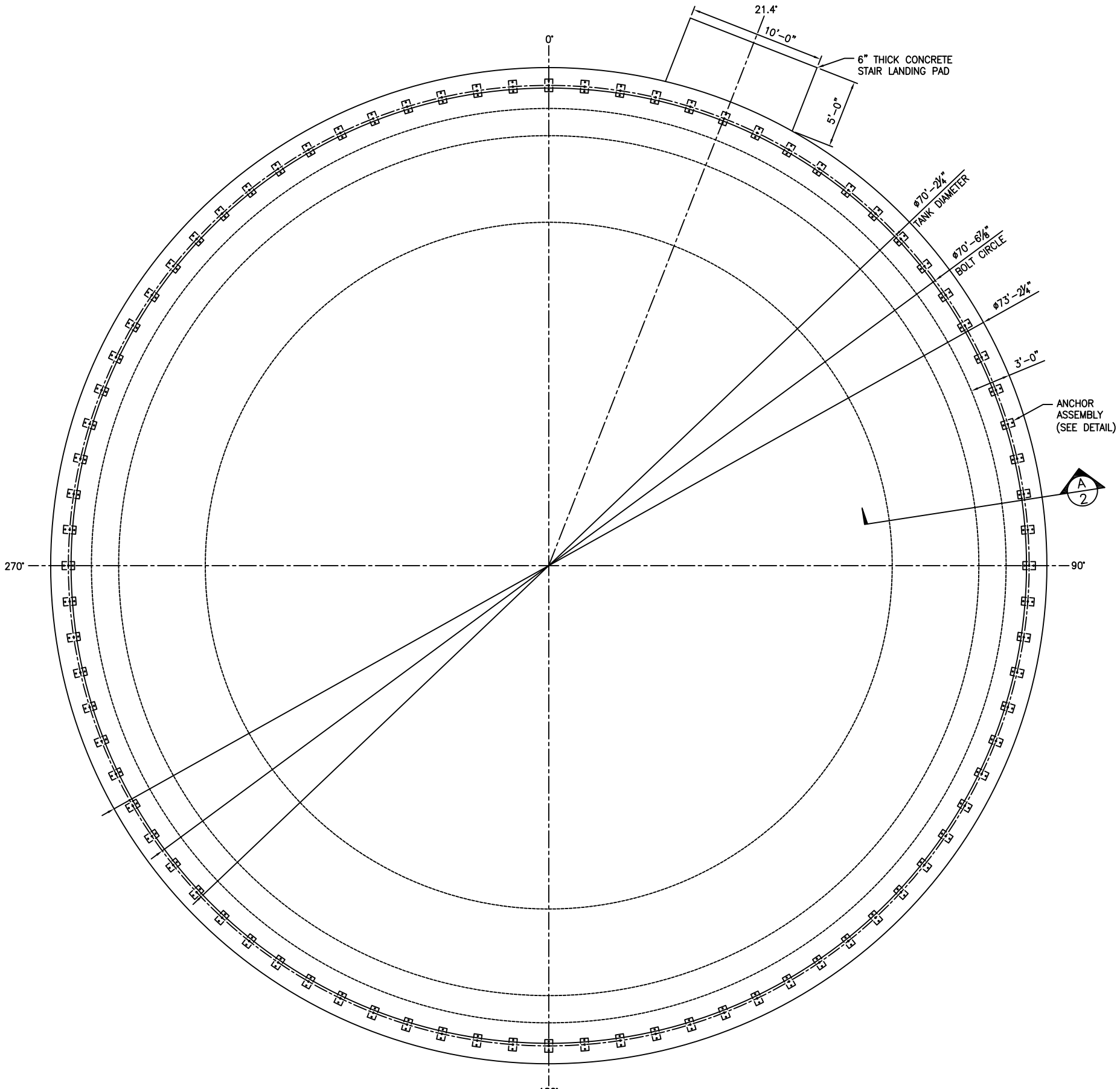
FOUNDATION FOR 70.19 FEET DIAMETER BY 45.84 FEET TALL GLASS LINED BOLTED STEEL WATER STORAGE TANK



TANK FOUNDATION PLAN
¼"=1'-0"

DESIGN NOTES:

1. FOUNDATION DESIGNED IN ACCORDANCE WITH THE 2015 INTERNATIONAL BULDING CODE; AWWA D103-19 USED TO DETERMINE WIND AND SEISMIC LOADS FOR FOUNDATION DESIGN,
2. DESIGN LOADS:
   DESIGN SPECIFIC GRAVITY = 1.0
   ROOF LIVE LOAD = 20 PSF
   SNOW LOAD = 20 PSF
   WIND: = 115 MPH, EXPOSURE C
   SEISMIC: Ss=0.144 S1=0.058, SITE CLASS D, I =1.5
3. ALLOWABLE SOIL BEARING PRESSURE = 3,000 PSF (PER UIG)

GENERAL CONDITIONS:

1. WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS.
2. CONTRACTOR IS RESPONSIBLE TO REVIEW THE PLANS AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO BEGINNING CONSTRUCTION.
3. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL BE LIABLE FOR ANY AND ALL DAMAGES WHICH MAY BE DUE TO HIS FAILURE TO LOCATE AND PRESERVE ANY AND ALL UTILITIES.
4. THE CONTRACTOR SHALL OBTAIN A CONSTRUCTION PERMIT.
5. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS.

SITE WORK:

1. ALL TOP SOIL TO BE REMOVED FROM SITE.
2. SITE MUST BE PREPARED TO ACHIEVE THE ALLOWABLE SOIL BEARING PRESSURE USED FOR DESIGN. OVER EXCAVATE AND BACK FILL AS REQUIRED BY GEOTECHNICAL ENGINEER. FOUNDATION BEARING GRADES MUST BE OBSERVED AND EVALUATED BY THE GEOTECHNICAL ENGINEER TO DETERMINE IF THE SUBGRADE CONDITIONS BENEATH THE FOUNDATION ARE ADEQUATE TO ACHIEVE THE ALLOWABLE SOIL BEARING PRESSURE USED FOR DESIGN.
3. RING WALL BELOW GRADE SHALL HAVE BACKFILL PLACED EQUALLY ON BOTH SIDES UNTIL THE REQUIRED LEVELS ARE REACHED.

CONCRETE:

1. CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF ACI 301 LATEST EDITION, STANDARD SPECIFICATIONS FOR STRUCTURAL CONCRETE, PUBLISHED BY THE AMERICAN CONCRETE INSTITUTE, DETROIT, MICHIGAN, EXCEPT AS MODIFIED BELOW:
   EXPOSURE CLASS = F2, S0, P0, C1
   MINIMUM f'c = 4,500 PSI
   MAXIMUM WATER/CEMENT RATIO = 0.45
   MAXIMUM AGGREGATE SIZE = 1"
   GRADE 60 REINFORCING STEEL
2. MAKE ALL BARS CONTINUOUS AROUND CORNERS OR PROVIDE CORNER BARS OF EQUAL SIZE AND SPACING.
3. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1".
4. LAP ALL CONTINUOUS BARS PER ACI 318. PROVIDE A MINIMUM OF 46" LAP FOR #6 BARS
5. ALL CONCRETE SHALL BE CONSOLIDATED IN PLACE USING INTERNAL VIBRATOR. DO NOT USE VIBRATORS TO TRANSPORT CONCRETE WITHIN FORMS.
6. CONCRETE SHALL MEET THE TOLERANCES OF AWWA D103-19 SECTION 13.6.
7. PROVIDE CONSTRUCTION JOINTS AS INDICATED ON THE DRAWINGS. CONCRETE SURFACE AT CONSTRUCTION JOINTS SHALL BE THOROUGHLY CLEANED AND LAITANCE REMOVED.
8. ALL WATER STOPS MUST BE CONTINUOUS. WATER STOPS MUST BE CONNECTED AS REQUIRED BY MANUFACTURER TO PROVIDE A LEAK FREE CONTAINMENT.
9. ADD XYPEX C-500 OR C-1000 ADMIXTURE TO CONCRETE.
10. SPECIAL INSPECTION SHALL BE PERFORMED IN ACCORDANCE WITH THE 2015 INTERNATIONAL BUILDING CODE.

CONCRETE CONTROLLED SLAB:

1. FOUNDATION SLAB IS TO BE CONSTRUCTED AS A CONTROLLED SLAB IN ACCORDANCE WITH ACI 350-20 CHAPTER 21.
2. THE CONCRETE WORK MUST BE DONE BY A CONTRACTOR EXPERIENCED IN THE CONSTRUCTION OF THESE TYPE OF SLABS.
3. THE ENTIRE CONTROLLED SLAB IS TO BE POURED IN ONE POUR WITH NO COLD JOINTS OR CONSTRUCTION JOINTS.
4. A GRANULAR BASE MATERIAL SHALL BE USED BENEATH THE CONTROLLED SLAB. THIS MATERIAL SHALL BE STABLE, COMPACTABLE ANGULAR OR SUBANGULAR WITH 100 PERCENT PASSING THE 1 IN. SIEVE SIZE AND NOT MORE THAN 8 PERCENT PASSING THE NO. 200 SIEVE SIZE. ALTERNATIVELY, A ROAD BASE MATERIAL CAN BE USED THAT SATISFIES THE REQUIREMENTS FOR CONSTRUCTION AND LONG-TERM STABILITY BASED ON THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER.
5. THE SUBGRADE PREPARATION BELOW THE TANK MUST BE PREPARED PER THE GEOTECHNICAL ENGINEER.
6. THE TOLERANCES FOR THE ELEVATION OF THE PREPARED BASE MATERIAL DIRECTLY BENEATH THE CONTROLLED SLAB SHALL BE +0 IN. AND −1/2 IN. ALL TRANSITIONS IN ELEVATION SHALL BE SMOOTH AND GRADUAL.
7. TOLERANCES FOR FINISHED CONTROLLED SLAB SURFACE ELEVATION SHALL BE −0 IN. +¾ IN. WITH NO GREATER DIFFERENCE THAN ±¼ IN. IN 10 FT.
8. A MINIMUM 6 MIL-THICK PLASTIC SHEETING SHALL BE PLACED ON TOP OF THE GRANULAR BASE MATERIAL AND USED DIRECTLY BENEATH THE CONTROLLED SLAB.
9. CONCRETE SHALL BE CURED IN ACCORDANCE WITH ACI 350-20 SECTION 5.13.

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Original sealed by:

Date original signed:

TANK FOUNDATION PLAN FOR 70.19' DIAMETER x 45.84' TALL WATER STORAGE TANK

Designed By:

Drawn By:

Checked By:

Job Number:

Delivery Date:

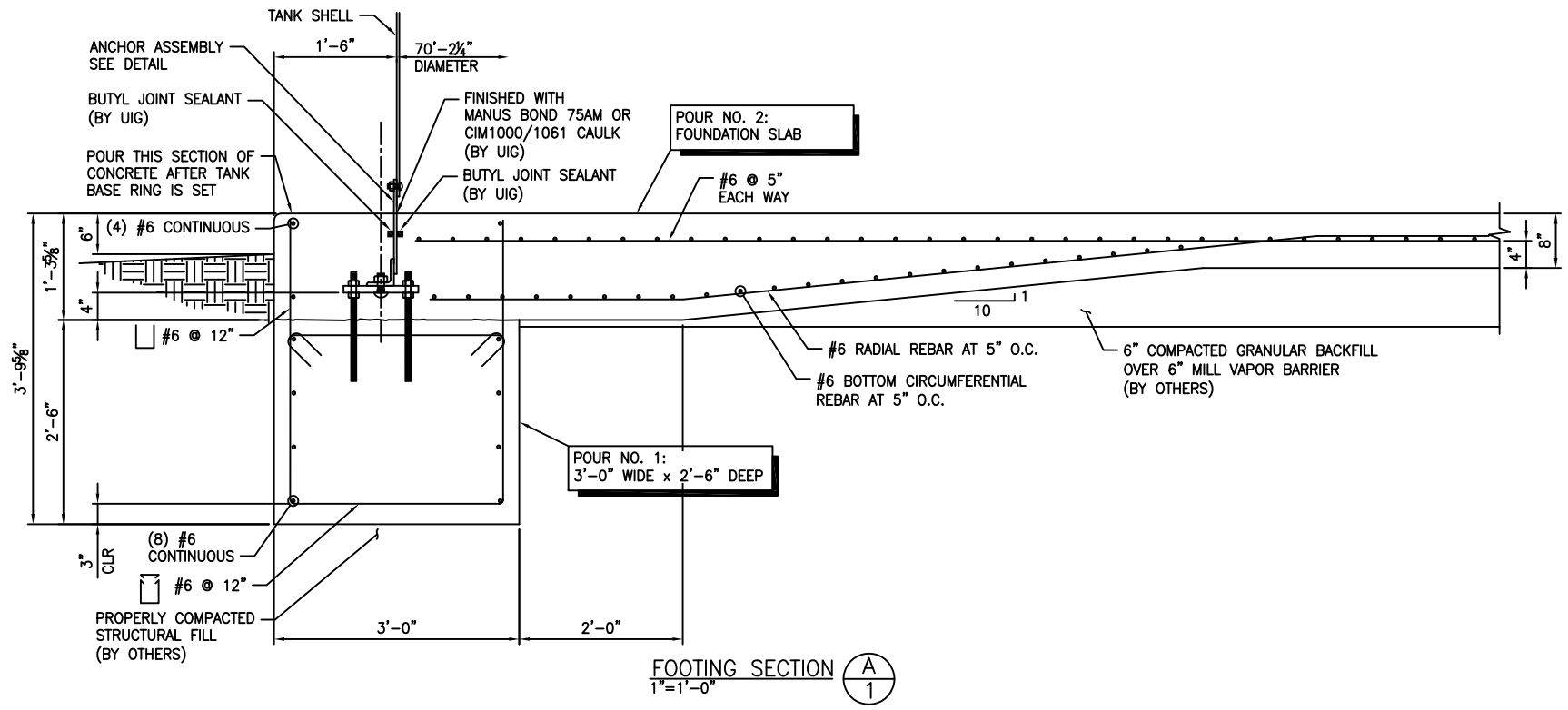
BOLTED WATER STORAGE TANK

REVISIONS

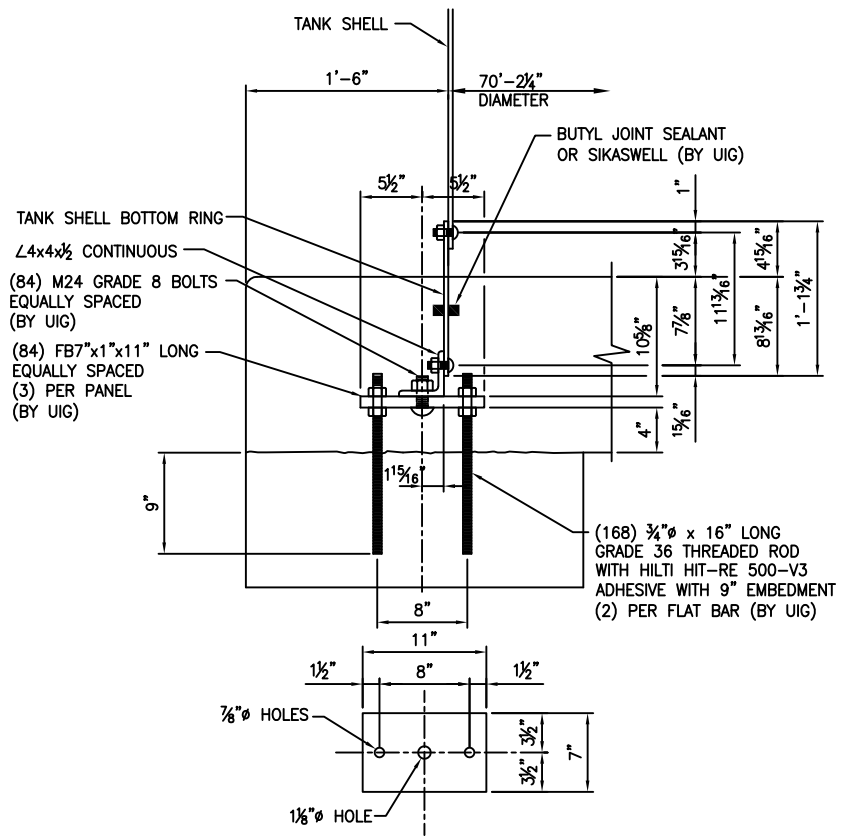
No.	DATE	BY	DESCRIPTION

SCALE: NOTED

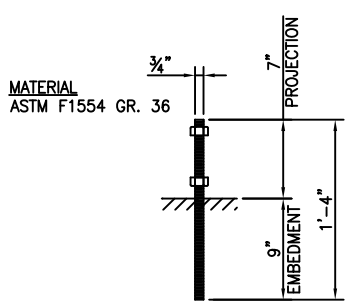
Sheet Number: 1 OF 2



FOOTING SECTION A/1
1"=1'-0"



ANCHOR ASSEMBLY
1½"=1'-0"



ANCHOR BOLT DETAIL
(168 REQUIRED)

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Detailed/Checked by:
Date original signed:

TANK FOUNDATION PLAN FOR 70.19' DIAMETER x 45.84' TALL WATER STORAGE TANK

BOLTED WATER STORAGE TANK

Job Number:
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No.	DATE	BY	DESCRIPTION
			REVISIONS

SCALE: NOTED
Sheet Number: 2 OF 2