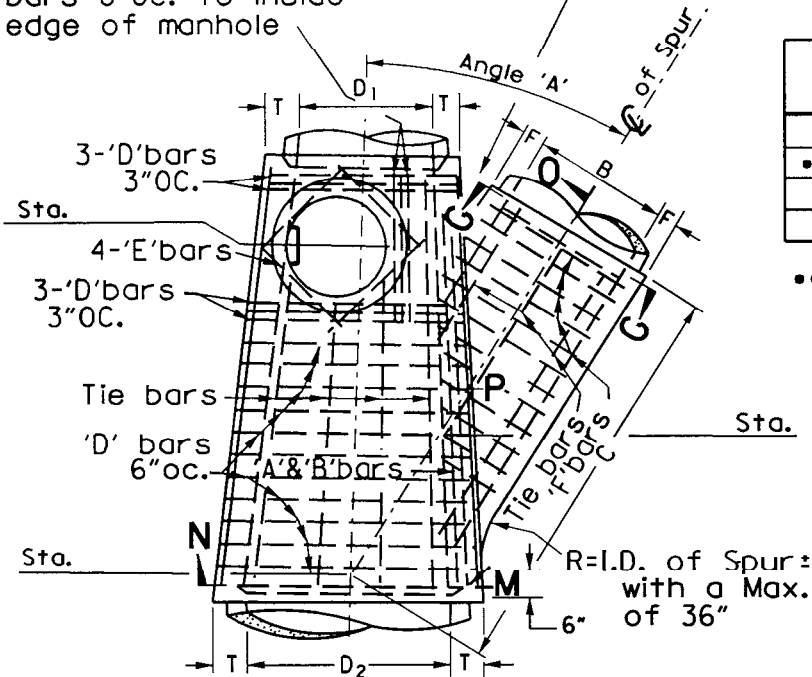


3-#4 'J'bars, 4'-8"long,
3"OC. Continue additional
bars 6"OC. to inside
edge of manhole

Optional fillet

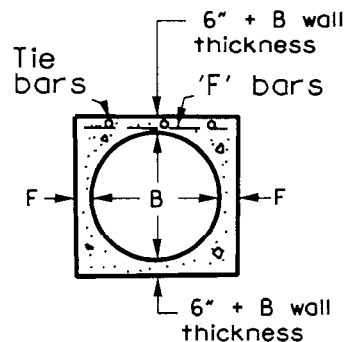


PLAN

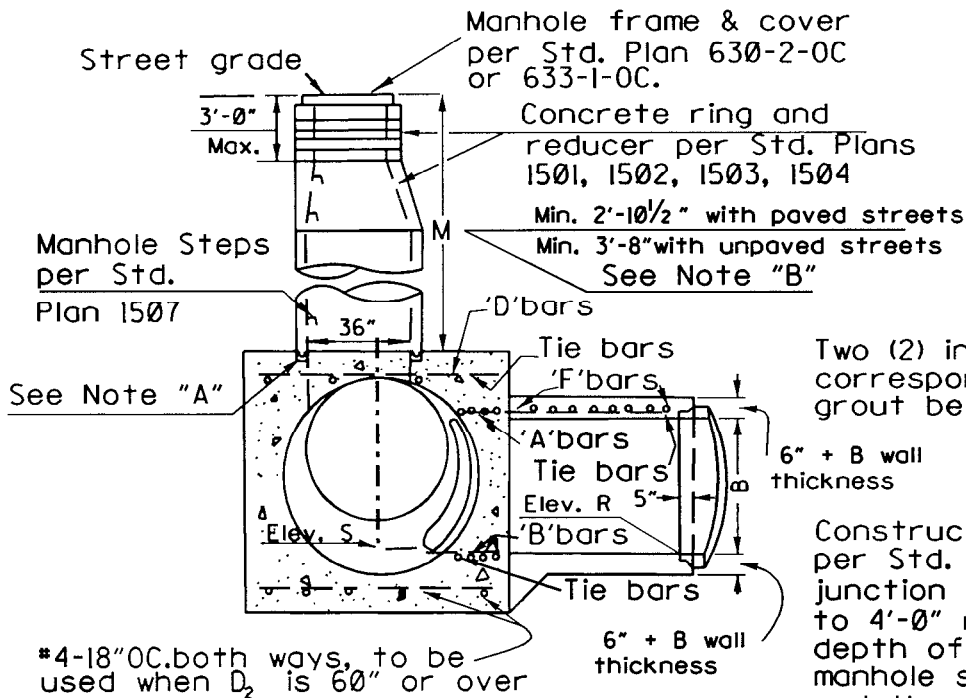
Shaft Not Shown

TABLE OF BAR SIZES PROJECTED ON R-P-0		
D ₂ or B	A & B Bars	D or F Bars
24"-39"	#5 @ 3"	#4 @ 6"
42"-84"	#6 @ 3"	#5 @ 6"
90"-144"	#7 @ 3"	#6 @ 6"

•• For structure without manhole.
Revise D₂ or B to read 12"-39"



SECTION G-G



SECTION N-M-P-O

NOTE "A"

Two (2) inch deep seat to correspond to manhole shaft, grout between shaft & seal

NOTE "B"

Construct Deep Manhole Landing(s) per Std. Plan 1508 and increase junction structure bottom width to 4'-0" minimum when the combined depth of the pipe diameter and manhole shaft (M) is 20' or greater and the manhole shaft is greater than 12', or as directed by the engineer.

ORANGE COUNTY RESOURCES & DEVELOPMENT MANAGEMENT DEPARTMENT

STD. PLAN

Approved

H. I. Nakasone
H. I. Nakasone, Chief Engineer

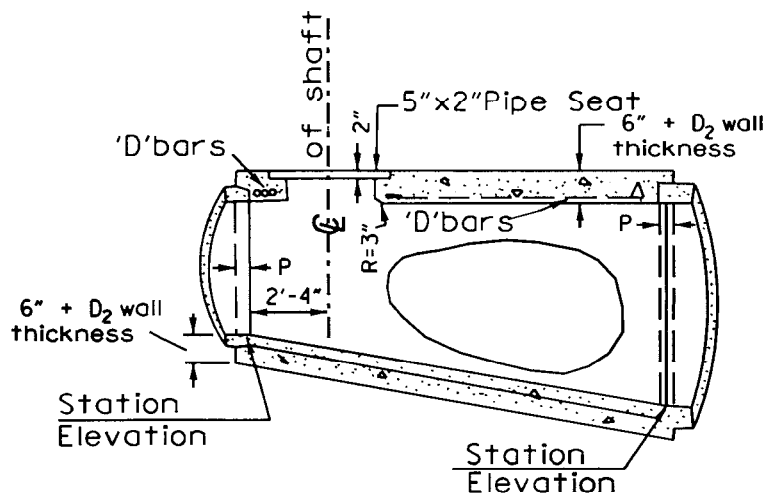
Adopted: Res. 77-92

Revised: Res. 82-718; 86-1141; 96-546; 06-010

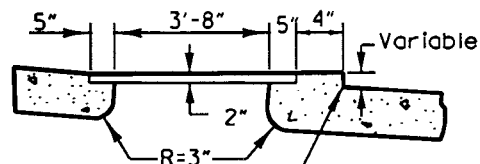
1312

JUNCTION STRUCTURE - TYPE III

SHT. 1 OF 4



LONGITUDINAL SECTION

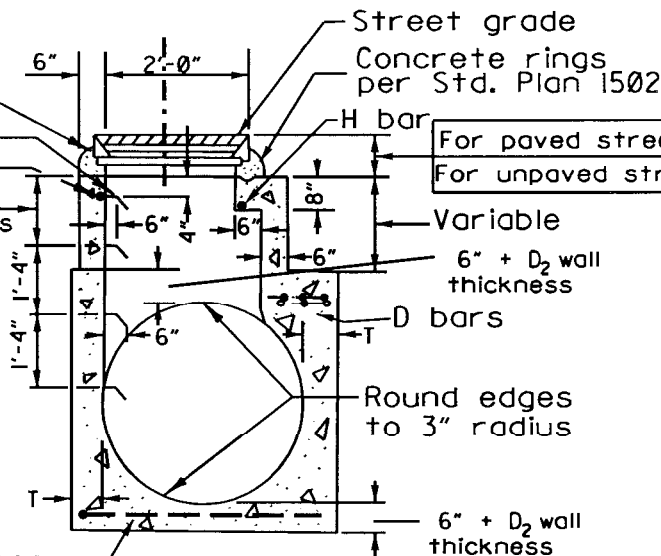


Build up deck of manhole to provide level pipe seat.

SEAT FOR SHAFT WHEN TOP IS NOT LEVEL

Manhole frame and cover per Std. Plan 630-2-0C thru 633-1-0C

Omit this step in paved streets
H bar
1'-4" for paved streets
2'-2" for unpaved streets



	Max.	Min.
For paved streets	11"	8-1/2"
For unpaved streets	16"	15"

DETAIL M

NOTE: 'A & B' bars not shown for clarity.

ORANGE COUNTY RESOURCES & DEVELOPMENT MANAGEMENT DEPARTMENT

Approved

H. I. Nakasone
H. I. Nakasone, Chief Engineer

Adopted: Res. 77-92

Revised: Res. 82-718; 86-1141; 96-546; 06-010

STD. PLAN

1312

SHT. 2 OF 4

JUNCTION STRUCTURE - TYPE III

TABLE OF VALUES FOR F AND T			
D ₂	T	B	F
36"	8"	18"	6"
39"	8"	21"	6"
42"	8"	24"	7"
45"	8"	27"	7"
48"	8"	30"	7"
51"	8½"	33"	8"
54"	9"	36"	8"
57"	9¼"	39"	8"
60"	9½"	42"	8"
63"	10"	45"	8"
66"	10¼"	48"	8"
69"	10¾"	51"	8½"
72"	11"	54"	9"
78"	11¾"	57"	9¼"
84"	12½"	60"	9½"
90"	13¼"	63"	10"
96"	14"	66"	10¼"
102"	15½"	69"	10¾"
108"	16"	72"	11"
114"	16½"	78"	11¾"
120"	17"	84"	12½"
126"	17"	90"	13¼"
132"	17½"	96"	14"
138"	17½"	102"	15½"
144"	18"	108"	16"
		114"	16½"
		120"	17"
		126"	17"
		132"	17½"
		138"	17½"
		144"	18"

NOTES:

- VALUES for A,B,C,D,D₂, Elevation R and Elevation S are shown on plan. Table of values for F and T hereon.
- LATERALS. If laterals enter both sides of junction str., access shaft shall be located on side receiving the smaller lateral.
- CENTER OF MANHOLE SHAFT shall be located over center line of Storm Drain when D₁ is 48" or less. In this case place 4-E bars symmetrically around shaft 45° with center line.
- LENGTH of junction structure may be increased at option to meet pipe ends, but any change in location of spur must be approved by the Engineer.
- DETAIL M. When depth of manhole from street to top of junction structure is less than 2'-10½" for paved streets or 3' 6" for unpaved streets, construct monolithic shaft per Detail M. Construction of shaft as per Detail M for any depth of manhole is optional. When D is 48" or less, center of shaft shall be located as per Note 3.
- REINFORCING STEEL. Straight bars, ½" clear of face of concrete unless shown otherwise. Tie bars shall be #4 spaced 18" on centers or closer. Steel schedule detailed on plan.
- EMBEDMENT 'P' shall be 5" for D₂=96" or less and 8" for D₂ over 96".
- Construct steps per Standard Plan 1307.
- RINGS, REDUCER, AND PIPE for access shaft shall be seated in 1:2 mix mortar and neatly pointed or wiped inside shaft.
- FLOOR of junction structure shall be steel troweled to spring line.
- BODY of junction structure, including spur, shall be constructed in one continuous operation, except that a construction joint at the spring line, with longitudinal keyway, is permitted.
- ELEVATIONS applies at center of main line on prolongation of invert spur.

ORANGE COUNTY RESOURCES & DEVELOPMENT MANAGEMENT DEPARTMENT

Approved


H. I. Nakasone, Chief Engineer

Adopted: Res. 77-92

Revised: Res. 82-718; 86-1141; 96-546; 06-010

STD. PLAN

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SHT. 3 OF 4

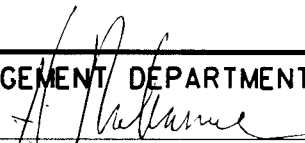
JUNCTION STRUCTURE-TYPE III

NOTES: (cont.)

13. Manholes shall be constructed unless specified otherwise on the project plans. Std. Plan 1312 may be used without manhole when Engineer determines sufficient means of access is available for storm drain maintenance.
14. When manhole is omitted from Junction Structure Type III the following notes shall apply:
 - a. For D_2 or B from 18" through 30", T & F shall be 8".
 - b. For D_2 or B greater than 30" use table of values hereon.
 - c. Omit "E", "J" & "H" bars.
 - d. Omit "D" bars spaced at 3" and use spacing indicated on the table.
 - e. Omit "A", "B" & "F" bars for structure without side inlets.

ORANGE COUNTY RESOURCES & DEVELOPMENT MANAGEMENT DEPARTMENT

Approved


H. I. Nakasone, Chief Engineer

Adopted: Res. 77-92

Revised: Res. 82-718; 86-1141; 96-546; 06-010

STD. PLAN

1312

JUNCTION STRUCTURE-TYPE III

SHT. 4 OF 4