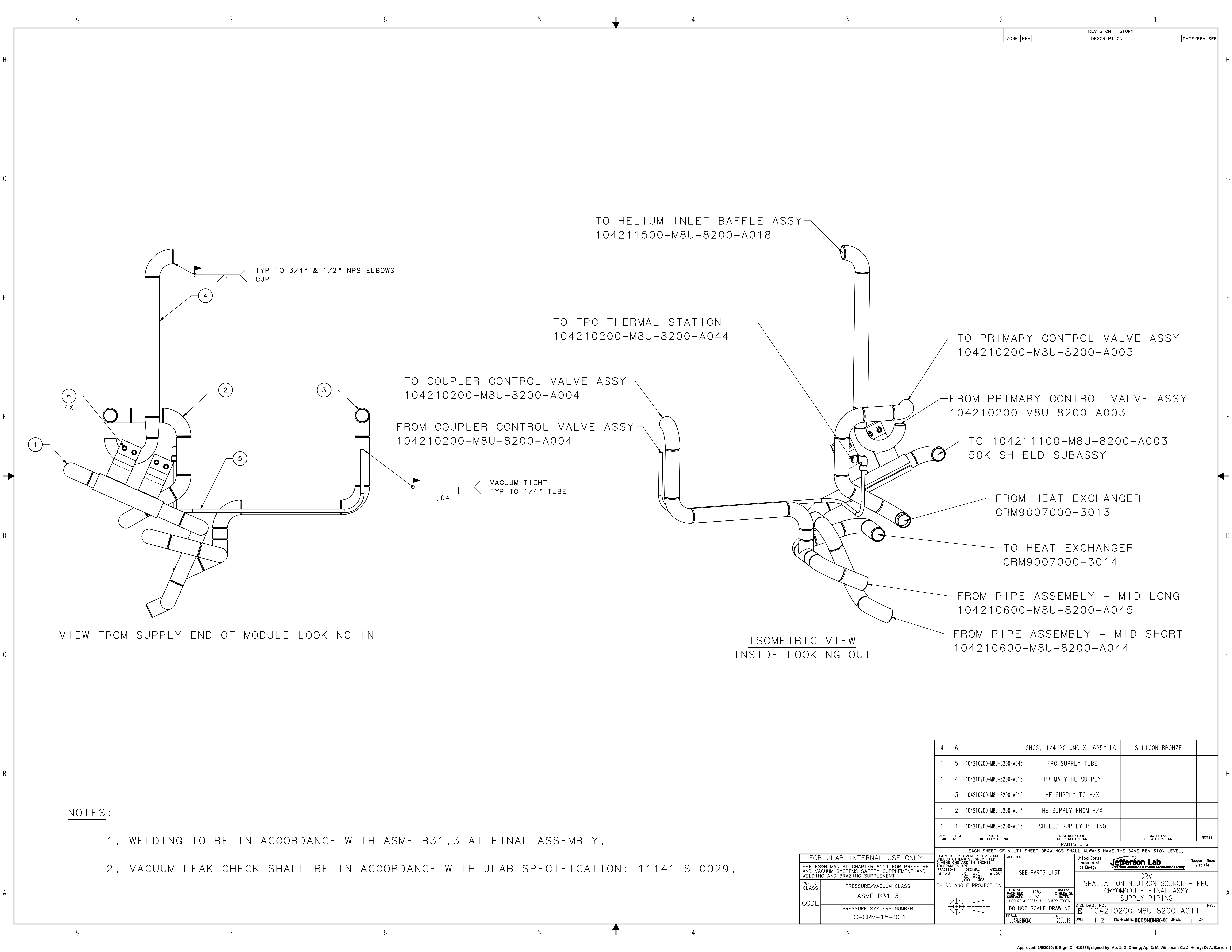
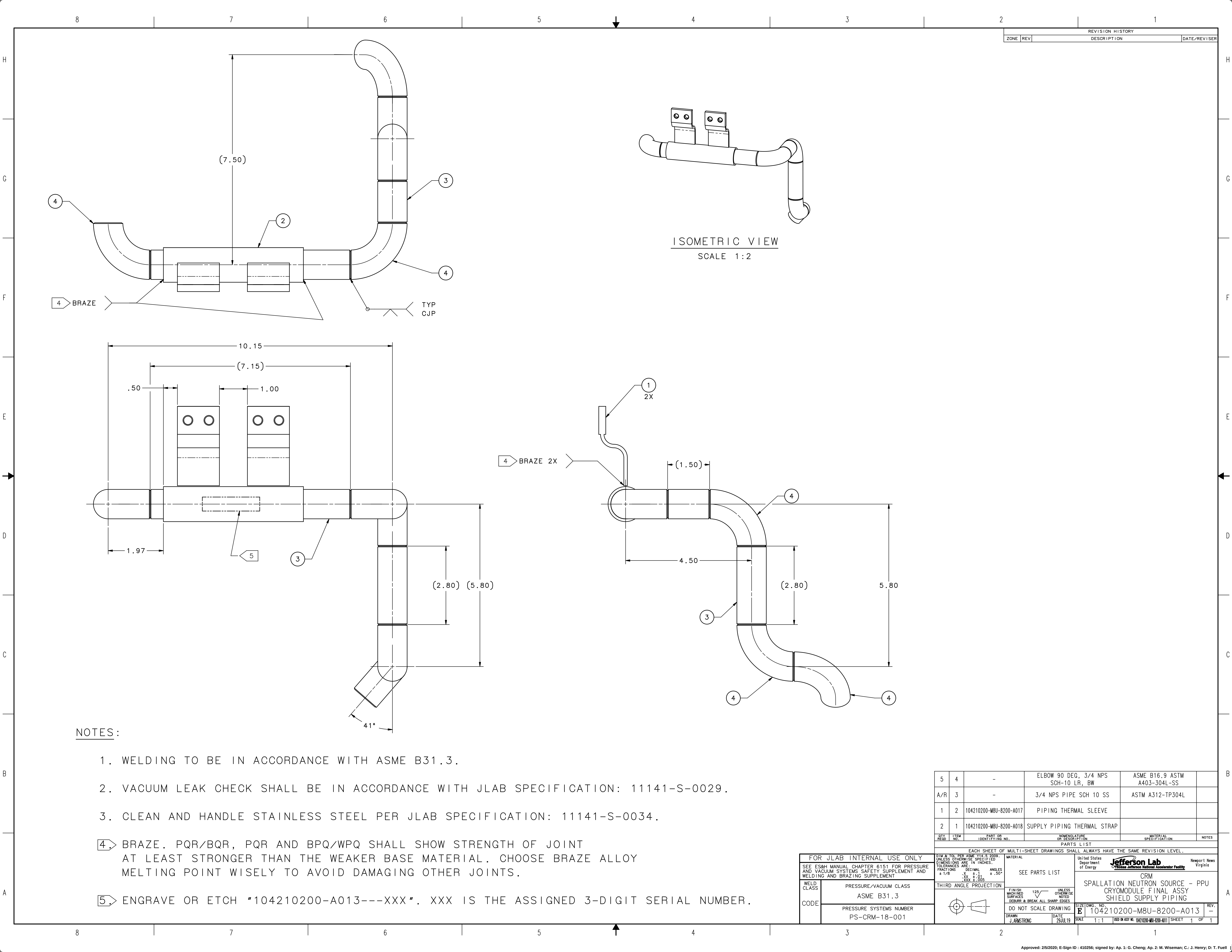
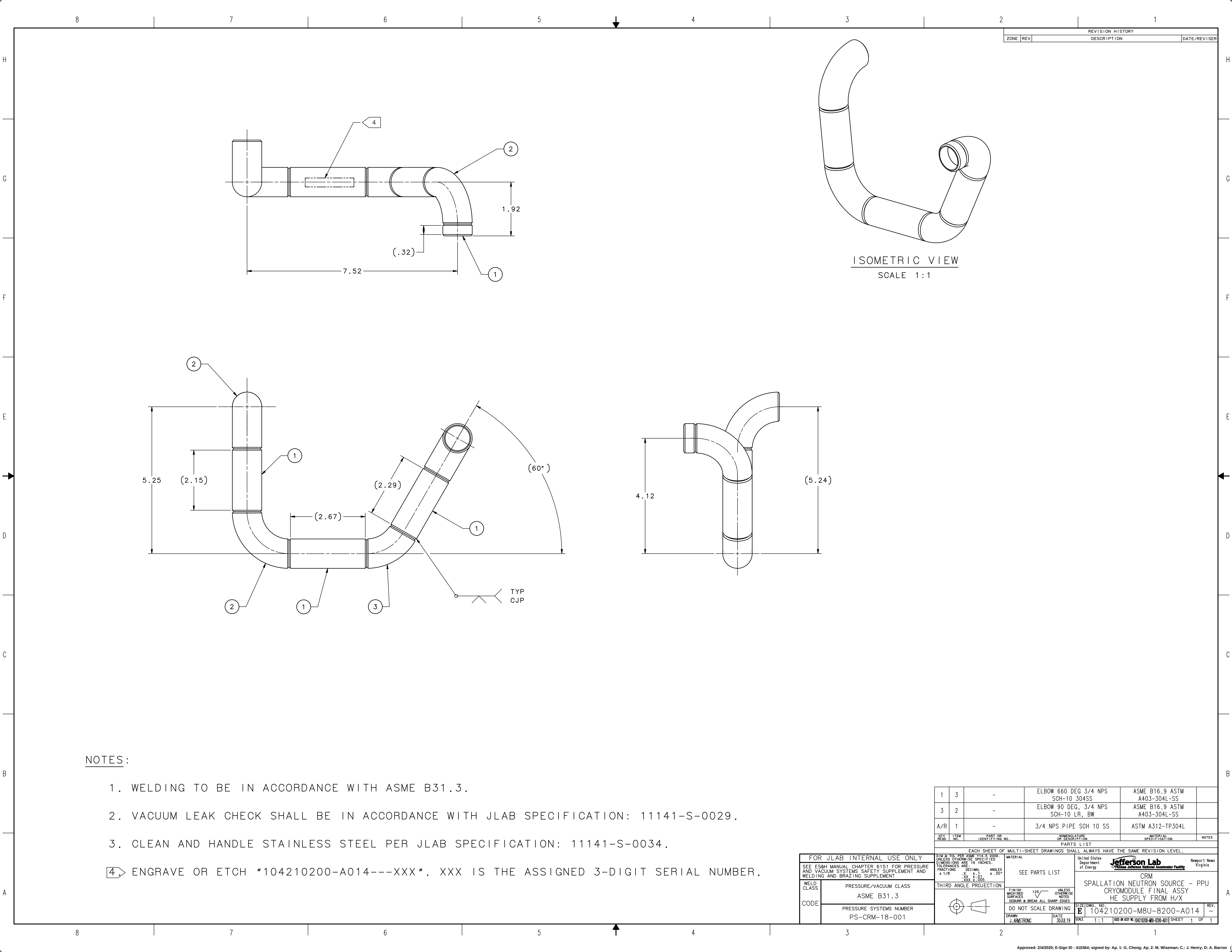
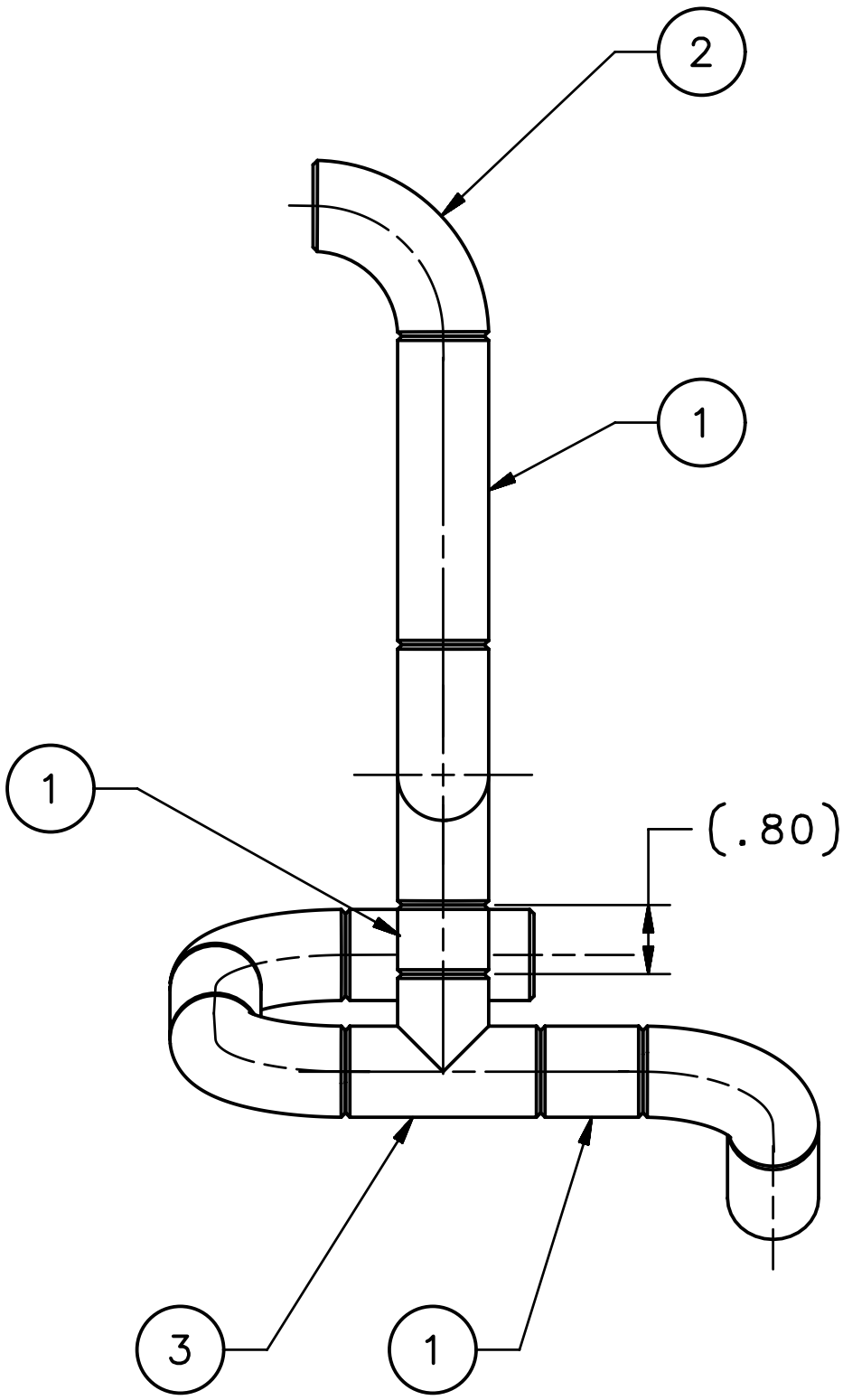
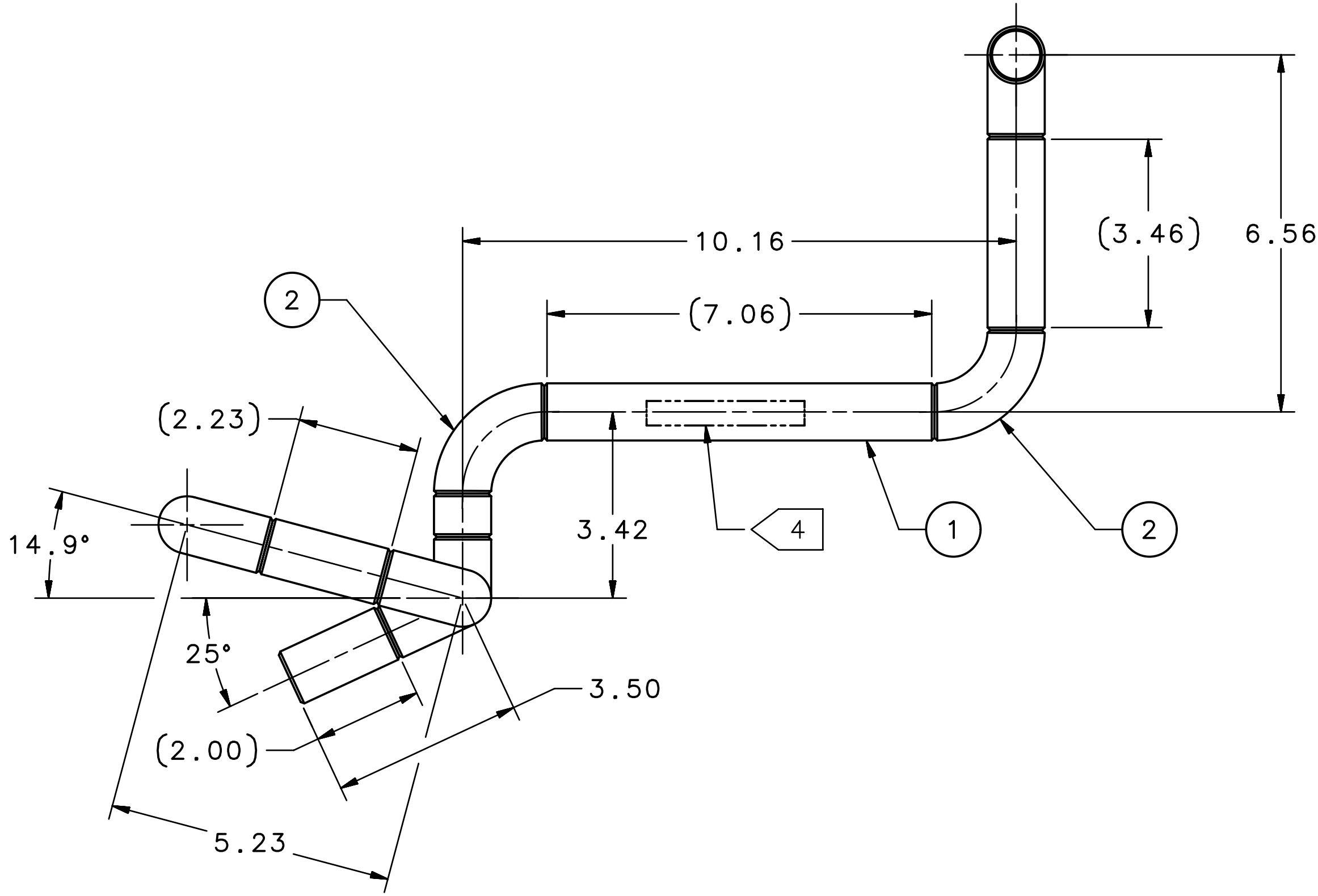
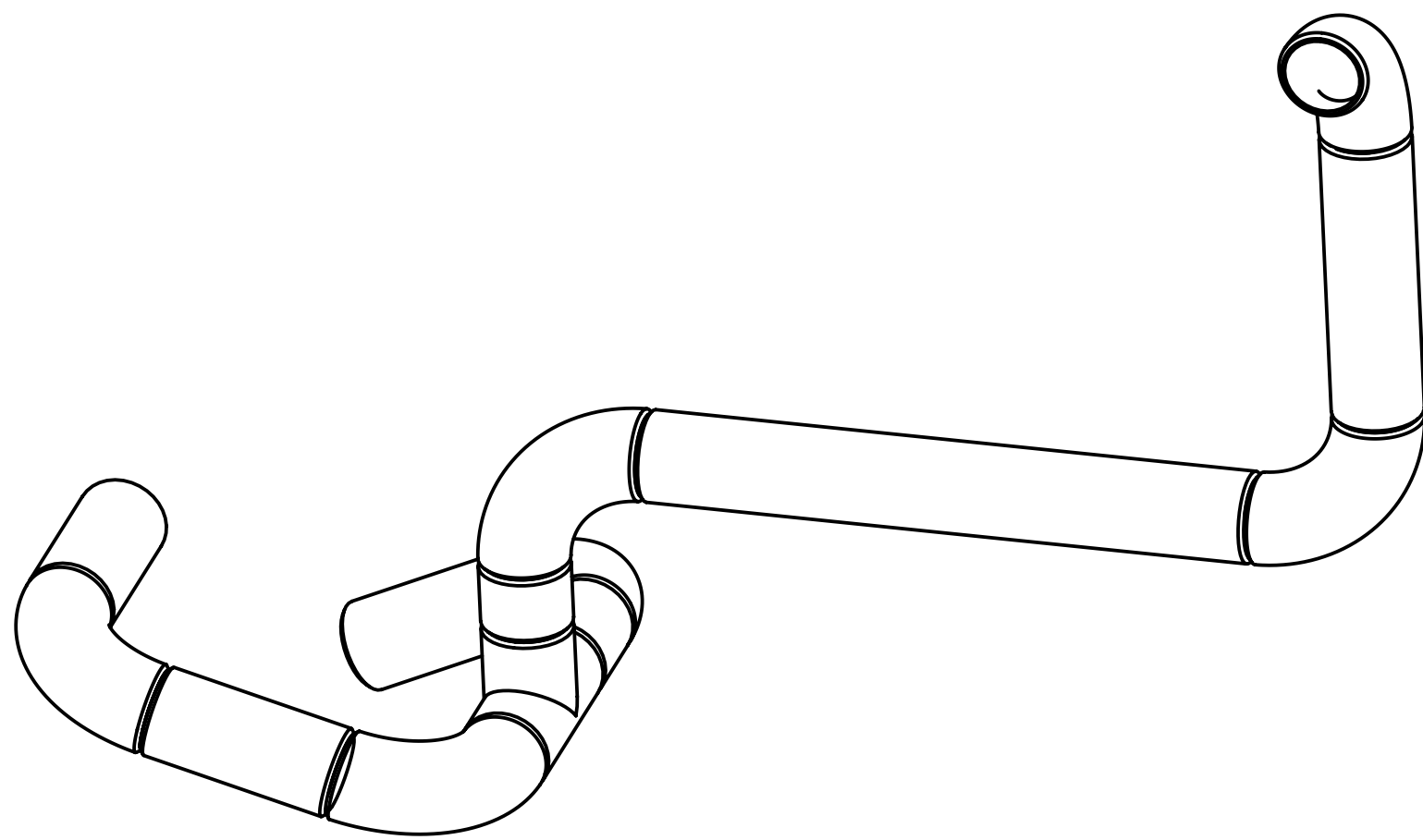
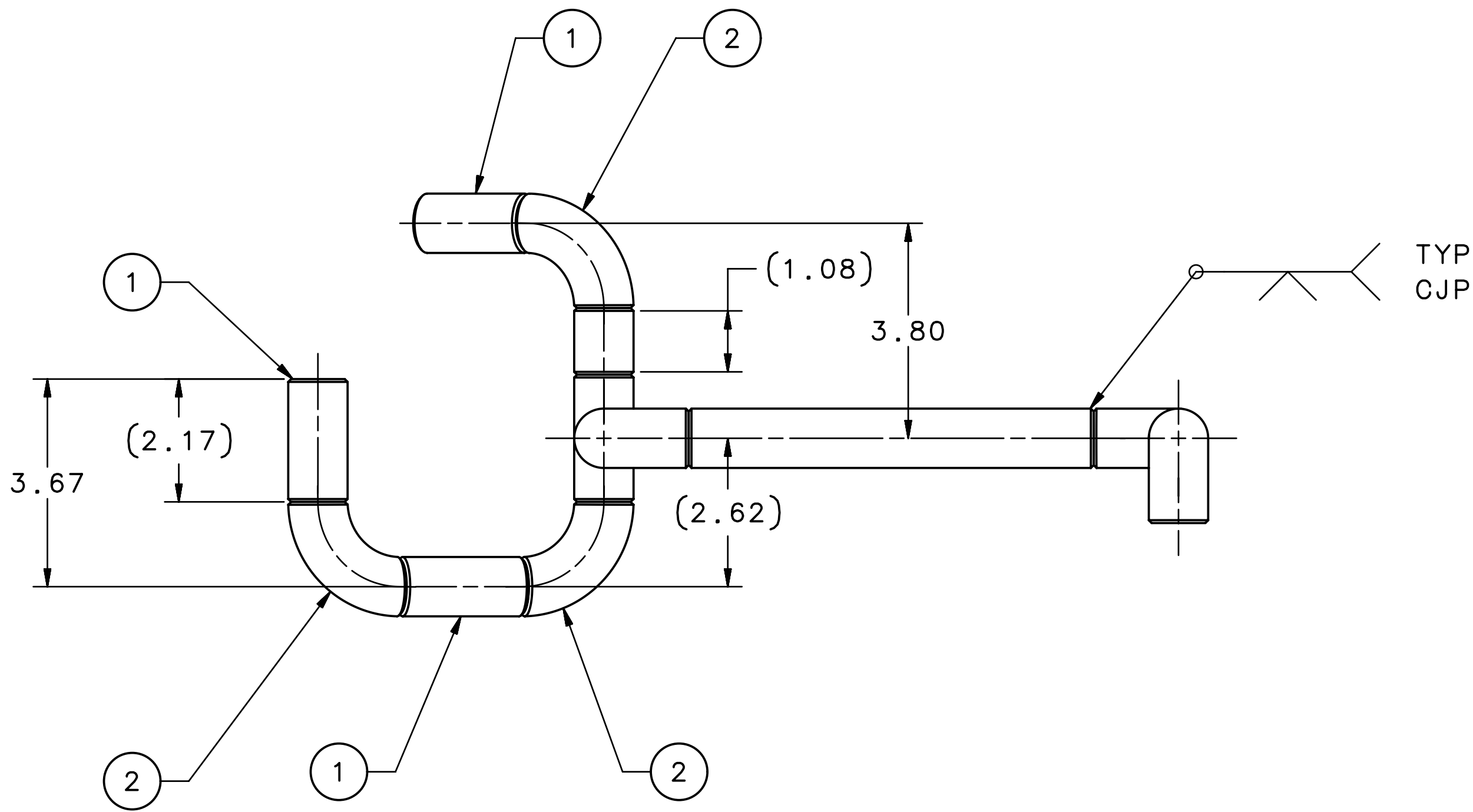








REVISION HISTORY		
ZONE	REV	DESCRIPTION
		DATE/REVISOR

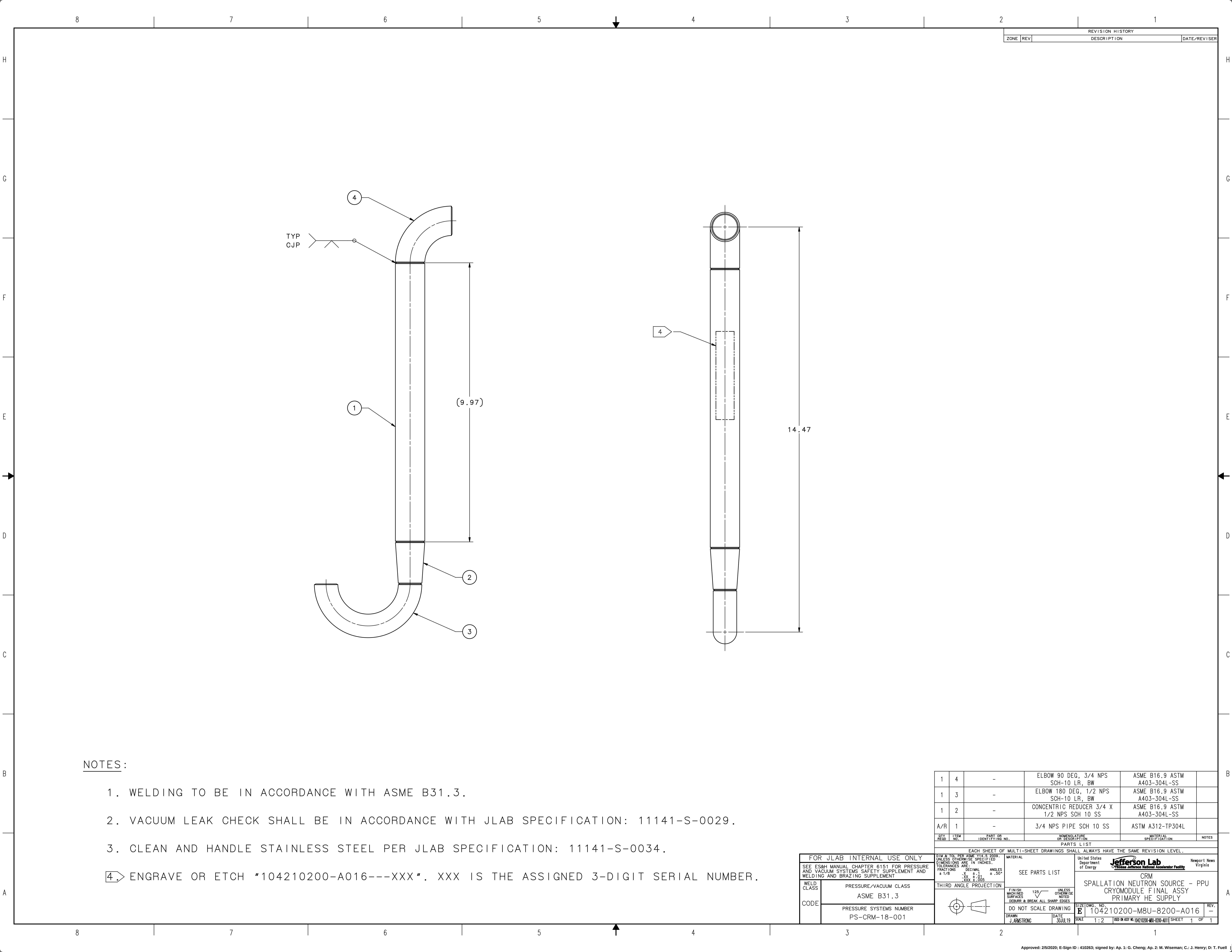


NOTES:

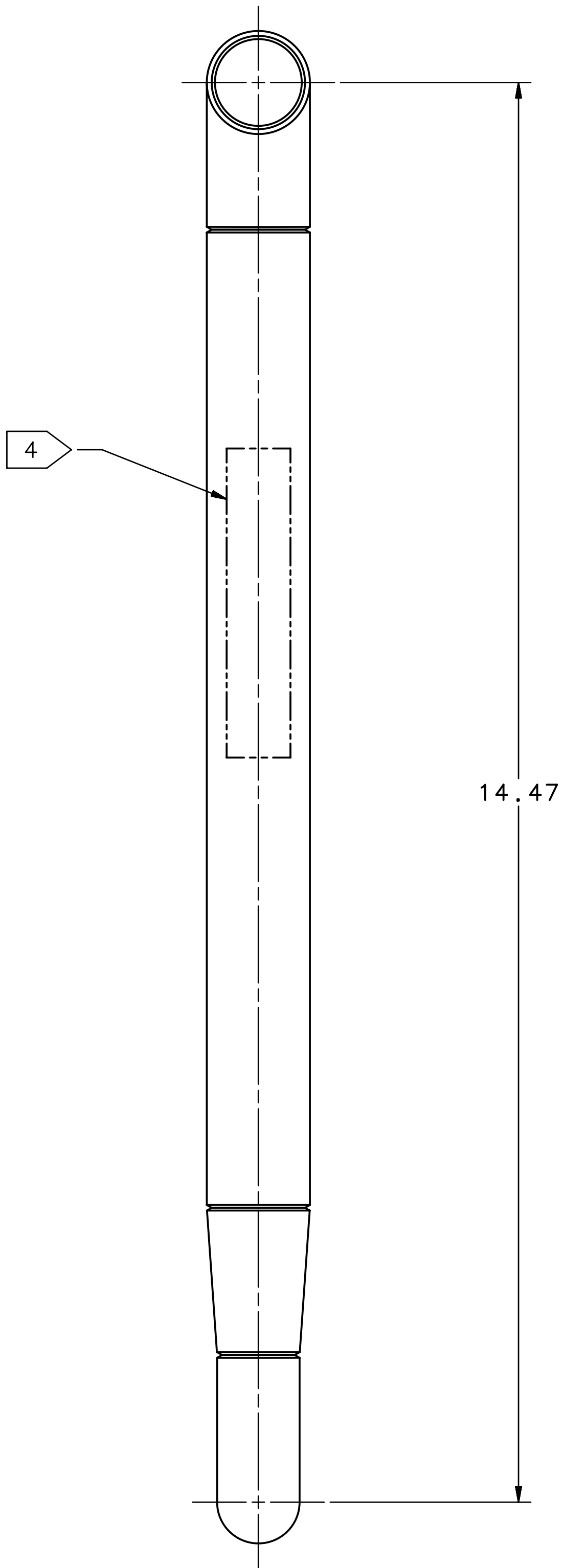
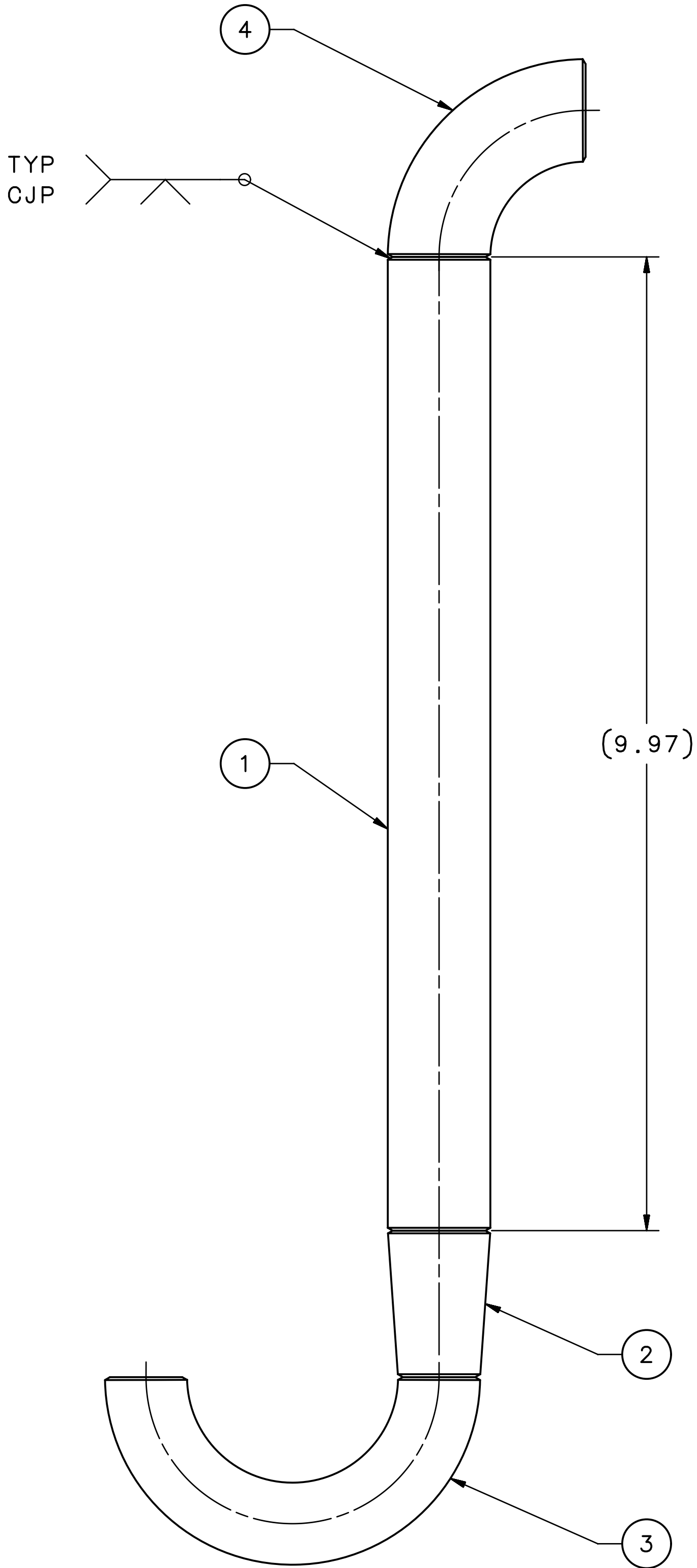
- WELDING TO BE IN ACCORDANCE WITH ASME B31.3.
- VACUUM LEAK CHECK SHALL BE IN ACCORDANCE WITH JLAB SPECIFICATION: 11141-S-0029.
- CLEAN AND HANDLE STAINLESS STEEL PER JLAB SPECIFICATION: 11141-S-0034.
- ENGRAVE OR ETCH "104210200-A015---XXX". XXX IS THE ASSIGNED 3-DIGIT SERIAL NUMBER.

1	3	-	TEE, 3/4 NPS SCH-10, BW	ASME B16.9 ASTM A403-304L-SS	
6	2	-	ELBOW 90 DEG, 3/4 NPS SCH-10 LR, BW	ASME B16.9 ASTM A403-304L-SS	
A/R	1	-	3/4 NPS PIPE SCH 10 SS	ASTM A312-TP304L	

QTY	ITEM NO.	PART OR IDENTIFYING NO.	DESCRIPTION	MATERIAL SPECIFICATION	NOTES
PARTS LIST					
EACH SHEET OF MULTI-SHEET DRAWINGS SHALL ALWAYS HAVE THE SAME REVISION LEVEL.					
FOR JLAB INTERNAL USE ONLY			SEE PARTS LIST		
SEE ESHM MANUAL CHAPTER 6151 FOR PRESSURE AND VACUUM SYSTEMS SAFETY SUPPLEMENT AND WELDING AND BRAZING SUPPLEMENT			THIRD ANGLE PROJECTION		
WELD CLASS			DO NOT SCALE DRAWING		
CODE			DRAWN J. ARMSTRONG		
PRESSURE/VACUUM CLASS			DATE 30JUL19		
ASME B31.3			SCALE 1:2		
PRESSURE SYSTEMS NUMBER			REV. -		
PS-CRM-18-001			SHEET 1 OF 1		



REVISION HISTORY		
ZONE	REV	DESCRIPTION
		DATE/REVISER



NOTES:

1. WELDING TO BE IN ACCORDANCE WITH ASME B31.3.
2. VACUUM LEAK CHECK SHALL BE IN ACCORDANCE WITH JLAB SPECIFICATION: 11141-S-0029.
3. CLEAN AND HANDLE STAINLESS STEEL PER JLAB SPECIFICATION: 11141-S-0034.
4. ENGRAVE OR ETCH "104210200-A016---XXX". XXX IS THE ASSIGNED 3-DIGIT SERIAL NUMBER.

1	4	-	ELBOW 90 DEG, 3/4 NPS SCH-10 LR, BW	ASME B16.9 ASTM A403-304L-SS	
1	3	-	ELBOW 180 DEG, 1/2 NPS SCH-10 LR, BW	ASME B16.9 ASTM A403-304L-SS	
1	2	-	CONCENTRIC REDUCER 3/4 X 1/2 NPS SCH 10 SS	ASME B16.9 ASTM A403-304L-SS	
A/R	1	-	3/4 NPS PIPE SCH 10 SS	ASTM A312-TP304L	

FOR JLAB INTERNAL USE ONLY			EACH SHEET OF MULTI-SHEET DRAWINGS SHALL ALWAYS HAVE THE SAME REVISION LEVEL.		
SEE ESH MANUAL CHAPTER 6151 FOR PRESSURE AND VACUUM SYSTEMS SAFETY SUPPLEMENT AND WELDING AND BRAZING SUPPLEMENT			PARTS LIST		
WELD CLASS			THIRD ANGLE PROJECTION		
CODE			DO NOT SCALE DRAWING		
PRESSURE/VACUUM CLASS			SCALE		
ASME B31.3			1:2		
PRESSURE SYSTEMS NUMBER			SHEET 1 OF 1		
PS-CRM-18-001					

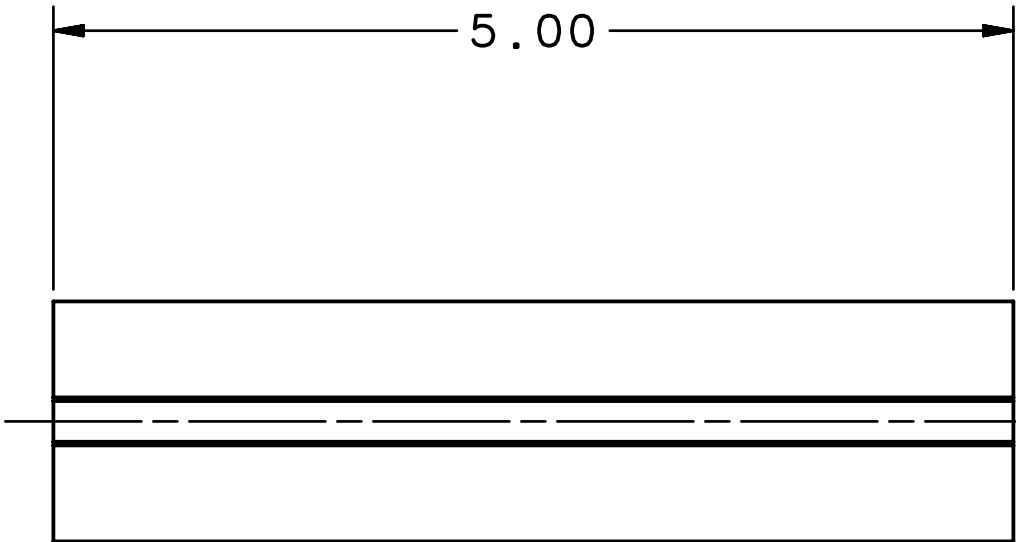
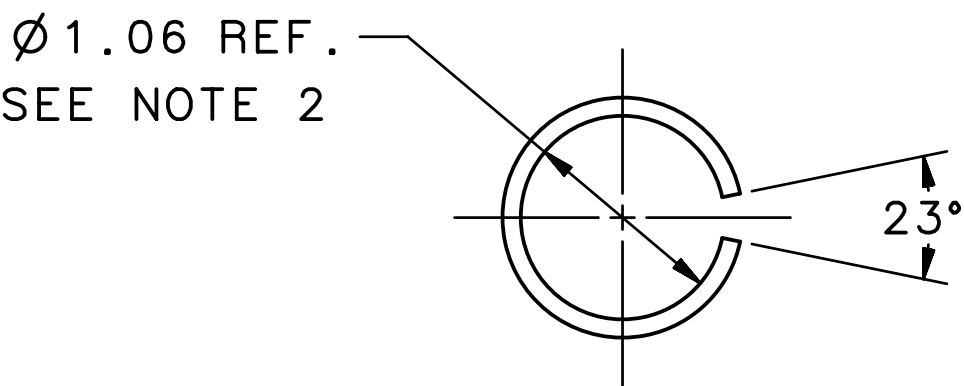
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REVISION HISTORY			
ZONE	REV	DESCRIPTION	DATE/REVISER



NOTES:

- 1. CLEAN AND HANDLE PER TJNAF SPECIFICATION 11141-S-0035.
- 2. SWAGE ID OF COPPER TUBE OVER 3/4 NPS PIPE MANDREL.

DIM & TOL PER ASME Y14.5 2009. UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMAL ANGLES ± 1/8 .XX ±.1 ±.50° .XX ±.01 .XXX ±.005	MATERIAL		United States Department of Energy		Jefferson Lab Orinoss Jefferson National Accelerator Facility		Newport News Virginia		
	Ø 1.25 OD TUBE. .12 WALL COPPER C11000		CRM SPALLATION NEUTRON SOURCE - PPU CRYMODULE FINAL ASSY PIPING THERMAL SLEEVE						
	FINISH 125 MACHINED SURFACES DEBURR & BREAK ALL SHARP EDGES								
	THIRD ANGLE PROJECTION		DO NOT SCALE DRAWING		SIZE	DWG. NO.	REV.		
		DRAWN J.ARMSTRONG		DATE 30JUL19		C 104210200-M8U-8200-A017 -			
				SCALE 1:2		USED ON ASSY NO: 104210200-M8U-8200-A013/A022		SHEET 1 OF 1	

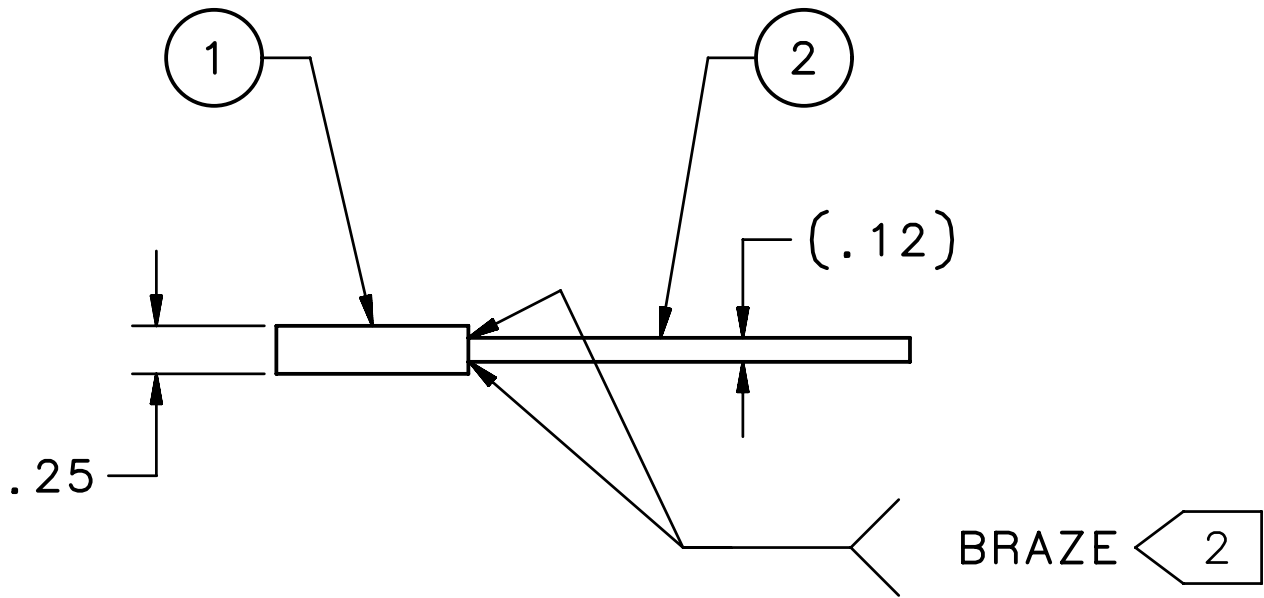
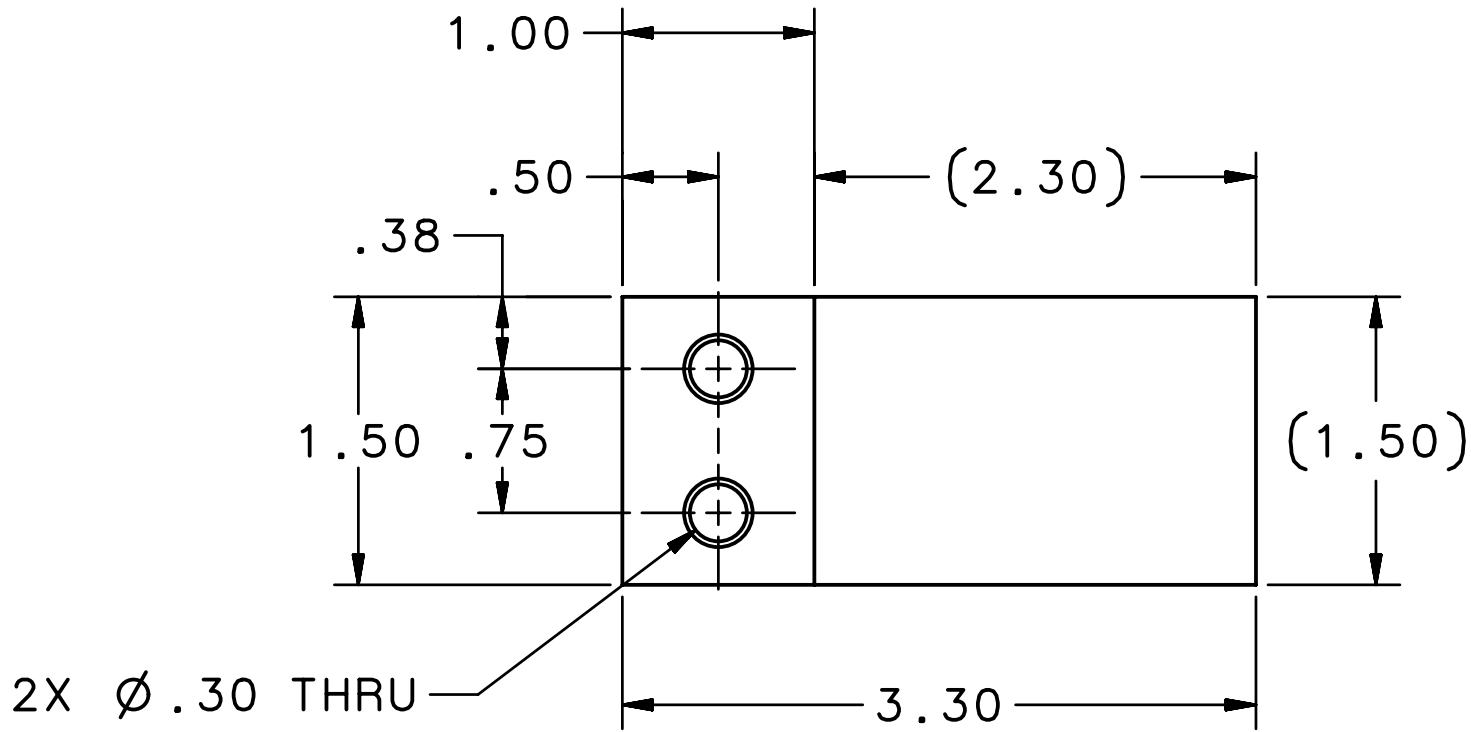
4

3

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1

REVISION HISTORY			
ZONE	REV	DESCRIPTION	DATE/REVISER



NOTES:

1. CLEAN AND HANDLE PER TJNAF SPECIFICATION 11141-S-0035.

2. BRAZE MATERIAL: SAFETY-SILV 45 (BAG-5).

1	2	-	THERMAL STRAP 1.5" WIDE X .12" THK X 2.3" LONG	BRAIDED C10100 OFE COPPER	
1	1	-	THERMAL BLOCK	C10100 OFE COPPER	
QTY REQD	ITEM NO.	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	MATERIAL SPECIFICATION	NOTES
PARTS LIST					
FOR JLAB INTERNAL USE ONLY			MATERIAL		
SEE ES&H MANUAL CHAPTER 6151 FOR PRESSURE AND VACUUM SYSTEMS SAFETY SUPPLEMENT AND WELDING AND BRAZING SUPPLEMENT			SEE PARTS LIST		
WELD CLASS			THIRD ANGLE PROJECTION		
PRESSURE/VACUUM CLASS			FINISH 125 UNLESS MACHINED SURFACES ☒ OTHERWISE DEBURR & BREAK ALL SHARP EDGES NOTED		
LOW RISK			DO NOT SCALE DRAWING		
PRESSURE SYSTEMS NUMBER			DRAWN J.ARMSTRONG DATE 30JUL19		
N/A			UNITED STATES DEPARTMENT OF ENERGY Jefferson Lab Ottomans Jefferson National Accelerator Facility Newport News Virginia		
N/A			CRM SPALLATION NEUTRON SOURCE - PPU CRYOMODULE FINAL ASSY SUPPLY PIPING THERMAL STRAP		
N/A			SIZE DWG. NO. C 104210200-M8U-8200-A018		
N/A			SCALE 1:1 USED ON ASSY NO:104210200-M8U-8200-A013 SHEET 1 OF 1		

