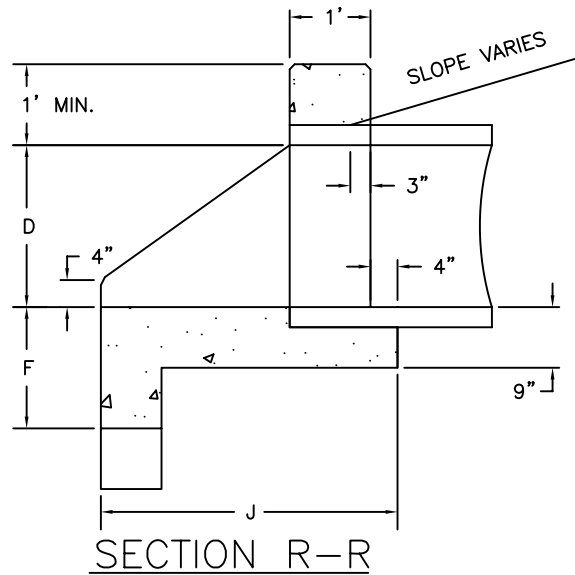
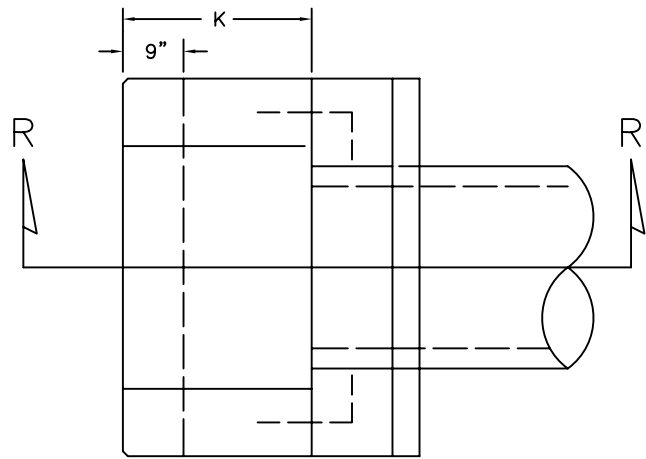


FRONT ELEVATION



SECTION R-R



PLAN VIEW

NOTE:

1. CHAMFER ALL EXPOSED EDGES 3/4" MIN. BEARING CAPACITY 2000 P.S.I.
2. WHERE THE RODS ARE REQUIRED, THE COST OF THE SAME SHALL BE INCLUDED IN THE UNIT BID PRICE
3. CONCRETE DESIGN STRENGTH 3000 P.S.I.

TABLE OF DIMENSIONS AND ESTIMATED QUANTITIES
PIPE CULVERT ENDWALLS WITH U-TYPE WINGS

DIMENSIONS							QUANTITIES IN ONE ENDWALL						
OPENING		WALL			FOOTING		TOTAL CU. YDS. CONCRETE, 3000 P.S.I. Δ						STEEL TIE RODS
D	AREA SQ.FT.	G	H	K	F	J	CONC. PIPE		C.M. PIPE		C.I. PIPE		
							INLET	OUTLET	INLET	OUTLET	INLET	OUTLET	
12"	0.8	3'-8"	2'-0"	1'-0"	1'-3"	2'-2"	0.50	0.57	0.51	0.59	0.51	0.59	NONE
15"	1.2	3'-11"	2'-3"	1'-5"	1'-3"	2'-7"	0.61	0.69	0.64	0.72	0.63	0.72	NONE
18"	1.8	4'-2"	2'-6"	1'-9"	1'-3"	2'-11"	0.72	0.81	0.76	0.84	0.76	0.84	NONE
24"	3.1	4'-8"	3'-0"	2'-6"	1'-6"	3'-8"	1.03	1.13	1.08	1.18	1.08	1.18	2-3/4" φ x 2'-0"
30"	4.9	5'-2"	3'-6"	3'-3"	1'-6"	4'-5"	1.35	1.46	1.43	1.53	1.42	1.53	2-3/4" φ x 2'-0"
36"	7.1	5'-8"	4'-0"	4'-0"	1'-9"	5'-2"	1.75	1.87	1.86	1.98	1.84	1.96	2-3/4" φ x 2'-6"
42"	9.6	6'-2"	4'-6"	4'-9"	2'-0"	5'-11"	2.21	2.34	2.34	2.47			2-3/4" φ x 2'-6"
48"	12.6	6'-8"	5'-0"	5'-6"	2'-0"	6'-8"	2.66	2.80	2.83	2.97			2-3/4" φ x 3'-0"

CONCRETE ENDWALL
WITH U-TYPE WINGS
FOR PIPE CULVERTS

*CITY OF
JACKSONVILLE
STANDARD*

N.T.S.

PLATE D-409

DATE DRAWN 7-14-79

REVISED DATE 5-12-94