

**NOTES CONTINUED:**

5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. A VIBRATORY TOOL MAY BE USED.  
EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX

6. APPROXIMATE WEIGHT = 13.09 LB [5.94 kg]

7. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.

8. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

9. ALL MATERIAL IS TO BE VIRGIN MATERIAL (i.e. NOT WELD REPAIRS OR PLUGS UNLESS APPROVED IN ADVANCE IN WRITING BY LIGO. REFER TO LIGO-E0900364.

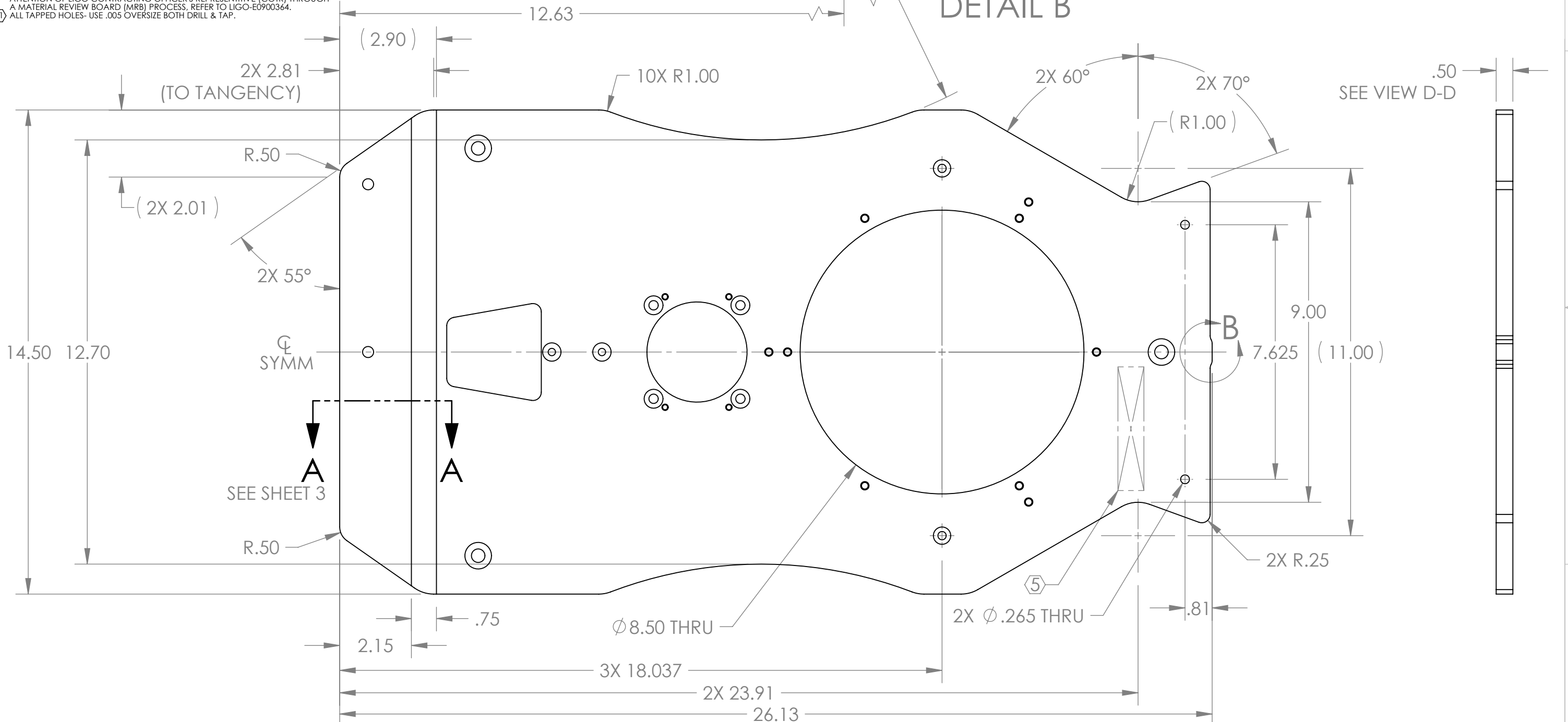
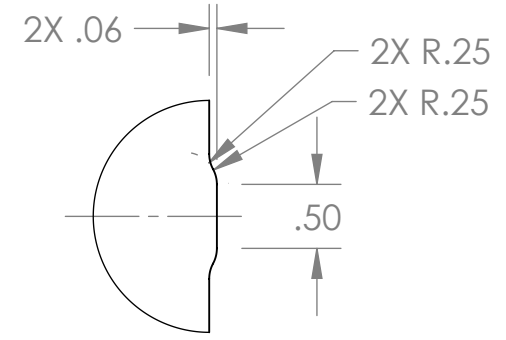
10. NO REPAIRS SHALL BE MADE UNLESS APPROVED IN ADVANCE, AND IN WRITING, BY LIGO LABORATORY. IN GENERAL WELD REPAIRS AND PRESS FIT INSERT REPAIRS ARE NEVER ACCEPTABLE; THE MATERIAL SHOULD BE MADE WITH VIRGIN MATERIAL. SPECIAL CIRCUMSTANCES CAN BE REVIEWED IF / WHEN BROUGHT TO THE ATTENTION OF LIGO CONTRACTING OFFICER'S REPRESENTATIVE (COTR) THROUGH A MATERIAL REVIEW BOARD (MRB) PROCESS. REFER TO LIGO-E0900364.

11. ALL TAPPED HOLES - USE .005 OVERSIZE BOTH DRILL & TAP.

**MANUFACTURING PROCESS** (DOES NOT PERTAIN TO .0003 T.I.R. COPLANAR REGIONS, SHEET 4):  
PURCHASE 3/4" ALUM. ALLOY 6061-T651 PLATE.  
ROUGH BLANCHARD GRIND, EQUAL AMOUNTS FROM STOCK FROM EACH SIDE OF ALUM. PLATES.  
COLD STABILIZE PLATES.  
FINISH GRIND BOTH SIDES TO: .535 THICKNESS WITH A FLATNESS OF .002 ACROSS ENTIRE FACE.  
RE-CLAMP, MACHINE & ENGRAVE BALANCE OF PART IN THE FLAT.  
ON TOOLROOM VERTICAL MILL MACHINE, CLAMP PART TO ANGLE PLATE. MACHINE HOLES FOR 5/16-18 OVERSIZE THREAD PER 11 ON (1) END OF EACH PART.  
HAND DEBURR PARTS WITH BURR KNIVES & ROTARY CARBIDE BURRS.  
HAND TAP ALL REQUIRED HOLES, .005 OVERSIZE PER 11.

INSPECT PARTS. ASSURE A FLATNESS OF .003 OR BETTER OVER FACE 'A' (SEE SHEET 4).  
SEND MATERIAL CERTS.

REV.	DATE	DCN #	DRAWING TREE #
v1	08 NOV 2010	E1000365-V1	-
v2	07 DEC 2010	E1000839-V1	-
-	-	-	-

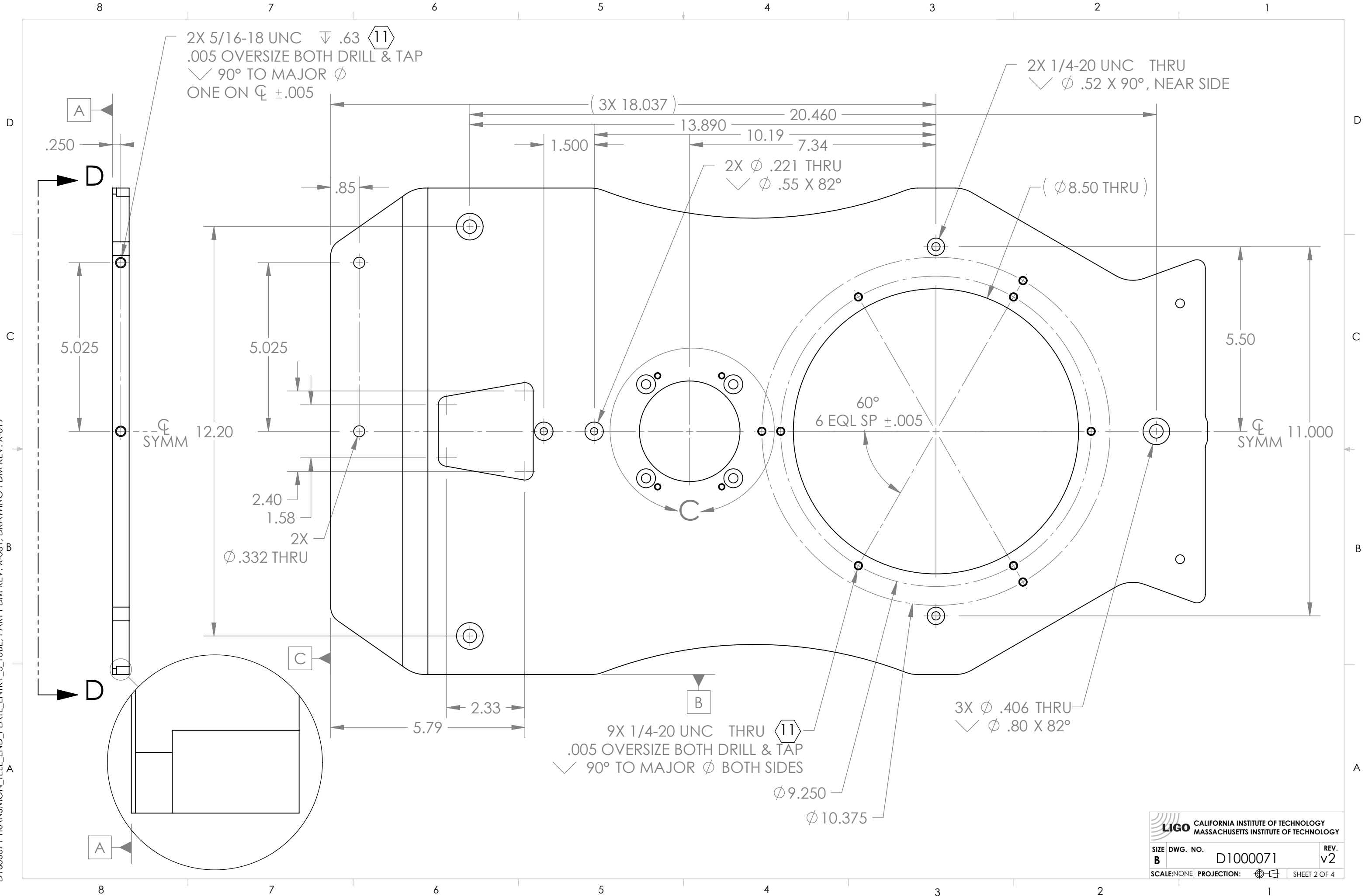


D1000071 TRANSMON\_TEL\_END\_PLATE\_ENTRY\_3\_TUBE, PART PDM REV: X-081, DRAWING PDM REV: X-019

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)	
DIMENSIONS ARE IN INCHES	
TOLERANCES: .XX ± .01 .XXX ± .005	
ANGULAR ± 0.5°	
1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.	
MATERIAL	6061-T6 Al
FINISH	63 µinch Ra

CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME		TRANSMON TELE	
SYSTEM		SUB-SYSTEM		END PLATE ENTRY 3 TUBE	
ADVANCED LIGO		AOS		DESIGNER	K. MAILAND 21 JUN 2010
NEXT ASSY		D1003120		DRAFTER	C. CONLEY 08 NOV 2010
		CHECKER	K. MAILAND 5/4/10	SIZE DWG. NO.	
		APPROVAL	K. MAILAND 5/4/10	B D1000071	
		SCALE: NONE		PROJECTION:	SHEET 1 OF 4
				REV.	v2

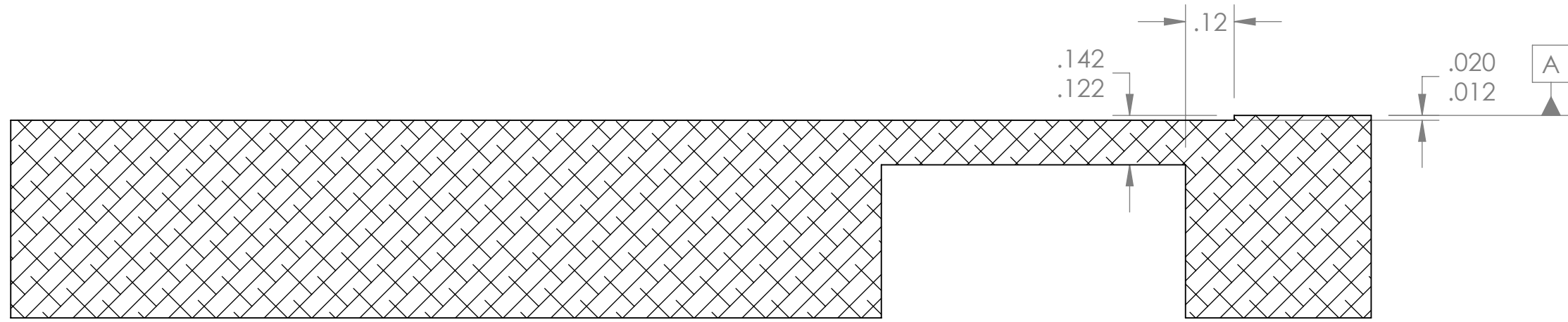
D1000071 TRANSMON\_TEL\_END\_PLATE\_ENTRY\_3\_TUBE, PART PDM REV: X-081, DRAWING PDM REV: X-019



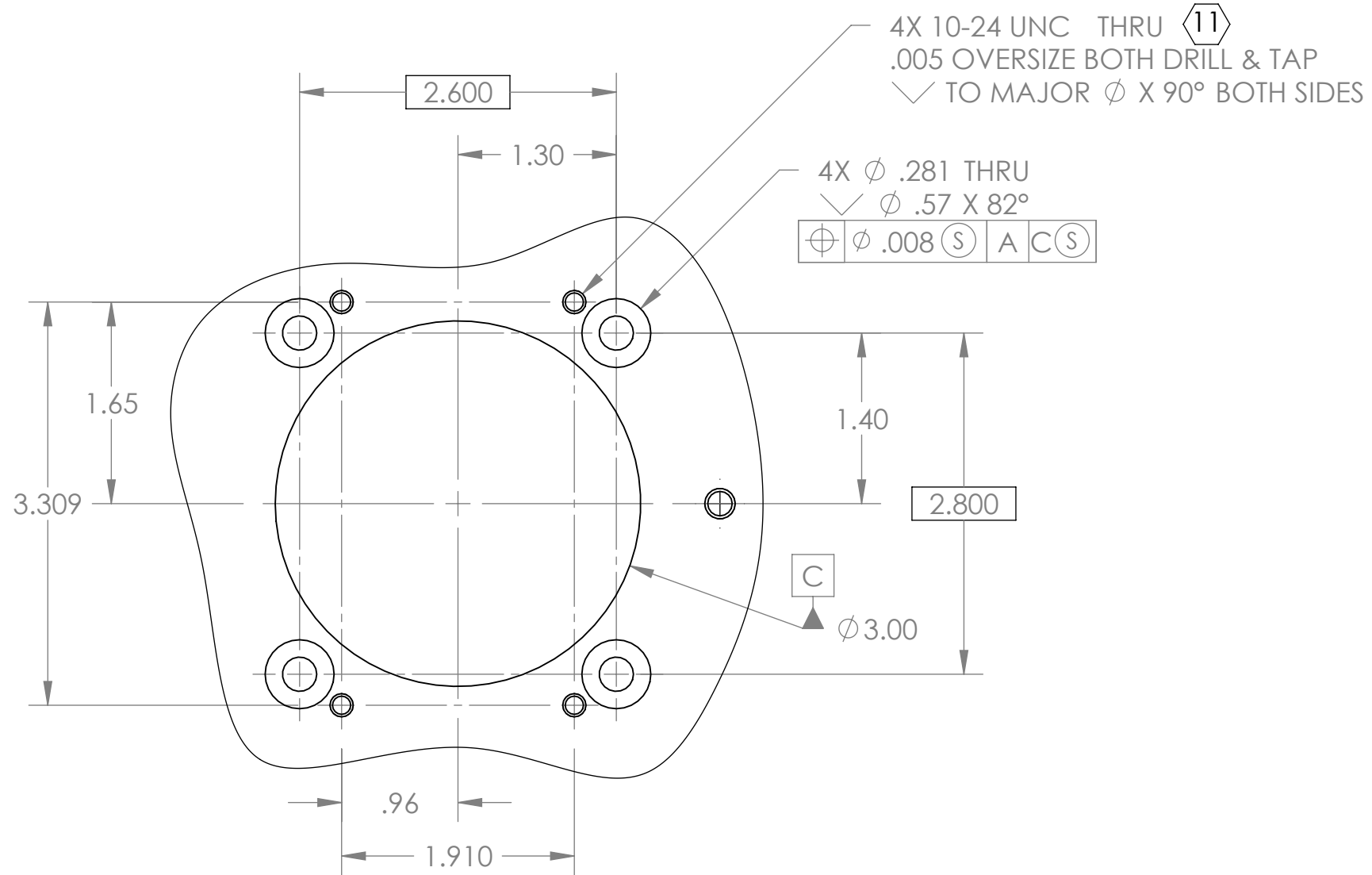
**LIGO** CALIFORNIA INSTITUTE OF TECHNOLOGY  
 MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SIZE	DWG. NO.	REV.
B	D1000071	v2
SCALE: NONE	PROJECTION:	SHEET 2 OF 4

D1000071 TRANSMON\_TELE\_END\_PLATE\_ENTRY\_3\_TUBE, PART PDM REV: X-081, DRAWING PDM REV: X-019



SECTION A-A



DETAIL C

CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		
SIZE <b>B</b>	DWG. NO. D1000071	REV. v2
SCALE: NONE	PROJECTION: $\text{\textcircled{A}}$	SHEET 3 OF 4

D1000071 TRANSMON\_TELE\_END\_PLATE\_ENTRY\_3\_TUBE, PART PDM REV: X-081, DRAWING PDM REV: X-019

8 7 6 5 4 3 2 1

D

D

C

C

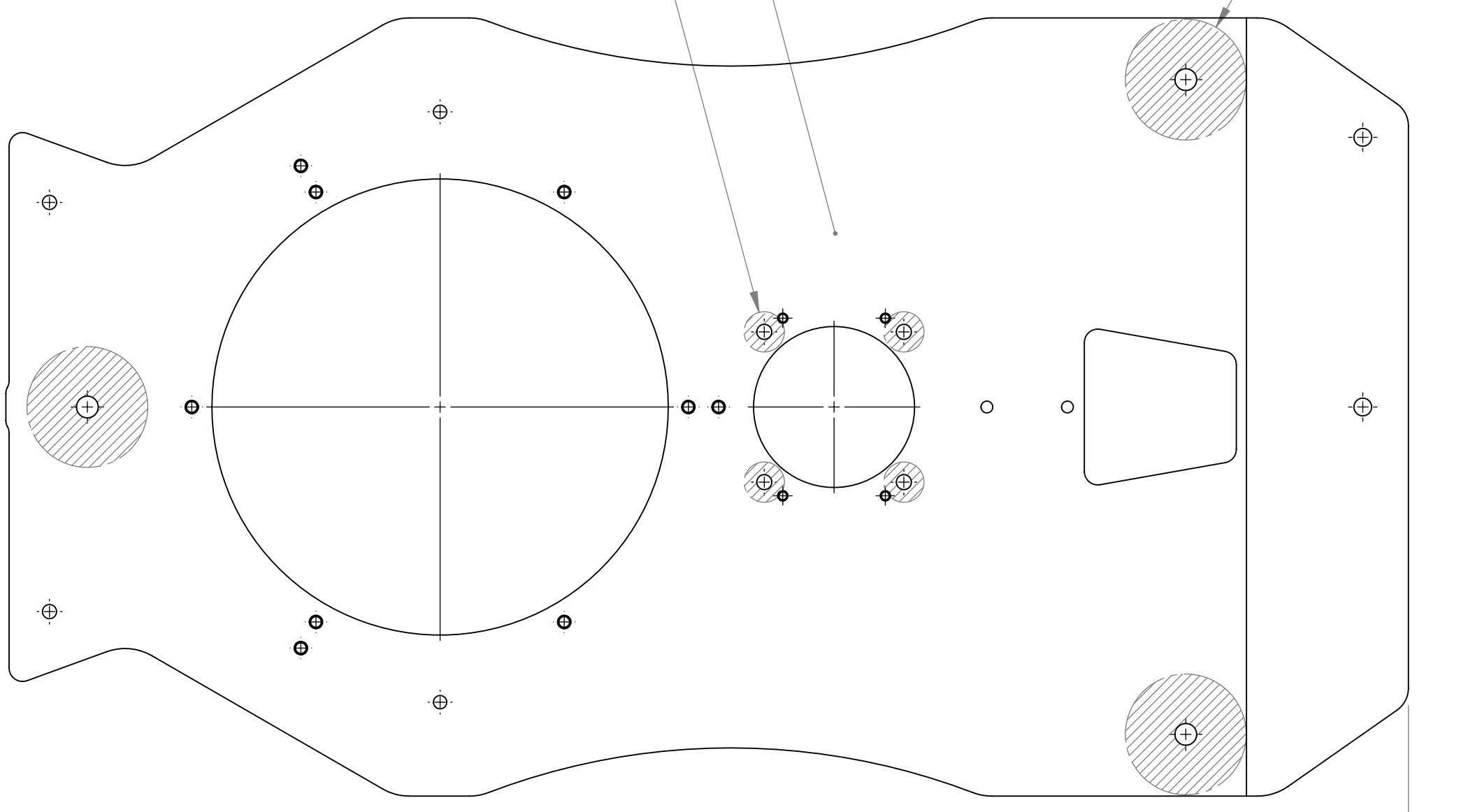
B

B

A

A

FACE 'A'  
(ALSO DATUM [A])  
4X  $\phi$ .75 MIN  
3X  $\phi$ 2.25 MIN



(3.02)

### VIEW D-D

HATCHED AREAS .0003 T.I.R. COPLANAR

CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		
SIZE <b>B</b>	DWG. NO. D1000071	REV. v2
SCALE: NONE	PROJECTION:	SHEET 4 OF 4

8 7 6 5 4 3 2 1