

CONSTRUCTION NOTES:

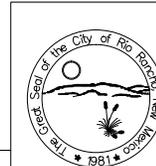
- A. CONCRETE PIPE SUPPORTS SHALL EXTEND OUTSIDE OF MANHOLE TO THE BELL OF FIRST JOINT AND SHALL CRADLE PIPE TO SPRINGLINE.
- B. PIPE PENETRATION INTO MANHOLE SHALL BE FLUSH TO 2" MAXIMUM, MEASURED AT SPRINGLINE OF PIPE.
- C. ADJUSTMENT RINGS MAY BE USED TO PROVIDE A MAXIMUM 12" ADJUSTMENT.
- D. BASE TO BE POURED IN PLACE USING NUMBER 4 BARS AT 6" ON CENTER EACH WAY FOR MANHOLE DEPTH OF 16' OR GREATER. NUMBER 4 BARS AT 12" ON CENTER EACH WAY FOR MANHOLE LESS THAN 16" DEEP.
- E. INVERT ELEVATION OF STUB OR LATERAL AS SHOWN ON PLANS.
- F. 6" GROUT FILLET ON UPPER HALF OF PIPE AND AROUND BASE.
- G. USE 18" ROUND COLLAR CONCRETE PAD IN ALL AREAS.
- H. MANHOLE FRAME AND COVER, SEE DWG. S-02.
- I. CONCRETE FILL SHALL HAVE A COMPRESSIVE STRENGTH OF 3,000 POUNDS PER SQUARE INCH AT 28 DAYS.
- J. SLOPE 1" PER FOOT FROM PIPE CROWN.
- K. SHELF SHALL HAVE MINIMUM WIDTH OF 9".
- L. ALL WATERSTOP MATERIALS SHALL BE SUITABLE FOR THE TYPE OF PIPE USED.
- M. IN UNPAVED AREAS, SET FRAME TO GRADE AND SLOPE TOP OF PAD.

GENERAL NOTES:

- 1. INSTALL NEOPRENE O-RING ON POLYVINYL CHLORIDE PIPE AND FILL ANNULAR SPACE WITH MORTAR TO PROVIDE A WATERTIGHT SEAL.
- 2. FOR PRESSURE TYPE MANHOLE COVER USE SAME AS SHOWN WITH EIGHT (8) 1/2" X 2" 316 STAINLESS STEEL HEXAGONAL HEAD BOLTS WITH A NEOPRENE GASKET. BOLT HOLES SHALL BE PREDRILLED IN COVER AND TAPPED IN FRAME. SEE DWG. S-02.
- 3. SANITARY SEWER SERVICES SHALL NOT BE ALLOWED IN MANHOLES.
- 4. IF THE SEWER MAIN AT A MANHOLE IS TO BE CONTINUED TO A FUTURE STREET, A 20' STUBOUT TO BE INSTALLED WITH CAP AND WITH 1% MINIMUM SLOPE.
- 5. IN UNIMPROVED AND UNPAVED ROADS, MANHOLE RIMS AND CONCRETE COLLARS ARE TO BE INSTALLED AT EXISTING ROAD GRADE.
- 6. IN NATURAL AREAS, ELEVATIONS OF MANHOLE RIMS AND CONCRETE SHALL BE INSTALLED 6" ABOVE NATURAL GROUND.
- 7. USE OF ADJUSTMENT RINGS ON MANHOLES IS LIMITED TO A MAXIMUM OF 12".
- 8. USE NON-SHRINK MORTAR INSIDE AND OUTSIDE OF MANHOLE JOINTS. USE NON-SHRINK GROUT FOR JOINTS, FILLETS, AND PIPE PENETRATIONS.
- 9. ALL MANHOLE BARREL JOINTS SHALL BE SEALED USING A PRODUCT SPECIFIED BY THE MANHOLE MANUFACTURER.
- 10. TYPE "E" MANHOLES SHALL NOT TO BE USED FOR DEPTHS LESS THAN 6', FOR DEPTHS LESS THAN 6' USE TYPE "C" MANHOLES. MEASURED FROM INVERT TO RIM.
- 11. MANHOLES GREATER THAN 18' IN DEPTH SHALL BE OF PRECAST CONCRETE SECTIONS ONLY.
- 12. DESIGN APPLIES TO 4' AND 6' INSIDE DIAMETER MANHOLES.
- 13. COMPACT ALL BACKFILL AROUND MANHOLES TO 95% AMERICAN SOCIETY FOR TESTING AND MATERIALS STANDARD D1157.
- 14. POSITION MANHOLES OPENING OVER THE UPSTREAM SIDE OF MAIN LINE.
- 15. MANHOLES SHALL BE CAST-IN-PLACE OR PRECAST. BRICK MANHOLES ARE PROHIBITED.
- 16. STAMP MANHOLE COLLAR TO INDICATE DIRECTION OF FLOW WHILE CONCRETE IS GREEN.
- 17. STORM DRAIN MANHOLES SHALL HAVE STEPS.
- 18. THE INTERIOR OF ALL SEWER MANHOLES SHALL BE COATED WITH AN EPOXY-RESIN TYPE MATERIAL CAPABLE OF PROTECTING THE CONCRETE FROM DETERIORATION DUE TO A GASEOUS SANITARY SEWER ENVIRONMENT. APPLICATION OF COATING SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED RECOMMENDATIONS.

DATE MODIFIED:

SEPTEMBER 2016



City of Rio Rancho  
Department of Public Works

STANDARD CONCRETE MANHOLE  
TYPE "C" & "E"

DWG. NO. S-03-02

APRIL 22, 2016