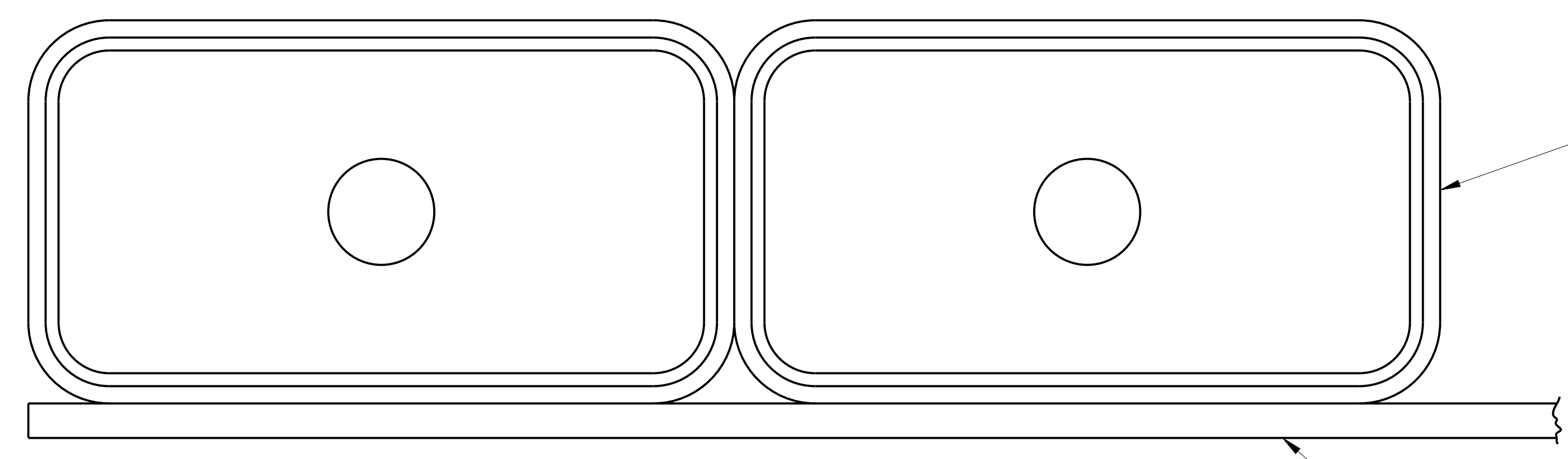


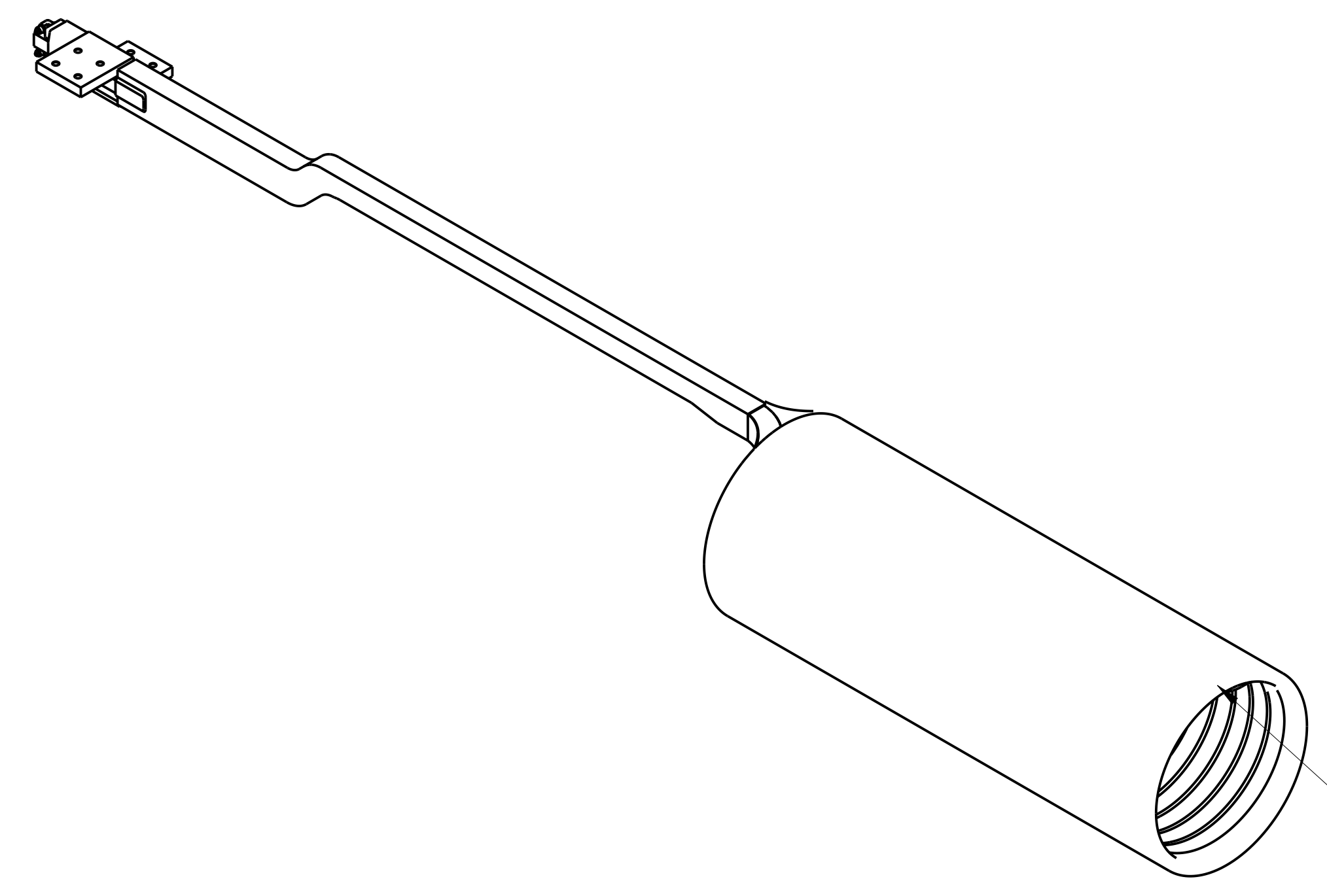
NO.	REVISION	BY	CH	SUP	APPROVED	DATE



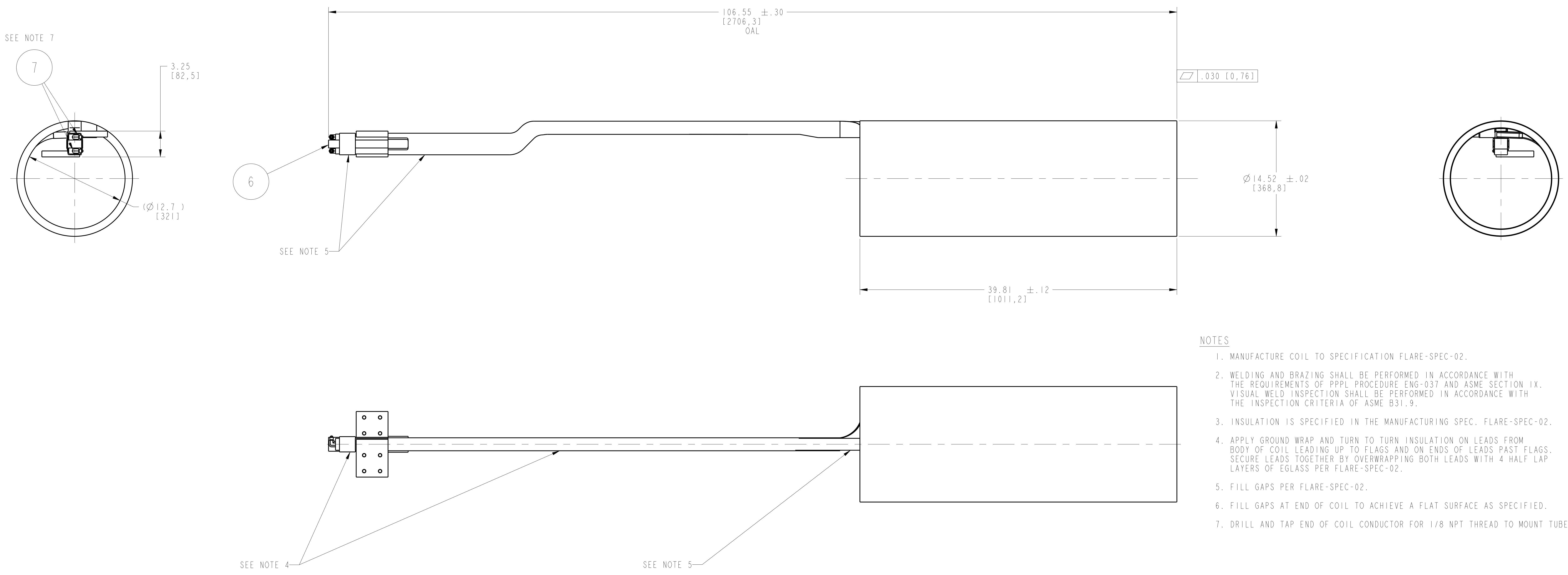
TYPICAL COIL CROSS SECTION

TURN TO TURN INSULATION  
(.028) KAPTON + (.048) GLASS = (.076)  
INCLUDES LEADS  
SEE NOTE 3

WRAP OUTER DIAMETER  
OF COIL AND LEADS  
AS INDICATED (.040) GLASS  
SEE NOTE 3



SEE NOTE 6



NOTES

1. MANUFACTURE COIL TO SPECIFICATION FLARE-SPEC-02.
2. WELDING AND BRAZING SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF PPPL PROCEDURE ENG-037 AND ASME SECTION IX. VISUAL WELD INSPECTION SHALL BE PERFORMED IN ACCORDANCE WITH THE INSPECTION CRITERIA OF ASME B31.9.
3. INSULATION IS SPECIFIED IN THE MANUFACTURING SPEC. FLARE-SPEC-02.
4. APPLY GROUND WRAP AND TURN TO TURN INSULATION ON LEADS FROM BODY OF COIL LEADING UP TO FLAGS AND ON ENDS OF LEADS PAST FLAGS. SECURE LEADS TOGETHER BY OVERWRAPPING BOTH LEADS WITH 4 HALF LAP LAYERS OF EGLASS PER FLARE-SPEC-02.
5. FILL GAPS PER FLARE-SPEC-02.
6. FILL GAPS AT END OF COIL TO ACHIEVE A FLAT SURFACE AS SPECIFIED.
7. DRILL AND TAP END OF COIL CONDUCTOR FOR 1/8 NPT THREAD TO MOUNT TUBE FITTING.

-01 ASSEMBLY OH SOLENOID COIL ASSEMBLY

PART NO.	DRAWING NO.	NOMENCLATURE OR DESCRIPTION	MAT'L	QTY	RECD
2	7	COMM	TUBE FITTING, PARKER 4 CTX-B OR EQUIV	BRASS	
1	6	THIS DRAWING	FILLER	G-10	
2	5	THIS DRAWING	LEAD, FLAG	COPPER	
A/R	4	COMM	INSULATION	SEE NOTE 3	
A/R	3	COMM	INSULATION	SEE NOTE 3	
A/R	2	COMM	KAPTON	SEE NOTE 3	
1	1	THIS DRAWING	COIL CONDUCTOR, 25 TURNS, 19mm X 38mm	COPPER	
1	—	THIS DRAWING	OH SOLENOID COIL ASSEMBLY	—	1

PARTS LIST

**GENERAL NOTES**

1. PPPL APPROVED DRAWINGS TAKE PRECEDENCE OVER MODEL DIMENSIONS.
2. WHEN MODELS ARE PROVIDED, VENDOR MUST VERIFY THAT MODEL DIMENSIONS CONFORM WITH PPPL APPROVED DRAWINGS PRIOR TO FABRICATION.

MAGNETIC PERMEABILITY REQUIREMENT (SEE NOTES)	
YES	NO
[Hatched Box]	[X]

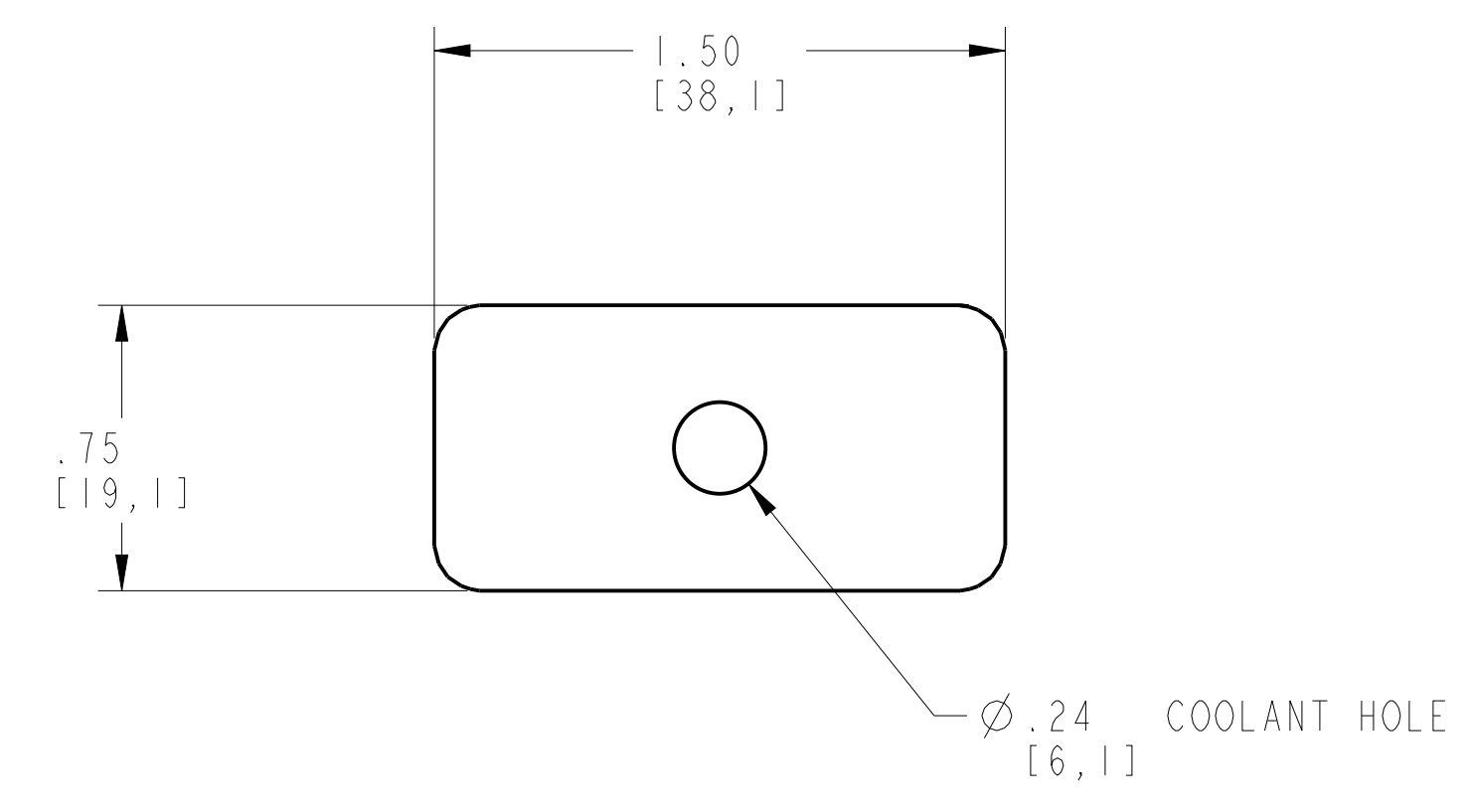
RELEASED FOR FABRICATION / INSTALLATION  
PPPL Drafting

RELEASE LEVEL: Fabrication  
DWG VERSION NO: 0.1

WELDING ENGINEER: \_\_\_\_\_  
APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

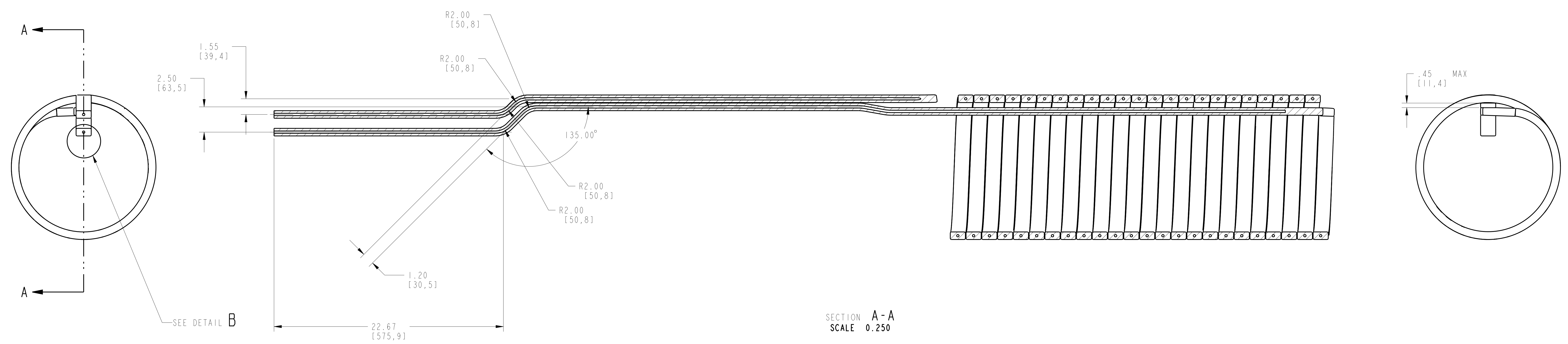
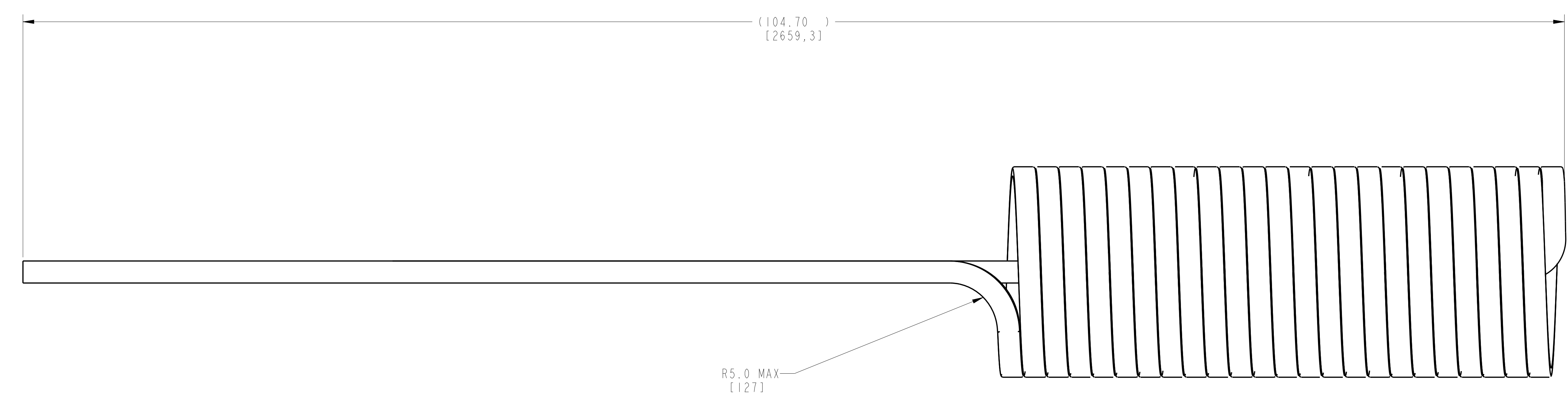
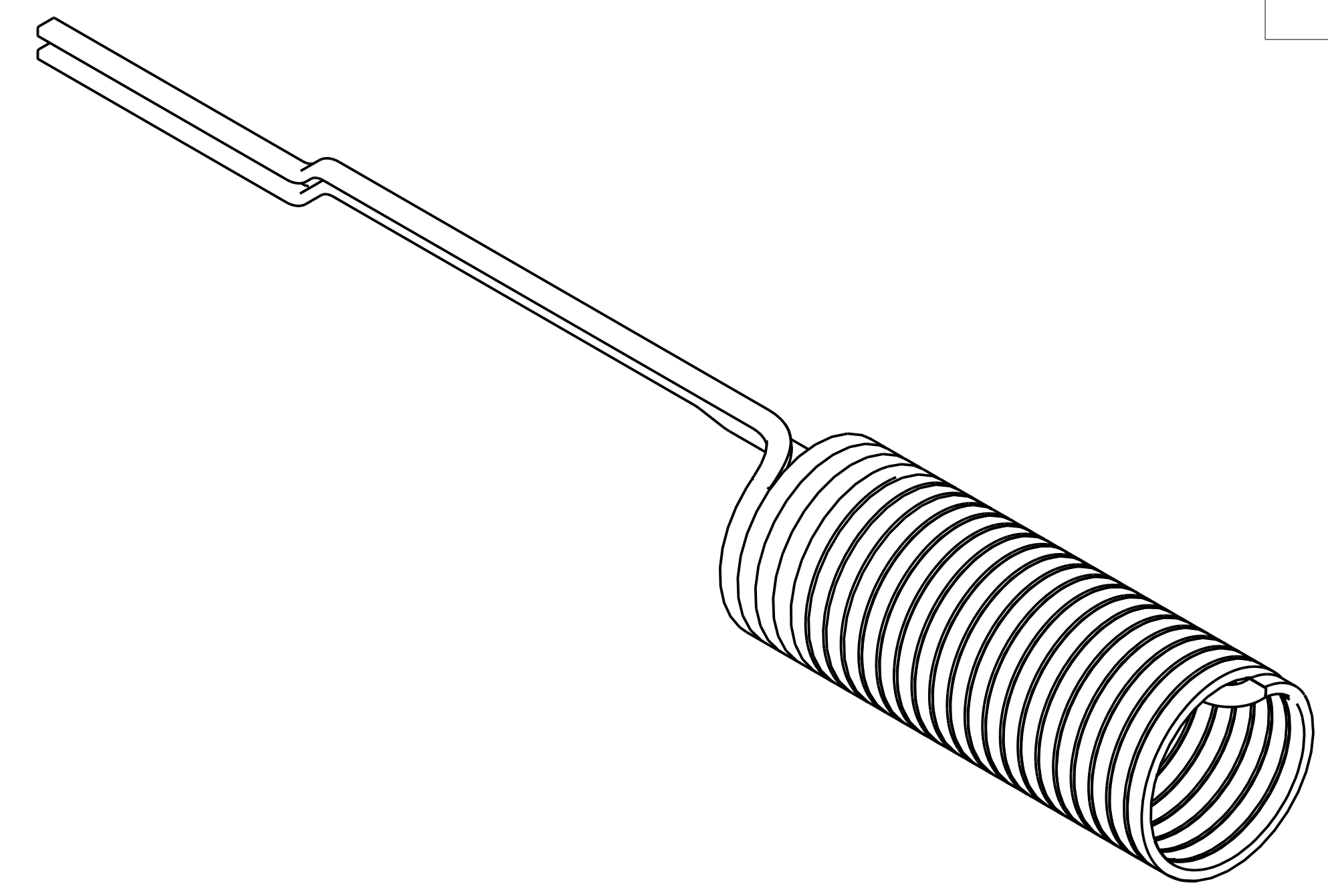
COMPUTER GENERATED DRAWING MANUAL CHANGES NOT PERMITTED Pro E	CENTRAL FILES: UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES MACHINE SURFACES BREAK SHARP EDGES .055/.020	PRINCETON PLASMA PHYSICS LABORATORY PRINCETON UNIVERSITY FACILITY FOR LABORATORY RECONNECTION EXPERIMENT COIL SYSTEMS OH COIL OH SOLENOID COIL ASSEMBLY
DO NOT VERIFY INFORMATION BY SCALING DRAWING	TOLERANCES - NON-CUMULATIVE DECIMAL-INCH FRACTIONS XX ±.000 0°-12° ±.010 XXX ±.010 12°-120° ±.014 ANGULAR ±0°-15° 0.001 120° ±.012	DIV: MECH. ENG. DATE: 11/21/2014 ENG: M KALISH DSN: J MITCHELL CHK: M KALISH
SCALE: .25	NEXT ASSEMBLY	APPROVED: _____ E-FL400-001
SHEET 1 OF 3		REV 0

NO.	REVISION	BY	CH	SUP	APPROVED	DATE



1 COIL CONDUCTOR

DETAIL B  
SCALE 2.000



**GENERAL NOTES**

- PPPL APPROVED DRAWINGS TAKE PRECEDENCE OVER MODEL DIMENSIONS.
- WHEN MODELS ARE PROVIDED, VENDOR MUST VERIFY THAT MODEL DIMENSIONS CONFORM WITH PPPL APPROVED DRAWINGS PRIOR TO FABRICATION.

MAGNETIC PERMEABILITY REQUIREMENT (SEE NOTES)	
YES	NO

**RELEASED FOR FABRICATION / INSTALLATION**  
PPPL Drafting

RELEASE LEVEL: Fabrication  
DWG VERSION NO: 0.1

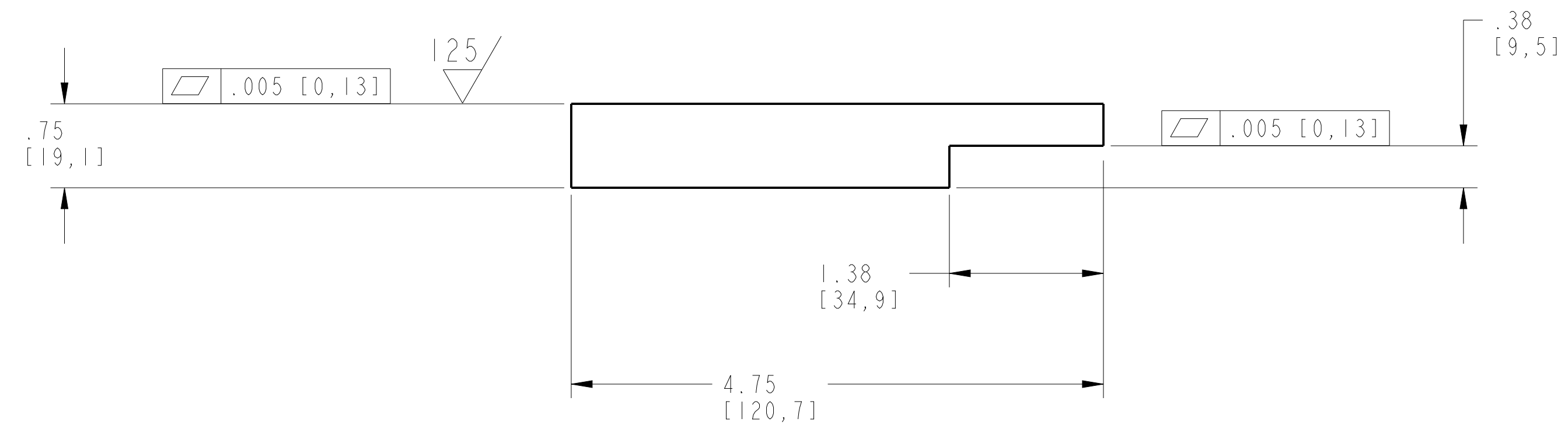
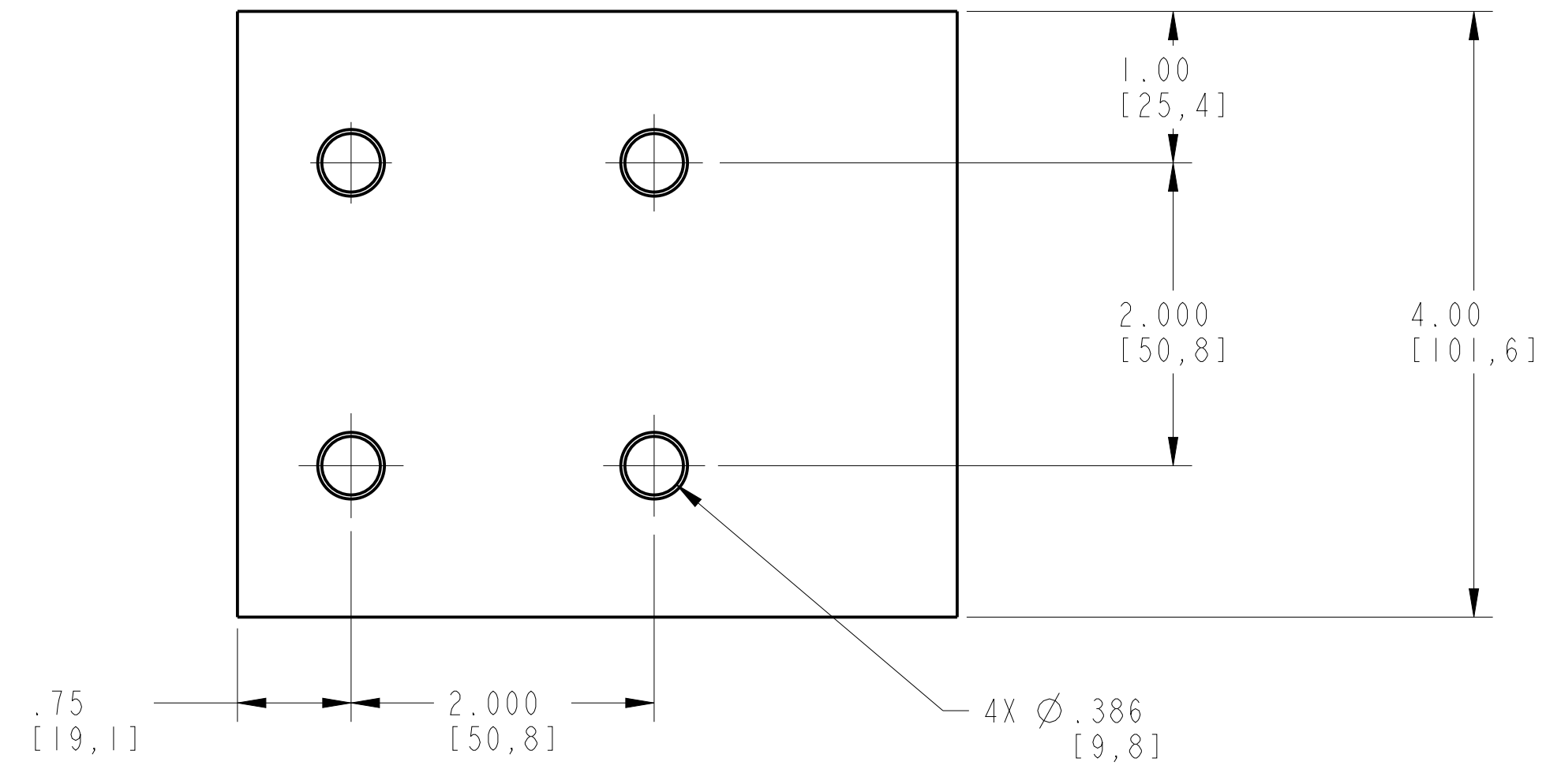
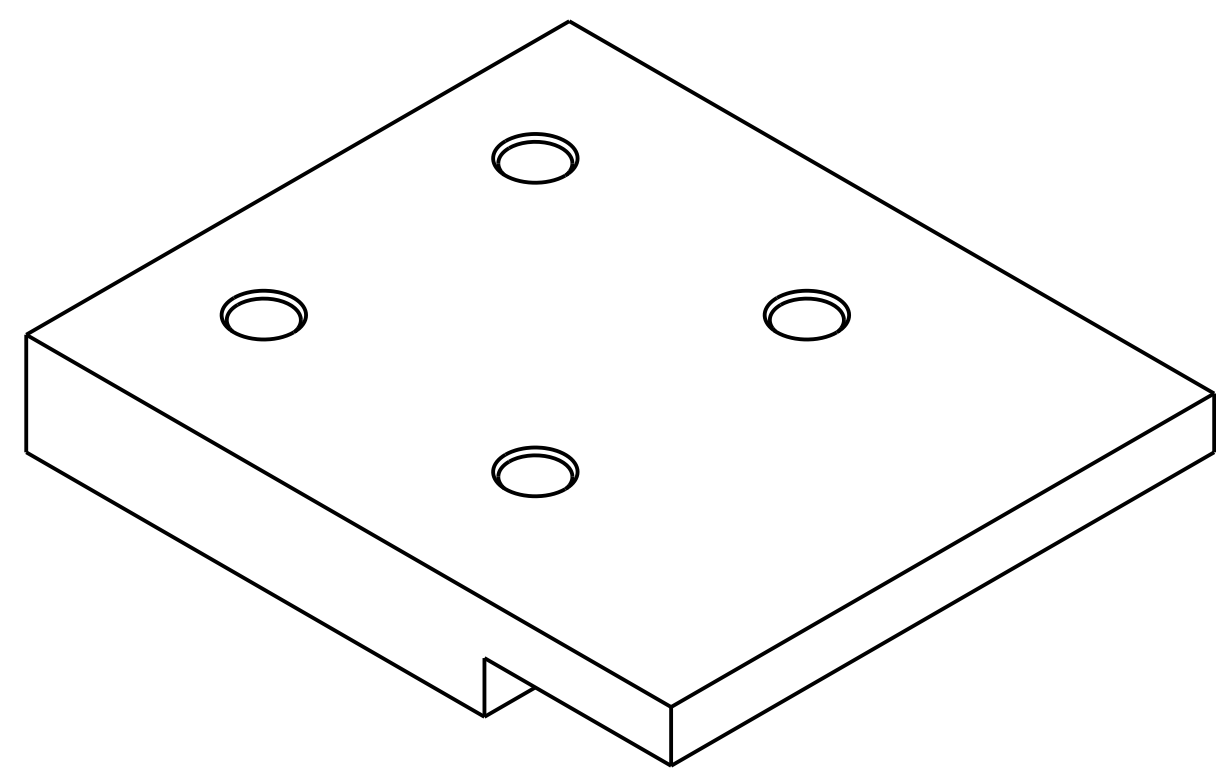
WELDING ENGINEER  
APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

SEE SHEET 1 FOR NOTES & PARTS LIST

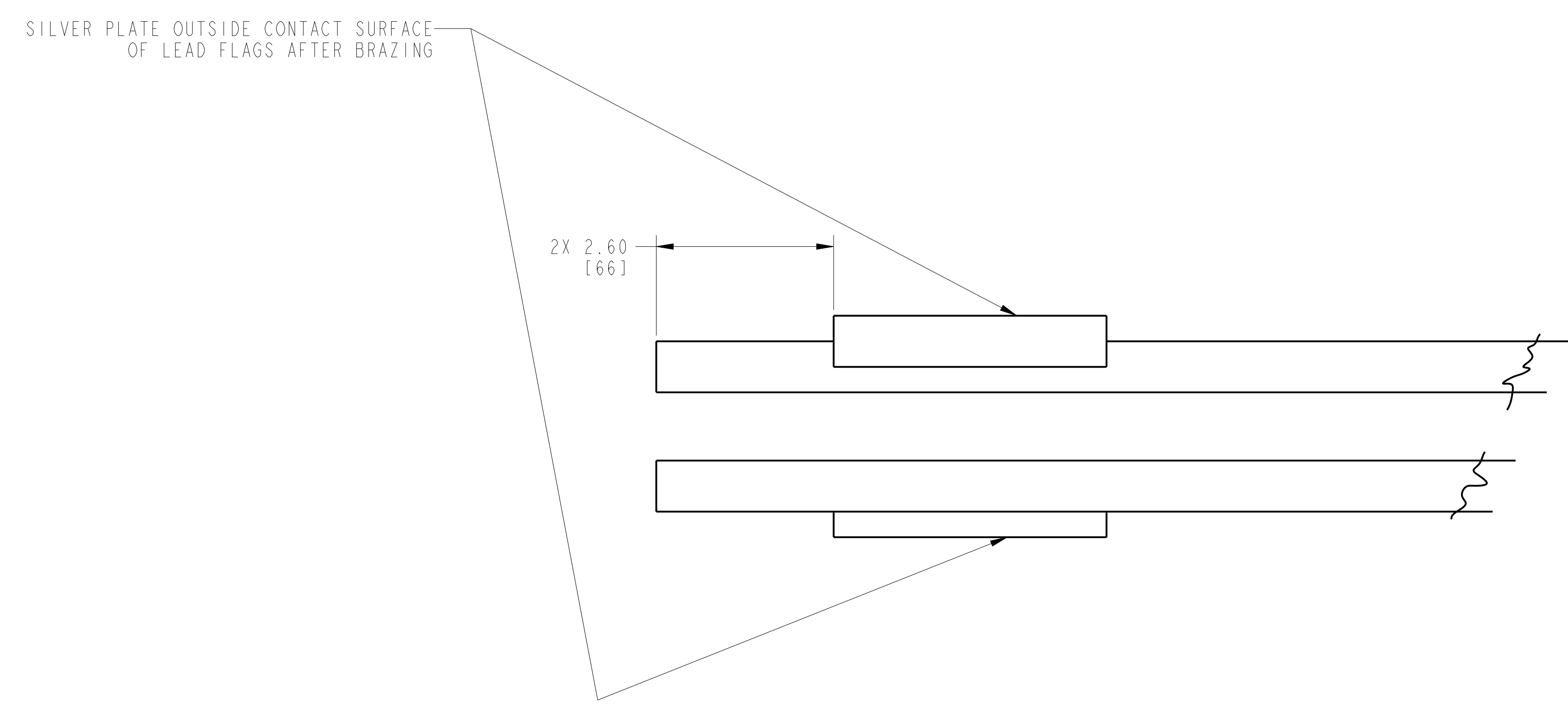
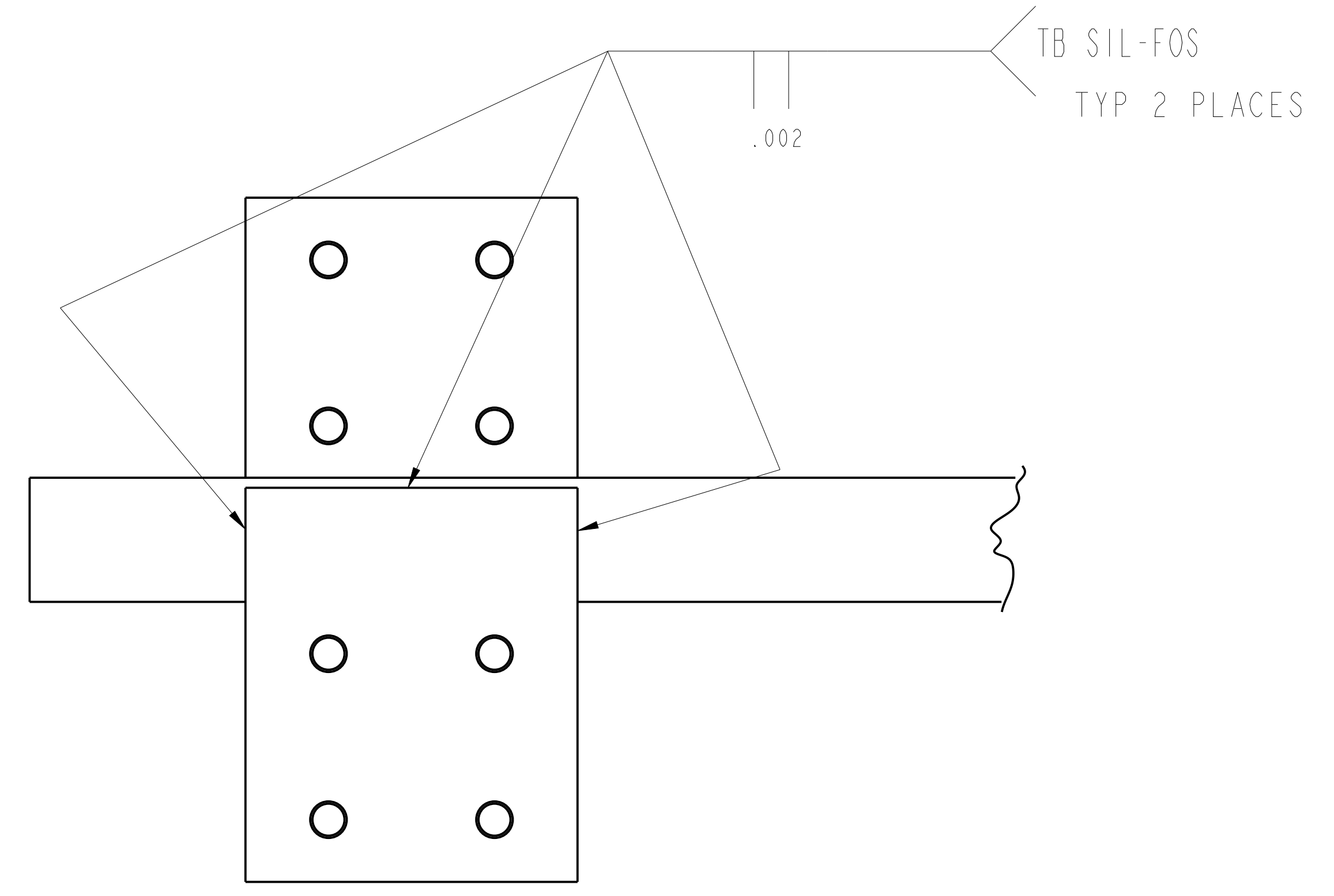
COMPUTER GENERATED DRAWING MANUAL CHANGES NOT PERMITTED Pro E	CENTRAL FILES: UNLESS OTHERWISE SPECIFIED	PRINCETON PLASMA PHYSICS LABORATORY PRINCETON UNIVERSITY FACILITY FOR LABORATORY RECONNECTION EXPERIMENT COIL SYSTEMS OH COIL OH SOLENOID COIL ASSEMBLY	
DO NOT VERIFY INFORMATION BY SCALING DRAWING	BREAK SHARP EDGES .055/.020	DIV: MECH. ENG.	DATE: 11/21/2014
SCALE:	TOLERANCES NON-CUMULATIVE	ENG: M KALISH	APPROVED
NEXT ASSEMBLY	DECIMAL-INCH FRACTIONS	DSN: J MITCHELL	M KALISH
	XXX 0.010 72°-120° 0.1/4	CHK: M KALISH	CRK SUPV LM
	ANGULAR 0.0°-15° 0/0.0 120° 0.1/2		
			SHEET 2 OF 3 REV 0

E-FL400-001

NO.	REVISION	BY	CH	SUP	APPROVED	DATE



5 LEAD FLAG



LEAD FLAG DETAIL  
SCALE 0.750

SEE SHEET 1 FOR NOTES & PARTS LIST

**GENERAL NOTES**  
 1. PPPL APPROVED DRAWINGS TAKE PRECEDENCE OVER MODEL DIMENSIONS.  
 2. WHEN MODELS ARE PROVIDED, VENDOR MUST VERIFY THAT MODEL DIMENSIONS CONFORM WITH PPPL APPROVED DRAWINGS PRIOR TO FABRICATION.

MAGNETIC PERMEABILITY REQUIREMENT (SEE NOTES)	
YES	NO

**RELEASED FOR FABRICATION / INSTALLATION**  
PPPL Drafting

RELEASE LEVEL: Fabrication  
 DWG VERSION NO: 0.1  
 WELDING ENGINEER  
 APPVD: M. Stryer DATE: 12/10/2015

COMPUTER GENERATED DRAWING MANUAL CHANGES NOT PERMITTED Pro E	CENTRAL FILES: UNLESS OTHERWISE SPECIFIED	PRINCETON PLASMA PHYSICS LABORATORY PRINCETON UNIVERSITY FACILITY FOR LABORATORY RECONNECTION EXPERIMENT	
DO NOT VERIFY INFORMATION BY SCALING DRAWING	BREAK SHARP EDGES .005/.020	COIL SYSTEMS OH COIL OH SOLENOID COIL ASSEMBLY	
SCALE:	TOLERANCES NON-CUMULATIVE	DIV: MECH. ENG.	DATE: 11/21/2014
NEXT ASSEMBLY	DECIMAL-INCH FRACTIONS	ENG: M KALISH	APPROVED
	XXX 0.010 12°-120° 0.124	DSN: J MITCHELL	M KALISH
	ANGULAR 00°-15° 000°-120° 0.122	CHK: M KALISH	CRK SUPV LM
			EMI
			SHEET 3 OF 3 REV 0

FILE: E-FL400-001