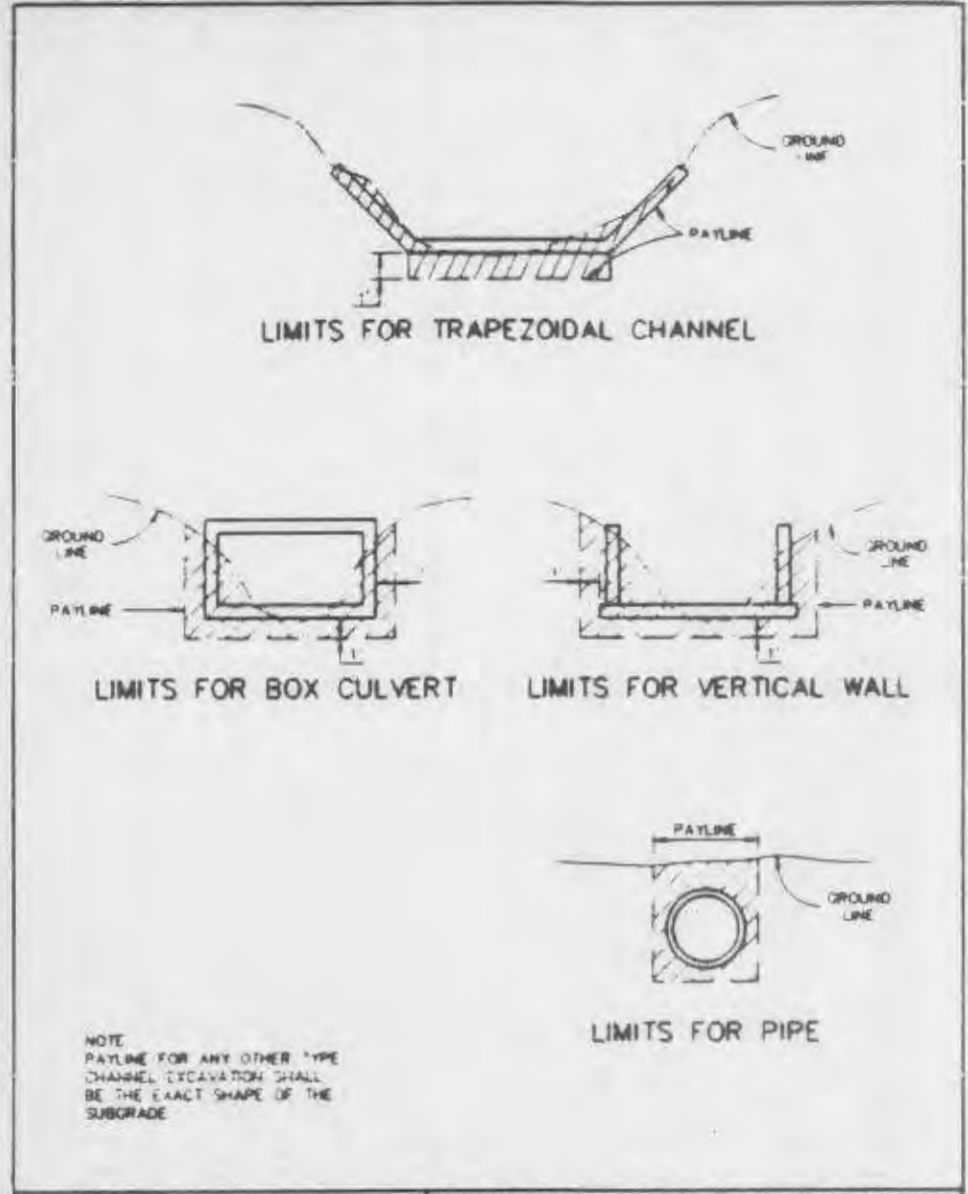
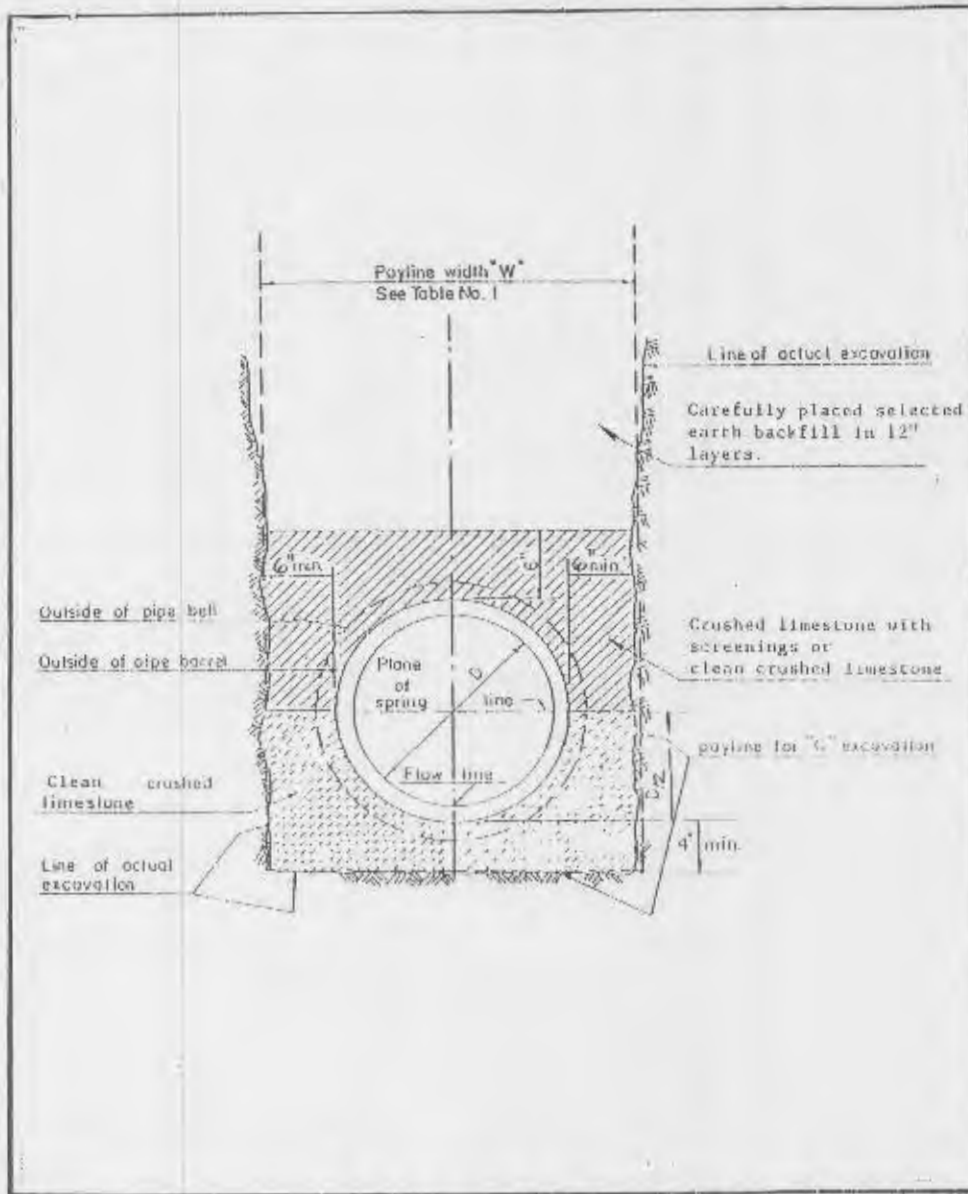


ROUND PIPE				HORIZONTAL ELLIPTICAL PIPE			
INSECT DIAMETER OF PIPE (INCHES)	"T" PAYLINE WIDTH OF TRENCH (INCHES)	"T" PAYLINE WIDTH OF TRENCH (FEET)	PAY-VOLUMES (CU YD PER FT)	INSECT DIMENSIONS OF PIPE (INCHES)	"T" PAYLINE WIDTH OF TRENCH (INCHES)	"T" PAYLINE WIDTH OF TRENCH (FEET)	PAY-VOLUMES (CU YD PER FT)
4	30	2.50	3.38				
6	30	2.50	3.58				
8	30	2.50	3.87				
10	30	2.50	4.15				
12	30	2.50	4.43				
15	36	3.00	5.55				
18	36	3.00	5.77	14 x 22	41	3.42	5.84
21	36	3.25	6.61				
24	42	3.50	7.38	19 x 30	48	4.08	7.68
27	42	3.75	8.18	22 x 34	53	4.42	8.81
30	48	4.08	9.30	24 x 38	58	4.83	9.70
33	48	4.42	10.53	27 x 42	62	5.17	10.71
36	54	4.87	11.43	29 x 45	66	5.50	11.72
39	54	5.21	12.36	32 x 49	71	5.87	13.14
42	60	5.75	13.38	34 x 53	75	6.25	14.68
48	70	6.63	15.67	38 x 60	83	6.92	16.18
54	77	7.42	18.15	42 x 68	92	7.67	18.81
60	84	8.20	20.73	48 x 76	101	8.42	21.58
66	91	9.08	23.45	53 x 83	108	9.08	24.35
72	98	9.96	26.27	58 x 91	116	9.83	27.45
78	105	10.84	29.28	63 x 98	124	10.58	30.50
84	112	11.72	32.37	68 x 106	132	11.25	33.91
90	118	12.60	35.86	72 x 113	140	11.93	38.90
96	126	13.50	39.57	77 x 121	148	12.67	44.88
102	132	14.40	43.39	82 x 128	156	13.33	49.85
108	140	15.30	47.37	87 x 136	164	14.00	55.79
114	147	16.20	51.66	92 x 143	172	14.67	61.70
120	154	17.10	56.27	97 x 151	180	15.32	68.01
126	161	18.00	61.12	102 x 158	188	16.03	74.84
132	168	18.90	66.27	108 x 166	196	16.73	82.18
144	182	21.42	77.40	118 x 182	212	18.77	97.56

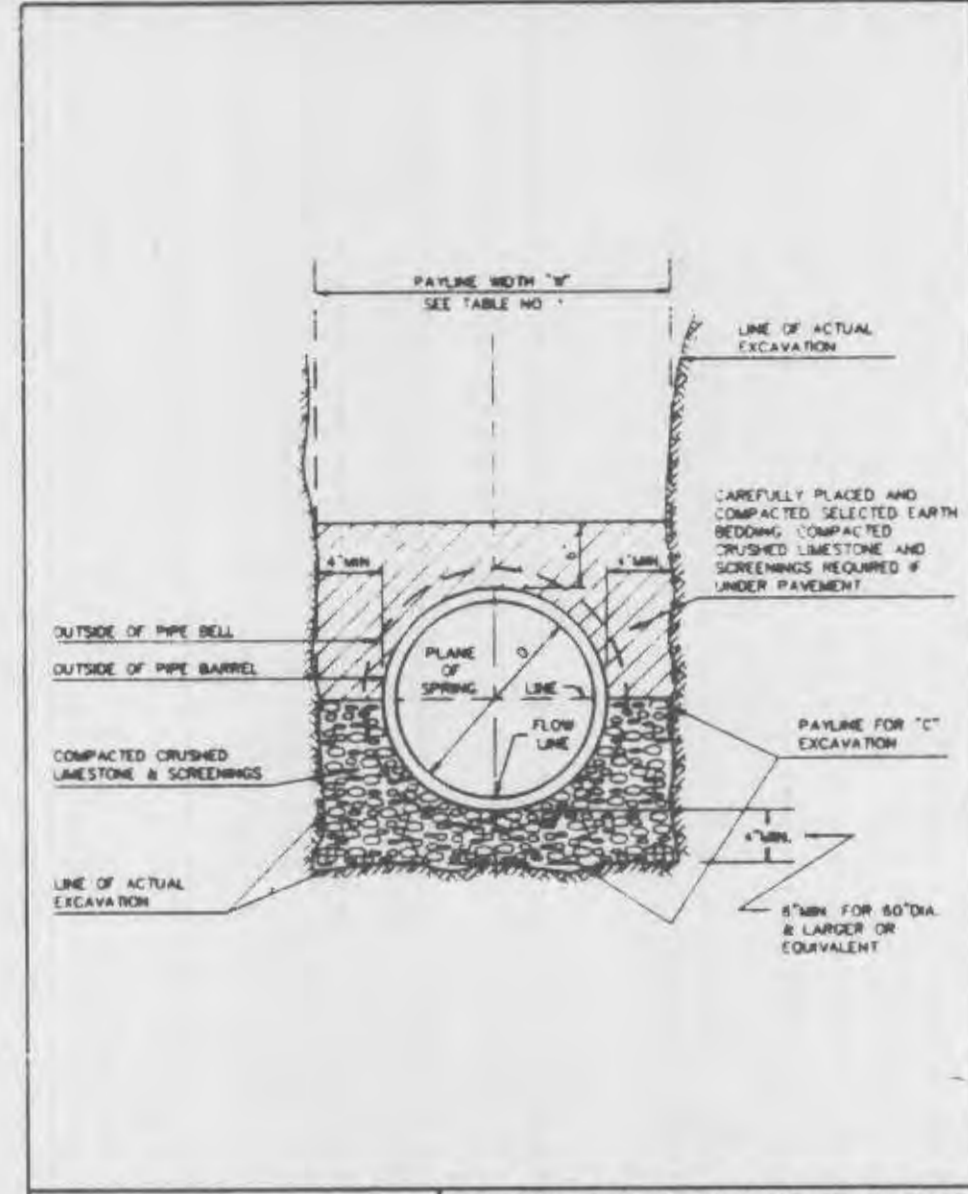
TABLE 1  
PAYLINE WIDTHS OF TRENCH AND PAY-QUANTITIES OF CONCRETE  
METROPOLITAN ST. LOUIS SEWER DISTRICT  
Standard Details of Sewer Construction  
Dr. B.E.B. 1992 SHEET 1



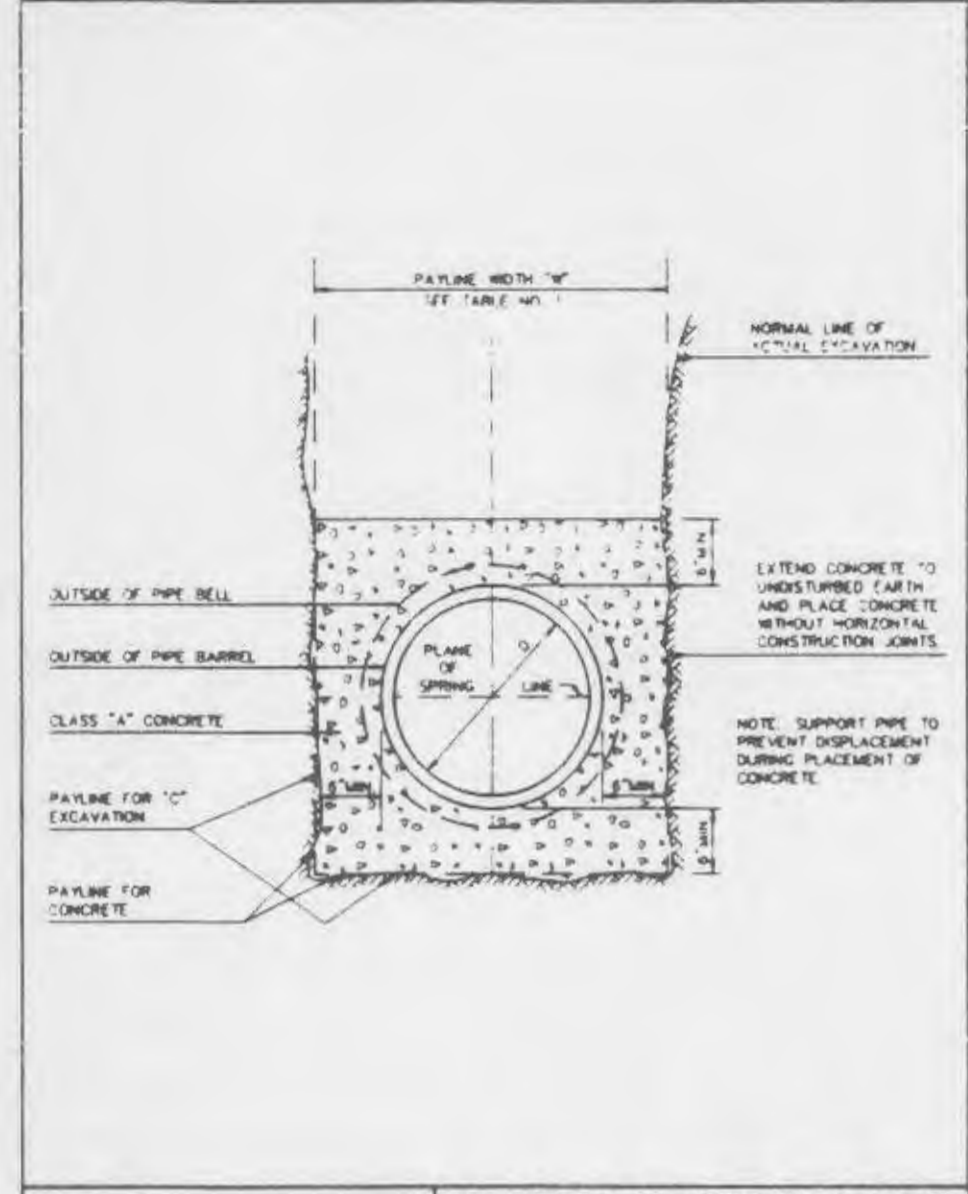
PAYLINE LIMITS FOR EXCAVATION  
METROPOLITAN ST. LOUIS SEWER DISTRICT  
Standard Details of Sewer Construction  
Dr. W.S.H. 1992 SHEET 2



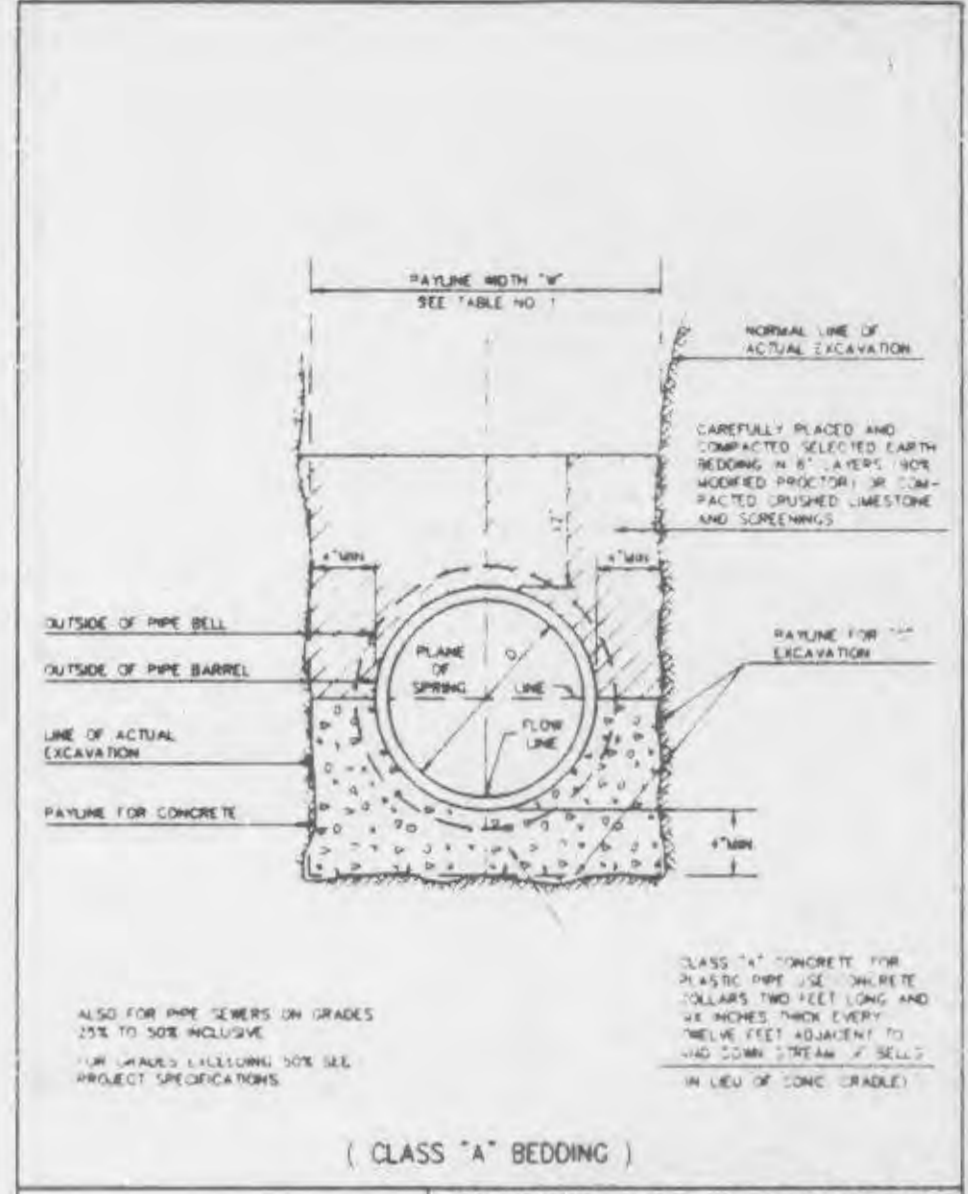
PIPE BEDDING CLASS "C" (FOR ALL PIPE EXCEPT REINFORCED CONCRETE PIPE)  
DUCKETT CREEK SEWER DISTRICT  
STANDARD CONSTRUCTION DETAIL  
DETAIL NO. JAN. 1989



PIPE BEDDING CLASS "C" (MODIFIED FOR REINFORCED CONCRETE PIPE)  
METROPOLITAN ST. LOUIS SEWER DISTRICT  
Standard Details of Sewer Construction  
Dr. W.S.H. 1992 SHEET 4



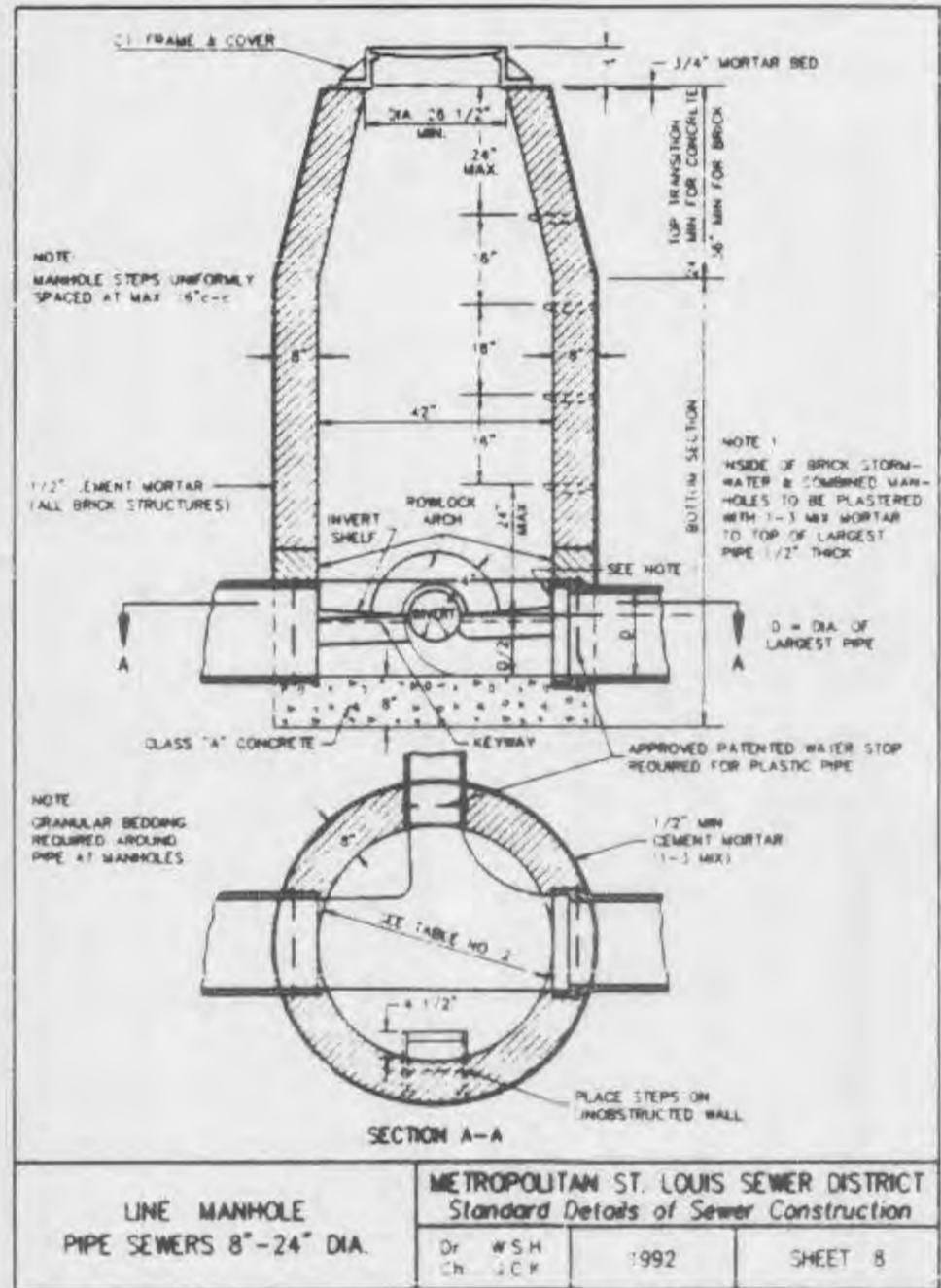
CONCRETE ENCASEMENT  
METROPOLITAN ST. LOUIS SEWER DISTRICT  
Standard Details of Sewer Construction  
Dr. W.S.H. 1992 SHEET 5



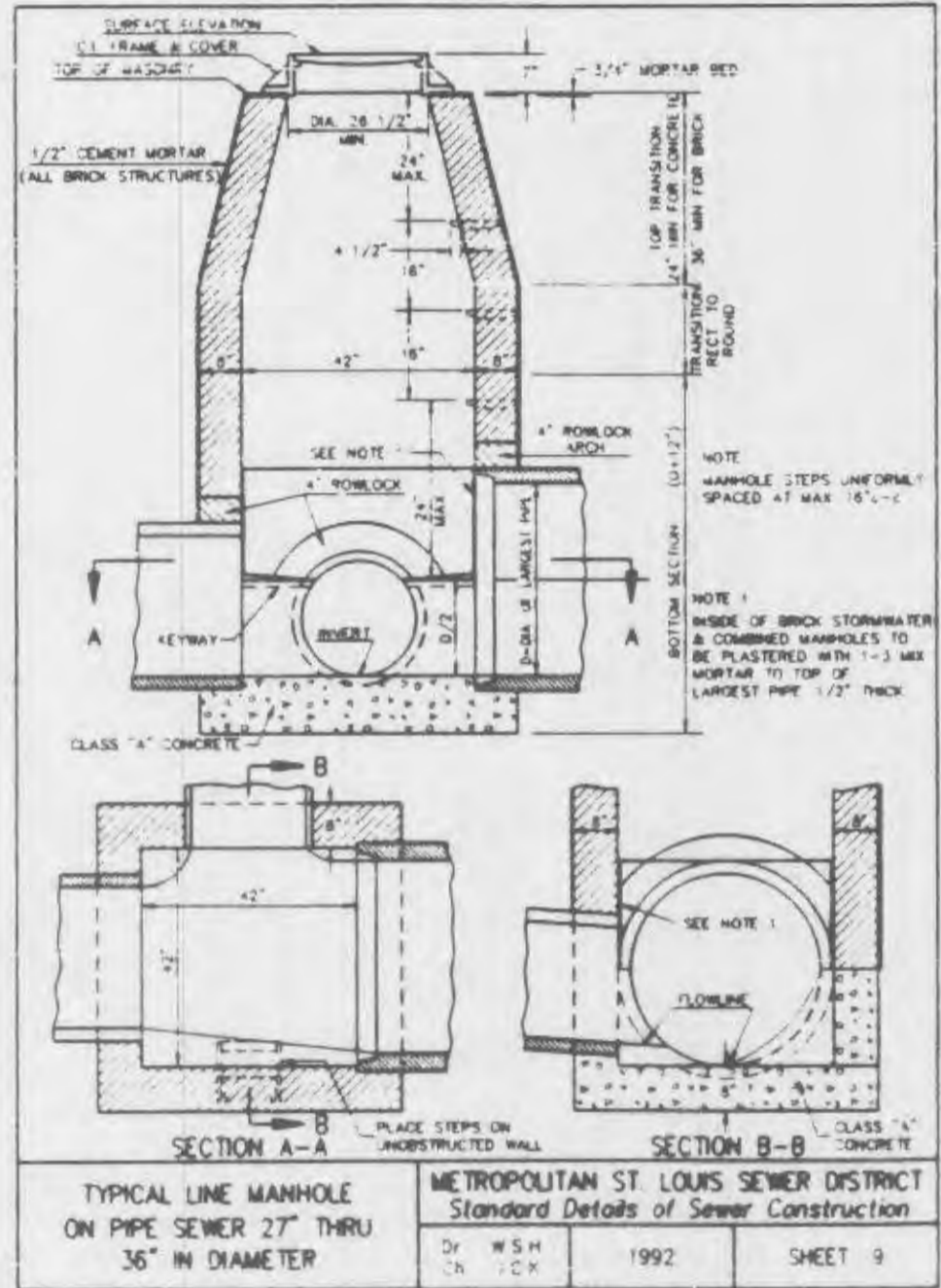
CONCRETE CRADLE  
METROPOLITAN ST. LOUIS SEWER DISTRICT  
Standard Details of Sewer Construction  
Dr. W.S.H. 1992 SHEET 5

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

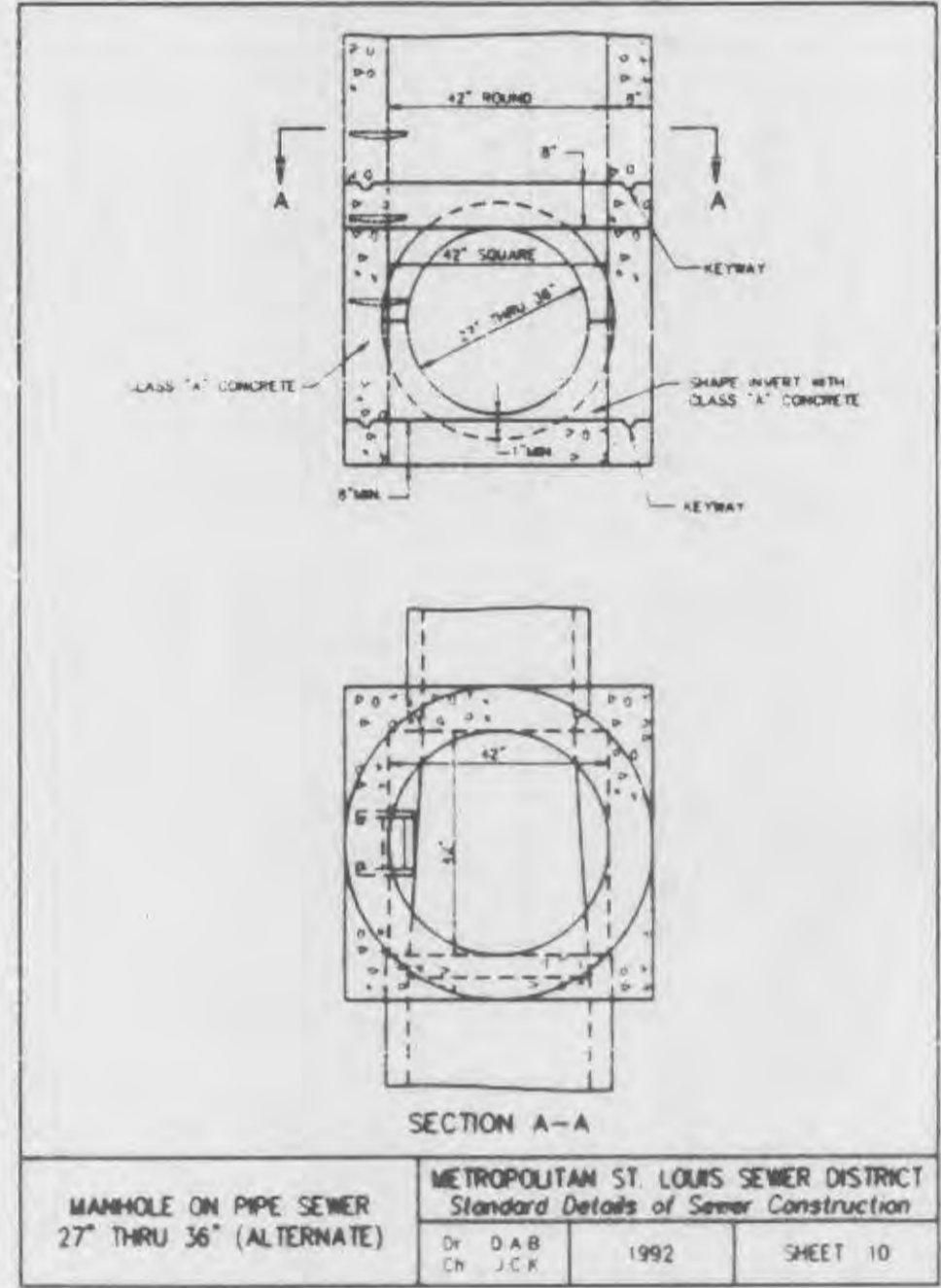
TABLE NO. 2  
STANDARD MANHOLE DIMENSIONS  
METROPOLITAN ST. LOUIS SEWER DISTRICT  
Standard Details of Sewer Construction  
Dr. R.G.W. 1992 SHEET 7



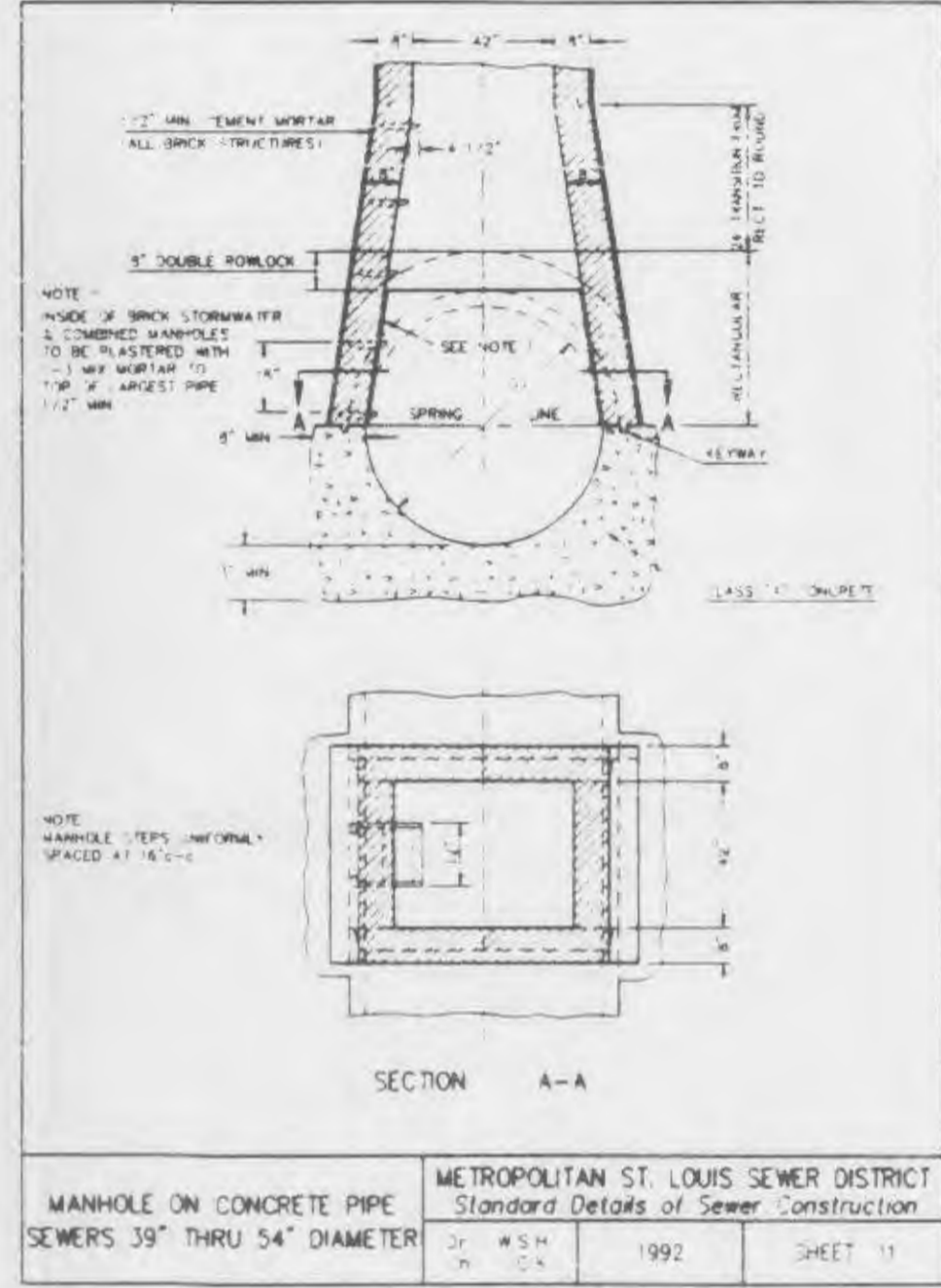
LINE MANHOLE PIPE SEWERS 8"-24" DIA.  
METROPOLITAN ST. LOUIS SEWER DISTRICT  
Standard Details of Sewer Construction  
Dr. W.S.H. 1992 SHEET 8



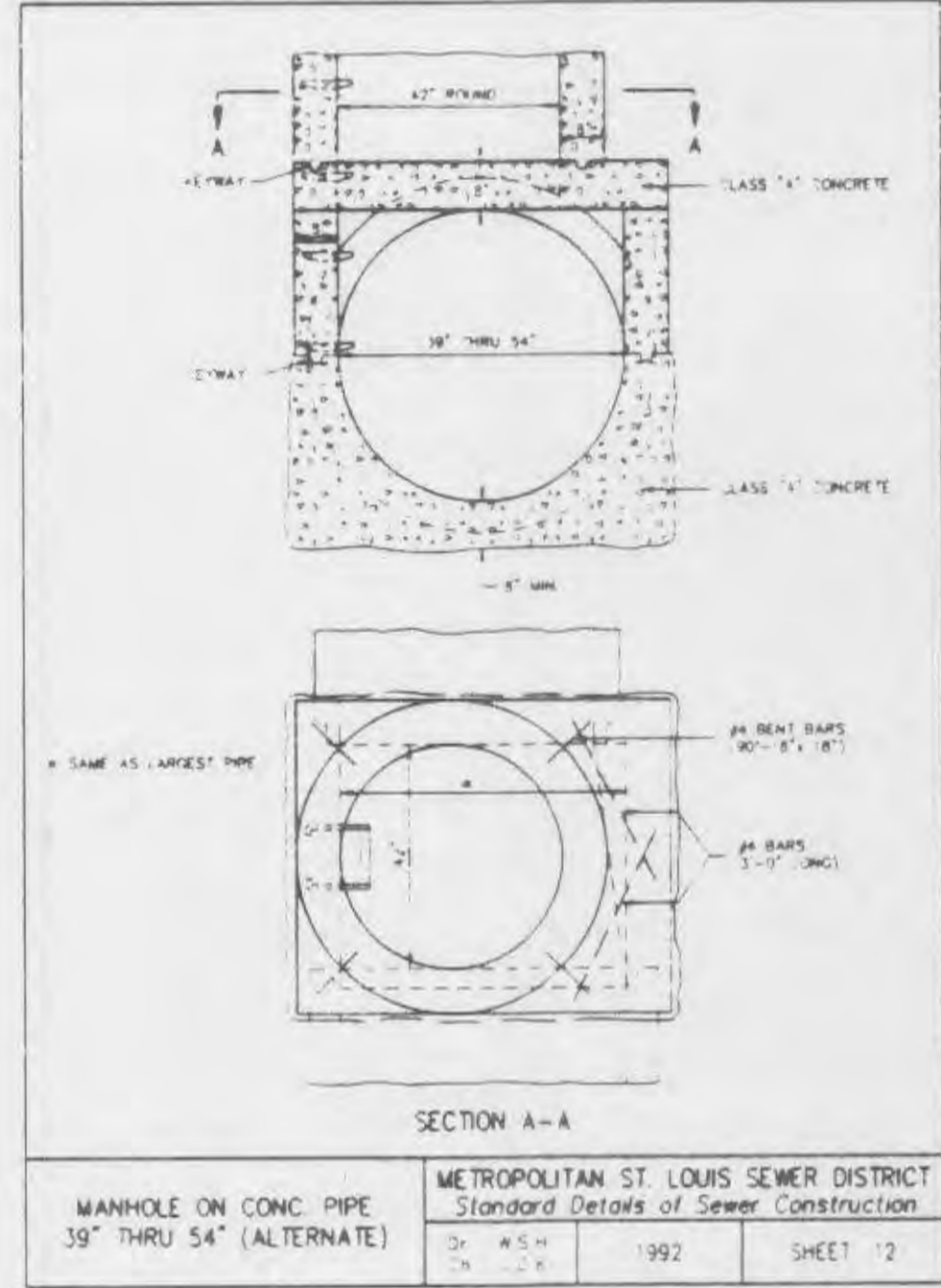
TYPICAL LINE MANHOLE ON PIPE SEWER 27" THRU 36" IN DIAMETER  
METROPOLITAN ST. LOUIS SEWER DISTRICT  
Standard Details of Sewer Construction  
Dr. W.S.H. 1992 SHEET 9



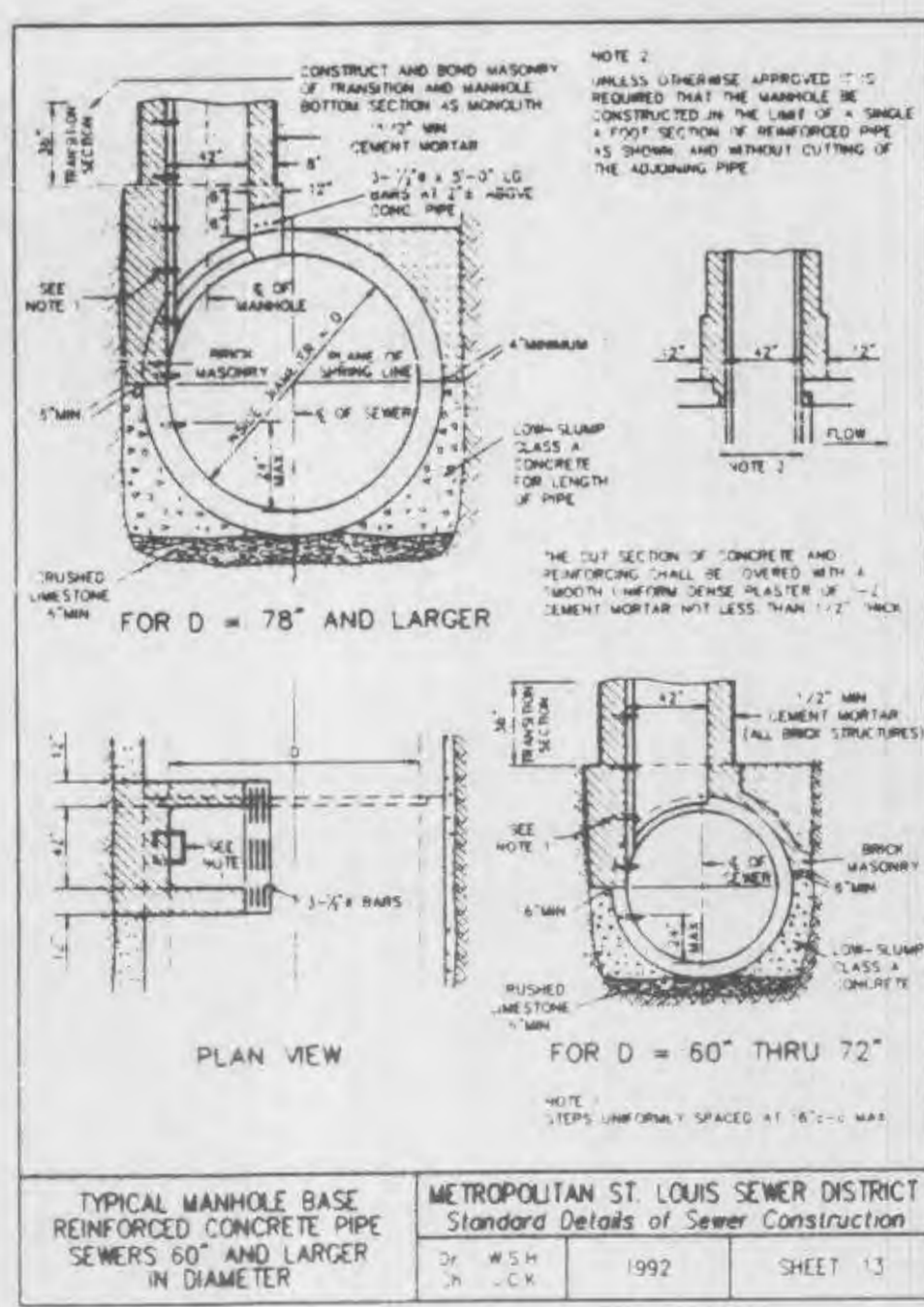
MANHOLE ON CONCRETE PIPE SEWERS 27" THRU 36" (ALTERNATE)  
METROPOLITAN ST. LOUIS SEWER DISTRICT  
Standard Details of Sewer Construction  
Dr. D.A.B. 1992 SHEET 10



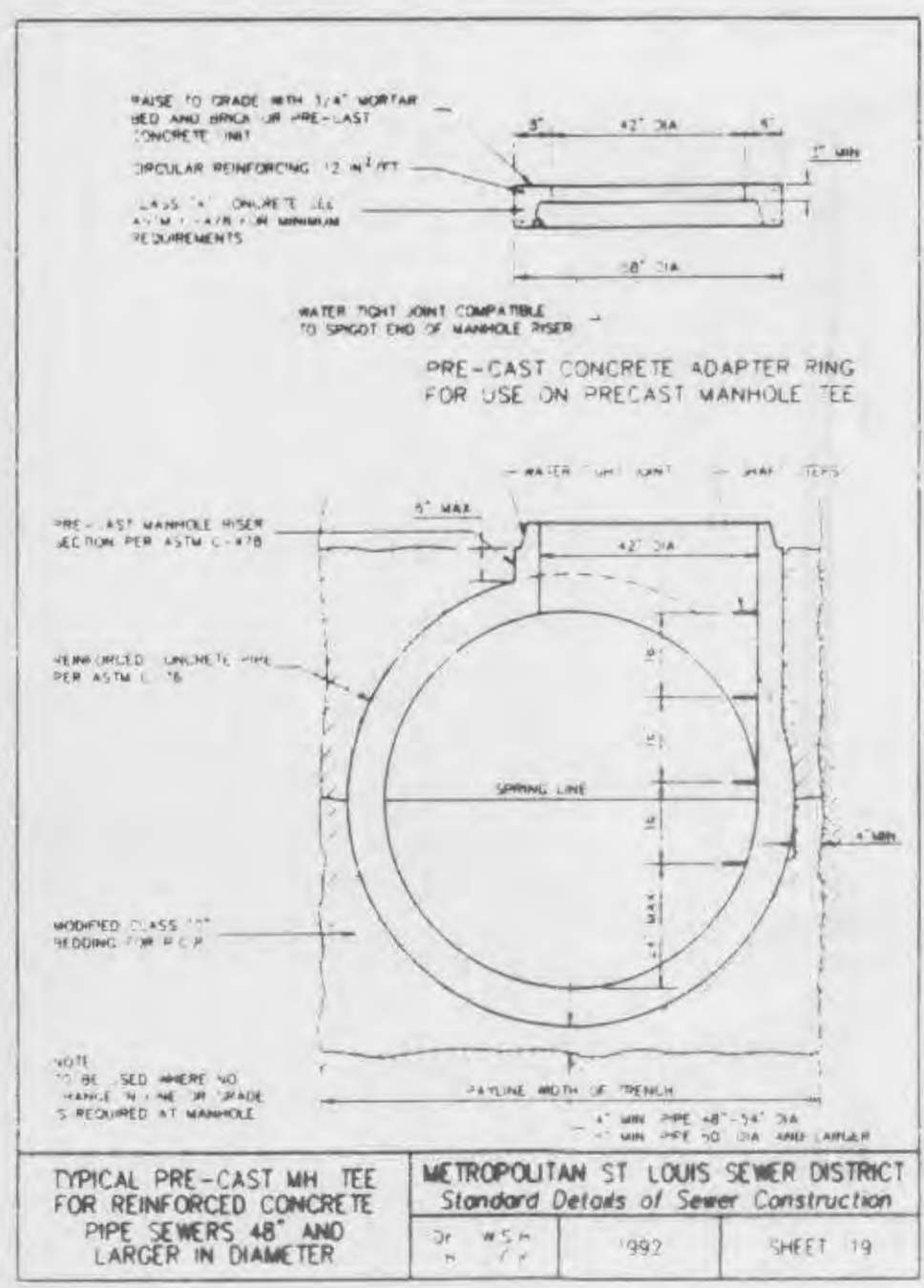
MANHOLE ON CONCRETE PIPE SEWERS 39" THRU 54" DIAMETER  
METROPOLITAN ST. LOUIS SEWER DISTRICT  
Standard Details of Sewer Construction  
Dr. W.S.H. 1992 SHEET 11



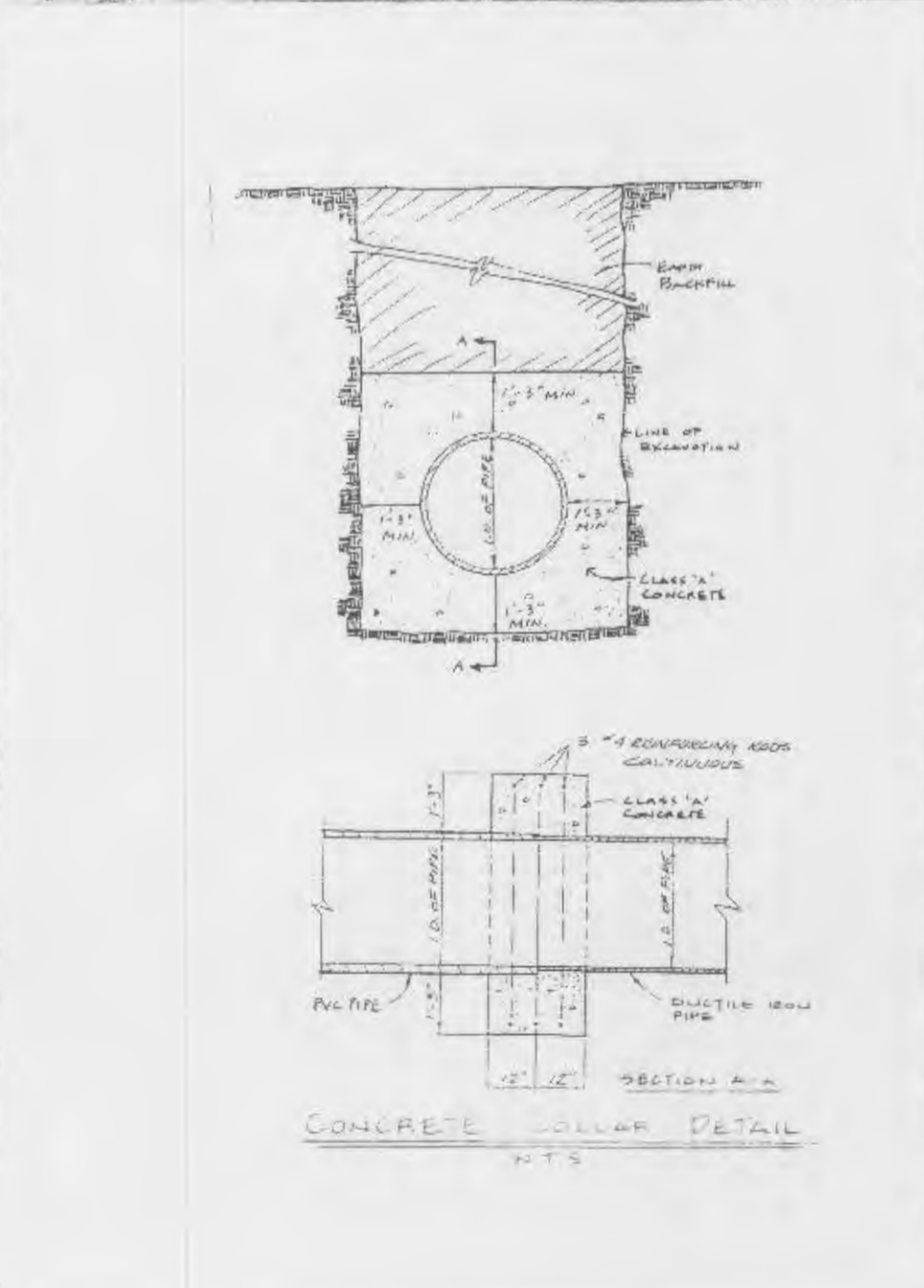
MANHOLE ON CONCRETE PIPE SEWERS 39" THRU 54" (ALTERNATE)  
METROPOLITAN ST. LOUIS SEWER DISTRICT  
Standard Details of Sewer Construction  
Dr. W.S.H. 1992 SHEET 12



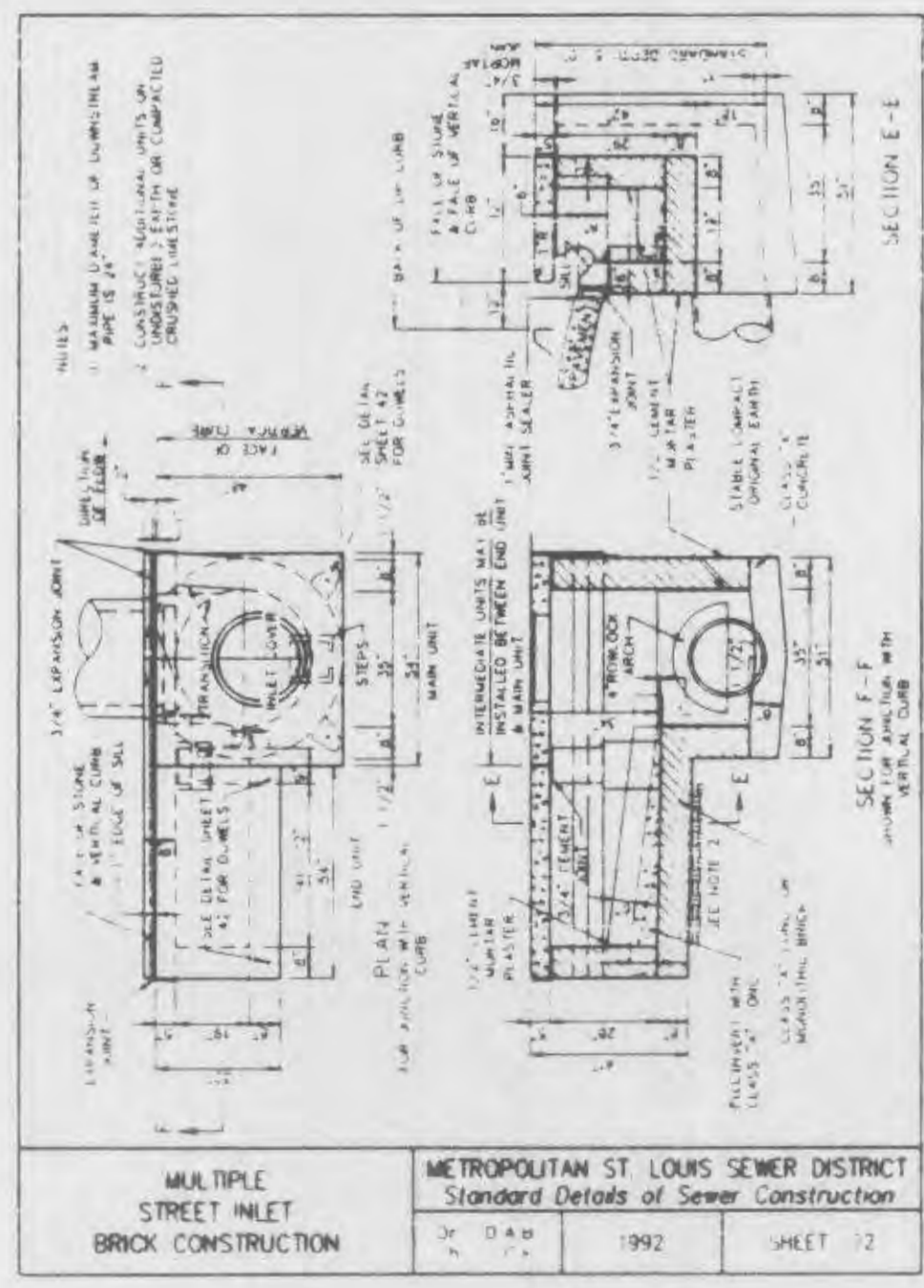
TYPICAL MANHOLE BASE FOR REINFORCED CONCRETE PIPE SEWERS 60" AND LARGER IN DIAMETER  
METROPOLITAN ST. LOUIS SEWER DISTRICT  
Standard Details of Sewer Construction  
Dr. W.S.H. 1992 SHEET 13



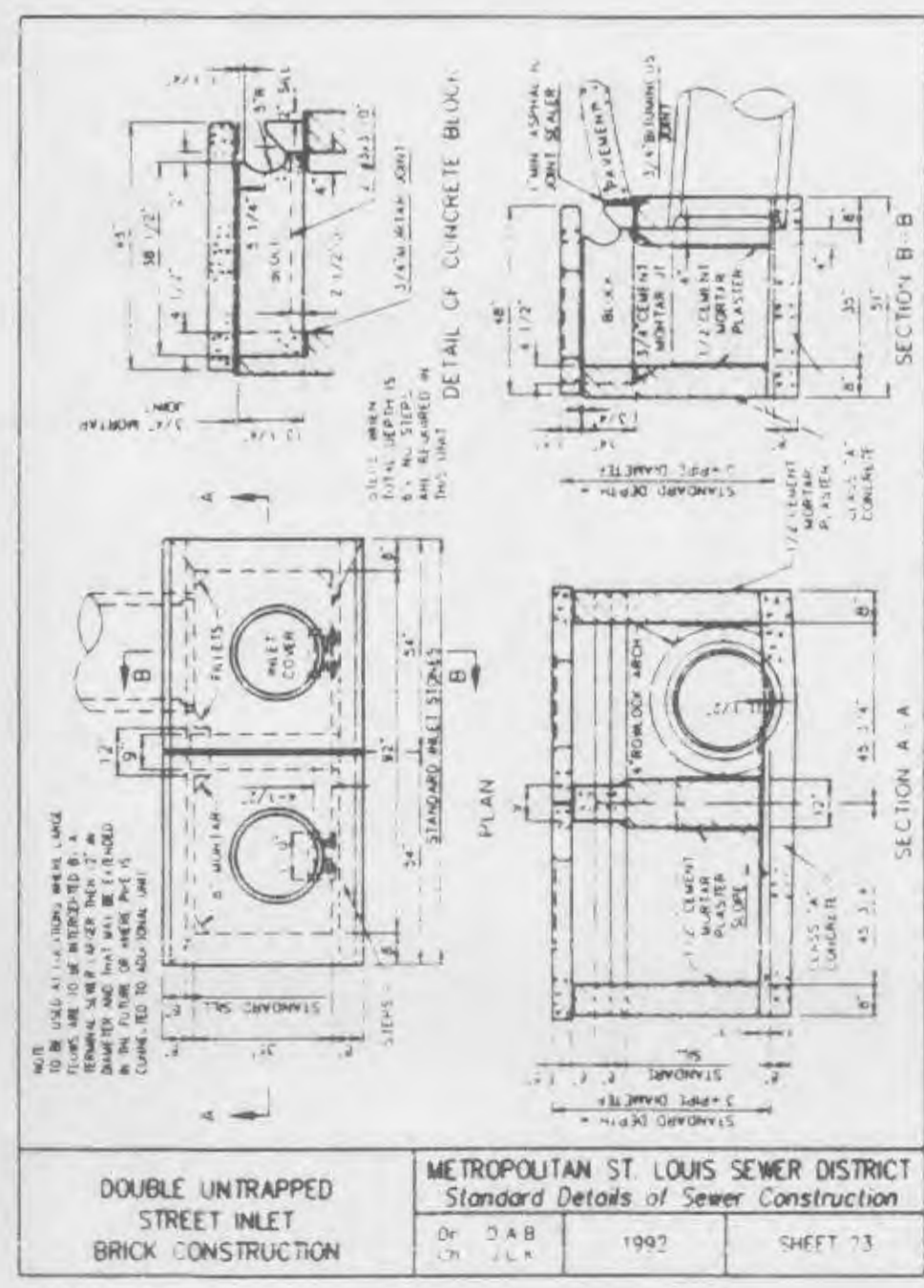
TYPICAL PRE-CAST MH TEE FOR REINFORCED CONCRETE PIPE SEWERS 48" AND LARGER IN DIAMETER  
METROPOLITAN ST. LOUIS SEWER DISTRICT  
Standard Details of Sewer Construction  
Dr. W.S.H. 1992 SHEET 19



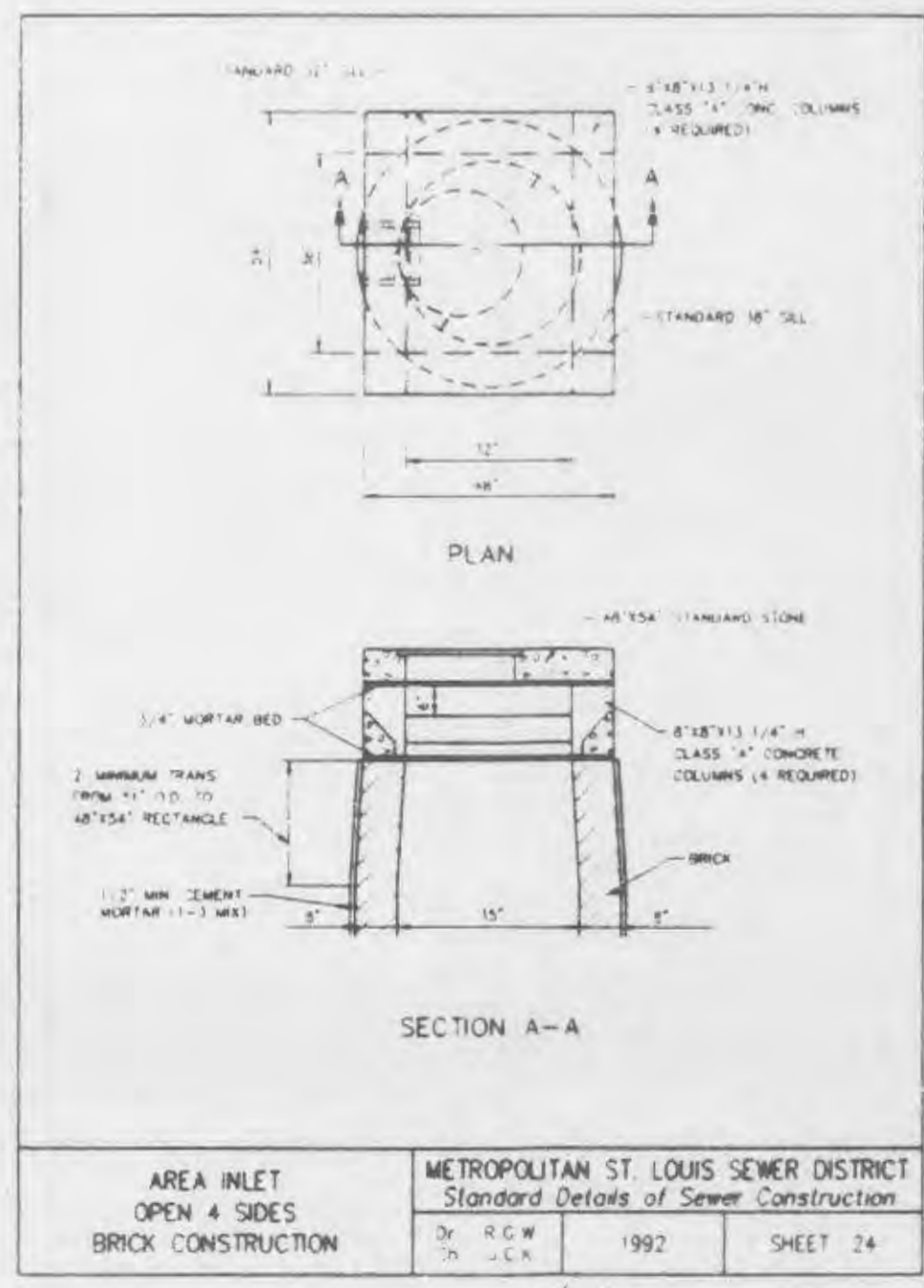
CONCRETE COLLAR DETAIL  
METROPOLITAN ST. LOUIS SEWER DISTRICT  
Standard Details of Sewer Construction  
Dr. W.S.H. 1992 SHEET 19



MULTIPLE STREET INLET BRICK CONSTRUCTION  
METROPOLITAN ST. LOUIS SEWER DISTRICT  
Standard Details of Sewer Construction  
Dr. D.A.B. 1992 SHEET 12



DOUBLE UNTRAPPED STREET INLET BRICK CONSTRUCTION  
METROPOLITAN ST. LOUIS SEWER DISTRICT  
Standard Details of Sewer Construction  
Dr. D.A.B. 1992 SHEET 13



AREA INLET OPEN 4 SIDES BRICK CONSTRUCTION  
METROPOLITAN ST. LOUIS SEWER DISTRICT  
Standard Details of Sewer Construction  
Dr. R.G.W. 1992 SHEET 24