

JORDAN VALLEY WATER CONSERVANCY DISTRICT

SERWTP INFLUENT VAULT REHABILITATION

JANUARY 2025



SHEET NO.	DRAWING NO.	SHEET TITLE	SHEET NO.	DRAWING NO.	SHEET TITLE
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F- PROFESSION, REV.	REVISIONS DESCRIPTION BY DATE		AT FULL SIZE ORIGINAL SIZE	SERWTP INFLUENT VAULT REHABILITATION	01/23/2025
13593208-2202	200000000000000000000000000000000000000	JORDAN VALLEY WATER		COVER	PROJECT NUMBER
13593208-2202 CONOR TYSON		CONSERVANCY DISTRICT 8215 South 1300 West	DESIGN: CDT DRAWING: CDT		PROJECT NUMBER 4367 DRAWING NUMBER
STATE OF UITH		West Jordan, UT 84088 801-565-4300	PROJ. MGR: CDT APPROVAL: DRM		SHEET NUMBER 1 OF 15

THE CONTRACTOR SHALL CAREFULLY READ ALL OF THE NOTES AND SPECIFICATION, THE CONTRACTOR SHALL ACCEPT THE TRUE MEANING AND BE RESPONSIBLE FOR COMPLYING WITH EACH.

GENERAL NOTES:

- ALL IMPROVEMENTS SHALL BE CONSTRUCTED IN STRICT ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS INCLUDED AS PART OF THE CONTRACT DOCUMENTS.
- 2. IT IS INTENDED THAT THESE PLANS AND SPECIFICATIONS REQUIRE ALL NECESSARY AND PROPER LABOR AND MATERIALS NECESSARY FOR THE WORK CONTEMPLATED AND THAT THE WORK BE IN ACCORDANCE WITH THEIR TRUE INTENT AND PURPOSE. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY REGARDING ANY DISCREPANCIES OR AMBIGUITIES WHICH MAY EXIST IN THE PLANS OR SPECIFICATION. THE ENGINEER'S INTERPRETATION THEREOF SHALL BE CONCLUSIVE.
- 3. WHERE THE PLANS OR SPECIFICATION DESCRIBE PORTIONS OF THE WORK IN GENERAL TERMS BUT NOT IN COMPLETE DETAIL, IT IS UNDERSTOOD THAT ONLY THE BEST GENERAL PRACTICE IS TO PREVAIL AND THAT ONLY MATERIALS AND WORKMANSHIP OF THE HIGHEST QUALITY ARE TO DETAILS.
- THE CONTRACTOR SHALL BE SKILLED AND REGULARLY ENGAGED IN THE GENERAL CLASS AND TYPE OF WORK CALLED FOR IN THE PROJECT PLANS AND SPECIFICATIONS, THEREFORE, THE OWNER IS RELYING UPON THE EXPERIENCE AND EXPERTISE OF THE CONTRACTOR; IT SHALL BE EXPECTED THAT PRICES PROVIDED WITHIN THE CONTRACT DOCUMENTS SHALL INCLUDE ALL MATERIALS NECESSARY AND PROPER LABOR FOR THE WORK CONTEMPLATED AND THAT THE WORK BE COMPLETED IN ACCORDANCE WITH THE TRUE INTENT AND PURPOSE. THE CONTRACTOR SHALL BE COMPETENT, KNOWLEDGEABLE AND HAVE SPECIAL SKILLS IN THE NATURE, EXTENT AND INHERENT CONDITIONS OF THE WORK TO BE PERFORMED. CONTRACTOR SHALL ALSO ACKNOWLEDGE THAT THERE ARE CERTAIN PECULIAR AND INHERENT CONDITIONS EXISTENT IN THE CONSTRUCTION OF THE PARTICULAR FACILITIES, WHICH MAY CREATE, DURING THE CONSTRUCTION PROGRAM, UNUSUAL OR UNSAFE CONDITIONS HAZARDOUS TO PERSONS, PROPERTY AND THE ENVIRONMENT. CONTRACTOR SHALL BE AWARE OF SUCH PECULIAR RISKS AND HAVE THE SKILL AND EXPERIENCE TO FORESEE AND TO ADOPT PROTECTIVE MEASURES TO ADEQUATELY AND SAFELY PERFORM THE CONSTRUCTION WORK WITH RESPECT TO SUCH HAZARDS
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMITS AND LICENSES REQUIRED FOR THE CONSTRUCTION AND COMPLETION OF THE PROJECT, AND SHALL PERFORM ALL WORK IN ACCORDANCE WITH THE REQUIREMENTS AND CONDITIONS OF ALL PERMITS AND APPROVALS APPLICABLE TO THIS PROJECT. THE CONTRACTOR SHALL ENSURE THAT THE NECESSARY RIGHT-OF WAYS, EASEMENTS, AND/OR PERMITS ARE SECURED PRIOR TO CONSTRUCTION.
- 6. THE CONTRACTOR SHALL, AT THE TIME OF BIDDING, AND, THROUGHOUT THE PERIOD OF THE CONTRACT, BE LICENSED IN THE STATE OF UTAH TO DO THE TYPE OF WORK CONTEMPLATED IN THE PLANS AND SPECIFICATIONS, AND SHALL BE BONDABLE FOR AN AMOUNT EQUAL TO OR GREATER THAN THE AMOUNT OF THE BID.
- 7. CONTRACTOR SHALL INSPECT THE SITE OF THE WORK PRIOR TO BIDDING TO SATISFY THEMSELVES BY PERSONAL EXAMINATION OR BY

- SUCH OTHER MEANS AS THEY MAY PREFER, OF THE LOCATION OF THE PROPOSED WORK, AND OF THE ACTUAL CONDITIONS OF AND AT THE SITE OF WORK. IF, DURING THE COURSE OF THEIR EXAMINATION. A BIDDER FINDS FACTS OR CONDITIONS WHICH APPEAR TO THEM TO BE IN CONFLICT WITH THE LETTER OR SPIRIT OF THE PROJECT PLANS AND SPECIFICATIONS, THEY SHALL CONTACT THE ENGINEER FOR ADDITIONAL INFORMATION AND EXPLANATION BEFORE SUBMITTING THEIR BID. SUBMISSION OF A BID BY THE CONTRACTOR SHALL CONSTITUTE ACKNOWLEDGMENT THAT, IF AWARDED THE CONTRACT. THEY HAVE REVIEWED AND ARE RELYING ON THEIR OWN EXAMINATION OF (1) THE SITE OF THE WORK, (2) ACCESS TO THE SITE, AND (3) ALL OTHER DATA AND MATTERS REQUISITE TO THE FULFILLMENT OF THE WORK AND ON THEIR OWN KNOWLEDGE OF EXISTING FACILITIES ON AND IN THE VICINITY OF THE SITE OF THE WORK TO BE CONSTRUCTED UNDER THIS CONTRACT. THE INFORMATION PROVIDED BY THE OWNER OR THE ENGINEER IS NOT INTENDED TO BE A SUBSTITUTE FOR, OR A SUPPLEMENT TO THE INDEPENDENT VERIFICATION BY THE CONTRACTOR TO THE EXTENT SUCH INDEPENDENT INVESTIGATION OF SITE CONDITIONS IS DEEMED NECESSARY OR DESIRABLE BY THE CONTRACTOR. CONTRACTOR SHALL ACKNOWLEDGE THAT THEY HAVE NOT BELIED SOLELY UPON OWNER OR ENGINEER FURNISHED INFORMATION REGARDING SITE CONDITIONS IN PREPARING AND SUBMITTING.
- 8. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ALL WATER, POWER, AND SANITARY FACILITIES AS REQUIRED FOR THE CONTRACTOR'S USE DURING CONSTRUCTION.
- THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE OWNER AND ENGINEER.
- 10. THE CONTRACTOR AGREES THAT:
 - A. THEY WILL BE RESPONSIBLE TO CLEAN THE JOB SITE AT THE END OF EACH PHASE OF WORK
 - B. THEY WILL BE RESPONSIBLE TO REMOVE AND DISPOSE OF ALL TRASH, SCRAP AND UNUSED MATERIAL AT THEIR OWN EXPENSE IN A TIMELY MANNIER
 - C. THEY WILL BE RESPONSIBLE TO MAINTAIN THE SITE IN A NEAT, SAFE AND ORDERLY MANNER.
 - D. THEY WILL BE RESPONSIBLE TO KEEP MATERIALS, EQUIPMENT, AND TRASH OUT OF THE WAY OF OTHER CONTRACTORS SO AS NOT TO DELAY THE JOB. FAILURE TO DO SO WILL RESULT IN A DEDUCTION FOR THE COST OF CLEAN UP FROM THE FINAL PAYMENT.
 - E. THEY SHALL BE RESPONSIBLE FOR THEIR OWN SAFETY, TRAFFIC CONTROL, PERMITS, RETESTING AND RE-INSPECTION AT THEIR OWN EXPENSE.
- 11. THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.

- 12. IF EXISTING IMPROVEMENTS NEED TO BE DISTURBED AND/OR REMOVED FOR THE PROPER PLACEMENT OF IMPROVEMENTS TO BE CONSTRUCTED BY THESE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXISTING IMPROVEMENTS FROM DAMAGE. COST OF REPLACING OR REPAIRING EXISTING IMPROVEMENTS SHALL BE INCLUDED IN THE UNIT PRICE BID. THERE WILL BE NO EXTRA COST DUE TO THE CONTRACTOR FOR REPLACING OR REPAIRING EXISTING IMPROVEMENTS.
- 13. WHENEVER EXISTING FACILITIES ARE REMOVED, DAMAGED, BROKEN, OR CUT IN THE INSTALLATION OF THE WORK COVERED BY THESE PLANS OR SPECIFICATIONS, SAID FACILITIES SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE, AFTER PROPER BACKFILLING AND/OR CONSTRUCTION, WITH MATERIALS EQUAL TO OR BETTER THAN THE MATERIALS USED IN THE ORIGINAL EXISTING FACILITIES. THE FINISHED PRODUCT SHALL BE SUBJECT TO THE APPROVAL OF THE OWNER, THE ENGINEER, AND THE RESPECTIVE REGULATORY AGENCY.
- 14. THE CONTRACTOR SHALL MAINTAIN A NEATLY MARKED SET OF AS-BUILT RECORD DRAWINGS SHOWING THE FINAL LOCATION, DIMENSION, AND LAYOUT OF ALL STRUCTURES AND OTHER FACILITIES, AS-BUILT RECORD DRAWINGS SHALL REFLECT CHANGE ORDERS, ACCOMMODATIONS, MODIFICATIONS, AND ADJUSTMENTS TO ALL IMPROVEMENTS CONSTRUCTED. WHERE NECESSARY, SUPPLEMENTAL DRAWINGS SHALL BE PREPARED AND SUBMITTED BY THE CONTRACTOR. PRIOR TO ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL DELIVER TO THE ENGINEER, ONE SET OF NEATLY MARKED AS-BUILT RECORD DRAWINGS SHOWING THE INFORMATION REQUIRED ABOVE. AS-BUILT RECORD DRAWINGS SHALL BE REVIEWED AND THE COMPLETE AS-BUILT RECORD DRAWING SET SHALL BE CURRENT WITH ALL CHANGES AND DEVIATIONS REDLINED AS PRECONDITION TO THE FINAL PROGRESS PAYMENT APPROVAL AND/OR FINAL ACCEPTANCE.
- 15. UPON SUBSTANTIAL COMPLETION OF WORK, THE CONTRACTOR SHALL BROOM SWEEP WORK SITE PRIOR TO CALLING FOR INSPECTION.
- JVWCD STAFF WILL SERVE AS ENGINEER ON THIS PROJECT.
- 17. THE ENTIRE INSTALLATION SHALL BE IN ACCORDANCE WITH THE MOST RECENTLY ADOPTED REQUIREMENTS OF THE INTERNATIONAL MECHANICAL CODE, INTERNATIONAL PLUMBING CODE, INTERNATIONAL BUILDING CODE, NATIONAL ELECTRICAL CODE, AND ALL OTHER APPLICABLE CITY, COUNTY, STATE, AND NATIONAL CODES AND REGULATIONS IN EFFECT AT THE DATE OF THE BID.
- 18. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS PRIOR TO FABRICATION.
- 19. ANY PART OF THIS INSTALLATION THAT FAILS, IS UNFIT, OR BECOMES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- 20. ALL EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE EQUIPMENT MANUFACTURER'S RECOMMENDATIONS. PROVIDE ALL FITTINGS, TRANSITIONS, AND OTHER DEVICES/ACCESSORIES REQUIRED FOR A COMPLETE WORKABLE INSTALLATION.

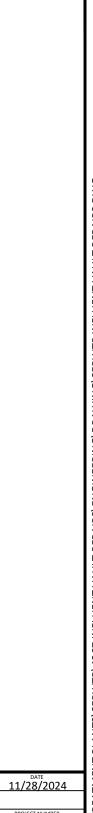
ELECTRICAL IMPROVEMENTS:

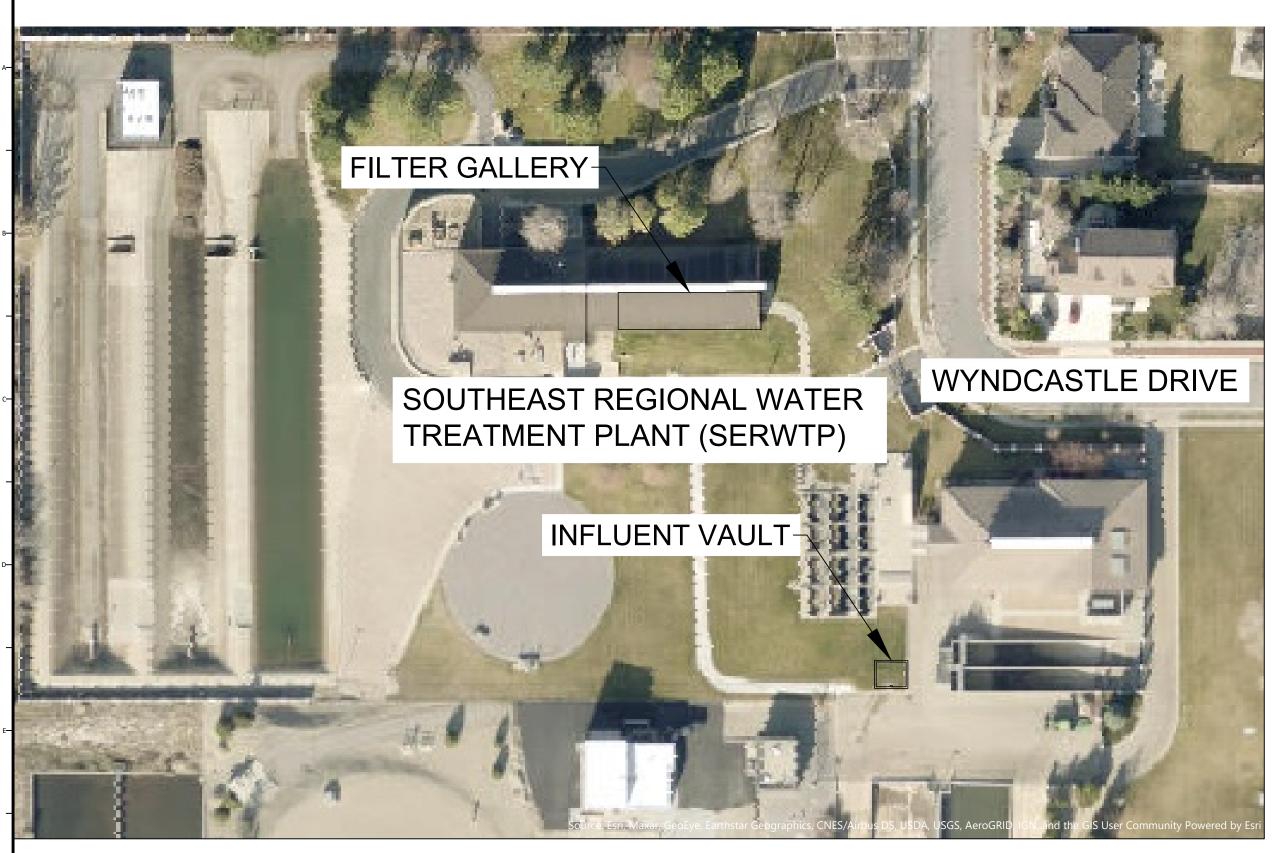
- PRIOR TO SUBMITTING A BID THE ELECTRICAL CONTRACTOR SHALL INSPECT THE SITE AND INCLUDE IN THEIR BID PACKAGE ALL CHARGES DUE TO EXISTING CONDITIONS. SHOP DRAWINGS ARE REQUIRED.
- 2. THE CONTRACTOR SHALL INFORM THE ENGINEER IN WRITING OF ANY DISCREPANCIES FOUND BETWEEN THE INTENDED FUNCTION OF EQUIPMENT AND EQUIPMENT SPECIFIED IN THE CONTRACT DOCUMENTS A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO ISSUANCE OF THE FINAL BID. FAILURE TO REPORT ANY DISCREPANCY (CATALOG NUMBERS, DISCONTINUED ITEMS, ETC.) DOES NOT RELIEVE THE CONTRACTOR FROM PROVIDING EQUIPMENT WHICH SHALL CONFORM TO FULFILL THE INTENT OF THE CONTRACT DOCUMENTS. NOR SHALL IT BE USED AS A CONDITION TO OBTAIN ADDITIONAL FUNDS FROM THE OWNER AFTER THE CONTRACT IS AWARDED. THE CONTRACTOR SHALL REQUEST ALL CLARIFICATIONS OF CONTRACT DOCUMENT REQUIREMENTS IN WRITING TO THE ENGINEER A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO ISSUANCE OF THE FINAL ADDENDUM.
- MINIMUM SIZE OF CONDUIT TO BE 3/4". ALUMINUM CONDUITS SHALL NOT BE USED.
- RUN A NEUTRAL CONDUCTOR FOR EACH PHASE CONDUCTOR (EACH CIRCUIT) IN A CONDUIT.
- 5. ALL NEW EXPOSED CONDUIT SHALL RUN AGAINST THE WALLS OR CEILINGS. DO NOT PENDANT MOUNT ANY CONDUIT FROM THE CEILINGS. (FLOW METER EXCEPTED)
- ALL ELECTRICAL WIRING SHALL BE STRANDED AND IN CONDUIT (ROMEX AND MC CABLE NOT PERMITTED).
- ALL CONDUITS SHALL BE GALVANIZED RIGID STEEL, UNLESS OTHERWISE NOTED. BURIED CONDUIT SHALL BE SCHEDULE 40 PVC.
- ALL NEW WORK SHALL MEET THE CURRENT ADOPTED
 NATIONAL ELECTRICAL CODE.
- 9. CONTRACT DOCUMENTS SHALL TAKE PRECEDENCE OVER SHOP DRAWINGS UNLESS SPECIFICALLY NOTED OTHERWAYSE
- 10. ALL CONDUCTORS SHALL BE STRANDED COPPER.
- 11. ALL WIRING DEVICES SHALL BE BACK WIRED ONLY.
- 12. STRANDED CONDUCTORS REQUIRE LUGS AND SHALL NOT BE WRAPPED AROUND SCREWS.

SURFACE IMPROVEMENTS:

 PAVEMENT, SIDEWALK AND SURFACE IMPROVEMENTS, AND LANDSCAPE DISTURBED DURING THIS WORK SHALL BE REPLACED AS PART OF THE WORK. ALL ASSOCIATED COSTS SHALL BE INCLUDED IN THE CONTRACTOR'S BID PRICE.

PROFESSION	REVISIONS			LINE IS 1 INCH ORIGINAL SIZE	SERWTP INFLUENT VAULT REHABILITATION	DATE 11/29/2024
	REV. DESCRIPTION BY	DATE		(IF NOT 1" - SCALE ACCORDINGLY)		11/28/2024
13593208-2202 CONOR TYSON			JORDAN VALLEY WATER		COVER	PROJECT NUMBER 4367
TYSON S				DESIGN: CDT DRAWING: CDT	-	DRAWING NUMBER
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NOTES:

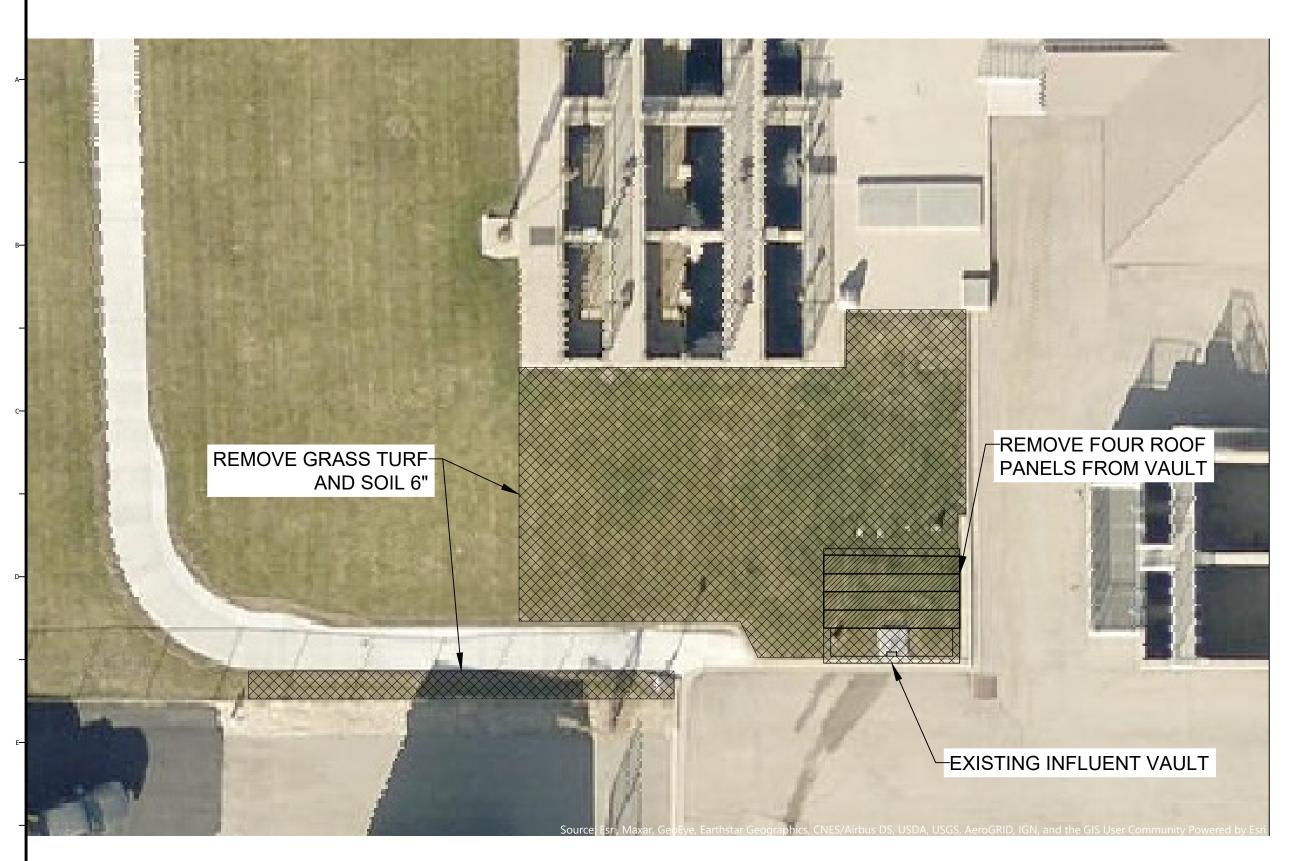
- PROJECT SITE IS ENTIRELY ON SECURED DISTRICT PROPERTY.
- OPERATORS ARE ON-SITE AND CONTROL ACCESS.

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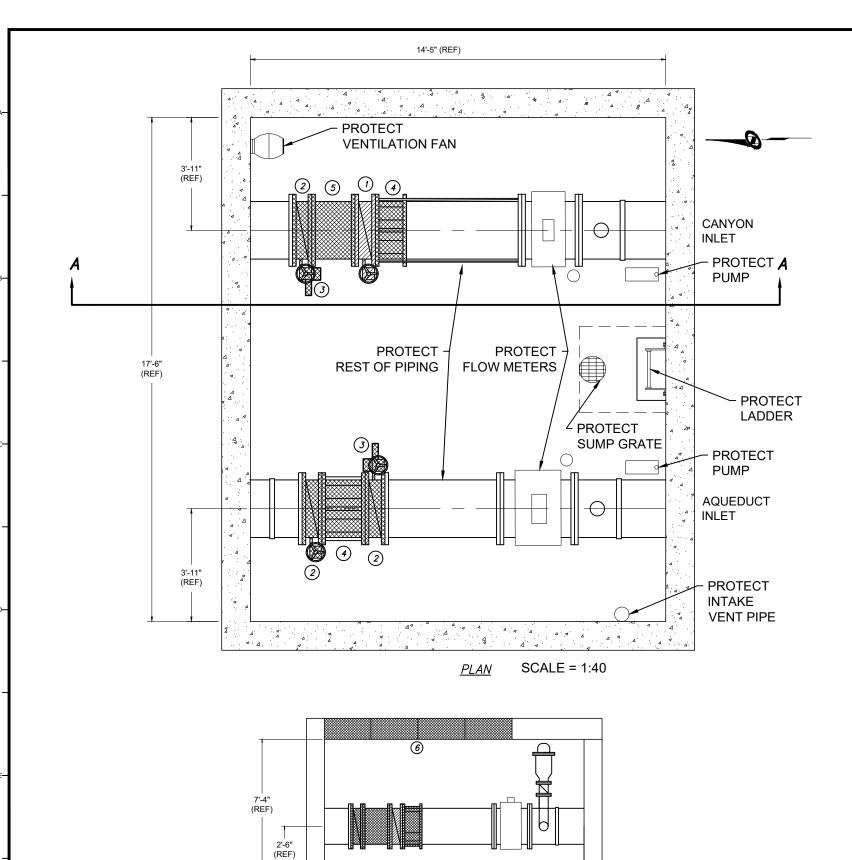
SERWTP INFLUENT VAULT REHABILITATION	11/28/2024
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PROJECT SITE	PROJECT NUMBER 4283
	DRAWING NUMBER
	3 OF 15



- REMOVE SOD AND TOPSOIL ABOVE VAULT BEFORE REMOVING PANELS.
- 2. EXPOSED SPRINKLER LINES IN PROJECT AREA SHALL BE CAPPED.

SERWTP INFLUENT VAULT REHABILITATION 11/28/2024 DESCRIPTION JORDAN VALLEY WATER SCALE: 1:40 **DEMOLITION SITE PLAN** PROJECT NUMBE DESIGN: **INFLUENT VAULT** 8215 South 1300 West West Jordan, UT 84088 801-565-4300 DRAWING: D1 PROJ. MGR: APPROVAL: DRM 4 OF 15

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SECTION A-A SCALE = 1:64

	EQUIPMENT TO REMOVE										
NUMBER	DESCRIPTION	COUNT	ACTION								
1	BUTTERFLY VALVE	24"	1	REMOVE, CLEAN SEAL, REUSE							
2	BUTTERFLY VALVE	24"	3	DEMO							
3	ELECTRONIC ACTUATOR	-	2	DEMO							
4	COUPLER	24"	2	DEMO							
5	SPOOL	24"	1	DEMO							
6	CONDUITS ON ROOF PANELS		4	REMOVE AND PROTECT TO REINSTALL							

NOTES:

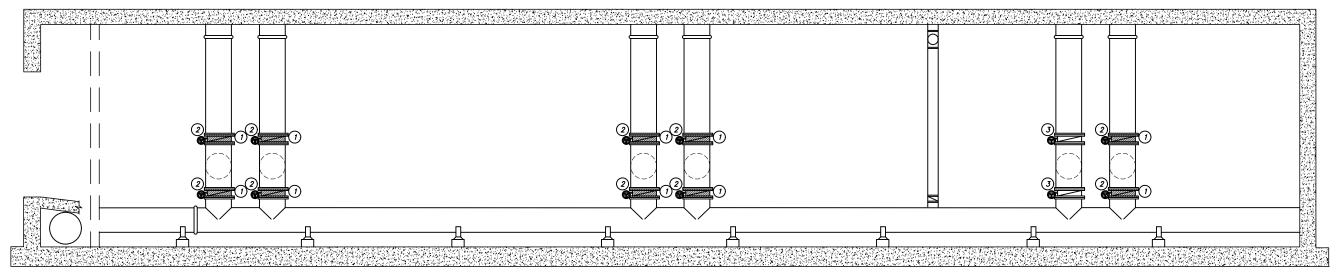
- 1. REMOVE ALL EQUIPMENT MARKED WITH HATCH LINES IN DRAWING.
- 2. OWNER WILL DEPRESSURIZE PIPE AND DRAIN. OWNER CANNOT GUARANTEE DRIP—TIGHT SHUT OFF. CONTRACTOR MUST BE PREPARED FOR UP TO 30 $_{
 m gpm}$ NUISANCE WATER
- 3. DEMOLISH PIPING SALVAGE TO CONTRACTOR.





EXISTING PIPES IN VAULT

F- PROFESSION	REV.	REVISIONS DESCRIPTION	BY DATE		LINE IS 1 INCH AT FULL SIZE (IF NOT 1" - SCALE ACCORDINGLY)	SERWTP INFLUENT VAULT REHABILITATION	01/23/2025
13593208-2202 CONOR TYSON				JORDAN VALLEY WATER CONSERVANCY DISTRICT 8215 South 1300 West West Jordan, UT 84088	SCALE: SCALE	DEMOLITION PLAN INFLUENT VAULT	PROJECT NUMBER 4367 DRAWING NUMBER D2 SHEET NUMBER 5 OF 15



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	EQUIPMENT TO REMOVE										
NUMBER	DESCRIPTION	SIZE	COUNT	ACTION							
1	BUTTERFLY VALVE	24"	10	DEMO							
2	ELECTRIC ACTUATOR	-	10	DEMO							
3	ELECTRIC ACTUATOR	-	2	REMOVE, SALVAGE TO OWNER							

NOTES:

- 1. OWNER WILL DEPRESSURIZE PIPE AND DRAIN.
- 2. DEMOLISH PIPING SALVAGE TO CONTRACTOR.
- 3. CONTRACTOR MUST PROVIDE SUPPORT FOR REMOVING VALVES.





EXISTING VALVES AND ACTUATORS

F- 310VESSTOVE REV. REV.	REVISIONS DESCRIPTION B	Y DATE		JORDAN VALLEY WATER		SERWTP INFLUENT VAULT REHABILITATION DEMOLITION PLAN	01/24/2025 PROJECT NUMBER
TYSON E			0	8215 South 1300 West West Jordan, UT 84088	DESIGN: CDT DRAWING: CDT PROJ. MGR: CDT APPROVAL: DRM	FILTER GALLERY	PROJECT NUMBER 4367 DRAWING NUMBER D3 SHEET NUMBER 6 OF 15

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D		3 74	INTAKE VENT PIPE
		<u>PLAN</u>	

NEW EQUIPMENT								
NUMBER	DESCRIPTION	SIZE	CONNECTION	COMMENTS				
1	BUTTERFLY VALVE	24"	CLASS 150 FLG.	PRATT, BRAY, AV-TEK OR APPROVED EQUAL				
2	KNIFE GATE VALVE	24"		WITH VALVE EXTENSION STEM TO VAULT CEILING				
3	HIGH PERFORMANCE DOUBLE OFFSET BUTTERFLY VALVE	24"	CLASS 150 FLG.	AV-TEK DEX, VAG EKN, OR APPROVED EQUAL				
4	BUTTERFLY VALVE	24"	CLASS 150 FLG.	REUSE REMOVED AND CLEANED VALVE				
5	ELECTRONIC ACTUATOR (2)		BUTTERFLY VALVE	AUMA, ROTORK, OR LIMITORQUE. SEE NOTES				
6	(NOT USED)							
7	DISMANTLING JOINT (2)	24"	CLASS 150 FLG	ROMAC DJ 400 CLASS F W/ SS TIE RODS AND BOLTS OR APPROVED EQUAL				
8	RESTRAINED FLANGED COUPLING ADAPTOR	24"	CLASS 150 FLANGE					
9								
10								

GENERAL NOTES:

- 1. USE STAINLESS STEEL BOLTS AND NUTS
- ALL EXPOSED METAL PIPING, FITTINGS, AND VALVES, NEW OR EXISTING SHALL BE COATED WITH A HIGH SOLIDS TWO COMPONENT EPOXY COATING SYSTEM. THE EPOXY COATING SHALL BE AMERON, AMERLOCK 400, MATCHING THE EXISTING WHITE COLOR, OR APPROVED EQUAL. THE FLOW METERS SHALL NOT BE COATED.
- 3. CLEAN AND DISINFECT ALL PIPING BEFORE PUTTING INTO SERVICE.
- 4. ALL COMPONENTS IN CONTACT WITH CULINARY WATER SHALL BE NSF-61 APPROVED.

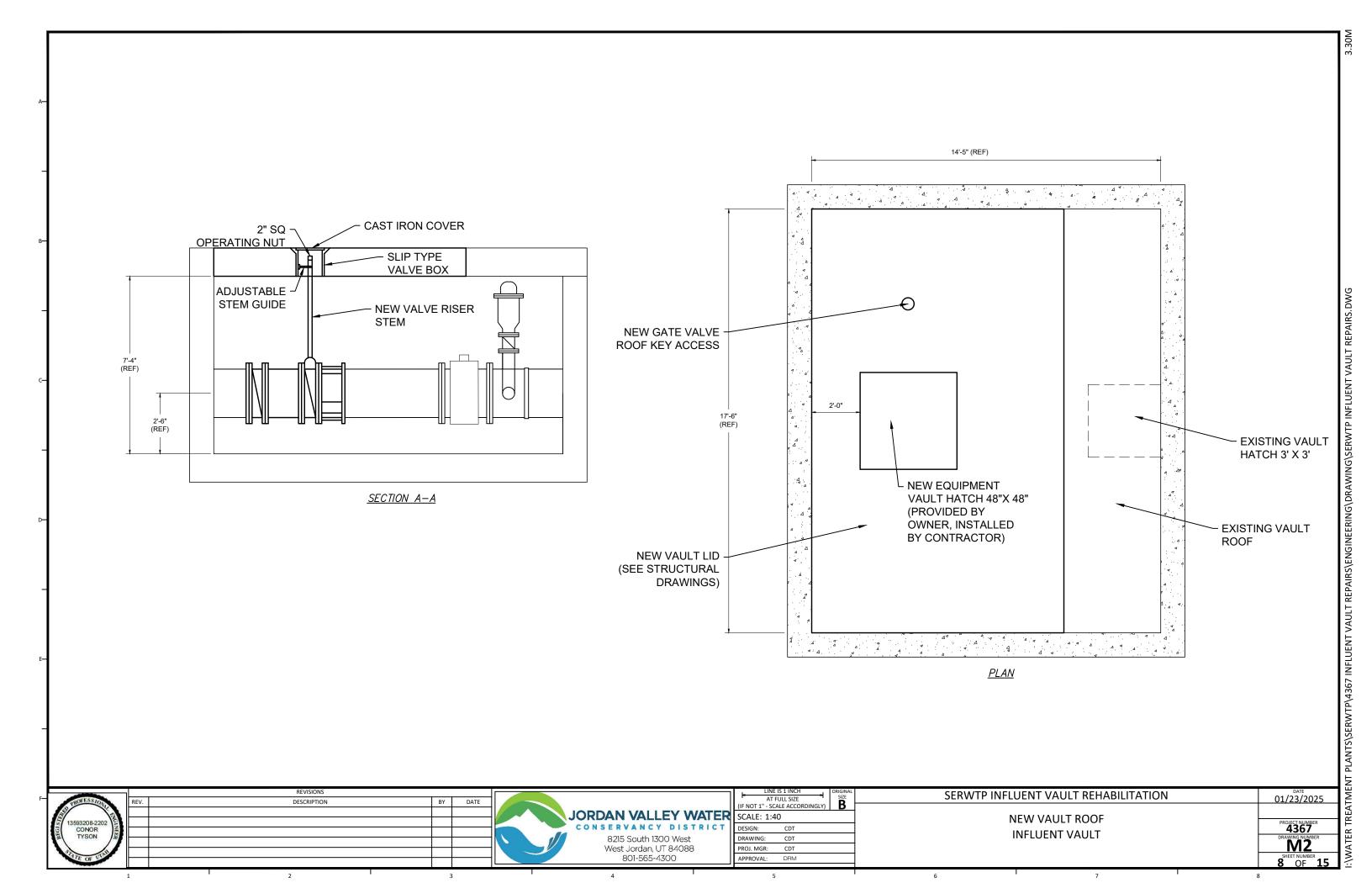
ACTUATOR NOTES:

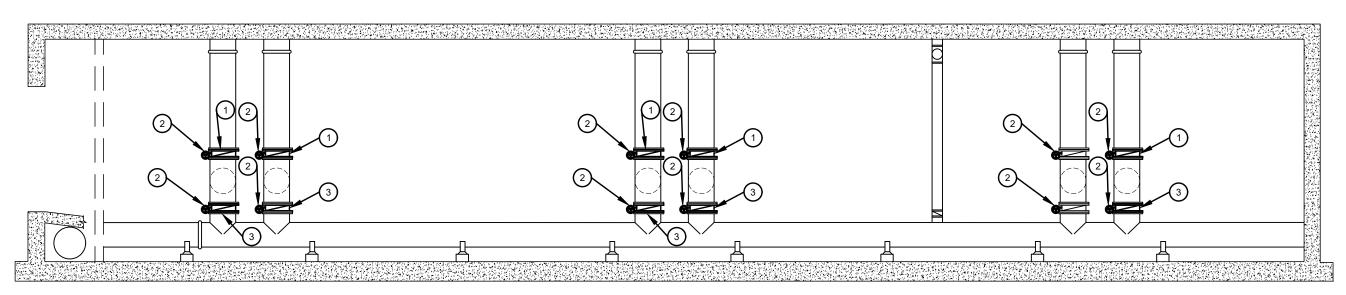
- 1. 480 VAC, 3 PHASE
- 2. WORKING PRESSURE = 10 PSI TO 65 PSI

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SECTION

EQUIPMENT SCHEDULE								
NUMBER	DESCRIPTION	SIZE	NOTES					
1	BUTTERFLY VALVE	24"	5	PRATT, BRAY, AV-TEK OR APPROVED EQUAL				
2	ELECTRONIC ACTUATOR	-	10	AUMA, ROTORK, OR LIMITORQUE. SEE NOTES				
3	HIGH PERFORMANCE DOUBLE OFFSET BUTTERFLY VALVE	24"	5	AV-TEK DEX, VAG EKN, OR APPROVED EQUAL				

GENERAL NOTES:

- 1. USE STAINLESS STEEL BOLTS AND NUTS
- ALL NEW VALVES, PLUS ALL METAL PIPING AND FITTINGS COATINGS DISTURBED DURING CONSTRUCTION SHALL BE COATED WITH A HIGH SOLIDS TWO COMPONENT EPOXY COATING SYSTEM. THE EPOXY COATING SHALL BE AMERON, AMERLOCK 400, MATCHING THE EXISTING BLUE COLOR, OR APPROVED EQUAL.
- 3. CLEAN AND DISINFECT ALL VALVES BEFORE PUTTING INTO SERVICE.
- 4. ALL VALVES SHALL BE NSF-61 APPROVED.

ACTUATOR NOTES:

- 1. 480 VAC, 3 PHASE
- 2. WORKING PRESSURE = 10 PSI TO 65 PSI

F- PROFESSION	REV.	REVISIONS DESCRIPTION BY	DATE		LINE IS 1 INCH AT FULL SIZE (IF NOT 1" SCALE ACCORDINGLY)	SERWTP INFLUENT VAULT REHABILITATION	01/23/2025
13593208-2202 CONOR TYSON				JORDAN VALLEY WATER CONSERVANCY DISTRICT 8215 South 1300 West	(IF NOT 1" - SCALE ACCORDINGLY) B SCALE: 1/8" = 1.0' DESIGN: CDT DRAWING: CDT PROJ. MGR: CDT APPROVAL: DRM	MECHANICAL PLAN FILTER GALLERY	PROJECT NUMBER 4367 DRAWING NUMBER M3 SHEET NUMBER 9 OF 15

STRUCTURAL NOTES

Design Criteria

Design per 2021 IBC

Seismic Design Risk Category Importance Factor (Seismic) Seismic Spectral Response Acceleration (S₅) 1.417a Seismic Spectral Response Acceleration (Sps) 1.134a Seismic Spectral Response Acceleration (S_1) 0.532g Seismic Spectral Response Acceleration (S_{D1}) Null Seismic Site Class Definition Seismic Design Category Seismic Force Resistance System Special Reinforced Concrete Shear Walls Response Modification Factor (R) 2.5 Over-strength Factor (Ω o) Deflection Amplification Factor (Cd)

Slab Loads

Ground Snow Load (P_a) :

Importance Factor (Snow)

Assumed Coefficient of Friction

Seismic Snow Contribution Soil Design Soils report not provided. Assumed Allowable Soil Bearing Pressure 1500 psf Assumed Lateral Pressure 60 pcf

General

The Scope of Work requires the General Contractor to remove and replace the roof slab on an existing concrete vault. The General Contractor and Sub-Contractors shall provide sufficient skilled workmen and supervisors who shall be present at all times during execution of the Work. A Project Manager, shall be assigned by the General Contractor, and shall be responsible for the daily coordination of the project and shall maintain all required drawings, specifications, reports, and other items for review at the site. 3. The General Contractor and/or Sub-Contractors shall be responsible for verifying all dimensions in the field. Any discrepancies in dimensions or differences between plans and specifications shall be reported to the Engineer and construction suspended until clarification is received. This includes the integration of any other systems, such as mechanical or electrical, that may require changes to the intended structural design of the project.

Unless noted otherwise, all details, sections and notes shown on the contract drawings are intended to be typical and shall apply to similar conditions elsewhere.

All construction shall be according to the current edition of the International Building Code (IBC). The contractor shall be responsible for the protection of and safety in and around the job site and/or adjacent properties. The contractor and/or owner shall keep loads on the structure within the limits of the design loads both during and after

construction. Specific notes and details in the drawings shall govern over the structural notes and any "typical" details.

42 psf

0.25

Typical details and sections shall apply were specific details are not shown.

10. Changes to these contract drawings may be only made by an authorized representative of Conder Engineering, LLC. Conder Engineering, LLC shall not be held responsible or liable for any claims arising directly or indirectly from changes made by any party without written authorization by an authorized representative of Conder Engineering, LLC.

Omissions or conflicts between any drawings and/or specifications shall be brought to the attention of the architect/engineer before proceeding with any construction. Any work done by others shall by at their own risk and liability.

12. The contractor shall provide adequate shoring and bracing for all structural members, as needed. The shoring and bracing shall remain in place until the final connections, diaphragms, etc are installed completely.

Special Inspection & Testina

Special inspection and testing shall be provided by an independent agency employed by the owner unless waived by the building official. The contractor shall coordinate and cooperate with the required inspections. All testing and inspection reports shall be provided to the engineer/architect for review.

Special inspections do not include nor waive the responsibility for any required inspections by the building officials. The contractor is responsible for scheduling both inspections.

3. Special inspection and testing are required.

Submittals

The following information and submittals shall be provided to the Engineer before fabrication and/or delivery to the jobsite, not all may apply. The review of shop drawings and submittals by Conder Engineering, LLC is for general compliance only and is not intended for approval. Any shop drawing reviews and approvals shall not relieve the contractor from their responsibility of completing the project according to the project drawings.

Concrete mix designs Rebar submittal

Other shop drawings & submittals as deemed necessary by the Engineer

Earthwork & Soils

A soils report was not provided. The contractor is to comply to all code requirements.

All organic materials, rubbish, etc. shall be removed from beneath locations of proposed footings, concrete slabs and asphalt paving. It is recommended that the top soil be removed and stockpiled. This material is not to be used. All footings shall be placed on undisturbed existing soil or imported structural fill compacted to 95% maximum relative density

based on ASTM D1557, current revision, as approved by the Engineer. 4. Slabs shall be placed on 6" of granular backfill compacted to 95% maximum relative density or as dictated by all code requirements.

5. Structural backfill shall conform to all code requirements.

All free water shall be removed from the foundation excavation prior to placing concrete.

Exterior footings and grade beams shall be located at least 30" below finished grade.

8. It is recommended that a geotechnical engineer visually inspect and/or test the subgrade and engineered fill during contraction, to verify site constructability. 9. It is recommended that both the subgrade and fill be proof rolled with a loaded truck to verify that no pumping or rutting is

present prior to backfill, and when the slab and other structural items are constructed. 10. All recommendations above are minimum requirements. Refer to the current code and jurisdiction's requirements for any

site-specific requirements.

1. All structural steel and structural steel work shall comply with "Specifications for the Design, Fabrication and Erection of Structural Steel for Buildings of the AISC" and the "AISC Code of Standard Practice."

All structural steel shall be ASTM A36, unless noted otherwise.

All welds and welding shall be in accordance with the specifications of "The American Welding Society, using electrodes as specified therein." Welds to be made with E - 70xx electrodes unless noted otherwise.

Use A307 bolts with plate washers, unless otherwise specified, for typical connections and connections to concrete.

Use A325 bolts with plate washers, unless otherwise specified, for steel to steel connections.

Metal flashing shall be hot dip galvanized, or have other approved equal corrosion resistance.

Material shall comply with the following standards except where noted otherwise. ASTM A-307 Grade A A.Typical Bolts

B.High Strength Bolts ASTM A-325 ASTM A-307 Grade A C.Anchor Bolts D.Nuts for Anchor ASTM A563 Grade A

ASTM A-500 Grade B with yield strength of 46 ksi E.Steel Tubes F. Steel Pipes ASTM A-53 Grade B type E or S

G. Deformed Bar Manufactured by Nelson Stud Co. or equivalent H.Headed Stud Anchor ASTM A-108 Manufactured by Nelson Stud Co. or equivalent

I. All Other Steel Shapes ASTM A-36 with yield strength of 36 ksi All steel in contact with treated lumber or exposed to weathering to be galvanized, coated per manufacturer, or stainless steel per IBC 2304.10.6

Concrete

1. All concrete shall have a minimum 28-day compressive strength of 4000 psi: A.Portland cement - ASTM C-150, Type I. Obtain all cement from the same source.

B.Hard-rock aggregate shall conform to ASTM C-33 and shall be of the following maximum sizes: 1-1/2 in. for footings and 3/4 in. for all other work, with 0% - 10% passing #10 sieve. C.Water - clean, clear, potable.

D.Water/cement ratio - not to exceed 0.45.

E.Maximum slump - 4".

F. Admixtures - air-entraining ASTM C-260, 6% ± 1%. Do not use calcium chloride.

Do not add water at site.

All reinforcing bars shall be grade 60 and shall conform to ASTM A-615, current revision. Reinforcing steel shall be new and free from rust, oil or other bond inhibitor. Grade 40 bars may be used in place of grade 60 bars, when approved by the engineer. All reinforcing bars shall be detailed and supported according to ACI 318.

All reinforcing bars shall be securely anchored to the forms. The following minimum concrete cover shall be provided for reinforcement:

A.Concrete cast against and permanently exposed to earth: 3" B.Concrete exposed to earth or weather:

No. 6 through No. 18 bars: 1-1/2" No. 5 bar and smaller: C.Concrete not exposed to weather or in contact with the ground: No. 14 and No. 18 bars:

No. 11 bar and smaller: All continuous reinforcing bars shall lap at least 40 bar diameters. Splices shall be made away from points of maximum stress. Minimum lap shall be 18 in.

Unless noted otherwise, all on grade slabs shall be 4 in. thick for residential construction. Driveway and architectural slabs shall be reinforced with #3 deformed bars @ 12" O.C. each way, placed in center of slab. Contact the engineer of record if thicker slabs are required per the civil drawings or geotechnical report. For all other slabs on grade rebar is to be placed at 2" from the top of slab. The contractor shall provide construction joints and/or control joints in concrete slabs on grade. The spacing of the joints shall not exceed 2.25 (max) x's the slab thickness in inches (i.e. 4'' slab x 2.25 = 9 ft o.c., max), and form a square pattern if possible. The maximum length to width ration is 1.25:1. Joints to be coordinated with architectural and structural drawings.

8. For pouring concrete during cold weather:

A.Follow recommendations contained in publication ACI 306R "Cold-Weather Concreting," current revision. B.Protect concrete work from physical damage or reduced strength which could be caused by frost, freezing actions or low temperatures.

C.When air temperature has fallen to or is expected to fall below 40°F or 4°C, uniformly heat water and aggregates before mixing to obtain a concrete mixture temperature of not less than 50°F or 10°C, and not more than 80°F or 27 D.Concrete shall be air entrained with air content of 6% + / - 1% by volume.

E.Do not use frozen materials or materials containing ice or snow. Do not place concrete on frozen subgrade or on subgrade containing frozen materials.

F.Do not use calcium chloride, salt or other materials containing antifreeze agents or chemical accelerators, unless otherwise approved in the mix design.

Cover and heat concrete for a minimum of 7 days as recommended by ACI 306R, current revision.

9. For pouring concrete during hot weather: A.Follow recommendations contained in publication ACI 305R "Hot-Weather Concreting," current revision. B.Protect concrete from flash curing by providing a water/moisture cure for 3 days.

All anchors to be installed per the manufacturer's requirements. For both mechanical and epoxy type anchors these requirements include, but is not limited to:

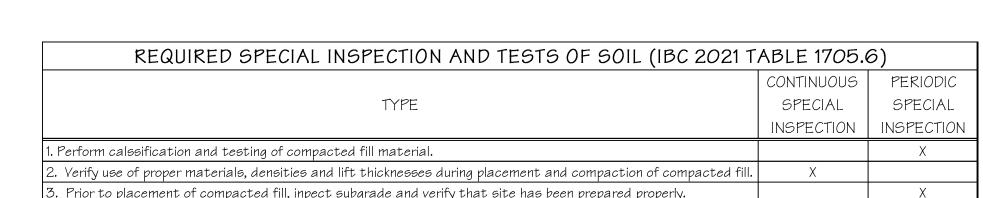
A.Proper hole diameter, depth, edge distances, and spacing.

B.Proper hole preparation and clean out

C. Weather requirements to be followed, especially for cold weather applications.

C.A 4500 psi (with a 6-1/2 bag mix) is recommended for these conditions.

D.All structural anchors to comply with the cracked concrete requirements of the current edition of the ACI 318.



REQUIRED SPECIAL INSPECTION	OF CONCR	ETE CONST	RUCTION (IBC 2021 TABLE 1705.3)	
	CONTINUOUS	PERIODIC		
TYPE	SPECIAL	SPECIAL	REFERENCED STANDARD	IBC REFERENCE
	INSPECTION	INSPECTION		
1. Inspection reinforcement, including prestressing tendons, and verify placement		X	ACI 318: Ch 20, 25.2, 25.3, 26.6.1-26.6.3	
2. Inspect anchors cast in concrete		X	ACI 318: 17.8.2	
3. Inspect anchors post-installed in hardened concrete members				
a. Adhesive anchors installed in horizontally or upward inclided orentation to				
resist sustained tension loads.	X		ACI 318: 17.8.2.4	
b. Mechanical anchors and adhesives not defined in 4.a.		X	ACI 318: 17.8.2	
4. Verify use of required design mix		X	ACI 318: Ch 19, 26.4.3, 26.4.4	1904.1, 1904.2
5 Prior to consert a placement folywest a speciment for strongeth tests represent			ASTM C172	
5. Prior to concrete placement, fabricate specimens for strength tests, perform	X		ASTM C31	
slump and air content tests, and determine the temperature of the concrete			ACI 318: 26.5, 26.12	
6. Inspect concrete and shotcrete placement for proper application techniques.	X		ACI 318: 26.5	
7. Verify maintenance of specified curing temperature and techniques.		Х	ACI 318: 26.5.3-26.5.5	
8. Inspect formwork for shape, location, and dimensions of the concrete member being formed		X	ACI 318: 26.11.1.2(b)	

SPECIAL INSPECTION NOTES:

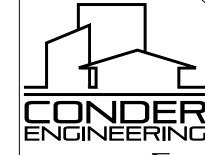
THE OWNER WILL BE RESPONSIBLE FOR ALL SPECIAL INSPECTIONS. THE CONTRACTOR SHALL PROVIDE ADEQUATE NOTICE TO OWNER AT ANY TIME THAT SPECIAL INSPECTIONS ARE REQUIRED.

FAILURE OF ANY INSPECTIONS ARE TO BE NOTED AND SUBMITTED TO THE OWNER, ENGINEER OF RECORD, AND THE CONTRACTOR WHEN THE CORRECTIONS REQUIRE A FOLLOW UP AND CANNOT BE COMPLETED DURING THE INITIAL INSPECTION. DOCUMENTATION FOR INSPECTIONS MUST BE COMPLETED AND SUBMITTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, INTERNATIONAL BUILDING CODES

(LATEST EDITION), CITY REQUIREMENTS, AND THE LATEST EDITION OF THE "MANUAL FOR SPECIAL INSPECTIONS, OR AS AGREED UPON WITH THE OWNER, ENGINEER OF RECORD AND CONTRACTOR. SPECIAL INSPECTIONS DO NOT INCLUDE NOR WAIVE THE NECESSITY OF ANY REQUIRED INSPECTIONS BY THE BUILDING OFFICIALS. THE CONTRACTOR IS

RESPONSIBLE FOR SCHEDULING ALL INSPECTIONS WITH THE BUILDING OFFICIALS AND COORDINATING SPECIAL INSPECTIONS WITH THE OWNER. ANY SPECIFIED CONCRETE AND MASONRY TESTING DURING CONSTRUCTION WILL BE FURNISHED BY THE CONTRACTOR. ALL SPECIFIED LAB TESTS, MIX DESIGN, AND SIMILAR TESTING TO VERIFY MATERIAL QUALITY AND CONFORMANCE TO ALL PROJECT SPECIFICATIONS/DRAWINGS, AND ANY SUBMITTALS REQUIRED

SHALL BE THE THE REASONABILITY OF THE CONTRACTOR. THE SPECIAL INSPECTOR IS RESPONSIBLE FOR ENSURING THE PUBLICATIONS USED FOR INSPECTION CRITERIA ARE THE MOST CURRENT AND UP TO DATE. IF ANY STRUCTURAL OBSERVATIONS THAT ARE TO BE PROVIDED BY THE ENGINEER, PER IBC SECTION 110 AND CHAPTER 17, THEN CONTRATOR SHALL PROVIDE ADEQUATE NOTICE TO THE ENGINEER PRIOR TO CONCRETE PLACEMENT OR COVERING UP ANY WORK.



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By accepting the design and submission to the building official for approval, any changes thereafter to the approved design that modify the Structural elements or the Structure itself, without the Engineer's Approval, will void the Engineer's

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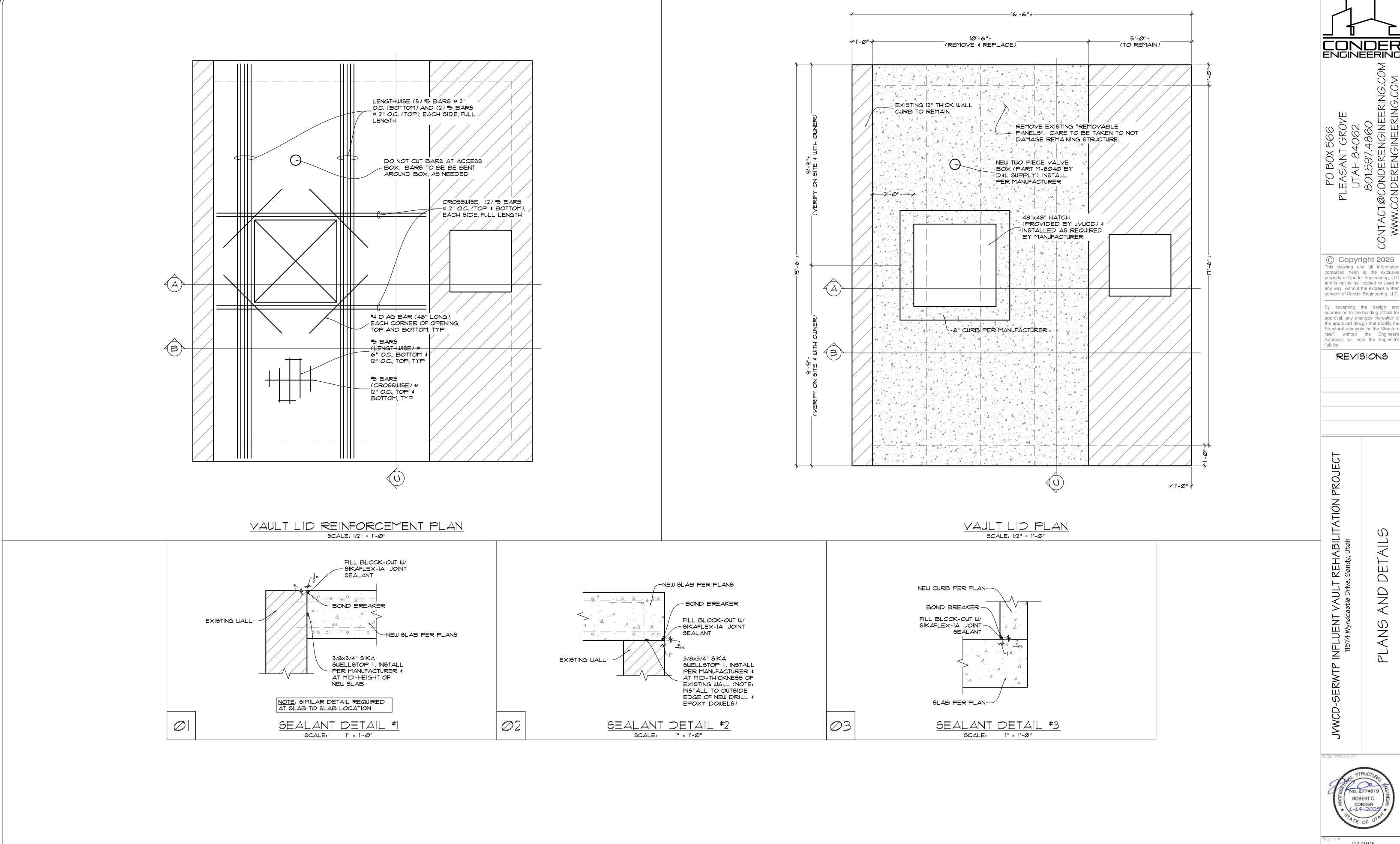
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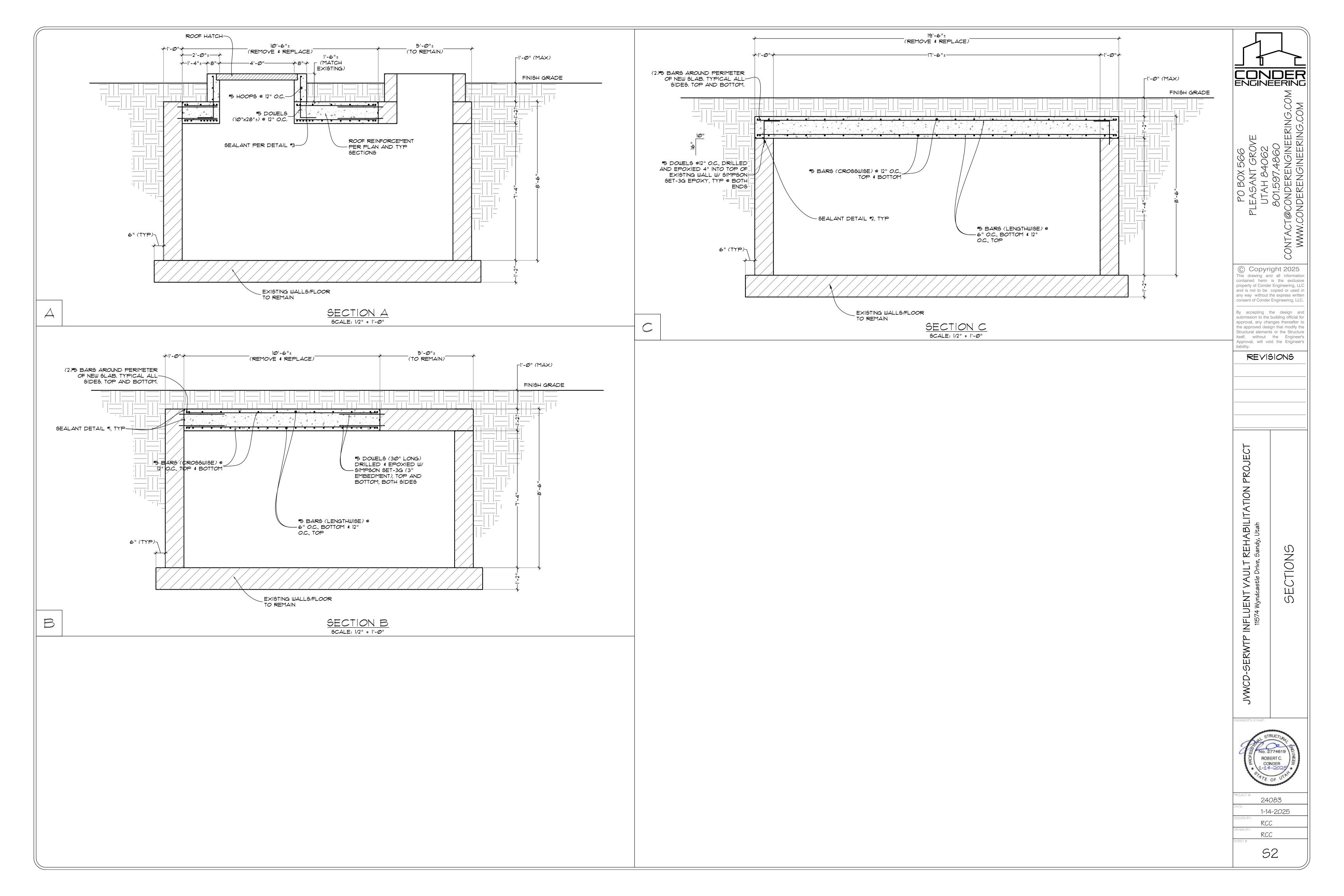
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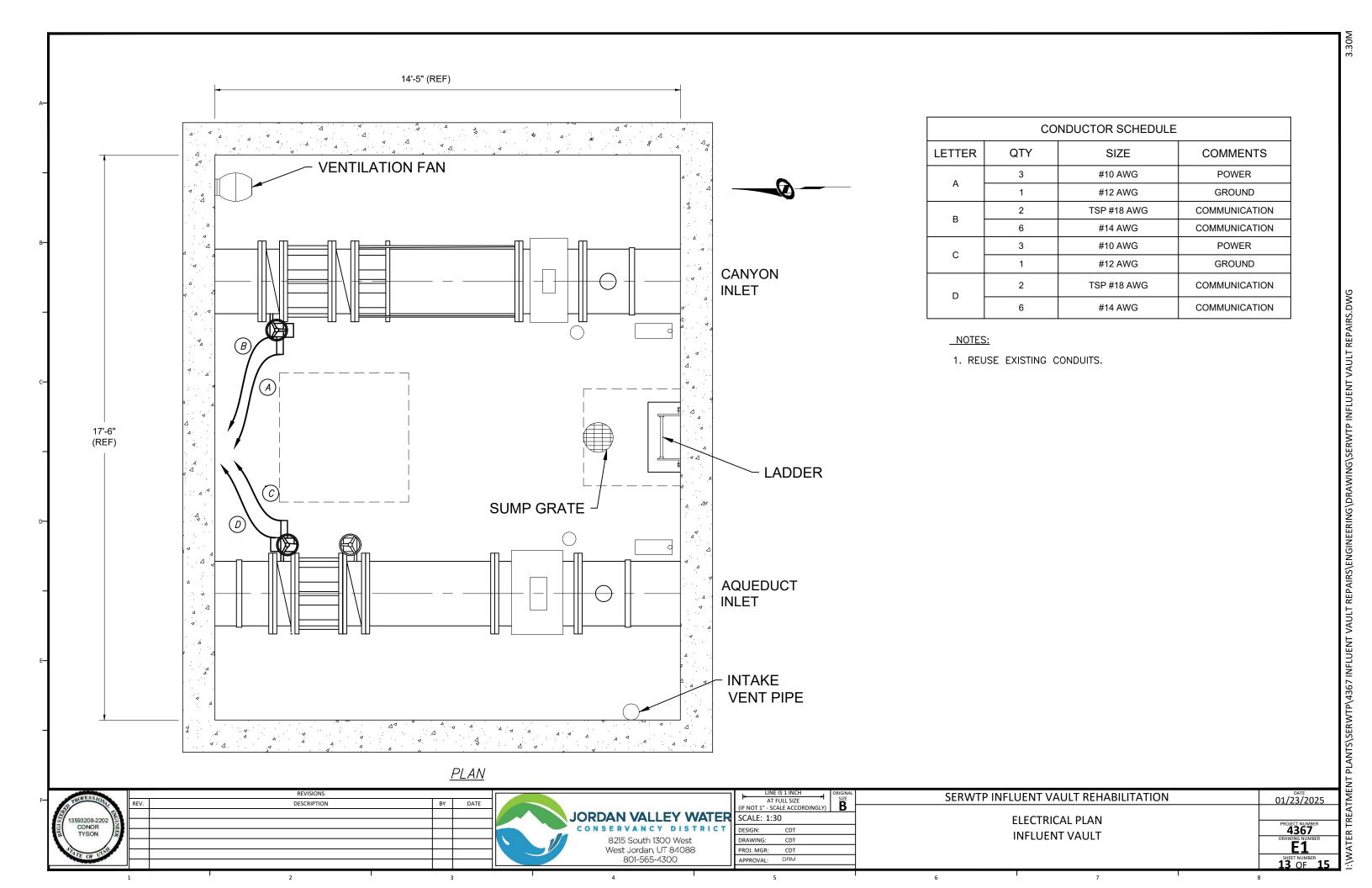
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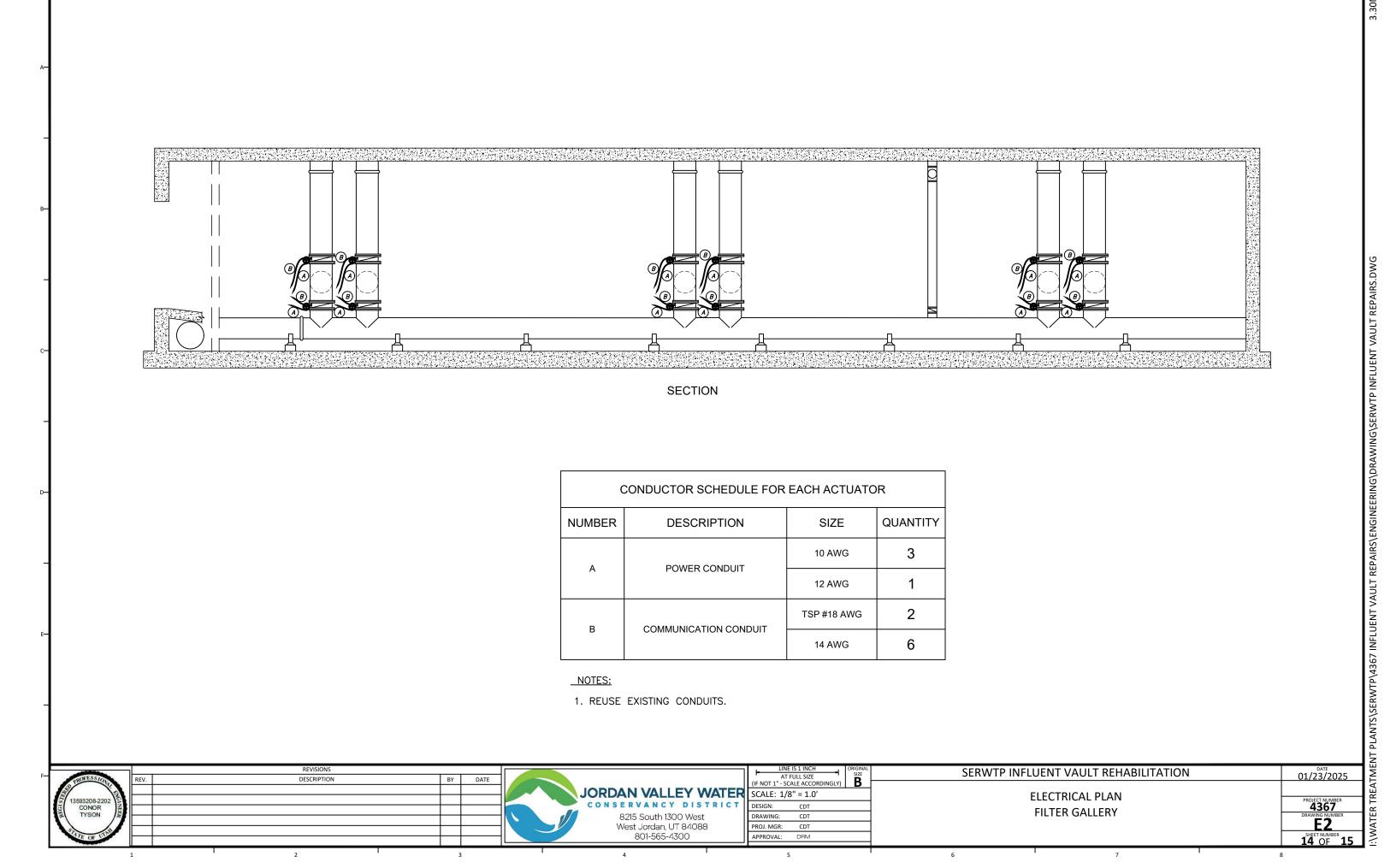
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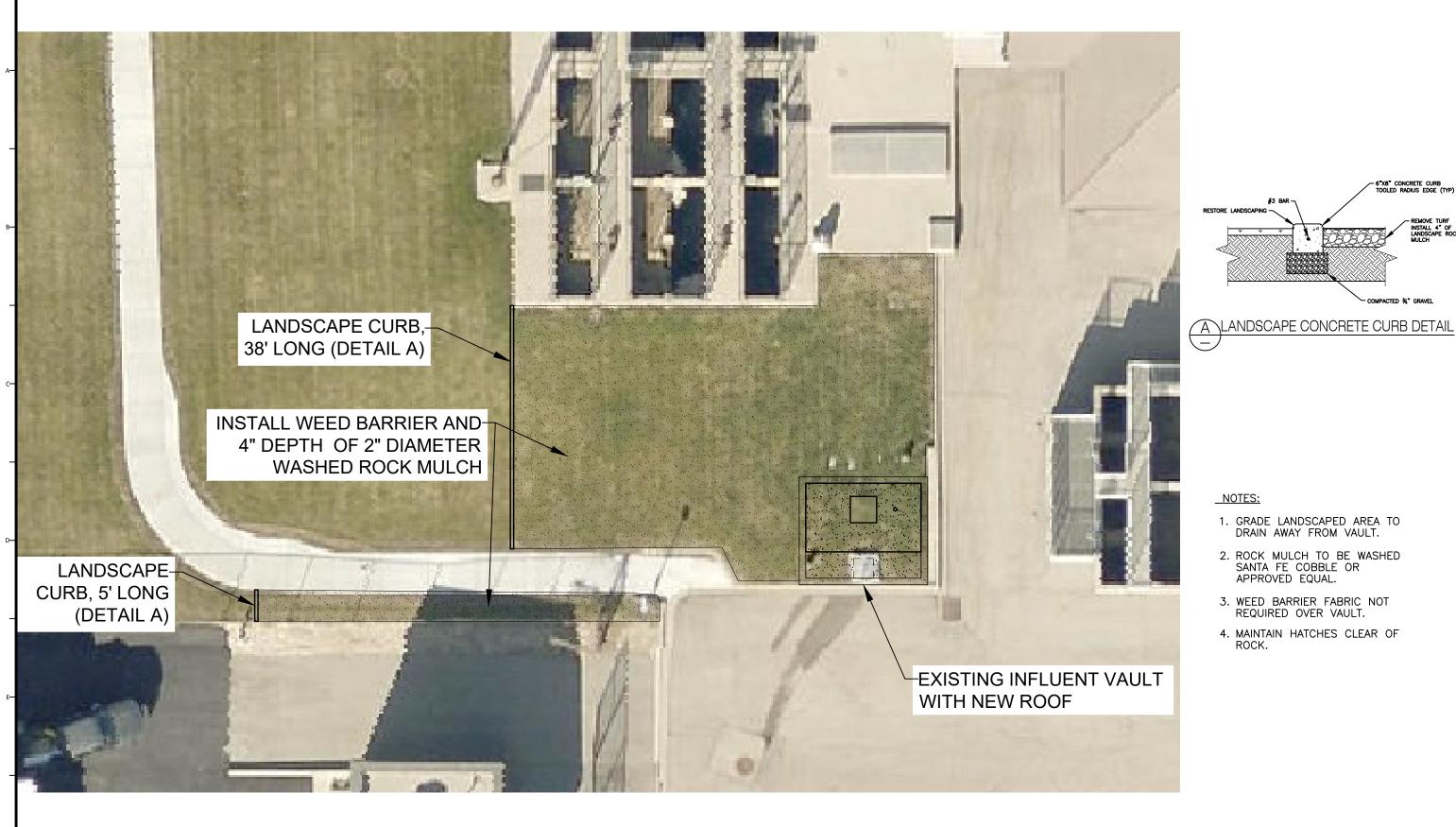
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- 1. GRADE LANDSCAPED AREA TO DRAIN AWAY FROM VAULT.
- 2. ROCK MULCH TO BE WASHED SANTA FE COBBLE OR APPROVED EQUAL.
- 3. WEED BARRIER FABRIC NOT REQUIRED OVER VAULT.
- 4. MAINTAIN HATCHES CLEAR OF ROCK.

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