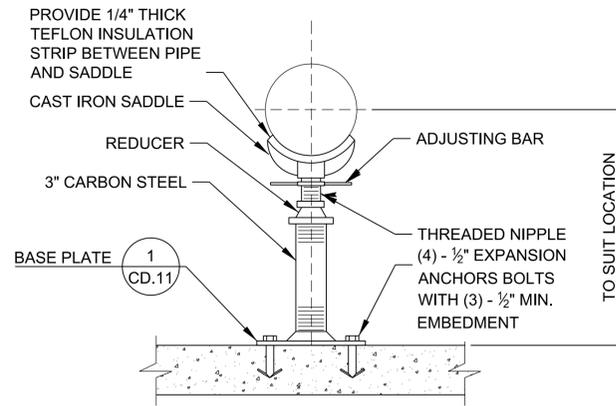
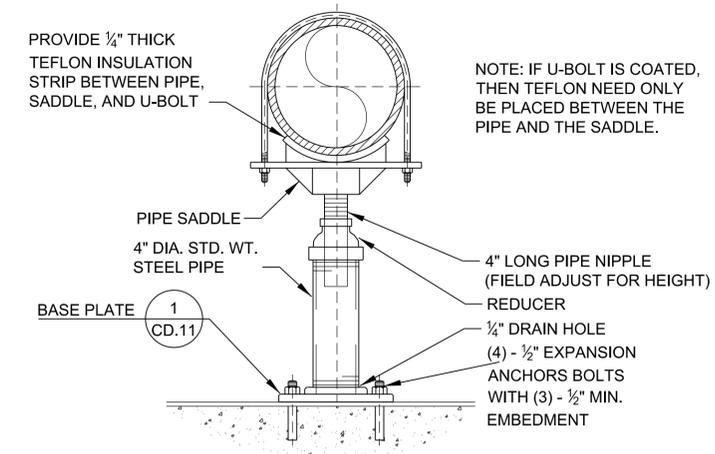


DESIGNER NOTES:  
1. OTHER PIPE SUPPORTS AND SUPPORT LOCATIONS SHALL BE CALCULATED BY A PIPE STRESS ANALYSIS AND HYDRAULIC TRANSIENT COMPUTATIONS.



ADJUSTABLE PIPE SADDLE SUPPORT DETAIL (PS-1)

SCALE: NONE

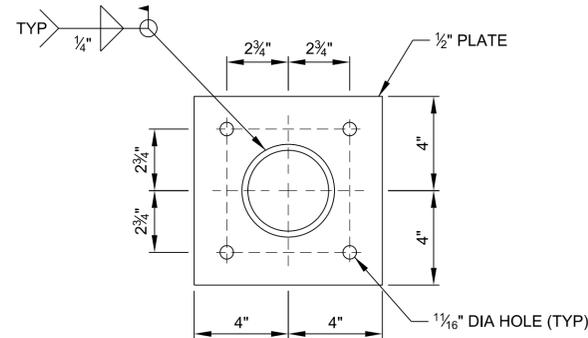


ADJUSTABLE PIPE SUPPORT DETAIL (PS-2)

SCALE: NONE

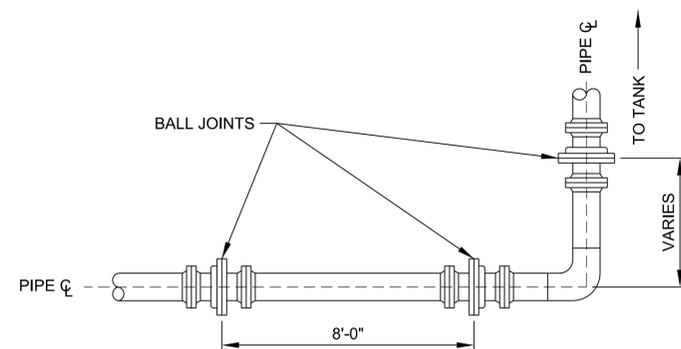
TYPICAL EXPANSION LOOP

SCALE: NONE



BASE PLATE

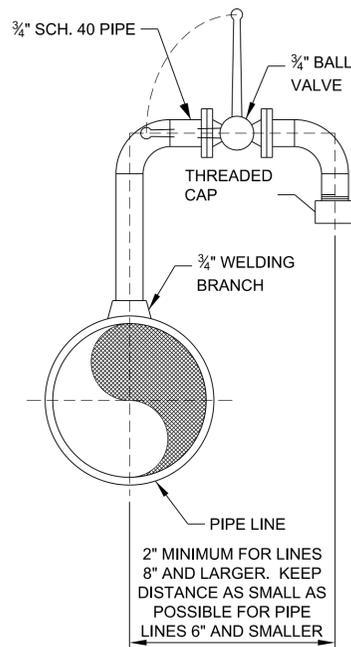
SCALE: NONE



FLEXIBLE BALL JOINTS

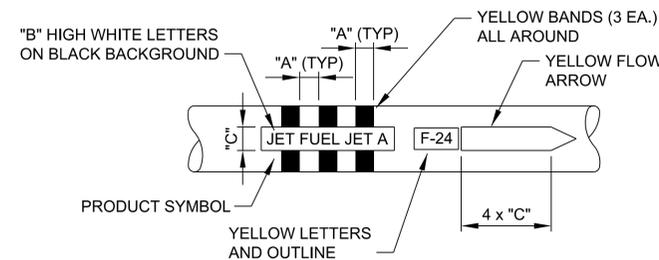
SCALE: NONE

DESIGNER NOTES:  
1. DISTANCE TO THIRD BALL JOINT AFTER THE ELBOW SHOULD BE AS LONG AS PIPING LAYOUT ALLOWS WHILE MINIMIZING DROOP, BUT NOT TO EXCEED 8 FEET OR MAXIMUM ALLOWABLE PIPE SUPPORT DISTANCE.



MANUAL AIR VENT

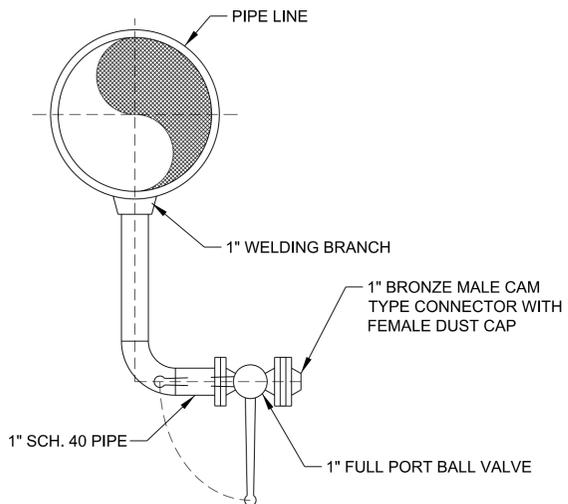
SCALE: NONE



DESIGNER NOTES:  
THE EXAMPLE MARKINGS SHOWN ARE FOR JET A TURBINE FUEL, FOR OTHER FUEL TYPES, REFER TO MIL-STD-161G.

PRODUCT FLOW SYMBOL DETAIL

SCALE: NONE



DESIGNER NOTES:  
1. ENSURE THAT THE ABOVEGROUND LOW POINT DRAIN HAS ADEQUATE CLEARANCE TO ALLOW FOR FULL ROTATION OF THE BALL VALVE HANDLE.

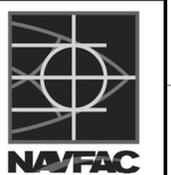
ABOVEGROUND LOW POINT DRAIN

SCALE: NONE

SIZES OF LETTERS AND BANDS

PIPE DIAMETER (IN)	A BAND WIDTH AND SPACING (IN)	B TITLE LETTER SIZE (IN)	C BACKGROUND AND ARROWS (IN)
UNDER 3	3	0.5	1
3 TO 6	3	1	2
6 TO 9	3	2	3
OVER 9	4	3	4.5

DATE	
DESCRIPTION	
DATE	
DESCRIPTION	



US ARMY CORPS OF ENGINEERS OMAHA DISTRICT

APPROVED

FOR COMMANDER NAFAC

SATISFACTORY TO

DES CCH DRW CCH CHK CRM

SUBMITTED BY:

DATE: APRIL 2015

NAVAL FACILITIES ENGINEERING COMMAND - ATLANTIC  
DOD STANDARD DESIGN AW78-24-27  
FUEL TANKS WITH FIXED ROOFS ABOVEGROUND VERTICAL STEEL MISCELLANEOUS DETAILS

SCALE: AS NOTED  
PROJECT NO.: XXXXX  
CONSTR. CONTR. NO. XXXXX  
NAFAC DRAWING NO. XXXXX  
SHEET 21 OF 57

CD.11

UNCLASSIFIED//FOR OFFICIAL USE ONLY

UNCLASSIFIED//FOR OFFICIAL USE ONLY

A

A