



IFB No. 2023-0079-GM/APS

GREATER GLORIETA REGIONAL WELL CDBG No. 19-C-NR-I-01-G-17

NOVEMBER 2022

Note: These documents are issued by the Owner for use for Small Cities Community Development Block Grant construction projects and include pertinent federal and state procurement statutes and regulations. The document format promulgated by the Construction Specifications Institute, CSI Document MP-2-1 and was used as a guideline in formulating the organization of these documents. These documents have important legal consequences; consultation with an attorney is encouraged with respect to its modification or completion and approval by the Funding Agency with respect to its modification. Any approved modifications are to be included at the end of each section. This Document has been formatted and pages numbered so copies can be run on both sides (front and back).

SANTA FE COUNTY

Santa Fe County Manager

	10/24/2022
Gregory S. Shaffer	Date

FINANCE DIVISION DIRECTOR:

Yvonne S. Herrera

BOARD OF COUNTY COMMISSIONERS:

Henry Roybal, District 1
Anna Hansen, District 2
Rudy N. Garcia, District 3
Anna T. Hamilton, District 4
Hank Hughes, District 5

GREATER GLORIETA MDWCA

Trent Botkin President



CONSULTANT

HDR Engineering, Inc. 2155 Louisiana Boulevard NE, Suite 9500

Albuquerque, NM 87110 Phone: (505) 830-5400 Fax: (505) 830-5454

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



10/19/22

Chris Rodriguez Engineer of Record Date

All questions about the meaning or intent of these documents shall be submitted only to the Architect/Engineer of Record, stated above, in writing. Refer to paragraph 3.2 of the Instructions to Bidders as to interpretations.

ACKNOWLEDGEMENT OF RECEIPT FOR IFB NO. 2022-0234-GM/APS GREATER GLORIETA REGIONAL WELL

In acknowledgement of receipt of this Invitation for Bids the undersigned agrees that he/she has received a complete copy, beginning with the title page, and ending with the contractual documents. Completed forms must be submitted to <u>Amanda Patterson-Sanchez</u> no later than <u>November 18, 2022</u> to receive any addenda for this solicitation.

Only Bidders that return this form in a timely manner will receive copies of addenda to this IFB.

FIRM:		 	
REPRES	ENTED BY:	 	
TITLE:		 	
PHONE	NO.:	 	
FAX NO	.:	 	
E-MAIL	ADDRESS:	 	
MAILIN	G ADDRESS:	 	
DELIVE	RY ADDRESS:	 	
By:		Date:	
Dy.	(Signature)	 _ Date	
Name:	(D.:	 _	
Title:	(Printed)	 _	

This name and address will be used for all correspondence related to the Invitation for Bids (IFB).

Amanda Patterson-Sanchez, Procurement Specialist Senior Santa Fe County Purchasing Division 102 Grant Avenue Santa Fe, NM 87501

Phone: (505) 992-6753 Fax: (505) 989-3243 E-mail: apatterson-sanchez@santafecountynm.gov

BIDDING AND CONTRACT DOCUMENTS INDEX

INDEX TO BIDDING DOCUMENTS Section 00002

DIVISION 0 - BIDDING REQUIREMENTS

Title	Section No.	Other Supplements to Bid Forms	
Title, Certification & Seals Page	00001		
Acknowledgement of Receipt	00001	AGREEMENT FORMS	00500
Index to Bidding Documents	0002	Agreement between Owner &	
_		Contractor	00510
PRE-BID INFORMATION	00010		
Prequalification Form	00011	BONDS, CERTIFICATES &	
Debarred or Suspended Contrac	tors 00012	NOTICES	00600
Federal & State Laws & Regulat	ions 00013	Performance Bond	00610
Registration of Contractors & Su	ubs 00014	Labor & Material Payment Bond	00620
Notice of Invitation for Bids	00021	Rider to Bonds	00621
Invitation for Bids	00022	Agent's Affidavit	00622
		Guaranty Bond/Maintenance Bond	00630
INSTRUCTIONS TO BIDDERS	00100	Certificate of Insurance	00650
		Assignment of Anti-Trust Claims	00660
INFORMATION AVAILABLE		Certificate of Owner's Attorney 000	
TO BIDDERS	00200	Table A Proposed Subcontracts Breakdown	
Geotechnical Investigation Repor	rt 00220	Table B Estimated Project Workforce Breakdow	
BID FORMS	00300	GENERAL CONDITION OF	
Bid Form	00310	THE CONTRACT	00700
		(See Index within General Conditions)	
SUPPLEMENTS TO BID FORMS	00400	Modifications to General Conditions	00700
Bid Bond	00420		
Bid Security Review Form	00421	SUPPLEMENTAL CONDITIONS	00800
Agent's Affidavit	00422	Supplemental General Conditions	00820
Subcontractor Listing & NMDW	VS .	Modifications to Supplemental Genera	1 00830
Registration & Anti-Trust Cla	ims 00430	Conditions	
Certification of Bidder Regarding	g	Additional Conditions	00830
Equal Employment Opportuni	ty 00440	Modifications to Additional Condition	s 00830
Certification of Bidder Regarding	g	Federal Labor Standards Provisions	
Section 3 & Segregated Facilit	ties 00441	Federal Wage Rate Determination	00851
Contractor Section 3 Plan Forma	t	State Wage Rate Determination	00850
Table A Proposed Subcontracts	Breakdown		
Table B Estimated Project Workf	Force Breakdown		

TECHNICAL SPECIFICATIONS

[Instructions: this page(s) to be replaced by Architect/Engineer with Index pages of Technical Specifications, if additional pages are needed, label as pages 4A-4, 4B-4, etc.]

Technical Specifications begin on page 126

PRE-BID INFORMATION

PRE-BID INFORMATION
Section 00010

1.0 PREQUALIFICATION FORMS

Section 00011

[Authority for prequalification - 13-1-134 NMSA 1978, insert "Not Required" if not used for this project]

2.0 DEBARRED OR SUSPENDED CONTRACTORS

Section 00012

2.1 A business (contractor, subcontractor or supplier) that has either been debarred or suspended pursuant to the requirements of Sections □13-1-177 through □13-1-180, and □Sections 13-4-11 through □13-4-17 NMSA 1978 as amended, shall not be permitted to do business with the Owner and shall not be considered for award of contract during the period for which it is debarred or suspended with the Owner.

3.0 FEDERAL AND STATE LAWS AND REGULATIONS

Section 00013

3.1 State administered Community Development Block Grant monies are Federal funds. Section 13-1-30B NMSA 1978 of the Procurement Code stipulates: "When a procurement involves the expenditure of federal funds, the procurement shall be conducted in accordance with mandatory applicable federal law and regulations. When mandatory applicable federal law or regulations are inconsistent with the provisions of the Procurement Code, compliance with federal law or regulations shall be compliance with the Procurement Code." The applicable governing federal procurement standards are defined in OMB Circular A-102, Attachment O. When federal and state procurement policies are different, the more restrictive policies apply so long as they are consistent with Circular A-102 standards.

3.2 For purposes of these Bidding Documents, the term "Grantee" means the Owner. The term "Funding Agency" means the Local Government Division, Department of Finance and Administration, Bataan Memorial Building, Suite 202, Santa Fe, New Mexico 87501, 505-827-8051.

4.0 REGISTRATION OF CONTRACTORS AND SUBCONTRACTORS

Section 00014

- 4.1 A contractor or subcontractor that submits a bid valued at more than \$60,000 for a public works project subject to the Public Works Minimum Wage Act shall be registered with the Labor and Industrial Division of the New Mexico Department of Workforce Solutions (NMDWS).
- 4.2 The contractor submitting a bid and all subcontractors must have a Dun and Bradstreet Number (<u>DUNS</u>) and registration with System of Awards Management (<u>SAM</u>).
- 4.3 A contractor or subcontractor that submits a bid regardless of the contract amount must be licensed and registered, and cannot be debarred. For any contracts \$60,000 and over the contractor or subcontractor must be current with annual Labor Enforcement Fund payments.
- 4.4 The Owner shall not accept a bid on a public works project from a Contractor that does not provide proof of required registration for itself (§ 13-4-13.1 NMSA 1978). Contractors, prime contractors and subcontractors shall be registered with the NMDWS.
- 4.5 See Bid Form and Subcontractor Listing form for Registration Numbers to be provided.

NOTICE OF INVITATION FOR BID

PRE-BID INFORMATION
Section 00021

Competitive sealed bids will be received by the Owner, for <u>Greater Glorieta Regional Well</u> for IFB N°. <u>2023-0079GM/APS</u> Project No.: <u>CDBG No. 19-C-NR-I-01-G-17.</u>

Project: The Santa Fe Growth Management Department request bids for the purpose of procuring a licensed construction company to upgrade the Greater Glorieta Mutual Domestic Water Consumer Association's (MDWCA) infrastructure and water quality. The well will be located at the site of the MDWCA's existing well at 80 Avenida Ponderosa, Glorieta, NM 87535 or approximately 35.574079 latitude and -105.76012 longitude. This project will replace the existing well with a deep water supply well (at a depth of 1,200-1,500 ft. into the Madera formation) which will directly benefit the combined Glorieta Village and Estates communities as a long term water source to address the public health risk of elevated radium above drinking water standards, a regional water supply source for both communities in the near term, a potential water source of East Glorieta should that subsystem be physically connected in the future, and a source of system redundancy for emergency purposes. The project will include siting and drilling a hole approximately 14 in. in width and 1,200 ft. in depth into the Madera Formation and constructing a water supply well and appurtenances including a well head, pump, approximately 50 ft. of pipe and fittings to connect to the existing distribution system. The well and connections will be fenced and the area graded for positive drainage following construction of the well. A Preliminary Engineering Report, complete with a geologic formation study, has been completed. Bids will be held for ninety (90) days subject to all action by the County. Santa Fe County reserves the right to reject any and all bids in part or in whole. A complete bid package must be submitted in a sealed container indicating the bid title and number along with the bidding firm's name and address clearly marked on the outside of the container. All bids must be received at Santa Fe County Purchasing Division, 102 Grant Avenue (First Floor), Santa Fe, N.M. 87501 until Thursday, December 8, 2022. At 2:00p.m. which time bids will be opened and publicly read aloud.

Santa Fe County has taken preventative measures to insure the safety of its staff and the public. In an effort to combat the spread of the recent COVID-19 Pandemic, the Bid Opening will be held via **WebEx by using the link below or by calling (408) 418-9388 meeting number: 2483 195 2039.** If a bidder submitting a bid chooses to stay for the bid opening, only ONE (1) person representing the firm may be in the conference room. Social distancing will be maintained during the opening and hand sanitizer will be available, all surfaces will be wiped down with disinfectant. If you plan on attending in person please email apatterson-sanchez@santafecountynm.gov.

https://sfco.webex.com/sfco/j.php?MTID=m2183f3721e7c58fa5ce3d29d14ea4014

EQUAL OPPORTUNITY EMPLOYMENT: All qualified bidders will receive consideration of contract(s) without regard to race, color, religion, sex, national origin, ancestry, age, physical and mental handicap, serious mental condition, disability, spousal affiliation, sexual orientation or gender identity.

An Invitation for Bid packages is available by contacting Amana Patterson-Sanchez, Santa Fe County, by telephone at (505) 992-6753, by email at apatterson-sanchez@santafecountynm.gov or by accessing the Santa Fe County website at http://www.santafecountynm.gov/asd/current_bid_solicitations

Prospective bidders must attend a Pre-Bid Conference which will be held at the Glorieta Pass Fire Station, #43 Fire Station Road, Village of Glorieta, New Mexico 87535 on Wednesday, November 16, 2022 at 10:30a.m.

This Project is funded in whole or in part by a grant from the state of New Mexico Small Cities Community Development Block Grant Program and is subject to requirements of the United States Department of Housing and Urban Development and the funding agency.

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I uic	nasmg	Agent:

Amanda I	Patterson-Sanchez Date: November 6, 20	22	
	(FOR OWNER	R USE ONLY)	
Newspaper:	Albuquerque Journal	Publish:	November 6, 2022
Newspaper:	Santa Fe New Mexican	Publish:	November 7, 2022
Newspaper:		Publish:	

(Note: This Notice is issued pursuant to the requirements of \$\textstyle{1}\$13-1-104 NMSA 1978)

INVITATION FOR BID

PRE-BID INFORMATION Section 00022

Project: Greater Glorieta Regional Well

Project No. CDBG No. 19-C-NR-I-01-G-17

CONSTRUCTION CONTRACT

Bid Number: 2023-0079-GM/APS

Architect/Engineer of Record:

HDR Engineering, Inc. Chris Rodriguez, PE 2155 Louisiana Blvd. NE, Suite 9500 Albuquerque, NM 87110

Owner:

Santa Fe County Growth Management 100 Catron Street Santa Fe, NM 87501

IMPORTANT: Bids must be submitted in a sealed envelope with the bid number and opening date clearly indicated on the bottom left-hand side of the front of the envelope.

Sealed Bids will be received until the above-specified date and local time, then publicly opened and read aloud. All hand-delivered bids must be received at the Office of the Purchasing Agent, address shown above.

This Bid is subject to the requirements of the Bidding Documents as defined in the "Instructions to Bidders," Section 00100. The Bid Form must be accompanied by a surety bond, subcontractor listing form, and documents specified in the "Instructions to Bidders."

Proposed Bid Schedule:

Date Published: November 6 and 7, 2022
Prebid meeting: Wednesday, November 16, 2022
Bid Opening: Thursday, December 8, 2022

Sealed bids shall be submitted to:

Office of the Purchasing Agent

102 Grant Avenue (First Floor) Santa Fe, New Mexico 87501

Bids will be publicly opened after the Bid Deadline:

Date: <u>December 8, 2022</u> Time: <u>2:00(MDT) P.M.</u>

BIDDING DOCUMENTS MAY BE REVIEWED BY VISTING THE SANTA FE COUNTY WEBSITE AT:

https://www.santafecountynm.gov/asd/current_b id_solicitations

Bids shall be presented in the form of a total Base Bid proposal under a Lump Sum Contract plus any additive or deductive alternates that are selected by the Owner. A bid must be submitted on all bid items and alternates; segregated bids will not be accepted. [Base Bid price shall not include state gross receipts or local options taxes. However, estimated tax shall be shown on the bid. In submitting this bid, each Bidder must satisfy all terms and conditions of the Bidding Documents]

All work covered by this Invitation for Bid shall be in accordance with applicable state laws and is subject to the minimum wage rate determination issued by the office of the Labor Commissioner for this project.

Bid security in the form of a surety bond executed by a surety company authorized to do business in the state of New Mexico in the amount of 5% of the total bid, or the equivalent in cash by means of a cashier's check or in a form satisfactory to the Owner, must accompany each bid in accordance with the Instructions to Bidders.

A 100% performance bond and a 100% payment and materials bond executed by a surety company authorized to do business in this state and said surety to be approved in federal circular 570 as published by the United States treasury department shall be required from the successful Bidder.

A completed Subcontractor Listing Form must accompany each bid.

The Bidding Documents contain a time for completion of the work and further impose liquidated damages for failure to complete the work within that time period.

No Bidder may withdraw his bid for **10 days** after the actual date of the opening thereof. The Owner intends to award this Project to the lowest responsible Bidder. The Owner reserves the right to reject any and all bids, to waive technical irregularities, and to award the contract to the Bidder whose bid it deems to be in the best interest of the Owner.

The Bidder's attention is directed to the requirements of the Contract Documents for adherence to applicable federal, state and local statutes, regulations and ordinances; including but not limited to, requirements as to conditions of employment to be observed, minimum wage rates to be paid under the Contract, Section 3, Segregated Facilities, Section 109, Executive Order 11246, and bonding and insurance requirements.

This Project is funded in whole or in part by a grant from the state of New Mexico Small Cities Community Development Block Grant Program and is subject to requirements of the United States Department of Housing and Urban Development and the funding agency.

All potential bidders must attend a Pre-bid Conference which will be held on:

Date: November 16, 2022 Time: 10:30 A.M. (MDT)

Location: Glorieta Pass Fire Station, #43 Fire Station Road, Village of Glorieta, NM 87535

⋉ End of Invitation for Bid □

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INSTRUCTIONS TO BIDDERS

INSTRUCTIONS TO BIDDERS
Section 00100

1.0 DEFINITIONS AND TERMS

- 1.1 Terms used in these Bidding Documents which are defined in the Instructions to Bidders and in the Conditions of the Contract for Construction (General, Supplementary, and Other Conditions) have the meanings assigned to them in those documents.
- 1.1.1 Addendum means a written or graphic instrument issued prior to the opening of Bids which clarifies, corrects, or changes the Bidding Documents or Contract Documents. Plural: Addenda.
- 1.1.2 Alternate Bid means the amount stated in the Bid as the sum to be added from the amount of the Base Bid if the corresponding change in the project scope, materials, and/or methods of construction is awarded by the Owner.
- 1.1.3 Base Bid means the amount stated in the Bid as the sum for which the Bidder offers to perform the work, excluding alternate Bids.
- 1.1.4 *Bid* means the offer of the bidder submitted on the prescribed form setting forth the prices for the work to be performed in conformance with the Bidding Documents. This amount does not include gross receipts or local options taxes.
- 1.1.5 *Bid Lot* means a major item of work for which a separate quotation or proposal is requested.
- 1.1.6 *Bidder* means the one who submits a Bid directly to the Owner, as distinct from a subcontractor who submits a bid to a contractor.
- 1.1.7 *Bidding Documents* means the Bidding Requirements and the Contract Documents.
- 1.1.8 *Bid Form.* A form which shall include space in which the bid price shall be inserted and which the bidder shall sign and submit along with all other necessary submissions. A Bidder may submit a reasonable facsimile of the Bid Form. Oral, telephonic, and telegraphic bids are invalid and will not be considered.
- 1.1.9 Bidding Requirements means the Notice of Invitation for Bid, Pre-bid Information, Instructions to Bidders, Information Available for Bidders, the Bid Form, Supplements to the Bid Form, and portions of Addenda

relating to any of these.

- 1.1.10 *Invitation for Bid (IFB)* means all documents including those attached or incorporated by reference or utilized for soliciting sealed bids.
- 1.1.11 Responsible Bidder means a Bidder who submits a Responsive Bid and who has furnished, when required, information and data to prove that his financial resources, production or service facilities, personnel, service reputation, and experience are adequate to make satisfactory delivery of the services, construction, or items of tangible personal property described in the Invitation for Bid.
- 1.1.12 Responsive Bid means a bid that conforms in all material respects to the requirements set forth in the Invitation for Bid.
- 1.1.13 Successful Bidder means the <u>lowest responsible</u> Bidder to whom the Owner, on the basis of the Owner's evaluation, makes an award. A Successful Bidder does not become the contractor until an agreement with the Owner is signed.

2.0 EXAMINATION OF BIDDING DOCUMENTS AND SITE

- 2.1 Before submitting a Bid, each Bidder must:
- 2.1.1 Examine the bidding Documents thoroughly;
- 2.1.2 Visit the site to familiarize himself with local conditions that may in any manner affects cost, progress, or performance;
- 2.1.3 Familiarize himself with federal, state, and local laws, ordinances, rules, and regulations that may in any manner affect cost, progress, or performance of the Work; and
- 2.1.4 Study and carefully correlate the Bidder's observations with the Bidding Documents.
- 2.2 On request, the Owner will provide each Bidder access to the site to conduct such investigations and tests as each Bidder deems necessary for submission of his Bid.
- 2.3 The land upon which the Work is to be performed, rights-of-way for access thereto, and other lands designated for use by the Contractor in performing the work are identified in the Bidding Documents.
- 2.4 The submission of a Bid will constitute an

incontrovertible representation by the Bidder that he has complied with every requirement of this Part and that the Bidding Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance of the Work.

3.0 BIDDING DOCUMENTS

3.1 Copies of Bidding Documents

- 3.1.1 Complete sets of the Bidding Documents in the number and for the deposit sum, if any, stated in the Invitation may be obtained from the Architect/ Engineer (unless another issuing office is designated in the Invitation for Bid). The deposit will be refunded to Bidders who submit a bona-fide bid and return the bidding Documents in good and complete condition within 15 calendar days after opening of Bids.
- 3.1.2 Complete sets of Bidding Documents shall be used in preparing bids; neither the Owner nor the Architect/Engineer assumes responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.
- 3.1.3 The Owner and the Architect/Engineer, in making copies of Bidding Documents available on the above terms, do so only for the purpose of obtaining Bids on the Work and do not confer a license or grant for any other use.

3.2 Interpretations

- 3.2.1 All questions about the meaning or intent of the Bidding Documents shall be submitted to the Architect/ Engineer in writing. Replies will be issued by addenda mailed or delivered to all parties recorded by the Architect/ Engineer as having received the Bidding Documents. Questions received less than 7 calendar days prior to the date for opening of Bids will not be answered. Only questions answered by formal written Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.
- 3.2.2 Bidders and Subcontractor shall promptly notify the Architect/Engineer of any ambiguity, inconsistency, or error that they may discover upon examination of the Bidding Documents or of the site and local conditions.

3.3 Substitute Material and Equipment

3.3.1 The contract, if awarded, will be on the basis of material and equipment described in the Drawings or specified in the Specifications without consideration of possible substitute or "or-equal" items. Whenever it is

indicated in the Drawings or specified in the Specifications that a substitute or "or-equal" item of material or equipment may be furnished or used by the contractor if acceptable to the Architect/Engineer, application for such acceptance will not be considered by the Architect/Engineer unless submitted to the Architect/Engineer at least ten days prior to the date for opening Bids. Any allowance of substitutions will be published to all prospective Bidders via addendum. The procedure for submittal of any such application by the Contractor and consideration by the Architect/ Engineer is set forth in the Contract Documents.

3.4 Addenda

- 3.4.1 Addenda will be mailed or delivered to all that are known by the Architect/ Engineer to have received a complete set of Bidding Documents.
- 3.4.2 Copies of addenda will be made available for inspection wherever Bidding Documents are on file for that purpose.
- 3.4.3 Addenda will be issued no later than four days prior to the date for receipt of Bids, except an addendum withdrawing the request for bids or one which includes postponement of the date for receipt of bids.

4.0 BIDDING PROCEDURES

- 4.1 Form and Style of Bids
- 4.1.1 Bids shall be submitted on forms identical to the form included with the Bidding Documents.
- 4.1.2 All blanks on the Bid Form shall be filled in by typewriter or manually in ink.
- 4.1.3 Where so indicated by the makeup of the bid firm, sums shall be expressed in both words and figures, and, in case of discrepancy between the two, the amount written in words shall govern.
- 4. 1.4 The signer of the bid must initiate any interlineations, alteration, or erasure.
- 4.1.5 All requested additive or deductive alternate bids shall be bid. If no change in the Base Bid is required, enter "No Change."
- 4.1.6 Where there are two or more major items of work (identified as "Bid Lots") for which separate quotations are requested, the Bidder may, at his discretion, submit quotations for any or all items, unless otherwise specified. Additionally, the Bidder may submit a lump

sum price for all lots for which the Bidder has submitted separate quotations.

- 4.1.7 Each copy of the bid shall include the complete name of the bidder and a statement that the bidder is a sole proprietor, a partnership, a corporation, or some other legal entity. Each copy shall be signed by the person or persons legally authorized to bind the bidder to a contract. A Bid by a corporation shall further give the state of incorporation and have the applicable New Mexico Certificate of Incorporation number or Certificate of Authority number. The Bid shall include the current contractor's license number and type, and the current Contractor's preference number. A bid submitted by an agent shall have a current power of attorney attached certifying the agent's authority to bind the Bidder.
- 4.1.8 The Bid shall contain an acknowledgment of receipt of all addenda (the numbers of which shall be filled in on the Bid Form).
- 4.1.9 The address to which communications regarding the Bid are to be directed must be shown.
- 4.1.10 The project name and number, as well as the Owner's invitation to bid number, shall be clearly shown on the outside of the envelope in which the Bid is submitted.

4.2 Bid Security

- 4.2.1 Bid security in an amount equal to at least five percent (5%) of the amount of the Bid shall be a bond provided by a surety company authorized to do business in this state, or the equivalent in cash, a cashier's check, or otherwise supplied in a form satisfactory to the Owner (§13-1-146 NMSA 1978) and approved in writing by the Owner in advance. All bonds shall be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies," as published in circular 570, latest edition, by the Audit Staff Bureau of Accounts, United States Treasury Department.
- 4.2.2 The bid security shall be in the amount of 5% of the highest Bid amount submitted, unless otherwise stipulated, pledging that the Bidder will enter into a contract with the Owner on the terms stated herein and will furnish bonds covering the faithful performance of the contract and payment of all obligations arising thereunder. Should the Bidder refuse to enter into such contract or fail to furnish bid security, the amount of the bid security shall be forfeited to the Owner as liquidated damages, not as a penalty.

- 4.2.3 The Owner will have the right to retain the bid security of Bidders to whom an award is being considered until either:
- A. The contract has been executed and performance and labor/material bonds have been furnished,
- B. The specified time has elapsed so that Bids may be withdrawn, or
 - C. All Bids have been rejected.
- 4.2.4 When the Bidding Documents require bid security, noncompliance by the Bidder requires that the Bid be rejected (§13-1-147A NMSA 1978).
- 4.2.5 If a Bidder is permitted to withdraw his Bid before award, no action shall take place against the Bidder or the bid security (§ 13-1-147B NMSA 1978).
- 4.2.6 The Owner may reduce bid security requirements authorized by the Procurement Code, \$\\$13-1-28 to 13-1-199 NMSA 1978, to encourage procurement from small businesses. Reduction, if any, and the manner thereof will be stipulated in \\$7.0 of this section, Other Instructions to Bidders. Reduction of the amount of bid security, if any, shall in no way reduce requirements for performance, payment, or other bonds referenced in the Bidding Documents.
- 4.3 Pre-bid Conference
- 4.3.1 The Architect/Engineer shall conduct a pre-bid conference approximately 15 calendar days prior to the bid opening date stated in the Invitation for Bid.
- 4.3.2 The Architect/Engineer and his consultants, as applicable, shall be represented. Prospective Bidders, prospective Subcontractors, and prospective Vendors are encouraged to attend and should be prepared to ask questions regarding substitutions and/or to request clarification of the Bidding Documents.
- 4.3.3 Questions and requests for clarification are to be presented in written form. Responses will be written and issued as addenda. No verbal response shall be binding.
- 4.4 Resident Contractor's Preference
- Not used for federally funded projects
- 4.5 Subcontractors

- 4.5.1 The bidder shall list the Subcontractors he proposes to use for all trades or items on the Subcontractor Listing Formattached to the Bidding Documents.
- 4.5.2 *Definitions*. As used in this subpart 4.5, subcontractor listing shall be in compliance with the Subcontractors Fair Practices Act, the pertinent provisions of which are summarized in this subpart 4.5.
- A, *Contractor* means the prime contractor on a public works construction project who contracts directly with the Owner (using agency);
- B. *Subcontractor* is a person or entity often skilled in a specific type of construction work that enters into a contractual agreement with the prime contractor to perform part or all of the construction work.
- C. Listing threshold means the dollar amount, stipulated in the bidding documents, above which subcontractors must be listed;
- D. *Notice* means information, advice or a written warning intended to apprise a contractor or subcontractor of some proceeding in which his interests are involved or to inform him of some fact which is his right to know. Notice may be sent to a contractor or subcontractor by certified or registered mail and shall be deemed to be completed upon date of mailing; and
- E. *Using Agency* means the Owner requiring services or construction.
- 4.5.3 Listing of Subcontractors, Requirements. The Owner shall provide in the bidding documents prepared for that project a listing threshold which shall be \$5,000 or one-half of one percent of the architect's or engineer's estimate of the total project cost, whichever is greater. Any person submitting a bid shall in his bid set forth:
- A. The name location of the place of business of each subcontractor under subcontract to the contractor who will perform work or labor or render service to the contractor in or about the construction of the public works construction project in an amount in excess of the listing threshold; and
- B. The nature of the work which will be done by each subcontractor under the Subcontractor Fair Practices Act. The contractor shall list only one subcontractor for each category as defined by the contractor in his bid.
- 4.5.4 Substitution of Subcontractor

A. No contractor whose bid is accepted shall substitute any person as subcontractor in place of the subcontractor listed in the original bid, except that the using agency shall consent to the substitution of another person as a subcontractor in the following circumstances: (1) when the subcontractor listed in the bid, after having had a reasonable opportunity to do so, fails or refuses to execute a written contract, when such written contract, based upon the general terms, conditions, plans and specifications for the project involved and the terms of such subcontractor's written bid, is presented to him by the contractor; (2) when the subcontractor listed in the original bid becomes bankrupt or insolvent prior to execution of a subcontract; (3) when the using agency refuses to approve the subcontractor listed in the original bid, provided such approval has been reserved in the bidding documents; (4) when the subcontractor listed in the original bid fails or refuses to perform his subcontract; (5) when the contractor demonstrates to the using agency or its duly authorized officer that the name of the subcontractor was listed as the result of an inadvertent clerical error: (6) when a bid alternate accepted by the using agency causes the listed subcontractor's bid not to be low; (7) when the contractor can substantiate to the using agency that a listed subcontractor's bid is incomplete; (8) when the listed subcontractor fails or refuses to meet the bond requirements of the contractor; (9) when it is determined that the listed subcontractor does not have a proper license to perform the work and the contractor has submitted the name of the subcontractor along with proof that the subcontractor bid work for which he was not licensed by the construction industries division of the regulation and licensing department; or (10) when it is determined by the using agency, the prime contractor or the director of the labor and industrial division of the labor department that a listed subcontractor is not a registered subcontractor on the date bids are unconditionally accepted for consideration.

B. Prior to approval of the contractor's request for such substitution, the Owner shall give notice in writing to the listed subcontractor of the contractor's request to substitute and of the reasons for such request. Such notice shall be served by certified or registered mail to the last known address of the subcontractor. The listed subcontractor who has been so notified has 5 working days within which to submit written objections to the substitution to the Owner. Failure to file such written objections shall constitute the listed subcontractor's consent to the substitution. If written objections are filed, the Owner shall give at least 5 working days' notice in writing to the listed subcontractor of a hearing by the

Owner on the contractor's request for substitution.

- C. No contractor whose bid is accepted shall permit any such subcontract to be voluntarily assigned or transferred or allow it to be performed by anyone other than the original subcontractor listed in the original bid without the consent of the Owner.
- D. No contractor whose bid is accepted, other than in the performance of change orders causing changes or deviations from the original contract, shall sublet or subcontract any portion of the work in excess of the listing threshold as to which his original bid did not designate a subcontractor unless the contractor fails to receive a bid for a category of work. Under such circumstances, the contractor may subcontract. The contract shall designate on the listing form that no bid was received.
- 4.5.5 Subcontractor Bond, Requirements. As to subcontractor required performance and payment bond if requested by the contractor, see §13-4-37 NMSA 1978.
- 4.5.6 Failure to Specify Subcontractor. If a contractor fails to specify a subcontractor in excess of the listing threshold, he represents that he is fully qualified to perform that portion himself and that he shall perform that portion himself. If after the award of the contract the contractor subcontracts any portion of the work, except as provided in the Subcontractors Fair Practices Act, the contractors hall be guilty of violation of the Subcontractors Fair Practices Act and subject to the penalties provided in subpart 4.5.9 of this section.

4.5.7 Inadvertent Clerical Error.

- A. The contractor, as a condition to assert a claim of inadvertent clerical error in the listing of a subcontractor, shall within 2 working days after the time of the prime bid opening by the Owner give written notice to the Owner and to both the subcontractor he claims to have listed in error and the subcontractor who had bid to the contractor prior to bid opening.
- B. Any listed subcontractor who has been notified by the contractor in accordance with the provisions of this section as to an inadvertent clerical error shall be allowed 6 working days from the time of the prime bid opening within which to submit to the Owner and to the contractor written objection to the contractor's claim of inadvertent clerical error. Failure of such listed subcontractor to file such written notice within 6 working days shall be primary evidence of his agreement that an inadvertent clerical error was made.

- C. The Owner shall, after a public hearing and in the absence of compelling reasons to the contrary, consent to the substitution of the intended contractor: 1) If the contractor, the subcontractor listed in error, and the intended subcontractor each submit an affidavit to the Owner, along with such additional evidence as the parties may wish to submit, that an inadvertent clerical error was in fact made, provided that the affidavits from each of the three parties are filed within eight working days from the time of the prime bid opening; or 2) If such affidavits are filed by both the contractor and the intended subcontractor within such specified time but the subcontractor whom the contractor claims to have listed in error does not submit within six working days to the Owner and to the contractor written objection to the contractor's claim of inadvertent clerical error as provided in this section.
- D. If such affidavits are filed by both the contractor and the intended subcontractor but the listed subcontractor has within six working days from the time of the prime bid opening submitted to the Owner and to the contractor written objection to the contractor's claim of inadvertent clerical error, the Owner shall investigate the claims of the parties and hold a public hearing to determine the validity of such claims. Any determination made shall be based on facts contained in the affidavits submitted by all three parties and supported by testimony under oath and subject to cross-examination. The Owner may on its motion or that of any other party admit testimony of other contractors, any bid registries or depositories, or any other party in possession of facts that may have a bearing on the decision of the Owner.
- 4.5.8 Emergency Subcontracting. Subcontracting any portion of the work in excess of the listing threshold as to which no subcontractor was designated in the original bid shall be permitted only in the case of public emergency or necessity and then only upon a written finding by the Owner setting forth the facts constituting the emergency or necessity.

4.5.9 Penalties.

A. A contractor who violates the provisions of the Subcontractors Fair Practices Act violates his own contract, and the Owner may exercise the option of: 1) canceling the contract; or 2) assessing the contractor a penalty in an amount of not more than ten percent of the amount of the subcontract involved but in no case less than the difference of the amount between the listed subcontractor and the subcontractor used, which penalty shall be deposited into the fund out of which the contract is awarded. In any proceeding under this subpart, the contractor shall be entitled to a hearing after

notice.

- B. A violation of the provisions of the Subcontractors Fair Practices Act constitutes grounds for disciplinary action against a contractor pursuant to regulations of the Construction Industries Division of the Regulation and Licensing Department.
- C. A contractor who attempts to circumvent the provisions of the Subcontractors Fair Practices Act shall be subject to the penalties established pursuant to this subpart.
- 4.5.10 Dispute Resolution. Once the Owner has determined the existence of a valid claim under the provisions of the Subcontractors Fair Practices Act, the Owner or agent of the Owner may:
- A. Hold a public hearing for the purpose of providing an informal resolution of the dispute by preparing a "front of dispute" which shall be available to all parties. The form shall state concisely, in numbered paragraphs, the matter at issue or dispute that the complainant expects to be determined. The agent or the Owner shall evaluate the issues presented by both sides of the dispute and render a decision within 10 days after the hearing, and provide the parties with a written copy of the decision by certified mail, return receipt requested; or
- B. Refer the matter in dispute to be resolved through arbitration.
- 4.5.11 The Bidder shall not list himself as the supplier or as the Subcontractor for any trade unless he has previously performed work of this type or can prove to the Architect's/Engineer's and the Owner's satisfaction that he actually has, or will obtain, fully adequate facilities and plans to perform the work with his own forces.
- 4.5.12 Failure to comply with subcontractor listing requirements or provisions of the Subcontractors Fair Practices Act shall be grounds for considering a Bid as nonresponsive.
- 4.5.13 Prior to the award of the Contract, the Architect/Engineer will notify the Bidder in writing if either the Owner or the Architect/Engineer, after due investigation and written findings of fact, has reasonable and substantial objection to any person or organization on such list. If the Owner or Architect/ Engineer has reasonable and substantial objection to any person or organization on such list and refuses in writing to accept such person or organization, the Bidder may, at his

option:

- A. Withdraw his Bid, or
- B. Submit an acceptable substitute Subcontractor with no increase in his bid price.
- C. In the event of withdrawal under this paragraph, bid security will not be forfeited.
- 4.5.14 The Successful Bidder shall, within 7 calendar days of notice of the award of a contract for the Work, submit the following information to the Architect/ Engineer:
- A. A signed list of the proprietary names and the suppliers of principal items or systems of material and equipment proposed for the Work; and
- B. A list signed by all Subcontractors proposed for the principal portions of the Work in accordance with the Subcontractors Listing Form submitted with the Bid. Refer to Section 00430 for form of Subcontractors Listing.
- 4.5.15 The Successful Bidder will be required to establish to the satisfaction of the Architect/Engineer and the Owner the reliability and responsibility of the persons or entities proposed to furnish and perform the Work described in the Bidding Documents.
- 4.5.16 Persons and organizations proposed by the Bidder and to whom the Owner and the Architect/ Engineer have made no reasonable objection under the provisions of subpart 4.5.15 above must be used on the Work for which they were proposed and shall not be changed except with the written consent of the Owner and the Architect/Engineer.
- 4.5.17 No Successful Bidder shall be required to employ any Subcontractor, other person, or organization against which he has reasonable objection.
- 4.6 Submission of Bids
- 4.6.1 Bids shall be submitted at the time and place indicated in the Invitation for Bid and shall be included in an opaque sealed envelope marked with the Project title and name and address of the Bidder and accompanied by the bid security, subcontractors listing, and other required documents listed in the Bidding Requirements.
- 4.6.2 The envelope shall be addressed to the Owner at the address shown on the cover page. The following

information shall be provided on the front lower left corner of the bid envelope: invitation for bid number, date of opening, and time of opening. If the bid is sent by mail, the sealed envelope shall have the notation "SEALED BID ENCLOSED" on the face thereof.

- 4.6.3 Bids received after the date and time for receipt of Bids will be returned unopened.
- 4.6.4 The Bidder shall assume full responsibility for timely delivery of Bids at the office noted on the Invitation for Bid, including those Bids submitted by mail. Hand-delivered bids shall be submitted at the location stated in the Invitation for Bid, Section 00022, and will be clocked in at the time received, which must be prior to the time specified. Bids will then be held for public opening.
- 4.6.5 Oral, telephonic, or telegraphic bids are invalid and will not receive consideration.
- 4.7 Correction or Withdrawal of Bids
- 4.7.1 A Bid containing a mistake discovered before bid opening may be modified or withdrawn by a Bidder prior to the time set for bid opening by delivering written or telegraphic notice to the location designated in the invitation for bid as the place where bids are to be received.
- 4.7.2 Bid security, if required, shall be in an amount sufficient for the Bid as modified or resubmitted in conformance with subpart 4.2 of this section.
- 4.7.3 Withdrawn Bids may be resubmitted up to the time and date designated for the receipt of Bids, provided they are then fully in conformance with the Bidding Documents.
- 4.7.4 After bid opening, no modifications in Bid Prices or other provisions of Bids shall be permitted. A low Bidder alleging a material mistake of fact that makes his Bid nonresponsive may be permitted to withdraw his Bid if:
- A. The mistake is clearly evident on the fact of the Bid Document; or
- B. The Bidder submits evidence which clearly and convincingly demonstrates that a mistake was made.
- C. Any decision by the Owner to permit or deny the withdrawal of a Bid on the basis of a mistake contained therein shall be supported by a determination setting forth the grounds for the decision. If withdrawal

is permitted, bid security will not be forfeited.

- 4.8 Notice of Contract Requirements Binding on Bidder
- 4.8.1 In submitting this bid, the Bidder represents that he has familiarized himself with the nature and extent of the following requirements of the Conditions of the Construction Contract (General, Supplementary, and Other Conditions):
- A. Definitions Sections 00700, Part 1.0 and 00810, §1.0;
- B. Bribes, Gratuities, and Kickbacks Section 00820:
- C. Nonresident Contractor Requirements Regarding Gross Receipts Tax Surety Bond - Section 00820;
- D. Contractor's Gross Receipts Tax Registration Section 00820;
- E. Contracts with Nonresident Persons or Partnerships or Unadmitted Foreign Corporations, Agent for Service of Process-Section 00820;
 - F. Assignment of Antitrust Claims Section 00820;
- G. Equal Employment Opportunity Section 00820; and
 - H. Others listed within the Contract Documents.
- 4.9 Rejection or Cancellation of Bids

An invitation for bid may be canceled, or any or all Bids may be rejected in whole or in part, when it is in the best interest of the Owner. A determination containing the reasons therefor shall be made part of the project file (§13-1-131 NMSA 1978). Bid security for rejected Bids shall be returned to the Bidder.

4.10 Protests

- 4.10.1 Any Bidder, Offerer, or Contractor who is aggrieved in connection with this Bid may protest to the Owner. The protest should be made in writing within 24 hours after the facts or occurrences giving rise thereto, but in no case later than 15 calendar days after the facts or occurrences giving rise thereto (§13-1-172, NMSA 1978).
- 4.10.2 In the event of a timely protest under subsection 4.10.1 above (§13-1-172 NMSA 1978), the procurement

officer and the Owner shall not proceed further with the procurement unless the procurement officer or the Owner makes a determination that the award of contract is necessary to protect substantial interests of the Owner (§13-1-173 NMSA 1978).

- 4.10.3 The procurement officer or his designee shall have the authority to take any action reasonably necessary to resolve a protest of an aggrieved Bidder, Offerer, or contractor concerning procurement.
- 4.10.4 The procurement officer or his designee shall promptly issue a determination relating to the protest. The determination shall:
 - A. State the reasons for the action taken; and
- B. Inform the protestant of the right to judicial review of the determination pursuant to §13-1-183 NMSA 1978 (§13-1-175 NMSA 1978).
- C. A copy of the determination is sued under §13-1-175 NMSA 1978 shall immediately be mailed to the protestant and other bidders or offerors involved in the procurement (§13-1-176 NMSA 1978).

5.0 CONSIDERATION OF BIDS

5.1 Receipt, Opening, and Recording

Bids received on time will be opened publicly and will be read aloud, and an abstract of the amounts of the Base Bids and alternates or Bid items, if any, will be made available to the Bidders. Each Bid shall be open to public inspection (§13-1-107 NMSA 1978).

- 5.2 Bid Evaluation and Award. If the lowest bid, including alternates, exceeds the amount budgeted for construction, the Grantee may negotiate with the low bidder to bring the contract within the available funds, if the bid amount does not exceed 10% of available funds. Owner may reject all bids and may start the process over if necessary.
- 5.2.1 The Owner shall have the right to waive technical irregularities in the form of the Bid of the low Bidder which do not alter the price, quality, or quantity of the services, construction, or items of tangible personal property bid (§ 13-1-132 NMSA 1978).
- 5.2.2 It is the intent of the Owner to award a contract to the lowest responsible Bidder, provided the Bid has been submitted in accordance with the requirements of the Bidding Documents. The unreasonable failure of a Bidder to promptly supply information in connection

with an inquiry with respect to responsibility is grounds for a determination that the Bidder is not a responsible Bidder (§ 13-1-133 NMSA 1978). See subpart 6.6 of this section as to Post-Bid Information that may be required of a contractor as to qualifications.

- 5.2.3 If the Base Bid is within the amount of funds available to finance the construction, contract award will be made to the responsible Bidder submitting the low Base Bid; except that, if sufficient funds are available to fund alternates, the Owner may award the contract to the responsible Bidder submitting the low combined Bid within the amount of funds available (Base Bid plus or minus alternates). If the award is based on alternates, the Owner shall accept them based on available funding.
- 5.2.4 Discrepancies in the Bid form between words and figures will be resolved in favor of words. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.
- 5.2.5 Conditional Bids or Bids with additional terms will not be accepted.

5.3 Notice of Award

The Owner shall issue a written Notice of Award after review and approval of the bid and related documents by the Owner with reasonable promptness §§13-1-100 and 13-1-108 NMSA 1978).

5.4 Identical Bids

When two or more of the bids submitted are identical in price and are the low Bid, the Owner may:

- A. Award pursuant to the multiple source award provisions of §§13-1-153 and 13-1-154 NMSA 1978 of the procurement code;
- B. Award to a resident business if the identical low Bids are submitted by a resident business and a nonresident business;
- C. Award to a resident manufacturer if the identical low Bids is submitted by a resident manufacturer and a resident business:
- D. Award by lottery to one of the identical low Bidders; or
- E. Reject all Bids and resolicit Bids or proposals for the required services, construction, or items of tangible personal property (§13-1-110 NMSA 1978).

F. Subsections B and C are not applicable to federally funded projects.

5.5 Cancellation of Award

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

6.0 POST-BID INFORMATION

6.1 Submittals to Architect/ Engineer

Within 7 days after Notice of Award, the following shall be submitted to the Architect/Engineer:

- A. The required bonds and certificate of insurance,
- B. The requirements under subpart 4.5.5 of this section, and
- C. A brief resume of the Successful Bidder's superintendent.

6.2 Return of Bid Security

- 6.2.1 All bid security in the form of checks, except those of the two lowest Bidders, will be returned immediately following the opening and checking of the Bids. The retained bid security of the unsuccessful of the two lowest Bidders, if in the form of a check, will be returned within 15 days following the award of contract.
- 6.2.2 The retained bid security of the Successful Bidder, if in the form of a check, will be returned after a satisfactory contract bond has been furnished and the Agreement has been executed. Bid securities in the form of bid bonds will be returned only upon the request of the unsuccessful Bidder, but will be released by the procurement officer after the Owner sends the Notice of Award.

6.3 Execution and Approval of Agreement

- 6.3.1 The agreement shall be prepared and sent to the Successful Bidder by the Owner and shall be signed by the Successful Bidder and returned, together with both the contract bonds and certificate of insurance, within 15 calendar days after the date of the Notice of Award.
- 6.3.2 If the Owner does not execute the agreement within 30 days following receipt from the Bidder of the signed Agreement with bonds and certificate, the Bidder

shall have the right to withdraw his proposal without penalty. No contract shall be effective until it has been fully executed by all of the parties thereto.

6.4 Notice to Proceed

The Owner will issue a written Notice to Proceed to the contractor stipulating the date from which contract time will be charged and the date contract time is to expire, subject to valid modifications of the contract authorized by change order.

6.5 Failure to Execute Contract

Failure to return the signed Agreement with acceptable contract bonds and certificate of insurance within 15 calendar days after the date of the Notice of Award shall be just cause for the cancellation of the award and the forfeiture of the bid security, which shall become the property of the Owner, not as a penalty, but in liquidation of damages sustained. Award may then be made to the next lowest responsible Bidder, or the Work may be re-advertised and constructed under contract or otherwise, as the Owner may decide.

6.6 Contractor's Qualifications Statement

Bidders to whom award of a contract is under consideration shall submit, upon request, information and data to prove that their financial resources, production or service facilities, personnel, and service reputation and experience are adequate to make satisfactory delivery of the services, construction, or items of personal property described in the Bidding Documents (§13-1-82 NMSA 1978).

7.0 OTHER INSTRUCTIONS TO BIDDERS

The bid will be awarded on the <u>lowest responsible</u> base bid and the accepted alternates.

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GEOTECHNICAL INVESTIGATION REPORT

INFORMATION AVAILABLE TO BIDDERS Section 00220

1.0 INVESTIGATION

(list any special conditions bidders need to be aware of at job site)

2.0 INTERPRETATION

These data are for information only and not intended as representations or warranties of continuity of conditions between borings.

The Owner and the Architect/Engineer disclaim any responsibility for accuracy, true location and extent of soils investigation that had been prepared by others. They further disclaim responsibility for interpretation of these databy bidders; as in projecting soil bearing values, soil profiles and soil stability.

BID FORM

Lump Sum or Unit Price

BID FORMS Section 00310

Project: <u>CDBG No. 19-C-NR-I-01-G-17</u>	IFB No. 2023-0079-GM/APS
Bidder:	This Bid is submitted to: Santa Fe County 102 Grant Avenue (First Floor) Santa Fe, New Mexico 87501
	Attn: Amanda Patterson-Sanchez
1.0 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an agreement with the Owner in the form included in the Bidding Documents to perform and furnish all Work as specified or indicated in the Bidding Documents for the Contract Price and within the Contract Time indicated in this Bid and in accordance with the other terms and conditions of the Contract Documents. 2.0 The Bidder accepts all of the terms and conditions of the Invitation for Bid and Instructions to Bidders, including without limitation those dealing with the disposition of bid security and other Bidding Documents. This Bid will remain subject to acceptance for 90 days after the day of Bid opening. The Bidder shall sign and submit the Agreement between Owner and Contractor (hereinafter called Agreement) with the bonds and other documents required by the Bidding Requirements within 15 calendar days after the date of	B. The Bidder has familiarized himself with the nature and extent of the Bidding Documents, Work, site, locality, and all local conditions, laws, and regulations that in any manner may affect cost, progress, performance, or furnishing of the Work. C. The Bidder has carefully studied all reports and drawings of subsurface conditions which are identified in the Information Available to Bidders and accepts the determination set forth in the Information Available to Bidders of the extent of the technical data contained in such reports and drawings upon which the Bidder is entitled to rely. D. The Bidder has correlated the results of all such observations, examinations, investigations, explorations, tests, reports, and studies with the terms and conditions of the Bidding Documents.
the Owner's Notice to Award. 3.0 In submitting this Bid, the Bidder represents, as more fully set forth in the Agreement, that:	E. The Bidder has given the Architect/Engineer written notice of all conflicts, errors, and discrepancies that he has discovered in the Bidding Documents, and the written resolution thereof by the Architect/Engineer is acceptable to the Bidder.
A. The Bidder has examined copies of all the Bidding Documents and of the following Addenda (receipt of all of which is hereby acknowledged):	F. This Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm, or corporation and is not submitted in conformity with
No Dated	any agreement or rules of any group, association, organization, or corporation; the Bidder has not directly
No Dated	or indirectly induced or solicited any other Bidder to
No Dated	submit a false or sham Bid; the Bidder has not solicited or induced any person, firm, or corporation to refrain
No Dated	from bidding; and the Bidder has not sought by collusion to obtain for himself any advantage over any other Bidder or over the Owner.
No Dated	
No Dated	G. The Bidder acknowledges that he has attended any mandatory pre-bid conference scheduled by the

Owner and/or the Architect/Engineer pertaining to this

project.

- H. The Bidder agrees to show clearly on the envelope in which the Bid is submitted the Project Name and Number, as well as Invitation for Bid Number.
- I. The Bidder will complete the Work for the following price(s) which do not include any gross

receipts tax in the price(s):

4.0 Bids shall be presented in the form of a total Base Bid proposal under a lump sum contract plus any additive or deductive alternates that are selected by the Owner. A bid must be submitted on all bid items and alternatives. The Owner will not select segregated bids.

BID SHEETS

IFB# 2023-0079-GM/APS RE-BID GREATER GLORIETA REGIONAL WELL

Bid Item No.	Description	Unit	Quantity	Unit Price	Bid Price
	(Complete in Place)				
Base B	id Items				
Well D	rilling, Construction and Testing				
1	Phase 1 Mobilization/demobilization	LS	1	\$	\$
2	SWPPP preparation and implementation	LS	1	\$	\$
3	Site Preparation, restoration and cleanup	LS	1	\$	\$
4	Temporary surface casing (20 ft min. depth), install and remove	LF	20	\$	\$
5	Drill 7-7/8" borehole diameter (minimum)	LF	1200	\$	\$
6	Geophysical logging	LS	1	\$	\$
7	Install test well (perforated section on drill stem with pea gravel and bentonite seal)	LS	1	\$	\$
8	Develop test well by airlifting	HR	16	\$	\$
9	Water quality sampling by bailer and analyses (fast turn-around time)	LS	2	\$	\$
10	Plug and abandon exploratory boring	FT	0	\$	\$
11	Phase 2 Drilling Mobilization/demobilization	LS	2	\$	\$
12	Set up mud pits, remove mud, thin-spread cuttings	LS	1	\$	\$
13	Ream borehole to 24" (minimum) from ground surface to 50' bgs	FT	50	\$	\$
14	Install 20" surface casing, cement in place	FT	53	\$	\$
15	Drill 17-3/4" borehole (minimum)	FT	1150	\$	\$
16	Run caliper log and alignment survey	LS	1	\$	\$

17	Install 10" diameter HSLA steel blank casing, wall thickness 0.3125",with centralizers every 120 feet	LF	1040	\$ \$
18	Install 10" diameter HSLA steel louvered screen (0.045" apertures) with centralizers every 80 feet	LF	160	\$ \$
19	Silica sand filter pack, 8-12 gradation	LF	200	\$ \$
20	Silica sand filter pack, 20-40 gradation, in place	LF	20	\$ \$
21	Bentonite Seal, in place	LF	20	\$ \$
22	Cement-bentonite grout, in place	LF	960	\$ \$
23	Temporary discharge conveyance	LS	1	\$ \$
24	Well development by flushing and swabbing	HR	16	\$ \$
25	Well development by airlift pumping	HR	80	\$ \$
26	Mud dispersant addition and well disinfection	LS	1	\$ \$
27	Furnish, install, and remove test pumping equipment (40-100 gpm at 1,000 ft)	LS	1	\$ \$
28	Development pumping	HR	24	\$ \$
29	Step rate pumping test	HR	18	\$ \$
30	Constant rate pumping test (96 hours pumping; 10 days of recovery per Santa Fe County Land Development Code)	HR	96	\$ \$
31	Video and alignment surveys	LS	1	\$ \$
32	Pitless adaptor (Baker style for 10 inch)	LS	1	\$ \$
33	Concrete pad (4 ft x 4 ft x 4 inches)	LS	1	\$ \$
34	Submersible pump (expected Grundfos 150S150), installed with drop pipe, cable, knock out valve, PVC sounding tube, electrical and controls	LS	1	\$ \$
35	Rig Rate	HR	0	\$ \$
36	Abandon Existing Wells: UP-1288 and 1643	LF	1305	\$ \$
	Total Base Bid			\$ \$
	Total Base Bid Plus NMGRT		_	\$ \$
Distribu	ntion System Construction			
37	Construction Mobilization	LS	1	\$ \$

38	Construction Traffic Control and Barricading	LS	1	\$	\$
39	Site Clearing and Grubbing, Incl. Tree removal	LS	1	\$	\$
40	8" Waterline , incl. trench & compacted backfill , including fittings & joint restraint	LF	160	\$	\$
41	6" Waterline , incl. trench & compacted backfill, including fittings & joint restraint	LF	3628	\$	\$
42	2" Waterline , incl. trench & compacted backfill, including valves and fittings & joint restraint	LF	320	\$	\$
43	3/4" Water service relocation, relocate existing meter and connect to new water main per Santa Fe County standard specifications	EA	22	\$	\$
44	Fire Hydrant assembly, CIP including valve, valve box, concrete surface completion, drain, bollards, fittings, blocking, testing	EA	8	\$	\$
45	Combination Single Vault (dual purpose), Vault incl. Isolation Valve and Drain with ARV, incl. excavation, backfill, reinforced concrete, all piping, and appurtenances	EA	3	\$	\$
46	Asphalt Pavement patching including subgrade and aggregate base course per plans and specifications	SY	1200	\$	\$
47	6" Gate Valve. CIP	EA	13	\$	\$
48	Construction Demobilization	LS	1	\$	\$
	Additive Alternate -Total Distribution System			\$	\$
	Additive Alternate -Total Distribution System Plus NMGRT			\$	\$
Allowan					
AL-1.0	Materials Testing Allowance	LS	1	\$10,000.00	\$10,000.00
AL-2.0	Utility Relocation	LS	1	\$50,000.00	\$50,000.00
AL-3.0	Electrical Allowance	LS	1	\$30,000.00	\$30,000.00

Total Base Bid plus Allowances		\$ \$
Total Base Bid plus Allowances and NMGRT		\$ \$
Total Bid (Base Bid plus Add Alt plus Allowances)		\$ \$
Total Bid (Base Bid plus Add Alt plus Allowances) and NMGRT		\$ \$

ALL BID ITEMS MUST BE EXCLUSIVE OF NMGRT

- 5.0 The Bidder agrees that:
- A. The Work to be performed under this Contract shall be commenced not later than 10 consecutive calendar days after the date of written Notice to Proceed, and that Substantial Completion shall be achieved not later than (270) calendar days after the date of written Notice to Proceed, except as hereafter extended by valid written Change Order by the Owner.
- B. Should the Contractor neglect, refuse, or otherwise fail to complete the Work within the time specified, the Contractor agrees to pay to the Owner in partial consideration for the award of this Contract the amount of <u>Five Hundred Dollars (\$500.00)</u> per consecutive calendar day, not as a penalty, but as liquidated damages for such breach of the Contract.
- C. The above prices shall include all labor, materials, removal, overhead, profit, insurance, taxes (not including gross receipts tax), etc., to cover the finished work of the several kinds called for. Changes shall be processed in accordance with the Contract Documents.
- D. It is understood that the Owner reserves the right to reject any or all Bids and to waive any technical irregularities in the bidding.
- 6.0 The following documents are attached to and made a condition of this Bid:
- 8.0 If the Bidder is
 - A. An **INDIVIDUAL**:

A. Bid Bond

- B. Bid Security with Agent's Affidavit
- C. Subcontractors Listing & NMDWS Registration form.
- D. Certification of Bidder Regarding Equal Employment Opportunity, Form 950.1
- E. Certification of Bidder Regarding Section 3 and Segregated Facilities
- F. Section 3 Plan
- G. Table A Proposed Subcontracts Breakdown
- H. Table B Estimated Project Workforce Breakdown
- Active or "in progress" status in the System of Award Management (sam.gov) for contractor and subcontractor(s)
- J. Other (list):
- 7.0 The terms used in this Bid and the Bidding and Contract Documents which are defined in the Conditions of the Construction Contract (General, Supplementary, and Other Conditions), included as part of the Bidding Documents, have the meanings assigned to them in those Conditions.

	Ву	
	(Individual's Signature) doing business as	
address	Business	
	Telephone: () Fax: ()	
		[Seal]

B. A **PARTNERSHIP**:

	By	
	(Firm Name)	
	(General Partner's Signature)	
	Business address:	
	Telephone: () Fax: ()	[Seal]
C.	A CORPORATION:	
	Corporation Name:	
	State of Incorporation:	
	By: Title:	_
	(Name of Person Authorized to Sign)	_
	If a New Mexico Corporation: NM Certificate of Incorporation Number	
	If a Foreign Corporation:	
	NM Certificate of Authority Number Attest (Secretary):	
	Business address:	
-		
	Telephone: () Fax: ()	
	D. A JOINT VENTURE :	
	Ву	
	(Name) Address:	
_		
	Telephone: () Fax: ()	
	Ву	
	(Name) Address:	

Telephone: ()	Fax: ()	
		ing for each individual, partnership, and corporation that is indicated in the appropriate category]
	BIDDER MUST FILL IN THE F	FOLLOWING (If none, write none)
NM License N°.		Classification(s)
Resident Contractor's Preference N°.	Not Applicable for this Project	Workforce Solutions Dept. Registration N°.
System of Award Manag (CAGE Numl	gement Registration No.	
Federal Employer Tax ID	No	
State of New Mexico Tax	x ID No	

BID BOND

SUPPLEMENTS TO BID FORMS Section 00420

	KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned,	as
Principa	ipal, and as Surety, are hereby held and firmly bound	unto
	as Owner in the pen	al sum of
	for which, well and truly to be made, we hereby jointly and sever	rally bind ourselves, our
heirs, e	, executives, administrators, successors and assigns.	
SIGNE	NED , this, 20	
The con	condition of the above obligation is such that whereas the Principal has submitted to t	he Owner a certain Bid,
attache	hed hereto and hereby made a part hereof to enter into a contract in writing,	
for (Pro	Project)	
NOW,	V, THEREFORE,	
A.	If said Bid shall be rejected, or in the alternate,	
В.	If said Bid shall be accepted and the Principal shall execute and deliver a contract is attached hereto (properly completed in accordance with said Bid) and shall furnish the faithful performance of said Contract, and for the payment of all persons performaterials in connection therewith, and shall in all other respects perform the agreed acceptance of said Bid.	a Bond (Bid Security) for rming labor or furnishing
and agr	this obligation shall be void, otherwise the same shall remain in force and effect; it be agreed that the liability of the Surety for any and all claims hereunder shall, in no event is obligation as herein stated.	
no way	Surety, for value received, hereby stipulates and agrees that the obligations of said Su ay impaired or affected by any extension of the time within which the Owner may accept does hereby waive notice of any such extension.	-
are corp	TITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and sorporations have caused their corporate seals to be hereto affixed and these presents ters, the day and year first set forth above.	
	Principal: (L	.S.)
	Surety:	
[Seal]	By:	

CERTIFICATE AS TO CORPORATE PRINCIPAL

I,	, certify that I am the
, Seci	etary of the Corporation named as Principal in this bond, that who signed the
bond	on behalf of the Principal was then of said corporation; that I know
his/h	er signature, and his/her signature thereto is genuine; and that said bond was duly signed, sealed, and attested
to for	and on behalf of said corporation by authority of this governing body.
	[Corporate Seal]
Title:	
	BID SECURITY REVIEW FORM
	EMENTS TO BID FORMS n 00421
1.	Review and Approval : This Bond has been executed by a Surety named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies," as published in Circular 570 (July 1st edition) by the Audit Staff Bureau of Accounts, United States Treasury Department.
	Yes No (If No , report to Funding Agency immediately
2.	I, as Owner's Representative, have verified with (Name of Contact) of the Office of the Superintendent of Insurance, 1-855-427-5674 that the Surety Company listed on the Bid Bond is licensed/authorized to do business in the state of New Mexico in accordance with \$\square\$ 13-1-46 and \$\square\$ 13-4-18 NMSA 1978. If source of verification is other that the State Corporation Commission, Insurance Division, identity the source document below and publication date.
	Dated:
	(Name of Source Document)
	Date
	(Signature of Owner's Representative)

AGENT'S AFFIDAVIT

SUPPLEMENTS TO BID FORMS Section 00422

[To be filled in by Agent]		This Form Must Be Used By Surety
STATE OF)	
COUNTY OF) ss.	
	, being first duly sworn, dep	poses and says that he/she is the duly
appointed agent for		
and is licensed in the State of New Mexico.		
Deponent further states that a certain bond grawith the construction of		
dated the day of	, 20, 6	executed by
, Contra	actor, as principal, and	
, as surety, signed by this Depo	onent; and Deponent further states	that said bond was written, signed, and
delivered by him/her; that the premium on the	same has been or will be collected	by him/her; and that the full commission
thereon has been or will be retained by him/ho	er.	
SUBSCRIBED AND SWORN TO BEFORE MI	ETHIS DAY OF	, 20
	NOTARY PUBLIC	
MY COMMISSION EXPIRES:	[Seal]	
	Agent's Address:	
Telephone (_)Fax()	

[This form must be used for all bonds required in the Bidding Documents. Power of Attorney for person signing for Surety Company must be attached to bond]

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SUBCONTRACTORS LISTING, NMDWS REGISTRATION, & ASSIGNMENT OF ANTITRUST CLAIMS

Project:		Project No.			
REGISTRATION, & ASSICLAIMS [by Contractor, Su Subcontractors, and Suppliers 1.1 To be fully executed as	nd included with Bid as a	that such of is agreed the antitrust clapassed on	hereby assigned to the Owner, but only to the extent that such overcharges are passed on to the Owner. It is agreed that the firm retains all rights to any such antitrust claims to the extent of any overcharges not passed on to the Owner, including the right to any treble damages attributable thereto.		
condition of the Bid, including all Subcontractors providing services valued at \$5,000 or more, pursuant to \$13-4-34 NMSA 1978.				actor that submits a bid	
 1.2 To be signed after award of Contract by individual empowered to obligate Supplier, Subcontractor, or Sub-subcontractor. 1.3 See Instructions to Bidders, subsection 4.5 of section 00100, Subcontractors, for rules regarding changes in this list after bidding. 		subject to to registered workforce the Depart	valued at more than \$60,000 for a public works pro- subject to the Public Works Minimum Wage Actsh registered with the Labor and Industrial Division of Workforce Solutions Department (NMDWS) (form the Department of Labor (DOL). The Owner shall accept a bid on a public works project from a Contr		
1.4 The undersigned agree which the firm may have or overcharges resulting from goods, services, and mater connection with the above	itself. Cont	that does not provide proof of required registration for itself. Contractors, prime contractors and subcontractors must be registered with the NMDWS (§13-4-13.1NMSA 1978			
Company Name of Contractor/Subcontractor	Email and phone number	NMDWS Registration No	DUNS number	SAM's registration number	

U. S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

CERTIFICATION OF BIDDER REGARDING EQUAL EMPLOYMENT OPPORTUNITY

INSTRUCTIONS

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

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

CERTIFICATION BY BIDDER NAME AND ADDRESS OF BIDDER (Include ZIP Code) ☐ Yes ☐ No 1. Bidder has participated in a previous contract or subcontract subject to the Equal Opportunity Clause. ☐ Yes ☐ No 2. Compliance reports were required to be filed in connection with such contract or subcontract \square Yes \square No 3. Bidder has filed all compliance reports due under applicable instructions, including SF-100. 4. Have you ever been or are you being considered for sanction due to violation of Executive Order 11246, as amended? ☐ Yes ☐ No (Name And Title Of Signer Please type) Signature Date

CERTIFICATION OF BIDDER REGARDING SECTION 3 AND SEGREGATED FACILITIES

SUPPLEMENTS TO BID FORMS Section 00441

[SAMPLE]

Name of Prime Contractor	Project Name
Project Number	
The undersigned hereby certifies that:	
(a) Section 3 provisions are included in the Cont	ract.
-	submitted as part of the bid proceedings (if bid equals
(c) No segregated facilities will be maintained.	
Name and Title of Signer (Print or Type)	
Signature	Date

CONTRACTOR - SECTION 3 PLAN FORMAT

	ntractor) agrees to implement the following specific
affirmative action steps directed at increasing the utilizar	tion of lower income residents and businesses with
the Municipality/County of	, New Mexico.
 A. To ascertain from the locality's CDBG 	in areas other than Section 3 covered project areas
program official the exact boundaries of the Section	are also let on a negotiated basis, however,
3 covered project area and where advantageous,	feasible, when let in a Section 3 covered project
seek the assistance of local officials in preparing	area.
and implementing the affirmative action plan.	
	F. To formally contact unions,
B. To attempt to recruit from within the	subcontractors, and trade associations to secure
municipality or county (as applicable), the	their cooperation for this program.
necessary number of lower income residents	1 0
through: local advertising media, signs placed at	G. To ensure that all appropriate project area
the proposed site for the project, and community	business concerns are notified of pending sub-
organizations and public or private institutions	contractual opportunities.
operating within or serving the project area such as	oomiaotaa opportamioo.
Service Employment and Redevelopment (SER),	H. To maintain records, including copies of
Opportunities Industrialization Center (OIC), Urban	correspondence, memoranda, etc., which
League, Concentrated Employment Program,	document that all of the above affirmative action
, ,	steps have been taken.
Hometown Plan, or the U. S. Employment Service.	steps have been taken.
C. To maintain a list of all lower income	I. To appoint or recruit an executive official of
	• •
residents who have applied either on their own or on	the company or agency as Equal Opportunity
referral from any source, and to employ such	Officer to coordinate the implementation of this
persons, if otherwise eligible and if a vacancy	Section 3 plan.
exists.	I To list on Table A information valetal to
D * To insert this Costion 2 Plan in all hid	J. To list on Table A, information related to
D.* To insert this Section 3 Plan in all bid	subcontracts to be awarded.
documents, and to require all bidders on	
subcontracts to submit a Section 3 affirmative	K. To list on Table B, all projected workforce
action plan including utilization goals and the	needs for all phases of this project by occupation,
specific steps planned to accomplish these goals.	trade, skill level, and number of positions.
E.* To ensure that subcontracts which are	* Loans, grants, contracts, and subsidies for less
typically let on a negotiated rather than a bid basis	than \$10,000 will be exempt.
As officers and representatives of (name of contractor) _	
undersigned have read and fully agree to this Affirmative	Action Plan, and become party to the full
implementation of this program.	
	
Signature	
Title Dete	
Title Date	
Signature	
Oignatul C	

Date

Rev 11-19 4A-41

Title

TABLE A PROPOSED SUBCONTRACTS BREAKDOWN

For the Period Covering	, 20 through	, 20
<u>-</u>	[Duration of the CDBG-Assisted Project]	

Column 1	Column 2	Column 3	Column 4	Column 5
Type of Contract	Total Number of Contracts	Total Approximate Dollar (\$) Amount	Estimated Number of Contracts to Project Area Businesses*	Estimated Dolla (\$) Amount to Project Area Businesses*
he Project Area is	coextensive with	the Municipality/County	/ of	's boundaries.
he Project Area is	coextensive with	the Municipality/County	/ of	's boundar

Company		
Project Name	Project Number	
EEO Officer (Signature)	Date	

TABLE B ESTIMATED PROJECT WORKFORCE BREAKDOWN

Column 1	Column 2	Column 3	Column 4	Column 5
Job Category	Total Estimated Positions	Number Positions Currently Occupied by Permanent Employ ees	Number Positions Not Currently Occupied	Number Positions to be filled with LIPAR*
Officers/Supervisors				
Professionals				
Technicians				
Housing Sales/Rental Management				
Office Clerical				
Service Workers				
Others				
TRADE:				
Journeymen				
Helpers				
Apprentices				
Maximum Number of Trainees				
Others				
TRADE:				
Journeymen				
Helpers				
Apprentices				
Maximum Number of Trainees				
Others				

*Lower Income Project Area	Residents. Individuals residing within the Municipality/County of
	whose family income does not exceed 80% of the median income of the
State.	
	Company

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OTHER SUPPLEMENTS TO BID FORMS

SUPPLEMENTS TO BID FORMS Section 00400

SUBSTITUTION LISTING

Section 00440

EQUIPMENT SUPPLIERS LISTING

Section 00450

NON-COLLUSION AFFIDAVIT

Section 00480

STATEMENT OF BIDDER'S QUALIFICATIONS

Section 00470

[If the above forms are required by the Owner or the Architect/Engineer to be inserted into the Bidding Documents, this page should be replaced by the appropriate forms — special mention under Section 7, Instructions to Bidders, and on the Bid Form, if applicable, should be made by the Architect/Engineer]

NON-COLLUSION AFFIDAVIT OF PRIME BIDDER

COUNTY OF _____ being first duly sworn, deposes and says that: (1) They are the ________of _____ Bidder that has submitted the attached Bid Proposal; (2) They are fully informed respecting the preparation and contents of the attached Bid Proposal and of all pertinent circumstances respecting such bid; (3) Such bid is genuine and is not a collusive or sham bid; (4) Neither the said bidder nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly with any other bidder, firm or person to submit a collusive or sham bid in connection with the contract for which the attached bid has been submitted or to refrain from bidding in connection with such contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communications or conference with any other bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the Contracting Agency or any person interested in the proposed contract; and (5) The price or prices quoted in the attached bid are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant. (SIGNED) _____ TITLE _____ SUBSCRIBED AND SWORN to before me this ____day of ______2022. NOTARY PUBLIC

Rev 11-19 4A-46

My Commission Expires _____

STATE OF NEW MEXICO

CONTRACTOR'S NON-COLLUSION AFFIDAVIT OF SUBCONTRACTOR

of	, hereinafter
(Name of subcontractor) "Subcontractor".	(Name of subcontractor's company)
	e preparation and contents of the Subcontractor's
proposar succession of an succession of a	(name of contractor and contractor's
company)	(name of community and community
hereinafter "Contractor", for certain work or	services in connection with the
·	ereinafter "Contract," pertaining to the
(contract title and/or number)	
·	project in
(description of the project)	(location of project)
2. Contractor represents that Subcontractor proposal.	's proposal is genuine and is not a collusive or sham
or indirectly with any other bidder, firm or per Contract for which the attached bid has been Contract, or has in any manner, directly or ind or conference with any other bidder, or to see unlawful agreement, any advantage against See 4. The price or prices quoted in the Subcontraction	in any way colluded, conspired, connived or agreed, directly son to submit a collusive or sham bid in connection with the submitted, or refrained from bidding in connection with this firectly, sought by agreement or collusion or communications ure through any collusion, conspiracy, connivance or anta Fe County or any person interested in the Contract. actor's proposal are fair and proper and are not tainted by vful agreement on the part of the bidder, Contractor or any ees, or parties in interest.
	(Signature of Contractor and title)
A	cknowledgement
SUBSCRIBED AND SWORN to before by	me thisday of2022,
Notary Public	
My commission expires:	

SUBCONTRACTS

- A. Contractor shall not execute any agreement with any subcontractor or permit any subcontractor to perform any work under the Contract until the Contractor has submitted and signed this Non-Collusion Affidavit of Subcontractor and Santa Fe County has approved the subcontractor in writing. No subcontractor will be disapproved by Santa Fe County except for cause.
- C. Contractor shall be fully responsible to Santa Fe County for the acts and omissions of Contractor's Subcontractor(s), and of persons either directly or indirectly employed by the Subcontractor.
- D. Contractor shall cause appropriate provision(s) to be inserted in all written subcontracts relative to the work of this Contract requiring the Subcontractor's compliance with all the applicable provisions of the Contract.
- E. Nothing contained in this Contract shall create any contractual relation between any subcontractor or sub-subcontractor's and Santa Fe County.

CERTIFICATION OF NON-SEGREGATED FACILITIES

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

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

	SIGNED:	
	TITLE:	
SUBSCRIBED AND SWORN to before 1	me thisday of	, 2022.
NOTARY PUBLIC		
My Commission Expires:	_	

CERTIFICATION OF BIDDER REGARDING EQUAL EMPLOYMENT OPPORTUNITY

INSTRUCTIONS

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

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

	CERTIFICATION OF BIDDER
	CERTIFICATION OF BIDDER
Bidder's Name:	
Address:	
_	
1. Bidder ha	s participated in a previous contract or subcontract subject to the Equal Opportunity Clause.
Yes	_ No
2. Compliar	ce reports were required to be filed in connection with such contract or subcontract.
Yes	_ No
Certification T	he information above is true and complete to the best of my knowledge and belief.
NAME AND TI	TLE OF SIGNER (PLEASE TYPE)
SIGNATURE	DATE

CERTIFICATION OF SUBCONTRACTOR REGARDING EQUAL EMPLOYMENT OPPORTUNITY

INSTRUCTIONS

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

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

	CERTIFICATION OF SUBCONTRACTOR	
Subc	ocontractor's Name:	
Addr	dress:	
1.	Subcontractor has participated in a previous contract or subcontract subject to the Equal Op Clause.	portunity
2.	Yes No Compliance reports were required to be filed in connection with such contract or subcontract Yes No	ract.
 Certi	rtification The information above is true and complete to the best of my knowledge and belie	ef.
NAM	ME AND TITLE OF SIGNER (PLEASE TYPE)	
 SIGN	GNATURE DATE	

CAMPAIGN CONTRIBUTION DISCLOSURE

Pursuant to the Procurement Code, Sections 13-1-28, et seq., NMSA 1978 and NMSA 1978, § 13-1-191.1 (2006), as amended by Laws of 2007, Chapter 234, any prospective contractor seeking to enter into a contract with any state agency or local public body for professional services, a design and build project delivery system, or the design and installation of measures the primary purpose of which is to conserve natural resources must file this form with that state agency or local public body. This form must be filed even if the contract qualifies as a small purchase or a sole source contract. The prospective contractor must disclose whether they, a family member or a representative of the prospective contractor has made a campaign contribution to an applicable public official of the state or a local public body during the two years prior to the date on which the contractor submits a proposal or, in the case of a sole source or small purchase contract, the two years prior to the date the contractor signs the contract, if the aggregate total of contributions given by the prospective contractor, a family member or a representative of the prospective contractor to the public official exceeds two hundred and fifty dollars (\$250) over the two year period.

Furthermore, the state agency or local public body may cancel a solicitation or proposed award for a proposed contract pursuant to Section 13-1-181 NMSA 1978 or a contract that is executed may be ratified or terminated pursuant to Section 13-1-182 NMSA 1978 of the Procurement Code if: 1) a prospective contractor, a family member of the prospective contractor, or a representative of the prospective contractor gives a campaign contribution or other thing of value to an applicable public official or the applicable public official's employees during the pendency of the procurement process or 2) a prospective contractor fails to submit a fully completed disclosure statement pursuant to the law.

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

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

The following definitions apply:

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

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

organization that sponsors the committee.

'Family member" means spouse, father, mother, child, father-in-law, mother-in-law, daughterson-in-law of (a) a prospective contractor, if the prospective contractor is a natural person; or (b) anowner of a prospective contractor.

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

"Prospective contractor" means a person or business that is subject to the competitive sealed proposal process set forth in the Procurement Code or is not required to submit a competitive sealed proposal because that person or business qualifies for a sole source or a small purchase contract.

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

Name(s) of Applicable Public Official(s) if any: ______

(Completed by State Agency or Local	al Public Body)
DISCLOSURE OF CONTRIBUTION	ONS BY PROSPECTIVE CONTRACTOR:
Contribution Made By:	
Relation to Prospective Contractor:	
Date Contribution(s) Made:	
Amount(s) of Contribution(s)	
Nature of Contribution(s)	
Purpose of Contribution(s)	
(Attach extra pages if necessary)	
Signature	Date
Title (position)	

--OR--

NO CONTI DOLLARS representative	(\$250)								
Signature		 	_	Ī	Date	 	 		
Title (Position	 ı)	 	_						

AGREEMENT BETWEEN OWNER AND CONTRACTOR

AGREEMENT FORMS - LUMP SUM PRICE OR UNIT PRICE Section 00510



Contract No.

- ·	e to this document, other than the typical construction items for which the contractor is bidding and/or onsent of the Local Government Division, DFA shall render this document null and void]
This Agreement entered into this	day of, 20, by and between the parties as follows:
THE OWNER: Santa Fe County Growth Man 100 Catron Street Santa Fe, NM 87501	THE CONTRACTOR:
Telephone:	Telephone:
E-mail address:	E-mail address:
For the following Project:	
Project Number:	ARCHITECT/ENGINEER OF RECORD:
Te	elephone: 505-830-5400
	-mail address:_ nris.rodriguez@hdrinc.com

RECITALS

WHEREAS,	 	

(insert funding authority); and

WHEREAS, the Owner, through its Mayor/ Chairman, is authorized to enter into a construction contract for the Project pursuant to Sections 13-1-100 NMSA 1978; and

WHEREAS, the Owner has let this contract according to the established state and local purchasing procedures for contracts of the type and amount let; and

WHEREAS, award of the construction contract on this Project was approved by the Governing Body at its meeting of ______, 20___;

The OWNER and the CONTRACTOR agree as set forth below.

ARTICLE 1 THE CONTRACT DOCUMENTS

- 1.1 The Contract Documents consist of the following:
- ➢ Bid Form
- > This Agreement
- > Performance Bond
- ➤ Labor and Material Payment Bonds
- ➤ Agent's Affidavit
- > Certificate of Insurance
- ➤ Assignment of Antitrust Claims
- > Table A Subcontracts Breakdown
- ➤ Table B Estimated Project Workforce Breakdown
- ➤ Notice of Award
- ➤ Notice to Proceed
- Conditions of the Contract (General,
- Supplementary and Other Conditions)
- Drawings
- > Specifications
- ➤ All Addenda Issued Prior to and
- All Modifications Issued after Execution of this Agreement
- ➤ Federal requirements, certifications and forms required by the CDBG program

These documents form the Contract, and all are as fully a part of the Contract as if attached to this Agreement or repeated herein. An enumeration of the Contract Documents appears in Article 7 of this Agreement.

ARTICLE 2 THE WORK

2.1 The Contractor shall perform all the Work required by the Contract for the following: Santa Fe County will construct a regional well in Glorieta, NM as part of a system-wide capital improvement program to upgrade the Greater Glorieta Mutual Domestic Water Consumer Association's (MDWCA) infrastructure and water quality. The well will be located at the site of the MDWCA's existing well at 80 Avenida Ponderosa, Glorieta, NM 87535 or approximately 35.574079 latitude and -105.76012 longitude. This project will replace the existing well with a deep water supply well (at a depth of 1,200-1,500 ft. into the Madera formation) which will directly benefit the combined Glorieta Village and Estates communities as a long term water source to address the public health risk of elevated radium above drinking water standards, a regional water supply source for both communities in the near term, a potential water source of East Glorieta should that subsystem be physically connected in the future, and a source of system redundancy for emergency purposes. The project will include siting and drilling a hole approximately 14 in. in width and 1,200 ft. in depth into the Madera Formation and constructing a water supply well and appurtenances including a well head, pump, approximately 50 ft. of pipe and fittings to connect to the existing distribution system. The well and connections will be fenced and the area graded for positive drainage following construction of the well. A Preliminary Engineering Report, complete with a geologic formation study, has been completed.

ARTICLE 3 TIME OF COMMENCEMENT AND SUBSTANTIAL COMPLETION

3.1 The Work to be performed under the contract shall commence not later than ten (10) consecutive calendar
days after the date of written Notice to Proceed.
Substantial Completion shall be achieved not later than
calendar days after the date of
written Notice to Proceed, except as hereafter extended
by valid written Change Order by the Owner.
3.2 Should the Contractor neglect, refuse, or otherwise
fail to complete the Work within the time specified in this
article, the Contractor agrees, in partial consideration for
the award of the Contract, to pay to the Owner the
amount of Dollars
(\$) per consecutive calendar day, not as a

penalty, but as liquidated damages for such breach of the

Contract.

ARTICLE 4 CONTRACT SUM

11 The Owner shall pay the Contractor in augment

funds for the performance of the Work, subject to additions and deductions by Change Order as provided in the Contract, the Contract Sum of		
 Dollars (\$).		
4.2 The Contract sum is de	etermined as follows:	
Base Bid	\$	
Alternatives (if any)	\$	
NM GRT @ %	\$	
Contract Sum	\$	
ADIEN	CLES	

ARTICLE 5 PROGRESS PAYMENTS

- 5.1 Based upon Applications for Payment submitted to the Architect/Engineer by the Contractor and Certificates for Payment issued by the Architect/Engineer, the Owner shall make progress payments on account of the Contract Sum to the Contractor as provided in the Contract for the period ending the 5th day of the month as follows:
- 5.2 Not later than thirty (30) working days following receipt by the Owner of an undisputed Application for Payment or as stated in Paragraph 25 of the Supplemental General Conditions, one hundred percent (100%) of the portion of the Contract Sum properly allocable to labor, materials, and equipment incorporated in the Work and one hundred percent (100%) of the portion of the Contract Sum properly allocable to materials and equipment suitably stored at the site or some other location agreed upon in writing for the period covered by the Application for Payment, less the aggregate of previous payments made by the Owner; less such amounts as the Architect/ Engineer shall determine for all incomplete Work and unsettled claims as provided in the Contract Documents (Section 57-28-5 NMSA 1978). (48 CFR 52.232-27) (Title 5 Part 1315.14).
- 5.2.1 When making payments, an owner, contractor or subcontractor shall not retain, withhold, hold back or in any other manner not pay amounts owed for work performed. For additional information regarding retainage and

the Prompt Payment Act refer to Section 57-28-5 NMSA 1978.

ARTICLE 6 FINAL PAYMENT

6.1 Final payment, constituting the entire unpaid balance of the Contract Sum, shall be paid by the Owner to the Contractor within thirty (30) calendar days after notification of the Owner by the Architect/Engineer that all incomplete and unacceptable work that was noted during the Substantial Completion Inspection and listed on the attachment to the Certificate of Substantial Completion has been corrected, and provided the Contract has been fully performed and a final Certificate for Payment has been issued by the Architect/Engineer and final monitoring and close-out by the Funding Agency. In addition, the Contractor shall provide to the Owner a certified statement of Release of Liens (AIA Document G706A or approved form) and Consent of Surety.

ARTICLE 7 GENERAL AND SPECIAL PROVISIONS

- 7.1 This Agreement shall be governed exclusively by the provisions hereof and by the laws of the State of New Mexico as the same from time to time exist.
- 7.2 Terms used in this Agreement that are defined in the Conditions of the Contract shall have the meanings designated in those Conditions.
- 7.3 As between the parties to this Agreement. As to all acts or failures to act by either party to this Agreement, any applicable statute of limitations shall commence to run and any alleged cause of action shall be deemed to have accrued in any and all events not later than the relevant Date of Substantial Completion of the Work; and as to any acts or failures to act occurring after the relevant Date of Substantial Completion, not later than the date of the Owner's approval of the Final Certificate of Payment.
- 7.4 The Contractor shall hold harmless and indemnify the Owner against any and all injury, loss, or damage, including cost of defense including but not limited to court costs and attorneys' fees arising out of the negligent acts, errors, or omissions of the Contractor.
- 7.5 This Agreement shall not become effective until approved by the governing body; and signed by all parties required to sign this Agreement and reviewed by

the Funding Agency.

- 7.6 The Contractor and his agents and employees are independent contractors and are not employees of the Owner. The Contractor and his agents and employees shall not accrue leave, retirement, insurance, bonding, use of Owner vehicles, or any other benefits afforded to employees of the Owner as a result of this Agreement.
- 7.7 The Contractor, upon final payment of the amounts due under this Agreement, releases the Owner, his officers and employees from his liabilities and obligations arising from or under this Agreement, including but not limited to all damages, losses, costs, liability, and expenses, including but not limited to attorneys' fees and costs of litigation that the Contractor may incur.
- 7.8 The Contractor agrees not to purport to bind Owner to any obligation not assumed herein by Owner unless the Contractor has express written authority to do so, and then only within the strict limits of that authority.
- 7.9 Notices. All notices herein provided to be given, or which may be given, by either party to the other shall be deemed to have been fully given when made in writing and deposited in the United States mail, postage prepaid in the instance of notice of termination of work also by certified mail and addressed as shown on the title page of this Agreement.
- 7.10 Nothing herein contained shall preclude the giving of any such written notice by personal service. The address to which notices shall be mailed to either party may be changed by written notice given by such party to the other as hereinabove provided.
- 7.11 Gender Singular/Plural. Words of any gender used in this Agreement shall be held and construed to include any other gender, and words in the singular number shall be held to include the plural, unless the context requires otherwise.
- 7.12 Captions and Section Headings. The captions and section headings contained in this Agreement are for convenience of reference only, and in no way limit, define, or enlarge the terms, scope, and conditions of this Agreement.
- 7.13 This document shall be executed in no less than three (3) counterparts, each of which shall be deemed an original.

- 7.14 Certificates and Documents Incorporated. All certificates and documentation required by the provisions of this Agreement shall be attached to this Agreement at the time of execution and are hereby incorporated by reference as though set forth in full in this Agreement to the extent they are consistent with its conditions and terms.
- 7.15 Separability. If any clause or provision of this Agreement is illegal, invalid, or unenforceable under present or future laws effective during the term of this Agreement, then and in that event it is the intention of the parties hereto that the remainder of this Agreement shall not be affected thereby.
- 7.16 Waiver. No provision of this Agreement shall be deemed to have been waived by either party unless such waiver be in writing signed by the party making the waiver and addressed to the other party; nor shall any custom or practice which may evolve between the parties in the administration of the terms hereof be construed to waive or lessen the right of either party to insist upon performance by the other party in strict accordance with the terms hereof. Further, the waiver by any party of a breach by the other party of any term, covenant, or condition hereof shall not operate as a waiver of any subsequent breach of the same or any other term, covenant, or condition thereof.
- 7.17 Entire Agreement. This Agreement represents the entire contract between the parties and, except as otherwise provided herein, may not be amended, changed, modified, or altered without the written consent of the parties hereto. This Agreement incorporates all of the conditions, agreements, and understandings between the parties concerning the subject matter of this Agreement, and all such conditions, understandings, and agreements have been merged into this written Agreement. No prior condition, agreement, or understanding, verbal or otherwise, of the parties or their agents shall be valid or enforceable unless embodied in this written Agreement.
- 7.18 Interchangeable Terms. For purposes of all provisions within this Agreement and all attachments hereto, the terms "Agreement" and "Contract" shall have the same meaning and shall be interchangeable.
- 7.19 Words and Phrases. Words, phrases, and abbreviations which have well-known technical or trade meanings used in the Contract Documents shall be used according to such recognized meanings. In the event of a conflict, the more stringent meaning shall govern.

7.20 Relationship of Contract Documents. The Contract Documents are complementary, and any requirement of one contract document shall be as binding as if required by all.

7.21 Pursuant to §13-1-191 NMSA 1978, reference is hereby made to the criminal laws of New Mexico, including §§30-14-1, 30-24-2, and 30-41-1 through 3 NMSA 1978, which prohibit bribes, kickbacks, and gratuities, violation of which constitutes a felony. Further, the Procurement Code, §§13-1-28 through 13-1-199 NMSA 1978, imposes civil and criminal penalties for its violation.

7.22 The Contract Documents, which constitute the entire Contract between the Owner and the Contractor, are listed in Article 1 and, except for Modifications issued after execution of this Agreement, are enumerated as follows:

7.23 The following documents bound in the Project Manual:

<u>Documents</u>		Section
Bid Form		00310
Agreement between Owner		
and Contractor		00510
Performance Bond		00621
Labor and Material Payment Bond		00621
Agent's Affidavit		00422
Certificate of Insurance		-
Assignment of Antitrust Claims		00661
Table A Subcontracts Breakdown	-	
Table B Estimated Project Workforce	-	
Breakdown		
General Conditions		00700
Supplementary Conditions		00820

Technical Specifications -

OWNER:			
		Date:	
	Mayor/Chairperson		
Reviewed:	As to Legal Form and Sufficiency		
By:			
Title:		Date:	
	As to Budget Sufficiency		
By:			
Title:		Date:	
APPROVED : This A	agreement is entered into as of the day and year fi	rst written above.	
CONTRACTOR:			
By:			
Title:		Date:	
Federal Tax I	D N°: S	tate Tax ID N°:	
AGENCY CONCUR	RENCE:		
By:			
	=-		

	Date:

[Instructions: This page to be replaced by Architect/Engineer with *AIA Document A311*, form of **Performance Bond** or similar documents and labeled as pages 4A-45]

[Instructions: This page to be replaced by Architect/Engineer with *AIA Document A311*, form of **Labor and Material Payment Bond** or similar documents and labeled as page 4A-47]

RIDER TO BONDS

BONDS, CERTIFICATES AND NOTICES Section 00621

This Form Must Be Used By Surety

Performance Bond N°.	Labor & Material Payment Bond N°	
Obligee (Owner):		
Surety		
Surety's New Mexico Agent:		
Name:		
Address:		
Telephone N°. ()		
The Surety and Principal stipulate as follows	3:	
or sufficient Surety, the Owner may require to (10) days; and thereupon, if the Owner shall security is not furnished within said time, the on force account, or letting the same by conforthe delinquent Contractor in completing some Surety hereby stipulates and agrees that Sum, Conditions of the Contract, or the scopaffect its obligation on this bond, and it doe	so order, security shall be furnished. If such e Owner may, at its option, take over and Stract, and shall be entitled to use any equipaid Work. It no properly authorized Change Order alte to of nature of the Work to be performed the	ch new or additional bond or urety, either doing the Work ment, materials and supplies ring Contract Time, Contract
Signed and sealed this day of	, 20	
	(Principal)	(Seal)
(Witness)		
	(Title)	
(Witness)		
	(Surety)	(Seal)
	(Title)	

AGENT'S AFFIDAVIT

SUPPLEMENTS TO BID FORMS Section 00422

[To be filled in by Agent]	This Form Must Be Used By Surety
STATE OF)	
COUNTY OF) ss.	
, being first duly sworn, deposes and s	ays that he/she is the duly
appointed agent for	
and is licensed in the State of New Mexico.	
Deponent further states that a certain bond given to indemnify the Owner in connection with	h the construction of
	dated the
day of, 20, executed by	
, Contractor, as principal, and	d
, as surety, signed by this De	eponent; and Deponent
further states that said bond was written, signed, and delivered by him/her; that the premiur	m on the same has been
or will be collected by him/her; and that the full commission thereon has been or will be retained.	ined by him/her.
SUBSCRIBED AND SWORN TO BEFORE ME THIS DAY OF	, 20
NOTARY PUBLIC	
MY COMMISSION EXPIRES:	[SEAL]
Agent's Address:	
Telephone () Fax ()	

[This form must be used for all bonds required in the Bidding Documents.

Power of Attorney for person signing for Surety Company must be attached to bond. Power of Attorney for person signing for Surety Company must be attached to bond]

GUARANTY BOND/MAINTENANCE BOND

BONDS, CERTIFICATES, AND NOTICES Section 00600

GUARANTY BOND

Section 00630

MAINTENANCE BOND

Section 00640

(Instructions: This is a listing of forms that are not supplied. If required by the Owner or the Architect/Engineer as part of the Bidding Documents, this page should be replaced by the appropriate forms - special mention under Section 7, Instructions to Bidders, and on the Bid Form, if applicable, should be made by the Architect/Engineer.)

[Instructions: this page to be replaced by Architect/Engineer with AIA Document G705, form of Certificate of Insurance or similar form and labeled as page 53. A/E to fill in minimum amounts of insurance required in the Supplemental General Conditions]

ASSIGNMENT OF ANTITRUST CLAIMS

(To be executed by Suppliers, Subcontractors, and Sub-Subcontractors of Contractors)

BONDS, CERTIFICATES, AND NOTICES Section 00661

This Form Must Be Submitted
Within 10 Days of Bid Award

Duoisati	Duo io at Numban
Project:	Project Number:
	agrees that any and all claims which it may have or may
purchased in connection with the above-reference extent that such overcharges are passed on It is agreed that the undersigned retain	remed project are hereby assigned to the Owner, but only to the to the Owner. as all rights to any such antitrust claims to the extent of any cluding the right to any treble damages attributable thereto.
Signed by Individual Empowered to Obligate Supplier, Subcontractor, or Sub-Subcontractor	Firm: By: Title: Date:

CERTIFICATE OF OWNER'S ATTORNEY

BONDS, CERTIFICATES, AND NOTICES Section 00670

I, the unde	ersigned,	, the	duly authorized and acting
legal repre	esentative of the (municipality/co	ounty) of	
do hereby	certify as follows:		
of the opin acting thro authority to foregoing	nion that each of the aforesaid a ough their duly authorized repress o execute said agreements on be	greements has been duly executentatives; that said representatives that respective parties legally binding obligation upon	-
Name:			
Address:			
Date:		Telephone No.	

TABLE A SUBCONTRACTS BREAKDOWN

For the Period Covering	, 20 through	, 20
-	[Duration of the CDBG-Assisted Project]	

Column 1	Column 2	Column 3	Column 4	Column 5
Type of Contract	Total Number of Contracts	Total Approximate Dollar (\$) Amount	Estimated Number of Contracts to Project Area Businesses*	Estimated Dollar (\$) Amount to Project Area Businesses*
* The Project Area is o	coextensive with	the Municipality/County	y of	_'s boundaries.
Company		-		

EEO Officer (Signature)

Date

Project Number

Rev 11-19 4A-69

Project Name

TABLE B ESTIMATED PROJECT WORKFORCE BREAKDOWN

Column 1	Column 2	Column 3	Column 4	Column 5
Job C ategory	Total Estimated Positions	Number Positions Currently Occupied by Permanent Employees	Number Positions Not Currently Occupied	Number Positions to be filled with LIPAR*
Officers/Supervisors				
Professionals				
Technicians				
Housing Sales/Rental Management				
Office Clerical				
Service Workers				
Others				
TRADE:				
Journeymen				
Helpers				
Apprentices				
Maximum Number of Trainees				
Others				
TRADE:				
Journeymen				
Helpers				
Apprentices				
Maximum Number of Trainees				
Others				

*Lower Income Project Area	Residents.	Individuals	residing w	vithin the	Municipali	ty/County	of
	whose fami	ily income o	does not e	exceed 8	0% of the r	nedian ind	come of the
State.							

Company

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GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM

GENERAL CONDITIONS OF THE CONTRACT Section 00700

TABLE OF CONTENTS

nts

- 2. Definitions
- 3. Additional Instructions and Detail Drawings
- 4. Shop/Setting Drawings
- 5. Materials/Services/Facilities
- 6. Contractor's Title to Materials
- 7. Inspection/Testing of Materials
- 8. "Or Equal" Clause
- 9. Patents
- 10. Survey/Permits/Regulations
- 11. Contractor's Obligations
- 12. Weather Conditions
- 13. Protection of Work and Property, Emergency
- 14. Inspection
- 15. Reports/Records/Data
- 16. Superintendence by Contractor
- 17. Changes in Work
- 18. Extras
- 19. Time for Completion and Liquidated Damages
- 20. Correction of Work
- 21. Subsurface Conditions Found Different
- 22. Claims for Extra Cost
- 23. Right of Owner to Terminate
- 24. Construction Schedule/Periodic Estimate
- 25. Payments to Contractor

- 26. Acceptance of Final Payment as Release
- 27. Payments by Contractor
- 28. Insurance
- 29. Contract Security
- 30. Additional/Substitute Bond
- 31. Assignments
- 32. Mutual Responsibility of Contractors
- 33. Separate Contracts
- 34. Subcontracting
- 35. Architect/Engineer Authority
- 36. Stated Allowances
- 37. Use of Premises/Removal of Debris
- 38. Quantities of Estimate
- 39. Lands and Rights of Way
- 40. General Guaranty
- 41. Conflicting Conditions
- 42. Notice of Service Thereof
- 43. Required Provisions
- 44. Protection of Lives/Health
- 45. Subcontracts
- 46. Interest of Member of or Delegate to Congress
- 47. Other Prohibited Interests
- 48. Use and Occupancy Prior to Acceptance

1. Contract and Contract Documents

- 1.1 The project to be constructed pursuant to this contract will be financed with the assistance of the New Mexico Small Cities Community Development Block Grant Program and is subject to all applicable federal and state laws and regulations. State administered Community Development Block Grant monies are federal funds. Section □13-1-30B NMSA 1978 of the Procurement Code stipulates: "When a procurement involves the expenditure of federal funds, the procurement shall be conducted in accordance with mandatory applicable federal law and regulations. When mandatory applicable federal law or regulations are inconsistent with the provisions of the Procurement Code, compliance with federal law or regulations shall be compliance with the Procurement Code."
- 1.2 The applicable governing federal procurement standards are defined in OMB Circular A-102,

Attachment O. When federal and state procurement policies are different, the more restrictive policies apply so long as they are consistent with Circular A-102 standards.

1.3 The plans, specifications and addenda, hereinafter enumerated in Paragraph 1 of the Supplemental General Conditions shall form part of this Contract and the provisions thereof shall be as binding upon the parties hereto as if they were herein fully set forth. The table of contents, titles, headings, running headlines and marginal notes contained herein and in said documents are solely to facilitate reference to various provisions of the Contract Documents and in no way affect, limit or cast light on the interpretation of the provisions to which they refer.

2. Definitions

The following terms as used in this contract are

respectively defined as follows:

- 2.1 *Contractor* is a person, firm or corporation with whom the contract is made by the Owner.
- 2.2 Subcontractor is a person, firm or corporation supplying labor and materials or only labor for work at the site of the project for, and under separate contract or agreement with, the Contractor.
- 2.3 Work on (at) the project is work to be performed at the location of the project, including the transportation of materials and supplies to or from the location of the project by employees of the Contractor and any Subcontractor.

3. Additional Instructions and Detail Drawings

The Contractor will be furnished additional 3.1 instructions and detail drawings as necessary to carry out the work included in the contract. The additional drawings and instructions thus supplied to the Contractor will coordinate with the Contract Documents and will be so prepared that they can be reasonably interpreted as part thereof. The Contractor shall carry out the work in accordance with the additional detail drawings and instructions. The Contractor and the Architect/Engineer will prepare jointly (a) a schedule, fixing the dates at which special detail drawings will be required, such drawings, if any, to be furnished by the Architect/ Engineer in accordance with said schedule, and (b) a schedule fixing the respective dates for the submission of shop drawings, the beginning of manufacture, testing and installation of materials, supplies and equipment, and the completion of the various parts of the work; each such schedule to be subject to change from time to time in accordance with progress of the work.

4. Shop or Setting Drawings

4.1 The Contractor shall submit promptly to the Architect/Engineer two copies of each shop or setting drawing prepared in accordance with the schedule predetermined as aforesaid. After examination of such drawings by the Architect/Engineer and the return thereof, the Contractor shall make such corrections to the drawings as have been indicated and shall furnish the Architect/Engineer with two corrected copies. If requested by the Architect/Engineer the Contractor must furnish additional copies, Regardless of corrections made in or approval given to such drawings by the Architect/Engineer, the Contractor will never the less be

responsible for the accuracy of such drawings and for their conformity to the Plans and Specifications, unless he notifies the Architect/Engineer in writing of any deviations at the time he furnishes such drawings.

5. Materials, Services, and Facilities

- 5.1 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, superintendence, temporary construction of every nature, and all other services and facilities of every nature whatsoever necessary to execute, complete, and deliver the work within the specified time.
- 5.2 Any work necessary to be performed after regular working hours, on Sundays or legal holidays, shall be performed without additional expense to the Owner.

6. Contractor's Title to Materials

6.1 No materials or supplies for the work shall be purchased by the Contractor or by any Subcontractor subject to any chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller. The Contractor warrants that he has good title to all materials and supplies used by him in the work, free from all liens, claims or encumbrances.

7. Inspection and Testing of Materials

- 7.1 All materials and equipment used in the construction of the project shall be subject to adequate inspection and testing in accordance with accepted standards. The laboratory or inspection agency shall be selected by the Owner. The Owner will pay for all laboratory inspection service direct, and not as a part of the contract.
- 7.2 Materials of construction, particularly those upon which the strength and durability of the structure may depend, shall be subject to inspection and testing to establish conformance with specifications and suitability for uses intended.

8. "Or Equal" Clause

8.1 Whenever a material, article or piece of equipment is identified on the plans or in the specifications by reference to manufacturers' or vendors' names, trade names, catalogue numbers, etc., it is intended merely to establish a standard; and, any material, article, or

equipment or other manufacturers and vendors which will perform adequately the duties imposed by the general design will be considered equally acceptable provided the material, article, or equipment so proposed, is, in the opinion of the Architect/Engineer, of equal substance and function. It shall not be purchased or installed by the Contractor without the Architect/Engineer's written approval.

9. Patents

- 9.1 The Contractor shall hold and save the Owner and its officers, agents, servants, and employees harmless from liability of any nature or kind, including cost and expenses for, or on account of, any patented or unpatented invention, process, article, or appliance manufactured or used in the performance of the contract, including its use by the Owner, unless otherwise specifically stipulated in the Contract Documents.
- 9.2 License or Royalty Fees. License and/or Royalty Fees for the use of a process which is authorized by the Owner of the project must be reasonable, and paid to the holder of the patent, or his authorized licensee, direct by the Owner and not be or through the Contractor.
- If the Contractor uses any design, device or materials covered by letters, patent or copyright, he shall provide for such use by suitable agreement with the Owner of such patented or copyrighted design, device or material. It is mutually agreed and understood, that, without exception, the contract prices shall include all royalties or costs arising from the use of such design, device or materials, in any way involved in the work. The Contractor and/or his Sureties shall indemnify and save harmless the Owner of the project from any and all claims for infringement by reason of the use of such patented or copyrighted design, device or materials, or any trademark or copyright in connection with work agreed to be performed under this contract, and shall indemnify the Owner for any cost, expense or damage which it may be obliged to pay by reason of such infringement at any time during the prosecution of the work or after, completion of the work.

10. Surveys, Permits, and Regulations

- 10.1 Unless otherwise expressly provided for in the Specifications, the Owner will furnish to the Contractor all surveys necessary for the execution of the work.
- 10.2 The Contractor shall procure and pay all permits, licenses and approvals necessary for the execution of his

contract.

10.3 The Contractor shall comply with all laws, ordinances, rules, orders, and regulations relating to performance of the work, the protection of adjacent property, and the maintenance of passageways, guard fences or other protective facilities.

11. Contractor's Obligations

- 11.1 The Contractor shall and will, in good workmanlike manner, do and perform all work and furnish all supplies and materials, machinery, equipment, facilities and means, except as herein otherwise expressly specified, necessary or proper to perform and complete all the work required by this contract, within the time herein specified. The Contractor will perform the Work in accordance with the provisions of this contract and said specifications and in accordance with the plans and drawings covered by this contract any and all supplemental plans and drawings, and in accordance with the directions of the Architect/Engineer as given from time to time during the progress of the work. He shall furnish, erect, maintain, and remove such construction plant and such temporary works as may be required.
- 11.2 The Contractor shall observe, comply with, and be subject to all terms, conditions, requirements, and limitations of the contract and specifications, and shall do, carry on, and complete the entire work to the satisfaction of the Architect/Engineer and the Owner.

12. Weather Conditions

12.1 In the event of temporary suspension of work, or during inclement weather, or whenever the Architect/Engineer shall direct, the Contractor will, and will cause his subcontractors to protect carefully his and their work and materials against damage or injury from the weather. If, in the opinion of the Architect/Engineer, any work or materials shall have been damaged or injured by reason of failure on the part of the Contractor or any of his Subcontractors so to protect his work, such materials shall be removed and replaced at the expense of the Contractor.

13. Protection of Work and Property-Emergency

13.1 The Contractor shall at all times safely guard the Owner's property from injury or loss in connection with this contract. He shall at all times safely guard and protect his own work, and that of adjacent property from

damage. The Contractor shall replace or make good any such damage, loss or injury unless such is caused directly by errors contained in the contract or by the Owner, or his duly authorized representatives.

- 13.2 In case of an emergency which threatens loss or injury of property, and/or safety of life, the Contractor will be allowed to act, without previous instructions from the Architect/Engineer, in a diligent manner. He shall notify the Architect/Engineer immediately thereafter. Any claim for compensation by the Contractor due to such extra work shall be promptly submitted to the Architect/Engineer for approval.
- 13.3 Where the Contractor has not taken action but has notified the Architect/Engineer of an emergency threatening injury to persons to damage to the work or any adjoining property, he shall act as instructed or authorized by the Architect/Engineer.
- 13.4 The amount of reimbursement claimed by the Contractor on account of any emergency action shall be determined in the manner provided in Paragraph 17 of the General Conditions.

14. Inspection

14.1 The authorized representatives and agents of the Department of Housing and Urban Development shall be permitted to inspect all work, materials, payrolls, records of personnel, invoices of materials, and other relevant data and records.

15. Reports, Records, and Data

15.1 The Contractor shall submit to the Owner such schedule of quantities and costs, progress schedules, payrolls, reports, estimates, records and other data as the Owner may request concerning work performed or to be performed under this contract.

16. Superintendence by Contractor

16.1 At the site of the work the Contractor shall employ a construction superintendent or foreman who shall have full authority to act for the Contractor. It is understood that such representative shall be acceptable to the Architect/ Engineer and shall be one who can be continued in that capacity for the particular job involved unless he ceases to be on the Contractor's payroll.

17. Changes in Work

17.1 No changes in the work covered by the approved

Contract Documents shall be made without having prior written approval of the Owner and funding agency. Charges or credits for the work covered by the approved change shall be determined by one or more, or a combination of the following methods:

- A. Unit bid prices previously approved.
- B. An agreed lump sum.
- C. The actual cost of:
 - 1. Labor, including foremen;
- 2. Materials entering permanently into the work:
- 3. The ownership or rental cost of construction plant and equipment during the time of use on the extra work:
- 4. Power and consumable supplies for the operation of power equipment;
 - 5. Insurance;
- 6. Social Security and old age and unemployment contributions.
- 17.2 To the costs under 17.1 there shall be added a fixed fee to be agreed upon but not to exceed fifteen percent (15%) of the actual cost of the work. The fee shall be compensation to cover the cost of supervision, overhead, bond, profit and any other general expenses.
- 17.3 The Contractor must submit in writing any request for any modifications to the plans and specifications. Shop drawings that are submitted to the Architect/Engineer for review do not constitute "in writing" unless it is brought to the attention of the Architect/Engineer that specific changes are being proposed. In any event, the responsibility for proposing changes to the plans and specifications by means of shop drawings resides with the Contractor and no additional costs resulting from such changes will be paid to the Contractor.
- 17.4 All change orders will include the total added (or deducted) cost to the Owner, including gross receipts tax. The Owner must approve any increase or decrease to the Construction Cost.
- 17.5 All change orders will be approved by the funding agency (Local Government Division, DFA) before taking effect. Any additional project costs (including GRT) approved by the Owner without LGD approval, shall become the sole responsibility of the Owner.
- 17.6 Any party that becomes aware of an expected project cost over-run, will notify the Owner immediately. The Owner will notify the Funding Agency. If funding is

not already in place to cover the entire over-run, the owner and Architect/Engineer will: 1) amend the scope of work to bring the project back within budget, 2) secure additional and timely funding to cover the entire over-run or 3) deny approval of the change order.

18. Extras

18.1 Without invalidating the contract, the Owner may order extra work or make changes by altering, adding to or deducting from the work, the contract sum being adjusted accordingly, and the consent of the Surety being first obtained where necessary or desirable. All the work of the kind bid upon shall be paid for at the price stipulated in the proposal, and no claims for any extra work or materials shall be allowed unless the work is ordered in writing by the Owner or its Architect/Engineer, acting officially for the Owner, and the price is stated in such order.

19. Time for Completion and Liquidated Damages

- 19.1 It is hereby understood and mutually agreed, by and between the Contractor and the Owner, that the date of beginning and the time for completion as specified in the contract of the work to be done hereunder are *essential conditions* of this contract: and it is further mutually understood and agreed that the work embraced in this contract shall be commenced on a date to be specified in the "Notice to Proceed."
- 19.2 The Contractor agrees that said work shall be prosecuted regularly, diligently, and uninterruptedly at such rate of progress as will insure full completion thereof within the time specified. It is expressly understood and agreed, by and between the Contractor and the Owner, that the time for the completion of the work described herein is a reasonable time for the completion of the same, taking into consideration the average climatic range and usual industrial conditions prevailing in this locality.
- 19.3 If the said Contract shall neglect, fail or refuse to complete the work within the time herein specified, or any proper extension thereof granted by the Owner, then the Contractor does hereby agree, as a part consideration for the awarding of this contract, to pay to the Owner the amount specified in the contract, not as a penalty but as liquidated damages for such breach of contract as hereinafter set forth, for each and every calendar day that the contract shall be in default after the time stipulated in the contract for completing the work.

- 19.4 The said amount is fixed and agreed upon by and between the Contractor and the Owner because of the impracticability and extreme difficulty of fixing and ascertaining the actual damages the Owner would in such event sustain, and said amount is agreed to be the amount of damages which the Owner would sustain and said amount shall be retained from time to time by the Owner from current periodical estimates.
- 19.5 It is further agreed that time is of the essence of each and every portion of this contract and of the specifications wherein a definite and certain length of time is fixed for the performance of any act whatsoever; and where under the contract an additional time is allowed for the completion of any work, the new time limit fixed by such extension shall be of the essence of this contract. Provided, that the Contractor shall not be charged with liquidated damages or any excess cost when the Owner determines that the Contractor is without fault and the Contractor's reasons for the time extension are acceptable to the Owner; Provided, further, that the Contractor shall not be charged with liquidated damages or any excess cost when the delay in completion of the work is due:
- A. To any preference, priority or allocation order duly issued by the Government;
- B. To unforeseeable cause 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 severe weather; and
- C. To any delays of Subcontractors or suppliers occasioned by any of the causes specified in subsections a) and b) of this article:
- 19.6 Provided further, that the Contractor shall, within ten (10) days from the beginning of such delay, unless the Owner shall grant a further period of time prior to the date of final settlement of the contract, notify the Owner, in writing, of the causes of the delay, who shall ascertain the facts and extent of the delay and notify the Contractor within a reasonable time of it decision in the matter.

20. Correction of Work

20.1 All work, all materials, whether incorporated in the work or not, all processes of manufacture, and all methods of construction shall be at all times and places subject to the inspection of the Architect/ Engineer who

shall be the final judge of the quality and suitability of the work, materials, processes of manufacture, and methods of construction for the purposes for which they are used. Should they fail to meet his approval they shall be forthwith reconstructed, made good, replaced and/or corrected, as the case may be, by the Contractor at his own expense. Rejected material shall immediately be removed from the site. If, in the opinion of the Architect/Engineer, it is undesirable to replace any defective or damaged materials or to reconstruct or correct any portion of the work injured or not performed in accordance with the Contract Documents, the compensation to be paid to the Contractor hereunder shall be reduced by such amount as in the judgment of the Architect/Engineer shall be equitable.

21. Subsurface Conditions Found Different

21.1 Should the Contractor encounter sub-surface and/or latent conditions at the site materially differing from those shown on the Plans or indicated in the Specifications, he shall immediately give notice to the Architect/Engineer of such conditions before they are disturbed. The Architect/Engineer will thereupon promptly investigate the conditions, and if he finds that they materially differ from those shown on the Plans or indicated in the Specifications, he will at once make such changes in the Plans and/or Specifications as he may find necessary, any increase or decrease of cost resulting from such changes to be adjusted in the manner provided in Paragraph 17 of the General Conditions.

22. Claims for Extra Cost

22.1 No claim for extra work or cost shall be allowed unless the same was done in pursuance of a written order of the Architect/Engineer approved by the Owner, as aforesaid, and the claim presented with the first estimate after the changed or extra work is done. When work is performed under the terms of subparagraph 17.3 of the General Conditions, the Contractor shall furnish satisfactory bills, payrolls and vouchers covering all items of cost and when requested by the Owner, giver the Owner access to accounts relating thereto.

23. Right of the Owner to Terminate Contract

23.1 In the event that any of the provisions of this contract are violated by the Contractor, or by any of his subcontractors, the Owner may serve written notice upon the Contractor and the Surety of its intention to terminate the contract, such notices to contain the reasons for such intention to terminate the contract, and

unless within ten (10) days after the serving of such notice upon the Contractor, such violation or delay shall cease and satisfactory arrangement of correction be made, the contract shall, upon the expiration of said ten (10) days, cease and terminate. In the event of any such termination, the Owner shall immediately serve notice thereof upon the Surety and the Contractor and the Surety shall have the right to take over and perform the contract; Provided, however, that if the Surety does not commence performance thereof within ten (10) days from the date of the mailing to such Surety of notice of termination, the Owner may take over the work and prosecute the same to completion by contract or by force account for the account and at the expense of the Contractor and the Contractor and his Surety shall be liable to the Owner for any excess cost occasioned the Owner thereby, and in such event the Owner may take possession of and utilize in completing the work, such materials, appliances, and plant as may be on the site of the work and necessary therefor.

24. Construction Schedule and Periodic Estimates

24.1 Immediately after execution and delivery of the contract, and before the first partial payment is made, the Contractor shall deliver to the Owner an estimated construction progress schedule in form satisfactory to the Owner, showing the proposed dates of commencement and completion of each of the various subdivisions of work required under the Contract Documents and the anticipated amount of each monthly payment that will become due the Contractor in accordance with the progress schedule. The Contractor shall also furnish on forms to be supplied by the Owner (a) a detailed estimate giving a complete breakdown of the contract price and (b) periodic itemized estimates of work done for the purpose of making partial payments thereof. The costs employed in making up any of these schedules will be used only for determining the basis of partial payments and will not be considered as fixing a basis for additions to or deductions from the contract price.

25. Payments to Contractor

25.1 Based upon Applications for Payment submitted to the Architect/Engineer by the Contractor and Certificates for Payment issued by the Architect/ Engineer, the Owner shall make progress payments on account of the Contract Sum to the Contractor as provided in the Contract for the period ending the ____ day of the month as follows:

- A. Not later than thirty (30) working days following receipt by the Owner of an undisputed Application for Payment or as stated in Paragraph 3 of the Supplemental General Conditions, one hundred percent (100%) of the portion of the Contract Sum properly allocable to labor, materials, and equipment incorporated in the Work and one hundred percent (100%) of the portion of the Contract Sum properly allocable to materials and equipment suitably stored at the site or some other location agreed upon in writing for the period covered by the Application for Payment, less the aggregate of previous payments made by the Owner; and less such amounts as the Architect/ Engineer shall determine for all incomplete Work and unsettled claims as provided in the Contract Documents.
- B. When making payments, an owner, contractor or subcontractor shall not retain, withhold, hold back or in any other manner not pay amounts owed for work performed. For additional information regarding retainage and the Prompt Payment Act refer to Section 57-28-5 NMSA 1978.
- 25.2 In preparing estimates the material delivered on the site and preparatory work done may be taken into consideration.
- 25.3 All material and work covered by partial payments made shall thereupon become the sole property of the Owner, but this provision shall not be construed as relieving the Contractor from the sole responsibility for the care and protection of materials and work upon which payments have been made or the restoration of any damaged work, or as a waiver of the right of the Owner to require the fulfillment of all of the terms of the contract.
- 25.4 Owner's Right to Withhold Certain Amounts and Make Application Thereof: The Contractor agrees that he will indemnify and save the Owner harmless from all claims growing out of the lawful demands of subcontractors, laborers, workmen, mechanics, material men, and furnisher of machinery and parts thereof, equipment, power tools, and all supplies, including commissary, incurred in the furtherance of the performance of this contract. The Contractor shall, at the Owner's request, furnish satisfactory evidence that all obligations of the nature hereinabove designated have been paid, discharged, or waived. If the Contractor fails so to do, then the Owner may, after having served written notice on the said Contractor, either pay unpaid

bills, of which the Owner has written notice, direct, 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 this contract, but in no event shall the provisions of this sentence be construed to impose any obligations upon the Owner to either the Contractor or his Surety. In paying any unpaid bills of the Contractor, the Owner shall be deemed the agent of the Contractor, and any payment so made by the Owner shall be considered as a payment made under the contract by the Owner to the Contractor and the Owner shall not be liable to the Contractor for any such payments made in good faith.

26. Acceptance of Final Payment Constitutes Release

26.1 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 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. No payment, however, final or otherwise, shall operate to release the Contractor or his sureties from any obligations under this contract or the Performance and Payment Bond.

27. Payments by Contractor

27.1 Contractors and subcontractors shall make prompt payment to their subcontractors and suppliers for amounts owed for work performed on the construction project within seven days after receipt of payment from the owner, contractor or subcontractor. If the contractor or subcontractor fails to pay his subcontractor and suppliers by first-class mail or hand delivery within seven days of receipt of payment, the contractor or subcontractor shall pay interest to his subcontractors and suppliers beginning on the eighth day after payment was due, computed at one and onehalf percent of the undisputed amount per month or fraction of a month until payment is issued. These payment provisions apply to all tiers of contractors, subcontractors and suppliers (Section 57-28-1 et. seq. NMSA 1978).

28. Insurance

28.1 The Contractor shall not commence work under this contract until he has obtained all the insurance required under this paragraph and such insurance has been approved by the Owner, nor shall the Contractor

allow any subcontractor to commence work on his subcontract until the insurance required of the subcontractor has been so obtained and approved.

- 28.2 Compensation Insurance. The Contractor shall procure and shall maintain during the life of this contract Workmen's Compensation Insurance as required by applicable State or territorial law for all of this employees to be engaged in work at the site of the project under this contract and, in case of any such work sublet, the Contractor shall require the subcontractor similarly to provide Workmen's Compensation Insurance for all of the latter's employees to be engaged in such work unless such employees are covered by the protection afforded by the Contractor's Workmen's Compensation Insurance. In case any class of employees engaged in hazardous work on the project under this contract is not protected under the Workmen's Compensation statute, the Contractor shall provide and shall cause each subcontractor to provide adequate employer's liability insurance for the protection of such of his employees as are not otherwise protected.
- 28.3 Contractor's Public Liability and Property Damage Insurance and Vehicle Liability Insurance. The Contractor shall procure and shall maintain during the life of this contract Contractor's Public Liability Insurance, Contractor's Property Damage Insurance and Vehicle Liability Insurance in the amounts specified in the Supplemental General Conditions.
- 28.4 Subcontractor's Public Liability and Property Damage Insurance and Vehicle Liability Insurance. The Contractor shall either 1) require each of his subcontractors to procure and to maintain during the life of his subcontract, Subcontractor's Public Liability and Property Damage Insurance and Vehicle Liability Insurance of the type and in the amounts specified in the Supplemental General Conditions specified in subparagraph 28.3 hereof or, 2) insure the activities of his policy, specified in subparagraph 28.3 hereof.
- 28.5 Scope of Insurance and Special Hazards. The insurance require under subparagraphs 28.3 and 28.4 hereof shall provide adequate protection for the Contractor and his subcontractors, respectively, against damage claims which may arise from operations under this contract, whether such operations be by the insured or by anyone directly or indirectly employed by him and, also against any of the special hazards which may be encountered in the performance of this contract as enumerated in the Supplemental General Conditions.

- 28.6 Builder's Risk Insurance (Fire and Extended Coverage). Until the project is completed and accepted by the Owner, the Owner, or Contractor [at the Owner's option as indicated in the Supplemental General Conditions, Form HUD-4238-N] is required to maintain Builder's Risk Insurance (fire and extended coverage) on a 100 percent completed value basis on the insurable portion of the project for the benefit of the Owner, the Contractor, subcontractors as their interests may appear. The Contractor shall not include any costs for Builder's Risk Insurance (fire and extended coverage) premiums during construction unless the Contractor is required to provide such insurance; however, this provision shall not release the Contractor from his obligation to complete, according to plans and specifications, the project covered by the contract, and the Contractor and his Surety shall be obligated to full performance of the Contractor's undertaking. Certificates of insurance acceptable to the Owner shall be filed with the Owner within ten (10) days after receipt of the Notice of Award. These certificates shall contain a provision that coverage's afforded under the policies will not be cancelled unless a least thirty (30) days prior written notice has been given to the Owner. A copy of the Builder's All-Risk Policy, if required, shall be provided to the Owner before any portion of Work is commenced by the Contractor. The original Owner's Protective Liability Insurance Policy shall be provided to the Owner before any portion of the work is commenced by the Contractor.
- 28.7 Payment of Damages. Nothing contained in these insurance requirements is to be construed as limiting the extent of the Contractor's responsibility for payment of damages resulting from his operation under this contract.
- 28.8 Proof of Carriage of Insurance. The Contractor shall furnish the Owner with certificates showing the type, amount, class of operations covered, effective dates and date of expiration of policies. Such certificates shall also contain substantially the following statement: "The insurance covered by this certificate will not be canceled or materially altered, except after ten (10) days written notice has been received by the Owner."

29. Contract Security

29.1 The Contractor shall furnish a performance bond in an amount at least equal to one hundred percent (100%) of the contract prices as security for the faithful performance of this contract and also a payment bond in an amount not less than one hundred percent (100%) of the contract price or in a penal sum not less than that prescribed by state, territorial or local law, as security for

the payment of all persons performing labor on the project under this contract and furnishing materials in connection with this contract. The performance bond and the payment bond may be in one or in separate instruments in accordance with local law.

29.2 A claimant is further defined as set forth in \square Sections 13-4-18 through \square 13-4-20 NMSA 1978. The security is bound by the provisions of \square Sections 13-4-18 through \square 13-4-20 NMSA 1978.

30. Additional or Substitute Bond

30.1 If at any time the Owner for justifiable cause shall be or become dissatisfied with any surety or sureties, then upon the Performance or Payment Bonds, the Contractor shall within five (5) days after notice from the Owner so to do, 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 such an acceptable bond to the Owner.

31. Assignments

31.1 The Contractor shall not assign the whole or any part of this contract or any moneys due or to become due hereunder without written consent of the Owner. In case the Contractor assigns all or any part of any moneys due or to become due under this contract, the instrument of assignment shall contain a clause substantially to the effect that it is agreed that the right of the assignee in and to any moneys due or to become due to the Contractor shall be subject to prior claims of all persons, firms and corporations of services rendered or materials supplied for the performance of the work called for in this contract.

32. Mutual Responsibility of Contractors

32.1 If, through acts of neglect on the part of the Contractor, any other Contractor or any subcontractor shall suffer loss or damage on the work, the Contractor agrees to settle with such other Contractor or subcontractor by agreement or arbitration if such other Contractor or subcontractors will so settle. If such other Contractor or subcontractor shall assert any claim against the Owner on account of any damage alleged to have been sustained, the Owner shall notify the Contractor, who shall indemnify and save harmless the Owner against any such claim.

33. Separate Contract

33.1 The Contractor shall coordinate his operations with those of other Contractors. Cooperation will be required in the arrangement for the storage of materials and in the detailed execution of the work. The Contractor, including his subcontractors, shall keep informed of the progress and the detail work of other Contractors and shall notify the Architect/ Engineer immediately of lack of progress or defective workmanship on the part of other Contractors. Failure of a contractor to keep informed of the work progressing on the site and failure to give notice of lack of progress or defective workmanship by others shall be construed as acceptance by him of the status of the work as being satisfactory for proper coordination with his own work.

34. Subcontracting

- 34.1 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.
- 34.2 The Contractor shall not award any work to any subcontractor without prior written approval of the Owner, which approval will not be given until the Contractor submits to the Owner a written statement concerning the proposed award to the subcontractor, which statement shall contain such information as the Owner may require.
- 34.3 The Contractor shall be as fully responsible to the Owner for the acts and omissions of his subcontractors, and of persons either directly or indirectly employed by them, as he is for the acts and omissions of persons directly employed by him.
- 34.4 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 General Conditions and other 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.
- 34.5 Nothing contained in this contract shall create any contractual relation between any subcontractor and the Owner.

35. Architect/Engineer's Authority

- 35.1 The Architect/Engineer shall give all orders and directions contemplated under this contract and specifications, relative to the execution of the work. The Architect/Engineer shall determine the amount, quality, acceptability, and fitness of the several kinds of work and materials which are to be paid for under this contract and shall decide all questions which may arise in relation to said work and the construction thereof. The Architect/Engineer's estimates and decisions shall be final and conclusive, except as herein otherwise expressly provided. In case any question shall arise between the parties hereto relative to said contract or specifications, the determination or decision of the Architect/Engineer shall be a condition precedent to the right of the Contractor to receive any money or payment for work under this contract affected in any manner or to any extent by such question.
- 35.2 The Architect/Engineer shall decide the meaning and intent of any portion of the specifications and of any plans or drawings where the same may be found obscure or be in dispute. any differences or conflicts in regard to their work which may arise between the Contractor under this contract and other Contractors performing work for the Owner shall be adjusted and determined by the Architect/Engineer.

36. Stated Allowances

36.1 The Contractor shall include in his proposal the cash allowances stated in the Supplemental General Conditions. The Contractor shall purchase the "Allowed Materials" as directed by the Owner on the basis of the lowest and best bid of at least three competitive bids. If the actual price for purchasing the "Allowed Materials" is more or less than the "Cash Allowance," the contract price shall be adjusted accordingly. The adjustment in contract price shall be made on the basis of the purchase price without additional charges for overhead, profit, insurance or any other incidental expenses. The cost of installation of the "Allowed Materials" shall be included in the applicable sections of the Contract Specifications covering this work.

37. Use of Premises and Removal of Debris

37.1 The Contractor expressly undertakes at his own expense:

A. to take every precaution against injuries to persons or damage to property;

- B. to store his apparatus, materials, supplies and equipment in such orderly fashion at the site of the work as will not unduly interfere with the progress of his work or the work of any other contractors;
- C. to place upon the work or any part thereof only such loads as are consistent with the safety of the portion of the work;
- D. to clean up frequently all refuse, rubbish, scrap materials, and debris caused by his operations, to the end that at all times the site of the work shall present a neat, orderly and workmanlike appearance;
- E. before final payment to remove all surplus material, false-work, temporary structures, including foundations thereof, plant of any description and debris of every nature resulting from his operations, and to put the site in a neat, orderly condition.
- F. to effect all cutting, fitting or patching of his work required to make the same to conform to the plans and specifications and, except with the consent of the Architect/Engineer, not to cut or otherwise alter the work of any other Contractor.

38. Quantities of Estimate

38.1 Wherever the estimated quantities of work to be done and materials to be furnished under this contract are shown in any of the documents including the proposal, they are given for use in comparing bids and the right is especially reserved except as herein otherwise specifically limited, to increase or diminish them as may be deemed reasonably necessary or desirable by the Owner to complete the work contemplated by this contract, and such increase or diminution shall in no way vitiate this contract, nor shall any such increase or diminution give cause for claims or liability for damages.

39. Lands and Rights-of-Way

39.1 Prior to the start of construction, the Owner shall obtain all lands and rights-of-way necessary for the carrying out and completions of work to be performed under this contract.

40. General Guaranty

40.1 Neither the final certificate of payment nor any provision in the Contract Documents, nor partial or entire occupancy of the premises by the Owner, shall constitute an acceptance of work not done in accordance with the Contract Documents or relieve the Contractor of liability in respect to any express warranties or responsibility for faulty materials or workmanship. The

Contractor shall remedy any defects in the work and pay for any damage to other work resulting therefrom, which shall appear within a period of one year from the date of final acceptance of the work unless a longer period is specified. The Owner will give notice of observed defects with reasonable promptness.

41. Conflicting Conditions

41.1 Any provisions in any of the Contract Documents which may be in conflict or inconsistent with any of the paragraphs in these General Conditions shall be void to the extent of such conflict or inconsistency.

42. Notice and Service Thereof

42.1 Any notice to any Contractor from the Owner relative to any part of this contract shall be in writing and considered delivered and the service thereof completed, when said notice is posted, by certified or registered mail, to the said Contractor at his last given address, or delivered in person to the said Contractor or his authorized representative on the work.

43. Provision Required by Law Deemed Inserted

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

44. Protection of Lives and Health

44.1 "The Contractor shall exercise proper precaution at all times for the protection of persons and property and shall be responsible for all damages to persons or property, either on or off the site, which occur as a result of his prosecution of the work. The safety provisions of applicable laws and building and construction codes, in addition to specific safety and health regulations described by Chapter XIII, Bureau of Labor Standards, Department of Labor, Part 1518, Safety and Health Regulations for Construction; as outlined in the Federal Register, Volume 36, No. 75, Saturday, April 17, 1971. Title 29 - LABOR, shall be observed and the Contractor shall take or cause to be taken, such additional safety and health measures as the Contracting Authority may determine to be reasonably necessary."

45. Subcontracts

45.1 It is the contractor's responsibility to provide the owner an updated listing of subcontractors or any further subcontracts (Table A) within 10 days of the award.

46. Interest of Member of or Delegate to Congress

46.1 No member of or Delegate to Congress, or Resident Commissioner, shall be admitted to any share or part of this contract or to any benefit that may arise therefrom, but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.

47. Other Prohibited Interests

47.1 No official of the Owner who is authorized in such capacity and on behalf of the Owner to negotiate, make, accept or approve, or to take part in negotiating, making accepting or approving any architectural, engineering, inspection, construction or material supply contract or any subcontract in connection with the construction of the project, shall become directly or indirectly interested personally in this contract or in any part hereof. No officer, employee, architect, attorney, engineer or inspector of or for the Owner who is authorized in such capacity and on behalf of the Owner to exercise any legislative, executive, supervisory or other similar functions in connection with the construction of the project, shall become directly or indirectly interested personally in this contract or in any part thereof, any material supply contract, subcontract, insurance contract, or any other contract pertaining to the project.

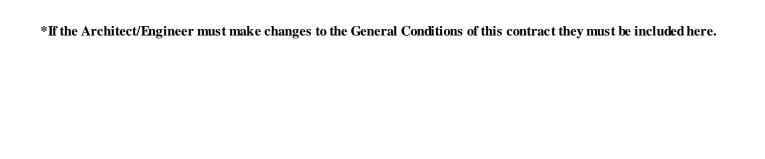
48. Use and Occupancy Prior to Acceptance by Owner

- 48.1 The Contractor agrees to the use and occupancy of a portion or unit of the project before formal acceptance by the Owner, provided the Owner:
- A. Secures written consent of the Contractor except in the event, in the opinion of the Architect/ Engineer, the Contractor is chargeable with unwarranted delay in final cleanup of punch list items or other contract requirements.
- B. Secures endorsement from the insurance carrier and consent of the surety permitting occupancy of the building or use of the project during the remaining period of construction, or,

C. When the project consists of more than one building, and one of the buildings is occupied, secures permanent fire and extended coverage insurance, including a permit to complete construction. Consent of the surety must also be obtained.

MODIFICATIONS TO GENERAL CONDITIONS





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SUPPLEMENTAL GENERAL CONDITIONS

SUPPLEMENTARY CONDITIONS Section 00820

1. Enumeration of Plans, Specifications and

TABLE OF CONTENTS

10. Special Conditions Pertaining to Hazards, Safety

Addenda 2. Stated Allowances	Standards and Accident Prevention 11. Flood Disaster Protection 12. Access to Records and Maintenance of Records		
3. Notice of Extended Payment Provision			
4. Public Liability and Property Damage Insurance	13. Conflict of Interest of Officers or Employees of the		
5. Photographs of Project	Local Jurisdiction, members of the Local Governing Body, or other Public Officials 14. Minority and Female Contractor Association		
6. Schedule of Minimum Hourly Wage Rates			
7. Builder's Risk Insurance			
8. Special Equal Opportunity Provisions	15. Special Hazards		
9. Certification of Compliance with Air and Water Acts			
1. ENUMERATION OF PLANS, SPECIFICATIONS AND ADDENDA	Page to, inclusive		
SPECIFICATIONS AND ADDENDA	ADDENDA		
Following are the Plans, Specifications and Addenda which	ADDENDA		
form a part of this contract, as set forth in Paragraph 1 of	No Date No Date		
the General Conditions, "Contract and Contract	No Date No Date		
Documents":	No Date No Date		
DRAWINGS	2. STATED ALLOWANCES		
General Construction: Nos	A. Pursuant to paragraph 36 of the General		
Heating and Ventilating: Nos.	Conditions, the Contractor shall include the following cash allowances in the Bid:		
Plumbing: Nos	1. For (page of Specifications) \$		
Electrical: Nos	2. For (page of Specifications) \$		
Nos	3. For (page of Specifications) \$		
Nos	4. For (page of Specifications) \$		
SPECIFICATIONS	5. For (page of Specifications) \$		
General Construction: Page to, inclusive	6. For (page of Specifications) \$		
Heating and Ventilating Page to, inclusive	3. NOTICE OF EXTENDED PAYMENT PROVISION		
Plumbing: Page to, inclusive	This contract allows the Owner to make payment within (not to exceed 45 days) days after submission of an undisputed request for payment (Section 57-28-5 B (2)		
Electrical Page to, inclusive	NMSA 1978).		
Page to inclusive			

4. CONTRACTOR'S AND SUBCONTRACTOR'S PUBLIC LIABILITY, VEHICLE LIABILITY, AND PROPERTY DAMAGE INSURANCE

As required under paragraph 28 of the General Conditions, the policy shall be written for not less than the following or greater if required by law:

4.1 Worker's Compensation (including accident and occupational disease coverage):

a.	State	Statutory
b.	Employer's Liability	\$ 100,000 each accident
		\$ 500,000 disease-policy limit
		\$ 100,000 disease-each employee

4.2 Comprehensive General Liability (including Premises Operations; Independent Contractor's Protective; Products and Completed Operations; Broad Form Property Damage):

a. Bodily Injury	\$ 500,000 per person
	\$1,000,000 each occurrence
b. Property Damage	\$ 500,000 each occurrence
	\$ 500,000 annual aggregate

- c. Property Damage Liability Insurance shall provide X, C or coverage as applicable.
- 4.3 Comprehensive Automobile Liability:

a. Bodily Injury	\$ 500,000 per person
	\$1,000,000 each occurrence
b. Property Damage	\$ 500,000 each occurrence
	\$ 500,000 annual aggregate

- 4.4 Umbrella Excess Liability: \$1,000,000 over primary insurance
- 4.5 The Contractor shall either: (1) require each of his subcontractors to procure and to maintain during the life of his subcontract, Subcontractor's Public Liability and Property Damage of the type and in the same amounts as specified in the preceding paragraph, or (2) insure the activities of his subcontractors in his own policy.

5. PHOTOGRAPHS OF PROJECT

As required by the Funding Agency, the Contractor will furnish photographs before construction, during construction and upon completion of the project.

6. SCHEDULE OF OCCUPATIONAL CLASSIFICATIONS AND MINIMUM HOURLY WAGE RATES.

Given on pages _	through	Note:
Applicable federa	al and state regula	tions require that
the higher of the	federal or the stat	e wage rate for each
classification mu	st be paid. See Sec	ction 9 of the
Additional Cond	itions.	

7. BUILDER'S RISK INSURANCE

7.1 As provided in the General Conditions, Paragraph 28, the Contractor will will not* maintain Builder's Risk Insurance (fire and extended coverage) on a 100 percent completed value basis on the insurable portions of the project for the benefit of the Owner, the Contractor, and all subcontractors, as their interests may appear.

(* Check one - to be filled in by Architect/Engineer)

8. SPECIAL EQUAL OPPORTUNITY PROVISIONS - Executive Order 11246

A. Section 202 Equal Opportunity Clause

During the performance of this contract, the Contractor agrees as follows:

- 1. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agree to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- 2. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration without regard to race, color, religion, sex, or national origin.

- 3. The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding a notice to be provided by the Contract Compliance Officer advising the said labor union or workers' representatives of the Contractor's commitment under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- 4. The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and the rules, regulations, and relevant orders of the Secretary of Labor.
- 5. The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the Department and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and others.
- 6. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- 7. The Contractor will include the provisions of the sentence immediately preceding paragraph 1. and the provisions of paragraphs 1 through 7 in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the department may direct as a means of enforcing such provisions, including sanctions for noncompliance. Provided, however, that in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the Department, the Contractor may request the United States to enter into such litigation to protect the interest of the United States.

B. Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity (Executive Order 11246).

- 1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.
- 2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area, are as follows:

Goals for Minority Goals for Female Participation: * % listed by County below Participation: 6.9%			
rarricip	oation. 0.9 /6		
Bernalillo	38.3%	Catron	46.9%
Sandoval	"	Colfax	"
De Baca	"		
Chaves	49.0%	Guadalupe	"
Dona Ana	"	Lincoln	"
Eddy	"	Los Alamos	"
Grant	"	McKinley	"
Hidalgo	"	Mora	"
Luna	"	Rio Arriba	"
Otero	"	San Juan	"
Sierra	"	San Miguel	"
Santa Fe	"		
Lea	31.0%	Socorro	"
Roosevelt	"	Taos	"
Torrance	"		
Curry	11.0%	Valencia	"
Harding	"		
Quay	"		
Union	"		

These goals are applicable to all the Contractor's construction work (whether or not it is federal or federally assisted) performed in the covered area. If the Contractor performs construction work in a geographic area located outside of the covered area, it shall apply the goals established for such geographic area where the work is actually performed. With regard to this second area, the Contractor also is subject to the goals for both its federally involved and non-Federally involved construction.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity

Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals established for the geographic area where the contract resulting from this solicitation is to be performed. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order, and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

- 3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address, and telephone number of the subcontractor; employer identification number; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the contract is to be performed.
- 4. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is (insert description of the geographical areas where the contract is to be performed, giving the State, County, and Municipality, if any).

C. Standard Federal Equal Employment Opportunity Construction Contract Specifications (Executive Order 11246)

- 1. As used in these specifications:
- a. *covered area* means the geographic area described in the solicitation from which this contract resulted;
- b. *Director* means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;
 - c. Employer identification number means the

Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.

d. Minority includes:

- (1) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
- (2) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish culture or origin, regardless of race);
- (3) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands); and
- (4) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
- 2. When the Contractor, or any Subcontractor at any tier, subcontracts a portion of the Work involving any construction trade, is shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
- 3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good

faith efforts to achieve the Plan goals and timetables.

- 4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through 7p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered construction contractors performing contracts in geographical areas where they do not have a Federal or Federally-assisted construction contract shall apply the minority and female goals established for the geographic area where the contract is being performed. Goals are published periodically in the Federal Register in notice form and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.
- 5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.
- 6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.
- 7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:

- a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
- b. Establish and maintain a current list of minority and female recruitment sources, provided written notification to minority and female recruitment sources and to community or its unions have employment opportunities available, and maintain a record of the organizations' responses.
- c. Maintain a current file of the names, addresses, and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source, or community organization and what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.
- d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or female sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
- e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and female, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.
 - f. Disseminate the Contractor's EEO policy by

providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

- g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination, or other employment decisions including specific review of these items with on-site supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
- h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.
- i. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
- j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer, and vacation employment to minority and

female youth both on the site and in other areas of a Contractor's work force.

- k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
- l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
- m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
- n. Ensure that all facilities and company activities are non-segregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
- o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
- p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
- 8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through 7p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the Contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through 7p of these specifications provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and females in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and

female work force participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation shall not be a defense for the Contractor's non-compliance.

- 9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).
- 10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
- 11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
- 12. The Contractor shall not carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended.

D. Civil Rights Act of 1964

Under Title VI of the Civil Rights Act of 1964, no person shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.

E. Section 109 of the Housing and Community Development Act of 1974

No person in the United States shall on the ground of race, color, national origin, religion, or sex be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity funded in whole or in part with funds made available under this title.

F. "Section 3" Compliance in the Provision of Training, Employment and Business Opportunities

- 1. The work to be performed under this contract is on a project assisted under a program providing direct Federal financial assistance from the Department of Housing and Urban Development and is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 170lu. Section 3 requires that to the greatest extent feasible opportunities for training and employment be given lower income residents of the project area and contracts for work in connection with the project be awarded to business concerns which are located in, or owned in substantial part by persons residing in the area of the project.
- 2. The parties to this contract will comply with the provisions of said Section 3 and the regulations issued pursuant thereto by the Secretary of Housing and Urban Development set forth in 24 CFR 134, and all applicable rules and orders of the Department issued thereunder prior to the execution of this contract. The parties to this contract certify and agree that they are under no contractual or other disability which would prevent them from complying with these requirements.
- 3. The Contractor will send to each labor organization or representative of workers with which he has a collective bargaining agreement or other contract or understanding, if any, a notice advising said labor organization or workers' representative of his commitments under this Section 3 clause and shall post copies of the notice in conspicuous places available to employees and applicants for employment or training.
- 4. Compliance with the provisions of Section 3, the regulations set forth in 24 CFR Part 135, and all applicable rules and orders of the Department issued hereunder prior to the execution of the contract, shall be a condition of the Federal financial assistance provided to the project, binding upon the applicant or recipient for such assistance, its successors and assigns. Failure to fulfill these requirements shall subject the applicant or recipient, its contractors or subcontractors, its successors and assigns to those sanctions specified by the grant or loan agreement or

contract through which federal assistance is provided, and to such sanctions as are specified by 24 CFR Part 135.

G. Section 504 Handicapped (if \$ 2,500 or over), Affirmative Action for Handicapped Workers

- 1. The Contractor will not discriminate against any employee or applicant for employment because of physical or mental handicap in regard to any position for which the employee or applicant is qualified. The Contractor agrees to take affirmative action to employ, advance in employment and otherwise treat qualified handicapped individuals without discrimination based upon their physical or mental handicap in all employment practices such as the following: employment upgrading, demotion or transfer, recruitment, advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship.
- 2. The Contractor agrees to comply with the rules, regulations and relevant orders of the Secretary of Labor issued pursuant to this Act.
- 3. In the event of the Contractor's noncompliance with the requirements of this clause, actions for noncompliance may be taken in accordance with the rules, regulations and relevant orders of the Secretary of Labor issued pursuant to this Act.
- 4. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices in a form to be prescribed by the Director, provided by or through the Contracting Officer. Such notices shall state the Contractor's obligation under the law to take affirmative action to employ and advance in employment qualified handicapped employees and applicants for employment, and the rights of applicants and employees.
- 5. The Contractor will notify each labor union or representative of workers with which it has a collective bargaining agreement or other contractual understanding, that the Contractor is bound by the terms of Section 503 of the Rehabilitation Act of 1973, and is committed to take affirmative action to employ and advance physically and mentally handicapped individuals.
 - 6. The Contractor will include the provisions of

this part in every subcontract or purchase order of \$2,500 or more unless exempted by the rules, regulation, or orders of the Secretary issued pursuant to Section 503 of the Act, so that such provisions will be binding upon each subcontractor and vendor. The Contractor will take such action with respect to any subcontract or purchase order as the Director of the Office of Federal Contract Compliance Programs may direct to enforce such provisions, including action for noncompliance.

H. Age Discrimination Act of 1975

No person in the United States shall, on the basis of age, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under, any program or activity receiving Federal financial assistance.

9. CERTIFICATION OF COMPLIANCE WITH AIR AND WATER ACTS

(Applicable to Federal assisted construction contracts and related subcontracts exceeding \$100,000).

Compliance with Air and Water Acts

- A. During the performance of this contract, the Contractor and all subcontractors shall comply with the requirements of the Clean Air Act, as amended, 42 USC 1857 et seq., the Federal Water Pollution Control Act, as amended, 33 USC 1251 et seq., and the regulations of the Environmental Protection Agency with respect thereto, at 40 CFR Part 15, as amended.
- B. In addition to the foregoing requirements, all nonexempt Contractors and Subcontractors shall furnish to the Owner, the following:
- 1. A stipulation by the Contractor or subcontractors, that any facility to be utilized in the performance of any nonexempt contract or subcontract, is not listed on the "List of Violating Facilities" issued by the Environmental Protection Agency (EPA) pursuant to 40 CFR 15.20.
- 2. Agreement by the Contractor to comply with all the requirements of Section 114 of the Clean Air Act, as amended, (42 USC 1857c-8) and Section 308 of the Federal Water Pollution Control Act, as amended, (33 USC 1318) relating to inspection, monitoring, entry, reports and information, as well as

all other requirements specified in said Section 114 and Section 308, and all regulations and guidelines issued thereunder.

- 3. A stipulation that as a condition for the award of the contract, prompt notice will be given of any notification received from the Director, Office of Federal Activities, EPA, indicating that a facility utilized, or to be utilized for the contract, is under consideration to be listed on the EPA "List of Violating Facilities".
- 4. Agreement by the Contractor that he will include, or cause to be included, the criteria and requirements in paragraph a through d of this section in every nonexempt subcontract and requiring that the Contractor will take such action as the Government may direct as a means of enforcing such provisions.

10. SPECIAL CONDITIONS PERTAINING TO HAZARDS, SAFETY STANDARDS AND ACCIDENT PREVENTION

A. Lead-Based Paint Hazards

(Applicable to contracts for construction or rehabilitation of residential structures)

The construction or rehabilitation of residential structures is subject to the HUD Lead-Based Paint regulations, 24 CFR Part 35. The Contractor and Subcontractors shall comply with the provisions for the elimination of lead-based paint hazards under subpart B of said regulations. The Owner will be responsible for the inspections and certifications required under Section 35.14(f) thereof.

B. Use of Explosives

When the use of explosives is necessary for the prosecution of the work, the Contractor shall observe all local, state and federal laws in purchasing and handling explosives. The Contractor shall take all necessary precautions to protect completed work, neighboring property, water lines, or other underground structures. Where there is danger to structures or property from blasting, the charges shall be reduced and the material shall be covered with suitable timber, steel or rope mats.

The Contractor shall notify all Owners of public utility property of intention to use explosives at least eight hours before blasting is done, close to such property. Any supervision or direction of use of explosives by the Architect/Engineer does not in any way reduce the responsibility of the Contractor or his Surety for damages that may be caused by such use.

C. Danger Signals and Safety Devices

The Contractor shall make all necessary precautions to guard against damages to property and injury to persons. He shall put up and maintain in good condition, sufficient red or warning lights at night, suitable barricades and other devices necessary to protect the public. In case the Contractor fails or neglects to take such precautions, the Owner may have such lights and barricades installed and charge the cost of this work to the Contractor. Such action by the Owner does not relieve the Contractor of any liability incurred under these specifications or contract.

11. FLOOD DISASTER PROTECTION

This contract is subject to the requirements of the Flood Disaster Protection Act of 1973 (P.L. 93-234). Nothing included as a part of this contract is approved for acquisition or construction purposes as defined under Section 3(a) of said Act, for use in an area identified by the Secretary of HUD as having special flood hazards which is located in a community not then in compliance with the requirements for participation in the National Flood Insurance Program pursuant to Section 201(d) of said Act; and the use of any assistance provided under this contract for such acquisition or construction in such identified areas in communities then participating in the National Flood Insurance Program shall be subject to the mandatory purchase of flood insurance requirements of Section 102(a) of said Act.

Any contract or agreement for the sale, lease, or other transfer of land acquired, cleared or improved with assistance provided under this Contract shall contain, if such land is located in an area identified by the Secretary as having special flood hazards and in which the sale of flood insurance has been made available under the National Flood Insurance Act of 1968, as amended, 42 U.S.C. 4001 et seq., provisions obligating the transferee and its successors or assigns to obtain and maintain, during the ownership of such land, such flood insurance as required with respect to financial assistance for acquisition or construction purposes under Section 102(a) of the

Flood Disaster Protection Act of 1973.

12. ACCESS TO RECORDS AND MAINTENANCE OF RECORDS

The State grantor agency (funding agency), the Department of Housing and Urban Development, the Comptroller General of the United States, or any of their duly authorized representatives, shall have access to any books, documents, papers and records of the Contractor which are directly pertinent to this specific contract, for the purpose of audits, examinations, and making excerpts and transcriptions. All records connected with this contract will be maintained in a central location by the unit of local government and will be maintained for a period of six (6) years from the official date of close-out of the Grant.

13. CONFLICT OF INTEREST OF OFFICERS OR EMPLOYEES OF THE LOCAL JURISDICTION, MEMBERS OF THE LOCAL GOVERNING BODY, OR OTHER PUBLIC OFFICIALS

No officer or employee of the local jurisdiction or its designees or agents, no member of the governing body, and no other public official of the locality who exercises any function or responsibility with respect to this contract, during his/her tenure or for one year thereafter, shall have any interest, direct or indirect, in

any contract or subcontract, or the proceeds thereof, for work to be performed. Further, the Contractor shall cause to be incorporated in all subcontracts the language set forth in this paragraph prohibiting conflict of interest.

14. MINORITY AND FEMALE CONTRACTOR ASSOCIATIONS

Lists are available from various sources including the state Department of Transportation, the U.S.

Department of Housing and Urban Development, Ft.

Worth Area Office. These lists are provided solely for the benefit of the Contractor for the purpose of assisting him/her in meeting the Equal Opportunity Provisions contained in these Supplemental General Conditions. The lists do not contain a complete listing of minority and female businesses. The information may in some cases be out of date.

15. SPECIAL HAZARDS

The Contractor's and his Subcontractor's Public Liability and Property Damage Insurance shall provide adequate protection against the following special hazards:

[None]

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MODIFICATIONS TO SUPPLEMENTAL GENERAL CONDITIONS

SUPPLEMENTARY CONDITIONS Section 00820

*If the Architect/Engineer must make any modifications to the Supplemental General Conditions of this contract they must be included here.

NON-APPROPRIATIONS CLAUSE

The terms of this Agreement are contingent upon sufficient appropriations and authorization being made by the Legislature of New Mexico for the performance of this Agreement. If sufficient appropriations and authorization are not made by the Legislature, Santa Fe County and the Greater Glorieta Community Regional MDW & SWA may immediately terminate this Agreement by giving Contractor written notice of such termination. The Greater Glorieta Community Regional MDW & SWA's and Santa Fe County's decision as to whether sufficient appropriations are available shall be accepted by the Contractor and shall be final. Contractor hereby waives any rights to assert an impairment of contract claim against the Greater Glorieta Community Regional MDW & SWA, Santa Fe County, the New Mexico Environment Department. or the State of New Mexico in the event of immediate or Early Termination of this Agreement by the Greater Glorieta Community Regional MDW & SWA, Santa Fe County, or the New Mexico Environment Department.

TERMINATION CLAUSE

This contract is funded in whole or in part by funds made available under a New Mexico Environment Department Grant Agreement. Should the New Mexico Environment Department early terminate the grant agreement, Santa Fe County and the Greater Glorieta Community Regional MDW & SWA may early terminate this contract by providing Contractor written notice of such termination. In the event of termination pursuant to this paragraph, the Greater Glorieta Community Regional MDW & SWA's and Santa Fe County's only liability shall be to pay Contractor for acceptable goods delivered and services rendered before the termination date.

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ADDITIONAL CONDITIONS

SUPPLEMENTARY CONDITIONS Section 00830

TABLE OF CONTENTS

- 1. Construction Industries Licensing Act
- 2. Contract Audit
- 3. Assignment of Antitrust Claims
- 4. Bribes, Gratuities, and Kickbacks
- Non-Resident Contractor's Requirements Regarding Gross Receipts Tax Surety Bond
- 6. Contractor's Gross Receipts Tax Registration
- Contracts with Nonresident Persons or Partnerships or Unadmitted Foreign Corporations, Agent for Service of Process
- 8. Safety Standards and Accident Prevention
- 9. Minimum Wage Rates
- 10. Project Identification Sign

1. CONSTRUCTION INDUSTRIES LICENSING ACT

1.1 This Contract is subject to the provisions of the New Mexico Construction Industries Licensing Act (§§60-13-1 to 60-13-59 NMSA 1978), the rules and regulations of the New Mexico Construction Industries Commission and the rules, regulations and codes of the various trade boards adopted pursuant to the Construction Industries Licensing Act.

2. CONTRACT AUDIT

2.1 The Owner shall be entitled to audit the books and records of a Contractor or any Subcontractor under any negotiated Contract or subcontract other than a firm fixed-price Contract to the extent that such books and records relate to the performance of such Contract or subcontract. Such books and records shall be maintained by the Contractor for a period of six years from the date of final payment under the prime Contract and by the Subcontractor for a period of six years from the date of final payment under the subcontract unless a shorter period is otherwise authorized by the Owner in writing (§13-1-161 NMSA 1978).

3. ASSIGNMENT OF ANTITRUST CLAIMS

3.1 All contractor, suppliers, subcontractors agree that any and all claims which it may have or may inure to it for overcharges resulting from antitrust violations as to goods, services and materials purchased in connection with this Project are hereby assigned to the Owner and the funding agency, but only to the extent that such

overcharges are passed on to the Owner. It is agreed that the contractor, supplier, subcontractor or subsubcontractor retains all rights to any such antitrust claims to the extent of any overcharges not passed on to the Owner, including the right to any treble damages attributable thereto.

4. BRIBES, GRATUITIES, AND KICKBACKS

- 4.1 It is illegal in this state for any public employee to solicit or accept anything of value in connection with award of this Contract and for any person to offer or pay anything of value to any such public employee (§§30-24-1 through 2 NMSA 1978).
- 4.2 Pursuant to §13-1-191 NMSA 1978 reference is hereby made to the criminal laws of New Mexico, including §§30-24-1 through 30-24-2, and §§30-41-1 through 30-41-3 NMSA 1978, which prohibit bribes, kickbacks, and gratuities and violation of which constitutes a felony. Further, the Procurement Code, §§13-1-28 through 13-1-199 NMSA 1978, imposes civil and criminal penalties for its violation.

5. NON-RESIDENT CONTRACTOR'S REQUIREMENTS REGARDING GROSS RECEIPTS TAX SURETY BOND

- 5.1 Section 7-1-55A NMSA 1978 provides that any person (as defined in §7-1-3 NMSA 1978) engaged in the construction business who does not have his principal place of business in New Mexico and enters into a prime construction contract to be performed in this state shall, at the time such contract is entered into, furnish the Director of the Revenue Division, Taxation and Revenue Department, or his delegate with a surety bond or other acceptable security in a sum equivalent to the gross receipts tax to be paid under the contract multiplied by the applicable rate of the gross receipts tax imposed by §7-9-4 NMSA 1978 to secure payment of the tax imposed on the gross receipts from the contract, and shall obtain a certificate from the Director of the Revenue Division, Taxation and Revenue Department, or his delegate, that the requirements of this paragraph have been met.
- 5.2 If the total sum to be paid under the contract is changed by ten percent or more after the date the surety bond or other acceptable security is furnished, to the

Director or his delegate, such person shall increase or decrease, as the case may be, the amount of the bond or security within fourteen days after the change (§7-1-55B NMSA 1978).

5.3 In addition to the above requirements, the Contractor will be subject to all the requirements of §7-1-55 NMSA 1978.

6. CONTRACTOR'S GROSS RECEIPTS TAX REGISTRATION

- 6.1 §7-10-4 NMSA 1978 provides that any person (as defined in §7-10-3 NMSA 1978) performing services for the state or its political subdivisions, as those terms are used in the Gross Receipts and Compensating Tax Act (§§7-10-1 through 7-10-5 NMSA 1978) must be registered and be issued an identification number with the Revenue Division of the Taxation and Revenue Department of the state to pay the gross receipts tax.
- 6.2 For information in obtaining the identification number contact: Revenue Processing Division, Taxation and Revenue Department, Manuel Lujan Sr. Building, 1200 St. Francis Drive, Santa Fe, New Mexico 87505, or call (505) 827-0825.
- 6.3 If any person who performs services for the State or its political subdivisions is not registered to pay the gross receipts tax, the Owner shall withhold payment of the amount due until the person has presented evidence of registration with the Revenue Division to pay the gross receipts tax.

7. CONTRACTS WITH NONRESIDENT PERSONS OR PARTNERSHIPS OR UNADMITTED FOREIGN CORPORATIONS, AGENT FOR SERVICE OF PROCESS

Special attention of contractors is called to the requirements of §§ 13-4-21 through 13-4-24 NMSA 1978, whereby a public works contract with a nonresident person or partnership or foreign corporation not authorized to do business in the State shall contain a specific provision designating an agent resident within the State, and his address, upon whom process and writs in any action or proceeding against such business may be served in any action arising out of such contract.

7.1 The Contractor warrants and agrees that he, all subcontractors and any further subcontractors will comply with all applicable provisions of the New Mexico Public Works Minimum Wage Act, §13-4-11 NMSA

1978. The attached Minimum Wage Rate Determinations are declared to be prevailing and apply to all construction. Note: Applicable federal and state regulations require that the higher of the federal or the state wage rate for each classification must be paid.

8. SAFETY STANDARDS AND ACCIDENT PREVENTION

With respect to all work performed under this contract, the Contractor shall:

- A. Comply with the safety standards provisions of applicable laws, building and construction codes and the "Manual of Accident Prevention in Construction" published by the Associated General Contractors of America, the requirements of the Occupational Safety and Health Act of 1970 (P.L. 91-596), and the requirements of Title 29 of the Code of Federal Regulations, 1518 as published in the "Federal Register", Volume 36, No. 75, Saturday, April 17, 1971.
- B. Exercise every precaution at all times for the prevention of accidents and the protection of persons (including employees) and property.
- C. Maintain at his/her office or other well-known place at the job site, all articles necessary for giving first aid to the injured, and shall make standing arrangements for the immediate removal to a hospital or a doctor's care of persons (including employees), who may be injured on the job site. In no case shall employees be permitted to work at a job site before the employer has made a standing arrangement for removal of injured persons to a hospital or a doctor's care.

9. MINIMUM WAGE RATES

- 9.1 Submission of weekly payroll records to the Owner and Department of Workforce Solutions is mandatory. Include the decision number on Contractor's and subcontractor's payrolls. The scale of wages must also be posted in a prominent location at the site.
- 9.2 In the event it is found by the Labor Commission, that any laborer or mechanic employed by the Contractor, subcontractor or any further subcontractors on the site of the project covered by this Contract, has been or is being paid as a result of a willful violation, a rate of wages less than the rate of wages required by the Contract, the Owner may, by written notice to the Contractor, his subcontractor or any further subcontractors if the violation involves a Subcontractor,

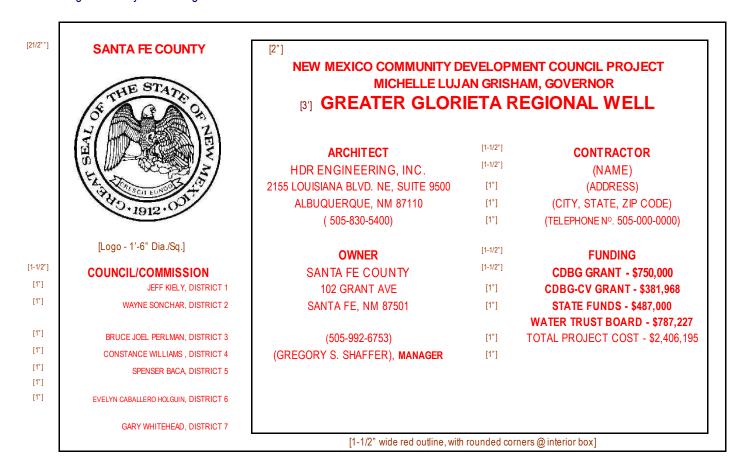
terminate their right to proceed with the Work or such part of the Work as to which there has been a willful failure to pay the required wages and the Owner may prosecute the work to completion by contract or otherwise, and the Contractor, subcontractor or any further subcontractor shall be liable to the Owner and the State of New Mexico for any excess cost occasioned thereby. If the Owner or State of New Mexico is unable to collect from the Subcontractor or any further Subcontractors, the Contractor will be liable for all costs.

10. PROJECT IDENTIFICATION SIGN

10.1 The Contractor as an incidental cost shall provide, erect, and maintain for the duration of the construction project one identification sign at each construction site. The sign shall be painted on one side with a background color of yellow with red lettering of 3/4" thick, not smaller than 4' x 6' nor larger than 4' x 8', marine grade plywood. Each sign shall be mounted on two 4" x 4" posts, with the bottom of the sign at least four feet above grade. The sign shall be mounted level and at the location designated by the Architect/Engineer or the Owner's Project Manager. The sign shall be salvaged to the Owner at the end of the construction project.

Sample Sign

Sign shall be yellow background with red letters



11. OTHER ADDITIONAL CONDITIONS (list):

- 11.1 Federal Labor Standards Provisions
- 11.2 Attachments to Federal Labor Standards Provisions

MODIFICATIONS TO ADDITIONAL CONDITIONS

SUPPLEMENTARY	CONDITIONS
Section 00830	

*If the Architect/Engineer must make any modifications to the Additional Conditions of this contract they must be included here.

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FEDERAL LABOR STANDARDS PROVISIONS

U.S. Department of Housing and Urban Development

HUD4010 (2-84) (HB 1344.1)

Applicability

The Project or Program to which the construction work covered by this contract pertains is being assisted by the United States of America and the following Federal Labor Standards Provisions are included in this Contract pursuant to the Provisions applicable to such Federal assistance.

A. 1.(i)Minimum Wages. All laborers and mechanics employed or working upon the site of the work (or under the United State Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated forbona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)iv); also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made of incurred during such weekly period.

Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR Part 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified foreach classification for the time actually worked therein; provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under 29 CFR Part 5.5(a)(1)(ii) and the Davis-Bacon poster (WH-1321) shall be posted at all time by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(ii)(a)Any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. HUD shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

- (1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
 - (2) The classification is utilized in the area by the construction industry; and
- (3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
- (b) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and HUD or its designee agree on the classification and wage rate (including the amount designated for fringe benefits were appropriate), a report of the action taken shall be sent by HUD or its designee to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30 day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB control number 1215-0140.)
- (c) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and HUD or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), HUD or its designee shall refer the questions, including the views of all interested parties and the recommendation of HUD or its designee, to the Administrator for determination.

The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30 day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

- (d) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(b) or (c) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- (iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- (iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages or any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program. Provided, that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labormay require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)
- 2. Withholding. HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees and helpers required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee or helper, employed or working on the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), all or part of the wages required by the contract, HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased. HUD or its designee may, after written notice to the contractor, disburse such amounts withheld for and on account of the contractor or subcontractor to the respective employees to whom they are due. The Comptroller Ceneral shall make such disbursements in the case of direct Davis-Bacon Act contracts.
- 3. (i) Payrolls and Basic Records. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work (or under the United States Housing Act of 1937, or under the Housing Act of 1949, in the construction or development of the project). Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in Section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions make and actual wages paid. Wheneverthe Secretary of Labor has found under 29 CFR 5.5 (a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140 and 1215-0017).
- (ii)(a) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant, sponsor, or owner, as the case may be for transmission to HUD or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR Part 5.5(a)(3)(i). This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal Stock Number 029-005-00014-1). U.S. Government Printing Office, Washington, DC 20402. For all CDBG projects, the mandatory form WH-347 (Exhibit 4-P Certified Payroll) located on the website link

http://nmdfa.state.nm.us/CDBG Implementation Manual.aspx. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. (Approved by the Office of Management and Budget under OMB Control Number 1215-0149).

- (b) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agency who pays or supervises the payment of the persons employed under the contract and shall certify the following:
- (1) That the payroll for the payroll period contains the information required to be maintained under 29 CFR Part 5.5(a)(3)(i) and that such information is correct and complete;
- (2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid in full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR Part 3;
- (3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
- (c) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 (for all CDBG projects use the mandatory Exhibit 4-P Certified Payroll located on the website link http://nmdfa.state.nm.us/CDBG Implementation Manual.aspx) shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph A.3.(ii)(b) of this section.
- (d) The falsification of any of the above certifications may subject the contractor or subcontractor to civilor criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.
- (iii) The contractor or subcontractor shall make the records required under paragraph A.3.(i) of this section available for inspection, copying, or transcription by authorized representatives of HUD or its designee or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR Part 5.12.
- **4.** (i) **Apprentices and Trainees. Apprentices.** Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to any contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rage on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered programshall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level or progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fine benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- (ii) **Trainees.** Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermine rate for the work performed until an acceptable program is
- (iii) **Equal Employment Opportunity.** The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirement of Executive Order 11246, as amended and 29 CFR Part 30
- **5.** Compliance with Copeland Act Requirements. The contractor shall comply with the requirements 29CFR Part 3 which are incorporated by reference in this contract.
- **6. Subcontracts.** The contractor or subcontractor will insert in any subcontracts the clauses contained in 29CFR 5.5(a)(1) through (10) and such other clauses as HUD of its designee may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractorshall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29CFR Part 5.5.
- **7. Contract Termination; Debarment.** A breach of the contract clauses in 9 CFR 5.5 may be grounds fortermination of the contract and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.
- **8.** Compliance with Davis-Bacon and Related Act Requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract.
- **9. Disputes Concerning Labor Standards.** Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and HUD or its designee, the U.S. Department of Labor, or the employees or their representatives.
- 10. (i) Certification of Eligibility. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.
- (ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of Section 3(a) of the Davis-Bacon Act of 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR 24.
- (iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001. Additionally, U.S. Criminal Code, Section 1010, Title 18, U.S.C., "Federal Housing Administration transaction", provides in part "Whoever, for the purpose of...influencing in any way the action of such Administration...makes, utters or publishes any statement, knowing the same to be false...shall be fined not more than \$5,000 or imprisoned not more than two years, or

- 11. A. Complaints, Proceedings, or Testimony by Employees. No laborer or mechanic to whom the wage, salary, or other labor standards provisions of this contract are applicable shall be discharged or in any other manner discriminated against by the contractor or any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable under this contract to his employer.
- **B.** Contract Work Hours and Safety Standards Act. As used in this paragraph, the terms "laborers" and "mechanics" include watchmen and guards.
- (1) Overtime Requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess or forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- (2) Violation; Liability for Unpaid Wages; Liquidated Damages. In the event of any violation of the clause set forth in subparagraph (1) of this paragraph, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contractor for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards employed in violation of the clause set forth in subparagraph (1) of the paragraph, in the sumof \$27 (or as otherwise specified by the Contract Work Hours and Safety Standards Act (CWHSSA) for each calendarday on which such individual was required or permitted to work in excess of the standard workweek of fourth hours without payment of the overtime wages required by the clause set forth in subparagraph (1) of this paragraph.
- (3) Withholding for Unpaid Wages and Liquidated Damages. HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract orany other Federal contract with the same prime contract, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in subparagraph (2) of this paragraph.
- (4) **Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraph (1) through (4) of this paragraph and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lowertier subcontractor with the clauses set forth in subparagraphs (1) through (4) of this paragraph.

C. Health and Safety

- (1) No laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health and safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation.
- (2) The contractor shall comply with all regulations issued by the Secretary of Labor pursuant to Title 29 Part 1926 (formerly part 1518) and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act (Public Law 91-54, 83 Stat. 96).
- (3) The Contractor shall include the provisions of this Article in every subcontract so that such provisions will be binding on each subcontractor. The contractor shall take such action with respect to any subcontract as the Secretary of Housing and Urban Development or the Secretary of Labor shall direct as a means of enforcing such provisions.

HUD-1010.1 (2-76)

ATTACHMENT TO FEDERAL LABOR STANDARDS PROVISIONS

SO-CALLED "ANTI-KICKBACK ACT" AND REGULATIONS PROMULGATED PURSUANT THERETO BY THE SECRETARY OF LABOR UNITED STATES DEPARTMENT OF LABOR

TITLE 18, U.S.C., section 874

(Replaces section 1 of the Act of June 13, 1934 (48 Stat. 948, 40 U.S.C., sec. 276b) pursuant to the Act of June 25, 1948, 62 Stat. 862)

KICKBACKS FROM PUBLIC WORKS EMPLOYEES

Whoever, by force, intimidation, or threat of procuring dismissal from employment, or by any other manner whatsoever induces any person employed in the construction, prosecution, completion or repair of any public building, public work, or building or work financed in whole or in part by loans or grants from the United States, to give up any part of the compensation to which he is entitled under his contract of employment, shall be fined not more than \$5,000 or imprisoned not more than five years, or both.

SECTION 2 OF THE ACT OF JUNE 13, 1934, AS AMENDED (48 Stat. 948, 62 Stat. 862, 63 Stat, 108, 72 Stat. 967, 40 U.S.C., sec 276c)

The Secretary of Labor shall make reasonable regulations for contractors and subcontractors engaged in the construction, prosecution, completion or repair of public buildings, public works or buildings or works financed in whole or in part by loans or grants from the United States, including a provision that each contractor and subcontractorshall furnish weekly a statement with respect to the wages paid each employee during the preceding week. Section 1001 of Title 18 (United State Code) shall apply to such statements.

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Pursuant to the aforesaid Anti-Kickback Act, the Secretary of Labor, United States Department of Labor, has promulgated the regulations hereinafter set forth, which regulations are found in Title 29, Subtitle A, Code of Federal Regulations, Part 3. The term "this part," as used in the regulations hereinafter set forth, refers to Part 3 last above mentioned. Said regulations are as follows:

TITLE 29 - LABOR

Subtitle A - Office of the Secretary of Labor

PART 3- CONTRACTORS AND SUBCONTRACTORS ON PUBLIC BUILDING OR PUBLICWORKFINANCED IN WHOLE OR IN PART BY LOANS OR GRANTS FROM THE UNITED STATES.

Section 3.1 Purpose and Scope.

This part prescribes "anti-kickback" regulations under section 2 of the Act of June 13, 1934, as amended (40USC. 276c), popularly known as the Copeland Act. This part applies to any contract which is subject to Federal wage standards and which is for the construction, prosecution, completion, or repair of public buildings, public works or buildings or works financed in whole or in part by loans or grants from the United States. The part is intended to aid in

the enforcement of the minimum wage provisions of the Davis-Bacon Act and the various statutes dealing with Federally assisted constructions that contain similar minimum wage provisions, including those provisions which are not subject to Reorganization Plan No. 14 (e.g., the College Housing Act of 1950, the Federal Water Pollution Control Act, and the Housing Act of 1959), and in the enforcement of the overtime provisions of the Contract Work Hours Standards Act whenever they are applicable to construction work. The part details the obligation of contractors and subcontractors relative to the weekly submission of statements regarding the wages paid on work covered thereby; sets forth the circumstances and procedures governing the making of payroll deductions from the wages of those employed on such work; and delineates the methods of payment permissible on such work.

Section 3.2 Definitions.

As used in the regulations in this part:

- (a) The terms "building" or "work" generally include construction activity as distinguished from manufacturing, furnishing of materials, or servicing and maintenance work. The terms include, without limitation, buildings, structures, and improvements of all types, such as bridges, dams, plants, highways, parkways, streets, subways, tunnels, sewers, mains, power lines, pumping stations, railways, airports, terminals, docks, piers, wharves, ways, lighthouses, buoys, jetties, breakwaters, levers, and canals; dredging, shoring, scaffolding, drilling, blasting, excavating, clearing, and landscaping. Unless conducted in connection with and at the site of such building or work as is described in the foregoing sentence, the manufacture or furnishing of materials, articles, supplies, or equipment (whether ornot a Federal or State agency acquires title to such materials, articles, supplies, or equipment during the course of the manufacture or furnishing, or owns the materials from which they are manufactured or furnished) is not a "building" or "work" within the meaning of the regulations in this part.
- (b) The terms "construction," "prosecution," "completion," or "repair" means all types of work done on a particular building or work at the site thereof, including, without limitation, altering, remodeling, painting and decorating, the transporting of materials and supplies to or from the building or work by the employees of the construction contractor or construction subcontractor, and the manufacturing or furnishing or materials, articles, supplies, or equipment on the site of the building or work, by persons employed at the site by the contractor or subcontractor.
- (c) The terms "public building" or "public work" include building or work for whose construction, prosecution, completion, or repair, as defined above, a Federal agency is a contracting party, regardless of whether title thereof is in a Federal agency.
- (d) The term "building or work financed in whole or in part by loans or grants from the United States" includes building or work for whose construction, prosecution, completion, or repair, as defined above, payment orpart payment is made directly or indirectly from funds provided by loans or grants by a Federal agency. The term does not include building or work for which Federal assistance is limited solely to loan guarantees or insurance.
- (e) Every person paid by a contractor or subcontractor in any manner for his labor in the construction, prosecution, completion, or repair of a public building or public work or building or work financed in whole or in part by loans or grants from the United States is "employed" and receiving "wages," regardless of any contracted relationship alleged to exist between him and the real employer.
- (f) The term "any affiliated person" includes a spouse, child, parent, or other close relative of the contractor or subcontractor; a partner or officer of the contractor or subcontractor; a corporation closely connected with the contractor or subcontractor as parent, subsidiary or otherwise, and an officer or agent of such corporation.
- (g) The term "Federal agency" means the United States, the District of Columbia, and all executive departments, independent establishments, administrative agencies, and instrumentalities of the United States and of the District of Columbia, including corporations, all or substantially all of the stock of which is beneficially owned by the United States, by the District of Columbia, or any of the foregoing departments, establishments, agencies and instrumentalities.

Section 3.3 Weekly Statement with Respect to Payment of Wages

- (a) As used in this section, the term "employees" shall not apply to persons in classifications higher than that of laborer or mechanic and those who are the immediate supervision of such employees.
- (b) Each contractor or subcontractor engaged in the construction, prosecution, completion, or repair of any public building or public work, or building or work financed in whole or in part by loans or grants from the United States shall furnish each week a statement with respect to the wages paid each of its employees engaged on workcovered by 29 CFR Parts 3 and 5 during the preceding weekly payroll period. This statement shall be executed by the contractor or subcontractor or by an authorized officer or employee of the contractor or subcontractor who supervises the payment of wages and shall be on form WH 348, "Statement of Compliance", or on an identical form on the back of WH317, "Payroll (For Contractors Optional Use)" or on any form with identical wording. Sample copies of WH 347 and WH 348 may be obtained from the Government contracting or sponsoring agency, and copies of these forms may be purchased at the Government Printing Office.
 - (c) The requirements of this section shall not apply to any contract of \$2,000 or less.
- (d) Upon a written finding by the head of a Federal agency, the Secretary of Labor may provide reasonable limitations, variations, tolerances, and exemptions from the requirements of this section subject to such conditions as the Secretary of Labor may specify.

[20 F.R. 93, Jan. 4, 1964, as amended at 33 F.R. 10186, July 17, 1968]

Section 3.4 Submission of Weekly Statements and the Preservation and Inspection of Weekly Payroll Records.

- (a) Each weekly statement required under section 3.3 shall be delivered by the contractor or subcontractor, within seven days after the regular payment date of the payroll period, to a representative of a Federal or State agency in charge at the site of the building or work, or, if there is no representative of a Federal or State agency at the site of the building of work, the statement shall be mailed by the contractor or subcontractor, within such time, to a Federal or State agency contracting for or financing the building or work. After such examination and check as may be made, such statement, or a copy thereof, shall be kept available, or shall be transmitted together with a report of any violation, in accordance with applicable procedures prescribed by the United States Department of Labor.
- (b) Each contractor or subcontractor shall preserve his weekly payroll records for a period of three years fromdate of completion of the contract. The payroll records shall set out accurately and completely the name and address of each laborer and mechanic, his correct classification, rate of pay, daily and weekly number of hours worked, deductions made, and actual wages paid. Such payroll records shall be made available at all times for inspection by the contracting officer or his authorized representative, and by authorized representatives of the Department of Labor.

Section 3.5 Payroll Deductions Permissible Without Application to or Approval of the Secretary of Labor.

Deductions made under the circumstances or in the situations described in the paragraphs of this section may be made without application and approval of the Secretary of Labor:

- (a) Any deduction made in compliance with the requirements of Federal, State, or local law, such as Federal or State withholding income taxes and Federal social security taxes.
- (b) Any deductions of sums previously paid to the employee as a bona fide prepayment of wages when such prepayment is made without discount or interest. A "bona fide prepayment of wages" is considered to have been made only when cash or its equivalent has been advanced to the person employed in such manner as to give him complete freedom of disposition of the advanced funds.
- (c) Any deduction of amounts required by court process to be paid to another, unless the deduction is in favorof the contractor, subcontractor or any affiliated person, or when collusion or collaboration exists.
- (d) Any deduction constituting a contribution on behalf of the person employed to funds established by the

employer or representatives of employees, or both, for the purpose of providing either from principal or income, or both, medical or hospital care, pensions or annuities on retirement, death benefits, compensation for injuries, illness, accidents, sickness, or disability, or for insurance to provide any of the foregoing, or unemployment benefits, vacation pay, savings accounts, or similar payments for the benefit of employee, their families and dependents; Provided, however, that the following standards are met: (1) The deduction is not otherwise prohibited by law; (2) it is either (i) voluntarily consented to by the employee in writing and in advance of the period in which the work is to be done and such consent is not a condition either for the obtaining of or for the continuation of employment, or (ii) provided for in a bona fide collective bargaining agreement between the contractor or subcontractor and representatives of its employees; (3) no profit or other benefit is otherwise obtained, directly or indirectly, by the contractor or subcontractor or any affiliated person in the form of commissions, dividend, or otherwise; and (4) the deductions shall serve the convenience and interest of the employee.

- (e) Any deduction contributing toward the purchase of United States Defense Stamps and Bonds when voluntarily authorized by the employee.
- (f) Any deduction requested by the employee to enable him to repay loans to or to purchase shares in credit unions organized and operated in accordance with Federal and State credit union statutes.
- (g) Any deduction voluntarily authorized by the employee for the making of contributions to governmental orquasigovernmental agencies, such as the American Red Cross.
- (h) Any deductions voluntarily authorized by the employee for the making of contributions to Community Chests, United Givers Funds, and similar charitable organizations.
- (i) Any deductions to pay regular union initiation fees and membership dues, not including fines or special assessments; Provided however, that a collective bargaining agreement between the contractor or subcontractor and representatives of its employees provides for such deductions and the deductions are not otherwise prohibited by law.
- (j) Any deduction not more than for the "reasonable cost" of board, lodging, or other facilities meeting the requirements of section 3(m) of the Fair Labor Standards Act of 1938, as amended, and Part 531 of this title. When such a deduction is made the additional records required under section 516.27(a) of this title shall be kept.

Section 3.6 Payroll Deductions Permissible with the Approval of the Secretary of Labor

Any contractor or subcontractor may apply to the Secretary of Labor for permission to make any deduction not permitted under Section 3.5. The Secretary may grant permission whenever he finds that:

- (a) The contractor, subcontractor, or any affiliated person does not make a profit or benefit directly or indirectly the deduction either in the form of a commission, dividend, or otherwise;
 - (b) The deduction is not otherwise prohibited by law;
- (c) The deduction is either (1) voluntarily consented to by the employee in writing and in advance of the period in which the work is to be done and such consent is not a condition either for the obtaining of employment or its continuance, or (2) provided for in a bona fide collective bargaining agreement between the contractor or subcontractor and representative of its employees; and
 - (d) The deduction serves the convenience and interest of the employee.

Section 3.7 Applications for the Approval of the Secretary of Labor

Any application for the making of payroll deductions under section 3.6 shall comply with the requirements prescribed in the following paragraphs of this section:

- (a) The application shall be in writing and shall be addressed to the Secretary of Labor.
- (b) The application shall identify the contract or contracts under which the work in question is to be performed. Permission will be given for deductions only on specific, identified contracts, except upon a showing of exceptional circumstances.
- (c) The application shall state affirmatively that there is compliance with the standards set forth in the provisions of section 3.6. The affirmation shall be accompanied by a full statement of the facts indicating such compliance.
- (d) The application shall include a description of the proposed deduction, the purpose to be served thereby, and the classes of laborers or mechanics from whose wages the proposed deduction would be made.
- (e) The application shall state the name and business of any third person to whom any funds obtained from the proposed deductions are to be transmitted and the affiliation of such person, if any, with the applicant.

Section 3.8 Action by the Secretary of Labor Upon Applications.

The Secretary of Labor shall decide whether or not the requested deduction is permissible under provisions of section 3.6; and shall notify the applicant in writing of his decision.

Section 3.9 Prohibited Payroll Deductions.

Deductions not elsewhere provided for by this part and which are not found to be permissible under Section 3.6 are prohibited.

Section 3.10 Methods of Payment of Wages.

The payment of wages shall be by cash, negotiable instruments payable on demand, or the additional forms of compensation for which deductions are permissible under this part. No other methods of payment shall be recognized on work subject to the Copeland Act.

Section 3.11 Regulations Part of Contract.

All contracts made with respect to the construction, prosecution, completion, or repair of any public building or public work or building or work financed in whole or in part by loans or grants from the United States covered by the regulations in this part shall expressly bind the contractor or subcontractor to comply with such of the regulations in this part as may be applicable. In this regard, see section 5.5(a) of the subtitle.

NEW MEXICO WAGE DECISION

SF-22-1772-H

R RELATIONS DIVISION WWW.DWS.STATE.NM.US
adway NE
erque, NM 87102



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

PUBLIC WORKS PROJECT REQUIREMENTS

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

Contracting Agency

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

General Contractor

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

An Equal Opportunity Employer

Page 1 of 2



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

Subcontractor

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

Additional Information

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

CONTACT INFORMATION

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



TYPE "H" - HEAVY ENGINEERING

Effective January 1, 2022

	Base	Fringe	
Trade Classification	Rate	Rate	Apprenticeship
Asbestos workers/Heat & Frost			
Insulators	34.51	12.06	0.60
Asbestos workers/Heat & Frost			
Insulators: Los Alamos County	36.94	12.06	0.60
Boilermaker/blacksmith	34.88	32.28	0.60
Boilermaker/blacksmith: San Juan			
County	35.83	31.88	0.60
Bricklayer/Block layer/Stonemason	25.54	8.81	0.60
Carpenter/Lather	26.48	12.14	0.60
Carpenter: Los Alamos County	29.24	13.94	0.60
Millwright/pile driver	35.08	27.57	0.60
Cement Mason	22.30	7.41	0.60
Electricians-Outside Classifications:			
Zone 1			
Ground man	24.57	11.74	0.60
Equipment Operator	35.25	16.06	0.60
Lineman/technician	44.32	18.08	0.60
Cable Splicer	48.75	19.19	0.60
Electricians-Outside Classifications: Zone 2			
Ground man	24.57	11.74	0.60
Equipment Operator	35.25	16.06	0.60
Lineman/technician	44.32	18.08	0.60
Cable Splicer	48.75	19.19	0.60
Electricians-Outside Classifications:			
Los Alamos			
Ground man	25.27	11.76	0.60
Equipment Operator	36.27	16.09	0.60
Lineman/technician	45.47	18.36	0.60
Cable Splicer	49.59	19.40	0.60

Electricians-Inside Classifications:			
Zone 1			
Wireman/low voltage technician	35.20	12.21	0.60
Cable Splicer	38.72	12.31	0.60
Electricians-Inside Classifications:			
Zone 2			
Wireman/low voltage technician	38.37	12.30	0.60
Cable Splicer	41.89	12.41	0.60
Electricians-Inside Classifications: Zone 3			
Wireman/low voltage technician	40.48	12.36	0.60
Cable Splicer	44.00	12.47	0.60
Electricians-Inside Classifications: Zone 4			
Wireman/low voltage technician	44.35	12.48	0.60
Cable Splicer	47.87	12.58	0.60
Electricians - Inside Classifications:			
Dona Ana, Hidalgo, Luna and Otero			
Counties			
Wireman/low voltage technician	31.42	8.87	0.60
Cable Splicer	30.77	8.64	0.60
Electricians-Inside Classifications: Los			
Alamos			
Wireman/low voltage technician	40.48	14.38	0.60
Cable Splicer	44.00	14.67	0.60
Glazier			
Glazier/Fabricator	21.00	6.45	0.60
Delivery Driver	11.50	6.45	0.60
Ironworker	27.70	17.89	0.60
Painter- Industrial	22.00	10.05	0.60
Paperhanger	19.50	10.05	0.60
Drywall Finisher/Taper - Industrial			
Ames tool Operator	27.06	8.00	0.60
Hand finisher/machine texture	26.06	8.00	0.60
Plumber/Pipefitter	36.40	14.25	0.60
Roofer	26.34	9.16	0.60
Sheet metal Worker	34.54	17.92	0.60
Operators			
Group I	21.81	6.74	0.60
Group II	22.01	6.74	0.60

Group III	22.22	6.74	0.60
Group IV	22.36	6.74	0.60
Group V	22.47	6.74	0.60
Group VI	22.67	6.74	0.60
Group VII	22.69	6.74	0.60
Group VIII	24.71	6.74	0.60
Group IX	30.72	6.74	0.60
Group X	34.15	6.74	0.60
Laborers			
Group I-Unskilled	19.18	6.93	0.60
Group II-Semi-Skilled	20.06	6.93	0.60
Group III-Skilled	21.93	6.93	0.60
Group IV-Specialty	22.30	6.93	0.60
Laborers-Underground			
Group I	21.43	6.93	0.60
Group II	21.85	6.93	0.60
Group III	22.26	6.93	0.60
Soft Floor Layer	20.75	8.45	0.60
Truck Drivers			
Group I	17.65	8.72	0.60
Group II	17.65	8.72	0.60
Group III	17.65	8.72	0.60
Group IV	17.65	8.72	0.60
Group V	17.65	8.72	0.60
Group VI	17.65	8.72	0.60
Group VII	17.65	8.72	0.60
Group VIII	17.71	8.72	0.60
Group IX	19.65	8.72	0.60
Maintenance Sub Group IX			
Rate I	20.90	9.00	0.60
Rate II	21.77	9.00	0.60
Rate III	22.24	9.00	0.60

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

Federal Wage Rates

"General Decision Number: NM20220042 02/25/2022

Superseded General Decision Number: NM20210042

State: New Mexico

Construction Type: Heavy HEAVY CONSTRUCTION PROJECTS

County: Santa Fe County in New Mexico.

HEAVY CONSTRUCTION PROJECTS

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an |. The contractor must pay option is exercised) on or after January 30, 2022:

- |. Executive Order 14026 generally applies to the contract.
- all covered workers at least \$15.00 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2022.

If the contract was awarded on . Executive Order 13658 or between January 1, 2015 and generally applies to the January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:

- contract.
- |. The contractor must pay all| covered workers at least \$11.25 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2022.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at https://www.dol.gov/agencies/whd/government-contracts.

Publication Date 01/07/2022

0	01/0//2022	
1	01/14/2022	
2	02/25/2022	
CARP1319-011 01/01/2022		
	Rates	Fringes
CARPENTER (Form Work Onl	y)\$ 26.48	12.09
ELEC0611-001 01/01/2017		
	Rates	Fringes
ELECTRICIAN	¢ 24 F0	10.01
ELECTRICIAN	•	
SUNM2016-011 09/26/201		
301112010-011 03/20/201	0	
	Rates	Fringes
	naces	
CARPENTER, Excludes Form	Work\$ 16.43	0.00
-		
CEMENT MASON/CONCRETE FI	NISHER\$ 19.44	8.08
IRONWORKER, REINFORCING.	\$ 27.80	0.00
LABORER: Common or Gene	ral\$ 15.34	3.63
LABORER: Pipelayer	\$ 16.67	3.04

6.18

Rev 11-19 4A-120

OPERATOR: Bobcat/Skid

Backhoe/Excavator/Trackhoe.....\$ 21.12

OPERATOR:

Modification Number

Steer/Skid	Loader\$ 21.06	0.00
OPERATOR:	Bulldozer \$ 21.00	0.00
OPERATOR:	Grader/Blade\$ 19.02	0.00
OPERATOR:	Loader\$ 18.30	0.00
OPERATOR:	Oiler \$ 18.23	0.00
OPERATOR:	Roller \$ 18.83	0.00
	ER: Dump Truck\$ 15.53	0.00

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at

https://www.dol.gov/agencies/whd/government-contracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

- Has there been an initial decision in the matter? This can be:
- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations Wage and Hour Division U.S. Department of Labor 200 Constitution Avenue, N.W.

Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

> Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISIO"

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Technical Specifications

DIVISION 1 - GENERAL REQUIREMENTS

01010	SUMMARY OF WORK
01040	COORDINATION
01050	FIELD SURVEYING
01060	SPECIAL CONDITIONS
01150	MEASUREMENT AND PAYMENT
01340	SUBMITTALS
01400	QUALITY CONTROL
01500	TEMPORARY FACILITIES
01560	ENVIRONMENTAL PROTECTION AND SPECIAL CONTROLS
01600	PRODUCT DELIVERY, STORAGE, AND HANDLING
01640	PRODUCT SUBSTITUTIONS
01710	CLEANING
01720	PROJECT RECORD DOCUMENTS
01750	WARRANTIES AND GUARANTEES
01760	SPARE PARS AND MAINTENANCE MATERIALS

DIVISION 2 - SITE WORK

02221	TRENCHING, BACKFILLING, AND COMPACTING FOR UTILITIES
02513	ASPHALTIC CONCRETE VEHICULAR PAVING
02660	WATER MAIN CONSTRUCTION

DIVISION 9 - FINISHES

09905 PAINTING AND PROTECTIVE COATINGS

DIVISION 13 - SPECIAL CONSTRUCTION

13310 SUPPLY WELL CONSTRUCTION

DIVISION 15 - MECHANICAL

15060	PIPE AND PIPE FITTINGS: BASIC REQUIREMENTS
15062	PIPE: DUCTILE
15064	PIPE: PLASTIC
15100	VALVES: BASIC REQUIREMENTS
15101	GATE VALVES
15114	MISCELLANEOUS VALVES
15510	FIRE HYDRANTS

1		SECTION 01010
2		SUMMARY OF WORK
3	PAF	RT1- GENERAL
4 5 6 7 8 9 10 11 12 13 14 15		 A. The work required described in these documents includes but is not limited to: Installation of new 8" waterline, fittings, and appurtenances, Installation of new 6" waterline, fittings, and appurtenances, New service lines and meters and/or modification of existing service lines and relocation of water meters. Connection to existing waterlines, service lines, and meters, Installation of fire hydrants, valves, and appurtenances. Pavement removal and replacement, Water Supply Well including pilot testing, well development, pump testing, and water quality monitoring. Other items as specified and/or shown on the drawings.
16	1.1	WORK COVERED BY CONTRACT DOCUMENTS
17		A. Work to be performed includes construction of water system improvements.
18 19 20		B. Furnish all materials, equipment, supplies, appurtenances; provide all construction equipment and tools; provide Operation and Maintenance training, and perform all necessary labor and supervision.
21 22		C. Coordinate the progress of the Work, including coordination between trades, subcontractors, suppliers, public utilities, and OWNER to ensure the progress of Work.
23 24		D. It is the intent of this Contract that Work proceed in the most expeditious manner possible.
25	1.2	CONTRACTS
26 27		A. Construct the Work under a Unit Price Contract.
28	1.3	WORK SEQUENCE
29 30 31 32		A. Construct Work in stages as required to allow for OWNER's continuous occupancy and for uninterrupted service to water system customers. Coordinate construction schedule and operations with the OWNER.
33	1.4	CONTRACTOR'S USE OF PREMISES
34 35 36		A. CONTRACTOR shall conduct all on-site Work during regular working hours, which are defined as weekdays, 8:30 a.m. to 4:30 p.m., holidays excluded, and 8:00 a.m. to 5:00 p.m. on weekends with special permission.
37		B. Coordinate use of premises under direction of OWNER.
38 39		C. Assume full responsibility for the protection and safekeeping of products furnished under this Contract, stored on-or off-site.
40		D. Move any stored products under CONTRACTOR's control that interfere with operations of the

OWNER.

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2 3		F. CONTRACTOR shall coordinate all materials storage, equipment storage and employee and subcontractor parking with OWNER.
4 5 6		G. CONTRACTOR shall restore any areas used for materials storage, equipment storage, or employee and subcontractor parking to their original condition or better, unless specified otherwise.
7	1.5	EASEMENTS AND RIGHTS-OF-WAY
8 9 10 11		A. Confine construction operations to the immediate vicinity of the location indicated on Drawings and use due care in placing construction tools, equipment, excavated materials, and pipeline materials and supplies, so as to cause the least possible damage to property and interference with traffic.
12	1.6	MAINTENANCE OF TRAFFIC
13		A. Maintain entry for all residences and/or businesses located along the project.
14	PAF	T 2 - PRODUCTS (NOT USED)
15	PAF	T 3 - EXECUTION (NOT USED)
16		
17 18		END OF SECTION
-		

E. Obtain and pay for the use of additional storage or work areas needed for operations.

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1 2		SECTION 01040 COORDINATION
3	PAF	RT 1 - GENERAL
4	1.1	SUMMARY
5 6 7 8		 A. Section includes: 1. Coordination with the Owner. 2. Coordination with other contractors. 3. Coordination with Public Utilities.
9 10 11		 B. Related sections include but are not necessarily limited to: 1. Division 0 – Bidding Requirements. 2. Division 1 – Technical Specifications.
12	1.2	COORDINATION WITH OWNER
13 14 15 16 17		 A. Coordinate work operations (including those of the Contractor's subcontractors and suppliers) with the Owner in order to: 1. Minimize disruption of activities of Owner's personnel. 2. Make certain that operations of the Contractor do not interfere with the Owner's successful operation of existing systems.
18	1.3	COORDINATION WITH OTHER CONTRACTORS
19 20		A. Cooperate with, coordinate with, and do not interfere with the operations of other contractors who may be working adjacent to or near the work sites of this project.
21	1.4	COORDINATION WITH VENDORS
22 23 24 25		 A. Coordinate work operations (including those of the Contractor's subcontractors and suppliers) in order to: 1. Make certain that the equipment furnished is correctly unloaded, placed, and installed. 2. Successfully complete connection, testing, and startup.
26	1.5	COORDINATION WITH PUBLIC UTILITIES
27 28		A. The Contractor shall coordinate with all utilities to provide the Owner with a complete operating system.
29	1.6	COORDINATION REQUIREMENTS
30 31 32		A. The required Time of Completion of the Work of this Contract and provisions for assessment of liquidated damages are set forth in the Bid Proposal. This Section sets forth coordination requirements for the Work.
33 34 35 36 37		B. For existing facilities or systems or components thereof that will be temporarily taken out of service, dismantled, or disconnected, and then reconnected or assembled and placed back into service, the Contractor shall prior to proceeding with that work verify the operability and accuracy of all affected components. Contractor's verification shall be witnessed by the Engineer.

facility re-starts.

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C. All pipe supports, anchors and restraints, all applicable electrical, instrumentation & controls,

and all specified startup and field acceptance testing of equipment shall be satisfactorily

completed by the Contractor and witnessed by the Owner and/or Engineer prior to system or

10 11		END OF SECTION
9		days for Engineer to respond after date of receipt of a written RFI from Contractor.
8	F.	Request for Information (RFI) – Contractor shall allow a minimum period of ten (10) working
6 7		heavy construction traffic shall not be paved until potentially destructive traffic loads induced by large construction equipment will no longer be routed over said areas.
5	ے.	to installation of all underground utilities shown under this Contract in the area. Areas subject to
4	E.	Paving, landscaping and sidewalk construction in any given area shall not be commenced prior
3		sequencing described in these Specifications, whether or not specifically called out herein.
1	D.	The Contractor shall be solely responsible for furnishing, installing and removing when no longer needed all facilities necessary to accomplish the coordination and construction

1 2		SECTION 01050 FIELD SURVEYING
2		TILLE CONVETTING
3	PAF	RT 1 - GENERAL
4	1.1	SUMMARY
5 6 7 8 9 10		 A. Section includes: 1. Provide and pay for field surveying services required for Project. a. Survey work required in execution of Project. b. Civil, structural or other professional engineering services specified or required to execute Contractor's construction methods. c. Trench Safety.
11 12 13 14		 B. Related sections include but are not necessarily limited to: 1. Division 0 – Bidding Requirements. 2. Division 1 – Technical Specifications. 3. Sections in Division 1 identifying conditions requiring field engineer.
15	1.2	QUALIFICATIONS
16 17		A. All surveying shall be completed by a qualified registered engineer or registered land surveyor in the state in which the construction is being done, acceptable to Contractor and Owner.
18	1.3	PROJECT SURVEY REQUIREMENTS
19 20 21 22		 A. Establish lines and levels, locate and lay out, by instrumentation and similar appropriate means: 1. Pipeline and Appurtenance Installation. a. Stakes for grading, fill and topsoil placement. b. Utility slopes and invert elevations.
23 24		B. From time to time and when requested by the Engineer, verify layouts by same methods as required for control of the Work.
25 26 27 28 29 30		C. The Contractor shall take reasonable efforts to protect all existing property corners, permanent bench marks, right-of-way markers, government established monuments, and similar reference points. If any must be disturbed, the monuments must be referenced before removal and replaced as soon as work in the area is completed. Referencing and replacing shall be done by a licensed surveyor, and in the case of U.S.F.S, U.S.G.S., and BNSF monuments, or State Highway Department right-of-way markers, shall be a first order survey work.
31	1.4	RECORDS
32		A. Maintain a complete, accurate log of all control and survey work as it progresses.
33 34		B. On completion of improvements, prepare Record Drawings in accordance with Section 01720: Project Record Documents.
35	1.5	SUBMITTALS
36		A. Name and address of surveyor and professional engineer to Engineer.
37		B. Survey data and computations for all Work.
38		C. Submit data on utility slopes and invert elevations for review by Engineer.
39 40		D. On request of Engineer, submit documentation to verify accuracy of field engineering work.
41		END OF SECTION

SPECIAL CONDITIONS

PART 1 - GENERAL 3

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1	11	PRECONSTRUCTION	CONFEDENCE
4	1.1	PRECUNSTRUCTION	CONFERENCE

A. A preconstruction conference shall be held at the Project Site after award of Contract. Engineer will notify the Contractor as to the date and time of the conference one (1) week in advance of the proposed date. Contractor's Project Manager and Project Superintendent and Contractor's Subcontractor Representatives shall attend.

1.2 PROJECT SIGNS

- 10 A. Regulatory Agency Sign(s):
 - Furnish and install 4 FT x 6 FT plywood backboard with support legs and bracing for each
 - Furnish and install commercially produced regulatory agency sign(s) conforming to 00830 Exhibit 4A-113 attached to this Specification Section.
 - Color sample of Exhibit(s) will be provided at Pre-Construction Conference.
 - B. Coordinate sign locations with Owner.
- 17 C. Signs not listed in this Specification Section permitted only upon approval of Owner.

18 1.3 DRAWINGS AND CONTRACT DOCUMENTS FOR CONTRACTOR USE

- A. Refer to General Conditions. 19
- 20 B. Contractor shall pick up all "no-charge" documents within ten (10) days from date of Notice to 21 Proceed.
- 22 C. Additional documents after "no-charge" documents will be furnished to Contractor at cost.

23 PROJECT VIDEO AND PHOTOGRAPHS

- A. Prior to commencing with construction the Contractor shall videotape the entire project area, at no additional cost to the Owner, to document the condition of all existing structures, curb and gutter, sidewalk, and pavement on both sides of the street within the project area. Any curb and gutter, sidewalk, and/or pavement damaged and/or removed during construction shall be replaced by the Contractor to the same or better conditions and the existing elevations prior to construction unless otherwise indicated on the plans.
 - B. At least once during construction of the Work, provide professional quality photographs of progress as directed by Engineer. Furnish glossy prints (approximately 8 x 10 in) and each negative, with all rights of reproduction, to Owner.
 - 1. Provide ten (10) ground level color photos.
 - Contractor shall schedule and coordinate photographer with Engineer's Field Representative.
 - Include all photographs with dates and description.

TESTING 1.5

- A. Payment for Soil, Concrete and Other Testing:
 - Soils and concrete testing: The Owner will pay for "Passing" soils and "Passing" concrete tests on the Project. Costs of corrective action, costs of "Failing" soils and concrete tests, and cost of testing associated with establishment of mix design are the sole responsibility of the Contractor.

3. Testing Frequency per the New Mexico Department of Transportation Minimum Testing Requirements Table A – 8 and 9 for water lines. 7. 1.6 ORDER OF CONSTRUCTION AND CONSTRUCTION SCHEDULE 8. A. Order of Construction 9. 1. All tiems of work shall be completed at the CONTRACTORS discretion within the Contract time. The suggested sequence of work is as follows: 10. a. Construct New 8" Waterlines. 11. b. Make Connections to Existing Waterlines in Place. 12. c. Reconnect Existing Water Services to New 8" Waterlines. 13. d. Cut, Cap, and Abandon Existing Waterlines in Place. 14. c. Repair Road Surfacing. 15. d. Construction Schedule 16. Construction Schedule 17. d. Construction operations shall be scheduled to allow the Owner uninterrupted operation of existing adjacent facilities. Coordinate connections with existing work to ensure timely completion of interfaced items. 18. construction operations shall be scheduled to allow the Owner uninterrupted operation of existing adjacent facilities. Coordinate connections with existing work to ensure timely completion of interfaced items. 19. 2. At no time shall Contractor or his employees modify operation of the existing facilities or start construction modifications without approval of the Owner except in emergency to prevent or minimize damage. 20. Within three (3) days after receiving notice to proceed, submit for approval a critical path type schedule. Account for schedule of Subcontracts. Include proper sequence of construction, various crafts, purchasing time, Shop Drawing approval, material delivery, equipment fabrication, startup, demonstration, and similar time consuming factors. Show on schedule as a minimum, earliest starting, earliest completion, latest starting, latest finish, and free and total float for each task or item. 22. Evaluate schedule no less than weekly. Update, correct, and rerun schedule and submit to Engineer in triplicate with pay application to show rescheduling necessary to correct for behind schedule conditions, indicate action	1 2 3 4			2.	Other testing: Required testing, testing procedures, reports, certificates, and costs associated with all phases of securing required satisfactory test information which may be required by individual sections of Specifications or Drawings are the full responsibility of the Contractor.
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1.7 PROJECT MEETINGS

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- 2 A. Construction Meetings:
 - 1. The Engineer will conduct construction meetings involving:
 - a. Contractor's project manager.
 - b. Contractor's project superintendent.
 - c. Owner's designated representative(s).
 - d. Engineer's designated representative(s).
 - e. Contractor's subcontractors as appropriate to the work in progress.
 - f. Owner's Construction Quality Control Consultant.
 - 2. Meetings will be conducted every other week.
 - 3. The Engineer will take meeting minutes and submit copies of meeting minutes to participants and designated recipients identified at the Preconstruction Conference. Corrections, additions or deletions to the minutes shall be noted and addressed at the following meeting.
 - 4. The Engineer will schedule meetings for most convenient time frame.
 - 5. The Engineer will have available at each meeting full chronological files of all previous meeting minutes.
 - 6. The Contractor shall have available at each meeting up-to-date record drawings.

1.8 SPECIAL CONSIDERATIONS

- A. Contractor shall be responsible for negotiations of any waivers or alternate arrangements required to enable transportation of materials to the site.
 - B. Maintain conditions of access road to site such that access is not hindered as the result of construction related deterioration.

24 1.9 HISTORICAL AND ARCHAEOLOGICAL

- A. If during the course of construction, evidence of deposits of historical or archeological interest is found, the Contractor shall cease operations affecting the find and shall notify Owner. No further disturbance of the deposits shall ensue until the Contractor has been notified by the Owner that the Contractor may proceed. The Owner will issue a notice to proceed after appropriate authorities have surveyed the find and made a determination to Owner. Compensation to the Contractor, if any, for lost time or changes in construction resulting from the find, shall be determined in accordance with changed or extra work provisions of the Contract Documents.
- B. The site has been previously investigated and has no known history of historical or archaeological finds.

34 PART 2 - PRODUCTS - (NOT APPLICABLE TO THIS SECTION)

35 PART 3 - EXECUTION - (NOT APPLICABLE TO THIS SECTION)

36 END OF SECTION

SPECIAL CONDITIONS

PART 1 - GENERAL 3

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1	11	PRECONSTRUCTION	CONFEDENCE
4	1.1	PRECUNSTRUCTION	CONFERENCE

A. A preconstruction conference shall be held at the Project Site after award of Contract. Engineer will notify the Contractor as to the date and time of the conference one (1) week in advance of the proposed date. Contractor's Project Manager and Project Superintendent and Contractor's Subcontractor Representatives shall attend.

1.2 PROJECT SIGNS

- 10 A. Regulatory Agency Sign(s):
 - Furnish and install 4 FT x 6 FT plywood backboard with support legs and bracing for each
 - Furnish and install commercially produced regulatory agency sign(s) conforming to 00830 Exhibit 4A-113 attached to this Specification Section.
 - Color sample of Exhibit(s) will be provided at Pre-Construction Conference.
 - B. Coordinate sign locations with Owner.
- 17 C. Signs not listed in this Specification Section permitted only upon approval of Owner.

18 1.3 DRAWINGS AND CONTRACT DOCUMENTS FOR CONTRACTOR USE

- A. Refer to General Conditions. 19
- 20 B. Contractor shall pick up all "no-charge" documents within ten (10) days from date of Notice to 21 Proceed.
- 22 C. Additional documents after "no-charge" documents will be furnished to Contractor at cost.

23 PROJECT VIDEO AND PHOTOGRAPHS

- A. Prior to commencing with construction the Contractor shall videotape the entire project area, at no additional cost to the Owner, to document the condition of all existing structures, curb and gutter, sidewalk, and pavement on both sides of the street within the project area. Any curb and gutter, sidewalk, and/or pavement damaged and/or removed during construction shall be replaced by the Contractor to the same or better conditions and the existing elevations prior to construction unless otherwise indicated on the plans.
 - B. At least once during construction of the Work, provide professional quality photographs of progress as directed by Engineer. Furnish glossy prints (approximately 8 x 10 in) and each negative, with all rights of reproduction, to Owner.
 - 1. Provide ten (10) ground level color photos.
 - Contractor shall schedule and coordinate photographer with Engineer's Field Representative.
 - Include all photographs with dates and description.

TESTING 1.5

- A. Payment for Soil, Concrete and Other Testing:
 - Soils and concrete testing: The Owner will pay for "Passing" soils and "Passing" concrete tests on the Project. Costs of corrective action, costs of "Failing" soils and concrete tests, and cost of testing associated with establishment of mix design are the sole responsibility of the Contractor.

3. Testing Frequency per the New Mexico Department of Transportation Minimum Testing Requirements Table A – 8 and 9 for water lines. 7. 1.6 ORDER OF CONSTRUCTION AND CONSTRUCTION SCHEDULE 8. A. Order of Construction 9. 1. All tiems of work shall be completed at the CONTRACTORS discretion within the Contract time. The suggested sequence of work is as follows: 10. a. Construct New 8" Waterlines. 11. b. Make Connections to Existing Waterlines in Place. 12. c. Reconnect Existing Water Services to New 8" Waterlines. 13. d. Cut, Cap, and Abandon Existing Waterlines in Place. 14. c. Repair Road Surfacing. 15. d. Construction Schedule 16. Construction Schedule 17. d. Construction operations shall be scheduled to allow the Owner uninterrupted operation of existing adjacent facilities. Coordinate connections with existing work to ensure timely completion of interfaced items. 18. construction operations shall be scheduled to allow the Owner uninterrupted operation of existing adjacent facilities. Coordinate connections with existing work to ensure timely completion of interfaced items. 19. 2. At no time shall Contractor or his employees modify operation of the existing facilities or start construction modifications without approval of the Owner except in emergency to prevent or minimize damage. 20. Within three (3) days after receiving notice to proceed, submit for approval a critical path type schedule. Account for schedule of Subcontracts. Include proper sequence of construction, various crafts, purchasing time, Shop Drawing approval, material delivery, equipment fabrication, startup, demonstration, and similar time consuming factors. Show on schedule as a minimum, earliest starting, earliest completion, latest starting, latest finish, and free and total float for each task or item. 22. Evaluate schedule no less than weekly. Update, correct, and rerun schedule and submit to Engineer in triplicate with pay application to show rescheduling necessary to correct for behind schedule conditions, indicate action	1 2 3 4			2.	Other testing: Required testing, testing procedures, reports, certificates, and costs associated with all phases of securing required satisfactory test information which may be required by individual sections of Specifications or Drawings are the full responsibility of the Contractor.
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1.7 PROJECT MEETINGS

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- 2 A. Construction Meetings:
 - 1. The Engineer will conduct construction meetings involving:
 - a. Contractor's project manager.
 - b. Contractor's project superintendent.
 - c. Owner's designated representative(s).
 - d. Engineer's designated representative(s).
 - e. Contractor's subcontractors as appropriate to the work in progress.
 - f. Owner's Construction Quality Control Consultant.
 - 2. Meetings will be conducted every other week.
 - 3. The Engineer will take meeting minutes and submit copies of meeting minutes to participants and designated recipients identified at the Preconstruction Conference. Corrections, additions or deletions to the minutes shall be noted and addressed at the following meeting.
 - 4. The Engineer will schedule meetings for most convenient time frame.
 - 5. The Engineer will have available at each meeting full chronological files of all previous meeting minutes.
 - 6. The Contractor shall have available at each meeting up-to-date record drawings.

1.8 SPECIAL CONSIDERATIONS

- A. Contractor shall be responsible for negotiations of any waivers or alternate arrangements required to enable transportation of materials to the site.
 - B. Maintain conditions of access road to site such that access is not hindered as the result of construction related deterioration.

24 1.9 HISTORICAL AND ARCHAEOLOGICAL

- A. If during the course of construction, evidence of deposits of historical or archeological interest is found, the Contractor shall cease operations affecting the find and shall notify Owner. No further disturbance of the deposits shall ensue until the Contractor has been notified by the Owner that the Contractor may proceed. The Owner will issue a notice to proceed after appropriate authorities have surveyed the find and made a determination to Owner. Compensation to the Contractor, if any, for lost time or changes in construction resulting from the find, shall be determined in accordance with changed or extra work provisions of the Contract Documents.
- B. The site has been previously investigated and has no known history of historical or archaeological finds.

34 PART 2 - PRODUCTS - (NOT APPLICABLE TO THIS SECTION)

35 PART 3 - EXECUTION - (NOT APPLICABLE TO THIS SECTION)

36 END OF SECTION

SECTION 01150

MEASUREMENT AND PAYMENT

PART 1 - MEASUREMENT

11	CENERAL	

A. Payment for materials furnished and work done under the contract will be made as hereinafter stipulated, for actual amount of materials furnished and work performed under authorization of the OWNER and in accordance with actual measurements.

B. BID ITEMS:

D. DIDTIE

The following items, classifying the various kinds of work refer to the respective items listed in the bid proposal and cover all items required to provide the owner with a complete project considered to be incidental to the Base Bid. Any work elements not listed but are necessary for a complete project are considered incidental even thought they are not specifically listed below.

All of the following items include construction staking; coordination; overtime; restoration; spare parts; start-up; training; overtime; field offices, field office equipment; utilities; project overhead; construction sign and all other materials, equipment and labor incidental thereto.

BASE BID ITEMS

BID ITEM 1 – MOBILIZATION AND DEMOBILIZATION – Payment will be made according
to the respective price listed in the Bid Proposal. Price Bid shall include but not be limited to the
following: project signs; setting up trailers; staging areas; bonds; insurance; permits; SWPPP;
mobilization and demobilization of forces; preconstruction conference; and all other materials,
equipment and labor incidental thereto. This amount will be amortized over a period of two months,
at beginning and end of project.

 BID ITEM 2 – TRAFFIC CONTROL & BARRICADING – Payment will be made according to
the respective price listed in the Bid Proposal. Price Bid shall include all equipment and labor
incidental thereto for providing construction traffic control and barricading as required for the
project.

BID ITEM 3 – SITE CLEARING AND GRUBBING INCL. TREE REMOVAL - Payment will be made according to the respective price listed in the Bid Proposal. Price Bid shall include but not be limited to the following: clearing and grubbing; tree removal of 18"φ and smaller including all labor material and equipment incidental thereto

4. BID ITEM 4 -8" PVC WATERLINE – Payment will be made according to the respective price listed in the Bid Proposal. Payment shall be made for each lineal foot measured along the centerline of pipeline as shown on the construction drawings. Price shall include, but not be limited to the following: staking; potholing; unclassified excavation in open trench; pipe bedding and backfill; dewatering and compaction for all trench zones; hand digging; tunneling under or removing and replacing surface obstructions; discovery and protection of subsurface obstructions; shoring and bracing; hauling excavated material; restoration of disturbed areas not included in other pay items; marking tape; joint restraint; concrete blocking; preparation of pipe subgrade; temporary connections; jointing materials; furnishing and installing pipe, wire, fittings, bends, and tees in open trench; hydrostatic testing and disinfection; line flushing and all other testing required for Final Acceptance; and all labor material and equipment incidental thereto.

5. **BID ITEM 5 –6" PVC WATERLINE** – Payment will be made according to the respective price listed in the Bid Proposal. Payment shall be made for each lineal foot measured along the centerline of pipeline as shown on the construction drawings. Price shall include, but not be limited to the

Santa Fe County February 2022

Glorieta, NM
East Glorieta Distribution & Regional Well
Contract Documents

 following: staking; potholing; unclassified excavation in open trench; pipe bedding and backfill; dewatering and compaction for all trench zones; hand digging; tunneling under or removing and replacing surface obstructions; discovery and protection of subsurface obstructions; shoring and bracing; hauling excavated material; restoration of disturbed areas not included in other pay items; marking tape; joint restraint; concrete blocking; preparation of pipe subgrade; temporary connections; jointing materials; furnishing and installing pipe, wire, fittings, bends, and tees in open trench; hydrostatic testing and disinfection; line flushing and all other testing required for Final Acceptance; and all labor material and equipment incidental thereto.

- 6. **BID ITEM 6 ¾"-1" WATER SERVICE LINE CONNECTION TO NEW WATERLINE** Payment will be made according to the respective price listed in the Bid Proposal. Payment shall be made on a per each basis for work accomplished as shown on the standard drawing and shall include, but not be limited to, the following: Connecting or Relocating Neptune T-10 water meter w/E-coder R900i register and radio transmitter including a 10-lf length of service line including all necessary fittings and appurtenances per Santa Fe County Utilities Department Water Construction Standards and Specifications; including trenching, backfilling, and compaction, dewatering, and all other labor, material, and equipment incidental thereto.
- 7. **BID ITEM 7 FIRE HYDRANT** Payment will be made according to the respective price listed in the Bid Proposal. Payment will be made for each fire hydrant and shall include, but not be limited to, the following: excavation; gravel drain pocket; pipe; fire hydrant; mechanical restraining system or blocking; backfilling; compaction; preparing and installing cast-in-place concrete pad on finished ground; and testing complete in place and all other labor, material, and equipment incidental thereto.
- 8. BID ITEM 8 COMBINATION AIR RELIEF VALVE AND VALVE BOX Payment will be made according to the respective price listed in the Bid Proposal. Payment shall be made on a per each basis for work accomplished as shown on the standard drawing and shall include, but not be limited to, the following: furnishing and installing combination air relief valve with all necessary fittings and appurtenances; valve vault; concrete blocking and/or joint restraint; preparing and installing cover and lid on finished ground including trenching, backfilling, and compaction, dewatering, furnishing and installing reinforcing steel; and all other labor, material, and equipment incidental thereto.
- 9. **BID ITEM 9 BORE & JACK WATERLINES -** Payment will be made according to the respective price listed in the Bid Proposal. Payment will be made or work accomplished as shown on the standard drawing and shall include, but not be limited to, the following: bore and jack of 14" sch 30 steel Casing for 6" carrier pipe; bore and jack of 16" sch 30steel casing for 8" carrier pipe; mechanical restraining system or blocking; restoration of disturbed areas not included in other pay items; marking tape; joint restraint; concrete blocking; preparation of casing subgrade; temporary connections; jointing materials; wire, skids, steel ties, grouting, jacking or drilling pits; boring pit bracing, casing boring head, removal of excavated material and all labor material and equipment incidental thereto.
- 10. BID ITEM 10 SUBGRADE PREP, 12-INCH AT 95% COMPACTION Payment for subgrade prep will be made according to the respective price listed in the Bid Proposal per square yard per each thickness required, complete in place. Price Bid shall include all material, labor, and equipment required in placing, grading, and compacting the subgrade.
- 11. **BID ITEM 11 AGGREGATE BASE COURSE, CRUSHED, 6-INCH AT 95% COMPACTION** Payment for Aggregate Base Course will be made according to the respective price listed in the Bid Proposal per square yard per each thickness required, complete in place. Price Bid shall include all material, labor, and equipment required in placing, grading, and compacting the aggregate base course.
- 12. **BID ITEM 12 EXISTING PAVEMENT, REMOVE AND DISPOSE** Payment will be made according to the respective price listed in the Bid Proposal for each square yard of pavement removed and disposed. Price Bid shall include hauling and disposal of asphalt offsite to a location as designated by the Owner; and all other labor, materials, and equipment incidental thereto.

13. BID ITEM 13 - CHIP-SEAL DOUBLE BITUMINOUS PAVEMENT, EXISTING DEPTH -

bituminous chip seal pavement per NMSSP for Public works specification 334 or Santa Fe County

Payment will be made according to the respective price listed in the Bid Proposal for double

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1		SECTION 01340		
2	SUBMITTALS			
3	PAF	RT1- GENERAL		
4	1.1	SUMMARY		
5 6 7 8 9		 A. Section Includes: 1. Mechanics and administration of the submittal process for: a. Shop Drawings. b. Samples. c. Miscellaneous submittals. d. Operation and maintenance manuals. 		
11 12 13 14		 B. Related Sections include but are not necessarily limited to: 1. Division 0 - Bidding Requirements, Contract Forms, and Conditions of the Contract. 2. Division 1 - General Requirements. 3. Sections in Divisions 2 through 16 identifying required submittals. 		
15	1.2	DEFINITIONS		
16 17 18		 A. Shop Drawings: 1. See General Conditions. 2. Product data and samples are Shop Drawing information. 		
19 20 21 22 23 24 25 26 27 28		 B. Miscellaneous Submittals: Submittals other than Shop Drawings: Representative types of miscellaneous submittal items include but are not limited to: Construction schedule. Concrete, soil compaction, and pressure test reports. Manufacturer's installation certification letters. Warranties. Service agreements. Construction photographs. Health and safety plans. 		
29	1.3	TRANSMITTAL OF SUBMITTALS		
30 31 32		A. Shop Drawings, Samples and Operation and Maintenance Manuals: 1. Transmit all submittals to: HDR Engineering, Inc. 2155 Louisiana Blvd, NE, Suite 9500 Albuquerque, NM 87110-5483 Phone: (505) 830-5400 Fax: (505) 830-5454 Attn: Jerome A. Márez		
33 34 35 36 37 38 39		 Utilize two (2) copies of attached Exhibit "A" to transmit all Shop Drawings and samples. All submittals must be from Contractor and bear his approval stamp. a. Submittals will not be received from or returned to subcontractors. b. Shop Drawing submittal stamp shall read "(Contractor's Name) has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review and approval as stipulated under General Conditions Paragraph 6.17D". 		

1 2			4.	Provide submittal information defining specific equipment or materials utilized on the project.
3				a. Generalized product information, not clearly defining specific equipment or materials
4			~	to be provided, will be rejected.
5			5.	Calculations required in individual Specification Sections will be received for information
6				purposes only, as evidence calculations have been performed by individuals meeting
7				specified qualifications, and will be returned stamped "E. Engineer's Review Not Required"
8			_	to acknowledge receipt. Submittal schedule:
9			6.	
10 11				a. Schedule of Shop Drawings:1) Submitted and approved within five (5) days of receipt of Notice to Proceed.
12				 Submitted and approved within five (5) days of receipt of Notice to Proceed. Account for multiple transmittals under any Specification Section where partial
13				submittals will be transmitted.
14				b. Shop Drawings:
15				1) Submittal and approval prior to 50 percent completion.
		ъ	1 A.	
16 17		В.		scellaneous Submittals:
18			1.	Transmit under Contractor's standard letter of transmittal or letterhead.
10 19			2. 3.	Submit in triplicate or as specified in individual Specification Section. Transmit to:
20			Э.	Transmit to.
20				HDR Engineering, Inc.
				2155 Louisiana Blvd, NE, Suite 9500
				Albuquerque, NM 87110-5483
				Phone: (505) 830-5400
				Fax: (505) 830-5454
				Attn: Jerome A. Márez
21				
22 23			4.	Provide carbon copy of letter of transmittal to Owner's Resident Project Representative.
23				a. Exception for concrete, soils compaction and pressure test reports.
24 25				 Transmit one copy to Resident Project Engineer. Transmit one copy to location and individual indicated above for other
25 26				miscellaneous submittals.
27	1.4	PR	EPA	ARATION OF SUBMITTALS
•0			C1	
28		A.		op Drawings:
29 30			1.	Scope of any submittal and letter of transmittal:
31				a. Limited to one Specification Section.b. Do not submit under any Specification Section entitled (in part) "Basic Requirements".
32			2.	Numbering letter of transmittal:
33			۷.	a. Include as prefix the Specification Section number followed by a series number, "-xx",
34				beginning with "01" and increasing sequentially with each additional transmittal.
35				b. If more than one submittal under any Specification Section, assign consecutive series
36				numbers to subsequent transmittal letters.
37			3.	Describing transmittal contents:
38				a. Provide listing of each component or item in submittal capable of receiving an
39				independent review action.
40				b. Identify for each item:
41				1) Manufacturer and Manufacturer's drawing or data number.
42				2) Contract Document tag number(s).
43				3) Unique page numbers for each page of each separate item.
44 4.5			4.	Contractor stamping:
45 46				a. General:
46 47				1) Contractor's review and approval stamp shall be applied either to the letter of
47				transmittal or a separate sheet preceding each independent item in the submittal.

17			b.	Electronic stamps:
18				1) Contractor may electronically embed Contractor's review and approval stamp to
19				either the letter of transmittal or a separate index sheet preceding each independent
20				item in the submittal.
21				2) Contractor's signature and date on electronically applied stamps shall be original
22				ink signature.
23	4	5.	Resu	ıbmittals:
24			a.	Number with original root number and a suffix letter starting with "A" on a (new)
25				duplicate transmittal form.
26				Do not increase the scope of any prior transmittal.
27				Account for all components of prior transmittal.
28				1) If items in prior transmittal received "A" or "B" Action code, list them and indicate
29				"A" or "B" as appropriate.
30				a) Do not include submittal information for items with prior "A" or "B" Action in
31				transmittal.
32				2) Indicate "Outstanding-To Be Resubmitted At a Later Date" for any prior "C" or
33				"D" Action item not included in resubmittal.
34				a) Obtain Engineer's prior approval to exclude items.
35	Ć	5.	For 8	8-1/2 x 11 IN size sheets, provide three (3) copies of each page for Engineer plus the
36				ber required by the Contractor.
37				The number of copies required by the Contractor will be defined at the Preconstruction
38				Conference, but shall not exceed 5.
39		7.	For i	items not covered in Paragraph 1.4A.6, submit one reproducible transparency or
40			came	era-ready quality print and one additional print of each drawing until approval is
41			obta	ined.
42			a.	Utilize mailing tube; do not fold.
43			b.	The Engineer will mark and return the reproducible to the Contractor for his
44				reproduction and distribution.
45	8	8.	Prov	ride clear space (3 IN x 3 IN) for Engineer stamping of each component defined in
46			Para	graph 1.4-A.4.
47	Ģ	9.	Cont	tractor shall not use red color for marks on transmittals.
48			a.	Duplicate all marks on all copies transmitted, and ensure marks are photocopy
49				reproducible.
50			b.	Outline Contractor marks on reproducible transparencies with a rectangular box.
51	1	10.	Tran	asmittal contents:
52			a.	Coordinate and identify Shop Drawing contents so that all items can be easily verified
53				by the Engineer.
54				Identify equipment or material use, tag number, drawing detail reference, weight, and
55				other project specific information.
	Santa Fe Cou	untv		Glorieta, NM
	February 202	-		East Glorieta Distribution & Regional Well
				Contract Documents
				SUBMITTALS 01340 - 3
				VIJ+0 - J

a) Contractor's signature and date shall be original ink signature.

entire contents of a particular item and vice-versa.

in any other manner acknowledged as submitted.

2) Letters of transmittal may be stamped only when the scope of the submittal is one

Submittals containing multiple independent items shall be prepared with an index

Individual pages or sheets of independent items shall be numbered in a manner

that permits Contractor's review and approval stamp to be associated with the

The items not listed in the transmittal letter will not be logged as received, or

sheet for each item listing the discrete page numbers for each page of that item, which shall be stamped with the Contractor's review and approval stamp.

In the event submittals are transmitted as a single item and found to include multiple independent items, the Owner and Engineer reserve the right to limit

return them not reviewed to the Contractor for coordination, stamping and

submittal under a new transmittal number that is not a re-submittal number.

review to the single item listed, remove the other items from the submittal and

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1 2 3				c. Provide sufficient information together with technical cuts and technical data to allow an evaluation to be made to determine that the item submitted is in compliance with the contract December 1.	
3 4				Contract Documents. d. Submit items like equipment brochures, cuts of fixtures, product data sheets or catalog	g
5 6 7				sheets on 8-1/2 x 11 IN pages. Indicate exact item or model and all options proposed. e. Include legible scale details, sizes, dimensions, performance characteristics, capacities test data, anchoring details, installation instructions, storage and handling instructions	s,
8 9				color charts, layout drawings, parts catalogs, rough-in diagrams, wiring diagrams, controls, weights and other pertinent data.	
10				1) Arrange data and performance information in format similar to that provided in	
11				Contract Documents.	
12				2) Provide, at minimum, the detail provided in the Contract Documents.	
13				f. If proposed equipment or materials deviate from the Contract Drawings or	
14 15				Specifications in any way, clearly note the deviation and justify the said deviation in detail in a separate letter immediately following transmittal sheet.	
16	1.5	EN	GIN	EER'S REVIEW ACTION	
17		A.	Sho	pp Drawings:	
18			1.	Items within transmittals will be reviewed for overall design intent and will receive one of	:
19				the following actions:	
20				a. A - FURNISH AS SUBMITTED.	
21				b. B - FURNISH AS NOTED (BY ENGINEER).	
22				c. C - REVISE AND RESUBMIT.	
23				d. D - REJECTED.	
24				e. E - ENGINEER'S REVIEW NOT REQUIRED.	
25			2.	Submittals received will be initially reviewed to ascertain inclusion of Contractor's approv	al
26				stamp.	
27 28				a. Drawings not stamped by the Contractor or stamped with a stamp containing language other than that specified in Paragraph 1.3A.4.a., will not be reviewed for technical	е
29			2	content and will be returned without any action.	
30 31			3.	Submittals returned with Action "A" or "B" are considered ready for fabrication and	
32				installation.	
				a. If for any reason a submittal that has an "A" or "B" Action is resubmitted, it must be	
33 34				accompanied by a letter defining the changes that have been made and the reason for the resubmittal.	
35				b. Destroy or conspicuously mark "SUPERSEDED" all documents having previously	
36				received "A" or "B" Action that are superseded by a resubmittal.	
37			4.	Submittals with Action "A" or "B" combined with Action "C" (Revise and Resubmit) or	
38			т.	"D" (Rejected) will be individually analyzed giving consideration as follows:	
39				a. The portion of the submittal given "C" or "D" will not be distributed (unless previous)	Ιv
40				agreed to otherwise at the Preconstruction Conference).	y
41				1) One copy or the one transparency of the "C" or "D" drawings will be marked up	
42				and returned to the Contractor.	
43				a) Correct and resubmit items so marked.	
44				b. Items marked "A" or "B" will be fully distributed.	
45				c. If a portion of the items or system proposed are acceptable, however, the major part o	f
46				the individual drawings or documents are incomplete or require revision, the entire	
47				submittal may be given "C" or "D" Action.	
48				1) This is at the sole discretion of the Engineer.	
49				2) In this case, some drawings may contain relatively few or no comments or the	
50				statement, "Resubmit to maintain a complete package."	
51				3) Distribution to the Owner and field will not be made (unless previously agreed to	,
52				otherwise).	

1	5.	Failure to include any specific information specified under the submittal paragraphs of the
2		Specifications will result in the submittal being returned to the Contractor with "C" or "D"
3		Action.
4	6.	Transmittals of submittals which the Engineer considers as "Not Required" submittal
5		information, which is supplemental to but not essential to prior submitted information, or
6		items of information in a transmittal which have been reviewed and received "A" or "B"
7		Action in a prior submittal, will be returned with Action "E. Engineer's Review Not
8		Required."
9		END OF SECTION
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EXHIBIT A Shop Drawing Transmittal No.

(Spec	Section)) (Series)

Project Name: Ea	ast Glorieta Distribution & Regional Well				Date Receiv	ed:		
Project Owner: G	Greater Glorieta				Checked By	:		
Contractor:		HDR Engineering,		Log Page:				
Address:		Address:			HDR No.:			
		2155 Louisiana Blv	vd, NE, Suite 9500, Albuquerque, NM,	87110	Spec Sectio	n:		
					Drawing/Det	ail No.:		
Attn:		Attn:			1st. Sub		ReSub.	
Date Transmitted	d:	Previous Transmitt	al Date:					
Item No. No. Copies	Description		Manufacturer	Mfr/Vend	or Dwg or Da	ata No.	Action T	aken*
	Designated Above is in Accordance with rnish as Submitted	the Following Le	egend: D - Rejected					
C - Re 1. 2. 3. 4. 5. 6. 7.	rnish as Noted evise and Submit Not enough information for review. No reproducibles submitted. Copies illegible. Not enough copies submitted. Wrong sequence number. Wrong resubmittal number. Wrong spec. section. Wrong form used. See comments.		E - Engineer's review not 1. Submittal not re 2. Supplemental Ir informational pu 3. Information review submittal. 4. See comments.	quired. nformatior irposes or ewed and	n. Submitt nly.			
Distribution:	Contractor	File	Field C	Owner	_	Date Oth		

3		
4	PAI	T1 - LABORATORY TESTS
5	1.1	GENERAL
6 7		A. Soil Testing. The Owner will pay for "Passing" soils test on the Project. Costs of corrective action and costs of "Failing" soils tests are the sole responsibility of the CONTRACTOR.
8 9 10		B. Other testing: Required testing, testing procedures, reports, certificates, and costs associated with all phases of securing required satisfactory test information which may be required by individual sections of Specifications or Drawings are the full responsibility of the CONTRACTOR.
11	1.2	QUALIFICATION OF LABORATORY
12 13		A. Meet "Recommended Requirements for Independent Laboratory Qualification," published by the American Council of Independent Laboratories.
14 15 16		B. Meet basic requirements of ASTM E329, "Standards of Recommended Practice for Inspection and Testing Agencies for Concrete, Steel, and Bituminous Materials as Used in Construction" as applicable.
17		C. Authorized to operate in the State of New Mexico.
18 19 20		D. Submit copy of report of inspection of facilities made by Materials Reference Laboratory of National Berea of Standards during the most recent tour of inspection, with memorandum of remedies of any deficiencies reported by the inspection.
21 22 23 24		 E. Testing Equipment: 1. Calibrated at reasonable intervals by devices of accuracy traceable to either: a. National Bureau of Standards. b. Accepted values of natural physical constants.
25	1.3	LABORATORY DUTIES
26		A. Cooperate with Engineer and Contractor; provide qualified personnel.
27 28 29		 B. Perform specified inspections, sampling, and testing of materials and methods of construction: 1. Comply with specified standards. 2. Ascertain compliance of materials with requirements of Contract Documents.
30 31		C. Promptly notify Engineer and Contractor of observed irregularities or deficiencies of Work or products.
32 33 34 35 36 37 38 39 40 41 42		 D. Promptly submit five (5) copies of written report of each test and inspection to Engineer. Each report shall include: Date issued. Project title and number. Testing laboratory name, address, and telephone number. Name and signature of laboratory inspector. Date and time of sampling or inspection. Record of temperature and weather conditions. Date of test. Identification of product and Specification section. Location of sample or test in the Project.
43		10. Type of inspection or test.
	Santa	Fe County Clasine NIA

SECTION 01400

QUALITY CONTROL

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- 1 11. Results of tests and compliance with Contract Documents.
- 2 12. Interpretation of test results, when requested by Engineer.
- 3 E. Engineer will distribute copies of the tests to the Contractor and the Owner.

4 1.4 LIMITATIONS OF AUTHORITY OF TESTING LABORATORY

5 A. Laboratory is not authorized to:

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- 1. Release, revoke, alter, or enlarge upon requirements of Contract Documents.
- 2. Approve or accept any portion of the Work.
 - 3. Owner employed laboratory shall not perform any duties of the Contractor.

9 1.5 CONTRACTOR'S RESPONSIBILITIES

- 10 A. Cooperate with laboratory personnel and provide access to work.
- B. Secure and deliver to the laboratory adequate quantities of representative samples of materials proposed to be used and that require testing.
- C. Provide to the laboratory the preliminary design mix proposed to be used for concrete and other material mixes that require control by the testing laboratory.
- D. Furnish copies of product test reports as required.
 - E. Furnish incidental labor and facilities:
 - 1. To provide access to Work to be tested.
- 18 2. To obtain and handle samples at the Project site or at the source of the product to be tested.
 - 3. To facilitate inspections and tests.
- 4. Far storage and curing of test samples.
- F. Notify laboratory sufficiently in advance of operations to allow for laboratory assignment of personnel and scheduling of tests.

23 1.6 SUBMITTALS

- A. Copy of laboratory inspection report.
- B. Calibration test report from laboratory.
- C. Schedule of shop tests.
- D. Schedule of Manufacturer's field services.

28 PART 2 - SHOP TESTS

29 **2.1 GENERAL**

- A. Contractor shall pay all costs associated with specified shop tests of materials and equipment, including retesting of items that fail original tests.
- 32 B. Related requirements specified elsewhere: 33 Inspections and testing required by lay
 - 1. Inspections and testing required by laws, ordinances, rules, regulations, orders, or approvals of public authorities: Conditions of the Contract.
 - 2. Certification of products: The respective sections of Specifications.
 - 3. Test, adjust, and balance of equipment: The respective sections of Specifications.
- 37 4. Shop tests required and standards for testing: Each Specification section listed.
 - C. Observation of shop tests:
 - 1. Where the Specifications call for a shop test to be witnessed by a representative of the Engineer, notify Engineer not less than 14 days prior to the scheduled test date.
 - 2. Owner is to pay for all costs of Engineer's first visit.
- 3. If subsequent visits by Engineer are required because of incomplete tests, retesting, or subsequent tests, Contractor shall reimburse Owner for all costs of the subsequent visits.

PART 3 - FIELD TESTING

2 3.1 GENERAL

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- 3 A. Contractor shall pay all costs associated with field-testing of materials and equipment
- B. Contractor shall schedule all field-testing to avoid conflicting with other manufacturer's field services and other field testing.
 - C. Related requirements specified elsewhere:
 - 1. Inspection and testing required by laws, ordinances, rules, regulations, orders, or approvals of public authorities: Conditions of the Contract.
 - 2. Certification of products: The respective section of Specifications.
 - 3. Test, adjust, and balance equipment: The respective sections of Specifications.
 - 4. Field tests required and standards for testing: The respective Specification sections.
 - 5. Operating and Maintenance Data: Section 01340.

13 **3.2 TESTING**

- A. Provide all required materials, labor, equipment, water, and power required for testing.
- B. Perform all tests in presence of Engineer.
 - C. Prepare and submit to Engineer five (5) copies of written reports detailing the results of the tests and identifying corrective action for materials and equipment that fail to pass field tests. For each pump tested, submit pump curve with operating point for installed design condition clearly marked.
- D. Prepare and submit to Engineer a pipe pressure test report for each pipe test specified and performed. Include as an attachment to the report a copy of the approved piping layout or schematic of the system being tested which indicates any deviations from the approval layout with dimensional information.
- 24 E. Repair all materials and equipment that fail during testing with no additional compensation.

PART 4 - SCHEDULES

26 4.1 SHOP TESTING

A. Shop testing shall be provided for the following: See Individual Specification Sections.

28 4.2 MANUFACTURER'S FIELD SERVICES

- A. Manufacture's field services shall be provided for the following Contractor supplied equipment: See Individual Specification Sections.
- B. Manufacturer's O&M Training Durations
 - 1. Specification Training
 Section Type of Equipment or System Durations for 1 group

For the above listed equipment, all training sessions shall be presented, in their entirety, to two groups, one group at a time. Durations listed above are for one group.

All training must be recorded by Contractor and given to Owner per Specification 01060-1.12.

2. Training for all electrical equipment listed shall be as set forth in their respective specification section.

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END OF SECTION

1		SECTION 01500
2		TEMPORARY FACILITIES
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4	1.1	DESCRIPTION
5 6 7 8 9 10 11 12		 General: Furnish all labor, materials, tools, equipment, and services for all temporary facilities and their subsequent removal as indicated, in accord with provisions of Contract Documents. Completely coordinate with work of all other trades. Although such work is not specifically indicated, furnish and install all supplementary or miscellaneous items, appurtenances and devices incidental to or necessary for a sound, secure and complete installation. See Divisions 0 and 1 for additional requirements.
13	1.2	TEMPORARY ELECTRICITY
14 15 16		A. CONTRACTOR shall make arrangements for and install all equipment, poles, meter, wiring, switches, outlets, etc., to provide power for all lighting and power requirements for construction purposes.
17		B. Temporary electrical power used will be paid for by CONTRACTOR.
18 19		C. At completion of work, remove all temporary power facilities and replace all parts of permanent system damaged.
20 21		D. Extend warranty or guarantee period on any permanent systems used during construction period to commence with date of Substantial Completion. (Beneficial Use).
22 23		E. CONTRACTOR shall provide extension cords and temporary lighting to suit his needs until permanent lighting is installed and operable.
24	1.3	TEMPORARY WATER
25 26 27		A. CONTRACTOR make all arrangements, pay all costs and permit fees to install or have others install equipment, piping, and outlets for an adequate supply of clean water for construction purposes.
28		B. CONTRACTOR shall furnish drinking water for all those connected with his work.
29	1.4	TEMPORARY TOILETS
30 31		 A. CONTRACTOR provide temporary toilet facilities for use of all workers. 1. Provide facilities complying with applicable local and State sanitary and Federal laws.
32	1.5	TEMPORARY ENCLOSURES
33 34 35 36		A. CONTRACTOR furnish and install any temporary enclosures, doors and transparent plastic covered windows required to protect his work from damage due to vandalism, or the elements, or to maintain suitable temperature during installation or finishing work.
37	1.6	TEMPORARY STORAGE AND WORKING AREAS
38 39 40 41		 A. Owner will designate area the CONTRACTOR may use for storage and parking. 1. Except as specifically provided, working and storing outside these areas will not be permitted.

- B. Within area designated for his use, CONTRACTOR shall provide sufficient enclosed and covered spaces, with raised flooring, to protect materials and equipment from damage by weather or construction work.
 - 1. Maintain storage and working areas in a clean and orderly condition.
 - 2. Upon completion of his work, or sooner if directed by ENGINEER, remove temporary structures and leave area in clean and orderly condition.

1.7 TEMPORARY FENCES AND BARRICADES

A. CONTRACTOR furnish, install and maintain all necessary temporary fences, barricades, trench and hole covers, warning lights and all other safety devices necessary to prevent injury to persons and damage to property.

1.8 ACCESS ROADS

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- A. Provide access on building site as required to accomplish the work.
 - B. Maintenance of access on building site will be responsibility of CONTRACTOR and will be accomplished per methods as approved by OWNER's Representative.
 - C. Maintenance of access shall include but not be limited to:
- 1. Dust control.
 - 2. Provisions for new access ways to laydown/storage areas.
 - 3. Grading and compacting.
 - 4. Repair existing roadway as required for access to site.
- 5. Designated parking area maintenance.
- D. CONTRACTOR is responsible for cleaning up all debris, materials, etc., that fall from CONTRACTOR's vehicles en route to site.
 - E. When this access is no longer required, restore site to its original condition.

1.9 PARKING

- A. Construction personnel shall park their vehicles in the area designated by the OWNER.
- B. Any CONTRACTOR personnel violating this stipulation, do so at their own risk; be aware that their vehicles may be towed at offender's expense.

28 **1.10 SECURITY**

- A. Preservation of Property:
 - 1. Preserve from damage, all property along the line of the work, in the vicinity of or in any way affected by the work, the removal or destruction of which is not called for by the Drawings. Preserve from damage, public utilities, trees, lawn areas, building monuments, fences, pipe and underground structures, and public streets, etc. Note: Normal wear and tear of streets resulting from legitimate use by the CONTRACTOR are not considered as damage. Whenever damages occur to such property, immediately restore to its original condition. Costs for such repairs are incidental to the Contract.
 - 2. In case of failure on the part of the CONTRACTOR to restore property or make good on damage or injury, the OWNER may, upon 24 hours written notice, proceed to repair, rebuild, or otherwise restore such property as may be deemed necessary, and the cost thereof will be deducted from any moneys due or which may become due the CONTRACTOR under this Contract. If removal, repair or replacement of public or private property is made necessary by alteration of grade or alignment authorized by the OWNER and not contemplated by the Contract Documents, the CONTRACTOR will be compensated, in accordance with the General Conditions, provided that such property has not been damaged through fault of the CONTRACTOR or the CONTRACTOR's employees.

Santa Fe County

February 2022

1 2 3		B.	Public Utility Installations and Structures:1. Comply with the requirements of the public utility companies regarding the preservation and protection of utilities and services.
4 5 6 7 8 9 10 11 12 13		C.	Work on Private Property: Where installations are to be placed on private property, rights-of-way or easements will be secured by the OWNER without cost to the CONTRACTOR. Comply with all easement requirements. Conduct operations along rights-of-way and easements through private property to avoid damage to the property and to minimize interference with its ordinary use. Upon completion of the work through such property, restore the surface and all fences or other structures disturbed by the construction as nearly as possible to the preconstruction conditions. Do not remove any material from private property without the consent of the property owner or responsible party in charge of such property. 1. See Section 01060 1.4 for Video Documentation Prior to Construction to verify existing conditions.
14 15 16 17		D.	Miscellaneous Structures: Assume and accept responsibility for all injuries or damage to culverts, building foundations and walls, retaining walls, or other structures of any kind encountered during the execution of the work. Assume and accept liability for damages to public or private property resulting from Contractor's actions.
18 19 20 21 22 23 24		E.	 Protection of Trees and Landscape Areas: Protect with boxes, trees and shrubs, except those ordered to be removed. Do not place excavated material so as to cause injury to such trees or shrubs. Replace trees or shrubs destroyed by accident or negligence of the CONTRACTOR or CONTRACTOR's employees with new stock of similar size and age, at the proper season, at no additional cost to the OWNER. Leave landscaped areas in as good condition as before the start of the work.
25	1.11	RE	MOVAL
26 27		A.	Remove temporary materials, equipment, service and construction prior to Substantial Completion inspection.
28		B.	Clean and repair damage caused by installation or use of temporary facilities.
29	PAR	RT 2	- PRODUCTS - NOT USED
30	PAR	RT 3	- EXECUTION - NOT USED
31 32 33			END OF SECTION

1	SECTION 01560
2	ENVIRONMENTAL PROTECTION AND SPECIAL CONTROLS
3	PART 1 - GENERAL
4	1.1 SUMMARY
5 6 7	 A. Section Addresses: 1. Minimizing the pollution of air, water, or land; control of noise, the disposal of solid waste materials, and protection of deposits of historical or archaeological interest.
8 9 10	 B. Related Sections include but are not necessarily limited to: 1. Division 0 - Bidding Requirements, Contract Forms, and Conditions of the Contract. 2. Division 1 - General Requirements.
11	1.2 SUBMITTALS
12 13 14 15 16 17 18 19 20	 A. Shop Drawings: See Section 01340. Prior to the start of any construction activities submit: A detailed proposal of all methods of control and preventive measures to be utilized for environmental protection. A drawing of the work area, haul routes, storage areas, access routes and current land conditions including trees and vegetation. A copy of the NPDES permit for storm water discharges from construction activities. A copy of the approved pollution prevention plan. PART 2 - PRODUCTS - (NOT APPLICABLE TO THIS SECTION)
22	PART 3 - EXECUTION
23	3.1 INSTALLATION
24 25	A. Employ and utilize environmental protection methods, obtain all necessary permits, and fully observe all local, state, and federal regulations.
26 27 28 29 30	 B. Land Protection: 1. Except for any work or storage area and access routes specifically assigned for the use of the Contractor, the land areas outside the limits of construction shall be preserved in their present condition. Contractor shall confine his construction activities to areas defined for work within the Contract Documents.

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soils.

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2. Manage and control all borrow areas, work or storage areas, access routes and embankments

3. Restore all disturbed areas including borrow and haul areas and establish permanent type of

Unless earthwork is immediately paved or surfaced, protect all side slopes and backslopes

Plan and execute earthwork in a manner to minimize duration of exposure of unprotected

to prevent sediment from entering nearby water or land adjacent to the work site.

locally adaptable vegetative cover.

immediately upon completion of final grading.

1 2 3 4 5		6. Except for areas designated by the Contract Documents to be cleared and grubbed, the Contractor shall not deface, injure or destroy trees and vegetation, nor remove, cut, or disturb them without approval of the OWNER's Representative. Any damage caused by the Contractor's equipment or operations shall be restored as nearly as possible to its original condition at the Contractor's expense.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	C.	 Surface Water Protection: Utilize, as necessary, erosion control methods to protect side and backslopes, minimize and the discharge of sediment to the surface water leaving the construction site as soon as rough grading is complete. These controls shall be maintained until the site is ready for final grading and landscaping or until they are no longer warranted and concurrence is received from the OWNER's Representative. Physically retard the rate and volume of run-on and runoff by: Implementing structural practices such as diversion swales, terraces, straw bales, silt fences, berms, storm drain inlet protection, rocked outlet protection, sediment traps and temporary basins. Implementing vegetative practices such as temporary seeding, permanent seeding, mulching, sod stabilization, vegetative buffers, hydroseeding, anchored erosion control blankets, sodding, vegetated swales or a combination of these methods. Providing Construction sites with graveled or rocked access entrance and exit drives and parking areas to reduce the tracking of sediment onto public or private roads. Discharges from the construction site shall not contain pollutants at concentrations that produce objectionable films, colors, turbidity, deposits or noxious odors in the receiving stream or waterway.
24 25 26 27 28 29 30	D.	 Solid Waste Disposal: Collect solid waste on a daily basis. Provide disposal of degradable solid waste to an approved solid waste disposal site. Provide disposal of nondegradable solid waste to an approved solid waste disposal site or in an alternate manner approved by OWNER's Representative and regulatory agencies. No building materials wastes or unused building materials shall be buried, dumped, or disposed of on the site.
31 32 33 34 35 36 37 38	E.	 Fuel and Chemical Handling: Store and dispose of chemical wastes in a manner approved by regulatory agencies. Take special measures to prevent chemicals, fuels, oils, greases, herbicides, and insecticides from entering drainage ways. Do not allow water used in onsite material processing, concrete curing, cleanup, and other waste waters to enter a drainage way(s) or stream. The Contractor shall provide containment around fueling and chemical storage areas to ensure that spills in these areas do not reach waters of the State.
39 40 41 42 43 44 45 46 47 48 49 50	F.	 Control of Dust: The control of dust shall mean that no construction activity shall take place without applying all such reasonable measures as may be required to prevent particulate matter from becoming airborne so that it remains visible beyond the limits of construction. Reasonable measures may include paving, frequent road cleaning, planting vegetative groundcover, application of water or application of chemical dust suppressants. The use of chemical agents such as calcium chloride must be approved by the State of New Mexico DOT. Utilize methods and practices of construction to eliminate dust in full observance of agency regulations. The OWNER's Representative will determine the effectiveness of the dust control program and may request the Contractor to provide additional measures, at no additional cost to Owner.

G. Burning:

16		END OF SECTION
15		find based upon normal change order procedures.
14		2. The Contractor will be compensated for lost time or changes in construction to avoid the
13		disturb deposits until written notice from OWNER's Representative is given to proceed.
12		interests is found, cease work affecting find and notify OWNER's Representative. Do not
11		1. If during the course of construction, evidence of deposits of historical or archaeological
10	J.	Historical Protection:
9		required permanent work are removed.
8		2. Ensure all signs of temporary construction and activities incidental to construction of
7		1. Upon completion of work, leave area in a clean, natural looking condition.
6	I.	Completion of Work:
5		1. Control noise by fitting equipment with appropriate mufflers.
4	Н.	Control of Noise:
3		regulations.
2		burning, make arrangements for an off-site burning area and conform to all agency
1		1. Do not burn material on the site. If the Contractor elects to dispose of waste materials by

1 2			SECTION 01600 PRODUCT DELIVERY, STORAGE, AND HANDLING
3	PAF	RT 1	- GENERAL
4	1.1	SU	MMARY
5 6 7 8 9		A.	 Section Includes: Scheduling of product delivery. Packaging of products for delivery. Protection of products against damage from: a. Handling. b. Exposure to elements or harsh environments.
11 12 13		B.	 Related Sections include but are not necessarily limited to: 1. Division 0 - Bidding Requirements, Contract Forms, and Conditions of the Contract. 2. Division 1 - General Requirements.
14 15 16 17		C.	Payment: 1. No payment will be made to Contractor for equipment or materials not properly stored and insured or without approved shop drawings. a. Previous payments for items will be deducted from subsequent progress estimate(s) if proper storage procedures are not observed.
19	1.2	DE	LIVERY
20 21 22		A.	Scheduling: 1. Schedule delivery of products or equipment as required to allow timely installation and to avoid prolonged storage.
23 24 25 26		В.	Packaging: 1. Deliver products or equipment in manufacturer's original unbroken cartons or other containers designed and constructed to protect the contents from physical or environmental damage.
27 28		C.	Identification: 1. Clearly and fully mark and identify as to manufacturer, item, and installation location.
29 30		D.	Protection and Handling: 1. Provide manufacturer's instructions for storage and handling.
31	PAF	RT 2	- PRODUCTS - (NOT APPLICABLE TO THIS SECTION)
32	PAF	RT 3	- EXECUTION
33	3.1	PR	OTECTION, STORAGE AND HANDLING
34 35 36 37 38 39		A.	 Manufacturer's Instruction: 1. Protect all products or equipment in accordance with manufacturer's written directions. a. Store products or equipment in location to avoid physical damage to items while in storage. b. Handle products or equipment in accordance with manufacturer's recommendations and instructions. 2. Protect equipment from exposure to elements and keep thoroughly dry.

1 2		3. When space heaters are provided in equipment, connect and operate heaters during storage until equipment is placed in service.
3	3.2	FIELD QUALITY CONTROL
4 5 6		 A. Inspect Deliveries: 1. Inspect all products or equipment delivered to the site prior to unloading. Reject all products or equipment that are damaged, used, or in any other way unsatisfactory for use on Project.
7		END OF SECTION

1		SECTION 01640
2		PRODUCT SUBSTITUTIONS
3	PAF	RT 1 - GENERAL
4	1.1	SUMMARY
5 6 7 8 9 10 11 12 13		 A. Section Includes: 1. The procedure for requesting substitution approval for a product which is specified by descriptive or performance criteria or defined by reference to one or more of the following: a. Name of manufacturer. b. Name of vendor. c. Trade name. d. Catalog number. 2. This Section does not address substitutions for major equipment. See "Instructions to Bidders."
14 15 16		 B. Related Sections include but are not necessarily limited to: 1. Division 0 - Bidding Requirements, Contract Forms, and Conditions of the Contract. 2. Division 1 - General Requirements.
17 18 19 20 21 22 23 24 25		 Requests for Substitution - General: Base all bids on materials, equipment, and procedures specified. Certain types of equipment and kinds of material are described in specifications by means of references to names of manufacturers and vendors, trade names, or catalog numbers. When this method of specifying is used, it is not intended to exclude from consideration other products bearing other manufacturer's or vendor's names, trade names, or catalog numbers, provided said products are capable of accomplishing the same tasks as the products specifically indicated. Other types of equipment and kinds of material may be acceptable.
26	1.2	QUALITY ASSURANCE
27 28 29 30 31 32 33 34		 A. In making request for substitution or in using an approved product, Contractor represents: He has investigated proposed product, and has determined that it is adequate or superior in all respects to that specified, and that it will perform function for which it is intended. He will provide same guarantee for substitute item as for product specified. He will coordinate installation of accepted substitution into work, to include building modifications if necessary, making such changes as may be required for work to be complete in all respects. He waives all claims for additional costs related to substitution which subsequently arise.
35	1.3	DEFINITIONS
36		A. Product: Manufactured material or equipment.
37	1.4	PROCEDURE FOR REQUESTING SUBSTITUTION
38 39 40 41 42		 A. Considered after award of Contract. 1. Considered only if: a. Or-equals are unavailable due to strike, discontinued production of products meeting specified requirements, or other factors beyond control of Contractor; or, b. Contractor proposes a cost reduction incentive to the Owner.

C. Transmittal Mechanics: Santa Fe County February 2022

B. Written requests through Contractor only.

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1 2 3 4 5 6			1. Follow the transmittal mechanics prescribed for Shop Drawings in Section 01340. Product substitution will be treated in a manner similar to "deviations," as described in Paragraph 1.4A.9.f. of Section 01340. List the letter describing the deviation and justifications on the transmittal form in the space provided under the column with the heading "DESCRIPTION." Include in the transmittal letter, either directly or as a clearly marked attachment, the items listed in Paragraph D below.
7 8 9 10 11 12 13 14 15 16 17 18 19 20		D.	 Transmittal Contents: Product identification: a. Manufacturer's name. b. Telephone number and representative contact name. c. Specification section or drawing reference of originally specified product, including discrete name or tag number assigned to original product in the Contract Documents. Manufacturer's literature clearly marked to show compliance of proposed product with Contract Documents. Itemized comparison of original and proposed product addressing product characteristics including but not necessarily limited to: a. Size. b. Composition or materials of construction. c. Weight. d. Electrical or mechanical requirements.
21 22 23 24 25 26 27 28 29 30 31 32	1.5	AP	 4. Product experience: a. Location of past projects utilizing product. b. Name and telephone number of persons associated with referenced projects knowledgeable concerning proposed product. c. Available field data and reports associated with proposed product. 5. Data relating to changes in construction schedule. 6. Data relating to changes in cost. 7. Samples: a. At request of Engineer. b. Full size if requested by Engineer. c. Held until substantial completion. d. Engineer not responsible for loss or damage to samples.
34			Written approval or rejection of substitution given by the Engineer.
35 36		B.	Engineer reserves the right to require proposed product to comply with color and pattern of specified product if necessary to secure design intent.
37 38		C.	In event substitution results in a change of Contract price or time, provisions in General Conditions will be applied for adjustment.
39 40 41 42 43 44		D.	 Substitutions will be rejected if: Submittal is not through the Contractor with his stamp of approval. Requests are not made in accordance with this Section. In the Engineer's opinion, acceptance will require substantial revision of the original design. In the Engineer's opinion, substitution will not perform adequately the function consistent with the design intent.
45			END OF SECTION

1 2		SECTION 01710 CLEANING
3	PAF	RT1- GENERAL
4	1.1	SUMMARY
5 6 7		 A. Section Includes: 1. Intermediate and final cleaning of Work not including special cleaning of closed systems specified elsewhere.
8 9 10		 B. Related Sections include but are not necessarily limited to: 1. Division 0 - Bidding Requirements, Contract Forms, and Conditions of the Contract. 2. Division 1 - General Requirements.
11	1.2	STORAGE AND HANDLING
12 13		A. Store cleaning products and cleaning wastes in containers specifically designed for those materials.
14	1.3	SCHEDULING
15 16		A. Schedule cleaning operations so that dust and other contaminants disturbed by cleaning process will not fall on newly painted surfaces.
17	PAF	RT 2 - PRODUCTS
18	2.1	MATERIALS
19 20 21 22		 A. Cleaning Agents: 1. Compatible with surface being cleaned. 2. New and uncontaminated. 3. For Manufactured Surfaces: Material recommended by manufacturer.
23	PAF	RT 3 - EXECUTION
24	3.1	CLEANING - GENERAL
25		A. Prevent accumulation of wastes that create hazardous conditions.
26 27		B. Conduct cleaning and disposal operations to comply with laws and safety orders of governing authorities.
28 29		C. Do not dispose of volatile wastes such as mineral spirits, oil, or paint thinner in storm or sanitary drains or sewers.
30		D. Dispose of degradable debris at an approved solid waste disposal site.
31 32		E. Dispose of nondegradable debris at an approved solid waste disposal site or in an alternate manner approved by Engineer and regulatory agencies.
33		F. Handle materials in a controlled manner with as few handlings as possible.
34 35		G. Do not drop or throw materials from heights greater than 4 FT (or less than 4 FT if conditions or materials warrant greater care).

1 2 3		H. On completion of work, leave area in a clean, natural looking condition that matches or exceeds existing conditions. Remove all signs of temporary construction and activities incidental to construction of required permanent Work.
4		I. Do not burn on-site.
5	3.2	EXTERIOR (SITE) CLEANING
6 7 8 9 10 11 12 13 14 15		 A. Cleaning During Construction: Construction debris: Confine in strategically located container(s): Cover to prevent blowing by wind. Haul from site minimum once a week. Remove from work area to container daily. Vegetation: Keep weeds and other vegetation trimmed to 3 IN maximum height. Soils, sand, and gravel deposited on paved areas and walks: Remove as required to prevent muddy or dusty conditions. Do not flush into storm sewer system.
17 18 19 20		 B. Final Cleaning: 1. Remove trash and debris containers from site: a. Re-seed areas disturbed by location of trash and debris containers. 2. Clean paved roadways.
21	3.3	FIELD QUALITY CONTROL
22 23		A. Immediately prior to Demonstration Period, conduct an inspection with Engineer to verify condition of all work areas.
24		END OF SECTION

SECTION 01720 1 PROJECT RECORD DOCUMENTS 2 PART 1 - GENERAL 3 4 DESCRIPTION 1.1 5 A. General: 1. Furnish all labor, materials, tools, equipment, and services to provide project record 6 documents as specified, in accord with provisions of Contract Documents. 7 8 Completely coordinate with work of all other trades. 9 See Divisions 0 and 1 for additional requirements. 10 B. Definitions: 11 1. Documents required for construction: Complete set of all documents required by Contract Documents, including but not limited to: 12 13 Contract drawings. Project manual/specifications. 14 b. Addenda. 15 c. 16 Shop drawings. 17 Samples and mock-ups. e. f. Change orders. 18 19 Modifications. g. 20 h. Submittals. 21 Field test records. 22 į. Certificates of inspection. 23 k. Manufacturers Certificates. 24 Construction photographs. 25 Field documents: Complete set of all documents required for construction. 26 Used for construction of project. 27 Provide contract drawings in form of prints. 3. Periodic Update Documents: Complete separate set of all documents required for 28 29 construction with exception of samples and mock-ups. 30 Not used for construction of project. 31 Provide contract drawings in form of clean prints. 32 Project Record Documents: Complete set of all documents required for construction with 33 exception of samples and mock-ups. 34 Not used for construction of project. 35 Provide contract drawings in form of correctable, reproducible sepia mylars. 36 1.2 **SUBMITTALS** 37 A. Section 01340: Shop Drawings, Project Data and Samples. 38 Project record documents: To OWNER with letter of transmittal. 39 C. Copy of letter of transmittal: To ENGINEER. 40 POSTING PRIOR TO CONSTRUCTION

- A. After contract is awarded, but prior to start of construction, obtain contract drawings and 41 specifications which will be used for Field Documents and Periodic Update Documents. 42
- 43 B. Obtain copies of all addenda and post above documents.

MAINTENANCE OF FIELD DOCUMENTS 44 1.4

45 A. Maintain minimum of one copy at project site.

- B. Label each document "FIELD".
- C. These documents will be used for construction of project.
- D. Make documents available at all times for review by ENGINEER, OWNER and authorities having jurisdiction.

5 1.5 MAINTENANCE OF PERIODIC UPDATE DOCUMENTS

- 6 A. Maintain one copy at project site.
- 7 B. Label each document "PERIODIC UPDATE".
- 8 C. Do not use these documents for construction purposes.
- D. Make documents available at all time for review by ENGINEER, OWNER and authorities having jurisdiction.
- 11 E. Maintain in clean, dry, legible condition.
- F. Maintain contract drawings in stackable, enclosed cardboard file drawers designed to hold drawings horizontally. Provide index of contents of each file drawer on outside of drawer.
- G. Maintain all other Periodic Update Documents in stackable, enclosed file boxes designed to hold specific type of document. Provide index of contents of each box on outside of box.

1.6 POSTING AND UPDATING OF PERIODIC UPDATE DOCUMENTS

- 17 A. Digital files of drawings and specifications will be provided to Contractor.
- B. Post and update on weekly basis.
 - C. Contract drawings: Use redlining software to record actual construction including but not limited to:
 - 1. Depths of various elements of foundations in relation to first floor level.
 - 2. Horizontal and vertical location of underground utilities and appurtenances referenced to permanent surface improvements.
 - Location of internal utilities and appurtenances concealed in construction referenced to visible and accessible features of structure.
 - 4. Field changes of dimension and detail.
 - 5. Changes made by change order or field order.
- D. Project Manual/Specifications: Type on each section to record all changes including but not limited to:
- 30 1. Addenda.

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- 2. Changes made by change order or field order.
- 3. Changes made by modifications to contract.
- 4. Bind added sections into Project Manual/Specifications.
- E. No work for which information must be recorded, may be concealed until all required information is recorded on Periodic Update Documents.
- F. Any work concealed prior to recording of required information, will be exposed and once all required information is recorded on Periodic Update Documents, will be restored at CONTRACTOR's expense.

1.7 PRODUCTION OF PROJECT RECORD DOCUMENTS

- 40 A. As work shown on each sheet is completed, provide digital "Redlined" copy on CD.
- B. At substantial completion, obtain complete set of correctable, reproducible mylars of contract drawings.
- 43 C. Label each document "PROJECT RECORD".

1 2		D.	Have skilled CADD Technician transfer all changes, corrections, entries, etc., from field notes to digital files.
3	1.8	PR	OJECT CLOSEOUT
4 5		A.	At completion of project, deliver Project Record Documents to OWNER with letter of transmittal. Included: Two CD's and one hard copy.
6 7 8 9 10 11		В.	Provide transmittal letter containing: 1. Date. 2. Project title. 3. CONTRACTOR's name and address. 4. Title and number of each Project Record Document. 5. Certification that Project Record Documents submitted are complete and accurate.
12		C.	Submit Project Record Documents in containers used for Periodic Update Documents.
13	PAR	T 2	- PRODUCTS - NOT USED
14	PAR	Т 3	- EXECUTION - NOT USED
15 16 17			END OF SECTION

1 2		SECTION 01750 WARRANTIES AND GUARANTEES
3	PAF	1- GENERAL
4	1.1	DESCRIPTION
5		A. Provide written warranties for products and installations indicated.
6		3. See General Conditions and Supplementary General Conditions.
7 8		C. Provide warranty for worked performed for a period of one (1) year. Start of warranty period will begin when substantial completion is issued.
9 10 11 12		 Provide manufacturer's guarantees for products. Provide one (1) year warranty or as specified elsewhere. Where manufacturer's standard warranties expire before expiration date required by Contract Documents, obtain and pay for warranty extensions, as part of Contract Price.
13	1.2	FORM OF SUBMITTALS
14 15 16 17 18 19 20		 Format: Size: 8-1/2 IN X 11 IN. Binder: Commercial quality, three-ring binders with durable and cleanable plastic covers. Cover and Spine: Label with typed or printed title "Warranties".
21 22 23 24		 Table of Contents: Neatly typed, in the sequence of the Table of Contents of the Project Manual, with each item identified with a number and title of the specification section in which specified and the name of the product or work item.
25 26 27		C. Separate each warranty with index tab sheets keyed to Table of Contents listing.1. List subcontractor, suppliers, and manufacturer, with name, address and telephone number of responsible principal.
28	1.3	PREPARATION OF SUBMITTAL
29 30		 Obtain warranties, executed in duplicate by responsible subcontractors, suppliers, and manufacturers.
31		3. Verify that documents are in proper form, contain full information and are notarized.
32	1.4	TIME OF SUBMITTALS
33		A. Provide all warranties prior to final acceptance.
34 35		3. Submit warranties indicated to the OWNER with copy of transmittal form to ENGINEER. Submit in 3-ring binder.
36	1.5	WARRANTIES AND GUARANTEES
37 38		A. All warranties and guarantees specifically called for by the specifications shall expressly run to the benefit of the OWNER.
39		2 - PRODUCTS - NOT USED
40	PAF	3 - EXECUTION - NOT USED

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END OF SECTION

2		SPARE PARTS AND MAINTENANCE MATERIALS
3	PAF	RT1- GENERAL
4	1.1	DESCRIPTION
5 6 7 8 9 10 11 12 13		 General: Furnish all labor, materials, tools, equipment, and services for all spare parts and maintenance materials as indicated, in accord with provisions of Contract Documents. Completely coordinate with work of all other trades. Although such work is not specifically indicated, furnish and install all supplementary or miscellaneous items, appurtenances and devices incidental to or necessary for a sound, secure and complete installation. See Divisions 0 and 1 for additional requirements. See specification sections for items required.
14	1.2	SUBMITTALS
15 16 17 18 19		 A. Section 01340: Shop Drawings, Project Data and Samples. B. Spare parts: To OWNER with letter of transmittal. C. Maintenance materials: To OWNER with letter of transmittal. D. Extra materials: To OWNER with letter of transmittal. E. Copies of all letters of transmittal: to ENGINEER.
20	1.3	PRODUCTS REQUIRED
21 22 23 24 25		 A. Provide quantities of products, spare parts, maintenance tools and maintenance materials specified in individual sections to be provided to OWNER, in addition to that required for completion of work. 1. Products: Identified to those installed in the work - include quantities in original purchase from manufacturer and/or suppliers to avoid variation in manufacturers.
26	1.4	STORAGE
27 28 29 30 31		 A. Spare Parts and Tools: 1. Package in clearly identified boxes. a. Indicate manufacturers name, part name and stock number. b. Indicate piece of equipment part or tool is for. c. Indicate name, address and phone number of closest supplier.
32 33 34 35 36		 B. Maintenance Materials: 1. Package in clearly identified boxes. a. Indicate trade name and stock number. b. Indicate which item material is to be used with. c. Indicate name, address and phone number of closest supplier.
37 38 39 40 41 42 43		 C. Extra Materials: 1. Package in clearly identified containers, or install where indicated. a. Indicate trade name, stock number, size, color, etc. b. Indicate where product is to be used. c. Indicate name, address and phone number of closest supplier.
	Sant	ta Fe County Glorieta, N

SECTION 01760

1	1.5	DELIVERY
2		A. Deliver to OWNER at time of substantial completion, unless OWNER requests earlier delivery.
3	PAF	RT 2 - PRODUCTS - NOT USED
4	PAF	RT 3 - EXECUTION - NOT USED
5 6		END OF SECTION
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1		SECTION 02221
2		TRENCHING, BACKFILLING, AND COMPACTING FOR UTILITIES
3	PAF	RT1- GENERAL
4	1.1	SUMMARY
5 6 7 8 9 10 11		 A. Section Includes: Excavation, trenching, backfilling and compacting for all underground utilities. Relocation of existing piping. All related utility and process appurtenances. B. Related Sections include but are not necessarily limited to: Division 0 - Bidding Requirements, Contract Forms, and Conditions of the Contract. Division 1 - General Requirements.
12	1.2	QUALITY ASSURANCE
13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31		 A. Referenced Standards: American Association of State Highway & Transportation Officials (AASHTO): T99, The Moisture-Density Relations of Soils Using a 5.5 LB Rammer and a 12 IN Drop. T180, Moisture-Density Relations of Soils Using a 10 LB Rammer and an 18 IN Drop. ASTM International (ASTM): C33, Standard Specification for Concrete Aggregates. D698, Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft³). D1557, Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft³(2,700 kN-m/m)). D2487, Standard Classification of Soils for Engineering Purposes (Unified Soil Classification System). D4253, Standard Test Methods for Maximum Index Density of Soils Using a Vibratory Table. D4254, Minimum Index Density of Soils and Calculation of Relative Density. B. Qualifications: Hire an independent soils laboratory to conduct in-place moisture-density tests for backfilling to assure that all work complies with this Specification.
32	1.3	DEFINITIONS
33 34		A. Excavation:1. All excavation will be defined as unclassified.
35	1.4	SUBMITTALS
36 37 38 39 40 41 42 43 44 45		 A. Shop Drawings: See Section 01340. Product technical data including:

B. Miscellaneous Submittals:

1. Submit test reports and fully document each with specific location or stationing information, date, and other pertinent information.

4 1.5 SITE CONDITIONS

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- A. Avoid overloading or surcharge a sufficient distance back from edge of excavation to prevent slides or caving. Maintain and trim excavated materials in such manner to be as little inconvenience as possible to public and adjoining property owners.
 - B. Provide full access to public and private premises and fire hydrants, at street crossings, sidewalks and other points as designated by Owner to prevent serious interruption of travel.
- C. Protect and maintain bench marks, monuments or other established points and reference points and if disturbed or destroyed, replace items to full satisfaction of Owner and controlling agency.
- D. Verify location of existing underground utilities.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Backfill Material:
 - Class I, II, or III soils, or lean fill as specified in Section 700, Subsection 701.13 of the New Mexico Standard Specifications for Public Works Construction.
- 18 2. As approved by the Soils Engineer.
 - 3. Free of rock cobbles, roots, sod or other organic matter, and frozen material.
 - 4. Moisture content at time of placement: 5 percent plus/minus of optimum moisture content as specified in accordance with ASTM D1557.
 - B. Subgrade Stabilization Materials: Provide subgrade stabilization material consisting of Class I, II, or III soils in accordance with the requirements of the Section 700 of the New Mexico Standard Specifications for Public Works Construction.
 - C. Bedding Materials:
 - 1. As approved by the Soils Engineer.
 - 2. Granular bedding materials:
 - a. ASTM C33, gradation 67 (3/4 IN to No. 4 sieve) defined below:

Sieve Size	1 IN	3/4 IN	3/8 IN	No. 4	No. 20
Percent Passing by Weight	100	90-100	20-55	0-10	0

D. Lean Fill

 As specified in Section 207 of the New Mexico Standard Specifications for Public Works Construction

33 PART 3 - EXECUTION

34 3.1 GENERAL

A. Remove and dispose of unsuitable materials as directed by Engineer to site approved by Owner.

36 3.2 EXCAVATION

- A. Unclassified Excavation:
- 1. Remove rock excavation, clay, silt, gravel, hard pan, loose shale, and loose stone as directed by Soils Engineer.

2			1. 12 IN (minimum) clear distance between outer surface and embankment.
3		C.	Trench Excavation:
4			1. Excavate trenches by open cut method to depth shown on Drawings and necessary to
5			accommodate work.
6			a. Support existing utility lines and yard piping where proposed work crosses at a lower
7			elevation.
8			1) Stabilize excavation to prevent undermining of existing utility and yard piping.
9			2. Open trench outside buildings, units, and structures:
10 11			 No more than the distance between two manholes, structures, units, or 300 LF, whichever is less.
12			b. Field adjust limitations as weather conditions dictate.
13			c. Contractor to backfill all open trenches at end of day following completion of work.
14			Trenches may be reopened with commencement of work on following day.
15			3. Trenching within buildings, units, or structures:
16			a. No more than 100 LF at any one time.
17			4. Any trench or portion of trench, which is opened and remains idle for 7 calendar days, or
18			longer, as determined by the Owner, may be directed to be immediately refilled, without
19			completion of work, at no additional cost to Owner. Said trench may not be reopened until
20			Owner is satisfied that work associated with trench will be prosecuted with dispatch.
21			5. Observe following trenching criteria:
22			a. Trench size.
23			1) Excavate width to accommodate free working space.
24 25			2) Maximum trench width at top of pipe or conduit may not exceed outside diameter
26			of utility service by more than the following dimensions:
20			OVERALL DIAMETER
			OVERALL DIAMETER OF UTILITY SERVICE EXCESS DIMENSION
			33 IN and less 18 IN
			more than 33 IN 24 IN
27			
28			3) Cut trench walls vertically from bottom of trench to 1 FT above top of pipe,
29			conduit, or utility service.
30			4) Keep trenches free of water. Include cost of dewatering in original proposal.
31	3.3	PR	EPARATION OF FOUNDATION FOR PIPE LAYING
32		A.	Over-Excavation:
33			1. Over-excavate the trench section in accordance with the requirements of Section 701.12.3 of
34			the New Mexico Standard Specifications for Public Works Construction.
35 36			 Backfill and compact to 95 percent of maximum dry density per ASTM D1557. Backfill with granular bedding material as option.
37		В.	Rock Excavation:
38			1. Rock excavation shall be in accordance with the requirements of Section 701.11 of the New
39			Mexico Standard Specifications for Public Works Construction.
40			2. Excavate minimum of 6 IN below bottom exterior surface of the pipe or conduit.
41			3. Form bell holes in trench bottom.
42		C.	C
43			1. Stabilize the subgrade when directed by the Owner in accordance with the requirements of
44			Section 701.12 of the New Mexico Standard Specifications for Public Works Construction.
45			2. Observe the following requirements when unstable trench bottom materials are encountered.

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B. Excavation for Appurtenances:

Notify Owner when unstable materials are encountered.

1) Define by drawing station locations and limits.

1 2 3		b. Remove unstable trench bottom caused by Contractor failure to dewater, rainfall, or Contractor operations.1) Replace with subgrade stabilization with no additional compensation.	
4	3.4	BACKFILLING METHODS	
5 6		A. Do not backfill until tests to be performed on system show system is in full compliance to specified requirements.	
7 8 9 10 11 12 13 14 15		 B. Compacted Backfill: Furnish where indicated on Drawings, specified for trench embedment conditions and for compacted backfill conditions up to 12 IN above top of pipe or conduit. Comply with the following:	
16		C. Water flushing for consolidation is not permitted.	
17	3.5	COMPACTION	
18 19 20 21 22 23		 A. General: Compaction shall be in accordance with the requirements of Section 701.13 of the New Mexico Standard Specifications for Public Works Construction. Place and assure bedding, backfill, and fill materials achieve an equal or "higher" degree of compaction than undisturbed materials adjacent to the work. In no case shall degree of compaction below "Minimum Compaction" specified be accepted. 	
24	FIE	LD QUALITY CONTROL	
25 26 27 28 29 30 31 32 33 34 35		 B. Testing: Perform in-place moisture-density tests as directed by the Owner. Perform tests through recognized testing laboratory approved by Owner. Costs of "Passing" tests paid by Owner. Perform additional tests as directed until compaction meets or exceeds requirements. Cost associated with "Failing" tests shall be paid by Contractor. Reference to Engineer in this section will imply Soils Engineer when employed by Owner and directed by Engineer to undertake necessary inspections as approvals as necessary. Assure Owner has immediate access for testing of all soils related work. Ensure excavations are safe for testing personnel. See Specification 01060 1.5 for Testing Frequency. 	
36		END OF SECTION	

2		ASPHALTIC CONCRETE VEHICULAR PAVING
3	PAF	RT1- GENERAL
4	1.1	SUMMARY
5 6		A. Section Includes:1. Asphaltic concrete vehicular paving.
7 8 9		 B. Related Sections include but are not necessarily limited to: 1. Division 0 - Bidding Requirements, Contract Forms, and Conditions of the Contract. 2. Division 1 - General Requirements.
10	1.2	QUALITY ASSURANCE
11 12 13 14 15		 A. Referenced Standards: 1. Federal Specifications (FS): a. TT-P-115F, Paint, Traffic (Highway, White and Yellow). 2. Construction standards: State of New Mexico Standard Specifications for Public Works Construction, as amended to date.
16 17 18		 B. Miscellaneous: 1. Should conflicts arise between standard specifications of government agencies mentioned herein and Contract Documents, Contract Documents shall govern.
19	1.3	SUBMITTALS
20 21 22 23 24		 A. Shop Drawings: 1. Product technical data including: a. Acknowledgement that products submitted meet requirements of standards referenced. b. Manufacturer's installation instructions. 2. Asphalt design mix.
25	PAF	RT 2 - PRODUCTS
26	2.1	MATERIALS
27 28		A. Asphaltic Concrete: Per Sections 116 and 334 of the New Mexico Standards for Public Works Construction or Santa Fe County approved equal.
29 30 31 32		B. Line Paint:1. Nonreflective.2. White.3. Fed Spec TT-P-115F.
33	PAF	RT 3 - EXECUTION
34	3.1	INSTALLATION
35 36		A. Construct to line, grade and section as shown on Drawings and in accordance with New Mexico Standard Specifications for Public Works Construction.
37		B. Paving shall be completed following trench backfilling operations.

SECTION 02513

1 2	C.	Install a 4 IN compacted layer of base course in accordance with Section 336 of the New Mexico Standard Specifications for Public Works Construction.	
3 4 5	D.	Spread a prime coat uniformly on compacted aggregate base course at rate of 0.10 to 0.30 GAL per square yard in accordance with Section 336.3.2 New Mexico Standard Specifications for Public Works Construction.	
6 7	E.	Install a 4 IN layer of asphalt concrete in accordance with Sections 116 and 336 of New Mexico Standard Specifications for Public Works Construction.	
8	F.	Tolerance of Finished Grade: +0.10 FT from required elevations.	
9 10 11 12 13 14 15 16	G.	 Line Painting: Thoroughly clean surfaces which are to receive paint. Make completely dry before paint is applied. Do not paint until minimum of 5 days has elapsed from time surface is completed. A longer period may be required if directed by Engineer. Do not apply paint over wet surfaces, during wet or damp weather, or when temperature is below 40 DegF. Lay out markings and striping to match existing. 	
17		FND OF SECTION	

1		SECTION 02660
2		WATER MAIN CONSTRUCTION
3	PAF	RT 1 - GENERAL
4	1.1	SUMMARY
5 6 7 8 9 10 11 12 13 14 15		 A. Section Includes: Coordination and interface with existing facilities and utilities. Connections to existing watermains. Testing, flushing and disinfection. B. Related Sections include but are not necessarily limited to: Division 0 - Bidding Requirements, Contract Forms, and Conditions of the Contract. Division 1 - General Requirements. Section 15060 - Pipe and Pipe Fittings: Basic Requirements. Section 15062 - Pipe: Ductile. Section 15100 - Valves: Basic Requirements. Section 15101 - Gate Valves.
16		7. Section 15114 – Miscellaneous Valves.
17		8. Section 15510 - Fire Hydrants.
18	1.2	QUALITY ASSURANCE
19 20 21 22 23 24 25 26 27		 A. Referenced Standards: 1. American Water Work Association (AWWA): a. B300, Standard for Hypochlorites. b. B301, Standard for Liquid Chlorine. c. C600, Standard for Installation of Ductile-Iron Water Mains. d. C651, Standard for Disinfecting Water Mains. 2. National Sanitation Foundation International (NSF) a. 61, Drinking Water System Components – Health Effects b. 60, Drinking Water Treatment Chemicals – Health Effects
28	1.3	SUBMITTALS
29 30		A. Submit results of the leakage tests, identifying the specific length of pipe tested, the test pressure, the duration of test and the amount of leakage.
31		B. Submit satisfactory bacteriological test reports on disinfection requirements.
32 33		C. Operation and Maintenance Manuals:1. See Section 01340.
34	PAF	RT 2 - PRODUCTS
35	2.1	MATERIALS
36		A. Pipe: Refer to Sections 15060, 15062, and 15064.
37 38 39 40		 B. In-Line Valves: 1. Refer to Sections 15100 and 15101. 2. Provide adjustable valve boxes. Include price of valve boxes in price of valve installed complete.
41		C. Fire Hydrants: Refer to Section 15510.

PART 3 - EXECUTION

2 INSTALLATION 3.1

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- 3 A. Install water main to the line and grade on the Drawings. Water mains to be staked at a 4 minimum 100 FT interval with depth of cuts monitored.
 - B. Field verify depth of utilities that will be crossed.
 - Adjust water main elevation as required during construction.
 - 2. No separate payment will be made for field verification or adjustment of main depths as required.
- C. Contractor shall restore all existing structures or services damaged by Contractor's operations at 10 no cost to Owner.

INTERRUPTION OF SERVICE

A. Interruption of service to water users shall not exceed 4 HRS. Notify property owners of interruption a minimum of 24 HRS in advance.

14 3.3 UNDERGROUND SERVICES

- 15 A. Notify utility representative prior to construction to obtain available information on location of 16 existing utilities. The Contractor shall be responsible for locating all utilities.
- 17 B. Existing water services are to be connected to the new watermains. Damage to existing water 18 service to be repaired, using polyethylene pipe and union the same size as existing service.

19 DRIVEWAY REMOVAL AND REPLACEMENT 3.4

- 20 A. All Portland cement concrete and asphalt noted for removal and replacement shall be cut prior to 21 removal. Cut by sawing, vertical cut to be 1 IN minimum. The remaining depth of section may 22 be broken out in a manner subject to Engineers approval. Width of section removed to be either 23 a width not greater than the outside diameter of the water main plus 4 FT-0 IN or to the nearest 24 joint.
- 25 B. Replace Portland cement concrete and asphalt equal to or better than original paving plus 2 IN.
- 26 C. Debris resulting from the above operations shall be removed and hauled as directed by the 27 Engineer.
- 28 D. Payment for driveway removal and replacement to be at bid unit price for this item.

29 GRAVEL SURFACED DRIVES AND ROADWAYS 3.5

- 30 A. The Contractor shall restore all damaged gravel surfaced drives and roadways to a condition 31 equal to or better than original. Payment to be at bid unit price for this item.
 - 1. Replacement gravel gradation to match existing.

PROTECTION OF EXISTING UTILITIES

- 34 A. Contractor to verify the location of all underground utilities. Omission from, or the inclusion of 35 utility locations on the plans is not to be considered as the nonexistence of or a definite location 36 of existing underground utilities.
- 37 B. A representative of the underground utilities shall be notified 24 HRS in advance of crossings.

38 3.7 CONNECTIONS TO EXISTING WATER MAINS

A. Make connections to existing water mains as shown on Drawings, by attaching to existing or changed fitting. Cost for making connections shall include cost of all fittings including flexible couplings, and shall be included in the bid unit price of the water main.

- 1 B. Where the connection is made to an existing water main which can be adequately isolated from 2 the distribution system, it shall be termed a "dry connection."
- C. Contractor is responsible for controlling and disposing of water in the trench at no additional cost to the Owner. 4

3.8 SEWER CROSSINGS

- A. Water mains crossing house sewers, storm sewers or sanitary sewers shall be laid to provide a 6 7 vertical separation of at least 18 IN between the bottom of the water main and the top of the 8 sewer, whenever possible. A water main may be laid closer than 10 FT horizontally if the crown 9 of the sewer is at least 18 IN below the water main invert. In the event 18 IN of vertical 10 separation cannot be provided at a sewer crossing, the sewer shall be removed for a distance of 11 10 FT on each side of the water main and replaced with one 20 FT length of pipe of the same 12
 - B. Concrete collars or a connection approved by the Engineer shall be provided at each end of the new sewer to connect to the existing sewer pipe.
 - C. Payment for crossings shall be included in the bid unit price of the water main.

3.9 TREES 16

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A. Do not remove trees without written instructions from the Engineer unless tree removal is shown on drawings. No separate payment will be made for tree removal and the cost shall be included in the bid unit price for water main.

20 3.10 FENCES, SIGNS, MAILBOXES, ETC.

A. Restore all damaged fences, signs, mailboxes, etc., to their original conditions. No separate payment will be made for these items.

3.11 FIELD QUALITY CONTROL

- A. Sealing, Flushing, and Disinfection of Potable Water Systems:
 - Maintain interior of all pipes, fittings and other accessories free from dirt and foreign material at all times. If, in the opinion of the Engineer, the pipe contains dirt that will not be removed by flushing, the pipe interior shall be cleaned and swabbed with bactericidal solution. At close of day's work or whenever workmen are absent from jobsite, plug, cap or otherwise provide watertight seal from open ends of pipe to prevent ingress of foreign material. If water is present in the trench, seal shall remain in place until trench is pumped
 - After favorable performance of pressure test and prior to final acceptance, thoroughly flush the entire potable water piping system and perform disinfection as prescribed. Perform all work including preventative measures during construction in full compliance to AWWA
 - 3. Flush each segment of the system to provide a flushing velocity of not less than 2.5 FT per second
 - Drain flushing water to location approved by the Owner.
 - Perform disinfection using one of the following forms:
 - Application of chlorine gas-water mixture by means of solution-feed chlorinating device. Liquid chlorine shall comply with AWWA B301.
 - Application of calcium hypochlorite, or sodium hypochlorite. Chlorine compounds shall comply with AWWA B300.
 - 6. Disinfect pipe with chlorinated water as per AWWA C651. Method of application of chlorine shall be by continuous feed method or slug method. During disinfection procedure, ensure that initial and residual chlorine concentrations meet AWWA C651 requirements by testing by an approved method as directed by the Owner. Cost of testing shall be included in the Bid Unit Price for water mains and no separate payment will be made for this item.

1	7.	Tag the system during the disinfection procedure.
2	8.	Following disinfection for required contact period, neutralize chlorine residual in water by
3		treating with reducing agent. (Refer to AWWA C651) Flush all treated water from pipeline
4		at its extremities until replacement water throughout pipe, upon test is proved comparable in
5		quality to water in existing system. Take two samples to test for bacteriological quality as
6		directed by Engineer. Repeat disinfection procedure until two satisfactory results are
7		obtained. Quality of water delivered by the new water main to remain satisfactory for a
8		minimum period of two (2) days.
9	9.	Secure satisfactory bacteriological reports on samples from the system. Ensure all sampling
10		and testing procedures are in full compliance to AWWA C651, and applicable requirements
11		of the State of New Mexico. No separate payment will be made for this item.
12	10.	The Owner will provide the water required to fill the main initially and will pay for the
13		water required to flush the main once. Filling and flushing shall be performed during
14		periods of low usage, between the hours of midnight and 4:00 AM. Flushing water will be
15		based on a maximum of 8 HRS total. Any additional refilling or reflushing to be at the
16		Contractor's expense at the Owner's commercial water rates.
17		END OF SECTION

2	PAINTING AND PROTECTIVE COATINGS		
3	PAF	RT 1 - GENERAL	
4	1.1	SUMMARY	
5		A. Section Includes:	
6 7		 Painting and protective coatings. Minimum surface preparation requirements. 	
8 9 10 11 12 13 14		 B. Related Sections include but are not necessarily limited to: 1. Division 0 - Bidding Requirements, Contract Forms, and Conditions of the Contract. 2. Division 1 - General Requirements. 3. Section 15060 - Pipe and Pipe Fittings: Basic Requirements. 4. Section 15062 - Pipe: Ductile. 5. Section 15100 - Valves: Basic Requirements. 6. Section 15510 - Fire Hydrants. 	
15	1.2	QUALITY ASSURANCE	
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 44 45		 A. Referenced Standards: American National Standards Institute (ANSI): a. A250.10, Test Procedure and Acceptance Criteria For Prime Painted Steel Surfaces for Steel Doors. b. Z535.1, Safety Color Code. ASTM International (ASTM): a. D4258, Practice for Surface Cleaning Concrete for Coating. b. D4259, Practice for Abrading Concrete. c. D4261, Practice for Surface Cleaning Concrete Unit Masonry for Coating. d. D4262, Test Method for pH of Chemically Cleaned or Etched Concrete Surfaces. e. D4263, Test Method for Indicating Moisture in Concrete by the Plastic Sheet Method. f. E84, Test Method for Surface Burning Characteristics of Building Materials. American Water Works Association (AWWA). National Bureau of Standards (NBS): a. Certified Coating Thickness Calibration Standards. National Fire Protection Association (NFPA): a. 101, Life Safety Code. National Sanitation Foundation International (NSF): a. 61, Drinking Water System Components - Health Effects. b. 60, Drinking Water Treatment Chemicals – Health Effects. Steel Structures Painting Council (SSPC) Joint Surface Preparation Standard: a. PA-2, Measurement of Dry Paint Thickness with Magnetic Gages. b. SP-1, Solvent Cleaning. c. SP-2, Hand Tool Cleaning. d. SP-3, Power Tool Cleaning. e. SP-5/NACE No. 1, White Metal Blast Cleaning. f. SP-6/NACE No. 3, Commercial Blast Cleaning. g. SP-6/NACE No. 4, Brush-off Blast Cleaning. h. SP-10/NACE No. 2, Near-White Blast Cleaning. i. SP-13/NACE No. 6, Surface Preparation of Concrete. 	
46		B. Qualifications:	

SECTION 09905

- 1. Coating manufacturer's authorized representative shall provide written statement attesting
 2 that Applicator has been instructed on proper preparation, mixing and application procedures
 3 for coatings specified.
 - 2. Contractor and applicators shall have minimum of 10 years experience in application of similar products on similar project. Provide references for minimum of three different projects completed in last 5 years with similar scope of work. Include name and address of project, size of project in value (painting) and contact person.
 - C. Miscellaneous:
 - 1. Furnish paint through one manufacturer unless noted otherwise.
- D. Deviation from specified mil thickness or product type is not allowed without written authorization of Engineer.
 - E. Material may not be thinned unless approved, in writing, by paint manufacturer's authorized representative.

1.3 DEFINITIONS

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- A. Installer or Applicator:
 - 1. Installer or applicator is the person actually installing or applying the product in the field at the Project site.
 - 2. Installer and applicator are synonymous.
- B. Approved Factory Finish: Finish on a product in compliance with the finish specified in the section where the product is specified.
 - C. Corrosive Environment: Immersion in, or not more than 6 IN above, or subject to frequent condensation, spillage or splash of a corrosive material such as water, wastewater, or chemical solution; or chronic exposure to corrosive, caustic or acidic agent, chemicals, chemical fumes, chemical mixture, or solutions with pH range of 5 9.
 - D. Highly Corrosive Environment: Immersion in, or not more than 6 IN above, or subject to frequent condensation, spillage or splash of a corrosive material such as water, wastewater, or chemical solution; or chronic exposure to corrosive, caustic or acidic agent, chemicals, chemical fumes, chemical mixture, or solutions with pH range below 5 or above 9.
 - E. Exposed Exterior Surface: Surface which is exposed to weather but not necessarily exposed to view as well as surface exposed to view. Exterior surfaces are considered corrosive environment.
- F. Finished Area: One that has finish called for on Room Finish Schedule or is indicated, on Drawings, to be painted.
 - G. Paint includes fillers, primers, sealers, emulsions, oils, alkyds, latex, enamels, thinners, stains, epoxies, vinyls, chlorinated rubbers, urethanes, shellacs, varnishes, and any other applied coating specified within this Section.
 - H. Surface Hidden from View: Surfaces such as those within pipe chases, and between top side of ceilings (including drop-in tile ceilings) and underside of floor or roof structure above.
 - I. VOC: Volatile Organic Compounds.

39 1.4 SUBMITTALS

- A. Shop Drawings:
 - 1. See Section 01340.
 - 2. Product technical data including:
 - Acknowledgement that products submitted meet requirements of standards referenced.
- b. Manufacturer's application instructions.
- c. Manufacturer's surface preparation instructions.

1 d. If products being used are manufactured by Company other than listed in Article 2.1, 2 provide complete individual data sheet comparison of proposed products with specified products including application procedure, coverage rates and verification that product is 3 4 designed for intended use. 5 Contractor's written plan of action for containing airborne particles created by blasting 6 operation and location of disposal of spent contaminated blasting media. Coating manufacturer's recommendation on abrasive blasting. 7 f. 8 Manufacturer's recommendation for universal barrier coat. 9 3. Manufacturer's statement regarding Applicator instruction on product use. 10 4. Contractor and applicator experience qualifications. No submittal information will be reviewed until Engineer has received and approved 11 12 Contractor and Applicator qualifications. 13 Certification that coating systems proposed for use have been reviewed and approved by 14 Senior Corrosion Specification Specialist employed by the coating manufacturer. 15 B. Miscellaneous Submittals: 1. See Section 01340. 16 17 2. Approval of application equipment. 18 3. Applicator's daily record: 19 a. Submit daily record at end of each week in which painting work is performed. 20 DELIVERY, STORAGE, AND HANDLING 21 A. Deliver in original containers, labeled as follows: 22 Name or type number of material. 23 Manufacturer's name and item stock number. 24 3. Contents, by volume, of major constituents. 25 4. Warning labels. 26 5. VOC content. PART 2 - PRODUCTS 27 28 ACCEPTABLE MANUFACTURERS 29 A. Subject to compliance with the Contract Documents, only the following manufacturers are 30 acceptable: 31 1. Tnemec. 32 2. Ameron Protective Coatings Div. 33 3. ICI Devoe. 34 4. Carboline Protective Coatings. 5. Sherwin Williams. 35 Dampney Company, Inc. 36 37 B. Submit request for substitution in accordance with Specification Section 01640. 38 2.2 **MATERIALS** 39 A. All materials used must contain not more than 2.8 LBS/GAL VOC. 40 B. For unspecified materials such as thinner, provide manufacturer's recommended products. 41 C. Paint Systems - General: 42 1. P=prime coat. F1, F2 . . . Fn = first finish coat, 43 second finish coat nth finish coat, color as selected by Engineer. 44 If two finish coats of same material are required, Contractor may, at his option and by written

specified.

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approval from paint manufacturer, apply one coat equal to mil thickness of two coats

I	-	D.	Products specified are manufactured by Themec.
2		E.	Paint Systems (Systems not shown are not used):
3			1. SYSTEM #1 - Polyamidoamine Epoxy Primer with Polyamidoamine Epoxy or Aliphatic
4			Acrylic Polyurethane Enamel Finish Coat(s).
5			a. Prime coat:
6			1) P1=1 coat, 3 mils, Series N69 Epoxoline (Polyamidoamine Epoxy), VOC=2.11
7			b. Finish coat(s):
8			1) Interior:
9			
9 10			 a) F1=1 coat, 3 mils, Series N69 Epoxoline (Polyamidoamine Epoxy) b) F2=1 coat, 3 mils, Series N69 Epoxoline (Polyamidoamine Epoxy)
11 12			2) Exterior:
13			 a) F1=1 coat, 3 mils, Series N69 Epoxoline (Polyamidoamine Epoxy) b) F2=1 coat, 2.5 mils, Series 1074 Endura-Shield (Aliphatic Acrylic Polyurethane
13 14			
			Enamel), VOC=1.81
15			2. SYSTEM #2 - Polyamidoamine Epoxy Primer with Polyamidoamine Epoxy or Aliphatic
16			Acrylic Polyurethane Enamel Finish Coat(s).
17			a. Prime coat:
18			1) P1=1 coat, 5 mils, Series N69 Epoxoline (Polyamidoamine Epoxy), VOC=2.11
19			b. Finish coat(s):
20			1) Interior:
21			a) F1=1 coat, 5 mils, Series N69 Epoxoline (Polyamidoamine Epoxy), VOC=2.11
22			2) Exterior:
23			a) F1=1 coat, 5 mils, Series N69 Epoxoline (Polyamidoamine Epoxy)
24			b) F2=1 coat, 2.5 mils, Series 1074 Endura-Shield (Aliphatic Acrylic Polyurethane
25			Enamel), VOC=2.45
26			3. SYSTEM #3 - Polyamidoamine Epoxy Primer with Polyamidoamine Epoxy or Aliphatic
27			Acrylic Polyurethane Enamel Top Coat(s).
28			a. Prime coat:
29			1) P1=1 coat, 5 mils, Series N69 Epoxoline (Polyamidoamine Epoxy), VOC=2.11
30			b. Finish coat(s):
31			1) Interior:
32			a) F1=1 coat, 5 mils, Series N69 Epoxoline (Polyamidoamine Epoxy)
33			2) Exterior:
34			a) F1=1 coat, 2.5 mils, Series 1074 Endura-Shield (Aliphatic Acrylic Polyurethane
35			Enamel), VOC=2.80
36	PAR	Г3	- EXECUTION
37	3.1	TTI	EMS TO BE PAINTED
31	3.1	111	ENIS TO BETAINTED
38		A.	Exposed Exterior Surfaces including:
39			1. Piping, valves, fittings, and hydrants.
40			2. Steel pipe bollards.
41			3. Galvanized metal surfaces.
42			4. Copper and brass surfaces.
43	3.2	ITI	EMS NOT TO BE PAINTED
44		A.	
45			Documents to be painted.
46		В.	Items with Approved Factory Finish.
47		C.	Other Items:
48		٠.	Stainless steel surfaces except:
49			a. Piping.
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	Februa		·

1 2 3 4 5 6 7 8 9 10 11 12 13 14	3.3	200	2. 3. 4. 5. 6. 7. 8.	b. Banding as required to identify piping. Aluminum surfaces except: a. Where specifically shown in the Contract Documents. b. Where in contact with concrete. c. Where in contact with dissimilar metals. Fiberglass surfaces except: a. Fiberglass piping. b. Piping supports. Interior of pipe, ductwork, and conduits. Moving parts of mechanical and electrical units where painting would interfere with the operation of the unit. Code labels and equipment identification and rating plates. Contact surfaces of friction-type connections. Galvanized steel items. DULE OF ITEMS TO BE PAINTED AND PAINTING SYSTEMS
13	3.3	SC	пег	OLE OF ITEMS TO BE FAINTED AND FAINTING STSTEMS
16		A.		e, Valves, and Fittings:
17 18				Pipe bollards: SYSTEM #2.
19			2. 3.	Steel, cast-iron, and uncoated ductile iron: SYSTEM #1. Stainless: SYSTEM #1.
20			4.	Brass and bronze: SYSTEM #3.
21			5.	PVC, FRP, and CPVC: SYSTEM #3.
22	3.4	PR	EPA	ARATION
22			C	
23 24		A.	1.	neral: Prepare surfaces to be painted in accordance with coating manufacturer's instructions and this
25			1.	Section unless noted otherwise in the Specification.
26			2.	Remove all dust, grease, oil, compounds, dirt and other foreign matter which would prevent
27				bonding of coating to surface.
28		В.	Pro	otection:
29				Protect surrounding surfaces not to be coated.
30			2.	Remove and protect hardware, accessories, plates, fixtures, finished work, and similar items;
31				or provide ample in-place protection.
32		C.	Pre	pare and Paint Before Assembly: Where component is subject to corrosive or highly corrosive
33				rironment, prepare and paint, before assembly, all surfaces which may be subject to
34			env	rironment which are inaccessible after assembly.
35		D.		rous Metal:
36			1.	Prepare ductile iron pipe in accordance with pipe manufacturer's recommendations and
37			2	AWWA.
38			2.	Complete fabrication, welding or burning before beginning surface preparation.
39 40				a. Chip or grind off flux, spatter, slag or other laminations left from welding.b. Remove mill scale.
41				c. Grind smooth rough welds and other sharp projections.
42			3.	Solvent clean in accordance with SSPC SP-1 all surfaces scheduled to receive additional
43				SSPC surface preparation.
44			4.	Surfaces subject to corrosive or highly corrosive environment and all surfaces subject to
45				immersion service:
46				a. Near-white blast clean in accordance with SSPC SP-10/NACE No. 2.
47			5.	All interior and exterior surfaces:
48			6	a. Minimum commercial blast clean in accordance with SSPC SP-6/NACE No. 3.
49 50			6.	Surfaces subject to high temperatures. a. Heat in excess of 600 DegF: SSPC SP-10/NACE No. 2.
51				a. Heat in excess of 600 DegF: SSPC SP-10/NACE No. 2.b. Heat in excess of 200 DegF but less than 600 DegF: SSPC SP-6/NACE No. 3.
J 1	Sant	a Fe C	Olints	
		uary 2		East Glorieta Distribution & Regional Well

1 2 3 4			 7. Surfaces of steel joists and steel trusses: a. Commercial blast clean the major portion of the truss in accordance with SSPC SP-6/NACE No. 3. b. Power tool or hand clean tight connection areas and other difficult to access areas in 	
5			accordance with SSPC SP-2 or SP-3.	
6			8. Steel surfaces scheduled to receive paint system No. 24:	
7			a. White metal blast in accordance with SSPC SP-5/NACE No. 1.	
8			9. Restore surface of field welds and adjacent areas to original surface preparation.	
9			10. All surfaces of steel lintels and steel components of concrete lintels used in wall construct	tion
10			shall be completely painted with both prime and finish coats prior to placing in wall.	
		_		
11		E.	Galvanized Metal:	
12 13			 Solvent clean in accordance with SSPC SP-1 followed by abrasive brush blast in accorda with SSPC SP-7/NACE No. 4 to provide 1 mil profile. 	nce
14		F.	Preparation by Abrasive Blasting:	
15			All abrasive-blasted ferrous metal surfaces shall be inspected immediately prior to	
16			application of paint coatings.	
17			a. Inspection shall be performed to determine cleanliness and profile depth of blasted	
18			surfaces and to certify that surface has been prepared in accordance with these	
19			Specifications.	
20			2. Schedule the abrasive blasting operation so blasted surfaces will not be wet after blasting	and
21			before painting.	,
22			3. Perform additional blasting and cleaning as required to achieve surface preparation required.	red.
23			Prior to painting, reblast surfaces allowed to set overnight and surfaces that show rust blo	
24			a. Surfaces that are allowed to set overnight or surfaces which show rust bloom prior to	
23 24 25			painting shall be reinspected prior to paint application.	
26			4. Profile depth of blasted surface: Not less than 1 mil or greater than 2 mils unless required	d
27			otherwise by coating manufacturer.	
28			5. Provide compressed air for blasting that is free of water and oil. Provide accessible separate	ators
29			and traps.	
30			6. Confine blast abrasives to area being blasted.	
31			a. Provide shields of polyethylene sheeting or other such barriers to confine blast mater	rial.
32 33			b. Plug pipes, holes, or openings before blasting and keep plugged until blast operation complete and residue is removed.	is
34			7. Protect nameplates, valve stems, rotating equipment, motors and other items that may be	
35			damaged from blasting.	
36			8. Reblast surfaces not meeting requirements of these Specifications.	
37			9. Abrasive blasting media may be recovered, cleaned and reused providing Contractor sub-	mits.
38			for Engineer's review, a comprehensive recovery plan outlining all procedures and equipped	ment
39			proposed in reclamation process.	
40			10. Properly dispose of blasting material contaminated with debris from blasting operation no	ot
41			scheduled to be reused.	
42		G.	All Plastic Surfaces and Non-Ferrous Surfaces Except Galvanized Steel:	
43			1. Sand using 80-100 grit sandpaper to scarify surfaces.	
44	3.5	AP	PLICATION	
45		A.	General:	
46			1. Thin, mix and apply coatings by brush, roller, or spray in accordance with manufacturer's	s
47			installation instructions.	
48			a. Application equipment must be inspected and approved in writing by coating	
49			manufacturer.	
50			2. Temperature and weather conditions:	

19			a. Clean contaminated surfaces before applying next coat.
20		9.	Smooth out runs or sags immediately, or remove and recoat entire surface.
21		10.	Allow preceding coats to dry before recoating.
22			a. Recoat within time limits specified by coating manufacturer.
23			b. If recoat time limits have expired reprepare surface in accordance with coating
24			manufacturer's printed recommendations.
25		11	Allow coated surfaces to cure prior to allowing traffic or other work to proceed.
26			Coat all aluminum in contact with dissimilar materials.
27			When coating rough surfaces which cannot be backrolled sufficiently, hand brush coating to
28		10.	work into all recesses.
29	B.	Prir	ne Coat Application:
30		1.	Prime all surfaces indicated to be painted. Apply prime coat in accordance with coating
31			manufacturer's written instructions and as written in this Section.
32		2.	Ensure field-applied coatings are compatible with factory-applied coatings. Ensure new
33			coatings applied over existing coatings are compatible.
34			a. Employ services of coating manufacturer's qualified technical representative.
35			1) Certify through material data sheets.
36			2) Perform test patch.
37			b. If field-applied coating is found to be not compatible, require the coating manufacturer's
38			technical representative to recommend, in writing, product to be used as barrier coat,
39			thickness to be applied, surface preparation and method of application.
40			c. At Contractor's option, coatings may be removed, surface reprepared, and new coating
41			applied using appropriate paint system listed in paragraph 2.2 E.
42			1) All damage to surface as result of coating removal shall be repaired to original
43			condition or better by Contractor at no additional cost to Owner.
44		3.	Prime ferrous metals embedded in concrete to minimum of 1 IN below exposed surfaces.
45		4.	Back prime all wood scheduled to be painted, prior to installation.
46		5.	After application of primer to gypsum board surfaces, inspect surface and repair in
47			accordance with Article 3.4.
48			a. Re-prime repaired surfaces to uniform finish before application of finish coat(s).
49		6.	Apply zinc-rich primers while under continuous agitation.
50		7.	Ensure abrasive blasting operation does not result in embedment of abrasive particles in paint
51			film.
52		8.	Brush or spray bolts, welds, edges and difficult access areas with primer prior to primer
53			application over entire surface.
	Santa E- C	lovet	Clarice NM
	Santa Fe C February 2	-	Glorieta, NM East Glorieta Distribution & Regional Well

Do not paint surfaces when surface temperature is below 50 DegF unless product has

All paint systems are "to cover." In situations of discrepancy between manufacturer's

square footage coverage rates and mil thickness, mil thickness requirements govern.

When color or undercoats show through, apply additional coats until paint film is of

Work each application of material into corners, crevices, joints, and other difficult to work

Avoid degradation and contamination of blasted surfaces and avoid intercoat contamination.

in writing by Engineer and paint manufacturer's authorized representative.

If so directed by Engineer, do not apply consecutive coats until Engineer has had an

Avoid painting surfaces exposed to hot sun.

Provide complete coverage to mil thickness specified.

Thickness specified is dry mil thickness.

opportunity to observe and approve previous coats.

Apply materials under adequate illumination.

Evenly spread to provide full, smooth coverage.

Do not paint on damp surfaces.

uniform finish and color.

been formulated specifically for low temperature application and application is approved

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1 2			9. Touch up damaged primer coats prior to applying finish coats. Restore primed surface equal to surface before damage.
3 4 5 6 7		C.	 Finish Coat Application: Apply finish coats in accordance with coating manufacturer's written instructions and in accordance with this Section. Touch up damaged finish coats using same application method and same material specified for finish coat. Prepare damaged area in accordance with Article 3.4.
8	3.6	FII	ELD QUALITY CONTROL
9 10 11 12 13 14 15 16 17 18 19 20 21		A.	 Maintain Daily Record: Provide the following information for each coat of paint applied: a. Date, starting time, end time, and all breaks taken by painters. b. For exterior painting:
22		B.	Measure wet coating with wet film thickness gages.
23 24 25 26		C.	Measure coating dry film thickness in accordance with SSPC PA-2 using Mikrotest gage calibrated against NBS "Certified Coating Thickness Calibration Standards." 1. Engineer may measure coating thickness at any time during project to assure conformance with Specifications.
27 28		D.	Measure surface temperature of items to be painted with surface temperature gage specifically designed for such.
29		E.	Measure substrate humidity with humidity gage specifically designed for such.
30		F.	Provide wet paint signs.
31	3.7	CL	EANING
32		A.	Clean paint spattered surfaces. Use care not to damage finished surfaces.
33		В.	Upon completion of painting, replace hardware, accessories, plates, fixtures, and similar items.
34		C.	Remove surplus materials, scaffolding, and debris. Leave areas broom clean.
35			END OF SECTION

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SECTION 13310 SUPPLY WELL CONSTRUCTION

PART 1 - GENERAL

1.1 SCOPE OF WORK

- A. The Greater Glorieta Community Mutual Domestic Water Consumers Association (Glorieta MDWCA; Owner), is soliciting bids for 1) drilling of an 8-inch (minimum) pilot hole for geophysical logging and zone testing, 2) reaming of pilot hole to production diameter (17.75-inch minimum), and 3) construction of a nominal 10-inch water supply well. The selected Contractor shall furnish the labor, materials, supplies, and equipment required to complete the project described in these technical specifications. The well site is located in Glorieta, New Mexico. To be considered for this work, bidders must have current New Mexico Well Driller and Business licenses, and must also have the appropriate General Contractor license required by the State. All work shall be performed in accordance with New Mexico Office of the State Engineer (OSE), including 19.27.4 NMAC and New Mexico Environment Department (NMED) requirements for water supply wells and associated infrastructure..
- B. The CONTRACTOR shall familiarize himself with local conditions at the project site. Failure to do so shall in no way relieve CONTRACTOR of the responsibility for performing any of the work or operations required as a part of this contract.
- C. The subsurface geology is composed of sandstone and shale with interbedded limestones, typical of the Sangre de Cristo Formation and limestones of the Madera Formation. The estimated depth to water is 300 feet below ground surface (bgs). This information is provided for Contractor use in preparing for anticipated drilling conditions and possible equipment needed for successfully completing the project. Neither the Owner nor the Engineer (Daniel B. Stephens & Associates, Inc. [DBS&A]) makes any representation as to the accuracy of conditions at the project location.
- D. The work scope includes two phases:
 - 1. Phase 1
 - a. Construction of one pilot boring: Mobilization/demobilization, site preparation, installation of an 20-inch surface casing, drilling an 8-inch (minimum) pilot hole to an approximate depth of 1,200 feet bgs, borehole geophysics, and zone testing with packer assembly.
 - Collection and analysis of water quality samples during zone testing from one or two zones.
 - c. If water quality is acceptable, final well design will be completed and Phase two implemented.

2. Phase 2

- a. Construction of supply well: Mobilization/demobilization, ream of pilot hole to 17.75 inches, well material installation to an approximate depth of 1,200 feet bgs, surface completion for wellhead.
- b. Development and testing: Development by flushing, swabbing, airlift, and development pumping, step- and constant-rate pumping tests, followed by video and alignment surveys.
- c. Equipping Installation of submersible pump, drop pipe, electrical wire; and pitless adaptor and well cap
- d. Restoration of site
- e. Plugging and abandonment of two out of service wells.
- E. All work shall be completed in strict accordance with American Water Works Association Standard for Water Wells (ANSI/AWWA A100), and the project specific specifications and drawings. The approximate well completion is detailed within the attached drawings. The exact depths and lengths will be determined by the Engineer from the analysis of drill cuttings and geophysical logs collected during

Santa Fe County February 2022

- the course of the project. Interpretation of the Phase 1 geophysics and zone testing results by the Engineer will dictate the scope of the construction activities in Phase 2. If the borehole is not suitable for the project objectives, the Engineer may direct the Contractor to abandon the borehole per OSE requirements.
 - F. These technical specifications are intended to inform prospective bidders about the equipment, materials, and work required to complete the installation of production well. Compensation for all work will be based on unit prices as negotiated with the CONTRACTOR.

1.2 CONTRACTOR'S LICENSE

- A. The CONTRACTOR shall have a valid license for drilling water wells in the State of New Mexico. The CONTRACTOR shall submit record completion forms to the OSE and provide the ENGINEER with a copy of the final well records no later twenty (20) days after completion of each well or bore hole.
- B. Qualifications: The Contractor shall have prior experience in the construction of at least three (3) wells valued at no less than five hundred thousand dollars (\$500,000) each within the past three (3) years. The Contractor shall have engaged in the construction of wells in similar geologic materials and similar to the dimensions of the well specified herein. Prospective bidders shall provide evidence of the above requirements in the form of reference projects at the time of receipt of bids. A reference form has been provided in the Bid Documents and shall be submitted by prospective bidders at the time of bidding. Failure to provided references may result in bidders being deemed non-responsive. The Owner may contact references to verify experience and quality of work, and may make other such investigations as necessary to determine the qualifications of prospective bidders.

1.3 GENERAL PROVISIONS

- A. Warranties: CONTRACTOR shall warrant against defects, all materials provided and work performed under this contract for a period of 1 year from the date of Final Completion, as determined by the ENGINEER in accordance with the EJCDC C-700, and amendments thereto. The CONTRACTOR shall replace promptly, at the CONTRACTOR's own expense, any materials and workmanship that fail during this warranty period as determined by the OWNER or ENGINEER.
- B. Protection of Site: The premises, materials, tools, and drilling equipment shall be maintained so as to minimize the potential for subsurface contamination during drilling operations. Except as otherwise provided herein, the CONTRACTOR shall protect all existing fences, structures, walks, utilities, trees, shrubbery, etc. During the progress of the work the CONTRACTOR shall remove all debris and unused materials and shall, upon completion of the work, restore the site as nearly as possible to its original condition to the satisfaction of the OWNER. The restoration shall include the replacement, at the CONTRACTOR's sole expense, of any facility or landscaping that has been destroyed or damaged beyond restoration.
- C. Site Access: The CONTRACTOR shall not enter on or occupy with personnel, tools, equipment, or material, any ground outside the construction area without approval of the OWNER. Other CONTRACTORs, employees, or agents of the OWNER may, for business purposes, enter the work site and premises used by the CONTRACTOR. The CONTRACTOR shall not impede any work being done by others on or adjacent to the well sites unless necessary as determined by the ENGINEER. The CONTRACTOR shall be responsible for the construction of suitable access, temporary site fencing, and drill pads for construction of the project described herein.
- D. Utilities: Unless otherwise indicated in these Specifications, the CONTRACTOR shall arrange for and provide any required utilities at his sole cost and expense. This includes, but is not limited to, water for drilling, power for operating the drill rig or equipment (including testing equipment), and personnel sanitation facilities. Water for drilling operations will be available from a fire hydrant located within 200 ft of the site; however, cost associated with purchase of the water from the OWNER and getting water to the drill site shall be considered incidental to this project. Power is not available at the drill site. It shall be the CONTRACTOR's responsibility to notify all utility companies involved whenever activities are to

occur that have the potential to cut, tap, move, or in any way disturb a utility line from its original placement. Sufficient notice shall be provided to the utility company so that its users can be informed of any disruption of service. Such notice shall be given no less than 24 hours in advance, excluding weekends.

- E. Disposal of Wastewater and Drilling Fluids: The CONTRACTOR shall be responsible for disposing of all debris, including but not limited to drilling fluid and water produced during well development or other operations, by such methods and to such locations that will not cause damage to, or interference with, structures, roads, or utilities, or with other construction projects. All costs incurred in connection with the disposal of drilling fluid, cuttings, and water shall be incidental to the Contract and shall be included in the contract price. Test water shall be discharged away from the construction area by way of conveyance supplied by the CONTRACTOR to the location indicated on the project drawings.
- F. Safety Requirements: The CONTRACTOR shall comply with all pertinent provisions of the Department of Labor "Safety and Health Regulations for Construction (Title 29 Code of Federal Regulations Part 1926 [29 CFR Part 1926])," with additions and modifications thereto, in effect during construction of this project. The following measures or provisions shall be adhered to at all times during the construction of this project:
 - 1. All heavy construction machinery, such as trenching machines, bulldozers, and backhoes must be equipped with a roll bar meeting the requirements of the above regulation.
 - 2. Safety helmets, eye protection, and hearing protection shall be worn by all personnel working at the site.
 - 3. Safety shoes or boots shall be worn by all personnel working at the site.

CONTRACTOR shall inspect the site for the presence of overhead and underground utilities and shall satisfy himself in regard to their existence and locations prior to submitting his bid. CONTRACTOR shall have utilities spotted prior to beginning any subsurface work. A safe distance shall be maintained between equipment and materials and power lines. The CONTRACTOR shall provide temporary fencing, caution signs, or barricades as necessary to ensure the safety of personnel at the site and people adjacent to, or passing by, the site. The CONTRACTOR shall develop a site specific health and safety plan that is subject to the ENGINEERs approval.

- G. Permitting: Wells will be drilled under approved OSE exploratory permits obtained by the OWNER. The OWNER will provide a copy of the well permit to the CONTRACTOR upon issuing Notice to Proceed. The CONTRACTOR shall file a Storm Water Pollution Prevention Plan (SWPPP) or notice of intent (NOI) to discharge, as may be appropriate, with the NMED prior to beginning work. The CONTRACTOR must comply with Santa Fe County grading and traffic control requirements, as applicable.
- H. Security: The CONTRACTOR shall be responsible for site security of materials, equipment, and protection of the boreholes and wells. The OWNER and ENGINEER cannot be held responsible for security.
- I. The CONTRACTOR must protect boreholes and wells from the entry of undesirable fluids and materials at all times. Any time the site is unoccupied by the CONTRACTOR, the boreholes or wells shall be covered and secured against tampering.
- J. Sanitary Facilities: The CONTRACTOR shall provide and maintain portable sanitary toilet facilities for the duration of the project. Facilities shall be maintained at regular intervals. CONTRACTOR's costs associated with providing and maintaining sanitary toilet facilities are considered incidental to the project, and no separate payment will be made.
- K. Standard Specifications: When any of the following standards or specifications are referred to in these specifications, the latest edition, publication, standard, or specification should be used:

API American Petroleum Institute

ASTM American Society for Testing and Materials

AWWA American Waterworks Association

Santa Fe County February 2022

- 1 EPA Environmental Protection Agency
 2 NSF National Sanitation Foundation
- 3 OSHA Occupational Safety and Health Administration

4 1.4 SUBMITTALS

- The CONTRACTOR shall submit to the OWNER and ENGINEER (or other as noted) with his bid or during the course of the project the following items:
 - A. At the Time of Receipt of Bids:
 - 1. Complete list of equipment and methods that are proposed for the work.
 - 2. List of relevant projects and reference information.
 - 3. Bid Form

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- 4. List of SubCONTRACTORs for Subcontracts Valued at or Above \$5,000
- 5. List of SubCONTRACTORs for Subcontracts Valued at or Above \$50,000
- 6. EEOC Form
 - 7. Bid Bond
- B. Prior to Commencing Construction Activities:
 - 1. Storm Water Pollution Prevention Plan (SWPPP) in accordance with NMED and EPA regulations including National Pollution Discharge Elimination System (NPDES)
 - 2. Progress Schedule, including the CONTRACTOR's earliest available start date, estimated time to drill borehole(s), install, and equip the injection well.
 - 3. Schedule of Submittals
 - 4. Schedule of Values
- 22 C. During Construction
 - 1. Daily Drilling Report upon request of the ENGINEER.
 - 2. Cutting samples, alignment surveys, and geophysical logs to ENGINEER.
 - 3. Quality certificates for well and materials.
 - 4. Well development and pump test data
- 27 5. Video survey
- 28 6. Permanent pump specifications and setting depth

29 PART 2 - PRODUCTS

30 2.1 CONTRACTOR'S EQUIPMENT AND METHODS

- A. General Requirements: The pilot borehole and production well shall be constructed using air rotary methods. The CONTRACTOR shall supply capable and experienced personnel and suitable equipment to perform the work, as specified herein. The CONTRACTOR shall employ only competent workers for the execution of the work, which shall be directly supervised by an experienced drilling superintendent who shall be deemed satisfactory by the OWNER/ENGINEER.
 - B. The Contractor shall submit to the Engineer the proposed drilling program and schedule. Due to proximity to residences, continuous operations (24 hours per day) are not required during all phases, but are necessary during drilling, well completion, and testing. No unnecessary delays or work stoppages will be tolerated.
 - C. The CONTRACTOR shall be held responsible, and payment will be withheld for damages to the wells due to any act of omission, error, or faulty operation by the CONTRACTOR or his employees or agents. Resulting repairs shall be completed by the CONTRACTOR to the satisfaction of the OWNER/ENGINEER, or a replacement well shall be drilled by the CONTRACTOR at no additional cost to the OWNER and without claim against the OWNER, ENGINEER, or agents.

Santa Fe County February 2022

2.2 **CIRCULATING MEDIA:**

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- A. The pilot borehole and production well shall be constructed using air rotary methods. If the air rotary method is unsuccessful in advancing the boreholes to the desired depth, the OWNER and/or ENGINEER may direct the CONTRACTOR to employ mud rotary methods with the following conditions.
 - B. Drilling fluid characteristics shall be measured every 50 feet of drilling or every four hours of circulation per AWWA standards and shall meet the requirements specified below.
 - Weight: Drilling fluid weights of < 9.3 lbs/gal to speed drilling, minimize lost circulation, and prevent tight hole.
 - Funnel Viscosity: Mud viscosity should be kept as thin as practical while still retaining formation stability and adequate hole cleaning. Normal viscosities of 30 to 40 seconds per quart shall be maintained to adequately clean the hole.
 - Thirty-Minute Water Loss: Filtrate values below 10 cc should be maintained.
 - Filter Cake: Filter cake thickness shall be maintained at 3/32-in maximum. 4.
 - Sand content of fluid entering the hole should not exceed 2 percent by volume. 5.
 - 6. pH: 8.5 9.5
 - A mud ENGINEER shall be made available at the CONTRACTORs expense on an on-call basis to measure drilling fluid properties periodically during all drilling operations. The mud ENGINEER and frequency of measurement shall be approved by the ENGINEER.
 - C. Acceptable drilling fluid constituents must be NSF approved for use in water-supply wells and may include bentonite, synthetic polymers, inorganic-phosphate thinning agents, drilling detergents and foaming agents, and weighting materials, as pre-approved by the ENGINEER. It is expressly understood that toxic and/or dangerous substances will not be added to the drilling fluid. Potable water only will be used for mixing the drilling fluid.
 - D. The Contractor shall provide two above ground mud circulation pits with a volume of not less than two times the borehole volume constructed and maintained so as to minimize contamination of the drilling fluid. The drilling fluid shall discharge into the first pit for settling of drill cuttings, then flow into the second pit before recirculating into the hole. Pits shall be cleaned on a schedule acceptable to the Engineer.
- E. The CONTRACTOR shall maintain current records on the site at all times to show: 1) time, depth and results of all mud tests, 2) all materials added to the drilling system including kind, amount, time, and depth, and 3) variances or modifications from agreed to drilling fluid program including time, depth, reason and authorization.

2.3 CEMENT GROUT AND BENTONITE SEALS

- A. Annular seals for the well casing will consist of a neat cement grout mixture that meets the requirements of the ASTM C150 Type I. Grout density shall be 15.6 lbs/gal (116.7 lbs/ft3). A maximum of 3 percent bentonite and 2 percent calcium chloride by weight may be added to the grout.
- B. Bentonite seals, in pellet or granular form, will be placed immediately above the filter pack to prevent cement invasion into the underlying filter pack as directed by the ENGINEER utilizing a tremie pipe.
- C. The cement water mixture shall be placed by pumping through the tremie tubing placed near the top of the bentonite seal where it will raise in a uniform body up the sides of the steel casing forming a dependable seal. The cement will be allowed to set for a period of at least 24 hours before any downhole operations are performed.

2.4 **CASING AND SCREEN**

A. The ENGINEER will determine final well construction depths after reviewing drill cuttings, geophysical logs and test well results and after consulting with the OWNER. If the quantity of the boreholes drilled, or quantity of materials actually incorporated in well construction change, unit bid prices shall prevail. For bidding purposes, the length of the casing string shall be as shown on the drawings and bid schedule. The actual length of the casing will be subject to change as determined by the ENGINEER.

- 1 B. All blank and screen casing shall be new and free of oils, grease, paint, dirt, scratches, or other defects. 2 Well casing shall be kept as clean as possible and shall not come in contact with the ground surface 3 during installation.
 - C. Well casing shall be supplied in minimum lengths of 20 ft, and joined by welding by a certified welder in accordance with applicable ANSI/AWS standards. Each joint shall be measured to the nearest 0.01' and marked by the CONTRACTOR. All welds shall be fully penetrating and the entire beveled or collared and flat area filled with weld bead. The join shall be watertight, straight, and as strong as the casing or screen.
 - D. Surface casing shall be minimum 16-in outside diameter (OD) blank, low carbon steel casing, ASTM A-53 Grade B having a minimum wall thickness of 0.375-in and a minimum weight of 62.64 pounds per foot (lbs/ft).
 - E. High strength low alloy (HSLA) steel casing shall be 8.625-in OD blank, ASTM 606 Type 4 having a minimum wall thickness of 0.25-in and a minimum weight of 22.36 lbs/ft.
 - High strength low alloy (HSLA) steel louvered casing shall be 8.625-in OD having a minimum wall thickness of 0.25-in. The louvered screen shall consist of 0.050-in slots of the Full Flo design pattern manufactured by Roscoe Moss Company.

CENTERING GUIDES AND LANDING CLAMP 2.5

- A. Spring bow latch-on or weld-on type centralizers of the same type and grade of steel as the screen or blank casing shall be installed at 40 foot intervals throughout the screened interval and to a point 120 feet above the uppermost screen. If centralizers are welded, at no point shall the weld encroach on the louvered portion of the screen; centralizers shall only be welded to the blank sections at the end of the screened joints. Centering guides shall be aligned vertically with respect to each other and approved by the ENGINEER.
- A steel landing clamp shall be used to hang the well casing string. The clamp shall be bolted to the 8-in well casing in such a manner that the clamp ears rests on the 16-in surface casing. The clamp shall then be welded to the casing around the circumference, top and bottom. The clamp shall be set into notches cut in the top of the 16-in surface casing and welded, sides and bottom, with the casing string kept suspended at all times. The landing clamp shall be capable of holding in place the well casing and screen having an estimated weight of 9 tons.

30 2.6 FILTER PACK MATERIAL

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- A. Filter material will consist of #8-12 and #20-40 gradations of silica sand for the approximate intervals specified on the project drawings. The actual locations will be subject to change as determined by the ENGINEER.
- B. The grains shall be both round and spherical with a cumulative composition of no less than 97 percent silica (SiO₂). The material shall be composed of sound, durable, well-rounded particles, free from organic matter, silt, clay, or other deleterious materials. The material shall be washed, dried, and packaged at the production facility.
- C. The CONTRACTOR shall submit a certificate of filter material quality and gradation to the ENGINEER. Under no circumstances shall crushed rock or any material with an excess of 5 percent flat faces be installed in the well.

2.7 PUMP AND WELLHEAD COMPLETION

- A. A pitless adaptor capable of supporting the pumping equipment in the well (3,700 pounds) shall be installed in the casing with an electrical conduit and a well cap as shown in the drawings. The cap shall be vented with a protected screen of 24 mesh, corrosion resistant material.
- 45 B. A submersible pump shall be selected by the ENGINEER based on the pumping test results. It is 46 expected to be capable of producing 100 gpm with a total dynamic head (TDH) of 300 ft.

C. A concrete pad shall be provided at the land surface around the well casing. The concrete pad will measure a minimum of 5 feet by 5 feet, and be a minimum of 6 inches thick. The concrete pad will slope away from the well casing to allow for surface drainage.

SUBMERSIBLE PUMP AND CONTROLLER 2.8

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- A. The CONTRACTOR shall provide and install a submersible pump with motor as described in these specifications. The pump shall be selected for best efficiency while pumping 100 gpm at a TDH of 300 feet. The anticipated pump shall be GRUNDFOS Model #150S150-6 (15 HP), or equivalent. Final pump selection shall be determined following analysis of the pump test data by the ENGINEER. The pump shall be a variable frequency drive (VFD) model.
- B. The pump bowls shall be stainless steel or close-grained cast iron. The impellers shall be bronze enclosed type or stainless steel fastened to the stainless steel shaft by stainless steel collets or stainless steel keys. Carbon or mild steel will not be permitted in the pump.
- C. The motor shall be sized so that its nameplate horsepower is not exceeded throughout the entire range of the pump. The motor shall be designed for continuous underwater operation on 460-volt, 3-phase, and 60-Hz current. The motor must be compatible with the GRUNDFOS CU3 pump control panel. A description of the pump equipment and instruments shall include the following:
 - Column, shaft, and tubing sizes
 - 2. Bowl capacity and revolutions per minute at maximum lift
 - Number of bowl stages required at maximum lift
 - Type and horsepower of drive unit

2.9 SUBMERSIBLE PUMP CABLE

- A. The submersible pump cable shall have rubber insulation bonded to the conductors and a neoprene jacket. Unless otherwise indicated, the conductors shall be sized based upon the motor nameplate full load amps, the capacity of the conductor, and the allowable voltage drop. In general, the allowable voltage drop shall be less than the difference between the service voltage and the nameplate voltage. The electrical service will be within 30 feet of the wellhead. In no case shall the voltage drop exceed 5 percent. For bidding purposes, assume three-wire #12 AWG pump cable shall be provided. The CONTRACTOR shall submit calculations or charts used for wire selection.
- B. The meter used to measure resistances shall be suitable for the ranges involved and shall be accurate to within 2%. Resistances shall be measured and recorded to three places. Resistances to ground shall be measured with a meter capable of measuring resistances greater than 1 megaohm (1 million ohms).

2.10 GROUNDING OF SUBMERSIBLE PUMP MOTOR

A. In accordance with National Electrical Code (NEC) Section 250-43, a separate ground wire will be run down the well to the installed submersible pump motor. The ground wire is to be based on circuit amp rating (not motor amp rating) according to NEC 250-95. Ground wire may be insulated or bare and does not have to be larger than the supply cable. If the wire is insulated, it must be green, with or without yellow stripe(s) (NEC 310-11). All external metal parts of the pump and motor must be bonded together (metal to metal). Wire may be connected to the pump using an Underwriters Laboratories, Inc. (UL) approved compression (crimp or set screw) type with terminal attached to the pump frame or motor bolt.

2.11 **CABLE SPLICES**

- A. The submersible pump cable shall be spliced to the conductors from the motor starter in the pitless unit cap or in a National Electrical Manufacturer's Association (NEMA) 3R junction box attached to the pitless unit cap. No. 10 AWG and smaller conductors may be spliced with wire nuts.
- B. The submersible pump cable shall be spliced to the motor pigtails with splice kits manufactured for that purpose. If crimp type connectors are used, the crimps shall be made with the tool recommended by the sleeve manufacturer. If solder is used, it shall be resin core or pure solder with non-acid flux. It will not be possible to pull the joint apart by hand. If the CONTRACTOR wants to make another kind of splice, he shall submit the details for approval to the ENGINEER.

2.12 DROP PIPE

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A. The drop pipe shall be 3-inch Schedule 80 galvanized steel, the same size as the pump discharge. The pipe shall conform to ASTM A-120 (pipe, steel, black and hot-dipped, zinc-coated [galvanized] welded and seamless) or ASTM A-53 (pipe, steel, black and hot-dipped, zinc-coated welded and seamless). Couplings shall be 43-inch length as used for XS and XXS weight pipe.

6 2.13 IN-LINE CHECK VALVE

A. An inline check valve shall be installed at the first full pipe joint above the pump. The valve shall be equal to SIMMONS 3-inch drop check valve with a knockout plug.

9 **2.14 SOUNDER TUBE**

A. A 1.5-inch-diameter, polyvinyl chloride (PVC) pipe will be continuously placed into the well and strapped to the pump drop pipe at 20-foot intervals during pump installation. The pipe will be glued and coupled. The sounder tube will provide access for future water level measurement. The pipe will be terminated approximately 10 feet above the submersible pump, capped on the bottom, and perforated in the lower 20 feet to allow water to flow into the tube.

15 2.15 WELL IDENTIFICATION TAG

A. A well identification tag shall be affixed to the exterior portion of the well cap or casing in plain view using a stainless steel or aluminum band.

18 2.16 PUMP INSTALLATION REPORT AND O&M MANUALS

- A. The CONTRACTOR shall prepare a well pump installation report. All applicable information shall be included, and "NA" will be shown for those items that are not applicable.
- B. Upon completion of the project, the CONTRACTOR shall furnish five (5) sets of operations and maintenance (O&M) manuals to the ENGINEER. The manuals shall include:
 - 1. Operations manuals for all pumps, valves, and controls installed
 - 2. Piping diagrams of all installed plumbing, valves, and controls
 - 3. Material safety data sheets for all chemical substances and solvents used in drilling, installation, and construction
 - 4. Electrical circuit diagrams of all controls, power supplies, transformers, and any other electrical equipment installed

2.17 WELLHEAD PROTECTION

- A. A concrete pad shall be provided at the land surface around the well casing. The concrete pad will measure a minimum of 5 feet by 5 feet, and be a minimum of 6 inches thick. The concrete pad will slope away from the well casing to allow for surface drainage.
- B. Protective stanchions will be constructed of 4-inch-diameter steel placed at the outer corners of the pad.
 The stanchions will be extended a minimum of 3 feet above the surface of the ground and will be set in the ground to a depth of at least 24 inches.

PART 3 - EXECUTION

37 3.1 DRILLING METHODS

- A. Drilling shall be completed using foam assisted air rotary methods from beneath the surface casing to the total well depth. If the air rotary method is unsuccessful in advancing the boreholes to the desired depth, the OWNER and/or ENGINEER may direct the CONTRACTOR to employ mud rotary methods. Methods shall be consistent with standard practices for construction of water supply wells.
- B. Control of drilling fluid properties shall be maintained throughout all drilling operations. If applicable, mud based systems will consist of pre-approved additives for ease of drilling, filtrate control, flow

Santa Fe County February 2022

Contract Documents

- 1 control, and protection of the drilling operation. Adequate facilities for the collection of representative drill cutting samples shall be maintained at all times for drilling operations.
- C. To obtain accurate depth determination, representative cuttings samples, and a straight and plumb hole, the CONTRACTOR shall comply with the following guidelines:
 - 1. Maintain an operating geolograph, and a reasonably constant bit weight and rotary speed at all times.
 - 2. Use drill collars of appropriate diameter, weight, and length. Drill collar diameter should be of the maximum size allowable without interference with circulation.
 - 3. Run a mechanical drift indicator at intervals of 120 feet of depth to the total depth.

3.2 CONTRACTOR'S LOG AND RECORDS

- A. The CONTRACTOR shall keep an accurate, current log of operations at all times in the form of a daily drilling report. The report shall include, at minimum, the following information:
 - 1. Bit number, size, type, and depth-in
 - 2. Length and diameter of in-hole drilling assembly, including bit, subs, collars and drill pipe
- 3. Rotary speed

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- 15 4. Time devoted to each activity
 - 5. Description of soil/rock type and notation of depth at each change
 - 6. Water volume used for drilling
 - 7. Lengths, diameters, and types of casing and perforated casing run
 - 8. Volumes of filter pack material placed
 - 9. Grout volume, thickness, and location
 - 10. Time devoted to development and characteristics of fluid produced
 - B. The reference of each depth given shall be properly denoted and the distance from ground level to the reference point shall be measured and included in the report. One copy of each Daily Drilling Report shall be made available to the ENGINEER on the following day. Upon completion of the drilling, a complete set of the Daily Drilling Reports shall be provided to the ENGINEER. Any signatures made on the daily field reports or other field documentation provided by the CONTRACTOR shall be considered only to acknowledge that the form or report was accepted, not an acceptance of the hours worked, footage drilled, materials provided, placed, or the like.

29 3.3 PIPE TALLIES

A. An accurate record of all drill-pipe, tubing, and casing on the location shall be maintained at all times. A current pipe tally shall be maintained for all drill bits, subs, cross-overs, drill-pipe, tubing, and casing run into the borehole.

33 3.4 WELL CONSTRUCTION

- A. Surface Protection: The open annulus shall be protected from entry of unwanted material at all times by preventing surface runoff from reaching and entering the boring during construction activities. Whenever work ceases on the boreholes and well, the top of the casing shall be capped to cover and protect the hole until the permanent well head assembly is installed.
- B. Phase 1 Drilling
 - 1. A 22-inch-diameter (minimum) borehole shall be drilled from ground surface to an approximate depth as shown on the drawings to accommodate the surface casing, as directed by the Engineer.
 - 2. An 18-inch diameter surface casing of low carbon steel (ASTM A53 Grade B) shall be set plumb and cemented in place from approximately 3 feet above ground surface to 50 feet below ground surface.
 - 3. Surface casing shall be cemented in place from the bottom up using a tremmie pipe. The cement shall be allowed to set and cure for 24 hours before additional work is undertaken in the well.
 - 4. An 8-inch-diameter (minimum) pilot borehole shall be advanced from the bottom of the surface casing to the approximate depth as shown on the drawings or as directed by the Engineer.
 - 5. The Contractor shall contain all drilling fluids in accordance with applicable town, county, state, and federal requirements and the project approved SWPPP

C. Phase 2 Drilling

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1. A borehole of 17.75-inch diameter (minimum) shall be advanced within the pilot hole from the

- 2. All required materials shall be on-site and inspected by the ENGINEER prior to initiating installation activities. The casing shall be suspended above the bottom of the borehole a sufficient distance to ensure that none of the casing is supported from the bottom; at no time shall the casing string be placed in compression.
- 3. Casing shall be fitted with approved centering guides installed at points as approved by the ENGINEER. The casing string will be hung from the surface casing through the use of an ENGINEER approved landing clamp.
- 4. Casing and screen joints shall be welded by a certified welder in accordance with applicable ANSI/AWS standards. Welder's certification shall be approved by the ENGINEER. All welds shall be fully penetrating; the entire beveled or collared and flat area shall be filled with weld bead. The joint shall be watertight, straight, and as strong as the casing or screen.
- 5. Extreme care shall be taken to insure that the casing and screen are properly aligned before welding occurs.

H. Filter Pack Installation

- 1. The annular space between the borehole and the casing string shall be filled with select filter pack material as directed by the ENGINEER. The approximate placement of the filter pack is shown on the project drawings.
- 2. The CONTRACTOR shall ensure that circulation will be continuous from the time that watering-back of the drilling fluid begins until the time the filter pack is completely in place. The well shall be gently swabbed to alternate thinning flow inside the casing as well as in the annulus during filter pack placement. The drilling fluid characteristics shall be approved by the ENGINEER prior to introduction of the filter pack material.
- 3. The filter pack shall be placed using a tremie pipe until the annulus is filled to the approved level. The CONTRACTOR shall provide means of measuring the volume of filter pack as it is installed, and continual checks must be made to insure against voids or bridging of the filter material. The amount of filter pack introduced in the hole shall not be less than the amount as calculated by the ENGINEER. Any amount placed that is substantially different than the computed amount shall be deemed a sign of voids or bridging, and the CONTRACTOR shall undertake appropriate corrective measures at no cost to the OWNER.
- 4. The tremie pipe shall be gradually withdrawn as the filter pack is deposited. A minimum of one-half gallon of 12.5 percent sodium hypochlorite solution shall be added to every 6 cubic yards of filter pack as it is being placed
- 5. The casing string shall be flushed, baled, and swabbed as needed to fully settle the filter pack. At no time during any flushing or development procedure, shall the filter material be allowed to drop to within 50 feet of the top of the screen. The volume of all filter material added shall be calculated and recorded.

I. Bentonite and Sand Plugs

- 1. Annular bentonite and 20-40 sand plugs will be installed above the filter packing to prevent cement intrusion into the underlying filter pack after airlift development, as directed by the ENGINEER. The approximate placement of the seal is shown on the project drawings.
- 2. The amount of bentonite and sand introduced in the hole shall not be less than the computed amount of borehole volume as calculated by the ENGINEER.

J. Cement Grouting

- 1. A continuous cement grout annular seal will be placed above the appropriate bentonite plug interval as directed by the ENGINEER. The annular seal shall be a continuous cement plug. When completed, the annular seal shall completely fill the space between the casing string and the borehole, between the bentonite plug to ground level.
- 2. After the cement grout is in place, a minimum of 36 hours setup time shall be observed prior to any additional work being performed in the well.

3.5 TEMPORARY DISCHARGE CONVEYANCE

- A. Water discharged from the water supply well during the drilling process shall be routed to aboveground mud pits in the location shown on the project drawings or as determined by the Engineer. Once mud water is no longer produced and drilling has ceased the area shall be cleaned, and removed material shall be disposed of appropriately at the Contractor's expense.
- B. Development water shall be discharged by a method approved by the Engineer and Owner.

3.6 WELL DEVELOPMENT

- A. The CONTRACTOR shall furnish all plant, materials, and labor required to accomplish the development. All hours counted toward development of the well will be actual time spent developing with appropriate equipment as specified. No time will be considered for downtime due to improper, inadequate, or malfunctioning equipment, test procedures or techniques. If applicable, circulation of fluids after the well is completed shall be included in the development time; circulation of fluids prior to or during well completion shall not be considered part of well development.
 - B. Upon well completion, the CONTRACTOR shall develop the well through a step by step procedure consisting of fresh water circulation while swabbing and airlift development, followed by the introduction of a phosphate free dispersant if applicable, removal of the dispersant by swabbing and airlifting, and pump development.
 - C. During initial development, when produced water contains a high percentage of drilling fluid and sediment, water shall be impounded on-site. After the development water is returning to clear it may be discharged to the ground surface as directed by the ENGINEER. Discharge will be in accordance with the approved SWPPP.
 - D. The CONTRACTOR shall run a tremie line to within 20 feet of the well bottom and circulate clean water until fluids return clear. Thereupon, the well shall be swabbed from top to the bottom and back to the top of the screen interval. Pipe joints shall be added as each intervals clears. The CONTRACTOR shall add and subsequently remove phosphate free dispersant during this development process.
 - E. Zoned airlift pumping and swabbing, will be completed in continuous 20-foot sections, from the bottom of the well to the top of the perforated casing. The air-lift pumping device shall consist of a 20-foot length pipe with appropriate diameter double disc rubber washers, which fit tightly to the inside of the perforated casing as shown on the project drawings. The compressor equipment shall be capable of producing adequate air flow to lift water and sediment from the lower section of the well with an airline placement depth estimated at 300 feet bgs within the development tool.
 - F. Air lifting shall proceed until the produced water is free of suspended sediment, as approved by the ENGINEER. The well development program outlined above shall be refined by the ENGINEER in consultation with the CONTRACTOR.
- G. Once airlift development is complete, the CONTRACTOR shall tag the bottom of the well using a weighted wire line graduate in no less than one-foot increments. Any accumulated sediment shall be removed from the well to within 5 feet of the bottom of the casing.

3.7 DISINFECTION

- A. The Contractor shall disinfect the well immediately after well development. Granular calcium hypochlorite shall be distributed evenly throughout the water column with a chlorine basket. The chlorine basket shall have a fine mesh exterior and be of such design so that it can be lowered on a wire line to the full depth of the well. The basket shall be run for approximately 4 hours
 - B. The quantity of chlorine shall be sufficient to initially produce a residual chlorine concentration of no less than 50 mg/L throughout the entire water column in accordance with ANSI/AWWA C654. Based on a static water level of 300 feet bgs, the anticipated amount of calcium hypochlorite [Ca(OCl)2] with 65% available chlorine by weight is 2.4 pounds.
 - C. The test pump may be installed after running the chlorine basket, when the test pump is set, the chlorinated water shall be circulated within the well casing and pump column by surging three times. The solution shall be allowed to rest for at least 12 hours.
- D. Discharge water from disinfection shall be dechlorinated to local, county, and state standards prior to discharge or disposal.

3.8 DEVELOPMENT AND TEST PUMPING

- A. The CONTRACTOR shall furnish all necessary equipment, materials, and labor to begin development and test pumping within fours days of the airlift development work. The test pump shall be set to a depth of approximately 300 feet and be capable of producing a minimum rate of 20 gpm and a maximum rate of 210 with a pumping level of approximately 300 feet at maximum discharge.
- B. The pump shall be suspended on column pipe of sufficient diameter to maintain the maximum flow rate. Two in-line flow meters, a circular orifice or v-notch weir, a sampling port, a gate valve, and a sand separator shall be installed at the surface. Discharge water shall be routed to the ground surface as directed by the ENGINEER.
- C. The well shall be development pumped until the specific capacity does not increase by more than 10% in a 24-hour period and the sand content stabilize to an acceptable level as determined by the ENGINEER.
- D. Test pumping shall consist of an 400-minute step-drawdown test (four, 100-minute steps), a 24 hour constant-rate test, and associated recovery periods to pre-pumping conditions. Water-level data will be collected using manual and automated methods. A CONTRACTOR supplied pressure transducer and data logger will be provided for the tests. Pumping rates shall be maintained to within 5 percent of the desired rate specified by the ENGINEER. The CONTRACTOR will have representative on site to maintain pumping rates and collect manual water level data during all pumping periods.
- E. The pumping rate for the constant rate test shall be near the maximum capacity, as determined by the previous step test, approved by the ENGINEER. The pumping rate shall be held constant for the entire period.
- F. Water produced during test pumping will be discharged, as directed by the ENGINEER
- G. Any time incurred for restarts or delays caused by mechanical or other failures will not be considered part of the test time and will be at no additional cost to the OWNER. If the pump is shut off for any reason during the pumping portion of the test, it shall remain shut off until 95-percent water level recovery has been achieved and the complete test rerun at no additional expense to the OWNER.
- H. The test pump shall remain in the well for a minimum of four days or as directed by the ENGINEER after the end of pumping to prevent recovery water levels from being influenced by pump removal
- I. Upon completion of the test the results shall be turned over to the ENGINEER for analysis.

3.9 WATER QUALITY ANALYSIS

A. Phase 1:

- 1. The Contractor shall assist the Engineer and Owner with the collect samples of samples from the zone testing activity. The Contractor, supervised by the ENGINEER, shall collect and properly preserve, in containers provided by the laboratory, one suite of water samples at the end of the zone testing. The Contractor will collect water quality for general water quality characterization and combined radium isotopes. Analytes shall include calcium, magnesium, sodium, potassium, total alkalinity, sulfate, chloride, fluoride, nitrate, pH, arsenic, uranium, and combined radium isotopes. The expense for laboratory analysis of these samples shall be borne by the Contractor.
- 2. Samples shall be submitted to an Owner approved analytical laboratory, preferably Hall Environmental Analysis Laboratory in Albuquerque, NM. All samples shall be collected in properly preserved bottles provided by the laboratory. The Engineer must be present during sample collection. Samples shall be stored immediately on ice or blue ice after collection and remain so stored until received by the laboratory. All laboratory holding times for sample preservation shall be followed.

B. Phase 2:

- 1. The Contractor, supervised by the ENGINEER, shall collect and properly preserve, in containers provided by the laboratory, one suite of water samples at the end of the constant-rate test. The Contractor will collect water quality samples based on the requirements of the EPA's Safe Water Drinking Act as it pertains to public drinking water systems, as directed by the ENGINEER. The expense for laboratory analysis of these samples shall be borne by the Contractor.
- 2. Samples shall be submitted to an Owner approved analytical laboratory, preferably Hall Environmental Analysis Laboratory in Albuquerque, NM. All samples shall be collected in properly preserved bottles provided by the laboratory. The Engineer must be present during sample collection. Samples shall be stored immediately on ice or blue ice after collection and remain so stored until received by the laboratory. All laboratory holding times for sample preservation shall be followed.
- 3. Bacteriological testing shall be performed and approved results received prior to the completion of pumping. Bacteriological tests shall include total coliform and E. Coli.
- 4. The water shall be deemed unacceptable if coliform bacteria are present. It is the Contractor's responsibility to see that the well is so tested and, if unacceptable, disinfect the well again. Disinfection and subsequent testing shall continue at the Contractor's expense until test results are approved, indicating acceptable conditions. The pump shall not be removed from the well until results are approved.

3.10 VIDEO INSPECTION

- A. The CONTRACTOR shall make a closed-circuit color video inspection of the entire depth of the well following removal of the test pumping equipment. The camera equipment shall have a wide-angle (fisheye) lens directed downward, and shall also include right-angle (side-scan) capability. The camera depth, in feet below ground surface, shall be displayed on the tape at all times. The ENGINEER must be present for observation of video monitoring and to determine where side scanning will be required.
- B. A flocculent shall be added to the well in sufficient quantity before logging to allow removal of suspended material from the water column. The well water shall be sufficiently clear to allow examination of the entire hole and well casing during the video taping. If not, the CONTRACTOR shall be required to clear the water at his own expense to allow examination of the entire hole in subsequent video tapings.
- C. If the video show that the well completion does not meet specifications or that the casing or screen are deformed beyond the manufactures ellipticity tolerances, the CONTRACTOR shall remedy deficiencies.
- D. Four electronic copies of the video shall be furnished to the ENGINEER for delivery to the OWNER.

3.11 WELLHEAD COMPLETION INSTALLATION

- 2 A. The Contractor shall install the pitless adaptor and well cap shown on the project drawings.
- B. The well site shall be graded so that the site is free from depressions, reverse grades, or areas too rough for proper ground maintenance so as to ensure that surface water will drain away from the well.

3.12 WELL ABANDONMENT

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A. In the event that the well is not accepted for completion because of insufficient capacity or unsatisfactory water quality, or if it is abandoned because of poor alignment, loss of tools, or for any other cause, the CONTRACTOR shall, as directed by the OWNER, fill the abandoned hole with expansive clay or a clay and concrete mixture in accordance with OSE requirements.

10 3.13 DISPOSAL OF WASTEWATER AND DRILLING MUD

- A. Produced fluids shall be disposed of in a manner and at the location in accordance with the CONTRACTOR's SWPPP and the requirements of the OWNER. Water produced during development shall be routed as shown on the project drawings. The CONTRACTOR shall be responsible for supplying all discharge plumbing and additional pumps necessary for discharging the water. Discharge shall be such that erosion is minimized. Disposal of wastewater will be by such methods that damage will be prevented to structures, roads or utilities or interference with same or interference with construction projects. In the event that mud pits are required, they must be thoroughly cleaned and back filled with granular material upon completion of work.
- B. Waste drilling mud and cuttings shall be removed from the site and properly disposed of upon completion of drilling operations, unless otherwise indicated by the OWNER. All cost incurred in connection with the disposal of wastewater, drilling mud, cuttings, and cleaning and back filling of mud pits will be incidental to well drilling and be borne by the CONTRACTOR.

23 **3.14** CLEAN UP

A. After the work is completed, the CONTRACTOR shall remove all debris, tools, equipment, supplies, and excess material from the site and shall restore the site to its original condition, as approved by the OWNER/ENGINEER.

27 3.15 ADDITIONAL INFORMATION

A. The CONTRACTOR is responsible for the structural integrity of the well. If bidder's professional opinion is that any of these specifications are inadequate to ensure the long-term structural integrity of the well, the bidder shall notify OWNER in writing prior to the bid date.

31 3.16 PLUGGING AND ABANDONING OF OUT OF SERVICE WELLS

- A. Existing wells UP-1288 and UP-1643 require plugging and abandonment according to methods and the plans approved by the New Mexico Office of the State Engineer. Plans are attached for each well.
 - B. Pumping equipment shall be removed and disposed of by the contractor.
- C. Access to UP-1643 will require removal and replacement of a corrugated metal roof.
- D. Both wells shall be abandoned using a neat cement grout pumped by means of a tremie pipe from the bottom of the well to ground surface for UP-1288 and into the cement block for UP-1643. Grout shall be mixed at 6 gallons of water per 94 pound sack of cement.
- 39 E. Contractor shall prepare and submit a record of the plugging and abandonment for each well.

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41 END OF SECTION

1		SECTION 15060
2		PIPE AND PIPE FITTINGS: BASIC REQUIREMENTS
3	PAF	RT 1 - GENERAL
4	1.1	SUMMARY
5		A. Section Includes:
6		1. Piping systems.
7		B. Related Sections include but are not necessarily limited to:
8 9		 Division 0 - Bidding Requirements, Contract Forms, and Conditions of the Contract. Division 1 - General Requirements.
10		 Section 02221 - Trenching, Backfilling, and Compacting for Utilities.
11		4. Section 02660- Water Main Construction.
12		5. Section 15062 – Pipe: Ductile.
13		6. Section 15064 – Pipe: Plastic.
14		7. Section 15100 - Valves: Basic Requirements.
15		
16	1.2	QUALITY ASSURANCE
17		A. Referenced Standards:
18		American National Standards Institute (ANSI):
19		a. B16.3, Malleable Iron Threaded Fittings.
20		b. B16.5, Pipe Flanges and Flanged Fittings.
21		c. B16.9, Factory-Made Wrought Steel Butt-Welding Fittings.
22		d. B36.19, Stainless Steel Pipe.
23		e. B40.1, Gauges - Pressure Indicating Dial Type - Elastic Element.
24		2. American National Standards Institute (ANSI)/American Water Works Association (AWWA):
25		a. ANSI/AWWA C110/A21.10, Ductile Iron and Gray Iron Fittings, 3 IN through 48 IN for Water
26		and Other Liquids.
27		b. ANSI/AWWA C115/A21.15, Flanged Ductile Iron Pipe with Threaded Flanges.
28		c. C151, Ductile-Iron Pipe, Centrifugally Cast In Metal Molds or Sand-Lined Molds for Water or
29		Other Liquids.
30		d. ANSI/AWWA C153/A21.53, Ductile-Iron Compact Fittings, 3 IN Through 16 IN, for Water and
31		Other Liquids.
32		e. C207, Standard for Steel Pipe Flanges for Waterworks Service - Sizes 4 IN through 144 IN.
33		3. American Society for Testing and Materials (ASTM):
34		a. A53, Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated Welded and
35		Seamless.
36		b. A74, Cast-Iron Soil Pipe and Fittings.
37		c. A126, Standard Specification for Gray Iron Castings for Valves, Flanges and Pipe Fittings.
38		d. A234, Standard Specification for Pipe Fittings of Wrought Carbon Steel and Alloy Steel for
39		Moderate and Elevated Temperatures.
40		e. A269, Specification for Seamless and Welded Austenitic Stainless Steel Tubing for General
41		Service.
42		f. A536, Standard Specification for Ductile Iron Castings.
43		g. B88, Seamless Copper Water Tube (ANSI H23.1).
44		h. C14, Standard Specification for Concrete Sewer, Storm Drain, and Culvert Pipe.
45		i. C425, Compression Joints for Vitrified Clay Bell and Spigot Pipe.
46		j. C443, Joints for Circular Concrete Sewer and Culvert Pipe Using Flexible, Watertight, Rubber

Santa Fe County February 2022 Gaskets.

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48 49 C564, Rubber Gaskets for Cast-Iron Soil Pipe and Fittings.
C700, Extra Strength and Standard Strength Clay Pipe and Perforated Clay Pipe.

Glorieta, NM
East Glorieta Distribution & Regional Well
Contract Documents

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20		В.	 m. D1785, Specification for Rigid Poly Vinyl Chloride (PVC) Compounds and Chlorinated Poly Vinyl Chloride (CPVC) Compounds. n. D2467, Socket Type (PVC) Plastic Pipe Fittings, Schedule 80. o. F439, Standard Specification for Socket-Type Chlorinated Poly(Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 40. p. F441, Standard Specification for Chlorinated Poly(Vinyl Chloride) (CPVC) Plastic Pipe, Schedules 40 and 80. 4. American Water Works Association (AWWA): a. C111, Rubber-Gasket Joints for Ductile Iron and Gray Iron Pressure Pipe and Fittings. b. C200, Steel Water Pipe 6 IN and Larger. c. C207, Steel Pipe Flanges for Waterworks Service - Sizes 4 IN through 144 IN. d. C208, Dimensions for Fabricated Steel Water Pipe Fittings. e. C900, Polyvinyl Chloride (PVC) Pressure Pipe and Fabricated Fittings, 4 IN through 12 IN, for Water Distribution f. C901, Poleythylene (PE) Pressure Pipe and Tubing, ½ IN through 3 IN, for Water Service g. C606, Grooved and Shouldered Joints. h. C651, Standard for Disinfecting Water Mains. 5. National Fire Protection Association (NFPA). 6. Underwriters Laboratory, Inc (UL). Coordinate flange dimensions and drillings between piping, valves, and equipment.
21		٠.	Coordinate names contents and crimings contents premise, the equipment
22	1.3	SU	BMITTALS
23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48	1.4		 Shop Drawings: See Section 01340. Fabrication and/or layout drawings:
49	1.4	DΕ	LIVERY, STORAGE, AND HANDLING

Santa Fe County February 2022

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chains, hooks, metal bars or narrow skids in contact with coated pipe is not permitted.

A. Protect pipe coating during handling using methods recommended by manufacturer. Use of bare cables,

B. Prevent damage to pipe during transit. Repair abrasions, scars, and blemishes. If repair of satisfactory quality cannot be achieved, replace damaged material immediately.

3 PART 2 - PRODUCTS

4 2.1 ACCEPTABLE MANUFACTURERS

- A. Subject to compliance with the Contract Documents, the following manufacturers are acceptable:
 - Pipe Saddles:
 - a. Dresser Style 291.
- b. Dresser Style 194.
 - c. Or Approved Equal.
 - B. Submit requests for substitution in accordance with Specification Section 01640.

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2.2 COMPONENTS AND ACCESSORIES

- 13 A. Reducers:
 - 1. Furnish appropriate size reducers and reducing fittings to mate pipe to equipment connections.
- 15 Connection size requirements may change from those shown on Drawings depending on equipment furnished.
- B. Protective Coating and Lining:
 - Include pipe, fittings, and appurtenances where coatings, linings, paint, tests and other items are specified.
- 20 C. Valves:
- 21 1. See Section 15100.

22 PART 3 - EXECUTION

23 3.1 EXTERIOR BURIED PIPING INSTALLATION

- A. Unless otherwise shown on the Drawings, provide a minimum of 4 FT earth cover over buried piping systems and appurtenances conveying water, fluids, or solutions subject to freezing.
- B. Install expansion devices as necessary to allow for expansion and contraction movement.
- 27 C. Install insulating components where dissimilar metals are joined together.
- D. Laying Pipe in Trench:
 - 1. Excavate and backfill trench in accordance with Section 02221.
 - 2. Clean each pipe length thoroughly and inspect for compliance to Specifications.
 - 3. Grade trench bottom and excavate for pipe bell and lay pipe on trench bottom.
 - 4. Install gasket or joint material according to manufacturer's directions after joints have been thoroughly cleaned and examined.
 - 5. Except for first two joints, before making final connections of joints, install two full sections of pipe with earth tamped along side of pipe or final with bedding material placed.
 - 6. Lay pipe in only suitable weather with good trench conditions. Never lay pipe in water except where approved by owner.
 - 7. Seal open end of line with watertight plug if pipe laying is stopped.
 - 8. Remove water in trench before removal of plug.
 - E. Lining Up Push-On Joint Piping:
 - 1. Lay piping on route lines shown on Drawings.
 - 2. Deflect from straight alignments or grades by vertical or horizontal curves or offsets.
- 43 3. Observe maximum deflection values stated in manufacturer's written literature.

Santa Fe County February 2022

- 1 4. Provide special bends when specified or where required alignment exceeds allowable deflections stipulated.
 - 5. Install shorter lengths of pipe in such length and number that angular deflection of any joint, as represented by specified maximum deflection, is not exceeded.
 - F. Anchorage and Blocking:

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- 1. Provide thrust blocks, anchors, joint harnesses, or other acceptable means for preventing movement of piping caused by forces in or on buried piping tees, wye branches, plugs, or bends. For all buried piping systems, the length of pipe required to have restrained joint shall be determined by the pipe supplier.
- 9 G. Install underground hazard warning tape as specified.

3.2 CONNECTIONS WITH EXISTING PIPING

- A. Where connection between new work and existing work is made, use suitable and proper fittings to suit conditions encountered.
 - B. Perform connections with existing piping at time and under conditions which will least interfere with service to facilities affected by such operation.
 - C. Undertake connections in fashion which will disturb system as little as possible.
- D. Provide suitable equipment and facilities to dewater, drain, and dispose of liquid removed without damage to adjacent property.
 - E. Where connections to existing systems necessitate employment of past installation methods not currently part of trade practice, utilize necessary special piping components.
 - F. Where connection involves potable water systems, provide disinfection methods as prescribed in these Specifications.
 - G. Once tie-in to each existing system is initiated, continue work continuously until tie-in is made and tested.

3.3 FIELD QUALITY CONTROL

- A. Pipe Testing General:
 - 1. Test piping systems as follows:
 - a. Test buried piping prior to backfilling.
 - 2. Utilize pressures, media and pressure test durations as specified herein.
 - 3. Perform pressure test using calibrated pressure gages and calibrated volumetric measuring equipment to determine leakage rates.
 - a. Select each gage so that the specified test pressure falls within the upper half of the gage's range.
 - b. Notify the Engineer 24 HRS prior to each test.
 - 4. Completely assemble and test new piping systems prior to connection to existing pipe systems.
 - 5. Acknowledge satisfactory performance of tests and inspections in writing to Engineer prior to final acceptance.
 - 6. Bear the cost of all testing and inspecting, locating and remedying of leaks and any necessary retesting and re-examination.

- 1. Testing medium: Utilize the following test media unless otherwise specified.
 - a. Liquid systems:

	GRAVITY		
	OR	SPECIFIED TEST	TESTING
PIPE LINE SIZE (DIA)	PRESSURE	PRESSURE	MEDIUM
Up to and including 48 IN	Gravity	25 psig or less	Air or water
Above 48 IN	Gravity	25 psig or less	Water
All sizes	PRESSURE	250 psig or less	Water

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2. Allowable leakage rates:

8 9 10 a. All pressure piping systems which are hydrostatically pressure tested shall have an allowable leakage rate as determined by the formulas contained in AWWA C600 and C605. Piping shall be subject to the specified test pressure throughout the duration of the test.

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- 3. Hydrostatic pressure testing methodology:
 - a. General:
 - 1) All joints, including welds, are to be left exposed for examination during the test.
 - 2) Provide temporary restraints for expansion joints for additional pressure load under test.
 - 3) Do not paint or insulate exposed piping until successful performance of pressure test.

3.4 CLEANING, DISINFECTION AND PURGING

A. Cleaning:

- 1. Clean interior of piping systems thoroughly before installing.
- 2. Maintain pipe in clean condition during installation.
- 3. Before jointing piping, thoroughly clean and wipe joint contact surfaces and then properly dress and make joint.
- 4. Immediately prior to pressure testing, clean and remove grease, metal cuttings, dirt, or other foreign materials which may have entered the system.
- 5. At completion of work and prior to Final Acceptance, thoroughly clean work installed under these Specifications. Clean equipment, fixtures, pipe, valves, and fittings of grease, metal cuttings, and sludge which may have accumulated by operation of system, from testing, or from other causes. Repair any stoppage or discoloration or other damage to parts of building, its finish, or furnishings, due to failure to properly clean piping system, without cost to OWNER.

B. Disinfection of Potable Water Systems:

- 1. After favorable performance of pressure test and prior to Final Acceptance, thoroughly flush entire potable water piping system including supply, source and any appurtenant devices and perform disinfection as prescribed.
- 2. Perform work, including preventative measures during construction, in full compliance with AWWA C651.
- 3. Flush each segment of system to provide flushing velocity of not less than 2.5 FT per second.
- 4. Drain flushing water to sanitary sewer. Do not drain flushing water to receiving stream.
- 5. Use continuous feed method of application. Tag system during disinfection procedure to prevent use.
- 6. After required contact period, flush system to remove traces of heavily chlorinated water.
- 7. After final flushing and before placing water in service, obtain an independent laboratory approved by the OWNER to collect samples and test for bacteriological quality. Repeat entire disinfection procedures until satisfactory results are obtained.
- 8. Secure and deliver to OWNER, satisfactory bacteriological reports on samples taken from system.
- 9. Ensure sampling and testing procedures are in full compliance with the requirements of AWWA C651, local water purveyor and all applicable requirements of the State of New Mexico.

3.5 LOCATION OF BURIED OBSTACLES

2 A.	Furnish exact	location and desc	cription of burie	d utilities encountered.	

- B. Reference items to definitive reference point locations such as found property corners, entrances to buildings, existing structure lines, fire hydrants and related fixed structures.
- 5 C. Include such information as location, elevation, coverage, supports and additional pertinent information.
 - D. Incorporate information on "As-Recorded" Drawings on a daily basis.

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8 END OF SECTION

1	2002	2/01/14
2		SECTION 15062
3		PIPE: DUCTILE
4	PAF	RT 1 - GENERAL
5	1.1	SUMMARY
6 7		A. Section Includes:1. Ductile iron piping, fittings, and appurtenances.
8 9 10 11		 B. Related Sections include but are not necessarily limited to: 1. Division 0 - Bidding Requirements, Contract Forms, and Conditions of the Contract. 2. Division 1 - General Requirements. 3. Section 15060 - Pipe and Pipe Fittings: Basic Requirements.
12	1.2	QUALITY ASSURANCE
13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35		 A. Referenced Standards: American Society of Mechanical Engineers (ASME):
36	1.3	SUBMITTALS
37 38 39 40 41 42 43		 A. Shop Drawings: See Section 01340 for requirements for the mechanics and administration of the submittal process. See Section 15060. Certification of factory hydrostatic testing. If mechanical coupling system is used, submit piping, fittings, and appurtenant items which will be utilized to meet system requirements.

PART 2 - PRODUCTS

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2.1 ACCEPTABLE MANUFACTURERS

- A. Subject to compliance with the Contract Documents, the following manufacturers are acceptable:
- 5 1. Flanged adaptors:
 - a. Rockwell (Style 913 (steel).
 - b. Dresser (Style 128 (steel).
 - 2. Compression sleeve coupling:
 - a. Rockwell (Style 411 (steel).
 - b. Dresser (Style 38 (steel).
 - 3. Mechanical coupling:
 - a. Victaulic (Style 31).
- b. Tyler.
- 4. Glass lining:
 - a. Ceramic Coating (Non-Stick Glass Lining).
- b. Permutit (SG-14 Glass Lining).
 - 5. Insulating couplings:
 - a. Rockwell (Style 416).
 - b. Dresser (Style 39).
 - Reducing couplings:
 - a. Rockwell (Style 415).
 - b. Dresser (Style 62).
- 23 7. Transition coupling:
 - a. Rockwell (Style 413).
- b. Dresser (Style 62).
 - 8. Polyethylene encasement tape:
 - a. Chase (Chasekote 750).
 - b. Kendall (Polyken 900).
 - c. 3 M (Scotchrap 50).
- 9. Restrained joints:
 - a. American (Lock Fast) 12 IN and below.
 - b. U.S. Pipe (TR-Flex) 4 IN to 54 IN.
 - c. American (Lock Fast) Above 12 IN.
- 34 B. Submit request for substitution in accordance with Specification Section 01640.

2.2 MATERIALS

- A. Ductile Iron Pipe:
 - 1. AWWA/ANSI C115/A21.15.
 - 2. AWWA/ANSI C150/A21.50.
- 39 3. AWWA/ANSI C151/A21.51.
 - B. Fittings and Flanges:
 - 1. AWWA/ANSI C110/A21.10.
 - 2. AWWA/ANSI C115/A21.15.
- 43 3. Flanges drilled and faced per ASME B16.1 for both 125 and 250 psi applications.
- 44 C. Nuts and Bolts:
 - Buried: Cadmium-plated meeting SAE AMS-QQ-P-416, Type 1, Class 2 (Cor-Ten) for buried application.
- 47 2. Exposed: Mechanical galvanized ASTM B695, Class 40.
 - 3. Heads and dimensions per ASME B1.1.
- 4. Threaded per ASME B1.1.
 - 5. Project ends 1/4 to 1/2 IN beyond nuts.

- D. Gaskets: See individual piping system requirements in Section 15060.
- E. If mechanical coupling system is used, utilize pipe thickness and grade in accordance with AWWA C606.
- F. Polyethylene Encasement: See AWWA/ANSI C105/A21.5.
- 5 G. See Piping Schedules in Section 15060.

6 2.3 MANUFACTURED UNITS

A. Couplings:

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- 1. Flanged adaptors:
 - a. Unit consisting of steel or carbon steel body sleeve, flange, followers, Grade 30 rubber gaskets.
 - b. Provide units specified in Article 2.1.
 - c. Supply flanges meeting standards of adjoining flanges.
 - d. Rate entire assembly for test pressure specified on piping schedule for each respective application.
- 2. Compression sleeve coupling:
 - a. Unit consisting of steel sleeve, followers, Grade 30 rubber gaskets.
- b. Provide units specified in Article 2.1.
 - c. Supply flanges meeting standards of adjoining flanges.
 - d. Entire assembly to be rated for test pressure specified on piping schedule for each respective application.
 - e. Provide field coating for buried couplings per AWWA C203.
- 3. Mechanical couplings:
 - a. Use of mechanical couplings and fittings in lieu of flanged joints is acceptable where specifically specified in Section 15060.
 - b. Utilize units defined in Article 2.1.

2.4 FABRICATION

- A. Furnish and install without outside coatings of bituminous material any exposed pipe scheduled to be painted.
- B. Furnish cast parts with lacquer finish compatible with finish coat.
- 30 C. Glass Lining:
 - 1. Minimum two-coat process.
 - a. Base coat heated to solidly fuse glass to pipe surface.
 - b. Subsequent coat(s) heated to form integral bond with preceding coat.
 - 2. Final finish parameters:
 - a. Thickness: 8-12 mils.
 - b. Hardness: Above 5 on MOHS scale.
 - c. Density: 2.5-3.0 grams per cubic centimeter.
 - d. Metal to lining bonding: Capable of withstanding strain of 0.0001 IN/IN without damage to lining.
 - 3. Complete compatibility between fittings and piping.

2.5 LININGS AND COATINGS

- 42 A. Where specified in piping schedule, provide linings to a minimum thickness of 40 mils.
 - 1. Polyethylene, "Polybond" by American Pipe.
 - 2. Polyurethane, "Polythane" by U.S. Pipe.
 - 3. Ceramic epoxy, "Protecto 401" by U.S. Pipe.
 - 4. Calcium aluminate, "Sewper Coat" by Griffin Pipe.

2.6 SOURCE QUALITY CONTROL

A. Factory Test:

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1. Subject pipe to hydrostatic test of not less than 500 psi with the pipe under the full test pressure for at least 10 seconds.

PART 3 - EXECUTION

6 3.1 INSTALLATION

- A. Joining Method Push-On Mechanical (Gland-Type) Joints:
 - 1. Install in accordance with AWWA/ANSI C111/A21.11.
 - 2. Assemble mechanical joints carefully according to manufacturer's recommendations.
 - 3. If effective sealing is not obtained, disassemble, thoroughly clean, and reassemble the joint.
- 4. Do not overstress bolts.
 - 5. Where piping utilizes mechanical joints with tie rods, align joint holes to permit installation of harness bolts.
 - B. Joining Method Push-On Joints:
 - 1. Install in accordance with AWWA/ANSI C151/A21.51.
 - 2. Assemble push-on joints in accordance with manufacturer's directions.
 - 3. Bevel and lubricate spigot end of pipe to facilitate assembly without damage to gasket.
 - a. Use lubricant that is non-toxic, does not support the growth of bacteria, has no deteriorating effects on the gasket material, and imparts no taste or odor to water in pipe.
 - 4. Assure the gasket groove is thoroughly clean.
 - 5. For cold weather installation, warm gasket prior to placement in bell.
 - 6. Taper of bevel shall be approximately 30 degrees with centerline of pipe and approximately 1/4 IN back.
 - C. Joining Method Flanged Joints:
 - 1. Install in accordance with AWWA/ANSI C115/A21.15.
 - 2. Extend pipe completely through screwed-on flanged and machine flange face and pipe in single operation.
 - 3. Make flange faces flat and perpendicular to pipe centerline.
 - 4. When bolting flange joints, exercise extreme care to ensure that there is no restraint on opposite end of pipe or fitting which would prevent uniform gasket compression or would cause unnecessary stress, bending or torsional strains to be applied to cast flanges or flanged fittings.
 - 5. Allow one (1) flange free movement in any direction while bolts are being tightened.
 - 6. Do not assemble adjoining flexible joints until flanged joints in piping system have been tightened.
 - 7. Gradually tighten flange bolts uniformly to permit even gasket compression.
 - D. Joining Method Mechanical Coupling Joint:
 - 1. Arrange piping so that pipe ends are in full contact.
 - 2. Groove and shoulder ends of piping in accordance with manufacturer's recommendations.
 - Provide coupling and grooving technique assuring a connection which passes pressure testing requirements.
- E. Flange Adaptors 12 IN and Less:
 - 1. Locate and drill holes for anchor studs after pipe is in place and bolted tight.
- 45 2. Drill holes not more than 1/8 IN larger than diameter of stud projection.
- 46 F. Cutting:
- 47 1. Do not damage interior lining material during cutting.
 - 2. Use abrasive wheel cutters or saws.

1 2		3. Make square cuts.4. Bevel and free cut ends of sharp edges after cutting.
3		G. Support exposed pipe in accordance with Section 15060.
4		H. Install buried piping in accordance with Section 15060.
5		I. Install restrained joint systems where specified in Section 15060 under specific piping system.
6	3.2	FIELD QUALITY CONTROL
7		A. Test piping systems in accordance with Section 15060.
8		END OF SECTION
9		

1 2		SECTION 15064 PIPE: PLASTIC
3	PAF	RT 1 - GENERAL
4	1.1	SUMMARY
5 6 7 8 9		 A. Section Includes: Plastic pipe. B. Related Sections include but are not necessarily limited to: Division 0 - Bidding Requirements, Contract Forms, and Conditions of the Contract. Division 1 - General Requirements. Section 15060 - Pipe and Pipe Fittings: Basic Requirements.
11	1.2	QUALITY ASSURANCE
12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 33 33		 A. See Section 15060. B. Referenced Standards: American Society for Testing and Materials (ASTM): a. PVC (Polyvinyl Chloride) materials: D1784, Standard Specification for Rigid Poly(Vinyl Chloride) (PVC) Compounds and Chlorinated Poly(Vinyl Chloride) (CPVC) Compounds. D1785, Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe, Schedules 40, 80, and 120. D2241, (PVC) Plastic Pipe (SDR-PR and Class T). D2564, Solvent Cements for (PVC) Plastic Pipe, Tubing, and Fittings. D2740, (PVC) Plastic Tubing. D3139, Standard Specification for Joints for Plastic Pressure Pipes Using Flexible Elastomeric Seals. Installation: D2855, Making Solvent Cemented Joints with PVC Pipe and Fittings. American Water Works Association (AWWA): PVC (polyvinyl chloride) materials: C900, Polyvinyl Chloride (PVC) pressure pipe 4 through 12 IN for Water. Polyethylene (PE) materials: C901, Polyethylene (PE) Pressure Pipe Tubing and Fittings, 1/2 through 3 IN for Water.
33	1.3	SUBMITTALS
34 35	PAF	A. See Section 01340. RT 2 - PRODUCTS
36	2.1	ACCEPTABLE MANUFACTURERS
37 38 39 40 41		 A. Subject to compliance with the Contract Documents, the following manufacturers are acceptable: 1. Restrained joints: a. EBAA Iron Megalug. b. Uni-Flange. c. Or Approved Equal.

Santa Fe County February 2022

1 **MATERIALS** 2.2 2 A. Pipe 3 Furnish materials in full compliance with following requirements: 4-12 IN: AWWA C900 PVC with Pressure Class of 150 psi per Table 2, AWWA C900. 4 5 1/2-3 IN: AWWA C901 PE with Pressure Class of 150 psi per Table A3, AWWA 6 7 Joints for polyethylene pipe shall be fusion type in accordance with AWWA C901. 8 Joints for PVC pipe shall be the elastomeric-gasket type with a pressure rating not less than 9 the pipe pressure rating and meeting the performance requirements of ASTM D3139. 10 Fittings for C-900 PVC pipe shall be ductile iron in accordance with AWWA C110 or 11 C153. 12 Uniformity: Ensure that all piping and fittings are integrated into components of the finished 13 system. Utilize products of a single manufacturer. PART 3 - EXECUTION 14 15 3.1 IDENTIFICATION 16 A. Identify each length of pipe clearly at intervals of 5 FT or less. Include manufacturer's name and trademark, nominal size of pipe, appurtenant information regarding polymer cell classification, 17 18 critical identifications regarding performance specifications, and "NSF" approvals when 19 applicable. 20 INSTALLATION 3.2 21 A. Field threading of PVC pipe will not be permitted. Perform installation procedures, handling, 22 thrust blocking, connections, and other appurtenant operations in full compliance to the 23 manufacturer's printed recommendations and in full observance to plan details. 24 B. Tracer Wire: 25 Tracer wire shall be installed on all buried PVC pipe and all buried copper pipe 26 27 Tracer wire shall be a minimum ten (10) gage wire size for all installations and shall be 28 coated wire. 29 The installed ten (10) gage coated tracer wire shall be attached to the top of the pipe 30 with duct tape. 31 Wire connections shall be made by either soldering or using a split bolt, wire 32 connections shall be wrapped with electrical tape to protect the connections. 33 The tracer wire shall be electrically connected to a surface appurtenance of the water 34 line or sewer using jumper wires and cadwelding. 35 Surface appurtenances shall include hydrants and blowoffs, etc. 36 The cost of tracer wire and installation including all labor, equipment as necessary to install 37 said wire shall be included in the bid unit price of the water main. No separate payment 38 shall be made for the tracer wire. 39 C. Install buried piping in accordance with Section 15060. 40 D. Install restrained joint systems where specified. 41 3.3 FIELD QUALITY CONTROL 42 1. Test piping systems in accordance with Section 15060.

February 2022

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END OF SECTION

2	VALVES: BASIC REQUIREMENTS					
3	PAF	RT 1 - GENERAL				
4	1.1	SUMMARY				
5 6		A. Section Includes:1. Valving, actuators, and valving appurtenances.				
7 8 9 10 11 12 13		 Related Sections include but are not necessarily limited to: Division 0 - Bidding Requirements, Contract Forms, and Conditions of the Contract. Division 1 - General Requirements. Section 15060 - Pipe and Pipe Fittings: Basic Requirements. Section 15062 - Pipe: Ductile. Section 15101 - Gate Valves. Section 15114 - Miscellaneous Valves. 				
14	1.2 QUALITY ASSURANCE					
15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34		 A. Referenced Standards: American National Standards Institute (ANSI):				
35	1.3	DEFINITIONS				
36 37 38 39 40		 A. The following are definitions of abbreviations used in this section or one of the individual valve sections. 1. CWP: Cold water working pressure. 2. WOG: Water, oil, gas working pressure. 3. WWP: Water working pressure. 				
41 1.4 SUBMITTALS		SUBMITTALS				
42 43 44 45 46		 A. Shop Drawings: See Section 01340. Product technical data including: Acknowledgement that products submitted meet requirements of standards referenced. Manufacturer's installation instructions. 				
	Sant	a Fe County Glorieta, NM				

SECTION 15100

1

minimum thickness, and identifying cast iron cover. Box base to enclose buried valve gear box or bonnet. Provide 2 IN standard actuator nuts complying with Section 3.16 of AWWA C500. Provide extension stem to grade with guide bearings to center extension. Provide cast iron floor stands where shown on drawings. Stands shall be furnished by valvanta manufacturer with actuator. Stand or actuator to include thrust bearings for valve operation and weight of accessories. A. End Connections: Provide the type of end connections for valves as required in the Piping Schedules presented.	1 2 3 4 5 6 7 8 9	 c. Valve pressure and temperature rating. d. Valve material of construction. e. Special linings. f. Valve dimensions and weight. g. Valve flow coefficient. h. Wiring and control diagrams for electric or cylinder actuators. 3. Test reports. B. Operation and Maintenance Manuals: 1. See Section 01340. 				
A. Refer to individual valve specification sections. A. Refer to individual valve specification sections. A. Refer to individual valve specification sections. A. Valve Actuators A. Valve Actuators as shown on Drawings or specified. 1. Provide actuators as shown on Drawings or specified. 2. Counter clockwise opening as viewed from the top. 3. Direction of opening and the word OPEN to be cast in handwheel or valve bonnet. 4. Size actuator to produce required torque with a maximum pull of 80 LB at the maximum pressure rating of the valve provided and withstand without damage a pull of 200 LB on handwheel or chainwheel or 300 foot-pounds torque on the operating nut. 5. Unless otherwise specified, actuators for valves to be buried, submerged or installed in valls or manholes shall be sealed to withstand at least 20 FT of submergence. 6. Extension Stem: a. Install where shown or specified. b. Solid steel with actuator key and nut, diameter not less than stem of valve actuator shaft. c. Pin all stem connections. d. Center in valve box or grating opening band with guide bushing. B. Buried Valve Actuators: 1. Provide Actuators: 1. Provide Stemson stem to grade with guide bearings to center extension. 5. Provide cast iron floor stands where shown on drawings. Stands shall be furnished by valvanuffacturer with actuator. a. Stand or actuator to include thrust bearings for valve operation and weight of accessories. 4. End Connections: 1. Provide the type of end connections for valves as required in the Piping Schedules present	10	PAR	RT 2 - PRODUCTS			
A. Refer to individual valve specification sections. A. Refer to individual valve specification sections. A. Valve Actuators - General: 1. Provide actuators as shown on Drawings or specified. 2. Counter clockwise opening as viewed from the top. 3. Direction of opening and the word OPEN to be cast in handwheel or valve bonnet. 4. Size actuator to produce required torque with a maximum pull of 80 LB at the maximum pressure rating of the valve provided and withstand without damage a pull of 200 LB on handwheel or chainwheel or 300 foot-pounds torque on the operating nut. 5. Unless otherwise specified, actuators for valves to be buried, submerged or installed in vaults or manholes shall be sealed to withstand at least 20 FT of submergence. 6. Extension Stem: a. Install where shown or specified. b. Solid steel with actuator key and nut, diameter not less than stem of valve actuator shaft. c. Pin all stem connections. d. Center in valve box or grating opening band with guide bushing. B. Buried Valve Actuators: 1. Provide screw or slide type adjustable cast iron valve box, 5 IN minimum diameter, 3/16 I minimum thickness, and identifying cast iron cover. 2. Box base to enclose buried valve gear box or bonnet. 3. Provide 2 IN standard actuator nuts complying with Section 3.16 of AWWA C500. 4. Provide extension stem to grade with guide bearings to center extension. 5. Provide cast iron floor stands where shown on drawings. Stands shall be furnished by valvanual for accessories. 2.4 FABRICATION A. End Connections: 1. Provide the type of end connections for valves as required in the Piping Schedules present	11	2.1	ACCEPTABLE MANUFACTURERS			
A. Refer to individual valve specification sections. 15 2.3 VALVE ACTUATORS A. Valve Actuators - General: 1. Provide actuators as shown on Drawings or specified. 2. Counter clockwise opening as viewed from the top. 3. Direction of opening and the word OPEN to be cast in handwheel or valve bonnet. 4. Size actuator to produce required torque with a maximum pull of 80 LB at the maximum pressure rating of the valve provided and withstand without damage a pull of 200 LB on handwheel or chainwheel or 300 foot-pounds torque on the operating nut. 5. Unless otherwise specified, actuators for valves to be buried, submerged or installed in vaults or manholes shall be sealed to withstand at least 20 FT of submergence. 6. Extension Stem: a. Install where shown or specified. b. Solid steel with actuator key and nut, diameter not less than stem of valve actuator shaft. c. Pin all stem connections. d. Center in valve box or grating opening band with guide bushing. B. Buried Valve Actuators: 1. Provide screw or slide type adjustable cast iron valve box, 5 IN minimum diameter, 3/16 I minimum thickness, and identifying cast iron cover. 2. Box base to enclose buried valve gear box or bonnet. 3. Provide 2 IN standard actuator nuts complying with Section 3.16 of AWWA C500. 4. Provide extension stem to grade with guide bearings to center extension. 5. Provide cast iron floor stands where shown on drawings. Stands shall be furnished by valve manufacturer with actuator. a. Stand or actuator to include thrust bearings for valve operation and weight of accessories. 2.4 FABRICATION A. End Connections: 1. Provide the type of end connections for valves as required in the Piping Schedules present	12		A. Refer to individual valve specification sections.			
A. Valve Actuators - General: 1. Provide actuators as shown on Drawings or specified. 2. Counter clockwise opening as viewed from the top. 3. Direction of opening and the word OPEN to be cast in handwheel or valve bonnet. 4. Size actuator to produce required torque with a maximum pull of 80 LB at the maximum pressure rating of the valve provided and withstand without damage a pull of 200 LB on handwheel or chainwheel or 300 foot-pounds torque on the operating nut. 5. Unless otherwise specified, actuators for valves to be buried, submerged or installed in vaults or manholes shall be sealed to withstand at least 20 FT of submergence. 6. Extension Stem: a. Install where shown or specified. b. Solid steel with actuator key and nut, diameter not less than stem of valve actuator shaft. c. Pin all stem connections. d. Center in valve box or grating opening band with guide bushing. B. Buried Valve Actuators: 1. Provide screw or slide type adjustable cast iron valve box, 5 IN minimum diameter, 3/16 I minimum thickness, and identifying cast iron cover. 2. Box base to enclose buried valve gear box or bonnet. 3. Provide 2 IN standard actuator nuts complying with Section 3.16 of AWWA C500. 4. Provide extension stem to grade with guide bearings to center extension. 5. Provide cast iron floor stands where shown on drawings. Stands shall be furnished by valva manufacturer with actuator. a. Stand or actuator to include thrust bearings for valve operation and weight of accessories. 2.4 FABRICATION A. End Connections: 1. Provide the type of end connections for valves as required in the Piping Schedules present	13	2.2	MATERIALS			
A. Valve Actuators - General: 1. Provide actuators as shown on Drawings or specified. 2. Counter clockwise opening as viewed from the top. 3. Direction of opening and the word OPEN to be cast in handwheel or valve bonnet. 4. Size actuator to produce required torque with a maximum pull of 80 LB at the maximum pressure rating of the valve provided and withstand without damage a pull of 200 LB on handwheel or chainwheel or 300 foot-pounds torque on the operating nut. 5. Unless otherwise specified, actuators for valves to be buried, submerged or installed in vaults or manholes shall be sealed to withstand at least 20 FT of submergence. 6. Extension Stem: a. Install where shown or specified. b. Solid steel with actuator key and nut, diameter not less than stem of valve actuator shaft. c. Pin all stem connections. d. Center in valve box or grating opening band with guide bushing. B. Buried Valve Actuators: 1. Provide screw or slide type adjustable cast iron valve box, 5 IN minimum diameter, 3/16 I minimum thickness, and identifying cast iron cover. 2. Box base to enclose buried valve gear box or bonnet. 3. Provide 2 IN standard actuator nuts complying with Section 3.16 of AWWA C500. 4. Provide extension stem to grade with guide bearings to center extension. 5. Provide cast iron floor stands where shown on drawings. Stands shall be furnished by valval manufacturer with actuator. a. Stand or actuator to include thrust bearings for valve operation and weight of accessories. 4. End Connections: 4. End Connections: 4. Provide the type of end connections for valves as required in the Piping Schedules present	14		A. Refer to individual valve specification sections.			
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1. Provide the type of end connections for valves as required in the Piping Schedules presented	41	2.4	FABRICATION			
February 2022 East Glorieta Distribution & Regional W	43 44 45 46		 Provide the type of end connections for valves as required in the Piping Schedules presented in Section 15060 and 15062 or as shown on the Drawings. Comply with the following standards: a. Threaded: ANSI B1.20.1. b. Flanged: ANSI B16.1 Class 125 unless otherwise noted or AWWA C207. 			

1 2 3			c. Bell and spigot or mechanical (gland) type: AWWA C111.d. Soldered: ANSI B16.18.e. Grooved: Rigid joints per Table 5 of AWWA C606.
4		B.	Refer to individual valve sections for specifications of each type of valve on Project.
5 6		C.	Nuts, Bolts, and Washers: 1. Wetted or internal to be bronze or stainless steel. Exposed to be zinc or cadmium plated.
7 8		D.	On Insulated Piping: Provide valves with extended stems to permit proper insulation application without interference from handle.
9 10		E.	Epoxy Interior Coating: 1. Provide epoxy interior coating for all ferrous surfaces in accordance with AWWA C550.
11	PAF	RT 3	- EXECUTION
12	3.1	INS	STALLATION
13		A.	Install products in accordance with manufacturer's instructions.
14 15 16 17 18 19 20 21 22 23		В.	 Setting Buried Valves: Locate valves installed in pipe trenches where buried pipe indicated on Drawings. Set valves and valve boxes plumb. Place valve boxes directly over valves with top of box being brought to surface of finished grade. Install in closed position. Place valve on firm footing in trench to prevent settling and excessive strain on connection to pipe. After installation, backfill up to top of box for a minimum distance of 4 FT on each side of box.
24		C.	For threaded valves, provide union on one side within 2 FT of valve to allow valve removal.
25		D.	Install valves accessible for operation, inspection, and maintenance.
26			
28 29			END OF SECTION

1		SECTION 15101	
2		GATE VALVES	
3	PAF	RT 1 - GENERAL	
4	1.1	SUMMARY	
5 6		A. Section Includes: 1. Gate valves.	
7 8 9 10		 B. Related Sections include but are not necessarily limited to: 1. Division 0 - Bidding Requirements, Contract Forms, and Conditions of the Contract. 2. Division 1 - General Requirements. 3. Section 15100 - Valves: Basic Requirements. 	
11	1.2	QUALITY ASSURANCE	
12 13 14 15 16 17 18 19 20		 A. Referenced Standards: American Water Works Association (AWWA): a. C500, Metal-Seated Gate Valves for Water Supply Service. b. C509, Resilient-Seated Gate Valves for Water and Sewerage Systems. c. C550, Protective Epoxy Interior Castings for Valves and Hydrants. Manufacturer's Standardization Society of the Valve and Fittings Industry, Inc (MSS): a. SP-9, Spot Facing for Bronze, Iron and Steel Flanges. b. SP-70, Cast Iron Gate Valves, Flanged and Threaded Ends. c. SP-80, Bronze Gate, Globe, Angle and Check Valves. 	
21	1.3	DEFINITIONS	
22		A. OS&Y: Outside Screw and Yoke.	
23		B. NRS: Non-rising Stem.	
24		C. RS: Rising Stem.	
25	1.4	SUBMITTALS	
26 27		A. Shop Drawings: 1. See Section 01340 and 15100.	
28 29		B. Operation and Maintenance Manuals:1. See Section 01340.	
30	PAF	RT 2 - PRODUCTS	
31	2.1	ACCEPTABLE MANUFACTURERS	
32 33		A. Subject to compliance with the Contract Documents, the manufacturers listed under the specific valve types are acceptable.	
34 35	2.2	VALVES: WATER (HOT, COLD, HEATING, COOLING, SERVICE, NON-POTABLE, PROCESS, WASTEWATER); 3 TO 12 IN DIA	
36 37 38 39 40		 A. Resilient Seat Gate Valves (Wastewater - Water), 3 to 12 IN DIA: 1. Comply with AWWA C509. 2. Materials: a. Stem and stem nut - bronze. 1) Wetted bronze parts in low zinc bronze. 	
	Sant	a Fe County Glorieta, NN	

2 3		b. Body, gate - cast iron.c. Resilient seat - Styrene Butadiene Rubber (SBR).
3 4		3. Design requirements:
5		a. 200 psi working pressure.
6		b. Buried - NRS O-ring stem seal.
7		c. Exposed - OS&Y, stuffing box stem seal, handwheel
8		d. Counter clockwise open rotation.
9		4. Fusion bonded epoxy coating interior and exterior except stainless steel and bearing
10		surfaces.
11		a. Comply with AWWA C550.
12		1) Wetted bronze parts in low zinc bronze.
13		2) Aluminum bronze components: heat treated per AWWA C504.
14		B. Acceptable Manufacturers:
15		1. Clow.
16		2. Mueller.
17		3. American Flow Control.
18		4. M & H.
19		5. Or equal.
20	2.3	ACCESSORIES
21		A. Refer to Drawings and valve schedule for type of actuators. Furnish actuator integral with valve.
22		B. Refer to Section 15100 for actuator requirements.
23	2.4	FABRICATION
24		A. General:
25		Provide valves with clear waterways the full diameter of the valve.
		·
26	PAF	RT 3 - EXECUTION
27	3.1	INSTALLATION
28		A. See Section 15100.
29		B. Do not install gate valves inverted or with the stems sloped more than 45 degrees from the
30		upright unless the valve was ordered and manufactured specifically for this orientation.
31		END OF SECTION

2) Aluminum bronze components: heat treated per AWWA C504.

1

1	SECTION 15114				
2	MISCELLANEOUS VALVES				
3	PAR	T1- GENERAL			
4	1.1	SUMMARY			
5 6 7		A. Section Includes:1. Corporation stops.2. Curb stops.			
8 9 10 11 12		 B. Related Sections include but are not necessarily limited to: 1. Division 0 - Bidding Requirements, Contract Forms, and Conditions of the Contract. 2. Division 1 - General Requirements. 3. Section 02660 - Water Main Construction 4. Section 15100 - Valves: Basic Requirements. 			
13	1.2	QUALITY ASSURANCE			
14 15 16 17 18 19 20		 A. Referenced Standards: 1. American Gas Association (AGA). 2. American National Standards Institute (ANSI): a. B16.1, Cast-Iron Pipe Flanges and Flanged Fittings, Class 25, 125, 250, and 800. 3. American Water Works Association (AWWA): a. C512, Air-Release, Air/Vacuum, and Combination Air Valves for Waterworks Service. b. C550, Protective Epoxy Interior Coatings for Valves and Hydrants. 			
21	1.3	SUBMITTALS			
22 23		A. Shop Drawings:1. See Section 01340 and 15100.			
24 25		B. Operation and Maintenance Manuals:1. See Section 01340.			
26	PAR	T 2 - PRODUCTS			
27	2.1	ACCEPTABLE MANUFACTURERS			
28 29		A. Subject to compliance with the Contract Documents, the manufacturers listed under the specific valve types are acceptable.			
30		B. Submit requests for substitution in accordance with Specification Section 01640.			
31	2.2	2.2 COMBINATION AIR RELEASE AND VACUUM VALVES			
32 33		A. Application:1. Provide where indicated on drawings.			
34 35 36		 B. Acceptable manufacturers: 1. GA Industries, Figure 945 or 960, 2. APCO Series S-140C (1 IN-4 IN). 			
37 38 39 40		 C. Materials: 1. Body and cover: Cast iron. 2. Float, linkage and hardware: Stainless steel. 3. Seat: Buna-N. 			
41		D. Design requirements:			

- 1 1. Size: As shown.
- 2 Working pressure: 130 psi.
- 3. Release 10 cfm at 10 psi differential at 150 psi line pressure.
- 4. Air vacuum capacity: 5 scfm at 5 psi differential from atmospheric.
- 5. Provide isolation valve, type as shown.

6 2.3 CORPORATION STOPS

- A. AWWA Standard C800-89.
- 8 B. Bronze construction.
- 9 C. Ford meter box:
- 10 1. Key/Plug.
- 11 2. Ballcorp.
- 12 3. Or equal.

13 **2.4 CURB STOP**

- 14 A. Tee head type.
- B. Bronze construction.
- 16 C. Provide 3 keys.
- D. Ford Meter Box:
- 18 1. Ball Valve.
- 19 2. Hays Huseal Plug valve.
- 20 3. Mueller Mark II Oriseal.
- 21 4. Or equal.
- E. Curb Box:

23

- 1. Extension type, Minneapolis pattern base.
- 24 2. Provided with curb box sleeve for use in concrete.

25 2.5 ACCESSORIES

A. Furnish any accessories required to provide a completely operable valve.

27 **2.6 FABRICATION**

- A. Completely shop assemble unit including any interconnecting piping, speed control valves, control isolation valves and electrical components.
- B. Provide internal epoxy coating suitable for potable water for all iron body valves in accordance with AWWA C550.

32 2.7 SOURCE QUALITY CONTROL

A. Shop test hydrostatically to unit test pressure.

34 2.8 MAINTENANCE MATERIALS

A. Provide one set of any special tools or wrenches required for operation or maintenance for each type valve.

PART 3 - EXECUTION

2 3.1 INSTAL	LATION
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3 A. General:

1

4 1. See Section 15100.

5 3.2 FIELD QUALITY CONTROL

- 6 A. Clean, inspect, and operate valve to ensure all parts are operable and valve seats properly.
- B. Check and adjust valves and accessories in accordance with manufacturer's instructions and place into operation.
- 9 END OF SECTION

1 2		SECTION 15510 FIRE HYDRANTS
3	PAR	RT1- GENERAL
4	1.1	SUMMARY
5 6		A. Section Includes:1. Dry-barrel fire hydrant.
7 8 9 10 11 12		 B. Related Sections include but are not necessarily limited to: 1. Division 0 - Bidding Requirements, Contract Forms, and Conditions of the Contract. 2. Division 1 - General Requirements. 3. Section 09905 - Painting and Protective Coatings. 4. Section 15060 - Pipe and Pipe Fittings: Basic Requirements. 5. Section 15060 - Pipe: Ductile.
13	1.2	QUALITY ASSURANCE
14 15 16 17		 A. Referenced Standards: 1. American Waterworks Association (AWWA): a. C502, Dry-Barrel Fire Hydrant. b. M17, Installation, Operation and Maintenance of Fire Hydrants.
18	1.3	SUBMITTALS
19 20 21 22 23 24 25		 A. Shop Drawings: 1. See Section 01340. 2. Product technical data: a. Acknowledgement that products submitted meet the requirements of the standards referenced. b. Manufacturer's installation instructions. c. Acknowledge and verify dimensions and provide list of integral parts and materials.
26 27		B. Operation and Maintenance Manuals:1. See Section 01340.
28	PAR	RT 2 - PRODUCTS
29	2.1	ACCEPTABLE MANUFACTURERS
30 31 32 33 34		 A. Subject to compliance with the Contract Documents, the following manufacturers are acceptable: 1. Mueller. 2. American Flow Control. 3. Waterous.
35		B. Submit request for substitutions in accordance with Specification Section 01640.
36	2.2	FIRE HYDRANT
37 38 39 40 41		 A. Design and Fabrication: 1. Conform to AWWA C502. 2. Provide with either compression or gate design. 3. Provide with a 5 IN valve opening, nozzle section consisting of two 2-1/2 IN hose nozzles and one 4-1/2 IN steamer.
42		4. Provide with water passages to permit full flow of water to minimize friction loss.

Santa Fe County February 2022

3	6. Designed to throttle flow when partially opened.
4	7. Designed to allow removal of valve and valve stem without digging up hydrant.
5	8. Suitable for 5 FT of bury.
6	9. Furnish with mechanical (gland type) joint inlet connections.
7	10. Design to break off at ground line when struck by a vehicle.
8	11. Furnish with O-ring packing only.
9	12. Furnish hose and steamer nozzles with threads conforming to standard threads used by local
10	Fire Department.
11	13. Furnish with direction of opening as required by local Fire Department with direction of
12	opening cast on dome.
13 PA	RT 3 - EXECUTION
13 . 7 .	
14 3.1	INSTALLATION
15	A. Install hydrants at locations indicated in accordance with AWWA M17 and the following:
16	1. Remove foreign material from barrel of hydrant before placement.
17	2. Install plumb and at same elevation as connecting pipe and main.
18	3. Place each hydrant on a slab of concrete as shown on Drawings.
19	4. Block backside of hydrant, opposite pipe connection, with concrete firmly wedged between
20	hydrant and vertical face of undisturbed trench.
21	5. Place granular bedding material around base of hydrant to the dimensions shown in the
22	Drawings.
23	6. Firmly tamp carefully compacted backfill around hydrant to surface of ground and to a
2.4	distance of 5 FT in front of hydrant.
24	
24 25 3.2	COATINGS AND FINISHES
	COATINGS AND FINISHES A. Provide hydrant with below grade and above grade coatings as per Section 09905.
	COATINGS AND SINISHES

END OF SECTION

standpipe when hydrant valve is closed.

as directed by the Owner.

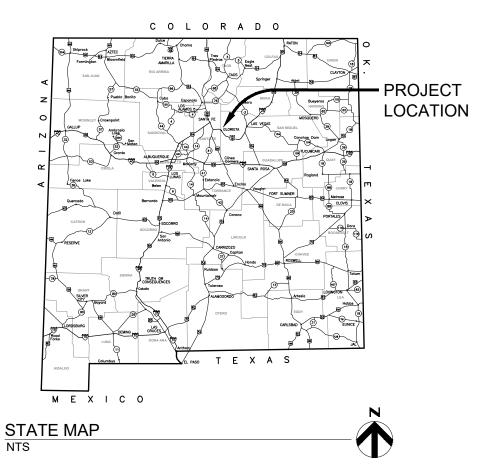
5. Furnish with multiple weep holes for positive draining to allow water to escape readily from

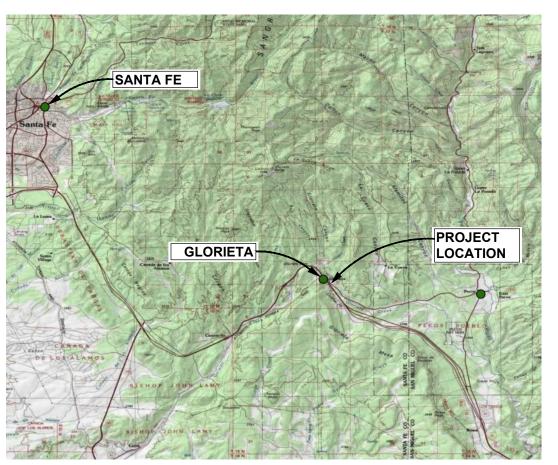
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Contract Drawings For

Glorieta, New Mexico

GLORIETA PHASE III - REGIONAL WATER QUALITY AND INFRASTRUCTURE IMPROVEMENTS

EAST GLORIETA DISTRIBUTION AND REGIONAL WELL

CDBG No. XXXX WTB No. XXXX

Project No.:

OCTOBER 2021



TEMPORARY TRAFFIC CONTROL STANDARD DETAILS - III

GENERAL CONSTRUCTION NOTES:

- 1. THE CONTRACTOR SHALL ABIDE BY ALL LOCAL, STATE AND FEDERAL RULES AND REGULATIONS THAT APPLY TO THE CONSTRUCTION OF THESE IMPROVEMENTS AND SHALL CONFORM WITH THE LATEST APWA STANDARD DETAILS AND SPECIFICATIONS. IF THERE IS A CONFLICT, THE STRICTER REQUIREMENT SHALL GOVERN.
- 2. LOCATIONS, ELEVATIONS AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF THE PREPARATION OF THESE P BUT DO NOT PURPORT TO BE ABSOLUTELY CORRECT AND ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING LOCATIONS. ELEVATIONS AND DIMENSIONS OF ALL EXISTING UTILITIES. STRUCTURES AND OTHER FEATURES WHICH PERTAIN TO AND AFFECT THE CONSTRUCTION OF THIS PROJECT AND THIS SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION COST. IF THE LOCATION OF A UTILITY IS UNKNOWN, ELEVATION IS INDICATED "UNK". ALL ELEVATIONS AND LOCATIONS OF EXISTING PIPING, UTILITIES, AND STRUCTURES AFFECTING NEW WORK SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO BEGIN
- 3. PRIOR TO FABRICATION OF PIPE, CONTRACTOR SHALL VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS WITH POTENTIAL TO CHANGE THE PIPE ALIGNMENT AND VERIFY EXISTING SIZE AND PIPE MATERIAL TYPE AT ALL POINTS OF CONNECTION TO EXISTING UTILITY LINES PRIOR TO INSTALLATION. THIS WORK IS INCIDENTAL TO COST OF PIPE INSTALLATION. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL
- 4. THE OWNER'S REPRESENTATIVE SHALL BE NOTIFIED 24 HOURS PRIOR TO ANY CONSTRUCTION WORK CONSTRUCTION WORK PERFORMED WITHOUT NOTIFICATION AND APPROVAL BY THE OWNER'S REPRESENTATIVE SHALL BE SUBJECT TO EXPOSURE, INSPECTION, AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
- 5. THE CONTRACTOR SHALL COORDINATE WORK SCHEDULES WITH THE OWNER'S REPRESENTATIVE SO AS TO PREVENT ANY CONFLICTING WORK CONDITIONS.
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXPENSES TO OBTAIN ALL REQUIRED NEW MEXICO CID PERMITS FOR BUILDING, ELECTRICAL, MECHANICAL, ETC. FOR THIS PROJECT AND SCHEDULE ALL REQUIRED
- 7. THE CONTRACTOR SHALL NOT INSTALL ITEMS AS SHOWN ON THESE PLANS WHEN FIELD CONDITIONS ARE DIFFERENT THAN SHOWN. SUCH CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE IN A TIMELY MANNER. IN THE EVENT THE CONTRACTOR DOES NOT NOTIFY THE OWNER'S REPRESENTATIVE IN A TIMELY MANNER, THE CONTRACTOR ASSUMES FULL RESPONSIBILITY AND EXPENSE FOR ANY REVISIONS NECESSARY, INCLUDING ENGINEERING DESIGN FEES.
- 8. THE TERM "REMOVE" USED IN THIS PLAN SET INCLUDES THE DISPOSAL OF SAID MATERIAL. CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSING OF ALL DEBRIS AND OTHER SUCH WASTE MATERIAL AT DISPOSAL SITES APPROVED BY AGENCIES GOVERNING THE REGULATION AND DISPOSAL OF SUCH MATERIALS.
- 9. IF ANY PREVIOUSLY UNIDENTIFIED ARCHEOLOGICAL OR CULTURAL ARTIFACTS ARE FOUND DURING CONSTRUCTION, WORK SHALL STOP IN THAT AREA AND THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE IMMEDIATELY, AND BEFORE PROCEEDING FURTHER, THE FOLLOWING AGENCY SHALL BE NOTIFIED: THE NEW MEXICO STATE HISTORIC PRESERVATION OFFICER.
- 10. GEOTECHNICAL REPORT PREPARED BY TERRACON CONSULTANTS, INC. UNDER SEPARATE COVER.
- 11. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN TO THE ENGINEER AT LEAST 72 HOURS PRIOR TO COMMENCEMENT OF WORK. TRAFFIC CONTROL PLANS SHALL BE PREPARED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION AND BY CERTIFIED PERSONNEL AND MUST BE APPROVED PRIOR TO BEGINNING OF WORK ON THE PROJECT.

DIMENSIONS:

ALL STATIONING AND ELEVATIONS SHOWN ARE TO THE CENTER OF PIPELINE, UNLESS OTHERWISE NOTED. ALL DISTANCES ARE HORIZONTAL GROUND DISTANCES.

SEEDING & LANDSCAPING:

- 1. CONTRACTOR SHALL MAINTAIN AS MUCH OF THE EXISTING LANDSCAPING AS FEASIBLE
- 2. ANY AREAS DISTURBED BY CONSTRUCTION AND NOT IDENTIFIED FOR SPECIFIC PERMANENT TREATMENT SHALL BE REVEGETATED WITH RECLAMATION SEEDING. SUCH SEEDING/REVEGETATION SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE.

ALL GAS VALVES AND GAS MANHOLES SHALL BE ADJUSTED TO GRADE BY THE APPROPRIATE UTILITY COMPANY.
CONTRACTOR SHALL COORDINATE WITH APPROPRIATE UTILITY COMPANY. WORK SHALL BE CONSIDERED
INCIDENTAL TO THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE.

TELECOMMUNICATIONS:

- 1. ALL TELEPHONE MANHOLES, PEDESTALS, POLES AND OTHER APPURTENANCES SHALL BE ADJUSTED TO GRADE BY THE APPROPRIATE UTILITY COMPANY. CONTRACTOR SHALL COORDINATE WITH APPROPRIATE UTILITY COMPANY. WORK SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO SEPARATE MEASUREMENT OR
- 2. CONTRACTOR SHALL EXERCISE CAUTION WHEN CROSSING OR WORKING ADJACENT TO FIBER OPTIC LINES. CONTRACTOR SHALL SUPPORT EXPOSED FIBER OPTIC LINES AS NECESSARY, AND AS APPROVED BY APPROPRIATE UTILITY COMPANY. WORK SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE.

ELECTRICAL:

 ALL ELECTRICAL MANHOLES, PEDESTALS, POLES AND OTHER APPURTENANCES SHALL BE ADJUSTED TO GRADE
BY THE APPROPRIATE UTILITY COMPANY. CONTRACTOR SHALL COORDINATE WITH APPROPRIATE UTILITY COMPANY. WORK SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO SEPARATE MEASUREMENT OR

SEWER:

1. ALL DISTURBED SANITARY SEWER MANHOLES SHALL BE ADJUSTED TO GRADE

STORM DRAIN:

- ALL DISTURBED STORM DRAIN MANHOLES, CATCH BASINS, INLETS, OR OTHER APPURTENANCES SHALL BE ADJUSTED TO FINISH GRADE. WORK SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE.
- ANY EXISTING STORM DRAIN INFRASTRUCTURE DISTURBED DURING CONSTRUCTION SHALL BE REPLACED TO MATCH EXISTING CONDITIONS AT THE CONTRACTORS EXPENSE.

EROSION CONTROL AND ENVIRONMENTAL PROTECTION:

- THE CONTRACTOR SHALL CONFORM TO ALL LOCAL AND FEDERAL DUST AND EROSION CONTROL REGULATIONS.
 THE CONTRACTOR SHALL PREPARE AND OBTAIN ANY DUST CONTROL OR EROSION CONTROL PERMITS FROM THE
- 2. THE CONTRACTOR SHALL SECURE NPDES PERMITS REQUIRED BY APPLICABLE LOCAL, STATE, AND FEDERAL
- 3. THE CONTRACTOR SHALL PROMPTLY REMOVE OR CONTROL ANY EXCAVATED MATERIAL TO KEEP IT FROM
- 4. THE CONTRACTOR SHALL INSTALL ANY TEMPORARY DRAINAGE CONTROL MEASURES NECESSARY TO SAFELY THE CUNIFACTOR SHALL INSTALL ANY TEMPORARY DRAINAGE CONTROL MEASURES NECESSARY TO SAFELY CONVEY STORM WATER RUNOFF TO EXISTING OUTFALLS. CONTRACTOR SHALL ENSURE THAT NO SOIL EROBES FROM THE SITE ONTO ADJACENT PROPERTY BY CONSTRUCTION OF TEMPORARY EROSION CONTROL BERMS OR INSTALLING SILT FENCES AT THE PROPERTY LINES (OR LIMITS OF CONSTRUCTION IF DESIGNATED) AND WETTING SOIL TO PREVENT IT FROM BLOWING. ANY DAMAGE TO PRIVATE PROPERTY OR IMPROVEMENTS CONSTRUCTED BY THE CONTRACTOR RESULTING FROM STORM WATER FLOWS SHALL BE THE SOLE RESPONSIBILITY OF THE
- 5. WATERING, AS REQUIRED FOR CONSTRUCTION DUST CONTROL, SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION AND NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE. CONSTRUCTION AREAS SHALL BE WATERED FOR DUST CONTROL IN COMPLIANCE WITH GOVERNING ORDINANCES. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER FOR WATER AVAILABILITY AND USE. THE CONTRACTOR SHALL SUPPLY ALL EQUIPMENT AND MATERIALS NECESSARY FOR PROVIDING WATER.
- 6. ALL WASTE PRODUCTS FROM THE CONSTRUCTION SITE, INCLUDING ITEMS DESIGNATED FOR REMOVAL ALL WASTE PRODUCTS FROM THE CONSTRUCTION STIE, INCLUDING HEAD FOR REMOVAL,
 CONSTRUCTION WASTE, CONSTRUCTION EQUIPMENT WASTE PRODUCTS (OIL, GAS, TIRES, ETC.), GARBAGE,
 GRUBBING, EXCESS CUT MATERIAL, VEGETATIVE DEBRIS, ETC. SHALL BE APPROPRIATELY DISPOSED OF OFFSITE
 AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DBTAINING ALL
 PERMITS REQUIRED FOR HAUL OR DISPOSAL OF WASTE PRODUCTS, AND TO ENSURE THAT THE WASTE
 DISPOSAL SITE COMPLIES WITH GOVERNMENT REGULATIONS REGARDING THE ENVIRONMENT, ENDANGERED SPECIES, AND ARCHAEOLOGICAL RESOURCES
- 7. ALL EXCAVATED MATERIAL THAT IS NOT REQUIRED TO BE REUSED MUST BE REMOVED FROM THE PROJECT AREA WITHIN A TIMELY MANNER AS APPROVED BY OWNER'S REPRESENTATIVE. SPOIL PILES WILL BE ALLOWED
- 8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEANUP AND REPORTING OF SPILLS OF HAZARDOUS MATERIALS ASSOCIATED WITH THE CONSTRUCTION SITE. HAZARDOUS MATERIALS, INCLUDES GASOLINE, DIESEL FUEL, MOTOR OIL, SOLVENTS, CHEMICALS, PAINT, ETC. WHICH MAY BE A THREAT TO THE ENVIRONMENT. THE CONTRACTOR SHALL REPORT THE DISCOVERY OF PAST OR PRESENT SPILLS TO THE NEW MEXICO EMERGENCY RESPONSE AT 1-800-219-6157 AND THE ENVIRONMENT DEPARTMENT AT (505) 867-4533
- 9. THE CONTRACTOR SHALL PROPERLY HANDLE AND DISPOSE OF ALL ASPHALT REMOVED ON THE PROJECT BY HAULING TO AN APPROVED DISPOSAL SITE IN ACCORDANCE WITH THE REQUIREMENTS OF THE NEW MEXICO
- 10. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REGULATIONS CONCERNING CONSTRUCTION NOISE AND HOURS OF OPERATION AS STATED IN THE SPECIFICATIONS.
- 11. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REGULATIONS CONCERNING SURFACE AND UNDERGROUND WATER, CONTACT WITH SURFACE WATER BY CONSTRUCTION EQUIPMENT AND PERSONNEL SHALL BE MINIMIZED, EQUIPMENT MAINTENANCE AND REFUELING OPERATIONS SHALL BE PERFORMED IN AN ENVIRONMENTALLY SAFE MANNER IN COMPLIANCE WITH GOVERNMENT REGULATIONS.
- 12. CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE SITE. CONTRACTOR SHALL PROMPTLY REMOVE ANY AND ALL GRAFFITI FROM STORED MATERIALS AND EQUIPMENT, WHETHER PERMANENT OR TEMPORARY.
- 13. ALL RIPRAP MATERIAL USED ON THIS PROJECT SHALL BE A NATURAL ROCK MATERIAL CONFORMING TO THE SIZE AND MATERIAL PROPERTY REQUIREMENTS SET FORTH IN THE NM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, MOST RECENT EDITION. NO BROKEN CONCRETE OR RUBBLE WILL BE ACCEPTED.

- 1. CONTRACTOR SHALL COMPLY WITH APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, ORDINANCES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
- 2. ONLY THE CONTRACTOR SHALL BE RESPONSIBLE FOR SAFETY OF ALL WORK. ALL WORK, INCLUDING WORK WITHIN TRENCHES, SHALL BE IN ACCORDANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA).
- CONTRACTOR SHALL TAKE NECESSARY SAFETY PRECAUTIONS AS REQUIRED BY FEDERAL, STATE AND LOCAL AUTHORITIES TO PROTECT PEDESTRIAN AND VEHICULAR TRAFFIC IN THE CONSTRUCTION AREA, WHICH INCLUDE, BUT ARE NOT LIMITED TO: MAINTAINING ADEQUATE WARNING SIGNS, BARRICADES, LIGHTS, GUARD FENCES,
- 4. CONTRACTOR SHALL MAINTAIN ALL CONSTRUCTION BARRICADES AND SIGNAGE AT ALL TIMES AND SHALL VERIFY THE PROPER LOCATION OF ALL BARRICADING AT THE BEGINNING AND END OF EACH DAY, AT MINIMUM.
- 5. ALL EXCAVATION, TRENCHING, AND SHORING ACTIVITIES SHALL BE CARRIED OUT IN ACCORDANCE WITH OSHA 29 CER 1926,650 SUBPART P AS A MINIMUM STANDARD.
- 6. IF A PAVEMENT DROP-OFF IS CREATED DURING CONSTRUCTION, THE CONTRACTOR SHALL INITIATE PROTECTIVE ACTION IN ACCORDANCE WITH THE NMDOT'S CURRENT "DROP-OFF GUIDELINE". THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE COMPLETION OF THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE THEREFORE.

NOTICE OF EXTENDED PAYMENT PROVISION THIS CONTRACT ALLOWS THE OWNER TO MAKE PAYMENT WITHIN 45 DAYS AFTER SUBMISSION OF AN UNDISPUTED REQUEST FOR PAYMENT



			PROJECT MANAGER	C. RODRIGUEZ
			DESIGNER	B. FLORES
			DESIGNER	
			DESIGNER	
			CHECKER	W. CHACON
			DRAWN BY	B. FLORES
	OCT 2021	FINAL 100% PROGRESS SUBMITTAL		
ISSUE	DATE	DESCRIPTION	PROJECT NUMBER	210565

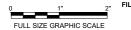


GREATER GLORIETA MDWCA NEW MEXICO

EAST GLORIETA DISTRIBUTION & REGIONAL WELL

GENERAL

INDEX OF SHEETS AND GENERAL NOTES



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SHEET G-01

C-09

C-10

- PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITIES WITHIN ADJACENT RIGHT-OF-WAY OR WITHIN PROPERTY NOT OWNED BY THE OWNER OF THE PROJECT SITE, THE CONTRACTOR SHALL OBTAIN ALL PERMITS AND PERMISSIONS IN WRITING.
- OVERNIGHT PARKING OF CONSTRUCTION VEHICLES ON PRIVATE PROPERTY IS THE SOLE RESPONSIBILITY OF
- CONTRACTOR SHALL PARK EQUIPMENT AND VEHICLES SO AS NOT TO INTERFERE WITH NORMAL RESIDENTIAL

GENERAL UTILITIES:

- ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES SHOWN ON THE PLANS ARE SHOWN IN AN APPROXIMATE LOCATION ONLY BASED ON THE INFORMATION PROVIDED TO THE OWNER'S REPRESENTATIVE BY OTHERS THAT MAY BE INACCURATE OR INCOMPLETE. ADDITIONALLY, UNDERGROUND LINES MAY EXIST THAT ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK. ANY DAMAGE TO ANY OTHER UTILITIES OR COLLATERAL DAMAGE CAUSED BY THE CONTRACTOR SHALL BE THE FULL RESPONSIBILITY OF THE
- CONTRACTOR SHALL EXERCISE DUE CARE TO AVOID DISTURBING ANY EXISTING UTILITIES, ABOVE OR BELOW GROUND. UTILITIES THAT ARE DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE REPAIRED OR REPLACED AT CONTRACTOR'S EXPENSE. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES TO PREVENT
- ALL UTILITY LINES NOT SPECIFICALLY DESIGNATED TO BE REMOVED AND REPLACED ON THE PLANS, SHALL BE MAINTAINED IN SERVICE. SHORING, SHEETING AND OTHER MEANS OF SUPPORT SHALL BE EMPLOYED BY THE CONTRACTOR TO PREVENT DAMAGE OR LOSS OF THESE EXISTING UTILITIES. BEAM AND CABLE OR OTHER ADEQUATE SUPPORTS SHALL BE USED FOR TEMPORARY SUPPORT OF ALL UTILITY LINES AS NECESSARY AT NO ADDITIONAL COST TO OWNER.
- CONTRACTOR SHALL PROVIDE A UTILITY SUPPORT DESIGN FOR ALL LARGE AND/OR CRITICAL SERVICES (E.G. COMMUNICATIONS AND ELECTRIC DUCT BANKS, EXPOSED GRAVITY LINE JOINTS, PRESSURIZED WATER LINES, SEWER FORCE MAINS, ETC.). SUPPORT FOR THESE CRITICAL SERVICES SHALL BE DESIGNED AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER AND SUBMITTED TO OWNER'S REPRESENTATIVE FOR APPROVAL. THE DESIGN AND INSTALLATION OF BOTH CRITICAL AND NONCRITICAL SUPPORTS SHALL BE PERFORMED AT THE CONTRACTOR'S EXPENSE. ANY DAMAGE TO EXISTING UTILITIES SHALL PROMPTLY BE REPAIRED AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE IMMEDIATELY OF ANY SIGNIFICANT DEVIATION OF EXPOSED UTILITIES FROM THE LOCATIONS SHOWN ON THE PLANS SO THAT CONFLICTS CAN BE RESOLVED IN A TIMELY MANNER
- PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL EXCAVATE AND FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL POTENTIAL CONFLICTING UTILITIES AT NO ADDITIONAL COST TO THE OWNER. SHOULD A CONFLICT EXIST BETWEEN THE FIELD INFORMATION AND THE PLANS, THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE SO THE CONFLICT CAN BE RESOLVED WITH MINIMUM DELAY
- ALL INTERFERING PORTIONS OF ABANDONED UTILITY LINES THAT ARE EXPOSED AS A RESULT OF CONSTRUCTION SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AT NO ADDITIONAL COST TO
- CONTRACTOR SHALL COORDINATE ANY REQUIRED UTILITY INTERRUPTIONS WITH THE AFFECTED UTILITY COMPANY A MINIMUM OF THREE (3) WORKING DAYS IN ADVANCE OF EXCAVATION, DISCONNECTION, CONNECTION, OR REMOVAL OF ANY PIPE, CONDUIT, OR POWER SUPPLY IN ORDER FOR THE AFFECTED UTILITY TO HAVE A REPRESENTATIVE AT THE PROJECT SITE.
- CONTRACTOR SHALL COORDINATE WITH PERTINENT UTILITY COMPANIES OF ALL EXISTING UTILITY LINES AND APPURTENANCES ENCOUNTERED DURING CONSTRUCTION THAT REQUIRE RELOCATION. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR DELAYS OR INCONVENIENCES CAUSED BY UTILITY COMPANY WORK CREWS. THE CONTRACTOR SHALL RESCHEDULE HIS ACTIVITIES AS NECESSARY TO ALLOW UTILITY CREWS TO PERFORM THEIR REQUIRED WORK.
- ANY ADJUSTMENT OR RELOCATION OF EXISTING UTILITIES (UNDERGROUND, SURFACE, OR OVERHEAD) SHALL BE COORDINATED WITH THE OWNER OF THE AFFECTED UTILITY AT LEAST THREE (3) WORKING DAYS PRIOR
- EXISTING VALVES SHALL ONLY BE OPERATED BY THE APPROPRIATE UTILITY COMPANY. CONTRACTOR SHALL NOTIFY THE UTILITY A MINIMUM OF SEVEN (7) WORKING DAYS BEFORE ANY VALVE, NEW OR EXISTING, NEEDS
- ANY DAMAGE TO THE EXISTING FACILITIES (CURB & GUTTER, PAVEMENT, CONDUITS, LANDSCAPING, UTILITY LINES, ETC.) DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT NO ADDITIONAL COST TO THE
- THE CONTRACTOR SHALL POTHOLE EXISTING UTILITIES AHEAD PRIOR TO CONSTRUCTION TO ALLOW FOR ANY NECESSARY ADJUSTMENTS OR REALIGNMENTS, AND TO VERIFY PIPE TYPES FOR ORDERING PROPER TRANSITION AND/OR TIE-IN FITTINGS THAT MAY BE REQUIRED.
- CONTRACTOR TO RELOCATE OR BYPASS EXISTING CONFLICTING LINES. ALL ABANDONED LINES SHALL BE PLUGGED WITH MASONRY PLUG WITH LENGTH = $4\ X$ DIA. OF PIPE AT CUT ENDS.

EXCAVATION, BACKFILL AND EARTHWORK:

- A GEOTECHNICAL REPORT WAS CONDUCTED FOR THIS PROJECT AND IS <u>INCLUDED UNDER SEPARATE COVER</u> NEITHER THE ENGINEER NOR THE OWNER ASSUMES RESPONSIBILITY FOR THE COMPLETENESS OR INTERPRETATION OF SUCH SUPPLEMENTARY INFORMATION. ALL EARTHWORK SHALL CONFORM WITH RECOMMENDATIONS PROVIDED IN THE GEOTECHNICAL REPORT. CONTRACTOR IS RESPONSIBLE FOR EXAMINATION OF THE SITE AND DETERMINATION OF THE CHARACTER OF MATERIALS TO BE ENCOUNTERED. NO ADDITIONAL ALLOWANCES WILL BE MADE FOR ROCK REMOVAL, SITE CLEARING AND GRADING, FILLING, COMPACTION, DISPOSAL, OR REMOVAL OF ANY UNCLASSIFIED MATERIALS.
- 2. ALL EXCAVATION WILL BE GOVERNED BY FEDERAL, STATE AND LOCAL LAWS, RULES, AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
- 3. FOR PIPELINE TRENCH EXCAVATION, CONTRACTOR SHALL COMPLY WITH THE OSHA REGULATIONS STANDARD NO. TRENCH SUPPORT AND TEMPORARY SHORING SHALL BE REQUIRED DURING CONSTRUCTION TO SATISFY CONSTRAINTS IDENTIFIED IN THE DRAWNOS FOR LIMITS OF DISTURBANCE, PROTECTION OF EXISTING UTILITIES, TRAFFIC CONTROL, ETC. AND SHALL BE DESIGNED BY CONTRACTOR IN ACCORDANCE WITH OSHA STANDARDS. DESIGN AND CONSTRUCTION OF ALL FORMS, SHORING, AND TEMPORARY BRACING SHALL COMPLY WITH 29 CFR 1926 AND THESE COSTS SHALL BE CONSIDERED INCIDENTAL TO THE TRENCHING AND BACKFILL COSTS.
- 4. ALL EXCAVATED MATERIAL THAT IS NOT REQUIRED TO BE REUSED SHALL BE REMOVED FROM THE PROJECT AREA WITHIN FOUR (4) DAYS OF EXCAVATION. SPOIL PILES WILL BE ALLOWED ONLY AS APPROVED BY THE
- 5. MINIMUM BOTTOM WIDTH OF TRENCHES FOR RIGID AND NON-RIGID PIPE SHALL BE AS SHOWN IN THE TRENCH
- NO MATERIAL PITS HAVE BEEN DESIGNATED FOR THIS PROJECT. THE CONTRACTOR MAY OBTAIN SPECIFIED BORROW OR SURFACING MATERIAL FROM ANY ACCEPTABLE SOURCE AT NO ADDITIONAL COST TO THE OWNER.
- ALL TRENCH EXCAVATION BACKFILL WITHIN THE ROADWAY PRISM SHALL BE COMPACTED TO 95% OF THE MODIFIED PROCTOR PER ASTM D-698 OR D-1557 AS APPLICABLE.
- ANY EARTHWORK HAUL ON THIS PROJECT WILL BE CONSIDERED AS INCLUDED IN THE CONTRACT PRICE FOR EXCAVATE AND DISPOSE OF UNCLASSIFIED MATERIAL AND NO SEPARATE PAYMENT WILL BE MADE.
- 9. CONTRACTOR SHALL UTILIZE FLOWABLE FILL WHEREVER BACKFILL MATERIAL CANNOT BE PLACED AND COMPACTED BETWEEN THE NEW PIPE LINE AND EXISTING UTILITIES OR IF THE VERTICAL SEPARATION BETWEEN THE NEW PIPE LINE AND EXISTING UTILITY IS LESS THAN 12-INCHES. THIS COST IS INCIDENTAL TO BACKFILL
- 10. CONTRACTOR SHALL USE CAUTION NEAR ALL EXISTING STRUCTURES INCLUDING MASONRY WALLS, BUILDINGS, CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO STRUCTURES CAUSED BY CONTRACTOR'S
- 11. FOR TRENCH DEPTHS EXCEEDING 20-FEET, CONTRACTOR SHALL SUBMIT VERIFICATION TO OWNER'S REPRESENTATIVE THAT TRENCH SUPPORT IS DESIGNED AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
- 12. CONTRACTOR SHALL RETURN ALL GRADES TO EXISTING FLEVATIONS AND CONDITIONS AFTER CONSTRUCTION OF THE WATERLINES, UNLESS OTHERWISE INDICATED
- 13. EXCESS SOIL MATERIAL, INCLUDING UNSUITABLE MATERIAL, REMAINING AS A RESULT OF THE WATERLINE OR OTHER INFRASTRUCTURE INSTALLATION SHALL BE REMOVED AND DISPOSED BY THE CONTRACTOR AND WILL BE CONSIDERED INCIDENTAL TO THE BID UNIT PRICES AND NO SEPARATE PAYMENT WILL BE MADE.
- 14. CONTRACTOR SHALL SUPPORT ALL POWERPOLES AND FENCES ALONG RIGHT-OF-WAY IF NECESSARY DURING CONSTRUCTION OF THE WATERLINE. THIS WORK IS INCIDENTAL TO THE PROJECT AND NO SEPARATE PAYMENT

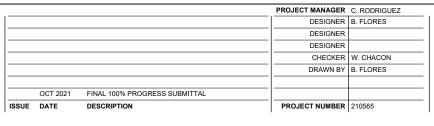
WATER SYSTEM:

- 1. THE CONTRACTOR SHALL NOTIFY THE UTILITY DEPARTMENT AT LEAST SEVEN (7) WORKING DAYS IN ADVANCE OF ANY WORK WHICH MAY AFFECT THE EXISTING PUBLIC WATER UTILITIES. EXISTING VALVES TO BE OPERATED BY GLORIETA PERSONNEL ONLY. CONTRACTOR SHALL MAINTAIN WATER SERVICES TO ALL EXISTING USERS DURING CONSTRUCTION ACTIVITIES AND COORDINATE SEQUENCING OF ALL PLANNED VALVE CLOSURES. CONTRACTOR SHALL SUBMIT A WATER SHUT OFF PLAN TO OWNER'S REPRESENTATIVE FOR REVIEW AND APPROVAL PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES IN APPLICABLE AREAS.
- CONTRACTOR SHALL ADJUST ALL WATER VALVE BOXES, VAULT LIDS AND OTHER APPURTENANCES TO FINISH GRADE. WORK SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO SEPARATE MEASUREMENT OR
- 3. IF A WATER SERVICE LINE IS DAMAGED, CONTRACTOR SHALL REPLACE FROM MAIN TO METER BOX WITHOUT SPLICING AT NO ADDITIONAL COST TO THE OWNER.
- 4. CONTRACTOR SHALL INSTALL WATER MAINS CROSSING SEWER AND WATER LINES TO PROVIDE A MINIMUM VERTICAL SEPARATION OF 18 INCHES BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF THE SEWER MAIN. THIS SEPARATION SHALL BE MAINTAINED WHERE THE WATER MAIN IS EITHER ABOVE OR BELOW THE SEWER LINES. THE CROSSING SHALL BE ARRANGED SO THAT THE WATER MAIN JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE SEWER LINES (~10 FEET).
- 5. ALL FITTINGS, BENDS, TEES, RESTRAINTS, ETC. TO COMPLETE THE INSTALLATION OF THE WATERLINE SHALL BE CONSIDERED INCIDENTAL TO THE WATERLINE UNIT PRICES AND NO SEPARATE PAYMENT WILL BE MADE.
- 6. ALL WATER MAIN PIPING SHALL BE MECHANICALLY RESTRAINED
- 7. CONTRACTOR SHALL FIELD VERIFY EXISTING PIPING CONFIGURATION AND REQUIRED CONNECTION COMPONENTS PRIOR TO CONSTRUCTION. VERIFICATION SHALL INCLUDE BUT IS NOT LIMITED TO THE HORIZONTAL AND VERTICAL LOCATION OF EXISTING WATER LINE, SIZE, MATERIAL AND TYPE OF CONNECTION. CONTRACTOR SHALL PROVIDE REQUIRED CONNECTION COMPONENTS AS PART OF THE CONNECTION. ALL COSTS ASSOC WITH FIELD VERIFICATION OF REQUIRED FITTINGS AND INSTALLATION SHALL BE CONSIDERED INCIDENTAL.
- 8. DEFLECT PIPE AS NECESSARY PER MANUFACTURER'S RECOMMENDATIONS.
- 9. 4' MIN. COVER TO TOP OF PIPE UNLESS OTHERWISE NOTED

PAVEMENT, SIDEWALKS, CURB & GUTTER NOTES:

- 1. ALL ASPHALT CONCRETE PAVEMENT, BASE COURSE, AND PAVEMENT SUBGRADE COMPACTION SHALL CONFORM TO THE NMDOT STANDARD SPECIFICATIONS (LATEST EDITION) AND THE GEOTECHNICAL REPORT.
- 2. WHEN ABUTTING NEW PAVEMENT TO EXISTING PAVEMENT, SAWCUT EXISTING PAVEMENT EDGE TO A CONTINUOUS, NEAT, STRAIGHT LINE AS NECESSARY TO REMOVE ANY BROKEN OR CRACKED PAVEMENT AND MATCH NEW PAVEMENT ELEVATION TO EXISTING. CONTRACTOR SHALL TAKE CARE TO AVOID DAMAGING SAWCUT EDGE WITH EQUIPMENT OR OTHER OPERATIONS, AND SHALL RE-SAWCUT A CONTINUOUS, NEAT, STRAIGHT LINE AS NECESSARY SHOULD SAWCUT EDGE BE DAMAGED. SPRAY SAWCUT EDGE WITH TACK COAT PRIOR TO PAVEMENT PLACEMENT PER NMDOT STANDARD SPECIFICATIONS (LATEST EDITION).
- 3. THE REPLACEMENT OF THE EXISTING UTILITIES AND THE INSTALLATION OF NEW UTILITY LINES SHALL B COMPLETED IN ADVANCE OF STARTING THE PAVEMENT WORK. TEMPORARY PAVEMENT SHALL BE PLACED IN ALL TRENCHES REQUIRED FOR THE UTILITY REPLACEMENT IN THOSE AREAS THAT MUST MAINTAIN TRAFFIC UNTIL THE FINAL PAVEMENT WORK STARTS IN EACH AREA. TEMPORARY STRIPING SHALL BE THE CONTRACTOR'S RESPONSIBILITY. PLACEMENT AND MAINTENANCE OF THE TEMPORARY PAVING AND STRIPING SHALL BE AT THE CONTRACTOR'S EXPENSE.
- 4. CONTRACTOR SHALL NOT PAVE OVER ANY SURFACE FEATURE, E.G., GAS VALVE, MANHOLE COVER, ETC. WITHOUT PRIOR WRITTEN APPROVAL FROM THE OWNER'S REPRESENTATIVE.
- 5. ALL SUBGRADE AND SUBBASE MATERIAL ENCOUNTERED IN PAVEMENT REMOVAL AND REPLACEMENT THAT IS DETERMINED BY THE OWNER'S REPRESENTATIVE TO MEET THE SPECIFICATIONS, MAY BE REUSED. HOWEVER, THE MATERIAL SHALL BE PROCESSED AND COMPACTED TO MEET MOISTURE CONTENT AND PERCENT COMPACTION REQUIRED BY THE SPECIFICATIONS.
- 6. WHEN REMOVAL OF EXISTING CURB AND GUTTER OR SIDEWALK IS REQUIRED, REMOVE BACK TO NEAREST SUITABLE JOINT UNLESS OTHERWISE DIRECTED BY THE OWNER'S REPRESENTATIVE. CURB, GUTTI SIDEWALK REPLACEMENT SHALL CONFORM TO NMDOT STANDARD SPECIFICATIONS AND DRAWINGS.
- 7. CONTRACTOR SHALL PLACE BITUMINOUS MATERIAL WITH THE USE OF A LAYDOWN MACHINE WHERE PAVEMENT IS 8-FEET IN WIDTH OR WIDER.
- ALL NEW STREET PAVING, DRIVEWAYS, SIDEWALKS, AND CURB AND GUTTERS, ABUTTING EXISTING AREAS SHALL MATCH THE ELEVATION OF THOSE AREAS.
- 9. CONTRACTOR SHALL REPLACE ALL PERMANENT PAVEMENT STRIPING AND MARKINGS. ALL STRIPING. PAVEMENT MARKINGS INCLUDING CROSSWALKS, ARROWS AND LINE MARKINGS ARE TO BE CONSTRUCTED OF HOT PLASTIC OR COLD PLASTIC IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (LATEST
- 10 CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING INFRASTRUCTURE (C & G PAVING MARKINGS, PAVING, SIDEWALKS, WHEEL CHAIR RAMPS, DRIVE PADS, ETC.) DURING CONSTRUCTION, APART FROM THOSE SECTIONS INDICATED FOR REMOVAL ON THE PLANS. REPAIR OR REPLACEMENT OF SAME SHALL BE AT THE CONTRACTOR'S OWN EXPENSE. CONTRACTOR SHALL SUITABLY PROTECT THE CURB AND GUTTER FROM INCIDENTAL SPLASHING DURING THE TACK COAT APPLICATION AND CLEANING SHALL BE AT THE CONTRACTOR'S OWN EXPENSE SHOULD SPLASHING OCCUR
- 11. ANY ADDITIONAL GRADING REQUIRED TO MATCH PROPOSED ASPHALT GRADES SHALL BE INCIDENTAL TO PAVING
- 12. WHEN ABUTTING NEW CURB AND GUTTER TO EXISTING PAVEMENT, THE CONTRACTOR SHALL SAWCUT, REMOVE, AND REPLACE A 1' WIDE SECTION OF EXISTING PAVEMENT ADJACENT TO THE CURB AND GUTTER PER THE NMDOT STANDARD SPECIFICATIONS (LATEST EDITION).
- 13. CONTRACTOR SHALL CUT PAVEMENT PARALLEL OR PERPENDICULAR TO TRAFFIC DIRECTION ONLY, NO DIAGONAL CUTS IN EXISTING PAVEMENT WILL BE PERMITTED.
- 14. IF VALLEY GUTTER IS DAMAGED CONTRACTOR SHALL REPLACE ENTIRE GUTTER PER NMDOT STANDARD SPECIFICATIONS AND DRAWINGS (LATEST EDITION).
- 15. WORK ASSOCIATED WITH ADJUSTMENTS TO ANY UTILITY ACCESS COVER IS CONSIDERED INCIDENTAL TO THE

NOTICE OF EXTENDED PAYMENT PROVISION THIS CONTRACT ALLOWS THE OWNER TO MAKE
PAYMENT WITHIN 45 DAYS AFTER SUBMISSION OF AN UNDISPUTED REQUEST FOR PAYMENT





GREATER GLORIETA MDWCA NEW MEXICO

EAST GLORIETA DISTRIBUTION & REGIONAL WELL **GENERAL GENERAL NOTES**

SCALE NONE FULL SIZE GRAPHIC SCALE

FILENAME 00G-02.dwg

SHEET G-02

GENERAL ABBREVIATIONS	,				PIPING FLUID ABBREVIATIONS	EQUIPMENT ABBREVIATIONS
AB ANCHOR BOLT, AERATION BASIN, AUGER BORING ABM AERATION BASIN MIXER ABN ABANDON IN PLACE ABND ABANDONED AC ASPHALT CONCRETE ACT ACOUSTICAL CEILING TILE AD AREA DRAIN ADDN ADDITION, ADDITIONAL ADMIN ADMINISTRATION AFF ABOVE FINISH FLOOR AHU AIR HANDLING UNIT AL ALUMINUM ALT ALLERNATE AK.ALUM ALUMINUM APPROX APPROXIMATE ARCH ARCHITECTURAL ARV AIR RELEASE VALVE ASSY ASSEMBLY AVG AVERAGE	E E E E E E E E E E E E E E E E E E E	I ID INSIDE DIAMETER, INSIDE DIMENSION IE INVERT ELEVATION IF INSIDE FACE IH INTAKE HOOD IN INCH INC INCREASER INSUL INSULATION, INSULATED INT INTERIOR INV INVERT INVERTOR IN	P PC PRIMARY CLARIFIER PD PRIMARY DICESTER PE PLAIN END, PRESSURE ELEMENT" PED PEDESTAL PG PRESSURE GAGE PI POINT OF INTERSECTION, PRESSURE INDICATOR PL PLATE, PLACE, PLASTIC PLCS PLACES P/L PROPERTY LINE PLYWD PLYWOOD PNL PANEL PNT PAINT POC POINT OF CURVE POT POINT OF TANGENCY PP POWER POLE PRELIM PRELIMINARY PRI PRIMARY PROJ PROJECTION PRS PRESSURE REDUCING STATION PRV PRESSURE REDUCING VALVE PS PIPE SUPPORT	T T TREADS, THICK, TILE, TOP, TANGENT T&B TOP AND BOTTOM TBM TEMPORARY BENCHMARK TC TOP OF CURB TEMP TEMPORARY TF TRICKLING FILTER THD THREADED THSLD THRESHOLD TI TEMPERATURE INDICATOR (THERMOMETER) TO TOP OF TOC TOP OF CONCRETE TOD TOP OF DUCT TOF TOP OF FOOTING TOG TOP OF GRATING TOS TOP OF SUPPORT OR TOP OF STEEL TOW TOP OF PIPE TRANS TRANSITION TS TUBULAR STEEL, TOP OF SLAB TW TOP OF WALL TYP TYPICAL	A AIR ABE AERATION BASIN EFFLUENT ABI AERATION BASIN INFLUENT BD BASIN DRAIN BS SODIUM BISULFITE BSS SODIUM BISULFITE SOLUTION BYP BYPASS CHS CHEMICAL SOLUTION CLP CHLORINE GAS PRESSURE CLV CHLORINE GAS VACUUM CLS CHORINE SOLUTION D DRAIN DAR DISSOLVED AIR RECYCLE DS DIGESTED SLUDGE DWAS DILUTE WASTE ACTIVATED SLUDGE EBI EQUALIZATION BASIN INFLUENT EBO EQUALIZATION BASIN INFLUENT EBR EQUALIZATION BASIN RETURN EBR EQUALIZATION BASIN WASHDOWN EFF EFFLUENT EFFLUENT EFFLUENT EFFLUENT FAD FOUL AIR DUCT FL FLUSH LINE FM FORCE MAIN FORCE MAIN	AC AIR COMPRESSOR, AIR CONDITIONER(ING) ACC AIR COOLED CONDENSING UNIT AFM AIR FLOW METER AHU AIR HANDLING UNIT AR AIR RELEASE B BLOWER BDP BASIN DRAIN PUMP BFP BACKFLOW PREVENTER BFV BUTTERFLY VALVE C COMPRESSOR CHL CHLORINATOR CMP CHEMICAL METERING PUMP CST CHEMICAL DP DRAIN PUMP DRP DISSOLVED AIR RECYCLE PUMP EF EXHAUST FAN EH ELECTRIC HOIST F FAN FE FLOW ELEMENT FC FAN COIL FH FUME HOOD FM FLOW METER G GATE
BCV BALL CHECK VALVE BD BOARD BDD BACKDRAFT DAMPER BF BLIND FLANGE BFV BUTTERFLY VALVE BLDG BUILDINC BM BENCHMARK, BEAM, BERM BOD BOTTOM OF DUCT, BIOCHEMICAL OXYGEN DEMAND BOG BOTTOM OF GRILL BOP BOTTOM OF PIPE BPV BACK PRESSURE VALVE BRK BRICK BTW BETWEEN BSP BLACK STEEL PIPE BU BELL UP BV BALL VALVE BYP BYPASS C C CURB, CONDUIT C&G CURB & GUTTER CB CATCH BASIN CC CONTROL COORDINATE, CENTER TO CENTER CD CONTROL DAMPER CEM CEMENT CF CUBIC FEET CFM CUBIC FEET PER MINUTE CHKD CHECKFEFD	F F F F SILT FENCE FAB FABRICATION FC FLUSHING CONNECTION FC FLANGED COUPLING ADAPTER FC FLOW CONTROL VALVE FD FIRE DAMPER, FLOOR DRAIN, FILE DRAWER FDC FLEXIBLE DUCT CONNECTION FDN FOUNDATION FEXT FFE FEC FIRE EXTINGUISHER FEC FIRE EXTINGUISHER FEC FIRE EXTINGUISHER FEF FINISH FLOOR FFH FIRE HYDRANT FIG	LB POUND LCP LOCAL CONTROL PANEL LF LONG FACE LL LIVE LOAD LLO LONG LEG OUTSTANDING LLV LONG LEG VERTICAL LAB LABORATORY LAV LAVATORY LP LOW PRESSURE\LOW POINT LS LIFT STATION LW LIGHT WEIGHT LWL LOW WATER LEVEL M MAINT MAINTENANCE MAN MANUFACTURER MAS MASONRY MATL MATERIAL MAX MAXIMUM MB MACHINE BOLT, MEZZANINE BEAM MC MECHANICAL COUPLING MCJ MASONRY CONTROL JOINT MDMJ MODIFIED DOUBLE MECHANICAL JOINT MECH MECHANICAL MED MEDIUM MEZZ MEZZANINE MFR MANUFACTURER MH MANHOLE MIN MINIMUM, MINUTE MISC MISCELLANEOUS	PSF POUNDS PER SQUARE FOOT PSL PIPE SLEEVE PT PRESSURE TREATED, POINT, POINT OF TANGENT PTD PAPER TOWEL DISPENSER PTN PARTITION PV PLUG VALVE PVC POLYVINYL CHLORIDE PWIT PAVEMENT R RADIUS, RIGHT, RISER, RUBBER SHEATH R&R REMOVE AND REPLACE PER ORIGINAL OR BETTER RAD RADIUS RB ROOF BEAM, RUBBER BASE RBC ROTATING BIOLOGICAL CONTRACTORS RCP REINFORCED CONCETE PIPE RD ROOF DRAIN, ROAD RDL ROOF DRAIN, ROAD RDL ROOF DRAIN LEADER RECIRC RECIRCULATION RECP RECEPTACLE RECT RECTANGULAR RED REDUCER REF REFERENCE REINFORCE(ING) REG REGULATOR, REGISTER	U UG UNDERGROUND UGE UNDERGROUND UNDERGROUND ELECTRIC UNK UNKNOWN UNO UNLESS NOTED OTHERWISE UR URINAL UV ULTRAVIOLET V V VAC VACUUM VAR VARNISH VD VOLUME DAMPER VENT VERTICAL VIF VERTICAL VIF VERTICAL VIF VERTY IN FIELD VTR VENT THRU ROOF W W W WATER, WINDOW, WIDE, WEST, WEIR WC WATER CLOSET WD WOOD WFM WATER FLATER WP WATER HEATER WP WATERSTOP WT WEIGHT WF WELDED WIRE FABRIC W/W WITH	GRT GRIT HPA HIGH PRESSURE AIR HWE HEADWORKS EFFLUENT IA INSTRUMENT AIR INFL ILENT IRR IRRIGATION LPA LOW PRESSURE AIR LS LIME SOLUTION ML MIXED LIQUOR RECYCLE NG NATURAL GAS NPW NON POTABLE WATER OF OVERFLOW PA PROCESS AIR PCE PRIMARY CLARIFIER EFFLUENT PCI PRIMARY CLARIFIER INFLUENT PD PLANT DRAIN PE PRIMARY EFFLUENT PFB PEAK FLOW BYPASS PFD PEAK FLOW DISCHARGE PI PRIMARY SILUDGE PW POTABLE WATER R RECYCLE RAS RETURN ACTIVATED SLUDGE RDL ROOF DRAIN LEADER RW REUSE WATER SAN SAMITERY SEWER	GRTP GRIT PUMP H HOIST HC HEATING COIL HEX HEAT EXCHANGER HWB HOT WATER BOILER IA INSTRUMENT AIR L LUVER MCP MIXING CHOPPER PUMP MIX MIXER MMP MIXED LIQUOR PUMP MOD MOTOR OPERATED DAMPER MOD MOTOR OPERATED GATE MOV MOTOR OPERATED VALVE MU MAKEUP AIR UNIT NPWP NON-POTABLE WATER PUMP P PUMP PEP PRIMARY EFFLUENT PUMP PF PROPELLER FAN PV PLUG VALVE RWP REUSE WATER PUMP SF SUPPLY FAN SLG SLIDE GATE SUP SUMP PUMP T TANK TC TURBO COMPRESSOR TCV TEMPERATURE CONTROL VALVE UH UNIT HEATER VFD VARIABLE FREQUENCY DRIVE WC WATER COOLER
CIP CAST IRON PIPE CJ CONSTRUCTION JOINT, CONTROL JOINT CL, Q CENTERLINE, CHAIN LINK CLG CEILING CLR CLEAR, CLEARANCE CMP CORRUGATED METAL PIPE CMU CONCRETE MASONRY UNIT CND, C CONDUIT CNDS CONDENSATE CO CLEAN OUT COL COLUMN COMM COMMUNICATION COM CONMECTION CON CONCETTRIC CONST CONSTRUCTION CONT CONSTRUCTION CONT CONTINUOUS, CONTINUATION CP CONTROL POINT CPLG COUPLING CS CONCRETE CSP CAST IRON SOIL PIPE CT CERAMIC TILE CTR CENTER CU CONDENSING UNIT, COPPER CV CHECK VALVE CW COLD WATER	FR FRAME FRP FIBERGLASS REINFORCED PLASTIC FT FEET, FOOT FTG FOOTING FXTR FIXTURE G GAS, GASLINE, GROUND, GRAM GA GAGE GAL GALLON GALLV GALVANIZED GI GRAVITY INLET GC GC GROOVED COUPLING GLV GLOBE VALVE GPM GALLONS PER MINUTE GND GROUND GR GRADE GRTG GRAVITY GOF VENTILATOR GRY GRAVITY ROOF VENTILATOR GSC GRIT SCREW CONVEYOR GSP GALVANIZED STEEL PIPE GSU GLAZED STRUCTURAL UNIT GTV GATE VALVE GV GRAVITY VENT, GATE VALVE GWB GYPSUM WALLBOARD GYP GYPSUM	MJ MECHANICAL JOINT MO MASONRY OPENING MOD MODIFIED, MODIFICATION MOV MODIFIED, MODIFICATION MOV MODIFIED, MODIFICATION MOV MODIFIED, MODIFICATION MODIFIED MTD MOUNTED MTG MOUNTING MTL METAL N N NORTH NA NOT APPLICABLE NC NON CORROSIVE NEC NATIONAL ELECTRIC CODE NIC NOT IN CONTRACT NO NUMBER NOM NOMINAL NPT NATIONAL PIPE THREADS NPW NON-POTABLE WATER NRS NONRISING STEM NTS NORTHWEST O OA OUTSIDE AIR OBVD OPPOSED BLADE VOLUME DAMPER	REV REVISION' RF ROOF, RETURN FAN RH RELIEF HOOD RI RUBBER INSULATED RM ROOM(S) R&R REMOVE & REPLACE PER ORIGINAL R&S REMOVE & SALVAGE TO OWNER TO ONSITE LOCATION AS DIRECTED RSV RESILIENT SHEET VINYL RVT RESILIENT VINYL TILE R/W RIGHT OF WAY S S S SOUTH, STRAINER, SECOND, SANITARY, SEWER, STRUCTURE SAN SANITARY SEWER SB SPLITTER BOX SC SC SECONDARY CLARIFIER SCH SCHEDULE SD SECONDARY DIGESTER, STORM DRAIN, SPLITTER DAMPER SE SECSECT SECTION SERV SERVICE SF SHORT FACE SG SUPPLY GRILL	W/O WITHOUT X XFMR TRANSFORMER Y YH YARD HYDRANT MISCELLANEOUS ABBREVIATIONS 2:1, SL 2 HORIZONTAL TO 1 VERTICAL SLOPE 1 ON 2 1 VERTICAL ON 2 HORIZONTAL SLOPE Ø DIAMETER, PHASE Δ DEFLECTION ANGLE	SC SCUM SCE SECONDARY CLARIFIER EFFLUENT SCI SECONDARY CLARIFIER INFLUENT SE SECONDARY EFFLUENT SEPTAGE SI SECONDARY INFLUENT SL SLUDGE SLD SLUDGE DRAIN SR SUPERNATANT RETURN SS STORM SEWER SSL SETTLED SECONDARY SLUDGE SUPERNATANT SW SEAL WATER THE TRICKLING FILTER EFFLUENT THE TRICKLING FILTER RECYCLE TS THICKENED SLUDGE TWAS THICKENED WASTE ACTIVATED SLUDGE UD UNDERDRAIN UDP PERFORATED UNDERDRAIN V WASTE ACTIVATED SLUDGE WAS WASHWATER	CENERAL NOTES: 1. THESE ABBREVIATIONS APPLY TO THE ENTIRE SET OF CONTRACT DRAWINGS. 2. LISTING OF ABBREVIATIONS DOES NOT IMPLY THAT ALL ABBREVIATIONS ARE USED IN THE CONTRACT DRAWINGS. 3. ABBREVIATIONS SHOWN ON THIS SHEET INCLUDE VARIATIONS OF A WORD. FOR EXAMPLE, "MOD" MAY MEAN MODIFY OR MODIFICATION; "INC" MAY MEAN INCLUDED OR INCLUDING AND "REINF" MAY MEAN EITHER REINFORCE OR REINFORCING.
D D D D D D D D D D D D D D D D D D D	H H HATCH, HIGH, HYDRANT" HB HOSE BIB HD HARD DRAIN HDW HARDWARE HH HEX HEAD HM HOLLOW METAL HMC HARNESSED MECHANICAL COUPLING HORIZ HORIZONTAL HP HIGH POINT HR HANDRAIL HS HEADED STUD HT HEIGHT HV HOSE VALVE HVAC HEATING, VENTILATION & AIR CONDITIONING HW HOT WATER, HEADWALL	OC ON CENTER(S) OD OUTSIDE DIAMETER OE OVERHEAD ELECTRICAL OED OPEN END DUCT OF OUTSIDE FACE OH,OVHD OVERHEAD, OPPOSITE HAND OPPOSITE ORD OVERFLOW ROOF DRAIN ORIG ORIGINAL ORL OVERFLOW ROOF LEADER OS & Y OUTSIDE STEM AND YOKE	SHT,SH SHEET SIM SIMILAR SL SLOPE SLG SLIDE GATE SLO SHORT LEG OUTSTANDING SLV SHORT LEG VERTICAL SP STOP PLATE SPA SPACING SPEC SPECIFICATION SQ SUARE SR SUPPLY REGISTER SS SERVICE SINK, SANITARY SEWER STA STATION STD STANDARD STIR STIRRUP STL STEL STR STRRUP STL STEL STR STAINER SUPPLY REGISTER SS SERVICE SINK, SANITARY SEWER STA STATION STD STANDARD STIR STIRRUP STL STEL STR STRAINER SUG SLUICE GATE SUP SUPPORT SUSP SUPPENDED SW SIDEWALK SWBD SWITCHBOARD SWGR SWITCH GEAR SYM SYMMETRICAL			NOTICE OF EXTENDED PAYMENT PROVISION THIS CONTRACT ALLOWS THE OWNER TO MAKE PAYMENT WITHIN 45 DAYS AFTER SUBMISSION OF AN UNDISPUTED REQUEST FOR PAYMENT
PROJECT MANAGER C. RODRIGUEZ DESIGNER B. FLORES DE						



			PROJECT MANAGER	C. RODRIGUEZ
			DESIGNER	B. FLORES
			DESIGNER	
			DESIGNER	
			CHECKER	W. CHACON
			DRAWN BY	B. FLORES
	OCT 2021	FINAL 100% PROGRESS SUBMITTAL		
ISSUE	DATE	DESCRIPTION	PROJECT NUMBER	210565

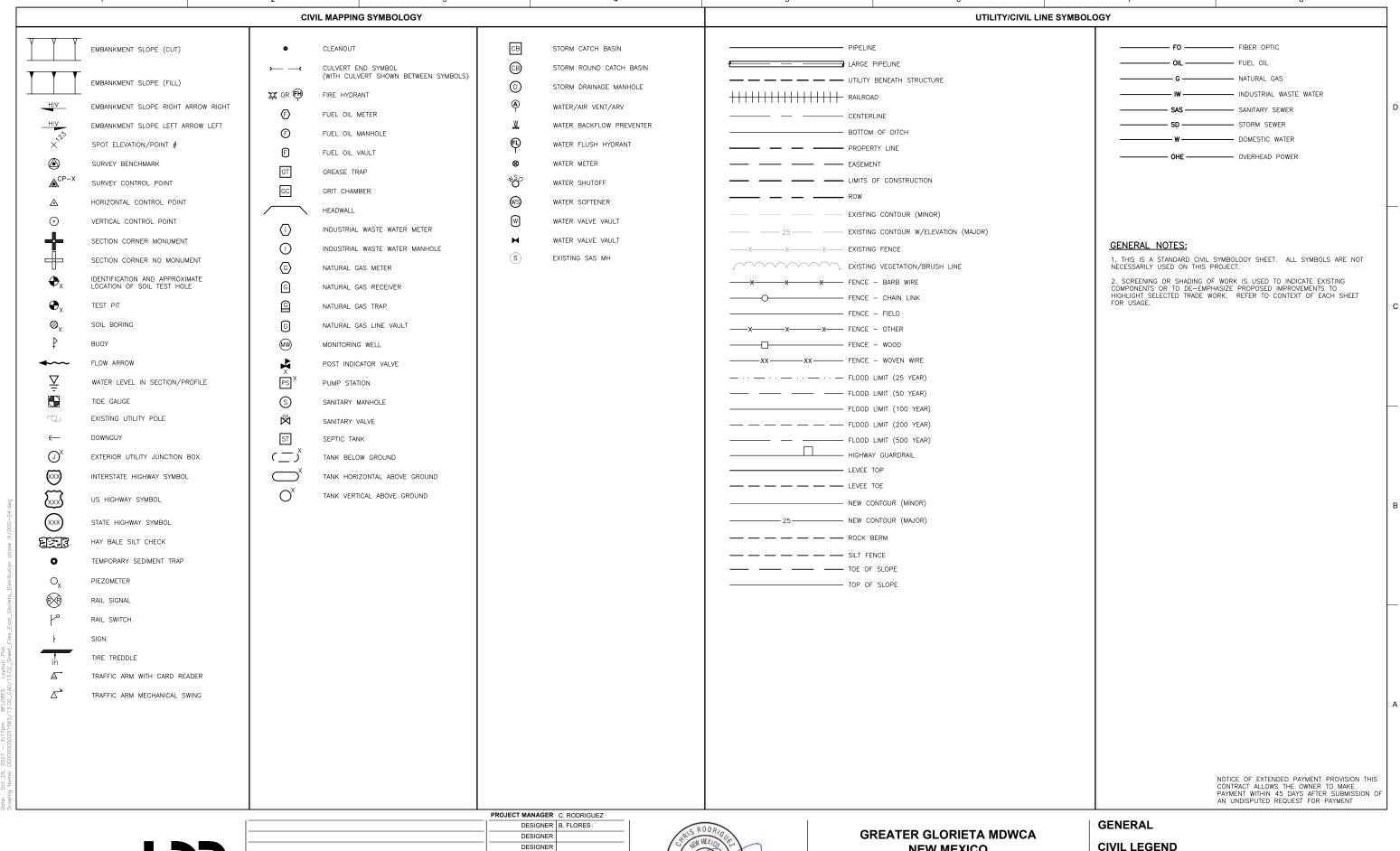


NEW MEXICO

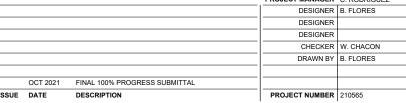
EAST GLORIETA
DISTRIBUTION & REGIONAL WELL

GENERAL	
ABBREVIATIONS	

SHEET G-03









NEW MEXICO

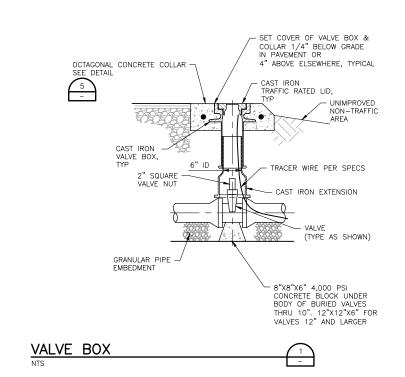
EAST GLORIETA DISTRIBUTION & REGIONAL WELL

0		1"	2"
FU	LL SIZE	GRAPH	IIC SCALE

FILENAME 00G-04.dwg SCALE NONE

SHEET

G-04





LENGTH OF RESTRAINT FOR TEES (FT)			
BRANCH SIZE	6"x6"xBRANCH*		
3"	AT FITTING		
4"	AT FITTING		
6"	AT FITTING		
8"	AT FITTING		
* EACH RUN P W/O JOINTS OF	IPE SHALL HAVE MINIMUM 10' N EACH SIDE OF BRANCH.		

LENGTH OF RESTRAINED PIPE (FEET) FOR REDUCERS				
PIPE SIZE	PIPE SIZE	SMALL SIDE	LARGE SIDE	
8"	6"	40'	40'	

LENGTH OF RESTRAINT FOR TEES (FT)			
BRANCH SIZE	8"x8"xBRANCH*		
3"	AT FITTING		
4"	AT FITTING		
6"	AT FITTING		
8"	AT FITTING		
	PIPE SHALL HAVE MINIMUM 10'		

LENGTH OF RESTRAINED PIPE (FEET) FOR HORIZONTAL BENDS						
PIPE SIZE	90.	45°	22½°	1 11/4°	VALVE	DEAD END
3"	20'	20'	20'	20'	60'	60'
4"	20'	20'	20'	20'	60'	60'
6"	20'	20'	20'	20'	60'	60'
8"	40'	20'	20'	20'	80'	80'
10"	40'	20'	20'	20'	80'	100'
NOTE: RESTRAINING GLANDS SHALL BE USED AT ALL FITTINGS AND CONNECTIONS SHALL BE RESTRAINED WITH HARNESSES						

OCT 2021

ISSUE DATE

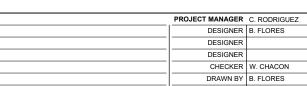
FINAL 100% PROGRESS SUBMITTAL

DESCRIPTION

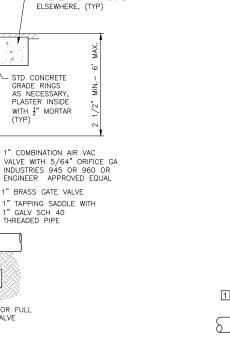
GIVEN LENGTHS ARE MINIMUM RESTRAINT LENGTHS AND CONTRACTOR SHALL PROVIDE ADDITIONAL RESTRAINT BASED ON MANUFACTURER'S RECOMMENDATIONS AS NECESSARY.

PER TABLE.

BURIED PIPE RESTRAINT TABLE







OCTAGONAL CONCRETE COLLAR

SET 1/4" BELOW GRADE IN PAVEMENT OR 4" ABOVE

GRADE RINGS AS NECESSARY, PLASTER INSIDE

WITH $\frac{1}{2}$ " MORTAR (TYP)

" COMBINATION AIR VAC

BRASS GATE VALVE 1" TAPPING SADDLE WITH 1" GALV SCH 40 THREADED PIPE

- ENCASE MAINLINE FOR FULL SUPPORT OF AIR VALVE

ENSURE INSTALLATION OF VALVE AT TRUE HIGH POINT OF PIPE FOR PROPER AIR RELEASE.

STD CAST IRON FRAME & COVER LABELED "WATER"

NON-TRAFFIC

AREA

SUPPORT SEE DETAIL BELOW

WATERLINE -

GRAVEL TO ALLOW DRAINAGE

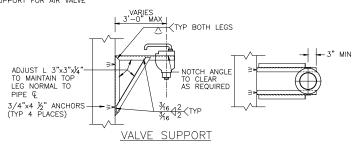
4' DIA MANHOLE RING

NOTE:

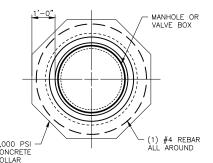
EXISTING GROUND

ECCENTRIC FLAT CONCRETE TRAFFIC RATED LID

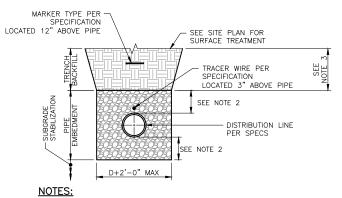
2. INSTALL SUPPORTS & CASING SUCH THAT PIPE PROVIDES NO SUPPORT FOR AIR VALVE







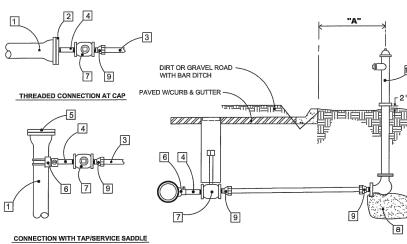




D = OUTSIDE DIAMETER OF PIPE.
 DEPTH PER PIPE MANUFACTURER'S RECOMMENDATIONS.
 MIN DEPTH OF EMBEDMENT: 8".

3. MIN COVER = 4' FROM FROST DEPTH





CONNECTION AT MAIN

KEYED NOTES	CONSTRUCTION NOTES		
TRAINED DEAD END MAIN	DIMENSION "A" IS TYPICAL 18" BACK OF CURB TO VALVE PAVED AREAS AND IS MINIMUM OF 18" BEHIND BAR DITCH		
	INDAYED ADDA O DUT OAN DE EVENDED UR TO TOUTO E		

1 REST 2 MJ CAP/PLUG W / 2" TA

4 2" BRASS NIPPLE

5 MJ CAP/PLUG

6 2" SERVICE SADDLE W / IPS THREADS

9 ADAPTER: 2" COMPRESSION x 2" MIP

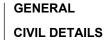
10 2-1/4" POST TYPE HYDRANT WITH SANTA FE THREADS

FLUSH HYDRANT

NOTICE OF EXTENDED PAYMENT PROVISION THIS CONTRACT ALLOWS THE OWNER TO MAKE PAYMENT WITHIN 45 DAYS AFTER SUBMISSION OF AN UNDISPUTED REQUEST FOR PAYMENT

GREATER GLORIETA MDWCA NEW MEXICO

EAST GLORIETA DISTRIBUTION & REGIONAL WELL



FULL SIZE GRAPHIC SCALE

TYPICAL INSTALLATION

FILENAME 00G-05.dwg

SCALE NONE

SHEET G-05

4,000 PSI CONCRETE COLLAR

PROJECT NUMBER 210565

6' TO 10'

AS REQUIRED BY
LOCAL GOVERNING BODY

3'-0" MIN OR AS
REQUIRED BY
LOCAL GOVERNING BODY

3'-0" MIN OR AS
GOVERNING BODY

SEE NOTE 3

VALVE BOX PER

1 G-05

COMPACTED BACKFILL

WATER MAIN
ISOLATION VALVE
WHERE INDICATED ON PLANS
GRANULAR BEDDING

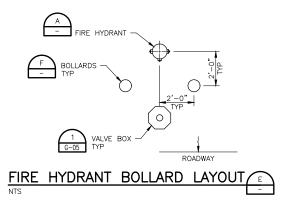
RYDRANT BEDDING

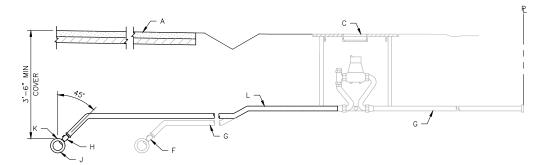
MATERIAL

NOTE:

- 1. ALL PIPING SHALL BE FULLY RESTRAINED.
- 2. INSTALL FIRE HYDRANT PER SPECIFICATIONS.
- 3. NO OBSTRUCTIONS WILL BE PERMITTED WITHIN 3 FT. OF FIRE HYDRANT.
- 4. HYDRANT LEG SHALL BE VALVED ON ALL MAIN LINES.
- 5. CONTRACTOR SHALL BE RESPONSIBLE FOR SETTING TOP FLANGE OF FIRE HYDRANT TO THE CONTROLLED ELEVATION LINE.
- FIRE HYDRANT SHALL BE LOCATED AT THE BEGINNING OF CURB RETURN OR AT THE PROPERTY LINE COMMON TO ADJOINING LOTS, OR AS DIRECTED BY THE OWNER.
- 7. PUMPER NOZZLE TO BE SET FACING THE TRAVELED WAY, UNLESS OTHERWISE NOTED ON PLANS.
- 8. FLANGE TO BE LOCATED 1" MAX ABOVE PAVEMENT OR 4" MAX ABOVE GRADE IN UNIMPROVED AREAS.
- 9. CLEARANCE AROUND FIT SHALL BE GRADED TO DRAIN.







CONSTRUCTION NOTES:

- A. STREET SURFACE-REMOVE & REPLACE
- B. NOT USED
- C. EXISTING METER BOX & COLLAR LID
- D. NOT USED
- E. NOT USE
- F. EXISTING WATER MAIN AND SERVICE CONNECTION
- G. EXISTING SERVICE LINE TUBING
- H. CORP STOP FOR NEW CONNECTION
- I NEW MAIN WATER LINE
- K. TAPPING SADDLE FOR NEW CONNECTION
- L. NEW HDPE TUBING PER SPECIFICATIONS WITH NO MORE THAN ONE (1) SPLICE. IF MORE THAN ONE CUT NECESSARY, REPLACE FROM METER TO MAIN AT NO ADDITIONAL COST TO OWNER.

SERVICE CONNECTION DETAIL



FILL WITH
CONCRETE AND
ROUND TOP

6" STEEL PIPE BOLLARD

1/2" COMPRESSIBLE FILLER
AND SEALANT WHERE IN PAVEMENT
EXISTING
GRADE

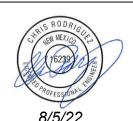
CONCRETE

BOLLARD F

NOTICE OF EXTENDED PAYMENT PROVISION THIS CONTRACT ALLOWS THE OWNER TO MAKE PAYMENT WITHIN 45 DAYS AFTER SUBMISSION OF AN UNDISPUTED REQUEST FOR PAYMENT



			PROJECT MANAGER C. RODRIGUEZ
			DESIGNER B. FLORES
			DESIGNER
			DESIGNER
			CHECKER W. CHACON
			DRAWN BY B. FLORES
	OCT 2021	FINAL 100% PROGRESS SUBMITTAL	
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GREATER GLORIETA MDWCA
NEW MEXICO

EAST GLORIETA
DISTRIBUTION & REGIONAL WELL

GENERAL

CIVIL DETAILS

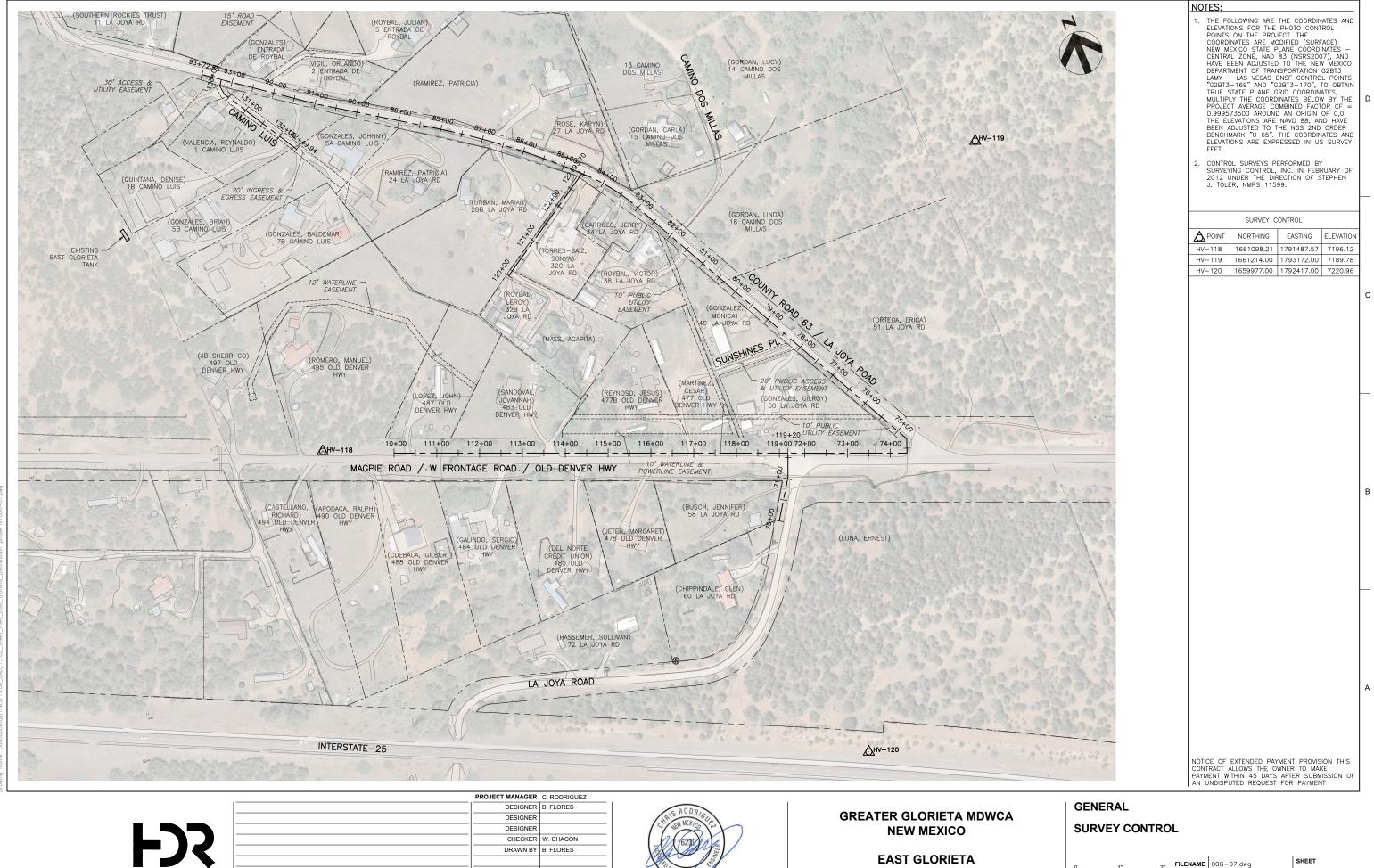
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FULL 5	SIZE GRAPHIC S	SCALE

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DISTRIBUTION & REGIONAL WELL

OCT 2021

ISSUE DATE

FINAL 100% PROGRESS SUBMITTAL

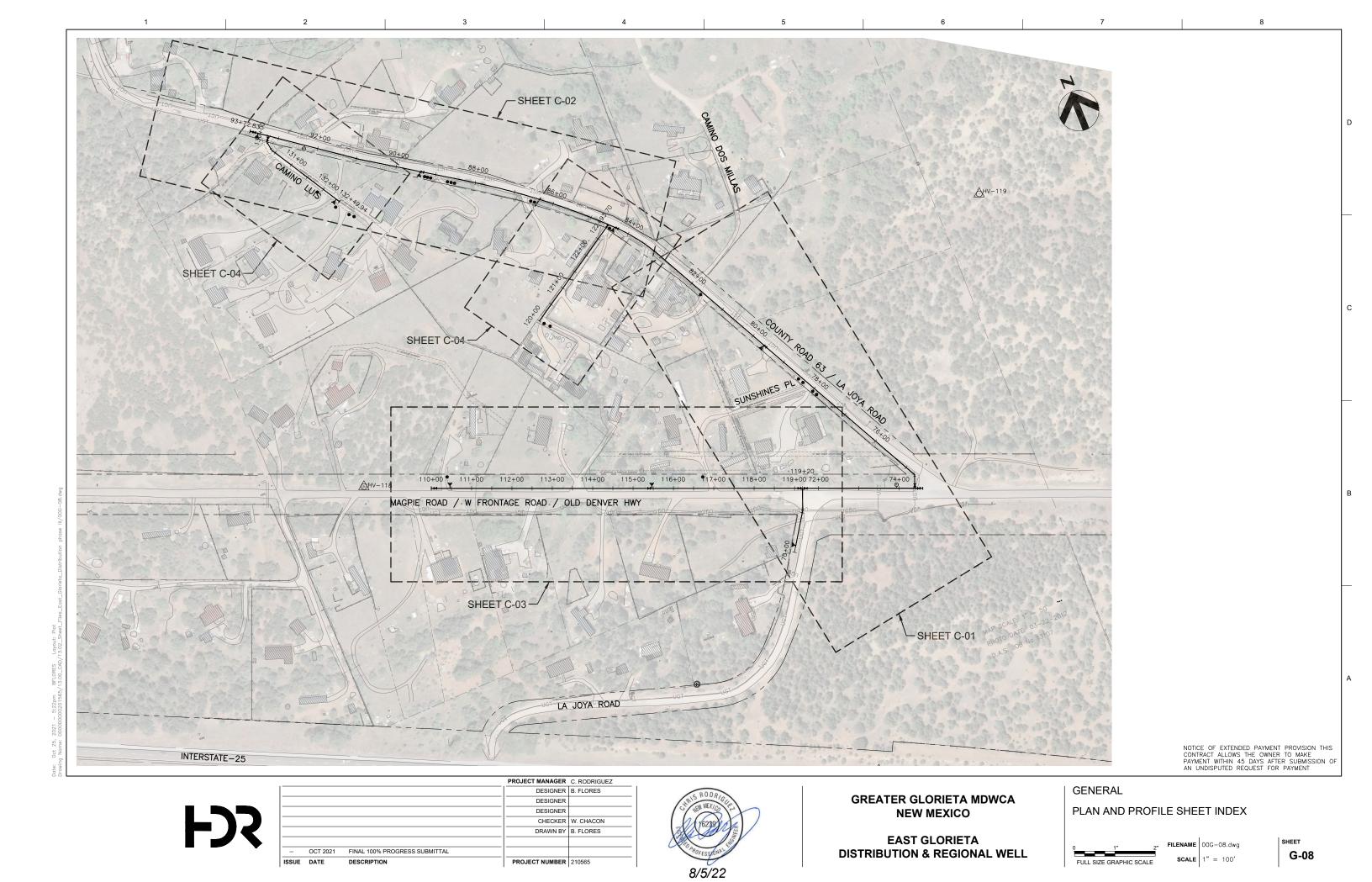
PROJECT NUMBER 210565

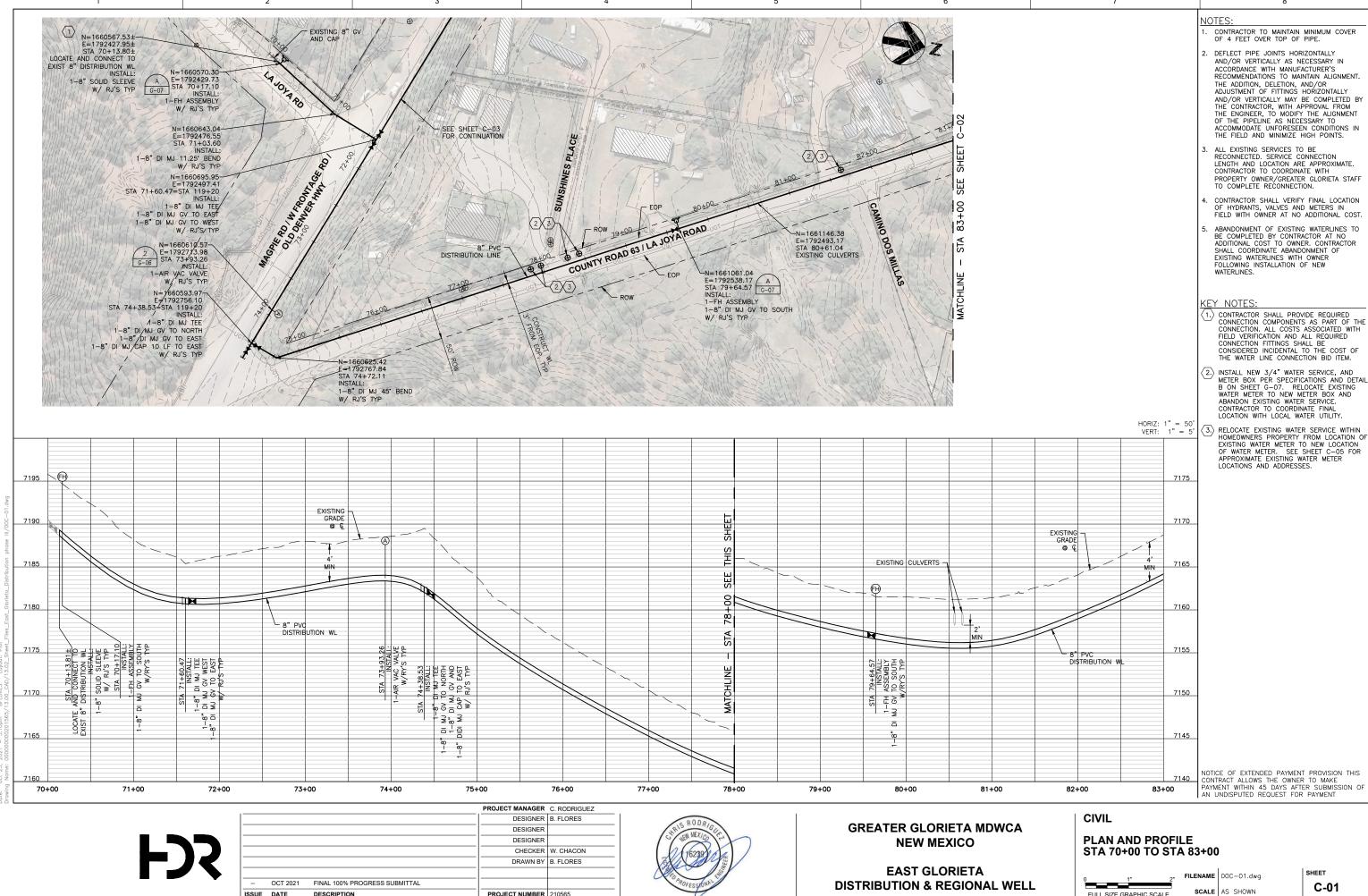
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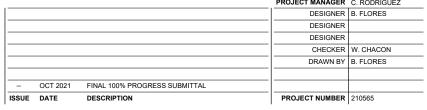
G-07

SCALE 1" = 100

FULL SIZE GRAPHIC SCALE



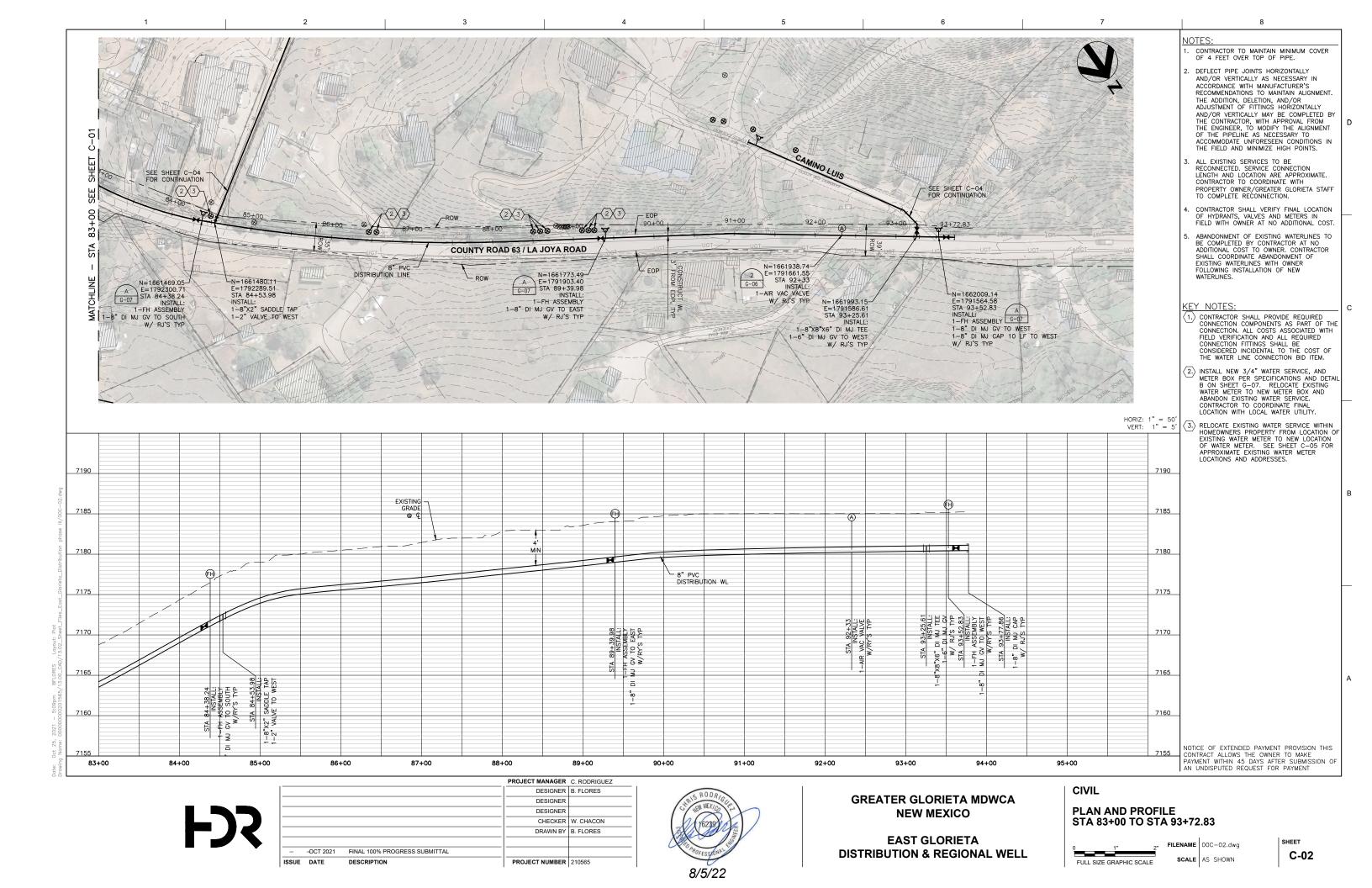


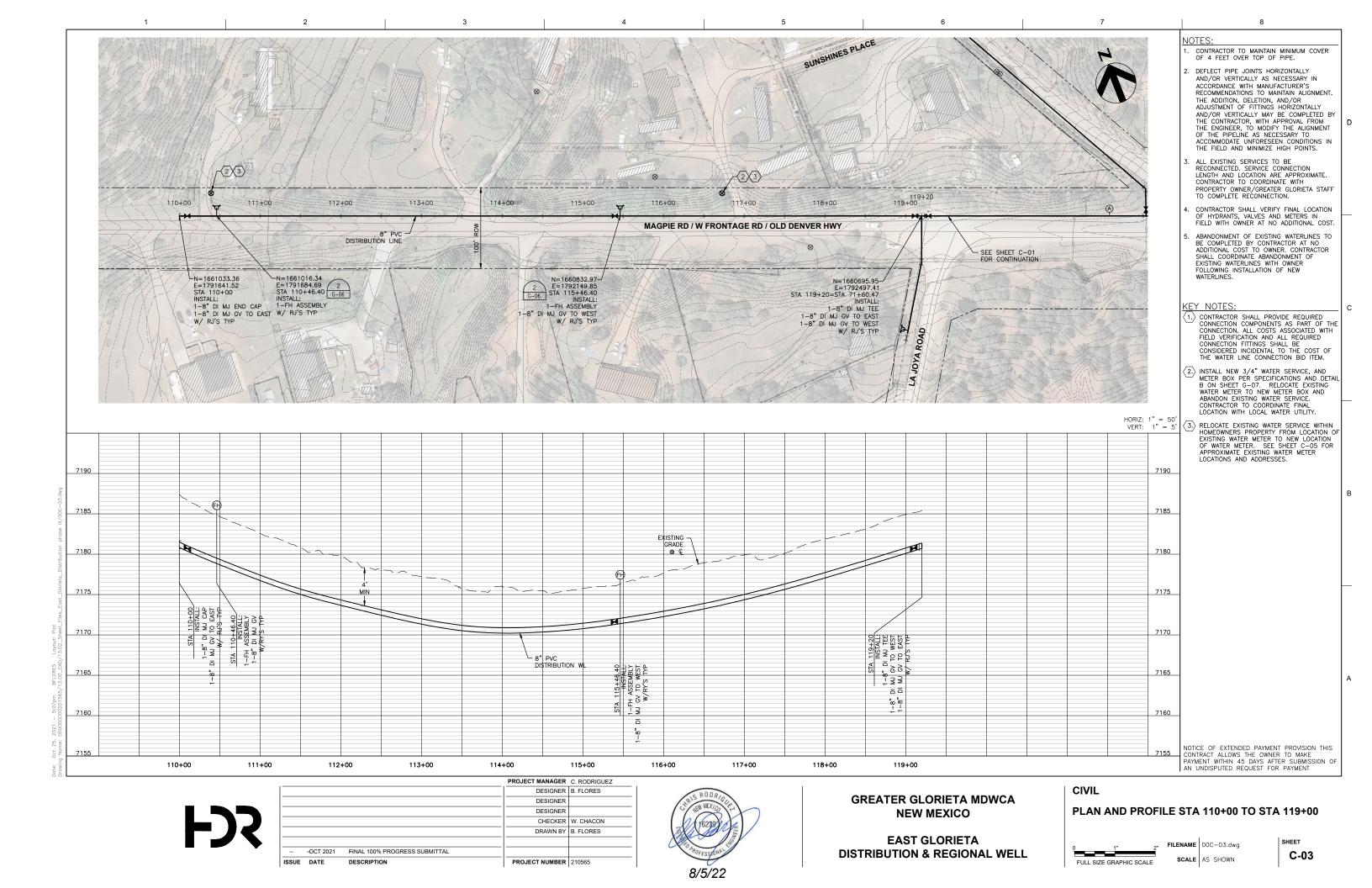


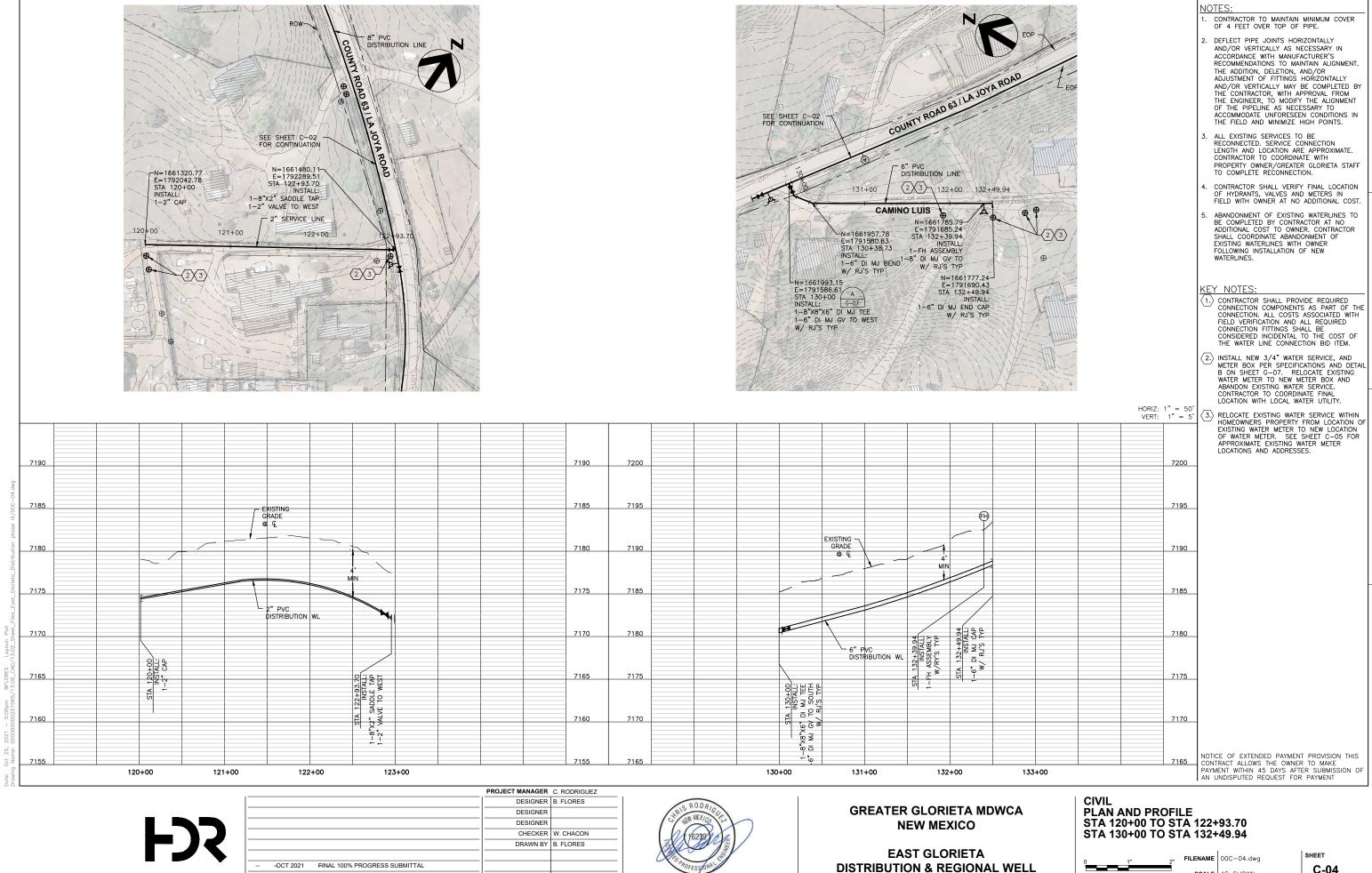


DISTRIBUTION & REGIONAL WELL

FULL SIZE GRAPHIC SCALE







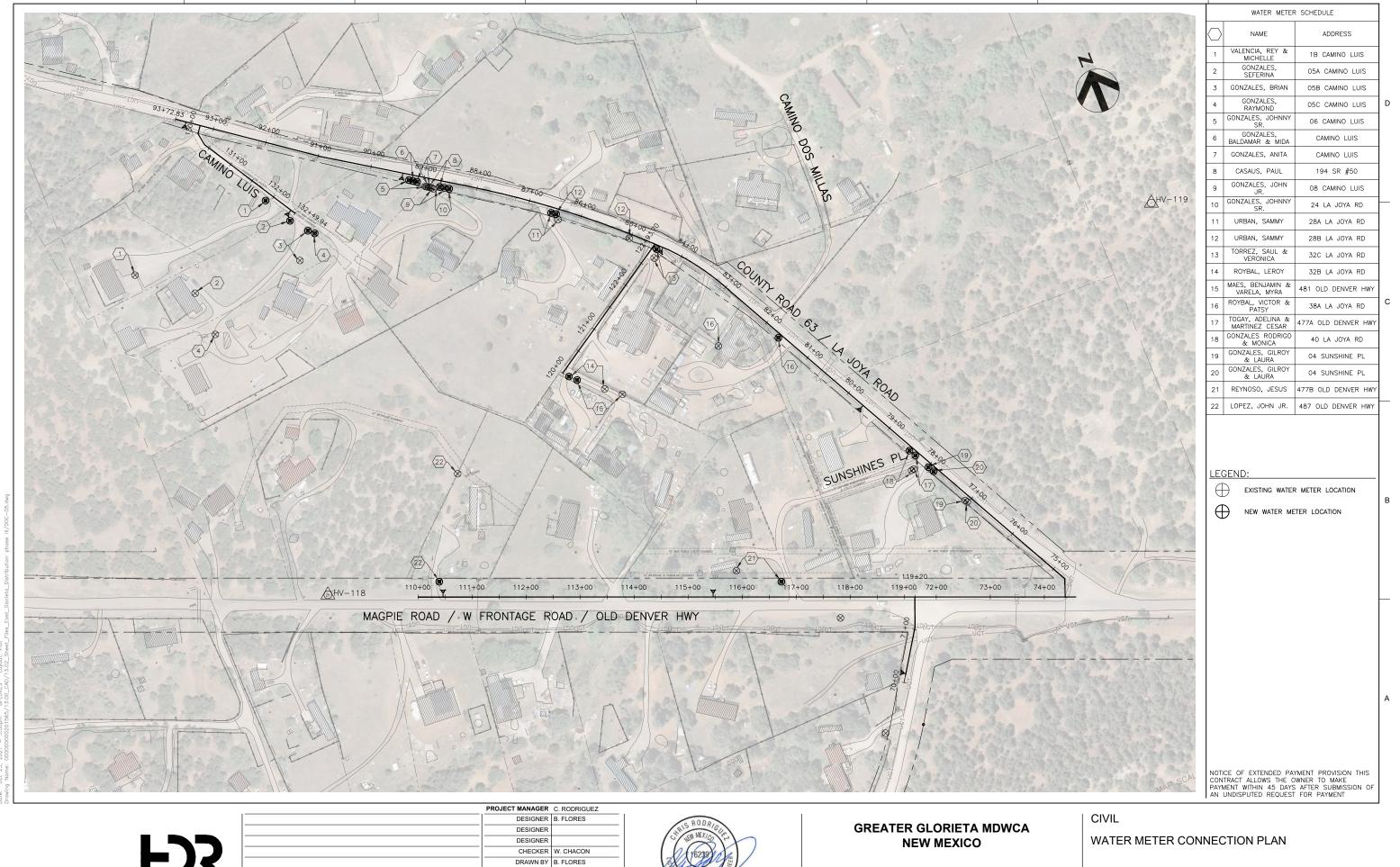
ISSUE DATE

DESCRIPTION

PROJECT NUMBER 210565

C-04 SCALE AS SHOWN

FULL SIZE GRAPHIC SCALE



FD3 OCT 2021 FINAL 100% PROGRESS SUBMITTAL ISSUE DATE DESCRIPTION PROJECT NUMBER 210565



EAST GLORIETA DISTRIBUTION & REGIONAL WELL



SCALE 1" = 80'

C-05

LOCATE NEW WELL WHITHIN
50 FT OF EXISTING WELL.
FINAL LOCATION TO BE
DETERMINED IN THE FIELD
AS APPROVED BY OWNER'S
REPRESENTATIVE
SEE SHEET C-10 FOR
WELL DETAIL. NMDOT RAILROAD (SUCCESSOR IN INTEREST TO THE ATCHISON, TOPEKA AND SANTA FE RAILWAY CO.) EXISTING
2" DI TEE W/
8"X2" REDUCER
TO WEST EXISTING 8" DI 90' BEND W/ AIR VAC VALVE TO WEST EXISTING 8" DI

NOTICE OF EXTENDED PAYMENT PROVISION THIS CONTRACT ALLOWS THE OWNER TO MAKE PAYMENT WITHIN 45 DAYS AFTER SUBMISSION OF AN UNDISPUTED REQUEST FOR PAYMENT

FDS

ISSUE	DATE	DESCRIPTION	PROJECT NUMBER	210565
-	OCT 2021	FINAL 100% PROGRESS SUBMITTAL		
			DRAWN BY	B. FLORES
			CHECKER	W. CHACON
			DESIGNER	
			DESIGNER	
			DESIGNER	B. FLORES
			PROJECT MANAGER	C. RODRIGUEZ



GREATER GLORIETA MDWCA NEW MEXICO

EAST GLORIETA DISTRIBUTION & REGIONAL WELL

WELL SITE PLAN



FILENAME 00C-06.dwg **SCALE** 1" = 50'

SHEET C-06

CONTRACTOR SHALL PLACE REFLECTORIZED PAINTED MARKINGS (ITEM NO. 704000) ON EACH INTERMEDIATE LIFT OF SURFACING OR MILLED SURFACE AT THE END OF EACH DAY'S SURFACING OR MILLING OPERATION. THESE MARKINGS SHALL BE PLACED IN ACCORDANCE WITH THE DETAILS SHOWN IN FIGURE 1 OR FIGURE 1A ON THIS SHEET. IN THE EVENT THE PAINTED MARKINGS CANNOT BE PLACED AS DESCRIBED ABOVE, THE CONTRACTOR SHALL, WITH THE APPROVAL OF THE PROJECT MANAGER, PLACE MARKING TAPE OR TEMPORARY REFLECTIVE RAISED PAVEMENT MARKERS IN ACCORDANCE WITH THE DETAILS SHOWN IN FIGURE 1 OR FIGURE 1A ON THIS SHEET OR AS DIRECTED BY THE PROJECT MANAGER. PAYMENT SHALL BE MADE USING THE UNIT PRICE OF REFLECTORIZED PAINTED MARKINGS (ITEM NO. 704000) OR REMOVABLE MARKING TAPE (ITEM NO. 704100).

THE CONTRACTOR SHALL PLACE REMOVABLE MARKING TAPE (ITEM NO. 704100) OR TEMPORARY REFLECTIVE RAISED PAVEMENT MARKERS (ITEM NO. 717116 OR 717120) AFTER PLACEMENT OF THE FINAL LIFT OF SURFACING IF PERMANENT MARKINGS ARE NOT PLACED DURING THE SAME WORKING DAY. THESE MARKINGS SHALL BE PLACED IN ACCORDANCE WITH THE DETAILS SHOWN IN FIGURE 1 OR FIGURE 1A ON THIS SHEET OR AS DIRECTED BY THE PROJECT MANAGER.

ON ROADWAYS WITH SEVERE CURVATURE, BROKEN-LINE INTERIM MARKINGS WITH HALF-CYCLE LENGTHS AND A MINIMUM OF 2-FOOT STRIPES OR A GROUP OF TWO TEMPORARY REFLECTIVE PAVEMENT MARKERS SPACED 2 FEET APART MAY BE USED WHERE PASSING IS ALLOWED.

INTERIM EDGE LINES OR CHANNELIZATION LINES FOR DELINIATION MAY BE USED AS NEEDED OR AS DIRECTED BY THE PROJECT MANAGER. PASSING NO PASSING ZONE SIGNING TO SUPPLEMENT INTERIM MARKINGS SHOULD BE USED AS NEEDED OR AS DIRECTED BY THE PROJECT MANAGER. ALL INTERIM SHALL BE IN ACCORDANCE WITH THE MUTCD AND CURRENT REVISIONS.

PAVEMENT DROP-OFF GUIDELINE

PAVEMENT OPERATIONS OR OTHER ACTIVITIES WITHIN THE TRAVELED WAY AND ADJACENT TO THE EXISTING TRAVELED LANE. THE CONTRACTOR SHALL ASSURE THAT NO PAVEMENT DROP-OFFS ARE LEFT EXPOSED DURING NON-WORKING HOURS. THE CONTRACTOR SHALL INITIATE CORRECTIVE MEANS AS PER "THE NEW MEXICO DEPARTMENT OF TRANSPORTATION PAVEMENT DROP-OFF GUIDFLINE" TO ACHIEVE A MINIMUM 6:1 SLOPE BETWEEN TRAVELED LANES AND A MINIMUM 3:1 SLOPE ADJACENT TO THE EXISTING TRAVELED LANE WITH TWO 11 FOOT DRIVING LANES AS SHOWN IN THE DETAIL BELOW. THIS WORK SHALL BE INCIDENTAL TO CONSTRUCTION AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE THEREFOR

11 FT. LANE MINIMUM TEMPORARY FILLET DETAIL

11 FT. LANE MINIMUM

FLAGGING OPERATIONS

THE FLAGGER, APPLICABLE SIGNS AND OTHER RELATED ITEMS SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION AND NO SEPARATE MEASUREMENT OR PAYMENT WILL

FLAGGERS AND CORRESPONDING SIGNING SHALL BE USED FOR CONSTRUCTION AT ALL INTERSECTIONS AND SIDE STREETS AS PER THESE PLANS OR PROJECT MANAGER'S DIRECTIONS AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE THEREFOR.

FLOODLIGHTS SHALL BE PROVIDED TO MARK FLAGGER STATIONS AT NIGHT AS NEEDED THIS SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE THEREFOR

SHOULDER WORK OPERATIONS

SHOULDER WORK CONSTRUCTION SHALL BE RESTRICTED TO ONE SIDE AT A TIME. THE CONTRACTOR SHALL SET TRAFFIC CONTROL SIGNING AND DEVICES TO DEFINE WORK ZONE AT THE BEGINNING OF EACH WORK DAY.

THE CONTRACTOR SHALL COMPLETE ALL SHOULDER WORK STARTED WITHIN THE WORK ZONE AT THE BEGINNING OF THE WORK DAY SUCH THAT THE PROJECT (FULL LENGTH) CAN BE OPEN TO TWO-WAY TRAFFIC AT THE END OF THE WORK DAY.

THERE SHALL BE A MAXIMUM OF TWO WORK ZONES WITH A MINIMUM GAP OF ONE MILE BETWEEN WORK ZONES FOR THE FOLLOWING OPERATIONS:

> SHOULDER WIDENING SURFACING OPERATIONS

RECONSTRUCTION OPERATIONS

AT NO TIME DURING CONSTRUCTION SHALL THERE BE MORE THAN TWO OF THE ABOVE NOTED OPERATIONS ON GOING SIMULTANEOUSLY.

FIGURE 1

SHORT TERM WORK ZONE INTERIM MARKINGS (IN PLACE FOR < 14 CALENDAR DAYS)

4 LANE DIVIDED ROADWAY

 \Diamond

 \leftarrow

 \Rightarrow

 \Rightarrow

TEMPORARY REFLECTIVE

RAISED PAVEMENT MARKERS

 \leftarrow

 \Rightarrow

 \Rightarrow

PAINTED MARKINGS OR MARKING TAPE

4'

4'

. . .

2 LANE TWO-WAY ROADWAY

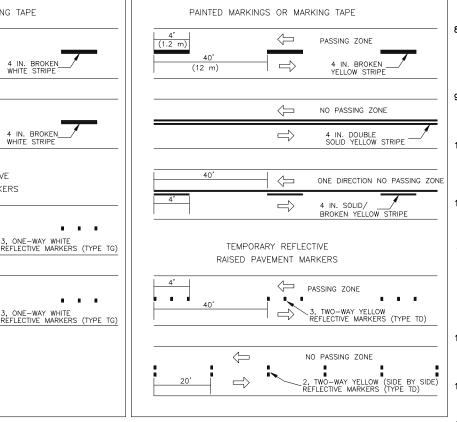
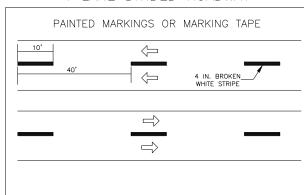


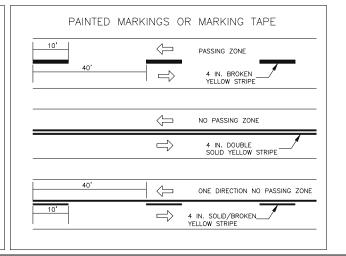
FIGURE 1A

STANDARD WORK ZONE INTERIM MARKINGS (IN PLACE FOR > 14 CALENDAR DAYS)

4 LANE DIVIDED ROADWAY



2 LANE TWO-WAY ROADWAY



6. <u>Driveway access</u> The contractor shall provide ingress and egress to local businesses and RESIDENCES FOR THE DURATION OF THE PROJECT. IF ACCESS CLOSURES TO LOCAL BUSINESSES OR RESIDENCES ARE REQUIRED, THE CONTRACTOR SHALL REQUEST THE CLOSURES THROUGH THE PROJECT MANAGER. UPON APPROVAL, THE CONTRACTOR SHALL COORDINATE SUCH CLOSURES WITH THE PROPERTY OWNERS AND THE PROJECT MANAGER AT LEAST 24 HOURS IN ADVANCE.

7. STRUCTURE EXTENSION WORK

STRUCTURE EXTENSION WORK SHALL BE LIMITED TO ONE SIDE AT A TIME. THE CONTRACTOR SHALL BE LIMITED TO A 1 MILE WORK ZONE FOR STRUCTURE

8. SEQUENTIAL ARROW

PLACEMENT OF THE SEQUENTIAL ARROW SHALL BE AT OR NEAR THE BEGINNING OF THE LANE CLOSURE TAPER. IN AREAS OF INSUFFICIENT PAVEMENT WIDTH, THE SEQUENTIAL ARROW MAY BE PLACED WITHIN THE TAPER, BUT NOT TO EXCEED THE TAPER LENGTH. IN ALL CASES, THE SEQUENTIAL ARROW SHALL BE PLACED BEHIND THE CHANNELIZATION DEVICES

9. CONCRETE WALL BARRIER:

THE CONCRETE WALL BARRIER (ITEM NO. 606600 — TEMPORARY CONCRETE WALL BARRIER) OF THE PROJECT, THE CONCRETE WALL BARRIER SHALL REVERT TO THE CONTRACTOR.

10. <u>Tapers in Vertical Curves</u>
In the event that a taper occurs in a vertical curve, a longitudinal buffer SPACE SHALL BE PROVIDED SO AS TO POSITION THE TAPER AND SEQUENTIAL ARROW IN ADVANCE OF THE VERTICAL CURVE TO OBTAIN ADEQUATE SIGHT DISTANCE OF THESE DEVICES

REQUIRED FOR THIS PROJECT SHOULD BE SUPPLIED BY THE CONTRACTOR. UPON COMPLETION

1. TAPERS IN HORIZONTAL CURVES

THE EVENT THAT A TAPER OCCURS IN A HORIZONTAL CURVE, A LONGITUDINAL BUFFER SPACE SHALL BE PROVIDED SO AS TO POSITION THE TAPER AND SEQUENTIAL ARROW IN ADVANCE OF

12. "BUMP", "LOOSE GRAVEL", "LANE DROP-OFF" SIGN PLACEMENT

THE CONTRACTOR SHALL PLACE W8-1-36 SIGNS ("BUMP" - B\O), W8 ("ROUGH ROAD" - B\O), W8-7-48 SIGNS ("LOOSE GRAVEL" - B\O), AND\OR W8-90-48 SIGNS ("LANE DROP-OFF" - B\O) IN ADVANCE OF BRIDGE APPROACHES OR OTHER LOCATIONS DURING COLD MILLING AND OVERLAY OPERATIONS AS NEEDED OR AS DIRECTED BY THE PROJECT MANAGER. THESE SIGNS AND WORK SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE THEREFOR.

13. STEEL POST AND BASE POSTS

THE CONTRACTOR SHALL HAVE THE OPTION OF SUPPLYING EITHER SQUARE TUBING POSTS OR FLANGED CHANNEL U-POSTS (ITEM NO. 702100 - STEEL POSTS AND BASE POSTS FOR CONSTRUCTION SIGNING) AS PER NMSHTD STANDARD SERIAL SN 75-1 OR DRAWING 33.

4. TRAFFIC CONTROL PLAN CHANGES

NO PAYMENT WILL BE MADE FOR ANY ADDITIONAL COST RESULTING FROM APPROVED TRAFFIC CONTROL PLAN CHANGES REQUESTED BY THE CONTRACTOR.

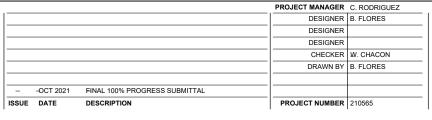
15.ACCESS SIGNS:

THE CONTRACTOR SHALL PROVIDE FIVE (5) SP-17 AND FIVE (5) SP-18 SIGNS DURING CONSTRUCTION. LOCATION AND LEGEND WILL BE DETERMINED BY THE PROJECT MANAGER

16. NIGHT TIME WORK:

ADDITIONAL EQUIPMENT REQUIRED FOR ANY APPROVED NIGHT TIME WORK SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION

> NOTICE OF EXTENDED PAYMENT PROVISION THIS CONTRACT ALLOWS THE OWNER TO MAKE
> PAYMENT WITHIN 45 DAYS AFTER SUBMISSION OF AN UNDISPUTED REQUEST FOR PAYMENT





GREATER GLORIETA MDWCA NEW MEXICO

EAST GLORIETA DISTRIBUTION & REGIONAL WELL CIVIL

TEMPORARY TRAFFIC CONTROL **STANDARD DETAILS - I**

FILENAME 00C-07.dwa FULL SIZE GRAPHIC SCALE SCALE NONE

C-07

SHEET

- THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN FOR THE ENTIRE PROJECT TO THE COUNTY TRAFFIC CONTROL ADMINISTRATOR AT LEAST HOURS PRIOR TO COMMENCEMENT OF WORK. TRAFFIC CONTROL PLANS SHALL BE PREPARED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION AND BY CERTIFIED PERSONNEL AND MUST BE APPROVED PRIOR TO COMMENCEMENT OF WORK ON THE PROJECT CALL 505-992-3010 FOR FURTHER INFORMATION
- A DAILY TRAFFIC CONTROL LOG SHALL BE MAINTAINED BY THE CONTRACTOR REFLECTING THE TYPES AND LOCATIONS OF ALL TRAFFIC CONTROL DEVICES, SIGNS, BARRICADES, ETC. BEING USED ON THE PROJECT IN COMPLIANCE WITH THE APPROVED TRAFFIC CONTROL PLAN. THIS LOG SHALL BE SUBMITTED TO THE SANTA FE COUNTY TRAFFIC CONTROL ADMINISTRATOR UPON COMPLETION OF THE PROJECT CONSTRUCTION OR WHEN SO REQUESTED BY THE PROJECT MANAGER OR THE SANTA FE COUNTY TRAFFIC CONTROL ADMINISTRATOR
- CONTRACTOR SHALL PROVIDE A WEEKLY CONSTRUCTION ACTIVITY SCHEDULE TO SANTA FE COUNTY PUBLIC WORKS DIVISION ATTN: PROJECT MANAGER
- THE CONTRACTOR SHALL FILE A WEEKLY WRITTEN REPORT TO THE TRAFFIC CONTROL ADMINISTRATOR DESCRIBING THE TRAFFIC CONTROL PLAN THAT WILL BE IN EFFECT FOR THE FOLLOWING WEEK.
- SUBJECT TO THE APPROVED TRAFFIC CONTROL PLAN, AT LEAST ONE LANE SHALL BE OPEN TO TRAFFIC AT ALL TIMES. CONTRÁCTOR SHALL PROVIDE PROPER SIGNAGE AND FLAGMAN AND SHALL MAINTAIN THE TRAFFIC LANE IN SUCH A MANNER AS TO ASSURE PROPER SAFETY TO THE TRAVELING PUBLIC AT ALL TIMES, EXCEPT WHEN GRADING, EXCAVATION AND BACKFILL OPERATIONS ARE BEING CONDUCTED IMMEDIATELY IN FRONT OF THE PROPERTY, IN WHICH CASE ACCESS WILL NOT BE DENIED FOR MORE THAN 4 HOURS WITHOUT APPROVAL
- TRAFFIC LANES PROVIDED DURING CONSTRUCTION SHALL BE MAINTAINED, IN SUCH A CONDITION UNDER ALL WEATHER CONDITIONS, SO AS TO PERMIT THE REASONABLE PASSAGE OF PASSENGER VEHICLES, AND SHALL BE KEPT GRADED AND SMOOTH, AND WATERED SEVERAL TIMES DAILY TO CONTROL DUST
- TYPICAL TRAFFIC CONTROL PLANS DO NOT REFLECT THE EXISTING TOPOGRAPHY SUCH AS DRIVEWAYS, LANE WIDTHS, AND BUSINESS/RESIDENTIAL ACCESSES. EVERY LOCATION THAT REQUIRES CONSTRUCTION TRAFFIC CONTROL SHALL HAVE A DETAILED TRAFFIC CONTROL PLAN SHOWING ALL EXISTING TOPOGRAPHY.
- CONSTRUCTION SHALL NOT BEGIN UNLESS A TRAFFIC CONTROL PLAN FOR THE ENTIRE PROJECT HAS BEEN APPROVED AND VERIFIED BY SANTA FE COUNTY TRAFFIC ENGINEERING
- ALL CONSTRUCTION TRAFFIC CONTROL DEVICES SHALL COMPLY WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL, SERVICE AND MAINTAIN ALL TRAFFIC CONTROL DEVICES. TRAFFIC CONTROL DEVICES SHALL NOT BE REMOVED OR ALTERED IN ANY WAY WITHOUT THE APPROVAL OF THE COUNTY TRAFFIC CONTROL ADMINISTRATOR, PER SECTION 6A-4 OF THE MUTCD, LATEST
- THE CONSTRUCTION TRAFFIC CONTROL INITIAL SET-UP FOR EACH PHASE SHALL BE BY AN AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA) CERTIFIED WORKSITE TRAFFIC SUPERVISOR. THE MAINTENANCE AND SERVICING SHALL ALSO BE DONE BY AN ATSSA CERTIFIED WORKSITE TRAFFIC SUPERVISOR OR
- CONTRACTOR IS RESPONSIBLE TO MAINTAIN AND SERVICE ALL TRAFFIC CONTROL DEVICES 24 HOURS A DAY, 7 DAYS A WEEK THROUGHOUT LENGTH OF PROJECT. CONTRACTOR IS RESPONSIBLE THAT ALL TRAFFIC CONTROL DEVICES COMPLY WITH THE MUTCD, LATEST EDITION.
- 13. ALL ADVANCE WARNING SIGNS SHALL BE DOUBLE INDICATED WHENEVER THERE ARE MULTI-LANE TRAFFIC IN ANY ONE GIVEN DIRECTION AND THERE IS SUFFICIENT MEDIAN SPACE.
- ALL BARRICADES IN ALL TAPERS AND TANGENTS SHALL BE PLACED APART, A DISTANCE MEASURED IN FEET, EQUAL TO THAT OF THE POSTED SPEED LIMIT NO EXCEPTIONS UNLESS APPROVED BY SANTA FE COUNTY TRAFFIC ENGINEERING PER MUTCD SECTION 6A-4.
- 15. ALL WORK IN ARTERIAL ROADWAYS SHALL BE ON A CONTINUOUS 24 HOUR PER DAY BASIS UNTIL COMPLETED.
- EQUIPMENT OR MATERIALS SHALL NOT BE STORED WITHIN 15 FEET OF A TRAVELED TRAFFIC LANE DURING NON-WORKING HOURS WITHOUT THE APPROVAL OF SANTA FE COUNTY TRAFFIC ENGINEERING.
- CONTRACTOR SHALL PROVIDE AND MAINTAIN A SAFE AND ADEQUATE MEANS OF CHANNELIZING PEDESTRIAN TRAFFIC AROUND AND THROUGH THE CONSTRUCTION

- 18. CONTRACTOR IS RESPONSIBLE FOR OBLITERATION OF ANY CONFLICTING STRIPING AND RESPONSIBLE FOR ALL TEMPORARY STRIPING
- CONTRACTOR SHALL MAINTAIN ACCESS TO ALL FACILITIES, BUSINESSES AND/OR RESIDENTS AT ALL TIMES.
- 20. CONTRACTOR SHALL PROVIDE ACCESS SIGNS FOR BUSINESSES LOCATED WITHIN THE CONSTRUCTION AREA UNDER THE SUPERVISION OF SANTA FE COUNTY TRAFFIC ENGINEERING. EACH ACCESS SIGN SHALL HAVE 5 INCH, WHITE LETTERING ON BLUE BACKGROUND. SHOPPING CENTERS AND MALLS SHALL BE
- 21. 48 HOURS PRIOR TO OCCUPYING OR CLOSING OF A RIGHT-OF-WAY, CONTRACTOR SHALL NOTIFY: POLICE, FIRE DEPARTMENT, SCHOOLS, HOSPITALS, TRANSIT AUTHORITY, BUSINESSES AND/OR RESIDENTS THAT WILL BE AFFECTED
- 22. ANY FIELD ADJUSTMENTS SHALL BE APPROVED BY SANTA FE COUNTY TRAFFIC ENGINEERING.
- 23. EXCAVATIONS SHALL BE PLATED, TEMPORARILY PATCHED OR RESURFACED PRIOR TO OPENING OF TRAFFIC. A MINIMUM OF 11 FEET, SHALL BE PROVIDED FOR TRAFFIC IN ANY GIVEN DIRECTION. CONTRACTOR IS RESPONSIBLE FOR ANY WORK INVOLVED IN SATISFYING THESE REQUIREMENTS.
- 24. THE CONTRACTOR SHALL KEEP TWO LANES OPEN AT ALL TIMES EXCEPT FOR THE WATER LINE CROSSING PAJARITO ROAD. WHEN THE WATER LINE IS CROSSING PAJARITO ROAD THE CONTRACTOR SHALL KEEP ONE LANE OPEN. FAILURE TO COMPLY WILL RESULT IN LIQUIDATED DAMAGES PER SECTION 7.18 OF THE CONTRACT DOCUMENT.

SIGN FACE DETAILS



0 DETOUR LEFT LANE NO RIGHT SPEED AHEAD MUST MUST LEFT TURNS TURN RIGHT TURN LEFT

30" DO NOT WRONG ONE WAY ENTER WAY

XX=SPEED LIMIT

B/W

R/W

ALL CONSTRUCTION WARNING SIGNS

ORANGE BACKGROUND.

SHALL HAVE A BLACK LEGEND ON A

36"

W/R

PARKING ONE WAY

TRAFFIC

KEEP

RIGHT

ROAD CLOSED THRU TRAFFIC MERGE LEFT

© [DETOUR_) © CDETOUR

LANE CLOSED

R11-6-48

B/W

ROAD CLOSED

THRU TRAFFIC

R11-4-60

EŅD

DETOUR

END ROAD WORK

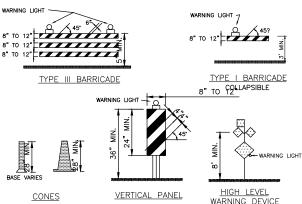
DETOUR

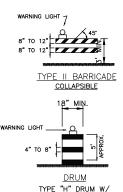
M4-9R-30

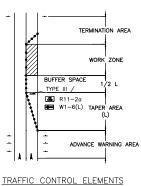


DETOUR

M4-9L-30







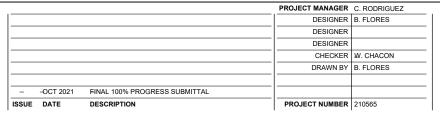
LEGEND

WORK AREA

- BARRICADE TYPE I, TYPE II, OR TYPE "H" DRUM W/REFLECTIVITY III-A SHEETING
- BARRICADE TYPE III
- VERTICAL PANEL
- WARNING SIGN
- DISTANCE BETWEEN SIGNS A DISTANCE MEASURED IN FEET EQUAL TO A VALUE OF TEN TIMES THE SPEED LIMIT OF THE STREET
- \Box FLAGMAN POSITION
- SPACING BETWEEN BARRICADES— A DISTANCE MEASURED IN FEET EQUAL TO THE SPEED LIMIT OF THE STREET
- TAPER LENGTH SEE CHART BELOW

THE TANGENT LENGTH IS EQUAL TO THE TAPER LENGTH FOR A GIVEN STREET

NOTICE OF EXTENDED PAYMENT PROVISION THIS CONTRACT ALLOWS THE OWNER TO MAKE
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TEMPORARY TRAFFIC CONTROL STANDARD DETAILS - II

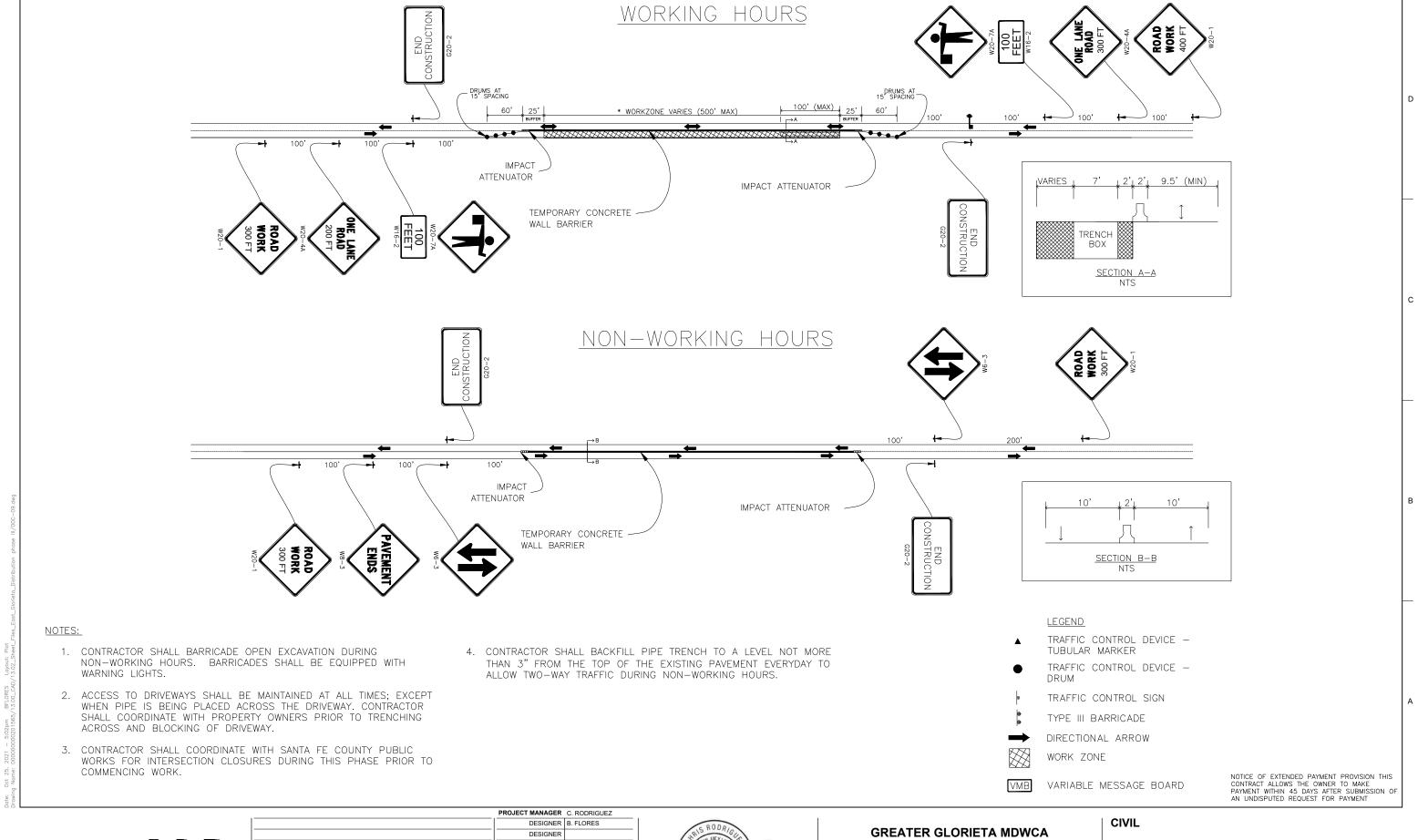


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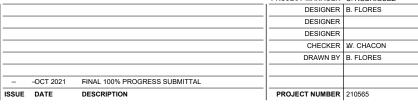
SHEET C-08

TYPE "H" DRUM W REFLECTIVITY III-A SHEETING

SCALE NONE



FDS





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TEMPORARY TRAFFIC CONTROL STANDARD DETAILS - III

0	1"	2"	F
Ì	FULL SIZE GRAPHIC	CCALE	

FILENAME 00C-09.dwg
SCALE NONE

C-09

