

DENNIS ENGINEERING COMPANY

# **VILLAGE OF TAOS SKI VALLEY**

## **CONTRACT DOCUMENTS AND SPECIFICATIONS**

**for the construction of the**

### **PHOENIX SWITCHBACK WATERLINE REPLACEMENT - REBID**

**SAP 23-H2504-GF**

**FEBRUARY, 2024**

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## ENGINEER'S CERTIFICATE

The technical material and data contained in these Specifications were prepared under the supervision and direction of the undersigned whose seal as a Professional Engineer, licensed to practice as such in the State of New Mexico is affixed below.

*Gary H. Bierner, P.E.*

Gary H. Bierner, #26787  
Licensed Engineer  
Date: February 12, 2024



Funding:  
SAP 23-H2504-GF

## Contract Documents And Specifications

### Village of Taos Ski Valley Phoenix Switchback Waterline Replacement - REBID

#### Governing Body

Christopher Stanek	Mayor
Tom Wittman	Mayor Pro-Tem
Henry Caldwell	Councilor
Chris Stagg	Councilor
Douglas Turner	Councilor
John Avila	Village Administrator
Ann Marie Wooldridge	Village Clerk

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# **SECTION 00111**

## **ADVERTISEMENT FOR BIDS**

### **VILLAGE OF TAOS SKI VALLEY TAOS SKI VALLEY, NM PHOENIX SWITCHBACK WATERLINE REPLACEMENT - REBID ADVERTISEMENT FOR BIDS**

Sealed Bids for the construction of the Phoenix Switchback Waterline Replacement - REBID will be received by Village of Taos Ski Valley at the Village Hall, 7 Fire House Road, Taos Ski Valley, NM 87525, until 11:00 a.m. local time on March 13, 2024, at which time the Bids received will be publicly opened and read.

Installation of approximately 3,020 LF of 6"/8" SDR9 DIPS HDPE. waterline including rock excavation, lean fill encasement, valves, fittings, fire hydrants, connections, meter service transfers, and other miscellaneous items to provide a complete and functional project.

Bids will be received for a single prime Contract. Bids shall be on a lump sum and unit price basis, with additive alternate bid items as indicated in the Bid Form. The Owner reserves the right to adjust quantities included in the Bid Schedule as necessary to provide a complete project with the available funding.

The Issuing Office for the Bidding Documents is: **DENNIS ENGINEERING COMPANY**, 6020 Indian School Road, NE, Albuquerque, NM 87110, (505) 281-2880. Prospective Bidders may examine the Bidding Documents at the Issuing Office on Mondays through Fridays between the hours of 8:00 a.m. and 5:00 p.m.

The Bidding Documents may also be examined at the following locations:

Village of Taos Ski Valley  
7 Fire House Road  
Taos Ski Valley, NM 87525  
575-776-8220

Construction Reporter  
4901 Mcleod Rd NE, STE 200A  
Albuquerque, NM 87109  
(505) 243-9793

The PlanIt Room  
1155 Westmoreland, Suite 109  
El Paso, TX 79925  
(915) 781-2900

The Bidding Documents for this project may be obtained at the following designated website: <https://www.decnm.com/DEC-FileShare>. Prospective Bidders are urged to register with the designated website as a plan holder, even if Bidding Documents are obtained from a plan room or source other than the designated website in either electronic or paper format. The designated website will be updated periodically with addenda and other information relevant to submitting a Bid for the Project.

All official notifications, addenda, and other Bidding Documents will be offered only through the designated website. Neither Owner nor Engineer will be responsible for Bidding Documents, including addenda, if any, obtained from sources other than the designated website.

If paper copies of the Bidding Documents are needed, call 505-281-2880 to request at least 24 hours in advance. Requested paper copies may be obtained at the office of **DENNIS ENGINEERING COMPANY**, 6020 Indian School NE, Albuquerque, NM 87110, upon payment of \$400.00 for each set of documents.

Checks for Bidding Documents shall be payable to “DENNIS ENGINEERING COMPANY”. Any PLANHOLDER, upon returning the Contract Documents in good condition within **ten (10) days** following the Bid Opening, will receive a \$200.00 refund.

A pre-bid conference will not be held.

Bid security shall be furnished in accordance with the Instructions to Bidders.

Owner: Village of Taos Ski Valley

By: John Avila

Title: Village Administrator

Date: February 12, 2024

++ END OF ADVERTISEMENT FOR BIDS ++

# **SECTION 00200**

## **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. Additional terms used in these Instructions to Bidders have the meanings indicated below:
- A. Issuing Office – The office from which the Bidding Documents are to be issued and where the bidding procedures are to be administered.

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

- 2.01 Complete sets of the Bidding Documents may be obtained from the Issuing Office in the number, format and for the deposit sum, if any, stated in the advertisement or invitation to bid. The deposit will be refunded to each document holder of record who returns a complete set of Bidding Documents in good condition within 10 days after opening of Bids.
- 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 - QUALIFICATION OF BIDDERS**

- 3.01 To demonstrate Bidder's qualifications to perform the Work, after submitting its Bid and within 5 days of Owner's request, Bidder shall submit (a) written evidence establishing its qualifications such as financial data, previous experience, and present commitments, and (b) the following additional information:
- A. Any Bidder submitting a bid shall have a valid license issued by the New Mexico Regulation and Licensing Department and other State and Local agencies, as required, to bid and perform the type of work to be undertaken.
- 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 the 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. The Supplementary Conditions identify:

- a. those reports known to Owner of explorations and tests of subsurface conditions at or adjacent to the Site.
  - b. those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities).
  - c. reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site.
  - d. Technical Data contained in such reports and drawings.
2. The Issuing Office will make copies of reports and drawings referenced above available to any Bidder on request, at the cost of reproduction and delivery. These reports and drawings are not part of the Contract Documents, but the Technical Data contained therein upon whose accuracy Bidder is entitled to rely, as provided in the General Conditions, has been identified and established in the Supplementary Conditions. Bidder is responsible for any interpretation or conclusion Bidder draws from any Technical Data or any other data, interpretations, opinions, or information contained in such reports or shown or indicated in such drawings.
3. If the Supplementary Conditions do not identify Technical Data, the default definition of Technical Data set forth in Article 1 of the General Conditions will apply.

##### 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;
- 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 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. 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 pre-Bid conference will not be held.

## **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. 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 ten 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 as deemed advisable by Owner or Engineer.

## **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 (EJCDC Form C-430, included in the Bidding Documents) issued by a surety meeting the requirements of Paragraphs 6.01 and 6.02 of the General Conditions. If a Bid bond is provided on a form other than the EJCDC Form C-430, the Bid shall be considered nonresponsive.
- 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 10 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 61 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 substantially completed and ready for final 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 Agreement.

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

- 11.01 The Contract for the Work, as awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents without consideration during the bidding and Contract award process of possible substitute or “or-equal” items. In cases in which the Contract allows the Contractor to request that Engineer authorize the use of a substitute or “or-equal” item of material or equipment, application for such acceptance may not be made to and will not be considered by Engineer until 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.

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

- 12.01 A Bidder shall be prepared to retain specific Subcontractors, Suppliers, or other individuals or entities for the performance of the Work if required by the Bidding Documents (most commonly in the Specifications) to do so. If a prospective Bidder objects to retaining any such Subcontractor, Supplier, or other individual or entity, and the concern is not relieved by an Addendum, then the prospective Bidder should refrain from submitting a Bid.
- 12.02 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.
- 12.03 The apparent Successful Bidder, and any other Bidder so requested, shall within five days after Bid opening, submit to Owner a list of the Subcontractors or Suppliers proposed for those portions of the Work for which such identification is required.

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, without an increase in Bid price.

- 12.04 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 not constitute grounds for forfeiture of the Bid security of any Bidder. Any Subcontractor, Supplier, individual, or entity so listed and against which Owner or Engineer makes no written objection prior to the giving of the Notice of Award will be deemed acceptable to Owner and Engineer subject to subsequent revocation of such acceptance as provided in Paragraph 7.06 of the General Conditions.
- 12.05 Contractor shall not award work to Subcontractor(s) in excess of the limits stated in Paragraph 7.06 of the Supplementary Conditions.

## **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 Bid item, or alternative 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 partnership shall be executed in the partnership name and signed by a partner (whose title must appear under the signature), accompanied by evidence of authority to sign. The official address of the partnership shall be shown.
- 13.04 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.
- 13.05 A Bid by an individual shall show the Bidder’s name and official address.
- 13.06 A Bid by a joint venture shall be executed by an authorized representative of each joint venture in the manner indicated on the Bid Form. The official address of the joint venture shall be shown.
- 13.07 All names shall be printed in ink below the signatures.
- 13.08 The Bid shall contain an acknowledgement of receipt of all Addenda, the numbers of which shall be filled in on the Bid Form.
- 13.09 Postal and e-mail addresses and telephone number for communications regarding the Bid shall be shown.
- 13.10 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.

## **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 unit price section of the Bid Form.
- B. The "Bid Price" (sometimes referred to as the extended price) for each unit price Bid item will be the product of the "Estimated Quantity" (which Owner or its representative has set forth in the Bid Form) for the item and the corresponding "Bid Unit Price" offered by the Bidder. The total of all unit price Bid items will be the sum of these "Bid Prices"; such total will be used by the Owner for Bid comparison purposes. The final quantities and Contract Price will be determined in accordance with Paragraph 13.03 of the General Conditions.
- C. Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.

#### 14.02 Allowances

- A. For cash allowances the Bid price shall include such amounts as the Bidder deems proper for Contractor's overhead, costs, profit, and other expenses on account of cash allowances, if any, named in the Contract Documents, in accordance with Paragraph 13.02.B of the General Conditions.

### ARTICLE 15 - SUBMITTAL OF BID

- 15.01 With each copy of the Bidding Documents, 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." A mailed Bid shall be addressed to:

Village of Taos Ski Valley  
7 Fire House Road  
Taos Ski Valley, NM 87525

- 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 delivering written or telegraphic notice 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 *Evaluation of Bids*
- A. 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.
  - B. In evaluating Bids, Owner will consider the Resident Contractor Preference and the Resident Veteran Preference, as applicable.
  - C. In the comparison of Bids, alternates will be applied in the same order of priority as listed in the Bid Form. For comparison purposes alternates will be accepted, following the order of priority established in the Bid Form, until doing so would cause the budget to be exceeded. After determination of the Successful Bidder based on this comparative process and on the responsiveness, responsibility, and other factors set forth in these Instructions, the award may be made to said Successful Bidder on Base Bid Schedule I OR Base Bid Schedule II and any

combination of its additive alternate Bids for which Owner determines funds will be available at the time of award.

D. If the Contract is to be awarded, Owner will award the Contract to the Bidder whose Bid is in the best interest of the Project.

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 **10 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 copies of the Contract Documents as stated in Paragraph 2.02 of the General Conditions.

## **ARTICLE 22 - PREVAILING WAGE RATES**

22.01 Bidder is notified that the Successful Bidder shall pay to their employees, employed on the site of the project, the wage rates and fringe benefit rates included in the Supplementary Conditions. The higher of federal or state wage rates shall be paid for each classification, as applicable. Federally assisted projects in excess of \$2,000.00 are subject to Federal Wage Standards. State assisted projects in excess of \$60,000.00 are subject to State Wage Standards.

## **ARTICLE 23 - CONTRACTOR LICENSURE**

23.01 A Bidder can only submit a Bid as the prime contractor if the major portion of the work, based on dollar amount, is authorized by the classification of the Bidder's license. Any work outside the scope of the Bidder's license classification(s) must be subcontracted.

## **ARTICLE 24 - BRIBES, GRATUITIES AND KICKBACKS**

24.01 Reference is hereby made to the criminal laws of New Mexico, which prohibits bribes, kickbacks, and gratuities, violation of which constitutes a felony.



## **ARTICLE 25 - REGISTRATION OF CONTRACTORS AND SUBCONTRACTORS FOR PUBLIC WORKS CONTRACTS**

25.01 In order to submit a bid valued at more than sixty thousand dollars (\$60,000.00), or to be considered for award of any portion of a public works project greater than sixty thousand dollars (\$60,000.00) the contractor serving as the prime contractor, subcontractor, or any tier thereof, shall be registered and obtain a New Mexico Public Works Registration Number.

## **ARTICLE 26 - CAMPAIGN CONTRIBUTION DISCLOSURE**

26.01 A Bidder or family member or representative of the Bidder shall not give a campaign contribution or other thing of value to an applicable public official or the applicable public official's employees during the pendency of the solicitation for Bids.

## **ARTICLE 27 - RESIDENT CONTRACTOR PREFERENCE AND RESIDENT VETERAN CONTRACTOR PREFERENCE**

27.01 In order for a Bidder to be eligible for the Resident Contractor Preference (pursuant to 13-4-2 NMSA 1978) or a Resident Veteran Preference (pursuant to Section 13-1-21 NMSA 1978) the Bidder shall submit with the Bid a copy of valid Resident Contractor Certificate, or a valid Resident Veteran Contractor Certificate.

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BIDDER: \_\_\_\_\_

**SECTION 00410  
BID FORM**

**Village of Taos Ski Valley**

**Phoenix Switchback Waterline Replacement - REBID**

**March 13, 2024**

**SAP 23-H2504-GF**

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BIDDER: \_\_\_\_\_

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## ARTICLE 1 – BID RECIPIENT

1.01 This Bid is submitted to:

Village of Taos Ski Valley  
7 Fire House Road  
Taos Ski Valley, NM 87525

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 60 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 a 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.

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.

BIDDER: \_\_\_\_\_

- 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;

BIDDER: \_\_\_\_\_

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

## ARTICLE 5 – BASIS OF BID

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

VILLAGE OF TAOS SKI VALLEY					
PHOENIX SWITCHBACK WATERLINE REPLACEMENT					
BASE BID SCHEDULE I: NEW 8" SDR9 DIPS HDPE WATERLINE					
Bid Item	Description	Unit	Estimated Quantity	Unit Price	Extended Amount
401.500	NEW 4" DIA. BOLLARD, COMPLETE IN PLACE	EA	8		
701.100	ROCK EXCAVATION	CY	230		
701.400	PORTLAND CEMENT (LEAN FILL) ENCASEMENT FOR UTILITIES, COMPLETE IN PLACE	LF	250		
801.208	FURNISH AND INSTALL 8" SDR9 DIPS HDPE WATERLINE, INCLUDING TRENCHING, BACKFILL, INSULATION, FITTINGS, ETC., COMPLETE IN PLACE	LF	3020		
801.508	FURNISH AND INSTALL 8" GATE VALVE ASSEMBLY, COMPLETE W/ VALVE BOX, COMPLETE IN PLACE	EA	6		
801.750	FURNISH AND INSTALL 6" FIRE HYDRANT ASSEMBLY, COMPLETE IN PLACE	EA	4		
801.752	REMOVE AND DISPOSE OF EXISTING FIRE HYDRANT ASSEMBLY, COMPLETE IN PLACE	EA	2		
801.802	CONNECT TO EXISTING WATER LINE, 4" TO 6" IN DIAMETER, COMPLETE IN PLACE	EA	2		
801.803	CONNECT TO EXISTING WATER LINE, 8" TO 10" IN DIAMETER, COMPLETE IN PLACE	EA	4		
801.852	CAP EXISTING WATER LINE, 4" TO 6" IN DIAMETER, COMPLETE IN PLACE	EA	3		

BIDDER: \_\_\_\_\_

801.922	FURNISH AND INSTALL NEW 2" COMBINATION AIR/VACUUM RELEASE VALVE ASSEMBLY INCLUDING HDPE VAULT, COMPLETE IN PLACE	EA	1		
802.100	FURNISH AND INSTALL 3/4" TYPE "K" COPPER SERVICE LINE WITH CURB STOP AND RISER, COMPLETE IN PLACE	LF	212		
1111.010	FURNISH AND INSTALL 24" HDPE VAULT, INCLUDING TRENCHING, BACKFILL, FOAM INSULATION, BRACKETS, LADDER, LID, ETC., COMPLETE IN PLACE.	EA	1		
1200.001	TEMPORARY TRAFFIC CONTROL	LS	1		
1500.001	MOBILIZATION/DEMOBILIZATION	LS	1		
1500.500	CONSTRUCTION STAKING	LS	1		
1510.100	GENERAL SITE REMOVAL AND DISPOSAL OF STRUCTURES AND OBSTRUCTIONS, COMPLETE	LS	1		
1511.000	CONTRACTOR'S QUALITY CONTROL CONSTRUCTION TESTING	ALL	1		
1520.001	TEMPORARY/PERMANENT EROSION AND SEDIMENT CONTROL	LS	1		
<b>Sub-Total Base Bid Schedule I: New 8" SDR9 DIPS HDPE Waterline</b>					
<b>Gross Receipt Tax @</b>				<b>8.9375%</b>	
<b>Total Base Bid Schedule I: New 8" SDR9 DIPS HDPE Waterline</b>					

<b>VILLAGE OF TAOS SKI VALLEY</b>					
<b>PHOENIX SWITCHBACK WATERLINE REPLACEMENT</b>					
<b>BASE BID SCHEDULE II: NEW 6" SDR9 DIPS HDPE WATERLINE</b>					
<b>Bid Item</b>	<b>Description</b>	<b>Unit</b>	<b>Estimated Quantity</b>	<b>Unit Price</b>	<b>Extended Amount</b>
401.500	NEW 4" DIA. BOLLARD, COMPLETE IN PLACE	EA	8		
701.100	ROCK EXCAVATION	CY	230		
701.400	PORTLAND CEMENT (LEAN FILL) ENCASEMENT FOR UTILITIES, COMPLETE IN PLACE	LF	250		
801.206	FURNISH AND INSTALL 6" SDR9 DIPS HDPE WATERLINE, INCLUDING TRENCHING, BACKFILL, INSULATION, FITTINGS, ETC., COMPLETE IN PLACE	LF	3020		



BIDDER: \_\_\_\_\_

801.506	FURNISH AND INSTALL 6" GATE VALVE ASSEMBLY, COMPLETE W/ VALVE BOX, COMPLETE IN PLACE	EA	4		
801.508	FURNISH AND INSTALL 8" GATE VALVE ASSEMBLY, COMPLETE W/ VALVE BOX, COMPLETE IN PLACE	EA	2		
801.750	FURNISH AND INSTALL 6" FIRE HYDRANT ASSEMBLY, COMPLETE IN PLACE	EA	4		
801.752	REMOVE AND DISPOSE OF EXISTING FIRE HYDRANT ASSEMBLY, COMPLETE IN PLACE	EA	2		
801.802	CONNECT TO EXISTING WATER LINE, 4" TO 6" IN DIAMETER, COMPLETE IN PLACE	EA	2		
801.803	CONNECT TO EXISTING WATER LINE, 8" TO 10" IN DIAMETER, COMPLETE IN PLACE	EA	4		
801.852	CAP EXISTING WATER LINE, 4" TO 6" IN DIAMETER, COMPLETE IN PLACE	EA	3		
801.922	FURNISH AND INSTALL NEW 2" COMBINATION AIR/VACUUM RELEASE VALVE ASSEMBLY INCLUDING HDPE VAULT, COMPLETE IN PLACE	EA	1		
802.100	FURNISH AND INSTALL 3/4" TYPE "K" COPPER SERVICE LINE WITH CURB STOP AND RISER, COMPLETE IN PLACE	LF	212		
1111.010	FURNISH AND INSTALL 24" HDPE VAULT, INCLUDING TRENCHING, BACKFILL, FOAM INSULATION, BRACKETS, LADDER, LID, ETC., COMPLETE IN PLACE.	EA	1		
1200.001	TEMPORARY TRAFFIC CONTROL	LS	1		
1500.001	MOBILIZATION/DEMOBILIZATION	LS	1		
1500.500	CONSTRUCTION STAKING	LS	1		
1510.100	GENERAL SITE REMOVAL AND DISPOSAL OF STRUCTURES AND OBSTRUCTIONS, COMPLETE	LS	1		
1511.000	CONTRACTOR'S QUALITY CONTROL CONSTRUCTION TESTING	ALL	1		
1520.001	TEMPORARY/PERMANENT EROSION AND SEDIMENT CONTROL	LS	1		
<b>Sub-Total Base Bid Schedule II: Waterline Replacement</b>					
<b>Gross Receipt Tax @</b>				<b>8.9375%</b>	
<b>Total Base Bid Schedule II: Waterline Replacement</b>					

- 5.02 Bidder acknowledges that (1) each Bid Unit Price includes an amount considered by Bidder to be adequate to cover Contractor's overhead and profit for each separately identified item, and (2) estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all unit price Bid items will be based on actual quantities, determined as provided in the Contract Documents.
- 5.03 In the comparison of Bids, alternates will be applied in the same order of priority as listed in the Bid Form. For comparison purposes alternates will be accepted, following the order of priority established in the Bid Form, until doing so would cause the budget to be exceeded. After determination of the Successful Bidder based on this comparative process and on the responsiveness, responsibility, and other factors set forth in the Instructions to Bidders, the award may be made to said Successful Bidder on Base Bid Schedule I OR Base Bid Schedule II and any combination of its additive alternate Bids for which Owner determines funds will be available at the time of award. Approximately \$1,650,000 to \$1,700,000 is available for construction.

#### **ARTICLE 6 – TIME OF COMPLETION**

- 6.01 Bidder agrees that the Work will be substantially complete and will be completed and read for final payment in accordance with Paragraph 15.06 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.
- 6.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

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

- 7.01 The following documents are submitted with and made a condition of this Bid:
- A. Required Bid security in the form of a Bid bond (EJCDC Form C-430) or Certified Check;
  - B. List of Proposed Subcontractors (Guide A-1);
  - C. Campaign Contribution Disclosure Form (Guide A-2)
  - D. Work Experience Questionnaire (Guide A-3);
  - E. Work Experience Schedule (Guide A-4);
  - F. Resident or Veteran Preference Certificate, if applicable; and

#### **ARTICLE 8 – DEFINED TERMS**

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

BIDDER: \_\_\_\_\_

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BIDDER: \_\_\_\_\_

**ARTICLE 9 – BID SUBMITTAL**

BIDDER: *[Indicate correct name of bidding entity]*

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

*[Signature]* \_\_\_\_\_

*[Printed name]* \_\_\_\_\_

*(If Bidder is a corporation, a limited liability company, a partnership, or a joint venture, attach evidence of authority to sign.)*

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

*[Signature]* \_\_\_\_\_

*[Printed name]* \_\_\_\_\_

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

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

Address for giving notices:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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

Fax Number: \_\_\_\_\_

Contact Name and e-mail address: \_\_\_\_\_

State Contractor License No. and Classification \_\_\_\_\_

Employers Tax ID No.: \_\_\_\_\_

Resident or Veteran Bidder's Preference No.:\* \_\_\_\_\_

New Mexico Public Works Registration No.: \_\_\_\_\_

*\*Current Certificate must be attached to be considered in bid award.*

BIDDER: \_\_\_\_\_

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## List of Subcontractors

1. To be fully executed and included with Bid as a condition of the Bid (§13-4-31 through §13-4-42 NMSA 1978), including all Subcontractors providing services valued at the greater of \$5,000 or one half of one percent of the engineers estimate, pursuant to §13-4-34 NMSA 1978.
2. Except as otherwise provided in this subsection, a contractor or subcontractor that submits a bid valued at more than sixty thousand dollars (\$60,000) for a public works project that is subject to the Public Works Minimum Wage Act [13-4-10 NMSA 1978] shall be registered with the labor and industrial division of the labor department. (13-4-13.1A NMSA 1978)
3. List only one subcontractor for each category of work.
4. Failure to comply with these requirements will make the Bid nonresponsive and the Bid will be rejected.

Nature or Category of Work	Name of Subcontractor	Total Approximate Dollar Amount of Subcontract	Location or Place of Business	NM Dept of Labor Registration Information
				Registration Number: _____ Expiration Date: _____
				Registration Number: _____ Expiration Date: _____
				Registration Number: _____ Expiration Date: _____
				Registration Number: _____ Expiration Date: _____
				Registration Number: _____ Expiration Date: _____

(Use additional pages, if necessary)

BIDDER: \_\_\_\_\_

Nature or Category of Work	Name of Subcontractor	Total Approximate Dollar Amount of Subcontract	Location or Place of Business	NM Dept of Labor Registration Information
				Registration Number: _____ Expiration Date: _____
				Registration Number: _____ Expiration Date: _____
				Registration Number: _____ Expiration Date: _____
				Registration Number: _____ Expiration Date: _____
				Registration Number: _____ Expiration Date: _____
				Registration Number: _____ Expiration Date: _____
				Registration Number: _____ Expiration Date: _____

(Use additional pages, if necessary)

## Campaign Contribution Disclosure Form

Pursuant to the Procurement Code, Sections 13-1-28, et seq., NMSA 1978 and NMSA 1978, § 13-1-191.1 (2006), as amended by Laws of 2007, Chapter 234, a prospective contractor subject to this section shall disclose all campaign contributions given by the prospective contractor or a family member or representative of the prospective contractor to an applicable public official of the state or a local public body during the two years prior to the date on which a proposal is submitted or, in the case of a sole source or small purchase contract, the two years prior to the date on which the contractor signs the contract, if the aggregate total of contributions given by the prospective contractor or a family member or representative of the prospective contractor to the public official exceeds two hundred fifty dollars (\$250) over the two-year period. A prospective contractor submitting a disclosure statement pursuant to this section who has not contributed to an applicable public official, whose family members have not contributed to an applicable public official or whose representatives have not contributed to an applicable public official shall make a statement that no contribution was made.

A prospective contractor or a family member or representative of the prospective contractor shall not give a campaign contribution or other thing of value to an applicable public official or the applicable public official's employees during the pendency of the procurement process or during the pendency of negotiations for a sole source or small purchase contract.

Furthermore, a solicitation or proposed award for a proposed contract may be canceled pursuant to Section 13-1-181 NMSA 1978 or a contract that is executed may be ratified or terminated pursuant to Section 13-1-182 NMSA 1978 if a prospective contractor fails to submit a fully completed disclosure statement pursuant to this section; or a prospective contractor or family member or representative of the prospective contractor gives a campaign contribution or other thing of value to an applicable public official or the applicable public official's employees during the pendency of the procurement process.

The state agency or local public body that procures the services or items of tangible personal property shall indicate on the form the name or names of every applicable public official, if any, for which disclosure is required by a prospective contractor.

THIS FORM MUST BE INCLUDED IN THE REQUEST FOR PROPOSALS AND MUST BE FILED BY ANY PROSPECTIVE CONTRACTOR WHETHER OR NOT THEY, THEIR FAMILY MEMBER, OR THEIR REPRESENTATIVE HAS MADE ANY CONTRIBUTIONS SUBJECT TO DISCLOSURE.

The following definitions apply:

**“Applicable public official”** means a person elected to an office or a person appointed to complete a term of an elected office, who has the authority to award or influence the award of the contract for which the prospective contractor is submitting a competitive sealed proposal or who has the authority to negotiate a sole source or small purchase contract that may be awarded without submission of a sealed competitive proposal.

**“Campaign Contribution”** means a gift, subscription, loan, advance or deposit of money or other thing of value, including the estimated value of an in-kind contribution, that is made to or received by an applicable public official or any person authorized to raise, collect or expend contributions on that official's behalf for the purpose of electing the official to statewide or local office. “Campaign Contribution” includes the payment of a debt incurred in an election campaign, but does not include the value of services provided without compensation or unreimbursed travel or other personal expenses of individuals who volunteer a portion or all of their time on behalf of a candidate or political committee, nor does it include the administrative or solicitation expenses of a political committee that are paid by an organization that sponsors the committee.

**“Family member”** means a spouse, father, mother, child, father-in-law, mother-in-law, daughter-in-law or son-in-law of (a) a prospective contractor, if the prospective contractor is a natural person; or (b) an owner of a prospective contractor;



BIDDER: \_\_\_\_\_

**“Pendency of the procurement process”** means the time period commencing with the public notice of the request for proposals and ending with the award of the contract or the cancellation of the request for proposals.

**“Prospective contractor”** means a person or business that is subject to the competitive sealed proposal process set forth in the Procurement Code [Sections 13-1-28 through 13-1-199 NMSA 1978] or is not required to submit a competitive sealed proposal because that person or business qualifies for a sole source or small purchase contract.

**“Representative of a prospective contractor”** means an officer or director of a corporation, a member or manager of a limited liability corporation, a partner of a partnership or a trustee of a trust of the prospective contractor.

<b>Name(s) of Applicable Public Official(s) if any:</b>	<u>Christopher Stanek, Mayor</u>
<b>(Completed by State Agency or Local Public Body)</b>	<u>Tom Wittman, Mayor Pro-Tem</u>
	<u>Henry Caldwell, Councilor</u>
	<u>Chris Stagg, Councilor</u>

BIDDER: \_\_\_\_\_

**DISCLOSURE OF CONTRIBUTIONS BY PROSPECTIVE CONTRACTOR**

Contribution Made By: \_\_\_\_\_

Relation to Prospective Contractor: \_\_\_\_\_

Name of Applicable Public Official: \_\_\_\_\_  
\_\_\_\_\_

Date Contribution(s) Made: \_\_\_\_\_  
\_\_\_\_\_

Amount(s) of Contribution(s): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Nature of Contribution(s): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Purpose of Contribution(s): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(The above fields are unlimited in size)

\_\_\_\_\_  
Signature Date

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

— OR —

**NO CONTRIBUTIONS IN THE AGGREGATE TOTAL OVER TWO HUNDRED FIFTY DOLLARS (\$250) WERE MADE** to an applicable public official by me, a family member or representative.

\_\_\_\_\_  
Signature Date

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

BIDDER: \_\_\_\_\_

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BIDDER: \_\_\_\_\_

## Work Experience Questionnaire

Your bid will be considered non-responsive and will be rejected unless this questionnaire is completed and received by the Owner with the bid documents.

All statements made herein will be investigated, any misrepresentation of facts will disqualify bidder, and bid will be considered non-responsive and will be rejected.

1. Name of Bidder: \_\_\_\_\_

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

Telephone No. \_\_\_\_\_

2. How many years has your organization been in business as a Contractor under your present business name? \_\_\_\_\_

3. How many years experience in construction work has your organization had:  
(a) as a General Contractor: \_\_\_\_\_; (b) as a Subcontractor: \_\_\_\_\_

4. Have you ever failed to complete any work awarded to you within the timeframe allowed by the contract?  
☐ Yes ☐ No

If so, give dates, projects and reasons therefore:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5. Provide information required in the following WORK EXPERIENCE SCHEDULE. List a sufficient number of projects to indicate to the OWNER your experience in the field of work covered by the Contract Documents. The schedule should include work performed within the last 5 years and must include the Owner's name and contact information as shown on the schedule.

6. Have you ever been defaulted under any Contract?  
☐ Yes ☐ No

7. Have liquidated damages, or other monetary penalties, ever been assessed against you for failure to complete on time?  
☐ Yes ☐ No

If so, give amounts, projects and reasons therefore:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

If so, what has your company done as corrective action to avoid having this problem reoccur?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

BIDDER: \_\_\_\_\_

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BIDDER: \_\_\_\_\_

## Work Experience Schedule

Year	Owner's Name(s), Address & Phone No.	Design Engineer's Name, Address & Phone No.	Contract Amount	Project Title and Brief Description of Work Performed

BIDDER: \_\_\_\_\_

<b>Year</b>	<b>Owner's Name(s), Address &amp; Phone No.</b>	<b>Design Engineer's Name, Address &amp; Phone No.</b>	<b>Contract Amount</b>	<b>Project Title and Brief Description of Work Performed</b>

BIDDER: \_\_\_\_\_

## SECTION 00430 BID BOND

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

BIDDER (*Name and Address*):

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

OWNER (*Name and Address*):

Village of Taos Ski Valley  
7 Fire House Road  
Taos Ski Valley, NM 87525

BID

Bid Due Date: March 13, 2024

Description (*Project Name and Include Location*):

Installation of approximately 3,020 LF of 6"/8" SDR9 DIPS HDPE. waterline including rock excavation, lean fill encasement, valves, fittings, fire hydrants, connections, meter service transfers, and other miscellaneous items to provide a complete and functional project.

BOND

Bond Number:

Date (*Not earlier than Bid due date*):

Penal sum

\_\_\_\_\_  
(Words)

\$

\_\_\_\_\_  
(Figures)

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

**BIDDER**

**SURETY**

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

(Seal)

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

(Seal)

By:

\_\_\_\_\_  
Signature

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

\_\_\_\_\_  
Title

Attest:

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

By:

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

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

\_\_\_\_\_  
Title

Attest:

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title



BIDDER: \_\_\_\_\_

*Note: Above addresses are to be used for giving any required notice. Provide execution by any additional parties, such as joint venturers, if necessary.*

1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and 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.

<b>BID FORM CHECKLIST</b>		
<b>Village of Taos Ski Valley - Phoenix Switchback Waterline Replacement - REBID</b>		
<b>BID FORM(S)</b>	<b>Document</b>	<b>Contractor Review and Verification</b>
00410	Bidder has acknowledged the addenda for the project.	
00410	Bidder has completed the bid schedules in their entirety and they are mathematically correct.	
00410	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.	
00410	A Bid by a partnership shall be executed in the partnership name and signed by a partner (whose title must appear under the signature), accompanied by evidence of authority to sign. The official address of the partnership shall be shown.	
00410	A Bid by a limited liability company shall be executed in the name of the firm by a member of other authorized person and accompanied by evidence of authority to sign. The state of formation of the firm and the official office of the firm shall be shown.	
00410	A Bid by an individual shall show the Bidder's name and official address.	
00410	A Bid by a joint venture shall be executed by an authorized representative of each joint venture in the manner indicated on the Bid Form. The official address of the joint venture shall be shown.	
00410	Bidder has identified their State Contractors License No. and Classification and is licensed to complete the work under this solicitation.	
00410	Bidder has identified their Employers Tax ID No.	
00410	Bidder has identified their resident Bidders Preference No. and has attached a valid Resident Contractor Certificate, or a valid Resident Veteran Contractor Certificate, if applicable.	
00410	Bidder has identified the New Mexico Public Works Registration No.	
00410	Bidder has listed their project manager and superintendent for the project and has attached resumes and work history experience.	

BIDDER: \_\_\_\_\_

Required Attachments		Contractor Review and Verification
Guide A-1	List of Subcontractors	
Guide A-2	Campaign Contribution Disclosure Form	
Guide A-3	Work Experience Questionnaire	
Guide A-4	Work Experience Schedule	
00430	Bidder has completed the Bid Bond using EJCDC Form C-430	

## SECTION 00510 NOTICE OF AWARD

Date of Issuance: 1/1/1901	
Owner: Village of Taos Ski Valley	Owner's Contract No.:
Engineer: DENNIS ENGINEERING COMPANY	Engineer's Project No.: 01253
Project: Phoenix Switchback Waterline Replacement - REBID	Contract Name:
Bidder: Name of Contractor	
Bidder's Address: Mailing Address, City, State Zip	

### TO BIDDER:

You are notified that Owner has accepted your Bid dated Bid Date for the above Contract, and that you are the Successful Bidder and are awarded a Contract for: Brief Work Description - describes scope of work awarded to contractor. i.e. Base Bid Schedule I.

The Contract Price of the awarded Contract is: [Spell out dollar amount] Dollars. (*(\$-Numerals)*)

Four (4) unexecuted counterparts of the Agreement accompany this Notice of Award, and Four (4) copies of the Contract Documents accompany this Notice of Award.

Four (4) sets of the Drawings will be delivered separately from the other Contract Documents.

You must comply with the following conditions precedent within 10 days of the date of receipt of this Award:

1. Deliver to Owner Four (4) counterparts of the Agreement, fully executed by Bidder
2. Deliver with the executed Agreement(s) the Contract security [ e.g., performance and payment bonds] and insurance documentation as specified in the Instructions to Bidders (C-200), General Conditions (Article 2 and Article 6) and Supplementary Conditions (Article 2 and Article 6).

Failure to comply with these conditions within the time specified will entitle Owner to consider you in default, annul this Notice of Award, and declare your Bid security forfeited.

Within ten days after you comply with the above conditions, Owner will return to you one fully executed counterpart of the Agreement, together with any additional copies of the Contract Documents as indicated in Paragraph 2.02 of the General Conditions.

Village of Taos Ski Valley

---

Owner

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

\_\_\_\_\_  
Title

Copy to Engineer

[This page intentionally left blank]

**SECTION 00520**  
**AGREEMENT**  
**BETWEEN OWNER AND CONTRACTOR FOR**  
**CONSTRUCTION CONTRACT (STIPULATED PRICE)**

THIS AGREEMENT is by and between Village of Taos Ski Valley (“Owner”) and  
Name of Contractor (“Contractor”).

Owner and Contractor hereby agree as follows:

**ARTICLE 1 - WORK**

- 1.01 Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

Brief Work Description - describes scope of work awarded to contractor. i.e. Base Bid Schedule I.

**ARTICLE 2 - THE PROJECT**

- 2.01 The Project, of which the Work under the Contract Documents is a part, is generally described as follows:

Installation of approximately 3,020 LF of 6"/8" SDR9 DIPS HDPE. waterline including rock excavation, lean fill encasement, valves, fittings, fire hydrants, connections, meter service transfers, and other miscellaneous items to provide a complete and functional project..

**ARTICLE 3 - ENGINEER**

- 3.01 The Project has been designed by [DENNIS ENGINEERING COMPANY](#).
- 3.02 The Owner has retained [DENNIS ENGINEERING COMPANY](#) (“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.

**ARTICLE 4 - CONTRACT TIMES**

- 4.01 Time of the Essence
- A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.
- 4.02 Contract Times: Days
- A. The Work will be substantially completed within **105** days after the date when the Contract Times commence to run as provided in Paragraph 4.01 of the General Conditions, and

completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions within **120** days after the date when Contract Times commence to run. The Work will occur in the 2024 construction season, between the months of May and October.

- B. Contractor shall begin the submittal process in accordance with Paragraph 7.16 of the General Conditions upon receipt of a Notice to Proceed and shall procure materials in advance of the 2024 construction season. Contractor shall not be entitled to an adjustment in Contract Price or Contract Time for delays resulting from materials not procured in advance of the 2024 construction season.

#### 4.03 Liquidated Damages

- A. Contractor and Owner recognize that time is of the essence as stated in Paragraph 4.01 above and that Owner will suffer financial and other losses if the Work is not completed and Milestones not achieved within the times specified in Paragraph 4.02 above, plus any extensions thereof allowed in accordance with the Contract. The parties also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty):
  - 1. Substantial Completion: Contractor shall pay Owner \$500.00 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 complete.
  - 2. Completion of Remaining Work: After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Time (as duly adjusted pursuant to the Contract) for completion and readiness for final payment, Contractor shall pay Owner \$500.00 for each day that expires after such time until the Work is completed and ready for final payment.
  - 3. Liquidated damages for failing to timely attain Substantial Completion and final completion are not additive and will not be imposed concurrently.

### 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.
- 5.02 Payment on the basis of materials delivered and suitably stored at the Site or at another location agreed to in writing prior to the 2024 construction season shall be in accordance with Paragraph 15.01.B.1 of the General Conditions.

## **ARTICLE 6 - PAYMENT PROCEDURES**

### **6.01 Submittal and Processing of Payments**

- A. Contractor shall submit Applications for Payment in accordance with Article 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 i.e. 25 th 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.

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

- a. 100 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. 100 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 100 percent of the Work completed, less such amounts set off by Owner pursuant to Paragraph 15.01.E of the General Conditions, and less 100 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.

### **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 1.5 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 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. 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.
- F. 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.
- G. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
- H. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
- I. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
- J. 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.

## ARTICLE 9 - CONTRACT DOCUMENTS

### 9.01 Contents

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

1. This Agreement (pages 1 to 8, inclusive).
2. Performance bond (pages 1 to 4, inclusive).
3. Payment bond (pages 1 to 4, inclusive).
4. General Conditions (pages 1 to 72, inclusive).
5. Supplementary Conditions (pages 1 to 14, inclusive).
  - a. State Wage Decision
6. Specifications as listed in the table of contents of the Project Manual.
7. Drawings (not attached but incorporated by reference) consisting of Fifteen (15) sheets with each sheet bearing the following general title: Phoenix Switchback Waterline Replacement
8. Addenda (numbers X to Y, inclusive).
9. Exhibits to this Agreement (enumerated as follows):
  - a. Contractor's Bid (pages 1 to 9, inclusive).
  - b. Construction Award Letter
  - c. Documentation submitted by Contractor prior to Notice of Award:
    - 1) List of Subcontractors (Guide A-1)
    - 2) Campaign Contribution Disclosure Form (Guide A-2)
    - 3) Work Experience Questionnaire (Guide A-3)
    - 4) Work Experience Schedule (Guide A-4)
    - 5) Veterans Preference Certification (Guide A-5), if applicable
10. The following which may be delivered or issued on or after the Effective Date of the Contract and are not attached hereto:
  - a. Notice to Proceed
  - b. Work Change Directives

- c. Change Orders
  - d. Field 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 the 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:

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

#### 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.

IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement.

This Agreement will be effective on **1/1/1901** (which is the Effective Date of the Contract).

OWNER:

Village of Taos Ski Valley

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

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

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

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

Address for giving notices:

Christopher Stanek, Mayor  
c/o John Avila, Village Administrator

7 Fire House Road

Taos Ski Valley, NM 87525

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

CONTRACTOR:

Name of Contractor

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

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

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

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

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

Address for giving notices:

Name of Contractor

Mailing Address

City, State Zip

License No.: \_\_\_\_\_  
(where applicable)

## SECTION 00550 NOTICE TO PROCEED

Owner:	Village of Taos Ski Valley	Owner's Contract No.:
Contractor:	Name of Contractor	Contractor's Project No.:
Engineer:	DENNIS ENGINEERING COMPANY	Engineer's Project No.: 01253
Project:	Phoenix Switchback Waterline Replacement - REBID	Contract Name:
		Effective Date of Contract: 1/1/1901

### TO CONTRACTOR:

Owner hereby notifies Contractor that the Contract Times under the above Contract will commence to run on 1/1/1901. *[see Paragraph 4.01 of the General Conditions]*

On that date, Contractor shall start performing its obligations under the Contract Documents. No Work shall be done at the Site prior to such date. In accordance with the Agreement, the number of days to achieve Substantial Completion is **105**, and the number of days to achieve readiness for final payment is **120**.

Before starting any Work at the Site, Contractor must comply with the following:

1. Deliver to Owner (with copies to Engineer and other identified additional insureds and loss payees) certificates of insurance in accordance with Paragraph 2.01.B of the General Conditions.
2. Deliver pre-construction video or photographs to Engineer.
3. Deliver preliminary schedules in accordance with Paragraph 2.05 of the General Conditions.
4. Deliver to Engineer documentation of compliance with USEPA-NPDES Construction General Permit and the Project specifications.

Owner: \_\_\_\_\_ Village of Taos Ski Valley

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

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

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

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

Copy to Engineer

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# SECTION 00610

## PERFORMANCE BOND

CONTRACTOR *(name and address)*

Name of Contractor

Mailing Address

City, State Zip

OWNER *(name and address):*

Village of Taos Ski Valley

7 Fire House Road

Taos Ski Valley, NM 87525

CONSTRUCTION CONTRACT

Effective Date of Agreement: 1/1/1901

Amount: [\$-Numerals]

Description *(name and location)*

Brief Work Description - describes scope of work awarded to contractor. i.e.  
Base Bid Schedule I

SURETY *(name and address of principal place of business):*

BOND

Bond Number:

Date *(not earlier than the Effective Date of the Agreement of the Construction Contract):*

Amount:

Modifications to this Bond Form: ☐ None ☐ See Paragraph 16

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

**CONTRACTOR AS PRINCIPAL**

**SURETY**

Name of Contractor \_\_\_\_\_ *(seal)*

Contractor's Name and Corporate Seal

\_\_\_\_\_ *(seal)*

Surety's Name and Corporate Seal

By:

Signature

Print Name

Title

Attest:

Signature

Title

By:

Signature *(attach power of attorney)*

Print Name

Title

Attest:

Signature

Title

**Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.**



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:
  - 3.1 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:

# SECTION 00615

## PAYMENT BOND

CONTRACTOR *(name and address)*

Name of Contractor

Mailing Address

City, State Zip

OWNER *(name and address):*

Village of Taos Ski Valley

7 Fire House Road

Taos Ski Valley, NM 87525

CONSTRUCTION CONTRACT

Effective Date of Agreement: 1/1/1901

Amount: [\$-Numerals]

Description *(name and location)*

Brief Work Description - describes scope of work awarded to contractor. i.e.  
Base Bid Schedule I

SURETY *(name and address of principal place of business):*

BOND

Bond Number:

Date *(not earlier than the Effective Date of the Agreement of the Construction Contract):*

Amount:

Modifications to this Bond Form: ☐ None ☐ See Paragraph 18

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

**CONTRACTOR AS PRINCIPAL**

**SURETY**

Name of Contractor \_\_\_\_\_ *(seal)*

Contractor's Name and Corporate Seal

\_\_\_\_\_ *(seal)*

Surety's Name and Corporate Seal

By:

Signature

Print Name

Title

Attest:

Signature

Title

By:

Signature *(attach power of attorney)*

Print Name

Title

Attest:

Signature

Title

**Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.**

1. 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 non-payment 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 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;
    2. The name of the person for whom the labor was done, or materials or equipment furnished;
    3. 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;
    5. The date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;
    6. 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.
  - 16.2 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 and 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:

**SECTION 00700**  
**STANDARD GENERAL CONDITIONS OF THE**  
**CONSTRUCTION CONTRACT**

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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.
1. *Addenda*—Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
  2. *Agreement*—The written instrument, 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. §§5501 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.
3. The words "perform" or "provide," when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.
4. 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:
  - 1. a preliminary Progress Schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract;
  - 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.
  - 1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work, nor interfere with or relieve Contractor from Contractor's full responsibility therefor.
  - 2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.
  - 3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to 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.
3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor had actual knowledge thereof.

*B. Resolving Discrepancies:*

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the 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:

1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or its consultants, including electronic media editions, or 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.
  - 1. 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:
  - 1. severe and unavoidable natural catastrophes such as fires, floods, epidemics, and earthquakes;
  - 2. abnormal weather conditions;
  - 3. 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:
1. 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:

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

#### 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
4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 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:*

1. 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.
2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times with respect to a subsurface or physical condition if:
  - a. 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
  - b. 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:
1. 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:
  - a. 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;
  - 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; and
  - d. Contractor gave the notice required in Paragraph 5.05.B.
2. 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:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by Contractor and safety precautions and programs incident thereto; or
  2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or
  3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions or information.
- C. Contractor shall not be responsible for 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.H 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:
  - 1. 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).

3. 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.
  2. 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.
  3. 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.
  3. 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:
  1. 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.
  4. 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.
  7. 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.
  9. 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*

- A. 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:
  - 1. loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other perils whether or not insured by Owner; and

2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by Owner during partial 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;
    - 2) it will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole;
    - 3) it has a proven record of performance and availability of responsive service; and
    - 4) it is not objectionable to Owner.
  - b. Contractor certifies that, if approved and incorporated into the Work:
    - 1) there will be no increase in cost to the Owner or increase in Contract Times; and
    - 2) it will conform substantially to the detailed requirements of the item named in the Contract Documents.
- 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 consider 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.

1. 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.
2. 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.
3. 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
  3. 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:
  - a. 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;
  - c. 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.

3. 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:*

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

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

1. abuse, modification, or improper maintenance or operation by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or
  2. normal wear and tear under normal usage.
- C. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents:
1. observations by Engineer;
  2. recommendation by Engineer or payment by Owner of any progress or final payment;
  3. the issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;
  4. use or occupancy of the Work or any part thereof by Owner;
  5. any review and approval of a Shop Drawing or Sample submittal;
  6. 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:
  - 1. the identity of the individual or entity that will have authority and responsibility for coordination of the activities among the various contractors;
  - 2. 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 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.
  - 1. *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 11.01.C.2.a and 11.01.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.

3. *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:
  1. 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;
  2. 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;
  2. 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
  2. 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.
- B. *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.
4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.
5. Supplemental costs including the following:
  - a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.
  - b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.
  - c. Rentals of all construction equipment and machinery, and the parts thereof, whether rented from Contractor or others in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.
  - d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, as imposed by Laws and Regulations.
  - e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
  - f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with Paragraph 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, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 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:
  - 1. 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
  - 2. 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:

1. the quantity of any item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement;
2. there is no corresponding adjustment with respect to any other item of Work; and
3. 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 special inspection or testing of the Work, whether or not the Work is fabricated, installed, or completed.
- B. 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.
  - 1. 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:*

1. 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;
  - b. 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;
  - k. 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;
  - l. 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:
  - 1. 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.
  - 2. 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:*

1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, 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:
  1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the Progress Schedule);
  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):
  - 1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
  - 2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses; 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:
  - 1. 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:
1. 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.

# **SECTION 00800 SUPPLEMENTARY CONDITIONS**

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## **Section 00800**

### **Supplementary Conditions**

These Supplementary Conditions amend or supplement the Standard General Conditions of the Construction Contract, EJCDC C-700 (2013 Edition). All provisions that are not so amended or supplemented remain in full force and effect.

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

The address system used in these Supplementary Conditions is the same as the address system used in the General Conditions, with the prefix “SC” added thereto.

#### **SC-1.01            DEFINED TERMS**

##### **SC-1.01    Delete Paragraph 1.01.A.3 in its entirety and insert the following in its place:**

3. Form C-620 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.

##### **SC-1.01    Delete Paragraph 1.01.A.8 in its entirety and insert the following in its place:**

8. Form C-941 which is signed by Contractor and Owner and authorizes and addition, deletion, or revision in the Work of an adjustment in the Contract Price or the contract Times, issued on or after the effective Date of the Agreement.

#### **SC-2.02            COPIES OF DOCUMENTS**

##### **SC-2.02.A.    Amend the first sentence of Paragraph 2.02.A by striking out the following words:**

“and one copy in electronic portable document format (PDF).”

#### **SC-3.01            INTENT**

##### **SC-3.01.C.    Delete Paragraph 3.01.C in its entirety and insert the following in its place**

C. Deleted.

#### **SC-5.03            SUBSURFACE AND PHYSICAL CONDITIONS**

##### **SC-5.03    Add the following new paragraphs immediately after Paragraph 5.03.B:**

- C. The following reports of explorations and tests of subsurface conditions at or adjacent to the Site are known to Owner:

1. Report dated May 16, 2023, prepared by Geotest, Inc., 3204 Richards Lane, Santa Fe, New Mexico 87507 , entitled: “Waterline Replacement, Village of Taos Ski Valley, NM”, consisting of nineteen (19) pages. The Technical Data contained in such report upon whose accuracy Contractor may rely are the boring location map, logs of test borings, summary of laboratory results and appendix a (pages 8 thru 19).
- E. Contractor may examine copies of reports and drawings identified in SC-5.03.C and SC-5.03.D that were not included with the Bidding Documents at [insert location] during regular business hours.

**SC-5.06 HAZARDOUS ENVIRONMENTAL CONDITIONS**

**SC-5.06 Delete Paragraphs 5.06.A and 5.06.B in their entirety and insert the following:**

- A. No reports or drawings related to Hazardous Environmental Conditions at the Site are known to Owner.
- B. Not Used.

**SC-6.03 CONTRACTOR’S LIABILITY INSURANCE**

**SC-6.03 Add the following new paragraph immediately after Paragraph 6.03.J:**

- K. The limits of liability for the insurance required by Paragraph 6.03 of the General Conditions shall provide coverage for not less than the following amounts or greater where required by Laws and Regulations:

1. Workers’ Compensation, and related coverages under Paragraphs 6.03.A.1 and A.2 of the General Conditions:

State:	Statutory
--------	-----------

Federal, if applicable (e.g., Longshoreman’s):	Statutory
--	-----------

Employer’s Liability:

Bodily injury, each accident	\$500,000.00
------------------------------	--------------

Bodily injury by disease, each employee	\$500,000.00
---	--------------

Bodily injury/disease, aggregate	\$500,000.00
----------------------------------	--------------

Foreign voluntary worker compensation	Statutory
---------------------------------------	-----------

2. Contractor’s Commercial General Liability under paragraphs 6.03.B and 6.03.C of the General Conditions:

General Aggregate	\$2,000,000.00
-------------------	----------------

Products – Completed Operations Aggregate	\$1,000,000.00
---	----------------

- |   |                |
|---|----------------|
| Personal and Advertising Injury                     | \$1,000,000.00 |
| Each occurrence (Bodily Injury and Property Damage) | \$1,000,000.00 |
3. Automobile Liability under Paragraph 6.03.D of the General Conditions:
- Bodily Injury:
- |               |                |
|---------------|----------------|
| Each person   | \$1,000,000.00 |
| Each accident | \$1,000,000.00 |
- Property Damage:
- |               |                |
|---------------|----------------|
| Each accident | \$1,000,000.00 |
|---------------|----------------|
- OR
- |                          |                |
|--------------------------|----------------|
| Combined Single Limit of | \$1,000,000.00 |
|--------------------------|----------------|
4. Excess or Umbrella Liability:
- |                   |                |
|-------------------|----------------|
| Per Occurrence    | \$2,000,000.00 |
| General Aggregate | \$2,000,000.00 |
5. Contractor's Pollution Liability:
- |                      |    |
|----------------------|----|
| a. Each Occurrence   | \$ |
| b. General Aggregate | \$ |
- ☒ If box is checked, Contractor is not required to provide Contractor's Pollution Liability insurance under this Contract.
6. Additional Insureds: In addition to Owner and Engineer, include as additional insureds the following:
- |                               |  |
|-------------------------------|--|
| a. Village of Taos Ski Valley |  |
| b. Taos Ski Valley, Inc.      |  |
| c. DENNIS ENGINEERING COMPANY |  |
| d. Geotest, Inc.]             |  |
7. Contractor's Professional Liability:
- |                     |       |
|---------------------|-------|
| a. Each Claim       | \$N/A |
| b. Annual Aggregate | \$N/A |



## **SC-6.05            PROPERTY INSURANCE**

### **SC-6.05.A.1   Add the following new subparagraph after subparagraph 6.05.A.1:**

- a. In addition to Owner, Contractor, and all Subcontractors, include as insureds the following:
  - 1) DENNIS ENGINEERING COMPANY
  - 2) Testing laboratories
  - 3) Utility Owners

## **SC-7.06            CONCERNING SUBCONTRACTORS, SUPPLIERS, AND OTHERS**

### **SC-7.06   Add a new paragraph immediately after Paragraph 7.06.O:**

- P. Contractors, Subcontractors, Sub-subcontractors, and any tier thereof shall make prompt payment to their Subcontractors and Suppliers for amounts owed for Work performed in accordance with the Contract within seven days after receipt of payment from the owner, Contractor, or Subcontractor.
- Q. The Contractor shall not subcontract Work valued at more than fifty percent (50%) of the Contract Price to Subcontractor(s) without prior written approval of the Owner.
- R. No Contractor shall substitute any person as Subcontractor in place of the Subcontractor listed in the original Bid, except for those reasons identified in 13-4-36 NMSA 1978.

## **SC-7.16            SHOP DRAWINGS, SAMPLES, AND OTHER SUBMITTALS**

### **SC-7.16.A.3   Amend the last sentence of Paragraph 7.16.A.3 by striking out the following words:**

“and approval”

### **SC-7.16.B Amend the first sentence of Paragraph 7.16.B by striking out the following words:**

“and approval”

### **SC-7.16.B.3   Amend the first sentence of Paragraph 7.16.B.3 by striking out the following words:**

“and approval”

### **SC-7.16.D.1   Amend the second sentence of Paragraph 7.16.D.1 by striking out the following words:**

“and approval”

### **SC-7.16.D.2   Amend the first sentence of Paragraph 7.16.D.2 by striking out the following words:**

“and approval”

**SC-7.16.D.3 Amend the first sentence of Paragraph 7.16.D.3 by striking out the following words:**

“and approval”

**SC-7.16.D.4 Amend the first sentence of Paragraph 7.16.D.4 by striking out the following words:**

“and approval”

**SC-7.16.D.5 Amend the first sentence of Paragraph 7.16.D.5 by striking out the following words:**

“and approval”

**SC-7.16.D.6 Amend the first sentence of Paragraph 7.16.D.6 by striking out the following words:**

“and approval”

**SC-7.16.E.1 Amend the first sentence of Paragraph 7.16.E.1 by striking out the following words:**

“and approval”

**SC-7.16.E.2 Delete Paragraph 7.16.E.2 in its entirety and replace with the following:**

2. Contractor shall furnish required submittals with sufficient information and accuracy in order to demonstrate the item conforms to the Contract requirements with no more than three submittals. Engineer will record Engineer’s time for reviewing a fourth or subsequent submittals of Shop Drawings, sample or other items, 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.

**SC-7.16.E.3 Delete Paragraph 7.16.E.3 in its entirety and replace with the following:**

3. In the event that Contractor requests a change of a previously approved submittal items, 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 changes, unless the need for such change is beyond the control of Contractor.

## **SC-7.19 DELEGATION OF PROFESSIONAL DESIGN SERVICES**

**SC-7.19.D Amend the first sentence of Paragraph 7.19.D by striking out the following words:**

“and approval”

**SC-7.19.D Amend the last sentence of Paragraph 7.19.D by striking out the following words:**

“and approval”

## **SC-9.11 EVIDENCE OF FINANCIAL ARRANGEMENTS**

### **SC-9.11 Add the following new paragraph immediately after Paragraph 9.11.A:**

- B. On request of Contractor prior to the execution of any Change Order involving a significant increase in the Contract Price, Owner shall furnish to Contractor reasonable evidence that adequate financial arrangements have been made by Owner to enable Owner to fulfill the increased financial obligations to be undertaken by Owner as a result of such Change Order.

## **SC-10.03 PROJECT REPRESENTATIVE**

### **SC-10.03 Add the following new paragraphs immediately after Paragraph 10.03.A:**

- B. The Resident Project Representative (RPR) will be Engineer's representative at the Site on a periodic basis, will act as directed by and under the supervision of Engineer, and will confer with Engineer regarding RPR's actions.
  - 1. General: RPR's dealings in matters pertaining to the Work in general shall be with Engineer and Contractor. RPR's dealings with Subcontractors shall only by through or with the full knowledge and approval of Contractor. RPR shall generally communicate with Owner only with the knowledge of and under the direction of Engineer.
  - 2. Schedules: Review the progress schedule, schedule of Shop Drawing and Sample submittals, and Schedule of Values prepared by Contractor and consult with Engineer concerning acceptability.
  - 3. Conferences and Meetings: Attend meetings with Contractor, such as preconstruction conferences, progress meetings, job conferences, and other Project-related meetings, and prepare and circulate copies of minutes thereof.
  - 4. Liaison:
    - a. Serve as Engineer's liaison with Contractor. Working principally through Contractor's authorized representative or designee, assist in providing information regarding the provisions and intent of the Contract Documents.
    - b. Assist Engineer in serving as Owner's liaison with Contractor when Contractor's operations affect Owner's on-Site operations.
    - c. Assist in obtaining from Owner additional details or information, when required for proper execution of the Work.
  - 5. Interpretation of Contract Documents: Report to Engineer when clarifications and interpretations of the Contract Documents are needed and transmit to Contractor clarifications and interpretations as issued by Engineer.
  - 6. Shop Drawings and Samples:
    - a. Record date of receipt of Samples and Contractor-approved Shop Drawings.

- b. Receive Samples which are furnished at the Site by Contractor, and notify Engineer of availability of Samples for examination.
  - c. Advise Engineer and Contractor of the commencement of any portion of the Work requiring a Shop Drawing or Sample submittal for which RPR believes that the submittal has not been reviewed by Engineer.
7. Modifications: Consider and evaluate Contractor's suggestions for modifications in Drawings or Specifications and report such suggestions, together with RPR's recommendations, if any, to Engineer. Transmit to Contractor in writing decisions as issued by Engineer.
8. Review of Work and Rejection of Defective Work:
- a. Conduct on-Site observations of Contractor's work in progress to assist Engineer in determining if the Work is in general proceeding in accordance with the Contract Documents.
  - b. Report to Engineer whenever RPR believes that any part of Contractor's work in progress is defective, will not produce a completed Project that conforms generally to the Contract Documents, or will imperil the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents, or has been damaged, or does not meet the requirements of any inspection, test or approval required to be made; and advise Engineer of that part of work in progress that RPR believes should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection or approval.
9. Inspections, Tests, and System Start-ups:
- a. Consult with Engineer in advance of scheduled major inspections, tests, and systems start-ups of important phases of the Work
  - b. Verify that tests, equipment, and systems start-ups and operating and maintenance training and conducted in the presence of appropriate Owner's personnel, and that Contractor maintains adequate records thereof.
  - c. Observe, record, and report to Engineer appropriate details relative to the test procedures and systems start-ups.
  - d. Accompany visiting inspectors representing public or other agencies having jurisdiction of the Project, record the results of these inspections, and report to Engineer.
10. Records:
- a. Maintain at the Site orderly files for correspondence, reports of job conferences, reproductions of original Contract Documents including all Change Orders, Field Orders, Work Change Directives, Addenda, additional Drawings issued subsequent to the execution of the Contract, Engineer's clarifications and interpretations of the

Contract Documents, progress reports, Shop Drawing and Sample submittals received from and delivered to Contractor and other Project-related documents.

- b. Prepare a daily report or keep a diary or log book, recording Contractor's hours on the Site, Subcontractors present at the Site, weather conditions, data relative to questions of Change Orders, Field Orders, Work Change Directives, or change conditions, Site visitors, deliveries of equipment or materials, daily activities, decisions, observations in general, and specific observations in more detail as in the case of observing test procedures; and send copies to Engineer.
- c. Record names, addresses, fax numbers, e-mail addresses, web site locations, and telephone numbers of all Contractors, Subcontractors, and major Suppliers of materials and equipment.
- d. Maintain records for use in preparing Project Documentation.
- e. Upon completion of the Work, furnish original set of all RPR Project Documentation to Engineer.

#### 11. Reports:

- a. Furnish to Engineer periodic reports as required of progress of the Work and of Contractor's compliance with the Progress Schedule and schedule of Shop Drawing and Sample submittals.
- b. Draft and recommend to Engineer proposed Change Orders, Work Change Directives, and Field Orders. Obtain backup material from Contractor.
- c. Furnish to Engineer and Owner copies of all inspection, test, and system start-up reports.
- d. Immediately notify Engineer of the occurrence of any Site accidents, emergencies, acts of God endangering the Work, force majeure or delay events, damage to property by fire or other causes, or the discovery of any Constituent of Concern or Hazardous Environmental Condition.

12. Payment Requests: Review Applications for Payment with Contractor for compliance with the established procedure for their submission and forward with recommendations to Engineer, noting particularly the relationship of the payment requested to the Schedule of Values, Work completed, and materials and equipment delivered at the Site but not incorporated in the Work.

13. Certificates, Operation and Maintenance Manuals: During the course of the Work, verify that materials and equipment certificates, operation and maintenance manuals and other data required by the Contract Documents to be assembled and furnished by Contractor are applicable to the items actually installed and in accordance with the Contract Documents, and have these documents delivered to Engineer for review and forwarding to Owner prior to payment for that part of the Work.

14. Completion:

- a. Participate in Engineer's visits to the Site to determine Substantial Completion, assist in the determination of Substantial Completion and the preparation of a punch list of items to be completed or corrected.
- b. Observe Contractor arranged inspections required by Laws and Regulations applicable to the Work including but not limited to those performed by public agencies having jurisdiction over the Work.
- c. Participate in Engineer's final visit to the Site to determine completion of the Work, in the company of Owner and Contractor and prepare a final punch list of items to be completed and deficiencies to be remedied.
- d. Observe whether all items on the final list have been completed or corrected and make recommendations to Engineer concerning acceptance and issuance of the notice of acceptability of the Work.

C. The RPR shall not:

1. Authorize any deviation from the Contract Documents or substitution of materials or equipment (including "or-equal" items).
2. Exceed limitations of Engineer's authority as set forth in the Contract Documents.
3. Undertake any of the responsibilities of Contractor, Subcontractors, or Suppliers.
4. Advise on, issue directions relative to, or assume control over any aspect of the means, methods, techniques, sequences or procedures of Contractor's work.
5. Advise on, issue directions regarding, or assume control over security or safety practices, precautions, and programs in connection with the activities or operations of Owner or Contractor.
6. Participate in specialized field or laboratory tests or inspections conducted off-site by others except as specifically authorized by Engineer.
7. Accept Shop Drawing or Sample submittals from anyone other than Contractor.
8. Authorize Owner to occupy the Project in whole or in part.

**SC-11.01 AMENDING AND SUPPLEMENTING CONTRACT DOCUMENTS**

**SC-11.01.A.2 Amend the second sentence of Paragraph 11.01.A.2 to read as follows:**

2. Contractor must submit any Change Proposal seeking an adjustment of the Contract Price or the Contract Times, or both, no later than 7 days after the completion of the Work set out in the Work Change Directive.

## **SC-11.06 CHANGE PROPOSALS**

### **SC-11.06.A.1 Amend the second sentence of Paragraph 11.06.A.1 to read as follows:**

1. The Contractor shall submit supporting data, including the proposed change in Contract Price or Contract Time (if any), to the Engineer and Owner within 7 days after the submittal of the Change Proposal.

### **SC-11.06.A.2 Delete Paragraph 11.06.A.2 in its entirety and insert the following in its place:**

2. *Engineer's Action:* Engineer will review each Change Proposal and, within 15 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 15 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.

## **SC-12.01 CLAIMS**

### **SC-12.01.B Amend the first sentence of Paragraph 12.01.B to read as follows:**

- B. The party submitting a Claim shall deliver it directly to the other party to the Contract promptly (but in no event later than 15 days) after the start of the event giving rise thereto; in the case of appeals regarding Change Proposals within 15 days of the decision under appeal.

### **SC-12.01.E Delete Paragraph 12.01.E in its entirety and insert the following in its place:**

- 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 15 days of such action the other party invokes the procedure set forth in Article 17 for final resolution of disputes.

### **SC-12.01.F Delete Paragraph 12.01.F in its entirety and insert the following in its place:**

- 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 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 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 15 days of the denial the other party invokes the procedure set forth in Article 17 for the final resolution of disputes.

## **SC-13.02 ALLOWANCES**

### **SC-13.02.B.3 Add the following new paragraph immediately after Paragraph 13.02.B.2:**

3. Mileage will be reimbursed at the current federally approved IRS rate for contractors, sub-contractors, and others where mileage is claimed.

### **SC-13.03 UNIT PRICE WORK**

#### **SC-13.03.E Delete Paragraph 13.03.E in its entirety and insert the following in its place:**

- E. The unit price of an item of Unit Price Work shall be subject to reevaluation and adjustment under the following conditions:
1. if the extended price of a particular item of Unit Price Work amounts to five (5) percent or more of the Contract Price (based on estimated quantities at the time of Contract formation) and the variation in the quantity of that particular item of Unit Price Work actually furnished or performed by Contractor differs by more than twenty (20) percent from the estimated quantity of such item indicated in the Agreement; and
  2. if there is no corresponding adjustment with respect to any other item of Work; and
  3. if Contractor believes that Contractor has incurred additional expense as a result thereof, Contractor may submit a Change Proposal, or if Owner believes that the quantity variation entitles Owner to an adjustment in the unit price, Owner may make a Claim, seeking an adjustment in the Contract Price.

### **SC-15.01 PROGRESS PAYMENTS**

#### **SC-15.01.B.1 Amend the first sentence of Paragraph 15.01.B.1 to read as follows:**

1. At least 55 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.

#### **SC-15.01.D.1 Delete Paragraph 15.01.D.1 in its entirety and insert the following in its place:**

1. Notice of Extended Payment Provision: This Contract allows the Owner to make payments within forty-five (45) days after submission of an undisputed request for payment.
  - a. Forty-five (45) days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended (subject to the provisions of 15.01.E) will become due, and when due will be paid by Owner to Contractor.

### **SC-15.06 FINAL PAYMENT**

#### **SC-15.06.A.2 Add the following new paragraph immediately after Paragraph 15.06.A.2.e:**

- f. Affidavit of Payment and Release of Liens for Contractor;
- g. Affidavit of Payment and Release of Liens for each Subcontractor and Supplier;
- h. Labor Standards Certificate;
- i. Contractor As-built Drawings;
- j. And other closeout documents, certifications and/ or Affidavits as identified in the Project specifications.



**SC-15.06.D Delete Paragraph 15.06.D in its entirety and insert the following in its place:**

**D. Payment Becomes Due:**

1. Notice of Extended Payment Provision: This Contract allows the Owner to make payments within forty-five (45) days after submission of an undisputed request for payment.
  - a. Forty-five 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.

**SC-16.02 OWNER MAY TERMINATE FOR CAUSE**

**SC-16.02.H Add the following new paragraphs immediately after Paragraph 16.02.G:**

- H. The terms of this Agreement are contingent upon sufficient appropriations and authorization being made by the Legislature of New Mexico for the performance of this Agreement. If sufficient appropriations and authorization are not made by the Legislature, the Owner may immediately terminate this Agreement by giving Contractor written notice of such termination. The Owner's decision as to whether sufficient appropriations are available shall be accepted by the Engineer and shall be final. Engineer hereby waives any rights to assert an impairment of contract claim against the Owner or the NMED or the State of New Mexico in the event of immediate or Early Termination of this Agreement by the Owner or the Department.

This contract is funded in whole or in part by funds made available under a NMED Grant Agreement. Should the NMED early terminate the grant agreement, the Owner may early terminate this contract by providing Contractor written notice of such termination. In the event of termination pursuant to this paragraph, the Owner's only liability shall be to pay Engineer for acceptable goods delivered and services rendered before the termination date.

**SC-16.04 CONTRACTOR MAY STOP WORK OR TERMINATE**

**SC-16.04.A Amend Paragraph 16.04.A to read:**

- 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 45 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.

**SC-16.04.B Amend the first sentence of Paragraph 16.04.B to read as follows:**

- A. 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 45 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.

**SC-18.07            CONTROLLING LAW**

**SC-18.07.A    Delete Paragraph 18.07.A in its entirety and insert the following in its place:**

- A. This Contract is to be governed by the laws of the State of New Mexico in which the Project is located.

**SC-18.09    Add the following new section to Article 18:**

**SC-18.09            TORT CLAIMS ACT**

- A. Any liability of the Owner incurred in connection with this Contract is subject to the immunities and limitations of the New Mexico Tort Claims Act, NMSA 1978, 41-4-4, et seq., as amended. The Owner and its public employees as defined by the New Mexico Tort Claims Act do not waive sovereign immunity, does not waive any defense, and do not waive any limitation on liability pursuant to said law. No provision of this Contract modifies or waives any provision of the New Mexico Tort Claims Act.

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**GEOTECHNICAL ENGINEERING  
SERVICES REPORT  
JOB NO. 1-30407  
WATERLINE REPLACEMENT  
VILLAGE OF TAOS SKI VALLEY, NEW MEXICO**

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**PREPARED FOR:  
  
TAOS SKI VALLEY, INC**

May 16, 2023  
Job No. 1-30407

**Taos Ski Valley, Inc.  
116 Sutton Place  
Village Taos Ski Valley, New Mexico 87525**

**ATTN: Peter J. Talty-Vice President**

**RE: Geotechnical Engineering Services Report  
Waterline Replacement  
Village of Taos Ski Valley, New Mexico**

Dear Mr. Talty:

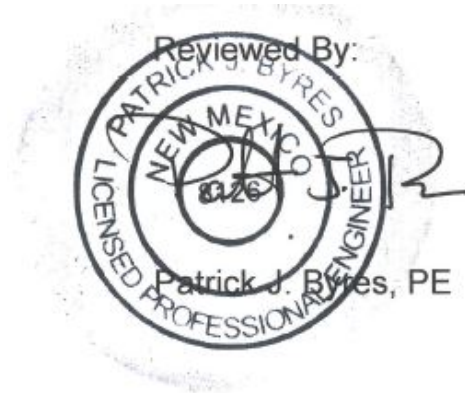
Submitted herein is the Geotechnical Engineering Services Report for the above-referenced project. The report contains the results of our field investigation, laboratory testing, criteria for excavation, backfill and general site grading.

It has been a pleasure to serve you on this project. If you should have any questions, please contact this office.

Respectfully submitted:  
GEO-TEST, INC.



Timothy Matson, Staff Engineer



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## **INTRODUCTION**

This report presents the results of our geotechnical engineering services investigation performed by this firm for the proposed waterline replacement project to be located in the Village of Taos Ski Valley, New Mexico.

The objectives of this investigation were to:

- 1) Evaluate the nature and engineering properties of the subsurface soils underlying the proposed waterline.
- 2) To provide recommendations for the necessary earthwork during construction of the proposed waterline including temporary slopes and general site grading.

The investigation includes subsurface exploration, selected soil sampling, laboratory testing of the samples, performing an engineering analysis and preparation of this report.

## **PROPOSED CONSTRUCTION**

It is understood that the project consists of the replacement of the existing waterline along Coyote Lane and Phoenix Switchback Road in the Village of Taos Ski Valley.

Should project details vary significantly from those outlined above, this firm should be notified for review and possible revision of the recommendations contained herein.

## **FIELD EXPLORATION**

As requested, six (6) exploratory borings were drilled to auger refusal at 6½ feet below existing site grade in boring no. 1 and to 10 feet below existing site grades in all the other borings. The approximate locations of the are shown on the Boring Location Map, Figure 1. The soils encountered in the borings were continuously examined, visually classified and logged during the drilling operation. The boring logs are presented in a following section of this report. Drilling was accomplished using a truck mounted drill rig equipped with 2.25-inch inside diameter continuous flight hollow stem auger. Auger cuttings were collected from throughout all of the borings.

## **LABORATORY TESTING**

Selected samples were tested in Geo-Test, Inc. laboratories to determine certain engineering properties of the soils. Moisture contents were determined to evaluate the various soil deposits with depth. The results of these tests are shown on the boring logs.

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Sieve analysis and Atterberg limits tests were performed to aid in soil classification. The results of these tests are presented in the Summary of Laboratory Results and on the individual test reports presented in a following section of this report.

Soluble sulfate testing, performed by Hall Environmental and are presented in Appendix A of this report.

### **SURFACE CONDITIONS**

A brief site reconnaissance was performed during our site exploration. The site for the waterline replacement will be located on Coyote Lane and Phoenix Switchback Road. The roads are unpaved, somewhat narrow and slopes to the southeast. Although the roadways were rather narrow, there were numerous underground utilities, cable, electric, gas, water and sewer.

### **SUBSURFACE SOIL CONDITIONS**

As indicated by the exploratory borings, the soils encountered consisted of interbedded layers of gravels with various amounts of sand, silt and lesser amounts of clays. These soils were also interbedded with cobbles and boulders, both of which were observed on the surface on the slopes surrounding the roadways. Difficult drilling was experienced throughout all of the borings.

No free groundwater was encountered in the borings and soil moisture contents were low throughout the extent of the borings. Detailed lithologic descriptions and moisture contents are shown on the attached boring logs.

### **CONCLUSIONS AND RECOMMENDATIONS**

The results of this investigation as well as the fact that there are existing underground utilities, indicate that the surficial soils encountered in the borings can be readily excavated using normal earth moving and excavation equipment. However, cobbles may be encountered in some areas which may require an oversized excavator bucket. In addition, most of the excavated soils will be suitable for use as backfill above pipe bedding and embedment materials. Some of the excavated soils may be used as pipe bedding, provided they are screened and conform to the pipe manufacturer's recommendations.

Excavated slopes for utility construction should be designed and constructed in accordance with 29 CFR 1926, Subpart P, and any applicable state or local regulations. Temporary cut slopes should not exceed 2 horizontal to 1 vertical. However, due to all the existing underground utilities and the limited room, shoring or some kind of trench box will probably be required.

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Bedding and pipe embedment materials to be used around the proposed waterline should consist of well graded sand or gravel conforming to the pipe manufacturer's recommendations and be placed and compacted in accordance with project specifications, local requirements or governing jurisdiction. General fill to be used above pipe embedment materials should be placed and compacted in accordance with the plans and specifications. Water jetting of trench backfill should not be allowed.

### **SITE GRADING**

The following general guidelines should be included in the project construction specifications to provide a basis for quality control during site grading. It is recommended that all structural fill and backfill be placed and compacted under full-time engineering observation and testing in accordance with the following:

- 1) The results of this investigation indicate that most of the excavated soils will be suitable for use as trench backfill above the pipe embedment; however, some blending, processing and removal of oversized material will be required. Import material can also be used as fill provided it meets the specifications presented below.
- 2) All trench backfill should be free of vegetation and debris and contain no rocks larger than 4 inches. The gradation of the backfill material, as determined in accordance with ASTM D-422, should be as follows:

Size	Percent Passing
4-inch	100
No. 4	60 - 100
No. 200	5 - 45

- 3) Trench backfill, consisting of soil approved by the geotechnical engineer, shall be placed in 8-inch loose lifts and compacted with approved compaction equipment. Lifts should be reduced to 4 inches if hand-held compaction equipment is used. All compaction of fill or backfill shall be accomplished to a minimum of 95 percent of the maximum dry density as determined in accordance with ASTM D-1557. The moisture content of the backfill during compaction should be within 2 percent of the optimum moisture content.
- 4) Tests for degree of compaction should be determined by the ASTM D-1556 method or ASTM D-6938. Observation and field tests should be performed during fill and backfill placement by the geotechnical engineer to assist the contractor in obtaining the required degree of compaction. If less than 95 percent is indicated, additional compaction effort should be made with adjustment of the moisture content as necessary until 95 percent compaction is obtained.

**REVIEW AND INSPECTION**

This report has been prepared to aid in the evaluation of this site and to assist in the design of this project. It is recommended that the geotechnical engineer be provided the opportunity to review the final design drawings and specifications in order to determine whether the recommendations in this report are applicable to the final design. Review of the final design drawings and specifications should be noted in writing by the geotechnical engineer.

In order to permit correlation between the conditions encountered during construction and to confirm recommendations presented herein, it is recommended that the geotechnical engineer be retained to perform continuous observations and testing during the earthwork portions of this project.

**CLOSURE**

Our conclusions, recommendations and opinions presented herein are:

- 1) Based upon our evaluation and interpretation of the findings of the field and laboratory program.
- 2) Based upon an interpolation of soil conditions between and beyond the explorations.
- 3) Prepared in accordance with generally accepted professional geotechnical engineering principles and practice.

This report has been prepared for the sole use of Taos Ski Valley, Inc., specifically to aid in the design of the waterline replacement project along Coyote Lane and Phoenix Switchback Road in the Village of Taos Ski Valley, New Mexico, and not for the use by any third parties.

We make no other warranty, either express or implied. Any person using this report for bidding or construction purposes should perform such independent investigation as he deems necessary to satisfy himself as to the surface and subsurface conditions to be encountered and the procedures to be used in the performance of work on this project. If conditions encountered during construction appear to be different than indicated by this report, this office should be notified.

All soil samples will be discarded 60 days after the date of this report unless we receive a specific request to retain the samples for a longer period of time.

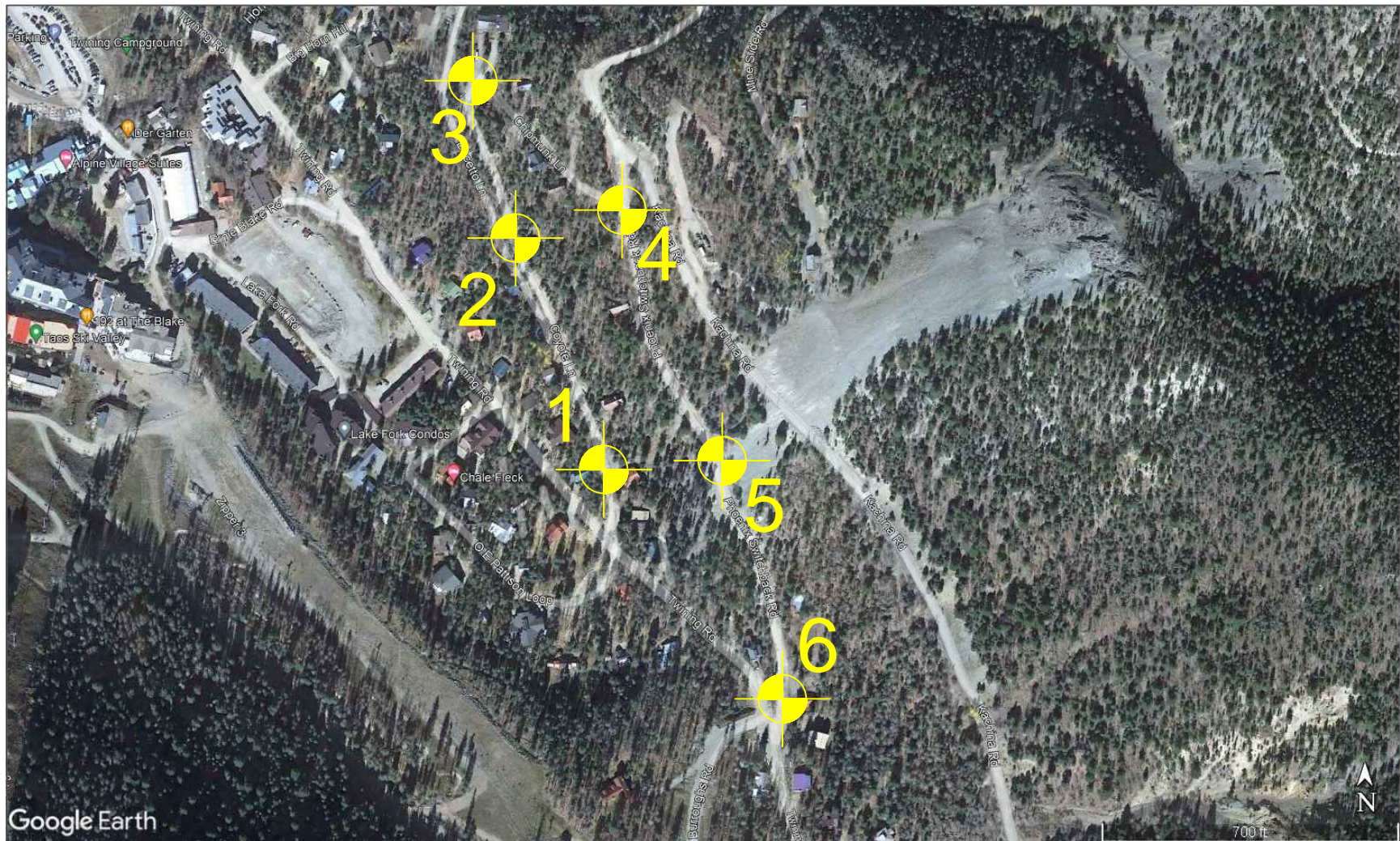
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## BORING LOCATION MAP

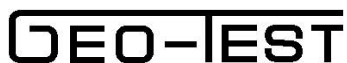


Waterline Replacement Project  
Village of Taos Ski Valley, New Mexico  
Job No. 1-30407

Figure 1



**GEO-TEST**  
GEOTECHNICAL ENGINEERING  
AND MATERIAL TESTING



Project: Waterline Replacement

Date: 05/04/2023

Project No: 1-30407

Elevation:

Type: 2.25" I.D. HSA

## LOG OF TEST BORINGS

## GROUNDWATER DEPTH

NO: 1

During Drilling: NONE

After 24 Hours:

DEPTH (Ft)	LOG	SAMPLE						SUBSURFACE PROFILE	N blows/ft			
		SAMPLE INTERVAL	TYPE	N. BLOWS/FT	MOISTURE %	DRY DENSITY (pcf)	USC	DESCRIPTION				
5			AC		6		GP-GC	GRAVEL with SILTY CLAY and SAND, fine to coarse grained, some cobbles & boulders, non-plastic to low plasticity, slightly moist, dark brown  *possible roadway fill in upper 4'				
10								AUGER REFUSAL ON COBBLES/BOULDER AT 6.5'				

## LEGEND

SS - Split Spoon

AC - Auger Cuttings

UD/SL - Undisturbed Sleeve

AMSL - Above Mean Sea Level

CS - Continuous Sampler

UD - Undisturbed

ST - Shelby Tube

Stratification lines represent approximate boundaries between soil types. Transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to factors other than those present at the time measurements were made.



Project: Waterline Replacement

Date: 05/04/2023

Project No: 1-30407

Elevation:

Type: 2.25" I.D. HSA

## LOG OF TEST BORINGS

## GROUNDWATER DEPTH

NO: 2

During Drilling: NONE

After 24 Hours:

DEPTH (Ft)	LOG	SAMPLE						SUBSURFACE PROFILE	N blows/ft			
		SAMPLE INTERVAL	TYPE	N. BLOWS/FT	MOISTURE %	DRY DENSITY (pcf)	USC	DESCRIPTION				
5			AC		3		GP-GC	GRAVEL with SILTY CLAY and SAND, fine to coarse grained, some cobbles & boulders, non-plastic to low plasticity, slightly moist, dark brown				
10								STOPPED AUGER AT 10'				

## LEGEND

SS - Split Spoon

AC - Auger Cuttings

UD/SL - Undisturbed Sleeve

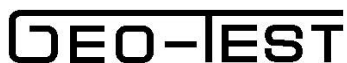
AMSL - Above Mean Sea Level

CS - Continuous Sampler

UD - Undisturbed

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Project: Waterline Replacement

Date: 05/04/2023

Project No: 1-30407

Elevation:

Type: 2.25" I.D. HSA

## LOG OF TEST BORINGS

## GROUNDWATER DEPTH

NO: 3

During Drilling: NONE

After 24 Hours:

DEPTH (Ft)	LOG	SAMPLE						SUBSURFACE PROFILE	N blows/ft			
		SAMPLE INTERVAL	TYPE	N. BLOWS/FT	MOISTURE %	DRY DENSITY (pcf)	USC	DESCRIPTION				
5			AC		5		GP-GC	GRAVEL with SILTY CLAY and SAND, fine to coarse grained, some cobbles & boulders, non-plastic to low plasticity, slightly moist, dark brown  *possiblefill in upper 5'				
10								STOPPED AUGER AT 10'				

## LEGEND

SS - Split Spoon

AC - Auger Cuttings

UD/SL - Undisturbed Sleeve

AMSL - Above Mean Sea Level

CS - Continuous Sampler

UD - Undisturbed

ST - Shelby Tube

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Project: Waterline Replacement

Date: 05/04/2023

Project No: 1-30407

Elevation:

Type: 2.25" I.D. HSA

## LOG OF TEST BORINGS

## GROUNDWATER DEPTH

NO: 4

During Drilling: NONE

After 24 Hours:

DEPTH (Ft)	LOG	SAMPLE						SUBSURFACE PROFILE	N blows/ft			
		SAMPLE INTERVAL	TYPE	N. BLOWS/FT	MOISTURE %	DRY DENSITY (pcf)	USC	DESCRIPTION				
5			AC		3		GC	CLAYEY GRAVEL, fine to coarse grained, some cobbles and boulders, low plasticity, slightly moist, light brown				
10								STOPPED AUGER AT 10'				

## LEGEND

SS - Split Spoon

AC - Auger Cuttings

UD/SL - Undisturbed Sleeve

AMSL - Above Mean Sea Level

CS - Continuous Sampler

UD - Undisturbed

ST - Shelby Tube

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Project: Waterline Replacement

Date: 05/04/2023

Project No: 1-30407

Elevation:

Type: 2.25" I.D. HSA

## LOG OF TEST BORINGS

## GROUNDWATER DEPTH

NO: 5

During Drilling: NONE

After 24 Hours:

DEPTH (Ft)	LOG	SAMPLE						SUBSURFACE PROFILE	N blows/ft			
		SAMPLE INTERVAL	TYPE	N. BLOWS/FT	MOISTURE %	DRY DENSITY (pcf)	USC	DESCRIPTION				
5			AC		2		GM	SILTY GRAVEL with SAND, fine to coarse grained, some cobbles & boulders, non-plastic to low plasticity, slightly moist, light brown				
10			AC		3							
								STOPPED AUGER AT 10'				

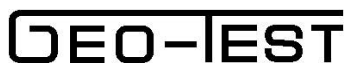
## LEGEND

SS - Split Spoon  
AC - Auger Cuttings  
UD/SL - Undisturbed Sleeve

AMSL - Above Mean Sea Level  
CS - Continuous Sampler  
UD - Undisturbed  
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Stratification lines represent approximate boundaries between soil types. Transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to factors other than those present at the time measurements were made.





Project: Waterline Replacement

Date: 05/04/2023

Project No: 1-30407

Elevation:

Type: 2.25" I.D. HSA

## LOG OF TEST BORINGS

## GROUNDWATER DEPTH

NO: 6

During Drilling: NONE

After 24 Hours:

DEPTH (Ft)	LOG	SAMPLE						SUBSURFACE PROFILE	N blows/ft			
		SAMPLE INTERVAL	TYPE	N. BLOWS/FT	MOISTURE %	DRY DENSITY (pcf)	USC	DESCRIPTION				
5			AC		3		GW-GM	GRAVEL with SILT and SAND, fine to coarse grained, some cobbles and boulders, non-plastic to low plasticity, slightly moist, brown				
10								STOPPED AUGER AT 10'				

## LEGEND

SS - Split Spoon  
AC - Auger Cuttings  
UD/SL - Undisturbed Sleeve

AMSL - Above Mean Sea Level  
CS - Continuous Sampler  
UD - Undisturbed  
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# SUMMARY OF LABORATORY RESULTS

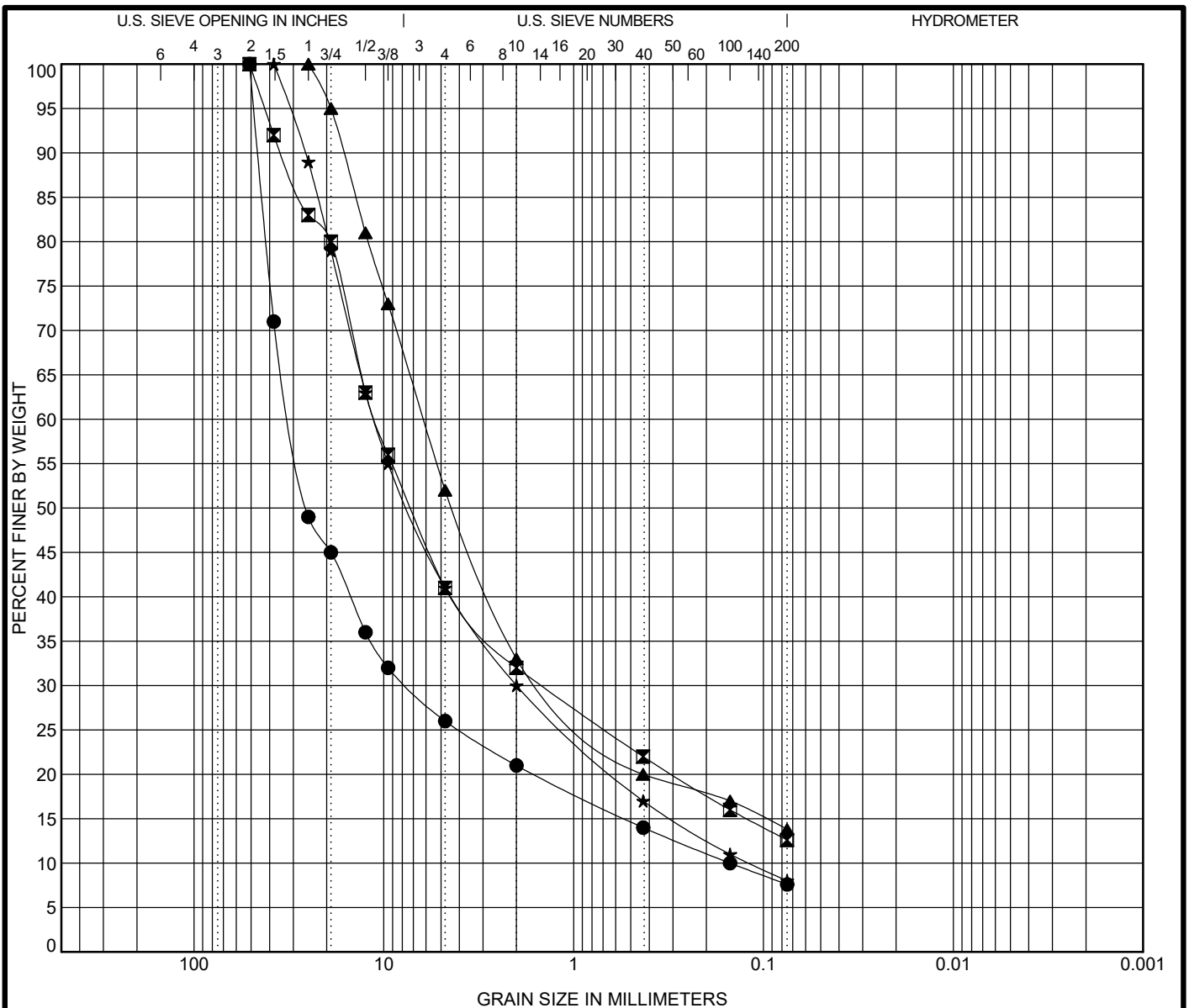
						SIEVE ANALYSIS PERCENT PASSING											
SAMPLE NO.	DEPTH (FEET)	UNIFIED CLASS	(%) MOIST	LL	PI	NO 200	NO 100	NO 40	NO 10	NO 4	3/8"	1/2"	3/4"	1"	1 1/2"	2"	3"
1	3.0		5.7														
2	5.0	GP-GC	3.2	23	5	8	10	14	21	26	32	36	45	49	70	98	
3	5.0		4.9														
4	5.0	GC	3.0	24	8	13	16	22	32	41	56	63	80	83	92	99	
5	2.5		2.1														
5	7.5	GM	3.4	NP	NP	14	17	20	33	52	73	81	95	100			
6	5.0	GW-GM	3.5	NP	NP	8	11	17	30	41	55	63	79	89	100		

MATERIALS TESTING SUMMARY 1-30407-TSV-WATERLINE REPLACEMENT.GPJ GEO TEST.GDT 5/16/23

**GEO-TEST**

LL = LIQUID LIMIT  
PI = PLASTICITY INDEX  
NP = NON PLASTIC or NO VALUE

Project: Waterline Replacement  
Location: Taos Ski Valley, New Mexico  
Number: 1-30407



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen Identification			Classification	LL	PL	PI	Cc	Cu
●	2	5.0	POORLY GRADED GRAVEL with SILTY CLAY and SAND(GP-GC)	23	18	5	12.30	205.48
☒	4	5.0	CLAYEY GRAVEL with SAND(GC)	24	16	8		
▲	5	7.5	SILTY GRAVEL with SAND(GM)	NP	NP	NP		
★	6	5.0	WELL-GRADED GRAVEL with SILT and SAND(GW-GM)	NP	NP	NP	2.98	94.73

Specimen Identification		D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	2	5.0	51	30.822	7.54	0.15	74.0	18.4	7.6
☒	4	5.0	51	11.113	1.471		59.0	28.4	12.6
▲	5	7.5	25	6.185	1.403		48.0	38.2	13.8
★	6	5.0	38	11.278	2	0.119	59.0	33.0	8.0

**GEO-TEST**

## GRAIN SIZE DISTRIBUTION

Project: Waterline Replacement

Location: Taos Ski Valley, New Mexico

Number: 1-30407

# APPENDIX A

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **2305659**

Date Reported: **5/15/2023**

**CLIENT:** Geo-Test

**Client Sample ID:** 1-30407 Coyote Lane Composite

**Project:** TSV Waterline Replacent

**Collection Date:** 5/4/2023 10:30:00 AM

**Lab ID:** 2305659-001

**Matrix:** SOIL

**Received Date:** 5/11/2023 3:08:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>SNS</b>
Chloride	23	7.5		mg/Kg	5	5/12/2023 10:47:57 PM	74919
Sulfate	16	7.5		mg/Kg	5	5/12/2023 10:47:57 PM	74919

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **2305659**

Date Reported: **5/15/2023**

**CLIENT:** Geo-Test

**Client Sample ID:** 1-30407 Phoenix Switchback Co

**Project:** TSV Waterline Replacent

**Collection Date:** 5/4/2023 11:00:00 AM

**Lab ID:** 2305659-002

**Matrix:** SOIL

**Received Date:** 5/11/2023 3:08:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>SNS</b>
Chloride	ND	7.5		mg/Kg	5	5/12/2023 11:37:34 PM	74919
Sulfate	34	7.5		mg/Kg	5	5/12/2023 11:37:34 PM	74919

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

<b>Contractor's Application for Payment</b>					
				No.	1
Contractor: Contractor Address City, State ZIP		Project: Phoenix Switchback Waterline Replacement			
Owner: Village of Taos Ski 7 Firehouse Road Taos Ski Valley, NM 87525		Project Nos.: SAP A23H2504 SAP A19D2555		Application Period: From 5/1/2024 thru 5/25/2024	
				Application Date: 6/1/2024	
CONTRACT CHANGE ORDER SUMMARY				PAY APPLICATION	
Change Order No.	Owner Approval Date	Amount w/o GRT			
		Addition	Deduction		
1	1/0/1900	\$0.00	\$0.00	1. Original Contract Value w/o NMGR	\$0.00
				2. Change Orders w/o NMGR	\$0.00
				3. Revised Contract Value (1+2)	\$0.00
				4. Work Completed, w/o NMGR	\$0.00
				5. Materials Stored this Period @ 100% of Invoice w/o NMGR	\$0.00
				6. Subtotal (4+5)	\$0.00
				7. Retainage @ 0%	\$0.00
				8. Less Previous Payments w/o NMGR	\$0.00
				9. Subtotal (6-7-8)	\$0.00
				10. NMGR @ 8.9375%	\$0.00
				11. Total Amount Due this Estimate (9+10)	\$0.00
Totals w/o GRT:		\$0.00	\$0.00		
Net Change w/o GRT:		\$0.00			
<b>CONTRACT TIME</b> <input type="checkbox"/> Working Days <input checked="" type="checkbox"/> Calendar Days					
Project on Schedule <input type="checkbox"/> Yes <input type="checkbox"/> No			Project Start Date: 5/1/2024		
Original Substantial Completion (days)		105		Project Substantial Completion Date (Original Contract) 8/14/2024	
Revised Substantial Completion (days)		105		Project Substantial Completion Date (Revised Contract) 8/14/2024	
Original Ready for Final Payment (days)		120		Ready for Final Payment Date (Original Contract) 8/29/2024	
Revised Ready for Final Payment (days)		120		Ready for Final Payment Date (Revised Contract) 8/29/2024	
ORIGINAL CONTRACT PERCENT COMPLETE				ACCEPTED BY:	
Time 29.52%		Funds 0.00%		Owner: Village of Taos Ski Valley	
CURRENT CONTRACT PERCENT COMPLETE				By:	
Time 29.52%		Funds 0.00%		Date:	
<b>CONTRACTOR'S CERTIFICATION:</b>  The undersigned Contractor certifies that: 1) all previous progress payments received from Owner on account of Work done under the Contract have been applied on account to discharge Contractor's legitimate obligations incurred in connection with Work covered by prior Applications for Payment; 2) title of all Work, materials, and equipment incorporated in said Work or otherwise listed in or covered by this Application for Payment will pass to Owner at time of payment free and clear of all 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); 3) all Work covered by this Application for Payment is in accordance with the Contract Documents and is not defective.					
REQUESTED BY: Contractor: Contractor			RECOMMENDED BY: Engineer: DENNIS ENGINEERING COMPANY		
By:			By:		
Date:			Date:		
1 <sup>st</sup> Funding Agency: Acknowledgement (if applicable)			2 <sup>nd</sup> Funding Agency: Acknowledgement (if applicable)		
By:			By:		
Date:			Date:		

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## CERTIFICATE OF SUBSTANTIAL COMPLETION

Owner:	Village of Taos Ski Valley	Owner's Contract No.:	
Contractor:	Name of Contractor	Contractor's Contract No.:	
Engineer:	DENNIS ENGINEERING COMPANY	Engineer's Project No.:	01253
Project:	Phoenix Switchback Waterline Replacement - REBID	Contract Name:	

This preliminary Certificate of Substantial Completion applies to:

☐ All Work ☐ The following specified portions of the Work:

\_\_\_\_\_  
Date of Substantial Completion

The Work to which this Certificate applies has been inspected by authorized representatives of Owner, Contractor and Engineer, and found to be substantially complete. The Date of Substantial Completion of the Work or portion thereof designated above is hereby established, subject to the provisions of the Contract pertaining to Substantial Completion. The date of Substantial Completion in the final Certificate of Substantial Completion marks the commencement of the contractual correction period and applicable warranties required by the Contract.

A punch list of items to be completed or corrected is attached to this Certificate. This list may not be all-inclusive, and the failure to include any items on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract.

The responsibilities between Owner and Contractor for security, operation, safety, maintenance, heat, utilities, insurance, and warranties upon Owner's use or occupancy of the Work shall be as provided in the Contract, except as amended as follows: *[Note: Amendments of contractual responsibilities recorded in this Certificate should be the product of mutual agreement of Owner and Contractor; see Paragraph 15.03.D of the General Conditions.]*

Amendments to Owner's responsibilities: ☐ None  
☐ As follows:

Amendments to Contractor's responsibilities: ☐ None  
☐ As follows:

The following documents are attached to and made a part of this Certificate: [punch list; others]

This Certificate does not constitute an acceptance of Work not in accordance with the Contract Documents, nor is it a release of Contractor's obligation to complete the Work in accordance with the Contract.

EXECUTED BY ENGINEER:

RECEIVED:

RECEIVED:

By: \_\_\_\_\_  
(Authorized Signature)

By: \_\_\_\_\_  
Owner (Authorized Signature)

By: \_\_\_\_\_  
Contractor (Authorized Signature)

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

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

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

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

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

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

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Date of Issuance: \_\_\_\_\_ Effective Date: \_\_\_\_\_

Owner:	Village of Taos Ski Valley	Owner's Contract No.:	
Contractor:	Name of Contractor	Contractor's Contract No.:	
Engineer:	DENNIS ENGINEERING COMPANY	Engineer's Project No.:	01253
Project:	Phoenix Switchback Waterline Replacement - REBID	Contract Name:	

Contractor is directed to proceed promptly with the following change(s):

Description:

Attachments: [List documents supporting change]

**Purpose for Work Change Directive:**

Directive to proceed promptly with the Work described herein, prior to agreeing to changes on Contract Price and Contract Time, is issued due to: *[check one or both of the following]*

- ☐ Non-agreement on pricing of proposed change  
☐ Necessity to proceed for schedule or other Project reasons.

**Estimated Change in Contract Price and Contract Time (non-binding, preliminary):**

Contract Price \$\_\_\_\_\_ increase

Contract Time XX days increase

**Basis of estimated change in Contract Price:**

- ☐ Lump Sum ☐ Unit Price  
☐ Cost of the Work ☐ Other

RECOMMENDED:

AUTHORIZED BY:

RECEIVED:

By: \_\_\_\_\_ By: \_\_\_\_\_ By: \_\_\_\_\_  
Engineer (Authorized Signature) Owner (Authorized Signature) Contractor (Authorized Signature)

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

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

Approved by Funding Agency (if applicable)

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

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

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<b>Contract Change Order</b>			
No.		1	
Contractor: Contractor Address City, State ZIP		Project: Phoenix Switchback Waterline Replacement	
Owner: Village of Taos Ski Valley 7 Firehouse Road Taos Ski Valley, NM 87525		SAP A23H2504 SAP A19D2555	
Date of Issue: <b>XX/XX/XX</b>		Effective Date: <b>XX/XX/XX</b>	
<b>The Contractor is hereby directed to make the following changes in the Contract Documents</b>			
<b>Amount (w/o GRT)</b>	<b>Description</b>		
\$0.00	Explanation of change, additional items, lengths, quantities, etc.		
	All deductions must be entered as negative numbers		
\$0.00	Sub Total		
\$0.00	Including NMGR @ 8.9375%		
<b>Reason for Change Order</b>			
Reasons			
<b>Attachments:</b> <i>(List documents supporting change and justifying cost and time)</i>			
Request for change			
Other supportings docs			
<b>Change in Contract Price:</b>		<b>Change in Contract Times:</b>	
Original Contract Price (w / GRT):		Original Contract Times:    Calendar Days <input checked="" type="checkbox"/> Working Days <input type="checkbox"/>	
<b>\$0.00</b>		Substantial Completion (days):    Ready for Final Payment (days):	
		105	120
Increase or Decrease from Previously Approved Change Orders:		Increase or Decrease from Previously Approved Change Orders:	
Increase:	Decrease:	Substantial Completion (days):    Ready for Final Payment (days):	
\$0.00	\$0.00	0 increase	0 increase
Contract Price Prior to this Change Order:		Contract Times Prior to This Change Order:	
<b>\$0.00</b>		Substantial Completion (days):    Ready for Final Payment (days):	
		105	120
Increase or Decrease of this Change Order:		Increase or Decrease of this Change Order:	
Increase:	Decrease:	Substantial Completion (days):    Ready for Final Payment (days):	
\$0.00	\$0.00	0	0
Contract Price with all Approved Change Orders:		Contract Times with all Approved Change Orders:	
<b>\$0.00</b>		Substantial Completion (days):    Ready for Final Payment (days):	
		105	120
RECOMMENDED: DENNIS ENGINEERING COMPANY		ACCEPTED: Village of Taos Ski Valley	
By:		By:	
Date:		Date:	
ACCEPTED: Contractor		APPROVED BY FUNDING AGENCY: (if applicable)	
By:		By:	
Date:		Date:	

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Field Order No. \_\_\_\_\_

Date of Issuance: \_\_\_\_\_ Effective Date: \_\_\_\_\_

Owner:	Village of Taos Ski Valley	Owner's Contract No.:	
Contractor:	Name of Contractor	Contractor's Contract No.:	
Engineer:	DENNIS ENGINEERING COMPANY	Engineer's Project No.:	01253
Project:	Phoenix Switchback Waterline Replacement - REBID	Contract Name:	

Contractor is hereby directed to promptly execute this Field Order, issued in accordance with General Conditions Paragraph 11.01, for minor changes in the Work without changes in Contract Price or Contract Times. If Contractor considers that a change in Contract Price or Contract Times is required, submit a Change Proposal before proceeding with this Work.

Reference: \_\_\_\_\_  
Specification(s) Drawing(s) / Detail(s)

Description: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Attachments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

ISSUED:

RECEIVED:

By: \_\_\_\_\_ By: \_\_\_\_\_  
Engineer (Authorized Signature) Contractor (Authorized Signature)

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

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

Copy to: Owner

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## AFFIDAVIT OF PAYMENT AND RELEASE OF LIENS

**To All Whom It May Concern, To The Following I Do Solemnly Swear And Affirm:**

Owner: Village of Taos Ski Valley

Project: Phoenix Switchback Waterline Replacement - REBID

Project No.(s): \_\_\_\_\_

WHEREAS, the undersigned, fro and in consideration of the sum of \_\_\_\_\_ (\$\_\_\_\_\_) Dollars received and, final payment in the amount of \_\_\_\_\_ (\$\_\_\_\_\_) Dollars paid in accordance with the contract, the undersigned does hereby waive and release any lien rights to, or claim of lien with respect to and on said above described premises, and the improvements thereon, and on the monies or other considerations due or to become due from the Owner, on account of labor, services, materials, fixtures, apparatus or machinery heretofore or which may hereafter be furnished by the undersigned to or for the above described premises by virtue of said contract.

The undersigned, as Contractor for the above named Contract pursuant to the Conditions of the Contract hereby certifies that, final payment in the amount of \_\_\_\_\_ (\$\_\_\_\_\_), he/she has paid in full or has otherwise satisfied all obligations for all materials and equipment furnished, for all work, labor, and services performed, and for all known indebtedness and claims against the Contractor for damages arising in any manner in connection with the performance of the Contract referenced above for which the Owner or his/her property might in any way be held responsible.

The undersigned hereby certifies that all work required to be done under terms of the above described Contract has been fully performed and completed in conformance with the Contract and that applicable provisions of the New Mexico Public Works Minimum Wage Act (§ 13-4-11 NMSA 1978) have been met.

\_\_\_\_\_  
Name of Contractor

\_\_\_\_\_  
Name of sole ownership, corporation or partnership

\_\_\_\_\_  
Name of Authorized Representative

\_\_\_\_\_  
Title

\_\_\_\_\_  
Signature of Authorized Representative

\_\_\_\_\_  
Date

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**SUBCONTRACTORS/ SUPPLIERS  
AFFIDAVIT OF PAYMENT AND RELEASE OF LIENS**

**To All Whom It May Concern, To The Following I Do Solemnly Swear And Affirm:**

WHEREAS, the undersigned has been employed by (A) Name of Contractor, to furnish ☐ **labor**, ☐ **service**, **and/or** ☐ **materials** (B), under contract (C) SAP 23-H2504-GF , , , for improvement of the premises described as (D) Phoenix Switchback Waterline Replacement - REBID to the (E) Village of Taos Ski Valley, County of Taos, State of New Mexico, the Village of Taos Ski Valley is the Owner.

**NOW, THEREFORE**, this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, for and in

consideration of the sum of (F) \_\_\_\_\_ Dollars, with receipt of final payment in the amount of \$ \_\_\_\_\_ the undersigned does hereby waive and release any lien rights to, or claim of lien with respect to and on said above described premises, and the improvements thereon, and on the monies or other considerations due or to become due from the Owner, on account of labor, services, materials, fixtures, apparatus or machinery heretofore or which may hereafter be furnished by the undersigned to or for the above described premises by virtue of said contract.

The undersigned, as Contractor for the above named Contract pursuant to the Conditions of the Contract hereby certifies that, except as listed below, he/she has paid in full or has otherwise satisfied all obligations for all materials and equipment furnished, for all work, labor, and services performed, and for all known indebtedness and claims against the Contractor for damages arising in any manner in connection with the performance of the Contract referenced above for which the Owner or his/her property might in any way be held responsible.

The undersigned hereby certifies that all work required to be done under terms of the above described Contract has been fully performed and completed in conformance with the Contract and that applicable provisions of the New Mexico Public Works Minimum Wage Act (§ 13-4-11 NMSA 1978) have been met.

**EXCEPTIONS:** (G) None

\_\_\_\_\_  
(H) Name of sole ownership, corporation or partnership

\_\_\_\_\_  
Name of Authorized Representative

\_\_\_\_\_  
Title

\_\_\_\_\_  
Signature of Authorized Representative

\_\_\_\_\_  
Date

**INSTRUCTIONS:**

- (A) Person or firm with whom you agreed to furnish either labor, or services, or materials, or both.
- (B) Fill in the nature and extent of work; strike the word labor or the materials if not in the contract.
- (C) Identify contract(s) by number, description, and extent of work.
- (D) Describe improvements and location of the premises to exclude all others.
- (E) Name community, such as City of \_\_, Village of \_\_, or Unincorporated Area known as \_\_.
- (F) Amount shown should be the amount actually received and equal to the total adjusted contract.
- (G) If none, write "None". If required by Owner, Contractor shall furnish bond satisfactory to Owner for each exception.
- (H) If waiver is for a corporation, corporate name should be used, corporate seal affixed and title of officer signing affidavit should be set forth; if waiver is for a partnership, the partnership name should be used, partner should sign and designate as partner.

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## LABOR STANDARDS CERTIFICATION

Local Authority: Village of Taos Ski Valley  
Address: 7 Fire House Road, Taos Ski Valley, NM 87525  
Project Name: Phoenix Switchback Waterline Replacement - REBID  
Project Number: SAP 23-H2504-GF

Contractor Name: Name of Contractor  
Contractor Address: Mailing Address, City, State Zip  
Total Contract Amount: [\$-Numerals]

By this letter, we certify that the New Mexico Public Works Minimum Wage Act, §13-4-11 NMSA 1978, has been complied with for all construction contracts in excess of \$60,000 for the referenced project. Weekly payroll records are available to the New Mexico Department of Labor – Labor and Industry Division, demonstrating compliance with the minimum wage rate determinations and wage scales were posted in a prominent location at the job site. The Contractor files the required Notification of Award (NOA) and a statement of Intent to Pay Prevailing Wages form as well as the Affidavit of Wages Paid form.

---

Name & Title (Contractor)

---

Signature

---

Date

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## CONSENT OF SURETY COMPANY TO FINAL PAYMENT

Project Name: Phoenix Switchback Waterline Replacement - REBID

Location: Taos Ski Valley, NM

A/E#: 01253

TO (Owner): Village of Taos Ski Valley

Address: 7 Fire House Road

City/State/Zip: Taos Ski Valley, NM 87525

Contractor: Name of Contractor Contract Date: 1/1/1901

---

In accordance with the provisions of the Contract between the Owner and the Contractor as indicated above, the  
(here insert name and address of Surety Company)

[Name of Surety Company]

Surety Company,

[Address 1]

[Address 2]

on bond of (here insert name and address of Contractor)

Name of Contractor

Contractor,

Mailing Address

City, State Zip

hereby approves of the final payment to the Contractor, and agrees that final payment to the Contractor shall not  
relieve the Surety Company of any of its obligations to the Village of Taos Ski Valley, Owner,  
as set forth in the said Surety Company's bond.

IN WITNESS WHEREOF,

the Surety Company has hereunto set its hand this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_

\_\_\_\_\_  
Surety Company

\_\_\_\_\_  
Signature of Authorized Representative

Attest:  
(Seal)

\_\_\_\_\_  
Title

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## LABOR RELATIONS DIVISION

401 Broadway NE  
Albuquerque, NM 87102  
Phone: 505-841-4400  
Fax: 505-841-4424

226 South Alameda Blvd  
Las Cruces, NM 88005  
Phone: 575-524-6195  
Fax: 575-524-6194

[WWW.DWS.STATE.NM.US](http://WWW.DWS.STATE.NM.US)

### Wage Decision Approval Summary

1) Project Title: Phoenix Switchback Waterline Replacement- REBID  
Requested Date: 01/22/2024  
Approved Date: 01/23/2024  
Approved Wage Decision Number: TA-24-0267-A

#### Wage Decision Expiration Date for Bids: 05/22/2024

2) Physical Location of Jobsite for Project:  
Job Site Address: 7 Fire House Road  
Job Site City: Taos Ski Valley  
Job Site County: Taos

3) Contracting Agency Name (Department or Bureau): Village of Taos Ski Valley  
Contracting Agency Contact's Name: Nancy Grabowski  
Contracting Agency Contact's Phone: (575) 776-8220 Ext. 2

4) Estimated Contract Award Date: 02/27/2024

5) Estimated total project cost: \$2,080,000.00  
a. Are any federal funds involved?: No  
b. Does this project involve a building?: No  
c. Is this part of a larger plan for construction on or appurtenant to the property that is subject to this project?: No  
d. Are there any other Public Works Wage Decisions related to this project?: No  
e. What is the ultimate purpose or functional use of the construction once it is completed?: Installation of approximately 3,020 LF of 6"/8" SDR9 DIPS HDPE. waterline including rock excavation, lean fill encasement, valves, fittings, fire hydrants, connections, meter service transfers, and other miscellaneous items to provide a complete and functional project.

6) Classifications of Construction:

Classification Type and Cost Total	Description
<b>Highway/Utilities (A)</b> <b>Cost: \$2,080,000.00</b>	Installation of approximately 3,020 LF of 6"/8" SDR9 DIPS HDPE. waterline including rock excavation, lean fill encasement, valves, fittings, fire hydrants, connections, meter service transfers, and other miscellaneous items to provide a complete and functional project.





TA-24-0267-A

## TYPE “A” – STREET, HIGHWAY, UTILITY & LIGHT ENGINEERING

**Effective January 1, 2024**

Wage Decision Expiration Date for Bids: 05/22/2024

Trade Classification	Base Rate	Fringe Rate
Bricklayer/Block layer/Stonemason	27.03	10.99
Bricklayer/ Block layer/Stonemason – Curry, DeBaca, Quay and Roosevelt counties	23.10	8.89
Bricklayer/ Block layer/Stonemason – Dona Ana, Otero, Eddie, and Lea counties	29.56	14.10
Carpenter/Lather	29.11	12.79
Carpenter- Los Alamos county	33.18	13.58
Cement Mason	19.34	7.41
Drywall Finisher/Taper	26.40	8.86
Glazier/Fabricator	21.75	7.10
Ironworker Journeyman	28.49	18.71
Probationary Ironworker	22.79	18.71
Painter- Commercial	21.00	5.75
Paper Hanger	21.00	5.75
Plumber/Pipefitter	40.74	15.90
<b>Electricians- Outside Classifications: Zone 1</b>		
Ground man	26.32	12.79
Equipment Operator	37.76	17.13
Lineman	47.70	19.92
Journeyman technician	44.42	19.10
Cable Splicer	48.87	20.22
<b>Electricians-Outside Classifications: Zone 2</b>		
Ground man	26.32	12.79
Equipment Operator	37.76	17.13
Lineman	47.70	19.92
Journeyman technician	44.42	19.10

Cable Splicer	48.87	20.22
<b>Electricians-Outside Classifications: Los Alamos county</b>		
Ground man	27.07	12.81
Equipment Operator	38.85	17.17
Lineman/technician	48.95	20.24
Journeyman technician	45.70	19.42
Cable Splicer	53.75	21.44
<b>Laborers</b>		
Group I – unskilled	16.60	7.30
Group II – semiskilled	17.60	7.30
Group III – skilled	18.10	7.30
Group IV – specialty	18.60	7.30
<b>Operators</b>		
Group I	22.42	6.79
Group II	23.50	6.79
Group III	23.61	6.79
Group IV	24.09	6.79
Group V	24.21	6.79
Group VI	24.43	6.79
Group VII	24.62	6.79
Group VIII	25.33	6.79
Group IX	33.56	6.79
Group X	37.43	6.79
<b>Soft Floor Layers</b>	21.00	9.20
<b>Truck Drivers</b>		
Group I-IX	19.75	9.15

**NOTE: All contractors are required to pay SUBSISTENCE, ZONE AND INCENTIVE PAY according to the particular trade. Details are located in a PDF attachment at [WWW.DWS.STATE.NM.US](http://WWW.DWS.STATE.NM.US). Search Labor Relations/Labor Information/Public Works/Prevailing Wage Rates.**

For more information about the Subsistence, Zone, and Incentive Pay rates, or to file a wage claim, contact the Labor Relations Division at (505) 841-4400 or visit us online at [www.dws.state.nm.us](http://www.dws.state.nm.us).

# PUBLIC WORKS PROJECT REQUIREMENTS

As a participant in a Public Works project valued at more than \$60,000 in the state of New Mexico, the following list addresses many of the responsibilities that are defined by statute or regulation to each project stakeholder.

## Contracting Agency

- Ensure that all contractors wishing to bid on a Public Works project when the project is \$60,000 or more are actively registered with the Public Works and Apprenticeship Application (PWAA) website: <http://www.dws.state.nm.us/pwaa> (Contractor Registration) prior to bidding.
- Please submit Notice of Award (NOA) and Subcontractor List(s) to the PWAA website promptly after the project is awarded.
- Please update the Subcontractor List(s) on the PWAA website whenever changes occur.
- All sub-contractors and tiers (excluding professional services) regardless of contract amount must be listed on the Subcontractor List and must adhere to the Public Works Minimum Wage Act.
- Ninety days after project completion please go into the PWAA system and close the project. Only contracting agencies are allowed to close the project. Agents or contractors are not allowed to close projects.

## General Contractor

- Provide a complete Subcontractor List and Statements of Intent (SOI) to Pay Prevailing Wages for all contractors, regardless of amount of work, to the contracting agency within 3 (three) days of award.
- Ensure that all subcontractors wishing to bid on a Public Works project have an active Contractor Registration with the Public Works and Apprenticeship Application (PWAA) website: <http://www.dws.state.nm.us/pwaa> prior to bidding when their bid will exceed \$60,000.
- Make certain the Public Works Apprentice and Training Act contributions are paid either to an approved Apprenticeship Program or to the Public Works Apprentice and Training Fund.
- Confirm the Wage Rate poster, provided in PWAA, is displayed at the job site in an easily accessible place.
- When the project has been completed, make sure the Affidavits of Wages Paid (AWP) are sent to the contracting agency.
- All subcontractors and tiers (excluding professional services) regardless of contract amount must pay prevailing wages, be listed on the Subcontractor List, and adhere to the Public Works Minimum Wage Act.

Phone: 505-841-4400  
Fax: 505-841-4424



## **Subcontractor**

- Ensure that all subcontractors wishing to bid on a Public Works project have an active Contractor Registration with the Public Works and Apprenticeship Application (PWAA) website: <http://www.dws.state.nm.us/pwaa> prior to bidding when their bid will exceed \$60,000.
- Make certain the Public Works Apprentice and Training Act contributions are paid either to an approved Apprenticeship Program or to the Public Works Apprentice and Training Fund.
- All subcontractors and tiers (excluding professional services) regardless of contract amount must pay prevailing wages, be listed on the Subcontractor List, and adhere to the Public Works Minimum Wage Act.

## **Additional Information**

Reference material and forms may be found in the New Mexico Department of Workforce Solutions Public Works web pages at: <https://www.dws.state.nm.us/Labor-Relations/Labor-Information/Public-Works>.

## **CONTACT INFORMATION**

Contact the Labor Relations Division for any questions relating to Public Works projects by email at [public.works@state.nm.us](mailto:public.works@state.nm.us) or call (505) 841-4400.

**LABOR ENFORCEMENT FUND**  
**NEW MEXICO DEPARTMENT OF WORKFORCE SOLUTIONS**  
**LABOR RELATIONS DIVISION**  
**APPLICATION FOR PUBLIC WORKS**  
**CONTRACTOR REGISTRATION**

**All applications must be accompanied by \$400 payable to the "LABOR ENFORCEMENT FUND"**

**Do Not Send Cash**

Send to: **Labor Enforcement Fund**

**PO Box 27679**

**Albuquerque, NM 87125-7679**

1. \_\_\_\_\_  
Contractor/Subcontractor – Company Trade Name  
  
\_\_\_\_\_  
Mailing Address                      City                      State                      Zip Code  
  
\_\_\_\_\_  
Area Code / Telephone Number  
  
\_\_\_\_\_  
E-Mail Address or Fax Number
2. \_\_\_\_\_  
Printed Name of First Qualifying Party (Owner of Company)
3.     Type of Business     ☐ Individual/Sole Proprietor     ☐ Partnership  
   ☐ Corporation                      ☐ Other \_\_\_\_\_
4.     **INCOMPLETE APPLICATIONS WILL BE RETURNED TO SENDER**

**APPLICANT STATEMENT**

As the responsible applicant-contractor, I understand:

- the application is subject to verification and that I agree to provide any additional documentation as requested by the Labor Relations Division director.
- failure to provide full and timely disclosure of any required information or documentation may result in the denial of this application for registration.
- **that payment in the exact amount of Four Hundred Dollars USD (\$400.00) is due with this application.**
- that registration is for two years from the date notice of registration is posted on the Department of Workforce Solutions website ([www.dws.state.nm.us](http://www.dws.state.nm.us)).
- that I am submitting this application for the purpose of a legal transaction with the State of New Mexico Department of Workforce Solutions.
- that failure to send this application and payment to the address shown above will result in delayed or denied registration.
- that it is my (the contractor's) responsibility to ensure that my registration is current.

I certify, under penalty of perjury, that the information contained in this application for registration is accurate, true, and complete to the best of my knowledge.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Print Name and Title





SUSANA MARTINEZ  
GOVERNOR



CELINA BUSSEY  
SECRETARY

JOHN SANCHEZ  
LT. GOVERNOR

STATE OF NEW MEXICO  
DEPARTMENT OF WORKFORCE SOLUTIONS  
Public Works Bureau  
625 Silver Ave SW, Suite 410  
Albuquerque, NM 87102  
(505) 222-4669 / FAX (505) 222-4780

GEORGE MARQUEZ  
DIRECTOR

## **NOTICE**

### **Public Works Apprenticeship and Training Act**

Statute 13-4D-4.B states:

"Public works construction projects, except for street, highway, bridge, road, utility or maintenance contracts with employers who elect not to participate in training, shall not be constructed unless an employer agrees to make contributions to approved apprentice and training programs in New Mexico in which the employer is a participant or to the public works apprentice and training fund administered by the public works bureau of the labor and industrial division of the labor department. Contributions shall be made in the same manner and in the same amount as apprentice and training contributions required pursuant to wage rate determinations made by the director."

For a copy of the above-mentioned act, please contact our office at (505) 841-4403.

For contractors that are not participants in an approved apprenticeship program, submit Apprenticeship & Training Contribution Compliance Statement and Payment to:

NMDWS  
Public Works Bureau  
PO Box 27428  
Albuquerque, NM 87125-7428

# *APPRENTICESHIP CONTRIBUTION PROGRAM*

The following are easy reminders regarding this program:

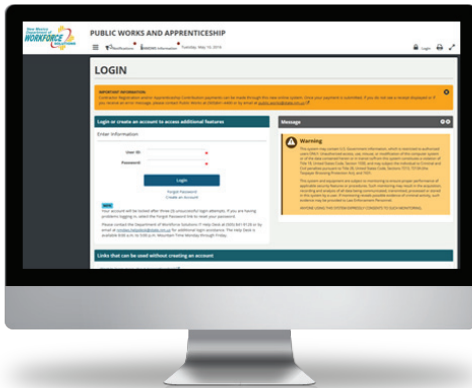
1. For "B", "C", & "H" Projects: Whenever you have any workers on the job (even if you are not using apprentices), you are required to pay into the Apprenticeship Training Program as outlined in the Apprenticeship & Training Act. This applies to all contractors, subcontractors, 2<sup>nd</sup> tiers, etc. Your wage rates will show which jobs have apprenticeship contributions.
2. If you have apprentices on the job, they must have a journeyman working with them. The ratio must be one-to-one.
3. The Apprenticeship Contribution is not considered part of the fringe benefits. It is totally separate.
4. The Apprenticeship Compliance Statement from our office (or our website) is the only form you may use. Do NOT modify our form or generate your own.
5. As noted on the Apprenticeship Compliance Statement, these forms are due on the 15<sup>th</sup> of every month for the length of the project. If no work was done for that month, send us a copy letting us know there was no work done.
6. Submit Apprenticeship Compliance Statements with payments to: NMDWS, Public Works Bureau, PO Box 27428, Albuquerque, NM 87125-7428

## PUBLIC WORKS & APPRENTICESHIP APPLICATION

The Public Works and Apprenticeship Application (PWAA) is the online database exchange between the New Mexico Department Workforce Solutions, apprenticeship programs, contractors, and contracting agencies. The PWAA is an interactive tool providing many self-service activities including: registering apprentices; issuing apprentice certifications; entering wage decision requests; completing public works paperwork; making apprenticeship contributions; and contractor registration/renewals.

If you have questions about account creation, system features, or changes in processes, contractors and contracting agencies are encouraged to contact the New Mexico Department of Workforce Solutions Public Works Office at (505) 841-4400 or via email at [public.works@state.nm.us](mailto:public.works@state.nm.us).

For questions regarding apprenticeship, please contact the New Mexico Apprenticeship Office at (505) 841-8565 or via email at [apprenticeship.info@state.nm.us](mailto:apprenticeship.info@state.nm.us).



[www.dws.state.nm.us/pwaa](http://www.dws.state.nm.us/pwaa)

## CONTACT INFORMATION

Labor Relations Division  
Wage & Hour and Public Works Offices  
Offices are open Monday-Friday, 8am-5pm

**Albuquerque Office**  
121 Tijeras NE, Suite 3000  
Albuquerque, NM 87102  
**Phone: (505) 841-4400**  
**Fax: (505) 841-4424**

**Las Cruces Office**  
226 S. Alameda Blvd  
Las Cruces, NM 88005  
**Phone: (575) 524-6195**  
**Fax: (575) 524-6194**

**Santa Fe Office**  
1596 Pacheco Street, Suite 103  
Santa Fe, NM 87505  
**Phone: (505) 827-6817**  
**Fax: (505) 827-9676**

[www.dws.state.nm.us/public-works](http://www.dws.state.nm.us/public-works)

[www.dws.state.nm.us/pwaa](http://www.dws.state.nm.us/pwaa)

### CONNECT WITH US!



**Twitter:** [www.twitter.com/nmdws](https://twitter.com/nmdws)



**YouTube:** [www.youtube.com/nmdws](https://www.youtube.com/nmdws)



**Instagram:** [www.instagram.com/nmdws](https://www.instagram.com/nmdws)

Revised 7/2016



## New Mexico Public Works



[WWW.DWS.STATE.NM.US/PUBLIC-WORKS](http://WWW.DWS.STATE.NM.US/PUBLIC-WORKS)

## PUBLIC WORKS MINIMUM WAGE ACT

The New Mexico Public Works Minimum Wage Act applies to employers and employees working on state and locally funded public works construction projects. Information presented here is not an official interpretation of the Act, but is intended to serve as a general guide to the law.

Find additional information and rules and regulations on the Public Works Minimum Wage Act at [www.dws.state.nm.us/Public-Works](http://www.dws.state.nm.us/Public-Works)

## WHEN DOES THE ACT APPLY?

Any state or locally funded construction project totaling more than \$60,000 is covered by the Act. The Labor Relations Division (LRD) of the New Mexico Department of Workforce Solutions (NMDWS) works to ensure that every employee on the project is paid the correct wage rate.

## HOW ARE WAGE RATES SET?

The Labor Relations Division sets the minimum wage rates for all Public Works projects each year. Wage rates include a base rate of pay, a fringe benefit rate, and apprenticeship training contributions. Specific information regarding wage rates can be found at [www.dws.state.nm.us](http://www.dws.state.nm.us).

## WHAT IS A WAGE DECISION?

A wage decision is the wage rate for a specific public works construction project. The person putting together project bid documents requests a wage decision by submitting a request that describes the scope of work. The type of work determines the type of rates issued. The four types of projects are:

TYPE **A** Street, highway, utility, and light engineering construction

TYPE **B** General building

TYPE **C** Residential

TYPE **H** Heavy engineering construction

To request a wage decision or obtain additional information about wage decisions, create an account and login to the Public Works and Apprenticeship Application at [www.dws.state.nm.us/PWAA](http://www.dws.state.nm.us/PWAA).

## PUBLIC WORKS PROJECT CHECKLIST



A **Notice of Award** is due from the contracting agency identifying the general contractor before work starts.



A subcontractor list is due from the contracting agency/general contractor listing all subcontractors before work starts.



A **Statement of Intent to Pay Prevailing Wages** is due from each contractor, subcontractor, and each tier contractor before work starts.



An **Apprenticeship Contribution or Compliance Statement** (for all except Type A projects) is due by the 15th of each month (for the previous month's work) from all contractors, subcontractors, and each tier of contractors.



A wage rate poster must be displayed in an easily accessible place at the job site to show all employees what their minimum rates of pay are.



An **Affidavit of Wages Paid** must be submitted after a contractor finishes work but before the final payment is made.



## 2024 SUBSISTENCE, ZONE, AND INCENTIVE PAY RATES

All contractors are required to pay subsistence, zone, and incentive pay according to the particular trade

### Asbestos workers or heat and frost insulators

- (1) Zone 1 shall consist of the area lying within the city limits of a circle whose radius is 66 miles from the city hall in Albuquerque or the city hall in El Paso - \$0.00 per day.
- (2) Zone 2 shall consist of Los Alamos county - \$40.00 per day if not furnished a company owned vehicle.
- (3) Zone 3 shall consist of the area lying beyond a circle whose radius is over 66 miles from the city hall in Albuquerque or the city hall in El Paso - \$85.00 per day.

### Boilermakers/Blacksmiths

- (1) Per diem is calculated from city hall of the dispatch city or the employee's home address, whichever is closer to the job location,
- (2) Per diem is \$55.00 per day for travel between 70 and 120 miles and \$85.00 per day for travel over 120 miles.

### Bricklayers

- (1) For Albuquerque area contractors, the starting point shall be at the intersection of I-40 and I-25 and shall continue to the job site. All other areas, the starting point shall be the employer's main office address.
- (2) Between 50 and 75 miles from the starting point, \$35.00 per day.
- (3) 76 or more miles from the starting point, \$55.00 per day.
- (4) All covered refractory work over 75 miles from the intersection of I-40 and I-25, \$80.00 per day.

### Cement Masons

- (1) For employees who travel to Santa Fe from Albuquerque or vice versa, \$20.00 per day.
- (2) In all other work performed more than 50 miles from the employer's main office, \$50.00 per day.
- (3) Mutually agreed-upon lodging or transportation paid for by the employer will substitute for subsistence pay.

## Drywall Finishers and Tapers

- (1) \$40.00 per day (\$5.00 per hour for eight hours work) for over 60 miles over the most typically traveled route, or other mutually agreed upon suitable lodging or transportation.
- (2) If an employee has worked the full week on four 10-hour days, the employee shall be paid the full week of per diem of \$200.00.
- (3) Special provision for Santa Fe and Albuquerque: Employees who travel between Santa Fe and Albuquerque will be paid \$15.00 per day or other mutually agreed upon lodging or transportation.

## Electricians (inside classifications)

- (1) For Albuquerque only:
  - (a) Zone 1 is classified as being within 40 miles from the main post office.
  - (b) Zone 2 shall extend up to 10 miles beyond zone 1. Work performed within zone 2 shall be compensated nine percent above the journeyman rate for zone 1.
  - (c) Zone 3 shall extend up to 20 miles beyond zone 1. Work performed within zone 3 shall be compensated fifteen percent above the journeyman rate for zone 1.
  - (d) Zone 4 shall extend 20 miles or more beyond zone 1. Work performed within zone 4 shall be compensated twenty six percent above the journeyman rate for zone 1.
- (2) For Los Alamos County only: work performed within the county shall be compensated fifteen percent above the zone 1 journeyman rate.
- (3) For all other counties:
  - (a) Zone 1 is:
    - (i) within six miles from the main post office for Raton, Tucumcari, and Farmington.
    - (ii) within eight miles from the main post office for Las Vegas.
    - (iii) within ten miles from the main post office for Santa Fe and Gallup.
    - (iv) within twelve miles from the main post office for Belen, Carrizozo, Clovis, Los Lunas, Portales, Roswell, Ruidoso, Artesia, Carlsbad, Hobbs, and Lovington.
    - (v) within fourteen miles from the main post office for Espanola.
  - (b) Zone 2 shall extend up to 20 miles beyond zone 1. Work performed within zone 2 shall be compensated nine percent above the journeyman rate for zone 1.

- (c) Zone 3 shall extend up to 30 miles from zone 1. Work performed within zone 3 shall be compensated fifteen percent above the journeyman rate for zone 1.
- (d) Zone 4 shall extend beyond 30 miles from zone 1. Work performed within zone 4 shall be compensated twenty six percent above the journeyman rate for zone 1.
- (4) When workers are ordered to report to the shop and then to the job and from job to job, and return to the shop, they shall be paid for the time spent traveling and shall be furnished transportation by the Employer. Under these conditions the Zone 1 rate and any applicable overtime will be paid.

### Electricians (outside classification)

Zone 2: \$50.00 per diem to be paid for work 30 miles outside of Santa Fe and 60 miles outside of Albuquerque. No per diem in Los Alamos County.

### Glaziers

- (1) When out-of-town travel is required, the employer shall provide suitable lodging with no more than two people per room and \$20.00 per night for food.
- (2) Employees required to use a personal vehicle for travel to a jobsite beyond a 30 mile radius of the main post office in town where the employer's shop is located shall be compensated at the current Internal Revenue Service (IRS) rate for actual mileage incurred beyond the 30 mile radius, plus their regular rate of pay for travel time.

### Ironworkers

- (1) Travel more than 50 miles from the interchange of Interstate 40 and Interstate 25 or from the employee's home should be paid at \$9.00 per hour.
- (2) If travel is within Santa Fe County, travel time shall be paid at \$3.00 per hour.

### Laborers

- (1) Type A:
  - (a) Work travel between 50 and 85 miles from the employer's primary address should be compensated at \$3.50 per hour.
  - (b) Work travel 86 miles or greater from the employer's primary address should be compensated at \$5.00 per hour.

- (2) Types B and C:
  - (a) Work travel over 70 miles from the union halls of Albuquerque, Espanola, Farmington, or Las Cruces shall be paid at \$7.00 per hour in travel pay, not to exceed 10 hours per day;
  - (b) If an overnight stay is necessary, the employer shall pay \$40.00 per day for meals, in addition to travel pay.
- (3) Type H – no zone subsistence pay:
- (4) If an employer provides the employee transportation and mutually agreeable, suitable lodging with no more than two people in a room in areas where overnight stays are necessary, subsistence rates do not apply.

## Millwrights

- (1) All zone pay shall be calculated from the address of the city hall of the respective dispatch point.
- (2) Zone 1: Work traveled up to 45 miles from the city hall of the respective dispatch points is a free zone.
- (3) Zone 2: Work traveled between 45 miles and 100 miles shall be compensated at \$4.00 per hour above base wage.
- (4) Zone 3: Work traveled 101 miles or more shall be compensated at \$6.00 per hour above base wage.
- (5) If employer fails to provide suitable lodging, employer shall pay \$110.00 per diem.
- (6) If an employee's principal place of residence is within 45 road miles from the project, no subsistence or travel time shall be paid.

## Operating Engineers

- (1) Type A operators should be compensated for zone and subsistence as follows:
  - (a) Work travel between 50 and 85 miles from the interchange of Interstate 25 and Interstate 40 in Albuquerque, or from the Farmington City Hall in Farmington, should be compensated at \$2.50 per hour.
  - (b) Work travel 86 miles or more from the interchange of Interstate 25 and Interstate 40 in Albuquerque or from the Farmington City Hall in Farmington, should be compensated at \$4.00 per hour.
- (2) Type B and C operators:
  - (a) Base points for operators are 30 miles and beyond:
    - (i) Bernalillo county courthouse in Albuquerque;
    - (ii) State capital building in Santa Fe;
    - (iii) City hall in Farmington.



- (b) Zone and subsistence for Albuquerque, Santa Fe, and Farmington are as follows:
    - (i) work travel between 30 and 50 miles from the base point compensated at \$20.00 per day;
    - (ii) work travel between 51 and 100 miles from the base point compensated at \$50.00 per day;
    - (iii) work travel over 100 miles from the base point that involves an overnight stay compensated at \$100.00 per day.
  - (c) Zone and subsistence for Los Alamos county, \$100.00 per day. This takes precedence over the 50 mile radius for Santa Fe zone and subsistence.
  - (d) If an employer provides the employee transportation and mutually agreeable suitable lodging in area where overnight stays are necessary, subsistence rates do not apply.
- (3) Type H operators are not eligible for zone and subsistence pay.

### Painters

- (1) When out-of-town travel is required, the employer shall provide suitable lodging with no more than two people per room and \$30.00 per day for expenses.
- (2) When out-of-town travel is required and employer and employer does not provide lodging, employer shall pay \$100 per day for expenses, plus their regular rate of pay.
- (3) Employees required to use a personal vehicle for travel to a jobsite beyond a 60-mile radius from their residence or the employer's shop, whichever is closest to the job, shall be compensated at the current IRS rate for actual mileage incurred beyond the 60-mile radius, plus their regular rate of pay for travel time.
- (4) Employer shall furnish transportation or gasoline for all work performed beyond the 30-mile radius that encompasses the free cities of Albuquerque, Santa Fe, and Belen.

### Paper hangers

- (1) Zone 1: Base pay for an area within a 30 mile radius from the main post office in the city or town where the employee permanently resides. Albuquerque, Santa Fe, and Belen shall be considered Zone I.
- (2) Zone 2: Work travel between 30 and 75 miles from the main post office in the town where an employee permanently resides shall be compensated at \$1.00 per hour above base pay.

- (3) Zone 3: Work travel 75 miles or more from the main post office in the town where an employee permanently resides shall be compensated at \$2.50 per hour above base pay.
- (4) When the employee is required to stay overnight, the employer should provide and pay for suitable lodging.
- (5) Employer will furnish transportation or gasoline for all work performed beyond the 30 mile radius that encompasses the free cities of Albuquerque, Santa Fe or Belen.

### Plasterers

- (1) Employees who travel from Albuquerque to Santa Fe should be compensated at \$20.00 per day.
- (2) Except for employees who travel from Santa Fe to Albuquerque, work travel 75 miles or more from the employer's office over the most typically traveled route should be compensated at \$5.00 per hour and capped at \$40.00 per day.

### Plumbers and pipefitters

- (1) Work travel for 90 or more miles from an employee's primary residence, and involving an overnight stay, should be compensated at \$80.00 per day.
- (2) No zone or subsistence pay is required should the employer elect to cover the room cost.

### Roofers

Work travel requiring an overnight stay should be compensated at \$35.00 per day for food. Employer should provide and pay for a suitable hotel. When employees are assigned to jobs located 60 or more miles from the employer's place of business, transportation to and from the job site must be provided.

### Sheet metal workers

- (1) Work travel 90 miles or more from contractor's home base and employee's home, should be paid at \$120.00 per day subsistence pay plus base and fringe, regardless of county.
- (2) Los Alamos county: \$2.00 per hour incentive pay plus base and fringe.
- (3) Workers living 60 or more miles from a San Juan county job site receive \$3.00 per hour subsistence pay plus base and fringe.

### Soft floor layer

- (1) Zone 1: Base pay for an area within a 30 mile radius from the main post office in the city or town where the employee permanently resides. Albuquerque, Santa Fe, and Belen shall be considered Zone I.
- (2) Zone 2: Work travel between 30 and 75 miles from the main post office in the town where an employee permanently resides shall be compensated at \$1.00 per hour above base pay.
- (3) Zone 3: Work travel 75 miles or more from the main post office in the town where an employee permanently resides shall be compensated at \$3.13 per hour above base pay.
- (4) Employer will furnish transportation or gasoline for all work performed beyond the 30-mile radius that encompasses the free cities of Albuquerque, Santa Fe, or Belen.
- (5) When the employee is directed to report to a job site and the distance to the job site requires the employee to stay out of town overnight, the employer shall provide housing arrangements for the affected employees.

### Sprinkler fitters

- (1) Work travel between 60 and 80 miles from the employee's primary residence should be compensated at \$23.00 per day.
- (2) Work travel between 81 and 100 miles from the employee's primary residence should be compensated at \$33.00 per day.
- (3) Work travel of 101 miles or more from the employee's primary residence should be compensated at \$125.00 per day.
- (4) No zone or subsistence pay shall be paid when the employer provides daily transportation and the employee elects to travel back and forth from home.



**STATEMENT OF INTENT TO PAY PREVAILING WAGES****To Be Completed Before Construction Starts****ALL FIELDS ARE REQUIRED****FORM MUST BE SENT TO THE CONTRACTING AGENCY WITHIN 3 DAY OF THE AWARD**

<b>General Contractor Information</b>		
Company Name:		
Address:		
City :	State:	Zip:
Phone:	Fax:	E-Mail:
FEIN #		
Estimated Start Date:		<b>State Wage Decision Number:</b>
Project Title:		Project Physical Address:
<b>Total Contract Amount:</b>		Estimated Completion Date:
Print Name:		General Contractor Signature:
<b>Sub Contractor Information</b>		Start date on this project:
Sub Contract Amount:		
Company Name:		
Address:		
City:	State:	Zip:
Phone:	Fax:	E-Mail:
FEIN #		
Print Name:		Sub Contractor Signature:
<b>2<sup>nd</sup>, 3<sup>rd</sup>, etc. Tier Sub-Contractor Information</b>		Start date on this project:
Contract Amount:		
Company Name:		
Address:		
City:	State:	Zip:
Phone:	Fax:	E-Mail:
FEIN#		
Print Name:		Tier Signature:

I hereby certify that the above information is correct and that all workers I employ on this public works project will be paid no less than the Prevailing Wage Rate(s) as determined by the Department of Workforce Solutions, Labor Relations Division for this project as identified by the State Wage Decision Number. I understand that contractors who violate Prevailing Wage Laws (i.e., incorrect job classification, improper payment of prevailing wages, and/or overtime, etc.), are subject to debarment procedures and shall be required to pay any back wages due to workers. (Ref. Labor Relations Division, Public Works Minimum Wage Act Policy Manual (11.1.2 NMAC) & Public Works Minimum Wage Act (13-4-11 through 13-4-18, NMSA 1978).

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Contractor's Signature

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Date

(Revised 11/21/2017)

## **INSTRUCTIONS FOR COMPLETING STATEMENT OF INTENT TO PAY PREVAILING WAGES**

### **GENERAL CONTRACTOR**

1. Enter general contractor information and provide signature.
2. Enter State Wage Decision Number as listed in bid documents. (Example: BE-13-0123 B)
3. Enter project title - listed in bid documents.
4. Enter project physical address - exact location of project (job site).
5. Enter estimated start & completion dates of project.
6. Enter general contractor's contract amount.
7. All Statements must be sent to the Contracting Agency.

### **SUB CONTRACTOR**

1. Enter general contractor information, but general contractor signature is not needed.
2. Enter sub contractor information as indicated and provide signature.
3. Enter sub contractor contract amount.

NOTE: A separate signed form is needed for each contractor.

### **2ND TIER SUB CONTRACTOR**

1. Enter general contractor information, but general contractor signature is not needed.
2. Enter sub contractor information; subcontractor signature not needed.
3. Enter 2nd tier sub information and provide signature.
4. Enter 2nd tier contractors contract amount.

### **3RD TIER AND HIGHER CONTRACTOR**

1. Attach a copy of this completed form & list the 3rd tier contractor information under the 2nd tier

**AFFIDAVIT OF WAGES PAID**  
**To Be Completed After Construction Is Complete**  
**ALL FIELDS ARE REQUIRED**  
**FORM MUST BE SENT TO THE CONTRACTING AGENCY**

<b>General Contractor Information</b>		
Company Name:		
Address:		
City:	State:	Zip:
Phone:	Fax:	E-Mail:
Estimated Completion Date:	<b>State Wage Decision Number:</b>	
Project Title:	Project Physical Address:	
Print Name:	General Contractor Signature:	
		Date you completed work on this project:
<b>Sub Contractor Information</b>		
Company Name:		
Address:		
City:	State:	Zip:
Phone:	Fax:	E-Mail:
Print Name:	Sub Contractor Signature:	
		Date you completed work on this project:
<b>2<sup>nd</sup>, 3<sup>rd</sup>, etc. Tier Sub Contractor Information</b>		
Company Name:		
Address:		
City:	State:	Zip:
Phone:	Fax:	E-Mail:
Print Name:	Tier Signature:	

I hereby certify that the above information is correct and that all workers I employ on this public works project were paid no less than the Prevailing Wage Rate(s) as determined by the Department of Workforce Solutions, Labor Relations Division for this project as identified by the State Wage Decision Number. I understand that contractors who violate Prevailing Wage Laws (i.e., incorrect job classification, improper payment of prevailing wages, and/or overtime, etc.), are subject to debarment procedures and shall be required to pay any back wages due to workers. (Ref. Labor Relations Division Public Works Minimum Wage Act Policy Manual (11.1.2 NMAC) & Public Works Minimum Wage Act (13-4-11 through 13-4-18, NMSA 78)).

Contractor's Signature                      Date

(Revised 08/23/13)

# **INSTRUCTIONS FOR COMPLETING AFFIDAVIT OF WAGES PAID**

## **GENERAL CONTRACTOR**

1. Enter general contractor information and provide signature.
2. Enter State Wage Decision Number as listed in bid documents. (Example: BE 13-0123 B)
3. Enter project title - listed in bid documents.
4. Enter project physical address - exact location of project (job site).
5. Enter completion date of project.
6. All Affidavits' must be sent to the Contracting Agency.

## **SUB CONTRACTOR**

1. Enter general contractor information, but general contractor signature is not needed.
2. Enter sub contractor information as indicated and provide signature.
3. Enter sub contractor completion date.

NOTE: A separate signed form is needed for each contractor.

## **2<sup>ND</sup>, 3<sup>RD</sup>, etc TIER SUB CONTRACTOR**

1. Enter sub contractor information, subcontractor signature is not needed.
2. Enter 2nd tier sub contractor information and provide signature.
3. Enter 2nd tier contract completion date.

(Revised 8/23/13)



**Form A: Apprenticeship & Training Contribution Compliance Statement for NM Public Works**

**No Payment is required for Type "A" projects or 100% Federally Funded projects.**

**Note** In accordance with the NM Apprenticeship & Training Act, **payment is due for all employees**, apprentices and journeymen.

**Please complete all items on form.** Make your check payable to the *Apprenticeship & Training Contribution Fund*. Mail the check with this form to: NMDWS, Apprenticeship & Training Fund, **P.O. Box 27428** Albuquerque, New Mexico 87125-7428. Payments are due by the 15<sup>th</sup> of each month for hours worked in the previous month per NMSA. A \$10 per day late fee may be assessed.

**Project Name:** \_\_\_\_\_ **State Wage Decision No.** \_\_\_\_\_

**Company Name:** \_\_\_\_\_ (Circle one) Contractor / Sub / 2<sup>nd</sup> Tier Sub / 3<sup>rd</sup> Tier Sub

**Address:** \_\_\_\_\_ **City:** \_\_\_\_\_ **State:** \_\_\_\_\_ **Zip** \_\_\_\_\_ **Phone** \_\_\_\_\_

**Payment for Month/Year of** \_\_\_\_\_ **Check No.** \_\_\_\_\_ **Total Check Amount** \_\_\_\_\_ **Date of Check** \_\_\_\_\_

(Sample Entry) Classification Trade Name Do not list names of employees	Week Ending	Week Ending	Week Ending	Week Ending	Week Ending	Total Hours	Appr. Rate per Hour	Total Contribution Amount
	8/4/2013	8/11/2013	8/18/2013	8/25/2013	8/31/2013			
LABORERS	120	62.5	0	90	110.5	383	.27	103.41
Classification Trade Name	Week Ending	Week Ending	Week Ending	Week Ending	Week Ending	Total Hours	Appr. Rate per Hour	Total Contribution Dollar Amount

Print name of person completing form \_\_\_\_\_ e-mail address \_\_\_\_\_

I certify that the information provided on this form is true and accurate to the best of my knowledge.

Signature \_\_\_\_\_ Date \_\_\_\_\_ Phone # \_\_\_\_\_ ext \_\_\_\_\_

**Note** A separate compliance statement is required for each month and each project, however only one check is needed.

When paying into a NM Apprenticeship Program please use *Form B: Apprenticeship & Training Compliance Statements for Approved Programs*.

NMDWS WILL NOT ACCEPT CREDITS WHEN PAYMENT IS OVER PAID

# PAYROLL STATEMENT OF COMPLIANCE

Wage Decision No. : \_\_\_\_\_

I, \_\_\_\_\_, \_\_\_\_\_ do hereby state:

(Name of Signatory Party)

(Title)

(1) that I pay or supervise the payment of the persons employed by: \_\_\_\_\_  
(Contractor or Subcontractor)

on the \_\_\_\_\_  
(Name of Project)

that during the payroll period commencing on the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_ and ending the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_, all persons employed on said project have been paid the full weekly wages earned, that no deductions have been or will be made either directly or indirectly to or on behalf of said \_\_\_\_\_ from the full weekly wages earned by any

(Contractor or Subcontractor)

person, other than deductions permitted by law. Anyone found in violation of the NM Public Works Minimum Wage Act [13-4-11 to 13-4-17 NMSA 1978] could be subject to penalties and debarment.

- (2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete; that the wage rates for laborer or mechanic conform with the work he performed.
- (3) That any apprentice(s) employed in the above period are duly registered in a bona fide apprenticeship program registered with the State Apprenticeship agency recognized by the Bureau of Apprenticeship & Trng., US Dept. of Labor, or properly enrolled in a bona fide training program approved for application on public works construction projects by the appropriate state (SAC) and/or federal agency(ies) (BAT) if and as required by law & applicable federal regulation.

(4) **FRINGE BENEFITS: (Please Spell Out Any/All Acronyms)**

- \_\_\_(a) ARE PAID TO APPROVED PLAN, FUND, OR PROGRAM in addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above-referenced payroll, payments of fringe benefits as listed in the contract have been or will be made to appropriate program for the benefit of such employees.

*If paid to an approved plan, fund, or program, please fill out name of program w/fringe breakdown per hour below.*

Name of Program Used for Fringe Benefits:				
Pension =	Health/Welfare =	Holiday/Vac. =	Life Ins. =	Training* =

(If additional space is needed for more programs/fringe breakdowns, please attach a separate page.)

FRINGE BENEFITS:

1. Pension
2. Health/Welfare
3. Holiday/Vacation
4. Life Insurance
5. Training (not Apprenticeship) \*

FRINGE BREAKDOWN SAMPLE:

Fringe Benefit:	Amount:
401(K) Plan	\$8.98/hr.
Vacation	\$2.23/hr.

- \_\_\_(b) **Paid to Union Program** - If paid to a Union and fringe benefits differ from employee to employee, and/or job contract, please provide fringe breakdown for each employee and attach copy of Union contract.
- \_\_\_(c) ARE PAID IN CASH, each laborer or mechanic listed in the above-referenced payroll has been paid as indicated on the payroll, an amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe benefits as listed in the contract.

Section 13-1D-1 to Section 13-1D-8, NMSA 1978 provides for employers to agree to make contributions to approved apprentice & training programs in New Mexico in which the employer is a participant to the public works apprentice and training fund administered by the Public Works Bureau of the Labor & Industrial Division of the New Mexico State Department of Labor. Contributions shall be made in the same manner and in the same amount as apprentice and training contributions required pursuant to wage rate determinations made by the Labor & Industrial Division Director.

**APPRENTICESHIP CONTRIBUTIONS:** (Please check applicable blank)

\_\_\_ Check paid to: NM Public Works Apprenticeship & Training Fund - Public Works Bureau, Labor & Industrial Div.

\_\_\_ Check paid to: \_\_\_\_\_  
(Name & address of approved Apprenticeship & Training Program) (Program No.)

Print Name of Certifying Official: \_\_\_\_\_ Signature of Certifying Official: \_\_\_\_\_ Title & Phone No.: \_\_\_\_\_ Date: \_\_\_\_\_

The willful falsification of any of the above statements may subject the contractor or subcontractor to civil or criminal prosecution. See Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.

Revised April/2006

## WEEKLY PAYROLL

Revised Feb/2014

[illegible]



**DENNIS ENGINEERING COMPANY**  
**SUPPLEMENTAL SPECIFICATIONS**  
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Note: Supplemental Specifications prepared by **DENNIS ENGINEERING COMPANY** reference the American Public Works Association (APWA) - New Mexico Standard Specifications, 2006 Edition and apply to this project. In case of a discrepancy between these supplemental specifications and the New Mexico Standard Specifications for Public Works Construction (2006 Edition), the Supplemental Specifications shall govern.

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The APWA – New Mexico Standard Specifications, 2006 Edition have been used as the format for the Supplemental Specifications with minor modifications. Section and paragraph numbers are provided for reference. Any item of construction omitted from Specifications herein shall be installed per the most current APWA-NMSS. Except as modified by the Supplemental Specifications and in the Contract Drawings, all materials, appliances and construction shall conform to the most current standards published in the APWA – New Mexico Standard Specifications. If work to be performed under this project is not covered under these specifications and/or in the Supplemental Specifications, the appropriate section in the APWA – New Mexico Standard Specifications, 2006 Edition specifications shall govern.

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APWA - - New Mexico Standard Specifications are subject to Copywrite. As such, it is the CONTRACTOR's responsibility to obtain the specifications and review them for content and applicability to this project.

The APWA - New Mexico Standard Specifications, 2006 Edition are available for purchase from Albuquerque Reprographics, 4716 McLeod Road, NE, Albuquerque, NM 87109, Telephone: 505-884-0862, Fax: 505-883-6452

**SUPPLEMENTAL SPECIFICATION MODIFYING**  
**SECTION 101**  
**PORTLAND CEMENT CONCRETE**

All provisions of Section 101 of the New Mexico Standard Specifications for Public Works Construction, 2006 Edition shall apply except as modified below:

- 101.1.1     **GENERAL:** Portland cement concrete, prestressed concrete, post tensioned concrete, shotcrete, granite, and light weight structural concrete shall consist of a mixture of Portland cement, aggregates, water, and admixtures, proportioned, batched and delivered as specified herein. All materials and design mixes used in Portland cement concrete, either batched at or delivered to a project shall be certified in accordance with the requirements of these specifications. Each design mix submitted and authorized for use under this Specification shall be identified by a design mix number, unique to that design mix. If either a change in material(s) or material supplier(s) from that specified in the authorized design mix occurs during a project, authorized use of the job mix formula on the project may be canceled as directed by the ENGINEER. A concrete design mix shall not be used on a project without written authorization of the ENGINEER. A design mix, upon request by a concrete supplier, may be authorized by the OWNER for use on OWNER and OWNER related projects for a period of 14 months from the date of sampling reference aggregates in the design mix.
- 101.7       Concrete shall be proportioned in accordance with the NMDOT Standard Specification for Highway and Bridge Construction, latest edition.
- 101.7.1.1   Design mix(es) shall be prepared in a laboratory accredited in accordance with the requirements of the New Mexico State Highway and Transportation Department (New Mexico Department of Transportation) "Procedure for Approval of Testing laboratories to Perform Inspection, Testing and Mix Design Services," latest edition under the direct supervision of a New Mexico Registered Engineer.
- 101.15.1.1   Quality assurance sampling and testing shall be performed in accordance with requirements of Section 1511, or as directed by the ENGINEER. Concrete shall be sampled and tested by a technician/ engineer certified as either an ACI certified Concrete Field Testing Technician Grade I, or the equivalent National Institute for Certification of Engineering Technologies Technician with Specialty Concrete Work Elements Level I 82001, 82002, and Level II 84002, 84003, and 84010.
- 101.15.1.2   Quality assurance testing and analysis shall be performed in a laboratory accredited in accordance with the requirements of the New Mexico State Highway and Transportation Department, (New Mexico Department of Transportation) "Procedure for Approval of Testing Laboratories to perform Inspection, Testing and Mix Design Services," October 10, 2017 or latest edition under the direct supervision of a New Mexico registered Professional Engineer.
- 101.15.10.1   Field Data
1.   Name of Project
  2.   Project Number

101.16 MEASUREMENT AND PAYMENT

If considered as a pay item, then the unit of measurement and payment will be specified in the Bid Proposal and Section 1590 of the Supplemental Specifications.

**END OF SECTION**



**SUPPLEMENTAL SPECIFICATION MODIFYING**

**SECTION 121**

**PLASTIC PIPE**

All provisions of Section 121 of the New Mexico Standard Specifications for Public Works Construction, 2006 Edition shall apply except as modified below:

**121.1 GENERAL**

Plastic pipe for pressure and non-pressure uses shall be manufactured from polyvinyl chloride (PVC), high-density polyethylene (HDPE) or ultra-high molecular weight materials. Each material or product in direct contact with drinking water shall conform to NSF/ ANSI Standard 61.

**121.4.2 LINE LOCATOR:** Metallic tape shall be used as a locator for all plastic pipes. The tape shall be installed to the depths recommended by the manufacturer and as shown on the construction drawings.

**121.5.1.4** Pressure pipe shall have a minimum dimension ratio of DR18, or as specified in the construction drawings.

**121.5.3.3** All water service lines shall be as indicated in the construction drawings and or Section 802 – Water Service Lines of the Supplemental Specifications.

**121.6 MEASUREMENT AND PAYMENT**

If considered as a pay item, then the unit of measurement and payment will be specified in the Bid Proposal and Section 1590 of the Supplemental Specifications.

**END OF SECTION**

**SUPPLEMENTAL SPECIFICATION MODIFYING**

**SECTION 129**

**DUCTILE IRON PIPE**

All provisions of Section 129 of the New Mexico Standard Specifications for Public Works Construction, 2006 Edition shall apply except as modified below:

**129.1 GENERAL**

Ductile iron pipe is acceptable for use in the installation of water lines for sizes 4 inches to 64 inches. The size and thickness class for ductile iron pipe shall be as specified herein or on the plans. Each material or product in direct contact with drinking water shall conform to NSF/ ANSI Standard 61.

**129.3 DUCTILE IRON WATER PIPE**

129.3.1 The required class of ductile iron pipe for this project is Class 250.

129.3.2 Ductile iron pipe shall be manufactured in accordance with AWWA C 151 and shall be cement mortar lined with a bituminous seal coat in accordance with AWWA C 104.

129.3.3 Ductile iron pipe joints for underground installations shall mechanical type in accordance with AWWA C 111. A polyethylene liner, minimum thickness of 8 mils, shall be installed around the valve, fittings, ductile iron pipe and restraints.

**129.5 MEASUREMENT AND PAYMENT**

If considered as a pay item, then the unit of measurement and payment will be specified in the Bid Proposal and Section 1590 of the Supplemental Specifications.

**END OF SECTION**

**SUPPLEMENTAL SPECIFICATION MODIFYING**  
**SECTION 130**  
**GRAY IRON AND DUCTILE IRON FITTINGS**

All provisions of Section 130 of the New Mexico Standard Specifications for Public Works Construction, 2006 Edition shall apply except as modified below:

130.1      **GENERAL**

Fittings required in the installation of ductile iron, polyvinyl chloride and asbestos cement pipes shall be either gray iron or ductile iron, as specified herein. Each material or product in direct contact with drinking water shall conform to NSF/ ANSI Standard 61.

130.6      **RESTRAINTS**

130.6.1      Thrust restraint blocking is required at all fittings and shall be constructed as indicated in the construction drawings unless a restrained fitting is installed with a full 20' length joint of buried pipe in each direction from the joint. A polyethylene liner, minimum thickness of 8 mils, shall be installed between the fitting and any concrete.

130.8      **MEASUREMENT AND PAYMENT**

Payment for iron fittings will not be made. All costs associated with material, labor, and equipment or the placement of all fittings shown in the construction drawings, or required as part of the installation are considered incidental costs, unless otherwise stipulated in the bid proposal.

**END OF SECTION**

**SUPPLEMENTAL SPECIFICATION**

**SECTION 190**

**MATERIAL AND EQUIPMENT**

190.1 GENERAL

190.1.1 REQUIREMENTS INCLUDED

190.1.1.1 For the purposes of this Specification Section, the terms “material and equipment” and “Products” have the same meaning and are used interchangeably.

190.1.1.2 Material and equipment incorporated into the Work:

1. New and free of defect unless otherwise shown on the Drawings
2. Conform to applicable specifications and standards.
3. Comply with size, make, type and quality specified, or as specifically approved in writing by the ENGINEER.
4. Manufactured and Fabricated Products:
  - a. Design, fabricate and assemble in accordance with the best engineering and shop practices.
  - b. Manufacture like parts of duplicate units to standard sizes and gages to be interchangeable.
  - c. Two or more items of the same kind shall be identical, by the same manufacturer.
  - d. Products shall be suitable for service conditions.
  - e. Equipment capacities, sizes and dimensions shown or specified shall be adhered to unless variations are specifically approved in writing.
5. Do not use material or equipment for any purpose other than that for which it is designed or is specified.

190.1.1.3 Owner-Furnished Equipment

None

190.1.2 REUSE OF EXISTING MATERIAL

190.1.2.1 Except as specifically indicated or specified, materials and equipment removed from the existing structure shall not be used in the completed Work.

190.1.2.2 For material and equipment specifically indicated or specified to be reused in the Work:

1. Use special care in removal, handling, storage, and reinstallation to assure proper function in the completed Work.
2. Arrange for transportation, storage, and handling of products which require offsite storage, restoration or renovation. Pay all costs for such work.

### 190.1.3 MANUFACTURER'S INSTRUCTIONS

190.1.3.1 When Contract Documents require that installation of work shall comply with manufacturer's printed instructions, such instructions must be included with:

1. Shop drawing and/or product data submitted if an operation and maintenance manual is not required.
2. Operation and maintenance data if required.

190.1.3.2 Handle, install, connect, clean, condition, and adjust products in strict accordance with such instructions and in conformity with specified requirements.

Should job conditions or specified requirements conflict with manufacturer's instructions, consult with ENGINEER for further instructions.

Do not proceed with work without clear instructions.

190.1.3.3 Perform work in accordance with manufacturer's instructions. Do not omit any preparatory step or installation procedure unless specifically modified or exempted by Contract Documents.

### 190.1.4 TRANSPORTATION AND HANDLING

190.1.4.1 Arrange deliveries of Products in accordance with construction schedules. Coordinate to avoid conflict with work and conditions at the site.

Deliver Products in undamaged conditions in manufacturer's original containers or packaging, with identifying labels intact and legible.

Immediately on delivery, inspect shipments to assure compliance with requirements of Contract Documents and approved submittals, and that Products are properly protected and undamaged.

190.1.4.2 Provide equipment and personnel to handle Products by methods to prevent soiling or damage to Products or packaging.

### 190.1.5 STORAGE AND PROTECTION

190.1.5.1 Store Products in accordance with manufacturer's instructions, with seals and labels intact and legible.

Store products subject to damage by the elements in weather tight enclosures.

Maintain temperature and humidity within the ranges required by manufacturer's instructions.

#### 190.1.5.2 Exterior Storage

Store fabricated Products above the ground, on blocking or skids, to prevent soiling or staining. Cover Products which are subject to deterioration with impervious sheet coverings, provide adequate ventilation to avoid condensation.

Store loose granular materials in a well-drained area on solid surfaces to prevent mixing with foreign matter.

190.1.5.3 Arrange storage in a manner to provide easy access for inspection. Make periodic inspections of stored Products to assure that products are maintained under specified conditions, and free from damage or deterioration.

#### 190.1.5.4 Protection After Installation

Provide substantial coverings as necessary to protect installed Products from damage from traffic and subsequent construction operations. Remove when no longer needed.

#### 190.1.6 SUBSTITUTIONS AND PRODUCT OPTIONS

##### 190.1.6.1 Contractors Options:

1. For Products specified only by reference standard, select any product meeting that standard.
2. For Products specified by naming several products or manufacturers, select any one of the products or manufacturers named, which complies with the specifications.
3. For Products specified by naming one or more Products or manufacturers and "or-equal" or similar term, CONTRACTOR must submit a request as for substitutions for any Product or manufacturer not specifically named.
4. For Products specified by naming only one Product and manufacturer, there is no option.

##### 190.1.6.2 Substitutions:

For a period of 7 days after the Preconstruction Conference is issued, ENGINEER will consider written requests from CONTRACTOR for substitution of Products.

Submit a separate request for each Product, supported with complete data, with drawings and samples as appropriate, including:

1. Comparison of the qualities of the proposed substitution with that specified.
2. Changes required in other elements of the work because of the substitution.
3. Effect on the construction schedule.
4. Cost data comparing the proposed substitution with the Product specified.
5. Any required license fees or royalties.
6. Availability of maintenance service, and source of replacement materials.

ENGINEER shall be the judge of the acceptability of the proposed Product substitution.

##### 190.1.6.3 Contractors Representation: A request for a Product substitution constitutes a representation that CONTRACTOR:

1. Has investigated the proposed Product and determined that it is equal to or superior in all respects to that specified.
2. Will provide the same warranties or bonds of the substitution as for the Product specified.
3. Will coordinate the installation of an accepted substitution into the Work and make such other changes as may be required to make the Work complete in all respects.
4. Waives all claims for additional costs or contract time, under his responsibility, which may subsequently become apparent.

- 190.1.6.4 ENGINEER will review requests for substitutions with reasonable promptness, and notify CONTRACTOR, in writing, of the decision to accept or reject the requested substitution.
- 190.1.7 NAMEPLATE DATA
- 190.1.7.1 Provide original component manufacturer's permanent operational data nameplate on each item of power operated mechanical equipment, indicating manufacturer, product name, model number, serial number, capacity, operating and power characteristics, labels of tested compliance, and similar essential data. Locate nameplates in an accessible location.
- 190.1.8 INTENT OF TECHNICAL SPECIFICATIONS
- 190.1.8.1 Since the specified materials and details of equipment and component fabrication and assembly are given for specific functional, operational, maintainability, and compatibility reasons, which are not detailed in the Contract Documents, the intent and the functional intent of the Specifications is exactly what the Specifications state in all details without any deviations whatsoever.

**END OF SECTION**

**SUPPLEMENTAL SPECIFICATION MODIFYING  
SECTION 207  
LEAN FILL CONSTRUCTION**

All provisions of Section 207 of the New Mexico Standard Specifications for Public Works Construction, 2006 Edition shall apply except as modified below:

207.1      **GENERAL**

Lean Fill Construction shall consist of filling shallow excavations, pipe zones in deep excavations and as authorized by the ENGINEER, with Lean Fill, a flowable mixture of Portland cement, aggregates, admixtures and water. It shall be identified by a unique design mix number as defined by the supplier. A design mix shall not be used on a project without written authorization of the ENGINEER.

207.14     **MEASUREMENT AND PAYMENT**

207.14.2   If considered as a pay item, then the unit of measurement and payment will be specified in the Bid Proposal and Section 1590 of the Supplemental Specifications.

**END OF SECTION**



**SUPPLEMENTAL SPECIFICATION MODIFYING**  
**SECTION 701**  
**TRENCHING, EXCAVATION AND BACKFILL**

All provisions of Section 701 of the New Mexico Standard Specifications for Public Works Construction, 2006 Edition shall apply except as modified below:

**701.1 GENERAL**

Trench excavation and backfill for underground utilities, sanitary sewer, storm sewer, water lines, and appurtenances shall conform to these specifications or as specified in the Supplemental Technical Specifications or as authorized, in writing, by the ENGINEER.

701.4.1.1 Prior to the start of construction, the CONTRACTOR shall notify the adjacent property owners as to when construction will start, the estimated completion date and anticipated access blockages.

701.11.1 Rock Excavation shall include excavating, grading, and disposing of material classified as rock and shall include the satisfactory removal and disposal of boulders  $\frac{1}{2}$  cubic yard or more in volume, solid rock, rock material that is in ledges, bedded deposits, and unstratified masses, which cannot be removed without systematic drilling and breaking or other non-typical soil excavation method, and firmly cemented conglomerate deposits possessing the characteristics of solid rock impossible to remove without systematic drilling and breaking or other non-typical soil excavation method. The removal of any subsurface concrete and masonry structures, except pavements, exceeding  $\frac{1}{2}$  cubic yard in volume that may be encountered in the work shall be included in this classification. If at any time during excavation, including excavation from borrow area, the CONTRACTOR encounters material that may be classified as rock excavation, such material shall be uncovered and the ENGINEER notified by the CONTRACTOR. The CONTRACTOR shall not proceed with the excavation of this material until the ENGINEER has classified the material and measured in accordance to Section 1590. Failure on the part of the CONTRACTOR to uncover such material, notify the ENGINEER's Representative, and allow ample time for classification and measurement of the undisturbed surface, and failure to demonstrate that the material cannot be removed by non-typical soil excavation methods will cause the forfeiture of the CONTRACTOR's right to claim to any classification and/ or measurement of the volume of material as rock excavation.

701.13.3.2 Embedment material shall be Class I, II, or III soils, lean fill as specified in Section 207, or as shown in the construction drawings.

**701.13.3.4 PIPE EMBEDMENT**

The CONTRACTOR may utilize acceptable on site soils in the embedment area which are in conformance with these specifications. The CONTRACTOR has the option of importing acceptable soil, however, no additional compensation will be granted.

701.16.1.12.2 Compaction tests shall be taken in accordance with Supplemental Specification 1511.

701.17 MEASUREMENT AND PAYMENT

If considered as a pay item, then the unit of measurement and payment will be specified in the Bid Proposal and Section 1590 of the Supplemental Specifications.

**END OF SECTION**

**SUPPLEMENTAL SPECIFICATION MODIFYING**

**SECTION 801**

**INSTALLATION OF WATER TRANSMISSION, COLLECTOR AND DISTRIBUTION LINES**

All provisions of Section 801 of the New Mexico Standard Specifications for Public Works Construction, 2006 Edition shall apply except as modified below:

**801.1 GENERAL**

The water facilities and materials specified herein are associated with water transmission, collector, and distribution lines.

801.3.4.4 Butterfly valves shall have a 2 inch square operating hub nut. Butterfly valves in vaults with valve covers shall have a handwheel with the 2 inch nut welded to the center.

801.3.5 VALVE BOXES: Valve boxes shall consist of a two-piece ductile or cast iron slip-type with a 5.25" shaft with extensions to accommodate the required depth. No joints shall be allowed. The pipe shall be centered and placed true to vertical around the axis of the operating nut. Valve covers and lids for re-use water shall be different than those used for potable water and shall be appropriately labeled "REUSE WATER" and "WATER".

801.3.7 FIRE HYDRANTS: Fire hydrants shall have a normal bury depth of 6 feet, and 7 feet unless field conditions require a deeper bury, in which case extensions will be used so as to bring the bottom of the break-off flange 2 to 8 inches above the top of finish grade.

801.8.1 All trenching and backfilling shall be in full accordance with Section 701. The minimum cover over distribution lines shall be 8 feet, and 9-1/2 feet of cover over transmission and collector lines, or as indicated in the construction drawings.

801.12.2 All tees, bends shall be restrained by mechanical means. Where rigid joints are called for on concrete cylinder pipe, the joints shall be flanged or field welded bell and spigot joints in accordance with the manufacturer's recommendations.

801.17.1 Water lines shall be disinfected in accordance with Supplemental Specification 815. The CONTRACTOR shall submit to the ENGINEER an approved disinfection plan that outlines which method disinfection described in Supplemental Specification 815 to be implemented, flushing and sampling points, and how the water for disinfection and flushing will be obtained. The chlorine solution that will remain in the line shall be equal to the normal residual in the existing system or at 0.5 parts per million for unchlorinated water. Dry chlorine will not be used for the disinfection of water lines. The flushed water will be disposed of by the CONTRACTOR appropriately, and in accordance to Local, State, and Federal regulations.

801.17.2 Prior to the line being placed into service, passing bacteria tests shall be submitted to the OWNER and ENGINEER by the CONTRACTOR. Should results of the bacteriological analysis be unsatisfactory, the disinfection procedure shall be repeated at no additional cost to the OWNER, and with no extension to the contract performance period.

801.17.4 The CONTRACTOR shall collect the water samples to test the existing lines with the assistance of the ENGINEER and/ or OWNER at the point of delivery for assurance of clean and potable water. The water in existing lines will be used for testing and flushing.

801.22 MEASUREMENT AND PAYMENT

If considered as a pay item, then the unit of measurement and payment will be specified in the Bid Proposal and Section 1590 of the Supplemental Specifications.

**END OF SECTION**

**SUPPLEMENTAL SPECIFICATION MODIFYING  
SECTION 802  
INSTALLATION OF WATER SERVICE LINES**

All provisions of Section 802 of the New Mexico Standard Specifications for Public Works Construction, 2006 Edition shall apply except as modified below:

**802.1 GENERAL**

This section pertains to the water service line which extends from the distribution line to the water meter, water meter and appurtenances.

**802.3 MATERIALS:**

All metal alloy items that contact potable water shall be NSF Standard 61 and 372 certified. Materials shall comply with the following unless indicated otherwise in the construction drawings.

**802.3.1 SERVICE LINE FITTINGS:** All service line fitting shall be in full compliance with the latest revision of AWWA Standard C-800, except as modified herein. Fittings will be of the type required for the type of service line being installed. All stops shall be of the round, full opening type with no restriction in the opening less than the nominal size. All service line fittings shall be rated for 150 psi or as indicated in the construction drawings.

**802.3.2 SERVICE LINE PIPE:** The 3/4" to 2" service pipe shall be the type indicated on the construction drawings. The size of the service line pipe shall be the same size as the service meter. Bends that exceed the manufacturer's recommendations for minimum radius will not be permitted. Cutting of service line shall be performed with cutters designed for that purpose, and specific material type and size.

**802.3.4 METERS:** Meters are to be furnished and installed by the CONTRACTOR unless otherwise indicated on the construction drawings.

**802.3.4.1** Meters shall have a metal alloy main case.

**802.3.4.2.** Meter type:

**802.3.4.2.2** 5/8" x 3/4" thru 1" meters shall be positive displacement type meters with threaded connections and shall have built in inlet strainers.

**802.3.4.2.3** 1-1/2" thru 2" meters shall be positive displacement type meters with flanged connections and shall have built in strainers.

- 802.3.4.3 Register shall be tamper resistant, through meter body magnetic drive with a glass lens. Register shall have a 10,000,000 gallon capacity with 1/10th gallon precision, electronic LCD or mechanical wheel reading with 6 dial resolution.
- 802.3.4.5 Acceptable manufacturers are Badger Meters, Inc., Neptune Technology Group, Inc., or ENGINEER approved equal.
- 802.3.5.1.3 Meter boxes shall be circular and be constructed of new material or recycled materials as indicated in the construction drawings.
- 802.3.5.1.6.4 Meter boxes shall be the dimensions as indicated in the construction drawings.
- 802.3.5.2.3 The cover and lid shall have, integrated in the casting top a corrugated design to provide a non-slip surface. The lid shall have integrated in the top of the casting, the words "WATER METER" and shall have a locking lid.
- 802.3.5.4 LOCATION OF METER BOXES: Meter boxes shall be located within the right-of-way. OWNER will coordinate with CONTRACTOR to determine location of new water meter assemblies.
- 802.3.6 CORPORATION STOP: Corporation stop shall be AWWA IP Thread inlet by compression type outlet, pack joint outlet, or an outlet type recommended by the manufacturer and accepted by the ENGINEER for the service line indicated in the construction drawings. The socket housing or the rotating ball shall be PTFE coated to avoid metal to metal contact, ensure adequate seal and provide smooth turning operation. All casting shall be ASTM B-62 and outlet seals shall be Buna-N.
- 802.3.7 TAIL PIECE: The service will be placed in the meter box with a PVC tail piece for 3/4" to 2" meter services protruding 18" from the meter box with a cap, or as shown on the construction drawings.
- 802.3.8 COPPERSETTERS: Coppersettters shall have pipe connections for the service line and tail pipe type indicated in these specifications or as indicated in the construction drawings. The coppersetter shall be an assembly of brass and copper tubing with a bottom bar, shall have a locking bronze ball valve on the inlet side of the meter and shall be furnished with coupling gaskets. Coppersettters shall have temporary threaded plugs in the meter connections and shall be furnished free of excess grease. A stabilizer bar of 16 inches by 1/2 inch diameter PVC pipe shall be inserted in the yoke assembly as shown in the construction drawings. A coppersetter with a dual check valve shall be installed, and the coppersetter shall be the height indicated in the construction drawings.
- 802.4.1.2 Connections to existing meters, if required, shall be considered incidental to the installation of the service line. Fittings, adapters, couplings, etc., required to complete the connection to the existing meter yoke shall be provided by the CONTRACTOR at no additional cost to the OWNER. As required, the CONTRACTOR may have to excavate and reinstall the existing meter box to complete the connection.
- 802.4.2.2.3 All necessary excavation and backfill, landscape replacement, detection tape and other items indicated in the construction drawings.

- 802.4.3.1 The meter location shall be as shown on the construction drawings or as determined by the OWNER and/or ENGINEER during construction.
- 802.4.3.4 New service line from the previous meter location shall be installed to the relocated meter inlet/outlet location, as applicable. Service line type shall be as indicated in the construction drawings.
- 802.6.1.2.1 Furnish and install the meter components indicated in the construction drawings.
- 802.6.2 3/4" thru 2" METER REPLACEMENT: Meters to be replaced under "Meter Relocation" and "Meter Rehabilitation" work shall be performed in accordance with the following procedure:
- 802.6.2.1 All existing meters involved with "Meter Relocation" and "Meter Rehabilitation" work shall be replaced by the CONTRACTOR with a new meter that is in substantial conformance with these specifications as indicated in the construction drawings.
- 802.6.2.1 An inventory of the existing meters removed shall be maintained by the CONTRACTOR. Data from each existing meter removed and replaced shall be documented on the attached Meter Replacement Form and shall be provided to the ENGINEER and OWNER within seven days of the replacement.
- 802.6.2.2 Date from the new meter installed shall also be included on the attached Meter Replacement Form for each meter replacement location. For Automatic Meter Reading (AMR) systems, the CONTRACTOR shall ensure the Encoder ID information and other applicable information needed to transfer the meter account(s) to the new meter is indicated on the Meter Replacement Form.
- 802.6.2.3 Existing meters and meter components are considered salvage material and shall be returned to the OWNER. The OWNER may elect that the CONTRACTOR dispose of the meter and meter components at no additional cost to the OWNER.
- 802.6.2.4 The CONTRACTOR shall handle all meters so as not to damage them and shall be responsible for the meters from the time of receipt to turn in. Stolen or lost meters shall be replaced at the CONTRACTOR's expense.
- 802.6.2.5 [Delete this Specification]
- 802.6.2.6 [Delete this Specification]
- 802.8 MEASUREMENT AND PAYMENT
- If considered as a pay item, then the unit of measurement and payment will be specified in the Bid Proposal and Section 1590 of the Supplemental Specifications.

## **END OF SECTION**

**SUPPLEMENTAL SPECIFICATION**

**SECTION 803**

**UTILITY TRACE WIRE**

**803.1 GENERAL**

803.1.1 All trace wire and trace wire products shall be domestically manufactured in the U.S.A.

803.1.2 All trace wire shall have HDPE insulation intended for direct bury color coated per APWA standard for the specific utility being marked.

**803.1.3 TRACE WIRE**

803.1.3.1 Open Trench – Trace wire shall be #12 AWG Copper Clad Steel, High Strength with a minimum 450 lb. break load, with minimum 30 mil HDPE insulation thickness.

803.1.3.2 Directional Drilling/Boring – Trace wire shall be #12 AWG Copper Clad Steel, Extra High Strength with minimum 1,150 lb. break load, with minimum 30 mil HDPE insulation thickness.

803.1.3.3 Pipe Bursting/ Slip Lining – Trace wire shall be 7 x 7 Stranded Copper Clad Steel, Extreme Strength with 4,700 lb. break load, with minimum 50 ml HDPE insulation thickness.

**803.1.4 CONNECTORS**

803.1.4.1 All mainline trace wires must be interconnected in intersections, at mainline tees and mainline crosses. At tees, the three wires shall be joined using a single 3-way lockable connector. At crosses, the four wires shall be joined using a 4-way connector. Use of two 3-way connectors with a short jumper wire between them in an acceptable alternative.

803.1.4.2 Direct bury wire connectors shall include 3-way lockable connectors and mainline to lateral lug connectors specifically manufactured for use in underground trace wire installation. Connectors shall be dielectric silicon filled to seal out moisture and corrosion, and shall be installed in a manner so as to prevent any uninsulated wire exposure.

803.1.4.3 Non locking friction fit, twist on or taped connectors are prohibited.

**803.1.5 TERMINATION/ ACCESS**

803.1.5.1 All trace wire termination points must utilize an approved trace wire access box (above ground access box or grade level/ in-ground access box as applicable), specifically manufactured for this purpose.

803.1.5.2 All grade level/ in-ground access boxes shall be appropriately identified with “sewer” or “water” cast into the cap and be color coded.

803.1.5.3 A minimum of 3-feet of excess/slack wire is required in all trace wire access boxes after meeting final elevation.



- 803.1.5.4 All trace wire access boxes must include a manually interruptible conductive/corrective link between the terminal(s) for the trace wire connection and the terminal for the grounding anode wire connection.
- 803.1.5.5 Grounding anode wire shall be connected to the identified (or bottom) terminal on all access boxes.
- 803.1.5.6 Service Laterals on public property  
Trace wire must terminate at an approved grade level/ in-ground trace wire access box, located at the edge of the road right-of-way, and out of the roadway.
- 803.1.5.7 Service Laterals on private property  
Trace wire must terminate at an approved above-ground trace wire access box, affixed to the building exterior directly above where the utility enters the building, at an elevation not greater than 5 vertical feet above finished grade, or terminate at an approved grade level/ in-ground trace wire access box, located within 2 linear feet of the building being served by the utility.
- 803.1.5.8 Hydrants  
Trace wire must terminate at an approved above-ground trace wire access box, properly affixed to the hydrant grade flange. Affixing with tape or plastic ties shall not be acceptable)
- 803.1.5.9 Long-runs, in excess of 500 linear feet without service laterals or hydrants  
Trace wire access must be provided utilizing an approved grade level/ in-ground trace wire access box, located at the edge of the road right-of-way, and out of the roadway. The grade level/ in-ground trace wire access box shall be delineated using a minimum 48" polyethylene marker post, color coded per APWA standard for the specific utility being marked.
- 803.1.6 GROUNDING
- 803.1.6.1 Trace wire must be properly grounded at all dead ends/stubs.
- 803.1.6.2 Grounding of trace wire shall be achieved by use of a drive-in magnesium grounding anode rod with a minimum of 20-feet of #14 red HDPE insulated copper clad steel wire connected to anode (minimum 0.5 lb.) specifically manufactured for this purpose, and buried at the same elevation as the utility.
- 803.1.6.3 When grounding the trace wire at dead ends/ stubs, the grounding anode shall be installed in a direction 180 degrees opposite of the trace wire, at the maximum possible distance.
- 803.1.6.4 When grounding the trace wire in areas where the trace wire is continuous and neither the mainline trace wire or the grounding anode wire will be terminated at/ above grade, install grounding anode directly beneath and in-line with the trace wire. Do not coil excess wire from grounding anode. In this installation method, the grounding anode wire shall be trimmed to an appropriate length before connecting to trace wire with a mainline to lateral lug connector.
- 803.1.6.5 Where the anode wire will be connected to a trace wire access box, a minimum of 3-feet of excess/ slack wire is required after meeting final elevation.

## 803.2 INSTALLATION

### 803.2.1 GENERAL

- 803.2.1.1 Trace wire installation shall be performed in such a manner that allows proper access for connection of line tracing equipment, proper locating of wire without loss or deterioration of low frequency (512Hz) signal for distances in excess of 1,000 linear feet, and without distortion of signal caused by multiple wires being installed in close proximity to one another.
- 803.2.1.2 Trace wire systems must be installed as a single continuous wire, except where using approved connectors. No looping or coiling of wire is allowed.
- 803.2.1.3 Any damage occurring during installation of the trace wire must be immediately repaired by removing the damaged wire, and installing a new section of wire with approved connectors. Taping and/or spray coating shall not be allowed.
- 803.2.1.4 Trace wire shall be installed at the bottom half of the pipe and secured (taped/tied) at 5-foot intervals.
- 803.2.1.5 Trace wire must be properly grounded as specified.
- 803.2.1.6 Trace wire on all service laterals/stubs must terminate at an approved trace wire access box located directly above the utility, at the edge of the road right-of-way, but out of the roadway. (See Trace Wire Termination/Access)
- 803.2.1.7 At all mainline dead-ends, trace wire shall go to ground using an approved connection to a drive-in magnesium grounding anode rod, buried at the same depth as the trace wire. (see Grounding)
- 803.2.1.8 Mainline trace wire shall not be connected to existing conductive pipes. Treat as a mainline dead-end, ground using approved waterproof connection to a grounding anode buried at the same depth as the trace wire.
- 803.2.1.9 All service lateral trace wires shall be a single wire, connected to the mainline trace wire using a mainline to lateral lug connector, installed without cutting/splicing the mainline trace wire.
- 803.2.1.10 In occurrences where an existing trace wire is encountered on an existing utility that is being extended or tied into, the new trace wire and existing trace wire shall be connected using approved splice connectors, and shall be properly grounded at the splice location as specified.

### 803.2.2 SANITARY SEWER SYSTEM

- 803.2.2.1 A mainline trace wire must be installed, with all service lateral trace wires properly connected to the mainline trace wire, to ensure full tracing/locating capabilities from a single connection point.
- 803.2.2.2 Lay mainline trace wire continuously, by-passing around the outside of manholes/structures on the North or East side.
- 803.2.2.3 Trace wire on all sanitary service laterals must terminate at an approved trace wire access box color coded green and located directly above the service lateral at the edge of road right of way.

### 803.2.3 WATER SYSTEM

803.2.3.1 A mainline trace wire must be installed, with all service lateral trace wires properly connected to the mainline trace wire, to ensure full tracing/locating capabilities from a single connection point.

803.2.3.2 Lay mainline trace wire continuously, by-passing around the outside of valves and fittings on the North or East side.

803.2.3.3 Trace wire on all water service laterals must terminate at an approved trace wire access box color coded blue and located directly above the service lateral at the edge of road right of way.

803.2.3.4 Tracer wire access boxes will be installed on all fire hydrant valves.

803.2.3.5 All conductive and non-conductive service lines shall include tracer wire.

### 803.2.4 PROHIBITED PRODUCTS AND METHODS

803.2.4.1 The following products and methods shall not be allowed or acceptable.

1. Uninsulated trace wire.
2. Trace wire insulations other than HDPE.
3. Trace wires not domestically manufactured.
4. Non locking, friction fit, twist on or taped connectors.
5. Brass or copper ground rods.
6. Wire connections utilizing taping or spray-on waterproofing.
7. Loped wire or continuous wire installations, that has multiple wires laid side-by-side or in close proximity to one another.
8. Trace wire wrapped around the corresponding utility.
9. Brass fittings with trace wire connection lugs.
10. Wire terminations within the roadway, i.e. in valve boxes, cleanouts, manholes, etc.
11. Connecting trace wire to existing conductive utilities.

### 803.2.5 TESTING

803.2.5.1 All new trace wire installations shall be located using typical low frequency (512Hz) line tracing equipment, witnessed by the CONTRACTOR, ENGINEER, and Owner as applicable, prior to acceptance of ownership.

This verification shall be performed upon completion of rough grading and again prior to final acceptance of the project.

Continuity testing in lieu of actual line tracing shall not be accepted.

## END OF SECTION

**SUPPLEMENTAL SPECIFICATION**  
**SECTION 815**  
**DISINFECTION OF WATER LINES**

815.1 GENERAL

815.1.1 SUMMARY

- 815.1.1.1 This section describes the minimum requirements for disinfection of potable water mains, appurtenances, and connections by chlorination, in accordance with AWWA C651. Each product added directly to water during production or treatment, including treatment in storage and distribution, shall conform to NSF/ ANSI Standard 60.

815.1.2 REFERENCES

All of the latest revisions shall apply:

815.1.2.1 American Water Works Association (AWWA)

1. C651, Disinfecting Water Mains
2. B300, Hypochlorites
3. B301, Liquid Chlorine

815.1.2.2 New Mexico Standard Specifications for Public Works Construction

1. Section 801, Installation of Water Transmission, Collector and Distribution Lines
2. Section 802, Installation of Water Service Lines

815.1.3 SUBMITTALS

The following shall be submitted in accordance to Section 1502 Submittals:

815.1.3.1 Sequencing and Scheduling

At least 21 calendar days prior to commencement of disinfection of waterlines, the CONTRACTOR shall submit the following information for disinfecting the new water lines:

1. Disinfectant information:
  - a. Product Data and MSDS Sheets
  - b. ANSI/ AWWA Certifications
  - c. Type and form of disinfectant used
  - d. Solution mixture and percent chlorine
2. Neutralizer information:
  - a. Product Data and MSDS Sheets
  - b. ANSI/ AWWA Certifications
  - c. Type and form of neutralizer used

- d. Solution mixture and dosage required
- 3. Disinfection and Flushing Plan:
  - a. Identify temporary connection locations and flushing points.
  - b. Identify temporary connection equipment.
  - c. Identify test locations.
  - d. Identify disinfection method to be used, and proposed flushing disinfecting and sampling dates.
  - e. Initial and 24 hour disinfectant residuals in treated water in ppm for each outlet tested.
  - f. Indicate proposed locations to dispose of neutralized water.
  - g. Disinfectant residual after flushing in ppm for each outlet tested.
- 4. Bacteriological Reports:
  - a. Date issued, project name, and testing laboratory name, address and telephone number.
  - b. Time and date of water sample collection.
  - c. Name of person collecting samples.
  - d. Test locations.
  - e. Initial and 24-hour disinfectant residuals in ppm for each outlet tested.
  - f. Coliform bacteria test results for each outlet tested.
  - g. Certify water system conforms, or fails to conform, to bacterial standards.

#### 815.1.3.2 Notifications

- 1. The CONTRACTOR shall notify the OWNER and ENGINEER at least seven (7) days before starting each phase of the work at the site. Arrival time shall be verified to the OWNER and ENGINEER 24 hours prior to commencement of site work. The phases of the work shall be as listed in the Disinfection Plan paragraph above.

#### 815.1.3.3 Qualifications

- 1. The CONTRACTOR's key personnel experienced in disinfecting and coliform testing of water lines to supervise and oversee all aspects of this project.
- 2. Testing Firm: Company specializing in testing potable water systems, certified by the State of New Mexico.
- 3. Submit bacteriologist's signature and authority associated with testing.

#### 815.1.3.4 Contract Closeout Submittals

- 1. All closeout submittals are to be submitted, reviewed and accepted by the ENGINEER prior to the preparation of the CONTRACTOR's Final Application for Payment.
- 2. Affidavit of Compliance with AWWA C651 to OWNER (see form included in this Specification): With Request for Final Payment.

#### 815.1.4 SAFETY

815.1.4.1 Protect against damage and contamination.

815.1.4.2 Maintain caution labels on hazardous materials.

815.1.4.3 Provide necessary signs, barricades, and notices to prevent any person from accidentally consuming water or disturbing system being treated.

#### 815.2 PRODUCTS

815.2.1 Liquid Chlorine conforming to ANSI/ AWWA B301 contains 100 percent available chlorine and shall be used only:

1. In combination with appropriate gas-flow chlorinators and ejectors to provide a controlled high-concentration solution feed to the water to be chlorinated;
2. Under the direct supervision of a person who is familiar with chlorine's physiological, chemical and physical properties, and who is trained and equipped to handle any emergency that may arise, and
3. When appropriate safety practices are observed to protect working personnel and the public.

815.2.2 Sodium Hypochlorite conforming to ANSI/ AWWA B300 contains approximately 5 percent to 15 percent available chlorine. Care must be taken to control storage conditions and length of storage to minimize its deterioration.

815.2.3 Calcium Hypochlorite conforming to ANSI/ AWWA B300 contains approximately 65 percent available chlorine by weight. The material should be stored in a cool, dry, dark environment to minimize its deterioration.

#### 815.3 EXECUTION

Prior to starting Work, verify that the domestic system or new lines constructed to feed the water mains, service lines and appurtenances, are completed, cleaned, disinfected and are providing water suitable to complete the Work.

##### 815.3.1 Examination

Verify piping system is clean, and has been inspected and pressure tested.

Perform scheduling and disinfecting activity with start-up, water pressure testing, adjusting and balancing, demonstration procedures, including coordination with related systems.

##### 815.3.2 Preliminary Flushing

815.3.2.1 Potable water shall be used for disinfection, hydrostatic pressure testing, and flushing. If applicable, isolation valves from in service potable mains shall be tagged and locked out.

815.3.2.2 Prior to disinfecting by either the continuous feed method or the slug method, the preliminary flushing of the line shall be completed before the line is chlorinated. The flushing velocity in the main shall not be less than 3.0 ft/sec unless otherwise authorized by the OWNER and ENGINEER in writing. Table 1 shows the rates of flow required to produce a velocity of 3.0 ft/sec in commonly used sizes of pipes.

Table 1						
Pipe Diameter (inches)	Flow Required to produce 3.0 ft/sec Velocity in Main (gpm)	Size of Tap (inches)			Number of 2-1/2 in Hydrant Outlets	Number of 4-1/2 in Hydrant Outlets
		1"	1-1/2"	2"		
		Number of Taps on Pipe +				
4	120	1	----	----	1	1
6	260	----	1	----	1	1
8	470	----	2	----	1	1
10	730	----	3	2	1	1
12	1,060	----	----	3	2	1
16	1,880	----	----	5	2	1
+ Number of taps on pipe on discharge through 5 ft of galvanized iron pipe with on 90° bend						

### 815.3.3 Disinfection by Calcium Hypochlorite Tablets:

- 815.3.3.1 The tablet method consists of placing calcium hypochlorite granules or tables in the water lines as it is being installed and then filling the main with potable water when installation is completed. This method may be used only if the pipes and appurtenances are kept clean and dry during construction.
- 815.3.3.2 During construction, calcium hypochlorite granules shall be place at the upstream end of the first section of pipe, at the upstream end of each branch main, and at 500-foot intervals. The quantity of granules shall be as shown in the following Table 2.
- 815.3.3.3 This procedure must not be used on solvent-welded plastic or on screwed-joint steel pipe because of the danger of fire or explosion from the reaction of the join compounds with the calcium hypochlorite.
- 815.3.3.4 During construction, 5-g calcium hypochlorite tablets shall be placed in each section of pipe. One tablet shall additionally be placed in each hydrant, hydrant branch, and other appurtenances. The number of 5-g tablets required for commonly used sizes of pipe is as shown in the following Table 3.

Table 2	
Pipe Diameter (d) (inches)	Calcium Hypochlorite Granules (ounces)
4	1.7
6	3.8
8	6.7
10	10.5
12	15.1
14 and larger	$D^2 \times 15.1$
Where D is the inside pipe diameter in feet $D = d/12$	

Table 3					
Pipe Diameter (inches)	Length of Pipe Section, ft				
	13 or less	18	20	30	40
	Number of 5-g Calcium Hypochlorite Tablets				
4	1	1	1	1	1
6	1	1	1	2	2
8	1	2	2	3	4
10	2	3	3	4	5
12	3	4	4	6	7
16	4	6	7	10	13
*Based on 3.25-g available chlorine per tablet; any portion of tablet rounded to the next higher integer.					

815.3.3.5 The tablets shall be attached with a food-grade adhesive. There shall be adhesive only on the broadside of the tablet attached to the surface of the pipe. Attached tablets inside and at the top of the main, with approximately equal numbers of tablets at each end of a given pipe length. If the tablets are attached before the pipe is placed in the trench, their position shall be marked on the section to indicate that the pipe has been installed with the tablets at the top.

815.3.3.6 When installation has been completed, the main shall be filled with water at a rate to ensure that the water within the main will flow at a velocity no greater than 1 ft/sec. Precautions shall be taken to ensure that air pockets are eliminated. This water shall remain in the pipe for at least 24 hours. If the water temperature is less than 41 ° F, the water shall remain in the pipe for at least 48 hours. A detectable free chlorine residual ( $\geq 0.2$  mg/L) shall be found at each sampling point after the 24 or 48 hour period.

#### 815.3.4 Disinfection by Continuous-feed Method

815.3.4.1 The continuous-feed method consists of completely filling the main with potable water to remove air pockets, flushing the completed main to remove particulates, and refilling the main with potable water that has been chlorinated to 25 mg/L. After a 24-hr holding period in the main, there shall be a free chlorine residual of not less than 10 mg/L.

1. Water supplied should be from a temporary, backflow-protected connection to the existing distribution system or other approved supply source with flow at a constant, measured rate into the newly installed water line. The main should undergo hydrostatic testing prior to disinfection.
2. At a point not more than 10 ft downstream from the beginning of the new line, water entering the new line shall receive a dose of chlorine fed at a constant rate such that the water will have not less than 25 mg/L free chlorine. To ensure that this concentration is provided, measure the chlorine concentration at regular intervals in accordance with the procedures described in the current edition of *Standard Methods for the Examination of Water and Wastewater* or AWWA Manual M12, or using appropriate chlorine test kits as provided under AWWA C651.



3. Table 4 gives the amount of chlorine for each 100 ft of pipe of various diameters. Solutions of 1 percent chlorine may be prepared with sodium hypochlorite or calcium hypochlorite. The latter solution required 1 lb of calcium hypochlorite in 8 gal of water.

Table 4		
Pipe Diameter (inches)	100% Chlorine (lb)	1% Chlorine (gal)
4	0.013	0.16
6	0.030	0.36
8	0.054	0.65
10	0.085	1.02
12	0.120	1.44
16	0.217	2.60

4. Chlorine application shall not cease until the entire line is filled with heavily chlorinated water. The chlorinated water shall be retained in the main for at least 24 hours, during which time valves and hydrants in treated section shall be operated to ensure disinfection of the appurtenances. At the end of this 24-hr period, the treated water in all portions of the main shall have a residual of not less than 10 mg/L of free chlorine.

#### 815.3.5 Slug Method

- 815.3.5.1 The slug method consists of completely filling the main to eliminate air pockets; flushing the main to remove particulates; and slowly flowing through the main a slug of water dosed with chlorine to a concentration of 100 mg/L. The slow rate of flow ensures that all parts of the main and its appurtenances will be exposed to the highly chlorinated water for a period of not less than 3 hours.
- 815.3.5.2 At a point not more than 10 ft downstream from the beginning of the new line, water entering the new line shall receive a dose of chlorine fed at a constant rate such that the water will have not less than 100 mg/L free chlorine. To ensure that this concentration is achieved, the chlorine concentration should be measured at regular intervals. The chlorine shall be applied continuously and for a sufficient period to develop a solid column, or slug, of chlorinated water that will, as it moves through the main, expose all interior surfaces to a concentration of approximately 100 mg/L for at least 3 hours.
- 815.3.5.3 The free chlorine residual shall be measured in the slug as it moves through the main. If at any time it drops below 50 mg/L, the flow shall be stopped; chlorination equipment shall be relocated at the head of the slug; and, a flow resumes, chlorine shall be applied to restore the chlorine in the slug to not less than 100 mg/L.
- 815.3.5.4 As the chlorinated water flows past fittings and valves, related valves and hydrants shall be operated so as to disinfect appurtenances and pipe branches.

- 815.3.6 Final Pipeline Flushing:
- 815.3.6.1 After confirming the chlorine residual, flush excess chlorine solution from the pipeline until the total chlorine concentration in the water leaving the pipe is within 0.5 mg/L of the replacement water.
- 815.3.6.2 Final flushing for the chlorine tablet method shall provide a velocity in the pipes of not less than 3.0 ft/sec in accordance with paragraph 815.3.2.2
- 815.3.7 Bacteriological Sampling and Testing
- 815.3.7.1 After the flushing and before the new water mains are connected to the distribution system, bacteriological samples shall be collected from the new lines. At least one set of samples shall be collected from every 1,200 feet of new water line, plus one set from the end of the line and at least one set from each branch. Samples shall be tested for bacteriological quality in accordance with *Standard Methods for the Examination of Water and Wastewater*, and shall show the absence of coliform organisms and the presence of a chlorine residual.
- 815.3.7.2 At the CONTRACTOR's option, one of two options may be used: 1) Take an initial set of samples upon completion of the final flushing and then resample again after a minimum of 16 hours, or 2) Upon completion of final flushing, let the main sit for 16 hours without any use. Then collect two samples a minimum of 15 minutes apart while the sample taps are left running.
- 815.3.7.3 If trench water has entered the new main during construction or if excessive quantities of dirt or debris have entered the new main, bacteriological samples shall be taken at intervals of approximately 200 ft, and the location shall be identified. Samples shall be taken of water that has stood in the new main for at least 16 hours after flushing has been completed.
- 815.3.7.4 The water in the full facility should also be tested to ensure that no offensive odor exists because of chlorine reactions or excess chlorine residual.
- 815.3.7.5 If the initial disinfection fails to produce satisfactory bacteriological results or if other water quality is affected, the new water lines may be reflashed and shall be resampled. If check samples also fail to produce acceptable results, the line shall be rechlorinated by the continuous-feed or slug method until satisfactory results are obtained – that two consecutive sets of acceptable samples taken in accordance with 815.3.7.2.
- 815.3.8 Connections to Existing System
- Where connections are to be made to an existing potable water system, swab or spray the interior surfaces of all pipe and fittings used in making the connections with a one percent hypochlorite solution before they are installed. Start a thorough flushing as soon as the connection is completed and continue until all discolored water is eliminated.

## END OF SECTION

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**AFFIDAVIT OF COMPLIANCE WITH AWWA C651 TO OWNER**

To: Village of Taos Ski Valley  
7 Firehouse Road  
Taos Ski Valley, NM 87525

For: Phoenix Switchback Waterline Replacement

Gentlemen:

We hereby certify that the Village of Taos Ski Valley water lines chlorination and disinfection completed for you at Village of Taos Ski Valley and described as follows: \_\_\_\_\_ inch diameter water mains have been chlorinated, disinfected and tested for coliform bacteria in accordance with all of the requirements of the American Water Works Association Standard C651, latest edition entitled "Disinfecting Water Mains" and that the results of all such inspections, and other tests indicate that the water lines installed for this project fully comply with all of the requirements of this standard.

\_\_\_\_\_  
(Name of Company)

\_\_\_\_\_  
(Authorized Representative)

\_\_\_\_\_  
(Date)

COUNTY OF \_\_\_\_\_)

\_\_\_\_\_) ss.

STATE OF \_\_\_\_\_)

Acknowledged and sworn to before me

this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

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

**SUPPLEMENTAL SPECIFICATION**

**SECTION 1200**

**BARRICADING AND TEMPORARY TRAFFIC CONTROL**

All provisions of Section 1200 of the New Mexico Standard Specifications for Public Works Construction, 2006 Edition, shall apply except as modified below:

**1200.1 GENERAL**

The work under this section includes, but is not limited to, traffic control standards needed to ensure safety to motorists, the public, construction workers, and special event participants when City roadways are temporarily disrupted due to construction efforts or special items.

1200.1.1 The Contractor shall provide a Traffic Control Plan (TCP) seven days prior to initiating work in roadway areas, to allow the Owner and Engineer to review and comment, and in sufficient time to obtain permits from State, County and Local agencies, as required. The TCP shall be prepared in accordance with these specifications, the Manual for Uniform Traffic Control Devices (MUTCD), other applicable specifications identified in the contract documents, and Federal, State and Local standards. The TCP shall, at a minimum, satisfy the following conditions:

1. The TCP shall be completed with Computer Aided Drafting (CAD), or shall be neatly completed by hand utilizing straight edges and be to scale.
2. The TCP shall clearly identify the location of the traffic control, shall identify if it is "typical" for the work being completed, and shall clearly indicate street names, driveways, number and direction of lanes, traffic flow indicators, advance warning sign placement and identification, barricade placement, and other items necessary to implement adequate traffic control.
3. If during the course of construction the implementation of traffic control is changed from what is indicated on the TCP, the Contractor shall update the TCP and provide the revised TCP to the Owner and Engineer.
4. The Contractor may be required to obtain TCP(s) certified by a Licensed Professional Engineer. Projects that include work within the NMDOT ROW shall require that the contractor provide a TCP that is certified by a Licensed Professional Engineer.

1200.1.2 The Contractor shall provide a designated representative that is in charge of implementing traffic control. This representative shall be in close proximity at all times that traffic control is to be maintained in the work zone, and contact information for the representative shall be provided to the Owner and Engineer. If the Contractor elects to utilize the services of a traffic control firm, the Contractor shall still be responsible for ensuring that

adequate traffic control measures are in place. The Contractor shall provide the contact information for the representative of the traffic control firm that is responsible for implementing the traffic control, and the contact information for Contractors representative oversees the activities of the traffic control firm.

1200.6 MEASUREMENT AND PAYMENT

If considered as a pay item, then the unit of measurement and payment will be specified in the Bid Proposal and Section 1590 of the Supplemental Specifications.

**END OF SECTION**

**SUPPLEMENTAL SPECIFICATION**

**SECTION 1502**

**SUBMITTALS**

1502.1 GENERAL

1502.1.1 This Section specifies administrative and procedural requirements for submittals required for performance of the Work including

1502.1.1.1 Shop Drawings:

Drawings, diagrams and schedules specifically prepared to illustrate some portion of the work

Diagrams and instructions from a manufacturer or fabricator for use in producing the product and as aids to the CONTRACTOR for integrating the product or system into the project.

Drawings prepared by or for the CONTRACTOR to show how multiple systems and interdisciplinary work will be coordinated.

1502.1.1.2 Product Data:

Catalog cuts, illustrations, schedules, diagrams, performance charts, instructions and brochures illustrating size, physical appearance and other characteristics of materials or equipment for some portion of the work.

Samples of warranty language when the contract requires extended product warranties.

1502.1.1.3 Samples:

Physical examples of materials, equipment or workmanship that illustrate functional and aesthetic characteristics of a material or product and establish standards by which the work can be judged.

Color samples from the manufacturer's standard line (or custom color samples if specified) to be used in selecting or approving colors for the project.

Field samples and mock-ups construction on the project site establish standards by which the ensuing work can be judged. Includes assemblies or portions of assemblies which are to be incorporated into the project and those which will be removed at conclusion of the work.

1502.1.1.4 Design Data

Calculations, mix designs, analyses or other data pertaining to a part of work.

1502.1.1.5 Test Reports

Report signed by authorized official of testing laboratory that a material, product or system identical to the material, product or system to be provided has been tested in accord with specified requirements. (Testing must have been within three years of date of contract award for the project.)

Report which includes findings of a test required to be performed by the CONTRACTOR on an actual portion of the work or prototype prepared for the project before shipment to job site.

Report which includes finding of a test made at the job site or on sample taken from the job site, on portion of work during or after installation.

Investigation reports.

Daily checklists.

Final acceptance test and operational test procedure.

1502.1.1.6 Certificates:

Statements signed by responsible officials of manufacturer of product, system or material attesting that product, system or material meets specification requirements. Must be dated after award of project contract and clearly name the project.

Documents required of CONTRACTOR, or of a supplier, installer, or subcontractor through CONTRACTOR, the purpose of which is to further quality of orderly progression of a portion of the work by documenting procedures, acceptability of methods or personnel qualifications.

1502.1.1.7 Manufacturer's Instructions:

Preprinted material describing installation of a product, system or material, including special notices and Material Safety Data Sheets concerning impedances, hazards and safety precautions.

1502.1.1.8 Manufacturer's Field Reports

Documentation of the testing and verification actions taken by manufacturer's representative to confirm compliance with manufacturer's standards or instructions.

Factory test reports.

1502.1.1.9 Operation and Maintenance Data:

Data intended to be incorporated in operations and maintenance manuals.

1502.2 SUBMITTAL PROCEDURES

1502.2.1 Coordination: Coordinate preparations and processing of submittals with performance of construction activities. Transmit each submittal sufficiently in advance of performance of related construction activities to avoid delay

1502.2.1.1 The ENGINEER reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.

1502.2.2 Processing: Allow sufficient review time so that installation will not be delayed as a result of the time required to process submittals, including time for resubmittals.

Allow two weeks for initial review. Allow additional time if processing must be delayed to permit coordination with subsequent submittals. The ENGINEER will advise the CONTRACTOR within seven days after the receipt of a submittal being processed that must be delayed for coordination.

No adjustment for time or money will be authorized because of failure to transmit submittals to the ENGINEER sufficiently in advance of the Work to permit processing



or for corrective actions required as a result of noncompliance with plans or specifications.

1502.2.3 Submittal Preparation: Place a permanent label or title block on each submittal for identification. Indicate the name of the entity that prepared each submittal on the label or title block:

1. Project Name
2. Date
3. Name and address of ENGINEER.
4. Name and address of CONTRACTOR.
5. Name and address of Subcontractor.
6. Name and address of Supplier.
7. Name of manufacturer.
8. Number and title of appropriate Specification Section
9. Drawing number and detail references, as appropriate.

1502.2.4 Submittal Transmittal: Package each submittal appropriately for transmittal and handling. Transmit each submittal from CONTRACTOR to ENGINEER using a transmittal form. Submittals received from sources other than the CONTRACTOR will be returned without action.

1502.2.4.1 On the transmittal, record relevant information and requests for data. Include CONTRACTOR's certification that information complies with Contract Document requirements.

1502.2.4.2 Transmittal Form: Use submittal forms included at the end of this section for transmittal of submittals.

1502.2.4.3 The CONTRACTOR shall submit all submittals as follows: 1 – OWNER; 2 – ENGINEER; 1 (or as required) – CONTRACTOR/Subcontractors, if hard copies are submitted. All complete submittals will be accepted via email. If physical examples of materials, equipment or workmanship are part of a submittal, they must be delivered to the ENGINEER by the CONTRACTOR.

### 1502.3 PRE-CONSTRUCTION PHOTOGRAPHS

1502.3.1 Prior to the date of the Notice to Proceed, the CONTRACTOR shall submit to ENGINEER photographs of the work areas and material storage areas. Photographs shall be taken along the center line of the proposed pipe trench and should capture all existing features of the sites such as mail boxes, curbing, lawns, driveways, signs, culverts, etc. As many photographs as necessary shall be taken but as a minimum one photograph for every 50-feet of pipe trench is required. Each photograph shall have the date taken, a description and sequential number (to follow pipe route) recorded on the back.

## **END OF SECTION**

**SUPPLEMENTAL SPECIFICATIONS  
SECTION 1502-a  
SUBMITTAL FORM**

**CONTRACTOR SUBMITTAL FORM**

Project: Village of Taos Ski Valley Phoenix Switchback Waterline Replacement	Contractor's Submittal No.:	Date:
	Dates of Previous Submissions:	
Contractor:	Specification No.:	
Supplier:	Drawing Nos.:	
Manufacturer:	Product Description:	
Are there any deviations to the CONTRACT DOCUMENTS? ____ No ____ Yes (Explain and identify. Include all above header information in attachments.)		
<p>CONTRACTOR'S CERTIFICATION: This submittal has been reviewed by the CONTRACTOR and it conforms to the requirements of the CONTRACT DOCUMENTS. Any deviations from the CONTRACT DOCUMENTS are identified above. If this is a resubmittal, any changes other than those specifically called for by the ENGINEER on previous submittals are specifically identified on the sheet(s) directly following this form.</p> <p>Signed: _____ Date: _____</p>		
Date Received by <b>DENNIS ENGINEERING COMPANY</b> :		Quantity Received:
<p><input type="checkbox"/> <b>REVIEWED</b> for general conformity with DRAWINGS and SPECIFICATIONS. Quantities shown not verified. CONTRACTOR'S full responsibility is in no way relieved by this action.</p> <p><input type="checkbox"/> <b>REVIEWED AND NOTED</b> for general conformity with DRAWINGS and SPECIFICATIONS. Quantities shown not verified. CONTRACTOR'S full responsibility is in no way relieved by this action.</p> <p><input type="checkbox"/> <b>REVIEWED AND NOT ACCEPTED.</b> Not in conformity with DRAWINGS and SPECIFICATIONS.</p> <p><input type="checkbox"/> <b>NOT REVIEWED.</b></p>		
By: _____ Date: _____		
Date Returned:		Quantity:
Engineer's Comments, if any:		
Engineer's Attachments, if any:		



DENNIS ENGINEERING COMPANY

**DENNIS ENGINEERING COMPANY**

**SUPPLEMENTAL SPECIFICATIONS**

**SECTION 1503**

**ELECTRICAL SUBMITTALS**

- 1503.1 GENERAL
- 1503.2 APPLICATION
  - 1503.2.1 This Section applies to sections regarding special construction, mechanical, electrical or that include a reference to this SECTION 1503.
  - 1503.2.2 Where material is called for on the Drawings with a reference to this SECTION 1503, and is not shown in the specifications, submit as if specified. References in the following paragraph to Specification Section also apply to Drawing number and note.
- 1503.3 TIMELINESS
  - 1503.3.1 Make all submittals soon enough to allow final review to be completed without an adverse impact on the project schedule.
  - 1503.3.2 No payments will be made for materials, equipment, or supplies, or for labor to install such materials or equipment, for which the Engineer's final review of submittal has not been made.
  - 1503.3.3 Materials, equipment, or supplies for which Engineer's final review of submittal has not been made shall not be allowed on the job site.
- 1503.4 CONTRACTOR RESPONSIBILITIES
  - 1503.4.1 If substitutions of materials are proposed, conform to DEC Supplemental Specification 190 – Material and Equipment.
  - 1503.4.2 Review Shop Drawings, Product Data, Certificates, Electrical Schematics, Electrical Connection Diagrams, Test Reports, Installation Instructions, Samples and similar required submittal materials for completeness and accuracy prior to submission. Return unsatisfactory submittal materials to the supplier or manufacturer for correction.
  - 1503.4.3 Complete the Contractor Submittal Form included at the end of this section. Notify the Engineer of any deviations in submittal from Contract requirements. Sign, date, and forward the Form and the Contractor reviewed submittal materials to the Engineer.
- 1503.5 FORMAT
  - 1503.5.1 Unless otherwise permitted below, furnish individual submittal packages for each section that includes a reference to this SECTION 1503. Conform to the following:
    - 1. When one supplier is furnishing submittals for multiple sections, the required submittals may be under a single cover in a single binding. When more than

- one submittal is included in a single binding, provide tabs with one and only one submittal under a single tab.
2. Include a separate Contractor Submittal Form for each section.
  3. Packages that do not cover all of a section may be returned without having been reviewed, marked "Incomplete: Re-submit."
  4. Packages that improperly contain information for more than one section may be returned with only one section reviewed and the requirement to resubmit on the other sections, or returned without having been reviewed.
  5. Furnish all applicable information in the re-submittal, including information on material that was favorably reviewed. Upon request, the Engineer will return all but two of the original submittals for reuse by the Contractor.
  6. Submittals containing partial information may or may not be reviewed.
- 1503.5.2 Identify submittal packages on the front or on the first page with the project name, the Contractor's name, the subcontractor's name, the date, and the contents of the binder (Section number and title).
- 1503.5.3 If a submittal includes more than one product covered by a single Section, group data related to each product and identify each by reference to the specific item by Section paragraph.
- 1503.5.4 Binding:
- 1 Minimum acceptable binding methods.
    - a. Submittals of no more than six sheets per set, including cover sheets: staple in sets.
    - b. Submittals of seven to 25 sheets per set: punch sheets and assemble in a soft cover binder with 3-hole metal fold-down clips to hold pages or in a "comb" binder.
    - c. Submittals of 26 to 75 sheets: punch sheets and assemble in a hard cover ring binder or in a "comb" binder.
    - d. Submittals of more than 75 sheets: punch sheets and assemble in a hard cover D-ring binder.
  2. Fold 11 inch by 17-inch drawings to fit into bound sets of submittals.
  3. Furnish drawings larger than 11 inches by 17 inches rolled. Provide a complete index in the submittal literature set.
- 1503.6 MISCELLANEOUS
- 1503.6.1 Manufacturer's literature and cut sheets:
1. Provide information required in individual sections.
  2. Identify applicable information with arrows or cross out inapplicable information. Do not use a highlighter because it will not reproduce well.
  3. Where sheets are reproduced from a pamphlet, catalog, or similar publication, print the manufacturer's name and the title of the publication on each sheet, or set of sheets, if it is not already on the sheet.

- 1503.6.2 Other Materials: As required in individual sections.
- 1503.6.3 Material described on Drawings but not shown in the Specifications: Provide cut sheets as a minimum, or as called for on the Drawings.
- 1503.6.4 The review of a separate item as such will not indicate approval of the assembly in which the item functions.
- 1503.7 SCHEMATIC DRAWINGS (SCHEMATICS)
- 1503.7.1 General:
1. Submitted shop drawings and related information are not solely for the convenience of the manufacturer's personnel.
  2. Prepare drawings to facilitate the review process, installation of the equipment, and operation and maintenance of the equipment as well as equipment manufacture.
  3. During the review process, heavy consideration will be given to ease of understanding (logic) of the drawings.
  4. Submittals with drawings that fail to clearly convey the information required (as determined by the Engineer), to facilitate installation, operation, and maintenance may be rejected even though changes in the construction of the equipment are not required.
- 1503.7.2 Drawing Size: 11 inches by 17 inches or 24 inches by 36 inches, or as allowed otherwise in a specific section.
- 1503.7.3 Format and Style:
1. Manufacturer's standard where allowed in the specific section.
  2. Manufacturer's standard where specifically requested in writing by the Contractor (not solely the supplier) and specifically approved in writing by the Engineer. The Engineer's favorable review of a submittal will not necessarily imply that the format and style of the schematic is acceptable for use as a Record Document.
  3. For all other cases, use the format, symbols, drafting conventions, graphic appearance, style, and presentation of the Drawings.
- 1503.7.4 Content:
1. Show every electrical or electronic component including, but not limited to, components in the equipment furnished and associated field devices.
  2. Show connector and terminal boards for both internal and external connections.
  3. Show all interconnections schematically.
  4. Tables may be used so one schematic diagram applies to several pieces of equipment that are physically and functionally identical but numbered differently.
  5. Provide schematics for the specific equipment furnished on this project.
  6. "Generic" schematics, i.e. those which include information that applies to various models of equipment, and schematics that employ notes or tables to include or exclude portions of a standard or generic schematic diagram will not be accepted.

1503.7.5 Identification:

1. Show a number or alphanumeric identification on each wire, terminal board point, and component such as relays, timers, pushbuttons, switches, pilot lights, and similar components. Where such numbers are already shown on the Drawings, then do not change them without prior approval of the Engineer.
2. Show manufacturer and catalog number of all components, either on the drawing or on an accompanying bill of materials.
3. Include the project name, the project-specific name of the equipment, and the date in the drawing title block.

1503.7.6 If the function or operation of a component, such as a limit switch, is not immediately obvious, then furnish an explanation on the drawing

1503.7.7 Furnish an explanation of the operation of electronic portions of schematic drawings in accompanying text. This text may be on the drawings or on attached sheets.

1503.8 INTERNAL CONNECTION DIAGRAMS

1503.8.1 Drawing Size: Match to respective schematic diagram(s).

1503.8.2 Format and Style:

1. Show components, terminals, terminal boards, connectors, etc. In a "simplified photographic" form, i.e. show devices in correct relative location with respect to actual equipment, front views of mounting pans, rear views of doors.
2. Where practical, show connections using tables or an addressing method, not wires or "highways."
3. The Engineer will determine if the Manufacturer's standard format, or a modified version of it, is acceptable.

1503.8.3 Content:

1. Show every internal electrical or electronic component that is shown on the associated schematic diagram. If a component is furnished as a part of a larger manufactured system but field mounted, then show it on the connection diagram and note its location.
2. Show connectors and terminal boards for both internal and external connections.
3. If a component, such as a relay socket, has marked terminals, then show the terminal points and respective marking on the connection diagrams.
4. Show all internal connection.
5. Identify terminal board points that are to be used for external connections. Identification shall relate to function, such as "alarm contact." Show details of external connection on the Project Record Documents.
6. Show the location of wiring duct and note whether the respective duct is for AC or DC wiring and whether it is for internal or external wiring.
7. Tables may be used so one diagram applies to several pieces of equipment that physically and functionally identical but numbered differently.
8. "Generic" diagrams, i.e. those which include information that applies to various models of equipment, and diagrams that employ notes or tables to include or exclude portions of a standard or generic connection diagram will not be accepted.

1503.8.4 Identification:

1. Use the same numbering as on the schematic as discussed above.
2. Show the same title information as on the associated schematic diagram as discussed above.

1503.9 PROJECT RECORD DOCUMENTS

1503.9.1 SECTION 1506 – Project Record Documents.

1503.9.2 If the equipment installed deviates in any way from the submittal for the equipment, then submit copies of submittals that are corrected to show actual equipment supplied.

1503.9.3 Show details of external connections on the Record Documents.

**END OF SECTION**

**SUPPLEMENTAL SPECIFICATION**  
**SECTION 1504**  
**REQUEST FOR INFORMATION (RFI)**

1504.1 GENERAL

1504.1.1 Summary

1504.1.1.1 This Specification Section specifies administrative and procedural requirements for handling and processing Requests for Information (RFI).

1504.1.1.2 RFI is intended for requesting clarifications and interpretations of Contract Documents due to apparent inconsistencies, errors or omissions in Contract Documents, and due to unanticipated existing conditions.

1504.1.1.3 RFI is not intended for general communication, requesting substitutions, Contractor's proposed changes, resolution of nonconforming work, or coordination between contractors or for general questions not related to the Contract Documents.

1504.1.1.4 RFI process is intended to be a cooperative effort between Engineer and Contractor to expedite responses to RFIs and maintain progress of Work without utilizing other lengthy procedures.

1504.1.1.5 Any other proposed method of processing RFIs other than indicated within this Specification Section shall be evaluated by Engineer for potential impact on Engineer's services.

1. If Engineer agrees to utilize another proposed method, Engineer will be reimbursed for any special training, usage fees, extra time required to implement, maintain, utilize and administer such a system.

1504.1.2 RFI Submittal Procedure

1504.1.2.1 All RFIs shall be submitted on the form attached to this Specification Section, or on mutually agreeable forms to be provided at the preconstruction meeting, and shall include all backup information

1. Backup information shall include, but not be limited to Contractor verified field measurements, quantities, dimensions, installation requirements, materials, catalog number, and any other information that will assist the Owner in reviewing the RFI.

1504.1.2.2 Within ten (10) working days of receipt of RFI, Engineer will either return a response to the RFI or notify Contractor when a response will be issued.

1504.1.3 Commencement of RFI-Related Work

1504.1.3.1 No portion of the work requiring instruction from the Engineer shall begin until RFI has been reviewed by the Engineer and returned to Contractor with instruction or with notation indicating Engineer response is not necessary.



1504.2 PRODUCTS – (NOT APPLICABLE TO THIS SPECIFICATION)

1504.3 EXECUTION

1504.3.1 Requests for Information

1504.3.1.1 Review of Contract Documents and Field Conditions:

1. Before starting each portion of Work, Contractor shall carefully study and compare various Drawings, Specifications and other Contract Documents, coordination drawings, Shop Drawings, prior correspondence or documentation relative to that portion of Work, as well as information furnished by Owner.
2. Contractor and Subcontractors shall evaluate and take field measurements of conditions related to that portion of Work and shall observe any conditions at site affecting it.
3. These obligations are for purpose of facilitating coordination and construction by Contractor.
4. Any errors, inconsistencies or omissions discovered in Contract Documents shall be reported promptly to Engineer as a properly prepared and timely RFI.

1504.3.1.2 Contractor's and Subcontractor's Responsibilities:

1. When interpretation, clarification or explanation of portion of Construction Documents is needed by Contractor, Subcontractor, Vendor or Supplier, the request shall be processed through Contractor.
  - a. Review request for completeness, quality, proper referencing to Drawing or Specification Section and reason submitted.
  - b. If request is not acceptable, it shall be returned to submitter with comments regarding reason for being returned.
  - c. Make every attempt to validate, resolve, or respond to RFI by thoroughly researching and reviewing Contract Documents and field conditions.
  - d. Respond to RFI accordingly if review of RFI discloses a response or is related to coordination of construction or other issue not related to Contract Documents.
  - e. If unable to respond to request, it shall be restated in clear concise, correct, complete and easily understood manner, rewritten in necessary, additional information included if necessary, and only then submitted to Engineer for response.
2. Follow these procedures in developing an RFI:
  - a. List specific Contract Documents researched when seeking information being requested.
  - b. Reference all applicable Contract Drawings by sheet number, section, detail, room number, door number, etc., Specifications by section and paragraph number, and reference any other relevant documents.
  - c. The field titled "Regarding" on attached RFI form must be clear for future reference in reports or correspondence.

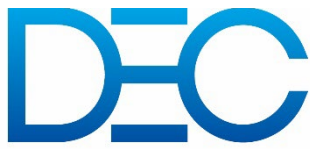
- d. Clearly state request and provide Contract Document references and any additional information needed so request can be fully understood, including sketches, photos or other reference material.
  - e. Fully assess issues, suggest any reasonable solutions and include various factors, including potential costs, schedule impacts, if any, and recommendations which will aid in determining a solution or response.
    - i. If a reasonable solution cannot be suggested, a statement to that effect should be so stated.
  - f. Indicate reason request is being submitted.
  - g. Any critical RFIs requiring a rapid response shall clearly indicate such with an explanation as to why RFI is critical.
  - h. Priority for responses shall be indicated when multiple RFIs are submitted within short period of time.
- 3. Copies of responses to RFIs shall be distributed to all parties affected.
  - 4. A response to RFI shall not be considered a notice to proceed with a change that may revise the Contract Sum or Contract Time, unless authorized by Owner in writing.
  - 5. If response to RFI is determined incomplete, it shall be resubmitted with reason response is unacceptable and any necessary additional information within five (5) days of time of receipt of response to RFI.

#### 1504.3.1.3 RFI Submittal Numbering:

- 1. RFIs shall be assigned unique numbers in sequential order (1, 2, 3, 4, etc.).
- 2. A resubmitted RFI or a previously answered RFI requiring revising or further clarification shall be submitted using original RFI number proceeded by ".1" to indicate revision one of RFI(i.e.: RFI No. 34.1 for revision 1 to RFI No. 34).
- 3. Engineer may return RFI without response for following reasons:
  - a. Request is unclear or incomplete.
  - b. Detailed information not provided.
  - c. Is related to construction means, methods or techniques.
  - d. Is related to health or safety measures.
  - e. Is due to Contractor's lack of adequate coordination.
  - f. Is for coordination between Subcontractors.
  - g. Is considered a "Substitution Request."
  - h. Is considered a "Contractor Proposed Change."
  - i. Is due to non-conformance.
  - j. Response is required by another party.

**END OF SECTION**





DENNIS ENGINEERING COMPANY

## Request for Information Form

Contractor's RFI No.: \_\_\_\_\_ Engineer's RFI No.: \_\_\_\_\_

Contract: Phoenix Switchback Waterline Replacement

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

Owner: Village of Taos Ski Valley Owner's Contract or ITB No.: N/A

Engineer: DENNIS ENGINEERING COMPANY Engineer's Contract No.: N/A

THIS REQUEST BY: \_\_\_\_\_ Cc to: \_\_\_\_\_  
(Name of the Contractor's Representative)

REGARDING: \_\_\_\_\_

REFERENCE: DIVISION \_\_\_\_\_ SECTION \_\_\_\_\_ PLAN SHEET NO. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

ATTACHMENTS: \_\_\_\_\_

\_\_\_\_\_

### CONTRACTOR'S CERTIFICATION:

The undersigned Contractor certifies that (1) due diligence was used to determine the intent of the contract documents prior to submitting the request; (2) Contractor has read and understood the provisions of Supplemental Specification 1504; and; (3) Contractor understands that once the Engineer provides a written response to a Contractor's RFI, that determination shall be final and binding on the Contractor unless the Contractor delivers to the Owner written notice of a change in the work within a certain period of time of receipt of that determination. See the General Conditions for further clarification.

Signature \_\_\_\_\_ Name and Title (Printed) \_\_\_\_\_ Date \_\_\_\_\_

INTERPRETATION BY: \_\_\_\_\_ Cc to: \_\_\_\_\_  
(Name of Engineer's Representative)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

ATTACHMENTS: \_\_\_\_\_

\_\_\_\_\_

Signature \_\_\_\_\_ Name and Title (Printed) \_\_\_\_\_ Date \_\_\_\_\_

**SUPPLEMENTAL SPECIFICATION**

**SECTION 1505**

**PROJECT SCHEDULE**

1505.1 GENERAL

1505.1.1 General Requirements

CONTRACTOR shall prepare and submit a detailed progress schedule to the ENGINEER for approval in accordance with the General Conditions.

If in the opinion of the ENGINEER the CONTRACTOR falls behind the progress schedule, the CONTRACTOR shall take such steps as may be necessary to improve his progress, which may require him to increase the number of shifts, and/or overtime operations, days of work, and/or the amount of construction planned, and to submit for approval such supplementary schedule or schedules as necessary to demonstrate the manner in which the agreed rate to progress will be regained, all without additional cost to the OWNER.

1505.2 PRODUCTS (NOT USED)

1505.3 EXECUTION

1505.3.1 Contractor's Construction Schedule

1505.3.1.1 Schedule: The CONTRACTOR shall prepare a fully developed CPM chart or spreadsheet type bar graph of CONTRACTOR'S construction schedule.

The scheduling of construction is the responsibility of the CONTRACTOR and CONTRACTOR management personnel shall actively participate in development of the schedule so that intended sequences and procedures are clearly understood. An orderly progression of work is demonstrated by:

1. Provided a separate task for each significant construction activity. Use the same breakdown of units of the Work as indicated in the "Schedule of Values."
2. Coordinate the CONTRACTOR's construction schedule with the schedule of values, list of subcontracts, submittal schedule, progress reports, payment requests and other schedules.
3. The diagram shall show a continuous activity flow from left to right. The activity or event numbers, description, duration, and value shall be shown on the diagram.
4. Dates shall be shown on the diagram for start of the project, any milestones required by the contract, and contract completion.
5. The critical path shall be clearly identified.

6. Submittal, review, procurement, fabrication, delivery, installation, start-up, and testing of special or long lead-time materials and equipment shall be included in the schedule.
  7. Other agency activities shall be shown. These include but are not limited to: notice to proceed, approvals, inspections, and utility tie in for phasing requirements.
- 1505.3.1.2 Work Stages: Indicate important stages of construction for each major portion of the Work, including testing and installation.
- 1505.3.2 A monthly meeting shall be conducted on site attended by the CONTRACTOR's project manager and appropriate ENGINEER's representatives. During this meeting the CONTRACTOR will describe, on an activity by activity basis, all proposed revisions and adjustments to the schedule required to reflect the current status of the project. The following shall be addressed:
1. The actual start and actual finish dates for all activities in progress or completed as appropriate.
  2. The estimated remaining duration for each activity in progress. Progress calculations must be based on remaining duration for each activity.
- 1505.3.3 Following the monthly progress meeting, a complete update of the schedule based on the approved progress, revisions, and adjustments agreed upon at the meeting shall be computed and submitted along with the application for progress payment. This update shall be subject to approval of the accurate entry of information agreed upon at the meeting.
- 1505.3.4 In the event the CONTRACTOR requests an extension of the contract completion date for any other contractual reason, he shall furnish such justification as the ENGINEER may deem necessary for a determination of the CONTRACTOR's right to an extension of time under the provisions of the contract. In such event, the schedule revisions shall clearly display that the CONTRACTOR has used in full all available float time for the work involved with the request. Actual delays that are found to be caused by the CONTRACTOR's own actions or lack of action and which result in the extension of the projected contract completion date shall not be a cause for extension of the contract completion date. The OWNER may find cause to extend the contract completion date under the contract in the absence of a request by the CONTRACTOR when, in the OWNER's judgement, it is equitable.

#### **END OF SECTION**

**SUPPLEMENTAL SPECIFICATION**  
**SECTION 1506**  
**PROJECT RECORD DOCUMENTS**

1506.1 GENERAL

1506.1.1 Record Drawings

1506.1.1.1 The CONTRACTOR will receive from the ENGINEER the contract drawings prepared for the project. A set of contract drawing prints (24"x36") shall be kept at the construction site for mark-up by the CONTRACTOR to record all as-built conditions. Once approved by the ENGINEER the CONTRACTOR shall transfer the information recorded as record drawings to the final record drawings.

1506.1.2 Submittals

1506.1.2.1 At project close-out, CONTRACTOR shall deliver record documents to ENGINEER for OWNER.

1506.1.2.2 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. Signature of CONTRACTOR or its authorized representative.

1506.2 WORKING RECORD DRAWINGS

The working record drawing prints shall be revised to show the as-built conditions during the construction of the project. Changes from the contract plans which are made in the work or additional information discovered or provided in the course of construction shall be accurately and neatly recorded as changes or additions to the original contract drawings.

1506.2.1 Content of Working Record Drawings

The working record drawings shall include, but not be limited to, the following information:

1. The location and description of any utility lines or other installations of any kind or description known to exist within the construction area. The location of exterior utilities includes actual measured horizontal distances from utilities to permanent facilities/features. These measurements shall be within an accuracy range of 300 mm (6 inches) and shall be shown at sufficient points to permit easy location of utilities for future maintenance purposes. Measurements shall be shown for all change of direction points and all surface or underground components such as valves, manholes, drop inlets,

clean outs, meter, etc. The general depth range of each underground utility line shall be shown (i.e., 1m (3ft) depth). The description of exterior utilities includes the actual quantity, size, and material of utility lines.

2. The location and dimensions or any changes within the building or structure.
3. Correct grade or alignment of roads, structures or utilities if any changes were made from contract plans.
4. Correct elevations if changes were made in site grading.
5. Changes in details of design or additional information obtained from working drawings specified to be prepared and/or furnished by the CONTRACTOR including but not limited to fabrication, erection, installation plans and placing details, pipe sizes, insulation material, dimensions of equipment foundations, etc.
6. The topography and grades of all drainage installed or affected as a part of the project construction.
7. Options: Where contract drawings or specifications allow options, only the option selected for construction shall be shown on the record drawings.
8. Shop drawings containing as-built information shall be incorporated into the working record drawings. This additional information may be added to an existing working record drawing or may require the addition of a new drawing to the working record drawing set.

#### 1506.2.2 Quality Control of Working Record Drawings

Subject to the approval of the ENGINEER, a member of the CONTRACTOR's Quality Control Organization shall be assigned sole responsibility for the maintenance and currency of working record drawings. Any reassignment of duties concerning the maintenance of the record drawings shall be promptly reported to the ENGINEER.

#### 1506.2.3 Withholding for Working Record Drawings

The working record marked prints will be jointly reviewed for accuracy and completeness by the ENGINEER and the CONTRACTOR prior to submission of each monthly pay estimate. If the CONTRACTOR fails to maintain the working as-built drawings as specified herein, the ENGINEER will deduct from the monthly progress payment an amount representing the estimated cost of maintaining the as-built drawings and will continue the monthly deduction until an agreement can be reached between the ENGINEER and the CONTRACTOR regarding the accuracy and completeness of the updated drawings.

#### 1506.3 FINAL RECORD DRAWINGS

The final record drawings shall be the final record of construction as installed and completed by the CONTRACTOR and as indicated on the working record drawings. All changes, variations and/or required additions to the contract drawings shall be included. In the event the CONTRACTOR accomplishes additional work which changes the as-built conditions of the facility after submission of the final record drawings, the CONTRACTOR shall furnish revised and/or additional drawings as required to depict as-built conditions. The



requirements for these additional drawings will be the same as for the record drawings included in the original submission.

1506.4 PRODUCTS (NOT USED)

1506.5 EXECUTION

1506.5.1 Maintenance of Documents and Samples:

1506.5.1.1 CONTRACTOR shall store documents and samples in CONTRACTOR's field office apart from documents used for construction.

1. Provide files and racks for storage of documents.

2. Provide locked cabinet or secure storage space for storage of samples.

1506.5.1.2 CONTRACTOR shall file documents and samples in accordance with Construction Specifications Institute (CSI) format.

1506.5.1.3 CONTRACTOR shall maintain documents in a clean, dry, legible condition and in good order. Do not use record documents for construction purposes.

1506.5.1.4 CONTRACTOR shall make documents and samples available at all times for reference by ENGINEER or OWNER.

1506.5.2 Marking Pens:

1506.5.2.1 Contractor shall provide felt tip marking pens for recording information designated by ENGINEER.

1506.5.3 Record Drawings:

1506.5.3.1 CONTRACTOR shall label each of the two sets of Record Drawings with document "PROJECT RECORD" in neat large printed letters.

1506.5.3.2 CONTRACTOR shall record information concurrently with construction progress. Do not cover any work until required information is recorded.

1506.5.3.3 Drawings shall be legibly marked by CONTRACTOR to record actual construction.

1506.5.3.4 During progress of Project, CONTRACTOR shall keep careful record at site of all changes and corrections from layouts shown on two separate sets of drawings. CONTRACTOR shall enter such changes and corrections on prints of contract drawings within a day of the time the changes are made. Record drawings shall also indicate in addition to changes and corrections, actual location of all subsurface utility lines encountered. In order that location of these lines and appurtenances may be determined in the event of surface openings or indicators become covered over or obscured, record drawing shall show, by installation elevation and offset dimensions to two permanently fixed surface features, end of each run including each change in direction. Valve, splice boxes and similar appurtenances shall be located by dimensioning along utility run from reference point. At time of substantial completion of each structure or facility involved under contract, CONTRACTOR shall submit to ENGINEER recorded drawings showing aforementioned data. ENGINEER will not recommend interim payments or final payment for project until above requirements have been fulfilled by CONTRACTOR.

1506.5.3.5 Specifications and Addenda shall be legibly marked by CONTRACTOR to record:

1. Manufacturer, trade name, catalog number, and supplier of each product and item of equipment actually installed.
2. Changes made by field order or by change order.

**END OF SECTION**

**SUPPLEMENTAL SPECIFICATION**

**SECTION 1507**

**OPERATION AND MAINTENANCE INSTRUCTIONS**

1507.1 GENERAL

1507.1.1 Operation and Maintenance Instructions, Spare parts list, spare parts, special tools, inventories of installed properties and training of operation and service personnel.

The CONTRACTOR shall be responsible for the preparation, coordination, execution and submittal of all operation and maintenance instructions, training of operating and service personnel, spare parts lists, special tools and inventories of equipment. Manuals and maintenance instructions shall be for all system installations provided in this contract and shall be in sufficient detail to facilitate normal maintenance and troubleshooting by persons with minimum experience with the installed equipment. These O & M manuals shall be consolidated by section of the technical specifications. Contents are indexed and suitably cross-referenced to and between various volumes. The manuals must be divided into chapters for each major system and subdivided into the proper chapters as necessary to promote readability. Bound set covers are labeled with the system name, building number, CONTRACTOR's name, and the contract number of the project. All copies shall be forwarded to the ENGINEER for review and approval.

1507.1.2 A draft manual shall be submitted in quadruplicate for review no later than 30 calendar days prior to scheduled contract completion. Failure to do so will result in a 10% retainage of the current progress payment. Four (4) copies of these documents shall be submitted unless a greater number is otherwise specified. If a lesser number is specified, four shall be submitted. After review by the ENGINEER, the CONTRACTOR will have 15 days to make corrections and submit final manuals. Except for those portions which cannot be fully developed prior to testing and checkout, as stated in paragraph 1.1, final approved manuals shall be furnished prior to scheduling training of operating and service personnel. Approved operations and maintenance instructions shall be provided 15 days prior to scheduling training of operating and service personnel. The CONTRACTOR shall coordinate the content of each instruction period required in the Technical Provisions of these specifications with the ENGINEER'S representative prior to the actual start of the training period.

1507.2 GENERAL GUIDANCE FOR O&M MANUAL PREPARATION

1507.2.1 Information provided shall consider the systems, individual equipment items, consolidation of equipment items into subsystems, and the composite integration of all building systems. The manuals must address at least the following systems:

- a. Domestic cold water,
- b. Heating and ventilation,

- c. Fire protection,
- d. Sanitary waste,
- e. Pump operation and control,
- f. Interior and special electrical,
- g. Exterior electrical,
- h. Communications and special systems (cable TV, PA, etc.)

This manual is to be building specific and stand alone. No other documents (i.e. shop drawings, contract drawings, specifications, etc.) shall be required to enable OWNER personnel to operate and maintain the systems/equipment covered therein. Information provided will be sufficient to fully describe all component parts of building systems, to depict their exact location, and to illustrate their relationship (both physical and functional) to other parts of the system. The CONTRACTOR is advised that unique diagrams, drawings, tables, etc., may have to be created to meet the intent of this paragraph. Details or diagrams found on contract drawings or shop drawing may be used for this purpose subject to the approval of the ENGINEER. However, any such "existing" drawings cannot be cluttered with information extraneous to the purpose of clear system depiction and representation.

1507.2.2 System Organization: Contents are indexed and suitably cross-referenced to and between various volumes. The manuals must be divided into chapters for each major system and subdivided into the proper chapters as necessary to promote readability. Bound set covers are labeled with the system name, building number, CONTRACTOR's name and the contract number of the project. Hardbound binders are required.

### 1507.3 O&M MANUAL CONTENTS

1507.3.1 Table of Contents: This must include a listing of all major subjects and the page numbers on which they appear, plus a list of all illustrations and a list of all tables to include the title and page numbers on which they appear.

1507.3.2 Integrated System Design: This section contains a general description of each system to indicate the type of system installed, its capacity and performance capabilities, special or unusual features, relationship to other systems, major subsystems and components, allowances for future expansions, the rationale for design decisions, and design factors and assumptions. The CONTRACTOR shall coordinate with the Designer of Record as necessary to obtain this information.

1507.3.3 The following features must be presented for systems as well as individual equipments:

1. Notes, Cautions and Warnings: Notes, cautions and warnings are used to emphasize important and critical instruction where necessary. A warning page consisting of the more vital warnings extracted from those shown throughout the manual must be used when care must be exercised.
2. Theory and Principles of Operation: This section includes a complete functional description of the system or equipment (as installed), based on a system or equipment block diagram. For complex mechanical or electrical

features, a complete explanation must be given using block diagrams, exploded views, or cutaway drawings. Each major component must be broken down to a block diagram or to simplified schematics where the complexity of the circuits require such detail.

3. Start up Procedures: This section includes step-by-step instructions for starting, operating, and stopping the equipment and/or system. Meter readings and the results to be expected from properly adjusted and operated equipment must be supplied, calling out all operating controls and indications. All references to controls and indicators must follow the specific designation on the panels and nameplates. Operating plasticized instruction cards must be provided in addition to the manual and attached to equipment (see POSTED INSTRUCTIONS hereinafter). Operating instructions must include routine and emergency precautions. Emergency operating instructions must include alternate procedures to be followed when normal operation is not possible because of emergency conditions (i.e. component equipment failure, power failure, etc.). Emergency operating instructions and procedures must be located for quick and ready reference.

#### 1507.3.4 Service and Maintenance

1. Preventative Maintenance: This section include all maintenance adjustment procedures to be performed periodically to prevent equipment failure. Preventative maintenance procedures which require the use of special tools, procedures, or specialized expertise must be specifically detailed with proper precautions highlighted. Any preventative maintenance procedure which requires that essential life support systems or subsystems be terminated or limited, must be explicitly stated. Data must include the recommended frequency of adjustment verification checks.
2. Corrective Maintenance: Instructions must be provided for all removal, repair, adjustment, and replacement procedures. Exploded and sectional views giving details of assemblies must be provided, as necessary, to clarify the text. For mechanical items, dimensional information with tolerances, clearances, wear limits, maximum bolt-down torques, and in-place balancing or other means or reducing noise level, if required, must be supplied.
3. Troubleshooting: Troubleshooting shall apply to systems as well as individual equipments. Failures that might occur during operation must be listed. Troubleshooting data and fault isolation techniques must state:
  - a. The indication or symptom of trouble.
  - b. The instructions necessary, including test hookups, to determine the cause.
  - c. Special tools and equipment required.
  - d. Methods for returning the equipment to operating conditions.
4. Circuit Diagrams: Circuit diagrams for electronic units are provided to support maintenance and troubleshooting. Circuit diagrams must cross-reference repair parts shown in test tables and parts lists. Interconnecting cable diagrams must be furnished to show TO and FROM information, including any intermediate connections.

5. Illustrations: Manuals must contain all illustrations necessary to locate and identify components of operational and maintenance significance. Where necessary for clarity, illustrations must show configuration, and the removal and disassembly of parts.
6. Replacement Parts: Parts list must provide positive identification of parts necessary for support of the systems or equipment and must include sufficient information to enable maintenance personnel to requisition replacement parts. The parts list must show part number, generic description and drawing components and mechanical components in the equipment. Parts lists are also provided for all vendor-supplied assemblies or subassemblies. Recommended stockage quantities of high usage repair parts must be provided. Provide price list for all spare parts.
7. Test and Balance Report: A copy of the approved test and balance report shall be included in the appropriate section of the manual.
8. Inventory of Installed Property: A copy of the approved inventory of installed property shall be included in a separate section of the manual.
9. Emergency Procedures: Include location and procedures for operating all emergency cutoffs.
10. Energy Conservation: Procedures for initiating energy conservation measures, when required selectively or because of equipment failure, must be provided. The negative impact of implementing these procedures must be stated. This section relates to EMCS control of major mechanical equipments.
11. Copies of the guarantee or warranty terms and conditions for all components of the facility. These must be organized and referenced by component. The name and address of installing and servicing contractors must be provided for each components. Performance agreements for roofs must be included.
12. Important and Special Considerations: Include data as to commercial warranty terms, available customer "in service" training offered by the manufacturer or supplier, initial inspection procedures, etc.

#### 1507.4 USE AND POSSESSION PRIOR TO COMPLETION

The OWNER may take possession of any completed or partially completed work, as provided for under Contract Clause entitled "PARTIAL USE OR OCCUPANCY." If the installed equipment and/or systems thereto have not been accepted by the OWNER due to the CONTRACTOR's failure to submit the above specified items, the CONTRACTOR shall operate and maintain such plant or system at no additional cost to the OWNER until such time that the specified items have been received, approved, and any subsequent testing, check-out, and/or training has been completed.

#### 1507.5 INVENTORY OF INSTALLED PROPERTY

A list of equipment or units of equipment that require electrical power or fuel, or may require removal or replacement such as air handling units (AHU), fans, air conditioners, compressors, condensers, boiler, thermal exchangers, pumps, cooling towers, tanks, fire hydrants, sinks, water closets, lavatories, urinals,

shower stalls, and any other large plumbing fixtures, light fixtures, etc., shall be made and kept up to date as installed. The list shall be reviewed periodically by the ENGINEER to insure completeness and accuracy. Partial payment will be withheld for equipment not incorporated in the list. List shall include on each item as applicable: Description, manufacturer, model or catalog number, serial number, input (power, voltage, BTU, etc.), output (power, voltage, BTU, tons, etc.), size or capacity (tanks), net inventory costs, and any other data necessary to describe the item. Final list shall be turned over to the ENGINEER two weeks prior to prefinal inspection.

1507.6 PRODUCTS (NOT USED)

1507.7 EXECUTION

1507.8 PREPARATION OF O&M MANUALS

The systems O & M manuals shall be prepared in two stages.

1507.8.1 Sections described in paragraph, Integrated System Design, shall be completed and submitted to the ENGINEER no later than 30 days following receipt of Notice to Proceed. At this time, a rough outline of the proposed manual will also be submitted for approval. The outline shall contain at least the following information:

1. System and subsystem breakdown.
2. Listing of equipments to be included in each system/subsystem.
3. Brief description of the illustrations and diagrams proposed to satisfy the requirements contained in this specification.
4. Preliminary outline of proposed posted instructions.

1507.9 FORMAT

1507.9.1 Use of Existing Manuals: If possible, commercial manuals must be incorporated without change in either content or format to satisfy the service and maintenance requirements of this specification. However, this requirement is not to be construed as superseding other manual content requirements presented in the "manual content" paragraphs hereinbefore, namely specific material.

1507.9.2 Volumes: The manual must be divided into volumes to prevent the manual from becoming unwieldy in size.

1507.9.3 Text: The manual must be oriented toward operation, maintenance, and repair of the equipment and system by the operators and maintenance repair trades without the assistance of a manufacturer's representative. Descriptive matter and theory must be limited to those technical details which are essential to a proper understanding of the system or equipment, and to satisfactory operation, maintenance, and repair.

1507.9.4 Reproduction: The method of reproducing the technical manuals must be done according to the supplier's standard commercial practice. However, the

reproduction process used must be one that will produce a high quality permanent copy.

1507.10 MANUSCRIPT REVIEW

Operating and maintenance procedures, including checkout, calibration, alignment, scheduled removal and replacement instructions, and associated checklists must be validated against the equipment or equipment systems in the presence of OWNER and ENGINEER during the start-up and training.

1507.11 POSTED INSTRUCTIONS

In addition to the operation and maintenance manuals, the following diagrams and instructions are CONTRACTOR furnished and installed, framed under glass or approved plastic laminate, and permanently posted within view of the installed system. A copy of these instructions are to be included in the pertinent section of the manual.

1. Complete layout diagram to include all wiring, controls, system components, plumbing, valves, and regulators.
2. Selective starting and stopping procedures.
3. Procedures which should be used to check the system for normal, safe operation.
4. Abbreviated recommended preventative maintenance procedures.
5. Emergency instructions.
6. Warnings and precautions

1507.12 TRAINING

After installation, start-up, and testing of the system, (but prior to facility acceptance), the CONTRACTOR is required to supply the services of competent personnel to instruct the using service and other OWNER personnel in the proper operation and maintenance of the complete system. Instructions will be given for each system/equipment covered in the manual. Training will be conducted using excerpts from the approved manuals, so as to familiarize government personnel with the manuals and validate the effectiveness of manual content and arrangement.

**END OF SECTION**



**SUPPLEMENTAL SPECIFICATION**

**SECTION 1510**

**GENERAL REQUIREMENTS**

1510.1 GENERAL

This section describes general requirements in addition to those in the General Conditions that shall be met by the CONTRACTOR.

1510.2 AUTHORITY OF CONTRACTOR REPRESENTATIVE

1510.2.1 The site representative appointed by the CONTRACTOR and approved by the ENGINEER shall, as a minimum, have the authority to negotiate and execute Supplemental Agreements having a value up to \$5,000.00.

1510.3 AGE AND VALUE OF EQUIPMENT

1510.3.1 If requested by the ENGINEER, the CONTRACTOR shall provide documentation to establish the age and value of any equipment being utilized to perform work under this contract.

1510.4 WORK SCHEDULE

1510.4.1 If the CONTRACTOR intends to work outside the normal 40 hour Monday through Friday work week, he shall notify the ENGINEER one full workday (Monday – Friday) in advance.

1510.5 SPECIFICATIONS

1510.5.1 The CONTRACTOR, or CONTRACTOR's representative shall at all times have in the field a copy of the New Mexico Standard Specifications for Public Works to utilized as a reference.

**END OF SECTION**

**SUPPLEMENTAL SPECIFICATION**

**SECTION 1511**

**QUALITY CONTROL AND QUALITY ASSURANCE TESTING**

1511.1 DEFINITIONS

Quality Control Testing (Process Control Testing): Sampling and testing performed by the CONTRACTOR for process control to provide a product fulfilling the requirements of the contract.

Quality Assurance Testing (Assurance Testing): Sampling and testing performed by the OWNER, or its designated agent, to determine acceptability for payment and pay factor.

1511.2 GENERAL

1511.2.1 All materials are subject to inspection, sampling, and testing at any time before acceptance of the work. References to a New Mexico test method in the contract or to a federal specification or to a specification or test designation of the American Association of State Highway and Transportation Officials (AASHTO), the American Society for Testing and Materials (ASTM), or any other recognized national organization, shall mean the latest revision of that test method or specification for the work in effect on the day the advertisement for bids for the work is dated, unless otherwise noted. All test methods may be subject to modification at the discretion of the ENGINEER.

1511.2.2 The CONTRACTOR may observe any testing performed by the OWNER. If the CONTRACTOR observes a deviation from the specified sampling or testing procedures by either the CONTRACTOR or OWNER, the CONTRACTOR shall immediately verbally describe the observed deviation to the ENGINEER. Written and full documentation of the observed deviation shall be presented to the ENGINEER within 24 hours.

1511.2.3 Technician Certification

All individuals performing inspection, sampling, or testing for acceptance (including process control test used for acceptance as set forth in these specifications) shall be completing such work under the supervision of a Professional Engineer licensed in the State of New Mexico.

1511.2.4 Acceptance Sampling and Testing

Items designated for acceptance will be obtained by an independent testing laboratory as directed by the ENGINEER or OWNER. Samples may be taken any time the material appears defective or when a change in the process or product has occurred, or when the ENGINEER determines that it to be in the best interest of the OWNER.

All costs for testing that does not comply with the specified requirement shall be paid by the CONTRACTOR. An amount, computed by the ENGINEER, shall be

based on the amount invoiced by the independent testing laboratory, plus a **10%** administrative fee. This amount will be withheld from the CONTRACTOR's Application for Payment on a monthly basis as the costs are incurred.

1511.3 RELATED DOCUMENTS

1. New Mexico Standard Specifications for Public Works (NMSSPW), 2006 Edition.
2. Construction Drawings or as listed in the Contract Documents and Technical Specifications.

1511.4 CONTRACTOR CONTROL

1511.4.1 Quality Control (QC) Plan

The CONTRACTOR shall provide and maintain a quality control plan, along with all personnel, equipment, supplies and facilities necessary to obtain samples, perform tests, and otherwise control the quality of the product to meet contract requirements, as deemed appropriate by the CONTRACTOR.

1511.4.2 Sampling

The plan shall contain a system for sampling that assures all materials being produced will have an equal chance of being selected for testing. This shall be done using a systematic application of a random sampling selection technique. The ENGINEER shall be provided the opportunity to witness all sampling. All sampling shall be in accordance with specified NMDOT, AASHTO or ASTM procedures, without modifications as determined by the ENGINEER. When directed by the ENGINEER, the CONTRACTOR shall sample and test any material that appears inconsistent with similar material being sampled, unless such material is voluntarily removed and replaced or corrected by the CONTRACTOR.

1511.4.3 Testing

All QC testing performed by the CONTRACTOR shall be performed in accordance with the acceptance test procedures applicable to the specified contract items or other methods set forth in the quality control plan. The CONTRACTOR shall provide copies of all quality control test results to the ENGINEER within **two (2)** working days after the respective sample has been taken. These results shall be furnished to the ENGINEER on forms preapproved by the ENGINEER.

1511.5 MINIMUM QUALITY CONTROL TESTING REQUIREMENTS

See Table A.

1511.6 MEASUREMENT AND PAYMENT

If considered as a pay item, then the unit of measurement and payment will be specified in the Bid Proposal and Section 1590 of the Supplemental Specifications.

**TABLE A: Minimum Quality Control Testing Requirements**

Item	Test Required	Sampling/ Testing Location	Contractor QC Testing	Owner QA Testing
Domestic Water Lines	Bacteriological Analysis	Per Specification 815	Per Specification 815	N/A
Utility Trench	Proctor	Per material type	1	*
	Backfill Density	Every two (2) foot of vertical fill	300 lineal feet	*
Concrete	Slump, Air, Break	Every 100 CY or days pour	1	*
* As provided in paragraph 1511.2.4. Acceptance Sampling and Testing				

**END OF SECTION**

**SUPPLEMENTAL SPECIFICATION**

**SECTION 1514**

**WARRANTY OF CONSTRUCTION**

1514.1 WARRANTY OF CONSTRUCTION

- 1514.1.1 In addition to any other warranties in this contract, the CONTRACTOR warrants, except as provided in Paragraph 1514.1.9 of this specification, that work performed under this contract conforms to the contract requirements and is free of any defect in equipment, material or design furnished, or workmanship performed by the CONTRACTOR or any subcontractor or supplier at any tier.
- 1514.1.2 This warranty shall continue for a period of one (1) year from the date of substantial completion. If the OWNER takes possession of any part of the work before final acceptance, this warranty shall continue for a period of one (1) year from the date the OWNER takes possession.
- 1514.1.3 The CONTRACTOR shall remedy at the CONTRACTOR's expense any failure to conform, or any defect. In addition, the CONTRACTOR shall remedy at the CONTRACTOR's expense any damage to OWNER owned or controlled real or personal property, when that damage is the result of:
1. The CONTRACTOR's failure to conform to contract requirements; or
  2. Any defect of equipment, material, workmanship or design furnished.
- 1514.1.4 The CONTRACTOR shall restore any work damaged in fulfilling the terms and conditions of this clause. The CONTRACTOR's warranty with respect to work repaired or replaced will run for one (1) year from the date of repair or replacement.
- 1514.1.5 The ENGINEER or OWNER shall notify the CONTRACTOR, in writing, within a reasonable time after discovery of any failure, defect, or damage.
- 1514.1.6 If the CONTRACTOR fails to remedy any failure, defect, or damage within a reasonable time after receipt of notice, the OWNER shall have the right to replace, repair, or otherwise remedy the failure, defect, or damage at the CONTRACTOR's expense.
- 1514.1.7 With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for work performed and materials furnished under this contract, the CONTRACTOR shall:
1. Obtain all warranties that would be given in normal commercial practice;
  2. Require all warranties to be executed, in writing, for the benefit of the OWNER, if directed by the ENGINEER; and
  3. Enforce all warranties for the benefit of the OWNER, if directed by the ENGINEER.

- 1514.1.8 In the event the CONTRACTOR's warranty under Paragraph 1.2 of this clause has expired, the OWNER may bring suit at its expense to enforce a subcontractor's manufacturer's, or supplier's warranty.
- 1514.1.9 Unless a defect is caused by the negligence of the CONTRACTOR or subcontractor or supplier at any tier, the CONTRACTOR shall not be liable for the repair of any defects of material or design furnished by the OWNER nor for the repair of any damage that results from any defect in OWNER furnished material or design.
- 1514.1.10 This warranty shall not limit the OWNER's rights under the Inspection and Acceptance clause of this contract with respect to latent defects, gross mistakes, or fraud.
- 1514.1.11 Defects in design or manufacture of equipment specified by the OWNER on a "brand name and model" basis shall not be included in this warranty. In this event, the CONTRACTOR shall require any subcontractor, manufacturers, or suppliers thereof to execute their warranties, in writing, directly to the OWNER.

1514.2 PRE-WARRANTY CONFERENCE

Prior to contract completion and at a time designated by the ENGINEER or his representative, the CONTRACTOR shall meet with the ENGINEER to develop a mutual understanding with respect to the requirements specified herein. The ENGINEER shall establish communication procedures for oral notification to the CONTRACTOR or warranty defects; establish reasonable time for CONTRACTOR responses; and other details deemed necessary by the ENGINEER for the execution of the construction warranty. In connection with these requirements, the CONTRACTOR will furnish the name, telephone number and address of representatives authorized to perform warranty repairs. If the CONTRACTOR is located outside the local service area, the name, telephone number and address of a licensed and bonded company that is authorized to initiate and maintain warranty work action on behalf of the CONTRACTOR shall be furnished. This point of contact will be located within the local service area of the warranty work and shall be an established company capable of performing the type of work under the warranty item. At this conference, the ENGINEER shall furnish names and telephone numbers of the personnel authorized to notify the CONTRACTOR or his designated representative of any failure, effect or damage, and to request warranty repair work.

1514.3 WARRANTY REPAIRS

Warranty repair work that threatens the health, safety, or wellbeing of personnel or the safety of property and/or equipment will be handled by the CONTRACTOR on an immediate basis as orally directed by the ENGINEER or authorized representative, as established in subparagraph, Pre-Warranty Conference, above. Such items requiring immediate attention shall include but not be limited to: air conditioning, heating, and ventilating systems; sewage disposal facilities or components thereto; fire protection systems; water supply system or components thereto; and electrical power systems. Other warranty repair which does not threaten the health, safety, or well-being of personnel and/or safety of property or equipment will be handled by the CONTRACTOR within seventy two (72) hours or the time frame established during the pre-warranty conference.

Failure of the CONTRACTOR to respond as requested will be cause for the ENGINEER to have the warranty repair work performed by others and proceed against the CONTRACTOR in accordance with Paragraph 1514.1.5. Any work required to correct a warranty item accomplished by the OWNER shall not void the warranty of the item.

**END OF SECTION**

**SUPPLEMENTAL SPECIFICATION**

**SECTION 1515**

**FIELD ENGINEERING**

1515.1 GENERAL

1515.1.1 Related Documents

1515.1.1.1 Drawings and general provisions of Contract, including General and Supplemental Conditions and other Technical Specifications Sections apply to this section

1515.1.2 Definitions

1515.1.2.1 For the purposes of these specifications the terms "grade sheet," and "cut sheet" shall be used interchangeable.

1515.2 PRODUCTS (NOT APPLICABLE)

1515.3 EXECUTION

1515.3.1 Construction Staking by Engineer

1515.3.1.1 All surveys shall be based upon the horizontal and vertical control shown in the Construction Drawings or established in the field by the ENGINEER prior to or during construction.

1515.3.1.2 The CONTRACTOR shall preserve and maintain in proper position all baselines and benchmarks provided by the ENGINEER. If any such are disturbed by vandalism, the CONTRACTOR's employees, equipment or his neglect to give them proper protection, those so disturbed shall be reset by the CONTRACTOR at his expense. If, in the opinion of the ENGINEER, the replacement of any disturbed control point necessitates the use of the ENGINEER's survey party, arrangements for such resetting will be made by the ENGINEER and the costs therefore will be deducted from monies due, or which may become due the CONTRACTOR.

1515.3.1.3 If the CONTRACTOR finds that conditions in the field are not those indicated on the Drawings, he shall notify the ENGINEER immediately and shall not proceed with the work until the ENGINEER authorizes him to do so.

1515.3.1.4 For utility construction, the CONTRACTOR's minimum responsibilities shall also include the following:

1. Stake out test pits and provide the ENGINEER with actual utility locations and elevations if so required by the ENGINEER.
2. Offset hub and cut-stake at 50-foot intervals along new liquid waste sewer lines between manholes, lift stations, drop inlets and/or ends of lines and two (2) offset hubs and cut-stakes at each manhole, lift station and drop inlet.



3. Stake out centerlines at 250-foot intervals along new water, electrical or gas lines.
4. Stake out intermediate points (P.I., P.C., P.T., BOP, EOP, structures, topographic changes) as required to complete the construction or deemed necessary by the ENGINEER.
5. Prepare and submit grade sheets showing for each alignment, or each days staking. As a minimum, the grade sheets shall provide the following information at the top of the page: project name, CONTRACTOR NAME, location, sheet number, total number of sheets in the set, name of person performing the calculations, and date.

The information required in the body of the cut sheet shall include the following: station, ground elevation, hub elevation, grade, cut/fill, pay cut, % grade, offset distance, and remarks.

The cut sheets shall be provided to the ENGINEER in both hard copy format (paper) and electronic format (Microsoft Excel).

6. Provide flag stakes for protection of all stakes installed to aid in their preservation and maintenance.

- 1515.3.1.5 For site excavations, open land leveling, embankments, and grading, the CONTRACTOR shall provide all engineering and stakeout necessary for the setting of batter boards, forms, string line and finished grade control, slope stakes and other controls which may be required for the proper construction of the work in the contract.

For site excavations and grading that have swales and embankments for dikes, dams or other retention or diverting structures, staking of the swales and embankment shall be in accordance to the requirements identified in 15.7.1.5 of this specification.

For site excavations and grading that have vertical tolerances less than 6", the CONTRACTOR will be required to stake the rough grade ("red tops") and the finished grade ("blue tops"). For site excavations and grading with tolerances 6" and greater, only "red tops" are required.

Prepare and submit grade sheets showing for each alignment, or each days staking. As a minimum, the grade sheets shall provide the following information at the top of the page: project name, CONTRACTOR name, location, sheet number, total number of sheets in the set, name of person performing the calculations, date. The information required in the body of the cut sheet shall include the following: station, ground elevation, hub elevation, grade, cut/fill, pay cut, % grade, offset distance, remarks. The cut sheets shall be provided to the ENGINEER in both hard copy format (paper) and electronic format (Microsoft Excel).

- 1515.3.1.6 For other types of construction, the CONTRACTOR shall provide necessary stakeout as required and as deemed necessary by the ENGINEER.
- 1515.3.1.7 Construction shall not begin in any given area until grade sheets (if required) have been submitted to the ENGINEER and the ENGINEER has received one copy of all field notes.

- 1515.3.1.8 Work done without lines and grades or without submittal of grade sheets will not be measured or paid for.
- 1515.3.1.9 Pursuant to NM State Statute 61-23-26, "Construction staking for public works projects in excess of \$100,000 dollars must be performed under the responsible charge of a surveyor licensed in the State of New Mexico."

**END OF SECTION**

**SUPPLEMENTAL SPECIFICATION**

**SECTION 1516**

**FIELD SERVICE REPRESENTATIVE**

1516.1 GENERAL

1516.1.1 Field Service Representative

1516.1.1.1 Shall be employed by the manufacturer and shall regularly engage in field checkout, calibration, testing, trouble-shooting, installation supervision, and start-up of equipment or systems.

1516.1.1.2 Shall have qualifications and experience acceptable by the ENGINEER.

1516.1.1.3 A manufacturer's sales representative will not be acceptable as a field service representative unless the CONTRACTOR applies for and receives in writing a waiver for such.

1516.1.1.4 Shall be thoroughly familiar with the specific equipment or system for this project on arrival at the jobsite. The Field Service Representative shall perform installation supervision, field check-out, calibration, testing, troubleshooting, adjustment or other services as specified in the pertinent section.

1516.1.1.5 The ENGINEER reserves the right to require a substitute Field Service Representative, at no extra cost to the OWNER, if the Field Service Representative supplied by the manufacturer is not able to properly perform the required tasks.

1516.2 PRODUCTS – NOT APPLICABLE

1516.3 EXECUTION

1516.3.1 Test Equipment

1516.3.1.1 Coordinate requirements for test equipment with Field Service Representative and ensure that all necessary standard and special test calibration and diagnostic equipment is available for start-up and testing.

**END OF SECTION**

## DENNIS ENGINEERING COMPANY

### SUPPLEMENTAL SPECIFICATIONS

#### SECTION 1518

#### CLEANING

##### 1518.1 GENERAL

##### 1518.2 REQUIREMENTS INCLUDED

1518.2.1 Execute cleaning, during progress of the Work, and at completion of the Work, as required by General Conditions.

##### 1518.3 RELATED REQUIREMENTS

1518.3.1 Conditions of the Contract

1518.3.2 Section 1520: Environmental Protection

1518.3.3 Each Specification Section: Cleaning for specific products or work.

##### 1518.4 DISPOSAL REQUIREMENTS

Conduct cleaning and disposal operations to comply with codes, ordinances, regulations, and anti-pollution laws.

##### 1518.5 PRODUCTS

##### 1518.6 MATERIALS

1518.6.1 Use only those cleaning materials which will not create hazards to health or property and which will not damage surfaces.

1518.6.2 Use only those cleaning materials and methods recommended by manufacturer of the surface material to be cleaned.

1518.6.3 Use cleaning materials only on surfaces recommended by cleaning material manufacturer.

##### 1518.7 EXECUTION

##### 1518.8 DURING CONSTRUCTION

1518.8.1 Execute periodic cleaning to keep the Work, the site and adjacent properties free from accumulations of waste materials, rubbish and windblown debris, resulting from construction operations.

1518.8.2 Provide on-site containers for the collection of waste materials, debris and rubbish.

1518.8.3 Remove waste materials, debris and rubbish from the site periodically and dispose of at legal disposal areas away from the site.

1518.9 DUST CONTROL

1518.9.1 Clean interior spaces prior to the start of finish painting and continue cleaning on an as-needed basis until painting is finished.

1518.9.2 Schedule operations so that dust and other contaminants resulting from cleaning process will not fall on wet or newly-coated surfaces.

1518.10 FINAL CLEANING

1518.10.1 Type 1 – For Buildings:

Employ skilled workmen for final cleaning.

Remove grease, mastic, adhesives, dust, dirt, stains, fingerprints, labels, and other foreign materials from sight-exposed interior and exterior surfaces.

Wash and shine glazing and mirrors.

Polish glossy surfaces to a clear shine.

Ventilating Systems:

- a. Clean permanent filters and replace disposable filters if units were operated during construction.
- b. Clean ducts, blowers and coils if units were operated without filters during construction.

Broom clean exterior paved surfaces; rake clean other surfaces of the grounds.

Prior to final completion, or Owner occupancy, Contractor shall conduct an inspection of sight-exposed interior and exterior surfaces, and all work areas, to verify that the entire Work is clean.

1518.10.2 Type 2 – For Grounds and Exposed Concrete Work:

Broom clean exterior paved surfaces; rake clean other ground surfaces.

Broom clean all concrete slabs.

Remove grease, mastic, adhesives, dust, dirt, stains, labels and other foreign materials from all piping systems surfaces and equipment.

Prior to final completion or Owner occupancy, Contractor shall conduct an inspection of sight-exposed interior and exterior surfaces and all work areas to verify that the entire Work is clean.

**END OF SECTION**

**SUPPLEMENTAL SPECIFICATION**  
**SECTION 1520**  
**ENVIRONMENTAL PROTECTION**

1520.1 GENERAL

1520.2 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

33 CFR 328	Definitions
40 CFR 68	Chemical Accident Prevention Provisions
40 CFR 260	Hazardous Waste Management System: General
40 CFR 261	Identification and Listing of Hazardous Waste
40 CFR 262	Standards Applicable to Generators of Hazardous Waste
40 CFR 279	Standards for the Management of Used Oil
40 CFR 302	Designation, Reportable Quantities, and Notification
40 CFR 355	Emergency Planning and Notification
49 CFR 171 – 178	Hazardous Materials Regulations

ENVIRONMENTAL PROTECTION AGENCY (EPA)

EPAPUB February 16, 2012 NPDES (National Pollution Discharge Elimination System) General Permits for Discharges from Large and Small Construction Activities.

1520.3 DEFINITIONS

1520.3.1 Environmental Pollution and Damage

Environmental pollution and damage is the presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances of importance to human life; affect other species of importance to humankind; or degrade the environment aesthetically, culturally and/or historically.

1520.3.2 Environmental Protection

Environmental protection is the prevention/control of pollution and habitat disruption that may occur to the environment during construction. The control of

environmental pollution and damage requires consideration of land, water, and air; biological and cultural resources; and includes management of visual aesthetics; noise; solid, chemical, gaseous, and liquid waste; radiant energy and radioactive material as well as other pollutants.

#### 1520.3.3 Contractor Generated Hazardous Waste

Contractor generated hazardous waste means materials that, if abandoned or disposed of, may meet the definition of a hazardous waste. These waste streams would typically consist of material brought on site by the Contractor to execute work, but are not fully consumed during the course of construction. Examples include, but are not limited to, excess paint thinners (i.e. methyl ethyl ketone, toluene etc.), waste thinners, excess paints, excess solvents, waste solvents, and excess pesticides, and contaminated pesticide equipment rinse water.

#### 1520.3.4 Land Application for Discharge Water

The term "Land Application" for discharge water implies that the Contractor shall discharge water at a rate which allows the water to percolate into the soil. No sheeting action, soil erosion, discharge into storm sewers, discharge into defined drainage areas, or discharge into the "waters of the United States" shall occur. Land Application shall be in compliance with all applicable Federal, State, and local laws and regulations.

#### 1520.3.5 Surface Discharge

The term "Surface Discharge" implies that the water is discharged with possible sheeting action and subsequent soil erosion may occur. Waters that are surface discharged may terminate in drainage ditches, storm sewers, creeks, and/or "waters of the United States" and would require a permit to discharge water from the governing agency.

#### 1520.3.6 Waters of the United States

All waters which are under the jurisdiction of the Clean Water Act, as defined in 33 CFR 328.

### 1520.4 GENERAL REQUIREMENTS

The Contractor shall minimize environmental pollution and damage that may occur as the result of construction operations. The environmental resources within the project boundaries and those affected outside the limits of permanent work shall be protected during the entire duration of this contract. The Contractor shall comply with all applicable environmental Federal, State, and local laws and regulations. The Contractor shall be responsible for any delays resulting from failure to comply with environmental laws and regulations.

#### 1520.4.1 SUBCONTRACTORS

The Contractor shall ensure compliance with this section by subcontractors.

### 1520.5 PAYMENT

No separate payment will be made for work covered under this section. The Contractor shall be responsible for payment of fees associated with environmental permits, application, and/or notices obtained by the Contractor. All

costs associated with this section shall be included in the contract price. The Contractor shall be responsible for payment of all fines/fees for violation or non-compliance with Federal, State, Regional and local laws and regulations.

#### 1520.6 SUBMITTALS

Engineer acceptance is required for all submittals. The following shall be submitted in accordance with SECTION 1502 - SUBMITTALS:

Preconstruction Submittals:

Environmental Protection Plan;

Storm-water Pollution Prevention Plan;

Sediment Control Plan;

NPDES Notice of Intent;

NPDES Notice of Termination;

#### 1520.7 ENVIRONMENTAL PROTECTION PLAN

Prior to commencing construction activities or delivery of materials to the site, the Contractor shall submit an Environmental Protection Plan for review and approval by the Engineer. The purpose of the Environmental Protection Plan is to present a comprehensive overview of known or potential environmental issues which the Contractor must address during construction. Issues of concern shall be defined within the Environmental Protection Plan as outlined in this section. The Contractor shall address each topic at a level of detail commensurate with the environmental issue and required construction task(s). Topics or issues which are not identified in this section, but which the Contractor considers necessary, shall be identified and discussed after those items formally identified in this section. Prior to submittal of the Environmental Protection Plan, the Contractor shall meet with the Engineer for the purpose of discussing the implementation of the initial Environmental Protection Plan; possible subsequent additions and revisions to the plan including any reporting requirements; and methods for administration of the Contractor's Environmental Plans. The Environmental Protection Plan shall be current and maintained onsite by the Contractor.

##### 1520.7.1 Compliance

No requirement in this Section shall be construed as relieving the Contractor of any applicable Federal, State, and local environmental protection laws and regulations. During Construction, the Contractor shall be responsible for identifying, implementing, and submitting for approval any additional requirements for environmental protection.

##### 1520.7.2 Contents

The environmental protection plan shall include, but shall not be limited to, the following:

Name(s) of person(s) within the Contractor's organization who is(are) responsible for ensuring adherence to the Environmental Protection Plan.



Name(s) and qualifications of person(s) responsible for manifesting hazardous waste to be removed from the site, if applicable.

An erosion and sediment control plan which identifies the type and location of the erosion and sediment controls to be provided. The plan shall include monitoring and reporting requirements to assure that the control measures are in compliance with the erosion and sediment control plan, Federal, State, and local laws and regulations. A Storm Water Pollution Prevention Plan (SWPPP) may be substituted for this plan.

Drawings showing locations of proposed temporary excavations or embankments for haul roads, stream crossings, material storage areas, structures, sanitary facilities, and stockpiles of excess or spoil materials including methods to control runoff and to contain materials on the site.

Traffic control plans including measures to reduce erosion of temporary roadbeds by construction traffic, especially during wet weather. Plan shall include measures to minimize the amount of mud transported onto paved public roads by vehicles or runoff.

Work area plan showing the proposed activity in each portion of the area and identifying the areas of limited use or nonuse. Plan should include measures for marking the limits of use areas including methods for protection of features to be preserved within authorized work areas.

Drawing showing the location of borrow areas.

The Contractor shall address the action taken if any buried solid or hazardous waste is uncovered during excavation.

The name of the individual who will report any spills or hazardous substance releases and who will follow up with complete documentation. This individual shall immediately notify the Engineer in addition to the legally required Federal, State, and local reporting channels (including the National Response Center 1-800-424-8802) if a reportable quantity is released to the environment. The plan shall contain a list of the required reporting channels and telephone numbers.

A historical, archaeological, cultural resources biological resources and wetlands plan that defines procedures for identifying and protecting historical, archaeological, cultural resources, biological resources and wetlands known to be on the project site: and/or identifies procedures to be followed if historical archaeological, cultural resources, biological resources and wetlands not previously known to be onsite or in the area are discovered during construction. The plan shall include methods to assure the protection of known or discovered resources and shall identify lines of communication between Contractor personnel and the Engineer.

#### 1520.7.3 Appendix

Copies of all environmental permits, permit application packages, approvals to construct, notifications, certifications, reports, and termination documents shall be attached, as an appendix, to the Environmental Protection Plan.

#### 1520.8 PROTECTION FEATURES

This paragraph supplements the Contract Clause PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS. Prior to start of any onsite construction activities, the Contractor and the Engineer shall make a joint condition survey. Immediately following the survey, the Contractor shall prepare a brief report including a plan describing the features requiring protection under the provisions of the Contract Clauses, which are not specifically identified on the drawings as environmental features requiring protection along with the condition of trees, shrubs and grassed areas immediately adjacent to the site of work and adjacent to the Contractor's assigned storage area and access route(s), as applicable. This survey report shall be signed by both the Contractor and the Engineer upon mutual agreement as to its accuracy and completeness. The Contractor shall protect those environmental features included in the survey report and any indicated on the drawings, regardless of interference which their preservation may cause to the Contractor's work under the contract.

#### 1520.9 ENVIRONMENTAL ASSESSMENT OF CONTRACT DEVIATIONS

Any deviations, requested by the Contractor, from the drawings, plans and specifications which may have an environmental impact will be subject to approval by the Engineer and may require an extended review, processing, and approval time. The Engineer reserves the right to disapprove alternate methods, even if they are more cost effective, if the Engineer determines that the proposed alternate method will have an adverse environmental impact.

#### 1520.10 NOTIFICATION

The Engineer will notify the Contractor in writing of any observed noncompliance with Federal, State or local environmental laws or regulations, permits, and other elements of the Contractor's Environmental Protection plan. The Contractor shall, after receipt of such notice, inform the Engineer of the proposed corrective action and take such action when approved by the Engineer. The Engineer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No time extensions shall be granted or equitable adjustments allowed to the Contractor for any such suspensions. This is in addition to any other actions the Engineer may take under the contract, or in accordance with the Federal Acquisition Regulation or Federal Law.

#### 1520.11 PRODUCTS (NOT USED)

#### 1520.12 EXECUTION

#### 1520.13 ENVIRONMENTAL PERMITS AND COMMITMENTS

The Contractor shall be responsible for obtaining and complying with all environmental permits and commitments required by Federal, State, Regional, and local environmental laws and regulations.

## 1520.14 LAND RESOURCES

The Contractor shall confine all activities to areas defined by the drawings and specifications. Prior to the beginning of any construction, the Contractor shall identify any land resources to be preserved within the work area. Except in areas indicated on the drawings or specified to be cleared, the Contractor shall not remove, cut, deface, injure, or destroy land resources including trees, shrubs, vines, grasses, topsoil, and land forms without approval. No ropes, cables, or guys shall be fastened to or attached to any trees for anchorage unless specifically authorized. The Contractor shall provide effective protection for land and vegetation resources at all times as defined in the following subparagraphs. Stone, soil, or other materials displaced into uncleared areas shall be removed by the Contractor.

### 1520.14.1 Work Area Limits

Prior to commencing construction activities, the Contractor shall mark the areas that need not be disturbed under this contract. Isolated areas within the general work area which are not to be disturbed shall be marked or fenced. Monuments and markers shall be protected before construction operations commence. Where construction operations are to be conducted during darkness, any markers shall be visible in the dark. The Contractor's personnel shall be knowledgeable of the purpose for marking and/or protecting particular objects.

### 1520.14.2 Undesignated Work Areas

The use of all non-commercial borrow areas, rock quarry areas, waste disposal areas, staging areas, and any associated new access roads, not shown on the contract drawings, regardless of their location, shall require approval of the Engineer, prior to the commencement of ground disturbing activities to avoid unacceptable environmental impacts to biological or cultural resources. If the Contractor proposes to use alternate areas, the Contractor shall provide evidence that assures the environmental protection of biological and cultural resources as required by and in compliance with the National Environmental Protection Act, as amended. The Contractor shall notify the Engineer at least two weeks in advance of the proposed use and specific locations of alternate borrow, rock quarry, waste disposal, and staging areas and new roads in order to allow sufficient time to verify environmental clearance for said areas. To expedite verification of environmental clearance, the Contractor shall also identify the names of, locations of, and landowners of the proposed alternate sites and their points-of-contact, addresses and phone numbers.

### 1520.14.3 Landscape

Trees, shrubs, vines, grasses, land forms and other landscape features indicated and defined on the drawings to be preserved shall be clearly identified by marking, fencing, or wrapping with boards, or any other approved techniques. The Contractor shall restore landscape features damaged or destroyed during construction operations outside the limits of the approved work area.

### 1520.14.4 Contractor Facilities and Work Areas

The Contractor's field offices, staging areas, stockpile storage, and temporary buildings shall be placed in areas designated on the drawings or as directed by the Engineer. Temporary movement or relocation of Contractor facilities shall be

made only when approved. Erosion and sediment controls shall be provided for on-site borrow and spoil areas to prevent sediment from entering nearby waters. Temporary excavation and embankments for plant and/or work areas shall be controlled to protect adjacent areas.

#### 1520.15 WATER RESOURCES

The Contractor shall monitor construction activities to prevent pollution of surface and ground waters. Toxic or hazardous chemicals shall not be applied to soil or vegetation unless otherwise indicated. All water areas affected by construction activities shall be monitored by the Contractor. For construction activities immediately adjacent to impaired surface waters, the Contractor shall be capable of quantifying sediment or pollutant loading to that surface water when required by State or Federally issued Clean Water Act permits.

#### 1520.16 AIR RESOURCES

Equipment operation, activities, or processes performed by the Contractor shall be in accordance with all Federal and State air emission and performance laws and standards.

##### 1520.16.1 Particulates

The Contractor shall maintain excavations, stockpiles, haul roads, permanent and temporary access roads, plant sites, spoil areas, borrow areas, and other work areas within or outside the project boundaries free from particulates which would cause the Federal, State, and local air pollution standards to be exceeded or which would cause a hazard or a nuisance. Sprinkling, to be efficient, must be repeated to keep the disturbed area damp at all times. The Contractor must have sufficient, competent equipment available to accomplish these tasks. Particulate control shall be performed as the work proceeds and whenever a particulate nuisance or hazard occurs. The Contractor shall comply with all State and local visibility regulations.

##### 1520.16.2 Odors

Odors from construction activities shall be controlled at all times. The odors shall not cause a health hazard and shall be in compliance with State regulations and/or local ordinances.

##### 1520.16.3 Sound Intrusions

The Contractor shall keep construction activities under surveillance and control to minimize environment damage by noise. The Contractor shall comply with the provisions of the State of New Mexico rules.

##### 1520.16.4 Burning

Burning will not be permitted on the project site.

#### 1520.17 CHEMICAL MATERIALS MANAGEMENT AND WASTE DISPOSAL

Disposal of wastes shall be as directed below, unless otherwise specified in other sections and/or shown on the drawings.

#### 1520.17.1 Solid Wastes

Solid wastes (excluding clearing debris) shall be placed in containers which are emptied on a regular schedule. Handling, storage, and disposal shall be conducted to prevent contamination. Segregation measures shall be employed so that no hazardous or toxic waste will become commingled with solid waste. The Contractor shall transport solid waste off the construction site and dispose of it in compliance with Federal, State, and local requirements for solid waste disposal.

#### 1520.17.2 Chemicals and Chemical Wastes

Chemicals shall be dispensed ensuring no spillage to the ground or water. Periodic inspections of dispensing areas to identify leakage and initiate corrective action shall be performed and documented. This documentation may be periodically reviewed by the Engineer. Chemical waste shall be collected in corrosion resistant, compatible containers. Collection drums shall be monitored and removed to a staging or storage area when contents are within 150 mm 6 inches of the top. Wastes shall be classified, managed, stored, and disposed of in accordance with Federal, State, and local laws and regulations.

#### 1520.17.3 Contractor Generated Hazardous Wastes/Excess Hazardous Materials

Hazardous wastes are defined in 40 CFR 261, or are as defined by applicable State and local regulations. Hazardous materials are defined in 49 CFR 171 - 178. The Contractor shall, at a minimum, manage and store hazardous waste in compliance with 40 CFR 262 and shall manage and store hazardous waste in accordance with the local city, county, or State hazardous waste management plan. The Contractor shall take sufficient measures to prevent spillage of hazardous and toxic materials during dispensing. The Contractor shall segregate hazardous waste from other materials and wastes, shall protect it from the weather by placing it in a safe covered location, and shall take precautionary measures such as berming or other appropriate measures against accidental spillage. The Contractor shall be responsible for storage, describing, packaging, labeling, marking, and placarding of hazardous waste and hazardous material in accordance with 49 CFR 171 - 178, State, and local laws and regulations. The Contractor shall transport Contractor generated hazardous waste off the construction site and staging areas within 60 days in accordance with the Environmental Protection Agency and the Department of Transportation laws and regulations. The Contractor shall dispose of hazardous waste in compliance with Federal, State and local laws and regulations. Spills of hazardous or toxic materials shall be immediately reported to the Engineer. Cleanup and cleanup costs due to spills shall be the Contractor's responsibility. The disposition of Contractor generated hazardous waste and excess hazardous materials are the Contractor's responsibility. The Contractor shall coordinate the disposition of hazardous waste with the appropriate regulatory agency.

#### 1520.17.4 Fuel and Lubricants

Storage, fueling and lubrication of equipment and motor vehicles shall be conducted in a manner that affords the maximum protection against spill and evaporation. Fuel, lubricants and oil shall be managed and stored in accordance with all Federal, State, Regional, and local laws and regulations. Used lubricants and used oil to be discarded shall be stored in marked corrosion-resistant

containers and recycled or disposed in accordance with 40 CFR 279, State, and local laws and regulations. There shall be no storage of fuel on the project site. Fuel must be brought to the project site each day that work is performed.

#### 1520.17.5 Waste Water

Disposal of waste water shall be as specified below.

Waste water from construction activities, such as onsite material processing, concrete curing, foundation and concrete clean-up, water used in concrete trucks, forms, etc. shall not be allowed to enter water ways or to be discharged prior to being treated to remove pollutants. The Contractor shall dispose of the construction related waste water off construction property in accordance with all Federal, State, Regional and Local laws and regulations or by collecting and placing it in a retention pond where suspended material can be settled out and/or the water can evaporate to separate pollutants from the water. The site for the retention pond shall be coordinated and approved with the Engineer. The residue left in the pond prior to completion of the project shall be removed, tested, and disposed off site in accordance with Federal, State, and local laws and regulations. The area shall be backfilled to the original grade, top-soiled and seeded/sodded.

For discharge of ground water, the Contractor shall obtain a State or Federal permit specific for pumping and discharging ground water prior to surface discharge in accordance with the requirements of the NPDES or State STORM WATER DISCHARGES FROM CONSTRUCTION SITES permit.

Water generated from the flushing of lines after disinfection or disinfection in conjunction with hydrostatic testing shall be land discharged or, when possible, discharged into the sanitary sewer system with prior approval and/or notification to the Waste Water Treatment Plant's Operator as approved by the Engineer.

#### 1520.18 RECYCLING AND WASTE MINIMIZATION

The Contractor shall participate in State and local government sponsored recycling programs. The Contractor is further encouraged to minimize solid waste generation throughout the duration of the project.

#### 1520.19 HISTORICAL, ARCHAEOLOGICAL, AND CULTURAL RESOURCES

##### 1520.19.1 Discovered Historic, Archaeological, and Cultural Resources

If during construction activities, artifacts, cultural resource manifestations, or other items are observed that may have historic or archaeological value, such observations shall be reported immediately to the Engineer so that the appropriate authorities may be notified and a determination made as to their significance and what, if any, special disposition of the find should be made. The Contractor shall prevent further disturbance to the archaeological find, shall cease all activities in the immediate vicinity of the find that may result in impact to or the destruction of the resource, and shall flag an area of 50 feet radius around the find to protect the resource(s). The Contractor shall prevent employees from trespassing on, removing, or otherwise disturbing such resources. Subsequent to mitigation of the cultural resource, the Engineer shall notify the Contractor as to when work may resume in the area.

1520.20 BIOLOGICAL RESOURCES

The Contractor shall minimize interference with, disturbance to, and damage to fish, wildlife, and plants including their habitat. The Contractor shall be responsible for the protection of threatened and endangered animal and plant species including their habitat in accordance with Federal, State, Regional, and local laws and regulations.

1520.21 PREVIOUSLY USED EQUIPMENT

The Contractor shall clean all previously used construction equipment prior to bringing it onto the project site. The Contractor shall ensure that the equipment is free from soil residuals, egg deposits from plant pests, noxious weeds, and plant seeds. The Contractor shall consult with the USDA jurisdictional office for additional cleaning requirements.

1520.22 MAINTENANCE OF POLLUTION FACILITIES

The Contractor shall maintain permanent and temporary pollution control facilities and devices for the duration of the contract or for that length of time construction activities create the particular pollutant.

1520.23 TRAINING OF CONTRACTOR PERSONNEL

The Contractor's personnel shall be trained in all phases of environmental protection and pollution control. The Contractor shall conduct environmental protection/pollution control meetings for all Contractor personnel prior to commencing construction activities. Additional meetings shall be conducted for new personnel and when site conditions change. The training and meeting agenda shall include: methods of detecting and avoiding pollution; familiarization with statutory and contractual pollution standards; installation and care of devices, vegetative covers, and instruments required for monitoring purposes to ensure adequate and continuous environmental protection/pollution control; anticipated hazardous or toxic chemicals or wastes, and other regulated contaminants; recognition and protection of archaeological sites, artifacts, wetlands, and endangered species and their habitat that are known to be in the area.

1520.24 POST CONSTRUCTION CLEANUP

The Contractor shall clean up all areas used for construction in accordance with Contract Clause: "Cleaning Up". The Contractor shall, unless otherwise instructed in writing by the Engineer, obliterate all signs of temporary construction facilities such as haul roads, work area, structures, foundations of temporary structures, stockpiles of excess or waste materials, and other vestiges of construction prior to final acceptance of the work. The disturbed area shall be graded, filled and the entire area seeded unless otherwise indicated.

**END OF SECTION**

**SUPPLEMENTAL SPECIFICATION**

**SECTION 1521**

**STORM WATER POLLUTION PREVENTION MEASURES**

1521.1 GENERAL

1521.1.1 The work under this section includes storm water pollution prevention measures to protect surface water sources in accordance with the Clean Water Act. This section is to be used in addition to Federal, State, and Local regulations governing the discharge of runoff from construction sites, staging yards, and other associated areas.

1521.1.2 The Contractor is responsible for ensuring that the work and construction site(s) comply with the provisions of the Clean Water Act (CWA), 33 U.S.C. § 1251 et. seq., as amended by the Water Quality Act of 1987, P.L. 100-4. Any permits required under the National Pollutant Discharge Elimination System (NPDES) shall be obtained by the Contractor, and any associated costs with providing and implementing storm water pollution prevention measures shall be borne by the Contractor.

1521.1.3 Projects that disturb one (1) or more acres of land, or will disturb less than one (1) acre of land but is part of a common plan of development or sale that will ultimately disturb one (1) or more acres of land must obtain coverage under the NPDES Construction General Permit (CGP) if all eligibility conditions are satisfied.

1521.1.4 Projects that disturb one (1) or more acres of land but less than five acres may qualify for a Low Erosivity Waiver (LEW). The EPA may waive the otherwise applicable permit requirements for storm water discharges from construction activities that take place during a period when the rainfall erosivity factor (R factor) is less than five (5).

1521.2 REFERENCES

1521.2.1 Code of Federal Regulations (CFR)

1. CFR 40 Part 122

1521.2.2 Environmental Protection Agency (EPA)

1. NPDES General Permit for Discharges from Construction Activities
2. Low Erosivity Waiver Certification for Storm Discharges Associated with Construction Activity

1521.2.3 New Mexico Administrative Code (NMAC)

1. 20.6.4 NMAC- Standards for Interstate and Intrastate Surface Waters

1521.2.4 Specifications

1. Section 1012- Native Grass Seeding



2. Section 1502- Submittals
3. Section 1590-Measurement and Payment

### 1521.3 SUBMITTALS

- 1521.3.1 As required, the following documents shall be delivered to the Engineer in accordance with Specification 1502:
1. NOI for Contractor
  2. NOI for Owner
  3. NOI for other operators as required
  4. Low Erosivity Waiver for Owner
  5. Low Erosivity Waiver for Contractor
  6. Storm Water Pollution Prevention Plan (SWPPP)
  7. Notice of Termination (NOT) for Contractor
  8. NOT for Owner
  9. NOT for other operators as required
- 1521.3.2 The following documents may be submitted to the Engineer in electronic (digital) format or by facsimile to meet contract timeline requirements:
1. Inspection reports
  2. SWPPP modifications
- 1521.3.2.2 Documents that are not legible in the opinion of the Engineer shall be resubmitted.
- 1521.3.3 The Engineer will review these documents for general conformity with this specification, and other specific requirements as identified in the Contract Documents. The Engineer will not review these documents for conformity with Federal, State, or Local laws and regulations. It is solely the Contractor's responsibility to ensure that all permits, reports, plans and other documents conform to Federal, State, and Local laws and regulations.
- 1521.3.4 If the Engineer or Owner have reason to believe that the submitted documents do not comply with Federal, State, or Local laws and regulations, the Contractor may be notified, and the Contractor shall immediately verify whether or not the documents are in compliance with Federal, State, and Local requirements, and confirm in writing to Owner and Engineer that the documents are in compliance, or shall resubmit documents that are in compliance.
- 1521.3.5 If the Owner prepares any of the documents identified in 1521.3.1, the Contractor shall review the documents and to the best of their ability identify any deficiencies or changes that should be made to the documents. The Contractor shall acknowledge to the Engineer in writing, that the documents were reviewed, and shall state that

there were no deficiencies noted, or identify each deficiency and give their reasoning therefore.

1521.4 OWNER PROVIDED INFORMATION AND RESPONSIBILITIES

1521.4.1 The following information is provided for completion of documents on the Owner's behalf

1. FEIN: `85-0214776
2. Latitude: 36°42'36.18"N
3. Longitude: 105°24'34.34"
4. Lat/Long Method: USGS Map 1:24000 Scale

1521.4.2 The Owner will provide the following documents for implementation of the NPDES CGP:

1. None

1521.4.3 The Owner will provide the following storm water pollution prevention measures:

1. None

1521.5 NPDES CGP REQUIREMENTS

If NPDES CGP coverage is required, the Contractor shall implement such storm water pollution prevention measures as needed to conform to the requirements of the CGP. In addition to the requirements of the CGP, the Contractor shall comply with the following, unless specifically identified as a responsibility of the Owner identified in 1521.4:

1521.5.1 Inspection reports shall be submitted to the Engineer within 24 hours of the inspection including the annual reports required for inspection of final stabilization.

1521.5.2 Final stabilization is not required on areas identified on the Construction Drawings as "Top of Dike", "Access Road", "Top of Embankment", or other locations specifically identified on the Construction Drawings (unless this conflicts with Federal, State, or Local laws and regulations).

1521.5.3 Vegetative stabilization shall comply with the requirements of Specification 1012-Native Grass Seeding.

1521.6 NOTICE OF INTENT

1521.6.1 The Contractor is responsible for ensuring all NOI's are filed, and the EPA has acknowledged receipt of each NOI. Once the EPA has acknowledged receipt of the NOI(s), the Contractor shall wait at least 14 calendar days prior to initiating earth disturbing activities, unless EPA notifies the operator(s) that authorization has been delayed or denied. Any penalties or fines associated with Contractors failure to comply with these conditions shall be borne by the Contractor.

1521.6.1.1 Unless identified in 1521.4 as a document provided by the Owner, the Contractor is authorized, and shall complete a NOI on the behalf of the Owner.

1521.6.1.2 If the Owner is completing their NOI, and the Contractor is completing the SWPPP, the Contractor shall then provide any information required for the Owner to submit

the NOI. Once the Owner has received this information from the Contractor, the Owner will then have seven days to file the NOI. The Owner will provide the acknowledgement of receipt of the NOI to the Contractor, so the Contractor will know the official start date of the permit coverage.

1521.6.2 No extension to the Contract Times, or change to the Contract Price will be made for failure of the Contractor to submit the NOI, or the Contractor's failure to provide information for the Owner to complete their NOI.

1521.6.3 The Contractor shall be authorized to begin preparation of the SWPPP and NOI upon receipt of a Notice of Award. If the Contractor begins preparation of the SWPPP and NOI(s) after the receipt of the Notice of Award and the Owners fails to execute an agreement with the Contractor, the Contractor shall be entitled to reimbursement for all costs associated with the preparation of the SWPPP and NOI in accordance to the Cost of Work conditions identified in the General Conditions.

#### 1521.7 NOTICE OF TERMINATION

1521.7.1 The Contractor shall complete the NOT for each operator upon stabilization of the site, unless it is identified in 1521.4 that the Owner will complete their NOT. If the Owner is to complete the stabilization of the site, the Contractor may complete their NOT once earth disturbing activities by the Contractor cease.

#### 1521.8 LOW EROSIVITY WAIVER

1521.8.1 If the project qualifies for the LEW, the Contractor shall complete the LEW on the behalf of the Owner, unless otherwise indicated in 1521.4. If the Owner is completing the LEW, the Contractor shall provide the data used to determine their rainfall erosivity factor to the Engineer.

1521.8.2 If the duration of earth disturbance changes during the construction of the project, the rainfall erosivity factor shall be recalculated. If after recalculation the project no longer qualifies for the LEW, the Contractor shall obtain CGP coverage in accordance with these specifications. If the change in duration of earth disturbing activities was due to additional work being added to the contract that was identified in the bidding documents, or if the change in duration is due to the Contractor's failure to adhere to a progress schedule or other items within the Contractor's control, there shall be no change to the Contract Price or the Contract Times.

#### 1521.9 STORM WATER POLLUTION PREVENTION PLANS

1521.9.1 The Contractor shall be the responsible for preparing a group SWPPP in which all operators of the site are identified (unless the Owner is to provide the SWPPP as indicated in 1521.4). All copies of the SWPPP shall be neatly prepared and provided in a three-ring binder with a cover, and table of contents. The organization of the SWPPP shall generally follow the sequence of information required in the CGP to ease review. The Contractor is solely responsible for ensuring all of the required storm water pollution prevention measures are included in the SWPPP.

1521.9.1.1 SWPPP shall be prepared by storm water professionals who can demonstrate qualifications, either by professional certification or by experience and training.

1521.9.2 The Contractor shall implement the BMP(s) and final stabilization measures identified in the SWPPP. The Contractor shall modify the SWPPP to revise storm

water pollution prevention measures as necessary. If there is evidence that sediment or pollutants are being discharged from the disturbed areas or beyond the storm water pollution prevention measures, the Engineer or Owner may notify the Contractor in writing. The Contractor shall inspect the locations identified, and provide corrective action.

- 1521.9.3 Should it be found that modifications to the SWPPP are necessary, the Contractor shall modify the SWPPP. Copies of the revisions shall be sent to the other operators and the Engineer within seven days.

1521.10 MEASUREMENT AND PAYMENT

- 1521.10.1 If considered as a pay item, then the unit of measurement and payment will be specified in the Bid Proposal and Section 1590 of the Supplemental Specifications.

1521.11 PENALTIES AND DEDUCTIONS FOR NON-CONFORMANCE

- 1521.11.1 Any failure to maintain the storm water pollution prevention measures in the field, lack of orderly documentation including but not limited to; failing to submit inspection reports within the specified timeframe, failure to maintain modifications to the SWPPP, may result in noncompliance citations by EPA.

- 1521.11.2 If the Contractor fails to maintain the storm water pollution prevention measures within the time constraints specified in the Contract, fails to document inspection and maintenance activities, or fails to modify the SWPPP in a timely manner and prescribed manner as directed by the Engineer or Owner, in writing, or as determined by the EPA, the Contractor will be subject to the following schedule of liquidated damages.

Liquidated Damages Schedule

Original Contract Amount		
Greater than or equal to:	Less than:	Damages Per Calendar Day
\$0	\$200,000	\$250
\$200,000	\$500,000	\$500
\$500,000	\$1,000,000	\$750
\$1,000,000	No Limit	\$1000

- 1521.11.3 The Engineer shall maintain a schedule of calendar days for each day of noncompliance by the Contractor. The compiled schedule of calendar days shall form the basis for accessing the liquidated damages. Liquidated damages shall continue to be withheld from partial payments until the Engineer, Owner, or EPA provides written notice of satisfactory compliance.

- 1521.11.4 If the Contractor or his/her agents refuse or fail to adhere to the requirements of the NPDES CGP and as a result an assessment or fine is made or levied against the Owner, the Contractor shall reimburse the Owner within ten (10) calendar days of the assessment, or fine, or the Owner may withhold the amount of the assessment or fine from payment to the Contractor.

**END OF SECTION**

**SUPPLEMENTAL SPECIFICATION**  
**SECTION 1530**  
**CONTRACTOR QUALITY CONTROL**

1530.1 GENERAL

1530.1.1 References

These publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM D 3740 (2001) Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction

ASTM E 329 (2000b) Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction

1530.1.2 Payment

Separate payment will not be made for providing and maintaining an effective Quality Control program, and all costs associated therewith shall be included in the applicable unit prices or lump-sum prices contained in the bid proposal.

1530.2 PRODUCTS (NOT APPLICABLE)

1530.3 EXECUTION

1530.3.1 General Requirements

The CONTRACTOR is responsible for quality control and shall establish and maintain an effective quality control system. The quality control system shall consist of plans, procedures, and organization necessary to produce an end product which complies with the contract requirements. The system shall cover all construction operations, both onsite and offsite, and shall be keyed to the proposed construction sequence. The site project superintendent will be held responsible for the quality of work on the job and is subject to removal by the ENGINEER for non-compliance with the quality requirements specified in the contract. The site project superintendent in this context shall be the highest level manager responsible for the overall construction activities at the site, including quality and production. The site project superintendent shall maintain a physical presence at the site at all times, except as otherwise acceptable to the ENGINEER, and shall be responsible for all construction and construction related activities at the site.

1530.3.2 Submittals and Deliverables

Submittals, if needed, shall be made as specified in Section 1502 – Submittals, and Section 1503 – Electrical Submittals. The CONTRACTOR shall be responsible for certifying that all submittals and deliverables are in compliance with the contract requirements.

1530.3.3 Control

Contractor Quality Control is the means by which the CONTRACTOR ensures that the construction, in include that of subcontractors and suppliers, complies with the requirements of the contract.

1530.3.4 Tests

1530.3.4.1 Testing Laboratories Capability Check

The ENGINEER reserves the right to check laboratory equipment in the proposed laboratory for compliance with the standards set forth in the contract specifications and to check the laboratory technician's testing procedures and techniques. Laboratories utilized for testing soils, concrete, asphalt, and steel shall meet criteria detailed in ASTM D 3740 and ASTM E 329.

1530.3.4.2 Testing Laboratories Capability Recheck

If the selected laboratory fails the capability check, the CONTRACTOR will be assessed a charge of \$1,000.00 to reimburse the OWNER for each succeeding recheck of the laboratory or the checking of a subsequently selected laboratory. Such costs will be deducted from the contract amount due the CONTRACTOR.

1530.3.4.3 Furnishing or Transportation of Samples for Testing

Costs incidental to the transportation of samples or materials shall be borne by the CONTRACTOR. Samples of materials for test verification and acceptance testing by the OWNER shall be delivered to the ENGINEER.

Dennis Engineering Company  
6020 Indian School Rd. NE  
Albuquerque, NM 87110

1530.3.5 Documentation

The CONTRACTOR shall maintain current records providing factual evidence that required quality control activities and/or tests have been performed. These records shall include the work of subcontractors and suppliers and shall be on an acceptable form that includes, as a minimum, the following information:

1. CONTRACTOR/Subcontractor and their area of responsibility
2. Operating plant/equipment with hours worked, idle, or down for repair.
3. Work performed each day, giving location, description, and by whom. When Network Analysis (NAS) is used, identify each phase of work performed each day by NAS activity number.
4. Test and/or control activities performed with results and references to specifications/drawings requirements. The control phase shall be identified (Preparatory, Initial, Follow-up). List of deficiencies noted, along with corrective action.

5. Quantity of materials received at the site with statement as to acceptability, storage, and reference to specifications/drawings requirements.
6. Submittals and deliverables reviewed, with contract reference, by whom, and action taken.
7. Offsite surveillance activities, including actions taken.
8. Job safety evaluations stating what was checked, results, and instructions or corrective actions.
9. Instructions given/received and conflicts in plans and/or specifications.

1530.3.6 Notification of Noncompliance

The ENGINEER will notify the CONTRACTOR of any detected noncompliance with the foregoing requirements. The CONTRACTOR shall take immediate corrective action after receipt of such notice. Such notice, when delivered to the CONTRACTOR at the work site, shall be deemed sufficient for the purpose of notification. If the CONTRACTOR fails or refuses to comply promptly, the ENGINEER may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to such stop orders shall be made the subject of claim for extension of time or for excess costs or damages by the CONTRACTOR.

**END OF SECTION**

**SUPPLEMENTAL SPECIFICATION**

**SECTION 1551**

**UTILITIES**

**1551.1 AVAILABILITY AND USE OF UTILITY SERVICES.**

All utilities required to complete construction under this contract are available to the Contractor.

The Contractor will be responsible for obtaining utility service from the utility owners for construction. The Contractor shall be responsible for all fees, charges, and rates charged for utilities. No separate measurement or payment shall be made for use of these utilities.

The Contractor, at its expense and in a workmanlike manner satisfactory to the Engineer, shall install and maintain all necessary temporary connections and distribution lines, and all meters required to measure the amount of each utility used for the purpose of determining charges. Before final acceptance of the work by the Owner, the Contractor shall remove all the temporary connections, distribution lines, meters and associated paraphernalia.

**1551.2 WATER FOR CONSTRUCTION PURPOSES.**

Water required to obtain optimum moisture in the backfill material, testing, sterilization and flushing of the new lines may be obtained in reasonable quantities from Owner's existing lines and fire hydrants at the rates indicated in the construction drawings.

The owner will designate a single fire hydrant near the center of the work area that shall be used by the contractor to obtain water for construction purposes. The Contractor shall install and maintain necessary supply connections, piping, metering, reduced pressure backflow preventors (or air gap) for same, but only at such locations and in such manner as may be approved by the Engineer. All water shall be carefully conserved. Before final acceptance, temporary connections and piping installed by the Contractor shall be removed in a manner satisfactory to the Engineer.

**1551.3 ELECTRIC POWER.**

The Contractor shall furnish, at his own expense, all backup power supply, temporary electric power lines and equipment required under this contract. All temporary electrical installations shall be subject to the approval of the Engineer. All temporary lines shall be furnished, installed, connected, and maintained by the Contractor in a workmanlike manner satisfactory to the Engineer and shall be removed by the Contractor in like manner at his expense prior to final acceptance of the construction. If additional electrical power is required for construction the Contractor shall provide the power using his own generators. The Contractor shall provide adequate protection for his equipment so that Contractor electrical equipment faults will not adversely affect the site electrical system or the utility system.

**1551.4 WASTE MATERIAL.**

Unless otherwise specified, waste material shall be disposed of by the Contractor at a licensed off site sanitary landfill or sewage disposal plant. Permission to use the offsite sanitary landfill



or sewage disposal plant shall be obtained by the Contractor and any costs attendant thereto shall be borne by the Contractor.

1551.5 TEMPORARY TELEPHONE SERVICE.

The Contractor is required to determine line availability and to make arrangements for installation of telephone lines and instruments with the telephone company as needed for their operations, unless otherwise required in the contract documents. All costs associated with telephone installation and service shall be the responsibility of the Contractor.

1551.6 SEWAGE DISPOSAL FOR TEMPORARY FACILITIES.

A sewage disposal location is not available at the site for use under this contract.

1551.7 INTERRUPTION OF EXISTING UTILITIES SERVICES.

The Contractor shall perform the work under this contract with a minimum of outage time for all utilities. In some cases, the Contractor may be required to perform the work while the existing utility is in service. The existing utilities services may be interrupted only when approved by the Engineer and the utility owner. The Contractor will coordinate with the Utility Owner. When it is necessary to interrupt the existing utilities, the Contractor shall notify the Engineer in writing at least 7 calendar days in advance of the time the Contractor desires the existing service to be interrupted. The interruption time shall be kept to a minimum. Depending upon the activities at the facility which require continuous service from the existing utility, an interruption may not be subject to schedule at the time desired by the Contractor. In such cases the interruption may have to be scheduled at a time of minimum requirement of demand for the utility. The amount of time requested by the Contractor for interruption of existing utility service shall be as approved by the Engineer and the utility owner.

1551.8 REQUIREMENTS CONCERNING EXISTING UNDERGROUND UTILITIES.

The drawings indicate known, existing, underground utilities which are located in areas requiring work under this contract. The locations shown are approximate and the depths are not indicated. The Contractor shall contact the utility companies or agencies which furnish utilities in the area where the project is located to determine if there are other known, new, or suspected additional underground utilities in the work areas other than those shown on the drawings. Prior to commencement of any excavation in areas where there are known utilities, it shall be the responsibility of the Contractor to contact the owner of each known utility and request that the owner mark the location of the utility and also obtain information as to the depth of the utility. The Contractor shall submit proof to the Engineer that the Contractor has contacted the owners of known utilities and has obtained the location, including depth below grade, for such utilities. The Contractor shall take all the necessary precautions to prevent harm to personnel and damage to equipment and existing construction from utilities which conduct electricity, transmit combustible gases, and convey water. Level 1

**END OF SECTION**

**SUPPLEMENTAL SPECIFICATION**

**SECTION 1580**

**ALLOWANCES**

1580.1 GENERAL

These specifications provide the administrative and procedural requirements governing handling and processing allowances identified in the bid schedules, other contract documents and specifications, and the construction drawings.

1580.1.1 Related Documents

1. General Conditions
2. Supplementary Conditions
3. Section 1502
4. Section 1511
5. Section 1590
6. Related technical specifications

1580.1.2 Definitions

1580.1.2.1 Cash Allowance

An allowance that is included in the Bid Schedule(s) to compensate the Contractor for an undetermined amount of work to be completed as part of the construction of the project.

1580.1.2.2 Quantity Allowance

An allowance that is included in the Bid Schedule(s) for a determined amount of work indicated in the Construction Drawings, Contract Documents, or Technical Specifications.

1580.1.3 Submittals

1580.1.3.1 Cash Allowances

The following shall be submitted for Cash Allowances:

1. Product submittals in accordance with Section 1502 for the materials and equipment installed.
2. Invoices for the material, and work performed.

1580.1.3.2 Quantity Allowances

The following shall be submitted for Quantity Allowances:

1. Product submittals in accordance with Section 1502 for the materials, and equipment installed.

2. Invoices or delivery tickets indicating the amount of actual quantities delivered to the site in fulfillment of each allowance.
3. Other items required by the contract documents, technical specifications, and construction drawings, such as qualifications, contracts, or proposals.
4. The maximum allowance cost shall be indicated as required in the bid schedule(s) in the bid form.

## 1580.2 EXECUTION

### 1580.2.1 Allowances

1. Allowances shall cover the costs as identified in Section 1580.3 below.
2. Any allowance amounts not used during the duration of the project shall be deducted from the Contractor's contract amount at the end of the project via a deductive change order.
3. Allowances shall NOT exceed the amounts indicated in the bid schedule(s), unless a change order has been accepted by the Owner, Engineer, and funding agencies.

## 1580.3 SCHEDULE

### 1580.3.1 **Contractors Quality Control Testing Allowance**

#### 1580.3.1.1 Description

The Contractor shall include an cash allowance in the Bid Schedule(s) where required an amount not to be exceeded for completing Quality Control Testing in accordance with Supplemental Specification 1511. The amount of the allowance shall be determined by the Bidder.

#### 1580.3.1.2 Payment Procedures

The measurement and payment for Contractors Quality Control Testing allowance shall be in substantial conformance with Supplemental Specification 1590.

**END OF SECTION**

**SUPPLEMENTAL SPECIFICATION**  
**SECTION 1590**  
**MEASUREMENT AND PAYMENT**

1590.1 GENERAL

1590.1.1 **Quantities**

Quantities in Bid Form and Table: Quantities for Selected Bid Items are approximate and used only as a basis for estimating probable cost of work and for comparing bids submitted for work. The CONTRACTOR must satisfy himself that the quantities are reasonable.

Actual work done or materials furnished under Unit Price item may differ from the estimated quantities.

Unit Price items, complete, in place, and ready for use shall be paid for at the unit price bid for the quantity actually installed.

Payment for all lump sum bid items includes all work, labor, and materials required to provide a complete and ready to use installation and will be paid for at the lump sum price bid.

1590.1.2 **Materials**

Payment for materials delivered but not fully incorporated in the project will only be made if such materials are available for inspection at the CONTRACTOR's job site yard, and for which invoices are presented to the ENGINEER.

1590.1.3 **Incidental Work**

All incidental work and materials required to complete the project, ready for use, and in compliance with all requirements and conditions of the Contract Documents will not receive special payment. Among the items included in this category are excavation, fill, compaction, cleanup, trench and stabilization, removal and disposal of excess soils, concrete or asphalt, temporary construction, general construction requirements and expenses and all other miscellaneous and incidental items.

Above, on, or below ground obstructions, utilities, subsurface water, features, or improvements which interfere with the work or which must be moved, removed, and/or restored to accomplish the job are considered as incidental work for which separate payment will not be made if separate bid items are not specifically given for such in the Contract Documents.

1590.2 PAY ITEMS

1590.2.1 **Bid Item 401.500: New Bollard, Complete in Place**

1590.2.1.1 Measurement

Measurement for Bollards will be by the unit per each.

1590.2.1.2 Payment

Payment will be at the unit price bid for New Bollards, and shall include all pipe, hydrant flag, concrete, paint, labor, and equipment to provide a finished product as indicated in the Construction Drawings, and accepted by the ENGINEER.

1590.2.2 **Bid Item 701.100: Rock Excavation**

1590.2.2.1 Measurement

Measurement of Rock excavation will be made by the cubic yard (CY), and is the product of the trench width (not to exceed 36") multiplied by the depth of rock (measured to 6" below pipe flowline), and the length of rock (as measured by the ENGINEER). If rock is encountered, the CONTRACTOR shall notify the ENGINEER, excavate to the top of the rock and assist the ENGINEER in surveying the elevation of the rock, before and after the rock is removed.

1590.2.2.2 Payment

Payment for rock excavation will be done at the unit price bid per cubic yard (CY) of rock removed. Separate payment will not be made for labor, material, equipment, placement of clean material required to reestablish the bottom grade of the trench, and/or disposal of rock that is unsuitable backfill material.

1590.2.3 **Bid Item 701.400: Portland Cement (Lean Fill) Encasement for Utilities, Complete in Place.**

1590.2.3.1 Measurement

Portland Cement (Lean Fill) Encasement will be measured by the cubic yard as measured by the ENGINEER. Portland Cement Concrete Encasement that is beyond the limits indicated in the Construction Drawings will not be measured.

1590.2.3.2 Payment

Payment will be made at the unit price bid for Portland Cement (Lean Fill) Encasement, and shall include all work, labor, materials, and equipment. Separate payment will not be made for reinforcing steel. Payment for costs resulting from the excavation for the Portland Cement Concrete Encasement, and compaction of the foundation shall be included associated utility bid items.

1590.2.4 **Bid Item 801.208: Furnish and Install 8" SDR9, DIPS HDPE Waterline, Including Trenching, Backfill, Insulation, Fittings, etc. Complete in Place.**

1590.2.4.1 Measurement

Measurement will be made by the linear foot along the centerline of the pipe through valves and fittings of the finished grade.

1590.2.4.2 Payment

Payment for pipe will be in accordance with unit price bid per linear foot and shall include pipe installed in the trench at the depths indicated in the construction

drawings, and shall include, polystyrene insulation, warning/indicator tape, fittings, clearing, excavation, shoring, dewatering, and other materials necessary to connect to existing lines, and other appurtenances. Separate payment will not be made for the required testing of pressure lines, disinfection, microbiological testing, and obtaining, hauling, placing, etc. bedding material, if necessary.

1590.2.5 **Bid Item 801.508: Furnish and Install 8" Gate Valve Assembly, Complete w/Valve Box, Complete in Place.**

1590.2.5.1 Measurement

Valves with boxes and concrete collars will be measured by the unit per each.

1590.2.5.2 Payment

Payment will be made at the unit price bid per each 8" Gate Valve Assembly. Included in the unit price shall be all concrete, valve boxes, fittings, adapters, concrete collar, labor, equipment, and all other minor items to provide a complete and functional facility as indicated on the construction drawings. Separate payment will not be made for any additional excavation, backfill, or compaction, which may be required to complete the installation.

1590.2.6 **Bid Item 801.750: Furnish and Install 6" Fire Hydrant Assembly, Complete in place.**

1590.2.6.1 Measurement

Measurement for the fire hydrant assembly will be by the unit per each.

1590.2.6.2 Payment

Payment at the unit price bid for the 6" fire hydrant assembly includes all materials, ductile iron pipe, valves, valve box, fittings, hydrant flag, concrete collar, equipment, labor, etc. necessary to provide a complete and operational unit as accepted by the ENGINEER. Separate payment will not be made for the isolation valves, piping, locks, and other minor items as indicated in the construction drawings.

1590.2.7 **Bid Item 801.752: Remove and Dispose of Existing Fire Hydrant Assembly Complete.**

1590.2.7.1 Measurement

Measurement for the removal and disposal of fire hydrant assembly will be by the unit per each.

1590.2.7.2 Payment

Payment at the unit price bid for removal and disposal of existing fire hydrant assembly to the Owner and includes all excavation, backfill, equipment, labor, and disposal, etc. necessary to remove and dispose of the existing fire hydrant as accepted by the ENGINEER.

1590.2.8 **Bid Item 801.802: Connect to Existing Water Line 4" to 6" in Diameter, Complete**

1590.2.8.1 Measurement

The unit of measurement will be the numerical count of the new connections of the new water main to existing lines completed by the CONTRACTOR, as

required by the Construction Drawings or as directed by the ENGINEER during construction.

1590.2.8.2 Payment

Connections to existing water lines 4" to 6" in diameter will be paid at the unit price bid, and shall include ALL excavation, materials, equipment, labor, fittings, adapters, thrust blocks, etc. necessary to complete the connection, as accepted by the ENGINEER.

Separate payment will not be made for connections that are within a distance of 20'.

1590.2.9 **Bid Item 801.803: Connect to Existing Water Line, 8" to 10" in Diameter, Complete in Place.**

1590.2.9.1 Measurement

The unit of measurement will be the numerical count of the new connections of the new water main to existing lines completed by the CONTRACTOR, as required by the Construction Drawings or as directed by the ENGINEER during construction.

1590.2.9.2 Payment

Connections to existing water lines 8" to 10" in diameter will be paid at the unit price bid, and shall include ALL excavation, materials, equipment, labor, fittings, adapters, thrust blocks, etc. necessary to complete the connection, as accepted by the ENGINEER.

Separate payment will not be made for connections that are within a distance of 20'.

1590.2.10 **Bid Item 801.852: Cap Existing Water Line, 4" to 6" in Diameter, Complete in Place**

1590.2.10.1 Measurement

Measurement for 4" to 6 " diameter cap will be measured by the unit per each.

1590.2.10.2 Payment

Caps to existing water lines from 4" to 6" in diameter will be paid at the unit price bid, and shall include all fittings, labor, and equipment to provide a complete cap. Separate payment will not be made for caps that are within a distance of 20'. Separate payment will be made for pavement replacement, if such is required.

1590.2.11 **Bid Item 801.922: Furnish and Install New 2" Combination Air/ Vacuum Release Valve Assembly Including HDPE Vault, Complete in Place**

1590.2.11.1 Measurement

Combination Air/Vacuum Release Valves will be measured by the unit per each.

1590.2.11.2 Payment

Payment will be made at the unit price bid for the Combination Air/Vacuum Release Valves, ladder, insulation and includes all materials for the vault, piping, fittings, adaptors, equipment, excavation, labor, etc.

1590.2.12 **Bid Item 802.100: Furnish and Install 3/4" Type "K" Copper Service Line with Curb Stop and Riser, Complete in Place**

1590.2.12.1 Measurement

Measurement will be made by the linear foot along the centerline of the service line on the finished grade.

1590.2.12.2 Payment

Payment for pipe will be in accordance with unit price bid per linear foot and shall include pipe installed in the trench at the depths indicated in the construction drawings, and shall include warning/indicator tape, fittings, insulation wrap, curb stop, 4" Schedule 40 PVC riser and 4" PVC cap and other materials necessary. Separate payment will not be made for the required excavation and backfill of the service line trench, and connections to the existing water service lines.

1590.2.13 **Bid Item 1111.070: FURNISH AND INSTALL 24" HDPE VAULT, INCLUDING TRENCHING, BACKFILL, FOAM INSULATION, BRACKETS, LADDER, LID, ETC., COMPLETE IN PLACE.**

1590.2.13.1 Measurement

No measurement will be made for the HDPE Vault.

1590.2.13.2 Payment

Payment for the HDPE vault includes furnishing and installation of:

1. 24" HDPE pipe, including lid, ladder, insulation, and appurtenances as shown in plans.
2. Trenching and backfill for valve, pipes, fittings, and lid.
3. All other required appurtenances as shown on drawings.

Payment will be made at a lump sum unit price, which will include all equipment, labor, and materials necessary to provide all items and appurtenances complete in all aspects, tested and placed into service as indicated in the Contract Documents.

1590.2.14 **Bid Item 1200.001: Temporary Traffic Control and Management**

1590.2.14.1 Measurement

Temporary Traffic Control and Management will not be measured.

1590.2.14.2 Payment

Payment will be made at the lump sum price for temporary traffic control and management by the CONTRACTOR and shall include furnishing, installing, and maintaining adequate traffic control devices during construction. Such devices shall be utilized and maintained throughout the project as necessary to properly control the traffic through the various construction areas.



1590.2.15 **Bid item 1500.001: Mobilization/Demobilization**

1590.2.15.1 Measurement

Mobilization/Demobilization will not be measured.

1590.2.15.2 Payment

If the CONTRACTOR's unit price for mobilization is equal to or less than 10% of the total original contract amount less mobilization, payment to the CONTRACTOR will be made using the following procedure:

1. If the CONTRACTOR has performed work representing less than 5% of the total original contract amount less mobilization, the CONTRACTOR will be paid 25% of the mobilization bid amount;
2. If the CONTRACTOR has performed work representing from 5% to less than 10% of the total original contract amount less mobilization, the CONTRACTOR will be paid 50% of the mobilization bid amount; and
3. If the CONTRACTOR has performed work representing 10% or more of the total original contract amount less mobilization, the CONTRACTOR will be paid 100% of the mobilization bid amount; and

If the CONTRACTOR's unit price bid for mobilization is greater than 10% of the total original contract amount less mobilization, the CONTRACTOR will only be allowed to apply the previous payment procedure to that portion of the CONTRACTOR's unit price bid for mobilization equal to 10% of the total original contract amount less mobilization. The CONTRACTOR will be paid the remainder of the unit price bid for mobilization upon completion of the work.

Separate payment will not be made for demobilization and remobilization due to shutdowns or suspensions of the work or for other mobilization and demobilization activities required to complete the contract satisfactorily.

1590.2.16 **Bid Item 1500.500: Construction Staking**

1590.2.16.1 Description

This bid item shall include all of the construction staking to complete the items as shown in the Construction Drawings, in accordance with Supplemental Specification 1515.

1590.2.16.2 Measurement

Construction staking by the CONTRACTOR will be measured by the lineal foot along the construction centerline of the proposed improvements or as a lump sum unit as measured and computed by the ENGINEER.

1590.2.16.3 Payment

Construction staking by the CONTRACTOR will be paid for at the unit price per lineal foot or at the lump sum contract price as provided in the contract and shall include all hubs, tacks, stakes, and other materials, labor and equipment necessary to locate the new improvements.

1590.2.17 **Bid Item 1510.100: General Site Removal and Disposal of Structures and Obstructions, Complete**

1590.2.17.1 Description

This work shall consist of the removal, wholly or in part, and satisfactory disposal of buildings, fences, structures, manholes, lift stations, utility lines, concrete pavement, irrigation or storm drain piping and other obstructions that are not designated or permitted to remain.

It shall also include salvaging designated materials and backfilling the resulting trenches, holes, pits and the disposal of steel items coated with lead paint.

The CONTRACTOR shall repair all salvageable items that are damaged during removal, whether designated for removal in the contract or by the ENGINEER. All fees associated with damage repairs shall be at no cost to the Owner.

1590.2.17.2 Measurement

General Site removal of all structures and obstructions will be measured by the lump sum unit.

1590.2.17.3 Payment

Removal of all structures and obstructions that are required to complete the intended construction, including final grading and clean-up, will be paid for at the lump sum contract price.

1590.2.18 **Bid Item 1511.001: Contractors Quality Control Construction Testing**

1590.2.18.1 Description

This bid item shall include all of the quality control testing in accordance with Supplemental Specification 1511.

1590.2.18.2 Measurement

Contractors Quality Control Construction Testing will not be measured. If the CONTRACTOR fails to provide copies of the quality control test reports within the time frame stipulated in the contract, the CONTRACTOR will be assessed a penalty in the amount of \$100.00 per calendar day the results are late.

1590.2.18.3 Payment

Contractors Quality Control Construction Testing will be reimbursed at the quality control laboratory itemized invoice price plus 10%, to an amount not to exceed the unit price bid, less any liquidated damages that may be assessed for results not submitted in accordance with these specifications.

1590.2.19 **Bid Item 1520.001 Temporary/Permanent Erosion and Sediment Control**

1590.2.19.1 Measurement

Temporary/ Permanent erosion and sediment control measures will not be measured.

1590.2.19.2 Payment

If the CONTRACTOR's completion of the work is less than 75 percent of total original contract amount less Temporary Erosion and Sediment Control, payment to the CONTRACTOR will be made using the following procedure:

1. If the CONTRACTOR has performed work representing less than 25% of the total original contract amount less Temporary Erosion and Sediment Control, the CONTRACTOR will be paid 25% of the Temporary/ Permanent Erosion and Sediment Control bid amount;
2. If the CONTRACTOR has performed work representing from 25% to less than 75% of the total original contract amount less Temporary/ Permanent Erosion and Sediment Control, the CONTRACTOR will be paid at the percentage of work performed less Temporary Erosion and Sediment Control; and

If the CONTRACTOR has performed work representing 75% or greater of the total original contract less Temporary Erosion and Sediment Control, the CONTRACTOR will not receive additional payment until:

1. Until the site is permanently stabilized in accordance to the Construction Drawings and Specifications. Once the permanent stabilization measures have been placed and a NOT is submitted, payment for Temporary Erosion and Sediment Control will be made at 100%

Any failure to maintain the measures in the field and lack of orderly documentation, including but not limited to continuous inspection reports, may result in noncompliance citations by the EPA.

If the CONTRACTOR fails to maintain the temporary erosion control measures within 24 hours of damage occurring to erosion control measures, fails to document inspection and maintenance activities, or fails to document field changes in erosion control measures in a timely manner and prescribed manner as directed by the ENGINEER in writing, or as determined by EPA, the CONTRACTOR shall comply to the following schedule of liquidated damages.

#### **LIQUIDATED DAMAGES SCHEDULE**

<b>Original Contract Amount</b>		
<b>From More Than</b>	<b>To and Including</b>	<b>Charges per Calendar Day</b>
\$0	\$200,000	\$250
\$200,000	\$500,000	\$500
\$500,000	\$1,000,000	\$750
\$1,000,000	No Limit	\$1000

The ENGINEER shall maintain a schedule of calendar days for each day of noncompliance by the CONTRACTOR. The compiled schedule of calendar days shall form the basis for accessing the liquidated damages. Liquidated damages shall continue until the ENGINEER provides written notice of satisfactory compliance with the SWPPP to the CONTRACTOR.

#### **1590.2.19.3 Penalty**

If the CONTRACTOR or his or her agents refuses or fails to adhere to the requirements of the NPDES General Permit and as a result an assessment or fine is made or levied against the Owner, the CONTRACTOR shall reimburse the Owner within 10-calendar days of the assessment, or fine, or the Owner may withhold the amount of the assessment, or fine, from the CONTRACTOR's next pay estimate (pay application) and deliver that sum to the permitting agency issuing the assessment, or fine.

**END OF SECTION**