thermal expansion and contraction.
 - 3. Coordinate installation of anchorages. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.
- H. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.
- I. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.

3.6 PROGRESS CLEANING

- A. General: Clean Project site and work areas daily, including common areas. Coordinate progress cleaning for joint-use areas where more than one installer has worked. Enforce requirements strictly. Dispose of materials lawfully.
 - 1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
 - 2. Do not hold materials more than 7 days during normal weather or 3 days if the temperature is expected to rise above 80 deg F (27 deg C).

- 3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
- B. Site: Maintain Project site free of waste materials and debris.
- C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.
 - 1. Remove liquid spills promptly.
 - 2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.
- D. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.
- E. Concealed Spaces: Remove debris from concealed spaces before enclosing the space.
- F. Exposed Surfaces in Finished Areas: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.
- G. Waste Disposal: Burying or burning waste materials on-site will not be permitted. Washing waste materials down sewers or into waterways will not be permitted.
- H. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
- I. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.
- J. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

3.7 PROTECTION OF INSTALLED CONSTRUCTION

- A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.
- B. Comply with manufacturer's written instructions for temperature and relative humidity.

3.8 CORRECTION OF THE WORK

- A. Repair or remove and replace defective construction. Restore damaged substrates and finishes. Comply with requirements in Division 01 Section "Cutting and Patching."
 - 1. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment.
- B. Restore permanent facilities used during construction to their specified condition.
- C. Remove and replace damaged surfaces that are exposed to view if surfaces cannot be repaired without visible evidence of repair.
- D. Repair components that do not operate properly. Remove and replace operating components that cannot be repaired.
- E. Remove and replace chipped, scratched, and broken glass or reflective surfaces.

END OF SECTION 017300

SECTION 017329 - CUTTING AND PATCHING

PART 1 - GENERAL

1.1 SUMMARY

- This Section includes procedural requirements for cutting and patching. Α.
- See Divisions 2 through 33 Sections for specific requirements and limitations B. applicable to cutting and patching individual parts of the Work.

1.2 **SUBMITTALS**

- Cutting and Patching Proposal: Submit a proposal describing procedures at least 10 Α. days before the time cutting and patching will be performed, requesting approval to proceed. Include the following information:
 - Extent: Describe cutting and patching, show how they will be performed, and 1. indicate why they cannot be avoided.
 - Changes to In-Place Construction: Describe anticipated results. Include changes to structural elements and operating components as well as changes in 2. building's appearance and other significant visual elements.

 Products: List products to be used and firms or entities that will perform the
 - 3. Work
 - Dates: Indicate when cutting and patching will be performed. 4.
 - Architect's Approval: Obtain approval of cutting and patching proposal before cutting and patching. Approval does not waive right to later require removal and replacement of unsatisfactory work.

QUALITY ASSURANCE 1.3

- Miscellaneous Elements: Do not cut and patch miscellaneous elements or related components in a manner that could change their load-carrying capacity, that results in reducing their capacity to perform as intended, or that results in increased maintenance or decreased operational life or safety
- Visual Requirements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch construction exposed on the exterior or in occupied spaces in a manner that would, in Architect's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. General: Comply with requirements specified in other Sections.
- B. In-Place Materials: Use materials identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.
 - 1. If identical materials are unavailable or cannot be used, use materials that, when installed, will match the visual and functional performance of in-place materials.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine surfaces to be cut and patched and conditions under which cutting and patching are to be performed.
 - 1. Compatibility: Before patching, verify compatibility with and suitability of substrates, including compatibility with in-place finishes or primers.
 - 2. Proceed with installation only after unsafe or unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Temporary Support: Provide temporary support of Work to be cut.
- B. Protection: Protect in-place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.
- C. Adjoining Areas: Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.

3.3 PERFORMANCE

- General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time, and complete without delay.
 - 1. Cut in-place construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.

- B. Cutting: Cut in-place construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. If possible, review proposed procedures with original Installer; comply with original Installer's written recommendations.
 - In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots as small as possible, neatly to size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
 - 2. Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.
 - 3. Concrete and Masonry: Cut using a cutting machine, such as an abrasive saw or a diamond-core drill.
 - 4. Excavating and Backfilling: Comply with requirements in applicable Division 31 Sections where required by cutting and patching operations.
 - 5. Proceed with patching after construction operations requiring cutting are complete.
- C. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other Work. Patch with durable seams that are as invisible as possible. Provide materials and comply with installation requirements specified in other Sections.
 - 1. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate integrity of installation.
 - 2. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will eliminate evidence of patching and refinishing.
- D. Cleaning: Clean areas and spaces where cutting and patching are performed. Completely remove paint, mortar, oils, putty, and similar materials.

END OF SECTION 017329

SECTION 017700 - CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
 - 1. Inspection procedures.
 - 2. Warranties.
 - 3. Final cleaning.
- B. See Division 01 Section "Payment Procedures" for requirements for Applications for Payment for Substantial and Final Completion.
- C. See Division 01 Section "Photographic Documentation" for submitting Final Completion construction photographs and negatives.
- D. See Division 01 Section "Project Record Documents" for submitting Record Drawings, Record Specifications, and Record Product Data.
- E. See Divisions 02 through 33 Sections for specific closeout and special cleaning requirements for the Work in those Sections.

1.2 SUBSTANTIAL COMPLETION

- A. Preliminary Procedures: Before requesting inspection for determining date of Substantial Completion, complete the following. List items below that are incomplete in request.
 - 1. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
 - 2. Advise Owner of pending insurance changeover requirements.
 - 3. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
 - Obtain and submit releases permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
 - 5. Prepare and submit Project Record Documents, operation and maintenance manuals, Final Completion construction photographs, damage or settlement surveys, property surveys, and similar final record information.
 - Deliver tools, spare parts, extra materials, and similar items to location designated by Owner. Label with manufacturer's name and model number where applicable.

- 7. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
- 8. Complete final cleaning requirements, including touchup painting.
- 9. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.
- B. Inspection: Submit a written request for inspection for Substantial Completion. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Architect, that must be completed or corrected before certificate will be issued.
 - 1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.
 - 2. Results of completed inspection will form the basis of requirements for Final Completion.

1.3 FINAL COMPLETION

- A. Preliminary Procedures: Before requesting final inspection for determining date of Final Completion, complete the following:
 - 1. Submit a final Application for Payment according to Division 01 Section "Payment Procedures."
 - 2. Submit certified copy of Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
 - 3. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
 - 4. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems.
- B. Inspection: Submit a written request for final inspection for acceptance. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.
 - Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected. If more than one (1) reinspection is required all associated cost of that inspection including architect/engineering fees shall be the responsibility of the Contractor.

1.4 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

- A. Preparation: Submit three copies of list. Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.
 - Organize items applying to each major element, including categories,

1.5 WARRANTIES

- A. Submittal Time: Submit written warranties on request of Architect for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated.
- B. Organize warranty documents into an orderly sequence based on the table of contents of the Project Manual.
 - 1. Bind warranties and bonds in heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch (215-by-280-mm) paper.
 - 2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer.
 - 3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name, and name of Contractor.
- C. Provide additional copies of each warranty to include in operation and maintenance manuals.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

PART 3 - EXECUTION

3.1 FINAL CLEANING

- A. General: Provide final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average cleaning and maintenance program. Comply with manufacturer's written instructions.
 - 1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a portion of Project:
 - a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
 - b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
 - c. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
 - d. Remove tools, construction equipment, machinery, and surplus material from Project site.
 - e. Clean exposed exterior hard surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
 - f. Remove labels that are not permanent.
 - g. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.
 - h. Remove excess mortar droppings, and other foreign substances.
 - i. Leave Project clean and ready for occupancy.
- C. Comply with safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on Owner's property. Do not discharge volatile, harmful, or dangerous materials into drainage systems. Remove waste materials from Project site and dispose of lawfully.

END OF SECTION 017700

SECTION 017839 - PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for Project Record Documents, including the following:
 - 1. Record Drawings (As-built Drawings).
 - 2. Record Specifications (As-built Specifications).
 - Record Product Data As-built Product Data).
- B. See Divisions 02 through 33 Sections for specific requirements for Project Record Documents of the Work in those Sections.

1.2 SUBMITTALS

- A. Record Drawings: Comply with the following:
 - 1. Number of Copies: Submit one set of marked-up Record Prints.
 - 2. Number of Copies: Submit copies of Record Drawings as follows:
 - a. Initial Submittal. Submit one set of red marked as-built prints to the Architect. The Architect will approve via initials and date the prints and indicate whether general scope of changes, additional information recorded, and quality of mark-ups are acceptable as well as any other modifications are deemed necessary. If required by the Architect the Contractor shall, at no additional expense to the Owner or Architect, prepare a revised set of As-built Prints for submission and approval by the Architect. The Architect will return approved prints to the contractor to prepare additional required sets for final submittal.
 - b. Final Submittal: Submit one set of red marked As-built Prints to the Architect. As-built Prints must be identical to initial submission with required corrections.
- B. Record Specifications: Submit one copy of Project's Specifications, including addenda and contract modifications.
- C. Record Product Data: Submit one copy of each Product Data submittal.

PART 2 - PRODUCTS

2.1 RECORD DRAWINGS

- Record Prints: Maintain one set of blue- or black-line white prints of the Contract Drawings and Shop Drawings.
 - 1. Preparation: Mark Record Prints to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to prepare the marked-up Record Prints.
 - a. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.
 - b. Record data as soon as possible after obtaining it. Record and check the markup before enclosing concealed installations.
 - 2. Mark the Contract Drawings or Shop Drawings, whichever is most capable of showing actual physical conditions, completely and accurately. If Shop Drawings are marked, show cross-reference on the Contract Drawings.
 - 3. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at same location.
 - 4. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.
- B. Format: Identify and date each Record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.
 - 1. Record Prints: Organize Record Prints and newly prepared Record Drawings into manageable sets. Bind each set with durable paper cover sheets. Include identification on cover sheets.
 - 2. Identification: As follows:
 - a. Project name.
 - Date
 - c. Designation "PROJECT RECORD DRAWINGS."
 - d. Name of Architect.
 - e. Name of Contractor.

2.2 RECORD SPECIFICATIONS

- A. Preparation: Mark Specifications to indicate the actual product installation where installation varies from that indicated in Specifications, addenda, and contract modifications.
 - 1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.

- 2. Mark copy with the proprietary name and model number of products, materials, and equipment furnished, including substitutions and product options selected.
- 3. Record the name of manufacturer, supplier, Installer, and other information necessary to provide a record of selections made.
- 4. Note related Change Orders, Record Product Data, and Record Drawings where applicable.

2.3 COMPLETE PROJECT RECORD DOCUMENTS

A. Preparation: Provide one complete set of Project Record Documents to the Owner.

2.4 RECORD PRODUCT DATA

- A. Preparation: Mark Product Data to indicate the actual product installation where installation varies substantially from that indicated in Product Data submittal.
 - 1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
 - 2. Include significant changes in the product delivered to Project site and changes in manufacturer's written instructions for installation.
 - 3. Note related Change Orders, Record Specifications, and Record Drawings where applicable.

2.5 MISCELLANEOUS RECORD SUBMITTALS

A. Assemble miscellaneous records required by other Specification Sections for miscellaneous record keeping and submittal in connection with actual performance of the Work. Bind or file miscellaneous records and identify each, ready for continued use and reference.

PART 3 - EXECUTION

3.1 RECORDING AND MAINTENANCE

- A. Recording: Maintain one copy of each submittal during the construction period for Project Record Document purposes. Post changes and modifications to Project Record Documents as they occur; do not wait until the end of Project.
- B: Maintenance of Record Documents and Samples: Store Record Documents and Samples in the field office apart from the Contract Documents used for construction. Do not use Project Record Documents for construction purposes. Maintain Record Documents in good order and in a clean, dry, legible condition, protected from deterioration and loss. Provide access to Project Record Documents for Architect's reference during normal working hours.

END OF SECTION 017839



SECTION 02940 – RAISE, LOWER, REALIGN, RESET & CLEAN FLAT GRAVE MAKERS INCLUDING INSTALLATION OF FLAT MARKER SUPPORT SYSTEM

1.1 SUMMARY

A. Raise, lower, realign, reset, clean of flat grave markers including installation of a support system shall be accomplished as describe in this section.

1.2 BASIC REQUIREMENTS

- A. Verification of Acreage & Marker Count: To insure accuracy of bids, it is the Contractor's responsibility to verify the estimated quantities indicated in the Bid Documents by onsite inspection and measurement. Any discrepancies in the estimated quantity of headstones or square footage indicated in the Bid Documents shall be reported to the Architect. Discrepancies shall be addressed and resolved prior to bidding. In no event shall failure to inspect the site constitute grounds for a claim after submitting bid or contract award.
- B. Visits to the site by Bidders may be made only by appointment with the Barbra Cooke or authorized designee of the Delaware Veterans Memorial Cemetery, 2465 Chesapeake City Road, Bear, Delaware. To conduct a site visit, YOU MUST CONTACT Barbara Cooke, Cemetery Director @ (302) 834-8046.
- C. Verification of Headstone Quantities: The **10,300** flat markers indicated in the Schedule are "estimated". To insure accuracy of bids, it is the Contractors responsibility to verify the estimated quantity of flat markers before bidding the project. If there is a discrepancy with the estimated quantity of flat markers it is the Contractor's responsibility to notify the Architect. The Architect shall verify the correct number of markers prior to bidding, contract award and commencement of work. In no event shall failure to inspect the site constitute grounds for a claim after bids are received. This stipulation applies to both the Basic Requirement and any Alternate Bids.
- D. Water & Irrigation Requirements: The Contractor is water (provided by Owner) and to regularly water the sod beginning during installation for a period of sixty (60) days to insure that the sod has adequately rooted into the soil to become established. The Owner will allow contractor to use their water system for construction and watering of sod purposes only.
- E. Acceptability: A re-established turf area is "acceptable" when the Contractor's clearly evidences compliance, without exception, in meeting contract requirements set forth in Section 1.5 (Surface Renovation & Turf Grass Re-Establishment), and 100% turf grass coverage is established to the complete satisfaction of the Architect and Cemetery Director.
- F. Acceptance of Re-established Turf Area(s): Acceptance is defined as the point in time which the Owner takes back control & physical possession of the re-established turf area(s). The Owner has the right either to reject or to require correction when the re-established turf area is not in conformity with contract requirements. Acceptance (in part or whole) shall be in writing.

ESTIMATED FLAT MARKER COUNT

ESTIMATED FLAT	WARKER COUNT
Burial Section 001	Est Qty of Flat Markers
А	943
В	982
С	490
D	432
E	468
F	576
G	476
Н	378
I	364
J	353
K	376
L	432
M	300
U	940
Burial Section 002	
2A	598
2B	598
2C	351
21	0
2J	494
2UL	76
Summary Grand Total:	10,300 / Flat Markers

1.3 RAISE, LOWER, REALGIN, RESET FLAT GRAVE MARKERS

- A. The Contractor shall pull the flat markers from the flat marker sockets and carefully stored. Headstones that are removed from a section shall be verified against Contractor produced grave plotting maps. The Contractor shall verify these maps with the Architect and Cemetery Director prior to removing any headstones. Markers must be handled and stored in a dignified manner. Markers shall be stacked on a pallet for storage with cardboard separation between each marker. Markers shall not exceed (twenty) 20 per pallet. Once markers have been palletized, Contractor is to wrap each pallet with stacked markers with a tarp that is securely fastened to the pallet. This ensures that the markers are protected from the elements as well as out of sight of the public. Any changes to this process must have the prior written approval of the Architect and Owner.
- B. All temporary markers, floral, commemorative, buried permanent floral vases, or other types of decorations and arrangements causing interference with the raise and realignment of flat headstone operation shall be carefully, and in an orderly manner moved from, and per completion of work, moved back to all gravesites by the Contractor. Prior to removal, the Contractor shall verify the numbering sequence and location of the

- headstone and associated decorations by using tags and permanent ink marker indicating from which grave the item was removed.
- C. Contractor shall install at location of removed headstone a temporary grave site marker. Temporary grave site marker shall be Number 700 Aluminum Grave Marker, as manufactured by McNeill Grave Marker Company, PO Box 3189 St. Joseph, MO 64503, (816) 279-6766, or Architect approved equal.
- D. The extent of this work includes areas shown within the limits of construction and other work disturbed by new construction.
- E. A 4" deep x 12" wide trench shall be dug under each flat marker headstone row beginning at the edge of the first flat marker and continuing until reaching the far edge of the last flat marker in the same row to accept a grid support system such as the MarkerGrid™ geogrid system or an approved, by the Architect, acceptable equivalent product. (Note: MarkerGrid is a "trademark" product designed for marker reinforcement and alignment). If an equivalent product is proposed, the Contractor shall follow the procedures outlined in Specification Section "013300 SUBMITTAL PROCEDURES" Obtain approval from Architect before use. Approval and acceptance of an equivalent product shall be at the sole discretion of the Architect.
- F. Over excavate the soil directly below each flat marker and 6" on all sides and an additional 5" deeper (overall depth 9"). Then backfill this same area (directly below each flat marker) with 5" minimum thickness of moistened crushed limestone (graded aggregate sizes ranging from crushed powder fines up to 3/4" maximum) heavily tamped to full compaction and leveled for the required alignment of the flat markers.
- G. After heavily tamping and compacting the soil in the bottom of the 4" deep continuous trench, install 12" wide continuous strip of the support grid system along the entire length of each flat marker row beginning at the edge of the first flat marker and continuing until reaching the far edge of the last flat marker in the same row.
- H. If reinforcement system material is furnished in palletized rolls and must be spliced, adjoining rolls shall be securely fastened in accordance with manufacturer specifications. Directly underneath each flat marker, backfill the voids of the grid systems with moistened crushed stone base material (grated aggregate sizes ranging from crushed powder fines up to 3/8" maximum) to fill the 1/2" high perpendicular cross members, and compact this material into place. Top elevation of the filled grid system material shall be the base for the flat markers.
- Backfill clean topsoil into the remaining areas of the grid system located in the trenches between the flat markers and firmly compact this material into place. Remaining trench areas around and between all flat markers from top of the grid system to top of ground surface shall be filled with 3" minimum clean topsoil compacted firmly into place so that settlement will not occur.
- J. Flat Marker Placement: Flat marker sockets shall be compacted to proper grade and alignment prior to the reinstallation of the flat marker to the required depth. Markers shall be accurately and precisely reinstalled on the correct gravesites with the utilization of temporary grave plotting maps and temporary grave site markers, existing permanent

control markers, and temporary Contractor installed control markers accurately and precisely installed at the ends of each gravesite row. Flat markers are to be reset to a depth so that one inch (1") of the flat marker is extending above the finished topsoil level. Flat markers shall be set horizontally flat, in a line laterally, transversely, and diagonally with flat markers of other graves. All measurements and string line set-ups shall be taken from established section layout control markers, not from previously set flat markers, unless otherwise directed by the Architect. All measurements shall be made in ascending grave number order. In irregular terrain where sloping and uneven ground conditions exist, all flat markers shall be set at proper heights and levels to provide a uniform flowing transition through uneven terrain. Two to three inches of clean topsoil shall be placed around the perimeter of each flat marker base and firmly tamped, leaving the top inch for topsoil that then lightly to moderately tamped, then lightly raked in preparation for the sod application and finally, sweep flat marker clean.

- K. After all work has been completed, the flat markers in all soil and terrain conditions shall be held firmly in place by the compacted soil and Class 2 crushed limestone road base [or approved substitute] so that the flat markers are rigid with no give, play or movement when subjected to forces by the Owner's Cemetery Staff.
- L. The realign crew shall start on a row of flat markers close to the center of the section to be realigned. These markers are chosen to be "keystones". Keystones are markers that are visibly in line with the majority of the rest of the markers in the row and are as close as possible to the proper measurements set forth at section of markers. Keystones are to be chosen and utilized at a maximum of every 10th marker (or more frequently in areas of rolling terrain). These keystones shall be aligned by leveling front and back and side-to-side, and raised or lowered to a final elevation height of one inch above topsoil level.
- M. At the start of work in each burial section, the first row of reset/realigned flat markers in each burial section is to be inspected by the Cemetery Staff Representative for appearance, spacing, depth, alignment, plumbness, height, accuracy and smoothness in grade transition. No further setting of flat markers shall be done until this first row has been inspected and accepted by the Cemetery Staff Representative. It is the Contractor's responsibility to notify the Cemetery Staff Representative two (2) business days in advance of when each of these inspections shall be needed.
- N. Heavy strings or lines must run along the sides and tops of keystones. These lines are marked with the proper measurements (size of section) for the section being aligned. All remaining flat markers in the row are then aligned along the strings front to back and side to side even with the measured marks on the line. Each flat marker is leveled and plumbed front to back and side to side keeping the back of the flat marker along the string and the side of the flat marker along the measured mark.
- O. Maximum vertical, lateral and transverse tolerance of any flat marker off the alignment string lines and/or marks shall be 1/8" or less. Each flat marker is also raised or lowered as necessary to ensure a uniform measurement of one inch above topsoil level. The flat marker is then aligned along the string front to back and side to side even with the measured mark on the line. The flat marker is leveled and plumbed front to back and side to side keeping the back of the marker along the string and the side of the marker along the measured mark.

- P. Alignment of flat markers shall be checked frequently during this process to ensure that the marker is not out of level or off the mark on the line. This process of raising and realigning is repeated for each row of markers. Flat markers in all completed work areas shall be firmly set and anchored in place with no movement from forces subjected by the Cemetery Staff Representative.
- Q. Any flat markers broken or damaged by the Contractor shall be reported to the Cemetery Administrator or Cemetery Staff Representative by close of business each working day in order that the grave can be properly marked. The Contractor shall be responsible for the cost of the flat marker replacement. All flat marker replacements must be coordinated with the Cemetery Administrator. The Contractor at his expense shall replace any grid or section monuments disturbed, displaced or broken. A licensed land surveyor at Contractor's expense shall properly reset all grid or sectional monuments disturbed, etc.
- R. Curbs, roads, walks, turf, trees, utilities, etc., existing above and below the ground that are damaged or disturbed by the contractor during performance of contract work shall be repaired at the Contractor's expense. The Contractor shall correct and repair such damages within fourteen (14) workdays unless otherwise agreed to with the Cemetery Administrator.

1.4 FLAT MARKER HEADSTONE CLEAINING

- A. The Architect/Owner is the authority on determining what is clean and what is not clean. The definition of a "clean stone" is that the marker has no dirt lines or watermarks and no visible signs of fungi.
- B. The Work consists of flat markers using various techniques to remove debris, stains, soil markings, mildew, mold, etc. Cleaning techniques shall demonstrate a clear understanding of, and sensitivity to, such environmental issues as ground water contamination, wetlands, etc., and shall be consistent and fully compliant with all applicable Federal, State, County and local Town laws, ordinances and regulations. Cleaning shall be accomplished as follows:
 - 1. An NCA approved cleaning solution is acceptable for use in cleaning headstones. The grave markers should not be removed from the site for cleaning.
 - Clean water shall be used to clean all flat marker headstones. The natural surfaces shall be retained. Markers shall not be painted, white washed or calcimined. Abrasive blasting and cleaning solution will not be used.
 - 3. When water under pressure is used pressure shall not be greater than 800 psi. Use of a washing pressure exceeding 600 psi shall require written approval of the Architect and the Cemetery Staff Representative.
 - 4. Excessive soil may be removed with plain water and a stiff brush (no wire brushes, bleach, or abrasive cleaners shall be permitted) followed by rinsing with clear water.
- C. Care shall be taken to protect the turf areas from damage. Any turf damaged by the Contractor shall be restored at Contractor's expense. Care shall be taken to protect the

turf area from any damage. Any turf damaged by the Contractor shall be restored at Contractor's cost.

1.5 SURFACE RENOVATION AND TURF GRASS RE-ESTABLISHMENT

- A. This section outlines operational procedures to be followed in burial sections designated for topsoil surface leveling / renovation and re-establishment of the existing turi / grass land areas.
 - 1. Collect and submit soil samples to a certified soil-testing laboratory from the site several weeks prior to the intended operation to determine soil fertility and pH adjustment requirements. Test report shall be furnished to the Architect upon completion of the laboratory testing.
 - 2. Mow target area several times removing grass clippings each time. Initial mowing in this sequence will be at normal maintenance height (i.e. 3 inches) and subsequent mowing 2 or 3 days apart will be at height approved by the Cemetery Administrator.
 - 3. After a minimum of three or more preparatory mowings, the entire vegetated area shall be sprayed with Round-Up Pro herbicide or equal. Application rate shall be the maximum label recommended rate for the complete elimination of perennial grass species and contaminant weeds. Application to be made by a licensed, in the State of Delaware, pesticide applicator. Allow 7 days after application for herbicide to fully Trans-locate throughout all plant parts. After the initial spraying of the cemetery turf and after the seven day waiting period the Contractor will monitor the treated area with the Cemetery Staff Representative to insure that all of the current grass has been killed before proceeding any further. If there are still visible signs of any vegetative growth, the treated area will be sprayed again with Round Up by the Contractor and another seven day waiting period will be needed to allow the herbicide to kill any remaining vegetation.
 - 4. The Contractor will power rake or vertical-cut the entire treated area to loosen and remove all residual plant debris, rocks, twigs and thatch. At no time is the old turf or debris to be tilled and buried underneath the soil. All existing turf and debris is to be raked and removed from the soil. Apply soil test recommended quantities of starter fertilizer and ground agricultural limestone. Spread evenly over entire area using any suitable broadcast application device. Roto-till area to a minimum depth of 3 inches to uniformly mix fertilizer, lime, and topsoil and to uniformly loosen top surface for regrading and leveling. Finely grade and compact surface of site to achieve desired finished appearance, which is to be smooth and uniformly level down each row and between each row, free of all surface ripples, depressions, high spots, low areas, ridges, etc.
 - 5. Erosion control methods will be required for this project. The contractor is to develop a plan to prevent surface sheet erosion during the performance of the contract. The contractor is required to submit his erosion control plan to the Architect for approval before startup of the project. The Owner reserves the right to reject the contractor's plan if the Architect's review indicates that the plan will result in an undesirable product.
 - 6. In locations where existing burial area surface has formed "ridges" between rows, these areas shall be knocked down by grading between high and low surfaces of the rows so that finished surface is uniformly flowing from row to row, and down each row. If this process does not achieve desired smooth and uniformly flowing finished

- grade due to numerous depressions and low or sunken areas in the existing surface grade, the Contractor will import, spread and compact additional high quality topsoil of similar characteristics and texture to the soil already present on site.
- 7. Topsoil shall be free of foreign matter, any objects bigger than 25 mm (1 inch) and weed seeds. Apply and compact with a roller sufficient topsoil to eliminate all ripples, depressions, and sunken grave areas as needed to achieve the desired smooth and uniformly level finish grade and appearance. Protect finished areas from damage by vehicular or pedestrian traffic. Install and maintain erosion control material to meet local requirements.
- 8. Firm finished seedbed by rolling in several directions with a standard turf grass roller filled with water.
- 9. Sod Application: The make-up of the sod shall be approved by the Owner. Currently the sod is a "TEAM MATES MIXTURE" with a make-up is as follows:

% PURITY	COMPONENT	% GERM	ORIGIN
29.61	HUNTER TALL FESCUE	90	OR
24.66	STETSON TALL FESCUE	90	OR
24.64	PADRE TALL FESCUE	90	OR
19.61	NOTABLE PERENNIAL RYEGRASS	90	OR

- 10. Prior to delivery of sod, the contractor shall have the Architect, Cemetery Administrator and the Cemetery Staff Representative inspect the work area. Any discrepancies in the ground preparation shall be corrected prior to the laying of sod in the work area.
- 11. The sod shall be cut in rolls and will be delivered to the work site the same day of installation. Contractor shall make all necessary arrangements to protect delivered sod from excessive drying and wind damage. Sod shall be laid in rolls expeditiously without interruption, until the work area is completely sodded. Sod shall be cut and fitted around all flat markers and other obstructions. In order to stabilize sod during the rooting process and to eliminate the chances of erosion, the Contractor will use sod pins in adequate amounts during sod installation if needed.

1.6 TURF ESTABLISHMENT PERIOD

- A. The Establishment Period for turf shall begin immediately after the complete sod installation of a section(s) with the approval of the Cemetery Staff Representative, and continue for a period of sixty (60) days. During that period the Contractor shall:
 - 1. Eradicate all weeds. Fertilize, re-sod, and perform any other operation necessary to promote the growth of uniform, healthy, high quality turf.
 - 2. Irrigate sod on a regular schedule immediately following installation to keep the sod moist and healthy and to promote rooting, but is also responsible to carefully conserve water. Coordinate irrigation with Cemetery Staff Representative.
 - 3. Replant areas void of turf 1 ft2 (one square foot) and larger in area and replace areas of sod that have died due to lack of water.
 - 4. Begin mowing when grass is firmly rooted into the soil and the turf growth is 4 inches in height. Turf will be mowed to and maintained at a height of 3 inches. The

Contractor is required to perform three (3) movings of the turf within the required 60 day establishment period

- B. The Contractor shall be fully responsible for the health and appearance of the turf for a sixty (60) day period from the start of the Turf Establishment Period and make all necessary corrective actions at no additional expense to the Owner.
- C. The Owner will mow the new grass areas once the grass reaches an acceptable height to the Cemetery. These mowing will occur within the 60 day establishment period. The Owner will not accept the new turf before the three cuttings have been performed.
- D. In areas where turf work has been completed, clear the area of all debris. Any areas damaged during establishment operations must be restored to their original condition.

1.7 INSPECTION & MONITORING PROCEDURES

- A. Weekly Progress Report: On a weekly basis, the Contractor will provide a written progress report to the Cemetery Administrator of all work completed (Attachment "C" Work Summary & Progress Report). If there are problems or issues adversely affecting progress of the contract, a detailed explanation shall be indicated on the report.
- B. Contract Performance & Quality Assurance. A record keeping system of Contractor work performance shall be established and implemented by the Contractor for the services involved. The Cemetery Staff Representative will inspect all work performed and submitted by the Contractor for acceptance. The Owner reserves the right to reject any work that does not meet contract specifications. Work rejected by the Owner will be re-performed without cost to the Owner.
- C. Federal Holidays: All work required under this contract will be performed during normal cemetery hours of operation. Work will not be performed on Federal Holidays. The following is a list of all Federal holidays:

New Year's Day Martin Luther King's Birthday President's Day Memorial Day Fourth of July Election Day (if applicable)

Labor Day Columbus Day Veterans Day Thanksgiving Day Christmas Day

2.1 EXECUTION

- A. A professional land surveyor, registered in the State of Delaware, whose services are retained and paid for by the Contractor, shall be used to restore any grave section corner monuments that may be disturbed as a result of the Contractor's work performance.
- B. The Contractor shall layout the work and shall be responsible for all measurements in connection with the layout. The Contactor shall furnish, at the Contractor's expense, all stakes, templates, platforms, equipment, tools, materials and labor required to layout any part of the work. The Contractor shall be responsible for execution the work to the lines

- and grades needed to accomplish the work and to ensure that grave markers are correctly and accurately located on their associated gravesites.
- C. The Contractor shall be responsible for maintaining and preserving all temporary and permanent stakes and other marks until authorized by the Owner's Staff Representative to remove them. If such marks are destroyed by the Contractor or through Contractor's negligence before their removal is authorized, the Owner may replace them and deduct the expense of the replacement from any amounts due or to become due to the Contractor.
- D. The Contractor is responsible to ensure that all work shall be done in a manner that safeguards all Cemetery visitors, employees, and public. The Contractor shall be solely responsible for all actions initiated and/or completed by his/her employees. Furthermore, the Contractor and his/her employees shall have a clear understanding of, and be sensitive to, such environmental issues as ground water contamination, wetlands, etc., and be consistent and fully compliant with all applicable Federal, State, County and City laws, ordinances, Right-to-Know laws, EPA guidelines, and regulations.
- E. Damage to Cemetery property: Contractors shall be responsible for replacement of any cemetery structure, to include: turf, curb, road pavement, headstone or marker, permanent floral vases, valve boxes, irrigation system including but limited to; irrigation heads and piping, control markers etc, which is chipped, marred, damaged and/or ruined at the fault of the Contractor and shall bear all costs associated with replacement and reinstallation. Any such damage shall be brought to the immediate attention of the appointed Cemetery Staff Representative prior to repair, replacement, and installation.
- F. Liability: At the Owner's discretion, the Contractor shall either repair or replace the property, or reimburse the Owner the full amount for all property damage(s). The Contractor shall be aware that Cemetery property beyond standard structures and equipment also includes headstones, monuments, trees, plant beds, and turf, i.e. wounded trees or scalped turf, etc as well as headstones shall be repaired or replaced.
- G. Contractors shall be responsible for cleaning cemetery structures, headstones, monuments, and roadways that are soiled or stained because of Contractor's performance. The Contractor shall wash-down with water all soiled or stained structures, headstones, and monuments at the end of each workday.
- H. Roadways shall be cleaned with a street sweeper each day as needed to keep the existing roads free from dirt and mud resulting from Contractor operations. No hazardous chemicals are to be used at any time on Cemetery property. The Contractor shall bear all costs associated with washing and cleaning. Any such washing/cleaning shall be brought to the immediate attention of the Cemetery Staff Representative prior to washing/cleaning.
- I. At the end of each day, the Contractor shall remove all debris from the cemetery site resulting from the work. The Contractor shall ensure at all times that rubbish and trash generated by the Contractor is kept clear of vehicular and pedestrian traffic throughout the site. The Owner shall not provide receptacle(s) for disposal of debris related to this contract. The Contractor will be permitted to place his trash receptacle dumpsters in the Owner approved "Contractor Staging Area".

- J. Adequate warning devices, barricades, guards, flagmen or other necessary precautions shall be provided by the Contractor at all work sites to eliminate hazards and for the protection, safety, and warning of all public visitors, pedestrians, cemetery employees, and vehicular traffic within the area.
- K. The Owner may undertake or award other contracts for additional work at or near the site of work for this contract. The Contractor shall fully cooperate with any other Contractors and with cemetery employees and shall carefully adapt scheduling and performance of work, and needing any direction, it shall be provided by the Cemetery Staff Representative. The Contractor is responsible for reporting to the Cemetery Administrator any problems or questions that may arise with any other personnel on site during the period of performance of this contract. The Contractor shall not take it upon him or herself to resolve any problems or issues with other on-site Contractors or employees, but rather will leave it to the Cemetery Administrator to resolve the issue.
- L. The Contractor (including his or her employees, sub-contractors, consultants or the like) shall not operate trucks, tractors, and other heavy equipment on any turf area except as provided in this contract to perform work or as authorized by the Cemetery Staff Representative. The Contractor will be responsible for repairing turf damage caused by the Contractor's equipment and staff at no additional cost to the Owner.

2.1 WORK ENVIRONMENT

- A. All work under this service contract will be performed primarily out-of-doors and personnel performing these services will be exposed to wind, sun, cold, dampness, frost, fog and rain. These conditions at times may be extreme. The Contractor shall take all necessary precautions to protect his/her employees from the elements to the maximum practicable extent. Inclement weather will not be considered an excusable delay in meeting specifications or project schedule. The Contractor understands that it may be necessary to work throughout all weather conditions and to apply additional labor and equipment as necessary to meet deadlines, at no additional cost to the Owner.
- B. The Owner reserves the right to order the contract work to cease once the surface conditions deteriorate to soggy or muddy conditions. Once the surface reaches this condition, it is non-productive for the Contractor to continue to fulfill the contract. When the Owner orders work to stop due to surface conditions, the Contractor may request a time extension to compensate for the number of days lost due to existing conditions.
- Due to the sensitive mission of the cemetery, the work could occasionally involve contact with and/or exposure to grieving individuals. Contractor personnel must exercise and exhibit absolute decorum, composure and stability at all times.

2.3 CONTRACTOR FURNISHED ITEMS

A. Contractor is responsible for supplying all equipment, personnel, tools, supplies and materials necessary to perform the services required by this contract.

- B. Contractor-furnished items necessary to perform work as required under this contract shall be furnished, maintained and operated by the Contractor and shall be consistent and fully compliant with all applicable OSHA, Federal, State, County, City laws, ordinances and regulations.
- C. Materials and supplies procured for the performance of the contract by the Contractor shall be consistent and fully compliant with all applicable Federal, State, County, and City laws, ordinances and regulations.
- D. Contractor Staging area will be located where shown on the drawings and/or where approved by the Cemetery Staff Representative. Contractor may, with Cemetery Staff Representative approval, install a 6' high chain link fence with gates around this entire area for duration of the project. Contractor shall base operations out of this staging area, using it for materials and equipment storage, administration, employee toilets, trash dumpster area, employee parking, employee lunch/break area, etc. After completion of project work, Contractor is to remove fencing and restore area back to original condition.
- E. The Contractor is responsible for the supply, maintenance and repair of all Contractor-owned equipment. This includes, minor maintenance/repair and minor operating parts for equipment such as lubrication, oil changes, spark plugs, gaskets, cotter pins/keys, electric extension cords, etc., to keep all equipment in good operational condition throughout the period of performance of this contract.
- F. The Contractor is responsible for ensuring that all of its motor vehicles and equipment meet State inspection, safety, licensing, registration, and insurance requirements.
- G. Rainfall: The Contractor shall monitor and record rainfall occurring at this site during the contract period. In the event of a State or Local Government mandate of a drought restriction, the Contractor will follow all guidelines concerning watering restrictions of turf and newly sodden areas. If the Contractor does not follow the guidelines, he/she assumes the responsibility of paying any State or Local imposed fines.
- H. Refuse Facilities: The Contractor shall provide his/her OWN refuse facilities of which will be located only in the approved "Staging Area". Contractor shall not place dumpsters or refuse facilities in any other location at the cemetery other than the approved staging area. The Contractor is required to dispose of all debris and other waste materials generated by his/her work at a licensed off-site landfill unless otherwise directed by the Cemetery Administrator. The Owner shall not provide receptacles for disposal of debris because of the services provided under this contract. In case of Hazardous Materials, the Contractor is required to obtain required disposal permits from the State regulatory agency.
- Only Contractor's equipment and supplies (property) required for performance of work under this contract shall be stored at the Contractor's designated storage area at the end of each workday. The maintenance and repair of equipment owned by the Contractor may not be performed without prior approval of the Cemetery Administrator.

J. GUARANTY

1. The Contractor shall guaranty all work for a period of Six Months (180) calendar days after final inspection and acceptance of the entire project by the Owner. Any

headstone adjust, realign, reset, cleaning, and/or backfill workmanship that does not meet specified requirements (including specified tolerance requirements) at the end of this guaranty period is to be reworked, adjusted, and corrected by the Contractor at no additional cost to the Owner. Remainder of all work related to this project is to be warranted for a period of one (1) year after final acceptance by the Owner. Work under the Guaranty shall be corrected within ten (10) workdays from receipt of notification or as directed by the Owner.

END OF SECTION

ATTACHMENT - A

MAP OF THE DELAWARE VETERANS MEMORIAL CEMETERY 2465 CHESAPEAKE CITY ROAD BEAR, DELAWARE

ATTACHMENT - B

RAISE, REALIGN & RESET FLAT MARKER DIAGRAM

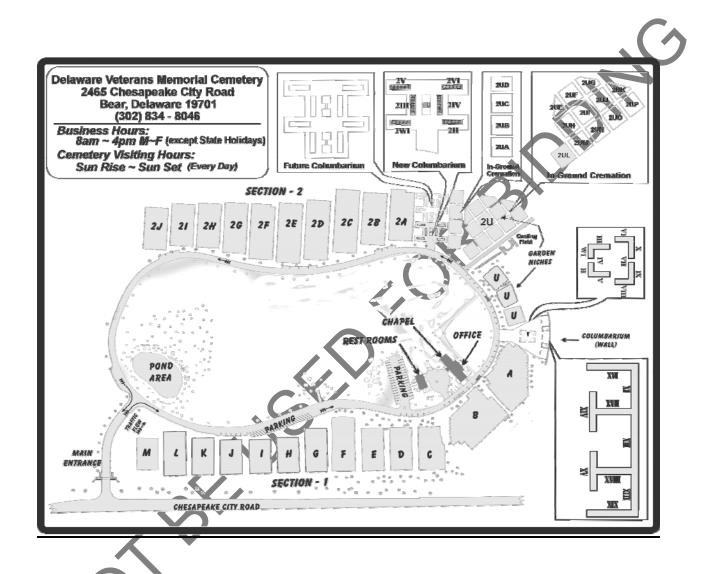
ATTACHMENT - C

BURIAL SECTION REALIGNMENT DIAGRAM

ATTACHMENT - D

WORK SUMMARY & PROGRESS REPORT

ATTACHMENT - A



ATTACHMENT – B

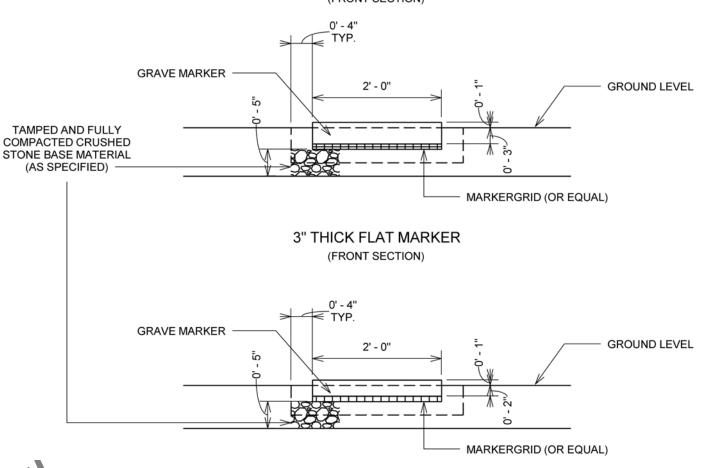
RAISE, REALIGN & RESET

FLAT MARKER

DIAGRAM

(with MarkerGrid or Architect Approved Equal)

4" THICK FLAT MARKER
(FRONT SECTION)

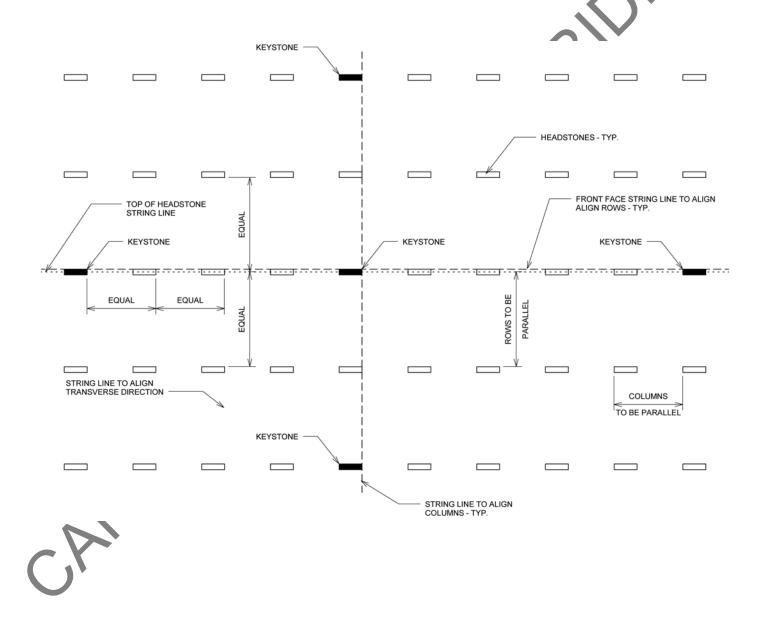




ATTACHMENT - C

RAISE, REALIGN & RESET

BURIAL SECTION REALIGMENT DIAGRAM



ATTACHMENT - D

WORK SUMMARY & PROGRESS REPORT	Period Covered:	From:	To:	
Cemetery Location:	Contractor:	•		
Delaware Veterans Memorial Cemetery				
2465 Chesapeake City Road			1	
Bear, Delaware 19701				
Project Title: Raise, Realign, Reset & Clean Flat Markers - Renovate & Re-establish Turf.				
Trenevate a re establish run.) `	
Contract No:				

Inspection / Acceptance. The Contractor shall only tender for acceptance those items that conform to the requirements of this contract. The Owner reserves the right to inspect or test some or all of the services that have been tendered for acceptance. The Owner may require re-performance of nonconforming services at no increase in contract price. The Owner shall exercise its post-acceptance rights—

- 1. Within a reasonable time after the defect was discovered or should have been discovered; and
- 2. Before any substantial change occurs in the condition of the item, unless the change is due to the defect in the item.

Work Completed & Submitted for Acceptance

	I		
01	Raise, Realign, Reset & Backfill Flat Markers	Total # Flat Markers Raised, Realigned, Reset & Backfilled.	>
	to include Marker Support System.	Cemetery Section: 001-A	>
		Cemetery Section: 001-B	>
		Cemetery Section: 001-C	>
		Cemetery Section: 001-D	>
		Cemetery Section: 001-E	>
		Cemetery Section: 001-F	>
		Cemetery Section: 001-G	>
		Cemetery Section: 001-H	>
		Cemetery Section: 001-I	>
		Cemetery Section: 001-J	>
		Cemetery Section: 001-K	>

		Cemetery Section: 001-L	>
		Cemetery Section: 001- M	>
		Cemetery Section: 001-N	·
		Cemetery Section: 001-U	·
		Cemetery Section: 002-2A	
		Cemetery Section: 002-2B	
		Cemetery Section: 002-2C	V
		Cemetery Section: 002-2I	>
		Cemetery Section: 002-24	>
		Cemetery Section: 002-2UL	>
00	Olean Flat Madue va	Total # Flat Markers Cleaned	>
02	Clean Flat Markers.	Cemetery Section: 001-A	>
		Cemetery Section: 001-B	>
	, 0	Cemetery Section: 001-C	>
		Cemetery Section: 001-D	>
		Cemetery Section: 001-E	>
7		Cemetery Section: 001-F	>
		Cemetery Section: 001-G	>
		Cemetery Section: 001-H	>
		Cemetery Section: 001-I	>

		Cemetery Section: 001-J	>
		Cemetery Section: 001-K	·
		Cemetery Section: 001-L	•
		Cemetery Section: 001- M	-
		Cemetery Section: 001-N	
		Cemetery Section: 001-U	
		Cemetery Section: 002-2A	V
		Cemetery Section: 002-2B	>
		Cemetery Section: 002-20	>
		Cemetery Section: 002-2I	>
		Cemetery Section: 002-2J	>
		Cemetery Section: 002-2UL	>
03	Surface Renovation and Re-establishment	Total Square Feet of Renovated / Reestablished Turf Area.	▶/SF
03	of Turf using Sod.	Cemetery Section: 001-A	>
		Cemetery Section: 001-B	>
		Cemetery Section: 001-C	>
		Cemetery Section: 001-D	>
		Cemetery Section: 001-E	>
		Cemetery Section: 001-F	>
		Cemetery Section: 001-G	>

Cemetery Section: 001-H	>		
Cemetery Section: 001-I	·		
Cemetery Section: 001-J	>		
Cemetery Section: 001-K	>		
Cemetery Section: 001-L			
Cemetery Section: 001- M			
Cemetery Section: 001-N	Q Y		
Cemetery Section: 001-U	·		
Cemetery Section: 002-2A	·		
Cemetery Section: 002-2B	>		
Cemetery Section: 002-2C	>		
Cemetery Section: 002-2I	>		
Cemetery Section: 002-2J	>		
Cemetery Section: 002-2UL	>		
Report below any circumstances which may have adversely affected work progress such as weather, turf conditions, strikes, delays by the Owner, etc.			
Signature of Contractor: Date Signed Signature of	of Cemetery Director Date Signed		
Note: Contractor shall sign confirming that services indicated have been completed. Progress Report.	Owner shall also sign in acknowledgment of receipt of the		