#### **CONTRACT DOCUMENTS and SPECIFICATIONS**

# 2022 WATER SYSTEM IMPROVEMENTS WATER TANK REHABILITATION

#### **FOR THE**

### **Bath County Water District**

Salt Lick, Kentucky





Kentucky Engineering Group, PLLC
P.O. Box 1034
Versailles, Kentucky 40383

January 2023 KEG Project No. 22015

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### SECTION 00100 ADVERTISEMENT FOR BIDS

Bath County Water District 21 Church Street Salt Lick, Kentucky 40371

Separate sealed Bids for the construction of the **2022 Water System Improvements Project** with the first contract consisting of the replacement of a new built in place **Ore Mines Pump Station** and the rehabilitation of **Midland Pump Station** and in a separate contract **Water Tank Rehabilitation** consisting of the rehabilitation of five (5) ground storage water tanks and one (1) elevated water storage tank as shown on the DRAWINGS and described in the SPECIFICATIONS will be received by the Bath County Water District at the District Office at 21 Church Street, Salt Lick, Kentucky 40371 until **3:00 pm (EST Local Time) Thursday, February 16, 2023**, and then at said office publicly opened and read aloud.

Bids for each contract shall be on a unit price basis.

The Contract Time allotted for the completion of each Contract is Three Hundred and Sixty-Five (365) consecutive calendar days.

The Contract Documents may be examined at the following locations:

KENTUCKY ENGINEERING GROUP, PLLC., 101 High Street, Versailles, Kentucky 40383

Phone: 859.351.9849

BATH COUNTY WATER DISTRICT, 21 Church Street, Salt Lick, KY 40371

Phone: 606.683.6363

Copies of the Contract Documents may be obtained from **KENTUCKY ENGINEERING GROUP, PLLC.,** located at **101 High Street, Versailles, Kentucky 40383** Phone: 859.251.4127, upon receipt of a non-refundable amount of **\$200.00** for each complete set of documents.

All bids must be made on required Bid Form and must be fully completed and executed with original signatures and corporate seals. All bidders must be listed as plan holder by the plan distributor and must attend the mandatory pre-bid meeting.

This project may be partially or entirely funded by the Cleaner Water Funds and KIA Fund B Loan

Bidders must comply with President's Executive Orders No. 11246 and No. 11375 and any amendments or supplements to those Executive Orders. Attention of bidders is particularly called to the requirements as to conditions of employment to be observed under the contract, Section 3, Segregated Facility, Section 109 and E.O. 11246.

Bidders must certify they do not and will not maintain or provide for their employees any facilities that are segregated or based on race, color, creed or national origin. Bidders must comply with 41 CFR 60-4 in regard to affirmative action and to ensure equal opportunity to females and minorities, and all that are applicable. Minorities and small businesses are encouraged to submit bids on this project.

Bidders must comply with Title VI of the Civil Rights Act of 1964 Anti-Kickback Act, and the Contract Work Hours Standard Act.

Successful Bidder shall make positive efforts to use small, minority, women owned and disadvantaged businesses.

The Bath County Water District reserves the right to waive any bidding informalities and to reject any or all bids, for any reason. The right is reserved by the Owner, in the exercise of its sole judgment to reject any or all Bids, and to re-advertise and award the Contract in the regular manner or to waive any informalities, irregularities, mistakes, errors, or omissions in any Bid received and to accept any Bid deemed to be responsive to this invitation and favorable to interests of the Owner.

The sealed bids for these projects shall be clearly marked on the outside of the envelope: "Sealed Bid for **2022 Water System Improvements Ore Mines and Midland Pump Stations Project** or **2022 Water System Improvements Water Tank Rehabilitation Project"** for the Bath County Water District. The bid may be mailed to: Bath County Water District, 21 Church Street, Salt Lick, Kentucky 40371. A certified check or Bid Bond payable to the Bath County Water District in the amount of five (5) percent of the Bid shall accompany the Bid.

LW Patton, Chairman
Bath County Water District

Date: \_February 02,2023\_\_\_

#### **INSTRUCTIONS TO BIDDERS**

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#### **ARTICLE 1 – DEFINED TERMS**

1.01 Terms used in these Instructions to Bidders have the meanings indicated in the General Conditions and Supplementary Conditions. The term "Bidder" means one who submits a Bid directly to Owner, as distinct from a subbidder, who submits a bid to a Bidder. The term "Successful Bidder" means the lowest, qualified, responsible, and responsive Bidder to whom Owner (on the basis of Owner's evaluation as hereinafter provided) makes an award. The term "Bidding Documents" includes the Advertisement or Invitation to Bid, Instructions to Bidders, the Bid Form, and the proposed Contract Documents (including all Addenda issued prior to receipt of Bids).

#### ARTICLE 2 – COPIES OF BIDDING DOCUMENTS

- 2.01 Complete sets of the Bidding Documents must be obtained from the Issuing Office in the number and format stated in the advertisement or invitation to bid. Bids from anyone not on the Engineer's Plan Holders List will not be opened.
- 2.02 Complete sets of Bidding Documents shall be used in preparing Bids; neither Owner nor Engineer assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.
- 2.03 Owner and Engineer, in making copies of Bidding Documents available on the above terms, do so only for the purpose of obtaining Bids for the Work and do not authorize or confer a license for any other use.

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

- 3.01 To demonstrate Bidder's qualifications to perform the Work, Bidder shall submit with its Bid written evidence establishing its qualifications such as financial data, previous experience, and present commitments, and the additional information listed in the Bid Form.
- 3.02 A Bidder's failure to submit required qualification information within the times indicated may disqualify Bidder from receiving an award of the Contract.
- 3.03 No requirement in this Article 3 to submit information will prejudice the right of Owner to seek additional pertinent information regarding Bidder's qualifications.
- 3.04 Bidder is advised to carefully review those portions of the Bid Form requiring Bidder's representations and certifications.

## ARTICLE 4 – SITE AND OTHER AREAS; EXISTING SITE CONDITIONS; EXAMINATION OF SITE; OWNER'S SAFETY PROGRAM; OTHER WORK AT THE SITE

#### 4.01 Site and Other Areas

A. The Site is identified in the Bidding Documents. By definition, the Site includes rights-of-way, easements, and other lands furnished by Owner for the use of the Contractor. Any additional lands required for temporary construction facilities, construction equipment, or storage of materials and equipment, and any access needed for such additional lands, are to be obtained and paid for by Contractor.

#### 4.02 Existing Site Conditions

- A. Subsurface and Physical Conditions; Hazardous Environmental Conditions
  - 1. If there are reports and/or additional information concerning site conditions available, they will be included as Appendices to the Bidding Documents.
  - Geotechnical Report: If a Geotechnical Report is available, it will be included as an appendix to the Bidding Documents. The Geotechnical Report describes certain select subsurface conditions that are anticipated to be encountered by Contractor during construction in specified locations.

The Conditions in the Geotechnical Report are intended to reduce uncertainty and the degree of contingency in submitted Bids. However, Bidders cannot rely solely on the said Conditions. Bids should be based on a comprehensive approach that includes an independent review and analysis of the Report, all other Contract Documents, Technical Data, other available information, and observable surface conditions. Not all potential subsurface conditions are reported.

Nothing in the report is intended to relieve Bidders of the responsibility to make their own determinations regarding construction costs, bidding strategies, and Bid prices, nor of the responsibility to select and be responsible for the means, methods, techniques, sequences, and procedures of construction, and for safety precautions and programs incident thereto.

- B. Underground Facilities: Information and data shown or indicated in the Bidding Documents with respect to existing Underground Facilities at or contiguous to the Site are set forth in the Contract Documents and are based upon information and data furnished to Owner and Engineer by owners of such Underground Facilities, including Owner, or others.
- C. Adequacy of Data: Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to subsurface conditions, other physical conditions, and Underground Facilities, and possible changes in the Bidding Documents due to differing or unanticipated subsurface or physical conditions appear in Paragraphs 5.03, 5.04, and 5.05 of the General Conditions. Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to a Hazardous Environmental Condition at the Site, if any, and possible changes in the Contract Documents due to any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work, appear in Paragraph 5.06 of the General Conditions.

#### 4.03 Site Visit and Testing by Bidders

- A. Bidder shall conduct the required Site visit during normal working hours and shall not disturb any ongoing operations at the Site.
- B. Bidder is not required to conduct any subsurface testing, or exhaustive investigations of Site conditions.
- C. On request, and to the extent Owner has control over the Site, and schedule permitting, the Owner will provide Bidder access to the Site to conduct such additional examinations, investigations, explorations, tests, and studies as Bidder deems necessary for preparing and submitting a successful Bid. Owner will not have any obligation to grant such access if doing

- so is not practical because of existing operations, security or safety concerns, or restraints on Owner's authority regarding the Site.
- D. Bidder shall comply with all applicable Laws and Regulations regarding excavation and location of utilities, obtain all permits, and comply with all terms and conditions established by Owner or by property owners or other entities controlling the Site with respect to schedule, access, existing operations, security, liability insurance, and applicable safety programs.
- E. Bidder shall fill all holes and clean up and restore the Site to its former condition upon completion of such explorations, investigations, tests, and studies.

#### 4.04 Owner's Safety Program

A. Site visits and work at the Site may be governed by an Owner safety program. As the General Conditions indicate, if an Owner safety program exists, it will be noted in the Supplementary Conditions.

#### 4.05 Other Work at the Site

A. Reference is made to Article 8 of the Supplementary Conditions for the identification of the general nature of other work of which Owner is aware (if any) that is to be performed at the Site by Owner or others (such as utilities and other prime contractors) and relates to the Work contemplated by these Bidding Documents. If Owner is party to a written contract for such other work, then on request, Owner will provide to each Bidder access to examine such contracts (other than portions thereof related to price and other confidential matters), if any.

#### **ARTICLE 5 – BIDDER'S REPRESENTATIONS**

- 5.01 It is the responsibility of each Bidder before submitting a Bid to:
  - A. examine and carefully study the Bidding Documents, and any data and reference items identified in the Bidding Documents;
  - B. visit the Site, conduct a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfy itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work;
  - C. become familiar with and satisfy itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work included but not limited to the AIS requirements as mandated and any subsequent statutes mandating domestic preference which apply to the following products made primarily of iron or steel: lined or unlined pipes and fittings, manhole covers and other municipal castings, hydrants, tanks, flanges, pipe clamps and restraints, valves, structural steel, reinforced precast concrete, and construction materials
  - D. carefully study all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Bidding Documents, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Bidding Documents, especially with respect to Technical Data in such reports and drawings;

- E. consider the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder's safety precautions and programs;
- F. agree, based on the information and observations referred to in the preceding paragraph, that at the time of submitting its Bid no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of its Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents;
- G. become aware of the general nature of the work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents;
- H. promptly give Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder discovers in the Bidding Documents and confirm that the written resolution thereof by Engineer is acceptable to Bidder;
- I. determine that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work; and
- J. agree that the submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

#### **ARTICLE 6 – PRE-BID CONFERENCE**

6.01 A mandatory pre-bid is not scheduled for this project.

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

- 7.01 All questions about the meaning or intent of the Bidding Documents are to be submitted to Engineer in writing via email to **jthompson@kyengr.com**. Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda delivered to all parties recorded as having received the Bidding Documents. Questions received less than seven days prior to the date for opening of Bids may not be answered. Only questions answered by Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.
- 7.02 Addenda may be issued to clarify, correct, supplement, or change the Bidding Documents.

#### **ARTICLE 8 – BID SECURITY**

8.01 A Bid must be accompanied by Bid security made payable to Owner in an amount of five (5) percent of Bidder's maximum Bid price (determined by adding the base bid and all alternates) and in the form of a certified check, bank money order, or a Bid bond (on the form included in

- the Bidding Documents) issued by a surety meeting the requirements of Paragraphs 6.01 and 6.02 of the General Conditions.
- 8.02 The Bid security of the apparent Successful Bidder will be retained until Owner awards the contract to such Bidder, and such Bidder has executed the Contract Documents, furnished the required contract security, and met the other conditions of the Notice of Award, whereupon the Bid security will be released. If the Successful Bidder fails to execute and deliver the Contract Documents and furnish the required contract security within 15 days after the Notice of Award, Owner may consider Bidder to be in default, annul the Notice of Award, and the Bid security of that Bidder will be forfeited. Such forfeiture shall be Owner's exclusive remedy if Bidder defaults.
- 8.03 The Bid security of other Bidders that Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the earlier of seven days after the Effective Date of the Contract or 91 days after the Bid opening, whereupon Bid security furnished by such Bidders will be released.
- 8.04 Bid security of other Bidders that Owner believes do not have a reasonable chance of receiving the award will be released within seven days after the Bid opening.

#### **ARTICLE 9 – CONTRACT TIMES**

9.01 The number of days within which, or the dates by which, the Work is to be <u>substantially</u> completed and ready for <u>final</u> payment are set forth in the Agreement.

#### **ARTICLE 10 – LIQUIDATED DAMAGES**

10.01 Provisions for liquidated damages, if any, for failure to timely attain Substantial Completion, or completion of the Work in readiness for final payment, are set forth in the Supplemental General Conditions and referred to in the Agreement.

#### ARTICLE 11 - SUBSTITUTE AND "OR-EQUAL" ITEMS

- 11.01 The Contract for the Work, if awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents, and those "or-equal" or substitute or materials and equipment subsequently approved by Engineer prior to the submittal of Bids and identified by Addendum. No item of material or equipment will be considered by Engineer as an "or-equal" or substitute unless written request for approval has been submitted by Bidder and has been received by Engineer at least 15 days prior to the date for receipt of Bids in the case of a proposed substitute and 5 days prior in the case of a proposed "or-equal". Each such request shall comply with the requirements of Paragraphs 7.04 and 7.05 of the General Conditions. The burden of proof of the merit of the proposed item is upon Bidder. Engineer's decision of approval or disapproval of a proposed item will be final. If Engineer approves any such proposed item, such approval will be set forth in an Addendum issued to all prospective Bidders. Bidders shall not rely upon approvals made in any other manner. Substitutes and "or-equal" materials and equipment may be proposed by Contractor in accordance with Paragraphs 7.04 and 7.05 of the General conditions after the Effective Date of the contract.
- 11.02 All prices that Bidder sets forth in its Bid shall be based on the presumption that the Contractor will furnish the materials and equipment specified or described in the Bidding Documents, as

- supplemented by Addenda. Any assumptions regarding the possibility of post-Bid approvals of "or-equal" or substitution requests are made at Bidder's sole risk.
- 11.03 If an award is made, Contractor shall be allowed to submit proposed substitutes and "or-equals" in accordance with the General Conditions.

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

- 12.01 If required by the bid documents, the Bidder shall submit to Owner a list of the Subcontractors or Suppliers proposed for the major portions of the Work. If requested by Owner, such list shall be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor, Supplier, or other individual or entity. If Owner or Engineer, after due investigation, has reasonable objection to any proposed Subcontractor, Supplier, individual, or entity, Owner may, before the Notice of Award is given, request apparent Successful Bidder to submit an acceptable substitute.
- 12.02 If apparent Successful Bidder declines to make any such substitution, Owner may award the Contract to the next lowest Bidder that proposes to use acceptable Subcontractors, Suppliers, or other individuals or entities. Declining to make requested substitutions will constitute grounds for forfeiture of the Bid security of any Bidder. Any Subcontractor, Supplier, individual, or entity so listed and against which Owner or Engineer makes no written objection prior to the giving of the Notice of Award will be deemed acceptable to Owner and Engineer subject to subsequent revocation of such acceptance as provided in Paragraph 7.06 of the General Conditions.
- 12.03 Subsequent to the submittal of the Bid, Owner may not require the Successful Bidder or Contractor to retain any Subcontractor, Supplier, or other individual or entity against which Contractor has reasonable objection.
- 12.04 The Contractor shall not award work to Subcontractor(s) in excess of the limits stated in SGC 7.06.

#### **ARTICLE 13 - PREPARATION OF BID**

- 13.01 The Bid Form is included with the Bidding Documents.
  - A. All blanks on the Bid Form shall be completed in ink and the Bid Form signed in ink. Erasures or alterations shall be initialed in ink by the person signing the Bid Form. A Bid price shall be indicated for each section, Bid item, alternate, adjustment unit price item, and unit price item listed therein.
  - B. If the Bid Form expressly indicates that submitting pricing on a specific alternate item is optional, and Bidder elects to not furnish pricing for such optional alternate item, then Bidder may enter the words "No Bid" or "Not Applicable."
- 13.02 A Bid by a corporation shall be executed in the corporate name by a corporate officer (whose title must appear under the signature), accompanied by evidence of authority to sign. The corporate address and state of incorporation shall be shown.

- 13.03 A Bid by a limited liability company shall be executed in the name of the firm by a member or other authorized person and accompanied by evidence of authority to sign. The state of formation of the firm and the official address of the firm shall be shown.
- 13.04 A Bid by an individual shall show the Bidder's name and official address.
- 13.05 A Bid by a joint venture shall be executed by an authorized representative of each joint venturer in the manner indicated on the Bid Form. The official address of the joint venture shall be shown.
- 13.06 All names shall be printed in ink below the signatures.
- 13.07 The Bid shall contain an acknowledgment of receipt of all Addenda, the numbers of which shall be filled in on the Bid Form.
- 13.08 Postal and e-mail addresses and telephone number for communications regarding the Bid shall be shown.
- 13.09 The Bid shall contain evidence of Bidder's authority and qualification to do business in the state where the Project is located, or Bidder shall covenant in writing to obtain such authority and qualification prior to award of the Contract and attach such covenant to the Bid. Bidder's state contractor license number, if any, shall also be shown on the Bid Form. 11.8. The Bid price shall include such amounts as the Bidder deems proper for overhead and profit on account of any cash allowances named in the Contract Documents as provided in Paragraph 11.02 of the General Conditions.
  - The Bid price shall include such amounts as the Bidder deems proper for overhead and profit on account of any cash allowances named in the Contract Documents as provided in Paragraph 11.02 of the General Conditions.
- 13.10 Each Bid must be submitted on the prescribed form and accompanied by the submittals listed in the Bid Form.

#### **ARTICLE 14 – BASIS OF BID**

#### 14.01 Unit Price

- A. Bidders shall submit a bid on a unit price basis for each item of work listed in the bid schedule.
- B. The total of all estimated prices will be the sum of the products of the estimated quantity of each item and the corresponding unit price. The final quantities and contract price will be determined in accordance with paragraph 11.03 of the general conditions.
- C. Discrepancies between the multiplication of units of work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum. Discrepancies between words and figures will be resolved in favor of the words.
- 14.02 The bid price shall include such amounts as the bidder deems proper for overhead and profit on account of cash allowances, if any, named in the contract documents as provided in paragraph 11.02 of the general conditions.
- 14.03 Bid prices will be compared after resolution of discrepancies, if any, as described above.

#### **ARTICLE 15 – SUBMITTAL OF BID**

- 15.01 With each copy of the Bidding Documents, a Bidder is furnished one separate unbound copy of the Bid Form, and, if required, the Bid Bond Form. The unbound copy of the Bid Form is to be completed and submitted with the Bid security and the other documents required to be submitted under the terms of Article 7 of the Bid Form.
- 15.02 A Bid shall be received no later than the date and time prescribed and at the place indicated in the advertisement or invitation to bid and shall be enclosed in a plainly marked package with the Project title (and, if applicable, the designated portion of the Project for which the Bid is submitted), the name and address of Bidder, and shall be accompanied by the Bid security and other required documents. If a Bid is sent by mail or other delivery system, the sealed envelope containing the Bid shall be enclosed in a separate package plainly marked on the outside with the notation "BID ENCLOSED."
- 15.03 Bids received after the date and time prescribed for the opening of bids, or not submitted at the correct location or in the designated manner, will not be accepted and will be returned to the Bidder unopened.

#### ARTICLE 16 - MODIFICATION AND WITHDRAWAL OF BID

16.01 A Bid may be withdrawn by an appropriate document duly executed in the same manner that a Bid must be executed and delivered to the place where Bids are to be submitted prior to the date and time for the opening of Bids. Upon receipt of such notice, the unopened Bid will be returned to the Bidder.

- 16.02 If a Bidder wishes to modify its Bid prior to Bid opening, Bidder must withdraw its initial Bid in the manner specified in Paragraph 16.01 and submit a new Bid prior to the date and time for the opening of Bids.
- 16.03 If within 24 hours after Bids are opened any Bidder files a duly signed written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, that Bidder may withdraw its Bid, and the Bid security will be returned. Thereafter, if the Work is rebid, that Bidder will be disqualified from further bidding on the Work.

#### **ARTICLE 17 – OPENING OF BIDS**

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

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

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

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

- 19.01 Owner reserves the right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids. Owner will reject the Bid of any Bidder that Owner finds, after reasonable inquiry and evaluation, to not be responsible. If Bidder purports to add terms or conditions to its Bid, takes exception to any provision of the Bidding Documents, or attempts to alter the contents of the Contract Documents for purposes of the Bid, then the Owner will reject the Bid as nonresponsive; provided that Owner also reserves the right to waive all minor informalities not involving price, time, or changes in the Work.
- 19.02 If Owner awards the contract for the Work, such award shall be to the responsible Bidder submitting the lowest responsive Bid.
- 19.03 In evaluating Bids, Owner will consider whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices, and other data, as may be requested in the Bid Form or prior to the Notice of Award.
- 19.04 In evaluating whether a Bidder is responsible, Owner will consider the qualifications of the Bidder and may consider the qualifications and experience of Subcontractors and Suppliers proposed for those portions of the Work for which the identity of Subcontractors and Suppliers must be submitted as provided in the Bidding Documents.
- 19.05 Owner may conduct such investigations as Owner deems necessary to establish the responsibility, qualifications, and financial ability of Bidders and any proposed Subcontractors or Suppliers.

#### **ARTICLE 20 – BONDS AND INSURANCE**

20.01 Article 6 of the General Conditions, as may be modified by the Supplementary Conditions, sets forth Owner's requirements as to performance and payment bonds and insurance. When the Successful Bidder delivers the Agreement (executed by Successful Bidder) to Owner, it shall be accompanied by required bonds and insurance documentation.

#### **ARTICLE 21 – SIGNING OF AGREEMENT**

21.01 When Owner issues a Notice of Award to the Successful Bidder, it shall be accompanied by the unexecuted counterparts of the Agreement along with the other Contract Documents as identified in the Agreement. Within 15 days thereafter, Successful Bidder shall execute and deliver the required number of counterparts of the Agreement (and any bonds and insurance documentation required to be delivered by the Contract Documents) to Owner. Within ten days thereafter, Owner shall deliver one fully executed counterpart of the Agreement to Successful Bidder, together with printed and electronic copies of the Contract Documents as stated in Paragraph 2.02 of the General Conditions.

**ARTICLE 22 - NOT USED** 

**ARTICLE 23 – NOT USED** 

#### **ARTICLE 24 – POWER OF ATTORNEY**

24.01 Attorneys-in-fact who sign Bid Bonds or Contract Bonds must file with each bond a certified and effective dated copy of their power of attorney.

#### **ARTICLE 25 – LAWS AND REGULATIONS**

25.01 The Bidder's attention is directed to the fact that all applicable State Laws, municipal ordinance, and the rules and regulations of all authorities having jurisdiction over construction of the Project shall apply to the Contract throughout, and they will be deemed to be included in the Contract the same as though herein written out in full.

#### **ARTICLE 26 – SAFETY STANDARDS AND ACCIDENT PREVENTION**

- 26.01 With respect to all Work performed under this contract, the Contractor shall:
  - A. Comply with the safety standards provisions of applicable laws, building and construction codes and the "Manual of Accident Prevention in Construction" published by the Associated General Contractors of America, the requirements of the Occupational Safety and Health Act of 1970 (Public Law 91-596), and the requirements of Title 29 of the Code of Federal Regulations, Section 1518 as published in the "Federal Register", Volume 36, No. 75, Saturday, April 17, 1971.
  - B. Exercise every precaution at all times for the prevention of accidents and the protection of persons (including employees) and property.

C. Maintain at his/her office or other well-known place at the job site, all articles necessary for giving first aid to the injured, and shall make standing arrangements for the immediate removal to a hospital or doctor's care of persons (including employees), who may be injured on the job site before the employer has made a standing arrangement for removal of injured persons to a hospital or a doctor's care.

#### **ARTICLE 27 – WAGE RATE REQUIREMENTS**

27.01 If the contract price is in excess of \$100,000, provisions of the Contract Work Hours and Safety Standards Act at 29 CFD 5.5(b) apply.

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#### BID FORM

## 2022 WATER SYSTEM IMPROVEMENTS WATER TANK REHABILITATION Bath County Water District

#### ARTICLE 1 – BID RECIPIENT

1.01 This Bid is submitted to:

**Bath County Water District** 

21 Church Street

Salt Lick, Kentucky 40371

1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

#### ARTICLE 2 – BIDDER'S ACKNOWLEDGEMENTS

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

#### ARTICLE 3 – BIDDER'S REPRESENTATIONS

- 3.01 In submitting this Bid, Bidder represents that:
  - A. Bidder has examined and carefully studied the Bidding Documents, and any data and reference items identified in the Bidding Documents, and hereby acknowledges receipt of the following Addenda:

Addendum No.	Addendum, Date		

- B. Bidder has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfied itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
- C. Bidder is familiar with and has satisfied itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work and including all AIS requirements.
- D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and

- drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings.
- E. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and any Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder's safety precautions and programs.
- F. Bidder agrees, based on the information and observations referred to in the preceding paragraph, that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.
- G. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
- H. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and confirms that the written resolution thereof by Engineer is acceptable to Bidder.
- I. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work.
- J. The submission of this Bid constitutes an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, and that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

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

#### 4.01 Bidder certifies that:

- A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation;
- B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;
- C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and
- D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:
  - 1. "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process;
  - "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;

- 3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and
- "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the e execution of the Contract.

#### **ARTICLE 5 - BASIS OF BID**

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

#### **BID SCHEDULE**

ITEM NO.	APPROX. QUANTITY	UNIT	DESCRIPTION	TOTAL BID AMOUNT
1	1	LS	Salt Lick Tank, 500,000 Gallon Ground Storage Tank Rehabilitation. Complete will all appurtenances.	
2	1	LS	Perry Road Tank, 100,000 Gallon Ground Storage Tank Rehabilitation. Complete will all appurtenances.	
3	1	LS	Ore Mines Tank, 250,000 Gallon Ground Storage Tank Rehabilitation. Complete will all appurtenances.	
4	1	LS	Means Tank, 156,000 Gallon Ground Storage (Glass Line) Tank Rehabilitation. Complete will all appurtenances.	
5	1	LS	Olympia Tank, 238,000 Gallon Ground Storage (Glass Line) Tank Rehabilitation. Complete will all appurtenances.	
6	1	LS	Owingsville Tank, 100,000 Gallon Elevated Water Storage Tank Rehabilitation. Complete will all appurtenances.	

AWARD OF THIS CONTRACT shall be based on the lowest responsible, responsive Bidder on the total of the BASE BID.

TOTAL AMOUNT BID :		
Dollars and	(Cents) (\$	)

The above prices shall include all labor, materials, overhead, profit, insurance and other costs necessary to cover the finished work of the several kinds called for. The price per foot for pipe installation includes all labor, materials, unclassified excavation, rock blasting and removal, clean-up, etc. for a finished product. Changes in the work shall be processed in accordance with Article 60 of the General Conditions.

By submission of this Bid, the BIDDER certifies, and in the case of a joint Bid each party thereto certifies as to its own organization, that this Bid has been arrived at independently, without consultation, communication, or agreement as to any matter relating to this Bid, with any other BIDDER or with any competitor.

#### **ARTICLE 6 – EQUIPMENT**

6.01	Bidder shall enter in the space provided below the name of the manufacturer or brand of equipment which it proposes to furnish for each item of equipment listed. In order for the bid to be considered responsible and responsive, the manufacturer listed must be either the one listed in the specifications or an approved equal or substitution issued by addendum. This information will only be used to determine the responsiveness of the bid and in no way discourages request for substitute or "or equal" during the shop drawing review process. In the interest of open and free competition, at any time after the bid award, the contractor may request consideration of alternate manufacturers.

#### **ARTICLE 7 – TIME OF COMPLETION**

- 7.01 Bidder agrees that the Work will be substantially complete within 365 calendar days after the date when the Contract Times commence to run as provided in Paragraph 4.01 of the General Conditions and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions within 395 calendar days after the date when the Contract Times commence to run.
- 7.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

#### **ARTICLE 8 – ATTACHMENTS TO THIS BID**

- 8.01 The following documents are submitted with and made a condition of this Bid:
  - A. Required Bid security;
  - B. List of Proposed Subcontractors;
  - C. List of Proposed Suppliers;

- D. List of Project References;
- E. Evidence of authority to do business in the state of the Project; or a written covenant to obtain such license within the time for acceptance of Bids;
- F. Contractor's License No.:
- G. Required Bidder Qualification Statement with supporting data; and

#### **ARTICLE 9 – DEFINED TERMS**

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

NOTE(S) TO USER:

Careful attention to proper use of terms defined in the Instructions to Bidders, the General Conditions, and Supplementary Conditions is most important.

#### **ARTICLE 10 – BID SUBMITTAL**

BIDDER: [Indicate correc	t name of bidding entity]
By: [Signature]	
[Printed name] (If Bidder is a corporation evidence of authority to	n, a limited liability company, a partnership, or a joint venture, attach sign.)
Attest: [Signature]	
[Printed name]	
Title:	
Submittal Date:	
Address for giving notice	es:
Telephone Number:	
Fax Number:	
Contact Name and e-ma	il address:
Bidder's License No.:	
	(where applicable)

NOTE TO USER: Use in those states or other jurisdictions where applicable or required.

# **QUALIFICATIONS STATEMENT**

# THE INFORMATION SUPPLIED IN THIS DOCUMENT IS CONFIDENTIAL TO THE EXTENT PERMITTED BY LAWS AND REGULATIONS

1.	SUBMITTED BY:	
	Official Name of Firm:	
	Address:	
2.	SUBMITTED TO:	
3.	SUBMITTED FOR:	
	Owner:	Bath County Water District
	Project Name:	2022 Water System Improvements
		Water Tank Rehabilitation
	TYPE OF WORK:	Tank Rehabilitation
	CONTRACTOR'S CONTACT IN	IFORMATION
	Contact Person:	
	Title:	
	Phone:	
	Email:	

4.	AFFILI	ATED COMPANIES:	
	Name	:	
	Addre	ss:	
5.	TYPE (	OF ORGANIZATION:	
		SOLE PROPRIETORSHIP	
		Name of Owner:	
		Doing Business As:	
		Date of Organization:	
		PARTNERSHIP	
		Date of Organization:	
		Type of Partnership:	
		Name of General Partner(s):	
		CORPORATION	
		State of Organization:	7
		Date of Organization:	
		Executive Officers:	
		- President:	
		- Vice President(s):	
		- Treasurer:	¬
		- Secretary:	9

LIMITED LIABILITY COMPANY	
State of Organization:	
Date of Organization:	
Members:	
JOINT VENTURE	
Sate of Organization:	
Date of Organization:	
Form of Organization:	
Joint Venture Managing Partner	
- Name:	
- Address:	
Joint Venture Managing Partner	
- Name:	
- Address:	
Joint Venture Managing Partner	
- Name:	
- Address:	

6.	LICENSING			
		Jurisdiction:		
		Type of License:		
		License Number:		
		Jurisdiction:		
		Type of License:		
		License Number:		
7.	CERTIFICATIO	NS		CERTIFIED BY:
		Disadvantage Business Ent	erprise:	
		Minority Business Enterpri	se:	
		Woman Owned Enterprise	::	
		Small Business Enterprise:		
		Other (	):	
8.	BONDING INF	ORMATION		
		Bonding Company:		
		Address:		
		Bonding Agent:		
		Address:		
		Contact Name:		
		Phone:		
		Aggregate Bonding Capaci	ty:	
				s submittal:

9.	FINANCIAL INFORMATION
	Financial Institution:
	Address:
	Account Manager:
	Phone:
	INCLUDE AS AN ATTACHMENT AN AUDITED BALANCE SHEET FOR EACH OF THE LAST 3 YEARS (REQUIRED, AS REQUESTED FROM THE LOW BIDDER BY THE OWNER AFTER RECEIPT OF BIDS)
10.	CONSTRUCTION EXPERIENCE:
	Current Experience:
	List on <b>Schedule A</b> all uncompleted projects currently under contract (If Joint Venture list each participant's projects separately).
	Previous Experience:
	List on <b>Schedule B</b> all projects completed within the last 5 Years (If Joint Venture list each participant's projects separately).
	Has firm listed in Section 1 ever failed to complete a construction contract awarded to it?
	☐YES ☐ NO
	If YES, attach as an Attachment details including Project Owner's contact information.
	Has any Corporate Officer, Partner, Joint Venture participant or Proprietor ever failed to complete a construction contract awarded to them in their name or when acting as a principal of another entity?
	☐ YES ☐ NO
	If YES, attach as an Attachment details including Project Owner's contact information.
	Are there any judgments, claims, disputes or litigation pending or outstanding involving the firm listed in Section 1 or any of its officers (or any of its partners if a partnership or any of the individual entities if a joint venture)?
	☐YES ☐ NO
	EJCDC° C-451. Qualifications Statement.

If YES, attach as an Attachment details including Project Owner's contact information.

11.

SAFETY PROGRAM:								
Name of Contractor's Safety Officer:								
Include the following as attachments:								
Provide as an Attachment Contractor's (and Contractor's proposed Subcontractors and Suppliers furnishing or performing Work having a value in excess of 10 percent of the total amount of the Bid) OSHA No. 500- Log & Summary of Occupational Injuries & Illnesses for the past 5 years.								
Provide as an Attachment Contractor's (and Contractor's proposed Subcontractors and Suppliers furnishing or performing Work having a value in excess of 10 percent of the total amount of the Bid) list of all OSHA Citations & Notifications of Penalty (monetary or other) received within the last 5 years (indicate disposition as applicable) - IF NONE SO STATE.								
Provide as an Attachment Contractor's (and Contractor's proposed Subcontractors and Suppliers furnishing or performing Work having a value in excess of 10 percent of the total amount of the Bid) list of all safety citations or violations under any state all received within the last 5 years (indicate disposition as applicable) - IF NONE SO STATE.								
Provide the following for the firm listed in Section V (and for each proposed Subcontractor furnishing or performing Work having a value in excess of 10 percent of the total amount of the Bid) the following (attach additional sheets as necessary):								
Workers' compensation Experience Modification Rate (EMR) for the last 5 years:								
YEAR EMR YEAR EMR YEAR EMR YEAR EMR								
<del></del>								
Total Recordable Frequency Rate (TRFR) for the last 5 years:								
YEAR TRFR TRFR								
YEAR TRFR TRFR								
YEAR TRFR TRFR								
YEAR TRFR YEAR TRER								
YEAR IKER								

Total number	of man-hou	urs worked for t	the last 5	Voarce		
YEAR		TOTAL NUMB				
YEAR	<u></u>	TOTAL NUMB	ER OF MA	N-HOURS		
YEAR		TOTAL NUMB	ER OF MA	N-HOURS		
YEAR		TOTAL NUMB	ER OF MA	N-HOURS		
YEAR	_	TOTAL NUMB	ER OF MA	AN-HOURS		
performing Work	having a va Days of Re ustry or type	lue in excess of stricted Work A e of Work to be	f 10 perce Activity or e perform	ent of the tota Job Transfer ed by Contra		ys
	YEAR		DART			
	YEAR		DART			
	YEAR		DART			
	YEAR		DART			
	YEAR		DART			
EQUIPMENT:						
MAJOR EQUIPMENT:						
List on <b>Schedule C</b> all	pieces of m	najor equipmen	t availabl	e for use on (	Owner's Project.	

**12.** 

HEREBY CERTIFY THAT THE INFORMATION SUBMITTED HEREWITH, INCLUDING ANY ATTACHMENTS, IS TRUE TO THE BEST OF MY KNOWLEDGE AND BELIEF.
NAME OF ORGANIZATION:
BY:
TITLE:
DATED:
NOTARY ATTEST:
SUBSCRIBED AND SWORN TO BEFORE ME
THIS DAY OF, 20
NOTARY PUBLIC - STATE OF
MY COMMISSION EXPIRES:
REQUIRED ATTACHMENTS
1. Schedule A (Current Experience).
2. Schedule B (Previous Experience).
3. Schedule C (Major Equipment).
4. Audited balance sheet for each of the last 3 years for firm named in Section 1. (REQUIRED, AS REQUESTED FROM THE LOW BIDDER BY THE OWNER AFTER RECEIPT OF BIDS)
5. Evidence of authority for individuals listed in Section 7 to bind organization to an agreement.
6. Resumes of officers and key individuals (including Safety Officer) of firm named in Section 1.
7. Required safety program submittals listed in Section 13.
8. Additional items as pertinent.
- Major Equipment Manufacturers

#### SCHEDULE A

#### **CURRENT EXPERIENCE**

Project Name	Owner's Contact Person	Design Engineer	Contract Date	Type of Work	Status	Cost of Work
	Name:	Name:				
	Address:	Company:				
	Telephone:	Telephone:				
	Name:	Name:				
	Address:	Company:				
	Telephone:	Telephone:				
	Name:	Name:				
	Address:	Company:				
	Telephone:	Telephone:				
	Name:	Name:				
	Address:	Company:				
	Telephone:	Telephone:				
	Name:	Name:				
	Address:	Company:				
	Telephone:	Telephone:				
	Name:	Name:				
	Address:	Company:				
	Telephone:	Telephone:				
	Name:	Name:				
	Address:	Company:				
	Telephone:	Telephone:				

#### SCHEDULE B

PREVIOUS EXPERIENCE (Include ALL Projects Completed within last 5 years)

Project Name	Owner's Contact Person	Design Engineer	Contract Date	Type of Work	Status	Cost of Work
	Name: Address: Telephone:	Name: Company: Telephone:				
	Name: Address: Telephone:	Name: Company: Telephone:				
	Name: Address: Telephone:	Name: Company: Telephone:				
	Name: Address: Telephone:	Name: Company: Telephone:				
	Name: Address: Telephone:	Name: Company: Telephone:				
	Name: Address: Telephone:	Name: Company: Telephone:				
	Name: Address: Telephone:	Name: Company: Telephone:				

#### SCHEDULE B

PREVIOUS EXPERIENCE (Include ALL Projects Completed within last 5 years)

Project Name	Owner's Contact Person	Design Engineer	Contract Date	Type of Work	Status	Cost of Work
	Name: Address: Telephone:	Name: Company: Telephone:				
	Name: Address: Telephone:	Name: Company: Telephone:				
	Name: Address: Telephone:	Name: Company: Telephone:				
	Name: Address: Telephone:	Name: Company: Telephone:				
	Name: Address: Telephone:	Name: Company: Telephone:				
	Name: Address: Telephone:	Name: Company: Telephone:				
	Name: Address: Telephone:	Name: Company: Telephone:				

#### SCHEDULE C - LIST OF MAJOR EQUIPMENT AVAILABLE

ITEM	PURCHASE DATE	CONDITION	ACQUIRED VALUE



# **BID BOND**

Any sing	gular reference to Bidder, Surety, Owner or ot	her party sh	all be considered plural where applicable.
BIDDER	(Name and Address):		
SURETY	(Name, and Address of Principal Place of Bo	usiness):	
OWNER	R (Name and Address): Bath County Water I 21 Church Street Salt Lick, Kentucky 4		
BID			
Des	Due Date: scription: 2022 Water System Improvement Bath County Water District	ts – Water Ta	ank Rehabilitation
BOND Boi	nd Number:		
Dat			
Per	nal sum		\$
C	(Words)		(Figures)
-	Bond to be duly executed by an authorized		ct to the terms set forth below, do each cause nt. or representative.
BIDDER	·	SURETY	•
	(Sea	al)	(Seal)
Bidder's	s Name and Corporate Seal	Surety's	Name and Corporate Seal
Ву:		By:	
,	Signature		Signature (Attach Power of Attorney)
	Print Name		Print Name
	Title		Title
<b>A.L. L</b> .		<b>A </b> .	
Attest:	Signature	Attest:	Signature
	Signature		Signature
	Title		Title
Provide	ddresses are to be used for giving any requi e execution by any additional parties, such a ler and Surety, jointly and severally, bind them	ıs joint ventu	nrers, if necessary. heirs, executors, administrators, successors, and
	EJCDC® C-430, Bid Bond (	Penal Sum Form)	Published 2013.

EJCDC® C-430, Bid Bond (Penal Sum Form). Published 2013.

Prepared by the Engineers Joint Contract Documents Committee.

Page 1 of 2



assigns to pay to Owner upon default of Bidder the penal sum set forth on the face of this Bond. Payment of the penal sum is the extent of Bidder's and Surety's liability. Recovery of such penal sum under the terms of this Bond shall be Owner's sole and exclusive remedy upon default of Bidder.

- 2. Default of Bidder shall occur upon the failure of Bidder to deliver within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents.
- 3. This obligation shall be null and void if:
  - 3.1 Owner accepts Bidder's Bid and Bidder delivers within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents, or
  - 3.2 All Bids are rejected by Owner, or
  - 3.3 Owner fails to issue a Notice of Award to Bidder within the time specified in the Bidding Documents (or any extension thereof agreed to in writing by Bidder and, if applicable, consented to by Surety when required by Paragraph 5 hereof).
- 4. Payment under this Bond will be due and payable upon default of Bidder and within 30 calendar days after receipt by Bidder and Surety of written notice of default from Owner, which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.
- 5. Surety waives notice of any and all defenses based on or arising out of any time extension to issue Notice of Award agreed to in writing by Owner and Bidder, provided that the total time for issuing Notice of Award including extensions shall not in the aggregate exceed 120 days from the Bid due date without Surety's written consent.
- 6. No suit or action shall be commenced under this Bond prior to 30 calendar days after the notice of default required in Paragraph 4 above is received by Bidder and Surety and in no case later than one year after the Bid due date.
- 7. Any suit or action under this Bond shall be commenced only in a court of competent jurisdiction located in the state in which the Project is located.
- 8. Notices required hereunder shall be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier, or by United States Registered or Certified Mail, return receipt requested, postage pre-paid, and shall be deemed to be effective upon receipt by the party concerned.
- 9. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent, or representative who executed this Bond on behalf of Surety to execute, seal, and deliver such Bond and bind the Surety thereby.
- 10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond shall be deemed to be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute shall govern and the remainder of this Bond that is not in conflict therewith shall continue in full force and effect.
- 11. The term "Bid" as used herein includes a Bid, offer, or proposal as applicable.

22015 BID BOND



#### **NOTICE OF AWARD**

Date of Iss	suance:		
Owner:	Bath County Water District	Owner's Contract No.:	
Engineer:	Kentucky Engineering Group, PLLC	Engineer's Project No.:	22015
Project:	2022 Water System Improvements	Contract Name:	Water Tank Rehabilitation
Bidder:			
Bidder's A	ddress:		
TO BIDDE	ER:		
	re notified that Owner has accepted your Bid ccessful Bidder and are awarded a Contract fo		he above Contract, and that you
	2022 Water System Improvements –	Water Tank Rehabilitation	
The Court	art Drive of the our and of Courtment in th		
	act Price of the awarded Contract is: \$		of Assert and one constation
Co	] unexecuted counterparts of the Agreeme ontract Documents accompanies this Notice dder electronically. [revise if multiple copies a	of Award, or has been tr	ansmitted or made available to
[	$\overline{\sum}$ a set of the Drawings will be delivered sep	parately from the other Co	ntract Documents.
You m	nust comply with the following conditions pre	cedent within 15 days of th	ne date of this Notice of Award:
1.	Deliver to Owner [ 4 ] counterparts of the A	greement, fully executed b	by Bidder.
2.		•	·
	and insurance documentation as specified Articles 2 and 6.		
3.	Other conditions precedent (if any):		
	e to comply with these conditions within the Notice of Award, and declare your Bid securit		Owner to consider you in default,
	n ten days after you comply with the above co ort of the Agreement, together with any additi	•	•
•	2.02 of the General Conditions.		
Owner:	Bath County Water District		
Ву:			
	Authorized Signature		
Title:	Chairman		
Copy: Er	ngineer		

EJCDC° C-510 (Rev. 1), Notice of Award.

Prepared and published 2013 by the Engineers Joint Contract Documents Committee.

Page 1 of 1

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

THIS A	GREE	MENT is by and between	Bath County Water District	("Owner") and
				("Contractor").
Owner	and	Contractor hereby agree as	follows:	
ARTIC	E 1 -	- WORK		
1.01		ntractor shall complete all rk is generally described as	Work as specified or indicated in the Contract follows:	Documents. The
ARTICI	.E 2 -	THE PROJECT		
2.01	foll	ows: 2022 Water System	a under the Contract Documents is a part, is gene  1 Improvements - Water Tank Rehabilitati  1 ater storage tanks as shown on the DRAWINGS	on consisting of
ARTIC	.E 3 -	- ENGINEER		
3.01		part of the Project that per pup, PLLC.	rtains to the Work has been designed by <u>Kentuck</u>	y Engineering
3.02	The Owner has retained <u>Kentucky Engineering Group, PLLC</u> ("Engineer") to act as Owner's representative, assume all duties and responsibilities, and have the rights and authority assigned to Engineer in the Contract Documents in connection with the completion of the Work in accordance with the Contract Documents.			
ARTIC	.E 4 -	- CONTRACT TIMES		
4.01	Tim	e of the Essence		
	A.		nes, if any, Substantial Completion, and completi d in the Contract Documents are of the essence c	
4.02	Con	tract Times: Days		
	A.	Times commence to run completed and ready for	tially completed within days after the date was provided in Paragraph 4.01 of the General final payment in accordance with Paragraph 15.0 ays after the date when the Contract Times comm	Conditions, and Of the General
4.03	Liqu	uidated Damages		
	A.	above and that Owner w and Milestones not achie extensions thereof allowe	ecognize that time is of the essence as stated in ill suffer financial and other losses if the Work wed within the times specified in Paragraph 4.02 and in accordance with the Contract. The parties a culties involved in proving in a legal or arbitratio	is not completed 2 above, plus any ilso recognize the

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actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty):

1. Substantial Completion: Contractor shall pay Owner \$\_\_500\_ for each day that expires after the time (as duly adjusted pursuant to the Contract) specified in Paragraph 4.02.A above for Substantial Completion until the Work is substantially completed.

#### **ARTICLE 5 – CONTRACT PRICE**

- 5.01 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents the amounts that follow, subject to adjustment under the Contract:
  - A. For all Work, at the prices stated in Contractor's Bid, attached hereto as an exhibit.

#### **ARTICLE 6 – PAYMENT PROCEDURES**

- 6.01 Submittal and Processing of Payments
  - A. Contractor shall submit Applications for Payment in accordance with Article 15 of the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions.
- 6.02 Progress Payments; Retainage
  - A. Owner shall make progress payments on account of the Contract Price on the basis of Contractor's Applications for Payment on or about the TBD day of each month during performance of the Work as provided in Paragraph 6.02.A.1 below, provided that such Applications for Payment have been submitted in a timely manner and otherwise meet the requirements of the Contract. All such payments will be measured by the Schedule of Values established as provided in the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no Schedule of Values, as provided elsewhere in the Contract.
    - Prior to Substantial Completion, progress payments will be made in an amount equal
      to the percentage indicated below but, in each case, less the aggregate of payments
      previously made and less such amounts as Owner may withhold, including but not
      limited to liquidated damages, in accordance with the Contract
      - a. 95 percent of Work completed (with the balance being retainage). If the Work has been 50 percent completed as determined by Engineer, and if the character and progress of the Work have been satisfactory to Owner and Engineer, then as long as the character and progress of the Work remain satisfactory to Owner and Engineer, there will be no additional retainage; and
      - b. <u>100</u> percent of cost of materials and equipment not incorporated in the Work (with the balance being retainage).
  - B. Upon Substantial Completion, Owner shall pay an amount sufficient to increase total payments to Contractor to 95 percent of the Work completed, less such amounts set off by Owner pursuant to Paragraph 15.01.E of the General Conditions, and less 5 percent of Engineer's estimate of the value of Work to be completed or corrected as shown on the punch list of items to be completed or corrected prior to final payment.

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#### 6.03 Final Payment

A. Upon final completion and acceptance of the Work in accordance with Paragraph 15.06 of the General Conditions, Owner shall pay the remainder of the Contract Price as recommended by Engineer as provided in said Paragraph 15.06.

#### **ARTICLE 7 – INTEREST**

7.01 All amounts not paid when due shall bear interest at the rate of 3.5 percent per annum.

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

- 8.01 In order to induce Owner to enter into this Contract, Contractor makes the following representations:
  - A. Contractor has examined and carefully studied the Contract Documents, and any data and reference items identified in the Contract Documents.
  - B. Contractor has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
  - C. Contractor is familiar with and is satisfied as to all Laws and Regulations that may affect cost, progress, and performance of the Work.
  - D. Contractor has considered the information known to Contractor itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and the Site-related reports and drawings identified in the Contract Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor; and (3) Contractor's safety precautions and programs.
  - E. Based on the information and observations referred to in the preceding paragraph, Contractor agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.
  - F. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
  - G. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
  - H. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
  - I. Contractor's entry into this Contract constitutes an incontrovertible representation by Contractor that without exception all prices in the Agreement are premised upon performing and furnishing the Work required by the Contract Documents.

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#### **ARTICLE 9 – CONTRACT DOCUMENTS**

#### 9.01 Contents

- A. The Contract Documents consist of the following:
  - 1. This Agreement (pages 1 to <u>11</u>, inclusive).
  - 2. Performance bond (pages <u>1</u> to <u>3</u>, inclusive).
  - 3. Payment bond (pages <u>1</u> to <u>3</u>, inclusive).
  - 4. Other bonds.
    - a. \_\_\_\_ (pages \_\_\_\_ to \_\_\_\_, inclusive).

#### NOTE(S) TO USER:

Such other bonds might include maintenance or warranty bonds intended to manage risk after completion of the Work.

- 5. General Conditions (pages 1 to 73, inclusive).
- 6. Supplementary Conditions (pages <u>1</u> to <u>8</u>, inclusive).
- 7. Specifications as listed in the table of contents of the Project Manual.
- 8. Drawings (not attached but incorporated by reference) consisting of \_\_\_\_ sheets with each sheet bearing the following general title: \_\_\_\_\_ [or] the Drawings listed on the attached sheet index.
- 9. Addenda (numbers 1, inclusive).
- 10. Exhibits to this Agreement (enumerated as follows):
  - a. Contractor's Bid (pages \_\_\_\_ to \_\_\_\_, inclusive).
- 11. The following which may be delivered or issued on or after the Effective Date of the Contract and are not attached hereto:
  - a. Change Orders
- B. The documents listed in Paragraph 9.01.A are attached to this Agreement (except as expressly noted otherwise above).
- C. There are no Contract Documents other than those listed above in this Article 9.
- D. The Contract Documents may only be amended, modified, or supplemented as provided in the General Conditions.

#### **ARTICLE 10 - MISCELLANEOUS**

#### 10.01 Terms

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

#### 10.02 Assignment of Contract

A. Unless expressly agreed to elsewhere in the Contract, no assignment by a party hereto of any rights under or interests in the Contract will be binding on another party hereto

without the written consent of the party sought to be bound; and, specifically but without limitation, money that may become due and money that is due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

#### 10.03 Successors and Assigns

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

#### 10.04 Severability

A. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Owner and Contractor, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

#### 10.05 Contractor's Certifications

- A. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Paragraph 10.05:
  - "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process or in the Contract execution;
  - "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Owner, (b) to establish Bid or Contract prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
  - "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish Bid prices at artificial, non-competitive levels; and
  - 4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

#### 10.06 Other Provisions

A. Owner stipulates that if the General Conditions that are made a part of this Contract are based on EJCDC® C-700, Standard General Conditions for the Construction Contract, published by the Engineers Joint Contract Documents Committee®, and if Owner is the party that has furnished said General Conditions, then Owner has plainly shown all modifications to the standard wording of such published document to the Contractor, through a process such as highlighting or "track changes" (redline/strikeout), or in the Supplementary Conditions.

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IN WITNESS WHEREOF, Owner and Contractor have $% \left( 1\right) =\left( 1\right) \left( 1\right) $	signed this Agreement.
This Agreement will be effective on	(which is the Effective Date of the Contract).
OWNER:	CONTRACTOR:
Bath County Water District	
Ву:	Ву:
Title: Chairman	Title: President
	(If Contractor is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)
Attest:	Attest:
Title:	Title:
Address for giving notices: 21 Church Street	Address for giving notices:
Salt Lick, KY 40371	
	License No.:  (where applicable)
(If Owner is a corporation, attach evidence of authority to sign. If Owner is a public body, attach evidence of authority to sign and resolution or other documents authorizing execution of this Agreement.)	NOTE TO USER: Use in those states or other jurisdictions where applicable or required.



#### **NOTICE TO PROCEED**

Owner:	Bath County Water District	Owner's Contract No.:	
Contractor: Contractor's Project No.:			
Engineer:	Kentucky Engineering Group, PLLC	Engineer's Project No.:	22015
Project:	2022 Water System Improvements	Contract Name:	Water Tank Rehabilitation
		Effective Date of Contrac	t:
TO CONTRA	ACTOR:		
	nereby notifies Contractor that the Con [see Paragraph 4.01 of t		e Contract will commence to run on
done at the	e, Contractor shall start performing its e Site prior to such date. In accordance, and the date of	ce with the Agreement, the	e date of Substantial Completion is
number of o	days to achieve Substantial Completion nt is		
	rting any Work at the Site, Contractor maccess limitations, security procedures,		ing:
Call in for	location of all existing utilities in work	area.	
Owner:	Bath County Water District		
Ву:			
Title:	Chairman		
Date Issue	d:		
Copy: Eng	ineer		

#### **SECTION 00600**

#### **INSURANCE CERTIFICATE**

Certificate of Insurance shall be provided in accordance with:

#### **OWNER'S MINIMUM INSURANCE REQUIREMENTS**

The Contractor at its expense shall procure and shall maintain the insurance required in this Contract and to be provided by the Contractor. The Contractor shall require each subcontractor to procure and maintain the insurance required by this Contract and to be provided by subcontractors. At a minimum, the following insurance

Limits shall be procured:

#### **General Liability** - Commercial General Liability

Limits of Insurance - \$2,000,000 general aggregate

\$2,000,000 products & completed operations aggregate

\$1,000,000 personal & advertising \$1,000,000 each occurrence

### Automobile Liability - All Owned, Non-owned & Hired vehicles

Limits of Liability - \$1,000,000 per accident

#### Excess or Umbrella Liability

Limits of Liability - \$2,000,000

<u>Workmen's Compensation</u> – Statutory Coverage in each state of operations or "all states" coverage

Limits of Liability - \$100,000 each accident bodily injury

\$500,000 policy limit bodily injury by disease \$100,000 each employee bodily injury by disease

#### **Description of Operations**

The Bath County Water District and Kentucky Engineering Groups, PLLC must be added to the Commercial General Liability policy as an additional insured by Standard Endorsements CG 2010(11-85) and CG 2037 or their equivalents.

All policies, except workers compensation, shall include a waiver of subrogation.

#### Certificate Holder

Must list: Bath County Water District

21 Church Street

Salt Lick, Kentucky 40371

#### Cancellation

Thirty (30) days prior written notice is required.

#### Builders Risk/Installation Floater

May be required in an amount equal to the contract. If above ground structures are involved in the Contract, this is required.

#### **END OF SECTION**



# **PERFORMANCE BOND**

CONTRACTOR (name and address):	SURETY (name and address of principal place of business):
OWNER (name and address): Bath County Water District 21 Church Street Salt Lick, Kentucky 40371	
CONSTRUCTION CONTRACT Effective Date of the Agreement: Amount: Description (name and location):	
BOND Bond Number: Date (not earlier than the Effective Date of the Agreement of Amount: Modifications to this Bond Form: None	of the Construction Contract):  See Paragraph 16
Surety and Contractor, intending to be legally bound cause this Performance Bond to be duly executed by	hereby, subject to the terms set forth below, do each an authorized officer, agent, or representative.
CONTRACTOR AS PRINCIPAL	SURETY
	(seal) Surety's Name and Corporate Seal
•	
By: Signature	By:Signature (attach power of attorney)
Print Name	Print Name
Title	Title
Attest:	Attest:
Signature	Signature
Title Notes: (1) Provide supplemental execution by any addit reference to Contractor, Surety, Owner, or other party	Title tional parties, such as joint venturers. (2) Any singular shall be considered plural where applicable.
·	Performance Bond Engineers, American Council of Engineering Companies, gineers. All rights reserved. 1 of 3

- 1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.
- 2. If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except when applicable to participate in a conference as provided in Paragraph 3.
- 3. If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond shall arise after:
  - The Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default, Such notice shall indicate whether the Owner is requesting a conference among the Owner, Contractor, and Surety to discuss the Contractor's performance. If the Owner does not request a conference, the Surety may, within five (5) business days after receipt of the Owner's notice, request such a conference. If the Surety timely requests a conference, the Owner shall attend. Unless the Owner agrees otherwise, any conference requested under this Paragraph 3.1 shall be held within ten (10) business days of the Surety's receipt of the Owner's notice. If the Owner, the Contractor, and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default;
  - 3.2 The Owner declares a Contractor Default, terminates the Construction Contract and notifies the Surety; and
  - 3.3 The Owner has agreed to pay the Balance of the Contract Price in accordance with the terms of the Construction Contract to the Surety or to a contractor selected to perform the Construction Contract.
- 4. Failure on the part of the Owner to comply with the notice requirement in Paragraph 3.1 shall not constitute a failure to comply with a condition precedent to the Surety's obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.
- 5. When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:
  - 5.1 Arrange for the Contractor, with the consent of the Owner, to perform and complete the Construction Contract;
  - 5.2 Undertake to perform and complete the Construction Contract itself, through its agents or independent contractors;
  - 5.3 Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the

- Owner and a contractor selected with the Owners concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 7 in excess of the Balance of the Contract Price incurred by the Owner as a result of the Contractor Default; or
- 5.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor, and with reasonable promptness under the circumstances:
  - 5.4.1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, make payment to the Owner; or
  - 5.4.2 Deny liability in whole or in part and notify the Owner, citing the reasons for denial.
- 6. If the Surety does not proceed as provided in Paragraph 5 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Paragraph 5.4, and the Owner refuses the payment or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.
- 7. If the Surety elects to act under Paragraph 5.1, 5.2, or 5.3, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication for:
  - 7.1 the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;
  - 7.2 additional legal, design professional, and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 5; and
  - 7.3 liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.
- 8. If the Surety elects to act under Paragraph 5.1, 5.3, or 5.4, the Surety's liability is limited to the amount of this Bond.
- 9. The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated

obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors, and assigns.

- 10. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.
- 11. Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall be instituted within two years after a declaration of Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum periods of limitations available to sureties as a defense in the jurisdiction of the suit shall be applicable.
- 12. Notice to the Surety, the Owner, or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears.
- 13. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

#### 14. Definitions

14.1 Balance of the Contract Price: The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been

made including allowance for the Contractor for any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.

- 14.2 Construction Contract: The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and changes made to the agreement and the Contract Documents.
- 14.3 Contractor Default: Failure of the Contractor, which has not been remedied or waived, to perform or otherwise to comply with a material term of the Construction Contract.
- 14.4 Owner Default: Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.
- 14.5 Contract Documents: All the documents that comprise the agreement between the Owner and Contractor.
- 15. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.
- 16. Modifications to this Bond are as follows:



# **PAYMENT BOND**

CONTRACTOR (name and address):	SURETY (name and address of principal place of business):
OWNER (name and address)  Bath County Water District 21 Church Street Salt Lick, Kentucky 40371	
CONSTRUCTION CONTRACT	
Effective Date of the Agreement: Amount: Description (name and location):	
BOND  Bond Number: Date (not earlier than the Effective Date of the Agreement of Amount: Modifications to this Bond Form:  None	f the Construction Contract):  See Paragraph 18
Surety and Contractor, intending to be legally bound cause this Payment Bond to be duly executed by an a CONTRACTOR AS PRINCIPAL	hereby, subject to the terms set forth below, do each uthorized officer, agent, or representative.  SURETY
(seal) Contractor's Name and Corporate Seal	(seal) Surety's Name and Corporate Seal
By: Signature	Signature (attach power of attorney)
Print Name	Print Name
Title	Title
Attest:	Attest:
Signature	Signature
Title Notes: (1) Provide supplemental execution by any addi reference to Contractor, Surety, Owner, or other party s	

- The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner to pay for labor, materials, and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.
- 2. If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies, and holds harmless the Owner from claims, demands, liens, or suits by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.
- 3. If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond shall arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Paragraph 13) of claims, demands, liens, or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, and tendered defense of such claims, demands, liens, or suits to the Contractor and the Surety.
- 4. When the Owner has satisfied the conditions in Paragraph 3, the Surety shall promptly and at the Surety's expense defend, indemnify, and hold harmless the Owner against a duly tendered claim, demand, lien, or suit.
- 5. The Surety's obligations to a Claimant under this Bond shall arise after the following:
  - 5.1 Claimants who do not have a direct contract with the Contractor,
    - 5.1.1 have furnished a written notice of nonpayment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and
    - 5.1.2 have sent a Claim to the Surety (at the address described in Paragraph 13).
  - 5.2 Claimants who are employed by or have a direct contract with the Contractor have sent a Claim to the Surety (at the address described in Paragraph 13).

- 6. If a notice of non-payment required by Paragraph 5.1.1 is given by the Owner to the Contractor, that is sufficient to satisfy a Claimant's obligation to furnish a written notice of non-payment under Paragraph 5.1.1.
- 7. When a Claimant has satisfied the conditions of Paragraph 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:
  - 7.1 Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and
  - 7.2 Pay or arrange for payment of any undisputed amounts.
  - 7.3 The Surety's failure to discharge its obligations under Paragraph 7.1 or 7.2 shall not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Paragraph 7.1 or 7.2, the Surety shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.
- 8. The Surety's total obligation shall not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Paragraph 7.3, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.
- 9. Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.
- 10. The Surety shall not be liable to the Owner, Claimants, or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to or give notice on behalf of Claimants, or otherwise have any obligations to Claimants under this Bond.
- 11. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract

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- or to related subcontracts, purchase orders, and other obligations.
- 12. No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Paragraph 5.1.2 or 5.2, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.
- 13. Notice and Claims to the Surety, the Owner, or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, shall be sufficient compliance as of the date received.
- 14. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.
- 15. Upon requests by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.

#### 16. **Definitions**

- 16.1 **Claim:** A written statement by the Claimant including at a minimum:
  - 1. The name of the Claimant:
  - The name of the person for whom the labor was done, or materials or equipment furnished;
  - A copy of the agreement or purchase order pursuant to which labor, materials, or equipment was furnished for use in the performance of the Construction Contract;
  - 4. A brief description of the labor, materials, or equipment furnished;
  - The date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;

- The total amount earned by the Claimant for labor, materials, or equipment furnished as of the date of the Claim;
- 7. The total amount of previous payments received by the Claimant; and
- 8. The total amount due and unpaid to the Claimant for labor, materials, or equipment furnished as of the date of the Claim.
- Claimant: An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor. materials, or equipment for use in the performance of the Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic's lien or similar statute against the real property upon which the Project is located. The intent of this Bond shall be to include without limitation in the terms of "labor, materials, or equipment" that part of the water, gas, power, light, heat, oil, gasoline, telephone service, or rental equipment used in the Construction Contract, architectural engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials, or equipment were furnished.
- 16.3 Construction Contract: The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and all changes made to the agreement and the Contract Documents.
- 16.4 Owner Default: Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.
- 16.5 Contract Documents: All the documents that comprise the agreement between the Owner and Contractor.
- 17. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.
- 18. Modifications to this Bond are as follows:

22015 PAYMENT BOND

FICDC	:		1 6	n (N		
ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE		Contractor's Application for Application Period:		Application Date:		
To Bath County Water District (Owner):		From (Contractor):		Via (Engineer): Kentucky Engineering Group, PLLC		
Project: 2022 Water System Improvements Water Tank Rehabilitation		Contract:				
Owner's Contract No.:		Contractor's Project No.:		Engineer's Project No.: 22015		
	Application For Payment Change Order Summary	•				
Approved Change Orders			1. ORIGINAL CONT	RACT PRICE\$		
Number	Additions	Additions Deductions		2. Net change by Change Orders\$		
			3. Current Contract P	rice (Line 1 ± 2)\$		
			4. TOTAL COMPLETED AND STORED TO DATE			
			(Column F total on Progress Estimates)\$			
			5. RETAINAGE:			
			a.	X Work Completed \$		
			b.	X Stored Material \$		
			c. Tota	l Retainage (Line 5.a + Line 5.b) \$		
			6. AMOUNT ELIGIB	LE TO DATE (Line 4 - Line 5.c) \$		
TOTALS			7. LESS PREVIOUS	PAYMENTS (Line 6 from prior Application) \$		
NET CHANGE BY		8. AMOUNT DUE TH		IS APPLICATION\$		
CHANGE ORDERS		9. BALANCE TO FIN		ISH, PLUS RETAINAGE		
			(Column G total on	Progress Estimates + Line 5.c above) \$		
Contractor's Certification						
The undersigned Contractor certifies, to the best of its knowledge, the following:  (1) All previous progress payments received from Owner on account of Work done under the Contract			Payment of: \$			
have been applied on account to	discharge Contractor's legitimate			(Line 8 or other - attach explanation of the other amount)		
with the Work covered by prior (2) Title to all Work, materials	Applications for Payment; and equipment incorporated in said	Work, or otherwise listed in or				
covered by this Application for	Payment, will pass to Owner at tim	ne of payment free and clear of all	is recommended by:			
Liens, security interests, and encumbrances (except such as are covered by a bond acceptable to Owner indemnifying Owner against any such Liens, security interest, or encumbrances); and (3) All the Work covered by this Application for Payment is in accordance with the Contract Documents and is not defective.				Kentucky Engineering Group, PLLC (Date)		
			D	6		
			Payment of:	(Line 8 or other - attach explanation of the other amount)		
			(Line 8 or other - attach explanation of the other amount)			
			is approved by:			
			is approved by:	Bath County Water District (Date)		
Contractor Signature				Ball County water District (Date)		
By: Date:			Approved by:			
-J.			. ipproved by.			

Funding Agency (if applicable)

(Date)



Chango	Order No.	
change	Order No.	

Date of Issua	nce:	Effective Date:		
Owner: Bath County Water District		Owner's Contract No.:		
Contractor:		Contractor's Project No.:		
Engineer:	Kentucky Engineering Group, PLLC	Engineer's Project No.: 22015		

Project: 2022 Water System Improvements Contract Name: Water Tank Rehab

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

Description:

Attachments: [List documents supporting change]

CHANGE IN CONTRACT PRICE	CHANGE IN CONTRACT TIMES			
Original Contract Price:	[note changes in Milestones if applicable] Original Contract Times: Substantial Completion:			
\$	Ready for Final Payment: days or dates			
[Increase] [Decrease] from previously approved Change Orders No to No:  \$	[Increase] [Decrease] from previously approved Change Orders No to No: Substantial Completion: Ready for Final Payment:  days			
Contract Price prior to this Change Order:  \$	Contract Times prior to this Change Order: Substantial Completion: Ready for Final Payment: days or dates			
[Increase] [Decrease] of this Change Order:  \$	[Increase] [Decrease] of this Change Order: Substantial Completion: Ready for Final Payment: days or dates			
Contract Price incorporating this Change Order:  \$	Contract Times with all approved Change Orders: Substantial Completion: Ready for Final Payment:  days or dates			
RECOMMENDED: ACCE	EPTED: ACCEPTED:			
Title: Title	By: Uthorized Signature) Title Date  By:  Contractor (Authorized Signature)			
Approved by Funding Agency (if applicable)  By:  Title:	Data			
EJCDC° C-941, Cha	ange Order.			



#### CERTIFICATE OF SUBSTANTIAL COMPLETION

Owner:	Bath County Water D	District		Owner's Contra	ct No.:	
Contractor:				Contractor's Pr	-	
Engineer:	Kentucky Engineerin			Engineer's Proj		22015
Project:	2022 Water System I	•		Contract Name		Water Tank Rehab
This [preli	minary] [final] Certifica	ate of Sub	stantial Completion appli	es to:		
All	Work		The	e following spec	ified porti	ons of the Work:
		Date	of Substantial Completi			
The 1875 doi:	. It is the state of a series of		nas been inspected by aut			
Engineer, and designated The date of	nd found to be substa above is hereby estab Substantial Completion	ntially cor lished, sub on in the f	nplete. The Date of Subsoject to the provisions of Final Certificate of Substant warranties required by the	tantial Comple the Contract po ntial Completio	tion of the ertaining t	e Work or portion thereof o Substantial Completion.
the failure	•		rrected is attached to this does not alter the respo			·
insurance, a	and warranties upon C s follows: [Note: Amen	wner's us dments of	Contractor for security, see or occupancy of the Work contractual responsibilities tor; see Paragraph 15.03.L	ork shall be as es recorded in t	provided i his Certific	n the Contract, except as tate should be the product
Amendmen responsibili	ts to Owner's ties:	None As follows	5			
Amendmen	ts to					
	s responsibilities:	None As follows	s:			
The following	ng documents are attac	ched to an	d made a part of this Cert	ificate: [punch i	list; others	1
			ptance of Work not in ac te the Work in accordance			act Documents, nor is it a
EXECU	TED BY ENGINEER:		RECEIVED:		R	ECEIVED:
		By:		By:	-	
Ву:			Owner (Authorized Signatu	ıre)	Contracto	or (Authorized Signature)
	thorized signature)		· ·			(Francisca Signature)
(Au	thorized signature)	Title:		Title:		// (Framorized Signature)

 $\label{eq:completion} {\it EJCDC}^{\circ} \mbox{ C-625, Certificate of Substantial Completion.}$  Prepared and published 2013 by the Engineers Joint Contract Documents Committee. Page 1 of 1

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#### **ARTICLE 1 – DEFINITIONS AND TERMINOLOGY**

# 1.01 Defined Terms

- A. Wherever used in the Bidding Requirements or Contract Documents, a term printed with initial capital letters, including the term's singular and plural forms, will have the meaning indicated in the definitions below. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.
  - Addenda—Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
  - Agreement—The written instrument, executed by Owner and Contractor, that sets
    forth the Contract Price and Contract Times, identifies the parties and the Engineer,
    and designates the specific items that are Contract Documents.
  - 3. Application for Payment—The form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
  - 4. *Bid*—The offer of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
  - 5. Bidder—An individual or entity that submits a Bid to Owner.
  - 6. Bidding Documents—The Bidding Requirements, the proposed Contract Documents, and all Addenda.
  - 7. Bidding Requirements—The advertisement or invitation to bid, Instructions to Bidders, Bid Bond or other Bid security, if any, the Bid Form, and the Bid with any attachments.
  - 8. Change Order—A document which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, or other revision to the Contract, issued on or after the Effective Date of the Contract.
  - 9. Change Proposal—A written request by Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment in Contract Price or Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; challenging a set-off against payments due; or seeking other relief with respect to the terms of the Contract.
  - 10. Claim—(a) A demand or assertion by Owner directly to Contractor, duly submitted in compliance with the procedural requirements set forth herein: seeking an adjustment of Contract Price or Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; contesting Engineer's decision regarding a Change Proposal; seeking resolution of a contractual issue that Engineer has declined to address; or seeking other relief with respect to the terms of the Contract; or (b) a demand or assertion by Contractor directly to Owner, duly submitted in compliance with the procedural requirements set forth herein, contesting Engineer's decision

regarding a Change Proposal; or seeking resolution of a contractual issue that Engineer has declined to address. A demand for money or services by a third party is not a Claim.

- 11. Constituent of Concern—Asbestos, petroleum, radioactive materials, polychlorinated biphenyls (PCBs), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to (a) the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§9601 et seq. ("CERCLA"); (b) the Hazardous Materials Transportation Act, 49 U.S.C. §§5101 et seq.; (c) the Resource Conservation and Recovery Act, 42 U.S.C. §§6901 et seq. ("RCRA"); (d) the Toxic Substances Control Act, 15 U.S.C. §§2601 et seq.; (e) the Clean Water Act, 33 U.S.C. §§1251 et seq.; (f) the Clean Air Act, 42 U.S.C. §§7401 et seq.; or (g) any other federal, state, or local statute, law, rule, regulation, ordinance, resolution, code, order, or decree regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.
- 12. *Contract*—The entire and integrated written contract between the Owner and Contractor concerning the Work.
- 13. *Contract Documents*—Those items so designated in the Agreement, and which together comprise the Contract.
- 14. *Contract Price*—The money that Owner has agreed to pay Contractor for completion of the Work in accordance with the Contract Documents. .
- 15. Contract Times—The number of days or the dates by which Contractor shall: (a) achieve Milestones, if any; (b) achieve Substantial Completion; and (c) complete the Work.
- 16. *Contractor*—The individual or entity with which Owner has contracted for performance of the Work.
- 17. Cost of the Work—See Paragraph 13.01 for definition.
- 18. *Drawings*—The part of the Contract that graphically shows the scope, extent, and character of the Work to be performed by Contractor.
- 19. *Effective Date of the Contract*—The date, indicated in the Agreement, on which the Contract becomes effective.
- 20. *Engineer*—The individual or entity named as such in the Agreement.
- 21. Field Order—A written order issued by Engineer which requires minor changes in the Work but does not change the Contract Price or the Contract Times.
- 22. Hazardous Environmental Condition—The presence at the Site of Constituents of Concern in such quantities or circumstances that may present a danger to persons or property exposed thereto. The presence at the Site of materials that are necessary for the execution of the Work, or that are to be incorporated in the Work, and that are controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract, does not establish a Hazardous Environmental Condition.

- 23. Laws and Regulations; Laws or Regulations—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
- 24. *Liens*—Charges, security interests, or encumbrances upon Contract-related funds, real property, or personal property.
- 25. *Milestone*—A principal event in the performance of the Work that the Contract requires Contractor to achieve by an intermediate completion date or by a time prior to Substantial Completion of all the Work.
- 26. *Notice of Award*—The written notice by Owner to a Bidder of Owner's acceptance of the Bid.
- 27. Notice to Proceed—A written notice by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work.
- 28. *Owner*—The individual or entity with which Contractor has contracted regarding the Work, and which has agreed to pay Contractor for the performance of the Work, pursuant to the terms of the Contract.
- 29. *Progress Schedule*—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor's plan to accomplish the Work within the Contract Times.
- 30. *Project*—The total undertaking to be accomplished for Owner by engineers, contractors, and others, including planning, study, design, construction, testing, commissioning, and start-up, and of which the Work to be performed under the Contract Documents is a part.
- 31. Project Manual—The written documents prepared for, or made available for, procuring and constructing the Work, including but not limited to the Bidding Documents or other construction procurement documents, geotechnical and existing conditions information, the Agreement, bond forms, General Conditions, Supplementary Conditions, and Specifications. The contents of the Project Manual may be bound in one or more volumes.
- 32. Resident Project Representative—The authorized representative of Engineer assigned to assist Engineer at the Site. As used herein, the term Resident Project Representative or "RPR" includes any assistants or field staff of Resident Project Representative.
- 33. Samples—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.
- 34. Schedule of Submittals—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements for Engineer's review of the submittals and the performance of related construction activities.
- 35. Schedule of Values—A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.
- 36. Shop Drawings—All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for Contractor and

- submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Contract Documents.
- 37. Site—Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements, and such other lands furnished by Owner which are designated for the use of Contractor.
- 38. Specifications—The part of the Contract that consists of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.
- 39. *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work.
- 40. Substantial Completion—The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion thereof.
- 41. *Successful Bidder*—The Bidder whose Bid the Owner accepts, and to which the Owner makes an award of contract, subject to stated conditions.
- 42. *Supplementary Conditions*—The part of the Contract that amends or supplements these General Conditions.
- 43. Supplier—A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or a Subcontractor.
- 44. *Technical Data*—Those items expressly identified as Technical Data in the Supplementary Conditions, with respect to either (a) subsurface conditions at the Site, or physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities) or (b) Hazardous Environmental Conditions at the Site. If no such express identifications of Technical Data have been made with respect to conditions at the Site, then the data contained in boring logs, recorded measurements of subsurface water levels, laboratory test results, and other factual, objective information regarding conditions at the Site that are set forth in any geotechnical or environmental report prepared for the Project and made available to Contractor are hereby defined as Technical Data with respect to conditions at the Site under Paragraphs 5.03, 5.04, and 5.06.
- 45. Underground Facilities—All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including but not limited to those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, fiber optic transmissions, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.
- 46. *Unit Price Work*—Work to be paid for on the basis of unit prices.
- 47. Work—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the

result of performing or providing all labor, services, and documentation necessary to produce such construction; furnishing, installing, and incorporating all materials and equipment into such construction; and may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents.

48. Work Change Directive—A written directive to Contractor issued on or after the Effective Date of the Contract, signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work.

# 1.02 Terminology

- A. The words and terms discussed in the following paragraphs are not defined but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.
- B. Intent of Certain Terms or Adjectives:
  - 1. The Contract Documents include the terms "as allowed," "as approved," "as ordered," "as directed" or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives "reasonable," "suitable," "acceptable," "proper," "satisfactory," or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action, or determination will be solely to evaluate, in general, the Work for compliance with the information in the Contract Documents and with the design concept of the Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility contrary to the provisions of Article 10 or any other provision of the Contract Documents.

#### C. Day:

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

#### D. Defective:

- 1. The word "defective," when modifying the word "Work," refers to Work that is unsatisfactory, faulty, or deficient in that it:
  - a. does not conform to the Contract Documents; or
  - b. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or
  - c. has been damaged prior to Engineer's recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 15.03 or 15.04).

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

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

- 2. The word "install," when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.
- The words "perform" or "provide," when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.
- 4. If the Contract Documents establish an obligation of Contractor with respect to specific services, materials, or equipment, but do not expressly use any of the four words "furnish," "install," "perform," or "provide," then Contractor shall furnish and install said services, materials, or equipment complete and ready for intended use.
- F. Unless stated otherwise in the Contract Documents, words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

#### **ARTICLE 2 – PRELIMINARY MATTERS**

# 2.01 Delivery of Bonds and Evidence of Insurance

- A. *Bonds*: When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner such bonds as Contractor may be required to furnish.
- B. Evidence of Contractor's Insurance: When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner, with copies to each named insured and additional insured (as identified in the Supplementary Conditions or elsewhere in the Contract), the certificates and other evidence of insurance required to be provided by Contractor in accordance with Article 6.
- C. Evidence of Owner's Insurance: After receipt of the executed counterparts of the Agreement and all required bonds and insurance documentation, Owner shall promptly deliver to Contractor, with copies to each named insured and additional insured (as identified in the Supplementary Conditions or otherwise), the certificates and other evidence of insurance required to be provided by Owner under Article 6.

#### 2.02 Copies of Documents

- A. Owner shall furnish to Contractor four printed copies of the Contract (including one fully executed counterpart of the Agreement), and one copy in electronic portable document format (PDF). Additional printed copies will be furnished upon request at the cost of reproduction.
- B. Owner shall maintain and safeguard at least one original printed record version of the Contract, including Drawings and Specifications signed and sealed by Engineer and other design professionals. Owner shall make such original printed record version of the Contract available to Contractor for review. Owner may delegate the responsibilities under this provision to Engineer.

#### 2.03 Before Starting Construction

A. *Preliminary Schedules*: Within 10 days after the Effective Date of the Contract (or as otherwise specifically required by the Contract Documents), Contractor shall submit to Engineer for timely review:

- a preliminary Progress Schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract;
- 2. a preliminary Schedule of Submittals; and
- 3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

#### 2.04 Preconstruction Conference; Designation of Authorized Representatives

- A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in Paragraph 2.03.A, procedures for handling Shop Drawings, Samples, and other submittals, processing Applications for Payment, electronic or digital transmittals, and maintaining required records.
- B. At this conference Owner and Contractor each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit and receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

#### 2.05 Initial Acceptance of Schedules

- A. At least 10 days before submission of the first Application for Payment a conference, attended by Contractor, Engineer, and others as appropriate, will be held to review for acceptability to Engineer as provided below the schedules submitted in accordance with Paragraph 2.03.A. Contractor shall have an additional 10 days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to Contractor until acceptable schedules are submitted to Engineer.
  - The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work, nor interfere with or relieve Contractor from Contractor's full responsibility therefor.
  - 2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.
  - 3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to the component parts of the Work.

#### 2.06 Electronic Transmittals

A. Except as otherwise stated elsewhere in the Contract, the Owner, Engineer, and Contractor may transmit, and shall accept, Project-related correspondence, text, data, documents, drawings, information, and graphics, including but not limited to Shop Drawings and other submittals, in electronic media or digital format, either directly, or through access to a secure Project website.

- B. If the Contract does not establish protocols for electronic or digital transmittals, then Owner, Engineer, and Contractor shall jointly develop such protocols.
- C. When transmitting items in electronic media or digital format, the transmitting party makes no representations as to long term compatibility, usability, or readability of the items resulting from the recipient's use of software application packages, operating systems, or computer hardware differing from those used in the drafting or transmittal of the items, or from those established in applicable transmittal protocols.

#### ARTICLE 3 – DOCUMENTS: INTENT, REQUIREMENTS, REUSE

#### 3.01 Intent

- A. The Contract Documents are complementary; what is required by one is as binding as if required by all.
- B. It is the intent of the Contract Documents to describe a functionally complete project (or part thereof) to be constructed in accordance with the Contract Documents.
- C. Unless otherwise stated in the Contract Documents, if there is a discrepancy between the electronic or digital versions of the Contract Documents (including any printed copies derived from such electronic or digital versions) and the printed record version, the printed record version shall govern.
- D. The Contract supersedes prior negotiations, representations, and agreements, whether written or oral.
- E. Engineer will issue clarifications and interpretations of the Contract Documents as provided herein.

#### 3.02 Reference Standards

- A. Standards Specifications, Codes, Laws and Regulations
  - 1. Reference in the Contract Documents to standard specifications, manuals, reference standards, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard specification, manual, reference standard, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Contract if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.
  - 2. No provision of any such standard specification, manual, reference standard, or code, or any instruction of a Supplier, shall be effective to change the duties or responsibilities of Owner, Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees, from those set forth in the part of the Contract Documents prepared by or for Engineer. No such provision or instruction shall be effective to assign to Owner, Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the part of the Contract Documents prepared by or for Engineer.

#### 3.03 Reporting and Resolving Discrepancies

#### A. Reporting Discrepancies:

- 1. Contractor's Verification of Figures and Field Measurements: Before undertaking each part of the Work, Contractor shall carefully study the Contract Documents, and check and verify pertinent figures and dimensions therein, particularly with respect to applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy that Contractor discovers, or has actual knowledge of, and shall not proceed with any Work affected thereby until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract Documents issued pursuant to Paragraph 11.01.
- 2. Contractor's Review of Contract Documents: If, before or during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents, or between the Contract Documents and (a) any applicable Law or Regulation, (b) actual field conditions, (c) any standard specification, manual, reference standard, or code, or (d) any instruction of any Supplier, then Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 7.15) until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract Documents issued pursuant to Paragraph 11.01.
- Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor had actual knowledge thereof.

# B. Resolving Discrepancies:

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

#### 3.04 Requirements of the Contract Documents

- A. During the performance of the Work and until final payment, Contractor and Owner shall submit to the Engineer all matters in question concerning the requirements of the Contract Documents (sometimes referred to as requests for information or interpretation—RFIs), or relating to the acceptability of the Work under the Contract Documents, as soon as possible after such matters arise. Engineer will be the initial interpreter of the requirements of the Contract Documents, and judge of the acceptability of the Work thereunder.
- B. Engineer will, with reasonable promptness, render a written clarification, interpretation, or decision on the issue submitted, or initiate an amendment or supplement to the Contract

- Documents. Engineer's written clarification, interpretation, or decision will be final and binding on Contractor, unless it appeals by submitting a Change Proposal, and on Owner, unless it appeals by filing a Claim.
- C. If a submitted matter in question concerns terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work under the Contract Documents, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, then Engineer will promptly give written notice to Owner and Contractor that Engineer is unable to provide a decision or interpretation. If Owner and Contractor are unable to agree on resolution of such a matter in question, either party may pursue resolution as provided in Article 12.

#### 3.05 Reuse of Documents

- A. Contractor and its Subcontractors and Suppliers shall not:
  - have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or its consultants, including electronic media editions, or reuse any such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer; or
  - 2. have or acquire any title or ownership rights in any other Contract Documents, reuse any such Contract Documents for any purpose without Owner's express written consent, or violate any copyrights pertaining to such Contract Documents.
- B. The prohibitions of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein shall preclude Contractor from retaining copies of the Contract Documents for record purposes.

#### ARTICLE 4 – COMMENCEMENT AND PROGRESS OF THE WORK

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

#### 4.02 Starting the Work

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

#### 4.03 Reference Points

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

requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

#### 4.04 Progress Schedule

- A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.05 as it may be adjusted from time to time as provided below.
  - Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.05) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times.
  - 2. Proposed adjustments in the Progress Schedule that will change the Contract Times shall be submitted in accordance with the requirements of Article 11.
- B. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, or during any appeal process, except as permitted by Paragraph 16.04, or as Owner and Contractor may otherwise agree in writing.

#### 4.05 Delays in Contractor's Progress

- A. If Owner, Engineer, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract Times and Contract Price. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
- B. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delay, disruption, or interference caused by or within the control of Contractor. Delay, disruption, and interference attributable to and within the control of a Subcontractor or Supplier shall be deemed to be within the control of Contractor.
- C. If Contractor's performance or progress is delayed, disrupted, or interfered with by unanticipated causes not the fault of and beyond the control of Owner, Contractor, and those for which they are responsible, then Contractor shall be entitled to an equitable adjustment in Contract Times. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times. Such an adjustment shall be Contractor's sole and exclusive remedy for the delays, disruption, and interference described in this paragraph. Causes of delay, disruption, or interference that may give rise to an adjustment in Contract Times under this paragraph include but are not limited to the following:
  - severe and unavoidable natural catastrophes such as fires, floods, epidemics, and earthquakes;
  - 2. abnormal weather conditions;
  - acts or failures to act of utility owners (other than those performing other work at or adjacent to the Site by arrangement with the Owner, as contemplated in Article 8); and
  - 4. acts of war or terrorism.
- D. Delays, disruption, and interference to the performance or progress of the Work resulting from the existence of a differing subsurface or physical condition, an Underground Facility

- that was not shown or indicated by the Contract Documents, or not shown or indicated with reasonable accuracy, and those resulting from Hazardous Environmental Conditions, are governed by Article 5.
- E. Paragraph 8.03 governs delays, disruption, and interference to the performance or progress of the Work resulting from the performance of certain other work at or adjacent to the Site.
- F. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for any delay, disruption, or interference if such delay is concurrent with a delay, disruption, or interference caused by or within the control of Contractor.
- G. Contractor must submit any Change Proposal seeking an adjustment in Contract Price or Contract Times under this paragraph within 30 days of the commencement of the delaying, disrupting, or interfering event.

# ARTICLE 5 – AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

# 5.01 Availability of Lands

- A. Owner shall furnish the Site. Owner shall notify Contractor of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work.
- B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which permanent improvements are to be made and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.
- C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

# 5.02 Use of Site and Other Areas

- A. Limitation on Use of Site and Other Areas:
  - 1. Contractor shall confine construction equipment, temporary construction facilities, the storage of materials and equipment, and the operations of workers to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and such other adjacent areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for (a) damage to the Site; (b) damage to any such other adjacent areas used for Contractor's operations; (c) damage to any other adjacent land or areas; and (d) for injuries and losses sustained by the owners or occupants of any such land or areas; provided that such damage or injuries result from the performance of the Work or from other actions or conduct of the Contractor or those for which Contractor is responsible.
  - 2. If a damage or injury claim is made by the owner or occupant of any such land or area because of the performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible, Contractor shall (a) take immediate corrective or remedial action as required by Paragraph 7.12, or otherwise;

- (b) promptly attempt to settle the claim as to all parties through negotiations with such owner or occupant, or otherwise resolve the claim by arbitration or other dispute resolution proceeding, or at law; and (c) to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claim, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused directly or indirectly, in whole or in part by, or based upon, Contractor's performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible.
- B. Removal of Debris During Performance of the Work: During the progress of the Work the Contractor shall keep the Site and other adjacent areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.
- C. Cleaning: Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site and adjacent areas all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.
- D. Loading of Structures: Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent structures or land to stresses or pressures that will endanger them.

#### 5.03 Subsurface and Physical Conditions

- A. Reports and Drawings: The Supplementary Conditions identify:
  - those reports known to Owner of explorations and tests of subsurface conditions at or adjacent to the Site;
  - 2. those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities); and
  - 3. Technical Data contained in such reports and drawings.
- B. Reliance by Contractor on Technical Data Authorized: Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely upon the accuracy of the Technical Data (as defined in Article 1) contained in any geotechnical or environmental report prepared for the Project and made available to Contractor. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:
  - the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and

- procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto; or
- 2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
- 3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions, or information.

#### 5.04 Differing Subsurface or Physical Conditions

- A. *Notice by Contractor*: If Contractor believes that any subsurface or physical condition that is uncovered or revealed at the Site either:
  - 1. is of such a nature as to establish that any Technical Data on which Contractor is entitled to rely as provided in Paragraph 5.03 is materially inaccurate; or
  - 2. is of such a nature as to require a change in the Drawings or Specifications; or
  - 3. differs materially from that shown or indicated in the Contract Documents; or
  - is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except with respect to an emergency) until receipt of a written statement permitting Contractor to do so.

- B. Engineer's Review: After receipt of written notice as required by the preceding paragraph, Engineer will promptly review the subsurface or physical condition in question; determine the necessity of Owner's obtaining additional exploration or tests with respect to the condition; conclude whether the condition falls within any one or more of the differing site condition categories in Paragraph 5.04.A above; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the subsurface or physical condition in question and the need for any change in the Drawings or Specifications; and advise Owner in writing of Engineer's findings, conclusions, and recommendations.
- C. Owner's Statement to Contractor Regarding Site Condition: After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the subsurface or physical condition in question, addressing the resumption of Work in connection with such condition, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations, in whole or in part.
- D. Possible Price and Times Adjustments:
  - Contractor shall be entitled to an equitable adjustment in Contract Price or Contract
    Times, or both, to the extent that the existence of a differing subsurface or physical
    condition, or any related delay, disruption, or interference, causes an increase or

decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:

- a. such condition must fall within any one or more of the categories described in Paragraph 5.04.A;
- b. with respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03; and,
- c. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
- Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times with respect to a subsurface or physical condition if:
  - Contractor knew of the existence of such condition at the time Contractor made a commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract, or otherwise; or
  - the existence of such condition reasonably could have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas expressly required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such commitment; or
  - c. Contractor failed to give the written notice as required by Paragraph 5.04.A.
- 3. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, or both, then any such adjustment shall be set forth in a Change Order.
- 4. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, or both, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the subsurface or physical condition in question.

#### 5.05 Underground Facilities

- A. Contractor's Responsibilities: The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or adjacent to the Site is based on information and data furnished to Owner or Engineer by the owners of such Underground Facilities, including Owner, or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:
  - Owner and Engineer do not warrant or guarantee the accuracy or completeness of any such information or data provided by others; and
  - 2. the cost of all of the following will be included in the Contract Price, and Contractor shall have full responsibility for:
    - a. reviewing and checking all information and data regarding existing Underground Facilities at the Site;
    - b. locating all Underground Facilities shown or indicated in the Contract Documents as being at the Site;

- c. coordination of the Work with the owners (including Owner) of such Underground Facilities, during construction; and
- d. the safety and protection of all existing Underground Facilities at the Site, and repairing any damage thereto resulting from the Work.
- B. Notice by Contractor: If Contractor believes that an Underground Facility that is uncovered or revealed at the Site was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy, then Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), identify the owner of such Underground Facility and give written notice to that owner and to Owner and Engineer.
- C. Engineer's Review: Engineer will promptly review the Underground Facility and conclude whether such Underground Facility was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the Underground Facility in question; determine the extent, if any, to which a change is required in the Drawings or Specifications to reflect and document the consequences of the existence or location of the Underground Facility; and advise Owner in writing of Engineer's findings, conclusions, and recommendations. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.
- D. Owner's Statement to Contractor Regarding Underground Facility: After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the Underground Facility in question, addressing the resumption of Work in connection with such Underground Facility, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations in whole or in part.

#### E. Possible Price and Times Adjustments:

- 1. Contractor shall be entitled to an equitable adjustment in the Contract Price or Contract Times, or both, to the extent that any existing Underground Facility at the Site that was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
  - Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated the existence or actual location of the Underground Facility in question;
  - b. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03;
  - Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times; and
  - d. Contractor gave the notice required in Paragraph 5.05.B.

- If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, or both, then any such adjustment shall be set forth in a Change Order.
- 3. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, or both, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the Underground Facility in question.

#### 5.06 Hazardous Environmental Conditions at Site

- A. *Reports and Drawings*: The Supplementary Conditions identify:
  - 1. those reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site; and
  - 2. Technical Data contained in such reports and drawings.
- B. Reliance by Contractor on Technical Data Authorized: Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely on the accuracy of the Technical Data (as defined in Article 1) contained in any geotechnical or environmental report prepared for the Project and made available to Contractor. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors with respect to:
  - the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by Contractor and safety precautions and programs incident thereto; or
  - 2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or
  - 3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions or information.
- C. Contractor shall not be responsible for removing or remediating any Hazardous Environmental Condition encountered, uncovered, or revealed at the Site unless such removal or remediation is expressly identified in the Contract Documents to be within the scope of the Work.
- D. Contractor shall be responsible for controlling, containing, and duly removing all Constituents of Concern brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible, and for any associated costs; and for the costs of removing and remediating any Hazardous Environmental Condition created by the presence of any such Constituents of Concern.
- E. If Contractor encounters, uncovers, or reveals a Hazardous Environmental Condition whose removal or remediation is not expressly identified in the Contract Documents as being within the scope of the Work, or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, then Contractor shall immediately: (1) secure or otherwise isolate such condition; (2) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required

by Paragraph 7.15); and (3) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any. Promptly after consulting with Engineer, Owner shall take such actions as are necessary to permit Owner to timely obtain required permits and provide Contractor the written notice required by Paragraph 5.06.F. If Contractor or anyone for whom Contractor is responsible created the Hazardous Environmental Condition in question, then Owner may remove and remediate the Hazardous Environmental Condition, and impose a set-off against payments to account for the associated costs.

- F. Contractor shall not resume Work in connection with such Hazardous Environmental Condition or in any affected area until after Owner has obtained any required permits related thereto, and delivered written notice to Contractor either (1) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work, or (2) specifying any special conditions under which such Work may be resumed safely.
- G. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by Contractor, then within 30 days of Owner's written notice regarding the resumption of Work, Contractor may submit a Change Proposal, or Owner may impose a set-off.
- H. If after receipt of such written notice Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work, following the contractual change procedures in Article 11. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 8.
- I. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition (1) was not shown or indicated in the Drawings, Specifications, or other Contract Documents, identified as Technical Data entitled to limited reliance pursuant to Paragraph 5.06.B, or identified in the Contract Documents to be included within the scope of the Work, and (2) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.I shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- J. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the failure to control, contain, or remove a Constituent of Concern brought to the Site by Contractor or by anyone for whom Contractor is responsible, or to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this

- Paragraph 5.06.J shall obligate Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- K. The provisions of Paragraphs 5.03, 5.04, and 5.05 do not apply to the presence of Constituents of Concern or to a Hazardous Environmental Condition uncovered or revealed at the Site.

#### ARTICLE 6 – BONDS AND INSURANCE

#### 6.01 Performance, Payment, and Other Bonds

- A. Contractor shall furnish a performance bond and a payment bond, each in an amount at least equal to the Contract Price, as security for the faithful performance and payment of all of Contractor's obligations under the Contract. These bonds shall remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 15.08, whichever is later, except as provided otherwise by Laws or Regulations, the Supplementary Conditions, or other specific provisions of the Contract. Contractor shall also furnish such other bonds as are required by the Supplementary Conditions or other specific provisions of the Contract.
- B. All bonds shall be in the form prescribed by the Contract except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (as amended and supplemented) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. A bond signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual's authority to bind the surety. The evidence of authority shall show that it is effective on the date the agent or attorney-in-fact signed the accompanying bond.
- C. Contractor shall obtain the required bonds from surety companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds in the required amounts.
- D. If the surety on a bond furnished by Contractor is declared bankrupt or becomes insolvent, or its right to do business is terminated in any state or jurisdiction where any part of the Project is located, or the surety ceases to meet the requirements above, then Contractor shall promptly notify Owner and Engineer and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which shall comply with the bond and surety requirements above.
- E. If Contractor has failed to obtain a required bond, Owner may exclude the Contractor from the Site and exercise Owner's termination rights under Article 16.
- F. Upon request, Owner shall provide a copy of the payment bond to any Subcontractor, Supplier, or other person or entity claiming to have furnished labor or materials used in the performance of the Work.

#### 6.02 Insurance—General Provisions

- A. Owner and Contractor shall obtain and maintain insurance as required in this Article and in the Supplementary Conditions.
- B. All insurance required by the Contract to be purchased and maintained by Owner or Contractor shall be obtained from insurance companies that are duly licensed or

- authorized, in the state or jurisdiction in which the Project is located, to issue insurance policies for the required limits and coverages. Unless a different standard is indicated in the Supplementary Conditions, all companies that provide insurance policies required under this Contract shall have an A.M. Best rating of A-VII or better.
- C. Contractor shall deliver to Owner, with copies to each named insured and additional insured (as identified in this Article, in the Supplementary Conditions, or elsewhere in the Contract), certificates of insurance establishing that Contractor has obtained and is maintaining the policies, coverages, and endorsements required by the Contract. Upon request by Owner or any other insured, Contractor shall also furnish other evidence of such required insurance, including but not limited to copies of policies and endorsements, and documentation of applicable self-insured retentions and deductibles. Contractor may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.
- D. Owner shall deliver to Contractor, with copies to each named insured and additional insured (as identified in this Article, the Supplementary Conditions, or elsewhere in the Contract), certificates of insurance establishing that Owner has obtained and is maintaining the policies, coverages, and endorsements required of Owner by the Contract (if any). Upon request by Contractor or any other insured, Owner shall also provide other evidence of such required insurance (if any), including but not limited to copies of policies and endorsements, and documentation of applicable self-insured retentions and deductibles. Owner may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.
- E. Failure of Owner or Contractor to demand such certificates or other evidence of the other party's full compliance with these insurance requirements, or failure of Owner or Contractor to identify a deficiency in compliance from the evidence provided, shall not be construed as a waiver of the other party's obligation to obtain and maintain such insurance.
- F. If either party does not purchase or maintain all of the insurance required of such party by the Contract, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage.
- G. If Contractor has failed to obtain and maintain required insurance, Owner may exclude the Contractor from the Site, impose an appropriate set-off against payment, and exercise Owner's termination rights under Article 16.
- H. Without prejudice to any other right or remedy, if a party has failed to obtain required insurance, the other party may elect to obtain equivalent insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and the Contract Price shall be adjusted accordingly.
- I. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor or Contractor's interests.
- J. The insurance and insurance limits required herein shall not be deemed as a limitation on Contractor's liability under the indemnities granted to Owner and other individuals and entities in the Contract.

#### 6.03 Contractor's Insurance

- A. *Workers' Compensation*: Contractor shall purchase and maintain workers' compensation and employer's liability insurance for:
  - claims under workers' compensation, disability benefits, and other similar employee benefit acts.
  - 2. United States Longshoreman and Harbor Workers' Compensation Act and Jones Act coverage (if applicable).
  - claims for damages because of bodily injury, occupational sickness or disease, or death
    of Contractor's employees (by stop-gap endorsement in monopolist worker's
    compensation states).
  - 4. Foreign voluntary worker compensation (if applicable).
- B. Commercial General Liability—Claims Covered: Contractor shall purchase and maintain commercial general liability insurance, covering all operations by or on behalf of Contractor, on an occurrence basis, against:
  - 1. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees.
  - 2. claims for damages insured by reasonably available personal injury liability coverage.
  - 3. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom.
- C. Commercial General Liability—Form and Content: Contractor's commercial liability policy shall be written on a 1996 (or later) ISO commercial general liability form (occurrence form) and include the following coverages and endorsements:
  - 1. Products and completed operations coverage:
    - a. Such insurance shall be maintained for three years after final payment.
    - b. Contractor shall furnish Owner and each other additional insured (as identified in the Supplementary Conditions or elsewhere in the Contract) evidence of continuation of such insurance at final payment and three years thereafter.
  - Blanket contractual liability coverage, to the extent permitted by law, including but not limited to coverage of Contractor's contractual indemnity obligations in Paragraph 7.18.
  - Broad form property damage coverage.
  - 4. Severability of interest.
  - 5. Underground, explosion, and collapse coverage.
  - 6. Personal injury coverage.
  - 7. Additional insured endorsements that include both ongoing operations and products and completed operations coverage through ISO Endorsements CG 20 10 10 01 and CG 20 37 10 01 (together); or CG 20 10 07 04 and CG 20 37 07 04 (together); or their equivalent.

- 8. For design professional additional insureds, ISO Endorsement CG 20 32 07 04, "Additional Insured—Engineers, Architects or Surveyors Not Engaged by the Named Insured" or its equivalent.
- D. Automobile liability: Contractor shall purchase and maintain automobile liability insurance against claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance, or use of any motor vehicle. The automobile liability policy shall be written on an occurrence basis.
- E. Umbrella or excess liability: Contractor shall purchase and maintain umbrella or excess liability insurance written over the underlying employer's liability, commercial general liability, and automobile liability insurance described in the paragraphs above. Subject to industry-standard exclusions, the coverage afforded shall follow form as to each and every one of the underlying policies.
- F. Contractor's pollution liability insurance: Contractor shall purchase and maintain a policy covering third-party injury and property damage claims, including clean-up costs, as a result of pollution conditions arising from Contractor's operations and completed operations. This insurance shall be maintained for no less than three years after final completion.
- G. Additional insureds: The Contractor's commercial general liability, automobile liability, umbrella or excess, and pollution liability policies shall include and list as additional insureds Owner and Engineer, and any individuals or entities identified in the Supplementary Conditions; include coverage for the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of all such additional insureds; and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby (including as applicable those arising from both ongoing and completed operations) on a non-contributory basis. Contractor shall obtain all necessary endorsements to support these requirements.
- H. Contractor's professional liability insurance: If Contractor will provide or furnish professional services under this Contract, through a delegation of professional design services or otherwise, then Contractor shall be responsible for purchasing and maintaining applicable professional liability insurance. This insurance shall provide protection against claims arising out of performance of professional design or related services, and caused by a negligent error, omission, or act for which the insured party is legally liable. It shall be maintained throughout the duration of the Contract and for a minimum of two years after Substantial Completion. If such professional design services are performed by a Subcontractor, and not by Contractor itself, then the requirements of this paragraph may be satisfied through the purchasing and maintenance of such insurance by such Subcontractor.
- I. General provisions: The policies of insurance required by this Paragraph 6.03 shall:
  - 1. include at least the specific coverages provided in this Article.
  - 2. be written for not less than the limits of liability provided in this Article and in the Supplementary Conditions, or required by Laws or Regulations, whichever is greater.
  - contain a provision or endorsement that the coverage afforded will not be canceled, materially changed, or renewal refused until at least 10 days prior written notice has been given to Contractor. Within three days of receipt of any such written notice, Contractor shall provide a copy of the notice to Owner, Engineer, and each other insured under the policy.

- 4. remain in effect at least until final payment (and longer if expressly required in this Article) and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work as a warranty or correction obligation, or otherwise, or returning to the Site to conduct other tasks arising from the Contract Documents.
- 5. be appropriate for the Work being performed and provide protection from claims that may arise out of or result from Contractor's performance of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable.
- J. The coverage requirements for specific policies of insurance must be met by such policies, and not by reference to excess or umbrella insurance provided in other policies.

#### 6.04 Owner's Liability Insurance

- A. In addition to the insurance required to be provided by Contractor under Paragraph 6.03, Owner, at Owner's option, may purchase and maintain at Owner's expense Owner's own liability insurance as will protect Owner against claims which may arise from operations under the Contract Documents.
- B. Owner's liability policies, if any, operate separately and independently from policies required to be provided by Contractor, and Contractor cannot rely upon Owner's liability policies for any of Contractor's obligations to the Owner, Engineer, or third parties.

#### 6.05 *Property Insurance*

- A. Builder's Risk: Unless otherwise provided in the Supplementary Conditions, Contractor shall purchase and maintain builder's risk insurance upon the Work on a completed value basis, in the amount of the full insurable replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:
  - include the Owner and Contractor as named insureds, and all Subcontractors, and any individuals or entities required by the Supplementary Conditions to be insured under such builder's risk policy, as insureds or named insureds. For purposes of the remainder of this Paragraph 6.05, Paragraphs 6.06 and 6.07, and any corresponding Supplementary Conditions, the parties required to be insured shall collectively be referred to as "insureds."
  - 2. be written on a builder's risk "all risk" policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, falsework, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire; lightning; windstorm; riot; civil commotion; terrorism; vehicle impact; aircraft; smoke; theft; vandalism and malicious mischief; mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement; flood; collapse; explosion; debris removal; demolition occasioned by enforcement of Laws and Regulations; water damage (other than that caused by flood); and such other perils or causes of loss as may be specifically required by the Supplementary Conditions. If insurance against mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement; or flood, are not commercially available

- under builder's risk policies, by endorsement or otherwise, such insurance may be provided through other insurance policies acceptable to Owner and Contractor.
- 3. cover, as insured property, at least the following: (a) the Work and all materials, supplies, machinery, apparatus, equipment, fixtures, and other property of a similar nature that are to be incorporated into or used in the preparation, fabrication, construction, erection, or completion of the Work, including Owner-furnished or assigned property; (b) spare parts inventory required within the scope of the Contract; and (c) temporary works which are not intended to form part of the permanent constructed Work but which are intended to provide working access to the Site, or to the Work under construction, or which are intended to provide temporary support for the Work under construction, including scaffolding, form work, fences, shoring, falsework, and temporary structures.
- cover expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects).
- 5. extend to cover damage or loss to insured property while in temporary storage at the Site or in a storage location outside the Site (but not including property stored at the premises of a manufacturer or Supplier).
- 6. extend to cover damage or loss to insured property while in transit.
- allow for partial occupation or use of the Work by Owner, such that those portions of the Work that are not yet occupied or used by Owner shall remain covered by the builder's risk insurance.
- 8. allow for the waiver of the insurer's subrogation rights, as set forth below.
- provide primary coverage for all losses and damages caused by the perils or causes of loss covered.
- 10. not include a co-insurance clause.
- 11. include an exception for ensuing losses from physical damage or loss with respect to any defective workmanship, design, or materials exclusions.
- 12. include performance/hot testing and start-up.
- 13. be maintained in effect, subject to the provisions herein regarding Substantial Completion and partial occupancy or use of the Work by Owner, until the Work is complete.
- B. Notice of Cancellation or Change: All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with this Paragraph 6.05 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 10 days prior written notice has been given to the purchasing policyholder. Within three days of receipt of any such written notice, the purchasing policyholder shall provide a copy of the notice to each other insured.
- C. *Deductibles*: The purchaser of any required builder's risk or property insurance shall pay for costs not covered because of the application of a policy deductible.
- D. Partial Occupancy or Use by Owner: If Owner will occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in Paragraph 15.04, then Owner (directly, if it is the purchaser of the builder's risk policy, or through Contractor) will

provide notice of such occupancy or use to the builder's risk insurer. The builder's risk insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy; rather, those portions of the Work that are occupied or used by Owner may come off the builder's risk policy, while those portions of the Work not yet occupied or used by Owner shall remain covered by the builder's risk insurance.

- E. Additional Insurance: If Contractor elects to obtain other special insurance to be included in or supplement the builder's risk or property insurance policies provided under this Paragraph 6.05, it may do so at Contractor's expense.
- F. Insurance of Other Property: If the express insurance provisions of the Contract do not require or address the insurance of a property item or interest, such as tools, construction equipment, or other personal property owned by Contractor, a Subcontractor, or an employee of Contractor or a Subcontractor, then the entity or individual owning such property item will be responsible for deciding whether to insure it, and if so in what amount.

#### 6.06 Waiver of Rights

- All policies purchased in accordance with Paragraph 6.05, expressly including the builder's risk policy, shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any insureds thereunder, or against Engineer or its consultants, or their officers, directors, members, partners, employees, agents, consultants, or subcontractors. Owner and Contractor waive all rights against each other and the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Engineer, its consultants, all Subcontractors, all individuals or entities identified in the Supplementary Conditions as insureds, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by Owner or Contractor as trustee or fiduciary, or otherwise payable under any policy so issued.
- B. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, for:
  - loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other perils whether or not insured by Owner; and
  - loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by Owner during partial occupancy or use pursuant to Paragraph 15.04, after Substantial Completion pursuant to Paragraph 15.03, or after final payment pursuant to Paragraph 15.06.
- C. Any insurance policy maintained by Owner covering any loss, damage or consequential loss referred to in Paragraph 6.06.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of

- recovery against Contractor, Subcontractors, or Engineer, or the officers, directors, members, partners, employees, agents, consultants, or subcontractors of each and any of them.
- D. Contractor shall be responsible for assuring that the agreement under which a Subcontractor performs a portion of the Work contains provisions whereby the Subcontractor waives all rights against Owner, Contractor, all individuals or entities identified in the Supplementary Conditions as insureds, the Engineer and its consultants, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by builder's risk insurance and any other property insurance applicable to the Work.

# 6.07 Receipt and Application of Property Insurance Proceeds

- A. Any insured loss under the builder's risk and other policies of insurance required by Paragraph 6.05 will be adjusted and settled with the named insured that purchased the policy. Such named insured shall act as fiduciary for the other insureds, and give notice to such other insureds that adjustment and settlement of a claim is in progress. Any other insured may state its position regarding a claim for insured loss in writing within 15 days after notice of such claim.
- B. Proceeds for such insured losses may be made payable by the insurer either jointly to multiple insureds, or to the named insured that purchased the policy in its own right and as fiduciary for other insureds, subject to the requirements of any applicable mortgage clause. A named insured receiving insurance proceeds under the builder's risk and other policies of insurance required by Paragraph 6.05 shall distribute such proceeds in accordance with such agreement as the parties in interest may reach, or as otherwise required under the dispute resolution provisions of this Contract or applicable Laws and Regulations.
- C. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the money so received applied on account thereof, and the Work and the cost thereof covered by Change Order, if needed.

# **ARTICLE 7 – CONTRACTOR'S RESPONSIBILITIES**

#### 7.01 Supervision and Superintendence

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

#### 7.02 Labor; Working Hours

A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall at all times maintain good discipline and order at the Site.

B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours, Monday through Friday. Contractor will not perform Work on a Saturday, Sunday, or any legal holiday. Contractor may perform Work outside regular working hours or on Saturdays, Sundays, or legal holidays only with Owner's written consent, which will not be unreasonably withheld.

#### 7.03 Services, Materials, and Equipment

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

# 7.04 "Or Equals"

- A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the Contract Price has been based upon Contractor furnishing such item as specified. The specification or description of such an item is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or equal" item is permitted, Contractor may request that Engineer authorize the use of other items of material or equipment, or items from other proposed suppliers under the circumstances described below.
  - 1. If Engineer in its sole discretion determines that an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, Engineer shall deem it an "or equal" item. For the purposes of this paragraph, a proposed item of material or equipment will be considered functionally equal to an item so named if:
    - a. in the exercise of reasonable judgment Engineer determines that:
      - 1) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;
      - it will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole;

- 3) it has a proven record of performance and availability of responsive service; and
- it is not objectionable to Owner.
- b. Contractor certifies that, if approved and incorporated into the Work:
  - there will be no increase in cost to the Owner or increase in Contract Times;
     and
  - 2) it will conform substantially to the detailed requirements of the item named in the Contract Documents.
- B. *Contractor's Expense*: Contractor shall provide all data in support of any proposed "or equal" item at Contractor's expense.
- C. Engineer's Evaluation and Determination: Engineer will be allowed a reasonable time to evaluate each "or-equal" request. Engineer may require Contractor to furnish additional data about the proposed "or-equal" item. Engineer will be the sole judge of acceptability. No "or-equal" item will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an "or-equal", which will be evidenced by an approved Shop Drawing or other written communication. Engineer will advise Contractor in writing of any negative determination.
- D. Effect of Engineer's Determination: Neither approval nor denial of an "or-equal" request shall result in any change in Contract Price. The Engineer's denial of an "or-equal" request shall be final and binding, and may not be reversed through an appeal under any provision of the Contract Documents.
- E. Treatment as a Substitution Request: If Engineer determines that an item of material or equipment proposed by Contractor does not qualify as an "or-equal" item, Contractor may request that Engineer considered the proposed item as a substitute pursuant to Paragraph 7.05.

## 7.05 Substitutes

- A. Unless the specification or description of an item of material or equipment required to be furnished under the Contract Documents contains or is followed by words reading that no substitution is permitted, Contractor may request that Engineer authorize the use of other items of material or equipment under the circumstances described below. To the extent possible such requests shall be made before commencement of related construction at the Site.
  - Contractor shall submit sufficient information as provided below to allow Engineer to determine if the item of material or equipment proposed is functionally equivalent to that named and an acceptable substitute therefor. Engineer will not accept requests for review of proposed substitute items of material or equipment from anyone other than Contractor.
  - The requirements for review by Engineer will be as set forth in Paragraph 7.05.B, as supplemented by the Specifications, and as Engineer may decide is appropriate under the circumstances.
  - Contractor shall make written application to Engineer for review of a proposed substitute item of material or equipment that Contractor seeks to furnish or use. The application:

- a. shall certify that the proposed substitute item will:
  - 1) perform adequately the functions and achieve the results called for by the general design,
  - 2) be similar in substance to that specified, and
  - 3) be suited to the same use as that specified.

#### b. will state:

- 1) the extent, if any, to which the use of the proposed substitute item will necessitate a change in Contract Times,
- 2) whether use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item, and
- 3) whether incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty.

# c. will identify:

- 1) all variations of the proposed substitute item from that specified, and
- 2) available engineering, sales, maintenance, repair, and replacement services.
- d. shall contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including but not limited to changes in Contract Price, shared savings, costs of redesign, and claims of other contractors affected by any resulting change.
- B. Engineer's Evaluation and Determination: Engineer will be allowed a reasonable time to evaluate each substitute request, and to obtain comments and direction from Owner. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No substitute will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an acceptable substitute. Engineer's determination will be evidenced by a Field Order or a proposed Change Order accounting for the substitution itself and all related impacts, including changes in Contract Price or Contract Times. Engineer will advise Contractor in writing of any negative determination.
- C. *Special Guarantee*: Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.
- D. Reimbursement of Engineer's Cost: Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor. Whether or not Engineer approves a substitute so proposed or submitted by Contractor, Contractor shall reimburse Owner for the reasonable charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the reasonable charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.
- E. *Contractor's Expense*: Contractor shall provide all data in support of any proposed substitute at Contractor's expense.

F. Effect of Engineer's Determination: If Engineer approves the substitution request, Contractor shall execute the proposed Change Order and proceed with the substitution. The Engineer's denial of a substitution request shall be final and binding, and may not be reversed through an appeal under any provision of the Contract Documents. Contractor may challenge the scope of reimbursement costs imposed under Paragraph 7.05.D, by timely submittal of a Change Proposal.

## 7.06 Concerning Subcontractors, Suppliers, and Others

- A. Contractor may retain Subcontractors and Suppliers for the performance of parts of the Work. Such Subcontractors and Suppliers must be acceptable to Owner.
- B. Contractor shall retain specific Subcontractors, Suppliers, or other individuals or entities for the performance of designated parts of the Work if required by the Contract to do so.
- C. Subsequent to the submittal of Contractor's Bid or final negotiation of the terms of the Contract, Owner may not require Contractor to retain any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against which Contractor has reasonable objection.
- D. Prior to entry into any binding subcontract or purchase order, Contractor shall submit to Owner the identity of the proposed Subcontractor or Supplier (unless Owner has already deemed such proposed Subcontractor or Supplier acceptable, during the bidding process or otherwise). Such proposed Subcontractor or Supplier shall be deemed acceptable to Owner unless Owner raises a substantive, reasonable objection within five days.
- E. Owner may require the replacement of any Subcontractor, Supplier, or other individual or entity retained by Contractor to perform any part of the Work. Owner also may require Contractor to retain specific replacements; provided, however, that Owner may not require a replacement to which Contractor has a reasonable objection. If Contractor has submitted the identity of certain Subcontractors, Suppliers, or other individuals or entities for acceptance by Owner, and Owner has accepted it (either in writing or by failing to make written objection thereto), then Owner may subsequently revoke the acceptance of any such Subcontractor, Supplier, or other individual or entity so identified solely on the basis of substantive, reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity.
- F. If Owner requires the replacement of any Subcontractor, Supplier, or other individual or entity retained by Contractor to perform any part of the Work, then Contractor shall be entitled to an adjustment in Contract Price or Contract Times, or both, with respect to the replacement; and Contractor shall initiate a Change Proposal for such adjustment within 30 days of Owner's requirement of replacement.
- G. No acceptance by Owner of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of the right of Owner to the completion of the Work in accordance with the Contract Documents.
- H. On a monthly basis Contractor shall submit to Engineer a complete list of all Subcontractors and Suppliers having a direct contract with Contractor, and of all other Subcontractors and Suppliers known to Contractor at the time of submittal.
- I. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as Contractor is responsible for Contractor's own acts and omissions.

- J. Contractor shall be solely responsible for scheduling and coordinating the work of Subcontractors, Suppliers, and all other individuals or entities performing or furnishing any of the Work.
- K. Contractor shall restrict all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work from communicating with Engineer or Owner, except through Contractor or in case of an emergency, or as otherwise expressly allowed herein.
- L. The divisions and sections of the Specifications and the identifications of any Drawings shall not control Contractor in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.
- M. All Work performed for Contractor by a Subcontractor or Supplier shall be pursuant to an appropriate contractual agreement that specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer.
- N. Owner may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor on account of Work performed for Contractor by the particular Subcontractor or Supplier.
- O. Nothing in the Contract Documents:
  - 1. shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between Owner or Engineer and any such Subcontractor, Supplier, or other individual or entity; nor
  - 2. shall create any obligation on the part of Owner or Engineer to pay or to see to the payment of any money due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.

## 7.07 Patent Fees and Royalties

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

C. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

#### 7.08 Permits

A. Unless otherwise provided in the Contract Documents, Contractor shall obtain and pay for all construction permits and licenses. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of the submission of Contractor's Bid (or when Contractor became bound under a negotiated contract). Owner shall pay all charges of utility owners for connections for providing permanent service to the Work

#### 7.09 *Taxes*

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

# 7.10 Laws and Regulations

- A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.
- B. If Contractor performs any Work or takes any other action knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all resulting costs and losses, and shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work or other action. It shall not be Contractor's responsibility to make certain that the Work described in the Contract Documents is in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor's obligations under Paragraph 3.03.
- C. Owner or Contractor may give notice to the other party of any changes after the submission of Contractor's Bid (or after the date when Contractor became bound under a negotiated contract) in Laws or Regulations having an effect on the cost or time of performance of the Work, including but not limited to changes in Laws or Regulations having an effect on procuring permits and on sales, use, value-added, consumption, and other similar taxes. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times resulting from such changes, then within 30 days of such notice Contractor may submit a Change Proposal, or Owner may initiate a Claim.

#### 7.11 Record Documents

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

## 7.12 Safety and Protection

- A. Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:
  - 1. all persons on the Site or who may be affected by the Work;
  - 2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
  - other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, other work in progress, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.
- B. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify Owner; the owners of adjacent property, Underground Facilities, and other utilities; and other contractors and utility owners performing work at or adjacent to the Site, when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property or work in progress.
- C. Contractor shall comply with the applicable requirements of Owner's safety programs, if any. The Supplementary Conditions identify any Owner's safety programs that are applicable to the Work.
- D. Contractor shall inform Owner and Engineer of the specific requirements of Contractor's safety program with which Owner's and Engineer's employees and representatives must comply while at the Site.
- E. All damage, injury, or loss to any property referred to in Paragraph 7.12.A.2 or 7.12.A.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor at its expense (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of

- Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).
- F. Contractor's duties and responsibilities for safety and protection shall continue until such time as all the Work is completed and Engineer has issued a notice to Owner and Contractor in accordance with Paragraph 15.06.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).
- G. Contractor's duties and responsibilities for safety and protection shall resume whenever Contractor or any Subcontractor or Supplier returns to the Site to fulfill warranty or correction obligations, or to conduct other tasks arising from the Contract Documents.

## 7.13 Safety Representative

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

## 7.14 Hazard Communication Programs

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

# 7.15 *Emergencies*

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

#### 7.16 Shop Drawings, Samples, and Other Submittals

- A. Shop Drawing and Sample Submittal Requirements:
  - 1. Before submitting a Shop Drawing or Sample, Contractor shall have:
    - reviewed and coordinated the Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;
    - b. determined and verified all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;
    - determined and verified the suitability of all materials and equipment offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and
    - d. determined and verified all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto.

- 2. Each submittal shall bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review of that submittal, and that Contractor approves the submittal.
- 3. With each submittal, Contractor shall give Engineer specific written notice of any variations that the Shop Drawing or Sample may have from the requirements of the Contract Documents. This notice shall be set forth in a written communication separate from the Shop Drawings or Sample submittal; and, in addition, in the case of Shop Drawings by a specific notation made on each Shop Drawing submitted to Engineer for review and approval of each such variation.
- B. Submittal Procedures for Shop Drawings and Samples: Contractor shall submit Shop Drawings and Samples to Engineer for review and approval in accordance with the accepted Schedule of Submittals. Each submittal will be identified as Engineer may require.

#### 1. Shop Drawings:

- a. Contractor shall submit the number of copies required in the Specifications.
- b. Data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide and to enable Engineer to review the information for the limited purposes required by Paragraph 7.16.D.

#### 2. Samples:

- a. Contractor shall submit the number of Samples required in the Specifications.
- b. Contractor shall clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the submittal for the limited purposes required by Paragraph 7.16.D.
- Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.
- C. Other Submittals: Contractor shall submit other submittals to Engineer in accordance with the accepted Schedule of Submittals, and pursuant to the applicable terms of the Specifications.

#### D. Engineer's Review:

- Engineer will provide timely review of Shop Drawings and Samples in accordance with
  the Schedule of Submittals acceptable to Engineer. Engineer's review and approval will
  be only to determine if the items covered by the submittals will, after installation or
  incorporation in the Work, conform to the information given in the Contract
  Documents and be compatible with the design concept of the completed Project as a
  functioning whole as indicated by the Contract Documents.
- Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions or programs incident thereto.

- 3. Engineer's review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
- 4. Engineer's review and approval of a Shop Drawing or Sample shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 7.16.A.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer will document any such approved variation from the requirements of the Contract Documents in a Field Order.
- 5. Engineer's review and approval of a Shop Drawing or Sample shall not relieve Contractor from responsibility for complying with the requirements of Paragraph 7.16.A and B.
- 6. Engineer's review and approval of a Shop Drawing or Sample, or of a variation from the requirements of the Contract Documents, shall not, under any circumstances, change the Contract Times or Contract Price, unless such changes are included in a Change Order.
- 7. Neither Engineer's receipt, review, acceptance or approval of a Shop Drawing, Sample, or other submittal shall result in such item becoming a Contract Document.
- 8. Contractor shall perform the Work in compliance with the requirements and commitments set forth in approved Shop Drawings and Samples, subject to the provisions of Paragraph 7.16.D.4.

#### E. Resubmittal Procedures:

- Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous submittals.
- 2. Contractor shall furnish required submittals with sufficient information and accuracy to obtain required approval of an item with no more than three submittals. Engineer will record Engineer's time for reviewing a fourth or subsequent submittal of a Shop Drawings, sample, or other item requiring approval, and Contractor shall be responsible for Engineer's charges to Owner for such time. Owner may impose a set-off against payments due to Contractor to secure reimbursement for such charges.
- 3. If Contractor requests a change of a previously approved submittal item, Contractor shall be responsible for Engineer's charges to Owner for its review time, and Owner may impose a set-off against payments due to Contractor to secure reimbursement for such charges, unless the need for such change is beyond the control of Contractor.

## 7.17 Contractor's General Warranty and Guarantee

A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer and its officers, directors, members, partners, employees, agents, consultants, and subcontractors shall be entitled to rely on Contractor's warranty and guarantee.

- B. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:
  - abuse, modification, or improper maintenance or operation by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or
  - 2. normal wear and tear under normal usage.
- C. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents:
  - 1. observations by Engineer;
  - 2. recommendation by Engineer or payment by Owner of any progress or final payment;
  - 3. the issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;
  - 4. use or occupancy of the Work or any part thereof by Owner;
  - 5. any review and approval of a Shop Drawing or Sample submittal;
  - the issuance of a notice of acceptability by Engineer;
  - 7. any inspection, test, or approval by others; or
  - 8. any correction of defective Work by Owner.
- D. If the Contract requires the Contractor to accept the assignment of a contract entered into by Owner, then the specific warranties, guarantees, and correction obligations contained in the assigned contract shall govern with respect to Contractor's performance obligations to Owner for the Work described in the assigned contract.

## 7.18 Indemnification

- A. To the fullest extent permitted by Laws and Regulations, and in addition to any other obligations of Contractor under the Contract or otherwise, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable.
- B. In any and all claims against Owner or Engineer or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 7.18.A shall not be limited in any way by any

- limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.
- C. The indemnification obligations of Contractor under Paragraph 7.18.A shall not extend to the liability of Engineer and Engineer's officers, directors, members, partners, employees, agents, consultants and subcontractors arising out of:
  - 1. the preparation or approval of, or the failure to prepare or approve maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or
  - 2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.

# 7.19 Delegation of Professional Design Services

- A. Contractor will not be required to provide professional design services unless such services are specifically required by the Contract Documents for a portion of the Work or unless such services are required to carry out Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. Contractor shall not be required to provide professional services in violation of applicable Laws and Regulations.
- B. If professional design services or certifications by a design professional related to systems, materials, or equipment are specifically required of Contractor by the Contract Documents, Owner and Engineer will specify all performance and design criteria that such services must satisfy. Contractor shall cause such services or certifications to be provided by a properly licensed professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, and other submittals prepared by such professional. Shop Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to Engineer.
- C. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy, and completeness of the services, certifications, or approvals performed by such design professionals, provided Owner and Engineer have specified to Contractor all performance and design criteria that such services must satisfy.
- D. Pursuant to this paragraph, Engineer's review and approval of design calculations and design drawings will be only for the limited purpose of checking for conformance with performance and design criteria given and the design concept expressed in the Contract Documents. Engineer's review and approval of Shop Drawings and other submittals (except design calculations and design drawings) will be only for the purpose stated in Paragraph 7.16.D.1.
- E. Contractor shall not be responsible for the adequacy of the performance or design criteria specified by Owner or Engineer.

#### ARTICLE 8 - OTHER WORK AT THE SITE

#### 8.01 Other Work

A. In addition to and apart from the Work under the Contract Documents, the Owner may perform other work at or adjacent to the Site. Such other work may be performed by Owner's employees, or through contracts between the Owner and third parties. Owner

- may also arrange to have third-party utility owners perform work on their utilities and facilities at or adjacent to the Site.
- B. If Owner performs other work at or adjacent to the Site with Owner's employees, or through contracts for such other work, then Owner shall give Contractor written notice thereof prior to starting any such other work. If Owner has advance information regarding the start of any utility work at or adjacent to the Site, Owner shall provide such information to Contractor.
- C. Contractor shall afford each other contractor that performs such other work, each utility owner performing other work, and Owner, if Owner is performing other work with Owner's employees, proper and safe access to the Site, and provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering such work; provided, however, that Contractor may cut or alter others' work with the written consent of Engineer and the others whose work will be affected.
- D. If the proper execution or results of any part of Contractor's Work depends upon work performed by others under this Article 8, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.

## 8.02 Coordination

- A. If Owner intends to contract with others for the performance of other work at or adjacent to the Site, to perform other work at or adjacent to the Site with Owner's employees, or to arrange to have utility owners perform work at or adjacent to the Site, the following will be set forth in the Supplementary Conditions or provided to Contractor prior to the start of any such other work:
  - the identity of the individual or entity that will have authority and responsibility for coordination of the activities among the various contractors;
  - an itemization of the specific matters to be covered by such authority and responsibility; and
  - 3. the extent of such authority and responsibilities.
- B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

## 8.03 Legal Relationships

A. If, in the course of performing other work at or adjacent to the Site for Owner, the Owner's employees, any other contractor working for Owner, or any utility owner for whom the Owner is responsible causes damage to the Work or to the property of Contractor or its Subcontractors, or delays, disrupts, interferes with, or increases the scope or cost of the performance of the Work, through actions or inaction, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times, or both. Contractor

must submit any Change Proposal seeking an equitable adjustment in the Contract Price or the Contract Times under this paragraph within 30 days of the damaging, delaying, disrupting, or interfering event. The entitlement to, and extent of, any such equitable adjustment shall take into account information (if any) regarding such other work that was provided to Contractor in the Contract Documents prior to the submittal of the Bid or the final negotiation of the terms of the Contract. When applicable, any such equitable adjustment in Contract Price shall be conditioned on Contractor assigning to Owner all Contractor's rights against such other contractor or utility owner with respect to the damage, delay, disruption, or interference that is the subject of the adjustment. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.

- B. Contractor shall take reasonable and customary measures to avoid damaging, delaying, disrupting, or interfering with the work of Owner, any other contractor, or any utility owner performing other work at or adjacent to the Site. If Contractor fails to take such measures and as a result damages, delays, disrupts, or interferes with the work of any such other contractor or utility owner, then Owner may impose a set-off against payments due to Contractor, and assign to such other contractor or utility owner the Owner's contractual rights against Contractor with respect to the breach of the obligations set forth in this paragraph.
- C. When Owner is performing other work at or adjacent to the Site with Owner's employees, Contractor shall be liable to Owner for damage to such other work, and for the reasonable direct delay, disruption, and interference costs incurred by Owner as a result of Contractor's failure to take reasonable and customary measures with respect to Owner's other work. In response to such damage, delay, disruption, or interference, Owner may impose a set-off against payments due to Contractor.
- D. If Contractor damages, delays, disrupts, or interferes with the work of any other contractor, or any utility owner performing other work at or adjacent to the Site, through Contractor's failure to take reasonable and customary measures to avoid such impacts, or if any claim arising out of Contractor's actions, inactions, or negligence in performance of the Work at or adjacent to the Site is made by any such other contractor or utility owner against Contractor, Owner, or Engineer, then Contractor shall (1) promptly attempt to settle the claim as to all parties through negotiations with such other contractor or utility owner, or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law, and (2) indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claims, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such damage, delay, disruption, or interference.

#### **ARTICLE 9 – OWNER'S RESPONSIBILITIES**

#### 9.01 Communications to Contractor

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

# 9.02 Replacement of Engineer

A. Owner may at its discretion appoint an engineer to replace Engineer, provided Contractor makes no reasonable objection to the replacement engineer. The replacement engineer's status under the Contract Documents shall be that of the former Engineer.

#### 9.03 Furnish Data

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

# 9.04 Pay When Due

A. Owner shall make payments to Contractor when they are due as provided in the Agreement.

# 9.05 Lands and Easements; Reports, Tests, and Drawings

- A. Owner's duties with respect to providing lands and easements are set forth in Paragraph 5.01.
- B. Owner's duties with respect to providing engineering surveys to establish reference points are set forth in Paragraph 4.03.
- C. Article 5 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of conditions at the Site, and drawings of physical conditions relating to existing surface or subsurface structures at the Site.

#### 9.06 *Insurance*

A. Owner's responsibilities, if any, with respect to purchasing and maintaining liability and property insurance are set forth in Article 6.

# 9.07 Change Orders

A. Owner's responsibilities with respect to Change Orders are set forth in Article 11.

#### 9.08 Inspections, Tests, and Approvals

A. Owner's responsibility with respect to certain inspections, tests, and approvals is set forth in Paragraph 14.02.B.

# 9.09 Limitations on Owner's Responsibilities

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

#### 9.10 Undisclosed Hazardous Environmental Condition

A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 5.06.

## 9.11 Evidence of Financial Arrangements

A. Upon request of Contractor, Owner shall furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract Documents (including obligations under proposed changes in the Work).

# 9.12 Safety Programs

- A. While at the Site, Owner's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Owner has been informed.
- B. Owner shall furnish copies of any applicable Owner safety programs to Contractor.

#### **ARTICLE 10 – ENGINEER'S STATUS DURING CONSTRUCTION**

#### 10.01 Owner's Representative

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

#### 10.02 Visits to Site

- A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.
- B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 10.08. Particularly, but without limitation, during or as a result of Engineer's visits or observations of Contractor's Work, Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

#### 10.03 Project Representative

A. If Owner and Engineer have agreed that Engineer will furnish a Resident Project Representative to represent Engineer at the Site and assist Engineer in observing the progress and quality of the Work, then the authority and responsibilities of any such Resident Project Representative will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in Paragraph 10.08. If Owner designates another representative or agent to represent Owner at the Site who is not Engineer's consultant, agent, or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the Supplementary Conditions.

# 10.04 Rejecting Defective Work

A. Engineer has the authority to reject Work in accordance with Article 14.

# 10.05 Shop Drawings, Change Orders and Payments

- A. Engineer's authority, and limitations thereof, as to Shop Drawings and Samples, are set forth in Paragraph 7.16.
- B. Engineer's authority, and limitations thereof, as to design calculations and design drawings submitted in response to a delegation of professional design services, if any, are set forth in Paragraph 7.19.
- C. Engineer's authority as to Change Orders is set forth in Article 11.
- D. Engineer's authority as to Applications for Payment is set forth in Article 15.

# 10.06 Determinations for Unit Price Work

A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor as set forth in Paragraph 13.03.

## 10.07 Decisions on Requirements of Contract Documents and Acceptability of Work

A. Engineer will render decisions regarding the requirements of the Contract Documents, and judge the acceptability of the Work, pursuant to the specific procedures set forth herein for initial interpretations, Change Proposals, and acceptance of the Work. In rendering such decisions and judgments, Engineer will not show partiality to Owner or Contractor, and will not be liable to Owner, Contractor, or others in connection with any proceedings, interpretations, decisions, or judgments conducted or rendered in good faith.

#### 10.08 Limitations on Engineer's Authority and Responsibilities

- A. Neither Engineer's authority or responsibility under this Article 10 or under any other provision of the Contract, nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer, shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.
- B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.
- C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.
- D. Engineer's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Paragraph 15.06.A will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals, that the results certified indicate compliance with the Contract Documents.
- E. The limitations upon authority and responsibility set forth in this Paragraph 10.08 shall also apply to the Resident Project Representative, if any.

# 10.09 Compliance with Safety Program

A. While at the Site, Engineer's employees and representatives will comply with the specific applicable requirements of Owner's and Contractor's safety programs (if any) of which Engineer has been informed.

#### ARTICLE 11 – AMENDING THE CONTRACT DOCUMENTS; CHANGES IN THE WORK

#### 11.01 Amending and Supplementing Contract Documents

A. The Contract Documents may be amended or supplemented by a Change Order, a Work Change Directive, or a Field Order.

## Change Orders:

- a. If an amendment or supplement to the Contract Documents includes a change in the Contract Price or the Contract Times, such amendment or supplement must be set forth in a Change Order. A Change Order also may be used to establish amendments and supplements of the Contract Documents that do not affect the Contract Price or Contract Times.
- b. Owner and Contractor may amend those terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, without the recommendation of the Engineer. Such an amendment shall be set forth in a Change Order.
- 2. Work Change Directives: A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the modification ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order, following negotiations by the parties as to the Work Change Directive's effect, if any, on the Contract Price and Contract Times; or, if negotiations are unsuccessful, by a determination under the terms of the Contract Documents governing adjustments, expressly including Paragraph 11.04 regarding change of Contract Price. Contractor must submit any Change Proposal seeking an adjustment of the Contract Price or the Contract Times, or both, no later than 30 days after the completion of the Work set out in the Work Change Directive. Owner must submit any Claim seeking an adjustment of the Contract Price or the Contract Times, or both, no later than 60 days after issuance of the Work Change Directive.
- 3. Field Orders: Engineer may authorize minor changes in the Work if the changes do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Such changes will be accomplished by a Field Order and will be binding on Owner and also on Contractor, which shall perform the Work involved promptly. If Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, or both, then before proceeding with the Work at issue, Contractor shall submit a Change Proposal as provided herein.

#### 11.02 Owner-Authorized Changes in the Work

A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work. Such changes shall be supported by Engineer's recommendation, to the extent the change

involves the design (as set forth in the Drawings, Specifications, or otherwise), or other engineering or technical matters. Such changes may be accomplished by a Change Order, if Owner and Contractor have agreed as to the effect, if any, of the changes on Contract Times or Contract Price; or by a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved; or, in the case of a deletion in the Work, promptly cease construction activities with respect to such deleted Work. Added or revised Work shall be performed under the applicable conditions of the Contract Documents. Nothing in this paragraph shall obligate Contractor to undertake work that Contractor reasonably concludes cannot be performed in a manner consistent with Contractor's safety obligations under the Contract Documents or Laws and Regulations.

## 11.03 Unauthorized Changes in the Work

A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents, as amended, modified, or supplemented, except in the case of an emergency as provided in Paragraph 7.15 or in the case of uncovering Work as provided in Paragraph 14.05.

## 11.04 Change of Contract Price

- A. The Contract Price may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Price shall comply with the provisions of Paragraph 11.06. Any Claim for an adjustment of Contract Price shall comply with the provisions of Article 12.
- B. An adjustment in the Contract Price will be determined as follows:
  - 1. where the Work involved is covered by unit prices contained in the Contract Documents, then by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 13.03); or
  - 2. where the Work involved is not covered by unit prices contained in the Contract Documents, then by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 11.04.C.2); or
  - 3. where the Work involved is not covered by unit prices contained in the Contract Documents and the parties do not reach mutual agreement to a lump sum, then on the basis of the Cost of the Work (determined as provided in Paragraph 13.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 11.04.C).
- C. *Contractor's Fee*: When applicable, the Contractor's fee for overhead and profit shall be determined as follows:
  - 1. a mutually acceptable fixed fee; or
  - 2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
    - a. for costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2, the Contractor's fee shall be 15 percent;
    - b. for costs incurred under Paragraph 13.01.B.3, the Contractor's fee shall be five percent;
    - c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraphs 11.04.C.2.a and

11.04.C.2.b is that the Contractor's fee shall be based on: (1) a fee of 15 percent of the costs incurred under Paragraphs 13.01.A.1 and 13.01.A.2 by the Subcontractor that actually performs the Work, at whatever tier, and (2) with respect to Contractor itself and to any Subcontractors of a tier higher than that of the Subcontractor that actually performs the Work, a fee of five percent of the amount (fee plus underlying costs incurred) attributable to the next lower tier Subcontractor; provided, however, that for any such subcontracted work the maximum total fee to be paid by Owner shall be no greater than 27 percent of the costs incurred by the Subcontractor that actually performs the work;

- d. no fee shall be payable on the basis of costs itemized under Paragraphs 13.01.B.4, 13.01.B.5, and 13.01.C;
- e. the amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in Contractor's fee by an amount equal to five percent of such net decrease; and
- f. when both additions and credits are involved in any one change, the adjustment in Contractor's fee shall be computed on the basis of the net change in accordance with Paragraphs 11.04.C.2.a through 11.04.C.2.e, inclusive.

## 11.05 Change of Contract Times

- A. The Contract Times may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Times shall comply with the provisions of Paragraph 11.06. Any Claim for an adjustment in the Contract Times shall comply with the provisions of Article 12.
- B. An adjustment of the Contract Times shall be subject to the limitations set forth in Paragraph 4.05, concerning delays in Contractor's progress.

## 11.06 Change Proposals

- A. Contractor shall submit a Change Proposal to Engineer to request an adjustment in the Contract Times or Contract Price; appeal an initial decision by Engineer concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the Contract Documents; contest a set-off against payment due; or seek other relief under the Contract. The Change Proposal shall specify any proposed change in Contract Times or Contract Price, or both, or other proposed relief, and explain the reason for the proposed change, with citations to any governing or applicable provisions of the Contract Documents.
  - 1. Procedures: Contractor shall submit each Change Proposal to Engineer promptly (but in no event later than 30 days) after the start of the event giving rise thereto, or after such initial decision. The Contractor shall submit supporting data, including the proposed change in Contract Price or Contract Time (if any), to the Engineer and Owner within 15 days after the submittal of the Change Proposal. The supporting data shall be accompanied by a written statement that the supporting data are accurate and complete, and that any requested time or price adjustment is the entire adjustment to which Contractor believes it is entitled as a result of said event. Engineer will advise Owner regarding the Change Proposal, and consider any comments or response from Owner regarding the Change Proposal.
  - 2. Engineer's Action: Engineer will review each Change Proposal and, within 30 days after receipt of the Contractor's supporting data, either deny the Change Proposal in whole,

approve it in whole, or deny it in part and approve it in part. Such actions shall be in writing, with a copy provided to Owner and Contractor. If Engineer does not take action on the Change Proposal within 30 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of Engineer's inaction the Change Proposal is deemed denied, thereby commencing the time for appeal of the denial under Article 12.

- Binding Decision: Engineer's decision will be final and binding upon Owner and Contractor, unless Owner or Contractor appeals the decision by filing a Claim under Article 12.
- B. Resolution of Certain Change Proposals: If the Change Proposal does not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters, then Engineer will notify the parties that the Engineer is unable to resolve the Change Proposal. For purposes of further resolution of such a Change Proposal, such notice shall be deemed a denial, and Contractor may choose to seek resolution under the terms of Article 12.

# 11.07 Execution of Change Orders

- A. Owner and Contractor shall execute appropriate Change Orders covering:
  - changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive;
  - changes in Contract Price resulting from an Owner set-off, unless Contractor has duly contested such set-off;
  - 3. changes in the Work which are: (a) ordered by Owner pursuant to Paragraph 11.02, (b) required because of Owner's acceptance of defective Work under Paragraph 14.04 or Owner's correction of defective Work under Paragraph 14.07, or (c) agreed to by the parties, subject to the need for Engineer's recommendation if the change in the Work involves the design (as set forth in the Drawings, Specifications, or otherwise), or other engineering or technical matters; and
  - 4. changes in the Contract Price or Contract Times, or other changes, which embody the substance of any final and binding results under Paragraph 11.06, or Article 12.
- B. If Owner or Contractor refuses to execute a Change Order that is required to be executed under the terms of this Paragraph 11.07, it shall be deemed to be of full force and effect, as if fully executed.

#### 11.08 Notification to Surety

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

#### **ARTICLE 12 - CLAIMS**

#### 12.01 *Claims*

- A. *Claims Process*: The following disputes between Owner and Contractor shall be submitted to the Claims process set forth in this Article:
  - 1. Appeals by Owner or Contractor of Engineer's decisions regarding Change Proposals;
  - Owner demands for adjustments in the Contract Price or Contract Times, or other relief under the Contract Documents; and
  - 3. Disputes that Engineer has been unable to address because they do not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters.
- B. Submittal of Claim: The party submitting a Claim shall deliver it directly to the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto; in the case of appeals regarding Change Proposals within 30 days of the decision under appeal. The party submitting the Claim shall also furnish a copy to the Engineer, for its information only. The responsibility to substantiate a Claim shall rest with the party making the Claim. In the case of a Claim by Contractor seeking an increase in the Contract Times or Contract Price, or both, Contractor shall certify that the Claim is made in good faith, that the supporting data are accurate and complete, and that to the best of Contractor's knowledge and belief the amount of time or money requested accurately reflects the full amount to which Contractor is entitled.
- C. Review and Resolution: The party receiving a Claim shall review it thoroughly, giving full consideration to its merits. The two parties shall seek to resolve the Claim through the exchange of information and direct negotiations. The parties may extend the time for resolving the Claim by mutual agreement. All actions taken on a Claim shall be stated in writing and submitted to the other party, with a copy to Engineer.

## D. *Mediation*:

- 1. At any time after initiation of a Claim, Owner and Contractor may mutually agree to mediation of the underlying dispute. The agreement to mediate shall stay the Claim submittal and response process.
- 2. If Owner and Contractor agree to mediation, then after 60 days from such agreement, either Owner or Contractor may unilaterally terminate the mediation process, and the Claim submittal and decision process shall resume as of the date of the termination. If the mediation proceeds but is unsuccessful in resolving the dispute, the Claim submittal and decision process shall resume as of the date of the conclusion of the mediation, as determined by the mediator.
- 3. Owner and Contractor shall each pay one-half of the mediator's fees and costs.
- E. Partial Approval: If the party receiving a Claim approves the Claim in part and denies it in part, such action shall be final and binding unless within 30 days of such action the other party invokes the procedure set forth in Article 17 for final resolution of disputes.
- F. Denial of Claim: If efforts to resolve a Claim are not successful, the party receiving the Claim may deny it by giving written notice of denial to the other party. If the receiving party does not take action on the Claim within 90 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of the inaction,

- the Claim is deemed denied, thereby commencing the time for appeal of the denial. A denial of the Claim shall be final and binding unless within 30 days of the denial the other party invokes the procedure set forth in Article 17 for the final resolution of disputes.
- G. Final and Binding Results: If the parties reach a mutual agreement regarding a Claim, whether through approval of the Claim, direct negotiations, mediation, or otherwise; or if a Claim is approved in part and denied in part, or denied in full, and such actions become final and binding; then the results of the agreement or action on the Claim shall be incorporated in a Change Order to the extent they affect the Contract, including the Work, the Contract Times, or the Contract Price.

#### ARTICLE 13 – COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

# 13.01 Cost of the Work

- A. *Purposes for Determination of Cost of the Work*: The term Cost of the Work means the sum of all costs necessary for the proper performance of the Work at issue, as further defined below. The provisions of this Paragraph 13.01 are used for two distinct purposes:
  - 1. To determine Cost of the Work when Cost of the Work is a component of the Contract Price, under cost-plus-fee, time-and-materials, or other cost-based terms; or
  - To determine the value of a Change Order, Change Proposal, Claim, set-off, or other
    adjustment in Contract Price. When the value of any such adjustment is determined
    on the basis of Cost of the Work, Contractor is entitled only to those additional or
    incremental costs required because of the change in the Work or because of the event
    giving rise to the adjustment.
- 3. Costs Included: Except as otherwise may be agreed to in writing by Owner, costs included in the Cost of the Work shall be in amounts no higher than those prevailing in the locality of the Project, shall not include any of the costs itemized in Paragraph 13.01.C, and shall include only the following items:
  - 1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor. Such employees shall include, without limitation, superintendents, foremen, and other personnel employed full time on the Work. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, and vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by Owner.
  - 2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts shall accrue to Owner. All trade discounts, rebates, and refunds and returns from sale of surplus materials and equipment shall accrue to Owner, and Contractor shall make provisions so that they may be obtained.

- 3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, who will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 13.01.
- Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.
- 5. Supplemental costs including the following:
  - a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.
  - b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.
  - c. Rentals of all construction equipment and machinery, and the parts thereof, whether rented from Contractor or others in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.
  - d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, as imposed by Laws and Regulations.
  - e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
  - Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with Paragraph 6.05), provided such losses and damages have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's fee.
  - g. The cost of utilities, fuel, and sanitary facilities at the Site.
  - h. Minor expenses such as communication service at the Site, express and courier services, and similar petty cash items in connection with the Work.

- i. The costs of premiums for all bonds and insurance that Contractor is required by the Contract Documents to purchase and maintain.
- C. Costs Excluded: The term Cost of the Work shall not include any of the following items:
  - 1. Payroll costs and other compensation of Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, safety managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expediters, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 13.01.B.1 or specifically covered by Paragraph 13.01.B.4. The payroll costs and other compensation excluded here are to be considered administrative costs covered by the Contractor's fee.
  - 2. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.
  - 3. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.
  - 4. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
  - 5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraph 13.01.B.
- D. Contractor's Fee: When the Work as a whole is performed on the basis of cost-plus, Contractor's fee shall be determined as set forth in the Agreement. When the value of any Work covered by a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price is determined on the basis of Cost of the Work, Contractor's fee shall be determined as set forth in Paragraph 11.04.C.
- E. *Documentation*: Whenever the Cost of the Work for any purpose is to be determined pursuant to this Article 13, Contractor will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to Engineer an itemized cost breakdown together with supporting data.

## 13.02 Allowances

- A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.
- B. Cash Allowances: Contractor agrees that:
  - the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
  - Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.

- C. *Contingency Allowance*: Contractor agrees that a contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.
- D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

#### 13.03 Unit Price Work

- A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.
- B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Payments to Contractor for Unit Price Work will be based on actual quantities.
- C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.
- D. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, subject to the provisions of the following paragraph.
- E. Within 30 days of Engineer's written decision under the preceding paragraph, Contractor may submit a Change Proposal, or Owner may file a Claim, seeking an adjustment in the Contract Price if:
  - the quantity of any item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement;
  - 2. there is no corresponding adjustment with respect to any other item of Work; and
  - Contractor believes that it is entitled to an increase in Contract Price as a result of having incurred additional expense or Owner believes that Owner is entitled to a decrease in Contract Price, and the parties are unable to agree as to the amount of any such increase or decrease.

# ARTICLE 14 – TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

#### 14.01 Access to Work

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

#### 14.02 Tests, Inspections, and Approvals

- A. Contractor shall give Engineer timely notice of readiness of the Work (or specific parts thereof) for all required inspections and tests, and shall cooperate with inspection and testing personnel to facilitate required inspections and tests.
- B. Owner shall retain and pay for the services of an independent inspector, testing laboratory, or other qualified individual or entity to perform all inspections and tests expressly required by the Contract Documents to be furnished and paid for by Owner, except that costs incurred in connection with tests or inspections of covered Work shall be governed by the provisions of Paragraph 14.05.
- C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.
- D. Contractor shall be responsible for arranging, obtaining, and paying for all inspections and tests required:
  - 1. by the Contract Documents, unless the Contract Documents expressly allocate responsibility for a specific inspection or test to Owner;
  - 2. to attain Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work;
  - 3. by manufacturers of equipment furnished under the Contract Documents;
  - 4. for testing, adjusting, and balancing of mechanical, electrical, and other equipment to be incorporated into the Work; and
  - 5. for acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work.

Such inspections and tests shall be performed by independent inspectors, testing laboratories, or other qualified individuals or entities acceptable to Owner and Engineer.

- E. If the Contract Documents require the Work (or part thereof) to be approved by Owner, Engineer, or another designated individual or entity, then Contractor shall assume full responsibility for arranging and obtaining such approvals.
- F. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, Contractor shall, if requested by Engineer, uncover such Work for observation. Such uncovering shall be at Contractor's expense unless Contractor had given Engineer timely notice of Contractor's intention to cover the same and Engineer had not acted with reasonable promptness in response to such notice.

#### 14.03 Defective Work

- A. *Contractor's Obligation*: It is Contractor's obligation to assure that the Work is not defective.
- B. *Engineer's Authority*: Engineer has the authority to determine whether Work is defective, and to reject defective Work.

- C. *Notice of Defects*: Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor.
- D. *Correction, or Removal and Replacement*: Promptly after receipt of written notice of defective Work, Contractor shall correct all such defective Work, whether or not fabricated, installed, or completed, or, if Engineer has rejected the defective Work, remove it from the Project and replace it with Work that is not defective.
- E. *Preservation of Warranties*: When correcting defective Work, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.
- F. Costs and Damages: In addition to its correction, removal, and replacement obligations with respect to defective Work, Contractor shall pay all claims, costs, losses, and damages arising out of or relating to defective Work, including but not limited to the cost of the inspection, testing, correction, removal, replacement, or reconstruction of such defective Work, fines levied against Owner by governmental authorities because the Work is defective, and the costs of repair or replacement of work of others resulting from defective Work. Prior to final payment, if Owner and Contractor are unable to agree as to the measure of such claims, costs, losses, and damages resulting from defective Work, then Owner may impose a reasonable set-off against payments due under Article 15.

# 14.04 Acceptance of Defective Work

A. If, instead of requiring correction or removal and replacement of defective Work, Owner prefers to accept it, Owner may do so (subject, if such acceptance occurs prior to final payment, to Engineer's confirmation that such acceptance is in general accord with the design intent and applicable engineering principles, and will not endanger public safety). Contractor shall pay all claims, costs, losses, and damages attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness), and for the diminished value of the Work to the extent not otherwise paid by Contractor. If any such acceptance occurs prior to final payment, the necessary revisions in the Contract Documents with respect to the Work shall be incorporated in a Change Order. If the parties are unable to agree as to the decrease in the Contract Price, reflecting the diminished value of Work so accepted, then Owner may impose a reasonable set-off against payments due under Article 15. If the acceptance of defective Work occurs after final payment, Contractor shall pay an appropriate amount to Owner.

## 14.05 Uncovering Work

- A. Engineer has the authority to require additional inspection or testing of the Work, whether or not the Work is fabricated, installed, or completed.
- 3. If any Work is covered contrary to the written request of Engineer, then Contractor shall, if requested by Engineer, uncover such Work for Engineer's observation, and then replace the covering, all at Contractor's expense.
- C. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, then Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, and provide all necessary labor, material, and equipment.

- If it is found that the uncovered Work is defective, Contractor shall be responsible for all claims, costs, losses, and damages arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and pending Contractor's full discharge of this responsibility the Owner shall be entitled to impose a reasonable set-off against payments due under Article 15.
- 2. If the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, then Contractor may submit a Change Proposal within 30 days of the determination that the Work is not defective.

#### 14.06 Owner May Stop the Work

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

## 14.07 Owner May Correct Defective Work

- A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work, or to remove and replace rejected Work as required by Engineer, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents, then Owner may, after seven days written notice to Contractor, correct or remedy any such deficiency.
- B. In exercising the rights and remedies under this Paragraph 14.07, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this paragraph.
- C. All claims, costs, losses, and damages incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 14.07 will be charged against Contractor as set-offs against payments due under Article 15. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.
- D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 14.07.

### ARTICLE 15 – PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD

#### 15.01 Progress Payments

A. Basis for Progress Payments: The Schedule of Values established as provided in Article 2 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments on account of Unit Price Work will be based on the number of units completed during the pay period, as determined under the provisions of Paragraph 13.03. Progress payments for cost-based Work will be based on Cost of the Work completed by Contractor during the pay period.

# B. Applications for Payments:

- 1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that Owner has received the materials and equipment free and clear of all Liens, and evidence that the materials and equipment are covered by appropriate property insurance, a warehouse bond, or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.
- 2. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior Applications for Payment.
- 3. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

## C. Review of Applications:

- 1. Engineer will, within 10 days after receipt of each Application for Payment, including each resubmittal, either indicate in writing a recommendation of payment and present the Application to Owner, or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.
- 2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations of the executed Work as an experienced and qualified design professional, and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:
  - a. the Work has progressed to the point indicated;
  - b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for

- Unit Price Work under Paragraph 13.03, and any other qualifications stated in the recommendation); and
- c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.
- 3. By recommending any such payment Engineer will not thereby be deemed to have represented that:
  - a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract; or
  - b. there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.
- 4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:
  - a. to supervise, direct, or control the Work, or
  - b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or
  - c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work, or
  - d. to make any examination to ascertain how or for what purposes Contractor has used the money paid on account of the Contract Price, or
  - e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.
- 5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 15.01.C.2.
- 6. Engineer will recommend reductions in payment (set-offs) necessary in Engineer's opinion to protect Owner from loss because:
  - a. the Work is defective, requiring correction or replacement;
  - b. the Contract Price has been reduced by Change Orders;
  - c. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
  - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible; or
  - e. Engineer has actual knowledge of the occurrence of any of the events that would constitute a default by Contractor and therefore justify termination for cause under the Contract Documents.

# D. Payment Becomes Due:

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

## E. Reductions in Payment by Owner:

- 1. In addition to any reductions in payment (set-offs) recommended by Engineer, Owner is entitled to impose a set-off against payment based on any of the following:
  - a. claims have been made against Owner on account of Contractor's conduct in the performance or furnishing of the Work, or Owner has incurred costs, losses, or damages on account of Contractor's conduct in the performance or furnishing of the Work, including but not limited to claims, costs, losses, or damages from workplace injuries, adjacent property damage, non-compliance with Laws and Regulations, and patent infringement;
  - Contractor has failed to take reasonable and customary measures to avoid damage, delay, disruption, and interference with other work at or adjacent to the Site;
  - c. Contractor has failed to provide and maintain required bonds or insurance;
  - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible;
  - e. Owner has incurred extra charges or engineering costs related to submittal reviews, evaluations of proposed substitutes, tests and inspections, or return visits to manufacturing or assembly facilities;
  - f. the Work is defective, requiring correction or replacement;
  - g. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
  - h. the Contract Price has been reduced by Change Orders;
  - i. an event that would constitute a default by Contractor and therefore justify a termination for cause has occurred;
  - j. liquidated damages have accrued as a result of Contractor's failure to achieve Milestones, Substantial Completion, or final completion of the Work;
  - Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens;
  - I. there are other items entitling Owner to a set off against the amount recommended.
- 2. If Owner imposes any set-off against payment, whether based on its own knowledge or on the written recommendations of Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and the specific amount of the reduction, and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, if Contractor remedies the reasons for such action. The reduction

- imposed shall be binding on Contractor unless it duly submits a Change Proposal contesting the reduction.
- 3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by Paragraph 15.01.C.1 and subject to interest as provided in the Agreement.

# 15.02 Contractor's Warranty of Title

A. Contractor warrants and guarantees that title to all Work, materials, and equipment furnished under the Contract will pass to Owner free and clear of (1) all Liens and other title defects, and (2) all patent, licensing, copyright, or royalty obligations, no later than seven days after the time of payment by Owner.

# 15.03 Substantial Completion

- A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete and request that Engineer issue a certificate of Substantial Completion. Contractor shall at the same time submit to Owner and Engineer an initial draft of punch list items to be completed or corrected before final payment.
- B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.
- C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a preliminary certificate of Substantial Completion which shall fix the date of Substantial Completion. Engineer shall attach to the certificate a punch list of items to be completed or corrected before final payment. Owner shall have seven days after receipt of the preliminary certificate during which to make written objection to Engineer as to any provisions of the certificate or attached punch list. If, after considering the objections to the provisions of the preliminary certificate, Engineer concludes that the Work is not substantially complete, Engineer will, within 14 days after submission of the preliminary certificate to Owner, notify Contractor in writing that the Work is not substantially complete, stating the reasons therefor. If Owner does not object to the provisions of the certificate, or if despite consideration of Owner's objections Engineer concludes that the Work is substantially complete, then Engineer will, within said 14 days, execute and deliver to Owner and Contractor a final certificate of Substantial Completion (with a revised punch list of items to be completed or corrected) reflecting such changes from the preliminary certificate as Engineer believes justified after consideration of any objections from Owner.
- D. At the time of receipt of the preliminary certificate of Substantial Completion, Owner and Contractor will confer regarding Owner's use or occupancy of the Work following Substantial Completion, review the builder's risk insurance policy with respect to the end of the builder's risk coverage, and confirm the transition to coverage of the Work under a permanent property insurance policy held by Owner. Unless Owner and Contractor agree otherwise in writing, Owner shall bear responsibility for security, operation, protection of the Work, property insurance, maintenance, heat, and utilities upon Owner's use or occupancy of the Work.
- E. After Substantial Completion the Contractor shall promptly begin work on the punch list of items to be completed or corrected prior to final payment. In appropriate cases Contractor

- may submit monthly Applications for Payment for completed punch list items, following the progress payment procedures set forth above.
- F. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to remove its property and complete or correct items on the punch list.

# 15.04 Partial Use or Occupancy

- A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions:
  - At any time Owner may request in writing that Contractor permit Owner to use or occupy any such part of the Work that Owner believes to be substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor, Owner, and Engineer will follow the procedures of Paragraph 15.03.A through E for that part of the Work.
  - At any time Contractor may notify Owner and Engineer in writing that Contractor considers any such part of the Work substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.
  - 3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 15.03 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.
  - 4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 6.05 regarding builder's risk or other property insurance.

#### 15.05 Final Inspection

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

## 15.06 Final Payment

# A. Application for Payment:

 After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, annotated record documents (as provided in Paragraph 7.11), and other documents, Contractor may make application for final payment.

- 2. The final Application for Payment shall be accompanied (except as previously delivered) by:
  - a. all documentation called for in the Contract Documents;
  - b. consent of the surety, if any, to final payment;
  - c. satisfactory evidence that all title issues have been resolved such that title to all Work, materials, and equipment has passed to Owner free and clear of any Liens or other title defects, or will so pass upon final payment.
  - d. a list of all disputes that Contractor believes are unsettled; and
  - e. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of the Work, and of Liens filed in connection with the Work.
- 3. In lieu of the releases or waivers of Liens specified in Paragraph 15.06.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (a) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (b) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner might in any way be responsible, or which might in any way result in liens or other burdens on Owner's property, have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien, or Owner at its option may issue joint checks payable to Contractor and specified Subcontractors and Suppliers.
- B. Engineer's Review of Application and Acceptance:
  - 1. If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract have been fulfilled, Engineer will, within ten days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of final payment and present the Application for Payment to Owner for payment. Such recommendation shall account for any set-offs against payment that are necessary in Engineer's opinion to protect Owner from loss for the reasons stated above with respect to progress payments. At the same time Engineer will also give written notice to Owner and Contractor that the Work is acceptable, subject to the provisions of Paragraph 15.07. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.
- C. Completion of Work: The Work is complete (subject to surviving obligations) when it is ready for final payment as established by the Engineer's written recommendation of final payment.
- D. Payment Becomes Due: Thirty days after the presentation to Owner of the final Application for Payment and accompanying documentation, the amount recommended by Engineer

(less any further sum Owner is entitled to set off against Engineer's recommendation, including but not limited to set-offs for liquidated damages and set-offs allowed under the provisions above with respect to progress payments) will become due and shall be paid by Owner to Contractor.

# 15.07 Waiver of Claims

- A. The making of final payment will not constitute a waiver by Owner of claims or rights against Contractor. Owner expressly reserves claims and rights arising from unsettled Liens, from defective Work appearing after final inspection pursuant to Paragraph 15.05, from Contractor's failure to comply with the Contract Documents or the terms of any special guarantees specified therein, from outstanding Claims by Owner, or from Contractor's continuing obligations under the Contract Documents.
- B. The acceptance of final payment by Contractor will constitute a waiver by Contractor of all claims and rights against Owner other than those pending matters that have been duly submitted or appealed under the provisions of Article 17.

#### 15.08 Correction Period

- A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents, or by any specific provision of the Contract Documents), any Work is found to be defective, or if the repair of any damages to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas used by Contractor as permitted by Laws and Regulations, is found to be defective, then Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:
  - 1. correct the defective repairs to the Site or such other adjacent areas;
  - 2. correct such defective Work;
  - 3. if the defective Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective, and
  - 4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others, or to other land or areas resulting therefrom.
- B. If Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others).
- C. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.
- D. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this paragraph, the correction period hereunder with

- respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.
- E. Contractor's obligations under this paragraph are in addition to all other obligations and warranties. The provisions of this paragraph shall not be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

#### ARTICLE 16 – SUSPENSION OF WORK AND TERMINATION

## 16.01 Owner May Suspend Work

A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by written notice to Contractor and Engineer. Such notice will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be entitled to an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension. Any Change Proposal seeking such adjustments shall be submitted no later than 30 days after the date fixed for resumption of Work.

# 16.02 Owner May Terminate for Cause

- A. The occurrence of any one or more of the following events will constitute a default by Contractor and justify termination for cause:
  - Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the Progress Schedule);
  - 2. Failure of Contractor to perform or otherwise to comply with a material term of the Contract Documents;
  - 3. Contractor's disregard of Laws or Regulations of any public body having jurisdiction; or
  - 4. Contractor's repeated disregard of the authority of Owner or Engineer.
- B. If one or more of the events identified in Paragraph 16.02.A occurs, then after giving Contractor (and any surety) ten days written notice that Owner is considering a declaration that Contractor is in default and termination of the contract, Owner may proceed to:
  - 1. declare Contractor to be in default, and give Contractor (and any surety) notice that the Contract is terminated; and
  - 2. enforce the rights available to Owner under any applicable performance bond.
- C. Subject to the terms and operation of any applicable performance bond, if Owner has terminated the Contract for cause, Owner may exclude Contractor from the Site, take possession of the Work, incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and complete the Work as Owner may deem expedient.
- D. Owner may not proceed with termination of the Contract under Paragraph 16.02.B if Contractor within seven days of receipt of notice of intent to terminate begins to correct its failure to perform and proceeds diligently to cure such failure.
- E. If Owner proceeds as provided in Paragraph 16.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds the cost to complete the Work, including all related claims, costs,

losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals) sustained by Owner, such excess will be paid to Contractor. If the cost to complete the Work including such related claims, costs, losses, and damages exceeds such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this paragraph, Owner shall not be required to obtain the lowest price for the Work performed.

- F. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue, or any rights or remedies of Owner against Contractor or any surety under any payment bond or performance bond. Any retention or payment of money due Contractor by Owner will not release Contractor from liability.
- G. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 6.01.A, the provisions of that bond shall govern over any inconsistent provisions of Paragraphs 16.02.B and 16.02.D.

## 16.03 Owner May Terminate For Convenience

- A. Upon seven days written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):
  - completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
  - expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses; and
  - 3. other reasonable expenses directly attributable to termination, including costs incurred to prepare a termination for convenience cost proposal.
- B. Contractor shall not be paid on account of loss of anticipated overhead, profits, or revenue, or other economic loss arising out of or resulting from such termination.

## 16.04 Contractor May Stop Work or Terminate

- A. If, through no act or fault of Contractor, (1) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (2) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (3) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon seven days written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the contract and recover from Owner payment on the same terms as provided in Paragraph 16.03.
- B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, seven days after written notice to Owner and Engineer, stop the

Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this paragraph are not intended to preclude Contractor from submitting a Change Proposal for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this paragraph.

#### **ARTICLE 17 – FINAL RESOLUTION OF DISPUTES**

#### 17.01 *Methods and Procedures*

- A. *Disputes Subject to Final Resolution*: The following disputed matters are subject to final resolution under the provisions of this Article:
  - A timely appeal of an approval in part and denial in part of a Claim, or of a denial in full; and
  - 2. Disputes between Owner and Contractor concerning the Work or obligations under the Contract Documents, and arising after final payment has been made.
- B. *Final Resolution of Disputes*: For any dispute subject to resolution under this Article, Owner or Contractor may:
  - elect in writing to invoke the dispute resolution process provided for in the Supplementary Conditions; or
  - 2. agree with the other party to submit the dispute to another dispute resolution process; or
  - 3. if no dispute resolution process is provided for in the Supplementary Conditions or mutually agreed to, give written notice to the other party of the intent to submit the dispute to a court of competent jurisdiction.

### **ARTICLE 18 - MISCELLANEOUS**

### 18.01 *Giving Notice*

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

## 18.02 Computation of Times

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

#### 18.03 Cumulative Remedies

A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of

them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract. The provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

## 18.04 Limitation of Damages

A. With respect to any and all Change Proposals, Claims, disputes subject to final resolution, and other matters at issue, neither Owner nor Engineer, nor any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, shall be liable to Contractor for any claims, costs, losses, or damages sustained by Contractor on or in connection with any other project or anticipated project.

#### 18.05 No Waiver

A. A party's non-enforcement of any provision shall not constitute a waiver of that provision, nor shall it affect the enforceability of that provision or of the remainder of this Contract.

# 18.06 Survival of Obligations

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

# 18.07 Controlling Law

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

### 18.08 Headings

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

#### **SUMMARY OF WORK**

#### PART 1 - GENERAL

### 1.01 WORK INCLUDED

- A. The contract shall include but not be limited to the work described in these specifications
- B. Project Identification: **2022 Water System Improvements Water Tank Rehabilitation** for the Bath County Water District.
- C. Engineer: Kentucky Engineering Group, PLLC. Versailles Kentucky
- D. The project includes the rehabilitation of five (5) ground water storage tanks and one (1) elevated water storage tank including all appurtenances.
- E. The Contractor shall include all materials, labor and equipment necessary to complete all site work. The contract Documents are intended to provide the basis for completion of the work suitable for the intended use of the Owner. Anything not expressly set forth, but which is reasonably implied or necessary for proper performance of the Project shall be included.
- F. All work shall be in accordance with these Specifications and include all work necessary for a finished product.
- G. All excavation is bid unclassified.
- H. Continuous operations: The existing system must be maintained in continuous operation in such a manner that it meets all local, state, and federal requirements. The contractor is responsible not to deactivate, demolish, or interfere with any system component required for the continuous operation until a new or temporary permanent-like system has been installed and is operational. The Contractor is responsible for payment of all fines resulting from any action or inaction on his part or the part of his subcontractors during performance of the Work that causes the facility/facilities to operate in an illegal manner or fail to operate in a legal manner.

Use of Site: Limit use of site to public right-of-way. Do not disturb portions of project site beyond areas in which the Work is indicated.

- 1. Limits: Confine constructions operations to public right-of-way.
- 2. Driveways and Entrances: Keep driveways and entrances serving premises clear and available to Owner, and emergency vehicles at all times. Do not use these areas for parking or storage of materials.

## **PART 2 - PRODUCTS**

Not used.

#### **PART 3 - EXECUTION**

Not used.

- END OF SECTION -

22015 SUMMARY OF WORK

## **WORK SEQUENCE**

### **PART 1 - GENERAL**

### 1.01 WORK INCLUDED

The Contractor shall submit to the Engineer for review and acceptance a complete schedule of his proposed sequence of construction operations prior to commencement of work. However, the Engineer shall not accept a construction schedule that fails to utilize the entire time allocated for the construction of this project. This schedule requirement in no way prevents the Contractor from completing the project in a shorter time frame than scheduled. The construction schedule shall be submitted and approved by the Owner prior to the submittal of the first partial payment request. A revised construction schedule shall be submitted with every subsequent partial payment request. This revised schedule must be approved by the Owner prior to payment. The contractor shall use the following sequence of construction while working on this project.

- 1. The Salt Lick Tank cannot be taken out of service until the Midland Pump Station Rehabilitation is complete. This is being done in a separate contract of work with same construction start schedule.
- 2. Locate all existing water mains and existing valves, sewer mains, gas mains and any other existing utilities in the area.
- 3. Notify the OWNER a minimum of 48 hours prior to connecting into any existing line
- 4. Contractor is responsible for any repairs to the existing utilities and/or property during construction.
- 5. Contractor shall keep cleanup current during construction.

### 1.02 RELATED WORK

A. Section 01010 - Summary of Work.

## 1.03 ADDITIONAL INFORMATION

Any delays caused by the Contractor shall be at his expense and at no cost to the Owner or Engineer.

- END OF SECTION -

22015 WORK SEQUENCE

#### **OCCUPANCY**

### **PART 1 - GENERAL**

## 1.01 WORK INCLUDED

- A. The Contractor shall be aware that after each major portion of the project is completed, the Contractor shall notify the Engineer that those specific operations are complete and prior to replacing that portion of the work into service shall request an interim inspection of the work to be returned to or placed into service.
- B. The interim inspection requested by the Contractor shall not preclude or supersede the final inspection of the project or reduce the Contractor's responsibility for the completed portion prior to final acceptance of the work by the Owner.
- C. The Contractor shall provide all necessary temporary controls and other items required for operation of all work placed into service prior to final acceptance as required. At such time as new controls, etc. are complete and functioning, the Contractor shall remove all temporary installed items.

- END OF SECTION -

22015 OCCUPANCY

#### MEASUREMENT AND PAYMENT

#### PART 1 - GENERAL

### 1.01 WORK INCLUDED

The Contractor shall furnish all necessary labor, machinery, tools, apparatus, equipment, materials, equipment, service, other necessary supplies and perform all work, including all excavation, backfilling, & cleanup (without additional compensation, except where specifically set out in these specifications) at the unit or lump sum prices for the following items.

## 1.02 PROGRESS AND PAYMENTS SCHEDULES

- A. Within ten (10) days after the date of formal execution of the AGREEMENT, the Contractor shall prepare and submit to the Engineer, for approval, a construction schedule which depicts the Contractor's plan for completing the contract requirements and show work placement in dollars versus contract time. The Contractor's construction schedule must be approved by the Engineer before any payments will be made on this contract.
- B. Within ten (10) days after the date of formal execution of the CONTRACT AGREEMENT, the Contractor shall prepare and submit to the Engineer, for approval, a periodic estimate which depicts the Contractor's cost for completing the contract requirements and show by major unit of the project work, the Contractor's dollar value for the material and the labor (two separate amounts) to be used as a basis for the periodic payments. The Contractor's periodic estimate must be approved by the Engineer before any payments will be made on this contract.
- C. The Engineer's decision as to sufficiency and completeness of the Contractor's construction schedule and periodic estimate will be final.
- D. The Contractor must make current, to the satisfaction of the Engineer, the construction schedule and periodic estimate each time he requests a payment on this contract.
- E. The Contractor's construction schedule and periodic estimate must be maintained at the construction site available for inspection and shall be revised to incorporate approved change orders as they occur.
- F. When the Contractor requests a payment on this contract, it must be on the approved periodic estimate and be current. Further, the current periodic estimate and construction schedule (both updated and revised) shall be submitted for review and approval by the Engineer before monthly payments will be made by the Owner. The Contractor shall submit six (6) current copies of each (periodic estimate and construction schedule) when requesting payment.

### 1.03 CONDITIONS FOR PAYMENT

- A. The Owner will make payments for acceptable work in place and materials properly stored onsite. The value of payment shall be as established on the approved construction schedule and periodic estimate, EXCEPT the Owner will retain five percent (5%) of the work in place and a percentage as hereinafter listed for items properly stored or untested.
- B. No payment will be made for stored materials unless a proper invoice form the supplier is attached to the pay request. Further, no item whose value is less than \$1,000 will be considered as stored materials for pay purposes.

- C. Payment for stored materials that are submitted with each monthly pay request will require documentation from the material supplier indicating that those items have been paid. Proof of payment for stored materials shall be in the form of "paid invoice" receipts or cancelled checks. Failure to provide adequate documentation will result in delays in processing subsequent pay requests.
- D. Payment for pipeline items shall be limited to eighty percent (80%) of the bid price until the pipeline items have been tested and clean up has been completed and accepted by the Engineer.
- E. Payment for equipment items shall be limited to eighty-five percent (85%) of their scheduled value (materials portion only) until they are set in place. Eighty-five percent (85%) for stored materials and equipment shall be contingent on proper on-site storage as recommended by the manufacturer or required by the Engineer.
- F. Payment for equipment items set in place shall be limited to ninety percent (90%) of their scheduled value until they are ready for operation and have been certified by the manufacturer. Ninety percent (90%) payment for installed equipment shall be contingent on proper routine maintenance of the equipment in accordance with the manufacturer's recommendations.
- G. Payment for equipment items set in place and ready for operation shall be limited to ninety-five percent (95%) of their scheduled value until all acceptance tests have been completed and the required manufacturer's pre-startup operator's training has been completed.
- H. Payment for the labor portion of equipment items will be subject only to the degree of completeness and the appropriate retainage.
- I. The retainage shall be an amount equal to 5% of said estimate. The retainage on the equipment items shall be 5% as defined hereinbefore.
- J. If at any time thereafter when the progress of the WORK is not satisfactory or determine that the Contractor is not making satisfactory progress, additional amounts may be retained.
- K. Payment for all iron and steel related items shall not be made until the American Iron and Steel (AIS) Certificates have been provided. The certificates would preferably be included as part of the shop drawing submittals.

### 1.04 DETERMINATION OF THE VALUE OF EXTRA (ADDITIONAL) OR OMITTED WORK

- A. The value of extra (additional) or omitted work shall be determined in one or more of the following ways:
  - 1. On the basis of the actual cost of all the items of labor (including on-the-job supervision), materials and use of equipment, plus a maximum 20% for added work or a minimum 20% for deleted work which shall cover the Contractor's general supervision, overhead and profit. In case of subcontracts, the sum of total overhead amounts of the subcontractors and Contractor, plus total profit amounts for the subcontracts and Contractor shall not exceed 25% of the cost. Subcontractors shall be limited to 15% and Contractors shall be limited to 10% for combined overhead and profit. The cost of labor shall include required insurance, taxes and fringe benefits. Contractor to provide detailed breakdown of all cost as justification of change in work. Equipment costs shall be based on current rental rates in the areas where the work is being performed, but in no case shall such costs be greater than the current rates published by the Associated Equipment Distributors, Chicago, Illinois.
  - 2. By estimate and acceptance in a lump sum.

- 3. By unit prices named in the Contract or subsequently agreed upon.
- B. Provided, however, that the cost or estimated cost of all extra (additional) work shall be determined in advance of authorization by the Engineer and approved by the Owner.
- C. All extra (additional) work shall be executed under the conditions of the original Contract. Any claim for extension of time shall be adjusted according to the proportionate increase or decrease in the final total cost of the work unless negotiated on another basis.
  - D. Except for over-runs in contract unit price items, no extra (additional) work shall be done except upon a written change Order from the Engineer, and no claim on the part of the Contractor for pay for extra (additional) work shall be recognized unless so ordered in writing by the Engineer.
  - E. Change Orders to the construction contract must comply with DOW Procurement Guidance for Construction and Equipment Contracts. Contract requires cost, pricing, and certification for change orders exceeding \$25,000 as required by DOW Procurement Guidance for Construction and Equipment Contracts.

#### **PART 2 - PRODUCTS**

## 2.01 REHABILITATION OF SALT LICK GROUND STORAGE TANK (500,000 GALLON)

- A. Payment shall be on a lump sum basis and include an interior SSPC SP 10 commercial blast, caulk all seams above water level, and paint shall be a 3 coat zinc/epoxy system. Exterior power wash at 3000 psi to remove loose debris, spot repair cleaning SP 3 power tool cleaning on all corrosion areas. Spot prime all cleaned areas with epoxy primer, paint with 3 coat zinc/epoxy system. Payment shall also include applying flexible sealant around base.
- B. All materials from the tank repainting shall be disposed of, in strict accordance with all local, state and federal regulations. All abrasive blasting of exterior surfaces, preparation of surfaces shall be in accordance with specified coating system.

## 2.02 REHABILITATION OF OWINGSVILLE ELEVATED MULTI-COLUMN TANK (100,000 GALLON)

- A. Payment shall be on a lump sum basis and include an interior SSPC SP 10 commercial blast, caulk all seams above water level, and paint shall be a 3 coat zinc/epoxy system. Exterior power wash at 3000 psi to remove loose debris, spot repair cleaning SP 3 power tool cleaning on all corrosion areas. Spot prime all cleaned areas with epoxy primer, paint with 3 coat zinc/epoxy system. Payment shall also include installing roof antenna corral and relocate antennas to new corral as well as removal of existing cathodic protection system.
- B. All materials from the tank repainting shall be disposed of, in strict accordance with all local, state and federal regulations. All abrasive blasting of exterior surfaces, preparation of surfaces shall be in accordance with specified coating system.
  - C. Tank shall be shrouded for protection of adjacent properties.

## 2.03 REHABILITATION OF ORE MINES GROUND STORAGE TANK (250,000 GALLON)

A. Payment shall be on a lump sum basis and include an interior power wash at 3000 psi to remove all sediment and stains, spot repair cleaning SP 3 power tool cleaning on all corrosion areas and apply three (3) coat immersion grade epoxy system 15-20 mil DFT to all spots. Exterior power wash at 3000 psi to remove loose debris, spot repair cleaning SP 3 power tool cleaning on all corrosion areas. Spot prime all cleaned areas with epoxy primer, apply full coat of Urethane Mastic. Payment shall also include relocating solar panel attached to exterior ladder, repair interior ladder and remove wire connection on lower sidewall and weld new plate.

B. All materials from the tank repainting shall be disposed of, in strict accordance with all local, state and federal regulations. All abrasive blasting of exterior surfaces, preparation of surfaces shall be in accordance with specified coating system.

### 2.04 REHABILITATION OF THE PERRY ROAD GROUND STORAGE TANK (100,000 GALLON)

- A. Payment shall be on a lump sum basis and include an interior power wash at 3000 psi to remove all sediment and stains, spot repair cleaning SP 3 power tool cleaning on all corrosion areas and apply three (3) coat immersion grade epoxy system 15-20 mil DFT to all spots. Exterior power wash at 3000 psi to remove loose debris, spot repair cleaning SP 3 power tool cleaning on all corrosion areas. Spot prime all cleaned areas with epoxy primer, apply full coat of Urethane Mastic.
- B. All materials from the tank repainting shall be disposed of, in strict accordance with all local, state and federal regulations. All abrasive blasting of exterior surfaces, preparation of surfaces shall be in accordance with specified coating system.

### 2.05 REHABILITATION OF THE MEANS (GLASS LINED) GROUND STORAGE TANK (156,000 GALLON)

- A. Payment shall be on a lump sum basis and include an interior power wash at 3000 psi to remove all sediment and stains as well as installing new sacrificial anodes per manufacturer recommendations.
- B. All materials from the tank work shall be disposed of, in strict accordance with all local, state and federal regulations. All abrasive blasting of exterior surfaces, preparation of surfaces shall be in accordance with specified coating system.

### 2.06 REHABILITATION OF THE OLYMPIA (GLASS LINED) GROUND STORAGE TANK (234,000 GALLON)

- A. Payment shall be on a lump sum basis and include an interior power wash at 3000 psi to remove all sediment and stains as well as installing new sacrificial anodes per manufacturer recommendations. Exterior power wash at 3000 psi to remove mildew staining.
- B. All materials from the tank work shall be disposed of, in strict accordance with all local, state and federal regulations. All abrasive blasting of exterior surfaces, preparation of surfaces shall be in accordance with specified coating system.

#### **PART 3 - EXECUTION**

## 3.01 PAY ITEMS

- A. The pay items listed herein before refer to the items listed in the Bid Schedule and cover all of the pay items under the base bid for this contract.
- B. Any and all other items of work listed in the specifications or shown on the Contract Drawings for this contract shall be considered incidental to and included in those pay items.

### 3.02 QUANTITIES OF ESTIMATE

A. Wherever the estimated quantities of work to be done and materials to be furnished under this Contract are shown in any of the documents, including the Bid Proposal, they are given for use in comparing bids and the right is especially reserved except as herein otherwise specifically limited, to increase or diminish them as

may be deemed reasonably necessary or desirable by the Owner to complete the work contemplated by this Contract, and such increase or diminution shall not give cause for claims or liability for damages. The Engineer will not be financially responsible for any omissions from the Contract Documents and therefore not included by the Contractor in his proposal.

- B. Aerial photographs utilized for plan sheets in the Contract Documents are indicated at an approximate scale and shall not be scaled for quantity take-offs. The pipeline quantities listed in the Bid Schedule are given for use in comparing bids and may not be the actual quantities to be installed. It is the Contractor's responsibility to field verify the length and quantities of pipeline to be installed prior to the ordering of materials. Payment on unit price contracts are based on actual quantities installed. The Owner or Engineer will not be financially responsible for any shortage of pipe or overrun of pipe ordered for the pipeline quantities.
- C. The actual quantities of all materials to be used for this project shall be field verified prior to the Contractor ordering the necessary materials. The quantity listed in the bid schedule is given for use in comparing bids and may increase or diminish as may be deemed necessary or as directed by the Owner. Any such increase or diminution shall not give cause for claims or liability for damages. The Engineer or Owner will not be financially responsible for any charges incurred for restocking of materials ordered.

- END OF SECTION -

#### LABOR PROVISIONS

### **PART 1 - GENERAL**

## 1.01 WORK INCLUDED

- A. The Contractor shall conform to all provisions of the Kentucky Department of Labor relative to minimum wages and hours as they may apply to the work to be accomplished under these specifications.
- B. In addition to the above, certain Federal laws and regulations shall govern the work and shall supplement or supplant the Kentucky Department of Labor, as the case may be.

## 1.02 RELATED SECTIONS

A. Section 3 - Part 1 Hours and Wages

### 1.03 WAGE RATES

**Federal prevailing wage rates apply to this job**. See Section 00850 for current wage decision for this area

### 1.04 LABOR PREFERENCE

Where feasible, the Contractor will utilize local labor.

## 1.05 HOURS OF WORK

- A. Hours of work shall be as set out in Kentucky Department of Labor; that is, not more than eight (8) hours in one calendar day, nor more than forty (40) hours in one week, except in case of emergency caused by fire, flood or damage to life and property.
- B. Any laborer, workman, mechanic, helper, assistant or apprentice working in excess of forty (40) hours per week, except in case of emergency, shall be paid not less than 1-1/2 times the wage rate. Whenever overtime work is scheduled, the Contractor shall give prior notice to the Owner.

- END OF SECTION -

22015 LABOR PROVISIONS

## **WORK SEQUENCE**

### **PART 1 - GENERAL**

### 1.01 WORK INCLUDED

The Contractor shall submit to the Engineer for review and acceptance a complete schedule of his proposed sequence of construction operations prior to commencement of work. However, the Engineer shall not accept a construction schedule that fails to utilize the entire time allocated for the construction of this project. This schedule requirement in no way prevents the Contractor from completing the project in a shorter time frame than scheduled. The construction schedule shall be submitted and approved by the Owner prior to the submittal of the first partial payment request. A revised construction schedule shall be submitted with every subsequent partial payment request. This revised schedule must be approved by the Owner prior to payment. The contractor shall use the following sequence of construction while working on this project.

- 1. The Salt Lick Tank cannot be taken out of service until the Midland Pump Station Rehabilitation is complete. This is being done in a separate contract of work with same construction start schedule.
- 2. Locate all existing water mains and existing valves, sewer mains, gas mains and any other existing utilities in the area.
- 3. Notify the OWNER a minimum of 48 hours prior to connecting into any existing line
- 4. Contractor is responsible for any repairs to the existing utilities and/or property during construction.
- 5. Contractor shall keep cleanup current during construction.

### 1.02 RELATED WORK

A. Section 01010 - Summary of Work.

## 1.03 ADDITIONAL INFORMATION

Any delays caused by the Contractor shall be at his expense and at no cost to the Owner or Engineer.

- END OF SECTION -

22015 WORK SEQUENCE

#### **SUBSTITUTIONS**

#### **PART 1 - GENERAL**

- A. If the CONTRACTOR wishes to furnish or use a substitute item of material or equipment or construction method he shall make written application to the Contracting Officer within thirty (30) days after execution of the Contractor, certifying that the proposed substitute will perform adequately the functions called for by the general design, be similar and of equal substance to that specified and be suited to the same use and capable of performing the same functions as that specified. Requests for review of substitute items of material and equipment will not be accepted by the ENGINEER from anyone other than CONTRACTOR.
- B. In making request for substitution, CONTRACTOR represents:
  - 1. He has personally investigated proposed product or method, and determined that it is equal or superior in all respects to that specified.
  - 2. He will provide the same or better guarantee for substitution as for product or method specified.
  - 3. He will coordinate installation of accepted substitution into work, making such changes as required in all respects.
  - 4. He waives all claims for additional costs related to substitution that consequently become apparent.
  - 5. Cost data is complete and includes all related costs under this Contract.

### 1.01 SUBMITTALS

- A. The CONTRACTOR shall submit six (6) copies of requests for substitution. Include in request the following:
  - 1. Complete data substantiating compliance of proposed substitution with Contract Documents.
  - 2. Indication whether or not incorporation or use of the substitute in connection with the Work is subject to payment of any license fee or royalty.
  - 3. For Products:
    - a. Product identification, including manufacturer's name and address.
    - b. Manufacturer's literature with product description, performance and test data, and reference standards.
    - c. Samples.
    - d. Name and address of similar projects on which product was used, data of installation, and product performance and maintenance records.
  - 4. For Construction Methods:
    - a. Detailed description of proposed method.
    - b. Drawings illustrating methods.

22015 SUBSTITUTIONS

- 5. Itemized comparison of proposed substitution with product or method specified.
- 6. Data relating to changes in construction schedule.
- 7. Relation to separate contracts, if any.
- 8. Accurate cost data on proposed substitution in comparison with product or method specified.

## D. Substitutions will not be accepted if:

- 1. They are only shown or implied on Shop Drawings.
- 2. Acceptance will require substantial revision of Contract Documents.
- 3. Substitutions would change design concepts or Specifications.
- 4. Substitutions would delay completion of the Work.
- 5. Substitutions involve items for which a manufacturer was declared at time of bidding.
- E. The ENGINEER will determine whether substitute brands or products are equal to those specified in the Contract Documents. No substitute will be ordered or installed without the ENGINEER's prior written acceptance.
- F. The OWNER may require CONTRACTOR to furnish at CONTRACTOR'S expense a special performance guarantee or other surety with respect to any substitute.
- G. If the ENGINEER determines that a substitute is not equal to that named in the Specifications, the CONTRACTOR shall furnish one of the brands or products specified, at no additional cost to the OWNER.
- H. The time required by the ENGINEER to evaluate and either accept or reject proposed substitutes is included in the Contract Time and no extension of the Contract Time shall be allowed therefore.

## 1.02 ENGINEERING COSTS

- A. The ENGINEER will record all time required in evaluating substitutions proposed by CONTRACTOR and in making any change in the Drawings or Specifications occasioned thereby. Whether or not the ENGINEER accepts a proposed substitute, the CONTRACTOR will reimburse the OWNER for the actual costs of the ENGINEER for evaluating any proposed substitute which either does not meet the requirements of the Drawings and Specifications, or the acceptance of which would require changes to other portions of the work.
- B. CONTRACTOR shall reimburse OWNER for all associated engineering costs, including redesign, additional shop drawing reviews, investigations, consultant fees and revision of the Contract Documents required because of the substitution.

- END OF SECTION -

22015 SUBSTITUTIONS

## WEATHER DELAYS

### **PART 1 - GENERAL**

#### 1.01 EXTENSIONS OF CONTRACT TIME

If the basis exists for an extension of time in accordance with the General Conditions, EJCDC C-700 Paragraph 4.05.C, an extension of time on the basis of weather may be granted only for the number of Weather Delay Days in excess of the number of days listed as the Standard Baseline for that month.

#### 1.02 STANDARD BASELINE FOR AVERAGE CLIMATIC RANGE

The Owner/Engineer's has reviewed weather data available from the National Oceanic and Atmospheric Administration and determined a Standard Baseline of average climatic range for the State of Kentucky.

Standard Baseline shall be regarded as the normal and anticipatable number of calendar days for each month during which construction activity shall be expected to be prevented and suspended by cause of adverse weather. Suspension of construction activity for the number of days each month as listed in the Standard Baseline is included in the Work and is not eligible for extension of Contract Time.

If, in the Owner/Engineer's opinion, sustained bad weather conditions prevent satisfactory performance of the work, he may suspend operations for an executed period until weather conditions are favorable. In this event, contract completion time shall be extended an equal number of days. Upon suspension of the work by the Owner/Engineer, the CONTRACTOR shall properly protect his work during the suspension period.

The Contract completion time of average number of inclement weather days as follows:

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC	ТОТ
Precipitation	7	7	9	8	8	8	8	7	6	5	6	7	86
Freez. Temp <u>.</u>	10	6	1	0	0	0	0	0	0	0	1	5	23
Total	17	13	10	8	8	8	8	7	6	5	7	12	109

#### 1.03 ADVERSE WEATHER AND WEATHER DELAY DAYS

Adverse Weather is defined as the occurrence of one or more of the following conditions which prevents exterior construction activity or access to the site within twenty-four (24) hours:

- A Precipitation (rain, snow, or ice) in excess of one-tenth inch (0.10") liquid measure
- B. Temperatures which do not rise above 32 degrees F by 10:00 a.m.
- C. Temperatures which do not rise above that specified for the day's construction activity by 10:00 a.m., if any is specified

22015 WEATHER DELAYS

- D. Sustained wind in excess of twenty-five (25)m.p.h.
- E. Standing snow in excess of one inch(1.00")

Adverse Weather may include, if appropriate, "dry-out" or "mud" days:

A For rain days above the standard baseline; Only if there is a hindrance to site access or sitework, such as excavation, backfill, and footings; and, at a rate no greater than 1 make-up day for each day or consecutive days of rain beyond the standard baseline that total 1.0 inch or more, liquid measure, unless specifically recommended otherwise by the OWNER/ENGINEER.

A Weather Delay Day may be counted if adverse weather prevents work on the project for fifty percent (50%) or more of the contractor's scheduled work day, including a weekend day or holiday if Contractor has scheduled construction activity that day.

### 1.04 DOCUMENTATION

Once the project begins, weather information should be recorded daily on the jobsite daily reports. Any adverse weather, including temperature, wind, rain, etc., should be noted. In addition, notes should be included If the weather event is adversely affecting a specific trade or sequence of work. Adverse weather affects shall also be included in the monthly progress report so all parties to the construction process will be aware of any delays the weather has caused

- END OF SECTION -

22015 WEATHER DELAYS

#### **SUBMITTALS**

#### **PART 1 - GENERAL**

#### 1.01 WORK INCLUDED

Shop drawings, descriptive literature, project data and samples (when samples are specifically requested) for all manufactured or fabricated items shall be submitted by the Contractor to the Engineer for examination and review in the form and in the manner required by the Engineer. All SUBMITTALS shall be furnished in at least six (6) copies and shall be checked, reviewed and signed by the Contractor before submission to the Engineer. The review of the Drawings by the Engineer shall not be construed as a complete check but only for conformance with the design concept of the Project and for compliance with information given in the Contract Documents. Review of such drawings will not relieve the Contractor of the responsibility for any errors that may exist, as the Contractor shall be responsible for the dimensions and design of adequate connections, details, and satisfactory construction of all work.

#### 1.02 RELATED REQUIREMENTS SPECIFIED ELSEWHERE

- A. General Provision.
- B. Section 01720 Project Record Documents (As-Builts).

### 1.03 **DEFINITIONS**

The term "submittals" shall mean shop drawings, manufacturer's drawings, catalog sheets, brochures, descriptive literature, diagrams, schedules, calculations, material lists, performance charts, test reports, office and field samples, and items of similar nature which are normally submitted for the Engineer's review for conformance with the design concept and compliance with the Contract Documents.

#### 1.04 GENERAL CONDITIONS

- A. Review by the Engineer of shop drawings or SUBMITTALS of material and equipment shall not relieve the Contractor from the responsibilities of furnishing same of proper dimension, size, quality, quantity, materials and all performance characteristics to efficiently perform the requirements and intent of the Contract Documents. Review shall not relieve the Contractor from responsibility for errors of any kind on the shop drawings. Review is intended only to assure conformance with the design concept of the Project and compliance with the information given in the Contract Documents.
- B. Review of shop drawings shall not be construed as releasing the Contractor from the responsibility of complying with the Specifications.

## 1.05 GENERAL REQUIREMENTS FOR SUBMITTALS

- A. Shop Drawings:
  - 1. Shop drawings shall be prepared by a qualified detailer. Details shall be identified by reference to sheet and detail numbers shown on Contract Drawings. Where applicable, show fabrication, layout, setting and erection details.
  - 2. Shop drawings are defined as original drawings prepared by the Contractor, subcontractors, suppliers, or distributors performing work under this Contract. Shop

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drawings illustrate some portion of the work and show fabrication, layout, setting or erection details of equipment, materials and components. The Contractor shall, except as otherwise noted, have prepared the number of reviewed copies required for his distribution plus two (2) which will be retained by the Engineer. Shop drawings shall be folded to an approximate size of 8-1/2" x 11" and in such manner that the title block will be located in the lower righthand corner of the exposed surface.

- B. Project data shall include manufacturer's standard schematic drawings modified to delete information which is not applicable to the Project, and shall be supplemented to provide additional information applicable to the Project. Each copy of descriptive literature shall be clearly marked to identify pertinent information as it applies to the Project.
- C. Where samples are required, they shall be adequate to illustrate materials, equipment or workmanship, and to establish standards by which completed work is judged. Provide sufficient size and quantity to clearly illustrate functional characteristics of product and material, with integrally related parts and attachment devices, along with a full range of color samples.
- D. All submittals shall be referenced to the applicable item, section and division of the Specifications, and to the applicable Drawing(s) or Drawing schedule(s).
- E. The Contractor shall review and check SUBMITTALS, and shall indicate his review by initials and date.
- F. If the submittals deviate from the Contract Drawings and/or Specifications, the Contractor shall advise the Engineer, in letter of transmittal of the deviation and the reasons therefor. All changes shall be clearly marked on the submittal with a bold red mark. Any additional costs for modifications shall be borne by the Contractor.
- G. In the event the Engineer does not specifically reject the use of material or equipment at variance to that which is shown on the Drawings or specified, the Contractor shall, at no additional expense to the Owner, and using methods reviewed by the Engineer, make any changes to structures, piping, controls, electrical work, mechanical work, etc., that may be necessary to accommodate this equipment or material. Should equipment other than that on which design drawings are based be accepted by the Engineer, shop drawings shall be submitted detailing all modification work and equipment changes made necessary by the substituted item.
- H. Additional information on particular items, such as special drawings, schedules, calculations, performance curves, and material details, shall be provided when specifically requested in the technical Specifications.
- I. Submittals for all electrically operated items (including instrumentation and controls) shall include complete wiring diagrams showing leads, runs, number of wires, wire size, color coding, all terminations and connections, and coordination with related equipment.
- J. Equipment shop drawings shall indicate all factory or shop paint coatings applied by suppliers, manufacturers and fabricators; the Contractor shall be responsible for insuring the compatibility of such coatings with the field-applied paint products and systems.
- K. Fastener specifications of manufacturer shall be indicated on equipment shop drawings.
- L. Where manufacturers' brand names are given in the Specifications for building and construction materials and products, such as grout, bonding compounds, curing compounds, masonry cleaners, waterproofing solutions and similar products, the Contractor shall submit names and descriptive literature of such materials and products he proposes to use in this Contract.

22015 SUBMITTALS

- M. No material shall be fabricated or shipped unless the applicable drawings or submittals have been reviewed by the Engineer and returned to the Contractor.
- N. All bulletins, brochures, instructions, parts lists, and warranties packaged with and accompanying materials and products delivered to and installed in the Project shall be saved and transmitted to the Owner through the Engineer.

## 1.06 CONTRACTOR RESPONSIBILITIES

- A. Verify field measurements, field construction criteria, catalog numbers and similar data.
- B. Coordinate each submittal with requirements of Work and of Contract Documents.
- C. Notify Engineer, in writing at time of submission, of deviations in submittals from requirements of Contract Documents.
- D. Begin no work, and have no material or products fabricated or shipped which required submittals until return of submittals with Engineer's stamp and initials or signature indicating review.

- END OF SECTION -

22015 SUBMITTALS

## **CONSTRUCTION PHOTOGRAPHY**

### **PART 1 - GENERAL**

## 1.01 WORK INCLUDED

The Contractor shall be responsible for video taping the entire project site both prior to construction and immediately after completion and acceptance of all work. Video tapes shall be produced by a videographer acceptable to the Engineer and of a professional quality.

### 1.02 VIDEO TAPE

The video tape shall be of a high quality DVD format. DVD discs shall show the time, date, and project location on screen during playback.

## 1.03 SUBMITTALS

The Contractor shall provide two copies of the DVD with jackets. Both the DVD's and jackets shall be clearly labeled with project name start date and completion date as shown below.

Project Name and Contract No.
Owner Name
Start Date:
Completion Date:

-END OF SECTION-

### **QUALITY CONTROL**

### **PART 1 - GENERAL**

#### 1.01 QUALITY CONTROL

- A. Work of all crafts and trades shall be laid out to lines and elevations as established by the Contractor from the Drawings or from instructions by the Engineer.
- B. Unless otherwise shown, all work shall be plumb and level, in straight lines and true planes, parallel or square to the established lines and levels. The Work shall be accurately measured and fitted to tolerance as established by the best practices of the crafts and trades involved, and shall be as required to fit all parts of the Work carefully and neatly together.
- C. All equipment, materials and articles incorporated into the Work shall be new and of comparable quality as specified. All workmanship shall be first-class and shall be performed by mechanics skilled and regularly employed in their respective trades.

## 1.02 TESTS, INSPECTIONS, AND CERTIFICATIONS OF MATERIALS

- A. Tests, inspections and certifications of materials, equipment, subcontractors or completed work, as required by the various sections of the Specifications shall be obtained by the Contractor and all costs shall be included in the Contract Price.
- B. The Contractor shall submit to the Engineer the name of testing laboratory to be used.
- C. Contractor shall deliver written notice to the Engineer at least 24 hours in advance of any inspections or tests to be made at the Project site. All inspections, tests, samples for water quality or other procedures requiring the Engineer to attest to be conducted in the field shall be done in the presence of the Engineer or his representative.
- D. Certifications by independent testing laboratories may be by copy of the attestation(s) and shall give scientific procedures and results of tests. Certifications by persons having interest in the matter shall be by original attest properly sworn to and notarized.

- END OF SECTION -

22015 QUALITY CONTROL

#### TEMPORARY FACILITIES AND CONTROLS

### **PART 1 - GENERAL**

### 1.01 DESCRIPTION

- A. The Contractor shall make his own provisions for temporary electricity and water and maintain strict supervision of use of temporary utility services as follows:
  - 1. Enforce compliance with applicable standards.
  - 2. Enforce safety practices
  - 3. Prevent abuse of services.
  - 4. Pay all utility charges required.

## 1.02 REQUIREMENTS OF REGULATORY AGENCIES

- A. The Contractor shall obtain and pay for all permits as required by governing authorities.
- B. Obtain and pay for temporary easements required across property other than that of Owner or that is shown on the Contract Drawings.
- C. The Contractor shall comply with applicable codes.

## 1.03 REMOVAL

- A. The Contractor shall completely remove temporary materials, equipment, and offices upon completion of construction.
- B. The Contractor shall repair damage caused by installation and restore to specified or original condition.

## 1.04 TEMPORARY LIGHTING

- A. The Contractor shall furnish and install temporary lighting required for:
  - 1. Construction needs.
  - 2. Safe and adequate working conditions.
  - 3. Public Safety.
  - 4. Security lighting.
  - 5. Temporary office and storage area lighting.
- B. Service periods for safety lighting shall be as follows:
  - 1. Within construction area: All times that authorized personnel are present.

- 2. Public areas: At all times.
- C. Costs of Installation and Preparation: Contractor shall pay all installation, maintenance and removal costs of temporary lighting.
- D. Maintenance of temporary lighting service (replacement of bulbs, etc.) shall be the sole responsibility of the General Contractor.

#### 1.05 TEMPORARY WATER

The Contractor shall provide the water necessary for testing and disinfection. Water purchased from the owner for flushing and testing shall be paid for at the whole sale price by the contractor. The Contractor shall supply his own hoses, chlorine for disinfection, etc.

### 1.06 SANITARY FACILITIES

Contractor shall provide sanitary facilities as set forth in General Provisions (GP-2.04.Sanitary Regulations).

## 1.07 FIELD OFFICE (Office Trailer not Required for this Contract)

The Contractor shall make his own provisions for providing the electricity, telephone, gas, water, sewer, and other utilities to his office trailer that are required or as necessary for completion of the work.

The Contractor shall be responsible for all utility charges.

#### **PART 2 - PRODUCTS**

Not used.

### **PART 3 - EXECUTION**

#### 3.01 IMPLEMENTATION

- B. The Contractor shall provide measures to prevent soil erosion and discharge of soil-bearing water runoff and airborne dust to storm drains, adjacent areas and walkways prior to the start of any site work.
- C. Straw bale dikes, silt fencing and synthetic filter fabric shall be used as necessary to protect adjacent lands, surface waters, and vegetation to achieve environmental objectives.
- D. Provide barriers in and around excavations and subgrade construction to prevent flooding by runoff of stormwater from heavy rains.
- E. Soil deposited on pavement by construction and other contractor vehicles shall be removed and the pavement swept as required.
- F. Plan and execute construction by methods to control surface drainage from cuts and fills, from borrow and waste disposal areas. Prevent erosion and sedimentation.
- G. Minimize amount of bare soil exposed at one time.
- H. Provide temporary measures such as berms, dikes, drains, hay bales, gabions, etc., as directed by the Engineer so as to minimize siltation due to runoff.

- I. Construct fill and waste areas by selective placement to avoid erosive exposed surface of silts or clays.
- J. Periodically inspect earthwork to detect evidence of erosion and sedimentation; promptly apply corrective measures.

## 3.02 OPERATION AND MAINTENANCE

A. The Contractor shall inspect, repair, and maintain erosion and sediment control measures until final stabilization has been established.

### 3.03 REMOVAL OF FACILITIES

A. The Contractor shall remove the temporary facilities after final stabilization has been established. Used devices (including old straw bales) shall be disposed of as Construction & Demolition debris.

### 3.04 DUST CONTROL

A. Execute work by methods to minimize raising dust from construction operations. Provide positive means to prevent air-borne dust from dispersing into atmosphere.

- END OF SECTION -

## **BARRIERS**

# PART 1 - GENERAL

## 1.01 WORK INCLUDED

Temporary Railing: Temporary railing shall be provided around open pits and other locations where needed, to prevent accidents or injury to persons.

# 1.02 COST

The Contractor shall pay all costs for temporary railing.

- END OF SECTION -

22015 BARRIERS

## **SECURITY**

# PART 1 - GENERAL

## 1.01 WORK INCLUDED

- A. Provide barricades, lanterns and other such signs and signals as may be necessary to warn of the dangers in connection with open excavation and obstructions.
- B. Provide an adequate and approved system to secure the Project area at all times, especially during non-construction periods; the Contractor shall be solely responsible for taking proper security measures.

## 1.02 **COSTS**

Contractor shall pay all costs for protection and security systems.

- END OF SECTION -

22015 SECURITY

#### ACCESS ROADS AND PARKING AREAS

### **PART 1 - GENERAL**

# 1.01 REQUIREMENTS INCLUDED

- A. Access roads.
- B. Parking.
- C. Existing pavements and parking areas.
- D. Permanent pavements and parking areas.
- E. Maintenance.
- F. Removal, resurfacing.

## **PART 2 - PRODUCTS**

## 2.01 MATERIALS

For temporary construction: Contractor's option.

### **PART 3 - EXECUTION**

### 3.01 ACCESS ROADS

- A. Construct temporary all-weather access roads from public thoroughfares to serve construction area, of a width and load-bearing capacity to provide unimpeded traffic for construction purposes.
- B. Construct temporary bridges and/or culverts to span low areas and allow unimpeded drainage.
- C. Extend and relocate as work progress requires, provide detours as necessary for unimpeded traffic flow.
- D. Locate temporary access roads as approved by the Owner and/or the Engineer.

#### 3.02 PARKING

The Contractor shall construct temporary parking areas to accommodate use of construction personnel in the area.

## 3.03 REMOVAL, REPAIR

- A. Remove temporary materials and construction when permanent facilities are usable, as directed by the Engineer.
- B. Repair existing permanent facilities damaged by usage to original and/or specified condition.

#### TRAFFIC REGULATION

### **PART 1 - GENERAL**

# 1.01 REQUIREMENTS INCLUDED

- A. Construction parking control.
- B. Flagmen.
- C. Flares and lights.
- D. Haul routes.
- E. Traffic signs and signals.
- F. Removal.

# 1.02 RELATED REQUIREMENTS

- A. Section 01530 Barriers.
- B. Section 01580 Project Identification and Signs.

### **PART 2 - PRODUCTS**

## 2.01 SIGNS, SIGNALS AND DEVICES

- A. Post-mounted and wall-mounted traffic control and informational signs as specified and required by local jurisdictions.
- B. Automatic Traffic Control Signals: As approved by local jurisdictions.
- C. Traffic Cones and Drums, Flares and Lights: As approved by local jurisdictions.
- D. Flagman Equipment: As required by local jurisdictions.

#### **PART 3 - EXECUTION**

### 3.01 CONSTRUCTION PARKING CONTROL

- A. Control vehicular parking to prevent interference with public traffic and parking, access by emergency vehicles, and Owner's operations.
- B. Monitor parking of construction personnel's vehicles in existing facilities. Maintain vehicular access to and through parking areas.
- C. Prevent parking on or adjacent to access roads or in nondesignated areas.

22015 TRAFFIC REGULATION

### 3.02 TRAFFIC CONTROL

- A. Whenever and wherever, in the Engineer's opinion, traffic is sufficiently congested or public safety is endangered, Contractor shall furnish uniformed officers to direct traffic and to keep traffic off the highway area affected by construction operations.
- B. Contractor shall abide by City regulations governing utility construction work.
- C. Traffic control shall be provided according to the Kentucky Department of Highways Manual on Uniform Traffic Control Devices for Streets and Highways.

### 3.03 FLAGMEN

Provide trained and equipped flagmen to regulate traffic when construction operations or traffic encroach on public traffic lanes.

### 3.04 FLARES AND LIGHTS

Use flares and lights during hours of low visibility to delineate traffic lanes and to guide traffic.

### 3.05 HAUL ROUTES

- A. Consult with authorities, establish public thoroughfares to be used for haul routes and site access.
  - B. Confine construction traffic to designated haul routes.
  - C. Provide traffic control at critical areas of haul routes to regulate traffic and minimize interference with public traffic.

## 3.06 TRAFFIC SIGNS AND SIGNALS

- A. At approaches to site and on site, install appropriate signs at crossroads, detours, parking areas, and elsewhere as needed to direct construction and affected public traffic.
- B. Install and operate traffic control signals to direct and maintain orderly flow of traffic in areas under Contractor's control, and areas affected by Contractor's operations.
- C. Relocate as work progresses, to maintain effective traffic control.

#### 3.07 REMOVAL

Remove equipment and devices when no longer required. Repair damage caused by installation. Remove post settings to a depth of 2 feet.

- END OF SECTION -

22015 TRAFFIC REGULATION

# PROJECT IDENTIFICATION AND SIGNS

### **PART 1 - GENERAL**

### 1.01 WORK INCLUDED

- A. The Contractor shall provide all signs required by these specifications near the site of the work. The sign shall set forth the description of the work and the names of the Owner, Engineer and Contractor as shown on the Plans or in these Specifications.
- B. The Contractor shall furnish and install One (1) sign on the Project. One sign shall conform to the specifications and painted as shown on Figure I on the following page. The location of signs shall be determined by the Owner and/or Engineer at the pre-construction meeting.

### **PART 2 - PRODUCT**

### 2.01 SIGN

The sign shall be constructed of 3/4" thick APA A-B Exterior grade or marine plywood. Posts shall be 4" x 4" of fencing type material. Prime all wood with white primer. Sign shall be as shown in Figure I and II.

### **PART 3 - EXECUTION**

#### 3.01 MAINTENANCE

The sign shall be maintained in good condition until completion of the Project.

### 3.02 LOCATION

The location of the project signs shall be determined at the pre-construction conference after the contract has been awarded.

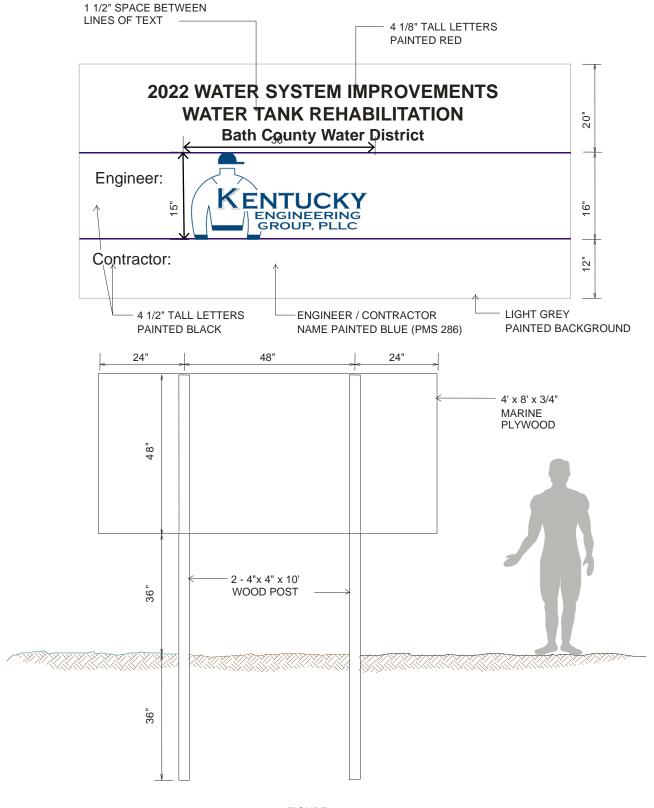


FIGURE 1 01580-2

## MATERIAL AND EQUIPMENT

### **PART 1 - GENERAL**

### 1.01 COMPLIANCE WITH SAFETY REGULATIONS

The equipment items furnished shall comply with all governing Federal and State laws regarding safety, including all requirements of the Occupational Safety and Health Act of 1970 (OSHA).

### **PART 2 - PRODUCTS**

## 2.01 REFERENCES

- A. General Provisions: Section 10 Correction and Guarantee of Work, Section 13 Materials and Equipment.
- B. Section 02600 Pipe, Fittings, and Installation
- C. Section 02640 Valves.
- D. All material shall meet applicable American Water Works Association (AWWA), American Standard Testing Methods (ASTM), Underwriters Laboratories (UL), Factory Mutual (FM), National Sanitation Foundation (NSF) standards.

## **BATH COUNTY WATER DISTRICT**

The following is a list of approved manufacturers for the materials to be provided on the project. All material shall meet applicable AWWA, ASTM, Underwriters Laboratories, and Factory Mutual standards. The Owner approves this list and the Owner and Engineer shall approve any deviation.

MATERIAL/ITEM	APPROVED MANUFACTURER
Air Release Valve	ARI s-010, or Approved Equal
All Brass Fittings (AWWA brass)	Mueller, Ford Q Fittings, or Approved Equal
Aluminum Hatch	Bil-Co or Approved Equal
Blowoff Hydrant Assembly	Mueller® 411 2-1/8 Post Type One Way or Approved Equal
Blowoff Hydrant Assembly (Underground in meter box pipe and valve)	M.J. Valve & M.J. 90 with grip ring pack on both sides of valve in Round Meter Box w/2 piece Locking Lid
Underground Blowoff Hydrant Assembly	Mueller Model No. A-412 or Approved Equal 6" and above
Flushing Hydrant Assembly	Mueller® Super Centurion 250 ® Model A-423 or Approved Equal
Bolted Cast Couplings	Mueller or Approved Equal
Brass Nipples and Pipe	Ford or Approved Equal
Brass Service Saddles	Ford or Approved Equal
Butterfly Valves (Class 150)	Mueller Lineseal III or Approved Equal

MATERIAL/ITEM	APPROVED MANUFACTURER
Butterfly Valves (Class 250)	Mueller Lineseal XP or Approved Equal
Casing Spacers	State Origin or approved equal.
Check Valve	American Flow Control, or Approved Equal.
Control Valve	Cal-Val or Approved Equal.
Gate Valves	Mueller MJ Resilient Seat or Approved Equal
PVC Valve Boxes	PVC pipe 6" SDR 21 Lamp Post or Top Hat Valve Box Top
Grip Ring MJ Packs	2" and 3" Midco Perma Grip 4" and larger Romac Grip Ring Glands (To be used on all fittings and valves)
MJ Fittings Compact/Full Body MJ Packs	Tyler, Sigma and Grip Ring MJ Glands or Approved Equal.
HDPE Pipe	Flying W, WL Plastics or Approved Equal
Blowoff & Air Release Boxes	Round Plastic 18" x 36" 2 pc Locking Lid
Copper Tracing Wire	12 AWG coated wire with 3M Direct Bury Splice Kit
Mainline Pressure Reducing Valve	Cla-Val or Approved Equal
Customer Individual Pressure Reducing Valve	Wilkins Model BR 4 SC or Approved Equal
Mainline Master Meter	Badger Turbo or Sensus Omni with Strainer
Customer Meter (as specified for project in sec. 1025)	Badger Orion radio read equipment type R25 with Data Profiling Feature or Approved Equal
Customer Meter Box Cover	Carson Ind. Plastic Lid with cast Iron Reader 24" depth or Approved Equal
Customer Meter Setter	Ford VHH72-7W-44-33Q – Tandem Setter TVHH72-7W-44-33Q w/dual check valve on the outlet side or Approved Equal.
Service Tubing – Polyethylene Tubing (CTS Service Tubing)	Endot (blue) or approved equal.
1-Inch Service Tubing - Type K Copper Soft	Domestic or approved equal.
Steel Tapping Valves and Sleeves (Check Working Pressure)	Ford or Approved Equal
DI and Cast Iron Full Body Tapping Sleeves	Ford or Approved Equal
DI Double Strap Service Saddles	Ford or Approved Equal
DI Pipe Class 350	Clow, US Pipe, American DI Pipe or Approved Equal
Dual Disc Check Valve	Ford, Mueller or Approved Equal.
Full Circle Repair Clamps	Ford, Smith Blair or Approved Equal. (All Stainless Steel)
Above Ground Valve Marker	2" PVC pipe with glued cap and sticker
Precast Concrete Manholes	Cloud, Sherman-Dixie or Approved Equal
Frecast Concrete Mannoles	, 11 1

MATERIAL/ITEM	APPROVED MANUFACTURER	
PVC Pipe Class 200, 250, or C900	Certainteed, or Approved Equal	

#### TRANSPORTATION AND HANDLING

### **PART 1 - GENERAL**

### 1.01 WORK INCLUDED

- A. Handling and Distribution:
  - 1. The Contractor shall handle, haul, and distribute all materials and all surplus materials on the different portions of the work, as necessary or required; shall provide suitable and adequate storage room for materials and equipment during the progress of the work, and be responsible for the protection, loss of, or damage to materials and equipment furnished by him, until the final completion and acceptance of the work.
  - 2. Storage and demurrage charges by transportation companies and vendors shall be borne by the Contractor.
- B. Storage of Materials and Equipment: All excavated materials and equipment to be incorporated in the work shall be placed so as not to injure any part of the work or the existing facilities and so that free access can be had at all times to all parts of the work and to all public utility installations in the vicinity of the work. Materials and equipment shall be kept neatly piled and compactly stored in such locations as will cause a minimum of inconvenience to public travel and adjoining owners, tenants and occupants.

## PROJECT CLOSEOUT

### **PART 1 - GENERAL**

## 1.01 RELATED REQUIREMENTS SPECIFIED ELSEWHERE

- A. Liquidated Damages: General Provisions-11.20. CHARGES FOR DELAY CAUSED BY THE CONTRACTOR
- B. Cleaning: Section 01710.
- C. Project Record Documents: Section 01720.

#### 1.02 SUBSTANTIAL COMPLETION

- A. Contractor:
  - 1. Submit written certification to Engineer that project is substantially complete.
  - 2. Submit list of major items to be completed or corrected.
- B. Engineer will make an inspection within seven days after receipt of certification, together with Owner's Representative.
- C. Should Engineer consider that work is substantially complete:
  - 1. Contractor shall prepare, and submit to Engineer, a list of items to be completed or corrected, as determined by the inspection.
  - 2. Engineer will prepare and issue a Certificate of Substantial Completion, containing:
    - a. Date of Substantial Completion.
    - b. Contractor's list of items to be completed or corrected, verified and amended by Engineer.
    - c. The time within which Contractor shall complete or correct work of listed items.
    - d. Time and date Owner will assume possession of work or designated portion thereof.
    - e. Responsibilities of Owner and Contractor for:
      - (1) Insurance
      - (2) Utilities
      - (3) Operation of mechanical, electrical and other systems.
      - (4) Maintenance and cleaning.
      - (5) Security

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- f. Signatures of:
  - (1) Engineer.
  - (2) Contractor.
  - (3) Owner.
- 3. Owner occupancy of Project or Designated Portion of Project:
  - a. Contractor shall:
    - (1) Obtain certificate of occupancy.
    - (2) Perform final cleaning in accordance with Section 01710.
  - b. Owner will occupy Project, under provisions stated in Certificate of Substantial Completion.
- 4. Contractor shall complete work listed for completion or correction, within designated time.
- D. Should Engineer consider that work is not substantially complete.
  - 1. He shall immediately notify Contractor, in writing, stating reasons.
  - 2. Contractor shall complete work, and send second written notice to Engineer, certifying that Project, or designated portion of Project is substantially complete.
  - 3. Engineer will reinspect work.

### 1.03 FINAL INSPECTION

- A. Contractor shall submit written certification that:
  - 1. Contract Documents have been reviewed.
  - 2. Project has been inspected for compliance with Contract Documents.
  - 3. Work has been completed in accordance with Contract Documents.
  - 4. Equipment and systems have been tested in presence of Owner's Representative and are operational.
  - 5. Project is completed and ready for final inspection.
- B. Engineer will make final inspection within seven (7) days after receipt of certification.
- C. Should Engineer consider that work is finally complete in accordance with requirements of Contract Documents, he shall request Contractor to make Project Closeout submittals.
- D. Should Engineer consider that work is not finally complete:
  - 1. He shall notify Contractor, in writing, stating reasons.
  - 2. Contractor shall take immediate steps to remedy the stated deficiencies, and send second written notice to Engineer certifying that work is complete.

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3. Engineer will reinspect work.

## 1.04 FINAL CLEAN UP

The Work will not be considered as completed and final payment made until all final clean up has been done by the Contractor in a manner satisfactory to the Engineer. See Section 01710 for detailed requirements.

## 1.05 CLOSEOUT SUBMITTALS

Project Record Documents: To requirements of Section 01720.

### 1.06 FINAL APPLICATION FOR PAYMENT

Contractor shall submit final applications in accordance with requirements of GENERAL PROVISIONS.

## 1.07 FINAL CERTIFICATE FOR PAYMENT

- A. Engineer will issue final certificate in accordance with provisions of GENERAL PROVISIONS.
- B. Should final completion be materially delayed through no fault of Contractor, Engineer may issue a Semi-Final Certificate for Payment.

- END OF SECTION -

22015 PROJECT CLOSEOUT

#### **CLEANING**

#### **PART 1 - GENERAL**

### 1.01 WORK INCLUDED

- A. During its progress the work and the adjacent areas affected thereby shall be kept cleaned up and all rubbish, surplus materials, and unneeded construction equipment shall be removed and all damage repaired so that the public and property owners will be inconvenienced as little as possible.
- B. Where material or debris has washed or flowed into or been placed in existing watercourses, ditches, gutters, drains, pipes, structures, by work done under this contract, or elsewhere during the course of the Contractor's operations, such material or debris shall be entirely removed and satisfactorily disposed of during the progress of the work, and the ditches, channels, drains, pipes, structures, and work, etc., shall, upon completion of the work, be left in a clean and neat condition.
- C. On or before the completion of the work, the Contractor shall, unless otherwise especially directed or permitted in writing, tear down and remove all temporary buildings and structures built by him; shall remove all temporary works, tools, and machinery or other construction equipment furnished by him; shall remove, acceptably disinfect, and cover all organic matter and material containing organics in, under, and around privies, houses, and other buildings used by him; shall remove all rubbish from any grounds which he has occupied; and shall leave the roads and all parts of the premises and adjacent property affected by his operations in a neat and satisfactory condition.
- D. The Contractor shall thoroughly clean all materials and equipment installed by him and his subcontractors, and on completion of the work shall deliver it undamaged and in fresh and new appearing condition.
- E. The Contractor shall restore or replace, when and as directed, any public or private property damaged by his work, equipment, or employees, to a condition equal or better than that existing immediately prior to the beginning of operations. To this end the Contractor shall do as required all necessary highway or driveway, walk, and landscaping work. Suitable materials, equipment, and methods shall be used for such restoration. The restoration of existing property or structures shall be done as promptly as practicable as work progresses and shall not be left until the end of the contract period.

#### 1.02 DESCRIPTION

- A. Related Requirements Specified Elsewhere:
  - 1. Project Closeout: Section 01700.
  - 2. Cleaning for Specific Products or Work: Specification Section for that work.
- B. On a continuous basis, maintain premises free from accumulations of waste, debris, and rubbish, caused by operations.

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C. At completion of Work, remove waste materials, rubbish, tools, equipment, machinery and surplus materials, and clean all sight-exposed surfaces; leave Project clean and ready for occupancy.

## 1.03 SAFETY REQUIREMENTS

- A. Hazards Control:
  - 1. Store volatile wastes in covered metal containers, and remove from premises daily.
  - 2. Prevent accumulation of wastes, which create hazardous conditions.
  - 3. Provide adequate ventilation during use of volatile or noxious substances.
- B. Conduct cleaning and disposal operations in compliance with local ordinances and antipollution laws.
  - 1. Do not burn or bury rubbish and waste materials on Project site without written permission from the Owner.
  - 2. Do not dispose of volatile wastes such as mineral spirits, oil, or fuel in open drainage ditches or storm or sanitary drains.
  - 3. Do not dispose of wastes into streams or waterways.

#### **PART 2 - PRODUCTS**

#### 2.01 MATERIALS

- A. Use only cleaning materials recommended by manufacturer of surface to be cleaned.
- B. Use cleaning materials only on surfaces recommended by cleaning material manufacturer.

### **PART 3 - EXECUTION**

### 3.01 DURING CONSTRUCTION

- A. Execute cleaning to ensure that grounds and public properties are maintained free from accumulations of waste materials and rubbish.
- B. Wet down dry materials and rubbish to minimize blowing dust.
- C. At reasonable intervals during progress of Work, clean site and public properties, and dispose of waste materials, debris and rubbish.
- D. Provide on-site containers for collection of waste materials, debris and rubbish.
- E. Remove waste materials, debris and rubbish from site and legally dispose of at public or private dumping areas off construction site.
- F. The Contractor shall thoroughly clean all materials and equipment installed.

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# 3.02 FINAL CLEANING

- A. Employ experienced workmen, or professional cleaners, for final cleaning.
- B. In preparation for substantial completion, conduct final inspection of project area(s).
- C. Broom clean paved surfaces; rake clean other surfaces of grounds.
- D. Maintain cleaning until Project, or portion thereof, is accepted by Owner.

- END OF SECTION -

22015 CLEANING

# PROJECT RECORD DOCUMENTS

### **PART 1 - GENERAL**

### 1.01 WORK INCLUDED

The Contractor shall obtain from the Engineer, one (1) set of prints of the Contract Drawings. These prints shall be kept and maintained in good condition at the project site and a qualified representative of the Contractor shall enter upon these prints, <u>from day-to-day</u>, the actual "as-built" record of the construction progress. Entries and notations shall be made in a neat and legible manner and these prints shall be delivered to the Engineer upon completion of the construction. APPROVAL FOR FINAL PAYMENT WILL BE CONTINGENT UPON COMPLIANCE WITH THIS PROVISION.

# 1.02 RELATED REQUIREMENTS SPECIFIED ELSEWHERE:

- A. Section 01300 Submittals.
- B. General Provisions

### 1.03 MAINTENANCE OF DOCUMENTS

- A. Maintain at job site, one copy of:
  - 1. Contract Drawings
  - 2. Specifications
  - 3. Addenda
  - 4. Reviewed Shop Drawings
  - 5. Change Orders
  - 6. Other Modifications to Contract
- B. Store documents in approved location, apart from documents used for construction.
- C. Provide files and racks for storage of documents.
- D. Maintain documents in clean, dry legible condition.
- E. Do not use record documents for construction purposes.
- F. Make documents available at all times for inspection by Engineer and Owner.

#### 1.04 MARKING DEVICES

Provide colored pencil or felt-tip marking pen for all marking.

### 1.05 RECORDING

A. Label each document "PROJECT RECORD" in 2-inch high printed letters.

- B. Keep record documents current.
- C. Do not permanently conceal any work until required information has been recorded.
- D. Contract Drawings: Legibly mark to record actual construction:
  - 1. Horizontal and vertical location of underground utilities and appurtenances referenced to permanent surface improvements.
  - 2. Location of internal utilities and appurtenances concealed in construction referenced to visible and accessible features of structure.
  - 3. Field changes of dimension and detail.
  - 4. Changes made by Change Order or Field Order.
  - 5. Details not on original Contract Drawings.
- E. Specifications and Addenda: Legibly mark up each Section to record:
  - 1. Manufacturer, trade name, catalog number, and supplier of each product and item of equipment actually installed.
  - 2. Changes made by Change Order or Field Order.
  - 3. Other matters not originally specified.
- F. Shop Drawings: Maintain as record documents; legibly annotate Shop Drawings to record changes made after review.

### 1.06 SUBMITTAL

- A. At completion of project, deliver record documents to Engineer.
- B. Accompany submittal with transmittal letter, in duplicate, containing:
  - 1. Date.
  - 2. Project Title and Number.
  - 3. Contractor's Name and Address.
  - 4. Title and Number of each Record Document.
  - 5. Certification that each Document as Submitted is Complete and Accurate.
  - 6. Signature of Contractor, or his authorized Representative.

#### **OPERATING AND MAINTENANCE DATA**

### **PART 1 - GENERAL**

# 1.01 WORK INCLUDED

- A. Compile product data and related information appropriate for Owner's maintenance and operation of equipment furnished under the contract. Prepare operating and maintenance data as specified.
- B. Instruct Owner's personnel in the maintenance and operation of equipment and systems as outlined herein and/or in other Divisions.
- C. In addition to maintenance and operations data, the manufacturer's printed recommended installation practice shall also be included. If not part of the operations and maintenance manual, separate written installation instructions shall be provided, serving to assist the Contractor in equipment installation.
  - D. Related Requirements Specified Elsewhere:
    - 1. Section 01300 Submittals.
    - 2. Section 01700 Project Closeout.
    - 3. Section 01720 Project Record Documents.
    - 4. Section 01740 Warranties and Bonds.
    - 5. General Provisions

### 1.02 MAINTENANCE AND OPERATIONS MANUAL

Every piece of equipment furnished and installed shall be provided with complete maintenance and operations manuals. These shall be detailed in instructions to the Owner's personnel. They shall be attractively bound for the Owner's records.

The manuals shall be submitted to the Engineer for review as to adequacy and completeness. Provide three (3) copies each.

#### 1.03 FORM OF SUBMITTALS

- A. Prepare data in the form of an instructional manual for use by Owner's personnel.
- B. Format:
  - 1. Size: 8-1/2 x 11 in.
  - 2. Paper: 20 pound minimum, white, for typed pages.
  - 3. Text: Manufacturer's printed data, or neatly typewritten.
  - 4. Drawings:
    - a. Provide reinforced punched binder tab, bind with text.

- b. Fold large drawings to the size of the text pages where feasible.
- c. For all drawings included within manuals, furnish a 3 mil mylar copy in standard size drawings 36" x 24", 8" x 16" or 8-1/2" x 11".
- d. For flow or piping diagrams that cannot be detailed on the standard size drawings, a larger, appropriate size drawing may be submitted.
- 5. Provide fly-leaf for each separate product, or each piece of operating equipment.
  - a. Provide typed description of product, and major component parts of equipment.
  - b. Provide indexed tabs.
- 6. Cover: Identify each volume with types or printed title "OPERATING AND MAINTENANCE INSTRUCTIONS". List:
  - a. Title of Project.
  - b. Identity of separate structure as applicable.
  - c. Identity of general subject matter covered in the manual.

#### C. Binders:

- 1. Commercial quality, durable and cleanable, 3-hole, 3" or 4" post type binders, with oil and moisture resistant hard covers.
- 2. When multiple binders are used, correlate the data into related consistent grouping.
- 3. Labeled on the front cover and side of each binder shall be the name of the Project, the Contract Number and Volume Number.

### 1.04 CONTENT OF MANUAL

- A. Neatly typewritten table of contents for each volume, arranged in systematic order.
  - 1. Contractor, name of responsible principal, address and telephone number.
  - 2. A list of each product required to be included, indexed to the content of the volume.
  - 3. List, with each product, the name, address and telephone number of:
    - a. Subcontractor or installer.
    - b. Maintenance contractor, as appropriate.
    - c. Identify the area of responsibility of each.
    - d. Local source of supply for parts and replacement.
  - 4. Identify each product by product name and other identifying symbols as set forth in Contract Documents.

### B. Product Data:

- 1. Include only those sheets which are pertinent to the specific product. References to other sizes and types or models of similar equipment shall be deleted or lined out.
- 2. Annotate each sheet to:
  - a. Clearly identify the specific product or part installed.
  - b. Clearly identify the data applicable to the installation.
  - c. Provide a parts list for all new equipment items, with catalog numbers and other data necessary for ordering replacement parts.
  - d. Delete references to inapplicable information.
- 3. Clear and concise instructions for the operation, adjustment, lubrication, and other maintenance of the equipment including a lubrication chart.

# C. Drawings:

- 1. Supplement product data with drawings as necessary to clearly illustrate:
  - a. Relations of component parts of equipment and systems.
  - b. Control and flow diagrams.
- 2. Coordinate drawings with information in Project Record Documents to assure correct illustration of completed installation.
- 3. Do not use Project Record Documents as maintenance drawings.
- D. Written text, as required to supplement product data for the particular installation:
  - 1. Organize in a consistent format under separate headings for different procedures.
  - 2. Provide a logical sequence of instructions for each procedure.
- E. Copy of each warranty, bond and service contract issued: Provide information sheet for Owner's personnel.
  - 1. Proper procedures in the event of failure.
  - 2. Instances which might affect the validity of warranties or bonds.
- F. These manuals shall be delivered to the Engineer at the time designated by the Engineer. The manuals must be approved by the Engineer before final payment on the equipment is made.

#### WARRANTIES AND BONDS

### **PART 1 - GENERAL**

## 1.01 WORK INCLUDED

- A. Compile specified warranties and bonds.
- B. Compile specified service and maintenance contracts.
- C. Co-execute submittals when so specified.
- D. Review submittals to verify compliance with Contract Documents.
- E. Related requirements specified elsewhere:
  - 1. Bid Bond: Instructions to Bidders.
  - 2. Performance and Payment Bonds: General Provisions.
  - 3. Guaranty: General Provisions.
  - 4. General Warranty of Construction: General Provisions.
  - 5. Project Closeout: Section 01700.
  - 6. Warranties and Bonds required for specific products: As listed herein.
  - 7. Provisions of Warranties and Bonds, Duration: Respective specification sections for particular products.
  - 8. Operating and Maintenance Data: Section 01730.

# 1.02 SUBMITTALS REQUIREMENTS

- A. Assemble warranties, bonds and service and maintenance contracts, executed by each of the respective manufacturers, suppliers and subcontractors.
- B. Furnish two (2) original signed copies.
- C. Table of Contents: Neatly typed, in orderly sequence. Provide complete information for each item.
  - 1. Product, equipment or work item.
  - 2. Firm name, address and telephone number.
  - 3. Scope
  - 4. Date of beginning of warranty, bond or service and maintenance contract.
  - 5. Duration of warranty, bond or service and maintenance contract.

- 6. Provide information for Owner's personnel:
  - a. Proper procedure in case of failure.
  - b. Instances which might affect the validity of warranty or bond.
- 7. Contractor name, address and telephone number.

### 1.03 FORM OF SUBMITTALS

- A. Prepare in duplicate packets.
- B. Format:
  - 1. Size 8-1/2 in. x 11 in., punch sheets for 3-ring binder: Fold larger sheets to fit into binders.
  - 2. Cover: Identify each packet with typed or printed title "WARRANTIES AND BONDS". List:
    - a. Title of Project.
    - b. Name of Contractor.
- C. Binders: Commercial quality, three-ring, with durable and cleanable plastic covers.

#### 1.04 TIME OF SUBMITTALS

- A. For equipment or component parts of equipment put into service during progress of construction: Submit documents within 10 days after inspection and acceptance.
- B. Otherwise, make submittals within 10 days after date of substantial completion, prior to final request for payment.
- C. For items of work, where acceptance is delayed materially beyond the Date of Substantial Completion, provide updated submittal within 10 days after acceptance, listing the date of acceptance as the start of the warranty period.

## 1.05 SUBMITTALS REQUIRED

Submit warranties, bonds, service and maintenance contracts as specified in the respective sections of the Specifications.

#### SITE RESTORATION

#### **PART 1 - GENERAL**

### 1.01 CLEAN-UP

Upon completion of the installation of the water main and appurtenances, the Contractor shall remove all debris and surplus construction materials resulting from his work. The Contractor shall grade the ground along each side of the pipe trench and/or structure in a uniform and neat manner leaving the construction area in a shape as near as possible to the original ground line.

### **PART 2 - PRODUCTS**

### 2.01 SEEDING

A. All graded areas shall be seeded at the rate of six (6) pounds of seed per 1,000 square feet. The mixture shall consist of:

Kentucky 31 Fescue	60%
Creeping Red Fescue	20%
Annual Rye Grass	20%

B. After seed has been distributed, the Contractor shall cover areas with straw to a depth of 1-1/2". Any necessary re-seeding or repairing shall be accomplished by the Contractor before final acceptance. Seeding is not a pay item.

### **PART 3 - EXECUTION**

### 3.01 SITE RESTORATION

- A. After installation of water lines, the construction site will be restored to its original condition or better. All paved streets, roads, sidewalks, curbs, etc. removed or disturbed during construction shall be replaced, and all materials and workmanship shall conform to standard practices and specifications of the Owner, and/or to the Kentucky Department of Highways requirements, and specifications, whichever applies. Gravel, cinder or dirt streets, drives and shoulders shall be replaced and sufficiently compacted to provide a surface suitable for carrying the type of traffic normally imposed at the location.
- B. All seeded areas shall be watered daily during the germination period, unless rain supplies the required moisture. The Contractor shall replace, at his own expense, trees, shrubs, etc. disturbed during construction.
- C. The Contractor shall remove from the site all equipment, unused materials and other items at his expense. The construction site shall be left in a neat, orderly condition, clear of all unsightly items, before the Work is finally accepted.

- END OF SECTION -

22015 SITE RESTORATION

#### PAINTING AND SANDBLASTING

#### PART 1 - GENERAL

### 1.01 WORK INCLUDED

- A. Salt Lick Tank Surface preparation shall consist of near white blast cleaning in accordance with SSPC-SP 10 in the interior of the tank, and power wash cleaning of the exterior along with SP 3 power tool cleaning of all corrosion areas and apply primer and coating system to all affected areas.
- B. Perry Road Tank Surface preparation shall consist of power washing the exterior surfaces, spot repair cleaning SP 3 power tool both the exterior and the interior surfaces and apply primer and coating system to all affected areas.
- C. Ore Mines Tank Surface preparation shall consist of power washing the exterior surfaces, spot repair cleaning SP 3 power tool both the exterior and the interior surfaces and apply primer and coating system to all affected areas.
- D. Owingsville Elevated Tank Surface preparation shall consist of near white blast cleaning in accordance with SSPC-SP 10 in the interior of the tank, and power wash cleaning of the exterior along with SP 3 power tool cleaning of all corrosion areas and apply primer and coating system to all affected areas.

### 1.02 REQUIREMENTS

The Contractor shall furnish all materials, labor, equipment and appliances and shall do all tank surface preparation and field painting as specified herein.

#### 1.03 REFERENCES.0

- A. AWWA D102 (Latest Revisions) Standards.
- B. Kentucky State Board of Health.
- C. U.S. Environmental Protection Agency.
- D. KY Environmental and Public Protection Cabinet.
- E. ASTM D 16 Terminology Relating to Paint, Varnish, Lacquer, and Related Products
- F. ASTM D 4263 Indicating Moisture in Concrete by the Plastic Sheet Method
- G. ASTM F 1869 Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride.
- H. AWWA C 652 Disinfection of Water Storage Facilities.
- I. AWWA D 102 Painting Steel Water Storage Tanks.

- J. SSPC-SP 3 Power Tool Cleaning.
- K. SSPC-SP 6/NACE 3 Commercial Blast Cleaning.
- L. SSPC-SP 10/NACE 2 Near White Metal Blast Cleaning.
- M. SSPC-SP 11 Power Tool Cleaning to Bare Metal.
- N. SSPC-SP 13/NACE 6 Surface Preparation of Concrete
- O. NSF/ANSI/CAN 600

### 1.04 SUBMITTAL

- A. Color chips of finish coatings.
- B. Manufacturer's name and number for each product to be used.
- C. Performance data for substitute products.
- D. Color Selection Charts.

### 1.05 QUALITY CONTROL

- A. The Contractor shall do a complete painting job throughout the work in accordance with these Specifications, the paint manufacturer's current surface preparation and application instructions, and with generally accepted practices for work of high quality.
- B. All paints and painting materials not specifically specified shall be high-grade products of nationally known manufacturers of established good reputation and shall be suitable for the intended use. Materials listed in the painting schedule without reference to a specification number, or materials not further described hereinafter, shall be products that have had a minimum of two years' satisfactory field service.
- C. All paint shall be applied under favorable conditions by skilled painters to produce smooth even coatings of all interior and exterior surfaces.
- D. Contractor to complete Holiday Detection, for all interior surfaces, in accordance with NACE International RPO188. Three copies of the results, noting any deficiencies, shall be transmitted to the Engineer.
- E. Manufacturer's Qualifications:
  - 1. Specialize in manufacture of coatings with a minimum of 10 years successful experience.
  - 2. Able to demonstrate successful performance on comparable projects.
  - 3. Single Source Responsibility: Coatings and coating application accessories shall be products of a single manufacturer.
- F. Applicator's Qualifications:

- 1. Experienced in application of specified coatings for a minimum of 5 years on projects of similar size and complexity of this work.
- 2. Applicator's Personnel: Employ persons trained for application of specified coatings.

#### **PART 2 - PRODUCTS**

#### 2.01 MATERIALS

- A. The paints to be used in the work shall be products of the Rust-Oleum Company supplied by High Performance Products/Mark Sholtes of Louisville, KY, (502) 552-3569, mark.sholtes@hppindustrial.com. The types of paint products to be used in the work shall be identified by the manufacturer's name and/or number and brought to the job site in the original sealed containers of the manufacturer. All paints and paint products used on the project shall be from the same manufacturer.
- B. The products of the manufacturers other than those herein named, which are acceptable equivalents to the products specified, may be substituted, except that, insofar as possible, all paints applied to a surface shall be products of one manufacturer. Data showing equivalent performance of each paint product to be substituted for the ones specified shall be submitted in writing to the Engineer for review at least 30 calendar days before the painting is to begin, and no painting shall proceed until the substituted products have been accepted.
- C. All paints and painting materials not particularly specified shall be high-grade products of nationally known manufacturers of established good reputation and shall be suitable for the intended use. Materials listed in the painting schedule without reference to a specification number, and not further described hereinafter, shall be products that have had a minimum of two years' satisfactory field service.
- D. All paints shall comply with the latest EPA regulations concerning volatile organic compounds (VOC).

#### 2.02 COLORS AND FINISHES

- A. The colors of finish coatings shall be selected by the Engineer from color chips submitted by the Contractor for review. The color selection shall be in the form of a color schedule indicating the colors to be used on the various surfaces. The colors used in the final work shall be in accordance with the color schedule and shall match the selected color chips.
- B. In order to provide contrast between successive coats, each coat shall be of such tint as will distinguish it from preceding coats.

#### 2.03 STORING AND MIXING

All painting materials shall be stored and mixed in a single place. The Contractor shall not use any plumbing fixture or pipe for mixing or for disposal of any refuse material. The Contractor shall carry to his mixing room all water necessary and shall dump all waste outside of the structure into a suitable receptacle so as not to create hazards or damage. The Contractor will be held responsible for all damage due to his failure to observe these provisions.

#### **PART 3 - EXECUTION**

#### 3.01 SURFACE PREPARATION

- A. General: Before any surface is painted, it shall be cleaned carefully of all dust, dirt, grease, loose rust, mill scale, old, weathered paint unsuitable for top coating, efflorescence, oil, moisture, or other foreign matter and conditions detrimental to coating bond and life. All necessary special preparatory treatment shall then be applied in strict accordance with the paint manufacturer's written instructions. Where required, imperfections and holes in surfaces to be painted shall be filled in an acceptable manner.
- B. Abrasive Blast Cleaning: All interior metal surfaces shall be cleaned by abrasive blasting to near white metal corresponding to SSPC-SP10 "Near White Metal Blasting" prior to applying any paint to the surfaces. All exterior metal surfaces shall be cleaned to a "commercial" finish corresponding to SSPC-SP6 "Commercial Blast Cleaning." A surface profile of 1.5 to 2.5 mils shall be achieved on all abrasive blasted surfaces. Abrasive blasted surfaces shall be painted at the end of each working day and not allowed to remain unpainted until the next working day.
- C. All abrasive blasting work to be conducted on areas not previously abrasive blasted which are adjacent to areas that have previously been blasted and painted shall be done in a manner so that a minimum of six (6) inches of the painted surface is removed and will receive a fresh coat of paint at the same time as the newly blasted surface. This method shall be used for all interior and exterior surfaces.
- D. Coordination: Surface preparation and painting shall be so programmed that dust and other contaminates from the cleaning process will not fall on wet, newly painted surfaces.
- E. All surface preparation work shall comply with all NSF/ANSI Standard 61 and all state and local EPA regulations governing lead-based paint removal and the levels of lead and silica to which the public can be exposed.
- F. All internal piping in vaults shall be abrasive blasted to a "commercial" finish corresponding to SSPC-SP6 "Commercial Blast Cleaning."
- G. All surface preparation work shall comply with all state and local EPA regulations governing lead-based paint removal and the levels of lead and silica to which the public can be exposed.
- H. All surface areas found to have contamination or loose primer coating, (visible oil, grease or dirt) shall be spot cleaned to remove contaminants or loose coatings- SSPC SP7/NACE No. 4

### 3.02 APPLICATION

- A. Paint shall be used and applied as recommended by the manufacturer without being extended or modified, and with particular attention to the correct preparation and condition of surfaces to be painted.
- B. Surfaces which have been cleaned, pretreated, or otherwise prepared for painting shall be painted with the first field coat as soon as practicable after such preparation has been completed, but in any event prior to any deterioration of the prepared surface.
- C. Unless otherwise specified, stainless steel surfaces throughout the work shall not be painted.

- D. Hardware accessories, machine surfaces, plates, lighting fixtures, and similar items in place prior to surface preparation and painting, and not intended to be painted, shall be removed during painting operations and repositioned upon completion of each area or shall otherwise be protected.
- E. Paints or other finish shall not be applied to wet or damp surfaces, or when the relative humidity exceeds 80% except in accordance with the instructions of the manufacturer. Exterior painting shall not be done during cold, rainy, or frosty weather, or when ambient temperature or painting surface temperature is likely to drop to 40 degrees F. Painting shall not be done unless the painting surface temperature is at least 5 degrees F above the dew point. Temperature requirements of paint manufacturer are to be observed when minimum is greater than 40 degrees F. Painting of surfaces while they are exposed to the sun shall be avoided.
- F. All paint shall be applied under favorable conditions by skilled painters and shall be brushed or rolled out carefully to a smooth, even coating without runs or sags. Each coat of paint shall be allowed to dry thoroughly, not only on the surface but throughout the thickness of the paint film before the next coat is applied.
- G. Finish surfaces shall be uniform in finish and color, and free from flash spots and brush marks. In all cases, the paint film produced shall be satisfactory in all respects to the Engineer.
- H. Spraying with adequate apparatus may be substituted for brush application of those paints and in those locations for which spraying is suitable.
- I. The Contractor shall not only protect his work at all times but shall also protect all adjacent work and materials. Upon completion of the work, he shall clean up all paint spots, oil, and stains from floors, glass, hardware, and similar finished items.
- J. Shop priming of the water storage tank shall be allowed by the Contractor. The preparation of all metal surfaces prior to applying any paint shall be conducted in accordance with the specification herein.
- K. If the tank is shop primed, the Contractor shall pay for all costs and expenses for the Engineer to inspect the tank while being shop primed. Once the tank has been erected in the field, all welds, scratches, and other areas which were damaged during erection of the tank shall be abrasive blasted and primed by roller or brush application as per the specification herein.

### 3.03 RATES OF APPLICATION

- A. Paint shall be applied so as to obtain the coverage per gallon and the dry film thickness recommended by the manufacturer or as specified herein. The Contractor shall record, in a manner satisfactory to the Engineer, the quantities of paint used for successive coats on the various parts of the work.
- B. If paints are thinned for spraying, the film thickness after application shall be of the same as for unthinned paint applied by brush. Thinning of paint for spraying shall be in accordance with the paint manufacturer's recommendations. Deficiencies in film thickness shall be corrected by the application of another coat of paint. Excessive application rates will not be allowed. The Contractor shall submit to the Engineer, immediately upon completion of the job, certification from the paint manufacturer indicating that the quantity of each coating purchased was sufficient to properly coat all surfaces. Such certification shall make reference to the square footage figures provided to the manufacturer and the Engineer by the Contractor.

C. The paint applicator shall have available on the project site a paint film thickness measuring device capable of measuring 0-59 mils with accuracy of 2% + 0.1 mil, operating temperature range 5 degrees C to 50 degrees C and meet ASTM B499 and ISO 2178 specifications. Reference SSPC-PA2 as to how thickness readings should be taken.

#### 3.04 PAINT TYPES AND SCHEDULE

The following types of paints shall be used throughout the work on items and surfaces indicated. All paints and painting schedules shall be in accordance with AWWA D102 (latest revisions).

- A. External Painting: The Contractor shall furnish all materials and labor to paint the external surface of the tank, center riser, support legs, bracing, catwalk, ladder, and any and all exterior metal surfaces on or related to the tank. The painting shall conform to the following:
  - 1. Surface Preparation: Power wash with Krud Kutter Pro to remove any contaminants. SP 2 hand tool and SP 3 power tool clean as needed. THIS IS JUST A SPOT REPAIR.
  - 2. Prime Coat: Spot prime with Rust-Oleum 9100 at 4.0 to 6.0 mils dry thickness.
  - 3. Finish Coat: Apply one coat of Rust-Oleum 9800 UV at 3.0-5.0 mils dry thickness to the spots.
- B. Interior Painting of the Salt Lick Tank and Owingsville Elevated Tank: The Contractor shall furnish all materials and labor to paint the interior of the tank and center riser with a 3-coat epoxy system. There shall be no paint applied until the abrasive blasting is complete and approved by the Owner prior to applying new paint. The painting shall conform to the following:
  - 1. Surface Preparation: SSPC-10 Near White Blast.
  - 2. Stripe Coat: Apply on coat of Rust-Oleum 9200 NSF/ANSI/CAN 600 to a minimum of 2.0-3.0 mils dry thickness on any welds, joints, or seams.
  - 3. Prime Coat: Apply one coat of Rust-Oleum 9200 NSF/ANSI/CAN 600 White at 4.0-6.0 mils dry thickness.
  - 4. Intermediate Coat: Apply one coat of Rust-Oleum 9200 NSF/ANSI/CAN 600 Blue at 4.0-6.0 mils dry thickness, alternating colors between coats.
  - 5. Finish Coat: Apply one coat of Rust-Oleum 9200 NSF/ANSI/CAN 600 White at 4.0-6.0 mils dry thickness, alternating colors between coats.

NOTE: THE COMBINED COATS SHALL HAVE A MINIMUM DRY THICKNESS OF 12.0 MILS.

- C. Interior Touch Up of the Perry Road Tank and/or Ore Mines Tank: The Contractor shall furnish all materials and labor for the touch up of the tanks. The painting shall conform to the following:
  - 1. Surface Preparation: As these tanks were originally coated with a polyurea high build system, they only need to be spot patched. SP3 power tool clean any areas showing corrosion. The area needing to be patched need to be brought out 1" wider to ensure good adhesion. Wipe clean with isopropyl alcohol (a safe solvent). Be sure to stay inside the grind lines when patching.

- 2. Prime Coat: Apply one coat of Rust-Oleum 9200 NSF/ANSI/CAN 600 at 4.0-6.0 mils dry thickness.
- 3. Intermediate Coat: Apply one coat of Rust-Oleum 9200 NSF/ANSI/CAN 600 at 4.0-6.0 mils dry thickness, alternating colors between coats.
- 4. Finish Coat: Apply one coat of Rust-Oleum 9200 NSF/ANSI/CAN 600 at 4.0-6.0 mils dry thickness, alternating colors between coats.

NOTE: AS THE AREAS ARE SMALL, IF THE CORRECT MILLAGE CAN BE ACHIEVED WITH ONLY ONE COLOR, THAT IS ACCEPTABLE. THE COMBINED COATS SHALL HAVE A DRY THICKNESS OF 15.0 – 20.0 MILS.

### 3.05 STERILIZATION

- A. Disinfection and sterilization of the interior of the tank shall not take place until the interior paint has sufficiently cured. This time shall not be less than five (5) days. Force curing may be conducted in accordance with the paint manufacturer; however, the Engineer shall be notified of the forced curing of the interior paint.
- B. The Contractor shall sterilize the tank in accordance with AWWA D05 C652-02 "Disinfection of Water Storage Facilities" and Kentucky Regulations 401 KAR 6-015. The Tank Contractor is to drain and clean all tanks after sterilization. The Owner reserves the right to delay testing and sterilization until the water is adequate for such major usage.
- C. The tank may be sterilized during preloading provided that no leaks are found which would require re-work and re-sterilization. Otherwise, the spray method of sterilization will be required.
- D. Bacteriological testing of the water shall be conducted by the State Department of Health. The tank shall not be placed in service until the sample is approved by the Health Department. All results are to be mailed to the Engineer. All costs of sampling, testing, and postage shall be borne by the Contractor.
- E. All testing and sampling shall be conducted in the presence of the Engineer or his representative.
- F. If declorination is required all heavily clorinated water shall be declorinated in accordance with AWWA C651.

# 3.06 CURING FOR INTERIOR PAINTED SURFACE

- A. A minimum of seven days at 75 degrees F. shall be allowed for curing after application of final coat for the tank interior wet surfaces prior to flushing, sterilizing or filling with water.
- B. Rinse potable water tanks with fresh water before filling to remove any traces of solvent thus assuring coating will not impart taste, odor or color.

## 3.07 GUARANTY

The Contractor, in signing his proposal, guarantees to repair any and all defects due to workmanship, i.e. sags, drips, cracks, separation or unsuitable material which appear in the structures or coating system during the period of three years after the date of acceptance.

# 3.08 CLEANUP

All construction material and debris shall be removed from the site upon completion of work.

## 3.09 SIGNAGE

No Signage Required on this project.