



**NOTES:**

1. MANHOLE SHALL CONFORM TO THE GENERAL NOTES AND ALL APPLICABLE REQUIREMENTS OF STANDARD DETAIL S-1.
2. PROVIDE TWO 24" RING AND COVERS, ONE LOCATED OVER THE MAJOR INCOMING AND OUTGOING PIPES.
3. MANHOLES SHALL BE CONSTRUCTED IN ACCORDANCE WITH ASTM C-478 UNLESS OTHERWISE SHOWN ON PLANS OR NOTED IN THE STANDARD SPECIFICATIONS.
4. PRECAST BASES SHALL BE FURNISHED WITH KNOCKOUTS. KNOCKOUTS SHALL HAVE WALL THICKNESS OF 2" MINIMUM. UNUSED KNOCKOUTS DO NOT NEED TO BE GROUTED IF LEFT IN INTACT. PIPE SHALL BE INSTALLED ONLY IN FACTORY KNOCKOUTS UNLESS CORE-DRILLED HOLES ARE APPROVED BY THE CITY.
5. KNOCKOUT OR CORE-DRILLED HOLES SHALL EQUAL THE PIPE OUTSIDE DIAMETER PLUS MANHOLE WALL THICKNESS. MAXIMUM HOLE SIZE DIAMETER SHALL BE 60" FOR 72" MANHOLE AND 84" FOR 96" MANHOLE. MINIMUM DISTANCE BETWEEN HOLES SHALL BE 12".
6. MINIMUM OF 6 FOOT SEPARATION BETWEEN THE PIPE CROWN TOP SLAB OR CONE SECTION.
7. FOR HEIGHTS OF 12' OR LESS, MINIMUM SOIL BEARING VALUE SHALL EQUAL 3,300 POUNDS PER SQUARE FOOT. FOR HEIGHTS OVER 12', MINIMUM SOIL BEARING VALUE SHALL EQUAL 3,800 POUNDS PER SQUARE FOOT.
8. FOR JOINT REQUIREMENTS, SEE WSDOT STANDARD SPECIFICATION SECTION 7-05.3.
9. GROUT ALL JOINTS INSIDE, OUTSIDE AND IN BETWEEN TO ACHIEVE WATERTIGHT CONSTRUCTION. FINISH SMOOTH THE INSIDE OF STRUCTURE. USE NON-SHRINK GROUT ONLY.



City of  
Bellevue

SEWER UTILITIES

TITLE

TYPE 3 MANHOLE  
72" AND 96"