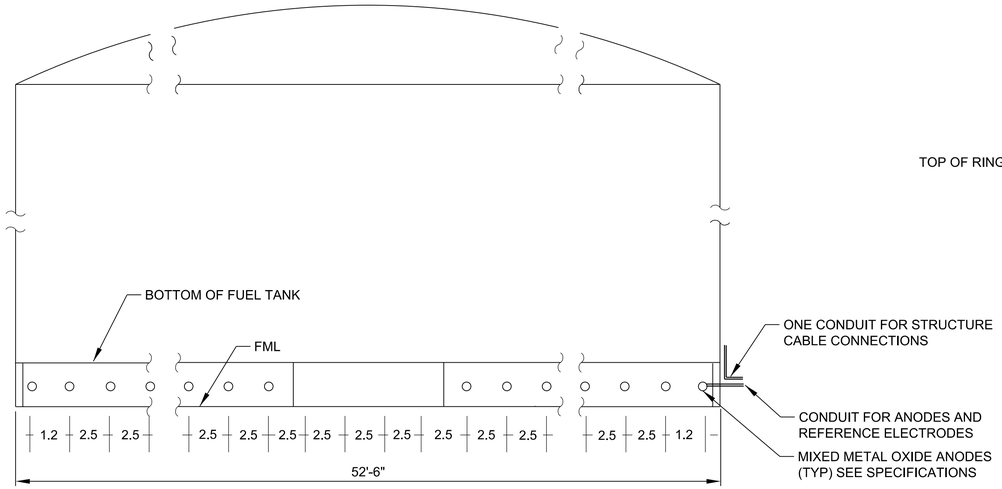


SIDE VIEW

NOTES:
1. ANODES, REFERENCE ELECTRODES SHALL BE LOCATED BENEATH THE FUEL TANK AS SHOWN.

2. ANODES SHALL BE LOCATED AT THE CENTER LINE OF THE SAND TO JUST ABOVE THE LINER BENEATH THE FUEL TANK.

3. SEE DETAIL 1 ON SHEET ED.04.

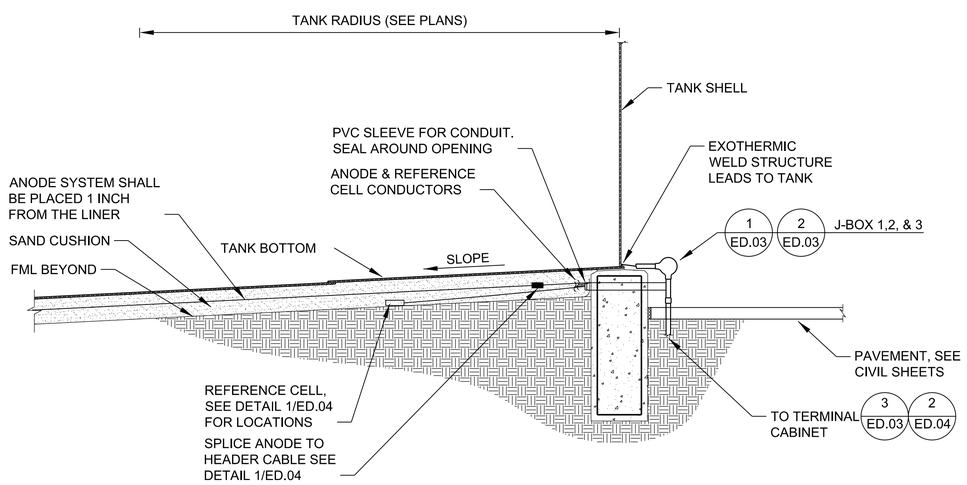
ON GRADE TANKS CATHODIC PROTECTION

SCALE: NONE

DESIGNER NOTES:

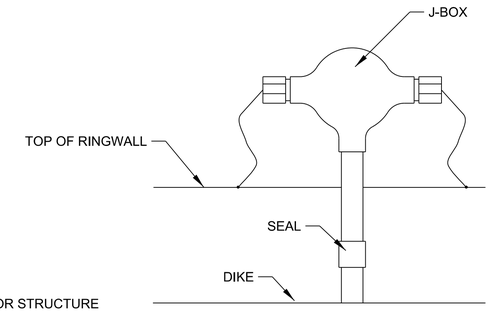
1. ENSURE ALL CATHODICALLY PROTECTED PIPING IS ISOLATED FROM THE TANK WITH AN ISOLATION FLANGE.

2. ALL PIPING WITH ELECTRICAL COMPONENTS CONNECTED TO THE ELECTRICAL GROUND SYSTEM SHALL BE ISOLATED FROM THE TANK.



PARTIAL TANK SECTION

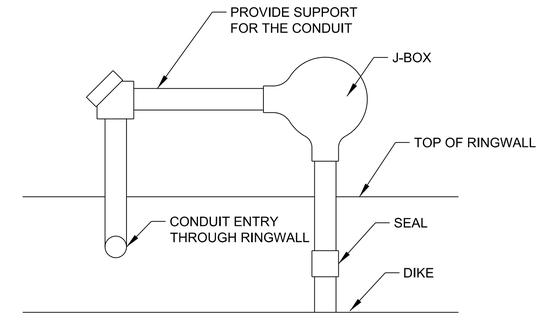
SCALE: NONE



J-BOX 1

1 ED.03 | ED.03

SCALE: NONE

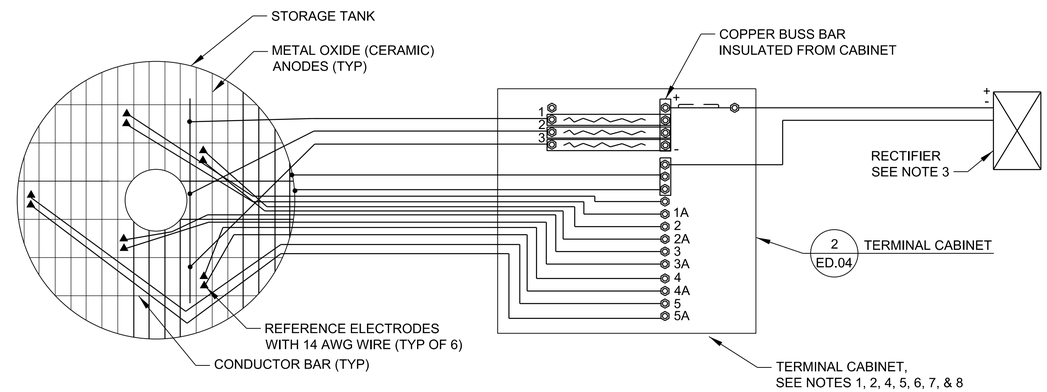


NOTE: ONE J-BOX IS FOR THE ANODE WIRES AND THE OTHER J-BOX IS FOR THE REFERENCE WIRES

J-BOX 2 & 3

2 ED.03 | ED.03

SCALE: NONE



NOTES:

1. PROVIDE ETCHED LABELS BY EACH TERMINAL INDICATING THE NUMBER AND/OR FUNCTION E.G. ANODE, REFERENCE CELL 1, RECTIFIER POS, ETC.

2. ALL TERMINALS SHALL BE OF THE SOLDERLESS TYPE. WIRE SHALL HAVE RING OR LUG TERMINATIONS.

3. SIZE RECTIFIER PER TANK SIZE AND NUMBER OF ANODES.

4. RUN 2#8 AWG, HMWPE CABLES IN 0.75 INCH RIGID STEEL CONDUIT FOR THE TWO STRUCTURE CONNECTIONS TO THE TANK FROM THE TERMINAL CABINET. SEE J-BOX 1 DETAIL 1, THIS SHEET.

5. ANODE CABLES SHALL BE NO. 6 AWG, HMWPE INSULATION. RUN 3#6 IN 0.75 INCH COATED RIGID STEEL CONDUIT BETWEEN TANK AND TERMINAL CABINET. SEE J-BOX 2 & 3 DETAIL 2, THIS SHEET.

6. REFERENCE CELL CABLES SHALL BE RUN IN 1" COATED RIGID STEEL CONDUIT (10#14) BETWEEN TANK AND TERMINAL CABINET. SEE J-BOX 2 &3 DETAIL 2, THIS SHEET.

7. RECTIFIER UNIT NEGATIVE CABLE AND POSITIVE CABLE SHALL BE NO. 6 AWG, HMWPE INSULATION. RUN 2#6, 0.75 INCH COATED RIGID STEEL CONDUIT BETWEEN RECTIFIER AND TERMINAL CABINET.

8. TERMINAL CABINET SHALL HAVE 0.01 OHM, 10 AMP SHUNTS PROVIDED FOR EACH ANODE CONNECTION.

9. TERMINAL CABINET SHALL BE LOCATED OUTSIDE OF THE CONTAINMENT BASIN.

10. ALL UNDERGROUND CONNECTIONS SHALL BE ENCASED IN A WATERTIGHT SPLICE.

11. SEE CONTRACTOR OPTION NOTE ON SHEET ED.04.

CERAMIC ANODE SYSTEM BLOCK DIAGRAM IMPRESSED CURRENT CATHODIC PROTECTION AREA UNDER STORAGE TANK

3 ED.03 | ED.03

SCALE: NONE

SYM	DESCRIPTION	DATE	APPR

NAVFAC

US ARMY CORPS OF ENGINEERS OMAHA DISTRICT

SEAL

A/E INFO

APPROVED

FOR COMMANDER NAVFAC

ACTIVITY

SATISFACTORY TO

DES MSO | DRW MHK | CHK WVB

SUBMITTED BY:

DATE: APRIL 2015

NAVAL FACILITIES ENGINEERING COMMAND – ALANTIC

DOD STANDARD DESIGN AW78-24-27

FUEL TANKS WITH FIXED ROOFS ABOVEGROUND VERTICAL STEEL

CATHODIC PROTECTION LAYOUT & TYPICAL DETAILS

SCALE: AS NOTED

EPROJECT NO.: XXXXX

CONSTR. CONTR. NO. XXXXX

NAVFAC DRAWING NO. XXXXX

SHEET 26 OF 57

ED.03

DRAWFORM REVISION: 10 MAY 2014