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DWG. NO.	DESCRIPTION	DWG. NO.	DESCRIPTION
V049-0-011	P & ID LEFT MID STATION		
V049-0-006	P & ID BOX CRYOPUMP		
V049-5-006	EQUIPMENT ARRANGEMENT LEFT MID STATION		
1101103	LIGO VACUUM EQUIPMENT MID STATION		

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UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
 TOLERANCES:
 FRACTIONAL 2
 ANGULAR/ARCH 10°-30° BEND 42°
 TWO PLACE DECIMAL ± .01
 THREE PLACE DECIMAL ± .005
 FINISHED SURFACE R/S
 BREAK CORNERS R4
 OUTLINE REMOVE ALL BURRS

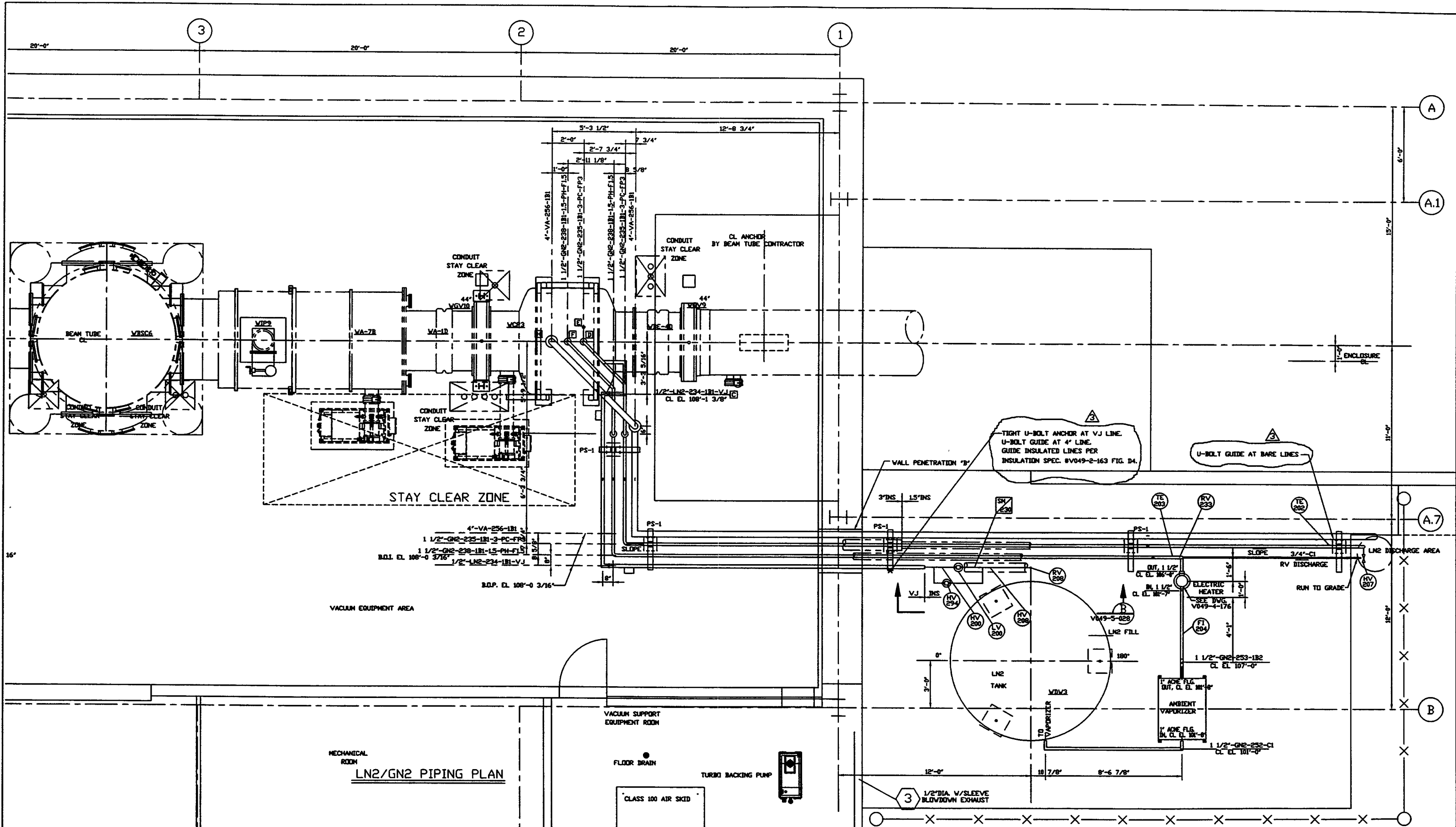
DO NOT SCALE THIS DRAWING
 USED ON:
 NEXT ASS'Y:

REV	DESCRIPTION	CHKD	DRWN	DATE	DESN
3	REISSUED FOR CONSTRUCTION AS NOTED			06/06/97	0491
2	ISSUED FOR CONSTRUCTION	DMV	RDC	04/28/97	0440
1	ISSUED FOR FDR UPDATE & BID	DMV	RDC	12/23/96	0356
0	ISSUED FOR FDR	DMV	RDC	05/7/96	0153

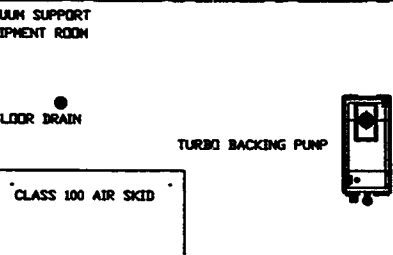
PROCESS SYSTEMS INTERNATIONAL, INC.
 20 WALKUP DR. WESTBOROUGH, MASSACHUSETTS 01581 USA

VAC/UTIL PIPE ARRGT - LOWER PLAN
 LEFT MID STATION
 WASHINGTON SITE
 LIGO VACUUM EQUIPMENT

CAD FILE: V0495026/S026S1
 SHEET: 1 OF 4
 DWG. NO.: V049-5-026
 REV: 3



MECHANICAL ROOM
LN2/GN2 PIPING PLAN



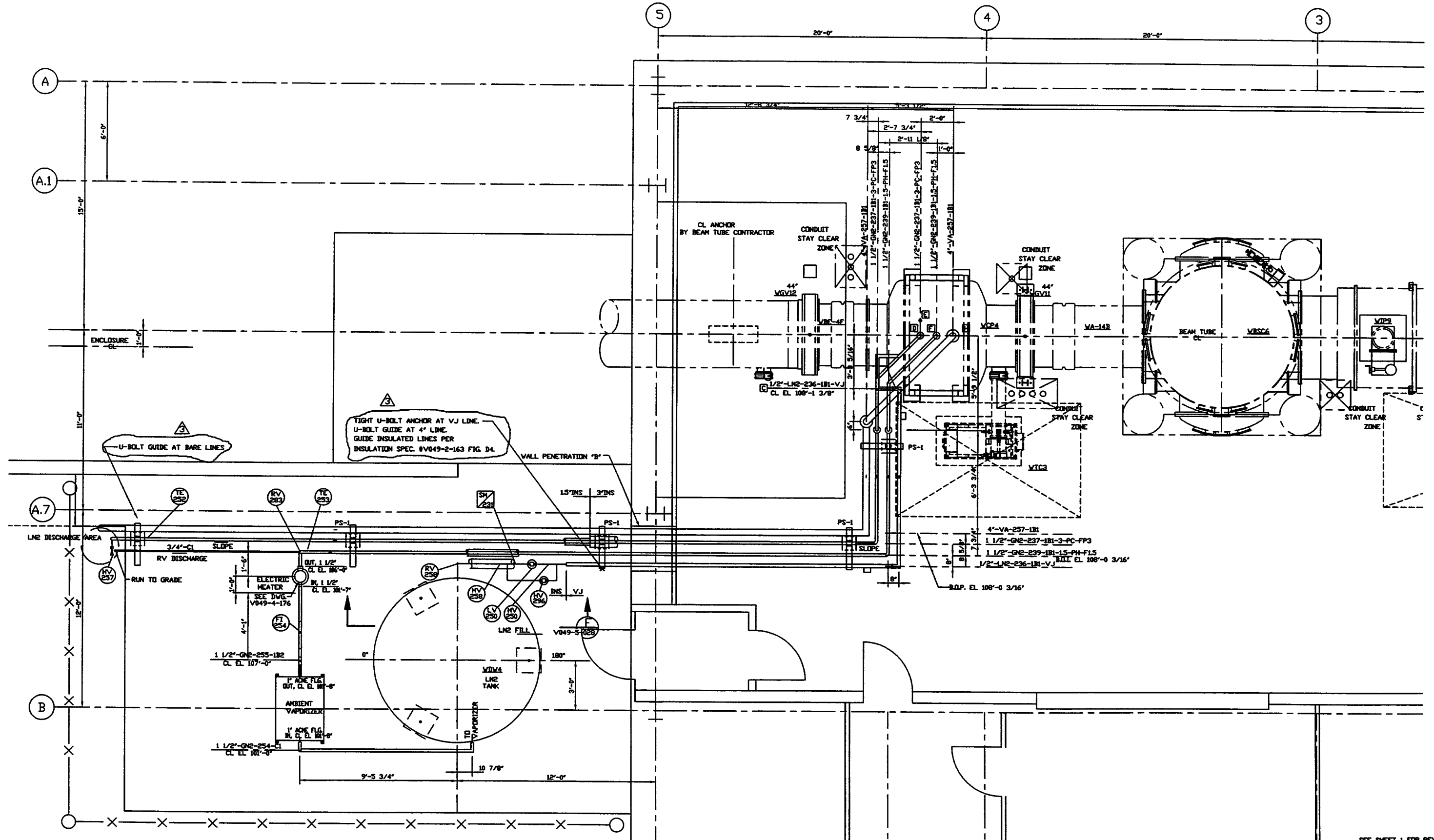
TIGHT U-BOLT ANCHOR AT VJ LINE.
U-BOLT GUIDE AT 4" LINE.
GUIDE INSULATED LINES PER
INSULATION SPEC. #V049-2-163 FIG. D4.

U-BOLT GUIDE AT BARE LINES

SEE SHEET 1 FOR REVISIONS

PROCESS SYSTEMS INTERNATIONAL INC. 20 WALKUP DR. WESTBOROUGH, MASSACHUSETTS 01581 USA			
LN2/GN2 ARRGT - UPPER PLAN (RIGHT) LEFT MID STATION WASHINGTON SITE LIGO VACUUM EQUIPMENT			
CAD FILE	SIZE	DWG. NO.	REV.
V0495026/5026S2	D	V049-5-026	3
SCALE	SHEET		2 OF 4
3/8"=1'-0"			

Feb 22, 1997 - 103413

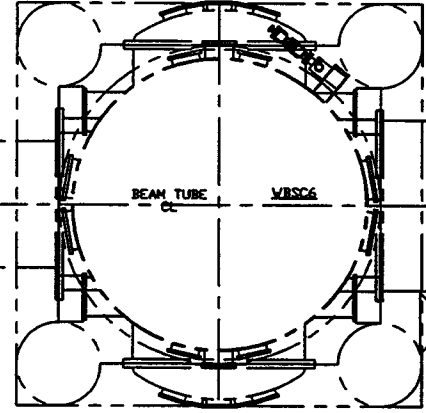


TIGHT U-BOLT ANCHOR AT VJ LINE.
 U-BOLT GUIDE AT 4' LINE.
 GUIDE INSULATED LINES PER
 INSULATION SPEC. #V049-2-163 FIG. D4.

U-BOLT GUIDE AT BARE LINES

CL ANCHOR
 BY BEAM TUBE CONTRACTOR

CONDUIT STAY CLEAR
 ZONE

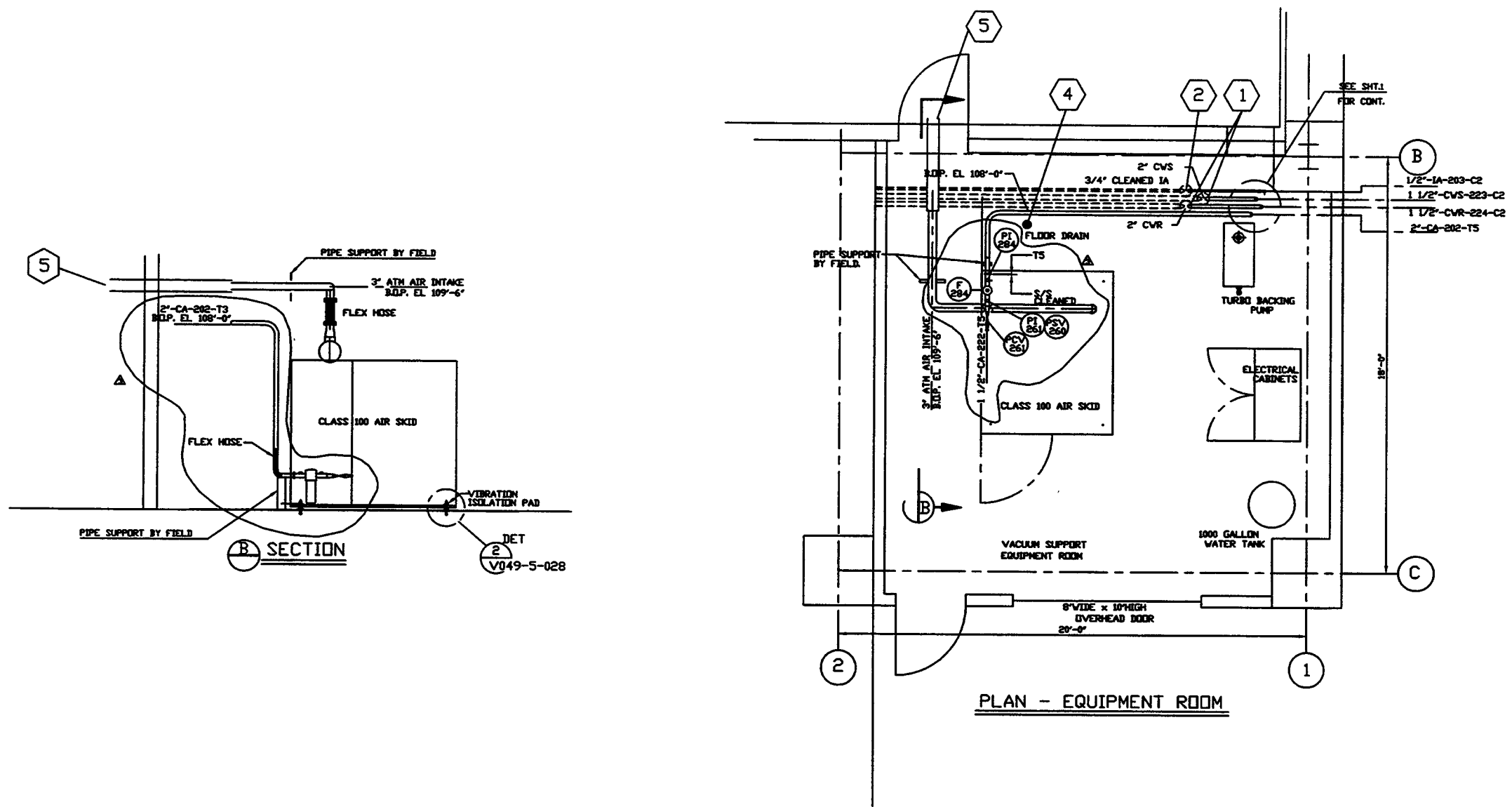


4\"/>

SEE SHEET 1 FOR REVISIONS

LN2/GN2 ARRGT - UPPER PLANK(LEFT) LEFT MID STATION WASHINGTON SITE LIGO VACUUM EQUIPMENT			
CAD FILE	SIZE	DWG. NO.	REV.
V0495026/5026S3	D	V049-5-026	3
SCALE	SHEET		3 OF 4
3/8\"/>			

FEB 22, 1977 - 1003443



B SECTION

PLAN - EQUIPMENT ROOM

SEE SHEET 1 FOR REVISIONS

PROCESS SYSTEMS INTERNATIONAL INC. 20 WALDEN DR. WESTBOROUGH, MASSACHUSETTS 01581 USA			
PIPING ARRGT PLAN - EQUIPMENT RM LEFT MID STATION WASHINGTON SITE LIGO VACUUM EQUIPMENT			
CAD FILE	SIZE	DWG. NO.	REV.
V0490026/382654	D	V049-5-026	3
SCALE	SHEET		4 OF 4
3/8"=1'-0"	1		

Feb 22, 1997 - 106507