

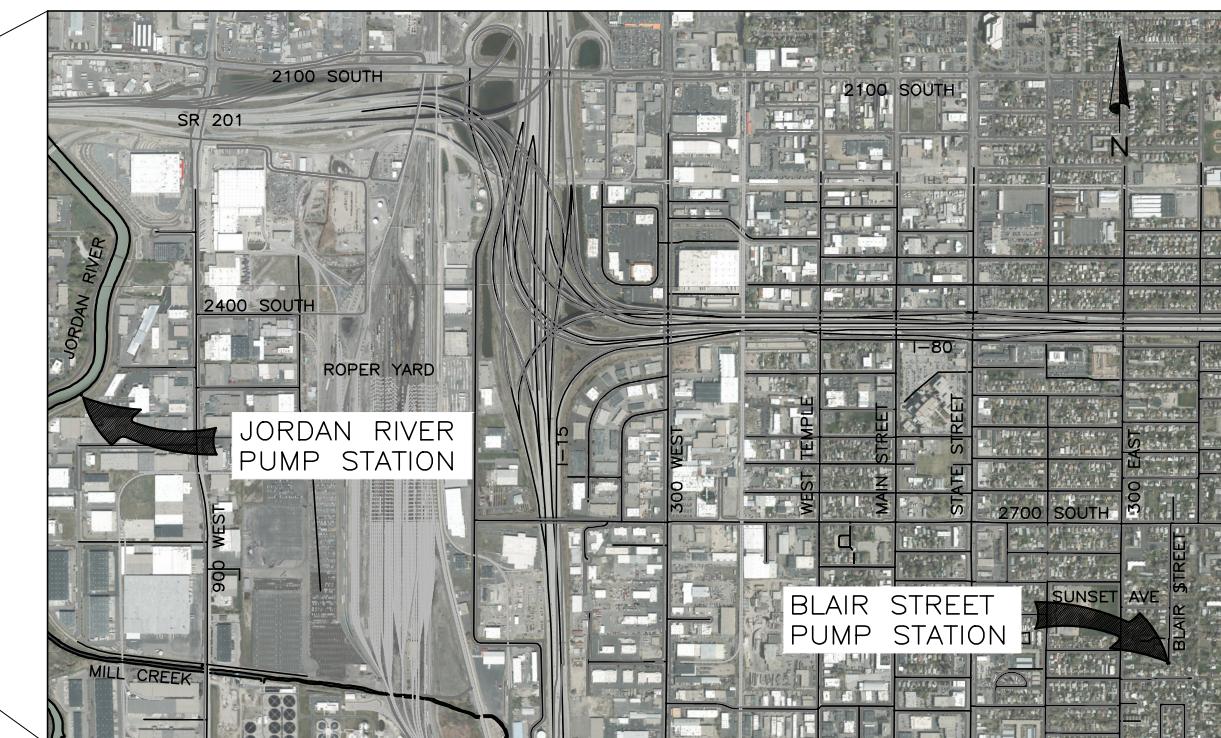
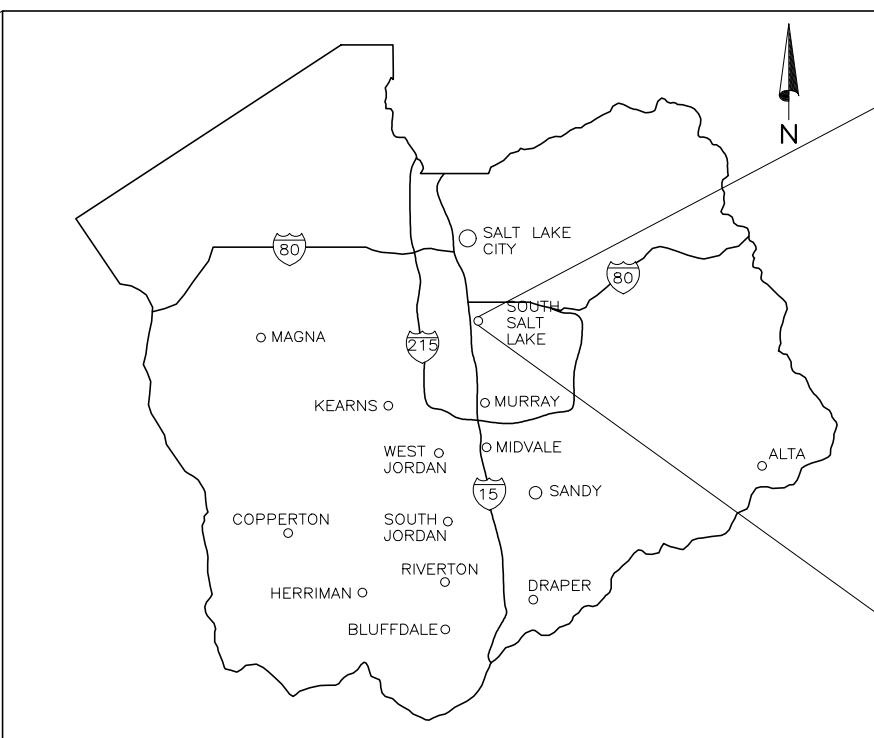
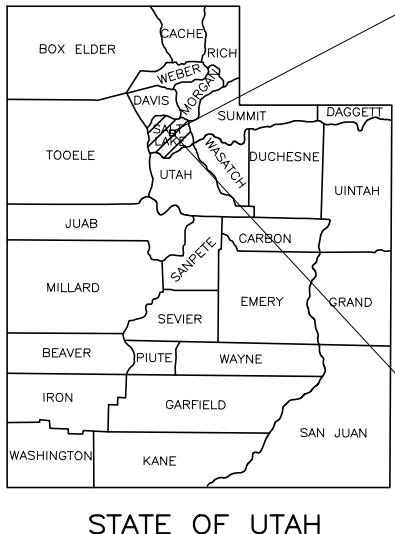
CITY OF SOUTH SALT LAKE

STORM WATER PUMP STATIONS

UPGRADES - BLAIR ST & JORDAN RIVER

AUGUST 2025
ISSUED FOR BID

FILE NAME: PROJECTS\126 - SOUTH SALT LAKE CITY\60.100 - STORM WATER PUMP STATION UPGRADES (CAD\DESIGN DWGS - BLAIR ST & JORDAN RIVER SW PS\G-1 COVER.DWG
FILE DATE: 8.21.2025 (6.22.41 (MA))



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AARON C. SPENCER, P.E. - PROJECT ENGINEER

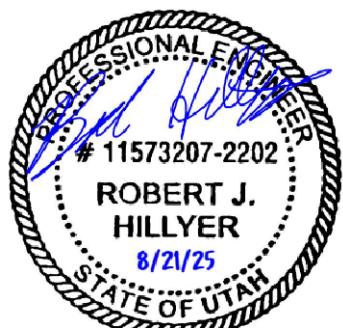
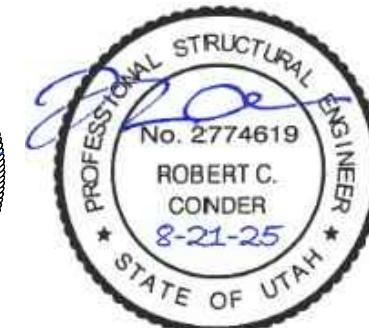
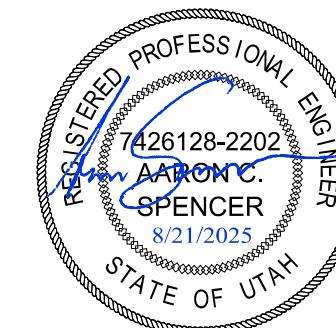
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220 EAST MORRIS AVENUE
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GENERAL NOTES

1. CONTRACTOR SHALL MEET ALL UTAH STATE DEPARTMENT OF ENVIRONMENTAL QUALITY AND U.S. EPA REQUIREMENTS WITH RESPECT TO THEIR MINIMUM RULES AND REGULATIONS.
2. CONSTRUCTION OPERATIONS SHALL BE CONDUCTED AND SIGNS, BARRICADES, AND FLASHERS SHALL BE PLACED SO AS TO COMPLY WITH OSHA, UTAH STATE INDUSTRIAL COMMISSION, LOCAL SAFETY STANDARDS, AND UDOT'S MANUAL ON UNIFORM TRAFFIC CONTROL.
3. UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES, INCLUDING WATER LINES, IRRIGATION DRAIN LINES, GAS LINES, TELEPHONE CABLES, ETC. AND ANY OTHER OBSTRUCTION DURING THE COURSE OF CONSTRUCTION AND INSTALLATION OF THE WORK. CONTRACTOR SHALL CALL BLUE STAKES (811) (1-800-662-4111) AT LEAST 3 DAYS BEFORE BEGINNING CONSTRUCTION.
4. CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN RIGHT OF INGRESS AND EGRESS SHOULD THEY VENTURE ONTO PRIVATE PROPERTY WHICH IS NOT WITHIN CITY EASEMENTS OR ACQUIRED RIGHTS-OF-WAY AND EASEMENTS.
5. UNLESS DETAILED, SPECIFIED OR INDICATED OTHERWISE, CONSTRUCTION SHALL BE AS INDICATED IN THE APPLICABLE TYPICAL DETAILS AND GENERAL NOTES. TYPICAL DETAILS ARE MEANT TO APPLY EVEN THOUGH NOT REFERENCED AT SPECIFIC LOCATIONS OR IN SPECIFIC DRAWINGS.
6. CONTRACTOR SHALL BE RESPONSIBLE TO PROTECT ALL EXISTING IMPROVEMENTS DURING CONSTRUCTION AND SHALL REPLACE OR RESTORE ANY IMPROVEMENTS DAMAGED AS A RESULT OF THE CONSTRUCTION ACTIVITY, AS DIRECTED BY ENGINEER.
7. CONTRACTOR SHALL VERIFY ALL DIMENSIONS BEFORE STARTING WORK AND SHALL IMMEDIATELY NOTIFY ENGINEER OF ANY DISCREPANCIES.
8. REFERENCE 2017 APWA STANDARD PLAN AND SPECIFICATIONS, SOUTH SALT LAKE CITY STANDARDS, AND ADDITIONAL SPECIFICATIONS INCLUDED HEREIN. IN CASE OF CONFLICT BETWEEN CODES, REFERENCE STANDARDS, DRAWINGS AND SPECIFICATIONS, THE MOST STRINGENT REQUIREMENTS SHALL GOVERN.
9. THIS PROJECT IS LOCATED IN SOUTH SALT LAKE CITY LIMITS. CONTRACTOR SHALL OBTAIN ALL APPLICABLE PERMITS AND APPROVALS FROM SOUTH SALT LAKE CITY AND SHALL COMPLY WITH SOUTH SALT LAKE CITY REGULATIONS FOR TRAFFIC CONTROL, SAFETY, EXCAVATION IN CITY OWNED RIGHTS OF WAY, ETC.
10. CONTRACTOR MUST COMPLY WITH ALL UPDES REQUIREMENTS PER THE STATE OF UTAH CONSTRUCTION GENERAL STORM WATER PERMIT (CGP). TO BE COVERED UNDER THIS PERMIT, CONTRACTOR IS RESPONSIBLE FOR PREPARATION, IMPLEMENTATION, AND MONITORING OF THE SITE STORM WATER POLLUTION PREVENTION PLAN (SWPPP); SUBMITTING AND COMPLETING AN ACCURATE NOTICE OF INTENT (NOI); REMITTING THE PERMIT FEE; AND RECEIVING AN AUTHORIZATION TO DISCHARGE LETTER AND COMPLETE AND SUBMIT A NOTICE OF TERMINATION (NOT) AT THE COMPLETION OF THE PROJECT.
11. CONTRACTOR IS RESPONSIBLE FOR SITE DUST CONTROL AND SUPPRESSION FOR THE DURATION OF THE PROJECT (WEEKENDS INCLUDED).
12. NON-SHRINK GROUT SHALL BE USED WHEREVER GROUT IS REQUIRED.

GENERAL NOTESSTORM DRAIN NOTES

1. THE EXISTING STORM DRAIN SHALL REMAIN IN SERVICE DURING CONSTRUCTION. CONTRACTOR SHALL PROVIDE, OPERATE AND MAINTAIN ANY TEMPORARY PUMPS, PIPING OR RELATED EQUIPMENT REQUIRED TO BYPASS STORM DRAIN FLOWS AROUND AREAS OF CONSTRUCTION. A PLAN OF CONSTRUCTION OPERATIONS SHALL BE PREPARED BY CONTRACTOR, SUBMITTED TO ENGINEER, AND APPROVED BY ENGINEER PRIOR TO THE START OF CONSTRUCTION.
2. SENSITIVE CONSTRUCTION WHICH WOULD EITHER OBSTRUCT STORM DRAIN FLOWS, OR THAT WOULD BE DAMAGED BY STORM WATER FLOWS, MUST BE PERFORMED WHEN THE FORECAST SHOWS MINIMAL CHANCE OF SIGNIFICANT RUNOFF.
3. WHERE PUMPS ARE USED, BACKUP PUMPS OF EQUAL CAPACITY MUST BE PROVIDED, AS WELL AS BACKUP GENERATORS CAPABLE OF SUPPORTING THE PUMPS AT FULL DISCHARGE.

SURVEY CONTROL DATA

SPECIFIC CONTROL POINTS WERE NOT TIED FOR THIS PROJECT. ALL MEASUREMENTS AND FIELD DATA ARE IN STATE PLANE GRID COORDINATES, NAD83 (WGS84), UTAH STATE PLANE CENTRAL (4302), US SURVEY FEET. ELEVATIONS ARE PER GEOID 18 (NAVD88).



**HANSEN
ALLEN
& LUCE**
ENGINEERS

8/21/2025
PROJECT ENGINEER

8/21/2025

STATE OF UTAH

PROJECT ENGINEER

426128-2202

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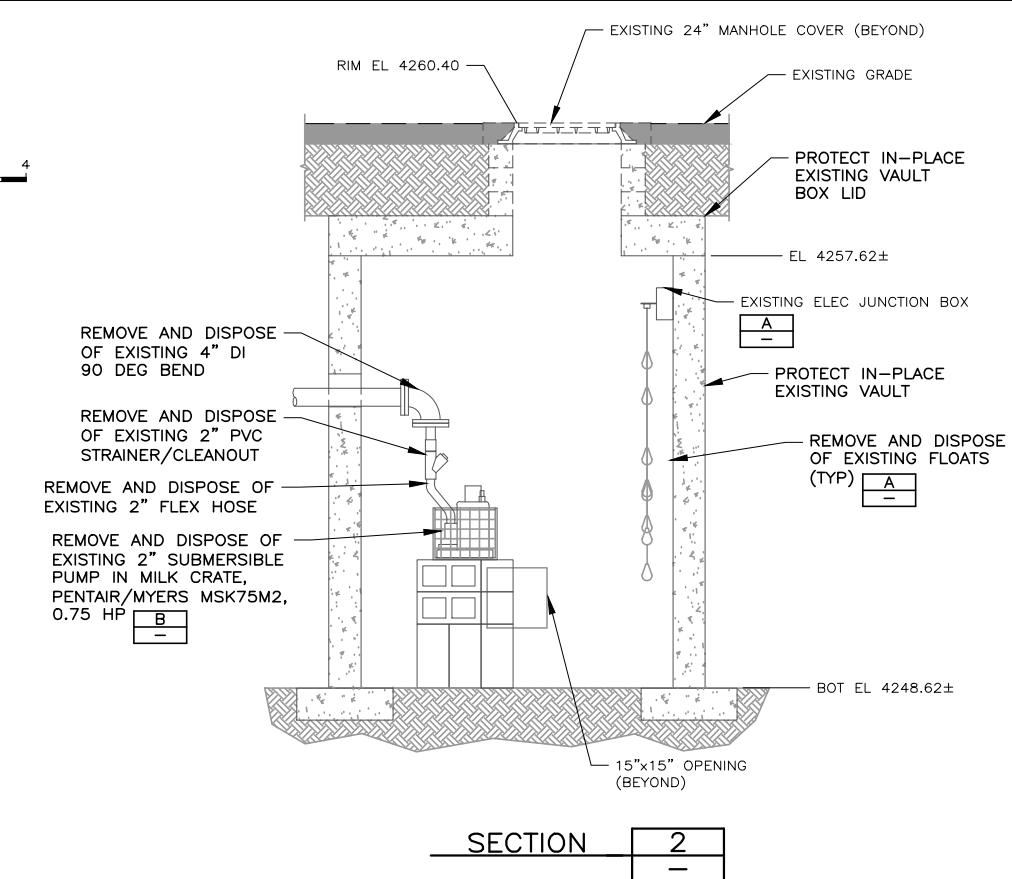
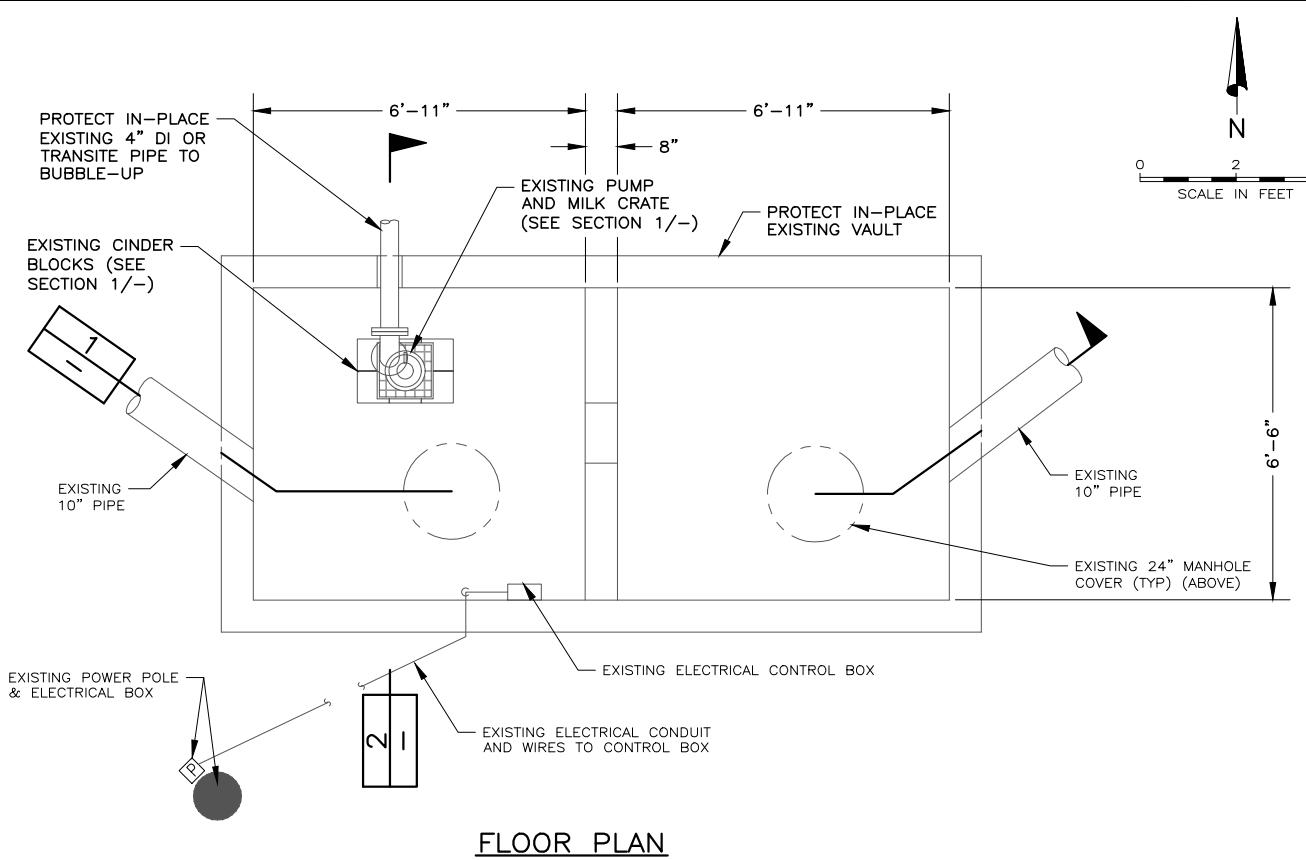
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GENERAL SHEET NOTES:

- SEE SHEET C-1 FOR SITE PLAN OF STRUCTURE
- DISPOSE OF ALL DEMOLISHED MATERIALS OFF-SITE AT AN APPROVED LANDFILL FACILITY.



DESIGNED ACS 2
DRAFTED MAJ 1
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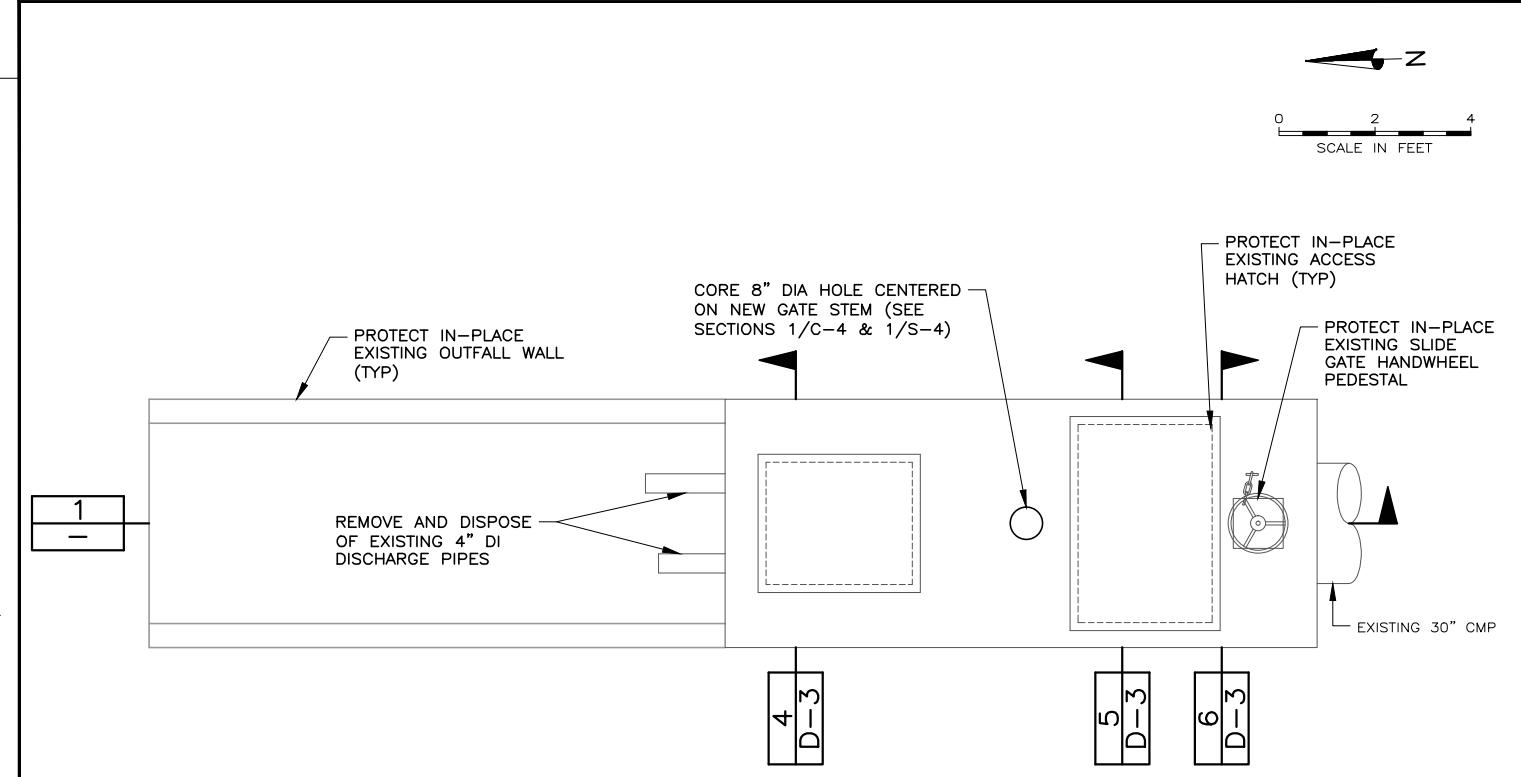
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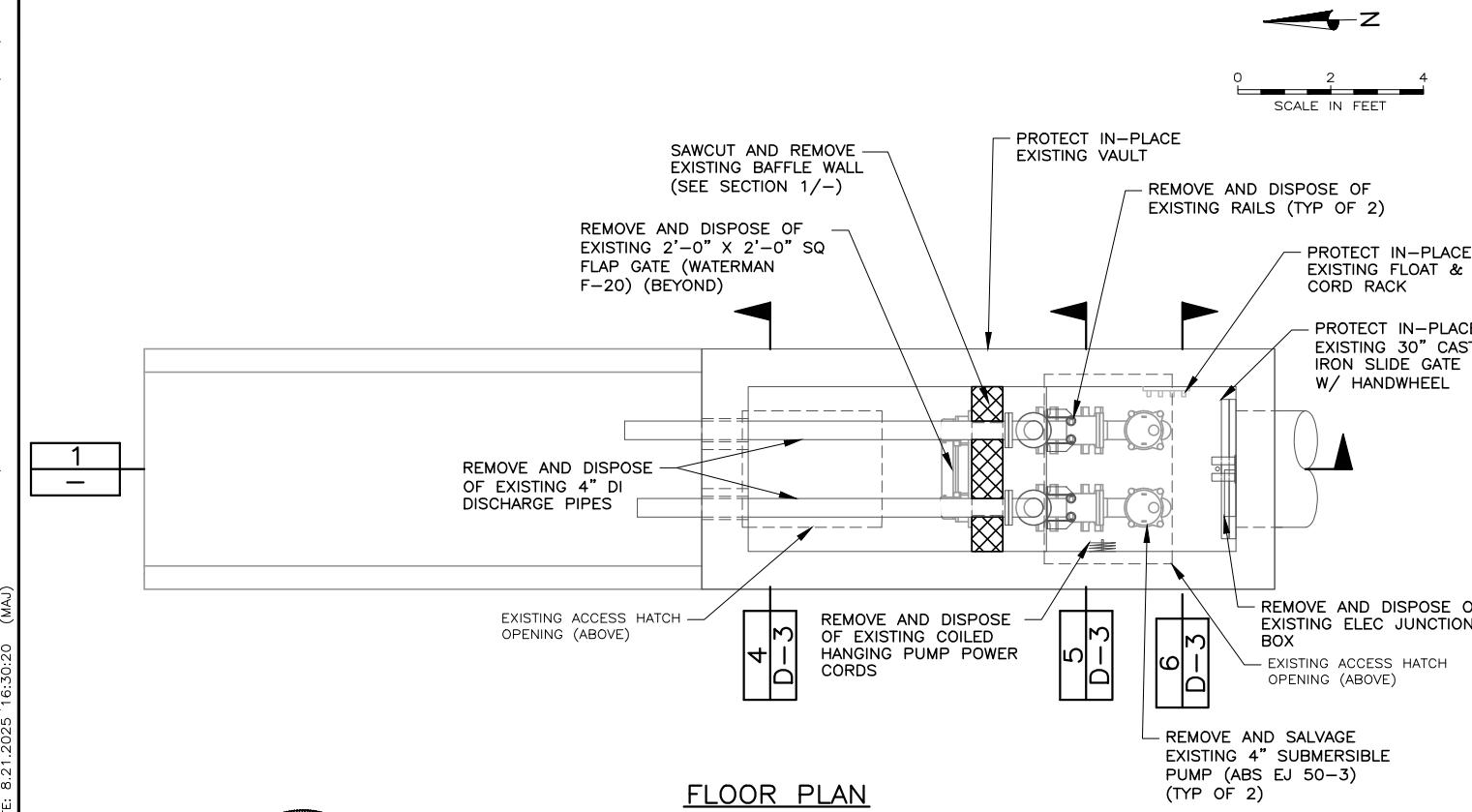


STORM WATER PUMP STATIONS UPGRADES
DEMOLITION
BLAIR STREET PS EXIST PLAN & SECTIONS

SHEET
D-1
126.60.100



ROOF DECK PLAN



FLOOR PLAN



HANSEN
ALLEN
& LUCE
ENGINEERS

PROFESSIONAL ENGINEERS
STATE OF UTAH
PROJECT ENGINEER
No. 426128-2202
8/21/2025

8/21/2025

DESIGNED ACS

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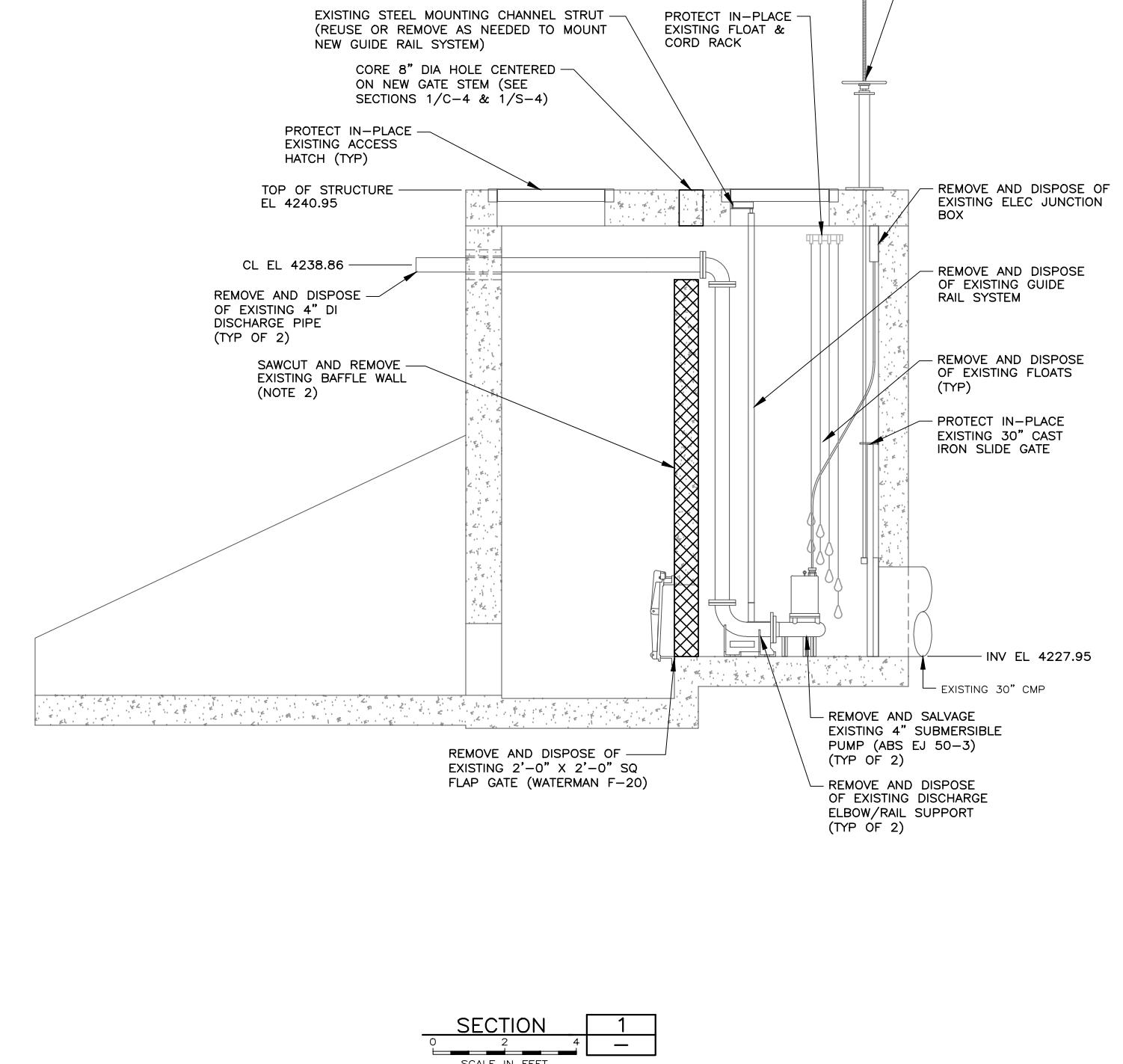
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STORM WATER PUMP STATIONS UPGRADES
DEMOLITION
JORDAN RIVER PS EXIST PLANS & SECTION

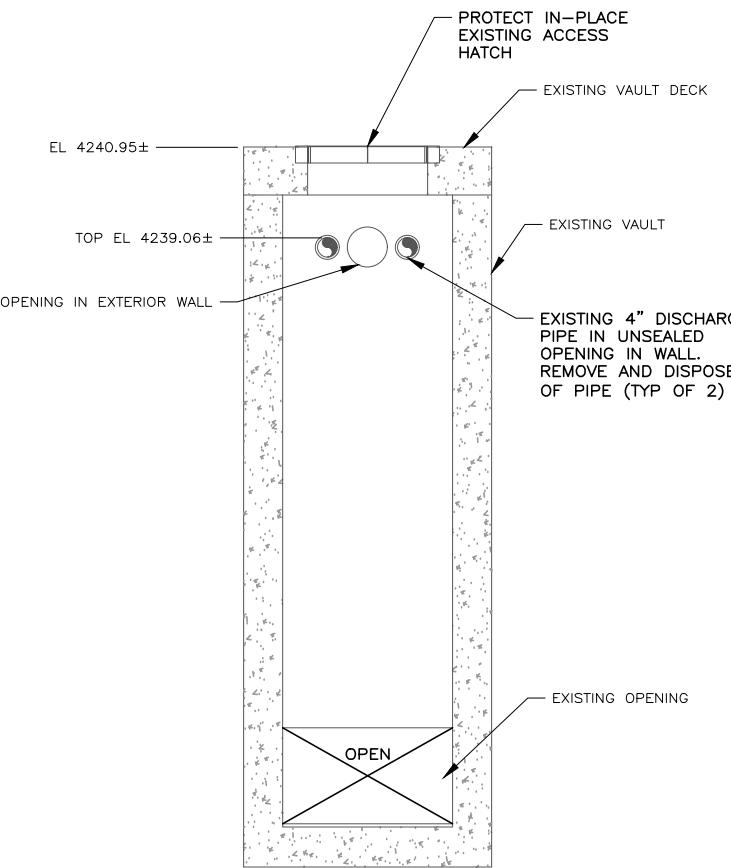
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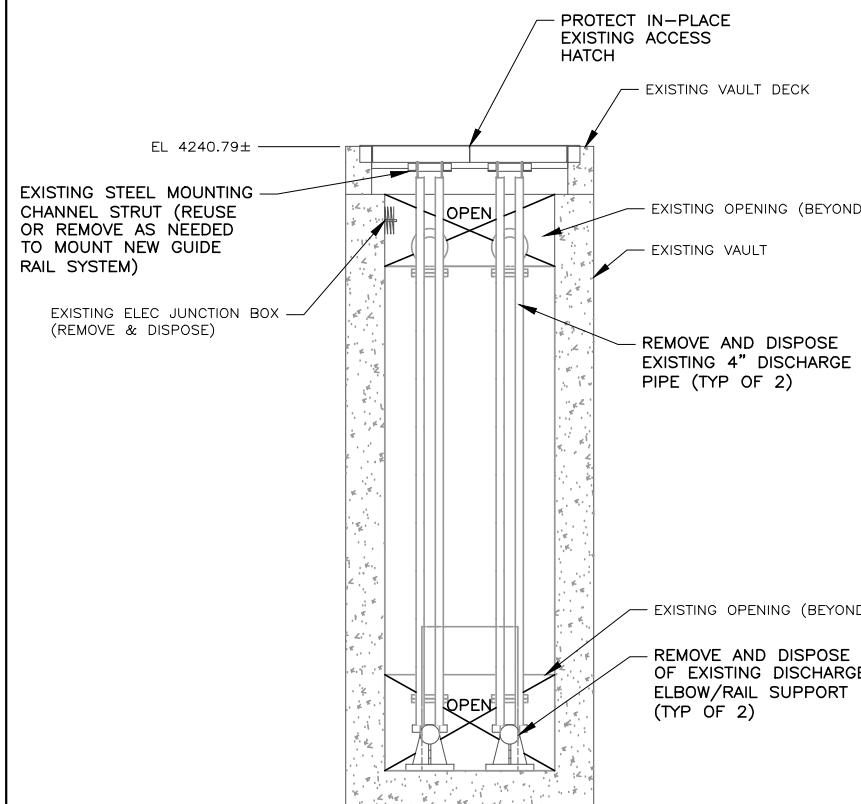
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GENERAL SHEET NOTES:

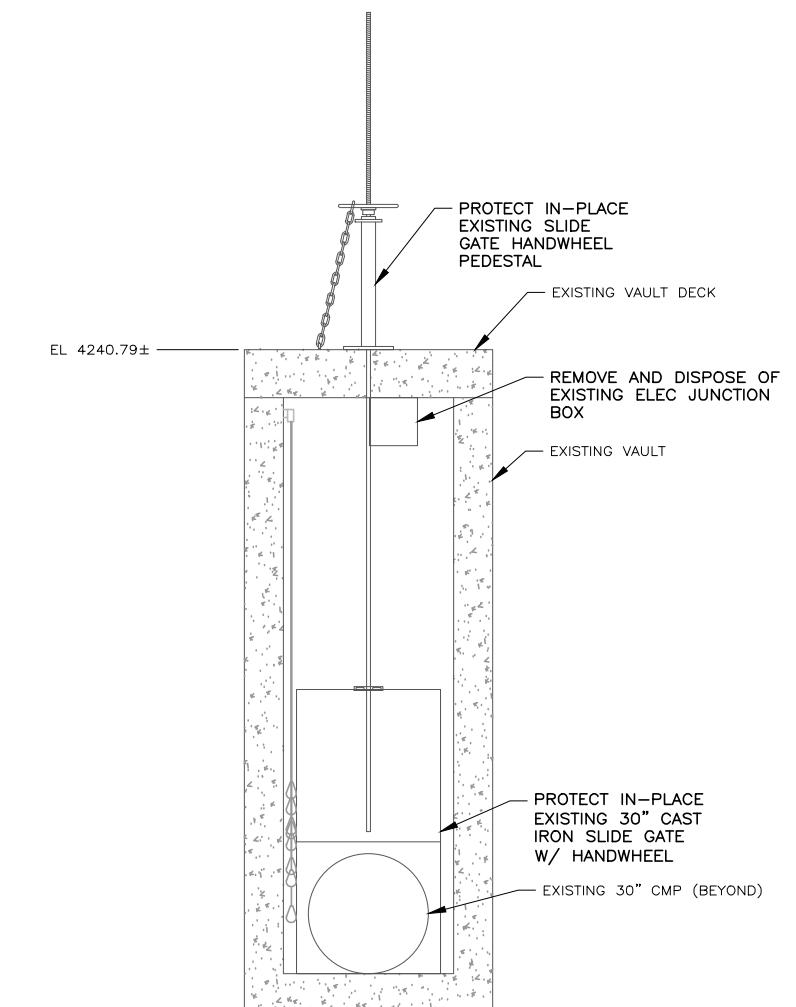
1. SEE SHEET C-3 FOR SITE PLAN OF STRUCTURE.
2. CUT AND GRIND SUCH THAT REMAINING EDGES DO NOT PROTRUDE MORE THAN 1/4-INCH BEYOND ADJACENT WALLS. GRIND EXPOSED REBAR 1/2-INCH BELOW SURFACE OF CONCRETE. INSTALL SIKA ARMATEC 1C BONDING PRIMER AND REINFORCEMENT CORROSION PROTECTANT PER MANUFACTURER'S WRITTEN INSTRUCTIONS. PATCH HOLES WITH HIGH STRENGTH NON-SHRINK GROUT.
3. DISPOSE OF ALL DEMOLISHED MATERIALS OFF-SITE AT AN APPROVED LANDFILL FACILITY.



SECTION 4
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SCALE IN FEET

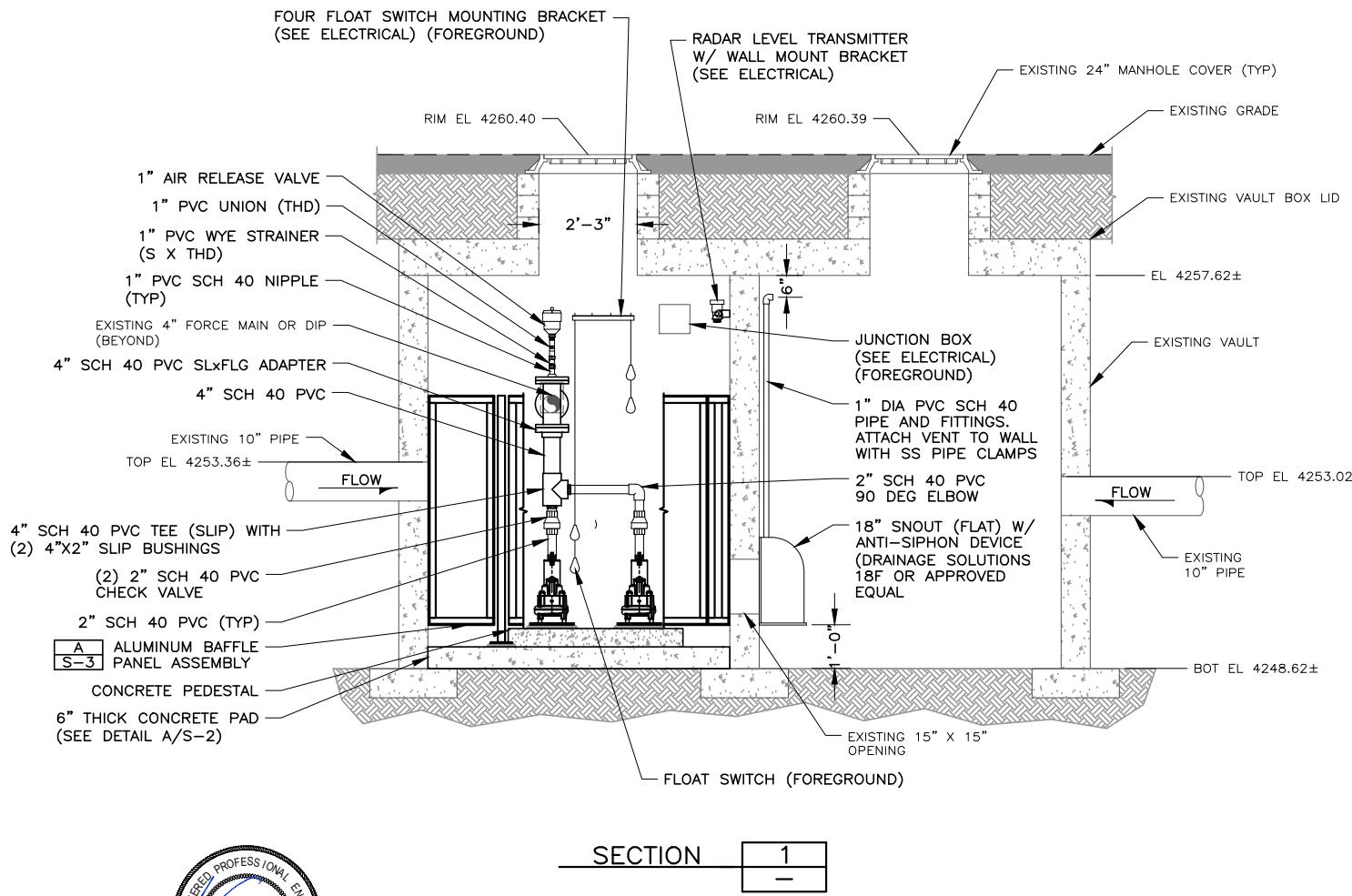
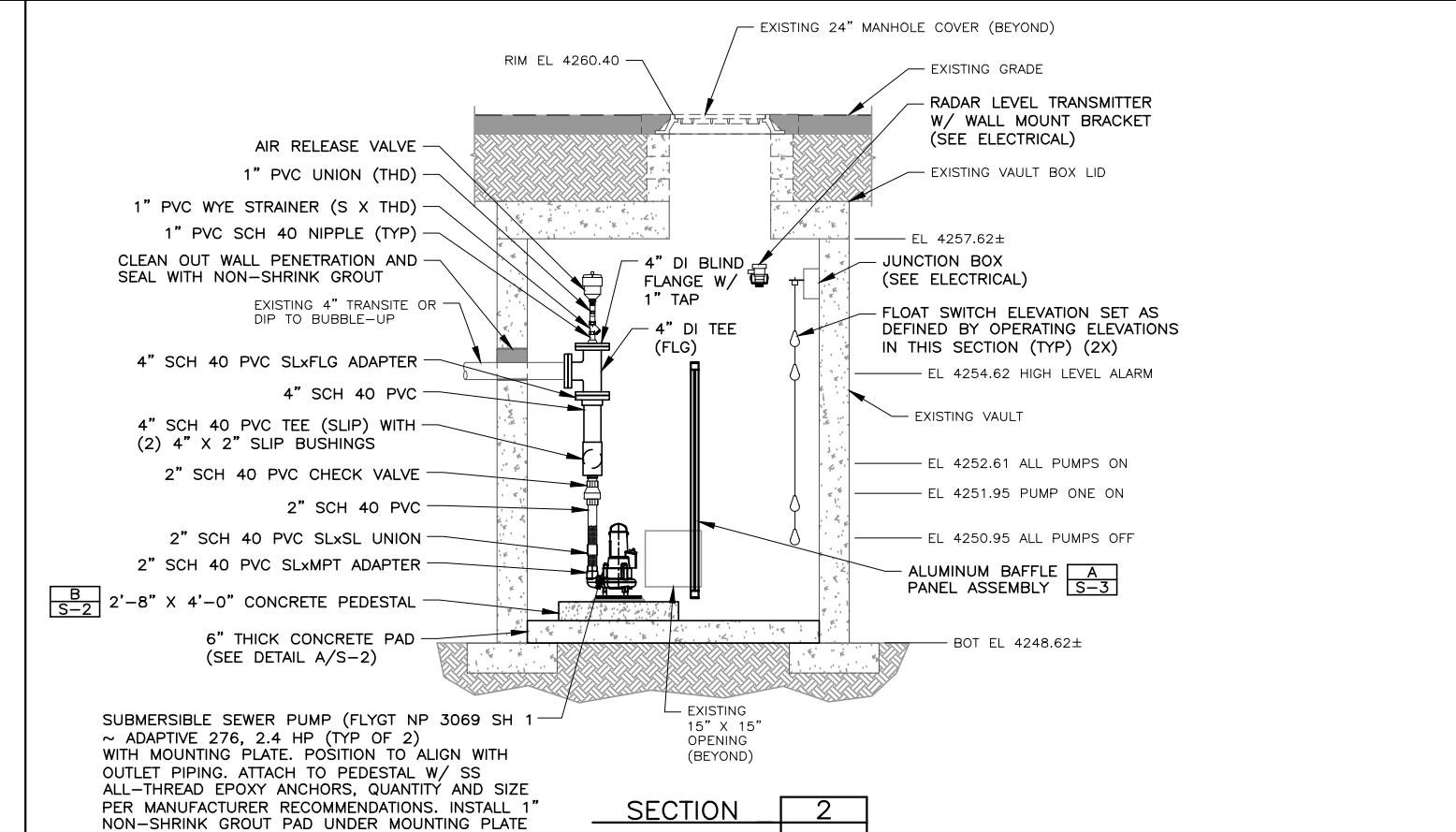
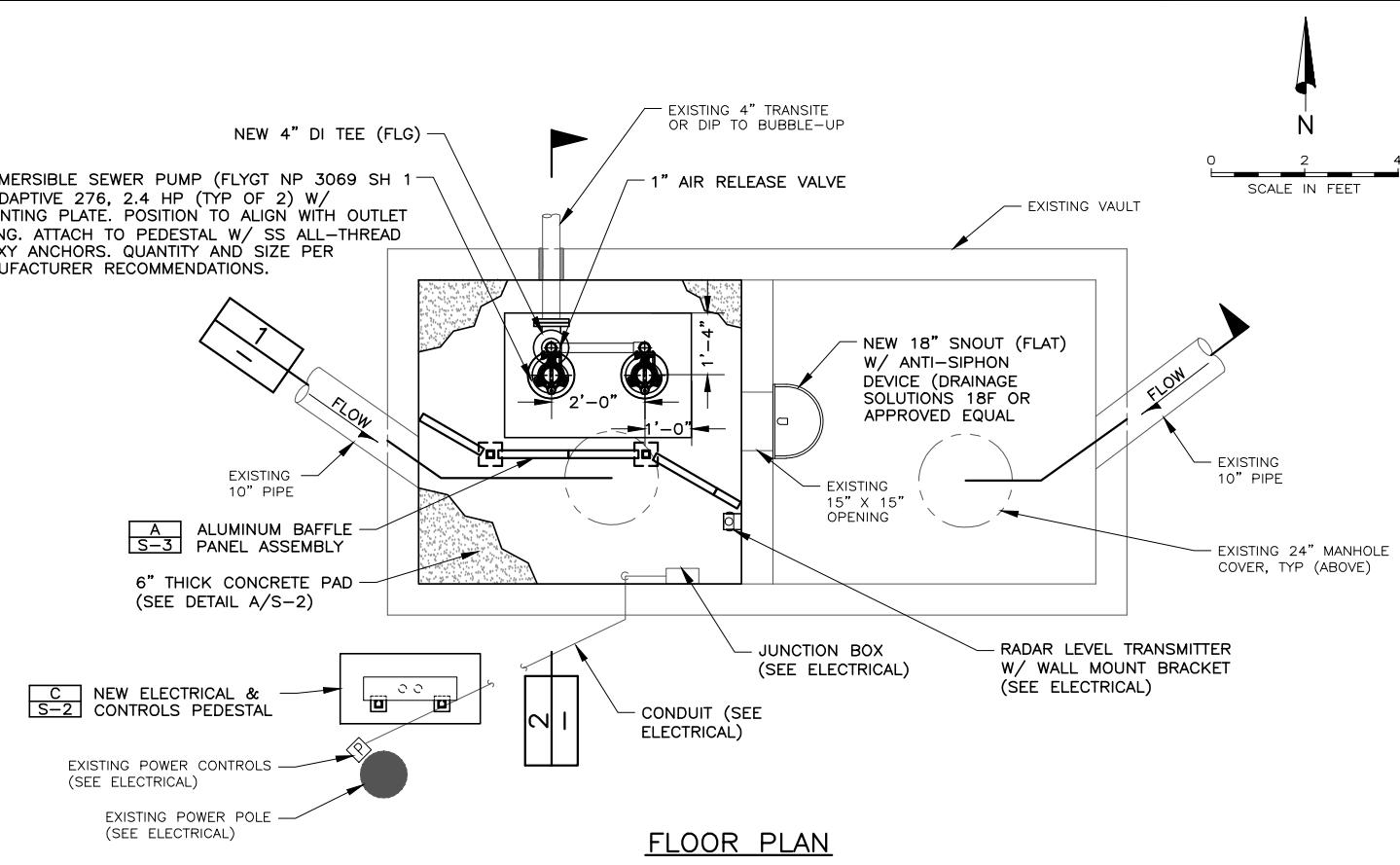


SECTION 5
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SCALE IN FEET



SECTION 6
D-2
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SCALE IN FEET

GENERAL SHEET NOTES:
1. SEE SHEET C-3 FOR SITE PLAN OF STRUCTURE.
2. DISPOSE OF ALL DEMOLISHED MATERIALS OFF-SITE AT AN APPROVED LANDFILL FACILITY.



- GENERAL SHEET NOTES:**
1. ALL NUTS, BOLTS AND WASHERS SHALL BE TYPE 304 STAINLESS STEEL.
 2. COAT ALL DUCTILE IRON PIPE AND FITTINGS PER SPECIFICATION SECTION 09 90 00 - SYSTEM #7.



- GENERAL SHEET NOTES:**
1. CONTRACTOR TO PROVIDE BEST MANAGEMENT PRACTICES AS PART OF A COMPREHENSIVE SWPPP PLAN THAT WILL PREVENT ANY DIRT OR MATERIALS FROM CONSTRUCTION SITE ENTERING THE RIVER.
 2. CONTRACTOR TO RESTORE ANY DISTURBED AREAS BY LEVELING TO MATCH ORIGINAL GRADE AND SEEDING WITH AN APPROPRIATE GRASS SEED MIX APPROVED BY THE ENGINEER.
 3. SITE ACCESS TO BE COORDINATED WITH THE CITY. THE UTILITY ROAD/TRAIL MAY BE ACCESSED FROM THE INTERSECTION OF MILLCREEK ROAD AND 900 WEST. COORDINATE WITH THE CITY FOR ACCESS THROUGH THE GATE.
 4. TRAIL MUST REMAIN OPEN TO PUBLIC USE. CONTRACTOR MUST PROVIDE ADEQUATE TRAFFIC CONTROL AND BARRIERS TO PROTECT PUBLIC TRAIL USERS. CLOSURE OF THE ACCESS ROAD IS NOT ANTICIPATED, BUT IF NECESSARY MUST BE COORDINATED WITH THE MANAGING PUBLIC AGENCY.



HANSEN
ALLEN
& LUCE
ENGINEERS

8/21/2025
PROJECT ENGINEER

STATE OF UTAH

8/21/2025

SPENCER

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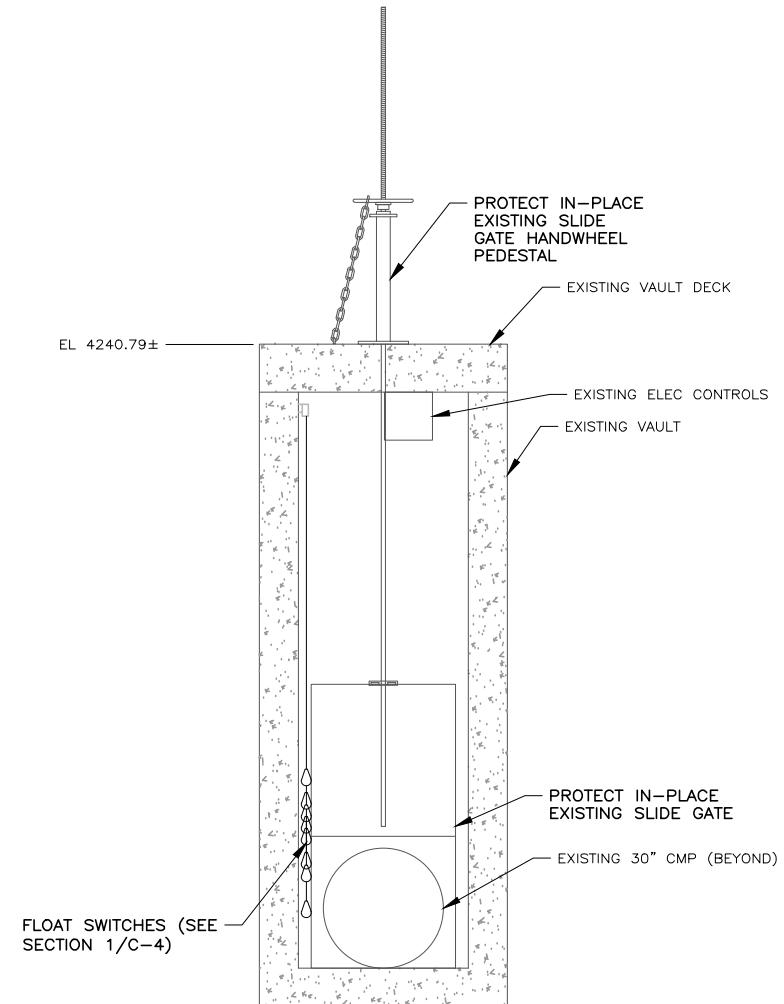
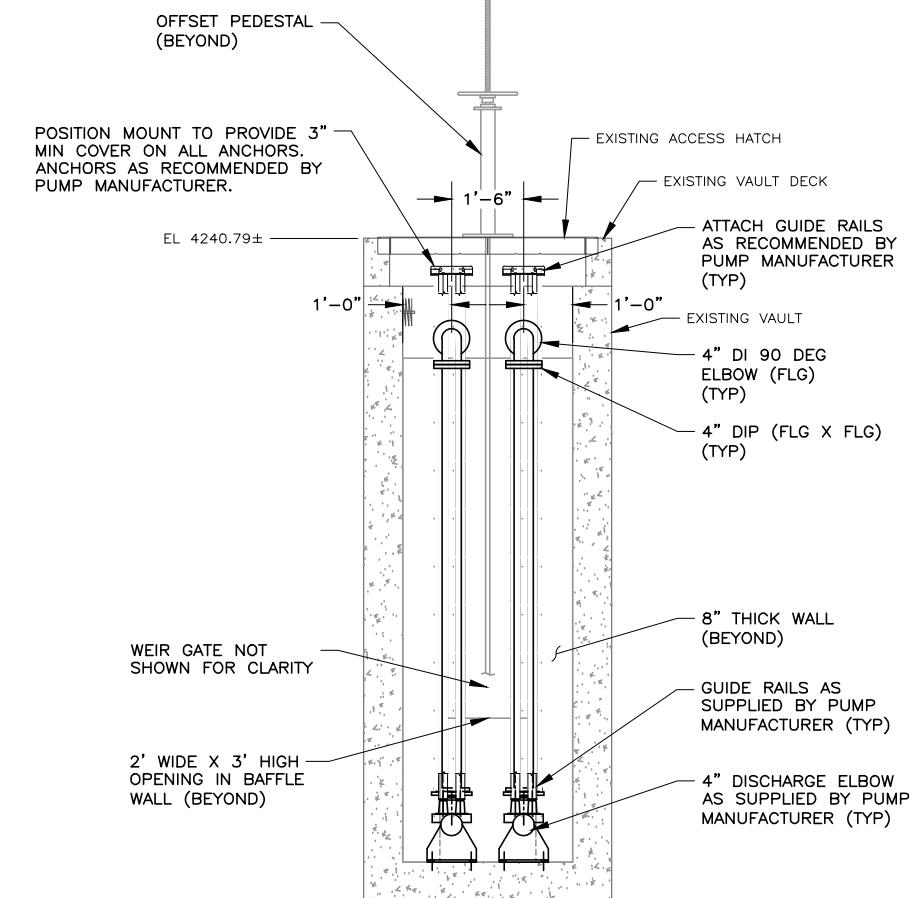
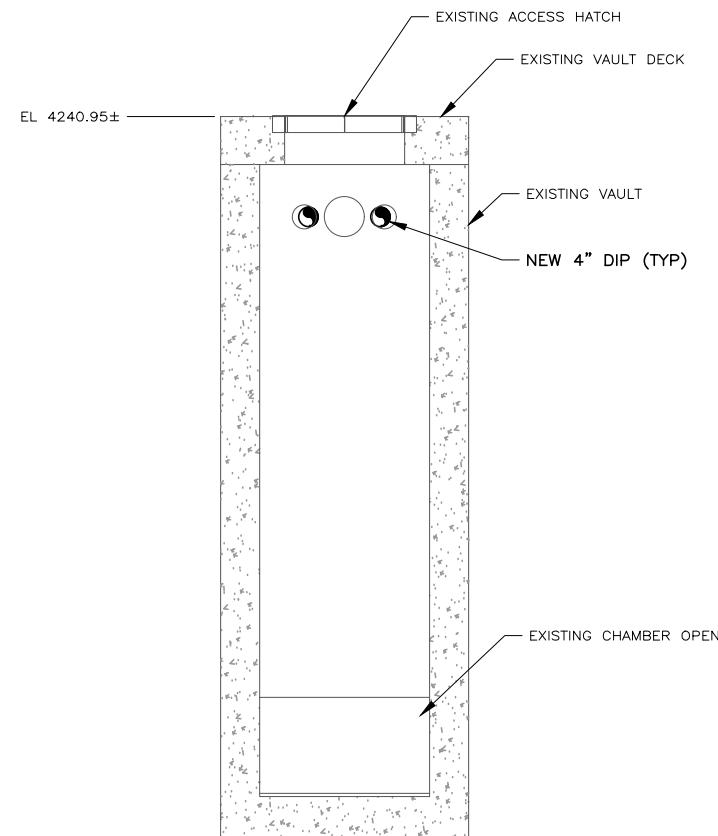
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STORM WATER PUMP STATIONS UPGRADES
CIVIL
JORDAN RIVER PS SITE PLAN

SHEET
C-3
126.60.100



SECTION 4
C-4
0 2 4
SCALE IN FEET

SECTION 5
C-4
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SCALE IN FEET

SECTION 6
C-4
0 2 4
SCALE IN FEET

GENERAL NOTES:

- CONTRACTOR AND SUB-CONTRACTORS SHALL PROVIDE SUFFICIENT SKILLED WORKMEN AND SUPERVISORS WHO SHALL BE PRESENT AT ALL TIMES DURING EXECUTION OF THE WORK. A PROJECT MANAGER, SHALL BE ASSIGNED BY CONTRACTOR, AND SHALL BE RESPONSIBLE FOR THE DAILY COORDINATION OF THE PROJECT AND SHALL MAINTAIN ALL REQUIRED DRAWINGS, SPECIFICATIONS, REPORTS, AND OTHER ITEMS FOR REVIEW AT THE SITE.
- ALL CONSTRUCTION SHALL BE ACCORDING TO THE 2021 EDITION OF THE INTERNATIONAL BUILDING CODE (IBC). AS AMENDED BY THE STATE OF UTAH.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF AND SAFETY IN AND AROUND THE JOB SITE AND/OR ADJACENT PROPERTIES.
- CONTRACTOR AND/OR OWNER SHALL KEEP LOADS ON THE STRUCTURE WITHIN THE LIMITS OF THE DESIGN LOADS BOTH DURING AND AFTER CONSTRUCTION.

DESIGN CRITERIA

1. RISK CATEGORY:	IV
2. IMPORTANCE FACTOR, I_s :	1.20
3. IMPORTANCE FACTOR, I_e :	1.50
4. ROOF DEAD LOAD:	60 PSF
5. GROUND SNOW LOAD (P_g):	30 PSF
6. SOILS REPORT PROVIDED BY:	NO SOILS REPORT PREPARED. VALUES ARE ASSUMED.
ALLOWABLE SOIL BEARING PRESSURE:	1500 PSF
COEFFICIENT OF FRICTION (μ):	0.35
ACTIVE PRESSURE:	60 PCF
PASSIVE PRESSURE:	225 PCF

STRUCTURAL NOTES:**REINFORCED CONCRETE:**

- ALL CONCRETE CONSTRUCTION, INCLUDING BENDING OF BARS, SHALL COMPLY WITH ACI "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (ACI 318).
- UNLESS CALLED OUT OTHERWISE ON THE PLANS, MINIMUM REINFORCEMENT OF CONCRETE WORK SHALL BE:
WALLS:
8" THICK OR LESS - USE #5 @ 16" EW
9" OR THICKER - USE #5 @ 12" EW, EF
SLABS:
8" THICK OR LESS - USE #5 @ 16" EW
- ALL WALL REINFORCEMENT AT CORNERS OR JUNCTIONS OF WALLS SHALL BE CONTINUOUS, LAPPED, OR TERMINATED IN A STANDARD 90 DEGREE HOOK. LAP SPLICES SHALL CONFORM WITH NOTE 6.
- UNLESS SHOWN OTHERWISE ALL BARS SHALL BE DOWELED. DOWELS SHALL BE THE SAME SIZE AND SPACING AS THE REINFORCEMENT WHICH IS TO BE SPLICED TO THE DOWELS.
- ALL REINFORCING BARS SHALL BE GRADE 60 AND SHALL CONFORM TO ASTM A-615, CURRENT REVISION. REINFORCING STEEL SHALL BE NEW AND FREE FROM RUST, OIL OR OTHER BOND INHIBITOR.
- ALL CONTINUOUS REINFORCING BARS SHALL LAP AT LEAST 40 BAR DIAMETERS. SPLICES SHALL BE MADE AWAY FROM POINTS OF MAXIMUM STRESS. MINIMUM LAP SHALL BE 18 IN.
- CONCRETE COVER OVER REINFORCEMENT SHALL BE AS FOLLOWS:
 - SURFACE NOT EXPOSED DIRECTLY TO THE GROUND, WATER OR WEATHER AFTER FORM REMOVAL:
CONCRETE SLABS IN BUILDINGS - - - - 3/4"
 - CONCRETE SLABS IN WATER BEARING SURFACES EXPOSED DIRECTLY TO THE GROUND, WATER OR WEATHER AFTER FORM REMOVAL:
FOR #5 BARS OR SMALLER- - - - 1-1/2"
FOR #6 BARS OR LARGER- - - - 2"
 - CONCRETE PLACED DIRECTLY AGAINST GROUND - - - - 3"
- REINFORCEMENT SHALL BE PLACED WITHIN A TOLERANCE OF $\pm 1/4$ " OF POSITION SPECIFIED.
- CONCRETE CURING SHALL BE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. SOME CONCRETE WORK REQUIRES WATER CURING, AS MEMBRANE CURING IS NOT ALLOWED. THE CONTRACTOR IS WARNED THAT WATER CURING IS DIFFICULT AT TIMES DUE TO WIND AND DRY CONDITIONS. THE CONTRACTOR SHALL STUDY REQUIREMENTS AND SHALL FURNISH ADEQUATE SYSTEMS TO PROVIDE WATER CURING WHERE REQUIRED. TOP OF WALLS SHALL BE KEPT VISIBLY MOIST AT ALL TIMES AND SHALL BE FLOODED NOT LESS THAN THREE TIMES DAILY.
 - FOR POURING CONCRETE DURING COLD WEATHER:
 - FOLLOW RECOMMENDATIONS CONTAINED IN PUBLICATION ACI 306R
 - "COLD-WEATHER CONCRETING" CURRENT REVISION.
 - PROTECT CONCRETE WORK FROM PHYSICAL DAMAGE OR REDUCED STRENGTH WHICH COULD BE CAUSED BY FROST, FREEZING ACTIONS OR LOW TEMPERATURES.
 - WHEN AIR TEMPERATURE HAS FALLEN TO OR IS EXPECTED TO FALL BELOW 40°F OR 4°C, UNIFORMLY HEAT WATER AND AGGREGATES BEFORE MIXING TO OBTAIN A CONCRETE MIXTURE TEMPERATURE OF NOT LESS THAN 50°F OR 10°C, AND NOT MORE THAN 80°F OR 27°C AT TIME OF PLACEMENT.

**GENERAL STRUCTURAL NOTES****REINFORCED CONCRETE CONT.**

- CONCRETE SHALL BE AIR ENTRAINED WITH AIR CONTENT OF 6% +/- 1% BY VOLUME.
- DO NOT USE FROZEN MATERIALS OR MATERIALS CONTAINING ICE OR SNOW. DO NOT PLACE CONCRETE ON FROZEN SUBGRADE OR ON SUBGRADE CONTAINING FROZEN MATERIALS.
- DO NOT USE CALCIUM CHLORIDE, SALT OR OTHER MATERIALS CONTAINING ANTIFREEZE AGENTS OR CHEMICAL ACCELERATORS, UNLESS OTHERWISE APPROVED IN THE MIX DESIGN.
- COVER AND HEAT CONCRETE FOR A MINIMUM OF 7 DAYS AS RECOMMENDED BY ACI 306R, CURRENT REVISION.
- FOR POURING CONCRETE DURING HOT WEATHER: FOLLOW RECOMMENDATIONS CONTAINED IN PUBLICATION ACI 305 "HOT-WEATHER CONCRETING" CURRENT REVISION. PROTECT CONCRETE FROM FLASH CURING BY PROVIDING A WATER/MOISTURE CURE FOR 3 DAYS. A 4500 PSI (WITH A 6-1/2 BAG MIX) IS RECOMMENDED FOR THESE CONDITIONS.
- NO BACKFILL SHALL BE PLACED AGAINST WALLS UNTIL CONCRETE HAS REACHED 85 PERCENT OF THE SPECIFIED STRENGTH AND THE CONNECTING SLABS AND BEAMS HAVE BEEN CAST AND HAVE REACHED 85 PERCENT OF THE SPECIFIED STRENGTH.
- CONCRETE TO HAVE A MIN 28 DAY STRENGTH OF 4000 PSI.

SUBMITTALS:

- THE FOLLOWING INFORMATION AND SUBMITTALS SHALL BE PROVIDED TO ENGINEER BEFORE FABRICATION AND/OR DELIVERY TO THE JOBSITE, NOT ALL MAY APPLY.
 - CONCRETE MIX DESIGNS.
 - CONCRETE REINFORCEMENT SHOP DRAWINGS.
 - STRUCTURAL BACKFILL PIT LOCATION AND MATERIAL SPECIFICATION, IF USED ON SITE.
 - STRUCTURAL STEEL SHOP DRAWINGS.
 - OTHER SHOP DRAWINGS & SUBMITTALS AS DEEMED NECESSARY BY ENGINEER.

SOIL NOTES

- NO KNOWN SOILS REPORT IS AVAILABLE FOR THIS SITE.
- ALL ORGANIC MATERIALS, RUBBISH, UNSUITABLE FILL, TOPSOIL, ETC. SHALL BE REMOVED FROM BENEATH LOCATIONS OF PROPOSED FOOTINGS, CONCRETE SLABS AND ASPHALT PAVING.
- SLABS SHALL BE PLACED ON COMPACTED GRANULAR BACKFILL COMPAKTED TO 95% MAXIMUM DRY DENSITY PER ASTM D-1557.
- UNLESS OTHERWISE NOTED, STRUCTURAL BACKFILL SHALL CONFORM TO:
 - IMPORTED GRANULAR MATERIAL SHALL BE FREE OF ORGANIC MATTER AND OTHER DELETERIOUS SUBSTANCES.
 - SHALL COMPLY WITH SPECIFICATIONS FOR GRADATIONS.
- ALL FREE WATER SHALL BE REMOVED FROM THE FOUNDATION EXCAVATION PRIOR TO PLACING CONCRETE.
- CONTRACTOR SHALL REMOVE ALL UNSUITABLE FILL FROM UNDER ALL CONCRETE FLATWORK, PAVEMENT, BUILDINGS AND STRUCTURES, AND REPLACE WITH STRUCTURAL FILL COMPAKTED TO 95% MAX DRY DENSITY PER ASTM D-1557.

ANCHOR NOTES:

- ALL ANCHORS TO BE INSTALLED PER THE MANUFACTURER'S REQUIREMENTS. FOR BOTH MECHANICAL AND EPOXY TYPE ANCHORS THESE REQUIREMENTS INCLUDE, BUT IS NOT LIMITED TO:
 - PROPER HOLE DIAMETER, DEPTH, EDGE DISTANCES, AND SPACING.
 - PROPER HOLE PREPARATION AND CLEANOUT.
 - WEATHER REQUIREMENTS TO BE FOLLOWED, ESPECIALLY FOR COLD WEATHER APPLICATIONS.
 - ALL STRUCTURAL ANCHORS TO COMPLY WITH THE CRACKED CONCRETE REQUIREMENTS ON THE CURRENT EDITION OF THE ACI 318.

SEISMIC BRACKETS:

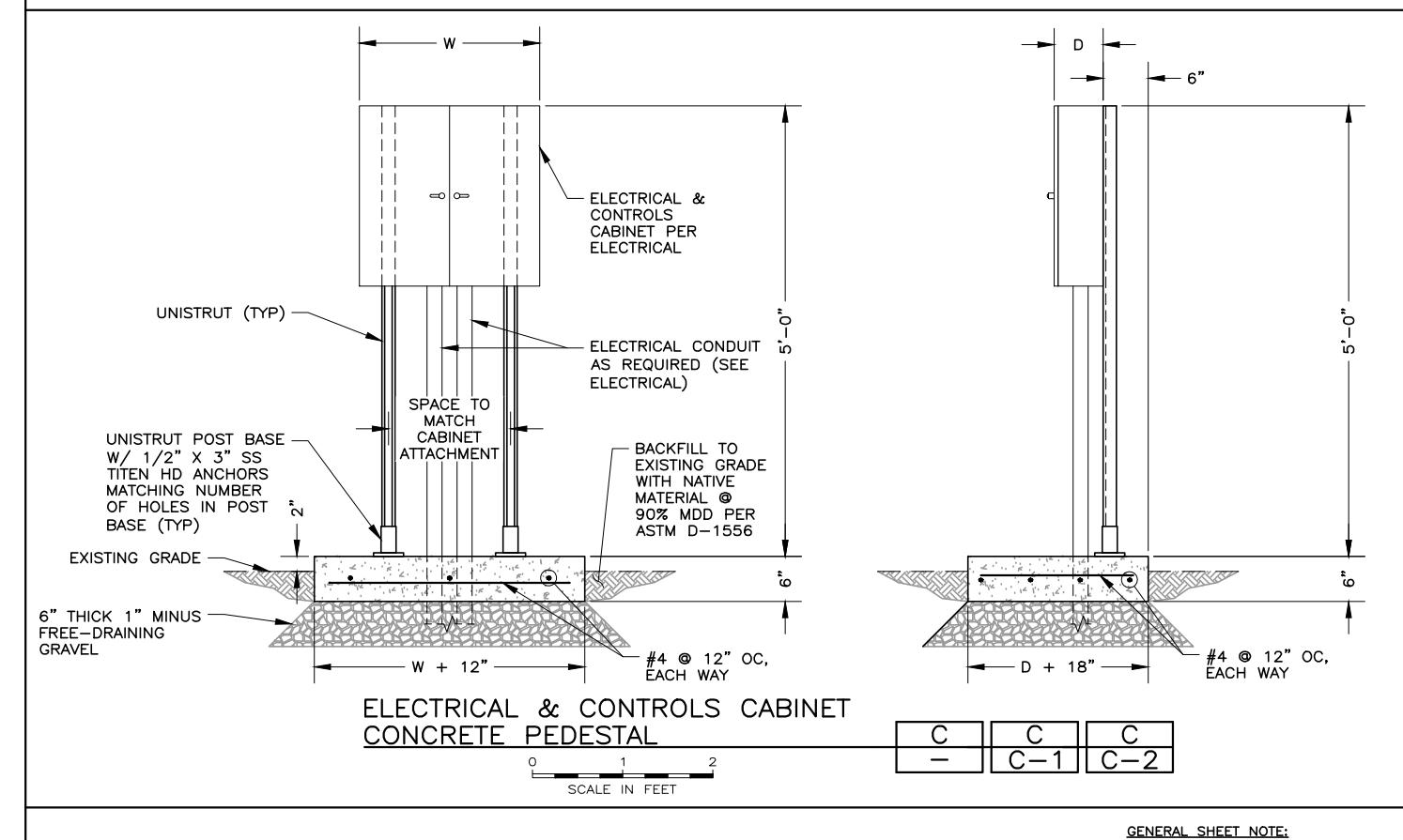
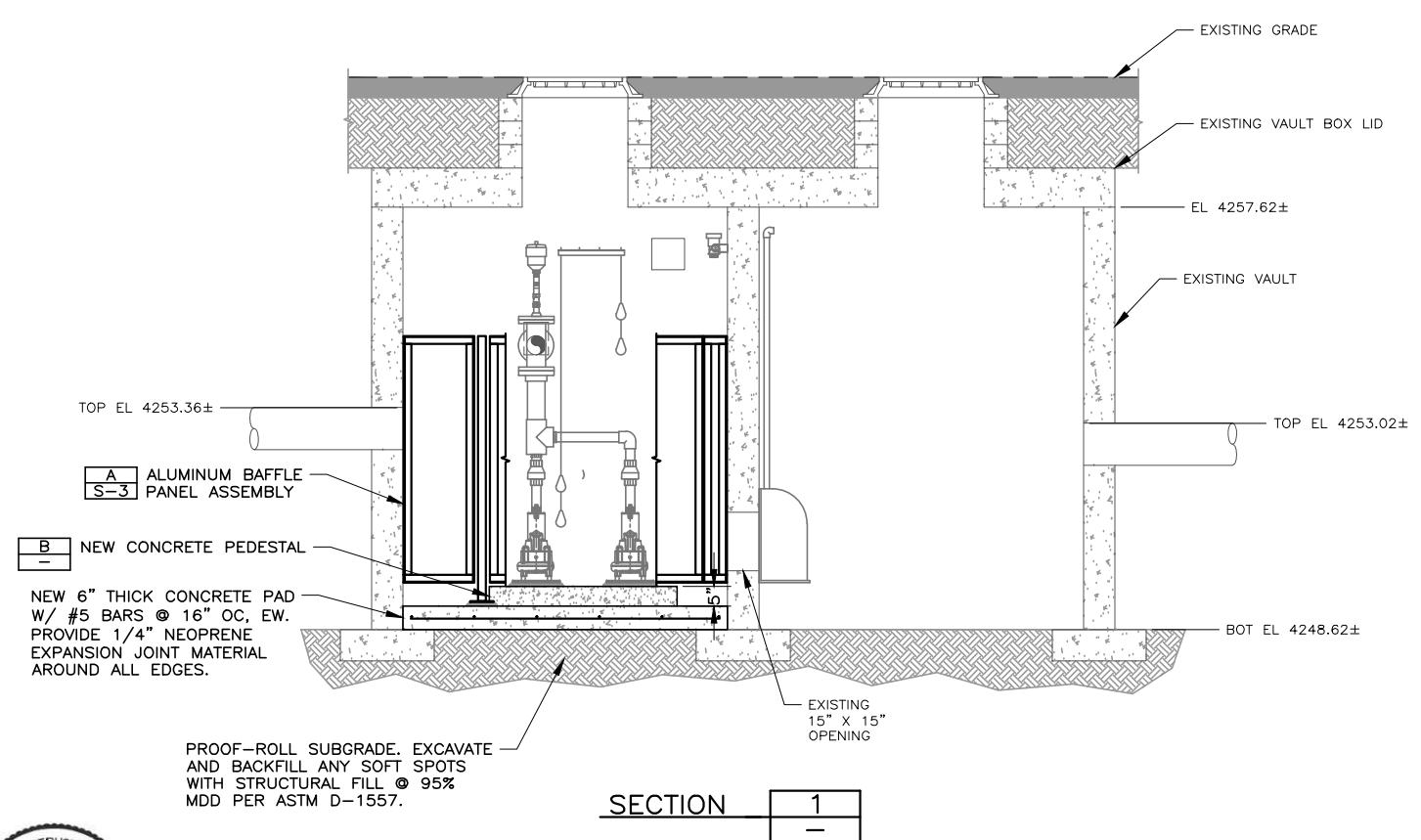
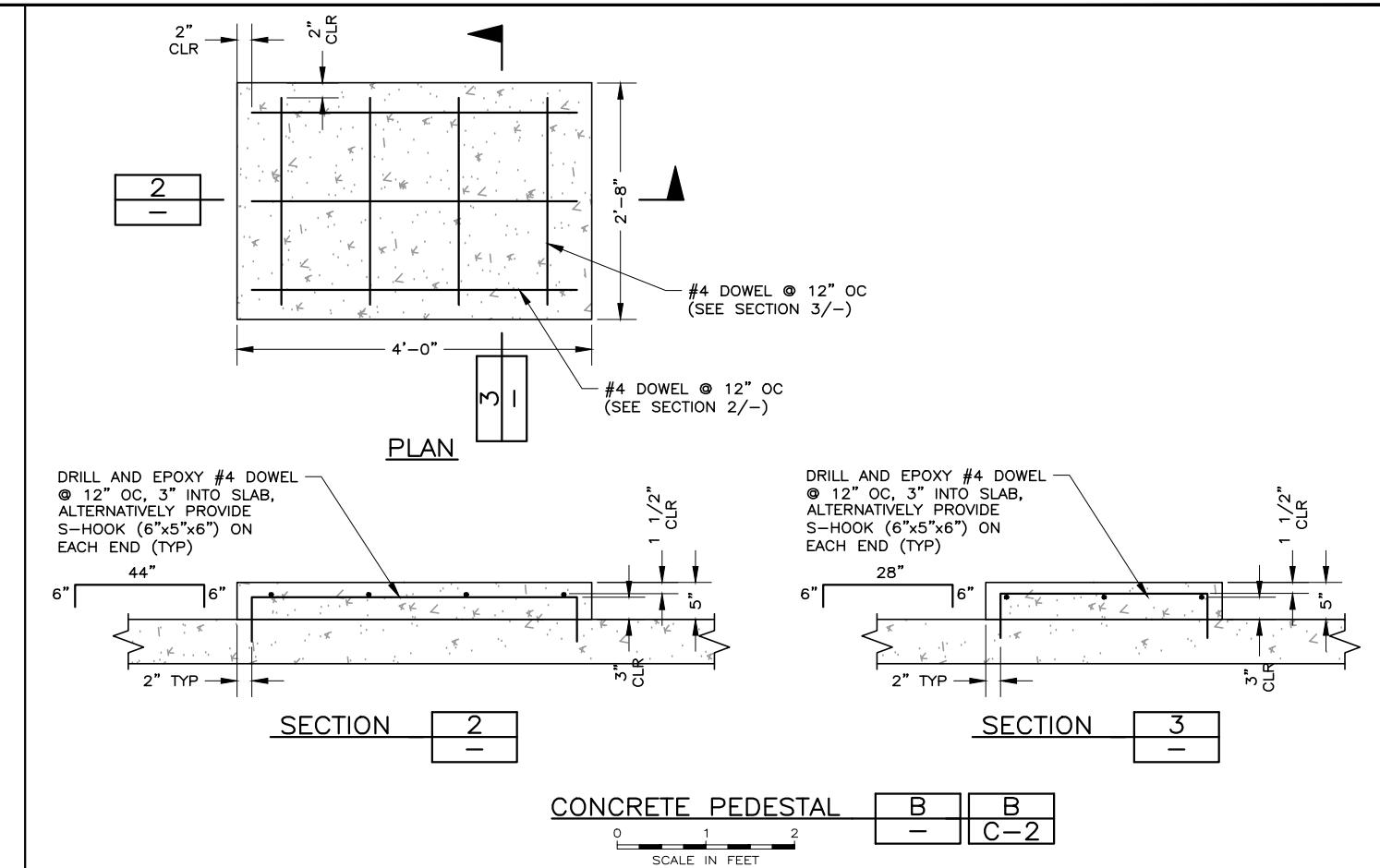
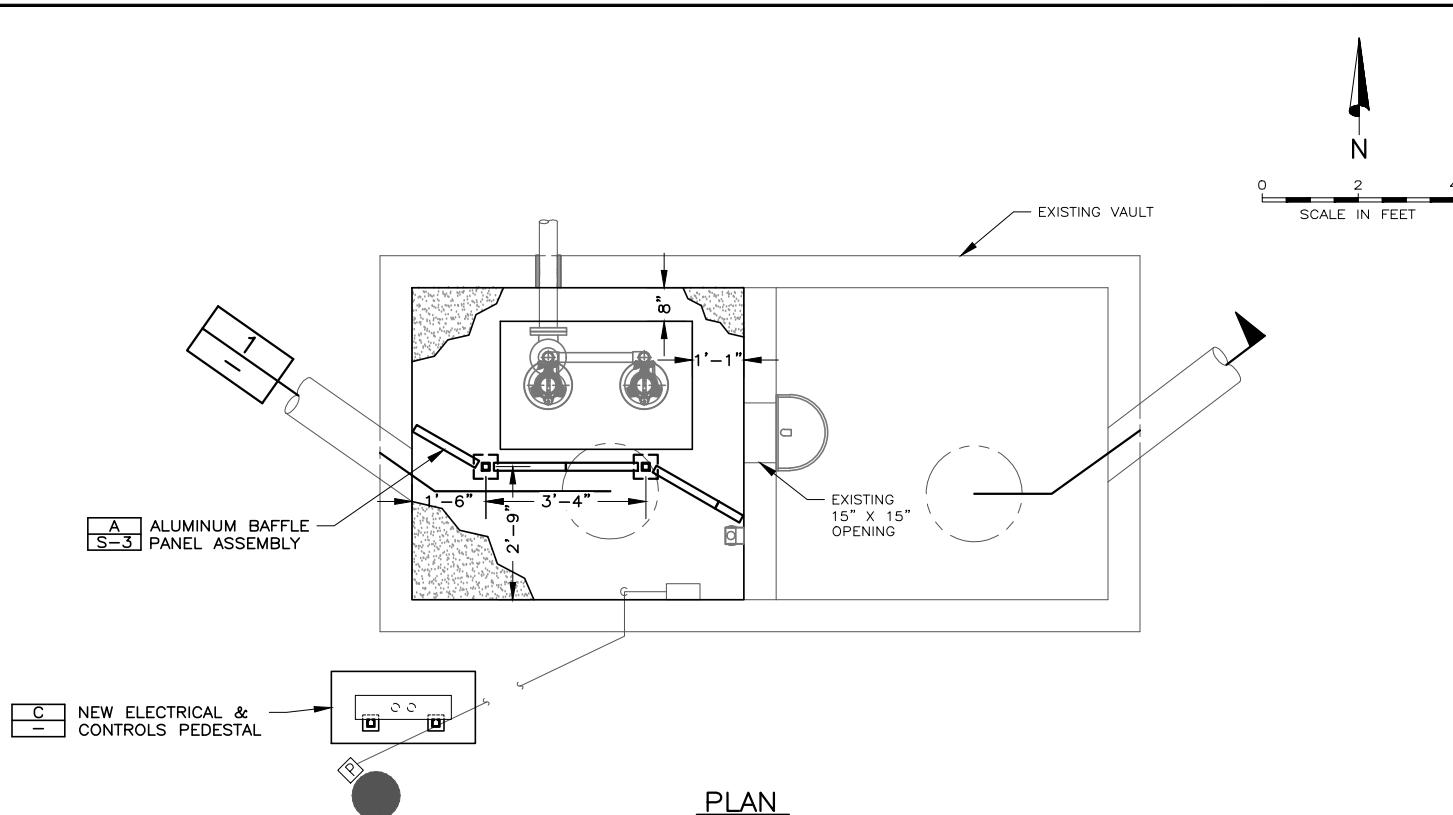
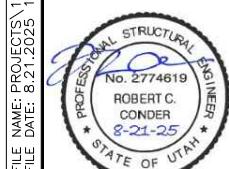
- CONTRACTOR TO SUBMIT FOR REVIEW AND APPROVAL SEISMIC BRACKETS FOR HVAC, MECHANICAL AND ELECTRICAL EQUIPMENT TO MEET LOCAL CODES.

STRUCTURAL STEEL AND METAL FABRICATIONS:

- ALL STRUCTURAL STEEL AND STRUCTURAL STEEL WORK SHALL COMPLY WITH "SPECIFICATIONS FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS OF THE AISC" AND THE "AISC CODE OF STANDARD PRACTICE."
- STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING:

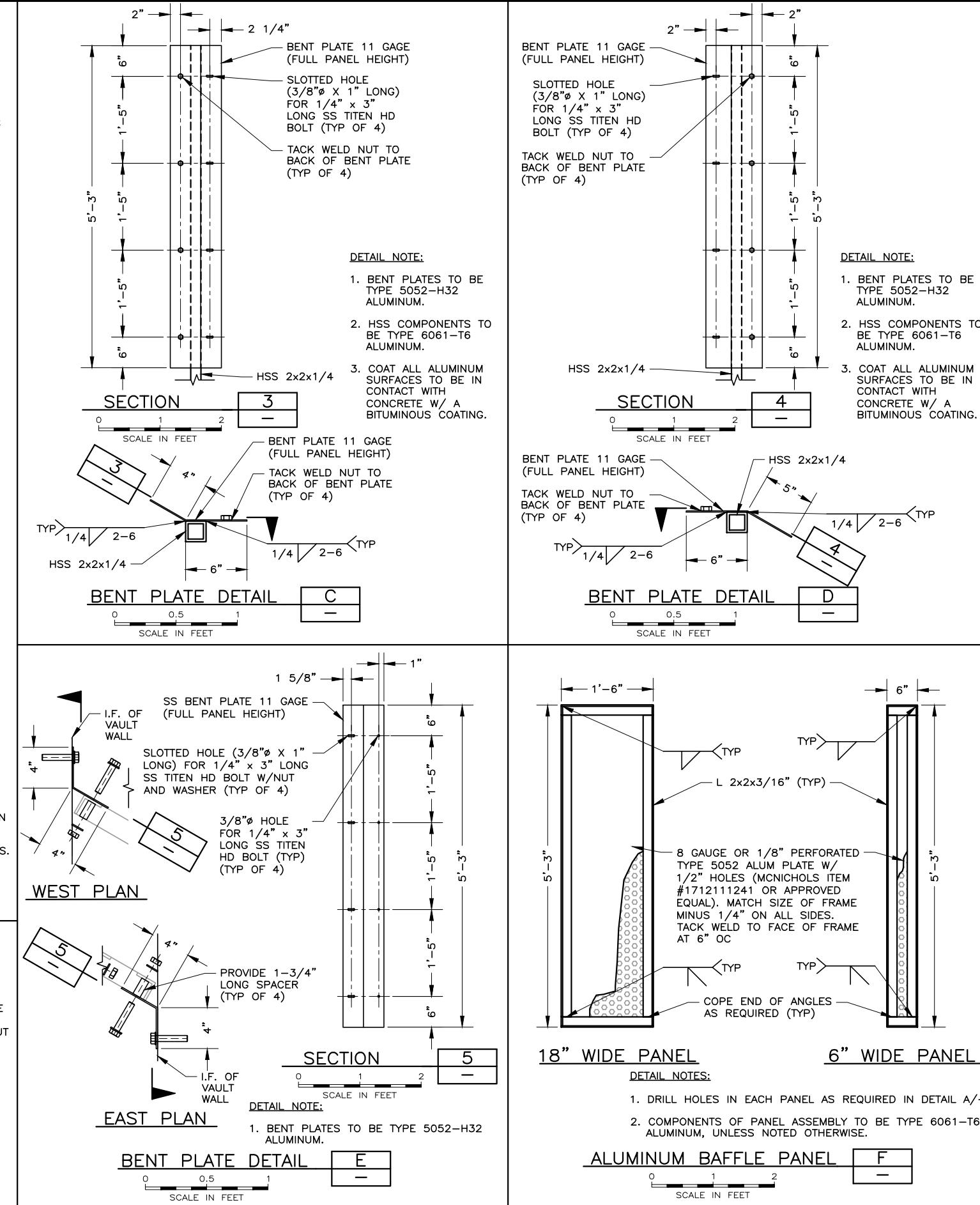
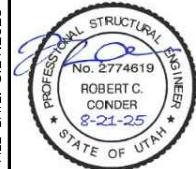
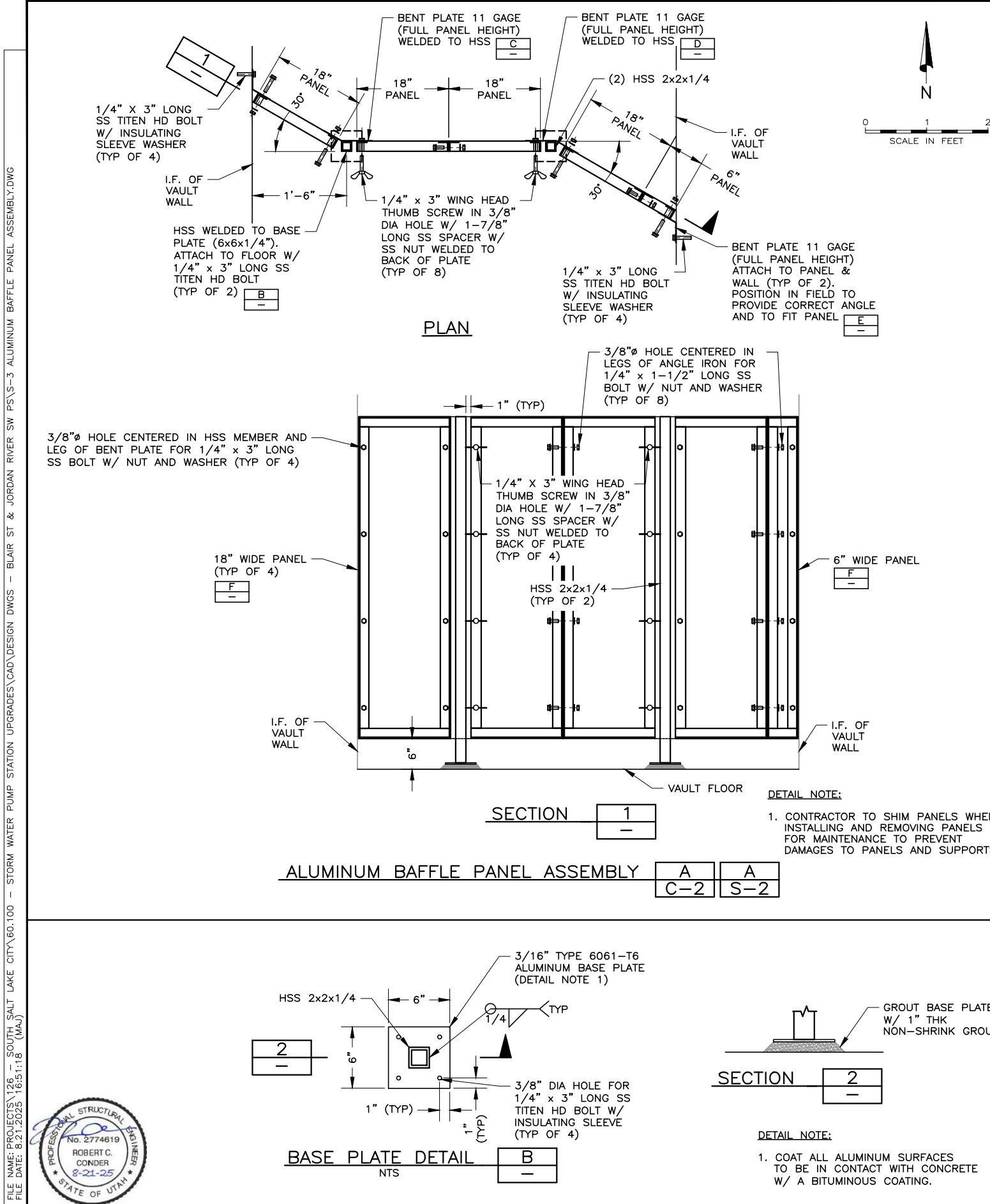
W-SHAPES	A992
MISCELLANEOUS SHAPES INCLUDING ANGLES, CHANNELS, PLATES, ETC.	A36
SQUARE OR RECTANGULAR STEEL	A500, GRADE B
TUBING STEEL PIPE	CLASS 53, GRADE B
- STRUCTURAL STEEL SHALL BE FABRICATED AND ERECTED IN CONFORMANCE WITH THE AISC MANUAL OF STEEL CONSTRUCTION, CURRENT EDITION, AND CURRENT OSHA STANDARDS.
- ALL WELDS AND WELDING SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS OF "THE AMERICAN WELDING SOCIETY, USING ELECTRODES AS SPECIFIED THEREIN." WELDS TO BE MADE WITH E - 70XX ELECTRODES UNO.
- BOLTS SHALL BE HIGH STRENGTH BOLTS CONFORMING TO THE FOLLOWING, EXCEPT WHERE SPECIFICALLY INDICATED OTHERWISE:

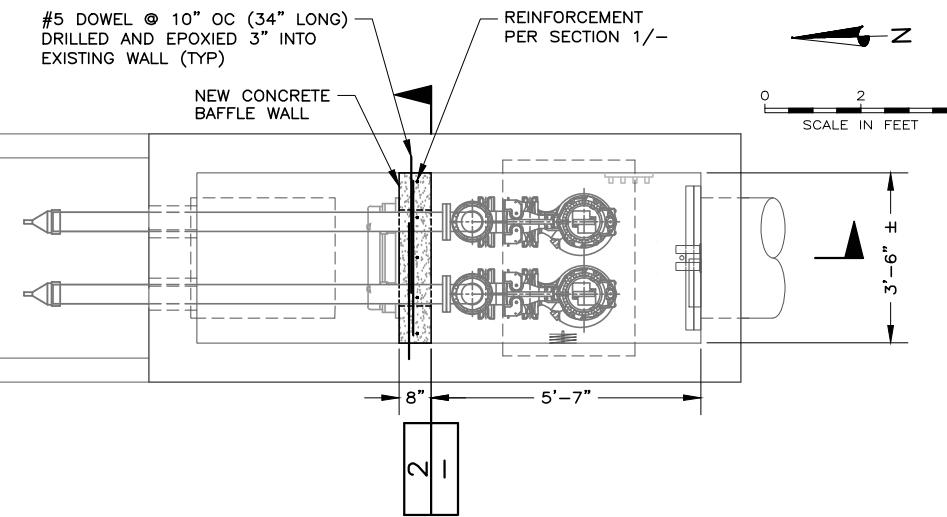
UNLESS SHOWN OTHERWISE	A325-N
SLIP CRITICAL	A325-SC
ANCHOR BOLTS (AB)	
STAINLESS STEEL	F593, AISI TYPE 316, CONDITION CW
STEEL	F1554, GR 36
GALVANIZED STEEL	F1554, GR 36/A153
MACHINE BOLTS (MB)	A307
- ITEMS TO EMBEDDED IN CONCRETE SHALL BE CLEAN AND FREE OF OIL, DIRT AND PAINT.
- NO HOLES OTHER THAN THOSE SPECIFICALLY DETAILED SHALL BE ALLOWED THROUGH STRUCTURAL STEEL MEMBERS. NO CUTTING OR BURNING OF STRUCTURAL STEEL IS PERMITTED WITHOUT THE APPROVAL OF ENGINEER.



BLAIR STREET PS A
C-2

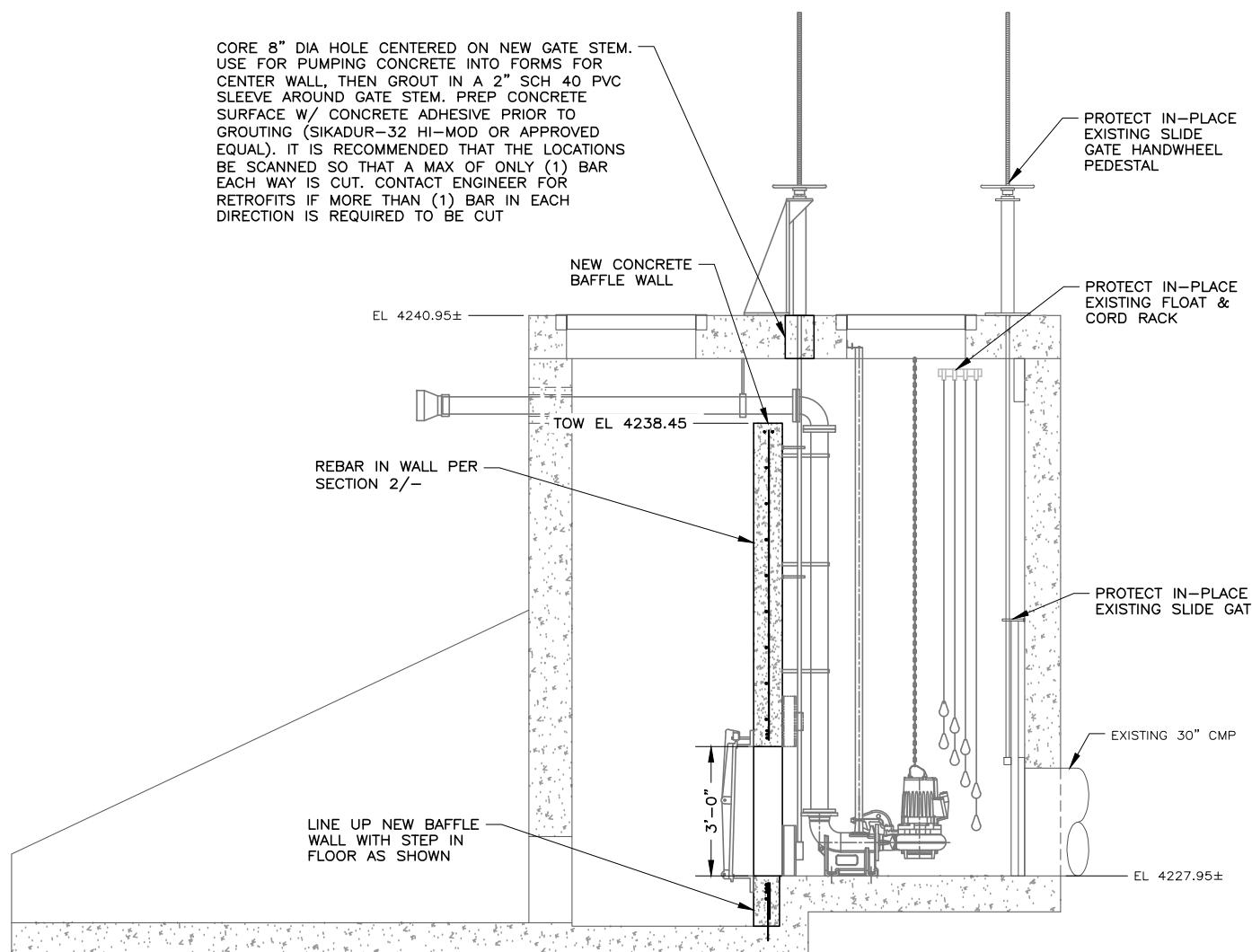
GENERAL SHEET NOTE:
1. ALL REBAR SHALL BE EPOXY COATED.



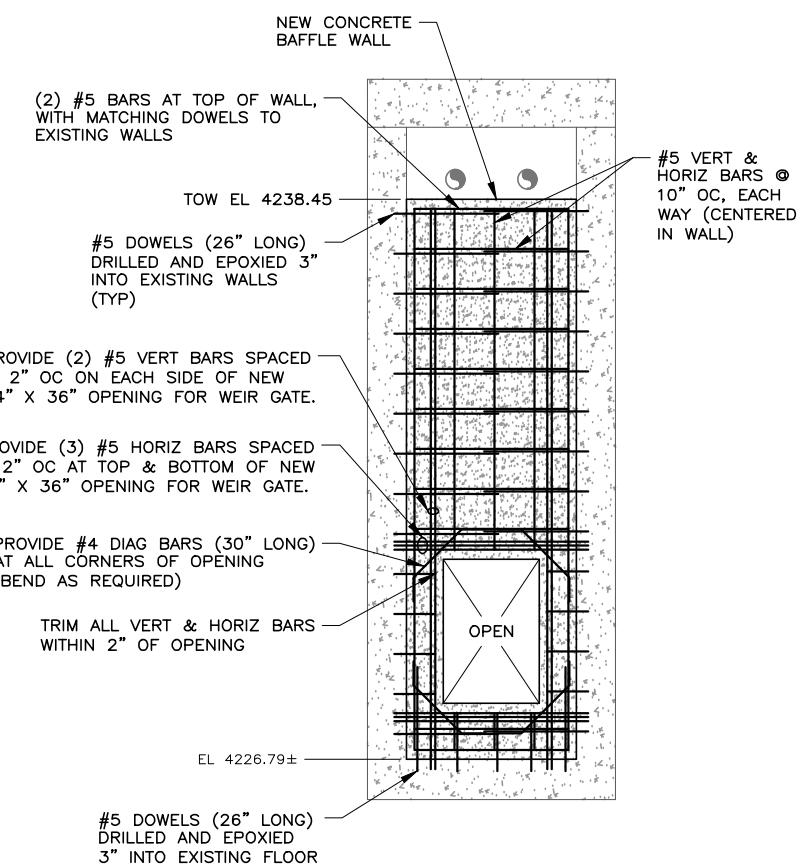


PLAN

CORE 8" DIA HOLE CENTERED ON NEW GATE STEM. USE FOR PUMPING CONCRETE INTO FORMS FOR CENTER WALL, THEN GROUT IN A 2" SCH 40 PVC SLEEVE AROUND GATE STEM. PREP CONCRETE SURFACE W/ CONCRETE ADHESIVE PRIOR TO GROUTING (SIKADUR-32 HI-MOD OR APPROVED EQUAL). IT IS RECOMMENDED THAT THE LOCATIONS BE SCANNED SO THAT A MAX OF ONLY (1) BAR EACH WAY IS CUT. CONTACT ENGINEER FOR RETROFITS IF MORE THAN (1) BAR IN EACH DIRECTION IS REQUIRED TO BE CUT



SECTION 1 C-4



SECTION 2

PANEL JORDAN RIVER																	
VOLTAGE:			120/240 V 1Ø 3W														
ENCLOSURE:			NEMA 3R														
CIRCUIT BREAKER TYPE:			BOLT-ON														
INTERRUPTING CAPACITY:			10 KAIC														
			LOCATION: JORDAN RIVER														
BRANCH CIRCUIT BREAKER		CONNECTION	DESCRIPTION	PHASE		DESCRIPTION	CONNECTION	BRANCH CIRCUIT BREAKER									
NOTES	#	AMP	P.	LOAD (VA)	L1	L2	LOAD (VA)	P.	AMP	#	NOTES						
1	60	2		5040	PUMP 1	6040	CONTROLLER	1000	1	20	2						
3	--	--		5040	-----	5220	RECEPTACLE	180	1	20	4						
5	60	2		5040	PUMP 2	5040	SPARE	1	20	6							
7	--	--		5040	-----	5040	SPARE	1	20	8							
9	20	1			SPARE	0	SPARE	1	20	10							
11	20	1			SPARE	0	SPARE	1	20	12							
PHASE SUBTOTALS (VA)				11080	10260												
PHASE TOTALS (KVA)				11.1	10.3												
PHASE TOTALS @ 120V (AMPS)				92.3	85.5												
NOTES:																	
G											PROVIDE WITH INTEGRAL SURGE PROTECTOR						
1																	
2																	
3																	

PANEL BLAIR STREET																	
VOLTAGE:			120/240 V 1Ø 3W														
ENCLOSURE:			NEMA 3R														
CIRCUIT BREAKER TYPE:			BOLT-ON														
INTERRUPTING CAPACITY:			10 KAIC														
			LOCATION: BLAIR STREET														
BRANCH CIRCUIT BREAKER		CONNECTION	DESCRIPTION	PHASE		DESCRIPTION	CONNECTION	BRANCH CIRCUIT BREAKER									
NOTES	#	AMP	P.	LOAD (VA)	L1	L2	LOAD (VA)	P.	AMP	#	NOTES						
1	30	2		2040	PUMP 1	3040	CONTROLLER	1000	1	20	2						
3	--	--		2040	-----	2220	RECEPTACLE	180	1	20	4						
5	30	2		2040	PUMP 2	2040	SPARE	1	20	6							
7	--	--		2040	-----	2040	SPARE	1	20	8							
9	20	1		0	SPARE	0	SPARE	1	20	10							
11	20	1		0	SPARE	0	SPARE	1	20	12							
PHASE SUBTOTALS (VA)				5080	4260												
PHASE TOTALS (KVA)				5.1	4.3												
PHASE TOTALS @ 120V (AMPS)				42.3	35.5												
NOTES:																	
G											PROVIDE WITH INTEGRAL SURGE PROTECTOR						
1																	
2																	
3																	

CONTROL CONDUIT SCHEDULE

C102	1	4 -#14	3/4"
		G: 1 -#14	
C202	1	ANTENNA WIRE	1"

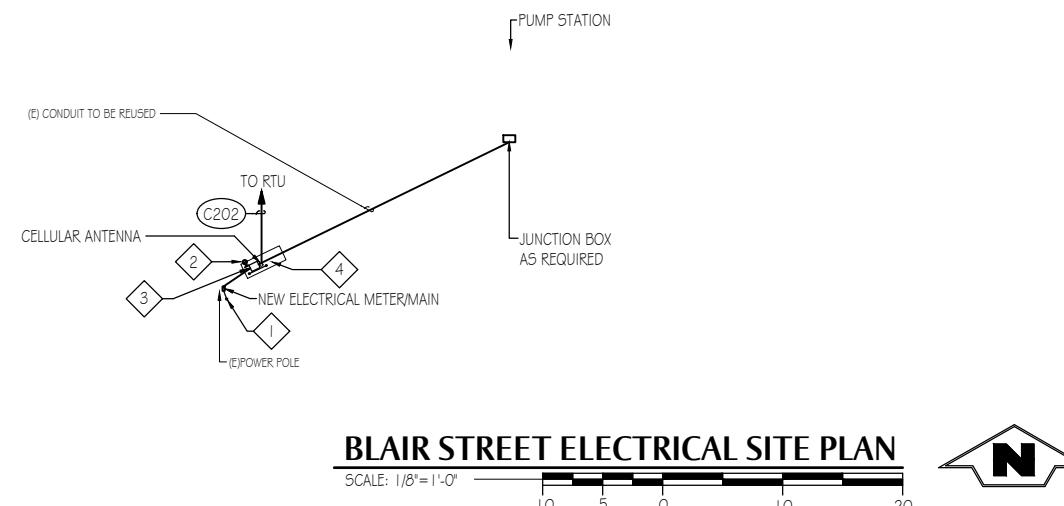
C203	1	6 -#14	EXISTING CONDUIT
		G: 1 -#14	

POWER CONDUIT SCHEDULE

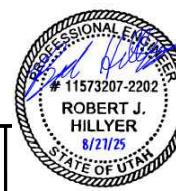
P104	1	P:	3 - #8	3/4"
		N:	NONE	
P105	1	PUMP SUPPLIED CABLE	-----	3/4"
		-----	-----	
P106	1	P:	2 - #12	3/4"
		N:	NONE	
P109	1	P:	2 - #12	EXISTING CONDUIT
		N:	NONE	
P110	1	P:	3 - #8	EXISTING CONDUIT
		N:	NONE	
P111				PUMP SUPPLIED CABLE

DRAWING NOTES

- 1 INSTALL GROUND RODS. SEE ONE-LINE DIAGRAM.
- 2 WP GFCI. RUN (2) #12, (1) #12 GND IN 3/4" CONDUIT TO 20A / 1P METER/MAIN BREAKER.
- 3 NEW ELECTRICAL CONTROLS ENCLOSURE, MOTOR CONTACTORS, AND RTU WITHIN ENCLOSURE. RUN (2) #12, (1) #12 GND IN 3/4" CONDUIT TO 20A / 1P METER/MAIN BREAKER FOR CONTROLLER.
- 4 POUR CONCRETE PAD OVER THE EXISTING CONDUIT. ENSURE THE EXISTING CONDUIT IS EXPOSED THROUGH THE NEW CONCRETE PAD AT ITS CURRENT LOCATION. INSTALL UNISTRUT FRAME IN THE CONCRETE TO SUPPORT THE ENCLOSURE AND PROVIDE MOUNTING FOR THE ANTENNA. ROUTE EXISTING CONDUIT TO THE ENCLOSURE. SEE UNISTRUT SUPPORT DETAIL AND UNISTRUT DETAIL IN CIVIL SHEETS.

**BLAIR STREET ELECTRICAL SITE PLAN**

SCALE: 1/8" = 1'-0" 10 5 0 10 20

FILE NAME:
FILE DATE:
**HANSEN
ALLEN
& LUCE**
INC.
ENGINEERS

PROJECT ENGINEER

ROBERT J.
HILLYERSTATE OF UTAH
#11573207-2202
8/21/25

DESIGNED RJH

DRAFTED KJB

CHECKED BT

DATE JULY 2025

3

2

1

NO.

DATE

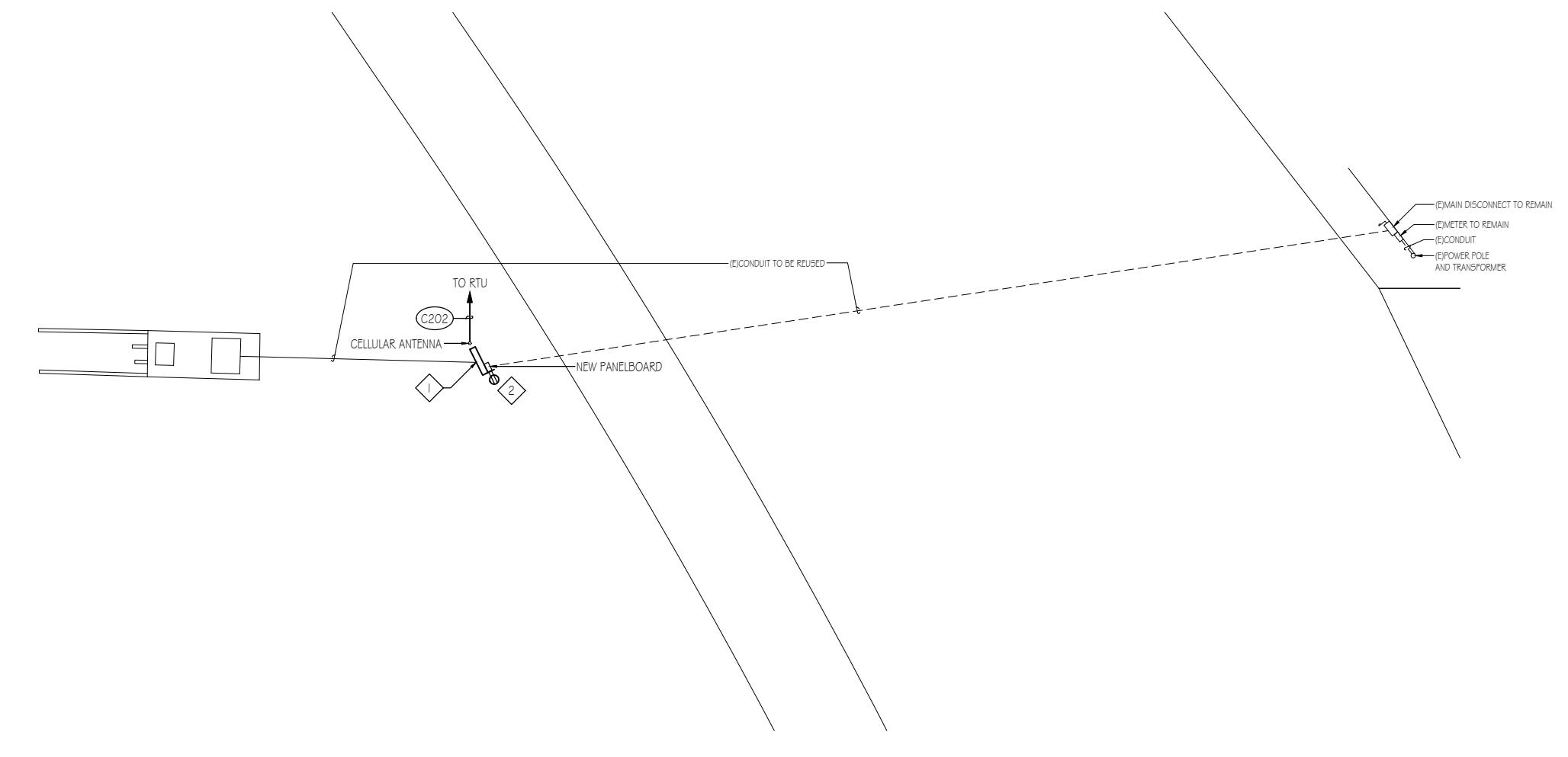
REVISIONS

SCALE
AS
SHOWNSTORM WATER PUMP STATIONS UPGRADES
ELECTRICAL
BLAIR STREET ELECTRICAL SITE PLANSSHEET
E-101
126.60.100

DRAWING NOTES

- 1 NEW ELECTRICAL CONTROLS ENCLOSURE. VFD'S, AND RTU WITHIN ENCLOSURE. RUN (2) #12, (1) #12 GND IN 3/4" CONDUIT TO 20A / 1P BREAKER FOR CONTROLLER.

2 WP GFCI. RUN (2) #12, (1) #12 GND IN 3/4" CONDUIT TO 20A / 1P BREAKER.



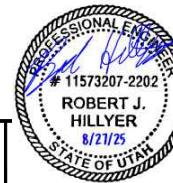
JORDAN RIVER ELECTRICAL SITE PLAN

A scale bar with a total length of 1 foot 0 inch, divided into 8 equal segments of 1/8 inch each. The segments are represented by alternating black and white rectangles. The text "SCALE: 1/8" = 1'-0" is positioned to the left of the bar.



FILE NAME:
FILE DATE:

1



**HANSEN
ALLEN
& LUCE**

8

DESIGNED	RJH	3				
DRAFTED	KJB	2				
CHECKED	BT	1				
DATE	JULY, 2025	NO.	DATE	REVISIONS	PK	AP

9

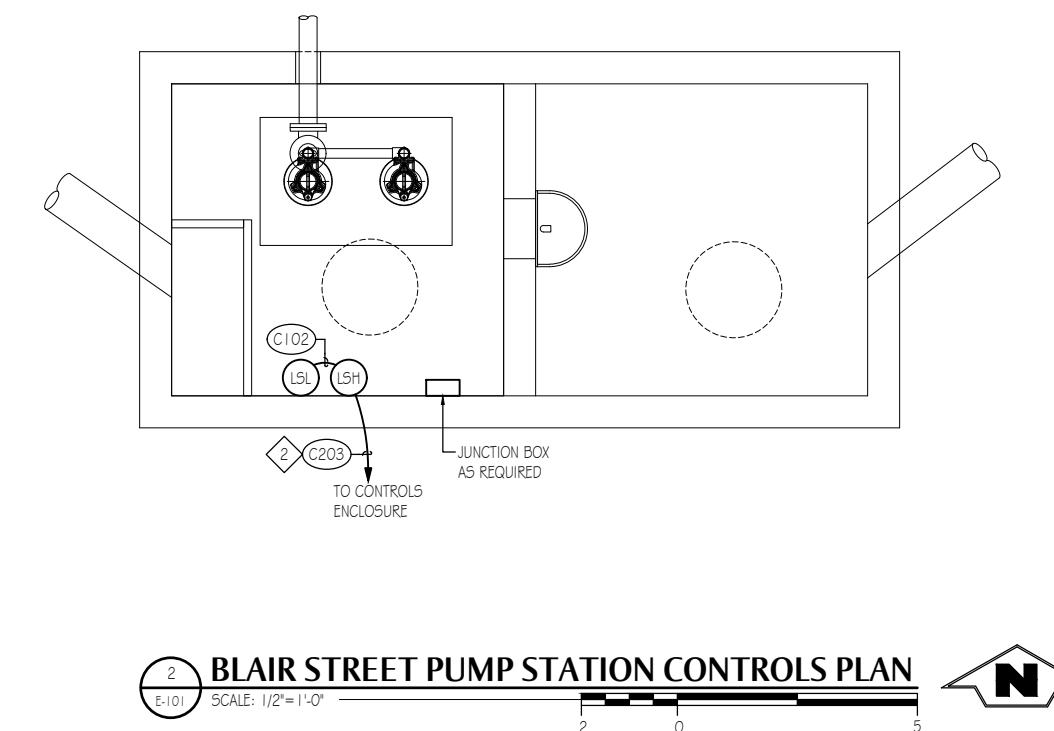
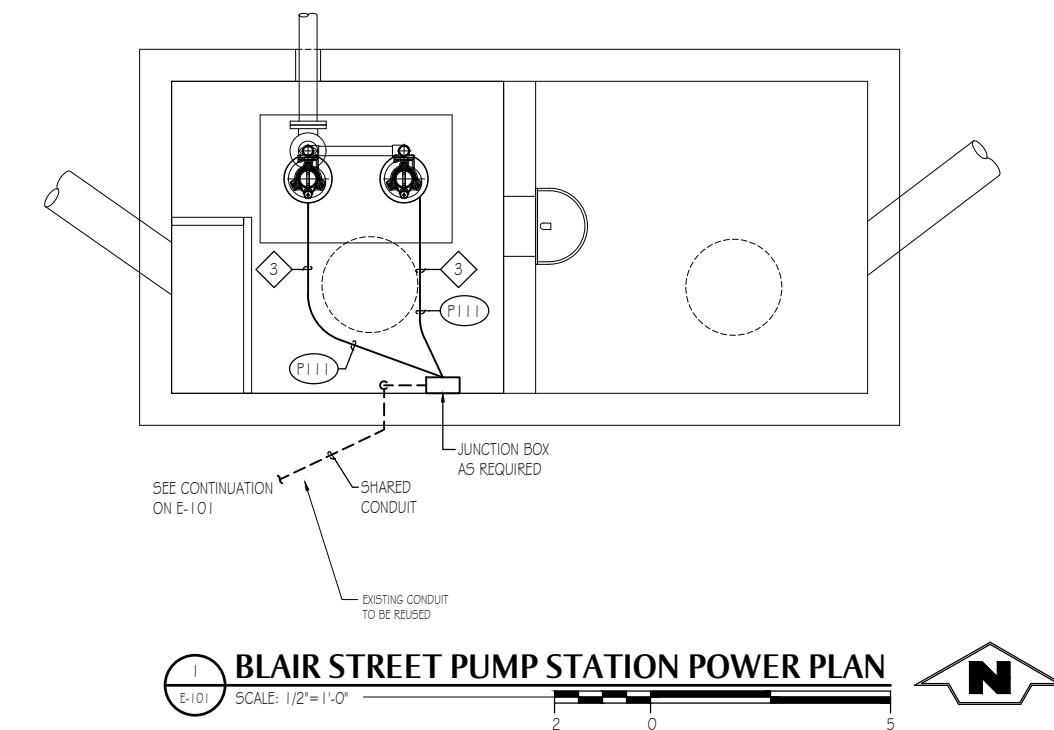
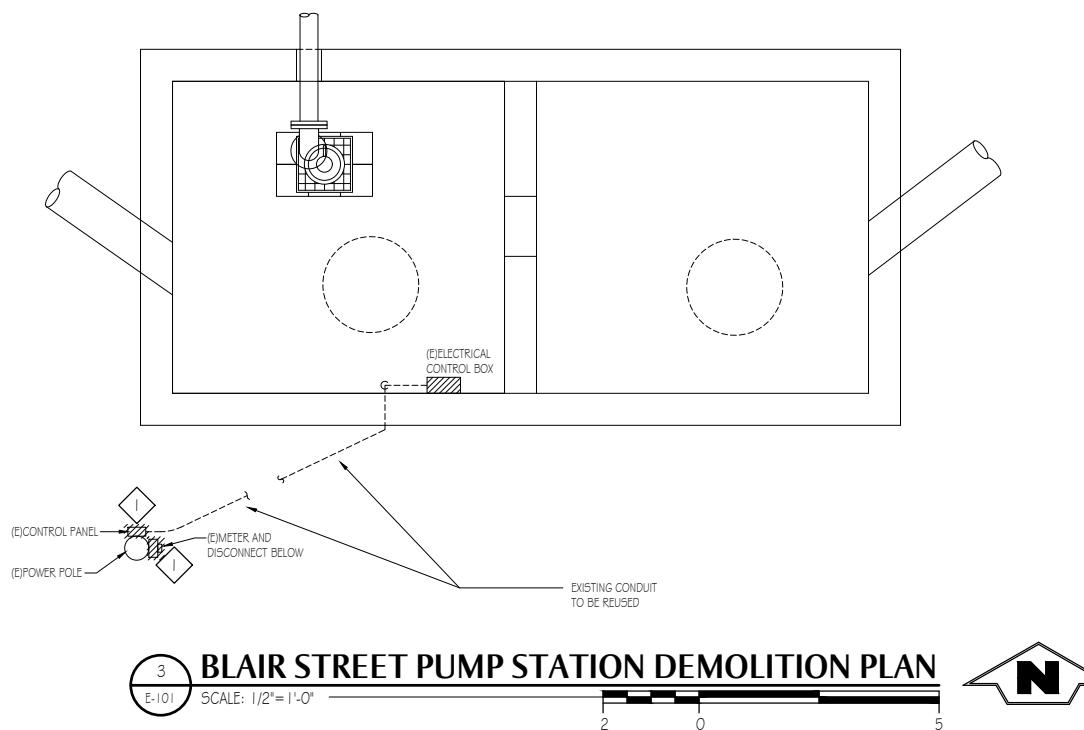
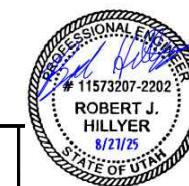


STORM WATER PUMP STATIONS UPGRADE
ELECTRICAL
JORDAN RIVER ELECTRICAL SITE PLANS

SHEET
E-102

DRAWING NOTES

- 1 REMOVE EXISTING ELECTRICAL BOX. SEE REMODEL DRAWING.
- 2 SHARED CONDUIT WITH POWER CONDUCTORS.
- 3 SUPPORT PUMP CORD TO CEILING OR WALL OF VAULT.

FILE NAME:
FILE DATE:

**HANSEN
ALLEN
& LUCE**
ENGINEERS
STATE OF UTAH
#11573207-2202
ROBERT J.
HILLYER
8/21/25

DESIGNED RJH 3
DRAFTED KJB 2
CHECKED BT 1
DATE JULY 2025 NO. DATE

REVISIONS BY APVD.

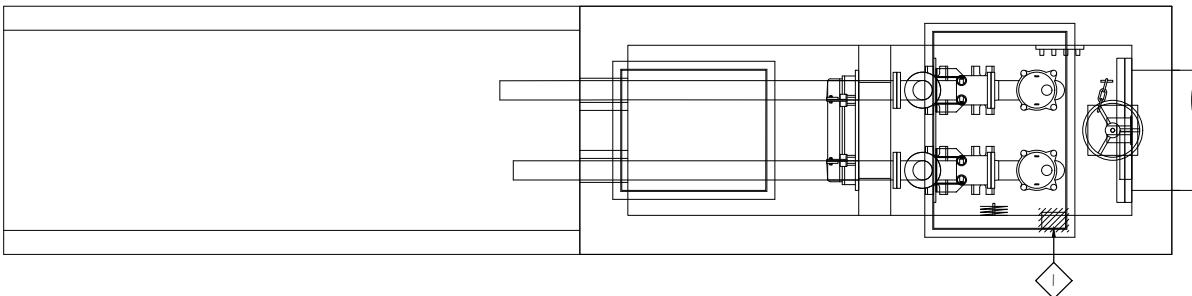
**is SOUTH
SALT LAKE**

STORM WATER PUMP STATIONS UPGRADES
ELECTRICAL
BLAIR STREET PUMP STATION PLANS

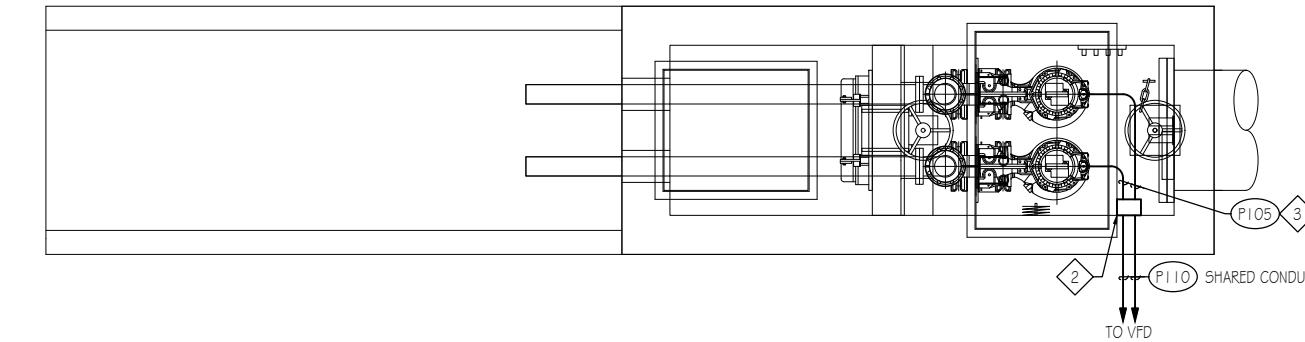
SHEET
E-201
126.60.100

DRAWING NOTES

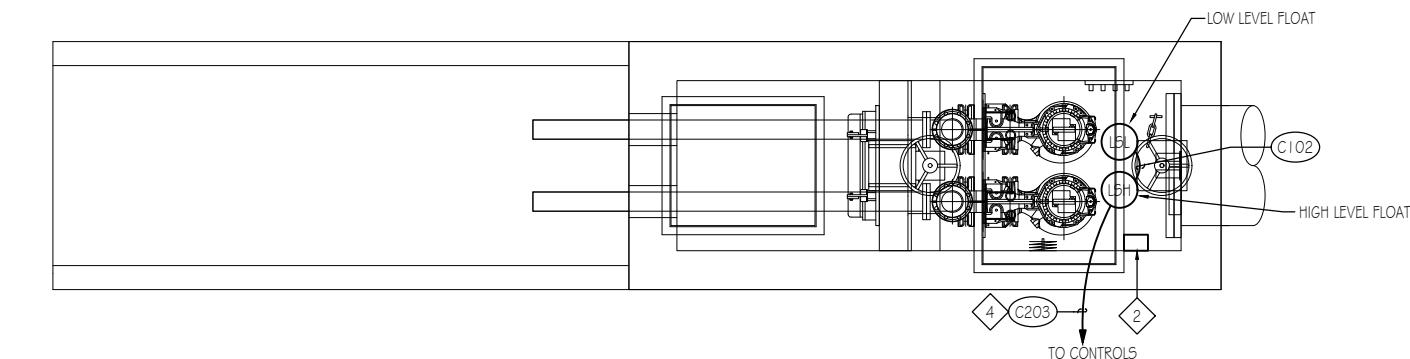
- 1 REMOVE EXISTING ELECTRICAL BOX. SEE REMODEL DRAWING.
- 2 NEW ELECTRICAL JUNCTION BOX FOR PUMP MOTOR CONNECTIONS AND CONTROLS AS REQUIRED.
- 3 SUPPORT PUMP CORD TO CEILING OR WALL OF VAULT.
- 4 SHARED CONDUIT WITH POWER CONDUCTORS.



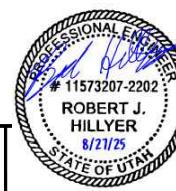
3
E-102 SCALE: 1/2'=1'-0"
JORDAN RIVER PUMP STATION DEMOLITION PLAN



1
E-102 SCALE: 1/2'=1'-0"
JORDAN RIVER PUMP STATION POWER PLAN



2
E-102 SCALE: 1/2'=1'-0"
JORDAN RIVER PUMP STATION CONTROLS PLAN

FILE NAME:
FILE DATE:

HANSEN
ALLEN
& LUCE, Inc.
ENGINEERS
STATE OF UTAH
11573207-2202
ROBERT J.
HILLYER
8/21/25

DESIGNED RJH
DRAFTED KJB
CHECKED BT
DATE JULY 2025
PROJECT ENGINEER

3

2

1

NO.

DATE

REVISIONS

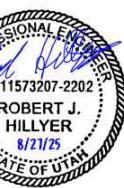
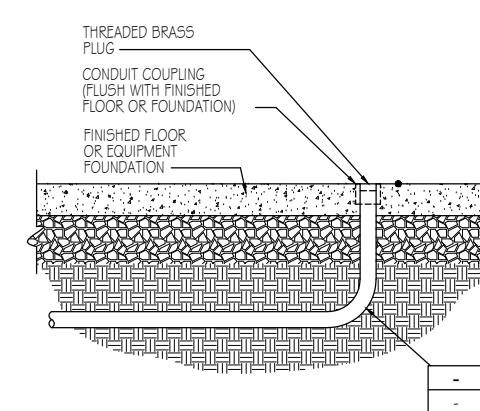
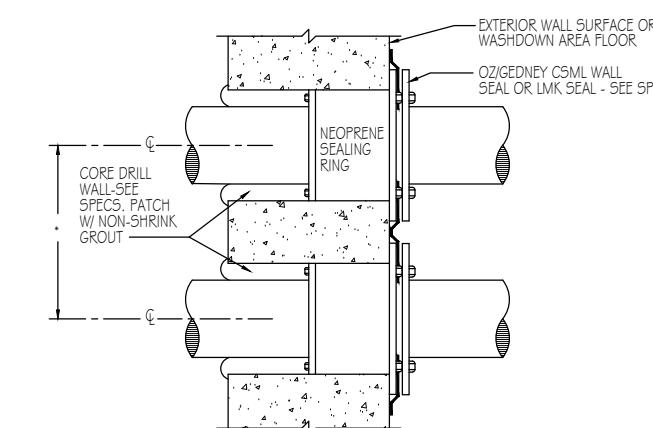
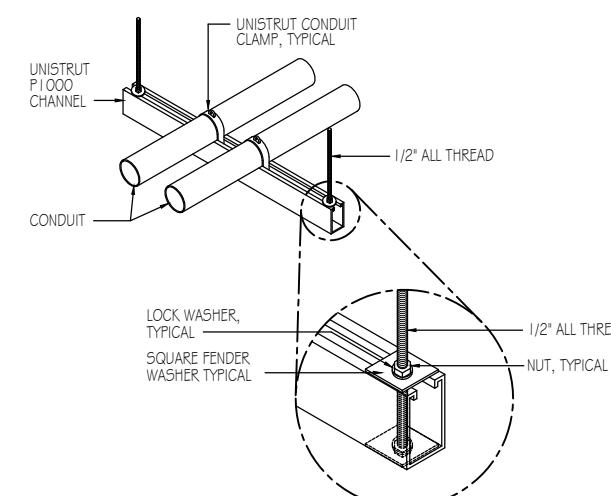
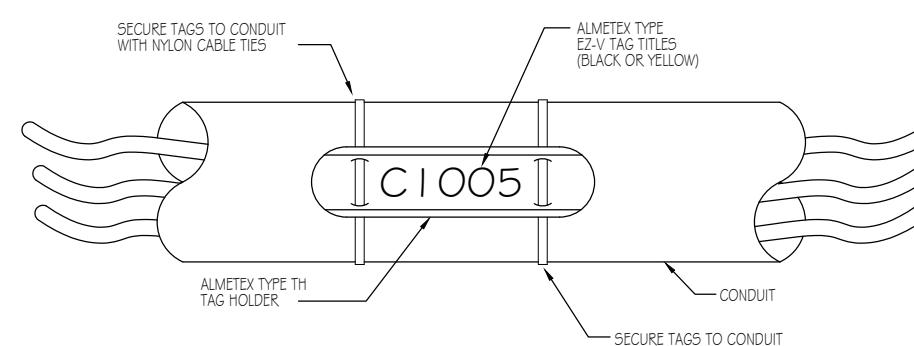
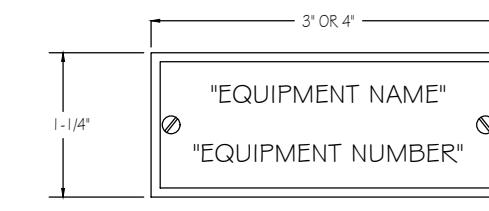
BY APVD.

SCALE
AS
SHOWN

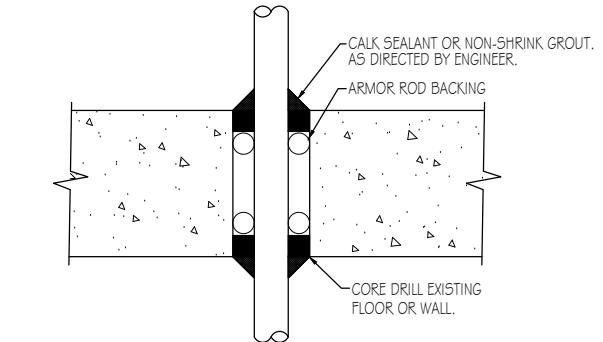
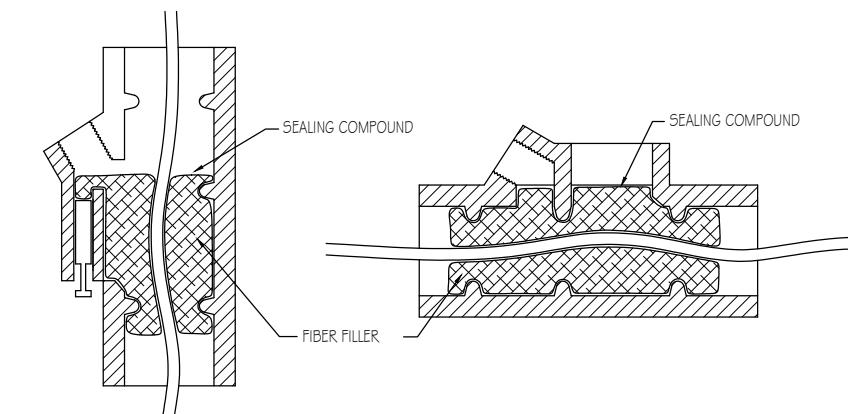
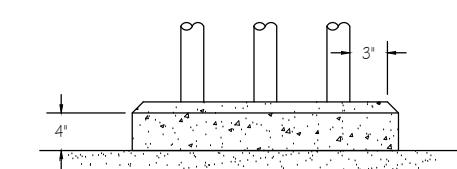
IS SOUTH
SALT LAKE

STORM WATER PUMP STATIONS UPGRADES
ELECTRICAL
JORDAN RIVER PUMP STATION PLANS

SHEET
E-202
126.60.100

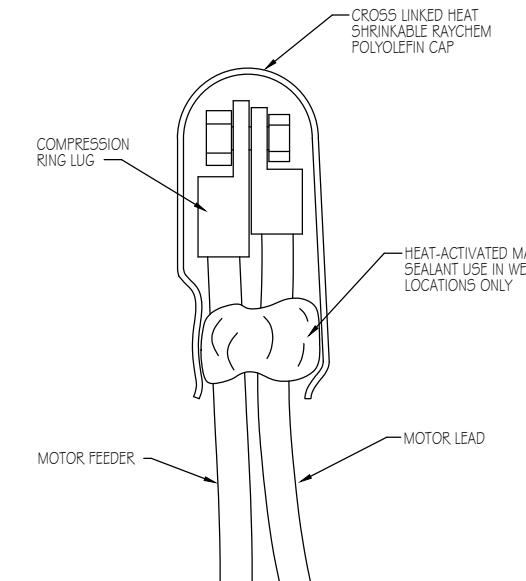

FLUSH CONDUIT TERMINATION
 E-501 SCALE: NONE — TYPICAL

CONDUIT SUPPORT DETAIL
 E-501 SCALE: NONE — TYPICAL

**UNDERGROUND CONDUIT
WALL SEAL OR WASHDOWN FLOOR**
 E-501 SCALE: NONE

CONDUIT MARKING SYSTEM
 E-501 SCALE: NONE — TYPICAL OF ALL CONDUITS

NAMEPLATE DETAIL
 E-501 SCALE: NONE — TYPICAL OF ALL EQUIPMENT

- NOTES:
1. ALL LETTERS TO BE 1/4" UNLESS NOTED OTHERWISE.
 2. ALL NAMEPLATES TO BE MOUNTED ON THE VERTICAL CENTERLINE OF THE CUBICAL OR DEVICE.
 3. ATTACH ALL NAMEPLATES WITH STAINLESS STEEL SCREWS.
 4. PROVIDE BLANK NAMEPLATES FOR ALL SPARE AND FUTURE DEVICES.

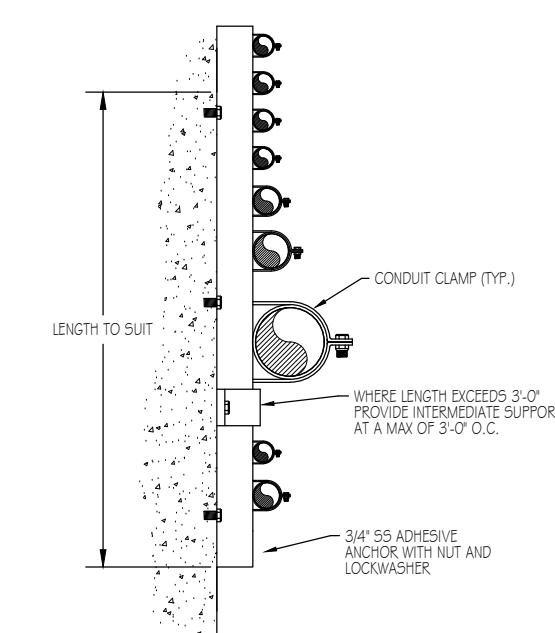

**EXISTING WALL/DRY
FLOOR PENETRATIONS**
 E-501 SCALE: NONE

VERTICAL CONDUIT
HORIZONTAL CONDUIT
**TYPICAL CONDUIT SEAL
DAMMING AND POURING**
 E-501 SCALE: NONE


HOUSEKEEPING CURB REQUIRED AT ALL INTERIOR WALL LOCATIONS FOR SINGLE AND MULTIPLE CONDUIT RISERS. CONDUIT RISERS SHALL BE COUPLED SO THAT SINGLE CONDUITS ARE SIX FEET APART MINIMUM.

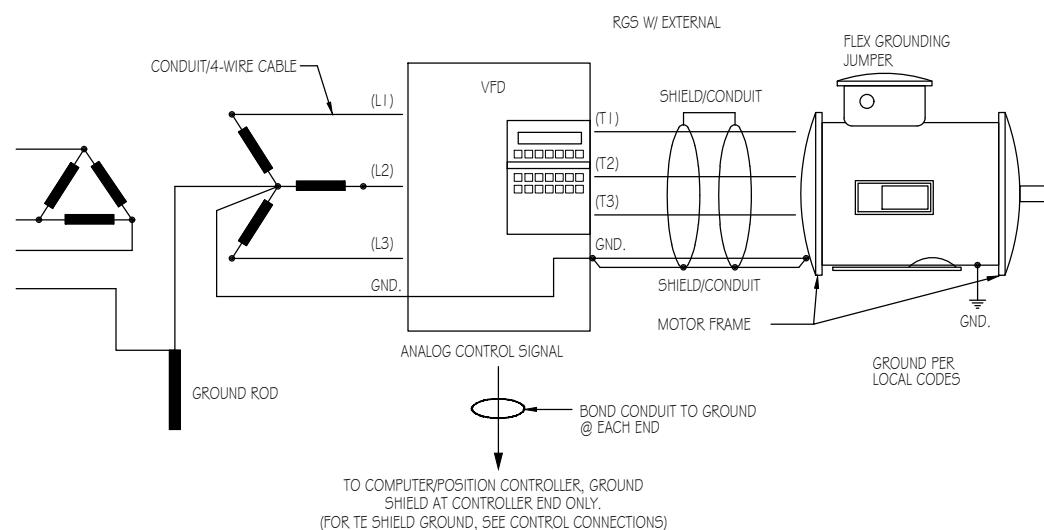
CONCRETE HOUSEKEEPING CURB DETAIL
 E-501 SCALE: NONE



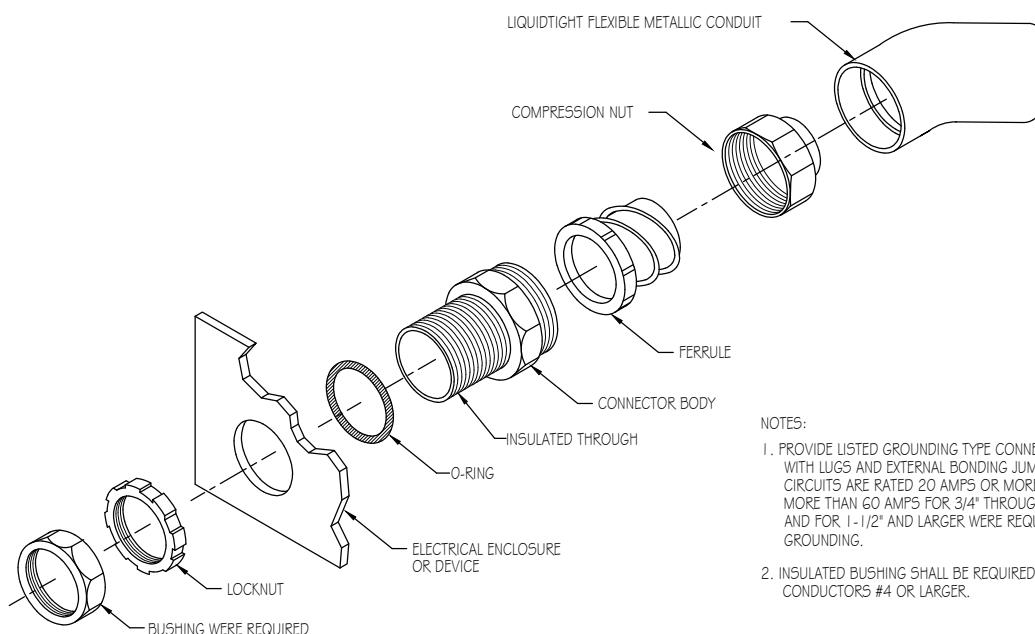
5 E-502 TYPICAL MOTOR LEAD TERMINATION



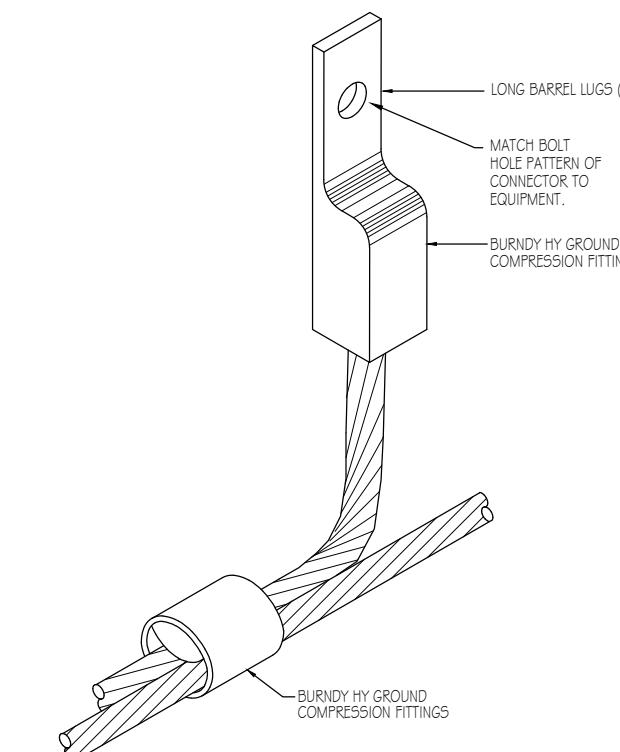
3 E-502 CONDUIT SUPPORT DETAIL



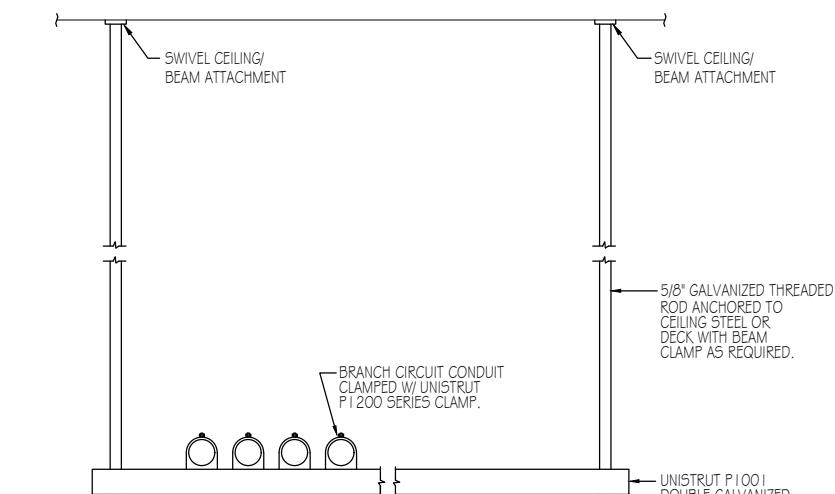
1 E-502 VFD GROUNDING DIAGRAM



6 E-502 TYPICAL FLEXIBLE CONDUIT CONNECTION DETAIL

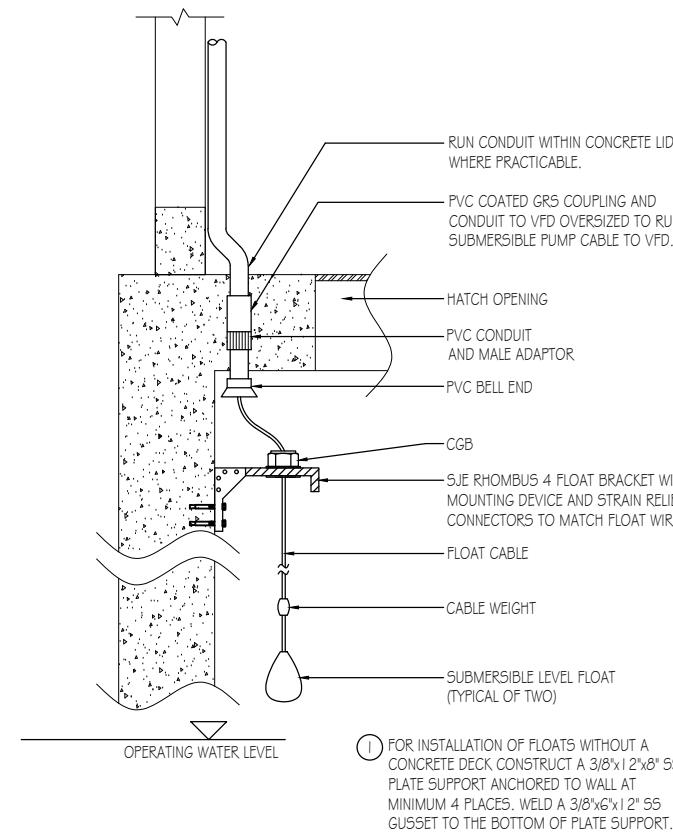


4 E-502 EQUIPMENT GROUNDING CONNECTION

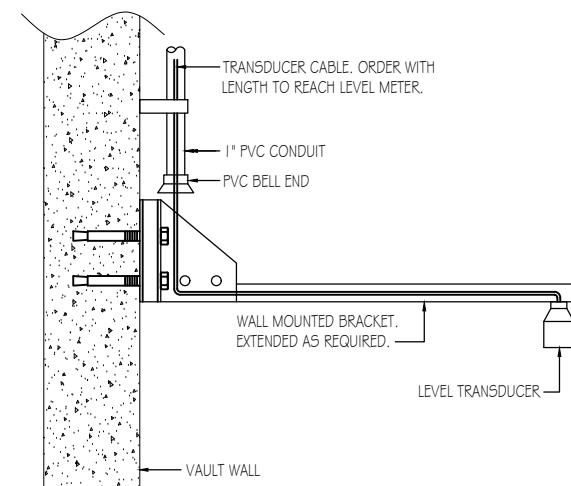


2 E-502 CONDUIT SUPPORT DETAIL

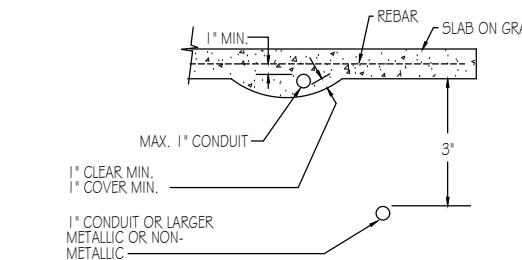




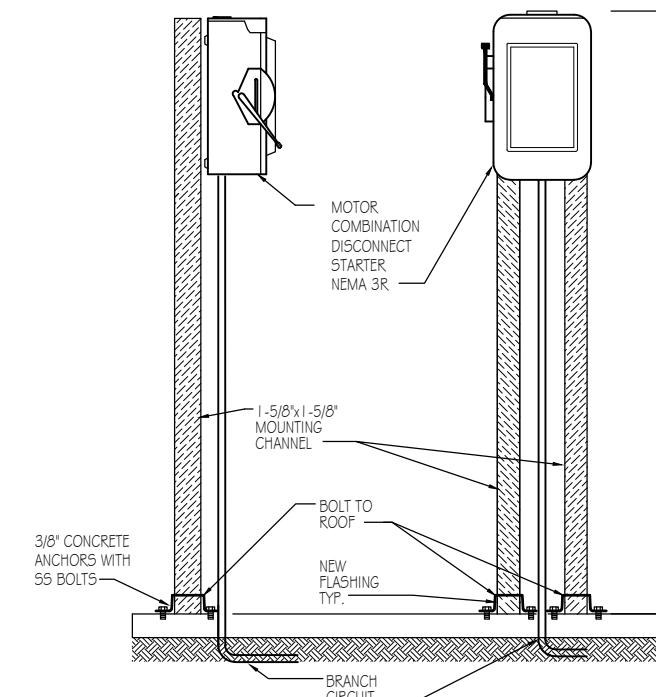
LEVEL FLOAT MOUNTING DETAIL
E-503 SCALE: NONE



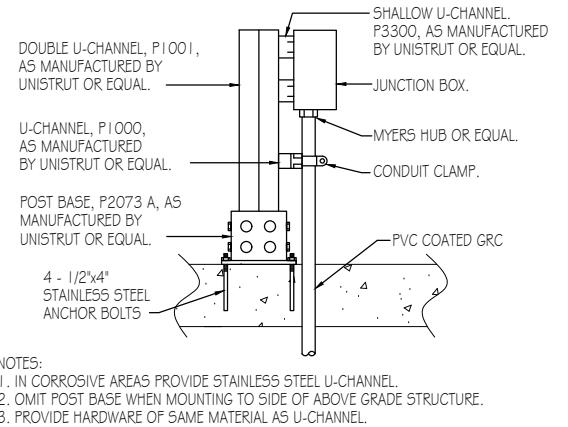
TRANSDUCER MOUNTING DETAIL
E-503 SCALE: NONE



CONDUIT PLACEMENT DETAIL
E-503 SCALE: NONE TYPICAL

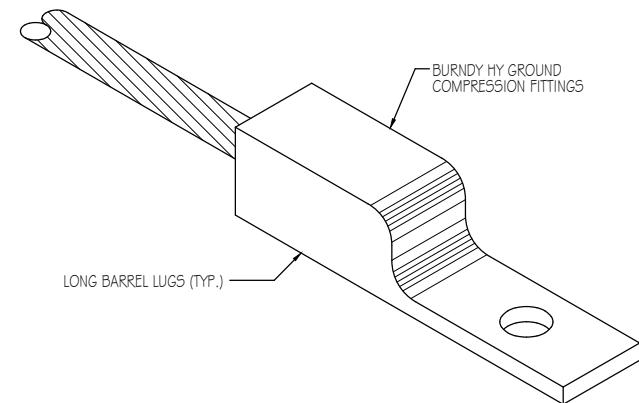


MOTOR COMBINATION DISCONNECT STARTER DETAIL
E-503 SCALE: NONE

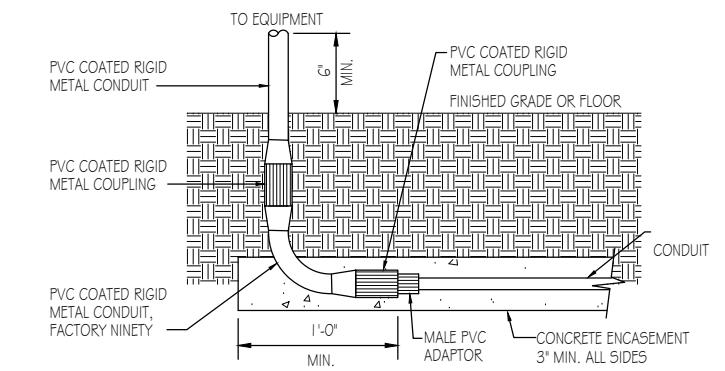


NOTES:
1. IN CORROSIVE AREAS PROVIDE STAINLESS STEEL U-CHANNEL.
2. OMIT POST BASE WHEN MOUNTING TO SIDE OF ABOVE GRADE STRUCTURE.
3. PROVIDE HARDWARE OF SAME MATERIAL AS U-CHANNEL.

JUNCTION BOX MOUNTING DETAIL
E-503 SCALE: NONE

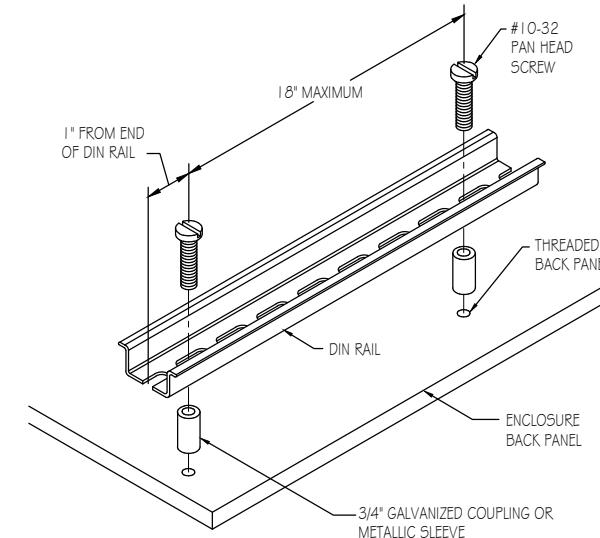


BONDING LUG DETAIL
E-503 SCALE: NONE



CONDUIT RISER DETAIL
E-503 SCALE: NONE TYPICAL

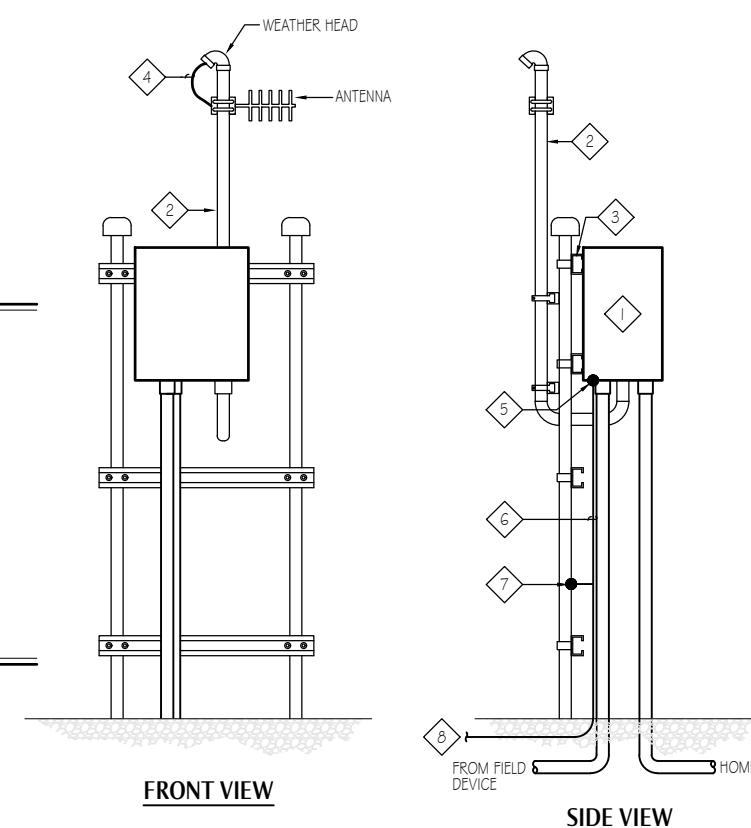




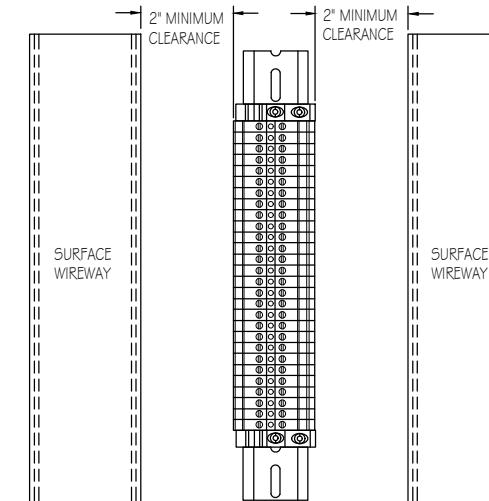
DIN RAIL MOUNTING DETAIL
E-504 SCALE: NONE

DETAIL NOTES

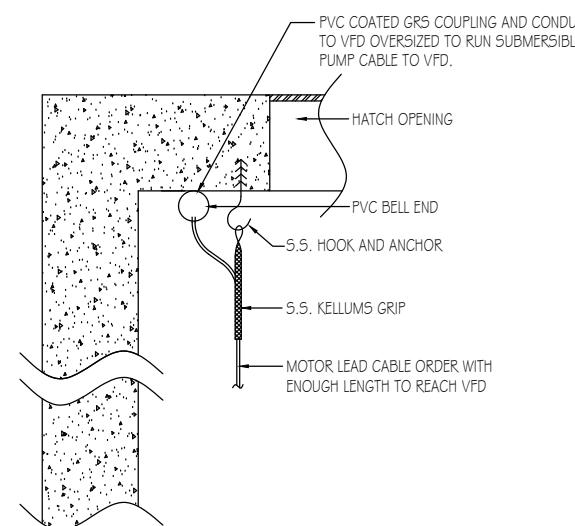
- 1 ENCLOSURE, NEMA 12.
- 2 MAST, 1" RGS.
- 3 CONDUIT CLAMPS
- 4 S.O. EXTERIOR ARRAY CABLE / WIRING HARNESS.
- 5 BOND TO CABINET AND TO SURGE SUPPRESSORS AND POWER SUPPLIES WITHIN CABINET.
- 6 #6 B.C. SOLID COPPER GROUND.
- 7 BOND TO MAST.
- 8 TO GROUND GRID. SEE SITE PLAN.



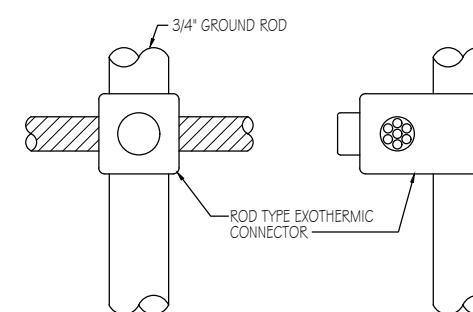
UNISTRUT SUPPORT DETAIL
E-504 SCALE: NONE



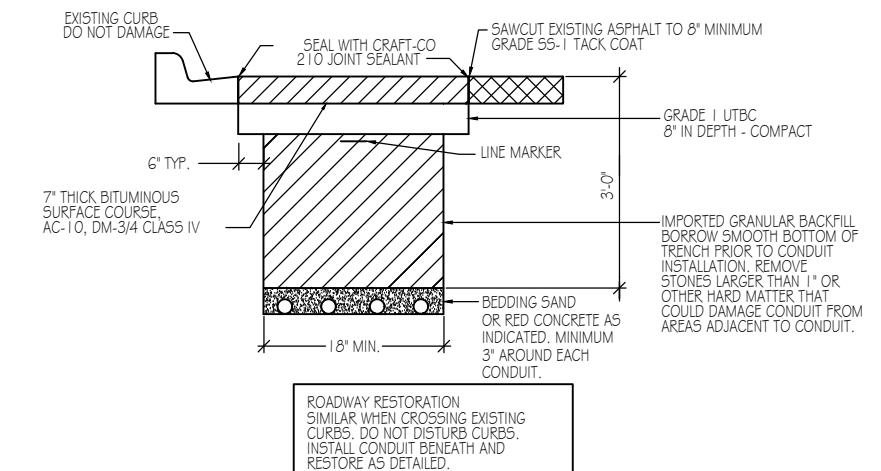
TERMINAL BLOCK CLEARANCE DETAIL
E-504 SCALE: NONE



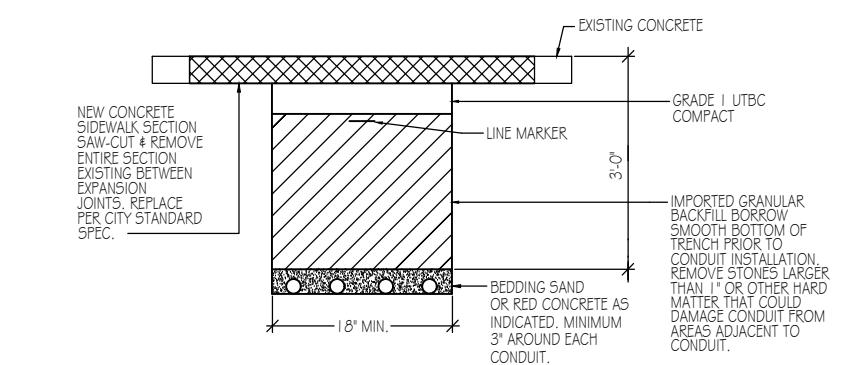
PUMP MOTOR LEAD MOUNTING DETAIL
(MOTOR MONITORING CABLE SIMILAR)
E-504 SCALE: NONE



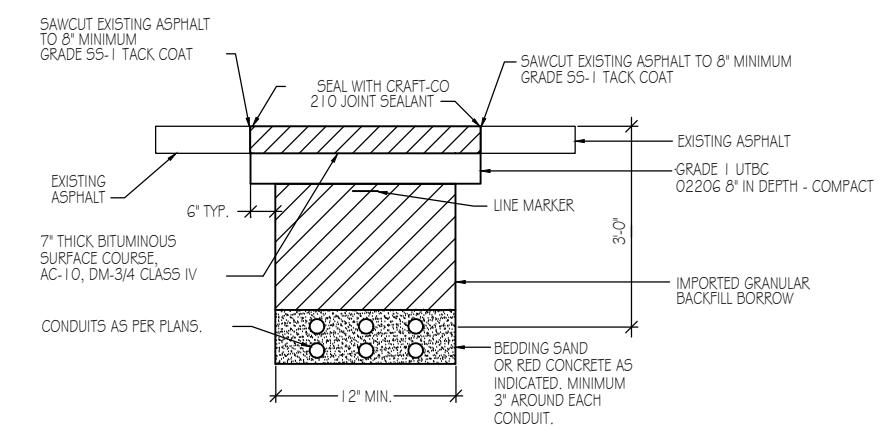
CABLE TO ROD CONNECTION DETAIL
E-504 SCALE: NONE TYPICAL



TRENCH DETAIL-ROADWAY RESTORATION
E-504 SCALE: NONE

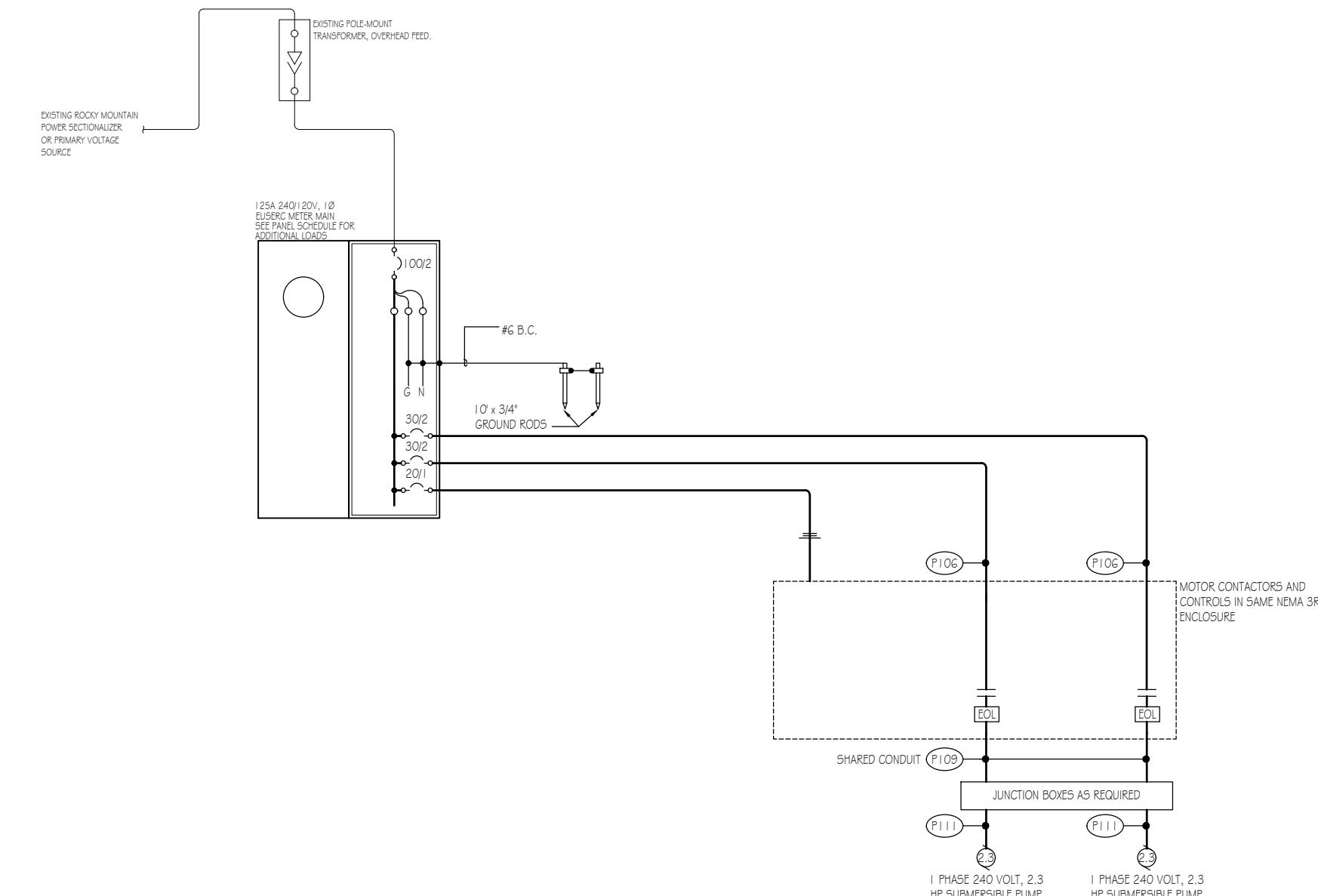


TRENCH DETAIL-SIDEWALK RESTORATION
E-504 SCALE: NONE



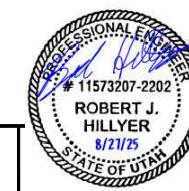
TRENCH DETAIL-ROADWAY RESTORATION
E-504 SCALE: NONE





1
E-601
SCALE: NONE

BLAIR STREET PUMP STATION ELECTRICAL ONE-LINE DIAGRAM

FILE NAME:
FILE DATE:

HANSEN
ALLEN
& LUCE Inc.
ENGINEERS
STATE OF UTAH
PROJECT ENGINEER

DESIGNED RJH
DRAFTED KJB
CHECKED BT
DATE JULY 2025

3

2

1

NO.

DATE

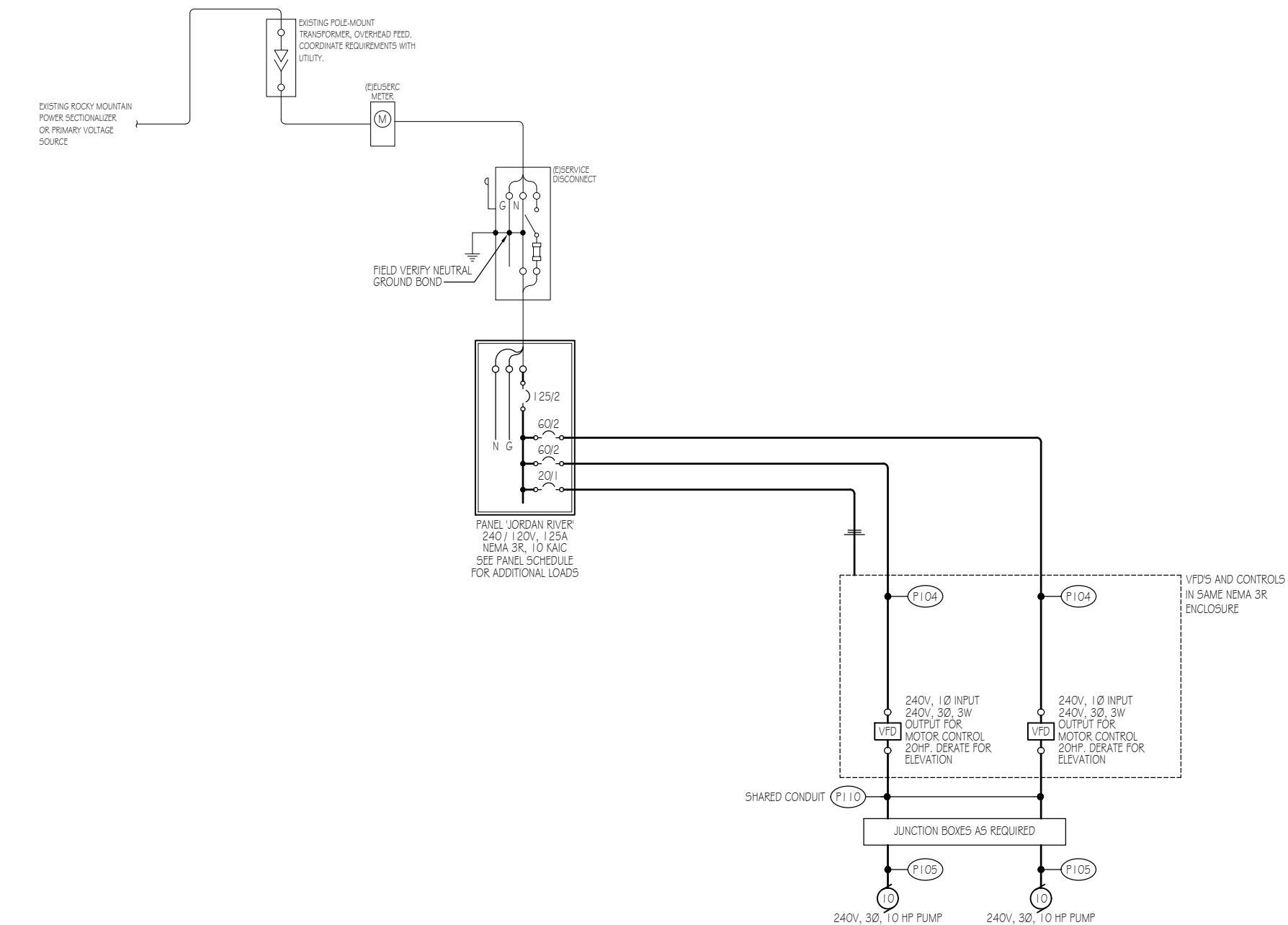
REVISIONS

SCALE
AS
SHOWN
BY APVD.

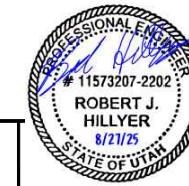


STORM WATER PUMP STATIONS UPGRADES
ELECTRICAL
BLAIR STREET PS ONE-LINE DIAGRAM

SHEET
E-601
126.60.100



JORDAN RIVER PUMP STATION ELECTRICAL ONE-LINE DIAGRAM

FILE NAME:
FILE DATE:

**HANSEN
ALLEN
& LUCE**
ENGINEERS

PROJECT ENGINEER

ROBERT J.
HILLYER

8/21/25

11573207-2202

STATE OF UTAH

8/21/25

DESIGNED RJH
DRAFTED KJB
CHECKED BT
DATE JULY 20253
2
1
NO. DATE

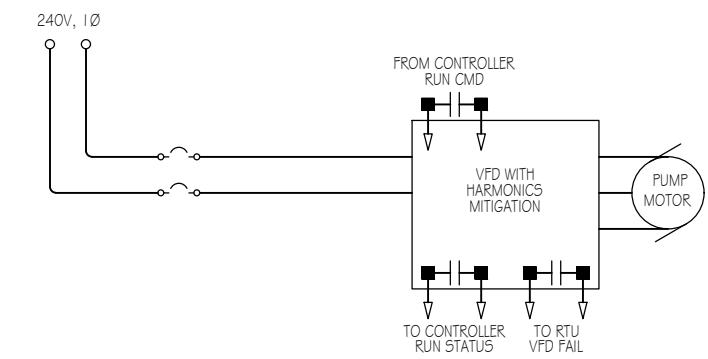
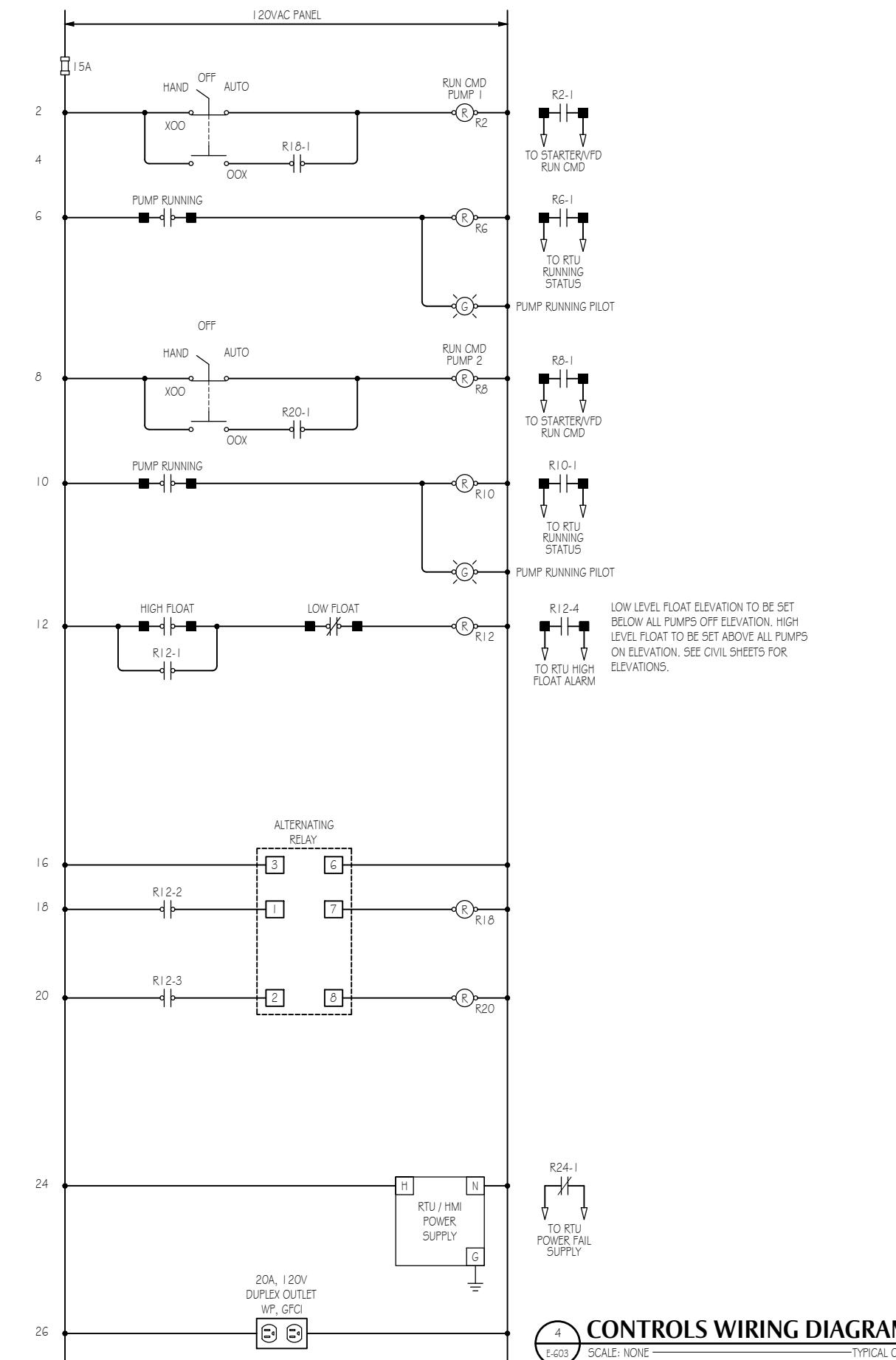
REVISIONS

BY APVD.

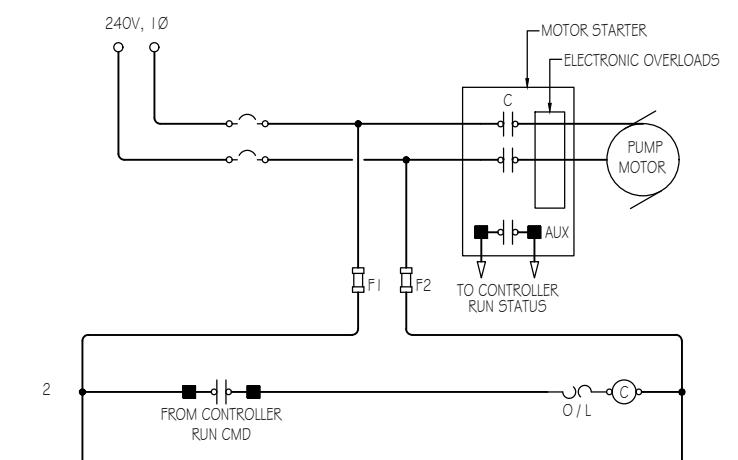
SCALE
AS
SHOWN

STORM WATER PUMP STATIONS UPGRADES
ELECTRICAL
JORDAN RIVER PS ONE-LINE DIAGRAM

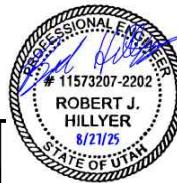
SHEET
E-602
126.60.100



JORDAN RIVER STORM WATER PUMP VFD CONTROLS DIAGRAM



BLAIRE STREET STORM WATER PUMP CONTROLS DIAGRAM



DESIGNED	RJH	3				
DRAFTED	KJB	2				
CHECKED	BT	1				
DATE	JULY 2025	NO.	DATE	R E V I S I O N S	BY	APVD.

SC
A
SH

**is SOUTH
SALT LAKE**

STORM WATER PUMP STATIONS UP ELECTRICAL WIRING AND CONTROL DIAGRAMS

SHEET
E-603
126.60.100