

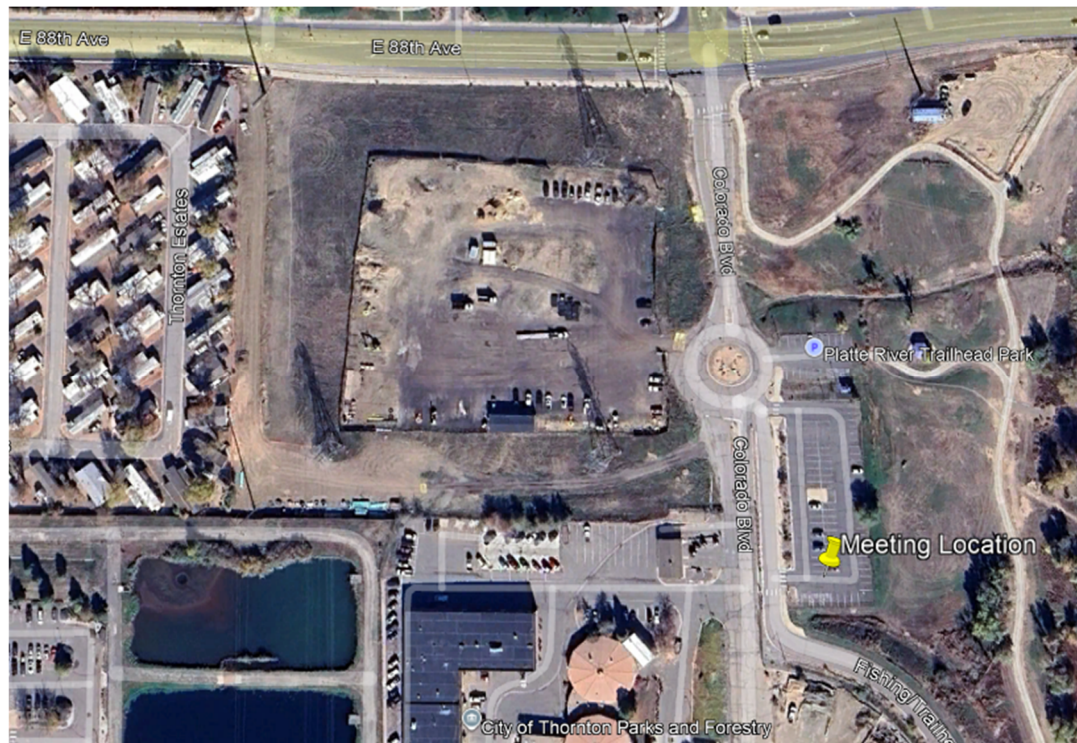
ADDENDUM NO. FOUR
THORNTON WATER PROJECT
SOURCE WATER PUMP STATION
PROJECT NO. 12-777XP
CITY OF THORNTON, CO

TO: Prospective Bidders and all others concerned

DATE: July 16, 2026

PURPOSE: To provide additional information and clarification to the solicitation documents for the above-referenced Project.

1. The following shall Add to, Modify, and/or Delete portions of the Project Manual and Drawings for the Project-noted above.
 - A. An optional Pre-Bid Site Walk will be offered at the **City of Thornton Chemical Building Site at 11:00 a.m., Tuesday, July 21, 2026**. All Prospective Bidders who *also attended the mandatory* Pre-Bid Conference on June 18th are encouraged to attend. Proper PPE is required. A map to the location is here:



- B. The Source Water Pump Station Drawings shall be modified as follows:
1. The following drawings are deleted in their entirety and replaced with the revised drawings: 30S09, 30E15, 30E19, 30N32: (under separate cover).
- C. The Source Water Pump Station Technical Specifications shall be modified as follows:
1. Section 01_11_00 - Summary of Work:
 - a. DELETE paragraph 1.06.D.1.c in its entirety and replace with the following paragraph:

“c. QED

 - 1) Transformers (Tag Nos. XFMR-SW1 and XFMR-PP1):
 - a) Siemens Custom Unit
 - 2) Switchgear (Tag Nos. SWGR-UT1 and SWGR-SW):
 - a) Siemens Model No. GM-SG Series
 - 3) Switchboard (Tag No. SWBD-SW):
 - a) Siemens Model No. 3VA65-HMAE
 - 4) Lighting Panel (Tag No. LP-SW):
 - a) Siemens Model No. P1C42Q4225CTST
 - 5) Power Panel (Tag No. PP-SW):
 - a) Siemens Model No. P1E66VB250CTST
 - 6) Estimated Delivery December 2, 2027.”
 2. Section 01_32_21 - Schedules and Reports:
 - a. DELETE paragraph 1.03.B in its entirety.
 - b. DELETE paragraph 1.05.L in its entirety.
 - c. DELETE paragraph 1.05.M in its entirety.
 3. Section 09_96_01 - High-Performance Coatings:
 - a. DELETE paragraph 1.02.B.7.f in its entirety.
 - b. DELETE paragraph 1.04.A.13.b.1)b) in its entirety and replace with the following paragraph:

“b) Coating manufacturer certification required.”
 4. Section 09_99_97 - Steel Pipeline Coatings:
 - a. DELETE paragraph 1.02.D.2 in its entirety.
 - b. DELETE paragraph 1.03.D.2 in its entirety and replace with the following paragraph:

“2. Polyurethane field repair: Coating manufacturer certification required.”
 5. Section 26_06_01 - Conduit Schedule:
 - a. REPLACE section in its entirety with the attached section.

6. Section 40_05_19.01 - Ductile Iron Pipe: AWWA C151:
 - a. DELETE paragraph 1.03.C.2 in its entirety and replace with the following paragraph:

“2. Plural component epoxy and plural component polyurethane field repair: Coating manufacturer certification required.”
7. Section 40_05_24.01 - Steel Pipe: Exposed:
 - a. DELETE paragraph 1.03.H.3 in its entirety and replace with the following paragraph:

“3. Plural component epoxy field repair: Coating manufacturer certification required.”
8. Section 40_05_57.65 - Hydraulic Cylinder Actuators:
 - a. DELETE paragraph 2.05.E in its entirety.
 - b. DELETE paragraph 2.05.G in its entirety.
9. Section 40_05_67.37 - Pressure Control Valves:
 - a. ADD the following paragraph:

2.02 PRESSURE RELIEF/SUSTAINING CONTROL VALVE

- i. Function and operation:
 1. The Pressure Relief/Sustaining Control Valve shall maintain a constant upstream pressure by bypassing or relieving excess pressure and shall maintain close pressure limits without causing surges. Valve will remain closed until the upstream pressure exceeds a pre-determined set point. Valve will be fast opening and modulate to limit the upstream pressure to a pre-determined set point. If upstream pressure decreases below the pilot spring setting, the valve shall close. Valve will be slow closing to prevent surges. The valve will also be equipped with anti-cavitation trim to help mitigate damage caused by cavitation.
- ii. Pilot control system:
 1. The pressure relief/sustaining pilot shall be a direct-acting, adjustable, spring-loaded, diaphragm valve designed to permit flow when controlling pressure exceeds the adjustable spring setting. The pressure relief pilot control is normally held closed by the force of the compression in the spring above the diaphragm and it opens when the pressure acting on the underside of the diaphragm exceeds the spring setting. The pilot control system shall include a strainer and an adjustable closing speed. The pilot control system shall include all required control accessories, equipment, control tubing, pressure gauges (with bleed valves), visual position indicator, and fittings. Pressure relief pilot control sensing shall be upstream of the pilot system strainer so accurate control may be

maintained if the strainer is partially blocked. A full range of spring settings shall be available in ranges from 0 to 250 psi. Pilot to be manufactured by control valve manufacture.

iii. Material specification:

1. Main valve body:

- a. Body and Cover: Ductile Iron-ASTM A536.
- b. Main Valve Trim: Stainless Steel Anti-Cavitation Trim.
- c. Disc Retainer: Cast Iron.
- d. Diaphragm Washer: Cast Iron.
- e. Seat: Stainless Steel.
- f. Stem, Nut and Spring: Stainless Steel.
- g. Seal Disc: Buna-N® Rubber.
- h. Diaphragm: Nylon Reinforced Buna-N® Rubber.
- i. Internal Trim Parts: Stainless Steel: Bronze; Brass.
- j. End Detail: Flanged.
- k. Pressure Rating: Class 150 lb. (250 psi Max.).
- l. Temperature Range: Water to 180 degrees Fahrenheit.
- m. Any other wetted metallic parts: Stainless Steel, Bronze, Brass.
- n. Coating: Fusion Bonded Epoxy Coating (Interior and Exterior); ANSI / NSF 61 Approved / AWWA coating specifications C116-03.

2. Pilot control:

- a. Body and Cover: Cast Bronze ASTM B62.
- b. Pilot Trim: Brass and Stainless Steel 303.
- c. Rubber: Buna-N.
- d. Connections: FNPT.
- e. Pressure Rating: 250 psi Max.
- f. Temperature Range: Water to 180 degrees Fahrenheit Max.
- g. Control Tubing: Stainless Steel.
- h. Control Fittings: Stainless Steel.

iv. Approved manufacturers:

- 1. Cla-Val: Model 650-90-KO.

10. Section 41_22_17 - Portable Davit Dranes, Table 1:

- a. DELETE the number "1,000" and REPLACE with the number "1,300."

D. The Source Water Pump Station Drawings shall be modified as follows:

- 1. The following drawings are deleted in their entirety and replaced with the revised drawings: 50C01, 50C03, 50S06: (under separate cover).

- 2. The attached Question and Response Log is provided for additional clarification to the Contract Documents.

3. This Addendum becomes part of the Contract Documents. All other conditions and requirements of the Contract Documents will remain unchanged. Receipt of this Addendum must be acknowledged in the space provided on the Bid Proposal Form in the Project Manual.

END OF ADDENDUM NO. FOUR

DocuSigned by:
Patrick Hinterberger
6DA8F281E4154C8...

Patrick Hinterberger
Contracts Supervisor

Thornton Water Project - Source Water Pump Station

Project No 12-777XP

City of Thornton, CO

Question and Response Log

Addendum No. 4

Item	Question	Response
1	1. The Chemical Building and PRV Vaults specification 01 11 00 1.04 B.5. states that the Owner has retained a Programmer and SCADA integrator. The Source Water Pump Station specifications do not contain 01 11 00 1.04 B.5. Is the Owner only providing programming and SCADA integration for the Chemical Building scope of work?	The Owner has retained a Programmer and SCADA integrator for both the SWPS and the Chemical Building. This was clarified in Addendum No. 3
2	On page 30 of 72 of Volume 5 of 7 Owner's Purchase Agreement can you please confirm that Items #3 and #4 are SWGR-SW and SWGR-UT1?	Correct: Item No. 3 Switchgear (Tag SWGR-SW) and Item No. 4 Switchgear (Tag SWGR-UT1)
3	Will the Engineer consider waiving the QP1 certification requirement for the paint contractor, provided the contractor has demonstrated experience performing similar coating work?	QP1 has been waived in lieu of coating manufacturer certifications in Addendum No. 4
4	As a value engineering opportunity, would the Owner consider waiving the requirement for a resource- and cost-loaded schedule? We believe the limited benefit may not justify the effort required and could divert focus from critical project activities.	Resource and cost loading has been removed from schedule requirements in Addendum No. 4
5	The pier detail on 30S09 states that the final top-of-bedrock elevation will be determined by the Contractor's geotechnical engineer. For the piers, please clarify what material or rock layer shall be considered the top of bedrock.	Bedrock will be determined by Owner's representative and is clarified in Addendum No. 4
6	The HPU spec references a control panel at the HPU which is typical and expected. It also lists a "Local Control Panel" in the cylinder specifications. I would like to ensure that the intent is to have control at the HPU LCP, and to have remote operation panels at each gate with the details laid out in the cylinder specification portion, 40_05_57.65.	Local control panels are not required and have been removed in Addendum No. 4
7	Also, in the cylinder specification it details control valves, but in the drawing its showing the isolation ball valves typical with cylinder plumbing, so I have to assume that portion is redundant and not intending to have additional valves quoted (which would be an odd and difficult design).	Control valves are not required and have been removed in Addendum No. 4
8	Last, also in the cylinder specification, the limit switches described do not clearly state if they are part of the gate assembly or if they are to be included in the cylinder. With my experience on these applications I recommend we discuss due to the issues with either option depending on the environment.	Limit switch configuration and mounting details will be finalized during the submittal review process to ensure compatibility with the specified operating conditions
9	1. Sht. 30S04, Keynote 5 states the minimum capacity of the davit crane is to be 1,300 lbs. Spec. section 41 22 17 - 2.02 indicates the maximum load is to be 1,000 lbs. Please clarify what the capacity of the davit crane is to be.	The spec has been updated to require 1,3090 lb capacity in Addendum No. 4
10	1. It appears that the following loads should be added to the panel schedule for Panel LP-DCSW on drawing 30E15: SWGR-SW CUBICLE 2D (52-T1), SWGR-SW CUBICLE 2F (52-T2), and SWGR-UT_1 CUBICLE 1 (52-U1 & RELAY) FUTURE. Is that correct?	Add SWGR-SW CUBICLE 2D (52-T1) and SWGR-SW CUBICLE 2F (52-T2) to the panelboard schedule. SWGR_UT1 Cubicle 1 is shown on circuits 18/20. A circuit can be reserved for future SWGR-UT2 Cubicle 1. This sheet has been updated and included in Addendum No. 4
11	2. Can you please supply the size of the batteries and charger for the 125V DC battery system? If these haven't been sized, can you provide the load required to operate the breakers for each cycle along with the length of time the operations each take?	The batteries and charger are to be sized by the Contractor based on equipment provided per section 26_33_01-1.04.D.
12	3. Can you provide an MCC spec for the Pump Station?	Low voltage MCCs are specified in section 26_24_20.
13	4. There are a few discrepancies between the Pump Station Vol 2 of 7 specifications 01 11 00 1.06 D.1.c and page 30 of 72 of Volume 5 of 7 Owner's Purchase Agreement regarding the Owner procured equipment. Can you please clarify the following?	See below
14	a. Specification 01 11 00 1.06 D.1.c. 3) lists SWGR-SW1 as owner supplied. I assume this should be SWGR-SW. Is that correct?	Correct. Summary of Work has been updated in Addendum No. 4
15	b. XFMR-SW1 is listed as owner supplied in the Owner's Purchase Agreement, but it is not on the list in specification 01 11 00 1.06 D.1.c. Is the owner supplying XFMR-SW1?	Correct. Summary of Work has been updated in Addendum No. 4
16	c. There is a second SWGR- on the Owner's Purchase Agreement which I assume is SWGR-UT1, but it is not shown in specification 01 11 00 1.06 D.1.c. Is the owner supplying SWGR-UT1?	Correct. Summary of Work has been updated in Addendum No. 4
17	What is the expected reservoir fill rate (ft per day) beginning March 31, 2027?	The fill rate of the WSSC #3 reservoir after March 31, 2027, is at the sole discretion of WSSC and cannot be determined or accurately estimated.
18	Per drawing 50C01, keynote 2 - Please clarify volume of material to be relocated and address or distance of relocation area. Provide detail of containers to be relocated.	The owner has cleared the site. This will be addressed in Addendum No. 4
19	Please verify whether access to Wes Brown WTP can be arranged to conduct a site walk.	We will have a site walk at the Wes Brown WTP for the area associated with the Chemical Building package on Tuesday 7/21 at 11am. The address is 8651 Colorado Blvd, Thornton, CO 80229
20	Per drawing 50C03, keynote 11 - What is the depth of the aggregate base coarse and depth of over-excavation?	This note has been clarified and is included in Addendum No. 4
21	Per drawing 50S06 - Drilled pier schedule shows top of bedrock at elevation 5,112 and bottom of slab at elev. 5,089. Please advise.	See revised drawing included in Addendum No. 4
22	Will the Chemical Building and PRV Vault work be administered separately from the Source Water Pump Station (e.g., separate pay applications, project schedules, progress meetings, and construction management trailer), or will all work be managed together?	The Chemical Building and PRV Vault work will be administered in conjunction with the SWPS including the aforementioned items.
23	What is the estimated volume of water to be contained within the pipeline prior to the start of commissioning?	There will only be small portions of water left in the pipe. Assume the pipe is empty at the start of commissioning and Contractor will need to fill the entire pipeline
24	Where is the water discharged during the required testing of the eight high-volume blowoff valves, and are there any restrictions or special requirements for managing or disposing of the discharge?	The water is discharged into the adjacent drainages for the 8 High Volume blowoffs. Any requirements must comply with CDPHE permitting.
25	Please confirm that the Contractor is not responsible for filling, flushing, treating, or otherwise participating in the commissioning of the pipeline between the WBWTP and the LCC PRV and Meter.	Section 01 75 17, <i>Commissioning</i> , states that the Contractor is required to "start-up the SWPS, the TWP Pipeline, and the TWP facilities described above." Based on this requirement, the TWP Pipeline is understood to include the pipeline between the West Brown Water Treatment Plant (WBWTP) and the LCC PRV and Meter. Accordingly, the Contractor is responsible for filling, flushing, treating, and participating in the commissioning of the pipeline between the WBWTP and the LCC PRV and Meter, except for those activities specifically identified as Owner responsibilities in the Contract Documents (e.g., operation of the East Gravel Lakes Pump Station and other Owner-operated facilities). The Contractor should review Section 01 75 17 and the associated commissioning requirements in conjunction with the identified Owner responsibilities. The Engineer will review and clarify the allocation of responsibilities, as necessary, through the bidding process.
26	Please confirm that a fire sprinkler system is not required at the Source Water Pump Station.	Confirmed. Per sheet 30A01, the pump station is divided into Fire Areas A & B, separated by a 3-hour rated fire wall to avoid the requirement for a fire suppression system.
27	Drawing 30S10, Detail 2 shows a 6ft thick, 24ft high wall. Please confirm that the wall may be placed in two 12ft high lifts, with a cold joint and waterstop between pours, while maintaining the full 6ft wall thickness.	An additional construction joint as described above and subject to the requirements of Section 03_30_00 is acceptable
28	Please confirm the anticipated construction duration for the project, including the expected Notice to Proceed date.	Notice of Award is anticipated within one week of bid due date and Notice to Proceed will immediately follow Contract execution, typically one month from bid date."

Item	Question	Response
29	Please confirm the scope of work to be provided by PVREA.	Construction Sequencing Phase 1 – Temporary Power Installation by PVREA •Install the primary conductor within the PVREA easement to the inflection point where the alignment turns due west. •Install a vault and temporary construction transformer at this location to provide construction power. Phase 2 – Permanent Power Extension After the SWPS contractor completes final grading and the equipment pad has been constructed, the contractor shall provide PVREA with a minimum of 60 days' notice to initiate permanent service installation. PVREA's work will include: •De-energizing the temporary transformer. •Splicing the primary conductor. •Installing a 6-inch conduit to the permanent meter location. •Installing a 4-inch conduit back to the temporary transformer location to re-energize temporary construction power until permanent facilities are operational. The SWPS contractor will: •Install conduit and conductors from the permanent meter to the permanent transformers located on the west side of the SWPS. Phase 3 – Removal of Temporary Service Once temporary construction power is no longer required: •The SWPS contractor will notify PVREA. •PVREA will remove the temporary transformer and temporary meter. •The temporary power feed will be disconnected and permanently capped by PVREA. Scheduling and Coordination Notification Requirements •The SWPS contractor shall provide PVREA with a minimum of 60 days' notice prior to: - oInstallation of permanent conduits, - oPermanent service cutover, and - oRe-energization of the temporary transformer.
30	Please confirm whether the 7,500 kVA Transformer (XFMR-SW1) will be Owner-furnished or Contractor-furnished.	Yes, this will be Owner Furnished. The first vendor submittal is included in Volume 8 issued with Addendum No. 3.
31	1	Requests for substitutions or additions to pre-approved manufacturers did not include the information required by the IFB and therefore have not been reviewed. Bidders are directed to General Conditions VII. Product Substitutions and "Or Equal" Clause for more information.
32	Please provide the shipping address for the Programmer's facility where the PLC and other instrumentation are to be delivered.	PLCs and instruments can stored at the system integrators facility.
33	Please provide an updated Sheet 30E19 to match the layout shown on Sheet 30E20.	Sheet 30E19 has been updated and is included in Addendum No. 4
34	Control wiring (#14 conductors) from the VFDs to the PLC is shown on the Pump P&IDs but is not shown on the Pump Station floor plan or conduit and wire schedule. Please confirm this wiring is required and revise the drawings accordingly.	Sheet 30E19 has been updated and is included in Addendum No. 4. 12-#14 conductors have been added between each VFD to the PCM cabinet. Routing will be similar to the analog signal conduit routing between the VFD and PCM cabinets.
35	Please identify the location of VCP-320, shown on Sheet 30N24, on the floor plan.	See Sheet 30M01, equipment tag 11
36	Please confirm that all items shown on Sheet 30N32 are vendor supplied.	Confirmed, all items are vendor supplies
37	Please provide an updated Surge Tank P&ID (Sheet 30N32) with equipment tags that match the floor plan (Sheet 30E25) and the conduit and wire schedule.	Sheet 30N32 has been updated and is included in Addendum No. 4
38	Specification Section 40 61 00, Paragraph 1.01.A.2 references loop drawings. Please confirm whether the System Integrator is responsible for providing all loop drawings, including those associated with vendor packages.	The system integrator is responsible for preparing all loop diagrams and coordinating with vendors to ensure a seamless integration.
39	1. The HPU is intended to operate the (2) existing Hydro Gate Sluice Gates (GAT-340, 341) and (1) new Knife Gate Valve (VAL-320). Please confirm.	Yes, the HPU is intended to operate the two existing Hydro Gate sluice gates (GAT-340 and GAT-341) and the new knife gate valve (VAL-320). The HPU shall be sized to operate one gate/valve at a time; simultaneous operation is not required.
40	a. Should the accumulators be sized to move one gate and the KGV? Or have the volume to move all three in the event of power loss? Please clarify.	Per Specification Section 40_05_57.43 Part 2.02.E.2, the accumulators shall be sized to either one 54" knife gate valve or one 54" gate, whichever is larger.
41	2. Section 40 05 62 Plug Valves – Is Pratt or Milliken an acceptable manufacturer? Please name if acceptable.	Requests for substitutions or additions to pre-approved manufacturers did not include the information required by the IFB and therefore have not been reviewed. Bidders are directed to General Conditions VII. Product Substitutions and "Or Equal" Clause for more information.
42	3. Section 40 05 65.24 – 2.02 – Check Valves – Is Pratt an acceptable manufacturer for the tilting disc check valves? Please name if acceptable.	Requests for substitutions or additions to pre-approved manufacturers did not include the information required by the IFB and therefore have not been reviewed. Bidders are directed to General Conditions VII. Product Substitutions and "Or Equal" Clause for more information.
43	4. Section 40 05 67.40 – 2.01 & 2.03 – Air and Vacuum Relief Valves – Is Pratt an acceptable manufacturer? Please name if acceptable.	Requests for substitutions or additions to pre-approved manufacturers did not include the information required by the IFB and therefore have not been reviewed. Bidders are directed to General Conditions VII. Product Substitutions and "Or Equal" Clause for more information.
44	5. Confirm spec section for PSV-315 (16" pressure sustaining valve on pump discharge). Section 40_05_67.37 as written only covers ≤2.5" PRVs (Watts/Zurn Wilkins). The 16" PSV likely has its own spec section or is covered by a hydraulic control valve section. Please add or identify the controlling specification for this valve. Singer Valve can supply this type of valve. If Singer is an acceptable manufacturer for the pressure sustaining valve, please name.	The SAV has been added to 40_05_67.37 in Addendum No. 4
45	6. Please confirm that the sleeve valves referenced in Section 40 61 16.10 are EXISTING. Section 40 05 54 that is referenced in Addendum 1 does not exist in the specifications. If new sleeve valves are required, please include the specification, and consider naming Pratt as an acceptable manufacturer. Henry Pratt has an extensive history of sleeve valve installations.	These sleeve valves are included in the Chemical Building and PRV Vault bid documents.
46	7. Section 40 05 65.01 – (Knife) Gate Valves - Is Wey Valve an acceptable manufacturer? Please name if acceptable. Wey is a high-end, rigorous service type knife gate valve. US made, highly engineered. I have attached some marketing material as well as provided a link to their website: Wey Valve - The trusted original since 1956	Requests for substitutions or additions to pre-approved manufacturers did not include the information required by the IFB and therefore have not been reviewed. Bidders are directed to General Conditions VII. Product Substitutions and "Or Equal" Clause for more information.
47	8. Section 40 05 57.43 - Hydraulic Power Supply Systems – Is Circle Bar Enterprises (CBE), LLC an acceptable manufacturer for the HPU? Please name if acceptable. CBE is a well-known HPU supplier, installer, and integrator in the region with several successful installations. Please see the attached letters of recommendations. Southwest Valve also highly recommends their knowledge and service based on current orders that are in process with them.	Requests for substitutions or additions to pre-approved manufacturers did not include the information required by the IFB and therefore have not been reviewed. Bidders are directed to General Conditions VII. Product Substitutions and "Or Equal" Clause for more information.
48	1. In regards to 40_05_57.65 2.05 E & G: (From Hydraquip)	See below
49	a. Does the owner want remote control panels for each gate as described in the cylinder spec? Or just the controls at the main panel?	Local control panels are not required and have been removed in Addendum No. 4
50	b. Does the owner want remote valves as described in the cylinder spec? Hydraquip does not recommend anything but the isolation system flush ball valves shown in the drawings.	Control valves are not required and have been removed in Addendum No. 4

Item	Question	Response
51	2. Regarding the HPU:	See below
52	a. Specifications refer to PO Check valve(s) to hold the load. Counterbalance valve(s) are recommended in lieu of PO Check valves. Less prone to failure.	This will be evaluated during submittal review
53	b. 40_05_57-43-8, 2.11-A, HPU Plumbing. Are Swagelok/Brennan Stainless Steel fittings acceptable in lieu of O-ring face seal fittings on the onboard HPU plumbing	This will be evaluated during submittal review
54	3. Electrical Clarifications:	See below
55	a. Will the remote signals be discrete signals such as relays and 4-20mA, or will Modbus registers available in the PLC be acceptable?	All remote signals shall be hardwired including discrete and 4-20mA signals.
56	b. Will the control panel need to be NEMA 12, 3R, 4 or 4X?	Sheet 30N05 equipment schedule specifies NEMA 12.

Replace Entire Section

SECTION 26_06_01^{AD4}

CONDUIT SCHEDULE AREA 30

PART 1 GENERAL

1.01 SUMMARY

- A. Conduit requirements:
 - 1. As defined in Section 26_05_00 and Section 26_05_33.
- B. Cable requirements and definitions:
 - 1. As defined in Section 26_05_00 and Section 26_05_18.
 - 2. 2/CS#16: 2 conductor, 16 gauge, twisted shielded pair.
 - 3. 3/CS#16: 3 conductor, 16 gauge, twisted shielded triplet.
 - 4. */FO: Fiber optic (* indicates strand count).
 - 5. CAT6: Category 6 Ethernet cable.
 - 6. MFR: Manufacturer or vendor furnished cable.
 - 7. PULL: Pull Rope.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

3.01 CONDUIT SCHEDULE

- A. Conduit Schedule is presented on the following pages.

CONDUIT SCHEDULE AREA

THORNTON SOURCE WATER
SOURCE WATER PUMP STATION

ENGINEER JD
REVISION
DATE 7/16/26

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
L-10-700	30E19	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: FACP-SW TO: LP-SW 2 #12 >> FACP-SW POWER	
C-30-003	30E19	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: ZSOC-302 TO: CONDUIT TEE 4 #14 >> ZSOC-302 CONTROL	C-30-020
C-30-004	30E19	0.75"	10	#14	XHHW-2	1	#14	XHHW-2	FR: FCV-302 TO: CONDUIT TEE 10 #14 >> FCV-302 CONTROL	C-30-014
C-30-005	30E19	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: ZSOC-303 TO: CONDUIT TEE 4 #14 >> ZSOC-303 CONTROL	C-30-013
C-30-006	30E19	0.75"	10	#14	XHHW-2	1	#14	XHHW-2	FR: FCV-303 TO: CONDUIT TEE 10 #14 >> FCV-303 CONTROL	C-30-013
C-30-007	30E19	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: PSH-305 TO: CONDUIT TEE 2 #14 >> PSH-305 CONTROL	C-30-016
C-30-008	30E19	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: PSH-306 TO: CONDUIT TEE 2 #14 >> PSH-306 CONTROL	C-30-018
C-30-009	30E19	1"	12	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: J-BOX 4 #14 >> ZSOC-306 CONTROL 2 #14 >> PSH-305 CONTROL 4 #14 >> ZSOC-305 CONTROL 2 #14 >> PSH-306 CONTROL	C-30-027 C-30-018 C-30-018 C-30-016 C-30-016
C-30-010	30E19	0.75"	2	#12	XHHW-2				FR: FIT-311 TO: CONDUIT TEE 2 #12 >> FIT-311 CONTROL	C-30-019
C-30-011	30E19	0.75"	2	#12	XHHW-2				FR: FIT-300 TO: CONDUIT TEE 2 #12 >> FIT-300 CONTROL	C-30-019
C-30-012	30E19	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: PSH-310 TO: CONDUIT TEE 2 #14 >> PSH-310 CONTROL	C-30-027
C-30-013	30E19	1"	14	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: CONDUIT TEE 10 #14 >> FCV-303 CONTROL 4 #14 >> ZSOC-303 CONTROL	C-30-014 C-30-006 C-30-005
C-30-014	30E19	1.5"	24	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: CONDUIT TEE 10 #14 >> FCV-303 CONTROL 4 #14 >> ZSOC-303 CONTROL 10 #14 >> FCV-302 CONTROL	C-30-020 C-30-013 C-30-013 C-30-004
C-30-015	30E19	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: ZSOC-305 TO: CONDUIT TEE 4 #14 >> ZSOC-305 CONTROL	C-30-016
C-30-016	30E19	0.75"	6	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: CONDUIT TEE 4 #14 >> ZSOC-305 CONTROL 2 #14 >> PSH-309 CONTROL	C-30-009 C-30-015 C-30-007
C-30-017	30E19	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: ZSOC-306 TO: CONDUIT TEE 4 #14 >> ZSOC-306 CONTROL	C-30-018
C-30-018	30E19	0.75"	6	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: CONDUIT TEE 4 #14 >> ZSOC-306 CONTROL 2 #14 >> PSH-306 CONTROL	C-30-009 C-30-017 C-30-008
C-30-019	30E19	0.75"	4	#12	XHHW-2	1	#12	XHHW-2	FR: CONDUIT TEE TO: J-BOX 2 #12 >> FIT-311 CONTROL 2 #12 >> FIT-300 CONTROL	C-30-028 C-30-010 C-30-011

CONDUIT SCHEDULE AREA									ENGINEER	JD
THORNTON SOURCE WATER									REVISION	
SOURCE WATER PUMP STATION									DATE	7/16/26
CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
C-30-020	30E19	1.5"	28	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: J-BOX 10 #14 >> FCV-303 CONTROL 4 #14 >> ZSOC-303 CONTROL 10 #14 >> FCV-302 CONTROL 4 #14 >> ZSOC-302 CONTROL	C-30-050 C-30-014 C-30-014 C-30-014 C-30-003
C-30-021	30E19	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: LSL-301 TO: J-BOX 2 #14 >> LSL-301 CONTROL	C-30-050
C-30-022	30E19	1"	10 2	#14 PULL	XHHW-2 ROPE	1	#14	XHHW-2	FR: LSL-301 TO: J-BOX 2 #14 >> LSL-301 CONTROL 2 #14 >> VFD-302 LSL-301 FLOAT CONTROL 2 #14 >> VFD-303 LSL-301 FLOAT CONTROL 1 PULL >> VFD-304 LSL-301 FLOAT CONTROL (FUTUR 2 #14 >> VFD-305 LSL-301 FLOAT CONTROL 2 #14 >> VFD-306 LSL-301 FLOAT CONTROL 1 PULL >> VFD-301 LSL-301 FLOAT CONTROL (FUTUR	C-30-050
C-30-025	30E19	1.5"	20	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: J-BOX 10 #14 >> FV-310 CONTROL 10 #14 >> FV-311 CONTROL	C-30-040 C-30-030 C-30-026
C-30-026	30E19	0.75"	10	#14	XHHW-2	1	#14	XHHW-2	FR: FV-311 TO: CONDUIT TEE 10 #14 >> FV-311 CONTROL	C-30-025
C-30-027	30E19	1"	14	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: CONDUIT TEE 4 #14 >> ZSOC-306 CONTROL 2 #14 >> PSH-305 CONTROL 4 #14 >> ZSOC-305 CONTROL 2 #14 >> PSH-306 CONTROL 2 #14 >> PSH-306 CONTROL	C-30-028 C-30-009 C-30-009 C-30-009 C-30-009 C-30-012
C-30-028	30E19	1"	4 14	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: CONDUIT TEE TO: J-BOX 4 #14 >> ZSOC-306 CONTROL 2 #14 >> PSH-305 CONTROL 4 #14 >> ZSOC-305 CONTROL 2 #14 >> PSH-306 CONTROL 2 #14 >> PSH-306 CONTROL 2 #14 >> PSH-310 CONTROL 2 #12 >> FIT-311 CONTROL 2 #12 >> FIT-300 CONTROL	C-30-040 C-30-027 C-30-027 C-30-027 C-30-027 C-30-027 C-30-019 C-30-019
C-30-029	30E19	0.75"	6	#14	XHHW-2	1	#14	XHHW-2	FR: LCP-311 TO: FV-311 6 #14 >> LCP-311 CONTROL	
C-30-030	30E19	0.75"	10	#14	XHHW-2	1	#14	XHHW-2	FR: FV-310 TO: CONDUIT TEE 10 #14 >> FV-310 CONTROL	C-30-025
C-30-040	30E19	2.5"	99	#14	XHHW-2	1	#14	XHHW-2	FR: J-BOX TO: PCM-SW 4 #14 >> ZSOC-306 CONTROL 2 #14 >> PSH-305 CONTROL 4 #14 >> ZSOC-305 CONTROL 2 #14 >> PSH-306 CONTROL 2 #14 >> PSH-310 CONTROL 2 #14 >> FIT-311 CONTROL 2 #14 >> FIT-300 CONTROL 10 #14 >> FV-310 CONTROL 10 #14 >> FV-311 CONTROL 10 #14 >> FCV-303 CONTROL 4 #14 >> ZSOC-303 CONTROL 10 #14 >> FCV-302 CONTROL 2 #14 >> AIT-341 CONTROL 2 #14 >> AIT-342 CONTROL 2 #14 >> AIT-343 CONTROL 2 #14 >> LSL-301 CONTROL 2 #14 >> LSL-301 CONTROL 4 #14 >> ZSOC-302 CONTROL 10 #14 >> FV-310 CONTROL 10 #14 >> FV-311 CONTROL 2 #14 >> FCG-341 CONTROL 1 #14 >> FCG-340 CONTROL	C-30-028 C-30-028 C-30-028 C-30-028 C-30-028 C-30-028 C-30-028 C-30-025 C-30-025 C-30-050 C-30-050 C-30-050 C-30-050 C-30-050 C-30-050 C-30-050 C-30-050 C-30-050 C-30-050 C-30-025 C-30-025 C-30-600 C-30-600

CONDUIT SCHEDULE AREA

THORNTON SOURCE WATER
SOURCE WATER PUMP STATION

ENGINEER JD
REVISION
DATE 7/16/26

CONDUIT			CONDUCTORS			GROUND			DESCRIPTION	CONNECTING SEGMENTS
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE		
C-30-050	30E19	1.5"	41	#14	XHHW-2	1	#14	XHHW-2	FR: J-BOX TO: J-BOX 10 #14 >> FCV-303 CONTROL 4 #14 >> ZSOC-303 CONTROL 10 #14 >> FCV-302 CONTROL 2 #14 >> AIT-341 CONTROL 2 #14 >> AIT-342 CONTROL 2 #14 >> AIT-343 CONTROL 2 #14 >> LSL-301 CONTROL 2 #14 >> LSL-301 CONTROL 4 #14 >> ZSOC-302 CONTROL 2 #14 >> FCG-341 CONTROL 1 #14 >> FCG-340 CONTROL	C-30-040 C-30-020 C-30-020 C-30-020 C-30-270 C-30-271 C-30-272 C-30-021 C-30-020 C-30-599 C-30-599
C-30-070	30E19	1"	16	#14	XHHW-2	1	#14	XHHW-2	FR: SW-NR-01 TO: PCM-SW 16 #14 >> SW-NR-01 CONTROL	
C-30-077	30E19	2"	80	#14	XHHW-2	1	#14	XHHW-2	FR: SWGR-SW BKR CONTROL PNL TO: SWGR-SW 68 #14 >> SWGR-SW BKR CONTROL PNL CONTRC 12 #14 >> SPARE	
C-30-078	30E19	2"	80	#14	XHHW-2	1	#14	XHHW-2	FR: SWGR-SW BKR CONTROL PNL TO: SWGR-SW 68 #14 >> SWGR-SW BKR CONTROL PNL CONTRC 12 #14 >> SPARE	
C-30-090	30E19	1.5"	10	#8	XHHW-2	1	#10	XHHW-2	FR: SWGR-SW TO: LP-DCSW 2 #8 >> SWGR-SW CUBICLE 2A (52-M1 & RELAY 2 #8 >> SWGR-SW CUBICLE 1B (52-M1 & RELAY 2 #8 >> SWGR-SW CUBICLE 2B (52-M1 & RELAY 2 #8 >> SWGR-SW CUBICLE 1C (52-M1 & RELAY 2 #8 >> SWGR-SW CUBICLE 2C (52-M1 & RELAY	
C-30-095	30E19	1.5"	10	#8	XHHW-2	1	#10	XHHW-2	FR: SWGR-SW TO: LP-DCSW 2 #8 >> SWGR-SW CUBICLE 1G (52-21 & RELAY 2 #8 >> SWGR-SW CUBICLE 2G (52-22 & RELAY 2 #8 >> SWGR-SW CUBICLE 1H (52-23 & RELAY 2 #8 >> SWGR-SW CUBICLE 2H (52-24 & RELAY 2 #8 >> SWGR-SW CUBICLE 2J (52-M2 & RELAY	
C-30-105	30E20	1"	1	PULL	ROPE				FR: FUTURE PMP-301 TO: FUTURE VFD-301 1 PULL >> SPARE	
C-30-131	30E19	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: LCP-302 TO: JBOX 2 #14 >> LCP-302 CONTROL	C-30-135
C-30-132	30E19	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: FSL-302 TO: JBOX 4 #14 >> FSL-302 CONTROL	C-30-135
C-30-133	30E19	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: PMP-302 TO: JBOX 2 #12 >> MWH-302 CONTROL	C-30-135
C-30-135	30E19 30E20	1"	2 6	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: JBOX TO: VFD-302 2 #14 >> LCP-302 CONTROL 4 #14 >> FSL-302 CONTROL 2 #12 >> MWH-302 POWER	C-30-131 C-30-132 C-30-133
C-30-161	30E19	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: LCP-303 TO: JBOX 2 #14 >> LCP-303 CONTROL	C-30-165
C-30-162	30E19	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: FSL-303 TO: JBOX 4 #14 >> FSL-303 CONTROL	C-30-165
C-30-163	30E19	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: PMP-303 TO: JBOX 2 #12 >> MWH-303 POWER	C-30-165
C-30-165	30E19 30E20	1"	2 6	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: JBOX TO: VFD-303 2 #14 >> LCP-303 CONTROL 4 #14 >> FSL-303 CONTROL 2 #12 >> MWH-303 POWER	C-30-161 C-30-162 C-30-163

CONDUIT SCHEDULE AREA

THORNTON SOURCE WATER

SOURCE WATER PUMP STATION

ENGINEER

JD

REVISION

DATE

7/16/26

CONDUIT			CONDUCTORS			GROUND			DESCRIPTION	CONNECTING SEGMENTS
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE		
C-30-205	30E20	1"	1	PULL	ROPE				FR: FUTURE PMP-304 TO: FUTURE VFD-304 1 PULL >> SPARE	
C-30-231	30E19	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: LCP-305 TO: JBOX 2 #14 >> LCP-305 CONTROLS	C-30-235
C-30-232	30E19	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: FSL-305 TO: JBOX 4 #14 >> FSL-305 CONTROL	C-30-235
C-30-233	30E19	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: PMP-305 TO: JBOX 2 #12 >> MWH-305 POWER	C-30-235
C-30-235	30E19 30E20	1"	2 6	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: JBOX TO: VFD-305 2 #14 >> LCP-308 CONTROLS 4 #14 >> FSL-308 CONTROL 2 #12 >> MWH-308 POWER	C-30-231 C-30-232 C-30-233
C-30-261	30E19	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: LCP-306 TO: JBOX 2 #14 >> LCP-306 CONTROL	C-30-265
C-30-262	30E19	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: FSL-306 TO: JBOX 4 #14 >> FSL-306 CONTROL	C-30-265
C-30-263	30E19	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: PMP-306 TO: JBOX 2 #12 >> MWH-306 POWER	C-30-265
C-30-265	30E19 30E20	1"	2 6	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: JBOX TO: VFD-306 2 #14 >> LCP-306 CONTROL 4 #14 >> FSL-306 CONTROL 2 #12 >> MWH-306 POWER	C-30-261 C-30-262 C-30-263
C-30-270	30E19	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: AIT-341 TO: J-BOX 2 #14 >> AIT-341 CONTROL	C-30-050
C-30-271	30E19	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: AIT-342 TO: J-BOX 2 #14 >> AIT-342 CONTROL	C-30-050
C-30-272	30E19	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: AIT-343 TO: J-BOX 2 #14 >> AIT-343 CONTROL	C-30-050
C-30-350	30E19	1"	16	#14	XHHW-2	1	#14	XHHW-2	FR: FACP-SW TO: SW-NR-01 16 #14 >> FACP-SW CONTROL	
C-30-400	30E23	0.75"	1	PULL	ROPE				FR: JBOX TO: JBOX 1 PULL >> SECURITY CABLE	
C-30-401	30E23	0.75"	1	PULL	ROPE				FR: JBOX TO: JBOX 1 PULL >> SECURITY CABLE	
C-30-402	30E23	0.75"	1	PULL	ROPE				FR: J-BOX TO: ACP-SW 1 PULL >> SECURITY CABLE	
C-30-403	30E23	0.75"	1	PULL	ROPE				FR: JBOX TO: JBOX 1 PULL >> SECURITY CABLE	
C-30-404	30E23	1"	1	PULL	ROPE				FR: JBOX TO: ACP-SW 1 PULL >> SECURITY CABLE	
C-30-405	30E23	0.75"	1	PULL	ROPE				FR: JBOX TO: JBOX 1 PULL >> SECURITY CABLE	
C-30-406	30E23	1"	1	PULL	ROPE				FR: JBOX TO: ACP-SW 1 PULL >> SECURITY CABLE	

CONDUIT SCHEDULE AREA

THORNTON SOURCE WATER

SOURCE WATER PUMP STATION

ENGINEER

JD

REVISION

DATE

7/16/26

CONDUIT			CONDUCTORS			GROUND			DESCRIPTION	CONNECTING SEGMENTS
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE		
C-30-407	30E23	0.75"	1	PULL	ROPE				FR: JBOX TO: JBOX 1 PULL >> SECURITY CABLE	
C-30-408	30E23	0.75"	1	PULL	ROPE				FR: JBOX TO: JBOX 1 PULL >> SECURITY CABLE	
C-30-409	30E24	0.75"	1	MFR	CABLE	1	#14	XHHW-2	FR: AHU-305 TO: HP-301 1 MFR >> ACU-305 CONTROL AND POWER	
C-30-410	30E24	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: AHU-305 TO: AHU-305 THERMOSTAT 4 #14 >> AHU-305 CONTROL	
C-30-411	30E24	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: AHU-305 THERMOSTAT TO: DDC-SW 4 #14 >> AHU-305 THERMOSTAT CONTROL	
C-30-421	30E24	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: SF-301 THERMOSTAT TO: J-BOX 4 #14 >> SF-301 THERMOSTAT CONTROL	C-30-435
C-30-422	30E24	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: XS-1 TO: J-BOX 4 #14 >> XS-1 CONTROL	C-30-435
C-30-423	30E24	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: XS-2 TO: J-BOX 4 #14 >> XS-2 CONTROL	C-30-433
C-30-424	30E24	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: SF-302 THERMOSTAT TO: J-BOX 4 #14 >> SF-302 THERMOSTAT CONTROL	C-30-433
C-30-425	30E24	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: SF-303 THERMOSTAT TO: J-BOX 4 #14 >> SF-303 THERMOSTAT CONTROL	C-30-431
C-30-426	30E24	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: XS-3 TO: J-BOX 4 #14 >> XS-3 CONTROL	C-30-431
C-30-428	30E24	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: SF-304 THERMOSTAT TO: J-BOX 4 #14 >> SF-304 THERMOSTAT CONTROL	C-30-430
C-30-429	30E24	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: XS-4 TO: J-BOX 4 #14 >> XS-4 CONTROL	C-30-430
C-30-430	30E24	0.75"	8	#14	XHHW-2	1	#14	XHHW-2	FR: J-BOX TO: CONDUIT TEE 4 #14 >> SF-304 THERMOSTAT CONTROL 4 #14 >> XS-4 CONTROL	C-30-432 C-30-428 C-30-429
C-30-431	30E24	0.75"	8	#14	XHHW-2	1	#14	XHHW-2	FR: J-BOX TO: CONDUIT TEE 4 #14 >> SF-303 THERMOSTAT CONTROL 4 #14 >> XS-3 CONTROL	C-30-432 C-30-425 C-30-426
C-30-432	30E24	1"	16	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: CONDUIT TEE 4 #14 >> SF-303 THERMOSTAT CONTROL 4 #14 >> XS-3 CONTROL 4 #14 >> SF-304 THERMOSTAT CONTROL 4 #14 >> XS-4 CONTROL	C-30-434 C-30-431 C-30-431 C-30-430 C-30-430
C-30-433	30E24	0.75"	8	#14	XHHW-2	1	#14	XHHW-2	FR: J-BOX TO: CONDUIT TEE 4 #14 >> SF-302 THERMOSTAT CONTROL 4 #14 >> XS-2 CONTROL	C-30-434 C-30-424 C-30-423
C-30-434	30E24	1.5"	24	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: CONDUIT TEE 4 #14 >> SF-303 THERMOSTAT CONTROL 4 #14 >> XS-3 CONTROL 4 #14 >> SF-304 THERMOSTAT CONTROL 4 #14 >> XS-4 CONTROL 4 #14 >> SF-302 THERMOSTAT CONTROL 4 #14 >> XS-2 CONTROL	C-30-436 C-30-432 C-30-432 C-30-432 C-30-432 C-30-433 C-30-433

CONDUIT SCHEDULE AREA

THORNTON SOURCE WATER

SOURCE WATER PUMP STATION

ENGINEER

JD

REVISION

DATE

7/16/26

CONDUIT			CONDUCTORS			GROUND			DESCRIPTION	CONNECTING SEGMENTS
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE		
C-30-435	30E24	0.75"	8	#14	XHHW-2	1	#14	XHHW-2	FR: J-BOX TO: CONDUIT TEE 4 #14 >> XS-1 CONTROL 4 #14 >> SF-301 THERMOSTAT CONTROL	C-30-436 C-30-422 C-30-421
C-30-436	30E24	1.5"	32	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: J-BOX 4 #14 >> XS-1 CONTROL 4 #14 >> SF-301 THERMOSTAT CONTROL 4 #14 >> SF-303 THERMOSTAT CONTROL 4 #14 >> XS-3 CONTROL 4 #14 >> SF-304 THERMOSTAT CONTROL 4 #14 >> XS-4 CONTROL 4 #14 >> SF-302 THERMOSTAT CONTROL 4 #14 >> XS-2 CONTROL	C-30-437 C-30-435 C-30-435 C-30-434 C-30-434 C-30-434 C-30-434 C-30-434 C-30-434
C-30-437	30E24	1.5"	32	#14	XHHW-2	1	#14	XHHW-2	FR: J-BOX TO: MCC-SW 4 #14 >> XS-1 CONTROL 4 #14 >> SF-301 THERMOSTAT CONTROL 4 #14 >> SF-303 THERMOSTAT CONTROL 4 #14 >> XS-3 CONTROL 4 #14 >> SF-304 THERMOSTAT CONTROL 4 #14 >> XS-4 CONTROL 4 #14 >> SF-302 THERMOSTAT CONTROL 4 #14 >> XS-2 CONTROL	C-30-436 C-30-436 C-30-436 C-30-436 C-30-436 C-30-436 C-30-436 C-30-436
C-30-447	30E24	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: DDC-SW TO: PCM-SW 2 #12 >> DDC-SW 120 VAC POWER	
C-30-448	30E24	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: ACP-SW TO: PCM-SW 2 #12 >> ACP-SW 120 VAC POWER	
C-30-450	30E24	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: AHU-302 TO: AHU-302 THERMOSTAT 4 #14 >> AHU-302 CONTROL	
C-30-451	30E24	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: HTR-304 THERMOSTAT TO: HTR-304 4 #14 >> HTR-304 THERMOSTAT CONTROL	
C-30-460	30E24	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: AHU-301 TO: AHU-301 THERMOSTAT 4 #14 >> AHU-301 CONTROL	
C-30-461	30E24	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: HTR-303 THERMOSTAT TO: HTR-303 4 #14 >> HTR-303 THERMOSTAT CONTROL	
C-30-462	30E24	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: AHU-301 THERMOSTAT TO: CONDUIT TEE 4 #14 >> AHU-301 THERMOSTAT CONTROL	C-30-464
C-30-463	30E24	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: AHU-302 THERMOSTAT TO: CONDUIT TEE 4 #14 >> AHU-302 THERMOSTAT CONTROL	C-30-464
C-30-464	30E24	0.75"	8	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: DDC-SW 4 #14 >> AHU-301 THERMOSTAT CONTROL 4 #14 >> AHU-302 THERMOSTAT CONTROL	C-30-462 C-30-463
C-30-470	30E24	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: AHU-302 TO: CU-302 4 #14 >> AHU-302 CONTROL	
C-30-471	30E24	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: HTR-302 DISCONNECT TO: HTR-302 4 #14 >> HTR-302 DISCONNECT CONTROL	
C-30-480	30E24	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: AHU-301 TO: CU-301 4 #14 >> AHU-301 CONTROL	
C-30-481	30E24	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: HTR-301 THERMOSTAT TO: HTR-301 4 #14 >> HTR-301 THERMOSTAT CONTROL	
C-30-495	30E24	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: HTR-306 THERMOSTAT TO: HTR-306 4 #14 >> HTR-306 THERMOSTAT CONTROL	

CONDUIT SCHEDULE AREA

THORNTON SOURCE WATER

SOURCE WATER PUMP STATION

ENGINEER

JD

REVISION

DATE

7/16/26

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
C-30-497	30E24	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: HTR-305 THERMOSTAT TO: HTR-305 4 #14 >> HTR-305 THERMOSTAT CONTROL	
C-30-505	30E02 30E15 30E20 30E20	2"	2 12	#8 #14	XHHW-2 XHHW-2	1	#10	XHHW-2	FR: SWGR-UT1 TO: SWGR-SW BREAKER CONTROL PANEL 12 #14 >> SWGR-UT1 CONTROL 2 #8 >> SWGR CUBICLE DC POWER (52-U1 AND	
C-30-506	30E15 30E20	2"	9	#8	XHHW-2	1	#8	XHHW-2	FR: SWGR-UT1 TO: SWGR-SW (CT WIRING) 9 #8 >> SWGR-UT1 CONTROL	
C-30-507	30E02 30E14 30E20	2"	2	#8	XHHW-2	1	#10	XHHW-2	FR: SWGR-UT1 TO: LP-DCSW 2 #8 >> SWGR-UT1 CUBICLE 1 (52-U1 & RELAY)	
C-30-510	30E19	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: VFD-305 TO: CONDUIT TEE 2 #14 >> VFD-305 LSSL FLOAT CONTROL	C-30-514
C-30-511	30E19	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: VFD-303 TO: CONDUIT TEE 2 #14 >> VFD-303 LSSL FLOAT CONTROL	C-30-523
C-30-514	30E19	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: CONDUIT TEE 2 #14 >> VFD-306 LSSL FLOAT CONTROL 2 #14 >> VFD-305 LSSL FLOAT CONTROL	C-30-523 C-30-517 C-30-510
C-30-517	30E19	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: VFD-306 TO: CONDUIT TEE 2 #14 >> VFD-306 LSSL FLOAT CONTROL	C-30-514
C-30-521	30E19	0.75"	8	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: J-BOX 2 #14 >> VFD-306 LSSL FLOAT CONTROL 2 #14 >> VFD-305 LSSL FLOAT CONTROL 2 #14 >> VFD-303 LSSL FLOAT CONTROL 2 #14 >> VFD-302 LSSL FLOAT CONTROL	C-30-523 C-30-523 C-30-523 C-30-522
C-30-522	30E19	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: VFD-302 TO: CONDUIT TEE 2 #14 >> VFD-302 LSSL FLOAT CONTROL	C-30-521
C-30-523	30E19	0.75"	6	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: CONDUIT TEE 2 #14 >> VFD-306 LSSL FLOAT CONTROL 2 #14 >> VFD-305 LSSL FLOAT CONTROL 2 #14 >> VFD-303 LSSL FLOAT CONTROL	C-30-521 C-30-514 C-30-514 C-30-511
C-30-524	30E01 30E15	2"	2	#14	XHHW-2	1	#14	XHHW-2	FR: LOWER INTAKE STRUCTURE TO: HH-1 2 #14 >> FCG-341 CONTROL	C-30-599 50
C-30-525	30E15 30E20	2"	1	PULL	ROPE				FR: FUTURE SWGR-UT2 TO: SWGR-SW BREAKER CONTROL PANEL 1 PULL >> SPARE	
C-30-526	30E15 30E20	2"	1	PULL	ROPE				FR: FUTURE SWGR-UT2 TO: SSWGR-SW (CT WIRING) 1 PULL >> SPARE	
C-30-534	30E01 30E15	2"	1	#14	XHHW-2	1	#14	XHHW-2	FR: UPPER INTAKE STRUCTURE TO: HH-1 1 #14 >> FCG-340 CONTROL	C-30-599
C-30-540	30E19 ADD 4	1"	12	#14	XHHW-2	1	#14	XHHW-2	FR: VFD-302 TO: CONDUIT TEE 12 #14 >> VFD-302 CONTROL	C-30-545
C-30-543	30E19 ADD 4	1"	12	#14	XHHW-2	1	#14	XHHW-2	FR: VFD-303 TO: CONDUIT TEE 12 #14 >> VFD-303 CONTROL	C-30-545
C-30-545	30E19 ADD 4	1.5"	24	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: CONDUIT TEE 12 #14 >> VFD-302 CONTROL 12 #14 >> VFD-303 CONTROL	C-30-550 C-30-540 C-30-543
C-30-548	30E19 ADD 4	1"	12	#14	XHHW-2	1	#14	XHHW-2	FR: VFD-305 TO: CONDUIT TEE 12 #14 >> VFD-305 CONTROL	C-30-550

CONDUIT SCHEDULE AREA

THORNTON SOURCE WATER

SOURCE WATER PUMP STATION

ENGINEER

JD

REVISION

DATE

7/16/26

CONDUIT			CONDUCTORS			GROUND			DESCRIPTION	CONNECTING SEGMENTS
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE		
C-30-550	30E19	1.5"	36	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: CONDUIT TEE	C-30-555
ADD 4									12 #14 >> VFD-302 CONTROL 12 #14 >> VFD-303 CONTROL 12 #14 >> VFD-305 CONTROL	C-30-545 C-30-545 C-30-548
C-30-553	30E19	1"	12	#14	XHHW-2	1	#14	XHHW-2	FR: VFD-306 TO: CONDUIT TEE	C-30-555
ADD 4									12 #14 >> VFD-306 CONTROL	
C-30-555	30E19	1.5"	48	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: PCM-SW	C-30-550 C-30-550 C-30-550 C-30-553
ADD 4									12 #14 >> VFD-302 CONTROL 12 #14 >> VFD-303 CONTROL 12 #14 >> VFD-305 CONTROL 12 #14 >> VFD-306 CONTROL	
C-30-599	30E15 30E20	2"	3	#14	XHHW-2	1	#14	XHHW-2	FR: HH-1 TO: VCP-340	C-30-050
									2 #14 >> FCG-341 CONTROL 1 #14 >> FCG-340 CONTROL	C-30-524 C-30-534
C-30-600	30E19	0.75"	3	#14	XHHW-2	1	#14	XHHW-2	FR: VCP-340 TO: J-BOX	C-30-040
									2 #14 >> FCG-341 CONTROL 1 #14 >> FCG-340 CONTROL	C-30-599 C-30-599
C-30-620	30E19	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: PMP-316 (VCP-320) TO: PCM-SW	
ADD 4									2 #14 >> PMP-316 (VCP-320) CONTROL	
C-30-700	30E02	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: LSH-321 TO: CONDUIT TEE	C-30-750
									2 #14 >> LSH-321 CONTROL	
C-30-710	30E02	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: LSH-322 TO: CONDUIT TEE	C-30-750
									2 #14 >> LSH-322 CONTROL	
C-30-750	30E02 30E20	1"	4	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: VCP-331	C-30-800
									2 #14 >> LSH-321 CONTROL 2 #14 >> LSH-322 CONTROL	C-30-700 C-30-710
C-30-770	30E02	0.75"	8	#14	XHHW-2	1	#14	XHHW-2	FR: VCP-321 TO: CONDUIT TEE	C-30-790
									8 #14 >> VCP-321 CONTROL	
C-30-780	30E02	0.75"	8	#14	XHHW-2	1	#14	XHHW-2	FR: VCP-322 TO: CONDUIT TEE	C-30-790
									8 #14 >> VCP-322 CONTROL	
C-30-790	30E02 30E20	1"	16	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: PCM-SW	C-30-770 C-30-780
									8 #14 >> VCP-321 CONTROL 8 #14 >> VCP-322 CONTROL	
C-30-800	30E19	1"	10	#14	XHHW-2	1	#14	XHHW-2	FR: VCP-331 TO: PCM-SW	C-30-750 C-30-750
									6 #14 >> VCP-331 CONTROL 2 #14 >> LSH-321 CONTROL 2 #14 >> LSH-322 CONTROL	
L-30-070	30E19	1"	2	#12	XHHW-2	1	#12	XHHW-2	FR: PCM-SW TO: LP-SW	
									2 #12 >> PCM-SW POWER	
L-30-071	30E19	0.75"	4	#12	XHHW-2	1	#12	XHHW-2	FR: SW-NR-01 TO: LP-SW	
									2 #12 >> ATS-SW POWER 2 #12 >> UPS-SW POWER	
L-30-072	30E19	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: PCM-SW TO: SW-NR-01	
									2 #12 >> PCM-SW UPS POWER	
L-30-075	30E19	0.75"	2	#8	XHHW-2	1	#8	XHHW-2	FR: BATTERY CHARGER TO: LP-SW	
									2 #8 >> BATTERY CHARGER POWER	
L-30-076	30E19	1"	2	#3	XHHW-2	1	#8	XHHW-2	FR: BATTERIES TO: BATTERY CHARGER	
									2 #3 >> BATTERIES POWER	

CONDUIT SCHEDULE AREA

THORNTON SOURCE WATER

SOURCE WATER PUMP STATION

ENGINEER

JD

REVISION

DATE

7/16/26

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
L-30-078	30E19	0.75"	2	#8	XHHW-2	1	#10	XHHW-2	FR: BATTERY CHARGER TO: LP-DCSW 2 #8 >> LP-DCSW POWER	
L-30-079	30E19	1"	2	#3	XHHW-2	1	#6	XHHW-2	FR: BATTERIES TO: LP-DCSW 2 #3 >> LP-DCSW POWER	
L-30-210	30E19	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: DDC-SW TO: LP-SW 2 #12 >> DDC-SW POWER	
L-30-220	30E19	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: ACP-SW TO: LP-SW 2 #12 >> DDC-SW POWER	
L-30-290	30E24	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: EF-301 TO: DISCONNECT 2 #12 >> EF-301 POWER	L-30-291
L-30-291	30E24	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT TO: CONDUIT TEE 2 #12 >> EF-301 POWER	L-30-302 L-30-290
L-30-300	30E24	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: HTR-307 TO: DISCONNECT 2 #12 >> HTR-307 POWER	L-30-301
L-30-301	30E24	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT TO: CONDUIT TEE 2 #12 >> HTR-307 POWER	L-30-302 L-30-300
L-30-302	30E24	0.75"	4	#12	XHHW-2	1	#12	XHHW-2	FR: CONDUIT TEE TO: J-BOX 2 #12 >> HTR-307 POWER 2 #12 >> EF-301 POWER	L-30-303 L-30-301 L-30-291
L-30-303	30E24	0.75"	4	#12	XHHW-2	1	#12	XHHW-2	FR: J-BOX TO: LP-SW 2 #12 >> HTR-307 POWER 2 #12 >> EF-301 POWER	L-30-302 L-30-302
L-30-412	30E24	0.75"	2	#10	XHHW-2	1	#12	XHHW-2	FR: HP-301 TO: DISCONNECT 2 #10 >> HP-301 POWER	L-30-426
L-30-426	30E24	0.75"	2	#10	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT TO: LP-SW 2 #10 >> HP-301 POWER	L-30-412
L-30-501	30E19	2"	4	#1/0	XHHW-2	1	#6	XHHW-2	FR: LP-SW TO: XFMR-LP-SW 4 #1/0 >> LP-SW POWER	
L-30-700	30E19	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: FACP-SW TO: LP-SW 2 #12 >> FACP-SW POWER	
M-30-101	30E20	3"	1	PULL	ROPE				FR: FUTURE PMP-301 TO: FUTURE VFD-301 1 PULL >> SPARE	
M-30-131	30E19 30E20	3"	3	#2.5KV	5KV-EPR	1	#6	XHHW-2	FR: PMP-302 TO: VFD-302 3 #2.5KV >> PMP-302 POWER	
M-30-132	30E19	3"	3	#1/0.5KV	5KV-EPR	1	#6	XHHW-2	FR: VFD-302 TO: SWGR-SW 3 #1/0.5KV >> VFD-302 POWER	
M-30-161	30E19 30E20	3"	3	#2.5KV	5KV-EPR	1	#6	XHHW-2	FR: PMP-303 TO: VFD-303 3 #2.5KV >> PMP-303 POWER	
M-30-162	30E19	3"	3	#1/0.5KV	5KV-EPR	1	#6	XHHW-2	FR: VFD-303 TO: SWGR-SW 3 #1/0.5KV >> VFD-303 POWER	
M-30-201	30E20	4"	1	PULL	ROPE				FR: FUTURE VFD-304 TO: FUTURE PMP-304 1 PULL >> SPARE (1 OF 2)	

CONDUIT SCHEDULE AREA

THORNTON SOURCE WATER

SOURCE WATER PUMP STATION

ENGINEER

JD

REVISION

DATE

7/16/26

CONDUIT			CONDUCTORS			GROUND			DESCRIPTION	CONNECTING SEGMENTS
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE		
M-30-202	30E20	4"	1	PULL	ROPE				FR: FUTURE VFD-304 TO: FUTURE PMP-304 1 PULL >> SPARE (2 OF 2)	
M-30-231	30E19 30E20	4"	3	250:5KV	5KV-EPR	1	#1	XHHW-2	FR: PMP-305 TO: VFD-305 3 250:5KV >> PMP-305 POWER	
M-30-232	30E19 30E20	4"	3	250:5KV	5KV-EPR	1	#1	XHHW-2	FR: PMP-305 TO: VFD-305 3 250:5KV >> PMP-305 POWER	
M-30-233	30E19	5"	3	350:15KV	15KV-EPR	1	#1	XHHW-2	FR: VFD-305 TO: SWGR-SW 3 350:15KV >> VFD-305 POWER (1 OF 2)	
M-30-234	30E19	5"	3	350:15KV	15KV-EPR	1	#1	XHHW-2	FR: VFD-305 TO: SWGR-SW 3 350:15KV >> VFD-305 POWER (2 OF 2)	
M-30-261	30E19 30E20	4"	3	250:5KV	5KV-EPR	1	#1	XHHW-2	FR: PMP-306 TO: VFD-306 3 250:5KV >> PMP-306 POWER	
M-30-262	30E19 30E20	4"	3	250:5KV	5KV-EPR	1	#1	XHHW-2	FR: PMP-306 TO: VFD-306 3 250:5KV >> PMP-306 POWER	
M-30-263	30E19	5"	3	350:15KV	15KV-EPR	1	#1	XHHW-2	FR: VFD-306 TO: SWGR-SW 3 350:15KV >> VFD-306 POWER (1 OF 2)	
M-30-264	30E19	5"	3	350:15KV	15KV-EPR	1	#1	XHHW-2	FR: VFD-306 TO: SWGR-SW 3 350:15KV >> VFD-306 POWER (2 OF 2)	
M-30-501	30E15	6"	3	350:15KV	15KV-EPR	1	#1/0	XHHW-2	FR: XFMR-SW1 TO: SWGR-UT1 3 350:15KV >> XFMR-SW1 POWER (1 OF 3)	
M-30-502	30E15	6"	3	350:15KV	15KV-EPR	1	#1/0	XHHW-2	FR: XFMR-SW1 TO: SWGR-UT1 3 350:15KV >> XFMR-SW1 POWER (2 OF 3)	
M-30-503	30E15	6"	3	350:15KV	15KV-EPR	1	#1/0	XHHW-2	FR: XFMR-SW1 TO: SWGR-UT1 3 350:15KV >> XFMR-SW1 POWER (3 OF 3)	
M-30-505	30E15 30E20	6"	3	350:5KV	5KV-EPR	1	#2	XHHW-2	FR: SWGR-SW TO: XFMR-SW1 3 350:5KV >> SWGR-SW POWER (1 OF 4)	
M-30-506	30E15 30E20	6"	3	350:5KV	5KV-EPR	1	#2	XHHW-2	FR: SWGR-SW TO: XFMR-SW1 3 350:5KV >> SWGR-SW POWER (2 OF 4)	
M-30-507	30E15 30E20	6"	3	350:5KV	5KV-EPR	1	#2	XHHW-2	FR: SWGR-SW TO: XFMR-SW1 3 350:5KV >> SWGR-SW POWER (3 OF 4)	
M-30-508	30E15 30E20	6"	3	350:5KV	5KV-EPR	1	#2	XHHW-2	FR: SWGR-SW TO: XFMR-SW1 3 350:5KV >> SWGR-SW POWER (4 OF 4)	
M-30-510	30E15 30E20	4"	3	350:5KV	5KV-EPR	1	#4	XHHW-2	FR: XFMR-PP1 TO: SWGR-SW 3 350:5KV >> XFMR-PP1 POWER	
M-30-525	30E15 30E20	6"	1	PULL	ROPE				FR: SWGR-SW TO: FUTURE XFMR-SW2 1 PULL >> SPARE (1 OF 4)	
M-30-526	30E15 30E20	6"	1	PULL	ROPE				FR: SWGR-SW TO: FUTURE XFMR-SW2 1 PULL >> SPARE (2 OF 4)	
M-30-527	30E15 30E20	6"	1	PULL	ROPE				FR: SWGR-SW TO: FUTURE XFMR-SW2 1 PULL >> SPARE (3 OF 4)	
M-30-528	30E15 30E20	6"	1	PULL	ROPE				FR: SWGR-SW TO: FUTURE XFMR-SW2 1 PULL >> SPARE (4 OF 4)	

Conduits Schedule - Area 30

26_06_01-11

CO\Thornton\203505-100000\04 Design\04 Specs\Carollo\SWPS\26_06_01 (AD4)

203505

Thornton Water Project (12-777XP)

Source Water Pump Station

July 16, 2026 - Addendum No. 4

CONDUIT SCHEDULE AREA

THORNTON SOURCE WATER
SOURCE WATER PUMP STATION

ENGINEER JD
REVISION
DATE 7/16/26

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
M-30-530	30E15 30E20	4"	1	PULL	ROPE				FR: FUTURE XFMR-PP2 TO: SWGR-SW 1 PULL >> SPARE	
M-30-700	30E01 30E02 30E15	6"	3	500:15KV	15KV-EPR	1	#1/0	XHHW-2	FR: SWGR-UT1 TO: UTILITY PRIMARY METER CABINET 3 500:15KV >> SWGR-UT1 POWER	
M-30-710	30E01 30E02 30E15	6"	1	PULL	ROPE		#1/0		FR: SWGR-UT1 TO: UTILITY PRIMARY METER CABINET 1 PULL >> SWGR-UT1 POWER SPARE	
N-30-070	30E19	0.75"	1		CAT6	1	#14	XHHW-2	FR: SW-NR-01 TO: PCM-SW 1 CAT6 >> PCM-SW NETWORK	
N-30-077	30E19	1.5"	4		CAT6	1	#14	XHHW-2	FR: SWGR-SW TO: SW-NR-01 4 CAT6 >> SWGR-SW NETWORK	
N-30-100	30E19	1.5"	4		CAT6	1	#14	XHHW-2	FR: SWBD-SW TO: SW-NR-01 4 CAT6 >> SWBD-SW NETWORK	
N-30-300	30E23	0.75"	1		CAT6	1	#14	XHHW-2	FR: SW-CAM-06 TO: SW-NR-01 1 CAT6 >> SW-CAM-06 NETWORK	
N-30-302	30E23	0.75"	1		CAT6	1	#14	XHHW-2	FR: SW-CAM-01 TO: JBOX 1 CAT6 >> SW-CAM-01 NETWORK	N-30-311
N-30-303	30E23	0.75"	1		CAT6	1	#14	XHHW-2	FR: SW-CAM-07 TO: JBOX 1 CAT6 >> SW-CAM-07 NETWORK	N-30-309
N-30-304	30E23	0.75"	1		CAT6	1	#14	XHHW-2	FR: SW-CAM-03 TO: JBOX 1 CAT6 >> SW-CAM-03 NETWORK	N-30-309
N-30-305	30E23	0.75"	1		CAT6	1	#14	XHHW-2	FR: SW-CAM-02 TO: JBOX 1 CAT6 >> SW-CAM-02 NETWORK	N-30-309
N-30-306	30E23	0.75"	1		CAT6	1	#14	XHHW-2	FR: SW-CAM-04 TO: CONDUIT TEE 1 CAT6 >> SW-CAM-04 NETWORK	N-30-310
N-30-309	30E23	1"	3		CAT6	1	#14	XHHW-2	FR: J-BOX TO: CONDUIT TEE 1 CAT6 >> SW-CAM-02 NETWORK 1 CAT6 >> SW-CAM-07 NETWORK 1 CAT6 >> SW-CAM-03 NETWORK	N-30-310 N-30-305 N-30-303 N-30-304
N-30-310	30E23	1.5"	4		CAT6	1	#14	XHHW-2	FR: CONDUIT TEE TO: J-BOX 1 CAT6 >> SW-CAM-04 NETWORK 1 CAT6 >> SW-CAM-02 NETWORK 1 CAT6 >> SW-CAM-07 NETWORK 1 CAT6 >> SW-CAM-03 NETWORK	N-30-311 N-30-306 N-30-309 N-30-309 N-30-309
N-30-311	30E23	1.5"	6		CAT6	1	#14	XHHW-2	FR: J-BOX TO: SW-NR-01 1 CAT6 >> SW-CAM-04 NETWORK 1 CAT6 >> SW-CAM-07 NETWORK 1 CAT6 >> SW-CAM-02 NETWORK 1 CAT6 >> SW-CAM-03 NETWORK 1 CAT6 >> SW-CAM-05 NETWORK 1 CAT6 >> SW-CAM-01 NETWORK	N-30-310 N-30-310 N-30-310 N-30-310 N-30-310 N-30-302
N-30-313	30E23	0.75"	1		CAT6	1	#14	XHHW-2	FR: SW-CAM-05 TO: J-BOX 1 CAT6 >> SW-CAM-05 NETWORK	N-30-311
N-30-345	30E24	0.75"	1		CAT6	1	#14	XHHW-2	FR: ACP-SW TO: SW-NR-01 1 CAT6 >> ACP-SW NETWORK	
N-30-346	30E24	0.75"	1		CAT6	1	#14	XHHW-2	FR: DDC-SW TO: SW-NR-01 1 CAT6 >> DDC-SW NETWORK	

CONDUIT SCHEDULE AREA

THORNTON SOURCE WATER
SOURCE WATER PUMP STATION

ENGINEER JD
REVISION
DATE 7/16/26

CONDUIT			CONDUCTORS			GROUND			DESCRIPTION	CONNECTING SEGMENTS
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE		
N-30-500	30E01	2.5"	1		72/FO	1	#14	XHHW-2	FR: HH-2 TO: EXISTING HANDHOLE 1 72/FO >> SW-NR-01 NETWORK	
N-30-502	30E19	0.75"	1		CAT6	1	#14	XHHW-2	FR: ACP-SW TO: SW-NR-01 1 CAT6 >> ACP-SW NETWORK	
N-30-506	30E15 30E20	2"	1		12/FO	1	#14	XHHW-2	FR: SWGR-UT1 TO: SW-NR-01 1 12/FO >> SWGR-UT1 NETWORK	
N-30-510	30E01	2.5"	1	PULL	ROPE				FR: CONTROL ROOM STUB UP TO: HH-2 1 PULL >> SPARE NETWORK	
N-30-520	30E01	2.5"	1	PULL	ROPE				FR: CONTROL ROOM STUB UP TO: HH-2 1 PULL >> SPARE NETWORK	
N-30-526	30E15 30E20	2"	1	PULL	ROPE				FR: SWGR-UT2 TO: SW-NR-01 1 PULL >> SPARE	
N-30-550	30E01	2.5"	1		72/FO	1	#14	XHHW-2	FR: SW-NR-01 TO: HH-2 1 72/FO >> SW-NR-01 NETWORK	
N-30-560	30E01 30E02	2.5"	1	PULL	ROPE				FR: CONTROL ROOM STUB UP TO: HH-2 1 PULL >> SPARE NETWORK	
N-30-570	30E01 30E02	2.5"	1	PULL	ROPE				FR: CONTROL ROOM STUB UP TO: HH-2 1 PULL >> SPARE NETWORK	
P-30-003	30E19	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: FCV-302 TO: DISCONNECT 3 #12 >> FCV-302 POWER	P-30-004
P-30-004	30E19	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT TO: CONDUIT TEE 3 #12 >> FCV-302 POWER	P-30-020 P-30-003
P-30-005	30E19	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: FCV-303 TO: DISCONNECT 3 #12 >> FCV-303 POWER	
P-30-020	30E19	0.75"	6	#12	XHHW-2	1	#12	XHHW-2	FR: CONDUIT TEE TO: CONDUIT TEE 3 #12 >> FCV-303 POWER 3 #12 >> FCV-302 POWER	P-30-041 P-30-006 P-30-004
P-30-030	30E19	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: FV-311 TO: DISCONNECT 3 #12 >> FV-311 POWER	P-30-031
P-30-031	30E19	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT TO: J-BOX 3 #12 >> FV-311 POWER	P-30-060 P-30-030
P-30-040	30E19	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: FV-310 TO: DISCONNECT 3 #12 >> FV-310 POWER	
P-30-041	30E19	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT TO: J-BOX 3 #12 >> FV-311 POWER	P-30-020
P-30-050	30E19	0.75"	6	#12	XHHW-2	1	#12	XHHW-2	FR: J-BOX TO: J-BOX 3 #12 >> FCV-303 POWER 3 #12 >> FCV-302 POWER	P-30-061 P-30-020 P-30-020
P-30-060	30E19	0.75"	6	#12	XHHW-2	1	#12	XHHW-2	FR: J-BOX TO: PP-SW 3 #12 >> FV-310 POWER 3 #12 >> FV-311 POWER	P-30-021 P-30-031
P-30-061	30E19	0.75"	6	#12	XHHW-2	1	#12	XHHW-2	FR: J-BOX TO: PP-SW 3 #12 >> FCV-303 POWER 3 #12 >> FCV-302 POWER	P-30-050 P-30-050

CONDUIT SCHEDULE AREA

THORNTON SOURCE WATER

SOURCE WATER PUMP STATION

ENGINEER

JD

REVISION

DATE

7/16/26

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
P-30-400	30E24	0.75"	3	#10	XHHW-2	1	#10	XHHW-2	FR: AHU-302 TO: AHU-302 DISC 3 #10 >> AHU-03 POWER	P-30-408
P-30-402	30E24	1"	3	#4	XHHW-2	1	#8	XHHW-2	FR: CU-301 DISC TO: SWBD-SW 3 #4 >> CU-301 POWER	P-30-404
P-30-403	30E24	1"	3	#4	XHHW-2	1	#8	XHHW-2	FR: CU-302 DISC TO: SWBD-SW 3 #4 >> CU-302 POWER	P-30-405
P-30-404	30E24	1"	3	#4	XHHW-2	1	#8	XHHW-2	FR: CU-301 TO: CU-301 DISC 3 #4 >> CU-301 POWER	P-30-402
P-30-405	30E24	1"	3	#4	XHHW-2	1	#8	XHHW-2	FR: CU-302 TO: CU-302 DISC 3 #4 >> CU-302 POWER	P-30-403
P-30-408	30E24	0.75"	3	#10	XHHW-2	1	#10	XHHW-2	FR: AHU-302 DISC TO: SWBD-SW 3 #10 >> AHU-03 POWER	P-30-400
P-30-410	30E24	0.75"	3	#10	XHHW-2	1	#10	XHHW-2	FR: AHU-301 DISC TO: SWBD-SW 3 #10 >> AHU-301 POWER	P-30-414
P-30-414	30E24	0.75"	3	#10	XHHW-2	1	#10	XHHW-2	FR: AHU-301 TO: AHU-301 DISC 3 #10 >> AHU-301 POWER	P-30-410
P-30-420	30E24	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISC TO: J-BOX 3 #12 >> SF-301 POWER	P-30-440 P-30-421
P-30-421	30E24	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: SF-301 TO: DISC 3 #12 >> SF-301 POWER	P-30-420
P-30-423	30E24	1"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT TO: CONDUIT TEE 3 #12 >> SF-302 POWER	P-30-432 P-30-424
P-30-424	30E24	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: SF-302 TO: DISCONNECT 3 #12 >> SF-302 POWER	P-30-423
P-30-425	30E24	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: SF-303 TO: DISCONNECT 3 #12 >> SF-303 POWER	P-30-427
P-30-427	30E24	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT TO: CONDUIT TEE 3 #12 >> SF-303 POWER	P-30-431 P-30-425
P-30-428	30E24	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: SF-304 TO: DISCONNECT 3 #12 >> SF-304 POWER	P-30-429
P-30-429	30E24	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT TO: CONDUIT TEE 3 #12 >> SF-304 POWER	P-30-431 P-30-428
P-30-431	30E24	0.75"	6	#12	XHHW-2	1	#12	XHHW-2	FR: CONDUIT TEE TO: CONDUIT TEE 3 #12 >> SF-303 POWER 3 #12 >> SF-304 POWER	P-30-432 P-30-427 P-30-429
P-30-432	30E24	1"	9	#12	XHHW-2	1	#12	XHHW-2	FR: CONDUIT TEE TO: J-BOX 3 #12 >> SF-303 POWER 3 #12 >> SF-304 POWER 3 #12 >> SF-302 POWER	P-30-441 P-30-431 P-30-431 P-30-423
P-30-440	30E24	0.75"	6	#12	XHHW-2	1	#12	XHHW-2	FR: J-BOX TO: J-BOX 3 #12 >> SF-301 POWER 3 #12 >> HTR-304 POWER	P-30-420 P-30-451

CONDUIT SCHEDULE AREA

THORNTON SOURCE WATER

SOURCE WATER PUMP STATION

ENGINEER

JD

REVISION

DATE

7/16/26

CONDUIT			CONDUCTORS			GROUND			DESCRIPTION	CONNECTING SEGMENTS
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE		
P-30-441	30E24	1"	9	#12	XHHW-2	1	#12	XHHW-2	FR: J-BOX TO: J-BOX 3 #12 >> SF-303 POWER 3 #12 >> SF-304 POWER 3 #12 >> SF-302 POWER	P-30-432 P-30-432 P-30-432
P-30-445	30E24	0.75"	6	#12	XHHW-2	1	#12	XHHW-2	FR: J-BOX TO: MCC-SW 3 #12 >> SF-301 POWER 3 #12 >> SF-304 POWER	
P-30-446	30E24	0.75"	6	#12	XHHW-2	1	#12	XHHW-2	FR: J-BOX TO: MCC-SW 3 #12 >> SF-301 POWER 3 #12 >> SF-304 POWER	
P-30-447	30E24	0.75"	6	#12	XHHW-2	1	#12	XHHW-2	FR: J-BOX TO: PP-SW 3 #12 >> HTR-301 POWER 3 #12 >> HTR-302 POWER	P-30-490 P-30-490
P-30-448	30E24	0.75"	6	#12	XHHW-2	1	#12	XHHW-2	FR: J-BOX TO: PP-SW 3 #12 >> HTR-304 POWER 3 #12 >> HTR-303 POWER	
P-30-450	30E24	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: HTR-304 TO: DISCONNECT 3 #12 >> HTR-304 POWER	P-30-451
P-30-451	30E24	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT TO: J-BOX 3 #12 >> HTR-304 POWER	P-30-440 P-30-450
P-30-460	30E24	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: HTR-303 TO: DISCONNECT 3 #12 >> HTR-303 POWER	P-30-461
P-30-461	30E24	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT TO: J-BOX 3 #12 >> HTR-303 POWER	P-30-460
P-30-470	30E24	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: HTR-302 TO: DISCONNECT 3 #12 >> HTR-302 POWER	P-30-471
P-30-471	30E24	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT TO: CONDUIT TEE 3 #12 >> HTR-302 POWER	P-30-490 P-30-470
P-30-480	30E24	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: HTR-301 TO: DISCONNECT 3 #12 >> HTR-301 POWER	P-30-481
P-30-481	30E24	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT TO: CONDUIT TEE 3 #12 >> HTR-301 POWER	P-30-490 P-30-480
P-30-490	30E24	0.75"	6	#12	XHHW-2	1	#12	XHHW-2	FR: CONDUIT TEE TO: J-BOX 3 #12 >> HTR-301 POWER 3 #12 >> HTR-302 POWER	P-30-447 P-30-481 P-30-471
P-30-495	30E24	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: HTR-306 TO: DISCONNECT 3 #12 >> HTR-306 POWER	P-30-496
P-30-496	30E24	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT TO: PP-SW 3 #12 >> HTR-306 POWER	P-30-495
P-30-497	30E24	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: HTR-305 TO: DISCONNECT 3 #12 >> HTR-305 POWER	P-30-498
P-30-498	30E24	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISCONNECT TO: PP-SW 3 #12 >> HTR-305 POWER	P-30-497
P-30-501	30E15 30E20	4"	4	350	XHHW-2	1	#2	XHHW-2	FR: SWBD-SW TO: XFMR-PP1 4 350 >> SWBD-SW POWER (1 OF 4)	

CONDUIT SCHEDULE AREA

THORNTON SOURCE WATER
SOURCE WATER PUMP STATION

ENGINEER JD
REVISION
DATE 7/16/26

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
P-30-502	30E15 30E20	4"	4	350	XHHW-2	1	#2	XHHW-2	FR: SWBD-SW TO: XFMR-PP1 4 350 >> SWBD-SW POWER (2 OF 4)	
P-30-503	30E15 30E20	4"	4	350	XHHW-2	1	#2	XHHW-2	FR: SWBD-SW TO: XFMR-PP1 4 350 >> SWBD-SW POWER (3 OF 4)	
P-30-504	30E15 30E20	4"	4	350	XHHW-2	1	#2	XHHW-2	FR: SWBD-SW TO: XFMR-PP1 4 350 >> SWBD-SW POWER (4 OF 4)	
P-30-510	30E19	2.5"	3	250	XHHW-2	1	#4	XHHW-2	FR: MTS-PP TO: SWBD-SW 3 250 >> MTS-PP POWER (REDUNDANT)	
P-30-521	30E15 30E20	4"	1	PULL	ROPE				FR: SWBD-SW TO: FUTURE XFMR-PP2 1 PULL >> SPARE (1 OF 4)	
P-30-522	30E15 30E20	4"	1	PULL	ROPE				FR: SWBD-SW TO: FUTURE XFMR-PP2 1 PULL >> SPARE (2 OF 4)	
P-30-523	30E15 30E20	4"	1	PULL	ROPE				FR: SWBD-SW TO: FUTURE XFMR-PP2 1 PULL >> SPARE (3 OF 4)	
P-30-524	30E15 30E20	4"	1	PULL	ROPE				FR: SWBD-SW TO: FUTURE XFMR-PP2 1 PULL >> SPARE (4 OF 4)	
P-30-530	30E19	2.5"	3	250	XHHW-2	1	#4	XHHW-2	FR: MTS-PP TO: SWBD-SW 3 250 >> MTS-PP POWER (NORMAL)	
P-30-531	30E19	2.5"	3	250	XHHW-2	1	#4	XHHW-2	FR: PP-SW TO: MTS-PP 3 250 >> PP-SW POWER	
P-30-532	30E19	1.5"	3	#1	XHHW-2	1	#6	XHHW-2	FR: XFMR-LP-SW TO: PP-SW 3 #1 >> XFMR-LP-SW POWER	
P-30-535	30E19	1.5"	3	#1/0	XHHW-2	1	#6	XHHW-2	FR: MCC-SW TO: PP-SW 3 #1/0 >> MCC-SW POWER	
P-30-540	30E19	0.75"	3	#8	XHHW-2	1	#10	XHHW-2	FR: BRIDGE CRANE TO: DISCONNECT 3 #8 >> BRIDGE CRANE POWER	P-30-541
P-30-541	30E19	0.75"	3	#8	XHHW-2	1	#10	XHHW-2	FR: DISCONNECT TO: SWBD-SW 3 #8 >> BRIDGE CRANE POWER	P-30-540
P-30-700	30E19	0.75"	3	#10	XHHW-2	1	#10	XHHW-2	FR: ARC-331A TO: VCP-331 3 #10 >> ARC-331A POWER	
P-30-710	30E19	0.75"	3	#10	XHHW-2	1	#10	XHHW-2	FR: ARC-331B TO: VCP-331 3 #10 >> ARC-331B POWER	
P-30-761	30E02	0.75"	1	MFR	CABLE	1	#14	XHHW-2	FR: PMP-321A TO: VCP-321 1 MFR >> PMP-321A POWER	
P-30-762	30E02	0.75"	1	MFR	CABLE	1	#14	XHHW-2	FR: PMP-321B TO: VCP-321 1 MFR >> PMP-321B POWER	
P-30-765	30E02	0.75"	1	MFR	CABLE	1	#14	XHHW-2	FR: PMP-322A TO: VCP-322 1 MFR >> PMP-322A POWER	
P-30-766	30E02	0.75"	1	MFR	CABLE	1	#14	XHHW-2	FR: PMP-322B TO: VCP-322 1 MFR >> PMP-322B POWER	
P-30-770	30E02	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: VCP-321 TO: CONDUIT TEE 3 #12 >> VCP-321 POWER	P-30-790

CONDUIT SCHEDULE AREA

THORNTON SOURCE WATER

SOURCE WATER PUMP STATION

ENGINEER

JD

REVISION

DATE

7/16/26

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
P-30-780	30E02	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: VCP-322 TO: CONDUIT TEE 3 #12 >> VCP-322 POWER	P-30-790
P-30-790	30E02 30E20	1"	6	#12	XHHW-2	1	#12	XHHW-2	FR: CONDUIT TEE TO: PP-SW 3 #12 >> VCP-321 POWER 3 #12 >> VCP-322 POWER	P-30-770 P-30-780
P-30-800	30E19	1"	3	#6	XHHW-2	1	#10	XHHW-2	FR: VCP-331 TO: SWBD-SW 3 #6 >> VCP-331 POWER	
S-30-003	30E19	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: PIT-302 TO: CONDUIT TEE 1 2/CS-#16 >> PIT-302 SIGNAL	S-30-019
S-30-004	30E19	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: FCV-302 TO: CONDUIT TEE 1 2/CS-#16 >> FCV-302 SIGNAL	S-30-020
S-30-005	30E19	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: PIT-303 TO: CONDUIT TEE 1 2/CS-#16 >> PIT-303 SIGNAL	S-30-018
S-30-006	30E19	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: FCV-303 TO: CONDUIT TEE 1 2/CS-#16 >> FCV-303 SIGNAL	S-30-018
S-30-007	30E19	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: PIT-305 TO: CONDUIT TEE 1 2/CS-#16 >> PIT-305 SIGNAL	S-30-009
S-30-008	30E19	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: PIT-306 TO: CONDUIT TEE 1 2/CS-#16 >> PIT-306 SIGNAL	S-30-009
S-30-009	30E19	0.75"	2	2/CS-#16		1	#14	XHHW-2	FR: CONDUIT TEE TO: J-BOX 1 2/CS-#16 >> PIT-306 SIGNAL 1 2/CS-#16 >> PIT-305 SIGNAL	S-30-028 S-30-008 S-30-007
S-30-010	30E19	0.75"	1	2/CS-#16					FR: FIT-311 TO: J-BOX 1 2/CS-#16 >> FIT-311 SIGNAL	S-30-021
S-30-011	30E19	0.75"	1	2/CS-#16					FR: FIT-300 TO: J-BOX 1 2/CS-#16 >> FIT-300 SIGNAL	S-30-021
S-30-012	30E19	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: PIT-310 TO: J-BOX 1 2/CS-#16 >> PIT-310 SIGNAL	S-30-040
S-30-015	30E19	0.75"	1	MFR	CABLE	1	#14	XHHW-2	FR: LT-302 TO: DESICCANT JBOX 1 MFR >> LT-302 SIGNAL	
S-30-018	30E19	0.75"	2	2/CS-#16		1	#14	XHHW-2	FR: CONDUIT TEE TO: CONDUIT TEE 1 2/CS-#16 >> PIT-303 SIGNAL 1 2/CS-#16 >> FCV-303 SIGNAL	S-30-019 S-30-005 S-30-006
S-30-019	30E19	1"	3	2/CS-#16		1	#14	XHHW-2	FR: CONDUIT TEE TO: CONDUIT TEE 1 2/CS-#16 >> PIT-303 SIGNAL 1 2/CS-#16 >> FCV-303 SIGNAL 1 2/CS-#16 >> PIT-302 SIGNAL	S-30-020 S-30-018 S-30-018 S-30-003
S-30-020	30E19	1"	4	2/CS-#16		1	#14	XHHW-2	FR: CONDUIT TEE TO: J-BOX 1 2/CS-#16 >> PIT-303 SIGNAL 1 2/CS-#16 >> FCV-303 SIGNAL 1 2/CS-#16 >> PIT-302 SIGNAL 1 2/CS-#16 >> FCV-302 SIGNAL	S-30-023 S-30-019 S-30-019 S-30-019 S-30-004
S-30-021	30E19	0.75"	2	2/CS-#16		1	#14	XHHW-2	FR: CONDUIT TEE TO: J-BOX 1 2/CS-#16 >> FIT-311 SIGNAL 1 2/CS-#16 >> FIT-300 SIGNAL	S-30-028 S-30-010 S-30-011

CONDUIT SCHEDULE AREA

THORNTON SOURCE WATER

SOURCE WATER PUMP STATION

ENGINEER

JD

REVISION

DATE

7/16/26

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
S-30-022	30E19	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: DESICANT JBOX TO: CONDUIT TEE 1 2/CS-#16 >> LT-302 SIGNAL	S-30-023
S-30-023	30E19	1.5"	5	2/CS-#16		1	#14	XHHW-2	FR: CONDUIT TEE TO: J-BOX 1 2/CS-#16 >> PIT-303 SIGNAL 1 2/CS-#16 >> FCV-303 SIGNAL 1 2/CS-#16 >> PIT-302 SIGNAL 1 2/CS-#16 >> FCV-302 SIGNAL 1 2/CS-#16 >> LT-302 SIGNAL	S-30-050 S-30-020 S-30-020 S-30-020 S-30-020
S-30-028	30E19	1"	4	2/CS-#16		1	#14	XHHW-2	FR: CONDUIT TEE TO: J-BOX 1 2/CS-#16 >> PIT-306 SIGNAL 1 2/CS-#16 >> PIT-305 SIGNAL 1 2/CS-#16 >> FIT-311 SIGNAL 1 2/CS-#16 >> FIT-300 SIGNAL	S-30-040 S-30-009 S-30-009 S-30-021 S-30-021
S-30-040	30E19	2.5"	2 17	3/CS-#16 2/CS-#16		1	#14	XHHW-2	FR: J-BOX TO: PCM-SW 1 2/CS-#16 >> AIT-341 SIGNAL 1 2/CS-#16 >> AIT-342 SIGNAL 1 3/CS-#16 >> TIT-342 SIGNAL 1 2/CS-#16 >> AIT-343 SIGNAL 1 2/CS-#16 >> PIT-303 SIGNAL 1 2/CS-#16 >> FCV-303 SIGNAL 1 2/CS-#16 >> PIT-302 SIGNAL 1 2/CS-#16 >> FCV-302 SIGNAL 1 2/CS-#16 >> LT-302 SIGNAL 1 3/CS-#16 >> TIT-343 SIGNAL 1 2/CS-#16 >> PIT-310 CONTROL 1 2/CS-#16 >> PIT-306 SIGNAL 1 2/CS-#16 >> PIT-305 SIGNAL 1 2/CS-#16 >> FIT-311 SIGNAL 1 2/CS-#16 >> FIT-300 SIGNAL 1 2/CS-#16 >> LT-311 SIGNAL 1 2/CS-#16 >> FCG-341 SIGNAL 1 2/CS-#16 >> LT-310 SIGNAL 1 2/CS-#16 >> FCG-340 SIGNAL	S-30-050 S-30-050 S-30-050 S-30-050 S-30-050 S-30-050 S-30-050 S-30-050 S-30-050 S-30-050 S-30-050 S-30-012 S-30-028 S-30-028 S-30-028 S-30-028 S-30-600 S-30-600 S-30-600 S-30-600
S-30-050	30E19	2"	2 12	3/CS-#16 2/CS-#16		1	#14	XHHW-2	FR: J-BOX TO: J-BOX 1 2/CS-#16 >> AIT-341 SIGNAL 1 2/CS-#16 >> AIT-342 SIGNAL 1 3/CS-#16 >> TIT-342 SIGNAL 1 2/CS-#16 >> AIT-343 SIGNAL 1 2/CS-#16 >> PIT-303 SIGNAL 1 2/CS-#16 >> FCV-303 SIGNAL 1 2/CS-#16 >> PIT-302 SIGNAL 1 2/CS-#16 >> FCV-302 SIGNAL 1 2/CS-#16 >> LT-302 SIGNAL 1 3/CS-#16 >> TIT-343 SIGNAL 1 2/CS-#16 >> LT-311 SIGNAL 1 2/CS-#16 >> FCG-341 SIGNAL 1 2/CS-#16 >> LT-310 SIGNAL 1 2/CS-#16 >> FCG-340 SIGNAL	S-30-040 S-30-270 S-30-271 S-30-272 S-30-273 S-30-023 S-30-023 S-30-023 S-30-023 S-30-023 S-30-274 S-30-600 S-30-600 S-30-600 S-30-600
S-30-070	30E19	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: SW-NR-01 TO: PCM-SW 1 2/CS-#16 >> SW-NR-01 SIGNAL	
S-30-105	30E20	2"	1	PULL	ROPE				FR: FUTURE PMP-301 TO: FUTURE VFD-301 1 PULL >> SPARE	
S-30-131	30E19	2"	8 2	3/CS-#16 2/CS-#16		1	#14	XHHW-2	FR: PMP-302 TO: JBOX 8 3/CS-#16 >> PMP-302 RTD SIGNAL 2 2/CS-#16 >> PMP-302 XVT SIGNAL	S-30-135
S-30-135	30E19 30E20	2"	8 2	3/CS-#16 2/CS-#16		1	#14	XHHW-2	FR: JBOX TO: VFD-302 8 3/CS-#16 >> PMP-302 RTD SIGNAL 2 2/CS-#16 >> PMP-302 XVT SIGNAL	S-30-131 S-30-131
S-30-161	30E19	2"	8 2	3/CS-#16 2/CS-#16		1	#14	XHHW-2	FR: PMP-303 TO: JBOX 8 3/CS-#16 >> PMP-303 RTD SIGNAL 2 2/CS-#16 >> PMP-303 XVT SIGNAL	S-30-165

CONDUIT SCHEDULE AREA									ENGINEER	JD
THORNTON SOURCE WATER									REVISION	
SOURCE WATER PUMP STATION									DATE	7/16/26
CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
S-30-165	30E19 30E20	2"	8 2	3/CS-#16 2/CS-#16		1	#14	XHHW-2	FR: JBOX TO: VFD-303 8 3/CS-#16 >> PMP-303 RTD SIGNAL 2 2/CS-#16 >> PMP-303 XVT SIGNAL	S-30-161 S-30-161
S-30-205	30E20	2"	1	PULL	ROPE				FR: FUTURE PMP-304 TO: FUTURE VFD-304 1 PULL >> SPARE	
S-30-231	30E19	2"	8 2	3/CS-#16 2/CS-#16		1	#14	XHHW-2	FR: PMP-305 TO: JBOX 8 3/CS-#16 >> PMP-305 RTD SIGNAL 2 2/CS-#16 >> PMP-305 XVT SIGNAL	S-30-235
S-30-235	30E19 30E20	2"	8 2	3/CS-#16 2/CS-#16		1	#14	XHHW-2	FR: JBOX TO: VFD-305 8 3/CS-#16 >> PMP-305 RTD SIGNAL 2 2/CS-#16 >> PMP-305 XVT SIGNAL	S-30-231 S-30-231
S-30-261	30E19	2"	8 2	3/CS-#16 2/CS-#16		1	#14	XHHW-2	FR: PMP-306 TO: JBOX 8 3/CS-#16 >> PMP-306 RTD SIGNAL 2 2/CS-#16 >> PMP-306 XVT SIGNAL	S-30-265
S-30-265	30E19 30E20	2"	8 2	3/CS-#16 2/CS-#16		1	#14	XHHW-2	FR: JBOX TO: VFD-306 8 3/CS-#16 >> PMP-306 RTD SIGNAL 2 2/CS-#16 >> PMP-306 XVT SIGNAL	S-30-261 S-30-261
S-30-270	30E19	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: AIT-341 TO: J-BOX 1 2/CS-#16 >> AIT-341 SIGNAL	S-30-050
S-30-271	30E19	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: AIT-342 TO: J-BOX 1 2/CS-#16 >> AIT-342 SIGNAL	S-30-050
S-30-272	30E19	0.75"	1	3/CS-#16		1	#14	XHHW-2	FR: TIT-342 TO: J-BOX 1 3/CS-#16 >> TIT-342 SIGNAL	S-30-050
S-30-273	30E19	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: AIT-343 TO: J-BOX 1 2/CS-#16 >> AIT-343 SIGNAL	S-30-050
S-30-274	30E19	0.75"	1	3/CS-#16		1	#14	XHHW-2	FR: TIT-343 TO: J-BOX 1 3/CS-#16 >> TIT-343 SIGNAL	S-30-050
S-30-510	30E19	0.75"	2	2/CS-#16		1	#14	XHHW-2	FR: VFD-305 TO: CONDUIT TEE 1 2/CS-#16 >> VF-305 VOLTAGE FEEDBACK 1 2/CS-#16 >> AF-305 CURRENT FEEDBACK	S-30-526
S-30-511	30E19	0.75"	2	2/CS-#16		1	#14	XHHW-2	FR: VFD-303 TO: CONDUIT TEE 1 2/CS-#16 >> VF-303 VOLTAGE FEEDBACK 1 2/CS-#16 >> AF-303 CURRENT FEEDBACK	S-30-514
S-30-514	30E19	1"	4	2/CS-#16		1	#14	XHHW-2	FR: CONDUIT TEE TO: CONDUIT TEE 1 2/CS-#16 >> VF-302 VOLTAGE FEEDBACK 1 2/CS-#16 >> AF-302 CURRENT FEEDBACK 1 2/CS-#16 >> VF-303 VOLTAGE FEEDBACK 1 2/CS-#16 >> AF-303 CURRENT FEEDBACK	S-30-526 S-30-522 S-30-522 S-30-511 S-30-511
S-30-517	30E19	0.75"	2	2/CS-#16		1	#14	XHHW-2	FR: VFD-306 TO: CONDUIT TEE 1 2/CS-#16 >> VF-306 VOLTAGE FEEDBACK 1 2/CS-#16 >> AF-306 CURRENT FEEDBACK	S-30-530
S-30-518	30E01	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: LT-311 TO: CONDUIT TEE 1 MFR >> LT-311 SIGNAL	S-30-524
S-30-519	30E01	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: LT-310 TO: CONDUIT TEE 1 MFR >> LT-310 SIGNAL	S-30-534
S-30-520	30E01	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: FCG-341 TO: CONDUIT TEE 1 2/CS-#16 >> FCG-341 SIGNAL	S-30-524

CONDUIT SCHEDULE AREA

THORNTON SOURCE WATER

SOURCE WATER PUMP STATION

ENGINEER

JD

REVISION

DATE

7/16/26

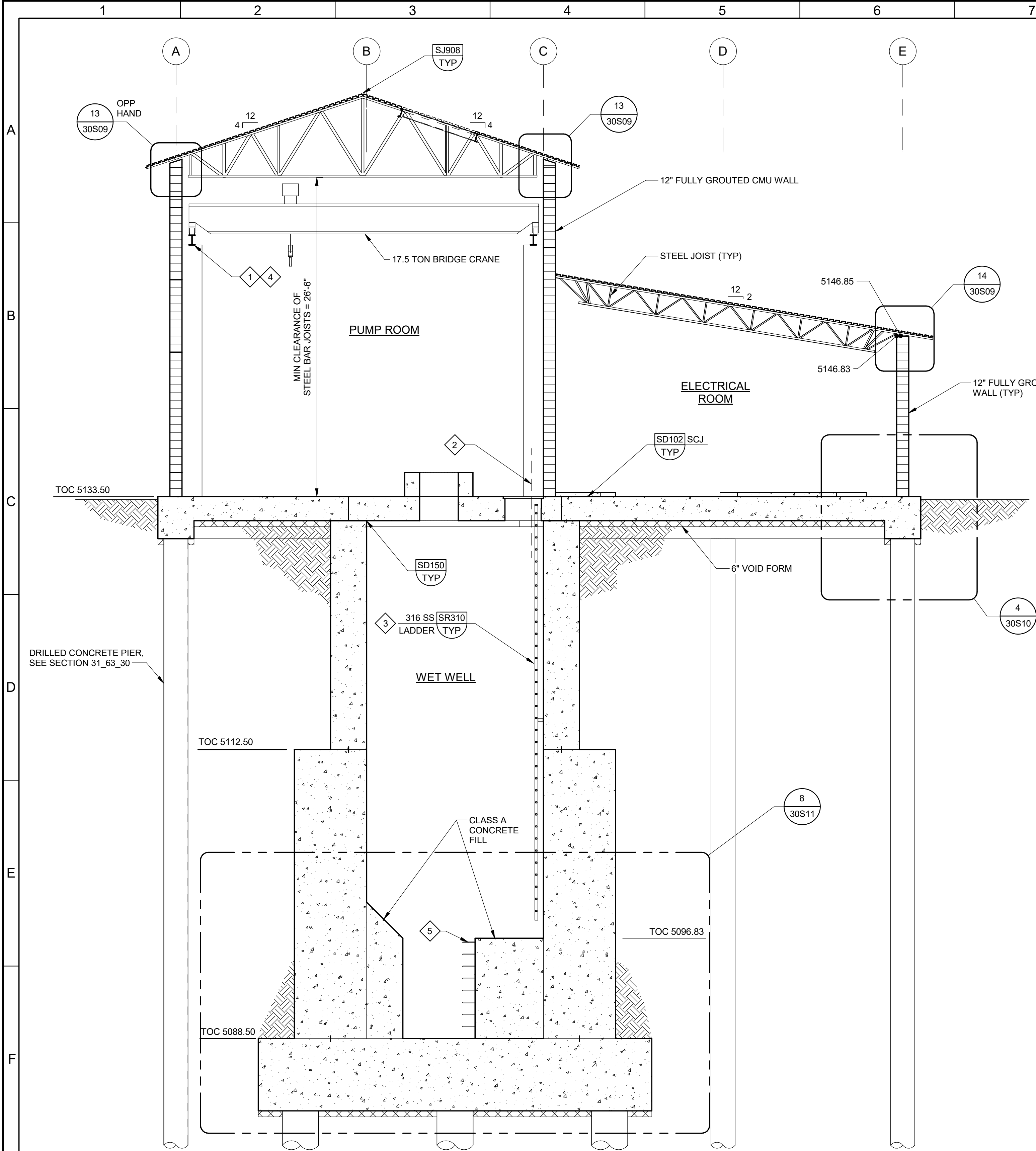
CONDUIT			CONDUCTORS			GROUND			DESCRIPTION	CONNECTING SEGMENTS
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE		
S-30-521	30E01	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: FCG-340 TO: CONDUIT TEE 1 2/CS-#16 >> FCG-340 SIGNAL	S-30-534
S-30-522	30E19	0.75"	2	2/CS-#16		1	#14	XHHW-2	FR: VFD-302 TO: CONDUIT TEE 1 2/CS-#16 >> VF-302 VOLTAGE FEEDBACK 1 2/CS-#16 >> AF-302 CURRENT FEEDBACK	S-30-514
S-30-524	30E01 30E15	2"	1 1	MFR 2/CS-#16	CABLE	1	#14	XHHW-2	FR: LT-311 TO: HH-1 1 MFR >> LT-311 SIGNAL 1 2/CS-#16 >> FCG-341 SIGNAL	S-30-599 S-30-518 S-30-520
S-30-526	30E19	1.5"	6	2/CS-#16		1	#14	XHHW-2	FR: CONDUIT TEE TO: CONDUIT TEE 1 2/CS-#16 >> VF-302 VOLTAGE FEEDBACK 1 2/CS-#16 >> AF-302 CURRENT FEEDBACK 1 2/CS-#16 >> VF-303 VOLTAGE FEEDBACK 1 2/CS-#16 >> AF-303 CURRENT FEEDBACK 1 2/CS-#16 >> VF-305 VOLTAGE FEEDBACK 1 2/CS-#16 >> AF-305 CURRENT FEEDBACK	S-30-530 S-30-514 S-30-514 S-30-514 S-30-514 S-30-510 S-30-510
S-30-530	30E19	1.5"	8	2/CS-#16		1	#14	XHHW-2	FR: CONDUIT TEE TO: PCM-SW 1 2/CS-#16 >> VF-302 VOLTAGE FEEDBACK 1 2/CS-#16 >> AF-302 CURRENT FEEDBACK 1 2/CS-#16 >> VF-303 VOLTAGE FEEDBACK 1 2/CS-#16 >> AF-303 CURRENT FEEDBACK 1 2/CS-#16 >> VF-305 VOLTAGE FEEDBACK 1 2/CS-#16 >> AF-305 CURRENT FEEDBACK 1 2/CS-#16 >> VF-306 VOLTAGE FEEDBACK 1 2/CS-#16 >> AF-306 CURRENT FEEDBACK	S-30-526 S-30-526 S-30-526 S-30-526 S-30-526 S-30-526 S-30-526 S-30-517
S-30-534	30E01 30E15	2"	1 1	MFR 2/CS-#16	CABLE	1	#14	XHHW-2	FR: LT-310 TO: HH-1 1 MFR >> LT-310 SIGNAL 1 2/CS-#16 >> FCG-340 SIGNAL	S-30-599 S-30-519 S-30-521
S-30-599	30E15 30E20	2"	2 2	MFR 2/CS-#16	CABLE	1	#14	XHHW-2	FR: HH-1 TO: JB-340 1 MFR >> LT-311 SIGNAL 1 2/CS-#16 >> FCG-341 SIGNAL 1 MFR >> LT-310 SIGNAL 1 2/CS-#16 >> FCG-340 SIGNAL	S-30-524 S-30-524 S-30-534 S-30-534
S-30-600	30E19	1"	4	2/CS-#16		1	#14	XHHW-2	FR: JB-340 TO: JBOX 1 2/CS-#16 >> LT-311 SIGNAL 1 2/CS-#16 >> FCG-341 SIGNAL 1 2/CS-#16 >> LT-310 SIGNAL 1 2/CS-#16 >> FCG-340 SIGNAL	S-30-040
S-30-620 ADD 4	30E19	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: PMP-316 (VCP-320) TO: PCM-SW 1 2/CS-#16 >> PMP-316 (VCP-320) SIGNAL	
S-30-700	30E02	0.75"	1	3/CS-#16		1	#14	XHHW-2	FR: LIT-321 TO: CONDUIT TEE 1 3/CS-#16 >> LIT-321 SIGNAL	S-30-750
S-30-710	30E02	0.75"	1	3/CS-#16		1	#14	XHHW-2	FR: LIT-322 TO: CONDUIT TEE 1 3/CS-#16 >> LIT-322 SIGNAL	S-30-750
S-30-750	30E02 30E20	1"	2	3/CS-#16		1	#14	XHHW-2	FR: CONDUIT TEE TO: VCP-331 1 3/CS-#16 >> LIT-321 SIGNAL 1 3/CS-#16 >> LIT-322 SIGNAL	S-30-800 S-30-700 S-30-710
S-30-800	30E19	1"	2 1	3/CS-#16 2/CS-#16		1	#14	XHHW-2	FR: VCP-331 TO: PCM-SW 1 3/CS-#16 >> LIT-321 SIGNAL 1 3/CS-#16 >> LIT-322 SIGNAL 1 2/CS-#16 >> SPARE	S-30-750 S-30-750
X-30-022	30E19	0.75"	2	PULL	ROPE				FR: J-BOX TO: STUB-UP IN ELECTRICAL ROOM 1 PULL >> VFD-304 LSSL FLOAT CONTROL (FUTUR 1 PULL >> VFD-301 LSSL FLOAT CONTROL (FUTUR	

CONDUIT SCHEDULE AREA									ENGINEER	JD
THORNTON SOURCE WATER									REVISION	
SOURCE WATER PUMP STATION									DATE	7/16/26
CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
X-30-506	30E02 30E15 30E20 30E20	2"	1	PULL	ROPE				FR: SWGR-UT1 TO: SWGR-SW BREAKER CONTROL PANEL 1 PULL >> SPARE	
X-30-526	30E15 30E20	2"	1	PULL	ROPE				FR: FUTURE SWGR-UT2 TO: SWGR-SW BREAKER CONTROL PANEL 1 PULL >> SPARE	
X-30-589	30E15 30E20	2"	1	PULL	ROPE				FR: HH-1 TO: CONTROL ROOM 1 PULL >> SPARE	
X-30-599	30E15 30E20	2"	1	PULL	ROPE				FR: HH-1 TO: ELECTRIC ROOM 1 PULL >> SPARE	
X-30-750	30E02	1"	1	PULL	ROPE				FR: SURGE TANK VAULT TO: STUB UP (VCP-331 PUMP ROOM) 1 PULL >> SPARE	

END OF CONDUIT SCHEDULE

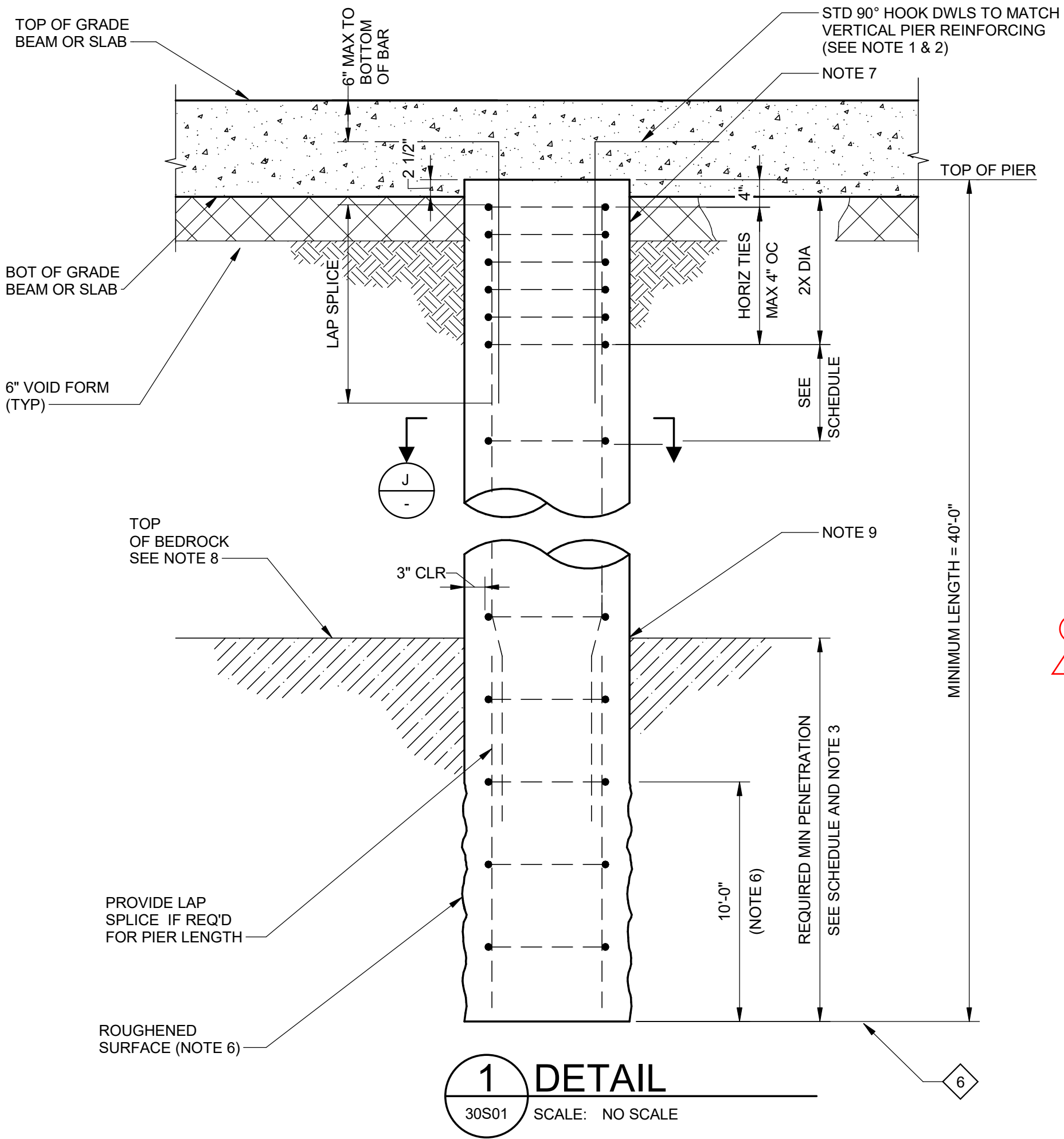
END OF SECTION

AD4 Addendum No. 4

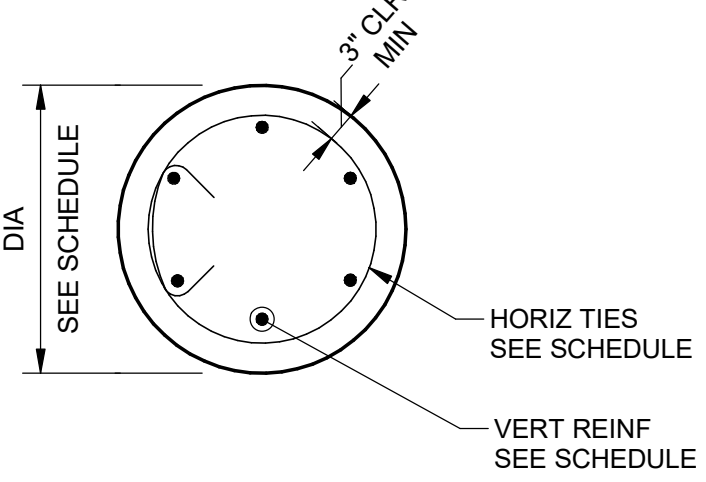


DRILLED PIER SCHEDULE						
LABEL	DIAMETER (FT)	TOP ELEVATION (FT)	MIN PENETRATION INTO BEDROCK (FT) (NOTE 1)	DRILLED PIER BEARING ELEVATION (NOTE 2)	VERT REINF	TIES (SEE NOTE 4)
P1	2'-0"	SEE PLAN	20'-0"	5064.50	(8) #9	#4@6"
P2	3'-0"	SEE PLAN	25'-0"	----	(12) #9	#4@6"

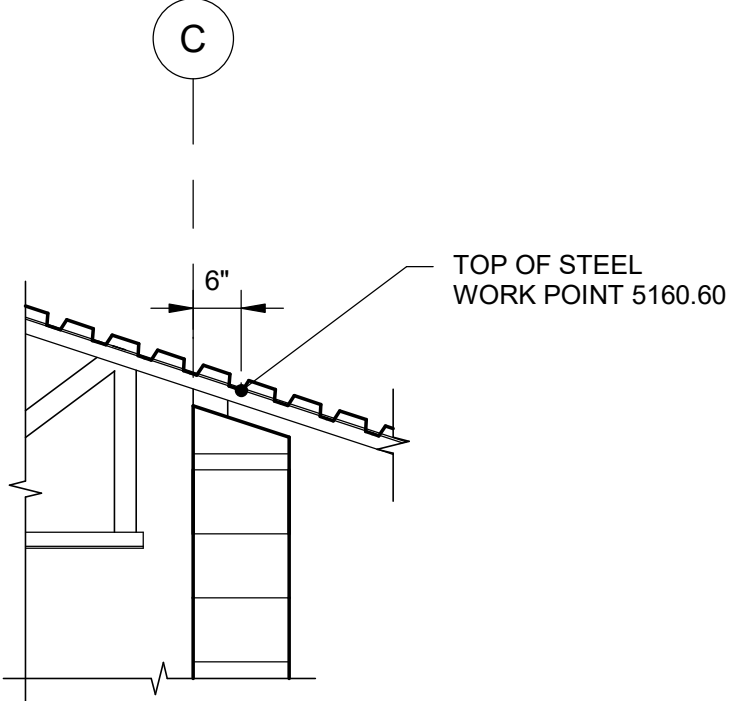
NOTE:
1. INCREASE BEDROCK PENETRATION AS NEEDED TO ACHIEVE THE MINIMUM TOTAL PIER LENGTH.
2. 24" DIA PIERS SHALL BEAR AT OR BELOW THE BOTTOM OF WET WELL VOID FORMATION ELEVATION. BOTH MINIMUM LENGTH AND MINIMUM BEDROCK PENETRATION CRITERIA SHALL STILL BE SATISFIED.



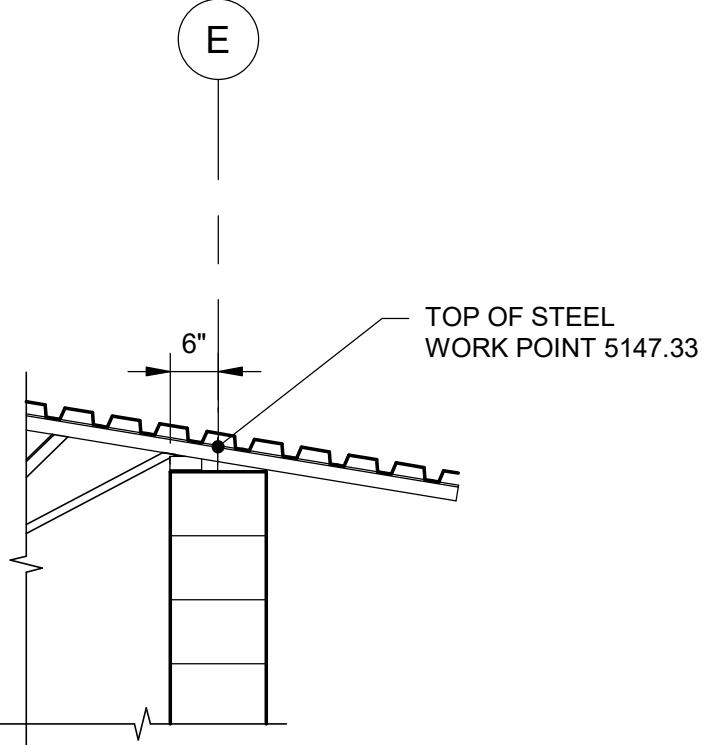
- GENERAL NOTES:**
- FOR STRUCTURAL GENERAL NOTES SEE DRAWING 30GS01.
- KEY NOTES:**
- ANCHORAGE OF BRIDGE CRANE TO PILASTER BY EQUIPMENT MANUFACTURER.
 - PROVIDE GUIDE RAIL AND LADDER UP SIMILAR TO SAF-T-CLIMB LADDER SYSTEM OR EQUAL. CENTER LADDER ON FLOOR OPENING.
 - CONTRACTOR TO SCAN AND LOCATE THE WALL REINFORCING PRIOR TO LADDER ANCHORAGE. DO NOT DAMAGE ANY EXISTING REBAR DURING THE LADDER INSTALLATION.
 - CONTRACTOR TO COORDINATE THE PILASTER ELEV WITH THE BRIDGE CRANE MFR.
 - INSTALL 316 SST RUNGS AT LOCATIONS BETWEEN PUMPS AS SHOWN, AT 12 INCHES OC VERTICAL SPACING. SEE ALSO DETAIL 8/30S11.
 - BOTTOM OF PIER ELEVATION SHALL SATISFY ALL OF THE FOLLOWING CRITERIA:
 - MINIMUM PIER LENGTH: 40 FT.
 - MINIMUM PENETRATION INTO BEDROCK: AS SCHEDULED.
 - PIER BEARING ELEVATION: AS SCHEDULED.
- DRILLED PIER NOTES:**
- NOT USED.
 - CONTRACTORS OPTION TO PROVIDE BAR TERMINATOR RATHER THAN STANDARD HOOK.
 - PROVIDE MINIMUM PENETRATION SHOWN IN SCHEDULE INTO BEDROCK.
 - SPIRALS MAY BE USED IN LIEU OF HORIZONTAL TIES SHOWN. FABRICATED SPIRALS TO CONFORM TO ACI 318 REQUIREMENTS. IF LAPS ARE REQUIRED, LAP AND TIE IN ACCORDANCE WITH ACI 318 REQUIREMENTS AND AS APPROVED BY THE ENGINEER.
 - CONCRETE SHALL BE CLASS P.
 - ROUGHEN LOWER 10'-0" OF SIDE WALLS WITH SAWTOOTH CUTTER TOOL. SEE SPECIFICATION 31_63_30.
 - UPPER SECTION OF DRILLED PIER SHALL BE FORMED. DO NOT PERMIT PIER TO MUSHROOM.
 - FINAL TOP OF BEDROCK ELEVATION WILL BE DETERMINED IN THE FIELD BY THE OWNER'S REPRESENTATIVE AS SPECIFIED IN SECTION 01_45_24, ATTACHMENT H, SPECIAL INSPECTION.
 - PROVIDE TEM SOIL AND SEAL INTO THE BEDROCK.



J SECTION
SCALE: NO SCALE



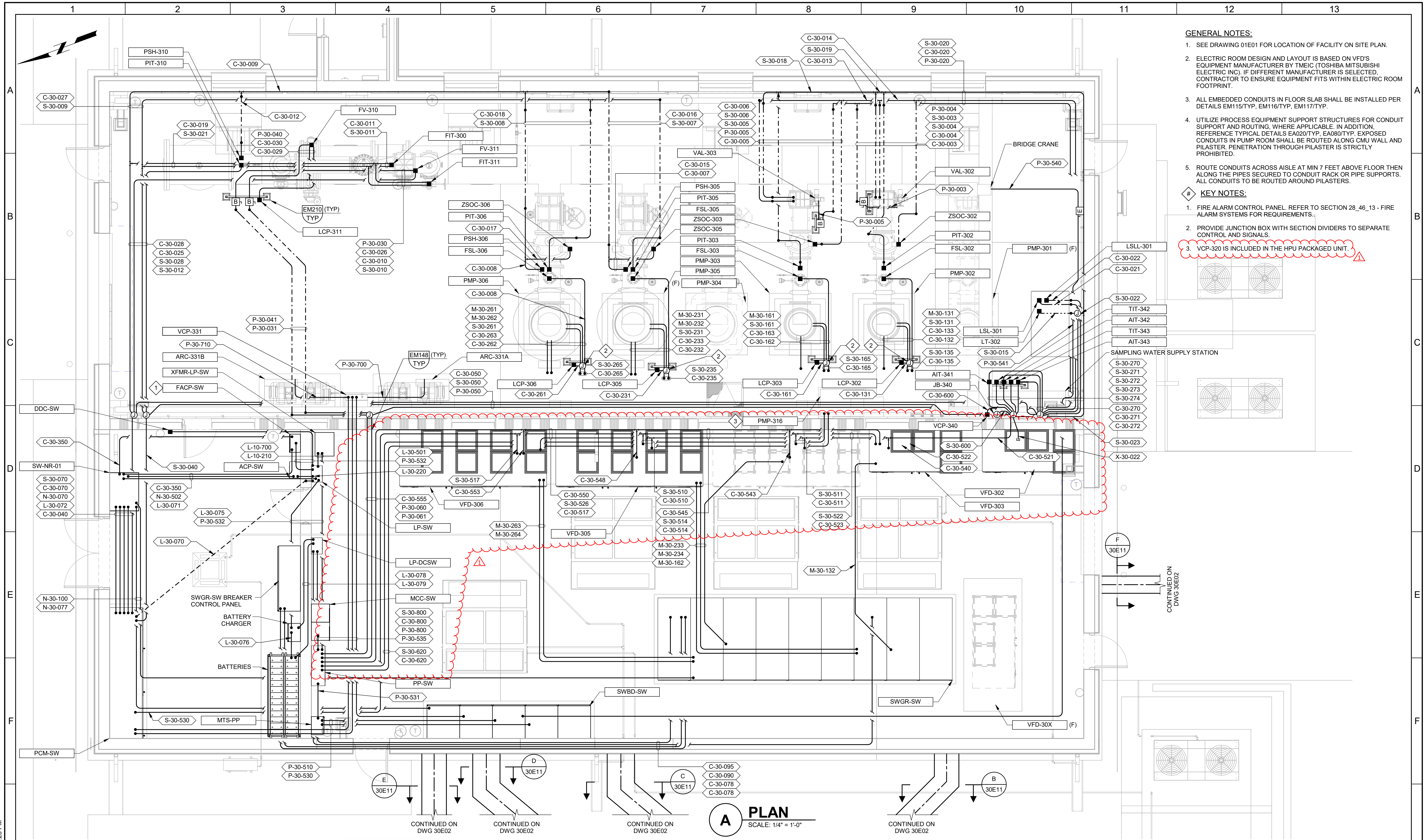
13 DETAIL
30S09 SCALE: 1/2" = 1'-0"



14 DETAIL
30S09 SCALE: 1/2" = 1'-0"

H SECTION
30S01 SCALE: 3/16" = 1'-0"

G				BID SET	DESIGNED NV			CITY OF THORNTON 203505		VERIFY SCALES	JOB NO. 203505
					DRAWN JBB			THORNTON WATER PROJECT SOURCE WATER PUMP STATION		BAR IS ONE INCH ON ORIGINAL DRAWING	DRAWING NO.
					CHECKED MAK			STRUCTURAL		0  1"	30S09
					DATE MAY 2026			SOURCE WATER PUMP STATION SECTION 2		IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	SHEET NO.
		6/26	MK	ADDENDUM NO. 4							
REV	DATE	BY	DESCRIPTION								



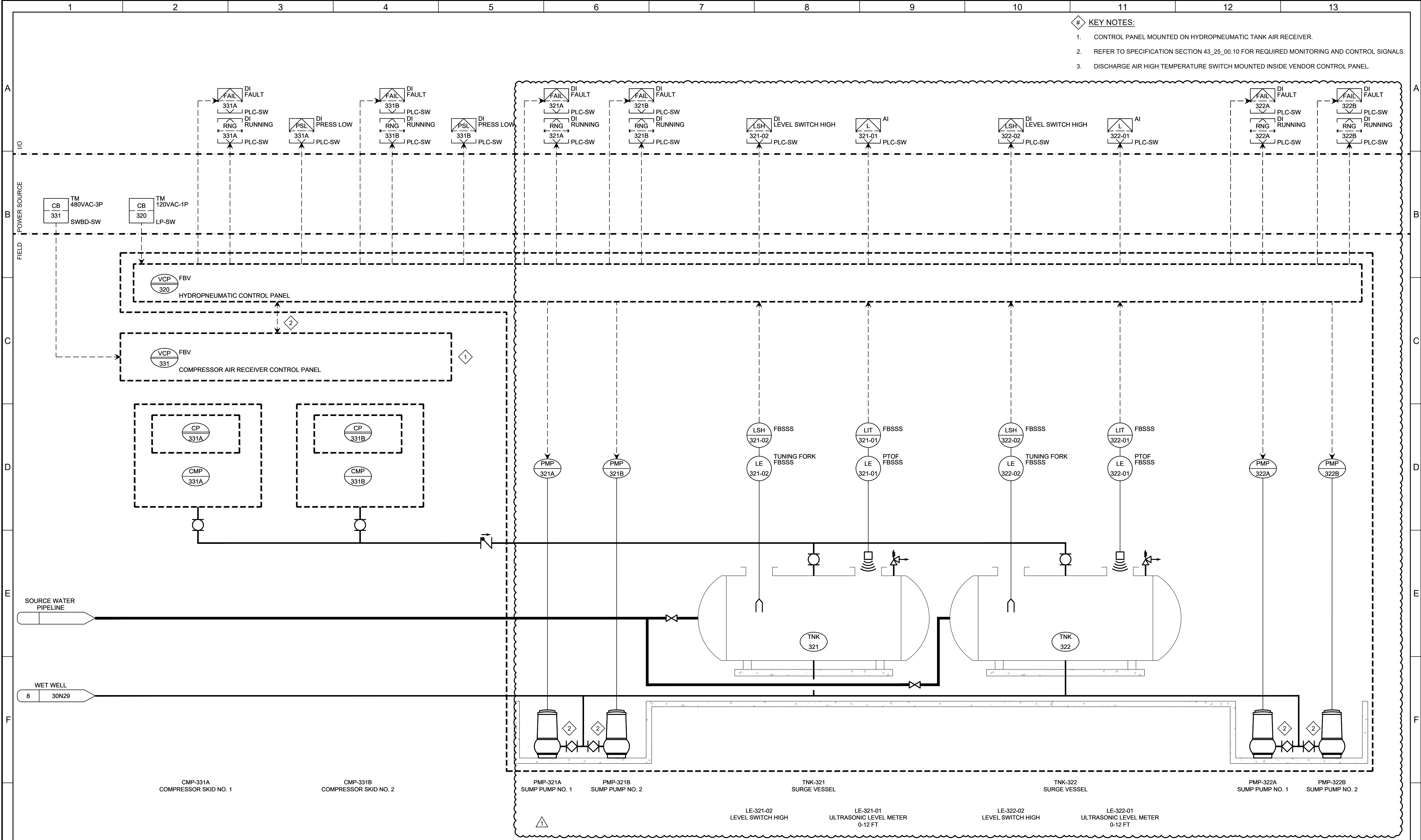
- GENERAL NOTES:**
- SEE DRAWING 01E01 FOR LOCATION OF FACILITY ON SITE PLAN.
 - ELECTRIC ROOM DESIGN AND LAYOUT IS BASED ON VFD'S EQUIPMENT MANUFACTURER BY TMEIC (TOSHIBA MITSUBISHI ELECTRIC INC). IF DIFFERENT MANUFACTURER IS SELECTED, CONTRACTOR TO ENSURE EQUIPMENT FITS WITHIN ELECTRIC ROOM FOOTPRINT.
 - ALL EMBEDDED CONDUITS IN FLOOR SLAB SHALL BE INSTALLED PER DETAILS EM115/TYP, EM116/TYP, EM117/TYP.
 - UTILIZE PROCESS EQUIPMENT SUPPORT STRUCTURES FOR CONDUIT SUPPORT AND ROUTING, WHERE APPLICABLE. IN ADDITION, REFERENCE TYPICAL DETAILS EA020/TYP, EA080/TYP. EXPOSED CONDUITS IN PUMP ROOM SHALL BE ROUTED ALONG CMU WALL AND PILASTER. PENETRATION THROUGH PILASTER IS STRICTLY PROHIBITED.
 - ROUTE CONDUITS ACROSS AISLE AT MIN 7 FEET ABOVE FLOOR THEN ALONG THE PIPES SECURED TO CONDUIT RACK OR PIPE SUPPORTS. ALL CONDUITS TO BE ROUTED AROUND PILASTERS.

- KEY NOTES:**
- FIRE ALARM CONTROL PANEL. REFER TO SECTION 28_46_13 - FIRE ALARM SYSTEMS FOR REQUIREMENTS.
 - PROVIDE JUNCTION BOX WITH SECTION DIVIDERS TO SEPARATE CONTROL AND SIGNALS.
 - VCP-320 IS INCLUDED IN THE HPU PACKAGED UNIT.

A PLAN
SCALE: 1/4" = 1'-0"

BID SET		DESIGNED TG						CITY OF THORNTON THORNTON WATER PROJECT SOURCE WATER PUMP STATION ELECTRICAL EXPOSED 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. 203505 DRAWING NO. 30E19 SHEET NO. 108 OF 169	
REV	DATE	TG		CHECKED TDH								
				DATE MAY 2026								

PLOT DATE: 7/15/2026 5:02:23 PM

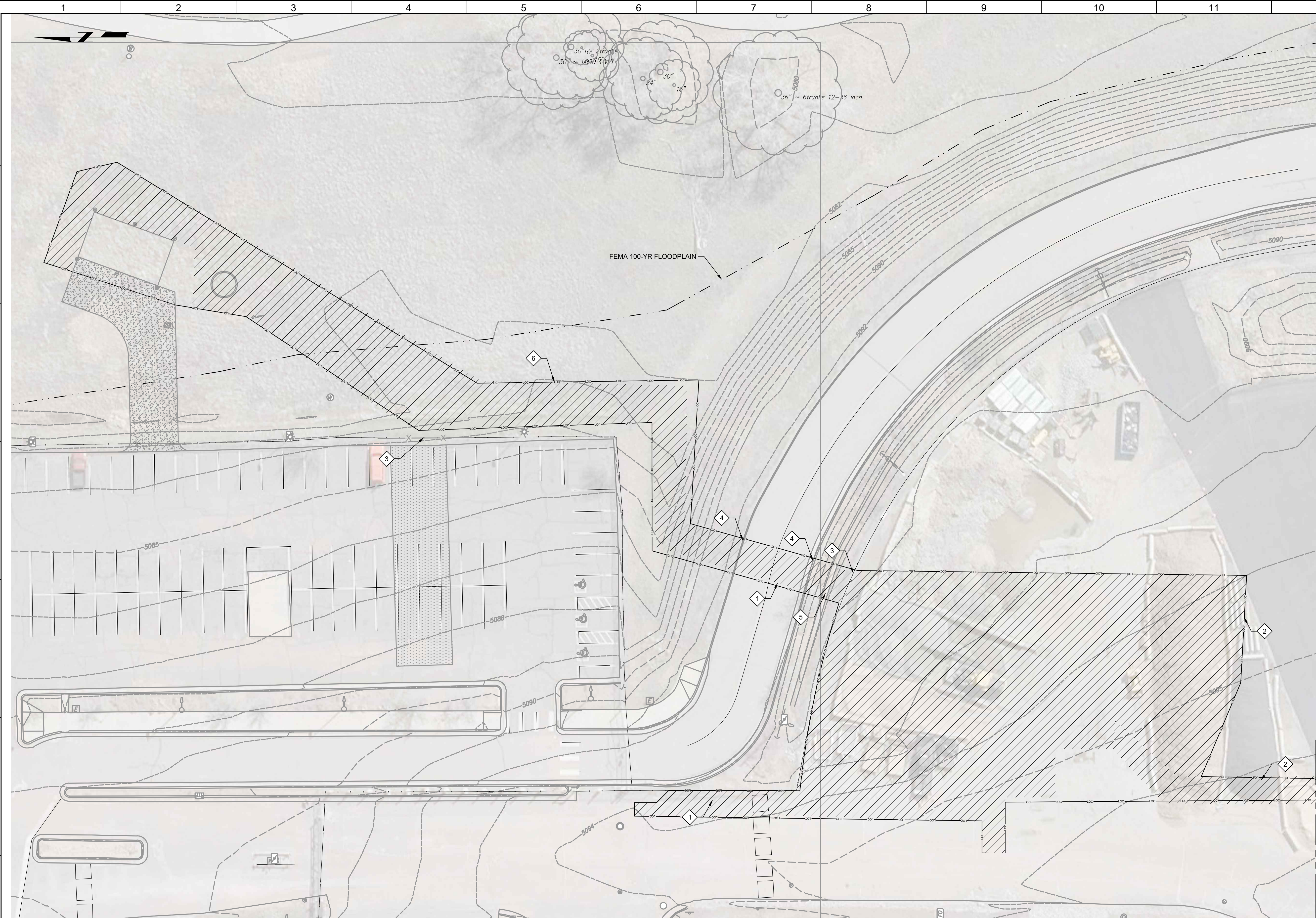


- # KEY NOTES:
- CONTROL PANEL MOUNTED ON HYDROPNEUMATIC TANK AIR RECEIVER.
 - REFER TO SPECIFICATION SECTION 43_25_00.10 FOR REQUIRED MONITORING AND CONTROL SIGNALS.
 - DISCHARGE AIR HIGH TEMPERATURE SWITCH MOUNTED INSIDE VENDOR CONTROL PANEL.

RECORD DRAWINGS				DESIGNED DR	** ORIGINAL SEALED BY BART L. GILES 11-20-2025 43662 **											VERIFY SCALES	JOB NO. 203505
				DRAWN DBC												BAR IS ONE INCH ON ORIGINAL DRAWING	DRAWING NO.
				CHECKED DJC												0 1"	30N32
				DATE JUNE 2026												IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	SHEET NO.
1	2	3	4	5	6	7	8	9	10	11	12	13	135	OF	169		

Plot Date: 5/4/2026 6:48:42 AM

LAST SAVED BY: Chusted



GENERAL NOTES:

1. BASIS OF SURVEY: NAD 1983/2011 AND NAVD88. SEE SURVEY CONTROL DIAGRAM FOR MORE DETAILED DESCRIPTION.

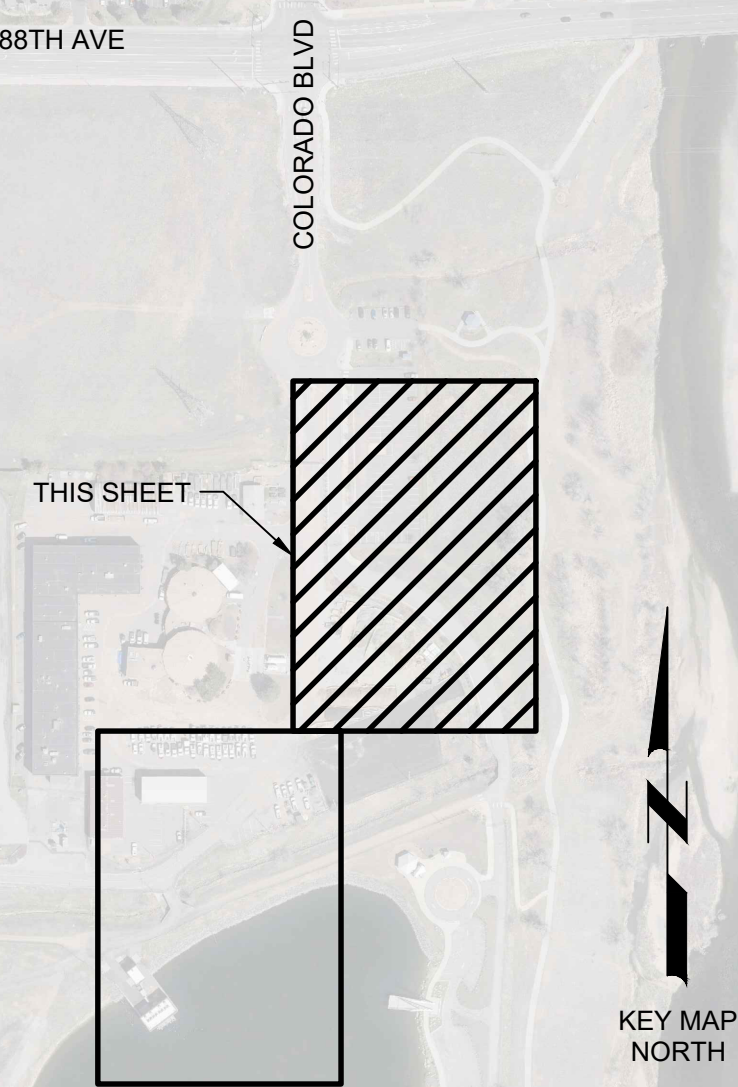
X KEY NOTES:

1. REMOVE ASPHALT PAVEMENT.
2. MATERIAL STOCK PILES, STORAGE CONTAINERS, EQUIPMENT, BLOCK WALLS, AND OTHER MATERIALS WILL BE REMOVED BY THE OWNER.
3. REMOVE FENCE.
4. REMOVE CONCRETE CURB AND GUTTER.
5. REMOVE CONCRETE CHANNEL.
6. CLEAR AND GRUB EXISTING VEGETATION TO LIMITS SHOWN.

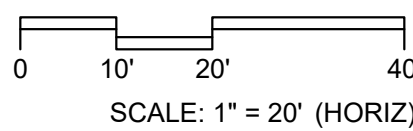


Call before you Overhead

KEY MAP



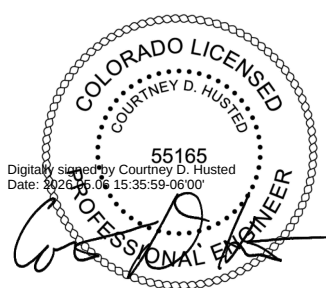
SCALE



BID SET

REV	DATE	BY	DESCRIPTION
	7/26	JK	ADDENDUM NO. 4

DESIGNED
CDH
DRAWN
CDH
CHECKED
JKK
DATE
MAY 2026



CITY OF THORNTON - THORNTON WATER PROJECT

CHEMICAL BUILDING AND PRV VAULTS

CIVIL
CHEMICAL BUILDING -
GRADING, PAVING & DRAINAGE DEMOLITION PLAN 1

VERIFY SCALES

BAR IS ONE INCH ON ORIGINAL DRAWING

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

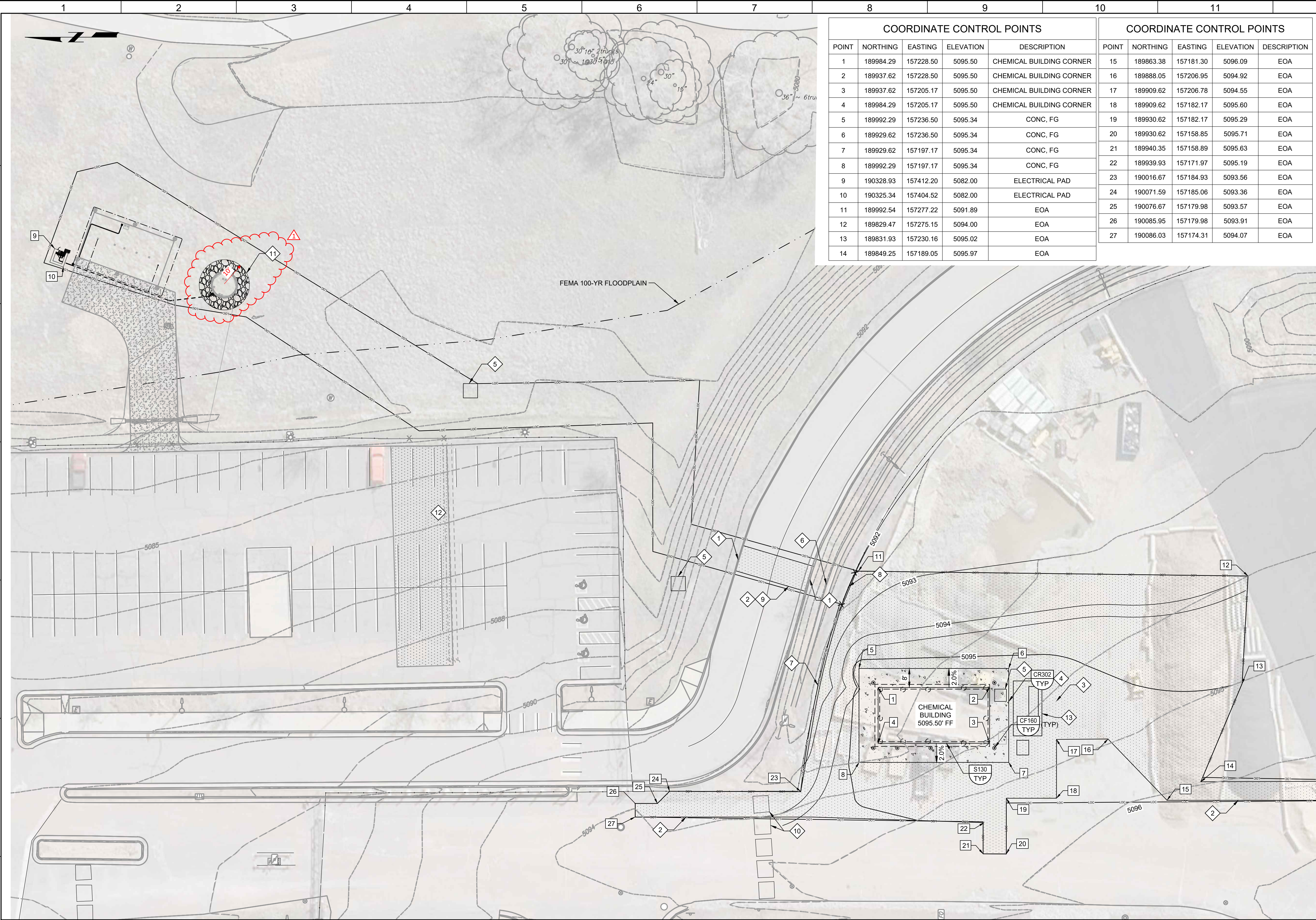
JOB NO.
204403

DRAWING NO.
50C01

SHEET NO.
64 OF 168

Plot Date: 5/6/2026 12:24:34 PM

LAST SAVED BY: Chusied



COORDINATE CONTROL POINTS				
POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	189984.29	157228.50	5095.50	CHEMICAL BUILDING CORNER
2	189937.62	157228.50	5095.50	CHEMICAL BUILDING CORNER
3	189937.62	157205.17	5095.50	CHEMICAL BUILDING CORNER
4	189984.29	157205.17	5095.50	CHEMICAL BUILDING CORNER
5	189992.29	157236.50	5095.34	CONC, FG
6	189929.62	157236.50	5095.34	CONC, FG
7	189929.62	157197.17	5095.34	CONC, FG
8	189992.29	157197.17	5095.34	CONC, FG
9	190328.93	157412.20	5082.00	ELECTRICAL PAD
10	190325.34	157404.52	5082.00	ELECTRICAL PAD
11	189992.54	157277.22	5091.89	EOA
12	189829.47	157275.15	5094.00	EOA
13	189831.93	157230.16	5095.02	EOA
14	189849.25	157189.05	5095.97	EOA

COORDINATE CONTROL POINTS				
POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
15	189863.38	157181.30	5096.09	EOA
16	189888.05	157206.95	5094.92	EOA
17	189909.62	157206.78	5094.55	EOA
18	189909.62	157182.17	5095.60	EOA
19	189930.62	157182.17	5095.29	EOA
20	189930.62	157158.85	5095.71	EOA
21	189940.35	157158.89	5095.63	EOA
22	189939.93	157171.97	5095.19	EOA
23	190016.67	157184.93	5093.56	EOA
24	190071.59	157185.06	5093.36	EOA
25	190076.67	157179.98	5093.57	EOA
26	190085.95	157179.98	5093.91	EOA
27	190086.03	157174.31	5094.07	EOA

GENERAL NOTES:

- BASIS OF SURVEY: NAD 1983/2011 AND NAVD88. SEE SURVEY CONTROL DIAGRAM FOR MORE DETAILED DESCRIPTION.
- ALL WORK WITHIN THE LIMITS OF THE 100-YR FLOODPLAIN OR FLOODWAY SHALL RETURN FINISHED GRADE TO MATCH EXISTING GRADE BEFORE CONSTRUCTION.

KEY NOTES:

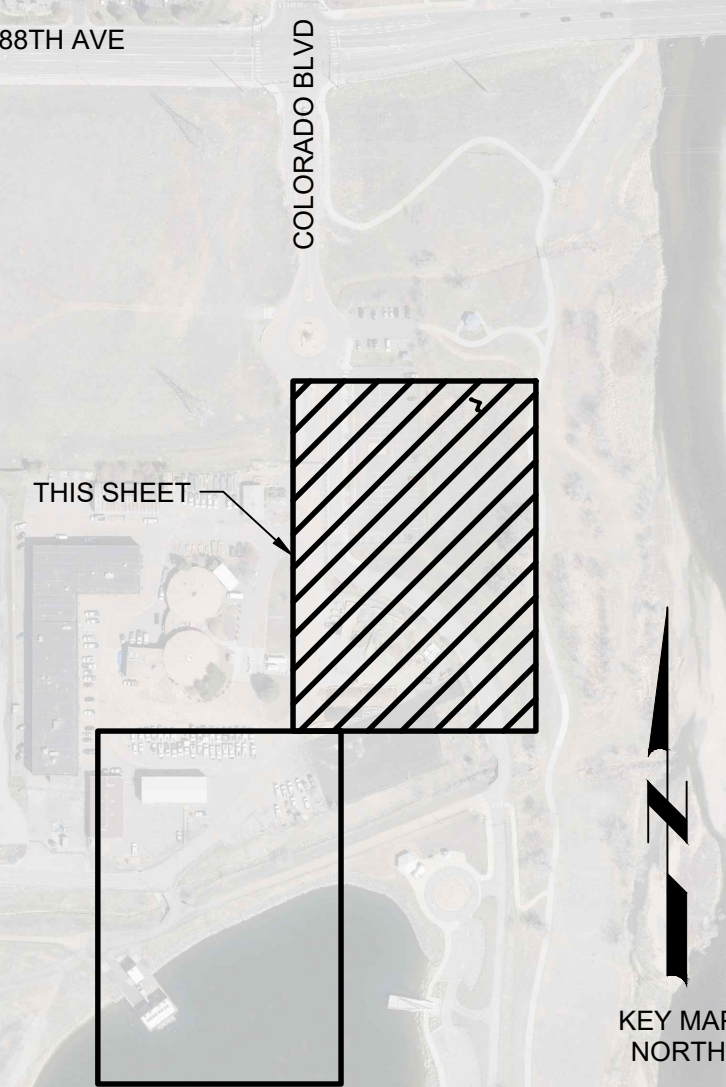
- INSTALL CURB AND GUTTER TO MATCH EXISTING CONDITION, INSTALL TO EXISTING LINE AND GRADE.
- INSTALL ASPHALT PAVING TO MATCH EXISTING SECTION + 1", INSTALL TO EXISTING LINE AND GRADE.
- 4" ASPHALT PAVEMENT OVER 8" OF CLASS 6 BASE COURSE.
- 8" WIDE CONCRETE APRON.
- ELECTRICAL HANDHOLE, SEE ELECTRICAL PLANS.
- INSTALL 6" THICK CONCRETE CHANNEL TO EXISTING LINE AND GRADE.
- INSTALL 2' ASPHALT CURB CUT, OUTLET ROOF DRAIN TO CONCRETE CHANNEL.
- INSTALL 6" CHAIN LINK FENCE.
- RESTORE EXISTING PAVEMENT MARKINGS.
- INSTALL TYPE 1 SPEED CUSHION AND PAVEMENT MARKINGS PER CITY OF THORNTON DETAILS AND DRAWING NO. 500-21.
- REMOVE 6-INCHES OF EXISTING MATERIAL AND REPLACE WITH 6-INCHES OF ABC IN A 10-FOOT DIAMETER RADIUS AROUND THE EXISTING CHEMICAL INJECTION MANHOLE.
- PARKING LOT CAN BE USED TO STOCKPILE MATERIAL.
- GENERATOR PAD. SEE STRUCTURAL FOR DETAILS.



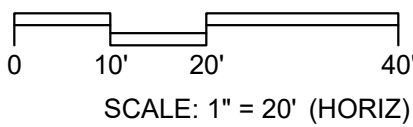
Know what's below.
Call before you dig.

Call
before you
Overhead

KEY MAP



SCALE



SCALE: 1" = 20' (HORIZ)

BID SET			
DESIGNED	CDH		
DRAWN	CDH		
CHECKED	JKK		
DATE	MAY 2026		
REV	7/26	CH	ADDENDUM NO. 4
DATE		BY	
			DESCRIPTION

DESIGNED	CDH
DRAWN	CDH
CHECKED	JKK
DATE	MAY 2026



CITY OF THORNTON - THORNTON WATER PROJECT

CHEMICAL BUILDING AND PRV VAULTS

CIVIL

CHEMICAL BUILDING -
GRADING, PAVING, AND DRAINAGE 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.

204403

DRAWING NO.

50C03

SHEET NO.

66 OF 168

Certificate Of Completion

Envelope Id: 744DEEB8-C5EC-8961-8040-4061EB2D0C25
 Subject: Complete with Docusign: 12-777XP Addend no4 7-16-26.pdf
 Source Envelope:
 Document Pages: 36
 Certificate Pages: 1
 AutoNav: Disabled
 Envelopeld Stamping: Disabled
 Time Zone: (UTC-07:00) Mountain Time (US & Canada)

Status: Completed
 Envelope Originator:
 Patrick Hinterberger
 9500 Civic Center Drive
 Thornton, CO 80229
 Patrick.Hinterberger@ThorntonCO.gov
 IP Address: 199.117.212.4

Record Tracking

Status: Original
 7/16/2026 2:38:53 PM

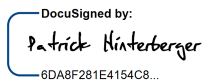
Holder: Patrick Hinterberger
 Patrick.Hinterberger@ThorntonCO.gov

Location: DocuSign

Signer Events

Patrick Hinterberger
 Patrick.Hinterberger@ThorntonCO.gov
 Sr. Contract Administrator
 SHI OBO City of Thornton
 Security Level: Email, Account Authentication
 (None)

Signature

DocuSigned by:

 6DA8F281E4154C8...
 Signature Adoption: Pre-selected Style
 Using IP Address: 199.117.212.4

Timestamp

Sent: 7/16/2026 2:39:14 PM
 Viewed: 7/16/2026 2:39:18 PM
 Signed: 7/16/2026 2:39:44 PM
 Freeform Signing

Electronic Record and Signature Disclosure:
 Not Offered via Docusign

In Person Signer Events

Signature

Timestamp

Editor Delivery Events

Status

Timestamp

Agent Delivery Events

Status

Timestamp

Intermediary Delivery Events

Status

Timestamp

Certified Delivery Events

Status

Timestamp

Carbon Copy Events

Status

Timestamp

Witness Events

Signature

Timestamp

Notary Events

Signature

Timestamp

Envelope Summary Events

Status

Timestamps

Envelope Sent	Hashed/Encrypted	7/16/2026 2:39:15 PM
Certified Delivered	Security Checked	7/16/2026 2:39:18 PM
Signing Complete	Security Checked	7/16/2026 2:39:44 PM
Completed	Security Checked	7/16/2026 2:39:44 PM

Payment Events

Status

Timestamps