

STORM DRAIN MANHOLE PIPE-TO-PIPE MAIN LINE ID = 36" OR LARGER



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| TABLE OF VALUES FOR F | |
|-----------------------|---------|
| D ₂ | F |
| 36" | 6 1/2" |
| 39" | 7" |
| 42" | 7 1/2" |
| 45" | 7 3/4" |
| 48" | 8" |
| 51" | 8 1/2" |
| 54" | 9" |
| 57" | 9 1/4" |
| 60" | 9 1/2" |
| 63" | 10" |
| 66" | 10 1/4" |
| 69" | 10 3/4" |
| 72" | 11" |
| 78" | 11 3/4" |
| 84" | 12 1/2" |
| 90" | 13 1/4" |
| 96" | 14" |
| 102" | 15 1/2" |
| 108" | 16" |
| 114" | 16 1/2" |
| 120" | 17" |
| 126" | 17" |
| 132" | 17 1/2" |
| 138" | 17 1/2" |
| 144" | 18" |

| TABLE OF VALUES FOR M (SEE NOTE 1) | | | | |
|------------------------------------|--------------|------------|----------------|-------|
| SECTION | PAVED STREET | | UNPAVED STREET | |
| | MAX | MIN | MAX | MIN |
| A-A | | 2'-10 1/2" | | 3'-6" |
| C-C | 11" | 8 1/2" | 16" | 15" |

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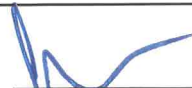
NOTES

1. WHEN DEPTH M FROM STREET GRADE TO THE TOP OF THE BOX IS LESS THAN 2'-10 1/2" FOR PAVED STREETS OR 3'-6" FOR UNPAVED STREETS, CONSTRUCT MONOLITHIC SHAFT PER SECTION C-C AND DETAIL "N". SHAFT FOR ANY DEPTH OF MANHOLE MAY BE CONSTRUCTED PER SECTION C-C. WHEN DIAMETER D₁ IS 48" OR LESS, CENTER OF SHAFT MAY BE LOCATED PER NOTE 2.
2. CENTER OF MANHOLE SHAFT SHALL BE LOCATED OVER CENTER LINE OF STORM DRAIN WHEN DIAMETER D₁ IS 48" OR LESS, IN WHICH CASE PLACE E BARS SYMMETRICALLY AROUND SHAFT AT 45° WITH CENTERLINE AND OMIT J BARS.
3. L AND P SHALL HAVE THE FOLLOWING VALUES UNLESS OTHERWISE SHOWN ON THE PROJECT DRAWINGS:
 - A. D₂=96" OR LESS, L=5'-6", P=5"
 - B. D₂ OVER 96", L=6'-0", P=8"
 L MAY BE INCREASED OR LOCATION OF MANHOLE SHIFTED TO MEET PIPE ENDS. WHEN L GREATER THAN THAT SHOWN ABOVE IS SPECIFIED, D BARS SHALL BE CONTINUED 6" OC.
4. STATIONS OF MANHOLES SHOWN ON PLANS APPLY AT CENTERLINE OF SHAFT. ELEVATIONS ARE SHOWN AT CENTERLINE OF SHAFT AND REFER TO THE PROLONGED INVERT GRADE LINES.
5. REINFORCEMENT SHALL CONFORM TO ASTM A 615, GRADE 40, AND SHALL TERMINATE 1 1/2" CLEAR OF CONCRETE SURFACES UNLESS OTHERWISE SHOWN.
6. FLOOR OF MANHOLE SHALL BE STEEL TROWELED TO SPRING LINE.
7. BODY OF MANHOLE SHALL BE POURED IN ONE CONTINUOUS OPERATION EXCEPT THAT A CONSTRUCTION JOINT WITH A LONGITUDINAL KEYWAY MAY BE PLACED AT SPRING LINE.
8. THICKNESS OF THE DECK SHALL VARY WHEN NECESSARY TO PROVIDE A LEVEL SEAT BUT SHALL NOT BE LESS THAN THE TABULAR VALUES FOR F SHOWN ON SHEET 2.
9. D BARS SHALL BE #4 FOR D₂ =39" OR LESS, #5 FOR D₂ = 42" TO 84" INCLUSIVE AND #6 FOR D₂ = 90" OR OVER.
10. CENTERLINE OF INLET PIPE SHALL INTERSECT INSIDE FACE OF CONE AT SPRING LINE UNLESS OTHERWISE SHOWN.
11. STEPS SHALL CONFORM TO CITY OF ANAHEIM (COA) STANDARD (STD) 636. UNLESS OTHERWISE SHOWN, STEPS SHALL BE UNIFORMLY SPACED 14" TO 15" OC. THE LOWEST STEP SHALL NOT BE MORE THAN 24" ABOVE THE INVERT.
12. THE FOLLOWING CRITERIA SHALL BE USED FOR THIS MANHOLE:
 - A. MAIN LINE = 36" INSIDE DIAMETER OR LARGER. EXCEPT IF THE MAIN LINE RCP DOWNSTREAM OF MANHOLE IS 36" TO 42" INSIDE DIAMETER AND THE MAIN LINE RCP UPSTREAM IS 33" OR LESS COA STD 321 SHALL BE USED.

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- B. THE OUTSIDE DIAMETER OF THE LATERAL MUST BE LESS THAN OR EQUAL TO 1/2 THE INSIDE DIAMETER OF THE MAIN LINE. IF THE UPSTREAM AND DOWNSTREAM DIAMETERS OF THE MANHOLE ARE NOT THE SAME, THE GOVERNING INSIDE DIAMETER OF THE MAIN LINE SHALL BE CONSIDERED TO BE THAT WHERE THE EXTENDED CENTERLINE OF THE LATERAL ENTERS THE MANHOLE.
- C. IN NO INSTANCE SHALL THE INSIDE DIAMETER OF THE LATERAL TO THE MANHOLE BE GREATER THAN 30".

13. MANHOLE FRAME AND COVER SHALL CONFORM TO COA STD 630 UNLESS OTHERWISE SHOWN.

14. MANHOLE SHAFT SHALL CONFORM TO COA STD 324 UNLESS OTHERWISE SHOWN.

15. WHERE A PRESSURE MANHOLE SHAFT – WITH ECCENTRIC REDUCER IS SPECIFIED REFER TO COA STD 328.

16. THE FOLLOWING COA STANDARDS ARE INCORPORATED HEREIN:

- 324 MANHOLE SHAFT – WITH ECCENTRIC REDUCER
- 328 PRESSURE MANHOLE SHAFT – WITH ECCENTRIC
- 630 24" MANHOLE FRAME AND COVER
- 636 POLYPROPYLENE PLASTIC STEP

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