ADDENDUM NO. 1

To: All Planholders
From: Frank A. Ferris, PE
Subject: United Irrigation District
Pump Station E458
Date: August 16, 2024

The Contract Documents & Plans are hereby modified as follows:

CONTRACT DOCUMENTS

I. SECTION 00030 – INVITATION TO BIDDERS:

- Bid date has been extended until August 27th, 2024. Replace the "received until" date of Tuesday, August 20th, 2024, with Tuesday, August 27th, 2024.

II. SECTION 00300 – PROPOSAL

- Replace Bid Schedule Sheets 00300 Sheets 00300-2, 00300-3 and 00300-4 with the attached revised pages, 00300-2 Addendum No. 1, 00300-3 Addendum No. 1 and 00300-4 Addendum No. 1.
- Add Bid Schedule Sheet 00300-5 Addendum No. 1.

III. SECTION 02050 – SUBSURFACE INVESTIGATION

- Clarification – Water proofing of concrete structures is not required.

IV. SECTION 02615 – DUCTILE IRON PIPE SECTION

- Replace 2.2E with the following:
  Bolts for buried service shall be stainless steel for flange connections, and Corten for mechanical joint connections. All buried pipe and fittings shall be poly wrapped in accordance with 2.3

V. MECHANICAL SPECIFICATIONS

Insert the following sections (attached) which are called out on the Table of Contents but inadvertently left out of the document:

- Section 15101 Gate Valves
- Section 15110 Check Valves
- Section 15150 Fabricated Stainless Steel Gates and Actuators

REFER TO CONTRACT PLANS

Plan Sheet 4
Replace Plan Sheet 4 with the attached Plan Sheet 4, 8-16-24 Addendum No. 1.

Plan Sheet 5
Change proposed 12" overflow (see Sheet 6) label to (see Sheet 14).

Plan Sheets 5&6
Change linear dimension of 40 linear feet of 36" ø 100 psi PVC, to 42 linear feet of 36" ø 100 psi PVC.

Add the following note:
Contractor may furnish and install a higher pressure class C900 PVC if 100 psi is not readily available.

Plan Sheet 6
On the Pump Station Profile View, change the 36" intake piping from 44 linear feet to 42 linear feet.

On the Standpipe Profile View, a proposed 20" diameter gate valve, flanged, is also required, as shown on Sheet 14 on the discharge piping.

Plan Sheet 7
On the 12" Pump Section, the "proposed concrete pipe support" is a thrust block, as shown in the structural plans. Typical of 4 places.

On the intake headwall section, the footing is 18", not 12".

Change "FG 143.00" to read "T.O.C. 143.00".

Change prop. 24" diameter DI pipe to 20".

Plan Sheet 8
On X-Section A and X-Section B, the "proposed concrete pipe support" is a thrust block, as shown in the structural plans.

Change the words "flap gate" to "check valve".

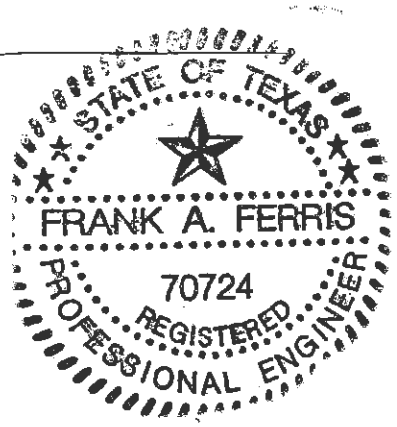
Change spool callout in X-Section A to 10".
Plan Sheet 10
Pump Station Plan View No. 1 and Section View No. 2 concrete thrust blocks reference Sheet 9, not Sheet 8.

Plan Sheet 14
On the proposed Meter Vault Detail, the proposed PVC weld on flange is a Van Stone – style flange.

Plan Sheet 15
Clarification – Middle braces only required at ends and corners. Delete other middle braces. Bottom braces are not required; however, 7 ga. tension wire as stated in the specifications shall be used.

Addendum No.1 Issued by,
FERRIS, FLINN & MEDINA, LLC
TBPE Firm Reg. No. F-897
UID, District Engineer

Frank A. Ferris, PE



8-16-24

Section 15101
Gate Valve Specifications

SECTION 1 - GENERAL

1.01 - The resilient seat gate valves shall fully comply with the latest revision of AWWA C509* and shall also be UL 262 listed and FM 1120/1130 approved. The valves shall be tested and certified to ANSI/NSF 61 & 372.

1.02 - The valve shall have a 350 psig working pressure.

1.03 - The valve type shall be NRS (non-rising stem) or OS&Y (outside screw & yoke) as specified.

1.04 - The valve shall have an arrow cast on the operating nut or handwheel showing opening direction. The direction of opening shall be as specified.

1.05 - The NRS valves shall be provided with a 2" square operating nut and OS&Y valves shall be provided with a handwheel. The bolt that attaches the operating nut to the stem shall be recessed into the operating nut so as not to interfere with valve wrench operation.

1.06 - The valves shall have Type 304 stainless steel bolts and nuts for the stuffing box and bonnet.

1.07 - The valve stem shall be made of bronze ASTM B-138 alloy C67600 H04 hard bar stock material. The stem shall have at least one "anti-friction" thrust washer above and below the stem collar to reduce operating torque. The design of the NRS valve stem shall be such that if excessive input torque is applied, stem failure shall occur above the stuffing box at such a point as to enable the operation of the valve with a pipe wrench or other readily available tool. The stem material shall provide a minimum 73,000psi tensile strength with 8% elongation and yield strength of 48,000psi. Valves with cast stems or two-piece stem collars are not acceptable. Optional bronze stem materials may be ASTM B78 alloy C66100 H02 (half hard). Optional stainless-steel stems may be hot forge upset or machined from bar stock in the following grades:

a. 304 Stainless Steel

b. 316 Stainless Steel

1.08 - The NRS valves shall have a stuffing box that is O-ring sealed. Stuffing box shall have two integrally cast lifting lugs. Two O-rings shall be placed above and one O-ring below the stem thrust collar. The thrust collar shall be factory lubricated. The thrust collar and its lubrication shall be isolated by the O-rings from the waterway and from outside contamination providing permanent lubrication for long term ease of operation. Valves without a stuffing box are unacceptable. Valves without at least three stem O-rings are also unacceptable.

1.09 - The valve body, bonnet, and stuffing box shall be composed of ASTM A536 ductile iron. The body and bonnet shall also adhere to the minimum wall thickness as set forth in Table 3, section 4.4.1.2 of AWWA C509. Wall thickness less than those in table 2 are not acceptable.

1.10 - The valve disc must be fully (100%) encapsulated in SBR ASTM D2000 rubber material. Guide caps of an acetal bearing material shall be placed over solid guide lugs to prevent abrasion and to reduce the operating torque.

1.11 - The valves shall have all internal and external ferrous surfaces coated with a fusion bonded thermosetting powder epoxy coating of 10 mils nominal thickness. The coating shall conform to AWWA C550.

1.12 - The tapping valves shall have an inlet flange conforming to ANSI B16.1Class 125 for attachment to a tapping sleeve or cross. In addition, the valve inlet flange shall have a machined projection or raised face complying with MSS SP-60 for accurate alignment to the mating recess in the tapping sleeve flange. The seat opening of the tapping valves shall be at least .30" larger than the nominal pipe size to permit full diameter cuts.

1.13 - The valves shall be warranted by the manufacturer against defects in materials or workmanship for a period of ten (10) years from the date of manufacture. The manufacturing facility for the valves must have current ISO certification.

1.14 - The NRS valves shall be Mueller® A2362 Series or approved equal.

1.15 - The OS&Y valves shall be Mueller R2362 (4"-12") and R2361 (2"-3") Series or approved equal.

1.16 - The NRS tapping valves shall be Mueller T2362 Series or approved equal.

END OF SECTION

SECTION 15110
RUBBER FLAPPER CHECK VALVE SPECIFICATIONS

1.01 - GENERAL

Check valves shall be designed, manufactured and tested in accordance with American Water Works Association Standards AWWA C-508. Check valves shall be suitable for cold working pressures of 150 psig. The check valve shall be of the full body type, with an access cover constructed of ductile iron and a backflow device for draining or pump priming.

2.01 - BODIES

The valve body and cover shall be constructed of ductile iron. Check valves shall be furnished with ANSI 150 pound flat-faced flanges. The valve body shall be full flow equal to nominal pipe diameter at all points through the valve. The seating surface shall be on a 45 degree angle to minimize disc travel. The top access cover shall be domed in shape to provide flushing action over the disc for operating in lines containing high solids content.

3.01 - BACKFLOW ACTUATOR

The check valve shall be equipped with a backflow actuator device for the purpose of draining or pump priming. The backflow actuator shall be of manual operation to allow the check valve disc to be opened as desired by the owner for backflow through the valve.

4.01 - DISC

The valve disc shall absolutely prevent the return of water or sewage back through the valve when the inlet pressure decreases below the delivery pressure, on pump shutoff or power failure. The valve shall be tight-seating. The disc shall be precision molded Buna-N (NBR) ASTM D2000. The disc shall be of one piece construction, precision molded with an internal o-ring type sealing surface, and contain alloy steel and nylon reinforcement in the flexible hinge area. The flex portion of the disc shall be warranted for twenty-five years. Non-slam closing characteristics shall be provided through a short 35 degree disc stroke. The valve disc shall be cycle tested 1,000,000 times in accordance with ANSI/AWWA C508, showing no signs of wear, cracking or distortion to the valve disc or seat, and shall remain drip tight at both high and low pressures. The test results shall be independently certified.

5.01 - COATINGS

The valves shall be shop-primed and painted in accordance with 09900.

6.01 - PRE-INSTALLATION TRAINING

The supplier or manufacturer shall include and provide pre-installation training for the supplied valves in accordance with the manufacturer's recommended training manual. The pre-installation training manual shall be included with the shop drawing submittals as part of the review process.

7.01 - SITE COMMISSIONING

Valve vendor or manufacturer's representative shall provide the services of a factory trained and authorized representative for a sufficient period of time as required to ensure proper adjustment, installation and operation of the valve. Pre-installation shall be required prior to the delivery of the valves to the selected installers.

8.01 - EXPERIENCE AND REQUIREMENTS

The manufacturer shall have had successful experience in manufacturing valves of this type service in the sizes indicated. The manufacturer shall have at least 10 years experience in the manufacture of rubber flapper check valves. All valves shall be hydro-statically tested and seat tested to demonstrate zero leakage. When requested, the manufacturer shall provide test certification and required documentation.

9.01 - ACCEPTABLE MANUFACTURERS

The valve shall be Crispin RF Series, as manufactured by Crispin-Multiplex Manufacturing Co. or equal, as approved by the Engineer.

END OF SECTION

SECTION 15150
FABRICATED STAINLESS STEEL SLIDE GATES & ACTUATORS

PART 1 - GENERAL

1.01 SCOPE

A. Slide and weir gates, including lifts, stems and accessories, shall be of the size and type shown on the drawings and specified herein. Gate type, height, width, lift type, stem diameter and frame height for the most common gate sizes are listed below. Fabricated gates are to be designed so that a minimum safety factor of 5 to 1 is achieved, based on the ultimate strength of the material used.

GATE SCHEDULE:
Size: 36"x36"
Seating and Unseating Head Required (ft.): 11
Actuation: Manual
Material: Fabricated Stainless Steel
Operator: Geared Crank
Gate Height: (invert opening to top of wall) = 13 feet

1.02 MANUFACTURER

A. Fresno Valves & Castings, Inc. or approved equal.

1.03 MATERIALS OF CONSTRUCTION

Frame, Slide and Reinforcing
A. Stainless steel, ASTM A276, Type 304 or 316

1.04 STEMS

A. Stainless steel ASTM F593/F594, Allow Group 1

1.05 ANCHORS

A. Stainless steel, ASTM F593/F594, Alloy Group 1

1.06 RUBBER SEALS

A. Neoprene, ASTM D2000, Grade BE625

1.07 GUIDES

A. Ultra High Molecular Weight (UHMW) Polymer, ASTM D4020

PART 2 – GATE CONSTRUCTION

2.01 FRAME

A. Gate frame shall be flat back or channel mount. (Spigot-back frames are not acceptable.) The frame shall be an integral unit of structural shapes, rigidly assembled to form the waterway opening. The frame members shall form guides for the slide, and shall be of sufficient length to support one-half of the height of the slide when in the full open position. Holes shall be provided for mounting of anchor bolts.

The head channels shall be welded or bolted to the gate frame. The channels are to be sufficiently spaced to allow removal of the gate slide. The primary slot of the frame shall contain polymer guide bars, when specified, to prevent metal-to-metal contact between slide and frame.

2.02 SLIDE

Gate slide shall conform to the safety factors stated under "General" but shall, in no case, be less than ¼ in. thickness. Deflection under full head shall be limited to 1/360 (AWWA – 1/720th) of the span. The stem connector bracket or stem block pocket shall be welded to the slide.

2.03 Flushbottom Seals

Slide gates shall incorporate a flush-bottom seal that is attached to the bottom frame invert member. The seal shall be of the materials shown in "Materials of Construction" above. Seals attached to the slide are not acceptable.

2.04 Seals

J-seals shall be provided if specified. Such seals shall be securely fastened to the frame with formed stainless steel retainers and shall be replaceable and adjustable without removing the gate from the installed position. The corners of the J-seals shall be vulcanized.

2.05 Stems

Gate stem diameter shall be adequate to withstand twice the force created by a 40-lb pull on the handwheel or crank. Stems shall have rolled threads with a maximum roughness of 16 micro-inches. The stem shall be supported by angle guides or cast iron with a cast bronze guide collar, spaced to provide an l/r ratio of 200 or less. Stems shall withstand 1.25 times the stalled motor thrust of an electric actuator.

2.06 Manual Lifts

Gate lifts shall be handwheel or geared crank type as shown in the "Gate Schedule." Lifts shall operate the gate with a maximum pull of 40 lb on the handwheel or crank. Handwheel or crank shall be located approximately 36 inches above grating or walkway. All lifts shall have bronze lift nuts and a bronze stop nut to limit the downward travel of the stem and slide. All geared lifts shall have cast iron housings. Aluminum housings and pedestals shall not be acceptable. All lifts shall be rising or non-rising stem type. Stem covers shall be furnished if specified. Bearing lifts shall be grease lubricated and regreasable through grease zerks.

Fresno Valves and Castings, Inc.
PO Box 40
Springfield Ave,
Selma, California 93662
(559) 834-2511 Fax (559) 834-4821

PART 3 – INSTALLATION

Gates shall be installed in accordance with manufacturer's instructions. The Contractor shall demonstrate to the Owner's representative that the gate is plumb and properly operates prior to placing the gate into service. The gate shall be lubricated in accordance with manufacturer's operation and maintenance manual by the Contractor.

END OF SECTION

United Irrigation District
Pump Station E458
Bid Schedule

Bid Schedule A - Texas Water Development Board Funded Items					
Bid Item	Qty	Units	Description	Unit Price	Total Price
1	1	L.S.	Development and implementation of Stormwater Pollution Prevention Plan in accordance with construction plans and specifications for the lump sum price of:		
2	1	L.S.	Construction of Pump Station including excavation, forming, waterstop, backfill, piping, rebar, structural steel, installation of pumps and electric motors, and any other incidentals necessary in accordance with construction plans and specifications for the lump sum price of:		
3	1	L.S.	Design and construction of 7' diameter, 90' tall Welded Steel Standpipe to include a concrete foundation, welded inlet piping with flanged connection for yard piping, welded dischage piping with flanged connection for yard piping, welded overflow piping with flanged connection for yard piping, ladders,two (2) 30 inch manways, roof vent, handrail, antenna mount, coating, and any other incidentals necessary in accordance with construction plans and specifications for the lump sum price of:		
4	1	L.S.	Construction of Intake Stucture including piping, concrete headwall, excavation, forming, rebar, structural steel, waterstop, backfill, barscreen, canal repair, furnishing and installation of fabricated stainless steel slide gate, and any other incidentals necessary in accordance with the construction plans and specifications for the lump sum price of:		

Bid Schedule A - Texas Water Development Board Funded Items					
Bid Item	Qty	Units	Description	Unit Price	Total Price
5	1	L.S.	Furnish and install all piping, other than 24 inch piping, in accordance with construction plans and specifications to include fittings, supports, polywrap, pipe bedding, and any other incidentals necessary for the lump sum price of:		
6	147	L.F.	Implementation of Trench Safety System for piping for trenches deeper than four (4) feet, other than 24 inch piping in accordance with the specifications per linear foot:		
7	2645	S.Y.	Hydromulch of all disturbed areas in accordance with specifications for the unit price of:		
8	74.5	1,000 gal.	Watering at the rate of one half inch (1/2") per day for ten (10) days in accordance with specifications for the unit price of :		
9	1	L.S.	Furnish and install all electrical wiring, fixtures and components in accordance with construction plans and specifications, and any other incidentals necessary for the lump sum price of:		
10	1	L.S.	Furnish and install all Supervisory Control And Data Acquisition (SCADA) components in accordance with construction plans and specifications, and any other incidentals necessary for the lump sum price of:		
11	461.65	S.Y.	Construct 6" thick caliche paving including 6" subgrade compacted to 95% standard proctor density for the unit price of:		
12	1	L.S.	Site grading, fencing, cleanup, and any other work required but not included in Bid Items 1-11 in accordance with construction plans and specifications for the lump sum price of:		
			Total Amount Bid Schedule A:		

Alternate Bid Schedule A					
Bid Item	Qty	Units	Description	Unit Price	Total Price
1	1	L.S.	Deduction for deletion of U.S. Iron & Steel Requirements specified in Division 00950 for Bid Schedule A for the lump sum deduct of:		
			Total Amount Alternate Bid Schedule A:		

Bid Schedule B - U.S. Bureau of Reclamation Funding - 24" Pipeline					
Bid Item	Qty	Units	Description	Unit Price	Total Price
1	343	L.F.	Furnish and install 24 inch C900 CL100 PVC pipeline in accordance with construction plans and specifications, and any other incidentals necessary for the lump sum price of:		
2	343	L.F.	Implementation of Trench Safety System for piping for trenches deeper than four (4) feet in accordance with the specifications for the unit price of:		
3	1	L.S.	Connect to existing 24 inch PIP, 100PSI PVC pipeline with transition coupling in accordance with construction plans and specifications for the lump sum price of:		
4	1	L.S.	Furnish and install meter vault including well, top, gravel foundation, PVC flange, flanged coupling adapters, magnetic meter, and any other incidentals necessary in accordance with construction plans and specifications for the lump sum price of:		
5	1	ea.	Furnish and install 24 inch x 20 inch mechanical joint tee with megalugs and polywrap in accordance with construction plans and specifications for the unit price of:		

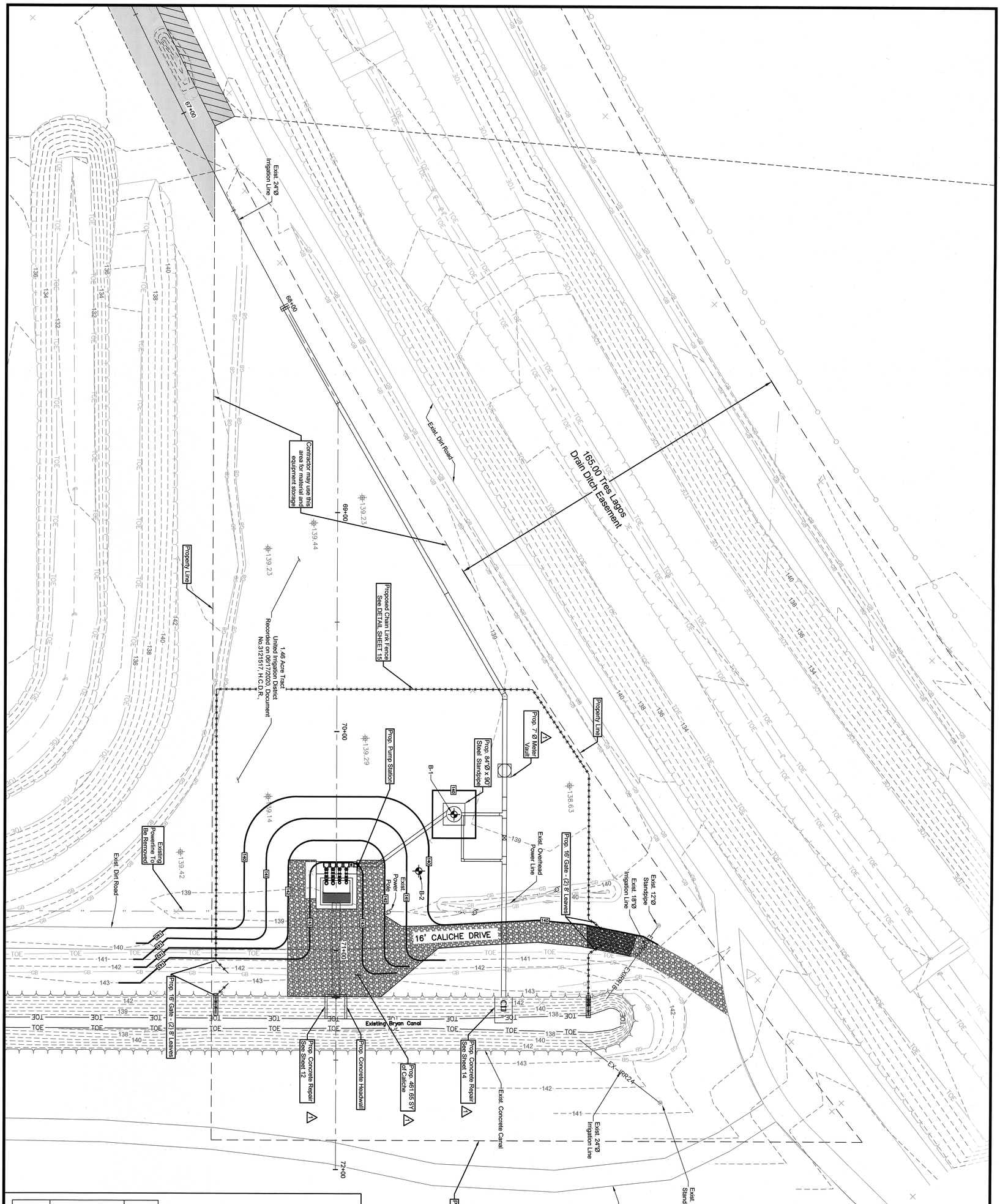
Bid Schedule B - U.S. Bureau of Reclamation Funding - 24" Pipeline					
Bid Item	Qty	Units	Description	Unit Price	Total Price
6	1	ea.	Furnish and install 24 inch motor-operated butterfly valve in accordance with construction plans and specifications for the unit price of:		
7	1	L.S.	Furnish and install 24 inch x 12 inch tee, mechanical joint, with megalugs and polywrap in accordance with construction plans and specifications for the lump sum price of:		
8	1	ea.	Furnish and install 24 inch 45 degree bend, flange x mechanical joint with megalugs and polywrap in accordance with construction plans and specifcations for the unit price of:		
9	1	ea.	Furnish and install 24 inch 22.5 degree bend, mechanical joint, in accordance with the construction plans and specifications for the unit price of:		
10	1	ea.	Furnish and install 24 inch 90 degree bend, flanged, in accordance with the construction plans and specifications for the unit price of:		
11	1	L.S.	Furnish and install 24 inch ductile iron spool, flanged, at canal bank in accordance with construction plans and specifications for the lump sum price of:		
12	1	L.S.	Repair concrete lined canal at 24 inch penetration into Bryan canal to include welded wire reinforcement, and concrete in accordance with construction plans and specifications for the lump sum price of:		
			Total Amount Bid Schedule B:		

Proposed Time of Completion of Base Bid A+B is longer than contract specified Time of Completion of 270 Calendar Days.

_____ Calendar Days

Proposed Alternate Time of Completion of Alternate Bid Schedule A for deletion of US Iron and Steel Requirements is constructed.

_____ Calendar Days



LEGEND

- EXIST. IRRIGATION EASEMENT
- EXIST. FUTURE EASEMENT REMOVAL
- EXIST. OVERHEAD POWERLINE
- EXIST. TOP OF BANK
- EXIST. CONTOUR
- PROP. CONTOUR
- EXIST. GRADE
- B-1 GEOTECHNICAL BORE LOCATION
- IRRIGATION STANDPIPE
- IRRIGATION VALVE
- POLE GUY WIRE (ANCHOR)
- POWER POLE

Plan View
Scale: 1" = 20'

NOTES:

1. CONTRACTOR SHALL FIELD VERIFY HORZ. & VERT. LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION
2. THE ENGINEER WILL PROVIDE CONSTRUCTION STAKING FOR LINE & GRADE OF STRUCTURES AND PIPELINES

4 / 20	SCALE: AS SHOWN DRAWN BY: MMO FILE:202065 DATE:8/16/2024	UNITED IRRIGATION DISTRICT PUMP STATION E458 PAVING, GRADING, & FENCING PLAN	REVISIONS 8-16-24 ADDENDUM NO. 1	8-16-24 SEAL STATE OF TEXAS FRANK A. FERRIS 70724 REGISTERED PROFESSIONAL ENGINEER

FERRIS, FLINN & MEDINA, LLC
ENGINEERS SURVEYORS
1405 N. STUART PLACE ROAD
PALM VALLEY, TEXAS 78552
PHONE (956) 364-2236 FAX (956) 364-1023
TEXAS BOARD OF PROFESSIONAL LAND SURVEYORS FIRM REGISTRATION NO.: 100370-00
TEXAS BOARD OF PROFESSIONAL ENGINEERS FIRM REGISTRATION NO.: F-897

F:\0202 UID\202-065 Pump Station E458\Dwg\202-065 New Four Pump Config..dwg, 04_Paving & Grading