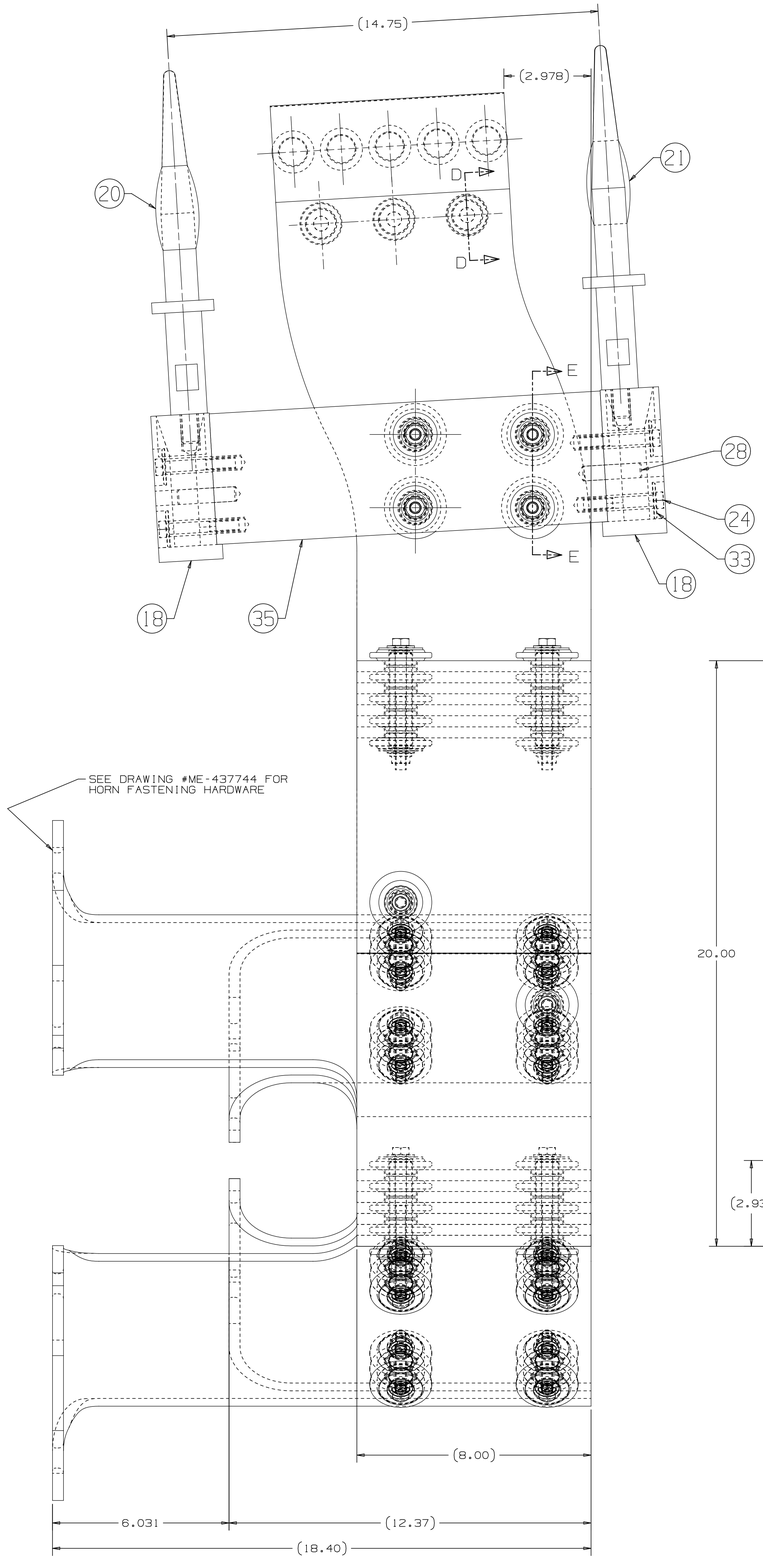
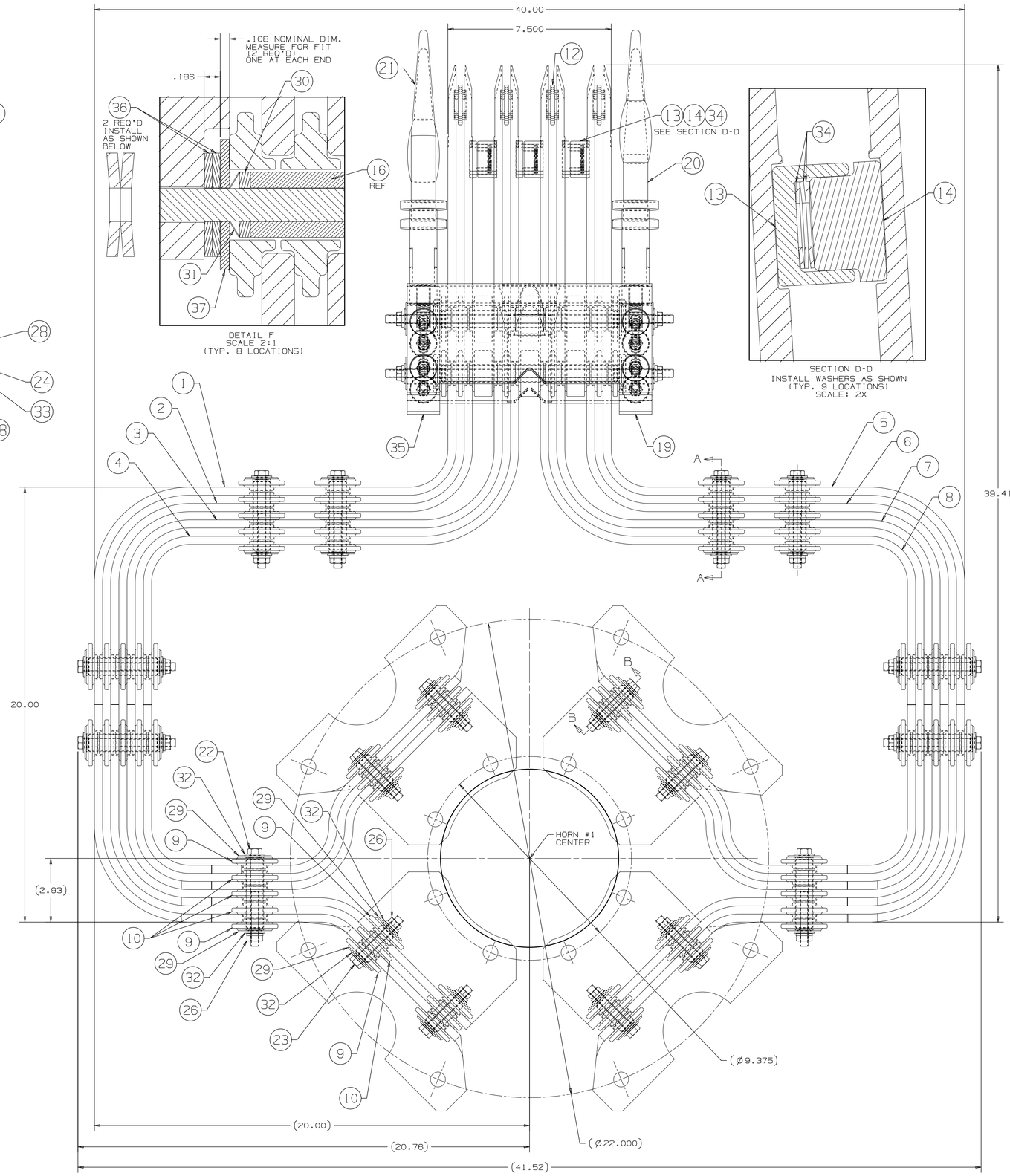
DESCRIPTION: NOVA 1MW HORN 1 STRIPLINE FINAL ASSEMBLY

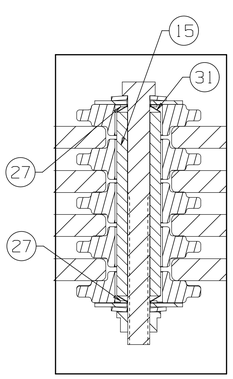
PROJECT: NUMI/Horn1

CATEGORY: ASSEMBLY

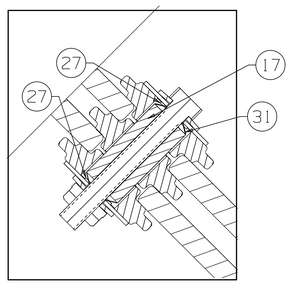
REV	REVISION CONTROL DOCUMENT	DATES	SIGNATURES	
-	F10105672---RCD		DRAWN	
			APPROVED	



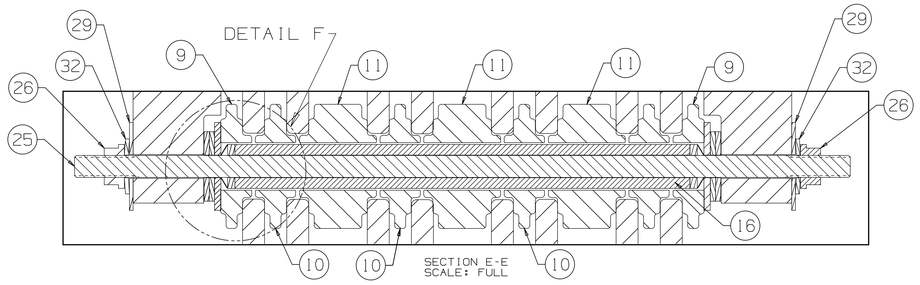




SECTION A-A
SCALE: FULL



SECTION B-B
(TYP. 16 LOCATIONS)
SCALE: FULL



SECTION E-E
SCALE: FULL

ITEM	PART NO.	DESCRIPTION	QTY.
37	MB-433519	STRIPLINE LOWER CLAMP ADJUSTABLE WASHER	8
36	SOLON, 6EH89718	BELLEVILLE WASHER, 1.188 OD X .386 ID X .089 THK., INCONEL 718	16
35	MB-433336	LOWER CLAMP BAR (LEFT HAND)	1
34	SOLON, 8L40301	BELLEVILLE WASHER, 1.063 OD X .515 ID X .042 THK., 301 STAINLESS STEEL	27
33	SOLON, 8M89718	BELLEVILLE WASHER, 1.188 OD X .515 ID X .090 THK., INCONEL 718	8
32	SOLON, 6M70718	BELLEVILLE WASHER, .938 OD X .386 ID X .068 THK., INCONEL 718	64
31	McMASTER-CARR, 9716K52	CURVED DISC SPRING, 301 STN. STL., .735 OD X .395 ID X .011 THK.	64
30	MA-437145	LOWER CLAMP THICK WASHER	8
29	McMASTER-CARR, 91525A140	WASHER, LARGE O.D., 3/8" SCREW SIZE, 316 STN. STL.	64
28	McMASTER-CARR, 90145A720 OR EQ.	DOWEL PIN, .500 O.D. X 2.00 LG., 18-8 STN. STL.	4
27	McMASTER-CARR, 98017A199	AN 960 C616L FLAT WASHER, 18-8 STN. STL., .625 OD X .390 ID X .032 THK.	56
26	SPIRALOCK FF0375-16-0001	SPIRALOCK HEX FLANGE NUT, 3/8-16 ,410 STN. STL.	36
25	MB-433335	STUD BOLT LOWER CLAMP BAR	4
24	PURCHASED	HEX HD. CAP SCREW, 1/2-13 UNC X 2.50 LG. 316 STAINLESS STEEL	8
23	METTEC NO. T4NC03752750	HEX HD. CAP SCREW, 3/8-16 UNC X 2.75 LG.(TITANIUM, 6AL-4V OR EQ.)	16
22	METTEC NO. T4NC03752750	HEX HD. CAP SCREW, 3/8-16 UNC X 4.25 LG.(TITANIUM, 6AL-4V OR EQ.)	12
21	MC-406836	ALIGNMENT BAYONET #2	2
20	MC-406851	ALIGNMENT BAYONET #1	2
19	MC-406813	LOWER CLAMP BAR (RIGHT HAND)	1
18	MC-406778	LOWER PULLUP BLOCK	2
17	MB-406702	CERAMIC SPACER TUBE #3	16
16	MB-406701	CERAMIC SPACER TUBE #2	4
15	MB-406700	CERAMIC SPACER TUBE #1	12
14	MB-406714	CERAMIC SPREADER PLUNGER	9
13	MB-406715	CERAMIC SPREADER PLUNGER CUP	9
12	MB-406671	CERAMIC INSULATOR BUTTON	20
11	MB-406536	LARGE DOUBLE BOSS SPACER	12
10	MB-406524	DOUBLE BOSS SPACER	68
9	MB-406525	SINGLE BOSS SPACER	64
8	F10105694	LAYER 4 RIGHT SIDE PLATING	1
7	F10105693	LAYER 3 RIGHT SIDE PLATING	1
6	F10105692	LAYER 2 RIGHT SIDE PLATING	1
5	F10105691	LAYER 1 RIGHT SIDE PLATING	1
4	F10105690	LAYER 4 LEFT SIDE PLATING	1
3	F10105689	LAYER 3 LEFT SIDE PLATING	1
2	F10105688	LAYER 2 LEFT SIDE PLATING	1
1	F10105687	LAYER 1 LEFT SIDE PLATING	1

NOTES:

1.) HAND TIGHTEN CERAMIC FASTENERS BEFORE STRIPLINE IS ATTACHED TO THE HORN, ATTACH STRIPLINE TO THE HORN AND TORQUE TO 60 ft.lbs. IN A CROSS PATTERN, THEN FINAL TIGHTEN CERAMIC FASTENERS TO TORQUE SPECS BELOW.

2.) TORQUE REQUIREMENTS:
A.) TORQUE ITEMS 20 & 21 TO 130 ft. lbs.
B.) TORQUE ITEMS 22 & 23 TO 40 ft. lbs.
C.) TORQUE NUTS ON END OF ITEM 25 TO 40 ft. lbs.
D.) TORQUE ITEM 24 TO 40 ft. lbs.

3.) SURFACE NICKS AND SCRATCHES OTHER THAN STANDARD MACHINING MARKS ARE NOT PERMITTED.

UNLESS OTHERWISE SPECIFIED					
±.X	±.XX	±.XXX	±X/X	±X°	
.1	.015	.005	1/16	1/2	

BREAK ALL SHARP EDGES, MAX: .015
DO NOT SCALE DRAWING
DIMENSIONS BASED ON: ASME Y14.5-2009
MAX MACHINE ALL SURFACES: 125
DRAWING UNITS: INCHES

THIRD ANGLE PROJECTION

DRAWN	G.WAVER	DATE	02-Jul-2018
CHECKED	D.HURD	DATE	22-May-2019
APPROVED	C.CROWLEY	DATE	22-May-2019

USED ON: ME-431588, ME-437744

MATERIAL: SEE PARTS LIST

GROUP: Accelerator Mechanical Support | CAGE CODE: 0U596

FERMI NATIONAL ACCELERATOR LABORATORY
UNITED STATES DEPARTMENT OF ENERGY

NAME: NOVA 1MW HORN 1 STRIPLINE FINAL ASSEMBLY

SCALE	SIZE	DRAWING NUMBER	SHEET	REV
1:2	E	F10105672	1 of 1	-

TEMPLATE VERSION: 2018.2.03