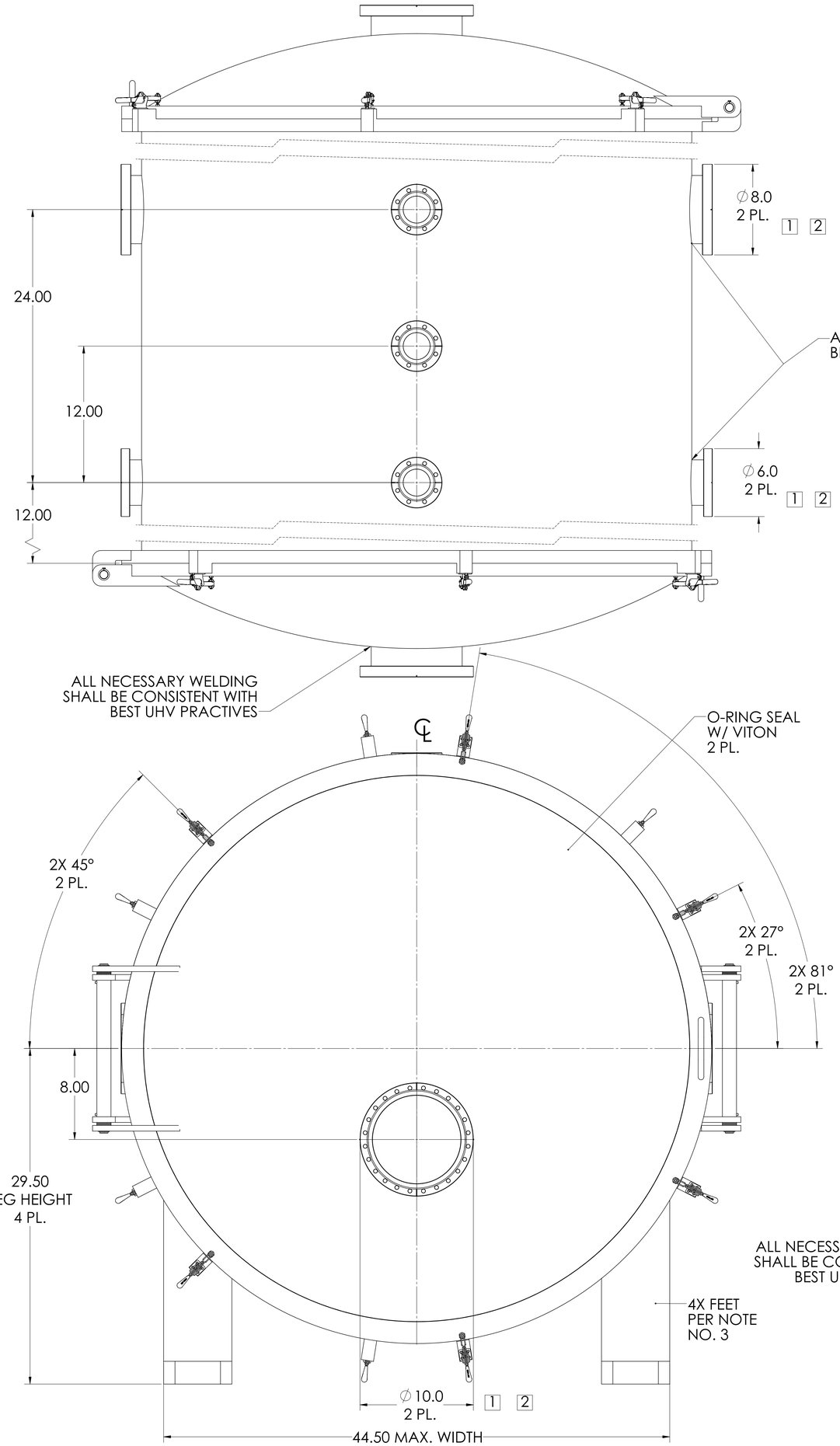
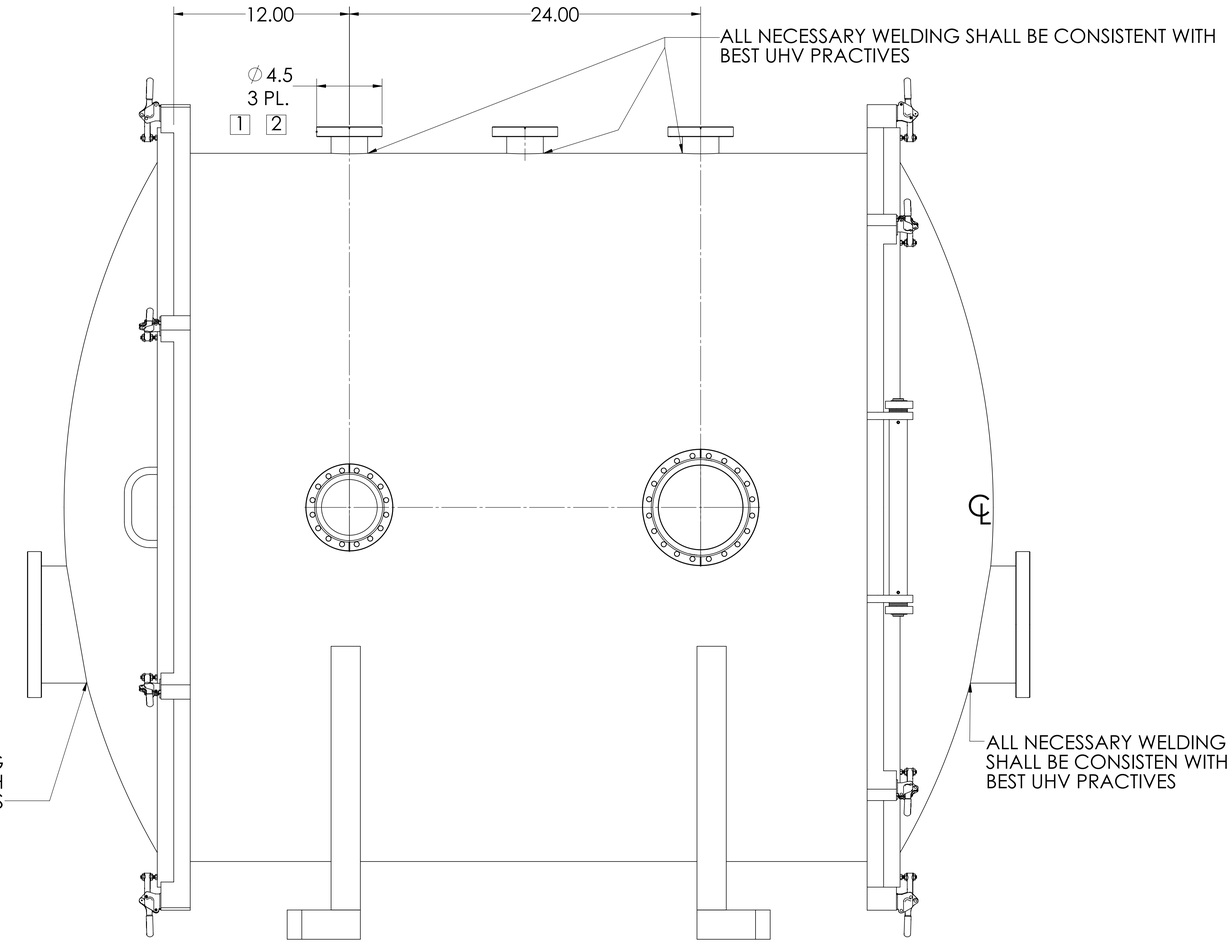
REV.	DATE	DCN #	DRAWING TREE #
v1	25 MAR 2014	-	-
v5	13 AUG 2014	-	-
-	-	-	-

1. ALL FLANGES ARE TO BE PROVIDED WITH BLANK-OFFS
2. CHAMBER SHALL BE LEAK TESTED IN CLOSE CONFIGURATION W/ BLANK OFFS (NOT SHOWN)
3. CHAMBER FEET SHALL BE DESIGNED/ CHOSEN TO MATCH VACUUM CHAMBER LOAD BEARING 500kg (VACUUM COMPONENTS + HARDWARE NOT INCLUDED).





NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

DIMENSIONS ARE IN INCHES

MATERIAL: N/A

FINISH: N/A µinch

CALIFORNIA INSTITUTE OF TECHNOLOGY
MASSACHUSETTS INSTITUTE OF TECHNOLOGY
LIGO

SYSTEM: ADVANCED LIGO

SUB-SYSTEM: SUS

NEXT ASSY: N/A

PART NAME: aLIGO, VAC. SYS. 48 IN. CYL.

DESIGNER	K.BUCKLAND	20 MAY 2013	
DRAFTER	E.SANCHEZ	12 MAY 2014	
CHECKER	SEE DCC	SEE DCC	
APPROVAL	SEE DCC	SEE DCC	

SIZE: E

DWG. NO.: D1400138

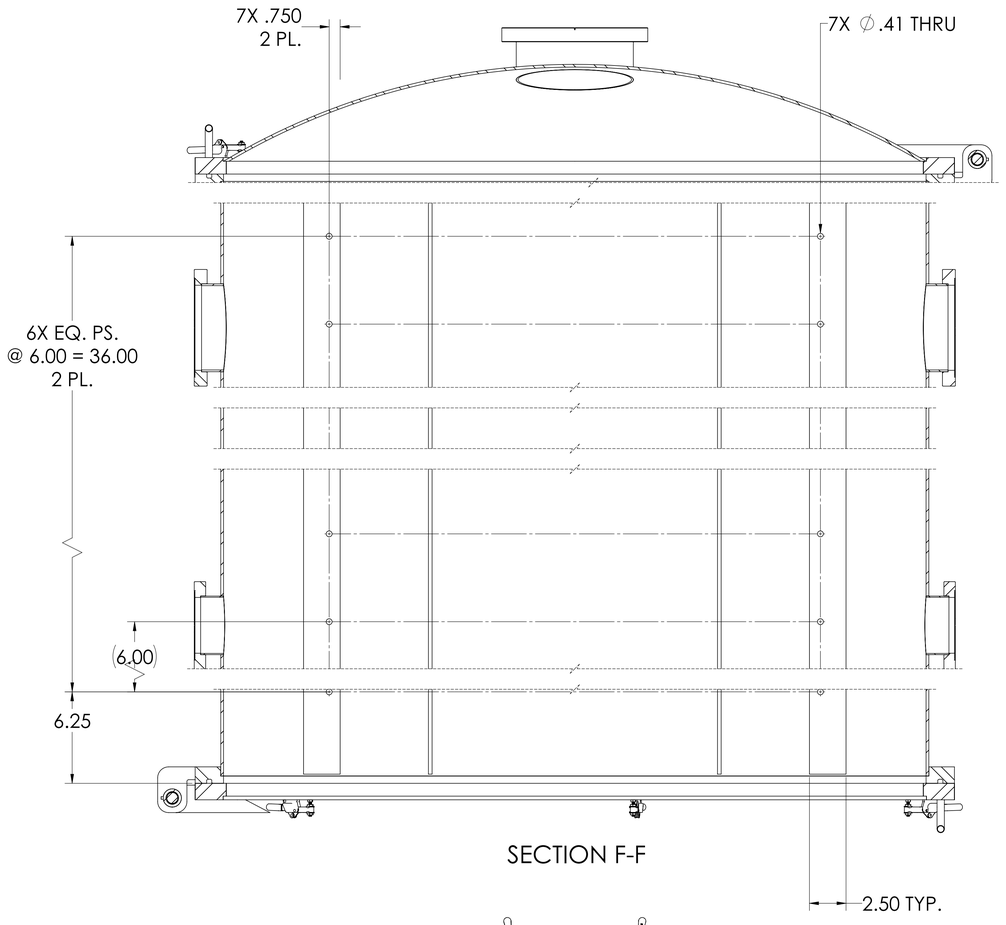
REV.: v5

SCALE: 1:4

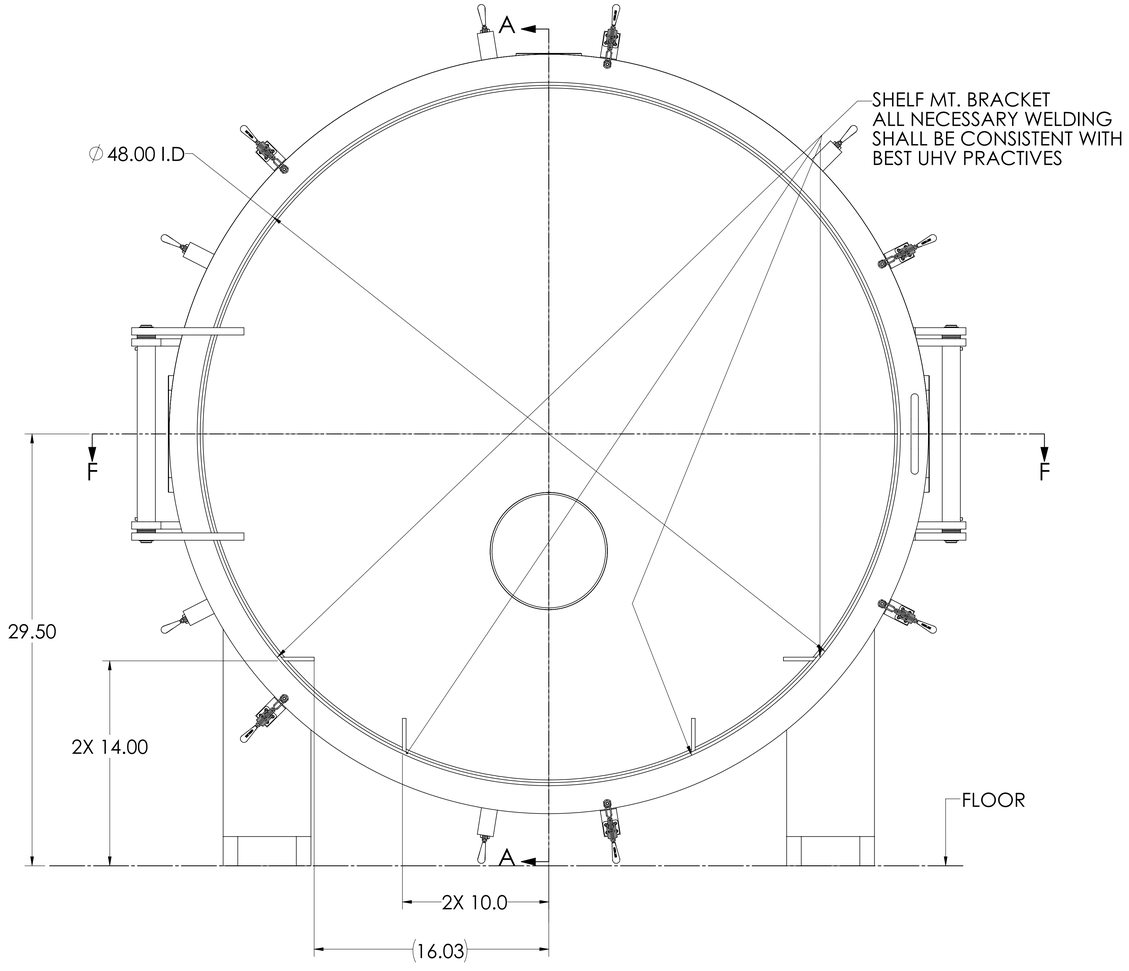
PROJECTION:

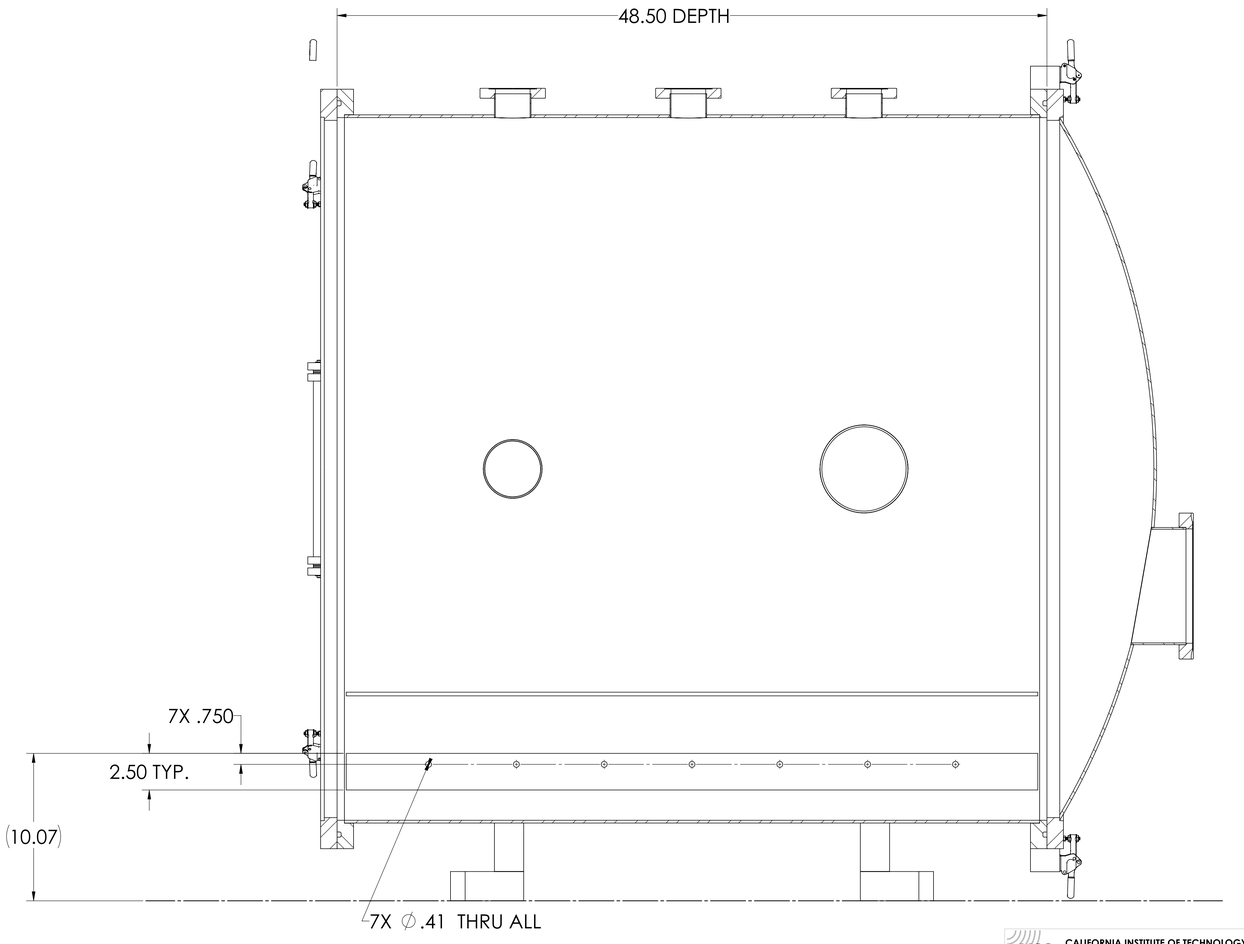
SHEET 1 OF 8

D1400138-aLIGO_VSYS_48 CYL_PART FDM REV-V_SOLIDWORKS FDM REV_X.SLDDRW



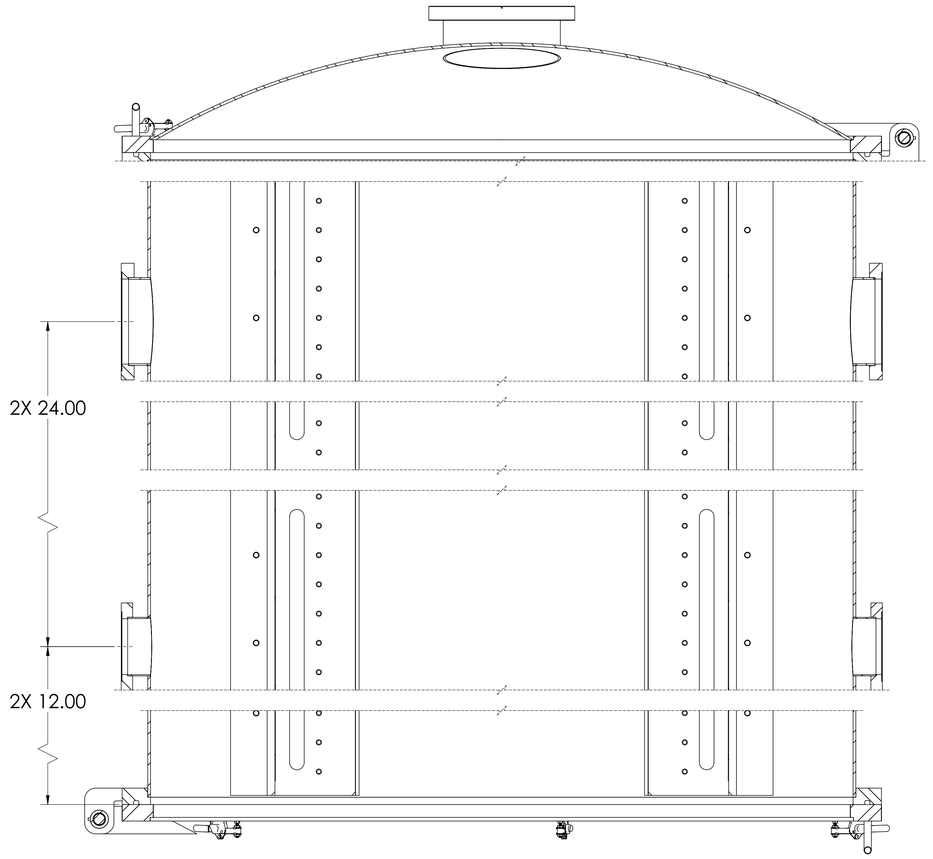
SECTION F-F



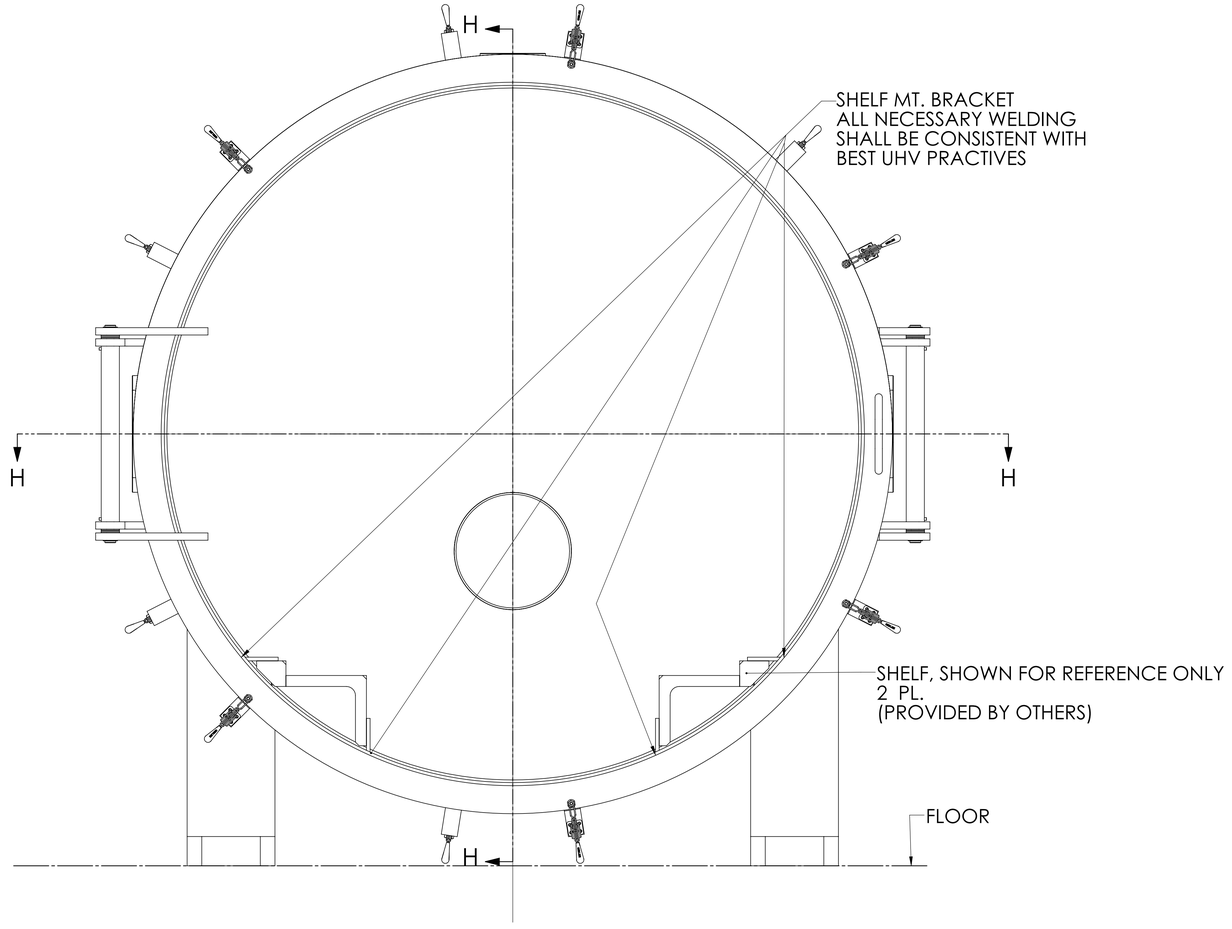


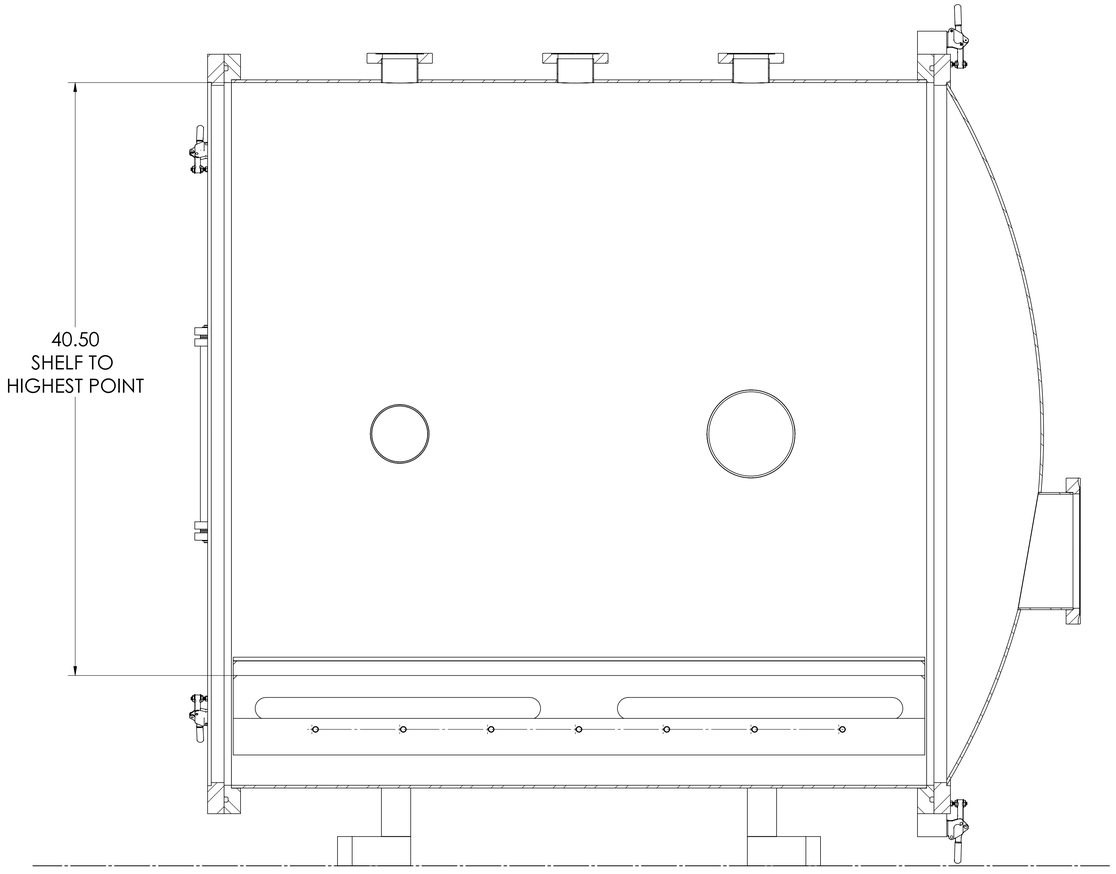
SECTION A-A

LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		
SIZE	DWG. NO.	REV.
E	D1400138	v5
SCALE: 1:4	PROJECTION:	SHEET 2 OF 8



SECTION H-H



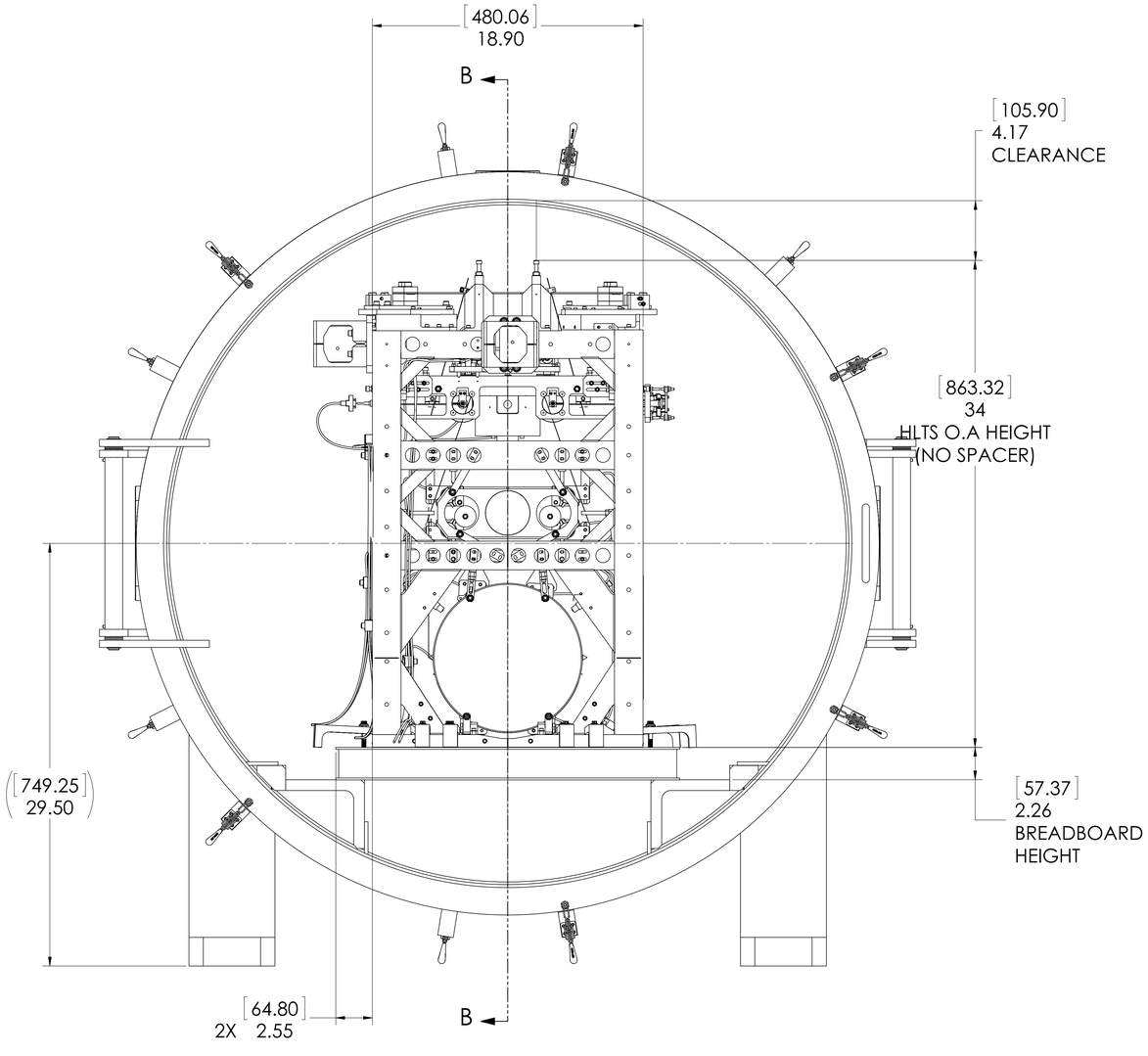


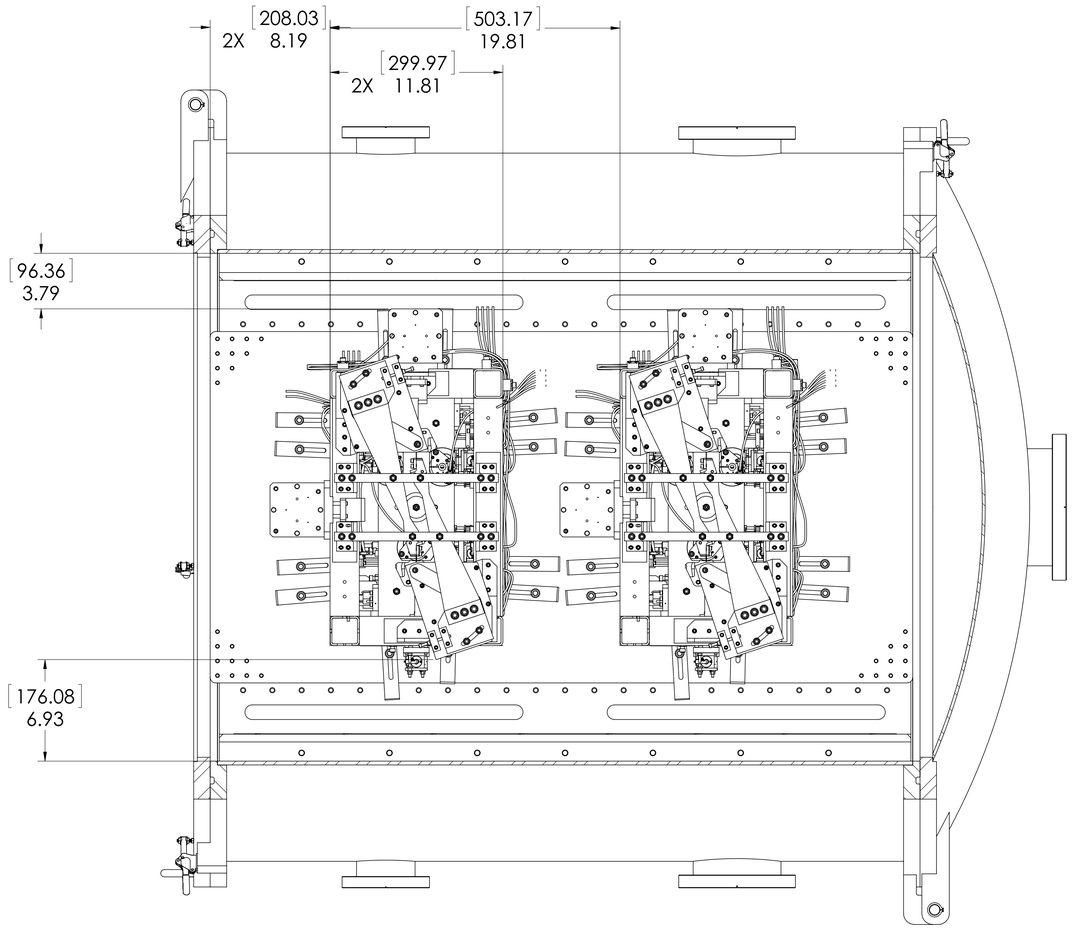
SECTION H-H

LIGO	CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	
SIZE	DWG. NO.	REV.
E	D1400138	v5
SCALE: 1:4	PROJECTION:	SHEET 3 OF 8

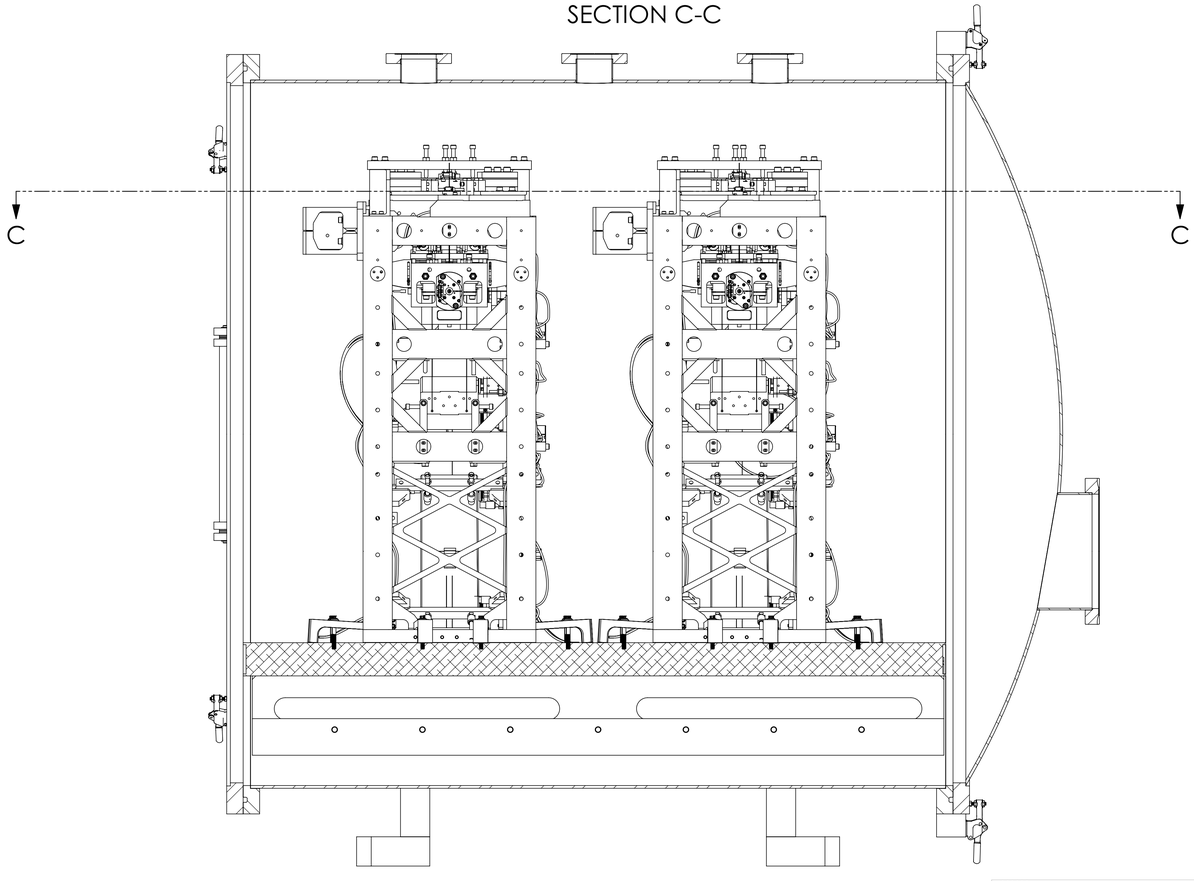
HLTS CLEARANCES

(INTERNAL--SHOWN FOR REFERENCE ONLY)





SECTION C-C

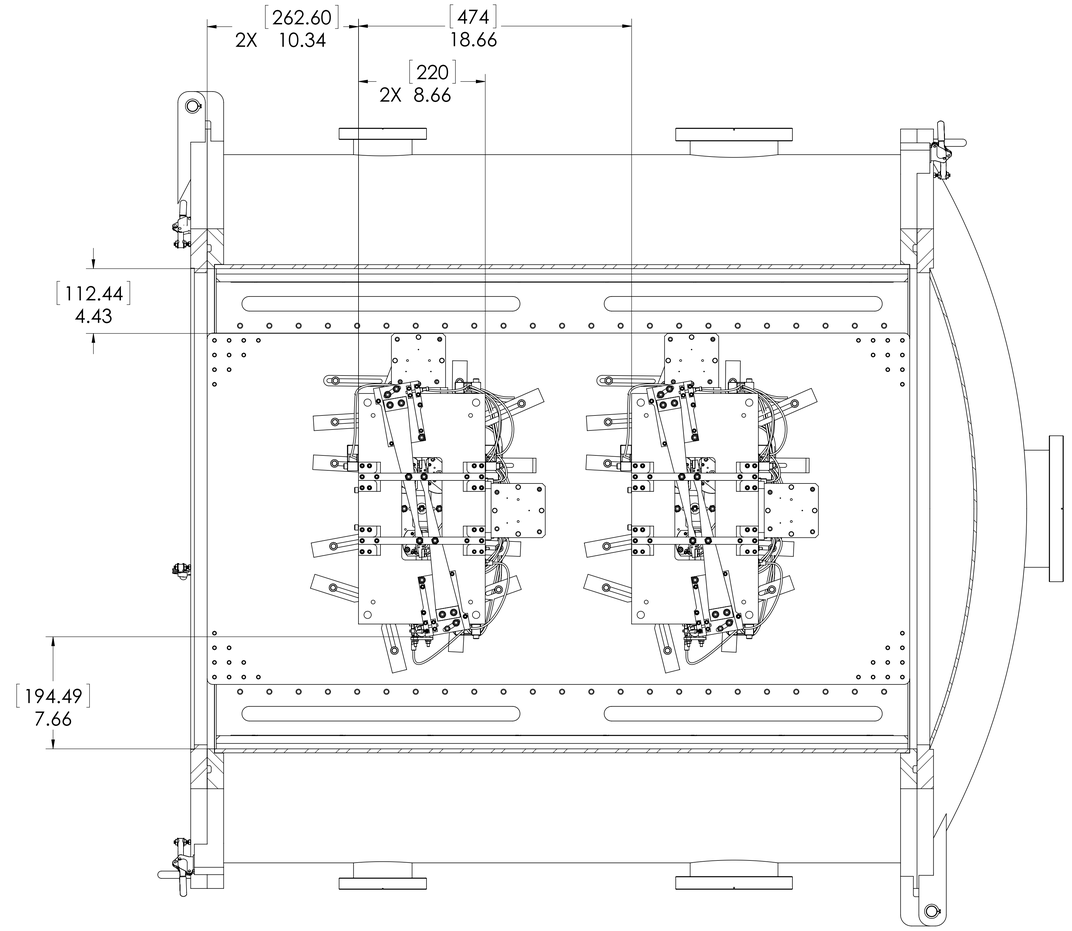


SECTION B-B

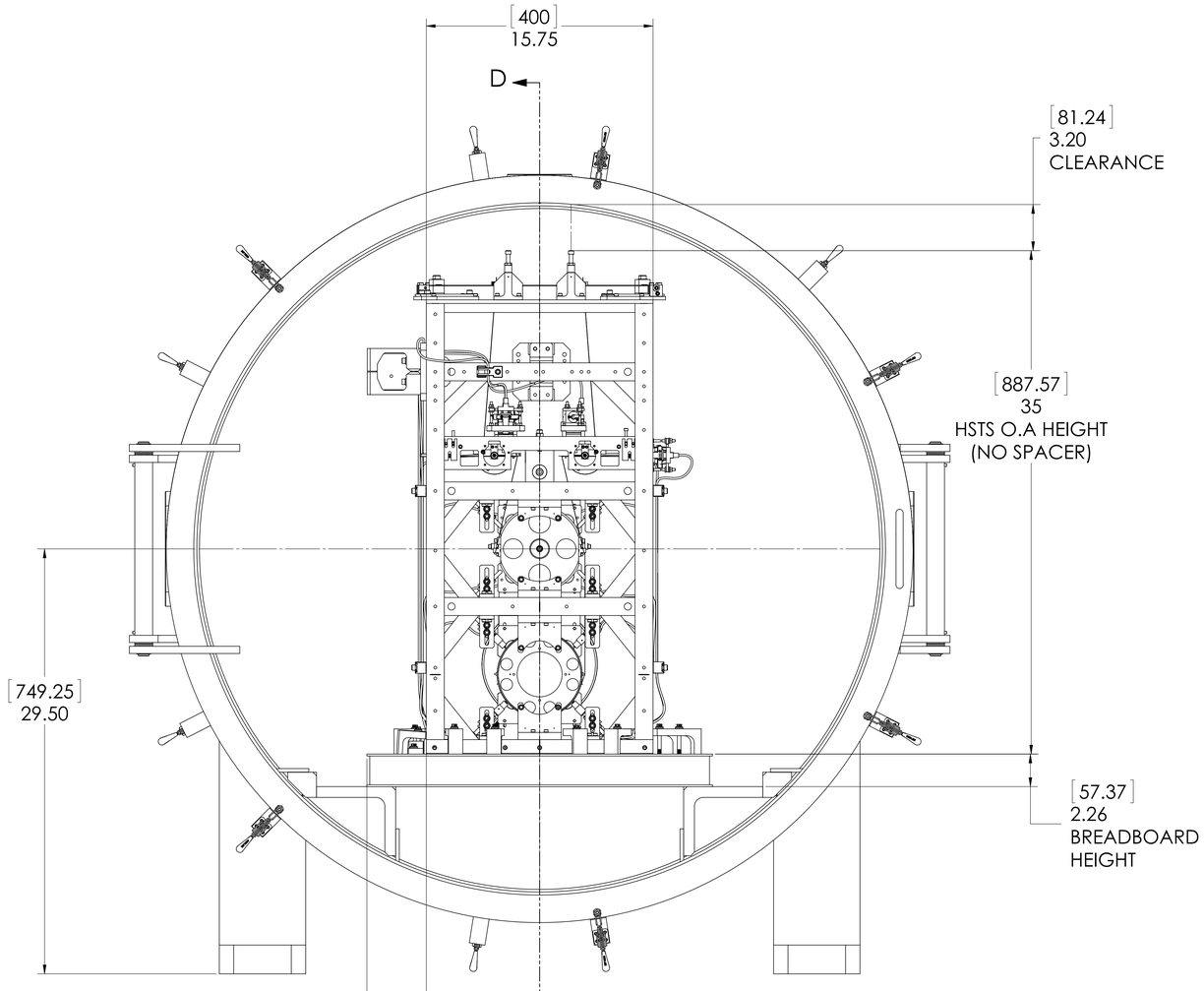
LIGO	CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	
SIZE	DWG. NO.	REV.
E	D1400138	v5
SCALE: 1:4	PROJECTION:	SHEET 4 OF 8

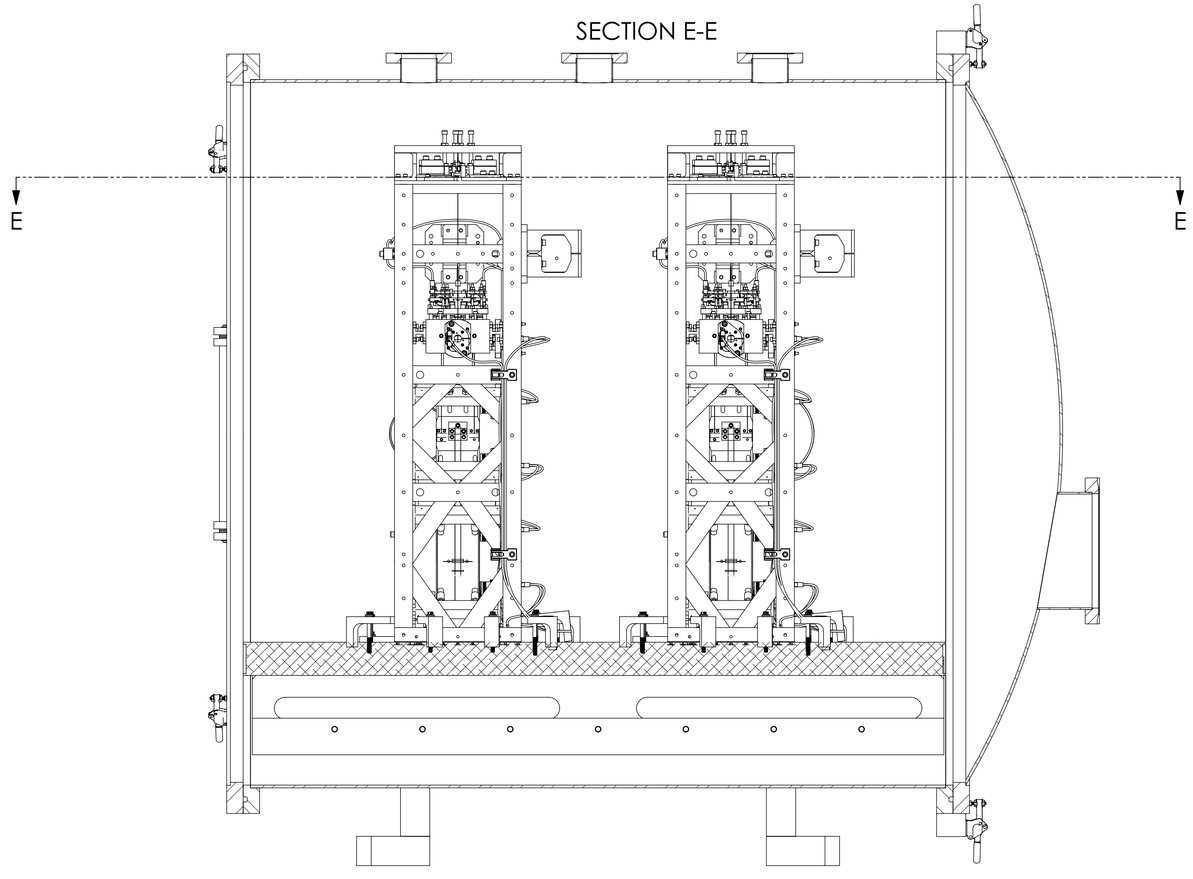
HSTS CLEARANCES

(INTERNAL--SHOWN FOR REFERENCE ONLY)



SECTION E-E



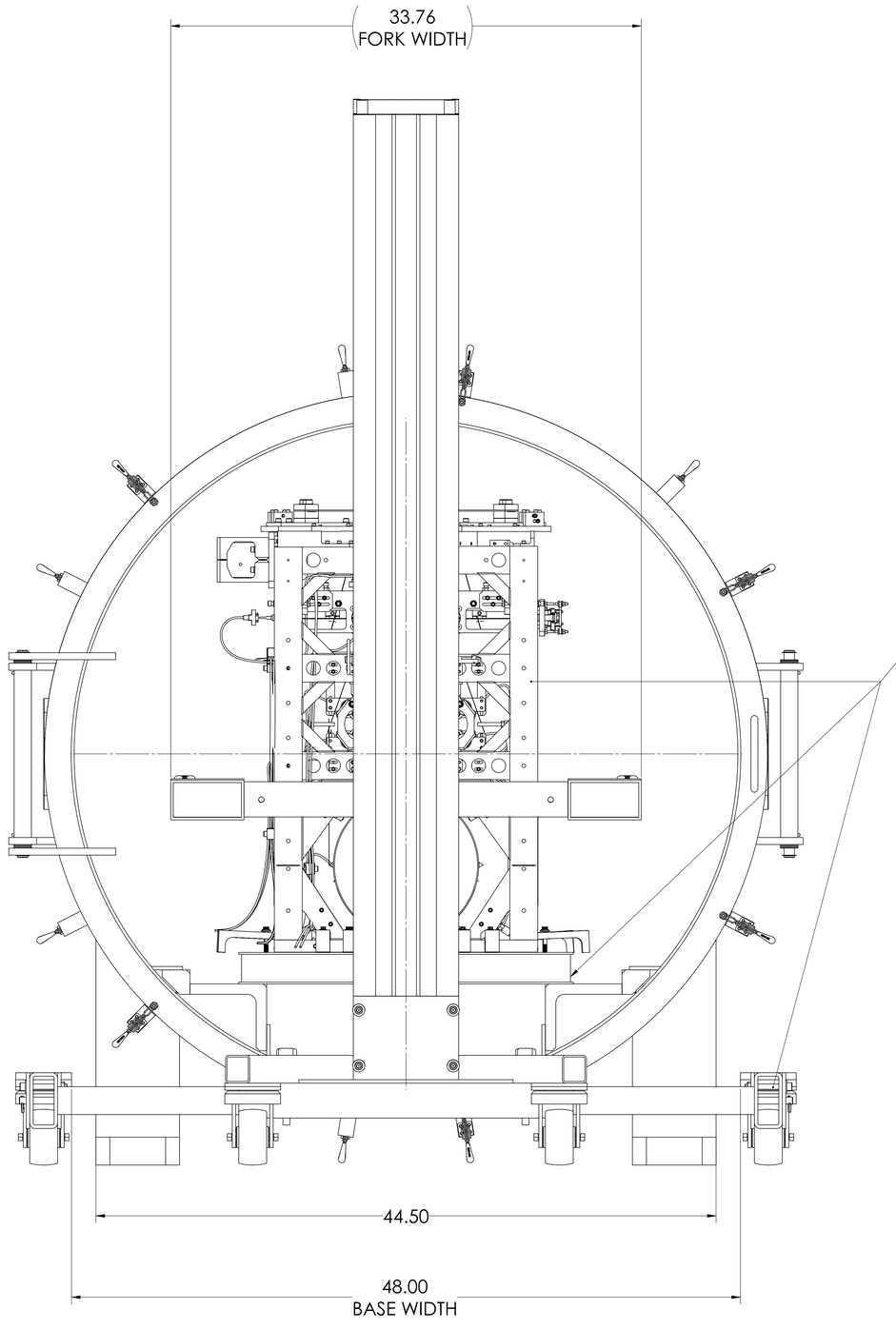


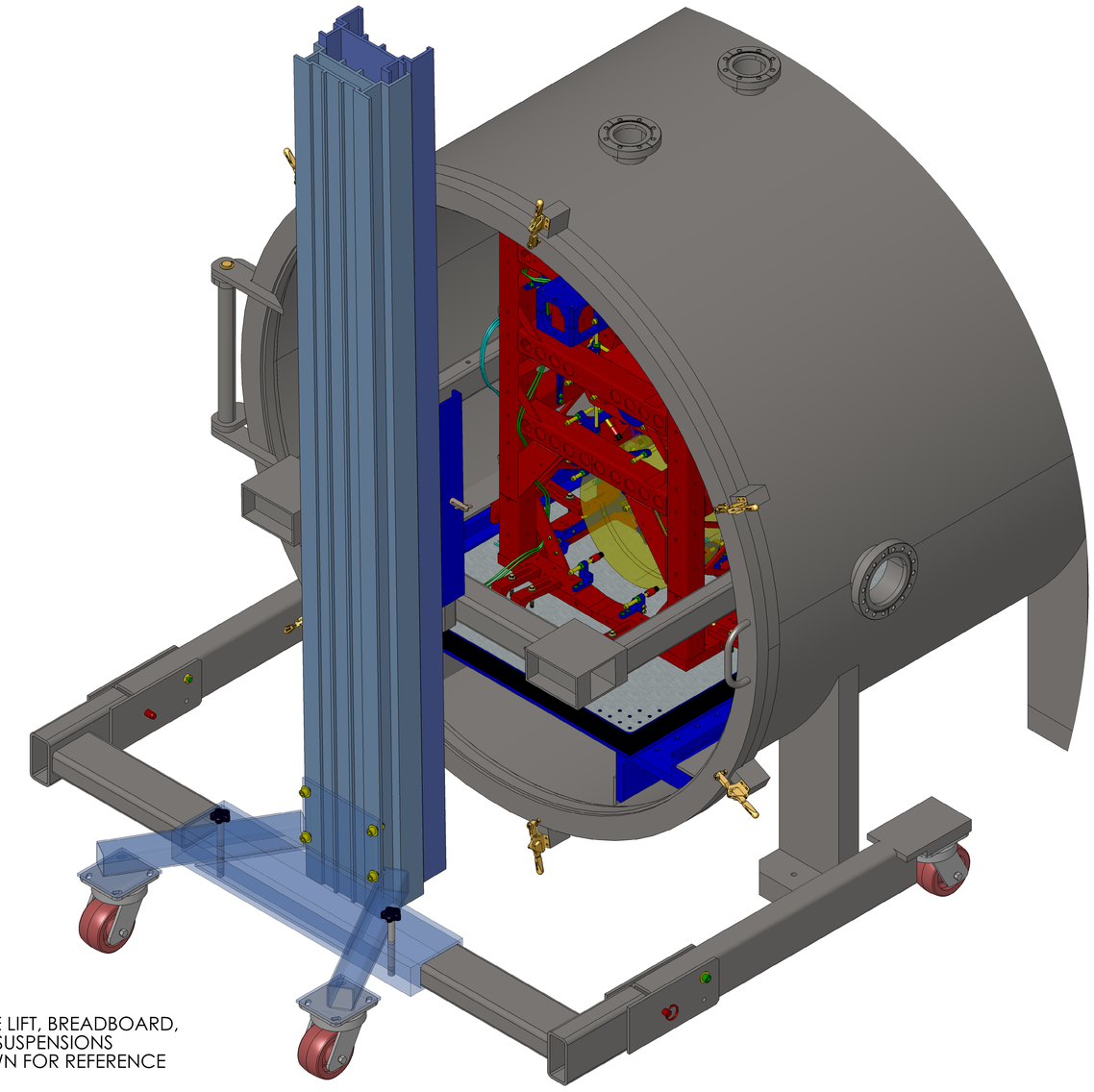
SECTION D-D

LIGO	CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	
SIZE: E	DWG. NO.: D1400138	REV.: v5
SCALE: 1:4	PROJECTION:	SHEET 5 OF 8

GENIE LIFT SLA-10 CLEARANCES

(INTERNAL--SHOWN FOR REFERENCE ONLY)





ISO VIEW - PARTIAL

LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

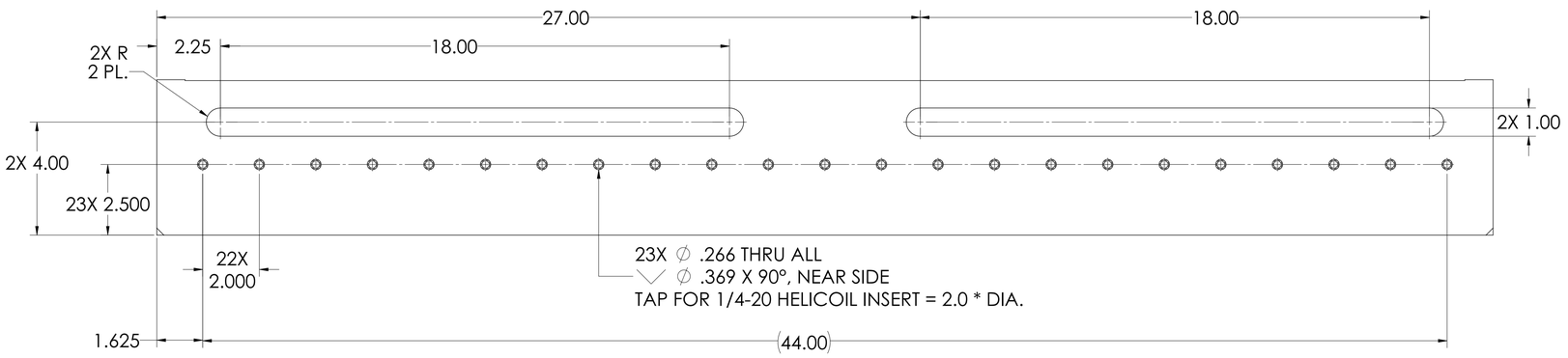
SIZE	DWG. NO.	REV.
E	D1400138	v5

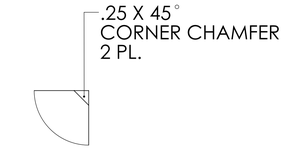
SCALE: 1:4 | PROJECTION: | SHEET 6 OF 8

4. ELECTROPOLISH AFTER FABRICATION TO REMOVE .0005 - .001 FROM ALL SURFACES.

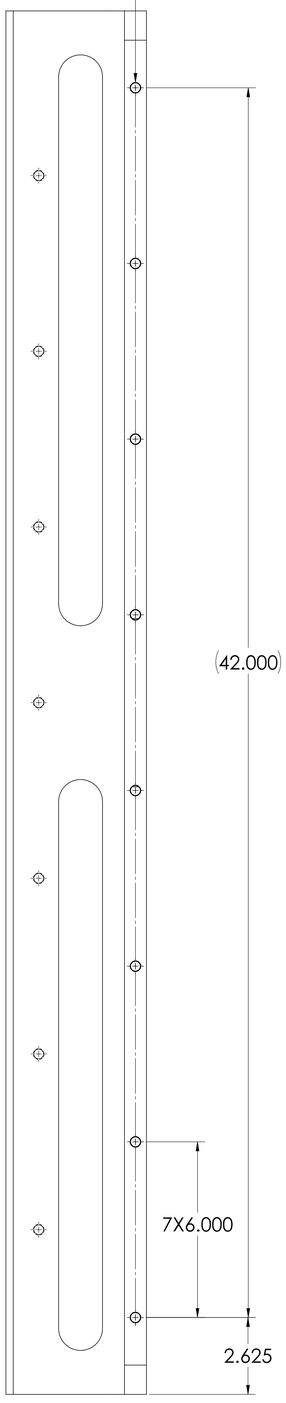
-101 DETAIL

MAKE FROM: 6061-T6 AL ALLOY ANGLE
6" X 6" X .75"

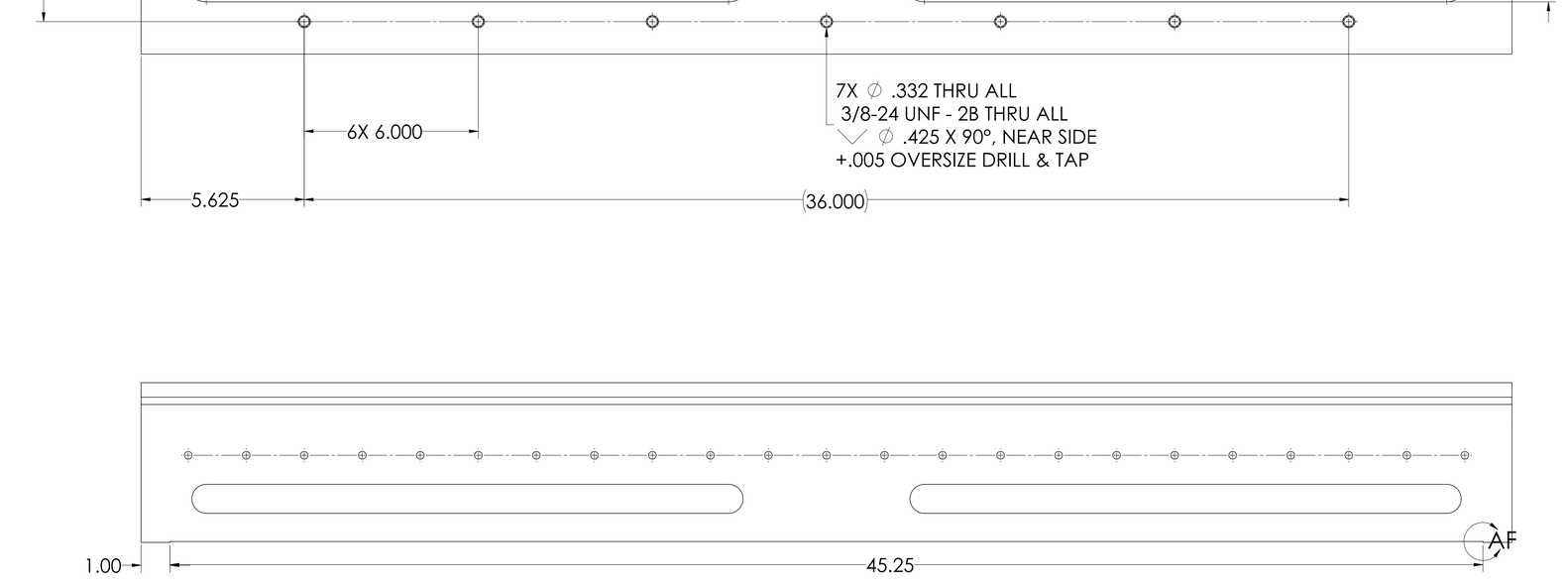


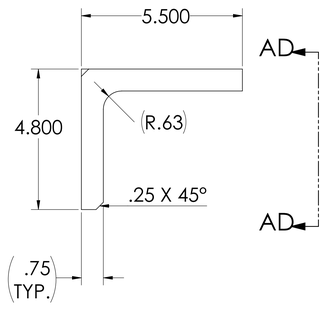


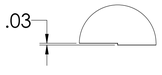
DETAIL AE
SCALE 1 : 1



SECTION AD-AD
(ROTATED 90 DEGREES CW)







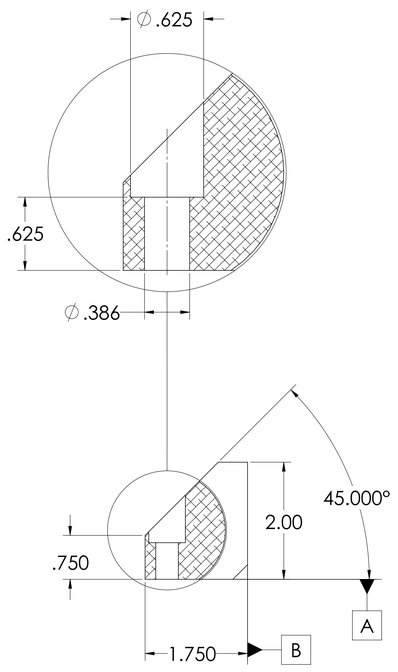
DETAIL AF
SCALE 1 : 1

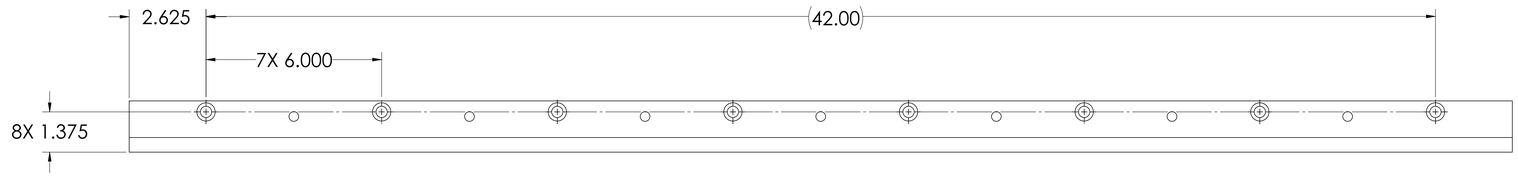
SHELF

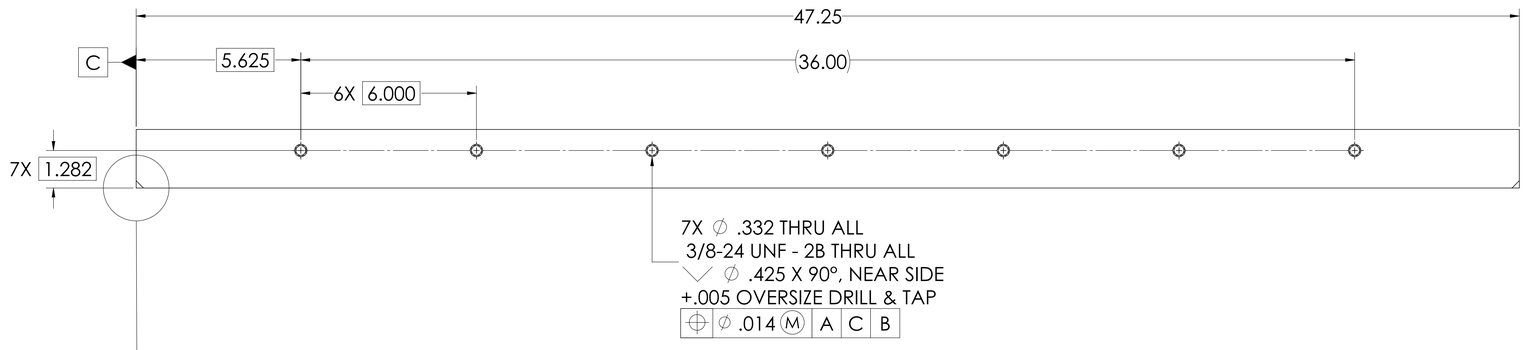
LIGO	CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	
SIZE E	DWG. NO. D1400138	REV. v5
SCALE: 1:2	PROJECTION:	SHEET 7 OF 8

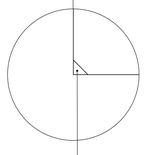
-102 DETAIL
MAKE FROM: 6061-T6 AL ALLOY

DETAIL G
SCALE 2 : 1
8 PL.









DETAIL AH
SCALE 1 : 1

SHELF

LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		
SIZE E	DWG. NO. D1400138	REV. v5
SCALE: 1:2	PROJECTION:	SHEET 8 OF 8