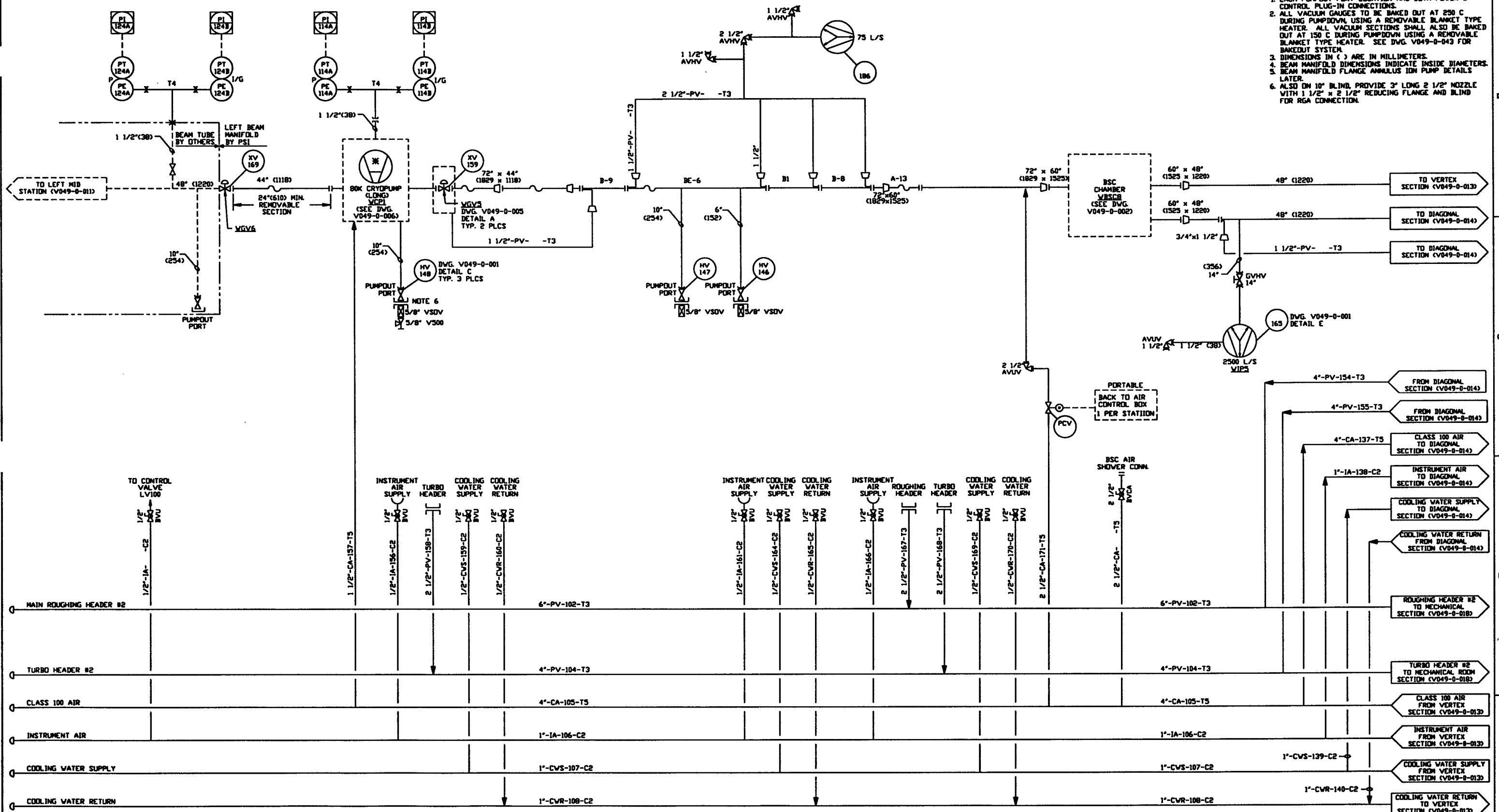


**NOTES:**

1. EACH PUMPOUT PORT LOCATION HAS BOTH POWER & CONTROL PLUG-IN CONNECTIONS.
2. ALL VACUUM GAUGES TO BE BAKED OUT AT 250 C DURING PUMPOUT, USING A REMOVABLE BLANKET TYPE HEATER. ALL VACUUM SECTIONS SHALL ALSO BE BAKED OUT AT 150 C DURING PUMPOUT, USING A REMOVABLE BLANKET TYPE HEATER. SEE DWG. V049-0-043 FOR BAKEDOUT SYSTEM.
3. DIMENSIONS IN ( ) ARE IN MILLIMETERS.
4. BEAM MANIFOLD DIMENSIONS INDICATE INSIDE DIAMETERS.
5. BEAM MANIFOLD FLANGE ANNULUS IDN PLMP DETAILS LATER.
6. ALSO ON 10" BLIND, PROVIDE 3" LONG 2 1/2" NOZZLE WITH 1 1/2" x 2 1/2" REDUCING FLANGE AND BLIND FOR RGA CONNECTION.



LIGO D961077-01-V

<p><b>LEGEND AND COMMENTS:</b></p> <p>THIS DRAWING CONTAINS PROPRIETARY INFORMATION BELONGING TO PROCESS SYSTEMS INTERNATIONAL, INC. OR ITS AFFILIATED COMPANIES AND SHALL BE USED ONLY FOR THE PURPOSE FOR WHICH IT WAS SUPPLIED. IT SHALL NOT BE COPIED, REPRODUCED OR OTHERWISE USED, NOR SHALL SUCH INFORMATION BE FURNISHED IN WHOLE OR IN PART TO ANY OTHER PARTY WITHOUT THE WRITTEN CONSENT OF PROCESS SYSTEMS INTERNATIONAL, INC. AND SHALL BE RETURNED UPON REQUEST.</p>	<p>V049-0-014 P &amp; ID DIAGONAL SECTION</p> <p>V049-0-013 P &amp; ID VERTEX SECTION</p> <p>V049-0-011 P &amp; ID LEFT MID STATION</p> <p>V049-0-006 P &amp; ID 60K CRYOPUMP</p> <p>V049-0-002 P &amp; ID BEAM SPLITTER CHAMBER</p> <p>V049-0-001 P &amp; ID LEGEND</p>	<p><b>EQUIP. THIS DWG.</b></p> <p>VGVS VCP1 VGV5 VWSCB VIPS</p>	<p><b>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES</b></p> <p>TOLERANCES: FRACTIONS: ±0.005 DECIMALS: ±0.001 ANGLES: ±0.1° HOLE POSITION: ±0.005 HOLE DIA: ±0.001</p>	<p>1 ISSUE FOR FDR</p> <p>0 ISSUE FOR DESIGN</p> <p>P1 PRELIMINARY DESIGN UPDATE</p>	<p>REV</p> <p>TS</p> <p>RT</p> <p>SH</p> <p>DHW</p> <p>RJV</p> <p>AWG</p> <p>CHKD</p> <p>DRWN</p> <p>DATE</p> <p>DEGR</p>	<p>04.26.96 0134</p> <p>01.03.96 0031</p> <p>09.26.95 0003</p>	<p><b>PROCESS SYSTEMS INTERNATIONAL, INC.</b> 30 WILBUR DR. WESTBOROUGH, MASSACHUSETTS 01581 USA</p> <p><b>PIPING &amp; INSTRUMENTATION DIAGRAM</b> LIGO VACUUM EQUIPMENT WASHINGTON SITE LEFT BEAM MANIFOLD</p> <p>CAD FILE: V0490012 SHEET: D DWG NO: V049-0-012 REV: 1</p>
	<p><b>REFERENCE DRAWINGS</b></p>	<p><b>DO NOT SCALE THIS DRAWING</b></p>	<p><b>USED ON:</b></p>	<p><b>NEXT ASSY.:</b></p>	<p><b>ISSUE DESCRIPTION</b></p>	<p><b>SCALE:</b> NONE</p>	<p><b>SHEET:</b> 1 OF 1</p>