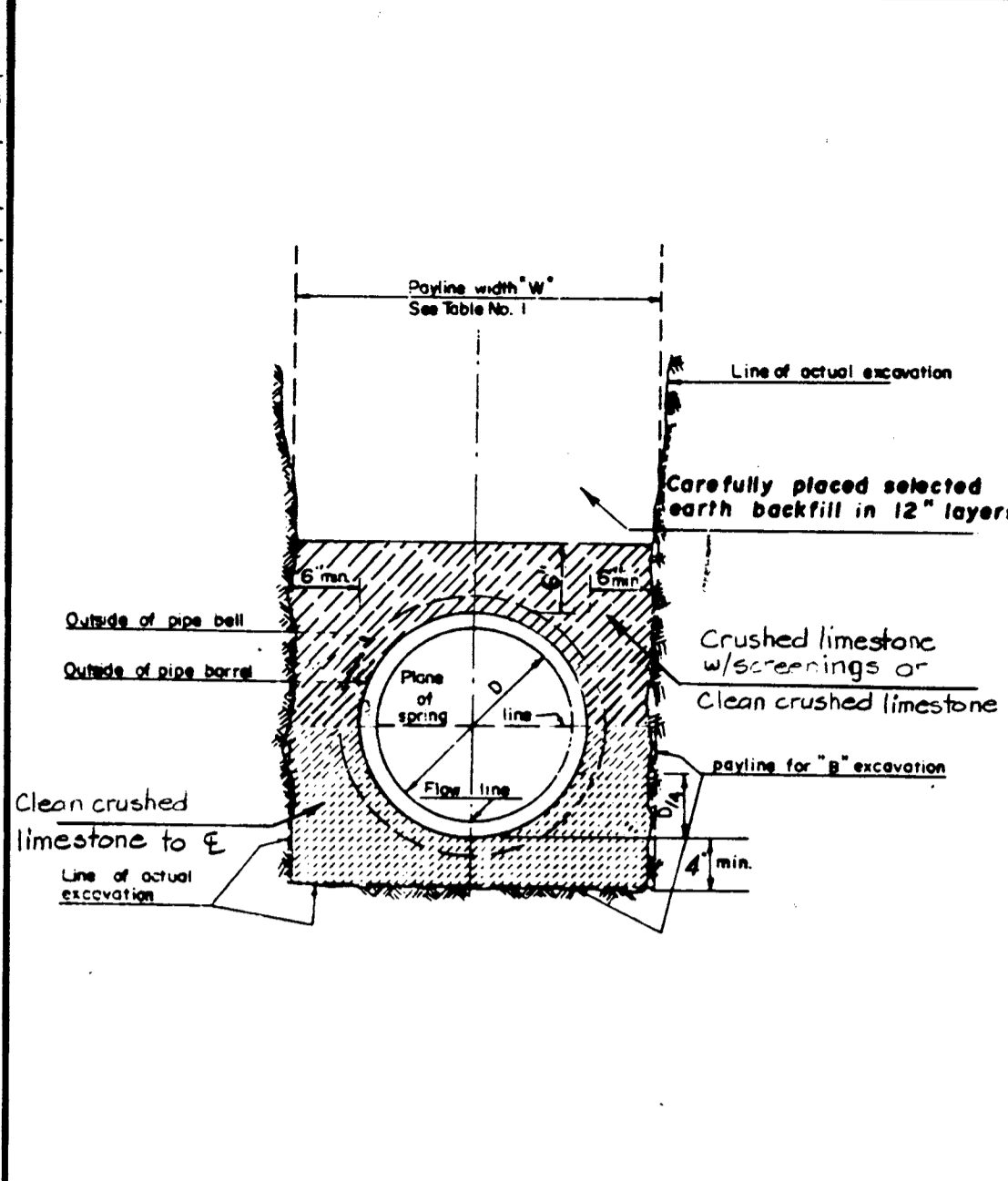
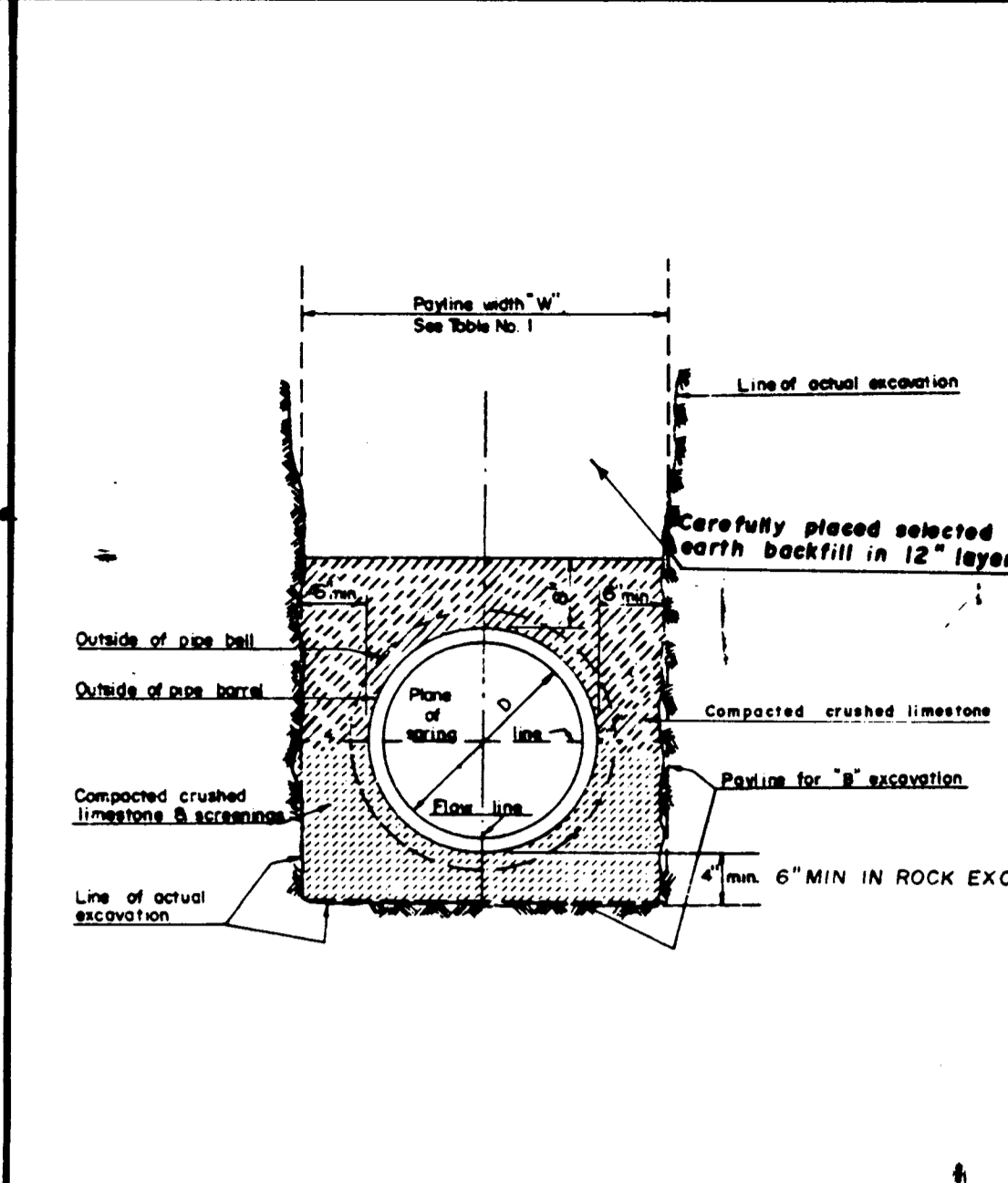


ROUND PIPE				HORIZONTAL ELLIPTICAL PIPE			
Inside Diameter of Pipe (Inches)	"W" Payline Width of Trench (Inches)	"W" Payline Width of Trench (Feet)	Pay-volumes cu ft per ft. of Concrete Encasement	Inside Dimensions of Pipe (Inches)	"W" Payline Width of Trench (Inches)	"W" Payline Width of Trench (Feet)	Pay-volumes cu ft per ft. of Concrete Encasement
4	28	2.33	3.20				
6	28	2.33	3.46				
8	28	2.33	3.70				
10	28	2.33	3.86				
12	28	2.33	3.98				
15	32	2.67	4.89				
18	35	2.92	5.63	14 x 23	41	3.42	5.94
21	36	3.00	6.61				
24	40	3.33	7.39	19 x 30	49	4.08	7.68
27	44	3.67	8.18	22 x 34	53	4.42	8.61
30	48	4.00	9.30	24 x 38	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			32 x 49	71	5.92	13.14
42	63	5.25	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 76	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 128	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	51.70
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	64.48
144	182	15.17	72.40	116 x 180	218	18.17	73.59

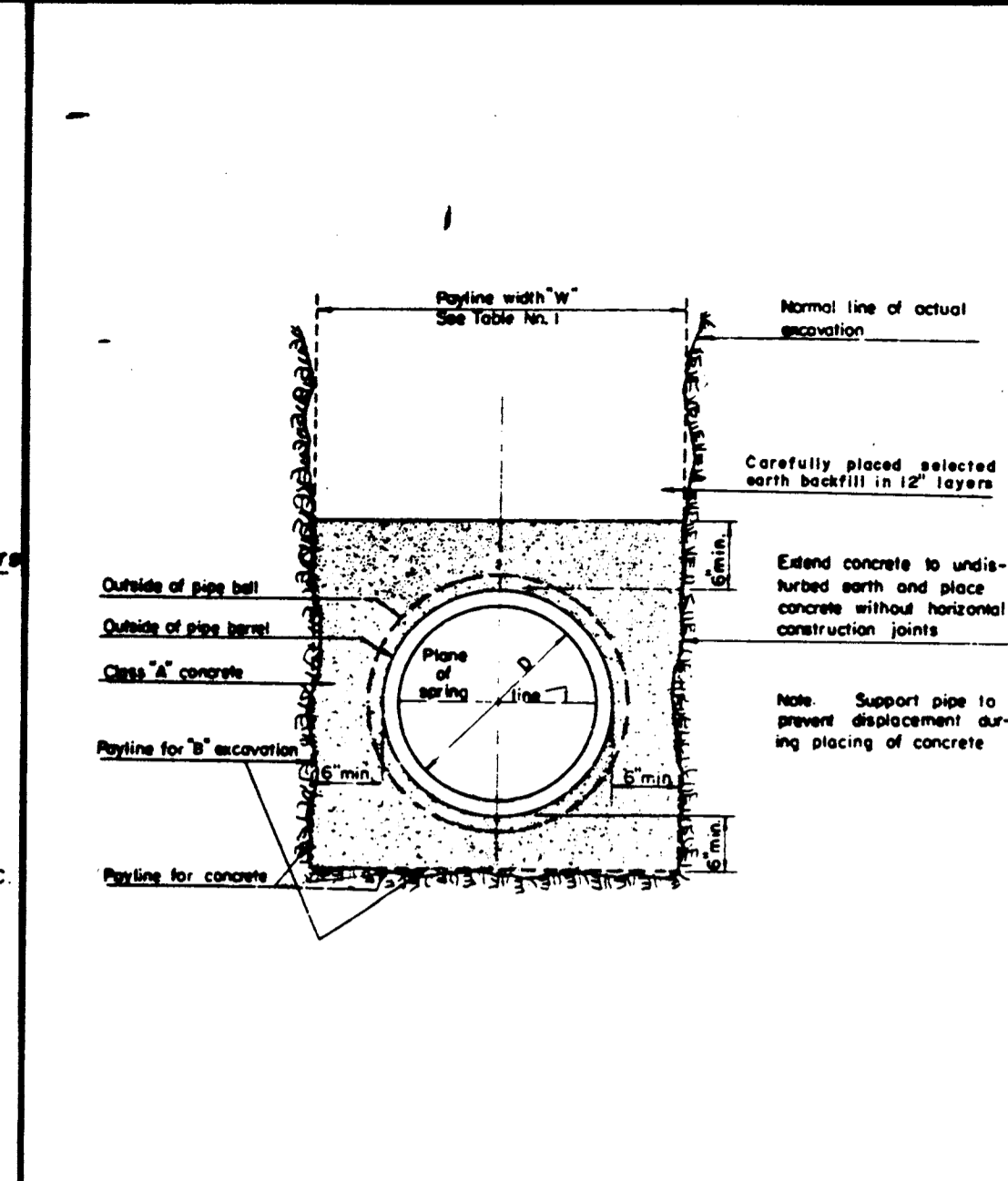
TABLE NO. 1
 PAYLINE WIDTHS OF TRENCH AND PAY-QUANTITIES OF CONCRETE



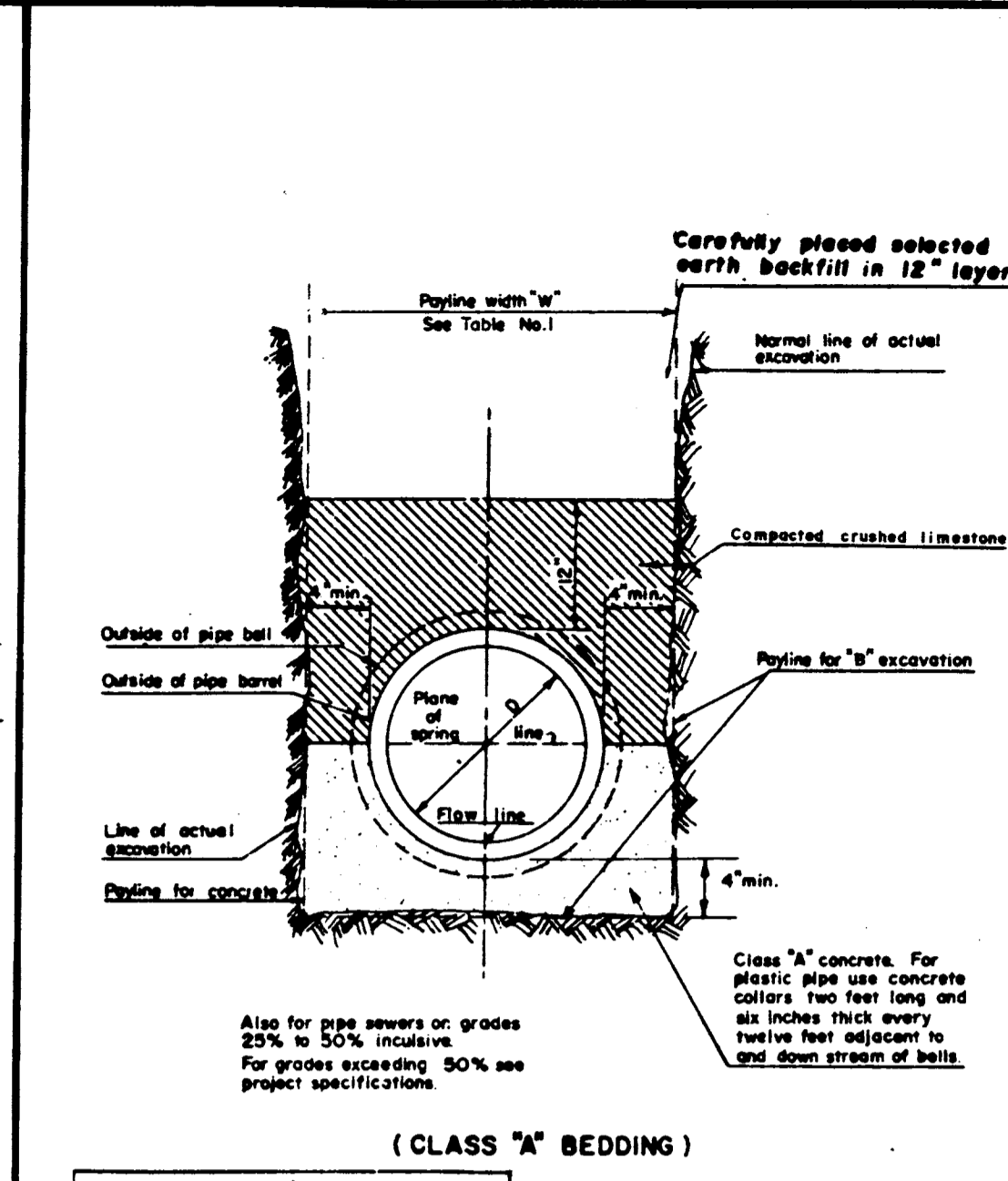
PIPE BEDDING CLASS "C"
 (FOR ALL PIPE EXCEPT REINFORCED CONCRETE PIPE)



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



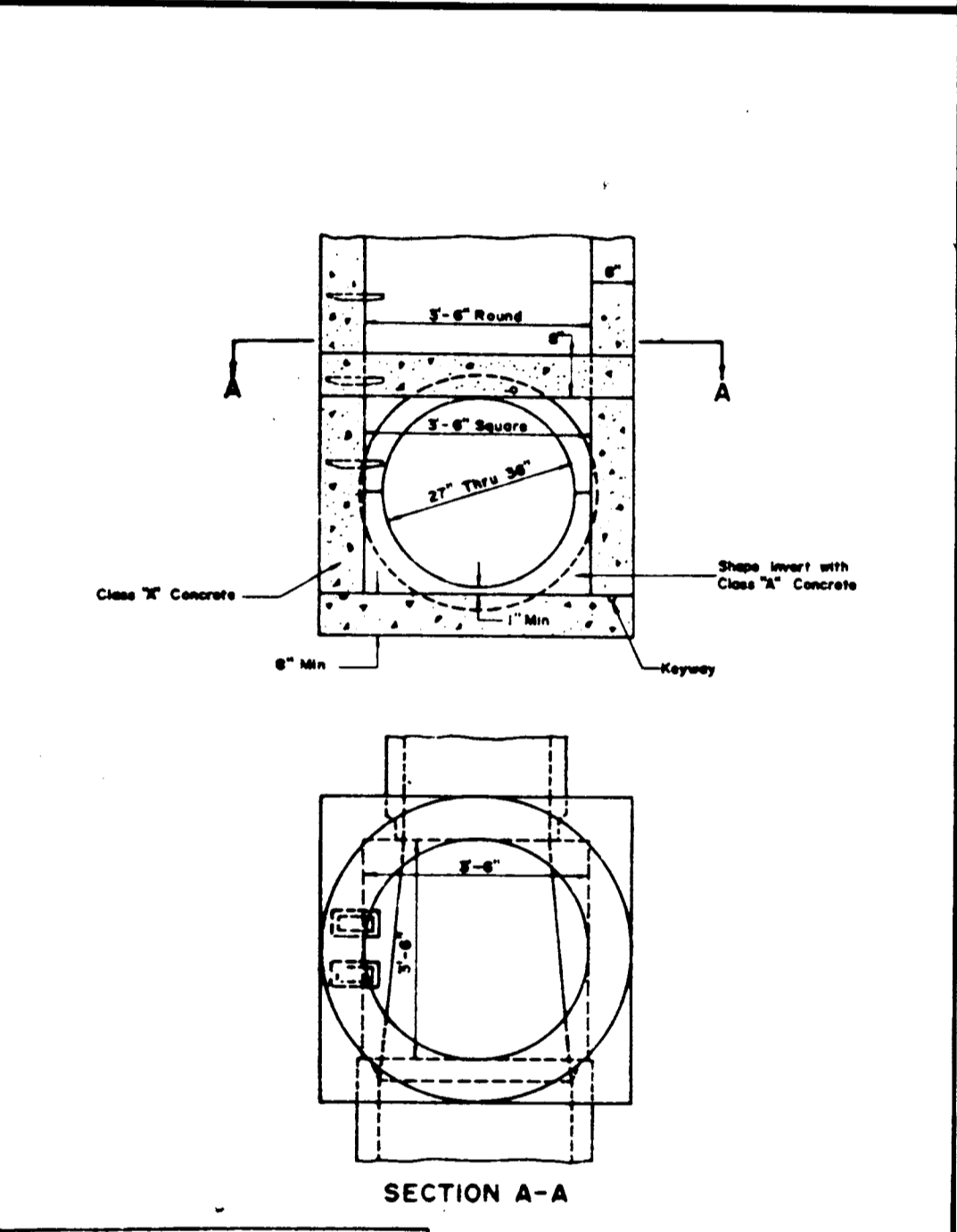
CONCRETE ENCASEMENT
 SEE PROFILE SHEETS FOR LENGTH OF ENCASING.



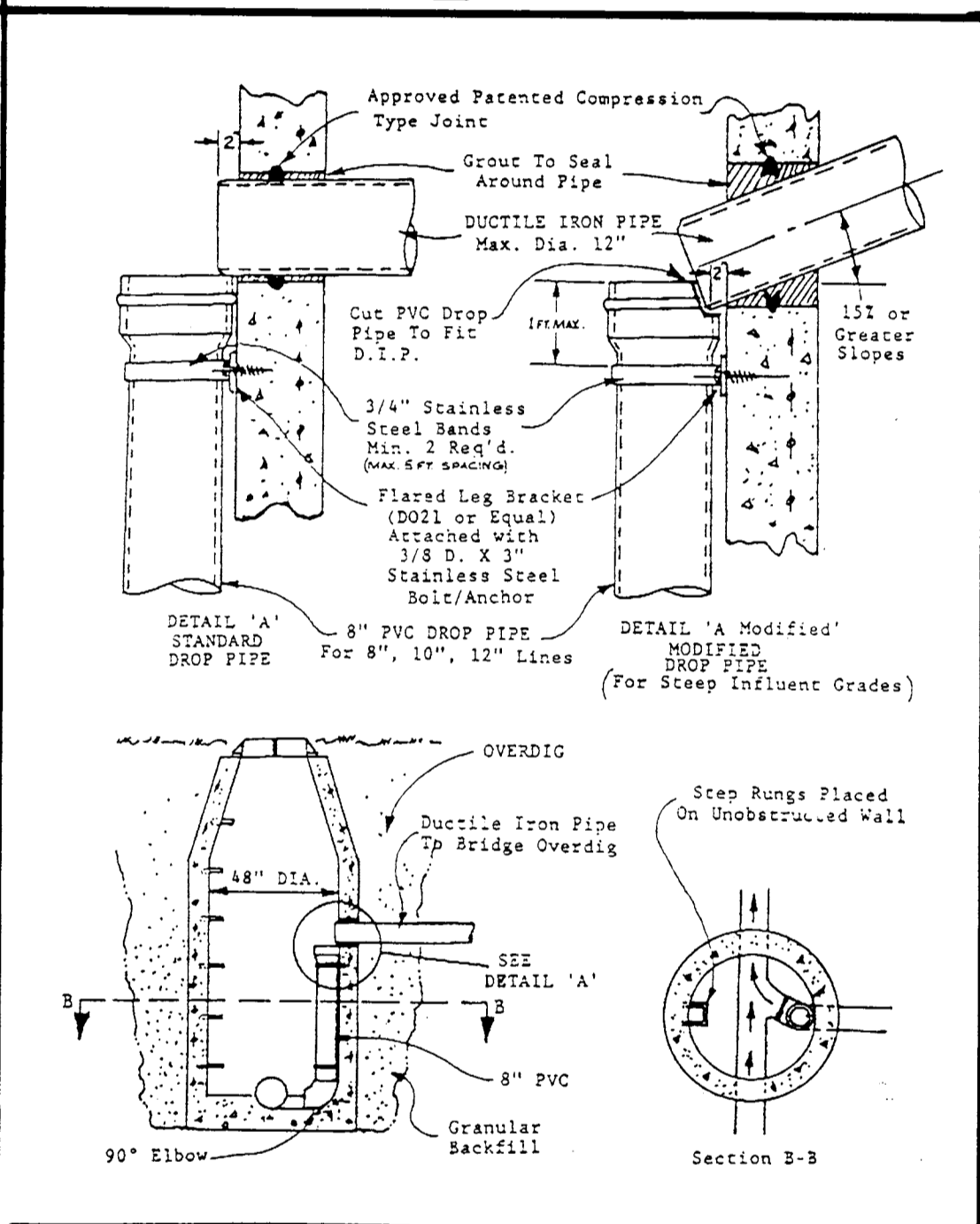
(CLASS "A" BEDDING)
 CONCRETE CRADLE

TABLE NO. 2
 STANDARD MANHOLE DIMENSIONS

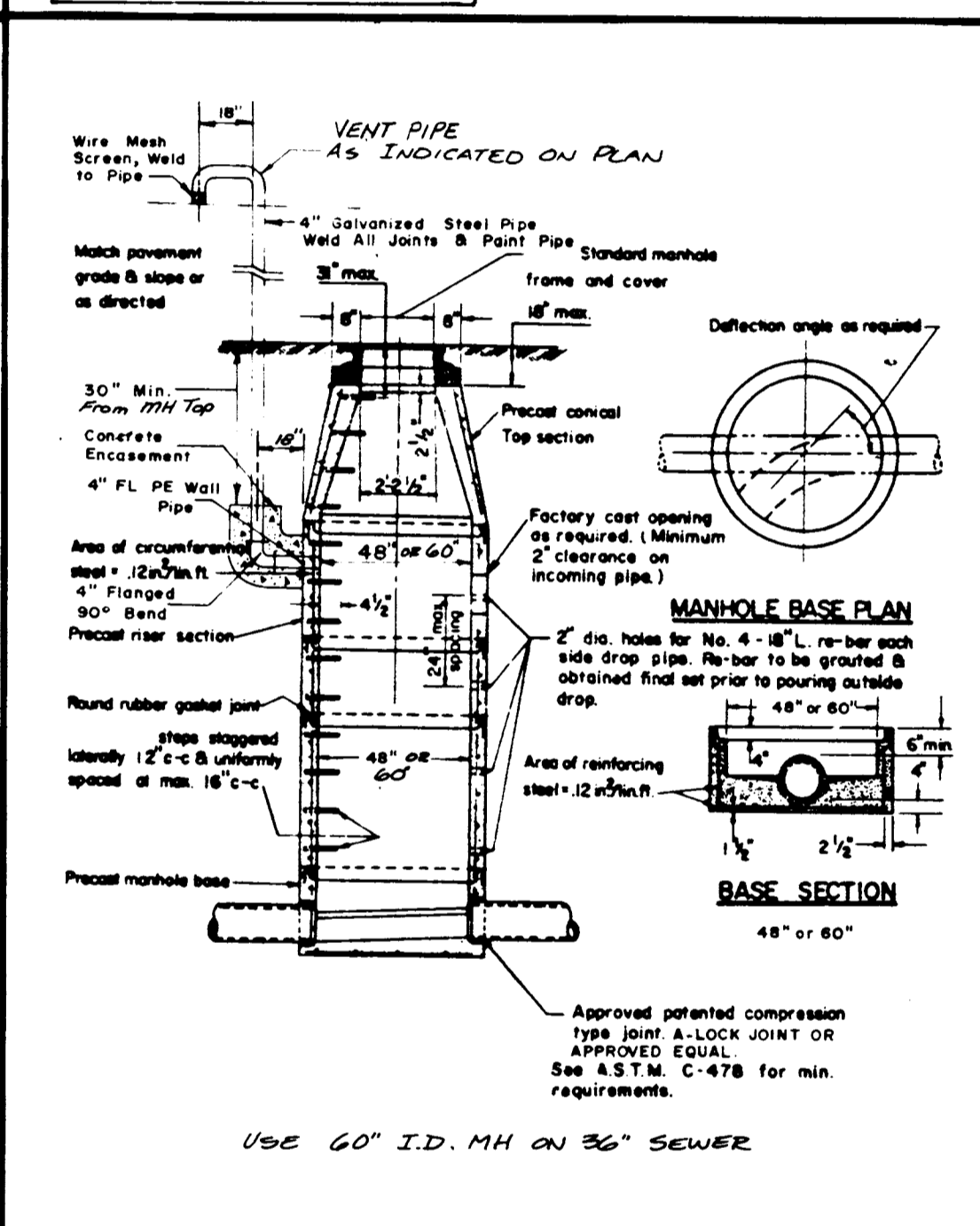
Section of Manhole	Dimension
Top Transition	Upper 2'-2 1/2" Dia. Lower 4' or 5' Dia.
Bottom Section	8" thru 21" Dia. Pipe 4'-0" Dia.
Bottom Section	24" thru 30" Dia. Pipe 5'-0" Dia.



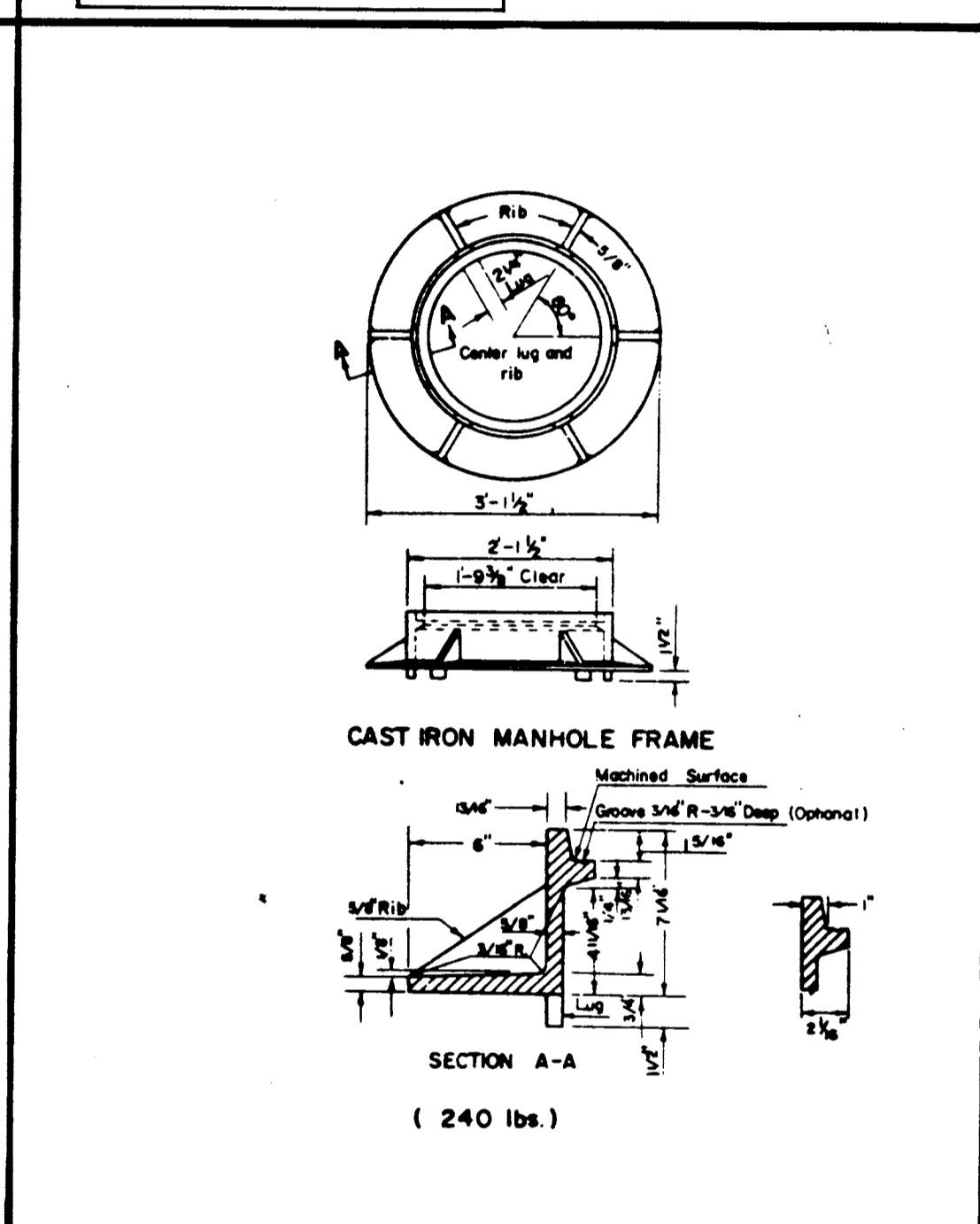
MANHOLE ON PIPE SEWER
 27" THRU 36" (ALTERNATE)



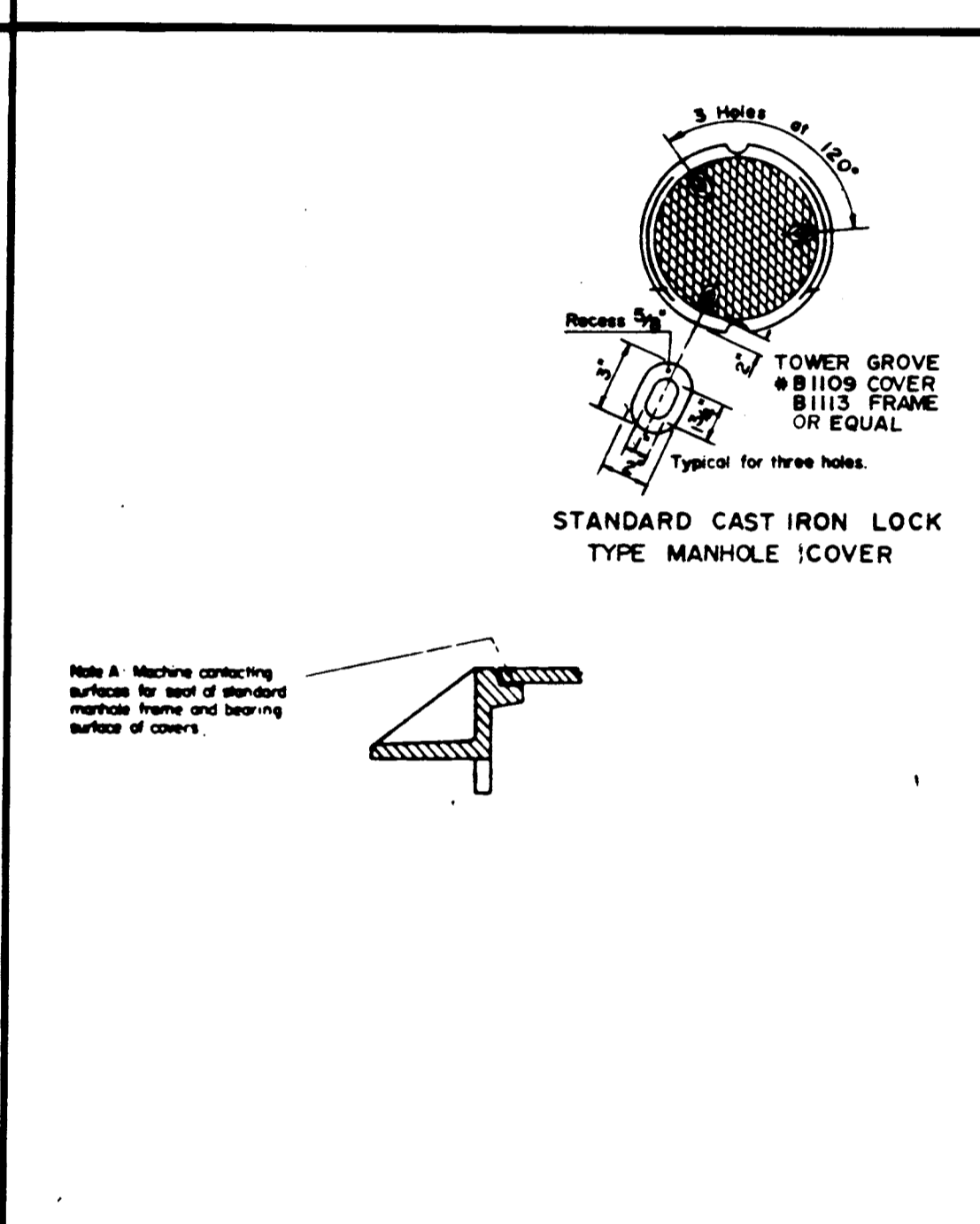
INSIDE DROP MANHOLE FOR PLASTIC PIPE



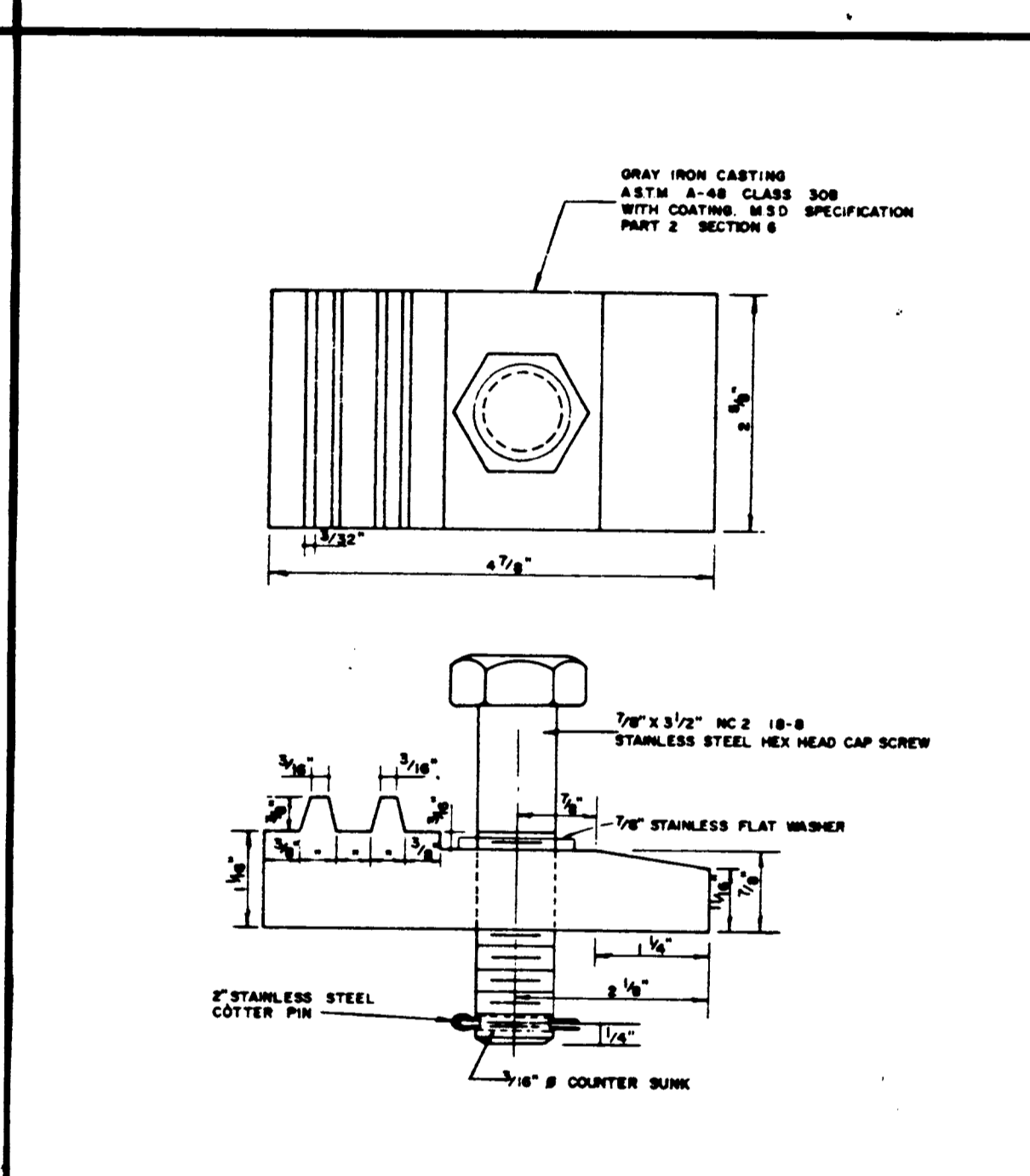
PRE-CAST CONCRETE MANHOLE FOR SEWERS
 6" THROUGH 36"



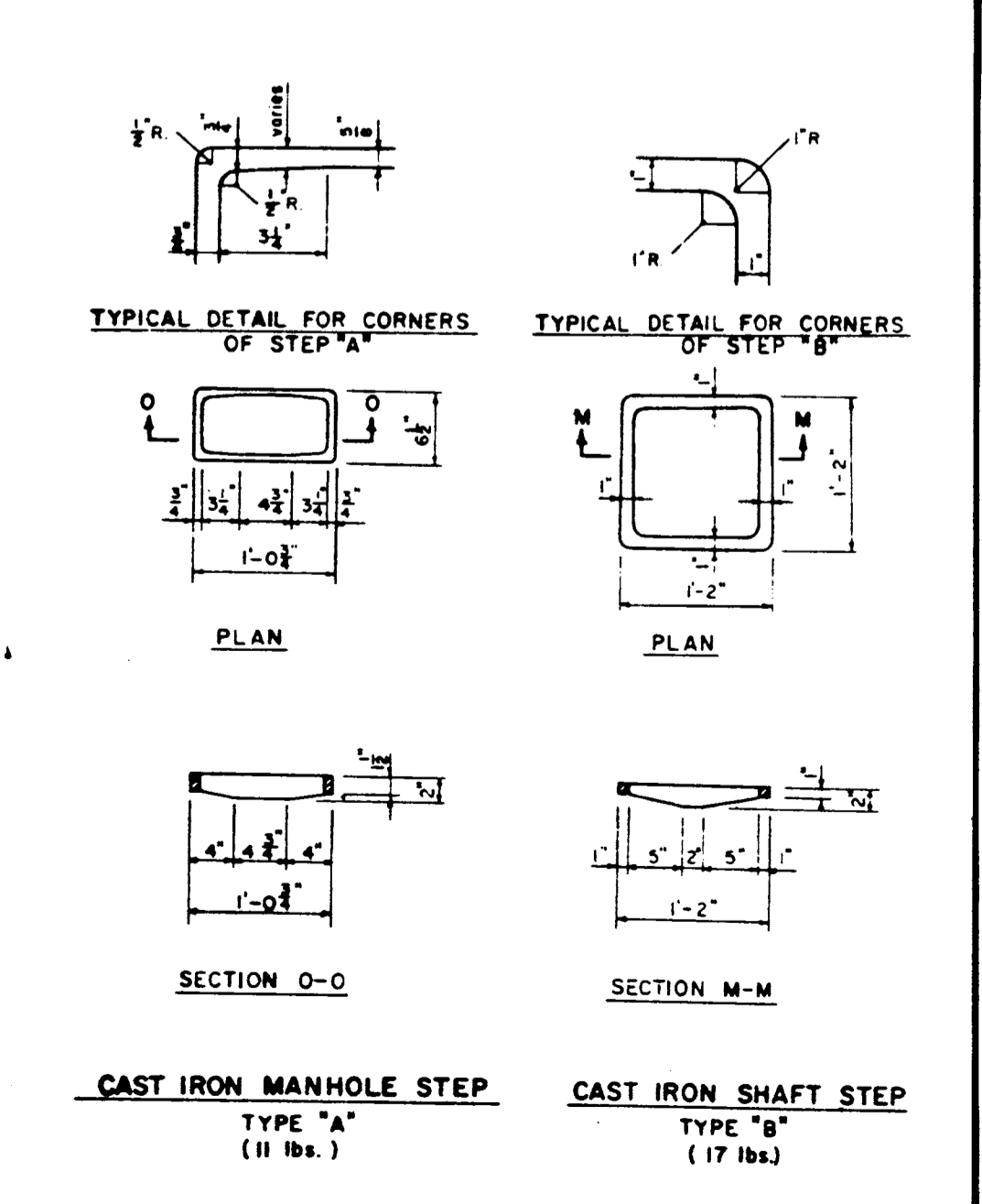
CAST IRON MANHOLE FRAME



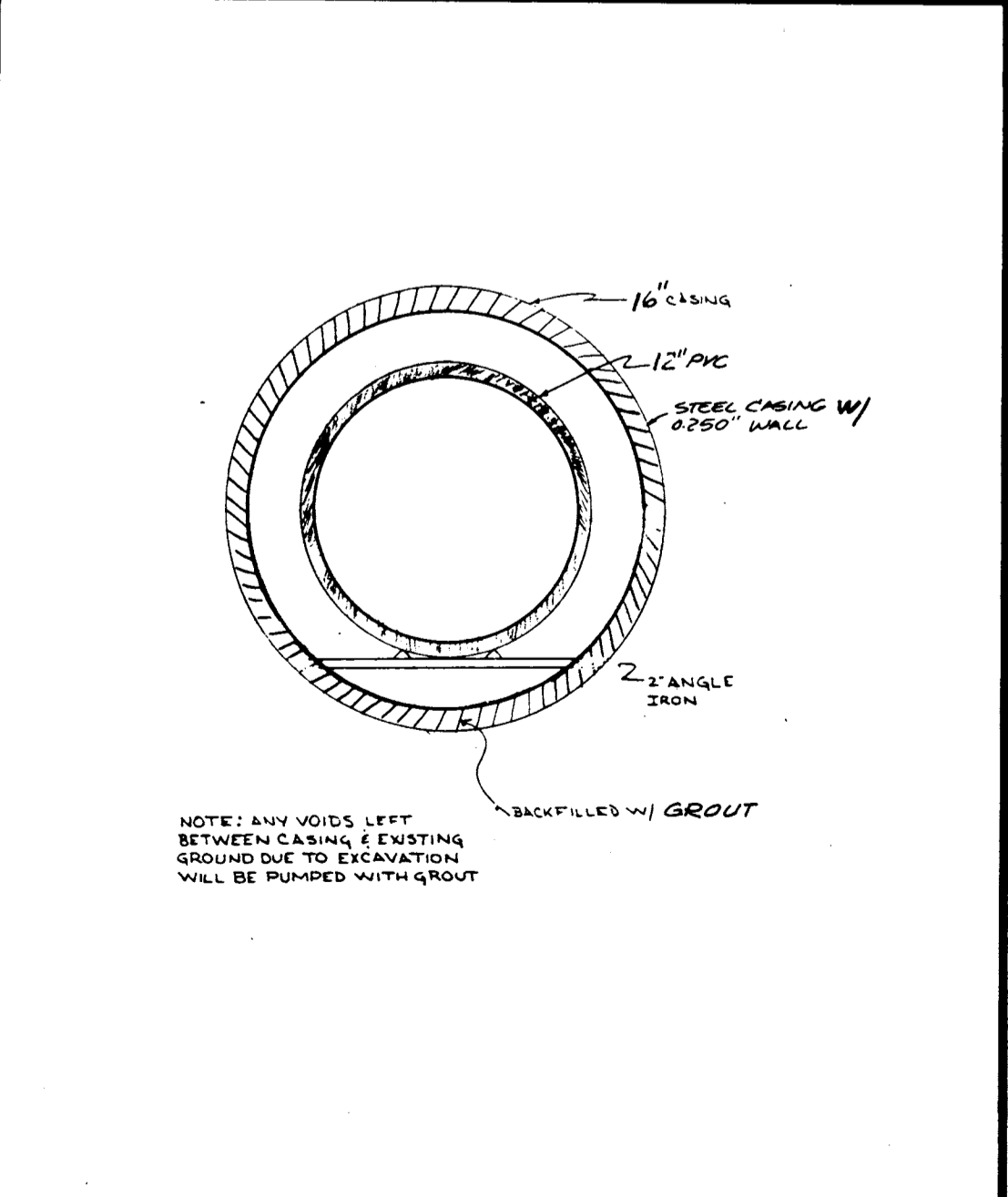
CAST IRON COVERS
 MANHOLES AND INLETS



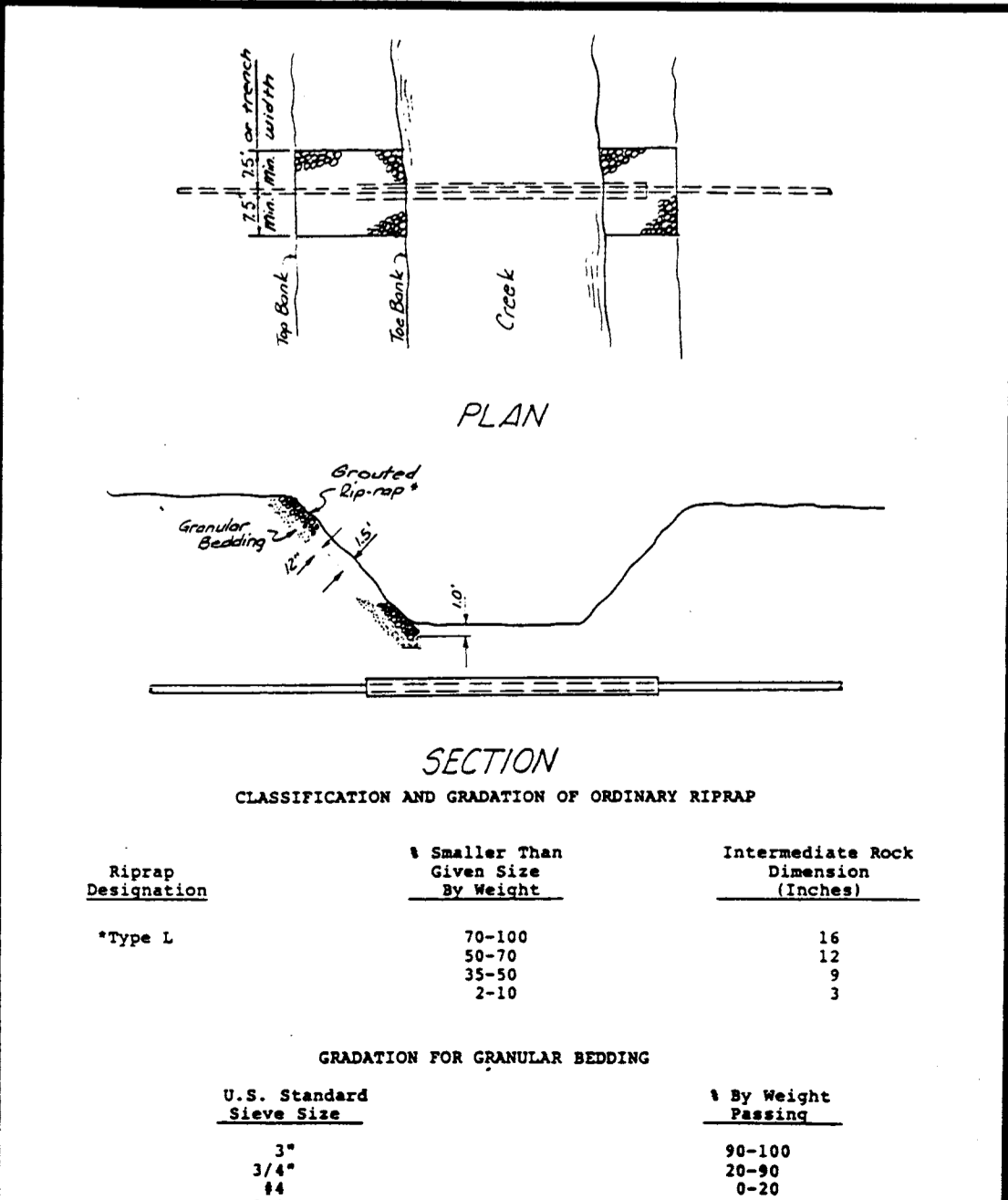
LOCK BLOCK FOR STANDARD CAST IRON LOCK TYPE MANHOLE COVER



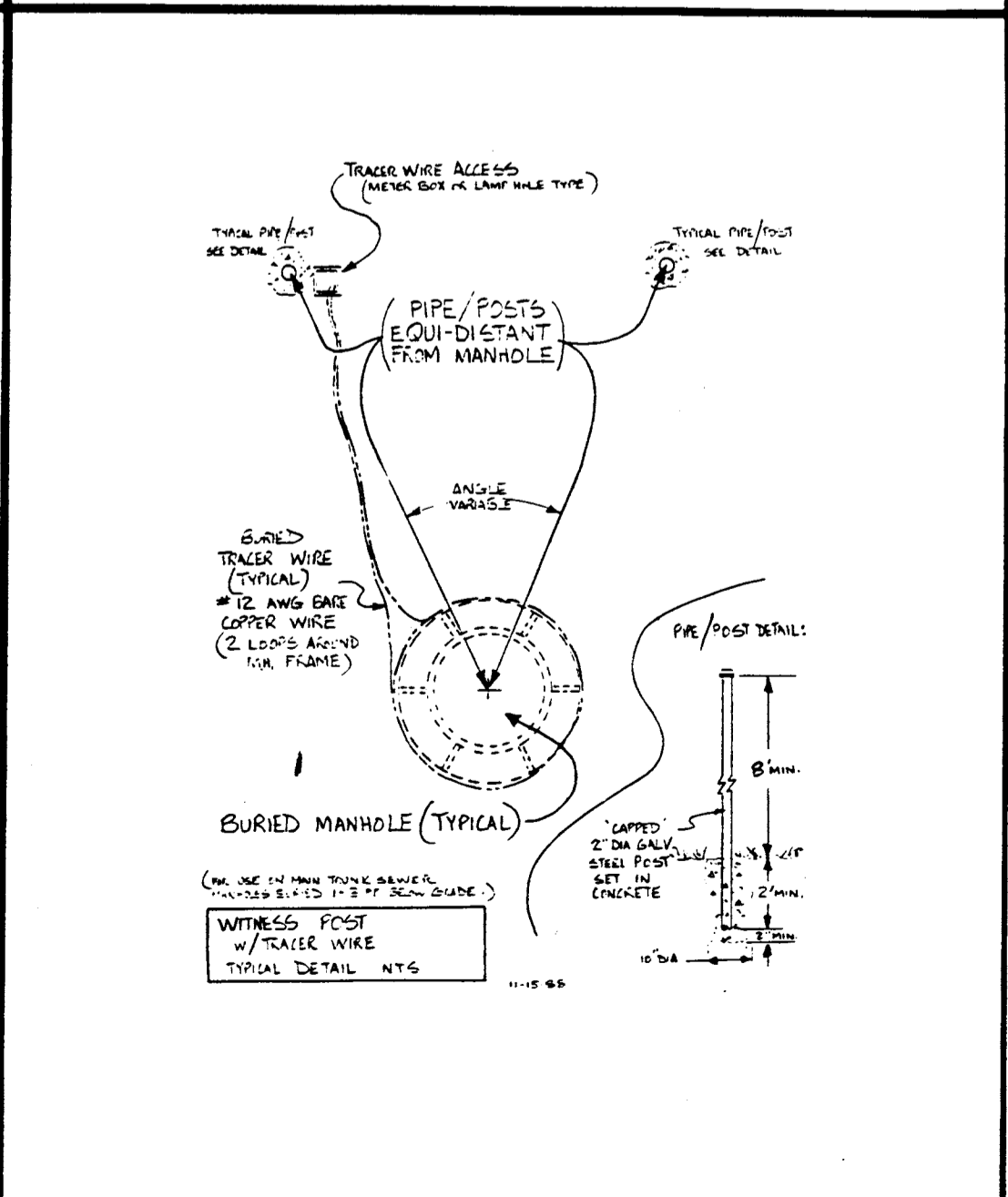
CAST IRON MANHOLE STEP
 TYPE "A" (11 lbs.)
 CAST IRON SHAFT STEP
 TYPE "B" (17 lbs.)
 CAST IRON STEPS



BORED OR JACKED PIPE DETAIL



GRADED RIP - RAP DETAIL



WITNESS POSTS