

PROJECT NO 22-712

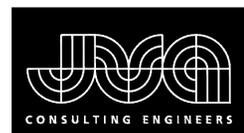
W 112TH AVENUE & CHEROKEE STREET

TANK PAINTING & REPAIR PROJECT

THORNTON, CO

CONTACTS

OWNER:	CITY OF THORNTON 12450 WASHINGTON ST. THORNTON, CO 80241	TIFFANY HESS (720) 977-6252 TIFFANY.HESS@THORNTONCO.GOV
STRUCTURAL ENGINEER:	JVA, INC. 1319 SPRUCE ST. BOULDER, CO 80302	ADAM TEUNISSEN, P.E. (303) 565-4936 ATEUNISSEN@JVAJVA.COM
CATHODIC PROTECTION:	QUALCORR ENGINEERING 3159 COMMERCE CT CASTLE ROCK, CO 80109	WINK JENKINS (303) 688-6103 WJENKINS@QUALCORR.COM



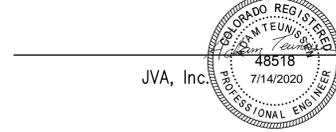
JVA, Inc. 1319 Spruce Street
Boulder, CO 80302 303.444.1951
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DRAWING INDEX

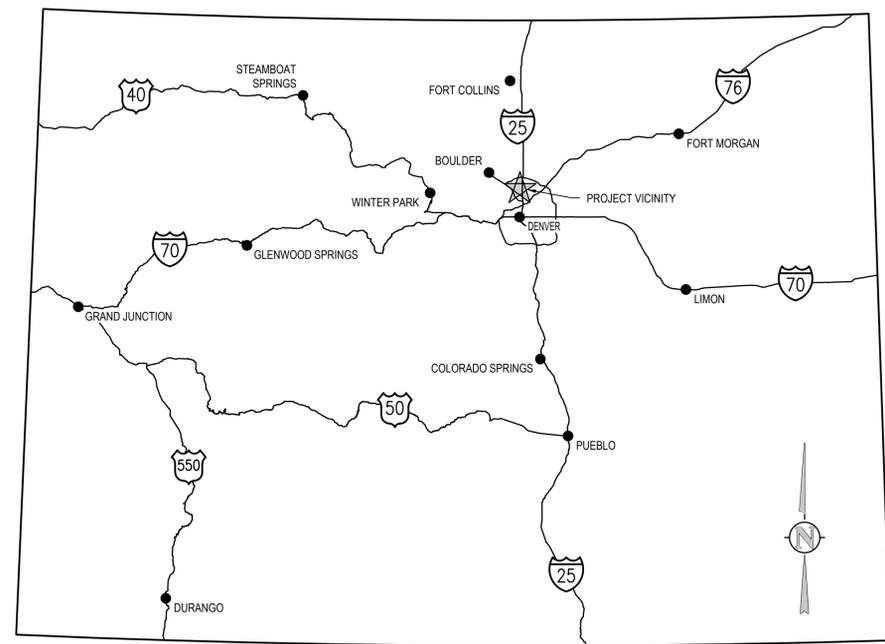
SHEET NO.	TITLE
S0.0	COVER
S1.0	TANK FLOOR PLAN
S1.1	TANK ROOF PLAN
S1.2	ELEVATIONS
CP1.0	CATHODIC PROTECTION PLAN
CP1.1	CATHODIC PROTECTION STANDARD DETAILS

AUGUST 2025

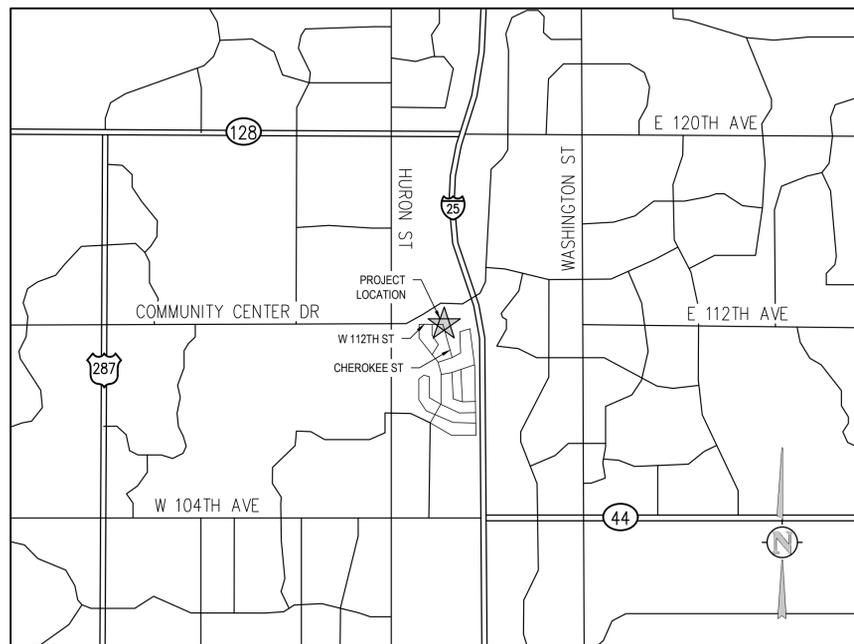
PREPARED UNDER THE SUPERVISION OF



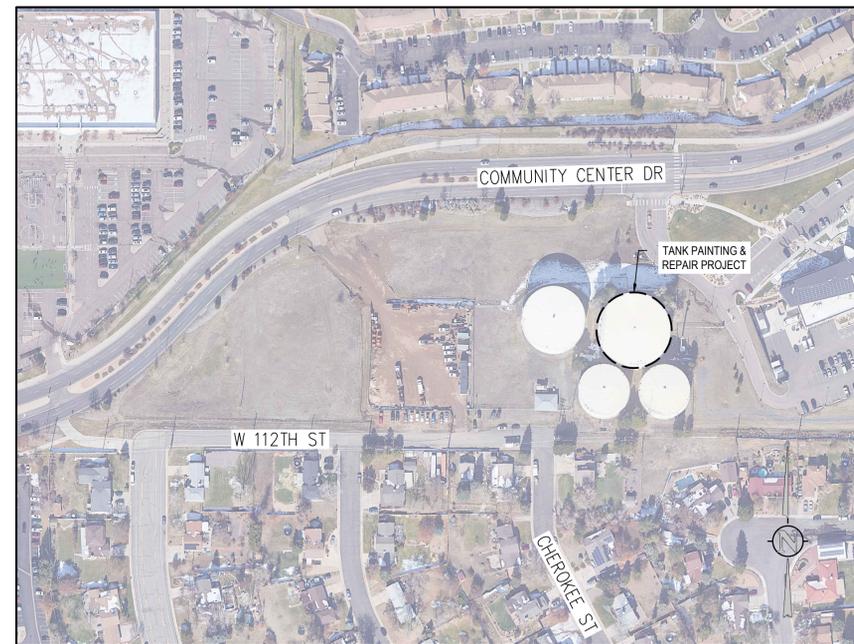
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VICINITY MAP
NTS



PROJECT LOCATION MAP
NTS



PROJECT AERIAL IMAGE
NTS



IMAGE 1

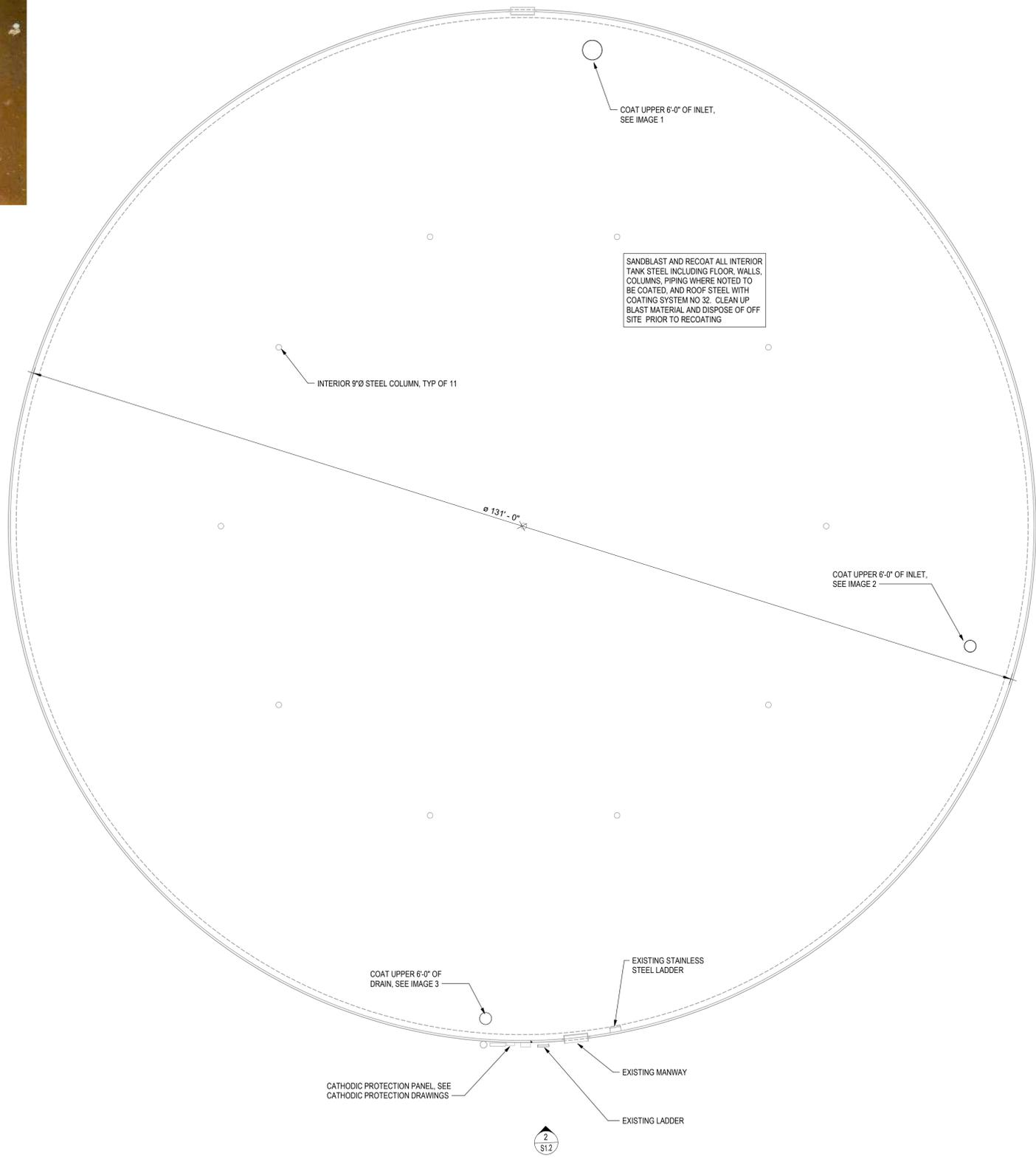


IMAGE 2



IMAGE 3

REVISIONS	NO.	DATE	DESCRIPTION



DESIGNED BY:	AJT
DRAWN BY:	AJT
CHECKED BY:	KLB
JOB #:	1100.1e
DATE:	JUNE 2025

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 22-712: W 112TH AVENUE & CHEROKEE ST

 TANK PAINTING & REPAIR PROJECT

 THORNTON, CO

 TANK FLOOR PLAN


TANK FLOOR PLAN

 1/8" = 1'-0"

 NORTH

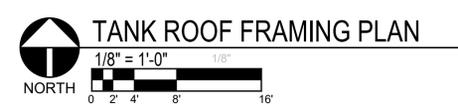




IMAGE 4



IMAGE 5



REVISIONS NO.	DATE	DESCRIPTION



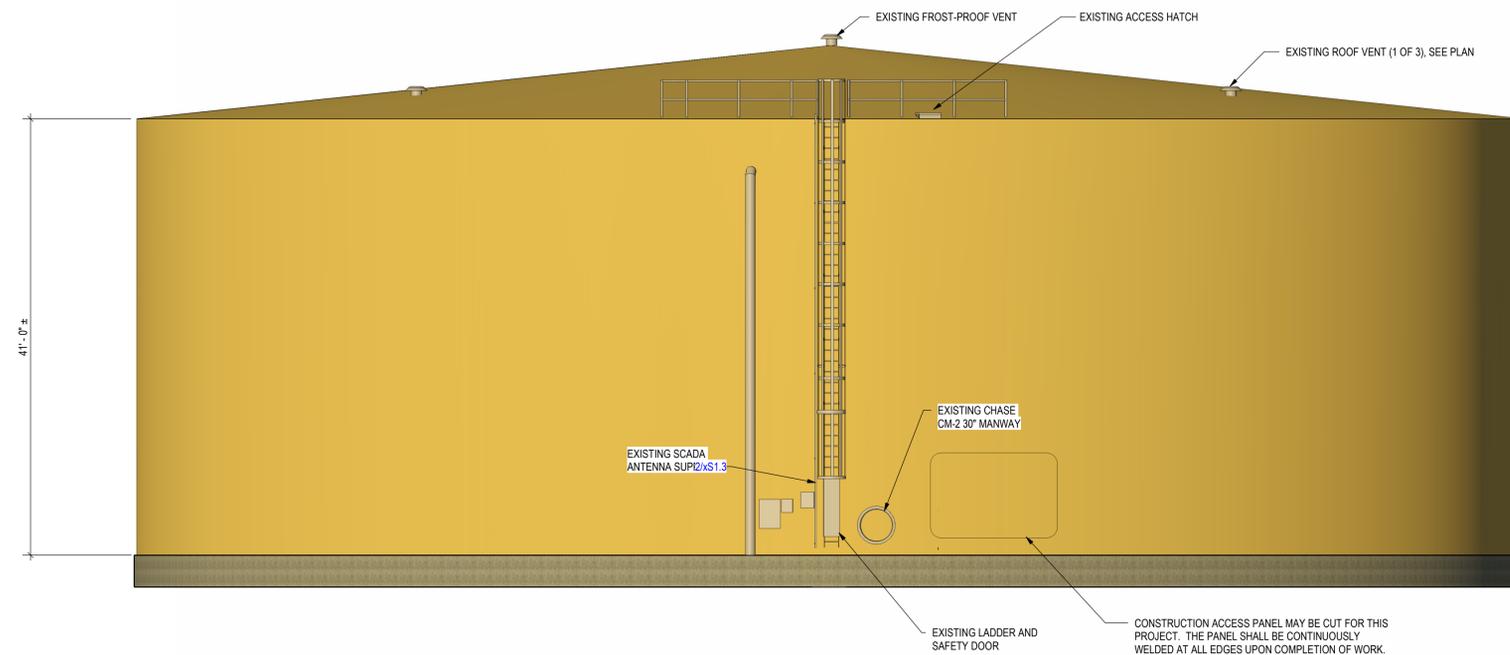
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 TANK PAINTING & REPAIR PROJECT
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 TANK ROOF PLAN

SHEET NO.
S1.1



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CONSTRUCTION ACCESS PANEL MAY BE CUT FOR THIS PROJECT. THE PANEL SHALL BE CONTINUOUSLY WELDED AT ALL EDGES UPON COMPLETION OF WORK. DAMAGED OR REMOVED COATINGS SHALL BE RECOATED UPON REPLACEMENT OF ACCESS PANEL. ACCESS PANEL SIZE SHALL BE AS SMALL AS POSSIBLE, BUT NOT GREATER THAN 7'-0" TALL AND 8'-0" IN WIDTH

2 SOUTH ELEVATION - IMPROVEMENTS
 S1.2 1/8" = 1'-0"
 0 2' 4' 8' 16'

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 THORNTON, CO
 ELEVATIONS

SHEET NO.
S1.2

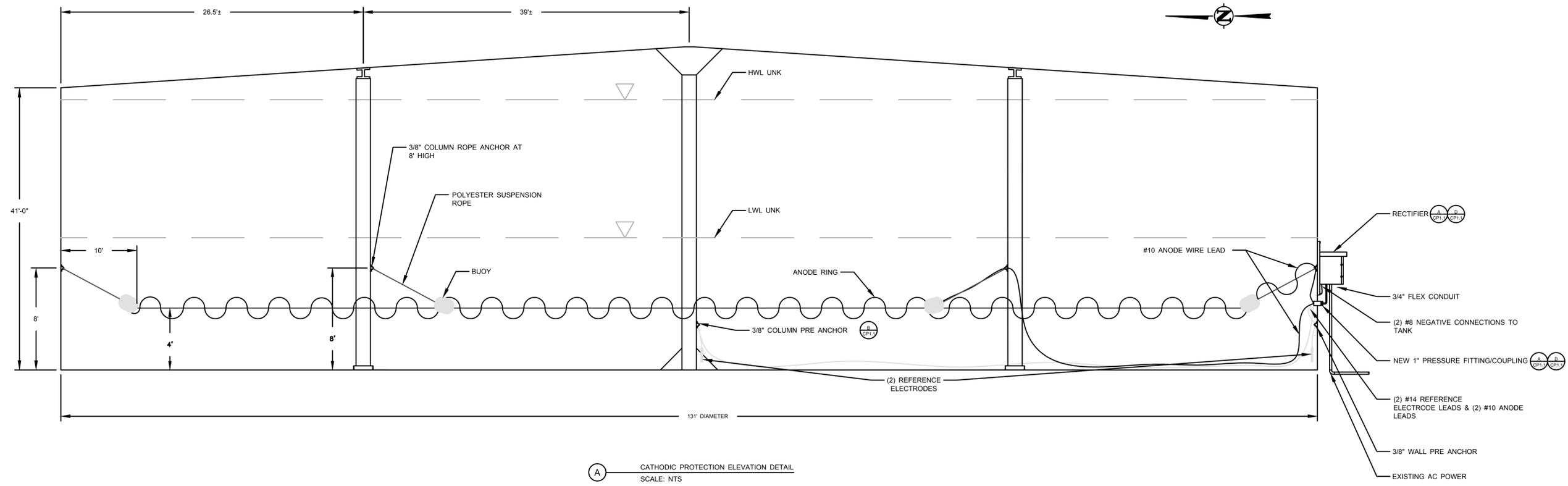
REVISIONS
 NO. DATE DESCRIPTION



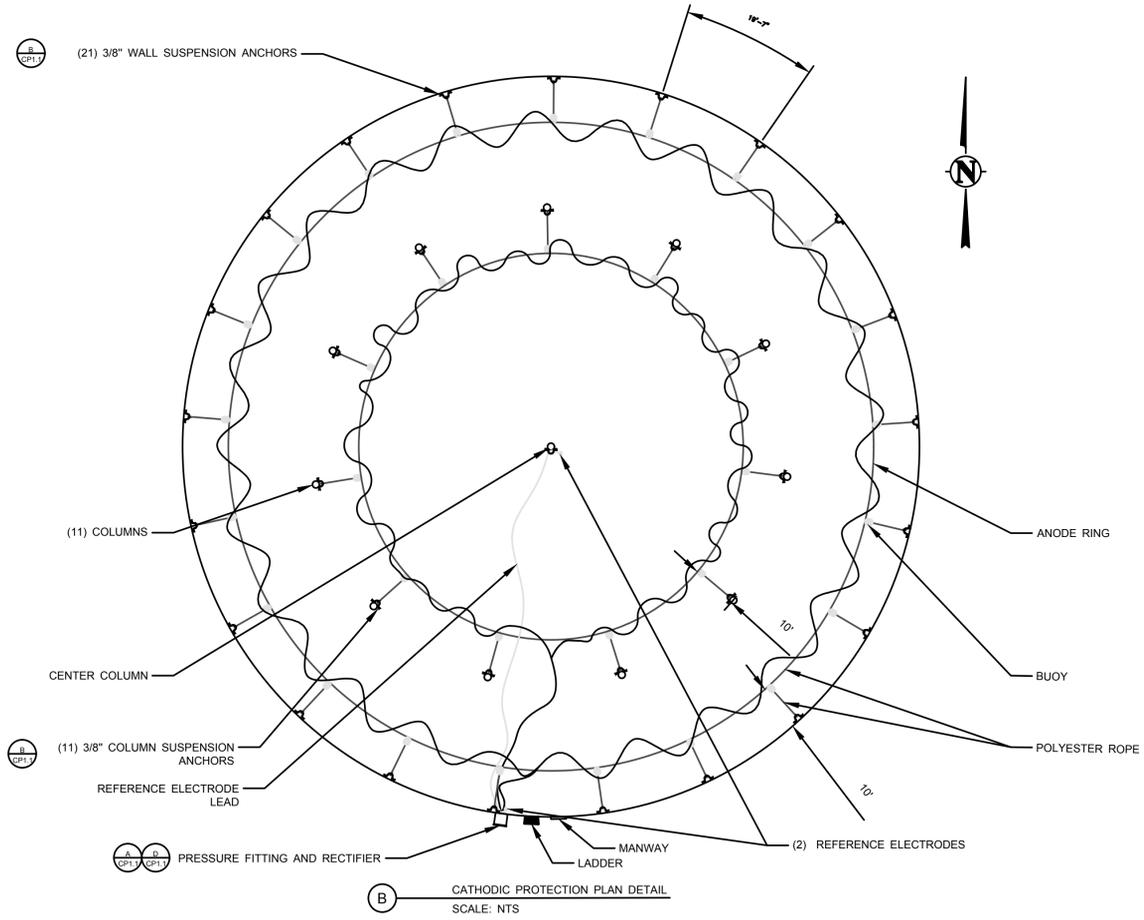
DESIGNED BY: MMV
 DRAWN BY: CAS
 CHECKED BY: MMV
 JOB #: 1100.1e
 DATE: APRIL 2023
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22-712: W 112TH AVENUE & CHEROKEE ST
 TANK PAINTING & REPAIR PROJECT
 THORNTON, CO
 CATHODIC PROTECTION PLAN

SHEET NO.
 CP1.0



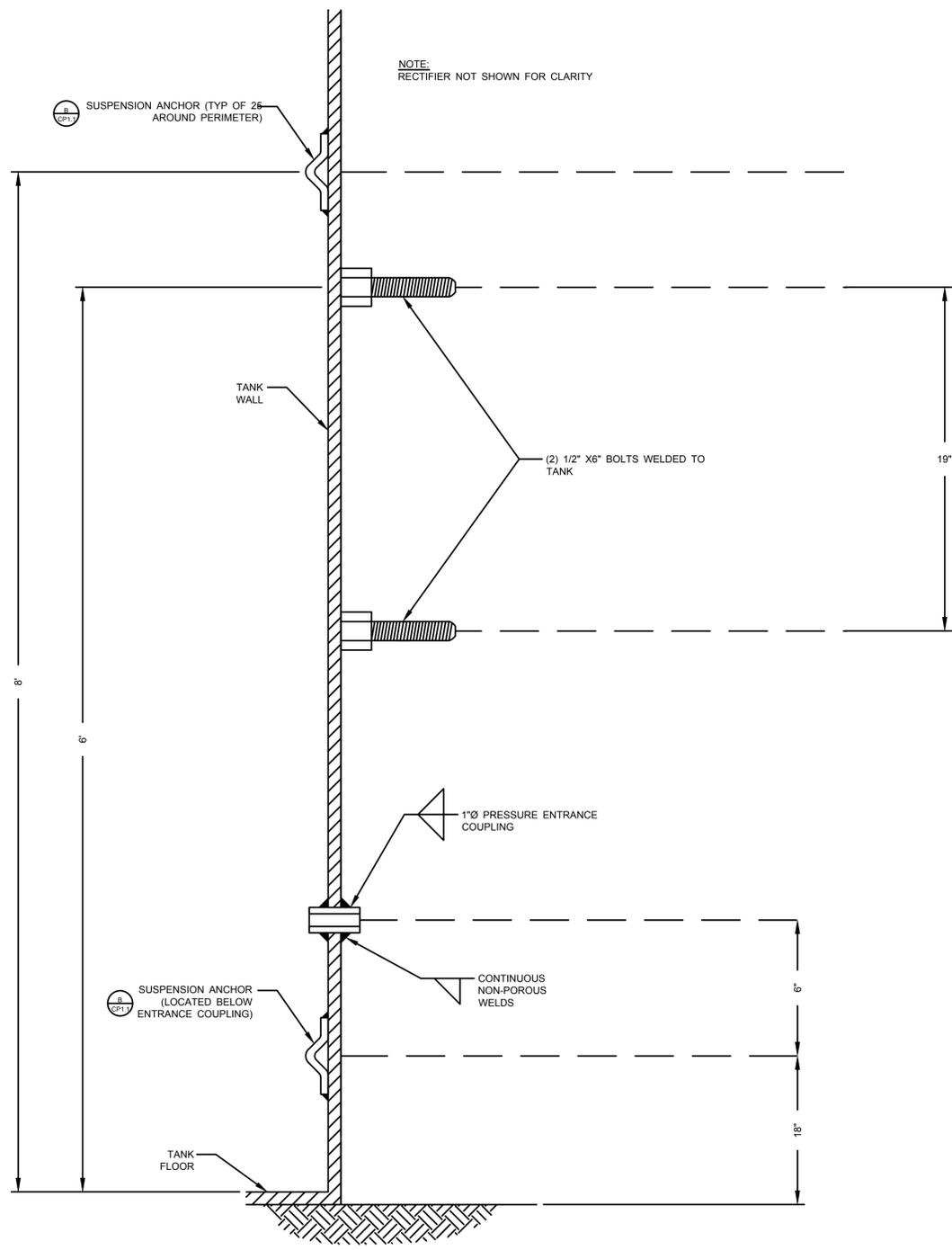
A CATHODIC PROTECTION ELEVATION DETAIL
 SCALE: NTS



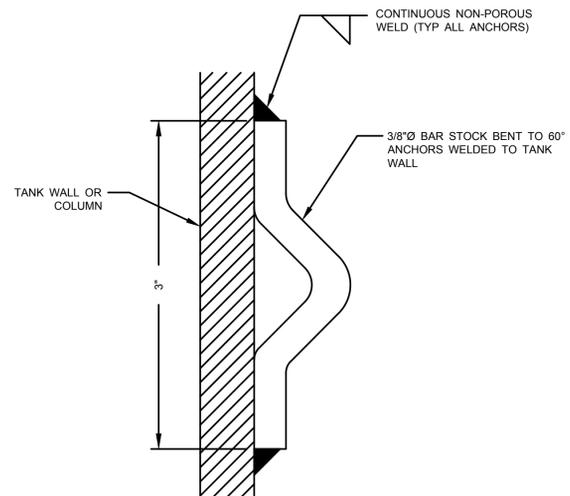
B CATHODIC PROTECTION PLAN DETAIL
 SCALE: NTS

KEY NOTES:

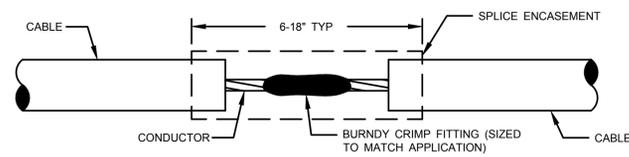
- CONTRACTOR SHALL COMPLETE AN API 653 MFL FLOOR SCAN AND TESTING AS DESCRIBED IN CATHODIC PROTECTION SPECIFICATIONS.
- CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN THE PLANS FOR THIS PROJECT AND ACTUAL FIELD CONDITIONS WHICH MAY INTERFERE WITH THIS PROJECT. FIELD MODIFICATIONS MAY BE ALLOWED BASED ON ACTUAL SITE CONDITIONS AND OBSTRUCTIONS.
- INSTALLATION OF ANCHORS, ENTRANCE COUPLING, AND INTERNAL TANK COATING TO BE COMPLETED PRIOR TO INSTALLATION OF CP SYSTEM. AFTER INSTALLATION OF THE CP SYSTEM, ONLY TOUCH-UP PAINTING VIA BRUSH METHOD IS ALLOWED AND PAINT SHOULD NOT COME IN CONTACT WITH THE CP SYSTEM.
- EXISTING ANCHORS MAY BE RE-USED IF POSSIBLE.
- FOLLOW PROPER SPLICING METHODS FOR CONNECTION OF ANODES WIRES AND REFERENCE ELECTRODES. ENSURE SPLICES CONSIST OF A WATERPROOF ENCASEMENT.
- INSTALL ANODES A MINIMUM OF 10 FEET FROM TANK SHELL, 10 FEET FROM INTERIOR COLUMNS, AND 4 FEET FROM TANK FLOOR AND 2 FEET FROM ANY OTHER SUBMERGED METALLIC STRUCTURES.
- UPON RETURNING THE TANK TO SERVICE, THE CP SYSTEM SHOULD COMMISSIONED AND SET TO OPERATE BY AN EXPERIENCED CP TECHNICIAN.
- TYPICAL WIRE INSULATION:
 BLACK: ANODE
 WHITE: PROTECTED STRUCTURE
 YELLOW: REFERENCE ELECTRODE
- SEE CATHODIC PROTECTION SPECS FOR ADDITIONAL INFORMATION.



(A) RECTIFIER MOUNTING DETAIL
 SCALE: NTS



(B) SUSPENSION ANCHOR DETAIL
 SCALE: NTS



(C) CABLE SPlicing DETAIL
 SCALE: NTS

TYPICAL PROCEDURE TO SPLICE ANODE OR CABLE:

1. CUT BACK INSULATION FROM END OF ANODES OR CABLES APPROX. 1 INCH. BE SURE ALL CABLE ENDS AND CONNECTIONS ARE CLEAN OF DIRT AND FOREIGN MATTER AND THAT ALL CONNECTIONS ARE BARE METAL.
2. PUT CABLES IN APPROPRIATE SIZED CRIMP FITTING AND CRIMP.
3. APPLY ELECTRICAL PUTTY TO FILL IN ANY VOIDS AND IRREGULAR SHAPES.
4. APPLY ELECTRICAL RUBBER TAPE AROUND THE PUTTY AND CABLE WHERE INSULATION WAS REMOVED.
5. APPLY ELECTRICAL TAPE ALONG THE ENTIRE SPLICE AND A MINIMUM OF 2 INCHES ON EACH ANODE OR CABLE END.
6. APPLY ELECTRICAL COATING ALONG THE ENTIRE SPLICE.



(D) RECTIFIER LOCATION DETAIL PHOTO
 SCALE: NTS

RECTIFIER DETAIL NOTES:

1. DEMO EXISTING RECTIFIER, PRESSURE ENTRANCE FITTING, JUNCTION BOX, BRACKETS/BOLTS, AND CONDUITS.
2. PROTECT EXISTING AC CONDUIT AND WIRING FOR RE-CONNECTION TO NEW RECTIFIER UNIT.
3. COVER WITH WELDED 3/16" STEEL PLATES TO INTERIOR AND EXTERIOR OF TANK. RECONDITION WELDED AREAS TO MATCH EXISTING COATING.
4. INSTALL NEW 1"Ø PRESSURE ENTRANCE FITTING AND RECTIFIER MOUNTING BOLTS. SEE DETAIL A.
5. INSTALL NEW RECTIFIER, CONDUITS, AND RE-CONNECT EXISTING AC POWER.

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 STANDARD DETAILS