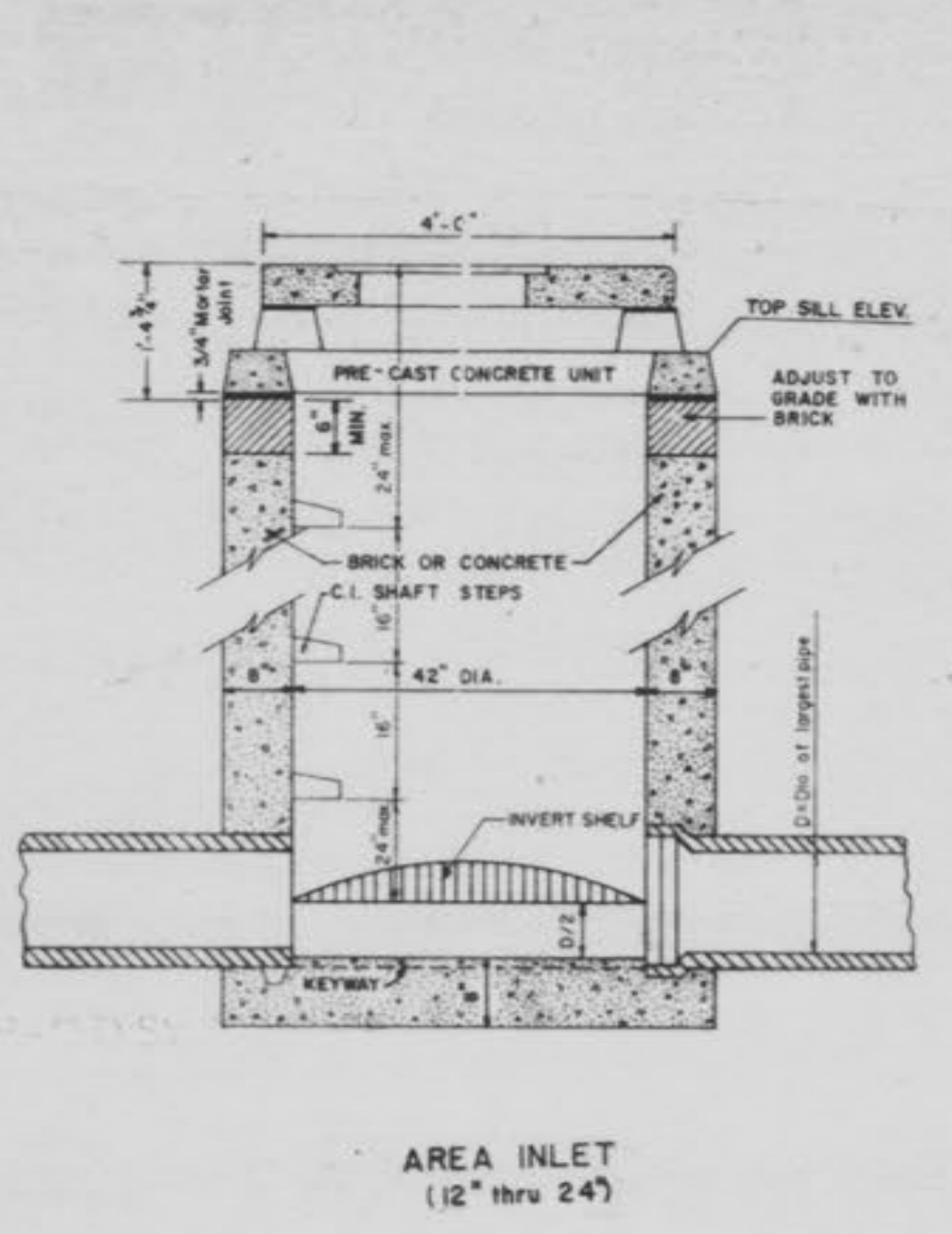
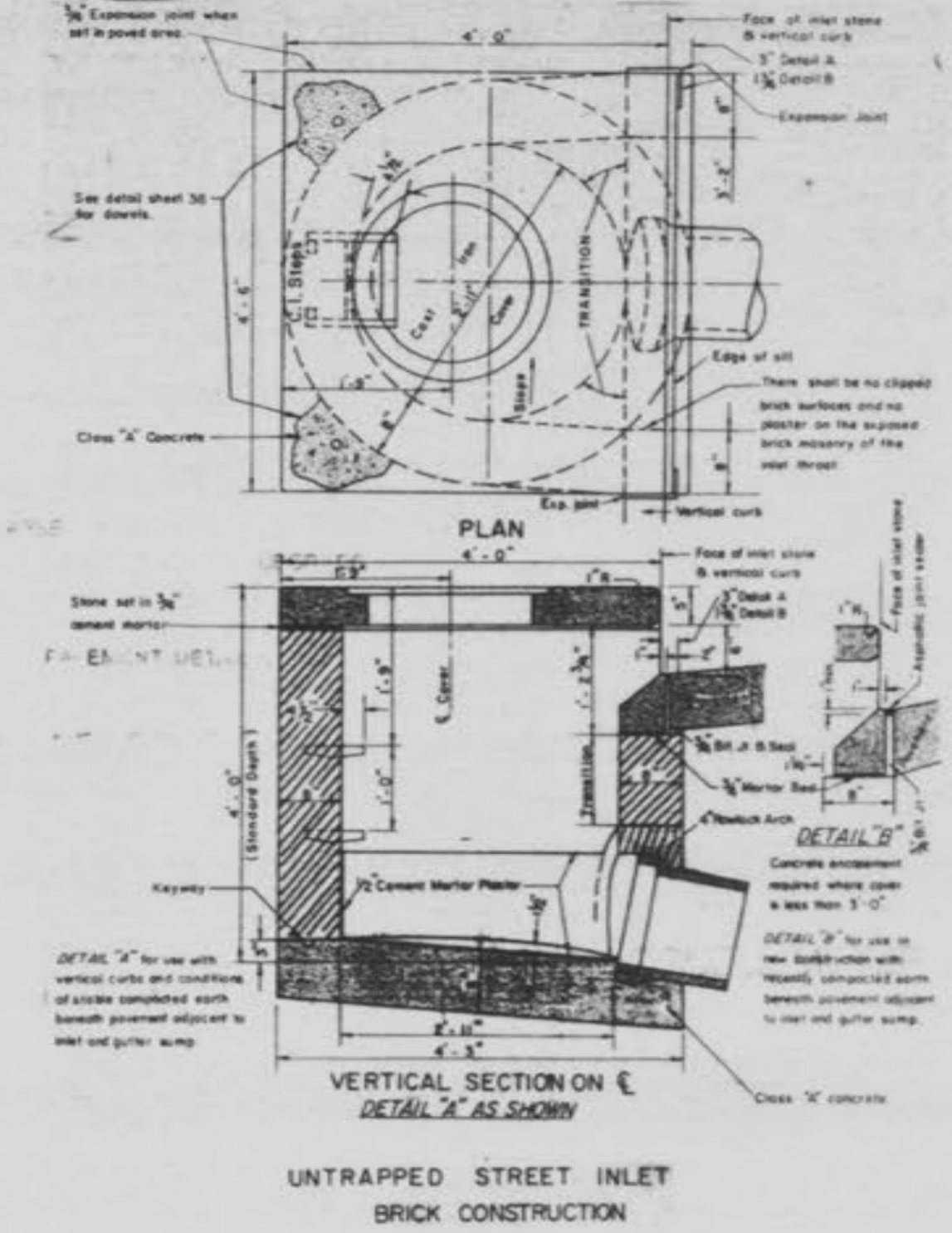
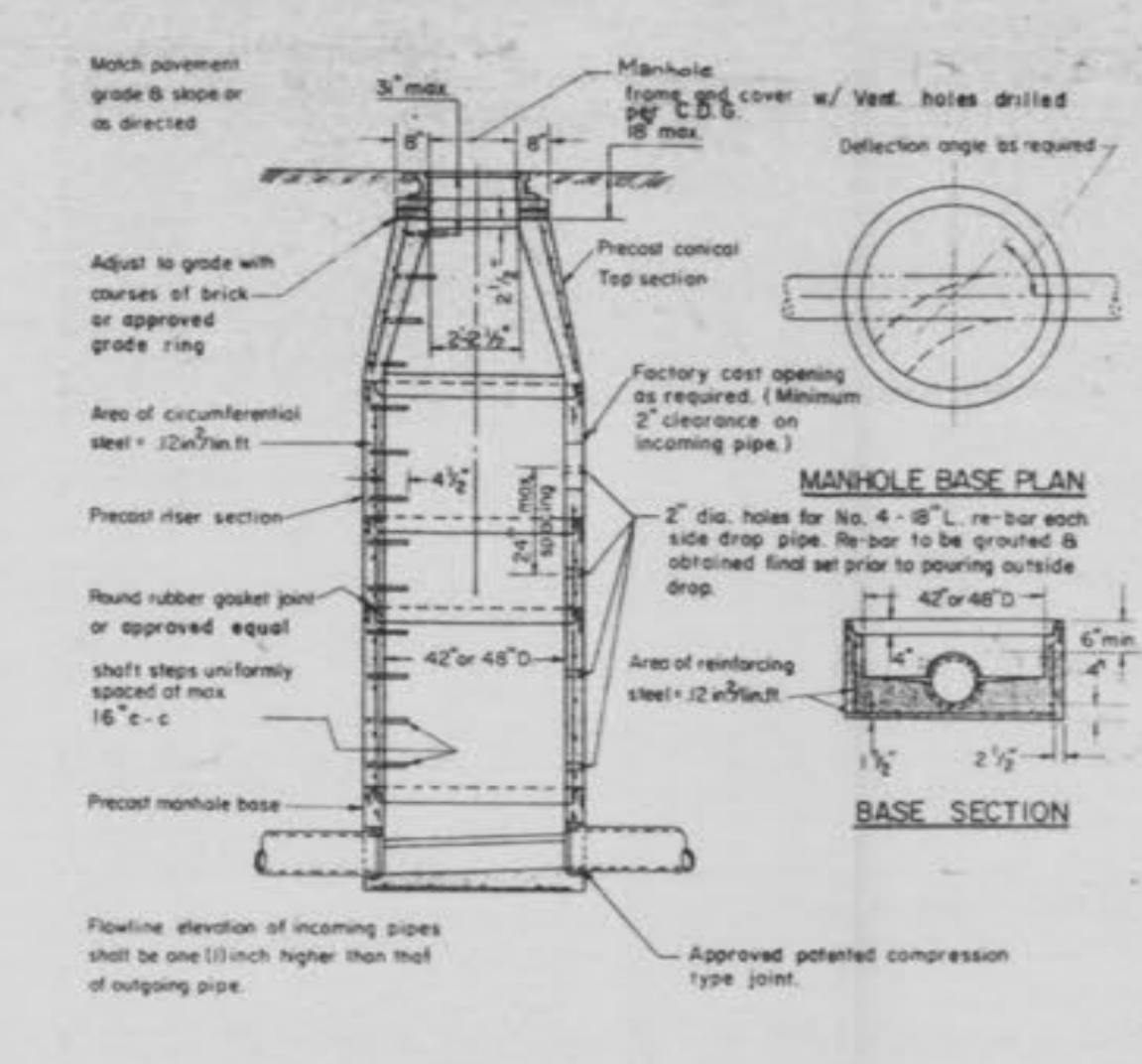


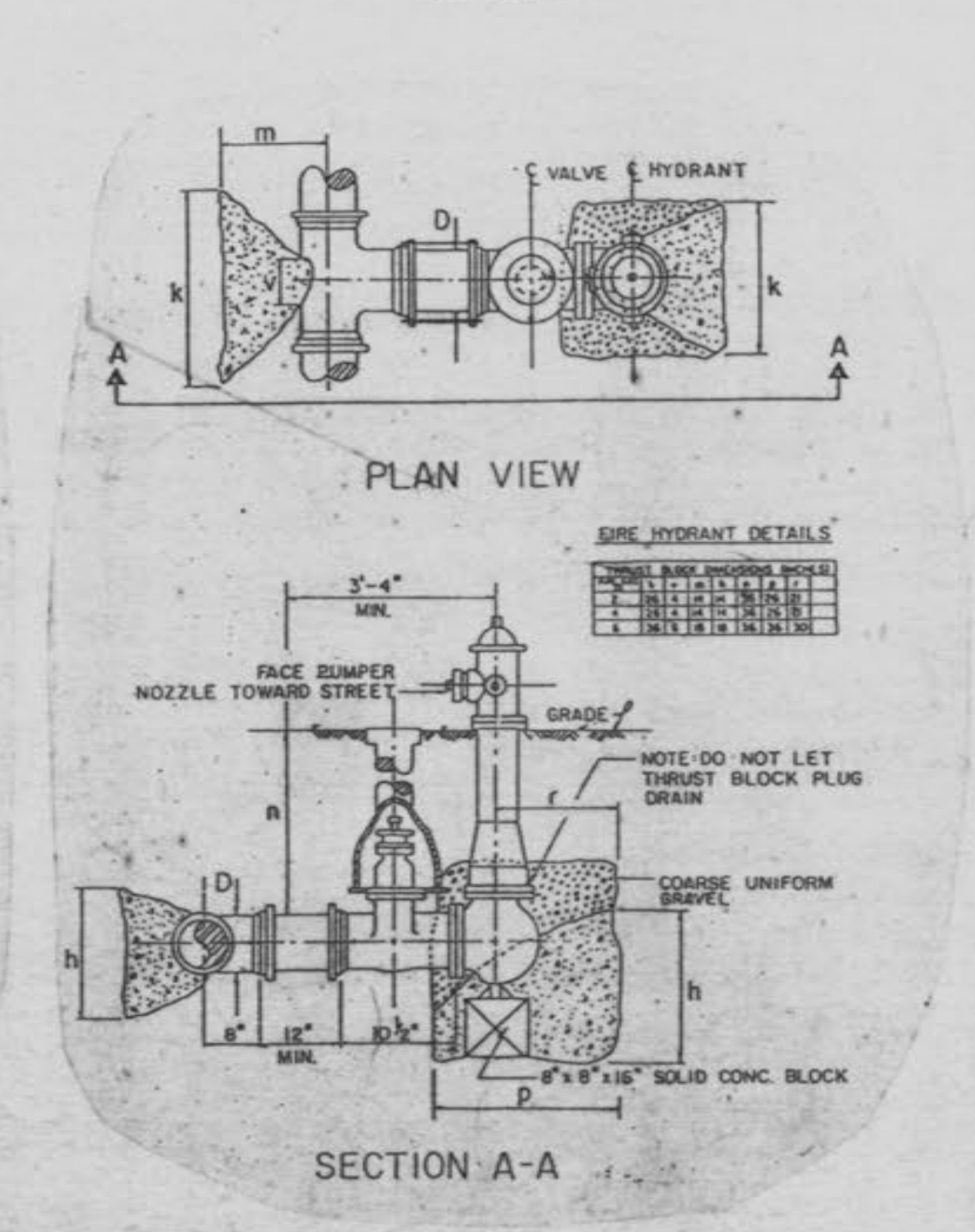
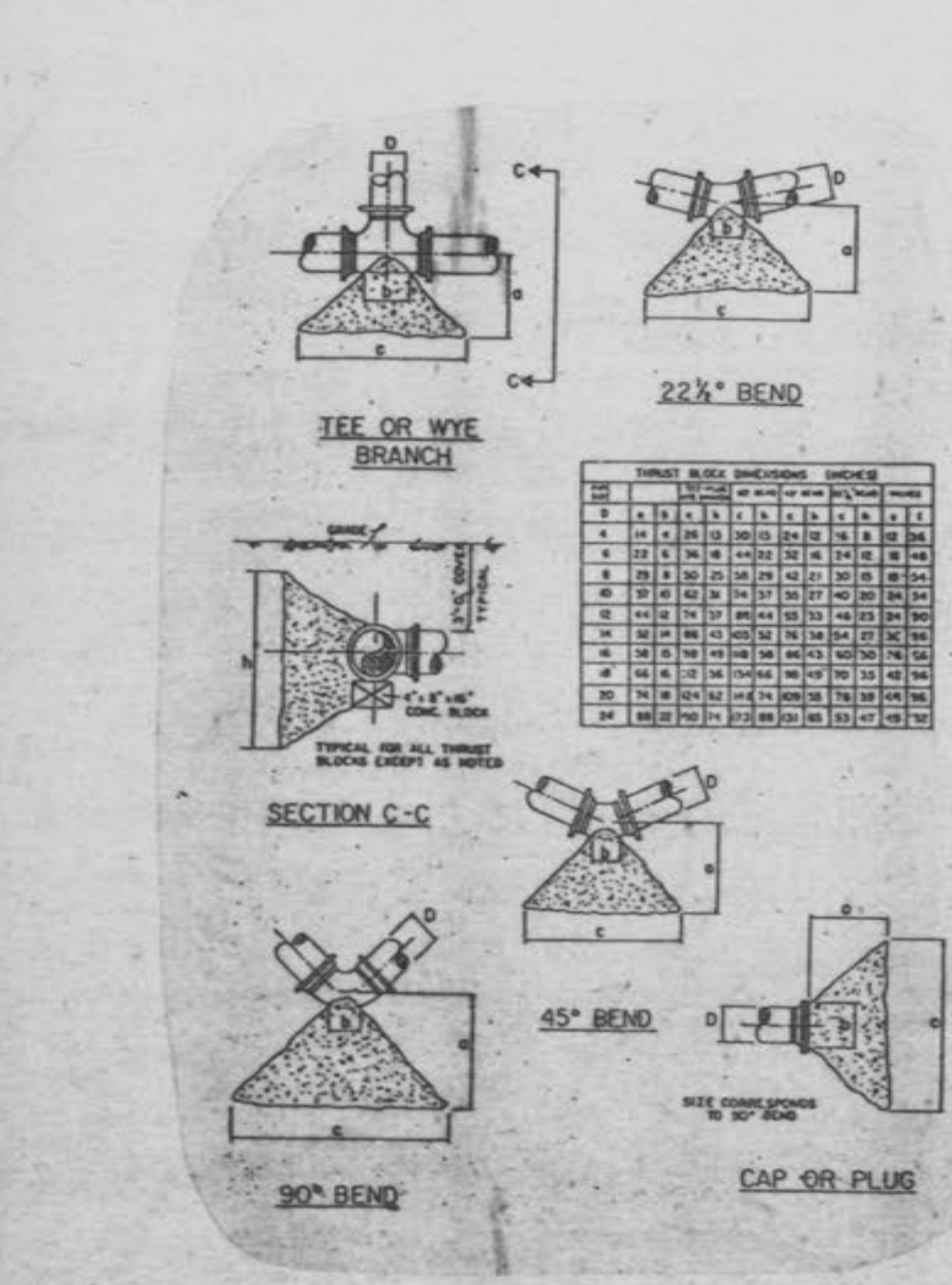
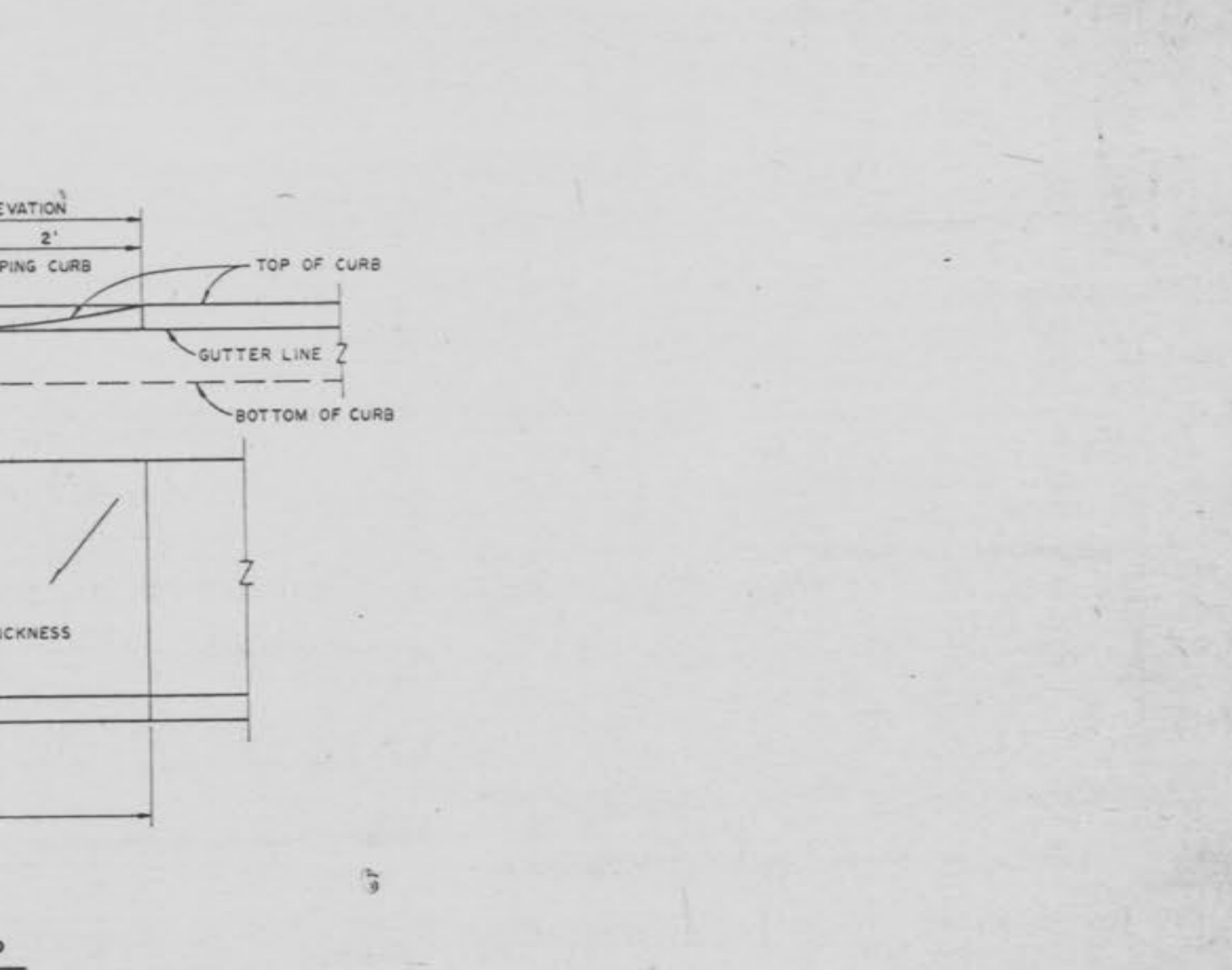
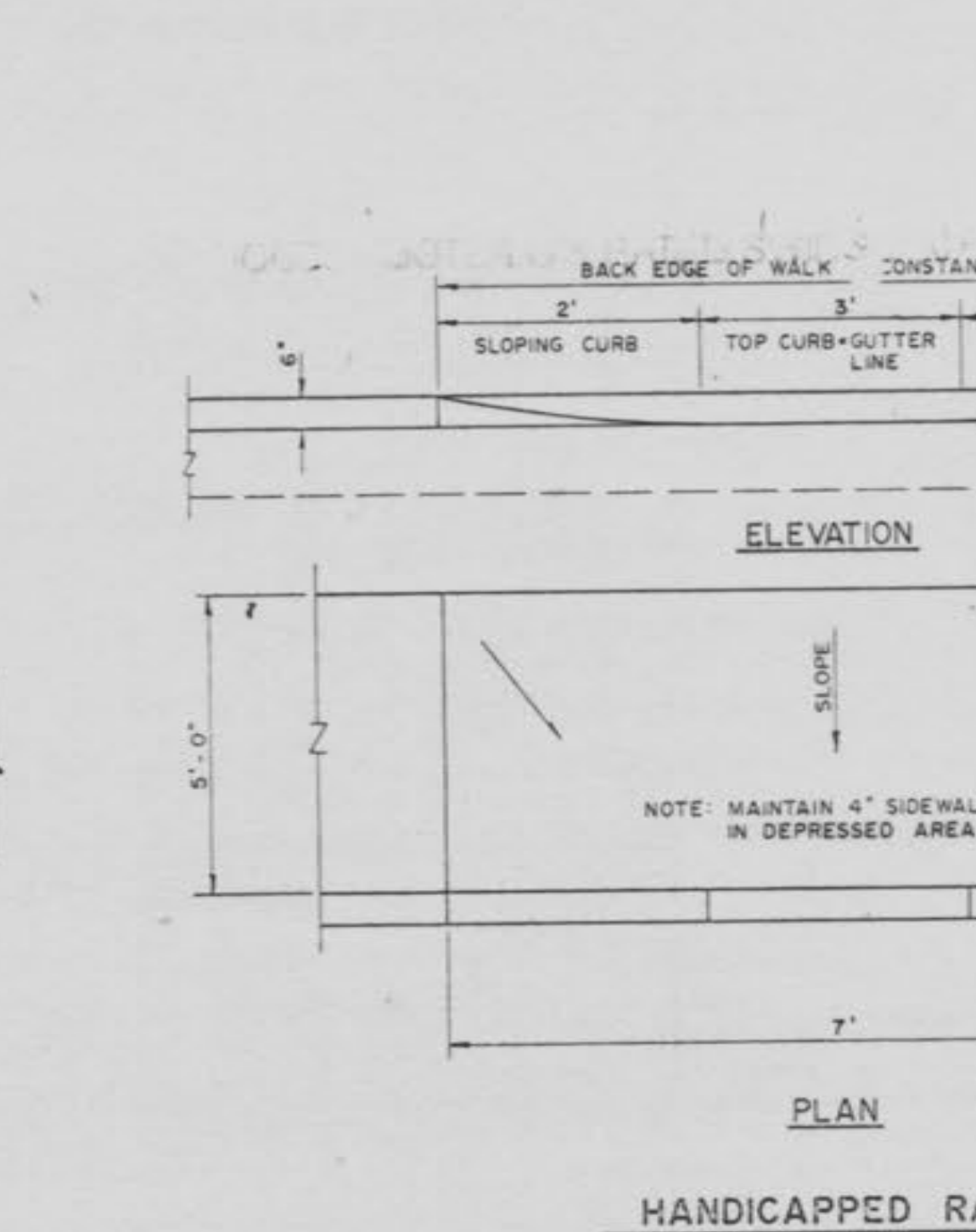
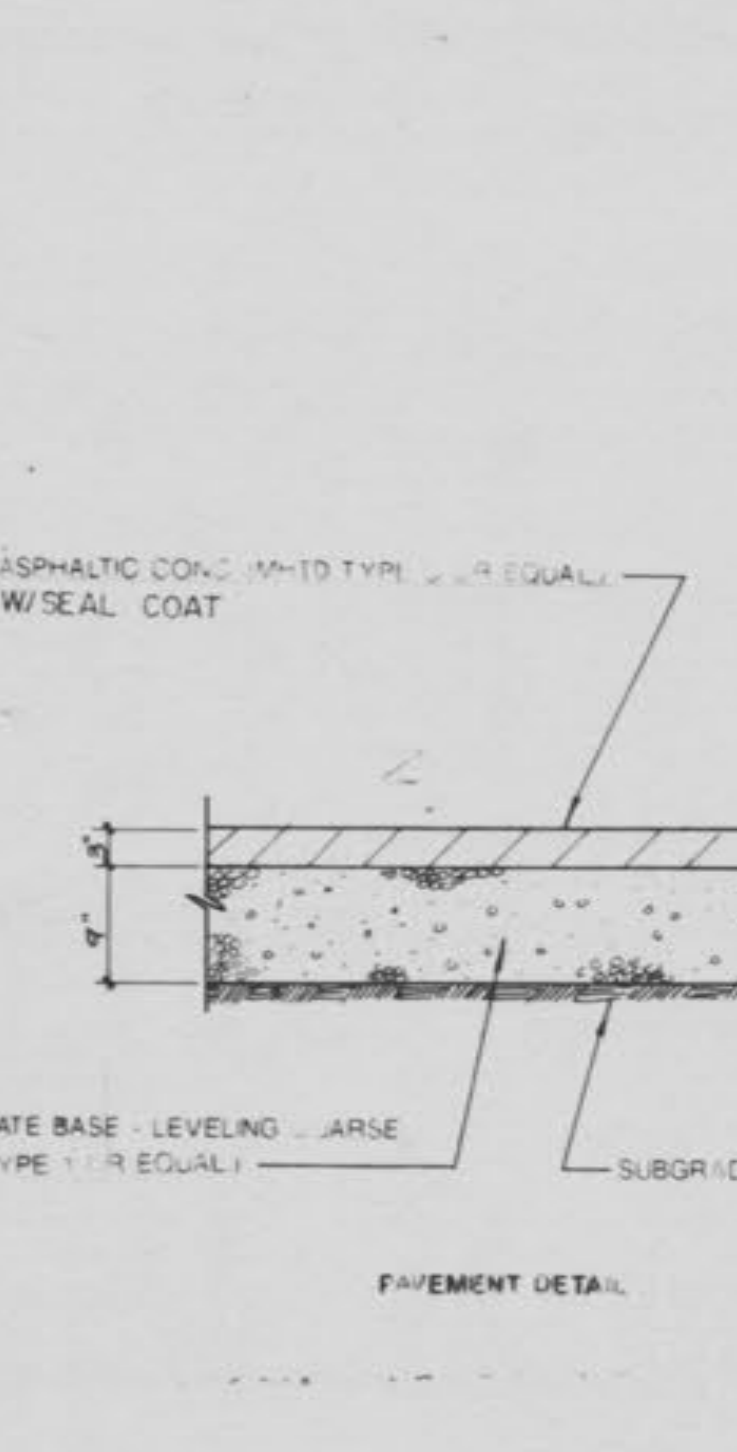
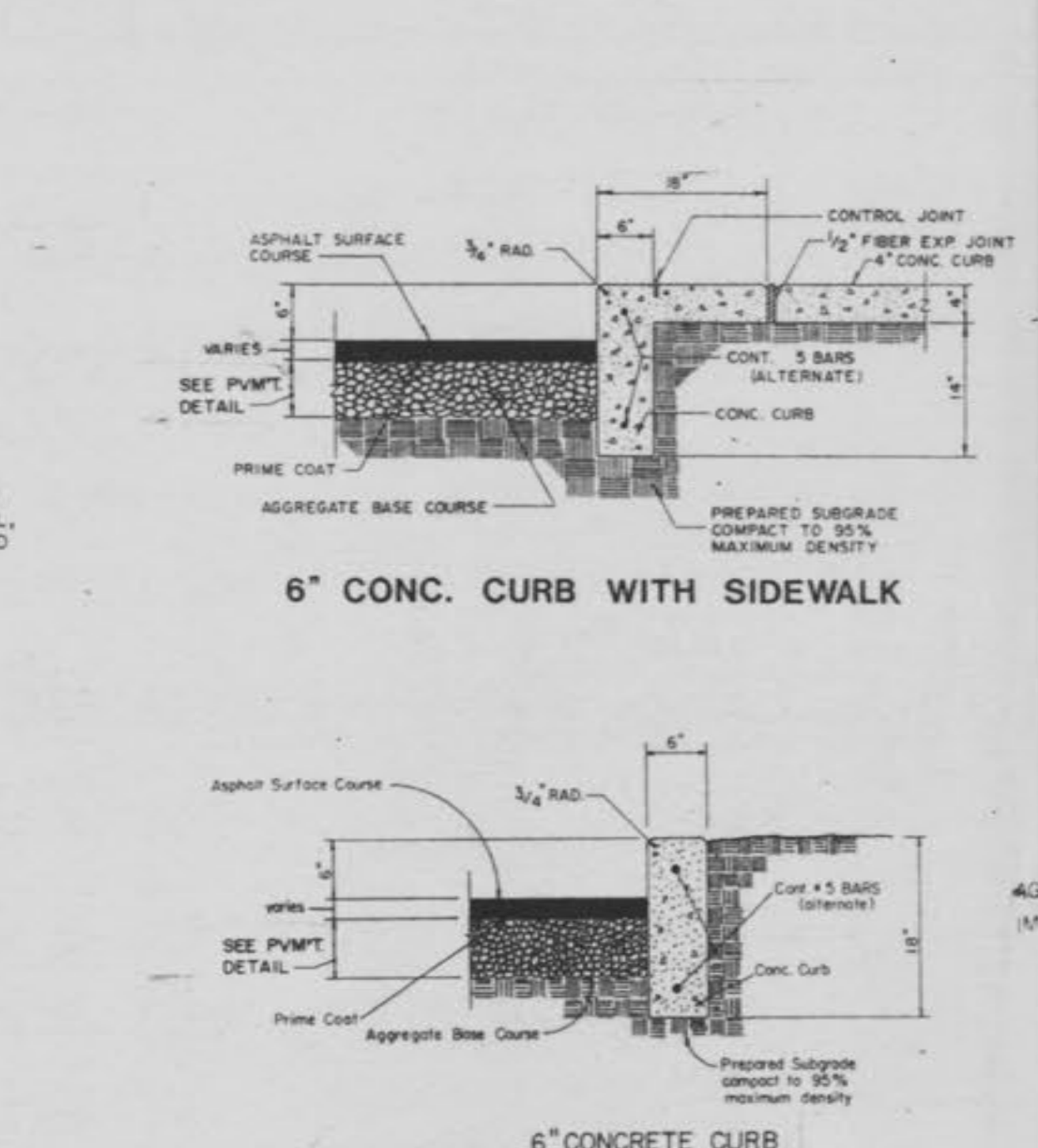
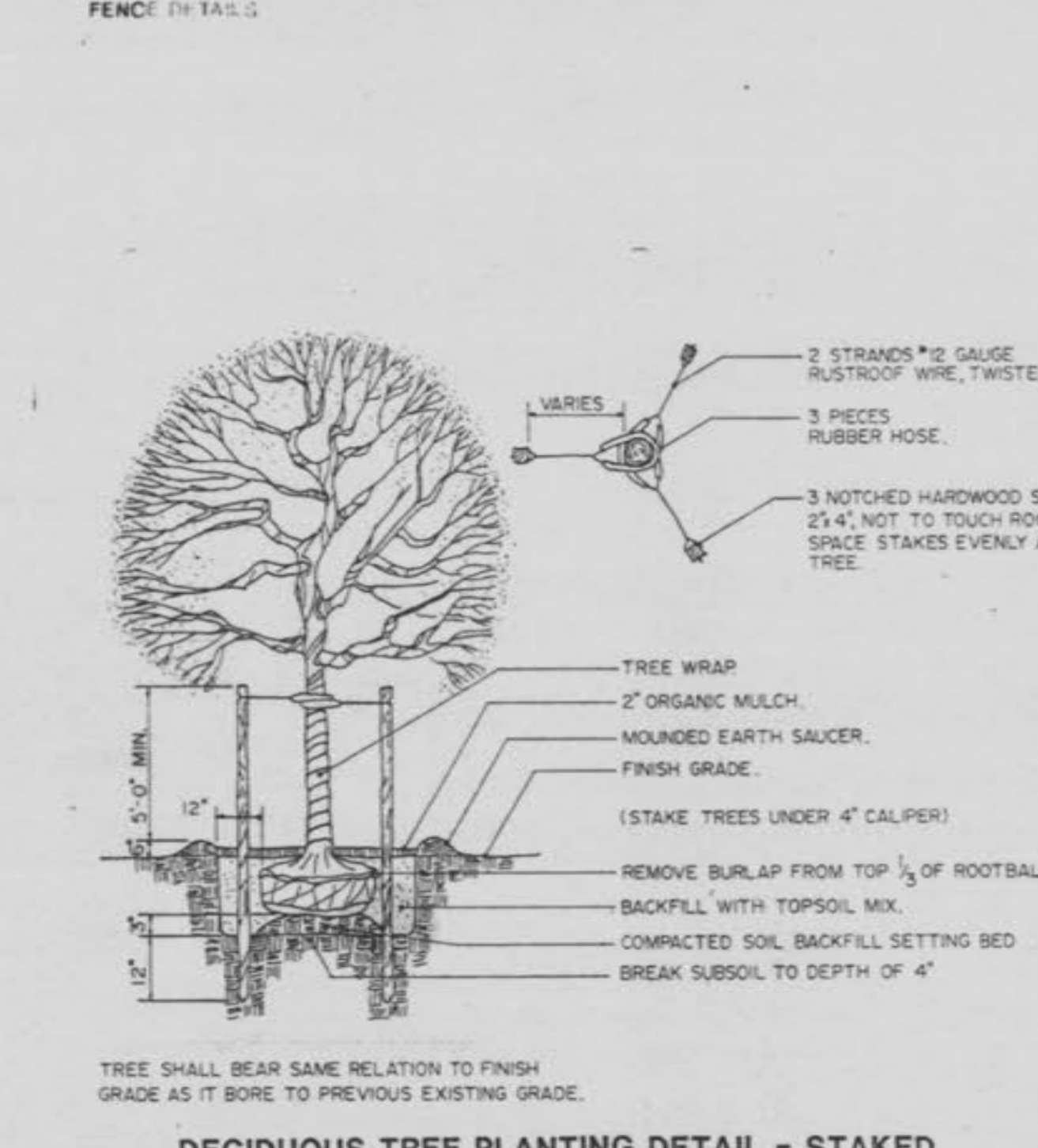
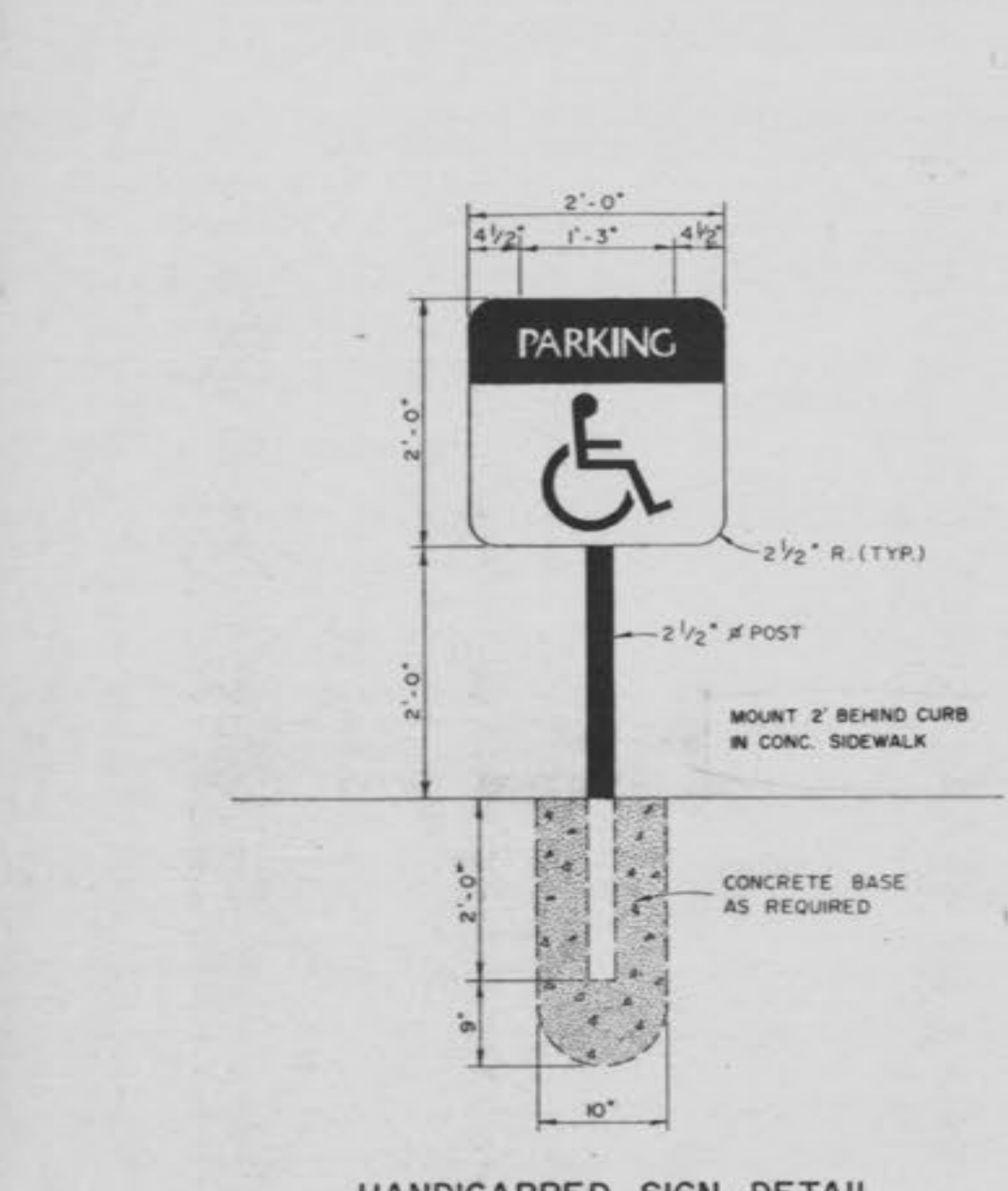
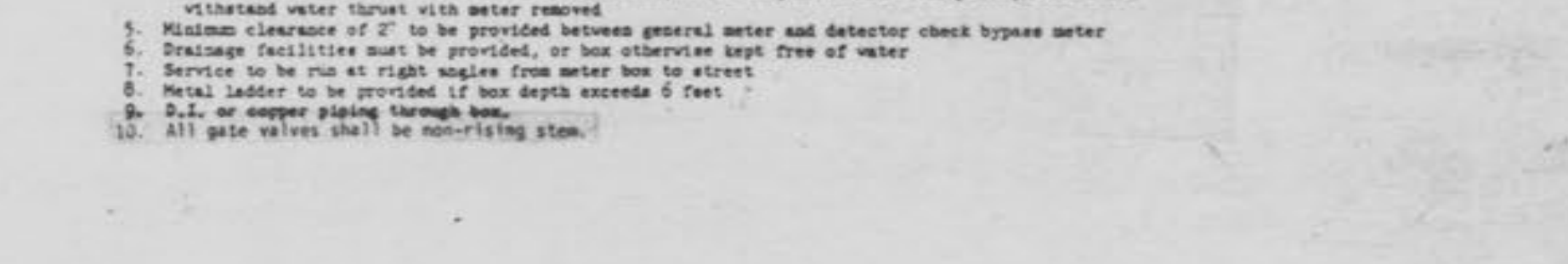
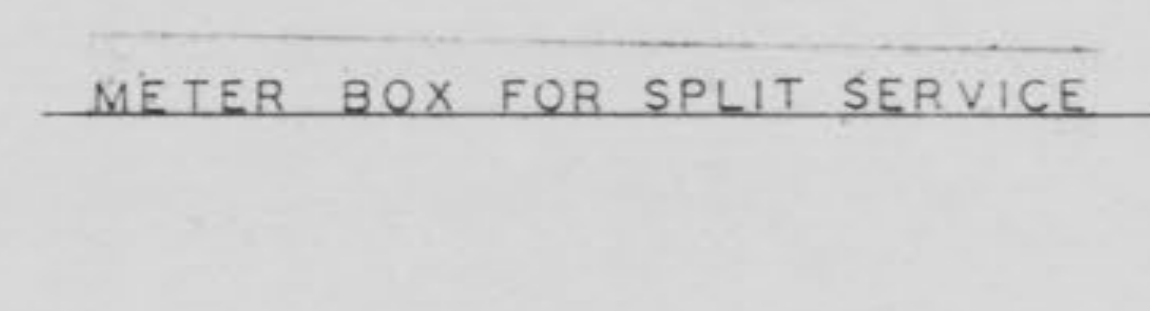
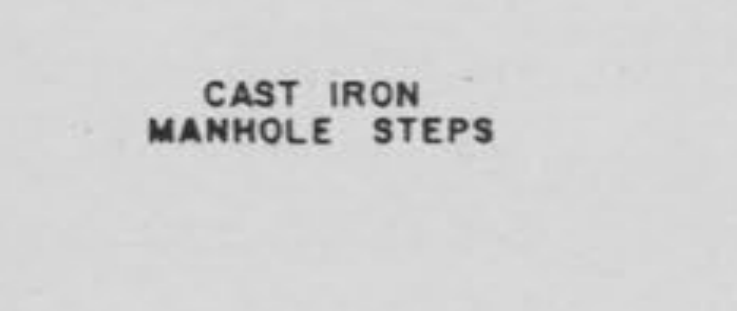
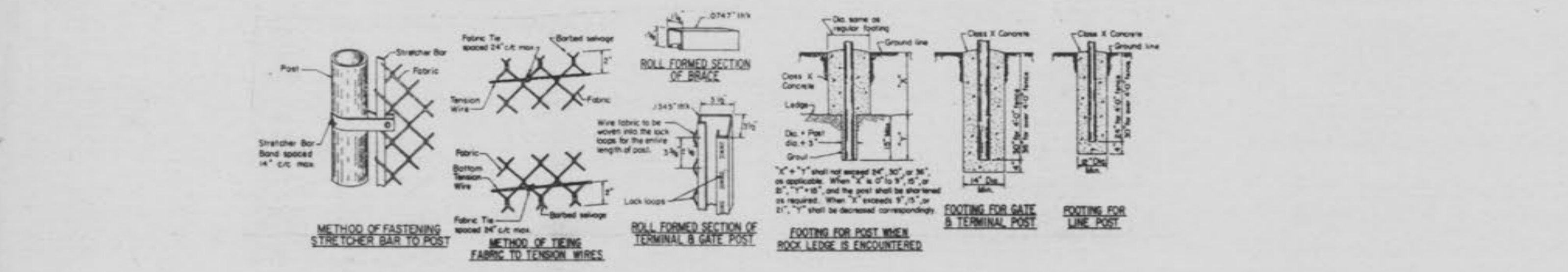
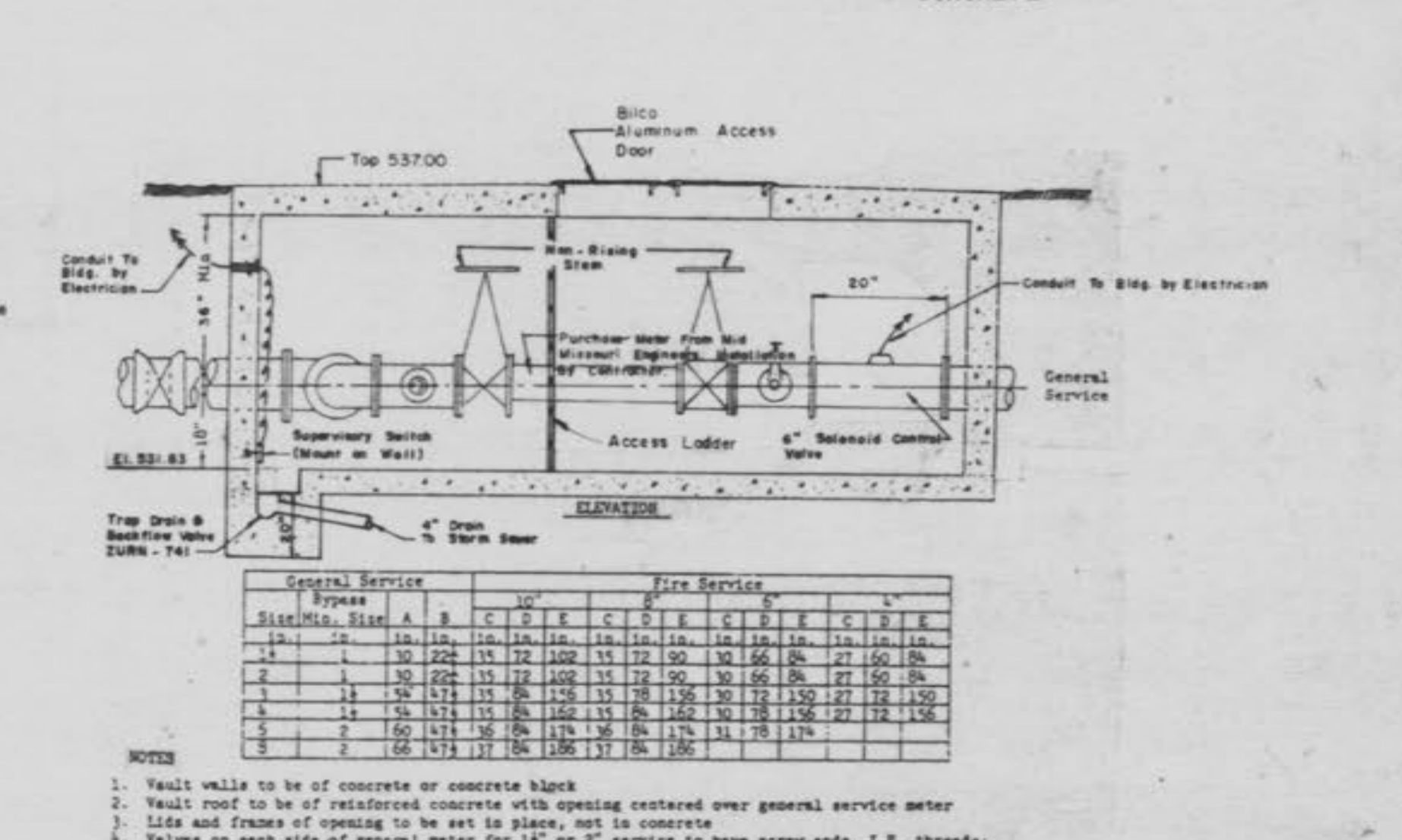
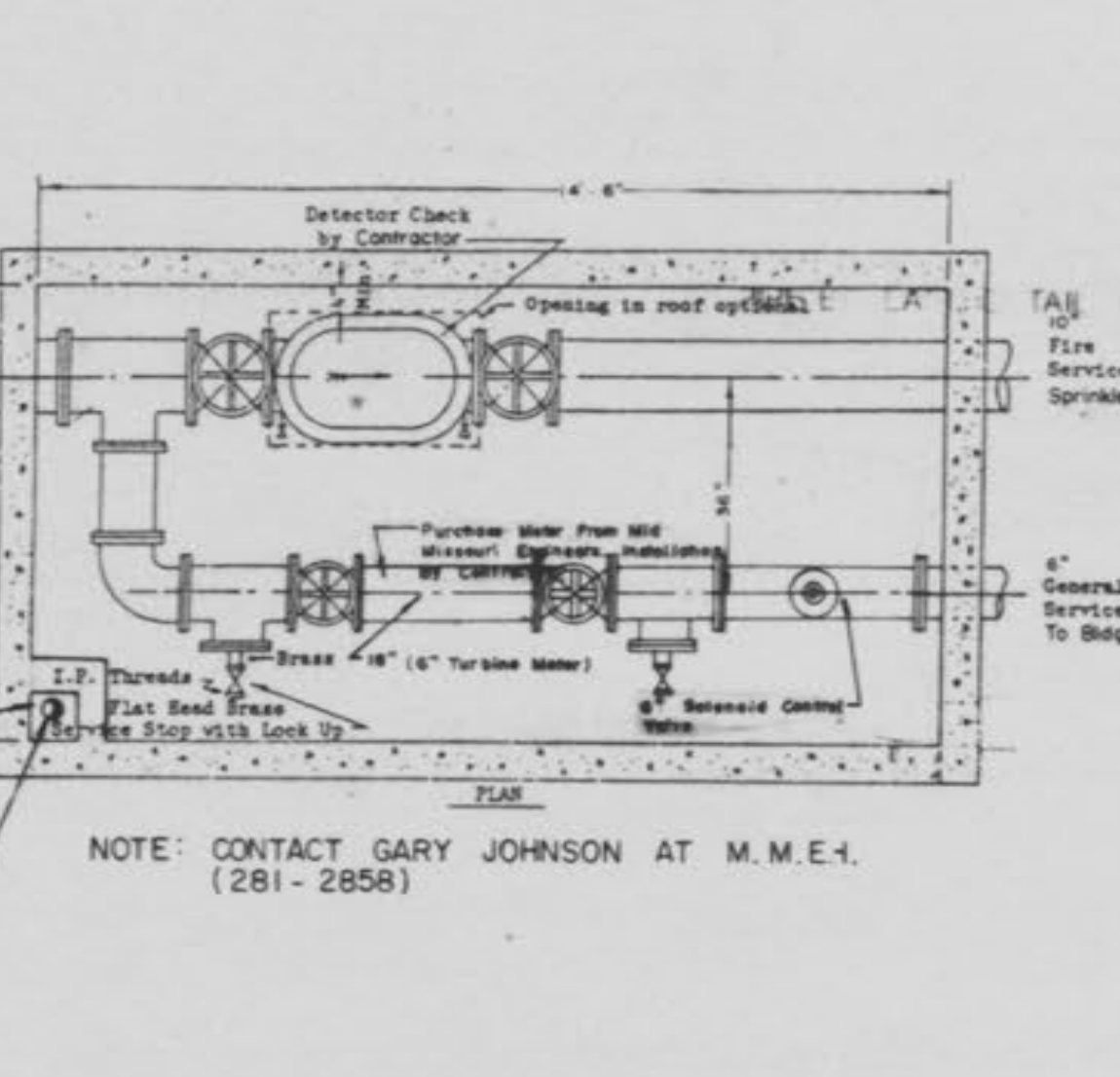
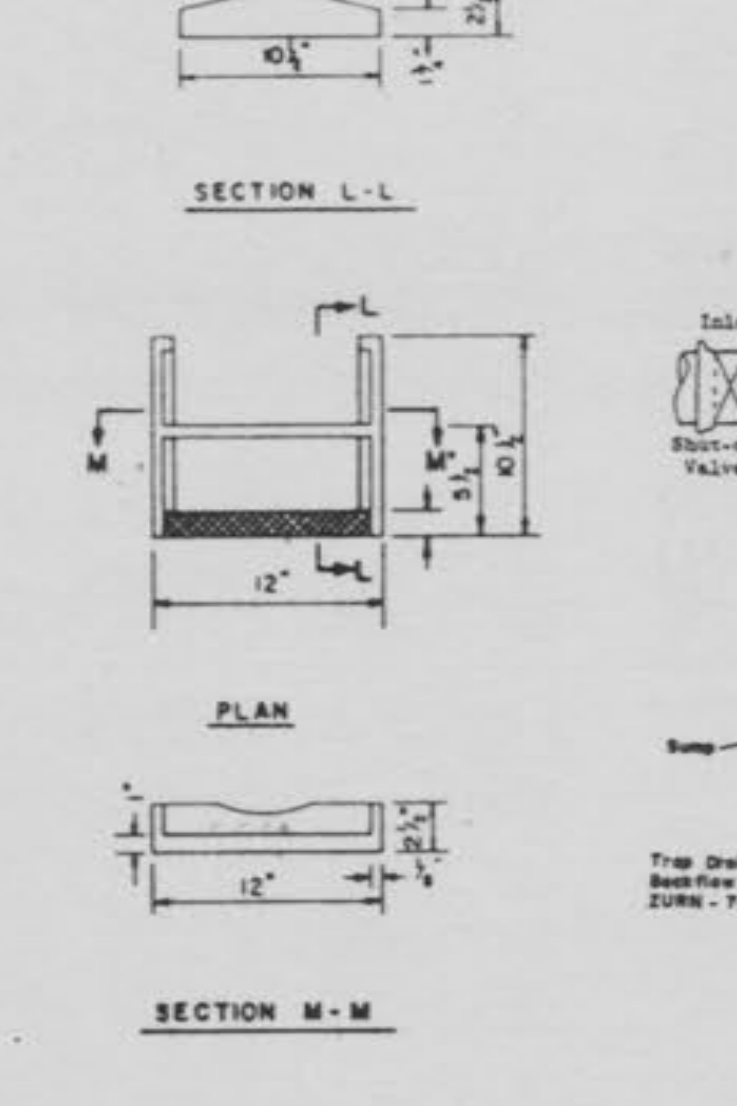
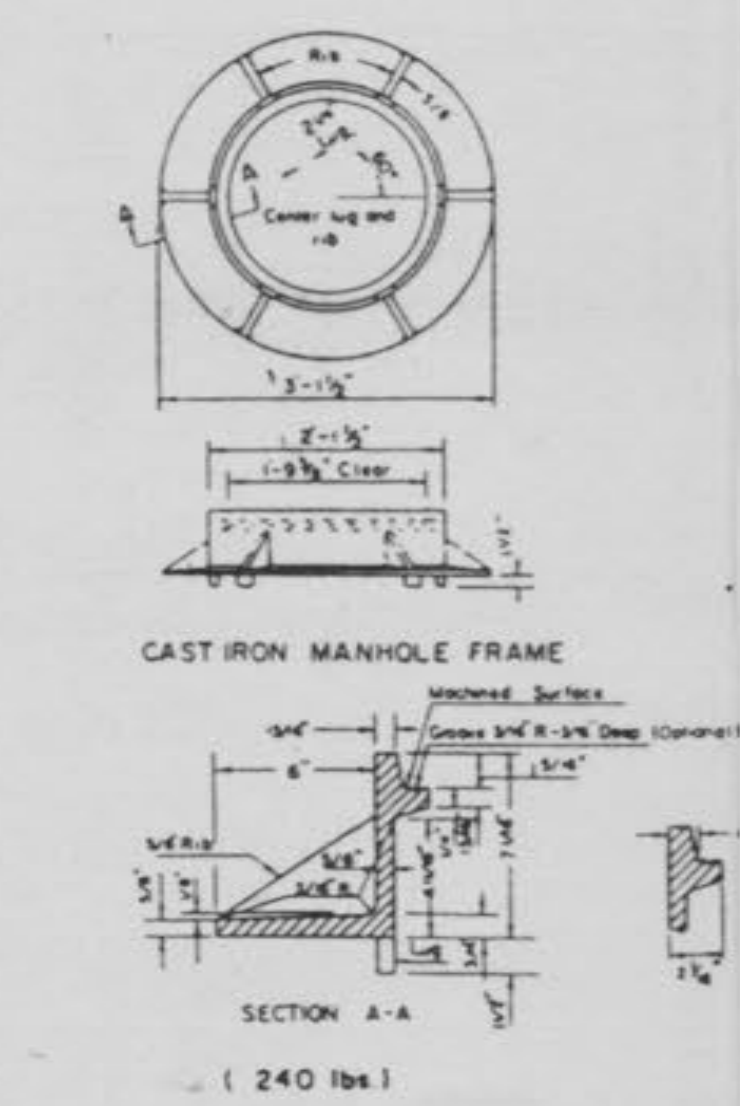
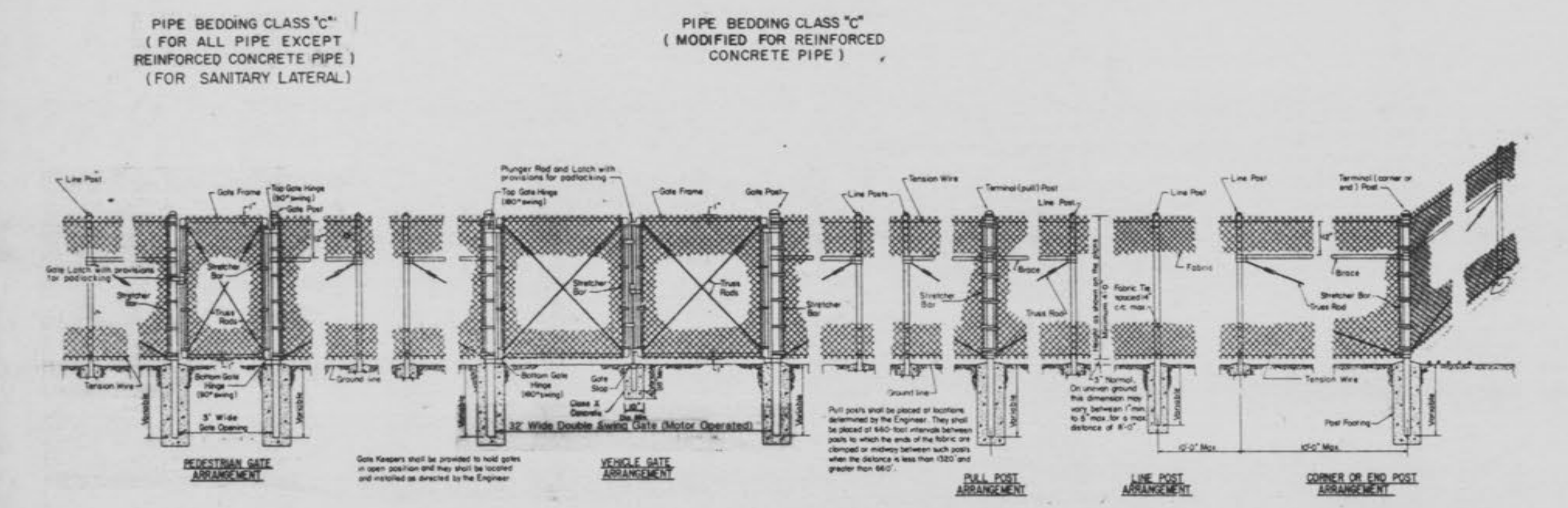
Section of Manhole	Dimension
Top Transition	Upper 2'-2 1/2" Dia. Lower 3'-6" Dia.
Bottom Section	8" thru 24" Dia. Pipe 3'-6" Dia. 27" thru 36" Dia. Pipe 3'-6" Square

TABLE NO. 2
STANDARD MANHOLE DIMENSIONS

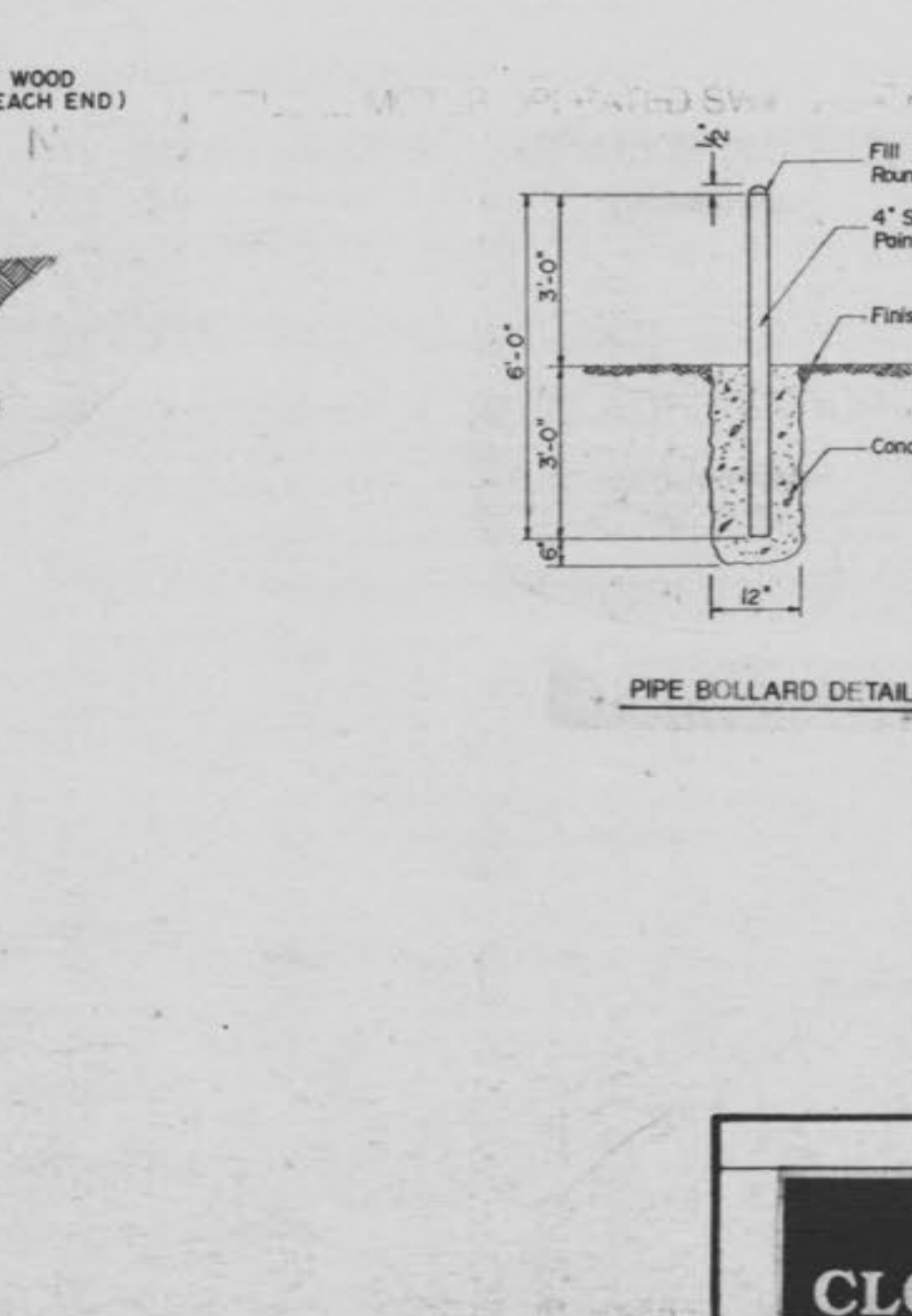
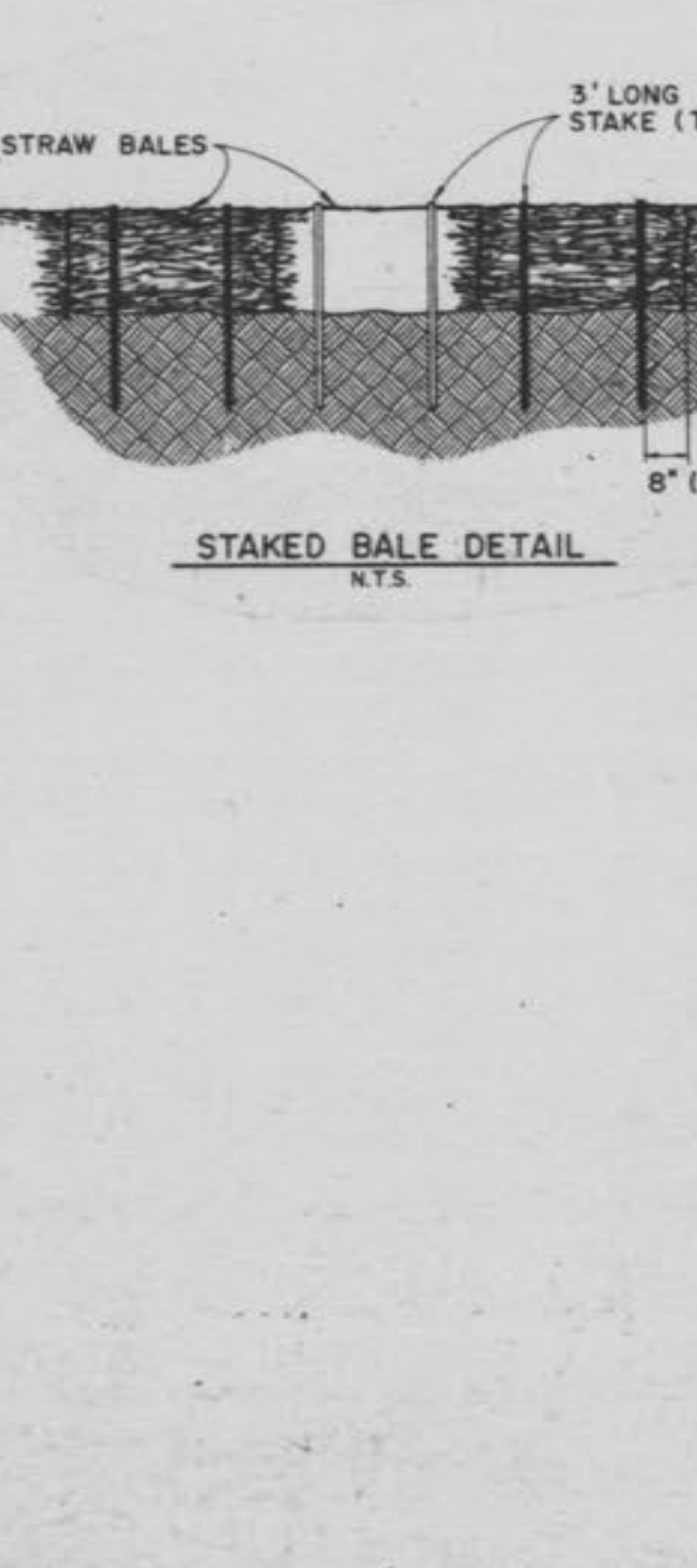


ROUND PIPE				HORIZONTAL ELLIPTICAL PIPE			
Inside Diameter of Pipe (Inches)	Payline Width of Trench (Inches)	Payline Width of Trench (Feet)	Volume of Concrete Encasement (cu. ft. per ft.)	Inside Dimensions of Pipe (Inches)	Payline Width of Trench (Inches)	Payline Width of Trench (Feet)	Volume of Concrete Encasement (cu. ft. per ft.)
24	28	2.33	3.20				
28	32	2.33	3.46				
32	36	2.33	3.70				
36	40	2.33	3.86				
40	44	2.33	3.98				
44	48	2.67	4.89				
48	52	2.92	5.63	14 x 23	41	3.42	5.94
52	56	3.25	6.61				
56	60	3.50	7.28	19 x 30	49	4.08	7.68
60	64	3.75	8.18	22 x 34	53	4.42	8.61
64	68	4.08	9.30	24 x 38	58	4.83	9.70
68	72	4.42	10.53	27 x 42	62	5.17	10.71
72	76	4.87	11.83	29 x 45	66	5.50	11.72
76	80	5.21	13.20	32 x 49	71	5.92	13.14
80	84	5.55	14.63	34 x 53	75	6.25	14.05
84	88	5.83	16.17	36 x 58	83	6.92	16.19
88	92	6.42	18.15	43 x 68	92	7.67	18.81
92	96	7.00	20.27	48 x 78	100	8.42	21.59
96	100	7.58	22.45	53 x 83	109	9.08	24.35
100	104	8.17	24.73	58 x 91	118	9.83	27.45
104	108	8.75	27.10	63 x 99	126	10.50	30.00
108	112	9.33	29.57	68 x 106	135	11.25	32.81
112	116	9.92	32.10	72 x 113	143	11.92	35.89
116	120	10.50	34.77	77 x 121	152	12.67	39.29
120	124	11.08	37.50	82 x 128	160	13.33	42.48
124	128	11.67	40.27	87 x 136	168	14.00	45.79
128	132	12.25	43.10	92 x 143	176	14.67	49.10
132	136	12.83	46.00	97 x 151	185	15.42	52.61
136	140	13.42	48.92	106 x 164	202	16.83	58.48
140	144	14.00	51.87	116 x 180	218	18.17	63.59

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



- NOTES
- Sanitary sewer pipes shall be 316 stainless steel.
 - Valves shall be resilient wedge, non-rising stem valves with operating nut and mechanical joint flanges manufactured in accordance with ANSI Standard C 509-86. The permanently bonded wedge sealing surface shall be resilient material meeting A.S.T.M. D 429 requirements for rubber bonded to cast iron and shall be as manufactured by Mueller Company of equal.
 - All fire hydrants shall be 3-1/4" Mueller Figure M23. The hydrant assembly will be furnished with a 6" flanged shoe. A 6" auxiliary valve and valve box to be flanged by Mechanical Joint installed. Hydrants to be 3.50.
 - All pipe and fittings shall be installed and pressure tested in accordance with A.S.T.M. Specification C-400-44 (300 psi at the low point).
 - All pipe shall be disinfected in accordance with A.W.W.A. Specification C-883 prior to being placed into service in the following manner: Disinfection shall be by the tablet method. Hypochlorite tablets (HTH) shall be attached to the pipe during installation. Two tablets per 20 foot length. Following installation, the water shall be filled with water at a velocity not to exceed one (1) foot per second. The water shall remain in the pipe for 24 hours prior to flushing.
 - Horizontal and vertical separation of water and sewer lines shall be in accordance with regulations as prescribed by the Missouri Department of Natural Resources, Division of Environmental Quality, Public Drinking Water Program.
 - Trenches at road crossings and parking areas shall be backfilled with compacted granular backfill material full height.
 - Trenches at road crossings and parking areas shall be backfilled with compacted granular backfill material full height.
 - All fittings within 6'-0" of each other shall be rodded by utilizing two (2) 5/8" threaded rods, four (4) nut lugs, and four (4) 5/8" nuts and washers per pair of fittings and/or valves.
 - A single No. 12 THW copper wire shall be placed in pipe trench with plastic sheath. Terminals of wire shall be brought above ground elevation at each end of watermain segment.
 - All fasteners on all fittings, lapping sleeves, and valves must be stainless steel or corrosion resistant.
 - Water mains shall be installed at 42" minimum.



PROPERTY OF CITY OF FALLON BUILDING DEPARTMENT

CONSULTANT
CLC Colton/Lester Corporation
Consulting Engineers & Surveyors
1402 South River Road
Charleston, Missouri 63017
314.676.7027

DESIGNED: JPT
DRAWN: DPB
CHECKED: []
SCALE: NO SCALE
DATE: DEC. 23, 1988

DESCRIPTION OF REVISION OR ISSUE

AS-BUILT	JPT	JPT	JPT
NOTE REV.	JPT	JPT	JPT
MOTORIZED GATE & PIPE BOLLARD DETAIL	DPB	JPT	JPT
PIT & MISC. REVISIONS	DPB	JPT	JPT
PIT DRAIN	DPB	JPT	JPT
DATE	BY	CHK.	APPROVAL

ANHEUSER-BUSCH COMPANIES
ANHEUSER-BUSCH, INC.
OF FALLON, MO.

CIVIL DETAIL SHEET

BLOG. NAME: PILOT PLANT

ENGINEER APPROVED: [] OWNER APPROVED: []

PLANT: [] BLDG. NO.: [] DIV.: [] DES. NO.: [] REV.: []

OPB - 1 - C - 1001 - 1