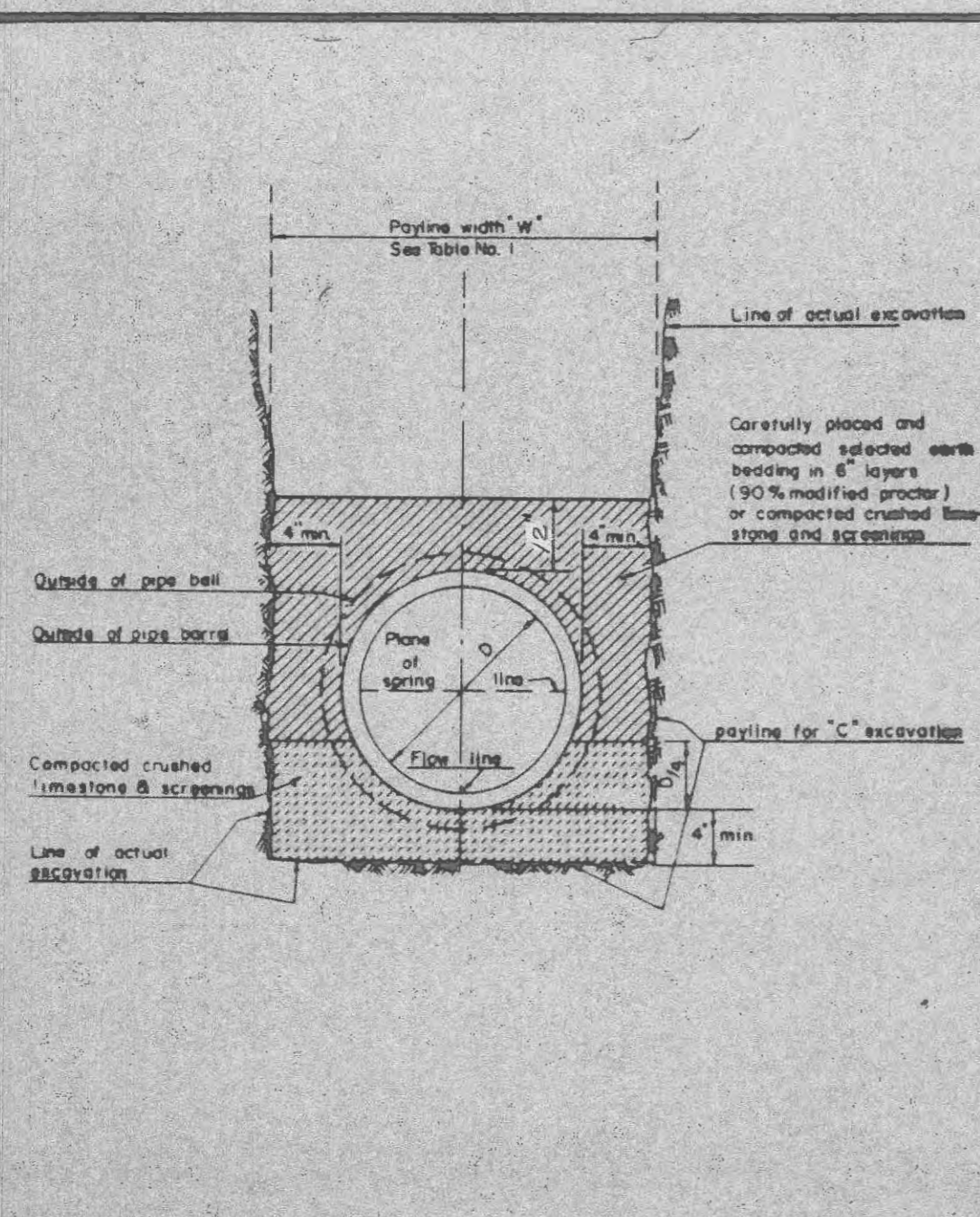
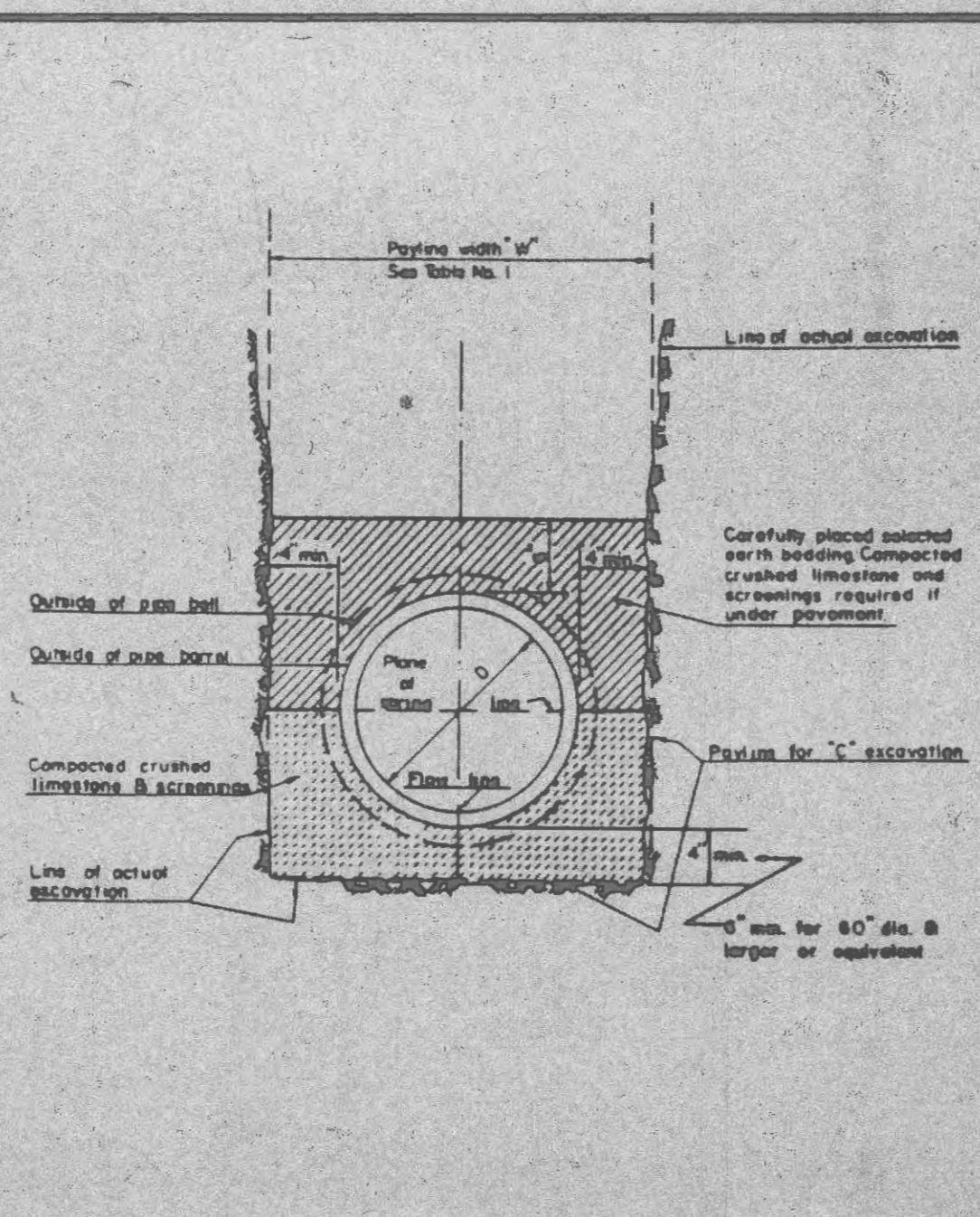


ROUND PIPE				HORIZONTAL ELLIPTICAL PIPE			
Inside Diameter of Pipe (Inches)	"w" Payline Width of Trench (Feet)	Payline Width of Trench (Feet)	Pay-volume cu ft per ft of Pipe (Concrete Excavation)	Inside Dimensions of Pipe (Inches)	"w" Payline Width of Trench (Feet)	Payline Width of Trench (Feet)	Pay-volume cu ft per ft of Pipe (Concrete Excavation)
4	28	2.33	3.20				
6	28	2.33	3.46				
8	28	2.33	3.70				
10	28	2.33	3.96				
12	28	2.33	3.98				
15	32	2.67	4.89				
18	35	2.92	5.63	14 x 23	41	3.42	9.94
21	39	3.25	6.61				
24	42	3.50	7.39	19 x 30	49	4.08	7.60
27	45	3.75	8.18	22 x 34	53	4.42	8.61
30	49	4.08	9.30	24 x 36	58	4.83	9.70
33	53	4.42	10.53	27 x 42	62	5.17	10.71
36	56	4.67	11.43	29 x 45	66	5.50	11.72
39	DISCONTINUED						
42	63	5.25	13.38	34 x 53	75	6.25	14.08
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 76	101	8.42	21.50
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	36.90
96	126	10.50	39.37	77 x 121	152	12.67	40.89
102	133	11.08	42.99	82 x 128	160	13.33	44.46
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	51.70
120	154	12.83	54.72	97 x 151	185	15.42	56.01
126	161	13.42	58.92				
132	168	14.00	63.27	106 x 166	202	16.83	64.40
144	182	15.17	72.40	116 x 180	218	18.17	73.56

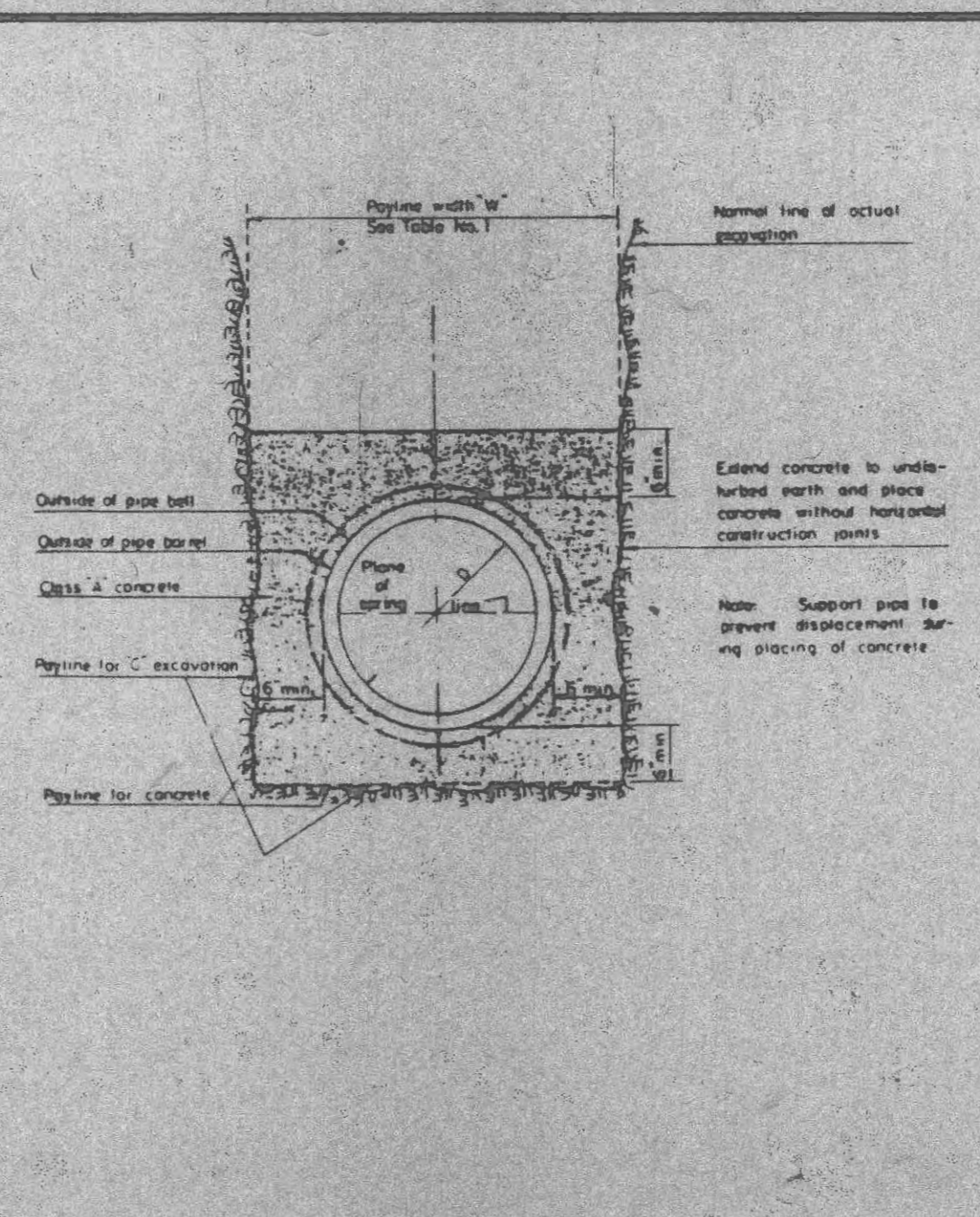
TABLE NO. 1
 PAYLINE WIDTHS OF TRENCH AND PAY-QUANTITIES OF CONCRETE
 DETAIL 1



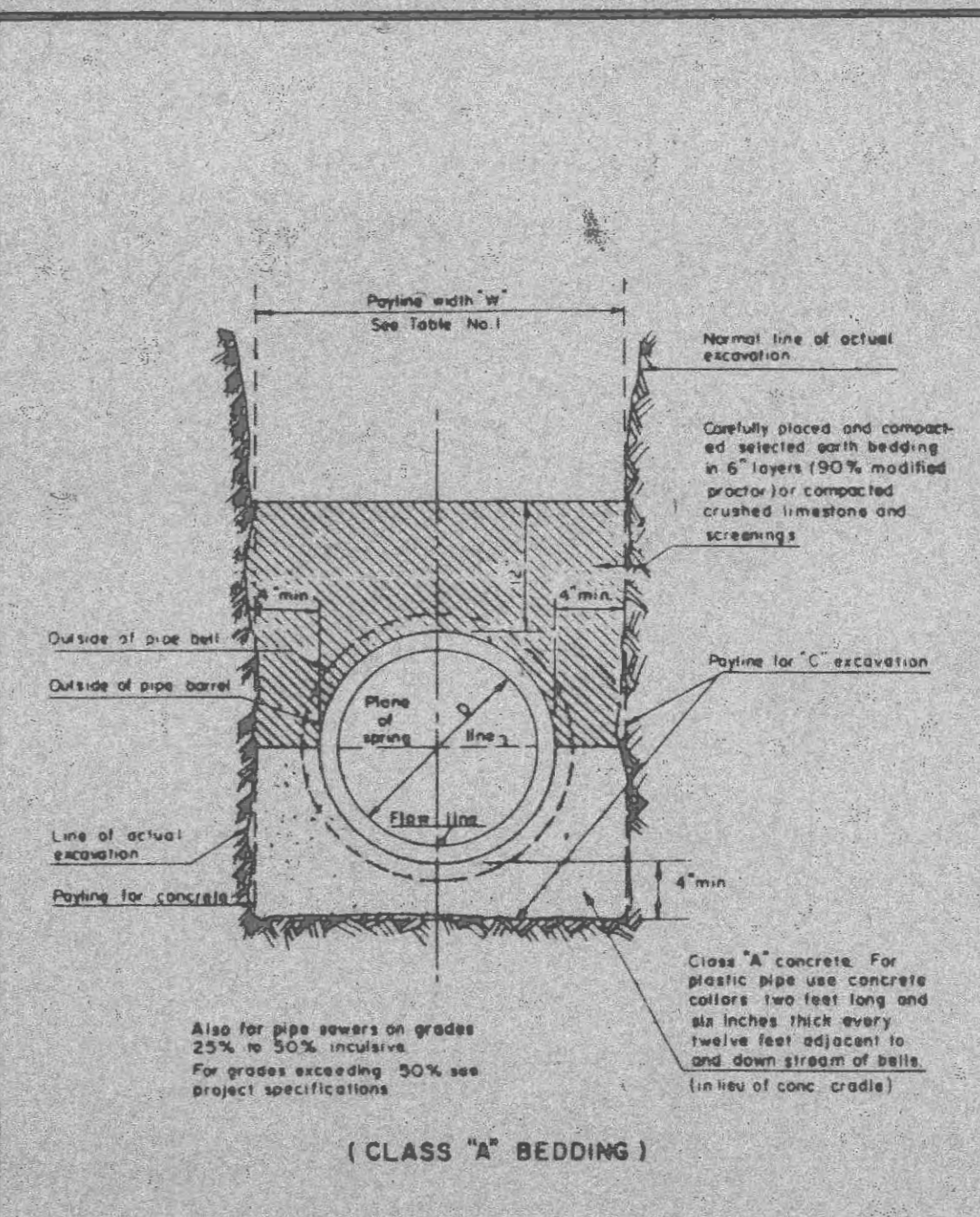
PIPE BEDDING CLASS "C" (FOR ALL PIPE EXCEPT REINFORCED CONCRETE PIPE)
 DETAIL 2



PIPE BEDDING CLASS "C" (MODIFIED FOR REINFORCED CONCRETE PIPE)
 DETAIL 3



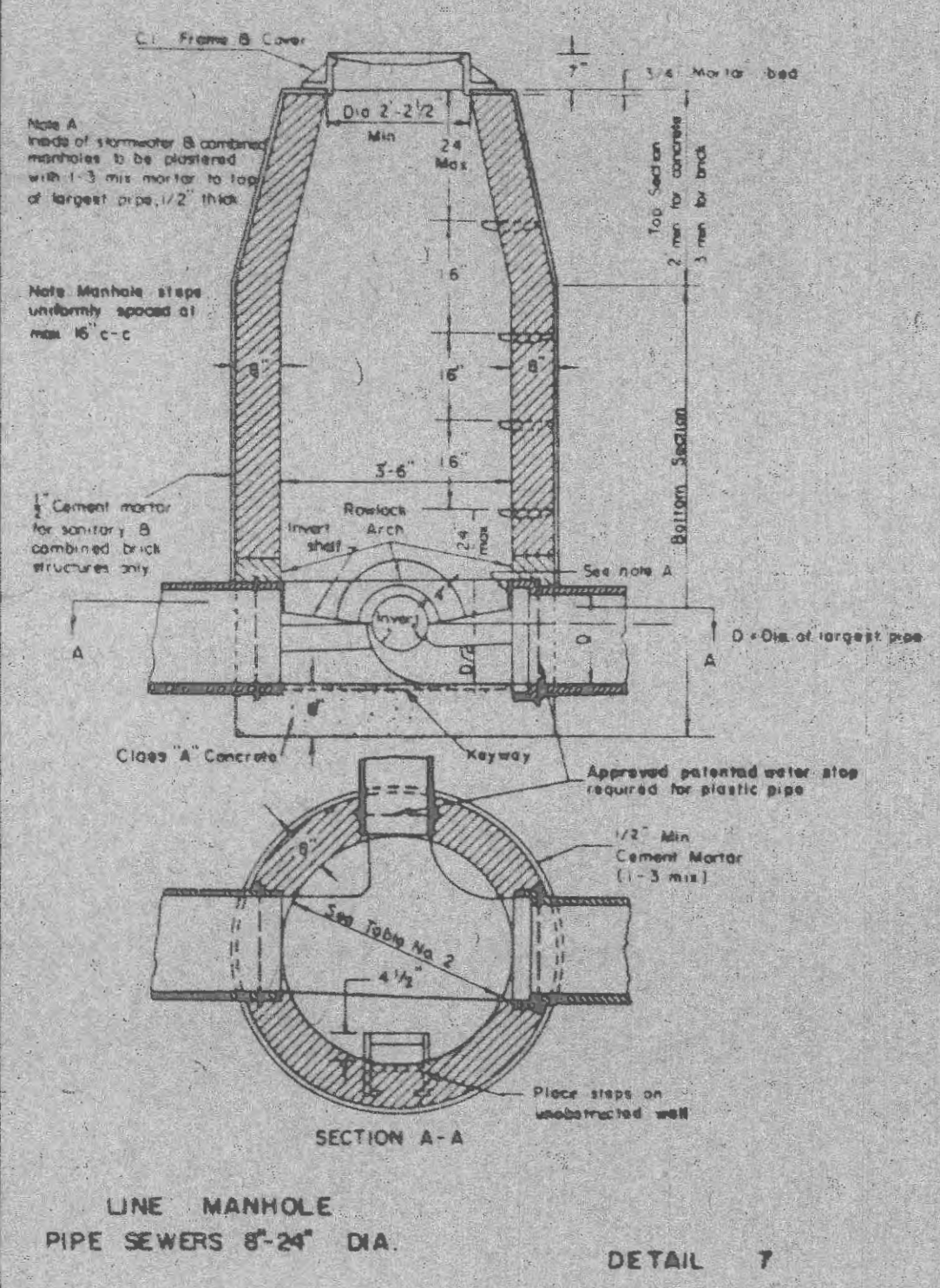
CONCRETE ENCASEMENT
 DETAIL 4



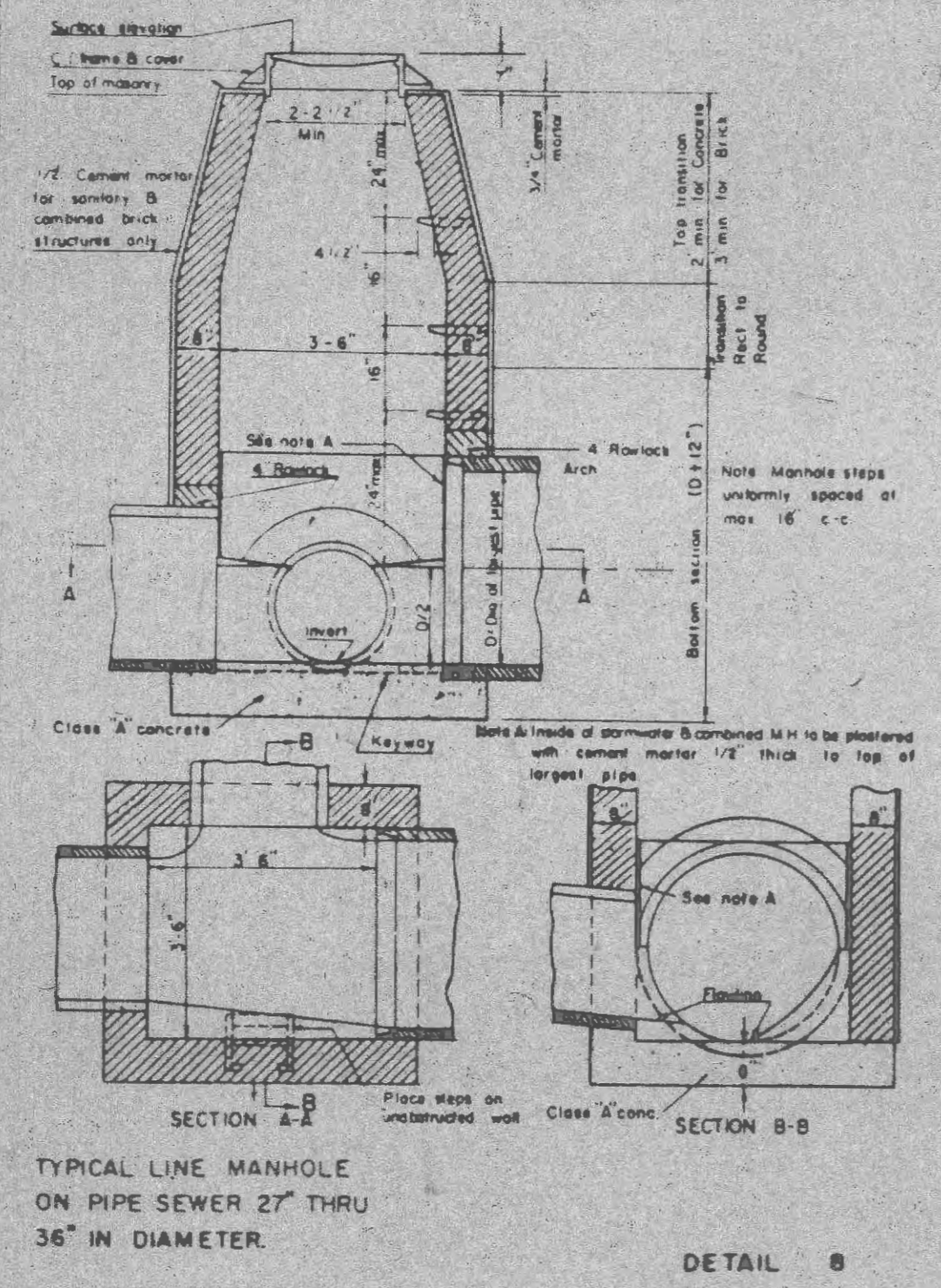
CONCRETE CRADLE
 DETAIL 5

TABLE NO. 2
 STANDARD MANHOLE DIMENSIONS
 DETAIL 6

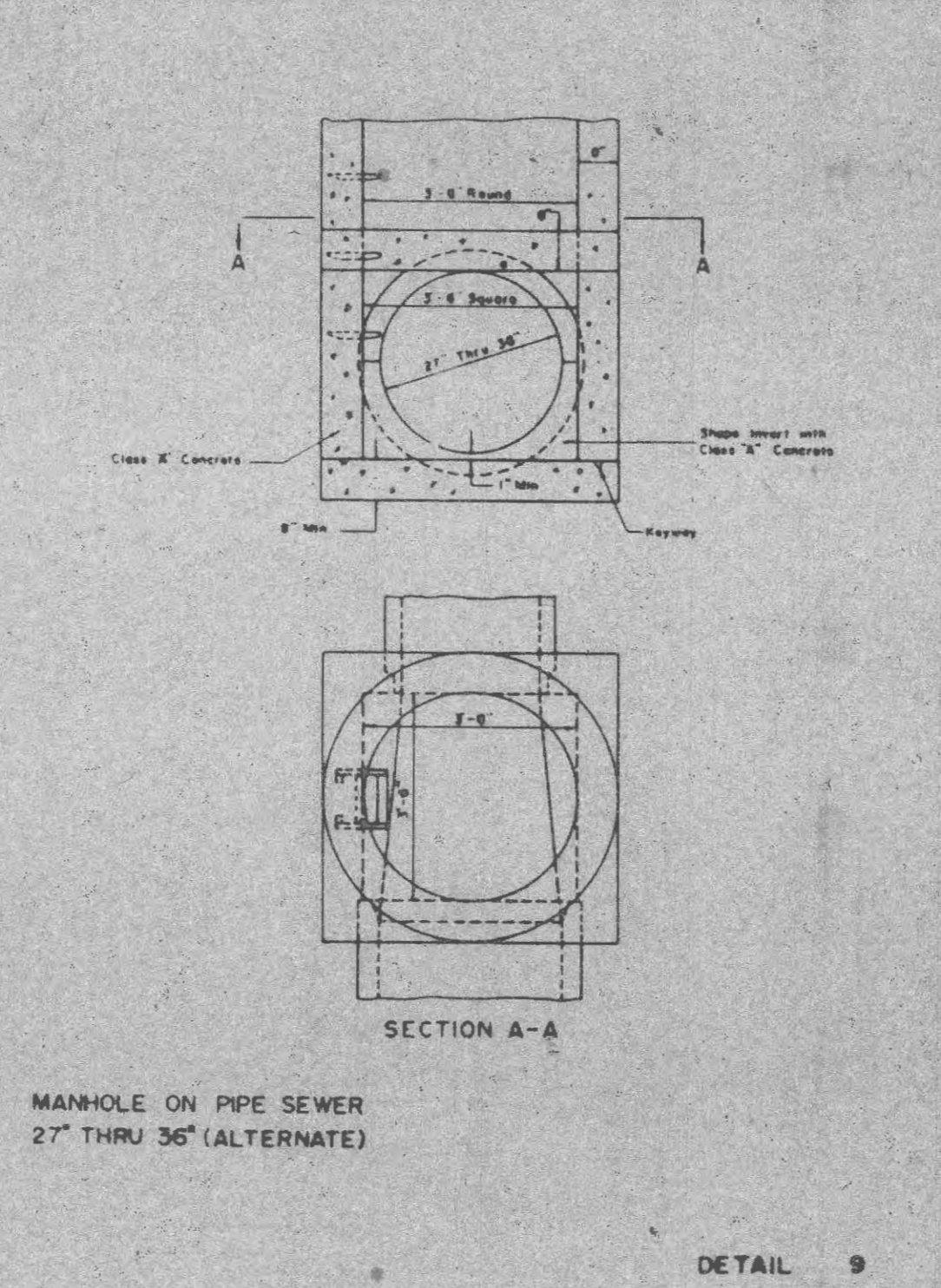
Section of Manhole	Dimension	
Top	Upper 2'-2 1/2" Dia.	
Transition	Lower 3'-6" Dia.	
	Bottom Section 8" thru 24" Dia. Pipe	3'-6" Dia.
Bottom Section	27" thru 36" Dia. Pipe	3'-6" Square



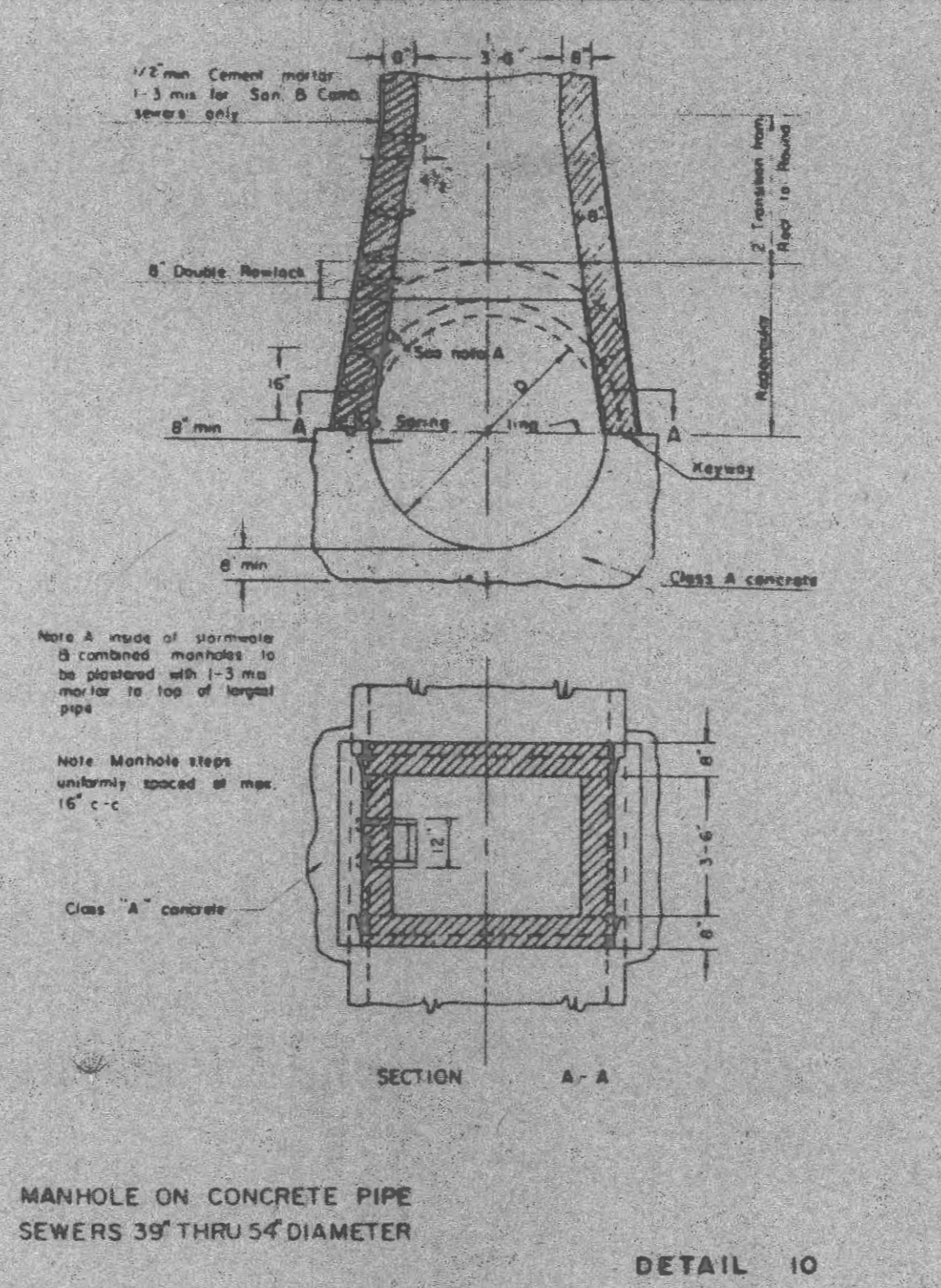
LINE MANHOLE PIPE SEWERS 8"-24" DIA.
 DETAIL 7



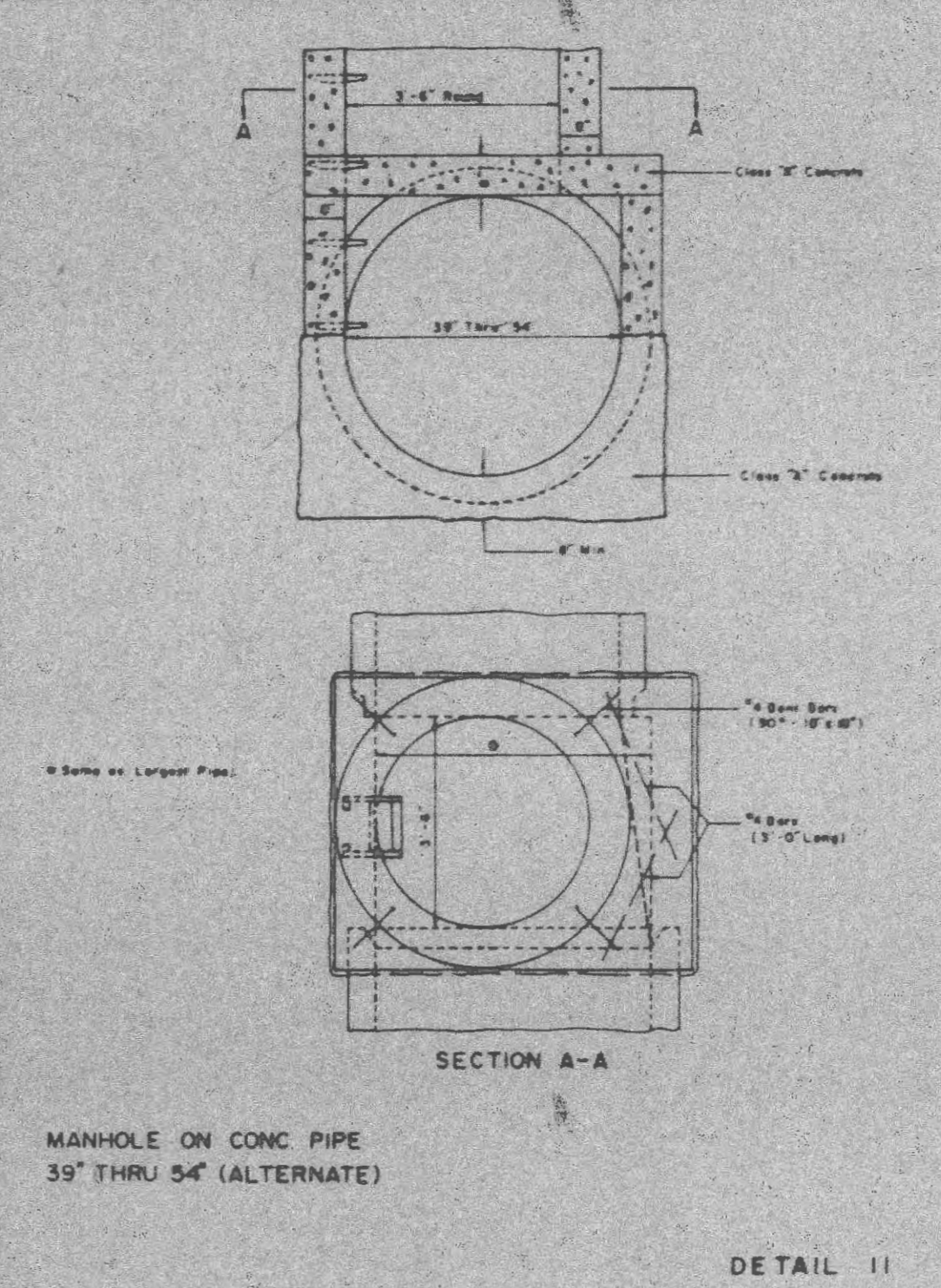
TYPICAL LINE MANHOLE ON PIPE SEWER 27" THRU 36" IN DIAMETER
 DETAIL 8



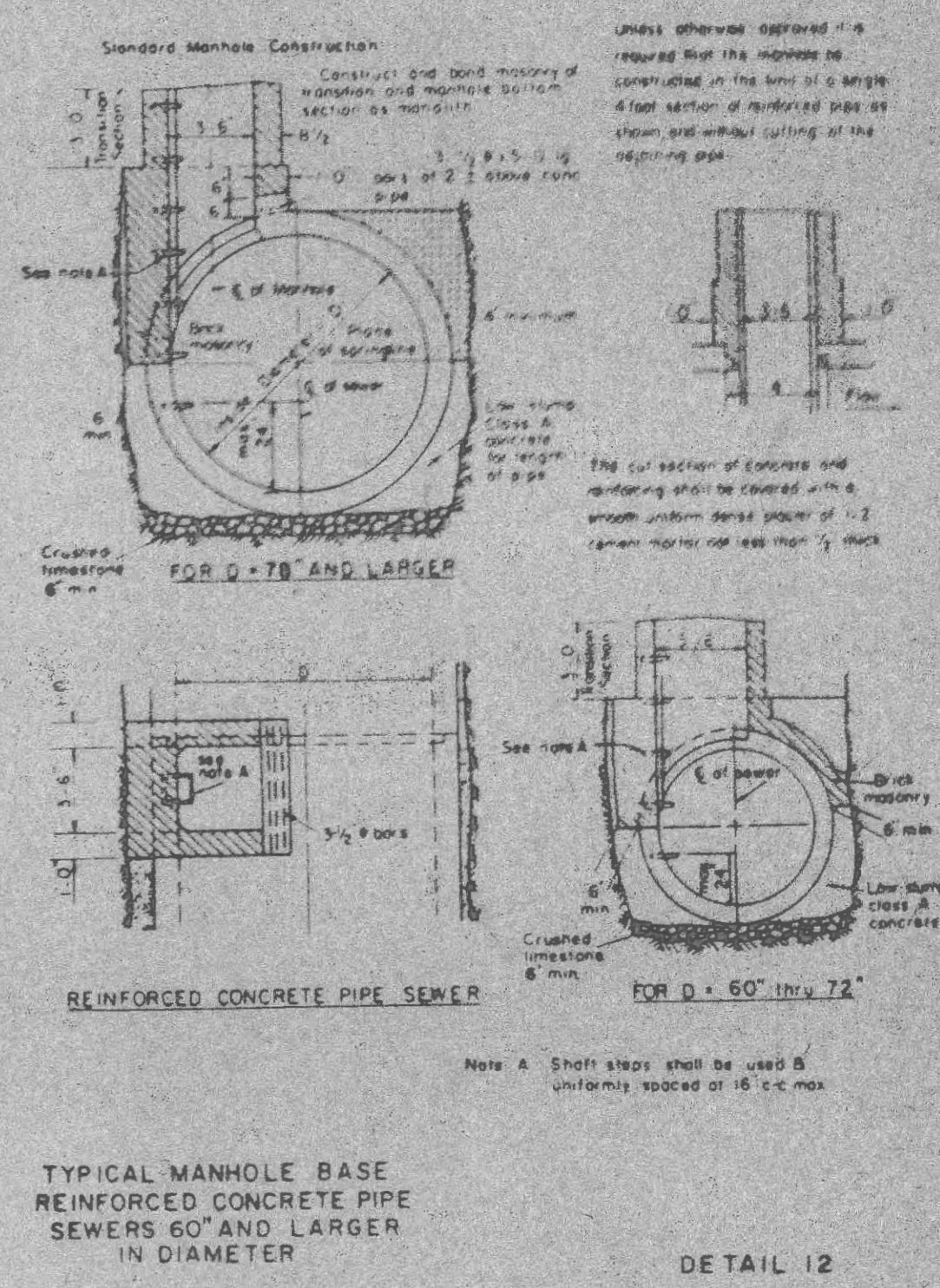
MANHOLE ON PIPE SEWER 27" THRU 36" IN DIAMETER (ALTERNATE)
 DETAIL 9



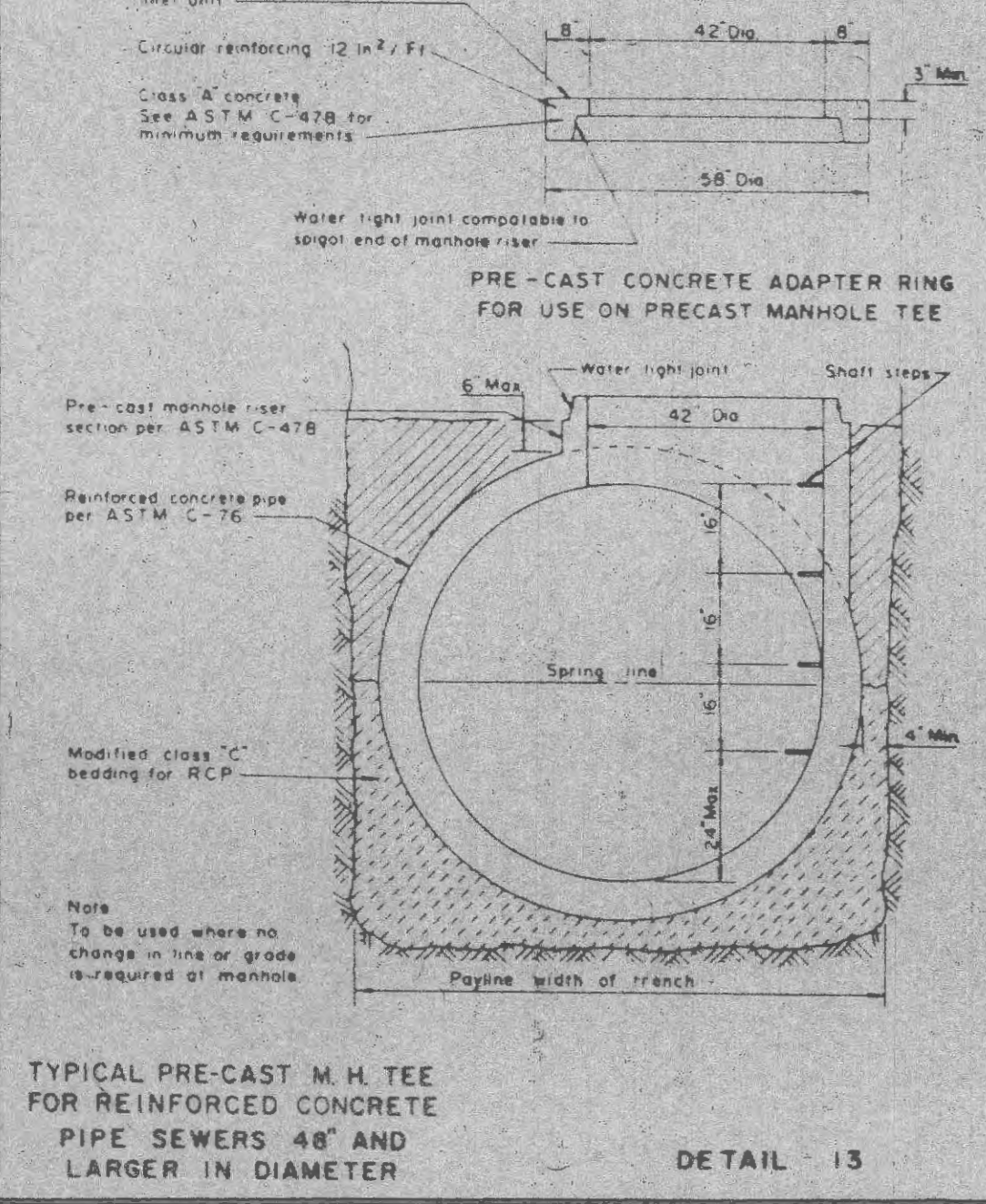
MANHOLE ON CONCRETE PIPE SEWERS 39" THRU 54" DIAMETER
 DETAIL 10



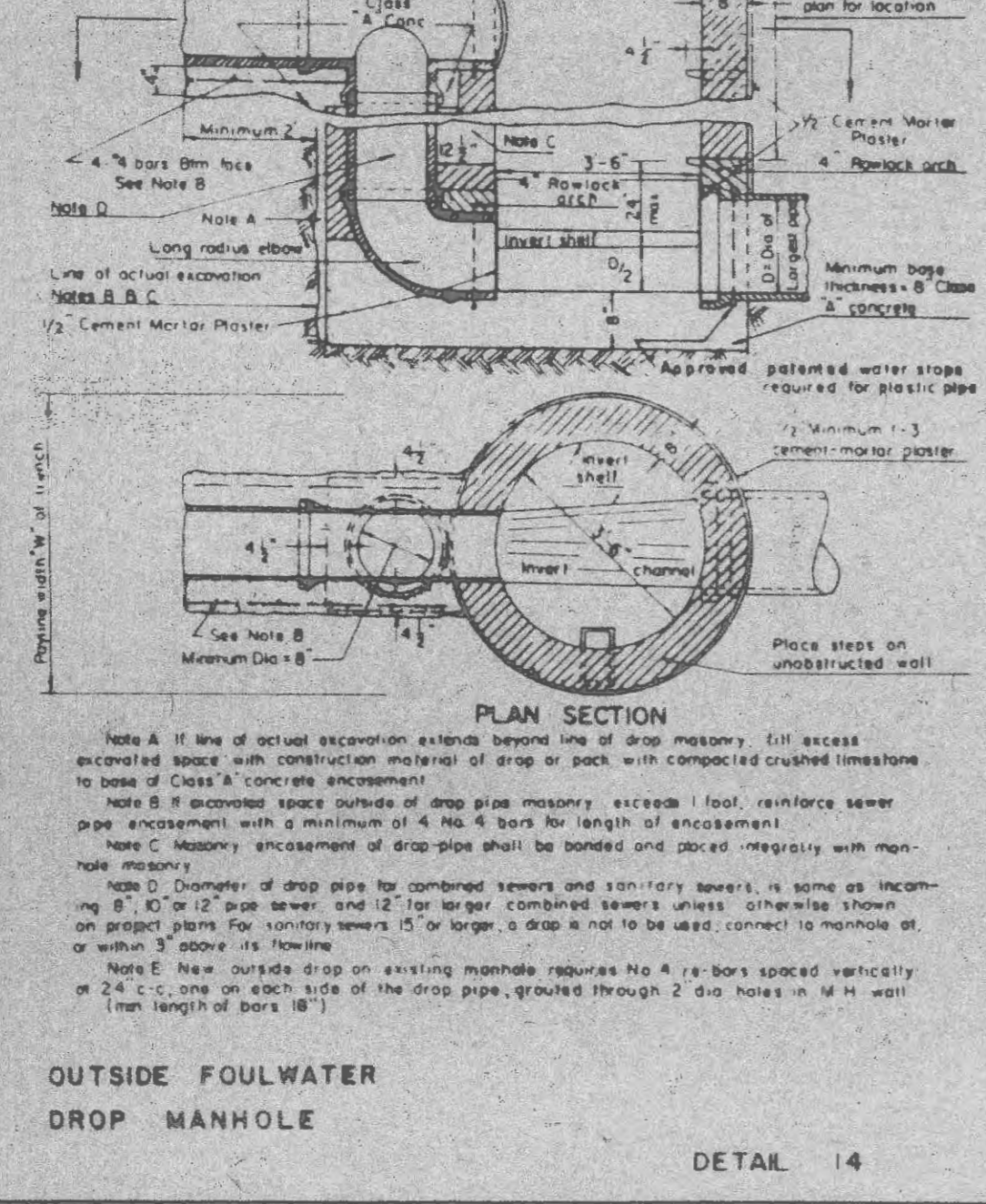
MANHOLE ON CONC. PIPE 39" THRU 54" (ALTERNATE)
 DETAIL 11



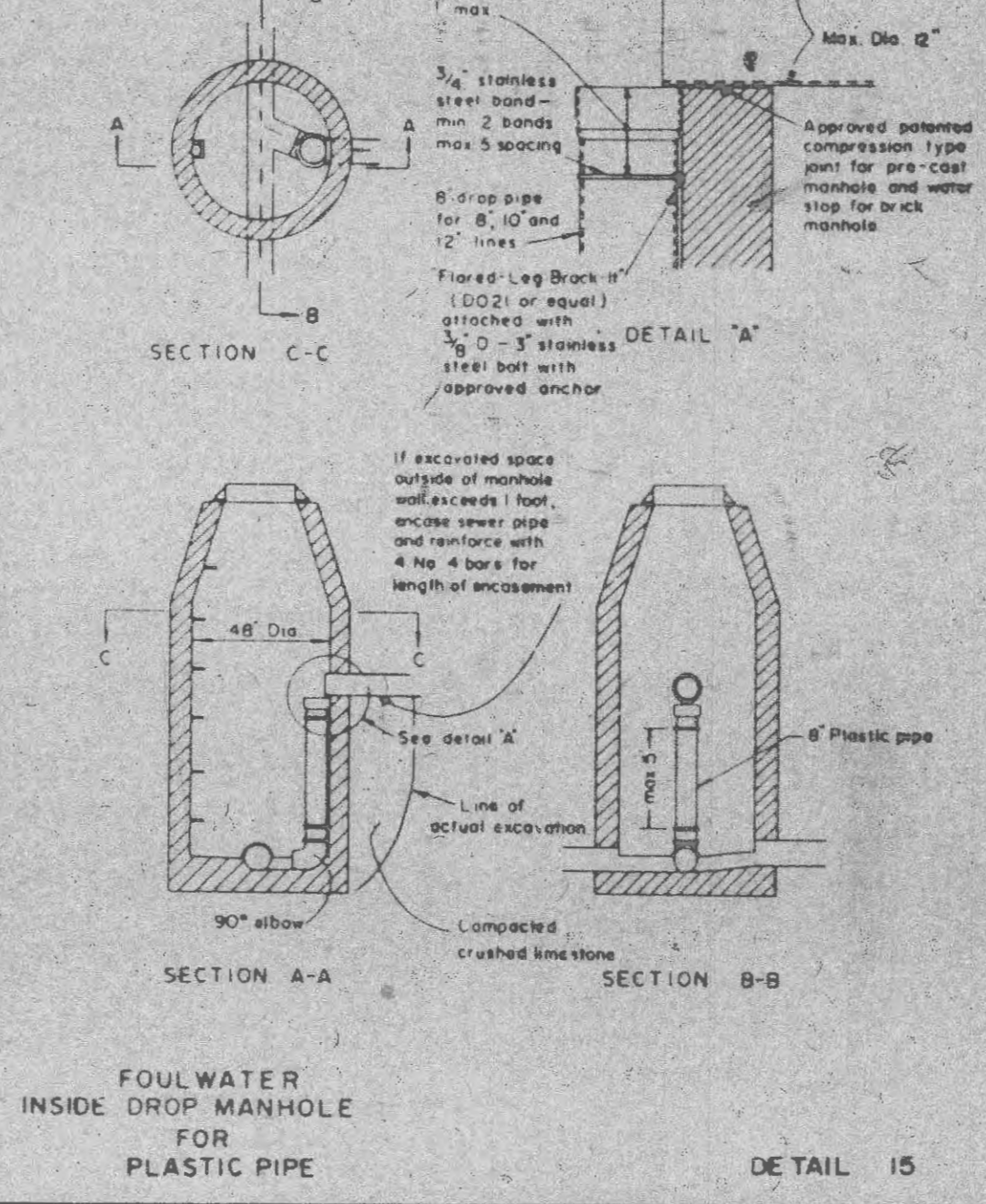
TYPICAL MANHOLE BASE REINFORCED CONCRETE PIPE SEWERS 60" AND LARGER IN DIAMETER
 DETAIL 12



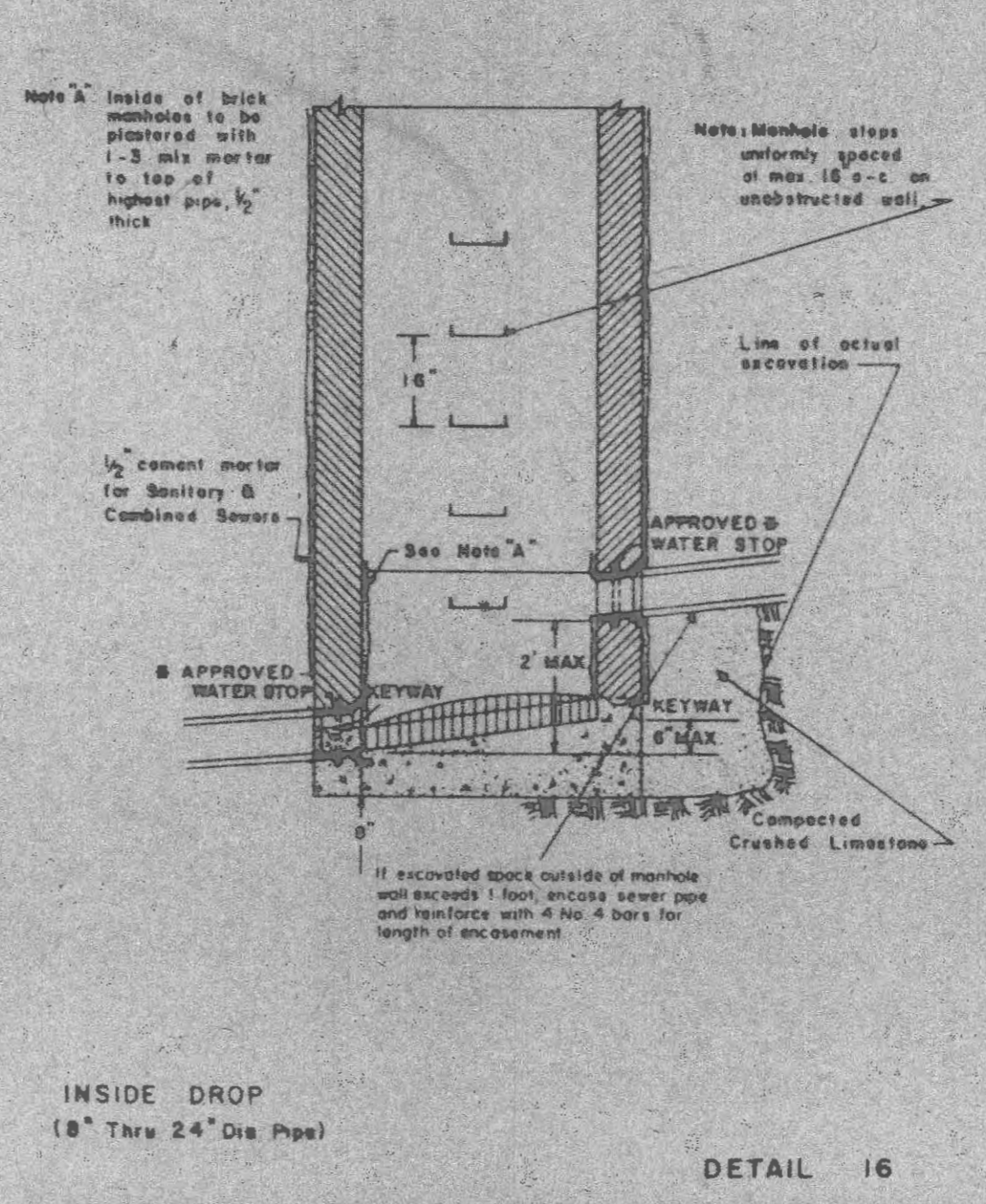
TYPICAL PRE-CAST M.H. TEE FOR REINFORCED CONCRETE PIPE SEWERS 48" AND LARGER IN DIAMETER
 DETAIL 13



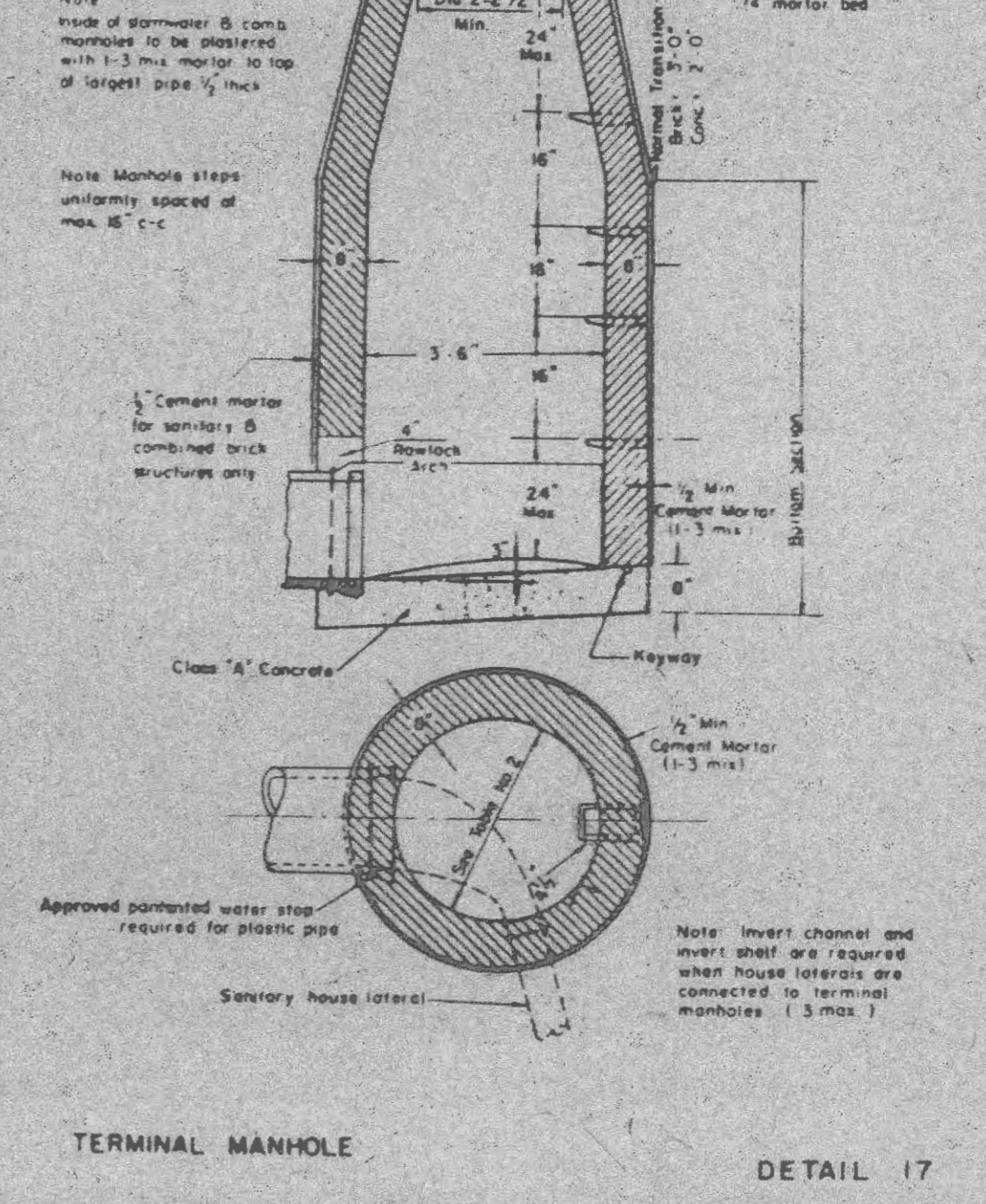
OUTSIDE FOULWATER DROP MANHOLE
 DETAIL 14



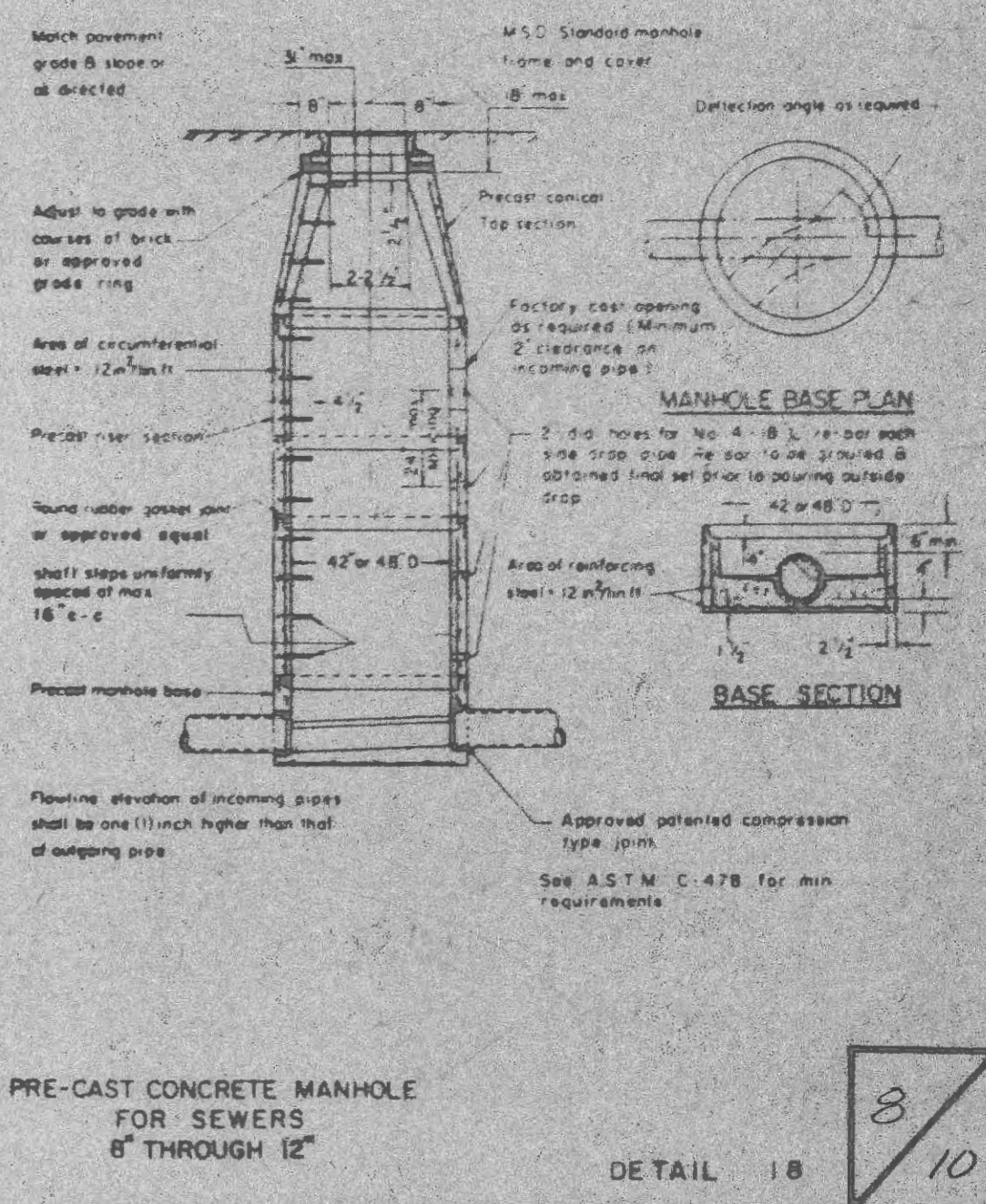
FOULWATER INSIDE DROP MANHOLE FOR PLASTIC PIPE
 DETAIL 15



INSIDE DROP (8" THRU 24" DIA. PIPE)
 DETAIL 16



TERMINAL MANHOLE
 DETAIL 17



PRE-CAST CONCRETE MANHOLE FOR SEWERS 6" THROUGH 12"
 DETAIL 18