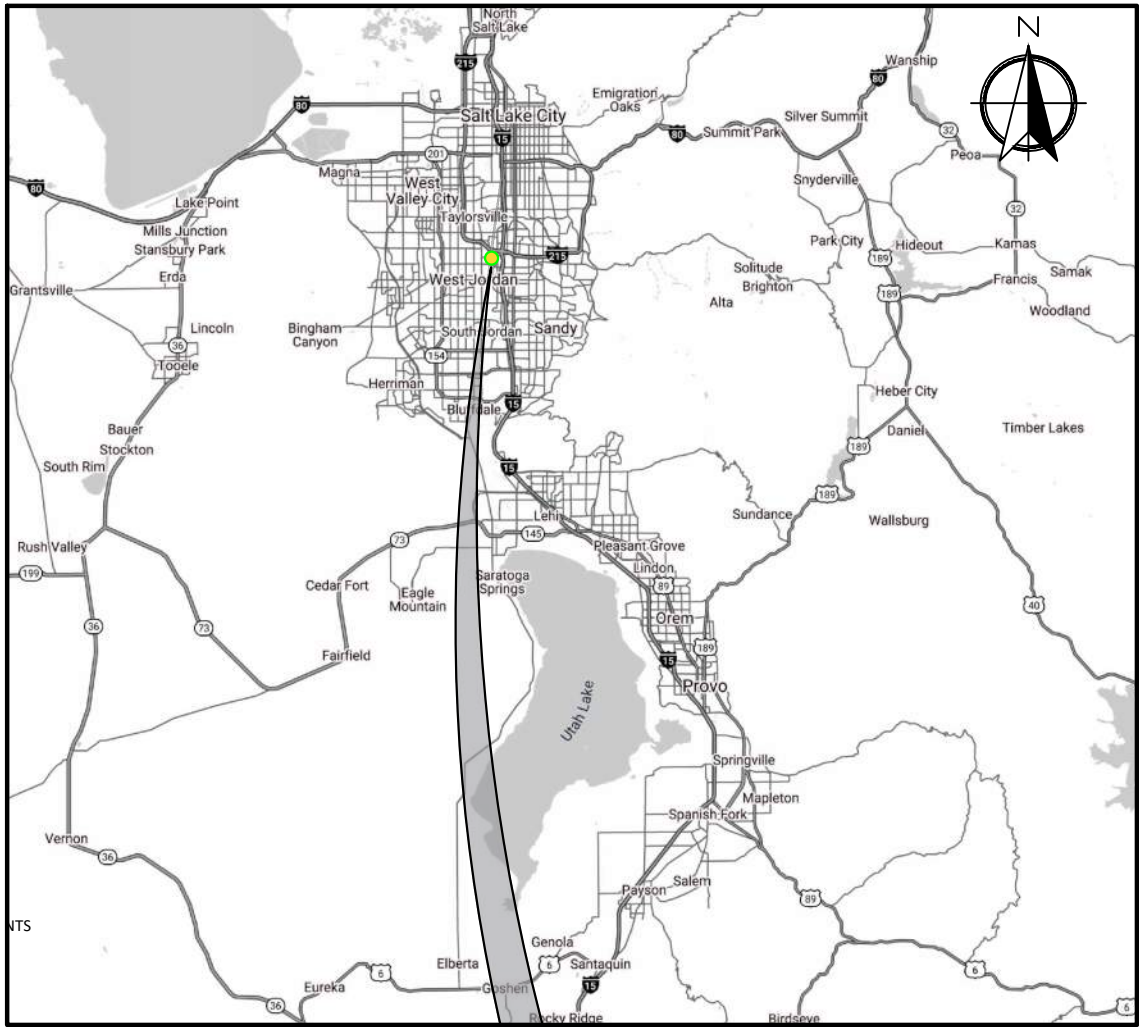


SOUTH VALLEY WATER RECLAMATION FACILITY

2024 CATHODIC PROTECTION SYSTEM PROJECT



UTAH LOCATION MAP

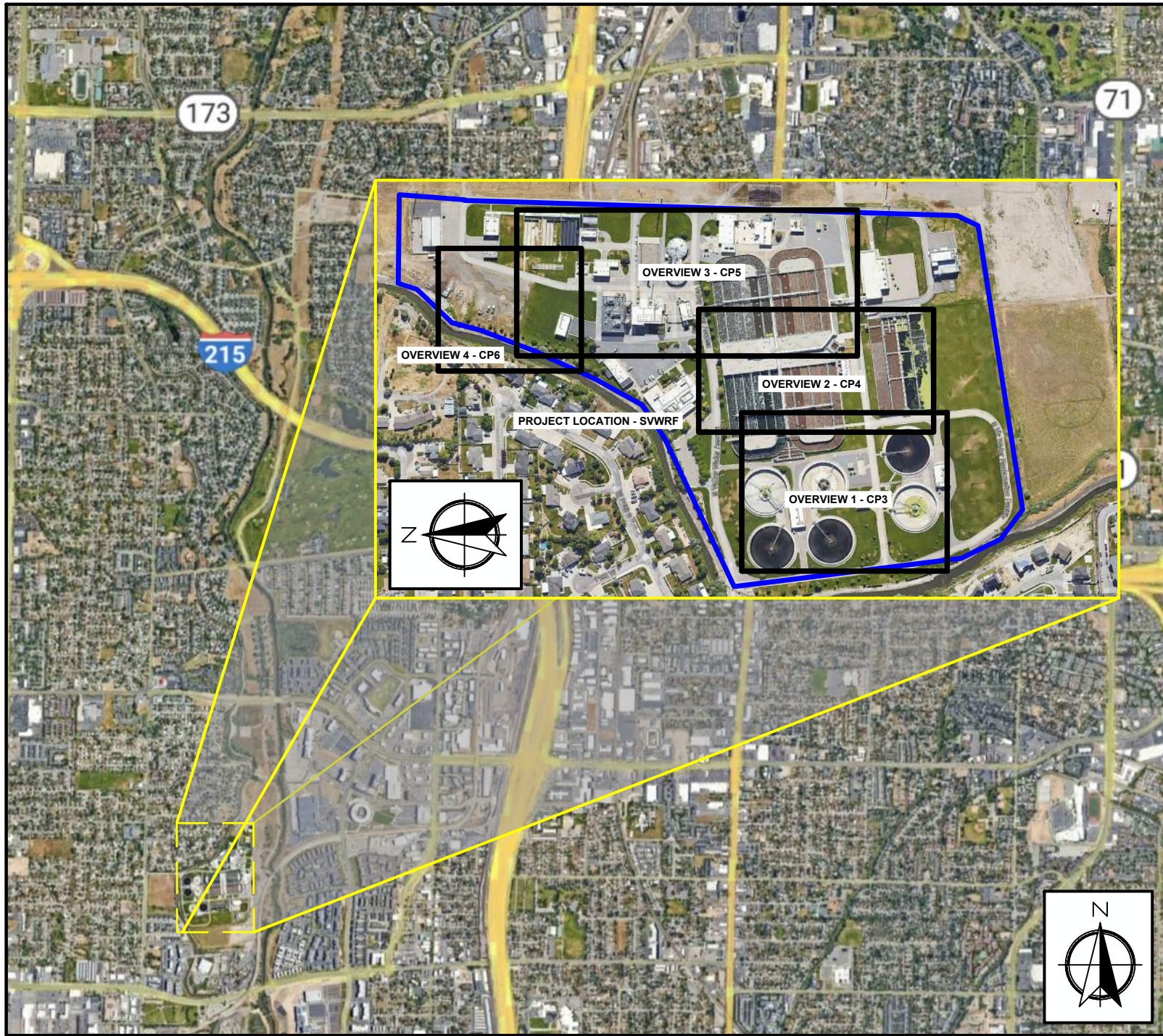
PROJECT
LOCATION

SHEET INDEX

SHEET	DESCRIPTION
1	PROJECT LOCATION MAPS AND CONTACT INFORMATION
2	CATHODIC PROTECTION TEST STATION SCHEDULE AND NOTES
3	SITE OVERVIEW 1
4	SITE OVERVIEW 2
5	SITE OVERVIEW 3
6	SITE OVERVIEW 4
7	CATHODIC PROTECTION DETAILS
8	CATHODIC PROTECTION DETAILS



DSGN	ESL	1	12/18/2024	REV 1 - UPDATED SHEET INDEX TO INCLUDE ADDITIONAL SITE OVERVIEW	ZGS	ESL
DR	ZGS			REV 1 - UPDATED PROJECT LOCATION MAP TO INCLUDE OVERVIEW 4		
CHK	ESL			REV 1 - UPDATED SHEET NUMBERING		
APVD	ESL	NO.	DATE	ISSUE/REVISION	BY	APVD



CONTACT INFORMATION

INFINITY CORROSION GROUP, INC.
CORROSION ENGINEER
ERIK LLEWELLYN, P.E.
PHONE: (801) 834-1159
EMAIL: ELLEWELLYN@INFINITYCORROSION.COM
CORROSION ENGINEER/DRAFTER
ZACHARY SHARON, P.E.
PHONE: (406) 490-9591
EMAIL: ZSHARON@INFINITYCORROSION.COM

PROJECT ADDRESS

7495 S. 1300 W.
WEST JORDAN, UT 84084

PROJECT LOCATION MAP

NTS



SVWRF CATHODIC PROTECTION



SHEET	1 OF 8
DWG	CP1
DATE	2024-05-16
CONTRACT	SVWRF-009

A

B

C

D

TABLE 1 - CATHODIC PROTECTION TEST STATION SCHEDULE FOR BURIED PIPING							
TS#	STRUCTURE	TEST STATION TYPE	TEST STATION STYLE	APPROX. TEST STATION OFFSET	HIGH POTENTIAL MAGNESIUM ANODE QTY AND BARE WEIGHT*	ESTIMATED BURY DEPTH (FEET)	LOCATION/COMMENTS
1	B" ML	A	POST	--	TOTAL COMBINED FIFTEEN (15)-60LB	B	INSTALL TEST STATION AGAINST CONCRETE WALL. ANODES TO BE INSTALLED IN GRASS TO NORTH OF TEST STATION LOCATION. TEST STATIONS 1, 14, 15, 16, AND 17 WILL UTILIZE A SINGLE ANODE GROUNDBED COMPRISED OF FIFTEEN (15) 60-LB ANODES. ANODE HEADER CABLE TO BE RUN TO ANODE BOND BOX. SEE OVERVIEW ON DWG CP3 FOR APPROX. GROUNDBED AND BOND BOX LOCATION.
2	B" SCUM	A	POST	15' NORTH	FOUR (4)-60LB	6	INSTALL ANODES IN GRASS. INSTALL TEST STATION AGAINST RAMP. ENSURE TEST STATION IS FULLY PROTECTED BY RAMP.
3	B" SCUM	A	POST	10' EAST	FIVE (5)-60LB	6	INSTALL ANODES TO EAST OF PIPELINE PARALLEL TO ROAD IN DIRT/GRASS BEHIND CONCRETE BARRIERS. INSTALL TEST STATION BEHIND CONCRETE BARRIERS.
3M	B" SCUM	METRICORR	POST	10' EAST	--	6	INSTALL METRICORR TEST STATION NEXT TO TEST STATION 3, TO EAST OF PIPELINE IN DIRT/GRASS BEHIND CONCRETE BARRIERS.
4	B" SCUM	A	FLUSH	10' NORTH	FIVE (5)-60LB	6	INSTALL TEST STATION IN GRASS. INSTALL ANODES IN GRASS PARALLEL TO PIPELINE.
5	B" WAS	A	FLUSH	20' SOUTH	FIVE (5)-60LB	B	ANODES TO BE INSTALLED IN GRASS SOUTH OF PIPELINE BEHIND CURB. INSTALL TEST STATION BEHIND CURB.
6	B" WAS	A	POST	--	FIVE (5)-60LB	B	ANODES TO BE INSTALLED IN GRASS BEHIND CURB PARALLEL TO PIPELINE. INSTALL TEST STATION BEHIND CURB.
6M	B" WAS	METRICORR	POST	--	--	B	INSTALL METRICORR TEST STATION IN GRASS NEXT TO TEST STATION 6 BEHIND CURB.
7	8" WAS	A	POST	--	FIVE (5)-60LB	8	ANODES TO BE INSTALLED IN GRASS PARALLEL TO PIPELINE. INSTALL TEST STATION IN GRASS OVER PIPELINE NEAR STRUCTURE.
8	24" WAS	A	POST	--	FOUR (4)-60LB	8	TEST STATION TO BE INSTALLED IN GRAVEL AGAINST CONCRETE WALL. INSTALL ANODES IN GRASS APPROX. 80' TO SOUTH OF TEST STATION LOCATION. RUN ANODE HEADER WIRE IN CONDUIT UNDER ASPHALT ROAD FROM TEST STATION TO ANODES. SEE DWG CP4 FOR APPROX. GROUNDBED LOCATION.
9	24" WAS	A	POST	--	FOUR (4)-60LB	B	TEST STATION TO BE INSTALLED IN GRAVEL AGAINST CONCRETE WALL. INSTALL ANODES IN GRASS APPROX. 175' TO SOUTH OF TEST STATION LOCATION. RUN ANODE HEADER WIRE IN CONDUIT UNDER ASPHALT ROAD FROM TEST STATION TO ANODES. SEE DWG CP4 FOR APPROX. GROUNDBED LOCATION.
10	30" RAS	A	POST	--	TWO (2)-60LB	13	INSTALL ANODES IN GRASS. INSTALL TEST STATION NEAR EDGE OF CONCRETE IN GRASS
11	30" RAS	A	FLUSH	--	FIVE (5)-60LB	14	INSTALL ANODES AND TEST STATION IN GRASS.
12	30" RAS	A	FLUSH	--	FIVE (5)-60LB	14	INSTALL ANODES AND TEST STATION IN GRASS.
13	42" PI	A	POST	--	FIVE (5)-60LB	10	INSTALL ANODES AND TEST STATION IN GRASS.
14	48" ML	A	POST	--	TOTAL COMBINED FIFTEEN (15)-60LB	15	INSTALL TEST STATION AGAINST CONCRETE WALL. ANODES TO BE INSTALLED IN GRASS TO NORTH OF TEST STATION LOCATION. TEST STATIONS 1, 14, 15, 16, AND 17 WILL UTILIZE A SINGLE ANODE GROUNDBED COMPRISED OF FIFTEEN (15) 60-LB ANODES. ANODE HEADER CABLE TO BE RUN TO ANODE BOND BOX. SEE OVERVIEW ON DWG CP3 FOR APPROX. GROUNDBED AND BOND BOX LOCATION.
15	48" ML	A	POST	--		15	
16	48" ML	A	POST	--		24	
17	48" ML	A	POST	--		24	
18	48" ML	A	POST	--	FIVE (5)-60LB	10	INSTALL ANODES IN GRASS. INSTALL TEST STATION AGAINST CONCRETE WALL. TEST LEADS TO BE INSTALLED AT THE END OF CONCRETE ENCASEMENT.
19	48" ML	A	FLUSH	--	FIVE (5)-60LB	10	INSTALL ANODES AND TEST STATION IN GRASS.
20	48" ML	A	POST	--	FIVE (5)-60LB	10	INSTALL ANODES IN GRASS. INSTALL TEST STATION AGAINST CONCRETE WALL. TEST LEADS TO BE INSTALLED AT THE END OF CONCRETE ENCASEMENT.
21	48" ML	A	POST	--	FIVE (5)-60LB	10	INSTALL ANODES IN GRASS. INSTALL NEW TEST STATION NEAR EXISTING TEST STATION. REMOVE EXISTING TEST STATION AT THIS LOCATION.
22	48" ML	A	POST	--	FIVE (5)-60LB	7	INSTALL ANODES IN SOIL BELOW GRAVEL AREA. TEST STATION TO BE INSTALLED AGAINST CONCRETE WALL.
23	48" ML	A	POST	--	FIVE (5)-60LB	7	INSTALL ANODES IN SOIL BELOW GRAVEL AREA. TEST STATION TO BE INSTALLED AGAINST CONCRETE WALL.
24	48" SE	A	POST	--	FIVE (5)-60LB	8	INSTALL ANODES AND TEST STATION IN GRASS.
25	48" SE	A	POST	--	FIVE (5)-60LB	8	INSTALL ANODES IN GRASS. INSTALL NEW TEST STATION NEAR EXISTING TEST STATION. REMOVE EXISTING TEST STATION AT THIS LOCATION.
26	54" PI	A	POST	--	FIVE (5)-60LB	20	INSTALL ANODES IN SOIL BELOW GRAVEL AREA. INSTALL TEST STATION IN GRAVEL ABOVE PIPE.
26M	54" PI	METRICORR	POST	--	--	20	INSTALL METRICORR TEST STATION IN GRAVEL NEXT TO TEST STATION 26.
27	54" PI - Y	A	POST	25' EAST	THREE (3)-60LB		INSTALL ANODES IN SOIL BELOW GRAVEL. INSTALL TEST STATION NEXT TO VAULT.
28	54" PI	A	FLUSH	--	FIVE (5)-60LB	15	INSTALL ANODES IN GRASS. LOCATE TEST STATION NEXT TO STRUCTURE. INSTALL TEST LEADS AT END OF STEEL PIPE WHERE PIPE TRANSITIONS TO RCP.
29	54" PI	A	FLUSH	--	FIVE (5)-60LB	15	INSTALL ANODES AND TEST STATION IN GRASS.
30	54" PI	A	POST	--	TWO (2)-60LB	16	INSTALL ANODES AND TEST STATION IN GRASS.
31	54" PI	A	POST	--	THREE (3)-60LB	12	INSTALL ANODES IN SOIL BELOW GRAVEL. OTHER PIPELINES IN AREA TO BE LOCATED PRIOR TO INSTALLING ANODES. INSTALL TEST STATION NEAR STRUCTURE.
32	54" PI	A	POST	--	FIVE (5)-60LB	12	TEST STATION TO BE INSTALLED IN GRAVEL AGAINST CONCRETE WALL. INSTALL ANODES IN GRASS APPROX. 95' TO SOUTH OF TEST STATION LOCATION. RUN ANODE HEADER WIRE IN CONDUIT UNDER ASPHALT ROAD FROM TEST STATION TO ANODES. SEE DWG CP4 FOR APPROX. GROUNDBED LOCATION.
33	60" IE	A	POST	--	FIVE (5)-60LB	10	INSTALL ANODES AND TEST STATION IN GRASS.
34	60" IE	A	POST	--	FIVE (5)-60LB	B	INSTALL ANODES AND TEST STATION IN GRASS.
35	60" PI	A	POST	--	THREE (3)-60LB	15	INSTALL ANODES IN SOIL BELOW GRAVEL. INSTALL TEST STATION NEAR STRUCTURE. OTHER PIPELINES IN AREA TO BE LOCATED PRIOR TO INSTALLING ANODES.
36	60" PI	A	POST	--	FIVE (5)-60LB	15	INSTALL ANODES IN GRASSY AREA. INSTALL TEST STATION NEAR CONCRETE.
37	72" SE	A	POST	--	SIX (6)-60LB	12	INSTALL ANODES AND TEST STATION IN GRASS BEHIND CURB.
37M	54" PI	METRICORR	POST	--	--	12	INSTALL METRICORR TEST STATION IN GRASS NEXT TO TEST STATION 37.
38	72" SE	A	POST	--	FOUR (4)-60LB	10-20	INSTALL ANODES IN GRASSY AREA. INSTALL TEST STATION NEAR CONCRETE STRUCTURE.
39	72" SE	A	POST	--	FOUR (4)-60LB	10-20	INSTALL ANODES IN GRASSY AREA. INSTALL TEST STATION NEAR UV SPLITTER BOX.

* IF VERTICAL ANODE ORIENTATION IS DEEMED MORE APPROPRIATE FOR THE INSTALLATION LOCATION, IT MAY BE UTILIZED. IN INSTANCES WHERE VERTICAL ANODE ORIENTATION IS SELECTED, ONE (1) ADDITIONAL ANODE IN ADDITION TO THE NUMBER CALLED OUT IN THE TEST STATION SCHEDULE SHALL BE INSTALLED.

GENERAL

- CONTRACTOR SHALL PROTECT NEW AND EXISTING SVWRF EQUIPMENT AND COMPONENTS. DAMAGE WILL BE REPAIRED AT THE CONTRACTORS SOLE EXPENSE.
- CONTRACTOR SHALL NOT BLOCK ACCESS OR LIMIT THE USE OF ANY PROPERTY DURING CONSTRUCTION.
- CONTRACTOR TO CONFIRM PIPE LOCATION BEFORE INSTALLING GALVANIC ANODES AND TEST STATIONS.
- WHERE NOTED IN THE TEST STATION SCHEDULE, CONTRACTOR SHALL DETERMINE LOCATION OF THE PIPE TRANSITION FROM REINFORCED CONCRETE PIPE (RCP) TO STEEL OR END OF CONCRETE ENCASEMENT, AND UTILIZE MINIMALLY INVASIVE METHODS TO EXPOSE THE PIPE, SUCH AS VACUUM EXCAVATION.
- CONTRACTOR RESPONSIBLE FOR RESTORING SITE TO PREWORK CONDITIONS.
- ALL WORK SHALL BE PERFORMED WITHIN DESIGNATED BOUNDARIES, CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE CLAIMS TO ADJACENT PUBLIC OR PRIVATE PROPERTY.
- TOP SOIL TO BE KEPT SEPARATE FROM OTHER EXCAVATED SOILS AND THEN REAPPLIED LAST AFTER BACKFILLING.
- PIPE SIZES AND MATERIALS ARE PROVIDED BASED ON AVAILABLE HISTORICAL PROJECT DOCUMENTATION. CONTRACTOR SHALL CONFIRM SIZES AND MATERIALS OF PIPELINES.

TEST STATIONS

- SEE TEST STATION SCHEDULE, TABLE 1 FOR LOCATIONS, TYPE, AND STYLE OF TEST STATIONS.
- SEE DETAIL 1, CP7 FOR TYPE "A" TEST STATION DETAIL.
- SEE DETAIL 2, CP7 FOR METRICORR TEST STATION DETAIL.
- STYLE OF TEST STATION MAY BE CHANGED WHERE NEEDED AT OWNER/PROJECT REPRESENTATIVE'S DISCRETION.
- LOCATE TEST STATIONS NEXT TO PROTECTIVE PERMANENT ABOVE GROUND STRUCTURES, OR WHERE SPECIFIED. TEST STATION SHOULD BE LOCATED AS CLOSE TO DIRECTLY OVER PIPELINE AS POSSIBLE WHERE OFFSETS ARE NOT REQUIRED. FINAL LOCATION TO BE VERIFIED IN THE FIELD BY THE OWNER/PROJECT REPRESENTATIVE.
- TEST STATIONS LOCATED WITHIN ROADS, OPEN AREAS, OR FIELDS SHALL BE OFFSET AS SHOWN ON THE SCHEDULE TO THE PHYSICAL FEATURE IDENTIFIED OR AS DIRECTED BY THE ENGINEER.
- FLUSH TEST STATIONS TO HAVE 12" OF GRAVEL INSTALLED BELOW BASE OF TEST STATION. SEE DETAIL 4, CP7.
- LOCATE REFERENCE ELECTRODE 6" FROM THE EDGE OF PIPE.
- THE LOCATION OF METRICORR TEST STATIONS CAN BE ADJUSTED DEPENDING ON THE TYPE AND MATERIAL OF THE PIPE. COATED STEEL PIPES ARE OPTIMAL FOR METRICORR INSTALLATION. IN CASES WHERE MORTAR COATED STEEL IS DISCOVERED DURING THE EXCAVATION PROCESS FOR METRICORR INSTALLATION, ENGINEER AND OR PROJECT REPRESENTATIVE SHALL BE CONSULTED FOR UPDATED TEST STATION LOCATION.
- ALL TEST LEADS WITHIN EACH TEST STATION MUST BE CLEARLY AND DURABLY LABELED. LABELING SHOULD INCLUDE IDENTIFICATION DETAILS CORRESPONDING TO ALL TEST LEAD TERMINATIONS INCLUDING BUT NOT LIMITED TO PIPELINE DETAILS, REFERENCE CELLS, AND TEST LEADS.
- EXISTING SVWRF TEST STATIONS CALLED OUT IN TEST STATION SCHEDULE TO BE REMOVED SHALL BE DISPOSED OF PER SVWRF DIRECTION.

CATHODIC PROTECTION

- SEE CPS SITE PLAN OVERVIEWS FOR GENERAL LOCATION OF CATHODIC PROTECTION TEST STATIONS.
- APPROXIMATE GROUNDBED LOCATIONS SHOWN FOR TEST STATIONS 1, 8, 9, 14, 15, 16, 17, AND 32.
- PIPELINES ASSOCIATED WITH TEST STATIONS 1, 14, 15, 16, AND 17 SHALL UTILIZE A SINGLE ANODE GROUNDBED COMPRISED OF FIFTEEN (15) ANODES.
- CATHODIC PROTECTION INSTALLATIONS SHALL BE ORIENTED AS SHOWN ON THE DRAWINGS. MODIFICATION TO THE INSTALLATIONS SHALL BE APPROVED BY THE OWNER AND ENGINEER.
- CONTRACTOR SHALL USE SVWRF APPROVED AND SPECIFIED EXCAVATION METHODS.
- INSTALL MAGNESIUM ANODES HORIZONTALLY OR VERTICALLY, AT PIPE SPRINGLINE, AND PARALLEL TO THE PIPELINE UNLESS SPECIFIED OTHERWISE.
- MAGNESIUM ANODES MAY BE INSTALLED VERTICALLY WHERE SPACE IS LIMITED AND AS APPROVED BY THE OWNER AND ENGINEER.
- ANODES MAY BE PLACED ON EITHER SIDE OF TEST STATION OR PIPE AS REQUIRED FOR CONSTRUCTION, OR AS APPROVED BY THE ENGINEER.
- REMOVE ANODE FROM PLASTIC PACKAGING BEFORE INSTALLATION.
- ENSURE ANODES ARE NOT IN CONTACT WITH ANY BELOW GRADE STRUCTURES.
- AFTER ANODE INSTALLATION, BACKFILL TO 1-FOOT OVER THE ANODES, WATER ANODES WITH 5 GALLONS OF WATER PER ANODE, IF SOILS ARE DRY AS DETERMINED BY THE ENGINEER.
- CONTRACTOR SHALL SUPPLY AN ADDITIONAL TEN (10) 60-LB ANODES FOR USE WHERE ADDITIONAL ANODES ARE DEEMED NECESSARY.



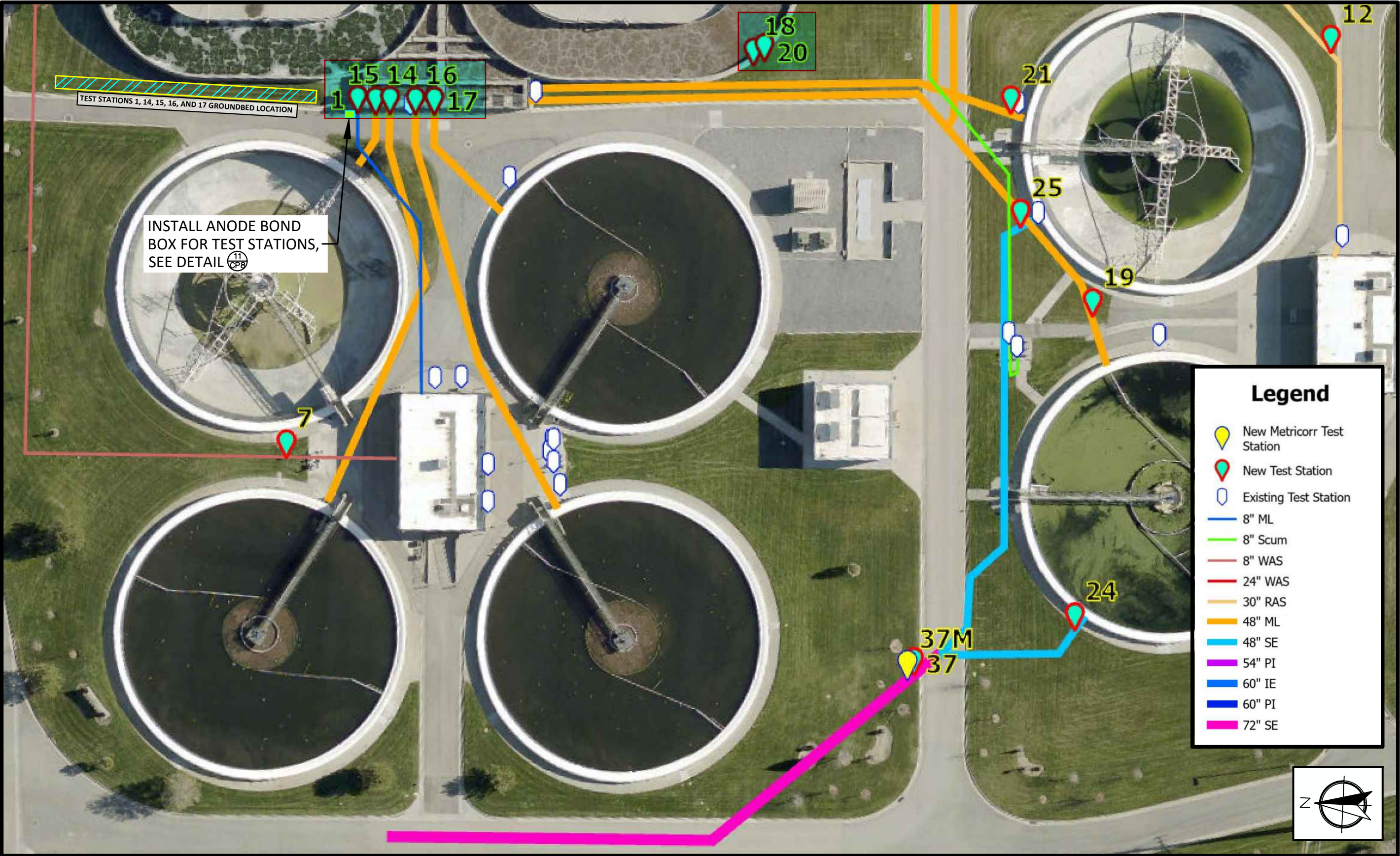
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DR	ZGS			REV 1 - UPDATED SHEET NUMBERING		
CHK	ESL					
APVD	ESL	NO.	DATE	ISSUE/REVISION	BY	APVD



SVWRF CATHODIC PROTECTION



SHEET	2 OF 8
DWG	CP2
DATE	2024-05-16
CONTRACT	SVWRF-009



SITE OVERVIEW 1

PROFESSIONAL ENGINEER
2024-05-16
No. 5043798
ERIK SCOTT LLEWELLYN
STATE OF UTAH

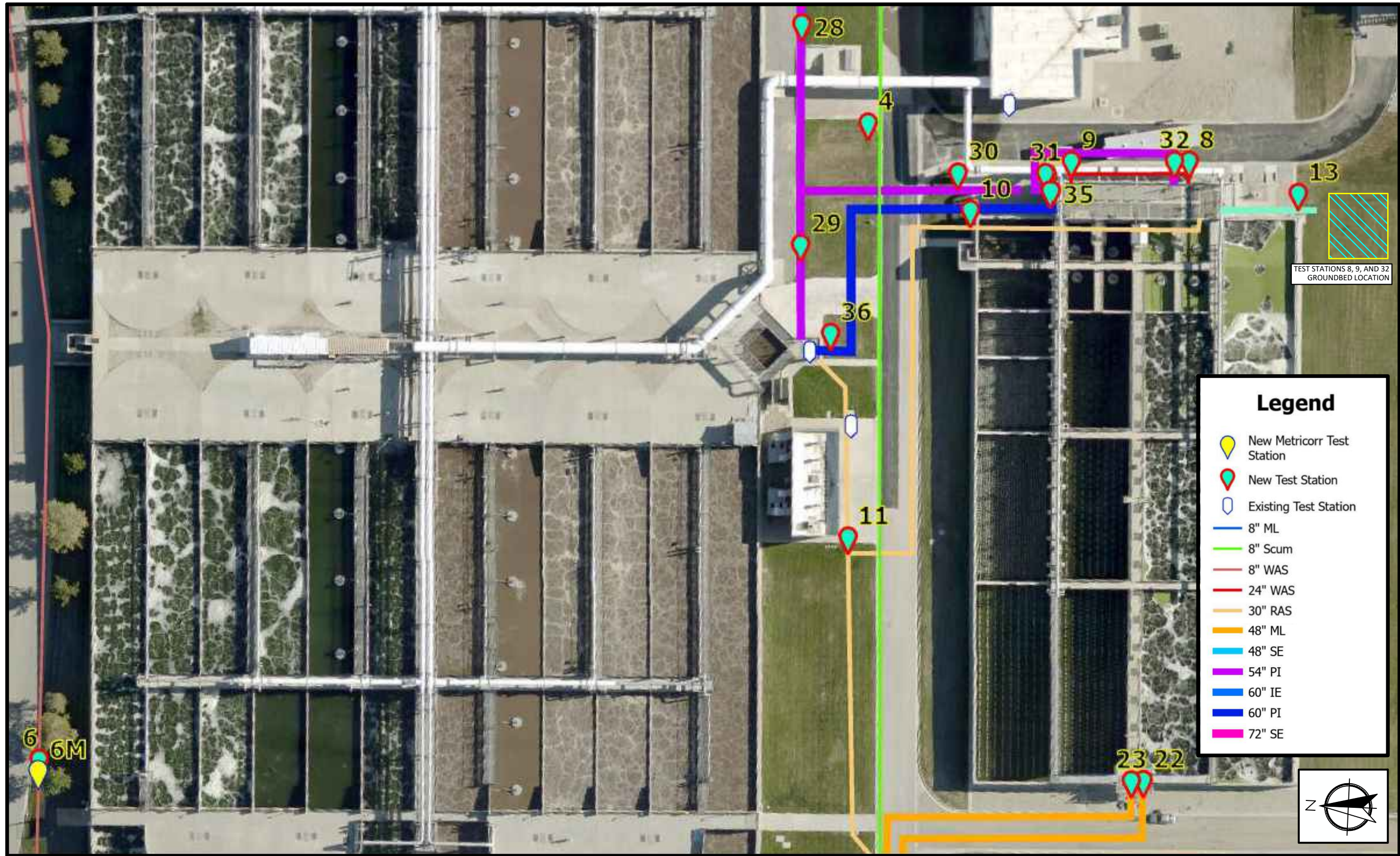
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DR	ZGS					
CHK	ESL					
APVD	ESL	NO.	DATE	ISSUE/REVISION	BY	APVD

Infinity Corrosion GROUP, INC.
Corrosion Engineers

SVWRF CATHODIC PROTECTION

South Valley WATER RECLAMATION FACILITY

SHEET	3 OF 8
DWG	CP3
DATE	2024-05-16
CONTRACT	SVWRF-009



SITE OVERVIEW 2



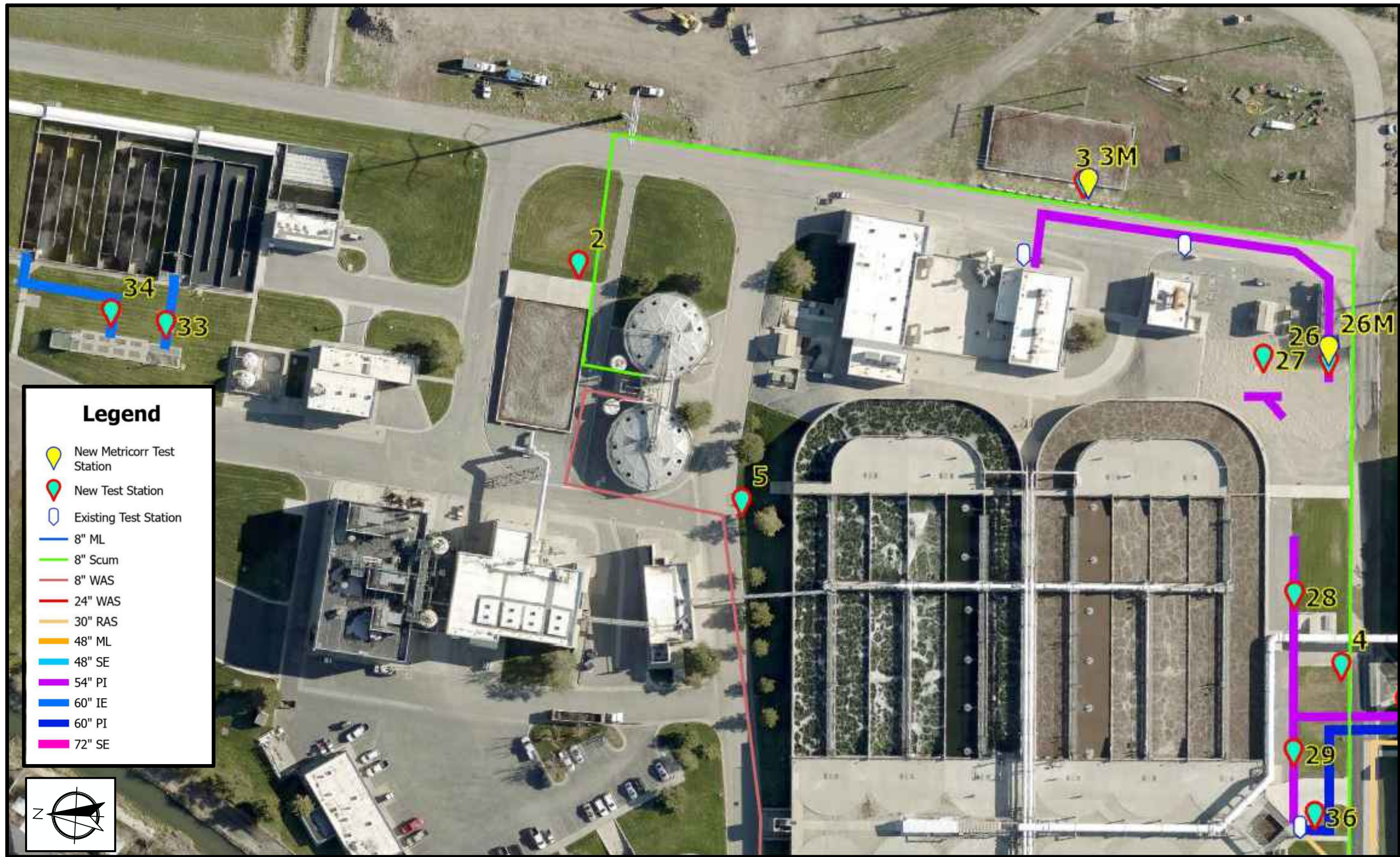
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CHK	ESL				
APVD	ESL	NO.	DATE	ISSUE/REVISION	BY APVD



SVWRF CATHODIC PROTECTION



SHEET	4 OF 8
DWG	CP4
DATE	2024-05-16
CONTRACT	SVWRF-009

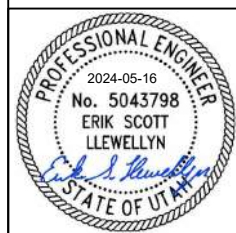


Legend

- New Metricorr Test Station
- New Test Station
- Existing Test Station
- 8" ML
- 8" Scum
- 8" WAS
- 24" WAS
- 30" RAS
- 48" ML
- 48" SE
- 54" PI
- 60" IE
- 60" PI
- 72" SE



SITE OVERVIEW 3



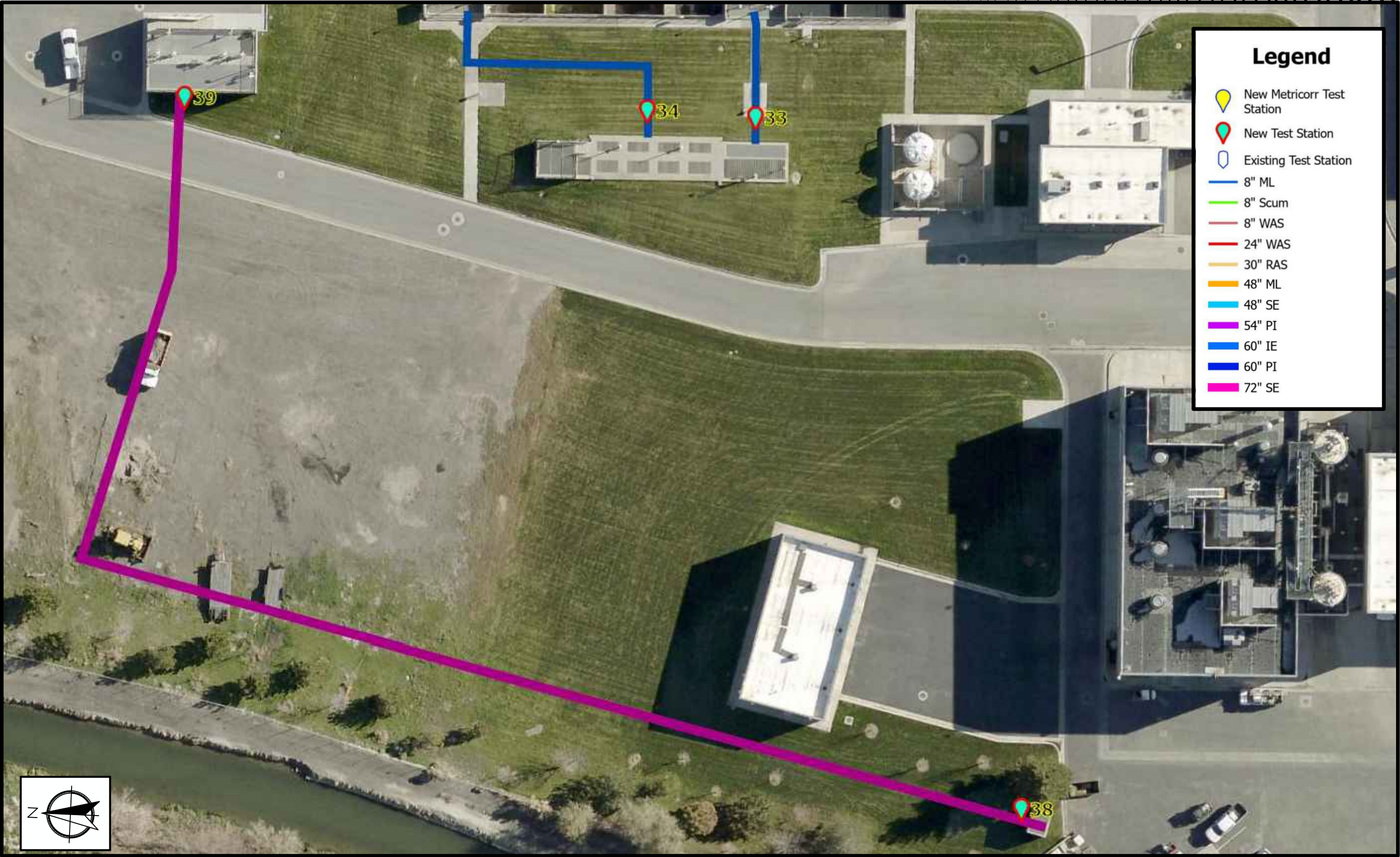
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DR	ZGS					
CHK	ESL					
APVD	ESL	NO.	DATE	ISSUE/REVISION	BY	APVD



SVWRF CATHODIC PROTECTION



SHEET	5 OF 8
DWG	CP5
DATE	2024-05-16
CONTRACT	SVWRF-009



Legend

- New Metricorr Test Station
- New Test Station
- Existing Test Station
- 8" ML
- 8" Scum
- 8" WAS
- 24" WAS
- 30" RAS
- 48" ML
- 48" SE
- 54" PI
- 60" IE
- 60" PI
- 72" SE

SITE OVERVIEW 4

PROFESSIONAL ENGINEER

2024-05-16

No. 5043798

ERIK SCOTT LLEWELLYN

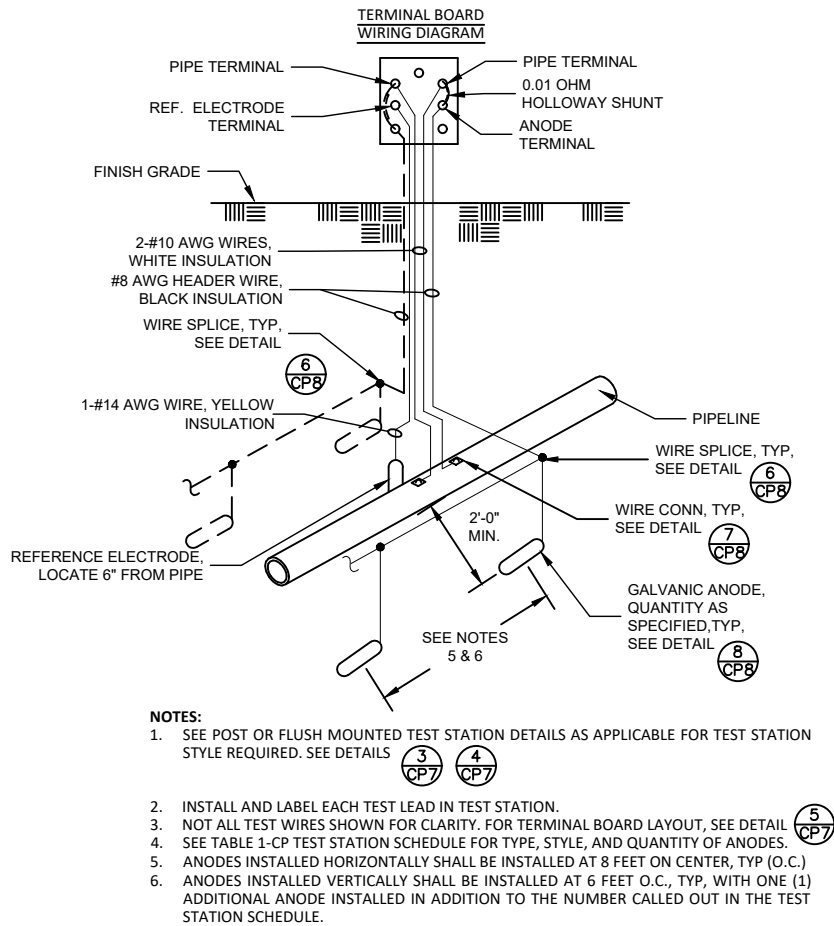
STATE OF UTAH

DSGN	ESL	1	12/18/2024	REV 1 - ADDED SITE OVERVIEW 4 FOR 72" SE PIPE AND TEST STATIONS	ZGS	ESL
DR	ZGS			REV 1 - UPDATED SHEET NUMBERING		
CHK	ESL					
APVD	ESL	NO.	DATE	ISSUE/REVISION	BY	APVD

SVWRF CATHODIC PROTECTION

SHEET	6 OF 8
DWG	CP6
DATE	2024-05-16
CONTRACT	SVWRF-009

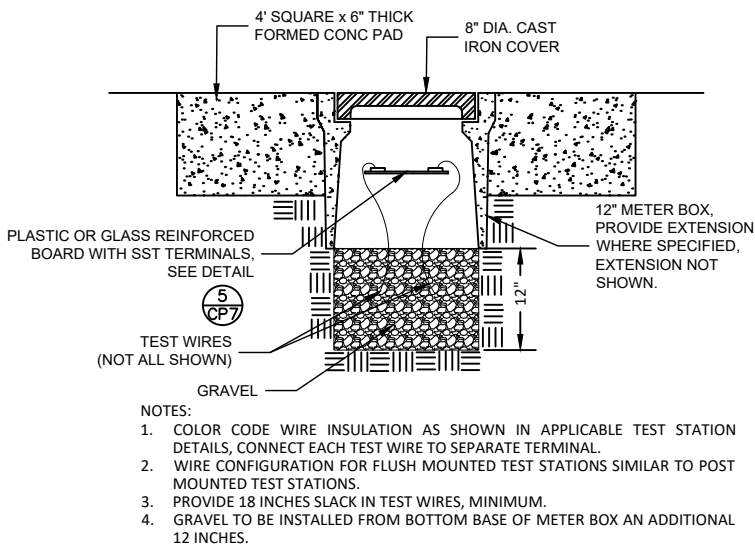
A
B
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TYPE "A" TEST STATION

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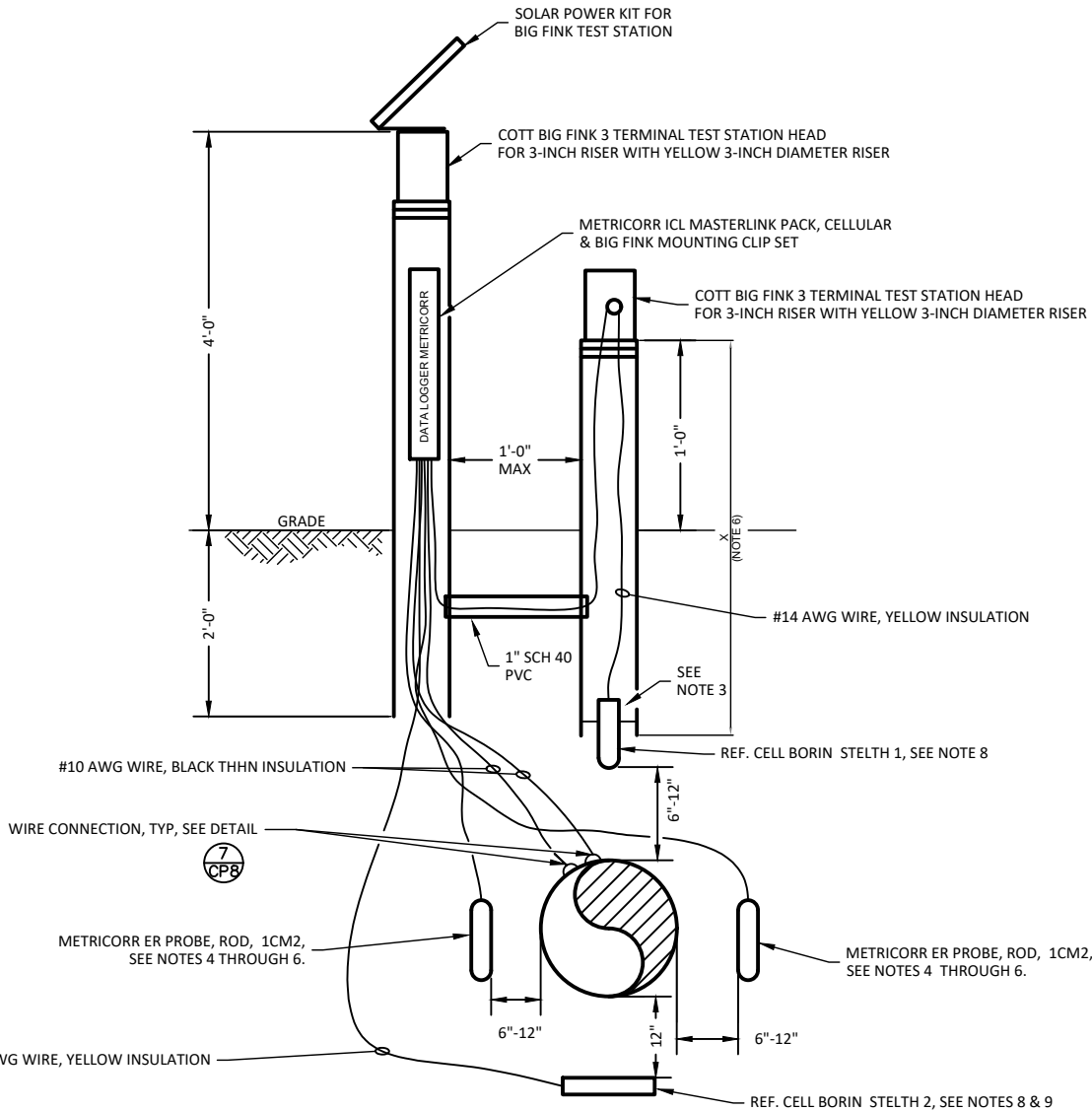
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FLUSH MOUNT TEST STATION BOX

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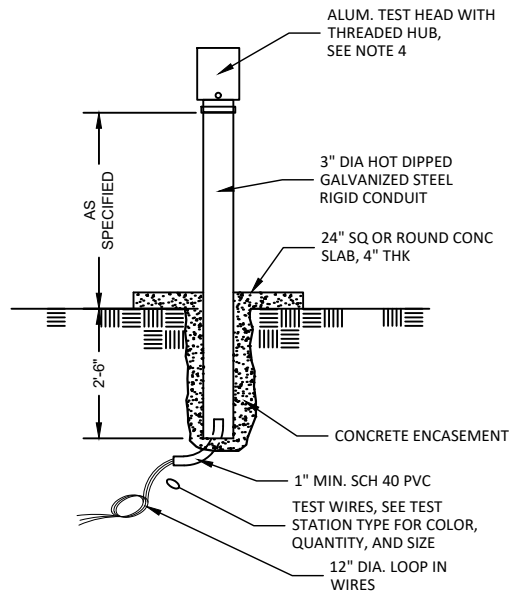
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METRICORR SLIMLINE ICL TEST STATION

NTS

2



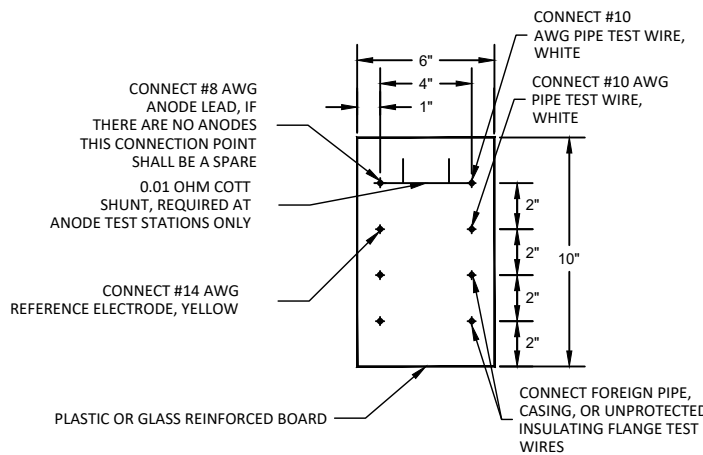
NOTES:

- QUANTITY OF TERMINALS AND WIRING CONNECTIONS VARIES, SEE APPLICABLE TEST STATION DETAILS FOR TYPE OF TEST STATION.
- PROVIDE WIRE LOOP AT BASE OF POST MOUNTED TEST STATION TO MINIMIZE SETTLEMENT STRESSES ON WIRE.
- INSTALL TESTOX SERIES 707 TEST STATION UNLESS SPECIFIED OTHERWISE.
- CORROSION RESISTANT TAPE WRAP TO BE APPLIED TO BURIED SECTION OF GALVANIZED STEEL POST. EXTEND TAPE TO 6" ABOVE GROUND.

POST MOUNTED, GALVANIZED STEEL POST

NTS

3



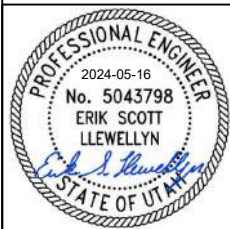
NOTES:

- TERMINAL BOARD LAYOUT FOR REFERENCE ONLY AND MAY BE DIFFERENT ON PHYSICAL BOARD.
- TERMINALS SHALL BE 1/4" STAINLESS STEEL WITH LOCKING WASHER, TWO FLAT WASHERS, AND DOUBLE NUTS.
- ALL WIRE CONNECTIONS TO BE WITH RING TONGUE COMPRESSION TERMINALS.
- INSTALL AND LABEL EACH TEST LEAD IN TEST STATION.
- TEST WIRES NOT SHOWN FOR CLARITY.

TERMINAL BOARD LAYOUT

NTS

5



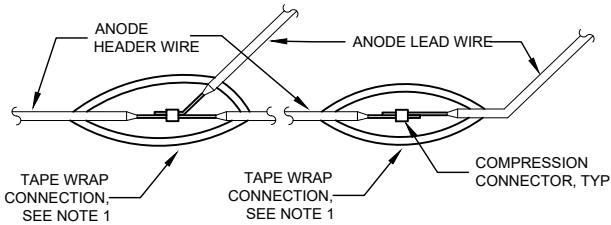
DSGN	ESL	1	12/18/2024	REV 1 - ADDED SITE OVERVIEW 4 FOR 72" SE PIPE AND TEST STATIONS	ZGS	ESL
DR	ZGS					
CHK	ESL					
APVD	ESL	NO.	DATE	ISSUE/REVISION	BY	APVD



SVWRF CATHODIC PROTECTION



SHEET	7 OF 8
DWG	CP7
DATE	2024-05-16
CONTRACT	SVWRF-009

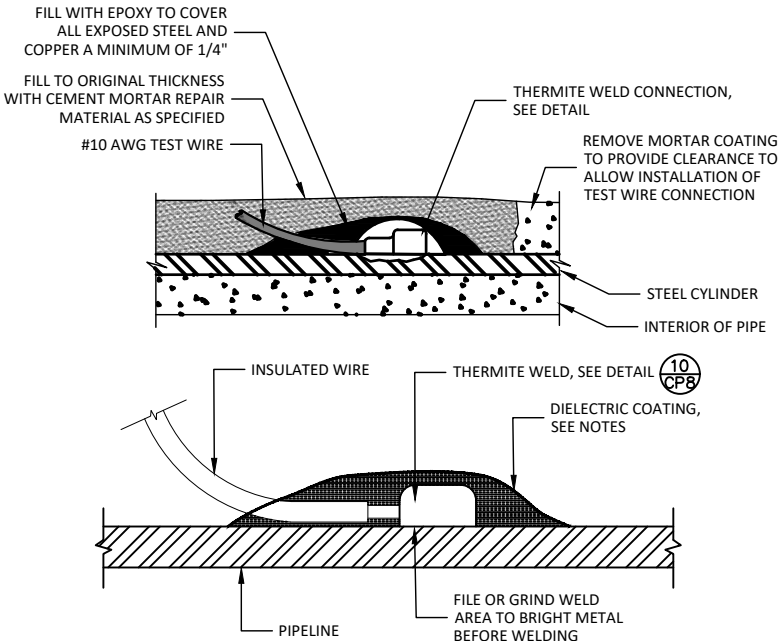


- NOTES:
1. FILL VOIDS AND IRREGULARITIES WITH INSULATING PUTTY, WRAP CONNECTION WITH TWO LAYERS OF SCOTCH 130C SELF VULCANIZING RUBBER TAPE AND TWO LAYERS OF SCOTCH 88 VINYL ELECTRICAL TAPE.
 2. DETAIL SIMILAR FOR ANODE HEADER WIRE SPLICES, SIZE COMPRESSION CONNECTORS AS REQUIRED.

GALVANIC ANODE WIRE SPLICES

NTS

6

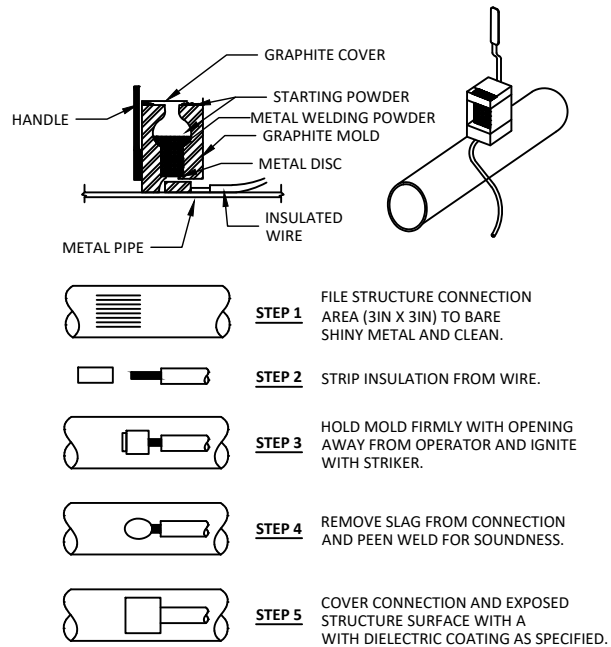


- NOTES:
1. COPPER SLEEVE REQUIRED FOR #2 AWG JOINT BONDS OR FOR #12 AWG OR SMALLER TEST WIRES.
 2. WELDER AND CARTRIDGE SIZE VARIES ACCORDING TO PIPE SIZE AND PIPE MATERIAL, CONSULT WELDER MANUFACTURER FOR RECOMMENDED WELDER AND CARTRIDGE
 3. COAT ALL THERMITE WELDS, PIPE, AND EXPOSED COPPER WIRE WITH DENSO PROTAL (7125, 7200, 7300) OR COATING SYSTEM AS SPECIFIED.
 4. PIPELINE COATING NOT SHOWN FOR CLARITY.

STEEL AND DUCTILE IRON PIPE WIRE CONNECTION

NTS

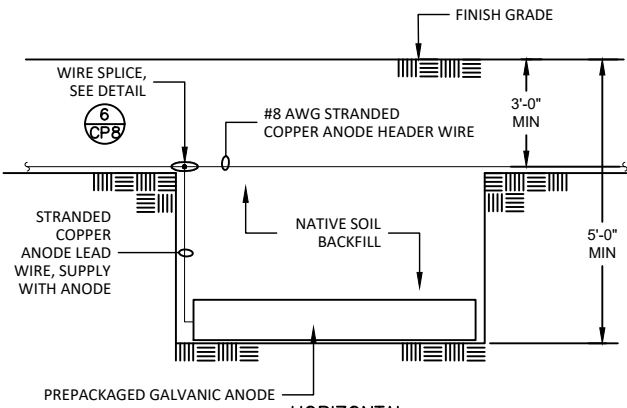
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EXOTHERMIC WELD PROCEDURE

NTS

9

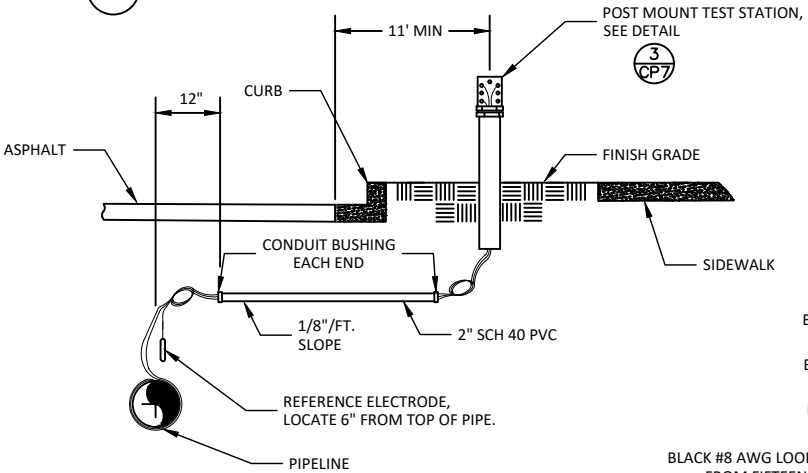
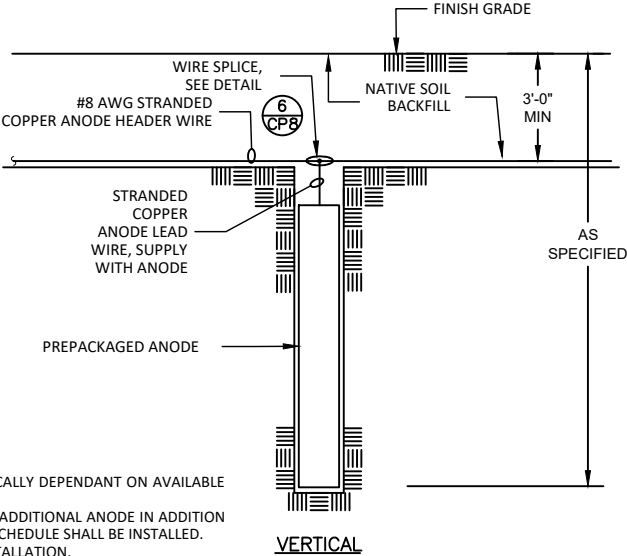


- NOTES:
1. ANODES TO BE INSTALLED HORIZONTALLY OR VERTICALLY DEPENDANT ON AVAILABLE SPACE TO INSTALL SPECIFIED QUANTITY OF ANODES.
 2. WHEN ANODES ARE INSTALLED VERTICALLY, ONE (1) ADDITIONAL ANODE IN ADDITION TO THE NUMBER CALLED OUT IN THE TEST STATION SCHEDULE SHALL BE INSTALLED.
 3. ANODES INCLUDE AN ATTACHED LEAD WIRE FOR INSTALLATION.
 4. INSTALL ANODES A MINIMUM OF 4 FEET BELOW FINISH GRADE.
 5. REMOVE ANODE FROM PLASTIC BEFORE INSTALLATION.
 6. ENSURE ANODES ARE NOT IN CONTACT WITH ANY OTHER BELOW GRADE STRUCTURES.
 7. AFTER ANODE INSTALLATION, BACKFILL TO 1-FOOT OVER THE ANODES, WATER ANODES WITH 5 GALLONS OF WATER PER ANODE, IF SOILS ARE DRY AS DETERMINED BY THE ENGINEER.
 8. WHEN POSSIBLE, PLACE ANODES WITHIN MOIST LOAM AND CLAY SOIL. AVOID PLACEMENT OF ANODES WITHIN DRY SAND AND DO NOT PLACE WITHIN GRAVEL.

GALVANIC ANODE INSTALLATION

NTS

8

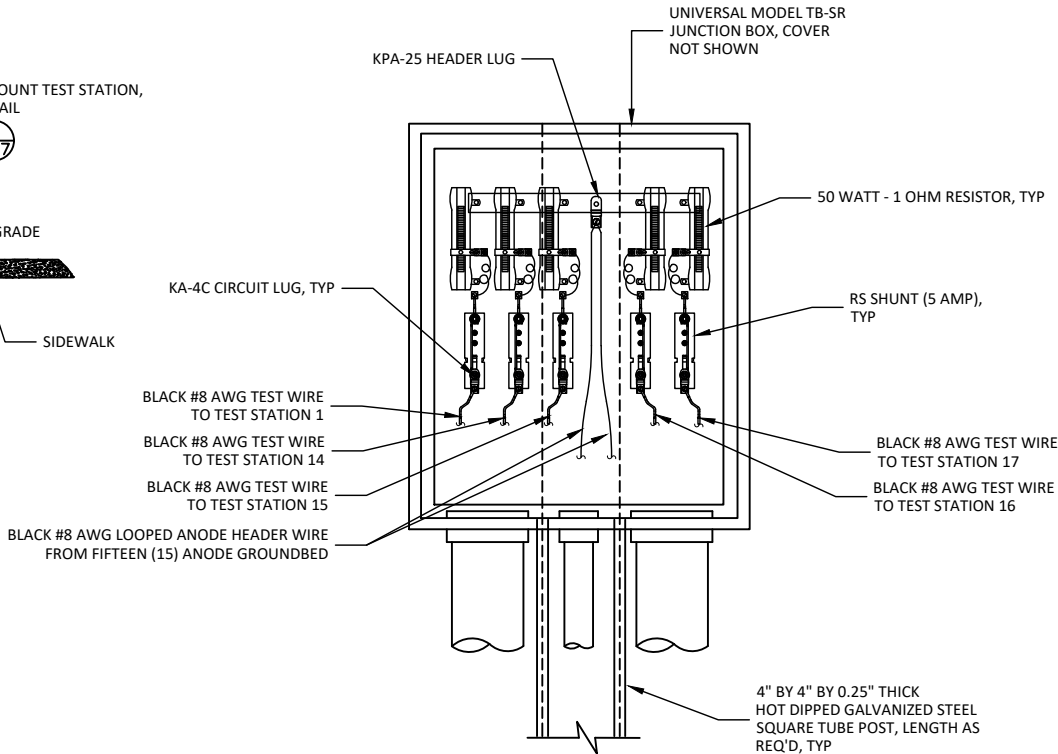


- NOTES:
1. FILL BOTH ENDS OF CONDUIT WITH DUCT PUTTY.
 2. ALL WIRES WILL BE SPLICED USING THE SAME COLOR CODE AS EXISTING WIRES, AND THE SAME TYPE WIRE.

TEST STATION OFFSET

NTS

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TEST STATION ANODE BOND BOX

NTS

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DSGN	ESL	1	12/18/2024	REV 1 - ADDED SITE OVERVIEW 4 FOR 72" SE PIPE AND TEST STATIONS	ZGS	ESL
DR	ZGS					
CHK	ESL					
APVD	ESL	NO.	DATE	ISSUE/REVISION	BY	APVD



SVWRF CATHODIC PROTECTION



SHEET	8 OF 8
DWG	CP8
DATE	2024-05-16
CONTRACT	SVWRF-009