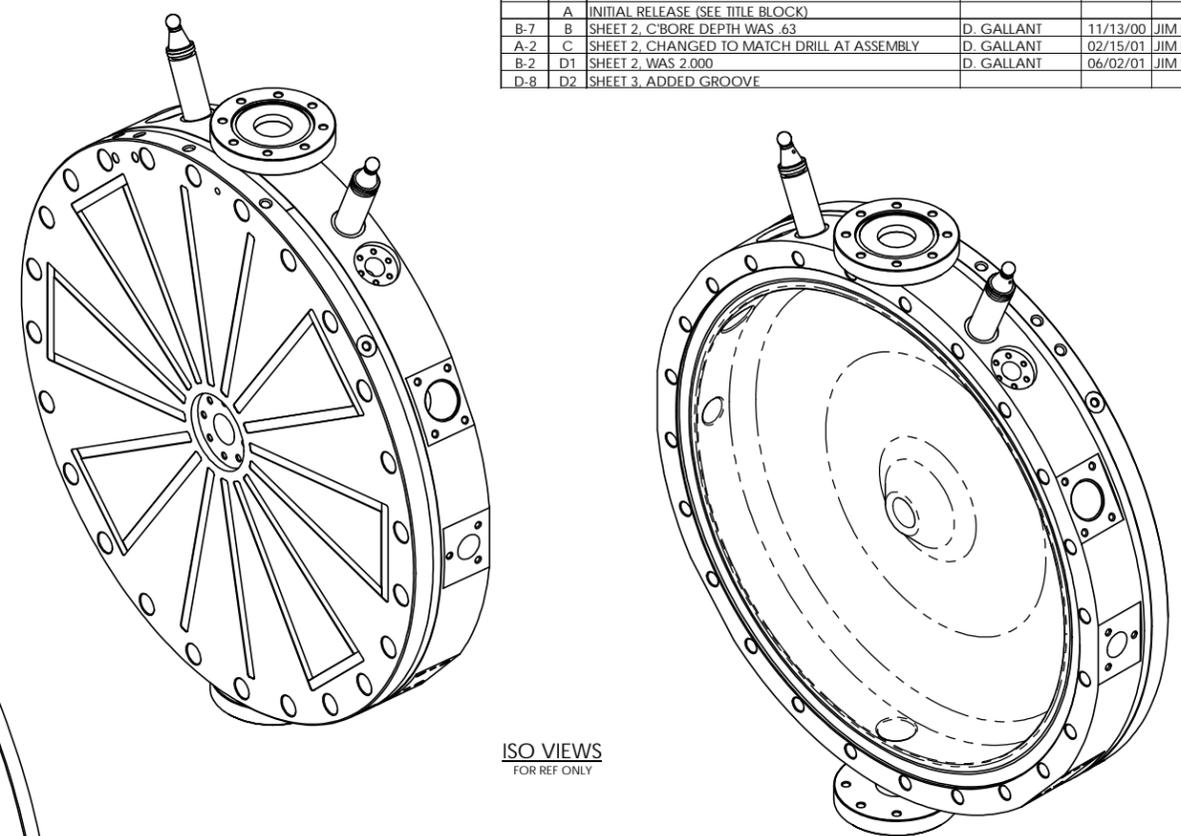


REVISIONS					
ZONE	REV	DESCRIPTION	CHANGED BY	DATE	APPROVED
	A	INITIAL RELEASE (SEE TITLE BLOCK)			
B-7	B	SHEET 2, C'BORE DEPTH WAS .63	D. GALLANT	11/13/00	JIM POTTER
A-2	C	SHEET 2, CHANGED TO MATCH DRILL AT ASSEMBLY	D. GALLANT	02/15/01	JIM POTTER
B-2	D1	SHEET 2, WAS 2.000	D. GALLANT	06/02/01	JIM POTTER
D-8	D2	SHEET 3, ADDED GROOVE			



**01** BUNCHER CAVITY, 30 MM BORE: WIDE SIDE WELDMENT

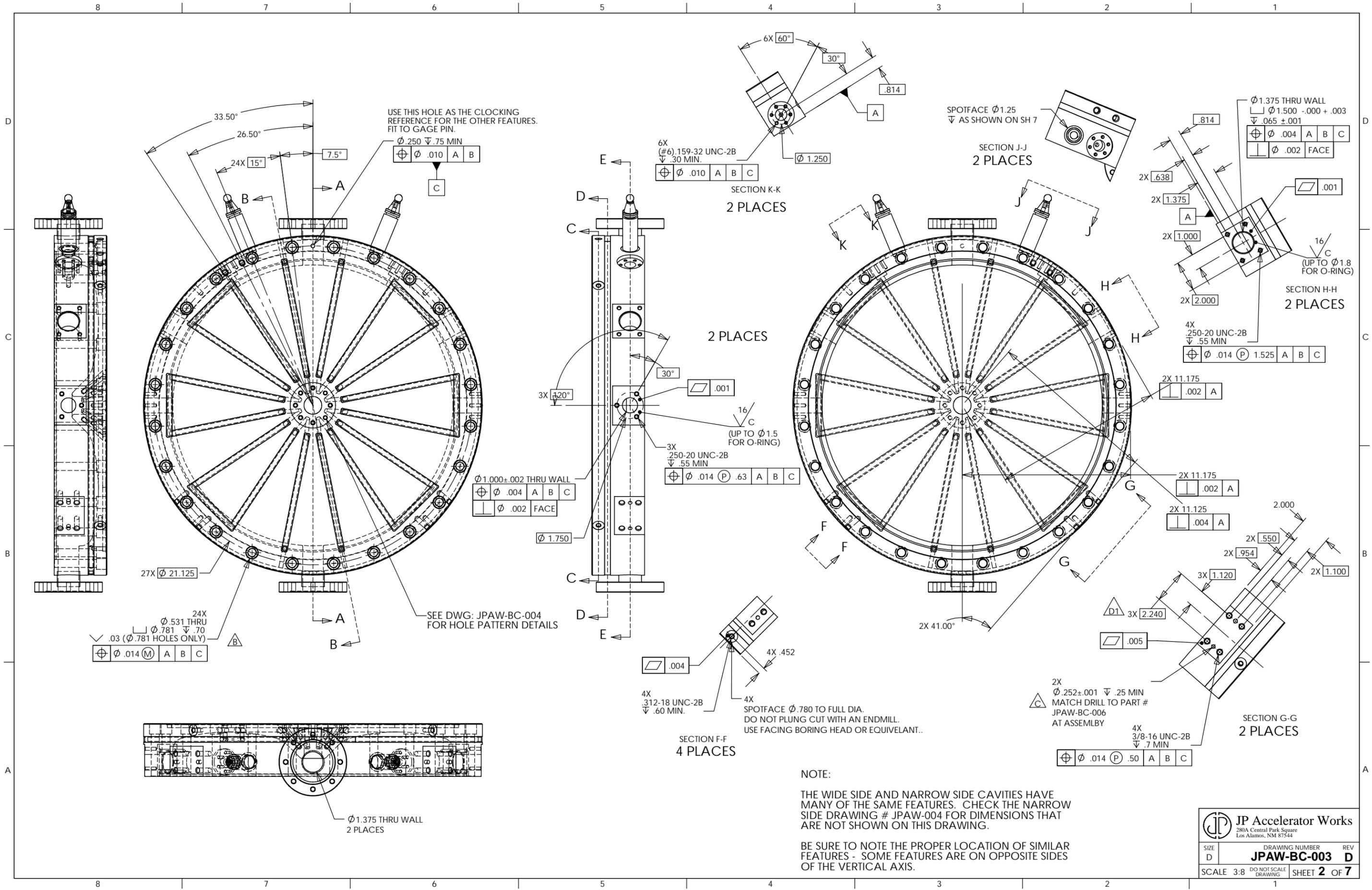
WELDMENT WEIGHT: 172.672 LBS

QTY	PART/DRAWING #	DESCRIPTION	MATERIAL	ITEM #
1	JPAW-BC-003, ITEM 01	BUNCHER CAVITY, 30 MM BORE: WIDE SIDE WELDMENT		01
2	LBNL SUPPLIED	SNS FIDUCIAL TARGET ASSEMBLY		02
2	LESKER F0450X150NT	CONFLAT FLANGE: 4.500" OD, FIXED TAPPED	304 STAINLESS STEEL	03
6		1.500" OD X 1.375" ID TUBING	304 STAINLESS STEEL	04
2	SEE SHEET 7	FIDUCIAL TARGET MOUNTING BAR	304 STAINLESS STEEL	05
4	JPAW-BC-004, ITEM 02	COOLANT CHANNEL COVER: LONG RADIAL	304 STAINLESS STEEL	06
6	JPAW-BC-004, ITEM 03	COOLANT CHANNEL COVER: CROSS	304 STAINLESS STEEL	07
12	JPAW-BC-004, ITEM 04	COOLANT CHANNEL COVER: SHORT RADIAL	304 STAINLESS STEEL	08
2	JPAW-BC-004, ITEM 05	OD COOLANT CHANNEL DIVIDER BLOCK	304 STAINLESS STEEL	09
1	JPAW-BC-004, ITEM 06	COOLANT CHANNEL COVER: OD	304 STAINLESS STEEL	10
2	JPAW-BC-004, ITEM 07	HOLE WELD PLUG	304 STAINLESS STEEL	11

FOR TECHNICAL QUESTIONS, CONTACT: JIM POTTER 505-690-8701

NOTES:  
 201 DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1994.  
 204 ALL INSIDE CORNERS TO BE R .015 MAX.  
 208 REMOVE ALL SHARP BURRS AND BREAK SHARP EDGES, INCLUDING HOLES .015 MAX.

1	WIDE SIDE WELDMENT		304 STAINLESS STEEL	
QTY RECD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	MATERIAL SPECIFICATION	ITEM NO
PARTS LIST/BILL OF MATERIAL				
		TASK CONTRACTOR		
		 280A Central Park Square Los Alamos, NM 87544		
		PROJECT		
		SNS		
		BUNCHER CAVITY, 30 MM BORE		
		WIDE SIDE WELDMENT		
		WELDMENT DETAIL		
		UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. TOLERANCES ARE: .X = ± .030      ANGULAR = ± .5° .XX = ± .010      MACHINED FINISH = 32/ .XXX = ± .005		
		DESIGNED JIM POTTER JPAW 10/30/00 DRAWN DANNY GALLANT GI 10/30/00 CHECKED JIM POTTER JPAW 10/30/00 ENGINEERING JIM POTTER JPAW 10/30/00		
		SIZE D      DRAWING NUMBER JPAW-BC-003      REV D		
		APPROVED JIM POTTER JPAW 10/30/00      SCALE 1:3      SHEET 1 OF 7		



USE THIS HOLE AS THE CLOCKING REFERENCE FOR THE OTHER FEATURES. FIT TO GAGE PIN.

6X (#6) .159-32 UNC-2B  
 $\downarrow$  .30 MIN.  
 $\oplus \phi .010$  A B C  
 SECTION K-K  
 2 PLACES

SPOTFACE  $\phi 1.25$   
 $\downarrow$  AS SHOWN ON SH 7  
 SECTION J-J  
 2 PLACES

$\phi 1.375$  THRU WALL  
 $\phi 1.500$   $-.000 + .003$   
 $\downarrow$   $.065 \pm .001$   
 $\oplus \phi .004$  A B C  
 $\phi .002$  FACE

2X  $\phi .638$   
 2X  $1.375$   
 2X  $1.000$   
 2X  $2.000$   
 $\phi 1.375$  THRU WALL  
 $\phi 1.500$   $-.000 + .003$   
 $\downarrow$   $.065 \pm .001$   
 $\oplus \phi .004$  A B C  
 $\phi .002$  FACE  
 SECTION H-H  
 2 PLACES

4X .250-20 UNC-2B  
 $\downarrow$  .55 MIN  
 $\oplus \phi .014$  P 1.525 A B C

3X  $120^\circ$   
 $\phi 1.750$   
 $\phi 1.000 \pm .002$  THRU WALL  
 $\oplus \phi .004$  A B C  
 $\phi .002$  FACE  
 3X .250-20 UNC-2B  
 $\downarrow$  .55 MIN  
 $\oplus \phi .014$  P .63 A B C

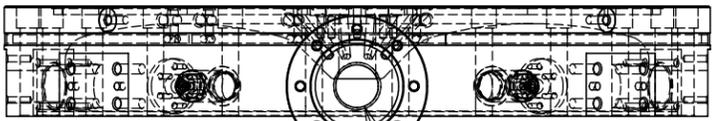
2X  $11.175$   
 $\phi .002$  A  
 2X  $11.125$   
 $\phi .004$  A

2X  $11.175$   
 $\phi .002$  A  
 2X  $11.125$   
 $\phi .004$  A  
 2X  $1.000$   
 2X  $1.100$   
 2X  $1.120$   
 2X  $1.100$

2X  $\phi .252 \pm .001$   $\downarrow$  .25 MIN  
 MATCH DRILL TO PART # JPAW-BC-006 AT ASSEMBLY  
 $\phi .014$  P .50 A B C  
 SECTION G-G  
 2 PLACES

4X .452  
 4X SPOTFACE  $\phi .780$  TO FULL DIA.  
 DO NOT PLUNG CUT WITH AN ENDMILL.  
 USE FACING BORING HEAD OR EQUIVELANT.  
 SECTION F-F  
 4 PLACES

24X  $\phi 531$  THRU  
 $\phi .781$   $\downarrow$  .70  
 $\downarrow$  .03 ( $\phi .781$  HOLES ONLY)  
 $\oplus \phi .014$  (M) A B C

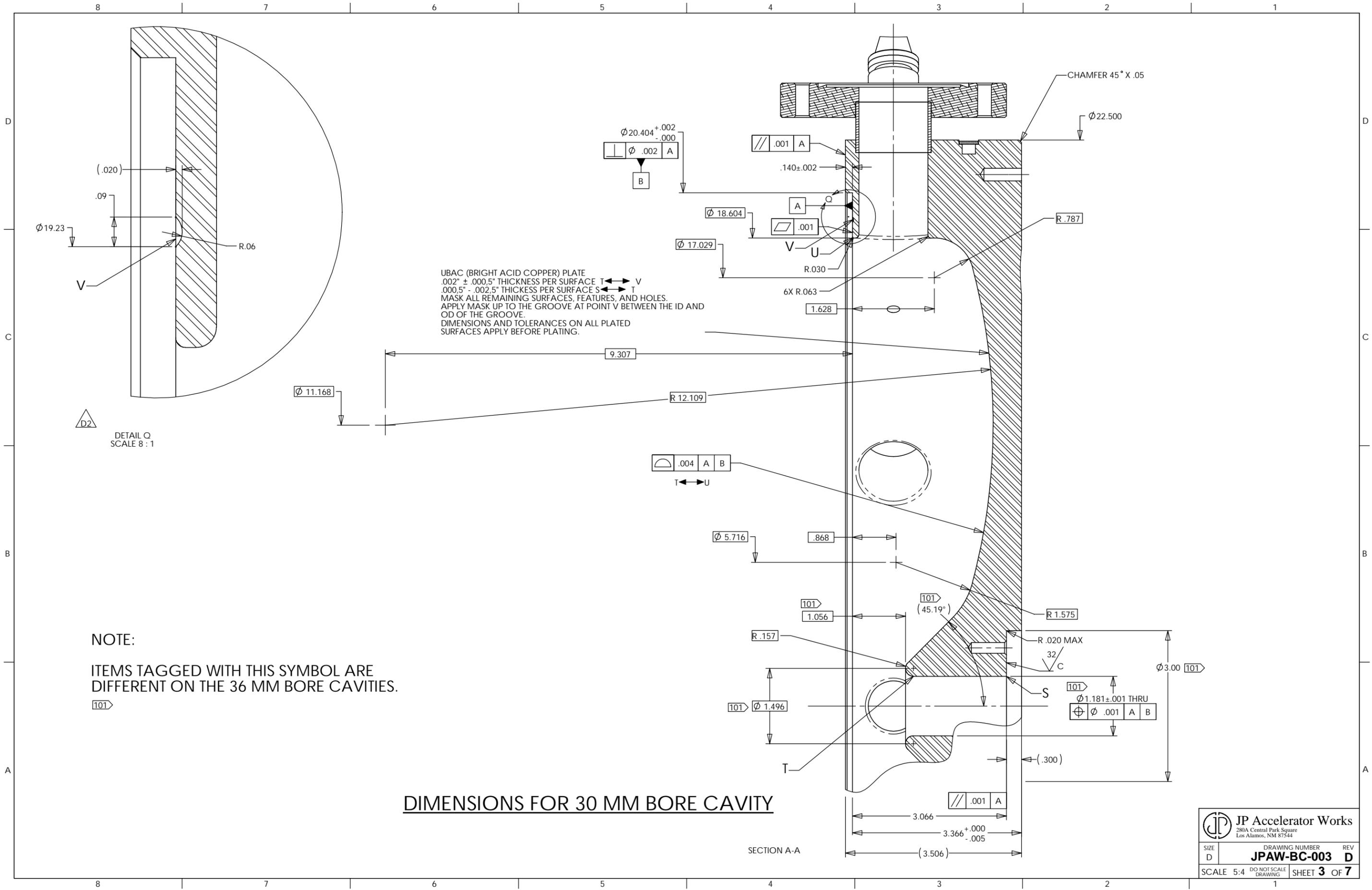


$\phi 1.375$  THRU WALL  
 2 PLACES

NOTE:  
 THE WIDE SIDE AND NARROW SIDE CAVITIES HAVE MANY OF THE SAME FEATURES. CHECK THE NARROW SIDE DRAWING # JPAW-004 FOR DIMENSIONS THAT ARE NOT SHOWN ON THIS DRAWING.  
 BE SURE TO NOTE THE PROPER LOCATION OF SIMILAR FEATURES - SOME FEATURES ARE ON OPPOSITE SIDES OF THE VERTICAL AXIS.

**JP Accelerator Works**  
 280A Central Park Square  
 Los Alamos, NM 87544

SIZE	DRAWING NUMBER	REV
D	<b>JPAW-BC-003</b>	<b>D</b>
SCALE 3:8	DO NOT SCALE DRAWING	SHEET 2 OF 7



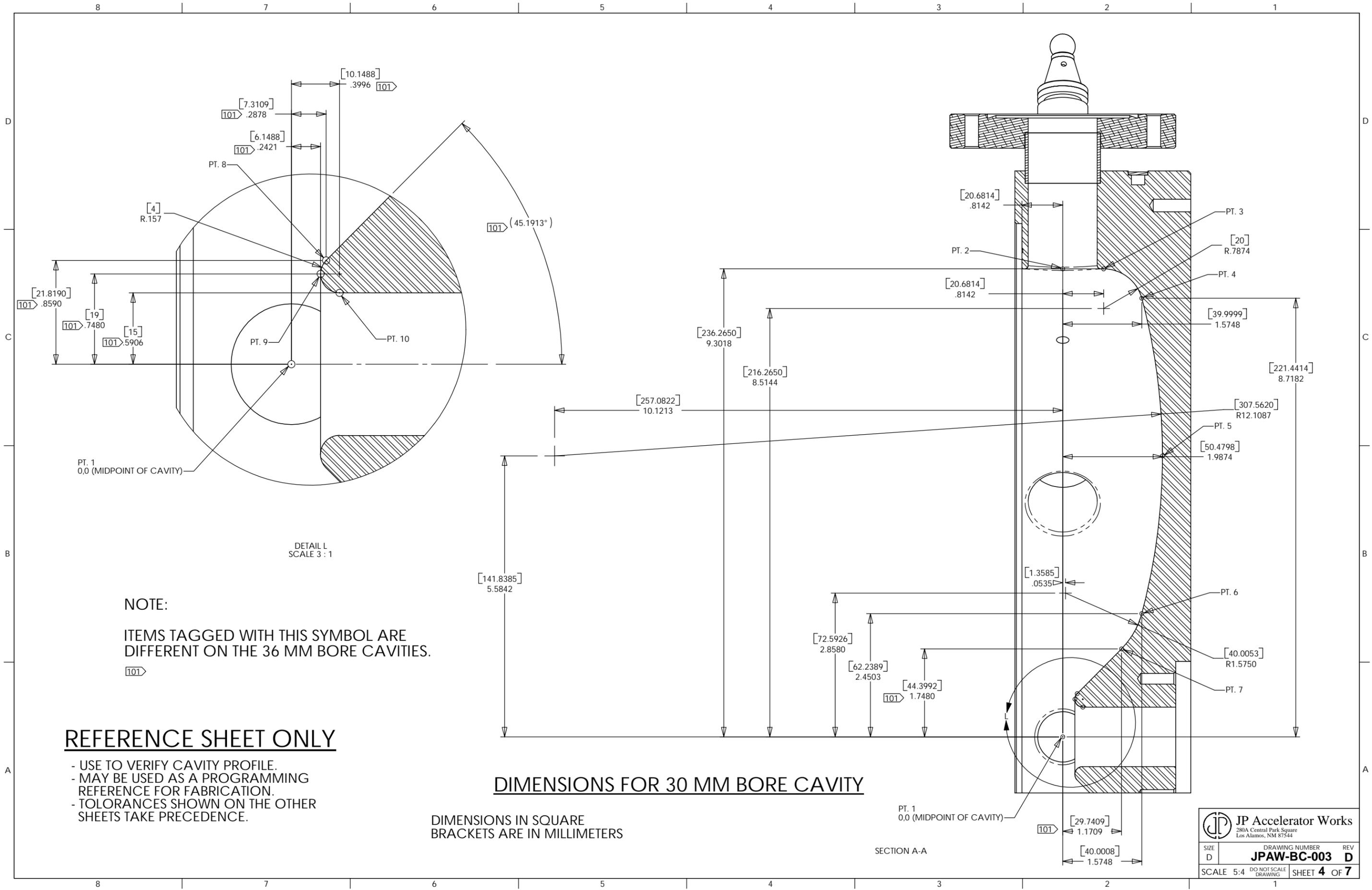
UBAC (BRIGHT ACID COPPER) PLATE  
 .002" ± .0005" THICKNESS PER SURFACE T ↔ V  
 .0005" - .0025" THICKNESS PER SURFACE S ↔ T  
 MASK ALL REMAINING SURFACES, FEATURES, AND HOLES.  
 APPLY MASK UP TO THE GROOVE AT POINT V BETWEEN THE ID AND  
 OD OF THE GROOVE.  
 DIMENSIONS AND TOLERANCES ON ALL PLATED  
 SURFACES APPLY BEFORE PLATING.

NOTE:  
 ITEMS TAGGED WITH THIS SYMBOL ARE  
 DIFFERENT ON THE 36 MM BORE CAVITIES.  
 [101]

**DIMENSIONS FOR 30 MM BORE CAVITY**

SECTION A-A

<b>JP Accelerator Works</b> <small>280A Central Park Square          Los Alamos, NM 87544</small>		
SIZE D	DRAWING NUMBER <b>JPAW-BC-003</b>	REV <b>D</b>
SCALE 5:4	DO NOT SCALE DRAWING	SHEET <b>3</b> OF <b>7</b>



**NOTE:**

ITEMS TAGGED WITH THIS SYMBOL ARE DIFFERENT ON THE 36 MM BORE CAVITIES.



**REFERENCE SHEET ONLY**

- USE TO VERIFY CAVITY PROFILE.
- MAY BE USED AS A PROGRAMMING REFERENCE FOR FABRICATION.
- TOLORANCES SHOWN ON THE OTHER SHEETS TAKE PRECEDENCE.

**DIMENSIONS FOR 30 MM BORE CAVITY**

DIMENSIONS IN SQUARE BRACKETS ARE IN MILLIMETERS

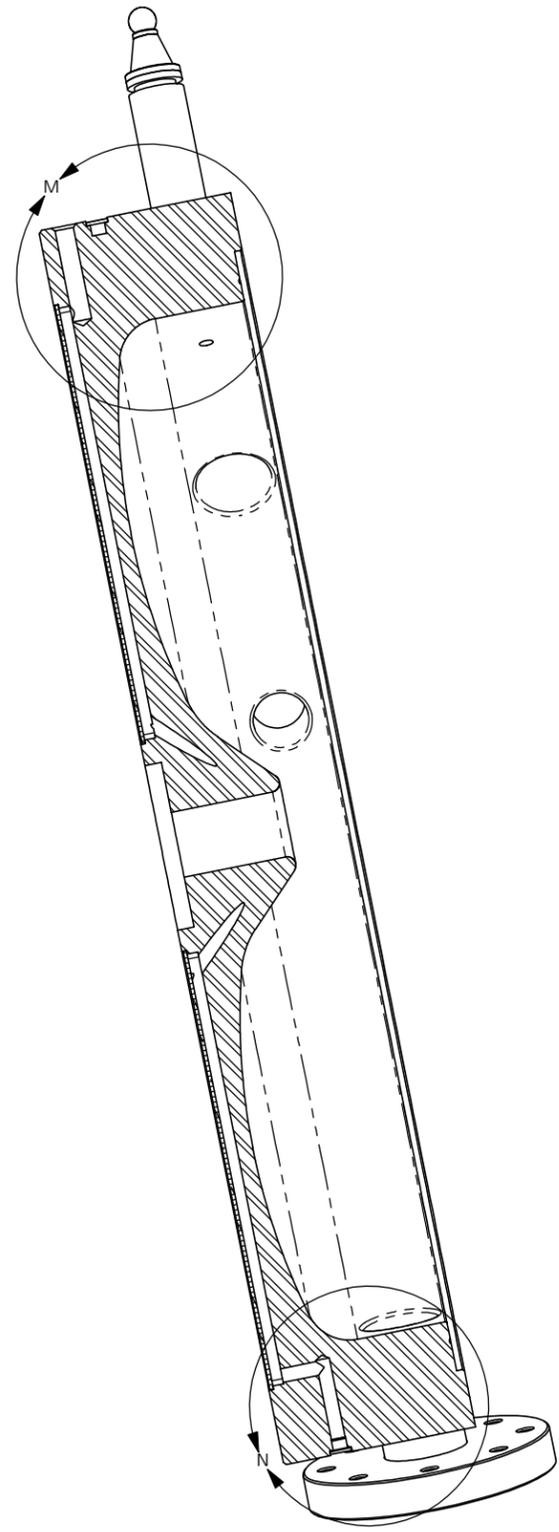
SECTION A-A

<b>JP Accelerator Works</b> <small>280A Central Park Square Los Alamos, NM 87544</small>		
SIZE D	DRAWING NUMBER <b>JPAW-BC-003</b>	REV <b>D</b>
SCALE 5:4 DO NOT SCALE DRAWING	SHEET <b>4</b> OF <b>7</b>	

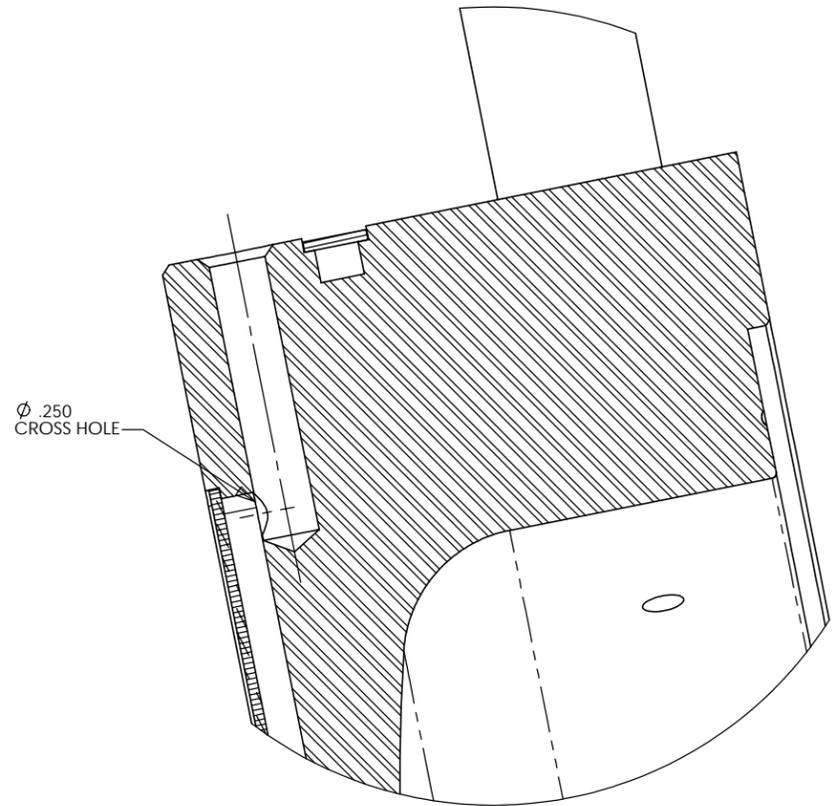
8 7 6 5 4 3 2 1

D  
C  
B  
A

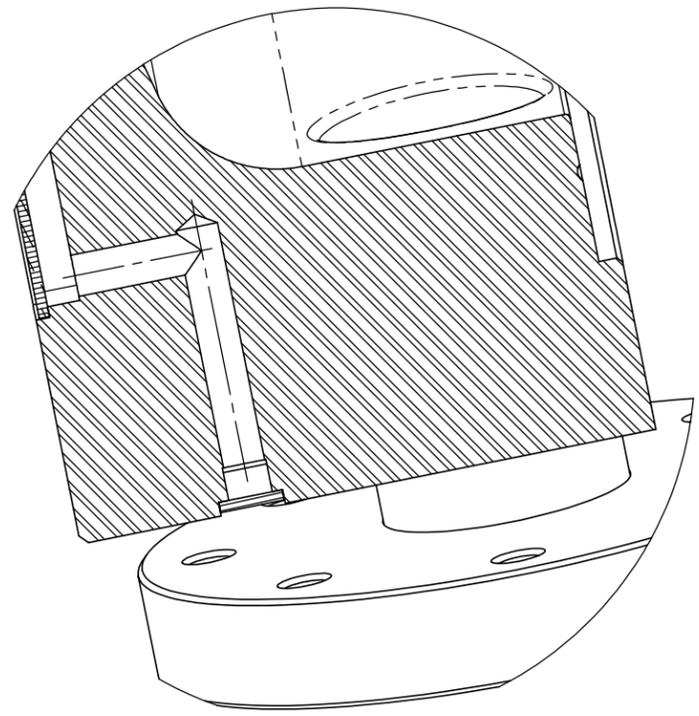
D  
C  
B  
A



SECTION B-B



DETAIL M  
SCALE 2 : 1

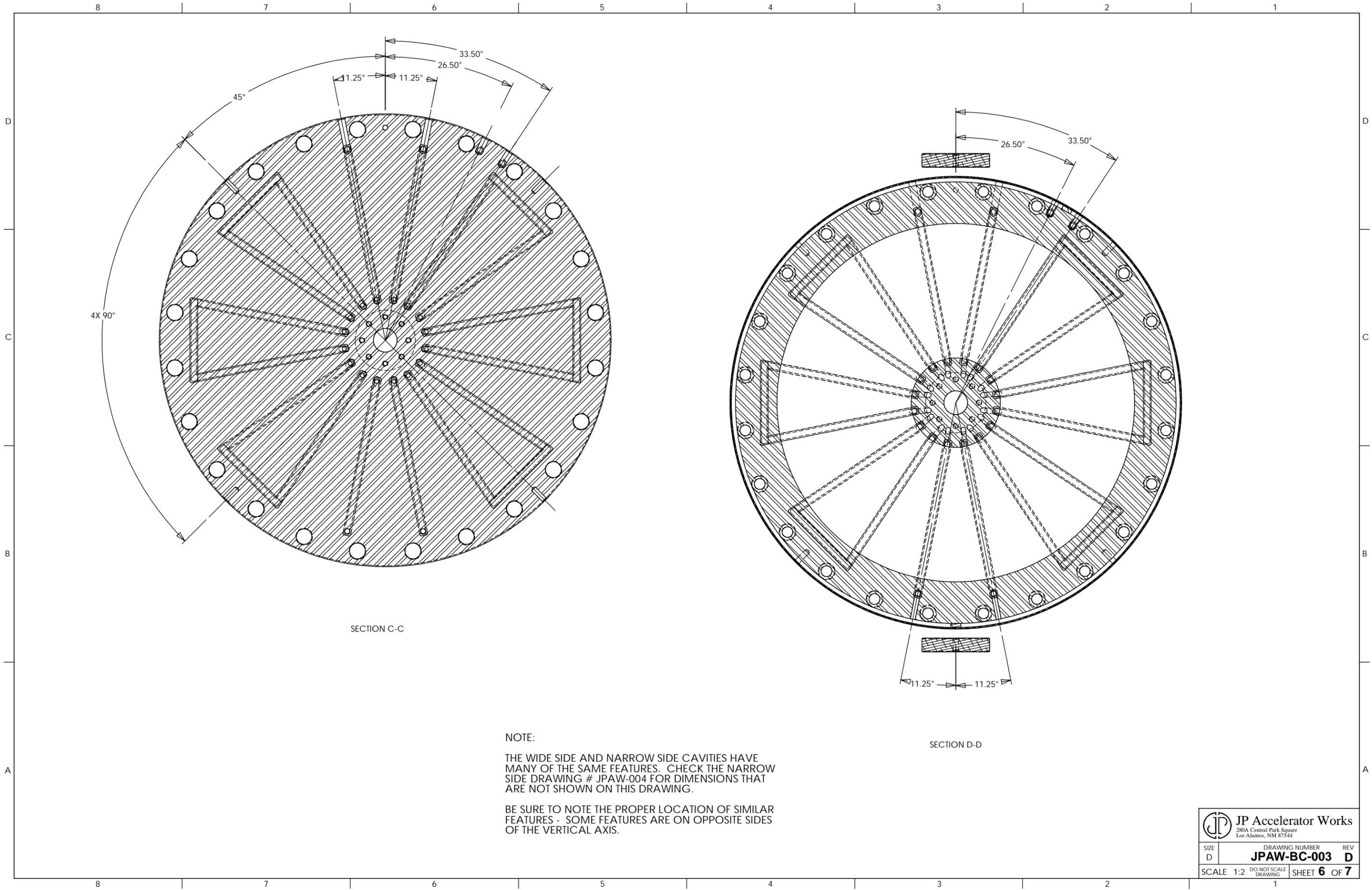


DETAIL N  
SCALE 2 : 1

NOTE:  
 THE WIDE SIDE AND NARROW SIDE CAVITIES HAVE MANY OF THE SAME FEATURES. CHECK THE NARROW SIDE DRAWING # JPAW-004 FOR DIMENSIONS THAT ARE NOT SHOWN ON THIS DRAWING.  
 BE SURE TO NOTE THE PROPER LOCATION OF SIMILAR FEATURES - SOME FEATURES ARE ON OPPOSITE SIDES OF THE VERTICAL AXIS.

 <b>JP Accelerator Works</b> <small>280A Central Park Square Los Alamos, NM 87544</small>		
SIZE D	DRAWING NUMBER <b>JPAW-BC-003</b>	REV <b>D</b>
SCALE 2:3	DO NOT SCALE DRAWING	SHEET <b>5</b> OF <b>7</b>

8 7 6 5 4 3 2 1

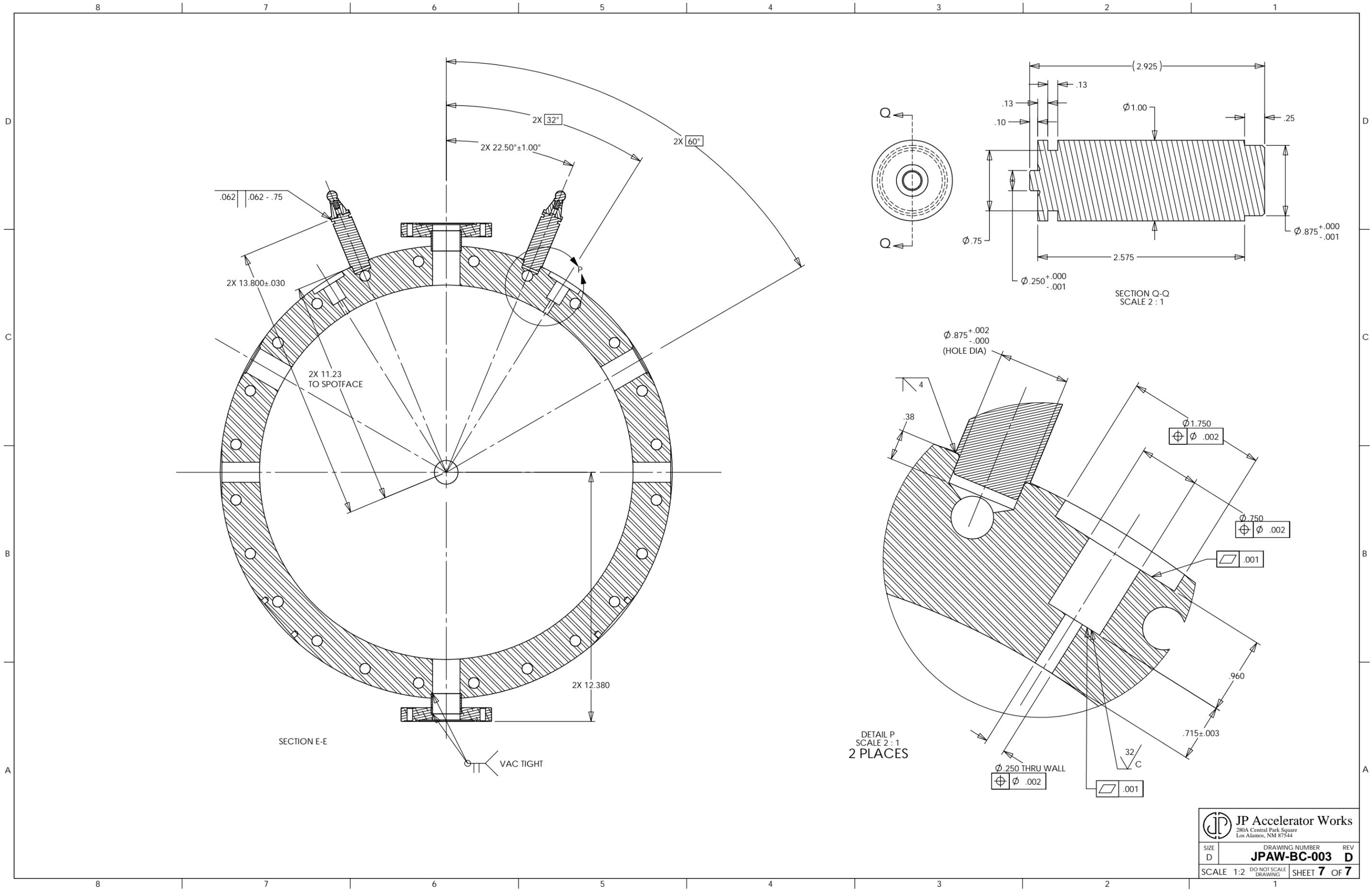


SECTION C-C

SECTION D-D

NOTE:  
 THE WIDE SIDE AND NARROW SIDE CAVITIES HAVE MANY OF THE SAME FEATURES. CHECK THE NARROW SIDE DRAWING # JPAW-004 FOR DIMENSIONS THAT ARE NOT SHOWN ON THIS DRAWING.  
 BE SURE TO NOTE THE PROPER LOCATION OF SIMILAR FEATURES - SOME FEATURES ARE ON OPPOSITE SIDES OF THE VERTICAL AXIS.

 <b>JP Accelerator Works</b> <small>280A Central Park Square        Los Alamos, NM 87544</small>		
SIZE D	DRAWING NUMBER <b>JPAW-BC-003</b>	REV <b>D</b>
SCALE 1:2	DO NOT SCALE DRAWING	SHEET <b>6</b> OF <b>7</b>



.062 | .062 - .75

2X 13.800±.030

2X 11.23  
TO SPOTFACE

2X 12.380

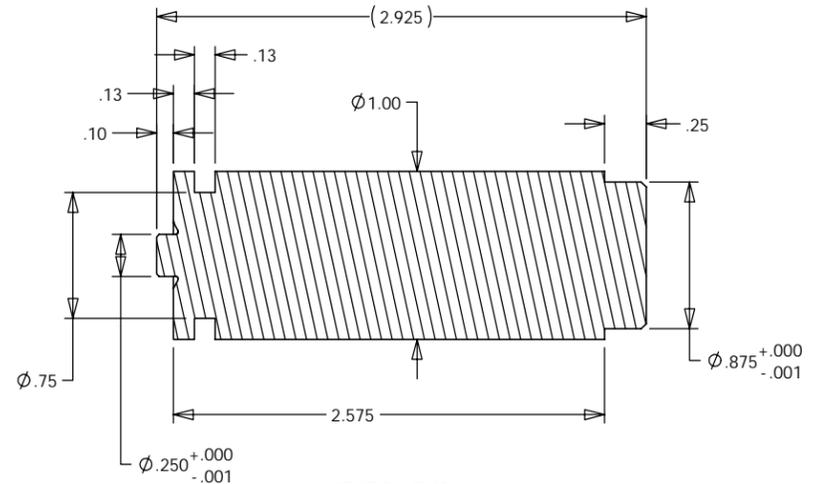
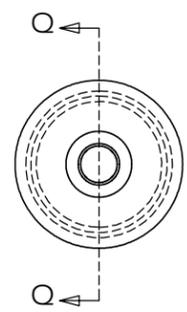
SECTION E-E

VAC TIGHT

2X 32°

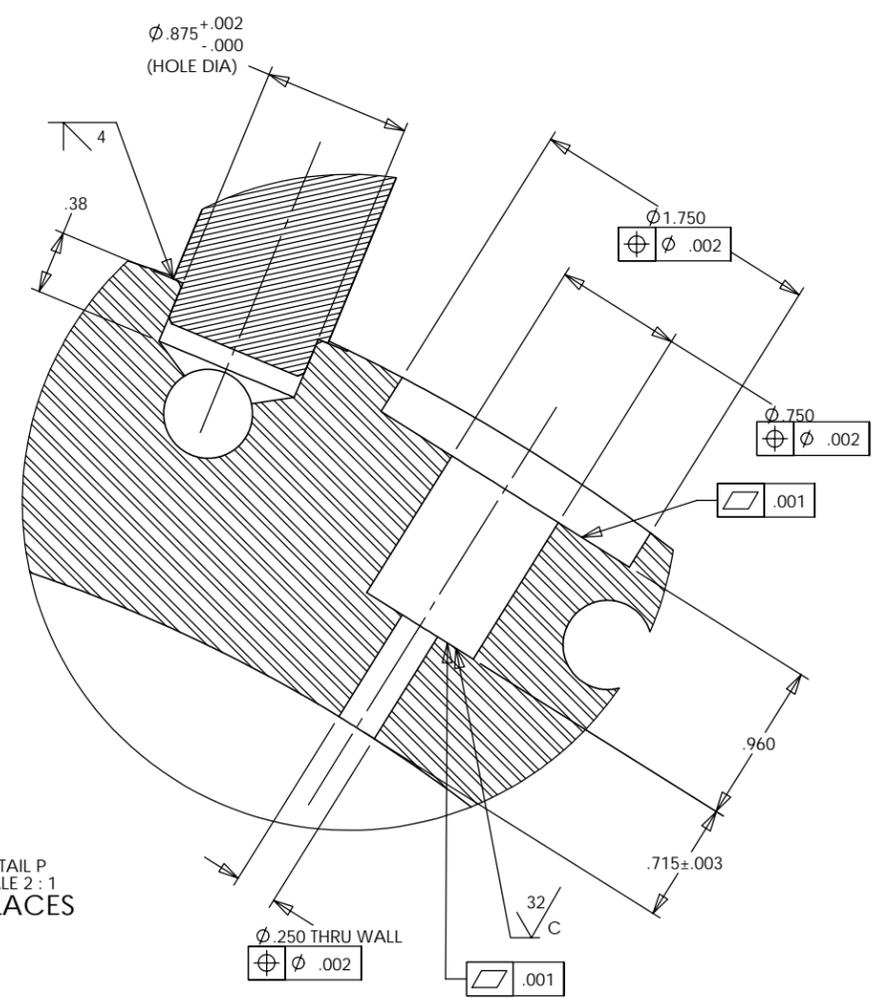
2X 22.50°±1.00°

2X 60°



SECTION Q-Q  
SCALE 2 : 1

DETAIL P  
SCALE 2 : 1  
2 PLACES



<b>JP Accelerator Works</b> 280A Central Park Square Los Alamos, NM 87544		
SIZE D	DRAWING NUMBER <b>JPAW-BC-003</b>	REV <b>D</b>
SCALE 1:2	DO NOT SCALE DRAWING	SHEET <b>7</b> OF <b>7</b>