

- NOTES:
- HEADS ARE ASME F&D.
  - INCLUDE CENTERING PINS ON NOZZLE FLANGES WHERE APPROPRIATE.
  - VIEWPORT (ITEM C) MEASUREMENTS REFER TO INTERSECTION OF VIEWPORT AXIS WITH OUTER SURFACE OF VACUUM WALL.
  - TOLERANCES, UNLESS OTHERWISE SPECIFIED: LINEAR,  $\pm 0.25$  CM  
ANGULAR,  $\pm 1$  DEGREE

5. NOZZLE SCHEDULE PER TABLE BELOW:

ITEM	SIZE	QUANTITY	FLANGE TYPE	PURPOSE
(A)	264cm ID TUBE	1	O/O-O/METAL*	MAJOR ACCESS
(B)	152cm ID TUBE	2	O/O-O/METAL*	LASER BEAM, ACCESS (MINIMIZE NECK LENGTH)
(C)	152cm ID TUBE	2	O/O-O/METAL*, WITH BLIND FLANGE	ACCESS (MINIMIZE NECK LENGTH)
(D)	35cm OD TUBE	4	CONFLAT**	SUPPORT BEAMS REFERENCE ICD # TBD
(E)	35cm OD TUBE***	8	CONFLAT**, WITH BLIND FLANGE	AIR SHWR, BACK-TO-AIR PURGE ROUGHING & ION PUMPS, UTILITY
(F)	25cm OD TUBE***	6	CONFLAT**, WITH BLIND FLANGE	ELECTRICAL FEEDTHROUGHS
(G)	20cm OD TUBE***	22	CONFLAT**, WITH BLIND FLANGE	OBSERVATION, BEAM PICK-OFFS
(H)	3.8cm OD TUBE	1	CONFLAT**, WITH BLIND FLANGE	ANNULUS PUMPOUT (NOT SHOWN)

\*DUAL O-RING DESIGN, WITH CAPABILITY OF REPLACING INBOARD O-RING WITH METAL SEAL. THESE FLANGES EACH INCLUDE AN ANNULAR CHANNEL BETWEEN O-RINGS, MANIFOLDED TO A SINGLE PUMPOUT PORT ON EACH CHAMBER, WITH CONFLAT\*\* SEAL.

\*\*REGISTERED TRADEMARK, VARIAN VACUUM PRODUCTS; COMPATIBLE ALTERNATES ARE ACCEPTABLE.

\*\*\*THESE FLANGES ARE TANGENT TO LOCAL VACUUM WALL, WITH MINIMUM NECK LENGTH.

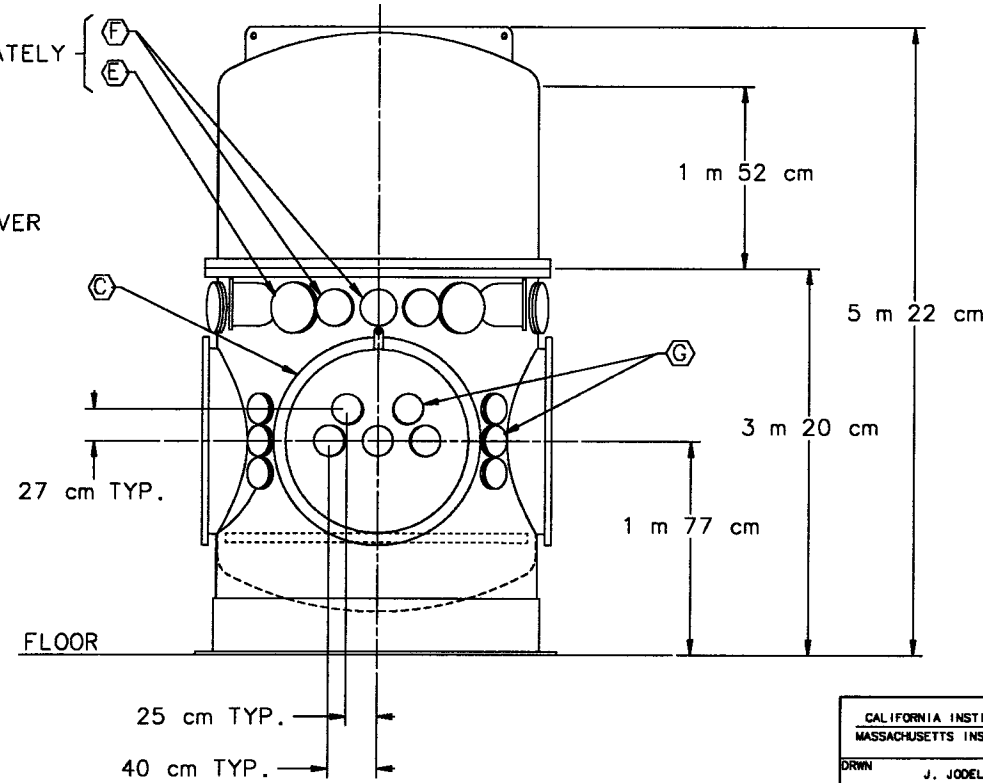
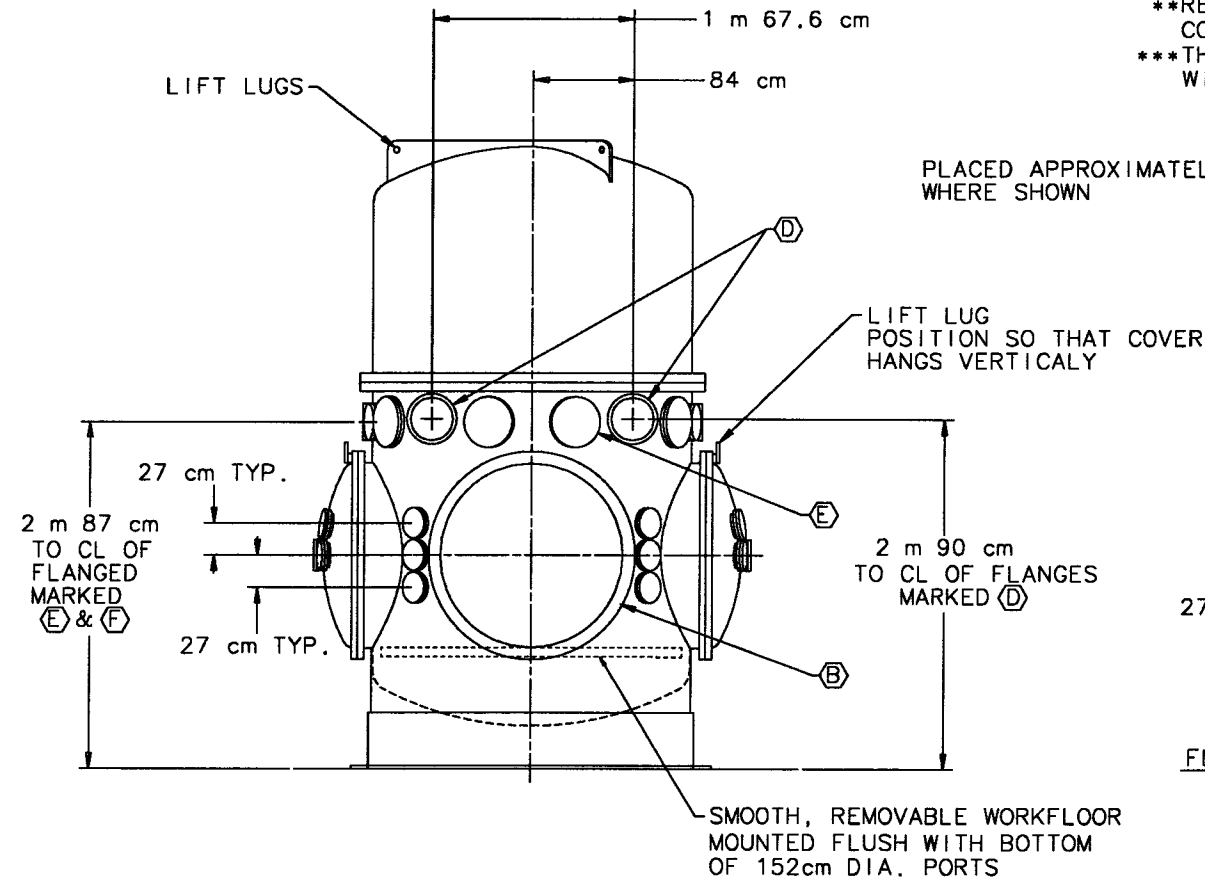
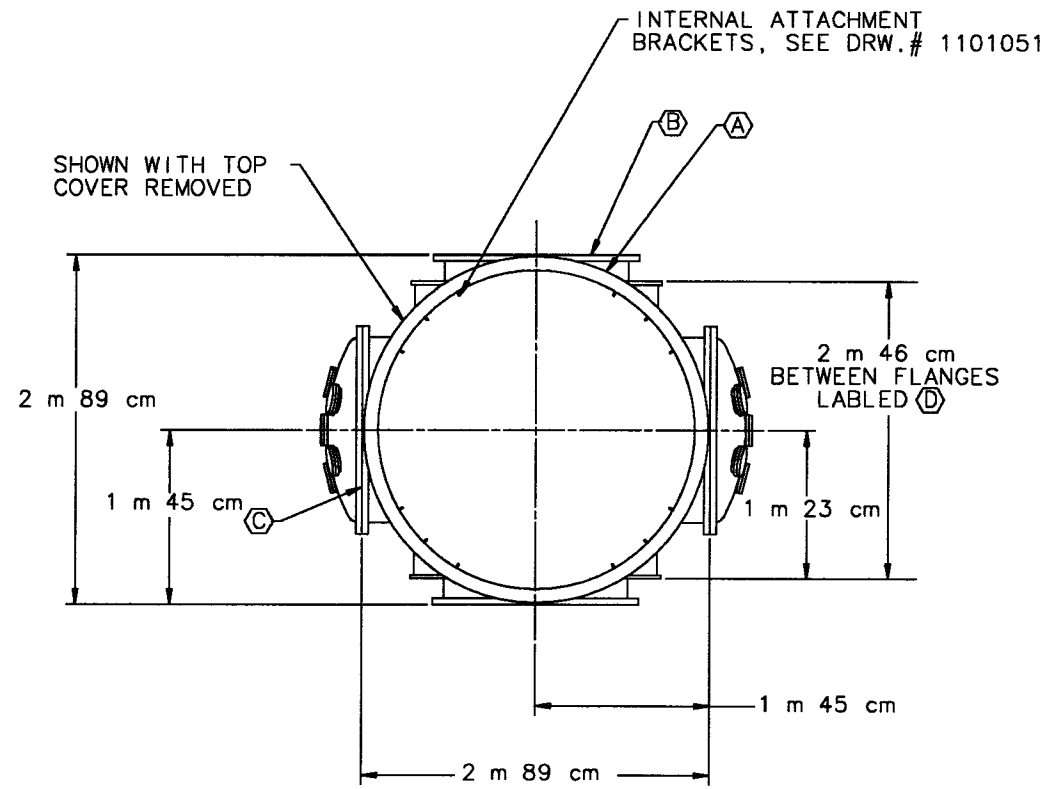


Figure 8.

CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		LIGO PROJECT	
DRWN	J. JOELE	BEAM SPLITTER CHAMBER (BSC)	
CHK		SCALE:	DRAWING NUMBER
			1101009
		SHEET	REV.
		1 of 1	