

USE PRE-CAST CONCRETE GRADE RINGS AND NON-SHRINK GROUT AS REQUIRED TO RAISE TO GRADE. USE RAM-NEK JOINT SEALER OR SEALANT AS RECOMMENDED BY MANUFACTURER FOR WATERTIGHT CONNECTION. THE FINAL 4"-6" MAXIMUM OF ADJUSTMENT RINGS MAY BE H.D.P.E. OR RECYCLED RING SEALED PER MANUFACTURES SPECIFICATIONS.

USE O-RING RUBBER GASKET OR RAM-NEK JOINT SEALER FOR WATERTIGHT CONNECTION

PRECAST SECTIONS SHALL MEET ASTM C-478 AND SHALL COMPLY WITH ITEM 502.1.1 OF THE STANDARD SPECIFICATIONS.

INTERMEDIATE RISER

BASE RISER WITH "BUTT END" INTEGRATED INTO THE CONCRETE BASE

CUT OUT TOP OF PIPE

SLOPE 1:12 (MIN.)

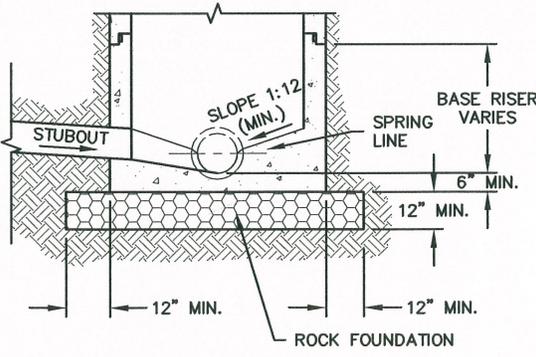
STUB-OUTS TO BE A MIN. OF 5' LONG. WITH CONCRETE CRADLE.

APPROVED RESILIENT PIPE- TO-MANHOLE CONNECTOR OR GASKET REQUIRED FOR PIPE OTHER THAN CLAY OR CONCRETE

ALL PIPE TO MANHOLE CONNECTIONS SHALL CONFORM TO ASTM C-923

ROCK FOUNDATION COMPLYING WITH STANDARD SPECIFICATION 504.2.2.1.(a) COARSE CRUSHED STONE.

**CAST IN PLACE BASE**  
**(4', 5', & 6')**



**PRECAST BASE**

**GENERAL NOTES:**

1. MANHOLES SHALL BE VACUUM TESTED IN STRICT ACCORDANCE WITH ITEM 502.1.5.2 OF THE NCTCOG STANDARD SPECIFICATIONS.
2. ECCENTRIC CONE SECTION TO ONLY BE USED AS APPROVED AND DIRECTED BY CITY ENGINEER.
3. MANHOLE CONES, INVERTS, AND BASES SHALL MEET REQUIREMENT OF TCEQ 217.55.
4. ALL MAIN LINE JOINTS TO BE A MINIMUM LENGTH OF 5' WITH CONCRETE CRADLE (FROM SAME POUR AS BASE IF CAST IN PLACE, UNDER ENTIRE LENGTH.)
5. STUB OUTS TO BE MIN. 5' LONG. STUB OUTS TO BE GROUTED AT M.H. WITH NON SHRINK GROUT. STUB OUTS SHALL ALSO BE FITTED WITH WATER TIGHT STOPPER OR CAP.
6. DIFFERENT SIZE MAINS ENTERING MANHOLE MUST HAVE TOP OF PIPES AT THE SAME ELEVATION.
7. SET INFLOW MAIN ELEVATIONS AND GROUT MANHOLE BOTTOM IN MANNER TO PREVENT FREE FALL OF FLUID INTO MANHOLE FROM MAINS.
8. WHEN A DROP IS APPROVED, AN EXTERNAL DROP PIPE MUST BE CONSTRUCTED.

**STANDARD MANHOLE**

NOT TO SCALE

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APPROVED  
*Diaphan P.E.* 3-10-16  
CITY ENGINEER DATE

CITY OF WICHITA FALLS, TX  
ENGINEERING DIVISION  
MARCH 2016

STANDARD MANHOLE  
DETAIL NO. 5020