

DATE: Sep 02, 2017 - 9:20pm C:\Users\Robert\Desktop\Drawings\DWG\CBI Miami-2015\Plan\Working Set\2015-Area Map.dwg

#### NOTE (SCOPE OF WORK):

THIS PROJECT PROVIDES 3 HEATED NEW TANKS: 27, 28, AND 29 TO STORE USED OIL REQUIRING ADVANCED TREATMENT FOR THE SEPERATION OF WATER, OIL & WATER. TWO NEW CENTRIFUGES THAT REMOVE WATER AND FINES FROM THE MATERIAL WHICH IS THEN SUITABLE FOR RESALE AS DISTILLATE

TANK NO. 30 IS THE NEW DISTILLATE STORAGE TANK

ALL EXISTING AND PROPOSED TANKS AND APPLICABLE EQUIPMENT ARE FDEP APPROVED

CONTAINMENT AREA NO 1: TOTAL AREA INSIDE CONTAINMENT WALL IS 19,808 SF.

EXISTING TANKS 1, 2, 3, 4, 6 AND 7 ARE ALL 25' DIAMETER. FLOOR AREA OF 6 TANKS IS 2,945.25 SF

EXISTING TANK 5 IS 30' DIAMETER AND IS THE LARGEST TANK IN THE TANK FARM WITH FLOOR AREA = 706.86 SF

EXISTING OIL HEATER, 8' DIAM. = 50 SF

EXISTING VAPOR TANKS 22 THROUGH 25 ARE 10' DIAMETER WITH FLOOR AREA OF 157.08 SF

EXISTING VAPOR TANKS ADJACENT TO TANKS 22-25, 8' DIAMETER WITH FLOOR AREA = 100 SF

PROPOSED OIL, WATER AND SLUDGE TANKS UNDER CENTRIFUGE HAVE A FLOOR AREA = 96 SF

PROPOSED TANKS 27, 28, AND 29 ARE 12' DIAMETER WITH A FLOOR AREA = 452.39 SF

TOTAL AREA EXISTING AND PROPOSED IN THE CONTAINMENT AREA NO. 1 = 4,657.48 SF

NET CONTAINMENT AREA AVAILABLE = 19,808 - 4,657.48 = 14,951 SF

CONTAINMENT REQUIRED FOR TANK NO. 5 (LARGEST TANK) X 1.1 = 210,000 GALS. X 1.17.48 = 30,882.35 CF

DEPTH OF PRODUCT FROM SPILL = 30,882.35 CF/14,951 SF = 2.07 FT.

CONTAINMENT AREA NO. 1 HAS 4 FT. HIGH WALLS AND IS THEREFORE ADEQUATE.

CONTAINMENT AREA NO. 2, (ALL EQUIPMENT AND TANKAGE IN THIS AREA EXIST WITH NO AREA IMPACTED BY THIS PERMIT APPLICATION)

EXISTING HORIZ. TANKS 16-21 ARE ON ELEVATED STEEL SUPPORTS COVERING APPROX. 120 SF.

EXISTING SHALLOW TRAY AIR STRIPPER = 66 SF.

EXISTING COLLECTION TANK = 28 SF.

EXISTING 4' DIAM. TANKS ADJ. TO AIR STRIPPER = 25 SF.

EXISTING TANKS 11A & 11B AND TANKS 12A & 12B = 572.56 SF (TANKS 10A & 10B ARE CONICAL)

STEEL SUPPORTS FOR PIPE BRIDGE= 144 SF

TOTAL AREA COVERED BY TANKS AND SUPPORTS = 954 SF

NET CONTAINMENT AREA = 9,892 SF - 954 SF = 8,938 SF

LARGEST TANK TO BE CONTAINED IN CONTAINMENT AREA NO. 2 = 50,000 GALS. X 1.1 = 55,000 GALS./7.48 = 7,353 CF

DEPTH OF SPILL FROM PRODUCT = 7,353 CF/8938 SF = 0.82'

CONTAINMENT AREA 2 IS ENCLOSED WITH 4' HIGH WALLS AND IS ADEQUATE. THE FLOORS OF BOTH CONTAINMENT AREAS AND THE WALLS ENCLOSING THEM ARE SEALED WITH A CONCRETE SEALANT.

## OVERALL SITE PLAN

SCALE: 1"=30'

## EXISTING LIQUID LEVEL INDICATOR

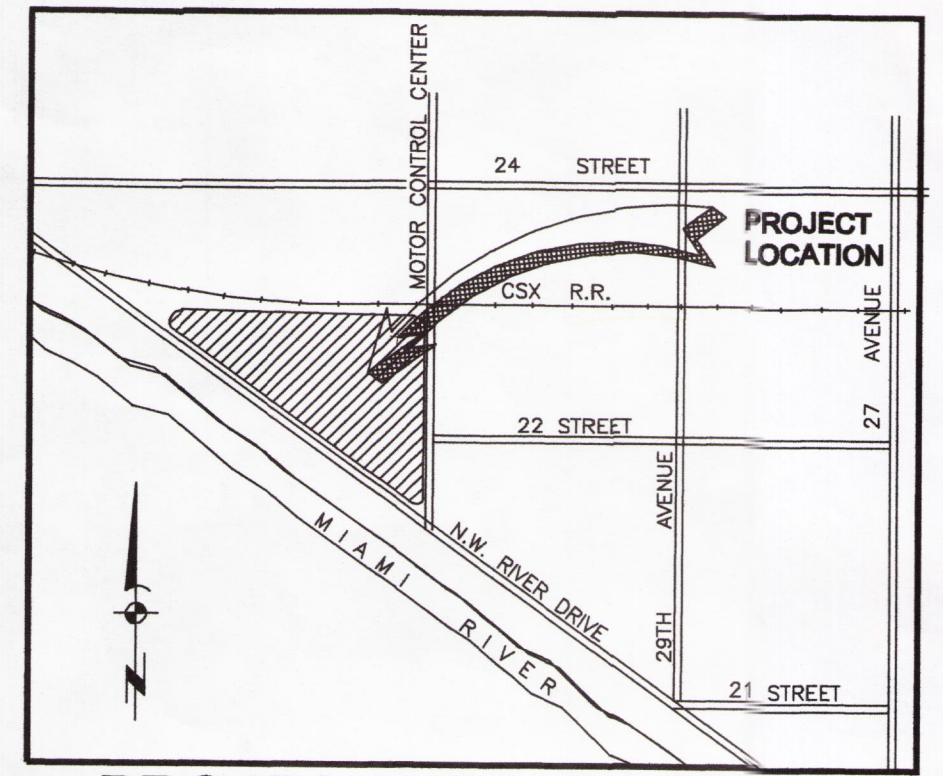
PROVIDED ON ALL VERTICAL TANKS  
AT CBI MIAMI FACILITY AS WELL AS FUTURE TANKS  
N.T.S.

#### PROFESSIONAL ENGINEER CERTIFICATION:

ALTHOUGH I AM NOT THE ORIGINAL ENGINEER OF RECORD FOR THIS PROJECT, TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE COMPLETED WORK DOES NOT VIOLATE ANY LAWS OF THE STATE OF FLORIDA, NOR ANY PROVISION OF THE CODE OF MIAMI DADE COUNTY WHICH MAY BE APPLICABLE, THAT DILIGENCE AND RECOGNIZED STANDARD PRACTICES OF THE ENGINEERING PROFESSION APPEAR TO HAVE BEEN EXERCISED IN THE ENGINEER'S DESIGN PROCESS FOR THE COMPLETED WORK. I HEREBY CERTIFY THE AS-BUILT LOCATION OF THE ADVANCED OIL CLEANING FACILITY SYSTEM COMPONENTS TO BE IN SUBSTANTIAL CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS AS ORIGINALLY DESIGNED BY MR. DAVID M. AMBROSE, PROFESSIONAL ENGINEER, NOW RETIRED. I HEREBY AFFIX MY SEAL THIS 31<sup>ST</sup> DAY OF JANUARY 2018.

ENGINEER'S SIGNATURE & SEAL  
DENIS H. BARDALES, P.E.  
FLORIDA REGISTRATION #46651  
FLORIDA CERTIFICATE OF AUTHORIZATION #30026  
BDH CONSULTING GROUP, LLC

JAN 31 2018  
DATE

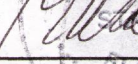




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TANK #	PRODUCT TYPE
1	USED OIL
2	USED OIL
3	WATER
4	WATER
5	USED OIL
6	USED OIL
7	USED OIL
10A	WASTEWATER
10B	WASTEWATER
11A	CLEAN OIL FROM CENTRIFUGE
11B	CLEAN OIL FROM CENTRIFUGE
12A	CLEAN OIL FROM CENTRIFUGE
12B	CLEAN OIL FROM CENTRIFUGE
13	CLEAN WATER
14	CLEAN WATER
15	OUT OF SERVICE
16	DIESEL FUEL
17	PCW
18	OUT OF SERVICE
19	WATER
20	OIL/ADV. TRMT
21	OIL/ADV. TRMT
22	COOKER TANK
23	COOKER TANK
24	COOKER TANK
25	COOKER TANK
26	DISTILLATE TANK
27	USED OIL
28	USED OIL
29	USED OIL
30	DISTILLATE

**PROFESSIONAL ENGINEER CERTIFICATION:**  
ALTHOUGH I AM NOT THE ORIGINAL ENGINEER OF KNOWLEDGE AND BELIEF, THE COMPLETED FLORIDA, NOR ANY PROVISION OF THE CODE THAT DILIGENCE AND RECOGNIZED STANDARDS APPEAR TO HAVE BEEN EXERCISED IN THE PAST, I HEREBY CERTIFY THE AS-BUILT LOCATION OF COMPONENTS TO BE IN SUBSTANTIAL CONFORMANCE WITH SPECIFICATIONS AS ORIGINALLY DESIGNED. I AM NOW RETIRED. I HEREBY AFFIX MY SEAL TO THIS CERTIFICATION.

  
ENGINEER'S SIGNATURE & SEAL  
DERIS H. BARDALES, P.E.  
FLORIDA REGISTRATION NO. 64661  
FLORIDA CERTIFICATE OF AUTHORIZATION  
BDH CONSULTING GROUP, LLC

NOTES:

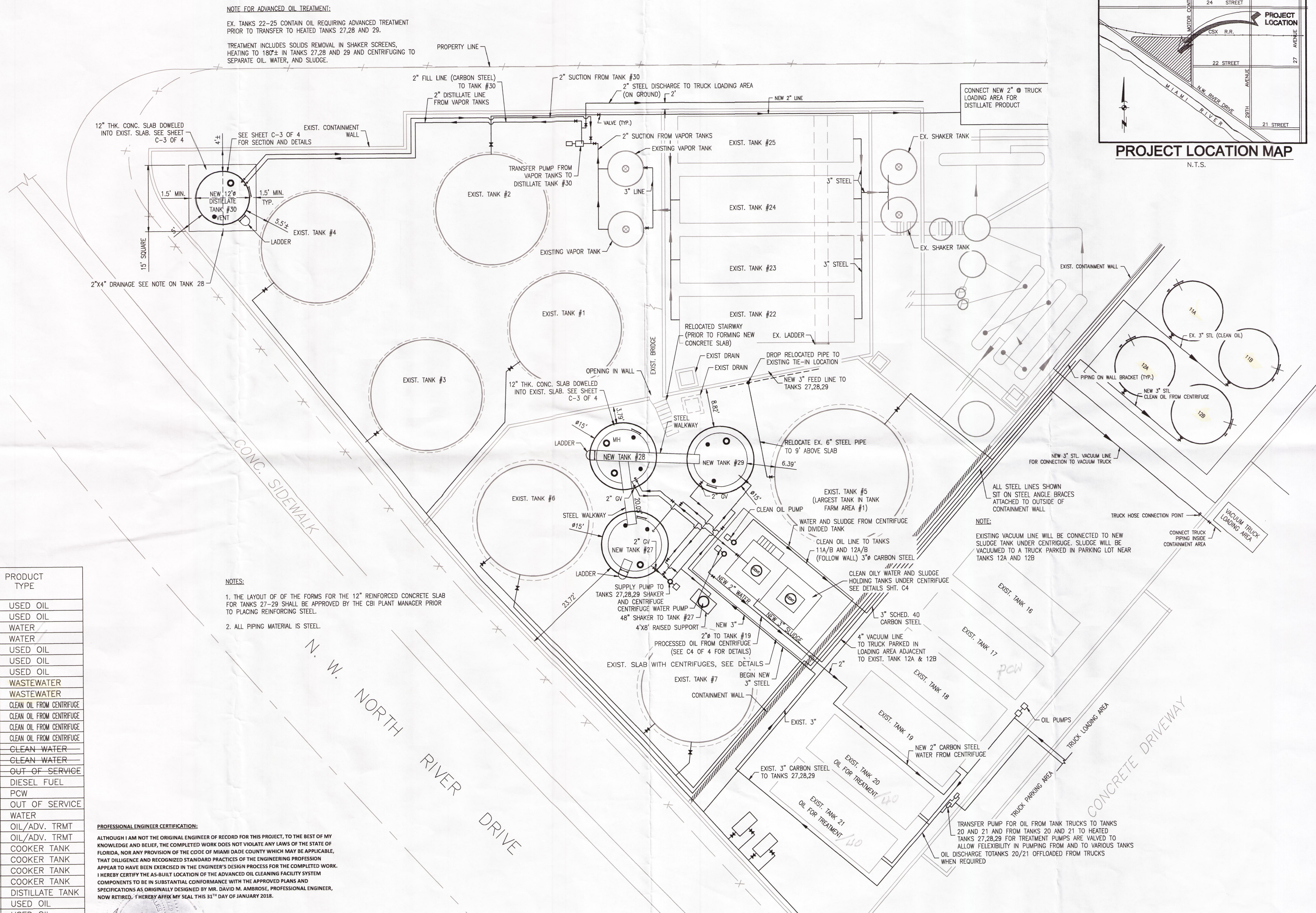
1. THE LAYOUT OF OF THE FORMS FOR THE 12" REINFORCED CONCRETE SLAB FOR TANKS 27-29 SHALL BE APPROVED BY THE CBI PLANT MANAGER PRIOR TO PLACING REINFORCING STEEL.
2. ALL PIPING MATERIAL IS STEEL.

JAN 31 2018

DAT

# PARTIAL TANK FARM SITE PLAN

SCALE: 1"=10'



**PROJECT LOCATION MAP**  
N.T.S.

**CBI MIAMI-DADE FACILITY**  
**3033 NW NORTH RIVER ROAD MIAMI, FL. 33142**  
**ADVANCED OIL CLEANING FACILITY**

**D.M. AMBROSE, CIVIL ENGINEER**

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**CONSULTING ENGINEER**  
P.O. BOX 10000, WOODBURY, NJ 07095  
PHONE: 908-358-4144 FAX: 908-358-4984

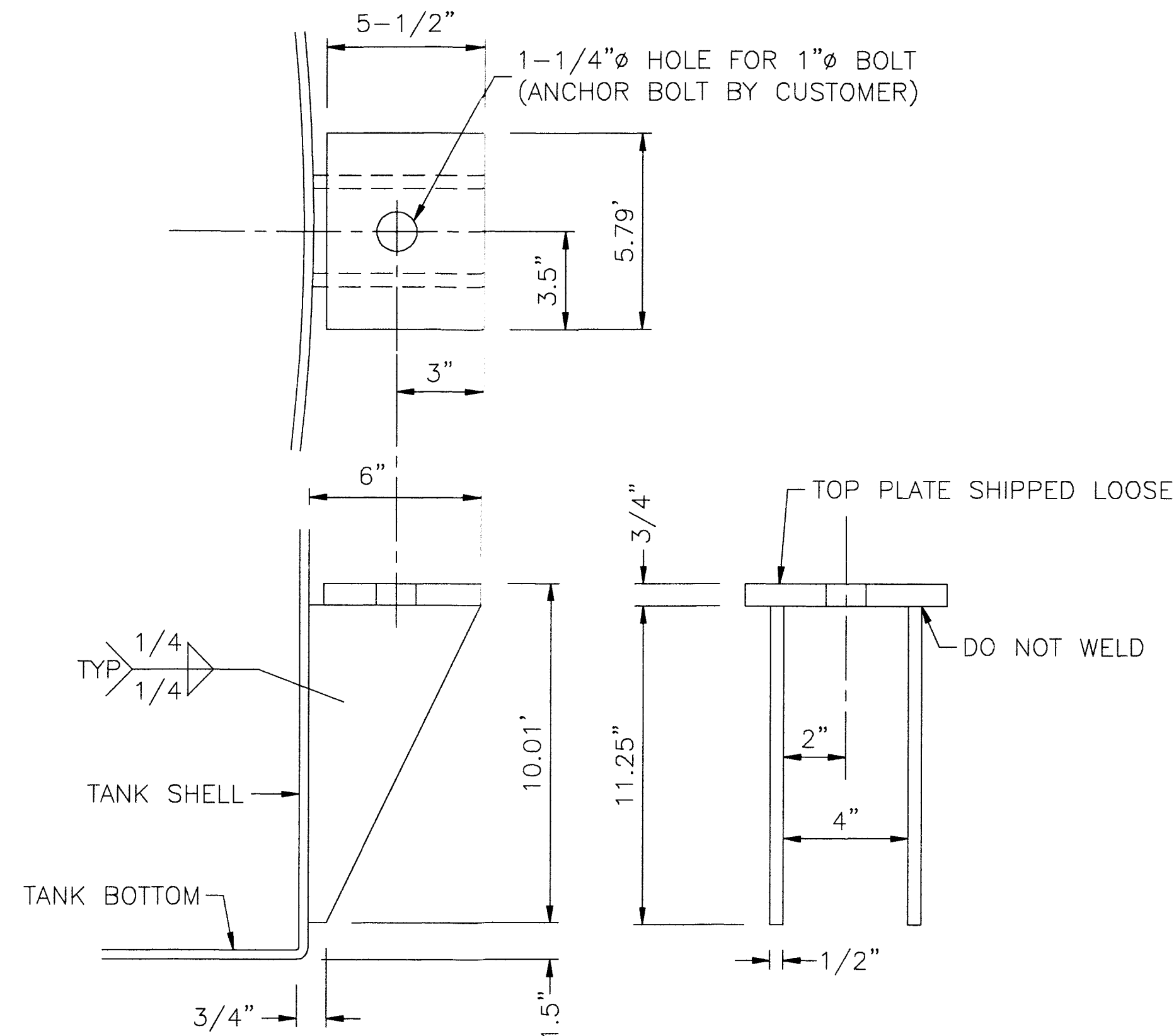
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DATE:	1/21/15
DRAWN BY:	RCW
CHECKED BY:	DMA
DESIGNED BY:	DMA

**C2 OF 4**  
**D.M. AMBROSE, P.E.**  
**FLORIDA REGISTRATION**  
**NO. 12831**

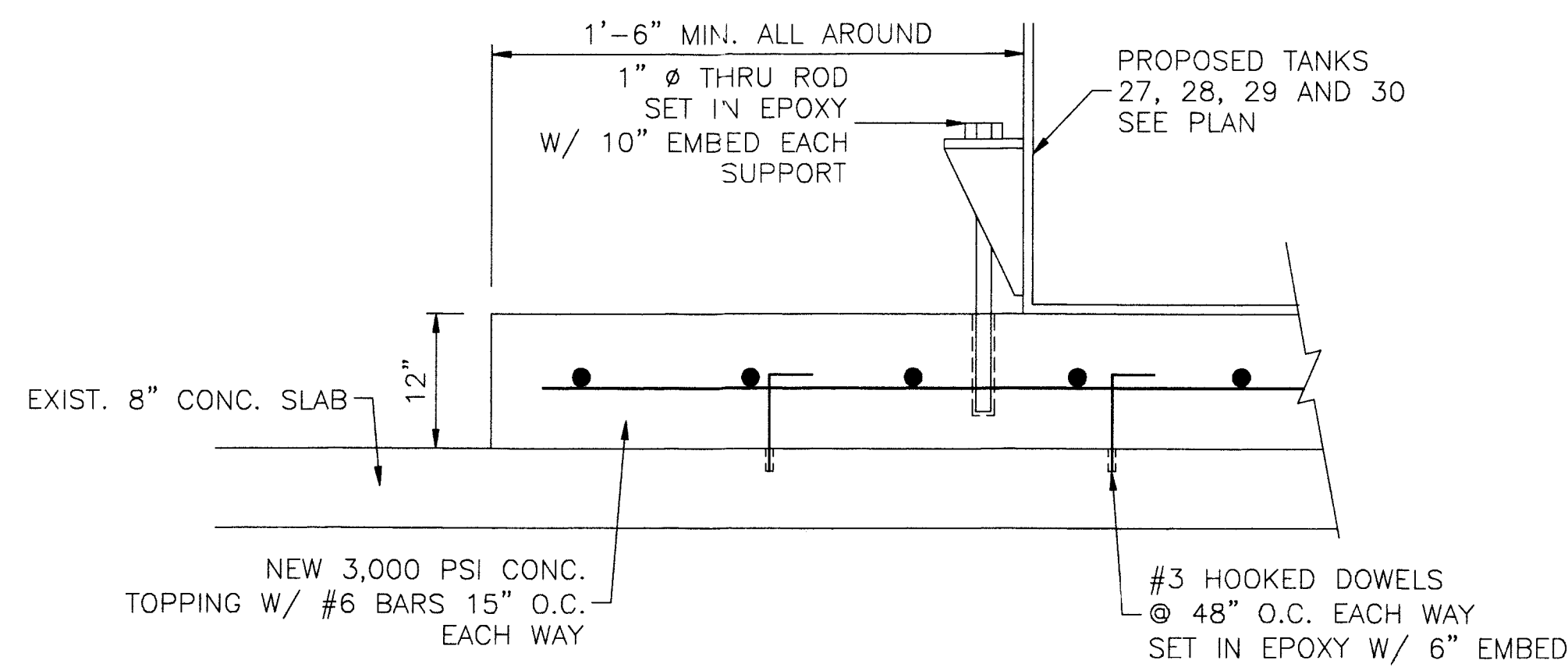
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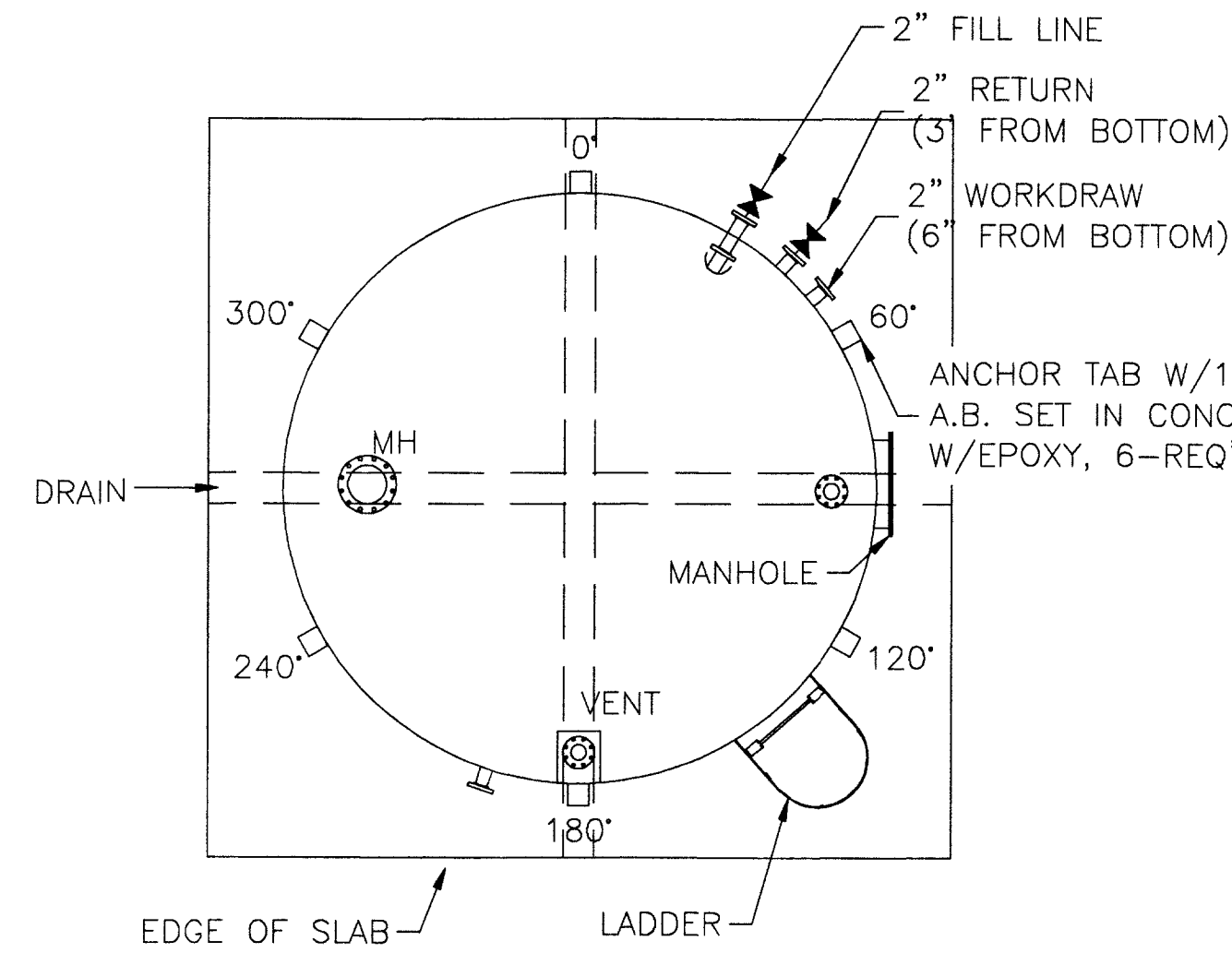
ANCHOR CHAIR DETAIL  
SCALE: N.T.S.



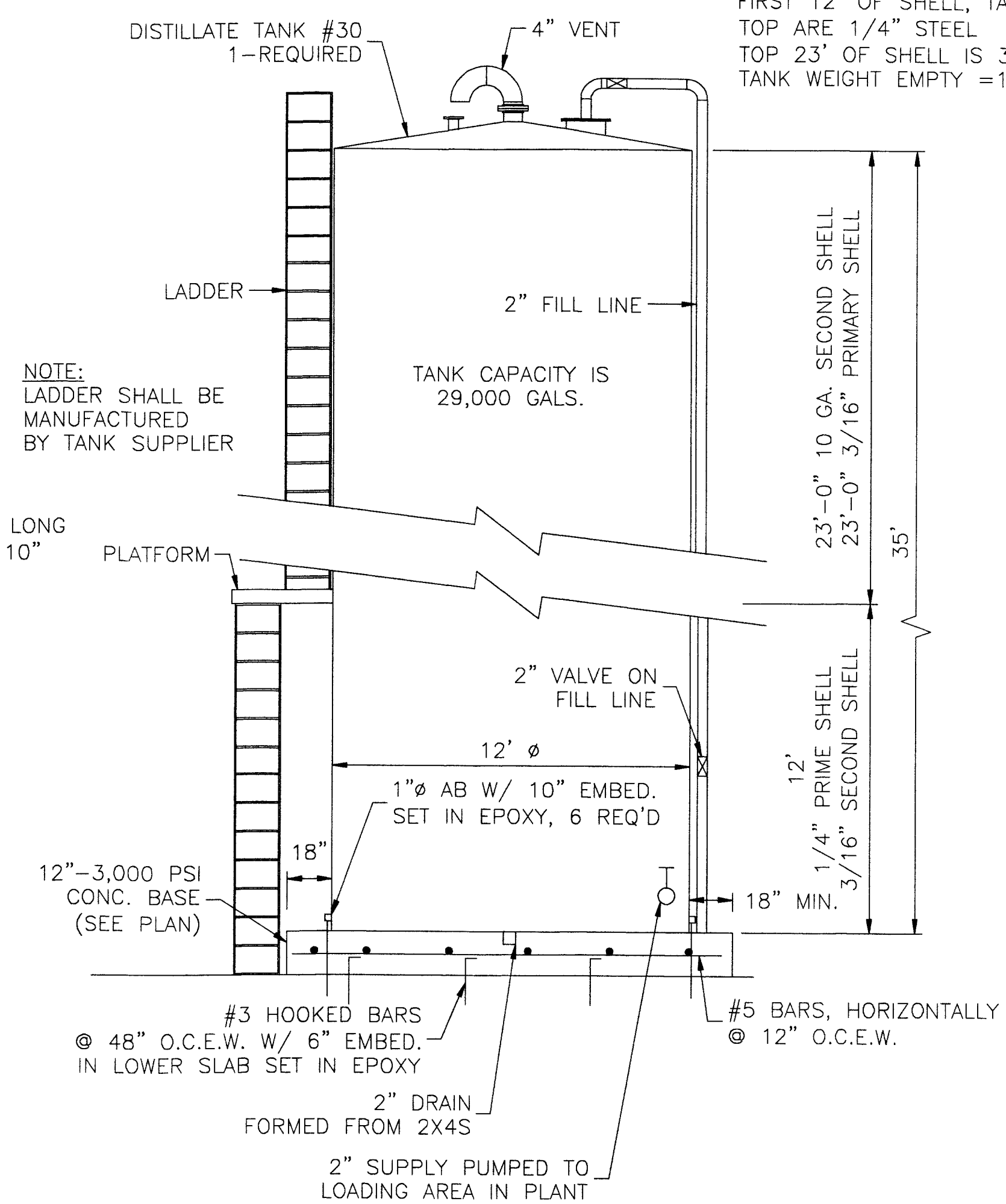
NOTE:

CONTRACTOR TO INSTALL 2'X4' FOR DRAINAGE SET IN CONCRETE BASE  
BEFORE INITIAL SET AND REMOVED  
BEFORE FINAL SET (TYP ALL TANKS)

FOUNDATION AND ANCHOR DESIGN  
FOR TANKS #27-#30  
SCALE: N.T.S.

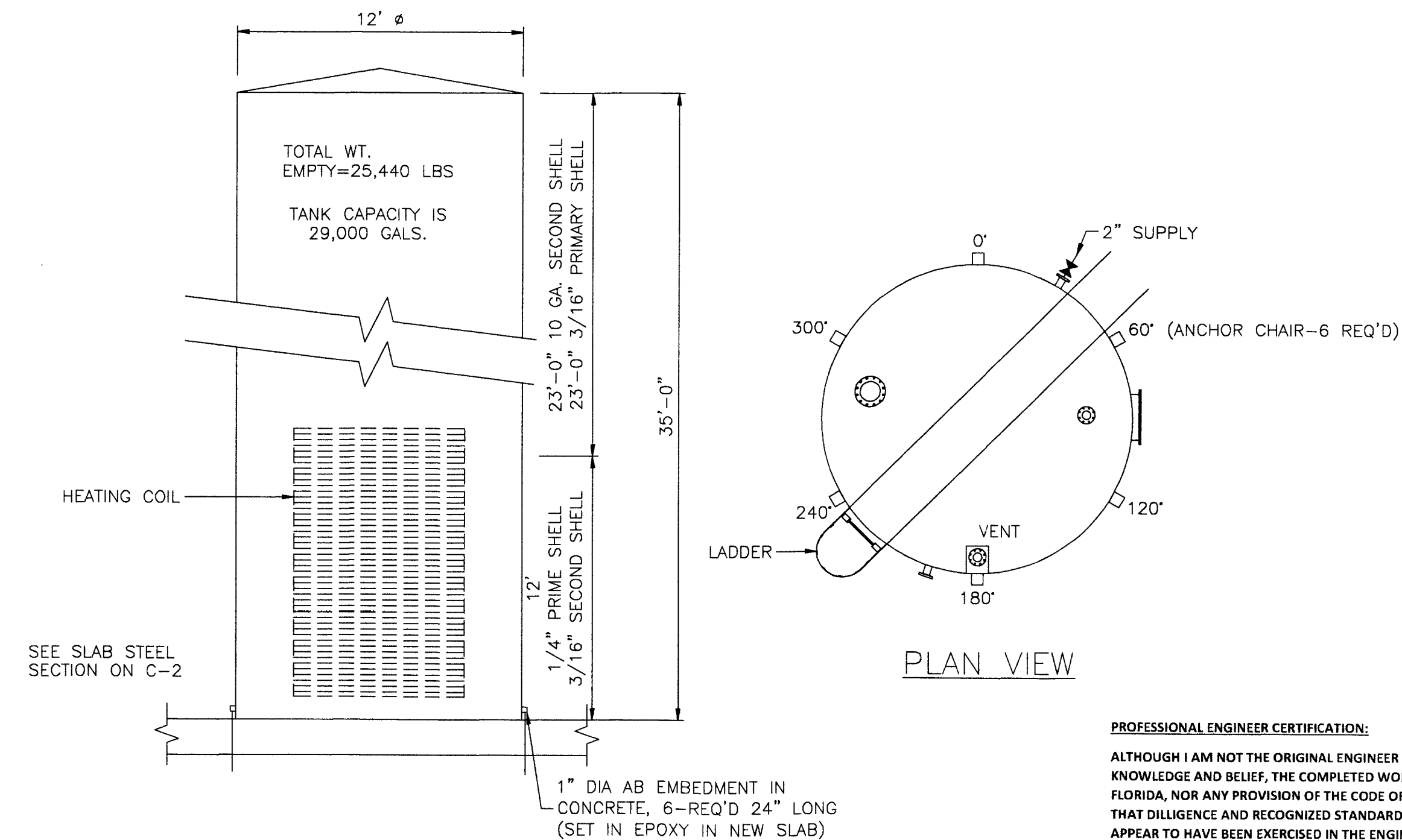


PLAN VIEW



ELEVATION VIEW

DISTILLATE TANK #30 DETAILS  
SCALE: N.T.S.



PLAN VIEW

SECTION VIEW

HEATED CENTRIFUGE FEED TANKS  
#27-#28-#29  
SCALE: N.T.S.

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THAT DILIGENCE AND RECOGNIZED STANDARD PRACTICES OF THE ENGINEERING PROFESSION  
APPEAR TO HAVE BEEN EXERCISED IN THE ENGINEER'S DESIGN PROCESS FOR THE COMPLETED WORK.  
I HEREBY CERTIFY THE AS-BUILT LOCATION OF THE ADVANCED OIL CLEANING FACILITY SYSTEM  
COMPONENTS TO BE IN SUBSTANTIAL CONFORMANCE WITH THE APPROVED PLANS AND  
SPECIFICATIONS AS ORIGINALLY DESIGNED BY MR. DAVID M. AMBROSE, PROFESSIONAL ENGINEER,  
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FLORIDA CERTIFICATE OF AUTHORIZATION #30026  
BDH CONSULTING GROUP, LLC

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CBI MIAMI-DADE FACILITY

3033 NW NORTH RIVER ROAD MIAMI, FL. 33142

ADVANCED OIL CLEANING FACILITY

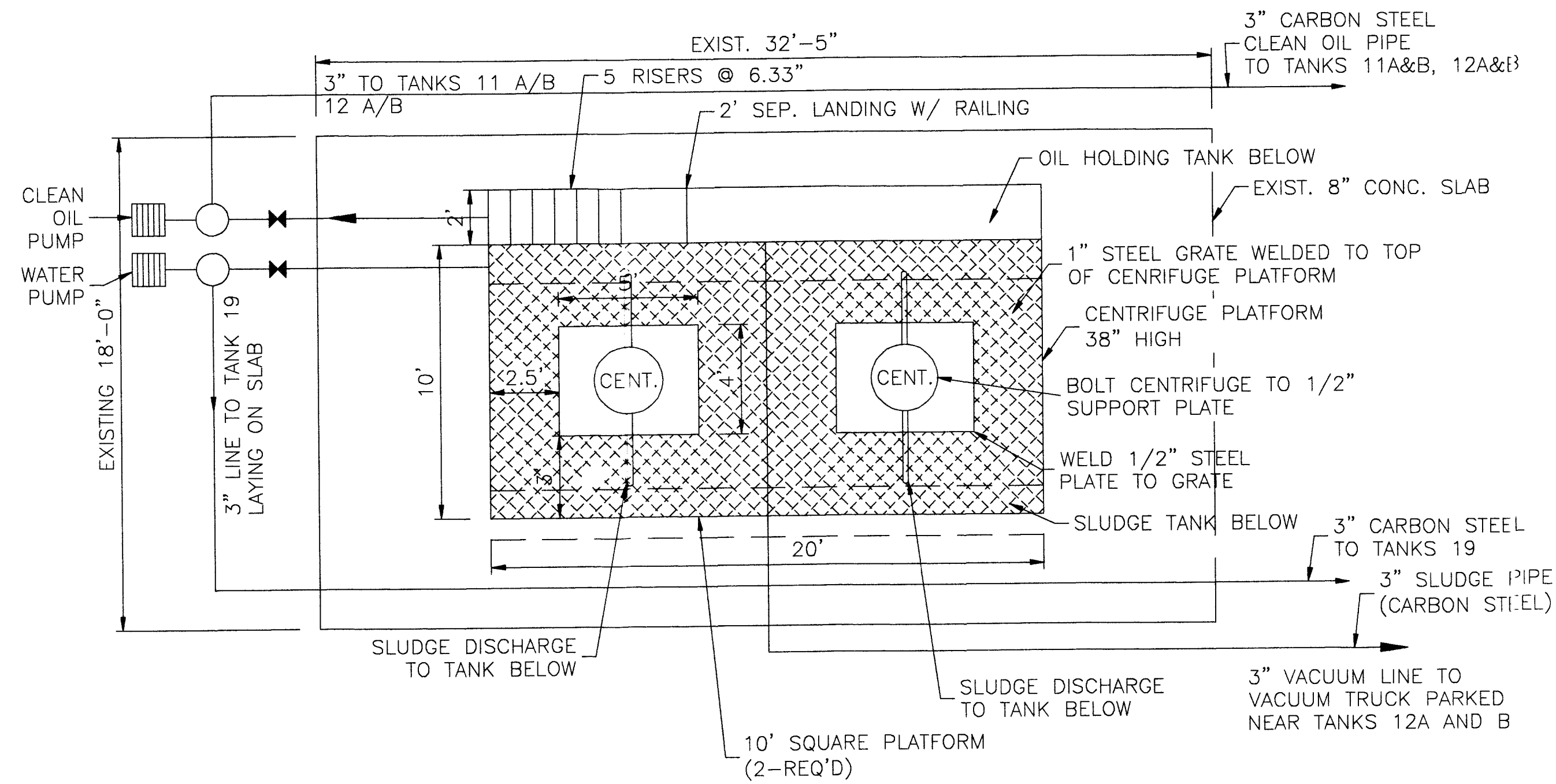
D.M. AMBROSE, CIVIL ENGINEER

CONSULTING ENGINEER  
PHONE: 305-555-9144 FAX: 305-555-9291

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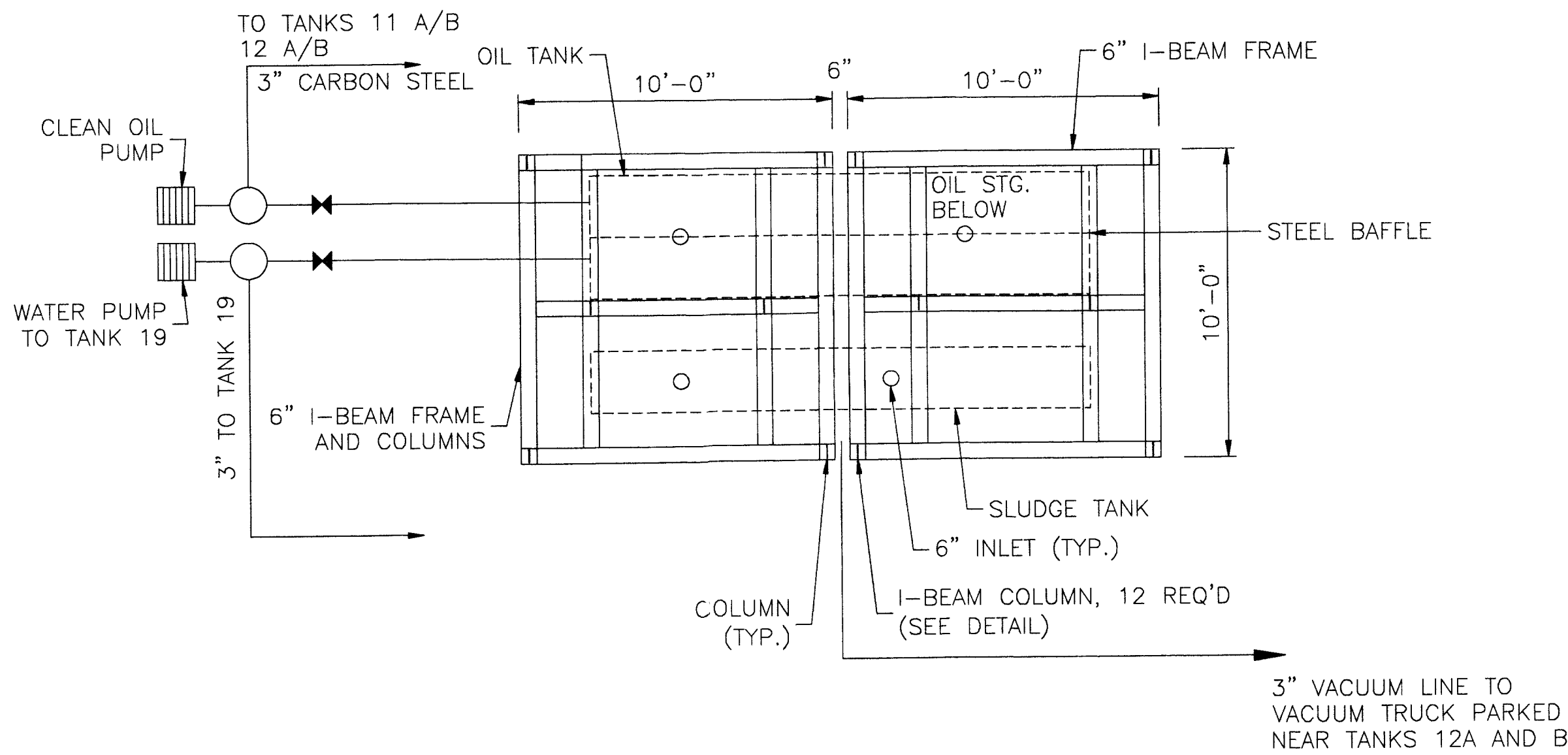
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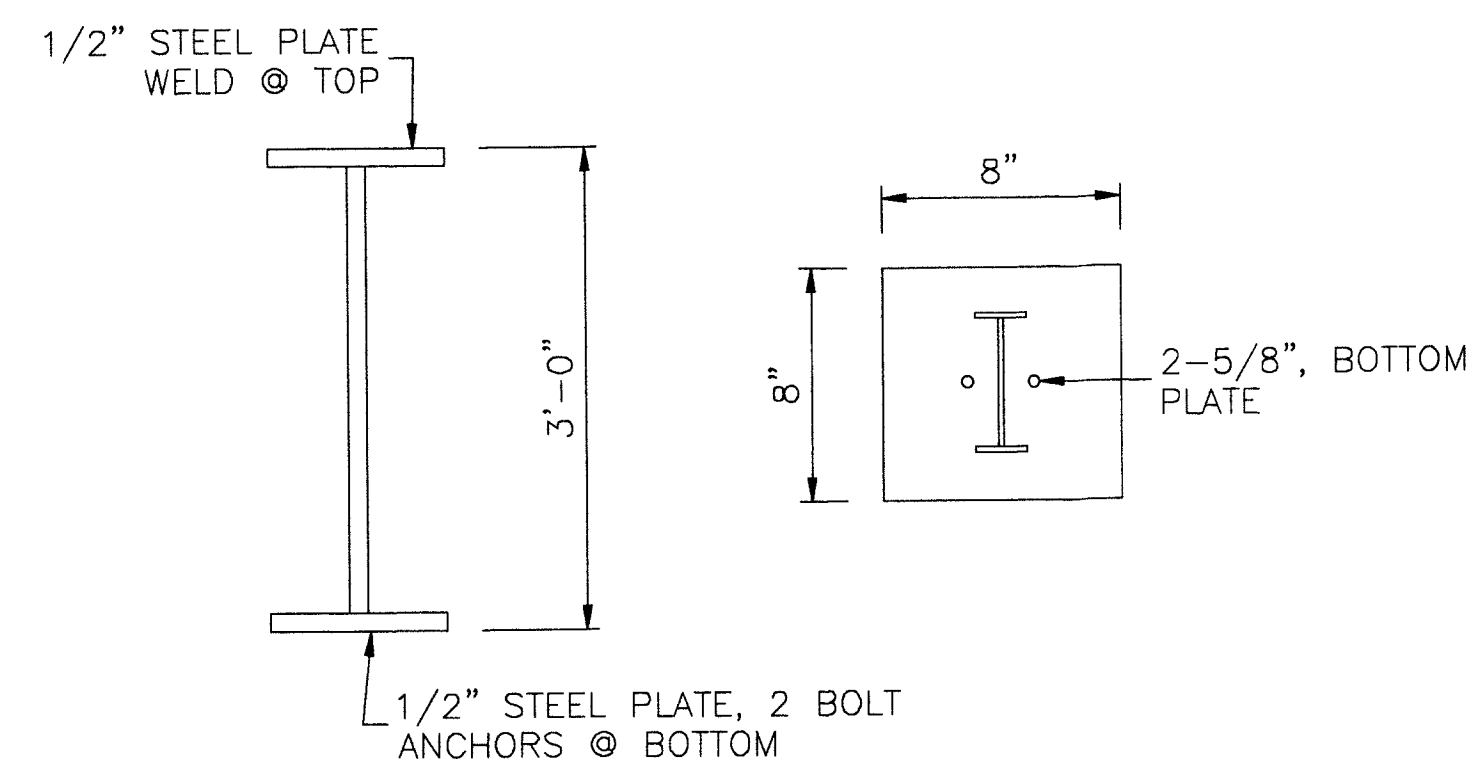
CENTRIFUGE PLAN

SCALE: 1"=4'



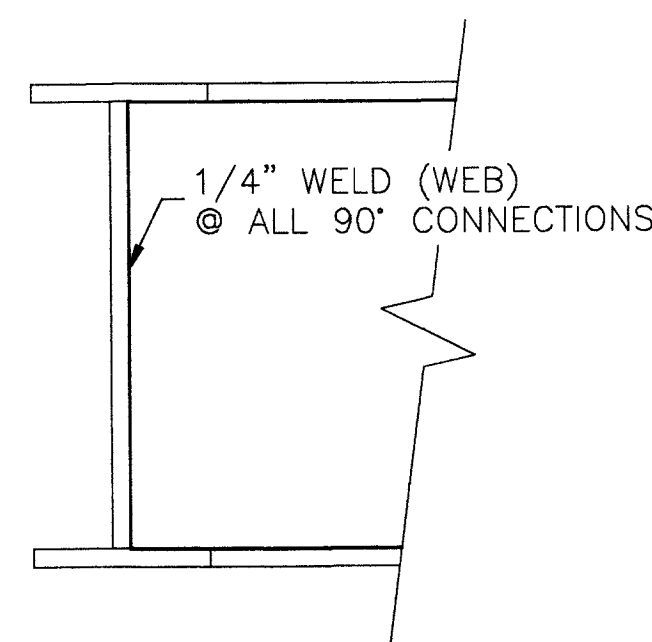
CENTRIFUGE SUPPORT PLATFORM FRAME

SCALE: 1"=4'



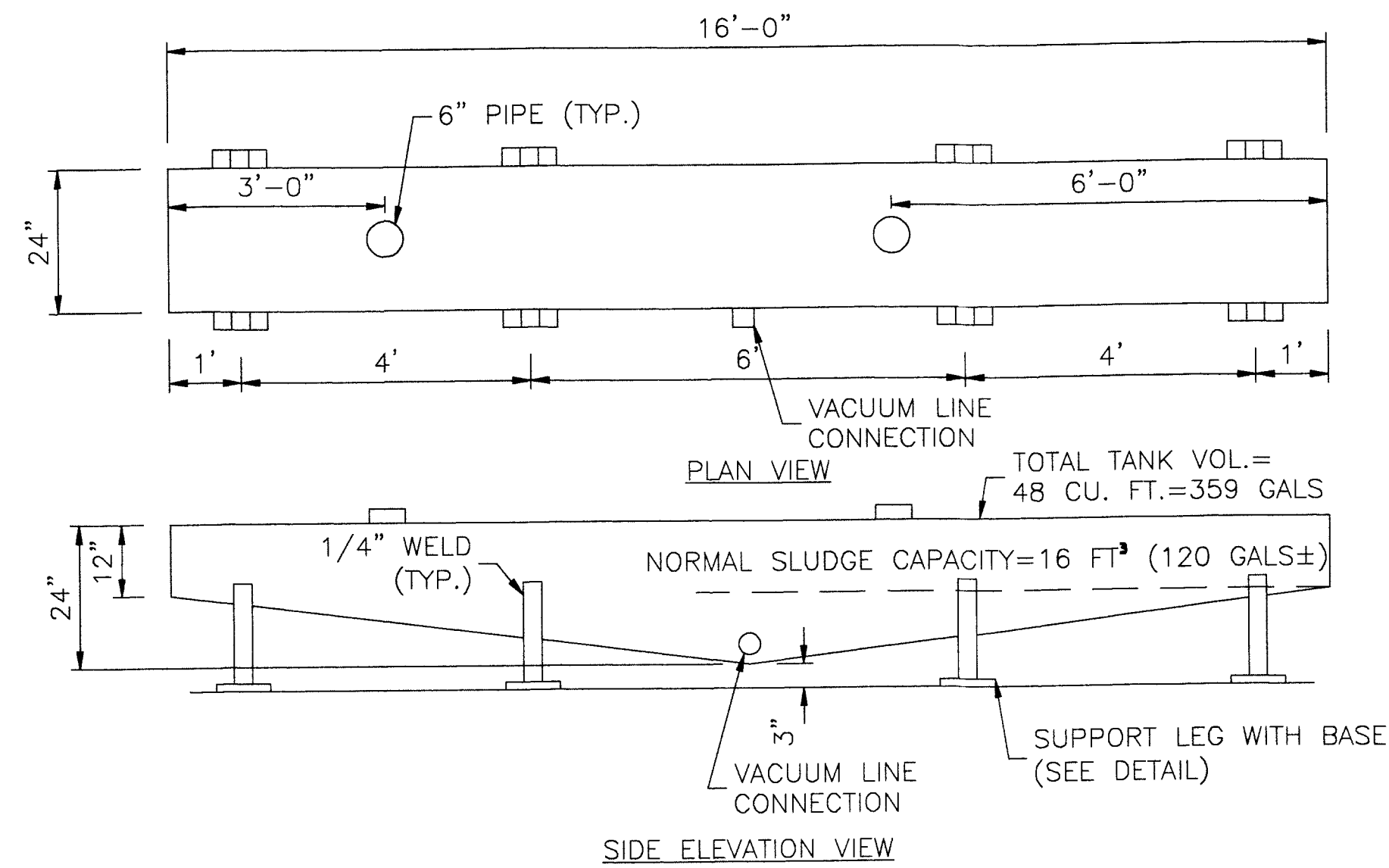
SUPPORT COLUMN

SCALE: N.T.S.



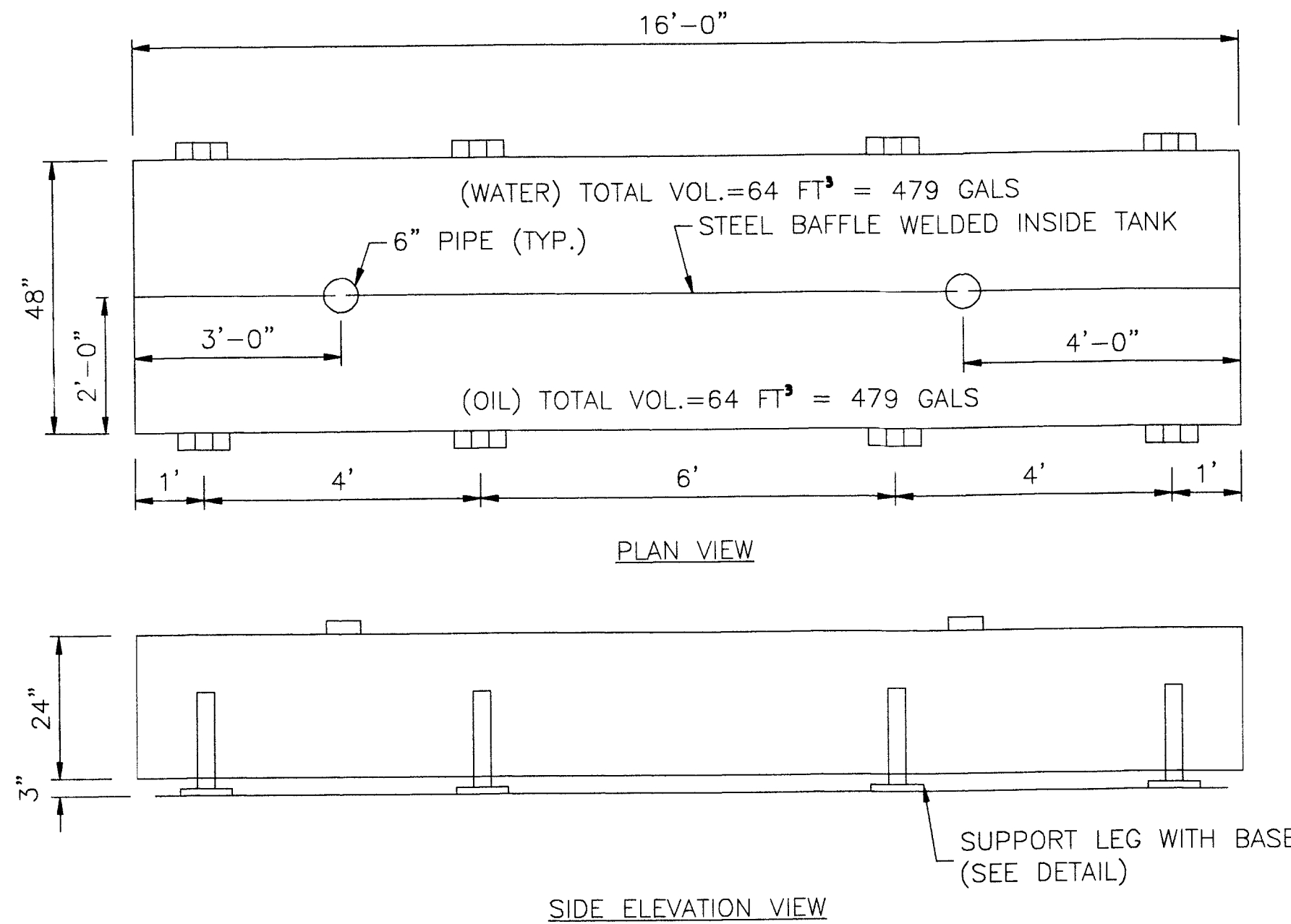
I-BEAM CONNECTION DETAIL

SCALE: N.T.S.



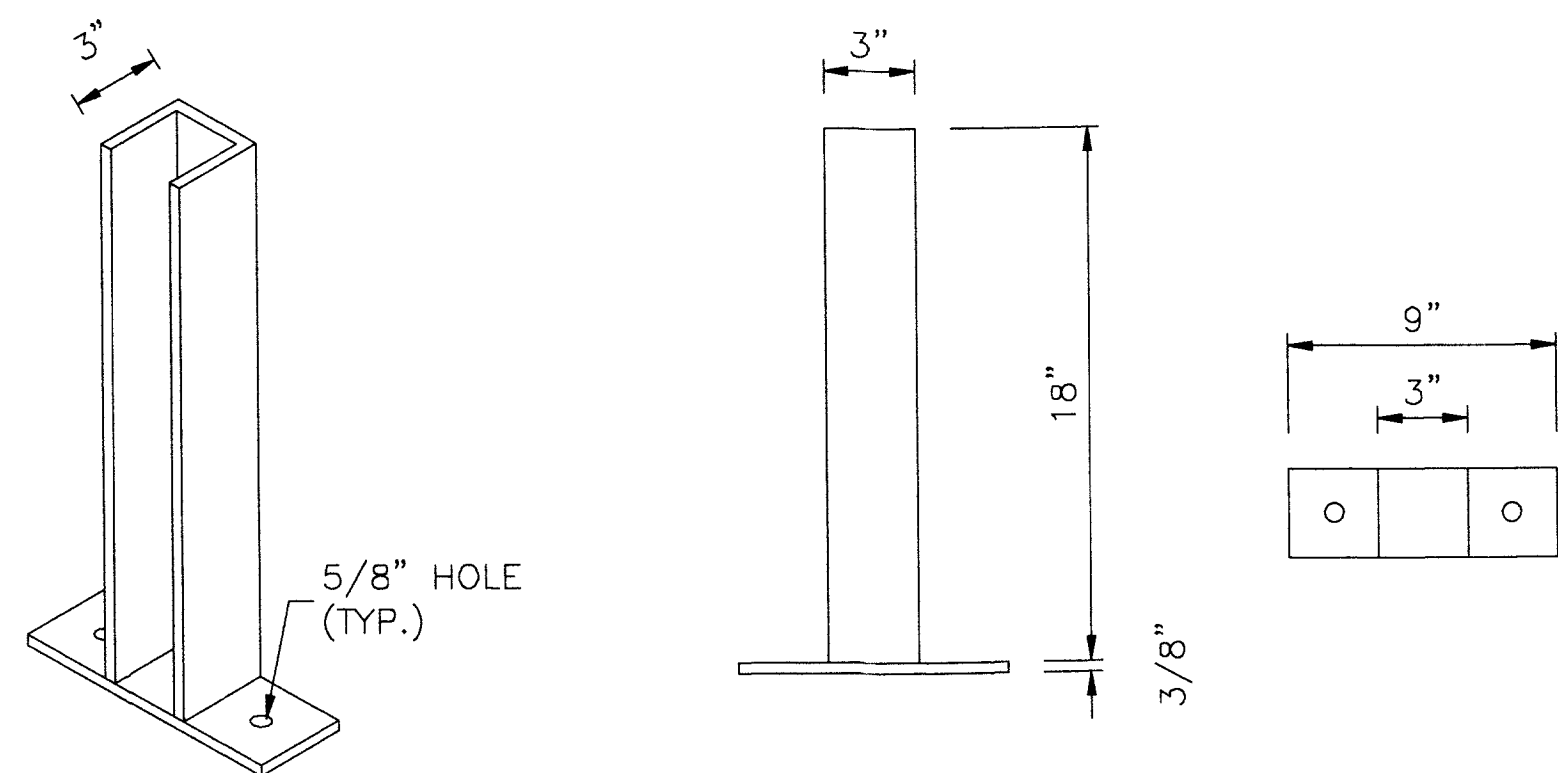
SLUDGE HOLDING TANK (3/16" CARBON STEEL)

SCALE: 1"=2'



WATER AND OIL TANK (3/16" CARBON STEEL)

SCALE: 1"=2'



3" CHANNEL SUPPORT LEGS  
16 REQ'D FOR TWO TANKS

SCALE: N.T.S.

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