BUCKMAN DIRECT DIVERSION



Buckman Direct Diversion

RAW WATER PUMPS BUCKMAN DIRECT DIVERSION PROJECT MANUAL

CITY OF SANTA FE BID NO. '16/38/B

BIDS DUE: June 23, 2016 PURCHASING OFFICE CITY OF SANTA FE 2651 SIRINGO ROAD – BUILDING "H" SANTA FE, NEW MEXICO 87505

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PRE-BID INFORMATION (00 0100)

(00 0101) DEBARRED OR SUSPENDED CONTRACTORS

A business (contractor, subcontractor, or supplier) that has either been debarred or suspended pursuant to the requirements of City Purchasing Manual or Section 13-1-177 through 13-1-180, and 13-4-17 NMSA 1978 as amended or City Purchasing provisions, shall not be permitted to do business with the City and shall not be considered for award of Contract during the period for which it is debarred or suspended.

(00 1100) BID INFORMATION

CITY OF SANTA FE BUCKMAN DIRECT DIVERSION

BID INFORMATION

SEALED BIDS FOR:

BUCKMAN DIRECT DIVERISON RAW WATER PUMPS

TO BE OPENED AT:	BID NO. '16/38/B City of Santa Fe Purchasing Office 2651 Siringo Road Building H Santa Fe, New Mexico 87505 (505) 955-5711
TIME:	2:00 pm, Local Prevailing Time
DATE:	June 23, 2016
ADDRESSED TO:	City of Santa Fe Puchasing Office 2651 Siringo Road Building H. Santa Fe, NM 87505
PRE-BID CONFERENCE:	DATE June 2, 2016 <u>10:00</u> a.m. (local time) Buckman Regional Water Treatment Plant 341 Caja Del Rio Rd. Santa Fe, New Mexico 87506

Bids will be received until the above time, then opened publicly at the Purchasing Director's office or other designated place, and read aloud. BIDS RECEIVED AFTER THE ABOVE TIME WILL BE RETURNED UNOPENED.

Bidding Documents will be posted on the City of Santa Fe web site <u>www.santafenm.gov</u> and a link to the electronic plan sets can be obtained from the Buckman Direct Diversion Facility Manager.

BIDDING DOCUMENTS MAY BE REVIEWED AT THE FOLLOWING LOCATIONS:

Buckman Regional Water Treatment Plant 341 Caja Del Rio Rd. Santa Fe, New Mexico 87506

Bid Documents will also be on file at Builders News and Plan Room, Construction Reporter, and available through Dodge Data & Analytics and Reed (CMD).

Bids for the project will be presented in the form of a lump sum base bid. Award will be made to the bidder providing the lowest total base bid. Bidder shall Bid all items listed in the Scope of Work. Bidder shall include in

the signed documents their license and classification. Contract award will be made to the responsible Bidder submitting the low Base Bid.

Bid security, made payable to the City of Santa Fe, the "Owner" in the amount of 5% of the proposal sum shall be submitted with the Bid. Bid security shall be in the form of a Bid Bond issued by Surety licensed to conduct business in the State of New Mexico, or by certified check. The Bidders security shall be retained by the Owner until the Contract is signed; the other Bidder's security shall be returned as soon as practicable. Failure or refusal by the successful Bidder to enter into Contract with the Owner will constitute Liquidated Damages in favor of the Owner.

The bid shall also include a signed "Non-Collusion Affidavit of Prime Bidders", signed "Certificate of Non-Segregated Facilities", a signed "Certificate of Bidder Regarding Equal Employment Opportunity", a Subcontractor's Listing and; if applicable, a Local Preference Application. The project is subject to the New Mexico Office of Labor Commission, Minimum Wage Rates for the State of New Mexico. Such wage rates are bound into the Contract Documents.

The successful Bidder shall, upon notice of award of contract, secure from each of his Subcontractors a signed "Non-Collusion Affidavit of Subcontractors".

The Bidding Documents contain a time for completion of the work by the successful Bidder, and further imposes liquidated damages for failure to comply with that time.

The Owner reserves the right to reject any and all Bids, to waive technicalities, and to accept the Bid it deems to be in the best interest of the City of Santa Fe.

The contractor shall be required comply with the most current City of Santa Fe, State of New Mexico and Federal codes.

The work designated bid #'16/38/B, Buckman Direct Diversion Raw Water Pumps, includes removing four existing vertical turbine pumps and replacing them with four new vertical turbine pumps. The work will be performed at two separate pumping stations, with two pumps replaced at each pump station.

- Contractor shall be responsible for adherence to the Contract Documents and approved directives.
- Contractor shall be responsible for verifications of existing conditions, measurements and dimensions for bidding and installation.
- Contractor shall be responsible for permits, fees, and inspections associated with the construction.

The City of Santa Fe is an Equal Opportunity Employer and all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation or national origin. The successful Bidder will be required to conform to the Equal Opportunity Employment Regulations.

ADVERTISEMENT

BID NO. '16/38/B

Bids will be received by the City of Santa Fe and will be delivered to City of Santa Fe, Purchasing Office, 2651 Siringo Road, Bldg. H Santa Fe, New Mexico 87505 until 2:00p.m. (local prevailing time) June 23, 2016. Any bid received after this deadline will not be considered. This bid is for the purpose of

Buckman Direct Diversion Raw Water Pumps

The bidder's attention is directed to the fact that all applicable Federal Laws, State Laws, Municipal Ordinances, and the rules and regulations of all authorities having jurisdiction over said item shall apply to the bid throughout, and they will be deemed to be included in the bid document the same as though herein written out in full.

The City of Santa Fe is an Equal Opportunity Employer and all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation or national origin. The successful bidder will be required to conform to the Equal Opportunity Employment regulations.

Bids may be held for sixty (60) days subject to action by the city. The city reserves the right to reject any or all bids in part or in whole. Bidding Documents will be posted on the City of Santa Fe web site <u>www.santafenm.gov</u> and a link to the electronic plan sets can be obtained from the Buckman Direct Diversion Facility Manager.

Bid packets are available by contacting: Shirley Rodriguez, City of Santa Fe, Purchasing Office, 2651 Siringo Road, Building "H" Santa Fe, New Mexico, 87505, (505) 955-5711.

ATTEST:

Tudrua 4000 Robert Rodarte, Purchasing Officer

Received by the Santa Fe New Mexican on: 05/20/16To be published on: 05/26/16

Received by the Albuquerque Journal on: 05/20/16To be published on: 05/26/16

(00 1113) BID SCHEDULE

1)	ADVERTISEMENT:	May 26, 2016
2)	ISSUANCE OF BID PACKET:	May 26, 2016
3)	PRE-BID CONFERENCE:	June 2, 2016 10:00 a.m. Buckman Regional Water Treatment Plant 341 Caja Del Rio Rd. Santa Fe, New Mexico 87506
4)	BID SUBMITTAL DEADLINE:	June 23, 2016
5)	OPENINGS OF BIDS RECEIVED:	June 23. 2016
7)	BUCKMAN DIRECT DIVERSION BOARD APPROVAL	July 7, 2016

DATES OF CONSIDERATION BY THE BUCKMAN DIRECT DIVERSION BOARD ARE TENTATIVE AND SUBJECT TO CHANGE WITHOUT NOTICE. PLEASE NOTE THAT THE CONTRACTOR BEING RECOMMENDED FOR SELECTION WILL NOT BE REQUIRED TO ATTEND THE BUCKMAN DIRECT DIVERSION BOARD MEETING.

INSTRUCTIONS TO BIDDERS (00 2100)

1.0 DEFINITIONS AND TERMS

1.1 Terms used in these Bidding Documents which are defined in the Conditions of the Contract for Construction (General, Supplementary, and other conditions) have the meanings assigned to them in those Conditions.

2.0 EXAMINATION OF BIDDING DOCUMENTS AND SITE

- 2.1 Before submitting a Bid, each Bidder must (a) examine the Bidding Documents thoroughly, (b) visit the site to familiarize himself with local conditions that may in any manner affect cost, progress, or performance of the work, (c) familiarize himself with Federal, State, and local laws, ordinances, rules, and regulations that may in any manner effect cost, progress, or performance of the work, and (d) study and carefully correlate the Bidder's observations with the Bidding Documents.
- 2.2 On request, the Owner will provide each Bidder access to the site to conduct such investigations and tests as each Bidder deems necessary for submission of his Bid.
- 2.3 The lands upon which the work is to be performed rights-of-way for access thereto, and other lands designated for use by the Contractor in performing the work are identified in the Bidding Documents.
- 2.4 The submission of a Bid will constitute an incontrovertible representation by the Bidder that has complied with every requirement of this Section and that the Bidding Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance of the work.

3.0 BIDDING DOCUMENTS

3.1 COPIES OF BIDDING DOCUMENTS

- 3.1.2 Complete sets of Bidding Documents shall be used in preparing Bids; the Owner does not assume responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.
- 3.1.3 The Owner, in providing for copies of Bidding Documents available on the above terms, does so only for the purpose of obtaining Bids on the work and does not confer a license or grant for any other use.

3.2 INTERPRETATIONS

3.2.1 All questions about the meaning or intent of the Bidding Documents shall be submitted to the Buckman Direct Diversion Facility Manager in writing. Replies will be issued by Addenda mailed or delivered to all parties recorded by the Buckman Direct Diversion Facility Manager as having received the Bidding Documents. Questions received less than ten (10) days prior to the date for opening of Bids will not be answered. Only questions answered by formal written Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

3.3 SUBSTITUTE MATERIAL AND EQUIPMENT

The Contract, if awarded, will be on the basis of material and equipment described in the Contract Documents without consideration of possible substitute or "of-equal" items. Whenever it is indicated in the Specifications that substitute "of-equal" item of material or equipment may be furnished or used by the Contractor if acceptable to the Owner, application of such acceptance will not be considered by the Owner until after the "effective date of the Contract." The procedure for submittal of any such application by the Contractor and consideration by the Owner is set forth in the Contract Documents.

3.4 ADDENDA

- 3.4.1 No oral interpretations of the meaning of the specifications or other pre-bid documents will be binding. Oral communications are permitted in order to make assessment for an addendum.
- 3.4.2 Any and all such interpretations and any supplemental instructions will be in the form of written addenda to the specifications which, if issued, will be delivered to all prospective bidders not later that three (3) days prior to the date fixed for the opening of the bids. Failure of any bidder to receive any such addendum or interpretations shall not relieve such bidder from any obligation under his bid as submitted. All addenda so issued shall become part of the contract documents.
- 3.4.3 The City reserves the right to not comply with these time frames if a critical addendum is required or if the proposal deadline needs to be extended due to a critical reason in the best interest of the City of Santa Fe.

4.0 BIDDING PROCEDURES

- 4.01 The person or persons opening the bids will adhere to the following procedure:
- 4.02 Bid Name the Bidder and the Number of Bidder's New Mexico Contractor's License with a check for proper signatures.
- 4.03 Bid Bond.
- 4.04 Non-Collusion Affidavit of Prime Bidder.
- 4.05 Acknowledgement of Addenda, if any on the Bid Form.
- 4.06 Properly executed Bid Form.
- 4.07 Subcontractor Listing
- 4.08 Certificate of Bidder Regarding Equal Employment Opportunity
- 4.09 Certification of Non-segregated Facilities.
- 4.09 The state or any political subdivision of the state shall not accept a bid on a public works project subject to the Public Works Minimum Wage Act from a prime contractor that does not provide proof of required registration for itself.

If any of the other requirements have not been met, the bid shall be disqualified and considered a non-responsive bid. Any disqualified bids will not be read.

4.1 FORM AND STYLE OF BIDS

- 4.1.1 Bids shall be submitted on forms identical to the form included with the Bidding Documents.
- 4.1.2 All blanks on the Bid Form shall be filled in by typewriter or manually in ink.
- 4.1.3 Where so indicated by the makeup of the Bid Form, sums shall be expressed in both words and figures, and, in case of discrepancy between the two, the amount written in words shall govern.
- 4.1.4 Any interlineation, alteration, or erasure must be initialed by the signer of the Bid.
- 4.1.5 All requested Additive or Deductive Alternate Bids shall be Bid. If no change in the Base Bid is required, enter "No Change."
- 4.1.6 Where there are two or more major items of work (identified as "Bid Lots") for which separate quotations are requested, the Bidder may, at his discretion, submit quotations for any or all items, unless otherwise specified. Additionally, the Bidder may submit a lump sum price for all lots for which the Bidder has submitted separate quotations.

- 4.1.7 Each copy of the Bid shall include the complete name of the Bidder and a statement that the Bidder is a sole proprietor, a partnership, by the person or persons legally authorized to bind the Bidder to a contract. A Bid by a corporation shall bind the Bidder to a contract. A Bid by a corporation shall further give the state of incorporation and have the applicable New Mexico Certificate of Incorporation number or Certificate of Authority number. The Bid shall include the current Contractor's license number and type, and the current Contractor's preference number. A Bid submitted by an agent shall have a current Power of Attorney attached certifying the agent's authority to bind the Bidder.
- 4.1.8 The Bid shall contain an acknowledgment of receipt of all Addenda (the numbers of which shall be filled in on the Bid Form).
- 4.1.9 The address, to which communications regarding the Bid are to be directed, must be shown.

4.2 BID SECURITY

- 4.2.1 Bid security only for the highest option bid in an amount equal to at least 5% of the amount of the Bid shall be a bond provided by a Surety company authorized to do business in this State, or the equivalent in cash, or otherwise supplied in a form satisfactory to the Owner. All Bonds shall be executed by such sureties as are named in the current list of Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies.
- 4.2.2 The Bid security shall be in the amount of five percent (5%) of the highest Bid amount submitted, unless otherwise stipulated, pledging that the Bidder will enter into a Contract with the Owner in the terms stated herein and will furnish bonds covering the faithful performance of the Contract and payment of all obligations arising there under. Should the Bidder refuse to enter into such Contract or fail to furnish such bonds, the amount of the Bid security shall be forfeited to the Owner as liquidated damages, not as a penalty.
- 4.2.3 The Owner will have the right to retain the Bid security of Bidders to whom an award is being considered until either (a) the Contract has been executed and bonds have been furnished, or (b) the specified time has elapsed so that Bids may be withdrawn, or (c) all Bids have been rejected.
- 4.2.4 When the Bidding Documents require Bid security, noncompliance by the Bidder requires that the Bid be rejected.
- 4.2.5 If a Bidder is permitted to withdraw his Bid before award, no action shall take place against the Bidder or the Bid Security.

4.3 PRE-BID CONFERENCE

- 4.3.1 The Owner of Record shall conduct a mandatory Pre-Bid Conference approximately ten (10) calendar days prior to the Bid opening date stated in the Invitation for Bid.
- 4.3.2 The Owner of Record and his consultants, as applicable, shall be represented. Prospective Bidders and Prospective Subcontractors should ask questions regarding substitutions and/or request clarification of the Bidding Documents. The failure of a Bidder, Subcontractor, or Vendor to attend shall be interpreted to mean that the Bid Documents are clear and acceptable to all non participants at the Pre-Bid Conference. Such clarity and acceptability shall be presumed with respect to all Bidders.
- 4.3.3 Questions and requests for clarification are to be presented in written form. Responses will be written and issued as Addenda. No verbal response shall be binding.

4.4 **RESIDENT PREFERENCE & LOCAL PREFERENCE**

INTENT AND POLICY

The city recognizes that the intent of the state resident preference statute is to give New Mexico businesses and contractors an advantage over those businesses, manufacturers and contractors from outside the State of New Mexico. The underlying policy is to give a preference to those persons and companies who contribute to the economy of the State of New Mexico by maintaining businesses and other facilities within the state and giving employment to residents of the state (1969 OP. Atty Gen. No. 69-42). The city also has adopted a policy to include a local preference to those persons and companies who

contribute to the economy of the County of Santa Fe by maintaining businesses and other facilities within the county and giving employment to residents of the county.

APPLICATION-IN-STATE AND OUT OF STATE BIDDERS

With acknowledgment of this intent and policy, the preference will only be applied when bids are received from in-state and county businesses, manufacturers and contractors that are within 5% of low bids received from out-of-state businesses, manufacturers and contractors (13-1-21 (A) -1-21 (F) and 13-4-2 (C) NMSA 1978).

To be considered a resident for application of the preference, the in-state bidder must have included a valid state purchasing certification number with the submitted bid.

Thus it is recommended that in-state bidders obtain a state purchasing certification number and use it on all bids, in order to have the preference applied to their advantage, in the event an out-of-state bid is submitted. In submitting a bid, it should never be assumed that an out-of-state bid will not be submitted.

For information on obtaining a state purchasing certification number, the potential bidder should contact the State of New Mexico Taxation and Revenue.

All resident preferences shall be verified through the State Purchasing Office. Applications for resident preference not confirmed by the state Purchasing Office will be rejected. The certification must be under the bidder's business name submitting the bid.

NON-APPLICATION-COMPETING IN-STATE BIDDERS

If the lowest responsive bid and the next responsive bids within 5% of the lowest bid are all from the state of New Mexico, then the resident preference will not be applied and the state purchasing certification number will not be considered. To be considered an in-state bidder in this situation, the bidders must meet the definition criteria of Chapter 13-1-21 (A) (1) and Chapter 13-4-2 (A) NMSA 1978. After examining the information included in the bid submitted, the city Purchasing Director may seek additional information of proof to verify that the business is a valid New Mexico business. If it is determined by the city Purchasing Director that the information is not factual and the low responsive bid is actually an out-of-state bidder and not a New Mexico business, then the procedures in the previous section may be applied.

If the bidder has met the above criteria, the low responsive "resident" bid shall be multiplied by .95. If that amount is then lower than the low responsive bid of a "non-resident" bidder, the award will be based taking into consideration the resident preference of 5%.

APPLICATION FOR LOCAL PREFERENCE

For the purposes of this section, the terms resident business and resident manufacturer shall be defined as set out in Section 13-1-21 NMSA 1978; the term local as applied to a business or manufacturer shall mean:

Principal Office and location must be stated: To qualify for the local preference, the principal place of business of the enterprise must be physically located within the Santa Fe County Geographic Boundaries. The business location inserted on the Form must be a physical location, street address or such. DO NOT use a post office box or other postal address. Principal place of business must have been established no less than six months preceding application for certification.

The PREFERENCE FACTOR for resident and local preferences applied to bids shall be .95 for residents and .90 for local. The local preference for proposals shall be 1.10.

The PREFERENCE FACTOR for resident and local preferences applied to bids shall be .95 for residents and .90 for local. The local preference for proposals shall be 1.10.

<u>New Mexico Resident Veteran Business Preference:</u> New Mexico law, Section 13-1-22 NMSA 1978, provides a preference in the award of a public works contract for a "resident veteran business". Certification by the NM Department of Taxation and Revenue for the resident veteran business requires the Offeror to provide evidence of annual revenue and other evidence of veteran status.

An Offeror who wants the veteran business preference to be applied to its proposal is required to submit with its proposal the certification from the NM Department of Taxation and Revenue and the sworn affidavit attached hereto as Appendix E.

If an Offeror submits with its proposal a copy of a valid and current veteran resident business certificate, 7%, 8%, or 10% of the total weight of all the evaluation factors used in the evaluation of proposal may be awarded.

The local preference or resident business preference is not cumulative with the resident veteran business preference.

<u>Bids for Goods and Services.</u> When bids for the purchase of goods or services pursuant to Section 22 are received, the lowest responsive bid received from those bidders in the first category listed below shall be multiplied by the Preference Factor. If the resulting price of that bid receiving the preference is lower than or equal to the lowest bid of all bids received, the contract shall be awarded to that bidder receiving the preference. If no bids are received from bidders in the first category, or if the bid receiving the preference does not qualify for an award after multiplication by the Preference Factor, the same procedure shall be followed with respect to the next category of bidders listed to determine if the bid qualifies for award. The priority of categories of bidders is:

- (1) Local business
- (2) Resident business

<u>Proposals for Goods and Services.</u> When proposals for the purchase of goods or services pursuant to Section 23 are received, the evaluation score of the proposal receiving the highest score of all proposals from those proponents in the first category listed above shall be multiplied by the Preference Factor. If the resulting score of that proposal receiving the preference is higher than or equal to the highest score of all proposals received, the contract shall be recommended to that proponent receiving the preference. If no proposals are received from proponents in the first category, or if the proposal receiving the preference does not qualify for an award after multiplication by the Preference Factor, the same procedure shall be followed with respect to the next category of proposals listed to determine if a proponent qualifies for award.

<u>Qualifications for Resident Preference.</u> No resident business or manufacturer, as defined, shall be given any preference in the awarding of contracts for furnishing goods or services to the city, unless it shall have qualified with the State Purchasing Agent as a resident business or manufacturer and obtained a certification number as provided in Section 13-1-22 NMSA 1978. The certification number must be submitted with its bid for an offeror to qualify for this preference. The Central Purchasing Office shall determine if a resident preference is applicable to a particular offer on a case by case basis.

<u>Qualifications for Local Preference</u>. The Central Purchasing Office shall have available a form to be completed by all bidders/proponents who desire to apply for the local preference as a local business. The completed form with the information certified by the offeror must be submitted by the bidders/proponents with their bid or proposal to qualify for this preference.

Limitation. No offeror shall receive more than a 10% preference pursuant to this section on any one offer submitted. A bidder may not claim cumulative preferences.

<u>Application</u>. This section shall not apply to any purchase of goods or services when the expenditure of federal and/or state funds designated for a specific purchase is involved and the award requirements of the funding prohibit resident and/or local preference(s). This shall be determined in writing by the department with the grant requirements attached to the Purchasing Office before the bid or request for proposals is issued.

Exception. The City Council at their discretion can approve waiving the Local Preference requirements for specific projects or on a case by case basis if it is the City's best interest to do so.

4.5 SUBCONTRACTORS

4.5.1 The threshold amount for this project is \$6,000.00. The General Contractor must list all Subcontractors who will perform work in excess of this threshold. Only one Subcontractor may be listed for each category as defined on by the Contractor. The Subcontractor Fair Practice Act (13-4-31 through 13-4-43 NMSA 1978) shall apply.

The Bidder shall list the Subcontractors or material suppliers he proposes to use for all trades or items on the Subcontractor Listing Form attached to the Bidding Document. If awarded the contract, the Bidder shall use the firm listed, or himself if "General Contractor has been listed, unless a request for a change or substitution is approved by the Owner of any reason as outlined herein.

4.5.2 The Owner shall consider any request for a change in the listed forms if the Bidder can furnish evidence of being able to perform the work in a manner more satisfactory and beneficial to both the Owner and the Bidder by not using the listed form. Satisfactory reasons for a substitution may include the inability to bond or lack of evidence of being able to furnish acceptable materials on schedule. Also, if the Bidder has made

a legitimate error in listing a low Subcontractor, a request for substitution, made after the Bid Opening with the Owner's approval, will be considered. The proof of error must be conclusive, based upon the approval of said evidence by the listed Subcontractor or material suppler and/or any other confirmation satisfactory to the Owner.

- 4.5.3 The Bidder shall not list himself as the supplier or as the Subcontractor for any trade unless he has previously performed work of this type or can prove to the Owner's satisfaction that he actually has or will obtain, fully adequate facilities and plans to perform the work with his own forces.
- 4.5.4 Omission or non-compliance with the intent of the Subcontractor Listing will be grounds for considering a Bid as non-responsive.
- 4.5.5 Prior to the award of the Contract, the Owner will notify the Bidder in writing if, after due investigation and written findings of fact, has reasonable and substantial objection to any person or organization on such list and refuses in writing to accept such person or organization, the Bidder may, at his option, (1) withdraw his Bid, or (2) submit an acceptable substitute Subcontractor with no increase in his Bid Price. In the event of withdrawal under this paragraph, Bid security will not be forfeited.
- 4.5.6 The successful Bidder shall, within seven (7) calendar days of notification of selection for the award of Contract for the work, submit the following information to the Owner:
 - (A) A signed list of the proprietary names and the suppliers of principal items or systems of materials and equipment proposed for the work; and
 - (B) A list signed by all Subcontractors proposed for the principal portions of the work in accordance with the Subcontractors Listing Form submitted with the Bid.
- 4.5.7 The successful Bidder will be required to establish to the satisfaction of the Owner the reliability and responsibility of the persons or entities proposed to furnish and perform the work described in the Bidding Documents.
- 4.5.8 Persons and organizations proposed by the Bidder and to whom the Owner has made no reasonable objection under the provisions of Paragraph 4.5.7 must be used on the work for which they were proposed and shall not be changed except with the written consent of the Owner.
- 4.5.9 No successful Bidder shall be required to employ any Subcontractor, other person, or organization against whom he has reasonable objection.

4.6 SUBMISSION OF BIDS

- 4.6.1 Bids shall be submitted at the time and place indicated in the Invitation for Bid and shall be submitted in a sealed envelope marked with the Project title and name and address of the Bidder, New Mexico License #, and accompanied by the Bid Security, Subcontractors Listing, and other required documents listed in the Bid Documents.
- 4.6.2 The envelope shall be addressed to:

Purchasing Agent/City of Santa Fe 2651 Siringo Road, Building 'H' Santa Fe, NM 87505

The following information shall be provided on the front of the Bid envelope: Invitation for Bid number, date of opening, time of opening, and New Mexico License Number. If the Bid is sent by mail, the sealed envelope shall be enclosed in a separate mailing envelope with the notation "SEALED BIDS ENCLOSED" on the face thereof.

- 4.6.3 Bids received after the date and time for receipt of Bids will be returned unopened.
- 4.6.4 The Bidder shall assume full responsibility for timely delivery of Bids at the office of the City's Purchasing Division, including those Bids submitted by mail. Hand-delivered Bids shall be submitted at the front desk of the City Purchasing Division and will be clocked in at the time received, which must be prior to the time specified. Bids will then be held for public opening.

4.6.5 Oral telephonic, e-mailed or telegraphic Bids are invalid and will not receive consideration.

4.7 CORRECTION OR WITHDRAWAL OF BIDS

- 4.7.1 A Bid containing a mistake discovered before Bid Opening may be modified or withdrawn by a Bidder prior to the time set for Bid Opening by delivering written or telegraphic notice to the location designated in the Invitation for Bid as the place where Bids are to be received.
- 4.7.2 Bid security, if required, shall be in an amount sufficient for the Bid as modified or resubmitted in conformance with Section 4.2.
- 4.7.3 Withdrawn Bids may be resubmitted up to the time and date designated for the receipt of Bids, provided they are then fully in conformance with the Bid Documents.
- 4.7.4 After Bid Opening, no modifications in Bid Prices or other provisions of Bids shall be permitted. A low Bidder alleging a material mistake of fact which makes his Bid non-responsive may be permitted to withdraw his Bid if:
 - (A) The mistake is clearly evident on the face of the Bid document; or
 - (B) The Bidder submits evidence which clearly and convincingly demonstrates that a mistake was made.

Any decision by the Owner to permit or deny the withdrawal of a Bid on the basis of a mistake contained therein shall be supported by a determination setting forth the grounds for the decision. If withdrawal is permitted, Bid security will not be forfeited.

4.8 NOTICE OF CONTRACT REQUIREMENTS BINDING ON BIDDER

4.8.1 In submitting this Bid, the Bidder represents that he has familiarized himself with the nature and extent of the

following requirements of the Conditions of the Construction Contract (General, Supplementary, and Other Conditions).

- (A) Definitions Sections 1.0 to 1.17;
- (B) Bribes, Gratuities, and Kickbacks Section 4.0;
- (C) Contract Bond Requirements Section 4.2;
- (D) Equal Employment Opportunity Labor Standards Provisions and other listed within the Contract Documents.

4.9 **REJECTION OR CANCELLATION OF BIDS**

4.9.1 An Invitation for Bid may be canceled, or any or all Bids may be rejected in whole or in part, when it is in the best interest of the Owner. A determination containing the reasons shall be made part of the Project file. Bid security for rejected Bids shall be returned to the Bidder.

4.10 PROTESTS

- 4.10.1 Any Bidder, Offeror, or Contractor who is aggrieved in connection with this procurement (Bid) may protest to the City Purchasing Agent and the Owner in accordance with the requirements. The protest should be made in writing within twenty-four (24) hours after the facts or occurrences giving rise thereto, but in no case more than within fifteen (15) calendar days after the facts or occurrences giving rise thereto.
- 4.10.2 The complete procedures and requirements regarding protest are available from the Purchasing Office upon request.

4.11 COMPETITIVE SEALED BIDS

4.11.1 Contracts solicited by competitive sealed Bids shall require that the base Bid amount exclude the applicable state gross receipts taxes or applicable local option taxes, but that the contracting agency shall be required

to pay the applicable taxes including any increase in the applicable tax which becomes effective after the date the Contract is entered into. The applicable gross receipts taxes or local option taxes shall be shown as a separate amount on each billing or request for payment made under the contract.

5.0 CONSIDERATION OF BIDS

5.1 RECEIPT, OPENING, AND RECORDING

5.1.1 Bids received on time will be opened publicly and will be read aloud, and an abstract of the amounts of the Base Bids and Alternates or Bid items, if any, will be made available to the Bidders. Each Bid shall be open to public inspection. The Owner shall have the right to waive any informalities or irregularities in any Bid or Bids received and to accept the Bid or Bids which are in the Owner's best interest.

5.2 BID EVALUATION AND AWARD

- 5.2.1 It is the intent of the Owner to award a Contract to the responsible Bidder submitting the lowest bid provided the Bid has been submitted in accordance with the requirements of the Bidding Documents and does not exceed the funds available and is in the best interest of the City. The unreasonable failure of a Bidder to promptly supply information in connection with an inquiry with respect to responsibility is grounds for a determination that the Bidder is not a responsible Bidder.
- 5.2.2 Discrepancies in the Bid Form between words and figures will be resolved in favor of words. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.
- 5.2.3 Acceptance of Alternates: Owner reserves the right to accept any alternate in any order.

5.3 NOTICE OF AWARD

A written Notice of Award shall be issued by the Owner after review and approval of the Bid and related documents by the Governing Authority, "as defined in the Supplementary Conditions", with reasonable promptness.

5.4 IDENTICAL BIDS

- 5.4.1 When two or more of the Bids submitted are identical in price and are the low Bid, the City Purchasing Agent or the Owner may:
 - (A) Award pursuant to the identical low bid provisions of the City Purchasing Manual;
 - (B) Award to a resident local business if the identical low Bids are submitted by a resident or local business and a non-resident business;
 - (C) Award to resident or local manufacturer if the identical low Bids are submitted by a resident or local manufacturer and a resident business;
 - (D) Award by lottery to one of the identical low Bidders; or
 - (E) Reject all Bids and re-solicit Bids or proposals for the required services, construction, or items of tangible personal property.

5.5 CANCELLATION OF AWARD

5.5.1 When in the best interest of the public, the Owner may cancel the award of any Contract at any time before the execution of said contracts by all parties without any liability against the Owner.

6.0 POST-BID INFORMATION

6.1 **RETURN OF BID SECURITY**

All Bid security in the form of checks, except those of the two lowest Bidders, will be returned immediately following the opening and checking of the Bids. The retained Bid security of the unsuccessful of the two lowest

Bidders, if in the form of a check, will be returned within fifteen (15) days following the award of contract. The retained Bid security of the successful Bidder, if in the form of a check, will be returned after a satisfactory Contract bond has been furnished and the Contract has been executed. Bid securities in the form of Bid bonds will be returned only upon the request of the unsuccessful Bidder, but will be released by the City Purchasing Agent after the Notice of Award is sent by the Owner.

6.2 NOTICE TO PROCEED

The Owner will issue a written Notice to Proceed to the Contractor stipulating the date from which Contract Time will be charged and the date Contract Time is to expire, subject to valid modifications of the Contract authorized by Change Order.

6.3 FAILURE TO EXECUTE CONTRACT

Failure to return the signed Contract with acceptable Contract Bonds and Certificate of Insurance within fifteen (15) calendar days after the date of the Notice of Award shall be just cause for the cancellation of the award and the forfeiture of the Bid security, which shall become damages sustained. Award may then be made to the next lowest responsible Bidder, or the work may be re-advertised and constructed under Contract or otherwise, as the Owner may decide.

6.4 CONTRACTOR'S QUALIFICATION STATEMENT

6.4.1 Bidder to whom award of a Contract is under consideration shall submit, upon request, information and data to prove that their financial resources, production or service facilities, personnel, and service reputation and experience are adequate to make satisfactory delivery of the services, construction, or items of personal property described in the Bidding Documents and form of Statement of Bidder's Qualifications.

6.5 CONTRACT BONDS REQUIREMENTS

6.5.1 The successful Bidder, where the Contract price exceeds twenty five thousand dollars (\$25,000), shall post a one hundred percent (100%) Performance Bond and one hundred percent (100%) Labor and Material Payment Bond. Bonds shall be executed on Performance Bond and Labor and Material Bond forms attached hereto, with amount payable conforming to the terms of the Contract. Surety shall be a company licensed to do business in the State of New Mexico and acceptable to the Owner.

6.6 INSURANCE REQUIREMENTS

- 6.6.1 The selected Bidder shall purchase and maintain, with a company or companies licensed to do business in the State of New Mexico, Liability and Property Insurance as required by law.
- 6.6.2 The insurance shall be in limits not less than those stated in the insurance for, enclosed in the Bid package, or greater if required by law.
- 6.6.3 The insurance coverage shall include worker's compensation, employers liability, comprehensive general liability (Premises Operations, independent contractual liability, explosion and collapse hazard, underground hazard, personal injury), Comprehensive automobile liability (owned and hired), excess liability (umbrella form), and all-risk builder's risk. For more specific insurance requirements refer to page 8 of the boilerplate AIA agreement included in this RFB.
- 6.6.4 All insurance coverage must be maintained for the entire life of the project. Products and completed operations coverage shall be maintained for a minimum period of one (1) year after final payment.
- 6.6.5 A valid certificate of insurance must be submitted to the Owner prior to issuance of a Notice-to-Proceed.

7.0 MINIMUM WAGE RATES

7.1 Pursuant to the requirements of any Contract entered into in excess of sixty thousand dollars (\$60,000) for construction, alteration, demolition, or repair, or any combination of these, including painting and decorating of public buildings or public works, is subject to the minimum wage rate determination issued by the Office of the Labor Commissioner for this project. This project is subject to SF-15-1373 B.

- 7.2 The Bidder shall ensure that, in submitting his Bid, the minimum wage rate determination, include herein, has been utilized in preparing his Bid.
- 7.3 A summary of the City of Santa Fe Ordinance No. 2003-8, passed by the Santa Fe City Council on February 26, 2003 is included herein. The proponent or bidder will be required to submit the proposal or bid such that it complies with the ordinance to the extent applicable. The recommended Contractor will be required to comply with the ordinance to the extent applicable, as well as any subsequent changes to the Ordinance throughout the term of this contract.

8.0 OTHER INSTRUCTIONS TO BIDDERS

- 8.1 The Owner will make copies of such reports available to any Bidder requesting them. These reports are not guaranteed as to accuracy or completeness, nor are they part of the bidding documents. Before submitting his Bid, each Bidder shall, at his own expense, make such additional investigations and tests as the Bidder may deem necessary to determine his Bid for performance of the work in accordance with the time, price, and other terms and conditions of the Bidding Documents.
- 8.2 It shall be the responsibility of the successful Bidder to secure from the New Mexico Regulations & Licensing Department, Construction Industries Division (CID) such permits or licenses required to carry out the construction.

9.0 NEW MEXICO LABOR AND INDUSTRIAL DIVISION OF THE LABOR DEPARTMENT CONTRACTOR AND SUBCONTRACTOR REGISTRATION

9.1 Registration with the Labor and Industrial Division of the Labor Department. A contractor or subcontractor that submits a bid valued at more than sixty thousand dollars (\$60,000) for a city project that is subject to the Public Works Minimum Wage Act (13-4-11 NMSA 1978) shall be registered with the labor and industrial division of the labor department. The registration number shall be provided in the bid submitted for the contractor in the space provided and for subcontractors with work proposed over \$60,000 on the subcontractor form. After the bid opening, the registration number(s) will be verified by the City and the bid will be determined to be non-responsive and disqualified if the registration number(s) appear to be not valid and the contractor does not provide proof of the required registration for itself or its subcontractors with work proposed over sixty thousand dollars (\$60,000). It is the responsibility of the contractor and the subcontractors to ensure the registration is completed prior to the bid opening.

INFORMATION AVAILABLE TO BIDDERS (00 3000)

(00 3100) EXISTING CONDITIONS

It is the Contractor's responsibility to verify existing conditions prior to bidding. A walk-through of the existing facility will be available at the end of the pre-bid meeting.

BID FORM

(00 4113) BID FORM - STIPULATED SUM (Single-Prime Contract)

Invitation No: RFB '16/38/B

Project: BUCKKMAN DIRECT DIVERSION RAW WATER PUMPS

Contractor:

Date: _____, 2016

This Bid is submitted to:

CITY OF SANTA FE PURCHASING DIRECTOR 2651 SIRINGO ROAD, BUILDING H SANTA FE, NEW MEXICO 87505

- 1. The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an agreement with the Owner in the form included in the Bidding Documents to perform and furnish all work as specified or indicated in the Bidding Documents for the Contract Price and within the Contract Time indicated in this Bid and in accordance with the other terms and conditions of the Contract Documents.
- 2. The Bidder accepts all of the terms and conditions of the Invitation for Bid and Instructions to Bidders, including, without limitation, those dealing with the disposition of Bid security and other Bidding Documents. This Bid will remain subject to acceptance for *60 days after the day of Bid opening. The Bidder shall sign and submit the Agreement between Owner and Contractor (hereinafter called Agreement) with the bonds and other documents required by the Bidding Requirements within fifteen (15) calendar days after the date of the Owner's Notice to Award.
- 3. In submitting this Bid, the Bidder represents, as more fully set forth in the Agreement, that:
 - A. The Bidder has examined copies of all the Bidding Documents and of the following Addenda (receipt of all of which is hereby acknowledged):

No	Date	No	Date
No	Date	No	Date
No	Date	No	Date
No	Date	No	Date

- B. The Bidder has familiarized himself with the nature and extent of the Bidding Documents, work, site, locality, and all local condition, laws, and regulations that in any manner may affect cost, progress, performance, or furnishing of the work.
- C. The Bidder has carefully studied all reports and drawings of existing conditions which are identified in the Information Available to Bidders and accepts the determination set forth in the Information Available to Bidders of the extent of the technical data contained in such reports and drawings upon which the Bidder is entitled to rely.
- D. The Bidder has correlated the results of all such observations, examinations, investigations, explorations, tests, reports, and studies with the terms and conditions of the Bidding Documents.
- E. The Bidder has given the Owner written notice of all conflicts, errors, or discrepancies that he has discovered in the Bidding Documents, and the written resolution thereof by the Owner is acceptable to the Bidder.
- F. This Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm, or corporation and is not submitted inconformity with any agreement or rules of any group, association, organization, or corporations, the Bidder has not directly or indirectly induced or solicited any other Bidder

to submit a false or sham Bid; the Bidder has not solicited or induced any person, firm or corporation to refrain from bidding; and the Bidder has not sought by collusion to obtain for himself any advantage over any

other Bidder or over the Owner. It is understood that the Owner reserves the right to reject any or all Bids and to waive any technical irregularities in the bidding.

- G. It is the intent of the City to award a Contract to the responsible Bidder submitting the lowest lump sum bid, provided the Bid has been submitted in accordance with the requirements of the Bidding Documents and is in the best interest of the City.
- 4. The Bidder will complete the work designated as BUCKMAN DIRECT DIVERSION RAW WATER PUMPS, PROJECT #______ for the following price (All prices listed below are for a complete installed product and includes all labor, materials, equipment, bonding, insurance, overhead & profit, etc.):

A. LUMP SUM BID

1. Furnish and Install four raw water pumps

)	
(use words)	(use figures)	
Gross Receipts Taxes @ 8.3125%		
(use words)	(\$) (use figures)	

B. ALTERNATIVE BID ITEMS

- The Buckman Direct Diversion Board may choose to purchase up to four additional pumps. This may include one or two pumps that are identical to Booster Pump Station 1A pumps and one or two pumps that are identical to Booster Pump Station 2A pumps. The specifications for these pumps shall be identical to those provided for the first pumps, including (but not limited to) removal and reconditioning of motor(s), supply and installation of new
- 2. The Bidder is required to honor the prices quoted below for a period of one-year from bid opening time. It is expressly understood that the Buckman Direct Diversion Board may choose to purchase one or more pumps at any time during the one-year period.
- **3.** The Bidder will provide the pump(s) for the following prices (All prices listed below are for a complete installed product and includes all labor, materials, equipment, bonding, insurance, overhead & profit, etc.):

(use words)	(\$(use figures))
Gross Receipts Taxes @ 8.3125%		
(use words)	(\$(use figures))

Alternative Bid Item No. 2 – Furnish and Install Two Additional Pumps at Booster Pump Station 1A

	(\$)
(use words)	(use figures)

	axes @ 8.3125%		
		(\$)
	(use words)	(\$(use figures)	
Alternative Bid	Item No. 3 – Furnish and Instal	ll One Additional Pump at Boo	ster Pump Station 2A
	_	(\$(use figures))
	(use words)	(use figures)	
Bross Receipts T	Faxes @ 8.3125%		
		(\$)
	(use words)	(\$(use figures)	
Alternative Bid	Item No. 3 – Furnish and Instal	ll Two Additional Pumps at Bo	oster Pump Station 2A
Alternative Bid	Item No. 3 – Furnish and Instal	_	-
Alternative Bid	Item No. 3 – Furnish and Instal (use words)	Il Two Additional Pumps at Bo (\$	-
		(\$(use figures))
	(use words)	(\$(use figures))

- 5. The Bidder agrees that:
 - A. The work to be performed under the Contract shall commence not later than ten (10) consecutive calendar days after the date of written Notice to Proceed, and that completion of the Base Bid shall be achieved not later than two-hundred forty (240) calendar days after the date of written "Notice to Proceed", except as hereafter extended by valid written "Change Order" by the Owner.
 - B. Should the Contractor neglect, refuse, or otherwise fail to complete the work within the time specified, the Contractor agrees, in partial consideration for the award of this Contract, to pay the Owner the amount of one thousand dollars (\$1,000.00) per consecutive calendar days, not as a penalty, but as liquidated damages for such breach of the Contract.
 - C. The above prices shall include all labor, profit, insurance, (excluding applicable taxes), etc., to cover the finished work of the many kinds called for. Changes shall be processed in accordance with the Contract Documents.
 - D. It is understood that the Owner reserves the right to reject any or all Bids and to waive any technical irregularities in the bidding.
- 6. The following documents are attached to and made a condition of this Bid:
 - A. Bid Bond (Bid Security Form and Agent's Affidavit)
 - B. This Bid Form, properly filled out and executed, including acknowledgement of Addenda, if any
 - C. Subcontractor Listing
 - D. Non-Collusion Affidavit of Prime Bidder
 - E. Certification of Non-Segregated Facilities
 - F. Resident contractor or Resident Veteran Contractor Certificate
 - G. Certificate of Registration with New Mexico Dept. of Workforce Solutions
 - H. Certification of Equal Employment Opportunity

If any of the above requirements have not been met, the bid shall not be valid.

7. The terms used in this Bid and the Bidding and Contract Documents which are defined in the Conditions of the Construction Contract (General, Supplementary, and Other Conditions)

8. If the Bidder is:

A.	AN INDIVIDUAL:	
	Ву:	
	doing business as:	(Individual's Name)
	Business address:	
	Telephone:	
(SEAL)		
B.	A PARTNERSHIP:	
	Ву:	(Firm Name)
		(General Partner)
	Business Address:	
	Telephone:	
	(SEAL)	
C.	A CORPORATION	
	By:	(Corporation Name)
		(State of Incorporation)
	By:	
		(Name of person authorized to sign)
		(Title)

If a New Mexico Corporation:	
- · · F · · · · · · · · · · · · · · · ·	Certificate of Incorporation No.
If a Foreign Corporation:	
	Certificate of Authority No.
Attest:	
	(Secretary)
Business address:	
Telephone:	
A JOINT VENTURE	
By:	
	(Name)
Address:	
By:	
	(Name)
Address:	
is a party to the joint venture should	nanner of signing for each individual, partnership, and corporation the be in the manner indicated in the appropriate category.
Bidder must fill in the following: (If	f none, write none)
NM License No.:	Classification:
NM Department of Labor Registr	ration No.
Resident Contractor or Resident	Veteran Contractor Certification No.
City of Santa Fe Business Registr	ration No.:
One Original and one copy of the Bi	d Submittal is required

D.

SUPPLEMENT TO BID FORMS (00 4300-4500)

(00 4313) BID SECURITY FORM

Review and Approval: This Bond has been executed by a Surety named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies," as published in Circular 570 (amended) by the Audit Staff Bureau of Accounts, United States Treasury Department.

Approved:

DATE:

Owner's Representative or Governing Authority

THIS FORM MUST ACCOMPANY THE BID BOND

THIS FORM MUST BE USED BY SURETY

(00 4517) AGENT'S AFFIDAVIT

BID SECURITY FORM

		(To be filled in by Agent)	
STATE OF COUNTY OF)) ss.		
COUNTY OF)		
sworn deposes and says:			being first duly
that he is the duly appointed age	ent for		
and licensed in the State of New Mexico	⁷ Mexico. Deponent fur	rther states that a certain bond give	n to indemnify the State of New
in connection with the construct	ion of		
	-	, 20, executed by	,
contractor, as principal and			, as surety, signed by this
deponent; and deponent further a has	states that said bond wa	as written, signed, and delivered by	him; that the premium on the same
been or will be collected by him	; and that the full comm	nission thereon has been or will be	retained by him.
Subscribed and sworn to before day of	me, a notary public in a	and for the County of	, this
My Commission expires:			
Agent's Address:			
Telephone:		-	

(00 4518) SUBCONTRACTOR LISTING

<u>Note</u>: A subcontractor that submits a bid valued at more than sixty thousand dollars (\$60,000) for a city project that is subject to the Public Works Minimum Wage Act 13-4-10 NMSA 1978) shall be registered with the labor and industrial division of the labor department. For this project, list below all subcontractors with more than \$6,000 work.

			Section	00430		
TRADE	NAME	ADDRESS	TELEPHONE#	LICENSE #	NM DEPT. OF LABOR REGISTRATION #	SUBCONTRACTOR SIGNATURE - TO BE OBTAINED AFTER AWARD OF CONTRACT

(00 4519) NON-COLLUSION AFFIDAVIT OF PRIME BIDDER

STATE OF))ss.			
COUNTY OF)			
	, being first duly sworn, deposes and says that:			
1)	He is the			
2)	He is fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid;			
3)	Such Bid is genuine and is not a collusive or sham Bid;			
4)	Neither the said Bidder nor any of its officers, partners, owners, agents, representatives, employees, or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly with the Bidder, firm or person to submit a collusive or sham Bid in connection with the Contract for which the attached Bid has been submitted or to refrain from bidding in connection with such Contract or has in any manner directly or indirectly, sought by agreement or collusion or communications or conference with any other Bidder, firm or person to fix the price or prices in the attached Bid or of any other Bidder, or to fix any overhead, profit or cost element of the Bid price or the Bid price of any other Bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the City of Santa Fe, or any person interested in the proposed Contract; and			
5)	The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affront.			
	By:			
	Title:			
Subscribed and s	worn to before me this day of, 20			
Notary Public				
My Commission	expires:			

(00 4533) CERTIFICATION OF NON-SEGREGATED FACILITIES

(Applicable to construction contracts and related subcontracts exceeding \$10,000 which are not exempt from the Equal Opportunity Clause.)

The construction contractor certifies that he does not maintain or provide for his employees any segregated facilities at any of his establishments and that he does not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. The construction contractor certifies further that he will not maintain or provide for his employees any segregated facilities at any of his establishments, and that he will not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. The construction contractor agrees that a breach of this certification is a violation of the Equal Opportunity Clause in this contract. As used in this certification, the term "segregated facilities" means: any waiting room, work areas, rest rooms and wash rooms, restaurants and other eating areas; time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, creed, color, or national origin because of habit, local custom, or otherwise. The construction contractor agrees that (except where he has obtained identical certifications from proposed Subcontractors for specific time periods) he will obtain identical certifications from proposed Subcontracts exceeding \$10,000 which are not exempt from the provision of the Equal Opportunity Clause and that he will retain such certifications in his files.

By:	 	
Title:	 	

Subscribed and sworn to before me this ______ day of ______, 20___.

Notary Public

My Commission expires: _____

(00 4534) INSTRUCTIONS RELATING TO LOCAL PREFERENCE CERTIFICATION FORM

- 1. All information must be provided. A 10% local preference may be available for this procurement. To qualify for this preference, an offeror must complete and submit the local preference certification form with its offer. If an offer is received without the form attached, completed, notarized, and signed or if the form is received without the required information, the preference will not be applied. The local preference form or a corrected form will not be accepted after the deadline for receipt of bids or proposals.
- 2. Local Preference precedence over State Preference: The Local Preference takes precedence over the State Resident Preference and only one such preference will be applied to any one bid or proposal. If it is determined that the local preference applies to one or more offerors in any solicitation, the State Resident Preference will not be applied to any offers.
- 3. Principal Office and location must be stated: To qualify for the local preference, the principal place of business of the enterprise must be physically located within the Santa Fe County Geographic Boundaries. The business location inserted on the Form must be a physical location, street address or such. DO NOT use a post office box or other postal address. Principal place of business must have been established no less than six months preceding application for certification.
- 4. Subcontractors do not qualify: Only the business, or if joint venture, one of the parties of the joint venture, which will actually be performing the services or providing the goods solicited by this request and will be responsible under any resulting contract will qualify for this preference. A subcontractor may not qualify on behalf of a prime contractor.
- 5. Definition: The following definition applies to this preference.

A local business is an entity with its Principal office and place of business located in Santa Fe County. A Principal office is defined as: The main or home office of the business as identified in tax returns, business licenses and other official business documents. A Principal office is the primary location where the business conducts its daily operations, for the general public, if applicable. A temporary location or movable property, or one that is established to oversee a City of Santa Fe project does not qualify as a Principal office.

Additional Documentation: If requested a business will be required to provide, within 3 working days of the request, documentation to substantiate the information provided on the form. Any business which must be registered under state law must be able to show that it is a business entity in good standing if so requested.

(00 4534.1) LOCAL PREFERENCE CERTIFICATION FORM

RFP/RFB NO:							
Business Name:					-		
Principal Office: _	Street Address	City	State	Zip Code	_		
		·					
City of Santa Fe Bi	usiness License #		(Attach Copy	to this Form)			
Date Principal Off RFP or RFB).	ice was established:		(Establish	ed date must be si	x months be	efore date of P	ublication of this
CERTIFICATIO	N						
submitting this off true and correct, th	at the business set out ab fer (e.g. as a partnership, hat I am authorized to s working days of receipt o	, joint venture sign on behalf	e). I hereby cer f of the busine	tify that the inform ss set out above an	nation whic nd, if reque	h I have provi sted by the Ci	ded on this Form is ty of Santa Fe, will
Signature of Autho	prized Individual:						
Printed Name:							
Title:	Date:		_				
Subscribed and swe	orn before me by		this, da	ay of			
My commission ex	xpires	N	lotary Public				
				SEAL			

THIS FORM MUST ACCOMPANY THE BID

(00 4535) RESIDENT VETERANS PREFERENCE CERTIFICATION

(NAME OF CONTRACTOR) hereby certifies the following in regard to application of the resident veterans' preference to this procurement.

Please check one box only:

 \Box I declare under penalty of perjury that my business prior year revenue starting January 1 ending December 31 is less than \$1M allowing me the 10% preference discount on this solicitation. I understand that knowingly giving false or misleading information about this fact constitutes a crime.

 \Box I declare under penalty of perjury that my business prior year revenue starting January 1 ending December 31 is more than \$1M but less than \$5M allowing me the 8% preference discount on this solicitation. I understand that knowingly giving false or misleading information about this fact constitutes a crime.

 \Box I declare under penalty of perjury that my business prior year revenue starting January 1 ending December 31 is more than \$5M allowing me the 7% preference discount on this solicitation. I understand that knowingly giving false or misleading information about this fact constitutes a crime.

I agree to submit a report or reports to the State Purchasing Division of the General Services Department declaring under penalty of perjury that during the last calendar year starting January 1 and ending on December 31, the following to be true and accurate:

In conjunction with this procurement and the requirements of this business application for a Resident Veteran Business Preference/Resident Veteran Contractor Preference under Sections 13-1-21 or 13-1-22 NMSA 1978, which awarded a contract which was on the basis of having such veterans preference, I agree to report to the State Purchasing Division of the General Services Department the awarded amount involved. I will indicate in the report the award amount as a purchase from a public body or as a public works contract from a public body as the case may be.

I understand that knowingly giving false or misleading information on this report constitutes a crime.

I declare under penalty of perjury that this statement is true to the best of my knowledge. I understand that giving false or misleading statements about material fact regarding this matter constitutes a crime.

(Signature of Business Representative)*

(Date)

*Must be an authorized signatory of the Business.

The representation made by checking the above boxes constitutes a material representation by the business. If the statements are proven to be incorrect, this may result in denial of an award or un-award of the procurement.

SIGNED AND SEALED THIS _____ DAY OF _____, 20__.

NOTARY PUBLIC

My Commission Expires:

(00 4546) CERTIFICATION OF EQUAL EMPLOYMENT OPPORTUNITY

INSTRUCTIONS

This certification is required pursuant to Executive Order 11246 (30 F.R. 12319-25). The implementing rules and regulations provide that any Bidder or perspective contractor, or any of their proposed Subcontractors, shall state as an initial part of the Bid or negotiations of the Contract whether he has participated in any previous Contract or subcontract subject to the equal opportunity clause; and, if so, whether he has filed all compliance reports due under applicable instructions.

Where the certification indicates that the Bidder has not filed a compliance report due under applicable instructions, such Bidder shall be required to submit a compliance report within seven calendar days after Bid opening. No Contract shall be awarded unless such report is submitted.

CERTIFICATION BY BIDDER

Bidder's	Name:
Address:	
1.	Bidder has participated in a previous Contract or subcontract subject to the equal Opportunity Clause.
	Yes No
2.	Compliance reports were required to be filed in connection with such Contract or subcontract.
	Yes No
Certificat	ion - The information above is true and complete to the best of my knowledge and belief.
Name and	d Title of Signer (please type)

Signature

Date

AGREEMENT FORMS (00 5200)

BUCKMAN DIRECT DIVERSION BOARD RAW WATER PUMP PROJECT

AGREEMENT BETWEEN OWNER AND CONTRACTOR

This Agreement is entered into this _____ day of _____ 2016, by and between the BUCKMAN DIRECT DIVERSION BOARD, herein known as the Owner, and ______, herein known as the Contractor.

For the following:

PROJECT: BDD Raw Water Pump Project Bid No.____

ENGINEER: Deere & Ault Consultants

Who is to act as Owner's representative, assume all duties and responsibilities, and have the rights and authority assigned to "Engineer" in the Contract Documents in connection with the completion of the Work in accordance with the Contract Documents.

RECITALS

WHEREAS, the Owner, through its Governing Board, is authorized to enter into an Agreement for the project; and

WHEREAS, the Owner has let this Agreement according to the established State and Local Purchasing procedures for contracts of the type and amount let; and

WHEREAS, construction of this Project was approved by the Governing Board of the Buckman Direct Diversion Board at its meeting of ______.

OWNER and the CONTRACTOR in consideration of the mutual covenants set forth herein, agree as follows:

1

ARTICLE 1 THE CONTRACT DOCUMENTS

The Contract Documents consist of this Agreement; the Conditions of the Agreement (General, Supplementary, and other Conditions); all Sections, Specifications, Exhibits, Drawings, and forms and documents listed in the General Conditions of the Agreement - Section 00 7500; all Addenda issued prior to Bid; and all modifications issued and executed by Owner and Contractor after execution of this Agreement. These documents form the Agreement, and all are as fully a part of the Agreement as if attached to this Agreement or repeated herein.

ARTICLE 2 THE WORK

- 2.1 The Contractor shall perform all the work required by the Contract Documents for the BDD Raw Water Pump Project, City of Santa Fe, Bid No.
- 2.2 The Work is located at Buckman Direct Diversion's Booster Pump Stations 1A and 2A, which are located approximately 17 miles northwest of Santa Fe, New Mexico.

The Work includes:

- a. Removing four (total) existing vertical turbine pumps from two existing pump stations.
- b. Removing four (total) electric motors from two existing pump stations and shipping those motors to a motor testing and repair facility. Those motors shall be returned to the Buckman Direct Diversion (BDD) and re-installed after service and testing.
- c. Manufacture, installation, startup and testing of four (total) new vertical turbine pumps and all appurtenant equipment.
- d. All electrical and controls wiring and testing to make the new pumps completely operable with the existing system.
- e. It is understood that all mechanical, electrical and controls work will be performed by the Contractor. It is also understood that BDD staff are familiar with the existing plant control systems and will assist the Contractor with software programming changes necessary to make the system fully functional.
- f. The work also consists of but not limited to furnishing all equipment, labor and materials as required by the Owner.
- 2.3 Contractor shall be responsible for verification of all measurements and dimensions for bidding.

2.4 Contractor shall be responsible for all permits, fees, insurance and the bond associated with the completion of this project.

ARTICLE 3

TIME OF COMMENCEMENT AND SUBSTANTIAL COMPLETION

3.1 The work to be performed under this Agreement shall be commenced not later than Ten (10) consecutive calendar days after the date of written Notice to Proceed, and the completion of the Base Bid shall be achieved not later than Two-Hundred Forty (240) calendar days after the date of written Notice to Proceed, except as hereafter extended by valid written "Change Order" by the Owner.

ARTICLE 4 CONTRACT SUM

4.1 The Owner shall pay the Contractor in current funds for the performance of the Work, subject to additions and deductions by Change Order as provided in the Contract Documents, the Contract Sum of ______ dollars (\$).

The Contract Sum is determined as follows:

Base Bid Price	\$
Bid Alternates () Price	\$
Gross Receipts (8.1875%) Tax	\$
TOTAL:	\$

ARTICLE 5 PROGRESS PAYMENTS

- 5.1 Contractor shall submit Applications for Payment, based on the percentage of the Work performed as follows and in accordance with Article 10 of the General and Special Provisions.
 - a) 20% Payment on approval of Shop Drawings
 - b) 50% Payment on completion of Pump Testing
 - c) 60% Payment on completion of Electric Motor Refurbishment
 - d) 80% Payment on Delivery of Pumps and Motors
 - e) 95% Payment on Complete Installation, Testing and Acceptance of Pumps

f) 100% Payment within twenty-eight (28) calendar days after correction of all deficiencies listed in the Certificate of Substantial Completion have been corrected.

<u>ARTICLE 6</u> LIQUIDATED DAMAGES

6.1 Contractor and Owner recognize that time is of the essence of this Agreement and that Owner will suffer financial loss if the Work and/or the specific tasks or portions of the Work are not completed within the time durations specified in Article 3 above, plus any extensions thereof agreed to by Owner. Contractor agrees to pay to the Owner the amount of one thousand dollars (\$1,000) per each consecutive calendar day of delay until the work is completed and accepted or until voided pursuant to the provisions of the General Conditions of the Agreement, not as a penalty, but as liquid damages for such breach of the Agreement.

ARTICLE 7

FINAL PAYMENT

- 7.1 Upon final completion and acceptance of the Work in accordance with Section 3.01 of the General Conditions of the Agreement, Owner shall issue Final Payment constituting the unpaid balance of the Contract Sum as recommended by Engineer, to the Contractor within twenty-eight (28) calendar days after all deficiencies that were noted during the Substantial Completion Inspection and listed on the attachment to the Certificate of Substantial Completion have been corrected, and provided the terms of the Agreement has been fully performed.
- 7.2 Prior to issuance of Final Payment by the Owner, the Contractor shall provide to the Owner a certified statement of Final Release Form, Consent of Surety, Warranty from Contractor, warranties from suppliers and manufacturers, training sessions, equipment/operation & maintenance manuals, and as-built drawings.

ARTICLE 8 SCHEDULE

8.1 The Contractor shall, within fifteen (15) days after the effective date of this Agreement, prepare and submit to the Owner five (5) copies of a progress schedule covering Project operations and activities for the Two Hundred Forty (240) calendar day Project period.

<u>ARTICLE 9</u> CONTRACTOR'S REPRESENTATIONS

- 9.1 In order to induce Owner to enter into this Agreement, Contractor makes the following representations:
 - A. Contractor has examined and carefully studied the Contract Documents and the other related data identified in the Bidding Documents.

- B. Contractor shall examine the site conditions, intended application, and operation of the pump system and recommend pumps that will best satisfy the indicated requirements. This includes review of installed equipment to be reused and coordination to assure the compatibility of new and existing equipment.
- C. Contractor is familiar with and is satisfied as to all federal, state, and local Laws and Regulations that may affect cost, progress, and performance of the Work.
- D. Contractor does not consider that any further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Sum, within the time for Substantial Completion, and in accordance with the other terms and conditions of the Contract Documents.
- E. Contractor is aware of the general nature of Work to be performed by Owner and others at the site that relates to the Work as indicated in the Contract Documents.
- F. Contractor has correlated the information known to Contractor, information and observations obtained from visits to the Site, reports and drawings identified in the Contract Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Contract Documents.
- G. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
- H. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

ARTICLE 10 GENERAL AND SPECIAL PROVISIONS

- 10.1 This Agreement shall be governed exclusively by the provisions hereof and by the laws of the State of New Mexico as the same from time to time exist.
- 10.2 Terms used in this Agreement which are defined in the Conditions of the Agreement shall have the meanings designated in those Conditions.
- 10.3 The Contractor shall defend, indemnify, and hold harmless the Owner against any and all injury, loss, or damage, including, without limitation, costs of defense, court costs and attorney's fees, arising out of the acts, errors, or omissions of the Contractor.
- 10.4 An enumeration of the Contractor's Liability Insurance requirements appears in the General Conditions of the Contract for construction. Insurance requirements are also described in the Instructions to the Bidder section of the Project Manual. Contractor shall maintain adequate insurance in at least the aggregate maximum amounts which the

Owner could be liable under the New Mexico Tort Claims Act, and shall provide proof of such insurance coverage to the Owner. It is the sole responsibility of the Contractor to be in compliance with the law.

- 10.5 This Agreement shall not become effective until; (i) approved by the Governing Board; (ii) and signed by all parties required to sign this Agreement.
- 10.6 The Contractor and the Contractor's agents and employees are independent contractors performing professional and technical services for the Owner and are not employees of the Owner. The Contractor and the Contractor's agents and employees shall not accrue leave, retirement, insurance, bonding, use of Owner's vehicles, or any other benefits afforded to employees of the Owner as a result of this Agreement.
- 10.7 The Contractor shall not subcontract any portion of the services to be performed under this Agreement without prior written approval of the Owner.
- 10.8 The Contractor shall maintain detailed time records which indicate the date, time, and nature of services rendered and work performed. These records shall be subject to inspection by the Owner, the New Mexico Department of Finance and Administration, and the State Auditor. The Owner shall have the right to audit billings both before and after payment. Payment under this Agreement shall not foreclose the right of the Owner to recover excessive illegal payments.
- 10.9 The terms of this Agreement are contingent upon sufficient appropriations and authorization being made by the Owner for the performance of this Agreement. If sufficient appropriations and authorization are not made by the Owner, this Agreement shall terminate upon written notice being given by the Owner to the Contractor. The Owner's decision as to whether sufficient appropriations are available shall be accepted by the Contractor and shall be final.
- 10.10 The Contractor warrants that the Contractor presently has no interest and shall not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance or services required under this Agreement.
- 10.11 The Contractor hereby warrants that the Contractor is in compliance with the Americans with Disabilities Act, 29 CFR 1630.
- 1012 The Contractor, upon Final Payment of the amounts due under this Agreement, releases the Owner, the Owner's officers and employees, the Owner's consultants, and the City of Santa Fe from all liabilities and obligations arising from or under this Agreement, including, without limitation, all damages, losses, costs, liability, and expenses, including, without limitation, attorney's fees and costs of litigation that the Contractor may have.
- 10.13 The Contractor agrees not to purport to bind the Owner to any obligation not assumed herein by the Owner, unless the Contractor has express written authority to do so, and

then only within the strict limits of that authority.

- 10.14 Gender, Singular/Plural: Words of any gender used in this Agreement shall be held and construed to include any other gender, and words in the singular number shall be held to include the plural, unless the context otherwise requires.
- 10.15 Captions and Section Headings: The captions and section headings contained in this Agreement are for convenience of reference only, and in no way limit, define, or enlarge the terms, scope and conditions of this Agreement.
- 10.16 This agreement shall be executed in no less than five (5) counterparts, each of which shall be deemed an original.
- 10.17 Certificates and Documents Incorporated: All certificates and documentation required by the provisions of the Agreement and are hereby incorporated by reference as though set forth in full in this Agreement to the extent they are consistent with its conditions and terms.
- 10.18 Severability: Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Owner and Contractor, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision. Any finding voiding or declaring unenforceable any provision of this Agreement shall not affect the validity or enforceability of any other provision hereof, the parties agreeing specifically that they would have entered into and performed pursuant to the provisions hereof without the existence of the voided or unenforceable provisions.
- 10.19 Waiver: No provision of this Agreement shall be deemed to have been waived by either party unless such waiver be in writing signed by the party making the waiver and addressed to the other party; nor shall any custom or practice which may evolve between the parties in the administration of the terms hereof be construed to waive or lessen the right of either party to insist upon the performance by the other party in strict accordance with the terms hereof. Further, the waiver by any party of breach by the other party of any term, covenant, or condition hereof shall not operate as a waiver of any subsequent breach of the same or any other term, covenant, or condition thereof.
- 10.20 Assignment of Agreement: No assignment by a party hereto of any rights under or interests in the Agreement will be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

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- 10.21 Successors and Assigns: Owner and Contractor each binds itself, its partners, successors, assigns, and legal representatives to the other party hereto, its partners, successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.
- 10.22 Entire Agreement: This Agreement represents the entire Agreement between the parties and except as otherwise provided herein, may not be amended, changed, modified, or altered without the written consent of the parties hereto. This Agreement incorporates all of the conditions, agreements, and understandings between the parties concerning the subject matter of this Agreement, and all such conditions, understandings, and agreements have been merged into this written Agreement. No prior conditions, agreement, or understanding, verbal or otherwise, of the parties or their agents shall be valid or enforceable unless embodied in this written Agreement.
- 10.23 Interchangeable Terms: For purposes of all provisions within this Agreement and all attachments hereto, the terms "Agreement" and "Contract" shall have the same meaning and shall be interchangeable.
- 10.24 Words and Phrases: Words, phrases, and abbreviations which have well-known technical or trade meanings used in the Contract Documents shall be used according to such recognized meaning. In the event of a conflict, the more stringent meaning shall govern.
- 10.25 Relationship of Contract Documents: The Contract Documents are complementary, and any requirement of one Contract Document shall be as binding as if required by all.
- 10.26 Notices: Any and all notices provided for hereunder shall be in writing and shall be deemed delivered, given and received when (i) personally delivered, or (ii) five (5) days after the same are deposited in the United States mail, postage prepaid, registered or certified mail, return receipt requested, addressed to the applicable party at the address indicated below for such party or at such other address as may be designated by either party in a written note to the other party.

OWNER: Buckman Direct Diversion Board
Buckman Direct Diversion
341 Caja del Rio
Santa Fe, New Mexico 87507
CONTRACTOR:

10.27 Conflicts: In interpreting the Contract Documents, words describing material, or work having a well-known technical or trade meaning, unless otherwise specifically defined, shall be construed in accordance with such well-known meaning recognized by Engineers, Architects, and the trades. In resolving inconsistencies and/or conflicts among

two (2) or more sections of the Contract Documents precedence shall be given in the following order:

- A. Contract Agreement
- B. Modifications to the Agreement by Change Order (if any)
- C. Addendums
- D. Supplementary Conditions
- E. Instructions to Bidders
- F. Plans/Drawings
- G. Technical Specifications
- H. General Requirements
- 10.28 Pursuant to Section 13-1-191, NMSA 1978, reference is hereby made to the Criminal Laws of New Mexico (including Sections 30-14-1, 30-24-2, and 30-41-1 through 30-41-3, NMSA 1978) which prohibit bribes, kickbacks, and gratuities, violation of which constitutes a felony. Further, the New Mexico Procurement Code (Sections 13-1-28 through 13-1-199, NMSA 1978) imposes civil and criminal penalties for its violation.
- 10.29 By entering into this Agreement, the parties do not intend to create any right, title or interest in or for the benefit of any person other than the Owner and the Contractor. No person shall claim any right, title or interest under this Agreement or seek to enforce this Agreement as a third party beneficiary of this Agreement.

ARTICLE 11 NEW MEXICO TORT CLAIMS ACT

11.1 Any liability incurred by the Buckman Direct Diversion Board or the City of Santa Fe in connection with this Agreement is subject to the immunities and limitations of the New Mexico Tort Claims Act, Section 41-4-1, et. seq. NMSA 1978, as amended. The Board and the City and its "public employees" as defined in the New Mexico Tort Claims Act, do not waive sovereign immunity, do not waive any defense and do not waive any limitation of liability pursuant to law. No provision in this Agreement modifies or provision waives anv of the New Mexico Tort Claims Act.

This Agreement is entered into as of the day and year first written above.

ATTEST:

BUCKMAN DIRECT DIVERSION BOARD:

YOLANDA Y. VIGIL, CITY CLERK

CHAIRPERSON

CONTRACTOR:

DATE: _____

.

BY: _____

TITLE: _____

DATE: _____

APPROVED AS TO FORM:

Many Cong NANCY R. LONG, BDDB COLUNSEL

APPROVED:

CITY FINANCE DIRECTOR

BUSINESS UNIT/LINE ITEM

Contractor's NM Taxation and Revenue CRS No.:

Contractor's City of Santa Fe Business Registration No.:

- END OF SECTION -

BDD Raw Water Pump Project

BONDS, CERTIFICATES, AND NOTICES (00 6100 - Sample Forms)

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PERFORMANCE BOND

CONTRACTOR (name and address):

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

OWNER (name and address):

CON	ISTRUCTION CONTRACT
	Effective Date of the Agreement:
	Amount:
	Description (name and location):
BON	ID
	Bond Number:
	Date (not earlier than the Effective Date of the Agreement of the Construction Contract): Amount:
	Modifications to this Bond Form: None See Paragraph 16

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

CONTRACTOR AS PRINCIPAL	SURETY
Contractor's Name and Corporate Seal	(seal)(seal, Surety's Name and Corporate Seal
By:	By: Signature (attach power of attorney)
Print Name	Print Name
Title	Title
Attest: Signature	Attest:Signature
Title	Title

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

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PAYMENT BOND

CONTRACTOR (name and address):

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

OWNER (name and address):			
CONSTRUCTION CONTRAC	r.		
Effective Date of the A	greement:		
Amount:			
Description (name and lo	cation)".		
BOND	6	a.	ал. А
Bond Number:			
Date (not earlier than the E	ffective Date of the Agreement of the	Construction Contract):	
Amount:			-
Modifications to this B	ond Form: None S	ee Paragraph 18	

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

CONTRACTOR AS PRINCIPAL

SURETY

(seal)	(seal)
Contractor's Name and Corporate Seal	Surety's Name and Corporate Seal
Ву:	Ву:
Signature	Signature (attach power of attorney)
Print Name	Print Name
Title	Title
Attest:	Attest:
Signature	Signature
Title	Fitle
Notes: (1) Provide supplemental execution by any addition to contractor, Surety, Owner, or other party shall be cons	onal parties, such as joint venturers. (2) Any singular reference idered plural where applicable.

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CERTIFICATE OF AIA DOCUMENT G705	INSU	RANCE					-	
This certificate is issued as a m or alter the coverage afforded l	natter of i by the pol	nformation c icies listed be	only and co low.	nfers no	rights upon the	addressee. It	does not ameno	i, exten
Name and Address of Insured				COMP	ANIES AFFORDING (OVERAGE		
.				1				
Covering (Project Name and Lo	ocation)			B				
Addressee:			٦	C	<u> </u>			
(Owner)				D				
				E	l			
L			L	F				
This is to certify that the follow the above named insured and	wing desc are in for	ribed policie ce at this tim	es, subject t ie.	o their t	erms, condition	s and exclusio	ns, have been j	issued t
TYPE OF INSURANCE	CO. CODE	POLICY NUMBER	EXPIRATION DATE	LIMITS (OF LIABILITY IN THO			REGATE
1. (a) Workers' Compensation			1	Statuto	rγ			
(b) Employer's Liability 2. Comprehensive General						s	. Each A	ccident
Lability including:				Bodily I	njury	5	\$	
Premises - Operations Independent Contractors				Propert	y Damage	s	s	÷
Products and Completed					, ,			
Operations Broad Form Property					•		s	
Damage				Bodily I and Pro	perty	s	,	
Contractual Liability Explosion and Collapse				Damage	e Combined			
Hazard								
Underground Hazard					s to Products and tions Hazard	Completed	\$ (Real	sonal
Personal Injury with Employment Exclusion Deleted				Operat	uons riazaro			ury)
 Comprehensive Automobile Uability 				Bodily I		\$		
Owned				Bodily In	-	s		
Hired				(Each Ac	ccident)			
Non-Owned					/ Damage	S		
				Bodily Ir and Proj Damage		\$		
Excess Liability	T			Bodily In		\$	\$	
Umbrella Form Other than Umbrella				and Prop Damage	Combined			
. Other (Specify)	I							

1. Products and Completed Operations coverage will be maintained for a minimum period of 🔲 1 🔲 2 year(s) after final payment.

2. Has each of the above listed policies been endorsed to reflect the company's obligation to notify the addressee in the event of cancellation or non-renewal?
Yes No

CERTIFICATION

I hereby certify that I am an authorized representative of each of the insurance companies listed above, and that the cover-ages afforded under the policies listed above will not be cancelled or allowed to expire unless thirty (30) days written notice has been given to the addressee of this certificate.

Name of Issuing Agency

Signature of Authorized Representative

Address

Date of Issue

AIA DOCUMENT G785 + CERTIFICATE OF INSURANCE + NOVEMBER 1978 EDITION + AIA (+ 0 1978) THE AMERICAN INSTITUTE OF ARCHITECTS, 1735 NEW YORK AVENUE, N.W., WASHINGTON, D.C. 20006

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G705-1978

DATE

NAME ADDRESS CITY/STATE/ZIP

RE:

Dear:

"OFFICIAL NOTICED-TO-PROCEED"

On ______, the Buckman Direct Diversion Board awarded a Contract to your firm for BDD Raw Water Pump Project No.______, CITY OF SANTA FE – BDD RAW WATER PUMP PROJECT – Bid Number ______. This letter shall serve as official Notice-to-Proceed with the work described for this project in the Contract Documents and Request for Bids_____.

The award of the Agreement is based on your Bid proposal dated _____, in the amount of \$_____.

Based on the date of issuance of this notice, as starting date, ______, and the ______() contract work time limit, the entire work under this Agreement shall be substantially completed by ______. Attached are two (2) signed copies of the Agreement between Owner and Contractor. These are for your files and Surety Company. Please comply with the requirements for filing payroll statements with the State Labor Commission and the City Contract Compliance Officer.

Please acknowledge receipt of this notice and return signed copies to Charles M. Vokes (BDD, Facilities Manager) and Engineer (Ray Eldridge, P.E.; ray.eldridge@deereault.com).

Sincerely, RECEIPT ACKNOWLEDGED:

By

Charles M. Vokes, BDD Facilities Manager Buckman Direct Diversion xc: Project/Book File

GENERAL CONDITIONS OF THE

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AGREEMENT (SECTION 00 7500)

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(00 7501) SUMMARY OF WORK

PART 1 -- GENERAL

1.1 SUMMARY

- A. The Work is located at Buckman Direct Diversion's Booster Pump Stations 1A and 2A, which are located approximately 17 miles northwest of Santa Fe, New Mexico.
- B. The Work includes:
 - 1. Removing four (total) existing vertical turbine pumps from two existing pump stations.
 - 2. Removing four (total) electric motors from two existing pump stations and shipping those motors to a motor testing and repair facility. Those motors shall be returned to the Buckman Direct Diversion (BDD) and re-installed after service and testing.
 - 3. Manufacture, installation, startup and testing of four (total) new vertical turbine pumps and all appurtenant equipment.
 - 4. All electrical and controls wiring and testing to make the new pumps completely operable with the existing system.
 - 5. It is understood that all mechanical, electrical and controls work will be performed by the Contractor. It is also understood that BDD staff are familiar with the existing plant control systems and will assist the Contractor with software programming changes necessary to make the system fully functional.
- C. Other:
 - 1. The Contract Documents are complementary; what is called for by one is as binding as if called for by all.
 - 2. It is the Contractor's responsibility for scheduling and coordinating the Work of subcontractors, suppliers, and other individuals or entities performing or furnishing any of Contractor's Work.
- D. Except as specifically noted otherwise, provide and pay for:
 - 1. Insurance and bonds.
 - 2. Labor, materials, and equipment.
 - 3. Cranes for lifting
 - 4. Tools, equipment, and machinery required for the Work.
 - 5. Utilities required for construction.
 - 6. Other facilities and services necessary for proper execution and completion of the Work.

1.2 ACTIVITIES BY OTHERS

- A. OWNER, utilities, and others will perform activities within Project area while the Work is in progress.
 - 1. Schedule the Work with Owner, utilities, and others to minimize mutual interference.
- B. Cooperate with others to minimize interference and delays.
 - 1. When cooperation fails, submit recommendations and perform Work in coordination with work of others.
- 1.3 COORDINATION OF WORK
 - A. Maintain overall coordination of the Work.
 - B. Obtain construction schedules from each subcontractor, and require each subcontractor to maintain schedules and coordinate modifications.

PART 2 -- PRODUCTS

Not used.

PART 3 -- EXECUTION

Not used.

- END OF SECTION -

(00 7502) VERTICAL TURBINE PUMPS

3.1 THE REQUIREMENT

- A. The Contractor shall provide vertical turbine pumps with associated appurtenances, complete and operable, in accordance with the Contract Documents.
- B. An authorized representative of the Pump Manufacturer shall examine the Site conditions, intended application, and operation of the pump system and recommend pumps that will best satisfy the indicated requirements. This includes review of installed equipment to be reused and coordination to assure the compatibility of new and existing equipment.
- C. Contractor shall protect, retain and reuse the existing pump motors, variable frequency drives, existing pump discharge piping and appurtenances. The new pumps shall be designed, manufactured and installed to fit within the laying lengths, space and available tolerances of the existing equipment.
- D. Contractor shall protect and remove the existing pumps and place them in a location as directed by the Owner at the Owner's water treatment plant site.
- E. Contractor shall protect and remove the existing pump motors, package and ship them to a large AC current motor testing and repair facility. The pump motors shall be serviced and tested. Once testing and service is complete, Contractor shall package and ship motors back to the project site for installation with the pumps. It shall be clearly understood that the care and protection of the motors are the sole responsibility of the Contractor from the time they are removed until the project is accepted by the Owner.
- F. **Unit Responsibility:** The Pump Manufacturer shall be made responsible for furnishing the Work and for coordination of design, assembly, testing, and installation of the Work of each pump system; however, the Contractor shall be responsible to the Owner for compliance with the Contract Documents.
- G. **Single Manufacturer:** All pumps shall be produced by the same Manufacturer.
- H. Shop Drawings: Shop Drawings shall contain the following information:
 - 1. Pump name, identification number, and specification section number.
 - 2. Performance Information:
 - a. Submit performance curves showing head, capacity, horsepower demand, NPSH required, and pump efficiency over the entire operating range of the pumps.
 - b. The equipment manufacturer shall indicate separately the head, capacity, horsepower demand, overall efficiency, and minimum submergence required at the design flow conditions.
 - c. Performance curves at intervals of 100 RPM from minimum speed to maximum speed shall be furnished for each pump equipped with a variable speed drive.

- 3. The Pump Manufacturer shall indicate the limits on the performance curves recommended for stable operation without surge, cavitation, or excessive vibration. The stable operating range shall be as wide as possible based on actual hydraulic and mechanical tests.
- 4. Assembly and installation drawings including shaft size, seal, coupling, bearings, anchor bolt plan, part nomenclature, material list, outline dimensions, and shipping weights.
- 5. Technical data for coating products for each piece to be coated, number of coats, primer products, top coats, final dry film thickness (DFT), color, and compatibility of shop and field applied coatings in accordance with the contract documents.
- 6. Detailed method for incorporation of controls to existing systems including details of additional terminals, enclosures, and appurtenances to receive inputs or transmit outputs to the existing local control panel and controls system.
- 7. Wiring diagram of field connections with identification of terminations between local control panels, junction terminal boxes, and equipment items.
- 8. Complete electrical schematic diagram.
- I. **Technical Manual:** The Technical Manual shall contain comprehensive information for each pump installed, including parts and materials, dimensions, hydraulic performance, test data, as well as installation, operation, and maintenance information.
- J. **Factory Test Data:** Signed, dated, and certified factory test data for each pump system shall be submitted before shipment of equipment.

K. Certifications:

- 1. Manufacturer's certification of proper installation.
- 2. Contractor's certification of satisfactory field testing.

3.2 WARRANTY

- A. All products, equipment, labor and services provided shall be warranted for a period of two years after final completion.
- B. It is understood that the service of the pumps is severe and erosion of wetted parts is considered normal wear and will not be covered by the two year warranty.

PART 4 -- PRODUCTS

- 4.1 GENERAL
 - A. Compliance with the Contract Documents may necessitate modifications to the Manufacturer's standard equipment.
 - B. **Performance Curves:** Centrifugal pumps shall have a continuously rising curve or the system operating range shall not cross the pump curve at 2 different capacities. Unless indicated otherwise, the required pump shaft horsepower at any point on the

performance curve shall not exceed the rated horsepower of the existing motor or encroach on the service factor.

- C. Components of each pump system provided shall be entirely compatible with new and existing equipment.
- D. Identification

Pump Name	Booster Pumps
Equipment Number	1A Pumps - 15PMP1103 and 15PMP1104 2A Pumps - 16PMP1101 and 16PMP1104
Quantity	4 Total
Location	Booster Pump Stations 1A and 2A

4.2 MATERIALS

- A. Materials shall be suitable for the intended application; materials not indicated shall be high-grade, standard commercial quality, free from defects and imperfections that might affect the serviceability of the product for the purpose for which it is intended, and shall conform to the following requirements:
 - 1. Miscellaneous stainless steel parts shall be Type 316 unless otherwise noted.
- B. **Flanges and Bolts:** Discharge flanges shall conform to ASME B16.5 Pipe Flanges and Flanged Fittings dimensions. Bolts shall be in accordance with the following:
 - Standard Service Bolts (Not Buried or Submerged): Except where otherwise shown or specified, all bolts, anchor bolts, and nuts shall be steel, galvanized after fabrication as specified herein. Threads on galvanized bolts and nuts shall be formed with suitable taps and dies such that they retain their normal clearance after hot-dip galvanizing. Except as otherwise specified herein, steel for bolts, anchor bolts and cap screws shall be in accordance with the requirements of ASTM A307.
 - Buried or Submerged Bolts: Unless other corrosion-resistant bolts are shown, all bolts and washers that are submerged, or within the pump can shall be of Type 316 stainless steel, with bronze nuts, or cap screws (where screwed into stainless steel), of copper-silicon alloy, conforming to ASTM B98, alloy C 65100, designation H04, or alloy C 65500, designation H04. Wherever stainless steel bolts and nuts are specified, it shall refer to the above material combination, unless specifically excluded.
 - 3. Bolt Requirements:
 - a. The bolt and nut material shall be free-cutting steel.
 - b. The nuts shall be capable of developing the full strength of the bolts. Threads shall be Coarse Thread Series conforming to the requirements of the American

Standard for Screw Threads. All bolts and cap screws shall have hexagon heads and nuts shall be Heavy Hexagon Series.

c. The length of all bolts shall be such that after joints are made up, each bolt shall extend through the entire nut, but in no case more than 1/2-inch beyond the nut.

4.3 SPARE PARTS

- A. One complete set of spare parts shall be furnished for each of the pumps supplied. The spare parts shall be as listed below:
 - 1. O-rings (complete set)
 - 2. Packing (complete set)
 - 3. Packing gland
 - 4. Lantern ring
 - 5. Stuffing box bearing
 - 6. Stuffing box shaft sleeve
 - 7. Lineshaft coupling
 - 8. Lineshaft bearing (complete set)
 - 9. Lineshaft bearing shaft sleeve
 - 10. Bowl shaft
 - 11. Bowl bearings (one for each bowl)
 - 12. Bowl wear rings, if applicable (one for each bowl)
 - 13. Impeller wear rings, if applicable (one for each impeller)
 - 14. Impeller collets, or key (one for each impeller)

4.4 PUMP REQUIREMENTS

A. **Operating Conditions:** The Work of this Section shall be suitable for long term operation under the following conditions:

	1A Pumps	2A Pumps
Duty	Continuous	Continuous
Drive	Variable Speed	Variable Speed
Ambient environment	Indoors	Indoors

Ambient temperature, degrees F	45 to 100	45 to 100
Fluid service	Raw Water	Raw Water
Fluid temperature, degrees F	35 to 75	35 to 75
Net Positive Suction Head available, ft absolute, measured at centerline of first stage.	36.7	35.5

B. Performance Requirements:

	1A Pumps	2A Pumps
Maximum shutoff head, ft	950	950
Maximum pump speed, rpm	1,800	1,800
Minimum pump speed, rpm	1,200	1,200
Maximum motor Size Available, hp	800	700
Design flow capacity, gpm	4,225	3,560
Design flow TDH, ft	575	590
Design flow minimum bowl efficiency, percent	83	83
Maximum flow capacity at maximum speed, gpm	4,800	4,300
Maximum flow TDH, ft	495	470
Maximum flow minimum bowl efficiency, percent	81	81
Minimum flow capacity, gpm	2,000	2,000
Minimum flow TDH, ft	485	460
Minimum flow minimum bowl efficiency, percent	65	65

C. Pump Dimensions:

	1A Pumps	2A Pumps
Length from base plate to inside bottom of pump can, ft	14.37	14.11
Minimum column diameter, in	16	14
Discharge diameter, in	16	14
Discharge flange rating ANSI, psi	300	300

Minimum lineshaft diameter, in	2.25	2.25
Maximum bowl diameter, in	18	18

D. **Pump Construction:** Construction of vertical turbine pumps shall conform to the following requirements:

Bowls	Close-grained gray cast iron, conforming to ASTM A48 - Gray Iron Castings, Class 30, or equal, with 20 mils of fusion bonded epoxy lining & coating (Scotchkote 134 or Engineer approved equal)
Impeller	Type 304 stainless steel, statically and dynamically balanced
Impeller shaft method of connection	Type 416 or 316 stainless steel impeller lock collet, or key
Wear rings	Type 440/410 (respectively) Stainless steel, replaceable (if applicable)
Pump shaft	Type 416 stainless steel with hard chrome plated journals (min. hardness 300 BNH), with hard backed fluted marine rubber bearings or Engineer approved equal.
Suction bell	Cast iron bell, with grease packed bottom bearing and streamlined ribs, with lining and coating to match bowls. Suction bell shall be fitted with a Type 316 stainless steel basket strainer.
Column	Steel pipe, not less than Schedule 30, epoxy-lined and coated with 20 mils DFT Devoe 233H, Carboline 891 or Engineer approved equal. Column shall be in maximum 5-ft lengths, flanged with registered fit and through bolting. Flange faces shall be machined after welding onto the column with machined O-rings grooves and neoprene O-rings.
Lineshaft and couplings	Type 416 stainless steel shaft in maximum 5-ft lengths with replaceable hard chrome shaft sleeves (300 BHN) at bearings. The shaft shall be sized for a critical speed of min 20 percent above max operating speed. Shaft coupling shall be Type 416 stainless steel, threaded or keyed to the shaft.
Shaft lubrication	Product water

Shaft seal	Stuffing box with packing and lantern ring, with automated grease lubrication system. Shafts shall be sleeved through the stuffing box with replaceable mechanically attached 416 stainless steel sleeves.
Lineshaft bearings	Fluted marine rubber bearings with bronze integral bearing retainers at each joint and replaceable 416 stainless steel shaft sleeves
Discharge head	Fabricated steel, reinforced to withstand pipe thrust, epoxy-lined with flange, base plate, and provision for pressure gauge, drain connections, and grease lubrication supply to stuffing box. Discharge heads shall match existing critical dimensions.
Motor shaft coupling	3-piece, heavy-duty, adjustable spacer coupling for solid shaft motors, with registered fit to allow for impeller adjustment
Pump cans	Each pump shall use the existing pump can

- E. **Stuffing Boxes:** Stuffing boxes shall be of the best quality, using the Manufacturer's suggested materials best suited for the specific application.
 - 1. The packing gland shall be of a two piece design. The packing shall be compatible with grease lubrication using a NSF Standard 61 grease that meets NLGI #2. The packing shall operate satisfactorily under the following conditions:

Shaft speeds	up to 2500 fpm
Temperature	up to 500 degrees F
pH range	0-14

4.5 MANUFACTURERS, OR EQUAL

A. Goulds Water Technology

- B. Peerless Pumps
- C. Weir-Floway Pumps
- D. Simflo Pumps
- E. Flowserve

4.6 PUMP DRIVE AND CONTROLS

- A. Each pump shall use the existing electric motor, variable speed drive, and control systems. Existing information is provided in Appendix A for Booster Station 1A and Appendix B for Booster Station 2A.
- 4.7 EXISTING MOTOR TESTING AND SERVICE
 - A. Each existing pump motor shall be removed from the existing pumps and shipped to an approved large AC motor testing and service facility.
 - B. Each motor shall have the following service:
 - 1. Disassemble, test, clean and inspect all parts
 - 2. Recondition stator
 - 3. Dynamically balance the rotor as an assembly
 - 4. Assemble motor using new OEM bearings
 - 5. Test motor
 - 6. Paint motor
 - 7. Drain oil before shipping
- C. If any motor is found to require repairs or service beyond those described above, Contractor shall immediately notify the Owner.
- D. The Owner and/or Engineer will be given 14 day notice in advance of final testing of the motors and will be allowed to witness the shop testing.

4.8 PUMP APPURTENANCES

A. **Nameplates:** Each pump shall be equipped with a stainless steel nameplate indicating serial numbers, rated head and flow, impeller size, pump speed, and Manufacturer's name and model number.

B. Gauges:

- 1. Pumps shall be equipped with pressure gauges installed at pump discharge lines.
- Gauges shall be located in a representative location, where not subject to shock or vibrations, in order to achieve true and accurate readings. Where subject to shock or vibrations, the gauges shall be wall-mounted or attached to galvanized channel floor stands and connected by means of flexible connectors.

C. Automatic Grease Lubrication System

1. The Contractor shall provide an automated grease lubrication system for each pump supplied. Grease lines shall be plumbed to each of the stuffing box ports. The automated grease systems shall be Graco G3 Max with a 12 liter grease reservoir, or Engineer approved equal.

- 2. Contractor shall install the automated grease lubrication system, including power supply, control conductors and conduit according to the manufacturer's recommendations. The system shall be able to start/stop with pump operation, apply lubrication on: 1) pump start, 2) a timed interval, and 3) high temperature.
- 3. Contractor shall install a stuffing box temperature probe that is suitable for the operating conditions and will supply continuous temperature reading to the plant control system.
- 4. Contractor shall fill the stuffing boxes to the level required by the pump manufacturer and fill the grease reservoirs completely. Grease shall be NSF Standard 61 approved and meet NLGI #2.

4.9 PROTECTIVE COATING

- A. Materials and equipment shall be coated according to Section 2.4.D. Pump Construction, using methods and products described below.
 - 1. The term "DFT" means minimum dry film thickness, without any negative tolerance.
 - 2. Coating and lining products for pieces in contact with potable water shall be NSF/ANSI 61 certified.
 - 3. Machined surfaces, stainless steel, equipment nameplates, electrical conduit, grease fittings, and indoor PVC piping shall not be coated unless noted otherwise.
 - 4. Field applied coatings and touch up products shall be compatible with the original coating and lining systems and colors.
 - 5. Colors and shades of colors of coatings shall match existing equipment. Each coat shall be of a slightly different shade to facilitate inspection of surface coverage for each coat.
 - 6. Surface preparation shall comply with the manufacturer's written recommendations for the intended service conditions.

4.10 FACTORY TESTING

- A. The following tests shall be conducted on each indicated pump system:
 - 1. Each pump shall be tested at the factory in accordance with the Hydraulic Institute's ANSI/HI 14.6 Rotodynamic Pumps for Hydraulic Performance Acceptance Tests. Manufacturer shall provide the Engineer a minimum of three (3) days' prior notice and allow the Engineer to witness factory testing.
 - a. Test shall be performed using the complete pump assembly to be installed. If Owner furnished motors cannot be used, the manufacturer shall perform the tests with an Engineer approved drive system. If not used in pump testing, job motors shall be tested under full load and variable speed at motor testing facility to ensure problem free operation from full speed to minimum speed at 100 rpm intervals. Testing of prototype models will not be acceptable. The following minimum test results shall be submitted:
 - 1) Hydrostatic test results of bowl assembly, column and discharge head.

- 2) At maximum speed, a minimum of five (5) hydraulic test readings between shutoff head and 25 percent beyond the maximum indicated capacity, recorded on data sheets as defined by the Hydraulic Institute.
- 3) Pump curves showing head, flow, bhp, and efficiency requirements.
- 4) NPSH required test curve.
- 5) Certification that the pump shaft horsepower demand did not exceed the rated motor horsepower of 1.0 service rating at any point on the curve.
- 6) The pump manufacturer shall record vibration during the performance test
- 2. Acceptance: In the event of failure of any pump to meet any of the requirements, the Contractor shall make necessary modifications, repairs, or replacements to conform to the requirements of the Contract Documents and the pump shall be re-tested until found satisfactory.

PART 5 -- EXECUTION

5.1 SERVICES OF MANUFACTURER

- A. **Inspection, Startup, and Field Adjustment:** An authorized service representative of the Manufacturer shall be at the Site for a minimum of three (3) work days during installation of the system to witness the following and to certify in writing that the equipment and controls have been properly installed, aligned, lubricated, adjusted, and readied for operation.
 - 1. Installation of the equipment
 - 2. Inspection, checking, and adjusting the equipment
 - 3. Startup and field testing for proper operation
 - 4. Performing field adjustments to ensure that the equipment installation and operation comply with requirements
- B. The Engineer may require that the inspection, startup, and field adjustment services above be furnished in up to three (3) separate trips.

C. Instruction of the Owner's Personnel:

- An authorized training representative of the Manufacturer shall visit the site for one (1) day to instruct the Owner's personnel in the operation and maintenance of the equipment, including step-by-step troubleshooting with necessary test equipment. Instruction shall be specific to the models of equipment provided.
- 2. The representative shall have at least two (2) years experience in training. A resume for the representative shall be submitted.
- 3. Training shall be scheduled a minimum of three (3) weeks in advance of the first session.

- 4. Proposed training material and a detailed outline of each lesson shall be submitted for review two weeks in advance of training. Comments shall be incorporated into the material.
- 5. The training materials shall remain with the trainees and a complete digital copy of the training materials shall be provided to the Owner.
- 6. The Owner may videotape the training for later use with the Owner's personnel.
- D. For the purposes of this Section, a work day is defined as an 8 hour period at the Site, excluding travel time.

5.2 INSTALLATION

- A. **General:** Pumping equipment shall be installed in accordance with the Manufacturer's written recommendations.
- B. **Alignment:** Equipment shall be field tested to verify proper alignment and freedom from binding, scraping, shaft runout, or other defects. Pump drive shafts shall be measured just prior to assembly to ensure correct alignment without forcing. Equipment shall be secure in position and neat in appearance.
- C. Lubricants: The Contractor shall provide all necessary oil and grease for initial operation.

5.3 FIELD TESTS

- A. Each pump system shall be field tested after installation to demonstrate:
 - 1. Satisfactory operation without excessive noise and vibration.
 - 2. No overheating of bearings.
- B. The following field testing shall be conducted:
 - Startup, check, and operate the pump system over its entire speed range. If the pump is driven by a variable speed drive, the pump and motor shall be tested at 100 RPM increments. Unless otherwise indicated, vibration shall be within the amplitude limits recommended by the Hydraulic Institute Standards at a minimum of four (4) pumping conditions defined by the Engineer.
 - 2. Obtain concurrent readings of motor voltage, amperage, pump suction head, and pump discharge head for at least four (4) pumping conditions at each pump rotational speed at 100 RPM increments. Check each power lead to the motor for proper current balance.
 - 3. Determine bearing temperatures by contact type thermometer. A run time until bearing temperatures have stabilized shall precede this test, unless insufficient liquid volume is available.
 - 4. Electrical and instrumentation tests shall be conducted as necessary to demonstrate satisfactory performance, as determined by the Engineer.
- C. Field testing will be witnessed by the Engineer. The Contractor shall furnish minimum three (3) Days advance notice of field testing.

- D. In the event any pumping system fails to meet the indicated requirements, the pump shall be modified or replaced and re-tested as outlined above until it satisfies the requirements.
- E. After each pumping system has satisfied the requirements, the Contractor shall certify in writing that it has been satisfactorily tested and that final adjustments have been made. Certification shall include the date of the field tests, a listing of persons present during the tests, and the test data.
- F. The Contractor shall be responsible for costs of field tests, including related services of the Manufacturer's representative, except for power and water, which the Owner will bear. If available, the Owner's operating personnel will provide assistance in field testing

- END OF SECTION -

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