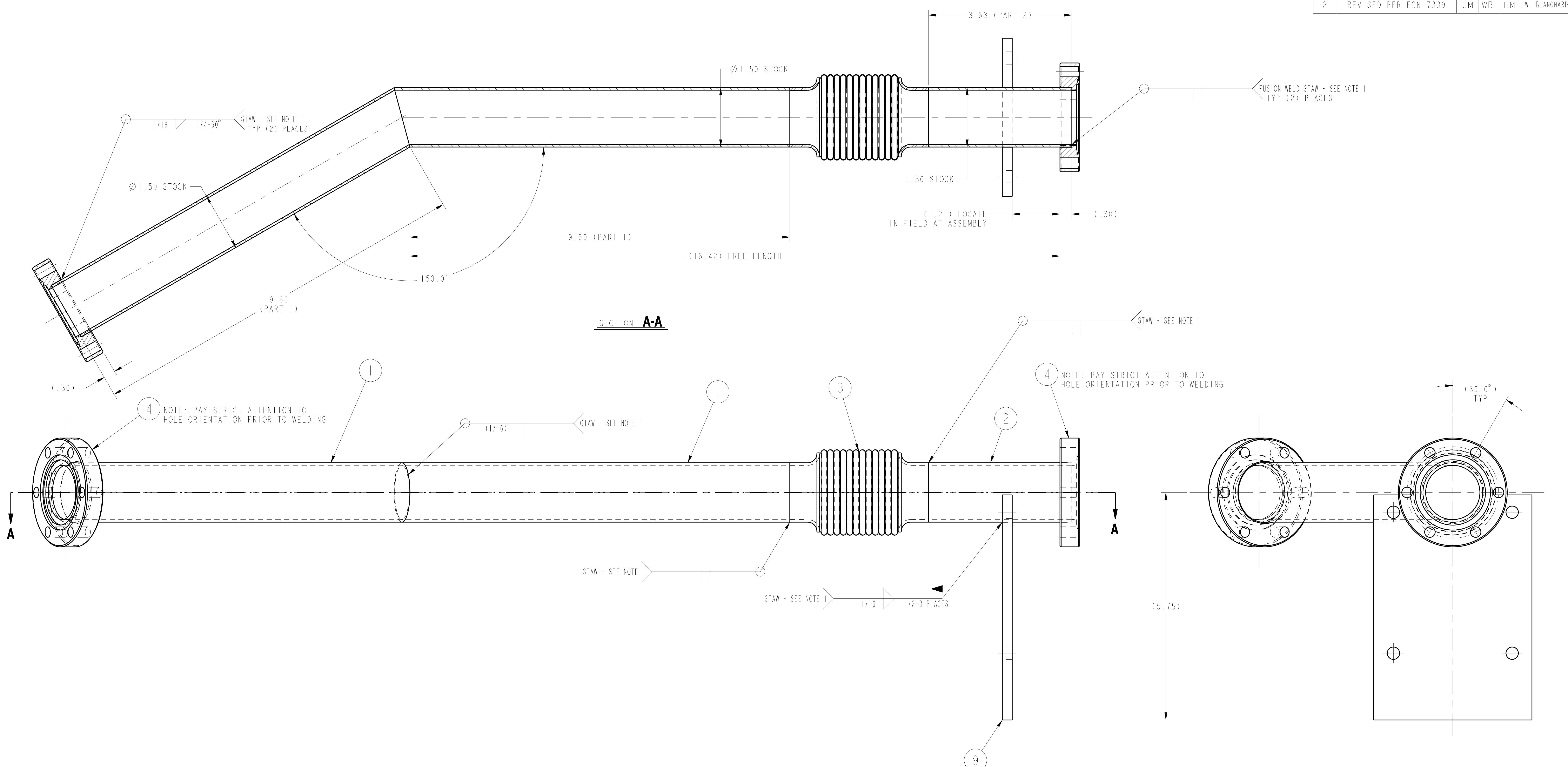


NO.	REVISION	BY	CH	SUP	APPROVED	DATE
1	REVISED PER ECN-7330	LM	WB	LM	W. BLANCHARD	10/2/2014
2	REVISED PER ECN-7339	JM	WB	LM	W. BLANCHARD	10/7/2014



01 ASSEMBLY - LOWER MGI VALVE FEED TUBE WELDMENT

- NOTES
1. WELDING SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF ASME B31.3. WELDING PERFORMED ONSITE SHALL ALSO MEET THE REQUIREMENTS OF PPPL PROCEDURE ENG-037. VISUAL WELD INSPECTION SHALL BE PERFORMED IN ACCORDANCE WITH THE ACCEPTANCE CRITERIA OF ASME B31.3 CATEGORY D.
  2. MAGNETIC PERMEABILITY AS DETERMINED WITH A SEVERN GAUGE SHALL NOT EXCEED THE FOLLOWING:  
 BASE MATERIAL: 1.04 mu  
 MACHINED: 1.20 mu  
 WELDED: 2.0 mu

ITEM NO.	DRAWING NO.	NOMENCLATURE OR DESCRIPTION	MATERIAL	QTY RECD
1	9	THIS DWG	LOWER MGI VALVE SPLIT CLAMP - TYPE "B"	316 S/S
2	8	THIS DWG	LOWER MGI VALVE SPLIT CLAMP - TYPE "A"	G-10
3	7	THIS DWG	RIB	316 S/S
4	6	THIS DWG	SIDE PLATE	316 S/S
5	5	THIS DWG	BASE PLATE	316 S/S
6	4	COMM	2.75 O.D. x 1.37 BORE CONFLAT FLANGE NON-ROT. w/TAPPED HOLES	316 S/S
7	3	COMM	1 1/2 NOM FORMED BELLOWS w/ WELD CLIFFS (3.50 L6) NDC #FBM-6522 OR EQ.	316 S/S
8	2	THIS DWG	FEED TUBE - Ø1.50 O.D. x .06 WALL	316 S/S
9	1	THIS DWG	FEED TUBE - Ø1.50 O.D. x .06 WALL	316 S/S
10		THIS DWG	LOWER MGI VALVE SUPPORT BRACKET WELDMENT	1
11		THIS DWG	LOWER MGI VALVE FEED TUBE WELDMENT	1

ITEM NO.	DRAWING NO.	NOMENCLATURE OR DESCRIPTION	MATERIAL	QTY RECD
02	01	ASSY		

PARTS LIST

COMPUTER GENERATED DRAWING MANUAL CHANGES NOT PERMITTED Pro E	CENTRAL FILES: UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES MACHINE SURFACES BREAK SHARP EDGES .005/.020	PRINCETON PLASMA PHYSICS LABORATORY NATIONAL SPHERICAL TORUS EXPERIMENT GAS INJECTION SYSTEM MASSIVE GAS INJECTION SYSTEM LOWER MGI SYSTEM DETAILS
DO NOT VERIFY INFORMATION BY SCALING DRAWING	TOLERANCES - NON-CUMULATIVE DECIMAL-INCH FRACTIONS X .140 0"-.12" .0150 XX .030 .12"-.12" .0150 XXX .010 .12"-.12" .0150 ANGULAR .05-.15 .005-1.00 .010	DIV: MECH. ENG. DATE: 9/4/2014 ENG: W. BLANCHARD DSN: L. MORRIS W. BLANCHARD CHK: W. BLANCHARD
SCALE: 1/1	NEXT ASSEMBLY	APPROVED E-EA3504

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.

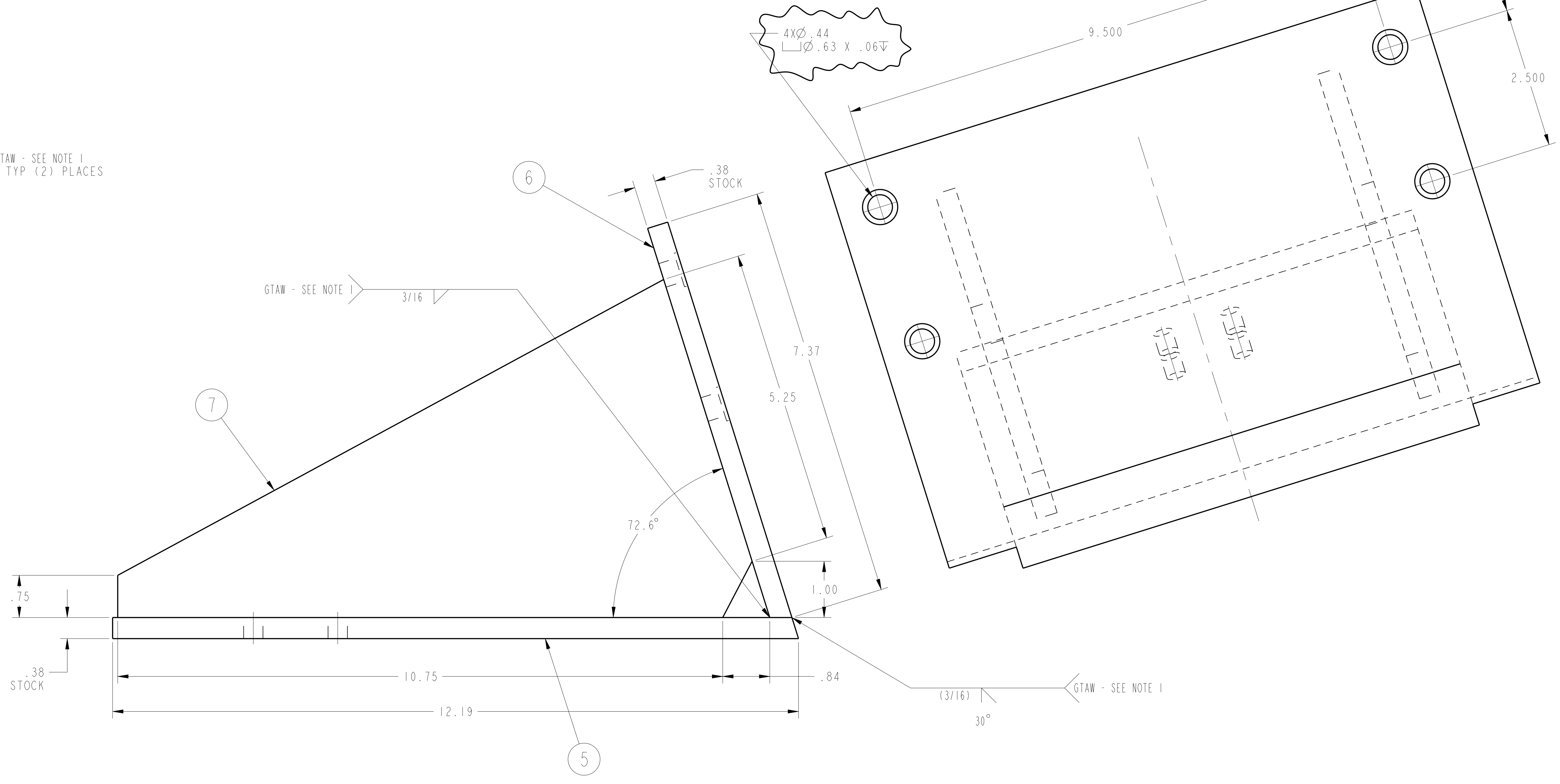
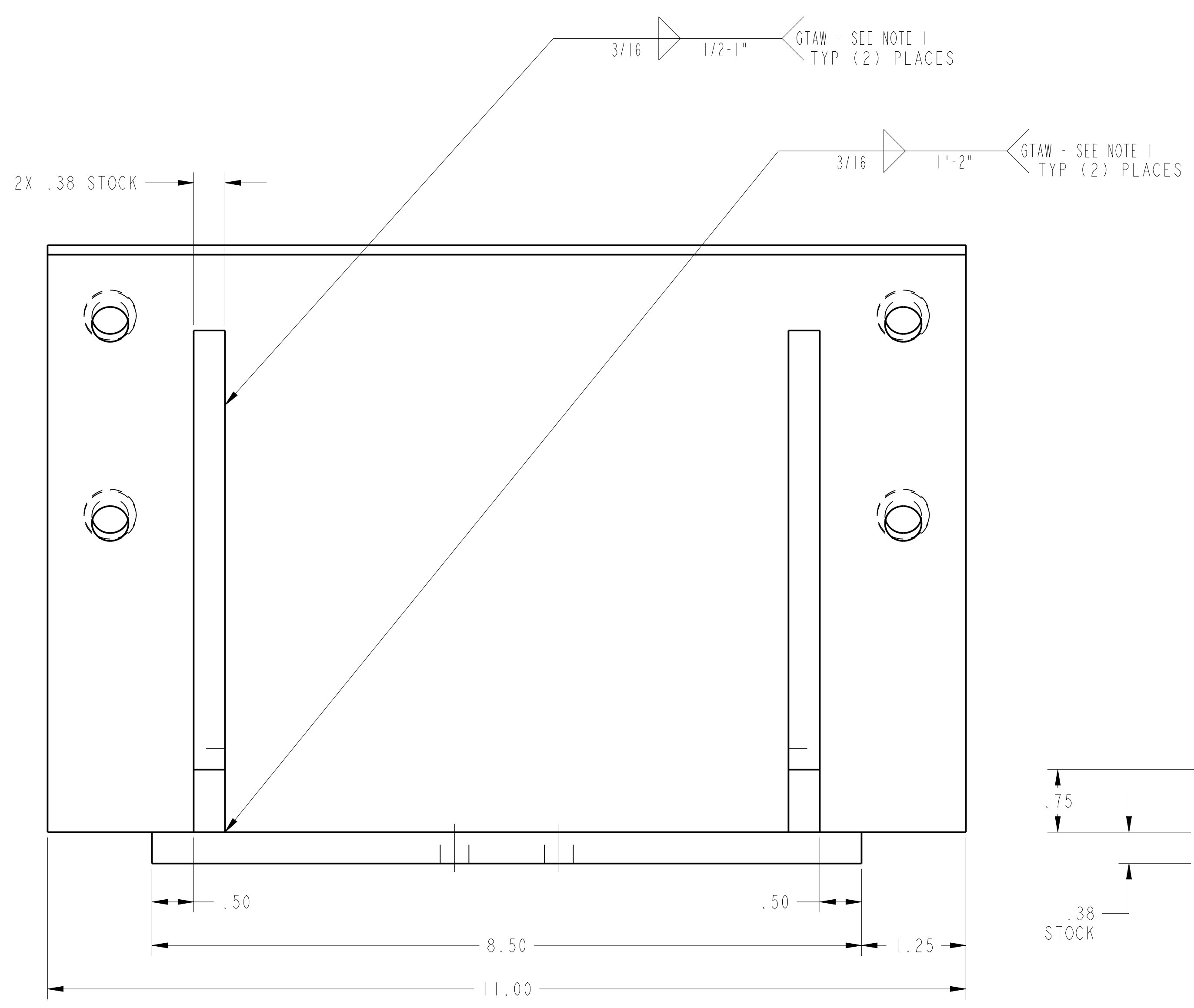
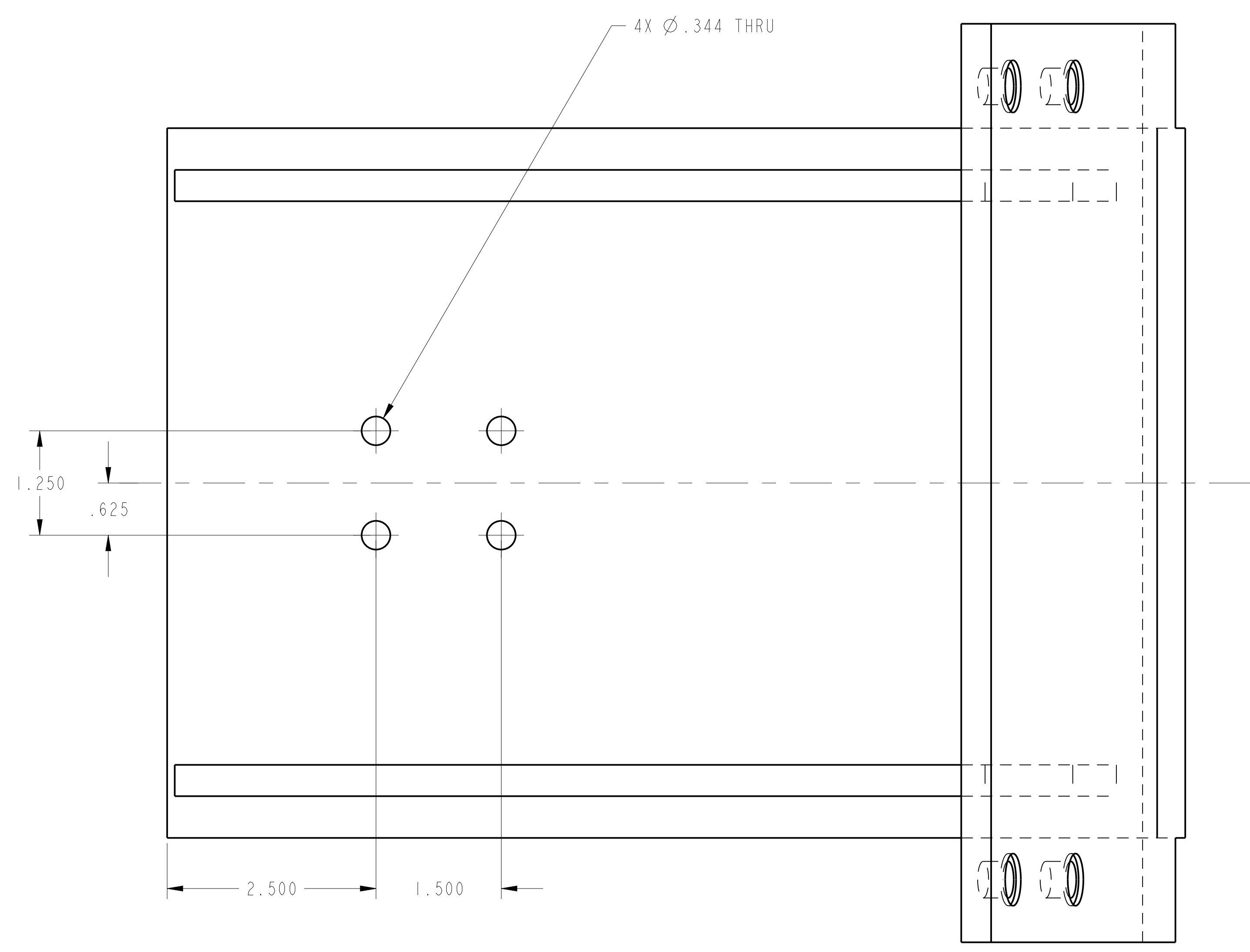
MAGNETIC PERMEABILITY REQUIREMENT (SEE NOTES)	
YES	<input checked="" type="checkbox"/> NO

RELEASE LEVEL: Fabrication  
 DWG VERSION NO: 2.0  
 WELDING ENGINEER: W. STYER  
 DATE: 12/8/2014

RELEASED FOR FABRICATION/INSTALLATION  
 PPPL Drafting

UNSTR-E-EA3504

NO.	REVISION	BY	CH	SUP	APPROVED	DATE



FOR NOTES AND BILL OF MATERIAL SEE SHEET 1

**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

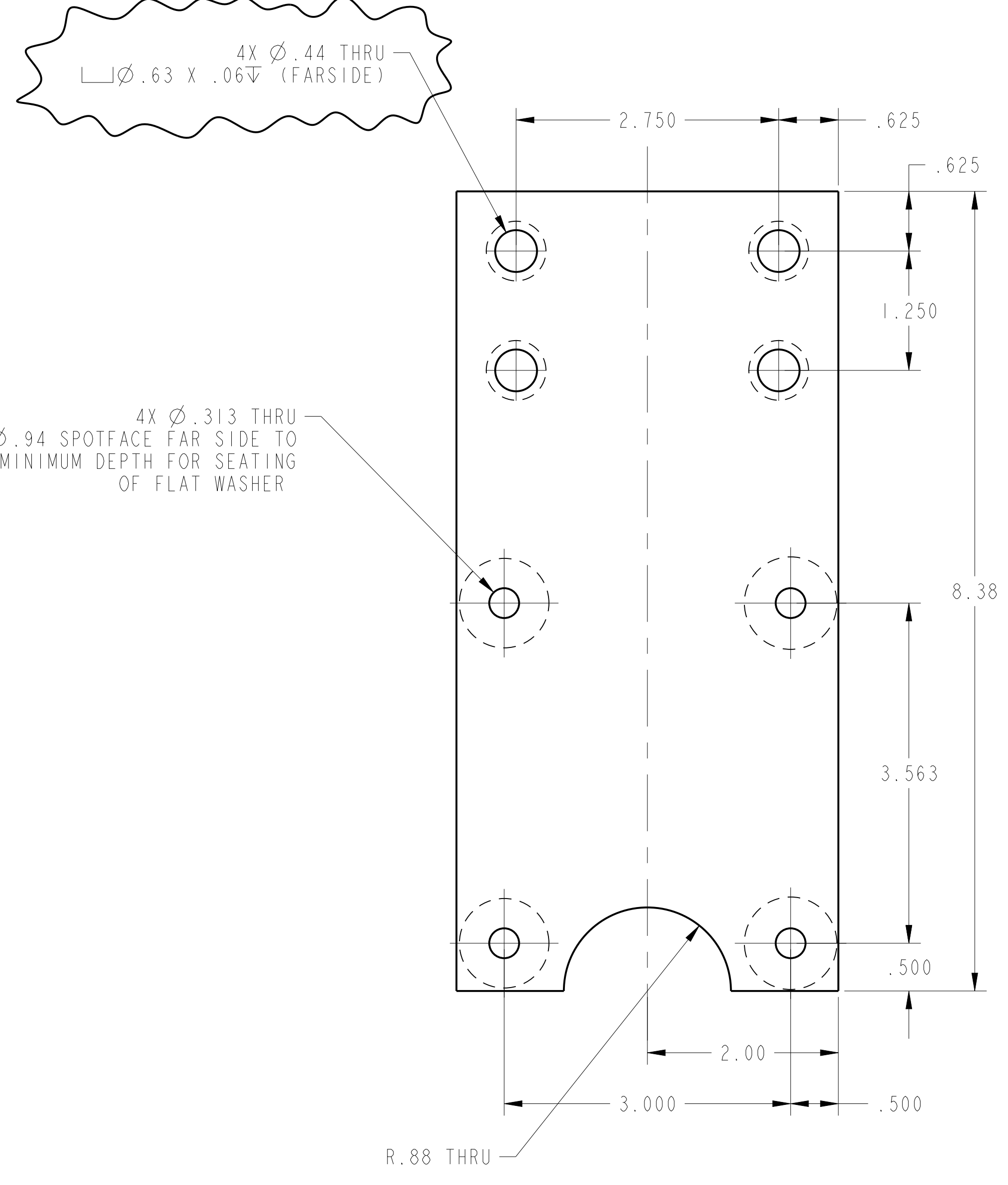
RELEASE LEVEL: Fabrication  
 DWG VERSION NO: 0.4

WELDING ENGINEER  
 APPVD: W. STYER DATE: 5/28/2014

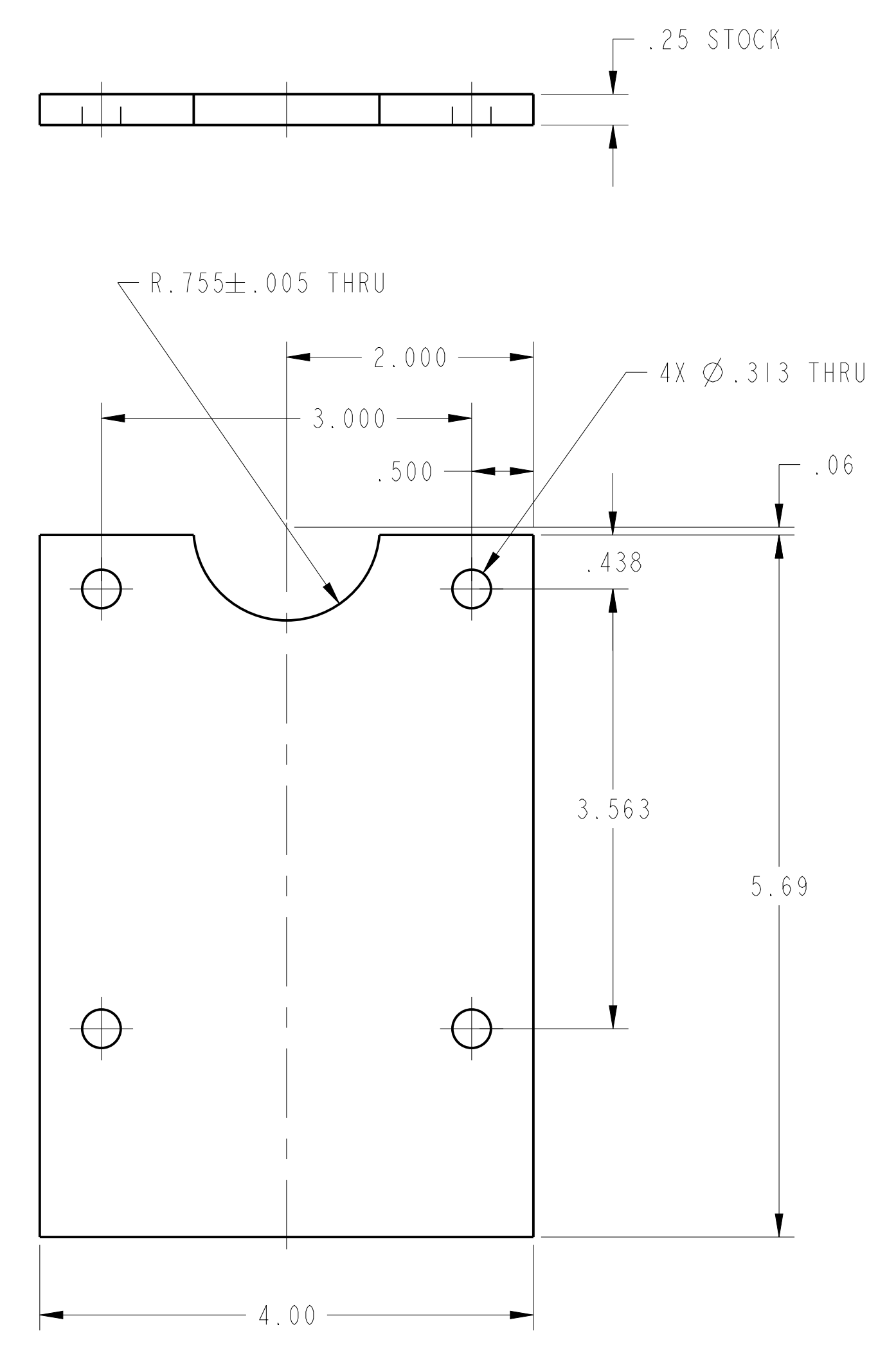
**RELEASED FOR FABRICATION / INSTALLATION**  
 PPPL Drafting

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 <b>NATIONAL SPHERICAL TORUS EXPERIMENT</b> GAS INJECTION SYSTEM MASSIVE GAS INJECTION SYSTEM LOWER MGJ SYSTEM DETAILS
DO NOT VERIFY INFORMATION BY SCALING DRAWING	TOLERANCES - NON-CUMULATIVE DECIMAL - INCH FRACTIONS X .100 0°-12° .0174 X .030 12°-72° .0174 X .010 72°-120° .0174 ANGULAR 20°-15 0.001 120° .010	DIV: MECH. ENG. DATE: 9/4/2014 ENG: W. BLANCHARD DSN: L. MORRIS W. BLANCHARD CHK: W. BLANCHARD
SCALE: 1/1	NEXT ASSEMBLY	APPROVER <b>E-EA3504</b>
SHEET 2 OF 3		REV 2

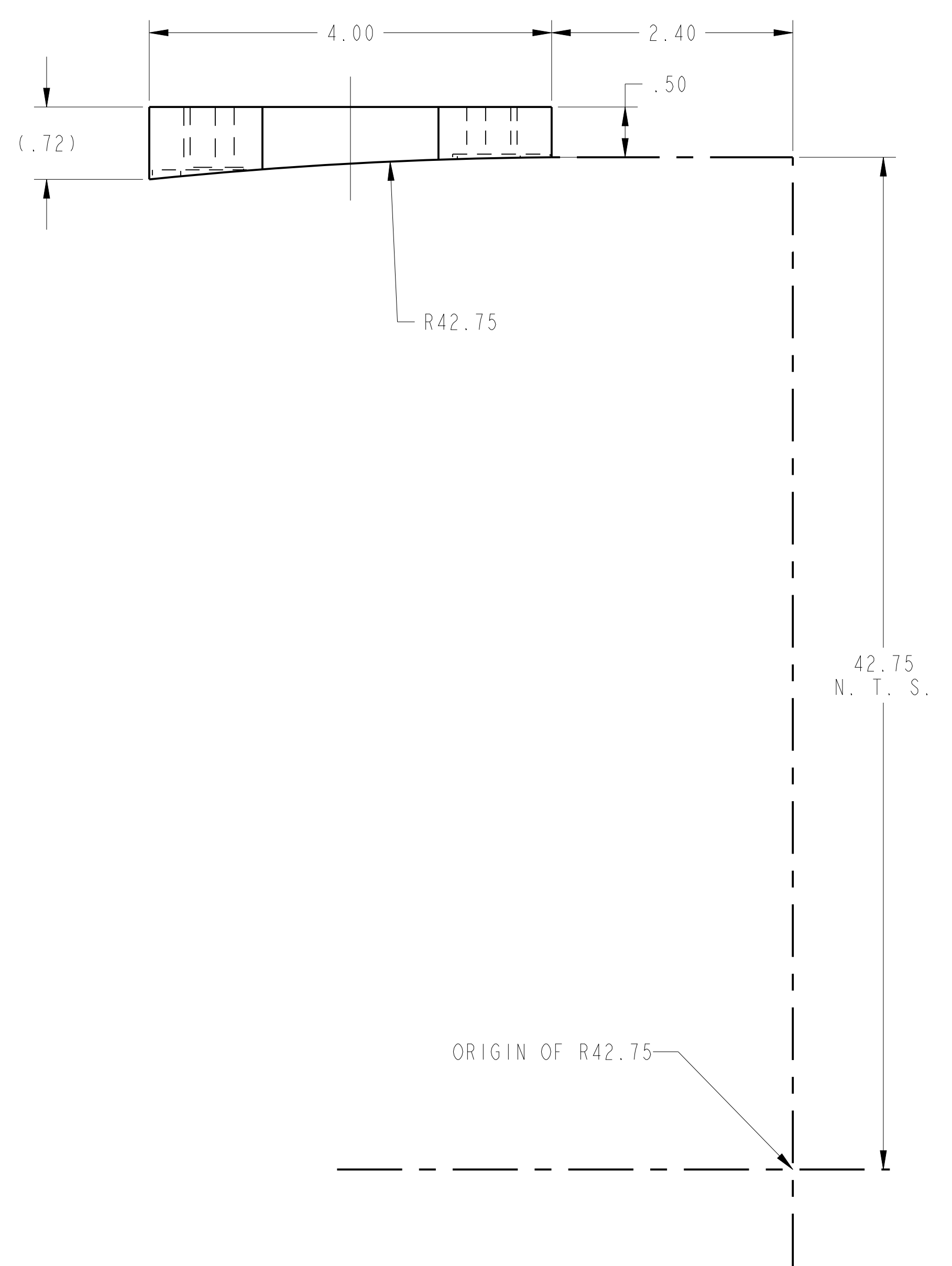
NO.	REVISION	BY	CH	SUP	APPROVED	DATE



4X Ø.313 THRU  
 AND Ø.94 SPOTFACE FAR SIDE TO  
 MINIMUM DEPTH FOR SEATING  
 OF FLAT WASHER



9 LOWER MGJ VALVE SPLIT CLAMP - TYPE "B"



8 LOWER MGJ VALVE SPLIT CLAMP - TYPE "A"

**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: 0.4

WELDING ENGINEER  
 APPVD: \_\_\_\_\_ DATE: \_\_\_\_\_

FOR NOTES AND BILL OF MATERIAL SEE SHEET 1

COMPUTER GENERATED DRAWING MANUAL CHANGES NOT PERMITTED Pro E	CENTRAL FILES: UNLESS OTHERWISE SPECIFIED	PRINCETON PLASMA PHYSICS LABORATORY PRINCETON UNIVERSITY <b>NATIONAL SPHERICAL TORUS EXPERIMENT</b>
DO NOT VERIFY INFORMATION BY SCALING DRAWING	BREAK SHARP EDGES .055/.020	GAS INJECTION SYSTEM MASSIVE GAS INJECTION SYSTEM LOWER MGJ SYSTEM DETAILS
SCALE: 1/1	TOLERANCES - NON-CUMULATIVE	DIV: MECH. ENG. DATE: 9/4/2014
NEXT ASSEMBLY	DECIMAL-INCH FRACTIONS	ENG: W. BLANCHARD DSN: L. MORRIS W. BLANCHARD CHK: W. BLANCHARD
	0.100 0.125 0.150 0.030 0.050 0.075 0.010 0.020 0.030	APPROVED <b>E-EA3504</b>
		CHK: W. BLANCHARD SHEET 3 OF 3 REV 2

INSTX-E-EA3504