



**NOTES:**

1. PRECAST CONCRETE SHALL BE TYPE 2 CEMENT 4000 PSI
2. LIFT HOLES NOT PERMITTED THROUGH PRECAST SECTIONS.
3. ALL OPENINGS SHALL BE SEALED WITH NON-SHRINK GROUT.
4. INSTALL FLOW CHANNEL INSIDE MANHOLES.
5. SERVICE LATERALS SHALL BE PERMITTED DIRECTLY INTO MANHOLES AT INVERT ELEVATION ONLY.
6. REINFORCING STEEL PER ASTM C478-88a.
7. PROVIDE 5' x 5' x 12" CONCRETE COLLAR AROUND COVER FRAME, W/4 #4 BARS E.W., IN UNPAVED AREAS WITHOUT CURBS OR OTHER TRAFFIC BARRIERS. SLOPE TOP OF CONCRETE AWAY FROM COVER FRAME.
8. MIN. 12" BETWEEN WALL PENETRATIONS.
9. MIN. 50% UNINTERRUPTED WALL AREA ON ANY HORIZONTAL PLANE.
10. PRIVATELY MAINTAINED SANITARY SEWER MANHOLES COVERS SHALL BE LABELED "PRIVATE SANITARY SEWER".

M.H. DEPTH	A*	B	C	D
UP TO 12'	48"	6"	36"	8"
>12', < 18'	60"	8"	36"	10"
18' & DEEPER	** 72"	8"	36"	14"

\*ENTIRE DEPTH EXCEPT CONE.  
 \*\* ECCENTRIC FLAT SLAB TRANSITION TO CONE SECTION IS ACCEPTABLE.

**MANHOLE SIZE:**

UP TO 24" PIPE = 48"  $\phi$ , UPTO 36" PIPE = 60"  $\phi$ , OVER 36" PIPE = 72"  $\phi$ .

**STANDARD MANHOLE DETAIL**