



- 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 PUMPDOWN, USING A REMOVABLE BLANKET TYPE HEATER. ALL VACUUM SECTIONS SHALL ALSO BE BAKED OUT AT 150 C DURING PUMPDOWN 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. ATMOSPHERIC AIR INTAKE SHALL BE LOCATED AWAY FROM SOURCES OF CONTAMINATION.
 6. BEAM MANIFOLD FLANGE ANNULUS ION PUMP DETAILS LATER.
 7. ON 12" O.D. OF BLIND, PROVIDE 3" LONG 2 3/4" O.D. CF x 1 1/2" O.D. NOZZLE AND 2 3/4" CF. BLIND FOR RGA CONNECTION WITH 25 OF SEAL-OFF FITTING. VACUUM PUMP-OUT OPERATOR IS SUPPLIED ONE PER BUILDING - REF PSI PART #V049M655.
 8. PROVIDE A CF. BLANK WITH 25 OF SEAL-OFF FITTING.

PROPRIETARY AND CONFIDENTIAL	DWG. NO.	DESCRIPTION	DWG. NO.	DESCRIPTION	ISSUE DESCRIPTION	REV	DATE	BY	CHKD	DRWN	DATE	DESN
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	V049-0-016	P & ID RIGHT MID STATION			4 REVISED	SH	02.14.97	RJV			0435	
	V049-0-006	P & ID 80K CRYOPUMP			3 REVISED	SH	01.03.97	RJV			0394	
	V049-0-002	P & ID BEAM SPLITTER CHAMBER			2 ISSUE FOR FDR UPDATE	TS	10.25.96	RJV			0309	
	V049-0-001	P & ID LEGEND			1 ISSUE FOR FDR	REB	04.26.96	RJV			0134	
					0 ISSUE FOR DESIGN	REB	01.03.96	RJV			0031	
					PI PRELIMINARY DESIGN UPDATE	REB	09.26.95	AFG			0003	
					USED ON							
					NEXT ASSY:							

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PIPING & INSTRUMENTATION DIAGRAM
LIGO VACUUM EQUIPMENT
WASHINGTON SITE
RIGHT END STATION

CAD FILE: V0490017
 DWG. NO.: V049-0-017
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