

**CONTRACT DOCUMENTS AND SPECIFICATIONS
FOR THE
SPECIAL IMPROVEMENT DISTRICT NO. 5
AUGMENTATION WELL NO.2 PIPELINE AND ROAD**

LOCATED IN
SAGUACHE, COLORADO

Prepared for
Special Improvement District No. 5 of the Rio Grande Water Conservation District
8805 Independence Way
Alamosa, Colorado 81101

August 27, 2024

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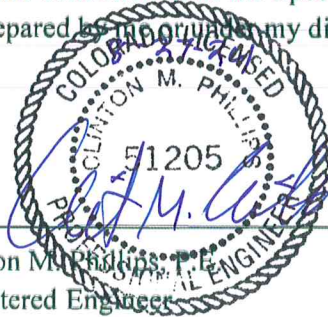
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CERTIFICATE

I hereby certify that these plans and SPECIFICATIONS for the construction of the Special Improvement District No. 5 Large Capacity Augmentation Well #2 were prepared by the original author under my direct supervision, for the OWNER thereof.



Clinton M. Phillips, P.E.
Registered Engineer
Colorado Certificate No. 51205

The Special Improvement District No. 5, Alamosa County, Colorado, OWNER, does hereby accept and approve these SPECIFICATIONS and accompanying plans for the construction of the Special Improvement District No. 5 Large Capacity Augmentation Well #2.

Date: 8/21/2024

Special Improvement District No. 5

By: Chris Chren

Title: Program Manager

SECTION I
Notice of Request for Proposal

The Rio Grande Water Conservation District is seeking proposals from qualified CONTRACTORS to grade a road, install 2 culverts, install approximately 303 feet of piping from an augmentation well, and construct a riprap ditch. The pipeline has 12 inch and 16-inch diameter sections. Contact the district office at (719) 589-6301 for a BID packet with full details. Additionally, you can access this information online at www.rgwcd.org. In your response, please include your relevant qualifications, and your timeline for completing the PROJECT. Proposals will be accepted through **1:30 p.m. September 27, 2024** and may be submitted in person or by mail to 8805 Independence Way, Alamosa, CO, 81101, or by e-mail to chris@rgwcd.org.

SECTION II

INFORMATION TO BIDDERS

BIDS will be received by the Special Improvement District No. 5 at mailing address of 8805 Independence Way, Alamosa, Colorado 81101 until **1:30 P.M.** (local time) **September 27, 2024**, and then opened at the Rio Grande Water Conservation District Building, 8805 Independence Way, Alamosa, CO and read aloud.

The first portion of this PROJECT will consist of installing two culverts and grading an access road to a well site. The second portion of the PROJECT will consist of installing approximately 303 feet of piping from a newly drilled well, and constructing a 30 foot long riprap lined ditch to discharge into Saguache Creek.

BIDS may be submitted in person or by mail to 8805 Independence Way, Alamosa, CO, 81101, or by e-mail to chris@rgwcd.org.

All BIDS must be made on a required BIDS form. All blank spaces for BIDS prices and material types must be filled in, in ink or typewritten, and the BID form must be fully completed and executed when submitted. Only one copy of the BID form is required. Standard BOND forms for CONTRACT DOCUMENTS may be used in lieu of the forms furnished in the SPECIFICATIONS.

The OWNER may waive any informalities or minor defects or reject any and all BIDs. Any BID may be withdrawn prior to the above scheduled time for the opening of BIDs or authorized postponement thereof. Any BID received after the time and date specified shall not be considered. No BIDDER may withdraw a BID within 60 days after the actual date of the opening thereof. Should there be reasons why the contract cannot be awarded within the specified period, the time may be extended by mutual agreement between the OWNER and the BIDDER.

BIDDERS must satisfy themselves of the accuracy of the estimated quantities in the BID Schedule by examination of the site and a review of the DRAWINGS and SPECIFICATIONS including ADDENDA. After BIDs have been submitted, the BIDDER shall not assert that there was a misunderstanding concerning the quantities of WORK or of the nature of the WORK to be done.

The OWNER shall provide to BIDDERS prior to BIDDING, all information which is pertinent to, and delineates and describes, the land owned and rights-of-way acquired or to be acquired.

The CONTRACT DOCUMENTS contain the provisions required for the construction of the PROJECT. Information obtained from an officer, agent, or employee of the OWNER or any other person shall not affect the risks or obligations assumed by the CONTRACTOR or relieve him from fulfilling any of the conditions of the contract.

No oral interpretation will be made to any BIDDER as to the meaning of the CONTRACT DOCUMENTS or any part thereof. Every request for such an interpretation shall be made in writing to the District and ENGINEER. Any inquiry received seven or more days prior to the date fixed for opening of BIDs will be given consideration. Every interpretation made to a BIDDER will be in the form of an Addendum to the CONTRACT DOCUMENTS, and when issued, will be on file in the office of the Local Public Agency and the office of the ENGINEER at least five days before BIDs are opened. In addition, all ADDENDA will be mailed to each person holding CONTRACT DOCUMENTS, but it shall be the BIDDER's responsibility to make inquiry as to the ADDENDA issued. All such ADDENDA shall become part of the Contract and all BIDDERS shall be bound by such ADDENDA, whether or not received by the BIDDERS.

Each BID must be accompanied by a BID BOND payable to the OWNER in the amount of five percent (5%) of the total amount of the BID. As soon as the BID prices have been compared, the OWNER will return the bonds of all except the three lowest responsible BIDDERS. When the Agreement is executed the BONDS of the two remaining unsuccessful BIDDERS will be returned. The BID BOND of the successful BIDDER will be retained until the payment and performance bonds have been executed and approved, after which it will be returned. A certified check may be used in lieu of a BID BOND.

A performance BOND and a payment BOND, each in the amount of 100 percent of the Contract Price, with a corporate surety approved by the OWNER, will be required for the faithful performance of the contract.

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

The party to whom the contract is awarded will be required to execute the Agreement and obtain the payment and performance BONDS within ten calendar days from the date when NOTICE OF AWARD is delivered to the bidder. The NOTICE OF AWARD shall be accompanied by the necessary Agreement and BOND forms. In case of failure of the BIDDER to execute the Agreement, the OWNER may, at his option, consider the BIDDER in default, in which case the BID BOND accompanying the proposal shall become the property of the OWNER.

The OWNER within 10 days of receipt of acceptable payment BOND and performance BOND, and Agreement signed by the party to whom the Agreement was awarded shall sign the Agreement and return to such party an executed duplicate of the Agreement. Should the OWNER not execute the Agreement within such period, the BIDDER may, by written notice, withdraw his signed Agreement. Such notice of withdrawal shall be effective upon receipt of the notice by the Owner.

The NOTICE TO PROCEED shall be issued by the OWNER within 10 days of the execution of the Agreement. Should there be reasons why the NOTICE TO PROCEED cannot be issued within such period, the time may be extended by mutual agreement between the OWNER and CONTRACTOR.

If the NOTICE TO PROCEED has not been issued within the 10 day period or within the period mutually agreed upon, the CONTRACTOR may terminate the Agreement without further liability on the part of either party.

The OWNER may make such investigations as deemed necessary to determine the ability of the BIDDER to perform the WORK, and the BIDDER shall furnish to the OWNER all such information and data for this purpose as the OWNER may request. The OWNER reserves the right to reject any BID if the evidence submitted by, or investigation of, such BIDDER fails to satisfy the OWNER that such BIDDER is properly qualified to carry out the obligations of the Agreement and to complete the WORK contemplated therein or for any other reason not in violation of any State, Federal or Local law.

A conditional or qualified BID will be not accepted.

Award will be made at the discretion of the OWNER. The BID award will be based on both the Total Base BID plus OWNER selected alternates and the completion time.

All applicable laws, ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the PROJECT shall apply to the contract throughout. This paragraph does not limit the standards to which the BIDDER will be held to perform and the BIDDER may be required to comply with codes not legally or officially adopted within the jurisdiction.

Each BIDDER is responsible for inspecting the site and for reading and being thoroughly familiar with the CONTRACT DOCUMENTS. The failure or omission of any BIDDER to do any of the foregoing shall in no way relieve any BIDDER from any obligation in respect to his BID. The unit price for each of the several items in the proposal of each BIDDER shall include its pro rata share of overhead so that the sum of the products obtained by multiplying the quantity shown for each item by the unit price BID represents the total BID. Any BID not conforming to this requirement may be rejected as informal. The special attention of all BIDDERS is called to this provision, for should conditions make it necessary to revise the quantities, no limit will be fixed for such increased or decreased quantities nor will adjustments in unit prices be allowed, provided the net monetary value of all such additive and subtractive changes in quantities of such items of WORK (i.e., difference in cost) shall not increase or decrease the original CONTRACT PRICE by more than twenty five (25) percent, except for WORK not covered in the DRAWINGS and TECHNICAL SPECIFICATIONS as provided for in the CONTRACT DOCUMENTS.

A project walk-through trip for prospective Bidders will be held at the project site on September 11th, 2024 at 11:30 A.M. Prospective Bidders must notify the Chris Ivers of their intent to attend by September 9th, 2024 at 5:00 P.M. Contact Chris Ivers at (719) 589-6301 or chris@rgwcd.org.

SECTION III

BID

Proposal of _____ (hereinafter called "BIDDER"), organized and existing under the laws of the State of _____, doing business as a _____*. to the Special Improvement District No. 5 (hereinafter called "OWNER").

In compliance with your Advertisement for BID, BIDDER hereby proposes to perform all WORK for the construction of the Special Improvement District No. 5 Augmentation Well No.2 Pipeline and Road in accordance with the CONTRACT DOCUMENTS, within the time set forth therein, and at the prices stated below.

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

BIDDER hereby agrees to commence WORK under this contract on or before a date to be specified in the NOTICE TO PROCEED and to fully complete the PROJECT within **180** consecutive calendar days thereafter. BIDDER further agrees to pay as liquidated damages, the sum of **\$750.00** for each consecutive calendar day thereafter as provided in Section 15 of the General Conditions.

BIDDER acknowledges receipt of the following Addendum:

*Insert "a corporation, "a partnership", or "an individual" as applicable.

BID SCHEDULE

All of the items under this BID Schedule are alternates and may be accepted at the OWNER's discretion. BIDDER agrees to perform all the WORK described in the CONTRACT DOCUMENTS for the following unit prices or lump sum:

<u>Item</u>	<u>Description</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Extension</u>
1	Mobilization, Demobilization and Bonding	1	l.s.	_____	_____
2a	16" Ø SDR 41 PVC Pipe with Fitting	222	l.f.	_____	_____
2b	12" Ø Welded Steel Pipe, with Fittings	56	l.f.	_____	_____
2c	16" Ø Welded Steel Pipe, with Fittings	25	l.f.	_____	_____
3a	12" Ø Totalizing Flow Meter	1	ea.	_____	_____
3b	Check Valve	1	ea.	_____	_____
3c	Continuous Air Vent / Vacuum Breaker	2	ea.	_____	_____
3d	2.5" Ø Pressure Relief	1	ea.	_____	_____
3e	Freezeless Drain and Control	1	ea.	_____	_____
3f	Flap Gate	1	ea.	_____	_____
4a	Discharge Ditch Riprap and Placement	5	c.y.	_____	_____
4b	Discharge Ditch Excavation	8	c.y.	_____	_____
5a	Access Road Clearing and Grubbing	1,837	l.f.	_____	_____
5b	8" Ø 20' Culvert and Installation	1	ea.	_____	_____
5c	24" Ø 20' Culvert and Installation	1	ea.	_____	_____
TOTAL BASE BID				_____	

ADDITIVE ALTERNATES

5d	Road Scarification and Compaction	1,837 l.f.	_____	_____
5e	ABC Road Base Placement and Compaction	136 c.y.	_____	_____
5f	3/4 Inch Minus Gravel Placement	136 c.y.	_____	_____

TOTAL BID WITH ADDITIVE ALTERNATES _____

Award will be based on Total Base BID plus OWNER selected alternatives and completion time.

Respectfully submitted,

Signature

Name: _____
(Please Print or Type)

Address

Title: _____

Date

License Number (if applicable)

(SEAL - If BID is by a corporation)

Attest: _____

CERTIFICATE AS TO CORPORATE BIDDER

_____, the secretary of the _____, in the name of which corporation the above and foregoing BID has been executed, hereby certifies that the is a corporation duly organized under the laws of the State of _____, and that , the _____ of said corporation was duly authorized by the Board of Directors to make said BID in behalf of said corporation.

Dated this _____ day of _____, 2024.

Secretary

CERTIFICATE AS TO PARTNERSHIP BIDDER

_____ one of the partners in the partnership doing business as and under the firm name of _____, certifies that such partnership is composed of as copartners, and that the foregoing BID has been executed, whether by all or less than all of said partners, as the act and on behalf of said partnership in its firm name.

Dated this _____ day of _____, 2024.

A Partner in

A Partnership

SECTION IV

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned _____ as Principal, and _____ as, Surety, are hereby held and firmly bound unto _____ as OWNER in the penal sum of _____ for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, successors and assigns. Signed, this ____ day of _____, 2024. The Condition of the above obligation is such that whereas the Principal has submitted Special Improvement District No. 5 a certain BID, attached hereto and hereby made a part hereof to enter into a contract in writing, for the Augmentation Well No.2 Pipeline and Road.

NOW THEREFORE,

- (a) If said BID shall be rejected, or in the alternate

- (b) If said BID shall be accepted and the Principal shall execute and deliver a contract in the Form of Contract attached hereto (properly completed in accordance with said BID) and shall furnish a BOND for his faithful performance of said contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said BID, then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its BOND shall be in no way impaired or affected by any extension of the time within which the OWNER may accept such BID; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first forth above.

By: _____ (L.S.) _____
Principal

Surety: _____

By: _____

IMPORTANT - Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the PROJECT is located.

SECTION V
NOTICE OF AWARD

To: _____

Project Description: Augmentation Well No. 2 Pipeline and Road.

The OWNER has considered the BID submitted by you for the above described WORK in response to its Invitation to BID dated the ___ day of _____ 2024, and Instructions to BIDDERS.

You are hereby notified that your BID has been accepted for items in the amount _____.

You are required by the Instructions to BIDDERS to execute the Agreement and furnish the required CONTRACTOR'S Performance BOND and Payment BOND within ten calendar days from the date of this Notice to you.

If you fail to execute said Agreement and to furnish said BONDS within ten days from the date of this Notice, said OWNER will be entitled to consider all your rights arising out of the OWNER'S acceptance of your BID as abandoned and as a forfeiture of your BID BOND. The OWNER will be entitled to such other rights as may be granted by law. You are required to return an acknowledged copy of this NOTICE OF AWARD to the OWNER.

Dated this _____ day of _____, 2024.

Special Improvement District No. 5
OWNER

By: _____

Title: _____

Acceptance of Notice

Receipt of the above Notice of Award is hereby acknowledged

By (Company): _____
this ___ day of _____, 2024

By: _____

Title: _____

SECTION VI

AGREEMENT

This Agreement, made this ____ day of _____, 2024, by and between the Special Improvement District No. 5, hereinafter called "OWNER" and _____, doing business as an individual hereinafter called "CONTRACTOR".

WITNESSETH: That for and in consideration of the payment and agreements hereinafter mentioned:

1. The CONTRACTOR will commence and complete the construction of the Special Improvement District No. 5 Augmentation Well No.2 Pipeline and Road.
2. The CONTRACTOR will furnish all of the materials, supplies, tools, equipment, labor and other services necessary for the construction and completion of the PROJECT described herein.
3. The CONTRACTOR will commence the WORK required by the CONTRACT DOCUMENTS within 5 calendar days after the date of the NOTICE TO PROCEED and will complete the same within 180 calendar days unless the period for completion is extended otherwise by the CONTRACT DOCUMENTS.

Intermediate Goals:

- Culverts installed and access road constructed by November 1st, 2024.

Completion Date:

- **Entire project to be completed no later than April 9th, 2025**

4. The CONTRACTOR agrees to perform all of the WORK described in the CONTRACT DOCUMENTS for the sum of

5. The term "CONTRACT DOCUMENTS" means and includes the following:

- (A) Request for Proposal
- (B) Instructions to BIDDERS
- (C) BID
- (D) BID BOND
- (E) Agreement
- (F) General Conditions
- (G) Supplemental General Conditions
- (H) Payment Bond
- (I) Performance Bond
- (K) Notice to Proceed
- (L) Change Orders
- (M) DRAWINGS prepared by Davis Engineering Service, Inc. numbered 1 to 9 and dated August 23, 2024.
- (N) SPECIFICATIONS prepared or issued by Davis Engineering Service, Inc., dated August 27, 2024.

(O) ADDENDA

No. _____, dated _____, 20__.

No. _____, dated _____, 20__.

- 6. The OWNER will pay to the CONTRACTOR in the manner and at such times as set forth in the General Conditions such amounts as required by the CONTRACT DOCUMENTS.
- 7. This Agreement shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns.

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, the Agreement in triplicate counterparts each of which shall be deemed an original on the date above written.

OWNER: Special Improvement District No. 5

By: _____

Name: _____

(Please Type)

Title: _____

(SEAL)

ATTEST: _____

Name: _____

(Please Type)

Title: _____

CONTRACTOR: _____

By: _____

Name: _____

(Please Type)

Address: _____

(SEAL)

ATTEST: _____

Name: _____

(Please Type)

Title: _____

SECTION VII

CERTIFICATE OF OWNER'S ATTORNEY

I, the undersigned, _____, the duly authorized and acting legal representative of _____, do hereby certify as follows:

I have examined the attached contract(s) and performance and payment BONDS(s) and the manner of execution thereof, and I am of the opinion that each of the aforesaid agreements has been duly executed by the proper parties thereto acting through their duly authorized representatives; that said representatives have full power and authority to execute said agreements on behalf of the respective parties named thereon; and that the foregoing agreements constitute valid and legally binding obligations upon the parties executing the same in accordance with terms, conditions and provisions thereof.

By: _____ Date: _____

SECTION VIII

PERFORMANCE BOND

KNOW ALL MEN THESE PRESENTS: that _____
(Name of CONTRACTOR)

(Address of CONTRACTOR)

a _____, hereinafter called Principal, and
(Corporation, Partnership, or Individual)

(Name of Surety)

(Address of Surety)

hereinafter called Surety, are held and firmly bound unto _____
(Name of OWNER)

(Address of OWNER)

hereinafter called OWNER, in the penal sum of _____ Dollars, (\$) in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the OWNER, dated the _____ day of _____, 2024, a copy of which is hereto attached and made a part hereof for the construction of _____.

NOW, THEREFORE, if the Principal shall well, truly and faithfully perform its duties all the undertakings, covenants, terms, conditions and agreements of said contract during the original term thereof, and any extensions thereof which may be granted by the OWNER, with or without notice to the Surety and during the one year guaranty period, and if the Principal shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the OWNER from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the OWNER all outlay and expenses which the OWNER may incur in making good any default, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to WORK to be performed thereunder or the SPECIFICATIONS accompanying the same shall in any way affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in counterparts, each one of which shall be deemed an original, this _____ day of _____, 2024.

Principal _____

ATTEST:

(Principal) Secretary By: _____(S)

(SEAL)

(Witness as to Principal) (Address)

ATTEST:

(Surety) Secretary

(SEAL)

Witness to Surety By: _____
Attorney-in-fact

(Address) (Address)

NOTE: Date of the BOND must not be prior to date of Contract. If CONTRACTOR is Partnership, all partners should execute the BOND.

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570, as amended) and be authorized to transact business in the state where the PROJECT is located.

SECTION IX
PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS: that _____
(Name of CONTRACTOR)

(Address of CONTRACTOR)

a _____, hereinafter called Principal, and _____
(Corporation, Partnership or Individual) (Name of Surety)

(Address of Surety)

hereinafter called Surety, are held and firmly bound unto _____
(Name of OWNER)

(Address of OWNER)

hereinafter called OWNER, in the penal sum of _____
Dollars, \$(_____) in lawful money of the United States, for the payment of which sum well and truly
to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain
contract with the OWNER, dated the ____ day of _____, 2024, a copy of which is hereto attached
and made a part hereof for the construction of _____.

NOW, THEREFORE, if the Principal shall promptly make payment to all persons, firms,
SUBCONTRACTORS, and corporations furnishing materials for or performing labor in the prosecution
of the WORK provided for in such contract, and any authorized extension or modification thereof,
including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery,
equipment and tools, consumed or used in connection with the construction of such WORK, and all
insurance premiums on said WORK and for all labor, performed in such WORK whether by
SUBCONTRACTOR or otherwise, then this obligation shall be void; otherwise to remain in full force and
effect.

PROVIDED, FURTHER, that the said Surety, for value received hereby stipulates and agrees that no
change, extension of time, alteration or addition to the terms of the contract or to the WORK to be
performed thereunder or the SPECIFICATIONS accompanying the same shall in any way affect its
obligation on this BOND, and it does hereby waive notice of any such change, extension of time,
alteration or addition to the terms of the contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall
abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

In WITNESS WHEREOF, this instrument in executed in ____ number counterparts, each one of which shall be deemed an original, this the _____ day of _____, 20 ____.

Principal

ATTEST:

(Principal) Secretary By: _____ (s)

(SEAL)

(Witness as to Principal) (Address)

(Address) Surety

ATTEST:

(Surety) Secretary

(SEAL)

Witness to Surety By: _____ Attorney-in-fact

(Address) (Address)

NOTE: Date of the BOND must not be prior to date of Contract. If CONTRACTOR is Partnership, all partners should execute the BOND.

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the PROJECT is located.

SECTION X

Workmen's Compensation Insurance Certificate

to be inserted in place of this page.

SECTION XI

Certificate of Insurance for CONTRACTOR's general liability and property insurance to be inserted in place of this page.

SECTION XII

NOTICE TO PROCEED

To: _____

Date: _____

PROJECT: Special Improvement District No. 5 Augmentation Well No.2 Pipeline and Road

You are hereby notified to commence WORK in accordance with the Agreement dated _____, on or before _____, you are authorized to commence WORK on the PROJECT, and you are to complete the WORK within **180** consecutive calendar days thereafter. The date of completion of all WORK is therefore _____.

Special Improvement District No. 5
OWNER

By: _____

Title: _____

ACCEPTANCE OF NOTICE

Receipt of the above Notice to Proceed is hereby acknowledged by

this _____ day of _____, 2024

By: _____

Title: _____

SECTION XIII
GENERAL CONDITIONS

1. Definitions
2. Additional Instructions and Detail DRAWINGS
3. Schedules, Reports and Records
4. DRAWINGS and SPECIFICATIONS
5. SHOP DRAWINGS
6. Materials, Services and Facilities
7. Inspection and Testing
8. Substitutions
9. Patents
10. Surveys, Permits, Regulations
11. Protection of WORK, Property, Persons
12. Supervision by CONTRACTOR
13. Changes in the WORK
14. Changes in CONTRACT PRICE
15. Time for Completion and Liquidated Damages
16. Correction of WORK
17. Subsurface Conditions
18. Suspension of WORK, Termination and Delay
19. Payments to CONTRACTOR
20. Acceptance of Final Payment as Release
21. Insurance
22. Contract Security
23. Assignments
24. Indemnification
25. Separate Contracts
26. Subcontracting
27. ENGINEER's Authority
28. Land and Rights-of-Way
29. Guaranty
30. Taxes
31. Environmental

1. DEFINITIONS

- 1.1 Wherever used in the CONTRACT DOCUMENTS, the following terms shall have the meanings indicated which shall be applicable to both the singular and plural thereof:

- 1.2 ADDENDA - Written or graphic instruments issued prior to the execution of the Agreement which modify or interpret the CONTRACT DOCUMENTS, DRAWINGS and SPECIFICATIONS, by additions, deletions, clarifications or corrections.
- 1.3 BID - The offer or proposal of the BIDDER submitted on the prescribed form setting forth the prices for the WORK to be performed.
- 1.4 BONDS - Bid, Performance, and Payment BONDS and other instruments of security, furnished by the CONTRACTOR and his surety in accordance with the CONTRACT DOCUMENTS.
- 1.5 BIDDER - Any person, firm or corporation submitting a BID for the WORK.
- 1.6 CHANGE ORDER - A written order to the CONTRACTOR authorizing an addition, deletion or revision in the WORK within the general scope of the CONTRACT DOCUMENTS, or authorizing an adjustment in the CONTRACT PRICE or CONTRACT TIME.
- 1.7 CONTRACT DOCUMENTS - The contract, including Information for BIDDERS, BID, BID BOND, Agreement, Performance BOND, Notice of Award, NOTICE TO PROCEED, CHANGE ORDER, DRAWINGS, SPECIFICATIONS, and ADDENDA.
- 1.8 CONTRACT PRICE - The total moneys payable to the CONTRACTOR under the terms and conditions of the CONTRACT DOCUMENTS.
- 1.9 CONTRACT TIME - The number of calendar days stated in the CONTRACT DOCUMENTS for the completion of the WORK.
- 1.10 CONTRACTOR - The person, firm or corporation with whom the OWNER has executed the Agreement.
- 1.11 DRAWINGS - The part of the CONTRACT DOCUMENTS which show the characteristics and scope of the WORK to be performed and which have been prepared or approved by the ENGINEER.
- 1.12 ENGINEER - The person, firm or corporation named as such in the CONTRACT DOCUMENTS.
- 1.13 FIELD ORDER - A written order effecting a change in the WORK not involving an adjustment in the CONTRACT PRICE or an extension of the CONTRACT TIME, issued by the ENGINEER to the CONTRACTOR during construction.

- 1.14 NOTICE TO PROCEED - Written communication issued by the OWNER to the CONTRACTOR authorizing him to proceed with the WORK and establishing the date of commencement of the WORK.
- 1.15 OWNER - A public or quasi-public body or authority, corporation, association, partnership, or individual for whom the WORK is to be performed.
- 1.16 PROJECT - The undertaking to be performed as provided in the CONTRACT DOCUMENTS.
- 1.17 RESIDENT PROJECT REPRESENTATIVE - The authorized representative of the OWNER who is assigned to the PROJECT site or any part thereof.
- 1.18 SHOP DRAWINGS - All DRAWINGS, diagrams, illustrations, brochures, schedules, and other data which are prepared by the CONTRACTOR, a SUBCONTRACTOR, manufacturer, SUPPLIER, or distributor, which illustrate how specific portions of the WORK shall be fabricated or installed.
- 1.19 SPECIFICATIONS - A part of the CONTRACT DOCUMENTS consisting of written descriptions of a technical nature of materials, equipment, construction systems, standards, and Workmanship.
- 1.20 SUBCONTRACTOR - An individual, firm or corporation having a direct contract with the CONTRACTOR or with any other SUBCONTRACTOR for the performance of a part of the WORK at the site.
- 1.21 SUBSTANTIAL COMPLETION - That date as certified by the ENGINEER when the construction of the PROJECT or a specified part thereof is sufficiently completed, in accordance with the CONTRACT DOCUMENTS, so that the PROJECT or specified part can be utilized for the purposes for which it is intended.
- 1.22 SUPPLEMENTAL GENERAL CONDITIONS - Modifications to General Conditions required by a Federal agency for participation in the PROJECT and approved by the agency in writing prior to inclusion in the CONTRACT DOCUMENTS, or such requirements that may be imposed by applicable state laws.
- 1.23 SUPPLIER - Any person or organization who supplies materials or equipment for the WORK, including that fabricated to a special design, but who does not perform labor at the site.
- 1.24 WORK - All labor necessary to produce the construction required by the CONTRACT DOCUMENTS, and all materials and equipment incorporated or to be incorporated in the PROJECT.

1.25 WRITTEN NOTICE - Any notice to any party of the Agreement relative to any part of this Agreement in writing and considered delivered and the service thereof completed, when posted by certified or registered mail to the said party at his last given address or delivered in person to said party or his authorized representative on the WORK.

2. ADDITIONAL INSTRUCTIONS AND DETAIL DRAWINGS

2.1 The CONTRACTOR may be furnished additional instructions and detail DRAWINGS, by the ENGINEER, as necessary to carry out the WORK required by the CONTRACT DOCUMENTS.

2.2 The additional DRAWINGS and instructions thus supplied will become a part of the CONTRACT DOCUMENTS. The CONTRACTOR shall carry out the WORK in accordance with the additional detail DRAWINGS and instructions.

3. SCHEDULES, REPORTS AND RECORDS

3.1 The CONTRACTOR shall submit to the OWNER such schedule of quantities and costs, progress schedules, payrolls, reports, estimates, records, and other data where applicable as are required by the CONTRACT DOCUMENTS for the WORK to be performed.

3.2 Prior to the first partial payment estimate the CONTRACTOR shall submit construction progress schedules showing the order in which the CONTRACTOR proposes to carry on the WORK, including dates at which the CONTRACTOR will start the various parts of the WORK, estimated date of completion of each part, as applicable:

3.2.1 The dates at which special detail DRAWINGS will be required; and

3.2.2 Respective dates for submission of SHOP DRAWINGS, the beginning of manufacture, the testing and the installation of materials, supplies and equipment.

3.3 The CONTRACTOR shall also submit a schedule of payments that the CONTRACTOR anticipates the CONTRACTOR will earn during the course of the WORK.

4. DRAWINGS AND SPECIFICATIONS

4.1 The intent of the DRAWINGS and SPECIFICATIONS is that the CONTRACTOR shall furnish all labor, materials, tools, equipment, and transportation necessary for the proper execution of the WORK in accordance with the CONTRACT DOCUMENTS and all incidental WORK necessary to complete the PROJECT in an acceptable manner, ready for use, occupancy, or operation by the OWNER.

- 4.2 In case of conflict between the DRAWINGS and SPECIFICATIONS, the SPECIFICATIONS shall govern. Figure dimensions on DRAWINGS shall govern over scale dimensions, and detailed DRAWINGS shall govern over general DRAWINGS.
- 4.3 Any discrepancies found between the DRAWINGS and SPECIFICATIONS and site conditions or any inconsistencies or ambiguities in the DRAWINGS or SPECIFICATIONS shall be immediately reported to the ENGINEER, in writing, who shall promptly correct such inconsistencies or ambiguities in writing. WORK done by the CONTRACTOR after his discovery of such discrepancies, inconsistencies or ambiguities shall be done at the CONTRACTOR'S risk.
5. SHOP DRAWINGS
- 5.1 The CONTRACTOR shall provide SHOP DRAWINGS as may be necessary for the prosecution of the WORK as required by the CONTRACT DOCUMENTS. The ENGINEER shall promptly review all SHOP DRAWINGS. The ENGINEER'S review of any SHOP DRAWING shall not release the CONTRACTOR from responsibility for deviations from the CONTRACT DOCUMENTS. The acceptance of any SHOP DRAWING which substantially deviates from the requirements of the CONTRACT DOCUMENTS shall be evidenced by a CHANGE ORDER.
- 5.2 When submitted for the ENGINEER'S review, SHOP DRAWINGS shall bear the CONTRACTOR'S certification that the CONTRACTOR has reviewed the SHOP DRAWINGS and that they are in conformance with the requirements of the CONTRACT DOCUMENTS.
- 5.3 Portions of the WORK requiring a SHOP DRAWING or sample submission shall not begin until the SHOP DRAWING or submission has been reviewed by the ENGINEER. A copy of each reviewed SHOP DRAWING and each sample shall be kept in good order by the CONTRACTOR at the site and shall be available from the ENGINEER.
6. MATERIAL, SERVICES AND FACILITIES
- 6.1 It is understood that, except as otherwise specifically stated in the CONTRACT DOCUMENTS, the CONTRACTOR shall provide and pay for all materials, labor, tools, equipment, water, light, power, transportation, supervision, temporary construction of any nature, and all other services and facilities of any nature whatsoever necessary to execute, complete, and deliver the WORK within the specified time.
- 6.2 Materials and equipment shall be so stored as to ensure the preservation of their quality and fitness for the WORK. Stored materials and equipment to be incorporated in the WORK shall be located so as to facilitate prompt inspection.

- 6.3 Manufactured articles, materials and equipment shall be applied, installed, connected, erected, used, cleaned, and conditioned as directed by the manufacturer.
- 6.4 Materials, supplies or equipment shall be in accordance with samples submitted by the CONTRACTOR and reviewed by the ENGINEER.
- 6.5 Materials, supplies or equipment to be incorporated into the WORK shall not be purchased by the CONTRACTOR or the SUBCONTRACTOR subject to a chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller.

7. INSPECTION AND TESTING

- 7.1 All materials and equipment used in the construction of the PROJECT shall be subject to adequate inspection and testing in accordance with generally accepted standards, as required and defined in the CONTRACT DOCUMENTS.
- 7.2 The OWNER shall provide all inspection and testing services not required by the CONTRACT DOCUMENTS.
- 7.3 The CONTRACTOR shall provide at his expense the testing and inspection services required by the CONTRACT DOCUMENTS.
- 7.4 If the CONTRACT DOCUMENTS, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any WORK to specifically be inspected, tested, or approved by someone other than the CONTRACTOR, the CONTRACTOR will give the ENGINEER timely notice of readiness. The CONTRACTOR will then furnish the ENGINEER the required certificates of inspection, testing or approval.
- 7.5 Inspections, tests, or reviews by the ENGINEER or others shall not relieve the CONTRACTOR from his obligations to perform the WORK in accordance with the requirements of the CONTRACT DOCUMENTS.
- 7.6 The ENGINEER and his representatives will at all times have access to the WORK. The CONTRACTOR will provide proper facilities for such access and observation of the WORK and also for any inspection, or testing thereof.
- 7.7 If any WORK is covered contrary to the written instructions of the ENGINEER it must, if requested by the ENGINEER, be uncovered for his observation and replaced at the CONTRACTOR'S expense.

7.8 If the ENGINEER considers it necessary or advisable that covered WORK be inspected or tested by others, the CONTRACTOR, at the ENGINEER'S request, will uncover, expose, or otherwise make available for observation, inspection or testing as the ENGINEER may require, that portion of the WORK in question, furnishing all necessary labor, materials, tools, and equipment. If it is found that such WORK is defective, the CONTRACTOR will bear all the expenses of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction. If, however, such WORK is not found to be defective, the CONTRACTOR will be allowed an increase in the CONTRACT PRICE or an extension of the CONTRACT TIME, or both, directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction and an appropriate CHANGE ORDER shall be issued.

8. SUBSTITUTIONS

8.1 Whenever a material, article or piece of equipment to be identified on the DRAWINGS or SPECIFICATIONS by reference to brand name or catalogue number, it shall be understood that this is referenced for the purpose of defining the performance or other salient requirements and that other products or similar capacities, quality and function shall be considered. The CONTRACTOR may recommend the substitution of a material, article, or piece of equipment of similar substance and function for those referred to in the CONTRACT DOCUMENTS by reference to brand name or catalogue number, and if, in the opinion of the ENGINEER, such material, article, or piece of equipment is of similar substance and function to that specified, the ENGINEER may approve its substitution and use by the CONTRACTOR. Any cost differential shall be deductible from the CONTRACT PRICE and the CONTRACT DOCUMENTS shall be appropriately modified by CHANGE ORDER. The CONTRACTOR warrants that if substitutes are accepted, no major changes in the function or general design of the PROJECT will result. Incidental changes or extra component parts required to accommodate the substitute will be made by the CONTRACTOR without a change in the CONTRACT PRICE or CONTRACT TIME.

9. PATENTS

9.1 The CONTRACTOR shall pay all applicable royalties and license fees. The CONTRACTOR shall defend all suits or claims for infringement of any patent rights and save the OWNER harmless from loss on account thereof, except that the OWNER shall be responsible for any such loss when a particular process, design, or the product of a particular manufacturer or manufacturers is specified, however if the CONTRACTOR has reason to believe that the design, process or product specified is an infringement of a patent, the CONTRACTOR shall be responsible for such loss unless the CONTRACTOR promptly gives such information to the ENGINEER.

10. SURVEYS, PERMITS, REGULATIONS

- 10.1 The OWNER shall furnish all boundary surveys and establish all base lines for locating the principal component parts of the WORK together with a suitable number of bench marks adjacent to the WORK as shown in the CONTRACT DOCUMENTS. From the information provided by the OWNER, unless otherwise specified in the CONTRACT DOCUMENTS, the ENGINEER shall develop and make all detail surveys needed for construction such as slope stakes, batter boards, stakes for pile location and other WORKing points, lines, elevations and cut sheets.
- 10.2 The CONTRACTOR shall carefully preserve bench marks, reference points and stakes and, in case of willful or careless destruction, the CONTRACTOR shall be charged with the resulting expense and shall be responsible for any mistakes that may be caused by their unnecessary loss or disturbance.
- 10.3 Permits and licenses of a temporary nature necessary for the prosecution of the WORK shall be secured and paid for by the CONTRACTOR unless otherwise stated in the SUPPLEMENTAL GENERAL CONDITIONS. Permits, licenses and easements for permanent structures or permanent changes in existing facilities shall be secured and paid for by the OWNER, unless otherwise specified. The CONTRACTOR shall give all notices and comply with all laws, ordinances, rules and regulations bearing on the conduct of the WORK as drawn and specified. If the CONTRACTOR observes that the CONTRACT DOCUMENTS are at variance therewith, the CONTRACTOR shall promptly notify the ENGINEER in writing, and any necessary changes shall be adjusted as provided in Section 13, CHANGES IN THE WORK.

11. PROTECTION OF WORK, PROPERTY AND PERSONS

- 11.1 The CONTRACTOR will be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the WORK. The CONTRACTOR will take all necessary precautions for the safety of, and will provide the necessary protection to prevent damage, injury, or loss to all employees on the WORK and other persons who may be affected thereby, all the WORK and all materials or equipment to be incorporated therein, whether in storage on or off the site, and other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designed for removal, relocation or replacement in the course of construction.
- 11.2 The CONTRACTOR will comply with all applicable laws, ordinances, rules, regulations, and orders of any public body having jurisdiction. The CONTRACTOR will erect and maintain, as required by the conditions and progress of the WORK, all necessary safeguards for safety and protection. The CONTRACTOR will notify OWNERS of adjacent utilities when prosecution of the WORK may affect them. The CONTRACTOR will remedy all damage, injury or loss to any property caused, directly or indirectly, in whole or in part, by the CONTRACTOR, any SUBCONTRACTOR or anyone directly or indirectly employed by any of them or anyone for whose acts any of them be liable, except damage or loss attributable to the fault of the

CONTRACT DOCUMENTS or to the acts or omissions of the OWNER or the ENGINEER or anyone employed by either of them or anyone for whose acts either of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of the CONTRACTOR.

- 11.3 In emergencies affecting the safety of persons or the WORK or property at the site or adjacent thereto, the CONTRACTOR, without special instruction or authorization from the ENGINEER, or OWNER, shall act to prevent threatened damage, injury or loss. The CONTRACTOR will give the ENGINEER prompt WRITTEN NOTICE of any significant changes in the WORK or deviations from the CONTRACT DOCUMENTS caused thereby, and a CHANGE ORDER shall thereupon be issued covering the changes and deviations involved.

12. SUPERVISION BY CONTRACTOR

- 12.1 The CONTRACTOR will supervise and direct the WORK. The CONTRACTOR will be solely responsible for the means, methods, techniques, sequences, and procedures of construction. The CONTRACTOR will employ and maintain on the WORK a qualified supervisor or superintendent who shall have been designated in writing by the CONTRACTOR as the CONTRACTOR'S representative at the site. The supervisor shall have full authority to act on behalf of the CONTRACTOR and all communications given to the supervisor shall be as binding as if given to the CONTRACTOR. The supervisor shall be present on the site at all times as required to perform adequate supervision and coordination of the WORK.

13. CHANGES IN THE WORK

- 13.1 The OWNER may at any time, as the need arises, order changes within the scope of the WORK without invalidating the Agreement. If such changes increase or decrease the amount due under the CONTRACT DOCUMENTS, or in the time required for performance of the WORK, an equitable adjustment shall be authorized by CHANGE ORDER.
- 13.2 The ENGINEER, also, may at any time, by issuing a FIELD ORDER, make changes in the details of the WORK. The CONTRACTOR shall proceed with the performance of any changes in the WORK so ordered by the ENGINEER unless the CONTRACTOR believes that such FIELD ORDER entitles him to a change in CONTRACT PRICE or TIME, or both, in which event the CONTRACTOR shall give the ENGINEER WRITTEN NOTICE thereof within seven (7) days after the receipt of the ordered change. Thereafter the CONTRACTOR shall document the basis for the change in CONTRACT PRICE or TIME within thirty (30) days. The CONTRACTOR shall not execute such changes pending the receipt of an executed CHANGE ORDER or further instruction from the OWNER.

14. CHANGES IN CONTRACT PRICE

14.1 The CONTRACT PRICE may be changed only by a CHANGE ORDER. The value of any WORK covered by a CHANGE ORDER or of any claim for increase or decrease in the CONTRACT PRICE shall be determined by one or more of the following methods in the order of precedence listed below:

(a) Unit prices previously approved.

(b) An agreed lump sum.

(c) The actual cost for labor, direct overhead, materials, supplies, equipment, and other services necessary to complete the WORK. In addition there shall be added an amount to be agreed upon but not to exceed fifteen percent (15%) of the actual cost of the WORK to cover the cost of general overhead and profit.

15. TIME FOR COMPLETION AND LIQUIDATED DAMAGES

15.1 The date of beginning and the time for completion of the WORK are essential conditions of the CONTRACT DOCUMENTS and the WORK embraced shall be commenced on a date specified in the NOTICE TO PROCEED.

15.2 The CONTRACTOR will proceed with the WORK at such rate of progress to ensure full completion within the CONTRACT TIME. It is expressly understood and agreed, by and between the CONTRACTOR and the OWNER, that the CONTRACT TIME for the completion of the WORK described herein is a reasonable time, taking into consideration the average climatic and economic conditions and other factors prevailing in the locality of the WORK.

15.3 If the CONTRACTOR shall fail to complete the WORK within the CONTRACT TIME, or extension of time granted by the OWNER, then the CONTRACTOR will pay to the OWNER the amount to liquidated damages as specified in the BID for each calendar day that CONTRACTOR shall be in default after the time stipulated in the CONTRACT DOCUMENTS.

15.4 The CONTRACTOR shall not be charged with liquidated damages or any excess cost when the delay in completion of the WORK is due to the following, and the CONTRACTOR has promptly given WRITTEN NOTICE of such delay to the OWNER or ENGINEER.

15.4.1 To, priority or allocation order duly issued by the any preference OWNER.

15.4.2 To unforeseeable causes beyond the control and without the fault or negligence of the CONTRACTOR, including but not restricted to, acts of GOD, or of the public enemy, acts of the OWNER, acts of another CONTRACTOR in the performance of a contract with the OWNER,

fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and abnormal and unforeseeable weather; and

15.4.3 To any delays of SUBCONTRACTORS occasioned by any of the causes specified in paragraphs 15.4.1 and 15.4.2 of this article.

16. CORRECTION OF WORK

16.1 The CONTRACTOR shall promptly remove from the premises all WORK rejected by the ENGINEER for failure to comply with the CONTRACT DOCUMENTS, whether incorporated in the construction or not, and the CONTRACTOR shall promptly replace and re-execute the WORK in accordance with the CONTRACT DOCUMENTS and without expense to the OWNER and shall bear the expense of making good all WORK of other CONTRACTORS destroyed or damaged by such removal or replacement.

16.2 All removal and replacement WORK shall be done at the CONTRACTOR'S expense. If the CONTRACTOR does not take action to remove such rejected WORK within ten (10) days after receipt of WRITTEN NOTICE, the OWNER may remove such WORK and store the materials at the expense of the CONTRACTOR.

17. SUBSURFACE CONDITIONS

17.1 The CONTRACTOR shall promptly, and before such conditions are disturbed, except in the event of an emergency, notify the OWNER by WRITTEN NOTICE of:

17.1.1 Subsurface or latent physical conditions at the site differing materially from those indicated in the CONTRACT DOCUMENTS; or

17.1.2 Unknown physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in WORK of the character provided for in the CONTRACT DOCUMENTS.

17.2 The OWNER shall promptly investigate the conditions, and if the OWNER finds that such conditions do so materially differ and cause an increase or decrease in the cost of, or in the time required for, performance of the WORK, an equitable adjustment shall be made and the CONTRACT DOCUMENTS shall be modified by a CHANGE ORDER. Any claim of the CONTRACTOR for adjustment hereunder shall not be allowed unless the CONTRACTOR has given the required WRITTEN NOTICE; provided that the OWNER may, if the OWNER determines the facts so justify, consider and adjust any such claims asserted before the date of final payment.

18. SUSPENSION OF WORK, TERMINATION AND DELAY

- 18.1 The OWNER may suspend the WORK or any portion thereof for a period of not more than ninety days or such further time as agreed upon by the CONTRACTOR, by WRITTEN NOTICE to the CONTRACTOR and the ENGINEER, which notice shall fix the date on which WORK shall be resumed. The CONTRACTOR will resume that WORK on the date so fixed. The CONTRACTOR will be allowed an increase in the CONTRACT PRICE or an extension of the CONTRACT TIME, or both, directly attributable to any suspension.
- 18.2 If the CONTRACTOR is adjudged a bankrupt or insolvent, or if the CONTRACTOR makes a general assignment for the benefit of his creditors, or if a trustee or receiver is appointed for the CONTRACTOR or for any of his property, or if the CONTRACTOR files a petition to take advantage of any debtor's act, or to reorganize under the bankruptcy or applicable laws, or if the CONTRACTOR repeatedly fails to supply sufficient skilled workmen or suitable materials or equipment, or if the CONTRACTOR repeatedly fails to make prompt payments to SUBCONTRACTORS or for labor, materials or equipment or if he disregards laws, ordinances, rules, regulations or orders of any public body having jurisdiction of the WORK or if the CONTRACTOR disregards the authority of the ENGINEER, or if the CONTRACTOR otherwise violates any provision of the CONTRACT DOCUMENTS, then the OWNER may, without prejudice to any other right or remedy and after giving the CONTRACTOR and his surety a minimum of ten (10) days from delivery of a WRITTEN NOTICE, terminate the services of the CONTRACTOR and take possession of the PROJECT and of all materials, equipment, tools, construction equipment and machinery thereon owned by the CONTRACTOR, and finish the WORK by whatever method the CONTRACTOR may deem expedient. In such case the CONTRACTOR shall not be entitled to receive any further payment until the WORK is finished. If the unpaid balance of the CONTRACT PRICE exceeds the direct and indirect costs of completing PROJECT, including compensation for additional professional services, such excess SHALL BE PAID TO THE CONTRACTOR. If such costs exceed such unpaid balance, the CONTRACTOR will pay the difference to the OWNER. Such costs incurred by the OWNER will be determined by the ENGINEER and incorporated in a CHANGE ORDER.
- 18.3 Where the CONTRACTOR'S services have been so terminated by the OWNER, said termination shall not affect any right of the OWNER against the CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of moneys by the OWNER due the CONTRACTOR will not release the CONTRACTOR from compliance with the CONTRACT DOCUMENTS.
- 18.4 After ten (10) days from delivery of a WRITTEN NOTICE to the CONTRACTOR and the ENGINEER, the OWNER may, without cause and without prejudice to any other right or remedy, elect to abandon the PROJECT and terminate the CONTRACT. In such case, the CONTRACTOR shall be paid for all WORK executed and any expense sustained plus reasonable profit.

- 18.5 If, through no act or fault of the CONTRACTOR, the WORK is suspended for a period of more than one hundred twenty (120) days by the OWNER or under an order of court or other public authority, or the ENGINEER fails to act on any request for payment within thirty (30) days after it is submitted, or the OWNER fails to pay the CONTRACTOR substantially the sum recommended by the ENGINEER or awarded by arbitrators within thirty (30) days of its approval and presentation, then the CONTRACTOR may, after ten (10) days from delivery of a WRITTEN NOTICE to the OWNER and the ENGINEER, terminate the CONTRACT and recover from the OWNER payment for all WORK executed and all expenses sustained. In addition and in lieu of terminating the CONTRACT, if the ENGINEER has failed to act on a request for payment or if the OWNER has failed to make any payment as aforesaid, the CONTRACTOR may upon ten (10) days WRITTEN NOTICE to the OWNER and the ENGINEER stop the WORK until the CONTRACTOR has been paid all amounts then due, in which event and upon resumption of the WORK, CHANGE ORDERS shall be issued for adjusting the CONTRACT PRICE or extending the CONTRACT TIME or both to compensate for the costs and delays attributable to the stoppage of the WORK.
- 18.6 If the performance of all or any portion of the WORK is suspended, delayed, or interrupted as a result of a failure of the OWNER or ENGINEER to act within the time specified in the CONTRACT DOCUMENTS, or if no time is specified, within a reasonable time, an adjustment in the CONTRACT PRICE or an extension of the CONTRACT TIME, or both, shall be made by CHANGE ORDER to compensate the CONTRACTOR for the costs and delays necessarily caused by the failure of the OWNER or ENGINEER.

19. PAYMENTS TO CONTRACTOR

- 19.1 At least ten (10) days before each progress payment falls due (but not more often than once a month), the CONTRACTOR will submit to the ENGINEER a partial payment estimate filled out and signed by the CONTRACTOR covering the WORK performed during the period covered by the partial payment estimate and supported by such data as the ENGINEER may reasonably require. If payment is requested on the basis of materials and equipment not incorporated in the WORK but delivered and suitably stored at or near the site, the partial payment estimate shall also be accompanied by such supporting data, satisfactory to the OWNER, as will establish the OWNER's title to the material and equipment and protect his interest therein, including applicable insurance. The ENGINEER will, within ten (10) days after receipt of each partial payment estimate, either indicate in writing his recommendation for payment and present the partial payment estimate to the OWNER, or return the partial payment estimate to the CONTRACTOR indicating in writing his reasons for refusing to recommend payment. In the latter case, the CONTRACTOR may make the necessary corrections and resubmit the partial payment estimate. The OWNER will, within ten (10) days of presentation to him of a recommended partial payment estimate, pay the CONTRACTOR a progress payment on the basis of the recommended partial payment estimate. The OWNER shall retain ten (10) percent of the amount of each payment until

final completion and acceptance of all WORK covered by the CONTRACT DOCUMENTS. The OWNER at any time, however, after fifty (50) percent of the WORK has been completed, if the CONTRACTOR finds that satisfactory progress is being made, shall reduce retainage to five (5%) percent on the current and remaining estimates. When the WORK is substantially complete (operational or beneficial occupancy), the retained amount may be further reduced below five (5) to only that amount necessary to assure completion. On completion and acceptance of a part of the WORK on which the price is stated separately in the CONTRACT DOCUMENTS, payment may be made in full, including retained percentages, less authorized deductions.

- 19.2 The request for payment may also include an allowance for the cost of such major materials and equipment which are suitably stored either at or near the site.
- 19.3 Prior to the SUBSTANTIAL COMPLETION, the OWNER, with the review of the ENGINEER and with the concurrence of the CONTRACTOR, may use any completed or substantially completed portions of the WORK. Such use shall not constitute an acceptance of such portions of the WORK.
- 19.4 The OWNER shall have the right to enter the premises for the purpose of doing WORK not covered by the CONTRACT DOCUMENTS. This provision shall not be construed as relieving the CONTRACTOR of the sole responsibility for the care and protection of the WORK, or the restoration of any damaged WORK except such as may be caused by agents or employees of the OWNER.
- 19.5 Upon completion and acceptance of the WORK, the ENGINEER shall issue a certificate attached to the final payment request that the WORK has been accepted by him under the conditions of the CONTRACT DOCUMENTS.
- 19.6 The CONTRACTOR will indemnify and save the OWNER or the OWNER'S agents harmless from all claims growing out the lawful demands of SUBCONTRACTORS, laborers, workmen, mechanics, materialmen, and furnisher of machinery and parts thereof, equipment, tools, and all supplies, incurred in the furtherance of the performance of the WORK. The CONTRACTOR shall, at the OWNER'S request, furnish satisfactory evidence that all obligations of the nature designated above have been paid, discharged, or waived. If the CONTRACTOR fails to do so the OWNER may, after having notified the CONTRACTOR, either pay unpaid bills or withhold from the CONTRACTOR'S unpaid compensation a sum of money deemed reasonably sufficient to pay any and all such lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged whereupon payment to the CONTRACTOR shall be resumed, in accordance with the terms of the CONTRACT DOCUMENTS, but in no event shall the provisions of this sentence be construed to impose any obligations upon the OWNER to either the CONTRACTOR, his Surety, or any third party. In paying any unpaid bills of the CONTRACTOR, any payment so made by the OWNER shall be considered as a payment made under the CONTRACT

DOCUMENTS by the OWNER to the CONTRACTOR and the OWNER shall not be liable to the CONTRACTOR for any such payments made in good faith.

- 19.7 If the OWNER fails to make payment thirty (30) days after review by the ENGINEER, in addition to other remedies available to the CONTRACTOR, there shall be added to each such payment interest at the maximum legal rate commencing on the first day after said paid is due and continuing until the payment is received by the CONTRACTOR.

20. ACCEPTANCE OF FINAL PAYMENT AS RELEASE

- 20.1 The acceptance by the CONTRACTOR of final payment shall be and shall operate as a release to the OWNER of all claims and all liability to the CONTRACTOR other than claims in stated amounts as may be specifically excepted by the CONTRACTOR for all things done or furnished in connection with this WORK and for every act and neglect of the OWNER and others relating to or arising out of this WORK. Any payment, however, final or otherwise, shall not release the CONTRACTOR or his sureties from any obligations under the CONTRACT DOCUMENTS or the PERFORMANCE BOND.

21. INSURANCE

- 21.1 The CONTRACTOR shall purchase and maintain such insurance as will protect him from claims set forth below which may arise out of or result from the CONTRACTOR'S execution of the WORK, whether such execution be by himself or by any SUBCONTRACTOR or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:

21.1.1 Claims under Workmen's compensation, disability benefit and other similar employee benefit acts;

21.1.2 Claims for damages because of bodily injury, occupational sickness or disease, or death of his employees;

21.1.3 Claims for damages because of bodily injury, sickness or disease, or death of any person other than his employees;

21.1.4 Claims for damages insured by usual personal injury liability coverage which are sustained by (1) any person as a result of an offense directly or indirectly related to the employment of such person by the CONTRACTOR or (2) any other person; and

21.1.5 Claims for damages because of injury to or destruction of tangible property, including loss of use resulting therefrom.

21.2 Certificates of Insurance acceptable to the OWNER shall be filed with the OWNER prior to commencement of the WORK. These Certificates shall contain a provision that coverages afforded under the policies will not be canceled unless at least fifteen (15) days prior WRITTEN NOTICE has been given the OWNER.

21.3 The CONTRACTOR shall procure and maintain, at his own expense, during the CONTRACT TIME, liability insurance as hereinafter specified;

21.3.1 CONTRACTOR'S General Public Liability and Property Damage Insurance including vehicle coverage issued to the CONTRACTOR and protecting him from all claims for personal injury, including death, and all claims for destruction of or damage to property, arising out of or in connection with any operations under the CONTRACT DOCUMENTS, whether such operations be by himself or by any SUBCONTRACTOR under him, or anyone directly or indirectly employed by the CONTRACTOR or by a SUBCONTRACTOR under him. Insurance shall be written with a limit of liability of not less than \$2,000,000 for all damages arising out of bodily injury, including death, at any time resulting therefrom, sustained by any one person in any one accident; and a limit of liability of not less than \$2,000,000 aggregate for any such damage sustained by two or more persons in any one accident. Insurance shall be written with a limit of liability not less than \$500,000 for all property damage sustained by any one person in any one accident; and a limit of liability of not less than \$500,000 aggregate for any such damage sustained by two or more persons in any one accident.

21.3.2 The CONTRACTOR shall acquire and maintain, if applicable, Fire and Extended Coverage insurance upon the PROJECT to the full insurable value thereof for the benefit of the OWNER, the CONTRACTOR, and SUBCONTRACTORS as their interest may appear. This provision shall in no way release the CONTRACTOR or CONTRACTOR'S surety from obligations under the CONTRACT DOCUMENTS to fully complete the PROJECT.

21.4 The CONTRACTOR shall procure and maintain at his own expense, during the CONTRACT TIME, in accordance with the provisions of the laws of the state in which the WORK is performed, Workmen's Compensation Insurance, including occupational disease provisions, for all of his employees at the site of the PROJECT and in case any WORK is sublet, the CONTRACTOR shall require such SUBCONTRACTOR similarly to provide Workmen's Compensation Insurance, including occupational disease provisions for all of the latter's employees unless such employees are covered by the protection afforded by the CONTRACTOR. In case any class of employees engaged in hazardous WORK under this contract at the site of the PROJECT is not protected under Workmen's Compensation statute, the CONTRACTOR shall provide, and shall cause each SUBCONTRACTOR to provide, adequate and suitable insurance for the protection of his employees not otherwise protected.

21.5 The CONTRACTOR shall secure, if applicable, "All RISK" type Builder's Risk Insurance for WORK to be performed. Unless specifically authorized by the OWNER, the amount of such insurance shall not be less than the CONTRACT PRICE totaled in the BID. The policy shall cover not less than the losses due to fire, explosion, hail, lightning, vandalism, malicious mischief, wind, collapse, riot, aircraft, and smoke during the CONTRACT TIME, and until the WORK is accepted by the OWNER. The policy shall name as the insured the CONTRACTOR, the ENGINEER, and the OWNER.

22. CONTRACT SECURITY

22.1 The CONTRACTOR shall within ten (10) days after the receipt of the NOTICE of AWARD furnish the OWNER with a Performance Bond and a Payment Bond in a penal sum equal to the amount of the CONTRACT PRICE, conditioned upon the performance by the CONTRACTOR of all undertakings, covenants, terms, conditions and agreements of the CONTRACT DOCUMENTS and upon the prompt payment by the CONTRACTOR to all persons supplying labor and materials in the prosecution of the WORK provided by the CONTRACT DOCUMENTS. Such BONDS shall be executed by the CONTRACTOR and a corporate bonding company licensed to transact such business in the state in which the WORK is to be performed and named on the current list of "Surety Companies Acceptable on Federal Bonds" as published in the Treasury Department Circular Number 570. The expense of these BONDS shall be borne by the CONTRACTOR. If at any time a surety on any such BOND is declared a bankrupt or loses its right to do business in the state in which the WORK is to be performed or is removed from the list of Surety Companies accepted on Federal BONDS, CONTRACTOR shall within ten (10) days after notice from the OWNER to do so, substitute an acceptable BOND (or BONDS) in such form and sum and signed by such other surety or sureties as may be satisfactory to the OWNER. The premiums on such BOND shall be paid by the CONTRACTOR. No further payments shall be deemed due nor shall be made until the new surety or sureties shall have furnished an acceptable BOND to the OWNER.

23. ASSIGNMENTS

23.1 Neither the CONTRACTOR nor the OWNER shall sell, transfer, assign or otherwise dispose of the Contract or any portion thereof, or of his right, title or interest therein, or his obligations thereunder, without written consent of the other party.

24. INDEMNIFICATION

24.1 The CONTRACTOR will indemnify and hold harmless the OWNER and the ENGINEER and their agents and employees from and against all claims, damages, losses and expenses including attorney's fees arising out of or resulting from the performance of the WORK, provided that any such claims, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property including the loss of use resulting therefrom; and is

caused in whole or in part by any negligent or willful act or omission of the CONTRACTOR, and SUBCONTRACTOR, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable.

24.2 In any and all claims against the OWNER or the ENGINEER, or any of their agents or employees, by any employee of the CONTRACTOR, any SUBCONTRACTOR, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, the indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the CONTRACTOR or any SUBCONTRACTOR under WORKmen's compensation acts, disability benefit acts or other employee benefits acts.

24.3 The obligation of the CONTRACTOR under this paragraph shall not extend to the liability of the ENGINEER, his agents or employees arising out of the preparation or review of maps, DRAWINGS, opinions, reports, surveys, CHANGE ORDER, designs or SPECIFICATIONS.

25. SEPARATE CONTRACTS

25.1 The OWNER reserves the right to let other contracts in connection with this PROJECT. The CONTRACTOR shall afford other CONTRACTORS reasonable opportunity for the introduction and storage of their materials and the execution of their WORK, and shall properly connect and coordinate his WORK with theirs. If the proper execution or results of any part of the CONTRACTOR'S WORK depends upon the WORK of any other CONTRACTOR, the CONTRACTOR shall inspect and promptly report to the ENGINEER any defects in such WORK that render it unsuitable for such proper execution and results.

25.2 The OWNER may perform additional WORK related to the PROJECT by himself, or the Owner may let other contracts containing provisions similar to these. The CONTRACTOR will afford the other CONTRACTORS who are parties to such Contracts (or the OWNER, if the Owner is performing the additional WORK himself), reasonable opportunity for the introduction and storage of materials and equipment and the execution of WORK, and shall properly connect and coordinate his WORK with theirs.

25.3 If the performance of additional WORK by other CONTRACTORS or the OWNER is not noted in the CONTRACT DOCUMENTS prior to the execution of the CONTRACT, WRITTEN NOTICE thereof shall be given to the CONTRACTOR prior to starting any such additional WORK. If the CONTRACTOR believes that the performance of such additional WORK by the OWNER or others involves him in additional expense or entitles him to an extension of the CONTRACT TIME, the CONTRACTOR may make a claim therefor as provided in Sections 14 and 15.

26. SUBCONTRACTING

- 26.1 The CONTRACTOR may utilize the services of specialty SUBCONTRACTORS on those parts of the WORK which, under normal contracting practices, are performed by specialty SUBCONTRACTORS.
- 26.2 The CONTRACTOR shall not award WORK to SUBCONTRACTOR(s), in excess of fifty (50) percent of the CONTRACT PRICE, without prior written approval of the OWNER.
- 26.3 The CONTRACTOR shall be fully responsible to the OWNER for the acts and omissions of his SUBCONTRACTORS, and of persons either directly or indirectly employed by them, as the CONTRACTOR is for the acts and omissions of persons directly employed by him.
- 26.4 The CONTRACTOR shall cause appropriate provisions to be inserted in all subcontracts relative to the WORK to bind SUBCONTRACTORS to the CONTRACTOR by the terms of the CONTRACT DOCUMENTS insofar as applicable to the WORK of SUBCONTRACTORS and to give the CONTRACTOR the same power as regards terminating any subcontract that the OWNER may exercise over the CONTRACTOR under any provision of the CONTRACT DOCUMENTS.
- 26.5 Nothing contained in this CONTRACT shall create any contractual relation between any SUBCONTRACTOR and the OWNER.

27. ENGINEER'S AUTHORITY

- 27.1 The ENGINEER shall act as the OWNER'S representative during the construction period. The ENGINEER shall decide questions which may arise as to quality and acceptability of materials furnished and WORK performed. The ENGINEER shall interpret the intent of the CONTRACT DOCUMENTS in a fair and unbiased manner. The ENGINEER will make visits to the site and determine if the WORK is proceeding in accordance with the CONTRACT DOCUMENTS.
- 27.2 The CONTRACTOR will be held strictly to the intent of the CONTRACT DOCUMENTS in regard to the workmanship and execution of the WORK. Inspections may be made at the factory or fabrication plant of the source of material supply.
- 27.3 The ENGINEER will not be responsible for the construction means, controls, techniques, sequences, procedures, or construction safety.
- 27.4 The ENGINEER shall promptly make decisions relative to interpretation of the CONTRACT DOCUMENTS.

28. LAND AND RIGHTS-OF-WAY

- 28.1 Prior to issuance of NOTICE TO PROCEED, the OWNER shall obtain all land and rights-of-way necessary for carrying out and for the completion of the WORK to be performed pursuant to the CONTRACT DOCUMENTS, unless otherwise mutually agreed.
- 28.2 The OWNER shall provide to the CONTRACTOR information which delineates and describes the lands owned and rights-of-way acquired.
- 28.3 The CONTRACTOR shall provide at his own expense and without liability to the OWNER any additional land and access thereto that the CONTRACTOR may desire for temporary construction facilities, or for storage of materials.

29. GUARANTY

- 29.1 The CONTRACTOR shall guarantee all WORK performed for a period of one (1) year from the date of SUBSTANTIAL COMPLETION. The CONTRACTOR warrants and guarantees for a period of one (1) year from the date of SUBSTANTIAL COMPLETION of the system that the completed system is free from all defects due to faulty WORKmanship and the CONTRACTOR shall promptly make such corrections as may be necessary by reason of such defects including the repairs of any damage to other parts of the system resulting from such defects. The OWNER will give notice of observed defects with reasonable promptness in the event that the CONTRACTOR should fail to make such repairs, adjustments, or other WORK that may be made necessary by such defects, the OWNER may do so and charge the CONTRACTOR the cost thereby incurred. The PERFORMANCE BOND shall remain in full force and effect through the guarantee period.

30. TAXES

- 30.1 The CONTRACTOR will pay all sales, consumer, use and other similar taxes required by the law of the place where the WORK is performed.

31. ENVIRONMENTAL REQUIREMENTS

The CONTRACTOR, when constructing a PROJECT involving trenching and/or other related earth excavation, shall comply with the following environmental constraints.

- 31.1 WETLANDS - The CONTRACTOR, when disposing of excess, spoil, or other construction materials on public or private property, WILL NOT FILL IN or otherwise CONVERT WETLANDS.
- 31.2 FLOODPLAINS - The CONTRACTOR, when disposing of excess, spoil, or other construction materials on public or private property, WILL NOT FILL IN or otherwise CONVERT 100 YEAR FLOODPLAIN areas delineated on the latest FEMA Floodplain Maps.

SECTION XIV

SUPPLEMENTAL GENERAL CONDITIONS

1. Preconstruction Conference: Prior to the commencement of WORK at the site, a preconstruction conference will be held at a mutually agreed time and place. The conference shall be attended by:
 - CONTRACTOR and the CONTRACTOR's superintendent.
 - Representative of principal SUPPLIERS and manufacturers as appropriate.
 - ENGINEER and The ENGINEER's Resident PROJECT Representative.
 - Representatives of OWNER.
 - Representatives of funding agencies.
 - Others as required by CONTRACTOR, OWNER, or ENGINEER.

Unless previously submitted to ENGINEER, CONTRACTOR shall bring to the conference a tentative schedule for each of the following:

- Progress.
- Procurement.
- Values for progress payment purposes.
- SHOP DRAWINGS and other submittals.
- Construction Schedule
- Plan and schedule for maintaining a safe drinking water supply so that water users are not out of water for no more than 12 hours in any one day. This plan and schedule is subject of review by the ENGINEER and approval by the OWNER.

The purpose of the conference is to designate responsible personnel and establish a WORKing relationship. Matters requiring coordination will be discussed and procedures for handling such matters established. The agenda will include:

- CONTRACTOR's tentative schedules.
- Transmittal, review and distribution of CONTRACTOR's submittals.
- Processing applications for payment.
- Maintaining record documents.
- Critical WORK sequencing.
- Field decisions and CHANGE ORDER.
- Use of premises, office and storage areas, security, housekeeping, and OWNER's needs.
- Major equipment deliveries and priorities.
- CONTRACTOR's assignments for safety and first aid.

ENGINEER will preside at the conference and will arrange for keeping the minutes and distributing the minutes to all persons in attendance.

2. DRAWINGS and SPECIFICATIONS: Reference to the standards of any technical society, organization, or association, or codes of local or state authorities, shall mean the latest standard, code, SPECIFICATIONS, or tentative standard adopted and published at the date of taking BIDs, unless specifically stated otherwise. Should any standard, code, specification, or tentative standard be in conflict with these CONTRACT DOCUMENTS, the provisions of these CONTRACT DOCUMENTS shall govern.
3. Sanitary Facilities: The CONTRACTOR shall provide and properly maintain acceptable sanitary facilities for all construction personnel and shall enforce the use thereof.
4. Testing: The OWNER shall pay all charges for testing services in connection with all tests made on materials incorporated in the PROJECT that meet the requirements of the SPECIFICATIONS. The CONTRACTOR shall pay for all tests that do not meet the requirements of the SPECIFICATIONS. The location and number of tests to be run will be determined by the ENGINEER. The CONTRACTOR shall pay for all other testing in accordance with the provisions of Section 7 of the General Conditions.
5. Time for Completion: The completion time will be extended if the CONTRACTOR can provide a bona fide materials order, which indicates a substantial delay in materials delivery. Such order must be presented to the ENGINEER no later than 15 days after receipt of the "NOTICE TO PROCEED".
6. Liquidated Damages: The OWNER shall have the right to deduct the amount of liquidated damages imposed on the CONTRACTOR from any money in its hands, otherwise due, or to become due, to the CONTRACTOR, or to use for and recover compensation for damages for nonperformance of this contract within the time stipulated.
7. Measurement of Partial Payment: The ENGINEER or his representative will make necessary measurements of completed WORK with the assistance and in the company of the CONTRACTOR to provide necessary information for periodic partial payments. If the CONTRACTOR cannot, or will not, assist in such measurement, the measurements shall be made by the ENGINEER or his representative.
8. Fire Insurance: Fire Insurance will not be required on PROJECTs or portions of PROJECTs which can suffer no damage from fire, e.g. earth-fill embankments, excavations.
9. Colorado State Sales Tax: The CONTRACTOR shall obtain, from the Colorado Department of Revenue, a Colorado State Sales Tax exemption certificate. This certificate shall exempt the

CONTRACTOR from paying Colorado State Sales Tax on all materials incorporated into the WORK. The CONTRACTOR shall not include in his unit prices or lump sums on the BID Schedule the costs associated with Colorado State Sales Tax.

This exemption of the Colorado State Sales Tax does not necessarily apply to other Federal, County or Local sales consumer, use or other similar taxes.

10. Acquisition of Rights of Way and Easements: All land, rights of way and easements required for this PROJECT will be obtained by the OWNER prior to the construction of any facilities thereof. When the CONTRACTOR carries on WORK outside of the lines designated for such easements the CONTRACTOR shall make his own arrangements with the adjacent property OWNERS and shall keep the OWNER free from any claim resulting from his WORK.
11. Plans and SPECIFICATIONS for BIDDING: BIDDERS and SUPPLIERS shall use only those sets of Plans and SPECIFICATIONS which have a red circle and red number inked on the title page of said plans and SPECIFICATIONS, in the upper right corner thereof. The number shall be entered on a Planholder's List by the ENGINEER together with the name, address and telephone number of the person, or firm, to whom the sets of plans and SPECIFICATIONS are issued.
12. Quality of WORK: All WORK shall be conducted in a skilled, WORKmanlike manner and finished lines and grades shall conform to the drawing related thereto.
13. Final Cleanup: Before the WORK shall be considered completed, all rubbish, waste and unused material due to or connected with the CONTRACTOR's activities shall be removed from the site of the WORK and the premises left in a condition satisfactory to the ENGINEER.
14. General and Supplemental General Conditions: In the case of any discrepancies between the General Conditions and the Supplemental General Conditions, the Supplemental General Conditions shall govern.

SECTION XV

GENERAL REQUIREMENTS

SCOPE OF WORK: The WORK to be performed under this Contract shall be for the construction of Special Improvement District No. 5 Augmentation Well No.2 Pipeline and Road

The CONTRACTOR, unless otherwise specified, shall furnish all materials, equipment, tools, labor, supervision, and transportation necessary to complete the WORK in accordance with the foregoing SPECIFICATIONS and accompanying DRAWINGS.

The CONTRACTOR shall also remove pipe; excavate trenches and pits to required dimensions; excavate bell holes; brace, sheet and support adjacent ground or structures where necessary for their protection; handle all drainage or groundwater; provide barricades, guards, and warning lights; lay, clean, grade, and test water pipe; backfill and consolidate trenches and pits; restore street and road surfaces; cleanup the WORK site; make street crossings with minimum interference to foot and vehicular travel.

The CONTRACTOR shall assume full responsibility and expense for the protection of all public and private property, structures, utilities both above and below the ground, at or near the site, or sites, of the WORK being performed under the contract, or which are in any manner affected by the prosecution of the WORK or the transportation of men and materials in connection therewith. The CONTRACTOR shall give reasonable WRITTEN NOTICE, in advance, to the department, agency, county, or municipality having charge of any property or utilities owned by them and to any other OWNER, or OWNERS, of public or private property or utilities when they will be affected by the WORK to be performed under the contract, and shall make all necessary arrangements with such department, departments, OWNER or OWNERS for moving, removing and replacing, or protecting in place such property or utilities. The determination of whether such property or utilities shall be moved, removed and replaced, or protected in place, shall be made by the department, departments, OWNER or OWNERS of the property or utilities. If the CONTRACTOR damages any utility, which has been properly located by the OWNER, the CONTRACTOR shall be responsible for immediate repair of the utility. During the course of the WORK, all lawn grass, shrubbery, flowers, other vegetation and fences, which interfere with the WORK shall be protected or removed and replaced to their original or better condition.

DEVIATIONS NECESSITATED BY OTHER STRUCTURES: Whenever obstructions not shown on the DRAWINGS are encountered during the progress of the WORK and interfere to such an extent that an alteration in the line or grade is required, the ENGINEER shall have the authority to change the line or grade and, if necessary, help the CONTRACTOR negotiate, or arrange, with the OWNERS of the obstruction for the removal, relocation or reconstruction of the same. If the change in line or grade results in an increase in the amount of WORK performed by the CONTRACTOR, such additional WORK shall be paid for on the basis of the unit price BID in the BID Schedule.

Existing underground installations such as water lines, sewer lines, gas lines, telephone lines, television lines, power lines, utility services and similar buried structures in the vicinity of the PROJECT may be shown approximately on the DRAWINGS. The CONTRACTOR shall be solely responsible for locating all existing underground installations, including service connections, in advance of excavation or trenching, by contacting the OWNERS thereof and prospecting. The CONTRACTOR shall use his own information and shall not rely upon any information shown on the DRAWINGS concerning existing underground installations.

BRAND NAME OR SIMILAR: Many items are specified by brand name, make and model to indicate the type, characteristics and quality of the item to be furnished and, in some instances, to indicate the specific item which the ENGINEER feels is best suited for the particular application. The "or similar" clause is used to permit the CONTRACTOR to use equipment which, for one reason or another, may be to his or the OWNER's advantage.

All BIDDERS are requested to BID the WORK to be performed and the equipment to be supplied under this contract as specified. After the contract is awarded, the successful BIDDER is requested to submit proposals to the ENGINEER for alternate methods of execution and equipment. No submittal is required if the CONTRACTOR uses the makes and models specified. Sufficient descriptions and materials SPECIFICATIONS shall be submitted to permit evaluation and comparison of the proposed alternative. Whenever a material, article or piece of equipment is identified on the DRAWINGS or in the SPECIFICATIONS by reference to brand name or catalogue number, it shall be understood that this is referenced for the purpose of defining the performance of other salient requirements and that other products with similar capacities, quality and function shall be considered. The CONTRACTOR may recommend the substitution of a material, articles, or piece of equipment of similar substance and function for those referred to in the CONTRACT DOCUMENTS by reference to brand name or catalogue number, and if, in the opinion of the ENGINEER, such material, article, or piece of equipment is of similar substance and function to that specified, the ENGINEER may approve its substitution and use by the CONTRACTOR. Any cost differential shall be deductible from the CONTRACT PRICE and the CONTRACT DOCUMENTS shall be appropriately modified by CHANGE ORDER. The CONTRACTOR warrants that if substitutes are accepted, no major changes in function or general design of the PROJECT will result. Incidental changes or extra component parts required to accommodate the substitute will be made by the CONTRACTOR without change in the CONTRACT PRICE or CONTRACT TIME. Only those alternate proposals which the ENGINEER opines to similar to or better than "as specified" and which will be compatible with the remainder of the system will be accepted. The "or similar" clause makes no reference that items must be identical in all respects if the above conditions are satisfied.

Alternate proposals must be submitted as soon as possible after award is made so as not to delay orders for materials and execution of the WORK. Requests for review of similarity will not be accepted from anyone except the CONTRACTOR, and such requests will not be considered until after the contract has

been awarded. Substitutions made without review of the ENGINEER are made at the CONTRACTOR's own risk.

NOTIFICATION OF UTILITY COMPANIES: The CONTRACTOR shall be responsible for notifying all utility companies having underground or overhead utilities in the construction area. Such notification shall be made prior to the commencement of any construction and shall advise the companies of the CONTRACTOR's construction schedule and nature of WORK.

HANDLING OF MATERIALS: All materials furnished by the CONTRACTOR shall be delivered and distributed at the site by the CONTRACTOR.

Pipe and accessories shall be loaded and unloaded by lifting with hoists, or skidding, so as to avoid shock or damage to materials as well as to coatings. Under no circumstances shall such materials be dropped. Pipe handled on skidways shall not be skidded or rolled against pipe already on the ground.

Each piece of material shall be unloaded opposite or near the site of the WORK where it is to be installed unless storage requirements make it necessary to do otherwise for the protection of the materials.

Pipe or pumping equipment shall be handled in such a manner that bells, coatings, linings, facings, etc. are protected from damage. If such damage should occur the repair or replacement shall be made by the CONTRACTOR, at his expense, in a manner satisfactory to the ENGINEER.

POWER: All power for lighting, operation of the CONTRACTOR's plant or equipment, or for other use by the CONTRACTOR, shall be provided by the CONTRACTOR at his sole expense.

WATER: The CONTRACTOR will be permitted to use a nearby well to supply water for this PROJECT. It will be the CONTRACTOR's responsibility to provide all pumps, piping, hoses, accessories, and labor required to transport the water.

WAIVERS AND VARIATIONS: Waivers for or variations to the following Technical Requirements may be granted by the ENGINEER if, in his opinion, such waivers or variations are in the best interests of the PROJECT and the OWNER.

DETAILED TECHNICAL REQUIREMENTS: The detailed technical requirements are identified by item number, which refers to the items of WORK on the BID Schedule. Item numbers on the BID Schedule, which are followed by a letter, refer to the same item of material but a different size, class or division of WORK.

Items with numbers under 100 are items for which payments shall be made. Items with numbers over 100 are items of WORK for which payment will not be made, but are included for the direction of the

CONTRACTOR in performing such items of WORK which are subsidiary to and necessary for the satisfactory completion of the pay item to which they refer.

SECTION XVI

TECHNICAL SPECIFICATIONS

Item 1 – MOBILIZATION, DEMOBILIZATION, AND BONDING

- 1.1 **SCOPE:** This SPECIFICATION covers mobilization and demobilization of personnel, equipment and supplies at the PROJECT site in preparation for and at the conclusion of WORK on the PROJECT. This item also includes the cost of all the BONDING to be obtained by the CONTRACTOR as required by this contract.
- 1.2 **PROCEDURE:** This item shall include the establishment of the CONTRACTOR's office and other necessary facilities as well as all other costs incurred or labor and operations which must be performed prior to beginning the other items under the Contract and at the completion of all items under the Contract.
- 1.3 **METHOD OF MEASUREMENT AND PAYMENT:** Payment for mobilization, demobilization and bonding shall be made at the contract lump sum. Payment for this item shall be full compensation for all required mobilization and demobilization as required by this contract.

The OWNER will provide a location for staging of equipment and supplies required for the completion of this PROJECT. The location and condition of the staging area(s) will be identified and inspected during the PROJECT walkthrough.

Item 2 - PIPE AND PIPE INSTALLATION

2.1 **SCOPE:** This SPECIFICATION covers the installation of water pipelines as part of this PROJECT.

2.2 **MATERIALS:** All pipe shall be installed in accordance with the pipe manufacturer's recommendations, unless otherwise specified herein. All pipe and fittings shall be new, clean, and free from scratches and abrasions.

Pipe to be installed shall conform to the following SPECIFICATIONS:

- a. **Polyvinyl Chloride (PVC) Pipe and Fittings (100 PSI SDR 41 Pipe):** Polyvinyl chloride pipe supplied under this specification shall conform to the requirements of ASTM D1784 cell class 12454; to including 16-inches in diameter. Pipe joints and couplings shall be made with appropriate O-rings conforming to ASTM D1784 cell class 12454. Accessories and fittings shall be of the same pressure rating as the pipe specified.
- b. **Welded Steel Pipe:** Steel pipe shall be welded steel or seamless steel to including 12 and 16-inches in diameter rated to a minimum of 80 PSI. Steel pipe fittings shall be forged steel or fabricated steel of a grade and size to match mating steel pipe as required for the application. All steel pipe and fittings which are underground shall be polyethylene encased with Poly Wrap, or similar.

All pipe, regardless of type, shall be installed in accordance with the pipe manufacturer's recommendations, unless otherwise specified herein. Pipe and fittings shall be new, clean, and free from scratches and abrasions. Below are the approximate lengths of each pipe type in this PROJECT.

- 56' of 12" diameter Steel
- 222' of 16" diameter PVC
- 25' of 16" diameter Steel

The other pipeline components to be installed can be found in the design DRAWINGS with their stations and invert elevations labeled.

- (2) Steel 12" diameter 45-degree elbows
- (1) 12" to 16" diameter reducer
- (2) Steel 16" diameter 45-degree elbows

All fittings shall be installed according to the trench bedding and thrust block details included in the DRAWINGS.

2.3 **TRENCH EXCAVATION:** All excavation shall be by open cut, except where otherwise indicated on the DRAWINGS. Banks of trenches located on traveled ways or in proximity of existing

structures shall be kept as nearly vertical as possible, and if required, shall be properly sheeted and braced. In open areas, sloping banks of trenches will be permitted if only the sides of the trench above the top of the pipe are sloped. The excavation of the trench shall not advance more than 400 feet ahead of the completed pipe laying unless permitted by the ENGINEER. The trench bottom along the entire length of pipe and at pipe joints shall be properly excavated to assure adequate bearing of the pipe barrel along its entire length. The CONTRACTOR shall not commence any excavating with power equipment until diligent effort has been made to determine the location of all underground structures. The CONTRACTOR shall preserve intact any underground pipes or structures encountered during the construction, provided that their location is such that they do not interfere with the proposed pipelines. In any case where such utilities or structures are accidentally broken or damaged they shall immediately be repaired or replaced to restore them to a condition at least equal to that in which they were found, all at the expense of the CONTRACTOR.

Where groundwater is encountered in excavations it shall be removed so that all pipe laying and other construction operations can be performed under dry conditions. The CONTRACTOR shall control the grading in the vicinity of trenches as much as possible so that the ground surface is properly sloped to prevent water from running into excavated areas.

The sides of trenches shall be firmly held in place with suitable bracing, sheeting and shoring whenever necessary to prevent injury to workers and damage to adjacent structures, utilities and road surfacing.

No blasting or other use of explosives will be permitted on this PROJECT, without the OWNER'S and ENGINEER'S written approval.

- 2.4 PIPE INSTALLATION: If the foundation is good firm earth, the trench bottom shall be shaped to give full support to the lower third of the pipe. If necessary, a layer of fine gravel or other suitable material shall be placed in the trench bottom to assure a proper bearing for the pipe. The ENGINEER shall determine when bedding is required. Bell holes shall be hand excavated to a depth two inches below the bell of the pipe. Payment for bedding will be in accordance with the specification entitled "BEDDING MATERIAL".

The width of the trench shall be ample to permit the pipe to be laid and joined properly and the bedding material placed and tamped. Unless authorized by the ENGINEER, the width of the trench, at the top of the pipe, shall not exceed the diameter of the pipe plus 24 inches.

Any pipe that is disturbed after laying shall be taken up and re-laid. The interior of all pipe shall be thoroughly cleaned of all foreign matter before being lowered into the trench and shall be kept clean during laying operations by means of plugs or other approved methods.

Under no circumstances shall pipe be laid so that groundwater can enter the pipe and no pipe shall be laid when trench or weather conditions are unsuitable for such WORK. At all times when WORK is not in progress, all open ends of pipes and fittings shall be securely closed so that no trench water, earth, or foreign materials will enter the pipe or the fitting. The subgrade upon which the pipe is placed shall consist of materials suitable for supporting the pipe without excessive settlement or stress development. In the event that rock or excessively spongy or unstable materials are encountered, they shall be removed to a depth of not less than 6 inches below the

bottom of the pipe, on grade; replaced with an approved material and mechanically compacted to grade.

Thrust blocks or other methods of pipe joint restraints as approved by the ENGINEER shall be provided at all tees, plugs, caps, valves, hydrants, and horizontal or vertical bends of 22½° or more. Such anchorage shall be constructed of concrete or other joint restraint methods and approved by the ENGINEER.

All water pipelines shall be installed with a minimum of 24 inches of cover from the top of the pipe to the natural ground surface unless otherwise shown on the DRAWINGS. An additional 6 inches of cover shall be mounded over the top of the pipeline, above the natural ground surface.

Pipe shall be protected during handling against impact, shocks and free fall. All pipe shall be cut with a type of cutter employing a method of cutting normally accepted by the trade. No method of cutting shall be employed which depends on impact or shock. This precludes the use of hammer and chisel or similar tools for cutting and trimming pipe.

- 2.5 TRENCH BACKFILL: The trenches shall not be backfilled until inspection has been completed and the ENGINEER or his designated inspector has accepted the pipe installation. Following placement of the pipe to proper line and grade, bedding material shall be placed, by hand, evenly along both sides of the pipe to a depth of approximately 4 inches. The bedding material shall then be hand tamped under the pipe haunches with an appropriate tamping bar. Additional 4 inch layers shall be placed and tamped until the tamped backfill is to a point not less than halfway up the pipe wall. Additional backfill material, consisting of finely divided and screened job excavated material free from debris, large clods of earth, frozen material, stones larger than 1½ inch in size or other material deemed unsuitable by the ENGINEER, shall be placed, by hand, evenly along both sides of the pipe in 4 inch lifts and compacted. Additional 4 inch layers shall be placed and compacted until the compacted backfill is to a point not less than 12 inches over the top of the pipe.

The remaining backfill material, above a point 12 inches above the pipe, shall consist of material excavated from the trench. Care shall be taken to avoid incorporating large stones which could damage the pipe by impact or by being forced down against the pipe under the weight of final backfill. Final backfill shall be placed in a manner which will prevent disturbing or damaging the pipe. Compaction of backfill material will be required to the extent that trench settlement will be minimized. Trench backfill material placed in county roads shall be compacted to not less than 95% of Standard Proctor Density (AASHTO T-99). Compaction shall be obtained by any methods, acceptable to the ENGINEER, that will not result in damage to the pipe, fittings, valves, appurtenances, adjacent structures or road surfaces.

Any grading necessary to provide a smooth ground surface shall be performed. Existing surfacing may be salvaged for re-use if the method of handling is approved by the ENGINEER. As soon as the trench has been backfilled, all stones, planks, and other refuse or materials of any description deposited by the CONTRACTOR in the line of WORK shall be removed and the surface of the ground shall be restored to the same condition as it was before the WORK was commenced. Any culverts, fences, etc., disturbed during construction shall be replaced, and the ditches restored to

original elevations. Trench cleanup shall be done within one week from the time the trench was backfilled.

Compaction tests of bedding and backfill materials shall be conducted at locations as determined by the ENGINEER. The OWNER shall pay all charges in connection with such testing except that the CONTRACTOR shall pay for any test which does not meet the PROJECT requirements. Backfill and bedding materials shall be compacted not less than 90% of the Standard Proctor Density (AASHTO T-99) outside of traveled ways and 95% of AASHTO T-99 in traveled ways throughout the width of the trench.

If groundwater exists, the trench will be dewatered so that pipe can be adequately installed. No additional payment will be made for trench dewatering.

- 2.6 METHOD OF MEASUREMENT AND PAYMENT: Payment for this item shall be made at the CONTRACT unit BID PRICE per linear foot of pipeline installed, based on material and diameter, inspected and accepted by the ENGINEER. Measurements shall be made along the centerline of the pipeline. Payment under this item shall be full compensation for installing all pipe, restraints, thrust blocks, excavation; dewatering; bracing; sheeting; shoring; joining; concrete; forms; reinforcement; testing; backfilling; resurfacing and cleanup and shall include the costs of all labor, equipment, and transportation necessary to complete the installation of water system pipelines in accordance with these SPECIFICATIONS and accompanying plans.

Item 3 – WATER FLOW METERS, CHECK VALVES, OTHER FITTINGS

- 3.1 SCOPE: This SPECIFICATION covers supply and installation of the flow meters, check valves, and vacuum breakers /air vents, and other fittings by the CONTRACTOR at the augmentation well and pipeline discharge channel.
- 3.2 MATERIALS AND INSTALLATION: The below components shall be installed at the locations shown in the construction DRAWINGS. The CONTRACTOR shall discuss substitutions with the ENGINEER prior to installation.

The all components shall be selected as per the industry standard for this size of the wells and pipeline. If any components specified below are found to be insufficient by the CONTRACTOR, the ENGINEER is to be consulted to remedy the situation. At the end of the pipeline, a flap gate needs to be installed to protect the pipeline discharge.

- a. Flow Meter: The flow meter shall be installed at the location shown in the DRAWINGS. The flow meter shall be a McCrometer Brand MF100 Model with flanged ends. The register shall be digital with a 4-20mA output. The register shall provide both an instantaneous flowrate and a total volume pumped. Upstream of the flowmeter, as indicated in the DRAWINGS, flow straightening vanes are to be installed. The vanes are to straighten flow such that a meter calibration device can be utilized on the section of steel pipe between the flowmeter and check valve. The CONTRACTOR is required to provide to the ENGINEER a submittal for both welded steel pipe and the flow meter so that compatibility can be verified, prior to installation. The minimum upstream and downstream distances of smooth pipe at the flowmeter are to be strictly maintained with no welds, fittings, or others disturbances permitted in this area.
- b. Check Valve: The check valve shall be a 12” Ø Fresno Chemigation Valve, or similar. Note: actual chemical application will not be occurring on this site, the chemigation valve is to function as a check valve to prevent backflow into the well only.
- c. Air Vents: The air vents shall be 2” Ø inlet Fresno Series 3500 Continuous Acting Air and Vacuum Relief. The air vent must be capable of venting positive pressure AND breaking a vacuum. The discharge of the air vent it to be pointed away from electronics such as the control panel or flowmeter.
- d. Pressure Relief Valves: Pressure relief valve(s) shall be Waterman Series AA-6 or similar. Reliefs shall be set in the field at the minimum pressure to not open during normal startup and operation. The relief at the large capacity well shall be 2.5” Ø. The pressure relief valve is to be installed without a thread lock product such that it can be removed. This is to allow a suction hose to drain the pipeline should groundwater levels be too high to permit the freezeless drain from functioning.
- e. Freezeless Drains and Controls: Any freezeless drain which meets industry standards is acceptable if appropriately sized and made of corrosion resistant materials. Care shall be taken to bed the drain properly when the pipeline is installed to prevent soil from interference when it

is opened or closed. The drain controls at the surface shall be marked to include if the drain is in the open or closed position.

- f. Flap Gate: The flap gate at the pipeline discharge into the riprap ditch shall automatically close due to gravity when not in use. The purpose of the flap gate is to prevent wildlife or any other things from entering the pipeline when it is not in use. An airtight seal is not required for the flap gate. The flap gate and hinge are to be fabricated from steel.

3.3 METHOD OF MEASUREMENT AND PAYMENT: Payment for the completion of Item 3 tasks shall be made for each component installed as per the BID schedule. Payments for these items shall be full compensation for installing all required Item 3 components required by this contract.

Item 4 – RIPRAP DISCHARGE DITCH AT SAGUACHE CREEK

- 4.1 SCOPE: This SPECIFICATION covers the construction of a riprap lined channel to convey water from the pipeline discharge into Saguache Creek without causing erosion.
- 4.2 MATERIALS: To construct the ditch approximately 5 cubic yards of riprap will be required. The total excavation will be approximately 8 cubic yards. Excess fill from channel excavation shall be used to construct the channel embankment, as per the DRAWINGS.

The materials used for riprap shall be sound, angular, rock consisting of not less than 60 percent plus 4 inches and shall not exceed 6 inches in maximum dimension. It shall be the responsibility of the CONTRACTOR to locate, purchase, and import to the PROJECT site riprap that is acceptable to the ENGINEER.

Riprap may be placed and spread by mechanical means. Riprap shall be dressed to neat lines and grades and shall form a protective layer on embankment slopes. Riprap shall be not less than 6 inches thick as shown in the DRAWINGS.

- 4.3 INSTALLATION: The discharge ditch shall be constructed by excavating below the existing ground surface and placing riprap within the channel, such that the ditch invert at its outlet matches the top of the creek embankment. The ditch will be a wide trapezoidal channel with a 5 foot base width, and side slopes of 3:1 Horizontal: Vertical. The height of the bank will taper downwards towards the top of creek embankment. The top of the ditch bank will be 1.5 feet wide. The bank will wrap under the discharge to form a horseshoe shape with the open end at the creek.

A 6-inch-thick layer of riprap will be placed on the inside banks, and the ditch bed, as per the construction DRAWINGS.

- 4.4 METHOD OF MEASUREMENT AND PAYMENT: Payment riprap shall be made at the CONTRACT BID PRICE per cubic yard of riprap installed. No payment will be made for excess riprap purchased, but not installed. Payment under this item shall be full compensation for riprap as part of this contract.

Payment for discharge ditch excavation shall be made at the CONTRACT BID PRICE per cubic yard of channel excavated. Payment under this item shall be full compensation for discharge channel excavation and discharge channel embankment construction as part of this contract.

Item 5 – ACCESS ROAD CONSTRUCTION

5.1 SCOPE: This SPECIFICATION covers the clearing and grubbing for an access road, road base placement and compaction, the installation of two culverts of different dimensions, and the additive alternate placement of a gravel road surface. All WORK will take place within the road easement as indicated in the DRAWINGS. The access road will consist of an extension of an existing road on the property. Changes to the existing road are not part of this item, although placement of gravel, under the additive alternate option, may be requested at the OWNER'S discretion. The total length of access road to be constructed is approximately 1,837 linear feet.

5.2 Clearing and Grubbing: The existing ground surface is uneven and has a significant amount of organic material such as grasses present. To facilitate road construction clearing and grubbing of the top two (2) inches of the ground surface is necessary. The width of the access road shall be 12', centered on the access easement. The total volume of material to be excavated as part of clearing and grubbing is approximately 136 cubic yards.

Excess excavated material shall be removed from the job site and stockpiled at a different location as indicated in the Vicinity Map in the DRAWINGS. At the pre-BID site visit, prospective BIDDERS will visit the stockpile site with the OWNER. Upon completion of the work, all borrow and waste disposal areas shall be left in a neat and sightly condition. Borrow and waste disposal areas shall be so graded and dressed that water will readily drain therefrom

5.3 Culvert Installation: Two culverts will be required as part of the access road construction. These culverts are both base BID items.

Both culverts are to be constructed of double wall HDPE.

Irrigation Ditch Culvert:

- This culvert shall be 8" Ø and 20' long

Large Ditch Culvert:

- This culvert shall be 24" Ø and 20' long

Culvert Bedding shall be done according to the detail in the DRAWINGS. Screened backfill compacted in 4" lifts shall be utilized to bed the culverts to a depth 6" below the invert of the culvert and to a minimum height 12" above the top of the culvert. Each lift shall be compacted to a minimum 90% standard proctor density.

5.4 Scarification and Compaction: The first additive alternate component of the road construction is scarifying and compacting the road.

The subgrade material shall be observed by the ENGINEER or his representative prior to the placing of any fill, the subgrade course shall be thoroughly loosened by scarifying or

plowing in the direction parallel to the centerline of the road, to a depth of ten (10) inches and compacted to 95% standard proctor density or as directed by the ENGINEER.

- 5.5 Aggregate Base Course (ABC) Placement and Compaction: The next additive alternate component of the road will be placing ABC to grade.

Materials proposed for use in the aggregate base course shall consist of a sand and gravel mixture that will result in a product which will conform to the gradation and other requirements of these specifications. The material supplied shall be a well graded mixture which when placed and compacted on the preceding layer of material will result in a firm, dense, stable surface. The material supplied shall be free of organic matter. The total volume of ABC required is approximately 136 cubic yards.

The material supplied for the aggregate base course shall be uniformly graded from coarse to fine and shall meet all requirements for a Colorado Highway Department (C-DOT) Class 5 material. The gradation meeting C-DOT Class 5 materials is listed below:

<u>U.S. Standard Sieve Size or Designation</u>	<u>Percentage by Weight Passing Square Mesh Sieve</u>
1 ½ inch	100
1 inch	95 - 100
¾ inch	---
No. 4	30 - 70
No. 8	---
No. 200	3 - 15

A sample of the material which the CONTRACTOR proposes to use for the aggregate base course shall be submitted to the ENGINEER for testing prior to the start of placement of this course of material. Alternatively, if a gradation report has been completed for the proposed material, the CONTRACTOR can submit a gradation report of the proposed material.

The base for the access road will consist of a two (2) inch thick layer of aggregate base course material. This material is to be brought up to the level of the existing ground, replacing the volume excavated under the clearing and grubbing task.

No aggregate base course material shall be placed until the prepared subgrade has been inspected and accepted by the Engineer. The CONTRACTOR shall keep the previously compacted course free of water or unacceptable material after placement of the aggregate base course has started. No aggregate base course material shall be placed on frozen or muddy foundation materials, nor shall snow, ice, or frozen material be incorporated in the aggregate base course material. The aggregate base course material shall be placed on the compacted aggregate subbase course in such quantities that it will form a layer of the depth shown on the drawing but in no case shall it exceed 6 inches in depth prior to compaction. The placement of aggregate base course material on the prepared foundation shall be done in such a manner that nonuniformity in the gradation of aggregate base course material from load to load will be adjusted or eliminated as far as

practicable. The method in which aggregate base course material is deposited shall be subject to acceptance by the Engineer.

After placement, the aggregate base course material shall be spread by motor grader or other approved equipment. No material placed in the aggregate base course by dumping in piles or windrows shall be incorporated in that position but shall be moved and spread by blading or similar accepted method.

After the aggregate base course material is placed, it shall be spread to the width and thickness as required in these specifications and as indicated on the plans or as established by the ENGINEER in the field. Aggregate base course material which does not contain sufficient moisture to avoid segregation of particle sizes during placing operations shall be wetted prior to and during placement.

After the aggregate base course material has been properly spread and wetted, it shall be compacted to 95% of Modified Proctor Density (ASTM D-1557). During compaction operations, the moisture content of the layer of aggregate base course material being compacted shall be maintained within a moisture content range of $\pm 2\%$ of optimum moisture content. The use of water in an amount which will result in the accumulation of a mulch of fines at the surface under the action of compaction equipment shall be avoided. The CONTRACTOR may use any type of compaction equipment the CONTRACTOR deems necessary to obtain the specified density, provided a smooth surface free of irregularities and depressions is achieved at the completion of compaction operations. The type of compaction equipment to be used shall be the one determined to be the best suited for the compaction of the material being placed, and shall be the sole responsibility of the CONTRACTOR; however, compaction equipment shall be subject to acceptance by the Engineer. Compaction shall begin at the edges of the aggregate base course and progress toward the center line with a minimum of $\frac{1}{4}$ track overlap. Pneumatic tire rollers and compaction with hauling equipment will be acceptable provided adequate compaction of the entire base course is achieved.

All irregularities and depressions that may develop shall be immediately corrected with aggregate base course material. Ruts formed by traffic moving over the aggregate base course shall be corrected prior to the final compaction of the aggregate base course material.

- 5.6 Gravel Road Surface Placement: The third additive alternate component of is placement of a gravel road surface. The gravel will be laid on top of the ABC as described in 5.3 and will not otherwise affect that portion of this contract. The gravel road surface will consist of a 2" thick layer of $\frac{3}{4}$ inch minus clean gravel. The effect of this will be that the road is elevated 2" above the existing grade. The width of this layer will be equivalent to that of the ABC at 12'. The total volume of gravel required is approximately 136 cubic yards.

The gravel road surface shall be dressed to neat lines. Any locations that experience settlement during gravel placement shall have additional gravel placed to maintain a smooth road surface. At no point during construction is excess gravel to be spread outside of the footprint of the road as a disposal method for excess material.

METHOD OF MEASUREMENT AND PAYMENT:

Payment for clearing and grubbing unsuitable material shall be made at the CONTRACT unit BID PRICE per cubic yard of excavated material. Unauthorized excavations beyond the limits as established by the ENGINEER in the field and the backfill required to replace unauthorized excavation will not be paid for. All costs related to unauthorized excavations shall be borne by the CONTRACTOR. Payment under this item shall be full compensation for all necessary clearing, excavating and hauling of unsuitable material. It shall include excavation and hauling unsuitable material and the costs of all labor, equipment and transportation necessary to complete the excavation of the unsuitable material in accordance with these SPECIFICATIONS and accompanying DRAWINGS.

Payment for 24" Ø culvert installation shall be made as a lump sum for each culvert installed as per the BID schedule. Payment for this item shall be full compensation for installing the 24" Ø culvert as required by this contract.

Payment for 8" Ø culvert installation shall be made as a lump sum for each culvert installed as per the BID schedule. Payment for this item shall be full compensation for installing the 8" Ø culvert as required by this contract.

Payment for scarifying and compacting the road shall be made at the CONTRACT unit BID PRICE per linear foot of road compacted. Unauthorized WORK beyond the limits as established by the ENGINEER in the field will not be paid for. All costs related to unauthorized work shall be borne by the CONTRACTOR. Payment under this item shall be full compensation for all scarifying and compacting. It shall include the costs of all labor, equipment and transportation necessary to complete the task in accordance with these SPECIFICATIONS and accompanying DRAWINGS.

Payment for aggregate base course placement and compaction shall be made at the CONTRACT unit BID PRICE per cubic yard of material in place. The yardage for which payment is made shall be determined by the ENGINEER based on the quantities actually installed. Payment under this item shall be full compensation for procuring, hauling, placing and compacting aggregate base course material and shall include the costs of all labor, equipment and transportation necessary to complete the construction of the aggregate base course in accordance with these SPECIFICATIONS and accompanying DRAWINGS.

Payment for gravel road surface placement shall be made at the CONTRACT unit BID PRICE per cubic yard of material in place. The yardage for which payment is made shall be determined by the engineering based on the quantities actually placed. Payment under this item shall be full compensation for procuring, hauling, and placing the gravel road surface material, and shall include the costs of all labor, equipment and transportation to complete the placement of the gravel road surface material in accordance with these SPECIFICATIONS and the DRAWINGS.

Item 101 – ENVIRONMENTAL POLLUTION AND EROSION CONTROLS:

101.1 **SCOPE:** This specification covers the Best Management Practices (BMPS) to minimize impacts to water quality and site vegetation.

101.2 **BEST MANAGEMENT PRACTICES:**

The following Best Management Practices (BMPs) will be utilized in order to minimize impacts to water quality and site vegetation:

- Use of mufflers or spark arresters on all vehicles and equipment will be required for fire prevention.
- Temporary access roads and staging areas will be located sufficiently far from streams or other water bodies, and wetlands to preclude discharges of non-PROJECT related fill material into these areas.
- CONTRACTOR, foremen, supervisors, and superintendents will be cognizant of erosion control measures outlined in the erosion control plan and will be held responsible for the correct implementation of erosion control measure. Erosion control SPECIFICATIONS will be included on all PROJECT plan sets.
- Best management practices will be implemented to control sedimentation, erosion, and aeolian (i.e., wind) deposition. These measures include: controlling surface water runoff in relation to slopes and other graded areas; placing hay bale barriers, silt fencing, sandbags and/or straw wattles along the toes of graded slopes, constructing water diversion bars on larger slopes to reduce flow velocity of storm runoff and bank material; restoring vegetation to impacted areas as soon as possible after completion of grading; seeding areas with appropriate species where needed; placing biodegradable erosion control blanketing over seeded areas where needed; placing silt curtains around construction areas to reduce erosion of disturbed soils and siltation of natural drainage channels; and applying water to graded areas and temporary (haul) roads during construction to control fugitive dust.
- The timing of land disturbing activities and installation of erosion and sedimentation control measures will be coordinated to minimize water quality and erosion impacts.
- Fueling and routine maintenance of construction equipment will occur at least 100 feet from wetland and aquatic habitats and away from storm water drains or gutters, to preclude adverse water quality impacts to existing drainages and wetland habitats. It is the CONTRACTOR's responsibility to prevent adverse impacts to water quality. Major repairs to equipment will be made in designated staging areas only.
- Equipment used on site will be monitored for signs of fluid leakage or other possible contaminant emissions and will be removed from the site for repair if found to be "unclean". Maintenance operations will be scheduled during dry weather inasmuch as possible. No fuel or other equipment fluids shall be stored on site. A properly equipped maintenance vehicle supplied and operated by the CONTRACTOR will provide maintenance services. Equipment for the immediate and complete removal of any soils contaminated during the maintenance operation, as well as sealed tanks or drums for the daily removal from the site of used fluids will also be supplied and properly handled. During fluid changes the use of adequate drip pans and other practices, such as direct pumping of the used fluid from the equipment being

serviced to its sealed container in the maintenance vehicle for removal, are encouraged. During refueling operations no fueling hose shall be left unattended by the maintenance personnel or the equipment operator.

➤ In the event of an above minor spillage of contaminant, especially if it occurs during wet weather, the CONTRACTOR or CONTRACTOR's designated representative, if not present, shall notify the ENGINEER immediately. These instructions also apply if the on-site person in charge deems it necessary to immediately notify any other agency.

The normal procedure for cleanup of a minor spill or observed fluid leakage will be to immediately remove the contaminated soil to a covered container for removal from the site. The urgency of completing the cleanup will be dictated by existing or predicted weather. In no case will polluted soils be left overnight without being placed into an approved lidded container. A lidded dumpster should be placed at the designated refueling and maintenance area, along with shovels and other appropriate tools sufficient to handle a small amount of contaminated soil. For a larger spill, a backhoe or excavator, if needed, will be expeditiously brought to the spill site for the necessary removal of contaminated soil.

➤ Water inflow into the trench will be minimized to the extent possible. Where groundwater inflow is unavoidable, excess groundwater that contains excessive sediment and suspended solids material will be pumped from the trench and discharged into adjacent upland areas.

➤ Trash dumpsters must be conveniently located and a trash cleanup program supervised by the CONTRACTOR's superintendent.

➤ The CONTRACTOR will provide portable sanitary facilities and insure completion of their scheduled periodic maintenance.

101.3 METHOD OF MEASUREMENT AND PAYMENT: There will be no payment for implementation of soil erosion and water pollution control and wetland construction measures, as the cost of all such control shall be considered subsidiary to those items requiring such control and for which payment is made. This specification is included for the guidance of the CONTRACTOR.