JORDAN VALLEY WATER CONSERVANCY DISTRICT

JORDAN VALLEY WATER CONSERVANCY DISTRICT
WEST JORDAN, UTAH

JORDAN VALLEY WATER TREATMENT PLANT
FILTER AND CHEMICAL FEED UPGRADES

JVWCD PROJECT #4289

ADDENDUM NO. 1
TO THE
CONTRACT DOCUMENTS

APRIL 2025

Digitally signed by Stetson Sky Bassett
Contact Info: Carollo Engineers, Inc.
Date: 2025.04.18 08:36:07-06'00'

REGISTERED PROFESSIONAL ENGINEER
No. 12149234-2202
STETSON SKY BASSETT
STATE OF UTAH

carollo®

7090 SOUTH UNION PARK AVENUE, SUITE 600 ▪ MIDVALE, UTAH 84047 ▪ P 801-233-2500
pw://Carollo/Documents//

Bidders on the above-named project are hereby notified that the Bidding Documents are modified as indicated below. Bidders are required to acknowledge receipt of this Addendum in the space provided on the Document C-1 Bid Form.

This addendum consists of the following items:

ADDENDUM ITEM	NO. OF PAGES
This document (including cover page)	8
ATTACHMENTS:	
Division 0 – Page C-5 – BID ALTERNATE SCHEDULE	1
Specification 01230 – ALTERNATES	1
DRAWINGS	40
Responses to Contractor Questions	2
Excel Version of Conduit Schedules – FOR REFERENCE ONLY	10 files

This Addendum shall become part of the Contract and provisions of the Contract apply.

The bid date and time remains the same at 2:00 pm on May 15, 2025.

SPECIFICATIONS

The following sections are modified as indicated below.

1. DIVISION 0:
   a. **ADD** the following paragraph AFTER the paragraph titled “AWARD OF CONTRACT”:

      In evaluating Bids, the Owner will consider compliance with the prescribed requirements, including the alternates and other data as requested in the Bid Form. The evaluation of bids will be based on the total bid price, including any owner selected bid alternates.

   b. On page C-3 **REPLACE** the word “electric” with “pneumatic” as shown in the following paragraph in the POWDER ACTIVATED CARBON DUST HAZARD MITIGATION ALLOWANCE SCHEDULE, row 5:

      Knife Gate Controls: Pneumatic actuator on knife gate valve with a sensor to automatically close the knife gate when filled.

   c. ADD the attached page C-5 after page C-4, providing a new BID ALTERNATE SCHEDULE, which shall be included in Bid.
2. SECTION 01230 – ALTERNATES:
   a. **ADD** the attached section, in it’s entirety.
3. SECTION 01140 WORK RESTRICTIONS

a. **ADD** the following paragraphs as sub-paragraphs to 1.04.A:

1. Contractor access to the site is not permitted from the north (via 15000 S or 3200 W).

2. See 01500 – Temporary Facilities and Controls for additional requirements on site access.

4. SECTION 01500 TEMPORARY FACILITIES AND CONTROLS

a. **ADD** the following paragraphs after 1.06.A:

B. Contractor shall provide a gate attendant to facilitate secure access to the site any time more than ten (10) entries through the plant gates per day anticipated within a rolling 8 hour period.

1. Gate attendant shall be located outside the south entry gate, providing controlled access to the site from Mountain View Corridor. See 01140 – Work Restrictions, for additional plant access constraints.

2. The Owner will provide the Gate attendant with a Contractor specific remote gate operator and/or keycard to allow entry of authorized construction personnel.

3. Gate attendant shall log all project associated construction traffic through the gate, recording the name of entrant(s), entry time/date, reason for entry, and exit time.

5. SECTION 09960 – HIGH PERFORMANCE COATINGS:

a. **REPLACE** the following paragraph in Section 3.12.C:

C. Galvanized structural steel framing, non-exposed portions of galvanized roof decking, galvanized pipe supports.

b. Attachment A - Schedules of Surfaces to be Coated:

1) ADD the following to the VE-C-1 row in the table in section A:

"All concrete surfaces inside the caustic chemical containment areas and tank offloading/fill sump, as shown on the structural drawings, including inside of containment wall surfaces (up to 3 ft above finished floor where indicated), top of containment wall surfaces, sump area, equipment pads, and tank pads."

2) ADD the following to the Notes, Item 1 in the table in section A:

"m. Exposed (underside) of galvanized roof decking."

6. SECTION 13207 – STRAND WOUND CIRCULAR PRESTRESSED CONCRETE TANK:

a. **ADD** the following paragraphs to 2.01.I.7:

c. roof access hatches shall have the following features, per the requirements of Utah Administrative Code section R309-545-14:

1) Framed a minimum of 4" above the roof surface

2) A shoebox type lid with 2" overhang around frame, gasket

3) No surface penetrations

4) Designed with a lock

b. **AMMEND** paragraph 2.01.I.10.b.5 for the roof ventilator as follows:

5) Insect screens with non-corrodible No.14 (or finer) mesh screen. Vents 6" or greater in diameter shall have an additional heavy gage screen to protect the fine mesh screen.

7. SECTION 13270 – PAC STORAGE AND HANDLING SYSTEM:
   a. **REMOVE** ", and booster pump" from the following paragraph in section 2.05.K.2:
      1) The eductor shall be equipped with a motive water line assembly complete with a manually operated isolation ball valve, a pressure reducing valve with integral strainer, a low-pressure switch, a pressure gauge, and booster pump.
   b. **REMOVE** "booster pump" from the following paragraph in section 2.05.N:
      1) The Contractor is responsible for the interconnected piping, wiring, and conduit to connect the booster pump, air compressor, and panels to the respective tie-in points within the silo system.
8. SECTION 15112 BUTTERFLY VALVES
   a. **ADD** the following paragraphs after 2.03:

2.04 DOUBLE ECCENTRIC/OFFSET BUTTERFLY VALVES

A. Manufacturers: One of the following or equal:
   1. VAG; EKN (Double Eccentric Rubber Seated).
   2. AV-Tek; DEX Double Eccentric Butterfly Valve.

B. Butterfly Valve Water Works Service 3 Inches to 72 Inches:
   1. Design and Operating Requirements:
      a. Valves shall be rated to 250 psi, with ANSI B16.5 and B16.47, Class 150 Series A raised face flanges. Each valve shall be drip tight in both directions.
   2. Elastomeric Seal:
      a. Valve seats shall be EPDM mounted on the valve disc with Type 316 stainless steel fasteners. It shall be one continuous 360-degree elastomeric ring. It shall not be penetrated by fasteners. The seat shall be field replaceable and adjustable in line. It shall not require special tools or skill sets to replace the seat. Seat removal, replacement and readiness for service must be able to be accomplished in a maximum of 8 hours. Seat methods which do not comply or which use hardened epoxy or grout in a dovetailed groove are not acceptable.
   3. Body:
      a. Valve bodies shall be ductile iron ductile iron, ASTM A536 65-45-12 or ASTM A536 60-40-18. Shear stress vulnerable cast iron is not allowed. Valve body shall include a stainless steel stamped or engraved tag indicating manufacturer and reference build data. Valve build data shall be made available upon request by the Owner and shall be retained by the manufacturer for no less than 2 times the expected valve life.
   4. Disc:
      a. For valves sizes 3 inches to 20 inches disc shall be ductile iron. For valve sizes 24 inches and larger, disc shall be ductile iron, ASTM A536 65-45-12 or ASTM A536 60-40-18. Disc elastomeric seal retainer shall be Type 316 stainless steel. Disc shall be mechanically fastened to valve shaft using Type 316 (or higher quality alloy) stainless steel tangential shaft pins. Where disc pins extend completely through valve, disc pins shall be mechanically retained or fastened.

5. Shaft:
    a. Shafts shall be stainless steel ASTM A276 Type 316. Valve shaft material shall be suitable for the application, pressure and velocity.
6. Metallic Seat:
    a. The metallic valve seat shall be located in the valve body. It shall be stainless steel alloy. There shall be no gap between the valve body and metallic body seat and consequently no potential for corrosion or lifting of seat. The seat shall be applied through a high alloy weld overlay process.
7. Shaft Seals:
    a. Shaft seals shall not need periodic manual adjustment. They shall be multi-O-ring seals protecting both the outside and inside diameter of the shaft bearings. They shall prevent pressurized system water from entering the uncoated valve disc hub and valve body shaft bore. The valve shaft shall remain nonwetted and unpressurized. The nonwetted shaft shall allow the actuator to be removed without dewatering the pipeline. It shall prevent debris and system pressurized water from entering into the uncoated valve body shaft bore. It shall prevent waters or contaminated media, external to the valve, from entering through the valve shaft under vacuum/negative pressure conditions in the pipeline such as at line break. It shall additionally prevent an ingress breach where external hydrostatic forces exceed pipeline pressures such as in dewatered pipelines. Neither manual pulldown packing glands nor braided packing are allowed. Outer shaft seals shall be replaceable cartridge type, bolted to the valve body and shall not be held in place with an adapter plate or by the valve actuator.
8. Shaft Bearings:
    a. Valve shaft bearings shall be corrosion resistant, self-lubricating sleeve type made of bronze, stainless steel or stainless steel backed PTFE. Bearing choice and consequent bearing friction shall be correctly added to valve input torque requirements.
9. Strength:
    a. The proportion and dimensions of all parts of the valve and actuator shall be designed to withstand, without failure, the stresses occurring under the testing and operating conditions. The maximum allowable stress in any material shall not exceed 1/5 of the ultimate tensile strength or 1/3 of the minimum yield strength.
10. Hardware:
    a. All fasteners and hardware shall be Type 316 stainless steel.
11. Paint and Coatings:
    a. Fusion bond line and coat valves 24 inches and smaller. If coatings are damaged in shipping or installation valve shall be totally recoated in the field.
    b. Line and coat valves larger than 24 Inches with 10 mils of NSF 61 approved 2-part liquid epoxy. All sharp edges to be coated shall be beveled/radiused to assure consistent coating thickness. Include in coating inspection report at least six locations where edges are most sharp for the complete circumference of sharp edge to assure proper coating and compliance. Compliance of proper beveling of all sharp edges with proper coating of carbon steel valves will be strictly enforced as a condition of providing a proper continuous water service valve.

9. SECTION 15936 – INSTRUMENTATION AND CONTROL DEVICES FOR HVAC:
   a. **REPLACE** "the unit will send a "smoke" alarm to the SCADA system. Upon smoke detection SCADA will shut down the HVAC units within the space." **with** "it will shut down the unit and send a "smoke" alarm to the PLC." **in each place it appears in paragraph 2.08 for HVAC Control Descriptions:**
   b. **REPLACE** "be interlocked" **with** "operate" **in paragraphs 2.08.B.5.a.5, B.5.b, B.5.c, B.5.e.1 for Chlorine Storage and Chlorinator Room Control Sequences.**
   c. **REPLACE** "be interlocked" **with** "operate" **in paragraphs 2.08.C.2.b.4, C.2.c, C.2.e, for Caustic Storage Control Strategies.**
   d. **ADD** "hardwired" **in front of** "duct mounted smoke detector" **in each place it appears in paragraph 2.08 for HVAC Control Descriptions.**
10. SECTION 16235 – SINGLE SPARK-IGNITED GENERATOR SET:
   a. **DELETE** paragraph 2.02.E.3 and 2.02.E.3.a.
11. SECTION 16990A – CONDUIT SCHEDULE – AREA 01:
   a. **REPLACE** conduits L-01-061, L-01-062, L-01-063, L-01-064, N-01-502, N-01-503, N-01-504, N-01-521, and N-01-931 with the following:

L-01-061	01E02	2"	2	#8	XHHW-2	1	#8	XHHW-2	FR:	PNL-CELL	L-01-062
									TO:	PB-18	
									2	#8 >> PNL-CELL POWER	
L-01-062	02E03	2"	2	#8	XHHW-2	1	#8	XHHW-2	FR:	PB-18	L-01-063
									TO:	PB-15	
									2	#8 >> PNL-CELL POWER	L-01-061
L-01-063	02E01	2"	2	#8	XHHW-2	1	#8	XHHW-2	FR:	PB-15	L-01-064
									TO:	PB-14	
									2	#8 >> PNL-CELL POWER	L-01-062
L-01-064	02E01	2"	2	#8	XHHW-2	1	#8	XHHW-2	FR:	PB-14	
									TO:	RTU-CS	
									2	#8 >> PNL-CELL POWER	L-01-063
N-01-502	01E02	2"	4	2/C-#14		1	#14	XHHW-2	FR:	CALLBOX	N-01-503
			1	3/CS-#16					TO:	WEST GATE OPERATOR	
									2	2/C-#14 >> CALLBOX NETWORK (TEMP)	
									2	2/C-#14 >> CALLBOX NETWORK (PERMANENT)	
									1	3/CS-#16 >> GATE CARD READER NETWORK	
N-01-503	02E03	2.5"	4	2/C-#14		1	#14	XHHW-2	FR:	WEST GATE OPERATOR	N-01-504
			1		CAT6				TO:	PB-15	
			1		12/FO				1	CAT6 >> S SECURITY GATE CAMERA NETWORK	N-01-501
			1	3/CS-#16					2	2/C-#14 >> CALLBOX NETWORK (TEMP)	N-01-502
									2	2/C-#14 >> CALLBOX NETWORK (PERMANENT)	N-01-502
									1	3/CS-#16 >> GATE CARD READER NETWORK	
									1	12/FO >> S SECURITY GATE NETWORK	
N-01-504	02E03	2"	2	2/C-#14		1	#14	XHHW-2	FR:	PB-15	N-01-521
			1		CAT6				TO:	PB-18	
			1		12/FO				1	CAT6 >> S SECURITY GATE CAMERA NETWORK	N-01-503
			1	3/CS-#16					2	2/C-#14 >> CALLBOX NETWORK (TEMP)	N-01-503
									1	3/CS-#16 >> GATE CARD READER NETWORK	N-01-503
									1	12/FO >> S SECURITY GATE NETWORK	N-01-503
N-01-521	01E02	2.5"	2	2/C-#14		1	#14	XHHW-2	FR:	PB-18 (INTERCEPTED FIBER OPTIC TO CULINARY RESERVOIR)	
			1		CAT6				TO:	ELECTRONICS ENCLOSURE	
			2		12/FO				1	CAT6 >> S SECURITY GATE CAMERA NETWORK	N-01-504
			1	3/CS-#16					2	2/C-#14 >> CALLBOX NETWORK (TEMP)	N-01-504
									1	12/FO >> S SECURITY GATE NETWORK	N-01-504
									1	3/CS-#16 >> GATE CARD READER NETWORK	N-01-504
									1	12/FO >> CULINARY RESERVOIR NETWORK	
N-01-931	30E19	1.5"	1	PULL	ROPE				FR:	EXISTING PULLBOX	
	69E01								TO:	MCC-B1 ROOM CABLE TRAY	
									1	PULL >> SPARE	

   b. **DELETE** conduits N-01-511, N-01-932.

12. SECTION 16990B – CONDUIT SCHEDULE – AREA 30:
    a. **REPLACE** conduits N-30-010, N-30-695 with the following:

N-30-010	30E03	0.75"	1		CAT5E	1	#14	XHHW-2	FR:	MCC-BL			
									TO:	RTU-BL			
										1	CAT5E	>>	MCC-BL POWER MONITOR NETWORK
N-30-695	30E19	1"	1		CAT6	1	#14	XHHW-2	FR:	LOI-FB			
									TO:	LEVEL 2 NETWORK ROOM PATCH PANEL			
										1	CAT6	>>	LOI-FB NETWORK

13. SECTION 16990D – CONDUIT SCHEDULE – AREA 55:
    a. **REPLACE** conduits P-55-101 and P-55-102 with the following:

P-55-101	02E02	4"	1	500	XHHW-2	1	#1	XHHW-2	FR:	GEN-5501			
									TO:	SWBD-CPS			
										1	500	>>	GEN-5501 POWER
P-55-102	02E02	4"	1	PULL	ROPE		#1		FR:	GEN-5501			
									TO:	SWBD-CPS			
										1	PULL	>>	SPARE

14. SECTION 17050:
    a. **ADD** the following to paragraph 2.02 K:

       The owner will design the back panel of the control panels and provide the sizes required to the contractor for purchase.

15. SECTION 17720 – PROGRAMMABLE LOGIC CONTROLLERS:
    a. **REPLACE** the words in paragraph 1.10.A.3 “for every power supply” with “for each type of power supply”.

DRAWINGS

Note to Bidders on addenda drawings: The addenda drawings make use of color coding to show revisions made by addendum. The following color codes are used, for clarity:

- Red is used to highlight additions, corrections, or changes that are incorporated into the drawing.
- Green is used to indicate items that shall be removed or deleted from the drawing.
- Blue is used for comments, notes, clarifications, or instructions that may not be physically added to the drawing itself.

The following drawings are modified as indicated below.

1. REPLACE the following drawings in their entirety with the drawings attached:
   a. 00G11
   b. 00G12
   c. 00G14
   d. 01DE01
   e. 55DE01
   f. 30D07
   g. 01C01
   h. 00GA01
   i. 63A01
   j. 63A06
   k. 30S01
   l. 65S02
   m. 41M02
   n. 63M04
   o. 01E02
   p. 01E03
   q. 01E04
   r. 03E02
   s. 03E03
   t. 03E20
   u. 03E22
   v. 30E03
   w. 30E19
   x. 63E04
   y. 63E14
   z. 65E04
   aa. 69E01
   bb. 71E02
   cc. 00GN07
   dd. 03N03
   ee. 03N04
   ff. 03N05
   gg. 03N06
   hh. 05N02
   ii. 05N03
   jj. 06N14
   kk. 06N16
   ll. 62N02
   mm. 65N01
   nn. 71N01

BID ALTERNATE SCHEDULE

Alternate	Description	Price ($)
A	High Performance Butterfly Valves	$
B	NOT USED	$
C	NOT USED	$
D	NOT USED	$
E	NOT USED	$

NOTES:

(1) See specification section 01230 - Alternates for a description of bid alternates.

SECTION 01230

ALTERNATES

PART 1 GENERAL

1.01 SUMMARY

A. Section includes: Identification and description of Alternates.

1.02 PROCEDURES

A. Alternates will be exercised at Owner's option.

B. Coordinate related work and modify surrounding work as required to complete the Work, including changes under Alternates accepted by Owner in Notice of Award.

1.03 ALTERNATES

A. Alternate A – Butterfly Valves:
   1. Base Bid: Provide butterfly valves in accordance with specification 15122 paragraph 2.02. All butterfly valves shall be general purpose AWWA butterfly valves (BFFV00) unless specifically indicated otherwise.
   2. Alternate: Provide butterfly valves in accordance with specification 15122 paragraph 2.04. All butterfly valves shall be high performance butterfly valves unless specifically indicated otherwise.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

ABBREVIATIONS

ABBREVIATIONS TO DESIGNATE TEST PRESSURE/METHOD PER SPECIFICATION SECTION 15956:	
AM	AIR METHOD
GR	GRAVITY METHOD
HH	HIGH HEAD METHOD
LH	LOW HEAD METHOD
SC	SPECIAL CASE
ABBREVIATIONS TO DESIGNATE PIPE MATERIAL:	
BSP	BLACK STEEL PIPE
CI	CAST IRON
CISP	CAST IRON SOIL PIPE
CPVC	CHLORINATED POLYVINYL CHLORIDE
DIP	DUCTILE IRON PIPING
FRP	FIBERGLASS REINFORCED PIPE
GSP	GALVANIZED STEEL PIPE
HDPE	HIGH DENSITY POLYETHYLENE
PVC	POLYVINYL CHLORIDE
RGRCP	RUBBER GASKETED REINFORCED CONCRETE PIPE
SST	STAINLESS STEEL
VCP	VITRIFIED CLAY PIPING
ABBREVIATIONS TO DESIGNATE CLASS, SCHEDULE, OR THICKNESS:	
CL	CLASS, FOLLOWED BY THE DESIGNATION
GA	GAUGE, PRECEDED BY THE DESIGNATION
SCH	SCHEDULE, FOLLOWED BY THE DESIGNATION
SDR	STANDARD DIMENSION RATIO
ABBREVIATIONS TO DESIGNATE PIPING JOINTS/FITTINGS:	
B&SP	BELL & SPIGOT
BFW	BUTT FUSION WELD
BW	BUTT-WRAPPED
BZD	BRAZED
CF	COMPRESSION FITTING
FL	FLANGED
FLR	FLARED
GE	GROOVED END JOINT
MJ	MECHANICAL JOINT
NH	NO HUB
PO	PUSH ON
PRF	PRESS FIT
RMJ	RESTRAINED MECHANICAL JOINT
RPO	RESTRAINED PUSH ON
SCRD	SCREWED
SFW	SOCKET FUSION WELD
SLD	SOLDERED
SW	SOLVENT WELD
WLD	WELDED
ABBREVIATIONS TO DESIGNATE LINING AND COATINGS:	
CEP	CERAMIC EPOXY
CTP	COAL TAR PITCH
CM	CEMENT MORTAR
EPU	EPOXY AND POLYURETHANE COATING SYSTEM PER SECTION 09960
FBE	FUSION BONDED EPOXY
GL	GLASS LINING
PCP	PLURAL COMPONENT POLYURETHANE
PEN	POLYETHYLENE ENCASED
PTW	POLYETHYLENE TAPE WRAP
WAE	WATERBORNE ACRYLIC EMULSION

NOTE: BOND ALL JOINTS ON BURIED AND ENCASED DIP AND STEEL PIPING AS DIRECTED ON CATHODIC PROTECTION DRAWINGS.

PIPE SCHEDULE

ABBR.	SERVICE	DIAMETER (INCHES)	MATERIALS	PRESSURE CL, SPECIAL THICKNESS CL, OR SCHEDULE	JOINTS/ FITTINGS	TEST PRESSURE/ METHOD	LINING	COATING	PIPE SPEC SECTION	COMMENTS
A	AIR									
	BURIED	ALL	STEEL	SCH 40	SCRD, WLD, FL, OR GE	PER APPLICABLE PLUMBING CODES	NONE	PCB,FBE,PTW, WXT	15270	
AS	AIR SCOUR									
	EXPOSED	ALL	316 SST	PER SPECIFICATION	WLD OR FL	25 PSI/AM	NONE	NONE	15286	
BWS	BACKWASH SUPPLY									
	EXPOSED	ALL	STEEL	AWWA C200	WLD, FL, OR GE	125 PSI/HH	CM	EPU	15278	
	BURIED	ALL	STEEL	AWWA C200	WLD		CM	PCP,WXT	15272	
CDX	CHLORINE DIOXIDE									
	EXPOSED	ALL	CPVC	SCH 80	SW	50 PSI/HH	NONE	NONE	15230	
	BURIED	CHEMICAL	PVC BRAID REINFORCED FLEXIBLE TUBING	-	BARBED / SS CLAMPED		NONE	NONE	15230	FINGER LAKES EXTRUSION BRAIDFLEX 70N OR SIMILAR. NO FITTINGS OR JOINTS ARE ALLOWED IN THE CARRIER PIPE - THEY MUST BE LOCATED IN THE BUILDINGS OR THE CHEMICAL YARD VAULTS
CLS	CHLORINE SOLUTION									
	EXPOSED	ALL	PVC	SCH 80	SW	150 PSI/HH	NONE	NONE	15230	
	BURIED	CHEMICAL	PVC BRAID REINFORCED FLEXIBLE TUBING	-	BARBED / SS CLAMPED		NONE	NONE	15230	FINGER LAKES EXTRUSION BRAIDFLEX 70N OR SIMILAR. NO FITTINGS OR JOINTS ARE ALLOWED IN THE CARRIER PIPE - THEY MUST BE LOCATED IN THE BUILDINGS OR THE CHEMICAL YARD VAULTS. ALL BURIED CHEMICAL PIPING SHALL BE CONTAINED WITHIN A CARRIER PIPE. PIPE CALLOUTS IN DRAWINGS REPRESENT FLEXIBLE TUBING SIZE AND NOT CARRIER PIPE SIZE
	BURIED	CARRIER PIPE	HDPE	SDR 17, ASTM D3350	BFW	10 FEET/GR	NONE	NONE	15241	ALL INTERNAL WELD BEADS SHALL BE REMOVED FROM CARRIER PIPE.
CLG	CHLORINE GAS UNDER VACUUM									
	EXPOSED	ALL	PVC	SCH 80	SW	VACUUM/AM	NONE	NONE	15230	
	BURIED	CHEMICAL	FEP TUBING	0.0625 WALL	INSERT		NONE	NONE	15230	NO FITTINGS OR JOINTS ARE ALLOWED IN THE CARRIER PIPE - THEY MUST BE LOCATED IN THE BUILDINGS OR THE CHEMICAL YARD VAULTS. ALL BURIED CHEMICAL PIPING SHALL BE CONTAINED WITHIN A CARRIER PIPE. PIPE CALLOUTS IN DRAWINGS REPRESENT FLEXIBLE TUBING SIZE AND NOT CARRIER PIPE SIZE
	BURIED	CARRIER PIPE	HDPE	SDR 17, ASTM D3350	BFW	10 FEET/GR	NONE	NONE	15241	ALL INTERNAL WELD BEADS SHALL BE REMOVED FROM CARRIER PIPE.
CS	CAUSTIC SODA									
	EXPOSED	ALL	CPVC	SCH 80	SW	150 PSI/HH	NONE	NONE	15230	
	BURIED	CHEMICAL	PVC BRAID REINFORCED FLEXIBLE TUBING	-	BARBED / SS CLAMPED		NONE	NONE	15230	FINGER LAKES EXTRUSION BRAIDFLEX 70N OR SIMILAR. NO FITTINGS OR JOINTS ARE ALLOWED IN THE CARRIER PIPE - THEY MUST BE LOCATED IN THE BUILDINGS OR THE CHEMICAL YARD VAULTS. ALL BURIED CHEMICAL PIPING SHALL BE CONTAINED WITHIN A CARRIER PIPE. PIPE CALLOUTS IN DRAWINGS REPRESENT FLEXIBLE TUBING SIZE AND NOT CARRIER PIPE SIZE.
	BURIED	CARRIER PIPE	HDPE	SDR 17, ASTM D3350	BFW	10 FEET/GR	NONE	NONE	15241	ALL INTERNAL WELD BEADS SHALL BE REMOVED FROM CARRIER PIPE.
DMW	DEMINERALIZED WATER									
	ALL	ALL	PVC	SCH 80	SW	150 PSI/HH	NONE	NONE	15230	
D	DRAIN									
	EXPOSED	1/2 TO 1-1/2	316 SST	PER SPECIFICATION	WLD, FL, GE, OR PRF	10 FEET/GR	NONE	NONE	15286	
		2 TO 10	CPVC	SCH 80	SW		NONE	NONE	15230	
	BURIED	8	C900	350	RPO OR RMJ		NONE	NONE	15244	8" DRAINLINE FROM EXISTING BACKWASH TANK.
		1/2 TO 10	CPVC	SCH 40	SW		NONE	NONE	15230	
		24	RCP	CLASS III	B&SP	NONE	NONE	NONE	15229	24" OVERFLOW DRAINLINE FROM BACKWASH TANK
		4"	PVC	SCH 40	SW		NONE	NONE	15230	BACKWASH TANK UNDERDRAIN
DP	DRAIN - PROCESS									
	EXPOSED	ALL	DIP	350	FL OR GE	150PSI/HH	CM	EPU	15211	
F	FLUORIDE SOLUTION									
	EXPOSED	ALL	PVC	SCH 80	SW	150 PSI/HH	NONE	NONE	15230	
	BURIED	CHEMICAL	PVC BRAID REINFORCED FLEXIBLE TUBING	-	BARBED / SS CLAMPED		NONE	NONE	15230	FINGER LAKES EXTRUSION BRAIDFLEX 70N OR SIMILAR. NO FITTINGS OR JOINTS ARE ALLOWED IN THE CARRIER PIPE - THEY MUST BE LOCATED IN THE BUILDINGS OR THE CHEMICAL YARD VAULTS. ALL BURIED CHEMICAL PIPING SHALL BE CONTAINED WITHIN A CARRIER PIPE. PIPE CALLOUTS IN DRAWINGS REPRESENT FLEXIBLE TUBING SIZE AND NOT CARRIER PIPE SIZE
	BURIED	CARRIER PIPE	HDPE	SDR 17, ASTM D3350	BFW	10 FEET/GR	NONE	NONE	15241	ALL INTERNAL WELD BEADS SHALL BE REMOVED FROM CARRIER PIPE.
FIW	FILTER INFLUENT WATER									
	EXPOSED	ALL	STEEL	AWWA C200	WLD, FL, OR GE	25 PSI/HH	CM	EPU	15278	
	BURIED	ALL	STEEL	AWWA C200	WLD		CM	PCP,WXT	15272	
FLW	FILTERED WATER									
	EXPOSED	ALL	STEEL	AWWA C200	WLD, FL, OR GE	25 PSI/HH	CM	EPU	15278	
	BURIED	ALL	STEEL	AWWA C200	WLD		CM	PCP,WXT	15272	
FTW	FILTER TO WASTE									
	EXPOSED	ALL	STEEL	AWWA C200	WLD, FL, OR GE	25 PSI/HH	CM	EPU	15278	
	BURIED	ALL	STEEL	AWWA C200	WLD		CM	PCP,WXT	15272	
FW	FINISHED WATER									
	EXPOSED	ALL	STEEL	AWWA C200	WLD, FL, OR GE	25 PSI/HH	CM	EPU	15278	
	BURIED	ALL	STEEL	AWWA C200	WLD		CM	PCP,WXT	15272	
HWR	HOT WATER RETURN									
	EXPOSED	2 AND SMALLER	COPPER	ASTM B88	SOLDERED	150 PSI/HH	NONE	NONE	15281	
HWS	HOT WATER SUPPLY									
	EXPOSED	2 AND SMALLER	COPPER	ASTM B88	SOLDERED	150 PSI/HH	NONE	NONE	15281	
NG	NATURAL GAS									
	EXPOSED	2 AND SMALLER	STEEL, BLACK ASTM 53	SCH 40	SCRD OR WLD	PER APPLICABLE PLUMBING CODES	NONE	NONE	15270	
	EXPOSED	2-1/2 AND LARGER	STEEL, BLACK ASTM 53	SCH 40	FL		NONE	EPU	15270	
	BURIED	ALL	ASTM D2513 MDPE	SDR 11	BFW OR SFW		NONE	NONE	15230	

PIPE SCHEDULE CONTINUED ON NEXT SHEET

REV	DATE	BY	DESCRIPTION
1	04/15/2025	SSB	ADDENDUM NO. 1

BID SET

DESIGNED DES
DRAWN RB
CHECKED
DATE FEBRUARY 2025

REGISTERED PROFESSIONAL ENGINEER No. 12149234-2202 STETSON SKY BASSETT STATE OF UTAH

carollo

JORDAN VALLEY WATER CONSERVANCY DISTRICT

JORDAN VALLEY WATER TREATMENT PLANT
FILTER AND CHEMICAL FEED UPGRADES
GENERAL
PIPE SCHEDULE 1

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 202001.10
DRAWING NO. 00G11
SHEET NO.
OF

PROJECT NO. 202001-100000 FILE NAME: 20200100G11.dgn

Plot Date: 10-FEB-2025 8:39:48 AM
User: svcPW
PlotScale: 1:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: RBhatia

PIPE SCHEDULE (CONT'D)

ABBR.	SERVICE	DIAMETER (INCHES)	MATERIALS	PRESSURE CL, SPECIAL THICKNESS CL, OR SCHEDULE	JOINTS/ FITTINGS	TEST PRESSURE/ METHOD	LINING	COATING	PIPE SPEC SECTION	COMMENTS
OF	OVERFLOW									
	EXPOSED	ALL	CPVC	SCH 80	SW	20 FEET/GR	NONE	NONE	15230	FOR CAUSTIC SODA SERVICE
	EXPOSED	ALL	PVC	SCH 80	SW	20 FEET/GR	NONE	NONE	15230	
PAC	POWDERED ACTIVATED CARBON									
	EXPOSED	ALL	PVC	SCH 80	SW	50 PSI/HH	NONE	NONE	15230	
	BURIED	ALL	HDPE	ASTM D2737	BFW OR CF		NONE	NONE	15230	
PC	PRIMARY COAGULANT									
	EXPOSED	ALL	PVC	SCH 80	SW	50 PSI/HH	NONE	NONE	15230	
PEA	ANIONIC POLYMER									
	EXPOSED	ALL	PVC	SCH 80	SW	50 PSI/HH	NONE	NONE	15230	
PEC	CATIONIC POLYMER									
	EXPOSED	ALL	PVC	SCH 80	SW	50 PSI/HH	NONE	NONE	15230	
PW	POTABLE WATER									
	EXPOSED	3 AND SMALLER	PVC	SCH 80	SW	150 PSI/HH	NONE	NONE	15230	
	EXPOSED	4 TO 12	DIP	350	FL OR GE		CM	EPU	15211	
	BURIED	2 AND SMALLER	HDPE	ASTM D2737	BFW OR CF		NONE	NONE	15230	
	BURIED	4 TO 12	DIP	350	RPO OR RMJ		CM	DOUBLE PEN	15211	
	BURIED	4 to 8	C900	350	RPO OR RMJ		NONE	NONE	15244	WXT/FBE COATING FOR METALLIC FITTINGS
SA	SAMPLE LINE									
	EXPOSED	ALL	PVC	SCH 80	SW	50 PSI/HH	NONE	NONE	15230	
SD	STORM DRAIN									
	BURIED	15	DIP	CL 53	PO OR MJ	NONE	CM	DOUBLE PEN	15211	
	BURIED	21	RGRCP	CL IV	B&SP	NONE	NONE	NONE	15229	
SP	SPARE CHEMICAL									
	EXPOSED	ALL	PVC	SCH 80	SW	50 PSI/HH	NONE	NONE	15230	
	BURIED	ALL	PVC BRAID REINFORCED FLEXIBLE TUBING	-	BARBED / SS CLAMPED		NONE	NONE	15230	FINGER LAKES EXTRUSION BRAIDFLEX 70N OR SIMILAR. NO FITTINGS OR JOINTS ARE ALLOWED IN THE CARRIER PIPE - THEY MUST BE LOCATED IN THE BUILDINGS OR THE CHEMICAL YARD VAULTS. ALL BURIED CHEMICAL PIPING SHALL BE CONTAINED WITHIN A CARRIER PIPE. PIPE CALLOUTS IN DRAWINGS REPRESENT FLEXIBLE TUBING SIZE AND NOT CARRIER PIPE SIZE.
	BURIED	CARRIER PIPE	HDPE	SDR 17, ASTM D3350	BFW	10 FEET/GR	NONE	NONE	15241	ALL INTERNAL WELD BEADS SHALL BE REMOVED FROM CARRIER PIPE.
SPD	SUMP PUMP DISCHARGE									
	EXPOSED	4 TO 12	DIP	350	FL OR GE	50 PSI/HH	CM	EPU	15211	
	SUBMERGED	ALL	316 SST	PER SPECIFICATION	WLD, FL, GE, OR PRF		NONE	NONE	15286	
SS	SANITARY SEWER									
	BURIED	ALL	PVC	SDR 35	B&SP	10 FEET/GR	NONE	NONE	15230	WXT/FBE COATING FOR METALLIC FITTINGS
UW	UTILITY WATER									
	EXPOSED	3 AND SMALLER	PVC	SCH 80	SW	150 PSI/HH	NONE	NONE	15230	
	EXPOSED	4 TO 12	DIP	350	FL OR GE		CM	EPU	15211	
V	VENT									
	ALL	ALL	PVC	SCH 80	SW	10 FEET/GR	NONE	NONE	15230	
	EXPOSED	6	STL	SCH 40	SCRD, FL, GE	150 PSI/HH	NONE	NONE	15278	
WW	WASTE WASHWATER (FILTER/BW)									
	EXPOSED	ALL	STEEL	AWWA C200	WLD, FL, OR GE	20 FEET/GR	CM	EPU	15278	
	BURIED	ALL	STEEL	AWWA C200	WLD, FL, OR GE		CM	PCP	15272	

REV	DATE	BY	DESCRIPTION
1	04/15/2025	SSB	ADDENDUM NO. 1

BID SET

DESIGNED DES
DRAWN RB
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DATE FEBRUARY 2025

REGISTERED PROFESSIONAL ENGINEER
No. 12149234-2202
STETSON SKY BASSETT
STATE OF UTAH

carollo

JORDAN VALLEY WATER CONSERVANCY DISTRICT

JORDAN VALLEY WATER TREATMENT PLANT
FILTER AND CHEMICAL FEED UPGRADES
GENERAL
PIPE SCHEDULE 2

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 202001.10
DRAWING NO. 00G12
SHEET NO.
OF

PROJECT NO. 202001-100000 FILE NAME: 20200100G12.dgn

Plot Date: 10-FEB-2025 8:40:31 AM
User: svcPW
PlotScale: 1:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: RBhatia

Plot Date: 4/11/2024 3:35:40 PM

VALVE AND ACTUATOR SCHEDULE CONTINUED

VALVE TAG	VALVE TYPE	DESCRIPTION	SIZE, INCHES	OPERATOR	VALVE ENDS	VALVE SPEC	ACTUATOR TAG	OPERATOR TYPE	VOLTAGE	PHASE	HP	OPERATING TIME	ACTUATOR SPEC
VAL-3157	VALVE - BUTTERFLY	FILTER 15 WASTE WASHWATER VALVE	42	MOTOR	FLANGED; CLASS 150B	15112	FV-3157	OPEN/CLOSE	480	3	1/2	2 TO 3 MINUTES	13447
VAL-3161	VALVE - BUTTERFLY	FILTER 16 INLET VALVE	36	MOTOR	FLANGED; CLASS 150B	15112	FV-3161	POSITION	480	3	1/2	2 TO 3 MINUTES	13447
VAL-3162	VALVE - BUTTERFLY	FILTER 16 EFFLUENT VALVE	30	MOTOR	FLANGED; CLASS 150B	15112	FV-3162	POSITION	480	3	1/2	1 TO 2 MINUTES	13447
VAL-3163	VALVE - BUTTERFLY	FILTER 16 FILTER TO WASTE VALVE	24	MOTOR	FLANGED; CLASS 150B	15112	FV-3163	POSITION	480	3	1/2	1 TO 2 MINUTES	13447
VAL-3164	VALVE - BUTTERFLY	FILTER 16 BACKWASH VALVE	36	MOTOR	FLANGED; CLASS 150B	15112	FV-3164	OPEN/CLOSE	480	3	1/2	2 TO 3 MINUTES	13447
VAL-3166(1)	VALVE - BUTTERFLY	FILTER 16 VENT VALVE	6	MOTOR	FLANGED; CLASS 150B	15112	FV-3166	OPEN/CLOSE	480	3	1/2	30 SECONDS	13447
VAL-3167	VALVE - BUTTERFLY	FILTER 16 WASTE WASHWATER VALVE	42	MOTOR	FLANGED; CLASS 150B	15112	FV-3167	OPEN/CLOSE	480	3	1/2	2 TO 3 MINUTES	13447
VAL-4041(2)	VALVE - BUTTERFLY	MASTER BWS VALVE	30	MOTOR	FLANGED; CLASS 150B	15112	FV-4041	POSITION	480	3	1/2	1 TO 2 MINUTES	13447
VAL-4051(2)	VALVE - BUTTERFLY	BWS NORTH (ODD) CONTROL VALVE	36	MOTOR	FLANGED; CLASS 150B	15112	FV-4051	POSITION	480	3	1/2	1 TO 2 MINUTES	13447
VAL-4061(2)	VALVE - BUTTERFLY	BWS SOUTH (EVE) CONTROL VALVE	36	MOTOR	FLANGED; CLASS 150B	15112	FV-4061	POSITION	480	3	1/2	1 TO 2 MINUTES	13447
VAL-4112	VALVE - BUTTERFLY	BW TANK 1 EFFLUENT VALVE	36	MOTOR	FLANGED; CLASS 150B	15112	FV-4112	OPEN/CLOSE	480	3	1/2	1 TO 2 MINUTES	13447
VAL-4122	VALVE - BUTTERFLY	BW TANK 2 EFFLUENT VALVE	36	MOTOR	FLANGED; CLASS 150B	15112	FV-4122	OPEN/CLOSE	480	3	1/2	1 TO 2 MINUTES	13447
VAL-4131	VALVE - BUTTERFLY	BW STORAGE ISOLATION VALVE	36	MOTOR	FLANGED; CLASS 150B	15112	FV-4131	OPEN/CLOSE	480	3	1/2	1 TO 2 MINUTES	13447
VAL-4411	VALVE - BUTTERFLY	MASTER FILTER TO WASTE VALVE	24	MOTOR	FLANGED; CLASS 150B	15112	FV-4411	OPEN/CLOSE	480	3	1/2	1 MINUTE	13447

NOTES:
(1) EXISTING VALVE. ACTUATOR REPLACEMENT ONLY.
(2) MODBUS TCP COMMUNICATIONS

GENERAL NOTES:

1. NOT ALL VALVES ARE SHOWN IN THE SCHEDULE, VALVES SMALLER THAN 6-INCH SIZE ARE NOT SHOWN. MANUAL VALVES ARE NOT SHOWN. CONTRACTOR SHALL REFER TO MECHANICAL DRAWINGS AND P&ID'S FOR ADDITIONAL VALVE REQUIREMENTS.
2. NEMA RATING OF 4X FOR ALL ACTUATORS.
3. MODULATING ACTUATORS WILL HAVE ~1200 STARTS/HR. OPEN/CLOSE ACTUATORS WILL BE IN THE RANGE OF 0-60 STARTS/HR.

TANK SCHEDULE

EQUIPMENT TAG	P&ID DWG.	DESCRIPTION	TYPE	CAPACITY (GAL)	DIAMETER (FT)	HEIGHT (FT)	SPECIFICATION	COMMENTS
TNK-4121	30N20	BACKWASH TANK NO. 2	PRESTRESSED CONCRETE	1,000,000	72	36	13207	
TNK-6211	62N02	PC DAY TANK	POLYETHYLENE	900	5.5	7	13208	
TNK-6501	65N01	CAUSTIC SODA TANK 1	FRP	18,000	12	22	13206A	
TNK-6502	65N01	CAUSTIC SODA TANK 2	FRP	18,000	12	22	13206A	
TNK-6503	65N01	CAUSTIC SODA TANK 3	FRP	18,000	12	22	13206A	
TNK-6531	65N02	CS DAY TANK	FRP	1,500	6	7	13206A	
TNK-6901	69N01	PEA AGING TANK 1	FRP	2,000	8	6	11256	PROVIDED BY VENDOR
TNK-6911	69N02	PEA AGING TANK 2	FRP	2,000	8	6	11256	PROVIDED BY VENDOR
TNK-7101	71N01	PEC TANK 1	POLYETHYLENE	4,600	10	10	13208	
TNK-7102	71N01	PEC TANK 2	POLYETHYLENE	4,600	10	10	13208	
TNK-7105	71N02	PEC DAY TANK	POLYETHYLENE	550	4	7	13208	

CHEMICAL FEEDER SCHEDULE

EQUIPMENT TAG	DESCRIPTION	SERVICE	TYPE	VOLTAGE	LOAD	LOAD UNITS	CAPACITY (GPH)	SPECIFICATION
PMP-6211	PRIMARY COAGULANT FEED PUMP 3	PC	DIAPHRAGM	120	1/4	KVA	52	11242
PMP-6221	PRIMARY COAGULANT FEED PUMP 4	PC	DIAPHRAGM	120	1/4	KVA	52	11242
PMP-6541	CAUSTIC SODA SMALL FEED PUMP 1	CS	DIAPHRAGM	120	1/4	KVA	52	11242
PMP-6562	CAUSTIC SODA SMALL FEED PUMP 2	CS	DIAPHRAGM	120	1/4	KVA	52	11242
PMP-6572	CAUSTIC SODA LARGE FEED PUMP 1	CS	HOSE	480	2	HP	720	11244
PMP-6582	CAUSTIC SODA LARGE FEED PUMP 2	CS	HOSE	480	2	HP	720	11244
PMP-6911	PEA FILTER AID SMALL FEED PUMP 1	PEA	DIAPHRAGM	120	1/4	KVA	52	11245
PMP-6916	PEA FILTER AID SMALL FEED PUMP 2	PEA	DIAPHRAGM	120	1/4	KVA	52	11245
PMP-6921	PEA FILTER AID LARGE FEED PUMP 1	PEA	HOSE	480	2	HP	720	11244
PMP-6926	PEA FILTER AID LARGE FEED PUMP 2	PEA	HOSE	480	2	HP	720	11244
PMP-6931	PEA FLOC AID FEED PUMP 1	PEA	HOSE	480	2	HP	720	11244
PMP-6936	PEA FLOC AID FEED PUMP 2	PEA	HOSE	480	2	HP	720	11244
PMP-6941	PEA FLOC AID FEED PUMP 3	PEA	HOSE	480	2	HP	720	11244
PMP-6946	PEA FLOC AID FEED PUMP 4	PEA	HOSE	480	2	HP	720	11244
PMP-6951	PEA STANDBY FEED PUMP	PEA	HOSE	480	2	HP	720	11244
PMP-6956	PEA FILTER AID DOSING PUMP	PEA	DIAPHRAGM	120	1/4	KVA	52	11245

PUMP SCHEDULE

EQUIPMENT TAG	DESCRIPTION	VOLTAGE	LOAD	LOAD UNITS	LOAD TYPE	SPECIFICATION	FLOW (GPM)	TDH
PMP-3911	FILTER DRAIN PUMP 1	480	5	HP	CONSTANT SPEED	11312K	600	16.5
PMP-3921	FILTER DRAIN PUMP 2	480	5	HP	CONSTANT SPEED	11312K	600	16.5
PMP-3931	FILTER DRAIN PUMP 1	120	1/2	HP	CONSTANT SPEED	11312J	60	10
PMP-3941	FILTER DRAIN PUMP 2	120	1/2	HP	CONSTANT SPEED	11312J	60	10
PMP-4125	VALVE VAULT SUMP PUMP	120	1/2	HP	CONSTANT SPEED	11312J	25	18
PMP-6201	PRIMARY COAGULANT TRANSFER PUMP 1	480	3/4	HP	CONSTANT SPEED	11312S	44	43
PMP-6202	PRIMARY COAGULANT TRANSFER PUMP 2	480	3/4	HP	CONSTANT SPEED	11312S	44	43
PMP-6211	PRIMARY COAGULANT FEED PUMP 3	120	1/4	KVA	VARIABLE SPEED	11242	23	139
PMP-6221	PRIMARY COAGULANT FEED PUMP 4	120	1/4	KVA	VARIABLE SPEED	11242	23	139
PMP-6319	CHLORINE BUILDING SUMP PUMP	120	1/2	HP	CONSTANT SPEED	11312V	25	5
PMP-6511	CAUSTIC SODA TRANSFER PUMP 1	480	3/4	HP	CONSTANT SPEED	11312S	43	44
PMP-6521	CAUSTIC SODA TRANSFER PUMP 2	480	3/4	HP	CONSTANT SPEED	11312S	43	44
PMP-6541	CAUSTIC SODA SMALL FEED PUMP 1	120	1/4	KVA	VARIABLE SPEED	11242	30	139
PMP-6562	CAUSTIC SODA SMALL FEED PUMP 2	120	1/4	KVA	VARIABLE SPEED	11242	30	139
PMP-6572	CAUSTIC SODA LARGE FEED PUMP 1	480	2	HP	VARIABLE SPEED	11244	1.0	139
PMP-6582	CAUSTIC SODA LARGE FEED PUMP 2	480	2	HP	VARIABLE SPEED	11244	1.0	139
PMP-6852	PAC SUMP PUMP	120	1/2	HP	CONSTANT SPEED	11312J	60	10
PMP-6911	PEA FILTER AID SMALL FEED PUMP 1	120	1/4	KVA	VARIABLE SPEED	11245	24	139
PMP-6916	PEA FILTER AID SMALL FEED PUMP 2	120	1/4	KVA	VARIABLE SPEED	11245	24	139
PMP-6921	PEA FILTER AID LARGE FEED PUMP 1	480	2	HP	VARIABLE SPEED	11244	0.8	139
PMP-6926	PEA FILTER AID LARGE FEED PUMP 2	480	2	HP	VARIABLE SPEED	11244	0.8	139
PMP-6931	PEA FLOC AID FEED PUMP 1	480	2	HP	VARIABLE SPEED	11244	3.0	139
PMP-6936	PEA FLOC AID FEED PUMP 2	480	2	HP	VARIABLE SPEED	11244	3.0	139
PMP-6941	PEA FLOC AID FEED PUMP 3	480	2	HP	VARIABLE SPEED	11244	3.0	139
PMP-6946	PEA FLOC AID FEED PUMP 4	480	2	HP	VARIABLE SPEED	11244	3.0	139
PMP-6951	PEA STANDBY FEED PUMP	480	2	HP	VARIABLE SPEED	11244	3.0	139
PMP-6956	PEA FILTER AID DOSING PUMP	120	1/4	KVA	VARIABLE SPEED	11245	16	139
PMP-7103	PEC TRANSFER PUMP 1	480	3/4	HP	CONSTANT SPEED	11312S	28	56
PMP-7104	PEC TRANSFER PUMP 2	480	3/4	HP	CONSTANT SPEED	11312S	28	56

MISC. EQUIPMENT SCHEDULE

EQUIPMENT TAG	P&ID DWG.	DESCRIPTION	SPECIFICATION	COMMENTS
CHL-6331	63N07	FINISHED WATER CHLORINATOR 1	11260	
CHL-6332	63N07	FINISHED WATER CHLORINATOR 2	11260	
CHL-6333	63N07	FINISHED WATER CHLORINATOR 3	11260	
CHL-6334	63N08	RAW WATER CHLORINATOR 1	11260	
CHL-6335	63N08	RAW WATER CHLORINATOR 2	11260	
CHL-6336	63N08	RAW WATER CHLORINATOR 3	11260	
EDU-6341	63N09	FINISHED WATER EDUCTOR 1	11260	
EDU-6342	63N09	FINISHED WATER EDUCTOR 2	11260	
EDU-6346	63N09	FINISHED WATER EDUCTOR 3	11260	
EDU-6343	63N10	RAW WATER EDUCTOR 1	11260	
EDU-6344	63N10	RAW WATER EDUCTOR 2	11260	
EDU-6345	63N10	RAW WATER EDUCTOR 2	11260	
TNK-6391	63N14	CHLORINE SCRUBBER	11265	
-	65N03	DUAL TANK WATER SOFTENER	15400	
-	68N01	PAC FEED SYSTEM 1	13270	
-	68N04	PAC FEED SYSTEM 2	13270	
-	69N01	PEA FEED SYSTEM 1	11256	
-	69N02	PEA FEED SYSTEM 2	11256	

REV	DATE	BY	DESCRIPTION
1	04/15/2025	MLL	ADDENDUM NO. 1

BID SET

DESIGNED SB
DRAWN RB
CHECKED RB
DATE FEBRUARY 2025

REGISTERED PROFESSIONAL ENGINEER No. 12149234-2202 STETSON SKY BASSETT STATE OF UTAH

carollo

JORDAN VALLEY WATER CONSERVANCY DISTRICT

JORDAN VALLEY WATER TREATMENT PLANT
FILTER AND CHEMICAL FEED UPGRADES
GENERAL
EQUIPMENT SCHEDULE 2

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

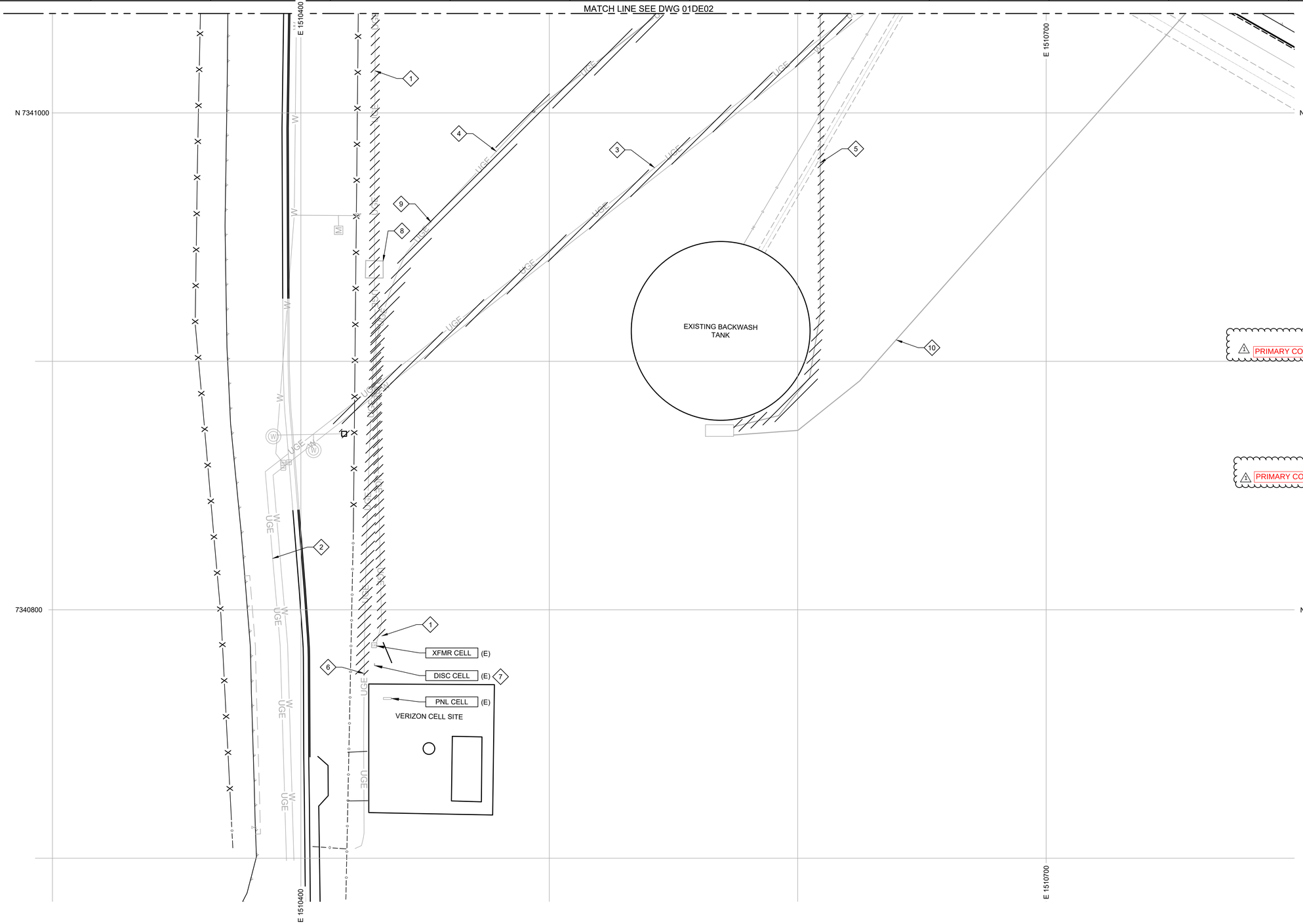
JOB NO. 202001.10
DRAWING NO. 00G14
SHEET NO. OF

LAST SAVED BY: sfields

PROJECT NO. 202001-100000 FILE NAME: 20200100G14.dwg

Plot Date: 4/15/2024 10:03:48 AM

MATCH LINE SEE DWG 01DE02



GENERAL NOTES:

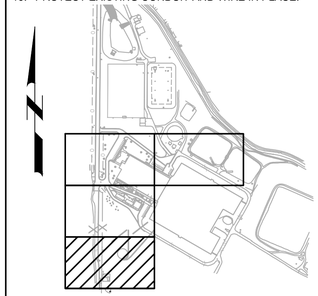
1. FIELD VERIFY DETAILS AND QUANTITIES OF ALL ITEMS TO BE DEMOLISHED AND REMOVED.
2. DEMOLISHED ITEMS SPECIFICALLY NOT IDENTIFIED TO BE RELOCATED, SALVAGED, OR STOCKPILED SHALL BE REMOVED AND DISPOSED OFFSITE.
3. ON COMPLETION OF ALL ITEMS TO BE DEMOLISHED, RE-GRADE THE DISTURBED AREAS WITH A UNIFORM SLOPE TO DRAIN AWAY FROM ADJACENT STRUCTURES.
4. REPLACE IN KIND ALL ITEMS DISTURBED BY CONSTRUCTION AND DEMOLITION ACTIVITIES THAT ARE NOT SPECIFICALLY IDENTIFIED FOR DEMOLITION.
5. REFER TO INSTALLATION PLANS FOR NEW WORK. DEMOLISH AS REQUIRED FOR INSTALLATION OF PROPOSED IMPROVEMENTS.
6. COORDINATE ALL ELECTRICAL DISCONNECTION AND SHUTDOWNS WITH OWNER.

KEY NOTES:

1. DEMOLISH 12.47 KV CONDUITS AND CONDUCTORS BETWEEN SECTIONALIZER 4 AND XFMR CELL. DUCT BANK (NOT CONCRETE ENCASED) CONTAINS TWO 4-INCH CONDUITS AND ONE 2-INCH CONDUIT.
2. ABANDONED CONDUITS. LEAVE IN PLACE TO THE POINT WHERE DEMOLITION IS SHOWN.
3. DEMOLISH ABANDONED CONDUITS.
4. REMOVE POLE MOUNTED SECURITY CAMERA AND OTHER EQUIPMENT. RETURN ALL EQUIPMENT FROM POLE TO OWNER. DEMOLISH POLE.
5. DEMOLISH CONDUITS AND WIRE BETWEEN BACKWASH TANK AND FLUORIDE BUILDING.
6. INTERCEPT TWO EXISTING CONDUITS CONTAINING 480V POWER AND FIBER OPTIC FOR THE CULINARY RESERVOIR. REFER TO DRAWING 01E02 FOR NEW PULLBOX AT THIS INTERCEPTION POINT AND NEW TERMINATIONS FOR 480V POWER WIRING AND FIBER OPTIC TO CULINARY RESERVOIR.
7. FUSED DISCONNECT.
8. SALVAGE POWER PULLBOX AND RELOCATE AS SHOWN ON DRAWING 01E02.
9. DEMOLISH CONDUITS AND WIRE FROM POINT OF INTERCEPTION TO THE FLUORIDE BUILDING.
10. PROTECT EXISTING CONDUIT AND WIRE IN PLACE.

⚠1 PRIMARY COAGULANT

⚠1 PRIMARY COAGULANT



KEY PLAN

Know what's below. Call 811 before you dig.

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UTILITY NOTIFICATION CENTER, INC.
www.bluestakes.org
1-800-662-4111

SCALE

0 10' 20' 40'

SCALE: 1" = 20'

REV	DATE	BY	DESCRIPTION
⚠1	04/15/2025	SKB	ADDENDUM NO. 1

BID SET

DESIGNED SKB
DRAWN MNH
CHECKED GCE
DATE FEBRUARY 2025

REGISTERED PROFESSIONAL ENGINEER
No. 5329023
GUY C. EHLERS
STATE OF UTAH

carollo®

JORDAN VALLEY WATER CONSERVANCY DISTRICT

JORDAN VALLEY WATER TREATMENT PLANT
FILTER AND CHEMICAL FEED UPGRADES
DEMOLITION
ELECTRICAL PLAN 1

VERIFY SCALES
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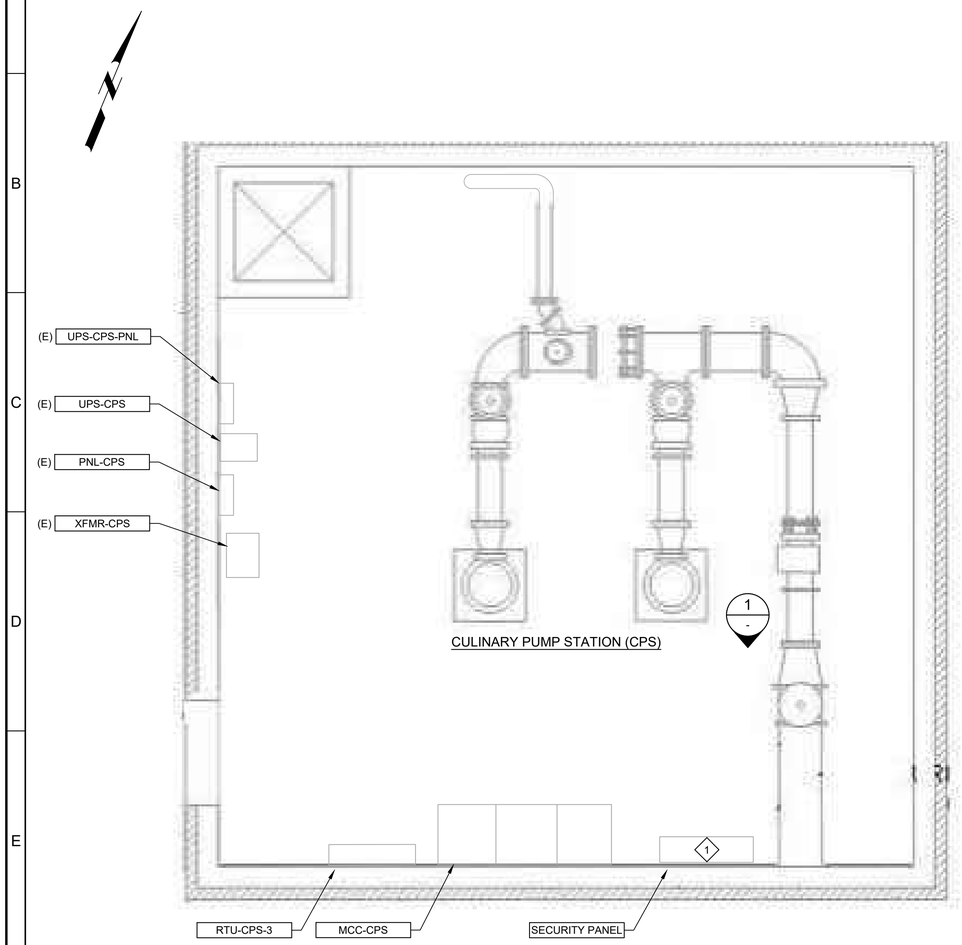
JOB NO. 202001.10
DRAWING NO. 01DE01
SHEET NO.
OF

LAST SAVED BY: MHood

PROJECT NO. 202001-100000 FILE NAME: 20200101DE01.DWG



A 01E01 PLAN
SCALE: NO SCALE
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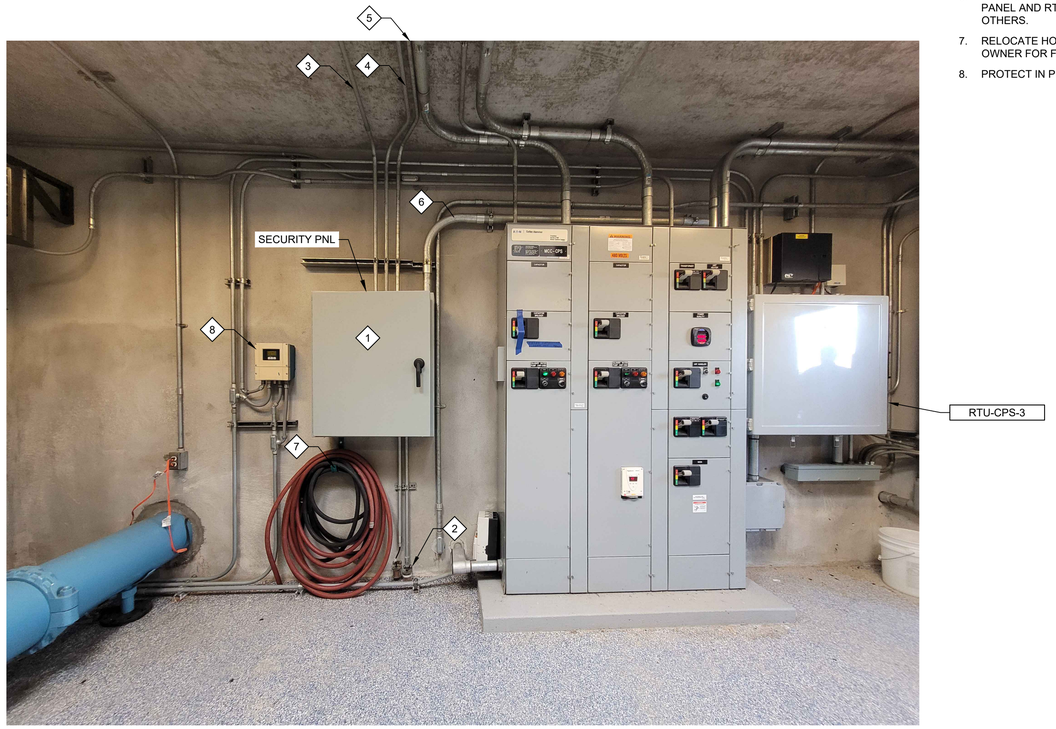


1 - PHOTO
SCALE: NO SCALE
FILE: 202001_55DE01A.jpg

GENERAL NOTES:

1. REUSE EXISTING CONDUIT AND WIRE FOR SECURITY PANEL RELOCATION UNLESS OTHERWISE NOTED. PROVIDE ADDITIONAL CONDUIT WHERE NECESSARY TO REACH NEW SECURITY PANEL LOCATION.

KEY NOTES:

1. REMOVE SECURITY PANEL AND RELOCATE TO THE OTHER SIDE OF THE PUMP STATION AS SHOWN ON THE DRAWING 55E01.
2. RELOCATE CONDUIT, WIRE, AND LOW LEVEL AND HIGH LEVEL FLOOD SWITCHES WITH THE SECURITY PANEL. (1)
3. RELOCATE CONDUIT BETWEEN SECURITY PANEL AND DOOR FOR DOOR SECURITY. WIRING PROVIDED BY OTHERS.
4. RELOCATE CONDUIT AND WIRE BETWEEN SECURITY PANEL AND THE PANEL UPS-CPS.
5. RELOCATE CONDUIT AND WIRE BETWEEN SECURITY PANEL AND PANEL CPS.
6. RELOCATE 2-INCH CONDUIT BETWEEN SECURITY PANEL AND RTU-CPS. WIRING PROVIDED BY OTHERS.
7. RELOCATE HOSE RACK. COORDINATE WITH OWNER FOR FINAL LOCATION.
8. PROTECT IN PLACE.

REV	DATE	BY	DESCRIPTION
1	04/15/2025	SKB	ADDENDUM NO. 1

BID SET

DESIGNED SKB
DRAWN NCS
CHECKED GCE
DATE FEBRUARY 2025

REGISTERED PROFESSIONAL ENGINEER
No. 5329023
GUY C. EHLERS
STATE OF UTAH

carollo

JORDAN VALLEY WATER CONSERVANCY DISTRICT

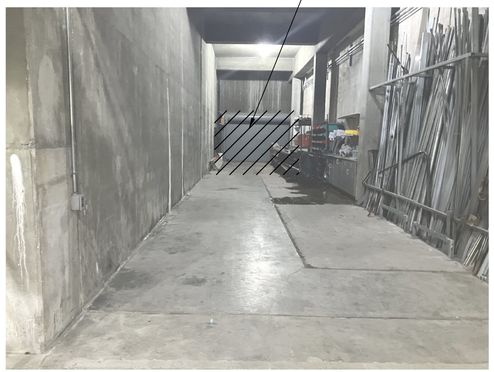
JORDAN VALLEY WATER TREATMENT PLANT
FILTER AND CHEMICAL FEED UPGRADES
DEMOLITION
CULINARY PUMP STATION PLAN

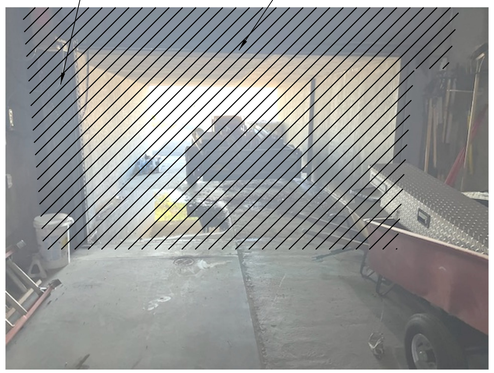
VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 202001.10
DRAWING NO. 55DE01
SHEET NO. OF

LAST SAVED BY: mhood

PROJECT NO. 202001-100000 FILE NAME: 20200155DE01.dwg



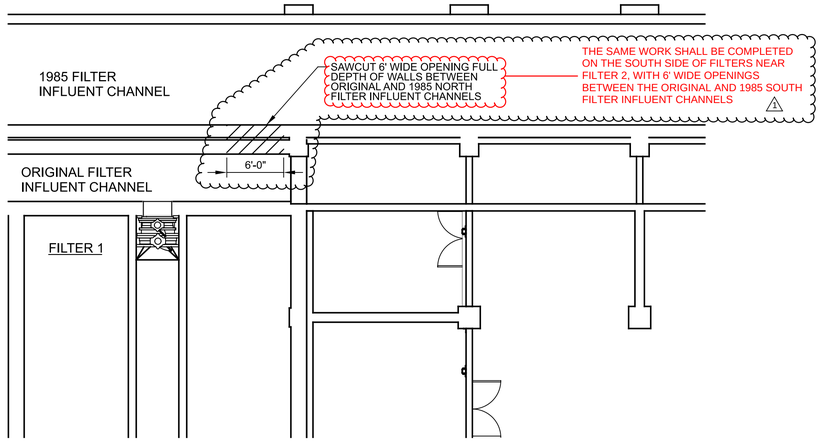


OVERHEAD DOOR DEMOLITION

12 PHOTO

30D01

SCALE: NO SCALE
FILE: IMG_2212.JPG

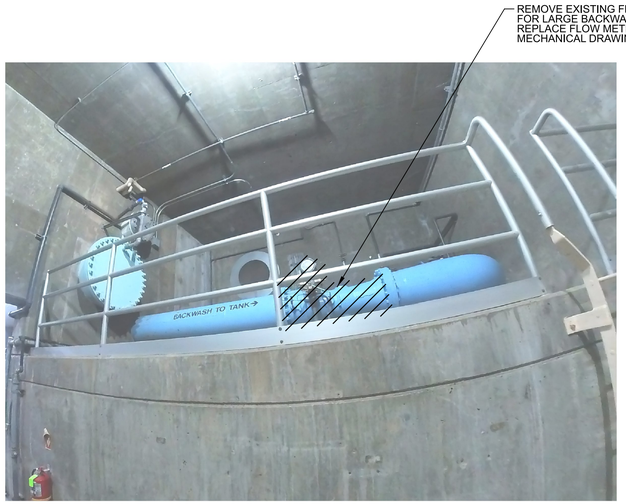


INFLUENT CHANNEL

16 DETAIL

30D01

SCALE: 1/8" = 1'-0"
FILE: 20200130M0801



BACKWASH FLOWMETER DEMOLITION

14 PHOTO

30D01

SCALE: NO SCALE
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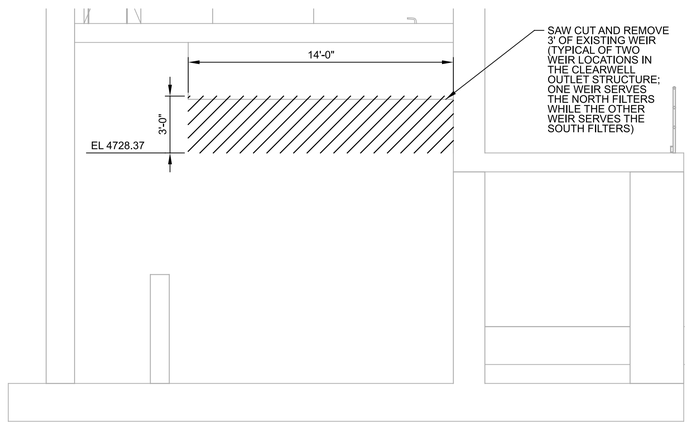

EFFLUENT WEIRS

15 DETAIL

30D01

SCALE: 1/4" = 1'-0"
FILE: SECTION 15

0

REV	DATE	BY	DESCRIPTION
1	04/15/2025	BRB	ADDENDUM NO. 1

BID SET

DESIGNED BRB
DRAWN SF
CHECKED
DATE FEBRUARY 2025

REGISTERED PROFESSIONAL ENGINEER
No. 12294472-2202
BRADLEY R. BUSWELL
STATE OF UTAH

carollo

JORDAN VALLEY WATER CONSERVANCY DISTRICT

JORDAN VALLEY WATER TREATMENT PLANT
FILTER AND CHEMICAL FEED UPGRADES
DEMOLITION
FILTERS
DETAILS 4

VERIFY SCALES
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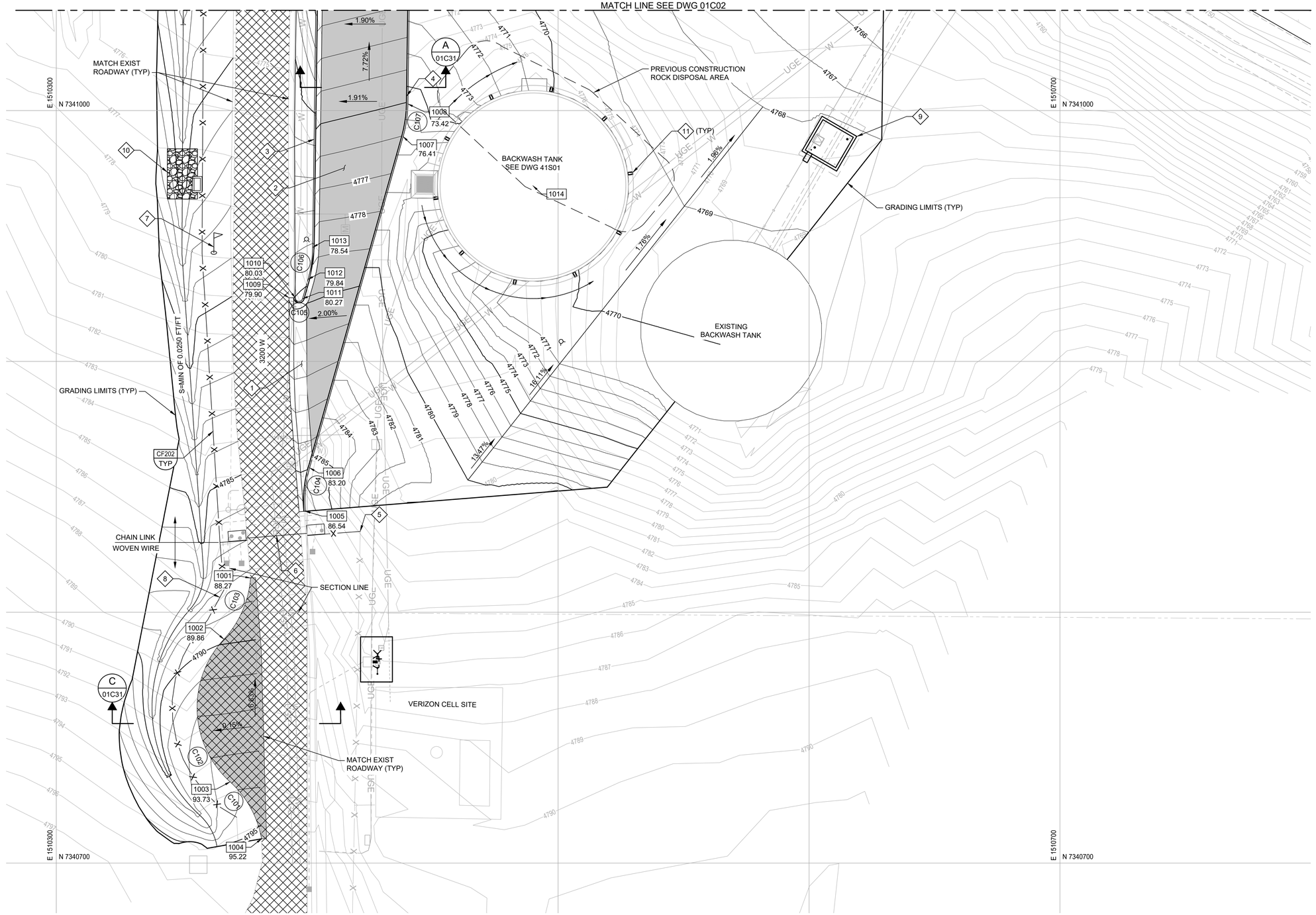
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 202001.10
DRAWING NO. 30D07
SHEET NO. OF

PROJECT NO. 202001-100000 FILE NAME: 20200130D07.dgn



PLAN

FILE: 20200101C02

GENERAL NOTES:

1. SEE 01C07 FOR COORDINATE DATA AND CURVE DATA.
2. ADJUST ALL VALVE BOXES, MANHOLES, HANDHOLES AND PULL BOXES TO FINISHED GRADE.
3. THE ELEVATION/SURFACE OF NEW SIDEWALKS, PAVEMENT, CURBS AND OTHER HARD SURFACES SHALL MATCH EXISTING SURFACES AND FEATURES WITHOUT ABRUPT GRADE CHANGES.
4. SPREAD SEED MIX PER SPECIFICATION 02939 IN ALL DISTURBED AREAS THAT DO NOT RECEIVE A FINISHED SURFACE TREATMENT SUCH AS PAVEMENT, SIDEWALK, RIPRAP, ETC.
5. THE BOUNDARY OF THE "PREVIOUS CONSTRUCTION ROCK DISPOSAL AREA" IS UNKNOWN. LIKEWISE THE SUBSURFACE MATERIAL IN THIS AREA, OTHER THAN WHAT IS EVIDENCED IN THE PROJECTS GEOTECHNICAL REPORT ARE ALSO UNKNOWN.

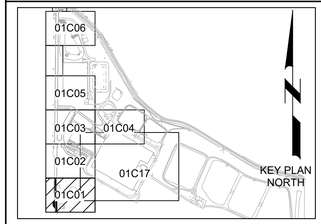
KEY NOTES:

1. DRIVEWAY APPROACH, SIMILAR TO APWA PAN 225.
2. ASPHALT PAVEMENT PER DETAIL 1 ON DWG 01C31.
3. CURB AND GUTTER PER APWA PLAN 205.1 TYPE A.
4. VERTICAL CURB PER APWA PLAN 209 TYPE P.
5. INSTALL CORNER POST IN EXISTING FENCE LINE.
6. INSTALL VERTICAL PIVOT GATE OPERATORS FROM EXISTING SOUTH GATE WITH NEW CHAINLINK 300+1 GATE LEAVES FROM AUTOGATE. ADJUST AND BALANCE OPERATORS FOR THE NEW GATES LEAVES. SEE EXISTING GATE O&M MANUAL AND ADDITIONAL INFORMATION PROVIDED IN VOLUME 6 OF 6, APPENDIX C. (A)
7. ORANGE WINDSOCK. AIRPORT WINDSOCK CORPORATION AWCS8-36, 8" BALL BEARING FRAME AWCFB8, AND HINGED 20' POLE AWCP-20. FOUNDATION SIM TO SC190/TYP.
8. 48" TALL WOVEN WIRE FENCE PER UDOT STD DWG NO FG 1A AND UDOT STANDARD SPECIFICATION 02822. INSTALL SIM TO TYPE F FENCE WITH THE HEIGHT OF THE FENCE INCREASED TO 48".
9. BACKWASH TANK VALVE VAULT, SEE DWG 41S04.
10. D_{50}=6" RIPRAP @ 1 FT DEPTH
11. SPLASH PAD PER DETAIL 3 ON DWG 01C33

LEGEND:

SLURRY SEAL

KEY PLAN



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SCALE

0 10' 20' 40'

SCALE: 1" = 20'

REV	DATE	BY	DESCRIPTION
1	04/15/2025	RAP	ADDENDUM NO. 1

BID SET

DESIGNED DAS
DRAWN ARE
CHECKED DAS
DATE FEBRUARY 2025

REGISTERED PROFESSIONAL ENGINEER
No. 7667716-2202
JACOB C. BAER
STATE OF UTAH

carollo

JORDAN VALLEY WATER CONSERVANCY DISTRICT

JORDAN VALLEY WATER TREATMENT PLANT
FILTER AND CHEMICAL FEED UPGRADES
CIVIL
GRADING AND PAVING PLAN 1

VERIFY SCALES
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0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 202001.10
DRAWING NO. 01C01
SHEET NO. OF

LAST SAVED BY: AEvans

PROJECT NO. 202001-100000 FILE NAME: 20200101C01.DWG

DOOR & HARDWARE SCHEDULE

DOOR NUMBER	POSITION INT/EXT	DOOR WIDTH	DOOR HEIGHT	DOOR THICK	DOOR TYPE (AJ103/TYP)	DOOR MATL	DOOR FINISH	FRAME WIDTH	FRAME HEIGHT	FRAME DEPTH	FRAME TYPE (AJ100/TYP)	FRAME MATL	FRAME FINISH	DETAILS HEAD (AJ105/TYP)	DETAILS JAMB (AJ107/TYP)	DETAILS SILL (AJ109/TYP)	UL LABEL	LOUVER SIZE	CARD READER	PANIC HARDWARE	HARDWARE GROUP
CHLORINE BUILDING - REFERENCE DRAWING 63A01																					
63-D101-01	EXT	3'-0"	7'-0"	1 3/4"	F	HM	PAINTED	3'-4"	7'-4"	5 3/4"	R	HM	PAINTED	H	H	E	R	NR	R	R	HW-1
63-D101-02	EXT	3'-0"	7'-0"	1 3/4"	F	HM	PAINTED	3'-4"	7'-4"	5 3/4"	R	HM	PAINTED	H	H	E	R	NR	R	R	HW-1
63-D102-01	EXT	12'-0"	16'-0"	2"	C	ALUM	FACT FIN	14'-0"	16'-0"	2"	C	STL	FACT FIN	A/AA207	B/AA207	C/AA207	NR	NR	NR	NR	-
63-D102-02	EXT	3'-0"	7'-0"	1 3/4"	F	HM	PAINTED	3'-4"	7'-4"	5 3/4"	R	HM	PAINTED	H	H	E	R	NR	R	R	HW-1
63-D102-03	EXT	3'-0"	7'-0"	1 3/4"	F	HM	PAINTED	3'-4"	7'-4"	5 3/4"	R	HM	PAINTED	H	H	E	R	NR	R	R	HW-1
63-D102-04	EXT	12'-0"	16'-0"	2"	C	ALUM	FACT FIN	14'-0"	16'-0"	2"	C	STL	FACT FIN	A/AA207	B/AA207	C/AA207	NR	NR	NR	NR	-
63-D103-01	EXT	3'-0"	7'-0"	1 3/4"	F	HM	PAINTED	3'-4"	7'-4"	5 3/4"	R	HM	PAINTED	H	H	E	R	NR	R	R	HW-1
63-D103-02	INT	3'-0"	7'-0"	1 3/4"	F	HM	PAINTED	3'-4"	7'-4"	5 3/4"	R	HM	PAINTED	C	C	B	R	NR	NR	R	HW-3
63-D104-01	EXT	3'-0"	7'-0"	1 3/4"	F	HM	PAINTED	3'-4"	7'-4"	5 3/4"	R	HM	PAINTED	H	H	E	R	NR	NR	R	HW-1
63-D105-01	EXT	6'-4"	10'-0"	1 3/4"	F & T	HM	PAINTED	6'-4"	10'-0"	5 3/4"	T	HM	PAINTED	H	H	E	R	NR	NR	R	HW-2
CAUSTIC SODA BUILDING - REFERENCE DRAWING 65A01																					
65-D101-01	EXT	3'-0"	7'-0"	1 3/4"	F	HM	PAINTED	3'-4"	7'-4"	5 3/4"	R	HM	PAINTED	H	H	E	NR	NR	R	R	HW-1
65-D101-02	EXT	14'-0"	14'-0"	2"	C	ALUM	PAINTED	14'-0"	14'-0"	-	-	ALUM	PAINTED	AJ123	AJ123	AJ123	NR	NR	NR	NR	-
65-D102-01	EXT	3'-0"	7'-0"	1 3/4"	F	HM	PAINTED	3'-4"	7'-4"	5 3/4"	R	HM	PAINTED	H	H	E	NR	NR	R	R	HW-1
65-D103-01	EXT	6'-0"	7'-0"	1 3/4"	F & T	HM	PAINTED	6'-4"	10'-0"	5 3/4"	R & T	HM	PAINTED	H	H	E	NR	NR	R	R	HW-2
PEA, PC, AND PEC AREAS - REFERENCE DRAWING 69A02																					
69-D101-01	EXT	3'-0"	7'-0"	1 3/4"	N	HM	PAINTED	3'-0"	7'-4"	5 3/4"	R	HM	PAINTED	H	H	E	NR	NR	R	R	HW-1
69-D101-02	EXT	13'-4"	13'-4"	2"	C	ALUM	FACT FIN	13'-4"	13'-4"	2"		ALUM	FACT FIN	A/AA207	B/AA207	C/AA207	NR	NR	NR	NR	
69-D102-01	INT	6'-0"	7'-0"	1 3/4"	G	HM	PAINTED	6'-8"	7'-4"	5 3/4"	R	HM	PAINTED	C	C	B	NR	NR	NR	NR	HW-4
69-D102-02	EXT	3'-0"	7'-0"	1 3/4"	N	HM	PAINTED	3'-0"	7'-4"	5 3/4"	R	HM	PAINTED	C	C	E	NR	NR	R	R	HW-1

FILTERS - REFERENCE DRAWING 30A02

WINDOW SCHEDULE

OPENING NUMBER	HEIGHT	WIDTH	HEIGHT ABOVE F.F.	FRAME MATL	FRAME FINISH	GLAZING MATL	FIRE RATING
CHLORINE BUILDING - REFERENCE DRAWING 63A01							
63-W104-01	4'-0"	4'-0"	3'-4"	ALUM	COATED	STANDARD, CLEAR	R
PEA, PC, AND PEC AREAS - REFERENCE DRAWING 69A03							
69-W102-01	7'-6"	8'-11"	1'-4"	ALUM	COATED	STANDARD, CLEAR	NR

*CONTRACTOR TO FIELD VERIFY EXISTING OPENING HEIGHT AND WIDTH FOR 69-W102-01 PRIOR TO ORDERING MATERIALS

SCHEDULE ABBREVIATION LIST:

ci:	CONTINUOUS INSULATION
CMU:	CONCRETE MASONRY UNIT
CONC:	CONCRETE
EXPO:	EXPOSED MATERIAL
FF:	FACTORY FINISH
FT:	FEET
F-1:	FACTORY INDUSTRIAL GROUP, MODERATE HAZARD OCCUPANCY
HW:	HARDWARE GROUP, REFERENCE SPECIFICATION SECTION 08710
INT:	INTEGRALLY COLORED CMU UNITS
MATL:	MATERIAL
MTL. DECK:	METAL DECK, REFERENCE STRUCTURAL DRAWINGS
NR:	NOT REQUIRED
PR:	PAIR
REQ:	REQUIRED
R-VALUE:	THERMAL RESISTANCE, IS THE INVERSE OF THE TIME RATE OF HEAT FLOW THROUGH A BODY FROM ONE OF ITS BOUNDING SURFACES TO THE OTHER SURFACE FOR A UNIT TEMPERATURE DIFFERENCE BETWEEN THE TWO SURFACES, UNDER STEADY STATE CONDITIONS, PER UNIT AREA
SF:	SQUARE FEET
TYP:	TYPICAL
U-FACTOR:	THERMAL TRANSMITTANCE, IS THE COEFFICIENT OF HEAT TRANSMISSION (AIR TO AIR) THROUGH A BUILDING COMPONENT OR ASSEMBLY, EQUAL TO THE TIME RATE OF HEAT FLOW PER UNIT AREA AND UNIT TEMPERATURE DIFFERENCE BETWEEN THE WARM SIDE AND COLD SIDE AIR FILMS.
VE:	VINYL ESTHER COATING, REFERENCE SPECIFICATION 09960

ROOM FINISH SCHEDULE

ROOM NUMBER	ROOM NAME	FLOOR MATL	FLOOR FINISH	MATL	NORTH MATL	NORTH FINISH	EAST MATL	EAST FINISH	SOUTH MATL	SOUTH FINISH	WEST MATL	WEST FINISH	CEILING MATL	CEILING INT CLR	CEILING FINISH	REMARKS
CHLORINE BUILDING - REFERENCE DRAWING 63A01																
63-101	CHLORINE STORAGE ROOM	CONC	SEALER	NA	CMU	COATING	CMU	COATING	CMU	COATING	CMU	COATING	MTL DECK	23'-0"	COATING	
63-102	TRUCK BAY	CONC	SEALER	NA	CMU	COATING	CMU	COATING	CMU	COATING	CMU	COATING	MTL DECK	27'-0"	COATING	
63-103	CHLORINATOR ROOM	CONC	SEALER	NA	CMU	COATING	CMU	COATING	CMU	COATING	CMU	COATING	MTL DECK	11'-0"	COATING	
63-104	MECHANICAL ROOM	CONC	SEALER	NA	CMU	COATING	CMU	COATING	CMU	COATING	CMU	COATING	MTL DECK	11'-0"	COATING	CONCRETE TOP
63-105	ELECTRICAL ROOM	CONC	SEALER	NA	CMU	COATING	CMU	COATING	CMU	COATING	CMU	COATING	MTL DECK	11'-0"	COATING	CONCRETE TOP
CAUSTIC SODA BUILDING - REFERENCE DRAWING 65A01																
65-101	CAUSTIC SODA METERING AREA	CONC	VE	NA	CMU	COATING	CMU	COATING	CMU	COATING	CMU	COATING	MTL DECK	26'-0"	COATED	
65-102	CAUSTIC SODA BULK AREA	CONC	VE	NA	CMU	COATING	CMU	COATING	CMU	COATING	CMU	COATING	MTL DECK	26'-0"	COATED	
65-103	ELECTRICAL ROOM	CONC	SEALER	NA	CMU	COATING	CMU	COATING	CMU	COATING	CMU	COATING	MTL DECK	26'-0"	COATED	
PEA, PC, AND PEC AREAS - REFERENCE DRAWING 69A02																
69-101	PEA DRY FEED AREA	EXIST	SEALER	NA	EXIST	COATING	EXIST	COATING	EXIST	COATING	EXIST	COATING	EXIST	EXIST	EXIST	
69-102	PEA POLYMER AREA	EXIST	SEALER	NA	EXIST	COATING	EXIST	COATING	EXIST	COATING	EXIST	COATING	EXIST	EXIST	EXIST	
69-103	PEC BULK STORAGE AREA	EXIST	SEALER	NA	EXIST	COATING	EXIST	COATING	EXIST	COATING	EXIST	COATING	EXIST	EXIST	EXIST	
69-104	PEA METERING AREA	EXIST	SEALER	NA	EXIST	COATING	EXIST	COATING	EXIST	COATING	EXIST	COATING	EXIST	EXIST	EXIST	
69-105	PEC AND PC METERING	EXIST	SEALER	NA	EXIST	COATING	EXIST	COATING	EXIST	COATING	EXIST	COATING	EXIST	EXIST	EXIST	

2018 INTERNATIONAL ENERGY CONSERVATION CODE1

ENVELOPE COMPONENT	REQUIRED	PROVIDED
BUILDING ENVELOPE REQUIREMENTS - SALT LAKE COUNTY - CLIMATE ZONE 5B		
INSULATION ENTIRELY ABOVE ROOF DECK	R-30ci	R-30ci
WALLS, ABOVE GRADE - MASS	R-11.4ci	R-11.4ci
FLOORS - MASS	R-10 ci	R-10 ci
OPAQUE DOORS	R-4.75	R-4.75
FIXED FENESTRATION	U-0.38	U-0.38
OPERABLE FENESTRATION	U-0.45	U-0.45
ENTRANCE DOORS	U-0.77	U-0.77
SWINGING DOORS	U-0.37	U-0.37

REV	DATE	BY	DESCRIPTION
1	04/15/2025	MEH	ADDENDUM NO. 1

BID SET

DESIGNED MEH
DRAWN JA
CHECKED JCA
DATE FEBRUARY 2025

STATE OF UTAH · MICHELE E. HOLLENBAUGH · No. 9334258 · LICENSED ARCHITECT

carollo

JORDAN VALLEY WATER CONSERVANCY DISTRICT

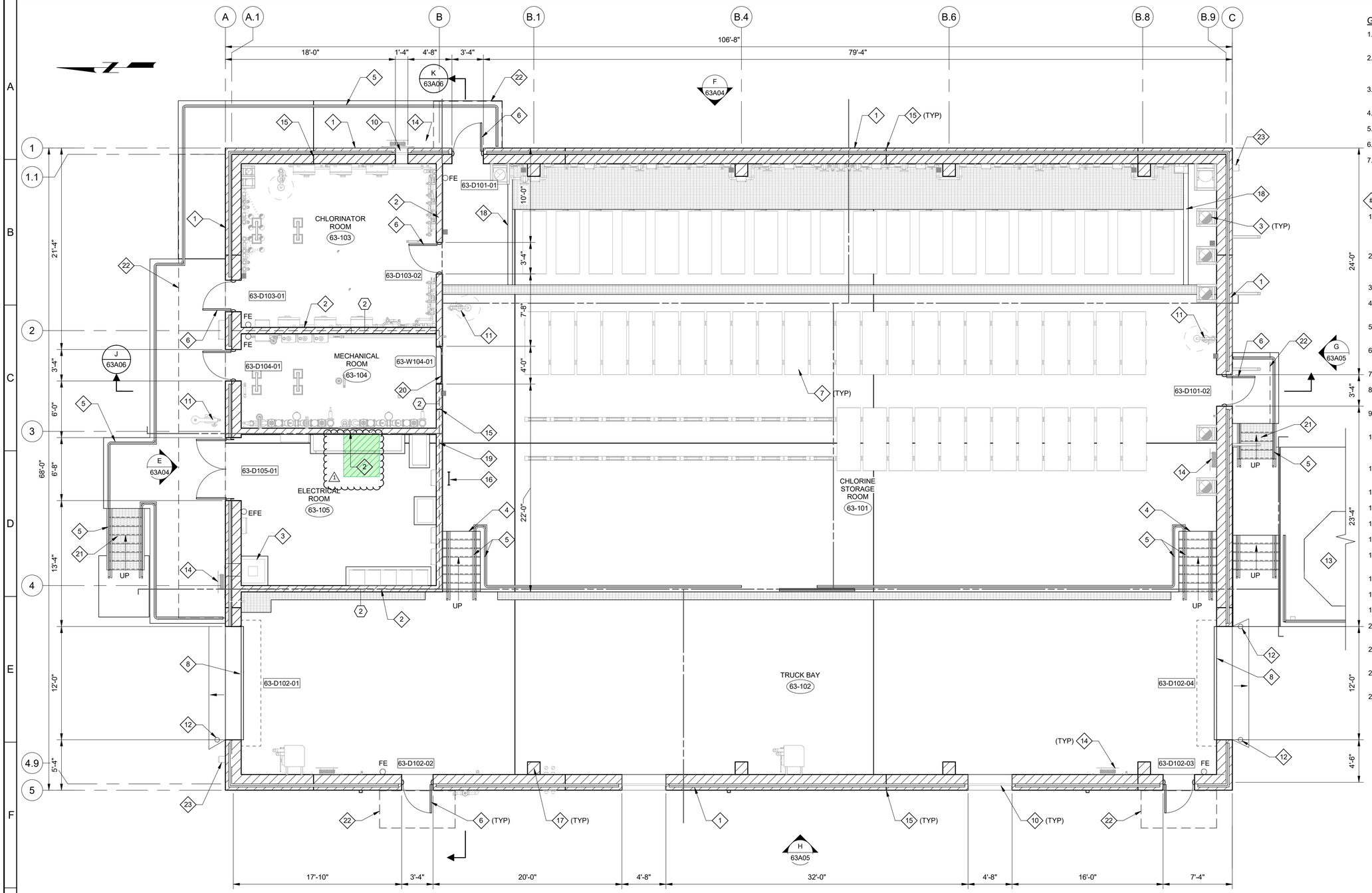
JORDAN VALLEY WATER TREATMENT PLANT
FILTER AND CHEMICAL FEED UPGRADES
ARCHITECTURAL
DOOR SCHEDULE, WINDOW SCHEDULE, AND ROOM FINISH SCHEDULE

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 202001.10
DRAWING NO. 00GA01
SHEET NO. OF

PLOT DATE: 2/11/2025 11:49:26 AM

FILE NAME: Autodesk Docs://JVWCD 202001-100000 JVWTP Upgrades/20200100A0801.rvt



FLOOR

B PLAN

SCALE: 3/16" = 1'-0"

GENERAL NOTES:

1. FOR DOOR HARDWARE AND ROOM FINISH INFORMATION, REFERENCE DRAWING 00GA01.
2. REFERENCE STRUCTURAL DRAWINGS FOR CAST-IN-PLACE AND CONCRETE DIMENSIONS, TOP OF FINISH FLOOR AND TOP OF WALL ELEVATIONS, AND ADDITIONAL STRUCTURAL INFORMATION.
3. REFERENCE MECHANICAL DRAWINGS FOR MECHANICAL INFORMATION.
4. REFERENCE ELECTRICAL DRAWINGS FOR ELECTRICAL INFORMATION.
5. REFERENCE PLUMBING DRAWINGS FOR PLUMBING INFORMATION.
6. REFERENCE HVAC DRAWINGS FOR HVAC INFORMATION.
7. EXTERIOR CONCRETE MASONRY UNITS SHALL BE FINISHED WITH WATER REPELLANT PER SPECIFICATION SECTION 07190.

KEY NOTES:

1. CAVITY WALL: 12"x8"x16" INTEGRALLY COLORED STANDARD CONCRETE MASONRY UNITS PER SPECIFICATION SECTION 04220, VAPOR BARRIER, 2 INCH RIGID INSULATION, 2 INCH AIR GAP, 4"x8"x16" INTEGRALLY COLORED CONCRETE MASONRY UNIT VENEER
2. 8"x8"x16" INTERALLY COLORED STANDARD CONCRETE MASONRY UNITS PER SPECIFICATION SECTION 04220. SEAL CMU WALL ON CHLORINE STORAGE ROOM SIDE, TRUCK BAY SIDE AND ON CHLORINATOR ROOM SIDE WITH EPOXY COATING PER SPECIFICATION 09960 AND UTAH ADMINISTRATION CODE. 1
3. ~~HVAC EQUIPMENT; REFERENCE HVAC DRAWINGS~~
4. CONCRETE STAIRS. REFERENCE DETAIL AC140/(TYP) AND STRUCTURAL DRAWINGS
5. HANDRAIL, REFERENCE DETAILS AC500/(TYP), AC504/(TYP), AC510/(TYP), AND AC514/(TYP)
6. HOLLOW METAL MAN DOOR, REFERENCE DOOR HARDWARE SCHEDULE SHEET 00GA01 AND SPECIFICATION SECTION 08110
7. CHLORINE STORAGE TANKS, REFERENCE MECHANICAL DRAWINGS
8. INSULATED OVERHEAD COILING DOOR, REFERENCE SPECIFICATION SECTION 08332
9. ALUMINUM DOWNSPOUT AND SPLASH BLOCK. REFERENCE DETAILS AG223/(TYP), AG225/(TYP), AND AG227/(TYP)
10. WALL OPENING, SIZE AND ELEVATION TO SUIT HVAC EQUIPMENT FOR LOUVERS, EXHAUST FANS, DUCTWORK AND EQUIPMENT, REFERENCE HVAC DRAWINGS
11. EMERGENCY EYE WASH STATION, REFERENCE PLUMBING DRAWINGS
12. BOLLARD, REFERENCE TYPICAL DETAIL CF160/(TYP)
13. CHLORINE SCRUBBER, REFERENCE HVAC DRAWINGS
14. HOSE RACK, REFERENCE MECHANICAL DRAWINGS
15. MASONRY CONTROL JOINT, REFERENCE STRUCTURAL DRAWINGS
16. ALUMINUM LADDER, REFERENCE TYPICAL DETAIL AC300/(TYP) AND SPECIFICATION SECTION 05500
17. CMU COLUMN, REFERENCE STRUCTURAL DRAWINGS
18. CONCRETE CURB, REFERENCE STRUCTURAL DRAWINGS
19. DASHED LINE INDICATED 2 HOUR FIRE RATED WALL SEPARATION
20. 4'-0" x 4'-0" HOLLOW METAL 2 HOUR FIRE RATED WINDOW, REFERENCE SPECIFICATION SECTIONS 08518 AND 08810
21. METAL STAIRS, REFERENCE DETAIL AC101/(TYP) AND STRUCTURAL DRAWINGS
22. PREFABRICATED METAL CANOPY, REFERENCE STRUCTURAL DRAWINGS AND SPECIFICATION SECTION 05500
23. SECURITY CAMERA, REFERENCE ELECTRICAL AND I&C DRAWINGS

REV	DATE	BY	DESCRIPTION
1	4/15/2025	MEH	ADDENDUM NO. 1

BID SET

DESIGNED MEH
DRAWN JA
CHECKED JCA
DATE FEBRUARY 2025

STATE OF UTAH · MICHELE E. HOLLENBAUGH · No. 9334258 · LICENSED ARCHITECT

carollo

JORDAN VALLEY WATER CONSERVANCY DISTRICT

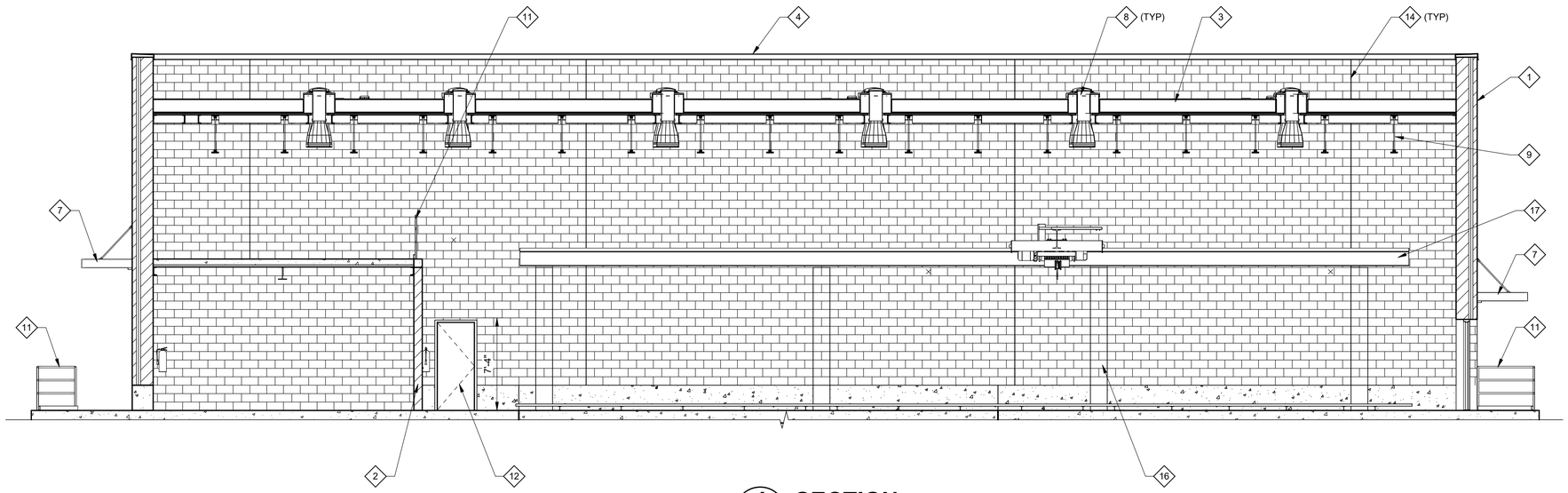
JORDAN VALLEY WATER TREATMENT PLANT
FILTER AND CHEMICAL FEED UPGRADES
ARCHITECTURAL
CHLORINE BUILDING FLOOR PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

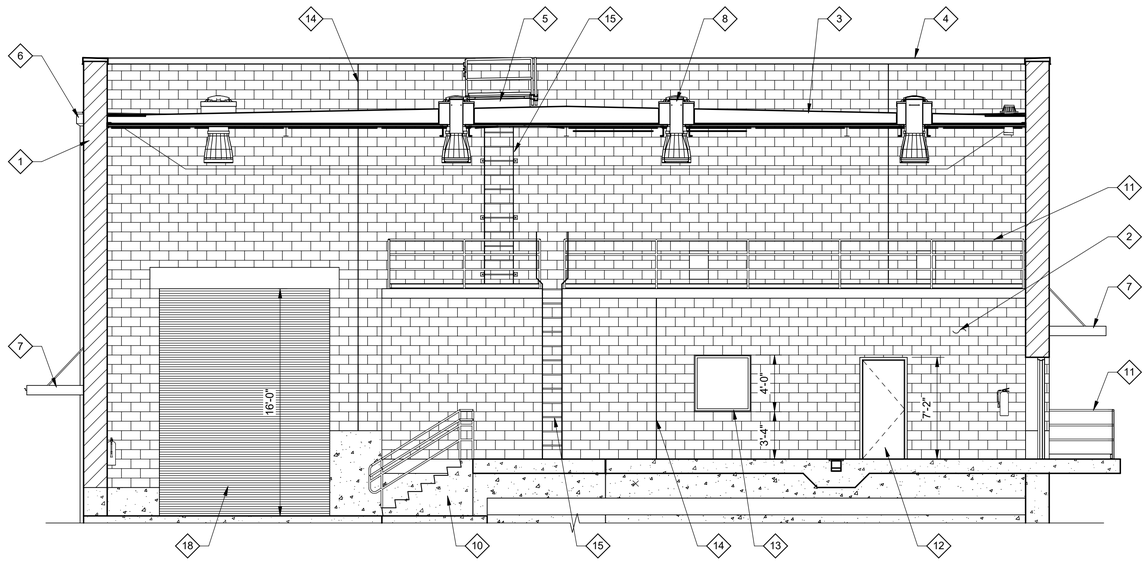
JOB NO. 202001.10
DRAWING NO. 63A01
SHEET NO. OF

PLOT DATE: 2/11/2025 12:17:19 PM

FILE NAME: Autodesk Docs://JVWCD 202001-100000 JVWTP Upgrades/20200163A0801.rvt



J SECTION
63A01
SCALE: 3/16" = 1'-0"



K SECTION
63A01
SCALE: 3/16" = 1'-0"

GENERAL NOTES:

1. FOR DOOR HARDWARE AND ROOM FINISH INFORMATION, REFERENCE DRAWING 00GA01.
2. REFERENCE STRUCTURAL DRAWINGS FOR CAST-IN-PLACE AND CONCRETE DIMENSIONS, TOP OF FINISH FLOOR AND TOP OF WALL ELEVATIONS, AND ADDITIONAL STRUCTURAL INFORMATION.
3. REFERENCE MECHANICAL DRAWINGS FOR MECHANICAL INFORMATION.
4. REFERENCE ELECTRICAL DRAWINGS FOR ELECTRICAL INFORMATION.
5. REFERENCE PLUMBING DRAWINGS FOR PLUMBING INFORMATION.
6. REFERENCE HVAC DRAWINGS FOR HVAC INFORMATION.
7. EXTERIOR CONCRETE MASONRY UNITS SHALL BE FINISHED WITH WATER REPELLANT PER SPECIFICATION SECTION 07190.

KEY NOTES:

1. CAVITY WALL: 12"x8"x16" INTEGRALLY COLORED STANDARD CONCRETE MASONRY UNITS PER SPECIFICATION SECTION 04220, VAPOR BARRIER, 2 INCH RIGID INSULATION, 2 INCH AIR GAP, ~~4"x8"x16" INTEGRALLY COLORED CONCRETE MASONRY UNIT VENEER~~
2. 8"x8"x16" INTERALLY COLORED STANDARD CONCRETE MASONRY UNITS PER SPECIFICATION SECTION 04220. SEAL CMU WALL ON CHLORINE STORAGE ROOM SIDE, TRUCK BAY SIDE AND ON CHLORINATOR ROOM SIDE WITH EPOXY COATING PER SPECIFICATION 09960 AND UTAH ADMINISTRATION CODE. (1)
3. ~~TPO MEMBRANE ROOFING, MINIMUM 6" TAPERED RIGID INSULATION~~, AND COVER BOARD, REFERENCE SPECIFICATION SECTIONS 07220 AND 07540
4. ALUMINUM COPING, REFERENCE DETAIL AG220/(TYP) AND SPECIFICATION SECTION 07700
5. ROOF ACCESS HATCH, REFERENCE SPECIFICATION SECTION 08320
6. ALUMINUM DOWNSPOUT AND SPLASH BLOCK. REFERENCE DETAILS AG223/(TYP), AG225/(TYP), AND AG227/(TYP)
7. PREMANUFACTURED CANOPY, REFERENCE STRUCTURAL DRAWINGS AND SPECIFICATION SECTION 05500
8. 21" SOLATUBE. INSTALL PER MANUFACTURER'S RECOMMENDATIONS, REFERENCE STRUCTURAL DRAWINGS FOR FRAMING
9. STRUCTURAL FRAMING, REFERENCE STRUCTURAL DRAWINGS
10. CONCRETE STAIRS. REFERENCE DETAIL AC140/(TYP) AND STRUCTURAL DRAWINGS
11. HANDRAIL, REFERENCE DETAILS AC500/(TYP), AC504/(TYP), AC510/(TYP), AND AC514/(TYP)
12. HOLLOW METAL MAN DOOR, REFERENCE DOOR HARDWARE SCHEDULE SHEET 00GA01 AND SPECIFICATION SECTION 08110
13. 4'-0" x 4'-0" HOLLOW METAL FIRE RATED WINDOW, REFERENCE SPECIFICATION SECTIONS 08518 AND 08810
14. MASONRY CONTROL JOINT, REFERENCE STRUCTURAL DRAWINGS
15. ALUMINUM LADDER, REFERENCE TYPICAL DETAIL AC300/(TYP) AND SPECIFICATION SECTION 05500
16. CMU COLUMN, REFERENCE STRUCTURAL DRAWINGS
17. BRIDGE CRANE, REFERENCE STRUCTURAL DRAWINGS
18. INSULATED OVERHEAD COILING DOOR, REFERENCE SPECIFICATION SECTION 08332

REV	DATE	BY	DESCRIPTION
			BID SET
1	4/15/2025	MEH	ADDENDUM NO. 1

DESIGNED MEH
DRAWN JA
CHECKED JCA
DATE FEBRUARY 2025

STATE OF UTAH · MICHELE E. HOLLENBAUGH · No. 9334258 · LICENSED ARCHITECT

carollo

JORDAN VALLEY WATER CONSERVANCY DISTRICT

JORDAN VALLEY WATER TREATMENT PLANT
FILTER AND CHEMICAL FEED UPGRADES
ARCHITECTURAL
CHLORINE BUILDING
BUILDING SECTIONS

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 202001.10
DRAWING NO. 63A06
SHEET NO. OF

PLOT DATE: 2/11/2025 12:17:34 PM

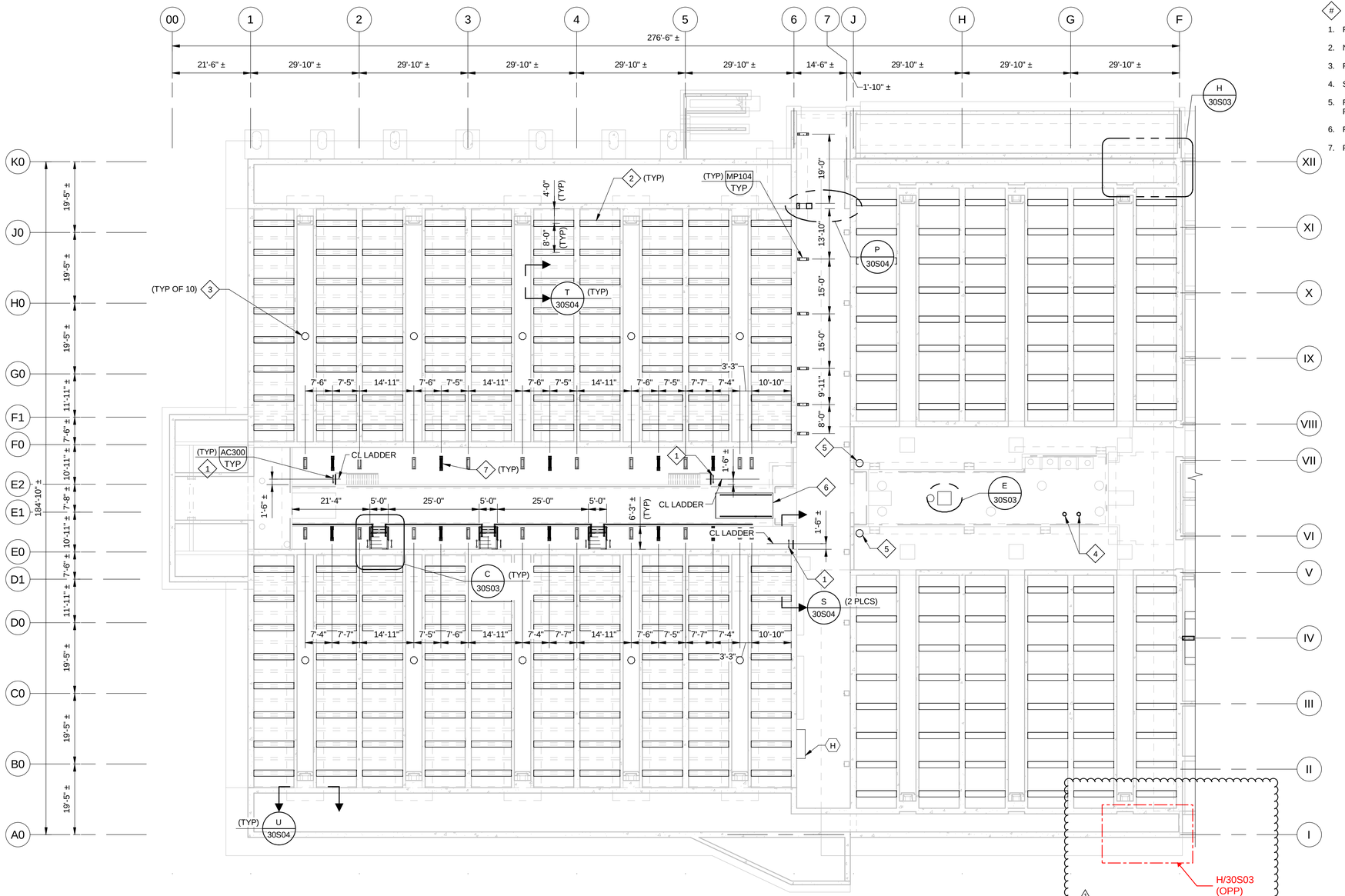
FILE NAME: Autodesk Docs://JVWCD 202001-100000 JVWTP Upgrades/20200163A0801.rvt

GENERAL NOTES:

1. FOR GENERAL STRUCTURAL NOTES SEE DRAWING 00GS01.

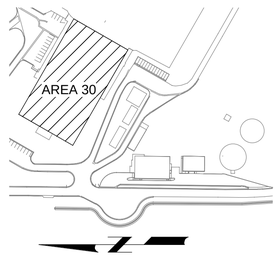
KEY NOTES:

1. REMOVE GUARDRAIL AND PROVIDE ACCESS LADDER W/ GATE.
2. NEW FIBERGLASS TROUGH (TYP OF FILTERS 1-16)
3. FILL OPENING OF MANWAY PER DETAIL 3/30S03.
4. SEAL EXISTING 1'-0" DIAMETER HOLES PER DETAIL 4/30S04.
5. RECONSTRUCT SLAB AFTER INSTALLATION OF NEW 2'-0" DIA PIPE PER ENLARGED PLAN R/30S04.
6. RECONSTRUCT CONCRETE RAMP. SEE ENLARGED PLAN F/30S03.
7. PIPE SUPPORT. SEE DETAIL 5/30S05.



A PLAN

SCALE: 1/16" = 1'-0"



KEYMAP

REV	DATE	BY	DESCRIPTION
1	04/15/2025	CB	ADDENDUM NO. 1

BID SET

DESIGNED CB
DRAWN TJD
CHECKED JAD
DATE FEBRUARY 2025

PROFESSIONAL STRUCTURAL ENGINEER
No. 7882644-2203
D. CRAIG BRINCK
STATE OF UTAH

carollo

JORDAN VALLEY WATER CONSERVANCY DISTRICT

JORDAN VALLEY WATER TREATMENT PLANT

FILTER AND CHEMICAL FEED UPGRADES

STRUCTURAL

FILTERS
LOWER PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 202001.10
DRAWING NO. 30S01
SHEET NO. OF

PLOT DATE: 2/12/2025 2:13:57 PM

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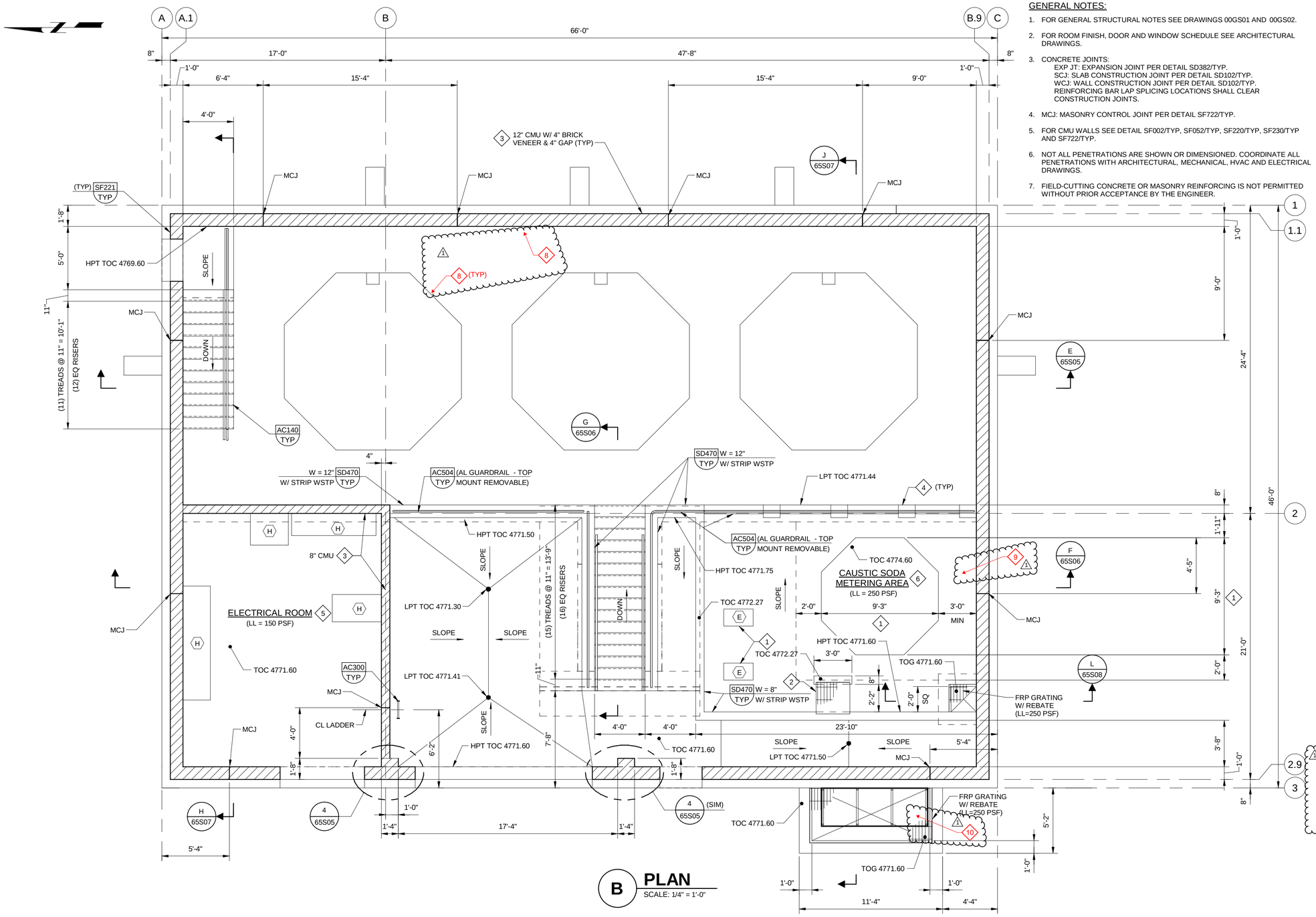

B **PLAN**
SCALE: 1/4" = 1'-0"

GENERAL NOTES:

1. FOR GENERAL STRUCTURAL NOTES SEE DRAWINGS 00GS01 AND 00GS02.
2. FOR ROOM FINISH, DOOR AND WINDOW SCHEDULE SEE ARCHITECTURAL DRAWINGS.
3. CONCRETE JOINTS:
   EXP JT: EXPANSION JOINT PER DETAIL SD382/TYP.
   SCJ: SLAB CONSTRUCTION JOINT PER DETAIL SD102/TYP.
   WCJ: WALL CONSTRUCTION JOINT PER DETAIL SD102/TYP.
   REINFORCING BAR LAP SPLICING LOCATIONS SHALL CLEAR CONSTRUCTION JOINTS.
4. MCJ: MASONRY CONTROL JOINT PER DETAIL SF722/TYP.
5. FOR CMU WALLS SEE DETAIL SF002/TYP, SF052/TYP, SF220/TYP, SF230/TYP AND SF722/TYP.
6. NOT ALL PENETRATIONS ARE SHOWN OR DIMENSIONED. COORDINATE ALL PENETRATIONS WITH ARCHITECTURAL, MECHANICAL, HVAC AND ELECTRICAL DRAWINGS.
7. FIELD-CUTTING CONCRETE OR MASONRY REINFORCING IS NOT PERMITTED WITHOUT PRIOR ACCEPTANCE BY THE ENGINEER.

STRUCTURAL DESIGN INFORMATION:

1. FOR GENERAL BUILDING CODE AND LOADING CRITERIA SEE DRAWING 00GS01. THE FOLLOWING NOTES INDICATE DESIGN CRITERIA SPECIFIC TO THIS STRUCTURE.
2. RISK CATEGORY: IV BY REQUEST.
   a. TYPE: WATER TREATMENT FACILITY.
   b. MATERIAL: TOXIC (50% SODIUM HYDROXIDE).
      1. L_{50} (ORAL, RAT) = 200MG/KG.
3. DEAD LOADS:
   a. SUPERIMPOSED DEAD COLLATERAL LOADS:
      1. EQUIPMENT: SEE DRAWINGS. IF THE APPROVED EQUIPMENT WEIGHS MORE THAN SHOWN, NOTIFY THE ENGINEER PRIOR TO SHOP DRAWING PREPARATION AND FABRICATION.
4. LIVE LOADS:
   a. FLOOR - UNIFORM:
      1. SEE PLAN FOR EACH AREAS LIVE LOAD.
      2. MINIMUM UNO: 100 PSF.
   b. ROOF - UNIFORM:
      1. TYPICAL UNO: 20 PSF.
      2. JOIST CONCENTRATED: 2,000 LB.
      3. DECK CONCENTRATED: 300 LB (OVER 2.5 x 2.5 AREA).
5. SNOW LOAD:
   a. FLAT ROOF SNOW LOAD, Pf: 35 PSF.
   b. SNOW LOAD IMPORTANCE FACTOR, Is = 1.20.
   c. EXPOSURE FACTOR, Ce = 1.0 (CAT B, PARTIALLY EXPOSED).
   d. THERMAL FACTOR, Ct = 1.1 (COLD ROOF).
   e. SLOPE FACTOR, Cs = 1.0 (FLAT).
   f. NEAR-GROUND SNOW LOAD, IsPg: 46 PSF.
   g. DRIFT LOADS: SEE PLANS.
6. RAIN LOAD
   a. RAIL LOAD, R = 21 PSF.
7. WIND LOAD:
   a. BASIC DESIGN WIND SPEED, V = 115 MPH.
   b. EXPOSURE CATEGORY: C.
   c. ELEVATION FACTOR, Ke = 0.84.
   d. INTERNAL PRESSURE COEFFICIENT, GCpi = ±0.55 (PARTIALLY ENCLOSED).
8. EARTHQUAKE:
   a. SEISMIC IMPORTANCE FACTOR: Ie = 1.5.
   b. SEISMIC DESIGN CATEGORY: D.
   c. BUILDING STRUCTURE
      1. BASIC SEISMIC FORCE RESISTING SYSTEM: BEARING WALL SPECIAL REINFORCED MASONRY SHEAR WALLS.
      2. SYSTEM RESPONSE MODIFICATION COEFFICIENT: R = 5.
      3. SEISMIC RESPONSE COEFFICIENT: Cs = 0.281.
      4. DESIGN BASE SHEAR, V = 220 KIPS (STRENGTH LEVEL).
      5. ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE.
   d. NONBUILDING STRUCTURE
      1. BASIC SEISMIC FORCE RESISTING SYSTEM: FLAT-BOTTOM GROUND SUPPORTED TANK, MECHANICALLY ANCHORED.
      2. SYSTEM RESPONSE MODIFICATION COEFFICIENT
         1. IMPULSIVE, Ri = 3.
         2. CONVECTIVE, Rc = 1.
      3. DESIGN BASE SHEAR (STRENGTH LEVEL):
         1. BULK AREA, V = 96 KIPS EA.
         2. METERING AREA, V = 14 KIPS EA.
9. FOUNDATION:
   a. TYPE: SPREAD FOOTINGS/ MAT.
   b. ALLOWABLE SOIL BEARING PRESSURE:
      1. FOOTINGS: 4000 PSF
      2. MAT: 3000 PSF
   c. FROST DEPTH: 30 INCHES.

KEY NOTES:

1. CONTRACTOR SHALL COORDINATE DIMENSIONS AS REQUIRED TO SUIT FINAL SUPPLIED EQUIPMENT. DIMENSIONS MAY VARY.
2. FRP GRATING W/ REBATE (LL = 100 PSF) TO SPAN OVER PIPING.
3. PROVIDE CMU WALL REINF:
   A. 8" CMU WALL = #5@32" VERT; #5@32" HORIZ; DOWELS TO MATCH PER DETAIL SF270/TYP.
   B. 12" CMU WALL = #6@16" VERT; #5@16" HORIZ; DOWELS TO MATCH PER DETAIL SF270/TYP.
      VENEER SEISMIC TIES ≤ 16" OC AND ≤ 8" OC AT OPENINGS.
   C. HOOK HORIZ BARS AROUND VERT BARS WHERE INTERRUPTED AT OPENINGS PER DETAIL SF230/TYP.
5. PROVIDE CURB AT GUARDRAIL POSTS PER DETAIL 11/65S08 .
6. 12" THICK SLAB WITH #5@12" EW T&B.
7. 12" THICK SLAB WITH #5@6" EW T&B IN THIS AREA.
8. COAT ENTIRE CONTAINMENT AREA, INCLUDING TANK PADS, FLOOR, SUMP, AND WALLS UP TO 3 FEET AFF WITH A VINYL ESTER COATING PER SPECIFICATION 09960
9. COAT ENTIRE CONTAINMENT AREA, INCLUDING TANK PAD, FLOOR, SUMP, AND CURBING, WITH A VINYL ESTER COATING PER SPECIFICATION 09960.
10. COAT INSIDE OF OF SUMP WITH A VINYL ESTER COATING PER SPECIFICAITON 09960.

REV	DATE	BY	DESCRIPTION
1	04/15/2025	DCB	ADDENDUM NO. 1

BID SET

DESIGNED JMY
DRAWN TJD
CHECKED JAD
DATE FEBRUARY 2025

REGISTERED PROFESSIONAL ENGINEER
No. 11390122-2202
J. MATTHEW YATES
STATE OF UTAH

carollo

JORDAN VALLEY WATER CONSERVANCY DISTRICT

JORDAN VALLEY WATER TREATMENT PLANT
FILTER AND CHEMICAL FEED UPGRADES
STRUCTURAL
CAUSTIC SODA BUILDING
LOWER PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 202001.10
DRAWING NO. 65S02
SHEET NO. OF

PLOT DATE: 2/12/2025 2:14:16 PM

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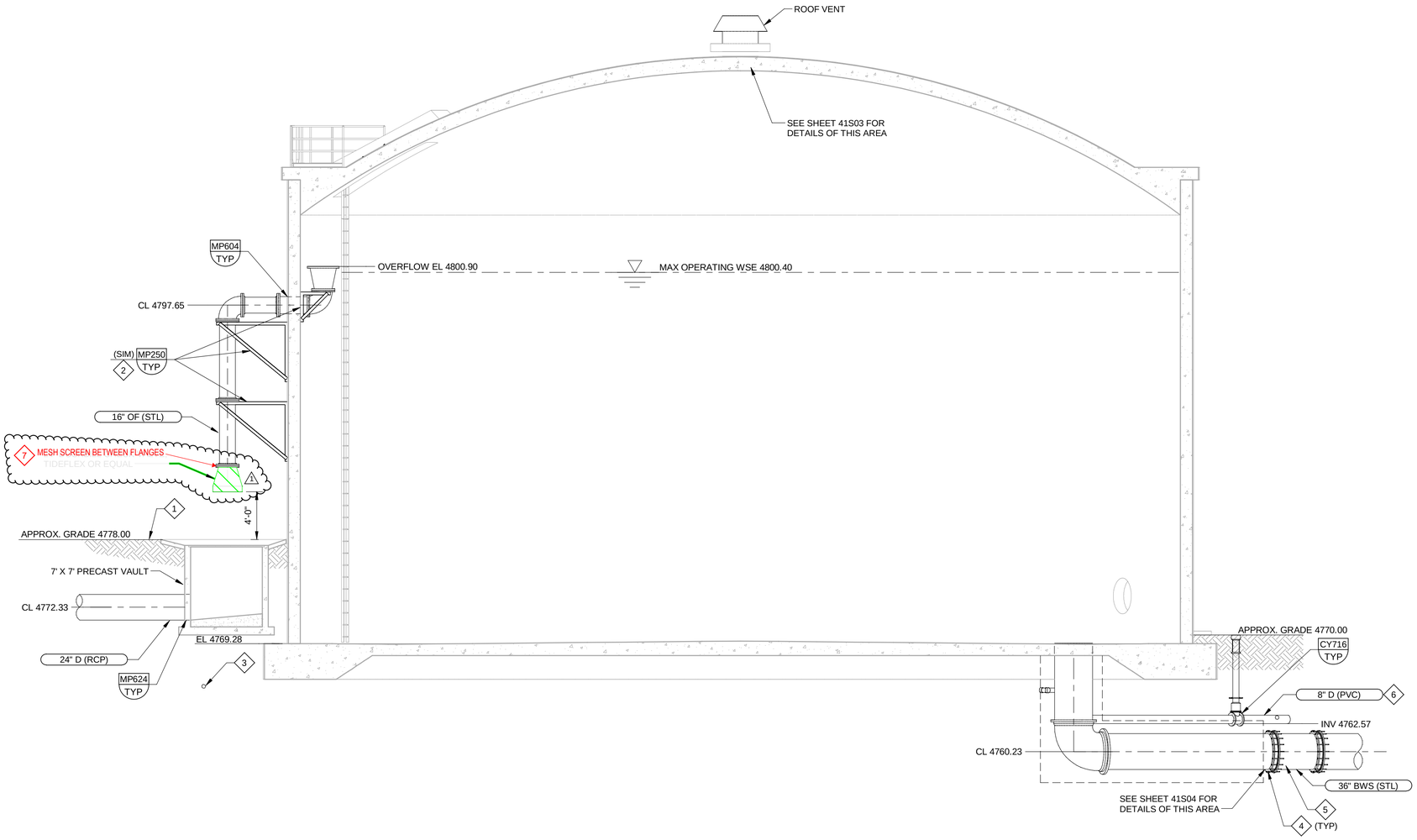


C SECTION
41M01

SCALE: 3/16" = 1'-0"

KEY NOTES:

1. TOP OF BOX TO MATCH HIGHEST SURROUNDING GRADE. SEE CIVIL DRAWINGS FOR APPROXIMATE GRADE.
2. PIPE SUPPORT BRACING TO BE DESIGNED BY TANK SUPPLIER.
3. 4" PERFORATED UNDERDRAIN SYSTEM.
4. INSTALL INSULATING FLANGE AS SHOWN ON CP01.
5. INSTALL CATHODIC PROTECTION TEST STATION AS SHOWN ON CP01.
6. C900 PVC PIPE.
7. PROVIDE NON-CORRODIBLE NO. 4 BUG AND BIRD MESH SCREEN. REINFORCE WITH HEAVY GAGE SCREEN TO PROTECT FINE MESH SCREEN. SECURE MESH SCREEN BETWEEN PIPE FLANGE AND COMPANION FLANGE, WITH A MINIMUM OF 8 BOLTS.

REV	DATE	BY	DESCRIPTION
1	04/15/2025	RAP	ADDENDUM NO. 1

BID SET

DESIGNED ML
DRAWN RPW
CHECKED BRB
DATE FEBRUARY 2025

REGISTERED PROFESSIONAL ENGINEER
No. 12294472-2202
BRADLEY R. BUSWELL
STATE OF UTAH

carollo

JORDAN VALLEY WATER CONSERVANCY DISTRICT

JORDAN VALLEY WATER TREATMENT PLANT
FILTER AND CHEMICAL FEED UPGRADES
MECHANICAL
BACKWASH TANK SECTIONS AND DETAILS

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 202001.10
DRAWING NO. 41M02
SHEET NO. OF

PLOT DATE: 2/10/2025 4:04:27 PM

FILE NAME: Autodesk Docs://JVWCD 202001-100000 JVWTP Upgrades/20200141M0801.rvt

GENERAL NOTES:

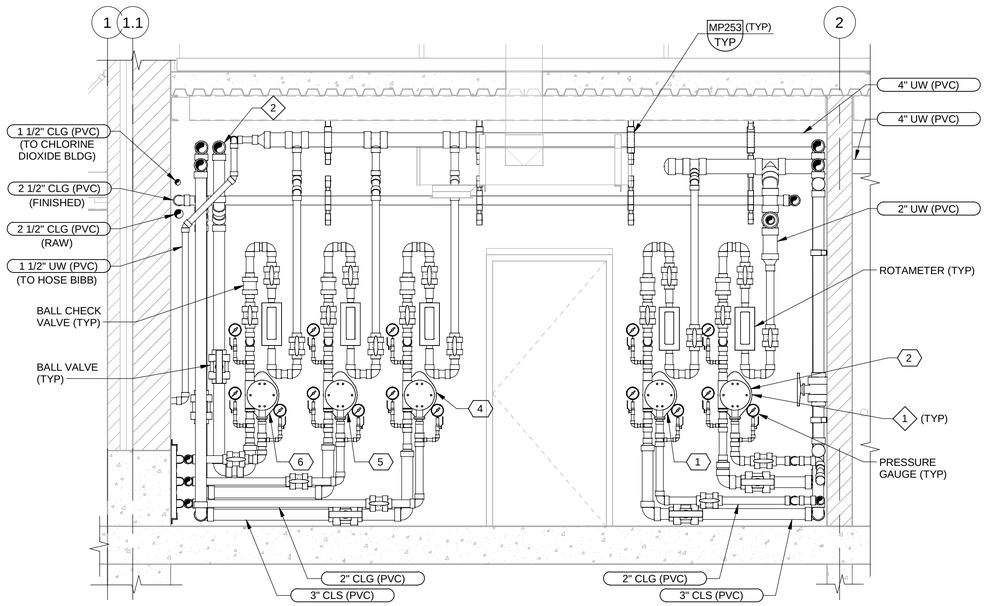
1. CONCRETE ENCASE ALL BURIED PIPING LOCATED BENEATH THE ZONE OF INFLUENCE OF THE STRUCTURE PER TYPICAL DETAIL MP003/TYP.
2. NOT ALL REQUIRED VALVES, INSTRUMENTS, AND DRAINS ARE SHOWN. SEE P&ID DRAWINGS.
3. ALL PIPING SUPPORT SYSTEMS SHALL BE DESIGNED AND DETAILED BY THE CONTRACTOR. ALL CALCULATIONS AND DETAILS SHALL BE STAMPED AND SIGNED BY A REGISTERED ENGINEER IN THE STATE OF UTAH.

KEY NOTES:

1. CHLORINATOR AND EDUCTOR TO BE PROVIDED BY MANUFACTURER. SEE SPECIFICATION SECTION 11260 - GASEOUS CHLORINATION SYSTEM.
2. ROUTE PIPING ALONG CEILING TO THE NORTH WALL. SUPPORT PIPING PER DETAIL MP132.
3. GAS FLOW TRANSMITTER TO BE PROVIDED BY MANUFACTURER. SEE SPECIFICATION SECTION 11260 - GASEOUS CHLORINATION SYSTEM.

KEY TAGS:

1	EDU-6341	FINISHED WATER EDUCTOR 1
2	EDU-6342	FINISHED WATER EDUCTOR 2
3	EDU-6346	FINISHED WATER EDUCTOR 3
4	EDU-6343	RAW WATER EDUCTOR 1
5	EDU-6344	RAW WATER EDUCTOR 2
6	EDU-6345	RAW WATER EDUCTOR 3



D SECTION (63M02)
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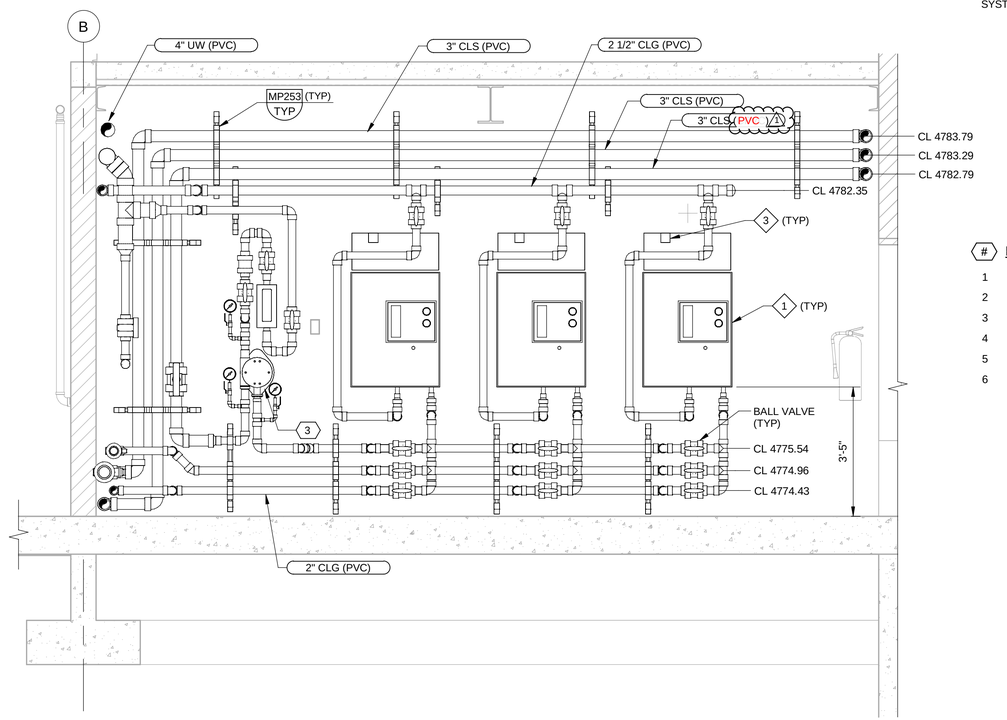


E SECTION (63M02)
SCALE: 1/2" = 1'-0"

REV	DATE	BY	DESCRIPTION
1	04/15/2025	SSB	ADDENDUM NO. 1

BID SET

DESIGNED SSB
DRAWN RPW
CHECKED ARL
DATE FEBRUARY 2025

REGISTERED PROFESSIONAL ENGINEER
No. 12149234-2202
STETSON SKY BASSETT
STATE OF UTAH

carollo

JORDAN VALLEY WATER CONSERVANCY DISTRICT

JORDAN VALLEY WATER TREATMENT PLANT
FILTER AND CHEMICAL FEED UPGRADES
MECHANICAL
CHLORINE BUILDING
SECTIONS 2

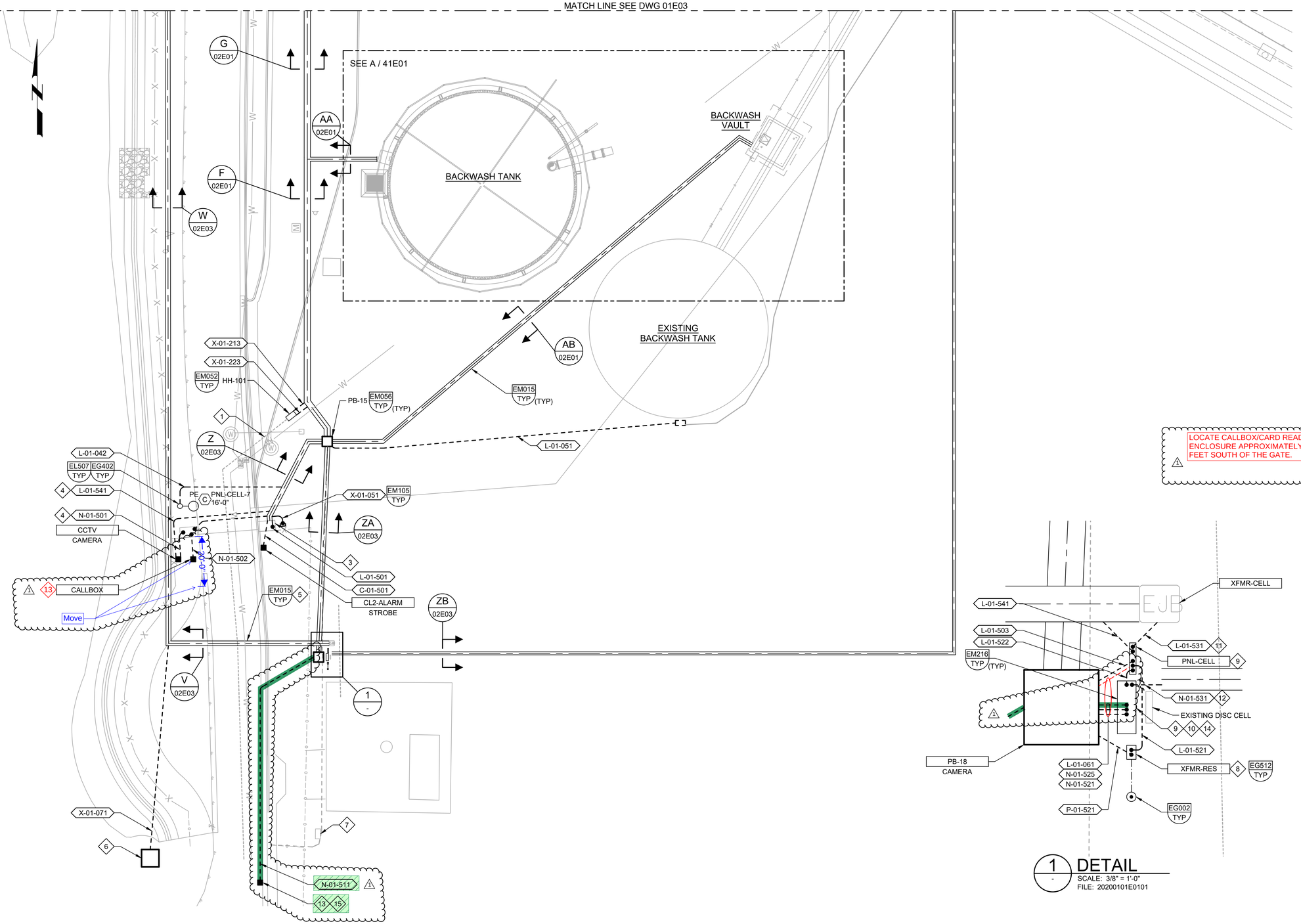
VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 202001.10
DRAWING NO. 63M04
SHEET NO.
OF

PLOT DATE: 2/10/2025 4:02:28 PM

FILE NAME: Autodesk Docs://JVWCD 202001-100000 JVWTP Upgrades/20200163M0801.rvt

MATCH LINE SEE DWG 01E03



1 - DETAIL
SCALE: 3/8" = 1'-0"
FILE: 20200101E0101

LOCATE CALLBOX/CARD READER ENCLOSURE APPROXIMATELY 20 FEET SOUTH OF THE GATE.

GENERAL NOTES:

1. SEE OVERALL SITE PLAN ON DRAWING 01E01.
2. SEE DRAWING 00DE01 FOR DEMOLITION IN THIS AREA.

KEY NOTES:

1. TWO ABANDONED 4-INCH CONDUITS. TERMINATE CONDUITS IN NEW HAND HOLE.
2. REROUTE TWO EXISTING CONDUITS WITH (3) #12 AWG CONDUCTORS FOR BACKWASH RESERVOIR LEVEL TRANSMITTER HEATER AND (1) 2/CS-#16 CABLE FOR LEVEL TRANSMITTER SIGNAL.
3. SOUTH SECURITY GATE, RELOCATED FROM EXISTING LOCATION. MODEL VPL-24, AG# AG8617, SERIAL NO. G-JA15-C03975. PROVIDE ALL NECESSARY CONDUIT AND WIRING TO MATCH EXISTING LOCATION.
4. STUB UP FOR SECURITY CAMERA, TO BE RELOCATED FROM EXISTING LOCATION.
5. PROVIDE CONCRETE CAP OVER DUCT BANK AS SHOWN IN THE TYPICAL DETAIL.
6. RELOCATE EXISTING PULL BOX FROM DRAWING 01DE01.
7. EXISTING PULL BOX FOR POWER AND FIBER OPTIC TO THE CULINARY RESERVOIR.
8. 3 KVA, 240V-480V, 1-PHASE, STEP UP TRANSFORMER FURNISHED BY OWNER, AND USED FOR TEMPORARY POWER TO THE CULINARY RESERVOIR.
9. PNL-CELL AND THE ELECTRONICS ENCLOSURE WILL BE PERMANENT. AT PROJECT COMPLETION, DISCONNECT POWER FROM XFMR-CELL TO PNL-CELL. RE-POWER PNL-CELL FROM PNL-CS IN THE CAUSTIC SODA BUILDING.
10. ELECTRONIC EQUIPMENT ENCLOSURE. 36 INCHES HIGH X 30 INCHES WIDE X 12 INCHES DEEP WITH BACK PANEL. RE-LOCATE ELECTRONIC EQUIPMENT FROM EXISTING GATE CONTROL BOX AND CHLORINE DIOXIDE RTU TO NEW ELECTRONICS ENCLOSURE AS SHOWN ON DRAWINGS. INSTALL NEW POWER METER AND OTHER NEW ITEMS AS REQUIRED.
11. TEMPORARY POWER FOR PNL-CELL.
12. TEMPORARY FIBER OPTIC FOR ELECTRONICS ENCLOSURE. ABANDON FIBER OPTIC AFTER THE PERMANENT FIBER OPTIC CONNECTION IS MADE TO RTU-CS.
13. FIELD VERIFY LOCATION OF EXISTING GATE CARD READER.
14. ELECTRONICS ENCLOSURE.
15. GATE CARD READER.

SCALE

0 10' 20' 40'
SCALE: 1" = 20'

REV	DATE	BY	DESCRIPTION
1	04/15/2025	SKB	ADDENDUM NO. 1

BID SET

DESIGNED SKB
DRAWN NKK
CHECKED GCE
DATE FEBRUARY 2025

REGISTERED PROFESSIONAL ENGINEER
No. 5329023
GUY C. EHLERS
STATE OF UTAH

carollo

JORDAN VALLEY WATER CONSERVANCY DISTRICT

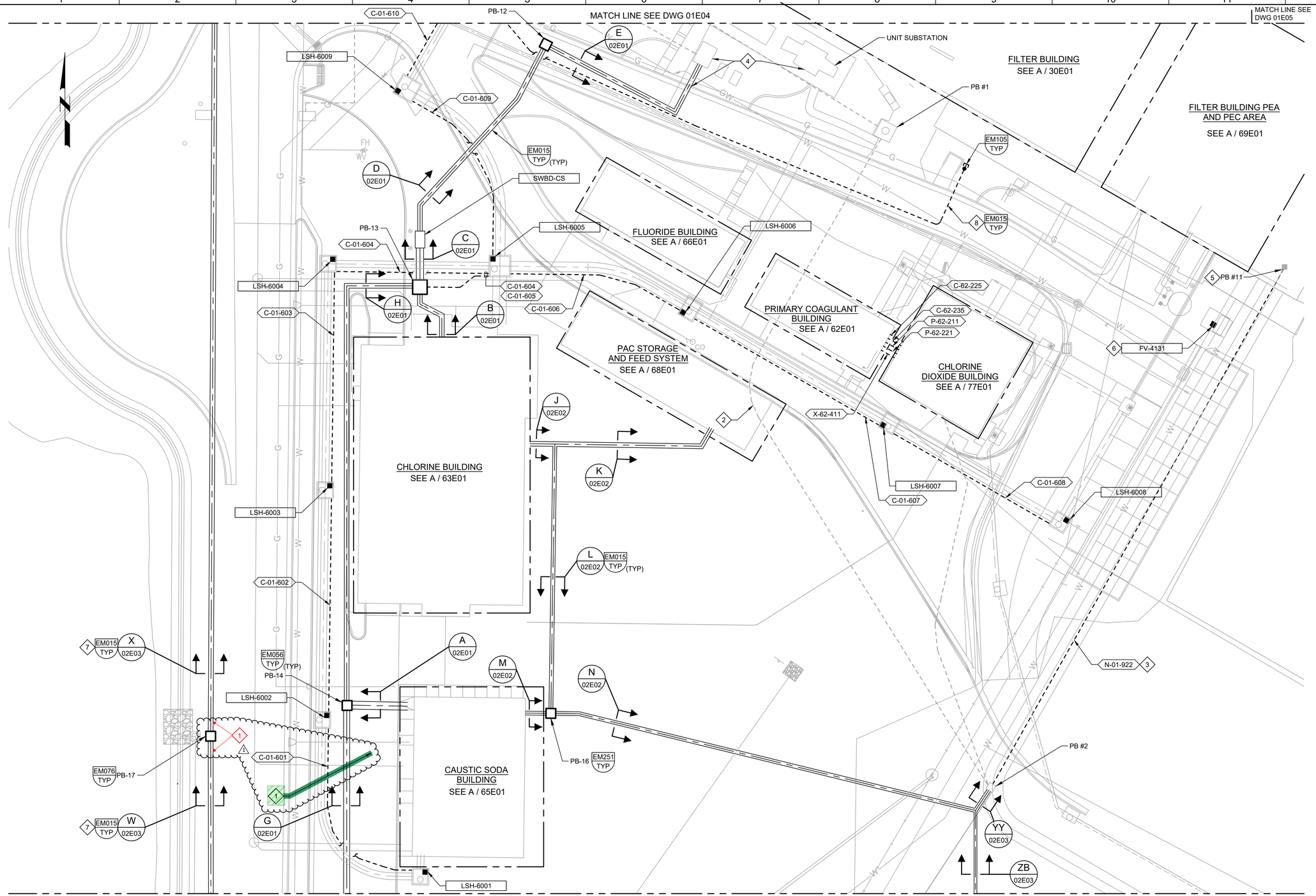
JORDAN VALLEY WATER TREATMENT PLANT
FILTER AND CHEMICAL FEED UPGRADES
ELECTRICAL
ENLARGED SITE PLAN 1

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 202001.10
DRAWING NO. 01E02
SHEET NO.
OF

LAST SAVED BY: NKillian

PROJECT NO.
FILE NAME: 20200101E02.dwg



GENERAL NOTES:

1. SEE OVERALL SITE PLAN ON DRAWING 01E01.
2. SEE DRAWING 00DE02 FOR DEMOLITION IN THIS AREA.
3. PROVIDE 120VAC, 1 POLE INSTRUMENT DISCONNECT PER DETAIL NA900/TYP FOR ALL 4-WIRE INSTRUMENTS.

KEY NOTES:

1. REROUTE EXISTING 12.47KV SINGLE PHASE CIRCUIT BETWEEN HANDHOLE AND SECTIONALIZER 4 FOR THE CELL TOWER. REFER TO ONE-LINE DIAGRAM ON DRAWING 03E02 FOR CABLE SIZE. SPLICE IN HANDHOLE AND PROVIDE NEW CABLES TO MATCH EXISTING CABLES. XFMR CELL
2. PROTECT EXISTING DUCT BANK IN PLACE BELOW THE NEW PAC AREA.
3. USE EXISTING SPARE CONDUIT TO ROUTE FIBER OPTIC WIRING THROUGH EXISTING DUCT BANK FROM PB #2 TO PB #11.
4. USE EXISTING VAULT BELOW THE TRANSFORMER TO ROUTE NEW 480V CIRCUIT FROM UNIT SUBSTATION TO NEW SWBD-CS THROUGH TWO EXISTING CONDUITS AND NEW DUCT BANK.
5. SEE DRAWING 30E10 FOR CONTINUATION.
6. RECONNECT NEW VALVE ACTUATOR TO EXISTING POWER AND I/O CONDUCTORS.
7. PROVIDE CONCRETE CAP OVER DUCT BANK AS SHOWN IN THE TYPICAL DETAIL.
8. INSTALL 5-INCH PVC CONDUIT. USE EXISTING SPARE CONDUIT IN EXISTING DUCT BANK.

SCALE

0 10' 20' 40'

SCALE: 1" = 20'

REV	DATE	BY	DESCRIPTION
1	04/15/2025	SKB	ADDENDUM NO. 1

BID SET

DESIGNED SKB
DRAWN NKK
CHECKED GCE
DATE FEBRUARY 2025

REGISTERED PROFESSIONAL ENGINEER No. 5329023 GUY C. EHLERS STATE OF UTAH

carollo

JORDAN VALLEY WATER CONSERVANCY DISTRICT

JORDAN VALLEY WATER TREATMENT PLANT
FILTER AND CHEMICAL FEED UPGRADES
ELECTRICAL
ENLARGED SITE PLAN 3

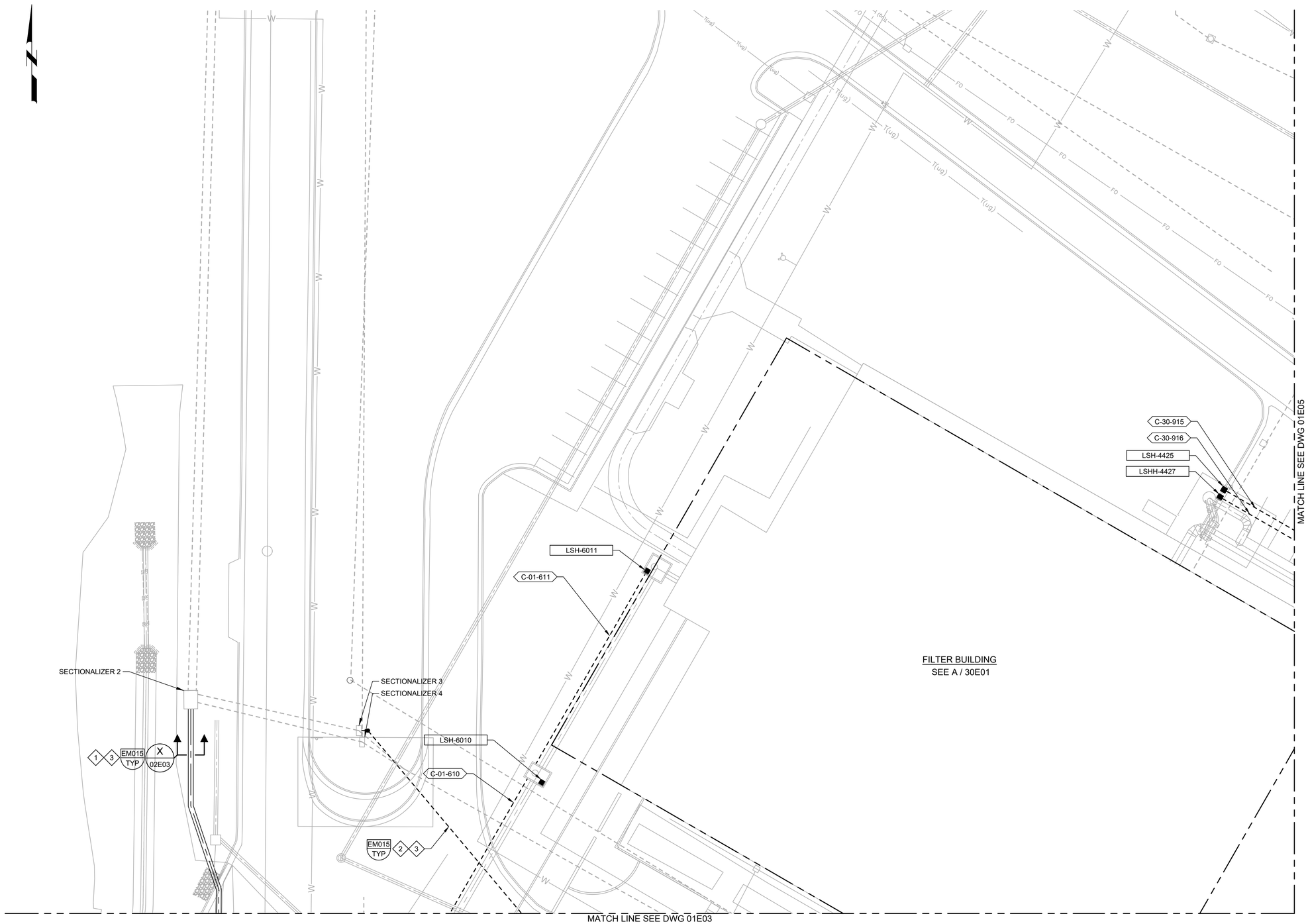
VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 202001.10
DRAWING NO. 01E03
SHEET NO.
OF

LAST SAVED BY: NKillian

PROJECT NO.

FILE NAME: 20200101E03.dwg



GENERAL NOTES:

1. SEE OVERALL SITE PLAN ON DRAWING 01E01.
2. SEE DRAWING 00DE03 FOR DEMOLITION IN THIS AREA.
3. PROVIDE 120VAC, 1 POLE INSTRUMENT DISCONNECT PER DETAIL NA900/TYP FOR ALL 4-WIRE INSTRUMENTS.

KEY NOTES:

1. REROUTE EXISTING 12.47KV SINGLE PHASE CIRCUIT BETWEEN HANDHOLE AND SECTIONALIZER 4 FOR THE CELL TOWER. REFER TO ONE-LINE DIAGRAM ON DRAWING 03E02 FOR CABLE SIZE. SPLICE IN HANDHOLE AND PROVIDE NEW CABLES TO MATCH EXISTING CABLES.
2. INSTALL 5-INCH PVC CONDUIT.
3. PROVIDE CONCRETE CAP OVER DUCT BANK AS SHOWN IN THE TYPICAL DETAIL.

XFMR CELL ⚠1

INSTALL LOAD BREAK ELBOW TO CONNECT TO SECTIONALIZER.

SCALE

0 10' 20' 40'

SCALE: 1" = 20'

REV	DATE	BY	DESCRIPTION
1	04/15/2025	SKB	ADDENDUM NO. 1

BID SET

DESIGNED SKB
DRAWN NKK
CHECKED GCE
DATE FEBRUARY 2025

REGISTERED PROFESSIONAL ENGINEER
No. 5329023
GUY C. EHLERS
STATE OF UTAH

carollo

JORDAN VALLEY WATER
CONSERVANCY DISTRICT

JORDAN VALLEY WATER TREATMENT PLANT
FILTER AND CHEMICAL FEED UPGRADES
ELECTRICAL
ENLARGED SITE PLAN 4

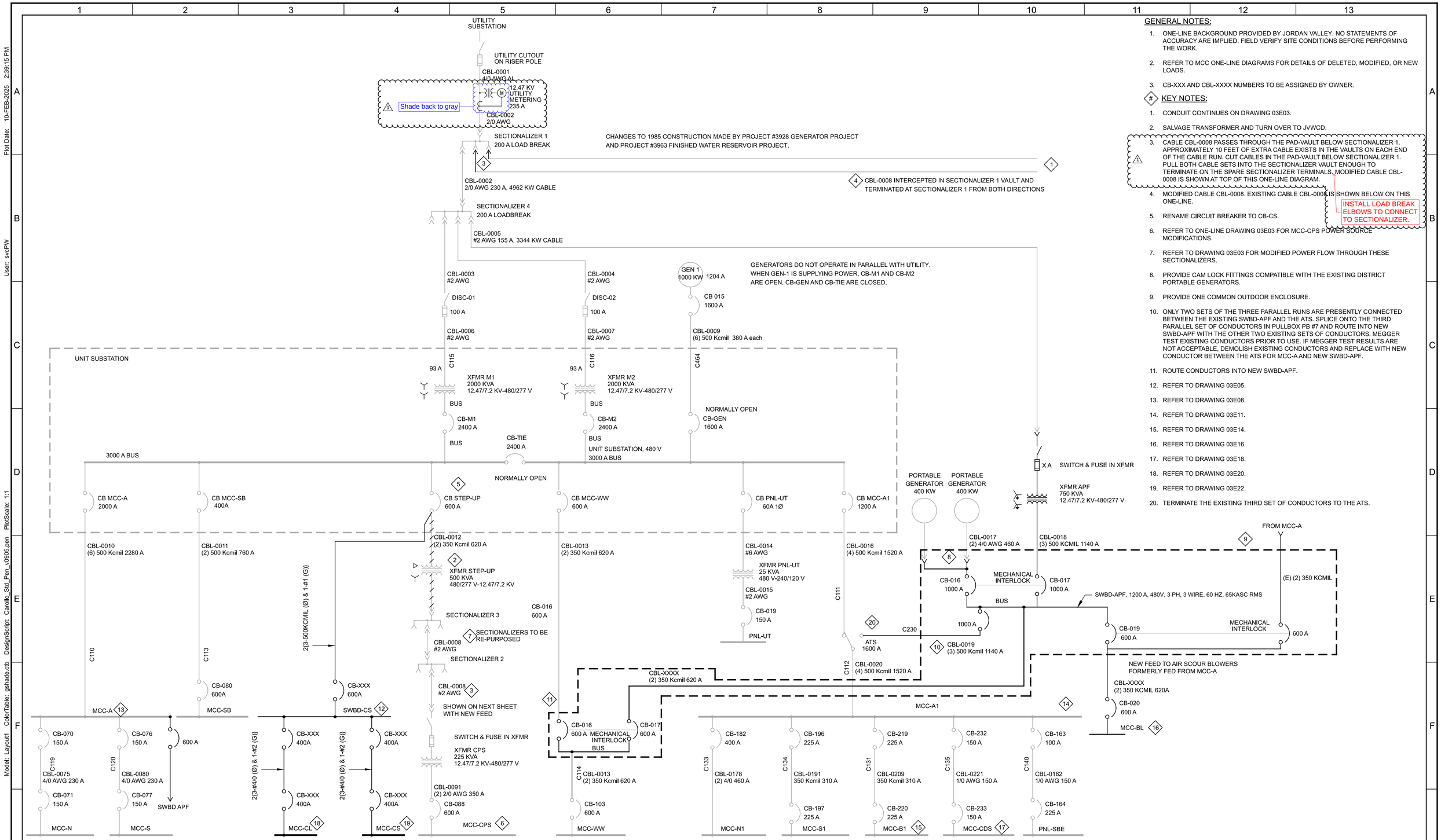
VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 202001.10
DRAWING NO. 01E04
SHEET NO.
OF

LAST SAVED BY: NKillian

PROJECT NO.

FILE NAME: 20200101E04.dwg



GENERAL NOTES:

1. ONE-LINE BACKGROUND PROVIDED BY JORDAN VALLEY. NO STATEMENTS OF ACCURACY ARE IMPLIED. FIELD VERIFY SITE CONDITIONS BEFORE PERFORMING THE WORK.
2. REFER TO MCC ONE-LINE DIAGRAMS FOR DETAILS OF DELETED, MODIFIED, OR NEW LOADS.
3. CB-XXX AND CBL-XXXX NUMBERS TO BE ASSIGNED BY OWNER.

KEY NOTES:

1. CONDUIT CONTINUES ON DRAWING 03E03.
2. SALVAGE TRANSFORMER AND TURN OVER TO JVWCD.
3. CABLE CBL-0008 PASSES THROUGH THE PAD-VAULT BELOW SECTIONALIZER 1. APPROXIMATELY 10 FEET OF EXTRA CABLE EXISTS IN THE VAULTS ON EACH END OF THE CABLE RUN. CUT CABLES IN THE PAD-VAULT BELOW SECTIONALIZER 1. PULL BOTH CABLE SETS INTO THE SECTIONALIZER VAULT ENOUGH TO TERMINATE ON THE SPARE SECTIONALIZER TERMINALS. MODIFIED CABLE CBL-0008 IS SHOWN AT TOP OF THIS ONE-LINE DIAGRAM.
4. MODIFIED CABLE CBL-0008. EXISTING CABLE CBL-0008 IS SHOWN BELOW ON THIS ONE-LINE.
5. RENAME CIRCUIT BREAKER TO CB-CS.
6. REFER TO ONE-LINE DRAWING 03E03 FOR MCC-CPS POWER SOURCE MODIFICATIONS.
7. REFER TO DRAWING 03E03 FOR MODIFIED POWER FLOW THROUGH THESE SECTIONALIZERS.
8. PROVIDE CAM LOCK FITTINGS COMPATIBLE WITH THE EXISTING DISTRICT PORTABLE GENERATORS.
9. PROVIDE ONE COMMON OUTDOOR ENCLOSURE.
10. ONLY TWO SETS OF THE THREE PARALLEL RUNS ARE PRESENTLY CONNECTED BETWEEN THE EXISTING SWBD-APF AND THE ATS. SPLICE ONTO THE THIRD PARALLEL SET OF CONDUCTORS IN PULLBOX PB #7 AND ROUTE INTO NEW SWBD-APF WITH THE OTHER TWO EXISTING SETS OF CONDUCTORS. MEGGER TEST EXISTING CONDUCTORS PRIOR TO USE. IF MEGGER TEST RESULTS ARE NOT ACCEPTABLE, DEMOLISH EXISTING CONDUCTORS AND REPLACE WITH NEW CONDUCTOR BETWEEN THE ATS FOR MCC-A AND NEW SWBD-APF.
11. ROUTE CONDUCTORS INTO NEW SWBD-APF.
12. REFER TO DRAWING 03E05.
13. REFER TO DRAWING 03E08.
14. REFER TO DRAWING 03E11.
15. REFER TO DRAWING 03E14.
16. REFER TO DRAWING 03E16.
17. REFER TO DRAWING 03E18.
18. REFER TO DRAWING 03E20.
19. REFER TO DRAWING 03E22.
20. TERMINATE THE EXISTING THIRD SET OF CONDUCTORS TO THE ATS.

REV	DATE	BY	DESCRIPTION
1	04/15/2025	SKB	ADDENDUM NO. 1

BID SET

DESIGNED SKB
DRAWN DPM
CHECKED GCE
DATE FEBRUARY 2025

REGISTERED PROFESSIONAL ENGINEER No. 5329023 GUY C. EHLERS STATE OF UTAH

carollo

JORDAN VALLEY WATER CONSERVANCY DISTRICT

JORDAN VALLEY WATER TREATMENT PLANT
FILTER AND CHEMICAL FEED UPGRADES
ELECTRICAL
OVERALL ONE-LINE DIAGRAM (MODIFIED) 1

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 202001.10
DRAWING NO. 03E02
SHEET NO.
OF

PROJECT NO. 202001-100000 FILE NAME: 20200103E02.dgn

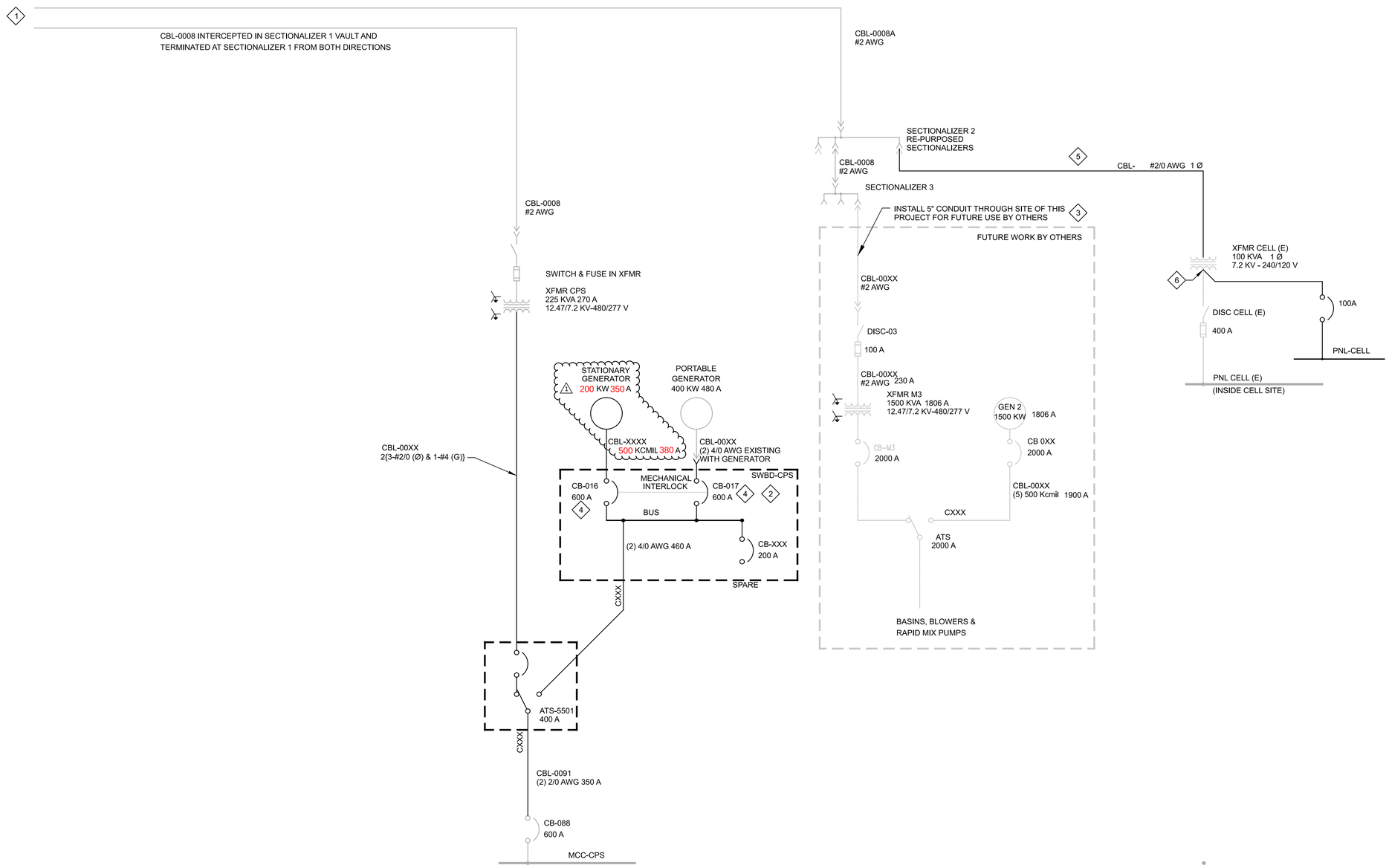
Plot Date: 10-FEB-2025 2:39:15 PM
User: svcPW
PlotScale: 1:1
DesignScript: Carollo_Std_Pen_v0905.pen
ColorTable: gshade.ctb
Model: Layout1
LAST SAVED BY: mhood

GENERAL NOTES:

1. ONE-LINE BACKGROUND PROVIDED BY JORDAN VALLEY. NO STATEMENTS OF ACCURACY ARE IMPLIED. FIELD VERIFY SITE CONDITIONS BEFORE PERFORMING THE WORK.
2. CB-XXX AND CBL-XXXX NUMBERS TO BE ASSIGNED BY OWNER.

KEY NOTES:

1. CONDUIT CONTINUES ON DRAWING 03E02.
2. EXISTING SWITCHBOARD FORMERLY IDENTIFIED AS "SWBD-APF" FOR THE ALTERNATE PLANT FEED TO BE RELOCATED TO THE CULINARY PUMP STATION AND RELABELED AS SWBD-CPS. REFER TO DRAWING 01E06.
3. INSTALL NEW 5-INCH CONDUIT AS SHOWN ON DRAWINGS 01E03 AND 01E04.
4. UPDATE EXISTING BREAKER TO 350A TRIP.
5. REROUTE EXISTING CIRCUIT AS SHOWN ON THE SITE PLAN DRAWINGS.
6. TAP OFF OF SECONDARY SIDE OF TRANSFORMER FOR TEMPORARY POWER TO NEW PANELBOARD PNL-CELL.



REV	DATE	BY	DESCRIPTION
1	04/15/2025	SKB	ADDENDUM NO. 1

BID SET

DESIGNED SKB
DRAWN DPM
CHECKED GCE
DATE FEBRUARY 2025

REGISTERED PROFESSIONAL ENGINEER — No. 5329023 — GUY C. EHLERS — STATE OF UTAH

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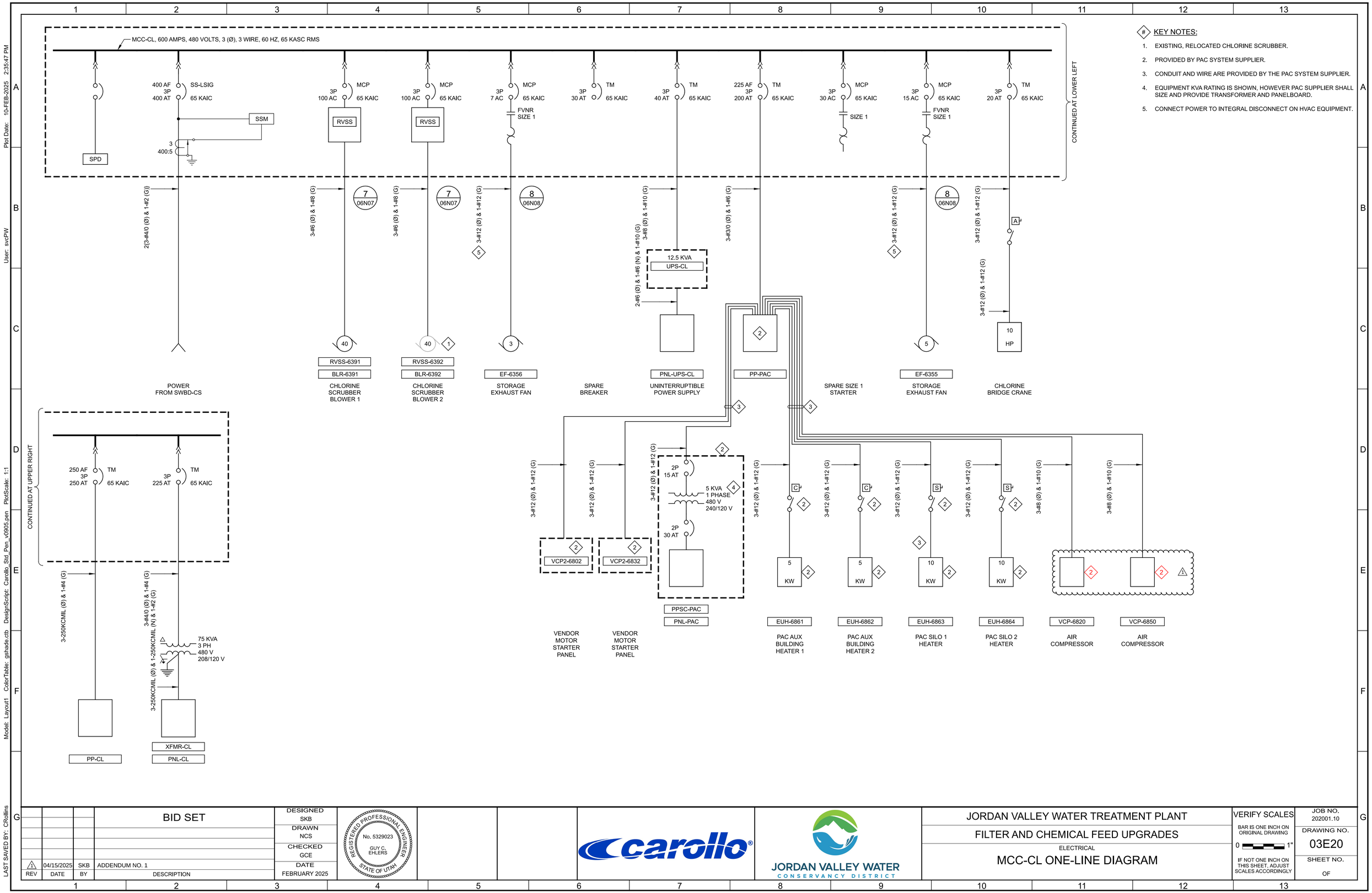
JORDAN VALLEY WATER CONSERVANCY DISTRICT

JORDAN VALLEY WATER TREATMENT PLANT
FILTER AND CHEMICAL FEED UPGRADES
ELECTRICAL
OVERALL ONE-LINE DIAGRAM (MODIFIED) 2

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 202001.10
DRAWING NO. 03E03
SHEET NO. OF



KEY NOTES:

1. EXISTING, RELOCATED CHLORINE SCRUBBER.
2. PROVIDED BY PAC SYSTEM SUPPLIER.
3. CONDUIT AND WIRE ARE PROVIDED BY THE PAC SYSTEM SUPPLIER.
4. EQUIPMENT KVA RATING IS SHOWN. HOWEVER PAC SUPPLIER SHALL SIZE AND PROVIDE TRANSFORMER AND PANELBOARD.
5. CONNECT POWER TO INTEGRAL DISCONNECT ON HVAC EQUIPMENT.

REV	DATE	BY	DESCRIPTION
1	04/15/2025	SKB	ADDENDUM NO. 1

BID SET

DESIGNED SKB
DRAWN NCS
CHECKED GCE
DATE FEBRUARY 2025

REGISTERED PROFESSIONAL ENGINEER — No. 5329023 — GUY C. EHLERS — STATE OF UTAH

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JORDAN VALLEY WATER CONSERVANCY DISTRICT

JORDAN VALLEY WATER TREATMENT PLANT
FILTER AND CHEMICAL FEED UPGRADES
ELECTRICAL
MCC-CL ONE-LINE DIAGRAM

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 — 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 202001.10
DRAWING NO. 03E20
SHEET NO.
OF

PROJECT NO. 202001-100000 FILE NAME: 20200103E20.dgn

Plot Date: 10-FEB-2025 2:35:47 PM
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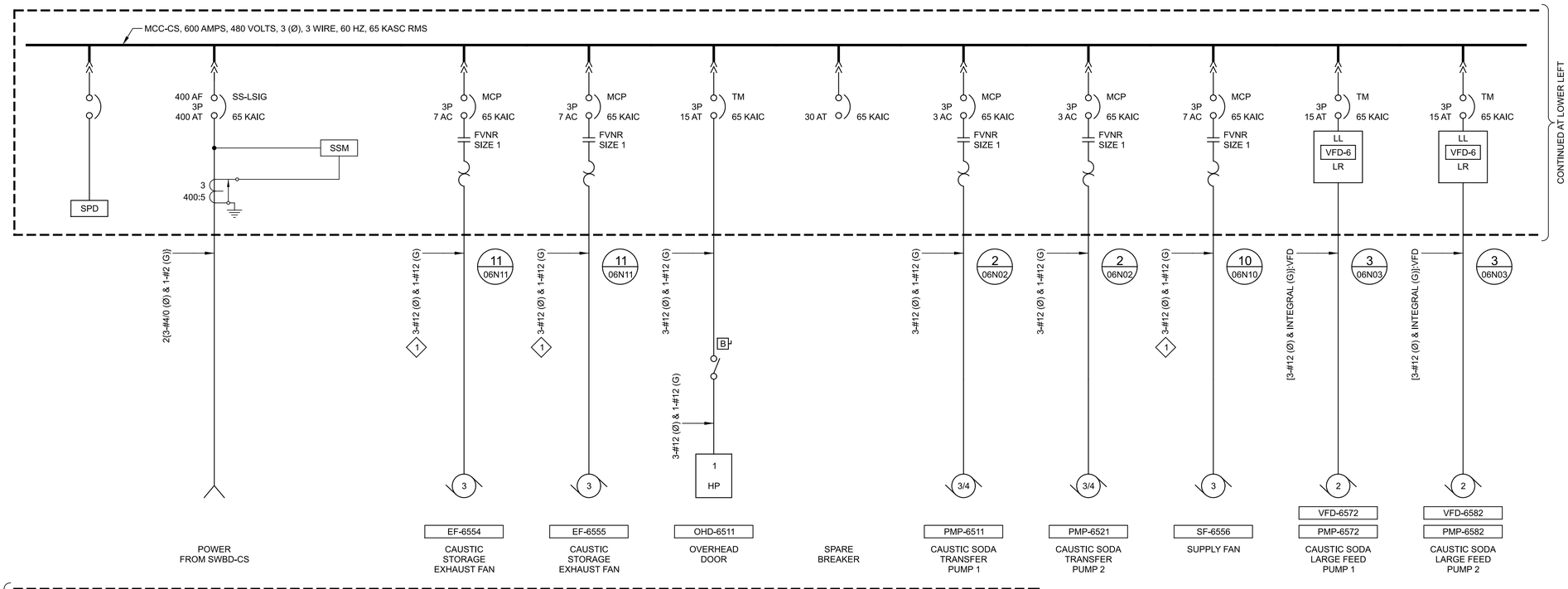
Model: Layout1 ColorTable: gshade.ctb DesignScript: Carollo_Std_Pen_v0905.pen PlotScale: 1:1
LAST SAVED BY: CRollins



KEY NOTES:

1. CONNECT POWER TO INTEGRAL DISCONNECT ON HVAC EQUIPMENT.

REV	DATE	BY	DESCRIPTION
1	04/15/2025	SKB	ADDENDUM NO. 1

BID SET

DESIGNED SKB
DRAWN NCS
CHECKED GCE
DATE FEBRUARY 2025

REGISTERED PROFESSIONAL ENGINEER — No. 5329023 — GUY C. EHLERS — STATE OF UTAH

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JORDAN VALLEY WATER CONSERVANCY DISTRICT

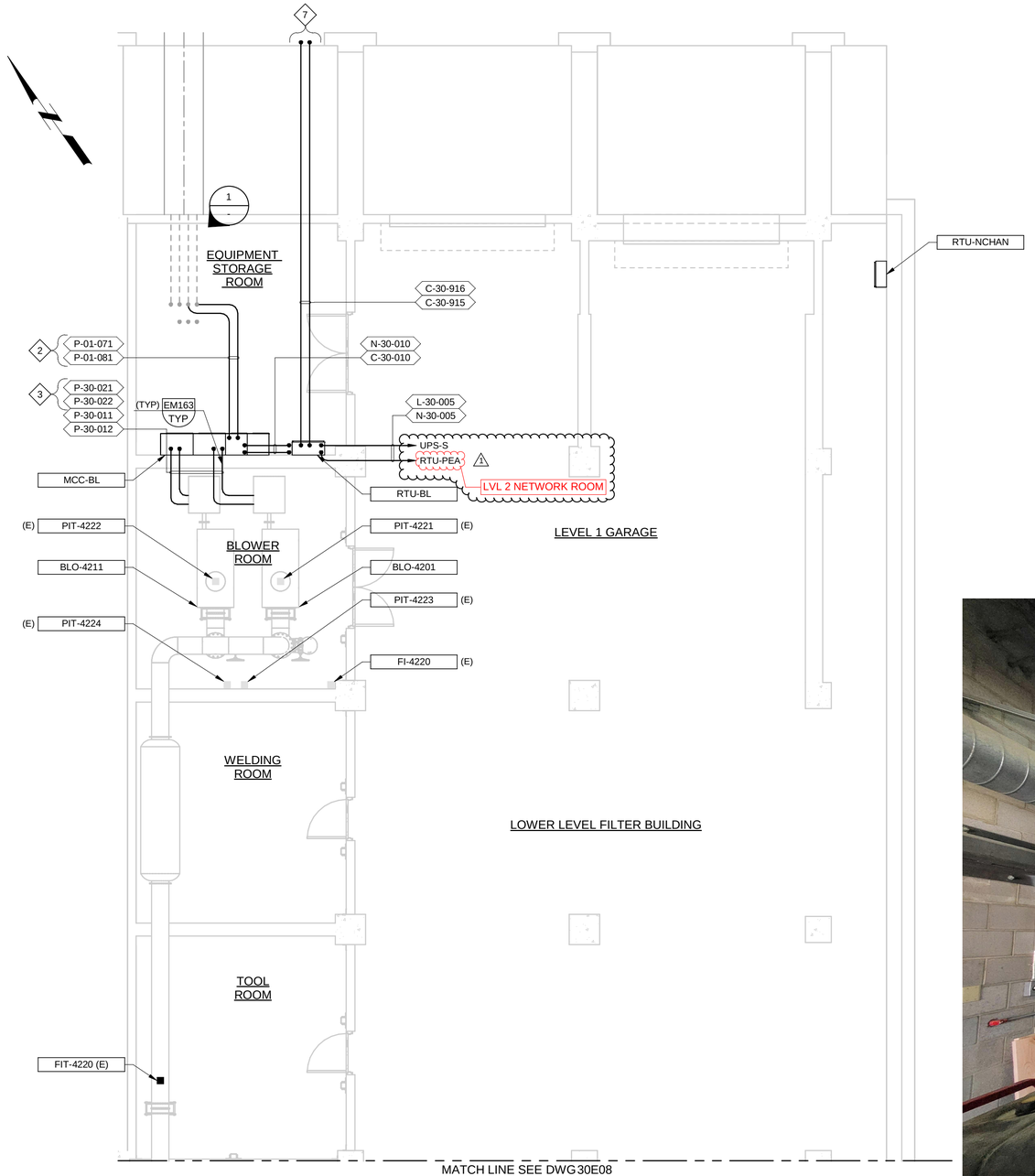
JORDAN VALLEY WATER TREATMENT PLANT
FILTER AND CHEMICAL FEED UPGRADES
ELECTRICAL
MCC-CS ONE-LINE DIAGRAM

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 202001.10
DRAWING NO. 03E22
SHEET NO. OF

PROJECT NO. 202001-100000 FILE NAME: 20200103E22.dgn

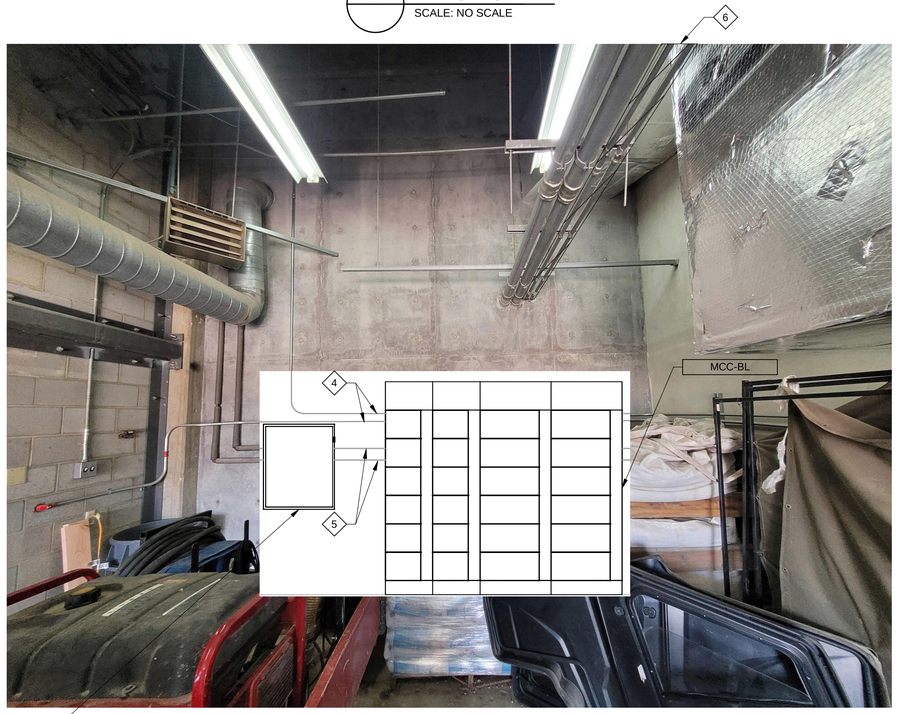
Plot Date: 10-FEB-2025 2:38:16 PM
User: svcPW
Model: Layout1 ColorTable: gshade.ctb DesignScript: Carollo_Std_Pen_v0905.pen PlotScale: 1:1
LAST SAVED BY: NKillian



C PLAN
SCALE: 3/16" = 1'-0"

EXISTING BLOWER CONDUITS

1 PHOTO
SCALE: NO SCALE



MCC-BL AND RTU-BL DRAFTED EQUIPMENT

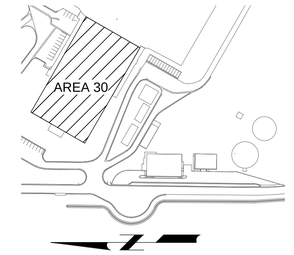
2 SECTION
SCALE:NO SCALE

GENERAL NOTES:

1. NEW MCC SHOWN ON THIS DRAWING IS TALLER THAN THE DOORWAYS AND WILL NEED TO BE BROUGHT INTO THE BUILDING ON ITS SIDE. COORDINATE WITH MANUFACTURER FOR PROPER BRACING AND SUPPORTS TO PROTECT EQUIPMENT DURING INSTALLATION.

KEY NOTES:

1. INTERCEPT EXISTING POWER CONDUITS FROM PB #7 TO THE EXISTING BLOWERS.
2. ROUTE VIA EXISTING INTERCEPTED CONDUITS TO PB #7.
3. AT CONTRACTOR'S DISCRETION, THE EXISTING CONDUITS MAY BE REUSED AS A PATH BETWEEN BLOWER BLO-4211, BLO-4201 AND THE NEW MCC.
4. RELOCATE EXISTING LIGHTING AND FIRE ALARM CONDUITS.
5. RELOCATE EXISTING HOT WATER SUPPLY AND RETURN LINES.
6. DEMOLISH TWO SOLENOID CONDUITS AND RE-ROUTE TO NEW MCC-BL.
7. CONDUITS CONTINUE ON DRAWING 01E05.
8. CAP EXISTING CONDUITS.



KEYMAP

REV	DATE	BY	DESCRIPTION
1	04/15/2025	SKB	ADDENDUM NO. 1

BID SET

DESIGNED SKB
DRAWN PLU
CHECKED GCE
DATE FEBRUARY 2025

REGISTERED PROFESSIONAL ENGINEER
No. 5329023
GUY C. EHLERS
STATE OF UTAH

carollo

JORDAN VALLEY WATER CONSERVANCY DISTRICT

JORDAN VALLEY WATER TREATMENT PLANT
FILTER AND CHEMICAL FEED UPGRADES
ELECTRICAL
HIGH RISE BUILDING AREA C LOWER LEVEL POWER AND CONTROL PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 202001.10
DRAWING NO. 30E03
SHEET NO. OF

PLOT DATE: 2/10/2025 4:49:52 PM

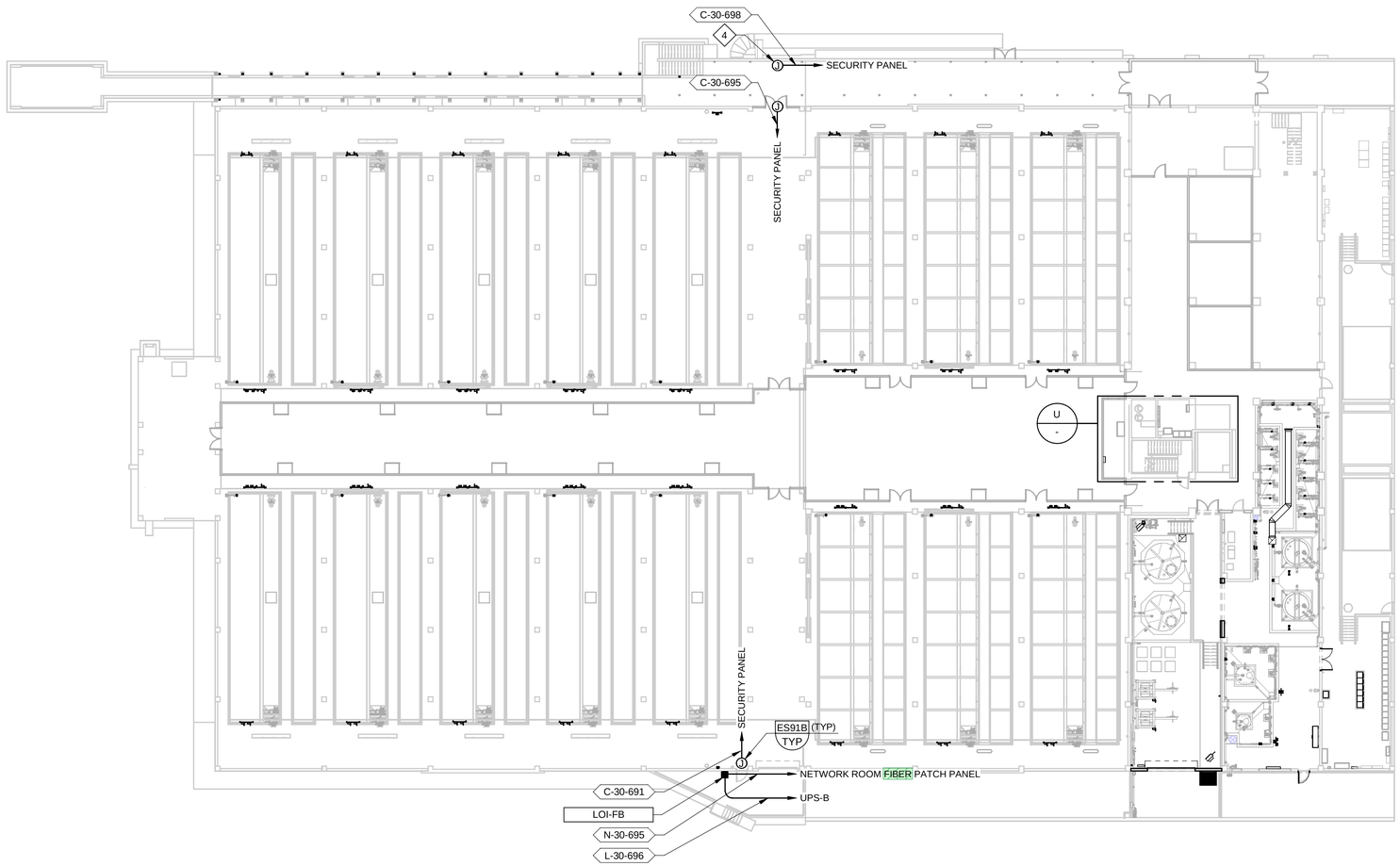
FILE NAME: Autodesk Docs://JVWCD 202001-100000 JVWTP Upgrades/20200169E0801.rvt

GENERAL NOTES:

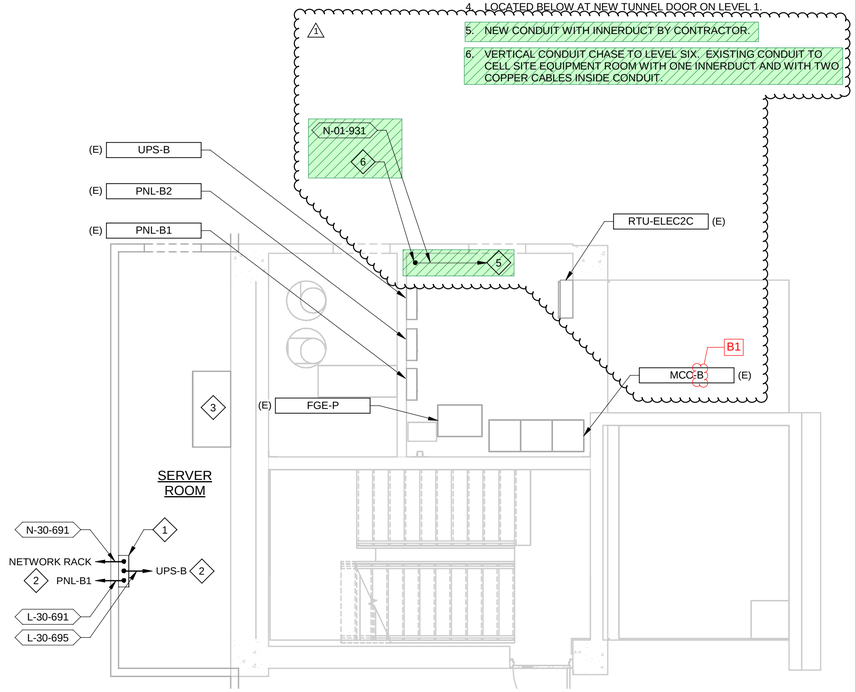
1. WHERE SECURITY CONDUITS ARE COMBINED, AT CONTRACTOR'S DISCRETION, THE COMBINED CONDUIT MUST HAVE A CROSS-SECTIONAL AREA EQUIVALENT TO OR LARGER THAN THE SUM OF CROSS-SECTIONAL AREAS OF THE INDIVIDUAL CONDUITS.
2. CONTRACTOR TO PROVIDE CONDUITS AND ALL JUNCTION BOXES INDICATED ON THIS DRAWING, INDICATED ON SECURITY SYSTEM TYPICAL DETAILS, AND AS NEEDED FOR INTERMEDIATE PULL POINTS. CONTRACTOR TO CONNECT SECURITY SYSTEM/CAMERA CONDUITS TO THE OWNER SUPPLIED SECURITY PANEL.
3. OWNER'S SECURITY SYSTEM SUPPLIER TO PROVIDE MAG LOCKS, CARD READERS, REQUEST-TO-EXIT MOTION DETECTORS, PUSH-TO-EXIT PUSHBUTTONS, SECURITY SYSTEM COMPONENTS TO GO INSIDE THE SECURITY PANEL, AND ALL WIRING.

KEY NOTES:

1. INSTALL OWNER SUPPLIED SECURITY PANEL IN LEVEL 2 SERVER ROOM. COORDINATE LOCATION IN ROOM WITH OWNER.
2. USE EXISTING SPARE 20A CIRCUIT BREAKER IN THE PANELBOARD.
3. NETWORK RACK.
4. LOCATED BELOW AT NEW TUNNEL DOOR ON LEVEL 1.
5. NEW CONDUIT WITH INNERDUCT BY CONTRACTOR.
6. VERTICAL CONDUIT CHASE TO LEVEL SIX. EXISTING CONDUIT TO CELL SITE EQUIPMENT ROOM WITH ONE INNERDUCT AND WITH TWO COPPER CABLES INSIDE CONDUIT.



T **PLAN**
SCALE: 1" = 20'-0"



U **ENLARGED PLAN**
SCALE: 1/4" = 1'-0"

PLOT DATE: 2/10/2025 4:53:14 PM

REV	DATE	BY	DESCRIPTION
1	04/15/2025	SKB	ADDENDUM NO. 1

BID SET

DESIGNED SKB
DRAWN MNH
CHECKED GCE
DATE FEBRUARY 2025

REGISTERED PROFESSIONAL ENGINEER
No. 5329023
GUY C. EHLERS
STATE OF UTAH

carollo

JORDAN VALLEY WATER CONSERVANCY DISTRICT

JORDAN VALLEY WATER TREATMENT PLANT
FILTER AND CHEMICAL FEED UPGRADES
ELECTRICAL
FILTERS
SECURITY PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 202001.10
DRAWING NO. 30E19
SHEET NO. OF

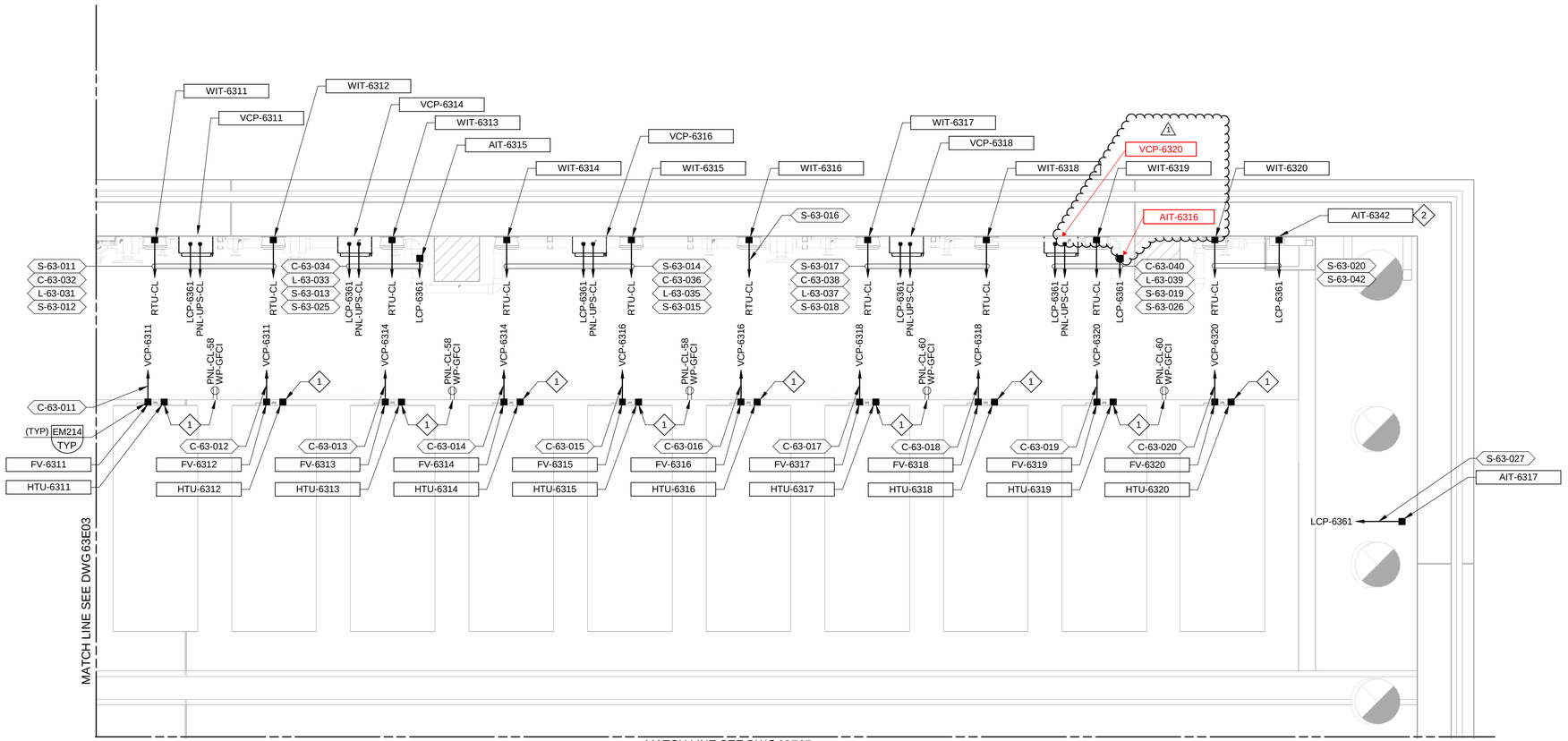
FILE NAME: Autodesk Docs://JVWCD 202001-100000 JVWTP Upgrades/20200169E0801.rvt

GENERAL NOTES:

1. PROVIDE 120VAC, 1 POLE INSTRUMENT DISCONNECT PER DETAIL NA900/TYP FOR ALL 4-WIRE INSTRUMENTS.

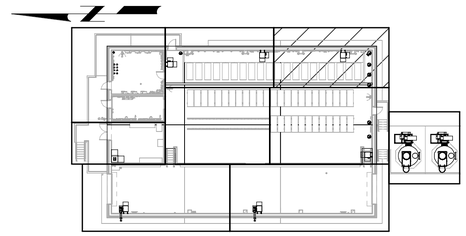
KEY NOTES:

1. PLUG IN CYLINDER DRIP LEG HEATER TO DUPLEX RECEPTACLE DEDICATED TO EACH PAIR OF ONLINE CYLINDERS.
2. LOCATED IN THE PASSIVE CHLORINE GAS ARRESTOR.



D PARTIAL PLAN

SCALE: 1/2" = 1'-0"



KEY MAP

REV	DATE	BY	DESCRIPTION
1	04/15/2025	SKB	ADDENDUM NO. 1

BID SET

DESIGNED MJG
DRAWN MNH
CHECKED GCE
DATE FEBRUARY 2025

REGISTERED PROFESSIONAL ENGINEER
No. 5329023
GUY C. EHLERS
STATE OF UTAH

carollo

JORDAN VALLEY WATER CONSERVANCY DISTRICT

JORDAN VALLEY WATER TREATMENT PLANT

FILTER AND CHEMICAL FEED UPGRADES

ELECTRICAL

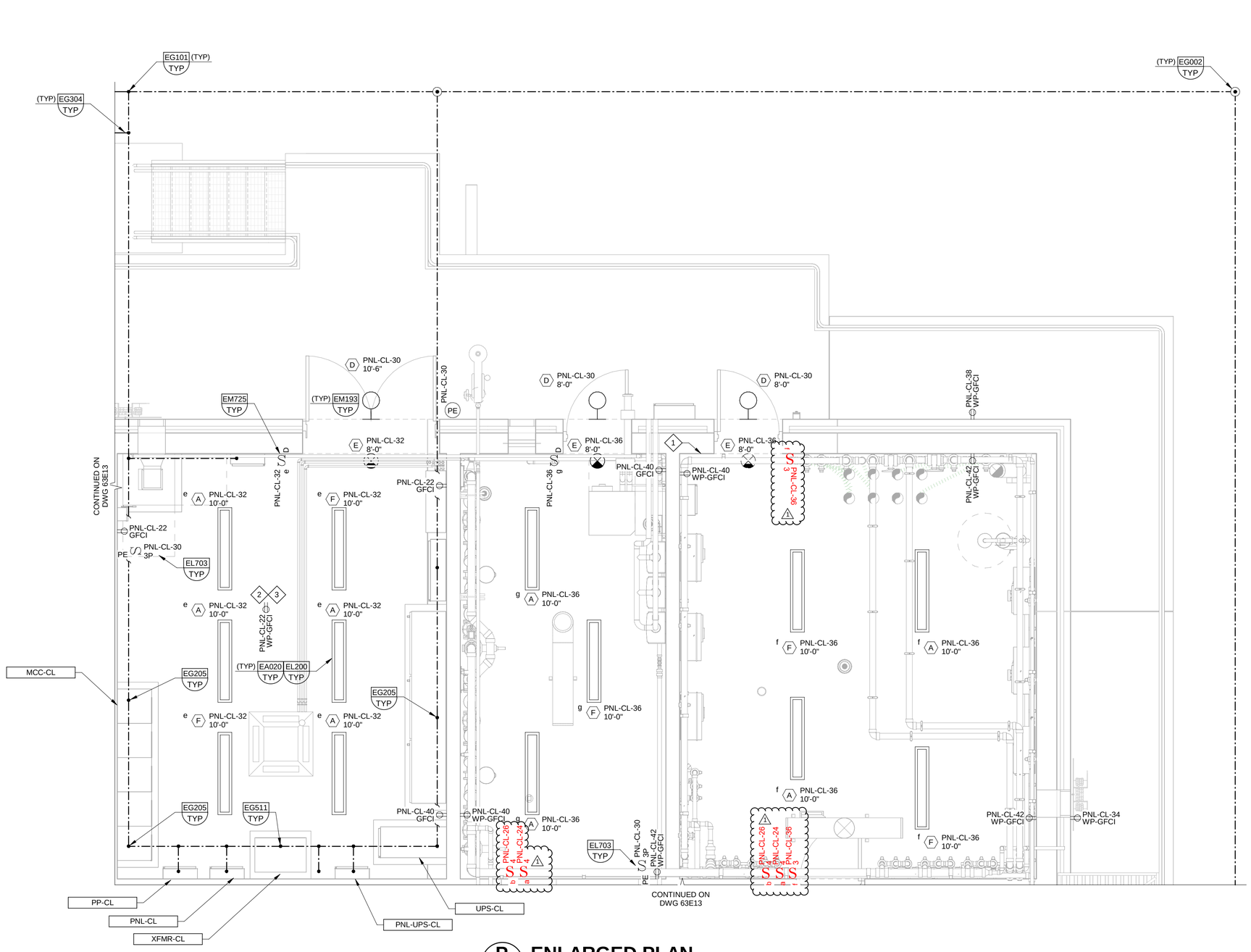
CHLORINE BUILDING CHLORINE AREA SOUTH POWER AND CONTROL PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 202001.10
DRAWING NO. 63E04
SHEET NO.
OF

PLOT DATE: 2/10/2025 4:49:44 PM

FILE NAME: Autodesk Docs://JVWCD 202001-100000 JVWTP Upgrades/20200163E0801.rvt



P ENLARGED PLAN

63E13

SCALE: 3/8" = 1'-0"

KEY NOTES:

1. PNL-CL-36
2. RECEPTACLE FOR WIRELESS ACCESS POINT EQUIPMENT. REFER TO SECURITY DRAWING FOR WIRELESS EQUIPMENT LOCATIONS.
3. CEILING MOUNTED RECEPTACLE.

REV	DATE	BY	DESCRIPTION
1	04/15/2025	SKB	ADDENDUM NO. 1

BID SET

DESIGNED CK
DRAWN MNH
CHECKED GCE
DATE FEBRUARY 2025

REGISTERED PROFESSIONAL ENGINEER No. 5329023 GUY C. EHLERS STATE OF UTAH

carollo

JORDAN VALLEY WATER CONSERVANCY DISTRICT

JORDAN VALLEY WATER TREATMENT PLANT

FILTER AND CHEMICAL FEED UPGRADES

ELECTRICAL

CHLORINE BUILDING LOWER LIGHTING AND GROUNDING ENLARGED PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 202001.10
DRAWING NO. 63E14
SHEET NO. OF

PLOT DATE: 2/10/2025 4:51:49 PM

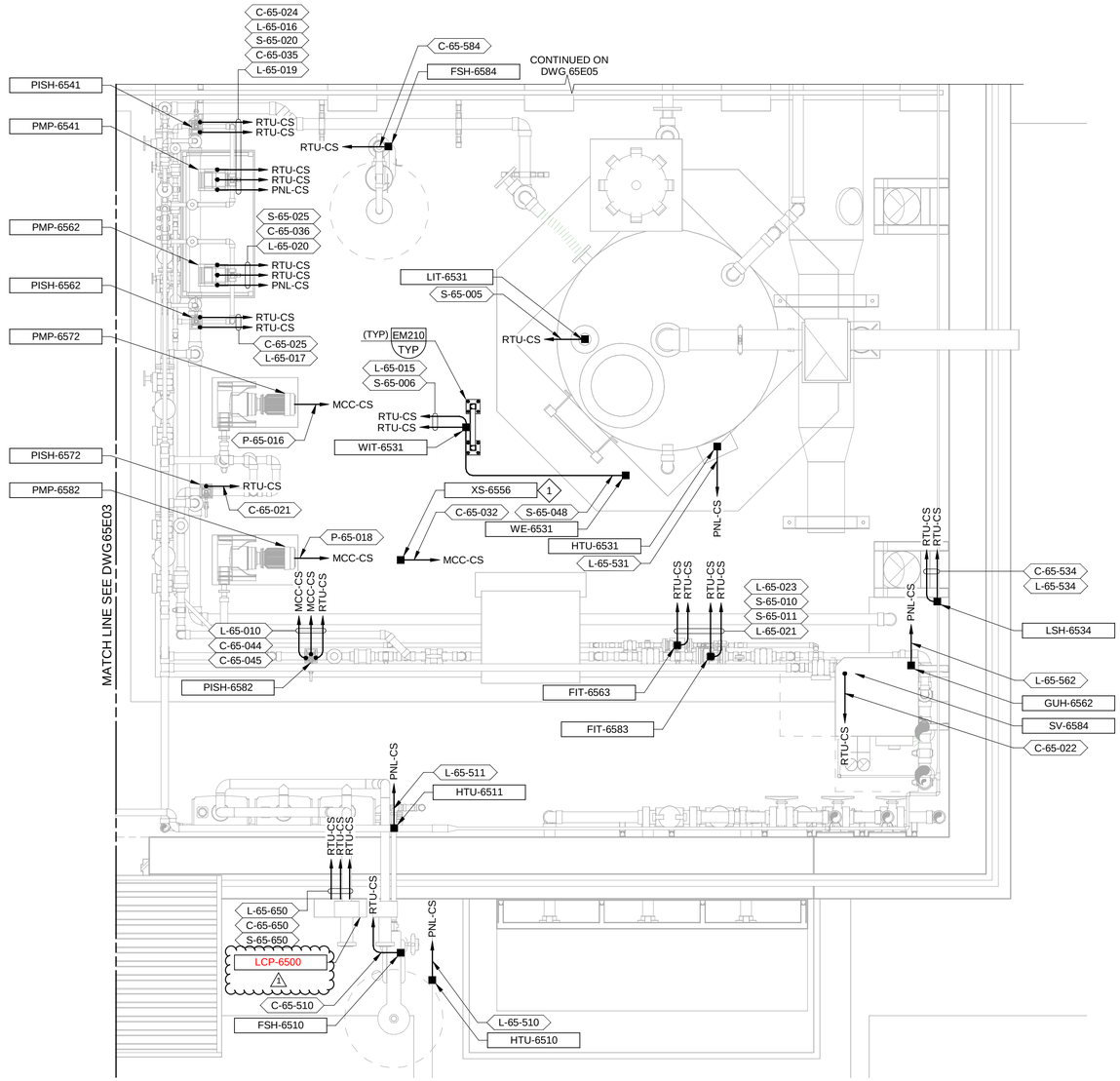
FILE NAME: Autodesk Docs://JVWCD 202001-100000 JVWTP Upgrades/20200163E0801.rvt

GENERAL NOTES:

1. PROVIDE 120VAC, 1 POLE INSTRUMENT DISCONNECT PER TYPICAL DETAIL NA900/TYP FOR ALL 4-WIRE INSTRUMENTS.

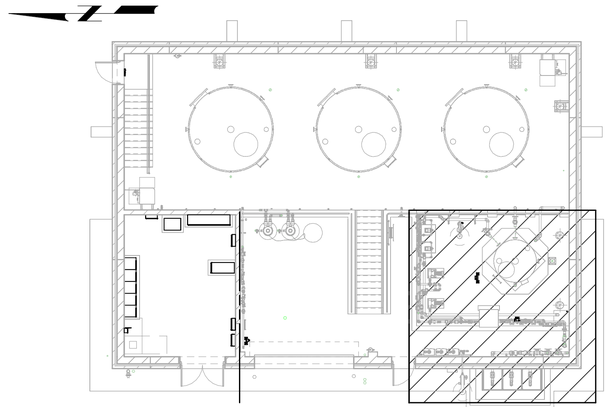
KEY NOTES:

1. SMOKE DETECTORS ARE LOCATED IN HVAC DUCTS NOT SHOWN ON ELECTRICAL DRAWINGS. REFER TO HVAC DRAWING 65H03 FOR SPECIFIC INSTRUMENT LOCATION.



D 65E01 **PARTIAL PLAN**

SCALE: 1/2" = 1'-0"



KEY MAP

REV	DATE	BY	DESCRIPTION
1	04/15/2025	SKB	ADDENDUM NO. 1

BID SET

DESIGNED SKB
DRAWN MNH
CHECKED GCE
DATE FEBRUARY 2025

REGISTERED PROFESSIONAL ENGINEER
No. 5329023
GUY C. EHLERS
STATE OF UTAH

carollo

JORDAN VALLEY WATER CONSERVANCY DISTRICT

JORDAN VALLEY WATER TREATMENT PLANT

FILTER AND CHEMICAL FEED UPGRADES

ELECTRICAL

CAUSTIC SODA BUILDING METERING AREA POWER AND CONTROL PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 202001.10
DRAWING NO. 65E04
SHEET NO. OF

PLOT DATE: 2/11/2025 7:24:57 AM

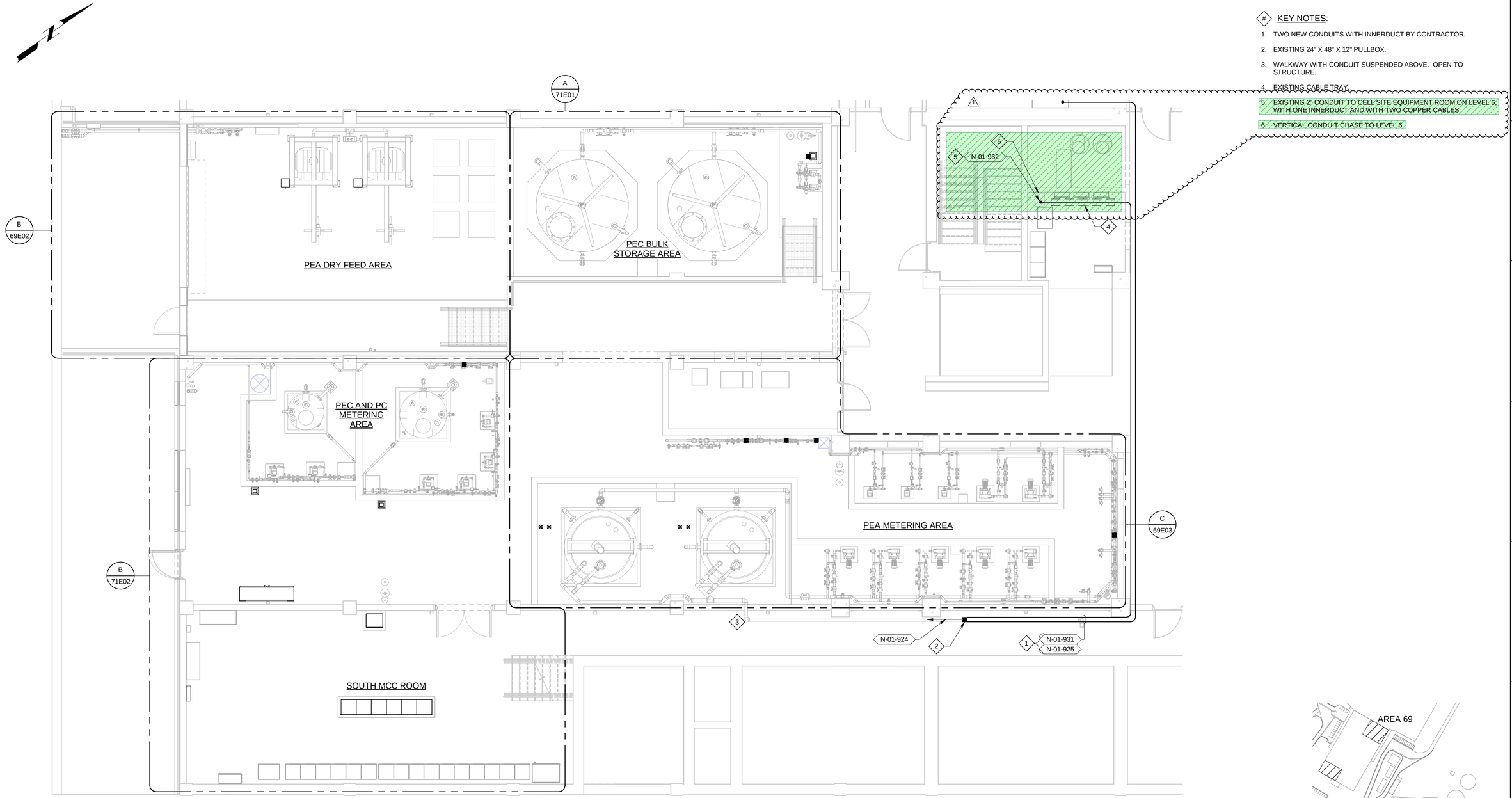
FILE NAME: Autodesk Docs://JVWCD 202001-100000 JVWTP Upgrades/20200165E0801.rvt

GENERAL NOTES:

1. SEE DRAWING 30E09 FOR LOCATION OF FACILITY ON SITE PLAN.

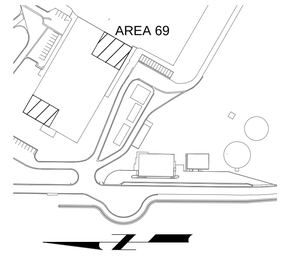
KEY NOTES:

1. TWO NEW CONDUITS WITH INNERDUCT BY CONTRACTOR.
2. EXISTING 24" X 48" X 12" PULLBOX.
3. WALKWAY WITH CONDUIT SUSPENDED ABOVE. OPEN TO STRUCTURE.
4. EXISTING CABLE TRAY.
5. EXISTING 2" CONDUIT TO CELL SITE EQUIPMENT ROOM ON LEVEL 6, WITH ONE INNERDUCT AND WITH TWO COPPER CABLES.
6. VERTICAL CONDUIT CHASE TO LEVEL 6.



A PLAN

SCALE: 3/16" = 1'-0"



KEYMAP

REV	DATE	BY	DESCRIPTION
			BID SET
1	04/15/2025	SKB	ADDENDUM NO. 1

DESIGNED SKB
DRAWN DJB
CHECKED GCE
DATE FEBRUARY 2025

REGISTERED PROFESSIONAL ENGINEER
No. 5329023
GUY C. EHLERS
STATE OF UTAH

carollo

JORDAN VALLEY WATER CONSERVANCY DISTRICT

JORDAN VALLEY WATER TREATMENT PLANT
FILTER AND CHEMICAL FEED UPGRADES
ELECTRICAL
PEA, PC, AND PEC UPPER LEVEL OVERALL POWER AND CONTROL PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 202001.10
DRAWING NO. 69E01
SHEET NO. OF

PLOT DATE: 2/10/2025 4:49:07 PM

FILE NAME: Autodesk Docs://JVWCD 202001-100000 JVWTP Upgrades/20200169E0801.rvt

MATCH LINE SEE DWG 69E02

MATCH LINE SEE DWG 69E03

MATCH LINE SEE DWG 69E03

PC AND PEC METERING AREA

TNK-7105
C-71-007
C-71-008
LIT-7105
WIT-7105
WE-7105
N-71-108
C-71-108
FIT-7108
C-71-003
L-71-003
S-71-005
C-71-107
C-71-002
L-71-002
S-71-004
C-71-106
RTU-PEA
VCP-7106
PMP-7106
PISH-7106
(TYP) EM202 TYP
LIT-7105
WIT-7105
S-71-006
S-71-007
C-71-010
VCP-7107
PMP-7107
PISH-7107
WIT-6211
S-71-011
TNK-6211
C-71-006
LSH-7104
S-71-204
L-71-204
C-71-204
S-71-205
L-71-205
C-71-205
C-71-214
LSH-6214
S-71-111
C-71-111
VCP-6204
PMP-6204
VCP-6205
PMP-6205
S-71-221
L-71-221
C-71-221
C-71-011
WE-6211
WIT-6211
S-71-211
L-71-211
C-71-211
VCP-6221
PMP-6221
VCP-6211
PMP-6211

L-71-004
RTU-PEA
UPS-S
PNL-PEA
L-71-005

C-62-201
FSH-6201
PNL-PEA
PP-PEA

N-01-923
N-01-924
XFMR-PEA
P-71-004
P-71-006
P-71-003
MCC-PEA

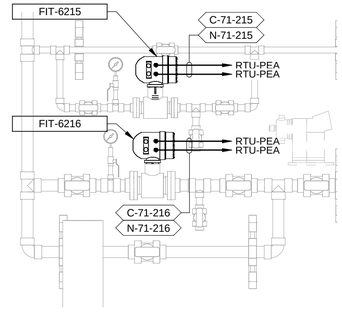
P-71-007
C-71-010
N-71-001
MCC-B1
PEA MCC ROOM
MCC-PEA

Shade back to gray
PANEL UPS-S

(E) RTU-ELEC S

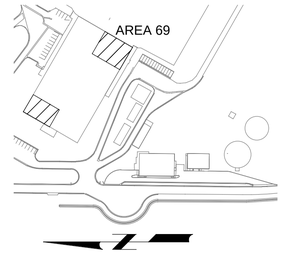
KEY NOTES:

1. EXISTING 3" CONDUIT ABOVE WALKWAY. CONTINUES ON DRAWING 69E01. INSTALL TWO INNERDUCTS.
2. EXISTING 24" X 24" X 12" PULLBOX ABOVE LARGER PULLBOX.
3. EXISTING 3" CONDUIT DOWN TO LEVEL 1. CONTINUES ON DRAWING 30E10. INSTALL TWO INNERDUCTS.



C SECTION
SCALE: 3/4" = 1'-0"

B 69E01 ENLARGED PLAN
SCALE: 3/8" = 1'-0"



KEYMAP

REV	DATE	BY	DESCRIPTION
1	04/15/2025	SKB	ADDENDUM NO. 1

BID SET

DESIGNED SKB
DRAWN MNH
CHECKED GCE
DATE FEBRUARY 2025

REGISTERED PROFESSIONAL ENGINEER — No. 5329023 — GUY C. EHLERS — STATE OF UTAH

carollo

JORDAN VALLEY WATER CONSERVANCY DISTRICT

JORDAN VALLEY WATER TREATMENT PLANT
FILTER AND CHEMICAL FEED UPGRADES
ELECTRICAL
PC AND PEC METERING ENLARGED POWER AND CONTROL PLAN

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

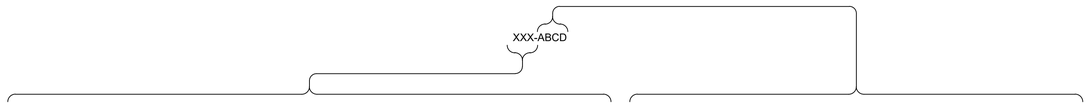
JOB NO. 202001.10
DRAWING NO. 71E02
SHEET NO. OF

PLOT DATE: 2/10/2025 4:52:32 PM

FILE NAME: Autodesk Docs://JVWCD 202001-100000 JVWTP Upgrades/20200169E0801.rvt

EQUIPMENT TAGGING SYSTEM

EQUIPMENT EXAMPLE: FLO-22.1101 (FLOCCULATOR TRAIN 1 NO. 1) REPRESENTS MAJOR PIECE OF EQUIPMENT



EQUIPMENT DESCRIPTOR			
XXX		XXX	
AEB	AERATION BASIN	FDR	FEEDER
AER	AERATOR	FLT	FILTER
AHU	AIR HANDLING UNIT	FLA	FLARE
AND	ANAEROBIC DIGESTER	FLO	FLOCCULATOR
ARC	AIR COMPRESSOR	FU	FUSE
ARF	AIR FILTER	GAT	GATE
ARR	ARRESTOR	GRI	GRINDER
AUG	AUGER	GRC	GRIT CHAMBER
AVR	AIR VACUUM RELIEF	HOI	HOIST
BAR	BAR SCREEN	IC	ISOLATION CONTACTOR
BAS	BASIN	INJ	INJECTOR
BC	BYPASS CONTACTOR	LAG	LAGOON
BFP	BELT FILTER PRESS	MAU	MAKE-UP AIR UNIT
BIT	BIO TOWER	MIX	MIXER
BLO	BLOWER	MMS	MAGNETIC MOTOR STARTER
BOI	BOILER	MPR	MOTOR PROTECTION RELAY
BUR	BURNER	MTR	MOTOR
CAL	CALIBRATION COLUMN	PLO	PLOW
CB	CIRCUIT BREAKER	PPR	PUMP PROTECTION RELAY
CEN	CENTRIFUGE	PRE	PRESS
CHI	CHILLER	PUD	PULSATION DAMPENER
CHL	CHLORINATOR	PMP	PUMP
CLR	CLARIFIER	REC	RECEIVER
CLA	CLASSIFIER	RES	RESERVOIR
CLU	CLUTCH	SCB	SCRUBBER
COA	COALESCER	SCR	SCREEN
COL	COLLECTOR	SEL	SEAL
COS	COMPOSITE SAMPLER	SF	SUPPLY FAN
CON	CONVEYOR	SHA	SHAKER
COO	COOLER	SLA	SLAKER
CPT	CONTROL POWER TRANSFORMER	SLC	SLUDGE COLLECTOR
CR	CONTROL RELAY	STR	STRAINER
DAM	DAMPENER	SV	SOLENOID VALVE
DEC	DECARBONATOR	TNK	TANK
DCD	DC DRIVE	THI	THICKENER
DIF	DIFFUSER	TRA	TRAP
DIS	DISTRIBUTOR	UVR	ULTRA VIOLET REACTOR
DRY	DRYER	VAL	VALVE
DSC	DUST COLLECTOR	VFD	VARIABLE FREQUENCY DRIVE
EDU	EDUCTOR	WEL	WELL
EF	EXHAUST FAN	*CV	* CONTROL VALVE
ENG	ENGINE GENERATOR	*V	* VALVE
EUH	ELECTRIC UNIT HEATER	*CG	* CONTROL GATE
EVP	EVAPORATOR	*G	* GATE
EXC	EXCHANGER		* = A (ANALYTICAL), F (FLOW), L (LEVEL) P (PRESSURE), T (TEMPERATURE)
FAN	FAN		

PROCESS AREA DESIGNATION TABLE		
LOOP		**PROCESS AREA**
1XXX		**RAW WATER**
	11XX	VALVES
	12XX	FLOW METERING
	13XX	STORAGE
	14XX	PRESEDIMENTATION
	15XX	SCREENING
	16XX	PUMPING
	17XX	OTHER INSTRUMENTS
	18XX	PILOT PLANT
2XXX		**PRETREATMENT**
	21XX	FLASH MIX
	22XX	FLOCCULATION
	23XX	SEDIMENTATION
	24XX	ACTIFLO PROCESS
3XXX		**FILTERS**
4XXX		**FILTER PERIPHERALS**
	41XX	BACKWASH WATER
	42XX	AIRWASH
	43XX	SOLIDS RESIDUALS
	44XX	WASTE WASHWATER
5XXX		**FINISHED WATER**
	55XX	CULINARY WATER PUMP STATION
6XXX		**CHEMICALS**
	61XX	ALUM
	62XX	PRIMARY COAGULANT
	63XX	CHLORINE
	64XX	CARBON
	65XX	CAUSTIC
	66XX	FLUORIDE
	67XX	KMNO4
	68XX	PAC
	69XX	PEA
7XXX		**CHEMICALS (CONTINUED)**
	71XX	PEC
	~~72XX~~	~~BRIDGING POLYMER~~
	77XX	CHLORINE DIOXIDE
~~8XXX~~		~~RESERVED~~
9XXX		**UTILITIES**
	91XX	WATER
	92XX	AIR
	93XX	DIESEL FUEL
	94XX	NATURAL GAS
	95XX	HVAC
	96XX	ELECTRIC
	97XX	COMMUNICATIONS
	98XX	SECURITY

REV	DATE	BY	DESCRIPTION
1	04/15/2025	ERB	ADDENDUM NO. 1

BID SET

DESIGNED CE
DRAWN CE
CHECKED GCE
DATE FEBRUARY 2025

REGISTERED PROFESSIONAL ENGINEER — No. 5329023 — GUY C. EHLERS — STATE OF UTAH

carollo

JORDAN VALLEY WATER CONSERVANCY DISTRICT

JORDAN VALLEY WATER TREATMENT PLANT
FILTER AND CHEMICAL FEED UPGRADES
INSTRUMENTATION
GENERAL
EQUIPMENT TAGGING SYSTEM

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 202001.10
DRAWING NO. 00GN07
SHEET NO. OF

$$$$DATE$$$$
$$$$USER$$$$
$$$$PLOT_INFO$$$$
LAST SAVED BY: LRvas

PROJECT NO. 202001-100000 FILE NAME: 20200100GN07.dwg

HIGH RISE LVL 2
NETWORK ROOM
FIBER OPTIC RACK
03N02

CHLORINE BUILDING

RTU-CL

(1) 12/FO-MM

FPP1-CL
FIBER PATCH PANEL

ESP-CL

RTU-CL

RIO1-CL

RIO2-CL

ESF-CL

FPP2-CL
FIBER PATCH PANEL

2 MM PATCH CABLES

LOI-CL
CHLORINE
INFORMATION PANEL

ROUTE CAT6
BACK TO
NETWORK
ROOM PATCH
PANEL

(1) 12/FO-MM

(2) 6/FO-MM

LOI-FB
CHLORINE
INFORMATION PANEL

LCP-6361
CHLORINE
INFORMATION PANEL
63N18

LOI-CL
CHLORINE
INFORMATION PANEL

EXTERIOR
WIRELESS
ACCESS POINT

PROCESS AREA
WIRELESS
ACCESS POINT 1

PROCESS AREA
WIRELESS
ACCESS POINT 2

ELECTRICAL ROOM
WIRELESS
ACCESS POINT

RTU-CL MBTCP
POWER MONITOR
SSM-6301
CL MCC POWER
MONITOR
63N22

RTU-CL MBTCP
VCP-6800
PAC FEED SYSTEM
VENDOR CONTROL
PANEL 1
68N01

RTU-CL MBTCP
VCP-6830
PAC FEED SYSTEM
VENDOR CONTROL
PANEL 2
68N04

GENERAL NOTES:

1. PROVIDE DUPLEX PATCH CABLES FOR ALL INTERNAL FIBER CONNECTIONS, UNLESS NOTED OTHERWISE.
2. ALL COPPER CONNECTIONS FROM DEVICES EXTERNAL TO THE ENCLOSURE SHALL BE MADE THROUGH COPPER PATCH PANELS (NOT SHOWN FOR CLARITY) OR SURGE PROTECTION DEVICE AND PATCHED THROUGH TO DEVICES AS SHOWN.
3. COMMUNICATION PROTOCOL SHALL BE MODBUS TCP, UNLESS NOTED OTHERWISE.
4. PROVIDE ADDITIONAL HARDWARE AND CONFIGURATION AS NEEDED FOR A FULLY FUNCTIONAL SYSTEM.

KEY NOTES:

1. OWNER TO FURNISH WIFI ROUTERS.

REV	DATE	BY	DESCRIPTION
1	04/15/2025	ERB	ADDENDUM NO. 1

BID SET

DESIGNED PL
DRAWN DKI
CHECKED GCE
DATE FEBRUARY 2025

REGISTERED PROFESSIONAL ENGINEER
No. 5329023
GUY C. EHLERS
STATE OF UTAH

carollo

JORDAN VALLEY WATER
CONSERVANCY DISTRICT

JORDAN VALLEY WATER TREATMENT PLANT
FILTER AND CHEMICAL FEED UPGRADES
INSTRUMENTATION
NETWORK
RTU-CL NETWORK CONNECTION DIAGRAM

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 202001.10
DRAWING NO. 03N03
SHEET NO.
OF

LAST SAVED BY: LRivas

PROJECT NO. 202001-100000 FILE NAME: 20200103N03.dwg

HIGH RISE LVL 2
NETWORK ROOM
FIBER OPTIC RACK
03N02

CAUSTIC SODA BUILDING

RTU-CS

(1) 12/FO-MM

FPP-CS
FIBER PATCH PANEL

ESP-CS

RTU-CS

ESF-CS

RIO1-CS

GAT-CS
MODBUS RTU GATEWAY

LOI-CS
CUASTIC LOI

(1) 12/FO-MM

2 CULINARY TANK RESERVOIR DWG 01E02

F

1 SECURITY GATE ELECTRONIC ENCLOSURE DWG 01E02

ELECTRONICS ENCLOSURE

3 EXTERIOR WIRELESS ACCESS POINT

3 STORAGE ROOM WIRELESS ACCESS POINT

3 ELECTRICAL ROOM WIRELESS ACCESS POINT

4

RTU-CS FLOW MB485
FE-6563
CS SMALL PMPS FLOW
65N03

4

RTU-CS FLOW MB485
FE-6583
CS FLOW METER
65N04

4

RTU-CS POWER MONITOR MBTCP
SSM-6501
CS MCC POWER MONITOR
65N08

GENERAL NOTES:

1. PROVIDE DUPLEX PATCH CABLES FOR ALL INTERNAL FIBER CONNECTIONS, UNLESS NOTED OTHERWISE.
2. ALL COPPER CONNECTIONS FROM DEVICES EXTERNAL TO THE ENCLOSURE SHALL BE MADE THROUGH COPPER PATCH PANELS (NOT SHOWN FOR CLARITY) OR SURGE PROTECTION DEVICE AND PATCHED THROUGH TO DEVICES AS SHOWN.
3. COMMUNICATION PROTOCOL SHALL BE MODBUS TCP, UNLESS NOTED OTHERWISE.
4. PROVIDE ADDITIONAL HARDWARE AND CONFIGURATION AS NEEDED FOR A FULLY FUNCTIONAL SYSTEM.

KEY NOTES:

1. SECURITY COMPONENTS ARE BEING PROVIDED AND INSTALLED UNDER SEPARATE CONTRACT. CONTRACTOR TO PULL FIBER TO NEW ELECTRONICS ENCLOSURE, CALL BOX AND GATE CONTROL.
2. PROVIDE NEW FIBER TO THE NEW MANHOLE/DUCT BANK MODIFICATIONS (PB-15) INDICATED ON 01E02. FUSION SPLICE FIBERS TO THE EXISTING CULINARY FIBER AND ROUTE BACK TO THE FIBER PATCH LOCATED WITHIN THE RTU-CS.
3. OWNER TO FURNISH WIFI ROUTERS.
4. MODBUS RS485 - ROUTE AND TERMINATE TO THE RTU.

REV	DATE	BY	DESCRIPTION
1	04/15/2025	ERB	ADDENDUM NO. 1

BID SET

DESIGNED PL
DRAWN DKI
CHECKED GCE
DATE FEBRUARY 2025

REGISTERED PROFESSIONAL ENGINEER No. 5329023 GUY C. EHLERS STATE OF UTAH

carollo

JORDAN VALLEY WATER CONSERVANCY DISTRICT

JORDAN VALLEY WATER TREATMENT PLANT
FILTER AND CHEMICAL FEED UPGRADES
INSTRUMENTATION
NETWORK
RTU-CS NETWORK CONNECTION DIAGRAM

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 202001.10
DRAWING NO. 03N04
SHEET NO.
OF

LAST SAVED BY: LRivas

PROJECT NO. 202001-100000 FILE NAME: 20200103N04.dwg

HIGH RISE LVL 2
NETWORK ROOM
FIBER OPTIC RACK
03N02

PEA AREA OF HIGH-RISE BUILDING

RTU-PEA

(1) 12/FO-MM

FPP1-PEA
FIBER PATCH PANEL

ESP-PEA

RTU-PEA

RIO1-PEA

RIO2-PEA

ESF-PEA

GAT-PEA
MODBUS RTU GATEWAY

LOI-PEA
PRIMARY COAGULANT AND POLYMER LOI

RTU-PEA FLOW MB485
FE-6215
PC FEED DISCHARGE 1 FLOW
62N04

RTU-PEA FLOW MB485
FE-6216
PC FEED DISCHARGE 2 FLOW
62N04

RTU-PEA FLOW MB485
FE-6918
PEA FILT AID SMALL DISCHARGE 1 FLOW
69N04

RTU-PEA FLOW MB485
FE-6919
PEA FILT AID SMALL DISCHARGE 1 FLOW
69N04

RTU-PEA FLOW MB485
FE-6928
PEA FILT AID LARGE 1 FLOW
69N06

RTU-PEA FLOW MB485
FE-7108
PEC FEED DISCHARGE FLOW
71N03

RTU-PEA FLOW MB485
FE-6929
PEA FILT AID LARGE 2 FLOW
69N06

RTU-PEA FLOW MB485
FE-6937
PEA FLOC AID FEED 1 FLOW
69N08

RTU-PEA FLOW MB485
FE-6938
PEA FLOC AID FEED 2 FLOW
69N08

RTU-PEA FLOW MB485
FE-6948
PEA FLOC AID FEED 3 FLOW
69N10

RTU-PEA FLOW MB485
FE-6949
PEA FLOC AID FEED 4 FLOW
69N10

RTU-PEA FLOW MB485
FE-6958
PEA FILT AID DOSING FLOW
69N12

RTU-PEA POWER MONITOR MBTCP
SSM-6901
PEA MCC POWER MONITOR
69N15

GENERAL NOTES:

1. PROVIDE DUPLEX PATCH CABLES FOR ALL INTERNAL FIBER CONNECTIONS, UNLESS NOTED OTHERWISE.
2. ALL COPPER CONNECTIONS FROM DEVICES EXTERNAL TO THE ENCLOSURE SHALL BE MADE THROUGH COPPER PATCH PANELS (NOT SHOWN FOR CLARITY) OR SURGE PROTECTION DEVICE AND PATCHED THROUGH TO DEVICES AS SHOWN.
3. COMMUNICATION PROTOCOL SHALL BE MODBUS TCP, UNLESS NOTED OTHERWISE.
4. PROVIDE ADDITIONAL HARDWARE AND CONFIGURATION AS NEEDED FOR A FULLY FUNCTIONAL SYSTEM.

KEY NOTES:

1. MODBUS RS485 - ROUTE AND TERMINATE TO THE RTU.

REV	DATE	BY	DESCRIPTION
1	04/15/2025	ERB	ADDENDUM NO. 1

BID SET

DESIGNED PL
DRAWN DKI
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DATE FEBRUARY 2025

REGISTERED PROFESSIONAL ENGINEER
No. 5329023
GUY C. EHLERS
STATE OF UTAH

carollo

JORDAN VALLEY WATER CONSERVANCY DISTRICT

JORDAN VALLEY WATER TREATMENT PLANT
FILTER AND CHEMICAL FEED UPGRADES
INSTRUMENTATION
NETWORK
RTU-PEA NETWORK CONNECTION DIAGRAM

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 202001.10
DRAWING NO. 03N05
SHEET NO. OF

LAST SAVED BY: LRivas

PROJECT NO. 202001-100000 FILE NAME: 20200103N05.dwg

BLDG LVL 2
NETWORK ROOM
FIBER OPTIC RACK
03N02

FILTER BUILDING

RTU-BL

(1) 12/FO-MM

FPP-BL
FIBER PATCH PANEL

ESP-BL

RTU-BL

ESF-BL

EXISTING
MODBUS RTU GATEWAY

RTU-BL
POWER MONITOR

MBTCP

SSM-3001

MCC-BL POWER
MONITOR

30N30

GENERAL NOTES:

1. PROVIDE DUPLEX PATCH CABLES FOR ALL INTERNAL FIBER CONNECTIONS, UNLESS NOTED OTHERWISE.
2. ALL COPPER CONNECTIONS FROM DEVICES EXTERNAL TO THE ENCLOSURE SHALL BE MADE THROUGH COPPER PATCH PANELS (NOT SHOWN FOR CLARITY) OR SURGE PROTECTION DEVICE AND PATCHED THROUGH TO DEVICES AS SHOWN.
3. COMMUNICATION PROTOCOL SHALL BE MODBUS TCP, UNLESS NOTED OTHERWISE.
4. PROVIDE ADDITIONAL HARDWARE AND CONFIGURATION AS NEEDED FOR A FULLY FUNCTIONAL SYSTEM.
5. FBW IS LOCATED IN INSIDE THE FILTER 1 CONSOLE, ALL EQUIPMENT IS EXISTING.

REV	DATE	BY	DESCRIPTION
1	04/15/2025	ERB	ADDENDUM NO. 1

BID SET

DESIGNED PL
DRAWN DKI
CHECKED GCE
DATE FEBRUARY 2025

REGISTERED PROFESSIONAL ENGINEER
No. 5329023
GUY C. EHLERS
STATE OF UTAH

carollo

JORDAN VALLEY WATER
CONSERVANCY DISTRICT

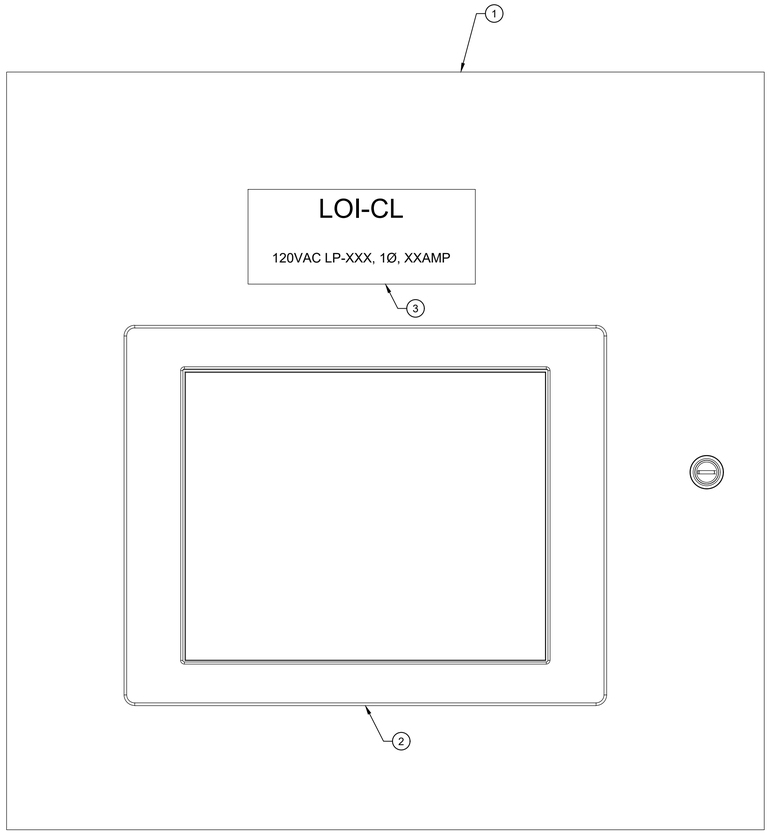
JORDAN VALLEY WATER TREATMENT PLANT
FILTER AND CHEMICAL FEED UPGRADES
INSTRUMENTATION
NETWORK
RTU-BL NETWORK CONNECTION DIAGRAM

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 202001.10
DRAWING NO. 03N06
SHEET NO. OF

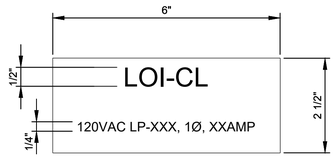
LAST SAVED BY: LRwas

PROJECT NO. 202001-100000 FILE NAME: 20200103N06.dwg



GENERAL NOTES:

1. PROVIDE 24VDC TO POWER LOCAL OPERATOR INTERFACE
2. FOLLOW ALL UL 508 AND 508A SUPPLEMENT SB REQUIREMENTS TO DETERMINE SHORT CIRCUIT RATINGS.
3. REFER TO ELECTRICAL PLANS FOR LOCATION OF ALL ENCLOSURES.
4. NOT USED
5. CONTRACTOR TO FURNISH AND INSTALL PANEL WITH NAMEPLATE AND ALL VENTS AND EXHAUST FANS AS INDICATED ON THE DRAWINGS.
6. THE OWNER WILL PROVIDE THE HMI TO THE CONTRACTOR FOR THE CONTRACTOR TO INSTALL ON THE DOOR.
7. CONTRACTOR TO PROVIDE THE OWNER WITH THE BACKPANEL. THE OWNER WILL ENGINEER, DOCUMENT AND BUILD ALL COMPONENTS LOCATED ON THE BACKPANEL.
8. CONTRACTOR TO PULL, TEST AND LABEL ALL CABLES TO THE ENCLOSURE FOR THE OWNER TO TERMINATE.



NAMEPLATE SCHEDULE
LOI-CL

MAJOR EQUIPMENT SCHEDULE	
ITEM	DESCRIPTION
1	ENCLOSURE, SS304 NEMA 4X WALL MOUNT
2	OPERATOR TOUCHSCREEN
3	NAMEPLATE

REV	DATE	BY	DESCRIPTION
1	04/15/2025	ERB	ADDENDUM NO. 1

BID SET

DESIGNED RJB
DRAWN SGS
CHECKED GCE
DATE FEBRUARY 2025

REGISTERED PROFESSIONAL ENGINEER — No. 5329023 — GUY C. EHLERS — STATE OF UTAH

JORDAN VALLEY WATER CONSERVANCY DISTRICT

JORDAN VALLEY WATER TREATMENT PLANT
FILTER AND CHEMICAL FEED UPGRADES
INSTRUMENTATION
PANEL ELEVATION
LOI-CL ENCLOSURE EXTERIOR

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
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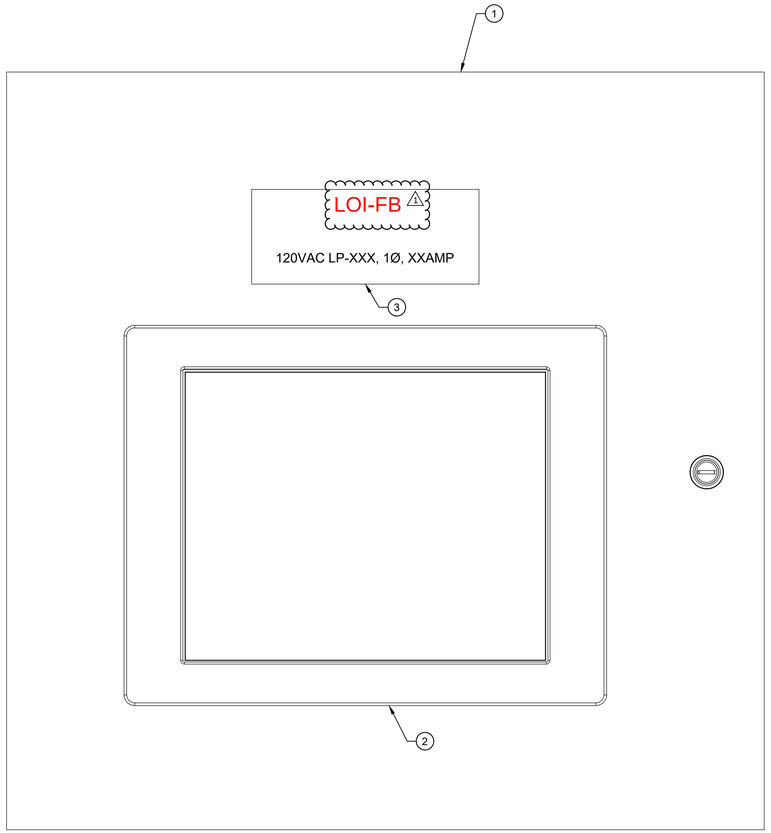
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

JOB NO. 202001.10
DRAWING NO. 05N02
SHEET NO. OF

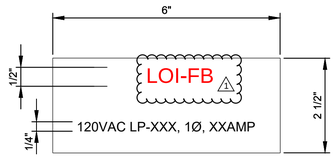
LAST SAVED BY: LRivas

PROJECT NO. 202001-100000 FILE NAME: 20200105N02.dwg



GENERAL NOTES:

1. PROVIDE 24VDC TO POWER LOCAL OPERATOR INTERFACE.
2. FOLLOW ALL UL 508 AND 508A SUPPLEMENT SB REQUIREMENTS TO DETERMINE SHORT CIRCUIT RATINGS.
3. REFER TO ELECTRICAL PLANS FOR LOCATION OF ALL ENCLOSURES.
4. LOI- FBU SHALL HAVE FIBER PATCH PANEL AND FIBER TO COPPER MEDIA CONVERTER OR SWITCH.
5. CONTRACTOR TO FURNISH AND INSTALL PANEL WITH NAMEPLATE. AND ALL VENTS AND EXHAUST FANS AS INDICATED ON THE DRAWINGS.
6. THE OWNER WILL PROVIDE THE HMI TO THE CONTRACTOR FOR THE CONTRACTOR TO INSTALL ON THE DOOR.
7. CONTRACTOR TO PROVIDE THE OWNER WITH THE BACKPANEL. THE OWNER WILL ENGINEER, DOCUMENT AND BUILD ALL COMPONENTS LOCATED ON THE BACKPANEL.
8. CONTRACTOR TO PULL, TEST AND LABEL ALL CABLES TO THE ENCLOSURE FOR THE OWNER TO TERMINATE.



NAMEPLATE SCHEDULE
LOI-FBU

MAJOR EQUIPMENT SCHEDULE	
ITEM	DESCRIPTION
1	ENCLOSURE, SS304 NEMA 4X WALL MOUNT
2	OPERATOR TOUCHSCREEN
3	NAMEPLATE

REV	DATE	BY	DESCRIPTION
1	04/15/2025	ERB	ADDENDUM NO. 1

BID SET

DESIGNED RJB
DRAWN SGS
CHECKED GCE
DATE FEBRUARY 2025

REGISTERED PROFESSIONAL ENGINEER — No. 5329023 — GUY C. EHLERS — STATE OF UTAH

carollo

JORDAN VALLEY WATER CONSERVANCY DISTRICT

JORDAN VALLEY WATER TREATMENT PLANT
FILTER AND CHEMICAL FEED UPGRADES
INSTRUMENTATION
PANEL ELEVATION
1 LOI-FB ENCLOSURE EXTERIOR

VERIFY SCALES
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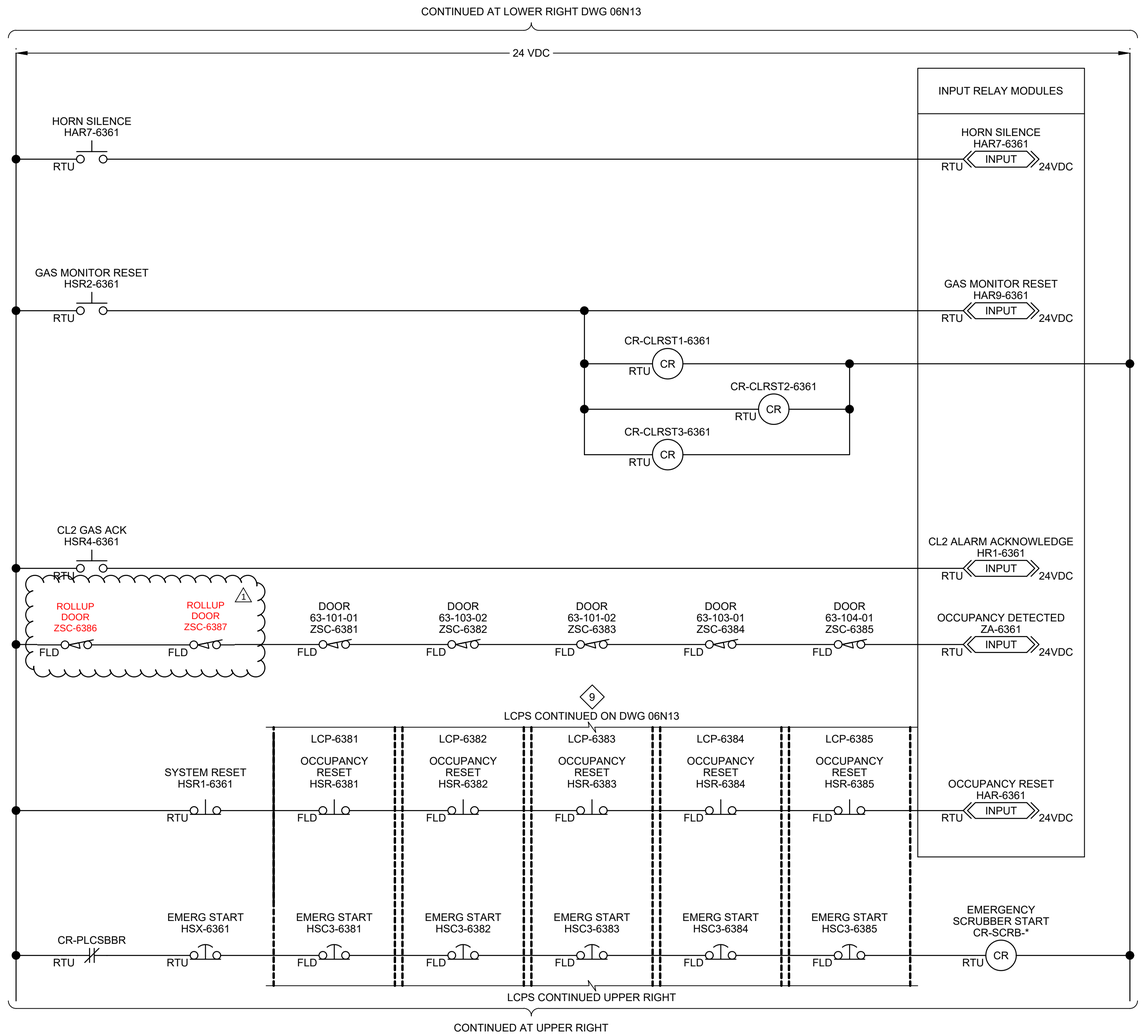
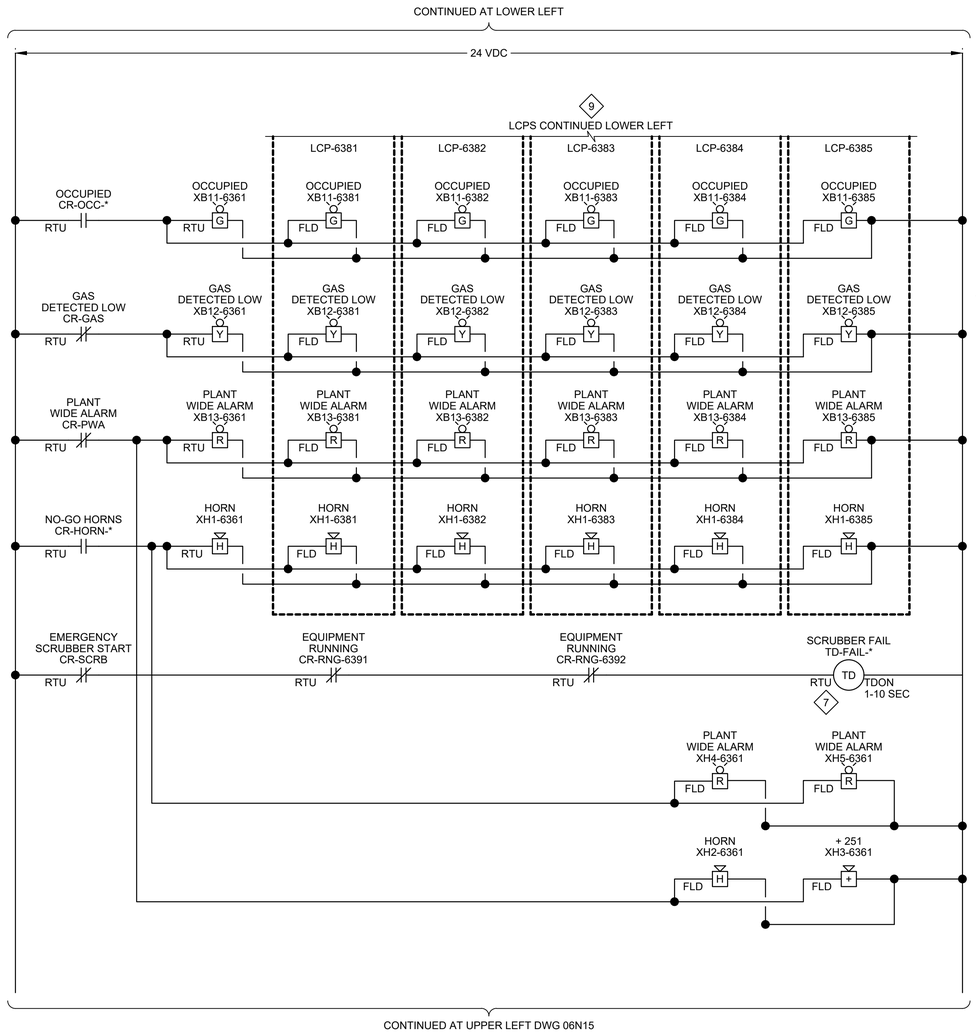
JOB NO. 202001.10
DRAWING NO. 05N03
SHEET NO. OF

LAST SAVED BY: LRivas

PROJECT NO. 202001-100000 FILE NAME: 20200105N03.dwg





GENERAL NOTES:

1. SCHEMATIC ILLUSTRATES DESIGN INTENT ONLY. PROVIDE ALL NECESSARY COMPONENTS TO MEET PROJECT REQUIREMENTS.
2. SELECTED PLC I/O IS SHOWN. REFER TO THIS INFORMATION BUT ALSO THE P&IDS FOR THE TOTAL I/O REQUIREMENTS.
3. RTU = RTU-CLIP

KEY NOTES:

7. START OTHER SCRUBBER (AFTER TIME DELAY) IF EITHER SCRUBBER IS COMMANDED TO RUN, BUT NEITHER SCRUBBER IS RUNNING.
8. RELAY CR-SCRB-* DE-ENERGIZES TO START SCRUBBER.
9. REPRESENTS GO/NO-GO PANELS LOCATED AT EACH OF THE 5 DOORS. REFER TO P&ID 63N13 FOR LCP TAGS.
10. CONTACTS FROM DRAWING 06N07.

TAG ◄——► LOOP
* = XXXX ◄——► 6361

REFERENCE DWG.
63N SERIES P&IDS

LOCATION LEGEND

RTU	RTU (PLC) PANEL
MCC	MOTOR CONTROL CENTER
FLD	FIELD DEVICE
LCP	LOCAL CONTROL PANEL
STR	FREE-STANDING STARTER
VFD	FREE-STANDING VFD

CHLORINE MASTER GO/NO-GO CONT.

13B CONTROL SCHEMATIC

REV	DATE	BY	DESCRIPTION
1	04/15/2025	ERB	ADDENDUM NO. 1

BID SET

DESIGNED RJB
DRAWN DKI
CHECKED GCE
DATE FEBRUARY 2025

REGISTERED PROFESSIONAL ENGINEER — No. 5329023 — GUY C. EHLERS — STATE OF UTAH

carollo®

JORDAN VALLEY WATER CONSERVANCY DISTRICT

JORDAN VALLEY WATER TREATMENT PLANT
FILTER AND CHEMICAL FEED UPGRADES
INSTRUMENTATION
CONTROL SCHEMATICS
CHLORINE MASTER GO/NO-GO PART 2

VERIFY SCALES
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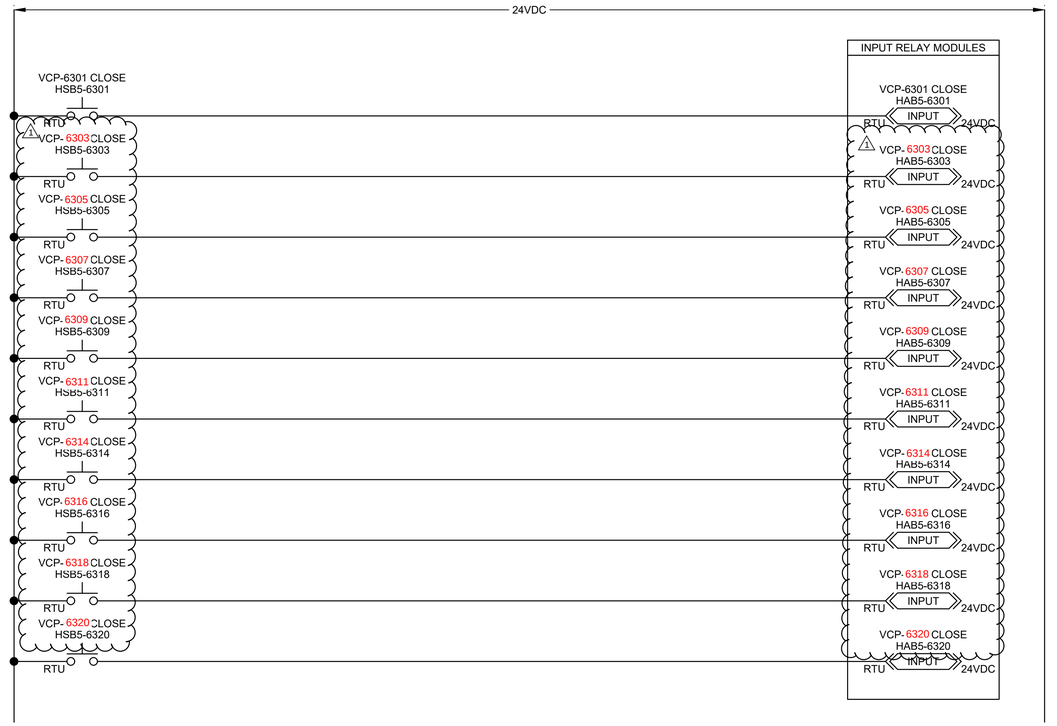
JOB NO. 202001.10
DRAWING NO. 06N14
SHEET NO.
OF

LAST SAVED BY: LRwas

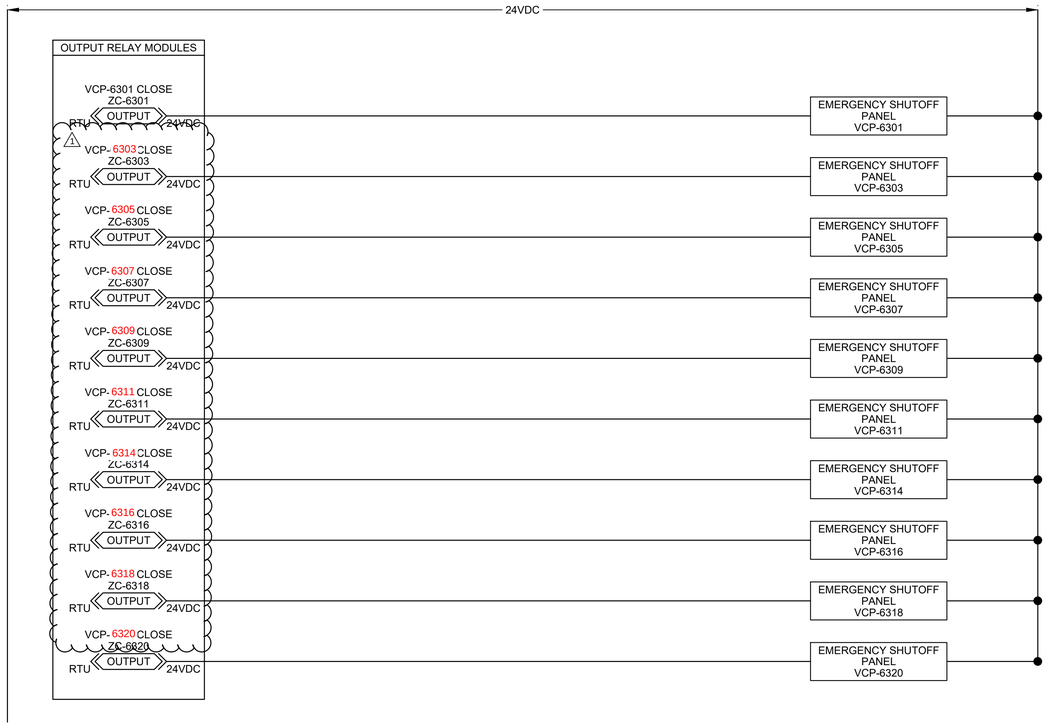
PROJECT NO. 202001-100000 FILE NAME: 20200106N14.dwg

CONTINUED AT LOWER RIGHT DWG 06N15



CONTINUED AT UPPER RIGHT

CONTINUED AT LOWER LEFT



CHLORINE EQUIPMENT		SCRUBBER 1		SCRUBBER 2	CHLORINE CYLINDER VALVES	CHLORINE STORAGE	CHLORINE STORAGE	CHLORINE FEED	CHLORINE STORAGE	CHLORINE STORAGE	CHLORINE STORAGE	CHLORINE FEED	OCCUPIED STROBE (GREEN)	LOW GAS (YELLOW)	PLANT WIDE ALARM (RED)	PLANT WIDE ALARM (HORN)	ALARM SCADA
CONDITIONS	**SET POINTS**	**BLR-6391**		**BLR-6392**	**6301 -6320**	**EF-6355**	**EF-6356**	**EF-6357**	**MAU-6354**	**LVR-6355**	**LVR-6357**	**LVR-6358**	**XB11-***	**XB12-***	**XB13-***	**XH1-***	
NORMAL OPERATION	STORAGE TEMP < 84F	-		-	**OPEN**	**ON**	OFF	**ON**	**ON**	CLOSED	CLOSED	CLOSED	OFF	OFF	OFF	OFF	OFF
HIGH STORAGE ROOM TEMP	STORAGE TEMP > 85F	-		-	**OPEN**	**ON**	**ON**	**ON**	**ON**	**OPEN**	**OPEN**	**OPEN**	OFF	OFF	OFF	OFF	OFF
LOW LEVEL CL2 DETECTED	CL2 > 1 PPM	OFF		OFF	**OPEN**	**ON**	**ON**	**ON**	**ON**	**OPEN**	**OPEN**	**OPEN**	OFF	**ON**	OFF	OFF	**ON**
HIGH LEVEL CL2 DETECTED	CL2 > 3 PPM	**ON**	**OR**	**ON**	**OPEN**	OFF	OFF	OFF	OFF	**OPEN**	**OPEN**	**OPEN**	OFF	OFF	**ON**	**ON**	**ON**
SMOKE DETECTED	SMOKE	OFF		OFF	**OPEN**	OFF	OFF	OFF	OFF	CLOSED	CLOSED	CLOSED	OFF	OFF	OFF	OFF	**ON**
STORAGE OR FEED ROOM OCCUPIED	OCCUPANCY DETECTED	-		-	**OPEN**	-	-	-	-	-	-	-	**ON**	-	-	-	**ON**
HIGH CO DETECTED	CO >50 PPM	-		-	**OPEN**	**ON**	**ON**	**ON**	**ON**	**OPEN**	**OPEN**	-	-	-	-	-	**ON**
EYEWASH	FLOW DETECTED	-		-	-	-	-	-	-	-	-	-	-	-	-	-	**ON**
CLIP PANEL PILOT DEVICES																	
ALARM ACK (HSR4-6361)	-	-		-	-	-	-	-	-	-	-	-	-	-	-	OFF	-
HORN SILENCE (HAR7-6361)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	OFF	OFF
OCCUPANCY RESET (HSR1-6361)	-	-		-	-	-	-	-	-	-	-	-	OFF	-	-	-	-
SCRUBBER SELECT 1/2 (HSF-6361)	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
GAS MONITOR RESET (HSR2-6361)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	OFF	OFF	OFF
EMERGENCY START (HSX-6361)	-	**ON**	**OR**	**ON**	CLOSE	OFF	OFF	OFF	OFF	**OPEN**	**OPEN**	**OPEN**	OFF	OFF	**ON**	**ON**	**ON**

NOTES:
THE CHLORINE STORAGE CYLINDER VALVES WILL BE CLOSED MANUALLY BY OPERATIONS IN ALL CONDITIONS.
SEVERAL TEST MODES WILL BE REQUIRED IN THE PLC/HMI PROGRAMMING.
TEST MODE 1: PROVIDE A TESTING SEQUENCE FOR OPERATIONS TRAINING THAT ALARMS LOCALLY BUT NOT ENGAGE THE PLANTWIDE ALARMS, NOR DOES IT START THE SCRUBBERS.
TEST MODE 2: IS EQUIPMENT TEST FOR MAINTENANCE - THIS MODE ALLOWS EQUIPMENT TESTING AND SHOWS ALL STATUS BUT DOES NOT GENERATE ANY ALARMS.
TEST MODE 3: IS A MODE FOR TESTING AND CALIBRATION ALL THE GAS SENSORS AND INCLUDES SUPPRESSION OF ALL ALARMS.

TAG ◄——► LOOP
* = XXXX ◄——► 6361

REFERENCE DWG.
63N SERIES P&IDS

LOCATION LEGEND

RTU	RTU (PLC) PANEL
MCC	MOTOR CONTROL CENTER
FLD	FIELD DEVICE
LCP	LOCAL CONTROL PANEL
STR	FREE-STANDING STARTER
VFD	FREE-STANDING VFD

CHLORINE MASTER GO/NO-GO

13D CONTROL SCHEMATIC

REV	DATE	BY	DESCRIPTION
			BID SET
1	04/15/2025	ERB	ADDENDUM NO. 1

DESIGNED RJB
DRAWN MCG
CHECKED GCE
DATE FEBRUARY 2025

REGISTERED PROFESSIONAL ENGINEER No. 5329023 GUY C. EHLERS STATE OF UTAH

carollo®

JORDAN VALLEY WATER CONSERVANCY DISTRICT

JORDAN VALLEY WATER TREATMENT PLANT
FILTER AND CHEMICAL FEED UPGRADES
INSTRUMENTATION
CONTROL SCHEMATICS
CHLORINE MASTER GO/NO-GO PART 4

VERIFY SCALES
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JOB NO. 202001.10
DRAWING NO. 06N16
SHEET NO.
OF

LAST SAVED BY: LRivas

PROJECT NO. 202001-100000 FILE NAME: 20200106N16.dwg

GENERAL NOTES:

1. ALL TAG IDENTIFIERS LOCATED ON THIS DRAWING INCLUDE THE PREFIX "JV_CF_PC_" AS PART OF THE TAGGING CONVENTION.

KEY NOTES:

1. WALL MOUNTED COMBINATION STARTER.

I/O

POWER SOURCE

FIELD

DI AUTO 6201 RTU-CDX
DO RUN 6201 RTU-CDX
DI HI TEMP 6201 RTU-CDX
DI RUNNING 6201 RTU-CDX
DI HIGH PRESS 6201 RTU-CDX
DI AUTO 6202 RTU-CDX
DO RUN 6202 RTU-CDX
DI HI TEMP 6202 RTU-CDX
DI RUNNING 6202 RTU-CDX
DI HIGH PRESS 6202 RTU-CDX
DI HIGH LEVEL LAH 6214 RTU-PEA
AI LEVEL L 6211 RTU-PEA
AI WEIGHT W 6211 RTU-PEA
DI SAFETY SHOWER FAH 6201 RTU-PEA

FVNR-6201 FVNR 480VAC-3P MCC-CDS (1)
FVNR-6202 FVNR 480VAC-3P MCC-CDS (1)
TM 24VDC-1P CB 6214 RTU-PEA
TM 24VDC-1P CB 6211 RTU-PEA

HOA HSD 6201 PMP 6201 MWH 6201 TSH 6201
HOA HSD 6202 PMP 6202 MWH 6202 TSH 6202
120VAC
PISH 6201 PRESS SW PE 6201
PISH 6202 PRESS SW PE 6202

LSH 6214 CAPACITANCE LE 6214
LIT 6211 INT RADAR PTOF LE 6211
WIT 6211 LOAD CELL WE 6211
FSH 6201 FE 6201 FBV

PRIMARY COAGULANT BUILDING | YARD | PEA, PEC, AND PC AREA

PRIMARY COAGULANT TANKS 1 62N01 PC

YARD 151 63N27 PC

OVERFLOW
QLHH
QLH
QLL
QLLL
VAPOR SEAL
TNK 6211
LI 6211
PRIMARY COAGULANT DAY TANK

PRIMARY COAGULANT FEED PUMPS 1 2 62N03
PRIMARY COAGULANT FEED PUMPS 2 3 62N04

YARD PUSTURA 152 63N27 PC
YARD PUSTURA 153 63N27 PC

LSHH 6214 PRIMARY COAGULANT PUMP LEVEL SHUTOFF NL114 NA900 TYP

PMP-6201
PRIMARY COAGULANT TRANSFER PUMP 1
0.75HP 480VAC 3PH
2 06N02

PMP-6202
PRIMARY COAGULANT TRANSFER PUMP 2
0.75HP 480VAC 3PH
2 06N02

PE-6201
PC TRANSFER 1 PRESS HIGH
25 PSIG OPEN
NP502 TYP

PE-6202
PC TRANSFER 2 PRESS HIGH
25 PSIG OPEN
NP502 TYP

LE-6211
PRIMARY COAG DAY TANK LEVEL
0-7 FT
NL150 TYP

WE-6211
PRIMARY COAG DAY TANK WEIGHT
0-11,000 LBS

FE-6201
PRIMARY COAG EYEWASH FLOW SWITCH HIGH
1.5 GPM

REV	DATE	BY	DESCRIPTION
1	04/15/2025	ERB	ADDENDUM NO. 1

BID SET

DESIGNED GEB
DRAWN CEY
CHECKED GCE
DATE FEBRUARY 2025

REGISTERED PROFESSIONAL ENGINEER STATE OF UTAH No. 5329023 GUY C. EHLERS

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JORDAN VALLEY WATER CONSERVANCY DISTRICT

JORDAN VALLEY WATER TREATMENT PLANT
FILTER AND CHEMICAL FEED UPGRADES
INSTRUMENTATION
P&ID
PRIMARY COAGULANT FEED DAY TANK

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
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JOB NO. 202001.10
DRAWING NO. 62N02
SHEET NO.
OF

LAST SAVED BY: LRvas

PROJECT NO. 202001-100000 FILE NAME: 20200162N02.dwg

GENERAL NOTES:

1. ALL TAG IDENTIFIERS LOCATED ON THIS DRAWING INCLUDE THE PREFIX "JV_CF_CS_" AS PART OF THE TAGGING CONVENTION.

I/O

AI HIGH LEVEL LAH 6514 RTU-CS

DI HIGH FLOW FAH 6510 RTU-CS

AI LEVEL CAUSTIC TANK 1 L1 6501 RTU-CS

DO SILENCE HAY 6500 RTU-CS

DO BEACON XB 6500 RTU-CS

DO HORN XH 6500 RTU-CS

AO LEVEL CAUSTIC TANK 1 L2 6501 RTU-CS

AO LEVEL CAUSTIC TANK 2 L2 6502 RTU-CS

AO LEVEL CAUSTIC TANK 3 L2 6503 RTU-CS

AI LEVEL CAUSTIC TANK 2 L1 6502 RTU-CS

AI LEVEL CAUSTIC TANK 3 L1 6503 RTU-CS

DI HIGH FLOW FAH 6516 RTU-CS

DI HIGH FLOW FAH 6517 RTU-CS

POWER SOURCE

TM 120VAC-1P CB 6510 PNL-CS

TM 24VDC-1P CB 6514 RTU-CS

TM 120VAC-1P CB 6510 PNL-CS

TM 120VAC-1P CB 6501 PNL-CS

TM 120VAC-1P CB 6500 RTU-CS

TM 120VAC-1P CB 6502 PNL-CS

TM 120VAC-1P CB 6503 PNL-CS

FIELD

LSH 6514 — CAPACITANCE

LE 6514

FSH 6510 — FBV

FE 6510 — FBV

LOAD STATION

HTU 6510 — HEAT TRACE

HTU1 6510 — HEAT TRACE

LIT 6501 — INT RADAR

LE 6501

HORN XH 6500

SILENCE HSY 6500

STROBE XB 6500

LCP 6500

LI 6501 — LEVEL INDICATOR

LI 6502 — LEVEL INDICATOR

LI 6503 — LEVEL INDICATOR

LIT 6502 — INT RADAR

LE 6502

LIT 6503 — INT RADAR

LE 6503

FSH 6516

FE 6516 — FBV — STORAGE

FSH 6517

FE 6517 — FBV — STORAGE

CAUSTIC SODA TRANSFER PUMPS — CS — 11 — 65N02

CS

OVERFLOW

TNK 6501

HTU 6501 — HEAT TRACE FBV

VAPOR SEAL

LI 6501

CAUSTIC SODA TANK 1

TNK 6502

HTU 6502 — HEAT TRACE FBV

LI 6502

CAUSTIC SODA TANK 2

TNK 6503

HTU 6503 — HEAT TRACE FBV

LI 6503

CAUSTIC SODA TANK 3

FE-6510
CAUSTIC SODA FLOW SWITCH HIGH
1.5 GPM

HTU-6510
SAFETY SHOWER HEAT TRACE
1.5AMP 120VAC 1PH

LE-6514
CAUSTIC SODA CONTAINMENT SUMP
3-IN AFF

NL114 / NA900 (* TYP)

TNK-6501
CAUSTIC SODA TANK 1

LE-6501
CAUSTIC SODA TANK 1 LEVEL METER
0-26 FT

NL150 (* TYP)

HTU-6501
CAUSTIC SODA TANK 1 HEAT TRACE
24AMP 120VAC 1PH

LCP-6500
CAUSTIC LOADING PANEL
5 / 06N05

TNK-6502
CAUSTIC SODA TANK 2

LE-6502
CAUSTIC SODA TANK 2 LEVEL METER
0-26 FT

NL150 (* TYP)

HTU-6502
CAUSTIC SODA TANK 2 HEAT TRACE
24AMP 120VAC 1PH

TNK-6503
CAUSTIC SODA TANK 3

LE-6503
CAUSTIC SODA TANK 3 LEVEL METER
0-26 FT

NL150 (* TYP)

HTU-6503
CAUSTIC SODA TANK 3 HEAT TRACE
24AMP 120VAC 1PH

FE-6516
FLOW SWITCH HIGH
1.5 GPM

FE-6517
FLOW SWITCH HIGH
1.5 GPM

REV	DATE	BY	DESCRIPTION
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REGISTERED PROFESSIONAL ENGINEER — No. 5329023 — GUY C. EHLERS — STATE OF UTAH

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JORDAN VALLEY WATER CONSERVANCY DISTRICT

JORDAN VALLEY WATER TREATMENT PLANT
FILTER AND CHEMICAL FEED UPGRADES
INSTRUMENTATION
P&ID
CAUSTIC SODA STORAGE 1

VERIFY SCALES
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JOB NO. 202001.10
DRAWING NO. 65N01
SHEET NO.
OF

LAST SAVED BY: LRivas

PROJECT NO. 202001-100000 FILE NAME: 20200165N01.dwg

GENERAL NOTES:

1. ALL TAG IDENTIFIERS LOCATED ON THIS DRAWING INCLUDE THE PREFIX "JV_CF_PEC_" AS PART OF THE TAGGING CONVENTION.

I/O

POWER SOURCE

FIELD

LAH 7103 — DI — RTU-PEA

CB 7103 — TM 120VAC-1P — RTU-PEA

LSH 7103

LE 7103 — CAPACITANCE — 17201.40_72_76

L1 7101 — AI PEC TANK 1 — RTU-PEA

LIT 7101 — INT — RADAR

LE 7101

HAY 7100 — DO SILENCE — RTU-PEA

XB 7100 — DO BEACON — RTU-PEA

XH 7100 — DO HORN — RTU-PEA

CB 7100 — TM 120VAC-1P — RTU-PEA

XH 7100 — HORN

HSY 7100 — SILENCE

XB 7100 — STROBE

LCP 7100

LI 7101 — LEVEL INDICATOR

LI 7102 — LEVEL INDICATOR

L2 7101 — AO PEC TANK 1 — RTU-PEA

L2 7102 — AO PEC TANK 2 — RTU-PEA

L2 7102 — AI PEC TANK 2 — RTU-PEA

LIT 7102 — INT — RADAR

LE 7102

PEC

PEC

OVERFLOW

VAPOR SEAL

TNK 7101

LI 7101

PEC TANK 1

OVERFLOW

VAPOR SEAL

TNK 7102

LI 7102

PEC TANK 2

PEC — PEC TRANSFER PUMPS — 6 — 71N02

6 06N06

LE-7103
LEVEL CAPACITANCE
3-IN AFF

* TYP — NL114

6 06N06

LE-7101
PEC TANK 1 LEVEL
0-10 FT

* TYP — NL150

LCP-7100
PEC LOADING PANEL

6 06N06

LE-7102
PEC TANK 2 LEVEL
0-10 FT

* TYP — NL150

REV	DATE	BY	DESCRIPTION
1	04/15/2025	ERB	ADDENDUM NO. 1

BID SET

DESIGNED GEB
DRAWN CEY
CHECKED GCE
DATE FEBRUARY 2025

REGISTERED PROFESSIONAL ENGINEER
No. 5329023
GUY C. EHLERS
STATE OF UTAH

carollo

JORDAN VALLEY WATER
CONSERVANCY DISTRICT

JORDAN VALLEY WATER TREATMENT PLANT

FILTER AND CHEMICAL FEED UPGRADES

INSTRUMENTATION

P&ID
PEC FEED STORAGE

VERIFY SCALES
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JOB NO. 202001.10
DRAWING NO. 71N01
SHEET NO.
OF

LAST SAVED BY: LRivas

PROJECT NO. 202001-100000 FILE NAME: 20200171N01.dwg

JORDAN VALLEY WATER TREATMENT PLANT FILTER AND CHEMICAL UPGRADES
JORDAN VALLEY WATER CONSERVANCY DISTRICT
WEST JORDAN, UTAH

Bidder RFI Responses
April 16, 2025

No.	Question	Response
1	I had a question for you regarding specification section 13206A, FRP Storage Tanks for Jordan Valley. I represent Diamond Fiberglass and we're hoping to bid on this project. Would you see any issue with them bidding? They were specified/named by Carollo for the TSSD Package B project. Also, Diamond let me know that Ershigs and Belco (the two named manufacturers) are now part of the same company (NOV) and Ershigs isn't making tanks anymore, so effectively, the only named bidder would be Belco. Would you consider naming Diamond by addendum? Or is it better to just go through the bid as an "or equal"? I'm not sure what your preference is	Any manufacturer that meets Specification 13206 requirements, including ASME RTP-1 certification outlined in 1.05.C and 2.02.A, can be submitted as an 'or equal'.
2	1. Shall all excavation spoils be exported to off site or is there room on the property to waste the spoils?	Please refer to specification section 01537-Erosion and Sediment Control, 3.01E, which states: If a Project spoil site is not indicated on the Drawings, dispose of sediment off site at location not in or adjacent to stream or floodplain. 2. Assume responsibility for off-site disposal. Please also reference specification section 02300 - Earthwork 2.01, which states: Obtain acceptable import material from other sources if surplus obtained within Project site does not conform to specified requirements or are not sufficient in quantity.
3	2. Please clarify Specification "General Conditions, 6.06 Permits" it appears that permit fees shall be paid by the Contractor. Is there a list of required permits/ permitting agencies and or a list of expected costs for the permits?	General Conditions section 6.06 describes requirements for SWPPP compliance but does not contain an exhaustive list of all permits that may be required. It is the contractor's responsibility to determine all permitting requirements. A building permit with the City of Herriman will also be required. Any planned dewatering activities will also require a permit with the State of Utah DEQ. Please refer to section 01410 for a list of authorities having jurisdiction and contact these authorities directly for all costs and requirements.
4	3. Will the Owner Provide and Pay for Construction Water and Power or shall the contractor add it to the cost of construction?	Please refer to specification section 01500 - Temporary Facilities and Controls: Under the subsection "1.04 TEMPORARY UTILITIES", it states: A. Temporary electrical power: 1. Arrange with the Owner to provide adequate temporary electrical service. Owner will supply the electricity from its facilities for the Contractors use in connection with the performance of the Work at no charge to Contractor. B. Temporary water: 1. Arrange with the Owner to provide adequate temporary water service for the Work. Owner will supply the water from its facilities for the Contractor's use in connection with the performance of the Work at no charge to Contractor.
5	4. Some areas requiring demolition have existing overheard trollies and cranes, may the contractor use these to assist with demolition?	Use of any available overhead trollies and cranes is allowed; However, the district cannot guarantee the condition of this equipment, or the suitability of this equipment to meet the contractor's needs. If an overhead trolly or crane is damaged by the contractor during the work, the contractor will be responsible to make the necessary repairs.
6	5. Will demolished items remain the property of the owner or shall the contractor be responsible for disposal of demolished items. If some items are to be conveyed to the owner please provide a list and a location where the Owner will receive them.	Section 01738 - Selective Alterations and Demolition: Under part 3, subsection 7 states: "Assume possession of materials unless otherwise indicated on the Drawings or specified." Demolition drawings describe the valves and instrumentation that should be salvaged to owner (for example see 69D01 Key Note 1). No location is provided for this, as each piece of equipment salvaged to the owner should be handed directly to district operations or maintenance personnel.
7	6. When needed, will the Chlorine Cylinders be removed by the Owners personnel or shall the contractor be responsible to move them. If the Contractor will move them is training required, where is training available? Where shall the cylinders be delivered?	Please refer to specification section 01140 - Work Restrictions, L.5, where it states that "Owner will be responsible for delivery, handling, or moving of chlorine gas cylinders. Contractor shall coordinate timeframes with Owner."
8	How will contractors personnel and deliveries be given access to the site through the gate / security system?	A paragraph has been added to 01140 - Work Contraints and 01500 - Temporary facilities and Controls defining additional requirements for Contractor access to the site.
10	The O&M manual for the existing gate is referenced as being attached to the supplemental general conditions, but was not found at this location	Referenced location for the O&M manual has been updated to reference its location. Please see Appendix C.
11	Several months ago we established that a booster pump isn't required for the PAC system and the specification generally doesn't acknowledge it. However, there are two sections that list it: 13270 – 2.05.K.2. and 2.05.N.9. Can you confirm if this is intentional? If not, can you confirm it needs to be deleted?	These references have been removed from Specification 13270 in this addendum.
12	The Bid Allowance for the Dust Hazard Analysis lists item 5 has an electrically actuated knife gate. Chemco can supply this as electric or pneumatic. An electric valve will cost more due to the expense of the Class II, Div. 1 Group F hazard rating on the actuator. The primary concern and operation that Carollo/Jordan Valley need to be aware of is an electric valve will close much slower than a pneumatic valve. The electric valve will have a motor that will rotate a helical screw to move the knife gate open/close. This action can take up to 10 seconds or longer. A pneumatic knife gate uses compressed air to actuate a rod-cylinder-assembly and the actuation occurs in less than second. Considering this valve is for DHA safety, it makes more sense to Chemco that this should be pneumatic. Especially because we will have compressed air routed throughout the silo. Please confirm Carollo/Jordan Valley preference. At this time, I plan to submit pricing for both in the event a decision is not made.	The specification has been adjusted in Division 0 Section C-3 of this addendum to include a pneumatically actuated knife gate instead of electrically actuated.
14	Is it possible to ask the engineer if we can get the conduit schedules in an Excel format. Specs 4 of 6 Section 16990A, B, C, D, E, F, G, H, J, and K.	Yes, a contractor version can be made available.
16	Please clarify if 'MCC-B1' on sheet 03E14 is the same as 'MCC-B' on sheet 30E19.	Yes, MCC-B and MCC-B1 are the same. MCC-B1 is the correct designation.
17	The Utility Transformer and metering on the top center of sheet 03E02 is shown in dark print. Will this Transformer be newly provided by the EC? Please clarify the work connected with this Transformer shown in dark print.	Utility metering/transformer are existing. No new work for this project.
18	Please confirm that the EC will be responsible for providing and installing MV 'XFMR-APF'. See sheet 03E02.	XFMR-APF on sheet 03E02 will be new. The Contractor is responsible for the work. How it is broken up between the general and sub is up to the Contractor.
19	Will 'XFMR-APF' require a vault or will a pad be sufficient per key note #1 on sheet 01E05?	A pad will be sufficient.
20	Please refer to Plant Area Electrical Material Requirements 16050-5 Table 1. Please clarify which Electrical rooms will require Nema 12 Enclosures.	Where NEMA Type 12 is listed in a specification it may be used in Electrical Rooms, for example formed steel enclosures in specification section 16134.
21	Please clarify if 'PANEL UPS-S' on sheet 71E02 is new or existing. If new, please provide a One-Line diagram for equipment size and connections.	Panel UPS-S is existing.
22	Please provide locations for 'PNL-PEA' & 'PP-PEA'. It appears that these should be located on sheet 71E02, but they are not shown.	PNL-PEA and PP-PEA will be shown on 71E02 by addendum.
23	UPS-CL' appears on sheets 03E20 & 03E22. Please clarify that 'UPS-CL' on sheet 03E22 should be named 'UPS-CS'. Please clarify if the rating for this UPS should be 12.5 KVA.	UPS-CL' on sheet 03E22 should be named 'UPS-CS', and is rated 12.5 KVA.
24	Please clarify who is responsible for providing and installing Process Piping and Equipment Heat Tracing.	The bidding Contractor has the ultimate responsibility to deliver the scope of work described in the contract documents. How the job is broken out by trade/sub is means & methods determined by the Contractor.
25	Will there be any Gutter Melt required for roofs, gutters and downspouts of the new buildings? Please clarify.	No, Gutter Melt is not required for new buildings.
26	Please clarify what will be required for cable management and fire tape in Medium Voltage Vaults and Pull Boxes.	The cable can lie on the floor of the medium voltage pull box. Fire tape is not required.
27	Who will be responsible for cutting and demolishing existing Concrete and Asphalt for Duct Banks and Underground conduits on the Site?	The bidding Contractor has the ultimate responsibility to deliver the scope of work described in the contract documents. How the job is broken out by trade/sub is means & methods determined by the Contractor.

28	Please Clarify if any Fire Alarm systems will be required. If so, please provide Manufacturer information and locations of existing Fire Alarm systems for integration purposes.	Fire alarm systems will not be required.
29	Please provide an Instrument list for the Process Instruments.	Each instrument (not provided by a vendor or indicated as FBV on the P&IDs) has a data sheet with the detailed information located at the end of each instrument spec.
30	HVAC Control wiring is not shown for the T-stats on the drawings or in the conduit/cable schedule, however some control wiring is shown in the P&ID's. Please clarify who is responsible for providing and installing HVAC control systems.	Mechanical contractor is responsible for control wiring between HVAC equipment and control device. Refer to specification section 15500-2.02.A.2 and section 15936-3.02. Electrical contractor is responsible for control wiring from HVAC equipment and/or devices that is connected to RTU (PLC). Refer to specification section 16990 for conduit schedules.
31	Please provide a set of Typical Details for this project.	Typical details are provided at the beginning of each disciplines drawing set, in Volume 6 of the bid set.
32	Please confirm that all Medium Voltage cables will be Concentric Neutral type per spec section 16124-4 2.05-B-7.	Yes, section 16124 applies to all medium voltage cables.
33	Please clarify the Scope of work required by the EC for Access control and CCTV security systems.	Please refer to General Note 2 on the Security Plan drawings.
34	The room finish schedule indicates that the exposed structural members and deck be “Coated” My question is it the intent of the engineer to use system 3.07 E and G in Specification 09910 or system EPU-M-1 or EPX-M-1.	Attachment A in Specification 09960 has been adjusted to clarify which surfaces will require coating with EPX-M-2.
35	The finish schedule on drawing 00GA01 indicates that the floor finish for the floors in the Chlorine Storage Room, Chlorinator Room, Cuastic Soda Metering Area and Caustic Soda Bulk Area to be clear sealer. Painting specification in Attachment B, Coating Detail Sheet for System VE-C-1 is a Vinyl Ester coating for secondary containment. My question is: Should any of the above rooms have the scheduled floor sealer be changed to the Vinyl Ester system considering the chemicals used in those rooms?	The Caustic Soda Bulk Area and Caustic Soda Metering Area should be coated in vinyl ester per Attachment B. See revised drawings
36	The finish schedule for the rooms in question one indicates that the wall finishes is “Coating” The only coating in the painting specifications is Section 09910 System 3.07 A which is a “Latex, semi-gloss”. On similar projects we have applied high performance water borne epoxies or solvent based epoxy. My question is: Is the latex semi-gloss the correct wall coating for those rooms or should a chemical resistant epoxy for added for extra wall protection for those rooms?	The latex, semi-gloss painting is the correct wall coating for all the buildings, except where noted in 62A01 Key Note 2 in the Chlorine Building
37	Key note #2 on pages 63A01, 63A06 and numerous other architectural drawings indicates the interior CMU should be sealed per section 09960. There are no paint system for CMU sealing. Also, this not is in contradiction with the room finish schedule which indicates the interior CMU walls should be “coated”.	The outside wall of the interior rooms of the chlorine building (chlorinator room, mechanical room, and electrical room) should be coated (sealed) with an epoxy based paint per Key Note 2 and Specification 09960. This is to provide a barrier between the chlorine gas storage area and the interior rooms. All other walls should be painted with the latex, semi-gloss paint per Specification 09910. Drawing 63A01 has been revised in this addendum to provide additional clarity
38	There appears to be quite a bit of new electrical/control work in the existing structures (Areas D, E, & F of the filter building especially), but there is not much information regarding demolition. The electrical demo drawings focus mostly on site demolition, and the filter building electrical drawings focus almost solely on new work. The one-lines show demo work, as does one of the panel schedules. However, there does not seem to be any information for the instrumentation/control circuits? Can more details be provided on what needs to stay and what needs to be removed?	Instrumentation/control electrical demolition in the filter area is minimal. Existing conduit and conductors will remain in use.
39	For security system work in Filters area (30E19), is there an existing system? If so, does the existing system need to be removed? If so, please provide details.	The existing security system in the filter area will remain. Work shown on Sheet 30E19 will add security for 3 doors.
40	What are the dimensions for the Contractor provided security panel enclosures? Drawing 63E16, General Note 2, drawing 65E10, General Note 3, & drawing 69E04, General Note 2 state that the Contractor is to "provide security panel enclosure as indicated on other drawings." What other drawings is this referring to? Some drawings, such as above, only state the Contractor is to provide. Some drawings state that it is provided by the Owner (30E19). Drawing 03N04, Key Note 1 alludes to the Security Gate Electronic Enclosure being provided by the Contractor and Drawing 01E02, Key Note 10 does provide dimensions for this enclosure. Are these the dimensions to be used for all security panel enclosures? Please provide some clarity.	Specification language has been added to 17050 describing the procedure for determining exact panel enclosure sizes. Refer to electrical drawings for plan view dimensions.