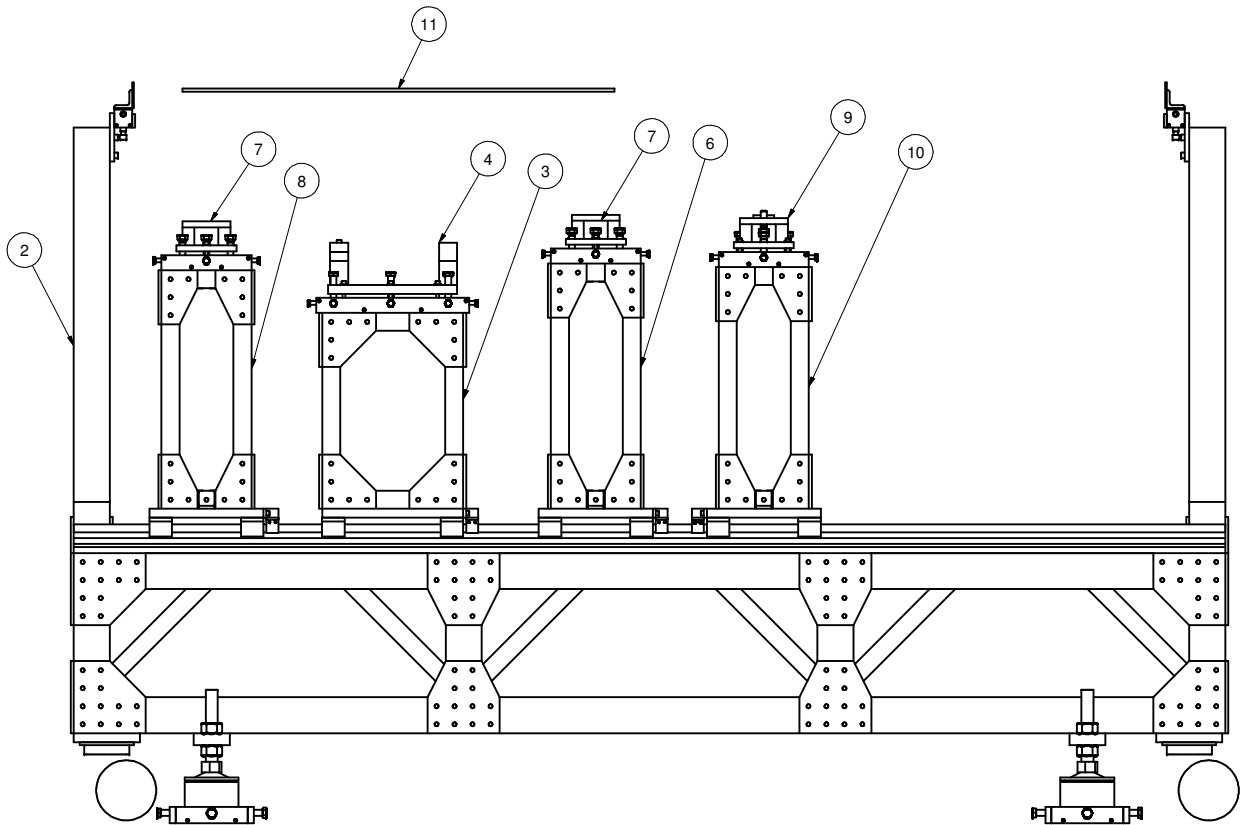
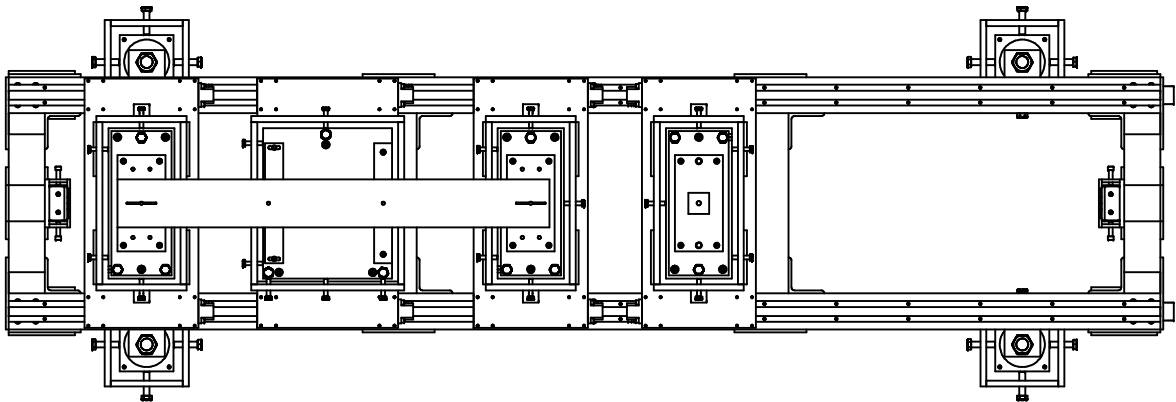
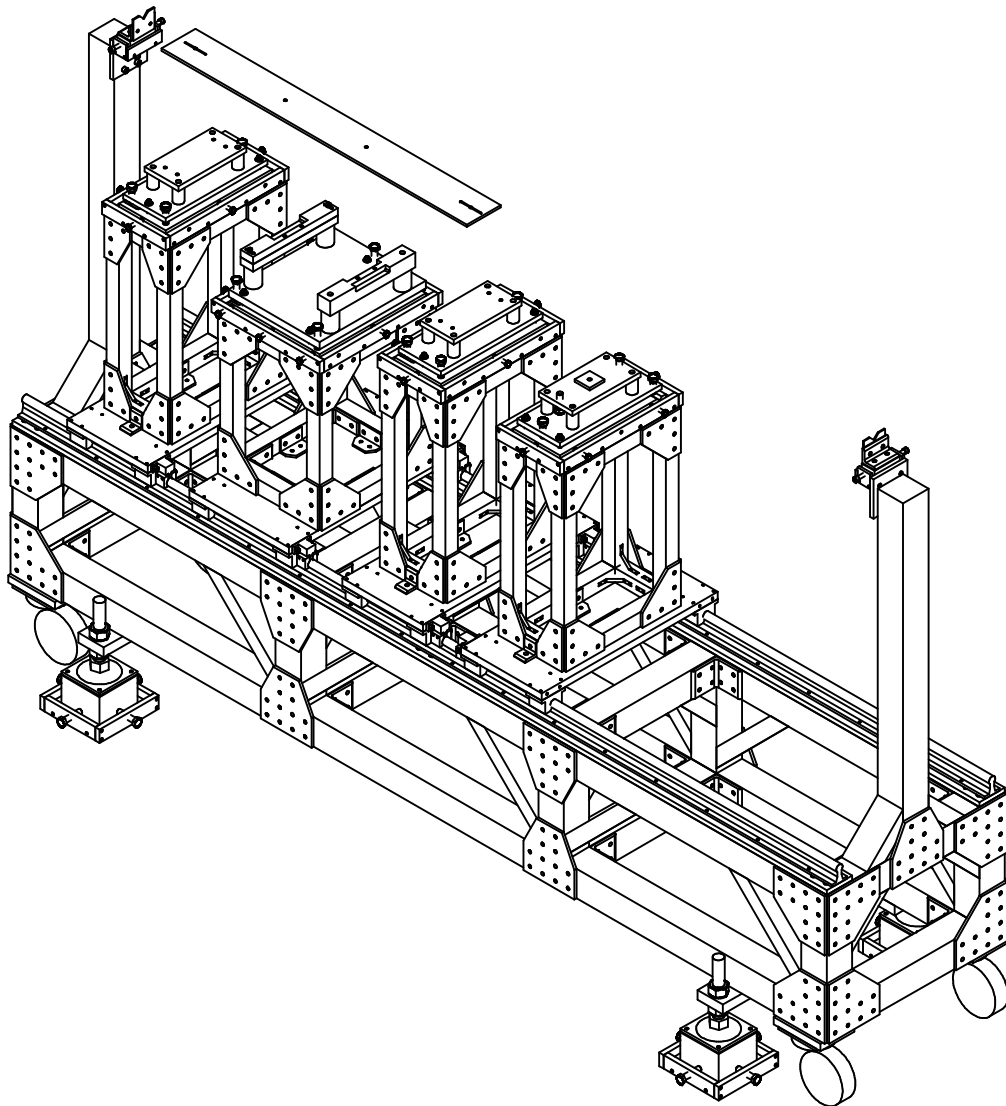


REVISIONS				1	
SYM.	ZONE	DESCRIPTION	DATE	APP.	



1 HORIZONTAL TEST ALIGNMENT FRAME ASSEMBLY
FILE NAME: 7110-014
SHEET NO.: 1
DFT. SCALE: 1/8
MATERIAL:
QTY: 1
NOTES: 1) PT. 11 - PIN SPACING TEMPLATE SHOWN HERE IN ITS APPROX. LOCATION, FOR REF. ONLY

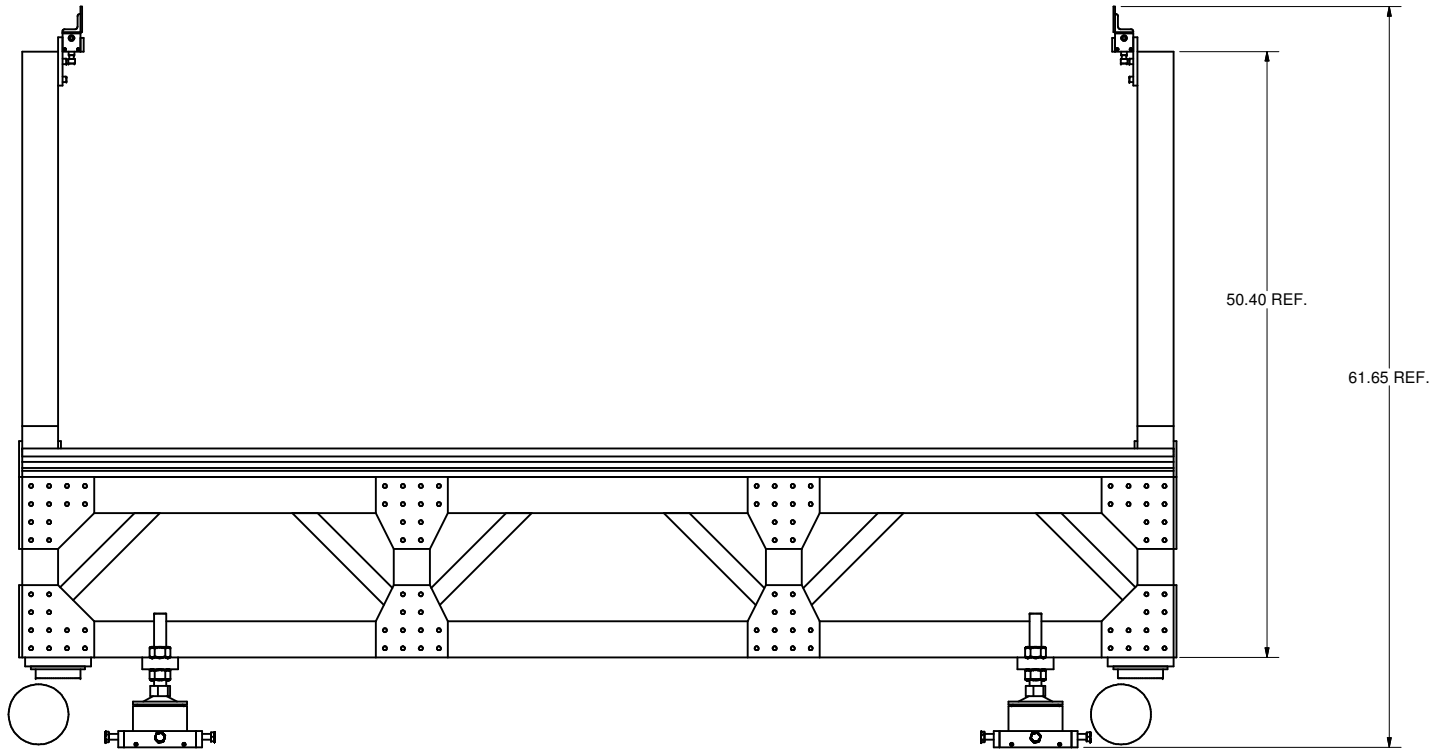
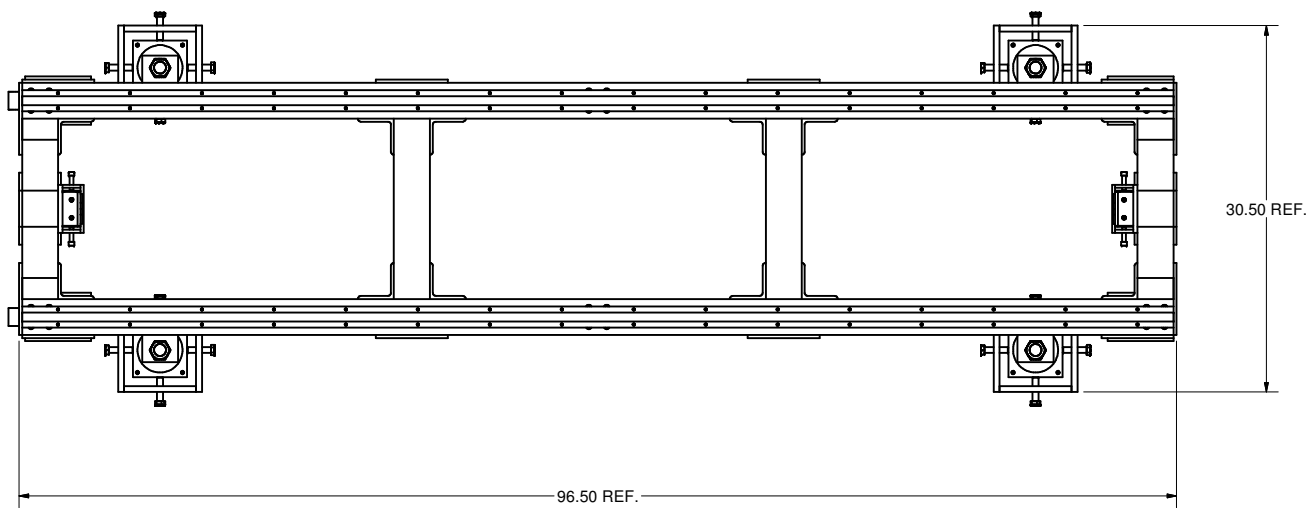


FOR MACHINING LUBRICANT USE ONLY
ALKALINE DETERGENT LUBRICANT CIMSTAR 40
OR EQUIVALENT APPROVED BY CORNELL LEPP

TECHNICAL RESOURCE APPROVALS REQUIRED BEFORE FABRICATION			
	OK	DATE	N/A
DRAFTING (O'Connell):			
MACHINE SHOP (Kaminski):			
CHEMISTRY (Conklin):			
ELECTRONICS SHOP (Barley):			
FURNACE BRAZING (Sherwood):			
BEAM WELDING (Sears):			
WELDING OTHER (Gallagher):			
UTILITIES INTEGRATION (Gallagher):			
STOCKROOMS (Lockwood):			

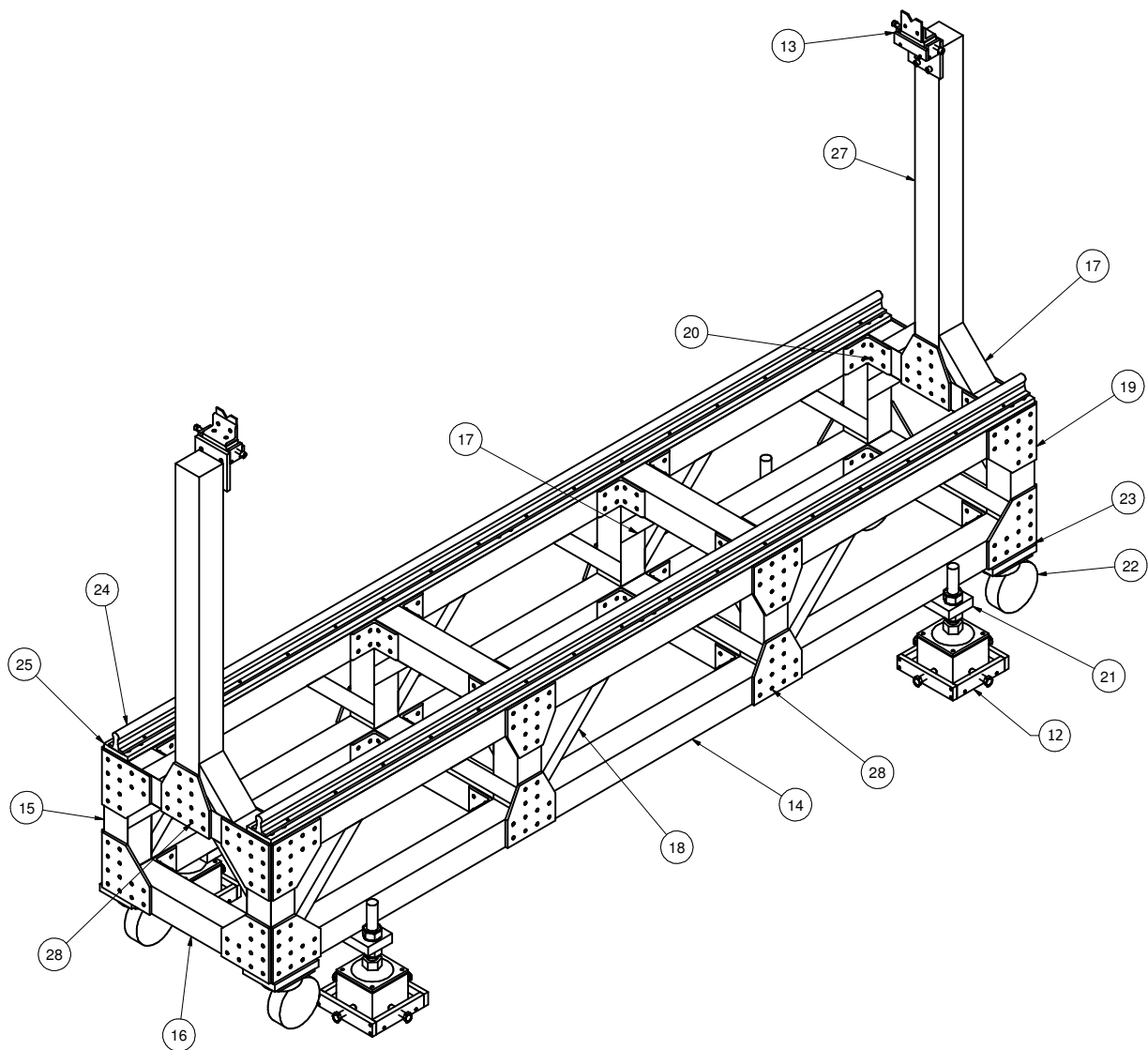
ITEM	DWG. NO.	DESCRIPTION	QUANTITY			REMARKS	REV.
			G1	G2	G3		
11	SHEET 26	PIN SPACING TEMPLATE	1				
10	SHEET 17	GATE VALVE PEDESTAL ASSY.	1				
9	SHEET 19	GATE VALVE ALIGNMENT SUPPORT ASSY.	1				
8	SHEET 17	HOM 106 PEDESTAL ASSY.	1				
7	SHEET 20	HOM ALIGNMENT SUPPORT ASSY.	2				
6	SHEET 17	HOM 78 PEDESTAL ASSY.	1				
4	SHEET 10	CAVITY ALIGNMENT SUPPORT ASSY.	1				
3	SHEET 8	CAVITY PEDESTAL ASSY.	1				
2	SHEET 2	HORIZ TEST ALIGNMENT FRAME CART SUB-ASSY.	1				
1	SHEET 1	HORIZONTAL TEST ALIGNMENT FRAME ASSEMBLY	X				
PLOT DATE: 5/4/2007 CAD FILE NAME: horiz test align extruded alum frame.idw							
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES		CORNELL UNIVERSITY LEPP LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853					
HORIZONTAL TEST ALIGNMENT FRAME ASSY. ASSEMBLY VIEWS AND B.O.M.		CHECKED BY: A.P.	DRAWN BY: H. Applin	DRAWN FOR: A. PAULING	DATE: 6/26/2006	SCALE: D	7110-014 SH. NO. 1 OF 26
APPROVED BY: A.P.							

REVISIONS			
SYM.	ZONE	DESCRIPTION	DATE APP.



2 HORIZ. TEST ALIGNMENT CART FRAME SUB-ASSY

FILE NAME: 7110-014
SHEET NO.: 2
DFT. SCALE: 1/8
MATERIAL:
QTY: 1
NOTES: 1) STRUCTURAL FRAME COMPONENTS - ALUMINUM 6061
2) FASTENERS NOT SHOWN HERE OR LISTED IN THE B.O.M.



28	PUR.	80/20 INC. 12 HOLE TEE PLATE #4325	12						
27	PUR.	80/20 INC. #3030 35.4" LG.	2						
25	SHEET 5	THOMSON RAIL MOUNTING PLATE	2						
	PUR.	THOMSON BEARINGS # SSUBPO-12 DP	16					DRY PACKED, 8 PER RAIL	
24	PUR.	THOMSON RAIL #SRA-12-96	2						
23	PUR.	HD FLANGE MOUNT CASTER PLATE #2147	4						
22	PUR.	ALBION 5" CASTER #16TM05101S	4						
21	SHEET 7	FOOT ATTACHMENT PLATE	4						
20	PUR.	80/20 INC. 8 HOLE INSIDE CORNER BRKT. #4304	24						
19	PUR.	80/20 INC. 12 HOLE 90 DEG. PLATE #4328	16						
18	PUR.	80/20 INC. #2540 12.0" LG.	12						
17	PUR.	80/20 INC. #2530 6.0" LG.	12						
16	PUR.	80/20 INC. #3030 15.0" LG.	8						
15	PUR.	80/20 INC. #3030 9.0" LG.	8						
14	PUR.	80/20 INC. #3030 96.0" LG.	4						
13	SHEET 3	WIRE ALIGNMENT ASSY.	2						
12	SHEET 6	CART FOOT ADJUSTMENT ASSY.	4						
2	SHEET 2	HORIZ. TEST ALIGNMENT CART SUB-ASSY	X						

FOR MACHINING LUBRICANT USE ONLY
ALKALINE DETERGENT LUBRICANT CIMSTAR 40
OR EQUIVALENT APPROVED BY CORNELL LEPP

TECHNICAL RESOURCE APPROVALS REQUIRED BEFORE FABRICATION			
	OK	DATE	N/A
DRAFTING (O'Connell):			
MACHINE SHOP (Kaminski):			
CHEMISTRY (Conklin):			
ELECTRONICS SHOP (Barley):			
FURNACE BRAZING (Sherwood):			
BEAM WELDING (Sears):			
WELDING OTHER (Gallagher):			
UTILITIES INTEGRATION (Gallagher):			
STOCKROOMS (Lockwood):			

PRINT
DISTR.

CR-1

7110-014

REV.

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES:
TOLERANCES ON:
.00 ± .010
.000 ± .005
FRACTIONS ± 1/64
ANGLES ± 0.5°
ALL SURFACES

CORNELL UNIVERSITY
LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS

LEPP
FLOYD R. NEWMAN LABORATORY
ITHACA, NY 14853

HORIZONTAL TEST ALIGNMENT FRAME ASSY.
HORIZ. TEST ALIGNMENT FRAME SUB-ASSY. DETAIL

CHECKED BY: A.P.
APPROVED BY: A.P.

DRAWN BY: H. Applin
DRAWN FOR: A. PAULING

DATE: 6/26/2006

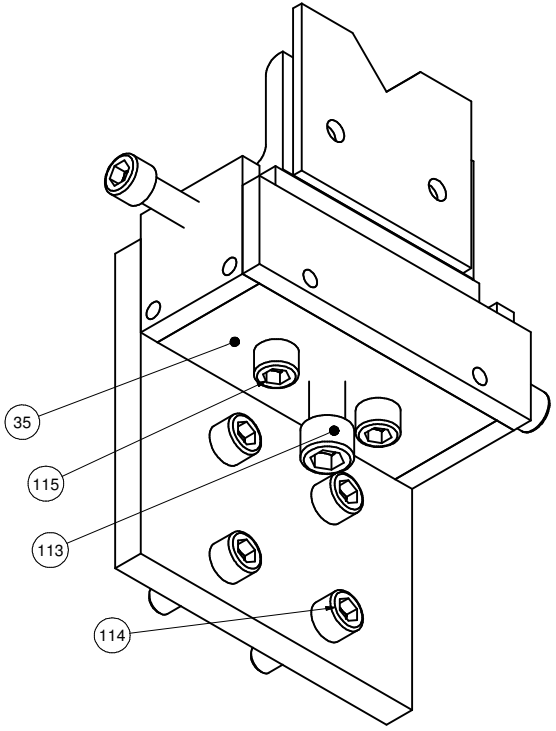
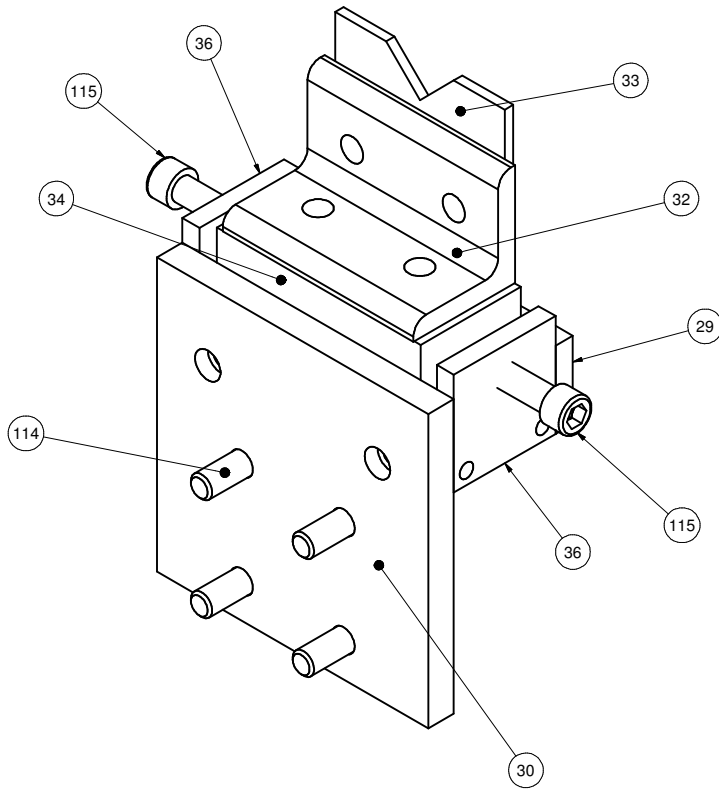
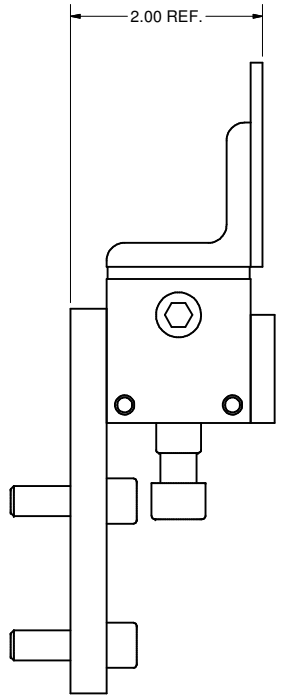
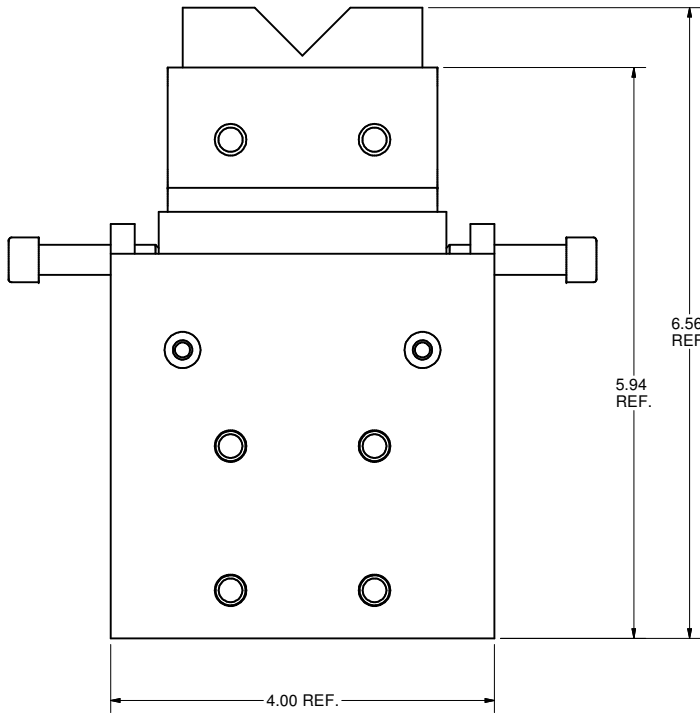
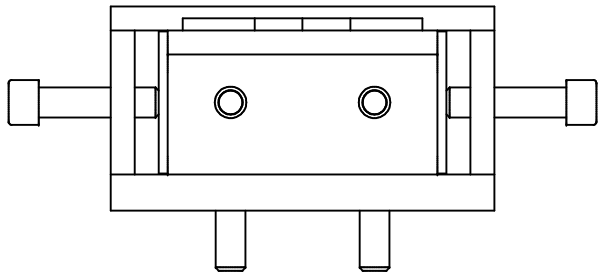
SCALE: D

7110-014
SH. NO. 2 OF 26

REV.

ITEM	DWG. NO.	DESCRIPTION	G1	G2	G3	REMARKS	REV.
PLOT DATE: 5/4/2007 CAD FILE NAME: horiz test align extruded alum frame.idw							


REVISIONS				1
SYM.	ZONE	DESCRIPTION	DATE	APP.





13 WIRE ALIGNMENT ASSEMBLY
FILE NAME: 7110-014
SHEET NO.: 3
DFT. SCALE: 1:1
MATERIAL:
QTY: 2
NOTES:

FOR MACHINING LUBRICANT USE ONLY
ALKALINE DETERGENT LUBRICANT CIMSTAR 40
OR EQUIVALENT APPROVED BY CORNELL LEPP

TECHNICAL RESOURCE APPROVALS REQUIRED BEFORE FABRICATION			
	OK	DATE	N/A
DRAFTING (O'Connell):			
MACHINE SHOP (Kaminski):			
CHEMISTRY (Conklin):			
ELECTRONICS SHOP (Barley):			
FURNACE BRAZING (Sherwood):			
BEAM WELDING (Sears):			
WELDING OTHER (Gallagher):			
UTILITIES INTEGRATION (Gallagher):			
STOCKROOMS (Lockwood):			



PRINT
DISTR.


DISTR.

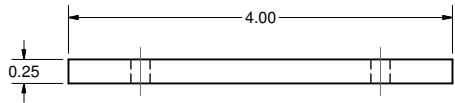
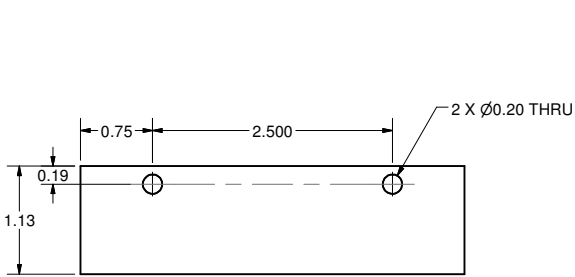

REV.

7110-014

SH. NO. 3 OF 26

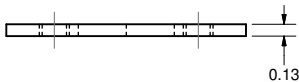
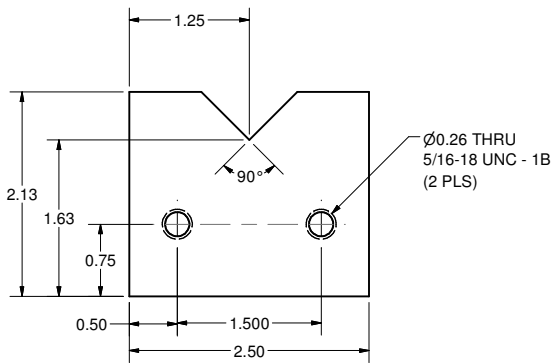
113	PUR.	HEX SOCKET - 3/8-24 UNF - 1 1/4 LG.	1					
36	SHEET 4	WIRE HOLDER BOX END	2					
35	SHEET 4	WIRE HOLDER BOX BOTTOM	1					
34	SHEET 4	WIRE ALIGNMENT PUSH BLOCK	1					
33	SHEET 4	WIRE V-BLOCK	1					
32	PUR.	80/20 INC. 4 HOLE INSIDE CORNER BRKT #4303	1					
114	PUR.	HEX SOCKET - 5/16 - 18 UNC - 1.0 LG.	4					
30	SHEET 4	WIRE HOLDER BOX MOUNT BRKT	1					
29	SHEET 4	WIRE HOLDER BOX SIDE	1					
115	PUR.	HEX SOCKET - 5/16 - 18 UNC- 1 1/4 LG.	4					
13	SHEET 3	WIRE ALIGNMENT ASSY.	X					
ITEM	DWG. NO.	DESCRIPTION	G1	G2	G3	REMARKS	REV.	
			QUANTITY					
PLOT DATE: 5/4/2007 CAD FILE NAME: horiz test align extruded alum frame.idw								
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES ✓		<div><div><div>CORNELL UNIVERSITY</div><div>LEPP</div><div>LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS</div></div><div>CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853</div></div>						
HORIZONTAL TEST ALIGNMENT FRAME ASSY. WIRE ALIGNMENT ASSEMBLY DETAIL								
CHECKED BY: A.P. APPROVED BY: A.P.		DRAWN BY H. Applin	DRAWN FOR A. PAULING	DATE 6/26/2006	SCALE D	7110-014 SH. NO. 3 OF 26	REV.	

REVISIONS			
SYM.	ZONE	DESCRIPTION	DATE APP.



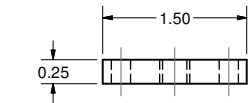
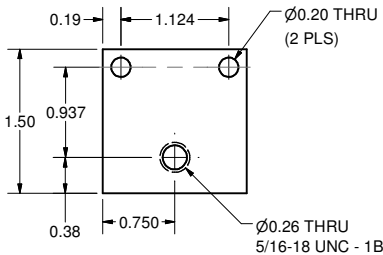
29 WIRE HOLDER BOX SIDE

FILE NAME: 7110-014
SHEET NO.: 4
DFT. SCALE: 1:1
MATERIAL: Aluminum-6061
QTY: 1 PER ASSEMBLY (2 TOTAL)
NOTES:



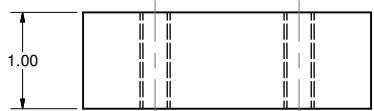
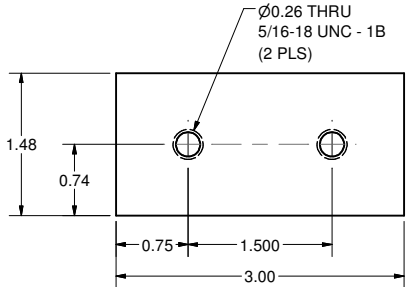
33 WIRE V-BLOCK

FILE NAME: 7110-014
SHEET NO.: 4
DFT. SCALE: 1:1
MATERIAL: Aluminum-6061
QTY: 1 PER ASSEMBLY (2 TOTAL)
NOTES:



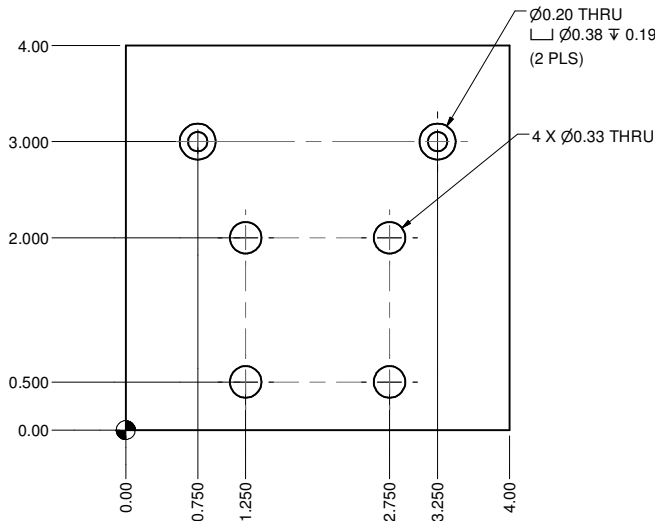
36 WIRE HOLDER BOX END

FILE NAME: 7110-014
SHEET NO.: 4
DFT. SCALE: 1:1
MATERIAL: Aluminum-6061
QTY: 2 PER ASSEMBLY (4 TOTAL)
NOTES:



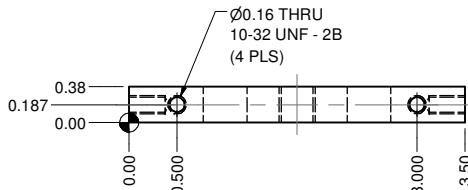
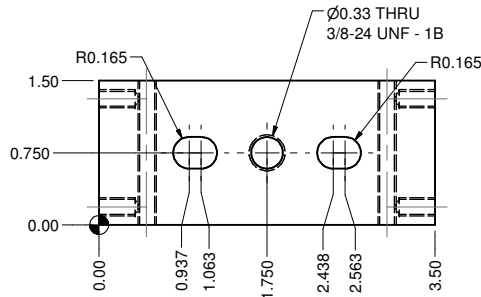
34 WIRE ALIGNMENT PUSH BLOCK

FILE NAME: 7110-014
SHEET NO.: 4
DFT. SCALE: 1:1
MATERIAL: Aluminum-6061
QTY: 1 PER ASSEMBLY (2 TOTAL)
NOTES:



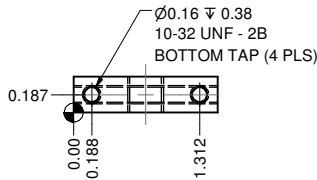
30 WIRE HOLDER BOX MOUNT BRACKET

FILE NAME: 7110-014
SHEET NO.: 4
DFT. SCALE: 1:1
MATERIAL: Aluminum-6061
QTY: 1 PER ASSEMBLY (2 TOTAL)
NOTES:







35 WIRE HOLDER BOX BOTTOM

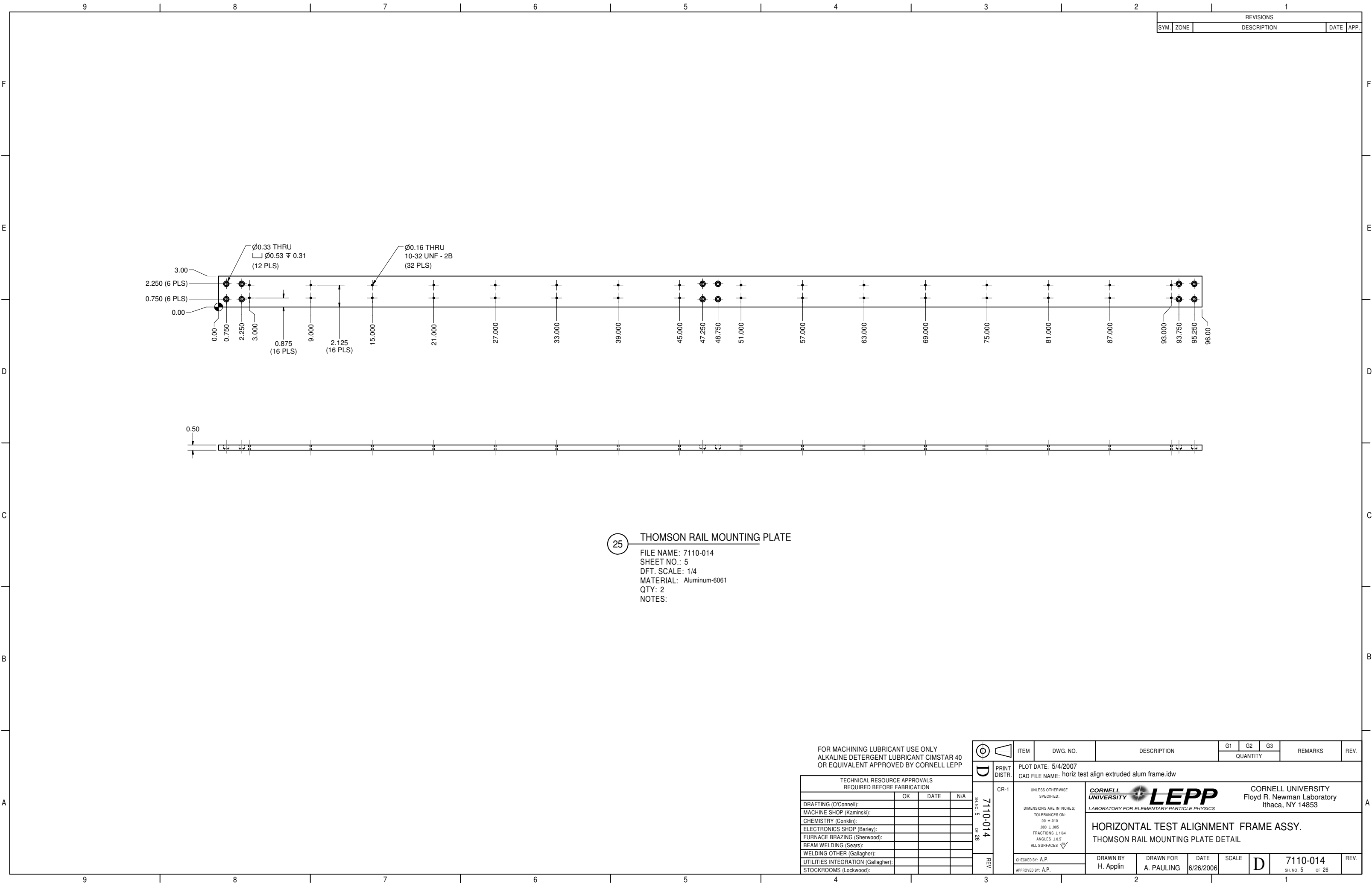
FILE NAME: 7110-014
SHEET NO.: 4
DFT. SCALE: 1:1
MATERIAL: Aluminum-6061
QTY: 1 PER ASSEMBLY (2 TOTAL)
NOTES:



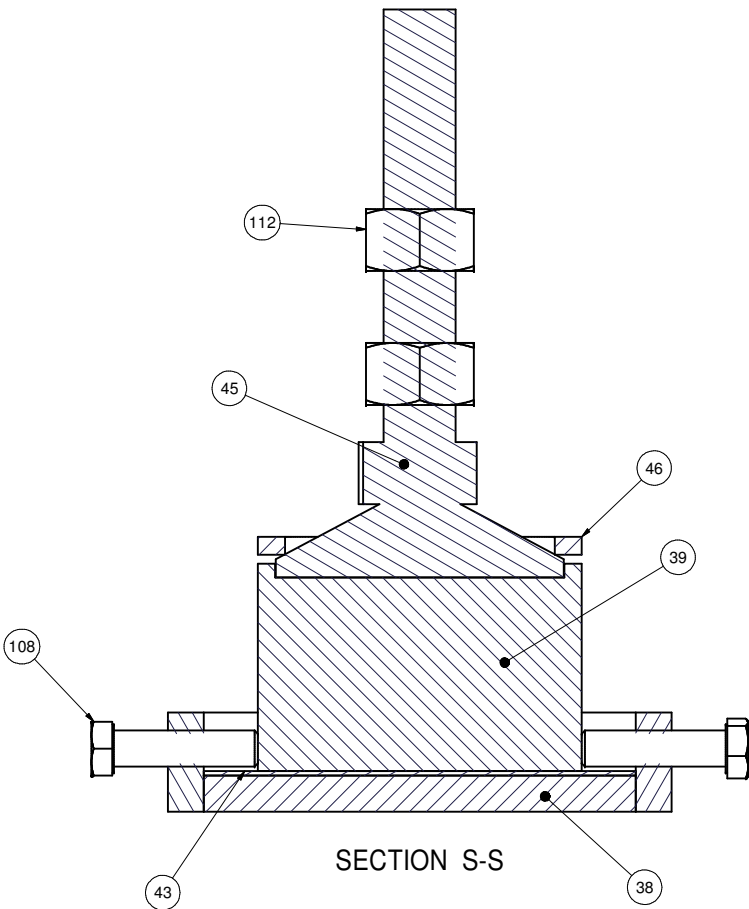
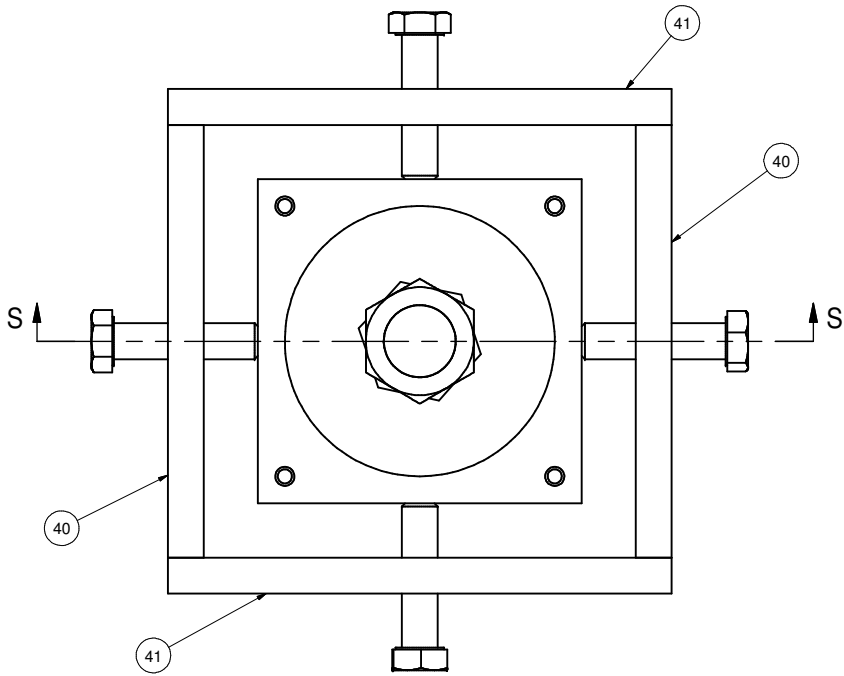
FOR MACHINING LUBRICANT USE ONLY
ALKALINE DETERGENT LUBRICANT CIMSTAR 40
OR EQUIVALENT APPROVED BY CORNELL LEPP

TECHNICAL RESOURCE APPROVALS REQUIRED BEFORE FABRICATION			
	OK	DATE	N/A
DRAFTING (O'Connell):			
MACHINE SHOP (Kaminski):			
CHEMISTRY (Conklin):			
ELECTRONICS SHOP (Barley):			
FURNACE BRAZING (Sherwood):			
BEAM WELDING (Sears):			
WELDING OTHER (Gallagher):			
UTILITIES INTEGRATION (Gallagher):			
STOCKROOMS (Lockwood):			

 	ITEM	DWG. NO.	DESCRIPTION			G1	G2	G3	REMARKS	REV.
							QUANTITY			
 D	PRINT DISTR.	PLOT DATE: 5/4/2007 CAD FILE NAME: horiz test align extruded alum frame.idw								
	CR-1	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES ✓		<div>CORNELL UNIVERSITY </div> <div>CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853</div> <div>LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS</div>						
HORIZONTAL TEST ALIGNMENT FRAME ASSY. WIRE ALIGNMENT ASSEMBLY DETAILS										
CHECKED BY: A.P.				DRAWN BY H. Applin	DRAWN FOR A. PAULING	DATE 6/26/2006	SCALE	D	7110-014	
APPROVED BY: A.P.		SH. NO. 4 OF 26								





REVISIONS			
SYM.	ZONE	DESCRIPTION	DATE APP.

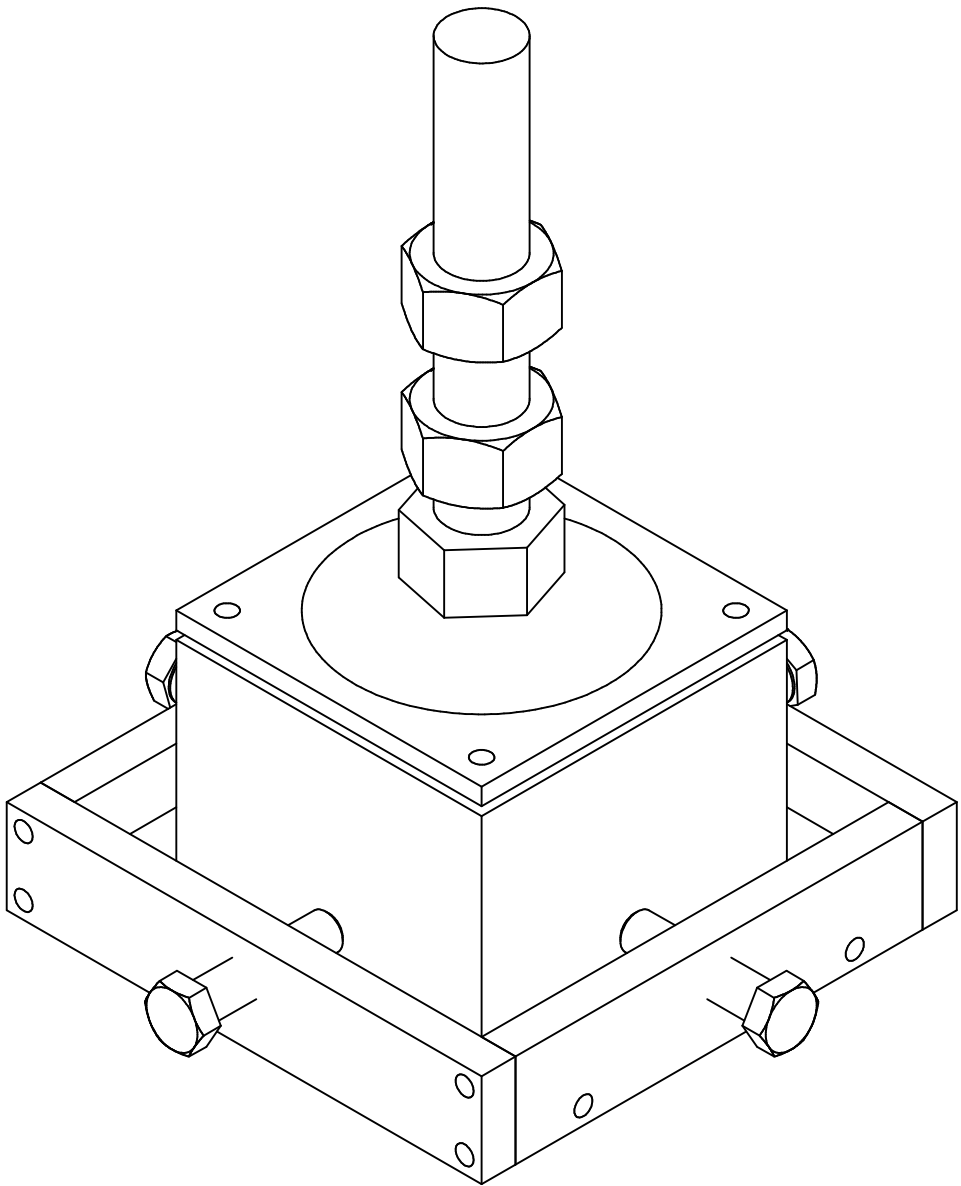


12 CART FOOT ADJUSTMENT ASSEMBLY
FILE NAME: 7110-014
SHEET NO.: 6
DFT. SCALE: 3/4
MATERIAL:
QTY: 4
NOTES: 1) NOT ALL FASTENERS ARE SHOWN HERE OR LISTED IN THE B.O.M.

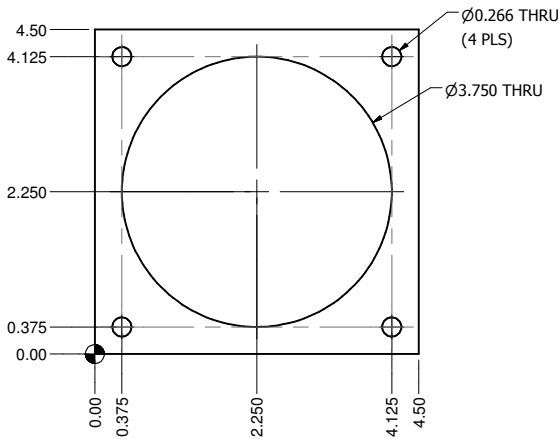
FOR MACHINING LUBRICANT USE ONLY
ALKALINE DETERGENT LUBRICANT CIMSTAR 40
OR EQUIVALENT APPROVED BY CORNELL LEPP

TECHNICAL RESOURCE APPROVALS REQUIRED BEFORE FABRICATION			
	OK	DATE	N/A
DRAFTING (O'Connell):			
MACHINE SHOP (Kaminski):			
CHEMISTRY (Conklin):			
ELECTRONICS SHOP (Barley):			
FURNACE BRAZING (Sherwood):			
BEAM WELDING (Sears):			
WELDING OTHER (Gallagher):			
UTILITIES INTEGRATION (Gallagher):			
STOCKROOMS (Lockwood):			

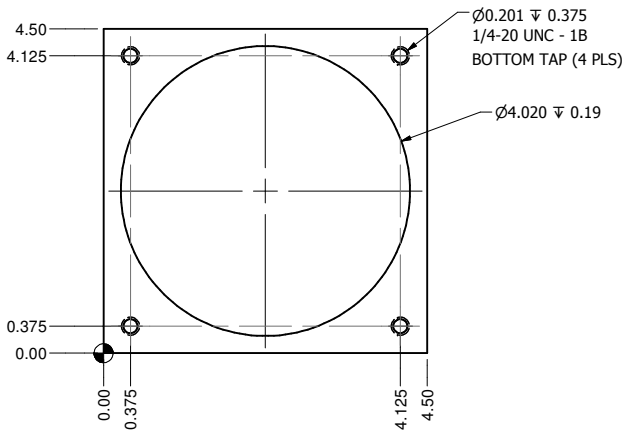
		ITEM		DWG. NO.		DESCRIPTION		G1		G2		G3		REMARKS		REV.			
D		PRINT DISTR.		PLOT DATE: 5/4/2007															
				CAD FILE NAME: horiz test align extruded alum frame.idw															
7110-014 SH. NO. 6 OF 26		CR-1		UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES ✓		<div><div>LEPP</div><div>CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853</div><div>LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS</div></div>										HORIZONTAL TEST ALIGNMENT FRAME ASSY. CART FOOT ADJUSTMENT ASSEMBLY DETAIL			
						CHECKED BY: A.P.		DRAWN BY H. Applin		DRAWN FOR A. PAULING		DATE 6/26/2006		SCALE D				7110-014 SH. NO. 6 OF 26	
REV.				APPROVED BY: A.P.															



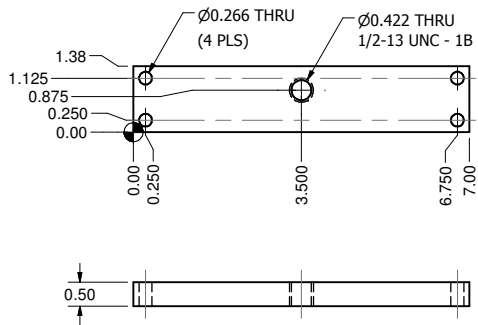
REVISIONS			
SYM.	ZONE	DESCRIPTION	DATE APP.



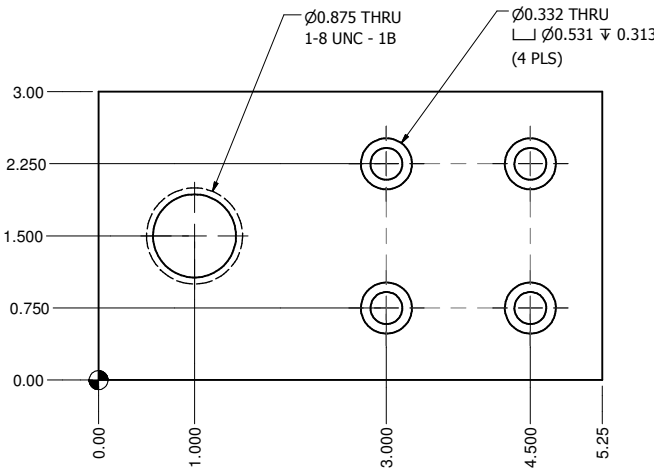
46 SWIVEL FOOT CLAMP DOWN PLATE
FILE NAME: 7110-014
SHEET NO.: 7
DFT. SCALE: 1:2
MATERIAL: Aluminum-6061
QTY: 1 PER ASSY. (4 TOTAL)
NOTES:



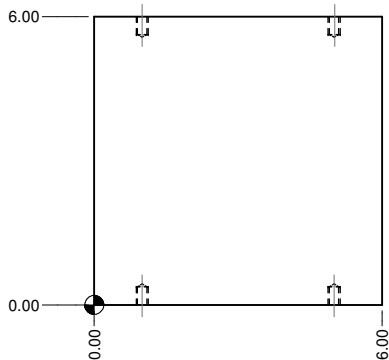
39 CART FOOT INSERT
FILE NAME: 7110-014
SHEET NO.: 7
DFT. SCALE: 1:2
MATERIAL: Aluminum-6061
QTY: 1 PER ASSY. (4 TOTAL)
NOTES:



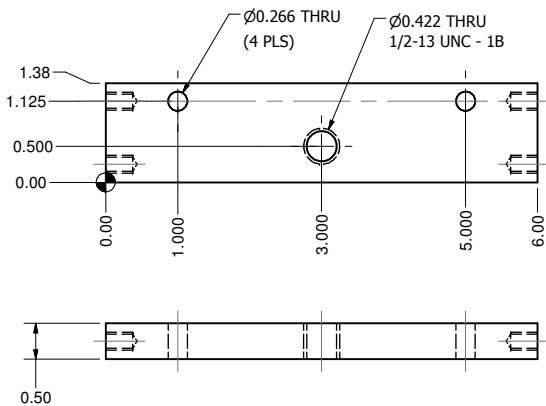
41 CART FOOT PUSHER SIDE PLATE 2
FILE NAME: 7110-014
SHEET NO.: 7
DFT. SCALE: 1:2
MATERIAL: Aluminum-6061
QTY: 2 PER ASSY. (8 TOTAL)
NOTES:



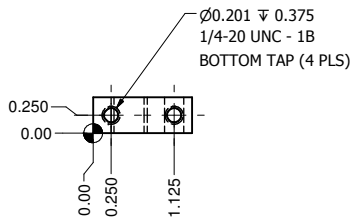
21 FOOT ATTACHMENT PLATE
FILE NAME: 7110-014
SHEET NO.: 7
DFT. SCALE: 1:1
MATERIAL: Aluminum-6061
QTY: 4
NOTES:



38 CART FOOT BASE PLATE
FILE NAME: 7110-014
SHEET NO.: 7
DFT. SCALE: 1:2
MATERIAL: Aluminum-6061
QTY: 1 PER ASSY. (4 TOTAL)
NOTES:





40 CART FOOT PUSHER SIDE PLATE 1
FILE NAME: 7110-014
SHEET NO.: 7
DFT. SCALE: 3/4
MATERIAL: Aluminum-6061
QTY: 2 PER ASSY. (8 TOTAL)
NOTES:

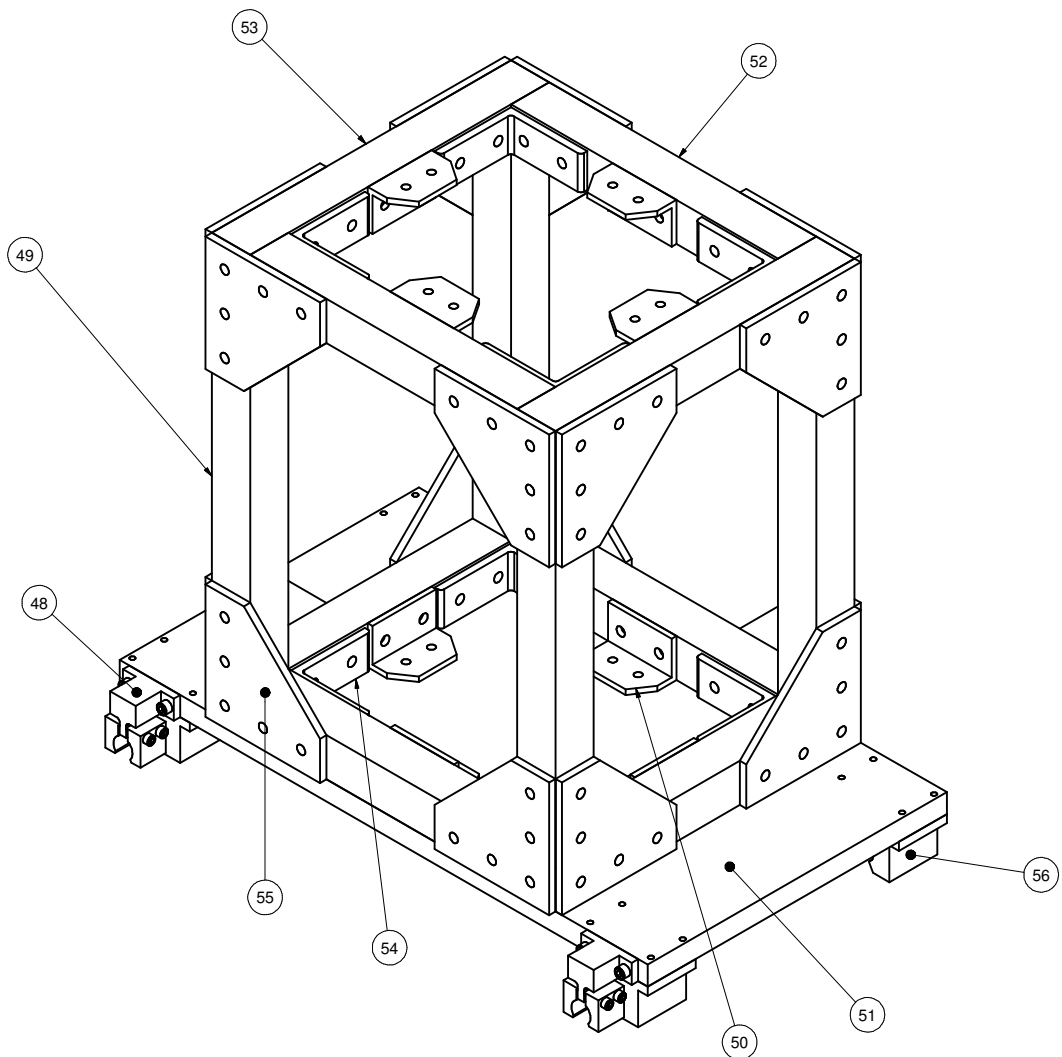
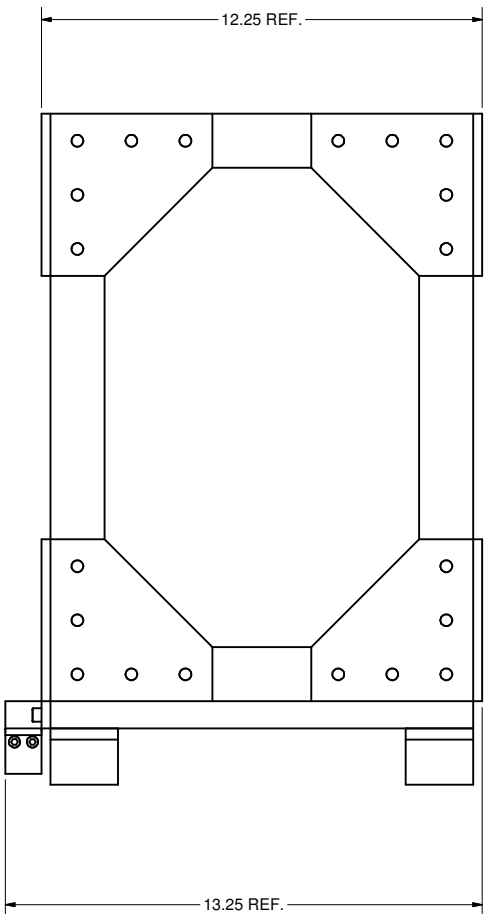
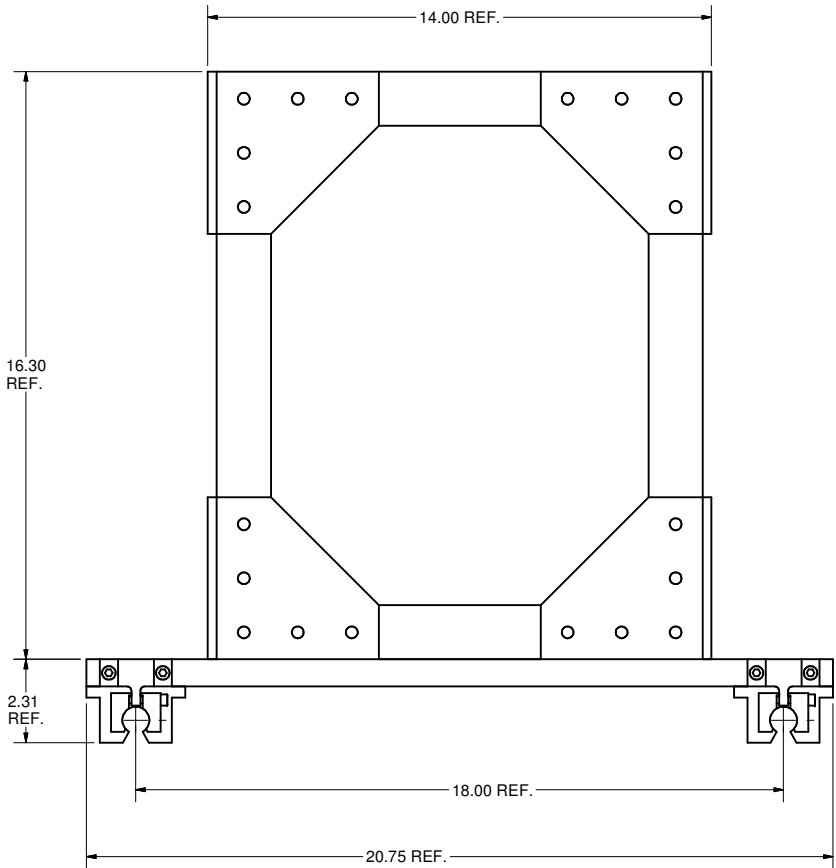
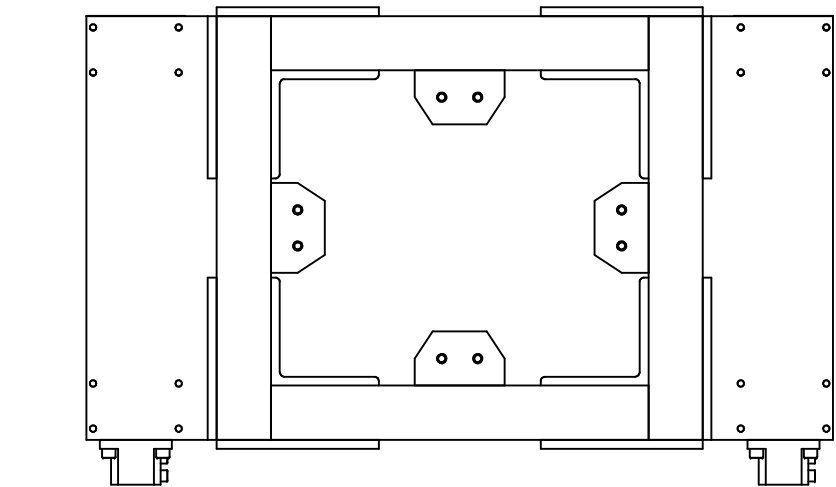


FOR MACHINING LUBRICANT USE ONLY
ALKALINE DETERGENT LUBRICANT CIMSTAR 40
OR EQUIVALENT APPROVED BY CORNELL LEPP

TECHNICAL RESOURCE APPROVALS REQUIRED BEFORE FABRICATION			
	OK	DATE	N/A
DRAFTING (O'Connell):			
MACHINE SHOP (Kaminski):			
CHEMISTRY (Conklin):			
ELECTRONICS SHOP (Barley):			
FURNACE BRAZING (Sherwood):			
BEAM WELDING (Sears):			
WELDING OTHER (Gallagher):			
UTILITIES INTEGRATION (Gallagher):			
STOCKROOMS (Lockwood):			

	ITEM	DWG. NO.	DESCRIPTION	G1	G2	G3	REMARKS	REV.
				QUANTITY				
PRINT DISTR.	PLOT DATE: 5/4/2007 CAD FILE NAME: horiz test align extruded alum frame.idw							
SH. NO. 7 OF 26	7110-014	CR-1	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES ✓		<div><div> LEPP</div><div>CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853</div><div>LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS</div></div>			
			HORIZONTAL TEST ALIGNMENT FRAME ASSY. CART FOOT ADJUSTMENT ASSEMBLY DETAILS					
			CHECKED BY: A.P. APPROVED BY: A.P.	DRAWN BY H. Applin	DRAWN FOR A. PAULING	DATE 6/26/2006	SCALE	D
REV.						REV.		

REVISIONS			
SYM.	ZONE	DESCRIPTION	DATE APP.




3 CAVITY PEDESTAL ASSY.
FILE NAME: 7110-014
SHEET NO.: 8
DFT. SCALE: 3/8
MATERIAL:
QTY: 1
NOTES: 1) FASTENERS NOT SHOWN HERE OR LISTED IN THE B.O.M.

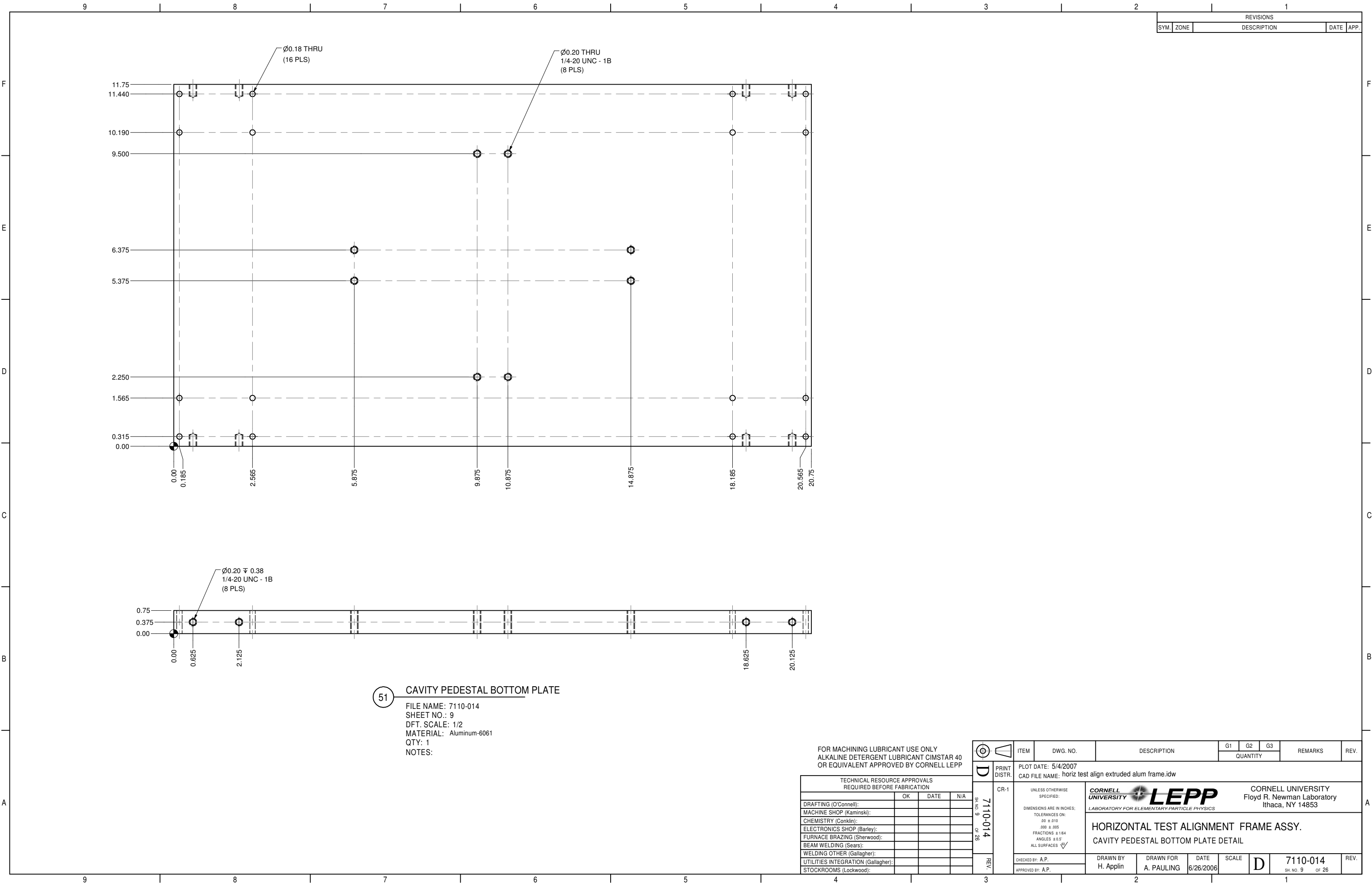
FOR MACHINING LUBRICANT USE ONLY
ALKALINE DETERGENT LUBRICANT CIMSTAR 40
OR EQUIVALENT APPROVED BY CORNELL LEPP

TECHNICAL RESOURCE APPROVALS REQUIRED BEFORE FABRICATION			
	OK	DATE	N/A
DRAFTING (O'Connell):			
MACHINE SHOP (Kaminski):			
CHEMISTRY (Conklin):			
ELECTRONICS SHOP (Barley):			
FURNACE BRAZING (Sherwood):			
BEAM WELDING (Sears):			
WELDING OTHER (Gallagher):			
UTILITIES INTEGRATION (Gallagher):			
STOCKROOMS (Lockwood):			



7110-014	REV.
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




56	PUR.	THOMSON PILLOW BLOCK #SSUPBO-12-DP	4					
55	PUR.	80/20 INC. 5 HOLE 90 DEG. JOINING PLATE #4351	16					
54	PUR.	80/20 INC. 4 HOLE INSIDE CORNER BRKT. #4301	8					
53	PUR.	80/20 INC. CAVITY PEDESTAL ALONG BEAM HORIZ. BAR #1515 11.75" LG.	4					
52	PUR.	80/20 INC. CAVITY PEDESTAL ACROSS BEAM HORIZ. BAR #1515 10.5" LG.	4					
51	SHEET 9	CAVITY PEDESTAL BOTTOM PLATE	1					
50	PUR.	80/20 INC. 4 HOLE TRANSITION INSIDE CORNER BRKT # 4512	8					
49	PUR.	80/20 INC. CAVITY PEDESTAL VERTICAL BAR #1515 13.286" LG.	4					
48	SHEET 15	RAIL CLAMP ASSEMBLY	2					
3	SHEET 8	CAVITY PEDESTAL ASSEMBLY	X					
ITEM	DWG. NO.	DESCRIPTION	G1	G2	G3	REMARKS	REV.	
			QUANTITY					
PLOT DATE: 5/4/2007 CAD FILE NAME: horiz test align extruded alum frame.idw								
UNLESS OTHERWISE SPECIFIED:				CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853				
DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES ✓		HORIZONTAL TEST ALIGNMENT FRAME ASSY. CAVITY PEDESTAL ASSEMBLY DETAIL						
CHECKED BY: A.P. APPROVED BY: A.P.		DRAWN BY H. Applin	DRAWN FOR A. PAULING	DATE 6/26/2006	SCALE D	7110-014 SH. NO. 8 OF 26		REV.



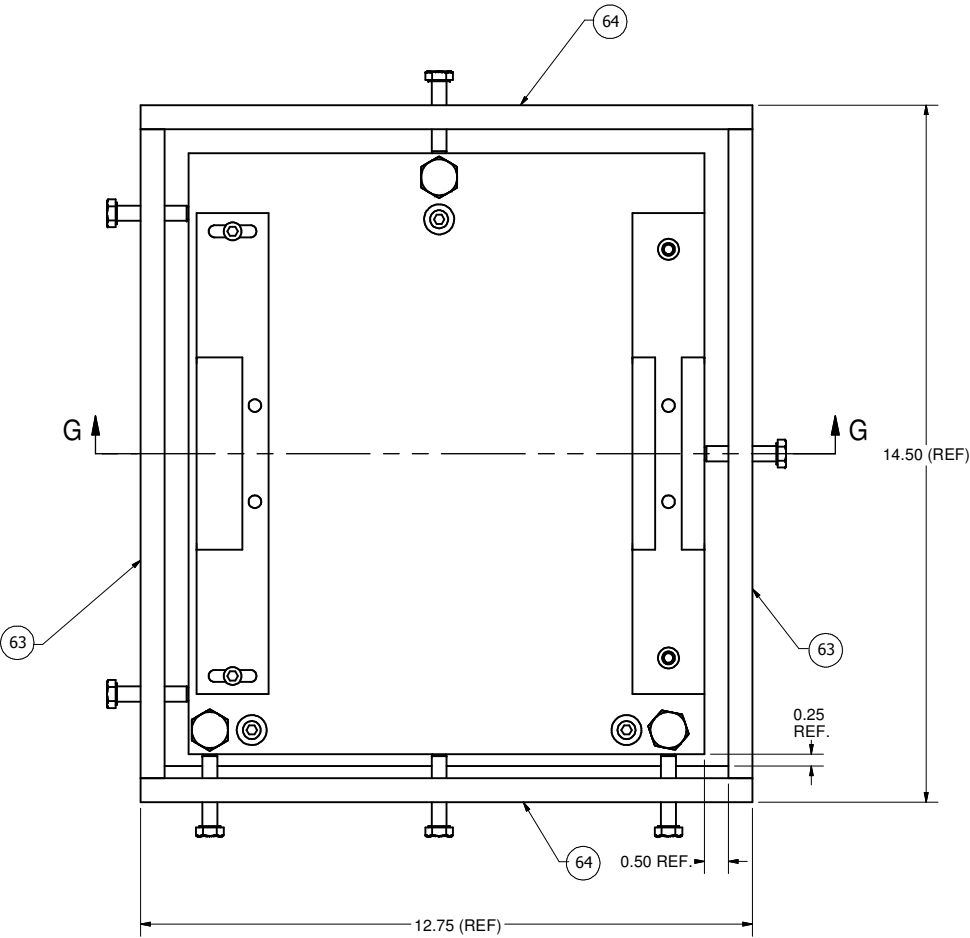
REVISIONS			
SYM.	ZONE	DESCRIPTION	DATE APP.

FOR MACHINING LUBRICANT USE ONLY
ALKALINE DETERGENT LUBRICANT CIMSTAR 40
OR EQUIVALENT APPROVED BY CORNELL LEPP

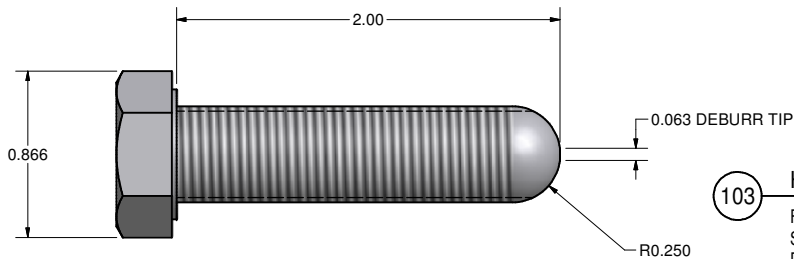
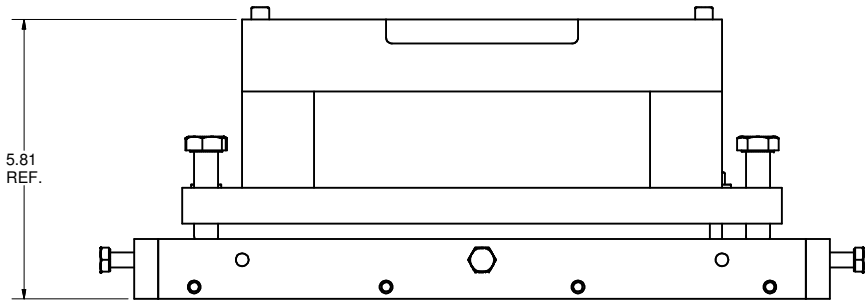
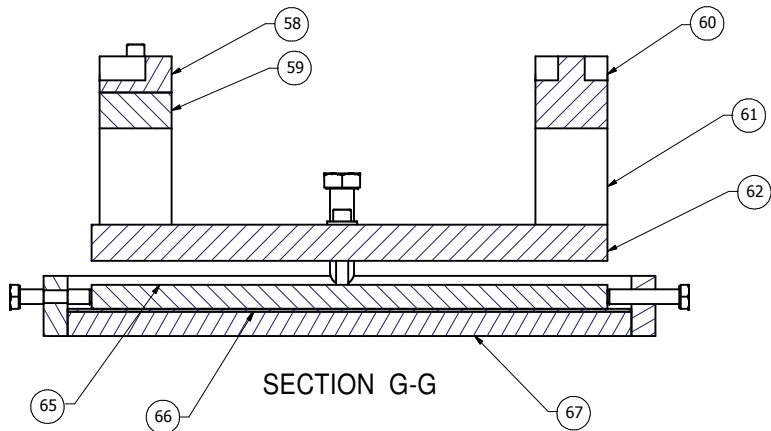
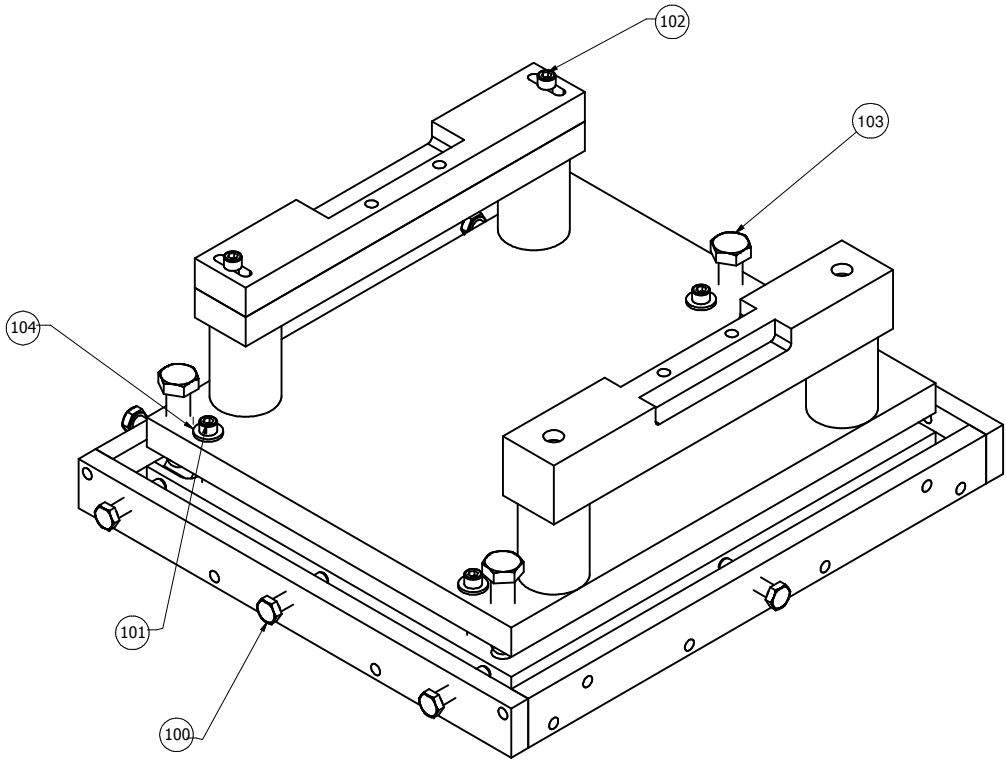
TECHNICAL RESOURCE APPROVALS REQUIRED BEFORE FABRICATION			
	OK	DATE	N/A
DRAFTING (O'Connell):			
MACHINE SHOP (Kaminski):			
CHEMISTRY (Conklin):			
ELECTRONICS SHOP (Barley):			
FURNACE BRAZING (Sherwood):			
BEAM WELDING (Sears):			
WELDING OTHER (Gallagher):			
UTILITIES INTEGRATION (Gallagher):			
STOCKROOMS (Lockwood):			

		ITEM	DWG. NO.	DESCRIPTION	G1	G2	G3	REMARKS	REV.
					QUANTITY				
	PRINT DISTR.	PLOT DATE: 5/4/2007 CAD FILE NAME: horiz test align extruded alum frame.idw							
	SH. NO. 9 OF 26	7110-014	CR-1	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES 	<div> LEPP</div> <div>CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853</div> <div>LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS</div>				
HORIZONTAL TEST ALIGNMENT FRAME ASSY. CAVITY PEDESTAL BOTTOM PLATE DETAIL									
CHECKED BY: A.P. APPROVED BY: A.P.									
REV.			DRAWN BY H. Applin	DRAWN FOR A. PAULING	DATE 6/26/2006	SCALE		7110-014 SH. NO. 9 OF 26	REV.

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A		ADDED DETAIL OF ITEM 103, MODIFIED HEX CAP. ITEM 65 PICTORIALY REFLECTS CHANGES MADE ON SHEET 12.	1-9-07	TIO



4 CAVITY ALIGNMENT SUPPORT ASSY.
FILE NAME: 7110-014
SHEET NO.: 10
DFT. SCALE: 1:2
MATERIAL:
QTY: 1
NOTES: 1) NOT ALL FASTENERS ARE SHOWN HERE OR LISTED IN THE B.O.M.



103 HEX CAP 1/2-20 x 2.0 LONG (MODIFIED)
FILE NAME: 7110-014
SHEET NO.: 10
DFT. SCALE: 2:1
MATERIAL:
QTY: 3 REQ'D
NOTES:

FOR MACHINING LUBRICANT USE ONLY
ALKALINE DETERGENT LUBRICANT CIMSTAR 40
OR EQUIVALENT APPROVED BY CORNELL LEPP

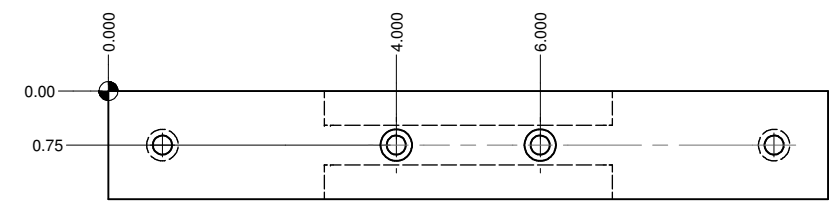
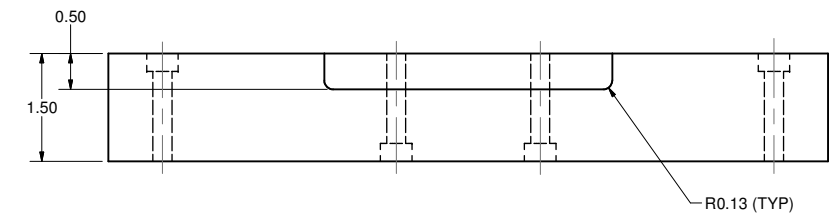
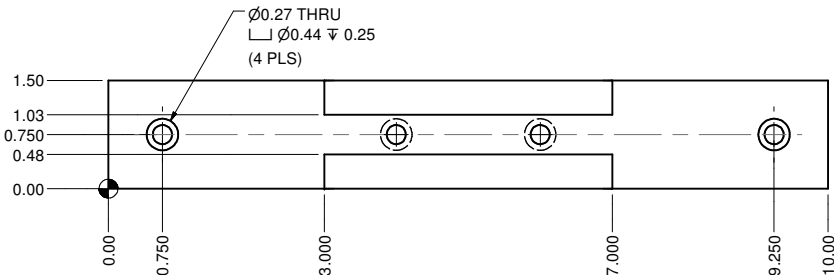
TECHNICAL RESOURCE APPROVALS REQUIRED BEFORE FABRICATION			
	OK	DATE	N/A
DRAFTING (O'Connell):			
MACHINE SHOP (Kaminski):			
CHEMISTRY (Conklin):			
ELECTRONICS SHOP (Barley):			
FURNACE BRAZING (Sherwood):			
BEAM WELDING (Sears):			
WELDING OTHER (Gallagher):			
UTILITIES INTEGRATION (Gallagher):			
STOCKROOMS (Lockwood):			

ITEM	DWG. NO.	DESCRIPTION	Q1	Q2	Q3	REMARKS	REV.
104	PUR.	WASHER 1/4 - NARROW TYPE A	3				
103	SHEET 10	HEX CAP 1/2-20 UNF - 2 LG. (MODIFIED)	3			PURCHASE	
102	PUR.	SOCKET HEAD 1/4-20 UNC - 1.0 LG.	2				
101	PUR.	SOCKET HEAD 1/4-20 UNC - 1 1/2 LG.	3				
100	PUR.	HEX CAP 5/16-24 UNF - 1.5 LG.	7				
67	SHEET 13	CAVITY ALIGNMENT STATIONARY HOR. PLATE	1				
66	PUR.	TEFLON SHEET 1/16" THK 10.75" x 12.5" MCM# 8545K32 OR EQUIV.	1			CUT TO FIT	
65	SHEET 12	CAVITY ALIGNMENT HORIZ. ADJUSTMENT PLATE	1				
64	SHEET 14	CAVITY ALIGNMENT PUSHER PLATE - SHORT	2				
63	SHEET 14	CAVITY ALIGNMENT PUSHER PLATE - LONG	2				
62	SHEET 12	FIXED TO CAVITY PLATE	1				
61	SHEET 11	CAVITY ALIGN VERT POST	4				
60	SHEET 11	FIXED TO CAVITY PLATE TOP	1				
59	SHEET 11	SLOTTED UNDER CAVITY TOP PLATE	1				
58	SHEET 11	CAVITY SUPPORT TUNER SPACER	1				
4	SHEET 10	CAVITY ALIGNMENT SUPPORT ASSY.	X				

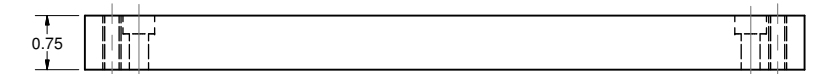
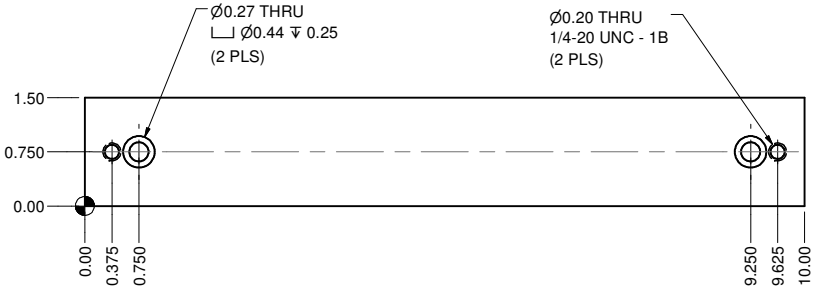
104	PUR.	WASHER 1/4 - NARROW TYPE A	3						
103	SHEET 10	HEX CAP 1/2-20 UNF - 2 LG. (MODIFIED)	3					PURCHASE	
102	PUR.	SOCKET HEAD 1/4-20 UNC - 1.0 LG.	2						
101	PUR.	SOCKET HEAD 1/4-20 UNC - 1 1/2 LG.	3						
100	PUR.	HEX CAP 5/16-24 UNF - 1.5 LG.	7						
67	SHEET 13	CAVITY ALIGNMENT STATIONARY HOR. PLATE	1						
66	PUR.	TEFLON SHEET 1/16" THK 10.75" x 12.5" MCM# 8545K32 OR EQUIV.	1					CUT TO FIT	
65	SHEET 12	CAVITY ALIGNMENT HORIZ. ADJUSTMENT PLATE	1						
64	SHEET 14	CAVITY ALIGNMENT PUSHER PLATE - SHORT	2						
63	SHEET 14	CAVITY ALIGNMENT PUSHER PLATE - LONG	2						
62	SHEET 12	FIXED TO CAVITY PLATE	1						
61	SHEET 11	CAVITY ALIGN VERT POST	4						
60	SHEET 11	FIXED TO CAVITY PLATE TOP	1						
59	SHEET 11	SLOTTED UNDER CAVITY TOP PLATE	1						
58	SHEET 11	CAVITY SUPPORT TUNER SPACER	1						
4	SHEET 10	CAVITY ALIGNMENT SUPPORT ASSY.	X						
ITEM	DWG. NO.	DESCRIPTION	G1	G2	G3	REMARKS			REV.
QUANTITY									

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES ✓	CORNELL UNIVERSITY LEPP LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS		CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853			
	HORIZONTAL TEST ALIGNMENT FRAME ASSY. CAVITY ALIGNMENT SUPPORT ASSEMBLY DETAIL					
CHECKED BY: A.P.	DRAWN BY H. Applin	DRAWN FOR A. PAULING	DATE 6/26/2006	SCALE D	7110-014 SH. NO. 10 OF 26	REV. A
APPROVED BY: A.P.						

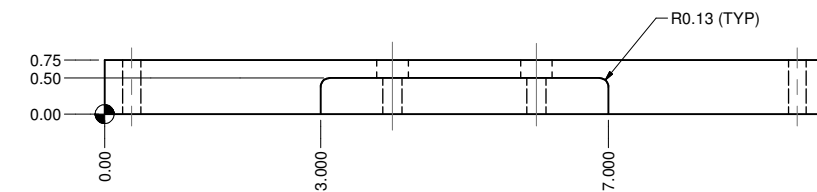
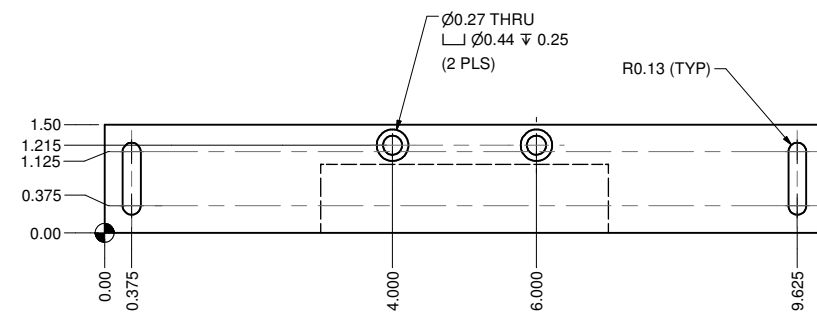
REVISIONS			
SYM.	ZONE	DESCRIPTION	DATE APP.



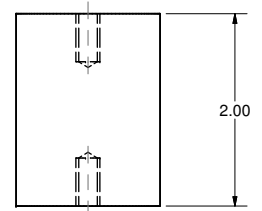
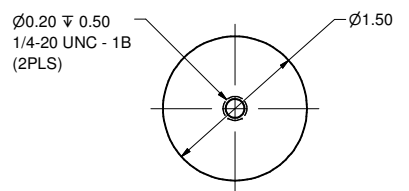
60 **FIXED TO CAVITY PLATE TOP**
FILE NAME: 7110-014
SHEET NO.: 11
DFT. SCALE: 3/4
MATERIAL: Aluminum-6061
QTY: 1
NOTES:



59 **SLOTTED UNDER CAVITY TOP PLATE**
FILE NAME: 7110-014
SHEET NO.: 11
DFT. SCALE: 3/4
MATERIAL: Aluminum-6061
QTY: 1
NOTES:






58 **CAVITY SUPPORT TUNER SPACER**
FILE NAME: 7110-014
SHEET NO.: 11
DFT. SCALE: 3/4
MATERIAL: Aluminum-6061
QTY: 1
NOTES:



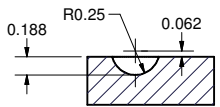
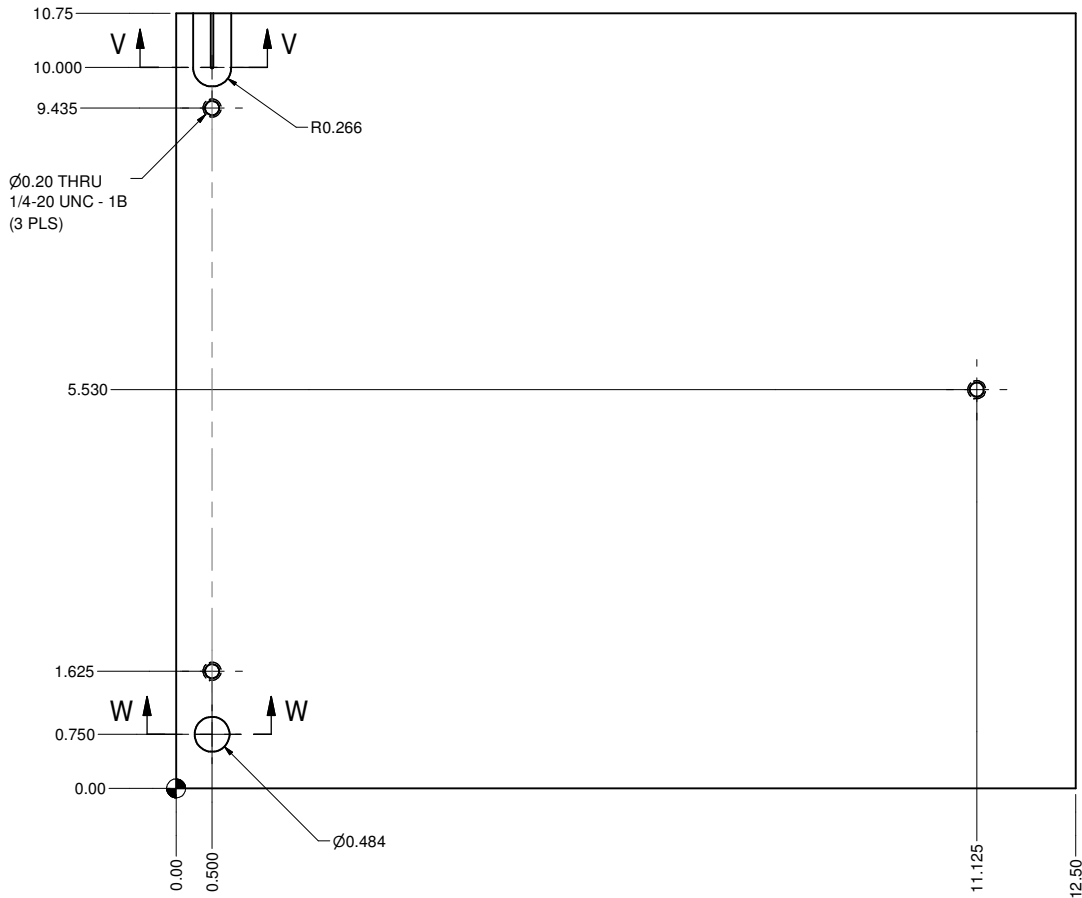
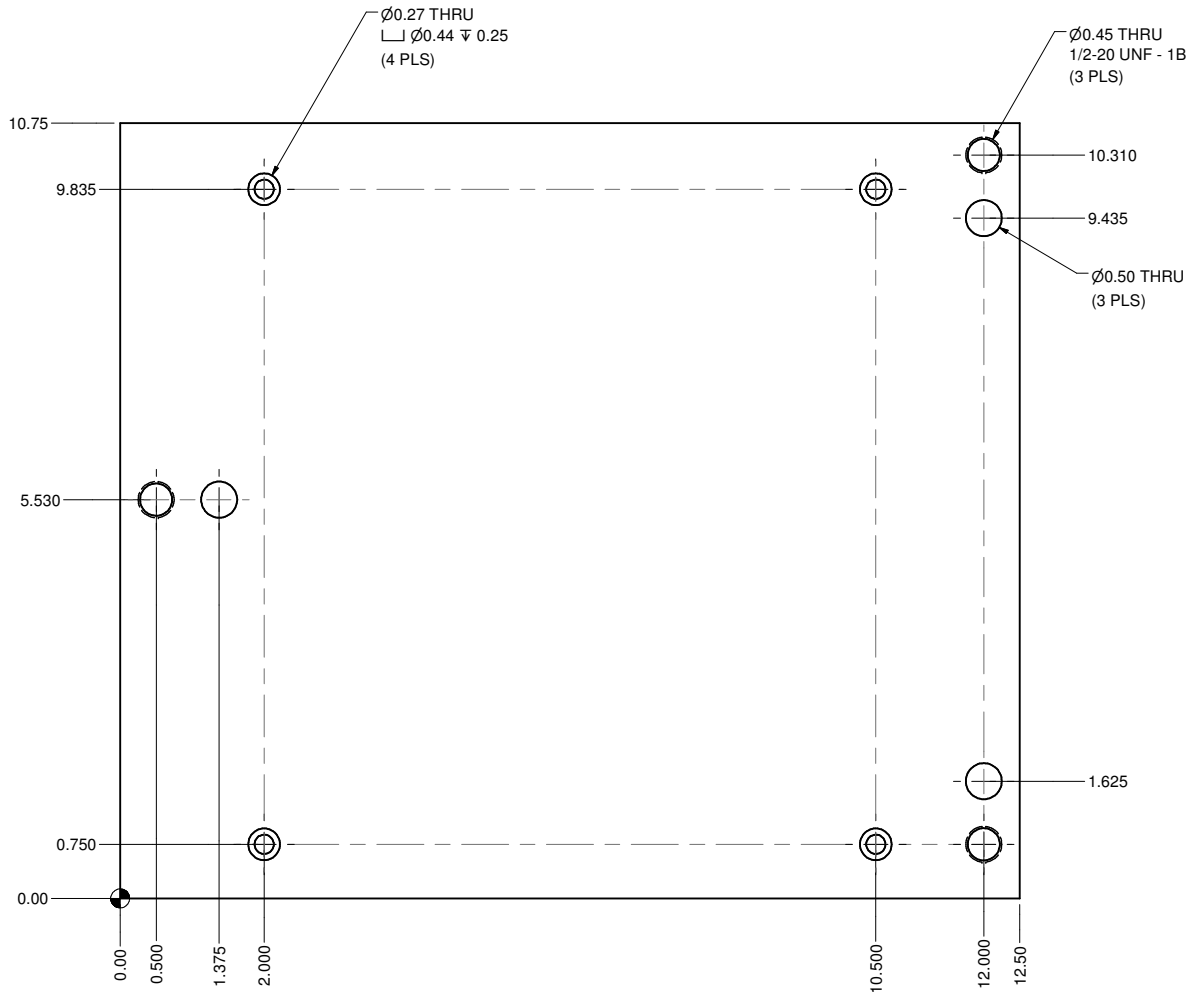
61 **CAVITY ALIGN. VERT. POST**
FILE NAME: 7110-014
SHEET NO.: 11
DFT. SCALE: 1:1
MATERIAL: Aluminum-6061
QTY: 4
NOTES:

FOR MACHINING LUBRICANT USE ONLY
ALKALINE DETERGENT LUBRICANT CIMSTAR 40
OR EQUIVALENT APPROVED BY CORNELL LEPP

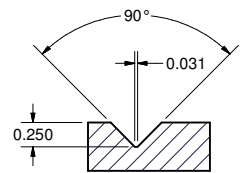
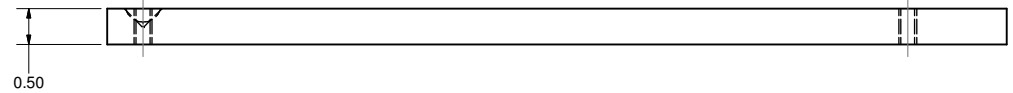
TECHNICAL RESOURCE APPROVALS REQUIRED BEFORE FABRICATION			
	OK	DATE	N/A
DRAFTING (O'Connell):			
MACHINE SHOP (Kaminski):			
CHEMISTRY (Conklin):			
ELECTRONICS SHOP (Barley):			
FURNACE BRAZING (Sherwood):			
BEAM WELDING (Sears):			
WELDING OTHER (Gallagher):			
UTILITIES INTEGRATION (Gallagher):			
STOCKROOMS (Lockwood):			

		ITEM	DWG. NO.	DESCRIPTION	G1	G2	G3	REMARKS	REV.
					QUANTITY				
PLOT DATE: 5/4/2007 CAD FILE NAME: horiz test align extruded alum frame.idw									
D	PRINT DISTR.	CR-1	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES 	 CORNELL UNIVERSITY FLOYD R. NEWMAN LABORATORY ITHACA, NY 14853					
SH. NO. 11 OF 26		7110-014	HORIZONTAL TEST ALIGNMENT FRAME ASSY. CAVITY ALIGNMENT ASSY. DETAIL						
REV.		CHECKED BY: A. P.	DRAWN BY H. Applin	DRAWN FOR A. PAULING	DATE 6/26/2006	SCALE	D	7110-014	REV.
		APPROVED BY: A. P.						SH. NO. 11 OF 26	

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A		ADDED DIMPLE AND 'V' SHAPED SLOT TO ITEM 65. D.M.E.	1-9-07	TIO



SECTION W-W
SCALE 1









SECTION V-V
SCALE 1

62 FIXED TO CAVITY PLATE
FILE NAME: 7110-014
SHEET NO.: 12
DFT. SCALE: 3/4
MATERIAL: Aluminum-6061
QTY: 1
NOTES:

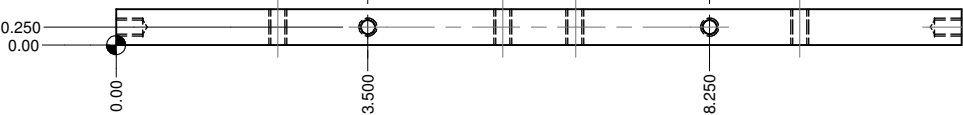
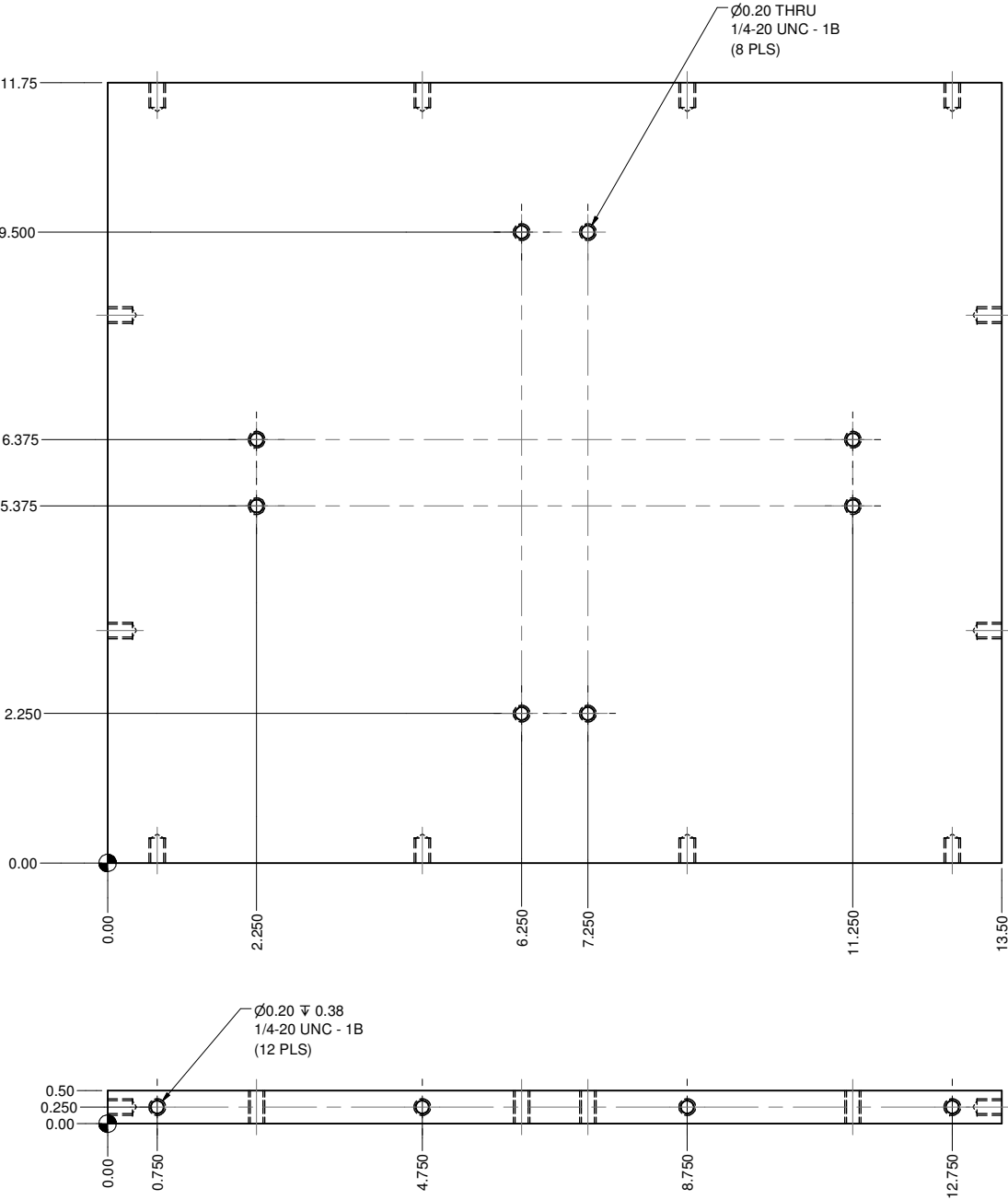
65 CAVITY ALIGNMENT HORIZ ADJUSTMENT PLATE
FILE NAME: 7110-014
SHEET NO.: 12
DFT. SCALE: 3/4
MATERIAL: Aluminum-6061
QTY: 1
NOTES:

FOR MACHINING LUBRICANT USE ONLY
ALKALINE DETERGENT LUBRICANT CIMSTAR 40
OR EQUIVALENT APPROVED BY CORNELL LEPP

TECHNICAL RESOURCE APPROVALS REQUIRED BEFORE FABRICATION			
	OK	DATE	N/A
DRAFTING (O'Connell):			
MACHINE SHOP (Kaminski):			
CHEMISTRY (Conklin):			
ELECTRONICS SHOP (Barley):			
FURNACE BRAZING (Sherwood):			
BEAM WELDING (Sears):			
WELDING OTHER (Gallagher):			
UTILITIES INTEGRATION (Gallagher):			
STOCKROOMS (Lockwood):			

		ITEM	DWG. NO.	DESCRIPTION	G1	G2	G3	REMARKS	REV.	
					QUANTITY					
		PRINT	PLOT DATE: 5/4/2007							
		DISTR.	CAD FILE NAME: horiz test align extruded alum frame.idw							
		CR-1	<div>UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES ✓</div>	<div><div> CORNELL UNIVERSITY</div><div></div><div>CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853</div></div> <div>L ABORATORY FOR ELEMENTARY-PARTICLE PHYSICS</div>						
									HORIZONTAL TEST ALIGNMENT FRAME ASSY. CAVITY ALIGNMENT ASSY. DETAILS	
SH. NO. 12 OF 26	7110-014	CR-1								
REV. A										
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REVISIONS			
SYM.	ZONE	DESCRIPTION	DATE APP.





67 CAVITY ALIGNMENT STATIONARY HORIZ PLATE

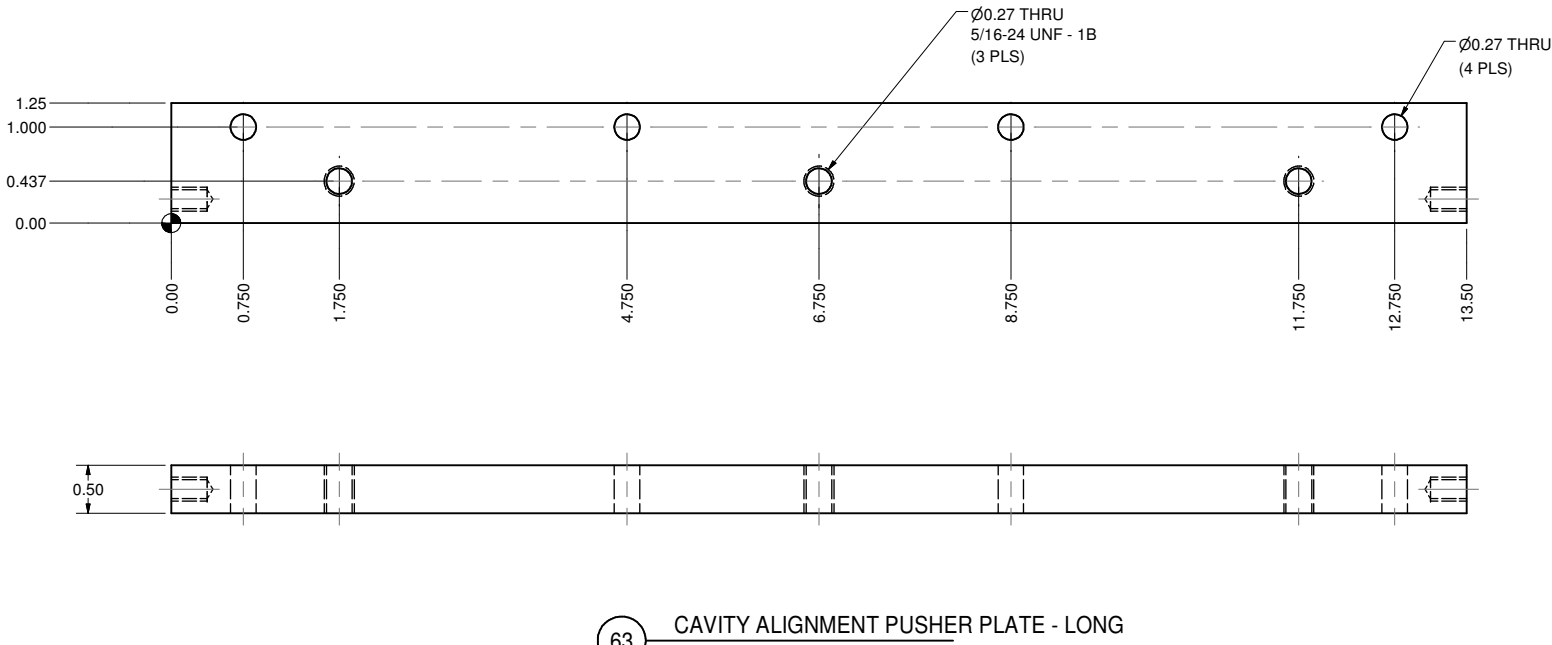
FILE NAME: 7110-014
SHEET NO.: 13
DFT. SCALE: 3/4
MATERIAL: Aluminum-6061
QTY: 1
NOTES:

FOR MACHINING LUBRICANT USE ONLY
ALKALINE DETERGENT LUBRICANT CIMSTAR 40
OR EQUIVALENT APPROVED BY CORNELL LEPP

TECHNICAL RESOURCE APPROVALS REQUIRED BEFORE FABRICATION			
	OK	DATE	N/A
DRAFTING (O'Connell):			
MACHINE SHOP (Kaminski):			
CHEMISTRY (Conklin):			
ELECTRONICS SHOP (Barley):			
FURNACE BRAZING (Sherwood):			
BEAM WELDING (Sears):			
WELDING OTHER (Gallagher):			
UTILITIES INTEGRATION (Gallagher):			
STOCKROOMS (Lockwood):			

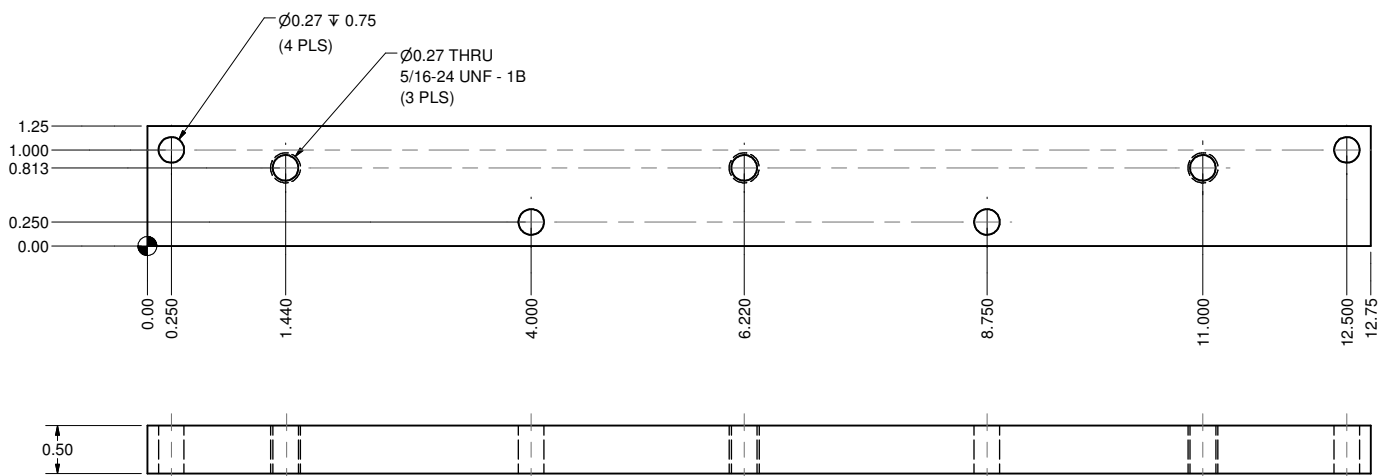
		ITEM		DWG. NO.		DESCRIPTION			G1	G2	G3	REMARKS		REV.
									QUANTITY					
D		PRINT DISTR.		PLOT DATE: 5/4/2007 CAD FILE NAME: horiz test align extruded alum frame.idw										
7110-014 SH. NO. 13 OF 26		CR-1		UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES ✓		 CORNELL UNIVERSITY FLOYD R. NEWMAN LABORATORY ITHACA, NY 14853			HORIZONTAL TEST ALIGNMENT FRAME ASSY. CAVITY ALIGNMENT STATIONARY HORIZ. PLATE DETAIL					
REV.		CHECKED BY: A.P.		DRAWN BY H. Applin		DRAWN FOR A. PAULING		DATE 6/26/2006		SCALE D		7110-014 SH. NO. 13 OF 26		REV.
		APPROVED BY: A.P.												

REVISIONS			
SYM.	ZONE	DESCRIPTION	DATE APP.



63 CAVITY ALIGNMENT PUSHER PLATE - LONG

FILE NAME: 7110-014
SHEET NO.: 14
DFT. SCALE: 1:1
MATERIAL: Aluminum-6061
QTY: 2
NOTES:



64 CAVITY ALIGNMENT PUSHER PLATE - SHORT

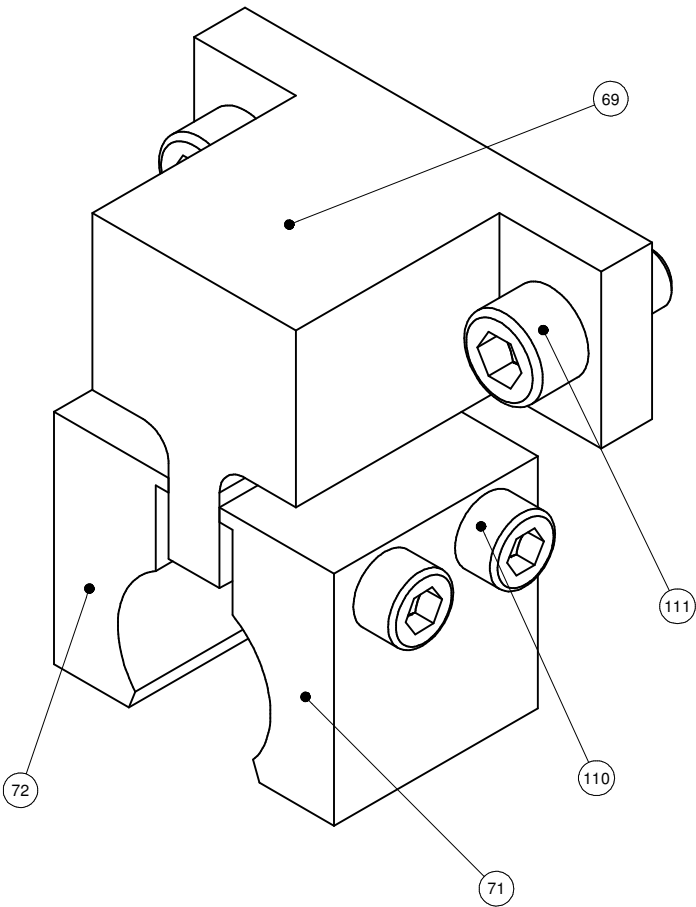
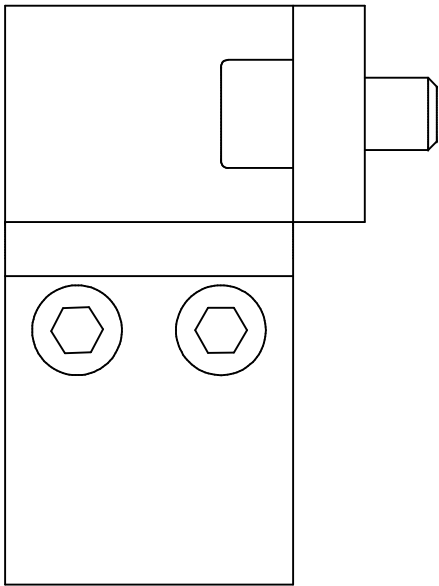
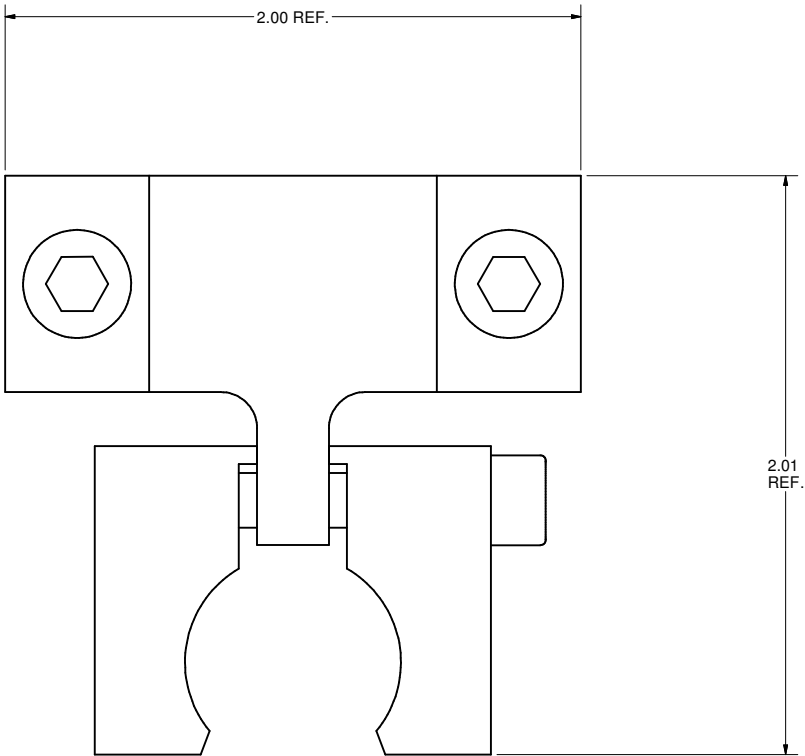
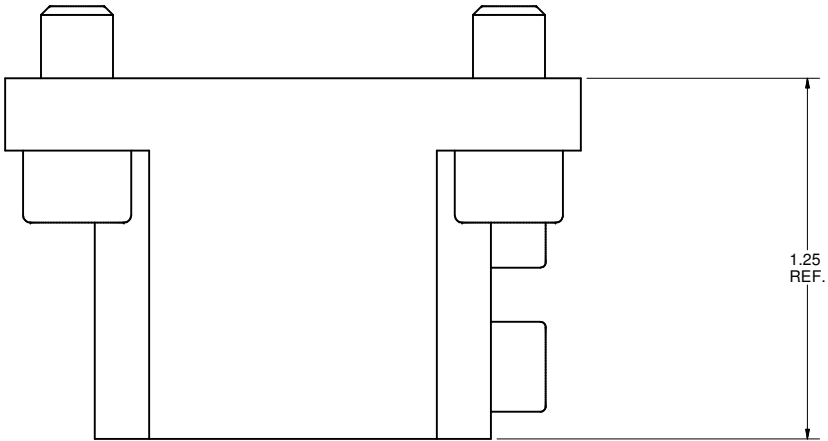
FILE NAME: 7110-014
SHEET NO.: 14
DFT. SCALE: 1:1
MATERIAL: Aluminum-6061
QTY: 2
NOTES:

FOR MACHINING LUBRICANT USE ONLY
ALKALINE DETERGENT LUBRICANT CIMSTAR 40
OR EQUIVALENT APPROVED BY CORNELL LEPP

TECHNICAL RESOURCE APPROVALS REQUIRED BEFORE FABRICATION			
	OK	DATE	N/A
DRAFTING (O'Connell):			
MACHINE SHOP (Kaminski):			
CHEMISTRY (Conklin):			
ELECTRONICS SHOP (Barley):			
FURNACE BRAZING (Sherwood):			
BEAM WELDING (Sears):			
WELDING OTHER (Gallagher):			
UTILITIES INTEGRATION (Gallagher):			
STOCKROOMS (Lockwood):			

		ITEM	DWG. NO.	DESCRIPTION	G1	G2	G3	REMARKS	REV.
					QUANTITY				
D	PRINT DISTR.	PLOT DATE: 5/4/2007 CAD FILE NAME: horiz test align extruded alum frame.idw							
	7110-014 SH. NO. 14 OF 26	CR-1	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES		<div>CORNELL UNIVERSITY FLOYD R. NEWMAN LABORATORY Ithaca, NY 14853</div> <div>CORNELL UNIVERSITY FLOYD R. NEWMAN LABORATORY Ithaca, NY 14853</div>				
REV.			CHECKED BY: A.P. APPROVED BY: A.P.		DRAWN BY H. Applin	DRAWN FOR A. PAULING	DATE 6/26/2006	SCALE D	7110-014 SH. NO. 14 OF 26

REVISIONS			
SYM.	ZONE	DESCRIPTION	DATE APP.





48 RAIL CLAMP ASSEMBLY
FILE NAME: 7110-014
SHEET NO.: 15
DFT. SCALE: 3:1
MATERIAL:
QTY: 2 PER PEDESTAL ASSY. (8 TOTAL)
NOTES:

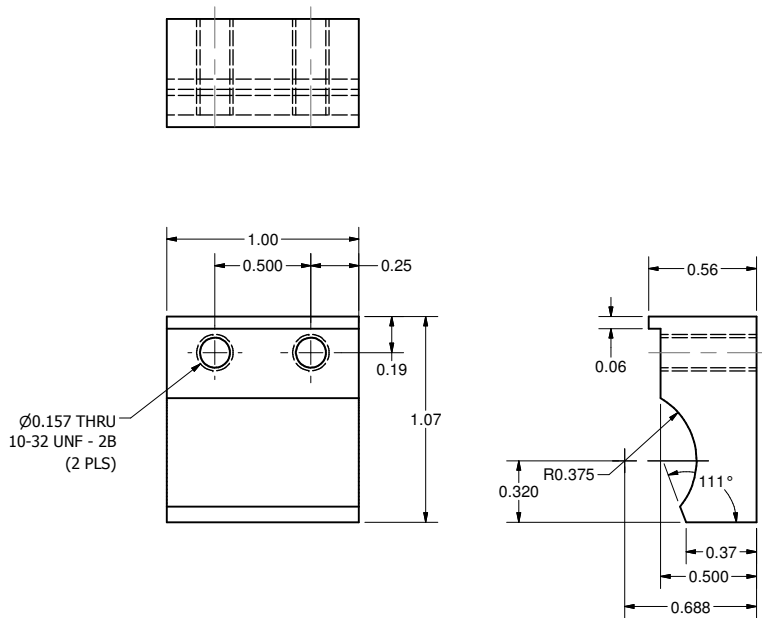
FOR MACHINING LUBRICANT USE ONLY
ALKALINE DETERGENT LUBRICANT CIMSTAR 40
OR EQUIVALENT APPROVED BY CORNELL LEPP

TECHNICAL RESOURCE APPROVALS REQUIRED BEFORE FABRICATION			
	OK	DATE	N/A
DRAFTING (O'Connell):			
MACHINE SHOP (Kaminski):			
CHEMISTRY (Conklin):			
ELECTRONICS SHOP (Barley):			
FURNACE BRAZING (Sherwood):			
BEAM WELDING (Sears):			
WELDING OTHER (Gallagher):			
UTILITIES INTEGRATION (Gallagher):			
STOCKROOMS (Lockwood):			

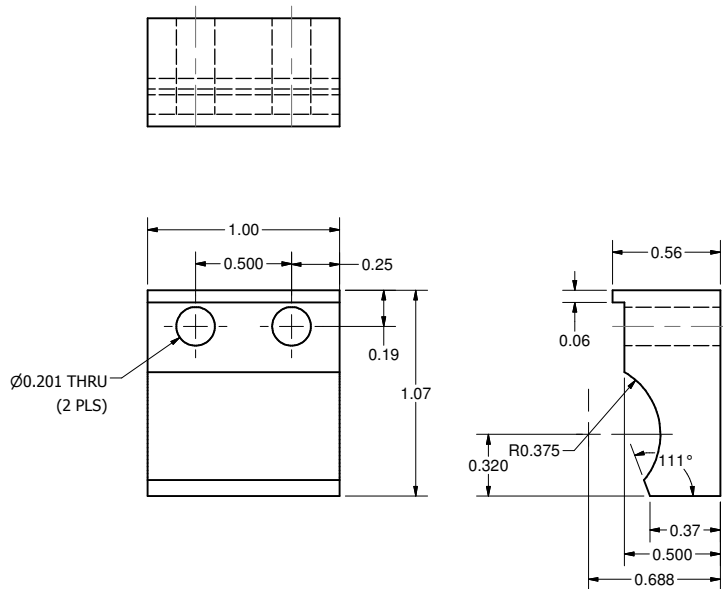
	PRINT DISTR.
D	7110-014
SH. NO. 15 OF 26	REV.

110	PUR.	HEX SOCKET - 10-32 UNF - 1.0 LG.	2					
72	SHEET 16	RAIL CLAMP TAPPED HOLE SIDE	1					
71	SHEET 16	RAIL CLAMP CLEAR HOLE SIDE	1					
111	PUR.	HEX SOCKET - 1/4 - 20 - 1/2 LG.	2					
69	SHEET 16	RAIL CLAMP BRKT.	1					
48	SHEET 15	RAIL CLAMP ASSEMBLY	X					
ITEM	DWG. NO.	DESCRIPTION	G1	G2	G3	REMARKS	REV.	
			QUANTITY					
PLOT DATE: 5/4/2007 CAD FILE NAME: horiz test align extruded alum frame.idw								
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES; TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES 		 CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853		HORIZONTAL TEST ALIGNMENT FRAME ASSY. RAIL CLAMP ASSEMBLY DETAIL				
CHECKED BY: A.P.		DRAWN BY H. Applin	DRAWN FOR A. PAULING	DATE 6/26/2006	SCALE D	7110-014 SH. NO. 15 OF 26	REV.	
APPROVED BY: A.P.								

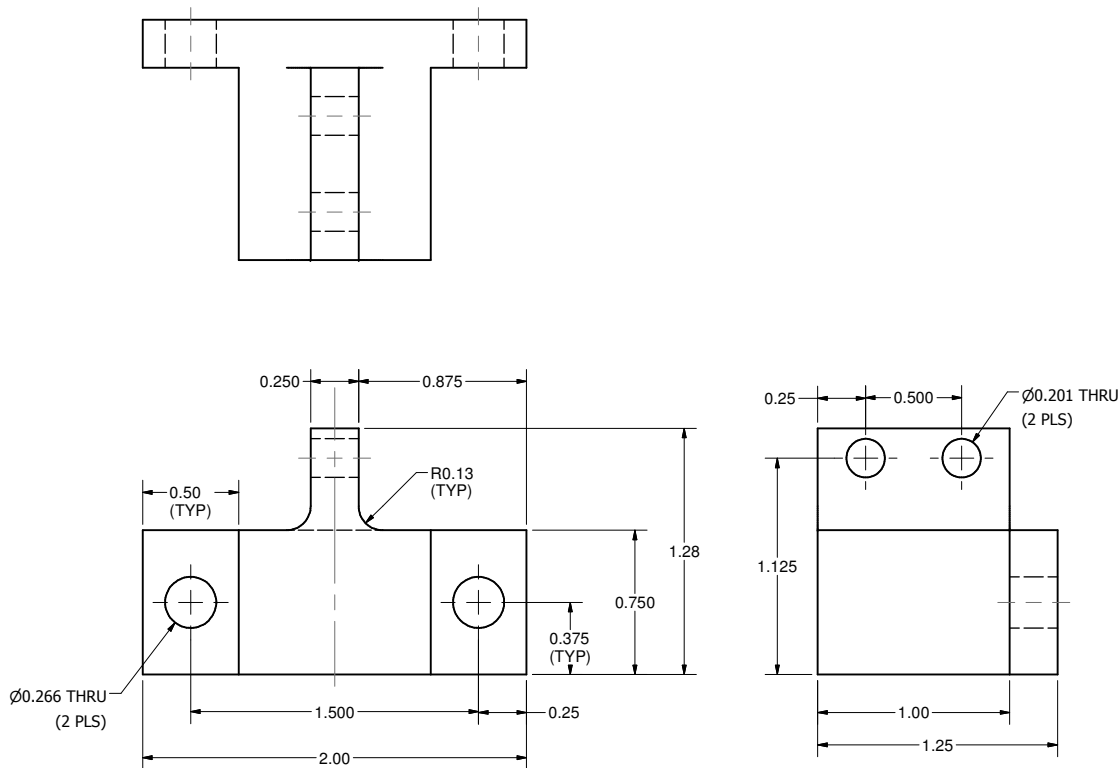
REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A		Changed Item Nos : 69 was 19, 71 was 18 & 72 was 17 JGL	5/4/07	TIO



72 RAIL CLAMP TAPPED HOLE SIDE
FILE NAME: 7110-014
SHEET NO.: 16
DFT. SCALE: 2:1
MATERIAL: Aluminum-6061
QTY: 2 PER PEDESTAL ASSY. (8 TOTAL)
NOTES:








71 RAIL CLAMP CLEAR HOLE SIDE
FILE NAME: 7110-014
SHEET NO.: 16
DFT. SCALE: 2:1
MATERIAL: Aluminum-6061
QTY: 2 PER PEDESTAL ASSY. (8 TOTAL)
NOTES:



69 RAIL CLAMP BRACKET
FILE NAME: 7110-014
SHEET NO.: 16
DFT. SCALE: 2:1
MATERIAL: Aluminum-6061
QTY: 2 PER PEDESTAL ASSY. (8 TOTAL)
NOTES:

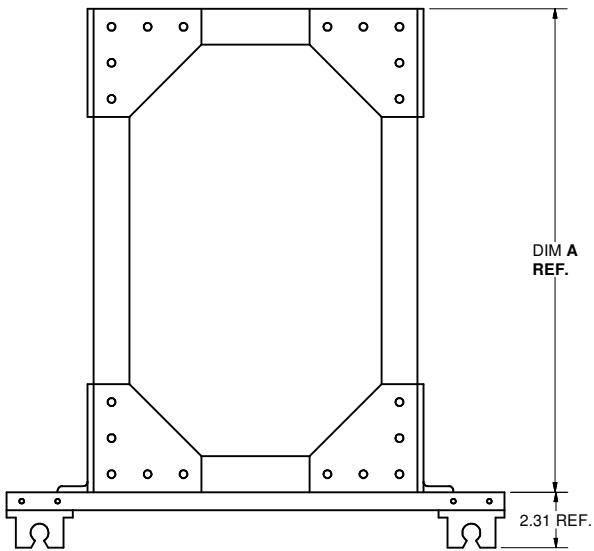
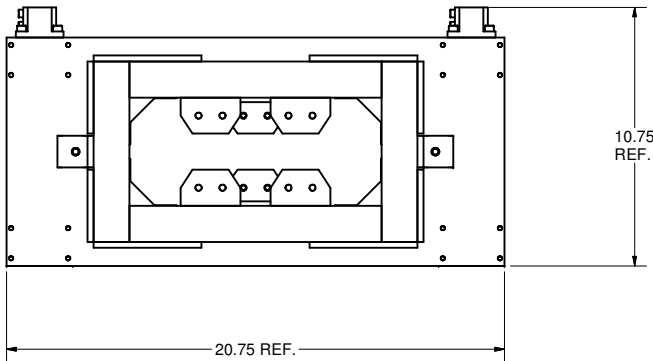
FOR MACHINING LUBRICANT USE ONLY
ALKALINE DETERGENT LUBRICANT CIMSTAR 40
OR EQUIVALENT APPROVED BY CORNELL LEPP

TECHNICAL RESOURCE APPROVALS REQUIRED BEFORE FABRICATION			
	OK	DATE	N/A
DRAFTING (O'Connell):			
MACHINE SHOP (Kaminski):			
CHEMISTRY (Conklin):			
ELECTRONICS SHOP (Barley):			
FURNACE BRAZING (Sherwood):			
BEAM WELDING (Sears):			
WELDING OTHER (Gallagher):			
UTILITIES INTEGRATION (Gallagher):			
STOCKROOMS (Lockwood):			

		ITEM	DWG. NO.	DESCRIPTION	G1	G2	G3	REMARKS	REV.
					QUANTITY				
		PRINT DISTR.	PLOT DATE: 5/4/2007 CAD FILE NAME: horiz test align extruded alum frame.idw						
		CR-1	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES ✓	<div>CORNELL UNIVERSITY </div> <div>CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853</div> <div>LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS</div>					
7110-014 SH. NO. 16 OF 26	HORIZONTAL TEST ALIGNMENT FRAME ASSY. RAIL CLAMP DETAILS								
	REV. A	CHECKED BY: A.P. APPROVED BY: A.P.	DRAWN BY H. Applin	DRAWN FOR A. PAULING	DATE 6/26/2006	SCALE	D	7110-014 SH. NO. 16 OF 26	REV. A

HORIZONTAL TEST ALIGNMENT FRAME ASSY.
RAIL CLAMP DETAILS

REVISIONS			
SYM.	ZONE	DESCRIPTION	DATE APP.



6 HOM 78 PEDESTAL ASSEMBLY

FILE NAME: 7110-014
SHEET NO.: 17
DFT. SCALE: 1/4
MATERIAL:
QTY: 1
NOTES:

8 HOM 106 PEDESTAL ASSEMBLY

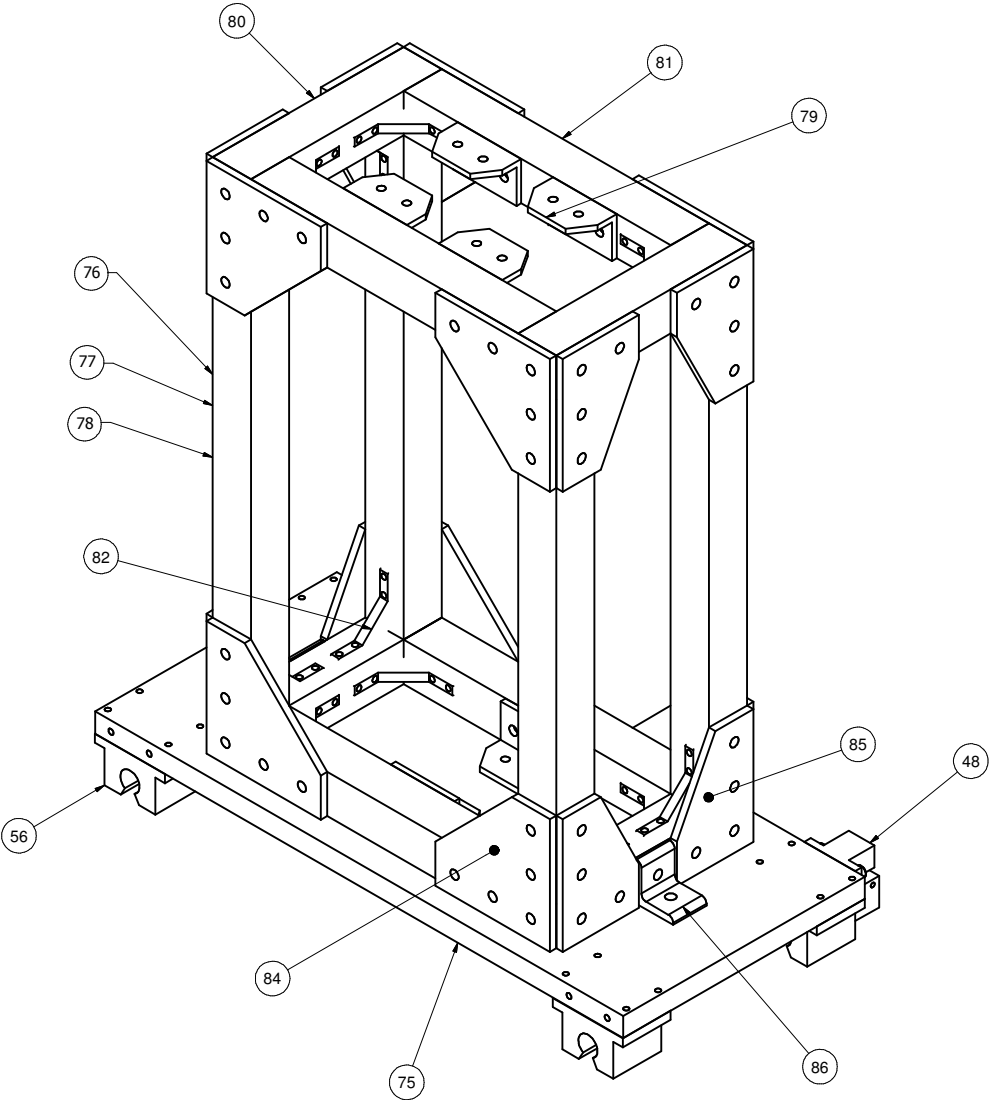
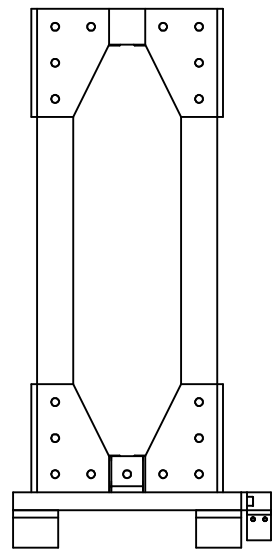
FILE NAME: 7110-014
SHEET NO.: 17
DFT. SCALE: 1/4
MATERIAL:
QTY: 1
NOTES:

10 GATE VALVE PEDESTAL ASSEMBLY

FILE NAME: 7110-014
SHEET NO.: 17
DFT. SCALE: 1/4
MATERIAL:
QTY: 1
NOTES:

DIM A	ASSEMBLY NAME
20.40	6) HOM 78 PEDESTAL ASSEMBLY
19.85	8) HOM 106 PEDESTAL ASSEMBLY
20.11	10) GATE VALVE PEDESTAL ASSEMBLY

GENERAL NOTE: 1) FASTENERS NOT SHOWN HERE OR LISTED IN THE B.O.M.



86	PUR.	80/20 INC. 2 HOLE INSIDE CORNER BRKT. #4302	2	2	2		
85	PUR.	80/20 INC. 4 HOLE 90 DEG. JOINING PLATE #4350	8	8	8		
84	PUR.	80/20 INC. 5 HOLE 90 DEG. JOINING PLATE #4351	8	8	8		
56	PUR.	THOMSON PILLOW BLOCK #SSUPBO-12-DP	4	4	4		
82	PUR.	80/20 INC. INSIDE CORNER CONNECTOR 90 DEG. OUTLINE #3364	16	16	16		
81	PUR.	80/20 INC. PEDESTAL ACROSS BEAM HORIZ. BAR #1515 10.5" LG.	4	4	4		
80	PUR.	80/20 INC. PEDESTAL ALONG BEAM HORIZ. BAR #1515 7.5" LG.	4	4	4		
79	PUR.	80/20 INC. 4 HOLE TRANS. INSIDE CORNER BRKT. #4512	6	6	6		
78	PUR.	80/20 INC. GATE VALVE PEDESTAL VERT BAR #1515 16.85" LG.			4		
77	PUR.	80/20 INC. HOM 106 PEDESTAL VERT BAR #1515 17.4" LG.		4			
76	PUR.	80/20 INC. HOM 78 PEDESTAL VERT BAR #1515 17.114" LG.	4				
75	SHEET 18	PEDESTAL BOTTOM PLATE	1	1	1		
48	SHEET 15	RAIL CLAMP ASSY.	2	2	2		
10	SHEET 17	GATE VALVE PEDESTAL ASSEMBLY			X		
8	SHEET 17	HOM 106 PEDESTAL ASSEMBLY		X			
6	SHEET 17	HOM 78 PEDESTAL ASSEMBLY	X				
ITEM	DWG. NO.	DESCRIPTION	G1	G2	G3	REMARKS	REV.
			QUANTITY				

FOR MACHINING LUBRICANT USE ONLY
ALKALINE DETERGENT LUBRICANT CIMSTAR 40
OR EQUIVALENT APPROVED BY CORNELL LEPP

TECHNICAL RESOURCE APPROVALS REQUIRED BEFORE FABRICATION			
	OK	DATE	N/A
DRAFTING (O'Connell):			
MACHINE SHOP (Kaminski):			
CHEMISTRY (Conklin):			
ELECTRONICS SHOP (Barley):			
FURNACE BRAZING (Sherwood):			
BEAM WELDING (Sears):			
WELDING OTHER (Gallagher):			
UTILITIES INTEGRATION (Gallagher):			
STOCKROOMS (Lockwood):			

PRINT
DISTR.

7110-014

REV.

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES:
TOLERANCES ON:
.00 ± .010
.000 ± .005
FRACTIONS ± 1/64
ANGLES ± 0.5°
ALL SURFACES

CORNELL UNIVERSITY

LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS

CORNELL UNIVERSITY

Floyd R. Newman Laboratory

Ithaca, NY 14853

HORIZONTAL TEST ALIGNMENT FRAME ASSY.

HOM & GATE VALVE PEDESTAL ASSEMBLY DETAILS

CHECKED BY: A.P.

APPROVED BY: A.P.

DRAWN BY: H. Applin

DRAWN FOR: A. PAULING

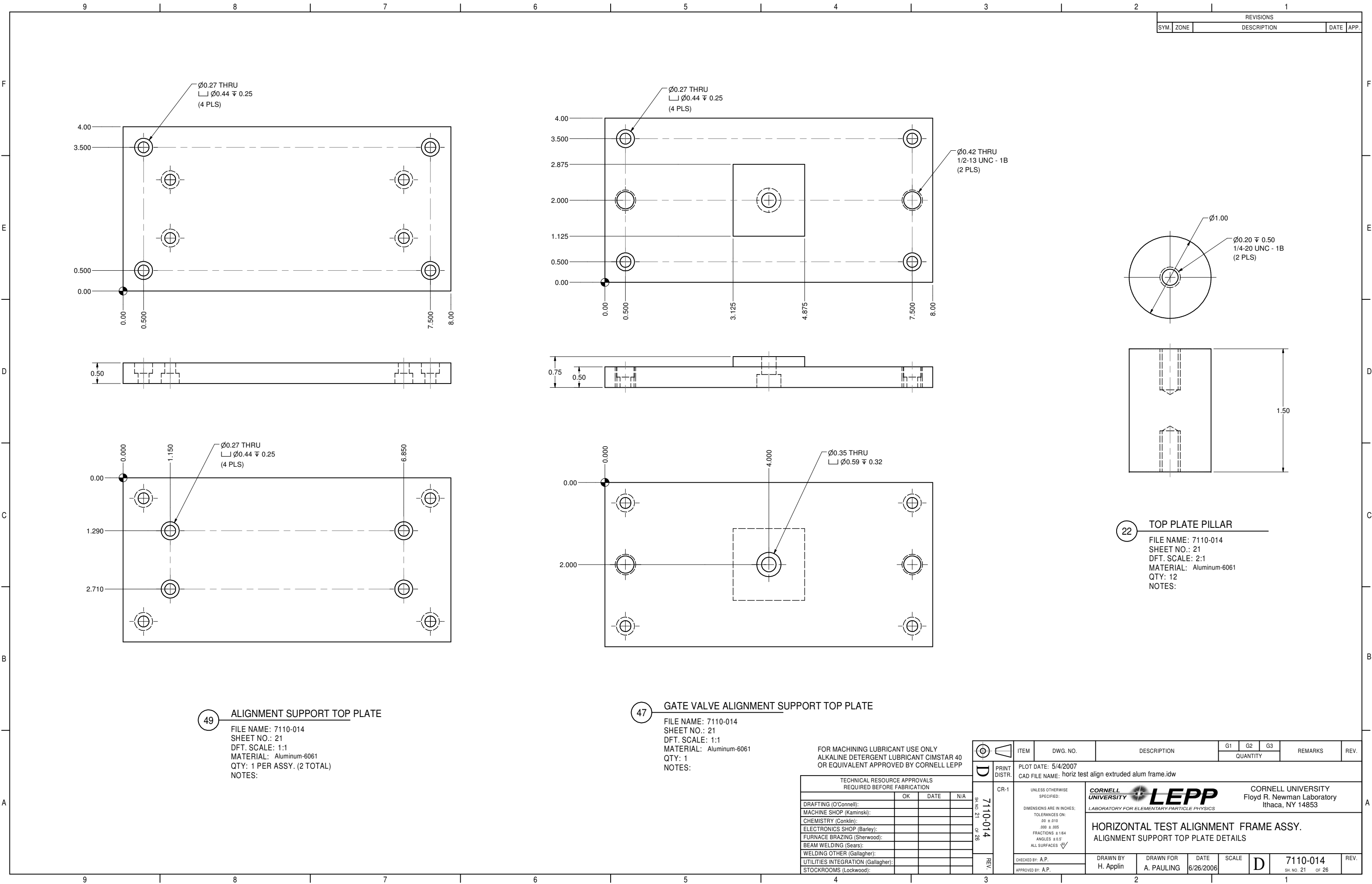
DATE: 6/26/2006

SCALE: D

7110-014



SH. NO. 17 OF 26

REV.

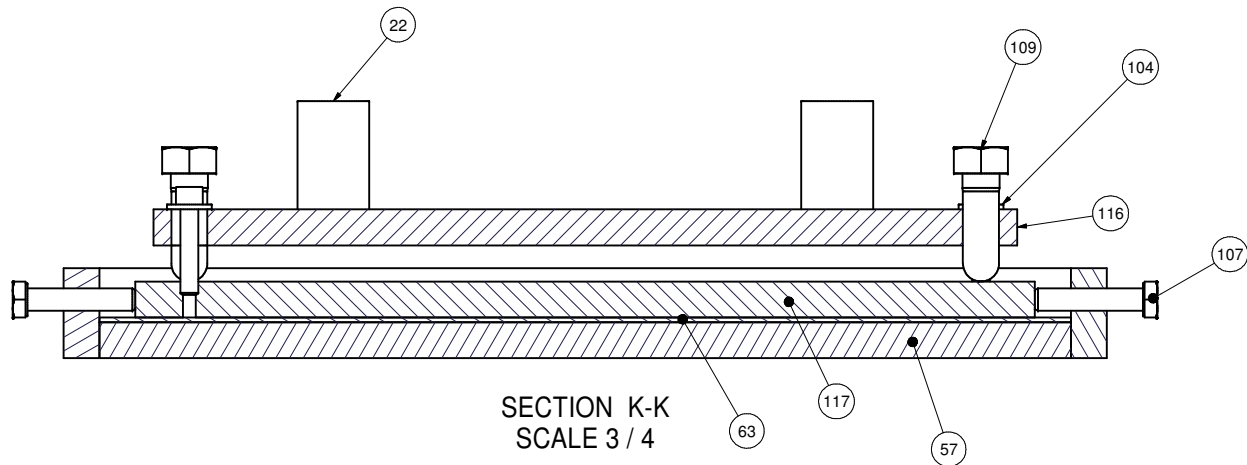
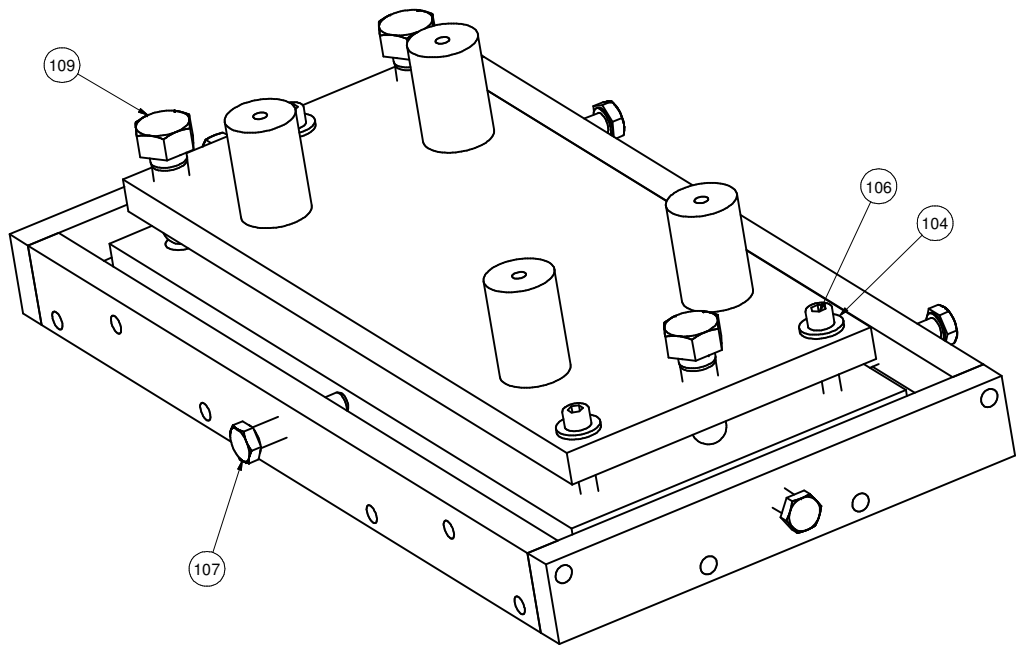
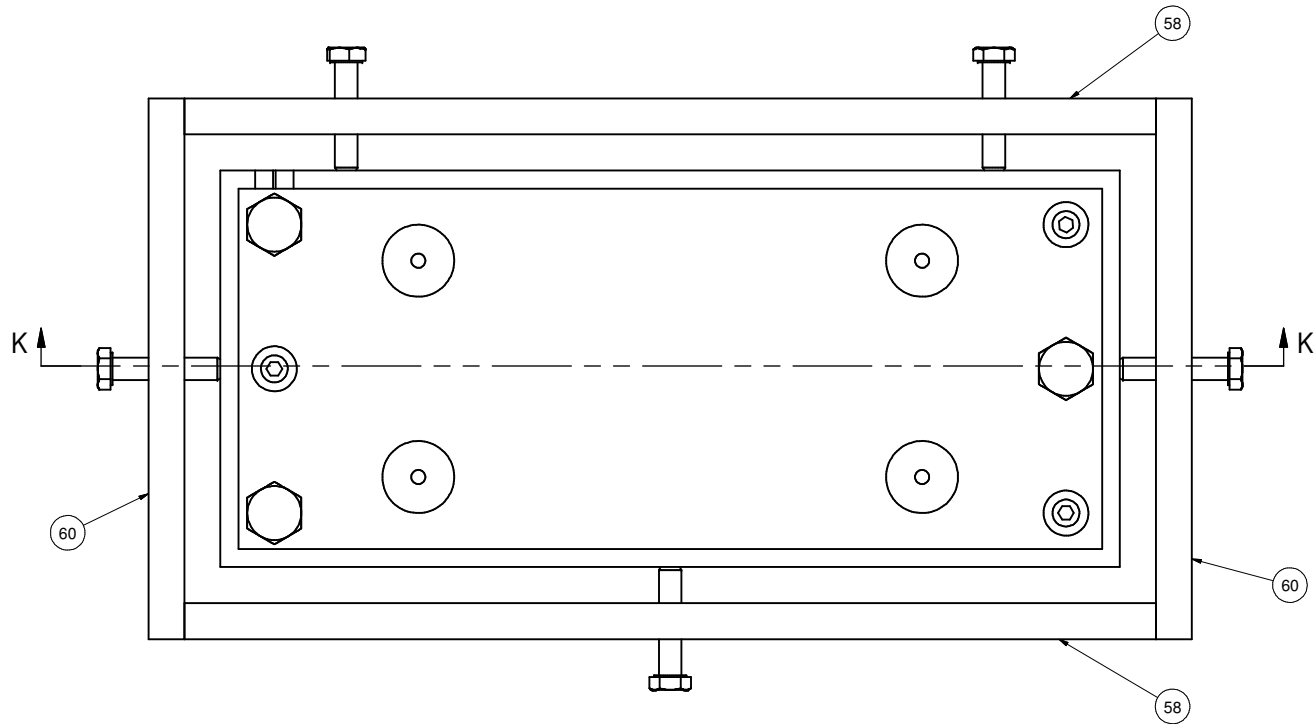


49 ALIGNMENT SUPPORT TOP PLATE
FILE NAME: 7110-014
SHEET NO.: 21
DFT. SCALE: 1:1
MATERIAL: Aluminum-6061
QTY: 1 PER ASSY. (2 TOTAL)
NOTES:

47 GATE VALVE ALIGNMENT SUPPORT TOP PLATE
FILE NAME: 7110-014
SHEET NO.: 21
DFT. SCALE: 1:1
MATERIAL: Aluminum-6061
QTY: 1
NOTES:

FOR MACHINING LUBRICANT USE ONLY ALKALINE DETERGENT LUBRICANT CIMSTAR 40 OR EQUIVALENT APPROVED BY CORNELL LEPP						ITEM	DWG. NO.	DESCRIPTION			G1	G2	G3	REMARKS		REV.																																							
<div>TECHNICAL RESOURCE APPROVALS REQUIRED BEFORE FABRICATION</div> <table><tr><td></td><td>OK</td><td>DATE</td><td>N/A</td></tr><tr><td colspan="4">DRAFTING (O'Connell):</td></tr><tr><td colspan="4">MACHINE SHOP (Kaminski):</td></tr><tr><td colspan="4">CHEMISTRY (Conklin):</td></tr><tr><td colspan="4">ELECTRONICS SHOP (Barley):</td></tr><tr><td colspan="4">FURNACE BRAZING (Sherwood):</td></tr><tr><td colspan="4">BEAM WELDING (Sears):</td></tr><tr><td colspan="4">WELDING OTHER (Gallagher):</td></tr><tr><td colspan="4">UTILITIES INTEGRATION (Gallagher):</td></tr><tr><td colspan="4">STOCKROOMS (Lockwood):</td></tr></table>					OK	DATE	N/A	DRAFTING (O'Connell):				MACHINE SHOP (Kaminski):				CHEMISTRY (Conklin):				ELECTRONICS SHOP (Barley):				FURNACE BRAZING (Sherwood):				BEAM WELDING (Sears):				WELDING OTHER (Gallagher):				UTILITIES INTEGRATION (Gallagher):				STOCKROOMS (Lockwood):				<div>D</div>	PRINT DISTR.	PLOT DATE: 5/4/2007 CAD FILE NAME: horiz test align extruded alum frame.idw									
					OK	DATE	N/A																																																
				DRAFTING (O'Connell):																																																			
				MACHINE SHOP (Kaminski):																																																			
				CHEMISTRY (Conklin):																																																			
ELECTRONICS SHOP (Barley):																																																							
FURNACE BRAZING (Sherwood):																																																							
BEAM WELDING (Sears):																																																							
WELDING OTHER (Gallagher):																																																							
UTILITIES INTEGRATION (Gallagher):																																																							
STOCKROOMS (Lockwood):																																																							
SH. NO. 21 OF 26	7110-014	CR-1	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES ✓	<div>CORNELL UNIVERSITY  LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS</div> <div>CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853</div>																																																			
				HORIZONTAL TEST ALIGNMENT FRAME ASSY. ALIGNMENT SUPPORT TOP PLATE DETAILS																																																			
				DRAWN BY H. Applin												DRAWN FOR A. PAULING	DATE 6/26/2006	SCALE D	7110-014 SH. NO. 21 OF 26		REV.																																		
				CHECKED BY: A.P. APPROVED BY: A.P.																																																			

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A		ITEM 116 WAS 54 & ITEM 117 WAS 56. PICTORIALY REFLECTS CHANGES TO ITEM 117 AND MODIFIED HEX CAP SCREW (ITEM 109) ON SHEET 23. D.M.E.	1-9-07	TIO



SECTION K-K
SCALE 3 / 4

45 **ALIGNMENT SUPPORT SUB-ASSEMBLY**
FILE NAME: 7110-014
SHEET NO.: 22
DFT. SCALE: 3/4
MATERIAL:
QTY: 1 PER ASSY. (3 TOTAL)
NOTES: 1) NOT ALL FASTENERS ARE SHOWN HERE OR LISTED IN THE B.O.M.

FOR MACHINING LUBRICANT USE ONLY
ALKALINE DETERGENT LUBRICANT CIMSTAR 40
OR EQUIVALENT APPROVED BY CORNELL LEPP

TECHNICAL RESOURCE APPROVALS REQUIRED BEFORE FABRICATION			
	OK	DATE	N/A
DRAFTING (O'Connell):			
MACHINE SHOP (Kaminski):			
CHEMISTRY (Conklin):			
ELECTRONICS SHOP (Barley):			
FURNACE BRAZING (Sherwood):			
BEAM WELDING (Sears):			
WELDING OTHER (Gallagher):			
UTILITIES INTEGRATION (Gallagher):			
STOCKROOMS (Lockwood):			



PRINT
DISTR.

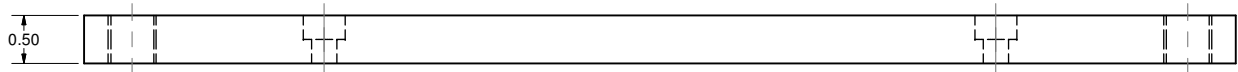
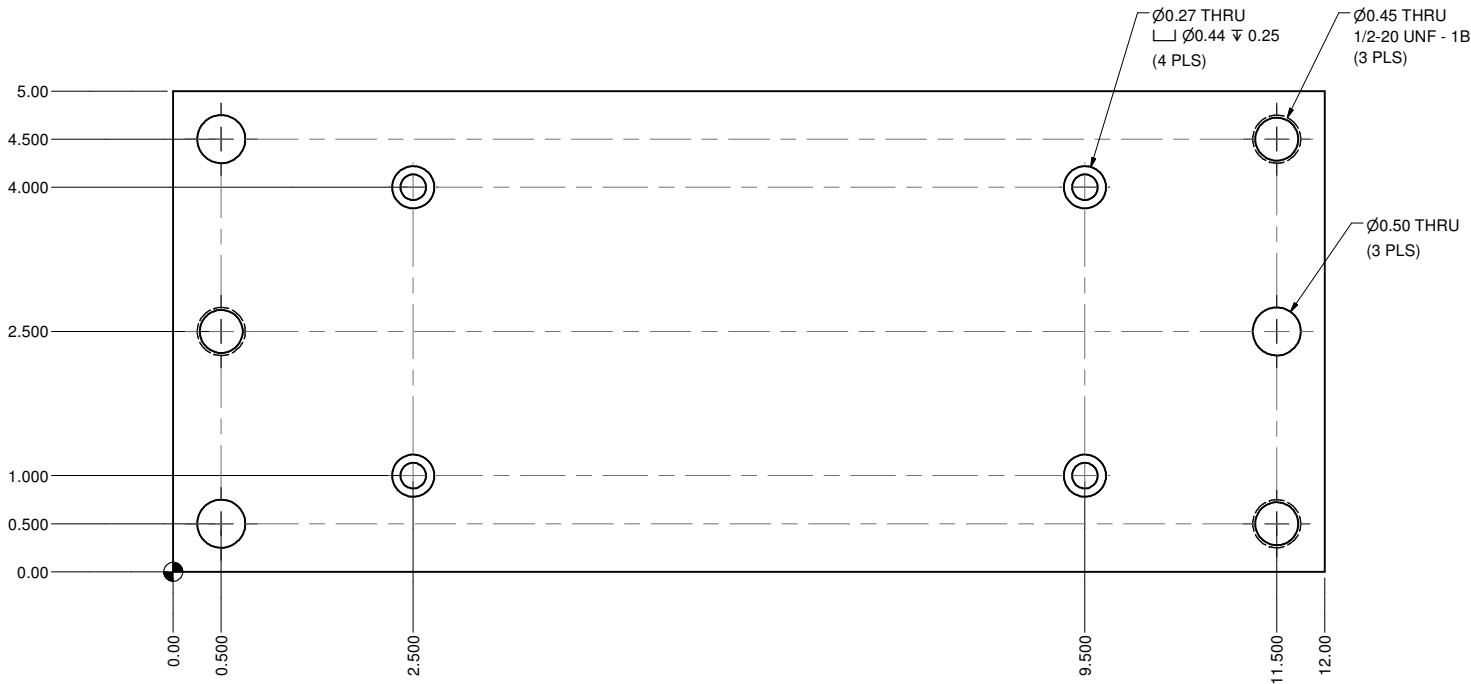
7110-014	REV.
SH. NO. 22	OF 26
A	

109	SHEET 23	HEX CAP 1/2-20 x 1-1/2" LONG (MODIFIED)	12			PURCHASE	
105	PUR.	HEX CAP - 1/2-13 UNC - 1.5 LG.	2				
22	SHEET 21	TOP PLATE PILLAR	4				
63	PUR.	TEFLON SHEET 1/16 THK. 6.5" x 13.5" MCM # 8545K32 OR EQUIV.	1			CUT TO FIT	
106	PUR.	HEX SOCKET - 1/4-20 UNF - 1.25 LG.	3				
104	PUR.	WASHER - 1/4 - NARROW - TYPE A	3				
60	SHEET 25	ALIGNMENT PLATE - SHORT	2				
107	PUR.	HEX CAP - 5/16-24 UNF - 1.5 LG.	5				
58	SHEET 25	ALIGNMENT PLATE - LONG	2				
57	SHEET 24	LATERAL POSITIONING PLATE	1				
117	SHEET 23	HOM VERT. ADJUSTMENT BASE PLATE	1				
116	SHEET 23	HOM BOTTOM PLATE	1				
45	SHEET 22	ALIGNMENT SUPPORT SUB-ASSY.	X				
ITEM	DWG. NO.	DESCRIPTION	G1	G2	G3	REMARKS	REV.
			QUANTITY				

PLOT DATE: 5/4/2007 CAD FILE NAME: horiz test align extruded alum frame.idw		UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES		CORNELL UNIVERSITY LEPP LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS		CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853	
CHECKED BY: A.P. APPROVED BY: A.P.		DRAWN BY H. Applin		DRAWN FOR A. PAULING		DATE 6/26/2006	
SCALE D		7110-014 SH. NO. 22 OF 26		REV. A			

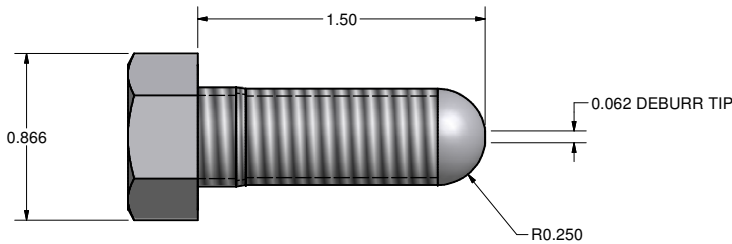
HORIZONTAL TEST ALIGNMENT FRAME ASSY.
ALIGNMENT SUPPORT SUB- ASSEMBLY DETAIL

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A		ITEM 116 WAS 54 & ITEM 117 WAS 56. ADDED DIMPLE AND 'V' SHAPED SLOT TO ITEM 117. ADDED DETAIL OF ITEM 109, MODIFIED HEX CAP. D.M.E.	1-9-07	TIO



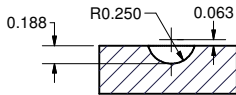
116 HOM BOTTOM PLATE

FILE NAME: 7110-014
SHEET NO.: 23
DFT. SCALE: 1:1
MATERIAL: Aluminum-6061
QTY: 1 PER ASSY. (3 TOTAL)
NOTES:

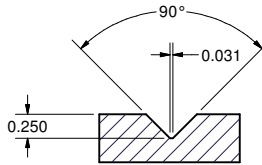
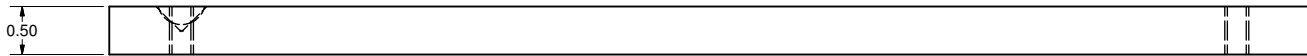


109 HEX CAP 1/2-20 x 1.5 LONG (MODIFIED)

FILE NAME: 7110-014
SHEET NO.: 23
DFT. SCALE: 2:1
MATERIAL: Aluminum-6061
QTY: 12
NOTES: PURCHASED (MODIFIED)



SECTION X-X
SCALE 1 : 1





SECTION Y-Y
SCALE 1 : 1

117 HOM VERT. ADJUSTMENT BASE PLATE

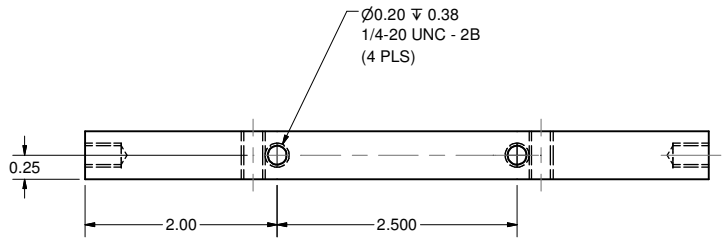
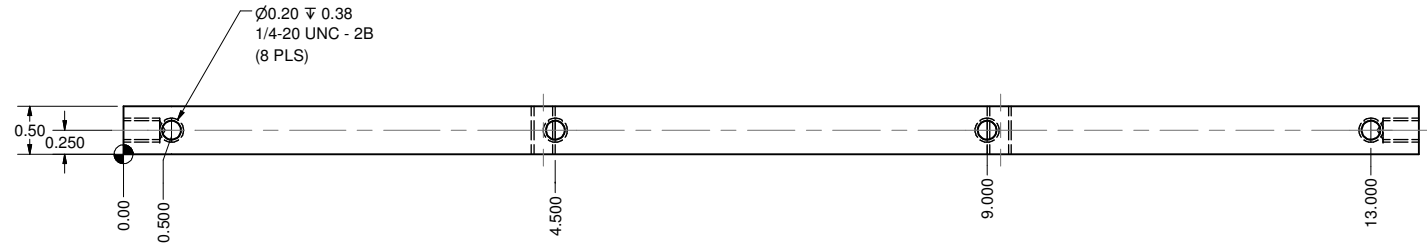
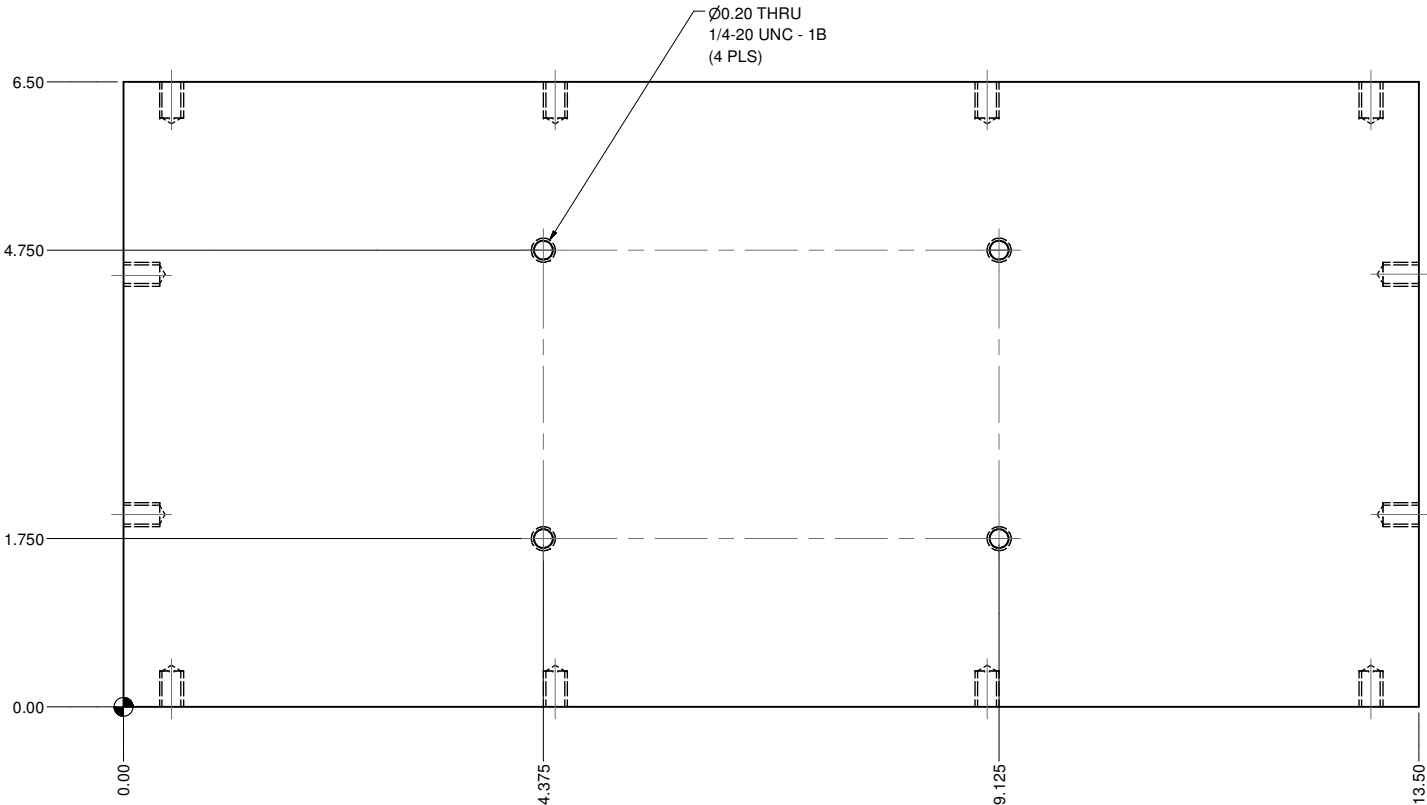
FILE NAME: 7110-014
SHEET NO.: 23
DFT. SCALE: 1:1
MATERIAL: Aluminum-6061
QTY: 1 PER ASSY. (3 TOTAL)
NOTES:

FOR MACHINING LUBRICANT USE ONLY
ALKALINE DETERGENT LUBRICANT CIMSTAR 40
OR EQUIVALENT APPROVED BY CORNELL LEPP

TECHNICAL RESOURCE APPROVALS REQUIRED BEFORE FABRICATION			
	OK	DATE	N/A
DRAFTING (O'Connell):			
MACHINE SHOP (Kaminski):			
CHEMISTRY (Conklin):			
ELECTRONICS SHOP (Barley):			
FURNACE BRAZING (Sherwood):			
BEAM WELDING (Sears):			
WELDING OTHER (Gallagher):			
UTILITIES INTEGRATION (Gallagher):			
STOCKROOMS (Lockwood):			

		ITEM		DWG. NO.		DESCRIPTION			G1		G2		G3		REMARKS		REV.				
D		PRINT		PLOT DATE: 5/4/2007																	
		DISTR.		CAD FILE NAME: horiz test align extruded alum frame.idw																	
7110-014		CR-1		UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES ✓			<div><div>LEPP</div><div>CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853</div><div>LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS</div></div>														
SH. NO. 23 OF 26					HORIZONTAL TEST ALIGNMENT FRAME ASSY. ALIGNMENT SUPPORT PLATE DETAILS																
REV. A		CHECKED BY: A.P.			DRAWN BY H. Applin			DRAWN FOR A. PAULING			DATE 6/26/2006			SCALE		D		7110-014		REV. A	
		APPROVED BY: A.P.			SH. NO. 23 OF 26																




REVISIONS				1
SYM.	ZONE	DESCRIPTION	DATE	APP.



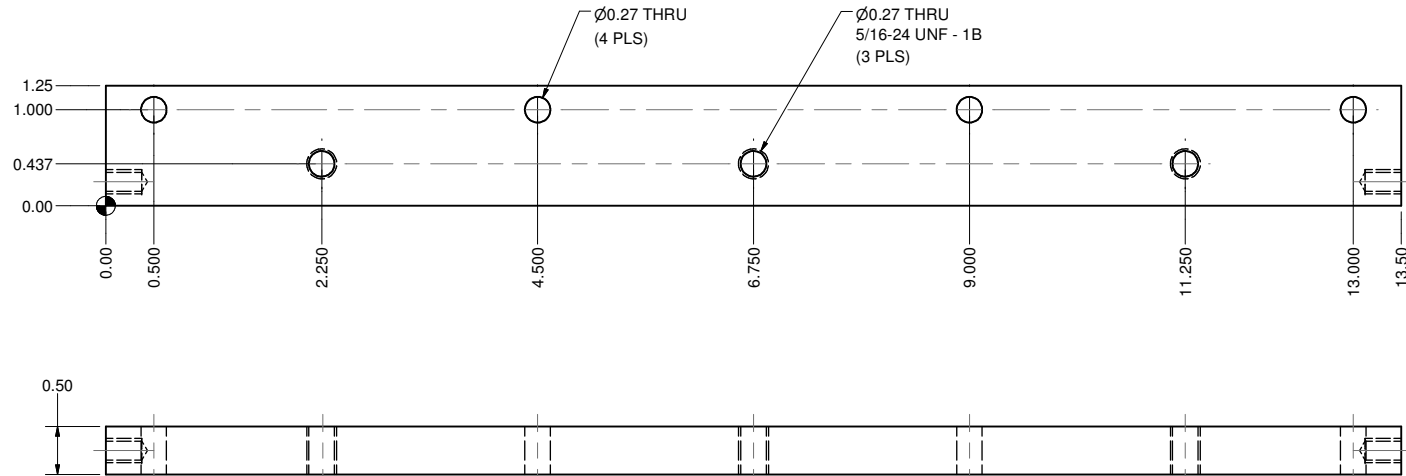
57 LATERAL POSITIONING PLATE
FILE NAME: 7110-014
SHEET NO.: 24
DFT. SCALE: 1:1
MATERIAL: Aluminum-6061
QTY: 1 PER ASSY. (3 TOTAL)
NOTES:

FOR MACHINING LUBRICANT USE ONLY
ALKALINE DETERGENT LUBRICANT CIMSTAR 40
OR EQUIVALENT APPROVED BY CORNELL LEPP

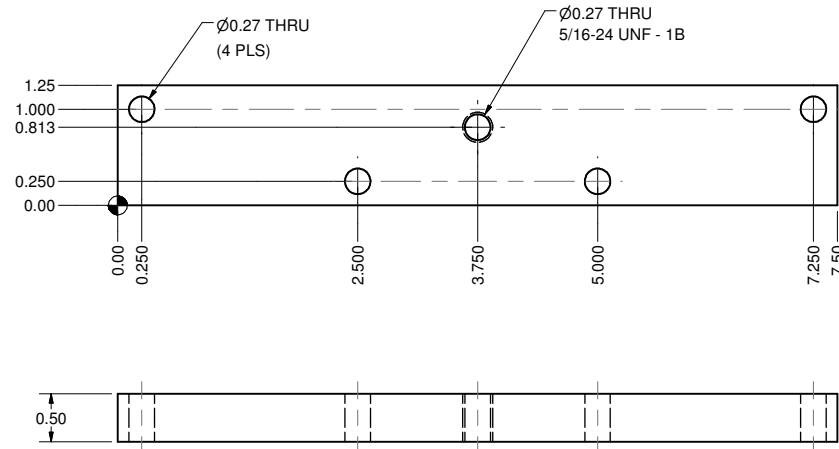
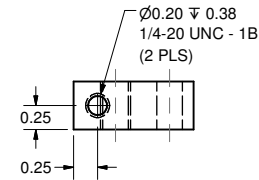
TECHNICAL RESOURCE APPROVALS REQUIRED BEFORE FABRICATION			
	OK	DATE	N/A
DRAFTING (O'Connell):			
MACHINE SHOP (Kaminski):			
CHEMISTRY (Conklin):			
ELECTRONICS SHOP (Barley):			
FURNACE BRAZING (Sherwood):			
BEAM WELDING (Sears):			
WELDING OTHER (Gallagher):			
UTILITIES INTEGRATION (Gallagher):			
STOCKROOMS (Lockwood):			

		ITEM		DWG. NO.		DESCRIPTION		G1	G2	G3	REMARKS		REV.
								QUANTITY					
D	PRINT DISTR.	PLOT DATE: 5/4/2007 CAD FILE NAME: horiz test align extruded alum frame.idw											
	7110-014 SH. NO. 24 OF 26	CR-1	UNLESS OTHERWISE SPECIFIED:		 CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853 LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS				HORIZONTAL TEST ALIGNMENT FRAME ASSY. LATERAL POSITIONING BASE DETAIL				
DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES 													
REV.		CHECKED BY: A.P.		DRAWN BY H. Applin		DRAWN FOR A. PAULING		DATE 6/26/2006		SCALE	D	7110-014 SH. NO. 24 OF 26	REV.
		APPROVED BY: A.P.											

REVISIONS			
SYM.	ZONE	DESCRIPTION	DATE APP.





58 **ALIGNMENT PLATE - LONG**
FILE NAME: 7110-014
SHEET NO.: 25
DFT. SCALE: 1:1
MATERIAL: Aluminum-6061
QTY: 2 PER ASSY. (6 TOTAL)
NOTES:



60 **ALIGNMENT PLATE - SHORT**
FILE NAME: 7110-014
SHEET NO.: 25
DFT. SCALE: 1:1
MATERIAL: Aluminum-6061
QTY: 2 PER ASSY. (6 TOTAL)
NOTES:

FOR MACHINING LUBRICANT USE ONLY
ALKALINE DETERGENT LUBRICANT CIMSTAR 40
OR EQUIVALENT APPROVED BY CORNELL LEPP

TECHNICAL RESOURCE APPROVALS REQUIRED BEFORE FABRICATION			
	OK	DATE	N/A
DRAFTING (O'Connell):			
MACHINE SHOP (Kaminski):			
CHEMISTRY (Conklin):			
ELECTRONICS SHOP (Barley):			
FURNACE BRAZING (Sherwood):			
BEAM WELDING (Sears):			
WELDING OTHER (Gallagher):			
UTILITIES INTEGRATION (Gallagher):			
STOCKROOMS (Lockwood):			

	ITEM	DWG. NO.	DESCRIPTION			G1	G2	G3	REMARKS	REV.			
						QUANTITY							
D	PRINT DISTR.	PLOT DATE: 5/4/2007 CAD FILE NAME: horiz test align extruded alum frame.idw											
SH. NO. 25 OF 26	7110-014	CR-1	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES ✓		<div>CORNELL UNIVERSITY  CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853</div> <div>LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS</div> <div>HORIZONTAL TEST ALIGNMENT FRAME ASSY. ALIGNMENT PLATE DETAILS</div>								
					CHECKED BY: A.P.		DRAWN BY H. Applin	DRAWN FOR A. PAULING	DATE 6/26/2006	SCALE	D	7110-014 SH. NO. 25 OF 26	REV.
					APPROVED BY: A.P.								

