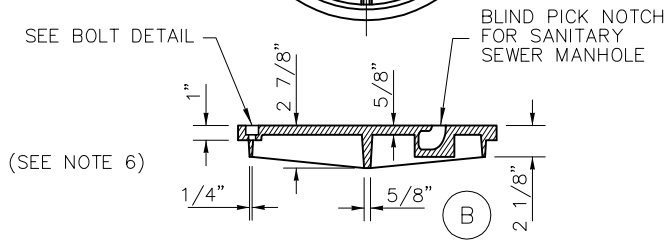
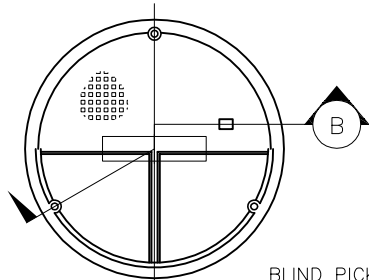
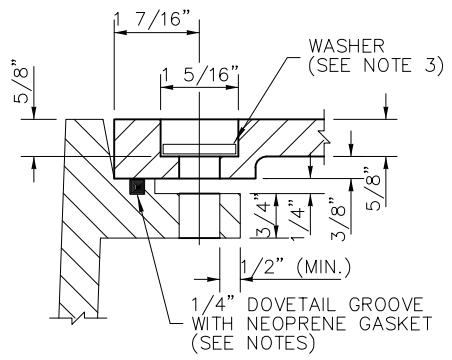


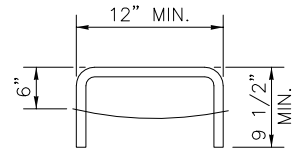
**CIRCULAR FRAME DETAIL**



**CIRCULAR LID DETAIL**

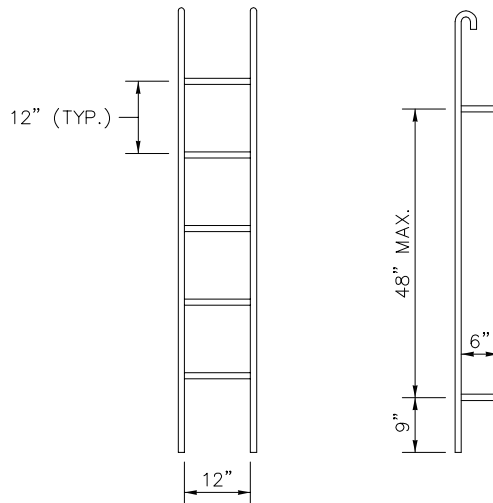


**BOLT DETAIL**



**STEP DETAIL**

LADDER RUNGS FOR MANHOLES AND CATCH BASINS SHALL MEET THE REQUIREMENTS OF AASHTO M 199.



**LADDER DETAIL**

**NOTES:**

1. THE GASKET AND GROOVE MAY BE IN THE SEAT (FRAME) OR IN THE UNDERSIDE OF THE COVER. THE GASKET MAY BE "T" SHAPED IN SECTION. THE GROOVE MAY BE CAST OR MACHINED.
2. FOR BOLT-DOWN MANHOLE RING AND COVERS THAT ARE NOT DESIGNATED "WATERTIGHT", THE NEOPRENE GASKET, GROOVE AND WASHER ARE NOT REQUIRED.
3. WASHER SHALL BE NEOPRENE (SEE BOLT DETAIL).
4. IN LIEU OF BLIND PICK NOTCH FOR STORM SEWER MANHOLE COVERS, DRILL THREE  $1"$  DIAMETER HOLES AT  $120^\circ$  SPACING.
5. PROPRIETARY MANHOLE COVERS WITHOUT BOTTOM RIBS ARE ACCEPTABLE.
6. FOR CLARITY, THE VERTICAL SCALE OF THE COVER SECTION HAS BEEN EXAGGERATED, IT IS 1.5 TIMES THE HORIZONTAL SCALE (1H:1.5V).
7. MANHOLES LOCATED WITHIN NON-PAVED AREAS SHALL REQUIRE THE INSTALLATION OF GREEN FIBERGLASS MARKER POSTS  $5'$  IN LENGTH WITH DECAL STATING "CAUTION SEWER PIPELINE". THE BURIED END SHALL BE "BARBED" OR AN ANCHOR KIT SHALL BE USED.



PUBLIC WORKS  
DEPARTMENT

MISCELLANEOUS MANHOLE  
DETAILS

DWG. NO.

5-7