

INVITATION TO BID BID # 2018-631

Animas River Diversion Project

BID DUE DATE/TIME/PLACE:

Wednesday, October 18, 2017, 3:00 PM
City of Aztec
201 W Chaco
Aztec, NM 87410

NON-MANDATORY PRE-BID MEETING

Monday, October 9, 2017 10:00 A.M. City of Aztec Public Works Department 610 Western Drive Aztec NM 87410

LAST DAY FOR QUESTIONS

Thursday, October 12, 2017 9:00 A.M. klamb@aztecnm.gov

For further information contact:
Kathy Lamb
Finance Director
City of Aztec
Phone: 505-334-7653

Fax: 505-334-7649 email: klamb@aztecnm.gov

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INVITATION TO BID

BID NOTICE

ADVERTISEMENT FOR BIDS 2018-631 Animas River Diversion Project

City of Aztec, New Mexico

The Purchasing Office with the City of Aztec, New Mexico will receive sealed bids for the Animas River Diversion Project until Wednesday, October 18, 2017, 3:00 PM local time, 201 W Chaco, Aztec NM 87410 at which time bids will be publically opened and read aloud in the Commission Room. Bids should be addressed to:

City of Aztec, New Mexico Attn: Purchasing Office 201 West Chaco Aztec, New Mexico 87410

The bids received will be considered by the City of Aztec at a regular meeting of the City Commission or at a special meeting of the City Commission as may be required. No bid will be received or considered if received by the Purchasing Office after the hour of 3:00 p.m. (local time) on October 18, 2017. Please note that the City of Aztec, NM is NOT a guaranteed delivery point for any of the various delivery services.

A <u>non-mandatory</u> pre-bid conference will be held on Monday, October 9, 2017, 10:00 AM, in the Public Works Conference Room, City of Aztec Public Works Building, 610 Western Drive, Aztec, NM 87410. The last day to ask questions about the project or construction documents is Thursday, October 12, 2017, 9:00 AM. All questions must be submitted in writing to Kathy Lamb at klamb@aztecnm.gov.

Plans, Specifications and other Contract Documents, including instructions to Bidders and Bid Forms are available online by accessing the City's purchasing webpage through www.aztecnm.gov or by contacting Kathy Lamb at (505) 334-7653; klamb@aztecnm.gov.

CITY OF AZTEC Aztec, New Mexico 87410 Kathy Lamb

Publication: Daily Times, Tuesday, October 3, 2017

ACKNOWLEDGMENT OF RECEIPT FORM

In acknowledgment of receipt of BID 2018-631 ANIMAS RIVER DIVERSION PROJECT, the undersigned agrees that he/she has received the bid document copy from the City's website.

The City will provide additional bid documents electronically upon receipt the completed acknowledgement form.

NON-MANDATORY PRE-BID: Monday, October 9, 2017 10:00 AM City of Aztec Public Works Building, 610 Western drive, Aztec NM 87410

The acknowledgment of receipt should be signed and returned as directed below no later than Thursday, October 12, 2017. Only potential Bidders/Offerors who elect to return this form will receive copies of all future communications, relating to, and including amendments to the Bid if issued.

FIRM:	
REPRESENTED BY:	
TITLE:	PHONE NO.:
EMAIL:	FAX NO.:
ADDRESS:	
CITY: STA	ATE: ZIP CODE:
SIGNATURE:	DATE:
This name and address will be used for all c	correspondence related to document this Bid/RFP
Firm does/does not (circle one) intend to res PROJECT.	spond to BID 2018-631 ANIMAS RIVER DIVERSION
If firm does not intend to reply, please give a	a brief reason for not responding.

Kathy Lamb
Finance Director
City of Aztec
201 W Chaco
Aztec, New Mexico 87410
Telephone Number: 505-334-7653
Fax Number: (505) 334-7649
klamb@aztecnm.gov

Return to:

Faxed or emailed copies of this form will be accepted. Faxed or emailed **BID** responses will not be accepted.

BID REQUIREMENTS

1. INSTRUCTION TO BIDDERS

The City of Aztec, New Mexico ("OWNER") is requesting bids for the project as announced in the Invitation to Bid.

2. EXAMINATION OF CONTRACT DOCUMENTS AND SITE

Bidders shall carefully examine the Contract documents and the maintenance sites to obtain first-hand knowledge of existing conditions. Bidders will not be given extra payment for conditions, which can be determined by examining the site and contract documents. It is mutually agreed that the Bidder has made the examinations, investigations and test required herein and has made provisions as to the cost in his bid.

Before submitting his Bid, each Bidder must (a) examine the Contract Documents thoroughly; (b) visit the site to familiarize himself with local conditions that may in any manner affect performance of the Work; (c) familiarize himself with federal, state, and local laws, ordinances, rules, and regulations affecting performance of the Work; and (d) carefully correlate his observations with the requirements of the Contract Documents.

3. QUESTIONS

Submit all questions about the project to the OWNER by the date and time identified in the Invitation to Bid. Corrections or clarifications shall be made by addendum. Oral clarifications will not be binding.

4. PREPARATION OF BIDS

Bids shall be submitted on the forms provided. Bid Forms must be completed in ink. The grand total of the Contract must be stated on the Bid Form in both writing and numerals; in case of an error, the price in words, unless obviously incorrect, shall govern.

Alternate proposals will not be considered unless called for.

Bids by corporations must be executed in the corporate name by the president or vice-president (or other corporate officer accompanied by evidence of authority to sign) and the corporate seal shall be affixed and attested by the secretary or an assistant secretary. The corporate address and state of incorporation shall be shown below the signature.

Bids by partnerships must be executed in the partnership name and signed by a partner, his title must appear under his signature and the official address of the partnership must be shown below the signature.

All names must be typed or printed below the signature.

The CONTRACTOR shall be licensed under the proper classification(s) as outlined under the State of New Mexico's Construction Industries Division Rules and Regulations (latest edition). A CONTRACTOR not having the minimum license at the time of Bid opening shall be considered a non-responsive Bidder and their Bid will be rejected.

Each addendum shall be made a part of the Contract Documents to the same extent as though contained in the original documents and itemized listings thereof. The Bid shall contain an acknowledgment of receipt of all Addenda (the numbers of which shall be filled in on the Bid Form).

Pursuant to Section 13-1-108 NMSA 1978, the total amount of the bid shall exclude the applicable state gross receipts tax or applicable local option tax. The OWNER will pay for any taxes due on the Contract and will pay any increase in applicable which become effective after the date the Contract is entered into in addition to the Bid total.

Taxes shall be shown as a separate amount in each billing or request for payment made under contract and shall separately identify each tax being billed.

5. SUBMISSION OF BIDS

Bids shall be submitted at the time and place indicated in the invitation to Bid. Bids shall be submitted in an opaque sealed envelope, addressed to the OWNER, marked with the Bid number, Project title, and opening date. If forwarded by mail, the sealed envelope containing the Bid may enclosed in another envelope addressed to the OWNER at the address state in the Advertisement for Bids. The City of Farmington reserves the right to accept or reject any or all Bids.

Bids received after the date and time in the Invitation to Bid will be returned to sender unopened.

6. RESIDENT CONTRACTOR PREFERENCE

Per Senate Bill 1, signed by Governor Martinez on October 5, 2011, all resident contractors, wishing to obtain in-state preference, are required to obtain a preference number with the New Mexico Department of Taxation and Revenue. All preference numbers issued prior to January 1, 2012 are invalid. It will be the sole responsibility of the Bidders requesting consideration for Resident Preference to obtain approval and a certification from the New Mexico Department of Taxation and Revenue prior to the bid opening date. For additional information please call 505-827-0951 or go to:

http://www.tax.newmexico.gov/businesses/pages/in-statepreferencecertification.aspx

In accordance with Sections 13-1-21 and 13-1-22 NMSA 1978 and effective July 1, 2012, a resident veteran's business preference has been implemented. The Taxation and Revenue Department (TRD) will be issuing a three (3) year certificate to each qualified business. Businesses are required to reapply to TRD every three (3) years with the proper documentation to renew their certificate.

This preference is separate from the in-state preference and is not cumulative with that preference.

7. BID SECURITY

Bid security in the amount of 5% of the amount of the bid shall accompany the bid proposal and must be in the form of a certified or bank cashier's check made payable to OWNER or a bid bond issued by a surety licensed to conduct business in the State of New Mexico and named in the current list of "Surety Companies Acceptable on the Federal Bonds" as published in the Federal Register by the Audit Staff Bureau of Accounts, U.S. Treasury Department.

The Bid Security of the successful Bidder will be retained until he has executed the Agreement and furnished the required Contract Security, whereupon it will be returned; if he fails to execute and deliver the Agreement and to furnish the required Contract Security within 10 days of receipt of the Notice of Award, OWNER may annul the Notice of Award and the Bid Security of that Bidder will be forfeited.

The Bid Security of any Bidder whom OWNER believes to have reasonable chance of receiving the award may be retained by OWNER until the earlier of the seventh day after the executed Agreement is delivered by OWNER to CONTRACTOR and the required Contract Security is furnished or the sixty-first day after the Bid opening.

Bid Security of other Bidders will be returned within

seven days of the Bid opening.

8. SUBCONTRACTORS AND MANUFACTURERS

Pursuant to Sections 13-4-31 through 13-4-43 NMSA 1978), the Bidder shall submit the following information for each Subcontractor who will perform work or labor or render service to the CONTRACTOR in or about the construction Project in an amount in excess of the listing threshold specified in the Invitation to Bid:

Name of the Subcontractor; City of County of the Subcontractor; Nature of the work which will be done by the Subcontractor

The listing threshold is \$5,000.

The Bidder may be required to establish the reliability and responsibility of the proposed Subcontractors or of any manufacturer to furnish an perform the work in accordance with the Contract Documents and completion schedule, and may also be required to require performance and payment bonds of some or all Subcontractors in conformance with Sec. 13-4-37 NMSA 1978.

9. WITHDRAWAL OF BIDS

Any Bid may be withdrawn prior to the scheduled time for the opening of Bids or authorized postponement thereof. Any Bid received after the time and date specified shall not be considered. No Bidder may withdraw a bid after the Bid opening until the time for award stipulated below has expired. Should there be reasons why the Contract cannot be awarded within the specified period, the time may be extended by mutual agreement between the OWNER and the bidder.

10. QUALIFICATIONS OF BIDDERS

To demonstrate his qualifications for the Project, each Bidder must be prepared to submit within five days of OWNER'S written request a written statement of Bidder's Qualifications on the form contained herein or as prescribed by the OWNER. The OWNER reserves the right to reject any Bid if the evidence submitted by, or investigation of, such Bidder fails to satisfy the OWNER that such Bidder is properly qualified to carry out the obligations of the of the Agreement and to complete the work contemplated by it; and such rejection shall not give rise to a cause of action against the OWNER or Engineer, or impose a requirement upon the OWNER or Engineer to divulge the information upon which

such rejection is based.

11. AWARD OF CONTRACT

All Bids shall remain open for sixty (60) days after the day of the Bid opening; but OWNER may, in his sole discretion, release any Bid and return the Bid Security prior to that date.

OWNER reserves the right to reject any and all Bids and waive any and all informalities and the right to disregard all nonconforming or conditional Bids or counter proposals. The City may not award all projects only some of the projects depending on bid amounts and the available funding for the projects.

In evaluating Bids, OWNER shall consider the qualifications of the Bidders, whether or not the Bids comply with the prescribed requirements, and alternates and unit prices if requested in the Bid forms. He may consider the qualifications and experience of Subcontractors and other persons and organizations (including those who are to furnish the principal items of material or equipment) proposed for those portions of the Work as to which the identity of Subcontractors and other persons and organizations must be submitted as specified in the Special Conditions. He may conduct such investigations as he deems necessary to establish the responsibility, qualifications, and financial ability of the Bidders, proposed Subcontractors and other persons and organizations to do the Work in accordance with the Contract Documents to OWNER's satisfaction within the prescribed time. OWNER reserves the right to reject the Bid of any Bidder who does not pass any such evaluation to OWNER's satisfaction.

If a contract is to be awarded, it will be awarded to the lowest responsible Bidder whose evaluation by OWNER indicates to OWNER that the award will be in the best interest of the Project.

The acceptance of a Bid will be evidenced by a Notice of Award in writing signed by a duly authorized representative of the OWNER and delivered to the Bidder whose Bid is accepted, in the manner provided for giving written notices (reference paragraph 13.3 of the General Conditions).

If the contract is to be awarded, OWNER will give the apparent successful Bidder a Notice of Award within sixty days after the day of the Bid opening.

12. PERFORMANCE AND PAYMENT BONDS

A performance bond and a labor and material payment bond, each in the amount of 100 percent of the Contract Price, with a corporate surety approved

by the OWNER, will be required for the faithful performance of the Contract.

Surety must be licensed to conduct business in the State of New Mexico and named in the current list of "Surety Companies Acceptable on the Federal Bonds" as published in the Federal Register by the Audit Staff Bureau of Accounts, U.S. Treasury Department.

Attorneys-in-fact who sign the payment bond and performance bond must file with each bond a dated, certified and effective copy of their power of attorney.

13. INSURANCE REQUIREMENTS (CONSTRUCTION OR INSTALLATION ONLY)

Contractor shall carry and maintain insurance in the following amounts:

General Liability - \$1,000,000 CSL (Combined Single Limits)

Auto Liability - \$1,000,000 CSL (Combined Single Limits)

Workers Compensation – Statutory limits pursuant to the New Mexico Workers Compensation Act.

The certificate shall specifically provide that the coverage afforded under the policy or policies will not be cancelled or be materially changed until prior written notice has been given to the City. The Contractor shall furnish a certificate of insurance showing that the City is additionally insured prior to commencing work.

14. EXECUTION OF CONTRACT

A City of Aztec Business License is required of any business conducting business within the City (Aztec City Code Sec 11-2-1). A Contract will NOT be executed until the CONTRACTOR is in compliance with Aztec City Code.

The CONTRACTOR will execute and return to the OWNER the Agreement and any required bonds and certificates of insurance within 15 days after receipt of the Notice of Award.

The CONTRACTOR shall not proceed with any construction activities other than ordering materials, supplies and equipment, until the required bonds and certificates of insurance are delivered to the OWNER, and OWNER acknowledges in writing their receipt.

No progress payments shall be made to CONTRACTOR until the required bonds and certificates of insurance are delivered to the OWNER.

15. PRE-BID CONFERENCE

The purpose of this conference is to answer any questions, as might arise, with respect to the Bidding requirements and execution of this Contract.

Questions resolved at this meeting will be included in the minutes and will be posted to the City of Aztec website www.aztecnm.gov

If a mandatory pre-bid conference is identified in the Invitation to Bid, bids received by Offerors who did not attend and sign the pre-bid conference attendance form will be returned unopened.

16. CONTRACT TIME – LIQUIDATED DAMAGES

The number of days for the substantial completion of Work (the Contract Time) and/or final completion is set forth in the Bid Proposal and will be included in the executed Construction Agreement. Any provisions for liquidated damages are set forth in the Contract Documents.

17. QUANTITIES

The quantities set forth in the Bid Form are estimated quantities on which Bids will be compared and which will be the basis for the award of Contract. Payment will be made for the Work actually performed. The OWNER reserves the right to increase or decrease quantities by any reasonable amount to suit the best interest by the OWNER.

18. COLLUSION-GENUINE BID

The Bidder, by submitting a Bid, certifies that the Bid is genuine and is not sham or collusive, or made in the interest, or in the behalf of any person not named as Bidder, and that the Bidder has not directly or indirectly induced or solicited any other Bidder to put in a sham bid, or any other person, firm or corporation to refrain from bidding, and that the Bidder has not in any manner sought by collision to secure himself an advantage over any other Bidder.

19. PREFERENCES AND STANDARDS FOR PROCESSES, MATERIALS AND EQUIPMENT

Unless specified in the Contract Documents, the OWNER has no preference for any process, type of equipment or kinds of material but will consider all processes, types of equipment or kinds of material offered which meet specifications on an equal competitive basis if they are in fact equal to those

specified and will accomplish the purpose intended. The OWNER reserves the right to be the sole judge as to whether or not a different process, type of equipment or kind of material offered is in fact the equal to that specified.

20. PROJECT FINANCE

Any Contract awarded under this invitation for Bid shall be subject to the appropriation of funds by the OWNER's City Commission.

21. WAGE RATES

The Bidder's attention is directed to the fact that wages to be paid on this project shall not be less than the prevailing wage rates as listed by the New Mexico State Office of Labor Commissioner and (where applicable) the prevailing Federal Wage Rate Decision listed by the U.S. Department of Labor and in effect at the time of this contract. It shall be the successful Bidder's responsibility to inform himself thoroughly of all state, federal, and local laws and statutes pertaining to the employment of labor, the freedom of organization, and the conditions of employment and shall strictly adhere to such laws and regulations as are applicable. There shall be no discrimination because of race, creed, sex, color. national origin, or legal political affiliation in the employment of persons qualified by training and experience for work under this contract.

22. FEDERAL ASSISTED CONSTRUCTION CONTRACTS

NOTICE OF REQUIREMENT FOR CERTIFICATION OF NON-SEGREGATED FACILITIES

Bidders are cautioned as follows: By signing the Contract for which this Bid is solicited, the Bidder will be deemed to have signed and agreed to the provisions of the "Certification to Non-segregated Facilities" as contained in the Specifications for this Project.

NOTICE TO PROSPECTIVE FEDERALLY ASSISTED CONSTRUCTION CONTRACTORS

A certification of Non-segregated Facilities, as required by the May 28, 1968 order (33 F.R. 7808, May 28, 1968; 41 CFR Part 60-1, et seq) on Elimination of Segregated Facilities, by the Secretary of Labor, must be submitted prior to the award of a federally assisted construction contract exceeding Ten Thousand Dollars (\$10,000.00) which is not exempt from the provisions of the Equal Opportunity clause.

CONTRACTORS receiving federally assisted construction contract awards exceeding Ten Thousand Dollars (\$10,000.00) which are not exempt from the provisions of the Equal Opportunity clause will be required to provide for the forwarding of this notice to prospective Subcontractors for supplies and construction contracts where the subcontracts exceed Ten Thousand Dollars (\$10,000.00) and are not exempt from the provisions of the Equal Opportunity clause.

Certification by Bidder regarding Equal Employment Opportunity must be submitted with each Bid.

23. EQUAL EMPLOYMENT OPPORTUNITY

During the performance of this Contract, the CONTRACTOR agrees as follows:

The CONTRACTOR will not discriminate against any employee or applicant for employment because of race, creed, color, sex or national origin. The CONTRACTOR will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, religion, creed, color, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selecting for training, including apprenticeship.

The CONTRACTOR agrees to post in conspicuous places, available to employees and applicants for employment, notices as provided setting forth the provisions of this nondiscrimination clause.

The CONTRACTOR will, in all solicitations or advertisements for employment placed by or on behalf of the CONTRACTOR, state that all qualified applicants will receive consideration for employment without regard to race, creed, color, sex, or national origin.

The CONTRACTOR will send to each labor union or representative of workers with which he has collective bargaining agreements or other contracts or understandings, a notice advising the labor union or worker's representative of the CONTRACTORS' commitments under Section 202 of Executive Order No. 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

The CONTRACTOR will comply with all provisions of Executive Order No. 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of

the Secretary of Labor.

The CONTRACTOR will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to CONTRACTOR's books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

In the event of the CONTRACTOR's noncompliance with the nondiscrimination clauses of this Contract or with any of such rules, regulations, or orders, this Contract may be canceled, terminated or suspended in whole or in part and the CONTRACTOR may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each Subcontractor or vendor.

The CONTRACTOR will take such action with respect to any subcontract or purchase order as the contracting agency may direct as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that in the event the CONTRACTOR becomes involved in, or is threatened with, litigation with a Subcontractor or vendor as a result of such direction by the contracting agency, the CONTRACTOR may request the United States to enter into such litigation to protect the interests of the United States.

24. COMPLIANCE WITH FEDERAL REGULATIONS

The CONTRACTOR agrees to comply with any Federal Statutes or Regulations which are applicable to this Project including, but not limited to, the following:

All labor standards including those relating to the payment of wages, working conditions, anti-kickback prohibitions and equal employment, and in particular:

The provisions of Title 29 of the Office of the Secretary of Labor of the United States Government, Part 3, entitled "Contractors and Subcontractors on Public Building or Public Work Financed in whole or in part by loans or grants from the United States" (29 CFR Part 3);

The provisions of 29 CFR Part 5 entitled "Labor Standard Provisions Applicable to Contracts Governing Federally Financed and Assisted Construction" as well as the "Labor Standard

Provisions Applicable to Non-construction Contracts Subject to Contract Work Hours and Safety Standards Act."

Those concerning relocation and related payments to in the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, 42 USC 4601 et seq;

The National Environmental Policy Act of 1969, as amended (42 USC 4231 et seq);

The Clean Air Act, as amended (42 USC 1857-1858 a);

The Federal Water Pollution Control Act, as amended (33 USC 1251-1376);

The National Historic Preservation Act of 1966, as amended (16 USC 470 et seq);

The Wild and Scenic Rivers Act (16 USC 1271-1281);

The Endangered Species Act of 1973, as amended (16 USC 1531 et seq);

The Historic Sites, Buildings and Antiquities Act, as amended (16 USC 461 et seq);

The Americans with Disabilities Act of 1990 (P.L.101-336, July 26, 1990), and any regulations adopted pursuant thereto;

The National Flood Insurance Act of 1968, as amended.

The National Pollutant Discharge Elimination System Regulations for Storm Water Discharges, 40 CFR Parts 122,123 and 124.

25. SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION

In order to protect the lives and health of his employees, the CONTRACTOR shall comply with all pertinent provisions of the Contract Work Hours and Safety Standards Act as amended, commonly known as the Construction Safety Act and also known as the Williams-Steiger Occupational Safety and Health Act of 1970, together with the regulations promulgated in 29 CFR, Parts 1901 through Parts 1919.

26. WARRANTIES

The Bidder shall warrant and guarantee all workmanship performed by the Bidder and materials supplied by the Bidder for a minimum period of one

(1) year from purchase date or date of Substantial Completion, unless otherwise specified in the specifications.

27. BID OPENING PROCEDURE

The person or persons opening the bids will adhere to the following procedure:

Announce the name of the bidder and the number of the bidder's N.M. Contractor's license.

Check for bid bond or bid security.

Check for acknowledgment of addendums.

Check for proper signature on bid form.

Check other requirements on bid form.

Read Bid aloud

If any of the above requirements have not been met, the bid shall be read after the deficiency or deficiencies have been accounted and noted.

28. PROTEST DEADLINE

Any protest by a Bidder must be timely and in conformance with Section 13-1-172, NMSA, 1978 and applicable procurement regulations. The fifteen (15) day protest period for responsive Bidders shall begin on the day following the City's written notification to all responding Bidders. Protests must be written and must include the name and address of the protestor and the number assigned to this Bid by the City. It also must contain a statement of grounds for protest including appropriate supporting exhibits. The timely protest must be delivered to:

Purchasing Officer City of Aztec 201 W. Chaco Aztec, NM 87410

29. DEFINED TERMS

Terms used in these Instructions to Bidders have the meanings assigned to them in the General Conditions unless otherwise defined in the Special Conditions.

BID SUBMITTAL

BID 2018-631 ANIMAS RIVER DIVERSION PROJECT

COMPANY NAME / MAILING ADDRESS	/ CITY / STATE /	ZIP (please print)
CONTACT PERSON (please print)	EMAIL	TELEPHONE
AND OPENING DATE CLEARLY INDIC	ATED ON THE	LED ENVELOPE WITH THE BID NUMBER FRONT OF THE ENVELOPE. <u>EMAILED OF</u> IG A "NO BID" IS NOT REQUIRED TO BI
NON-MANDATORY PRE-BID: Monday, 610 Western Drive, Aztec NM 87410	October 9, 2017	10:00 AM City of Aztec Public Works Building
Aztec, Attn: Purchasing Office, 201 W Ch	aco, Aztec NM 87 om. This bid is	er 18, 2017, 3:00 P.M. local time at City of 7410 at which time bids will be publicly opened subject to the Purchase Order Terms and
If a corporation, state of incorporation:		
NEW MEXICO TAX ID NO: NEW MEXICO CONTRACTORS LICENS NEW MEXICO CONTRACTORS LICENS	SE NO.:	EDERAL TAX ID NO.:
NEW MEXICO DEPT OF WORKFORCE	SOLUTIONS – P	UBLIC WORKS REGISTRATION NO.:
CITY OF AZTEC BUSINESS LICENSE N Current City of Aztec Business License no obtain City of Aztec Business License price	ot required at time	e of bid. Successful bidder will be required to
In-State Preference <u>will</u> be applied only the following:	/ to those in-stat	te certified businesses that <u>have</u> completed
Bidder has received certification from the Bidder has been issued Certification # preference. In-state certification approval in-state preference.		xico for Resident Business Certificationand is therefore eligible for the 5% e time of the proposal opening to be eligible fo
Bidder has received certification from the Offeror has been issued Certification #		

the time of the proposal opening to be eligible for resident veterans preference.

Guaranteed pricing is requested; please submit pricing guaranteed for 60 DAYS from the date of notice of award. Notice of award shall occur within 60 days of bid opening date. The City of Aztec reserves the right to accept any bid, in whole or in part, and to reject any or all bids if it is deemed in the best interest of the City to do so. The City of Aztec reserves the right to waive any formality or informality in the process of awarding this bid.

The items as specified herein are not to be taken as restrictive, but rather are to establish a standard for services desired. Any deviation in the attached pages should be specifically set forth in your bid offer. Except as specified as Sole Source, any brand name used is for the purpose of describing the standard of quality, performance and characteristics desired and is not intended to limit or restrict competition. Where there is more than one part to an item, all parts must be bid to receive Board consideration.

The bidder agrees the work will be substantially completed within **45 calendar days** from the date of the Notice to Proceed. Readiness for final payment will be 14 calendar days after substantial completion.

The bidder agrees liquidated damages will be paid to the Owner for each day beyond substantial completion expiration in the amount of \$500.00 per calendar day and \$250.00 per calendar day for completion of remaining work and readiness for final payment beyond completion expiration date.

The Proposal guarantee shall be of the total amount bid. Guarantee included with bid is (main one): Bid Bond Cashier's Check Payable to City of Aztec			
Subcontractor's listing threshold \$5,000			
Bidder must check the appropriate box below:			
If applicable, BIDDER ACKNOWLEDGES RECEI	PT OF THE FOLLOWING AMENDMENT(S):		
Addendum No Dated	Addendum NoDated		
Addendum No Dated	Addendum NoDated		

BIDDER'S REPRESENTATIONS

- A. 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.
- B. Bidder is familiar with and has satisfied itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work.
- C. 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.
- D. 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.
- E. 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.
- F. 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.
- G. 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.
- H. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work.
- I. 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.

BIDDER'S CERTIFICATION

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

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

To be a valid proposal, Bidder must sign here:	
Ti <u>tle</u>	

DRUG-FREE WORKPLACE CERTIFICATION

Project Name: Bid 2018-631 Animas River Diversion Project

The Contractor named below hereby certifies to be in compliance with 49 CFR parts 40 and 382 by establishing a program designed to help prevent accidents and injuries resulting from the misuse of alcohol or use of controlled substances by drivers of commercial motor vehicles and to provide a workplace free of drug use and alcohol misuse. The below Contractor will:

- 1. Have in place a policy in compliance with 49 CFR Parts 40 and 382 that provides for pre-employment, post-accident, random, reasonable suspicion, return-to-duty, and follow-up testing for controlled substances and alcohol.
- 2. 49 CFR Part 382, section 382.603 requires that persons designated to supervise drivers receive at least 60 minutes of training on alcohol misuse and receive an additional 60 minutes of training on controlled substances use.
- 3. Have in place a drug free and alcohol free workplace policy that applies to everyone that works on the project described in the contract. The drug free and alcohol free workplace policy shall include an education and training program that informs employees about the following:
 - a. The dangers of drug use and alcohol misuse in the workplace;
 - b. The person's or organization's policy in maintaining a workplace free of drug use and alcohol misuse;
 - c. Any available counseling, rehabilitation and employee assistance programs;
 - d. Penalties that may be imposed upon employees for violations; and,
 - e. Provisions for pre-employment and reasonable suspicion testing.
- 4. All of the contractor's employees who perform work on this project must be provided with a copy of the above referenced policies as those policies apply to them, i.e. not all employees are commercial drivers, but all employees would be subject to the drug-free and alcohol-free workplace policies.
- 5. That everyone who works on the contract agrees to abide by the terms of the Contractor's Statement as a condition of continued employment on the contract.
- 6. That no one who has tested positive within the past year will be allowed to perform work on this project.

CERTIFICATION

I, the official named below, hereby swear that I am duly authorized to legally bind the prospective contractor to the above described certification. I am fully aware that this certification, executed on the date and in the county below, is made under penalty of perjury under the laws of the State of New Mexico

COMPANY NAME:	FEDERAL ID NUMBER:
OFFICIAL'S NAME:	OFFICIAL'S SIGNATURE:
OFFICIAL'S TITLE:	DATE EXECUTED:
FEDERAL ID NUMBER:	EXECUTED IN THE COUNTY OF:

CONTRACTOR SAFETY CERTIFICATION

Project Name: Bid 2018-631 Animas River Diversion Project

The Contractor named below hereby certifies and shall comply with all applicable Federal, State, County laws, rules, regulations, City ordinances, and best safety practice guidelines for the health and safety of contractor and sub-contractor employees when performing work for the City of Aztec. The City of Aztec Compliance Contractor Safety Verification Program shall require contractors and subcontractors to comply with the law, and use all safety precautions to protect their employees, and the public when engaged in construction projects. The personal safety and health of contractor's and subcontractor's employees is of primary importance. The prevention of occupationally induced injuries and illnesses is of such consequence that it shall be given precedence over operating productivity whenever necessary.

Regulatory Standards: All applicable federal, state and local safety, health and environmental regulatory requirements, including but not limited to: OSHA-29 CFR.

BASIS: It is the responsibility of the general contractor to ensure contractor, and sub-contractors working within the City of Aztec adhere to all applicable safety, health, and environmental standards while conducting business on the construction site or on City Property. When a general contractor arranges to have employees of another employer (sub-contractors) perform work that involves activities that may put personnel at risk, the general contractor will inform the sub-contractor that the workplace contains specific hazards and that the work to be done shall be allowed only if all workers

have the proper training, necessary certification(s), proper equipment, and work conditions to complete the work safely.

GENERAL: The contractor will ensure that safe work practices are used by contractor and subcontractor personnel to provide for the control of risks associated with hazards, by using established procedures for; lock-out-tag-out, confined space entry, welding, trenching, piping, PPE, fall protection, dust control, hearing protection, public safety, and general safety. At the request of the City's Safety Division, the contractor shall provide information regarding the contractor's past safety performance and current safety program.

Responsibility: The contractor shall be responsible for complying with the safety standards applicable to the work they are performing. The contractor agrees that he/she is responsible to enforce compliance with all safety regulations from everyone, including sub-contractors, who work on the contract as a condition of employment on the contract.

Contractor Safety Inspections: Contractor work site safety inspections may be conducted periodically by a City of Aztec Safety Coordinator.

CERTIFICATION

I, the official named below, hereby swear that I am duly authorized to legally bind the prospective contractor to the above described certification. I am fully aware that this certification, executed on the date and in the county below, is made under penalty of perjury under the laws of the State of New Mexico.

COMPANY NAME:	FEDERAL ID NUMBER:
OFFICIAL'S NAME:	OFFICIAL'S SIGNATURE:
OFFICIAL'S TITLE:	DATE EXECUTED:
FEDERAL ID NUMBER:	EXECUTED IN THE COUNTY OF:

BASIS OF BID

BID 2018-631 ANIMAS RIVER DIVERSION PROJECT

TO: City of Aztec, New Mexico Attn: Purchasing Department

201 West Chaco

Aztec, New Mexico 87410

The undersigned hereby proposes to perform all work for the City of Aztec – BID 2018-631 ANIMAS RIVER DIVERSION PROJECT. Advertisement inviting bids was dated October 3, 2017.

The Contract Documents including Special Conditions and Plans and any Addenda. All of which are incorporated herein and made a part hereof; and to perform said work in accordance with and at the rates and prices (or lump sum bid) shown in the following bid schedule: (Each item or its alternate must be bid. The cost of any work added or deducted from the following estimated quantities shall be computed at the unit prices bid.)

The undersigned, as Bidder, hereby declares that the only persons or firms interested in the proposal as principal or principals is or are named herein and that no other persons or firms than herein mentioned have any interest in this proposal or in the contract to be entered into; that this proposal is made without collusion with any other person, company, or parties making a bid or proposal; and that it is in all aspects fair and in good faith without collusion or fraud.

The Undersigned agrees that, upon written notice of acceptance (Notice of Award) of this proposal mailed or otherwise furnished within 60 days after the date of opening proposals, he or she will within 15 days after receipt of said notice, execute and return to the City of Aztec, New Mexico the prescribed construction contract and any required bonds and certificates. The receipt of a facsimile transmission (FAX) of the Notice of Award, by undersigned shall constitute receipt as provided herein.

The bidder agrees the work will be substantially completed within **45 calendar days** from the date of the Notice to Proceed. Readiness for final payment will be 14 calendar days after substantial completion.

The bidder agrees liquidated damages will be paid to the Owner for each day beyond substantial completion expiration in the amount of \$500.00 per calendar day and \$250.00 per calendar day for completion of remaining work and readiness for final payment beyond completion expiration date.

The undersigned understands that immediately upon, or up to 10 days following receipt by the OWNER of construction contract signed by the undersigned, the OWNER may issue a Notice to Proceed. The receipt of a facsimile transmission (FAX) of the Notice to Proceed by undersigned shall constitute receipt as required herein.

BID 2018-631 ANIMAS RIVER DIVERSION PROJECT

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL
1	Clear and Grub work area	SY	4000		
2	Construct and Maintain Cofferdam	LF	600		
3	Dewatering	LS	1		
4	Earthwork, finished grading per plans	LS	1		
5	Wire tied riprap (Gabian mattress), including rock and installation, complete in place	CY	380		
6	SWPPP implementation and maintenance	LS	1		
7	Construction Mobilization / Demobilization	LS	1		
8	Construction Staking by Contractor	LS	1		
				BID TOTAL	

Total Written Amount of Bid (Excluding Tax)

	SIGNATURE OF BIDDER
	Printed Name of Bidder
	Title
	Telephone Number
	Fax Number
(SEAL) If Bid is by a Corporation	Email
Attest:	
Title:	

CONTRACTOR'S LIST OF SUBCONTRACTORS

PROJECT: BID 2018-631 ANIMAS RIVER DIVERSION PROJECT

BIDDER must list all Subcontractors whose listing is required pursuant to the New Mexico Subcontractors Fair Practices Act and estimated work exceeds the threshold amount of Five Thousand and no/100 Dollars (\$5,000.00).

Company Name:	
Address:	City: State: Zip:
E-mail Address:	License Number:
Phone Number:	Fax Number:
Work to be performed:	Contract Over \$ 60,000: ☐ YES ☐ NO
Company Name:	011
Address:	City: State: Zip:
E-mail Address:	License Number:
Phone Number:	Fax Number:
Work to be performed:	Contract Over \$ 60,000: ☐ YES ☐ NO
Company Name:	
Address:	City: State: Zip:
E-mail Address:	License Number:
Phone Number:	Fax Number:
Work to be performed:	Contract Over \$ 60,000: ☐ YES ☐ NO
Company Name:	
Address:	City: State: Zip:
E-mail Address:	License Number:
Phone Number:	Fax Number:
Work to be performed:	Contract Over \$ 60,000: ☐ YES ☐ NO
Company Name:	
Address:	City: State: Zip:
E-mail Address:	License Number:
Phone Number:	Fax Number:
Work to be performed:	Contract Over \$ 60,000: ☐ YES ☐ NO
ADDITIONAL SHEETS LISTING SUBCONTRAC	CTORS MAY BE ATTACHED IF NECESSARY.
NOTICE TO BIDDER	CONTRACTOR:
List only one subcontractor for each category work.	
FAILURE TO COMPLY WITH THESE	By:
REQUIREMENTS WILL MAKE THE BID NON	
RESPONSIVE and the Bid will be rejected.	Date:

SUBCONTRACTOR FAIR PRACTICES ACT COMPLIANCE

This Public Works Project is subject to the provisions of the Subcontractors Fair Practices Act (Chapter 18, Laws of 1988; Sections 13-4-31 through 13-4-43 NMSA 1978) as it may be amended.

The listing threshold is: \$5000

List of Subcontractors Required: The Bidder shall define the categories of subcontractors in the bid and shall list on the Contractor's List of Subcontractors, no more than one subcontractor for each such category, PROVIDED HOWEVER, that such listing shall not include subcontractors whose work does not exceed the threshold dollar amount given in the subparagraph A, above. Such list shall give the name and location of the place of business of each subcontractor under subcontract to the Bidder who will perform work or labor or render service to the Bidder in an amount exceeding the threshold stated in subparagraph A.

All subcontractors whose estimated work exceeds the threshold shall be listed at the time the Bid is submitted to OWNER.

The apparent low Bidder may allow a subcontractor that exceeds the threshold amount to be voluntarily assigned or transferred or to be performed by anyone other than the original subcontractor listed in the original bid only if the OWNER, gives prior written approval.

No Bidder whose Bid is accepted shall sublet or subcontract any portion of the Work in an amount exceeding the threshold amount given in subparagraph A, above, where the original bid did not designate a subcontractor, unless:

the Bidder received no bid for that category (note: the Bidder must designate on the list of subcontractors required in subparagraph B, above, that "no bid was received"), or

the work is pursuant to a Change Order that causes changes or deviations from the original Contract.

Delays Attributable to Hearings Required by the Subcontractors Fair Practices Act: In the event a hearing is required pursuant to the provisions of the Subcontractors Fair Practices Act and a delay in the Work is caused as a result of a subcontractor protesting its substitution, the CONTRACTOR shall not be entitled to an increase in the Contract Price or Contract Time.

BID BOND

KNOW ALL MEN BY THESE PRESENTS:

That we	hereinafter called the Principal, as Principal, and , a corporation duly organized under the laws of the State of
the of	, a corporation duly organized under the laws of the State of
the City of Aztec hereinafter called the Ok	hereinafter called Surety, as Surety, are held and firmly bound unto bligee, in the sum of dollars, for the payment of which sum well and truly
	d Surety, bind ourselves, our heirs, executors, administrators, successors
and assigns, jointly and severally, firmly by	
	'
WHEREAS, the Principal has sub	mitted a bid for:
The work to be performed under the	his contract shall consist of furnishing all professional service, labor,
	mplete the Animas River Diversion Project
Agreement with the Obligee in accordance specified in the bidding or Contract Docum Agreement and for the prompt payment of that either the Obligee shall be unable to a principal or the failure of the Principal to en pay to the Obligee the difference, not to exact larger amount for which the Obligee	accept the bid of the Principal and the Principal shall enter into an e with the terms of such bid, and give such bond or bonds as may be nents with good and sufficient surety for the faithful performance of such labor and material furnished in the prosecution thereof or in the event accept the bid of the Principal as a result of acts or omissions of the inter such Agreement and give such bond or bonds, if the Principal shall acceed the amount hereof, between the amount specified in said bid and may in good faith contract with another party to perform the work covered all and void, otherwise to remain in full force and effect.
SIGNED AND SEALED this c	lay of A.D., 2017
WITNESS	 Principal
	·
	Ву:
	Title:
	Title.
	Street Address
	Mailing Address
SURETY	City, State and Zip Code
	Phone Number
BY	
WITNESS	STREET ADDRESS
200	
	MAILING ADDRESS
	CITY/STATE AND ZIP CODE
	PHONE NUMBER
21	Bid 2018-631 Animas River Diversion Project
41 ∥	Did 2010 031 / millias River Diversion Flogeet

CERTIFICATE OF SURETY ON BID BOND

	Surety on the Bid Bond	dated the day of
		Aztec as Obligee does hereby
rectify that Surety is duly authorized to transac Surety it has complied with all applicable laws	•	· · · · · · · · · · · · · · · · · · ·
Witness, my hand and seal this	day of	, 2017
	Surety	
	Ву	
	Titlo	

THIS BOND MUST BE ACCOMPANIED BY POWER OF ATTORNEY, EFFECTIVELY DATED

STATEMENT OF BIDDERS QUALIFICATIONS

(To be submitted by the Bidder only upon the specific request of the OWNER in writing).

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

Name of Bidder and N.M. CONTRACTOR'S License Number.

Permanent main office address.
When organized?
If a corporation, where incorporated?
How many years have you been engaged in the contracting business under your present firm or trade name?
Contracts on hand. (Schedule these, showing amount of each contract and the approximated anticipated date of completion.)
General Character of work performed by your company.
Have you ever failed to complete any work awarded to you? If so, where and why?
Have you ever defaulted on a contract? If so, where and why?
List the more important projects recently completed by your company, stating the approximate cost for each and the month and year completed.
List your major equipment available for this contract.

Experience in construction work	k sımılar in imp	portance to this proje	ect.	
Background and experience of	the principal n	nembers of your org	anization, including the off	icers.
Give bank reference.				
Will you, upon request, fill out a be required by the OWNER?	a detailed finan	icial statement and f	urnish any other informatio	on that may
The undersigned hereby author by the OWNER in verification of				on requested
Dated atName of Bidder	this	day of	, 2017	
By:				
State of				
and that the answers to the fore correct.				
Subscribed and sworn to before	e me this	day of	, 2017	
(Notary Public)				
My Commission expires			_•	



GENERAL CONDITIONS

OF THE CONTRACT FOR CONSTRUCTION

The City of Aztec

ARTICLE 1: GENERAL PROVISIONS

ARTICLE 2: OWNER

ARTICLE 3: CONTRACTOR

ARTICLE 4: ADMINISTRATION OF THE CONTRACT

ARTICLE 5: SUBCONTRACTORS

ARTICLE 6: CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

ARTICLE 7: CLAIMS AND DAMAGES

ARTICLE 8: TIME

ARTICLE 9: PAYMENTS AND COMPLETION

ARTICLE 10: PROTECTION OF PERSONS AND PROPERTY

ARTICLE 11: INSURANCE AND BONDS

ARTICLE 12: UNCOVERING AND CORRECTION OF WORK

ARTICLE 13: MISCELLANEOUS PROVISIONS

ARTICLE 14: TERMINATION OF THE CONTRACT

ARTICLE 1: GENERAL PROVISIONS

1.1 BASIC DEFINITIONS

1.1.1 THE CONTRACT DOCUMENTS

The Contract Documents consist of (1) the executed Contract for Construction, (2) these General Conditions of the Contract for Construction, (3) any Supplemental Conditions or Special Conditions identified in the Contract for Construction, (4) The Project manual identified in the Contract for Construction, (5) the Drawings identified in the Contract for Construction, (6) Addenda issued prior to the receipt of bids, (7) Contractor's completed Qualification Statement if requested by owner, (8) Contractor's Performance Bond and Contractor's Payment Bond, (9) Notice to Proceed, (10) and any other exhibits and/or post bid adjustments identified in the contract for Construction, (11) Advertisement for Bid, (12) Information for Bidders, and (13) Change Orders issued after execution of the Contract.

1.1.2 THE CONTRACT

The Contract Documents form the Contract and are the exclusive statements of agreement between the parties. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior representations or agreements, either written or oral. The Contract Documents shall not be construed to create a contractual relationship of any kind between the Owner and a Subcontractor or any lower-tier Subcontractor.

1.1.3 THE WORK

Work shall mean construction and service including: supervision, labor, equipment, tools, material, supplies, incidentals operations and activities required by the Contract Documents or reasonably inferable by Contractor there from as necessary to produce the results intended by the Contract Documents in a safe, expeditious, orderly, and workman like manner, and in the best manner known to each respective trade. Only work included in the Contract documents is authorized, and the contractor shall do no work other than that described.

1.1.4 THE PROJECT

The Project is the total construction of which the Work performed under the Contract Documents may be the whole or a part and which may include construction by the Owner or by separate contractors.

1.1.5 THE DRAWINGS

The Drawings herein referred to, consist of drawings prepared by the owner and are enumerated in the Contract Documents. Drawings are intended to show general arrangements, design, and dimensions of work and are partly diagrammatic. Dimensions shall not be determined be scale or rule.

1.1.6 SPECIFICATIONS AND DRAWINGS

The Specifications are that portion of the Contract Documents consisting of the written requirements for materials, equipment systems, standards and workmanship and performance of related services for the Work identified in the Contract for Construction. Specifications are separated into titled divisions for convenience of reference only. Organization of the Specifications into divisions, sections and articles, and arrangement of Drawings shall not control the Contractor in dividing the Work among Subcontractors or in extent of Work to be performed by any trade. Such separation will not operate to make the Owner an arbiter of labor disputes or work agreements.

1.1.7 THE PROJECT MANUAL

The project manual is a document assembled for the Work, which may include the bidding requirements, sample forms, Conditions of the Contract and Specifications.

1.2 CORRELATION AND INTENT OF THE CONTRACT DOCUMENTS

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

1.2.1 Unless otherwise stated in the Contract Documents, words which have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings.

1.2.2 APPROVED

The terms "approved", "equal to", "directed", "required", "ordered", "designated", "acceptable", "satisfactory", and similar words or phrases will be understood to have reference to action on the part of the Owner's Representative.

1.2.3

Data in the contract Documents concerning lot size, ground elevations, present obstructions on or near the site, locations and depths of sewers, conduits, pipes, wires, etc., position of sidewalks, curbs, pavements, etc., and nature of ground and subsurface conditions have been obtained from sources the Owner believes reliable, but the Owner do not represent or warrant that this information is accurate or complete. The Contractor shall verify such data to the extent possible through normal construction procedures, including but not limited to contacting utility owners and by prospecting.

1.2.4 OWNER

The City of Aztec. The Owner may act through its City of Aztec Commission or any duly authorized committee or representative thereof.

1.2.5 OWNER'S REPRESENTATIVE

The Owner's Representative is authorized by the Owner as the administrator of the Contract and will represent the Owner during the progress of the Work. Communications from the Owner to the Contractor and from the Contractor to the Owner shall be as indicated in the Contract Documents.

1.2.6 ENGINEER

When the term "Engineer" is used herein, it shall refer to the Architect or the Engineer specified and defined in the Contract for Construction or its duly authorized representative. Communications to the Architect/Engineer shall be forwarded to the address shown in the Contract for Construction.

1.2.7 CONTRACTOR

The Contractor is the person or entity with whom the Owner has entered into the Contract for Construction. The term "Contractor" means the Contractor or the Contractor's authorized representative.

1.2.8 SUBCONTRACTOR AND LOWER-TIER SUBCONTRACTOR

A Subcontractor is a person or entity who has a contract with the Contractor to perform any of the

Work. The term "Subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Subcontractor or its authorized representative. The term "Subcontractor" also is applicable to those furnishing materials to be incorporated in the Work whether work performed is at the Owner's site or off site, or both. A lower-tier Subcontractor is a person or entity who has a contract with a Subcontractor or another lower-tier Subcontractor to perform any of the Work at the site. Nothing contained in the Contract Documents shall create contractual relationships between the Owner and any Subcontractor or lower-tier Subcontractor of any tier.

1.2.9 DAY

The term "day" as used in the Contract Documents shall mean calendar day unless otherwise stated.

1.2.10 KNOWLEDGE

The terms "knowledge," "recognize" and "discover," their respective derivatives and similar terms in the Contract Documents, as used in reference to the Contractor, shall be interpreted to mean that which the contractor knows or should know, recognizes or should know, recognizes or should recognize and discovers or should discover in exercising the care, skill, and diligence of a diligent and prudent contractor familiar with the work. Analogously, the expression "reasonably inferable" and similar terms in the Contract Documents shall be interpreted to mean reasonably inferable by a diligent and prudent contractor familiar with the work.

1.2.11 PUNCH LIST

"Punch list" means the list of items, prepared in connection with the inspection of the Project by the Owner's Representative in connection with Substantial Completion of the Work or a Portion of the Work, which the Owner's Representative has designated as remaining to be performed, completed or corrected before the Work will be accepted by the Owner.

1.2.12 CHANGE ORDER

The Contract may be amended or modified without invalidating the Contract, only by a Change Order, subject to the limitations in Article 7 and elsewhere in the contract documents. A change Order is a written instrument signed by the Owner and the Contractor stating their agreement to a change in the Work, the amount of the adjustment to the Contract Sum, if any, and the extent of the adjustment to the Contract Time, if any. Agreement to any Change Order shall constitute a final settlement of all matters relating to the change in the work which is the subject of the Change Order, including, but not limited to, all direct and indirect costs associated with such change and any and all adjustments of the Contract sum, time and schedule.

1.2.13 SUBSTANTIAL COMPLETION

The terms "Substantial Completion" or "substantially complete" as used herein shall be construed to mean the completion of the entire Work, including all submittals required under the contract Documents, except minor items which in the opinion of the Owner's Representative will not interfere with the complete and satisfactory use of the facilities for the purposes intended.

1.2.14 FINAL COMPLETION

The date when all punch list items are completed, including all closeout submittals and approval by the Engineer is given to the Owner in writing.

1.2.15 SUPPLEMENTAL AND SPECIAL CONDITIONS

The terms "Supplemental Conditions" or "Special Conditions" shall mean the part of the Contract

Documents, which amend, supplement, delete from, or add to these General Conditions.

1.2.16 MINORITY BUSINESS ENTERPRISE

Minority Business Enterprise [MBE] shall mean a business concern which is at least fifty-one percent (51%) owned by one (1) or more minorities as defined below or, in the case of any publicly-owned business, in which at least fifty-one percent (51%) of the stock of which is owned by one (1) or more minorities as defined below, and whose management and daily business operations are controlled by one (1) or more minorities as defined herein.

- .1 "African American", which includes persons having origins in any of the black racial groups of Africa.
- .2 "Hispanic Americans", which includes persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.
- .3 "Native Americans", which includes persons of American Indian, Eskimo, Aleut, or Native Hawaiian origin.
- .4 "Asian-Pacific Americans", which includes persons whose origins are from Japan, China, Taiwan, Korea, Vietnam, Laos, Cambodia, the Philippines, Samoa, Guam, the U.S Trust territories of the Pacific, or the northern Marinas.
- .5 "Asian-Indian Americans", which includes persons whose origins are from India, Pakistan, or Bangladesh.

1.2.17 WOMEN BUSINESS ENTERPRISE

Women Business Enterprise [WBE] shall mean a business concern which is at least fifty-one percent (51%) owned y one (1) or more women or, in the case of any publicly-owned business, in which at least fifty-one percent (51%) of the stock of which is owned by one (1) or more women, and whose management and daily business operations are controlled by one (1) or more women.

1.2.18 BUILDING COMMISSIONING

Building Commissioning shall mean the verification by Owner or its separate contractors that building systems are installed in accordance with the plans and specifications and will meet the minimum operational and environmental characteristics indicated in the Contract Documents, commissioning plan and submittals. Building Commissioning shall be conducted in accordance with the commissioning plan. Contractor support of the Building Commissioning, where required, shall be a part of the Work of this Contract.

1.3 INTERPRETATION OF CONTRACT REQUIREMENTS

- **1.3.1** Conflicts: In the event of conflict in the contract documents, the priorities stated below shall govern.
 - **1.3.1.1** Addenda shall govern over all other contract documents and subsequent addenda shall govern over prior addenda only to the extent modified.
 - **1.3.1.2** In case of conflict between plans and specifications, the specifications shall govern.
 - **1.3.1.3** Conflicts within the plans:

- a) Schedules, when identified as such, shall govern over all other portions of the plans.
- b) Specific notes shall govern over all other notes and all other portions of the plans except the schedules described in Article 5.01-b (3)(a), above.
- c) Larger scale drawing shall govern over smaller scale drawings.
- d) Figured or numerical dimensions shall govern over dimensions obtained by scaling.
- **1.3.1.4** Conflicts within the specifications:
 - "Contract General Conditions" shall govern over all sections of the specifications except for specific modifications thereto that may be stated in the Supplementary General Conditions or addenda. Now other section of the specifications shall modify the Contract General Conditions.
- **1.3.1.5** In the event that provisions of codes, safety orders, contract documents, referenced manufacturers specifications or industry standards are in conflict, the more restrictive or higher quality shall govern.
- **1.3.2 Omissions:** In the event of omissions in the contract documents, the following shall apply:
 - 1.3.2.1 If the contract documents are not complete as to any minor detail of a required construction system or with regard to the manner of combining or installing of parts, materials, or equipment, but there exists an accepted trade standard for good and skillful construction, such detail shall be deemed to be an implied requirement of the contract documents in accordance with such standard. "Minor Detail" shall include the concept of substantially identical components, where the price of each such component is small even through the aggregate cost or importance is substantial, and shall include a single component that is incidental, even though its cost or importance may be substantial.
 - 1.3.2.2 The quality and quantity of the parts or material so supplied shall conform to trade standards and be compatible with the type, composition, strength, size, and profile of the parts of materials otherwise set forth in the contract documents.

1.4 EXECUTION OR CONTRACT DOCUMENTS

- 1.4.1 Execution of the Contract by the Contractor is a representation that the Contractor has visited the site, become familiar with local conditions under which the Work is to be performed and correlated personal observations with requirements of the Contract Documents. Contractor represents that is has performed its own investigation and examination of the Work site and its surrounding and satisfied itself before entering into this contract as to:
 - .1 conditions bearing upon transportation, disposal, handling, and storage of materials;
 - .2 the availability of labor, materials, equipment, water, electrical power, utilities and roads;
 - .3 uncertainties of weather, river stages, flooding and similar characteristics of the site;
 - .4 conditions bearing upon security and protection of material, equipment, and Work in progress;
 - .5 the form and nature of the Work site, including the surface and sub-surface conditions;

- .6 the extent and nature of Work and materials necessary for the execution of the Work and the remedying of any defects therein; and
- .7 the means of access to the site and the accommodations it may require and, in general, shall be deemed to have obtained all information as to risks, contingencies and other circumstances.
- 1.4.2 The Owner assumes no responsibility or liability for the physical conditions or safety of the Work site of any improvements located on the Work site. The Contractor shall be solely responsible for providing a safe place for the performance of the work. The Owner shall not be required to make any adjustment in either the contract Sum or Contract Time concerning any failure by the Contractor or any Subcontractor to comply with the requirements of this Paragraph.
- **1.4.3** Drawings, specifications, and copies thereof furnished by the Owner are and shall remain the Owner's property. They are not to be used on another project and, with the exception of one contract set for each party to the Contract, shall be returned to the Owner's Representative on request, at the completion of the Work.

1.4.4 REQUIRED PROVISIONS DEEMED INSERTED

Each and every provision of law and clause required by law to be inserted in this Contract shall be read and enforced as though it were included herein; and if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the written application of either party the Contract shall forthwith be physically amended to make such insertion or correction.

1.5 OWNERSHIP AND USE OF ENGINEER'S DRAWINGS, SPECIFICATIONS, AND OTHER DOCUMENTS INSTRUMENTS OF SERVICE

1.5.1 In the event of inconsistencies within or between parts of the Contract Documents, or between the Contract Documents and applicable standards, codes and ordinances, the Contractor shall (1) provide the better quality or greater quantity of Work or (2) comply with the more stringent requirement; either or both in accordance with the Owner's Representative's interpretation. On the Drawings, given dimensions shall take precedence over scaled measurements, and large scale drawings over small-scale drawings. Before ordering any materials or doing-any Work, the Contractor and each Subcontractor shall be submitted to the Contractor and each Subcontractor shall verify measurements at the Work site and shall be responsible for the correctness of such measurements. Any difference, which may be found, shall be submitted to the Owner's Representative for resolution before proceeding with the Work. If a minor change in the Work is found necessary due to actual field conditions, the Contractor shall submit detailed drawings of such departure for the approval by the Owner's Representative before making the change.

ARTICLE 2: OWNER

2.1 GENERAL

- 2.1.1 The Owner is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Owner shall designate in writing a representative who shall have express authority to bind the Owner with respect to all matters requiring the Owner's approval or authorization. Except as otherwise provided, the Engineer does not have such authority. The term "Owner" means the Owner or the Owner's authorized representative.
- **2.1.2** The Owner shall furnish to the Contractor within 15 days after receipt of a written request, information necessary and relevant for the Contractor to evaluate, give notice of or enforce mechanic's lien rights.

2.2 INFORMATION AND SERVICES REQUIRED OF THE OWNER

- **2.2.1** Except for permits and fees which are the responsibility of the Contractor under the Contract Documents, the Owner shall secure and pay for necessary approvals, easements, test and balance, assessments and charges required for construction, use or occupancy of permanent structures or for permanent changes in existing facilities.
- 2.2.2 The Owner shall furnish surveys describing physical characteristics, legal limitations and utility locations for the site of the Project, and a legal description of the site. Data in the Contract Documents concerning lot size, ground elevations, present obstructions on or near the site, locations and depths of sewers, conduits, pipes, wires, etc., position of sidewalks, curbs, pavements, etc., and nature of ground and subsurface conditions have been obtained from sources the Owner believes reliable, but the Owner does not represent or warrant that this information is accurate or complete. The Contractor shall verify such data to the extent possible through normal construction procedures, including but not limited to contracting utility owners and by prospecting.
- 2.2.3 Information or services required of the Owner by the Contract Documents shall be furnished by the Owner with reasonable promptness. Any other information or services relevant to the Contractor's performance of the Work under the Owner's control shall be furnished by the Owner after receipt from the Contractor of a written request for such information or services.
- **2.2.4** Unless otherwise provided in the Contract Documents, the Contractor will be furnished, free of charge, such copies of Drawings and Project manuals as are reasonably necessary for execution of the Work

2.3 OWNER'S RIGHT TO STOP THE WORK

2.3.1 If the Contractor fails to perform or correct Work which is not in accordance with the requirements of the Contract Documents, fails to supply adequate working force (number and skill level), fails to supply material of proper quality, or fails to carry out Work in accordance with the Contract Documents, the Owner may issue a written order to the Contractor to stop the work, or any portion thereof, until the cause for such order has been eliminated; however, the

right of the Owner to stop the Work shall not give rise to a duty on the part of the owner to exercise this right for the benefit of the Contractor or any other person or entity except to the extent required by Subparagraph 6.1.3..

2.4 OWNER'S RIGHT TO CARRY OUT THE WORK

- 2.4.1 If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a seven (7) day period after receipt of a written notice from the Owner to correct such default or neglect, the Owner may, without prejudice to other remedies the Owner may have, correct such default or neglect. In such case, an appropriate Change Order shall be issued deducting from payments then or thereafter due the Contractor the cost of correcting such deficiencies, including compensation for the Owner's additional services and expenses made necessary by such default or neglect. If payments then or thereafter due the Contractor are not sufficient to cover such amounts, the Contractor shall pay the differences to Owner.
- 2.4.2 In the event the Contractor has not satisfactorily completed all items on the Punch List by the Final Completion Date, the Owner reserves the right to complete the Punch List without further notice to the Contractor or its surety. In such case, Owner shall be entitled to deduct from payments then or thereafter due the Contractor the cost of completing the Punch List items. If payments then or thereafter due Contractor are not sufficient to cover such amounts, the Contractor shall pay the difference to Owner.

2.5 EXTENT OF OWNER'S RIGHTS

- 2.5.1 The rights stated in this Article 2 and elsewhere in the Contract Documents are cumulative and not in limitation of any rights of the Owner (1) granted in the Contract Documents, (2) at law or (3) in equity.
- 2.5.2 In no event shall the Owner have control over, charge of, or any responsibility for construction means, methods, techniques, sequences or procedures or for safety precautions and programs in connection with the Work, notwithstanding any of the rights and authority granted the Owner in the Contract Documents.

ARTICLE 3: CONTRACTOR

3.1 GENERAL

- **3.1.1** The Contractor is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number.
- **3.1.2** The Contractor shall perform the Work in accordance with the Contract Documents.
- **3.1.3** The Contractor shall not be relieved of obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Owner in the Owner's administration of the Contract, or by tests, inspections or approvals required or performed by persons other than the Contractor.
- 3.1.4 During the progress of the Work, Contractor shall verify all field measurements prior to fabrication of building components or equipment, and proceed with the fabrication to meet field conditions. Contractor shall prepare coordination drawings to ensure the proper fitting of the Work in place. Contractor shall consult all Contract Documents to determine the exact location of all work and verify spatial relationships to all work. Any question concerning the location or spatial relationship shall be submitted to the Owner. Specific locations for equipment, pipelines, ductwork and other such items of work, where not dimensioned on plans, shall be determined in consultation with the Owner.

3.2 REVIEW OF CONTRACT DOCUMENTS AND FIELD CONDITIONS BY CONTRACTOR

- 3.2.1 Since the Contract Documents are complementary, before starting each portion of the Work, the Contractor shall carefully study and compare the various Contractor's coordination drawings as required and other Contract Documents relative to that portion of the Work, as well as the information furnished by the Owner pursuant to Subparagraph 2.2.3, shall take field measurements of any existing conditions related to that portion of the Work and shall observe any conditions at the site affecting it. These obligations are for the purpose of facilitating construction by the Contractor and are not for the purpose of discovering errors, omissions, or inconsistencies in the Contract Documents; however, any errors, inconsistencies or omissions discovered by the Contractor shall be reported promptly, so as not to delay progress of the work, to the Owner as a request for information in such form as the Owner may require. If the Contractor performs any construction activity which it knows or should have known involves a recognized error, inconsistency or omission in the Contract Documents without such written notice to the Owner, the Contractor shall assume appropriate responsibility for such performance and shall bear an appropriate amount of the attributable costs for correction.
- 3.2.2 The Contractor shall be responsible for preparing construction coordination and construction assembly drawings to plan the Work and proper fitting of the Work. The Contractor shall coordinate all construction operations, all subcontractors, all material suppliers and all work for this project to insure the efficient and orderly installation of all work so as to produce a high quality project that complies with the contract documents. Specific locations for partitions,

structure, equipment, pipelines, ductwork, and all other such items of Work, both above ceilings, below slabs and in the useable spaces shall be indicated. The best sequence of Work shall be considered. During the process of preparing the drawings, the contractor shall verify all field dimensions and measurements prior to fabricating and installation of Work. The contractor shall consult all Contract Documents to determine the location of all Work and to verify spatial relationships of the Work. The purpose of assembling these drawings is to coordinate the location and installation sequence of Work, to avoid waste and loss, but not to perform design functions. Any questions and conflicts shall be brought to the attention of the Owner for resolution before Work proceeds. Reasonable time for this Work shall be included in the Contract Time.

- 3.2.3 Any design inconsistencies, errors or omissions noted by the Contractor during this review shall be reported promptly, so as not to delay the progress of the Work, to the Owner, but it is recognized that the Contractor's review is made in the Contractor's capacity as a contractor and not as a licensed design professional unless otherwise specifically provided in the Contract Documents. The Contractor is not required, but shall use best efforts to ascertain that the Contract Documents are in accordance with applicable laws, statutes, ordinances, building codes, and rules and regulations, but any nonconformity discovered by or made known to the Contractor shall be reported promptly to the Owner.
- 3.2.4 If the Contractor performs any construction activity which it knows involves a recognized error, inconsistency, or omission in the Contract Documents without such written notice to the Owner, the Contractor shall assume appropriate responsibility for such performance and shall bear an appropriate amount of the attributable costs for correction. The Contractor shall not be liable to the Owner for damages resulting from errors, inconsistencies or omissions in the Contract Documents or for differences between field measurements or conditions and the Contract Documents unless the Contractor recognized such error, inconsistency, omission or difference and knowingly failed to report it to the Owner.
- 3.2.5 If the Contractor believes that additional cost or time is involved because of clarifications or instructions issued by the Owner in response to the Contractor's notices or requests for information, the Contractor shall make Claims. If the Contractor fails to perform the obligations of Subparagraphs 3.2.1 and 3.2.2 and 3.2.3, the Contractor shall pay such costs and damages to the Owner as would have been avoided if the Contractor had performed such obligations.

3.3 SUPERVISION AND CONSTRUCTION PROCEDURES

3.3.1 The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for job site safety, and have control over construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract, unless the Contract Documents give other specific instructions concerning these matters. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences or procedures, the Contractor shall evaluate the job site safety and, shall be fully and solely responsible for the jobsite safety of such means, methods, techniques, sequences or procedures. If the Contractor determines that such means, methods, techniques, sequences or procedures may not be safe, the Contractor shall give timely written notice to the Owner and shall not proceed with that portion of the Work

without further written instructions from the Owner. If the Contractor is then instructed to proceed with the required means, methods, techniques, sequences or procedures without acceptance of changes proposed by the Contractor, the Owner shall be solely responsible for any resulting loss or damage.

- 3.3.2 The Contractor shall be responsible to the Owner for acts and omissions of the Contractor's employees, Subcontractors and their agents and employees, and other persons or entities performing portions of the Work for or on behalf of the Contractor or any of its Subcontractors. The Contractor shall supply sufficient and competent supervision and personnel, and sufficient material, plant, and equipment to prosecute the Work with diligence to ensure completion within the time specified in the Contract Documents.
- 3.3.3 The Contractor shall be represented at the site by a competent superintendent from the beginning of the Work, who shall not be reassigned until its final acceptance, unless otherwise permitted in writing by the Owner. The superintendent for the Contractor shall exercise general supervision over the Work and such superintendent shall have decision-making authority of the Contractor.
- **3.3.4** Communications given to the superintendent shall be binding as if given to the Contractor. These communications shall be provided in writing to the superintendent, with a copy to the Contractor.
- **3.3.5** The Contractor shall be responsible for inspection of portions of Work already performed to determine that such portions are in proper condition to receive subsequent Work.
- 3.3.6 The Contractor's scheduled outage/tie-in plan, time, and date is subject to approval by the Owner. Failure of Contractor to secure Owner's approval shall cause the Contractor to waive any right to an adjustment of the Contract Sum or Contract Time for any postponement, rescheduling or other delays ordered by Owner in connection with such Work. Owner's approval shall not be unreasonably withheld.
- 3.3.7 The Contractor shall coordinate all Work so there shall be no prolonged interruption of existing utilities, systems and equipment of Owner. Any existing plumbing, heating, ventilating, air conditioning, or electrical disconnection necessary, which affect portions of this construction or building or any other building, must be scheduled with the Owner to avoid any disruption of operation within the building under construction or other buildings or utilities. In no case shall utilities be left disconnected at the end of a workday or over a weekend. Any interruption of utilities, either intentionally or accidentally, shall not relieve the Contractor from repairing and restoring the utility to normal service. Repairs and restoration shall be made before the workers responsible for the repair and restoration leave the job.
- 3.3.8 The Contractor shall be responsible for repair of damage to property caused by the Contractor on or off the project occurring during construction of the project, and all such repairs shall be make to meet code requirements or to the satisfaction of the Owner if code is not applicable, if possible, given the availability of parts, equipment and services necessary to effect the repair/restoration. Cost of expediting repair/restoration shall be the Contractor's provided the cause of the accidental interruption is the Contractor's.

3.4 USE OF SITE

- 3.4.1 The Contractor shall limit operations and storage of material to the area within the Work limit lines shown on Drawings, except as necessary to connect to existing utilities, shall not encroach on neighboring property, and shall exercise caution to prevent damage to existing structures.
- 3.4.2 The Contractor shall ensure that the Work is at all times performed in a manner that affords reasonable access, both vehicular and pedestrian, to the site of the Work and all adjacent areas. The Work shall be performed in such a manner that public areas adjacent to the site of the Work shall be free from all debris, building materials and equipment likely to cause hazardous conditions. Without limitations of any other provision of the Contract Documents, Contractor shall not interfere with the occupancy or beneficial use of (1) any areas and buildings adjacent to the site of the Work or (2) the work in the event of partial occupancy. Owner may agree, in writing, to disruption of adjacent buildings, if necessary to properly perform the Work. Contractor shall assume full responsibility for any damage to the property comprising the work or to the owner or occupant of any adjacent land or areas resulting from the performance of the Work.
- 3.4.3 The Contractor shall not permit any workers to use existing facilities at the Work site, including, without limitation, lavatories, toilets, entrances and parking areas other than those designated by Owner. The Contractor, Subcontractor of any tier, suppliers and employees shall comply with instructions or regulations of the Owner's governing access to, operation of, and conduct while in or on the premises and shall perform all Work required under the contract Documents in such a manner as not to unreasonably interrupt or interfere with the conduct of Owner's operations. Any request for Work, a suspension of Work or any other request or directive received by the Contractor from occupants of existing buildings shall be referred to the Owner for determination.
- 3.4.4 The Contractor shall keep the Work site and surrounding areas free from accumulation of waste materials, rubbish, debris, and dirt resulting from the Work and shall clean the Work site and surrounding areas as requested by the Owner. The Contractor shall be responsible for clean up and removal of debris from premises. The building and premises shall be kept clean, safe, in workmanlike manner, in compliance with OSHA standards at all times. At completion of the Work, the Contractor shall remove from and about the Work site tools, construction equipment, machinery, fencing, and surplus materials. Further, at the completion of the work, all dirt, stains, and smudges shall be removed from every part of the building, all glass in doors and windows shall be washed, and entire Work shall be left broom clean in a finished state ready for occupancy. If the Contractor fails to comply with the provisions of this paragraph, the Owner may do so, upon proper notice, and the cost shall be charged to the Contractor.

3.5 LABOR AND MATERIALS

- 3.5.1 Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.
- 3.5.2 The Contractor may make substitutions only with the consent of the Owner, after evaluation by the Owner and in accordance with a Change Order, as set forth in Section 3.13.

3.5.3 The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Contract. The Contractor shall not permit employment of unfit persons or persons not skilled in tasks assigned to them.

3.6 WARRANTY

- 3.6.1 The Contractor warrants to the Owner that materials and equipment furnished under the Contract will be of good quality and new unless otherwise required or permitted by the Contract Documents, that the Work will be free from defects not inherent in the quality required or permitted, and that the Work will confirm to the requirements of the Contract Documents for a period of twelve months after Substantial Completion or specific acceptance as provided in this Contract. Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. The Contractor's warranty excludes remedy for damage or defect caused by abuse, modifications not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage. If required by the Owner, the Contractor shall furnish satisfactory evidence as the kind and quality of materials and equipment. Should the Contractor fail or refuse to make the necessary repairs, replacements, and tests when requested by the Owner or Owner, the Owner may perform, or cause the necessary work and tests to be performed, at the Contractor's expense, or exercise the Owner's rights under Article 14.
- 3.6.2 Neither the final payment nor any provision in the Contract Documents nor partial or entire occupancy of the premises by the Owner, nor expiration of warranty stated herein, will constitute an acceptance of Work not done in accordance with the Contract Documents or relieve the Contractor of liability in respect to any responsibility for non-conforming work. The Contractor shall immediately remedy any defects in the Work and pay for any resulting damage upon written notice from the Owner. Should the Contractor fail or refuse to remedy the non-conforming work, the Owner may perform, or cause to be performed the work necessary to bring the work into conformance with the Contract Documents at the Contractor's expense.

3.7 TAXES

- 3.7.1 The Contractor shall pay sales, consumer, use and similar taxes for the Work provided by the Contractor which are legally enacted when bids are received or negotiations concluded, whether or not yet effective or merely scheduled to go into effect.
- 3.7.2 The Contractor will comply with the requirements of the State of New Mexico Gross Receipts Law and all amendments to same and will require all subcontractors to comply with the same.

3.8 PERMITS, FEES, AND NOTICES

3.8.1 The Contractor will procure all certificates of inspection, use occupancy, permits and licenses, pay all charges and fees and give all notices necessary and incidental to the due and lawful prosecution of the Work. Certificates of inspection, use and occupancy will be delivered to the Owner upon completion of the Work in sufficient time for occupation of the Project in accordance with the approved schedule for the Work. A photocopy of the building permit will be delivered to the Owner as soon as it is obtained. Upon final completion, the Contractor will deliver all original permits, licenses, and certificates to the Owner and will deliver photocopies to the Owner. The costs of such procurement, payment and delivery are included within the

Contract Sum. If a change Order affects any applicable Building Codes for the Project, new drawings will be submitted by the Contractor to proper authorities for approval. The Contractor will alert the Owner of the need for additional drawings if the Contractor knows that additional drawings will be needed to submit to appropriate governmental authorities for approval.

- **3.8.2** The contractor shall comply with and give notices required by laws, regulations and lawful orders of public authorities applicable to performance of the Work.
- 3.8.3 It is not the contractor's responsibility to ascertain that the Contract Documents are in accordance with applicable laws, statutes, ordinances, building codes, and rules and regulations. However, if the Contractor observes that portions of the Contract Documents are at variance therewith, the Contractor shall promptly, so as not to delay the progress of the Work, notify the Owner in writing, and necessary changes shall be accomplished by appropriate Modification.
- **3.8.4** If the Contractor performs Work knowing it to be contrary to laws, statutes, ordinances, building codes, and rules and regulations without such notice to the Owner, the Contractor shall assume full responsibility for such Work and shall bear the costs attributable to correction.

3.9 ALLOWANCES

- 3.9.1 The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. Items covered by allowances shall be supplied for such amounts and by such persons or entities as the Owner may direct, but the Contractor shall not be required to employ persons or entities to whom the Contractor has reasonable objection.
- **3.9.2** Unless otherwise provided in the Contract Documents:
 - .1 allowances shall cover the cost to the Contractor of materials and equipment delivered at the site and all required taxes, less applicable trade discount;
 - .2 contractor's costs for unloading and handling at the site, labor, installation costs, overhead, profit, and other expenses contemplated for stated allowance amounts shall be included in the Contract Sum but not in the allowances;
 - .3 whenever costs are more than or less than allowances, the Contract Sum shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect (1) the difference between actual cost and the allowances under Clause 3.9.2.1 and (2) changes in Contractor's costs under Clause 3.9.2.2.
- **3.9.3** Materials and equipment under an allowance shall be selected by the Owner in sufficient time to avoid delay in the Work.

3.10 CONTRACTOR'S CONSTRUCTION SCHEDULES

3.10.1 The Contractor, within fifteen (15) days after issuance of Notice to Proceed, shall prepare and submit for the Owner's information a Contractor's construction schedule for the Work. The schedule shall not exceed time limits current under the Contract Documents, shall be revised at appropriate intervals as required by the conditions of the Work and Project, shall include a

- critical path schedule, shall be related to the entire Project to the extent required by the Contract Documents, and shall provide for expeditious and practicable execution of the Work.
- **3.10.2** The Contractor shall prepare and keep current, for the Owner's approval, a schedule of submittals that is coordinated with the Contractor's construction schedule and allows the Owner reasonable time to review submittals.
- **3.10.3** The Contractor shall perform the Work in general accordance with the most recent schedules submitted to the Owner.
- 3.10.4 In the event the Owner determines that the performance of the Work, as of a Owner specified completion date as identified in the Construction Documents, is not progressing or reached the level of completion required by the Contract Documents, the Owner shall have the right to order the Contractor to take corrective measures necessary to expedite the progress of construction, including, without limitation, (1) working additional shifts or overtime, (2) supplying additional manpower, equipment, facilities, (3) expediting delivery of materials, and (4) other similar measures. Such corrective measures shall continue until the progress of the Work complies with the stage of completion required by the Construction Documents. The Owner's right to require corrective measures is solely for the purpose of ensuring the Contractor's compliance with the construction schedule. The Contractor shall not be entitled to an adjustment in the Contract Sum specific to these corrective measures.

3.11 DOCUMENTS AND SAMPLES AT THE SITE

3.11.1 The Contractor shall maintain at the site for the Owner one record copy of the Drawings, Specifications, Addenda, Change Orders and other Modifications, in good order and marked currently to record field changes and selections made during construction, and one record copy of approved Shop Drawings, Product Data, Samples and similar required submittals. These shall be available to the Owner and shall be delivered to the Owner upon completion of the Work.

3.12 SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES

- **3.12.1** Shop Drawings are drawings, diagrams, schedules and other data specially prepared for the Work by the Contractor or a Subcontractor, Sub-subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.
- **3.12.2** Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.
- **3.12.3** Samples are physical examples, which illustrate materials, equipment or workmanship and establish standards by which the Work will be judged.
- **3.12.4** Shop Drawings, Product Data, Samples and similar submittals are not Contract Documents. The purpose of their submittal is to demonstrate for those portions of the Work for which submittals are required by the Contract Documents the way by which the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents.

Informational submittals upon which the Owner is not expected to take responsive action may be so identified in the Contract Documents. Submittals which are not required by the Contract Documents may be returned by the Owner without action.

- 3.12.5 The Contractor shall review for compliance with the Contract Drawings, approve and submit to the Owner Shop Drawings, Product Data, Samples and similar submittals required by the Contract Documents with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of the Owner or of separate contractors. Submittals which are not marked as reviewed for compliance with the Contract Documents and approved by the Contractor may be returned by the Owner without action.
- 3.12.6 By approving and submitting Shop Drawings, Product Data, Samples and similar submittals, the Contractor represents that the Contractor has determined and verified materials, field measurements and field construction criteria related thereto, or will do so, and has checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Drawings.
- **3.12.7** The Contractor shall perform no portion of the Work for which the Contract Documents require submittal and review of Shop Drawings, Product Data, Samples or similar submittals until the respective submittal has been approved by the Owner.
- 3.12.8 The Work shall be in accordance with approved submittals: except that the Contractor shall not be relieved of responsibility for deviations from requirements of the Contract Documents by the Owner's approval of Shop Drawings, Product Data, Samples or similar submittals unless the Contract has specifically informed the Owner in writing of such deviation at the time of submittal and (1) the Owner has given written approval to the specific deviation as a minor change in the Work, or (2) a Change Order or Construction Change Directive has been issued authorizing the deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples or similar submittals by the Owner's approval thereof.
- **3.12.9** The Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data, Samples or similar submittals, to revisions other than those requested by the Owner on previous submittals. In the absence of such written notice the Owner's approval of a resubmission shall not apply to such revisions.
- 3.12.10 The Contractor shall not be required to provide professional services which constitute the practice of architecture or engineering unless such services are specifically required by the Contract Documents for a portion of the work or unless the Contractor needs to provide such services in order to carry out the Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. The Contractor shall not be required to provide professional services in violation of applicable law. If professional design services or certification by a design professional related to systems, materials or equipment are specifically required of the Contractor by the Contract Documents, the Owner will specify all performance and design criteria that such services must satisfy. The Contractor shall cause such services or certifications to be provided by a properly licensed design professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings and

other submittals prepared by such professional. Shop Drawings and other submittals related to the work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to the Owner. The Owner shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications and approvals performed by such design professionals, provided the Owner have specified to the Contractor all performance and design criteria that such services must satisfy. The Owner will review, approve or take other appropriate action on submittals only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Contractor shall not be responsible for the adequacy of the performance or design criteria required by the Contract Documents.

3.13 SUBSTITUTIONS

- **3.13.1** A substitution is a Contractor proposal of an alternate product or method in lieu of has been specified or shown in the Contract Documents.
- **3.13.2** Contractor may make a proposal to the Owner's Representative to use substitute products or methods as set forth herein, but the Owner's Representative's decision concerning acceptance of a substitute shall be final. The Contractor must do so in writing and setting forth the following:
 - .1 full explanation of the proposed substitution and submittal of all supporting data including technical information, catalog cuts, warranties, test results, installation instructions, operating procedures, and other like information necessary for a complete evaluation of the substitution.
 - .2 reasons the substitution is advantageous and necessary, including the benefits to the Owner and the Work in the event the substitution is acceptable.
 - .3 the adjustment, if any, in the Contract Sum, in the event the substitution is acceptable.
 - .4 the adjustment, if any, in the time of completion of the Contract and the construction schedule in the event the substitution is acceptable.
 - .5 proposals for substitutions shall be submitted to the Owner in sufficient time to allow the Owner no less than ten (10) working days for review. No substitution will be considered or allowed without the Contractor's submittal of complete substantiating data and information as stated herein.
- **3.13.3** Substitutions may be rejected at the Owner's sole discretion
- **3.13.4** Whether or not any proposed substitution is accepted by the Owner, the Contractor shall reimburse the Owner for any additional service fees charged by the Engineer or other consultants for evaluating each proposed substitute if the substitution is made after the submittal process has been completed.

3.14 CUTTING AND PATCHING

3.14.1 The Contractor shall be responsible for cutting, fitting or patching required to complete the Work or to make its parts fit together properly.

3.14.2 The Contractor shall not damage or endanger a portion of the Work or fully or partially completed construction by the Owner or separate contractors by cutting, patching or otherwise altering such construction, or by excavation. The Contractor shall not cut or otherwise alter such construction by the Owner or a separate contractor except with written consent of the Owner and of such separate contractor; such consent shall not be unreasonably withheld. The Contractor shall not unreasonably withhold from the Owner or a separate contractor the Contractor's consent to cutting or otherwise altering the Work.

3.15 ROYALTIES, PATENTS, AND COPYRIGHTS

3.15.1 The Contractor shall pay all royalties and license fees. The Contractor shall defend suits or claims for infringement of copyrights and patent rights and shall hold the Owner harmless from loss on account thereof, but shall not be responsible for such defense or loss when a particular design, process or product of a particular manufacturer or manufacturers is required by the Contract Documents or where the copyright violations are contained in Drawings, Specifications or other documents prepared by the Owner. However, if the Contractor has reason to believe that the required design, process or product is an infringement of a copyright or a patent, the Contractor shall be responsible for such loss unless such information is promptly furnished to the Owner.

3.16 INDEMNIFICATION

3.16.1 In claims against any person or entity indemnified under this Paragraph 3.18 by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligation under Subparagraph 3.18.1 shall not be limited by a limitation on amount or type of damages, compensation or benefits payable by or for the Contractor or a Subcontractor under workers' compensation acts, disability benefit acts or other employee benefit acts.

3.17 REPRESENTATIONS AND WARRANTIES

- 3.17.1 The Contractor represents and warrants the following to the Owner (in addition to the other representations and warranties contained in the Contract Documents), as an inducement to the Owner to execute the Owner-Contractor Agreement, which representations and warranties will survive the execution and delivery of the Owner-Contractor Agreement and the final completion of the Work:
 - (a) that the Contractor is financially solvent, able to pay his debts as they mature and possessed of sufficient working capital to complete the Work and perform Contractor's obligations under the Contract Documents;
 - (b) that the Contractor is able to furnish the plant, tools, materials, supplies, equipment and labor required to complete the Work and perform Contractor's obligations hereunder and has sufficient experience and competence to do so;
 - (c) that the Contractor is authorized to do business in the State of New Mexico where the Project is located and properly licensed by all necessary governmental and public and quasi-public authorities having jurisdiction over the Contractor and over the Work and the site of the Project;

- (d) that Contractor's execution of the Owner-Contractor Agreement and Contractor's performance thereof is within Contractor's duly authorized powers; and
- (e) that Contractor's duly authorized representative has visited the site of the Work, familiarized themselves with the local conditions under which the Work is to be performed, and correlated their observations with the requirements of the Contract Documents.

3.18 SUBSURFACE UTILITIES

3.18.1 Owner will comply with NMSA 1978, Chapter 62, Article 14 (the New Mexico Excavation Law) by performing utility spotting activities or by employing a qualified utility spotting company, or both. The Owner will provide the latest and best underground utility information available regarding the campus in the form of Utility Mapping Drawings. In addition, the Contractor shall perform utility spotting work. The Contractor shall locate, spot and find all utilities within the project boundaries or affected by the project. The Contractor shall repair any and all damaged utilities caused by excavation and spotting activities. Costs for this work shall be included in the Contract Price. Owner will not recognize claims for spotting or repairing concealed or unknown subsurface utilities. The Owner will process an appropriate Change Order if concealed or unknown subsurface utilities must be relocated in order to construct the project as indicated in the Contract Documents.

ARTICLE 4: ADMINISTRATION OF THE CONTRACT

4.1 ENGINEER

- **4.1.1** The Engineer is the person lawfully licensed to practice Engineering/architecture or an entity lawfully practicing engineering/architecture identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The term "Engineer" means the Engineer or the Engineer's authorized representative.
- **4.1.2** Owner reserves the right to appoint a representative empowered to act for Owner during the administration of the Contract with such duties and responsibilities as set forth in a written notice to Contractor.
- **4.1.3** Owner may employ or retain any licensed Engineer to perform any part of the duties or responsibilities of the Engineer hereunder or perform them through Owner's representative. In the event that employment of the Engineer is terminated, Owner will give prompt written notice to the Contractor of the termination and the scope of the Engineer's duties to be assumed by a replacement Engineer or the Owner's representative.

4.2 ENGINEER'S ADMINISTRATION OF THE CONTRACT

- 4.2.1 The Engineer will provide administration of the Contract as described in the Contract Documents, and will be an Owner's representative (1) during construction, (2) until final payment is due and (3) with the Owner's concurrence, from time to time during the one-year period for correction of Work described in Paragraph 12.2. The Engineer will have authority to act on behalf of the Owner only to the extent provided in the Contract Documents, unless otherwise modified in writing in accordance with other provisions of the Contract.
- 4.2.2 The Engineer, as a representative of the Owner, will visit the site at intervals appropriate to the stage of the Contractor's operations (1) to become familiar with and to keep the Owner informed about the progress and quality of the Work, (2) to use best efforts to guard the Owner against defects and deficiencies in the Work, (3) to determine if the Work is proceeding in accordance with the Contract Documents; and (4) cause Engineer's Consultants to perform observations necessary to determine that key components of the Work are being carried out in accordance with the Contract Documents . If Engineer or its Consultants becomes aware of the failure of Contractor, Subcontractor or any other persons performing any of the Work not in accordance with the Contract Documents the Engineer shall promptly notify Owner.
- **4.2.3** The duties and responsibilities of the Engineer set forth in Subparagraph 4.2.2 are solely for the benefit of the Owner, and the Engineer's performance or non-performance of its obligations under Subparagraph 4.2.2 shall not relieve the Contractor of its responsibility to perform the Work in accordance with the Contract Documents. The Engineer will not have control over or

- charge of and will not be responsible for acts or omissions of the Contractor, Subcontractors, or their agents or employees, or any other persons or entities performing portions of the Work.
- 4.2.4 Communications Facilitating Contract Administration. Except as otherwise provided in the Contract Documents or when direct communications have been specially authorized or requested by the Owner, the Owner and Contractor shall communicate with each other through the Engineer about matters arising out of or relating to the Contract. Communications by and with the Engineer's consultants shall be through the Engineer. Communications by and with Subcontractors and material suppliers shall be through the Contractor. Communications by and with separate contractors shall be through the Owner.
- **4.2.5** Based on the Engineer's evaluations of the progress and quality of the Work, Contractor's Applications for Payment and all other information available to the Engineer, the Engineer shall within three (3) business days of receipt of a properly executed Application for Payment certify to the Owner the undisputed amount recommended for payment to the Contractor.
- 4.2.6 The Engineer will have authority to reject Work that does not conform to the Contract Documents, and shall do so unless, after consultation with the Owner, Owner instructs otherwise. Whenever the Engineer in the exercise of Engineer's professional opinion considers it necessary or advisable, the Engineer will have authority subject to the Owner's prior approval to require inspection or testing of the Work in accordance with Subparagraphs 13.5.2 and 13.5.3, whether or not such Work is fabricated, installed or completed. However, neither this authority of the Engineer nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Engineer to the Contractor, Subcontractors, material and equipment suppliers, their agents or employees, or other persons or entities performing portions of the Work.
- 4.2.7 The Engineer will promptly review and approve, reject or take other appropriate action upon the Contractor's submittals such as Shop Drawings, Product Data and Samples, but only for the limited purpose of checking for conformance the Contract Documents. Review of such submittals is conducted solely in the interests of the Owner, and shall not relieve the Contractor of responsibility for-determining the accuracy and completeness of other details such as dimensions and quantities, proper fit of portions or components of the Work to each other, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor as required by the Contract Documents. The Engineer's review of the contractor's submittals shall not relieve the Contractor of the obligations under Paragraphs 3.3, 3.5, and 3.12. The Engineer's review shall not constitute approval of safety precautions or, unless otherwise specifically stated by the Engineer, of any construction means, methods, techniques, sequences or procedures. The Engineer's approval of a specific item shall not indicate approval of an assembly of which the item is a component.
- **4.2.8** The Engineer will prepare Change Orders and Construction Change Directives, and may authorize minor changes in the Work as provided in Paragraph 7.4. All Change Orders and Construction Change Directives shall require the approval of the Owner in writing to be binding on the Owner.

- 4.2.9 The Engineer will conduct inspections to make recommendations to the Owner of the date or dates of Substantial Completion and the date of final completion, will receive, approve and forward to the Owner, written warranties and related documents required by the Contract, and will recommend a final Certificate for Payment upon compliance with the requirements of the Contract Documents and the Retainage Act.
- **4.2.10** If the Owner and Engineer agree, the Engineer will provide one or more project representatives to assist in carrying out the Engineer's responsibilities at the site.
- 4.2.11 Subject to the claims procedures set forth in Paragraph 4.3, the Engineer will interpret and decide matters concerning performance under the Contract Documents on written request of either the Owner or Contractor. Upon receipt of such request from either the Owner or Contractor, the Engineer shall promptly notify the non-requesting party of the details of the request. The Engineer's response to the request will be made promptly, and in no event later than 15 days after the date on which such request is made. Delay shall not be recognized on account of failure by the Engineer to furnish such interpretations until 15 days after written request is made for them.
- **4.2.12** Interpretations and decisions of the Engineer will be consistent with Contract Documents and will be in writing or in the form of drawings. When making such interpretations and initial decisions, the Engineer will endeavor to secure faithful performance by both Owner and Contractor, will not show partiality to either and will not be liable for results of interpretations or decisions so rendered in good faith.

4.3 CLAIMS AND DISPUTES

- **4.3.1 Definition:** A Claim is a demand or assertion by one of the parties seeking, as a matter of right, adjustment or interpretation of Contract terms, payment of money, extension of time or other relief with respect to the terms of the Contract. The term "Claim" also includes other disputes and matters in question between the Owner and Contractor arising out of or related to the Contract. Claims must be initiated by written notice. The responsibility to substantiate Claims shall rest with the party making the Claim.
- **4.3.2 Time Limits on Claims:** Claims by Owner or Contractor must be initiated within 14 days after occurrence of the event giving rise to such Claim or within 14 days after the claimant first recognizes the condition giving rise to the Claim, whichever is later. Claims must be initiated by written notice to the Engineer and the other party. Owner, Contractor and Engineer shall cooperate in efforts to mitigate the alleged or potential damages, delay, or other adverse consequences arising out of the condition which is the cause of such Claim.
- **4.3.3 Continuing Contract Performance:** Pending final resolution of a Claim except as otherwise directed by the Owner in writing or as provided in Subparagraph 9.7.1 and Article 14, the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Contract Documents.

- 4.3.4 Claims for Concealed or Unknown Conditions: If conditions are encountered at the site which are (1) subsurface or otherwise concealed physical conditions which differ materially from those indicated in the Contract Documents or (2) unknown physical conditions of an unusual nature, which differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, then notice by the observing party shall be given to the other party promptly before conditions are disturbed and in no event later than 5 days after first observance of the conditions. The Engineer will promptly investigate such conditions and, if they differ materially and cause an increase or decrease in the Contractor's cost of, or time required for, performance of any part of the Work, will notify the Owner and Contractor stating the reasons, request information from the Contractor substantiating such cost and time impacts, and recommend to the Owner an equitable adjustment in the Contract Sum or Contract Time, or both. If the Engineer determines that the conditions at the site are not materially different from those indicated in the Contract Documents and that no change in the terms of the Contract is justified, the Engineer shall so notify the Owner and Contractor in writing, stating the reasons. Claims by either party in opposition to such determination must be made within 14 days after the Engineer has given notice of the decision. If the conditions encountered are materially different, the Contract Sum and Contract Time shall be equitably adjusted, but if the Owner and Contractor cannot agree on an adjustment in the Contract Sum or Contract Time, the adjustment shall be referred to the Engineer for initial determination, subject to further proceedings pursuant to Paragraph 4.4.
- 4.3.5 Claims for Additional Cost: If the Contractor wishes to make Claim for an increase in the Contract Sum, written notice as provided herein shall be given before proceeding to execute the Work. Prior notice is not required for Claims relating to an emergency endangering life or property arising under Paragraph 10.6. Contractor shall, upon recognition of a condition giving rise to a claim for additional cost, establish separate accounting codes or other methods for quantifying the cost or time impact attributable to the Claim. Written notice of the Claims shall itemize the claim and contain sufficient detail, including but not limited to the information required above, to permit evaluation of the claim by the Owner and Engineer. Engineer will give prompt notice to Contractor of inadequacies in the supporting information. No claim for delay shall be recognized for periods of time between the initial assertion of the claim and submission of adequate information for the Owner and Engineer to evaluate the claim or for a period of fifteen (15) days after submission of adequate information for evaluation.
- 4.3.6 If the Contractor believes additional cost is involved for reasons including but not limited to (1) a written interpretation from the Engineer, (2) an order by the Owner to stop the Work where the Contractor was not at fault, (3) a written order for a minor change in the Work issued by the Engineer, (4) unjustified failure of payment by the Owner, (5) termination of the Contract by the Owner, (6) Owner's suspension or (7) other reasonable grounds, Claim shall be filed in accordance with this Paragraph 4.3.

4.3.7 CLAIMS FOR ADDITIONAL TIME

4.3.7.1 If the Contractor wishes to make Claim for an increase in the Contract Time, written notice as provided herein shall be given. The Contractor's Claim shall include an estimate of cost and of probable effect of delay on progress of the Work. In the case of a continuing delay only one Claim is necessary.

- **4.3.7.2** If adverse weather conditions are the basis for a Claim for additional time, such claim shall be documented by U.S. Weather Bureau Climatological Reports for the month(s) involved plus a report indicating the average precipitation, temperature, etc. for the past ten (10) years from the nearest reporting station. The ten-year average shall be the basis for determining the number of adverse weather days that the Contractor should reasonably have anticipated and the conditions the Contractor should reasonably have expected to encounter.
- **4.3.8 Injury or Damage to Person or Property:** If either party to the Contract suffers injury or damage to person or property because of an act or omission of the other party, or of others for whose acts such party is legally responsible, written notice of such injury or damage, whether or not insured, shall be given to the other party within a reasonable time not exceeding seven (7) days after discovery. The notice shall provide sufficient detail to enable the other party to investigate the matter.
- **4.3.9** If unit prices are stated in the contract Documents or subsequently agreed upon, and if quantities originally contemplated are materially changed in a proposed Change Order so that application of such unit prices to quantities of Work proposed will cause substantial inequity to the Owner or Contractor, the applicable unit prices shall be equitably adjusted.
- **4.3.10** Claims for Consequential Damages: The Contractor and Owner waive Claims against each other for consequential damages arising out of or relating to this Contract. This mutual waiver includes:
 - .1 damages incurred by the Owner for rental expenses, for losses of use, income, profit, financing, business and reputation, and for loss of management or employee productivity or of the services of such persons; and
 - .2 damages incurred by the contractor for principal and field office expenses including the compensation of personnel stationed there, for losses of financing, business and reputation, and for loss of profit except anticipated profit arising directly from the Work.

This mutual waiver is applicable, without limitation to all consequential damages due to either party's termination in accordance with Article 14. Nothing contained in this Subparagraph 4.3.10 shall be deemed to preclude an award of liquidated damages, when applicable, in accordance with the requirements of the Contract Documents.

4.4 RESOLUTION OF CLAIMS AND DISPUTES

- **4.4.1 Decision of Engineer:** Claims, including those alleging an error or omission by the Engineer but excluding those arising under Paragraphs 10.3 through 10.5, shall be referred initially to the Engineer for decision. An initial decision by the Engineer shall be required as a condition precedent to mediation, arbitration or litigation of all Claims between the Contractor and Owner arising prior to the date final payment is due, unless 30 days have passed after the Claim has been referred to the Engineer with no decision having been rendered by the Engineer. The Engineer will not decide disputes between the Contractor and persons or entities other than the Owner.
- **4.4.2** The Engineer will review Claims and within ten days of the receipt of the Claim take one or of the following actions: (1) request additional supporting data from the claimant or a response

- with supporting data from the other party, (2) reject the Claim in whole or in part, (3) approve the Claim, or (4) suggest a compromise.
- **4.4.3** In evaluating Claims, the Engineer may, but shall not be obligated to, consult with or seek information from either party or from persons with special knowledge or expertise who may assist the Engineer in rendering a decision. The Engineer may request the Owner to authorize retention of such persons at the Owner's expense.
- 4.4.4 If the Engineer requests a party to provide a response to a Claim or to furnish additional supporting data, such party shall respond, within ten days after receipt of such request, and shall either provide a response on the requested supporting data, advise the Engineer when the response or supporting data will be furnished or advise the Engineer that no supporting data will be furnished. Upon receipt of the response or supporting data, if any, the Engineer will either reject or approve the Claim in whole or in part.
- **4.4.5** The Engineer will approve or reject Claims by written decision, which shall state the reasons therefore and which shall notify the parties of any change in the Contract Sum or Contract Time or both. The approval or rejection of a Claim by the Engineer shall be final and binding on the parties subject to mediation and arbitration.
- 4.4.6 A written decision of the Engineer shall state that (1) the decision is final but subject to mediation and arbitration and (2) a demand for arbitration of a Claim covered by such decision must be made within 30 days after the date on which the party making the demand receives the final written decision. Failure to demand arbitration within said 30 days period shall result in the Engineer's decision becoming final and binding upon the Owner and Contractor. If the Engineer renders a decision after arbitration proceedings have been initiated, such decision may be entered as evidence, but shall not supersede arbitration proceedings unless the decision is acceptable to all parties concerned.
- 4.4.7 Upon receipt of a Claim against the Contractor or at any time thereafter, the Engineer or the Owner may, but is not obligated to, notify the surety, if any, of the nature and amount of the Claim. If the Claim relates to a possibility of a Contractor's default, the Engineer or the Owner may, but is not obligated to, notify the surety and request the surety's assistance in resolving the controversy.
- **4.4.8** If a Claim relates to or is the subject of a mechanic's lien, the party asserting such Claim may proceed in accordance with applicable law to comply with the lien notice or filing deadlines prior to resolution of the Claim by the Engineer, by mediation or by arbitration.

4.5 MEDIATION

4.5.1 Any Claim arising out of or related to the Contract, except Claims waived as provided for in Subparagraphs 4.3.10, 9.10.4 and 9.10.5 shall, after initial decision by the Engineer or 30 days after submission of the Claim to the Engineer, be subject to mediation as a condition precedent to arbitration or the institution of legal or equitable proceedings by either party.

- 4.5.2 The parties shall endeavor to resolve their Claims by mediation which, unless the parties mutually agree otherwise, shall be in accordance with the procedures of the New Mexico Public Works Mediation Act (NMSA § 13-4C-1 et seq.) except that before any party may select a mediator it must confer in good faith with the other party concerning the selection of a mutually acceptable mediator. The request may be made concurrently with the filing of a demand for arbitration but, in such event, mediation shall proceed in advance of arbitration or legal or equitable proceedings, which shall be stayed pending mediation for a period of 60 days from the date of notice of mediation session, unless stayed for a longer period by agreement of the parties or court order.
- **4.5.3** Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof.

4.6 ARBITRATION

- 4.6.1 Any Claim arising out of or related to the Contract, except Claims waived as provided for in Subparagraphs 4.3.10, 9.10.4 and 9.10.5 shall, after decision by the Engineer or 30 days after submission of the Claim to the Engineer, be subject to arbitration. Prior to arbitration, the parties shall endeavor to resolve disputes by mediation in accordance with the provisions of Paragraph 4.5.
- 4.6.2 Claims not resolved by mediation shall be decided by arbitration which, unless the parties mutually agree otherwise, shall be in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association currently in effect. The demand for arbitration shall be filed in writing with the other party to the Contract and with the American Arbitration Association, and a copy shall be filed with the Engineer.
- **4.6.3** A demand for arbitration shall be made within the time limits specified in Subparagraphs 4.4.6 and 4.6.1 as applicable, and in other cases within a reasonable time after the Claim has arisen, and in no event shall it be made after the date when institution of legal or equitable proceedings based on such Claim would be barred by the applicable statute of limitations as determined pursuant to Paragraph 13.7.
- **4.6.4** Claims and Timely Assertion of Claims: The party filing a notice of demand for arbitration must assert in the demand all Claims then known to that part on which arbitration is permitted to be demanded.
- **4.6.5 Judgment on Final Award:** The award rendered by the arbitrator or arbitrators shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof.

ARTICLE 5: SUBCONTRACTORS

5.1 AWARD OF SUBCONTRACTS AND OTHER CONTRACTS FOR PORTIONS OF THE WORK

- 5.1.1 Unless otherwise stated in the Contract Documents or the bidding requirements, the Contractor, as soon as practicable after award of the Contract" shall furnish in writing to the Owner the names of persons or entities (including those who are to furnish materials or equipment fabricated to a special design and where applicable the name of the installing contractor), trades and proposed work scope for each portion of the Work. The Owner will promptly reply to the Contractor in writing stating whether or not the Owner, after due investigation, has reasonable objection to any such proposed person or entity. All Subcontractors must meet all the required contracting licensing and bonding requirements.
- 5.1.2 The Contractor shall not contract with a proposed person or entity to whom the Owner or Engineer has made reasonable and timely objection. The Contractor shall not be required to contract with anyone to whom the Contractor has made reasonable objection.
- **5.1.3** If the Owner or Engineer has reasonable objection to a person or entity proposed by the Contractor, or Subcontractor, the Contractor shall propose another to whom the Owner or Engineer has no reasonable objection.
- 5.1.4 The Contractor shall furnish a complete list of Subcontractors changes, each and every time a proposed change is to be requested by the Contractor. Any substitutions of a Subcontractor will comply with the New Mexico Subcontractor Fair Practices Act to the extent that the Subcontractors Fair Practices Act is applicable. The Contractor shall not substitute a Subcontractor, person or entity previously selected if the Owner makes reasonable objection to such substitution.

5.2 SUBCONTRACTURAL RELATIONS

5.2.1 By appropriate agreement, written where legally required for validity, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities, including responsibility for safety of the Subcontractor's Work, which the Contractor, by these Documents, assumes toward the Owner and Engineer. Each subcontract agreement shall preserve and protect the rights of the Owner and Engineer under the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise in the subcontract agreement, the benefit of all rights, remedies and redress against the Contractor that the Contractor, by the Contract Documents, has against the Owner. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound, and, upon written request of the Subcontractor, identify to the Subcontractor terms and conditions of the proposed subcontract agreement which may be at variance with the Contract Documents. Subcontractors

will similarly make copies of applicable portions of such documents available to their respective proposed Sub-subcontractors.

5.2.2 All agreements between the Contractor and a Subcontractor or supplier shall contain provisions whereby Subcontractor or supplier waives all rights against the Owner, contractor, Owner's representative, Engineer and all other additional insureds for all losses and damages caused by, arising out of, or resulting from any of the perils covered by property or builders risk insurance coverage required of the Contractor in the Contract Documents. If insureds on any such policies require separate waiver forms to be signed by any Subcontractors of any tier or suppliers, Contractor shall obtain the same.

5.3 CONTINGENT ASSIGNMENT OF SUBCONTRACTS

- **5.3.1** Each subcontract agreement for a portion of the Work is assigned by the Contractor to the Owner provided that:
 - .1 assignment is effective only after termination of the Contract by the Owner for cause pursuant to Paragraph 14.2 and only for those subcontract agreements which the Owner accepts by notifying the Subcontractor and the Contractor in writing; and
 - .2 assignment is subject to prior rights of the surety, if any, obligated under bond relating to the Contract.
- **5.3.2** Upon such assignment, if the Work has been suspended for more than 30 consecutive days, the Subcontractor's compensation shall be equitably adjusted for increases in cost resulting from the suspension.

ARTICLE 6: CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

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

- 6.1.1 The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces, and to award separate contracts in connection with other portions of the Project or other construction or operations on the site under Conditions of the Contract identical or substantially similar to these including those portions related to insurance and waiver of subrogation. If the Contractor claims that delay or additional cost is involved because of such action by the Owner, the Contractor shall make such Claim as provided in Paragraph 4.3.
- **6.1.2** When separate contracts are awarded for different portions of the Project or other construction or operations on the site, the term "Contractor" in the Contract Documents in each case shall mean the Contractor who executes each separate Owner-Contractor Agreement.
- 6.1.3 The Owner or Engineer shall provide for coordination of the activities of the Owner's own forces and of each separate contractor with the Work of the Contractor, who shall cooperate with them. The Contractor shall participate with the other separate contractors, the owners' forces and the Owner in reviewing and coordinating the construction work and schedules. The Contractor shall make any revisions to the construction schedule deemed necessary after a joint review and mutual agreement. The construction schedules shall then constitute the schedules to be used by the Contractor, separate contractors and the Owner until subsequently revised. The contractor shall complete the work correctly and at the proper time and not delay or cause additional expense to another contractor.
- 6.1.4 Unless otherwise provided in the Contract Documents, when the Owner performs construction or operations related to the Project with the Owner's own forces, the Owner shall be deemed to be subject to the same obligations and to have the same rights which apply to the Contractor under the Conditions of the Contract.
- 6.1.5 Owners Commissioning Agent: In addition to the Contractors equipment start-up and operational testing as required by the Contract Documents, the Owner may enter into separate contracts for Commissioning Services, the scope of which is generally contained in the Contract Documents. The Contractor and the associated subcontractors shall fully support the Owners Commissioning activities as required by the Contract Documents.

6.2 MUTUAL RESPONSIBILITY

- **6.2.1** The Contractor shall afford the Owner and separate contractors reasonable opportunity for introduction and storage of materials and equipment and performance of activities, and shall connect and coordinate the Contractor's construction and operations with theirs as required by the Contract Documents.
- 6.2.2 If part of the Contractor's Work depends for proper execution or results upon construction or operations by the Owner or a separate contractor, the Contractor shall, prior to proceeding with that portion of the Work, promptly, so as not to delay the project, report to the Engineer and Owner apparent discrepancies or defects in such other construction that would render it

unsuitable for proper execution and results. The Contractor's failure to promptly, so as not to delay the project, report such discrepancies or defects constitutes acknowledgement and acceptance-that the Owner's or separate contractor's completed or partially completed Work is fit and proper to receive the Contractor's Work, except as to defects not then reasonably discoverable.

- 6.2.3 The Owner shall be reimbursed by the Contractor for costs incurred by the Owner which are payable to a separate contractor because of delays, improperly timed activities or defective construction of the Contractor. The Owner shall be responsible to the Contractor for costs incurred by the Contractor because of delays, improperly timed activities, damage to the Work or defective construction of the Owner or separate contractor.
- **6.2.4** The Contractor shall promptly remedy damage caused by the Contractor to completed or partially completed construction or to property of the Owner or separate contractors as provided in Subparagraph 10.2.5.
- 6.2.5 The Owner and each separate contractor shall have the same responsibilities for cutting and patching and clean up as are described for the Contractor in Subparagraph 3.14 and 3.15.

6.3 OWNER'S RIGHT TO CLEAN UP

6.3.1 If a dispute arises among the Contractor, separate contractors and the Owner as to the responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish, the Owner may clean up and allocate the cost among those responsible.

ARTICLE 7: CLAIMS AND DAMAGES

7.1 GENERAL

- 7.1.1 Changes in the Work may be accomplished after execution of the Contract and without invalidating the Contract, by Change Order, Construction Change Directive or order for a minor change in the Work, subject to the limitations stated in this Article 7 and elsewhere in the Contract Documents.
- **7.1.2** A Change Order shall be based upon agreement among the Owner, Contractor and Engineer. A Construction Change Directive requires agreement among the Owner, Contractor and Engineer and may or may not be agreed to by the Contractor; an order for a minor change in the works may be issued by the Engineer alone.
- 7.1.3 Changes in the Work shall be performed under applicable provisions of the Contract Documents, and the Contractor will proceed promptly, unless otherwise provided in the Change Order, Construction Change Directive or order for a minor change in the Work.

7.2 CHANGE ORDERS

- **7.2.1** A Change Order is a written instrument prepared by the Engineer and signed by the Owner, Contractor, and Engineer, stating their agreement upon all of the following:
 - .1 change in the Work;
 - .2 the amount of the adjustment, if any, in the Contract Sum; and
 - .3 the extent of the adjustment, if any, in the Contract Time.
- **7.2.2** Methods used in determining adjustments to the Contract Sum may include those listed in Subparagraph 7.3.3.
- 7.2.3 With each proposal for a change in the Scope of Work, the Contractor will submit an itemized breakdown of all increases or decreases in the cost of the Contractor's and all Subcontractor's work to include the following detail in the order listed:
 - .1 material quantities and unit costs.
 - .2 labor amounts and hourly rates, (identified with specific items of material to be placed or operation to be performed).
 - .3 Labor Burden, including specific entries for Workman's Compensation Insurance, employee benefits, and employment taxes (Federal and State). The Labor Burden total will not exceed 46% of labor amounts. Exceptions can be made to this 46% limitation on a case by case basis. To request exceptions to the Contractor must submit detailed justification showing the elements of cost that would cause the labor burden to exceed 46%. The Engineer will review this justification for accuracy and reasonableness and notify the Owner, in writing, regarding the Engineer's recommendation concerning labor burdens above 46%.
 - .4 equipment costs, if any, (cars and pick-up trucks will not be included as equipment).

- .5 bonds and Public Liability Insurance.
- .6 do not include State Gross Receipts Tax. It will be computed with each pay application.
- .7 overhead and profit.

7.2.4 Overhead and profit on Change Orders shall be applied as follows:

.1 the overhead and profit charged by the Contractor shall be considered to include, but not limited to, performance bond, builder's risk and public liability insurance, job site office expense, normal hand tools, incidental job supervision, field supervision, company benefits, and general office overhead. The percentages for overhead and profit charged on Change Orders shall be negotiated and may vary according to the nature, extent, and complexity of the Work involved but in no case shall exceed the following:

Subtotal before applying overhead and profit:	Under \$500	\$500 to \$5,000	\$5,000 to \$25,000	Over \$25,000
Contractor (for work performed by his own forces):	Maximum: 28.00%	Maximum: 21.00%	Maximum: 15.75%	Maximum: 11.81%
Subcontractor (for work performed by his own forces):	Maximum: 22.40%	Maximum: 16.80%	Maximum: 12.60%	Maximum: 09.44%
Contractor (for work performed by Subcontractor):	Maximum: 11.20%	Maximum: 08.40%	Maximum: 06.30%	Maximum: 04.72%

Not more than three mark-ups, not to exceed individual maximums shown above, shall be allowed regardless of the number of tier subcontractors. Overhead and profit shall be shown separately for each Subcontractor of any tier and the Contractor.

- .2 on proposals covering both increases and decreases in the amount of the Contract, the application of overhead and profit shall be on the net change in direct cost for the Contractor and Subcontractor of any tier performing the Work.
- .3 the percentages for overhead and profit credit to the Owner on Change Orders that are strictly decreases in the quantity of work or materials shall be negotiated and may vary according to the nature, extent, and complexity of the Work involved, but shall not be less than the following:

Overhead and Profit: 10% credit to the Owner from the Contractor or Subcontractor of any tier for Work performed with their respective forces or materials purchased. 5% credit to the Owner from the Contractor on Work performed by other than his forces. 5% credit to

- the Owner from the first tier Subcontractor on Work performed by his Subcontractor of any tier.
- .4 if there is additional time granted in a Change Order, it strictly applies toward liquidated damages. No additional money can be charged for overhead for time extensions.
- .5 no overhead or profit will be allowed on FICA or FUTA taxes.

7.3 CONSTRUCTION CHANGE DIRECTIVES

- 7.3.1 A Construction Change Directive is a written order prepared by the Engineer and signed by the Owner and Engineer, directing a change in the Work prior to agreement or adjustment, if any, in the Contract Sum or Contract Time, or both. The Owner may by Construction Change Directive, without invalidating the Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions or other revisions, the Contract Sum and Contract Time being adjusted accordingly.
- **7.3.2** A Construction Change Directive shall be used in the absence of total agreement on the terms of a Change Order.
- **7.3.3** If the Construction Change Directive provides for an adjustment to the Contract Sum, the adjustment shall be based on one of the following methods:
 - .1 mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation as outlined in 7.2.3.
 - .2 unit prices stated in the Contract Documents or subsequently agreed upon.
 - .3 cost to be determined in a manner agreed upon by the parties and a mutually acceptable fixed or percentage fee, or
 - .4 as provided in Subparagraph 7.3.6.
- **7.3.4** Upon receipt of a Construction Change Directive, the Contractor shall promptly proceed with the change in the Work involved and advise the Engineer of the Contractor's agreement or disagreement with the method, if any, provided in the Construction Change Directive for determining the proposed adjustment in the Contract Sum or Contract Time.
- **7.3.5** A Construction Change Directive signed by the Contractor indicates the agreement of the Contractor therewith including adjustment in the Contract Sum and Contract Time or the method for determining them. Such agreement shall be effective immediately and shall be recorded as a Change Order.
- **7.3.6** If the Contractor does not respond promptly or disagrees with the method for adjustment in the Contract Sum, the method and the adjustment shall be determined by the Engineer on the change, including, in case of an increase in the Contract Sum, a reasonable allowance for overhead and profit. In such case, and also under Clause 7.3.3, the Contractor shall keep and present, in such form as the Engineer may prescribe, an itemized accounting together, with

appropriate supporting data. Unless otherwise provided in the Contract Documents, costs for the purposes of this Subparagraph 7.3.6 shall be limited to the following:

- .1 costs of labor, including social security, old age, and unemployment insurance, fringe benefits required by agreement or custom, and workers' compensation insurance;
- .2 costs of materials, supplies and equipment, including cost of transportation, whether incorporated or consumed.
- .3 rental costs of machinery and equipment, exclusive of hand tools, whether rented from the Contractor or others.
- .4 costs of premiums for all bonds and insurance, permit fees, and sales, use or similar taxes related to the Work; and
- .5 additional costs of supervision and field office personnel directly attributable to the change.
- 7.3.7 The amount of credit to be allowed by the Contractor to the Owner for a deletion or change that result in a net decrease in the Contract Sum shall be actual net cost as confirmed by the Engineer. When both additions and credits covering related Work or substitutions are involved in a change, the allowance for overhead and profit shall be figured on the basis of net increase, if any, with respect to that change.
- 7.3.8 Pending final determination of the total cost of a Construction Change Directive to the Owner, amounts not in dispute for such changes in the Work shall be included in Applications for Payment accompanied by a Change Order indicating the parties' agreement with part or all of such costs. For any portion of such cost that remains in dispute, the Engineer will make an interim determination for purposes of monthly certification for payment for those costs. That determination of cost shall adjust the Contract Sum on the same basis as a Change Order, subject to the right of either party to disagree and assert a claim in accordance with Article 4.
- **7.3.9** When the Owner and Contractor agree with the determination made by the Engineer concerning the adjustments in the Contract Sum and Contract Time; or otherwise reach agreement upon the adjustments, such agreement shall be effective immediately and shall be recorded by preparation and execution of an appropriate Change Order.

7.4 CONTRACTOR COMPLIANCE WITH THE CHANGE ORDER PROCESS

- **7.4.1** The Contractor shall provide Change Order Pricing and backup in a timely manner. No claim for an addition to the Contract Sum will be valid unless authorized in writing by the Owner.
- **7.4.2** No changes or additions to the work to be performed, materials to be furnished, or in the provisions of the Contract will be authorized until execution and delivery by the Owner to the Contractor of the written Change Order. Any work completed by the Contractor outside the original project scope without written approval from the Owner will be deemed as a waiver by the Contractor for additional compensation for said work.

7.5 MINOR CHANGES TO THE WORK

7.5.1 The Engineer will have authority to order minor changes in the Work not involving adjustment in the Contract Sum or extension of the Contract Time and not inconsistent with the intent of the Contract Documents. Such changes shall be effected by written order and shall be binding on the Owner and Contractor. The Contractor shall carry out such written orders promptly.

ARTICLE 8: TIME

8.1 **DEFINITIONS**

- **8.1.1** Unless otherwise provided, Contract Time is the period of time, including authorized adjustments, allotted in the Contract Documents for Substantial Completion of the Work.
- **8.1.2** The date of commencement of the Work is the date established in the Agreement. The date shall not be postponed by the failure of the Contractor or of persons or entities for whom the Contractor is responsible.
- **8.1.3** The date of Substantial Completion is the date certified by the Engineer and the Owner in accordance with paragraph 9.8.
- **8.1.4** The term "day" as used in the Contract Documents shall mean calendar day unless otherwise specifically defined.
- **8.1.5** The date of Final Completion is the date certified by the Engineer and the Owner in accordance with paragraph 9.10.

8.2 PROGRESS AND COMPLETION

- **8.2.1** Time limits stated in the Contract Documents are the essence of the Contract. By executing the Agreement the Contractor confirms that the Contract Time is a reasonable period for performing the Work.
- 8.2.2 The Contractor shall not knowingly, except by agreement or instruction of the Owner in writing, prematurely commence operations on the site or elsewhere prior to the effective date of insurance required by Article 11 to be furnished by the Contractor and Owner. The date of commencement of the Work will not be changed by the effective date of such insurance. Unless the date of commencement is established by a notice to proceed given by the Owner, the Contractor shall notify the Owner in writing not less than five days or other agreed period before commencing the Work to permit the timely filing of mortgages, mechanic's liens and other security interests.
- **8.2.3** The Contractor shall proceed expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time.
- **8.2.4** The Owner shall not be liable to the Contractor if the Contractor submits a progress report or any construction schedule expressing an intention to achieve completion of the Work prior to the Contract Time. No liability on the part of the Owner shall be created or implied for failure of the Contractor to so complete the Work.

8.3 DELAYS AND EXTENSIONS OF TIME

- **8.3.1** If the Contractor is delayed at any time in the commencement or progress of the Work by an act or neglect of the Owner or Engineer, or of a separate contractor employed by the Owner, or by changes ordered in the Work, or by labor disputes, fire, unusual delay in deliveries, unavoidable casualties or other causes beyond the Contractor's control, or by delay authorized by the Owner pending mediation and arbitration, or by other causes which the Engineer and the Owner determines may justify delay, then the Contract Time may be extended by Change Order for such reasonable time as the Engineer and the Owner may determine.
- **8.3.2** Claims relating to time shall be made in accordance with applicable provisions of Paragraph 4.3 and the applicable provisions of Paragraph 7.3.

8.4 CONTRACT TIME AND LIQUIDATED DAMAGES

- 8.4.1 The Contractor agrees that the Work will be prosecuted regularly, diligently and without interruption at such rate of progress as will ensure completion within the Contract Time. It is expressly understood and agreed, by and between the Contractor and the Owner, that the Contract Time is a reasonable time for completion of the Work, taking into consideration the average climate range and usual industrial conditions prevailing in this locality. If the Contractor neglects, fails or refuses to complete the Work within the Contract Time, or any proper extension granted by the Owner, then the Contractor agrees to pay to the Owner the amount specified in the Contract Documents, not as a penalty, but as liquidated damages.
- **8.4.2** The parties agree that the amount of the likely damage to the Owner for such delay is difficult to ascertain at the time of execution of this agreement, but that a reasonable estimate of such damages for delay is set forth in the Contract Documents. Liquidated damages may be deducted from any monthly progress payments due to the Contractor or from other moneys being withheld from the Contractor.
- **8.4.3** The Contractor and Surety are liable for any other liquidated damages over and above moneys held by the Owner.

ARTICLE 9: PAYMENTS AND COMPLETION

9.1 CONTRACT SUM

- **9.1.1** The Contract Sum is stated in the Agreement and, including authorized adjustments, is the total amount payable by the Owner to the Contractor for performance of the Work under the Contract Documents.
- 9.1.2 The Owner may withhold any payments to the Contractor if the Contractor fails to perform any of its obligations or is in default under any of the Contract Documents identified in Paragraph 9.5; provided, however, that any payments withheld will be limited to an amount sufficient to cure any default or failure of performance by the Contractor or as liquidated damages pursuant to paragraph 8.4.1.

9.2 SCHEDULE OF VALUES

- 9.2.1 Before the first Application for Payment, the Contractor shall submit to the Engineer and the Owner a schedule of values allocated to various portions of the Work, prepared in such form and supported by such data to substantiate its accuracy as the Engineer and Owner may require. This schedule, upon acceptance by the Engineer and the Owner shall be used as a basis for reviewing the Contractor's Applications for Payment. No Applications for Payment will be processed until the schedule of values is received and approved by the Engineer and the Owner.
- 9.2.2 The Owner will assign a dollar value to a line item in the schedule of values for "Contract Closeout". It will represent the estimated value of costs associated with closeout procedures, including but not limited to, preparation and delivery of project record drawings, warranties, affidavits of training sessions in the use of building equipment, operation and maintenance manuals, certification of compliance with final commissioning reports; certification of conformity to final testing and balancing of air-handling systems, and delivery of all close-out documentation.

9.3 APPLICATION FOR PAYMENT

- 9.3.1 By the date established as the end of each progress payment period, the Contractor shall submit to the Engineer and the Owner an itemized Application for Payment completed in accordance with the schedule of values and accompanied by the Owner's Certificate for Payment form. The Application for Payment shall be notarized, and supported by such data substantiating the Contractor's right to payment as the Owner or Engineer may require, such as copies of requisitions from Subcontractors and material suppliers.
 - **9.3.1.1** As provided in Subparagraph 7.3.8 such applications may include requests for payment on account of changes in the Work which have been properly authorized by Construction Change Directives, or by interim determinations of the Engineer or the Owner, but not yet included in Change Orders.

- **9.3.1.2** Such applications may not include requests for portions of the Work for which the Contractor does not intend to pay to a Subcontractor or material supplier unless such Work has been performed by others whom the Contractor intends to pay.
- **9.3.1.3** It is the Contractor's responsibility to comply with the provisions of the New Mexico Retainage Act (NMSA 57-28-1-et. seq.), including but not limited to making subcontractors aware of the forms and provisions of the escrow account entered into by the Owner.
- **9.3.1.4** It is the Contractor's responsibility to comply with Section 57-28-5(C) of the New Mexico Retainage Act requiring Contractors to make prompt payment to Sub-Contractors for work performed within (7) seven days after receipt of payment from the Owner or pay interest for failing to make prompt payment.
- **9.3.1.5** The Owner will pay 100% of the amount due the Contractor for progress payments less those amounts identified through the procedures in Paragraph 9.1.2 and in accordance with the requirements of the New Mexico Retainage Act.
- 9.3.2 Unless otherwise provided in the Contract Documents, payments shall be made for materials and equipment delivered and suitably stored at the site for incorporation in the Work. Any payments for such materials or equipment shall be conditioned upon the Contractor's demonstrating that they are adequately protected from weather, damage, vandalism and theft and that such materials or equipment have been inventoried and stored in accordance with procedures established by or approved by the Owner. If approved in advance by the Owner, payment may similarly be made for materials and equipment suitably stored off the site at a secure location agreed upon in writing. Payment for materials and equipment stored on or off the site shall be conditioned upon compliance by the Contractor with procedures satisfactory to the Owner to establish the Owner's title to such materials and equipment or otherwise protect the Owner's interest, and shall include the costs of applicable insurance, storage and transportation to the site for such materials and equipment stored off the site.
- 9.3.3 The Contractor warrants that title to all Work covered by an Application for Payment will pass to the Owner no later than the time of payment. The Contractor further warrants that upon submittal of an Application for Payment all Work for which Certificates for Payment have been previously issued and payments received from the Owner shall, be free and clear of liens, claims, security interests or encumbrances in favor of the Contractor, Subcontractors, material suppliers, or other persons or entities making a claim by reason of having provided labor, materials and equipment relating to the Work.

9.4 CERTIFICATE FOR PAYMENT

9.4.1 The Engineer and the Owner, within seven days after receipt of the Contractor's Application for Payment, will issue a Certificate for Payment to the Contractor, for such amount as the Engineer and the Owner determines is properly due, or notify the Contractor in writing of the reasons for withholding certification in whole or in part as provided in Subparagraph 9.5.1.

- 9.4.2 The issuance of a Certificate for Payment will constitute a representation by the Engineer to the Owner, that the Work has progressed to the point indicated and that, to the best of the Engineer's knowledge, information and belief, the quality of the Work is in accordance with the Contract Documents. The foregoing representations are subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, to results of subsequent tests and inspections, to correction of minor deviations from the Contract Documents prior to completion and to specific qualifications expressed by the Engineer. The issuance of a Certificate for Payment will further constitute a representation that the Contractor is entitled to payment in the amount certified.
- 9.4.3 The Owner will issue payment to the Contractor in the amount certified in the approved Certificate for Payment within twenty-one (21) days from the end of the progress payment period. This period is inclusive of the time for review of the Application for Payment specified in paragraph 9.4.1.

9.5 DECISIONS TO WITHHOLD CERTIFICATION

- 9.5.1 The Engineer or Owner may withhold a Certificate for Payment in whole or in part, to the extent reasonably necessary to protect the Owner, if the representations to the Owner required by Subparagraph 9.4.2 cannot be made. If the Contractor and Engineer and Owner cannot agree on a revised amount, the Engineer will promptly issue a Certificate for Payment for the amount for which the Engineer is able to make such representations to the Owner. The Engineer may also withhold a Certificate for Payment or, because of subsequently discovered evidence or subsequent observations, may nullify the whole or a part of a Certificate for Payment previously issued, to such extent as may be necessary in the Engineer's opinion to protect the Owner from loss for which the Contractor is responsible, including loss resulting from acts and omissions described in Subparagraph 3.3.2, because of:
 - .1 defective Work not remedied;
 - .2 third party claims filed or reasonable evidence indicating probable filing of such claims unless security acceptable to the Owner is provided by the Contractor;
 - .3 failure of the Contractor to make payments properly to Subcontractors or for labor, materials or equipment;
 - .4 reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
 - .5 damage to the Owner or another contractor;
 - .6 reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay; or
 - .7 persistent failure to carry out the Work in accordance with the Contract Documents.
 - .8 disputed certification amounts shall be subject to the provisions of the New Mexico Retainage Act (NMSA 57-28-1 et. Seq.).

9.5.2 When the above reasons for withholding certification are removed, certification will be made for amounts previously withheld.

9.6 PROGRESS PAYMENTS

- **9.6.1** After the Engineer has issued a certificate for payment and the Owner has independently verified the information and approved the certificate for payment, the Owner will make payment in the manner and within the time provided in the Contract Documents.
- **9.6.2** The Contractor shall pay each Subcontractor, upon receipt of payment from the Owner, the amount to which each Subcontractor is entitled in conformance with paragraph 9.3.1.4. The Contractor shall require each Subcontractor to make payments to Sub-subcontractors in a similar manner.
- **9.6.3** The Engineer will, on request, furnish to a Subcontractor information regarding percentages of completion or amounts applied for by the Contractor and action taken by the Engineer and Owner on account of portions of the Work done by such Subcontractor.
- **9.6.4** Neither the Owner nor Engineer shall have an obligation to pay or to see to the payment of moneys to a Subcontractor except as may otherwise be required by law.
- **9.6.5** Payment to material suppliers shall be treated in a manner similar to that provided in Subparagraphs 9.6.2, 9.6.3, and 9.6.4.
- **9.6.6** A Certificate for Payment, a progress payment, or partial or entire use or occupancy of the Project by the Owner shall not constitute acceptance of Work not in accordance with the Contract Documents.

9.7 FAILURE OF PAYMENT

9.7.1 If the Owner does not pay the Contractor the amount approved by the Engineer and the Owner, within thirty (30) days from the date specified in paragraph 9.4.3, then the Contractor may, upon written notice to the Owner and Engineer, stop the Work until payment of such amount has been received. Unless Contractor's action was improper or if the amount claimed is shown not to have been due, the Contract Time may be adjusted appropriately and the Contract Sum may be increased by the amount of the Contractor's reasonable costs of shut-down, delay and start-up, which will be accomplished as provided in Article 7. Contractor will nevertheless be liable to Owner for loss, damage, or expense caused by any wrongful stop-work by the Contractor.

9.8 SUBSTANTIAL COMPLETION

9.8.1 Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents and when all required occupancy permits, if any, have been issued so the Owner can occupy and utilize the Work for its intended use. The Contractor will secure and deliver to the Owner written warranties and guarantees from its Subcontractors, Sub-subcontractors and suppliers bearing the date of Substantial Completion or some other date as may be agreed to by the Owner and stating

the period of warranty as required by the Contract Documents. The Contractor is responsible for the warranty of all Work, whether performed by it or by its Subcontractors at any tier. The Contractor will also participate in a walk-through of the project within one year after Substantial Completion.

- 9.8.2 When the Contractor considers that the Work, or a portion thereof which the Owner agrees to accept separately, is substantially complete, the Contractor shall prepare and submit to the Engineer and the Owner a comprehensive list of items to be completed or corrected prior to final payment. Failure to include an item on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.
- 9.8.3 Upon receipt of the Contractor's list, the Engineer and the Owner will make an inspection to determine whether the Work or designated portion thereof is substantially complete. If inspection by the Engineer or the Owner discloses any item, whether or not included on the Contractor's list, which is not sufficiently complete in accordance with the requirements of the Contract, the Contractor shall complete or correct such item. In such case, the Contractor shall then submit a request for another inspection by the Engineer and the Owner to determine Substantial Completion.
- 9.8.4 When the Work or designated portion thereof is substantially complete, the Engineer will notify the Owner, and unless Owner disagrees with Engineer's opinion that Substantial Completion has been reached, the Engineer will prepare a Certificate of Substantial Completion which shall establish the Date of Substantial Completion, shall establish the responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance, and shall fix the time within which the Contractor shall furnish all items on the list accompanying the Certificate. Warranties required by the Contract Documents shall commence on the Date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion.
 - **9.8.4.1** Owner may withhold approval of a Certificate of Substantial Completion of the Work until building commissioning is successfully completed.

9.9 PARTIAL OCCUPANCY OR USE

9.9.1 The Owner may occupy or use any completed or partially completed portion of the Work at any stage when such portion is designated by separate agreement with the Contractor, provided such occupancy or use is consented to by the insurer as required under Clause 11.4.1.5 and authorized by public authorities having jurisdiction over the Work. Such partial occupancy or use may commence whether or not the portion is substantially complete, provided the Owner and Contractor have accepted in writing the responsibilities assigned to each of them for payments, security, maintenance, heat, utilities, damage to the Work and insurance, and have agreed in writing concerning the period for correction of the Work and commencement of warranties required by the Contract Documents. When the Contractor considers a portion substantially complete, the Contractor shall prepare and submit a list to the Engineer and the Owner as provided under Subparagraph 9.8.2. Consent of the Contractor to partial occupancy or use shall not be unreasonably withheld. The stage of the progress of the Work shall be determined by written agreement between the Owner and Contractor.

- **9.9.2** Immediately prior to such partial occupancy or use, the Owner, Contractor and Engineer shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work.
- **9.9.3** Unless otherwise agreed upon, partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of Work not complying with the requirements of the Contract Documents.

9.10 FINAL COMPLETION AND FINAL PAYMENT

- 9.10.1 Upon receipt of written notice from the Contractor that the Work is ready for final inspection and acceptance, the Engineer and the Owner will promptly make such inspection and, when the Engineer and the Owner finds the Work acceptable under the Contract Documents and the Contract fully performed, the Engineer will notify the Owner, and unless the Owner disagrees with the Engineer's opinion that Final Completion has been reached, the Engineer will promptly issue a final Certificate for Payment stating that to the best of the Engineer's knowledge, information and belief and on the basis of the Engineer's on-site visits and inspections, the Work has been completed in accordance with terms and conditions of the Contract Documents and the entire balance found to be due the Contractor and noted in the final Certificate is due and payable. The Engineer's final Certificate for Payment will constitute a further representation that conditions listed in Subparagraph 9.10.2 as precedent to the Contractor's being entitled to final payment have been fulfilled.
 - **9.10.1.1** Final Completion of the Work shall be accomplished no later than fourteen (14) days following Substantial Completion except as noted in paragraph 9.10.3.
 - **9.10.1.2** If Final Completion is not accomplished fourteen (14) days after Substantial Completion, the Contractor will pay an amount specified in the Contract Documents, not as a penalty, but as liquidated damages for Final Completion until such time as Final Completion is accomplished and the conditions of paragraph 9.10.1 and 9.10.2 are met. This provision is subject to the conditions noted in paragraph 9.10.3.
- Final payments shall not become due until the Contractor submits to the Engineer and the Owner 9.10.2 (1) an affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or the Owner's property might be responsible or encumbered (less amounts withheld by Owner), have been paid or otherwise satisfied, (2) a certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect and will not be canceled or allowed to expire until at least 30 days' prior written notice has been given to the Owner, (3) a written statement that the Contractor knows of no substantial reason that the insurance will not be renewable to cover the period required by the Contract Documents, (4) consent of surety, to final payment, (5) other data establishing payment or satisfaction of obligations, such as receipts, releases and waivers of liens, claims, security interests or encumbrances arising out of the Contract, to the extent and in such form as may be designated by Owner, and (6) other closeout requirements noted in paragraph 9.2.2. If a Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against such lien. If such lien remains unsatisfied after payments are made, the Contractor shall refund to the Owner all money that the Owner may be compelled to pay in discharging such lien, including all costs and reasonable attorneys' fees.

- 9.10.3 If, after Substantial Completion of the Work, final completion is materially delayed through no fault of the Contractor or by issuance of Change Orders affecting final completion, the Owner shall, upon application by the Contractor and certification by the Engineer, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance for Work not fully completed or corrected is less than stipulated in the Contract Documents, and if bonds have been furnished, the written consent of surety to payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contractor to the Engineer prior to certification of such payment. Such payment shall be made under terms and conditions governing final payment, except that it shall not constitute a waiver of claims.
- **9.10.4** The making of final payment shall constitute a waiver of Claims by the Owner except those arising from:
 - .1 liens, Claims, security interests or encumbrances arising out of the Contract and unsettled;
 - .2 failure of the Work to comply with the requirements of the Contract Documents; or
 - .3 terms of special warranties required by the Contract Documents.
- **9.10.5** Acceptance of final payment by the Contractor, a Subcontractor or material supplier shall constitute a waiver of claims by that payee except those previously made in writing and identified by that payee as unsettled at the time of final Application for Payment.

ARTICLE 10: PROTECTION OF PERSONS AND PROPERTY

10.1 SAFETY PRECAUTIONS AND PROGRAMS

- **10.1.1** The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the performance of the Contract.
- 10.1.2 The Contractor shall at all times conduct operations under this Contract in a manner to avoid risk of bodily harm to persons or risk of damage to any property. The Contractor shall promptly take precautions, which are necessary and adequate against conditions created during the progress of the Work which involve a risk of bodily harm to persons or a risk of damage to property. The Contractor shall continuously inspect the Work, materials and equipment to discover and determine any such conditions and shall be responsible for discovery, determination and correction of such conditions. The Contractor shall comply and shall cause its Subcontractors and others on the Project site to comply with applicable safety laws, standards, codes and regulations of the jurisdiction in which the Project is located.

10.2 SAFETY OF PERSONS AND PROPERTY

- **10.2.1** The Contractor shall take reasonable precautions for safety of, and shall provide reasonable protection to prevent damage, injury or loss to:
 - .1 employees on the Work and other persons who may be affected hereby;
 - .2 the Work and materials and equipment to be incorporated therein, whether in storage on or off the site, under care, custody, or control of the Contractor or the Contractor's Subcontractors or Sub-subcontractors; and
 - .3 other property at the site or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation or replacement in the course of construction.
 - .4 students, staff, faculty, visitors, and members of the general public on or in the vicinity of the City of Aztec property or facilities.
- 10.2.2 The Contractor shall give notices and comply with applicable laws, ordinances, rules, regulations and lawful orders of public authorities bearing on safety of persons or property or their protection from damage, injury or loss.
- 10.2.3 The Contractor shall erect and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations and notifying owners and users of adjacent sites and utilities.
- 10.2.4 When use or storage of explosives or other hazardous materials or equipment or unusual methods are necessary for execution of the Work, the Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel.
- 10.2.5 The Contractor shall promptly remedy damage and loss (other than damage or loss insured under property insurance required by the Contract Documents) to property referred to in Paragraph

10.2 caused in whole or in part by the Contractor, a Subcontractor, a Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Contractor is responsible, except damage or loss attributable solely to acts or omissions of the Owner or Engineer or anyone directly or indirectly employed by either of them, or by anyone for whose acts either of them may be liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to the Contractor's obligations stated elsewhere in the Contract Documents.

- 10.2.6 The Contractor shall designate a responsible member of the Contractor's organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent unless otherwise designated by the Contractor in writing to the Owner and Engineer.
- **10.2.7** The Contractor shall not load or permit any part of the construction or site to be loaded so as to endanger its safety.
- 10.2.8 The Contractor shall promptly report in writing to the Owner and the Engineer all accidents arising out of or in connection with the Work which cause lost time injury, personal injury, death or property damage, giving full details and statements of any witnesses. In cases of serious bodily injury, death or serious property damage, Contractor shall also contact Owner and Engineer immediately by the most expeditious means.
- 10.2.9 The Contractor shall promptly notify the Owner and the Engineer in writing of any claims received by the Contractor for personal injury or property damage related to the Work.

10.3 HAZARDOUS MATERIALS

- **10.3.1** If reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from a material or substance known by the Contractor to be hazardous, including but not limited to asbestos, or polychlorinated biphenyl (PCB), or other substances listed by the EPA as hazardous, encountered on the site by the Contractor, the Contractor shall, upon recognizing the condition, immediately stop Work in the affected area, take steps to contain spread of the material and immediately report the condition to the Owner and Engineer in writing.
- 10.3.2 The Owner shall obtain the services of an agency certified to verify the presence or absence of the material or substance reported by the Contractor and, in the event such material or substance is found to be present, to verify that it has been rendered harmless. The Owner shall, at its own expense, employ persons to render material encountered on the Site harmless. When the material or substance has been rendered harmless, Work in the affected area shall resume upon written agreement of the Owner and Contractor. The Contract Time and the Contract Sum shall be adjusted as provided in Article 7. "Rendered Harmless" shall mean that the levels of such materials are less than any applicable exposure standards set forth in OSHA or EPA regulations.
- 10.4 The Owner shall not be responsible under Paragraph 10.3 for materials and substances brought to the site by the Contractor.

10.5 If, without negligence on the part of the Contractor, the Contractor is held liable for the cost of remediation of a hazardous material or substance solely by reason of performing Work as required by the Contract Document, the Contract shall be adjusted in accordance with Article 7.

10.6 EMERGENCIES

10.6.1 In an emergency affecting safety of persons or property, the Contractor shall use its best efforts to prevent threatened damage, injury of loss. Additional compensation or extension of time claimed by the Contractor on account of an emergency shall be determined as provided in Paragraph 4.3 and Article 7.

ARTICLE 11: INSURANCE AND BONDS

11.1 CONTRACTOR'S LIABILITY INSURANCE

- 11.1.1 The Contractor shall purchase from and maintain in a company or companies lawfully authorized to transact insurance in New Mexico such insurance as will protect the Contractor from claims set forth below which may arise out of or result from the Contractor's operations under the Contract and for which the Contractor may be legally liable, whether such operations be by the Contractor or by a Subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:
 - .1 claims under workers' compensation, disability benefit and other similar employee benefit acts, which are applicable to the Work to be performed;
 - .2 claims for damages because of bodily injury, occupational sickness or disease, or death of the Contractor's employees;
 - .3 claims for damages because of bodily injury, sickness or disease, or death of any person other than the Contractor's employees;
 - .4 claims for damages, other than to the Work itself, because of damage to or destruction of tangible property, including loss of use resulting there from;
 - .5 claims for damages because of bodily injury, death of a person or property, damage arising out of ownership, maintenance, or use of a motor vehicle;
 - .6 claims for bodily injury or property damage arising out of completed operations; and,
 - .7 claims involving contractual liability insurance applicable to the Contractor's obligations under Paragraph 3.18.
- 11.1.2 The insurance required by Subparagraph 11.1.1 shall be written for not less than limits of liability specified herein or required by law, whichever coverage is greater. Coverage's shall be written on an occurrence basis and shall be maintained without interruption from date of commencement of the Work until date of final payment and termination of any coverage required to be maintained after final payment.
- 11.1.3 Certificates of insurance acceptable to the Owner shall be filed with the Owner prior to commencement of the Work. These certificates and the insurance policies required by this Paragraph 11.1 shall contain a provision that coverage's afforded under the policies will not be canceled or allowed to expire until at least 45 days' prior written notice has been given to the Owner. If any of the foregoing insurance coverage's are required to remain in force after final payment, and are reasonably available, an additional certificate evidencing continuation of such coverage shall be submitted with the final Application for Payment as required by Subparagraph 9.10.2. The Contractor shall furnish information concerning reduction of coverage on account of revised limits or claims paid under the General Aggregate, or both, with reasonable promptness.
 - 11.1.3.1 The Contractor will furnish the Owner one copy of each of the Certificates of Insurance herein required for each copy of the Contract, showing the coverage's, limits of liability, covered operations, effective dates and dates of expiration of policies of Insurance carried by the Contractor. The Contractor will furnish to the

Owner copies of any endorsements that are subsequently issued amending coverage or limits. The Certificates of Insurance will be in the form of AIA Document G705, or similar format acceptable to the Owner. Such certificates will be filed with the Owner and will also contain the following statements:

- .1 "the City of Aztec, its agents, servants and employees are recognized as Additionally Insured."
- .2 "the insurance coverage certified herein will not be canceled or materially changed except after forty-five (45) calendar days written notice has been provided to the Owner."
- .3 "the insured will not violate, or permit to be violated, any conditions of this policy, and will at all times satisfy the requirements of the insurance copy transacting the policy."

11.1.4 Minimum Required Coverage's:

- 11.1.4.1 Compensation Insurance: During the life of this Contract the Contractor will procure and will maintain Worker's Compensation Insurance as required by applicable State law for all of the Contractor's employees to be engaged at the site of the Project under this Contract and in case of any such work being sublet, the Contractor will require the Subcontractor or Sub-subcontractor similarly to provide Worker's Compensation Insurance for all of the Subcontractor's or Sub-subcontractor's employees which are not covered under the Contractor's Worker's Compensation Insurance. In case any class of employee engaged in work on the Project under this Contract is not protected under the Worker's Compensation Statute, the Contractor will provide and will cause each Subcontractor and Sub-subcontractor to provide Employer's Insurance in an amount not less than \$1,000,000.
- 11.1.4.2 Contractor's Public Liability Insurance: The Contractor will maintain liability insurance coverage equal to the maximum liability amounts set forth in the New Mexico Tort Claims Act, Section 41-4-1 et seq. NMSA 1978, as it now exists or may be amended. Limits will be \$1,000,000.00.
- 11.1.4.3 Comprehensive Vehicle Liability: During the life of this Contract, including any extensions to same, the Contractor will procure and will maintain Vehicle Liability Insurance providing limits of liability not less than the following:

 TYPE:

 LIMIT OF LIABILITY:

Bodily Injury \$1,000,000 Each Occurrence Property Damage \$1,000,000 Each Occurrence

- **11.1.4.4** Subcontractor's and Sub-subcontractor's Public Liability and Vehicle Liability Insurance: The Contractor will either:
 - (a) Require each Subcontractor and Sub-subcontractor to procure and maintain during the life of the Subcontract or Sub-subcontract, Public Liability Insurance of the types and amounts specified above, or
 - (b) Insure the activities of the Subcontractor and Sub-subcontractor in the Contractor's policy as required under this Article.

11.2 OWNER'S LIABILITY INSURANCE

11.2.1 The Owner shall be responsible for purchasing and maintaining the Owner's liability insurance.

11.3 PROJECT MANAGEMENT PROTECTIVE LIABILITY INSURANCE

- 11.3.1 Optionally, the Owner may require the Contractor to purchase and maintain Project Management Protective Liability insurance from the Contractor's usual sources as primary coverage for the Owner's, Contractor's and Engineer's vicarious liability for construction operations under the Contract. Unless otherwise required by the Contract Documents, the Owner shall reimburse the Contractor by increasing the Contract Sum to pay the cost of purchasing and maintaining such optional insurance coverage, and the Contractor shall not be responsible for purchasing any other liability insurance on behalf of the Owner. The minimum limits of liability purchased with such coverage shall be equal to the aggregate of the limits required for Contractor's Liability Insurance under paragraphs 11.1 through 11.1.4.4.
- 11.3.2 To the extent damages are covered by Project Management Protective Liability insurance, the Owner, Contractor and Engineer waive all rights against each other for damages, except such rights as they may have to the proceeds of such insurance. The policy shall provide for such waivers of subrogation by endorsement or otherwise.

11.4 PROPERTY INSURANCE

- 11.4.1 The Owner will provide property insurance written on a builder's risk "all-risk" or equivalent policy form in the amount of the initial Contract Sum, plus value of subsequent Contract modifications and cost of materials supplied or installed by others, comprising total value for the entire Project at the site on a replacement cost basis without optional deductibles. Such property insurance shall be maintained, unless otherwise provided in the Contract Documents or otherwise agreed in writing by all persons and entities who are beneficiaries of such insurance, until final payment has been made as provided in Paragraph 9.10 or until no person or entity other than the Owner has an insurable interest in the property required by this Paragraph 11.4 to be covered, whichever is later. This insurance shall include interests of the Owner, the Contractor, Subcontractors and Sub-subcontractors in the Project.
- 11.4.2 The Builder's Risk coverage to be furnished by the Owner is provided under the State of New Mexico's Blanket Property Coverage Policy, a copy of which is available for your perusal at the Purchasing Office of the City of Aztec.
- 11.4.3 The policy does not insure for theft of any building materials or supplies. Nor is there coverage provided for Contractor's, Subcontractor's or Sub-subcontractor's tools, machinery, or equipment. Any loss resulting there from will be borne by the Contractor incurring the loss.
- 11.4.4 The Contractor will be responsible for the first deductible amount of any insured loss.
- 11.4.5 If the Owner does not intend to purchase such property insurance required by the Contract and with all of the coverage's in the amount described above, the Owner shall so inform the

Contractor in writing prior to commencement of the Work. The Contractor may then affect insurance, which will protect the interests of the Contractor, Subcontractors and Subsubcontractors in the Work, and by appropriate Change Order, the cost thereof shall be charged to the Owner. If the Contractor is damaged by the failure or neglect of the Owner to purchase or maintain insurance as described above, without so notifying the Contractor in writing, then the Owner shall bear all reasonable costs properly attributable thereto.

- 11.4.6 Partial occupancy or use in accordance with Paragraph 9.9 shall not commence until the insurance company or companies providing property insurance have consented to such partial occupancy or use by endorsement or otherwise. The Owner and the Contractor shall take reasonable steps to obtain consent of the insurance company or companies and shall, without mutual written consent, take no action with respect to partial occupancy or use that would cause cancellation, lapse or reduction of insurance.
- **11.4.7 Loss of Use Insurance**: The Owner may provide such insurance as will insure the Owner against loss of use of the Owner's property due to fire or other hazards, however caused.
- 11.4.8 Waivers of Subrogation: The Owner and Contractor waive all rights against (1) each other and any of their subcontractors, sub-subcontractors, agents and employees, each of the other, and (2) the Engineer, Engineer's consultants, separate contractors described in Article 6, if any, and any of their subcontractors, sub-subcontractors, agents and employees, for damages caused by fire or other causes of loss to the extent covered by property insurance obtained pursuant to this Paragraph 11.4 or other property insurance applicable to the Work, except such rights as they have to proceeds of such insurance held by the Owner. The Owner or Contractor, as appropriate, shall require of the Engineer, Engineer's consultants, separate contractors described in Article 6, if any, and the subcontractors, sub-subcontractors, agents and employees of any of them, by appropriate agreements, written where legally required for validity, similar waivers each in favor of other parties enumerated herein. The policies shall provide such waivers of subrogation by endorsements or otherwise. A waiver of subrogation shall be effective as to a person or entity even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, did not pay the insurance premium directly or indirectly, and whether or not the person or entity had an insurable interest in the property damaged.
- 11.4.9 A loss insured under Owner's property insurance shall be adjusted by the Owner and made payable to the Owner for the insureds, as their interests may appear, subject to requirements of any applicable mortgage clause and of Subparagraph 11.4.10. The Contractor shall pay Subcontractors their just shares of insurance proceeds received by the Contractor, and by appropriate agreements, written where legally required for validity, shall require Subcontractors to make payments to their Sub-subcontractors in similar manner.
- 11.4.10 Cost of required bonds shall be charged against proceeds received. Proceeds so received, shall be distributed by the Owner in accordance with such agreement as the parties in interest may reach, or in accordance with an arbitration award in which case the procedure shall be as provided in paragraph 4.5 and 4.6. If after such loss no other special agreement is made and unless the Owner terminates the Contract for convenience, replacement of damaged property shall performed by the Contractor after notification of a Change in the Work in accordance with Article 7.

11.4.11 The Owner shall have power to adjust and settle a loss with insurers.

11.5 PERFORMANCE BOND AND PAYMENT BOND

- 11.5.1 As required by law, the Owner requires the Contractor to furnish bonds covering faithful performance of the Contract and payment of obligations arising thereunder as stipulated in bidding requirements or specifically required in the Contract Documents on the date of execution of the Contract.
- 11.5.2 Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligation arising under the Contract, the Contractor shall promptly furnish a copy of the bonds or shall permit a copy to be made.

ARTICLE 12: UNCOVERING AND CORRECTION OF WORK

12.1 UNCOVERING OF WORK

- **12.1.1** No work shall be covered until the Engineer and Owner have been given written notice and have had the opportunity to examine the Work.
- 12.1.2 If a portion of the Work is covered contrary to the Engineer's or Owner's request or to requirements specifically expressed in the Contract Documents, it must be uncovered for the Engineer's and Owner's examination and be replaced at the Contractor's expense without change in the Contract Time.
- 12.1.3 If a portion of the Work has been covered which the Engineer or Owner has not specifically requested to examine prior to its being covered, the Engineer or Owner may request to see such Work and it shall be uncovered by the Contractor. If such Work is in accordance with the Contract Documents, costs of uncovering and replacement shall, by appropriate Change Order, be at the Owner's expense. If such Work is not in accordance with the Contract Documents, uncovering, correction and replacement shall be at the Contractor's expense. If the non-compliant condition was caused by the Owner, the Owner shall be responsible for payment of such costs.

12.2 CORRECTION OF WORK

12.2.1 BEFORE OR AFTER SUBSTANTIAL COMPLETION

12.2.1.1 The Contractor shall promptly correct Work rejected by the Engineer or Owner or failing to conform to the requirements of the Contract Documents, whether discovered before or after Substantial Completion and whether or not fabricated, installed or completed. Costs of correcting rejected Work, including additional testing and inspections and compensation for the Engineer's services and expenses shall be at the Contractor's expense.

12.2.2 AFTER SUBSTANTIAL COMPLETION

12.2.2.1 In addition to the Contractor's obligations under Paragraph 3.6, if, within one year after the date of Substantial Completion of the Work or designated portion thereof or after the date for commencement of warranties established under Subparagraph 9.9.1, or by terms of an applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of written notice from the Owner or Engineer to do so unless the Owner has previously given the Contractor a written acceptance of such condition. The Owner or Engineer shall give such notice promptly after discovery of the condition. If the Contractor fails to correct nonconforming Work within the time established in Paragraph 2.4 the Owner

- may correct the Work in accordance with Paragraph 2.4.
- 12.2.2.2 The one-year period for correction of Work shall be extended with respect to portions of Work first performed after Substantial Completion by the period of time between Substantial Completion and Acceptance of the Work.
- **12.2.2.3** Corrected nonconforming Work shall have a new one-year period for correction, starting when the corrected Work has been accepted by the Owner.
- **12.2.3** The Contractor shall remove from the site portions of the Work, which are not in accordance with the requirements of the Contract Documents and are neither corrected by the Contractor nor accepted by the Owner.
- 12.2.4 The Contractor shall bear the cost of correcting damaged construction, whether completed or partially completed, of the Owner or separate contractors caused by the Contractor's correction or removal of Work which is not in accordance with the requirements of the Contract Documents.
- 12.2.5 Nothing contained in this Paragraph 12.2 shall be construed to establish a period of limitation with respect to other obligations which the Contractor might have under the Contract Documents. Establishment of the one-year period for correction of Work as described in Subparagraph 12.2.2 related only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct the Work.

12.3 ACCEPTANCE OF NONCONFORMING WORK

12.3.1 If the Owner prefers to accept Work that is not in accordance with the requirements of the Contract Documents, the Owner may do so instead of requiring its removal and correction, in which case the Contract Sum will be adjusted as appropriate and equitable. Such adjustment shall be effected whether or not final payment has been made.

ARTICLE 13: MISCELLANEOUS PROVISIONS

13.1 GOVERNING LAW

13.1.1 The Contract shall be governed by the laws of the State of New Mexico.

13.2 SUCCESSORS AND ASSIGNS

- 13.2.1 The Contractor hereby binds itself, its partners, successors, assigns and legal representatives to the Owner in respect to covenants, agreements and obligations contained in the Contract Documents. Contractor shall not assign the Contract or proceeds hereof without written consent of the Owner. If contractor attempts to make such an assignment without such consent, it shall be void and confer no rights on third parties; the Contractor shall nevertheless remain legally responsible for all obligations under the Contract. The Owner's consent to any assignment is conditioned upon Contractors entering into a written assignment which contains the following language: "it is agreed that the funds to be paid to the assignee under this assignment are subject to performance by the Contractor and to claims and to liens for services rendered or materials supplied for the performance of the Work required in said Contract in favor of all persons, firms, corporations rendering such services or supplying such materials." Except as provided in Subparagraph 13.2.2, neither party to the Contract shall assign the Contract as a whole without written consent of the other. If either party attempts to make such as assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.
- 13.2.2 The Owner may, without consent of the Contractor, assign the contract to an institutional lender providing construction financing for the Project. In such event, the lender shall assume the Owner's rights and obligations under the Contract Document. The Contractor shall execute all consents reasonably required to facilitate such assignment.

13.3 WRITTEN NOTICE

13.3.1 All notices required to be given by the Contractor shall be made in writing. Written notice, when served by the Owner, shall be considered served if delivered in person to the Contractor, or delivered at or sent by registered or certified mail to the last business address known to the party giving notice.

13.4 RIGHTS AND REMEDIES

13.4.1 Duties and obligations imposed by the Contract Documents and rights and remedies available there under shall be in addition to and not a limitation of duties, obligations, rights and remedies otherwise imposed or available by law.

- 13.4.2 No Action or failure to act by the Owner, Engineer or Contractor shall constitute a waiver of a right or duty afforded them under the Contract, nor shall such action or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed in writing.
- 13.4.3 Contractor shall carry out the work and adhere to the current construction schedule during all disputes or disagreements with the Owner. No work shall be delayed or postponed pending resolution of any disputes or disagreements except as the Owner may otherwise agree in writing.
- 13.4.4 Contractor shall specifically incorporate the obligations of this Article 13 into the subcontracts, supply agreements and purchase orders for the Work and require the same of any Subcontractors of any tier.

13.5 TEST AND INSPECTIONS

- 13.5.1 Test, inspections and approval of portions of the Work required by the Contract Document or by laws, ordinances, rules, regulations or orders of public authorities having jurisdiction shall be made at an appropriate time. Unless otherwise provided, the Contractor shall make arrangements for such tests, inspections and approvals with the Owner's designated testing entity. The Contractor shall give the Owner and the Engineer timely notice of when and where tests and inspections are to be made so that the Owner and the Engineer may observe such procedures. The Owner shall bear cost of tests, inspections or approvals.
- 13.5.2 If the Engineer, Owner or public authorities having jurisdiction determine that portions of the Work require additional testing, inspection or approval not included under Subparagraph 13.5.1, the Engineer or the Owner will instruct the Contractor to make arrangements for such additional testing, inspection or approval by the Owner's independent testing entity, and the Contractor shall give timely notice to the Owner and the Engineer of when and where tests and inspections are to be made so that the Owner and the Engineer may observe such procedures. Such cost, except as provided in Subparagraph 13.5.3, shall be at the Owner's expense.
- 13.5.3 If such procedures for testing, inspection or approval under Subparagraph 13.5.1 and 13.5.2 reveal failure of the portions of Work to comply with requirements established by the Contract Documents, all costs made necessary by such failure including those of repeated procedures and compensation for the Engineer's services and expenses shall be at the Contractor's expense.
- 13.5.4 Required certificates of testing, inspections or approvals shall, unless otherwise required by the Contract Documents, be secured by the Contractor and promptly delivered to the Owner and the Engineer.
- 13.5.5 If the Engineer or the Owner are to observe test, inspections or approvals required by the Contract Documents, the Engineer or Owner will do so and, where practicable, at the normal place of testing.
- **13.5.6** Test or inspections conducted pursuant to the Contract Documents shall be made to avoid unreasonable delay in the Work.

13.5.7 Payments due and unpaid under the Contract Document shall bear interest from the date payment is due at such rate as the parties may agree upon in writing or, in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located and in conformance with New Mexico statutes.

13.6 COMMENCEMENT OF STATUTORY LIMITATION PERIOD

- **13.6.1** As between the Owner and Contractor
 - **13.7.1.1 Before Substantial Completion:** As to acts or failures to act occurring prior to the relevant date of Substantial Completion, as described in Subparagraph 9.8.1, any applicable statute of limitations shall commence to run and any alleged cause of action shall be deemed to have accrued in any and all events not later than such date of Substantial Completion;
 - **13.7.1.2 Between Substantial Completion and final Certificate for Payment:** As to acts or failures to act occurring subsequent to the relevant date of Substantial Completion and prior to issuance of the final Certificate for Payment, any applicable statute of limitations shall commence to run and any alleged cause of action shall be deemed to have accrued in any and all events not later than the date of issuance of the final Certificate for Payment; and
 - 13.7.1.3 After Final Certificate for Payment: As to acts or failures to act occurring after the relevant date of issuance of the Final Certificate for Payment, any applicable statute of limitations shall commence to run and any alleged cause of action shall be deemed to have accrued in any and all events not later than the date of any act or failure to act by the Contractor pursuant to and Warrant provided under Paragraph 3.5, the date of any correction of the Work or failure to correct the Work by the Contractor under Paragraph 12.2, or the date of actual commission of any other act or failure to perform any duty or obligation by the Contractor or Owner, whichever occurs last.
 - **13.7.1.4 Equal Employment Opportunity:** The Contractor agrees not to discriminate against any employee or applicant for employment because or race, color, religion, sex, national origin or sexual preference, in accordance with U.S. Executive Order 11246, as amended, and N.M. Executive Order 85-15. If the Contract constitutes a federally assisted construction contract within the meaning of 41 C.F.R. 60-1.3 (1987), then the equal opportunity clause of 41 C.F.R. 60-1.4 (b) is incorporated herein by reference.

13.8 WAGE RATES

13.8.1 Minimum Wage: Minimum wages will be paid as determined by the Secretary of Labor, U.S. Department of Labor, Washington, D.C. 20210, or as determined by the Office of the Labor Commissioner, State of New Mexico, Santa Fe, New Mexico, as following hereinafter. The minimum wages to be paid on the project will be the higher of the Wage Determinations for each class of laborers and mechanics. All rules and regulations pursuant to State and/or Federal Labor Laws will apply to this work.

- **13.8.2** Payment of Employees and Weekly Payrolls: Attention of bidders is called to the fact that minimum wage rates to be paid various classes of laborers and mechanics, if based upon wages determined by the State Labor Commission, will be in accordance with the 6-6-6 N.M.S.A. 1953 Compilation.
 - 13.8.2.1 Following public hearings, the rule on submission of payrolls, contained in Paragraph 4 of Part II, reads as follows: "The contractual provision will require that the Contractor and each Subcontractor will deliver or mail copies of the certified weekly payrolls, prepared in accordance with these regulations, to the Office of the Labor Commission, no more than five working days following the close of the Payroll Period." It is further stated that such payrolls will depict the decision number for this Project and the County in which the work is being performed.
 - 13.8.2.2 The scale of wages to be paid will be posted by the Contractor in a prominent and easily accessible place at the job site. Public works construction projects, except for street, highway, bridge, road, utility or maintenance contracts with employers who elect not to participate in training, will not be constructed unless an employer agrees to make contribution to approved apprentice and training programs in New Mexico in which the employer is a participant, or to the public works apprentice and training program fund administered by the Public Works Bureau of Labor and Industrial Division of the Labor Department. Contributions will 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 Department of Labor.

13.8.3 NEW MEXICO STATUE RELATING TO RESIDENCE REQUIREMENTS FOR PUBLIC EMPLOYEES AND THOSE EMPLOYED ON PUBLIC WORK PROJECTS

13.8.3.1 Residential Preference: In accordance with Section 13-4-2, N.M.S.A. 1978, as amended, any Bidder desiring the preference of "Resident Contractor" must possess all required licenses and meet the residency requirements at the time the contract is advertised for bids. Contractor seeking to qualify as a resident contractor must also have completed the application form and submitted it to the state-purchasing agent prior to submission of their bid. The Resident Contractor's Certificate number must be received by the contractor by the time the Owner is ready to award the contract.

13.9 RECORDS

13.9.1 The Owner shall have access to and the right to examine any accounting or other records of the Contractor involving transactions and Work related to this Contract for five (5) years after final payment or five (5) years after the final resolution of any ongoing disputes at the time of final payment. All records shall be maintained in accordance with generally accepted accounting procedures, consistently applied. Subcontractors of any tier shall be required by Contractor to maintain records and to permit audits as required of Contractors herein.

13.10 MISCELLANEOUS GENERAL PROVISIONS

- 13.10.1 Any specific requirement in this Contract that the responsibilities or obligations of the Contractor also apply to a Subcontractor is added for emphasis and are also hereby deemed to include a Subcontractor of any tier. The omission of a reference to a Subcontractor in connection with any of the Contractor's responsibilities or obligation shall not be construed to diminish, abrogate or limit any responsibilities or obligations of a Subcontractor of any tier under the Contract Documents or the applicable subcontract.
- 13.10.2 This Contract shall be interpreted, construed, enforced and regulated under and by the laws of the State of New Mexico. Whenever possible, each provision of this Contract shall be interpreted in a manner as to be effective and valid under applicable law. If, however, any provision of this Contract, or a portion thereof, is prohibited by law or found invalid under any law, only such provision or portion thereof shall be ineffective, without invalidating of affecting the remaining provisions of this Contract or valid portions of such provision, which are hereby deemed severable. Contractor and Owner further agree that in the event any provision of this Contract, or a portion thereof, is prohibited by law or found invalid under any law, this Contract shall be reformed to replace such prohibited or invalid provisions or portion thereof with a valid and enforceable provision which comes as close as possible to expressing the intention of the prohibited or invalid provision.
- 13.10.3 Contractor and Owner each agree that the State of New Mexico District Court of the County where the Project is located shall have exclusive jurisdiction to resolve all Claims and any issue and disputes between Contractor and Owner. Contractor agrees that it shall not file any petition, complaints, lawsuit or legal proceedings against Owner in any other court other than the State of New Mexico District Court for the County where the Project is located.
- **13.10.4** Owner's total liability to Contractor and anyone claiming by, through, or under Contractor for any Claim, cost, loss, expense or damage caused in part by the fault of Owner and in part by the fault of contractor or any other entity or individual shall not exceed the percentage share that Owner's fault bears to the total fault of Owner, Contractor and all other entities and individuals as determined on the basis of comparative fault principles.
- 13.10.5 Contractor agrees that Owner shall not be liable to Contractor for any special, indirect, incidental, or consequential damage whatsoever, whether caused by Owner's negligence, fault, errors or omissions, strict liability, breach of contract, breach of warranty or other cause or causes whatsoever. Such special, indirect, incidental or consequential damages include, but are not limited to loss of profits, loss of savings or revenue, loss of anticipated profits, labor inefficiencies, idle equipment, home office overhead, and similar types of damages.
- **13.10.6** Nothing contained in this Contract or the Contract Documents shall create any contractual relationships with or cause of action in favor of a third party against the Owner.
- **13.10.7** No member or office of City of Aztec incurs or assumes any individual or personal liability under the Contract or by reason of the default of the Owner in the performance of any terms thereof. Contractor releases and discharges all members or officers of the City of Aztec from any liability as a condition of and as consideration for the award of the Contract to Contractor.
- **13.10.8** Owner reserves the right to conduct building commissioning activities during the construction, testing and acceptance phases of the Work.

- 13.10.8.1 If the Owner includes the building commissioning plan, including a building components testing schedule, in the plans and specifications for the Project, Contractor shall include all costs associated with commissioning support in the base bid for the Project and Contractor's schedule shall reflect all time associated with the commissioning plan, including a building component testing schedule, commissioning and commissioning support in Contractor's schedule. The Contractor shall not be entitled to a change in the Contract price or time for Owner's commissioning activities unless, without the fault of or delay by the Contractor or those for whom Contractor is responsible, the commissioning agent fails to conduct the component testing in accordance with the building component testing schedule. Should the Contractor:
 - .1 fail to complete component testing checklists in accordance with the commissioning plan;
 - .2 install components or systems in such a manner that they fail to achieve the minimum levels of performance set forth in the commissioning plan; or .3 fails to provide equipment and other components of systems that do not meet the minimum performance levels required by the specifications or identified in the submittals

Contractor shall not be entitled to any time extension or adjustment of the contract price for correction of such conditions and shall be liable to Owner for any additional costs of commissioning caused by such conditions in addition to any liquidated damages for delay in Project completion.

13.10.8.2 If, after entering into the Agreement, the Owner determines that building commissioning shall be required, the Contract shall be modified by Change Order or Construction Change Directive as provided in Article 7.

ARTICLE 14: TERMINATION OF THE CONTRACT

14.1 TERMINATION BY THE CONTRACTOR

- **14.1.1** The Contractor may terminate the Contract if the Work is stopped for a period of 30 consecutive days through no act or fault of the Contractor or a Subcontractor, Sub-subcontractor or their agents or employees or any other persons or entities performing portions of the Work under contract with the Contractor, for any of the following reasons:
 - **14.1.1.1** Issuance of an order of a court or other public authority having jurisdiction, which requires all Work to be stopped;
 - **14.1.1.2** An act of government, such as a declaration of national emergency, which requires all Work to be stopped;
 - **14.1.1.3** The Work is stopped pursuant to Subparagraph 9.7.1.
- 14.1.2 The Contractor may terminate the Contract if, through no act or fault of the Contractor or a Subcontractor, Sub-subcontractor or their agents or employees or any other persons performing portions of the Work under contract with the Contractor, repeated suspensions, delays or interruptions of the entire Work by the Owner as described in Paragraph 14.3 constitute in the aggregate more than 100 percent of the total number of days scheduled for completion, or 120 days (165 days for base bid and alternate #1) in any 365-day period, whichever is less. A condition to receiving the payment due under this Subparagraph 14.1.2, Contractor shall execute and deliver to the Owner such documents requested by the Owner, including the legal assignment of Contractor's contractual rights with respect to any Contracts or documents of Contractor pertaining to the Work. In addition, Contractor shall return all_drawings, plans, specifications, and other materials pertaining to the Work to the Owner; and will further execute a full release, waiver and assignment of Contractor's rights in interest on a form acceptable to the Owner.
- **14.1.3** If one of the reasons described in Subparagraph 14.1.1 or 14.1.2 exists, the Contractor may, upon seven days written notice to the Owner and Engineer, terminate the Contract and recover from the Owner payment for Work executed and for proven loss with respect to materials, equipment, tools, construction equipment and machinery, including reasonable overhead, profit, and damages.
- 14.1.4 If the Work is stopped for a period of 60 consecutive days through no act or fault of the Contractor or a Subcontractor or their agents or employees or any other persons performing portions of the Work under contract with the Contractor because the Owner has persistently failed to fulfill the Owner's obligations under the Contract Document with respect to matters important to the progress of the Work, the Contractor may, upon seven additional days written notice to the Owner and the Engineer, terminate the Contract and recover from the Owner as provided in Subparagraph 14.1.3.

14.2 TERMINATION BY THE OWNER FOR CAUSE

14.2.1 The Owner may terminate the Contract if the Contractor refuses or fails to supply enough properly skilled workers or proper materials.

- **14.2.1.1** Fails to make payment to Subcontractors for materials or labor in accordance with the respective agreements between the Contractor and the Subcontractors, or otherwise fails to comply with the New Mexico Retainage Act (NMSA 57-28-1 et seq.).
- **14.2.1.2** Disregards laws, ordinances, rules, regulations, or orders of a public authority having jurisdiction; or
- **14.2.1.3** Disregards the authority of the Owner's Representative or Engineer;
- **14.2.1.4** Fails to furnish the Owner with assurance satisfactory to the Owner evidencing the Contractor's ability to complete the work in compliance with all the requirements of the Contract Documents.
- 14.2.1.5 Fails after commencement of the Work to proceed continuously with the construction and completion of the Work for more than ten (10) consecutive days, except as permitted under the Contract Documents;
- **14.2.1.6** Fails to maintain a satisfactory rate of progress with the Work or fails to comply with approved progress schedules;
- **14.2.1.7** Otherwise is guilty of a substantial breach of the Contract Documents.
- 14.2.2 When any of the reasons described in Subparagraph 14.2.1.1 through 14.2.1.7 exist, the Owner, may without prejudice to any other rights or remedies and after giving the Contractor and the Contractor's surety seven days written notice, terminate employment of the Contractor and may, subject to any prior rights of the surety;
 - **14.2.2.1** Take possession of the site and of all materials, equipment, tools, and construction equipment and machinery thereon owned by the Contractor;
 - **14.2.2.2** Accept assignment of subcontracts pursuant to Paragraph 5.4, and
 - **14.2.2.3** Finish the Work by whatever reasonable method the Owner may deem expedient.
- **14.2.3** When the Owner terminates the Contract for one of the reasons stated in Subparagraph 14.2.1, the Contractor shall not be entitled to receive further payment until the Work is finished.
- 14.2.4 If the unpaid balance of the Contract Sum exceeds cost of finishing the Work, including compensation for the Engineer's services and other expenses and damages incurred by the Owner and not expressly waived, such excess may be paid to the Contractor. If such costs and damages exceed the unpaid balance, the Contractor shall pay the difference to the Owner. The amount to be paid to the Contractor or Owner, as the case may be, shall be certified by the Engineer, upon application, and this obligation for payment shall survive termination of the Contract.

- 14.2.5 In exercising the Owner's right to secure completion of the Work under any of the provisions hereof, the Owner shall have the right to exercise the Owner's sole discretion as to the manner, methods, and reasonableness of costs of competing the Work.
- **14.2.6** The rights of the Owner to terminate pursuant to Article 14.2 will be cumulative and not exclusive and shall be in addition to any other remedy provided by law or the Contract Documents.
- 14.2.7 Should the Contractor fail to achieve final Completion of the Work within fourteen (14) calendar days following the date of Substantial Completion, the Owner may exercise its rights under Article 14.2 or as mutually agreed between the parties.

14.3 SUSPENSION BY THE OWNER FOR CONVENIENCE

- **14.3.1** The Owner may, without cause, order the Contractor in writing to suspend, delay or interrupt the Work in whole or in part for such period of time as the Owner may determine.
- 14.3.2 The Contract Sum and the Contract Time may be adjusted for increases in cost and time caused by suspension, delay or interruption as described in Subparagraph 14.3.1. Adjustment of the Contract Sum may include profit. No adjustments shall be made to the extent.
 - **14.3.2.1** That performance is, was or would have been so suspended, delayed or interrupted by another cause for which the Contractor is responsible; or
 - **14.3.2.2** That an equitable adjustment is made or denied under another provision of the Contract.

14.4 TERMINATION BY THE OWNER FOR CONVENIENCE

- **14.4.1** The Owner may, at any time, terminate the Contract for the Owner's convenience and without cause.
- **14.4.2** Upon receipt of written notice from the Owner of such termination for the Owner's convenience, the Contractor shall:
 - **14.4.2.1** Cease operations as directed by the Owner in the notice.
 - **14.4.2.2** Take actions necessary, or that the Owner may direct, for the protection and preservation of the Work, and
 - **14.4.2.3** Except for the Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders.

In case of such termination for the Owner's convenience, the Contractor shall be entitled to receive payment for Work executed, and costs incurred by reason of such termination, along with reasonable overhead and profit on the Work not executed.



NOTICE OF AWARD

TO:			
PROJECT:	BID 2018-631	ANIMAS RIVER DIVERSION PROJEC	Т
DESCRIPTION:	CONSTRUCT	RIVER WATER DIVERSION CHANNE	L, AZTEC, NM
		BID submitted by you for the above desorber 3, 2017 and information for Bidders	•
You are hereby no plus NMGRT.	tified that your	BID has been accepted for items in the	amount of \$
time of receipt of the BOND. Payment E	his Notice by yo BONDS and cer	on for Bidders to execute the Agreement ou and to furnish any required CONTRA rtificates of insurance within fifteen (15) of receipt as provided herein.	CTOR'S PERFORMANCE
from the time of re of the OWNER's a	ceipt of this No cceptance of yo	ent and to furnish said BONDS and certi- tice, said OWNER will be entitled to con- our BID as abandoned and as a forfeiture entitled to such other rights as may be gr	sider all your rights arising out e of your BID BOND or bid
You are required to this	o return an ack	nowledged copy of this NOTICE OF AW	/ARD to the OWNER. Dated
[DATED THIS:		_
(OWNER:	City of Aztec	_
E	BY:		_
-	ΓITLE:		_
		ACCEPTANCE OF NOTICE	
Receipt of the abo	ve NOTICE OF	AWARD is hereby acknowledged	
(CONTRACTOR	R:	
	BY:		<u></u>
	ΓITLE:		
This	s is the	day of	



CONSTRUCTION AGREEMENT

Project Title: Animas River Diversion Project

Project No: 2018-631 Contract Control No.: 2018-631

THIS AGREEMENT DATED of Aztec, hereinafter called the "OWNER", and "CONTRACTOR".	made and entered into by and between the City hereinafter called the
WHEREAS, the City Commission of City of Aztec appro	oved the bid on;
WHEREAS, pursuant to the Notice of Award, the Contraction the required bonds; and,	actor as accepted the award and has submitted
WHEREAS, in consideration of the sum of \$\frac{\\$}{2}\$ by the Owner to the Contractor at the time and in the m has agreed and does hereby agree to furnish design, la complete in every detail the following:	anner hereinafter provided, the said Contractor

Animas River Diversion Project Bid 2018-631

The OWNER and the "CONTRACTOR" agree as follows:

To perform this contract and construct the work in accordance with the terms and conditions of the Contract Documents as defined in the General Conditions, Article 1 General Provisions and including the following additional Documents:

Project Specifications, referred to in this contract, all of which are incorporated herein and made a part hereof.

Payments to be made by the Owner to the Contractor shall be made in the manner provided for in the General Conditions, Article 9 Payment and Completion and on the basis of the prices set out in the Bid Form.

The bidder agrees the work will be substantially completed within **45 calendar days** from the date of the Notice to Proceed. Readiness for final payment will be 14 calendar days after substantial completion.

The bidder agrees liquidated damages will be paid to the Owner for each day beyond substantial completion expiration in the amount of \$500.00 per calendar day and \$250.00 per calendar day for completion of remaining work and readiness for final payment beyond completion expiration date.

That, in the event any of the provisions of the Agreement are violated by the Contractor or by any of his subcontractors, the Owner may serve written notice upon the Contractor and the Surety of its intention to terminate such Contract, such notices to contain the reasons for such intention to terminate the Contract, and unless with ten (10) days after the serving of such notice upon the Contractor such violation shall cease and terminate. In the event of any such termination, the Owner shall immediately serve notice

thereof upon the Surety who shall have the right to take over and perform this Agreement, provided, however, that if the Surety does not commence performance thereof within thirty (30) days from the date of the mailing to such Surety of notice of termination, the Owner may take over the work and prosecute the same to completion of the Agreement for the account and at the expense of the Contractor, and the Contractor and his Surety shall be liable to the Owner for any excess cost occasioned the Owner thereby, and in such event the Owner may take possession of and utilize in completing the work, such materials, appliances, and plant as may be on the site of the work and necessary therefore.

The Contract Documents shall be executed with one (1) original maintained by the City of Aztec City Clerk, and one certified copy which will be distributed to the Contractor.

IN WITNESS whereof the parties have executed this contract.

CONTRACTOR	A Municipal Corporation			
By:	By:			
Duly Authorized Signature	Title: City Manager			
By:	Date:			
Printed Name				
Title:	(SEAL)			
Date:	ATTEST:			
Signer has read the document and affirms that it true and complete and accurately represents the agreement of the parties	City Clerk Karla Sayler CMC			
NOTARY PUBLIC SIGNATURE (REQUIRED)	City Clerk Karia Sayler Civic			
THO TAKE I OBEIO GIOTATIONE (REGUINED)	Date			
State of New Mexico	CITY ATTORNEY APPROVED AS TO			
County of San Juan	FORM:			
(SEAL)				
Signature of notarial officer My commission expires:	Larry T. Thrower			
NM Taxation and Revenue Department Taxpayer Identification Number	Date			
Federal Taxpayer Identification or Social Security Number				
City of Aztec Business License Number				

PERFORMANCE BOND

KNOW ALL PERSONS BY THESE PRESENTS, that
[Here insert the name and address or legal title of the CONTRACTOR]
as Principal, hereinafter called the CONTRACTOR, and
[Here insert the legal title of the surety]
a corporation organized and existing under and by virtue of the laws of the State of and authorized to do business in the State of New Mexico, hereinafter called the Surety, are held and firmly bound unto City of Aztec, 201 West Chaco, Aztec, New Mexico 87410 as Obligee, hereinafter called the OWNER, in the amount of Dollars (\$), for the payment whereof CONTRACTOR and Surety bind themselves, their heirs, executors, administrators, successors, and assigns jointly and severally firmly by these presents.
WHEREAS, CONTRACTOR has by written agreement dated entered into a contract described as follows: Animas River Diversion Project which contract is by reference made a part hereof and is hereinafter referred to as the Contract.
NOW, THEREFORE, the condition of this obligation is such that, if CONTRACTOR shall faithfully perform and complete said contract according to its terms and comply with all requirements of law, then this obligations shall be null and void; otherwise it shall remain in full force and effect.
The Surety hereby waives notice of any alteration or extension of time made by the OWNER.

Complete the contract in accordance with its terms and conditions, or

Obtain a bid or bids for submission to the OWNER for completing said contract in accordance with its terms and conditions and, "upon determination by the OWNER and Surety of the lowest responsible bidder, arrange for a contract between such bidder and the OWNER and make available as work progresses (even though there should be a default or a succession of defaults under the contract or contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the contract price but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The term "balance of the contract price," as used in this paragraph shall mean: the total amount payable by the OWNER to the CONTRACTOR under said contract and any amendments thereto, less the amount properly paid by the OWNER to the CONTRACTOR.

Whenever the CONTRACTOR shall be, and declared by the OWNER to be, in default under the said contract, the OWNER having performed its obligations hereunder, the Surety may promptly remedy the default or shall promptly:

The Surety acknowledges that said contract may contain express guarantees and agrees that said guarantees, if any, are covered by the Surety's obligation hereunder.

Any suit under this bond must be instituted before the expiration of two years from the date on which final payment under the contract falls due, except that, with respect to express guarantees of a longer term, a suit thereon must be initiated within six months following the expiration of said express guarantees, if any.

Right of action with respect to any express guarantees, if any, in said contract shall accrue following completion and formal acceptance of the work under said contract.

No right of action shall accrue on this bond to or for the use of any person or corporation other than the Owner named herein or its successors or assigns.

Venue upon any suit brought upon this bond shall be in the District Court of San Juan County, New Mexico.

Signed and Sealed on:	, 2017
In Presence of	
	[Contractor's Principal]
	Ву:
	Title:
Approved as to Form:	
	[Surety]
	By:
Attorney for the Owner	Title:
	Countersigned:
	Surety's Authorized New Mexico Agent

LABOR AND MATERIAL PAYMENT BOND

KNOW ALL PERSONS BY THESE PRESENTS, that	
Here insert the name and address or legal title of the CONTRACTOR]	
as Principal, hereinafter called the CONTRACTOR, and	
[Here insert the legal title of the surety]	
a corporation organized and existing under and by virtue of the laws of the State of and authorized to do business in the State of New Mexico, hereinafter called the Surety, are held and firmly bound unto City of Aztec, 201 West Chaco, Aztec, New Mexico 87410 as Obligee, hereinafter called the OWNER, in the amount of Dollars (\$), for the payment whereof CONTRACTOR and Surety bind themselves, their heirs, executors, administrators, successors, and assigns jointly and severally firmly by these presents.	
WHEREAS, CONTRACTOR has by written agreement dated entered into a contract described as follows: Animas River Diversion Project which contract is by reference made a part hereof and is hereinafter referred to as the Contract.	:
NOW, THEREFORE, the condition of this obligation is such that if the CONTRACTOR shall pay as they become due, all just claims for labor performed and materials and supplies furnished upon or for the	/

NOW, THEREFORE, the condition of this obligation is such that if the CONTRACTOR shall pay as they become due, all just claims for labor performed and materials and supplies furnished upon or for the work under said contract, pursuant to Sections 13-4-18 through 13-4-20 NMSA 1978, whether said labor be performed and materials and supplies be furnished under the original contract or any contract thereunder, then this obligation shall be null and void; otherwise it shall remain in full force and effect, subject, however, to the following conditions:

The right to sue on this bond accrues only to the OWNER and the parties to whom New Mexico Statutes Annotated, 1978, 13-4-18 through 13-4-20, as amended, grant such right; and any such right shall be exercised only in accordance with the provisions and limitations of said statutes.

The Surety, for value received, hereby expressly stipulates and agrees that no change, extension of time, alteration or addition to the terms of the agreement or to the work to be performed thereunder or the specifications accompanying the same shall in any way affect the Surety's obligation on this bond; and the Surety does hereby waive notice of any such change, extension of time, alteration or addition to the terms of this agreement or to the work or specifications.

Venue upon any suit brought upon this bond shall be in the District Court of San Juan County, New Mexico.

This bond is issued simultaneously with another bond conditioned for the full and faithful performance of the contract.

Signed and Sealed on:	, 2017
In Presence of	
	[Contractor's Principal]
	Ву:
	Title:
Approved as to Form:	
	[Surety]
	By:
Attorney for the Owner	Title:
	Countersigned:
	[Surety's Authorized New Mexico Agent]

This bond is issued simultaneously with performance bond in favor of contracting agency for the faithful performance of the contract.

	TE OF LIABILITY II	STATE OF THE PARTY	DATE (MM/OD/YYYY)
ODUCER	ONLY AND C	ATION IS ISSUED AS A MATTER (CONFERS NO RIGHTS UPON THE CERTIFICATE DOES NOT AME OVERAGE AFFORDED BY THE POL	ND, EXTEND O
	INSURERS AFFO	ORDING COVERAGE	NAIC #
SURED	INSURER A:		
	INSURER B:		1
	INSURER C:		+
	INSURER D:		+
OVERAGES	triangration to		
THE POLICIES OF INSURANCE LISTED BELOW H NOTWITHSTANDING ANY REQUIREMENT, TERM OR CO BE ISSUED OR MAY PERTAIN, THE INSURANCE AFF	DITION OF ANY CONTRACT OR OTHER DO RDED BY THE POLICIES DESCRIBED HER	CUMENT WITH RESPECT TO WHICH THE REIN IS SUBJECT TO ALL THE TERMS	S CERTIFICATE M
CONDITIONS OF SUCH POLICIES, AGGREGATE LIMITS RACOAL TYPE OF INSURANCE POL	POLICY EFFECTIVE POL	ICY EXPIRATION	5
GENERAL LIABLITY	Y NUMBER CATE (MM/DD/YY) DA	EACH OCCURRENCE	s
COMMERCIAL GENERAL LIABILITY		DAMAGE TO RENTED PREMISES (En occurrence)	5
CLAIMS MADE OCCUR		MED EXP (Any one person)	5
		PERSONAL & ADV BUURY	\$
		GENERAL AGGREGATE	5
POLICY PRO LOC		PRODUCTS - COMPIOP AGG	5
AUTOMOBILE LIABILITY ANY AUTO	* 1	COMMINED SINGLE LIMIT (Ex accident)	5
ALL OWNED AUTOS SCHEDULED AUTOS		DODLY NUURY (Per person)	s
HRED AUTOS NON-OWNED AUTOS		DODLY NURY (Per accident)	s
		PROPERTY DAMAGE (Per scottent)	\$
GARAGE LIABILITY ANY AUTO		AUTO ONLY - EA ACCIDENT	5
		AUTO ONLY: AGG	5
EXCESSAUVORELLA LIABILITY		EACH OCCURRENCE	s
OCCUR CLAMS WADE		AGGREGATE	\$
			5
DEDUCTIBLE		-	\$
RETENTION \$ WORKERS COMPENSATION AND		WC STATU- OTH-	5
EMPLOYERS' LIABILITY		EL EACH ACCIDENT	5
ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED?		EL. DISEASE - EA EMPLOYEE	_
If yes, describe under SPECIAL PROMISIONS below		E.L. DISEASE - POLICY LIMIT	5
OTHER		4	
SCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES / EXCLUSIO	S ADDED BY ENDORSEMENT / SPECIAL PROVISIONS	•	
ERTIFICATE HOLDER	CANCELLATION		
(1)	DATE THEREOF, THE I MOTICE TO THE CERT IMPOSE NO OBLIGAT REPRESENTATIVES.	ABOVE DESCRIBED POLICIES BE CANCELLED ISSUING INSURER WILL ENDEAVOR TO MAIL. DEPICATE HOLDER NAMED TO THE LEFT, BUT F ION OR LIABILITY OF ANY KIND UPON THE B	DAYS WRITT
	AUTHORIZED REPRESE	INTATIVE	

NOTICE TO PROCEED



TO:		
PROJECT:	BID 2018-631	ANIMAS RIVER DIVERSION PROJECT
DATE:		
You are hereb	by notified to com	nmence WORK in accordance with the Agreement
dated	O	on or before You are to substantially complet
the WORK wit	thin cale	endar days thereafter. The date of substantial completion is
•	k and readiness	for final payment is within calendar days. The date for work
Contractor Co	nstruction Sched	dule is to be submitted to Owner within 15 days of the Notice to Proceed
	OWNER:	CITY OF AZTEC
	BY:	
	TITLE:	
		ACCEPTANCE OF NOTICE
Receipt of the	above NOTICE	TO PROCEED is hereby acknowledged
	BY:	
	TITLE:	
	DATE:	
		R IDENTIFICATION



CONTRACT CHANGE ORDER

PR	OJECT:	
CH	ANGE ORDER NO	
	NTRACTOR:	
ADI	DRESS:	FINANCE OFFICE NO
RE\	VISED CONTRACT AMOUNT	
1.	Original Contract Amount	\$
2.	Previously Approved Change Orders	\$
3.	Amount of This Order Add (Deduct)	\$
4.	Total Revised Contract Amount	\$
5.	Estimated Tax on Revised Contract	\$
6.	Total Revised Contract with Tax	\$
RE\	VISED CONTRACT TIME	
6.	Original Contract Completion Date	calendar days from notice to proceed
7.		Changecalendar days from notice to proceed
7.	•	ge Ordercalendar days from notice to proceed
(No	te: Items 2-5 Incl., to be filled in only if Char	nge Order involves a monetary change.)
	ASONS FOR CHANGE ORDER INCLUDING ached sheets to).	G ESTIMATED OR FIRM COST BREAKDOWN (See
	e work covered by this order shall be perforn original contract.	ned under the same terms and conditions as that included
CHANGE ORDER ACCEPTED		CHANGE ORDER APPROVED
		_ CITY OF AZTEC
BY		BY:
DA	TE	DATE:

CERTIFICATE OF SUBSTANTIAL COMPLETION



Name of Project:	Animas River Div	ersion Project				
Project #:	Bid # 2018-631					
Contract Control No	o: 2018-631					
	pondence we are do antially in acc	ocumenting beneficion cordance with	al acceptance of the plans		e referenced pr specifications	rojec or
	ill accept full mainte of warranty work if I					
PUNCH LIST:						
as required by the F any item on such accordance with the	completed or correct Prime Contractor or list does not relieve Contract document complete or correct ists of items.	Construction Manager to the Contractor of the Co	ger is appended of the respons	d hereto. The ibility to co	he failure to in implete all wo	clude
Contractor		Representa	ative		Date	
Architect/Enginee	r	Representa	ative		Date	
Owner: City of Az	ztec	Representa	ative		Date	
Attachments:						

Bid 2018-631 Animas River Diversion Project

RELEASE AND WAIVER OF LIENS



With reference to Contract Control No. 2018-631, o	dated	_,20,	as
amended, between the undersigned Contractor			and
City of Aztec for Animas River Diversion Projec	t, the Contractor hereby certifies	that is has r	made full
payment of all cots, charges and expenses incurre			
materials and equipment supplied to the foregoing	premises or used in connection	with its perfo	ormance
under said Contract.			
The Contractor further certifies that to its best known material men has made full payment of all costs, club behalf for work, labor, services, materials and equipthem in connection with said Contract. In consider complete and total payment, the Contractor hereby	narges and expenses incurred by pment supplies to the foregoing pation of \$ vermises, releases and forever definitions.	them or on or them or on or	their used by utes city of
Aztec, its premises and property and the Engineer,		•	•
out of or in connection with the performance of said	-	tnereto, exc	cept as set
forth in the Contractor's Statement Concerning Cla	III15.		
The foregoing shall not relieve the Contractor of its amended, which by their nature survive completion guarantees and indemnities.	-		
Executed this day of	, 20		
State of	Name of Contractor		
County of	Name of Contractor		
Subscribed and Sworn to me this day			
of, 20	Signature of Authorized Representativ	e for Contracto	or
Notary	Printed Name		
Notary Commission Expires	Title		

SUBCONTRACTOR'S RELEASE AND WAIVER OF LIENS



THE UNDERSIGNED, for and in consideration of the sum indicated below, the receipt whereof is hereby acknowledged, which is in full/partial payment of all sums due him for work performed and/or materials furnished in connection with the following described project, does hereby waive any right which he may have at this date to file any liens, mechanics, materialmen, or otherwise against said property for or by reason of any work performed or any materials furnished in undersigned affirms that there are no amounts included in this payment for labor or materials furnished by other parties which can become a lien against the described project.

PROJECT: BID 2018-631 ANIMAS RIVE LIEN WAIVER DATE:	ER DIVERSION PROJECT
AMOUNT:	D
Executed thisday of	, 20
CONTRACTOR	SUBCONTRACTOR
Mailing Address	Mailing Address
Contractor Authorized Representative	Sub-Contractor Authorized Representative
Printed Name	Printed Name
Title	Title
State of	
County of	
Subscribed and Sworn to me this day of	, 20
Notary	My Commission Expires





For the purpose of obtaining final payment of funds due me for the satisfactory completion of **BID 2018-631 ANIMAS RIVER DIVERSION PROJECT** in conformity with the contract documents, including the plans and specifications or authorized modifications thereof, I hereby certify that all lawful claims for labor performed and material, supplies and services furnished by me or any sub-contractor for the said work, have been fully paid or satisfied, with the exception of the following claims:

It is requested that final payment of funds due me	under the contract be made.	
Executed this day of	, 20	
State of		
County of	Name of Contractor	
Subscribed and Sworn to me this day		
of, 20	Signature of Authorized Representative for Contractor	
Notary	Printed Name	
Notary Commission Expires	Title	

TYPE "A" - STREET, HIGHWAY, UTILITY & LIGHT ENGINEERING
Effective January 1, 2017

Trade Classification	Base Rate	Fringe Rate On and Prior to February 10, 2017	Fringe Rate After February 10, 2017
Bricklayer/Blocklayer/Stonemason	23.46	8.40	8.40
Carpenter/Lather	23.75	9.27	9.27
Cement Mason	17.42	6.35	6.35
Ironworker	26.50	14.32	14.32
Painter (Brush/Roller/Spray)	16.60	5.78	5.78
Plumber/Pipefitter	22.84	7.48	7.48
Electricians (outside)			
Groundman	21.81	10.92	10.92
Equipment Operator	31.31	13.39	13.39
Lineman/Wireman or Tech	36.83	14.82	14.82
Cable Splicer	40.51	15.38	15.38
Laborers			
Group I	12.20	5.30	5.30
Group II	12.50	5.30	5.30
Group III	12.90	5.30	5.30
Operators			
Group I	16.69	6.03	6.33
Group II	17.44	6.03	6.33
Group III	17.55	6.03	6.33
Group IV	17.63	6.03	6.33
Group V	17.75	6.03	6.33
Group VI	17.89	6.03	6.33
Group VII	18.27	6.03	6.33
Group VIII	18.50	6.03	6.33
Group IX	25.45	6.03	6.33
Group X	28.35	6.03	6.33
Truck Drivers			
Group I	16.00	7.02	7.02
Group II	16.00	7.02	7.02
Group III	16.00	7.02	7.02
Group IV	16.00	7.02	7.02

NOTE: SUBSISTENCE, ZONE AND INCENTIVE PAY APPLY ACCORDING TO THE PARTICULAR TRADES COLLECTIVE BARGAINING AGREEMENT. DETAILS ARE LOCATED AT www.dws.state.nm.us.



STATE OF NEW MEXICO NEW MEXICO DEPARTMENT OF WORKFORCE SOLUTIONS Labor Relations Division 121 Tijeras Ave NE, Suite 3000 Albuquerque, NM 87102 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.

General Contractor

- Provide a complete Subcontractor List and Statements of Intent (SOI) to Pay Prevailing
 Wages for each Contractor 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.
- Submit bi-weekly certified payrolls to the Contracting Agency.
- 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.
- Make sure, when a project has been completed, the Affidavits of Wages Paid (AWP) are sent to the Contracting Agency.

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.
- Submit bi-weekly certified payrolls to the General Contractor(s).

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STATE OF NEW MEXICO NEW MEXICO DEPARTMENT OF WORKFORCE SOLUTIONS Labor Relations Division 121 Tijeras Ave NE, Suite 3000 Albuquerque, NM 87102 www.dws.state.nm.us

 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.

Additional Information

Reference material and forms may be found at New Mexico Department of Workforce Solutions Public Works web pages at: http://www.dws.state.nm.us/new/Labor_Relations/publicworks.html.

CONTACT INFORMATION

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

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STATE OF NEW MEXICO NEW MEXICO DEPARTMENT OF WORKFORCE SOLUTIONS Labor Relations Division, 121 Tijeras Ave NE, Suite 3000 Abuquerque, NM 87 102 www.dws.state.nm.us

Wage Decision Approval Summary

1) Project Title: RIVER DIVERSION GRADING

Requested Date: 09/28/2017

Approved Date: 09/29/2017

Approved Wage Decision Number: SJ-17-1561-A

Wage Decision Expiration Date for Bids: 01/27/2018

2) Physical Location of Jobsite for Project: Job Site Address: ROAD 2978 Job Site City: AZTEC Job Site County: San Juan

3) Contracting Agency Name (Department or Bureau): CITY OF AZTEC Contracting Agency Contact's Name: Kathleen Lamb Contracting Agency Contact's Phone: (505) 334-7653 Ext.

4) Estimated Bid Opening Date: 11/14/2017

- 5) Estimated total project cost: \$278,500.00
- 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?: CREATE RIVER DIVERSION CHANNEL TO DIVERT WATER TO WATER TREATMENT PLANT FOR MUNICIPAL WATER REQUIREMENTS

6) Classifications of Construction:

Classification Type and Cost Total	Description
Highway/Utilities (A) Cost: \$278,500.00	CONSTRUCT DIVERSION CHANNEL IN ANIMAS RIVER INCLUDING INSTALLATION OF INFLATABLE COFFERDAM, EARTHWORK, FINISH GRADING AND INSTALLATION OF WIRE TIED RIPRAP

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APPENDIX B: PLAN SET

Animas River Diversion Project Plan set is posted separately and available http://www.aztecnm.gov/purchasing/office.htm

APPENDIX C: TECHNICAL SPECIFICATIONS

TECHNICAL SPECIFICATIONS FOR THE CONSTRUCTION OF THE ANIMAS RIVER DIVERSION

- 1. ALL WORK DETAILED IN THIS PROJECT IS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED IN THE SUPPLEMENTAL SPECFICATIONS WHICH IS PROVIDED HEREIN, IN ACCORDANCE WITH THE NEW MEXICO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION 2006.
- 2. NEW MEXICO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION 2006. SEE ATTACHED TABLE OF CONTENTS.
- 3. The New Mexico Standard Specifications for Public Works Construction 2006 is available at Albuquerque Reprographics 4716 McLeod NE Albuquerque, NM 87109 (505) 884-0862 FAX (505) 883-6452 http:\\www.abqrepro.com. Please call ahead to ensure they will be able to fill your order. Hard copies = \$150/EA CDs = \$50/EA.
- 4. MEASUREMENT AND PAYMENT Work covered in individual specifications of the NEW MEXICO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION 2006 and associated costs therewith shall be included in the contract price for the item to which the work applies. No separate payment shall be made.
- 5. If alternative manufacturers other than the pre-approved manufacturer are proposed for any specified equipment, the CONTRACTOR/bidder must supply a submittal; refer to STS 01 33 00, section 6.0 for requirements after the effective date of the agreement. Although the brands listed herein are the preferred brands, it is not the intent of the OWNER for these specifications to be proprietary; equals will be evaluated in accordance with comparable quality, construction, strength, durability, and suitability for the purpose intended and are listed for the purpose of describing the standard of quality performance and characteristics.

SUPPLEMENTAL SPECIFICATIONS

Section No.	<u>Title</u>
01 21 19 01 33 00	Testing and Quality Assurance Submittal Procedure
01 78 39	Project Record Documents
Appendix 1	Preliminary Geotechnical Engineering Report (by Terracon, December 2014), For Bidding Purposes Only

SUPPLEMENTAL SECTION 01 21 19

TESTING AND QUALITY ASSURANCE

PART 1: GENERAL

1.0 SUMMARY

- A. This Section includes testing and quality control measures required on this project. The Section is additional to requirements specified for testing and quality assurance in the standard specifications and other supplemental specifications.
- B. Materials and equipment are subject to inspection, sampling, and testing before acceptance of the work.

2.0 RELATED WORK

A. General and Supplemental General Conditions of the Contract and Division 1.

3.0 REFERENCES AND DEFINITIONS

- A. All materials and equipment shall be tested, by the CONTRACTOR or the OWNER, pursuant to their technical specification (unless otherwise specified herein) and the manufacturer's recommendations.
- B. Structure shall include but is not limited to: parking lots, pavement, sidewalk, curb and gutter, foundations, structural concrete, piping, wet-wells, manholes, retaining walls, junction boxes, and buildings.

4.0 SUBMITTALS

- A. General: Submit listed submittals in accordance with conditions of the Contract and with Specification 1502 and 01 33 00. The CONTRACTOR or OWNER's independent testing laboratories shall submit all test results to the ENGINEER prior to acceptance of the project.
- B. Test Reports from tests performed by independent testing firm: Submit for acceptance, complete test reports from OWNER's independent testing laboratories certifying that product conforms to performance characteristics and testing requirements specified herein and in other supplemental/standard specifications. Independent firm to submit reports to the ENGINEER and CONTRACTOR, in duplicate, indicating observations and results of tests and indicating compliance or non-compliance with Contract Documents.
- C. Test Reports from tests performed by CONTRACTOR: Submit for acceptance, complete test reports from CONTRACTOR certifying that product conforms to performance characteristics and testing requirements specified herein and in other supplemental/standard specifications.

5.0 QUALITY ASSURANCE

A. Quality Assurance/Control of Installation – The CONTRACTOR shall:

- 1. Comply fully with manufacturers' instructions, including each step in sequence.
- 2. Request clarifications from ENGINEER before proceeding should manufacturers' instructions conflict with Contract Documents.
- 3. Request clarification from ENGINEER before proceeding should specified reference standards conflict with Contract Documents. The contractual relationship of the parties to the Contract shall not be altered from the Contract Documents by mention or inference otherwise in any reference document.
- 4. Comply with specified standards as a minimum quality for the work except when more stringent specified tolerances, codes, or requirements indicate higher standards or more precise workmanship are required.
- 5. Make sure work is performed by qualified persons.
- 6. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion or disfigurement.
- B. Testing Laboratory Services
 - 1. Testing may be provided by the ENGINEER, if the ENGINEER is independent of the CONTRACTOR, except on a design-build project.
 - 2. Reports will be submitted by the independent firm to the ENGINEER and CONTRACTOR, in duplicate, indicating observations and results of tests and indicating compliance or non-compliance with Contract Documents.
- C. All other appurtenances/equipment (see individual specification)
 - 1. Operation...... CONTRACTOR
 - 2. Witness..... OWNER & ENGINEER
 - 3. Payment (or cost)..... CONTRACTOR
- D. Electrical System Operation
 - 1. Operation..... CONTRACTOR
 - 2. Witness..... OWNER & ENGINEER
 - 3. Payment (or cost)..... CONTRACTOR
- E. Control Systems Operation
 - 1. Operation...... CONTRACTOR
 - 2. Witness..... OWNER & ENGINEER
 - 3. Payment (or cost)..... CONTRACTOR

- F. Manufacturer's Field Services and Reports per respective specification.
- G. Special Inspections: Pursuant to section 1704 of the International Building Code, special inspection is required for the following items:
 - 1. Concrete and reinforcements
 - 2. Structural Welding: Field welding and welding not done in an approved fabricators shop.
 - 3. Anchor bolts

6.0 TESTING METHODS

A. All materials and equipment shall be tested pursuant to their technical specification (unless otherwise specified herein) and the manufacturer's recommendations to the CONTRACTOR. The CONTRACTOR shall submit all test results to the ENGINEER prior to acceptance of the project.

PART 2: PRODUCTS

This section not used.

PART 3: EXECUTION

1.0 FIELD QUALITY CONTROL

- A. Testing Laboratory Services
 - 1. The OWNER will employ and pay for services of a firm independent of the CONTRACTOR to perform testing.
 - 2. The independent firm will perform tests and other services specified in individual Specification Sections and as required by the OWNER.
 - 3. CONTRACTOR shall:
 - a) Cooperate with independent firm; furnish samples of materials, design mix, equipment, tools, storage and assistance as requested.
 - b) Notify ENGINEER and independent firm 8 hours prior to expected time for operations requiring services.
 - c) Make arrangements with independent firm and pay for additional samples and tests required for CONTRACTOR'S use and retesting upon failure of previous tests as determined by ENGINEER.
- B. A partial list of field tests required on this project, parties responsible for conducting the tests, and parties responsible for payment of the tests is presented below. Where tests specified in other sections of these specifications are not listed below, the CONTRACTOR will request additional testing information from the OWNER.
 - 1. Compaction tests (subgrade, ABC, engineered fill, pipe bedding, backfill, etc.):
 - a) Compaction test: Independent Testing Laboratory
 - b) Payment: CONTRACTOR
 - 2. Concrete tests:
 - a) Slump test: Independent Testing Laboratory

b)	Air test	. Independent Testing Laboratory
c)	Unit weight test	. Independent Testing Laboratory
d)	Prepare test cylinders	. Independent Testing Laboratory
e)	Protect test cylinders	. CONTRACTOR
f)	Perform cylinder test:	. Independent Testing Laboratory
g)	Payment:	CONTRACTOR

3. Waterline:

a)	Pressure:	CONTRACTOR
b)	Witness:	ENGINEER
c)	Payment (or cost):	

- 4. All other appurtenances/equipment (see individual specification)
 - a) Operation CONTRACTOR
 - b) Witness OWNER & ENGINEER
 - c) Payment (or cost)......CONTRACTOR
- 5. Electrical System Operation SEE ELECTRICAL SPECIFICATIONS
- 6. Control Systems Operation SEE CONTROL SYSTEM SPECIFICATIONS
- C. Retesting required because of non-conformance to specified requirements shall be performed by the same independent firm on instructions by the ENGINEER.
- D. Tolerances CONTRACTOR shall:
 - 1. Monitor tolerance control of installed products to produce acceptable work. Do not permit tolerances to accumulate.
 - 2. Comply with manufacturers' tolerances. Should manufacturer's tolerances conflict with Contract Documents, request clarification from ENGINEER before proceeding.
 - 3. Adjust Products to appropriate dimensions; position before securing Products in place.

2.0 MEASUREMENT AND PAYMENT

- A. No additional payment is required for costs of testing laboratory services required by the Contact Documents.
- B. Incidental Costs associated with testing and quality assurance:
 - 1. Costs of incidental labor and facilities required to assist testing firm.
 - 2. Costs of testing laboratory services used by CONTRACTOR separate from Contract Document requirements.
 - 3. Costs of retesting upon failure of previous tests as determined by ENGINEER.
 - 4. Costs of testing performed by the CONTRACTOR (i.e. pressure test on waterline)

END OF SECTION

SUPPLEMENTAL SECTION 01 33 00

SUBMITTAL PROCEDURE

PART 1: GENERAL

1.0 SUMMARY

- A. Section includes procedures for preparing and transmitting submittals required by specification sections for a product, material, or construction method:
 - 1. Shop drawings.
 - 2. Product data.
 - 3. Manufacturer's certificates.
 - 4. Design data and calculations.
 - 5. Manufacturer's instructions.
 - 6. Manufacturer's field service reports.
 - 7. Samples.
 - 8. Operation and maintenance manuals (timing, quantity, content and form).
 - 9. Field Testing and Quality Assurance
- B. It is the responsibility of the GENERAL CONTRACTOR to convey the requirements of this Section to their SUB-CONTRACTORS and their suppliers and vendors.
- C. This section contains the Submittal Check List as described in Standard Section 1502.2 and additional information on submittal transmittal.
- D. This section contains procedures for Contractor's Substitution proposals.

2.0 RELATED WORK

- A. Standard Specification 1502 Submittals
- B. Section 26 01 00: General Electric Provisions

3.0 SUBMITTAL

- A. Schedule submittals to expedite Work. Unless otherwise indicated in this Section, submittals shall be submitted within 30 days of date of Notice to Proceed.
- B. Submittals shall be prepared in accordance with Std. Spec 1502.

C. Preparation:

- 1. Provide separate submittal for each specification section requiring submittals. Where multiple sections relate to the same system or element and are being provided from the same source, a single combined submittal is acceptable.
- 2. Coordinate submission of related items. Group submittals of related products in a single transmission.
- 3. Include all submittal material requested for that Section.
- 4. Identify variations from requirements of Contract Documents. State product and system limitations which may adversely affect Work.
- 5. Mark or show dimensions and values in same units as specified.
- 6. Include a copy of the specification section, with addendum updates included, and all referenced and applicable sections, with addendum updates included, with each paragraph check-marked to indicate specification compliance or marked to indicate requested deviations from specification requirements. Check marks shall denote full compliance with a paragraph as a whole. If deviations from the specifications are indicated, and therefore requested by the Contractor, each deviation shall be underlined and denoted by a number in the margin to the right of the identified paragraph, referenced to a detailed written explanation of the reasons for requesting the deviation. The Engineer shall be the final authority for determining acceptability of requested deviations. The remaining portions of the paragraph not underlined will signify compliance on the part of the Contractor with the specifications. Failure-to-include a copy of the marked-up specification sections, along with justification(s) for any requested deviations to the specification requirements, with the submittal shall be sufficient cause for rejection of the entire submittal with no further consideration.

D. CONTRACTOR RESPONSIBILITIES:

- 1. Review submittals prior to transmittal. Verify compatibility with field conditions and dimensions, product selections and designations, quantities, and conformance of submittal with requirements of Contract Documents. Return non-conforming submittals to preparer for revision rather than submitting for review.
- 2. Coordinate submittals to avoid conflicts between various items of work.
- 3. Failure of CONTRACTOR to review submittals prior to transmittal for review shall be cause for rejection.
- 4. Incomplete, improperly packaged, and submittals from sources other than CONTRACTOR will not be accepted.

4.0 QUALITY ASSURANCE

A. Where required by Specification Sections, provide quality assurance submittals:

- Qualification data: Written information demonstrating capabilities and experience of firm or person. Include lists of complete projects with names and contact information for references.
- 2. Manufacturer's certificates: Submit reference data, affidavits, and certifications on manufacturer's letterhead certifying that products conform to or exceed specified requirements. Certificates may be based on recent or previous test results supplied by manufacturer and accepted by A/E.
- 3. Installer approval: Certification on manufacturer's letterhead that installer complies with requirements and is approved for installing manufacturer's products.
- 4. Welding certificates: Written certification that welding procedures and personnel comply with requirements. Submit record of Welding Procedure Specifications (WPS) and Procedure Qualification Record (PQR) on American Welding Society (AWS) forms. Include names of firms and personnel certified.
- 5. Field test reports: Written reports from qualified testing agency indicating and interpreting results of field tests performed either during or after installation for compliance with specified requirements. The CONTRACTOR shall perform field testing as required by specifications.

5.0 SUBMITTAL TRANSMITTAL

- A. Where possible, transmit all submittals electronically. Where electronic submittal is not possible, submit seven (7) paper copies for A/E retention plus as many copies as CONTRACTOR desires returned after review.
- B. Submittal Cover Sheet: Identify Project, CONTRACTOR SUB-CONTRACTOR, supplier, manufacturer, pertinent drawing sheet and detail numbers, and associated Specification Section numbers. CONTRACTOR's standard submittal form may be used provided it contains essentially the same information as listed.
- C. Sequentially number submittals. Re-submittals shall have original number with a suffix. Acceptable form of number is NN-T where:
 - 1. NN indicates different submittals for that specification section.
 - 2. T indicates the number of times that submittal has been made.

6.0 SUBMITTAL REVIEW

- A. A/E will review submittals for sole purpose of verifying general conformance with design intent and general compliance with Contract Documents. Approval of submittal by A/E does not relieve CONTRACTOR of responsibility for correcting errors which may exist in submittal or from meeting requirements of Contract Documents.
- B. Review time: Initial review will be performed within 14 days of receipt. Reviewer reserves right to withhold action on a submittal requiring review of related submittals until related submittal is received. Additional time will be required if processing must be delayed to permit review of related subsequent submittals. A/E will review re-submittals within 14

days.

C. Review actions: After review, A/E will return submittals marked as follows to indicate action taken:

This submittal has been reviewed for compliance with general requirements of design and arrangement only and is not a contract document. Acknowledgement of compliance does not relieve Contractor of responsibility for performance of the work in compliance with all provisions and requirements of the contract documents. Job measurements and coordination of all dimensions for proper fit of all parts of the work and performance of all equipment supplied to meet specification requirements are and remain specific responsibilities of the Contractor.			
☐ Compliance acknowledged subject to	Compliance acknowledged as noted		
the foregoing: Distribute	and subject to the foregoing: Distribute		
☐ Compliance acknowledged as noted ☐ Rejected – Revise and resubmit for review			
and subject to the foregoing:			
Revise and Resubmit for record: Distribute			

7.0 SUBMITTAL LIST

A. The CONTRACTOR shall provide a submittal list identifying the proposed submittals for the project is required when submitting the schedule of values.

8.0 SUBSTITUTIONS

- A. If alternative manufacturers other than the pre-approved manufacturer are proposed for any specified equipment, the CONTRACTOR/bidder must supply a substation submittal after the effective date of the agreement. Although the brands listed in the specifications are the preferred brands, it is not the intent of the OWNER for these specifications to be proprietary; equals will be evaluated in accordance with comparable quality, construction, strength, durability, and suitability for the purpose intended and are listed for the purpose of describing the standard of quality performance and characteristics.
- B. See article 11 of the Instructions to Bidders, regarding the "Substitute and "Or-Equal" Items" and article 6 regarding the "Contractor's Responsibilities" of the Standard General Conditions of the Contract.
- C. A request for a substitution constitutes a representation that the 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 for 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, under his responsibility, which may subsequently become apparent.
- D. Contractor shall make written application to ENGINEER for review of a proposed substitute item of material or equipment that Contractor seeks to furnish or use.

E. The application:

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

2. will state:

- a) the extent, if any, to which the use of the proposed substitute item will prejudice Contractor's achievement of Substantial Completion on time;
- b) whether or not use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item; and
- c) whether or not incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty;
- 3. will identify: see paragraph E (Qualification packages for substitution listing) of this section for details.
- 4. and shall contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including costs of redesign and claims of other contractors affected by any resulting change.
- F.QUALIFICATION PACKAGES FOR SUBSTITUTION LISTINGS: The qualification package for the substitution of equipment items or products under this specification the CONTRACTOR proposes to furnish shall include but not be limited to, the following information appropriate for the particular item:
 - 1. TRANSMITTAL LETTER: The Transmittal Letter shall briefly introduce your organization and indicate the organization's interest in the Project.
 - 2. EXECUTIVE SUMMARY: The Executive Summary shall highlight the major points in the proposal and list reasons why your organization is uniquely qualified to undertake this Project. The summary shall also include a brief history of the organization and organizational structure.
 - 3. QUALITY: The application package shall demonstrate a clear understanding of the process of ensuring a quality project. The organization shall identify specifically who will be responsible for the Quality Control/Quality Assurance (QA/QC) program and how it will be managed. The applicant shall include its standard QA/QC plan outlining its quality program in detail. In particular, the organization shall define its review process, field

inspection process, submittal review process, deficiency identification, correction and tracking process, non-conformance compliance process, and level of senior management involved

- 4. MANUFACTURE'S EXPERIENCE: The manufacturers shall certify that their experience includes a minimum of ten installations where identical equipment has been in operation for a minimum of 5 years successfully. Successful operations meaning that the system has been consistently meeting the design requirements.
- 5. EQUIPMENT REQUIREMENTS: A complete set of drawings specific to this project, specifications catalogue, cut-sheets and detailed descriptive material of proposed major equipment items or products. This information shall identify technical and performance requirements stipulated in the specifications.
- 6. EQUIPMENT DETAILS: Detailed information shall be submitted for all items.
- 7. MATERIALS OF CONSTRUCTION: List showing materials of construction of all components.
- 8. RECOMMENDED SPARE PARTS: Manufacturer's recommended spare parts.
- 9. ERECTION REQUIREMENTS: Information on equipment field erection requirements.
- 10. MAINTENANCE REQUIREMENTS: A maintenance schedule showing the required maintenance, frequency of maintenance, lubricants and other items required at each regular preventative maintenance period.
- 11. ELECTRICAL REQUIREMENTS: Process equipment electrical requirements and schematic diagrams.
- 12. LIST OF DEVIATIONS; Detailed written documentation with discussion of all deviations of equipment from the contract documents.
- 13. O& M MANUAL: One representative O & M Manual per STS 01 77 23
- 14. INSTALLATION LIST: Past Experience Installation List complete with plant location, design flow and loadings, plant design discharge quality, design engineer, firm, owners, manager, operator, superintendent, and telephone number for each. Identify which plants on the installation list meet the experience requirements of the Specification.
- 15. GUARANTEE: Copy of the supplier's guarantee of the pumping system and equipment for one year starting after successful completion of start-up.

16. SYSTEM LAYOUT DRAWINGS AND CALCULATIONS:

- a) The application package shall provide drawings showing the proposed locations for all major equipment. The existing lift station, buildings and locations for the new channel are shown in the Engineer's Drawings.
- b) The application package shall provide drawings showing modifications to the structure or enclosure that pumping system is to be installed in.

- c) The application package shall provide drawings showing modifications to the electrical system for a fully operating pumping system.
- d) The application package shall provide drawings showing modifications to the yard and process piping required for a fully operating pumping system.
- e) A set of hydraulic calculations shall also be submitted showing the system conforms to the hydraulic requirements in the Engineer's Drawings.
- f) All calculations shall be completed for the current and future design flow rates identified in that system's technical specifications.
- 17. Additional specific information for each system as listed in their specification.

G. Substitute Construction Methods or Procedures:

- 1. If a specific means, method, technique, sequence, or procedure of construction is expressly required by the Contract Documents, Contractor may furnish or utilize a substitute means, method, technique, sequence, or procedure of construction approved by ENGINEER.
- 2. Contractor shall submit sufficient information to allow ENGINEER, in ENGINEER's sole discretion, to determine that the substitute proposed is equivalent to that expressly called for by the Contract Documents.

H. ENGINEER's Evaluation:

- The Engineer will determine whether or not the material or article submitted is equal to the named material or article. The Engineer's decision regarding evaluation of substitutions shall be final and binding. Request for time extensions and additional costs based on rejection of substitutions will not be allowed.
- 2. ENGINEER will be allowed a reasonable time within which to evaluate each proposal or submittal. ENGINEER may require Contractor to furnish additional data about the proposed substitute item. ENGINEER will be the sole judge of acceptability.
- 3. No "or equal" or substitute will be ordered, installed or utilized until ENGINEER's review is complete, which will be evidenced by either a Change Order for a substitute or an approved Shop Drawing for an "or equal." ENGINEER will advise Contractor in writing of any negative determination.

I. Substitutions will not be considered at any time if:

- 1. Acceptance will require substantial revision of contract documents as determined by the Engineer.
- 2. Acceptance will create problems in stocking of repair parts and in future maintenance by the Owner.
- 3. The Engineer in his sole right determines that the material or article submitted is not equal to the named material or article.

- 4. Additional costs may be incurred by the Owner.
- 5. A time extension is required.

PART 2: PRODUCTS

This section not used.

PART 3: EXECUTION

This section not used.

END OF SECTION

SUPPLEMENTAL SECTION 01 78 39

PROJECT RECORD DOCUMENTS

PART 1: GENERAL

1.0 SUMMARY

- A. This Section includes administrative and procedural requirements for Project Record Documents, including the following:
 - 1. Record Drawings.
 - 2. Record Specifications.
 - 3. Record Submittals.

2.0 REFERENCES AND DEFINITIONS

- A. Where all or part of a Federal, ASTM, ANSI, AWWA, and New Mexico Standard Specifications for Public Works Construction etc. is incorporated by reference in these specifications, the reference standard shall be the latest edition and revision.
- B. Related Work Specified Elsewhere:
 - 1. General and Supplemental General Conditions of the Contract and Division 1.
 - 2. Section 01 33 00: Submittal Procedures
 - 3. Section 26 01 00: General Electric Provisions
 - 4. Section 27 33 22: Programmable Logic Controller (PLC) and Accessories

3.0 SUBMITTALS

- A. General: Submit listed submittals in accordance with conditions of the Contract and with Std. Specification 1502 and STS 01 33 00.
- B. Prior to closeout of the project, the CONTRACTOR shall submit record documents as specified herein.

PART 2: PRODUCTS

This section not used.

PART 3: EXECUTION

1.0 EXAMINATION

A. Examine all products for compliance with this section.

2.0 RECORD DRAWINGS

A. Record Prints: Maintain one set of red-lined prints of the Contract Drawings and Shop Drawings. These prints shall be updated at least once per week. These prints will be reviewed for verification of updates by the construction observer on a regular basis, depending on the length of the contract.

Immediately before inspection for Certificate of Substantial Completion, review marked-up Record Prints with ENGINEER.

- B. Preparation: Mark Record Prints to show the actual installation where installation varies from that shown originally. Mark whichever drawing is most capable of showing "field" conditions fully. Require individual or entity who obtained record data, whether individual or entity is Installer, sub-CONTRACTOR, or similar entity, to prepare the marked-up Record Prints.
 - 1. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.
 - 2. Record data as soon as possible after obtaining it. Record and check the markup before enclosing concealed installations.
 - 3. The record drawings shall clearly and neatly show all changes.
 - a) Additions marked in red.
 - b) Deletions marked in green.
 - c) Comments marked in blue.
 - d) Installed systems in yellow.
- C. Mark the Contract Drawings or Shop Drawings, whichever is most capable of showing actual physical conditions, completely and accurately. If Shop Drawings are marked, show cross-references on the Contract Drawings.
- D. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at same location.
- E. Note Construction Change Directive numbers (field orders or Request for Information changes), alternate numbers, Change Order numbers, and similar identification, where applicable.
- F. As part of the monthly payment application approval process the CONTRACTOR shall provide ENGINEER with a copy of current record (as-built) documents.

3.0 RECORD SPECIFICATIONS

- A. Preparation: Mark Specifications to indicate the actual product installation where installation varies from that indicated in Specifications, addenda, and contract modifications.
 - 1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
 - 2. Mark copy with the proprietary name and model number of products, materials, and equipment furnished, including substitutions and product options selected.
 - 3. Record the name of manufacturer, supplier, Installer, and other information necessary to provide a record of selections made.
 - 4. Note related Change Orders, field order notes, Request for Information (RFI) notes, Record Product Data, and Record Drawings where applicable.

4.0 RECORD PRODUCT DATA

- A. Preparation: Mark Product Data to indicate the actual product installation where installation varies substantially from that indicated in Product Data submittal.
 - 1. CONTRACTOR shall take a digital photograph of all equipment ID tags, name plates, information labels as a verification of what equipment was installed and said photographs shall be included in the Operation and Maintenance Manual.
 - 2. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later
 - 3. Include significant changes in the product delivered to Project site and changes in manufacturer's written instructions for installation.
 - 4. Note related Change Orders, Record Specifications, and Record Drawings where applicable.

5.0 MISCELLANEOUS RECORD SUBMITTALS

- A. Operation and Maintenance Manuals: Organize the operational and maintenance manual information into suitable sets of manageable size and bind into individual binders properly identified and indexed. Include pocket folders for folded sheet information. (Binders larger than 3-inches will not be accepted)
 CONTRACTOR to provide both a PDF and paper copy.
- **B.** Assemble Certifications, Lab Test Reports, and Field Test Reports required by other Specification Sections for miscellaneous record keeping and submittal in connection with actual performance of the Work. Bind or file miscellaneous records and identify each, ready for continued use and reference. **CONTRACTOR to provide both a PDF and paper copy.**

6.0 RECORDING AND MAINTENANCE

- A. Per Section 01 77 23 Operating and Maintenance Data, the Manufacturer shall provide 3 paper copies and 1 PDF copy of the operations and maintenance manuals which shall include the assembly and installation instructions. Operation and maintenance instructions which rely on vendor cut-sheets and literature which include general configurations, or require operating personnel to selectively read portions of the manual shall not be acceptable. Operation and maintenance instructions must be specific to equipment supplied in accordance with these specifications.
- B. Recording: Maintain one copy of each submittal during the construction period for Project Record Document purposes. Post changes and modifications to Project Record Documents as they occur.
- C. Maintenance of Record Documents and Samples: Store Record Documents and Samples in the field office apart from the Contract Documents used for construction. It is not advisable to use Project Record Documents for construction purposes. Provide access to Project Record Documents for ENGINEER'S reference on the project site.

7.0 MEASUREMENT AND PAYMENT

A. Work covered in this Section of Specifications and associated costs therewith shall be included in the contract price for the item to which the work applies. No separate payment shall be made.

END OF SECTION



Smith Engineering Company 2201 San Pedro Drive NE, Bldg 4, Suite 200 Albuquerque, NM 87110

Attn: Mr. Jared Lujan, P.E.

P: [505] 884.0700 F: [505] 884.2376

E: jaredl@smithengineering.com

Re: Preliminary Geotechnical Engineering Report

Animas River Diversion Structure East Bank of Animas River Aztec, New Mexico Terracon Project No. 69145023

Dear Mr. Lujan:

Terracon has completed our preliminary geotechnical engineering services for the proposed concrete water diversion structure located on the east banks of the Animas River in Aztec, New Mexico. These services were performed in general accordance with our proposal number P69140014 revised dated November 26, 2014. This geotechnical engineering report presents the results of our analysis and provides preliminary geotechnical recommendations concerning the design and construction of the proposed concrete diversion structures.

SITE LOCATION

ITEM	DESCRIPTION	
Location	North of County Road 2980 and west of County Road 2999 on the east bank of the Animas River in Aztec, New Mexico.	
Existing improvements	An existing sand bar causes the river flow to shift east to west at the proposed diversion location. Additionally, at this location an existing diversion structure and earthen dike are currently in use. Several small structures are located on the west bank of the Animas River and the area adjacent to the east bank consists of agricultural fields.	
Current ground cover	Exposed earth, agricultural fields, native vegetation, and river water.	
Existing topography	Relatively flat channel floor with a slight slope upward from the river channel at the river banks.	

Animas River Diversion

Appendix 1 - For Bidding Purposes Only

Terracon Consultants, Inc. #4A CR 3499 Flora Vista, New Mexico 87415 P [505] 334 2900 F [505] 334 9703 terracon.com

Water Diversion Structure Aztec, New Mexico
December 19, 2014 Terracon Project No. 69145023



PROJECT DESCRIPTION

ITEM	DESCRIPTION	
Site Construction	The project includes construction of a new concrete diversion structure. Construction will include a cast-in-place concrete headgate and tailgate, concrete apron, placement of rip rap and gabion baskets, retaining walls, and regrading of the Animas River east bank.	
Proposed foundation	Spread/continuous footing or mat foundations.	
Maximum loads	3 to 5 kips and 1 to 3 kips per lineal foot	
Grading	Maximum cut and fills on the order of about 3 to 5 feet (assumed)	
Cut and fill slopes	3 to 5 feet.	
Free-standing retaining walls	Concrete cast-in-place retaining walls.	
Below grade areas	None.	

PREVIOUS COMPLETED GEOTECHNICAL EXPLORATION

Terracon previously completed a limited geotechnical exploration report (original report) on December 29, 2011 for the Larkin Group NM, Inc. on behalf of the City of Aztec. The previous exploration included test pit excavations at four (4) locations. We have received formal authorization to use this report by Mr. Edward Kotyk, City of Aztec Project Manager, in an e-mail dated February 18, 2014 to supplement our preliminary findings for our current geotechnical services described herein. The previous report is attached to this letter report.

Review of Subsurface Conditions (From original report)

A total of four (4) test pits were excavated as part of the exploration program for the previous completed report. The subsurface conditions generally consisted of gravel with sand and varying amounts of clay and cobbles to the total depths explored of about 2-½ to 9 feet. Gravelly sand with clay and cobble fill was encountered in Test Pit TP-2 to a depth of 3-½ feet below existing grade and sand with varying amounts of silt and clay was encountered in Test Pit TP-4 to about 5 feet below existing graded. Specific conditions encountered at the test pit locations are indicated on the individual test pit logs in the attached report. Stratification boundaries on the test pit logs represent the approximate location of changes in soil types; in-situ, the transition between materials may be gradual.

Groundwater was observed at approximate depths ranging from about 1-½ to 5 feet below existing ground surface at the time of field exploration. These observations represent groundwater conditions at the time of the previous field exploration and may not be indicative of other times, or at other locations. Groundwater conditions can change with varying seasonal and weather conditions, the water flow in the river and other factors.

Animas River Diversion

Water Diversion Structure Aztec, New Mexico
December 19, 2014 Terracon Project No. 69145023



Fluctuations in groundwater levels can best be determined by implementation of a groundwater monitoring plan. Such a plan would include installation of groundwater monitoring wells, and periodic measurement of groundwater levels over a sufficient period of time.

GEOTEHCNIAL CONSIDERATIONS

The site appears suitable for the proposed construction based upon geotechnical conditions encountered in our original report.

Based on the depth of groundwater encountered in the previously excavated test pits and planned depth of excavation, groundwater will be encountered in the excavation. Therefore, temporary dewatering will be required during construction. The proposed structure walls and floors should be designed to account for the submerged lateral earth and hydrostatic pressures.

Excavation and grading granular on-site soil may be difficult and may require placement of engineered fill to provide a level subgrade. If used, engineered fill should meet the requirements specified herein. Extra effort and heavy duty equipment may be required to excavate the on-site soils due to very dense conditions and gravel and cobbles.

Scour depth should be considered by the structural engineering during design.

Geotechnical engineering recommendations for the proposed structures and other earth connected phases of the project are outlined below. The recommendations contained in the following sections are preliminary as our analysis is based on a previously completed limited geotechnical evaluation. The preliminary recommendations should be confirmed with a supplemental subsurface exploration prior to or during construction.

PRELIMINARY FOUNDATION RECOMMENDATIONS

The proposed structures can be supported by a shallow spread/continuous footing or mat foundation system bearing directly on native dense or very dense gravel. Design recommendations for foundations for the proposed structures and related structural elements are presented in the following paragraphs.

Preliminary Design Recommendations¹

Description	Spread/Continuous Footings or Mat	
Bearing Material	Native dense or very dense gravels.	
Net allowable bearing pressure ² :	3,000 psf	
Modulus of Subgrade Reaction	250 psi/in	
Minimum footing width 18 inches		

Animas River Diversion

Water Diversion Structure Aztec, New Mexico
December 19, 2014 Terracon Project No. 69145023



Minimum embedment depth below finished grade ³	30 inches	
Approximate total settlement ⁴	<1 inch	
Estimated differential settlement	<1/2 inch over 40 feet	
Ultimate coefficient of sliding friction ⁵	0.45	

- 1. The provided recommendations are preliminary and should be confirmed with supplemental exploration prior to final design and/or during construction.
- 2. The recommended net allowable bearing pressure is the pressure in excess of the minimum surrounding overburden pressure at the foundation base elevation. Assumes any soft soils, if encountered, will be undercut and replaced with engineered fill. Based upon a Factor of Safety of 3.
- 3. Relative to lowest adjacent finished grade, typically exterior grade.
- 4. The above settlement estimates have assumed that the maximum footing size is 4 feet for column footings and 1.5 feet for continuous footings.
- 5. Sliding friction along the base of the foundation will not develop where net uplift conditions exist.

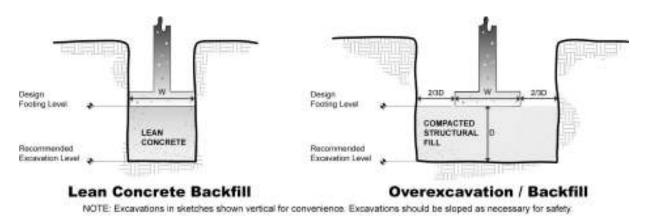
Construction Considerations

The base of all foundation excavations should be free of water and loose soil prior to placing concrete. Concrete should be placed soon after excavating to reduce bearing soil disturbance. Should the soils at bearing level become excessively dry, disturbed or saturated, the affected soil should be removed prior to placing concrete. It is recommended that the geotechnical engineer be retained to observe and test the soil foundation bearing materials.

Terracon anticipates hand-operated compaction equipment will be utilized, as necessary, in foundation cuts, following any mass grading. If unsuitable bearing soils are encountered in foundation excavations, the excavation should be extended deeper to suitable soils and the foundation could bear directly on these soils at the lower level or on lean concrete backfill placed in the excavations. As an alternative, the foundation could also bear on properly compacted backfill extending down to the suitable soils. Overexcavation for compacted backfill placement below foundation should extend laterally beyond all edges of the foundation at least 8 inches per foot of overexcavation depth below foundation base elevation. The overexcavation should then be backfilled up to the foundation base elevation per the preceding general earthwork specifications, using hand operated compaction equipment in foundation cuts. The overexcavation and backfill procedure is described in the following figure.

Water Diversion Structure Aztec, New Mexico
December 19, 2014 Terracon Project No. 69145023





SEISMIC CONSIDERATIONS

DESCRIPTION	VALUE
2009 International Building Code Site Classification (IBC) ¹	C ²
Site Latitude	N 36.838419°
Site Longitude	W 107.992322°
S _{Ms} Spectral Acceleration for a Short Period	0.169g
S _{M1} Spectral Acceleration for a 1-Second Period	0.092g
S _{Ds} Spectral Acceleration for a Short Period	0.113g
S _{D1} Spectral Acceleration for a 1-Second Period	0.061g
Fa Site Coefficient for a Short Period	1.2
F _v Site Coefficient for a 1-Second Period	1.7

¹ Note: In general accordance with the *2009 International Building Code*, Table 1613.5.2. IBC Site Class is based on the average characteristics of the upper 100 feet of the subsurface profile.

SLAB-ON-GRADE

Design Recommendations

DESCRIPTION	VALUE
Slab system Slab-on-grade concrete.	
Floor slab support	Native dense or very dense gravels.
Subbase	4 inches of aggregate base course (ABC) materials.

Animas River Diversion

² Note: The 2012 International Building Code (IBC) requires a site soil profile determination extending to a depth of 100 feet for seismic site classification. The current scope does not include the required 100 foot soil profile determination. Previously excavated test pits extended to a maximum depth of about 9 feet, and this seismic site class definition considers that dense or denser soil continues below the maximum depth of the subsurface exploration. Additional exploration to deeper depths would be required to confirm the conditions below the current depth of exploration.

Water Diversion Structure Aztec, New Mexico
December 19, 2014 Terracon Project No. 69145023



DESCRIPTION	VALUE		
Modulus of subgrade reaction	250 pounds per square inch per inch (psi/in) (The modulus was obtained based on our experience with similar subgrade conditions, and estimates obtained from ACI design charts.)		

In areas of exposed concrete, control joints should be saw cut into the slab after concrete placement in accordance with ACI Design Manual, Section 302.1R-37 8.3.12 (tooled control joints are not recommended). Additionally, dowels should be placed at the location of proposed construction joints. To control the width of cracking (should it occur) continuous slab reinforcement should be considered in exposed concrete slabs.

Positive separations and/or isolation joints should be provided between slabs and all foundations to allow independent movement. Interior trench backfill placed beneath slabs should be compacted in accordance with recommendations outlined in the Earthwork section of this report. Other design and construction considerations, as outlined in the ACI Design Manual, Section 302.1R are recommended.

Construction Considerations

Some differential movement of a slab-on-grade floor system is possible should the subgrade soils become elevated in moisture content. If encountered beneath the slab-on-grade floor, very loose or deleterious material should be removed and replaced with engineered fill. Such movements are anticipated to be within general tolerance for normal slab-on-grade construction. To reduce potential slab movements, the subgrade soils should be prepared as outlined in the Earthwork section of this report.

LATERAL EARTH PRESSURES

Design Recommendations

For soils above any free water surface, recommended equivalent fluid pressures for unrestrained foundation elements when using on-site soils as backfill are:

ITEM	SOIL TYPE	VALUE
Active Case	On-site soils	35 psf/ft
Passive Case	On-site soils	450 psf/ft
At-Rest Case	On-site soils	55 psf/ft ¹
Coefficient of Base Friction	On-site soils	0.45 ²

¹Note: Need to design walls for a submerged at-rest pressure of 93 psf/ft within the groundwater zone.

Design bottom of structure for 62.4 psf/ft to resist uplift/hydrostatic forces.

Animas River Diversion

²Note: The coefficient of base friction should be reduced to 0.30 when used in conjunction with passive pressure.

Water Diversion Structure Aztec, New Mexico
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The lateral earth pressures herein do not include any factor of safety and are not applicable for submerged soils/hydrostatic loading. Additional recommendations may be necessary if such conditions are to be included in the design.

Fill against foundations (if applicable) should be compacted to densities specified in the Earthwork section of this report. Compaction of each lift adjacent to walls should be accomplished with hand-operated tampers or other lightweight compactors.

EARTHWORK

The following presents recommendations for site preparation, excavation, subgrade preparation and placement of engineered fills (if applicable) on the project. The recommendations presented for design and construction of earth supported elements, are contingent upon following the recommendations outlined in this section.

Earthwork on the project should be observed and evaluated by Terracon. The evaluation of earthwork should include observation and testing of engineered fill, subgrade preparation, bearing materials, and other geotechnical conditions exposed during the construction of the project.

Site Preparation

Strip and remove vegetation (if applicable), debris and other deleterious materials from the proposed expansion area. Exposed surfaces should be free of mounds and depressions which could prevent uniform compaction.

Stripped materials consisting of vegetation and organic materials should be wasted from the site, or used to re-vegetate exposed slopes after completion of grading operations. If it is necessary to dispose of organic materials on-site, they should be placed in non-structural areas, and in fill sections not exceeding 5 feet in height.

Excavation

It is anticipated that excavations for the structures and other site infrastructure within the soil for the proposed construction can be accomplished with conventional earthmoving equipment. Additional effort may be required in zones of very dense soil and in cobbles or boulder zones. Care should be taken during the excavation process to not impact adjacent existing structures. If the excavation may impact adjacent structure, temporary shoring measures should be implemented by the contract to protect potentially impacted structures. Additionally, due the granular nature of the soil and shallow groundwater conditions, caving should be anticipated during and after excavation.

Based on the results from the previously excavated test pits, we anticipate groundwater control measures will be necessary in excavations approaching and exceeding about 1-½ feet below

Animas River Diversion

Water Diversion Structure Aztec, New Mexico
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existing site grades. Therefore, temporary dewatering will need to be utilized to control groundwater within the excavation during construction.

Subgrade Preparation

Exposed areas which will receive fill, once properly cleared, should be conditioned to near optimum moisture content and compacted.

Areas of loose soils may be encountered at the subgrade elevation after excavation is completed. When such conditions exist beneath the planned addition area, the subgrade soils should be surficially compacted prior to placement of engineered fill or concrete. If sufficient compaction cannot be achieved in-place, the loose soils should be removed and replaced as engineered fill. For placement of engineered fill below the addition, the excavation should be widened laterally, at least eight (8) inches for each foot of fill placed below foundation base elevations. Any deleterious material encountered should be removed and replaced with engineered fill.

Fill Materials and Placement

All fill materials should be inorganic soils free of vegetation, debris, and fragments larger than six inches in size. Pea gravel or other similar non-cementitious, poorly-graded materials should not be used as fill or backfill without the prior approval of the geotechnical engineer.

Clean on-site processed gravel or sand meeting the specification contained herein or approved imported materials may be used as fill material for the following:

general site grading

structure backfill

On-site gravel and sand or imported soils for use as fill material for backfill of the structures should conform to low volume change materials as indicated in the following specifications:

<u>Gradation</u>	Percent Finer by Weight (ASTM C 136)
6"	100
3"	70-100
No. 4 Sieve	50-100
No. 200 Sieve	40 (max)
Liquid Limit	NV (max)
Plasticity Index	NP (max)

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Water Diversion Structure Aztec, New Mexico
December 19, 2014 Terracon Project No. 69145023



Engineered fill (if applicable) should be placed and compacted in horizontal lifts, using equipment and procedures that will produce recommended moisture contents and densities throughout the lift. Fill lifts should not exceed eight (8) inches loose thickness.

Compaction Requirements

Recommended compaction and moisture content criteria for engineered fill materials are as follows:

	Per the Modified Proctor Test (ASTM D 1557)*								
Material Type and Location	Minimum Compaction	Range of Moisture Contents for Compaction							
	Requirement (%)	Minimum	Maximum						
On-site sand, granular or approved imported fill soils:									
Structure backfill:	95	-3%	+3%						
Aggregate base	95	-3%	+3%						

^{*}Per ASTM testing procedures, performing a Proctor may not be feasible with moderate to significate gravel, cobble and/or boulder content. If compaction testing is not feasible a method specification (10 passes with a 10-ton roller, 20 passes with a 5-ton roller, etc.) should be developed to properly compact the fill material. After development of the method specification the area should be proof rolled with a 20-ton minimum equipment and observed for any deflecting areas.

Corrosion Potential

Experience with similar soils in the project area indicates that ASTM Type I Portland cement should be suitable for concrete on and below grade. Foundation concrete should be designed in accordance with the provisions of the ACI Design Manual, Section 318, Chapter 4.

GENERAL COMMENTS

Terracon should be retained to review the final design plans and specifications so comments can be made regarding interpretation and implementation of our geotechnical recommendations in the design and specifications. The preliminary recommendations contained in this report should be confirmed with a supplemental subsurface exploration prior to or during construction. Terracon also should be retained to provide observation and testing services during grading, excavation, foundation construction, and other earth-related construction phases of the project.

The analysis and recommendations presented in this report are based upon the data obtained from the previous completed test pits performed at the indicated locations and from other information discussed in this report. This report does not reflect variations that may occur outside the test pit areas, across the site, or due to the modifying effects of construction or weather. The nature and extent of such variations may not become evident until during or after

Animas River Diversion

Preliminary Geotechnical Engineering Report Water Diversion Structure - Aztec, New Mexico December 19, 2014 - Terracon Project No. 69145023



construction. If variations appear, we should be immediately notified so that further evaluation and supplemental recommendations can be provided.

This report has been prepared for the exclusive use of our client for specific application to the project discussed and has been prepared in accordance with generally accepted geotechnical engineering practices. No warranties, either express or implied, are intended or made. Site safety, excavation support, and dewatering requirements are the responsibility of others. In the event that changes in the nature, design, or location of the project as outlined in this report are planned, the conclusions and recommendations contained in this report shall not be considered valid unless Terracon reviews the changes and either verifies or modifies the conclusions of this report in writing.

Sincerely,

Terracon Consultants, Inc./

Zachary C. St. Jean, P.E.

Office Manager

Michael E. Anderson, P.E.

Mull & a

Principal

Attachments: Limited Geotechnical Exploration, Terracon Project No. 69115022, prepared for Larkin

Group NM, Inc. dated December 29, 2011.

Copies: Addressee (1 via email, 3 mail)



Larkin Group NM, Inc. 8500 Menaul Boulevard NE, Suite A-440 Albuquerque, New Mexico 87112

Attn: Mr. David V. Owsley, P.E.

P: [505] 275 7500 F: [505] 275 0748 C: [505] 250 7252

E: dowsley@larkin.com

Re: Limited Geotechnical Exploration

Water Diversion Structure East Bank of Animas River

Aztec, New Mexico

Terracon Project No. 69115022

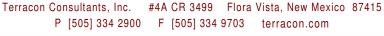
Dear Mr. Owsley:

Terracon has completed a limited geotechnical engineering exploration for the proposed raw water diversion structure located in Aztec, New Mexico. The purpose of these services is to provide geotechnical subsurface information to be used in the design and construction of the diversion structure and other earth connected phases of the project.

Project Description:

ITEM	DESCRIPTION
Location	North of County Road 2980 and west of County Road 2999 on the east bank of the Animas River in Aztec, New Mexico.
Structures	Construction details were not provided at the writing of this report. The project may include the construction of a concrete diversion structure, water wells, an infiltration chamber or a deepened channel (possibly concrete lined).
Existing improvements	Existing diversion structure and earthen dike into the river.
Proposed Foundation Type	Unknown
Maximum allowable settlement	Unknown
Below grade structures	Terracon has assumed that the new diversion structure will be constructed below grade. It is assumed that no other structures will be included as a part of this project.

Animas River Diversion







Limited Geotechnical Exploration

Water Diversion Structure Aztec, New Mexico
December 29, 2011 Terracon Project No. 69115022



Scope of Services:

The scope of the services performed for the geotechnical engineering exploration included site reconnaissance by a field geologist and a subsurface exploration program consisting of four (4) backhoe-excavated test pits. Test Pit TP-1 was excavated adjacent to the river to a depth of approximately 2½ feet below existing ground surface where wet caving conditions were encountered and advancement of the test pit was not possible. The remaining test pits were excavated to depths ranging from about 8 to 9 feet below existing ground surface. Groundwater was observed in the test pits at approximate depths ranging from about 1½ to 5 feet below existing ground surface at the time of field exploration. Based on site observations, it is anticipated that gravel, cobbles, and boulders will be encountered to the assumed construction depth below the elevation excavated.

Lithologic logs of the test pits were recorded by a field engineer during the excavation operations. No samples of subsurface materials were taken of the surface and near surface soils. Photographs of the excavations and spoils from the test pits were taken and are included in the attachments.

Subsurface Conditions:

Specific conditions encountered at the test pit locations are indicated on the individual test pit logs. Stratification boundaries on the test pit logs represent the approximate location of changes in soil types; in-situ, the transition between materials may be gradual. Details for the test pits can be found on the attached test pit logs. Based on the results of the test pits, subsurface conditions at the test pit locations can be generalized as follows:

Description	Approximate Depth to Bottom of Stratum (feet)	Material Encountered
Stratum 1	3½ (Test Pit TP-2)	Fill: Gravelly Sand with Clay and Cobbles
Stratum 2	5 (Test Pit TP-4)	Silty Sand to Clayey Sand
Stratum 3	2¼ to 9 (Total Explored Depth)	Poorly Graded Gravel with Sand, Clay and Cobbles

A review of the report "Aztec Exploratory Wells, Evaluation of Supplemental Water Supply from Shallow Alluvial Aquifer" by John Shomaker & Associates, Inc. dated October 2003 shows the subsurface conditions encountered during the drilling of a well near the diversion structure site to be relatively consistent with the results of Terracon's geotechnical subsurface exploration. The lithology at the North Well provided in this report consisted of sandy gravel and gravel to a depth of about 22 feet underlain by 8 feet of gray clay.

Groundwater was observed in the test pits at approximate depths ranging from $1\frac{1}{2}$ to 5 feet below existing ground surface at the time of field exploration. Based on our on-site observations, the surface water elevation of the river appeared to be approximately the same as

Animas River Diversion

Limited Geotechnical Exploration

Water Diversion Structure Aztec, New Mexico
December 29, 2011 Terracon Project No. 69115022



the existing ground surface elevation of Test Pit TP-1 at the time of field exploration. These observations represent groundwater conditions at the time of the field exploration and may not be indicative of other times, or at other locations. Groundwater conditions can change with varying seasonal and weather conditions, the water flow in the river and other factors.

Fluctuations in groundwater levels can best be determined by implementation of a groundwater monitoring plan. Such a plan would include installation of groundwater monitoring wells, and periodic measurement of groundwater levels over a sufficient period of time.

Construction Considerations:

It is anticipated that excavations in the site soils for the proposed construction may be difficult in areas of moderate to high gravel, cobble and boulder content. The correct equipment for site conditions should be selected by the Contractor to perform the earthwork at the site based on the information presented in this report and the contractor's on-site observations and evaluation.

Limited site surface areas, sloughing, loose surficial caving soils and shallow groundwater conditions encountered at the test pit locations will require particular attention during the design and construction of the diversion structure for this project. Temporary dewatering and excavation shoring during construction will likely be required to construct below existing groundwater conditions. An experienced contractor with a proven record for construction below the groundwater level should be retained to design and install a dewatering system which will provide effective dewatering during construction. Dewatering the site may influence adjacent structures and utilities. Also, below grade structures should be designed to account for the potential impacts of shallow groundwater including buoyancy and submerged lateral earth pressures.

Based upon the assumed depth of construction, groundwater will likely be encountered if the site is not dewatered. The individual contractor(s) should be made responsible for designing and constructing stable, temporary excavations as required to maintain stability of both the excavation sides and bottom. All excavations should be sloped or shored in the interest of safety following local and federal regulations, including current OSHA excavation and trench safety standards.

Earthwork on the project should be observed and evaluated by Terracon personnel. The evaluation of earthwork should include observation and testing of subgrade preparation, engineered fill, foundation bearing soils, foundations and other geotechnical conditions exposed during construction.

General Comments:

Terracon should be retained to provide services during earthwork and foundation construction phases of the project. Observation of foundation excavations should be performed prior to placement of reinforcing steel and concrete to confirm that satisfactory bearing materials are Appendix 1 - For Bidding Purposes Only

Limited Geotechnical Exploration

Water Diversion Structure Aztec, New Mexico December 29, 2011 Terracon Project No. 69115022



present and is considered a necessary part of continuing geotechnical engineering services for the project. Construction testing, including field and laboratory evaluation of fill, backfill, concrete, and steel should be performed to determine whether applicable project requirements have been met.

The analyses and recommendations in this report are based in part upon data obtained from the field exploration. The nature and extent of variations beyond the location of the test pits may not become evident until construction. If variations then appear evident, it may be necessary to re-evaluate the recommendations of this report.

We have appreciated being of service to you in the geotechnical engineering phase of this project, and are prepared to assist you during the construction phases as well. If you have any questions concerning this report or any of our testing, inspection, design, and consulting services, please do not hesitate to contact us.

Sincerely,

Terracon Consultants, Inc.

Heather M. Woods Staff Professional

Michael E. Anderson, P.E.

Principal

Attachments: Site Map

Test Pit Location Map Logs of Test Pits Site Photos General Notes

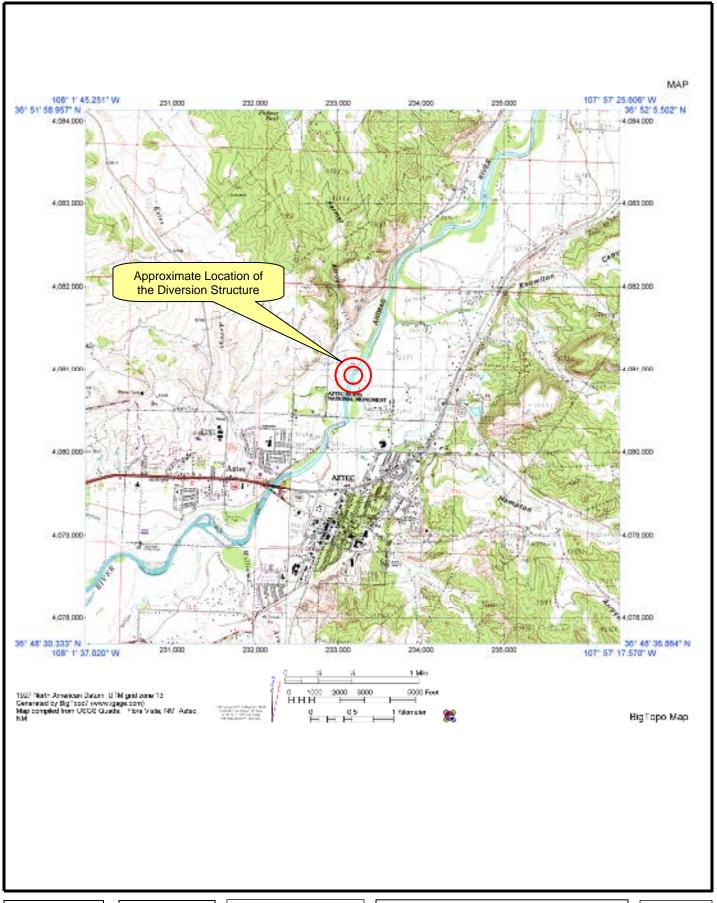
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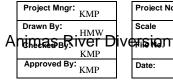
Copies: Addressee (1 via email, 3 mail)

Animas River Diversion

Kim M. Preston, P.E.

Office Manager





Project No. 69115022 Scale ~ 1:24,000 Site Map.doc Date: 12/28/2011



Site Location Map

Wappendix rsion For Bidding Purposes_Only Aztec, New Mexico



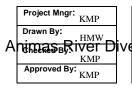


Legend



Approximate Test Pit Location

*Modified from drawing provided by the client.



69115022
As Shown
Boring.doc
12/28/11

#4A CR 3499 Flora Vista, New Mexico 505.334.2900 Fax: 505.334.9703

Test Pit Location Plan

Aztec, New Mexico

Exhibit

	LOG OF TEST	PIT	NC). 1	ΓP-1					Pa	age 1 of 1
CLI	ENT Larkin Group										
SIT	E	PROJECT Water Diversion Structure									
	Aztec, New Mexico					Vater L 1PLES	Divers	ion St		ESTS	
GRAPHIC LOG	DESCRIPTION	DЕРТН, ft.	USCS SYMBOL	CORE SIZE	TYPE	RECOVERY, in	SPT-N BLOWS \ ft	WATER CONTENT, %	DRY UNIT WT pcf		
	POORLY GRADED GRAVEL WITH SAND, CLAY AND COBBLES; brown and gray, moist to										
	wet, trace boulders. 2.25 Exploration terminated at a depth of approximately 2.25 feet below existing ground surface due to wet	- - -									
1728711	2.25 feet below existing ground surface due to wet caving conditions. Groundwater encountered at about 1 foot.										
betw B WA	stratification lines represent the approximate boundary lines veen soil and rock types: in-situ, the transition may be gradual. TER LEVEL OBSERVATIONS, ft VE River Diversion	-		3 F	ne I	*A TEST F TEST F RIG APPRO	PIT STA PIT CO For I	ARTED	TED ng Pu	urpos REMA	10-24-11 10-

	LOG OF TEST	PIT	NC). 7	ГР-2	2				Pa	age 1 of 1
CLIE	ENT Larkin Group										
SITE	<u> </u>	PROJECT									
	Aztec, New Mexico			1		Vater I	Divers	ion St		I re TESTS	
GRAPHIC LOG	DESCRIPTION	DEРТН, ft.	USCS SYMBOL	CORE SIZE	TYPE	RECOVERY, in	SPT-N BLOWS \ ft	WATER CONTENT, %	DRY UNIT WT		
	FILL: GRAVELLY SAND WITH CLAY AND COBBLES: brown, moist, trace boulders, 14" maximum particle size observed.	- - - -									
	NATIVE: POORLY GRADED GRAVEL WITH SAND, CLAY AND COBBLES; borwn, moist to wet, trace boulders, 8" maximum particle size observed.	5— 5—									
)_ [62]	Exploration terminated at a depth of approximately 8 feet below existing ground surface due to wet caving conditions. Groundwater encountered at about 5 feet.	_									
The stratification lines represent the approximate boundary lines between soil and rock types: in-situ, the transition may be gradual. *All blow counts converted to SPT blow counts.											
WA	TER LEVEL OBSERVATIONS, ft				1	TEST F	PIT STA	ARTE)		12-19-11
	\$ River Diversion Teff	30		3 [P ne	TEST F lix 1 - RIG	For I	MPLE Biddir ackhoe	TED 19 Po	urpos REMA	12-19-17 ses Only N HMM
WL						APPRO	DVED	KMF	JOI	В#	6911502

	LOG OF TEST	PIT	NC). 1	Г Р- 3	}				P	age 1 of 1
CLIE	ENT Larkin Group										
SITE		PRO	JEC ⁻	Т							
	Aztec, New Mexico					Vater I	Divers	ion St		I re TESTS	
GRAPHIC LOG	DESCRIPTION	DEPTH, ft.	USCS SYMBOL	CORE SIZE	TYPE	RECOVERY, in	SPT-N BLOWS \ft	WATER CONTENT, %		UNCONFINED STRENGTH, psi	
	POORLY GRADED GRAVEL WITH SAND, CLAY AND COBBLES; brown, moist to wet, trace boulders, 8" maximum particle size observed. Exploration terminated at a depth of approximately 8 feet below existing ground surface due to wet caving conditions. Groundwater encountered at about 4.5 feet.	5—				4					
The s	stratification lines represent the approximate boundary lines een soil and rock types: in-situ, the transition may be gradual.					*A	II blow c	ounts co	onverte	d to SP	T blow counts
	TER LEVEL OBSERVATIONS, ft					TEST F	PIT ST	ARTE)		12-19-11
nime	\$\frac{\frac}{\fracc}}}}}}{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\fir}}}}}{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\fir}}}}{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\fracc}}}}}{\frac{\f	20		3 F	J ne	TEST F IX 1 - RIG	For I		_	urpo: REMA	12-19-17 ses Only N HMW
WL					/	APPRO	OVED	KMF	JO	В#	6911502

	LOG OF TEST	PIT	NC). 1	ГР-4					Pa	age 1 of 1
CLII	ENT Larkin Group										
SITI		PRO	JEC.	Т	v	Vater I	Divers	ion St	ructu	ıre	
	/ Libb, Novi Moxico					1PLES	311010	.0 00		ESTS	
GRAPHIC LOG	DESCRIPTION	DЕРТН, ft.	USCS SYMBOL	CORE SIZE	TYPE	RECOVERY, in	SPT-N BLOWS\ft	WATER CONTENT, %	DRY UNIT WT	UNCONFINED STRENGTH, psi	
	<u>SILTY TO CLAYEY SAND</u> ; tan to gray, moist, increasing clay content with depth.										
	POORLY GRADED GRAVEL WITH SAND, CLAY AND COBBLES; gray, wet, trace to with cobbles, increasing particle size with depth.										
The s	Exploration terminated at a depth of approximately 9 feet below existing ground surface due to wet caving conditions. Groundwater encountered at about 5 feet.										
The s	stratification lines represent the approximate boundary lines een soil and rock types: in-situ, the transition may be gradual.					*A	ll blow c	ounts co	nverte	d to SP	T blow counts
	TER LEVEL OBSERVATIONS, ft					TEST F	PIT STA	ARTED)		12-19-11
WL nima WL	Fix River Diversion Territoria	a c		3f	ne I	TEST F lix 1 - Rig	For I	MPLE Biddir ackhoe	TED 19 Pu	urpos REMA	12-19-11 ses Only N HMW
WL					/	APPRO	OVED	KMF	JOI	3#	69115022











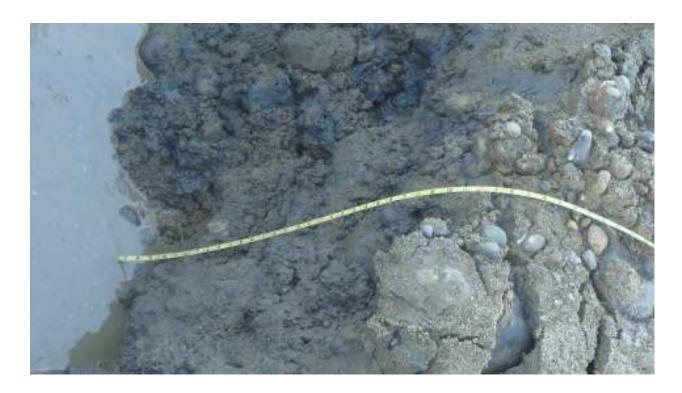














Animas River Diversion













Animas River Diversion







Animas River Diversion







Animas River Diversion

Appendix 1 - For Bidding Purposes Only

Limited Geotechnical Exploration
Water Diversion Structure ■ Aztec, New Mexico December 29, 2011 Terracon Project No. 69115022











Animas River Diversion

Appendix 1 - For Bidding Purposes Only







Animas River Diversion

Appendix 1 - For Bidding Purposes Only



















Animas River Diversion

Limited Geotechnical Exploration
Water Diversion Structure ■ Aztec, New Mexico December 29, 2011 Terracon Project No. 69115022











Animas River Diversion







GENERAL NOTES

DRILLING & SAMPLING SYMBOLS:

SS:	Split Spoon - 1-3/8" I.D., 2" O.D., unless otherwise noted	HS:	Hollow Stem Auger
ST:	Thin-Walled Tube – 2" O.D., 3" O.D., unless otherwise noted	PA:	Power Auger (Solid Stem)
RS:	Ring Sampler - 2.42" I.D., 3" O.D., unless otherwise noted	HA:	Hand Auger
DB:	Diamond Bit Coring - 4", N, B	RB:	Rock Bit
BS:	Bulk Sample or Auger Sample	WB	Wash Boring or Mud Rotary

The number of blows required to advance a standard 2-inch O.D. split-spoon sampler (SS) the last 12 inches of the total 18-inch penetration with a 140-pound hammer falling 30 inches is considered the "Standard Penetration" or "N-value".

WATER LEVEL MEASUREMENT SYMBOLS:

WL:	Water Level	WS:	While Sampling	BCR:	Before Casing Removal
WCI:	Wet Cave in	WD:	While Drilling	ACR:	After Casing Removal
DCI:	Dry Cave in	AB:	After Boring	N/E:	Not Encountered

Water levels indicated on the boring logs are the levels measured in the borings at the times indicated. Groundwater levels at other times and other locations across the site could vary. In pervious soils, the indicated levels may reflect the location of groundwater. In low permeability soils, the accurate determination of groundwater levels may not be possible with only short-term observations.

DESCRIPTIVE SOIL CLASSIFICATION: Soil classification is based on the Unified Soil Classification System. Coarse Grained Soils have more than 50% of their dry weight retained on a #200 sieve; their principal descriptors are: boulders, cobbles, gravel or sand. Fine Grained Soils have less than 50% of their dry weight retained on a #200 sieve; they are principally described as clays if they are plastic, and silts if they are slightly plastic or non-plastic. Major constituents may be added as modifiers and minor constituents may be added according to the relative proportions based on grain size. In addition to gradation, coarse-grained soils are defined on the basis of their in-place relative density and fine-grained soils on the basis of their consistency.

CONSISTENCY OF FINE-GRAINED SOILS

	RELATIVE DENSITY OF COARSE-GRAINED SO	ILS
--	---------------------------------------	-----

Unconfined Compressive Strength, Qu, psf	Standard Penetration or N-value (SS) Blows/Ft.	Consistency	Standard Penetration or N-value (SS) Blows/Ft.	Relative Density
< 500	0 - 1	Very Soft	0 – 3	Very Loose
500 - 1,000	2 - 4	Soft	4 – 9	Loose
1,000 - 2,000	4 - 8	Medium Stiff	10 – 29	Medium Dense
2,000 - 4,000	8 - 15	Stiff	30 – 50	Dense
4,000 - 8,000	15 - 30	Very Stiff	> 50	Very Dense
8,000+	> 30	Hard		

RELATIVE PROPORTIONS OF SAND AND GRAVEL

<u>Descriptive Term(s)</u> <u>of other constituents</u>	Percent of Dry Weight
Trace	< 15
With	15 – 29
Modifier	≥ 30

GRAIN SIZE TERMINOLOGY

Major Component of Sample	Particle Size
Boulders	Over 12 in. (300mm)
Cobbles	12 in. to 3 in. (300mm to 75mm)
Gravel	3 in. to #4 sieve (75mm to 4.75mm)
Sand	#4 to #200 sieve (4.75 to 0.075mm)
Silt or Clay	Passing #200 Sieve (0.075mm)

RELATIVE PROPORTIONS OF FINES

<u>Descriptive Term(s)</u> of other constituents	Percent of Dry Weight
Trace	< 5
With	5 – 12
Modifier	> 12

PLASTICITY DESCRIPTION

<u>Term</u>	Plasticity Index
Non-plastic	0
Low	1-10
Medium	11-30
Hiah	> 30

Animas River Diversion

Appendix 1 - For Bidding Purposes Only



Exhibit C-1

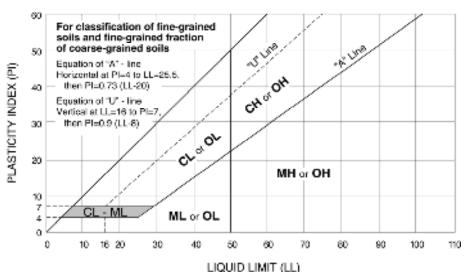
UNIFIED SOIL CLASSIFICATION SYSTEM

Criteria f		Soil Classification				
				Group Symbol	Group Name ^B	
Coarse Grained Soils	Gravels	Clean Gravels	$Cu \ge 4$ and $1 \le Cc \le 3^E$	GW	Well-graded gravel ^F	
More than 50% retained	More than 50% of coarse fraction retained on	Less than 5% fines ^c	Cu < 4 and/or 1 > Cc > 3 ^E	GP	Poorly graded gravel ^F	
on No. 200 sieve	No. 4 sieve		Fines classify as ML or MH	GM	Silty gravel ^{F,G, H}	
		than 12% fines ^c	Fines classify as CL or CH	GC	Clayey gravel ^{F,G,H}	
	Sands	Clean Sands	$Cu \geq 6 \text{ and } 1 \leq Cc \leq 3^E$	SW	Well-graded sand	
	50% or more of coarse fraction passes	Less than 5% fines ^D	Cu < 6 and/or 1 > Cc > 3 ^E	SP	Poorly graded sand	
	No. 4 sieve	Sands with Fines	Fines classify as ML or MH	SM	Silty sand ^{G,H,I}	
	More than 12% fines ^D	Fines Classify as CL or CH	SC	Clayey sand ^{G,H,I}		
Fine-Grained Soils	Silts and Clays	inorganic	PI > 7 and plots on or above "A" line	CL	Lean clay ^{K,L,M}	
50% or more passes the No. 200 sieve			PI < 4 or plots below "A" line ^J	ML	$Silt^{K,L,M}$	
		organic	Liquid limit - oven dried < 0.75	OL	Organic clay ^{K,L,M,N}	
			Liquid limit - not dried	OL	Organic silt ^{K,L,M,O}	
	Silts and Clays inorganic Liquid limit 50 or more	inorganic	PI plots on or above "A" line	CH	Fat clay ^{K,L,M}	
			PI plots below "A" line	МН	Elastic Silt ^{K,L,M}	
		organic	Liquid limit - oven dried < 0.75	ОН	Organic clay ^{K,L,M,P}	
			Liquid limit - not dried	OH	Organic silt ^{K,L,M,Q}	
Highly organic soils	Prima	rily organic matter, dark in co	olor, and organic odor	PT	Peat	

^ABased on the material passing the 3-in. (75-mm) sieve

E
 Cu = D_{60}/D_{10} Cc = $\frac{\left(D_{30}\right)^{2}}{D_{10} \text{ x } D_{60}}$

^QPI plots below "A" line.



Animas River Diversion

Appendix 1 - For Bidding Purposes Only



^B If field sample contained cobbles or boulders, or both, add "with cobbles or boulders, or both" to group name.

^C Gravels with 5 to 12% fines require dual symbols: GW-GM well-graded gravel with silt, GW-GC well-graded gravel with clay, GP-GM poorly graded gravel with silt, GP-GC poorly graded gravel with clay.

^D Sands with 5 to 12% fines require dual symbols: SW-SM well-graded sand with silt, SW-SC well-graded sand with clay, SP-SM poorly graded sand with silt, SP-SC poorly graded sand with clay

^F If soil contains ≥ 15% sand, add "with sand" to group name.

^GIf fines classify as CL-ML, use dual symbol GC-GM, or SC-SM.

^HIf fines are organic, add "with organic fines" to group name.

¹ If soil contains ≥ 15% gravel, add "with gravel" to group name.

^J If Atterberg limits plot in shaded area, soil is a CL-ML, silty clay.

^K If soil contains 15 to 29% plus No. 200, add "with sand" or "with gravel," whichever is predominant.

 $^{^{\}rm L}$ If soil contains \geq 30% plus No. 200 predominantly sand, add "sandy" to group name.

 $^{^{\}rm M}$ If soil contains $\geq 30\%$ plus No. 200, predominantly gravel, add "gravelly" to group name.

^NPI ≥ 4 and plots on or above "A" line.

^oPI < 4 or plots below "A" line.

PPI plots on or above "A" line.