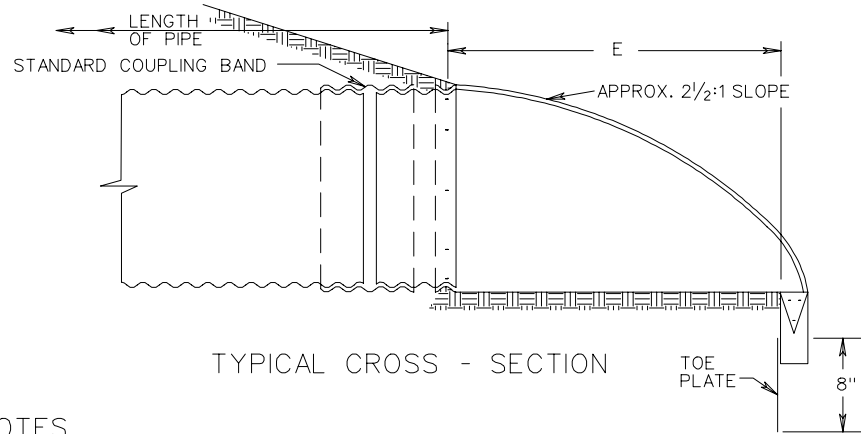
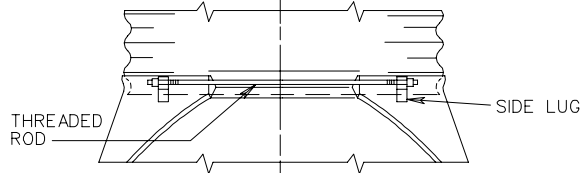
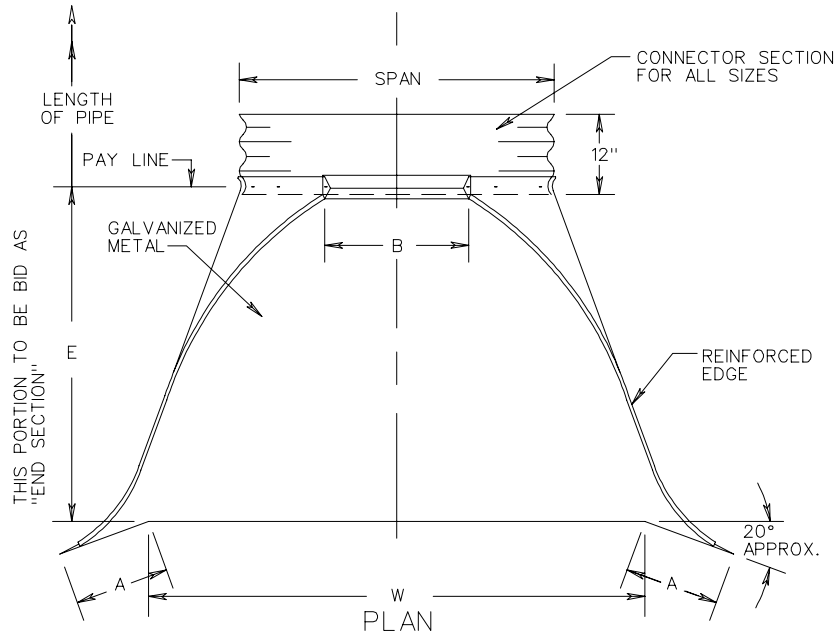


ALTERNATE CONNECTION

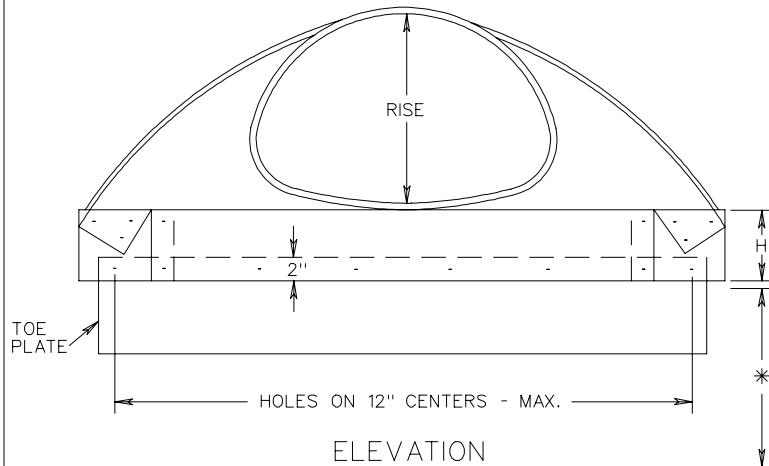


TYPICAL CROSS - SECTION



NOTES

1. TOE PLATE TO BE PUNCHED TO MATCH HOLES IN SKIRT LIP.
2. 3/8" GALVANIZED BOLTS TO BE FURNISHED, LENGTH OF TOE PLATE IS W + 10" WITH RISE OF 13" TO 29" INCLUDED AND W + 18" MIN. WITH RISE OF 33" TO 47" INCLUDED.
3. SKIRT SECTION WITH RISE OF 13" TO 24" INCLUDED TO BE MADE IN ONE PIECE.
4. SKIRT SECTION WITH RISE OF 29" TO 38" INCLUDED MAY BE MADE FROM TWO SHEETS JOINED BY RIVETING OR BOLTING ON CENTER LINE.
5. SKIRT SECTION WITH RISE OF 43" TO 47" INCLUDED MAY BE MADE FROM THREE SHEETS JOINED BY RIVETING OR BOLTING AT EQUAL DISTANCES FROM CENTER LINE.
6. CONNECTOR SECTION, CORNER PLATE AND TOE PLATE TO BE SAME SHEET THICKNESS AS SKIRT AND SAME TYPE OF MATERIAL AS CULVERT.
7. WHERE FLARED END - SECTIONS ARE TO BE USED WITH ASPHALT COATED AND PAVED METAL PIPE, END SECTIONS DO NOT NEED TO BE COATED OR PAVED.
- 8.* INDICATES PIPE ARCHES FOR WHICH DIMENSIONS FOR EITHER CORRUGATION MAY BE USED WITHIN FILL HEIGHT LIMITATIONS.



ELEVATION

PIPE-ARCH DIMENSIONS

3" x 1" and 5" x 1" CORRUGATIONS		2 2/3 x 1/2" CORRUGATIONS		DIMENSIONS							
SPAN	RISE	SHEET THICKNESS	SPAN	RISE	SHEET THICKNESS		1" TOL.	1" MAX.	1 1/2" TOL.	2" TOL.	
					STEEL	ALUM.					
			17"	13"	.064"	.060	4 1/2"	9"	6"	19"	30"
			21"	15"	.064"	.060	5 1/4"	10"	6"	23"	36"
			24"	18"	.064"	.060	6 1/4"	11 1/2"	6"	28"	42"
			28"	20"	.064"	.060	7"	14"	6"	31 1/2"	48"
			35"	24"	.064"	.075	8 3/4"	16"	6"	38 1/2"	60"
40"	31"	.079"	42"	29"	.064"	.105	10 3/4"	17 1/2"	7 5/8"	47"	75"
46"	36"	.079"	49"	33"	.109"	.105	12 1/4"	20"	9 1/8"	54"	85"
53"	41"	.079"	57"	38"	.109"	.105	14"	22"	10 5/8"	63"	96"
60"	46"	.079"	64"	43"	.109"	.105	15 3/4"	23"	10 5/8"	70"	112"
66"	51"	.079"	71"	47"	.138"	.135	17 1/4"	24"	12 1/8"	77"	128"

FLARED END-SECTION FOR METAL PIPE-ARCHES
13" - 47" RISE

VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION REFERENCE

302