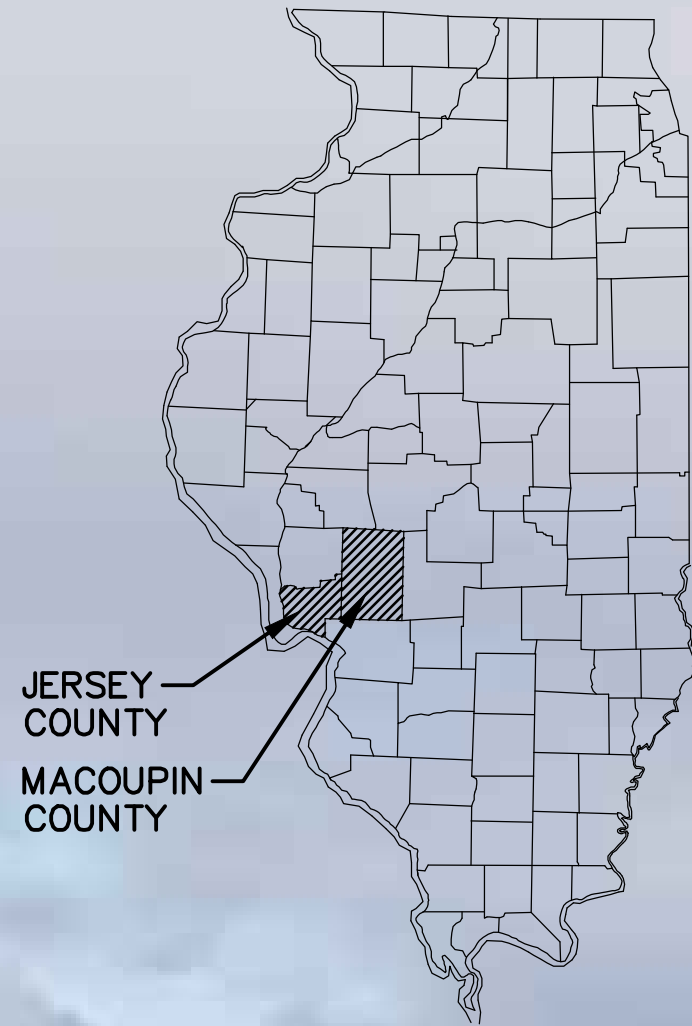


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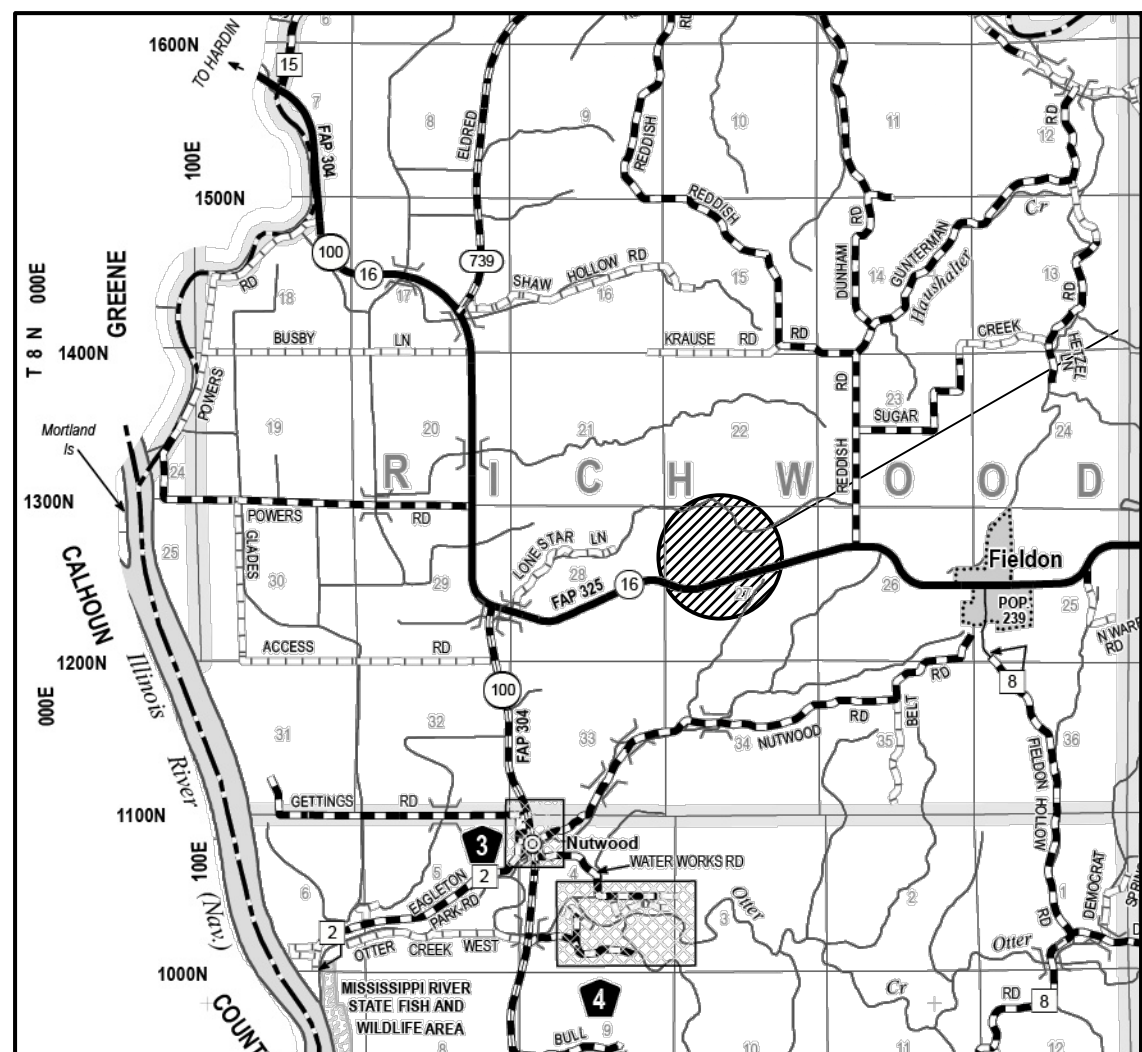


JERSEY COUNTY
MACOUPIN COUNTY

STATE OF ILLINOIS

CONSTRUCTION PLANS FOR CONTRACT "C" (PHASE "1B") WATER TREATMENT PLANT CLEARWELL NO. 1

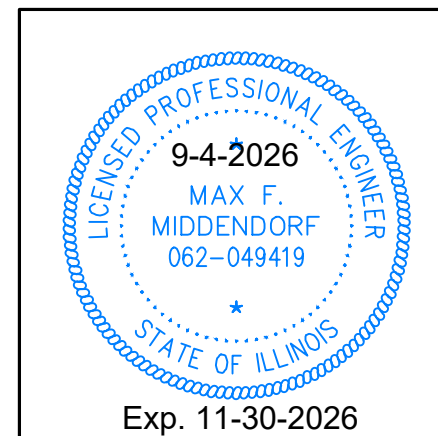
ILLINOIS ALLUVIAL REGIONAL WATER COMPANY
14500 STATE HIGHWAY 16, FIELDON, ILLINOIS 62031
2026



PROJECT LOCATION



LOCATION MAP



ENGINEER'S CERTIFICATION

I HEREBY CERTIFY THAT THESE PLANS
WERE PREPARED BY ME OR UNDER MY
DIRECT SUPERVISION AND THAT I AM
A DULY REGISTERED PROFESSIONAL
ENGINEER EXISTING UNDER THE LAWS
OF THE STATE OF ILLINOIS

Max Middendorf
MAX F. MIDDENDORF, P.E. # 062-049419 ILL.

PROJECT CONTACT INFORMATION

MAX MIDDENDORF
OFFICE PHONE: (217) 285-2550
EMAIL: mmiddendorf@mecoengineering.com

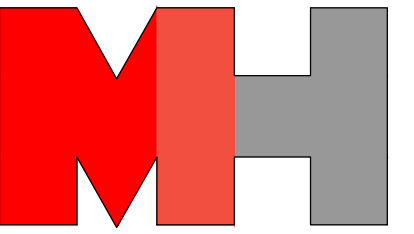
UTILITY PROVIDER INFORMATION

JERSEY COUNTY RURAL WATER COMPANY (618) 498-9534
MJM ELECTRIC CO-OPERATIVE (217) 707-6156

IARWC BOARD MEMBERS

JERSEY COUNTY RURAL WATER: ALLEN DAVENPORT
BUNKER HILL: JOHN CHAPMAN
DORCHESTER: SUE CAMPBELL
CARLINVILLE: SARAH OSWALD
FIELDON: JULIA DIXON
CENTRAL MACOUPIN COUNTY
RURAL WATER DISTRICT: RANDY DARR
FOSTERBURG WATER DISTRICT: STEVE RUPPERT

MECO-HENEGHAN
ENGINEERS, LLC



www.meco-heneghan.com

DESIGN FIRM NUMBERS:
IL: 184-007845-0010
035-003849
EXPIRES: APRIL 30, 2027
MO: 2018004041
EXPIRES: DECEMBER 31, 2027

400 N. FIFTH STREET
SUITE 107
ST. CHARLES, MO 63301
P: (636) 395-7055

REVISIONS

DATE

NO.

PHASE 1B

CONTRACT "C" - PHASE "1B"
COVER SHEET

ILLINOIS ALLUVIAL REGIONAL WATER COMPANY
JERSEY & MACOUPIN COUNTIES, ILLINOIS

DRAWN BY: D. MOORE
CHECKED BY: K. GARNETT
APPROVED BY: M. MIDDENDORF
HORIZONTAL SCALE:

N/A

VERTICAL SCALE:

N/A

PROJECT NO.

700-003

DATE:

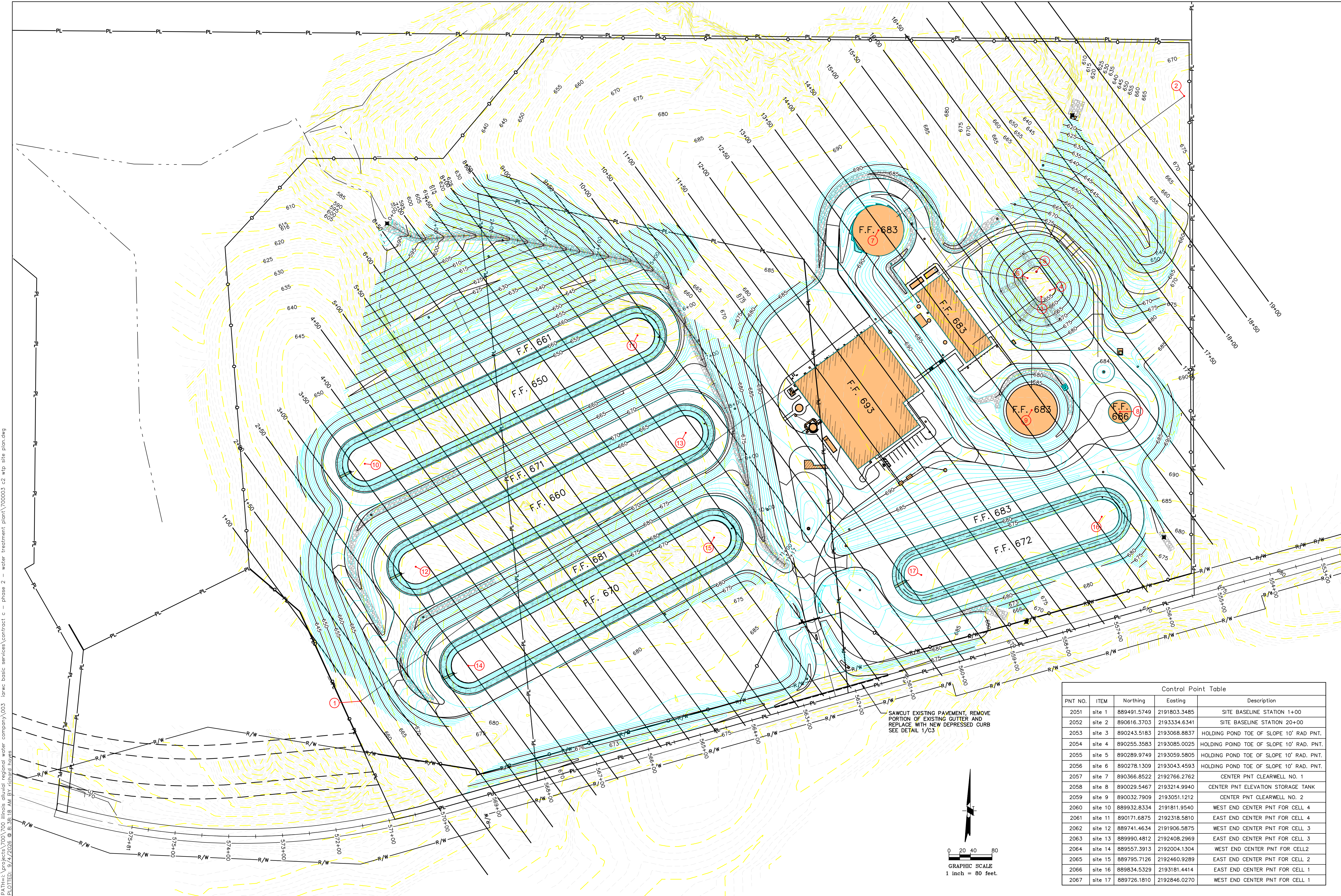
09/04/26

SHEET NO.

G1

1 OF 15 SHEETS

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PLOTED: 9/14/2026 @ 8:35:18 AM BY richard hoys



Control Point Table				
PNT NO.	ITEM	Northing	Easting	Description
2051	site 1	889491.5749	2191803.3485	SITE BASELINE STATION 1+00
2052	site 2	890616.3703	2193334.6341	SITE BASELINE STATION 20+00
2053	site 3	890243.5183	2193068.8837	HOLDING POND TOE OF SLOPE 10' RAD. PNT.
2054	site 4	890255.3583	2193085.0025	HOLDING POND TOE OF SLOPE 10' RAD. PNT.
2055	site 5	890289.9749	2193059.5805	HOLDING POND TOE OF SLOPE 10' RAD. PNT.
2056	site 6	890278.1309	2193043.4593	HOLDING POND TOE OF SLOPE 10' RAD. PNT.
2057	site 7	890366.8522	2192766.2762	CENTER PNT CLEARWELL NO. 1
2058	site 8	890029.5467	2193214.9940	CENTER PNT ELEVATION STORAGE TANK
2059	site 9	890032.7909	2193051.1212	CENTER PNT CLEARWELL NO. 2
2060	site 10	889932.8334	2191811.9540	WEST END CENTER PNT FOR CELL 4
2061	site 11	890171.6875	2192318.5810	EAST END CENTER PNT FOR CELL 4
2062	site 12	889741.4634	2191906.5875	WEST END CENTER PNT FOR CELL 3
2063	site 13	889990.4812	2192408.2969	EAST END CENTER PNT FOR CELL 3
2064	site 14	889557.3913	2192004.1304	WEST END CENTER PNT FOR CELL 2
2065	site 15	889795.7126	2192460.9289	EAST END CENTER PNT FOR CELL 2
2066	site 16	889834.5329	2193181.4414	EAST END CENTER PNT FOR CELL 1
2067	site 17	889726.1810	2192846.0270	WEST END CENTER PNT FOR CELL 1

MECO-HENEGHAN
ENGINEERS, LLC

MH

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DESIGN FIRM NUMBERS:
IL: 164.007845-0010
035.003949
EXPIRES: APRIL 30, 2027
MO: 201804041
EXPIRES: DECEMBER 31, 2027

400 N. FIFTH STREET
SUITE 107
ST. CHARLES, MO 63301
P: (636) 395-7055

REVISIONS

DATE

NO.

PHASE 1B

CONTRACT "C" - PHASE "1B"

SITE GRADING PLAN

DRAWN BY: R. HAYES
CHECKED BY: K. GARNETT
APPROVED BY: M. MIDDENDORF

HORIZONTAL SCALE:
1" = 80'

VERTICAL SCALE:
N/A

PROJECT NO.
700-003

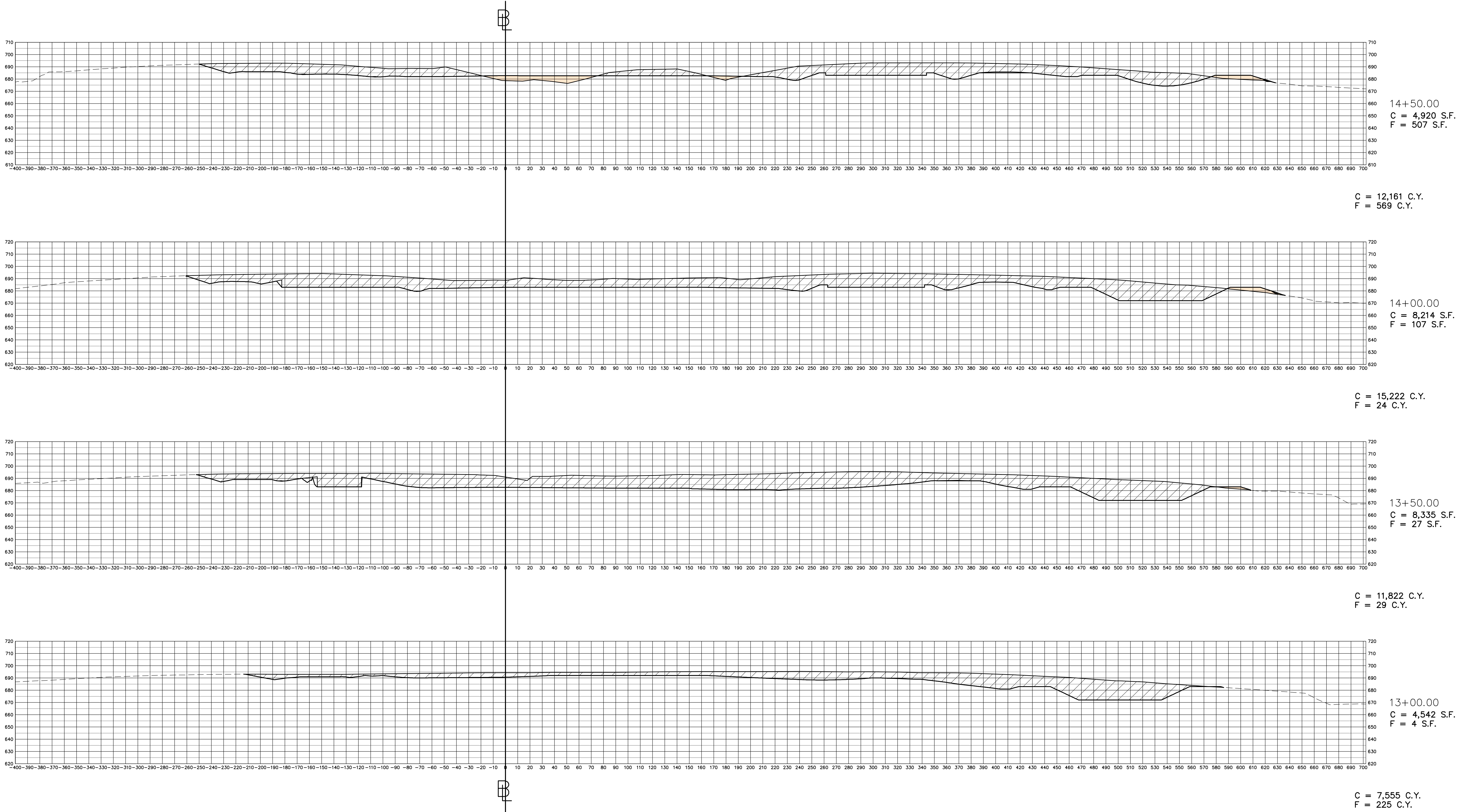
DATE:
09/04/26

SHEET NO.
C2

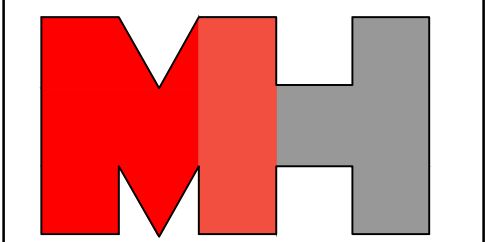
ILLINOIS ALLUVIAL REGIONAL WATER COMPANY
JERSEY & MACOUPIN COUNTIES, ILLINOIS

3 OF 15 SHEETS

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PLOTED: 9/14/2026 @ 8:38:29 AM BY richard hayes



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EXPIRES: APRIL 30, 2027
MO: 2018004041
EXPIRES: DECEMBER 31, 2027

400 N. FIFTH STREET
SUITE 107
ST. CHARLES, MO 63301
P: (636) 395-7055

NO.	DATE	REVISIONS

CONTRACT "C" - PHASE "1B"
SITE CROSS SECTIONS

ILLINOIS ALLUVIAL REGIONAL WATER COMPANY
JERSEY & MACOUPIN COUNTIES, ILLINOIS

DRAWN BY: R. HAYES
CHECKED BY: K. GARNETT
APPROVED BY: M. MIDDENDORF
HORIZONTAL SCALE:
1" = 50'

VERTICAL SCALE:
1" = 50'

PROJECT NO.
700-003

DATE:
09/04/26

SHEET NO.
C2.6
4 OF 15 SHEETS

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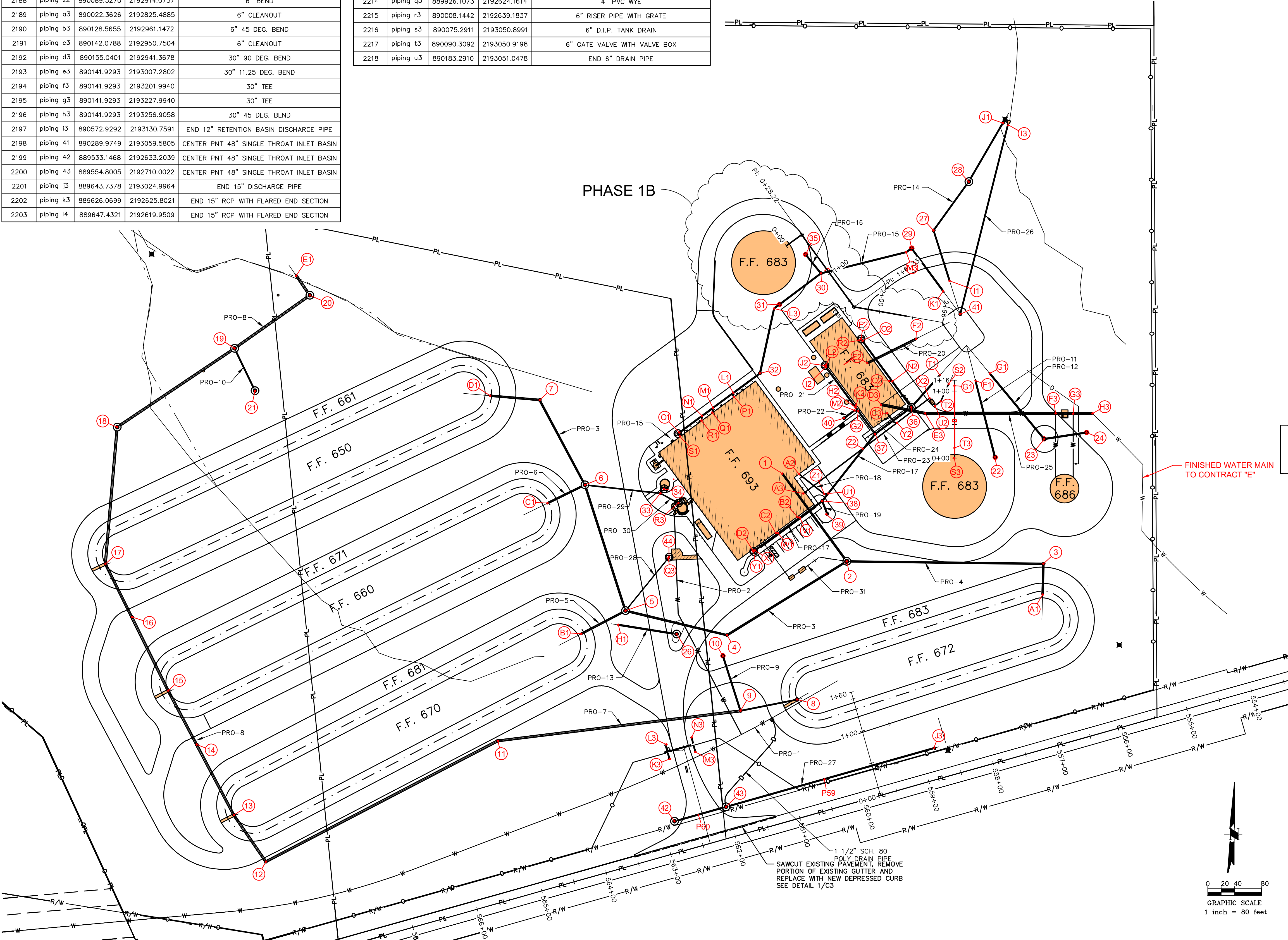
Control Point Table				
PNT NO.	ITEM	Northing	Easting	Description
2101	pipng 1	890051.9963	2192794.0802	END 20" PIPE AT PLANT TRENCH DRAIN
2102	pipng 2	889921.1446	2192890.1968	CENTER PNT 72" I.D. EFFLUENT MANHOLE
2103	pipng 3	889917.5353	2193183.7664	CENTER PNT 48" I.D. EFFLUENT MANHOLE
2104	pipng a1	889871.5535	2193182.5890	END 20" DISCHARGE PIPE AT CELL 1
2105	pipng 4	889811.0641	2192711.5945	CENTER PNT 48" I.D. EFFLUENT MANHOLE
2106	pipng 5	889847.4846	2192560.1149	CENTER PNT 72" I.D. EFFLUENT MANHOLE
2107	pipng b1	889813.0627	2192494.1845	END OF 20" DISCHARGE PIPE AT CELL 2
2108	pipng 6	890035.2800	2192499.4997	CENTER PNT 72" I.D. EFFLUENT MANHOLE
2109	pipng c1	890007.8947	2192443.7486	END 20" DISCHARGE PIPE AT CELL 3
2110	pipng 7	890161.9832	2192431.9833	48" I.D. EFFLUENT MANHOLE
2111	pipng d1	890168.3732	2192358.3733	END 20" DISCHARGE PIPE AT CELL 4
2112	pipng 8	889714.9177	2192816.0892	CENTER PNT DECONT STRUCTURE 1
2113	pipng 9	889698.0738	2192731.7549	CENTER PNT 60" I.D. JUNCTION MANHOLE
2114	pipng 10	889780.0874	2192705.4855	CENTER PNT 48" SINGLE THROAT INLET BASIN
2115	pipng 11	889653.2817	2192369.5276	CENTER PNT 60" I.D. JUNCTION MANHOLE
2116	pipng 12	889472.9965	2192023.6640	CENTER PNT 72" I.D. JUNCTION MANHOLE
2117	pipng 13	889542.6040	2191975.7871	CENTER PNT DECONT STRUCTURE 2
2118	pipng 14	889647.6624	2191920.3699	CENTER PNT 60" DOUBLE THROAT INLET BASIN
2119	pipng 15	889728.2064	2191877.8702	CENTER PNT DECONT STRUCTURE 3
2120	pipng 16	889837.9831	2191823.5107	CENTER PNT 60" DOUBLE THROAT INLET BASIN
2121	pipng 17	889917.4041	2191784.1828	CENTER PNT DECONT STRUCTURE 4
2122	pipng 18	890121.4309	2191801.8015	CENTER PNT 60" I.D. JUNCTION MANHOLE
2123	pipng 19	890238.8929	2191976.8148	CENTER PNT 60" DOUBLE THROAT INLET BASIN
2124	pipng 20	890318.1247	2192089.1893	CENTER PNT 72" I.D. JUNCTION MANHOLE
2125	pipng e1	890347.5484	2192068.9421	END 20" DECONT DISCHARGE PIPE
2126	pipng f1	890190.6587	2193082.3513	END 15" DRAIN PIPE
2129	pipng 23	890103.7200	2193184.6920	48" I.D. AREA DRAIN
2130	pipng h1	889826.4913	2192549.3999	END 15" DRAINAGE PIPE
2131	pipng 26	889812.5618	2192636.2904	CENTER PNT 48" I.D. AREA DRAIN BASIN
2132	pipng i1	890339.8734	2193043.6595	END 12" RETENTION BASIN OVERFLOW DRAIN
2133	pipng 27	890415.0029	2193019.6880	CENTER PNT 48" I.D. JUNCTION MANHOLE
2134	pipng 28	890487.7852	2193072.2282	CENTER PNT 48" SINGLE THROAT INLET BASIN
2135	pipng j1	890575.4156	2193123.3321	END 12" PIPE DISCHARGE
2136	pipng k1	890324.2400	2193034.3120	END 15" PIPE DISCHARGE (NORTH SIDE)
2137	pipng 29	890388.3830	2192987.0102	CENTER PNT 48" SINGLE THROAT INLET BASIN
2138	pipng 30	890350.9774	2192851.7377	CENTER PNT 48" I.D. JUNCTION MANHOLE
2139	pipng 31	890304.5305	2192789.8720	CENTER PNT 48" DOUBLE THROAT INLET BASIN
2140	pipng 32	890201.6438	2192760.7225	CENTER PNT 48" I.D. JUNCTION MANHOLE
2141	pipng i1	890172.4931	2192721.0411	15"x8" WYE
2142	pipng m1	890150.1690	2192690.6526	15"x8" WYE
2143	pipng n1	890138.3282	2192674.5344	15"x8" WYE
2144	pipng o1	890113.2892	2192640.4502	15"x8" WYE
2145	pipng 33	890111.6866	2192638.2686	CENTER PNT CLEANOUT
2147	pipng 35	890379.1969	2192828.7777	CENTER PNT 48" SINGLE THROAT INLET BASIN
2148	pipng p1	890166.8608	2192721.8196	CENTER PNT DOWNSPOUT
2149	pipng q1	890143.1793	2192689.5833	CENTER PNT DOWNSPOUT
2150	pipng r1	890131.3385	2192673.4651	CENTER PNT DOWNSPOUT
2151	pipng s1	890107.6570	2192641.2287	CENTER PNT DOWNSPOUT
2152	pipng t1	890199.0017	2193029.2617	END 15" PIPE DISCHARGE (SOUTH SIDE)
2153	pipng 36	890150.9904	2192986.5292	CENTER PNT 60" I.D. JUNCTION MANHOLE
2154	pipng 37	890111.3266	2192932.5313	CENTER PNT 48" I.D. JUNCTION MANHOLE
2155	pipng u1	890022.3165	2192862.4203	15"x8" WYE
2156	pipng 38	890011.2213	2192853.6809	CENTER PNT 48" I.D. JUNCTION MANHOLE
2157	pipng v1	889986.5317	2192820.0689	15"x8" WYE
2158	pipng w1	889962.8516	2192787.8312	15"x8" WYE
2159	pipng x1	889937.3955	2192753.1757	15"x8" WYE
2160	pipng y1	889935.9249	2192751.1736	CENTER PNT CLEANOUT
2161	pipng z1	890021.6493	2192856.8029	8" BEND
2162	pipng a2	890051.1473	2192819.3534	CENTER PNT DOWNSPOUT
2163	pipng b2	889987.0759	2192816.5869	CENTER PNT DOWNSPOUT
2164	pipng c2	889963.3958	2192784.3492	CENTER PNT DOWNSPOUT
2165	pipng d2	889937.9397	2192749.6937	CENTER PNT DOWNSPOUT
2166	pipng 39	889991.8689	2192861.2257	CENTER PNT 48" I.D. DRAINAGE BASIN
2167	pipng e2	890253.2173	2192993.5335	END 24" DISCHARGE PIPE
2168	pipng g2	890145.5015	2192907.4283	15"x8" WYE
2169	pipng h2	890150.8176	2192903.5234	15"x8" WYE
2170	pipng i2	890211.2631	2192859.1236	15"x8" WY
2171	pipng j2	890213.2780	2192857.6436	CENTER PNT CLEANOUT
2172	pipng k2	890154.3125	2192904.0583	CENTER PNT DOWNSPOUT
2173	pipng l2	890214.7580	2192859.6584	CENTER PNT DOWNSPOUT
2174	pipng m2	890146.3573	2192901.8366	15" 45 DEG BEND
2175	pipng 40	890134.8000	2192886.1026	CENTER PNT 48" I.D. AREA DRAIN BASIN
2176	pipng n2	890189.6755	2192958.1134	15"x8" WYE
2177	pipng o2	890250.1210	2192913.7135	15"x8" WYE
2178	pipng p2	890252.9418	2192911.6416	CENTER PNT CLEANOUT

Control Point Table				
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2179	pipng q2	890190.4243	2192953.2206	CENTER PNT DOWNSPOUT
2180	pipng r2	890250.8698	2192908.8208	CENTER PNT DOWNSPOUT
2181	pipng s2	890185.6911	2193042.2669	END 6" DISCHARGE PIPE
2182	pipng t2	890159.8702	2193030.3820	6" 22.5 DEG. BEND
2183	pipng u2	890153.4796	2193021.9387	6" 90 DEG. BEND
2184	pipng v2	890155.8974	2193020.1627	6" OIL SEPARATOR EFFLUENT PIPE
2185	pipng w2	890162.2079	2193015.5274	6" OIL SEPARATOR INFLUENT PIPE
2186	pipng x2	890164.6257	2193013.7514	6" 90 DEG. BEND
2187	pipng y2	890128.0171	2192955.3542	6" WYE
2188	pipng z2	890089.3270	2192914.0737	6" BEND
2189	pipng a3	890022.3626	2192825.4885	6" CLEANOUT
2190	pipng b3	890128.5655	2192961.1472	6" 45 DEG. BEND
2191	pipng c3	890142.0788	2192950.7504	6" CLEANOUT
2192	pipng d3	890155.0401	2192941.3678	30" 90 DEG. BEND
2193	pipng e3	890141.9293	2193007.2802	30" 11.25 DEG. BEND
2194	pipng f3	890141.9293	2193201.9940	30" TEE
2195	pipng g3	890141.9293	2193227.9940	30" TEE
2196	pipng h3	890141.9293	2193256.9058	30" 45 DEG. BEND
2197	pipng i3	890572.9292	2193130.7591	END 12" RETENTION BASIN DISCHARGE PIPE
2198	pipng j1	890289.9749	2193059.5805	CENTER PNT 48" SINGLE THROAT INLET BASIN
2199	pipng k2	889533.1468	2192633.2039	CENTER PNT 48" SINGLE THROAT INLET BASIN
2200	pipng k3	889554.8005	2192710.0022	CENTER PNT 48" SINGLE THROAT INLET BASIN
2201	pipng j3	889643.7378	2193024.9964	END 15" DISCHARGE PIPE
2202	pipng k3	889626.0699	2192625.8021	END 15" RCP WITH FLARED END SECTION
2203	pipng l4	889647.4321	2192619.9509	END 15" RCP WITH FLARED END SECTION

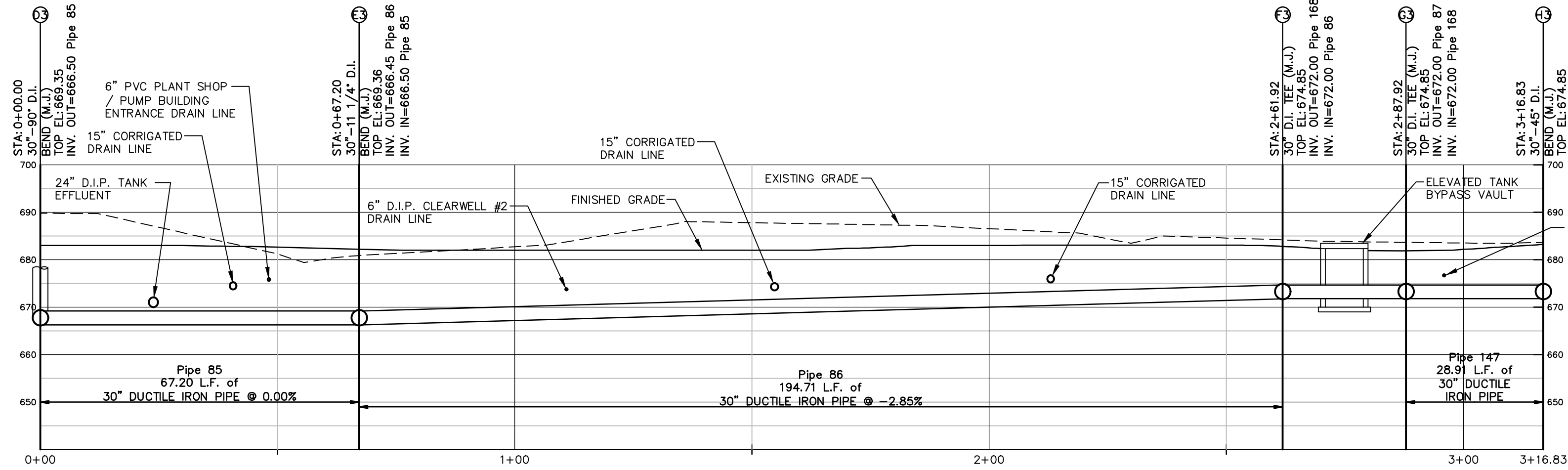
Control Point Table				
PNT NO.	ITEM	Northing	Easting	Description
2204	pipng m3	889636.8343	2192664.3461	END 15" RCP WITH FLARED END SECTION
2205	pipng n3	889658.2698	2192658.7608	END 15" RCP WITH FLARED END SECTION
2206	pipng f2	890217.0502	2192921.0563	END 24" DISCHARGE PIPE
2208	pipng 21	890175.8247	2192007.3489	CENTER PNT 48" I.D. DOUBLE THROAT INLET BASIN
2209	pipng 45	890022.5888	2192612.3583	48" I.D. AREA DRAIN BASIN
2210	pipng p3	890029.3169	2192617.7495	CENTER PNT 4" PIPE RISER
2211	pipng 44	889927.2818	2192625.1182	CENTER PNT CLEANOUT
2212	pipng i3	890298.5266	2192781.8750	15" - 45" BEND
2213	pipng a3	890382.4630	2192978.9509	15" - 22 1/2 DEG BEND
2214	pipng q3	889926.1073	2192624.1614	4" PVC WYE
2215	pipng r3	890008.1442	2192639.1837	6" RISER PIPE WITH GRATE
2216	pipng s3	890075.2911	2193050.8991	6" D.I.P. TANK DRAIN
2217	pipng t3	890090.3092	2193050.9198	6" GATE VALVE WITH VALVE BOX
2218	pipng u3	890183.2910	2193051.0478	END 6" DRAIN PIPE

PRO-1 SEE PROFILE 1/C4.1
PRO-2 SEE PROFILE 2/C4.1
PRO-3 SEE PROFILE 4/C4.1
PRO-4 SEE PROFILE 5/C4.1
PRO-5 SEE PROFILE 6/C4.1
PRO-6 SEE PROFILE 8/C4.1
PRO-7 SEE PROFILE 1/C4.5
PRO-8 SEE PROFILE 2/C4.5
PRO-9 SEE PROFILE 3/C4.5
PRO-10 SEE PROFILE 4/C4.5
PRO-11 SEE PROFILE 1/C4.8
PRO-12 SEE PROFILE 2/C4.8
PRO-13 SEE PROFILE 3/C4.8
PRO-14 SEE PROFILE 4/C4.8
PRO-15 SEE PROFILE 1/C4.9 & 2/C4.9
PRO-16 SEE PROFILE 3/C4.9

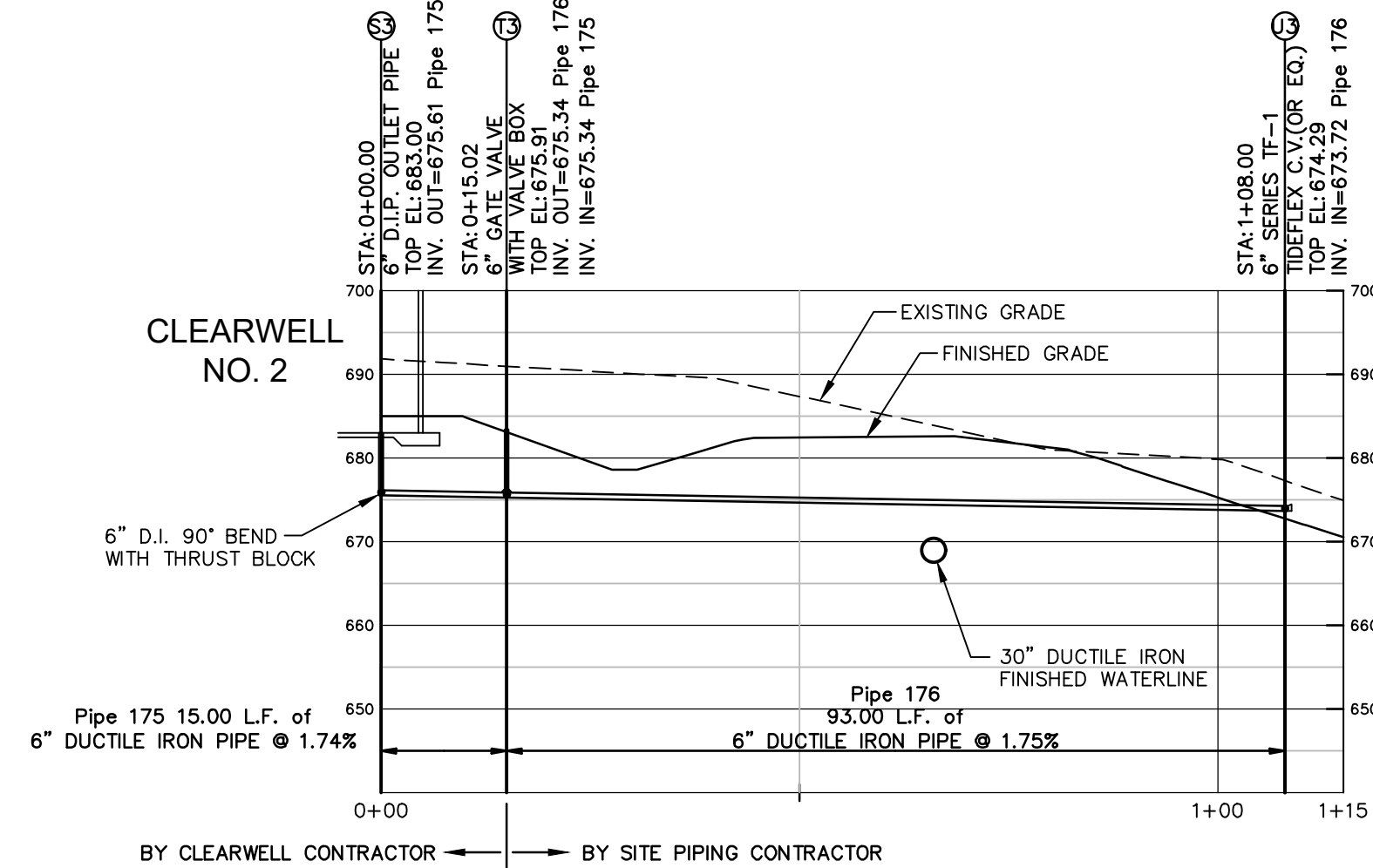
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PRO-18 SEE PROFILE 2/C4.10
PRO-19 SEE PROFILE 6/C4.10
PRO-20 SEE PROFILE 7/C4.10
PRO-21 SEE PROFILE 1/C4.11
PRO-22 SEE PROFILE 5/C4.11
PRO-23 SEE PROFILE 1/C4.11
PRO-24 SEE PROFILE 5/C4.11
PRO-25 SEE PROFILE 1/C4.12
PRO-26 SEE PROFILE 2/C4.12
PRO-27 SEE PROFILE 3/C4.12
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PRO-31 SEE PROFILE 3/C4.1



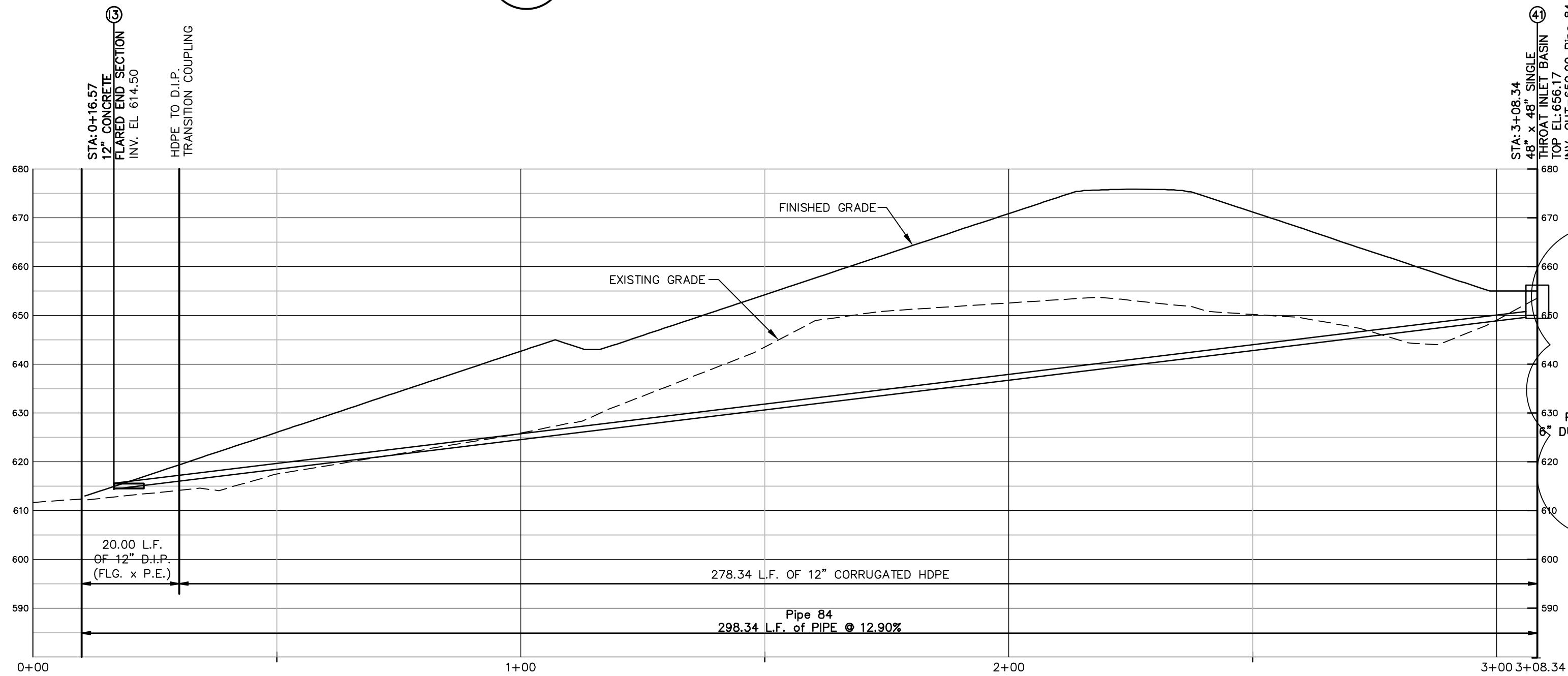
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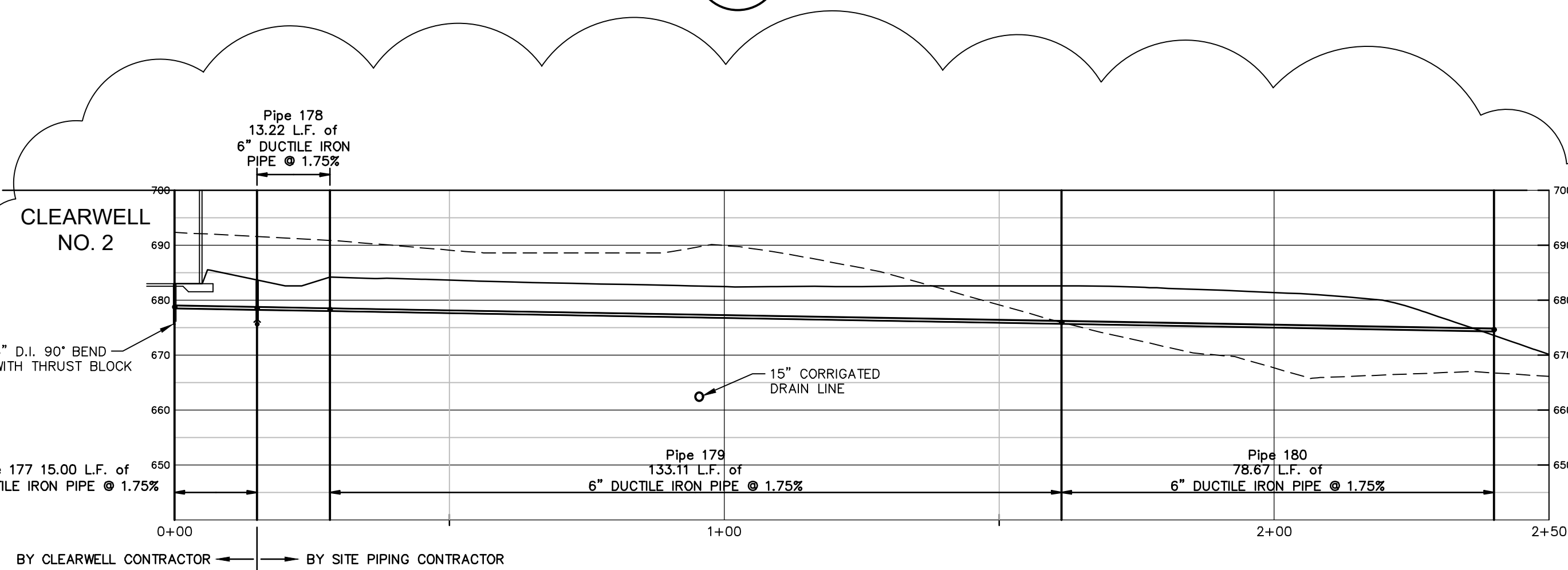
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C4.12



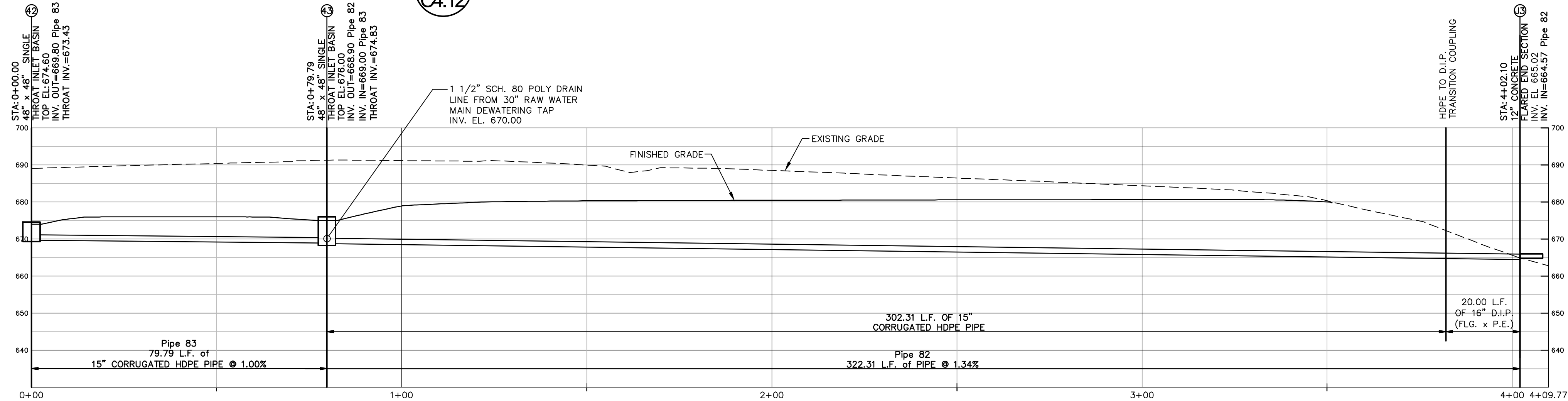
4 CLEARWELL NO. 2 DRAIN PIPE
C4.12



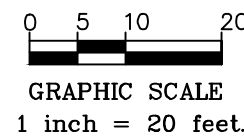
2 DETENTION BASIN OUTLET PIPE
C4.12



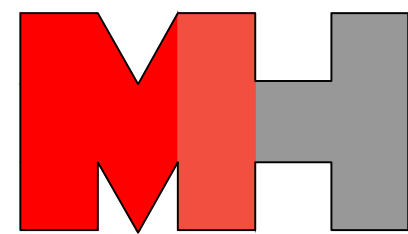
5 CLEARWELL NO. 1 DRAIN PIPE
C4.12



3 MAIN ENTRANCE DITCH DRAINS
C4.12



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IL: 164.007845-0010
035.003949
EXPIRES: APRIL 30, 2027
MO: 2018004041
EXPIRES: DECEMBER 31, 2027

400 N. FIFTH STREET
SUITE 107
ST. CHARLES, MO 63301
P: (636) 395-7055

REVISIONS	DATE	NO.

PHASE 1B

CONTRACT "C" - PHASE "1B"
PLANT STORM DRAINAGE /
HOLDING POND DRAIN AND
PUMP BUILDING FINISHED WATER
PIPING PROFILES
ILLINOIS ALLUVIAL REGIONAL WATER COMPANY
JERSEY & MACOUPIN COUNTIES, ILLINOIS

DRAWN BY: R. HAYES
CHECKED BY: K. GARNETT
APPROVED BY: M. MIDDENDORF
HORIZONTAL SCALE:
1" = 20'

VERTICAL SCALE:
1" = 20'

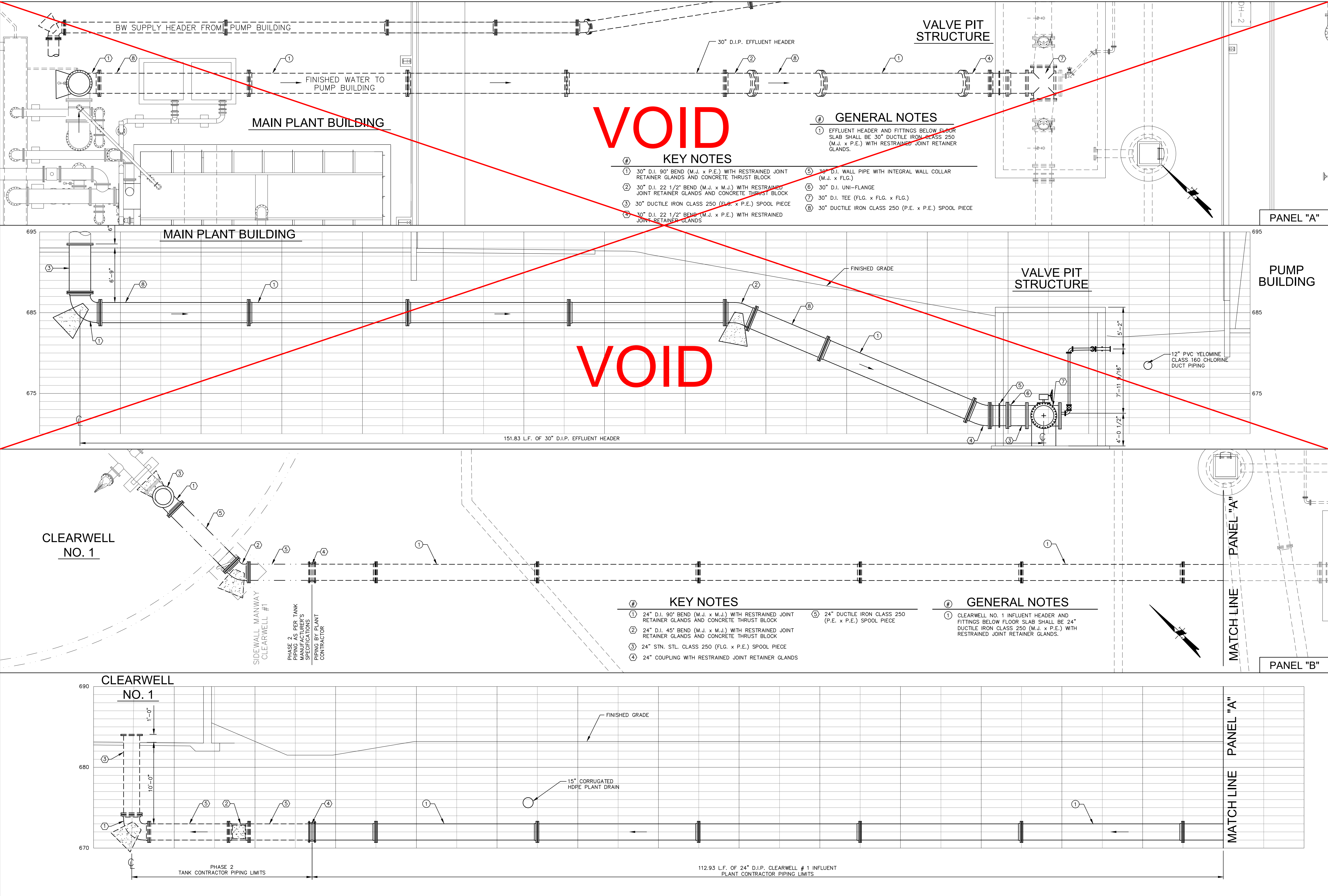
PROJECT NO.
700-003

DATE:
09/04/26

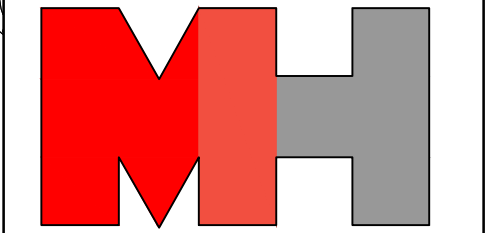
SHEET NO.
C4.12

6 OF 15 SHEETS

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PLOTED: 9/11/2026 @ 8:40:24 AM BY richard.hoyes



MECO-HENEGHAN
ENGINEERS, LLC



www.meco-heneghan.com

DESIGN FIRM NUMBERS:
IL: 164.007845-0010
035.003949
EXPIRES: APRIL 30, 2027
MO: 2018004041
EXPIRES: DECEMBER 31, 2027

☐ 400 N. FIFTH STREET
SUITE 107
ST. CHARLES, MO 63301
P: (636) 395-7055

NO.	DATE	REVISIONS

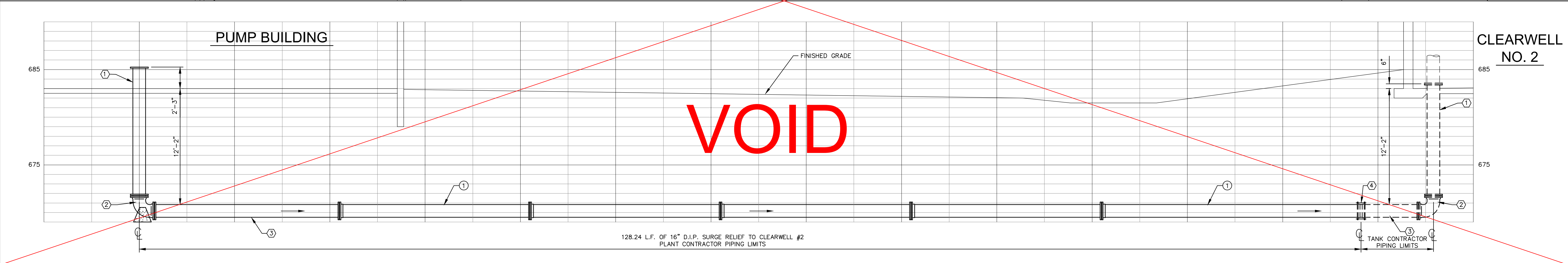
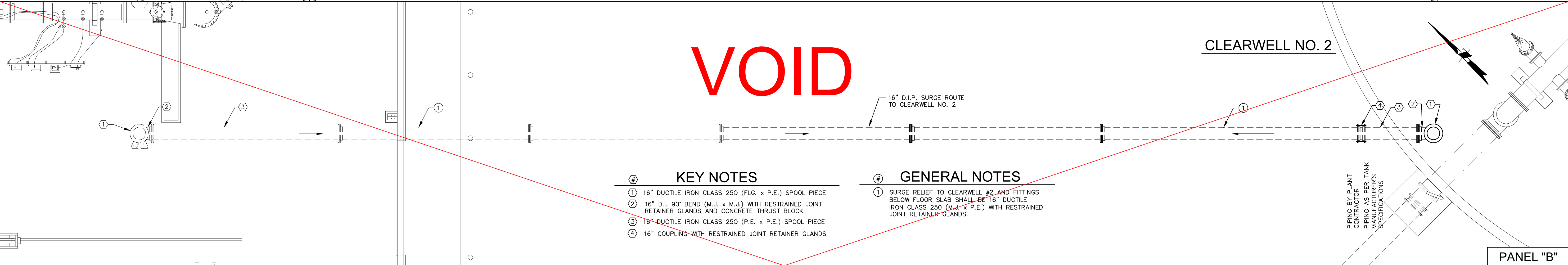
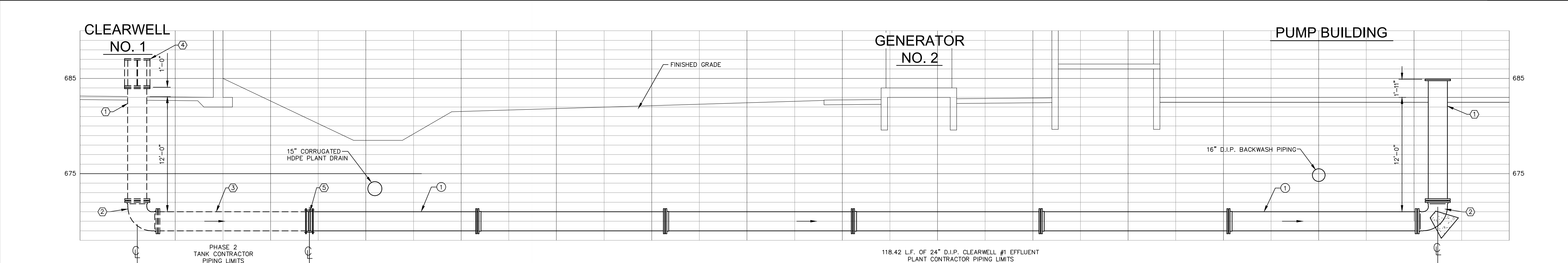
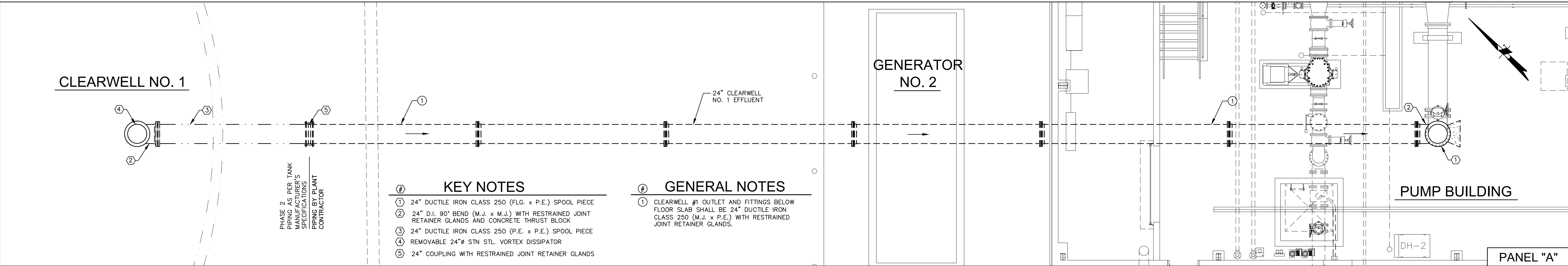
PHASE 1B

CONTRACT "C" - PHASE "1B"
FILTER EFFLUENT /
CLEARWELL NO. 1 INFLUENT
PLANS AND PROFILES

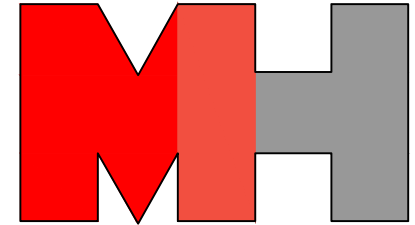
ILLINOIS ALLUVIAL REGIONAL WATER COMPANY
JERSEY & MACOUPIN COUNTIES, ILLINOIS

DRAWN BY: R. HAYES
CHECKED BY: K. GARNETT
APPROVED BY: M. MIDDENDORF
HORIZONTAL SCALE:
3/16" = 1'-0"
VERTICAL SCALE:
3/16" = 1'-0"
PROJECT NO.
700-003
DATE:
09/04/26
SHEET NO.
M6.9
7 OF 15 SHEETS

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PLOTED: 9/14/2026 @ 8:40:58 AM BY richard hayes



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DESIGN FIRM NUMBERS:
IL: 164.007845-0010
035.003949
EXPIRES: APRIL 30, 2027
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EXPIRES: DECEMBER 31, 2027

☐ 400 N. FIFTH STREET
SUITE 107
ST. CHARLES, MO 63301
P: (636) 395-7055

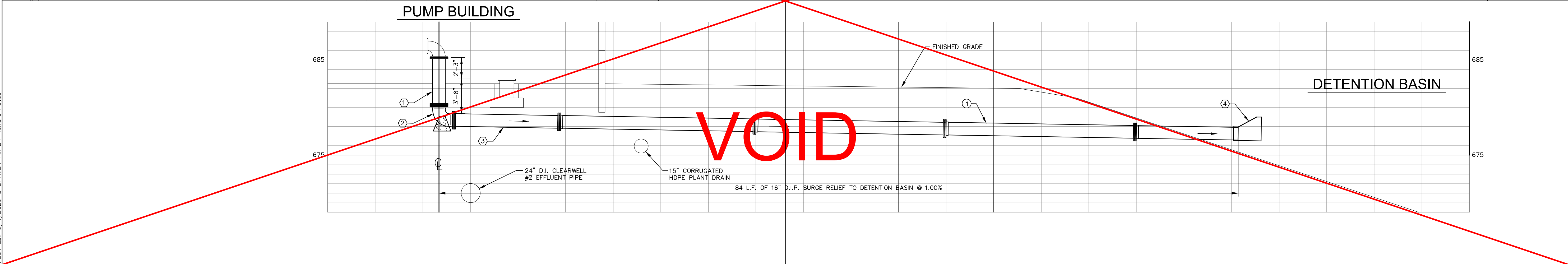
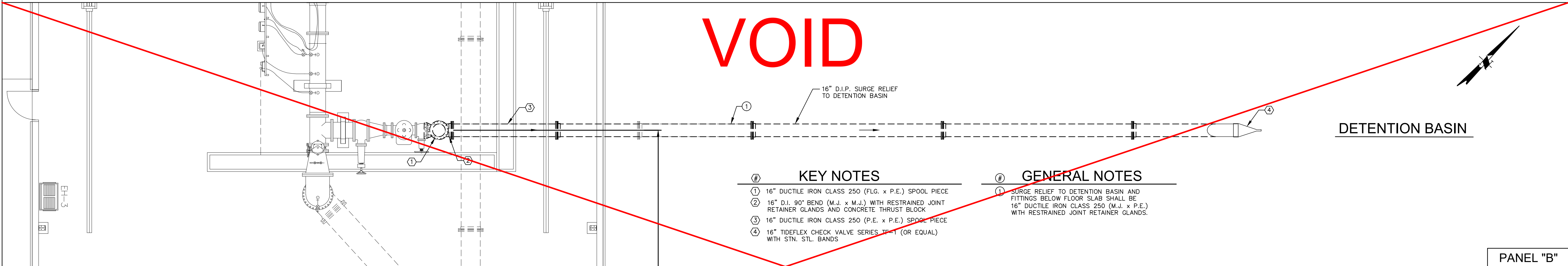
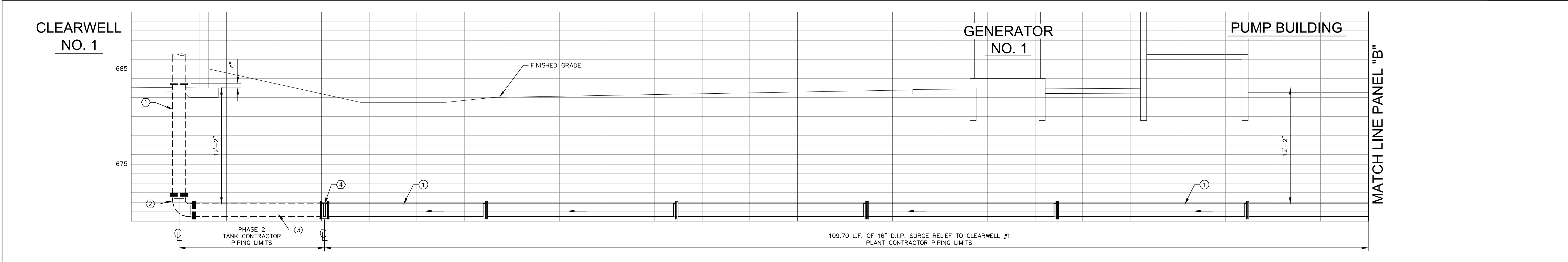
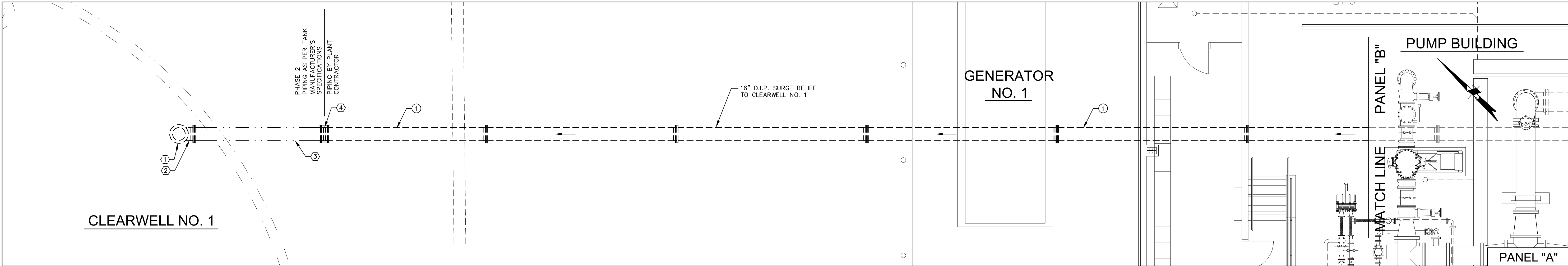
NO.	DATE	REVISIONS

CONTRACT "C" - PHASE "B"
CLEARWELL NO. 1 EFFLUENT /
SURGE RELIEF TO CLEARWELL NO. 2
PLANS AND PROFILES

ILLINOIS ALLUVIAL REGIONAL WATER COMPANY
JERSEY & MACOUPIN COUNTIES, ILLINOIS

DRAWN BY: R. HAYES
CHECKED BY: K. GARNETT
APPROVED BY: M. MIDDENDORF
HORIZONTAL SCALE:
3/16" = 1'-0"
VERTICAL SCALE:
3/16" = 1'-0"
PROJECT NO.
700-003
DATE:
09/04/26
SHEET NO.
M6.11
8 OF 15 SHEETS

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PLOTED: 9/11/2026 @ 8:41:24 AM BY richard hayes



VOID

VOID

- KEY NOTES**
- ① 16" DUCTILE IRON CLASS 250 (FLG. x P.E.) SPOOL PIECE
 - ② 16" D.I. 90° BEND (M.J. x M.J.) WITH RESTRAINED JOINT RETAINER GLANDS AND CONCRETE THRUST BLOCK
 - ③ 16" DUCTILE IRON CLASS 250 (P.E. x P.E.) SPOOL PIECE
 - ④ 16" TIDFLEX CHECK VALVE SERIES TF-1 (OR EQUAL) WITH STN. STL. BANDS

- GENERAL NOTES**
- ① SURGE RELIEF TO DETENTION BASIN AND FITTINGS BELOW FLOOR SLAB SHALL BE 16" DUCTILE IRON CLASS 250 (M.J. x P.E.) WITH RESTRAINED JOINT RETAINER GLANDS.

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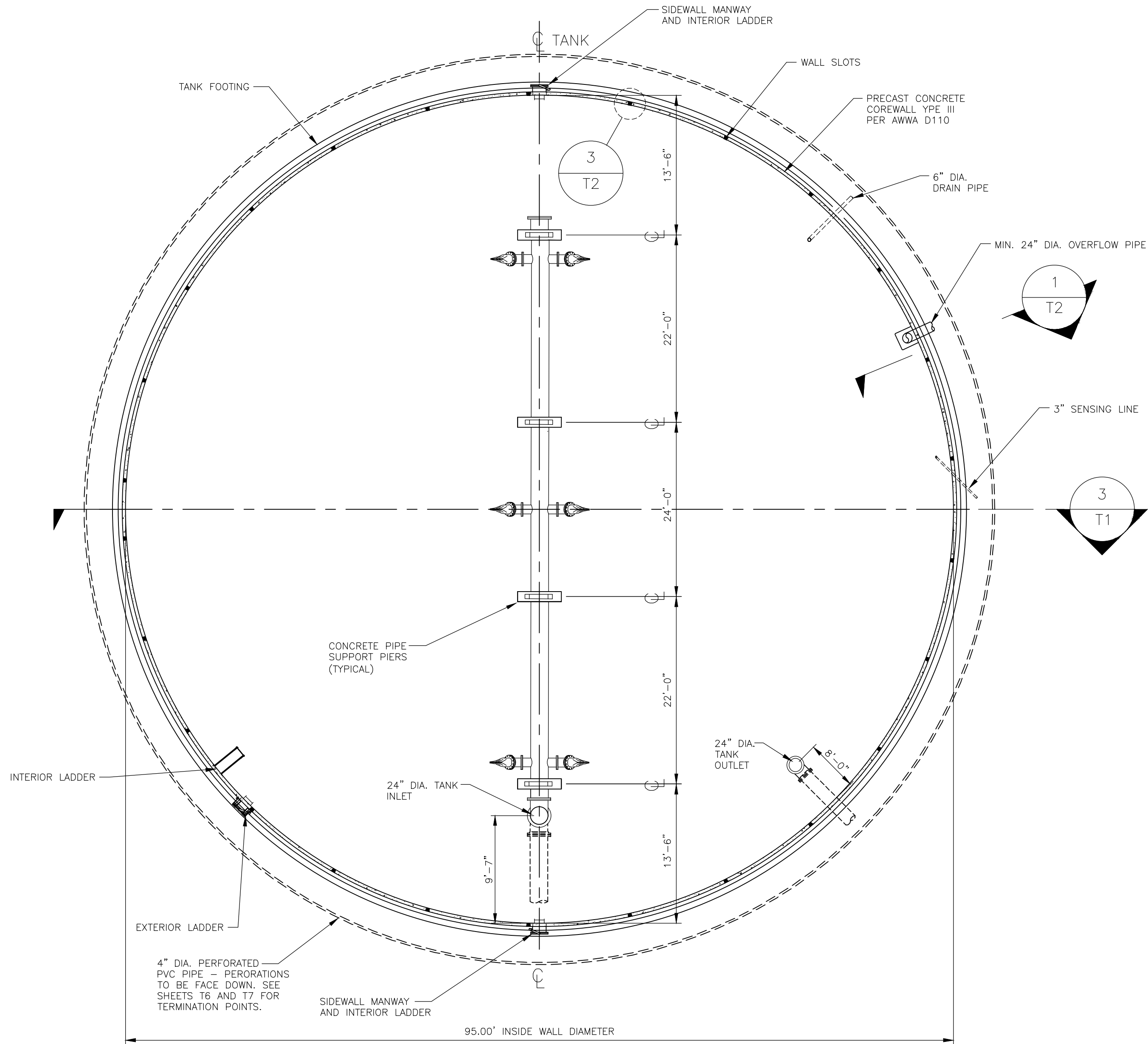
PHASE 1B

CONTRACT "C" - PHASE "1B"
SURGE RELIEF TO
CLEARWELL NO. 1
PLANS AND PROFILES

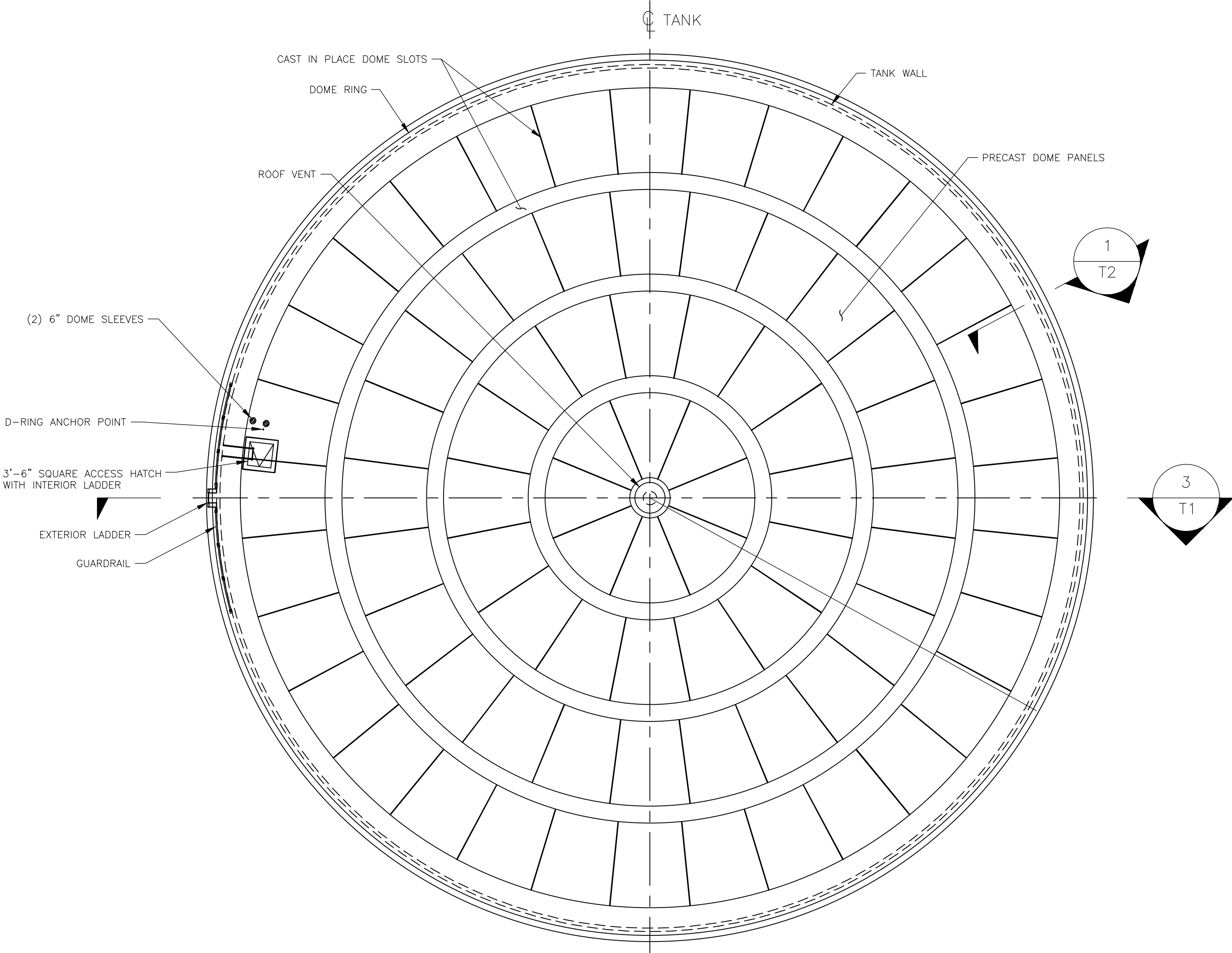
ILLINOIS ALLUVIAL REGIONAL WATER COMPANY
JERSEY & MACOUPIN COUNTIES, ILLINOIS

DRAWN BY: R. HAYES
CHECKED BY: K. GARNETT
APPROVED BY: M. MIDDENDORF
HORIZONTAL SCALE:
3/16" = 1'-0"
VERTICAL SCALE:
3/16" = 1'-0"
PROJECT NO.
700-003
DATE:
09/04/26
SHEET NO.
M6.12
9 OF 15 SHEETS

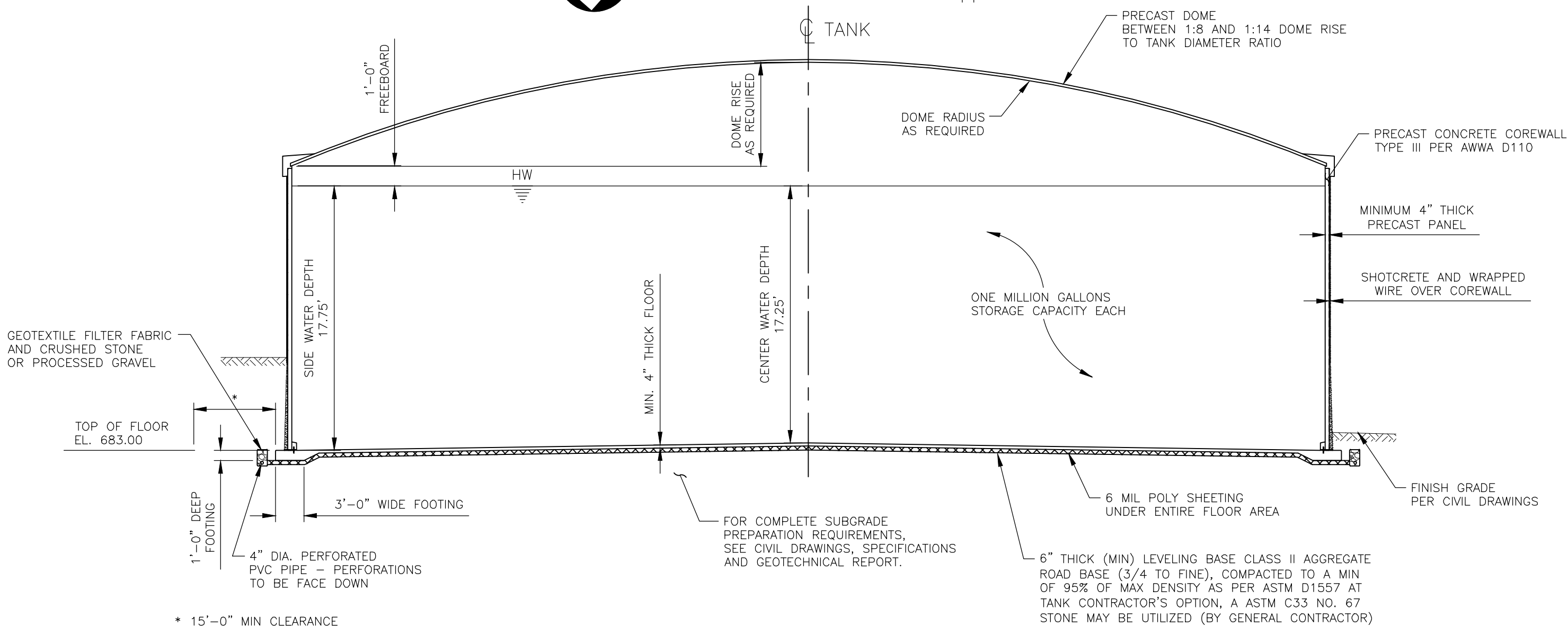
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PLOTED: 9/4/2026 @ 8:41:28 AM BY richard.hoxes



TANK NO. 1 PLAN 1
T1



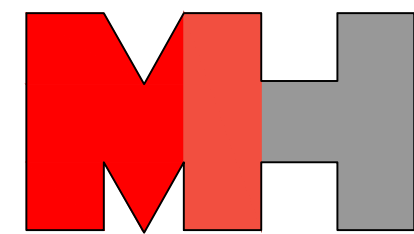
TANK ROOF PLAN 2
T1



TANK SECTION 3
T1

- GENERAL NOTES:**
*ALL DIMENSIONS SHOWN ARE MINIMUM REQUIREMENTS. TANK CONTRACTOR, AS DEFINED IN THE SPECIFICATIONS, TO VERIFY DIMENSIONS WITH STRUCTURAL CALCULATIONS.
- A. DESIGN LOADS**
- | | |
|--|--|
| 1. ROOF LOAD | : 20.0 PSF LIVE; SNOW |
| 2. LIQUID (WATER) | : 62.4 PCF |
| 3. R _i IMPULSIVE STRUCTURAL RESPONSE COEFFICIENT | : 3.25 (ASCE 7 WITH CABLES) 1.50 (ASCE 7 W/O CABLES) |
| | : 3.50 (AWWA WITH CABLES) 1.50 (AWWA W/O CABLES) |
| 4. R _c CONVECTIVE STRUCTURAL RESPONSE COEFFICIENT | : 1.0 |
| 5. ANALYSIS PROCEDURE USED | : EQUIVALENT LATERAL FORCE ANALYSIS BASED ON AWWA D110 AND ACI 350.3 |
- B. CONCRETE AND SHOTCRETE**
- | | |
|--|------------|
| 1. FLOOR, AND FOOTINGS | : 4000 PSI |
| 2. DOME, DOME RING AND DOME SLOTS | : 4000 PSI |
| 3. PRECAST WALL | : 4000 PSI |
| 4. SHOTCRETE FOR WIRE COVER (1C:3S) AND COVER COAT (1C:4S) | : 4500 PSI |
| 5. SEE TECHNICAL SPECIFICATION FOR COMPLETE MIX DESIGN INFORMATION INCLUDING MINIMUM CEMENT CONTENT, MAXIMUM WATER-CEMENT RATIO, AGGREGATE SIZE AND ACCEPTABLE ADMIXTURES. | |
| 6. SEE TECHNICAL SPECIFICATION FOR CONCRETE PLACING AND FORMING PROCEDURES. | |
- C. METALS**
1. ALL STAINLESS STEEL (SST) TO BE 304L UNLESS OTHERWISE NOTED.
- D. REINFORCING STEEL**
1. ALL REINFORCING IN TANK SHALL CONFORM TO ASTM A615 GRADE 60 UNLESS OTHERWISE NOTED ON THESE DRAWINGS.
 2. REINFORCING STEEL CALLED OUT AS GALVANIZED SHALL HAVE A CLASS 1 COATING IN ACCORDANCE WITH ASTM A767, WITHOUT CHROMATE.
- E. EARTHWORK REQUIREMENTS**
1. MINIMUM COMPACTION OF CRUSHED ROCK AND SUBGRADE UNDER AND AROUND PIPE BLOCKS AND UNDER FLOOR AND FOOTINGS SHALL EQUAL 95% RELATIVE COMPACTION AS DETERMINED IN ACCORDANCE WITH ASTM D1557.
 2. COMPACTION OF BACKFILL AROUND TANK SHALL EQUAL 90% RELATIVE COMPACTION AS DETERMINED IN ACCORDANCE WITH ASTM D1557. USE ONLY HAND HELD COMPACTION EQUIPMENT WITHIN 5' OF TANK WALL AND LIGHTWEIGHT EQUIPMENT (15,600 LBS MAX) BEYOND THE 5' AND WITHIN 15' OF THE TANK SO AS NOT TO DAMAGE THE WALL. BRING UP THE BACKFILL AROUND THE TANK IN UNIFORM LIFTS WHEN POSSIBLE. DIFFERENCE IN BACKFILL HEIGHTS DURING INSTALLATION SHALL NEVER EXCEED THE FINAL DIFFERENCE IN BACKFILL HEIGHTS.

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SUITE 107
ST. CHARLES, MO 63301
P: (636) 395-7055

REVISIONS

DATE

NO.

PHASE 1B

CONTRACT "C" - PHASE "1B"
PRECAST CONCRETE STORAGE
TANK PLANS AND SECTION

ILLINOIS ALLUVIAL REGIONAL WATER COMPANY
JERSEY & MACOUPIN COUNTIES, ILLINOIS

DRAWN BY: R. HAYES
CHECKED BY: K. GARNETT
APPROVED BY: M. MIDDENDORF
HORIZONTAL SCALE:

NOT TO SCALE

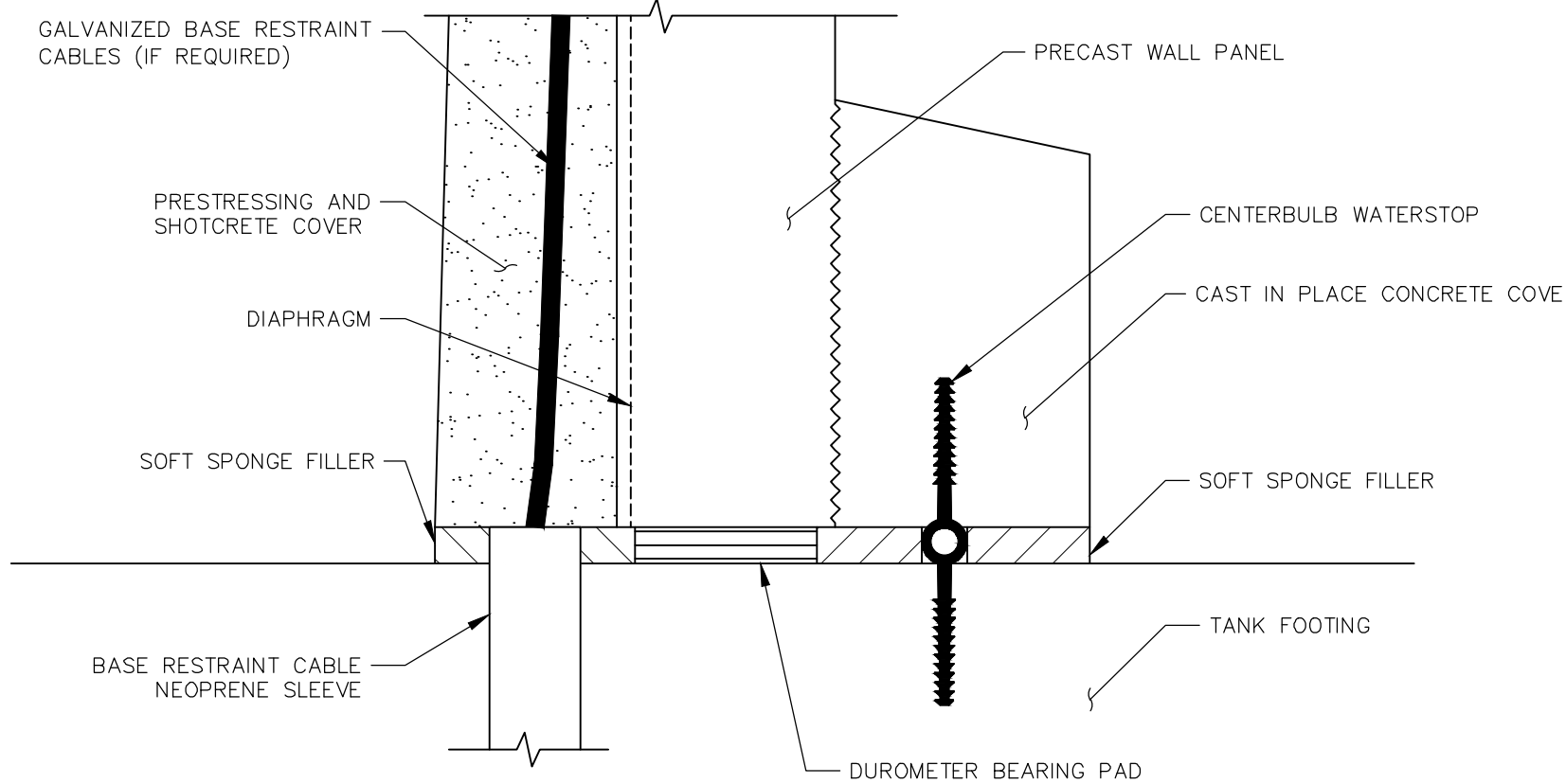
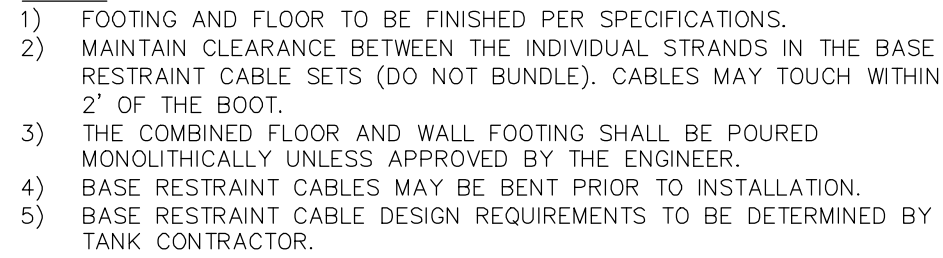
VERTICAL SCALE:
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PROJECT NO.
700-003

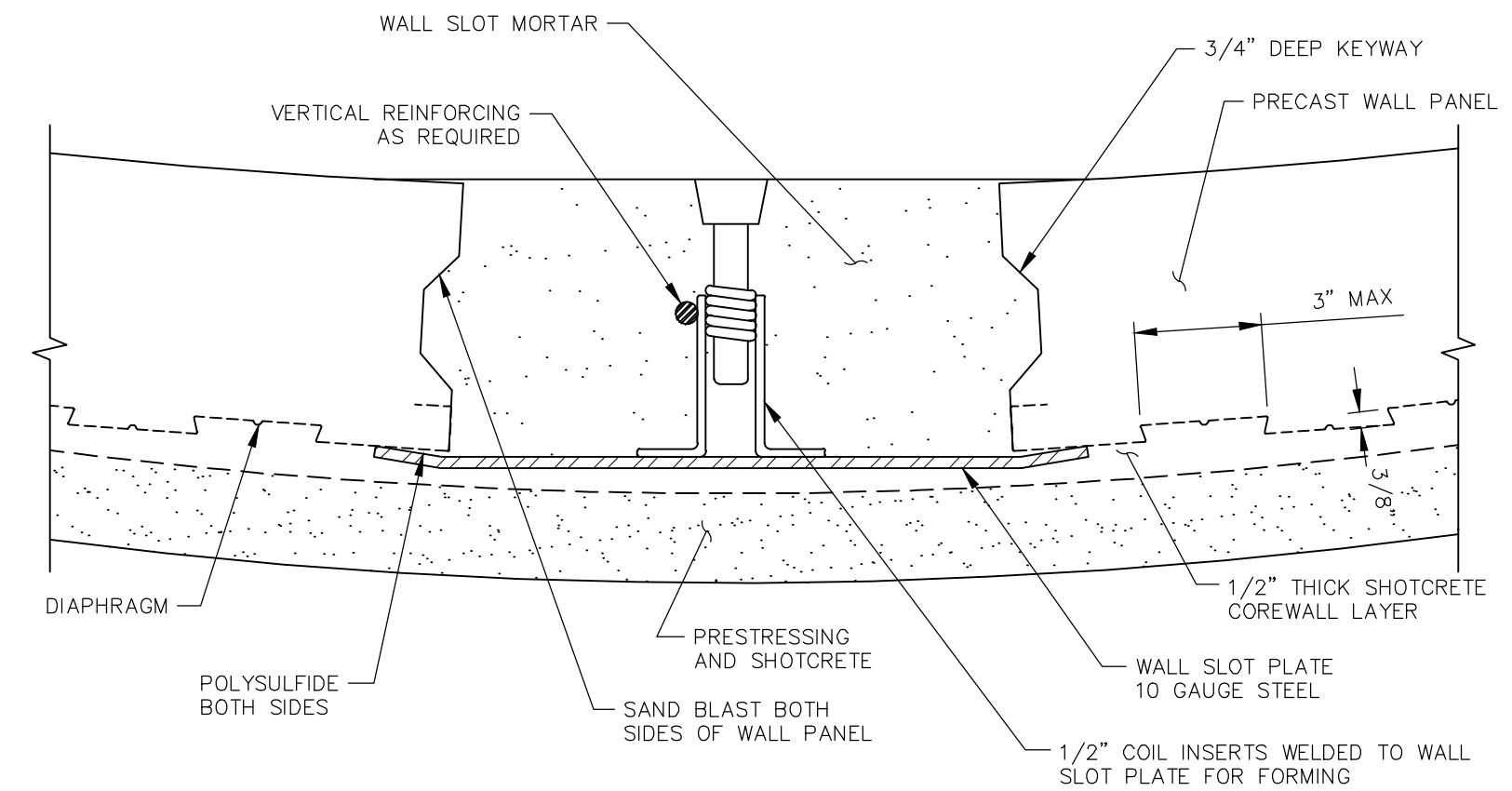
DATE:
09/04/26

SHEET NO.
T1

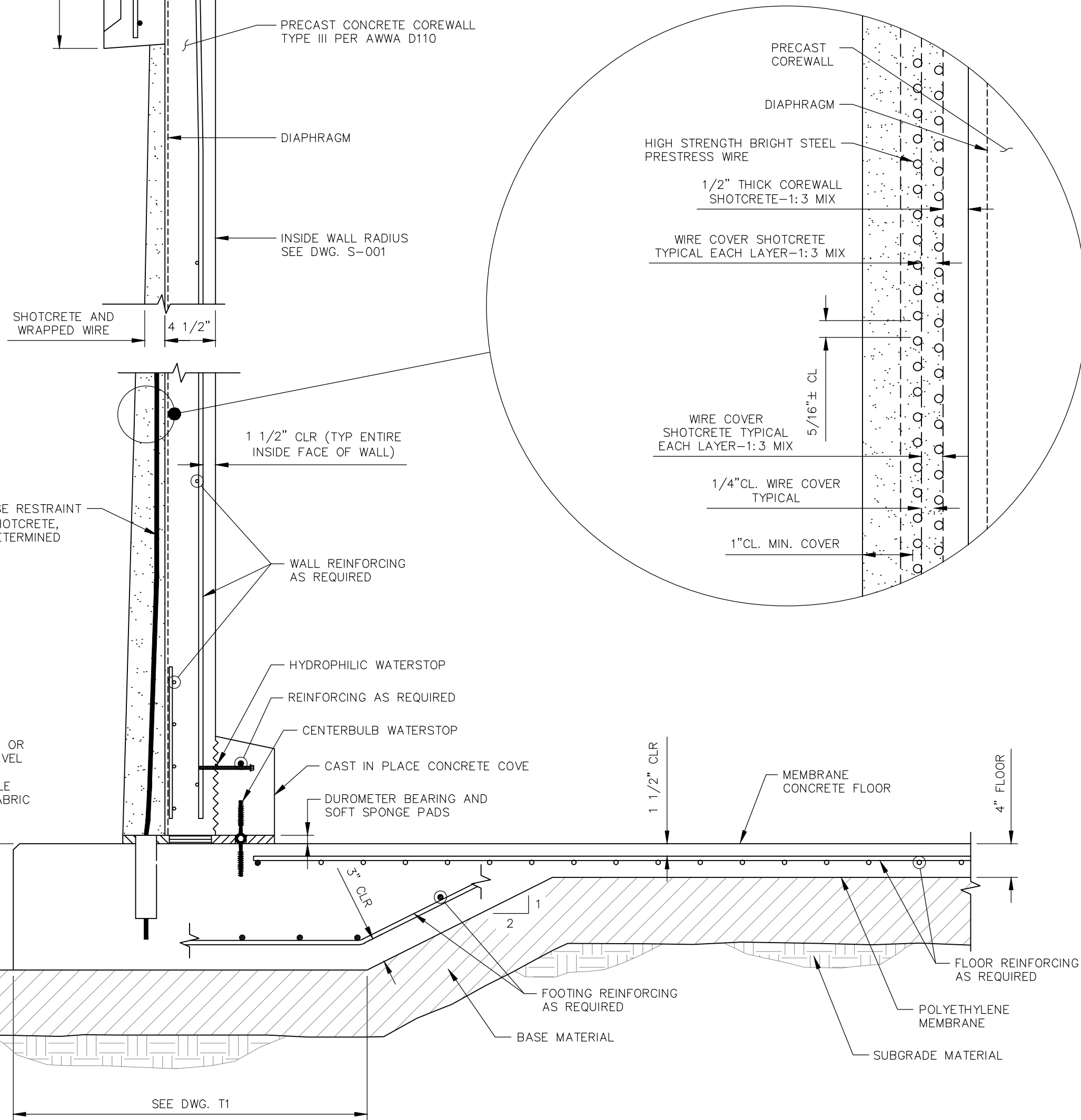
10 OF 15 SHEETS



WALL BASE

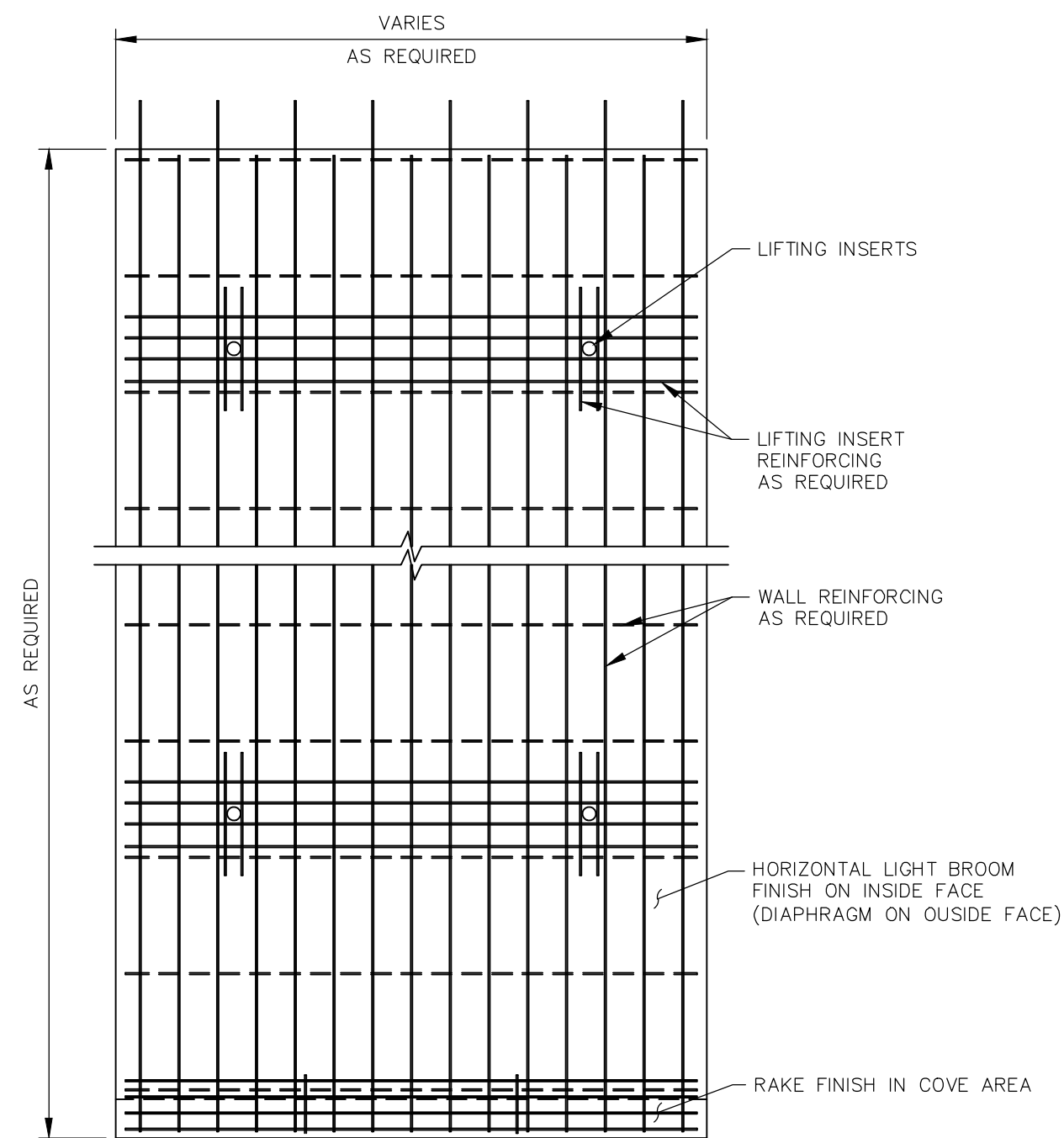


WALL SLOT

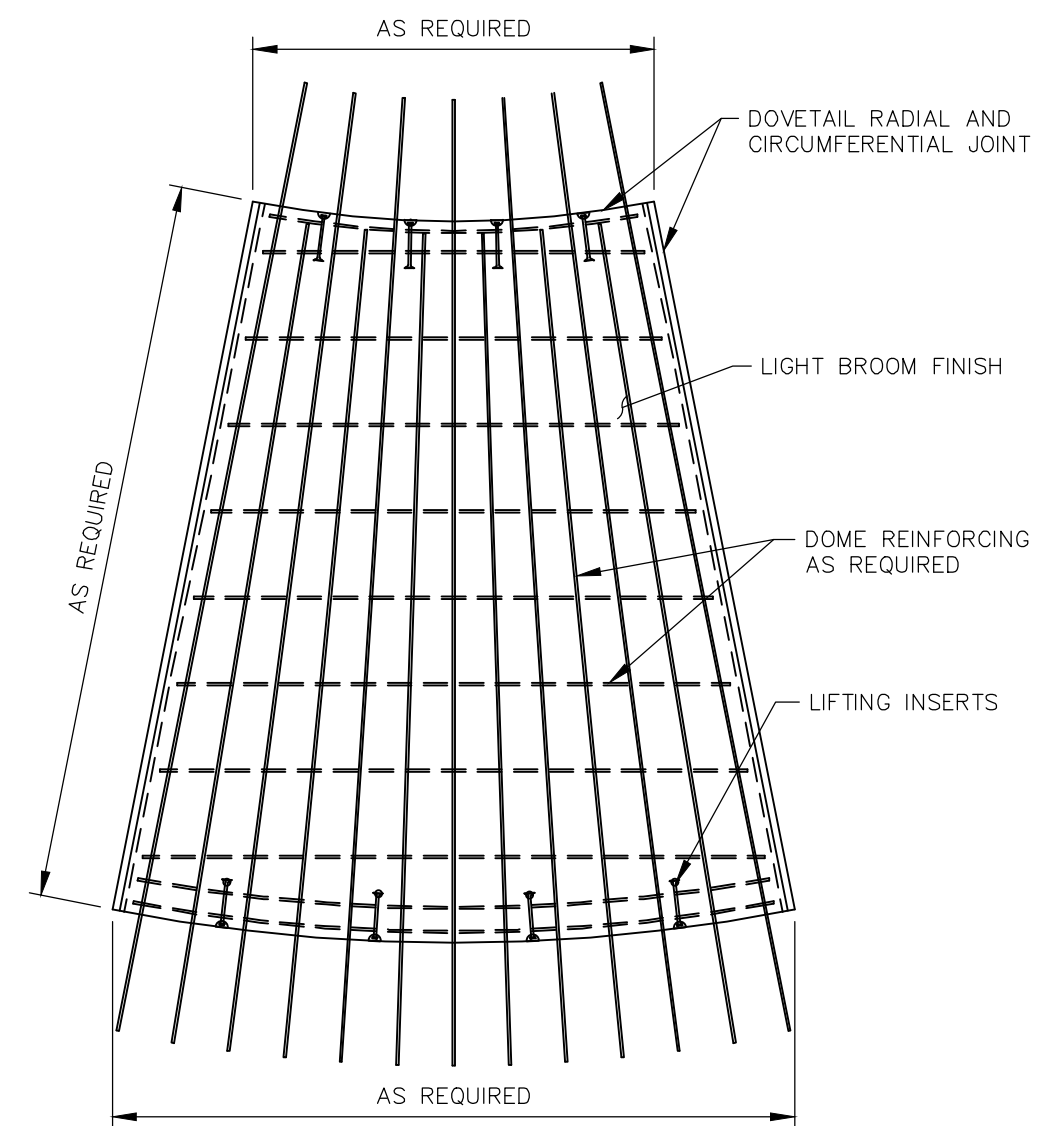


FOOTING, WALL AND ROOF SECTION

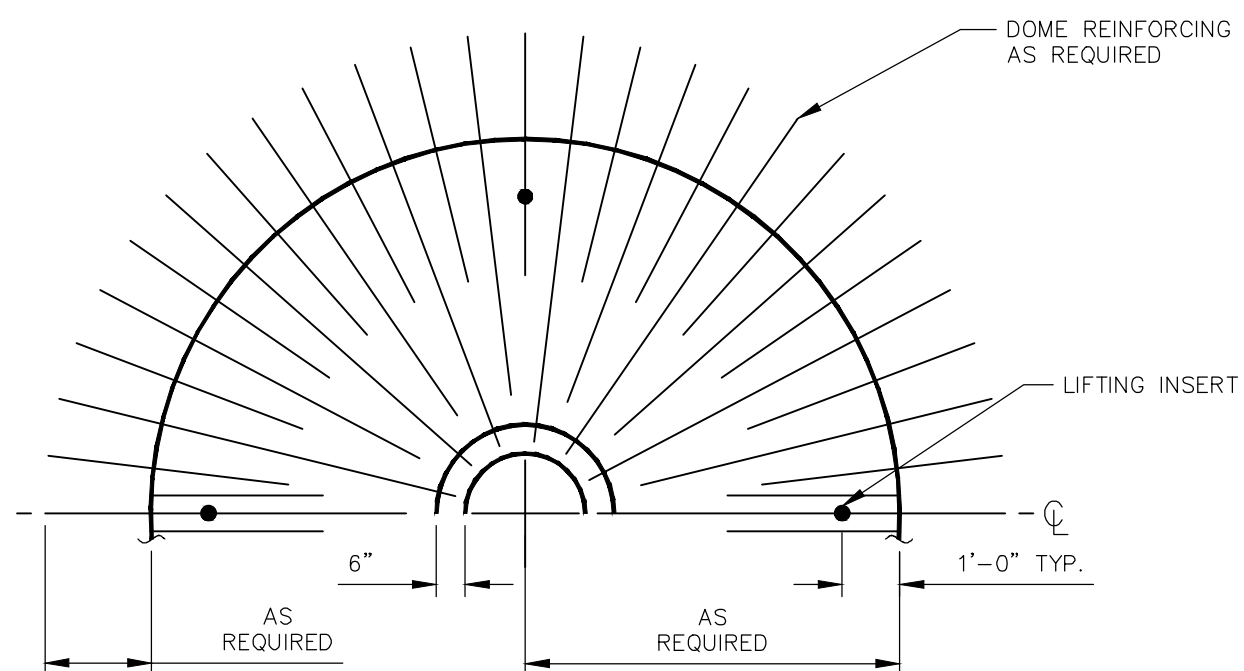
1. PERIMETER DRAIN MAY BE REQUIRED TO RELIEF HYDROSTATIC PRESSURE DUE TO GROUND WATER CONDITIONS.
2. PERIMETER DRAINS SHALL DISCHARGE TO DAYLIGHT SO THE FLOW CAN BE OBSERVED AND LOCATED AT A LOWER ELEVATION THAN THE TANK FLOOR SLAB TO PREVENT SURCHARGE AND BACKFLOW TO THE TANK FOUNDATION.



PRECAST WALL PANEL
QTY. AS REQ'D

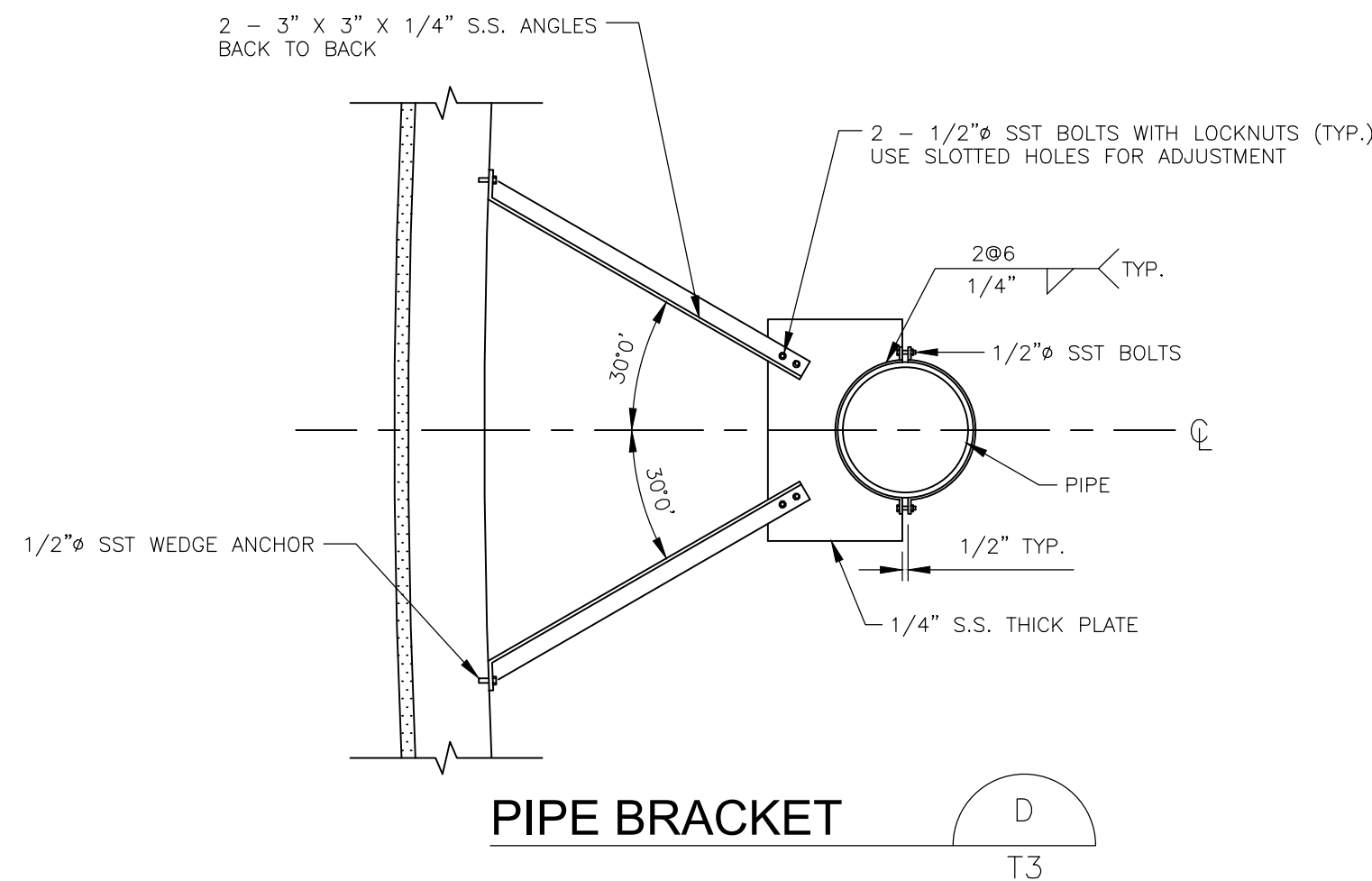
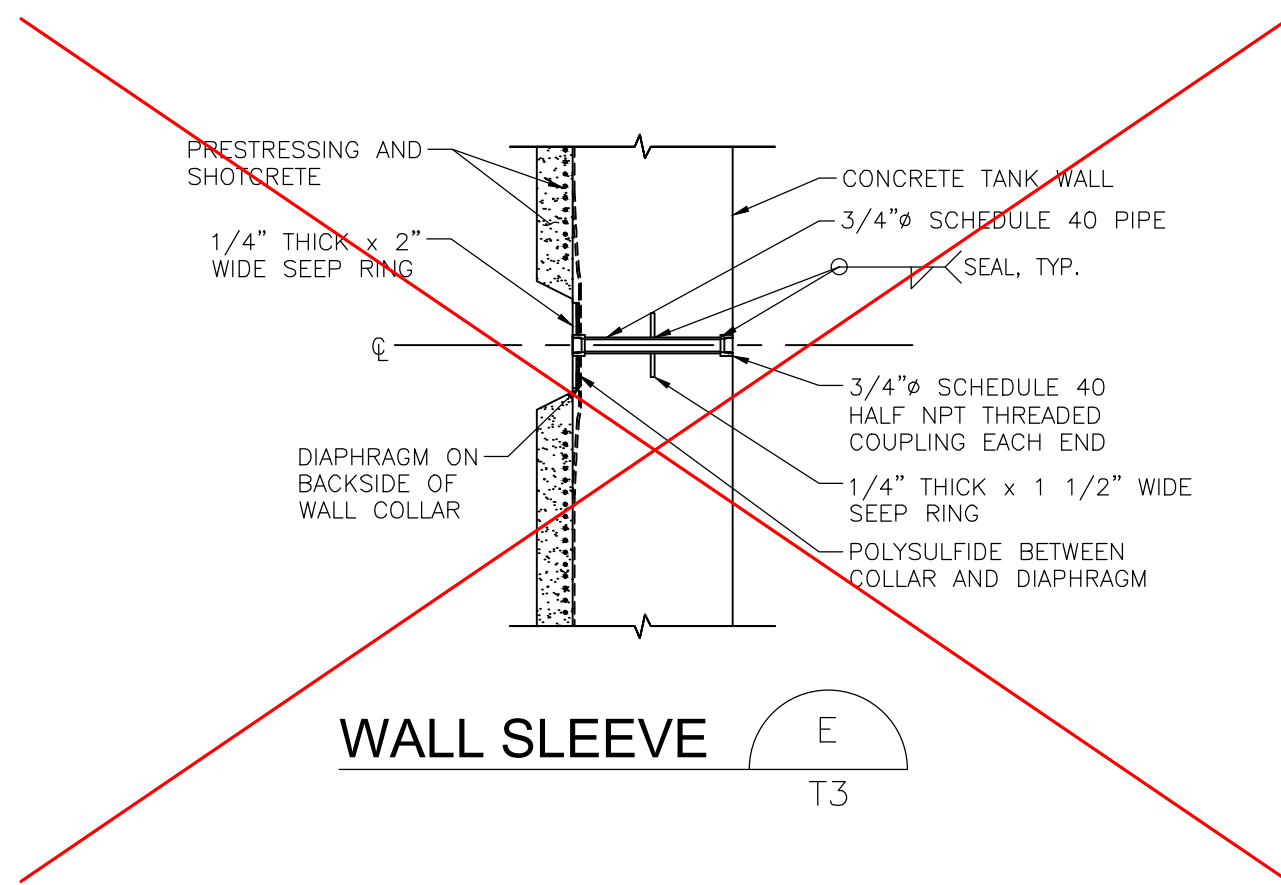
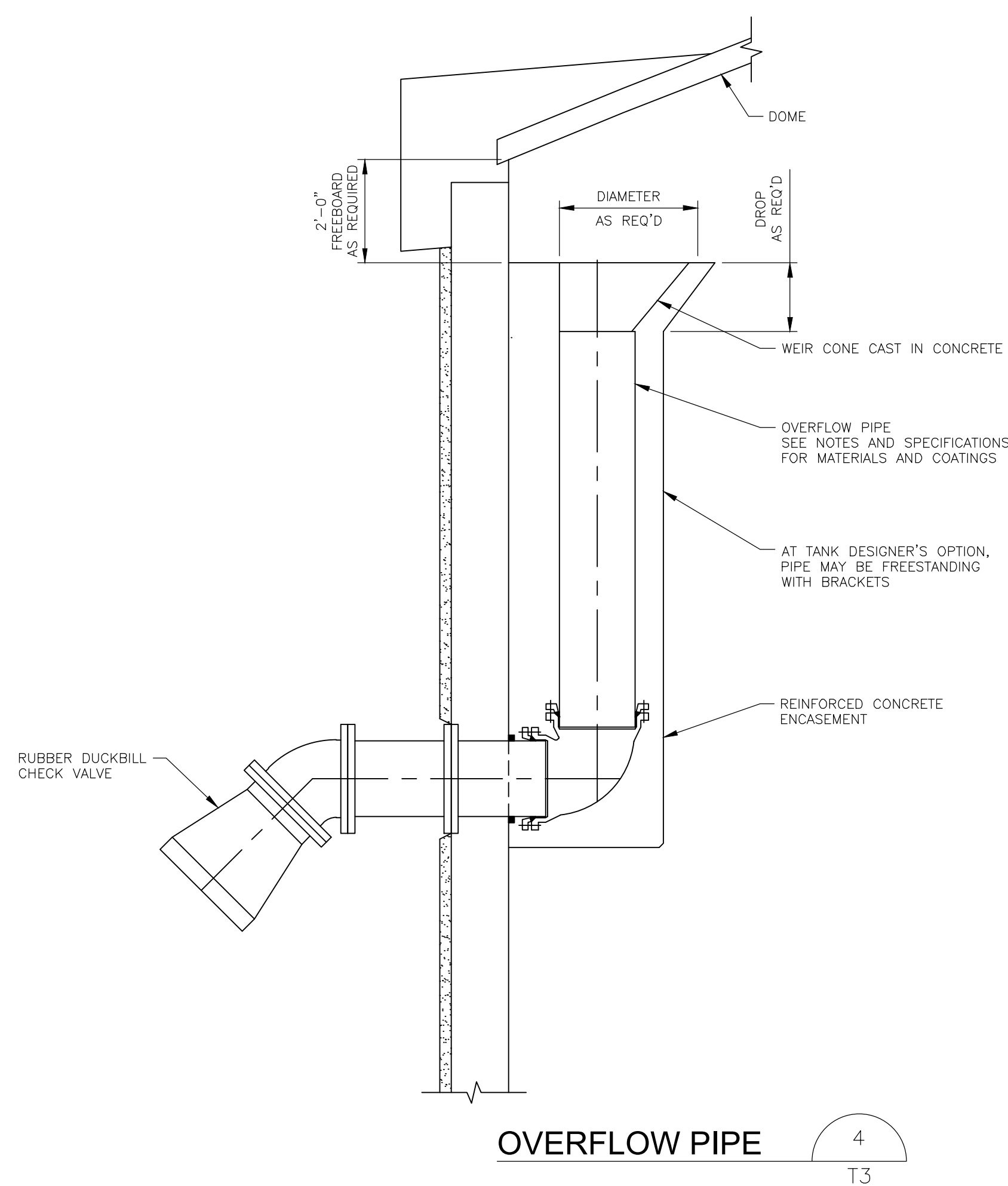
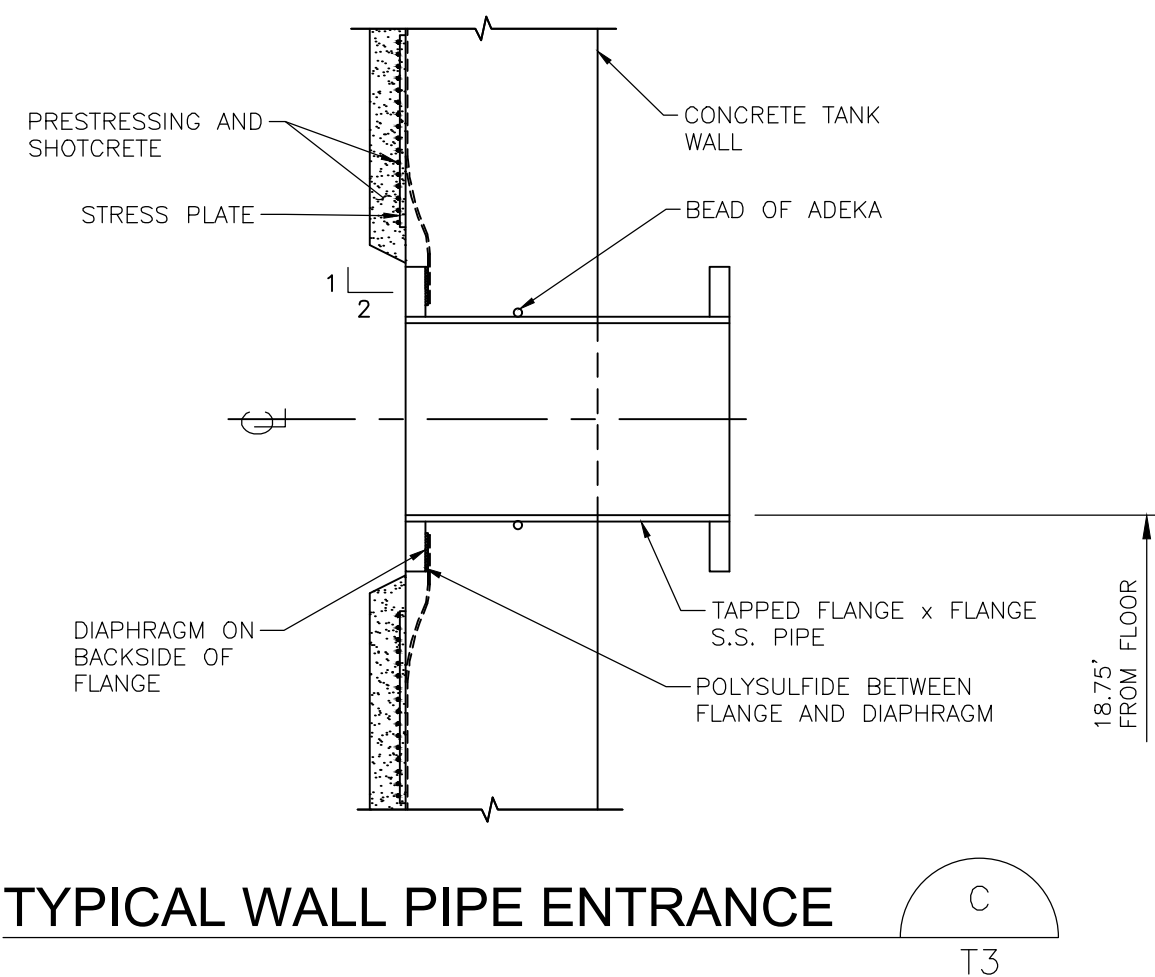
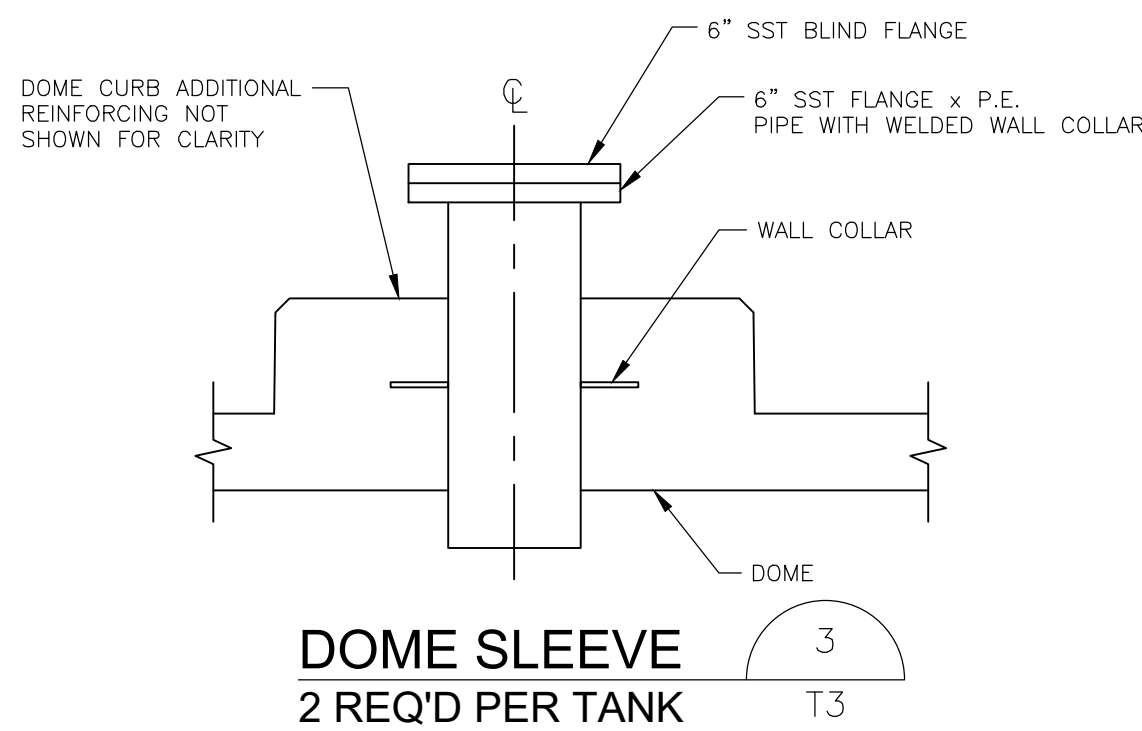
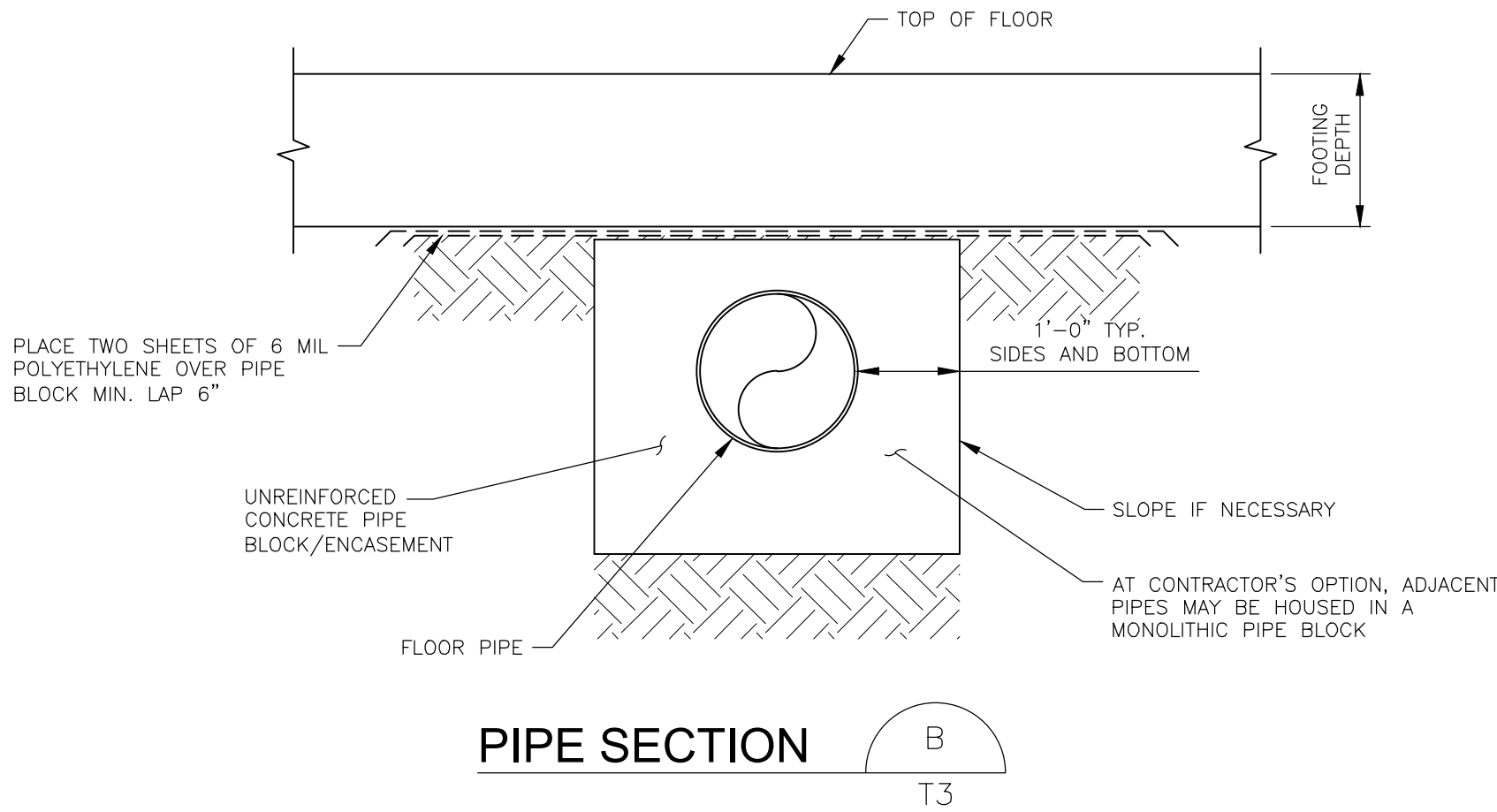
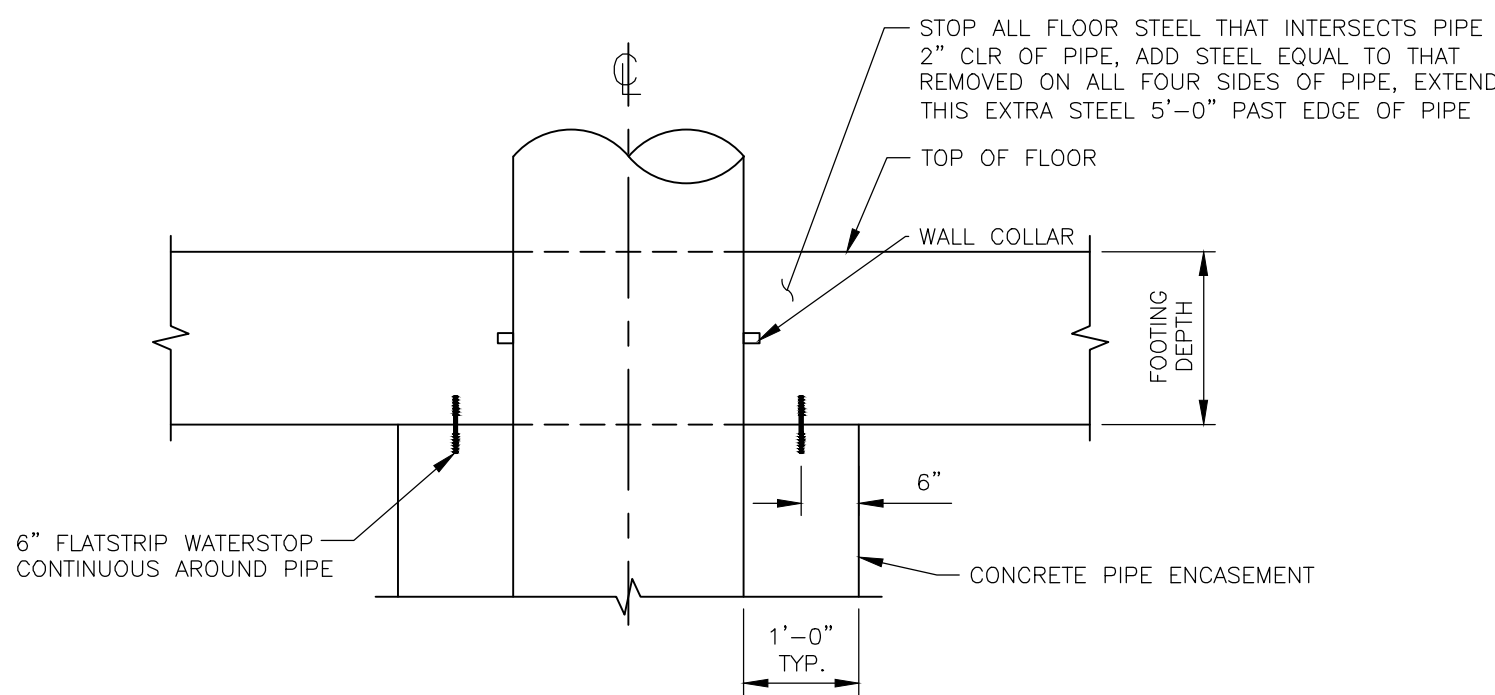
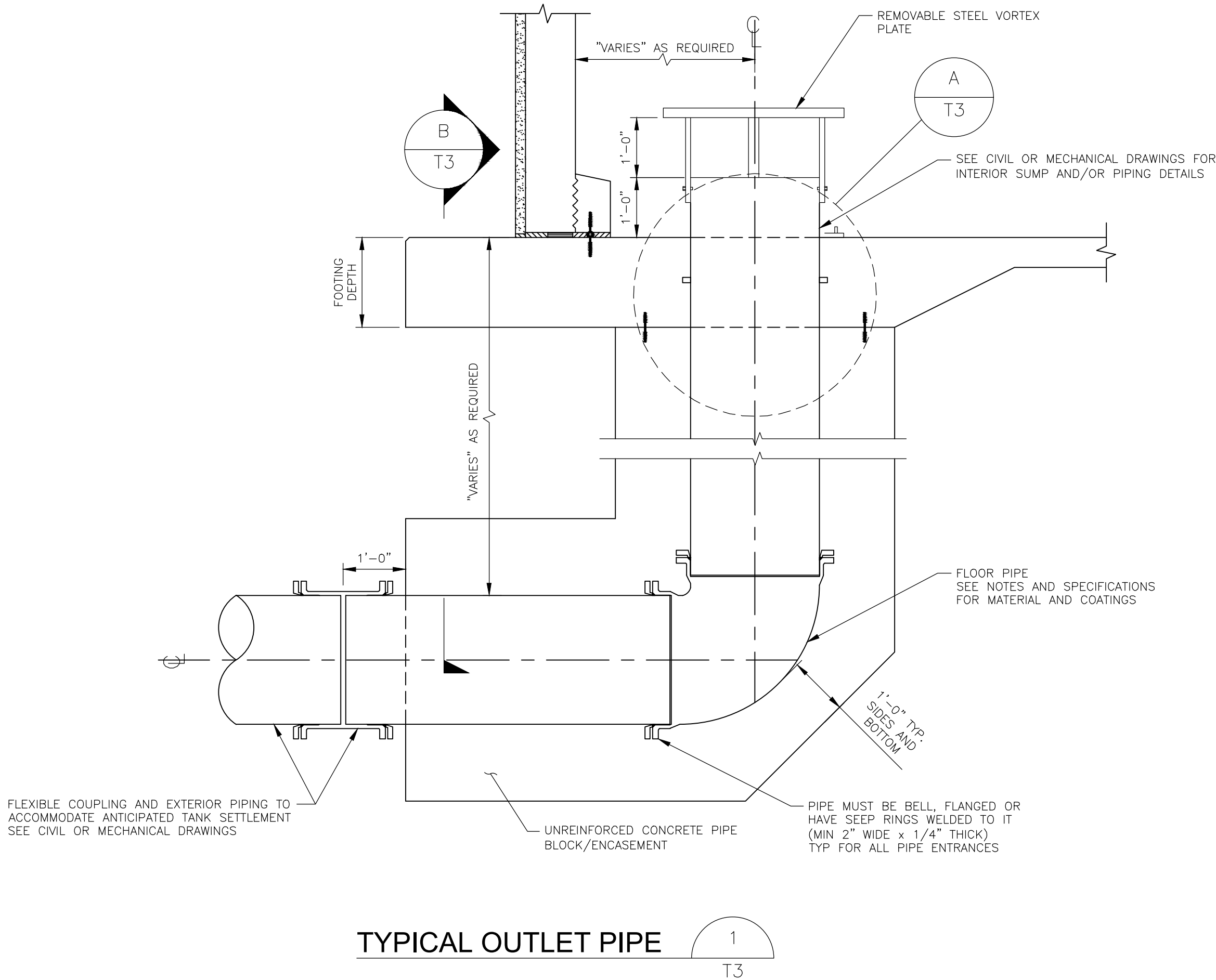
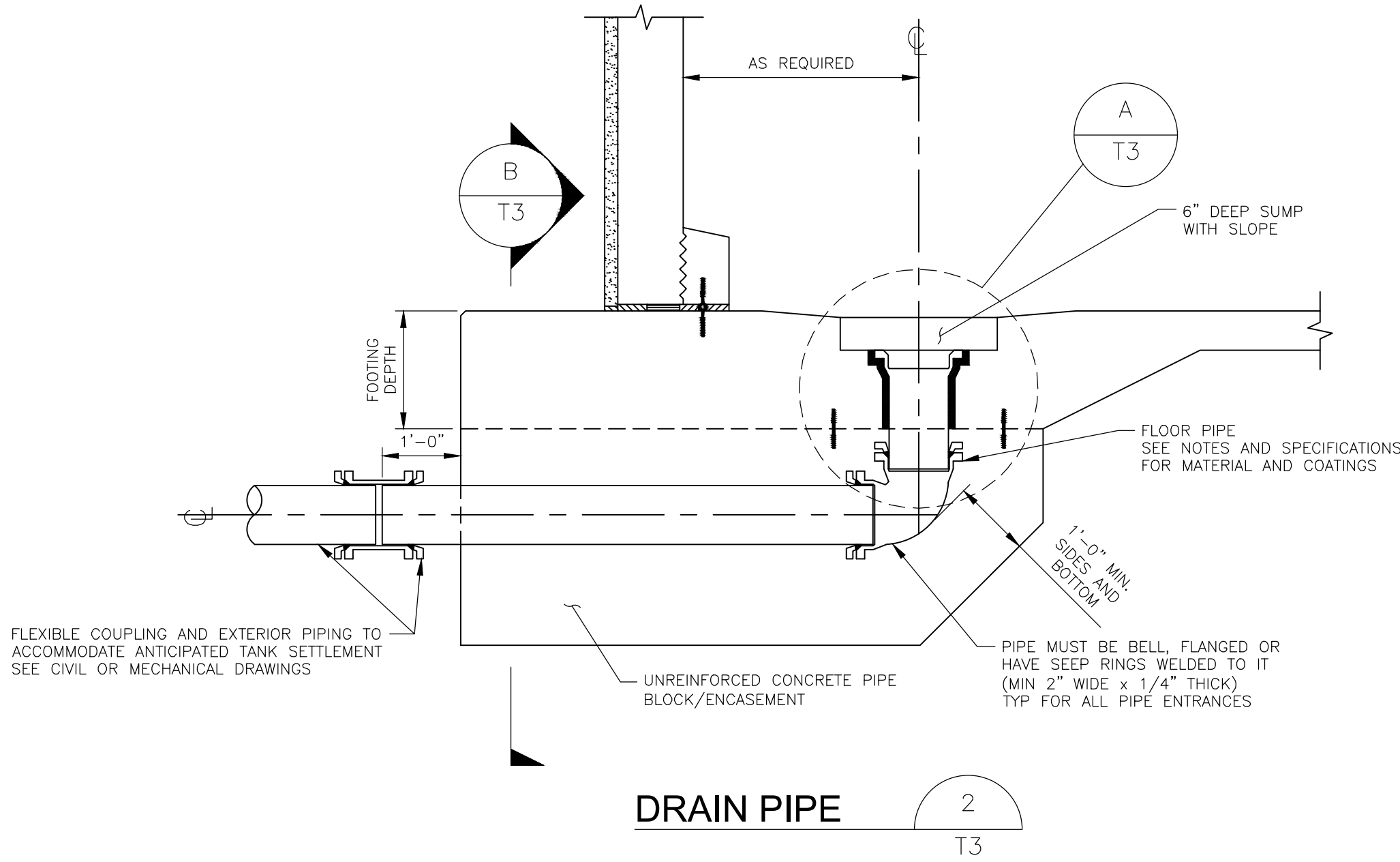


PRECAST DOME PANEL
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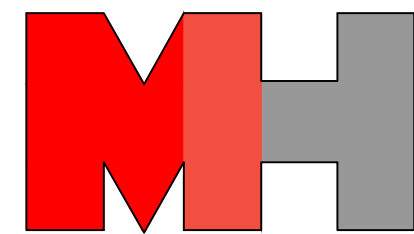


CENTER DOME PANEL - HALF SECTION
2 REQ'D

- PIPING NOTES:
1. ALL PIPE MATERIAL TO BE D.I.C.L. UNLESS NOTED OTHERWISE.
 2. EPOXY COAT EXTERIOR OF PIPING INSIDE TANK. NO COATING ON PIPE IN CONTACT WITH CONCRETE.
 3. EXTERIOR PIPING CONNECTION TO BE DESIGNED TO TOLERATE EXPECTED TANK SETTLEMENT.



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EXPIRES: DECEMBER 31, 2027

400 N. FIFTH STREET
SUITE 107
ST. CHARLES, MO 63301
P: (636) 395-7055

REVISIONS	DATE	NO.

PHASE 1B

CONTRACT "C" - PHASE "1B"
PRECAST CONCRETE
STORAGE TANK PIPING

ILLINOIS ALLUVIAL REGIONAL WATER COMPANY
JERSEY & MACOUPIN COUNTIES, ILLINOIS

DRAWN BY: R. HAYES
CHECKED BY: K. GARNETT
APPROVED BY: M. MIDDENDORF
HORIZONTAL SCALE:

NOT TO SCALE

VERTICAL SCALE:
NOT TO SCALE

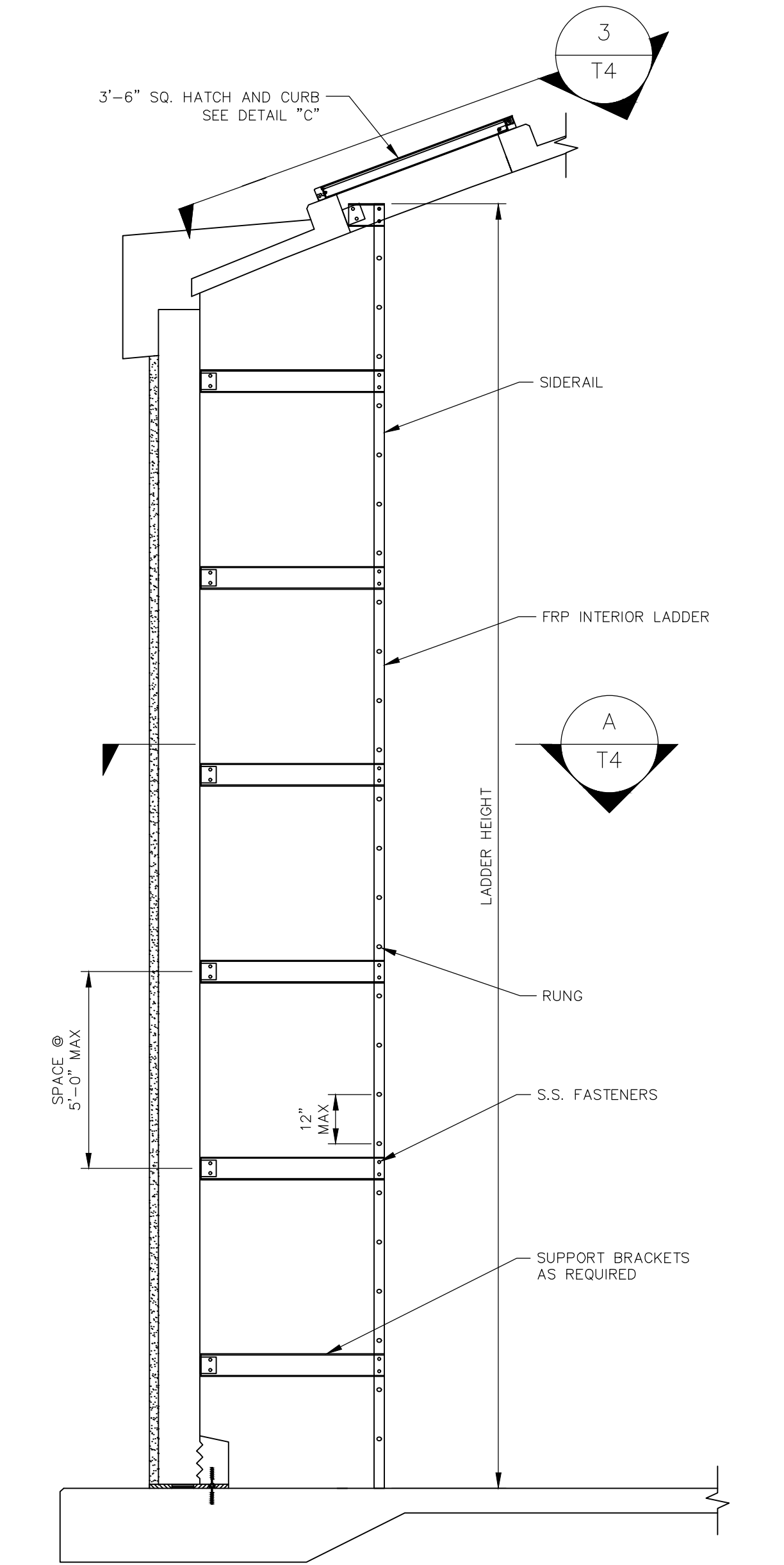
PROJECT NO.
700-003

DATE:
09/04/26

SHEET NO.
T3

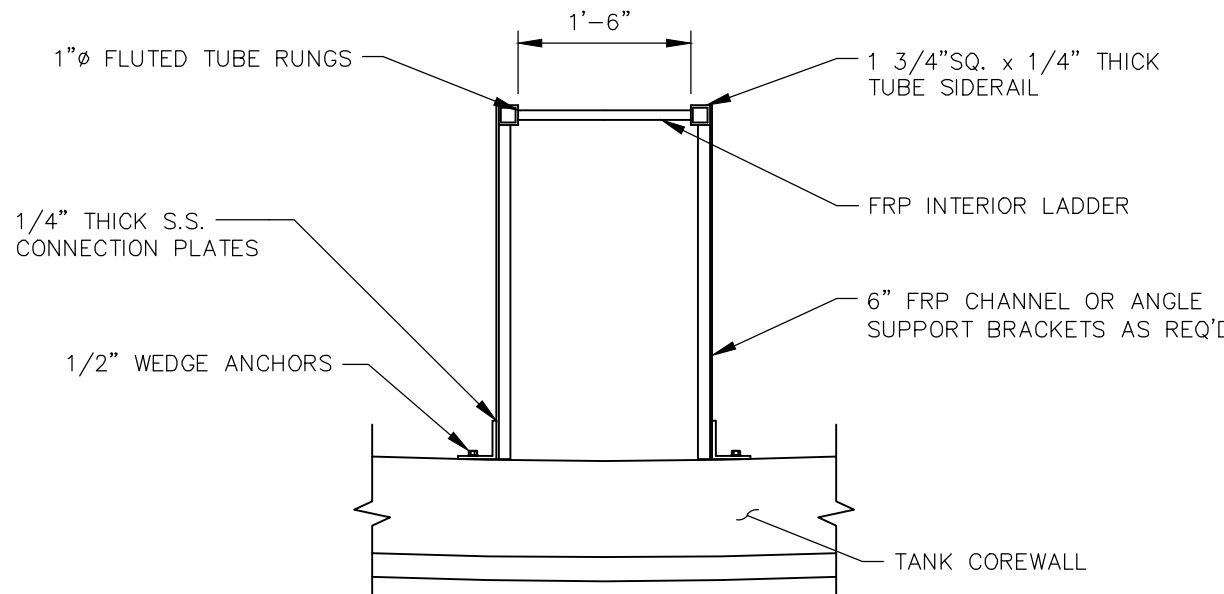
12 OF 15 SHEETS

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PLOTED: 9/4/2026 @ 8:41:40 AM BY richard hayes

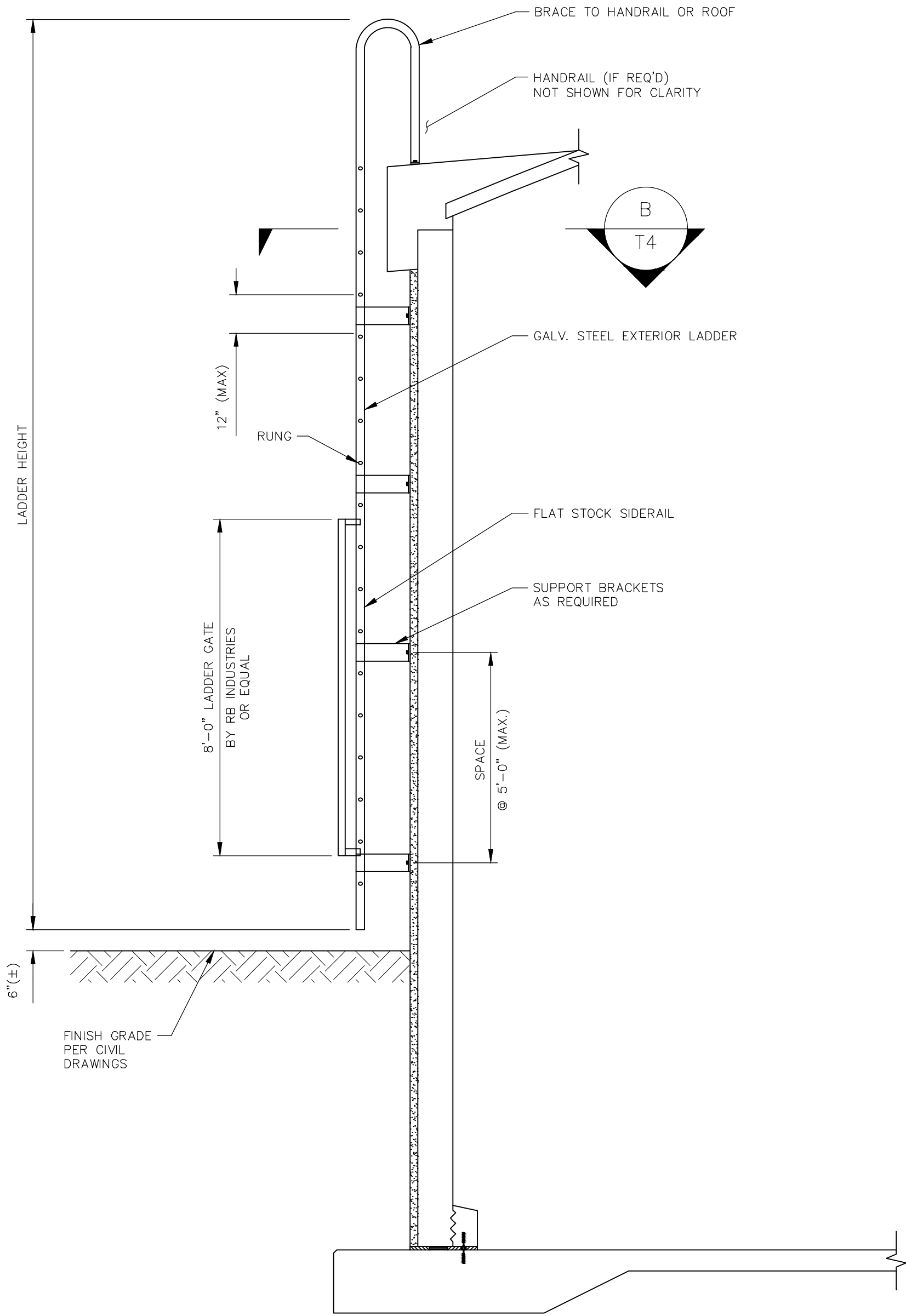


INTERIOR LADDER
2 REQ'D

- INTERIOR LADDER NOTES:
- 1) LADDER MATERIAL SHALL BE FRP.
 - 2) OSHA COMPLIANT FALL PREVENTION DEVICE SHALL BE INSTALLED (SST).
 - 3) LADDER RUNGS TO BE SOLID BARS AND FLUTED.
 - 4) USE SST WEDGE ANCHORS FOR ALL CONNECTIONS TO CONCRETE UNLESS NOTED OTHERWISE.

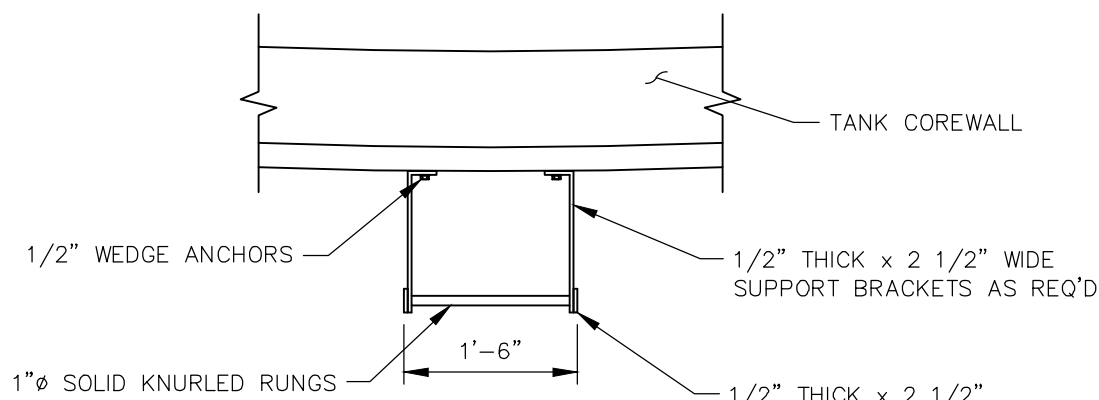


SECTION A
T4

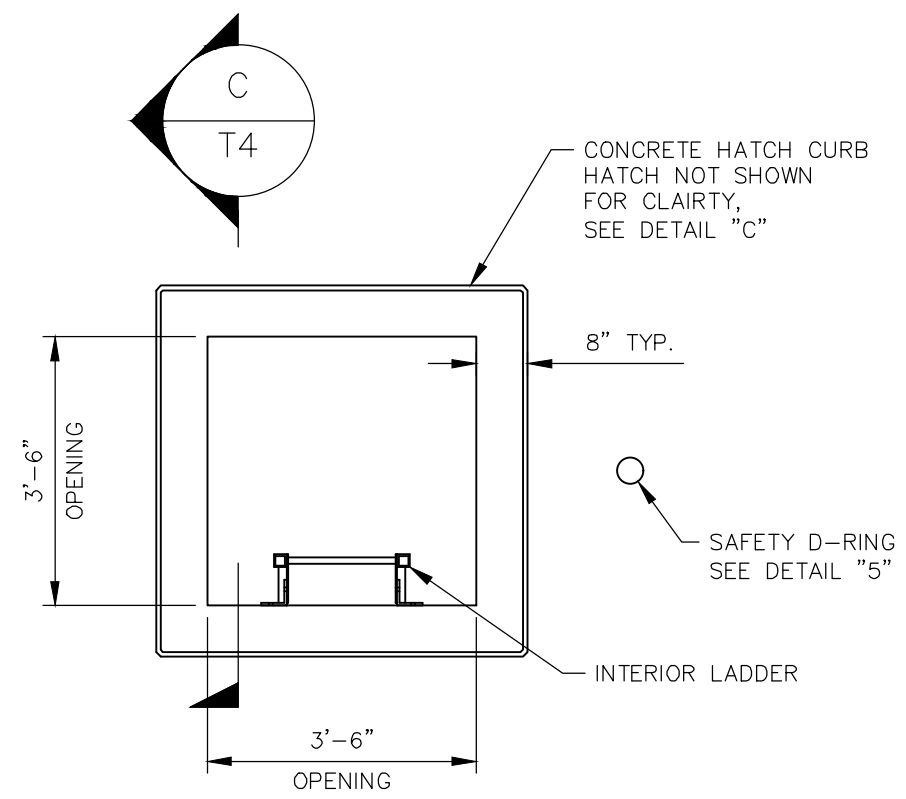


EXTERIOR LADDER
2 REQ'D

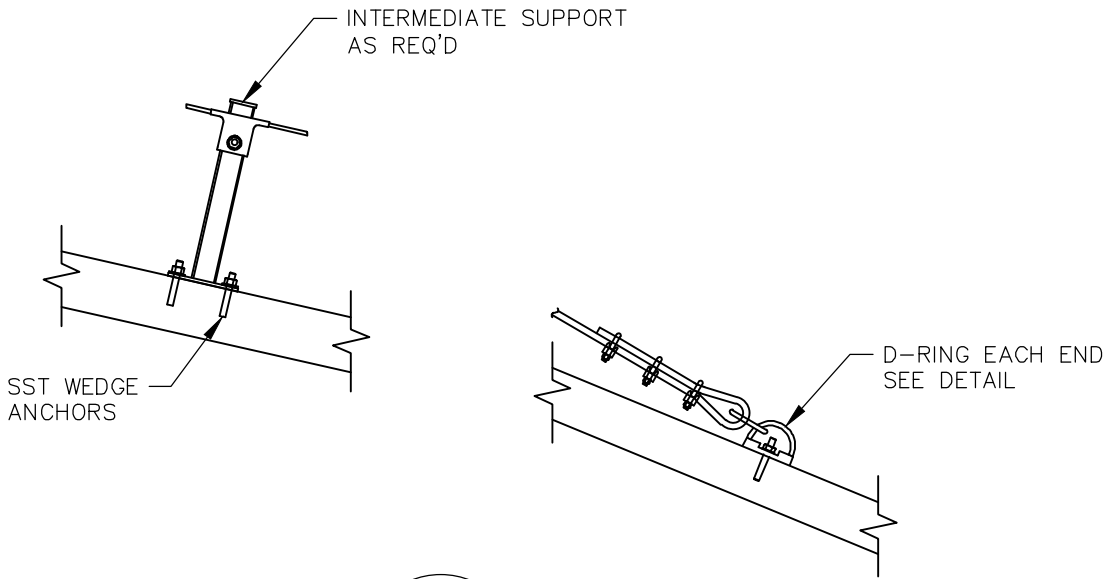
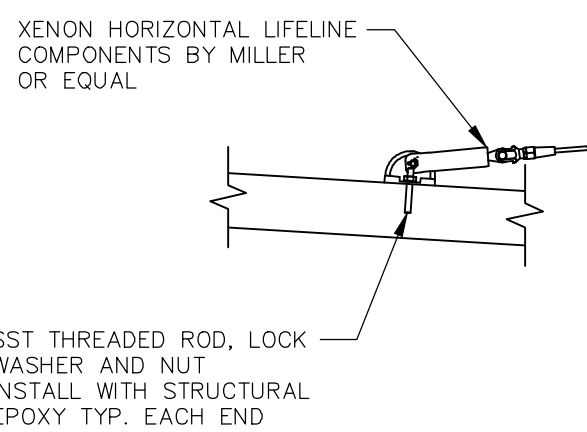
- EXTERIOR LADDER NOTES:
- 1) ALL MATERIAL FOR EXTERIOR LADDER, SIDERAILS, RUNGS AND BRACKETS SHALL BE GALV. STEEL.
 - 2) OSHA COMPLIANT FALL PREVENTION DEVICE SHALL BE INSTALLED (SST).
 - 3) LADDER RUNGS TO BE SOLID BARS AND KNURLED.
 - 4) ALL WELDS TO BE 3/16" MINIMUM.
 - 5) USE SST WEDGE ANCHORS FOR ALL CONNECTIONS TO CONCRETE UNLESS NOTED OTHERWISE.
 - 6) WHERE SST BOLTS ARE IN CONTACT WITH DISSIMILAR METALS, USE INSULATING SLEEVES AND PHENOLIC WASHERS TO ELECTRICALLY ISOLATE THE BOLTS.
 - 7) WHERE SST BOLTS ARE PLACED IN THE WALL EXTERIOR, DRILL AND PLACE AFTER WRAPPING AND BEFORE FINAL SHOTCRETING.



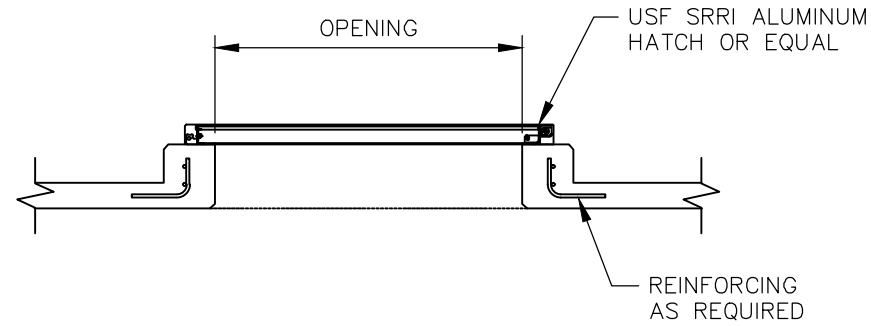
SECTION B
T4



3'-6" SQ. ACCESS HATCH
2 REQ'D

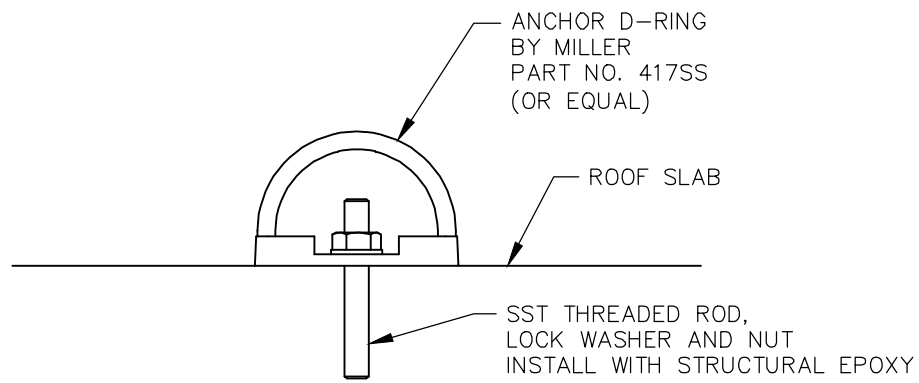


SAFETY CABLE
T4



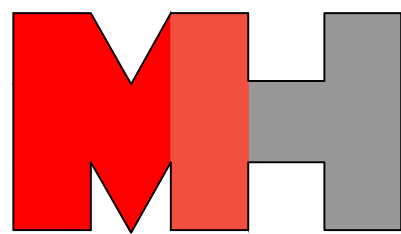
SECTION C
T4

- ROOF HATCHES NOTES:
- 1) HATCHES TO BE SINGLE LEAF USF SRRI ALUMINUM HATCHES OR EQUAL.
 - 2) ALL ALUMINUM IN CONTACT WITH CONCRETE MUST BE COATED WITH A HEAVY BITUMASTIC COATING, EPOXY PAINT OR SHIMMED USING PVC.
 - 3) USE SST WEDGE ANCHORS FOR ALL CONNECTIONS TO CONCRETE UNLESS NOTED OTHERWISE.
 - 4) WHERE SST BOLTS ARE IN CONTACT WITH DISSIMILAR METALS, USE INSULATING SLEEVES AND PHENOLIC WASHERS TO ELECTRICALLY ISOLATE THE BOLTS.



SAFETY D-RING
2 REQ'D @ EACH HATCH

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MO: 2018004041
EXPIRES: DECEMBER 31, 2027

400 N. FIFTH STREET
SUITE 107
ST. CHARLES, MO 63301
P: (636) 395-7055

REVISIONS

DATE

NO.

PHASE 1B

CONTRACT "C" - PHASE "1B"
PRECAST CONCRETE STORAGE
TANK LADDERS AND HATCHES

ILLINOIS ALLUVIAL REGIONAL WATER COMPANY
JERSEY & MACOUPIN COUNTIES, ILLINOIS

DRAWN BY: R. HAYES
CHECKED BY: K. GARNETT
APPROVED BY: M. MIDDENDORF
HORIZONTAL SCALE:

NOT TO SCALE

VERTICAL SCALE:
NOT TO SCALE

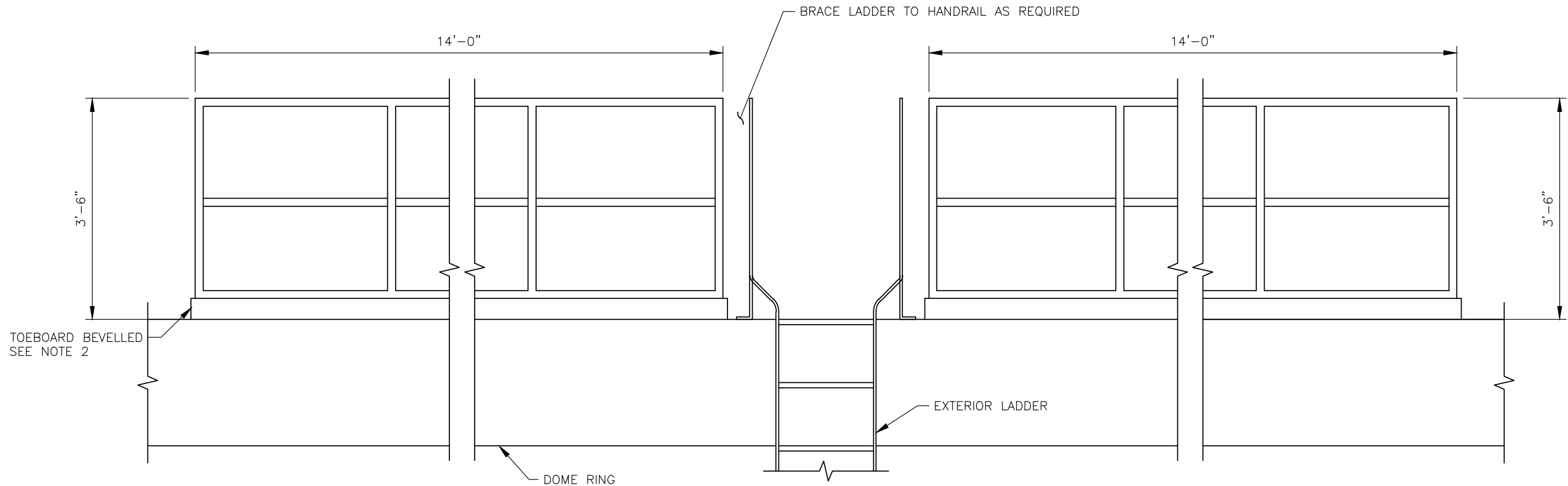
PROJECT NO.
700-003

DATE:
09/04/26

SHEET NO.
T4

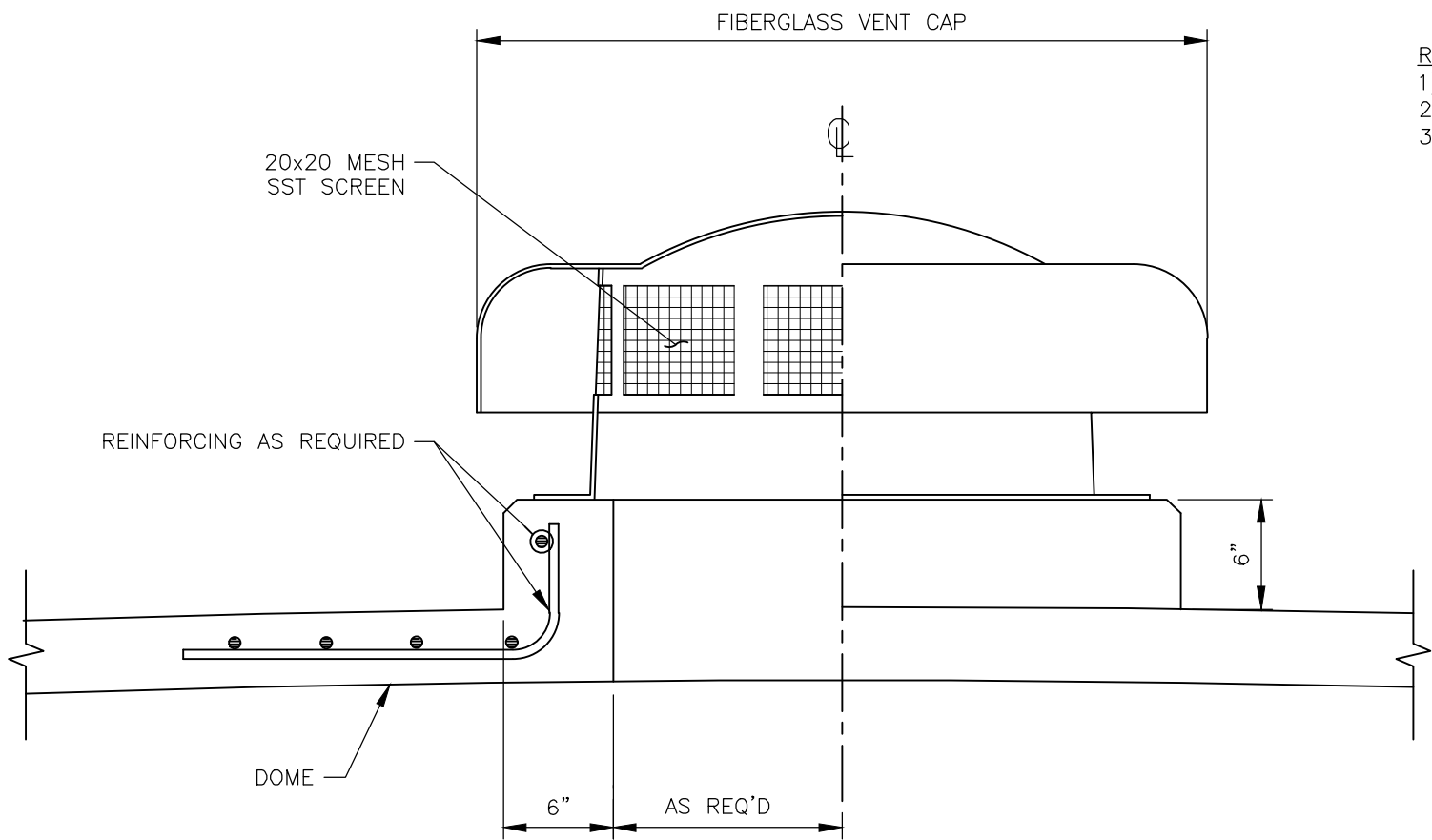
13 OF 15 SHEETS

PATH:\projects\700\700 illinois alluvial regional water company\003 larwc basic services\contract c - phase 2 - water treatment plant\700003 15 misc tank details.dwg
PLOTED: 3/17/2026 @ 8:41:45 AM BY: T5



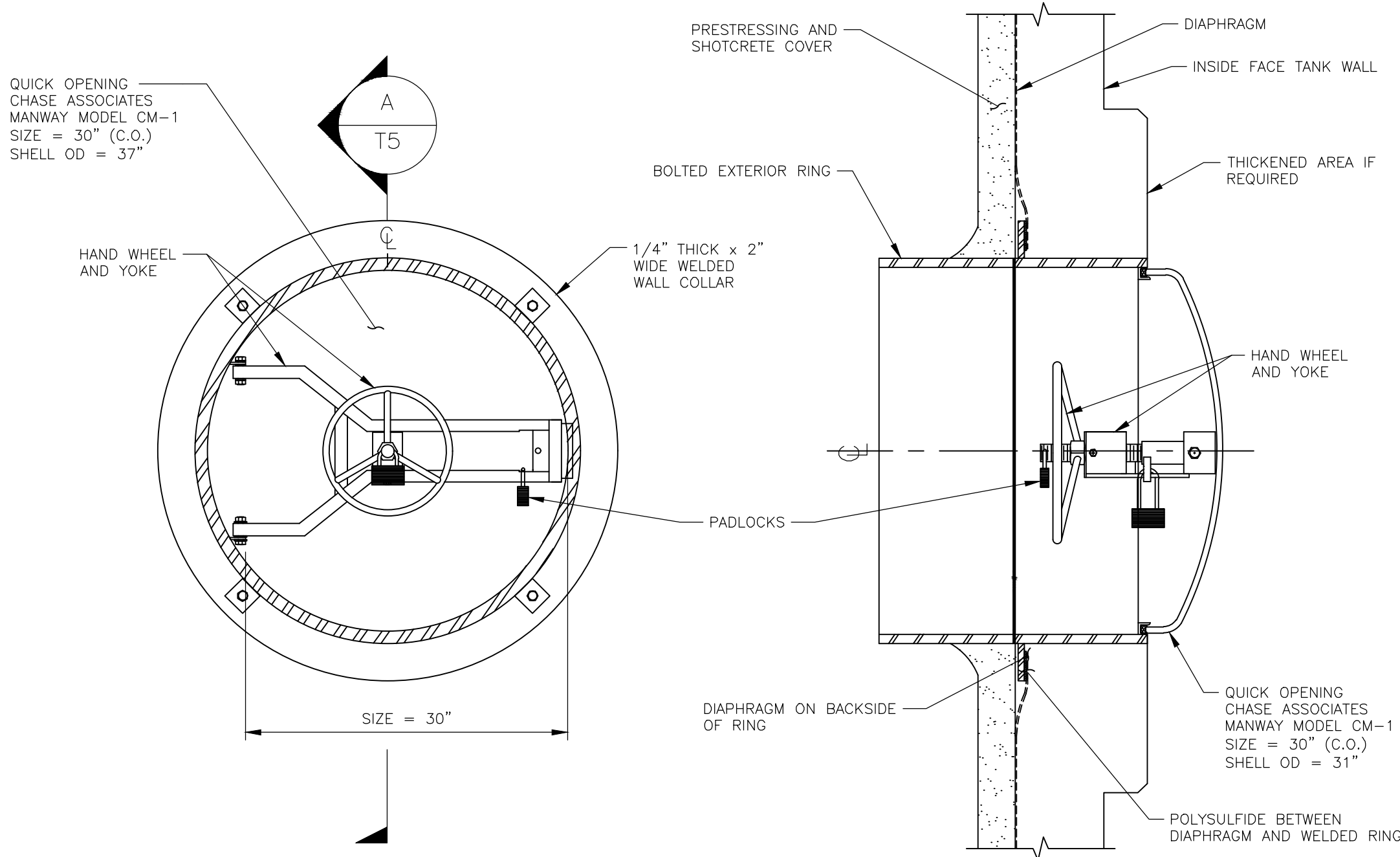
GUARDRAIL ELEVATION 1 T5

- GUARDRAIL NOTES:
- 1) ALL MATERIAL FOR RAILS AND POSTS TO BE 1 7/8" ALUMINUM.
 - 2) BEVELED TOE BOARD SHALL BE ATTACHED TO FRONT RAIL.
 - 3) USE SST FOR ALL BOLTS UNLESS NOTED OTHERWISE.
 - 4) USE SST WEDGE ANCHORS FOR ALL CONNECTIONS TO CONCRETE UNLESS NOTED OTHERWISE.



ROOF VENT 2 T5

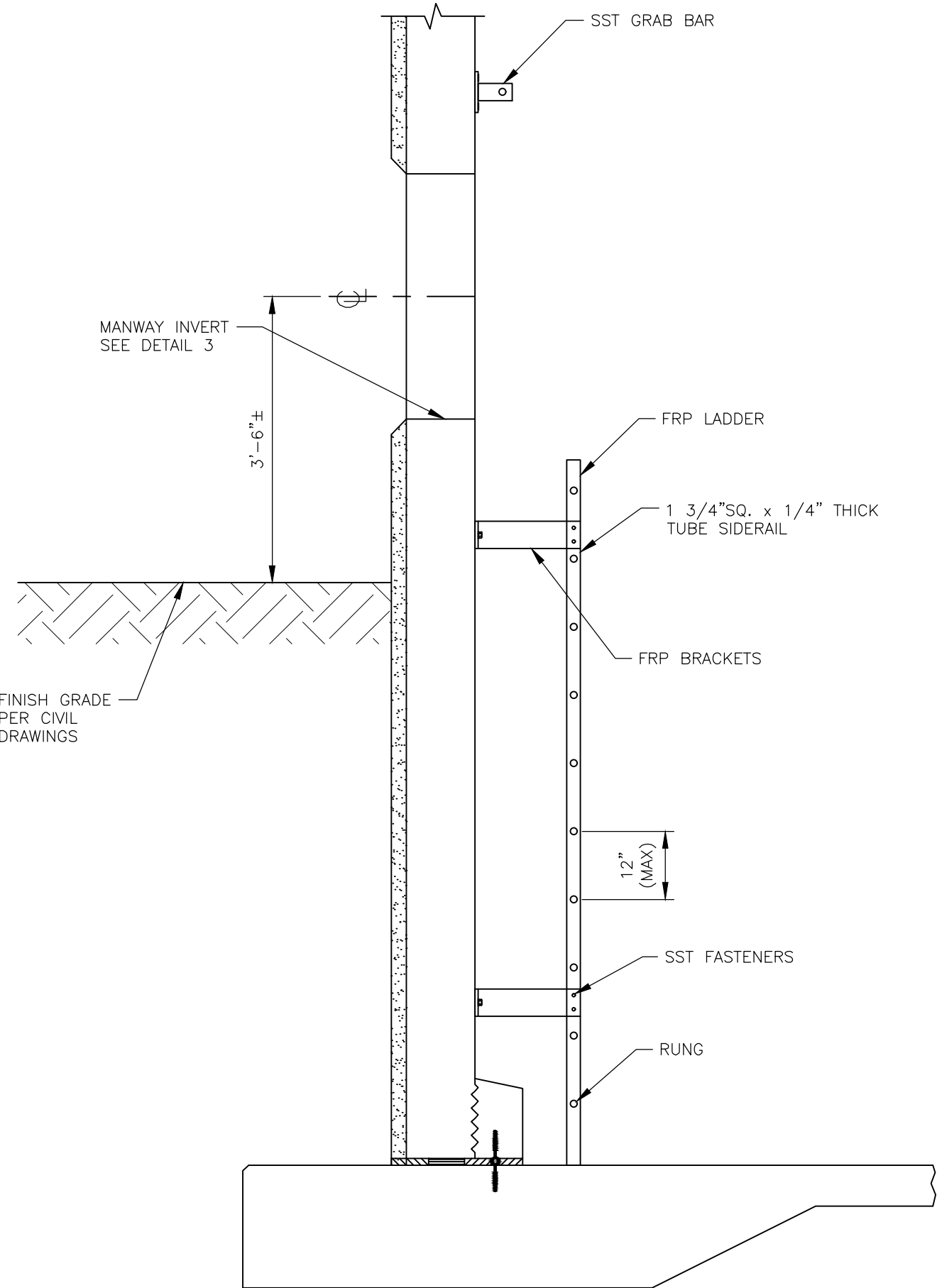
- ROOF VENT NOTES:
- 1) VENT TO BE FIBERGLASS REINFORCED POLYMER.
 - 2) SIZE PER PROJECT VENTING RATES.
 - 3) USE SST WEDGE ANCHORS FOR ALL CONNECTIONS TO CONCRETE UNLESS NOTED OTHERWISE.



WALL MANWAY 3 2 REQ'D T5

- WALL MANWAY NOTES:
- 1) MANWAY MATERIAL TO BE SST.
 - 2) THE MANWAY WILL BE CAST INTO THE WALL AND THE EXTERIOR MANWAY RING WILL BE BOLTED ON AFTER TANK PRESTRESSING IS COMPLETE, PRIOR TO FINAL COVERCOAT PLACEMENT.

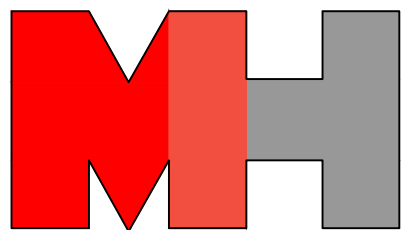
SECTION A T5



MANWAY LADDER 4 2 REQ'D T5

- MANWAY LADDER NOTES:
- 1) ALL MATERIAL FOR LADDER AND RUNGS TO BE FIBER REINFORCED POLYMER.
 - 2) MANWAY GRAB BAR TO BE SST.
 - 3) LADDER RUNGS TO BE SOLID BARS AND FLUTED.
 - 4) USE SST WEDGE ANCHORS FOR ALL CONNECTIONS TO CONCRETE UNLESS NOTED OTHERWISE.

MECO-HENEGHAN
ENGINEERS, LLC



www.meco-heneghan.com

DESIGN FIRM NUMBERS:
IL: 184.007845-0010
035.003949
EXPIRES: APRIL 30, 2027
MO: 2018004041
EXPIRES: DECEMBER 31, 2027

400 N. FIFTH STREET
SUITE 107
ST. CHARLES, MO 63301
P: (636) 395-7055

REVISIONS

DATE

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PHASE 1B

CONTRACT "C" - PHASE "1B"
PRECAST CONCRETE STORAGE
TANK MISCELLANEOUS
APPURTENANCES

ILLINOIS ALLUVIAL REGIONAL WATER COMPANY
JERSEY & MACOUPIN COUNTIES, ILLINOIS

DRAWN BY: R. HAYES
CHECKED BY: K. GARNETT
APPROVED BY: M. MIDDENDORF

HORIZONTAL SCALE:
NOT TO SCALE

VERTICAL SCALE:
NOT TO SCALE

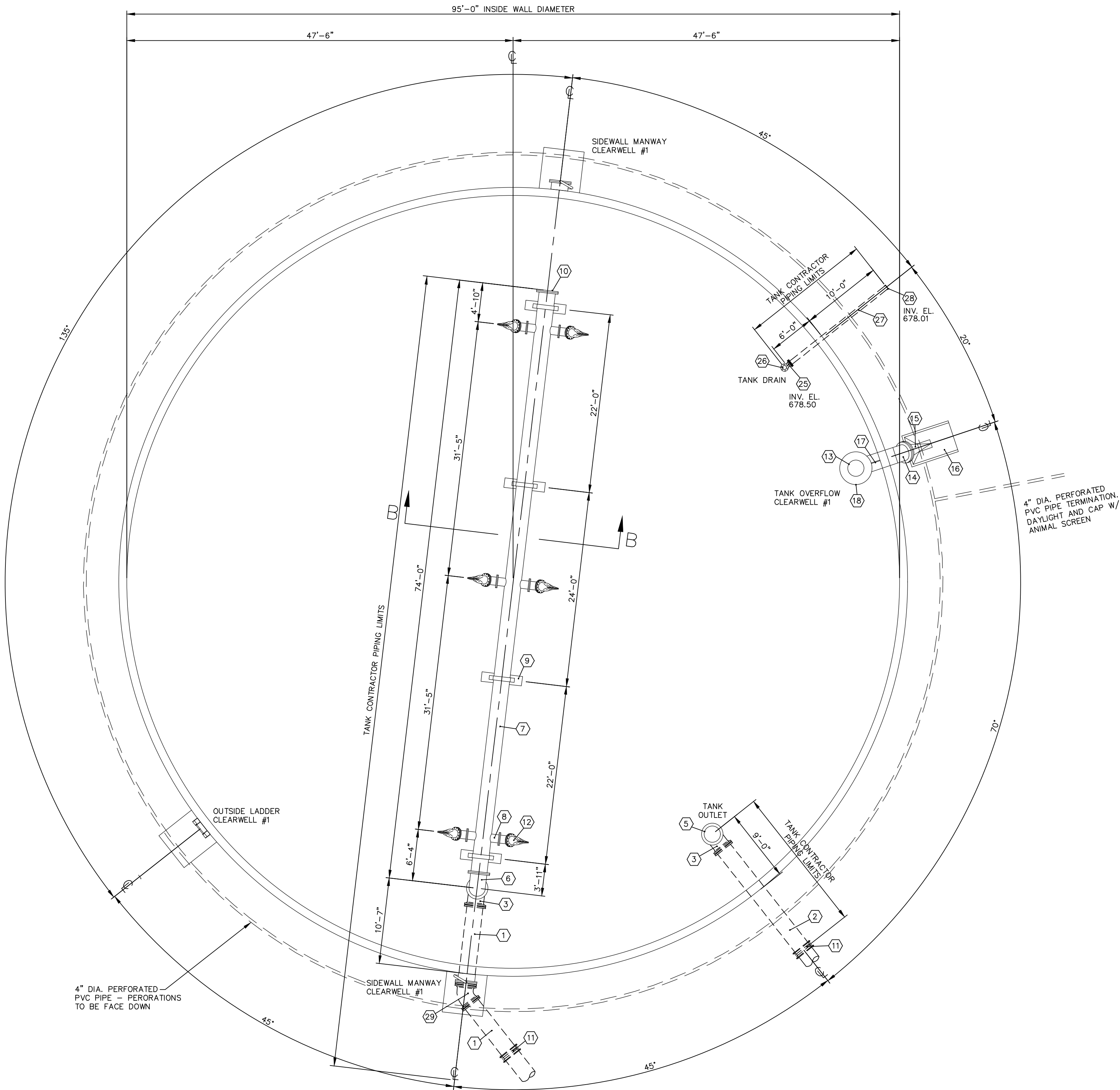
PROJECT NO.
700-003

DATE:
09/04/26

SHEET NO.
T5

14 OF 15 SHEETS

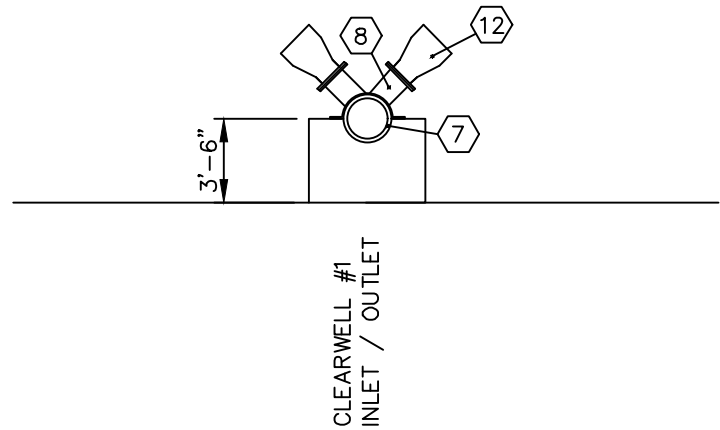
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PLOTTED: 9/11/2026 @ 8:41:49 AM BY richard.hoyes



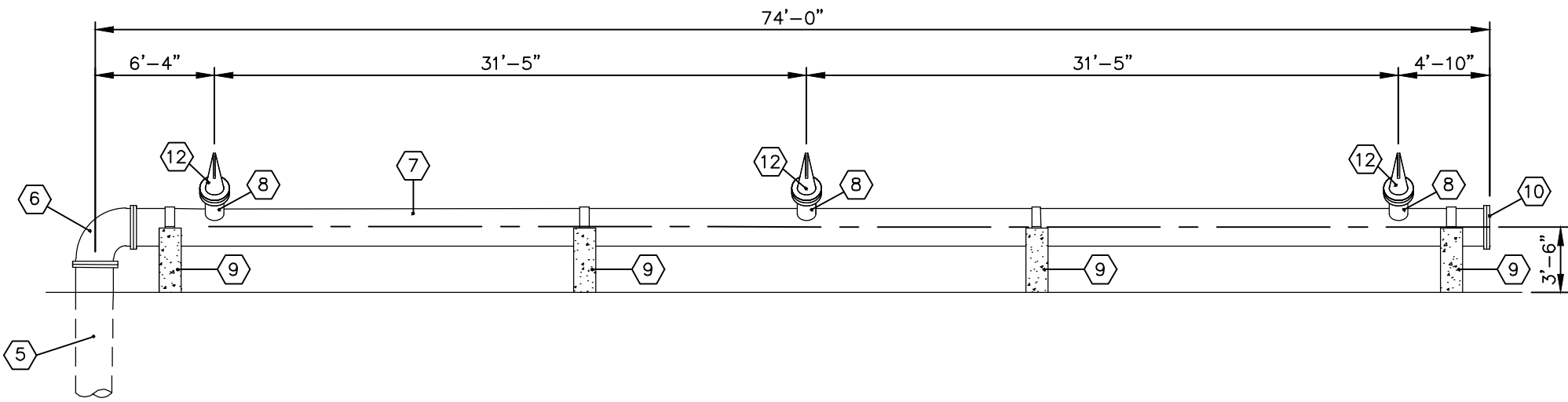
TANK PIPING PLAN

KEY NOTES

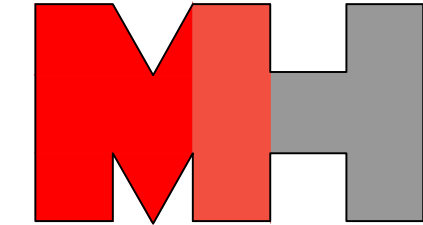
1. SIZE 24.00 INCH DUCTILE IRON INLET PIPE - P.E. x P.E.
2. SIZE 24.00 INCH DUCTILE IRON OUTLET PIPE - P.E. x P.E.
3. (2) SIZE 24.00 INCH DUCTILE IRON 90 DEGREE ELBOW - M.J. x M.J.
4. SIZE 24.00 INCH SCH 10 316L S.S. - P.E. x FLG.
5. SIZE 24.00 INCH SCH 10 316L S.S. - P.E. x P.E.
6. (1) SIZE 24.00 INCH SCH 10 316L S.S. 90 DEGREE ELBOW - FLG. x FLG.
7. SIZE 24.00 INCH SCH 10 316L S.S. MANIFOLD - FLG. x FLG.
8. (6) WELDED 16.00 INCH BRANCH REDUCING SCH 10 316 S.S. - FLG.
9. (8) CONCRETE PIPE SUPPORT PIERS WITH S.S. PIPE STRAPS
10. (1) SIZE 24.00 INCH SCH 10 316L S.S. BLIND FLANGE
11. (2) 24.00 INCH COUPLING
12. (6) SIZE 12.00 INCH RUBBER CHECK VALVE INLET MIXING NOZZEL, TIDFLEX TECHNOLOGIES SERIES 35 (OR EQUAL) - FLANGED
13. SIZE 24.00 INCH SCH 10 316L S.S. TANK OVERFLOW PIPE
14. SIZE 24.00 INCH SCH 10 316L S.S. 45 DEGREE ELBOW - FLG. x FLG.
15. SIZE 24 INCH RUBBER CHECK VALVE, TIDFLEX TECHNOLOGIES SERIES 35 (OR EQUAL) - FLANGED
16. SIZE 48.00 INCH W. X 72.00 INCH L. X 6.00 INCH T. REINFORCED CONCRETE SPLASH PAD
17. (3) 316L S.S. RISER PIPE SUPPORT BRACKETS - SEE SHEET T3 / DETAIL D
18. TANK OVERFLOW WEIR ASSEMBLY - SEE SHEET T3 / DETAIL 4
19. SIZE 16.00 INCH SCH 10 316L S.S. RISER PIPE - FLG. x P.E.
20. SIZE 16.00 INCH SCH 10 316L S.S. RISER PIPE - FLG. x FLG.
21. (2) SIZE 16.00 INCH SCH 10 316L S.S. 90 DEGREE ELBOW - FLG. x FLG.
22. SIZE 16.00 INCH DUCTILE IRON SURGE RELIEF OUTLET PIPE - P.E. x P.E.
23. SIZE 16.00 INCH DUCTILE IRON 90 DEGREE ELBOW - M.J. x M.J. WITH RETAINER GLANDS
24. (1) 16.00 INCH COUPLING
25. (1) SIZE 6.00 INCH DUCTILE IRON 90 DEGREE ELBOW - M.J. x M.J. SEE SHEET T3 / DETAIL 1
26. SIZE 6.00 INCH SCH. 10 316L S.S. - M.J. x P.E. SEE SHEET T3 / DETAIL 2
27. SIZE 6.00 INCH DUCTILE IRON DRAIN PIPE - P.E. x P.E. SEE SHEET T3 / DETAIL 2
28. (1) 6.00 INCH TEMPORARY CAP
29. (1) SIZE 24.00 INCH DUCTILE IRON 45 DEGREE ELBOW - M.J. x M.J.



TANK MIXING MANIFOLD
SECTION B-B



TANK MIXING MANIFOLD
SECTION A-A



DESIGN FIRM NUMBERS:
IL: 164.007845-0010
035.003949
EXPIRES: APRIL 30, 2027
MO: 2018004041
EXPIRES: DECEMBER 31, 2027

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ST. CHARLES, MO 63301
P: (636) 395-7055

REVISIONS

DATE

NO.

PHASE 1B

CONTRACT "C" - PHASE "1B"
PRECAST CONCRETE
CLEARWELL # 1 PIPING
PLAN AND SECTIONS

ILLINOIS ALLUVIAL REGIONAL WATER COMPANY
JERSEY & MACOUPIN COUNTIES, ILLINOIS

DRAWN BY: R. HAYES
CHECKED BY: K. GARNETT
APPROVED BY: M. MIDDENDORF
HORIZONTAL SCALE:

1/8" = 1'-0"

VERTICAL SCALE:
N/A

PROJECT NO.
700-003

DATE:
09/04/26

SHEET NO.
T6