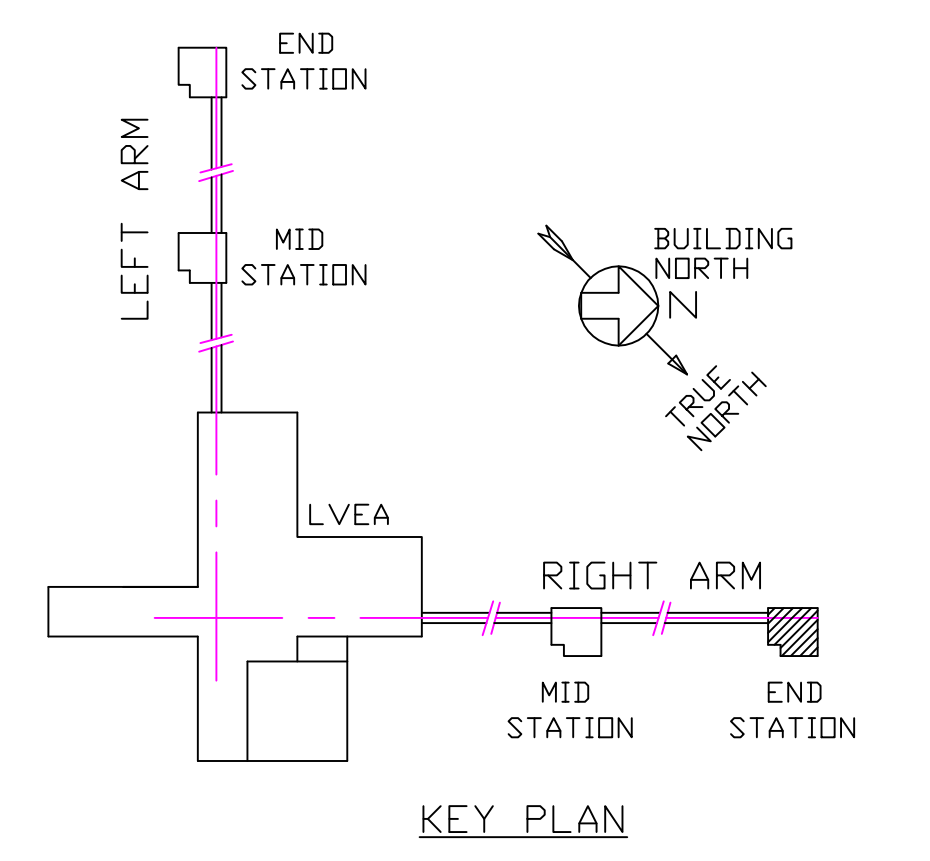


LEGEND

A	3 WAY ANCHOR
SG	SUPPORT/GUIDE (AXIALLY FLEXIBLE)
S	VALVE SUPPORT
□	GATE VALVE ION PUMP LOCATION
VS	VALVE SEAL SIDE

- NOTES:**
- ALL GATE VALVES ARE SUPPLIED BY PSI.
NOTE: SPECIAL BOLTS AND WASHERS ARE REQUIRED TO CONNECT SPOOL FLANGES TO 44" AND 48" GATE VALVES. USE PSI P/N 203567 FOR BOLTS AND PSI P/N 203568 FOR WASHERS. SEE BUILDING BOM V049100WA FOR MATERIALS.
FOR ORIENTATION OF LARGE GATE VALVES SEE SIDE OF VALVE NOTED BY SYMBOL 'VS' IN PLAN BELOW. ALL 6", 10" & 14" GATE VALVES ARE TO HAVE SEAL SIDE MOUNTED TOWARD VESSEL.
 - SEE SPEC. V049-2-021 FOR INSTALLATION/ COMMISSIONING INFORMATION.
 - FOR TUBING/ PIPE SUPPORT REQUIREMENTS, SEE SPEC. V049-2-021, SECTION 10.
 - SEE DWG. D V049-4-011 FOR TURBO PUMP CART INSTALLATION. 1 UNIT REQUIRED PER END STATION BUILDING.
 - LN₂ TANK ANCHOR BOLTS BY OTHERS.
 - FOR ANCHOR BOLTS AND VIBRATION ISOLATION PAD REQUIREMENTS FOR VACUUM SUPPORT ROOM EQUIPMENT AND ELECTRICAL CABINETS - SEE DWG. V049-5-023, DETAIL 2.
 - ORIENTATION OF BSC IS TO HAVE 0° CENTERLINE POSITIONED AS SHOWN.



DWG. NO.	DESCRIPTION	DWG. NO.	DESCRIPTION
V049-0-100	DRAWING TREE/BOM STRUCTURE		
V049-2-021	SPEC. FOR INSTALLATION/COMMISSIONING		
V049-0-001	P&ID LIGO VACUUM EQUIPMENT		
WA-A-202	PARSONS ARCHITECTURAL END STATIONS FLOOR PLAN		
1101102	LIGO VACUUM EQUIPMENT END STATION		

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	5	AS-BUILT	GW	6/26/98	0622		
TOLERANCES:	4	REISSUED FOR CONSTRUCTION AS NOTED	DMW	RDC	REC DA 6/26/97 0507		
FRACTIONAL ±	3	REISSUED FOR CONSTRUCTION AS NOTED	DMW	RDC	REC SPIDER 6/9/97 0497		
ANGULAR ± BEND ±	2	ISSUED FOR CONSTRUCTION	DMW	RDC	REC PV 4/14/97 0465		
TWO PLACE DECIMAL ±	1	ISSUED FOR UPDATE & BID	DMW	RDC	REC PV 2/4/97 0356		
THREE PLACE DECIMAL ±	0	ISSUED FOR FDR	DMW	RDC	REC MA 4/29/96 0147		
FINISHED SURFACE RMS							
BREAK CORNERS IN							
REMOVE ALL BURRS							
DO NOT SCALE THIS DRAWING							
USED ON:	REV	DESCRIPTION		CHKD	DRWN	DATE	DETH
NEXT ASS'Y:		ISSUE DESCRIPTION					

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

**EQUIPMENT ARRANGEMENT
RIGHT END STATION AREA 500
WASHINGTON
LIGO VACUUM EQUIPMENT**

CAD FILE: V0495005
SIZE: D
DWG. NO.: V049-5-005
REV: 5

SCALE: 1/8"=1'-0"
SHEET 1 OF 1

EDUCATION VERSION - NOT FOR COMMERCIAL USE

JUN 11, 1998 1:52:50A