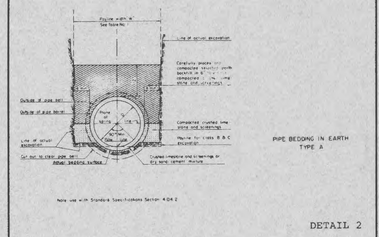
CONSTRUCTION DETAILS

Inside Diameter of Pipe (inches)	"W" Trench Width (inches)	Pipe volumes cu. ft. per ft. Concrete	Pipe volumes cu. ft. per ft. Clayware
6	24	2.72	
10	28	3.86	
12	28	3.86	
15	32	4.89	
18	35	5.43	
21	38	6.61	
24	42	7.78	
27	45	8.48	
30	48	9.20	
33	51	10.30	
36	54	> 43	
39	Increase	Increase	
42	63	13.38	
45	Increase	Increase	
48	72	15.67	
54	77	17.15	
60	84	20.73	
66	91	23.45	
72	98	26.37	
78	105		
84	112		
90	119		
96	126		
102	133		
108	140		
114	147		
120	154		
126	161		
132	168		

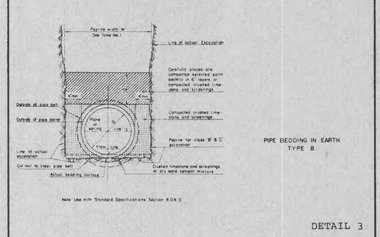
TABLE NO.1
PAYLINE WIDTHS OF TRENCH AND PAY-QUANTITIES OF CONCRETE

DETAIL 1



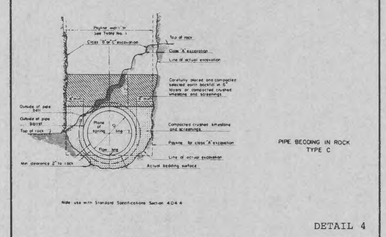
PIPE BEDDING IN EARTH TYPE A

DETAIL 2



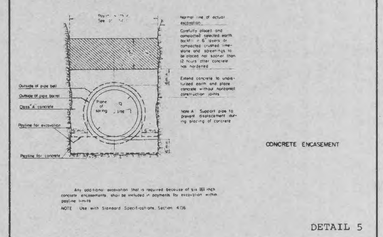
PIPE BEDDING IN EARTH TYPE B

DETAIL 3



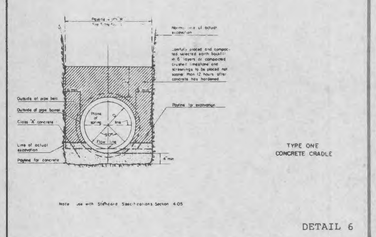
PIPE BEDDING IN ROCK TYPE C

DETAIL 4



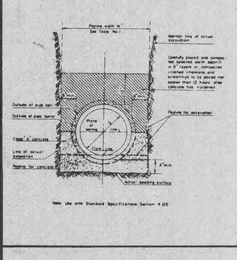
CONCRETE ENCASEMENT

DETAIL 5



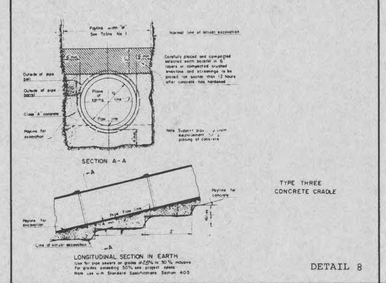
TYPE ONE CONCRETE CRADLE

DETAIL 6



TYPE TWO CONCRETE CRADLE

DETAIL 7



TYPE THREE CONCRETE CRADLE

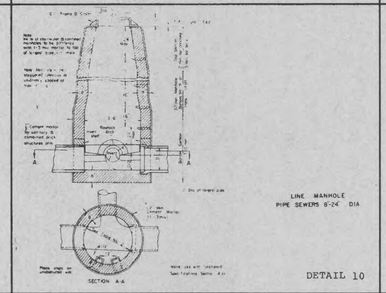
DETAIL 8

STANDARD MANHOLE DIMENSIONS

Section	Position	Minimum	Maximum
Top Transition	Upper	3'-0" Dia	3'-6" Dia
	Lower	3'-0" Dia	3'-6" Dia
Barrel or Shaft	Uniform	3'-0" Dia (1)	3'-6" Dia (1)
Bottom Transition	Upper	Same as Shaft	Same as Shaft
	Lower	Same as dia. in Same as dia. in Sec. 3	
Bottom Section	67"Incl. Dia. (2)	3'-6" Dia	3'-6" Dia
Bottom Section	27"Incl. Dia. (2)	3'-6" Square	3'-6" Square

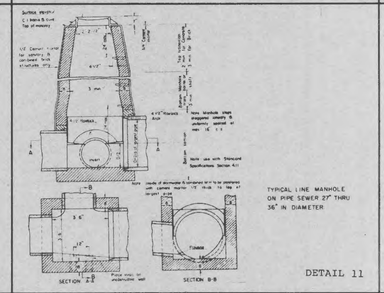
TABLE NO.2
STANDARD MANHOLE DIMENSIONS

DETAIL 9



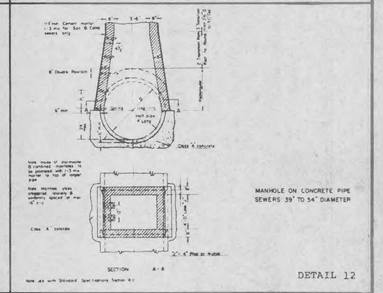
LINE MANHOLE PIPE SEWERS 8"-24" DIA

DETAIL 10



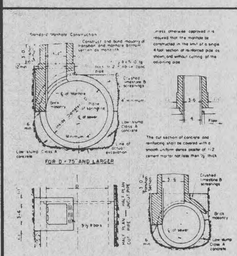
TYPICAL LINE MANHOLE ON PIPE SEWER 27" THRU 36" IN DIAMETER

DETAIL 11



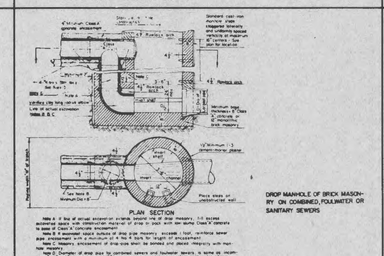
MANHOLE ON CONCRETE PIPE SEWERS 39" TO 54" DIAMETER

DETAIL 12



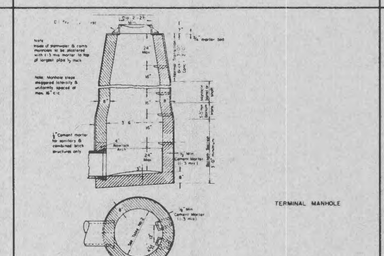
TYPICAL MANHOLE BASE REINFORCED CONCRETE PIPE SEWERS 27" AND LARGER IN DIAMETER

DETAIL 13



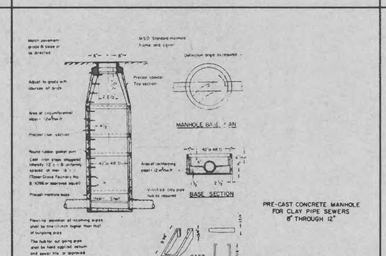
DROP MANHOLE OF BRICK MASONRY ON COMBINED, FOULWATER OR SANITARY SEWERS

DETAIL 14



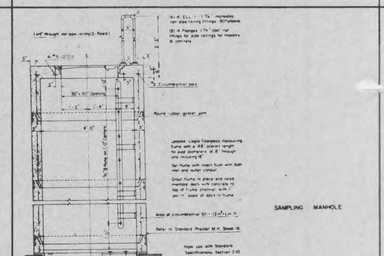
TERMINAL MANHOLE

DETAIL 15



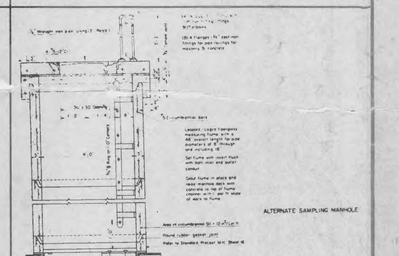
PRE-CAST CONCRETE MANHOLE FOR CLAY PIPE SEWERS 8" THROUGH 12"

DETAIL 16



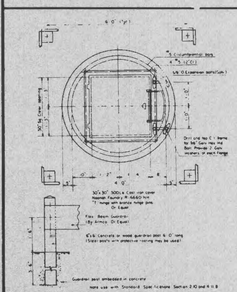
SAMPLING MANHOLE

DETAIL 17



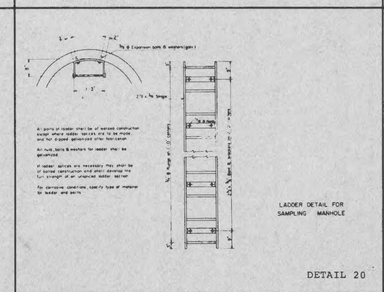
ALTERNATE SAMPLING MANHOLE

DETAIL 18



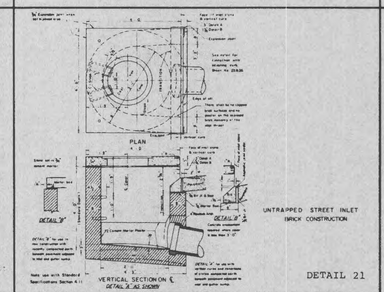
CAST IRON COVER AND GUARDRAIL DETAILS FOR SAMPLING MANHOLE

DETAIL 19



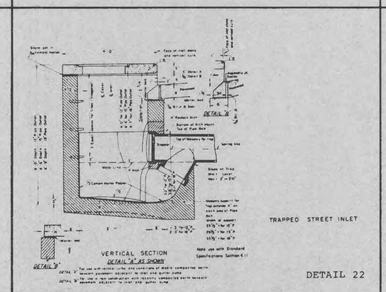
LADDER DETAIL FOR SAMPLING MANHOLE

DETAIL 20



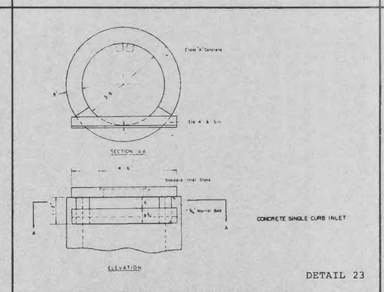
UNTRAPPED STREET INLET BRICK CONSTRUCTION

DETAIL 21



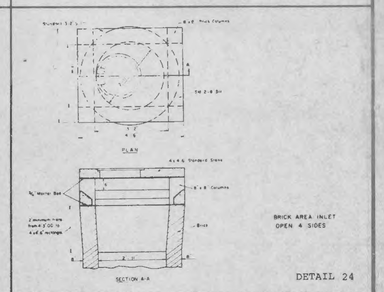
TRAPPED STREET INLET

DETAIL 22



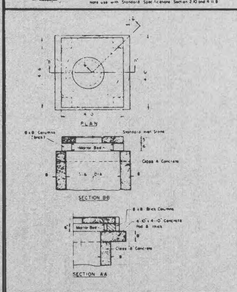
CONCRETE SINGLE CURB INLET

DETAIL 23



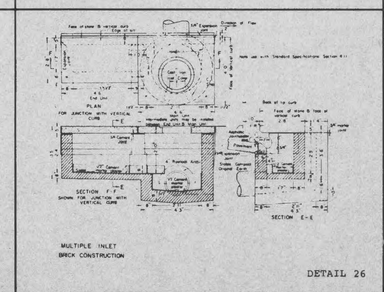
BRICK AREA INLET OPEN 4 SIDES

DETAIL 24



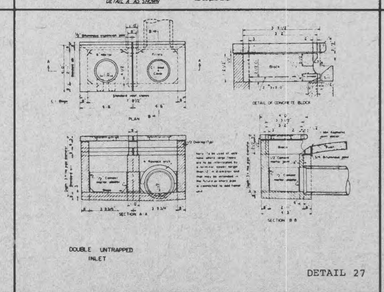
CONCRETE AREA INLET OPEN 4 SIDES

DETAIL 25



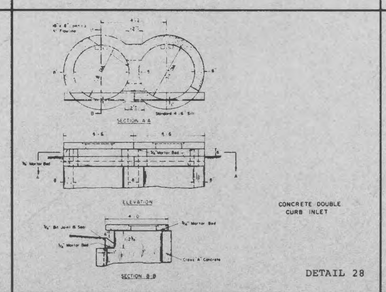
MULTIPLE INLET BRICK CONSTRUCTION

DETAIL 26



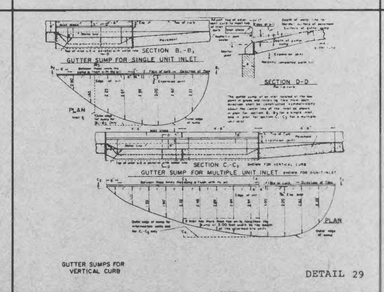
DOUBLE UNTRAPPED INLET

DETAIL 27



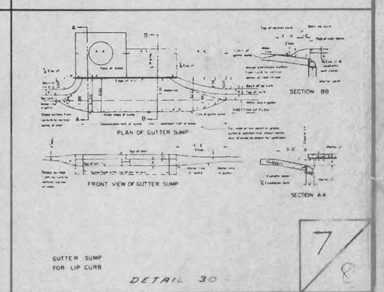
CONCRETE DOUBLE CURB INLET

DETAIL 28



GUTTER SUMPS FOR VERTICAL CURB

DETAIL 29



GUTTER SUMP FOR LIP CURB

DETAIL 30

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