9" x 2½" STRUCTURAL PLATE ALUMINUM ALLOY PIPE (STEEL BOLTED)
HEIGHT OF COVER LIMITS (ft.)

AREA (sft)	DIAMETER (in.)	THICKNESS (in.)									
		0.100		0.125		0.150		0.175		0.200	
		MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.
19.6	60	1.0	31.1	1.0	45.5	1.0	60.1	1.0	70.7	1.0	81.5
23.8	66	1.0	28.2	1.0	41.4	1.0	54.6	1.0	64.3	1.0	74.1
28.3	72	1.0	25.9	1.0	37.9	1.0	50.0	1.0	58.9	1.0	67.9
33.2	78	1.0	23.9	1.0	35.0	1.0	46.2	1.0	54.4	1.0	62.7
38.5	84	1.0	22.2	1.0	32.5	1.0	42.9	1.0	50.5	1.0	58.2
44.2	90	1.1	20.7	1.0	30.3	1.0	40.0	1.0	47.1	1.0	54.3
50.3	96	1.1	19.4	1.0	28.4	1.0	37.5	1.0	44.2	1.0	50.9
56.7	102	1.1	18.3	1.1	26.7	1.1	35.3	1.1	41.6	1.1	47.9
63.6	108	1.2	17.2	1.1	25.3	1.1	33.3	1.1	39.3	1.1	45.3
70.9	114	1.3	16.3	1.2	23.9	1.2	31.6	1.2	37.2	1.2	42.9
78.5	120	1.3	15.5	1.3	22.7	1.3	30.0	1.3	35.3	1.3	40.7
86.6	126	1.4	14.8	1.3	21.6	1.3	28.6	1.3	33.7	1.3	38.8
95.0	132	1.4	14.1	1.4	20.7	1.4	27.3	1.4	32.1	1.4	37.0
103.9	138	1.5	13.5	1.4	19.8	1.4	26.1	1.4	30.7	1.4	35.4
113.1	144	1.6	12.9	1.5	18.9	1.5	25.0	1.5	29.4	1.5	33.9
122.7	150			1.6	18.2	1.6	24.0	1.6	28.3	1.6	32.6
132.7	156			1.6	17.5	1.6	23.1	1.6	27.2	1.6	31.3
143.1	162					1.7	22.2	1.7	26.2	1.7	30.2
153.9	168					1.8	21.4	1.8	25.2	1.8	29.1
165.1	174					1.8	20.7	1.8	24.4	1.8	28.1
176.7	180							1.9	23.5	1.9	27.1
188.7	186							1.9	22.8	1.9	26.3
201.1	192									2.0	25.4
213.8	198									2.1	24.7
227.0	204									2.1	23.9
240.5	210										
254.5	216										
268.8	222										
283.5	228										

NOTE:

1. The tabulated cover depths shall be measured from the bottom of the asphalt or concrete pavement to the top of the pipe.

INDIANA DEPARTMENT OF TRANSPORTATION

PIPE HEIGHT OF COVER LIMITS

JANUARY 1998

STANDARD DRAWING NO. **E 717-PHCL-01**

ANTHONY L. UREMOVICH REGISTERED No. 18095 STATE OF INDIANA PROFESSIONAL ENGINEER

DESIGN STANDARDS ENGINEER

DETAILS PLACED IN THIS FORMAT 11-15-99

/s/ Anthony L. Uremovich 11-15-99
DESIGN STANDARDS ENGINEER DATE

/s/ Firooz Zandi 11-15-99
CHIEF HIGHWAY ENGINEER DATE

ORIGINALLY APPROVED 1-02-98