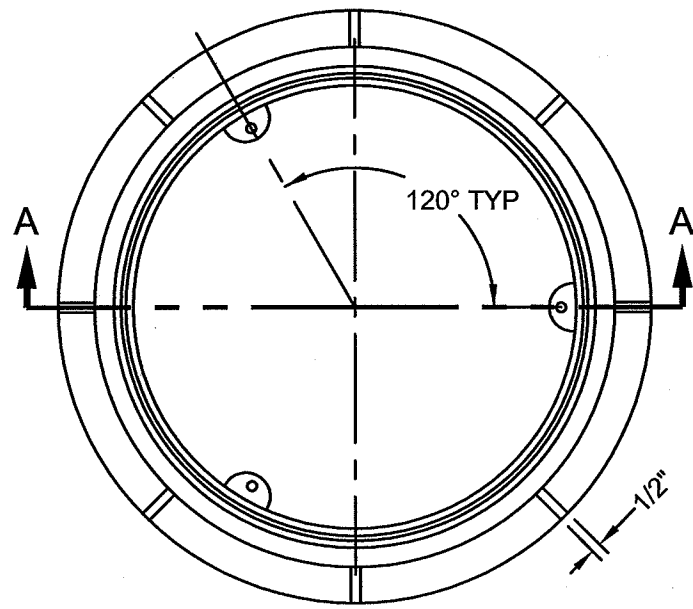
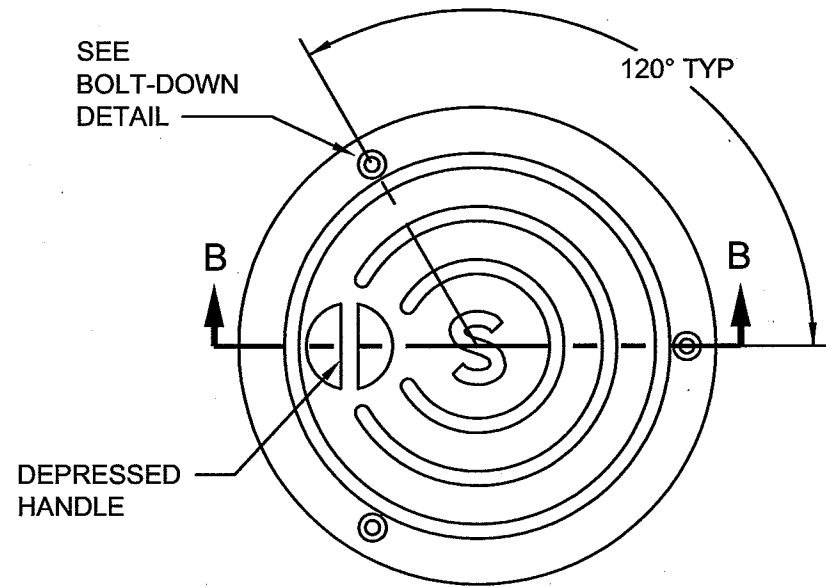


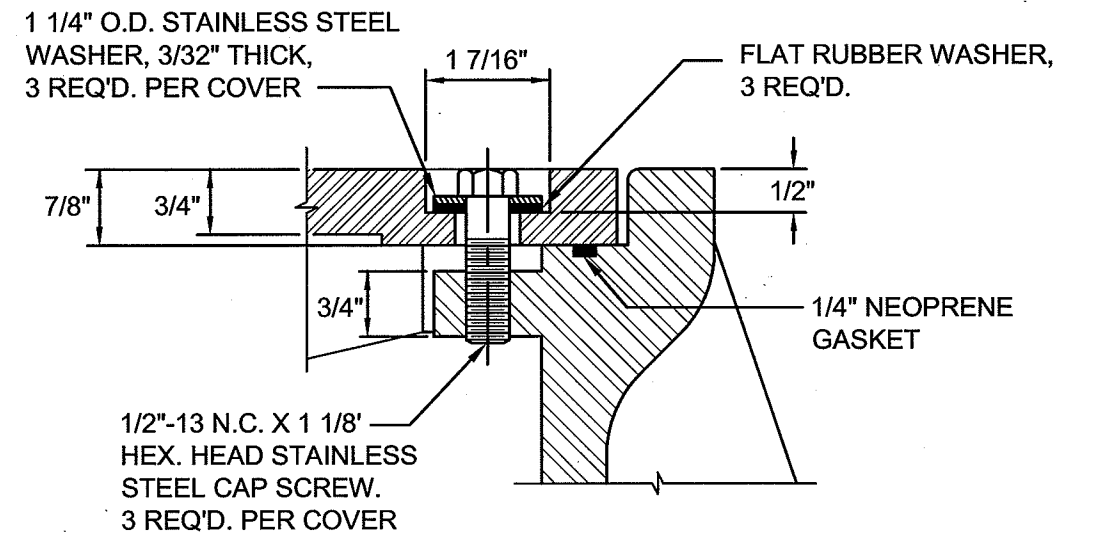
P-182\_WATERTIGHT\_MH\_FRAME\_COVER\_10-INCH.DWG 4/6/09 6:22 PM RICKS



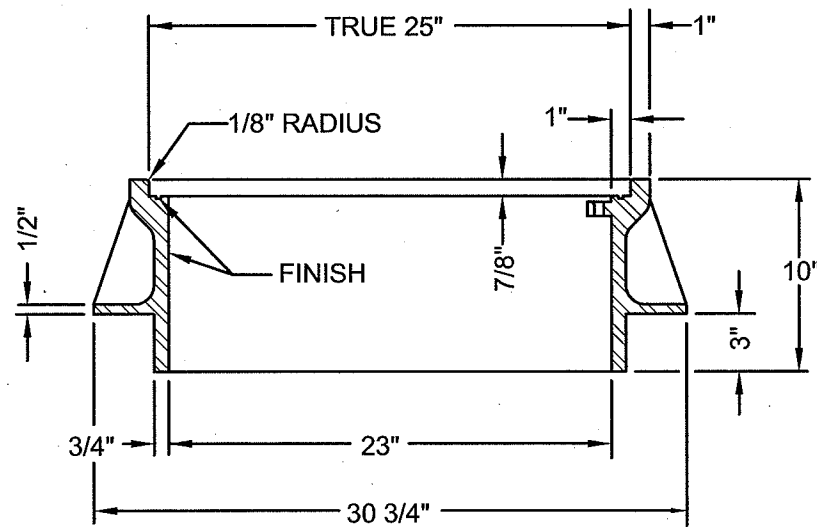
FRAME PLAN DETAIL



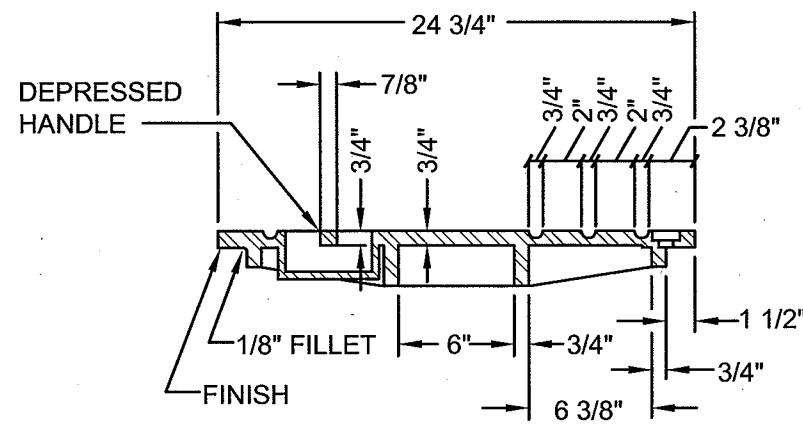
COVER PLAN DETAIL



BOLT-DOWN DETAIL



SECTION A-A



SECTION B-B

NOTES:

- COVER & FRAME TO BE MACHINED TO A TRUE BEARING ALL AROUND.
- MATERIAL SHALL BE OF GREY CAST IRON, ASTM A-48, CLASS 30.

<p>The selection and use of this Standard Detail, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user.</p>	<p>Bureau of Environmental Services CITY OF PORTLAND, OREGON</p> <p><i>Wick F. Ry...</i> Chief Engineer</p>	
	<p>Standard Detail Title</p> <p><b>Watertight Manhole Frame &amp; Cover 10 Inch Depth</b></p>	
<p>Note: All material and workmanship shall be in accordance with the City of Portland Standard Construction Specifications.</p>	<p>Effective Date: 01-01-09</p>	<p>Standard Detail No.</p> <p><b>P-182</b></p>
	<p>Calc. Book No.: N/A</p>	
	<p>Baseline Report Date: N/A</p>	