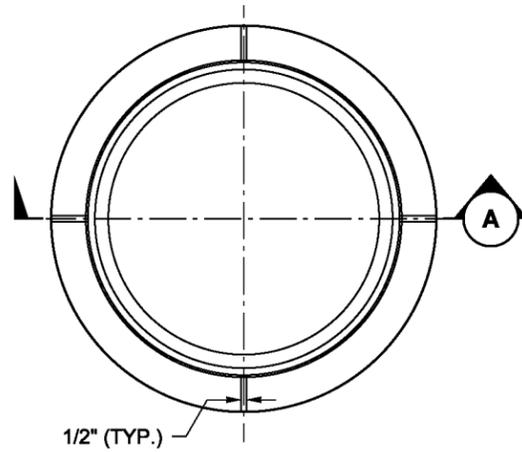
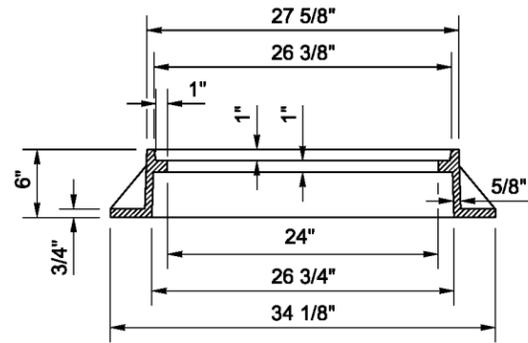


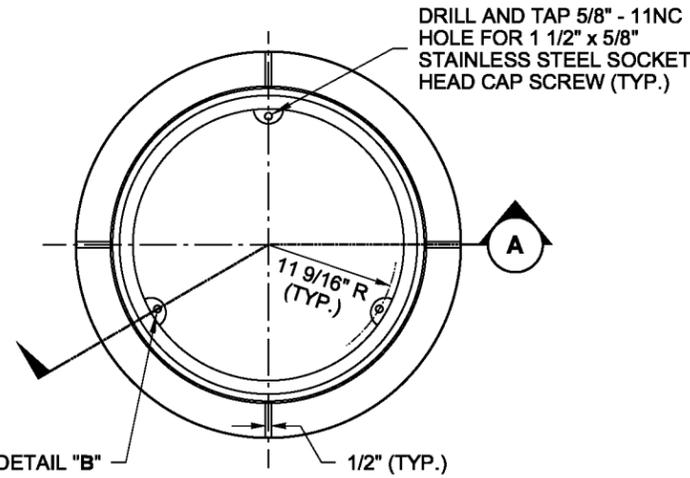
**BLIND PICK NOTCH
DETAIL "A"**



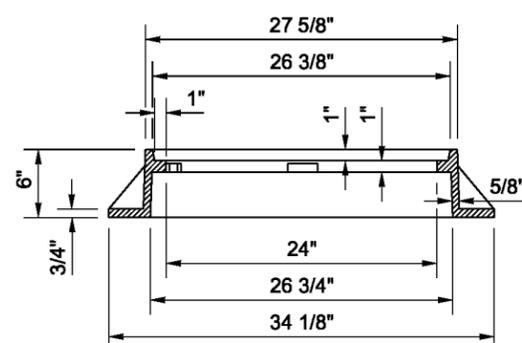
RING PLAN



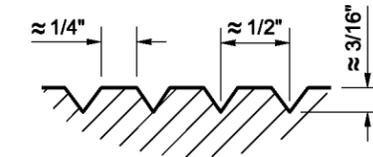
RING SECTION (A)



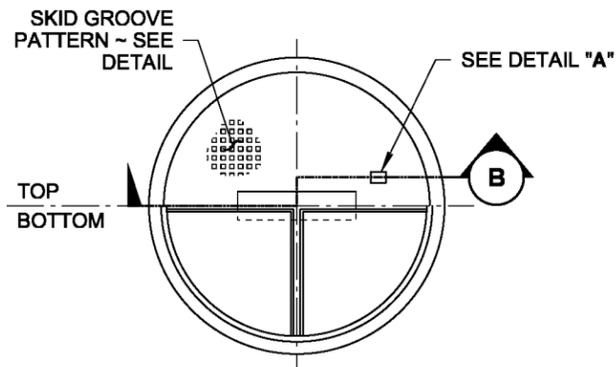
RING PLAN



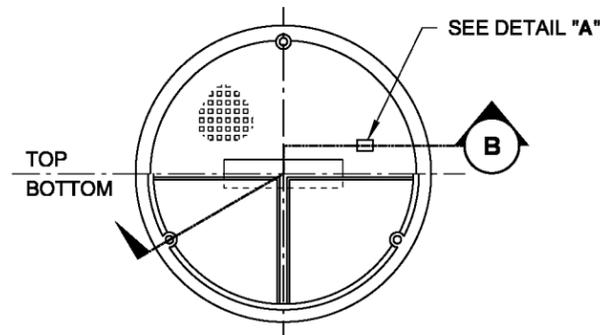
RING SECTION (A)



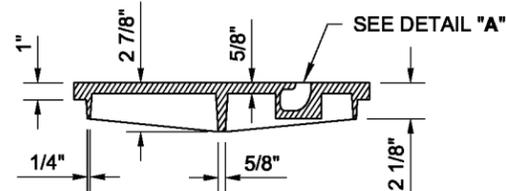
**SKID GROOVE PATTERN
DETAIL**



COVER PLAN



COVER PLAN

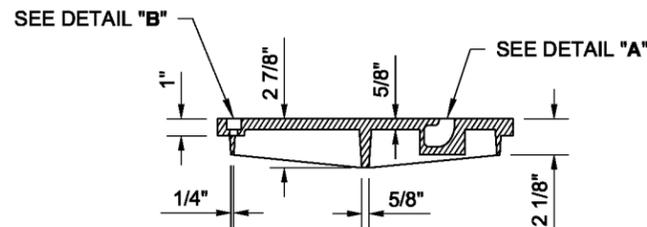


COVER SECTION (B)

(SEE NOTE 7)

STANDARD

TYPE 1

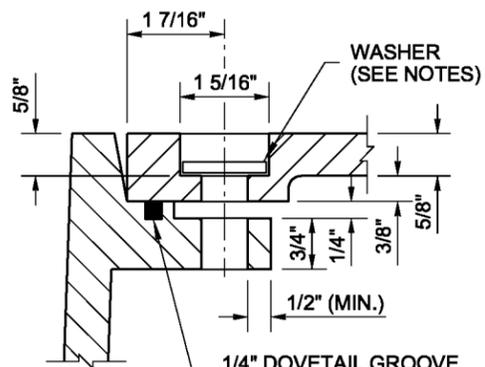


COVER SECTION (B)

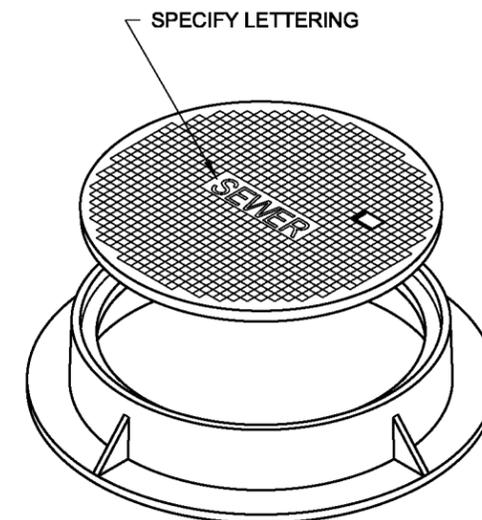
(SEE NOTE 7)

BOLT-DOWN / WATERTIGHT

TYPE 2



**BOLT-DOWN / WATERTIGHT
DETAIL "B"**



ISOMETRIC VIEW

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. Bolt-down capability is required on all frames, grates, and covers, unless specified otherwise in the Contract. Provide 3 holes in the frame that are vertically aligned with the grate or cover slots. The frame shall accept the 5/8" - 1 NC x 2" Allen head cap screw by being tapped, or other approved mechanism. Location of bolt down holes varies by manufacturer.
3. For bolt-down manhole ring and covers that are not designated "Watertight," the neoprene gasket, groove, and washer are not required.
4. Washer shall be neoprene (Detail "B").
5. In lieu of blind pick notch for manhole covers, a single 1" pick hole is acceptable. Hole location and number of holes may vary by manufacturer.
6. Alternative reinforcing designs are acceptable in lieu of the rib design.
7. For clarity, the vertical scale of the Cover Section has been exaggerated, it is 1.5 times the horizontal scale (1H:1.5V).



NOTE: THIS PLAN IS NOT A LEGAL ENGINEERING DOCUMENT UNTIL IT IS SIGNED AND SEALED BY THE ORIGINAL DESIGNER. THE ORIGINAL SIGNATURE OF THE ENGINEER MUST BE FILED WITH THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION. A COPY MAY BE OBTAINED UPON REQUEST.

**CIRCULAR FRAME (RING)
AND COVER**

STANDARD PLAN B-30.70-03

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

Pasco Bakotich III 04/26/12

STATE DESIGN ENGINEER DATE

Washington State Department of Transportation