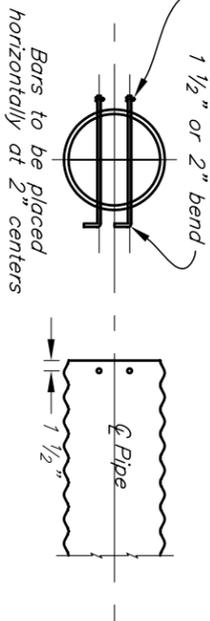


BILL OF MATERIALS			
Pipe Diam.	Bar Size	Quantity	Length
6"	#3 or #4	2	1-0
8"	#3 or #4	3	1-3
10"	#3 or #4	4	1-6

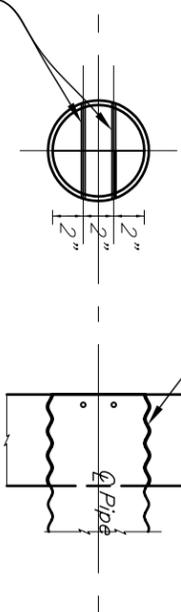
All holes in pipe to receive bars shall be $\frac{9}{16}$ " dia.

Drill $\frac{1}{8}$ " hole 1" from end of bars to receive nail, wire or cotter pin.



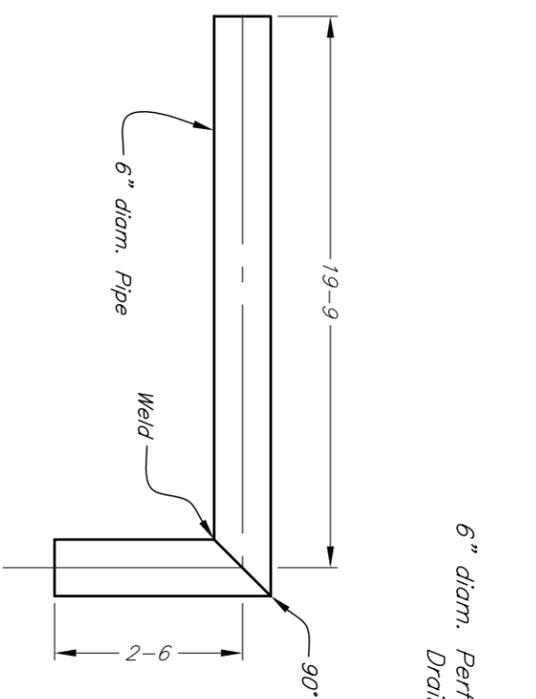
DETAILS OF ANIMAL GUARD (TYPE-1)

Pipe separated from concrete by two layers of Asphalt Treated Roofing Felt, approx. weight 55 lbs. per 100 sq.ft.



2 - $\frac{1}{4}$ " Wrought Iron Rods, Tack welded to pipe at each end. Rods to be horizontal when pipe is installed.

DETAILS OF ANIMAL GUARD (TYPE-2)



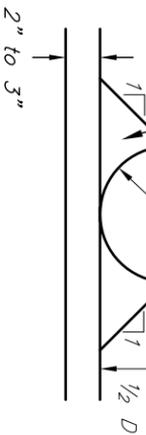
SPECIAL ELBOW DETAIL



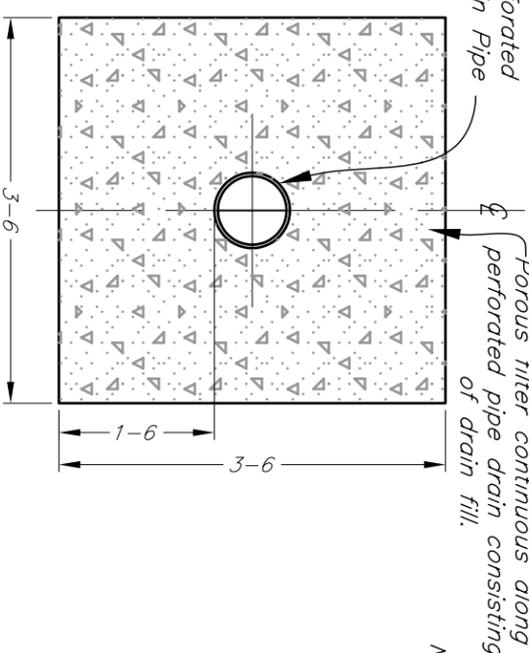
Excavate 2 to 3 inches below pipe grade. Then backfill with damp friable soil free from lumps and raked or graded to a true plane before placing C.M. Pipe. No compaction of bedding is required.

CORRUGATED OR SMOOTH METAL PIPE PRINCIPAL SPILLWAY BEDDING DETAIL

Note: Begin backfill immediately after pipe has been placed. Hand tamping only. (Do not use power tamper.)



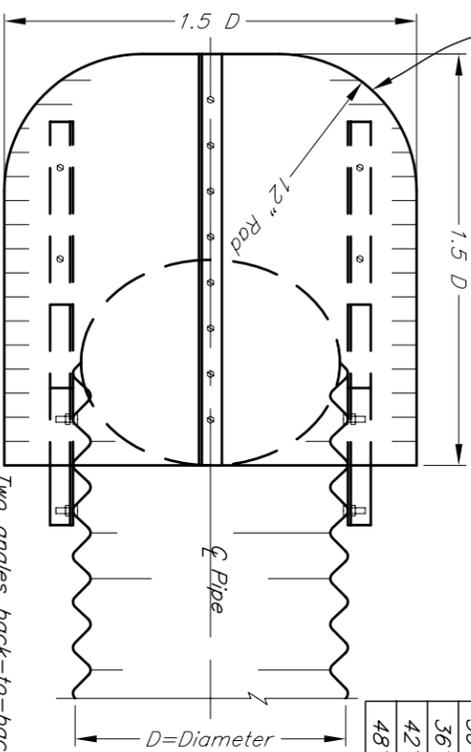
CORRUGATED OR SMOOTH METAL PIPE PRINCIPAL SPILLWAY BACKFILL DETAIL



CROSS SECTION OF POROUS FILTER FOR FOUNDATION TRENCH DRAINAGE SYSTEM

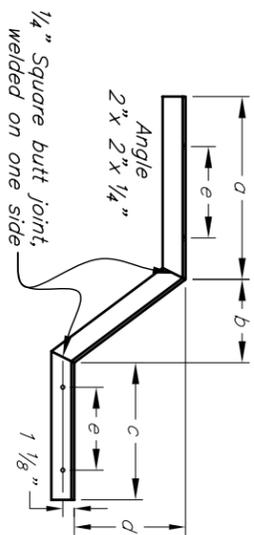
GAGE OF METAL BAFFLE AND DIMENSIONS OF ANGLE BRACE		Angle Brace Dimensions (Inches)					
Diam. of Pipe, D	Sheet Thick. of Baffle	a	b	c	d	e	
		Steel	Al.				
18"	.064	.135	10	6	9	8	5 1/5
21"	.064	.135	10	7 1/8	9	9 1/2	5 1/5
24"	.079	.135	13	8 1/4	12	11	8
30"	.079	.164	13	10 1/2	12	14	8
36"	.109	.164	13	12 3/4	12	17	8
42"	.109	.164	17	15	15	20	10 2/3
48"	.109	.164	17	17 1/4	15	23	10 2/3

Metal Baffle shall have the same coating as the pipe to which it is attached. Where Metal Baffle is fabricated of more than one piece of metal, the separate pieces shall be securely fastened to each other. Sharp corners shall be removed. At contractor's option, Metal Baffle may be made of corrugated or sheet metal and shaped circular, square or as shown.

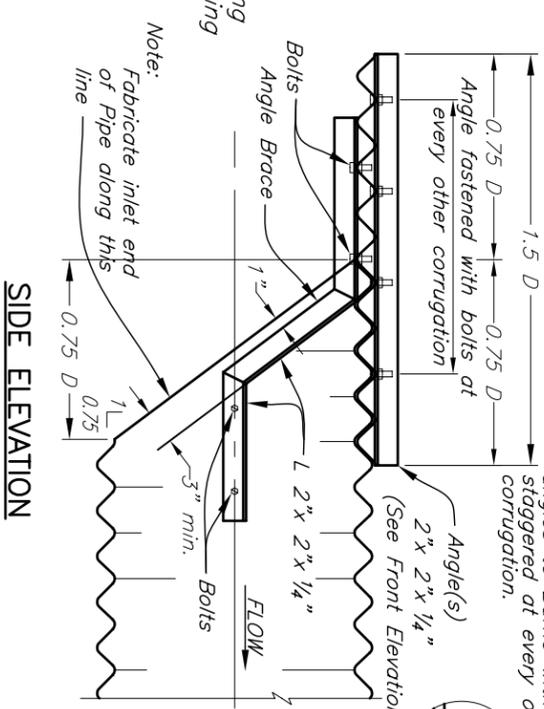


PLAN

Two angles back-to-back for support of Metal Baffle for 36" to 48" diam. Pipe. Bolt angles to each other, with 3 bolts. Bolt (1 left and 1 right required for each baffle) angles to Baffle with bolts staggered at every other corrugation.

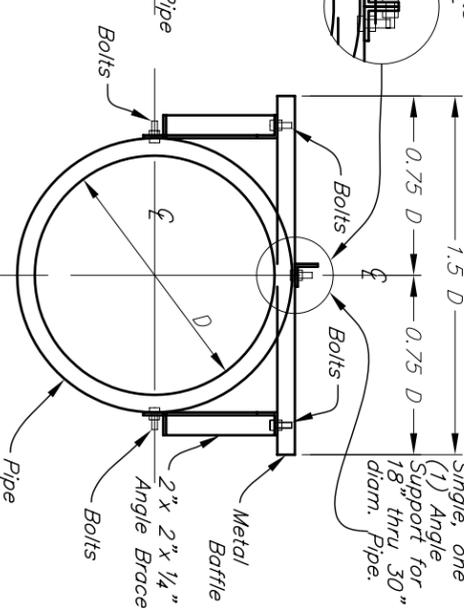


ANGLE BRACE DETAIL



SIDE ELEVATION

FRONT ELEVATION



Notes:
 USE ALUMINUM BAFFLE AND ANGLES WITH ALUMINUM PIPE.
 USE STEEL BAFFLE AND ANGLES WITH STEEL OR IRON PIPE.
 All bolts shall be $\frac{1}{2}$ " x $1\frac{1}{2}$ " with nut and split washers.
 All holes for bolts shall be drilled $\frac{9}{16}$ " diameter.
 All nuts, bolts and washers shall be galvanized, cadmium plated, or stainless steel.
 All cuts shall be saw or shear cuts.
 Holes in the angle brace shall be spaced and located to match corrugations in pipe and baffle.
 Steel angles shall be galvanized.

DETAILS OF HOOD INLET FOR ANNULAR OR SPIRAL C. M. PIPE



DETAILS 18"-48" DIAM CORRUGATED METAL PIPE WITH FOUNDATION DRAIN

Designed _____
 Drawn _____
 Checked _____
 Approved _____