

ROUND PIPE				HORIZONTAL ELLIPTICAL PIPE			
INSIDE DIAMETER OF PIPE (INCHES)	"W" PAYLINE WIDTH OF TRENCH (INCHES)	"T" PAYLINE WIDTH OF TRENCH (FEET)	PAY-VOLUMES (CU. YD. PER FT.)	INSIDE DIMENSIONS OF PIPE (INCHES)	"W" PAYLINE WIDTH OF TRENCH (INCHES)	"T" PAYLINE WIDTH OF TRENCH (FEET)	PAY-VOLUMES (CU. YD. PER FT.)
4	30	2.50	3.28				
6	30	2.50	3.59				
8	30	2.50	3.87				
10	30	2.50	4.09				
12	30	2.50	4.25				
15	36	3.00	5.55				
18	36	3.00	5.77	14 x 23	41	3.42	5.94
21	36	3.00	6.11				
24	42	3.50	7.39	18 x 30	49	4.08	7.68
27	42	3.50	8.18	22 x 34	53	4.42	8.61
30	48	4.08	9.30	24 x 38	58	4.83	9.70
33	48	4.08	10.53	27 x 42	62	5.17	10.71
36	48	4.08	11.43	29 x 45	66	5.50	11.72
39	54	4.57	12.52	32 x 49	71	5.92	12.74
42	54	4.57	13.38	34 x 53	75	6.25	14.05
48	70	5.83	15.67	38 x 60	83	6.92	16.18
54	77	6.42	18.15	43 x 68	92	7.67	18.81
60	84	7.00	20.73	48 x 78	101	8.42	21.59
66	91	7.58	23.45	53 x 83	109	9.08	24.35
72	98	8.17	26.37	58 x 91	118	9.83	27.45
78	105	8.75	29.39	63 x 98	126	10.50	30.50
84	112	9.33	32.57	68 x 106	135	11.25	33.91
90	119	9.92	35.90	72 x 113	143	11.92	36.99
96	126	10.50	39.37	77 x 121	152	12.67	40.69
102	133	11.08	42.99	82 x 129	160	13.33	44.45
108	140	11.67	46.75	87 x 136	168	14.00	47.79
114	147	12.25	50.66	92 x 143	176	14.67	51.20
120	154	12.83	54.72	97 x 151	185	15.42	54.61
126	161	13.42	58.93				
132	168	14.00	63.27	106 x 166	202	16.83	64.48
144	182	15.17	72.40	116 x 180	218	18.17	73.58

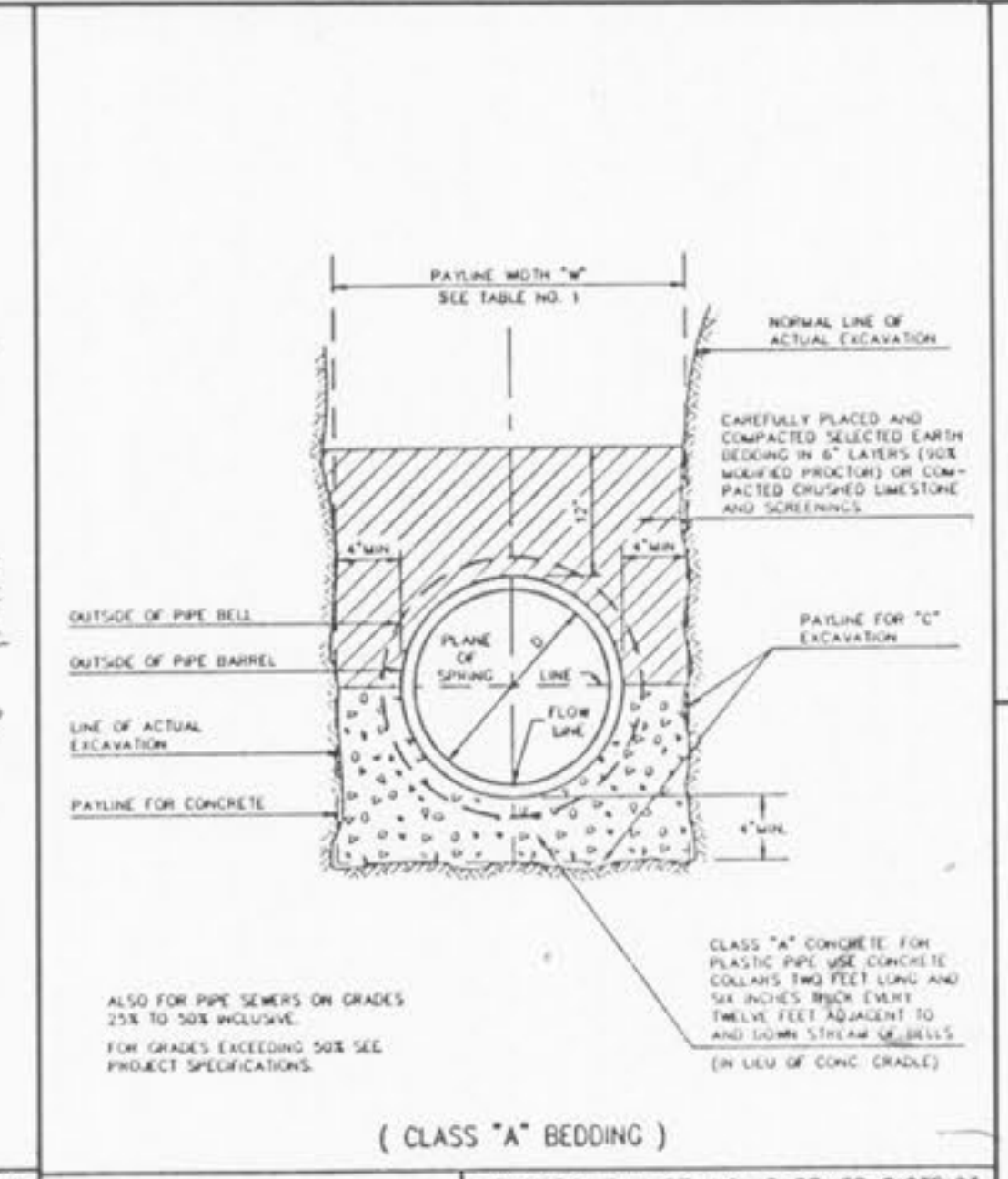
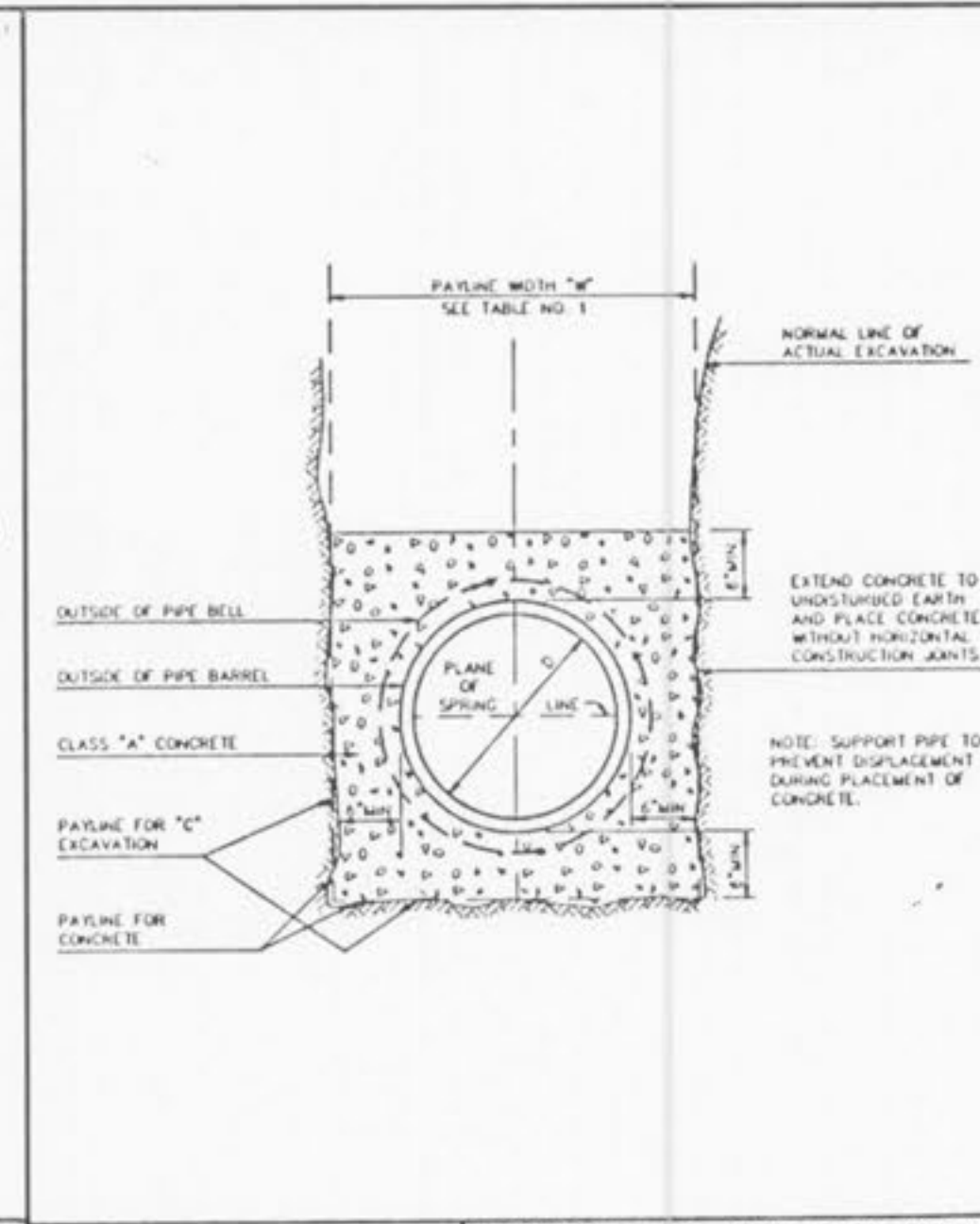
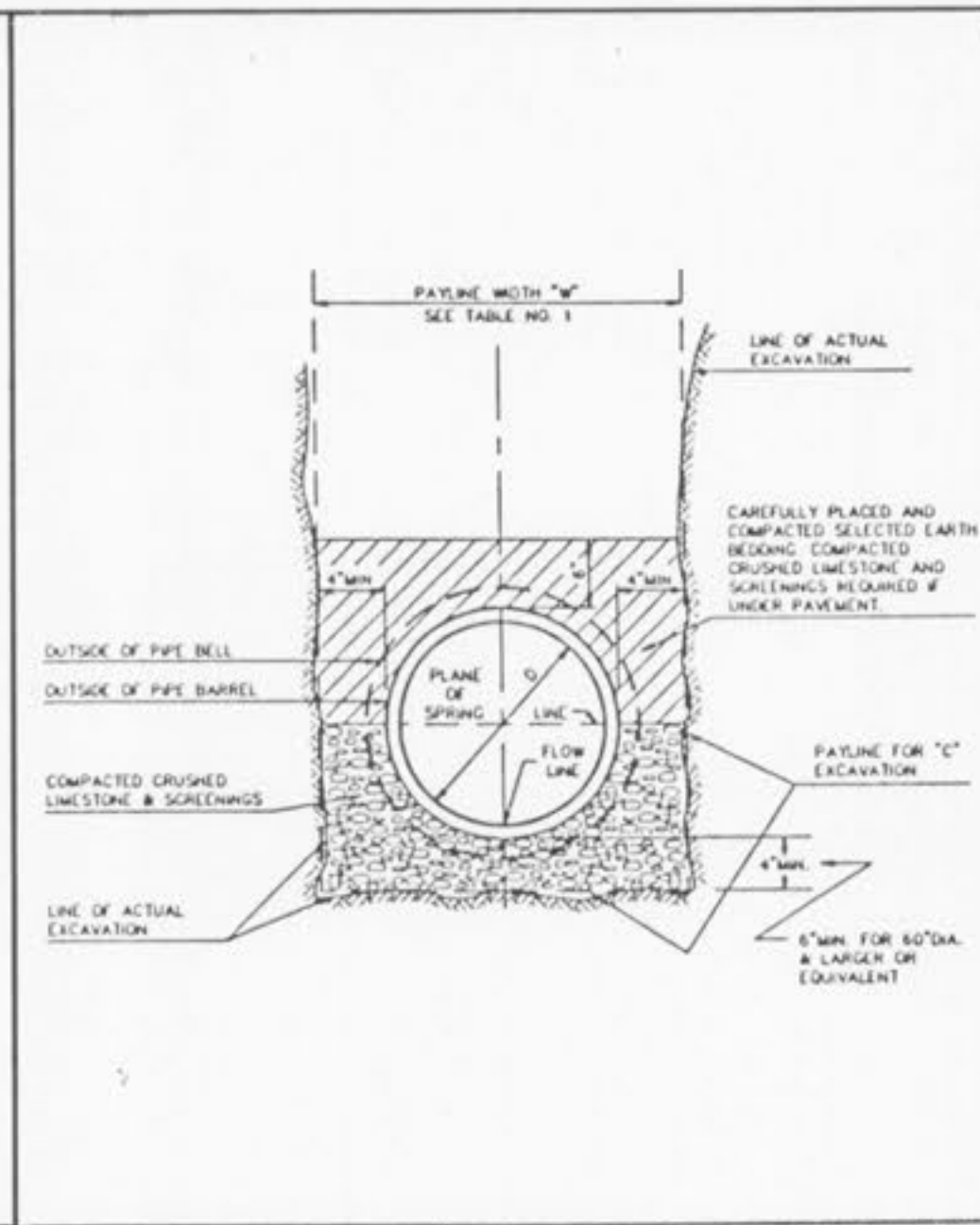
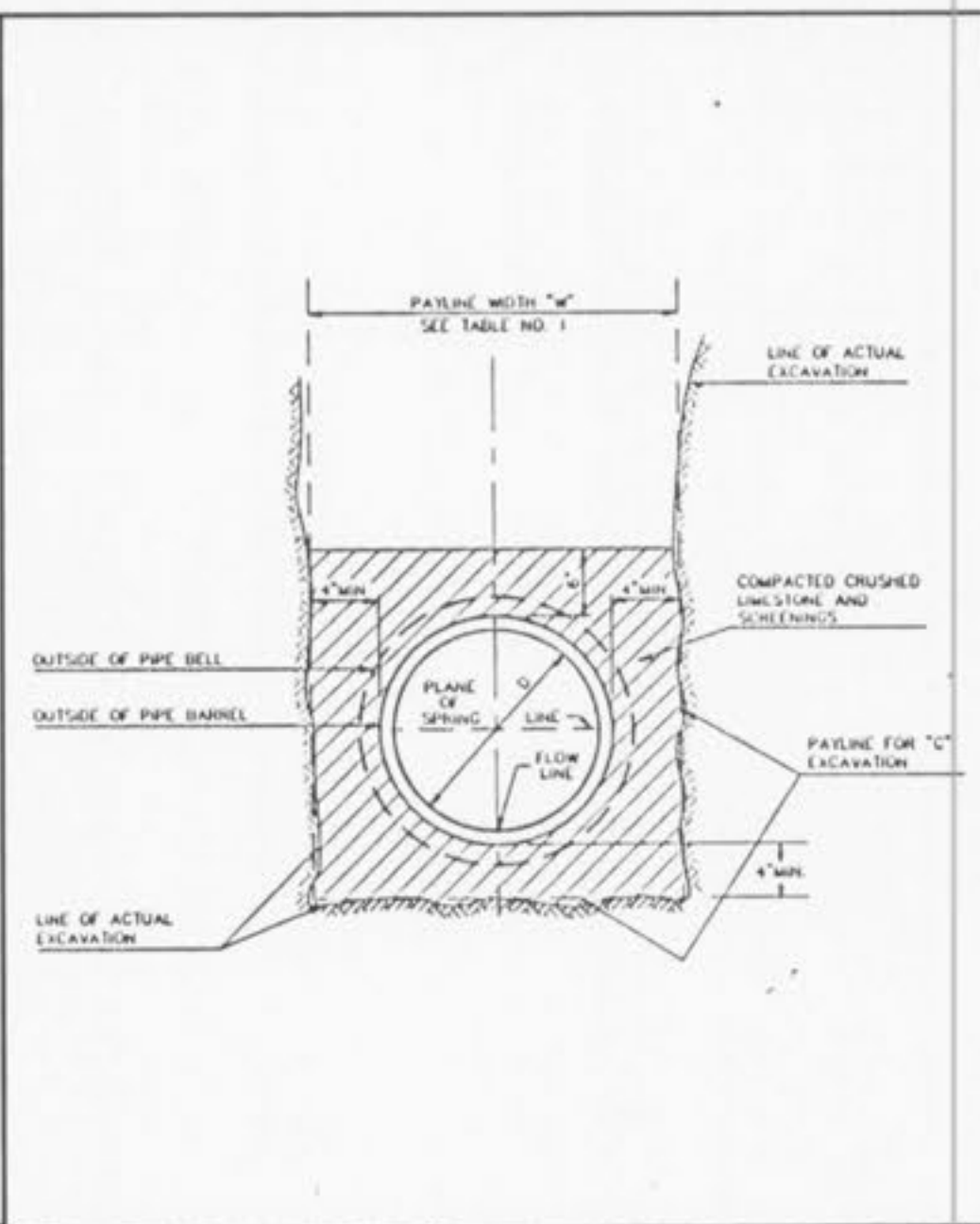
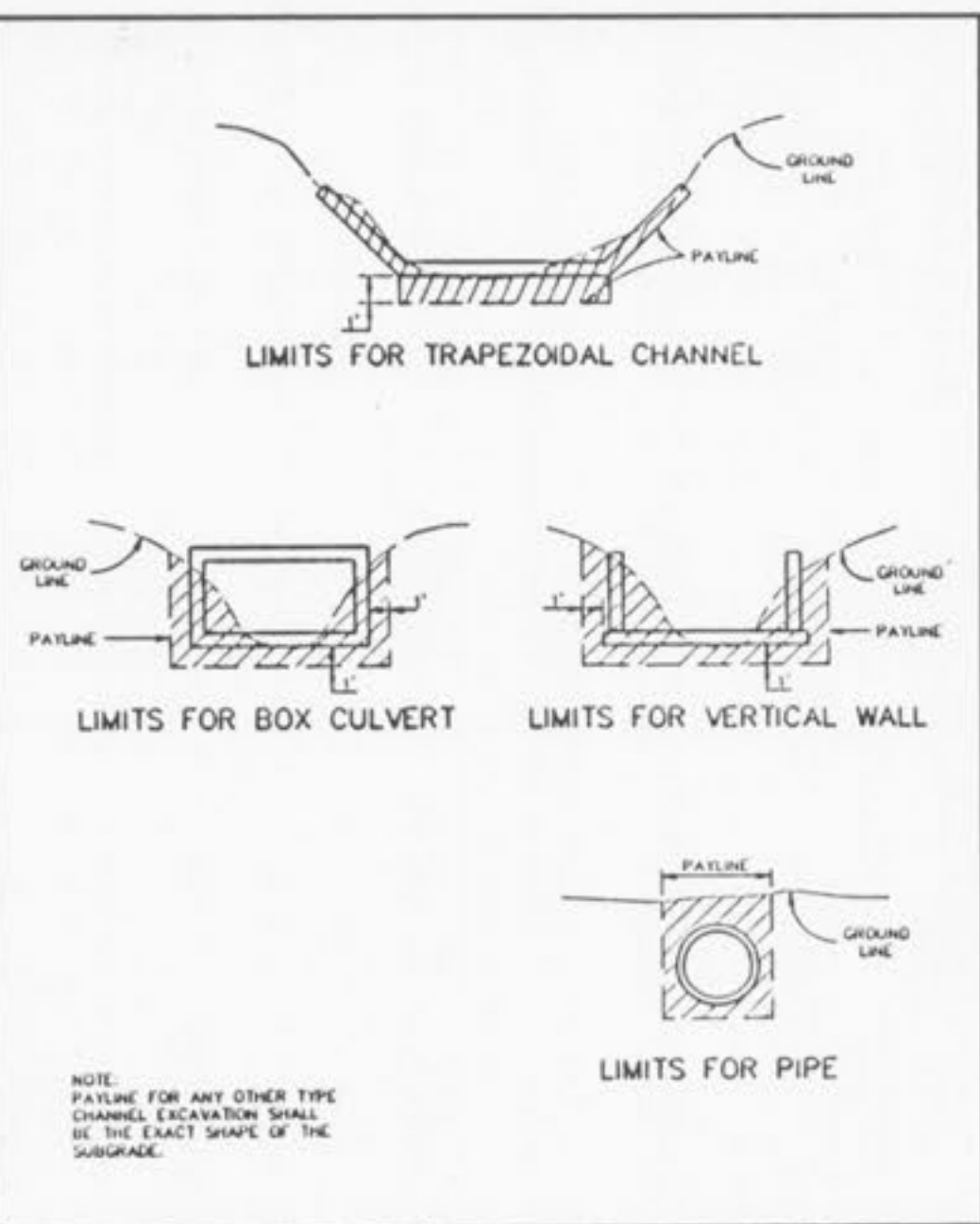


TABLE 1
PAYLINE WIDTHS OF TRENCH AND PAY-QUANTITIES OF CONCRETE

PAYLINE LIMITS FOR EXCAVATION

PIPE BEDDING CLASS "C" (FOR ALL PIPE EXCEPT REINFORCED CONCRETE PIPE)

PIPE BEDDING CLASS "C" (MODIFIED FOR REINFORCED CONCRETE PIPE)

CONCRETE ENCASEMENT

CONCRETE CRADLE

SECTION OF MANHOLE			DIMENSION	
TOP	UPPER	26 1/2" DIA.		
TRANSITION	LOWER	42" DIA.		
BOTTOM	SECTION	8" THRU 24" DIA. PIPE	42" DIA.	
BOTTOM	SECTION	27" THRU 36" DIA. PIPE	42" SQUARE	

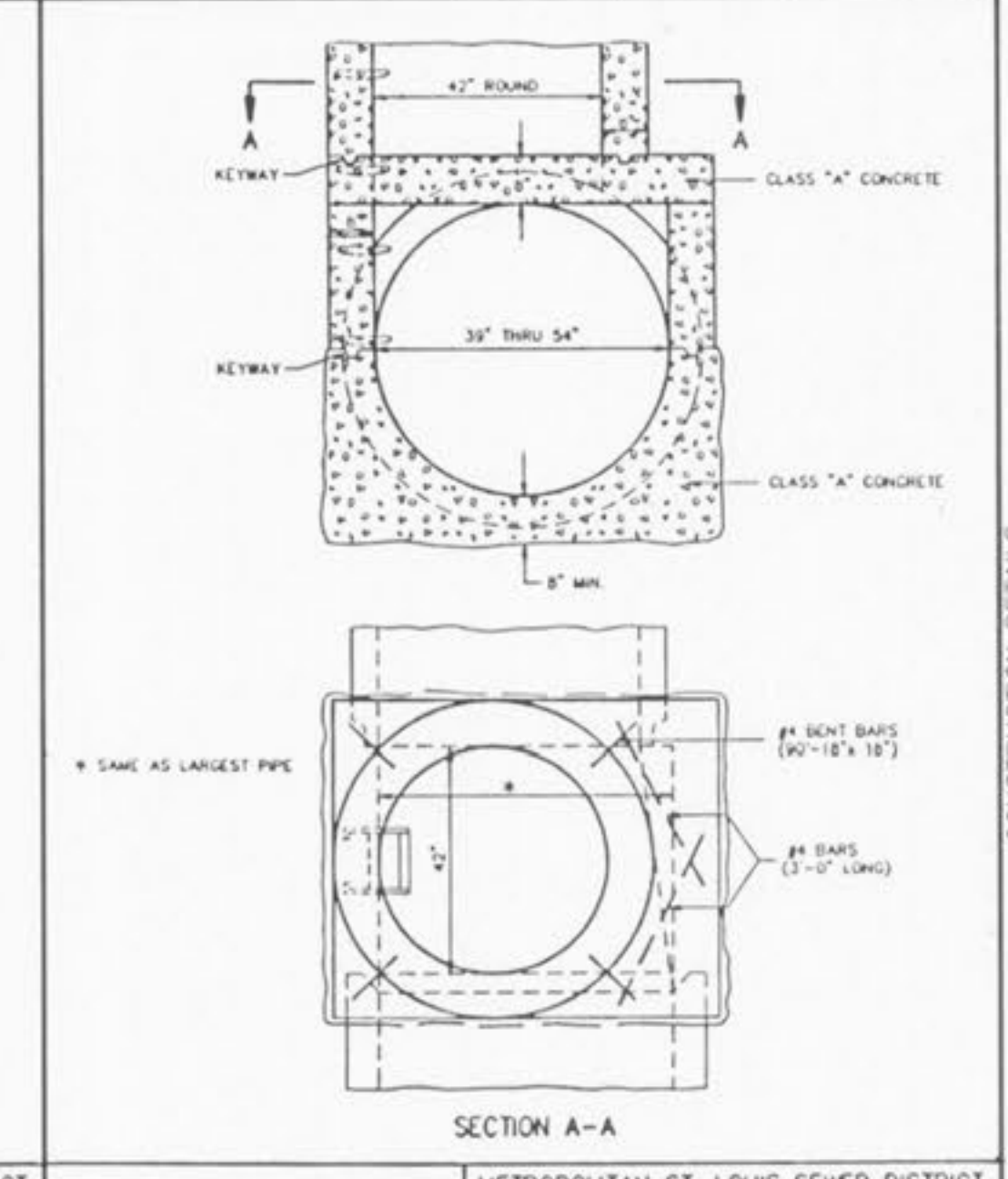
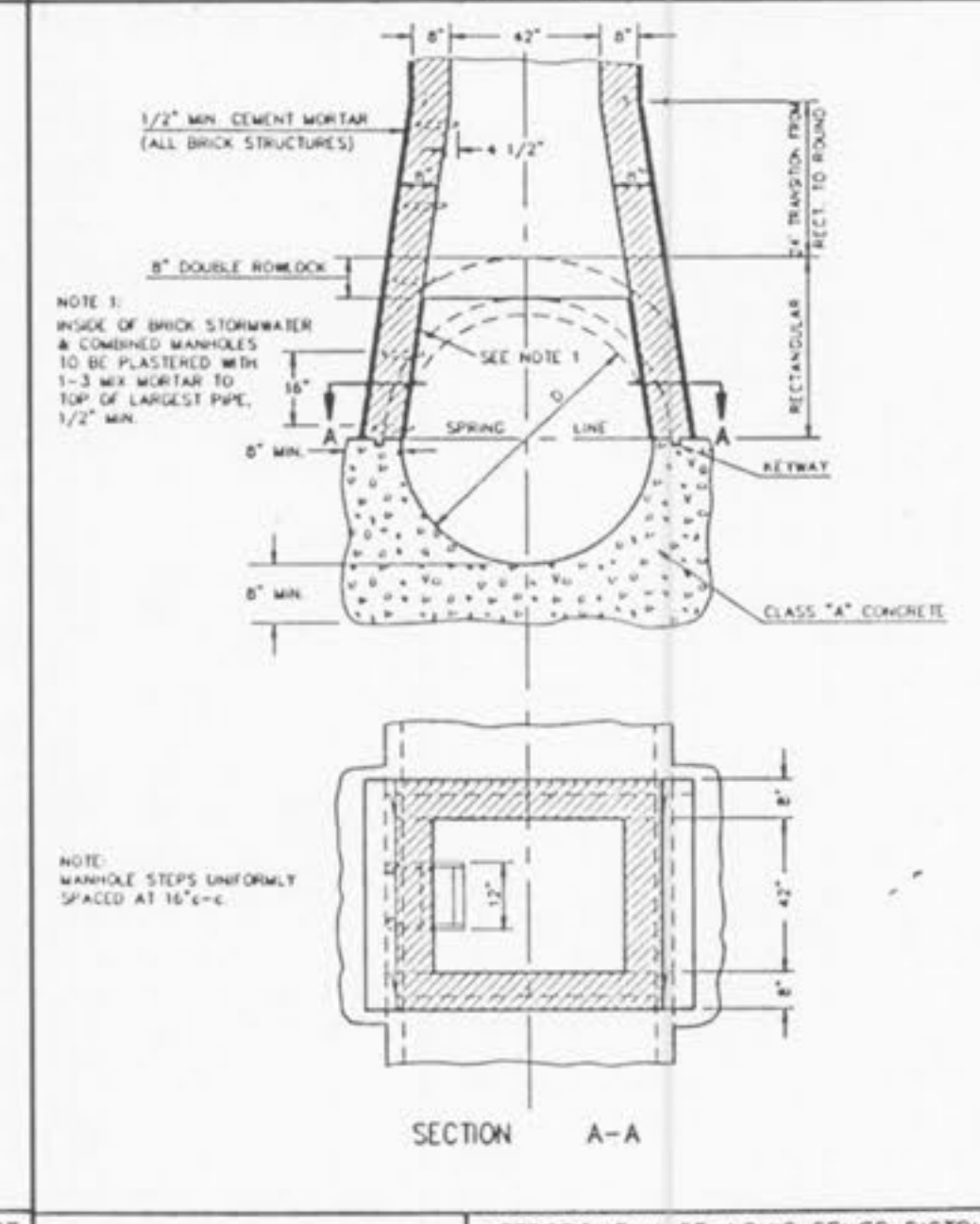
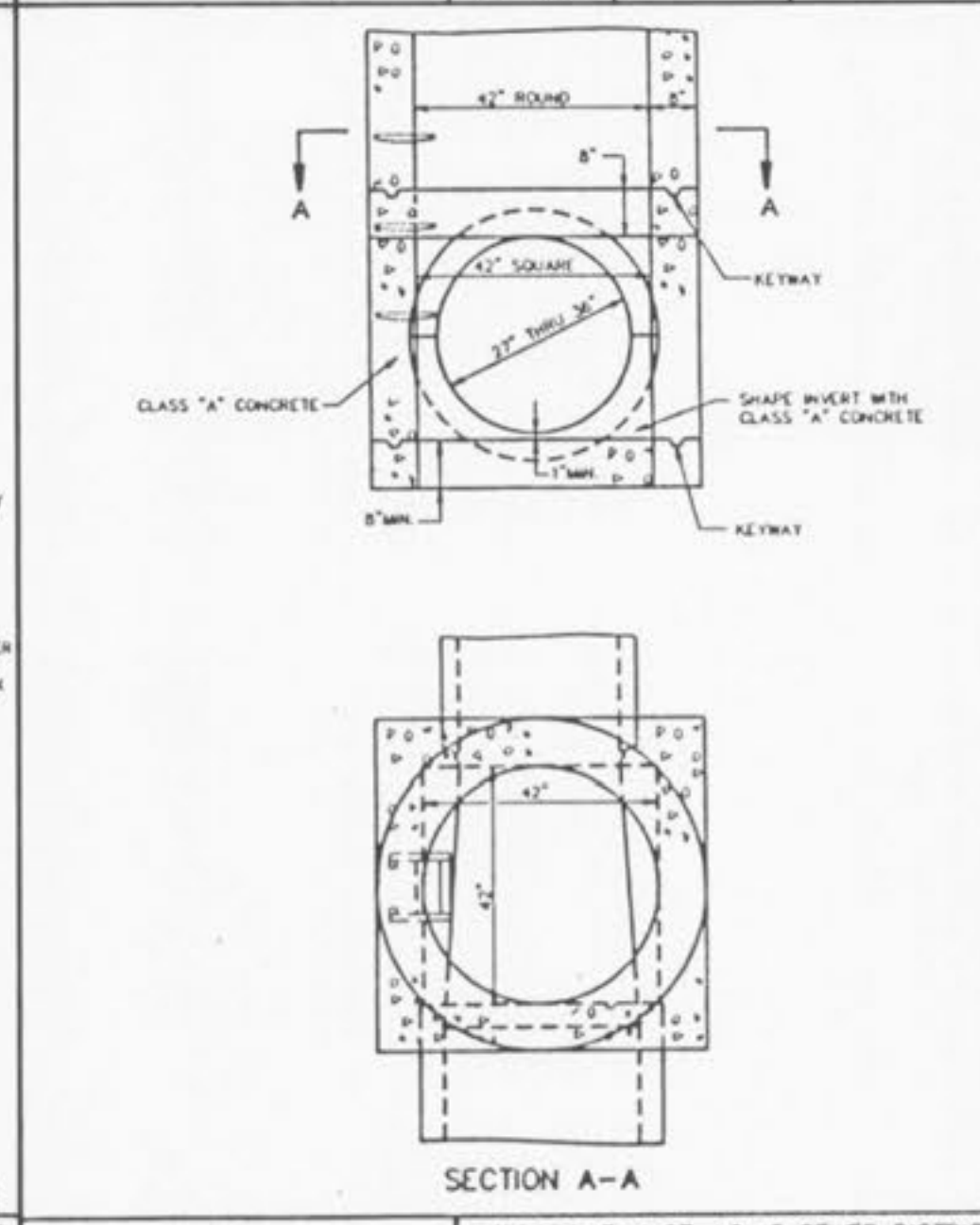
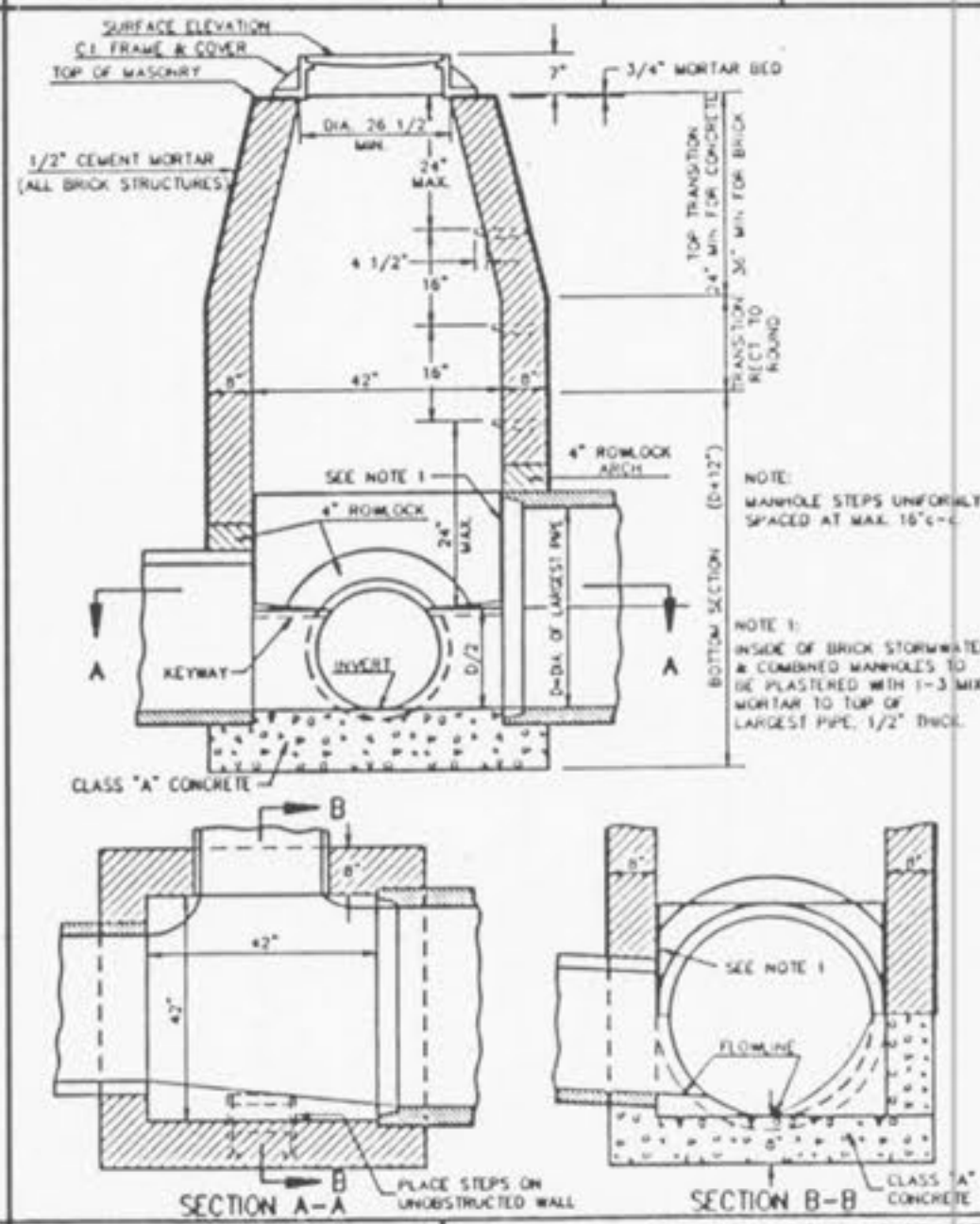
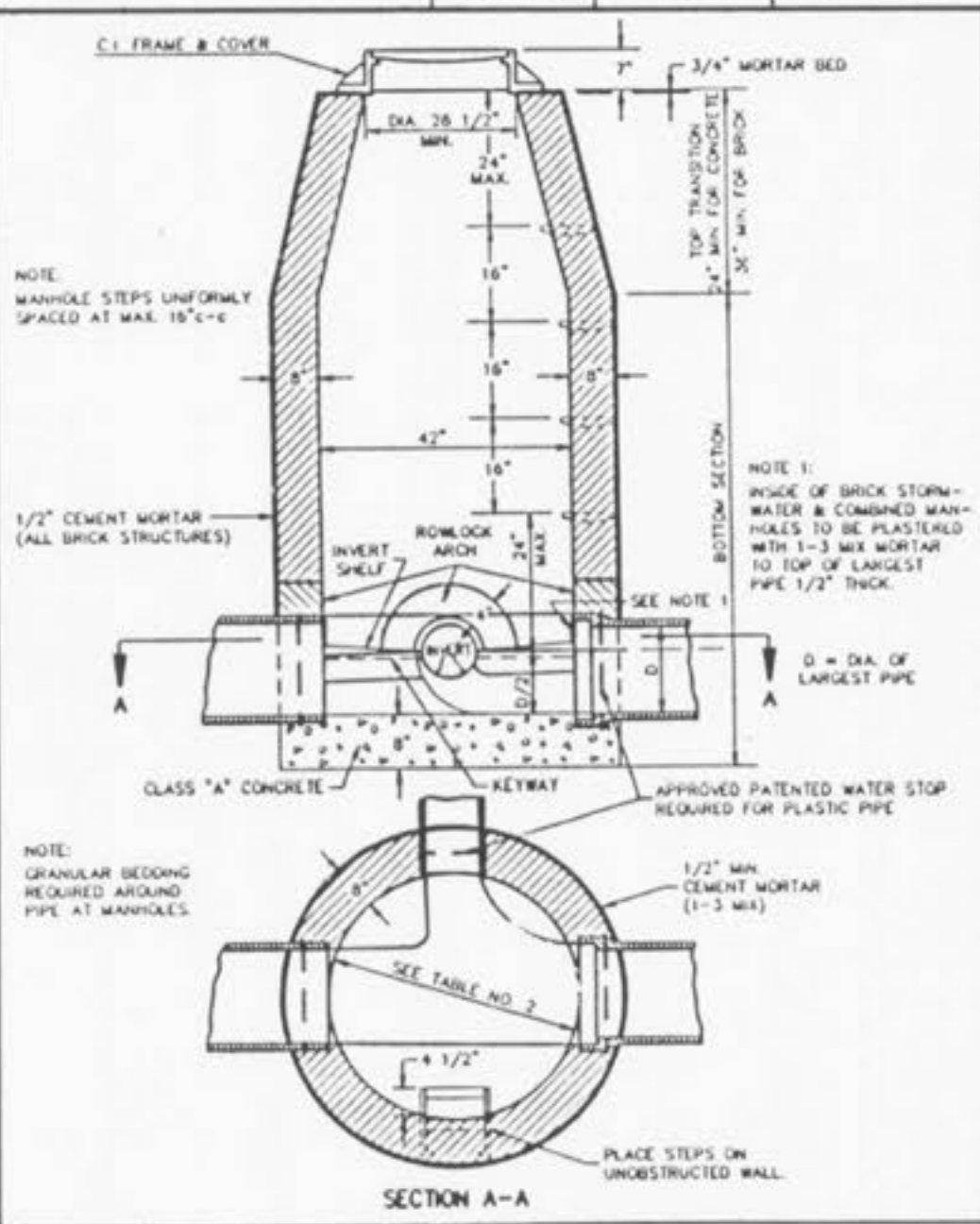


TABLE NO. 2
STANDARD MANHOLE DIMENSIONS

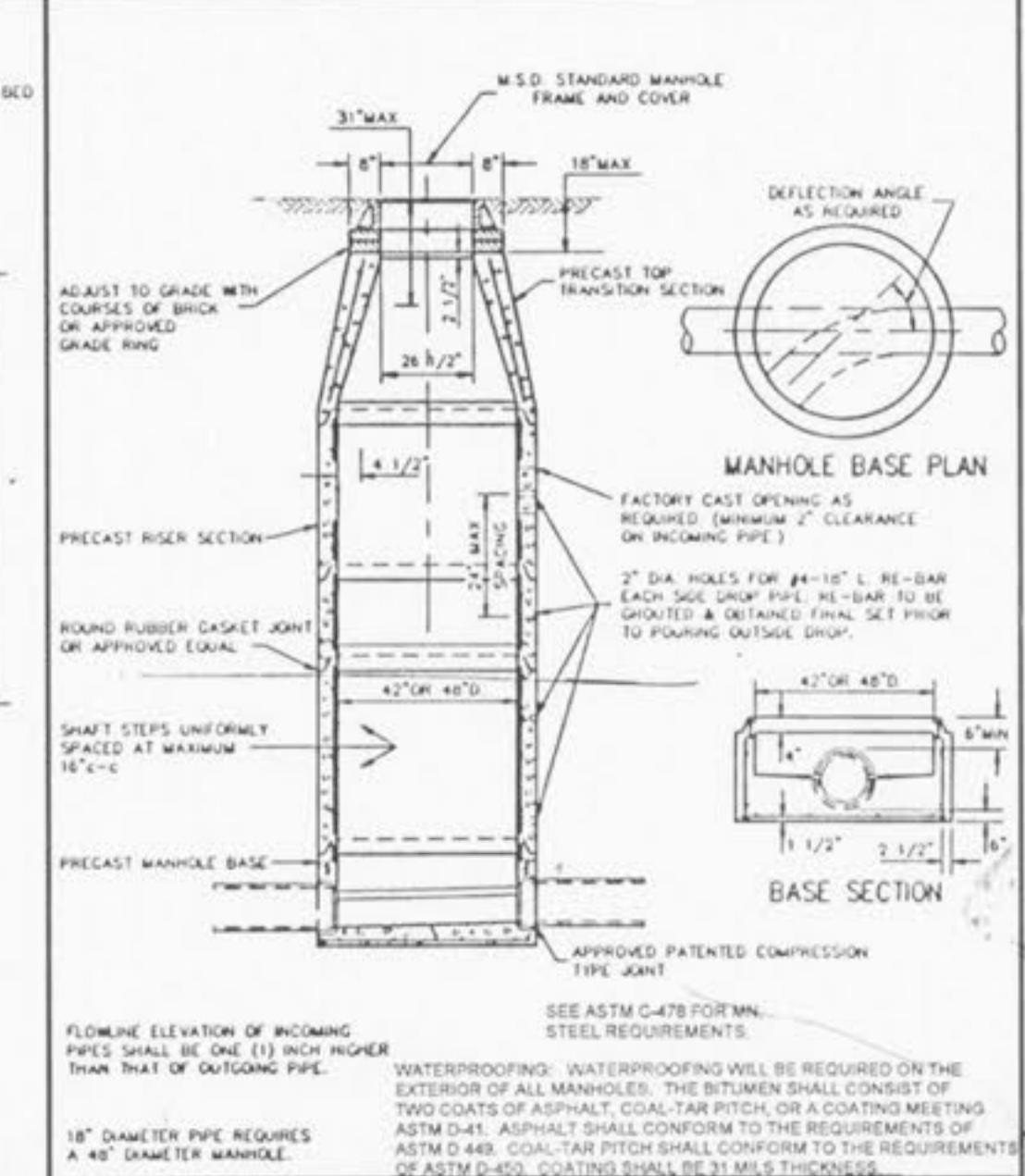
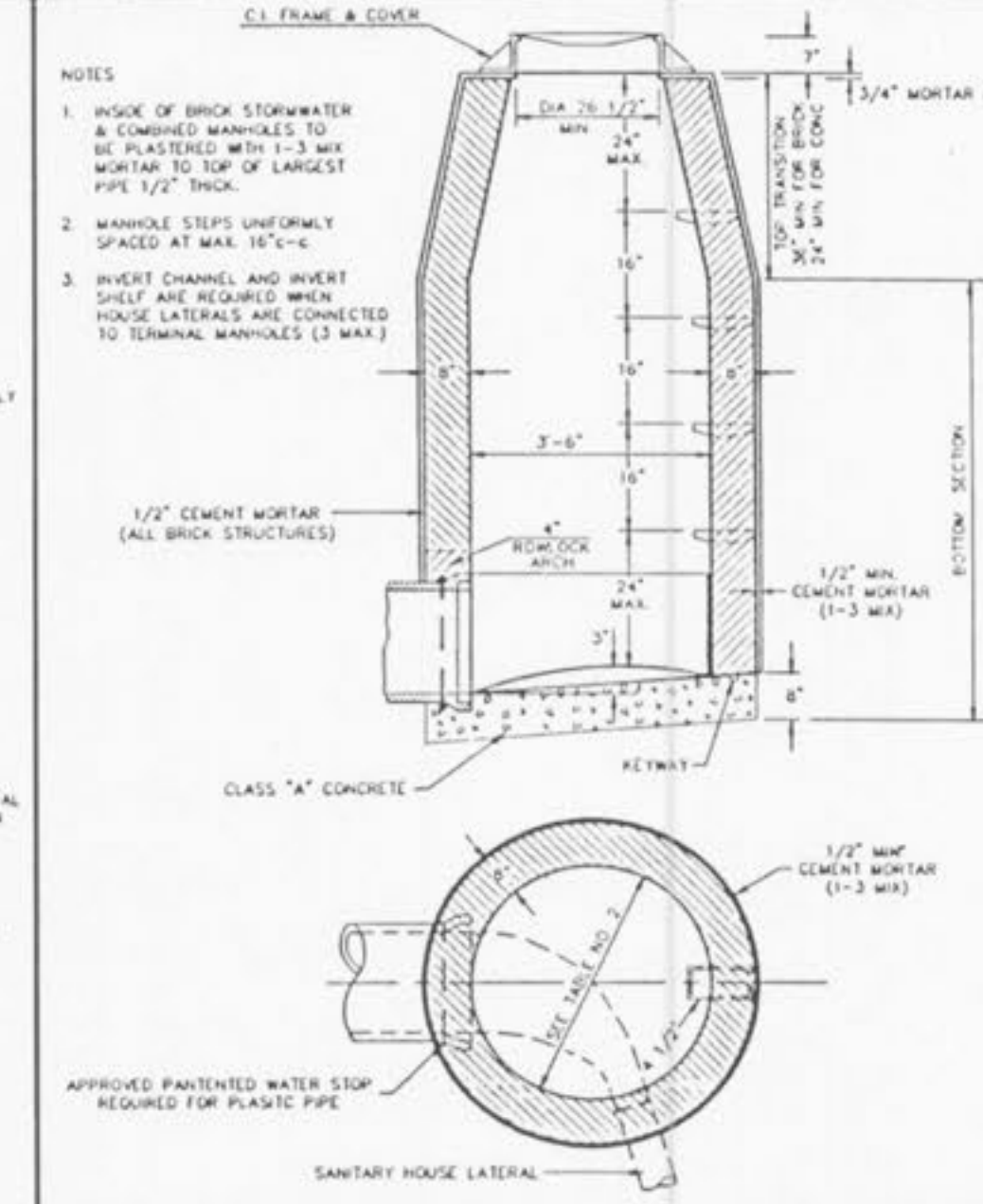
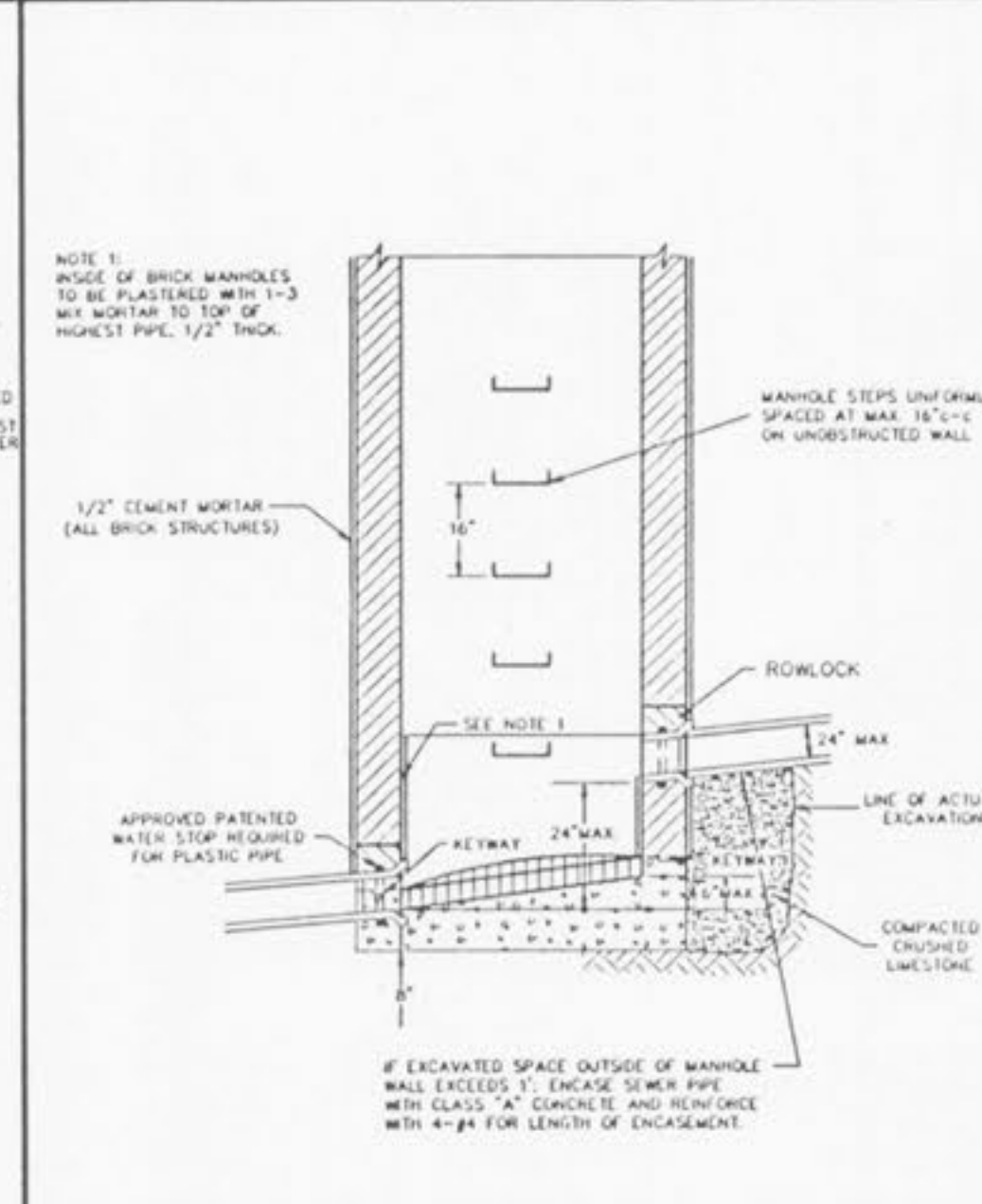
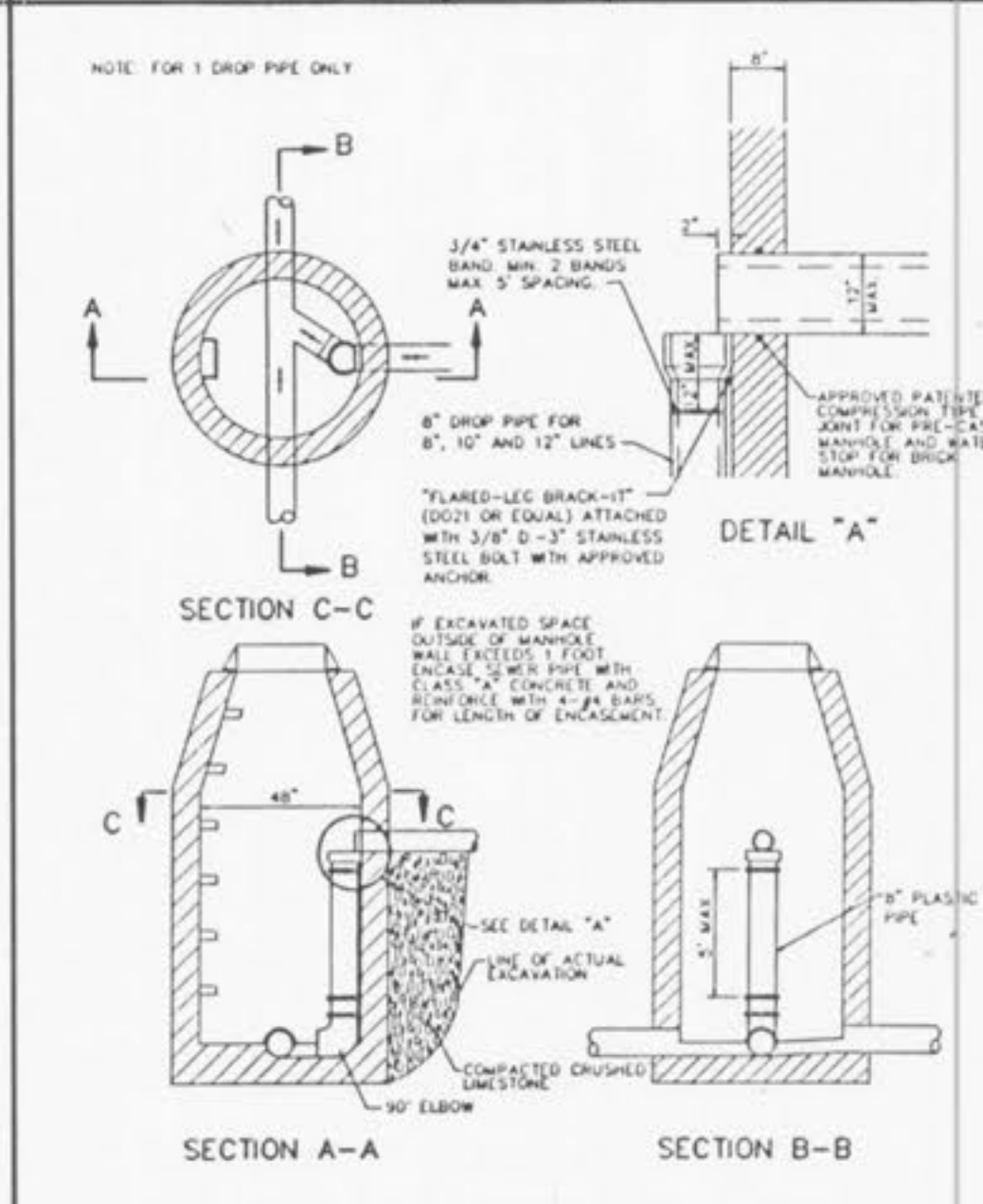
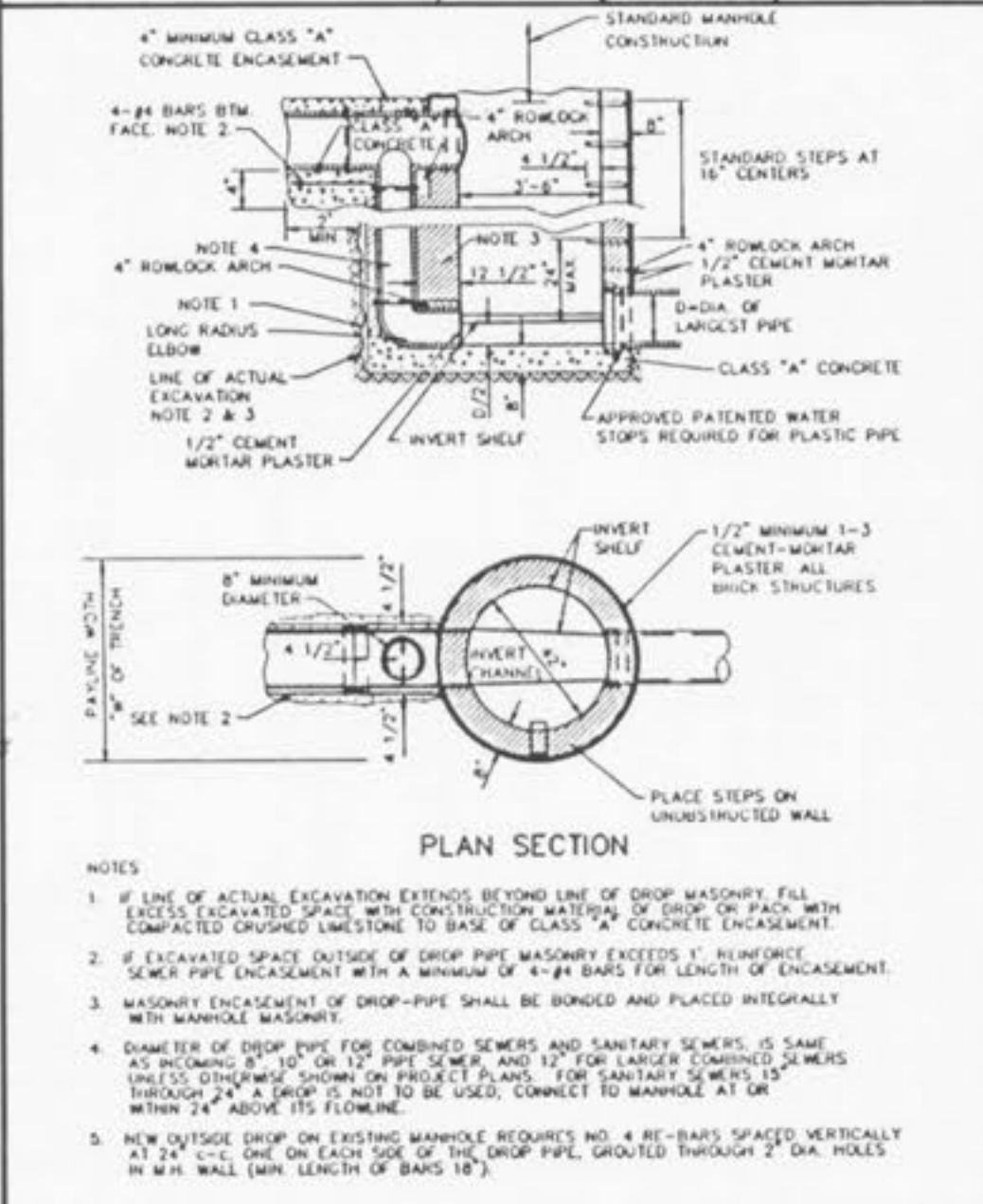
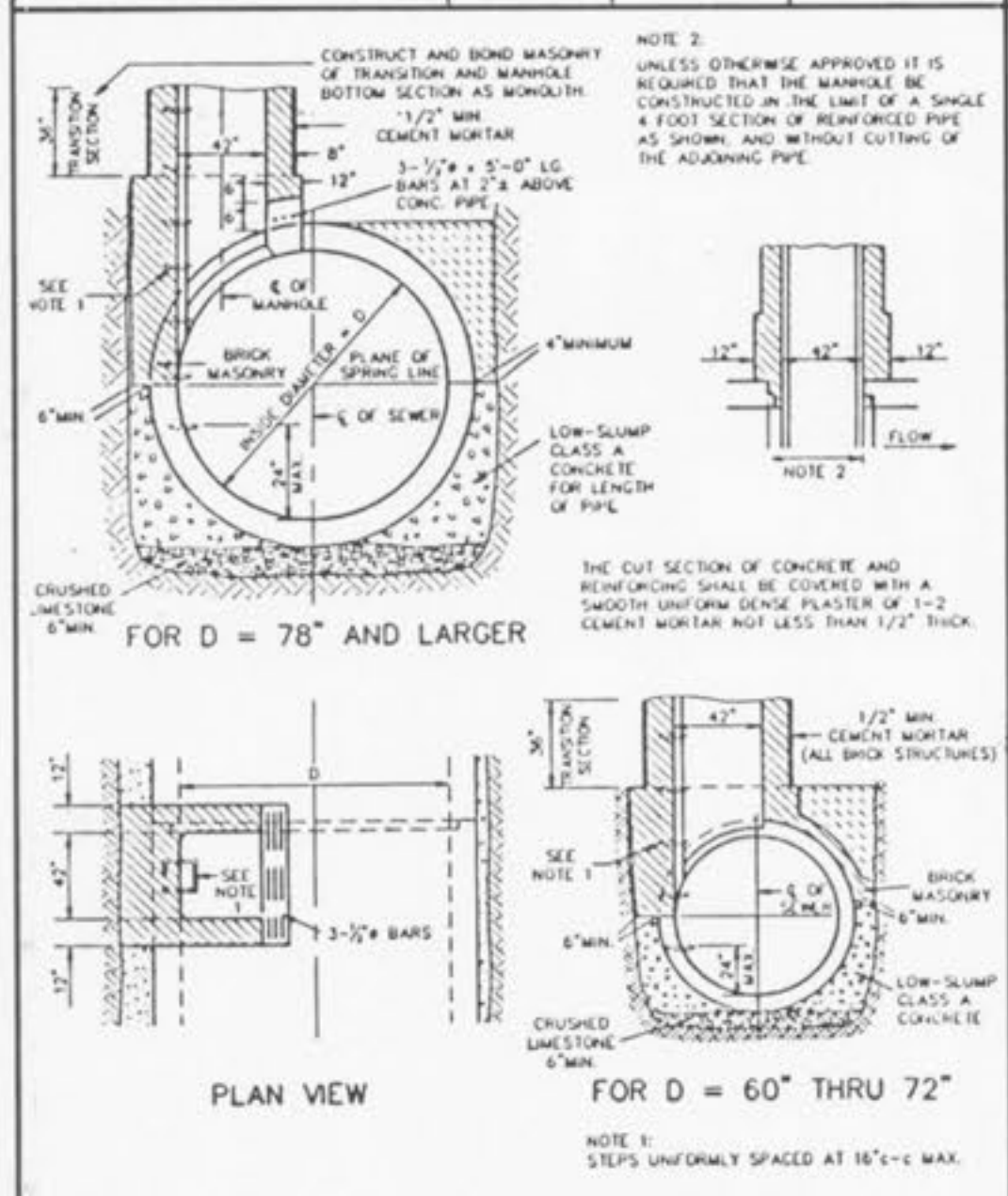
LINE MANHOLE ON PIPE SEWERS 8"-24" DIA.

TYPICAL LINE MANHOLE ON PIPE SEWER 27" THRU 36" IN DIAMETER

MANHOLE ON PIPE SEWER 27" THRU 36" (ALTERNATE)

MANHOLE ON CONCRETE PIPE SEWERS 39" THRU 54" DIAMETER

MANHOLE ON CONCRETE PIPE SEWERS 39" THRU 54" (ALTERNATE)



TYPICAL MANHOLE BASE REINFORCED CONCRETE PIPE SEWERS 60" AND LARGER IN DIAMETER

OUTSIDE FOULWATER DROP MANHOLE

INSIDE FOULWATER DROP MANHOLE

INSIDE FOULWATER DROP MANHOLE (FOR FREE-FALL)

TERMINAL MANHOLE

PRE-CAST CONCRETE MANHOLE FOR SEWERS 8" THROUGH 18"