

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED

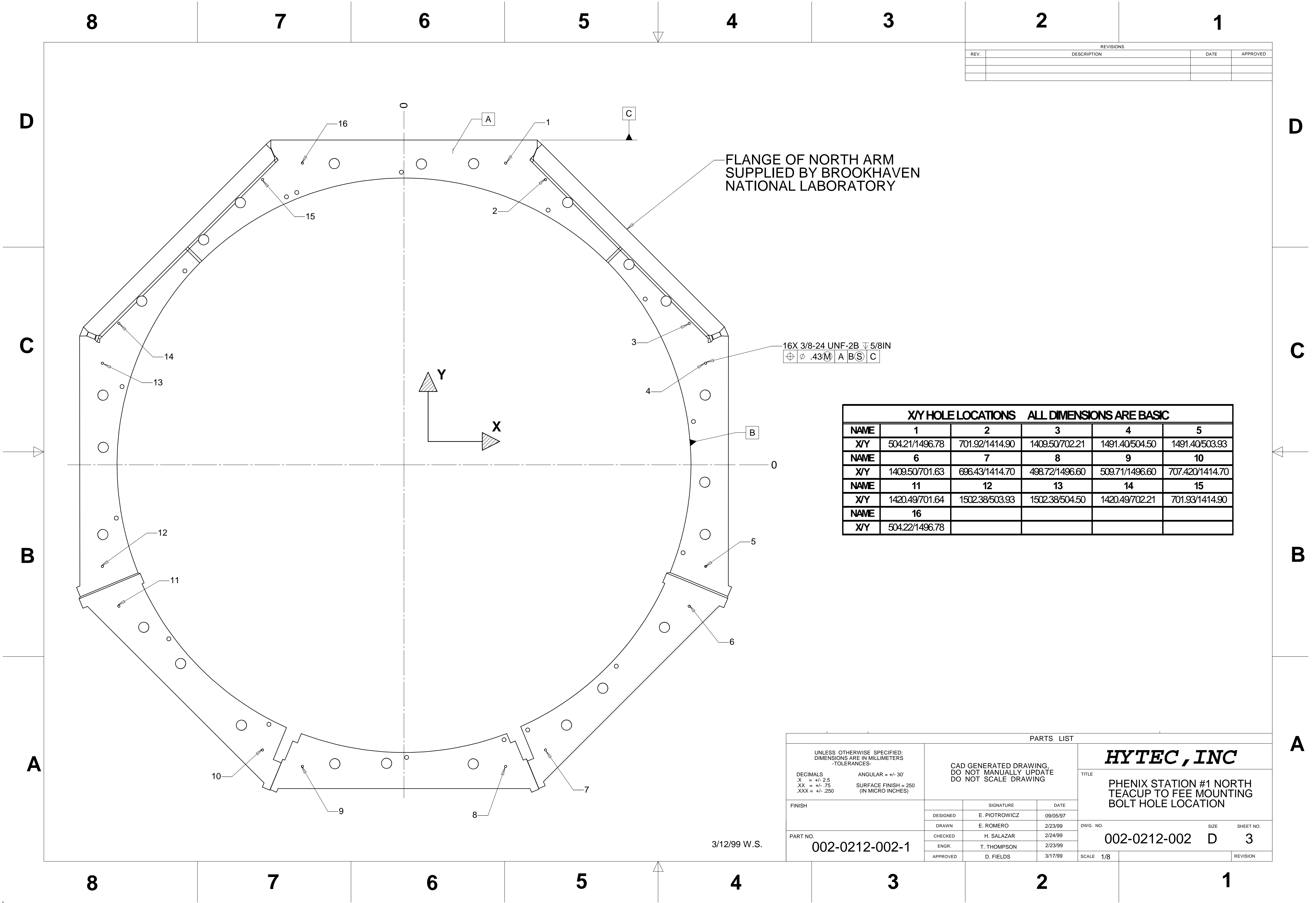
- NOTES: UNLESS OTHER WISE SPECIFIED
1. ALL DIMENSIONS IN MILLIMETERS
 2. DIMENSIONS AND TOLERANCING PER ANASI Y14.5M-1994
 3. SURFACE TEXTURE PER ANI/ASME B 46.1-1985
 4. REMOVE ALL BURRS AND BREAK SHARP EDGES TO A MAXIMUM OF 0.1mm
 5. ALL INSIDE CORNERS TO BE 0.4mm RADIUS MAX
 6. COUNTERSINK 82 DEGREES ALL TAPPED HOLES TO MAJOR DIAMETER
 7. COUNTERSINK 82 DEGREES APPROXIMATELY 0.4mm DEEP ALL DRILLED HOLES
 8. PARTS TO BE THOROUGHLY CLEANED TO REMOVE ALL OIL, GREASE, DIRT AND CHIPS
 9. PART NUMBER (DRAWING NO. PLUS DASH NO. PLUS SERIAL NO.) TO BE CLEARLY MARKED ON THE PART ITSELF.

FLANGE OF NORTH ARM
SUPPLIED BY BROOKHAVEN
NATIONAL LABORATORY

16X 3/4-16 UNF-2B ∇ 1.50 IN
 $\oplus \ominus \varnothing .43 \text{M} \text{A} \text{B} \text{S} \text{C}$

X/Y HOLE LOCATIONS ALL DIMENSIONS ARE BASIC					
NAME	1	2	3	4	5
X/Y	12.99/1451.94	715.00/1263.76	1196.63/822.42	1436.051/214.62	1384.80/436.63
NAME	6	7	8	9	10
X/Y	1053.24/999.49	613.79/1315.90	496.46/1364.49	12.67/1415.95	670.46/1287.94
NAME	11	12	13	14	15
X/Y	1167.20/863.68	1427.69/264.61	1399.19/388.03	1087.48/962.12	583.25/1329.71
NAME	16				
X/Y	532.11/1350.99				

PARTS LIST					
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS -TOLERANCES- DECIMALS X = +/- .25 .XX = +/- .75 .XXX = +/- .250 ANGULAR = +/- .30' SURFACE FINISH = 250 (IN MICRO INCHES)		CAD GENERATED DRAWING. DO NOT MANUALLY UPDATE DO NOT SCALE DRAWING		HYTEC, INC	
				TITLE PHENIX STATION #1 NORTH TEACUP TO ADAPTER RING MOUNTING HOLE LOCATIONS	
FINISH		SIGNATURE	DATE	DWG. NO.	
		DESIGNED	E. PIOTROWICZ	09/05/97	SIZE
		DRAWN	E. ROMERO	2/23/99	SHEET NO.
		CHECKED	H. SALAZAR	2/24/99	
		ENGR.	T. THOMPSON	2/23/99	
		APPROVED	D. FIELDS	3/17/99	
PART NO.		002-0212-002-1		SCALE 1/8	REVISION



REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED

XY HOLE LOCATIONS ALL DIMENSIONS ARE BASIC					
NAME	1	2	3	4	5
X/Y	504.21/1496.78	701.92/1414.90	1409.50/702.21	1491.40/504.50	1491.40/503.93
NAME	6	7	8	9	10
X/Y	1409.50/701.63	696.43/1414.70	498.72/1496.60	509.71/1496.60	707.420/1414.70
NAME	11	12	13	14	15
X/Y	1420.49/701.64	1502.38/503.93	1502.38/504.50	1420.49/702.21	701.93/1414.90
NAME	16				
X/Y	504.22/1496.78				

PARTS LIST			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS -TOLERANCES- DECIMALS .X = +/- .25 .XX = +/- .75 .XXX = +/- .250 ANGULAR = +/- .30° SURFACE FINISH = 250 (IN MICRO INCHES)	CAD GENERATED DRAWING. DO NOT MANUALLY UPDATE DO NOT SCALE DRAWING	SIGNATURE	DATE
FINISH	DESIGNED	E. PIOTROWICZ	09/05/97
PART NO. 002-0212-002-1	DRAWN	E. ROMERO	2/23/99
	CHECKED	H. SALAZAR	2/24/99
	ENGR.	T. THOMPSON	2/23/99
APPROVED		D. FIELDS	3/17/99
SCALE 1/8		DWG. NO.	002-0212-002
		SIZE	D
		SHEET NO.	3
		REVISION	

8

7

6

5

4

3

2

1

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED

D

D

C

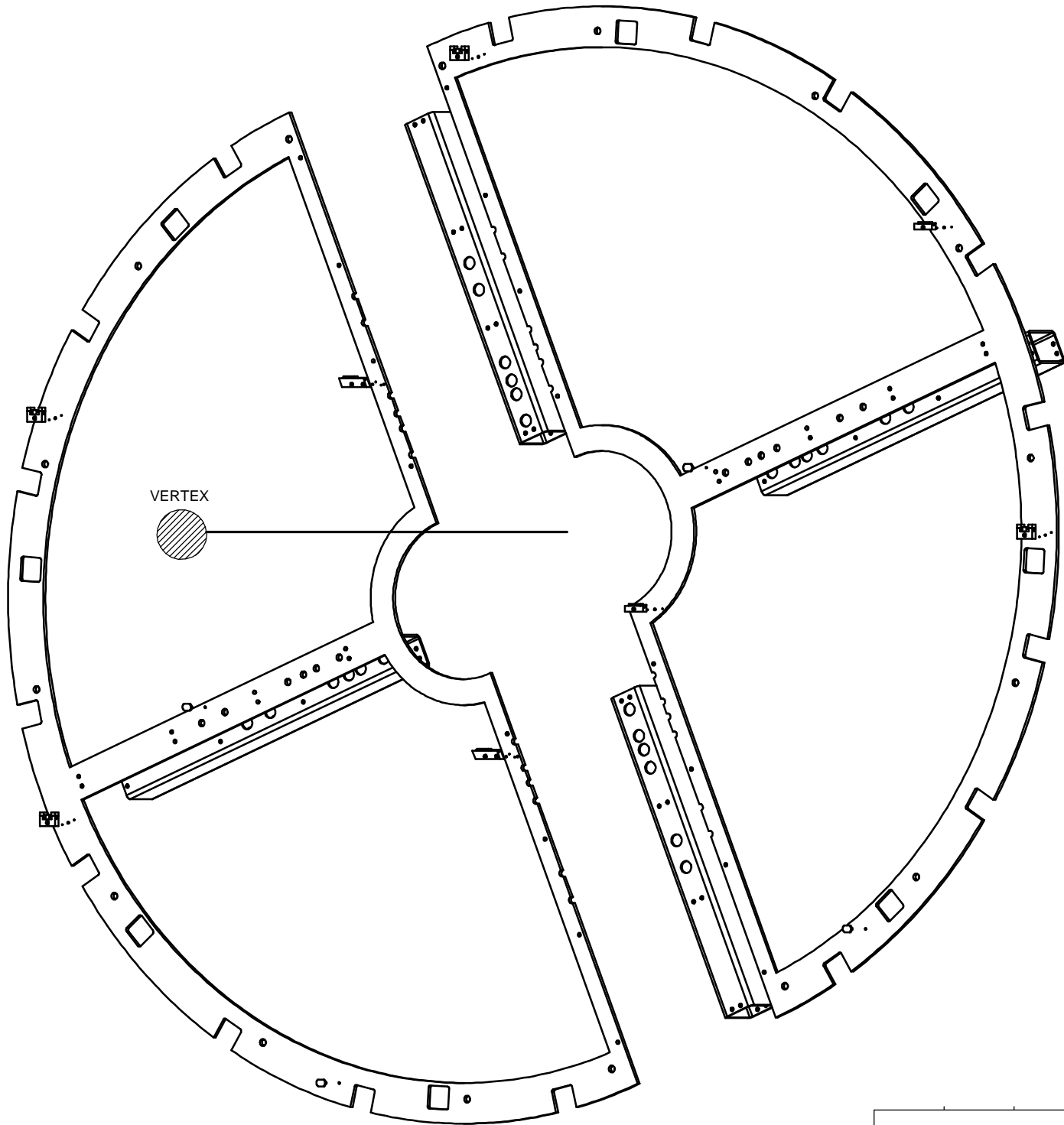
C

B

B

A

A



NOTES: UNLESS OTHER WISE SPECIFIED

1. ALL DIMENSIONS IN MILLIMETERS
2. DIMENSIONS AND TOLERANCING PER ANASI Y14.5M-1994
3. SURFACE TEXTURE PER ANI/ASME B 46.1-1985
4. REMOVE ALL BURRS AND BREAK SHARP EDGES TO A MAXIMUM OF .38
5. ALL INSIDE CORNERS TO BE .38 RADIUS MAX
6. COUNTERSINK 82 DEGREES ALL TAPPED HOLES TO MAJOR DIAMETER
7. COUNTERSINK 82 DEGREES APPROXIMATELY .76 TO 1.52 DEEP ALL DRILLED HOLES
8. PARTS TO BE THOROUGHLY CLEANED TO REMOVE ALL OIL, GREASE, DIRT AND CHIPS
9. PART NUMBER (DRAWING NO. PLUS DASH NO. PLUS SERIAL NO.) TO BE CLEARLY MARKED ON THE PART ITSELF.

PARTS LIST					
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE METRIC TOLERANCES: DECIMALS ANGULAR = +/- .25° .X = +/- 2.54 .XX = +/- .25 SURFACE FINISH = 3.2			CAD GENERATED DRAWING, DO NOT MANUALLY UPDATE DO NOT SCALE DRAWING		HYTEC, INC
					TITLE PHENIX STATION 1 SPLIT RING ASSEMBLY
FINISH	DESIGNED	SIGNATURE E. ROMERO	DATE 7/30/99	DWG. NO. 002-0212-007	SIZE D
	DRAWN	E. ROMERO	7/30/99		
	CHECKED	H. SALAZAR	8/3/99		
	ENGR.	T. THOMPSON	7/30/99		
PART NO. 002-0212-007-1	APPROVED	D. FIELDS	8/3/99	SCALE 1/8	SHEET NO. 2 of 2
				REVISION	

8

7

6

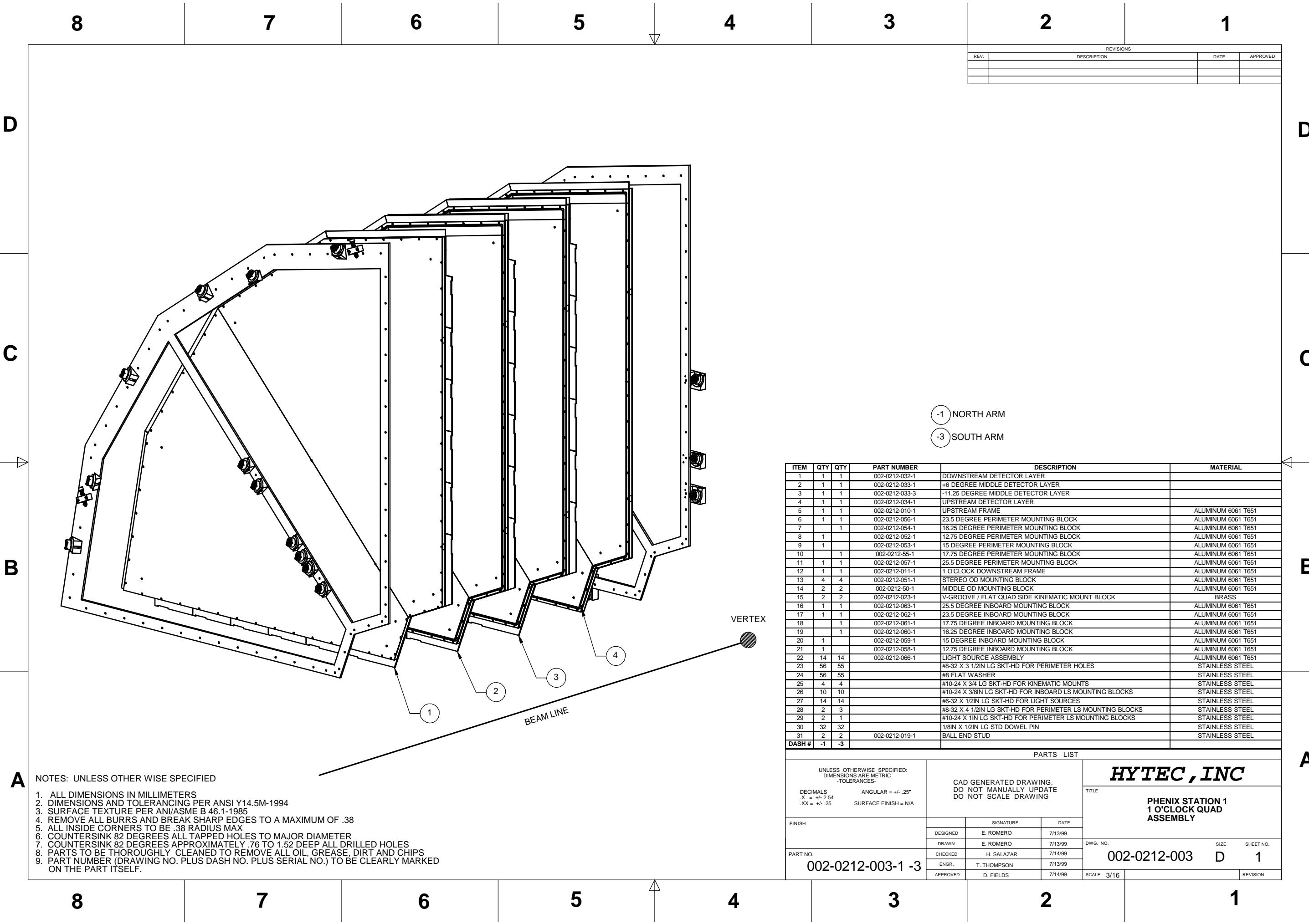
5

4

3

2

1



REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED

-1 NORTH ARM

-3 SOUTH ARM

ITEM	QTY	QTY	PART NUMBER	DESCRIPTION	MATERIAL
1	1	1	002-0212-032-1	DOWNSTREAM DETECTOR LAYER	
2	1	1	002-0212-033-1	+6 DEGREE MIDDLE DETECTOR LAYER	
3	1	1	002-0212-033-3	-11.25 DEGREE MIDDLE DETECTOR LAYER	
4	1	1	002-0212-034-1	UPSTREAM DETECTOR LAYER	
5	1	1	002-0212-010-1	UPSTREAM FRAME	ALUMINUM 6061 T651
6	1	1	002-0212-056-1	23.5 DEGREE PERIMETER MOUNTING BLOCK	ALUMINUM 6061 T651
7	1	1	002-0212-054-1	16.25 DEGREE PERIMETER MOUNTING BLOCK	ALUMINUM 6061 T651
8	1	1	002-0212-052-1	12.75 DEGREE PERIMETER MOUNTING BLOCK	ALUMINUM 6061 T651
9	1	1	002-0212-053-1	15 DEGREE PERIMETER MOUNTING BLOCK	ALUMINUM 6061 T651
10	1	1	002-0212-55-1	17.75 DEGREE PERIMETER MOUNTING BLOCK	ALUMINUM 6061 T651
11	1	1	002-0212-057-1	25.5 DEGREE PERIMETER MOUNTING BLOCK	ALUMINUM 6061 T651
12	1	1	002-0212-011-1	1 O'CLOCK DOWNSTREAM FRAME	ALUMINUM 6061 T651
13	4	4	002-0212-051-1	STEREO OD MOUNTING BLOCK	ALUMINUM 6061 T651
14	2	2	002-0212-50-1	MIDDLE OD MOUNTING BLOCK	ALUMINUM 6061 T651
15	2	2	002-0212-023-1	V-GROOVE / FLAT QUAD SIDE KINEMATIC MOUNT BLOCK	BRASS
16	1	1	002-0212-063-1	25.5 DEGREE INBOARD MOUNTING BLOCK	ALUMINUM 6061 T651
17	1	1	002-0212-062-1	23.5 DEGREE INBOARD MOUNTING BLOCK	ALUMINUM 6061 T651
18	1	1	002-0212-061-1	17.75 DEGREE INBOARD MOUNTING BLOCK	ALUMINUM 6061 T651
19	1	1	002-0212-060-1	16.25 DEGREE INBOARD MOUNTING BLOCK	ALUMINUM 6061 T651
20	1	1	002-0212-059-1	15 DEGREE INBOARD MOUNTING BLOCK	ALUMINUM 6061 T651
21	1	1	002-0212-058-1	12.75 DEGREE INBOARD MOUNTING BLOCK	ALUMINUM 6061 T651
22	14	14	002-0212-066-1	LIGHT SOURCE ASSEMBLY	ALUMINUM 6061 T651
23	56	55		#8-32 X 3 1/2IN LG SKT-HD FOR PERIMETER HOLES	STAINLESS STEEL
24	56	55		#8 FLAT WASHER	STAINLESS STEEL
25	4	4		#10-24 X 3/4 LG SKT-HD FOR KINEMATIC MOUNTS	STAINLESS STEEL
26	10	10		#10-24 X 3/8IN LG SKT-HD FOR INBOARD LS MOUNTING BLOCKS	STAINLESS STEEL
27	14	14		#6-32 X 1/2IN LG SKT-HD FOR LIGHT SOURCES	STAINLESS STEEL
28	2	3		#8-32 X 4 1/2IN LG SKT-HD FOR PERIMETER LS MOUNTING BLOCKS	STAINLESS STEEL
29	2	1		#10-24 X 1IN LG SKT-HD FOR PERIMETER LS MOUNTING BLOCKS	STAINLESS STEEL
30	32	32		1/8IN X 1/2IN LG STD DOWEL PIN	STAINLESS STEEL
31	2	2	002-0212-019-1	BALL END STUD	STAINLESS STEEL
DASH #	-1	-3			

PARTS LIST

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE METRIC
TOLERANCES:

DECIMALS
X = +/- .254
XX = +/- .25

ANGULAR = +/- .25°
SURFACE FINISH = N/A

CAD GENERATED DRAWING,
DO NOT MANUALLY UPDATE
DO NOT SCALE DRAWING

HYTEC, INC

TITLE

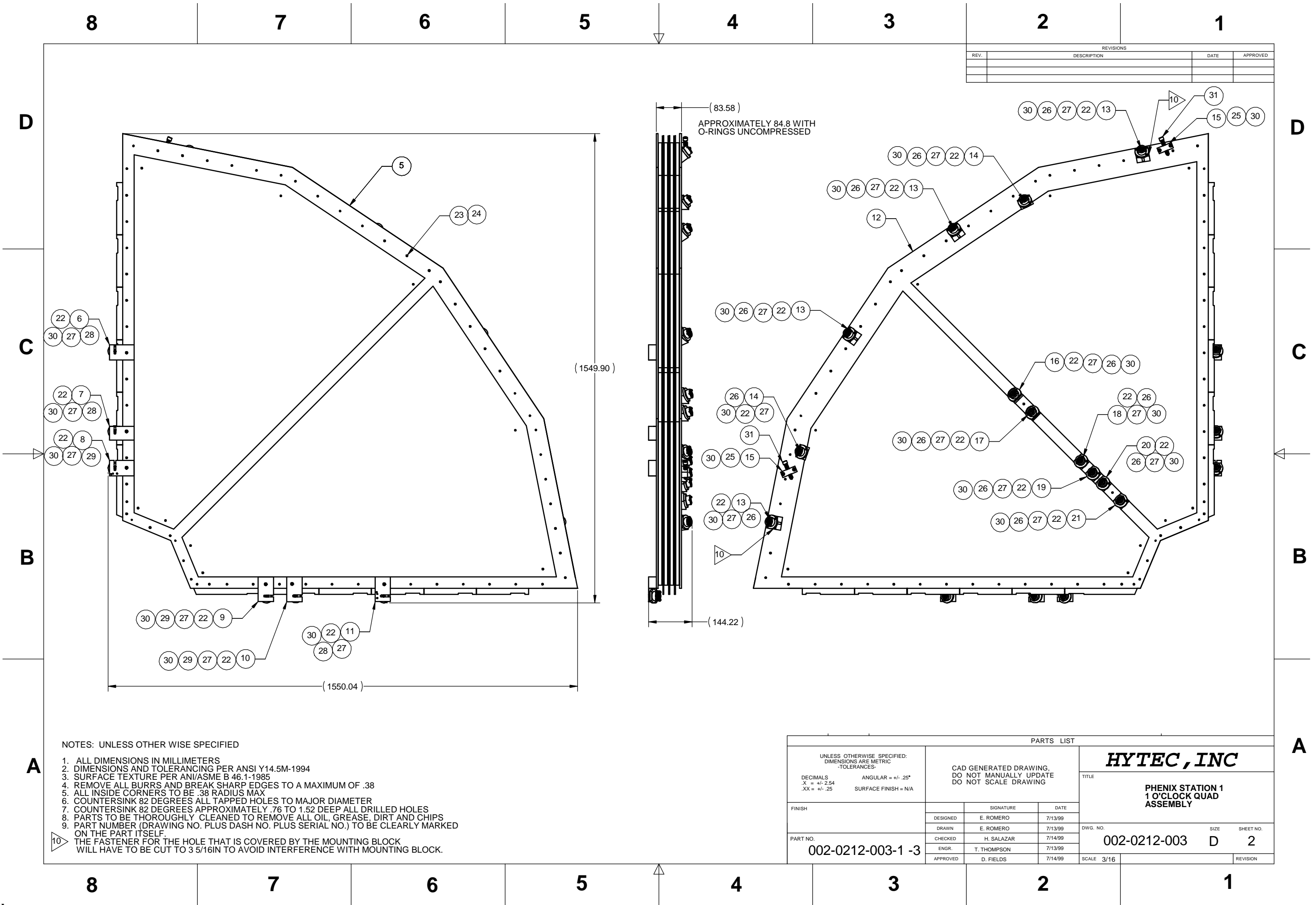
**PHENIX STATION 1
1 O'CLOCK QUAD
ASSEMBLY**

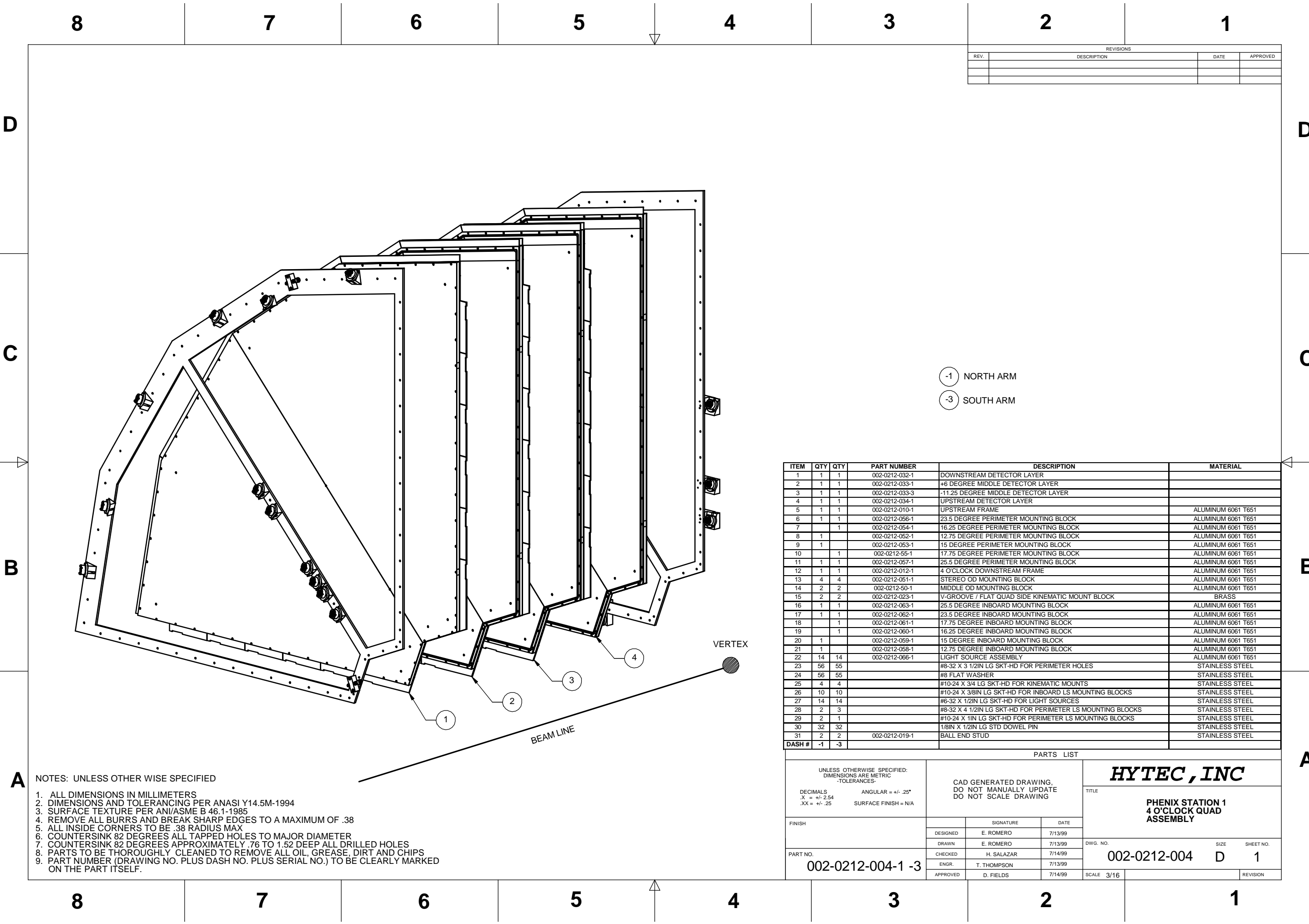
FINISH	SIGNATURE		DATE
	DESIGNED	E. ROMERO	7/13/99
PART NO.	DRAWN	E. ROMERO	7/13/99
	CHECKED	H. SALAZAR	7/14/99
002-0212-003-1 -3		ENGR.	T. THOMPSON 7/13/99
		APPROVED	D. FIELDS 7/14/99

DWG. NO.	SIZE	SHEET NO.
002-0212-003	D	1
SCALE 3/16		REVISION

NOTES: UNLESS OTHER WISE SPECIFIED

1. ALL DIMENSIONS IN MILLIMETERS
2. DIMENSIONS AND TOLERANCING PER ANSI Y14.5M-1994
3. SURFACE TEXTURE PER ANI/ASME B 46.1-1985
4. REMOVE ALL BURRS AND BREAK SHARP EDGES TO A MAXIMUM OF .38
5. ALL INSIDE CORNERS TO BE .38 RADIUS MAX
6. COUNTERSINK 82 DEGREES ALL TAPPED HOLES TO MAJOR DIAMETER
7. COUNTERSINK 82 DEGREES APPROXIMATELY .76 TO 1.52 DEEP ALL DRILLED HOLES
8. PARTS TO BE THOROUGHLY CLEANED TO REMOVE ALL OIL, GREASE, DIRT AND CHIPS
9. PART NUMBER (DRAWING NO. PLUS DASH NO. PLUS SERIAL NO.) TO BE CLEARLY MARKED ON THE PART ITSELF.





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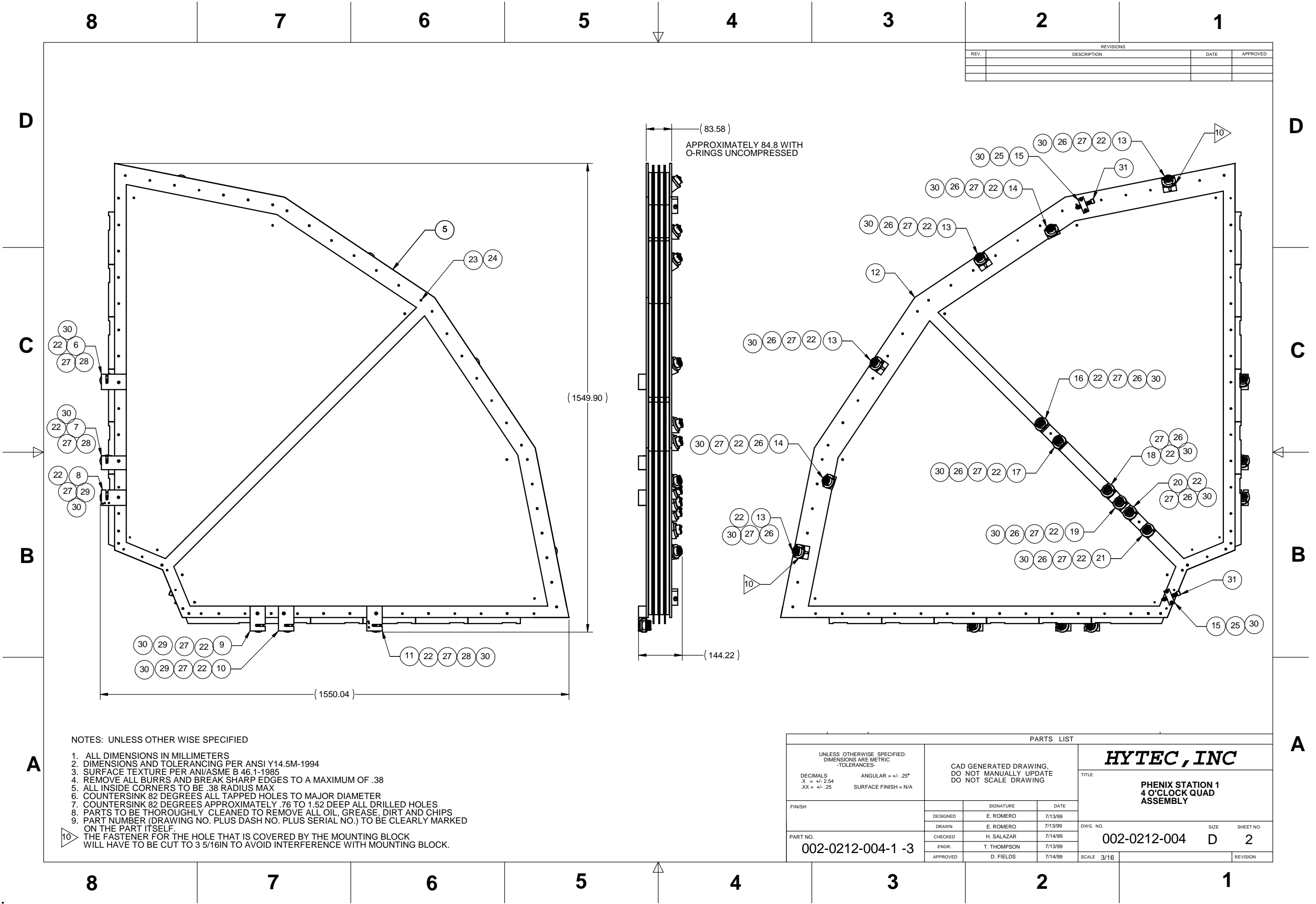
- 1 NORTH ARM
- 3 SOUTH ARM

ITEM	QTY	QTY	PART NUMBER	DESCRIPTION	MATERIAL
1	1	1	002-0212-032-1	DOWNSTREAM DETECTOR LAYER	
2	1	1	002-0212-033-1	+6 DEGREE MIDDLE DETECTOR LAYER	
3	1	1	002-0212-033-3	-11.25 DEGREE MIDDLE DETECTOR LAYER	
4	1	1	002-0212-034-1	UPSTREAM DETECTOR LAYER	
5	1	1	002-0212-010-1	UPSTREAM FRAME	ALUMINUM 6061 T651
6	1	1	002-0212-056-1	23.5 DEGREE PERIMETER MOUNTING BLOCK	ALUMINUM 6061 T651
7	1	1	002-0212-054-1	16.25 DEGREE PERIMETER MOUNTING BLOCK	ALUMINUM 6061 T651
8	1	1	002-0212-052-1	12.75 DEGREE PERIMETER MOUNTING BLOCK	ALUMINUM 6061 T651
9	1	1	002-0212-053-1	15 DEGREE PERIMETER MOUNTING BLOCK	ALUMINUM 6061 T651
10	1	1	002-0212-55-1	17.75 DEGREE PERIMETER MOUNTING BLOCK	ALUMINUM 6061 T651
11	1	1	002-0212-057-1	25.5 DEGREE PERIMETER MOUNTING BLOCK	ALUMINUM 6061 T651
12	1	1	002-0212-012-1	4 O'CLOCK DOWNSTREAM FRAME	ALUMINUM 6061 T651
13	4	4	002-0212-051-1	STEREO OD MOUNTING BLOCK	ALUMINUM 6061 T651
14	2	2	002-0212-50-1	MIDDLE OD MOUNTING BLOCK	ALUMINUM 6061 T651
15	2	2	002-0212-023-1	V-GROOVE / FLAT QUAD SIDE KINEMATIC MOUNT BLOCK	BRASS
16	1	1	002-0212-063-1	25.5 DEGREE INBOARD MOUNTING BLOCK	ALUMINUM 6061 T651
17	1	1	002-0212-062-1	23.5 DEGREE INBOARD MOUNTING BLOCK	ALUMINUM 6061 T651
18	1	1	002-0212-061-1	17.75 DEGREE INBOARD MOUNTING BLOCK	ALUMINUM 6061 T651
19	1	1	002-0212-060-1	16.25 DEGREE INBOARD MOUNTING BLOCK	ALUMINUM 6061 T651
20	1	1	002-0212-059-1	15 DEGREE INBOARD MOUNTING BLOCK	ALUMINUM 6061 T651
21	1	1	002-0212-058-1	12.75 DEGREE INBOARD MOUNTING BLOCK	ALUMINUM 6061 T651
22	14	14	002-0212-066-1	LIGHT SOURCE ASSEMBLY	ALUMINUM 6061 T651
23	56	55		#8-32 X 3 1/2IN LG SKT-HD FOR PERIMETER HOLES	STAINLESS STEEL
24	56	55		#8 FLAT WASHER	STAINLESS STEEL
25	4	4		#10-24 X 3/4 LG SKT-HD FOR KINEMATIC MOUNTS	STAINLESS STEEL
26	10	10		#10-24 X 3/8IN LG SKT-HD FOR INBOARD LS MOUNTING BLOCKS	STAINLESS STEEL
27	14	14		#6-32 X 1/2IN LG SKT-HD FOR LIGHT SOURCES	STAINLESS STEEL
28	2	3		#8-32 X 4 1/2IN LG SKT-HD FOR PERIMETER LS MOUNTING BLOCKS	STAINLESS STEEL
29	2	1		#10-24 X 1IN LG SKT-HD FOR PERIMETER LS MOUNTING BLOCKS	STAINLESS STEEL
30	32	32		1/8IN X 1/2IN LG STD DOWEL PIN	STAINLESS STEEL
31	2	2	002-0212-019-1	BALL END STUD	STAINLESS STEEL
DASH #	-1	-3			

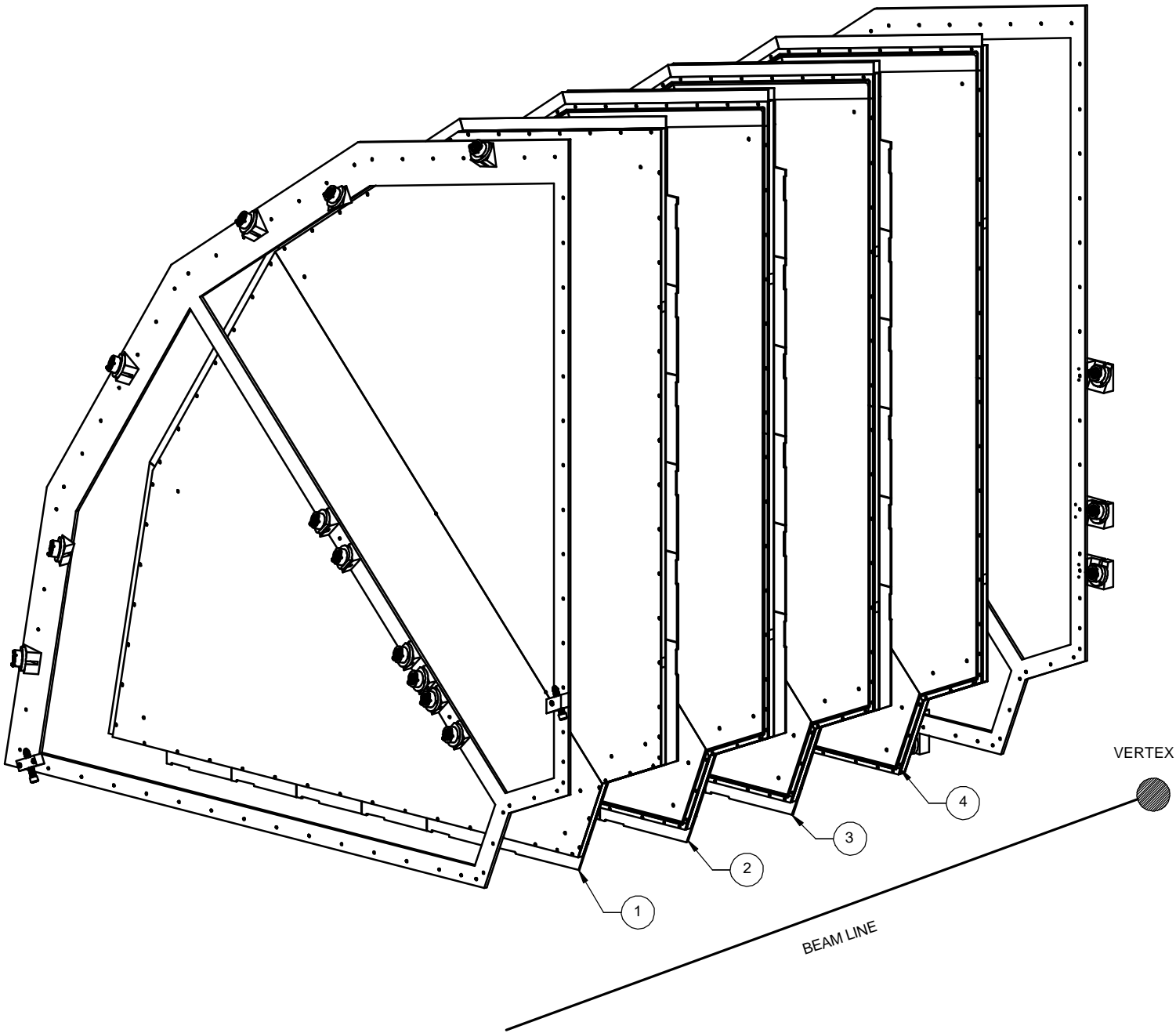
NOTES: UNLESS OTHER WISE SPECIFIED

1. ALL DIMENSIONS IN MILLIMETERS
2. DIMENSIONS AND TOLERANCING PER ANASI Y14.5M-1994
3. SURFACE TEXTURE PER ANI/ASME B 46.1-1985
4. REMOVE ALL BURRS AND BREAK SHARP EDGES TO A MAXIMUM OF .38
5. ALL INSIDE CORNERS TO BE .38 RADIUS MAX
6. COUNTERSINK 82 DEGREES ALL TAPPED HOLES TO MAJOR DIAMETER
7. COUNTERSINK 82 DEGREES APPROXIMATELY .76 TO 1.52 DEEP ALL DRILLED HOLES
8. PARTS TO BE THOROUGHLY CLEANED TO REMOVE ALL OIL, GREASE, DIRT AND CHIPS
9. PART NUMBER (DRAWING NO. PLUS DASH NO. PLUS SERIAL NO.) TO BE CLEARLY MARKED ON THE PART ITSELF.

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE METRIC TOLERANCES:			CAD GENERATED DRAWING, DO NOT MANUALLY UPDATE DO NOT SCALE DRAWING			HYTEC , INC		
DECIMALS		ANGULAR = +/- .25°				TITLE		
.X = +/- .254						PHENIX STATION 1 4 O'CLOCK QUAD ASSEMBLY		
.XX = +/- .25		SURFACE FINISH = N/A						
FINISH			SIGNATURE	DATE				
	DESIGNED	E. ROMERO		7/13/99				
	DRAWN	E. ROMERO		7/13/99		DWG. NO.	SIZE	SHEET NO.
	CHECKED	H. SALAZAR		7/14/99		002-0212-004	D	1
	ENGR.	T. THOMPSON		7/13/99				
PART NO.			APPROVED	D. FIELDS	7/14/99	SCALE	3/16	REVISION
002-0212-004-1 -3								



REVISIONS			
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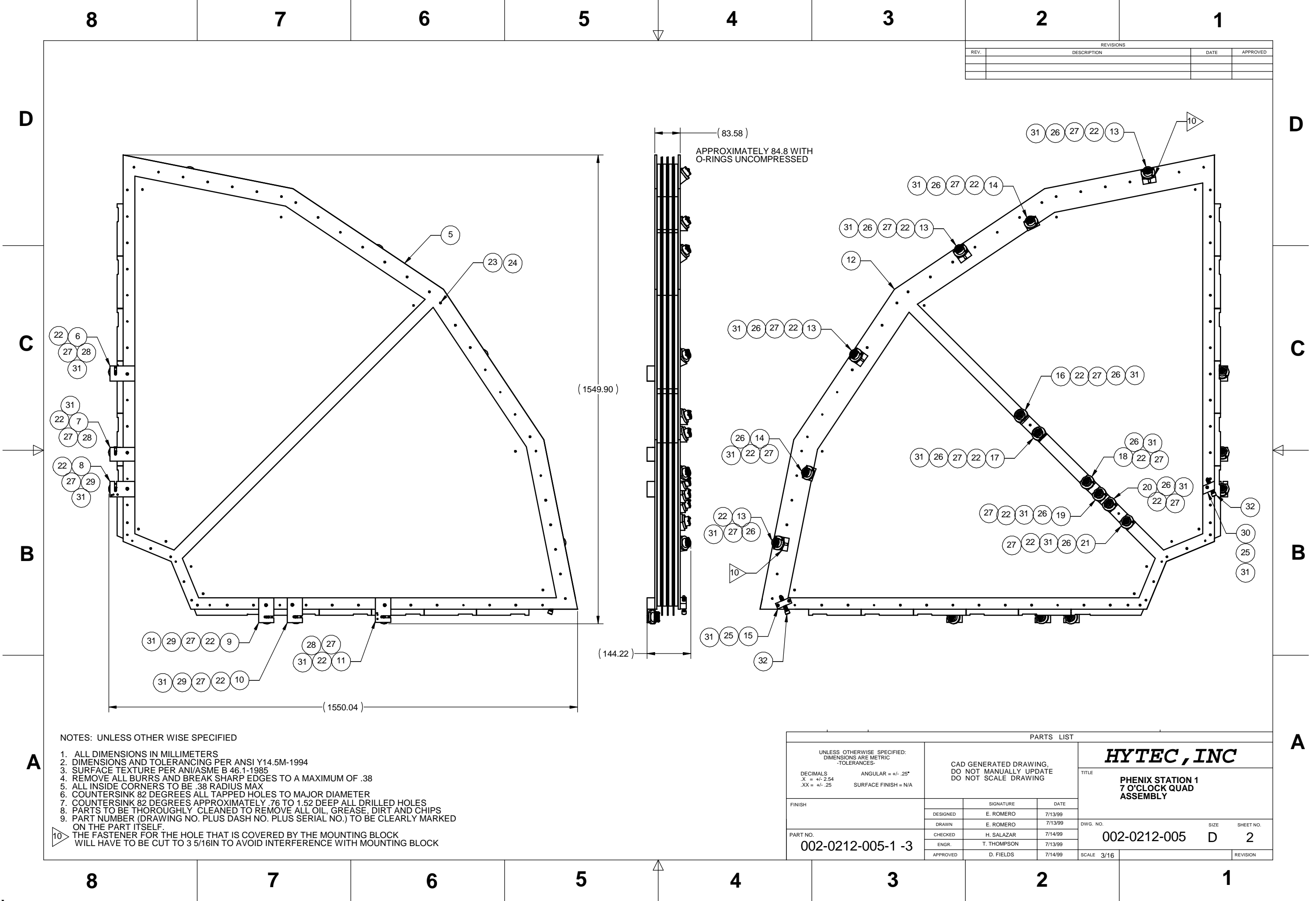


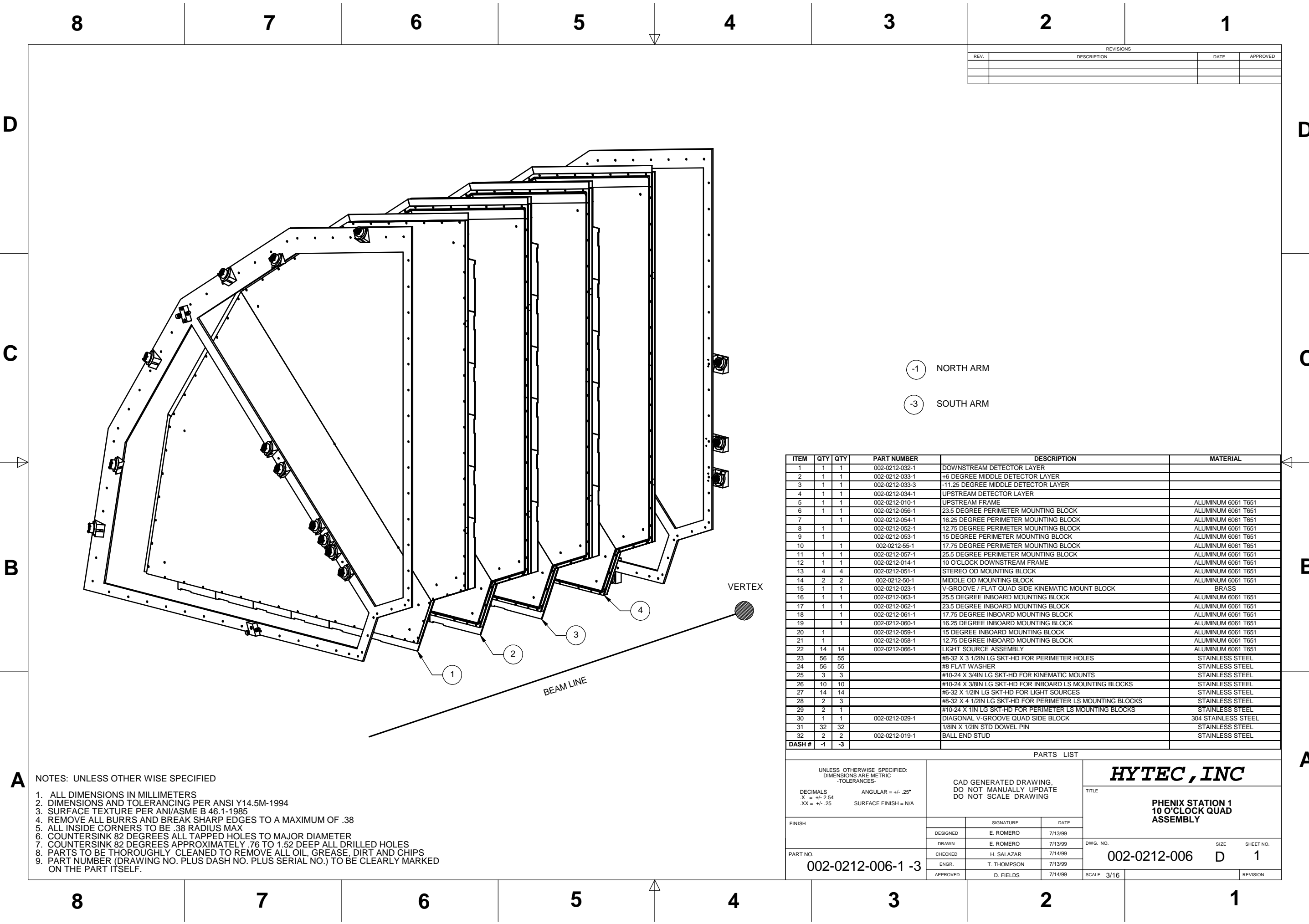
- 1 NORTH ARM
- 3 SOUTH ARM

ITEM	QTY	QTY	PART NUMBER	DESCRIPTION	MATERIAL
1	1	1	002-0212-032-1	DOWNSTREAM DETECTOR LAYER	
2	1	1	002-0212-033-1	+6 DEGREE MIDDLE DETECTOR LAYER	
3	1	1	002-0212-033-3	-11.25 DEGREE MIDDLE DETECTOR LAYER	
4	1	1	002-0212-034-1	UPSTREAM DETECTOR LAYER	
5	1	1	002-0212-010-1	UPSTREAM FRAME	ALUMINUM 6061 T651
6	1	1	002-0212-056-1	23.5 DEGREE PERIMETER MOUNTING BLOCK	ALUMINUM 6061 T651
7	1	1	002-0212-054-1	16.25 DEGREE PERIMETER MOUNTING BLOCK	ALUMINUM 6061 T651
8	1	1	002-0212-052-1	12.75 DEGREE PERIMETER MOUNTING BLOCK	ALUMINUM 6061 T651
9	1	1	002-0212-053-1	15 DEGREE PERIMETER MOUNTING BLOCK	ALUMINUM 6061 T651
10	1	1	002-0212-55-1	17.75 DEGREE PERIMETER MOUNTING BLOCK	ALUMINUM 6061 T651
11	1	1	002-0212-057-1	25.5 DEGREE PERIMETER MOUNTING BLOCK	ALUMINUM 6061 T651
12	1	1	002-0212-013-1	7 O'CLOCK DOWNSTREAM FRAME	ALUMINUM 6061 T651
13	4	4	002-0212-051-1	STEREO OD MOUNTING BLOCK	ALUMINUM 6061 T651
14	2	2	002-0212-50-1	MIDDLE OD MOUNTING BLOCK	ALUMINUM 6061 T651
15	1	1	002-0212-023-1	V-GROOVE / FLAT QUAD SIDE KINEMATIC MOUNT BLOCK	BRASS
16	1	1	002-0212-063-1	25.5 DEGREE INBOARD MOUNTING BLOCK	ALUMINUM 6061 T651
17	1	1	002-0212-062-1	23.5 DEGREE INBOARD MOUNTING BLOCK	ALUMINUM 6061 T651
18	1	1	002-0212-061-1	17.75 DEGREE INBOARD MOUNTING BLOCK	ALUMINUM 6061 T651
19	1	1	002-0212-060-1	16.25 DEGREE INBOARD MOUNTING BLOCK	ALUMINUM 6061 T651
20	1	1	002-0212-059-1	15 DEGREE INBOARD MOUNTING BLOCK	ALUMINUM 6061 T651
21	1	1	002-0212-058-1	12.75 DEGREE INBOARD MOUNTING BLOCK	ALUMINUM 6061 T651
22	14	14	002-0212-066-1	LIGHT SOURCE ASSEMBLY	ALUMINUM 6061 T651
23	56	55		#8-32 X 3 1/2IN LG SKT-HD FOR PERIMETER HOLES	STAINLESS STEEL
24	56	55		#8 FLAT WASHER	STAINLESS STEEL
25	3	3		#10-24 X 3/4 LG SKT-HD FOR KINEMATIC MOUNTS	STAINLESS STEEL
26	10	10		#10-24 X 3/8IN LG SKT-HD FOR INBOARD LS MOUNTING BLOCKS	STAINLESS STEEL
27	14	14		#6-32 X 1/2IN LG SKT-HD FOR LIGHT SOURCES	STAINLESS STEEL
28	2	3		#8-32 X 4 1/2IN LG SKT-HD FOR PERIMETER LS MOUNTING BLOCKS	STAINLESS STEEL
29	2	1		#10-24 X 1IN LG SKT-HD FOR PERIMETER LS MOUNTING BLOCKS	STAINLESS STEEL
30	1	1	002-0212-029-1	DIAGONAL V-GROOVE QUAD SIDE BLOCK	304 STAINLESS STEEL
31	32	32		1/8IN X 182IN LG STD DOWEL PIN	STAINLESS STEEL
32	2	2	002-0212-019-1	BALL END STUD	STAINLESS STEEL
DASH #	-1	-3			

- NOTES: UNLESS OTHER WISE SPECIFIED
- ALL DIMENSIONS IN MILLIMETERS
 - DIMENSIONS AND TOLERANCING PER ANSI Y14.5M-1994
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 - REMOVE ALL BURRS AND BREAK SHARP EDGES TO A MAXIMUM OF .38
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 - COUNTERSINK 82 DEGREES ALL TAPPED HOLES TO MAJOR DIAMETER
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UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE METRIC -TOLERANCES-		CAD GENERATED DRAWING, DO NOT MANUALLY UPDATE DO NOT SCALE DRAWING	
DECIMALS .X = +/- 2.54 .XX = +/- .25	ANGULAR = +/- .25° SURFACE FINISH = N/A	HYTEC, INC	
FINISH		TITLE PHENIX STATION 1 7 O'CLOCK QUAD ASSEMBLY	
PART NO. 002-0212-005-1 -3	DESIGNED	E. ROMERO	7/13/99
	DRAWN	E. ROMERO	7/13/99
	CHECKED	H. SALAZAR	7/14/99
	ENGR.	T. THOMPSON	7/13/99
APPROVED		D. FIELDS	7/14/99
DWG. NO. 002-0212-005		SIZE D	SHEET NO. 1
SCALE 3/16		REVISION	





REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED

-1 NORTH ARM

-3 SOUTH ARM

ITEM	QTY	QTY	PART NUMBER	DESCRIPTION	MATERIAL
1	1	1	002-0212-032-1	DOWNSTREAM DETECTOR LAYER	
2	1	1	002-0212-033-1	+6 DEGREE MIDDLE DETECTOR LAYER	
3	1	1	002-0212-033-3	-11.25 DEGREE MIDDLE DETECTOR LAYER	
4	1	1	002-0212-034-1	UPSTREAM DETECTOR LAYER	
5	1	1	002-0212-010-1	UPSTREAM FRAME	ALUMINUM 6061 T651
6	1	1	002-0212-056-1	23.5 DEGREE PERIMETER MOUNTING BLOCK	ALUMINUM 6061 T651
7	1	1	002-0212-054-1	16.25 DEGREE PERIMETER MOUNTING BLOCK	ALUMINUM 6061 T651
8	1	1	002-0212-052-1	12.75 DEGREE PERIMETER MOUNTING BLOCK	ALUMINUM 6061 T651
9	1	1	002-0212-053-1	15 DEGREE PERIMETER MOUNTING BLOCK	ALUMINUM 6061 T651
10	1	1	002-0212-55-1	17.75 DEGREE PERIMETER MOUNTING BLOCK	ALUMINUM 6061 T651
11	1	1	002-0212-057-1	25.5 DEGREE PERIMETER MOUNTING BLOCK	ALUMINUM 6061 T651
12	1	1	002-0212-014-1	10 O'CLOCK DOWNSTREAM FRAME	ALUMINUM 6061 T651
13	4	4	002-0212-051-1	STEREO OD MOUNTING BLOCK	ALUMINUM 6061 T651
14	2	2	002-0212-50-1	MIDDLE OD MOUNTING BLOCK	ALUMINUM 6061 T651
15	1	1	002-0212-023-1	V-GROOVE / FLAT QUAD SIDE KINEMATIC MOUNT BLOCK	BRASS
16	1	1	002-0212-063-1	25.5 DEGREE INBOARD MOUNTING BLOCK	ALUMINUM 6061 T651
17	1	1	002-0212-062-1	23.5 DEGREE INBOARD MOUNTING BLOCK	ALUMINUM 6061 T651
18	1	1	002-0212-061-1	17.75 DEGREE INBOARD MOUNTING BLOCK	ALUMINUM 6061 T651
19	1	1	002-0212-060-1	16.25 DEGREE INBOARD MOUNTING BLOCK	ALUMINUM 6061 T651
20	1	1	002-0212-059-1	15 DEGREE INBOARD MOUNTING BLOCK	ALUMINUM 6061 T651
21	1	1	002-0212-058-1	12.75 DEGREE INBOARD MOUNTING BLOCK	ALUMINUM 6061 T651
22	14	14	002-0212-066-1	LIGHT SOURCE ASSEMBLY	ALUMINUM 6061 T651
23	56	55		#8-32 X 3 1/2IN LG SKT-HD FOR PERIMETER HOLES	STAINLESS STEEL
24	56	55		#8 FLAT WASHER	STAINLESS STEEL
25	3	3		#10-24 X 3/4IN LG SKT-HD FOR KINEMATIC MOUNTS	STAINLESS STEEL
26	10	10		#10-24 X 3/8IN LG SKT-HD FOR INBOARD LS MOUNTING BLOCKS	STAINLESS STEEL
27	14	14		#6-32 X 1/2IN LG SKT-HD FOR LIGHT SOURCES	STAINLESS STEEL
28	2	3		#8-32 X 4 1/2IN LG SKT-HD FOR PERIMETER LS MOUNTING BLOCKS	STAINLESS STEEL
29	2	1		#10-24 X 1IN LG SKT-HD FOR PERIMETER LS MOUNTING BLOCKS	STAINLESS STEEL
30	1	1	002-0212-029-1	DIAGONAL V-GROOVE QUAD SIDE BLOCK	304 STAINLESS STEEL
31	32	32		1/8IN X 1/2IN STD DOWEL PIN	STAINLESS STEEL
32	2	2	002-0212-019-1	BALL END STUD	STAINLESS STEEL
DASH #	-1	-3			

NOTES: UNLESS OTHERWISE SPECIFIED

- ALL DIMENSIONS IN MILLIMETERS
- DIMENSIONS AND TOLERANCING PER ANSI Y14.5M-1994
- SURFACE TEXTURE PER ANI/ASME B 46.1-1985
- REMOVE ALL BURRS AND BREAK SHARP EDGES TO A MAXIMUM OF .38
- ALL INSIDE CORNERS TO BE .38 RADIUS MAX
- COUNTERSINK 82 DEGREES ALL TAPPED HOLES TO MAJOR DIAMETER
- COUNTERSINK 82 DEGREES APPROXIMATELY .76 TO 1.52 DEEP ALL DRILLED HOLES
- PARTS TO BE THOROUGHLY CLEANED TO REMOVE ALL OIL, GREASE, DIRT AND CHIPS
- PART NUMBER (DRAWING NO. PLUS DASH NO. PLUS SERIAL NO.) TO BE CLEARLY MARKED ON THE PART ITSELF.

PARTS LIST			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE METRIC TOLERANCES:		CAD GENERATED DRAWING, DO NOT MANUALLY UPDATE DO NOT SCALE DRAWING	
DECIMALS X = +/- .254 XX = +/- .25		ANGULAR = +/- .25° SURFACE FINISH = N/A	
FINISH	DESIGNED	E. ROMERO	7/13/99
	DRAWN	E. ROMERO	7/13/99
PART NO.	CHECKED	H. SALAZAR	7/14/99
	ENGR.	T. THOMPSON	7/13/99
002-0212-006-1 -3		APPROVED	D. FIELDS 7/14/99
		SCALE	3/16
		SHEET NO.	1
		REVISION	

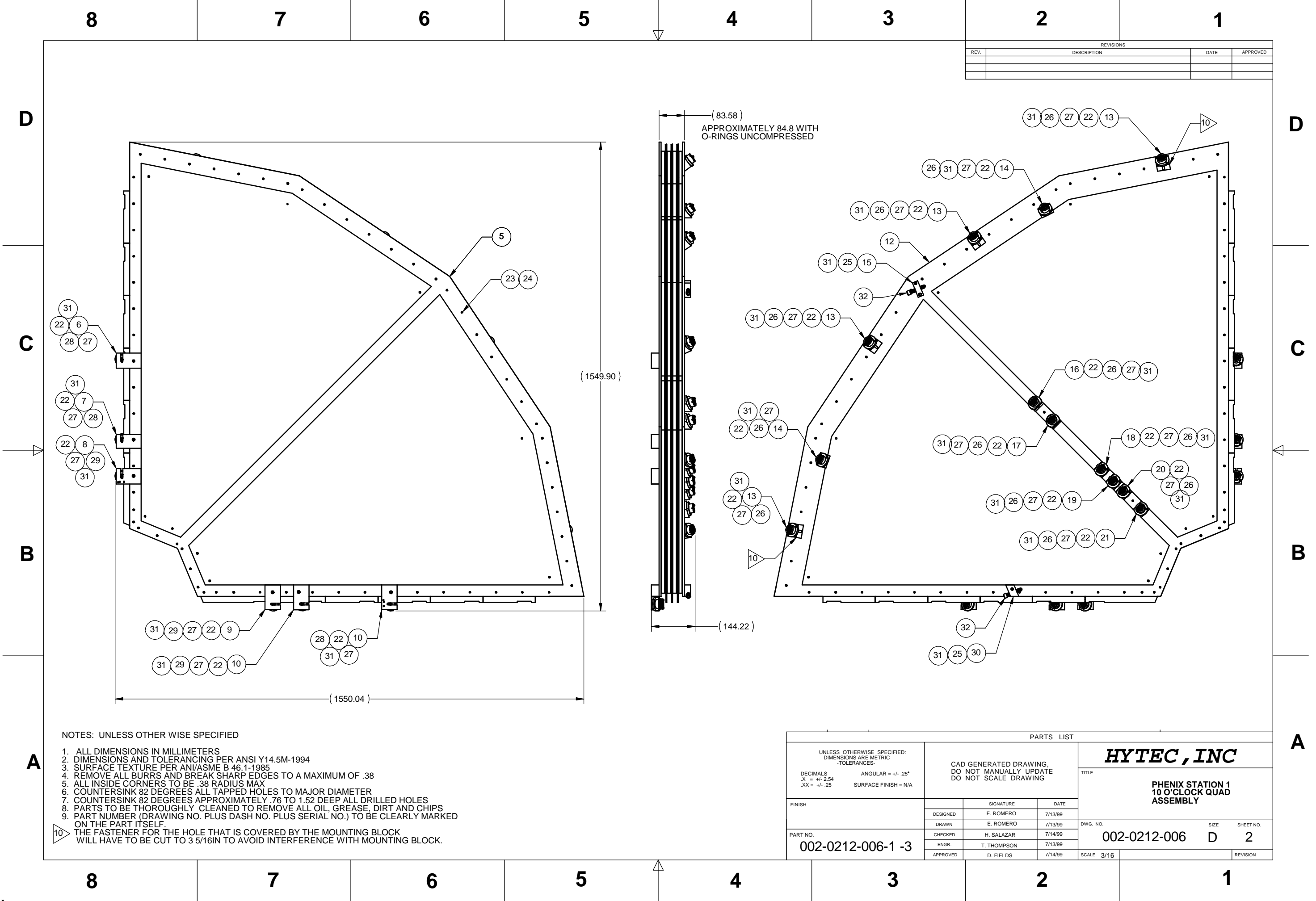
HYTEC, INC

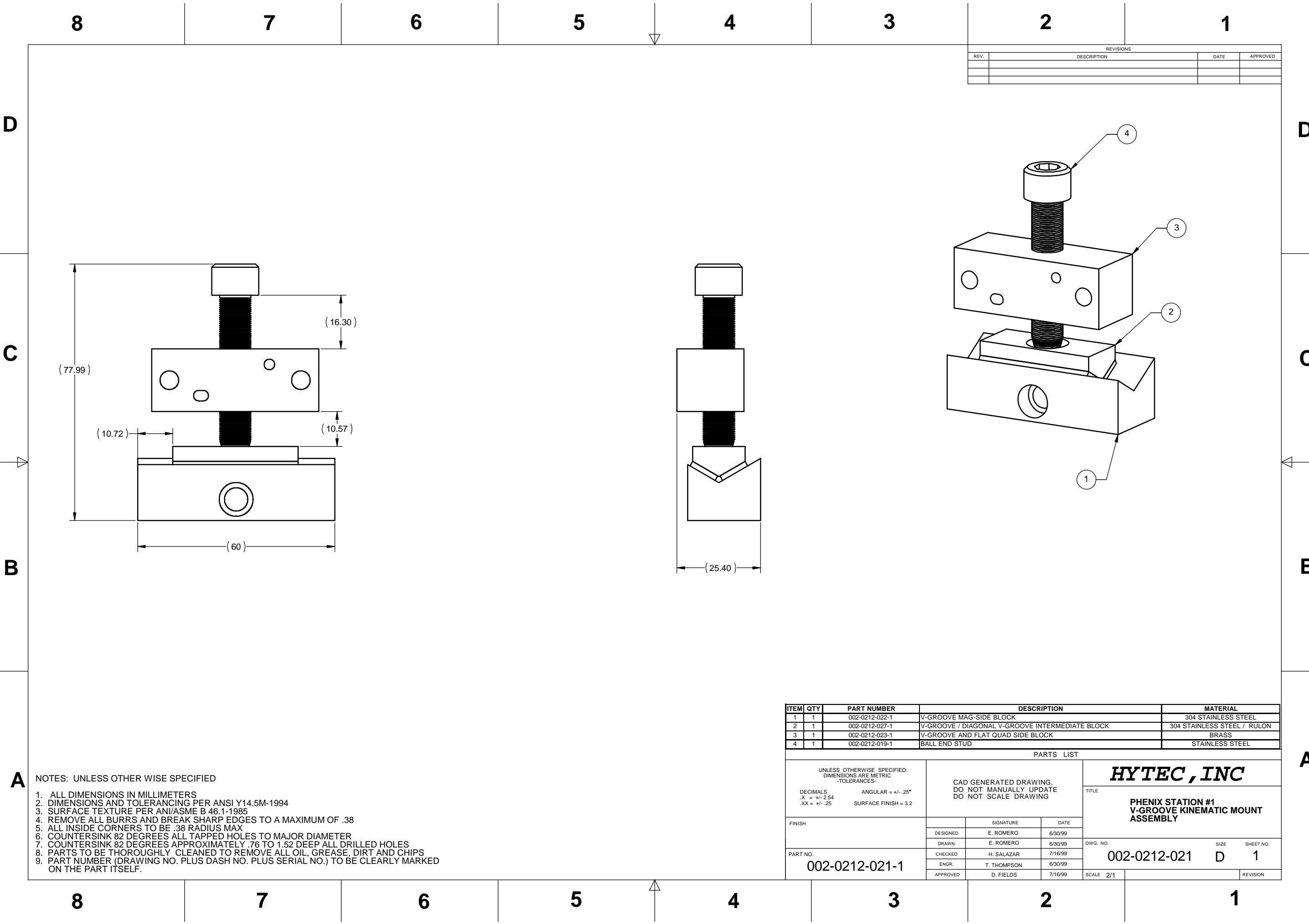
PHENIX STATION 1
10 O'CLOCK QUAD
ASSEMBLY

DWG. NO. 002-0212-006

SIZE D

SHEET NO. 1





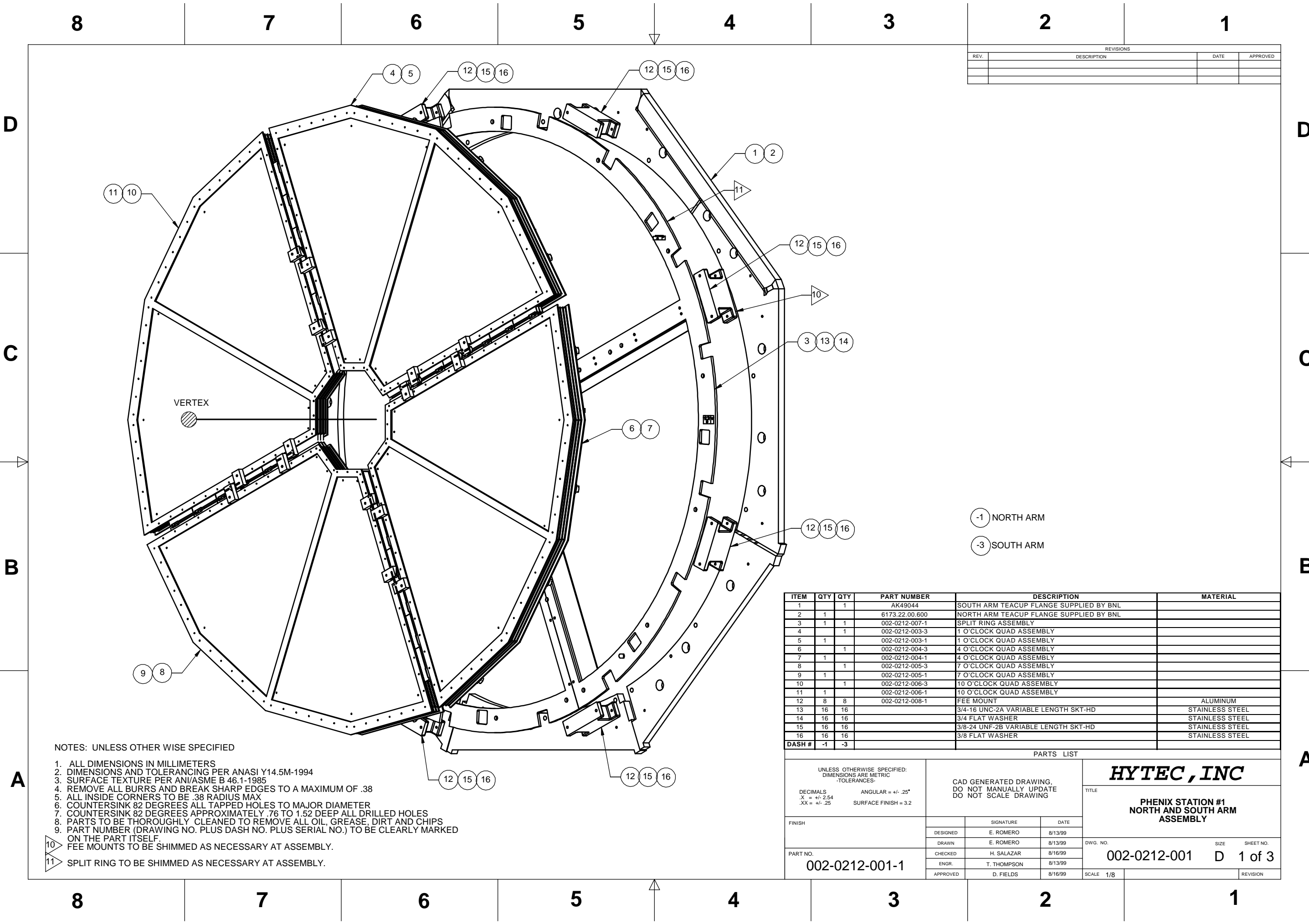
REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED

NOTES: UNLESS OTHER WISE SPECIFIED

1. ALL DIMENSIONS IN MILLIMETERS
2. DIMENSIONS AND TOLERANCING PER ANSI Y14.5M-1994
3. SURFACE TEXTURE PER ANI/ASME B 46.1-1985
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ITEM	QTY	PART NUMBER	DESCRIPTION	MATERIAL
1	1	002-0212-022-1	V-GROOVE MAG-SIDE BLOCK	304 STAINLESS STEEL
2	1	002-0212-027-1	V-GROOVE / DIAGONAL V-GROOVE INTERMEDIATE BLOCK	304 STAINLESS STEEL / RULON
3	1	002-0212-023-1	V-GROOVE AND FLAT QUAD SIDE BLOCK	BRASS
4	1	002-0212-019-1	BALL END STUD	STAINLESS STEEL

PARTS LIST				
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE METRIC -TOLERANCES- DECIMALS ANGULAR = +/- .25° .X = +/- 2.54 .XX = +/- .25 SURFACE FINISH = 3.2			CAD GENERATED DRAWING, DO NOT MANUALLY UPDATE DO NOT SCALE DRAWING	
FINISH	DESIGNED	E. ROMERO	DATE	6/30/99
	DRAWN	E. ROMERO	6/30/99	
	CHECKED	H. SALAZAR	7/16/99	
PART NO. 002-0212-021-1	ENGR.	T. THOMPSON	6/30/99	
	APPROVED	D. FIELDS	7/16/99	
DWG. NO. 002-0212-021		SIZE D	SHEET NO. 1	
SCALE 2/1		REVISION		



REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED

NOTES: UNLESS OTHER WISE SPECIFIED

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9. PART NUMBER (DRAWING NO. PLUS DASH NO. PLUS SERIAL NO.) TO BE CLEARLY MARKED ON THE PART ITSELF.
10. FEE MOUNTS TO BE SHIMMED AS NECESSARY AT ASSEMBLY.
11. SPLIT RING TO BE SHIMMED AS NECESSARY AT ASSEMBLY.

-1 NORTH ARM

-3 SOUTH ARM

ITEM	QTY	QTY	PART NUMBER	DESCRIPTION	MATERIAL
1		1	AK49044	SOUTH ARM TEACUP FLANGE SUPPLIED BY BNL	
2	1		6173.22.00.600	NORTH ARM TEACUP FLANGE SUPPLIED BY BNL	
3	1	1	002-0212-007-1	SPLIT RING ASSEMBLY	
4		1	002-0212-003-3	1 O'CLOCK QUAD ASSEMBLY	
5	1		002-0212-003-1	1 O'CLOCK QUAD ASSEMBLY	
6		1	002-0212-004-3	4 O'CLOCK QUAD ASSEMBLY	
7	1		002-0212-004-1	4 O'CLOCK QUAD ASSEMBLY	
8		1	002-0212-005-3	7 O'CLOCK QUAD ASSEMBLY	
9	1		002-0212-005-1	7 O'CLOCK QUAD ASSEMBLY	
10		1	002-0212-006-3	10 O'CLOCK QUAD ASSEMBLY	
11	1		002-0212-006-1	10 O'CLOCK QUAD ASSEMBLY	
12	8	8	002-0212-008-1	FEE MOUNT	ALUMINUM
13	16	16		3/4-16 UNC-2A VARIABLE LENGTH SKT-HD	STAINLESS STEEL
14	16	16		3/4 FLAT WASHER	STAINLESS STEEL
15	16	16		3/8-24 UNF-2B VARIABLE LENGTH SKT-HD	STAINLESS STEEL
16	16	16		3/8 FLAT WASHER	STAINLESS STEEL
DASH #			-1 -3		

PARTS LIST			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE METRIC -TOLERANCES- DECIMALS ANGULAR = +/- .25* .X = +/- .2,54 SURFACE FINISH = 3.2 .XX = +/- .25		CAD GENERATED DRAWING, DO NOT MANUALLY UPDATE DO NOT SCALE DRAWING	
FINISH	DESIGNED	E. ROMERO	8/13/99
	DRAWN	E. ROMERO	8/13/99
	CHECKED	H. SALAZAR	8/16/99
	ENGR.	T. THOMPSON	8/13/99
PART NO.		002-0212-001-1	
		APPROVED	D. FIELDS 8/16/99
		SCALE	1/8
		REVISION	
		DWG. NO.	002-0212-001
		SIZE	D
		SHEET NO.	1 of 3

HYTEC, INC

**PHENIX STATION #1
NORTH AND SOUTH ARM
ASSEMBLY**

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED

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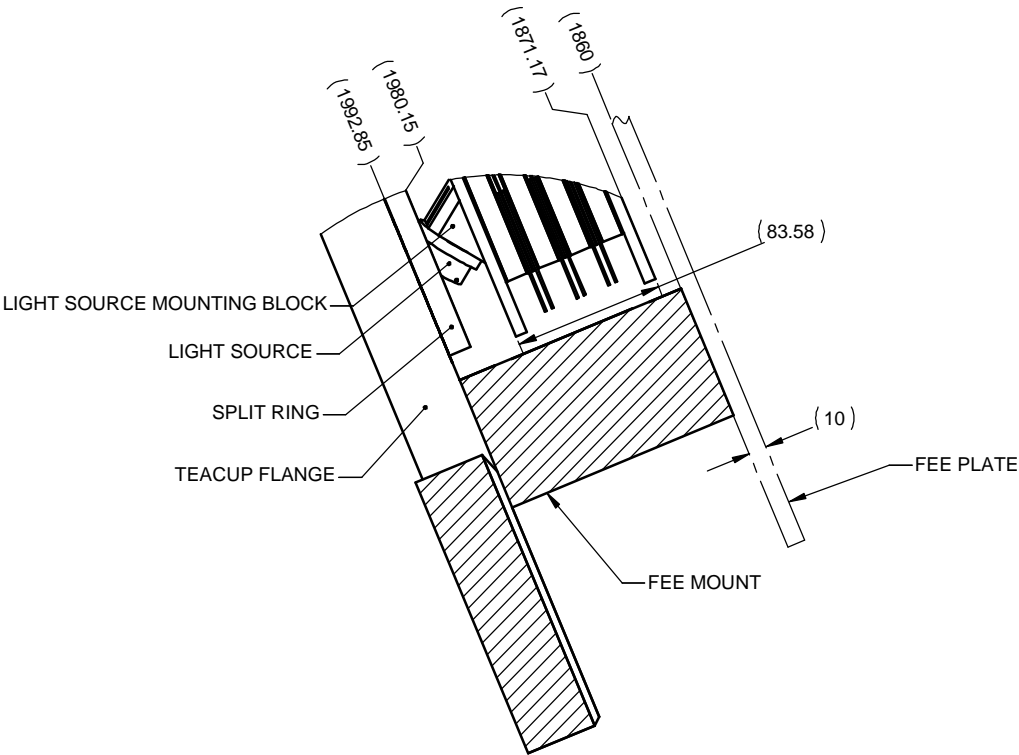
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A

NOTES: UNLESS OTHER WISE SPECIFIED

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SECTION A-A



DETAIL C
SCALE 1 : 2

PARTS LIST					
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE METRIC -TOLERANCES- DECIMALS .X = +/- .254 .XX = +/- .25 ANGULAR = +/- .25° SURFACE FINISH = 3.2	CAD GENERATED DRAWING, DO NOT MANUALLY UPDATE DO NOT SCALE DRAWING			HYTEC, INC TITLE PHENIX STATION #1 NORTH AND SOUTH ARM TOP ASSEMBLY	
FINISH	DESIGNED	E. ROMERO	8/13/99	DWG. NO.	SIZE
	DRAWN	E. ROMERO	8/13/99		
PART NO.	CHECKED	H. SALAZAR	8/16/99	002-0212-001	D 3 of 3
	ENGR.	T. THOMPSON	8/13/99		
002-0212-001-1	APPROVED	D. FIELDS	8/16/99	SCALE 1/8	REVISION

8

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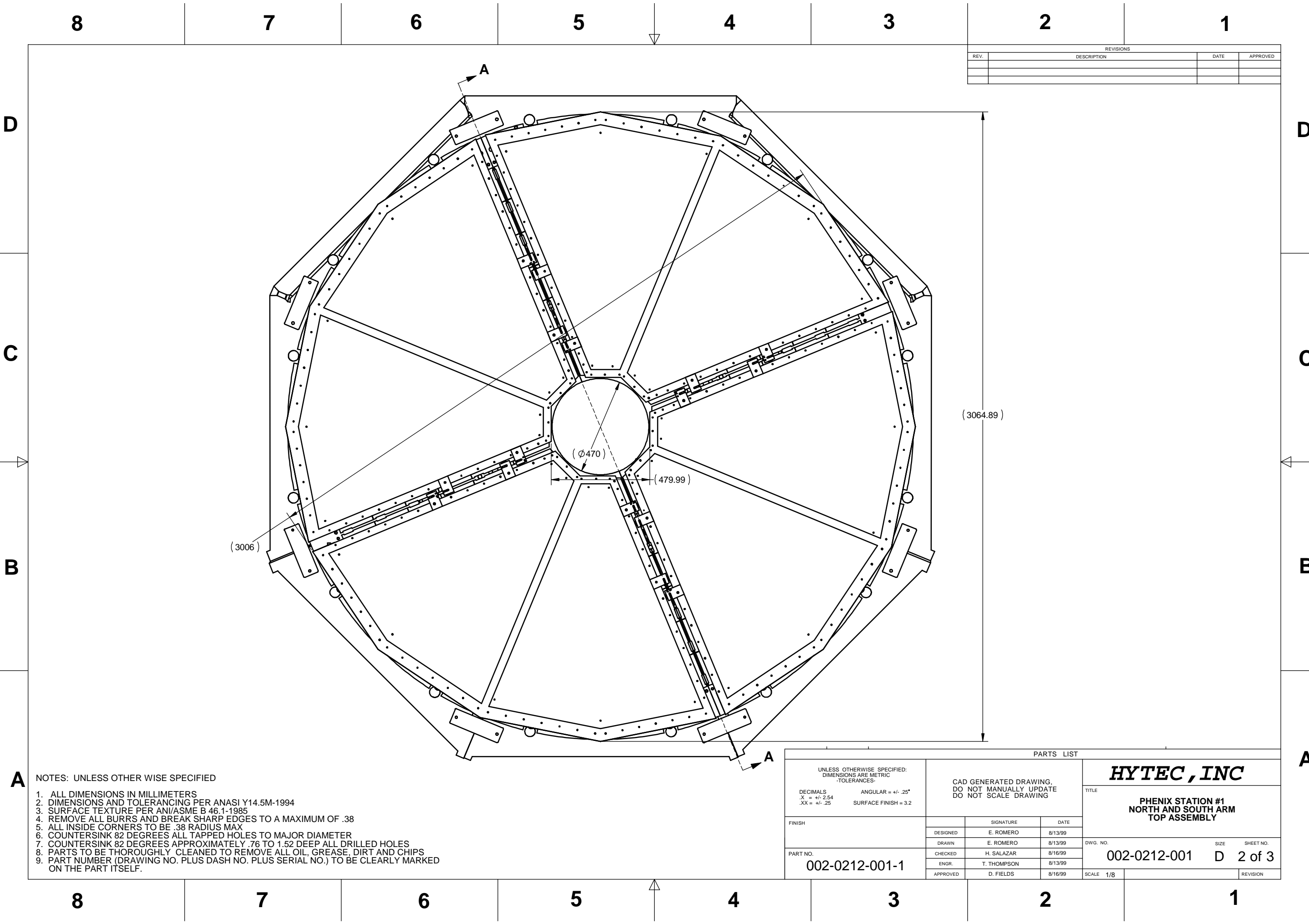
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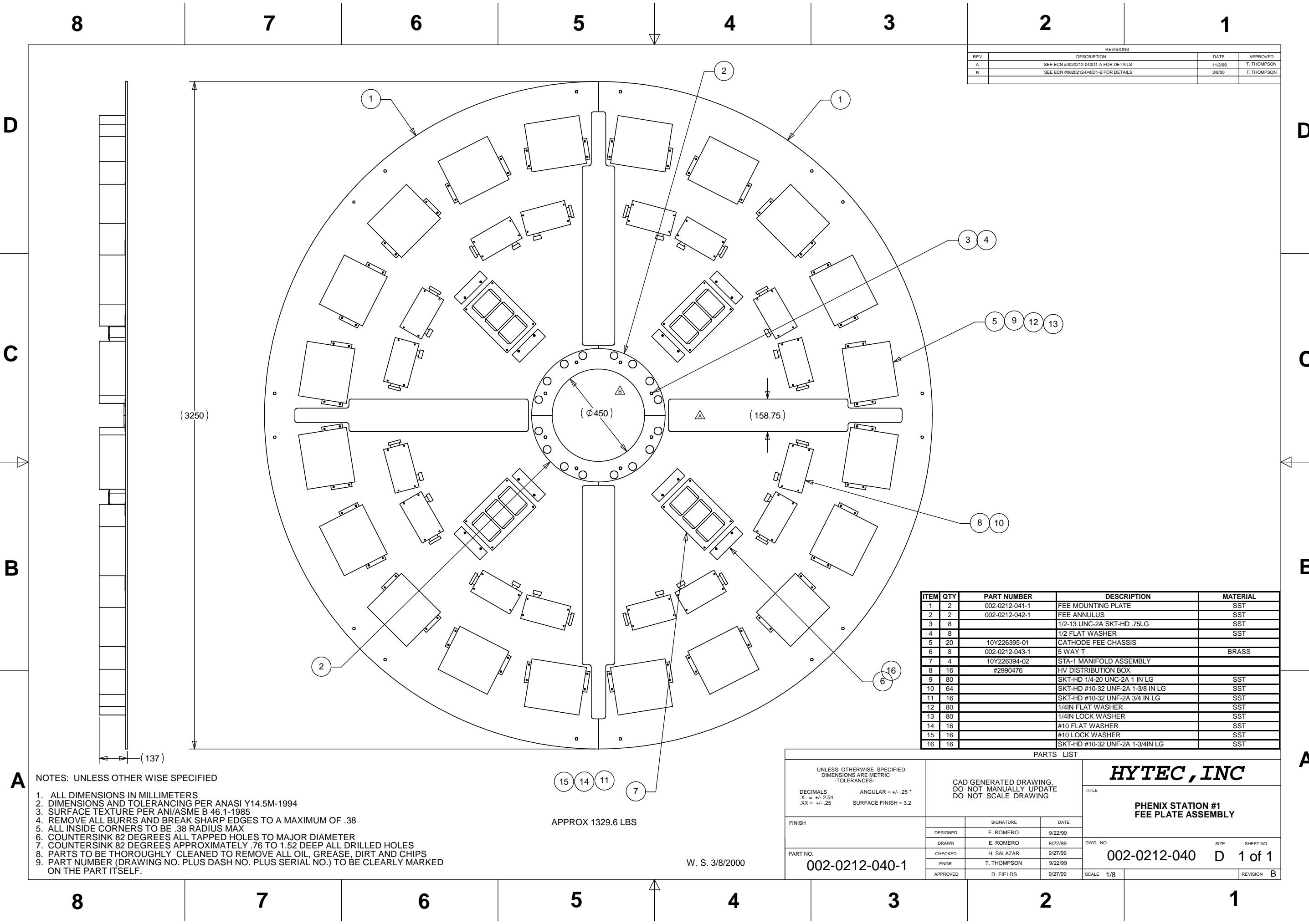


REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED

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DECIMALS .X = +/- .2,54 .XX = +/- .25		ANGULAR = +/- .25° SURFACE FINISH = 3.2	
FINISH	SIGNATURE		DATE
	DESIGNED E. ROMERO		8/13/99
	DRAWN E. ROMERO		8/13/99
	CHECKED H. SALAZAR		8/16/99
PART NO. 002-0212-001-1	ENGR. T. THOMPSON		8/13/99
	APPROVED D. FIELDS		8/16/99
DWG. NO. 002-0212-001		SIZE D	SHEET NO. 2 of 3
SCALE 1/8		REVISION	



REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	SEE ECN #0020212-04001-A FOR DETAILS	11/2/99	T. THOMPSON
B	SEE ECN #0020212-04001-B FOR DETAILS	3/8/00	T. THOMPSON

ITEM	QTY	PART NUMBER	DESCRIPTION	MATERIAL
1	2	002-0212-041-1	FEE MOUNTING PLATE	SST
2	2	002-0212-042-1	FEE ANNULUS	SST
3	8		1/2-13 UNC-2A SKT-HD .75LG	SST
4	8		1/2 FLAT WASHER	SST
5	20	10Y226395-01	CATHODE FEE CHASSIS	
6	8	002-0212-043-1	5 WAY T	BRASS
7	4	10Y226394-02	STA-1 MANIFOLD ASSEMBLY	
8	16	#2990476	HV DISTRIBUTION BOX	
9	80		SKT-HD 1/4-20 UNC-2A 1 IN LG	SST
10	64		SKT-HD #10-32 UNF-2A 1-3/8 IN LG	SST
11	16		SKT-HD #10-32 UNF-2A 3/4 IN LG	SST
12	80		1/4IN FLAT WASHER	SST
13	80		1/4IN LOCK WASHER	SST
14	16		#10 FLAT WASHER	SST
15	16		#10 LOCK WASHER	SST
16	16		SKT-HD #10-32 UNF-2A 1-3/4IN LG	SST

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APPROX 1329.6 LBS

W. S. 3/8/2000

PARTS LIST			
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE METRIC -TOLERANCES-		CAD GENERATED DRAWING, DO NOT MANUALLY UPDATE DO NOT SCALE DRAWING	
FINISH	DESIGNED	E. ROMERO	9/22/99
	DRAWN	E. ROMERO	9/22/99
	CHECKED	H. SALAZAR	9/27/99
	ENGR.	T. THOMPSON	9/22/99
PART NO. 002-0212-040-1		APPROVED	D. FIELDS 9/27/99
		SCALE	1/8
		REVISION	B

HYTEC, INC

TITLE
**PHENIX STATION #1
FEE PLATE ASSEMBLY**

DWG. NO. 002-0212-040 SIZE D SHEET NO. 1 of 1