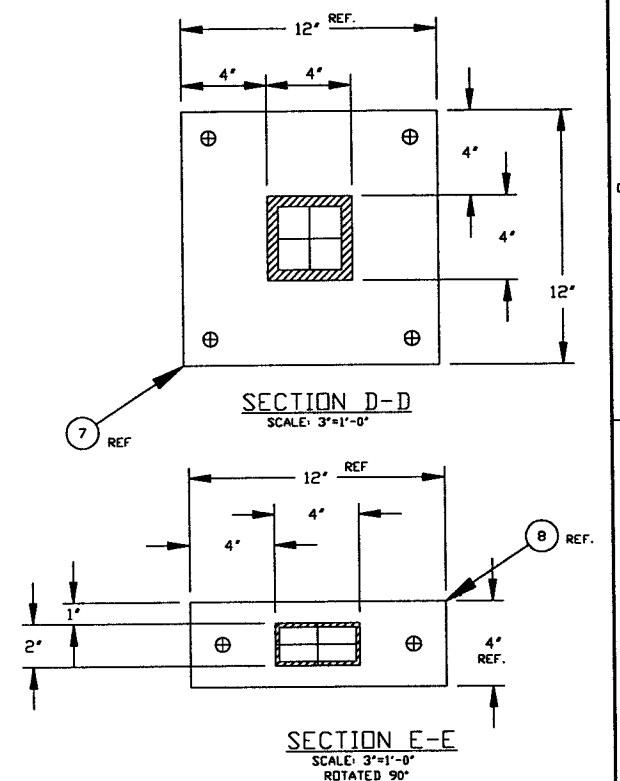


ITEM	PART NUMBER	SUFFIX	QTY	UM	DESCRIPTION
1	V049-4-018		2	EA	FLANGE, GROOVED
2	X		X	SF	PLATE, 304L SST 1/4" THK.
3	X		X	FT	ANGLE, 304 SST. 4"x3"x1/4"
4	X		X	FT	TUBE STL (TS) A500 GRB 4"x4"x1/2"
5	X		X	FT	TUBE STL (TS) 4"x2"x3/16" A500 GR B
6	X		1	EA	FLANGE
7	X		X	SF	TUBE, 304L SST. 1/4"
8	X		X	SF	PLATE, CS, A36 1" THK.
9	X		X	SF	PLATE, CS, A36 1" THK.
10	X		X	EA	BOLT, 5/8"-11 UNC A325
11	X		X	EA	NUT, 5/8"-11 UNC A325
12	X		12	EA	ANCHOR BOLT, 1" DIA.
13	X		X	FT	TUBE STL (TS) A500 GRB 4"x2"x3/16"
14	X		2	FT	PLATE, 8" X 4" X 3/8" 304 SST

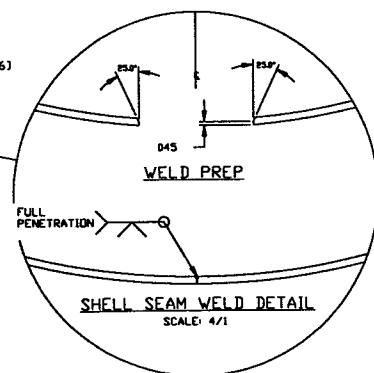
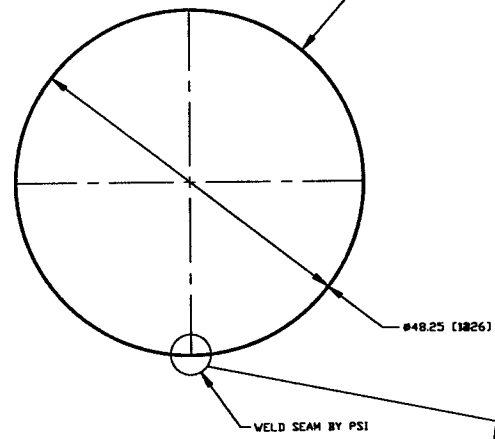
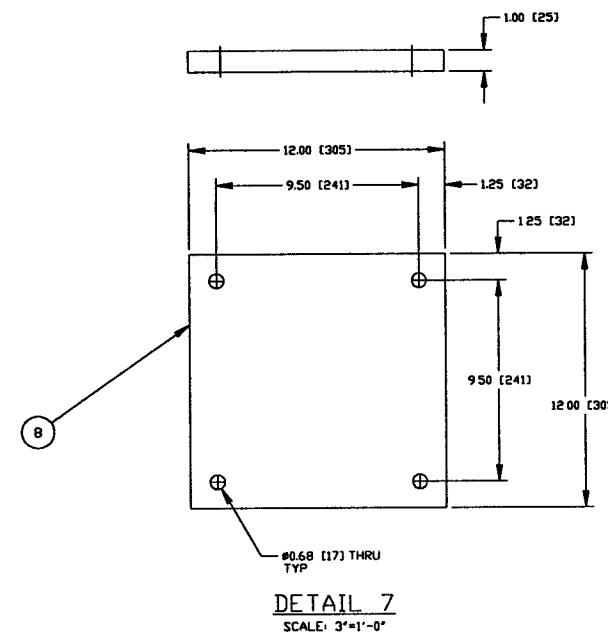
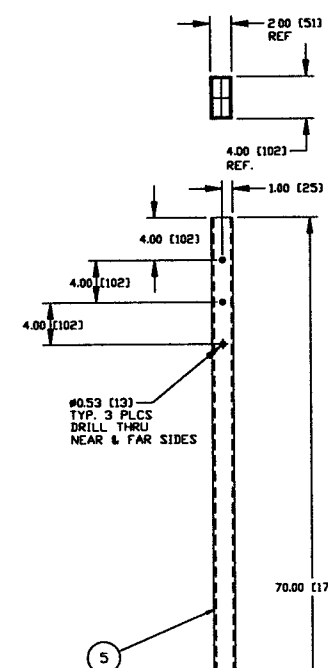
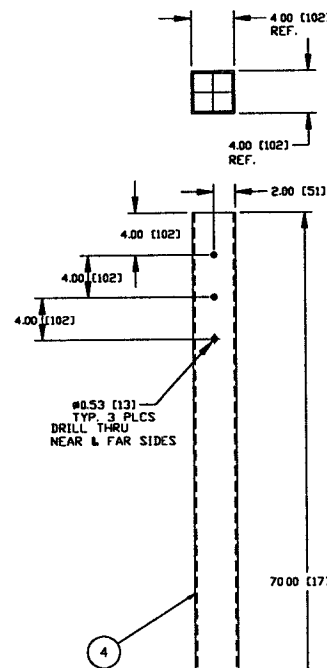
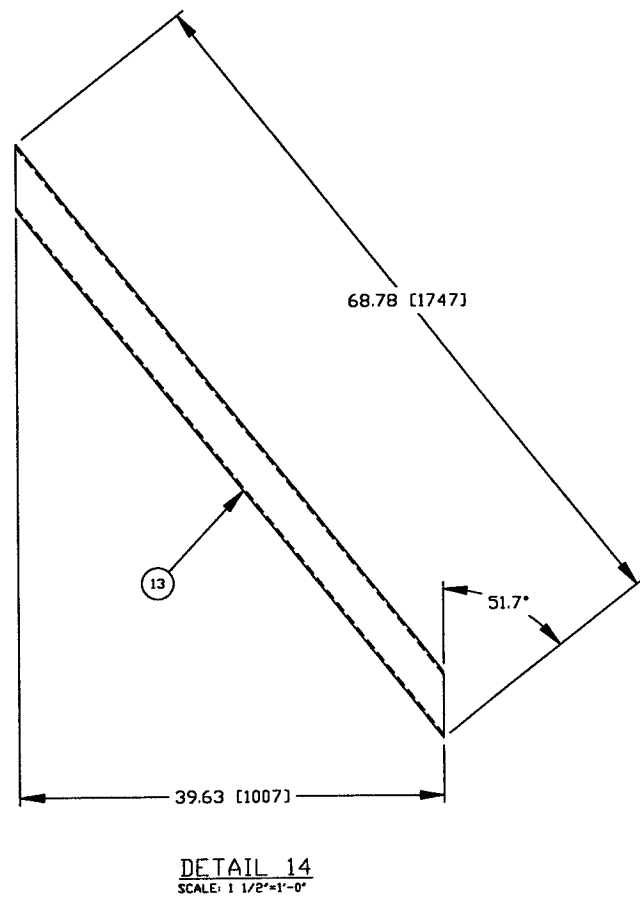
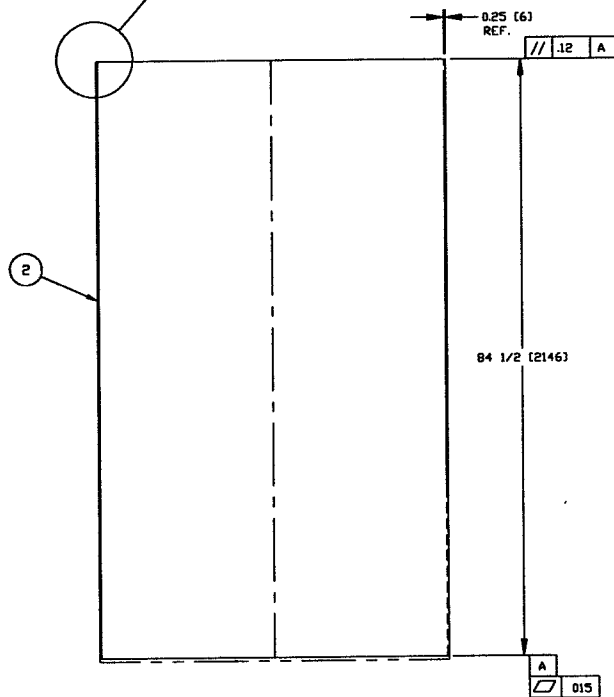
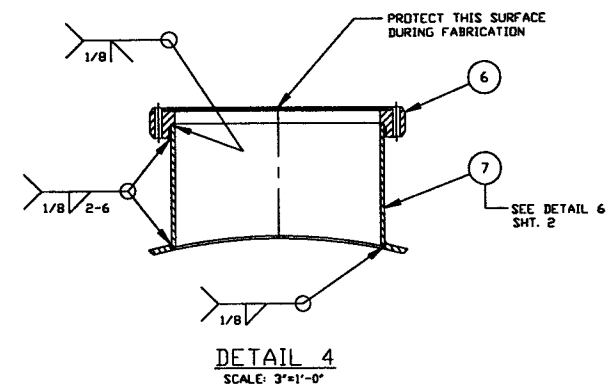
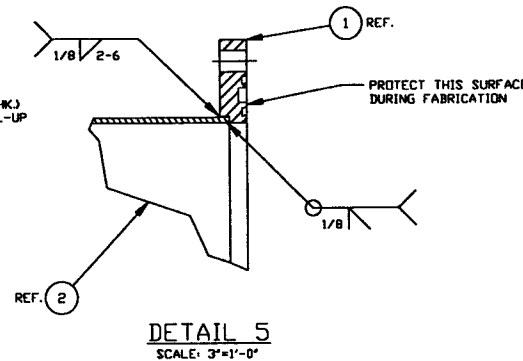
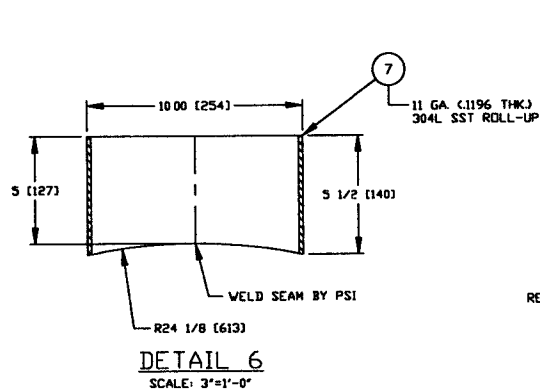
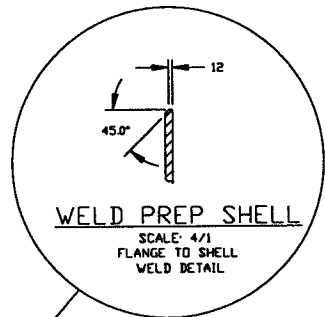


- NOTES:
- 10 LEAK TEST & METHOD PER PSI SPEC. V049-2-014
 9. CERTIFIED MANUFACTURER'S MATERIAL TEST REPORTS REQUIRED
 8. BOLT HOLES TO STRADDLE CENTERLINES AS SHOWN, +/- 0.015
 7. CLEAN PER SPEC. V049-2-015
 6. DO NOT USE CARBON STEEL BRUSHES OR BRUSHES CONTAMINATED WITH CARBON STEEL ON STAINLESS OR ALUMINUM MATERIAL
 5. THE CENTER LINES OF ALL SHELLS AND END FLANGES ARE TO LIE ON THE COMMON CENTER LINE WITHIN +/- 1/16.
 4. CHAMBER FABRICATION TO BE IN ACCORDANCE WITH SPEC. V049-2-097.
 3. FOR FLANGE DETAILS SEE DWG. V049-4-018
 2. THESE FLANGES EACH INCLUDE AN ANNULAR CHANNEL BETWEEN D-RINGS, MANIFOLD TO A SINGLE PUMPOUT PORT ON EACH CHAMBER, SEE DWG V049-4-
 1. REGISTERED TRADEMARK, VARIAN VACUUM PRODUCTS; COMPATIBLE ALTERNATIVES ARE ACCEPTABLE.

LIGO D961157-00-V

PROPERTY AND CONFIDENTIAL				UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES				PROCESS SYSTEMS INTERNATIONAL, INC.			
TOLERANCES: FRACTIONAL ± .01 ANGULAR/ROUND ± .01 BEND ± .02 TWO PLACE DECIMAL ± .01 THREE PLACE DECIMAL ± .005 FINISHED SURFACE FINISH: BREAK CORNERS IN OUT REMOVE ALL BURRS				DO NOT SCALE THIS DRAWING				PI PRELIMINARY			
USED ON:				REV				DESCRIPTION			
NEXT ASS'Y:				ISSUED FOR FDR				DA 4/29/96 0146			
DWG. NO.				DESCRIPTION				CAD FILE			
REFERENCE DRAWINGS				SIZE				D			
				DWG. NO.				V049-4-B7			
				SCALE				AS NOTED			
				SHEET				1 OF 3			

REV 06/1996 - 11/4/01



DETAIL 3 SCALE: 1 1/2"=1'-0"

DETAIL 2 SCALE: 1 1/2"=1'-0"

DETAIL 8 SCALE: 3"=1'-0"

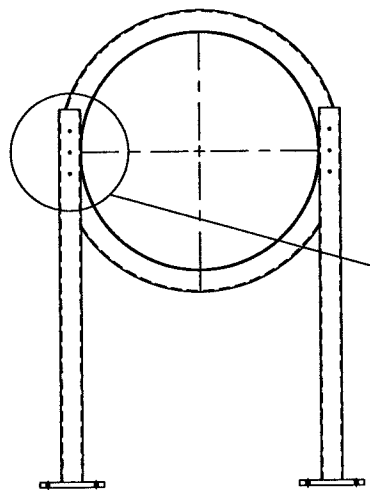
NOT FOR CONSTRUCTION
Raymond S. Watts, PE
 5/17/196

14000

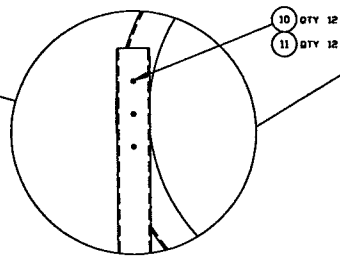
LIGO-1961157-00-V

PROCESS SYSTEMS INTERNATIONAL INC. 25 WILSON BL. WILSONVILLE, OREGON 97150 USA			
SPOOL B-7 48.50" ID LIGO VACUUM EQUIPMENT			
CAD FILE B4752	SIZE D	REV. NO. V049-4-B7	REV. 0
SCALE AS NOTED	SHEET 2 OF 3		

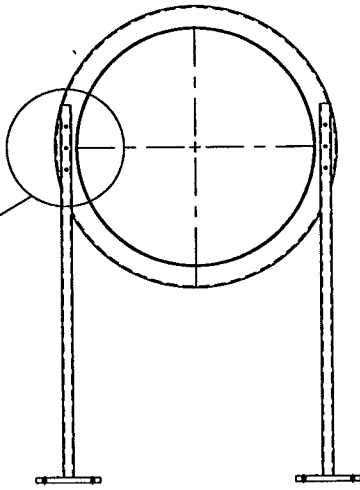
REV. 06. 1996 - 114605



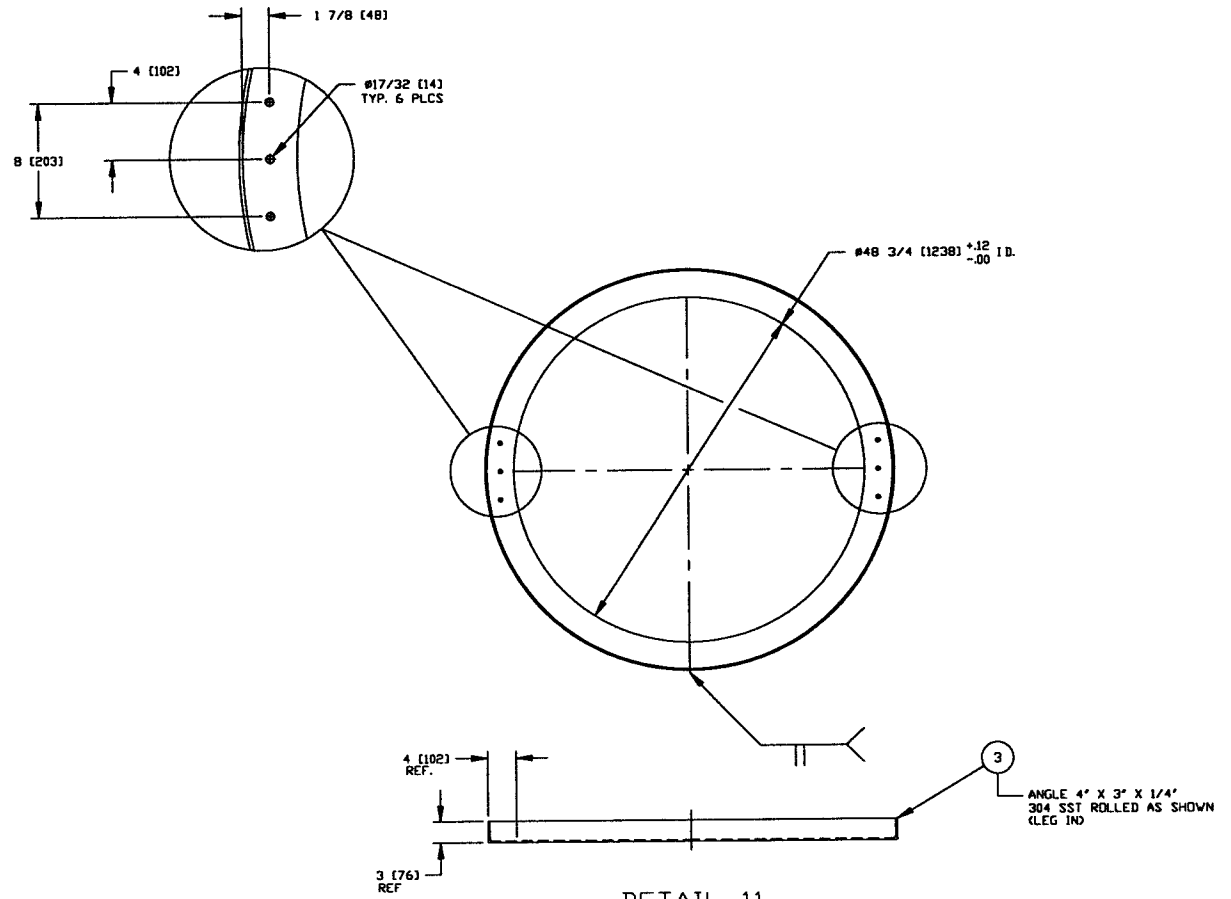
SECTION C-C
SCALE: 3/4"=1'-0"



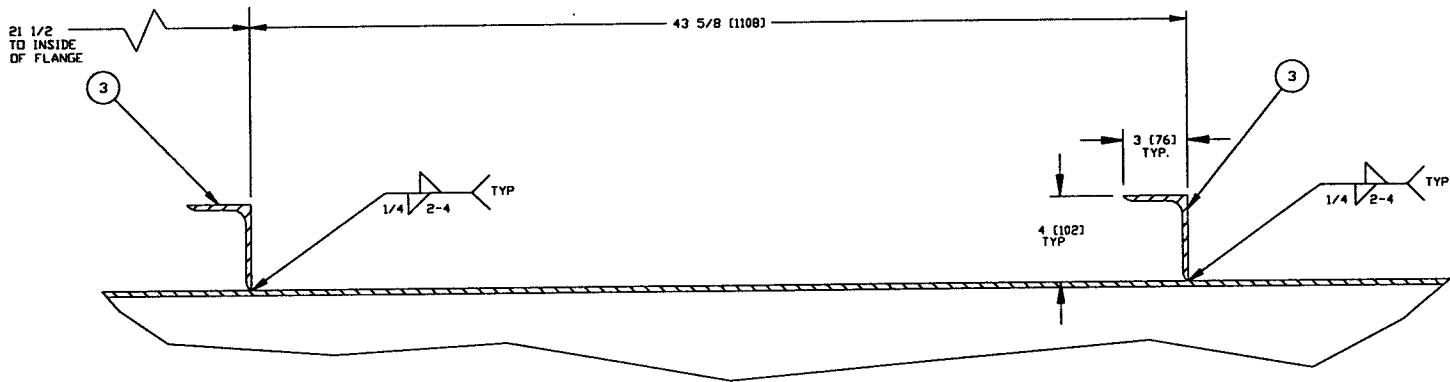
DETAIL 10
SCALE: 2X



SECTION B-B
SCALE: 3/4"=1'-0"



DETAIL 11
SCALE: 1"=1'-0"



DETAIL 12
SCALE: 3"=1'-0"

**NOT FOR
CONSTRUCTION**

*Raymond D. Gatto, P.E.
5/7/96*

LIGO D961157-00-V

SPOOL B-7 48.50" ID LIGO VACUUM EQUIPMENT			
CAD FILE B4753	SIZE D	DWG. NO. V049-4-B7	REV. 0
SCALE AS NOTED	SHEET 3 OF 3		

REV 05, 1996 - 114616