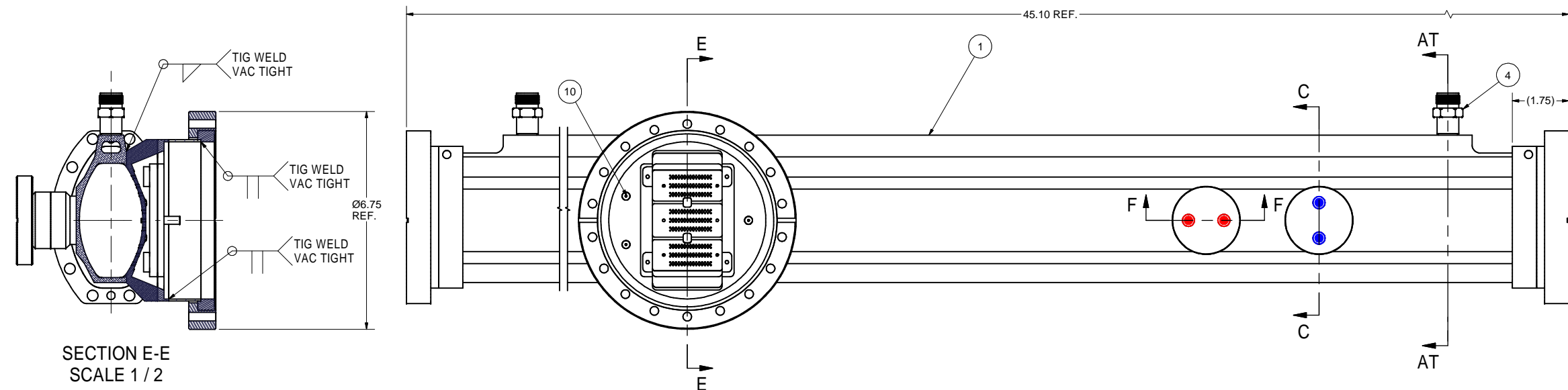
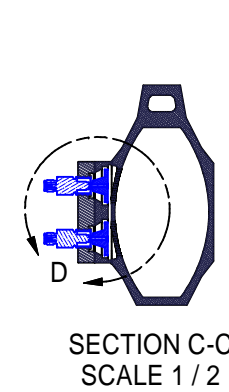


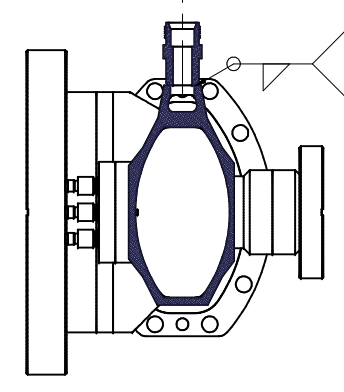
REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A	B-2	REVISED PART 5 DESCRIPTION IN BOM, TO MAKE IT CLEARER	2/11/09	Y.LI
B	B6	Added fillet at bottom of BPM pocket in item 1.	2/19/09	TIO
C		Added a new part #11	3/13/09	Y.LI
D		Revised welding note at Detail View D	3/16/09	Y.LI



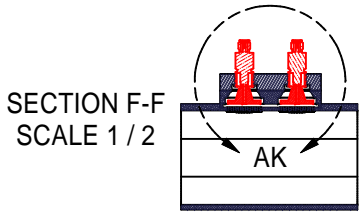
SECTION E-E
SCALE 1/2



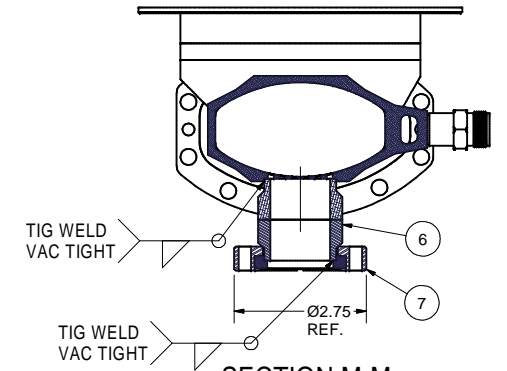
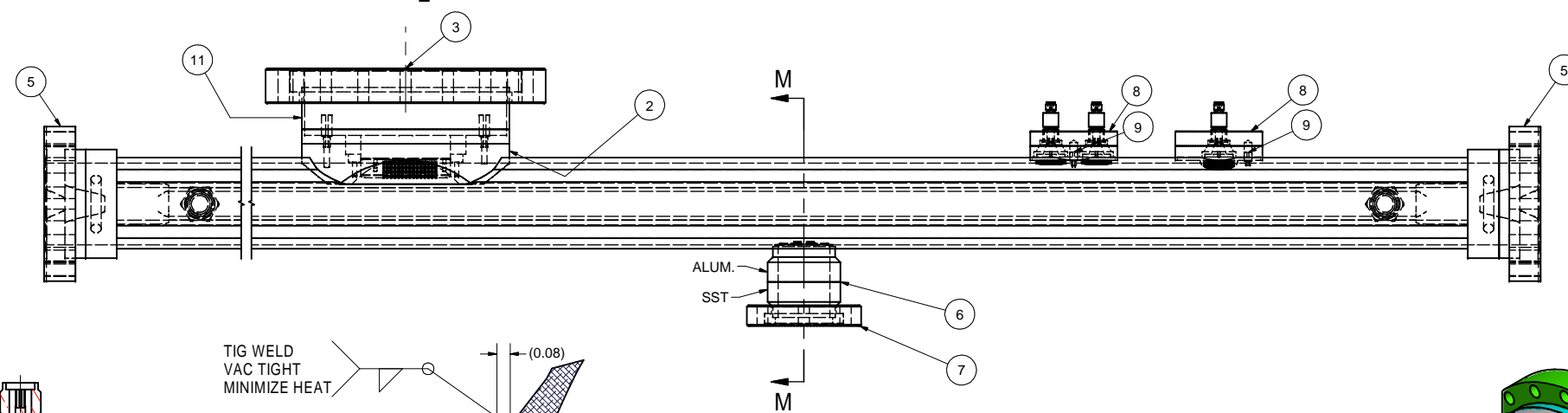
SECTION C-C
SCALE 1/2



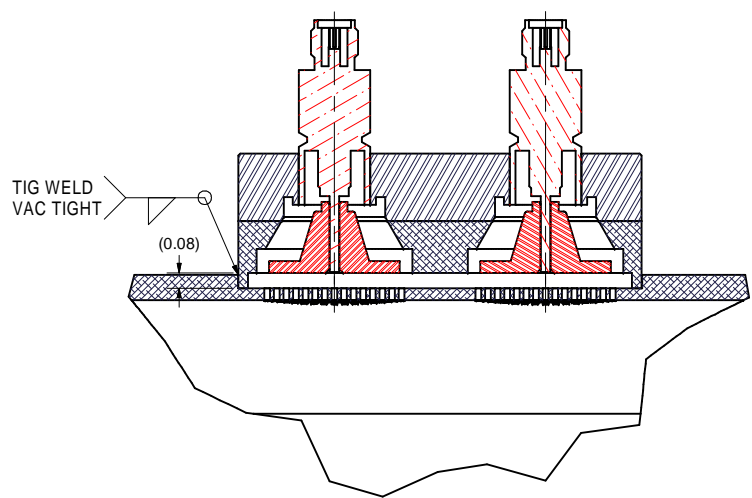
SECTION AT-AT
SCALE 1/2



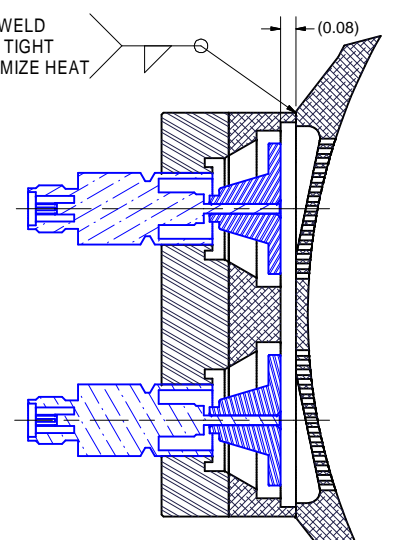
SECTION F-F
SCALE 1/2



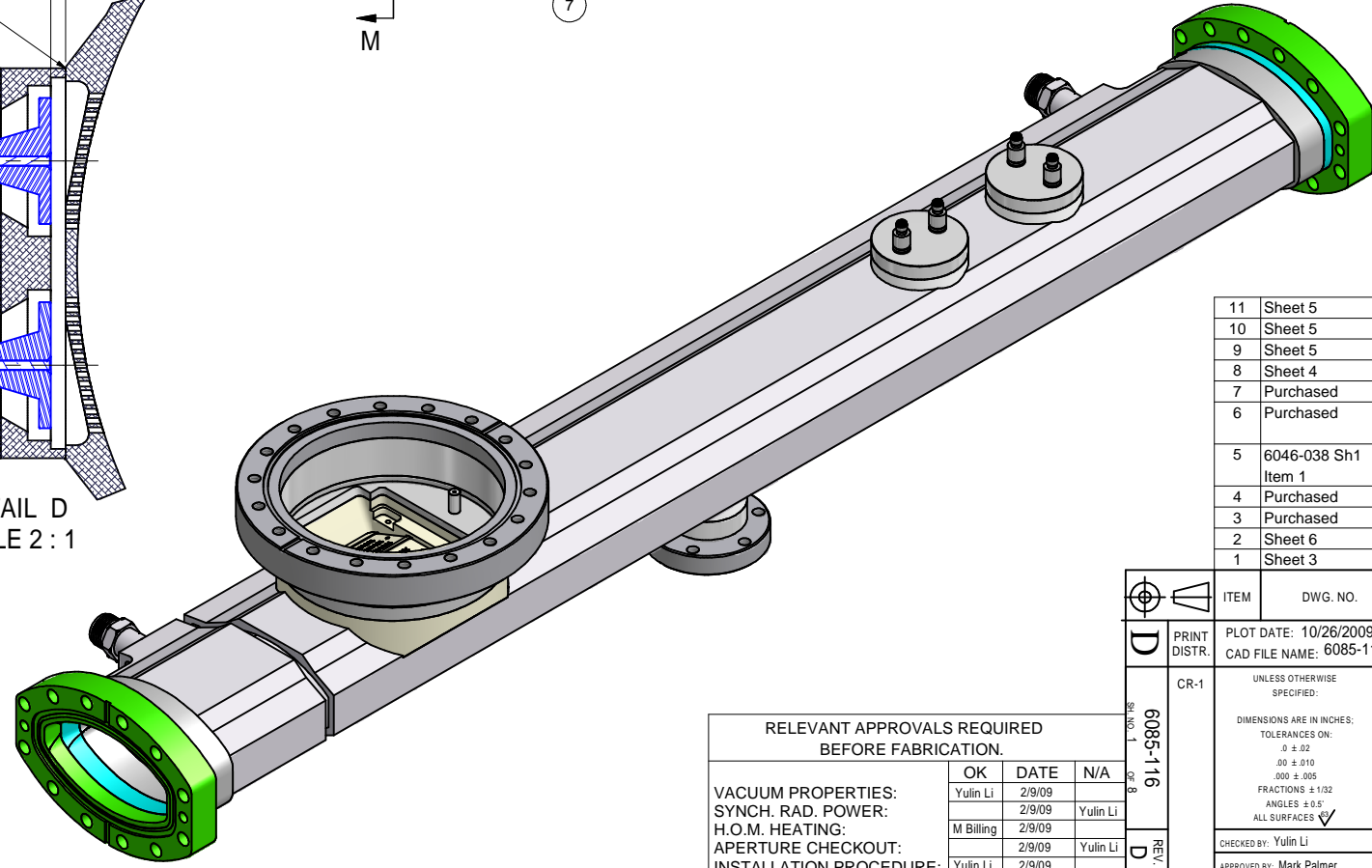
SECTION M-M
SCALE 1/2



DETAIL AK
SCALE 2:1



DETAIL D
SCALE 2:1



ITEM	DWG. NO.	DESCRIPTION	Q1	Q2	Q3	REMARKS	REV.
11	Sheet 5	5" RFA Port Extend Tube	1				
10	Sheet 5	1/4" Pin	3				
9	Sheet 5	3/16" Pin	2				
8	Sheet 4	Pickup Button Asm	2				
7	Purchased	F02750150RCE	1				
6	Purchased	Gauge Port SST_Ai Tube	1			Thermionics P/N ATS-150	
5	6046-038 Sh1 Item 1	CESR Oval Flange Asm, MK II	2			USE Pt 3 & 5 of 6046-038	
4	Purchased	Alum Water Fitting, 1/2"	2				
3	Purchased	F06750500RT	1				
2	Sheet 6	RFA Housing	1				
1	Sheet 3	CESR Extrusion	1				

RELEVANT APPROVALS REQUIRED BEFORE FABRICATION.			
	OK	DATE	N/A
VACUUM PROPERTIES:			
SYNCH. RAD. POWER:	Yulin Li	2/9/09	
H.O.M. HEATING:	M Billing	2/9/09	Yulin Li
APERTURE CHECKOUT:	Yulin Li	2/9/09	
INSTALLATION PROCEDURE:	Yulin Li	2/9/09	

PRINT DISTR. CR-1 6085-116

PLOT DATE: 10/26/2009
CAD FILE NAME: 6085-116 CESR Drift Pipe for Carbon Coating.idw

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES:
TOLERANCES ON:
.0 ± .02
.00 ± .010
.000 ± .005
FRACTIONS ± 1/32
ANGLES ± 0.5°
ALL SURFACES

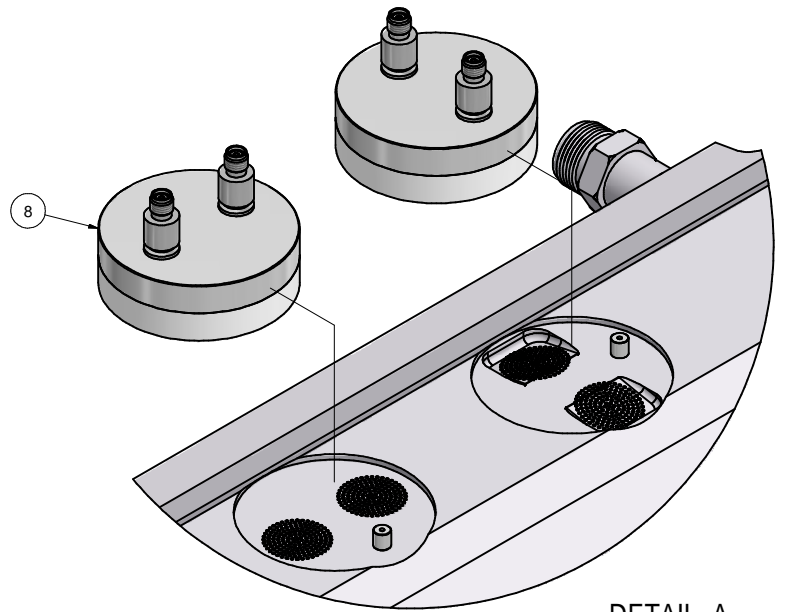
CORNELL UNIVERSITY
LEPP
LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS

CORNELL UNIVERSITY
Floyd R. Newman Laboratory
Ithaca, NY 14853

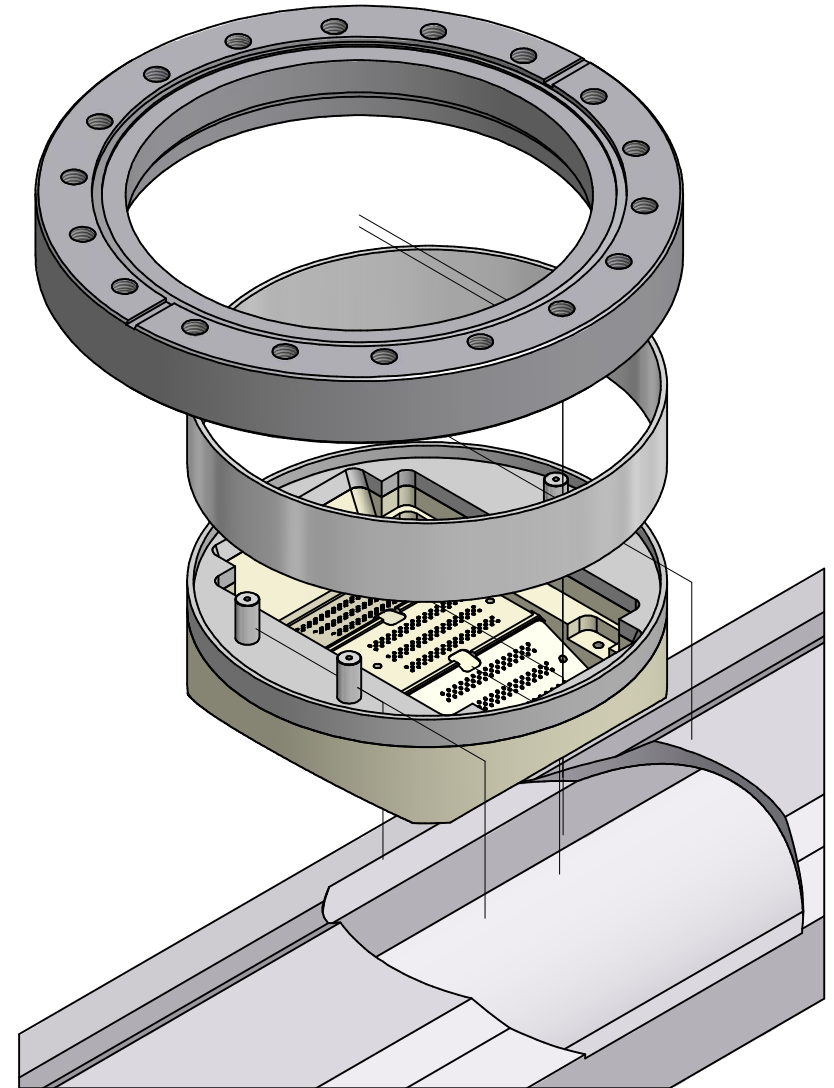
CESR Drift Beampipe for Carbon Coating Assembly

CHECKED BY: Yulin Li	DRAWN BY: TMK	DRAWN FOR: Y. Li	DATE: 1/25/2009	SCALE: D	6085-116 SH. NO. 1 OF 8	REV. D
APPROVED BY: Mark Palmer						

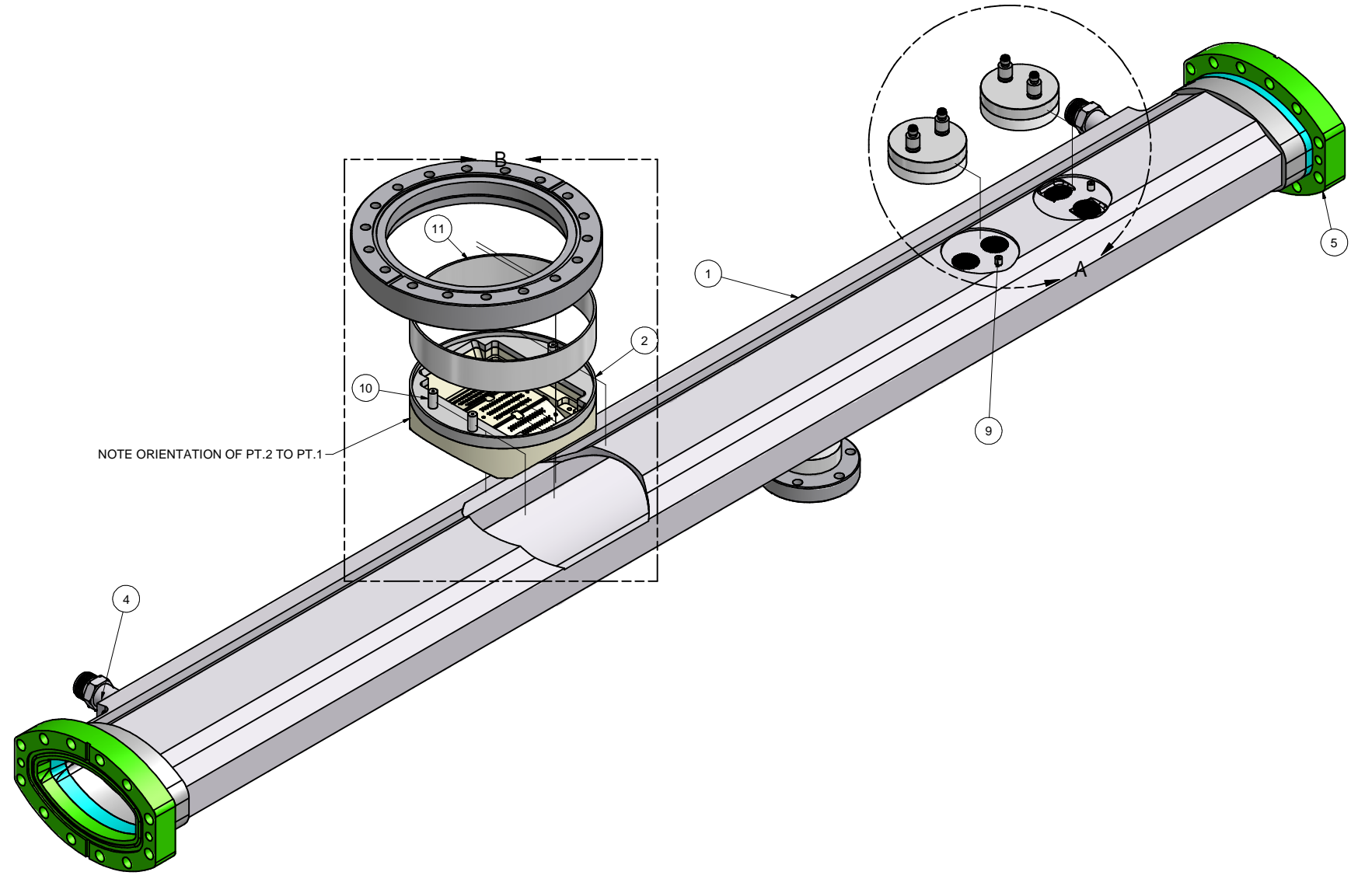
REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A		Added a new part #11	3/13/09	Y.LI



DETAIL A
SCALE 1:1



DETAIL B
SCALE 1:1

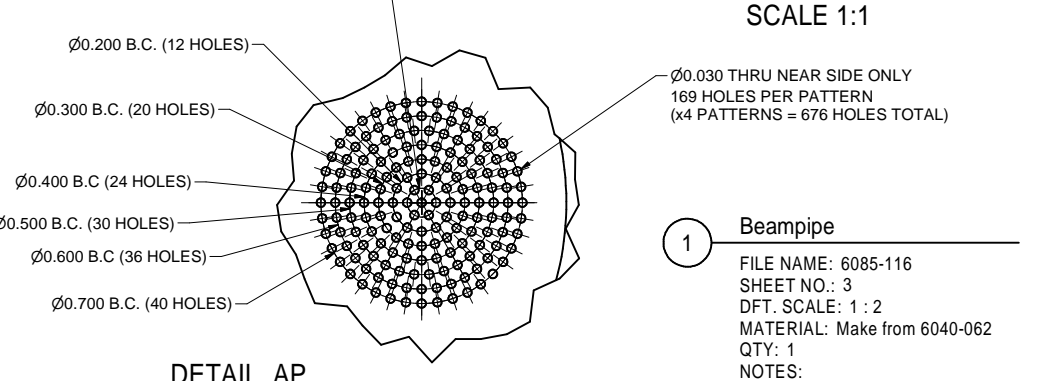
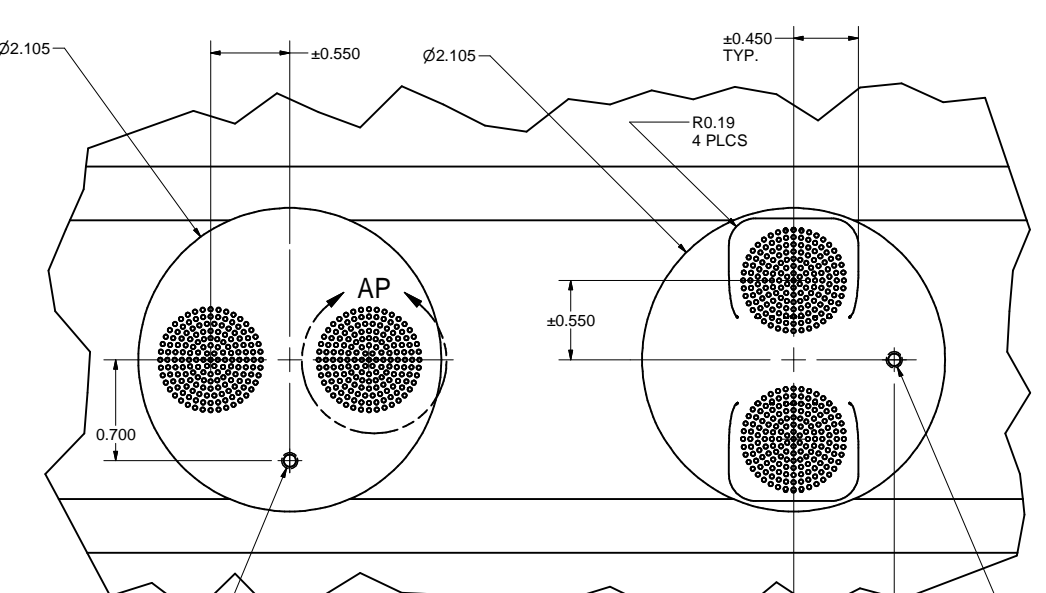
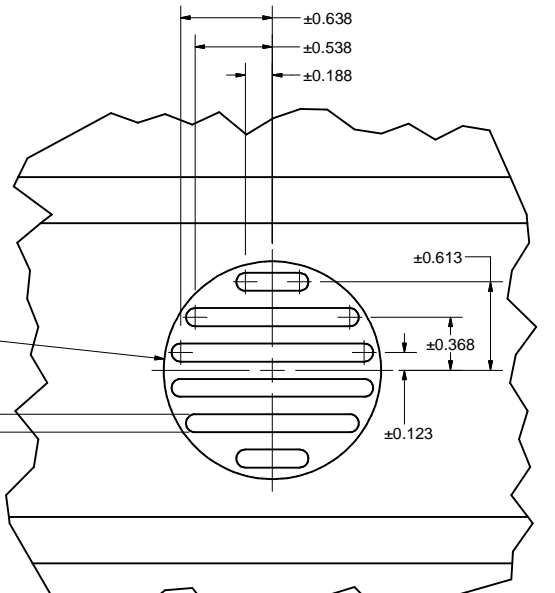
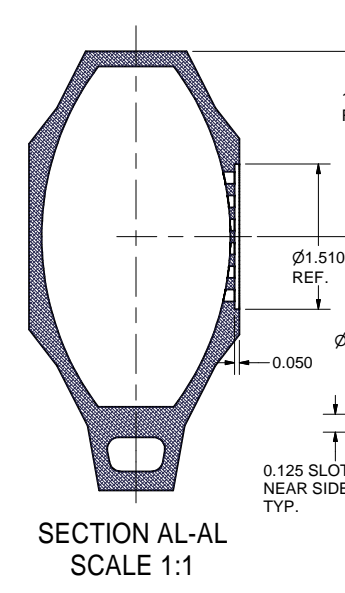
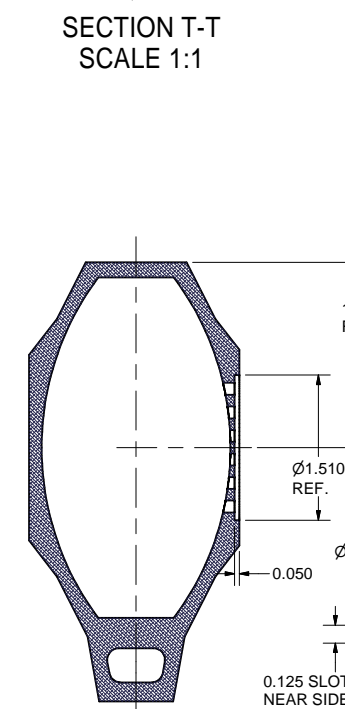
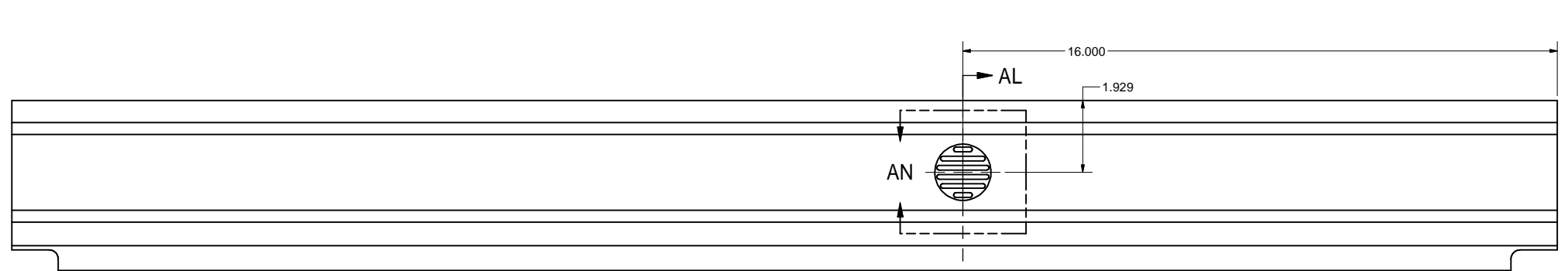
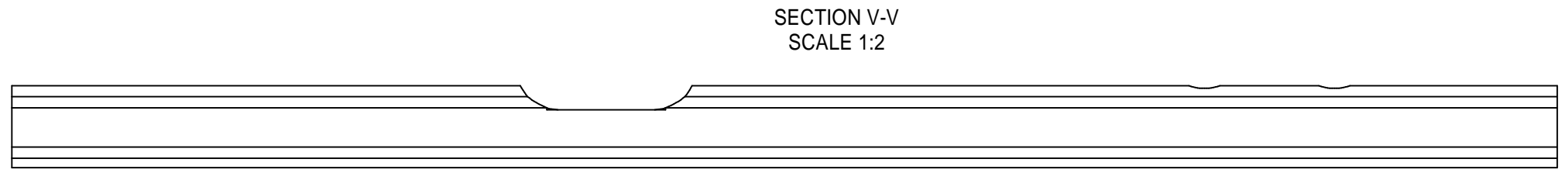
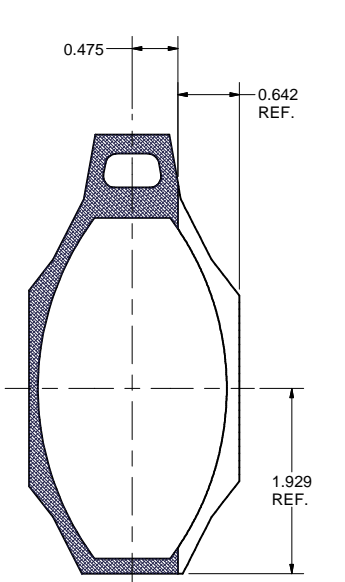
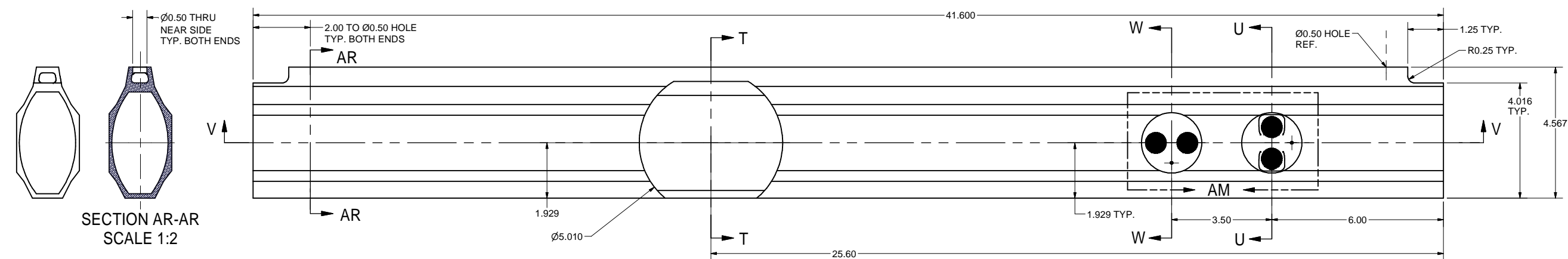


NOTE ORIENTATION OF PT.2 TO PT.1

ITEM	DWG. NO.	DESCRIPTION	QTY	REMARKS	REV.
11	Sheet 5	5" RFA Port Extend Tube	1		
10	Sheet 5	1/4" Pin	3		
9	Sheet 5	3/16" Pin	2		
8	Sheet 4	Pickup Button Asm	2		
7	Purchased	F02750150RCE	1		
6	Purchased	Gauge Port SST_Al Tube	1	Thermionics P/N	
5	6046-038 Sh1 Item 1	CESR Oval Flange Asm, MK II	2	ATS-150 USE Pt 3 & 5 of 6046-038	
4	Purchased	Alum Water Fitting, 1/2"	2		
3	Purchased	F06750500RT	1		
2	Sheet 6	RFA Housing	1		
1	Sheet 3	CESR Extrusion	1		

	PRINT	PLOT DATE: 10/26/2009		CORNELL UNIVERSITY LEPP LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853	SCALE D	DATE 1/25/2009	DRAWN FOR Y. Li	DRAWN BY TMK	CHECKED BY: Yulin Li APPROVED BY: Mark Palmer	REV. A
	DISTR.	CAD FILE NAME: 6085-116 CESR Drift Pipe for Carbon Coating.idw								
6085-116 REV. A		UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .0 ± .02 .00 ± .010 .000 ± .005 FRACTIONS ± 1/32 ANGLES ± 0.5° ALL SURFACES		CESR Drift Beampipe for Carbon Coating Exploded View		6085-116 SH. NO. 2 OF 8		REV. A		

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A	D2	Added fillet at bottom of BPM pocket. Added missing dimensions.	2/20/09	TIO

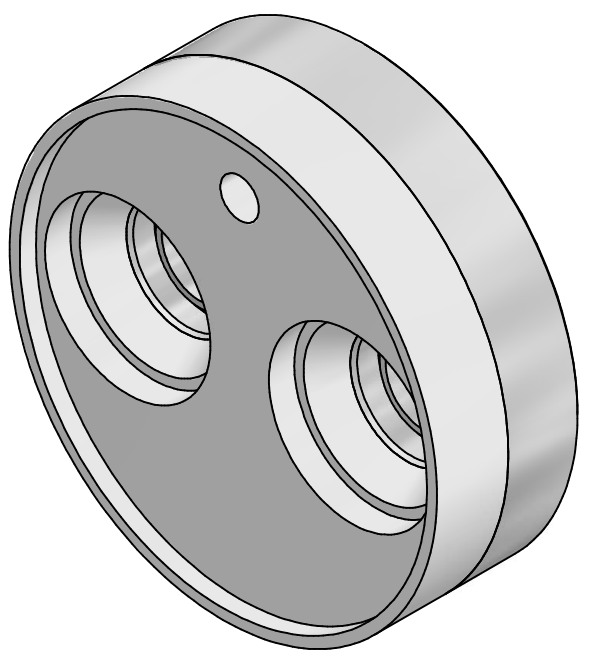
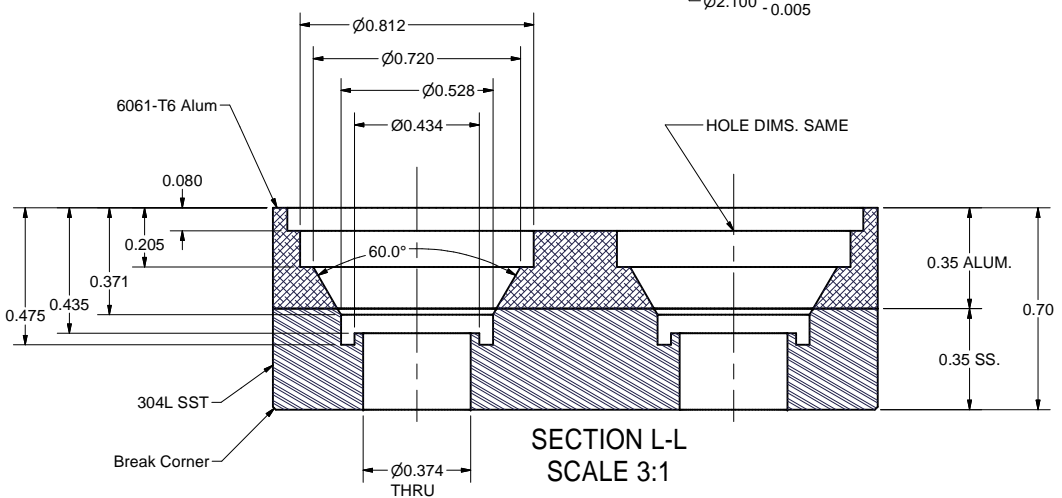
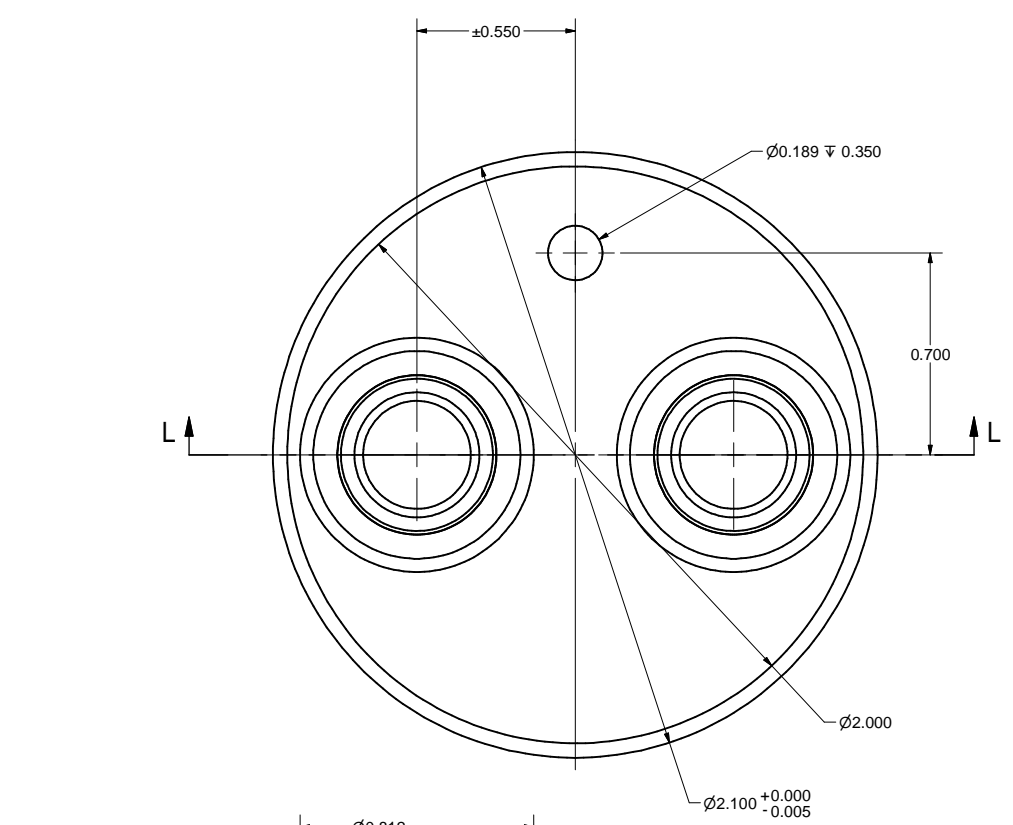
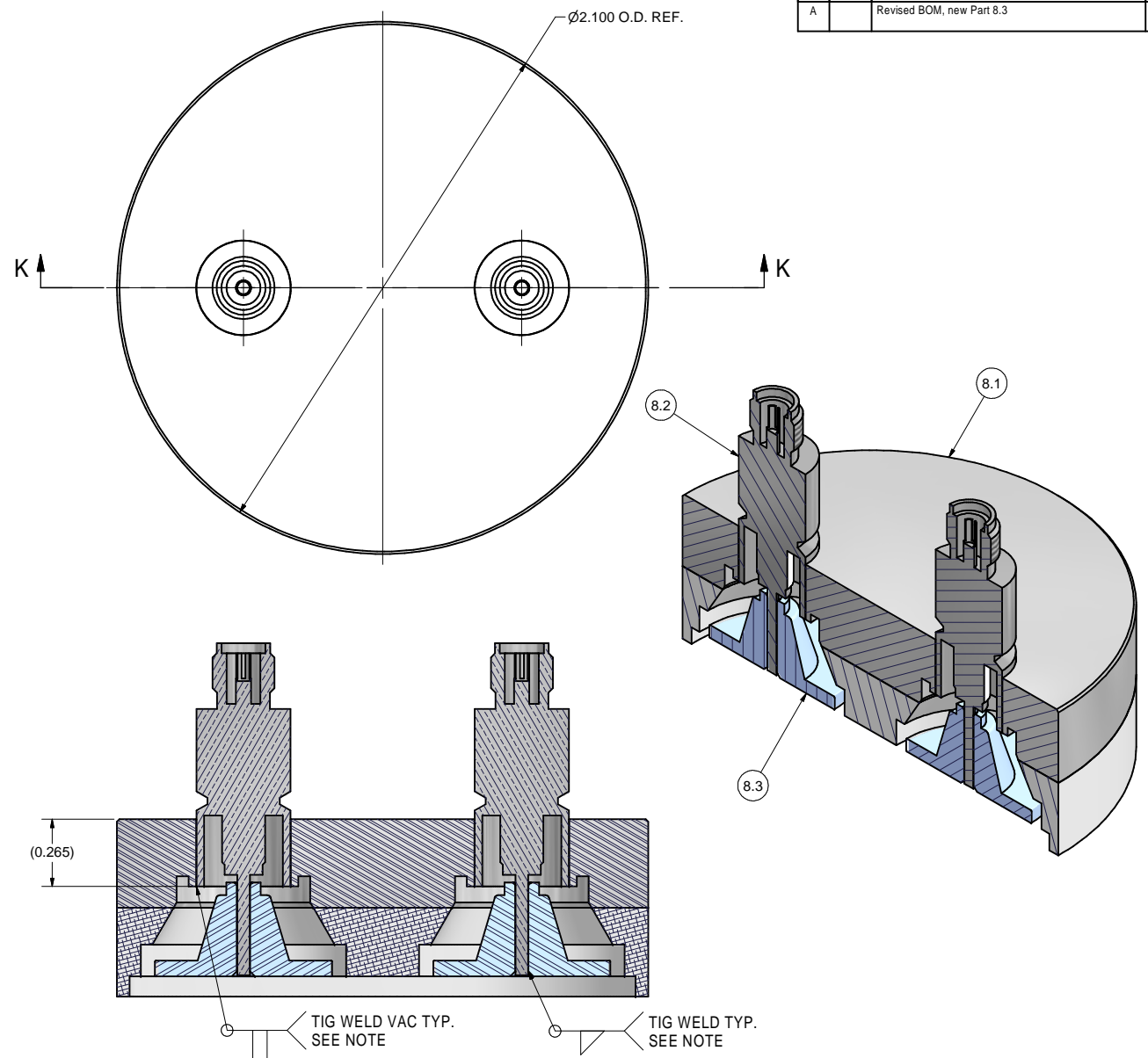


1 Beampipe
 FILE NAME: 6085-116
 SHEET NO.: 3
 DFT. SCALE: 1 : 2
 MATERIAL: Make from 6040-062
 QTY: 1
 NOTES:

DETAIL AP
 SCALE 3 : 1

ITEM	DWG. NO.	DESCRIPTION	QUANTITY			REMARKS	REV.
			G1	G2	G3		
PRINT DISTR.	PLOT DATE: 10/26/2009 CAD FILE NAME: 6085-116 CESR Drift Pipe for Carbon Coating.idw						
CR-1	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .0 ± .02 .00 ± .010 .000 ± .005 FRACTIONS ± 1/32 ANGLES ± 0.5° ALL SURFACES	CORNELL UNIVERSITY LEPP LABORATORY FOR ELEMENTARY PARTICLE PHYSICS	CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853				
6085-116 SH. NO. 3 OF 8		CESR Drift Beampipe for Carbon Coating Beampipe, Detail					
CHECKED BY: Yulin Li APPROVED BY: Mark Palmer	DRAWN BY: TMK DRAWN FOR: Y. Li	DATE: 1/25/2009	SCALE: D	6085-116 SH. NO. 3 OF 8			REV. A

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A		Revised BOM, new Part 8.3	3/16/09	Y.LI



SCALE 3:1

SECTION K-K
SCALE 3:1

SECTION L-L
SCALE 3:1

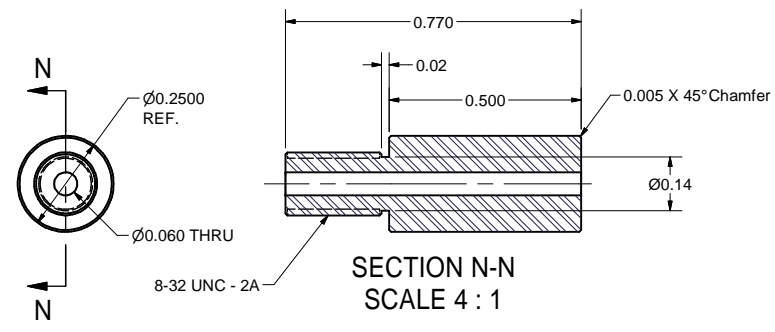
8 Pickup Button Asm
 FILE NAME: 6085-116
 SHEET NO.: 4
 DFT. SCALE: 2 : 1
 MATERIAL: As Noted
 QTY: 2 PER ASM
 NOTES: FOR THIS ASM. USE 6085-021, PT.11 AND
 IT'S ASM STEPS AND ALSO 6085-060, PTS. 5+6

8.1 Button Housing
 FILE NAME: 6085-116
 SHEET NO.: 4
 DFT. SCALE: 3:1
 MATERIAL: Explosion Bonded Alum/SST
 QTY: 1 PER SUB-ASM
 NOTES: 1) Thermal cycle the finished part between 150C and Room
 Temperature three times
 2) Leak check the thermal cycled part to ensure leak-tightness
 through the bonding zone

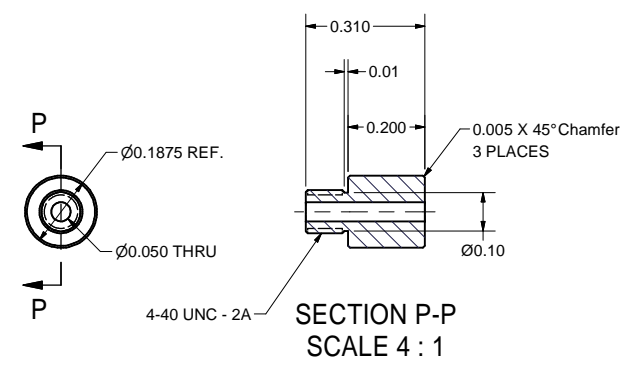
ITEM	DWG. NO.	DESCRIPTION	QUANTITY			REMARKS	REV.
			G1	G2	G3		
8.3	Sheet 5	BPM BUTTON Modified	2				
8.2	Purchased	SMA Connector Feedthrough	2			SST's #FA10638	
8.1	Sheet 4	Button Housing	1				

D	PRINT	PLOT DATE: 10/26/2009		CORNELL UNIVERSITY FLOYD R. NEWMAN LABORATORY ITHACA, NY 14853	CORNELL UNIVERSITY FLOYD R. NEWMAN LABORATORY ITHACA, NY 14853		
	DISTR.	CAD FILE NAME: 6085-116 CESR Drift Pipe for Carbon Coating.idw					
6085-116	CR-1	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .0 ± .02 .001 ± .010 FRACTIONS ± 1/32 ANGLES ± 0.5° ALL SURFACES	CESR Drift Beampipe for Carbon Coating Pickup Button, Detail and Asm				
	REV.	CHECKED BY: Yulin Li APPROVED BY: Mark Palmer				DRAWN BY: TMK	DRAWN FOR: Y. Li

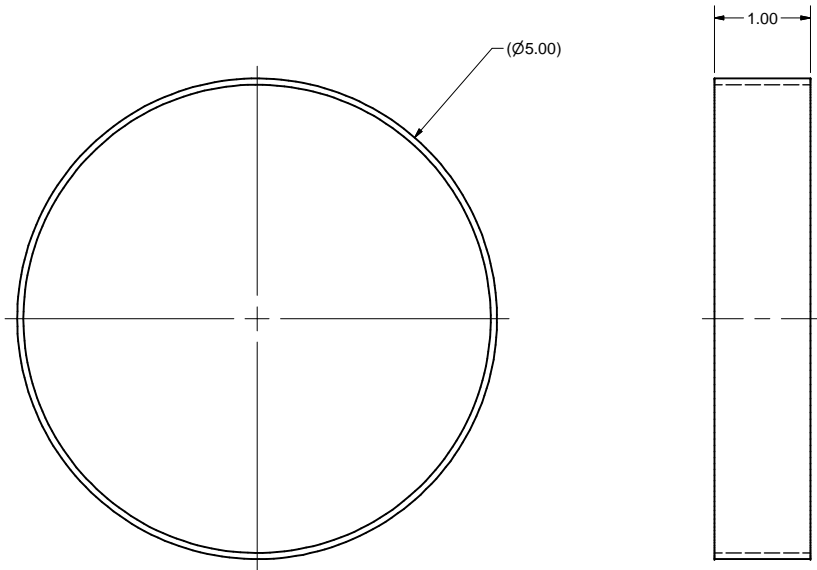
REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A		Added detail for new Part 11	3/13/09	Y.LI
B		Detail for Part 8.3	3/16/09	Y.LI



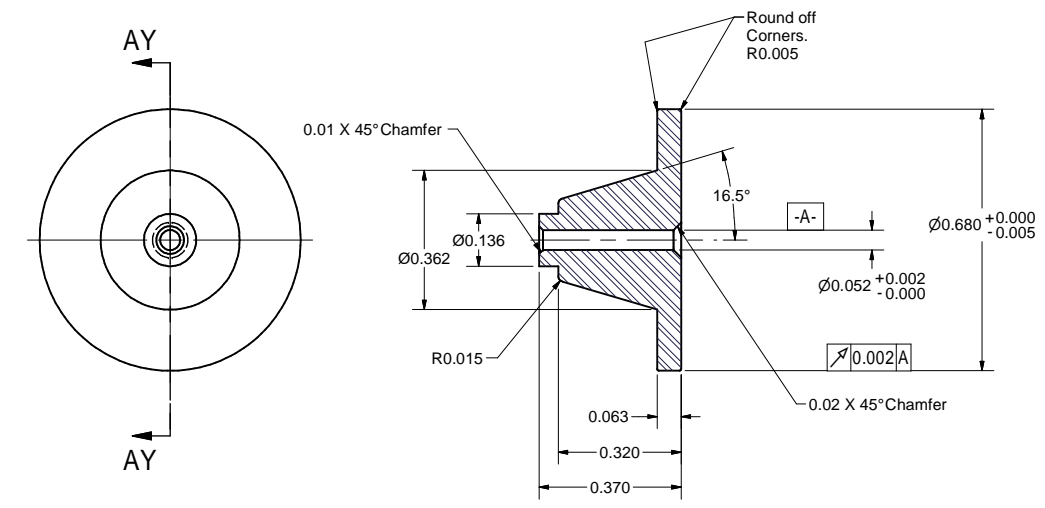
10 1/4" Pin
 FILE NAME: 6085-116
 SHEET NO.: 5
 DFT. SCALE: 4 : 1
 MATERIAL: 302 SST, 1/4" Precision Ground Pin
 QTY: 3
 NOTES:



9 3/16" Pin
 FILE NAME: 6085-116
 SHEET NO.: 5
 DFT. SCALE: 4 : 1
 MATERIAL: 302 SST, 3/16" DIA. Precision Ground Rod
 QTY: 2
 NOTES:



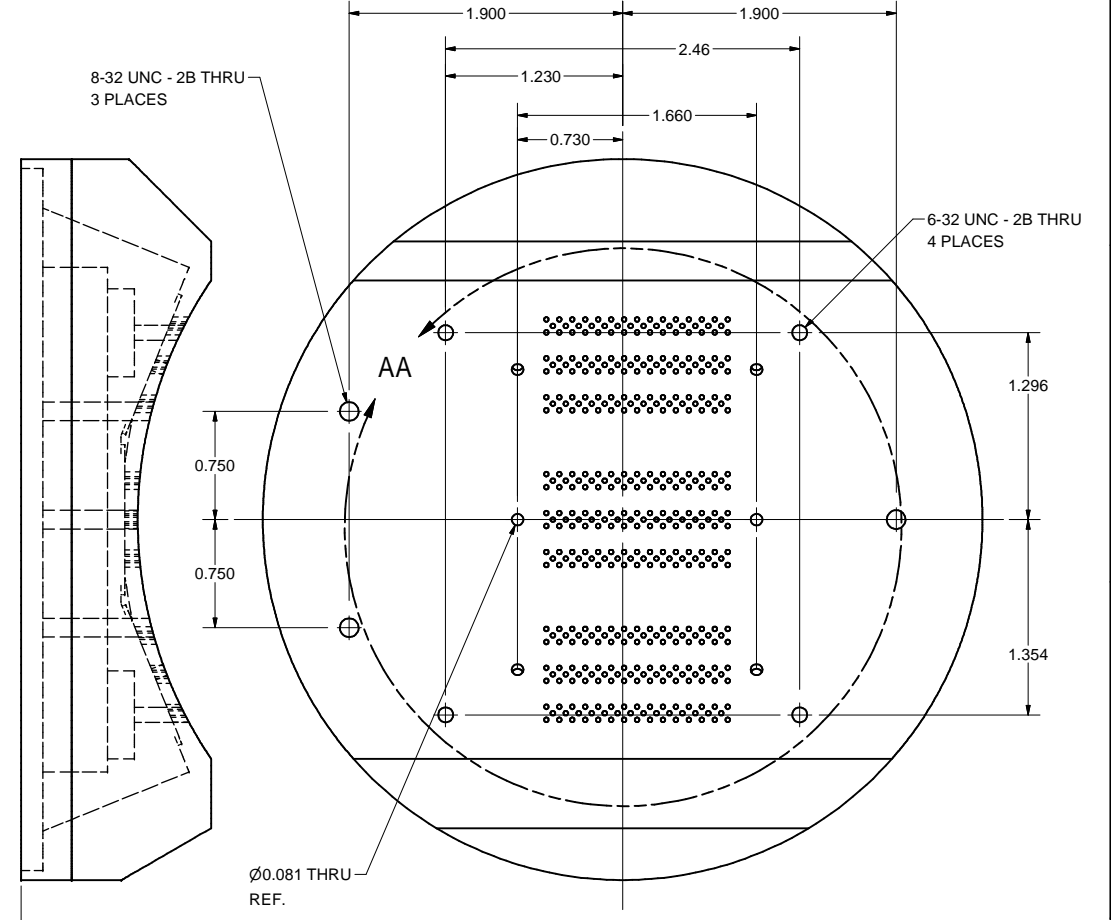
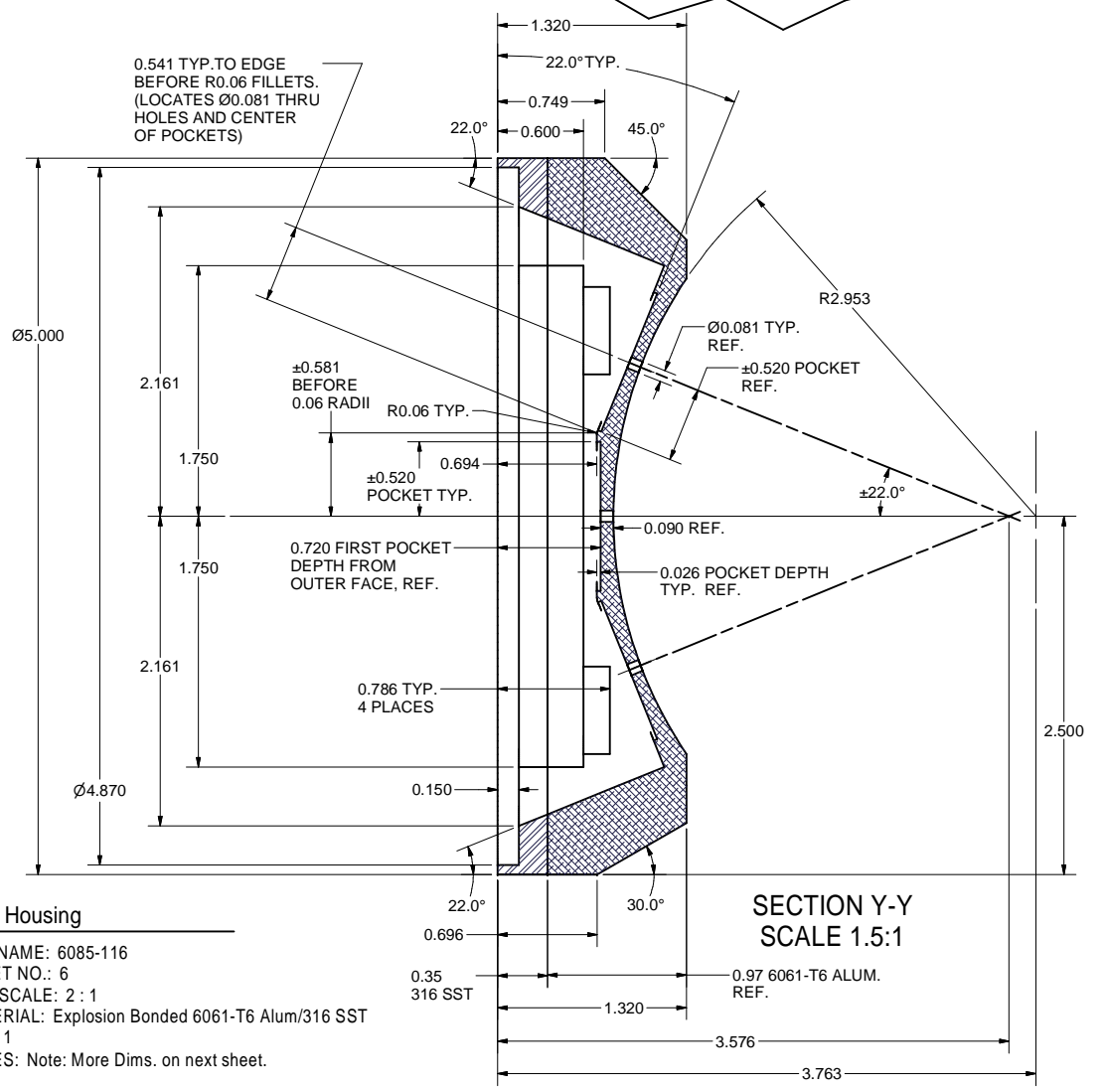
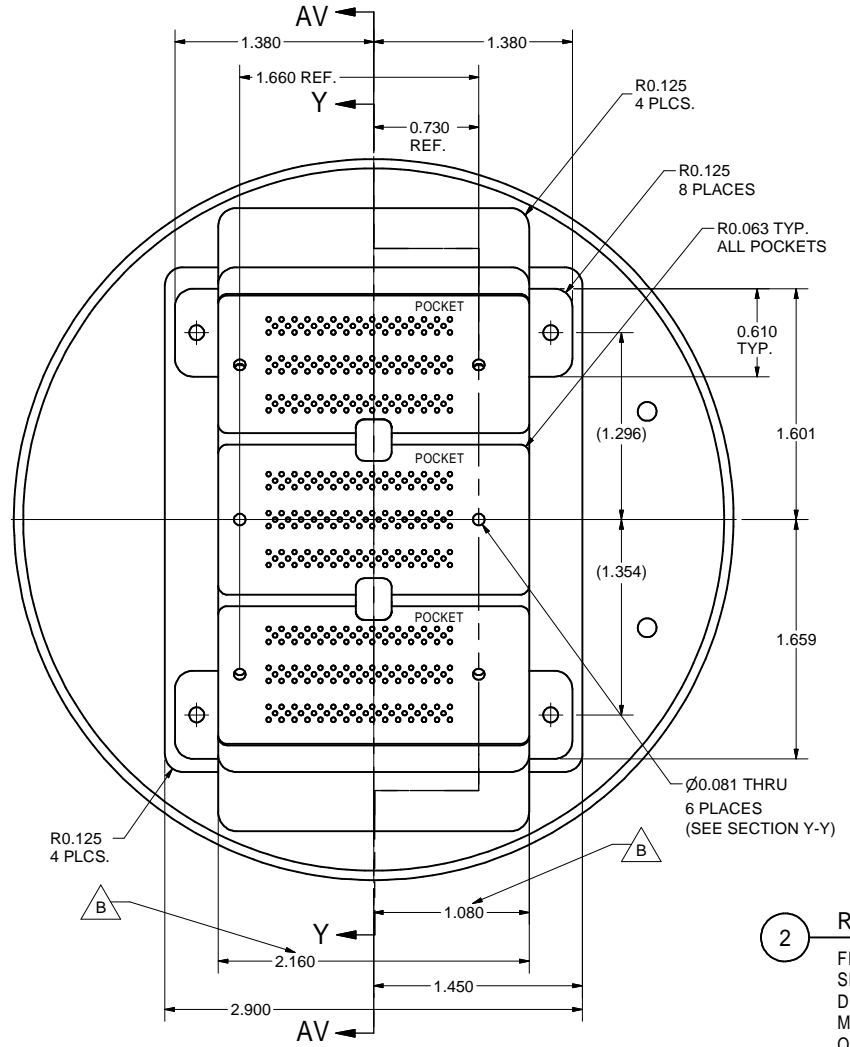
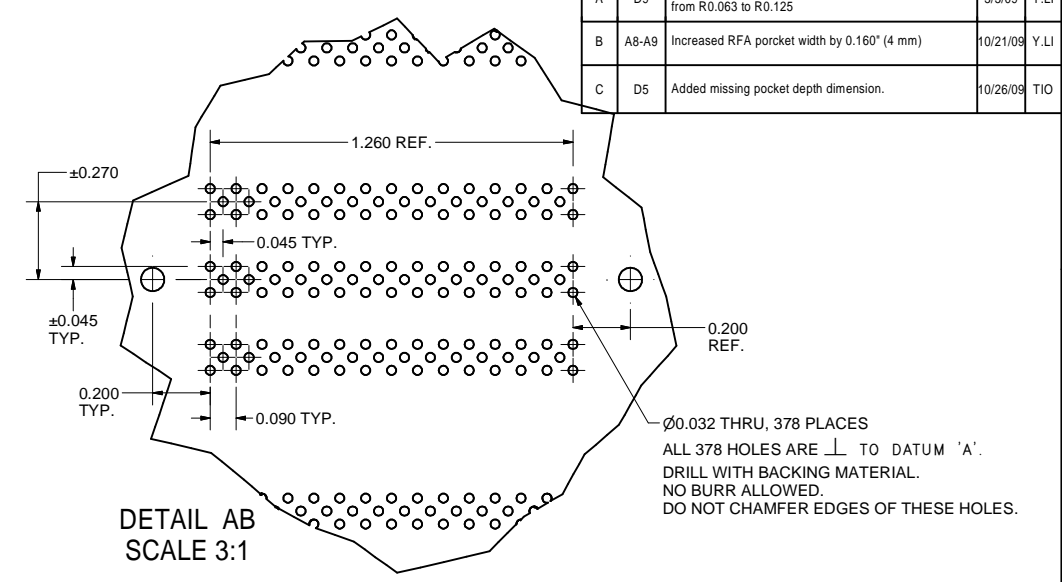
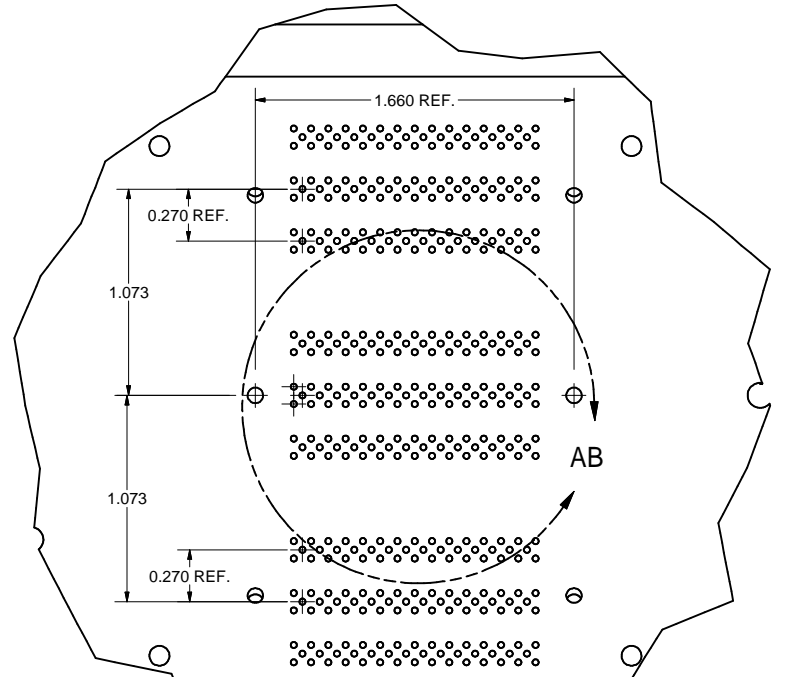
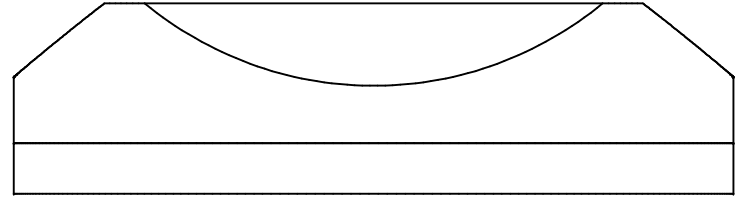
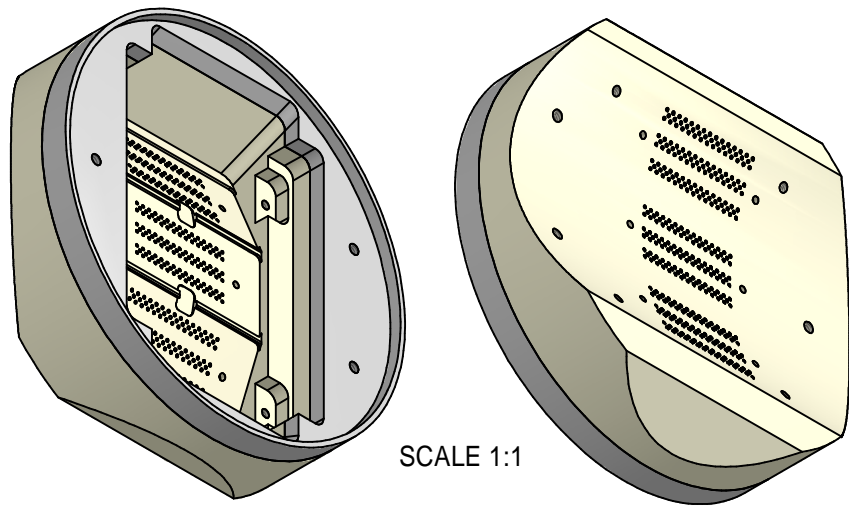
11 5" RFA Port Extension Tube
 FILE NAME: 6085-116
 SHEET NO.: 5
 DFT. SCALE: 1 : 1
 MATERIAL: 304L Tube, 5.00" OD, 0.065" Wall
 QTY: 1 per asm
 NOTES:



8.3 Modified BPM Button
 FILE NAME: 6085-116
 SHEET NO.: 5
 DFT. SCALE: 3 : 1
 MATERIAL: 304L SST
 QTY: 4 per assembly
 NOTES:

ITEM	DWG. NO.	DESCRIPTION	G1	G2	G3	REMARKS	REV.
			QUANTITY				
PRINT DISTR.	PLOT DATE: 10/26/2009 CAD FILE NAME: 6085-116 CESR Drift Pipe for Carbon Coating.idw						
CR-1	6085-116	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .0 ± .02 .000 ± .010 FRACTIONS ± 1/32 ANGLES ± 0.5° ALL SURFACES					CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853
CESR Drift Beampipe for Carbon Coating Small Parts, Details		CHECKED BY: Yulin Li	DRAWN BY: TMK	DRAWN FOR: Y. Li	DATE: 1/25/2009	SCALE: D	6085-116 SH. NO. 5 OF 8
APPROVED BY: Mark Palmer							B

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A	D9	Increased corner radius on the 22 degree slope cuts, from R0.063 to R0.125	3/3/09	Y.LI
B	A8-A9	Increased RFA pocket width by 0.160" (4 mm)	10/21/09	Y.LI
C	D5	Added missing pocket depth dimension.	10/26/09	TIO

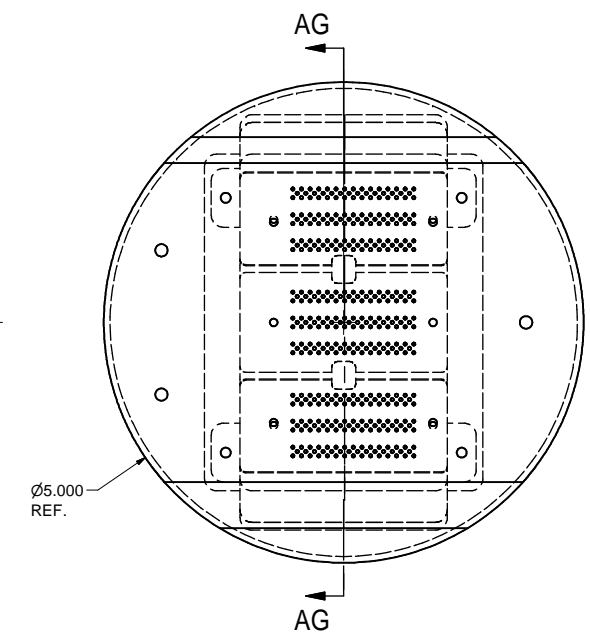
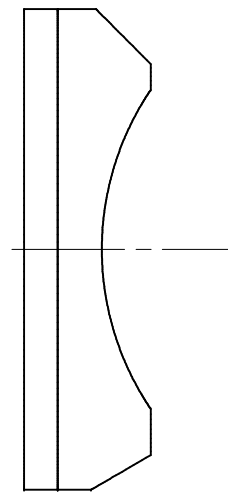
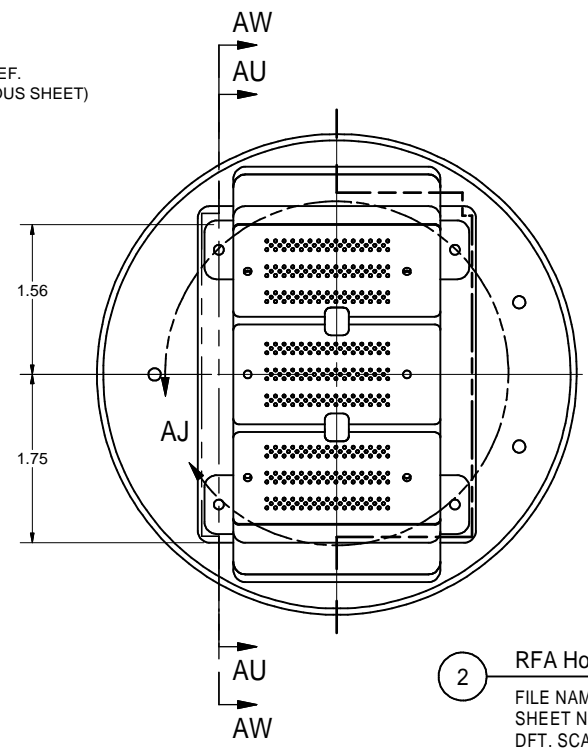
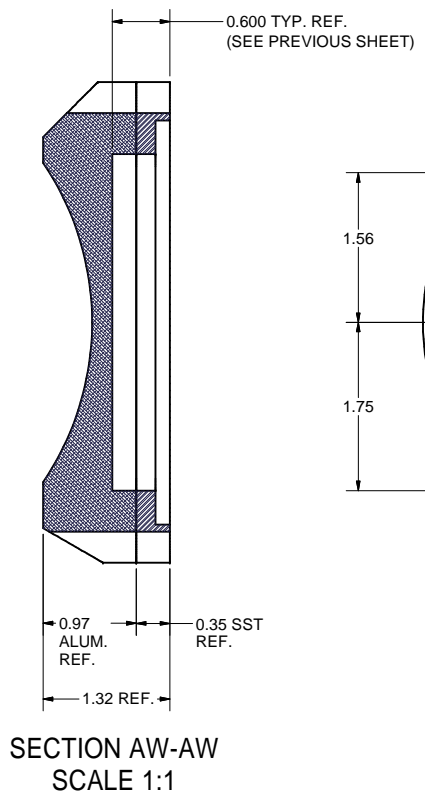
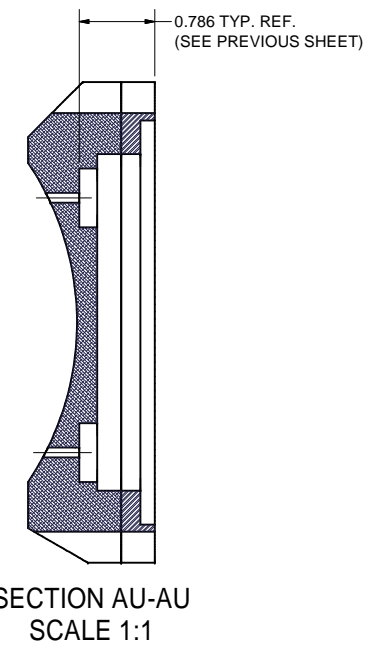
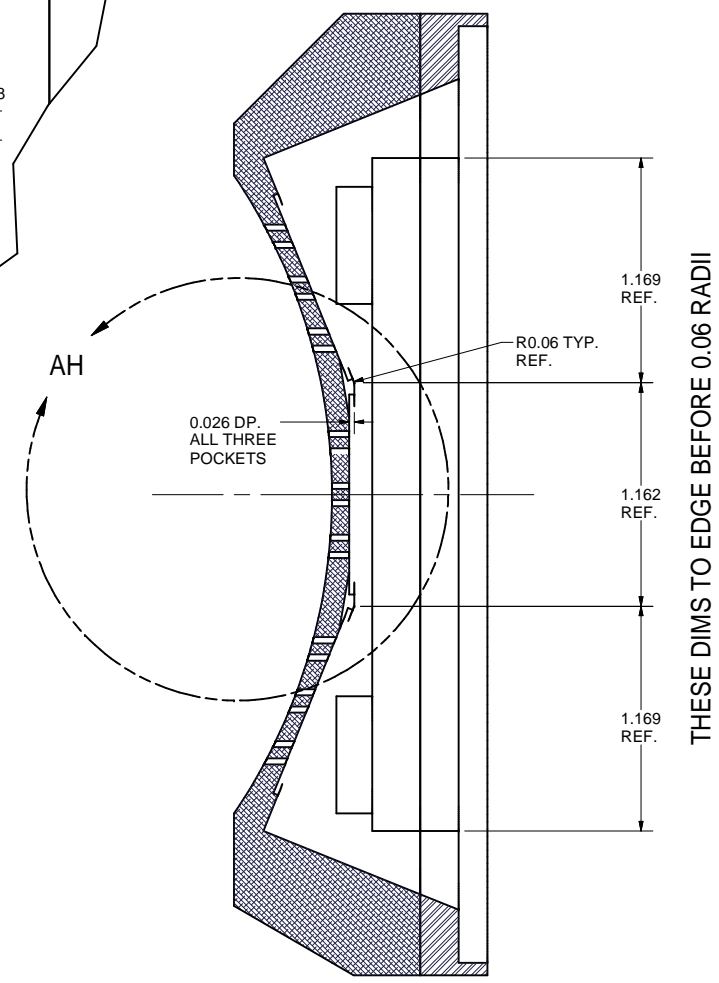
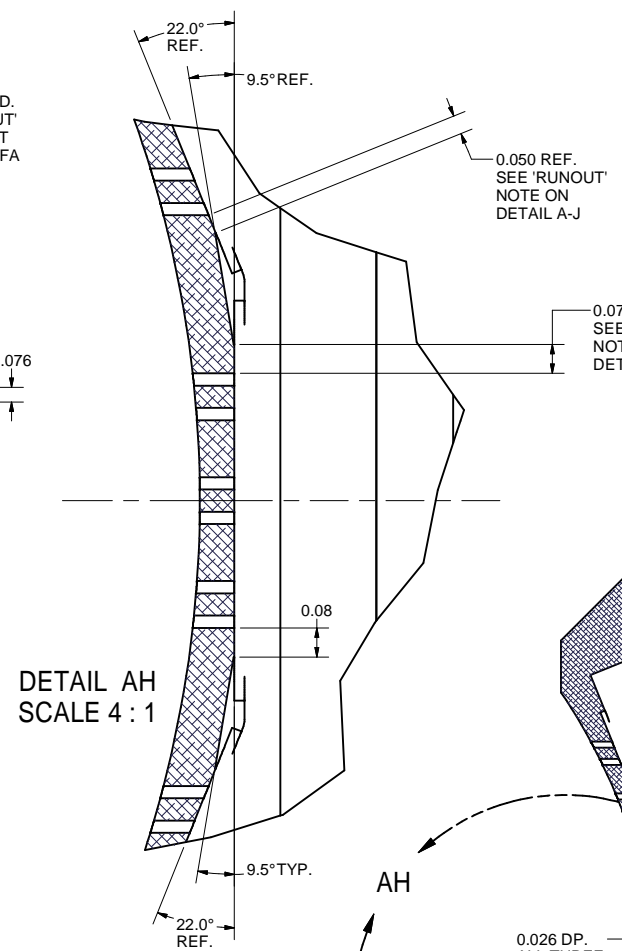
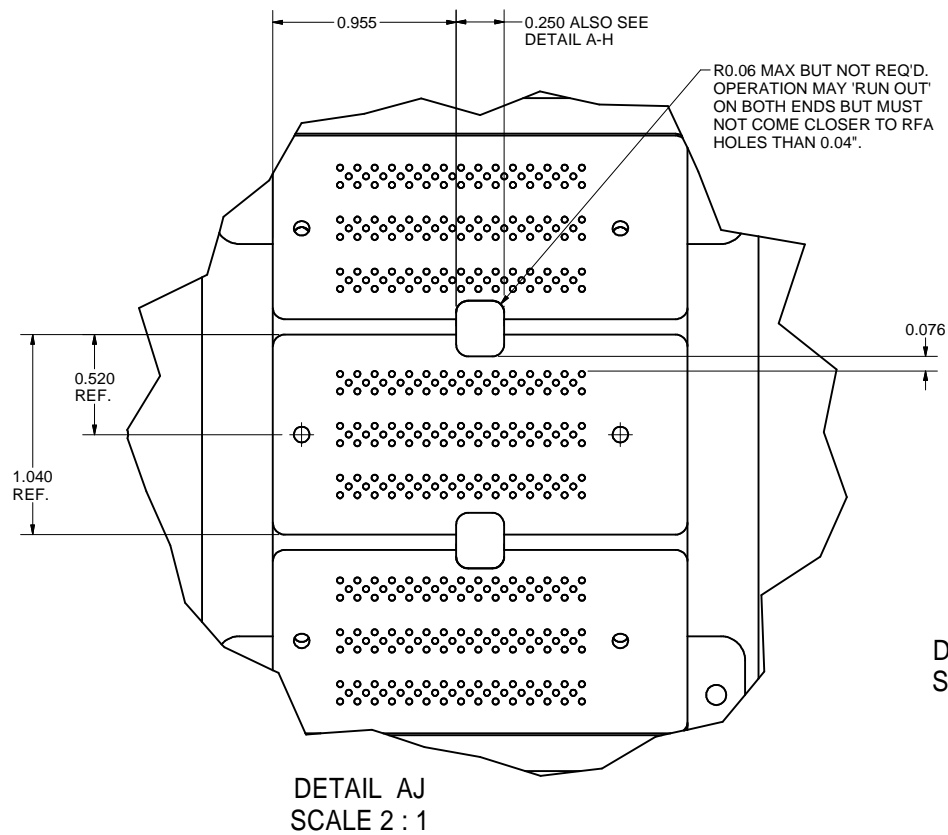
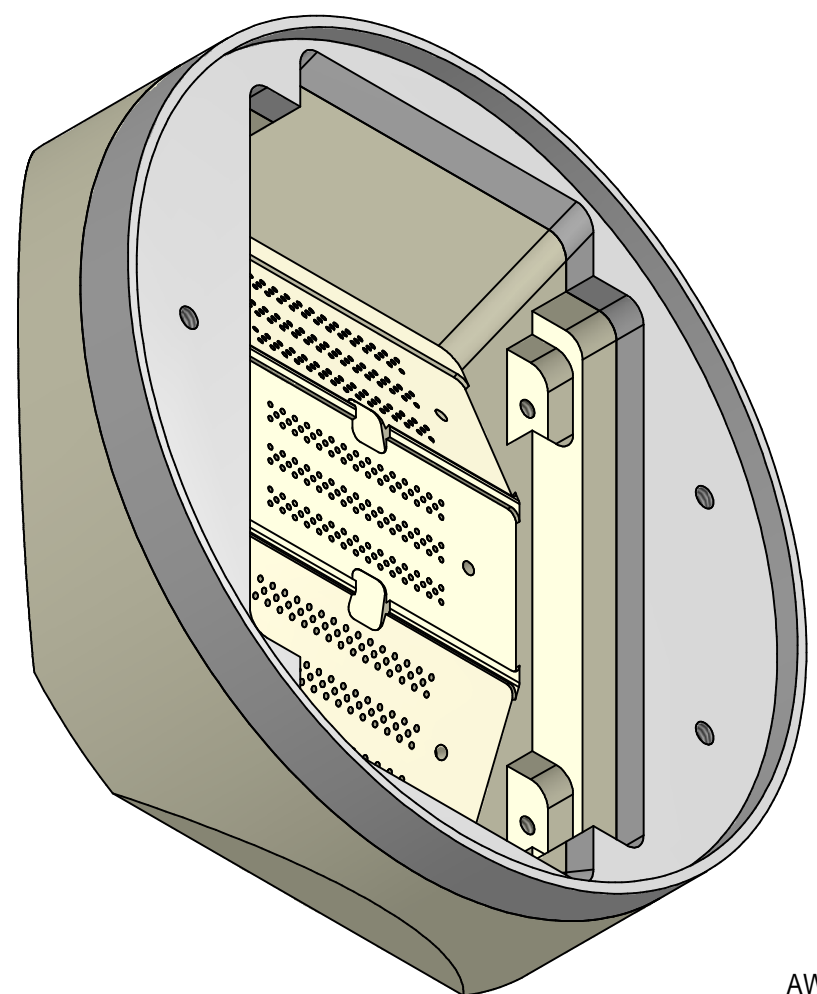


2 RFA Housing
 FILE NAME: 6085-116
 SHEET NO.: 6
 DFT. SCALE: 2 : 1
 MATERIAL: Explosion Bonded 6061-T6 Alum/316 SST
 QTY: 1
 NOTES: Note: More Dims. on next sheet.

NOTE: THERMAL CYCLE AND LEAK CHECK ALUM-SST BONDING BEFORE DRILLING ANY THROUGH HOLES.

ITEM	DWG. NO.	DESCRIPTION	G1	G2	G3	REMARKS	REV.
			QUANTITY				
PRINT DISTR.	PLOT DATE: 10/26/2009 CAD FILE NAME: 6085-116 CESR Drift Pipe for Carbon Coating.idw						
CR-1	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .0 ± .02 .001 ± .010 .005 ± .005 FRACTIONS ± 1/32 ANGLES ± 0.5° ALL SURFACES \checkmark	<p>CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853</p> <p>CESR Drift Beampipe for Carbon Coating RFA Housing Details</p>					
CHECKED BY: Yulin Li	APPROVED BY: Mark Palmer	DRAWN BY: TMK	DRAWN FOR: Y. Li	DATE: 1/25/2009	SCALE: D	6085-116 SH. NO. 6 OF 8	REV. C

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.



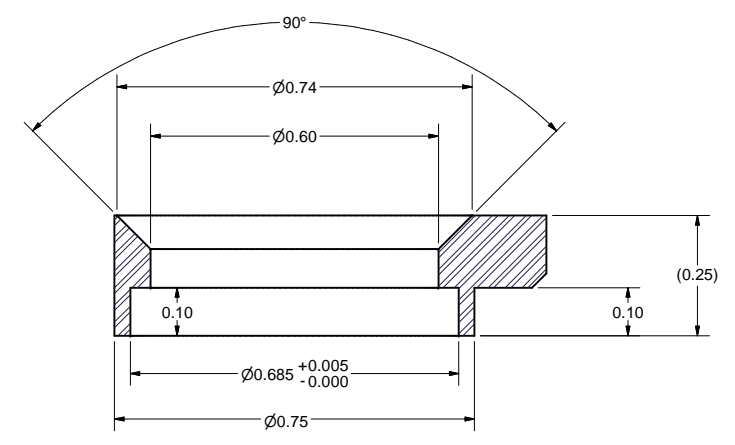
2 RFA Housing (Continued)
 FILE NAME: 6085-116
 SHEET NO.: 7
 DFT. SCALE: 2 : 1
 MATERIAL: Explosion Bonded 6061-T6 Alum/316 SST
 QTY: 1
 NOTES: Note: More Dims. on previous sheet.

NOTE: THERMAL CYCLE AND LEAK CHECK ALUM-SST BONDING BEFORE DRILLING ANY THROUGH HOLES.

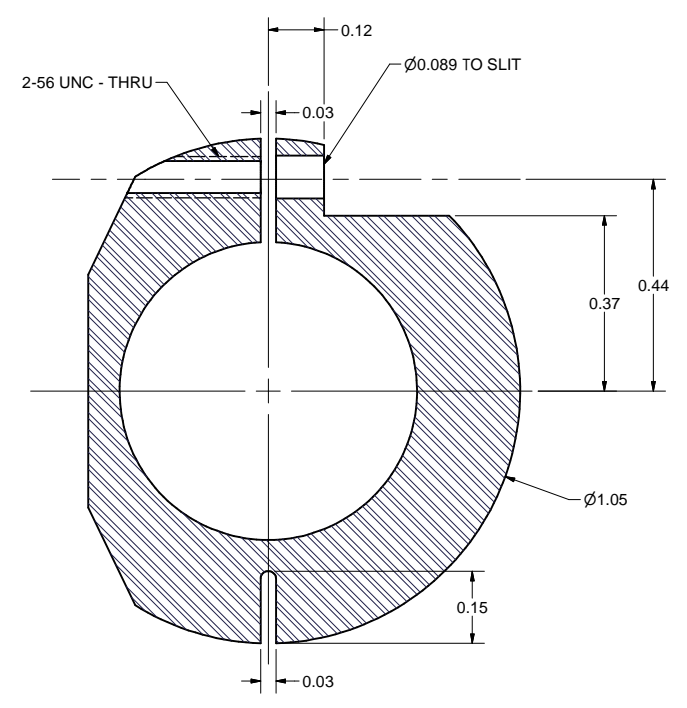
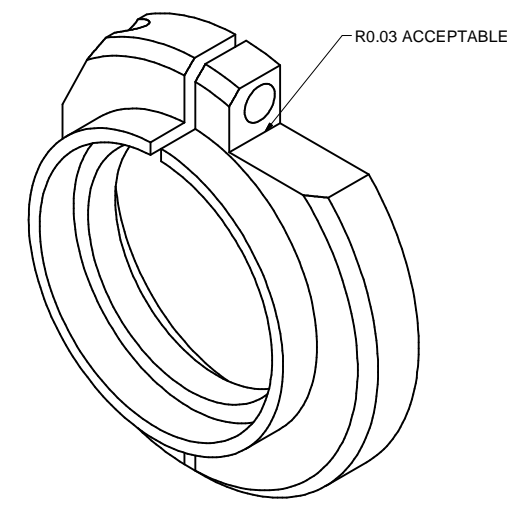
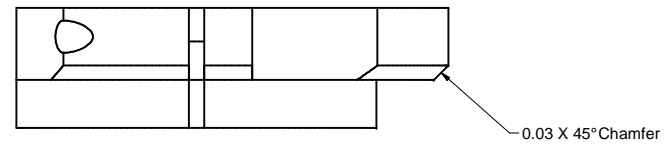
ITEM	DWG. NO.	DESCRIPTION	QUANTITY			REMARKS	REV.
			G1	G2	G3		
PRINT DISTR.	6085-116	DESCRIPTION					
CR-1	6085-116	CESR Drift Beampipe for Carbon Coating RFA Housing, Detail (Continued)					
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .0 ± .02 .00 ± .010 .000 ± .005 FRACTIONS ± 1/32 ANGLES ± 0.5° ALL SURFACES		CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853					
CHECKED BY: Yulin Li	DRAWN BY: TMK	DRAWN FOR: Y. Li	DATE: 1/25/2009	SCALE: D	6085-116	REV.	
APPROVED BY: Mark Palmer					SH. NO. 7 OF 8		

REVISIONS			
SYM.	ZONE	DESCRIPTION	DATE APP.

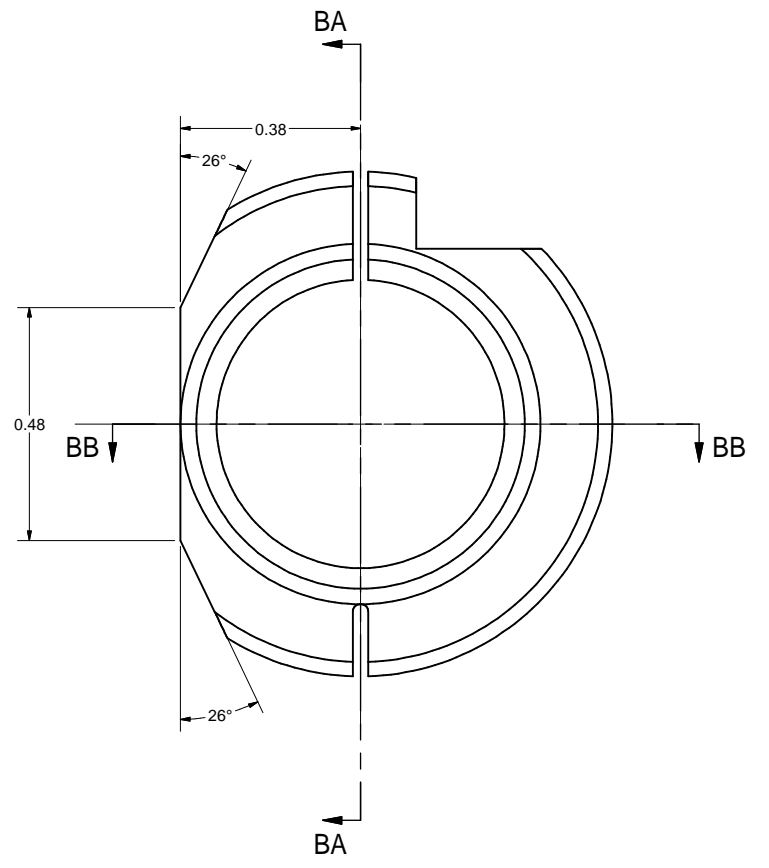
8.4 **BUTTON WELDING CLAMP**
 FILE NAME: 6085-116
 SHEET NO.: 8
 DFT. SCALE: 5 : 1
 MATERIAL: 304L SST, 1/4" THK
 QTY: 4 REQ'D
 NOTES:



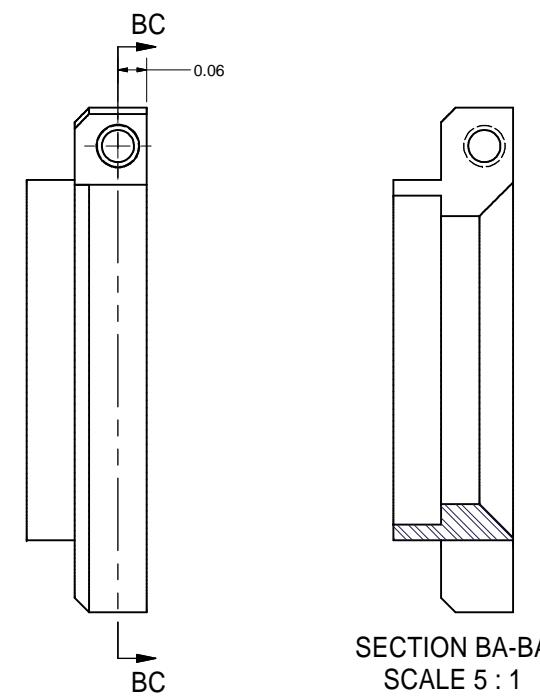
SECTION BB-BB
SCALE 5 : 1



SECTION BC-BC
SCALE 5 : 1



SECTION BA-BA
SCALE 5 : 1



SYM.	ZONE	DESCRIPTION	DATE	APP.	QUANTITY			REMARKS	REV.
					G1	G2	G3		

D	PRINT	PLLOT DATE: 10/26/2009	DWG. NO.	DESCRIPTION	G1	G2	G3	REMARKS	REV.
	DISTR.	CAD FILE NAME: 6085-116 CESR Drift Pipe for Carbon Coating.idw							
6085-116	CR-1	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .0 ± .02 .00 ± .010 .000 ± .005 FRACTIONS ± 1/32 ANGLES ± 0.5° ALL SURFACES	 CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853		CESR Drift Beampipe for Carbon Coating				
	REV.	CHECKED BY: Yulin Li APPROVED BY: Mark Palmer	DRAWN BY: TMK	DRAWN FOR: Y. Li	DATE: 1/25/2009	SCALE: D	6085-116	SH. NO. 8 OF 8	REV.