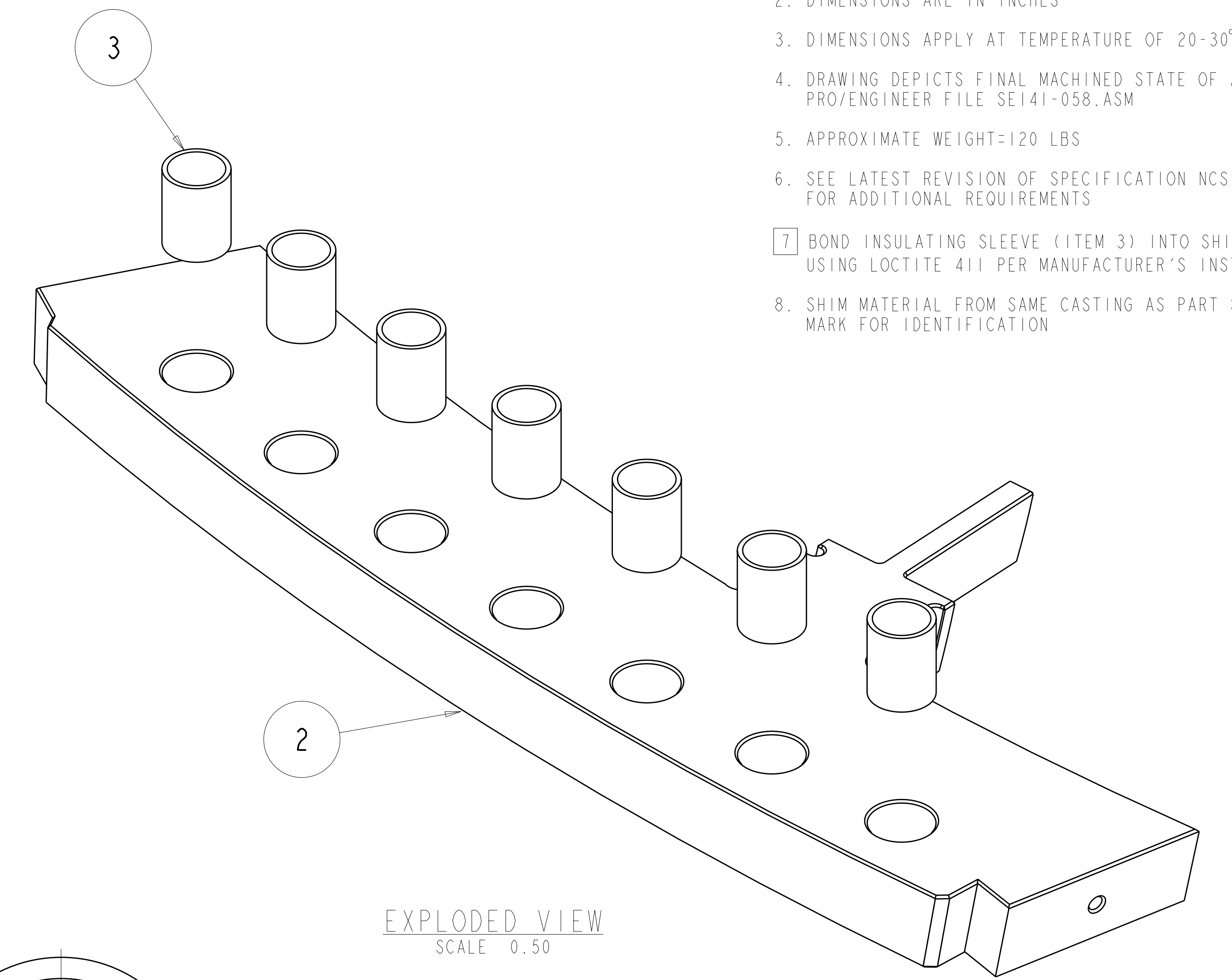
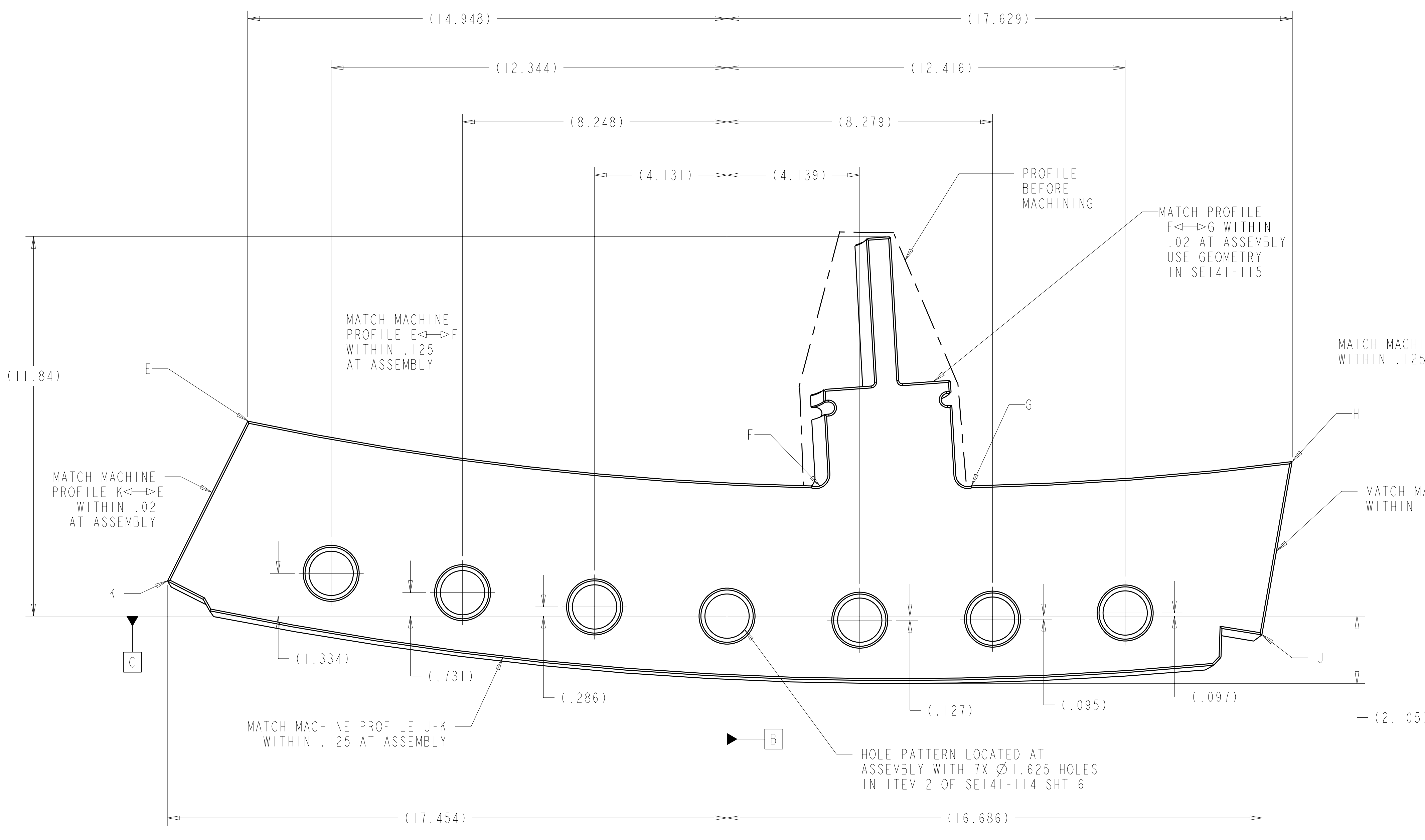
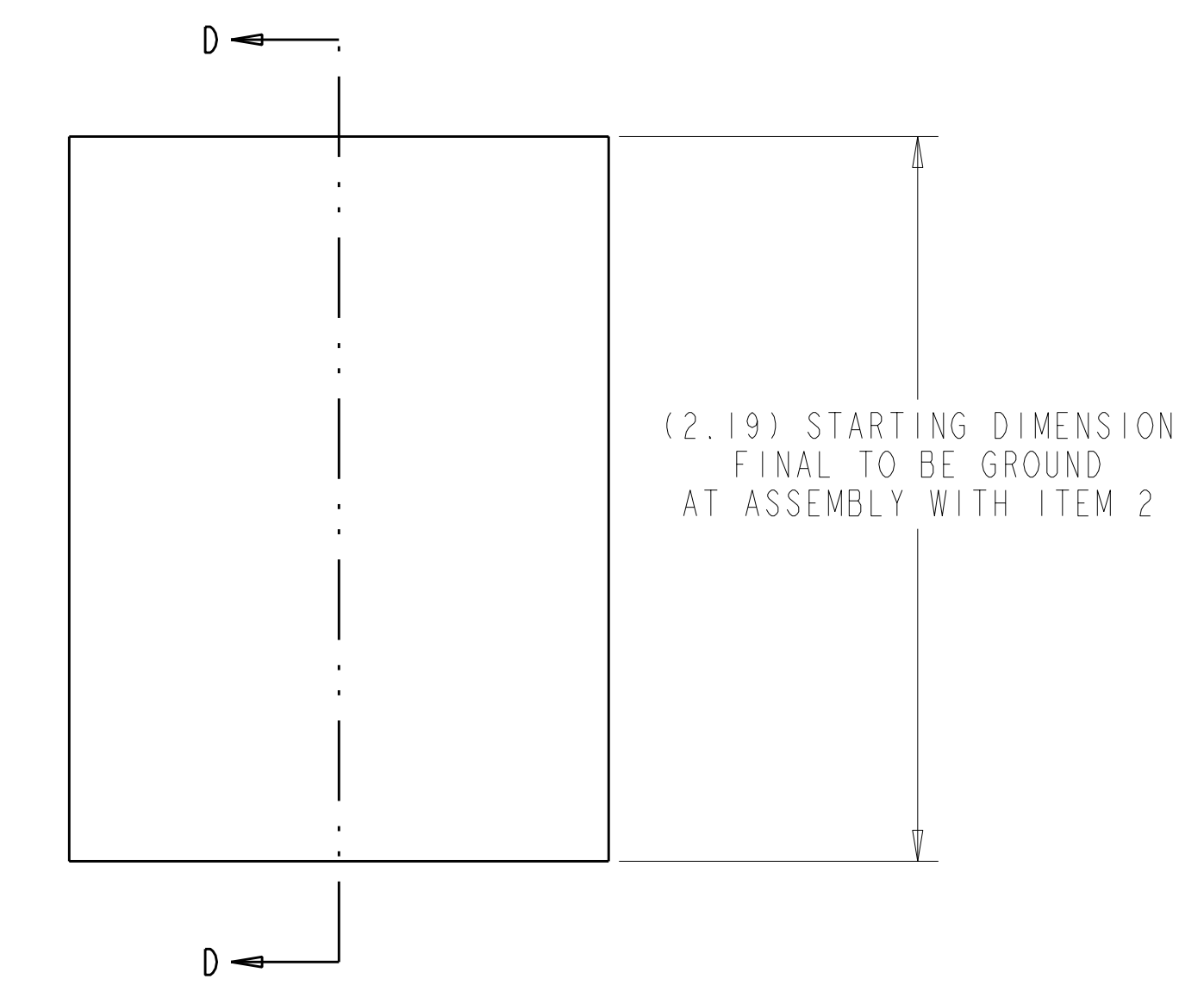
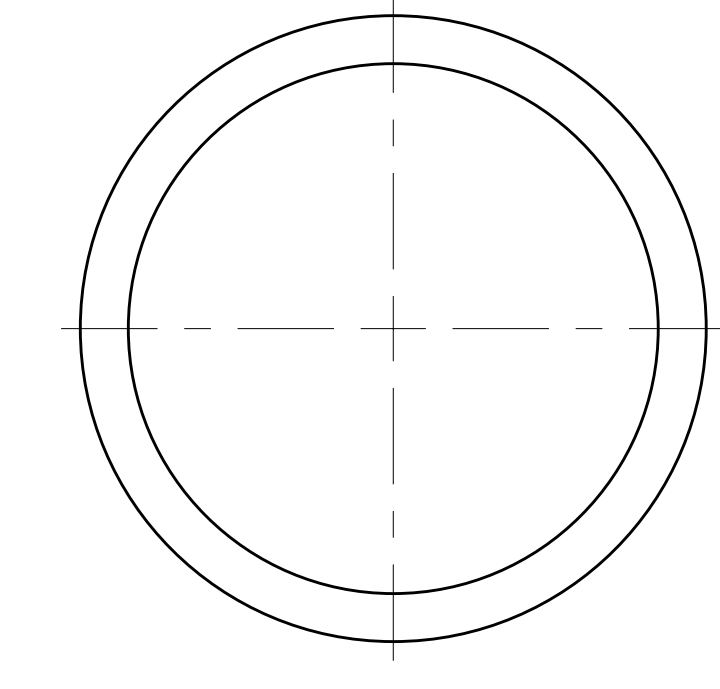


NOTES:

1. INTERPRET DIMENSIONS AND TOLERANCES PER ANSI Y14.5M
2. DIMENSIONS ARE IN INCHES
3. DIMENSIONS APPLY AT TEMPERATURE OF 20-30°C (68-86°F)
4. DRAWING DEPICTS FINAL MACHINED STATE OF ASSEMBLY DEFINED BY PRO/ENGINEER FILE SE141-058.ASM
5. APPROXIMATE WEIGHT=120 LBS
6. SEE LATEST REVISION OF SPECIFICATION NCSX-CSPEC-141-03 FOR ADDITIONAL REQUIREMENTS
7. BOND INSULATING SLEEVE (ITEM 3) INTO SHIM (ITEM 2) USING LOCTITE 411 PER MANUFACTURER'S INSTRUCTIONS
8. SHIM MATERIAL FROM SAME CASTING AS PART SE141-115; MARK FOR IDENTIFICATION

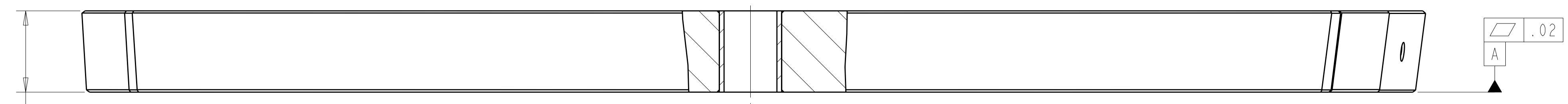


EXPLODED VIEW  
SCALE 0.50

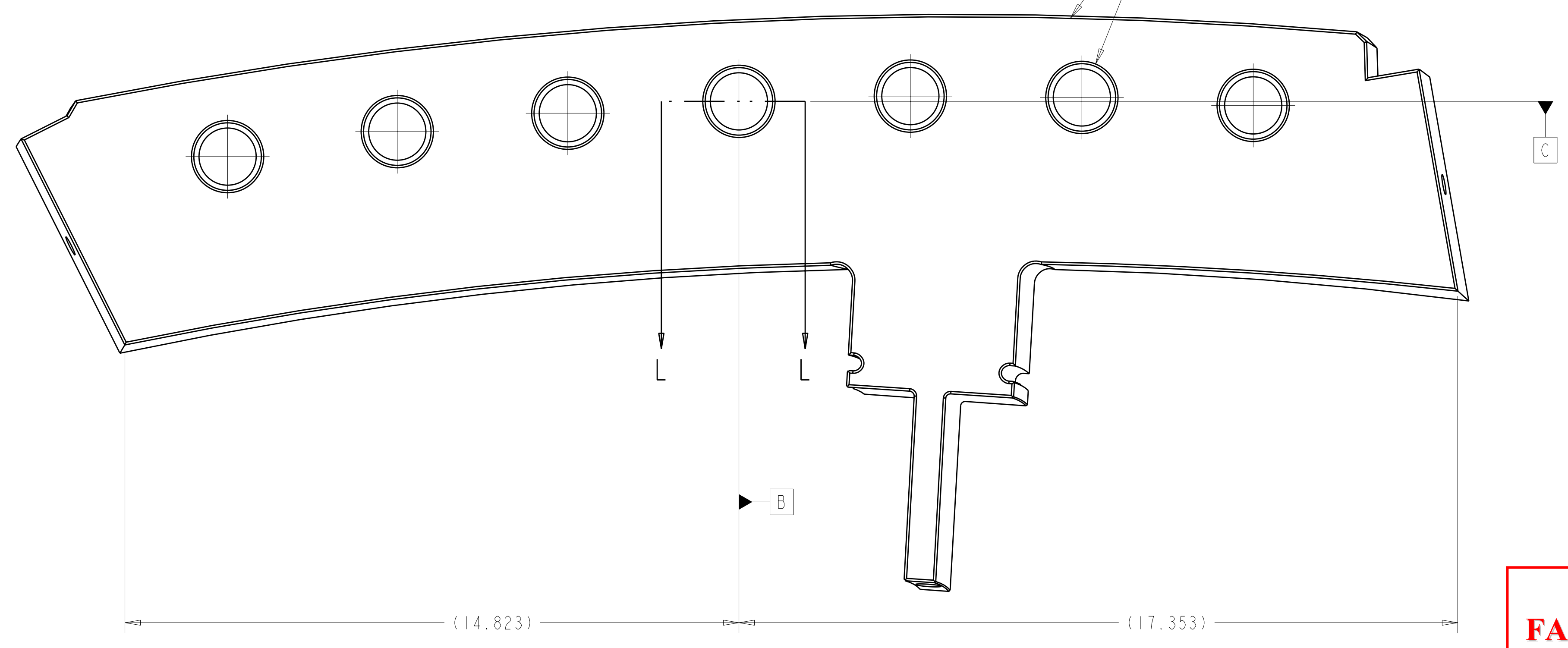


Ø1.63 OD TO MATCH HOLE DIA MINUS .001 TO .002 FOR CLEARANCE FIT

SECTION D-D  
SCALE 2.00



SECTION L-L



SCALE 0.50

**RELEASED FOR FABRICATION / INSTALLATION**  
PPPL Drafting:

REV	DESCRIPTION	BY	DATE	CHK	DEPT	DATE	PE	REQ	DATE	ORNL	DOC	DATE
3	REVISE PART AND DRAWING PER ECN 5112 AND 5128	GLL	06/08	MJC			DEW					
2	REVISE PART AND DRW PER ECN 5059	GLL	12/03	MJC			DEW					
1	REVISED "T" PROFILE PER ECN-4903	GLL	07/04	MJC			DEW					

REV	DESCRIPTION	BY	DATE	CHK	DEPT	DATE	PE	REQ	DATE	ORNL	DOC	DATE
3	REVISE PART AND DRAWING PER ECN 5112 AND 5128	GLL	06/08	MJC			DEW					
2	REVISE PART AND DRW PER ECN 5059	GLL	12/03	MJC			DEW					
1	REVISED "T" PROFILE PER ECN-4903	GLL	07/04	MJC			DEW					

SCALE	NOTED	DES	T BROWN	6-30-04
TOLERANCES UNLESS OTHERWISE SPECIFIED	FRACCTIONS ±.01	DRW	PAUL MILLER	6-30-04
XX DECIMALS ±.005	CR :	CHK	M COLE	6-30-04
XXX DECIMALS ±.0015	PE	DEPT :		
ANGLES ±0°15'	DR	PE	D WILLIAMSON	6-30-04
BREAK SHARP EDGES OR MAX FINISH .125 UNLESS OTHERWISE SPECIFIED	PJ :	REQ :		
	REO :	PPPL DRFT	J SIEGEL	6-30-04
		VERSION NO.	6	
		PLANT	X-10	
		BLDG	5700	
		FL	3	
		SHT OF	1	
		TYPE	2	
		CLASS	S	
		U		

NO REPRESENTATION OR WARRANTY, EXPRESSED OR IMPLIED, IS MADE AS TO THE ACCURACY, COMPLETENESS OR USEFULNESS OF THE INFORMATION OR STATEMENTS CONTAINED IN THESE DRAWINGS, OR THAT THE USE OR DISCLOSURE OF ANY INFORMATION, APPARATUS, METHOD OR PROCESS DISCLOSED IN THESE DRAWINGS MAY NOT INFRINGE PRIVATE RIGHTS OF OTHERS. NO LIABILITY IS ASSUMED WITH RESPECT TO THE USE OF, OR FOR DAMAGES RESULTING FROM THE USE OF, ANY INFORMATION, APPARATUS, METHOD OR PROCESS DISCLOSED IN THESE DRAWINGS. DRAWINGS MADE AVAILABLE FOR INFORMATION TO BIDDER ARE NOT TO BE USED FOR OTHER PURPOSES, AND ARE TO BE RETURNED UPON REQUEST OF THE FORWARDING CONTRACTOR.

**P** THIS DRAWING PRODUCED ON PRO-ENGINEER

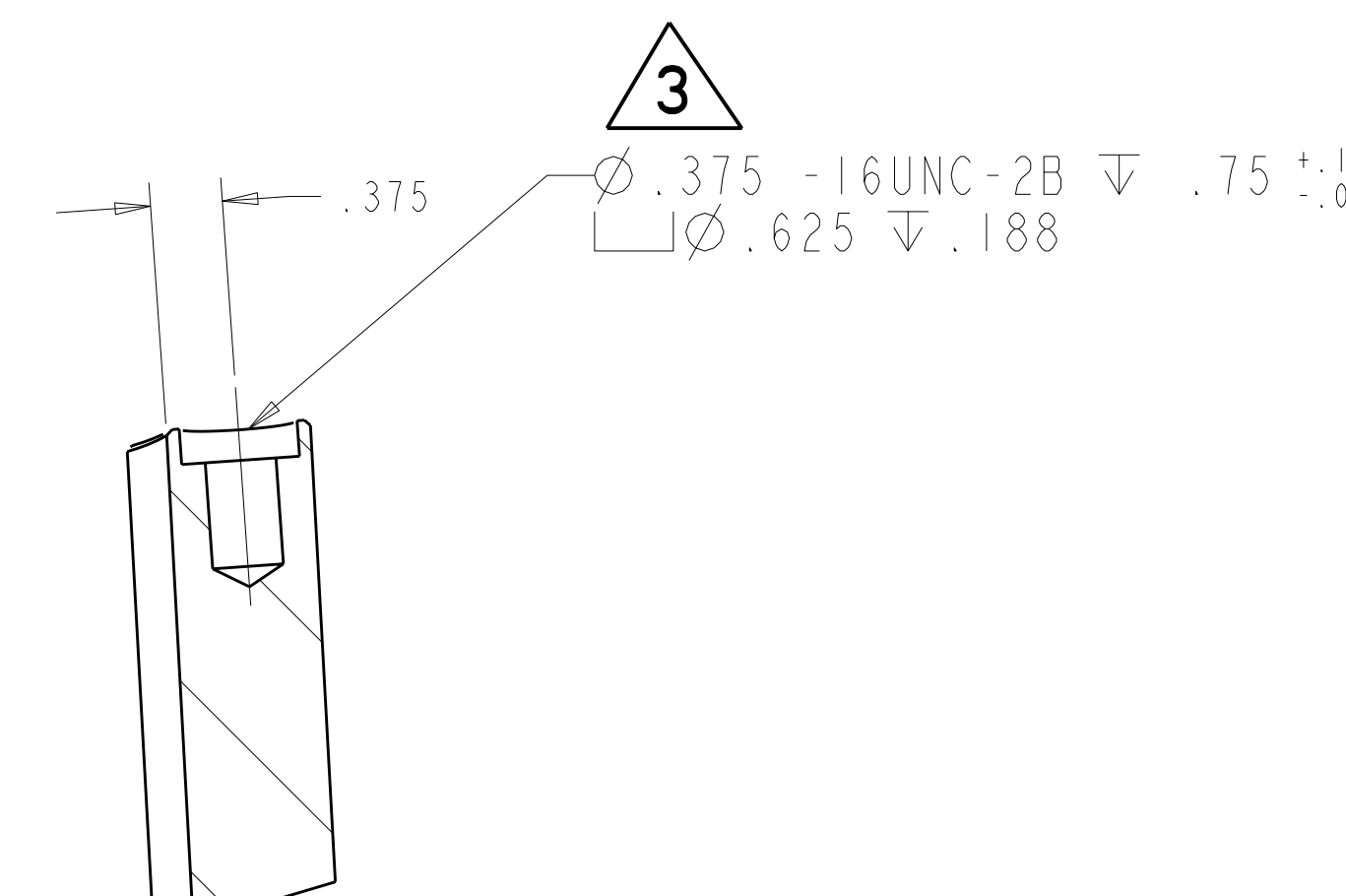
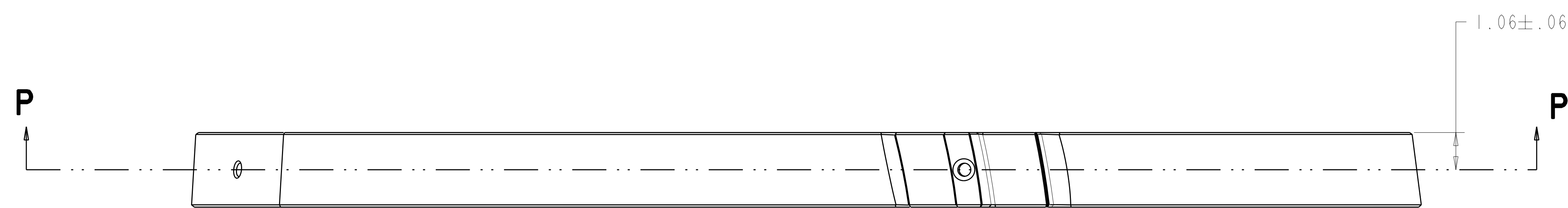
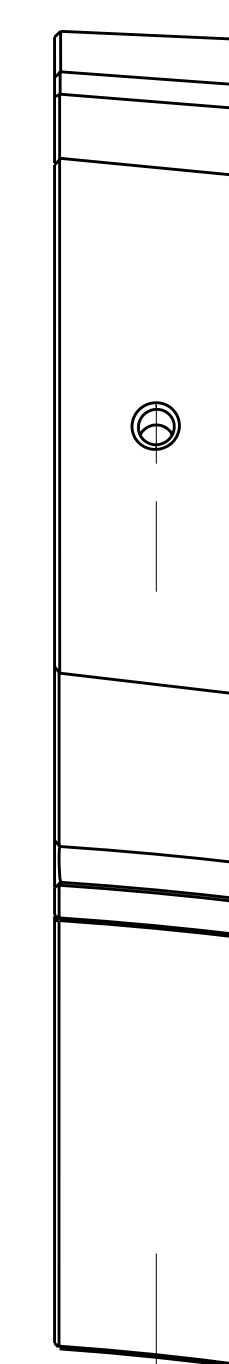
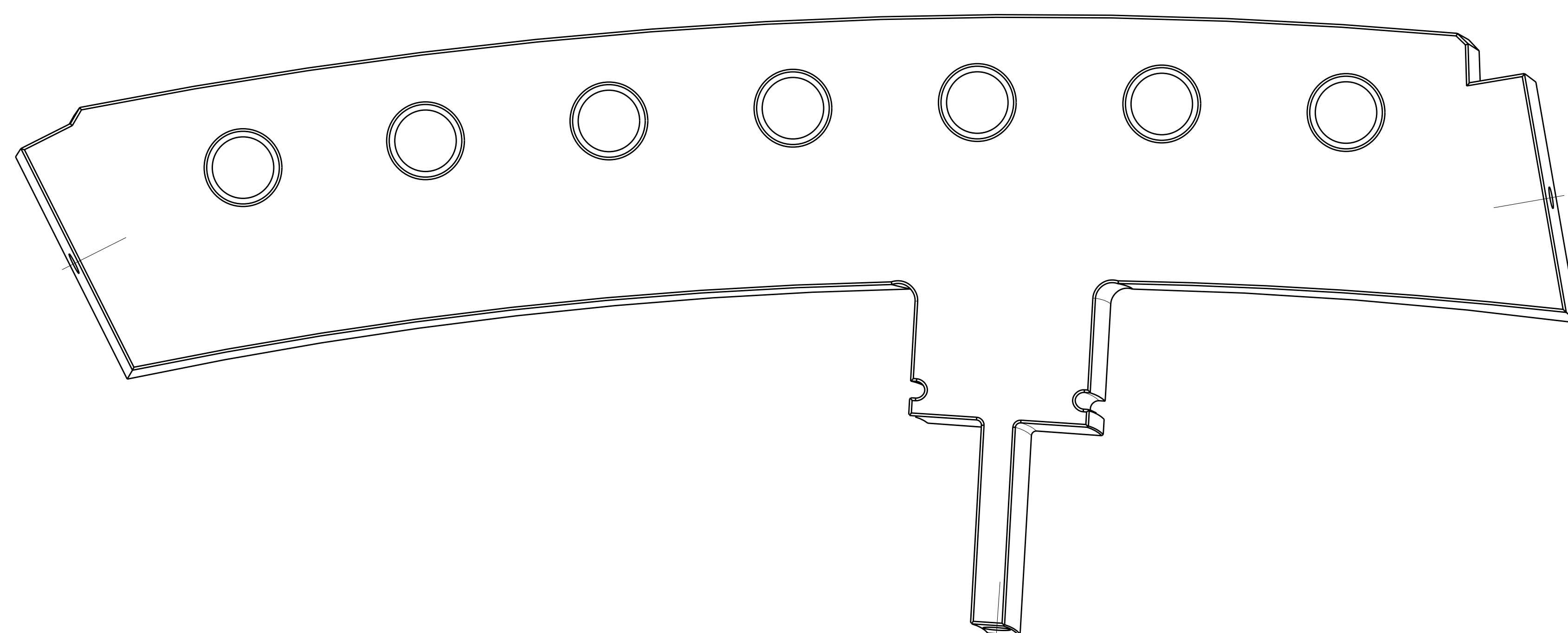
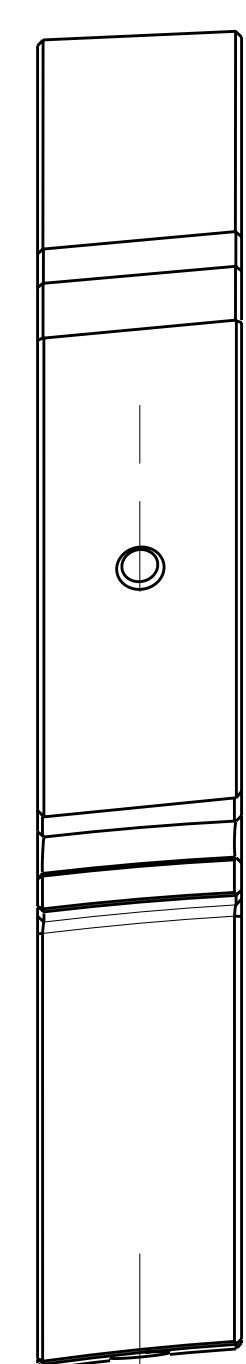
Oak Ridge National Laboratory managed for the DEPARTMENT OF ENERGY under U.S. GOVERNMENT contract DE-AC05-00OR22725 UT-BATTELLE, LLC. Oak Ridge, Tennessee

**UT-BATTELLE**

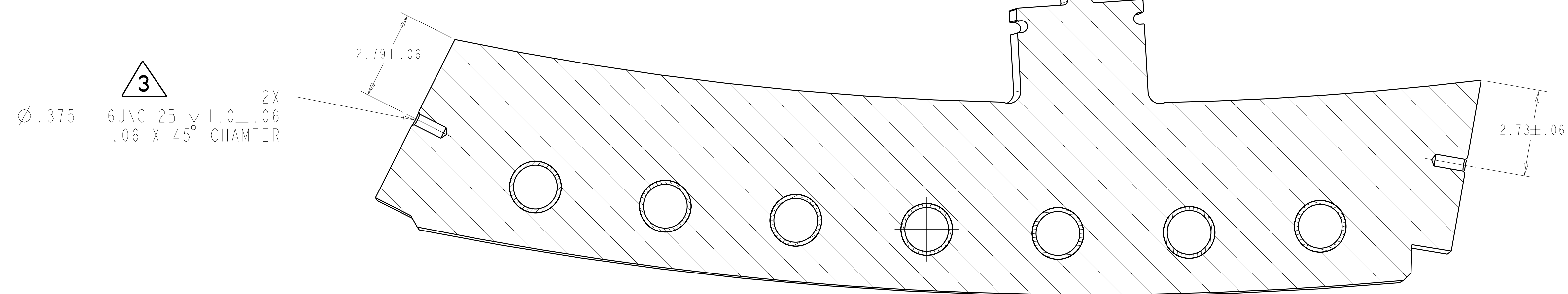
NATIONAL COMPACT STELLARATOR EXPERIMENT

POL BREAK SHIM ASSEMBLY TYPE-B

SE141-058



**DETAIL A**  
SCALE 1.00



**SECTION P-P**

**RELEASED FOR  
FABRICATION / INSTALLATION**  
PPPL Drafting:

Oak Ridge National Laboratory managed for the DEPARTMENT OF ENERGY under U.S. GOVERNMENT contract DE-AC05-00OR22725 UT-BATTELLE, LLC, Oak Ridge, Tennessee PROJECT NAME:						
<b>NATIONAL COMPACT STELLARATOR EXPERIMENT</b>						
POL BREAK SHIM ASSEMBLY TYPE-B						
VERSION NO.	PLANT	BLDG	FL	SHT OF	TYPE	CLASS
6	X-10	5700	3	2	2	S U
RELEASE LEVEL		SE141-058			REV	
Fabrication					3	