

Addendum No. 1
for Construction of
Water Pump Station
for the
CAGLE-FREDONIA UTILITY DISTRICT
in
SEQUATCHIE COUNTY, TENNESSEE

CONTRACT 125 – WATER PUMP STATION – JOHN HENRY LEWIS ROAD

Date: July 15, 2025
Bid Date: July 24, 2025
Bid Time: 2:00 P.M. LOCAL TIME

THIS ADDENDUM IS ISSUED TO CLARIFY QUESTIONS RAISED BY BIDDERS AND TO MAKE MODIFICATIONS TO THE SPECIFICATIONS, PLANS, AND BID DOCUMENTS FOR THIS PROJECT. THE FOLLOWING CHANGES WILL BECOME A PART OF THE CONTRACT DOCUMENTS FOR THIS PROJECT. **ACKNOWLEDGE RECEIPT OF THIS ADDENDUM ON THE BID FORM.**

PLANS: Replace Sheet 3 with attached Sheet 3, the following items have been updated:

- General Note 5.
- Design Criteria - “Controls”.
- Revised note for “panel mounting” on Interior Plan View.

SPECIFICATIONS:

- **Replace Table of Contents page vi with attached.** Note deleted Section WPS 10C Equipment – Miscellaneous.
- **Replace Section 02603 page 25 with attached.** Note revised paragraph 2.05.A.4a. and 4b.

**THIS ADDENDUM CONSISTS OF THREE (3) PAGES
AND ONE (1) PLAN SHEET**

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**CAGLE-FREDONIA UTILITY DISTRICT
WATER PUMP STATION
CONTRACT 125 – WATER PUMP STATION - JOHN HENRY LEWIS ROAD**

TECHNICAL SPECIFICATIONS – WATER PUMPING STATION

<u>DESCRIPTION</u>	<u>BEGINNING PAGE NO.</u>
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FINISHES – PAINTING

1. General.....	WPS 8A Page 1
2. Materials	WPS 8A Page 1
3. Application	WPS 8A Page 1
4. Acceptance of Work.....	WPS 8A Page 2
5. Clean Up.....	WPS 8A Page 2
6. Painting Schedule	WPS 8A Page 2

EQUIPMENT – GENERAL REQUIREMENTS

1. Scope	WPS 10A Page 1
2. Quality of Equipment.....	WPS 10A Page 1
3. Structural Design	WPS 10A Page 1
4. Lubrication Provisions	WPS 10A Page 1
5. Motor Requirements	WPS 10A Page 1
6. Submittals.....	WPS 10A Page 1
7. License Fees, Patents, Etc.	WPS 10A Page 1
8. Installation.....	WPS 10A Page 1
9. Substitutions of Equipment	WPS 10A Page 2

<u>ELECTRICAL –</u> Electrical Work, General.....	WPS 16A Page 1
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TECHNICAL SPECIFICATIONS – WATER PUMP STATION

SECTION 02603 Factory Assembled Booster Pump Station.....	02603-1
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TECHNICAL SPECIFICATIONS – SCADA

SECTION 16900 Data Communications.....	16900-1
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- I. PUMP 3 START FAIL ALARM message occurs when the assigned pump 3 run signal does not go active with the activation of the associated pump call relay. This event will also activate the assigned pump 3 fail telemetry contact.

2.05 INSTRUMENTATION

A. Pressure Gauges

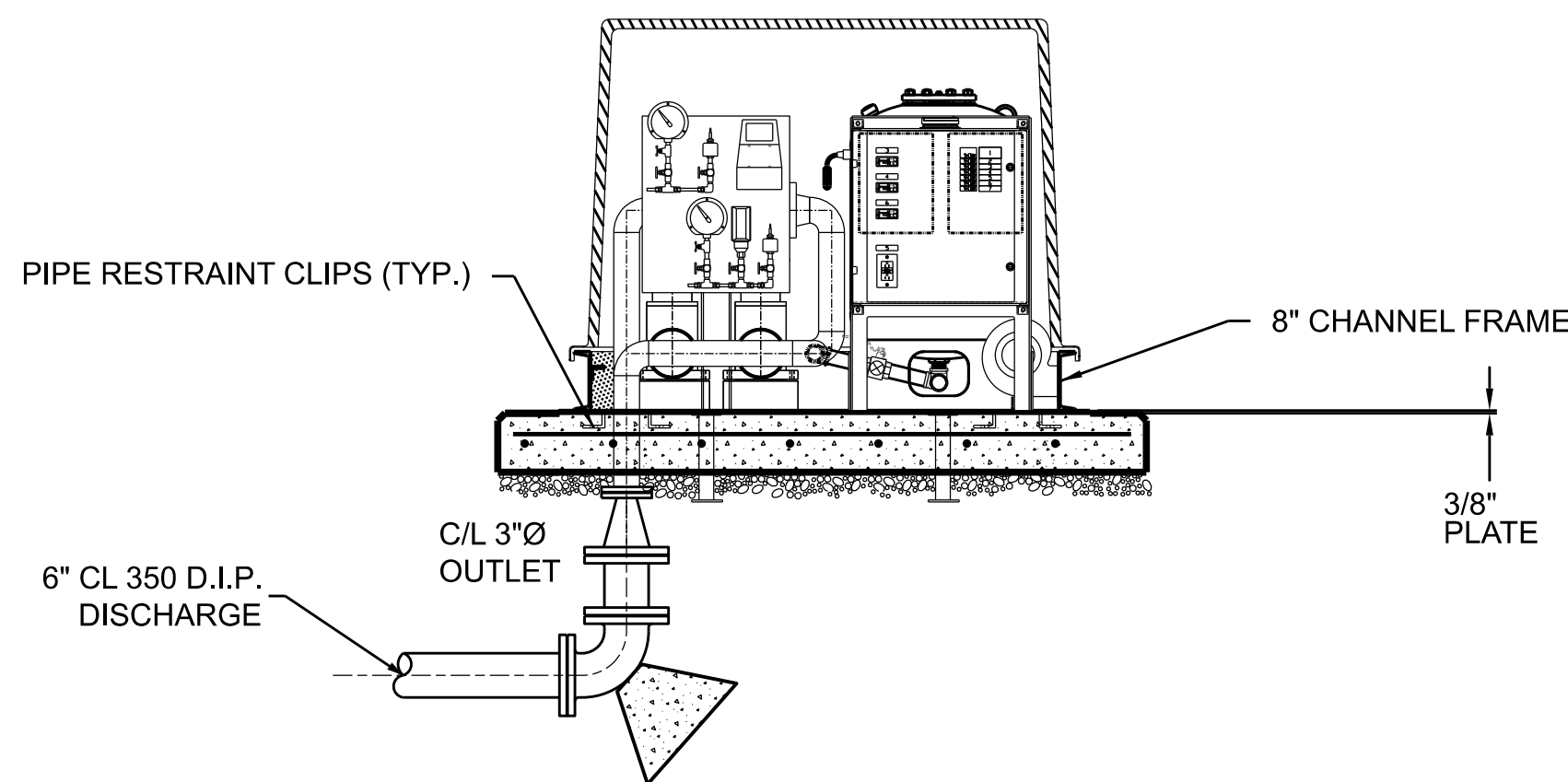
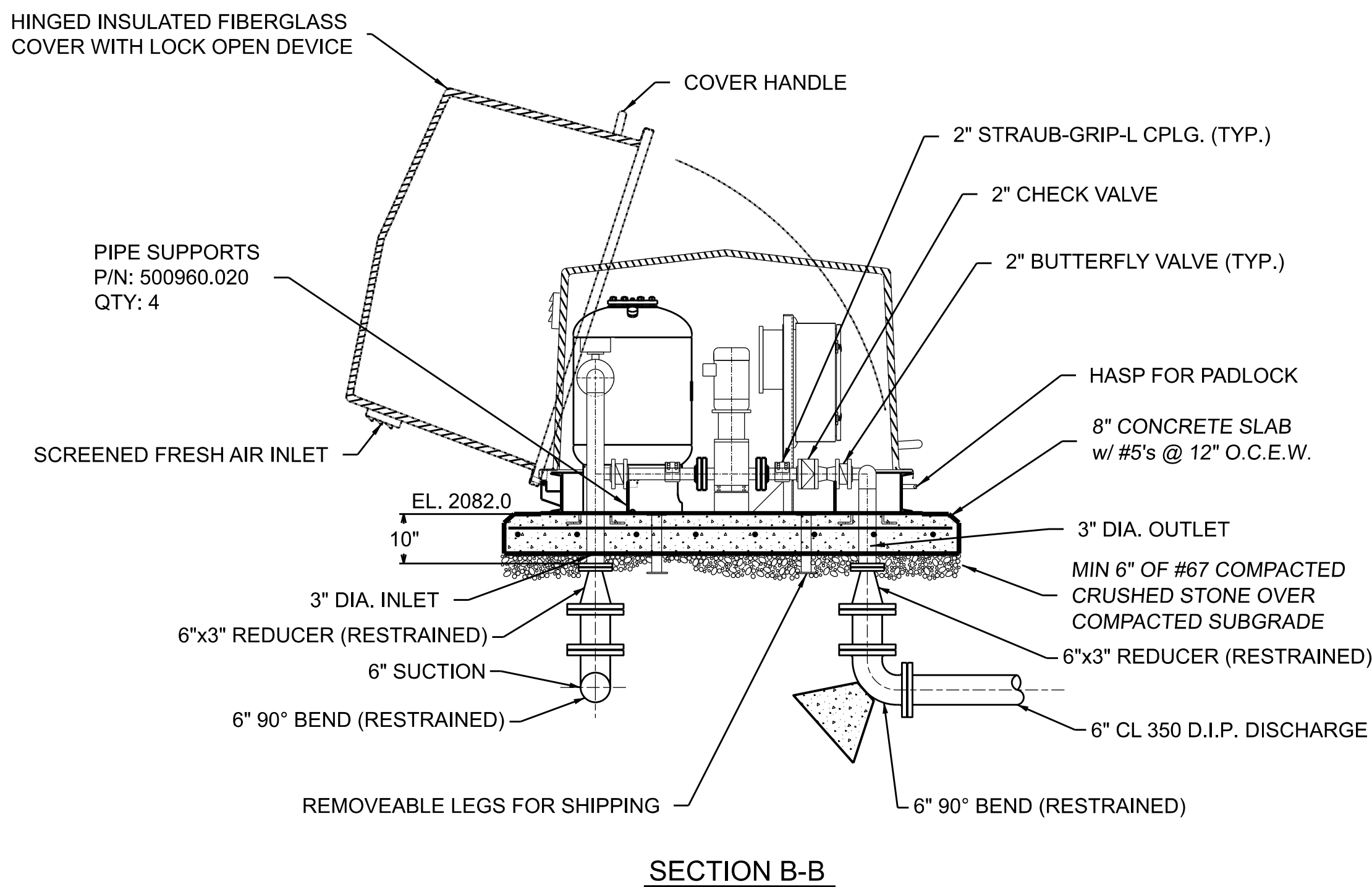
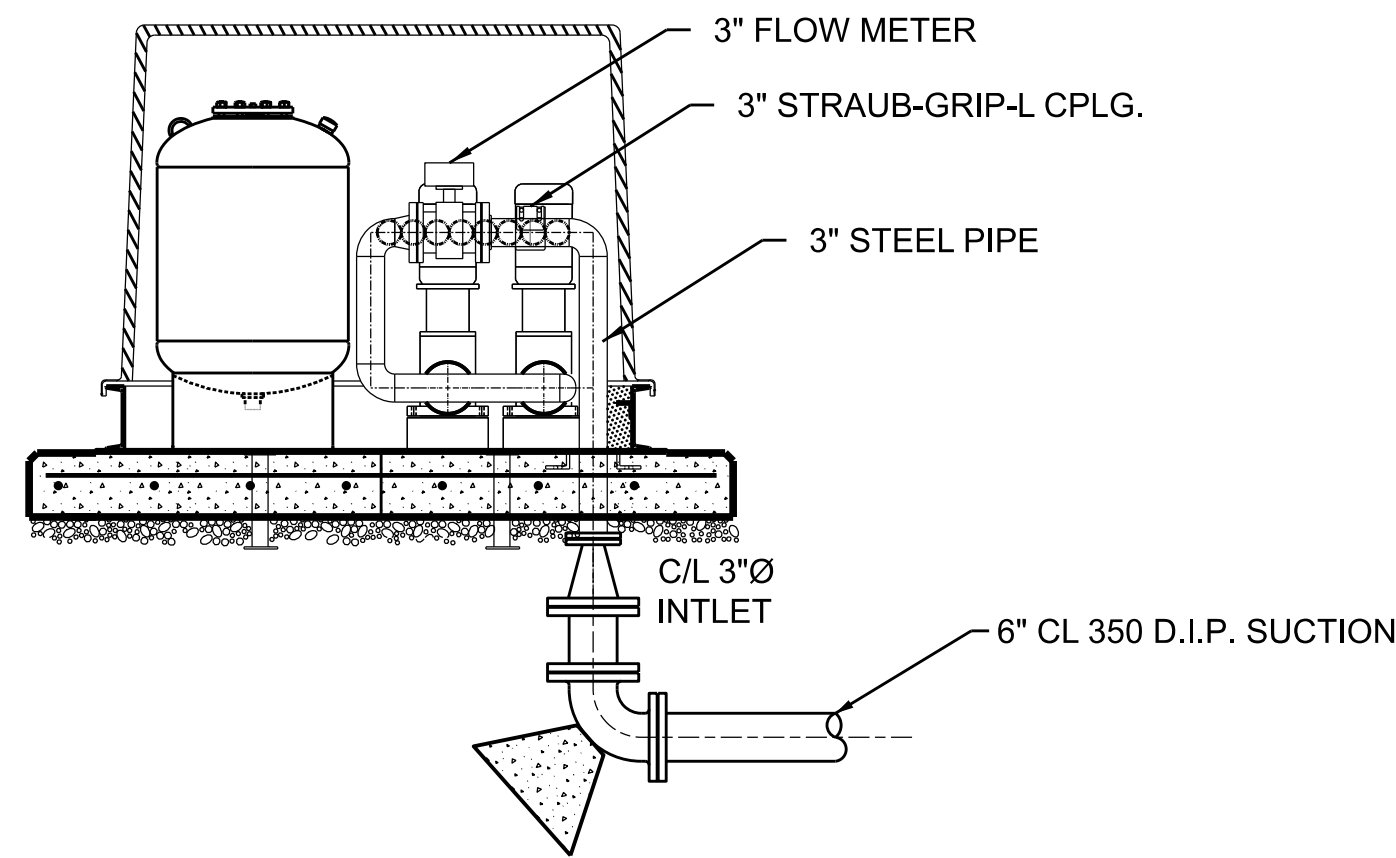
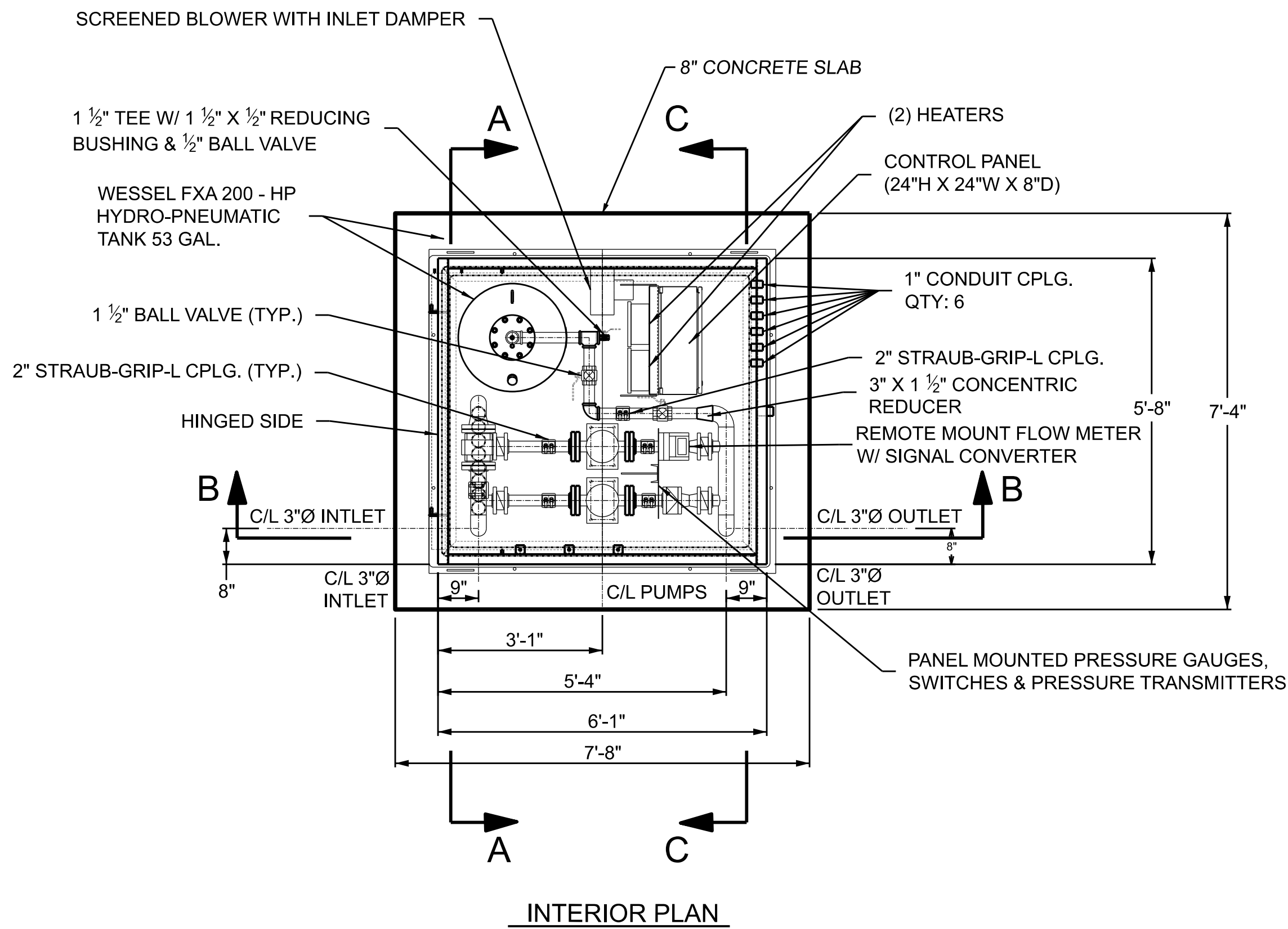
1. Pressure gauges shall be provided to indicate suction and discharge pressure and shall be wall mounted on a steel plate as near to the pressure source as possible. There shall be gauges provided on the suction and discharge of each pump.
2. The gauges shall have 4 1/2-inch minimum diameter faces with molded black phenolic case, turret type with snap ring face mounting.
3. The gauge internal construction shall include phosphor bronze bourdon tube with bronze movement and shall be liquid filled. The gauges shall have 1/4" N.P.T. bottom connections, flexible sensing lines, bronze snubbers, and needle valves.
4. Pressure gauge ranges shall be as follows:
 - a. Suction Pressure: 0 - 30 in. Hg / 0 - 160 psi.
 - b. Discharge Pressure: 0 - 200 psi.

B. Pressure Switches

1. Pressure switches shall be provided to shut down the pumps in the event of an operator determined low suction pressure and/or high discharge pressure.
2. The pressure switches shall be the snap action type rated for 5 amps at 240 VAC and have an adjustable differential. Switches shall be mounted on the control panel.

C. Pressure Transmitters

1. Variable capacitance transmitters shall be provided for station inlet and discharge pressure.
2. Transmitters shall provide a 4-20 mA signal to the programmable controller. The transmitters shall have adjustments for zero and span.
3. The housing shall be welded 17-4 PH stainless steel and have the following performance specifications at a minimum: accuracy of $\pm 0.13\%$ FS at constant temperature; non-repeatability 0.02% FS; ambient operating temperature -40°F to 260°F; EMI/RFI effect <1.0% FS @ 10 V/M.



GENERAL NOTES

- STATION PIPING: INTERIOR STATION PIPING TO BE SCHEDULE 40 STEEL. ALL PIPE TO HAVE HEAT TRACE TAPE.
- STRUCTURAL STEEL: STRUCTURAL STEEL SHALL MEET ASTM A-36. STRUCTURAL TUBING SHALL MEET ASTM A500, GRADE B.
- PAINTING: CAPSULE AND STRUCTURAL STEEL SHALL BE PAINTED WITH 6MILS DFT OF TNEDEC SERIES N69. SURFACE PREPARATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. INSIDE OF STEEL PIPE TO BE TRIPLE FUSION COATED.
- DO NOT SHIM STATION. CONCRETE SLAB TO BE CONSTRUCTED LEVEL ON FIRMLY COMPACTED BASE MATERIAL.
- PRESSURE GAUGES: EACH PUMP SHALL HAVE A STANDARD PRESSURE GAUGE ON ITS DISCHARGE LINE AND A COMPOUND GAUGE ON ITS SUCTION LINE. GAUGES SHALL READ AS FOLLOWS:

SUCTION - 0 - 30 in. Hg / 0-160 psi
DISCHARGE - 0 - 200 psi
- TELEMETRY: CELLULAR TELEMETRY TO BE AS MANUFACTURED BY MISSION COMMUNICATIONS. TELEMETRY SHALL BE COMPATIBLE WITH THE OWNER'S EXISTING MISSION SYSTEM FOR MONITORING OF THE PUMP STATION.
- ALL EXTERIOR 6" PIPE SHALL BE PRESSURE CLASS 350 DUCTILE IRON WITH MECHANICAL JOINT DUCTILE IRON COMPACT FITTINGS. FITTINGS BELOW THE STATION SHALL BE RESTRAINED. PIPING UNDER STATION SHALL BE BACKFILLED WITH COMPACTED CRUSHED STONE.
- CONTRACTOR SHALL DISPOSE OF ALL EXCESS MATERIAL AND SITE CLEARING DEBRIS OFF-SITE.
- CONCRETE FOR SLAB SHALL BE 6.5 BAG MIX, MAXIMUM SLUMP OF 5.0 INCHES, 28-DAY MINIMUM STRENGTH OF 4,500 PSI. REBAR SHALL BE ASTM A 615 GRADE 60.
- INSTALL PUMP STATION AND EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS. PUMP STATION TO BE AS MANUFACTURED BY USEMCO, INC. TOMAH, WI OR PRE-APPROVED EQUAL.

DESIGN CRITERIA

CONTROLS: CELLULAR TELEMETRY, VFD's, ALTERNATING PUMPS

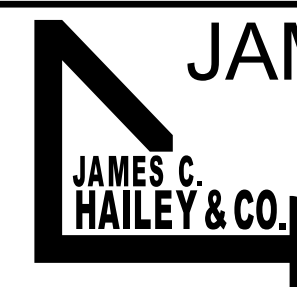
POWER SOURCE: 120/240 VOLT, SINGLE PHASE, 60 CYCLE

PUMP #1 & #2 DATA:

TYPE: MULTI-STAGE, VERTICAL IN-LINE PUMP
CAPACITY: 100 GPM @ 124 FT. TDH
MOTOR: 7.5 HP, 240V, 3 PHASE, 3500 RPM, INVERTER DUTY RATED
MODEL: GRUNDFOS SERIES CR20-3-3PH, 3-STAGE
SIZE: 2x2 - 4.13

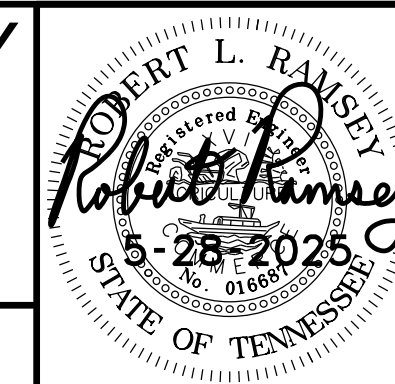
CONDUITS REQUIRED:

2 x 1" MOTOR POWER
1 x 1" ENCLOSURE POWER
2 x 1" SCADA
1 x 1" SPARE



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CAGLE - FREDONIA
UTILITY DISTRICT
Sequatchie County, Tennessee

DESIGN
RLR

DRAWN
ARK

CHECKED
RLR

DATE
MAY 2025

SCALE
AS NOTED

PROJECT NO.
23175

PLAN AND SECTIONS
JOHN HENRY LEWIS RD.
PUMP STATION

SHEET

3