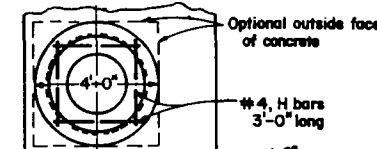
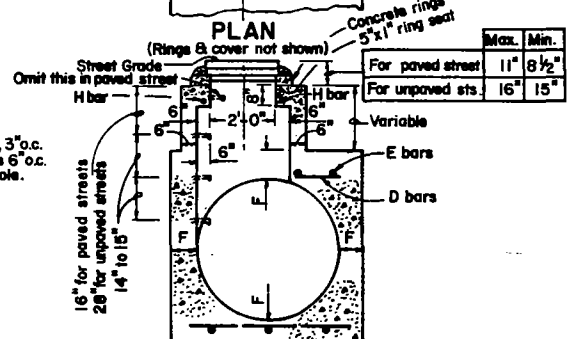


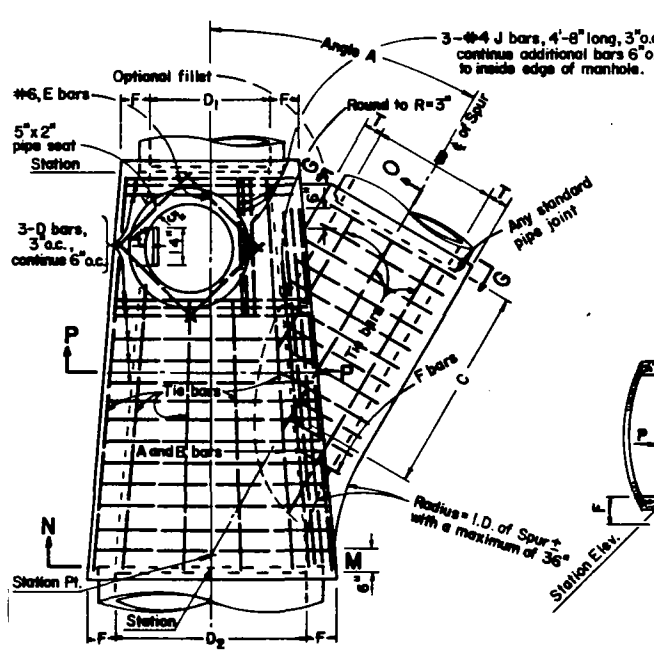
D	F	B	T	B	T
36"	6 1/2"	12"	4"	10 1/2"	15 1/2"
38"	7"	14"	4 1/2"	10 3/4"	16"
42"	7 1/2"	16"	5"	11"	16 1/2"
45"	7 3/4"	18"	5 1/2"	11 1/2"	17"
48"	8"	20"	6"	12"	17 1/2"
51"	8 1/2"	22"	6 1/2"	12 1/2"	18"
54"	9"	24"	7"	13"	18 1/2"
57"	9 1/2"	26"	7 1/2"	13 1/2"	19"
60"	9 3/4"	28"	8"	14"	19 1/2"
63"	10"	30"	8 1/2"	14 1/2"	20"
66"	10 1/4"	32"	9"	15"	20 1/2"
69"	10 1/2"	34"	9 1/2"	15 1/2"	21"
72"	10 3/4"	36"	10"	16"	21 1/2"
75"	11"	38"	10 1/2"	16 1/2"	22"
78"	11 1/4"	40"	11"	17"	22 1/2"
81"	11 1/2"	42"	11 1/2"	17 1/2"	23"
84"	11 3/4"	44"	12"	18"	23 1/2"
87"	12"	46"	12 1/2"	18 1/2"	24"
90"	12 1/4"	48"	13"	19"	24 1/2"
93"	12 1/2"	50"	13 1/2"	19 1/2"	25"
96"	12 3/4"	52"	14"	20"	25 1/2"



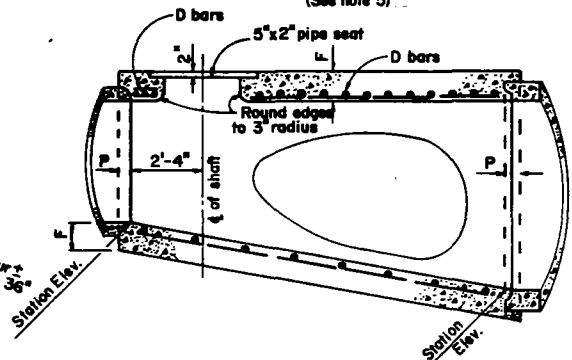
SECTION N-M-P-O  
Projected on P-P-O



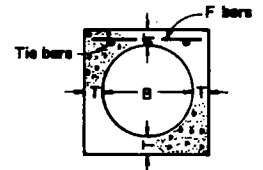
DETAIL M  
(See note 5)



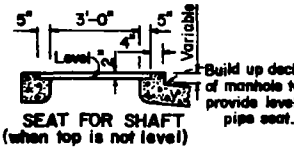
PLAN  
(Shaft not shown)



LONGITUDINAL SECTION



SECTION G-G



D <sub>2</sub> or B	A & B Bars	D or F Bars
12"-39"	#5@3"	#4@6"
42"-84"	#6@3"	#5@6"
90"-144"	#7@3"	#6@6"

REVISIONS	CITY OF LONG BEACH, CALIFORNIA DEPARTMENT OF PUBLIC WORKS		STANDARD PLAN NO.
NO. DATE	MANHOLE NO. 4 36" PIPE OR LARGER WITH SIDE INLET		624
1	APPROVED BY: <i>Edward J. Putsy</i>		SHEET
2	CITY ENGINEER R.E. No. 24233	DATE: 6-26-89	1 OF 2
3		EX DATE 12-31-89	
4			

## NOTES

1. VALUES for A,B,C,D<sub>1</sub>,D<sub>2</sub>, Elevation R, and Elevation S are shown on the plan. TABLE of values for F and T hereon.
2. LATERALS: If laterals enter on both sides of manhole, access shaft shall be located on side receiving the smaller lateral.
3. Center of manhole shaft shall be located over centerline of storm drain when D<sub>1</sub> is 48" or less, in which case place 4 E bars symmetrically around shaft 45° with centerline.
4. Length of manhole may be increased at option to meet pipe ends, but any change in location of spur must be approved by the Engineer.
5. DETAIL M: When depth of manhole from street to top of box is less than 2'-10½" for paved streets or 3'-6" for unpaved streets, construct monolithic shaft as per Detail M. Construction of shaft as per Detail M for any depth of manhole is optional. When diameter D<sub>1</sub> is 48" or less, center of shaft shall be located as per Note 3.
6. Reinforcing steel shall be 1½" clear from  
face of concrete unless shown otherwise. Tie bars shall be #3, and spaced 18" on centers or closer. Steel schedule detailed on plan.
7. Embedment P shall be 5" for D<sub>2</sub>=96" or less and 8" for D<sub>2</sub> over 96".
8. Steps shall be spaced 14" to 15" O. C. Where the distance from top step in the shaft is greater than 12" below finish grade, a step shall be installed below the M.H. frame. The top step and those in the 24" dia. section shall project 3" inside the M.H. and all others 5".
9. Floor of manhole shall be steel troweled to springing line.
10. Body of manhole, including spur, shall be poured in one continuous operation, except that a construction joint at the springing line with a longitudinal keyway permitted.
11. Elevation "S" applies at inside wall of structure.

REVISIONS	CITY OF LONG BEACH, CALIFORNIA		STANDARD PLAN NO.
NO. DATE	DEPARTMENT OF PUBLIC WORKS		
1	MANHOLE NO. 4 36" PIPE OR LARGER		624
2	WITH SIDE INLET		
3	APPROVED BY: <i>Edward J. Putz</i>		
4	CITY ENGINEER R.E. NO. 24233	DATE: 6-26-89 EX. DATE 12-31-89	
			SHEET 2 OF 2