05 - CIVIL
INDEX OF DRAWINGS

DRAWING NUMBER	DRAWING TITLE	DRAWING NUMBER	DRAWING TITLE
C-001	INDEX OF DRAWINGS		
C-002	TEMPORARY FACILITIES PLAN		
C-003	TEMPORARY FACILITIES DETAILS		
C-004	SITE PLAN		
C-005	MOTOR FUEL ISLAND PLAN		
C-006	MOTOR FUEL TANK DETAILS		
C-007	MOTOR FUEL ISLAND DETAILS		
C-008	FUEL OIL TANK PLAN		
C-009	FUEL OIL TANK DETAILS		
C-010	METAL BEAM RAIL MISCELLANEOUS DETAILS		
C-011	METAL BEAM RAIL MISCELLANEOUS DETAILS		

THE DESIGN APPEARS TO CONFORM TO APPLICABLE CRITERIA. APPROVAL IS NOT TO BE CONSTRUED TO MEAN THAT ALL ASPECTS OF THE DESIGN HAVE BEEN PERSONALLY CHECKED BY THE UNDERSIGNED.

Theodore H. Nezames
2013.01.22 11:22:20
-05'00'

TRANSPORTATION PRINCIPAL ENGINEER

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 1/18/2013

DESIGNER/DRAFTER: ME
CHECKED BY: JSB

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\FD_MSH_CIV_0022_0105_C001.dgn

SIGNATURE/ BLOCK:
OFFICE OF ENGINEERING
APPROVED BY:

PROJECT TITLE:
CANTERBURY MAINTENANCE FACILITY TANK REPLACEMENT

TOWN: CANTERBURY

DRAWING TITLE: INDEX OF DRAWINGS

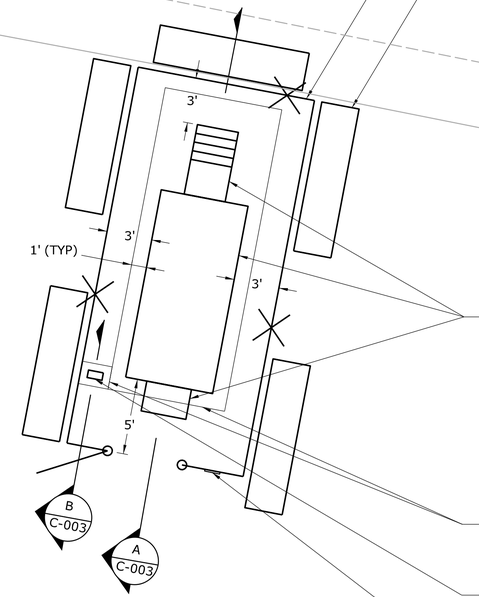
PROJECT NO. 22-105
DRAWING NO. C-001
SHEET NO. 05.01

ABBREVIATIONS

AST	ABOVEGROUND STORAGE TANK
AWG	AMERICAN WIRE GAUGE
BCLC	BITUMINOUS CONCRETE LIP CURB
℄	CENTER LINE
EWT&B	EACH WAY TOP & BOTTOM
FMU	FUEL MANAGEMENT UNIT
GND	GROUND
HMA	HOT MIX ASPHALT
MAX	MAXIMUM
MIN	MINIMUM
NO.	NUMBER
o.c.	ON CENTER
o.d.	OUTER DIAMETER
RGSC	RIGID GALVANIZED STEEL CONDUIT
TYP	TYPICAL
UST	UNDERGROUND STORAGE TANK
W/	WITH
W.W.R.	WIRE REINFORCEMENT

COORDINATE GRID
NAD 83
CONNECTICUT

EXISTING FACILITY



INSTALL 8' HIGH CHAIN LINK FENCE WITH 5' GATE, FENCE AND GATE TO BE REMOVED AND SALVAGED AFTER TEMPORARY TANK HAS BEEN REMOVED

INSTALL RELOCATED EXISTING CONCRETE BARRIER (TYP 5), BARRIERS TO BE REMOVED AND SALVAGED AFTER TEMPORARY TANK HAS BEEN REMOVED

2000 GALLON ABOVEGROUND DIESEL TANK (12'-7" x 5'-10" o.d.) WITH ACCESSORIES, DISPENSER, AND EXTERNAL STAIRWAY, REFER TO NOTE 3 FOR REMOVAL

CONCRETE PADS, REFER TO C-003 FOR DETAILS, PADS TO REMAIN AFTER REMOVAL OF TEMPORARY TANK

INSTALL RELOCATED EXISTING FMU, TO BE REMOVED AND SALVAGED AFTER TEMPORARY TANK HAS BEEN REMOVED

PROVIDE SIGNAGE LABELED "EMERGENCY POWER SHUTOFF LOCATED ON BUILDING"

NOTES:

1. STATE PERSONNEL SHALL HAVE ACCESS TO PERMANENT OR TEMPORARY DIESEL MOTOR FUEL AT ALL TIMES. NO PORTION OF THE TEMPORARY DIESEL MOTOR FUEL SYSTEM SHALL BE DEMOLISHED UNTIL THE PERMANENT FUEL FACILITY IS INSTALLED, TESTED AND ACCEPTED BY THE ENGINEER.
2. THE DEPARTMENT WILL SUPPLY DIESEL FUEL TO FILL THE TEMPORARY TANK UPON ITS ACCEPTANCE BY THE ENGINEER.
3. THE DEPARTMENT WILL EMPTY THE TEMPORARY DIESEL FUEL TANK AND THE CONTRACTOR SHALL TRANSPORT IT TO THE DEPARTMENT'S CENTRAL WAREHOUSE LOCATED AT 660 BROOK STREET, ROCKY HILL, CT 06067.
4. TEMPORARY TANK DIMENSIONS ARE BASED ON FIREGUARD. ACTUAL DIMENSIONS SHALL BE BASED ON THE APPROVED TANK DIMENSIONS.
5. REFER TO ED-002, ED-003, AND ED-004 FOR TEMPORARY FACILITIES ELECTRICAL PLANS.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

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Plotted Date: 1/18/2013

DESIGNER/DRAFTER: JSB
CHECKED BY: JWW
SCALE 1" = 5'
0 5' 10'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\FD_MSH_CIV_0022_0105_C002.dgn

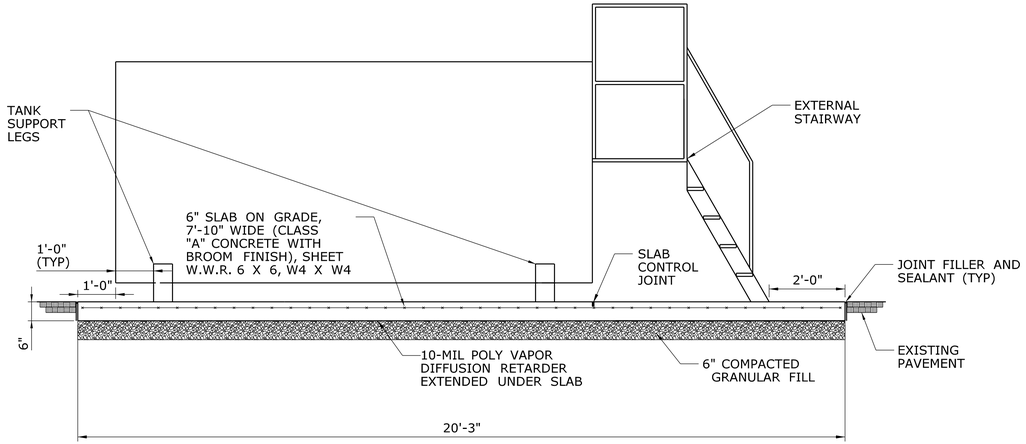
SIGNATURE/BLOCK:
OFFICE OF ENGINEERING
APPROVED BY:

PROJECT TITLE:
CANTERBURY MAINTENANCE FACILITY
TANK REPLACEMENT

TOWN: CANTERBURY

DRAWING TITLE: TEMPORARY FACILITIES PLAN

PROJECT NO. 22-105
DRAWING NO. C-002
SHEET NO. 05.02



SECTION A C-002
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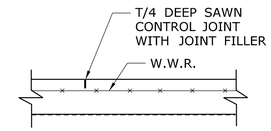
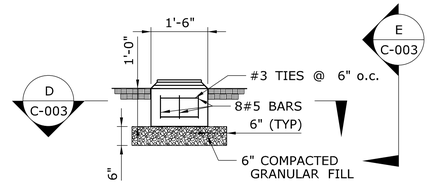


SLAB CONTROL JOINT
N.T.S.



SECTION B C-002
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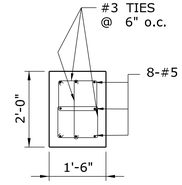
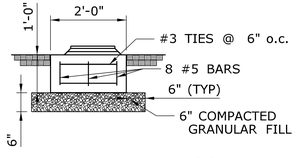


SECTION (TYP.) D C-003
SCALE ½"=1'-0"



SECTION E C-003
SCALE: ½" = 1'-0"

NOTES:

1. TEMPORARY TANK DIMENSIONS ARE BASED ON FIREGUARD. ACTUAL CONCRETE SLAB ON GRADE DIMENSIONS SHALL BE BASED ON THE APPROVED TANK DIMENSIONS AND EXTERNAL STAIRWAY DIMENSIONS.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

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Plotted Date: 1/18/2013

DESIGNER/DRAFTER: **JSB**
CHECKED BY: **JWW**
SCALE AS NOTED

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\FD_MSH_CIV_0022_0105_C003.dgn

SIGNATURE/ BLOCK:
OFFICE OF ENGINEERING
APPROVED BY:

PROJECT TITLE:
CANTERBURY MAINTENANCE FACILITY TANK REPLACEMENT

TOWN: **CANTERBURY**

DRAWING TITLE:
TEMPORARY FACILITIES DETAILS

PROJECT NO. **22-105**
DRAWING NO. **C-003**
SHEET NO. **05.03**

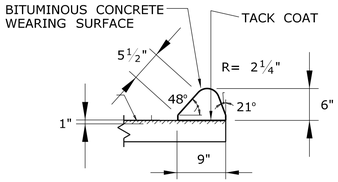
LEGEND

GRAVEL MULCH

ESTABLISH TURF

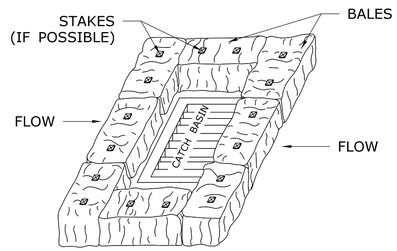
REMOVE TURF/ BITUMINOUS AND ESTABLISH BITUMINOUS

REMOVE CONCRETE/ BITUMINOUS AND REPLACE WITH BITUMINOUS



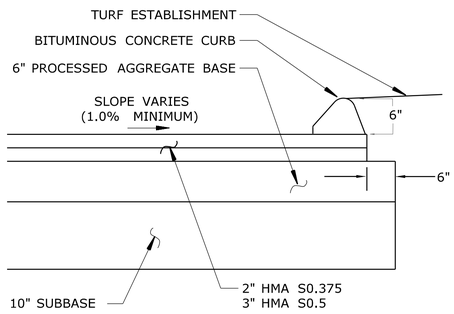
6" BITUMINOUS CONCRETE LIP CURBING

NOT TO SCALE



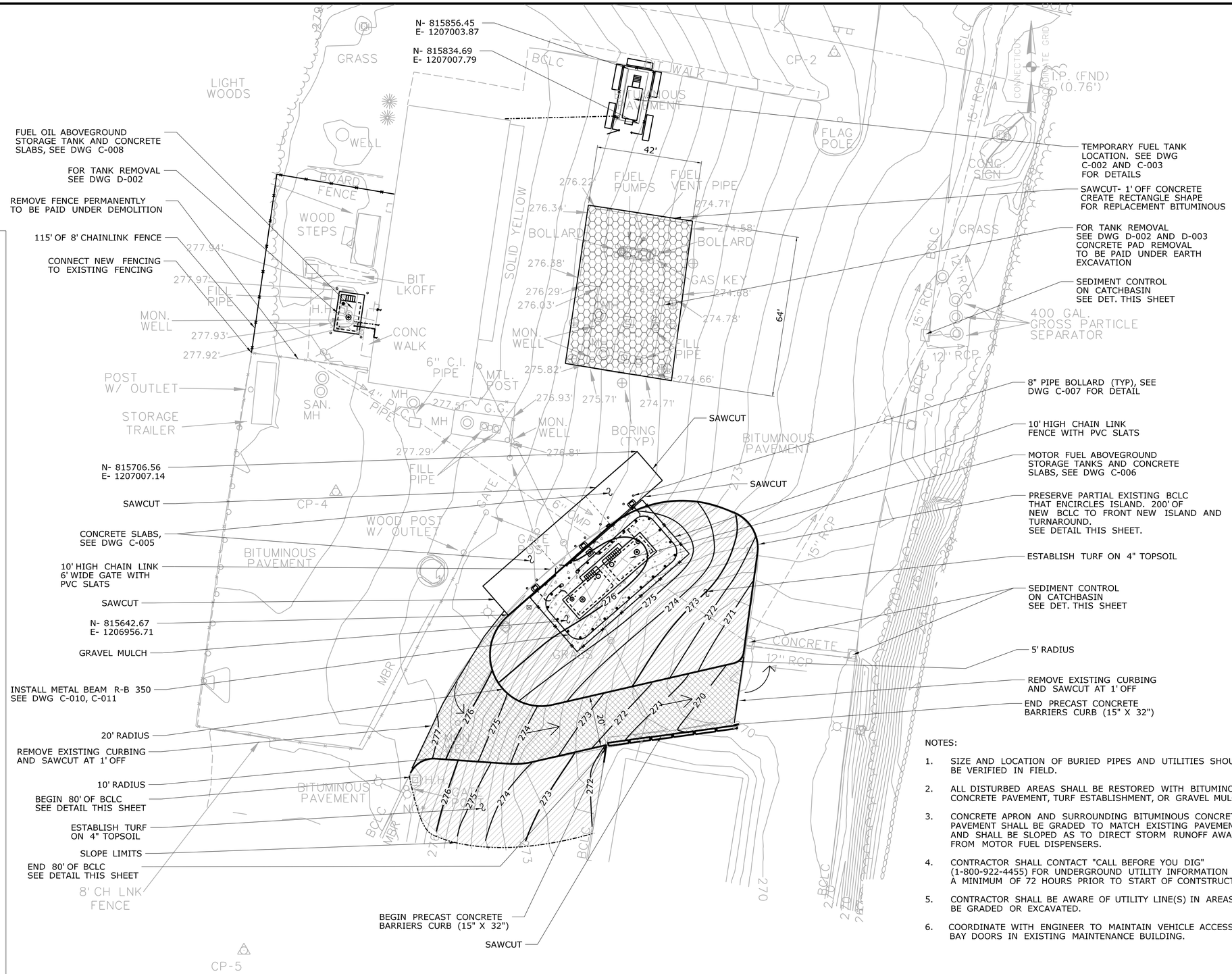
HAYBALES- INLET PROTECTION

NOT TO SCALE



BITUMINOUS CONCRETE PAVEMENT

NOT TO SCALE



NOTES:

1. SIZE AND LOCATION OF BURIED PIPES AND UTILITIES SHOULD BE VERIFIED IN FIELD.
2. ALL DISTURBED AREAS SHALL BE RESTORED WITH BITUMINOUS CONCRETE PAVEMENT, TURF ESTABLISHMENT, OR GRAVEL MULCH.
3. CONCRETE APRON AND SURROUNDING BITUMINOUS CONCRETE PAVEMENT SHALL BE GRADED TO MATCH EXISTING PAVEMENT AND SHALL BE SLOPED AS TO DIRECT STORM RUNOFF AWAY FROM MOTOR FUEL DISPENSERS.
4. CONTRACTOR SHALL CONTACT "CALL BEFORE YOU DIG" (1-800-922-4455) FOR UNDERGROUND UTILITY INFORMATION A MINIMUM OF 72 HOURS PRIOR TO START OF CONTSTRUCTION.
5. CONTRACTOR SHALL BE AWARE OF UTILITY LINE(S) IN AREAS TO BE GRADED OR EXCAVATED.
6. COORDINATE WITH ENGINEER TO MAINTAIN VEHICLE ACCESS TO BAY DOORS IN EXISTING MAINTENANCE BUILDING.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

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Plotted Date: 1/22/2013

DESIGNER/DRAFTER: ME

CHECKED BY: SK

SCALE IN FEET 0 20 40

SCALE 1"=20'

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\FD_MSH_CIV_0022_0105_C004.dgn

SIGNATURE/ BLOCK:

OFFICE OF ENGINEERING

APPROVED BY:

PROJECT TITLE:

CANTERBURY MAINTENANCE FACILITY TANK REPLACEMENT

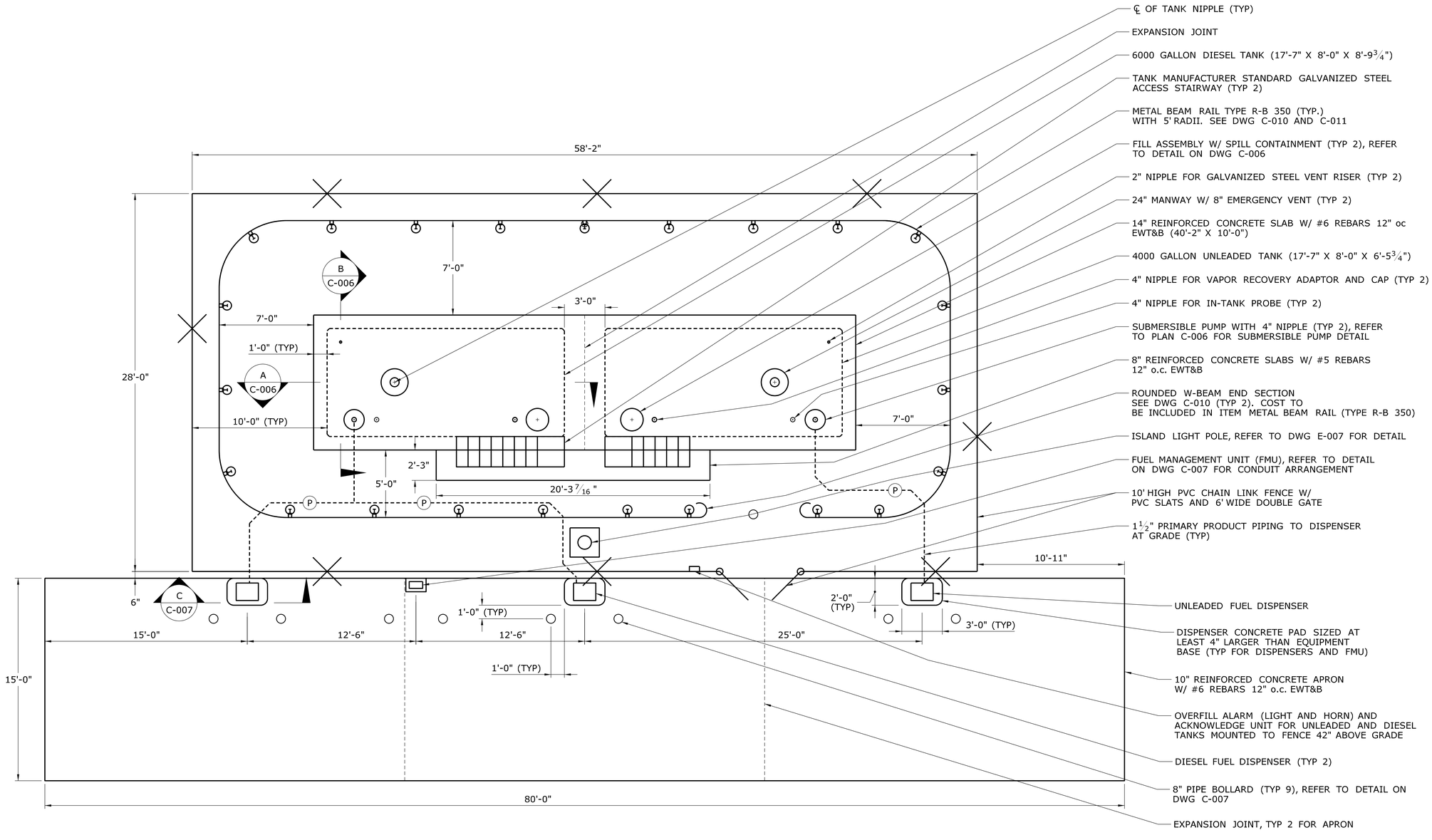
TOWN: **CANTERBURY**

DRAWING TITLE: **SITE PLAN**

PROJECT NO. **22-105**

DRAWING NO. **C-004**

SHEET NO. **05.04**



NOTES:

(P) PRIMARY PRODUCT PIPING

1. THE DESIGNED TANK DIMENSIONS ARE BASED ON CONVAULT. ACTUAL SLAB DIMENSIONS SHALL BE SIZED ON THE APPROVED TANK DIMENSIONS.
2. THE TANK NIPPLE ARRANGEMENT IS BASED ON CONVAULT TANKS. ACTUAL TANK NIPPLE ARRANGEMENT SHALL BE DESIGNED AS NECESSARY BASED ON THE APPROVED TANK MANUFACTURER.
3. REFER TO PLAN C-006 FOR MOTOR FUEL TANK AND PLAN C-007 FOR MOTOR FUEL ISLAND DETAILS.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

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Plotted Date: 1/18/2013

DESIGNER/DRAFTER: JSB
CHECKED BY: JWW
SCALE: 1/4" = 1'-0"

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

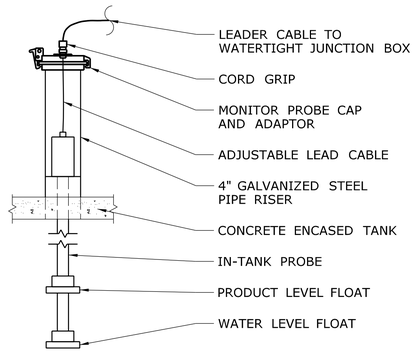
Filename: ...\FD_MSH_CIV_0022_0105_C005.dgn

SIGNATURE/ BLOCK:
OFFICE OF ENGINEERING
APPROVED BY:

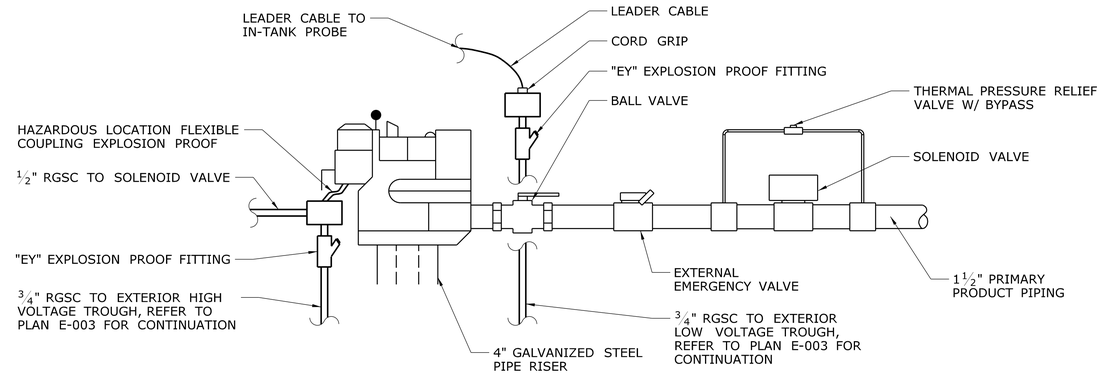
PROJECT TITLE:
CANTERBURY MAINTENANCE FACILITY TANK REPLACEMENT

TOWN: CANTERBURY
DRAWING TITLE: MOTOR FUEL ISLAND PLAN

PROJECT NO. 22-105
DRAWING NO. C-005
SHEET NO. 05.05



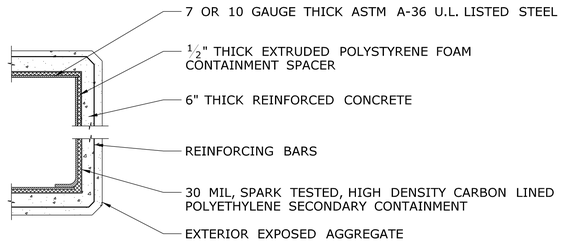
IN-TANK PROBE DETAIL



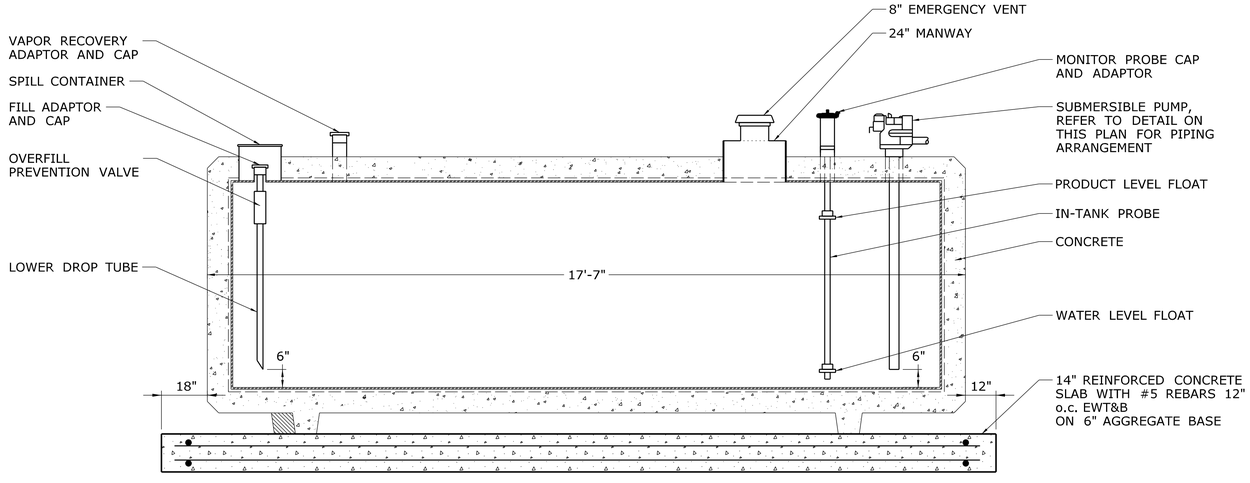
SUBMERSIBLE PUMP DETAIL

NOTES:

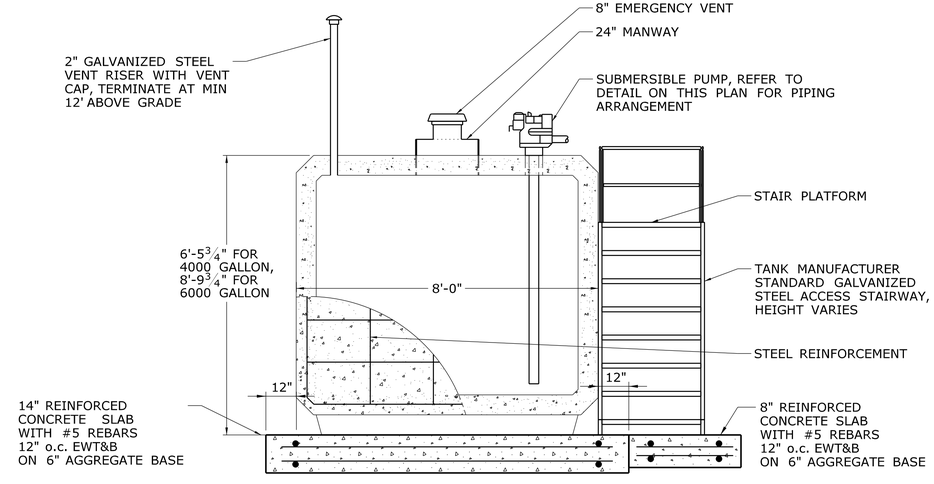
1. THE DESIGNED TANK DIMENSIONS ARE BASED ON CONVAULT. ACTUAL SLAB DIMENSIONS SHALL BE SIZED BASED ON THE APPROVED TANK DIMENSIONS.
2. THE TANK NIPPLE ARRANGEMENT IS BASED ON CONVAULT TANKS. ACTUAL TANK NIPPLE ARRANGEMENT SHALL BE DESIGNED AS NECESSARY BASED ON THE APPROVED TANK MANUFACTURER.
3. ALL CONDUITS SHALL BE PROVIDED WITH EXPLOSION PROOF FITTINGS AND SEALED AS REQUIRED IN ACCORDANCE WITH NFPA 70.



TANK DETAILS



SIDE VIEW A — C-005



END VIEW B — C-005

MOTOR FUEL ABOVEGROUND STORAGE TANK DETAIL

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

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Plotted Date: 1/18/2013

DESIGNER/DRAFTER: JSB
CHECKED BY: JWW
NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\FD_MSH_CIV_0022_0105_C006.dgn

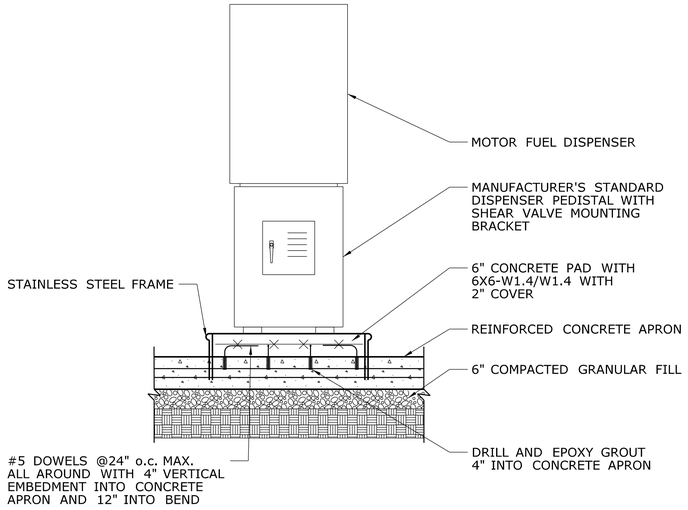
SIGNATURE/BLOCK:
OFFICE OF ENGINEERING
APPROVED BY:

PROJECT TITLE:
CANTERBURY MAINTENANCE FACILITY TANK REPLACEMENT

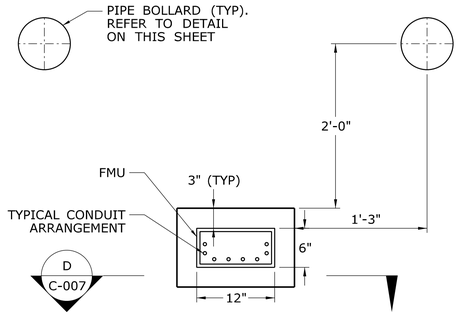
TOWN: CANTERBURY

DRAWING TITLE: MOTOR FUEL TANK DETAILS

PROJECT NO. 22-105
DRAWING NO. C-006
SHEET NO. 05.06



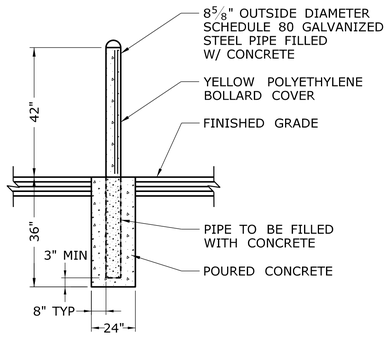
DISPENSER PAD AND APRON DETAIL — C / C-005



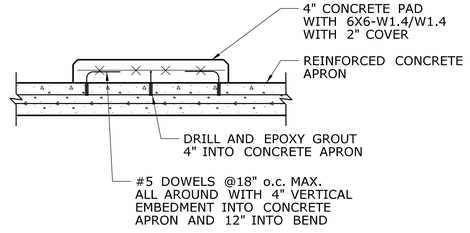
FUEL MANAGEMENT UNIT (FMU) SETTING DETAIL

NOTES:

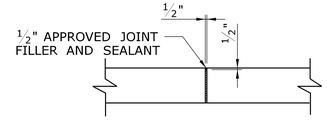
1. FMU SHALL BE SECURED TO CONCRETE WITH STAINLESS STEEL HARDWARE. SEAL BASE OF FMU TO CONCRETE WITH SILICONE TO FORM A WATERTIGHT SEAL.



PIPE BOLLARD INSTALLATION DETAIL



FMU PAD SECTION — D / C-007



SLAB EXPANSION JOINT

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

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Plotted Date: 1/18/2013

DESIGNER/DRAFTER: JSB
CHECKED BY: JWW
NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\FD_MSH_CIV_0022_0105_C007.dgn

SIGNATURE/BLOCK: OFFICE OF ENGINEERING
APPROVED BY:

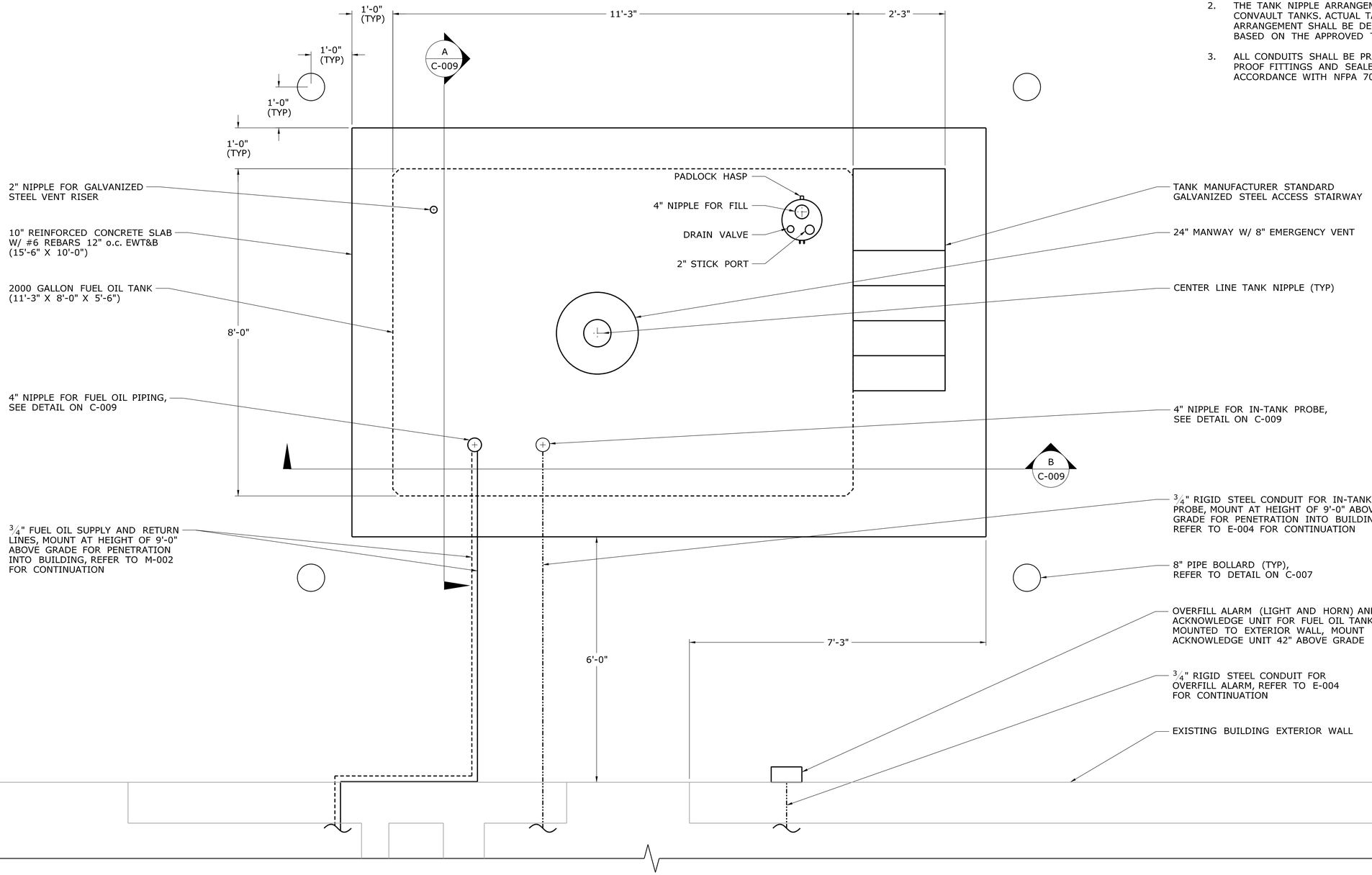
PROJECT TITLE: CANTERBURY MAINTENANCE FACILITY TANK REPLACEMENT

TOWN: CANTERBURY
DRAWING TITLE: MOTOR FUEL ISLAND DETAILS

PROJECT NO. 22-105
DRAWING NO. C-007
SHEET NO. 05.07

NOTES:

1. THE DESIGNED TANK DIMENSIONS ARE BASED ON CONVAULT. ACTUAL SLAB DIMENSIONS SHALL BE SIZED ON THE APPROVED TANK DIMENSIONS.
2. THE TANK NIPPLE ARRANGEMENT IS BASED ON CONVAULT TANKS. ACTUAL TANK NIPPLE ARRANGEMENT SHALL BE DESIGNED AS NECESSARY BASED ON THE APPROVED TANK MANUFACTURER.
3. ALL CONDUITS SHALL BE PROVIDED WITH EXPLOSION PROOF FITTINGS AND SEALED AS REQUIRED IN ACCORDANCE WITH NFPA 70.



REV.	DATE	REVISION DESCRIPTION	SHEET NO.

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Plotted Date: 1/18/2013

DESIGNER/DRAFTER: JSB
CHECKED BY: JWW
SCALE: 3/4" = 1'-0"

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\FD_MSH_CIV_0022_0105_C008.dgn

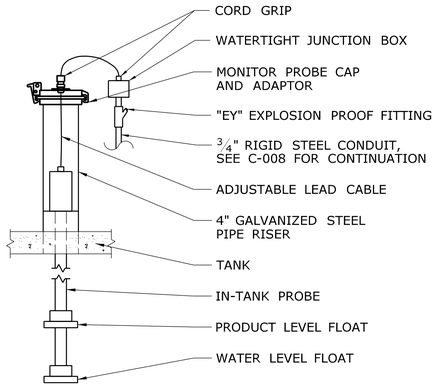
SIGNATURE/ BLOCK:
OFFICE OF ENGINEERING
APPROVED BY:

PROJECT TITLE:
CANTERBURY MAINTENANCE FACILITY TANK REPLACEMENT

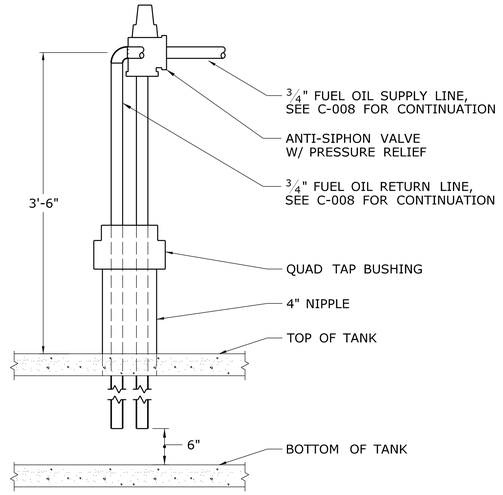
TOWN: CANTERBURY

DRAWING TITLE:
FUEL OIL TANK PLAN

PROJECT NO. 22-105
DRAWING NO. C-008
SHEET NO. 05.08



IN-TANK PROBE DETAIL



FUEL OIL PRODUCT PIPING DETAIL

NOTES:

1. THE DESIGNED TANK DIMENSIONS ARE BASED ON CONVAULT. ACTUAL SLAB DIMENSIONS SHALL BE SIZED BASED ON THE APPROVED TANK DIMENSIONS.
2. THE TANK NIPPLE ARRANGEMENT IS BASED ON CONVAULT TANKS. ACTUAL TANK NIPPLE ARRANGEMENT SHALL BE DESIGNED AS NECESSARY BASED ON THE APPROVED TANK MANUFACTURER.
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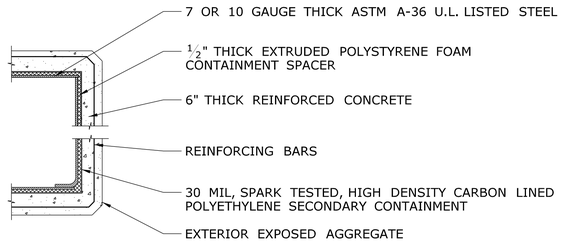
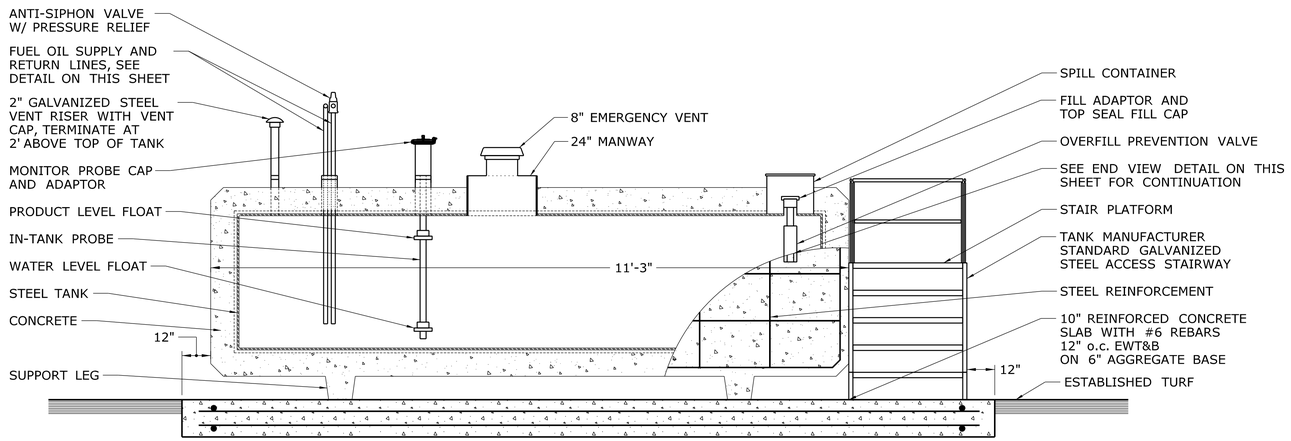
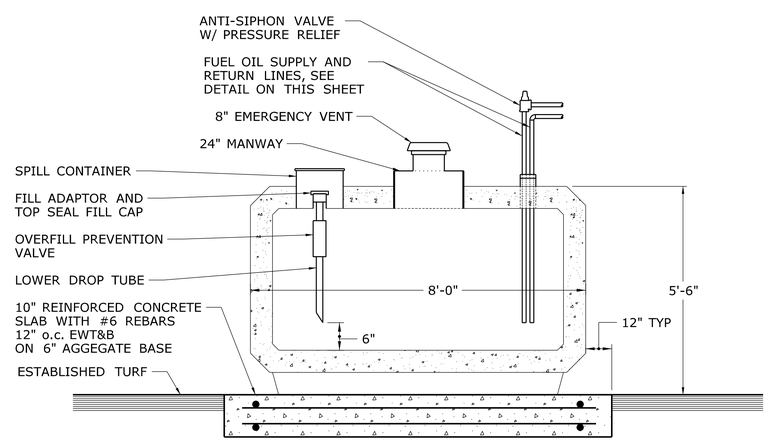


TANK DETAILS



SIDE VIEW A / C-005



END VIEW B / C-005

FUEL OIL ABOVEGROUND STORAGE TANK DETAIL

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 1/18/2013

DESIGNER/DRAFTER: JSB
CHECKED BY: JWW
NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\FD_MSH_CIV_0022_0105_C009.dgn

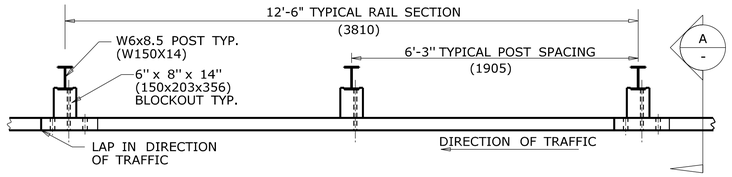
SIGNATURE/BLOCK:
OFFICE OF ENGINEERING
APPROVED BY:

PROJECT TITLE:
CANTERBURY MAINTENANCE FACILITY TANK REPLACEMENT

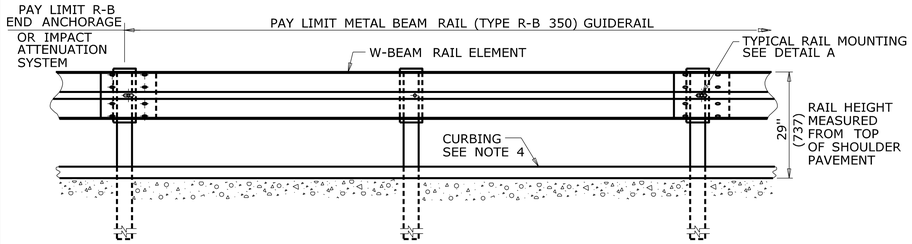
TOWN: CANTERBURY

DRAWING TITLE: FUEL OIL TANK DETAILS

PROJECT NO. 22-105
DRAWING NO. C-009
SHEET NO. 05.09

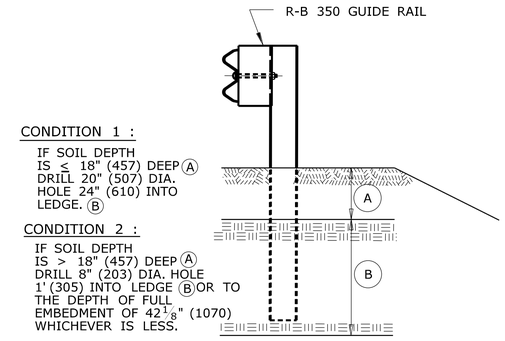


PLAN

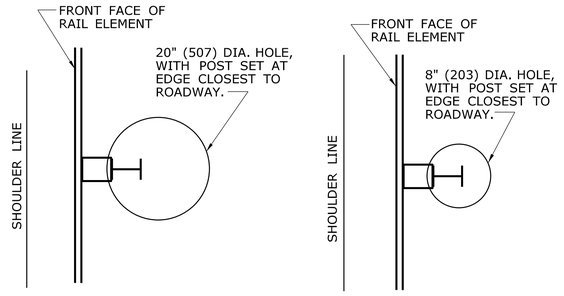


ELEVATION

METAL BEAM RAIL (TYPE R-B 350)



ELEVATION
(SEE NOTE 8)



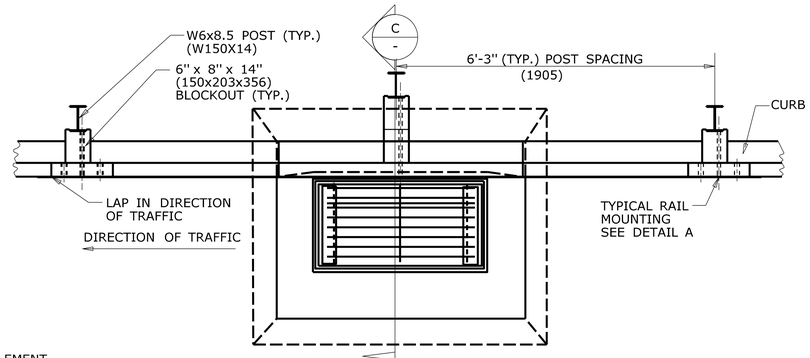
PLAN
CONDITION 1
(SEE NOTE 8)

PLAN
CONDITION 2
(SEE NOTE 8)

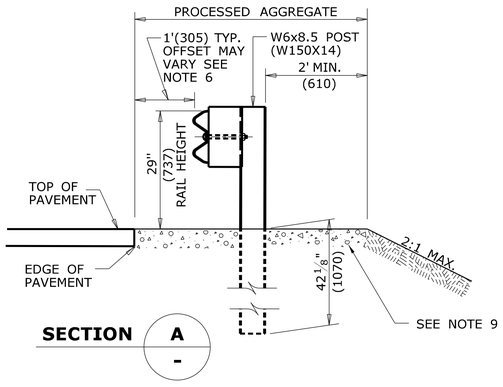
DRILLING IN ROCK FOR GUIDERAIL POSTS

GENERAL NOTES:

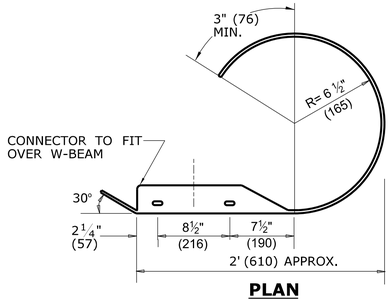
1. SEE DWG C-011 FOR HARDWARE AND DELINEATOR DETAILS.
2. MAXIMUM DESIGN DEFLECTION FOR R-B 350 GUIDERAIL AT THE STANDARD POST SPACING OF 6'-3"(1905) IS 4'-3"(1295). DEFLECTION REQUIREMENT IS MEASURED FROM THE BACK OF POST TO THE FACE OF OBJECT.
3. FOR CURVES WITH RADII OF 150'(45.7m) OR LESS, ALL RAIL ELEMENTS SHALL BE SHOP FABRICATED TO THE PROPER RADIUS AND GALVANIZED AFTER FABRICATION. RADIUS RAIL WHEN REQUIRED AND NOTED ON THE PLANS, IS INCLUDED IN THE PAY ITEM FOR GUIDERAIL.
4. RAIL HEIGHT WITH CURBING SHALL BE MEASURED FROM THE TOP OF PAVEMENT. ON HIGH SPEED ROADWAYS (≥45mph 72.4kph), 4"(102) CURBING MAY BE USED IN CONJUNCTION WITH GUIDERAIL AND THE RAIL ELEMENT SHALL BE PLACED FLUSH WITH THE FACE OF CURB. ON LOW SPEED ROADWAYS (<45mph 72.4kph), 6"(152) CURBING MAY BE USED IN CONJUNCTION WITH GUIDERAIL AND THE RAIL ELEMENT SHALL BE PLACED A MAXIMUM OF 9"(229) BEHIND THE FACE OF CURB.
5. THREE BLOCKOUTS MAY BE USED FOR ONE POST ONLY. TWO BLOCKOUTS MAY BE USED FOR A SERIES OF POSTS. THE COST OF ADDITIONAL BLOCKOUTS AND LONGER BOLTS SHALL BE INCLUDED IN THE BID PRICE PER FOOT OF GUIDERAIL. EXTRA BLOCKOUTS AT TRANSITION TO BRIDGE PARAPETS SHOULD BE AVOIDED.
6. W-BEAM GUIDERAIL MAY BE PLACED 1'(305) OR MORE FROM THE EDGE OF PAVEMENT ONLY ON SLOPES 10:1 OR FLATTER AND WITHOUT CURBING. IF THE RAIL IS INSTALLED WITHIN 2'(610) OF THE EDGE OF PAVEMENT, THE RAIL HEIGHT IS MEASURED FROM THE SHOULDER SLOPE EXTENDED TO THE RAIL. IF THE RAIL IS INSTALLED BEYOND 2'(610) FROM THE EDGE OF PAVEMENT, THE RAIL HEIGHT IS MEASURED FROM THE GROUND DIRECTLY BELOW THE RAIL.
7. ALL R-B 350 GUIDERAIL TYPES INSTALLED ON EXPRESSWAYS AND RAMPS SHALL USE CLASS B, TYPE-II (10 GAUGE) W-BEAM RAIL ELEMENTS.
8. 20" (507) DIA. EXCAVATED HOLE SHALL BE BACKFILLED WITH SUITABLE MATERIAL, OR GRANULAR FILL COMPACTED IN 6" (150) LIFTS BEFORE DRIVING POST OR POSTS MAY BE SET IN EXCAVATED HOLE AND BACKFILLED WITH CONTROLLED LOW STRENGTH MATERIAL (CLSM). 8" (203) DIA. HOLE SHALL BE BACKFILLED WITH SUITABLE MATERIAL.
9. AS DIRECTED BY THE ENGINEER AND WHERE PAVEMENT FOR RAILING IS NOT BEING INSTALLED, A MIN. 6" DEPTH OF PROCESSED AGGREGATE SHALL BE INSTALLED FROM THE PAVEMENT EDGE OR BACK OF CURB TO A MINIMUM OF 2'(610) BEHIND THE GUIDERAIL POST AND COMPACTED IN 6" (150) LIFTS.
10. MINIMUM RAIL HEIGHT FOR NEW CONSTRUCTION SHALL BE 29" (737) ± 1" (25).



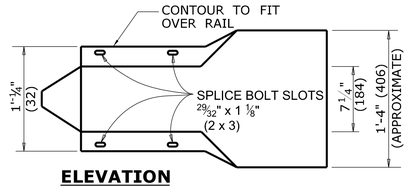
PLAN



NO CURB APPLICATION

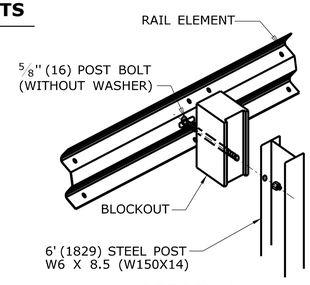


PLAN

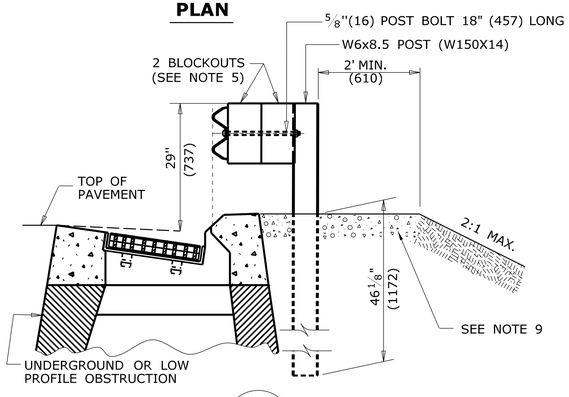


ELEVATION

ROUNDED W-BEAM END SECTION



DETAIL A
RAIL MOUNTING



MULTIPLE BLOCKOUT APPLICATION (MAY BE USED TO AVOID UNDERGROUND OR LOW PROFILE OBSTRUCTION)

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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Plotted Date: 1/18/2013

DESIGNER/DRAFTER: ME
CHECKED BY: SK
SCALE AS NOTED

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

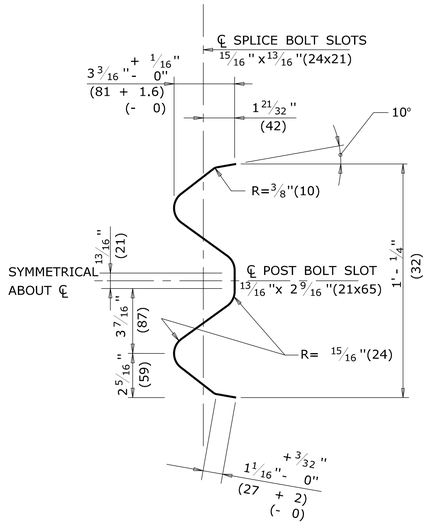
Filename: ...\FD_MSH_CIV_0022_0105_C010.dgn

SIGNATURE/BLOCK: OFFICE OF ENGINEERING
APPROVED BY: DATE:

PROJECT TITLE: CANTERBURY MAINTENANCE FACILITY TANK REPLACEMENT

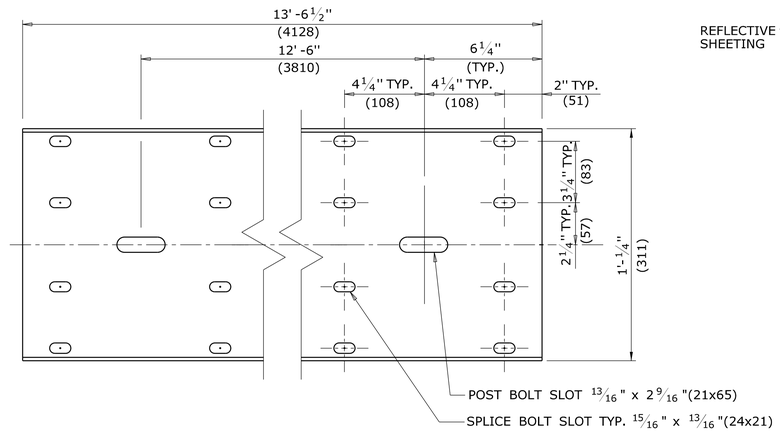
TOWN: CANTERBURY
DRAWING TITLE: METAL BEAM RAIL MISCELLANEOUS DETAILS

PROJECT NO. 22-105
DRAWING NO. C-010
SHEET NO. 05.10

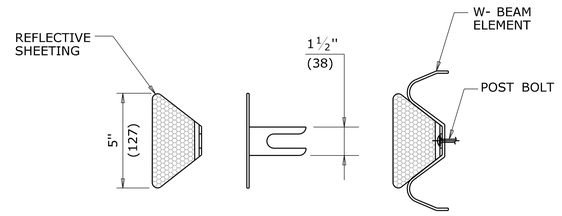


SELECTION THRU RAIL ELEMENT END VIEW

NOTE: ALL DIMENSIONS SUBJECT TO MANUFACTURING TOLERANCES



TYPICAL W-BEAM RAIL ELEMENT CLASS A, TYPE II



DELINEATOR DETAIL

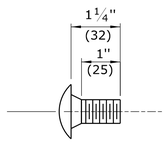
GENERAL NOTES:

1. NEW R-B 350 GUIDERAIL INCLUDING SYSTEMS, ANCHORS AND TRANSITIONS INSTALLED ON EXPRESSWAYS AND RAMPS SHALL USE CLASS B TYPE II (10 GAUGE) W-BEAM RAIL ELEMENTS.
2. W6x9 (W150x14) POSTS MAY BE USED IN PLACE OF W6 x 8.5(W150x13) POSTS.
3. W8x13 (W200x19) POSTS, 7'-6"(2286) LONG, ARE USED WITH TRANSITIONS TO VERTICAL OR SAFETY SHAPE PARAPETS (POSTS 1 AND 2) AND SYSTEM 6.
4. W6x8.5 (W150x13) POSTS, 6'-0"(1829) LONG, ARE USED WITH TRANSITIONS TO VERTICAL OR SAFETY SHAPE PARAPETS (POSTS 3 THOUGH 6), MD-B 350, SYSTEM 5 & 5A, AND STANDARD R-B 350 GUIDERAIL.

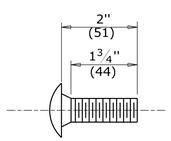
DELINEATOR NOTES:

1. DELINEATORS SHALL BE FORMED OF .080 POLY-CARBONATE OR .080 SHEET ALUMINUM IN ACCORDANCE WITH M.18.13.
2. REFLECTIVE SHEETING SHALL CONFORM TO M.18.09.2.
3. DELINEATORS SHALL BE INSTALLED ON THE POST CLOSEST TO THE DESIGNATED SPACING.
4. REFLECTIVE SHEETING SHALL BE WHITE EXCEPT ON THE LEFT SIDE OF DIVIDED STREETS, HIGHWAYS, RAMPS, AND ONE WAY ROADS IN THE DIRECTION OF TRAVEL WHERE IT SHALL BE YELLOW.
5. INSTALL DELINEATORS ON RAIL THAT IS PARALLEL TO AND NOT GREATER THAN 6'(1829) FROM THE EDGE OF THE ROADWAY. A MINIMUM OF THREE DELINEATORS MUST BE INSTALLED ON ANY RUN OF RAIL.

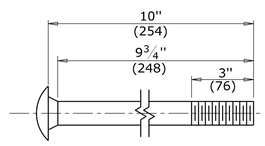
DELINEATOR SPACING:
RADIUS ≥ 300'(91440) - SPACE EVERY 50'(15.24m)
RADIUS < 300'(91440) - SPACE EVERY 25'(7.62m)



W-BEAM SPLICE BOLT DETAIL

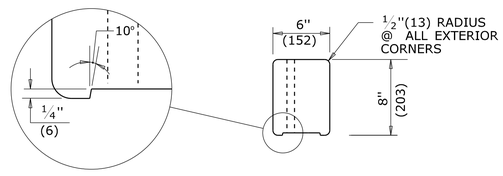


POST BOLT DETAIL FOR R-B 350 SYSTEM 6 RUBRAIL

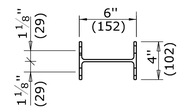


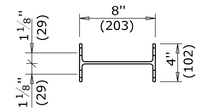
POST BOLT DETAIL FOR R-B 350 AND MD-B 350 GUIDERAIL

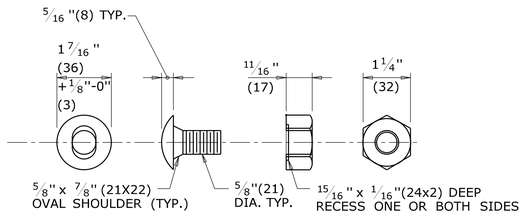
(UNTHREADED PORTION NOT TO EXCEED 6 3/4"(171))



PLAN



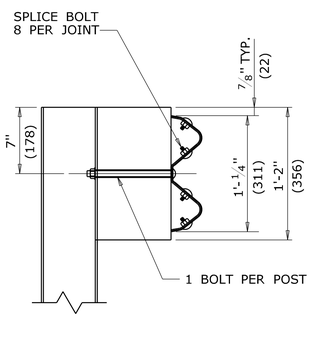




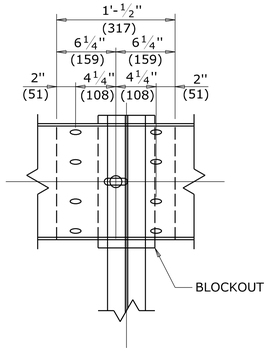
BUTTONHEAD BOLT

HEX NUT

NOTE: AFTER GALVANIZING, THE NUT SHALL BE FREE RUNNING ON THE BOLT. DIAMETER SHOWN IS TYPICAL FOR ALL GUIDERAIL BOLTS. SEE DETAILS ABOVE FOR SPECIFIC LENGTHS.



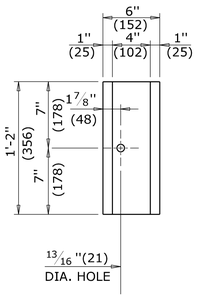
SECTION



ELEVATION

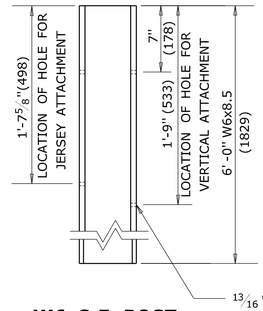
LAP DETAIL

NOTE:
LAP RAIL SECTION IN DIRECTION OF TANKS

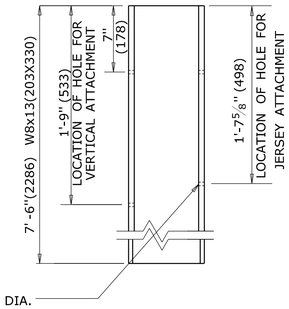


ELEVATION

R-B 350 PLASTIC BLOCKOUT DETAIL



W6x8.5 POST (W150x13) 6'-0"(1829) LONG



W8x13 POST (W200x19) 7'-6"(2286) LONG

BOLT HOLE LAYOUT FOR W8x13(W200x19) AND W6x8.5 (W150x13)UNIFORM POST

(REFER TO GENERAL NOTES)

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
-	-	-	-
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DESIGNER/DRAFTER: ME
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STATE OF CONNECTICUT
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SIGNATURE/ BLOCK:
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PROJECT TITLE:
CANTERBURY MAINTENANCE FACILITY TANK REPLACEMENT

TOWN: CANTERBURY

DRAWING TITLE:
METAL BEAM RAIL MISCELLANEOUS DETAILS

PROJECT NO. 22-105
DRAWING NO. C-011
SHEET NO. 05.11