

Design Assumptions for
Nebraska Base Drawing NE100-10-006
Metal Base Pipe Riser

Revised: 5/6/09 Replaces: 5001-41

Metal Base Pipe Riser

Use of the riser is permitted only as outlined in FOTG, Pond 378.

The riser gauge is determined by criteria contained in Table 3, FOTG, Pond 378.

Coating requirements criteria is contained in FOTG Pond (378) Standard.

Corrosion control design procedures contained in EFH NB 6-34a-h.

All pipe lengths and coupling bands shall be watertight. The installation is to be used where the riser is surrounded by embankment to protect it from ice action and to conform to assumptions made in the buoyancy analysis. A minimum 10' square berm at the riser crest elevation is required with this installation.

If the PI of the soil in the embankment is less than 15, the inlet area will be armor coated or have a concrete apron.

Instructions for
Nebraska Base Drawing NE100-10-006
Metal Base Pipe Riser

Fill in the following data fields to automatically fill in the necessary data fields on the drawing.

Title block

Title line(s)

Subtitle line

County, State

Sheet number of

Who / When

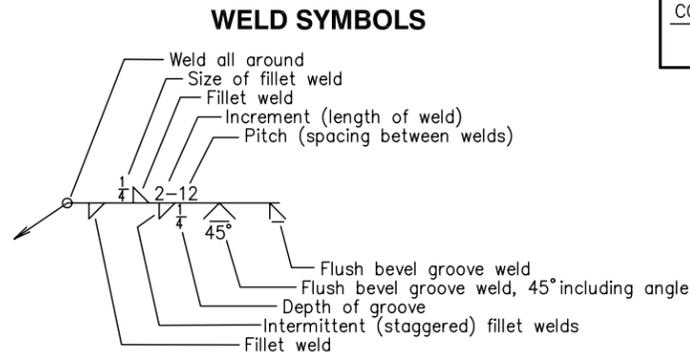
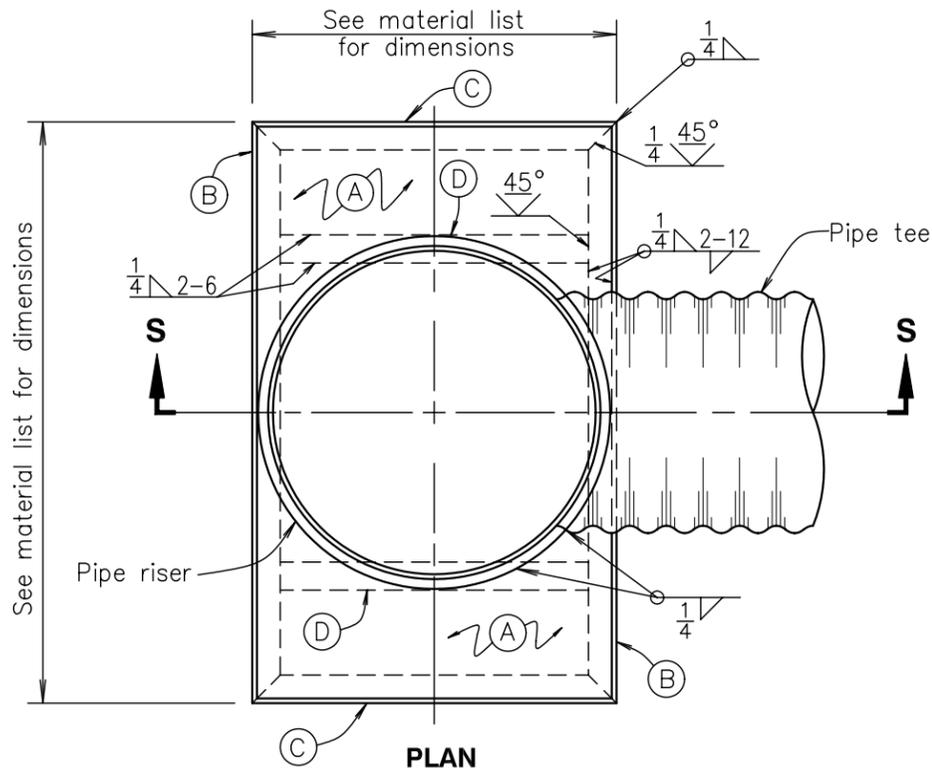
Designed

Drawn

Checked

Enter directly on drawing

Left click on yellow boxes on drawing to mark with X as required.
Left click data blue data fields to enter required information.



Note:
 Weld symbol above line indicates weld is on opposite side of joint to which arrow points.
 weld symbol below line indicates weld is on side of joint to which arrow points.
 2-12 indicates making a 2 inch weld every 12 inches.
 If fillet weld size is omitted, use standard shop practice.

REQUIREMENT TABLE

IN BOX INDICATES THE REQUIREMENTS THAT APPLY TO STRUCTURE INDICATES - NOT APPLICABLE

CORRUGATED METAL PIPE RISER, _____" DIA., _____GA., _____FT.
 NOMINAL LENGTH WITH A _____" DIA., _____GA., PIPE TEE _____FT. NOMINAL LENGTH
 WELDED TO IT 3" FROM THE LOWER END.

PIPE CLASSIFICATION	RISER	PIPE TEE
ANNULAR CORRUGATION, CLOSE RIVETED _____	<input type="checkbox"/>	<input type="checkbox"/>
HELICAL CORRUGATION _____	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> TYPE I, FULL CIRCULAR CROSS-SECTION FABRICATED _____	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> TYPE II, THIS IS TYPE I PIPE WHICH HAS BEEN REFORMED INTO A PIPE ARCH HAVING APPROXIMATELY A FLAT BOTTOM _____	<input checked="" type="checkbox"/>	<input type="checkbox"/>
CORRUGATION REQUIREMENTS - NOMINAL SIZE (INCH)		
<input type="checkbox"/> 2 2/3 x 1/2 _____	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> 3 x 1 _____	<input type="checkbox"/>	<input type="checkbox"/>
COATINGS AND FABRICATION		
SEE METAL PIPE REQUIREMENTS AND COUPLING BAND SHEET		

NOTE:
 THE FOLLOWING DESIGNATIONS FOR PIPE CLASSIFICATIONS, CORRUGATIONS AND COATINGS WHEN REFERRED TO ON THE DRAWINGS ARE IN ACCORDANCE WITH CURRENT ASTM'S:

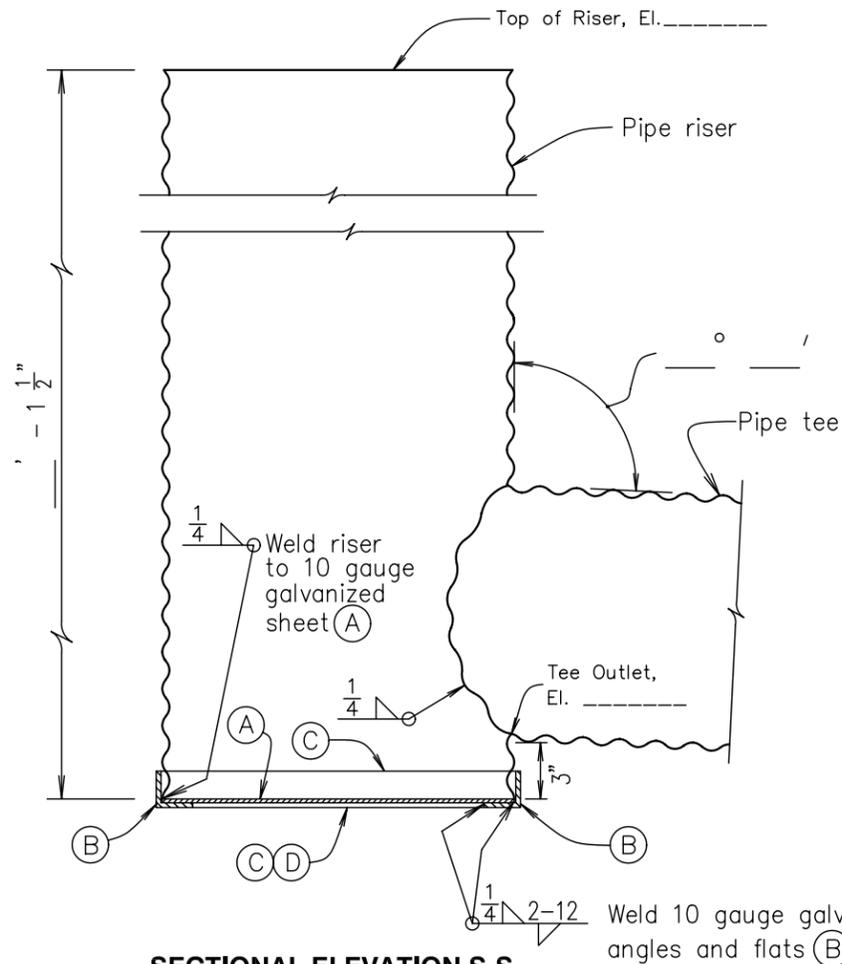
- A760 STANDARD SPECIFICATION FOR CORRUGATED STEEL PIPE, METALLIC-COATED FOR SEWERS AND DRAINS.
- A761 STANDARD SPECIFICATION FOR CORRUGATED STEEL STRUCTURAL PLATE, ZINC-COATED, FOR FIELD BOLTED PIPE, PIPE ARCHES, AND ARCHES.
- A762 STANDARD SPECIFICATION FOR CORRUGATED STEEL PIPE, POLYMER PRECOATED FOR SEWERS AND DRAINS.
- A849 STANDARD SPECIFICATION FOR POST-APPLIED COATINGS, PAVINGS, AND LININGS FOR CORRUGATED STEEL SEWER AND DRAINAGE PIPE.
- A885 STANDARD SPECIFICATION FOR STEEL SHEET, ZINC AND ARAMID FIBER COMPOSITE-COATED FOR CORRUGATED STEEL SEWER, CULVERT AND UNDERDRAIN PIPE.

FABRICATION AND INSTALLATION NOTES:

1. FOR FABRICATION OF RISERS ON HELICAL PIPE A FILLER STRIP MAY BE USED TO INSURE A WATERTIGHT SEAL BETWEEN THE RISER AND TEE.

MATERIAL LIST AND TABLE OF QUANTITIES FOR RISER BASE

	MARK	ITEM	12" DIA. RISER	15" DIA. RISER	18" DIA. RISER	21" DIA. RISER	24" DIA. RISER	30" DIA. RISER	UNIT	QUANTITY
MATERIAL LIST	A	10 GAUGE GALVANIZED METAL SHEET	13" x 36"	16" x 39"	19" x 42"	22" x 45"	25" x 48"	31" x 54"	EACH	1
	B	ANGLES, 3" x 3" x 1/4"	3' - 1"	3' - 4"	3' - 7"	3' - 10"	4' - 1"	4' - 7"	EACH	2
	C	ANGLES, 3" x 3" x 1/4"	1' - 2"	1' - 5"	1' - 8"	1' - 11"	2' - 2"	2' - 8"	EACH	2
	D	STEEL FLATS, 3" x 1/4"	0' - 8"	0' - 11"	1' - 2"	1' - 5"	1' - 8"	2' - 2"	EACH	2
TABLE OF QUANTITIES		10 GAUGE GALVANIZED METAL SHEET (LBS.)	18.8	25.0	32.0	39.7	48.2	67.2		
		STRUCTURAL STEEL (LBS.)	45.0	51.2	57.4	63.6	69.7	82.1		
		TOTAL WEIGHT OF STEEL BASE (LBS.)	63.8	76.2	89.4	103.3	117.9	149.3		



**SECTIONAL ELEVATION S-S
 METAL BASE PIPE RISER**

Date _____

Designed _____

Drawn _____

Checked _____

Approved _____

