



REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	Redraw	5/14/2008	narosenberg
A4, 2-A2, 2-B4	B	Items renumbered, solid rod diameter updated, drawing reformatted.	3/19/2020	CPO

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	FE-00001-01	1 3/4" x 1 3/4" x 1/8" 6061 Aluminum Tubing	2
2	FE-00001-02	1/4" 6061 Aluminum Plate	1
3	FE-00001-03	1" Schedule 40 Aluminum Tube	1
4	FE-00001-04	1 7/16" Dia. 6061 Aluminum Solid Rod	2
5	FE-00001-05	1 3/4" x 1 3/4" x 1/8" 6061 Aluminum Tubing	1

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DIMENSIONS ARE IN INCHES		DRAWN	
TOLERANCES:		CHECKED	
FRACTIONAL: ±1/16		ENG APPR.	
ANGULAR: MACH ±1° BEND ±1°		MFG APPR.	
TWO PLACE DECIMAL ±.01		Q.A.	
THREE PLACE DECIMAL ±.001		COMMENTS:	
INTERPRET GEOMETRIC TOLERANCING PER:			
MATERIAL			
FINISH			
NEXT ASSY	USED ON		
APPLICATION		DO NOT SCALE DRAWING	



TITLE:
Drivers Station Support

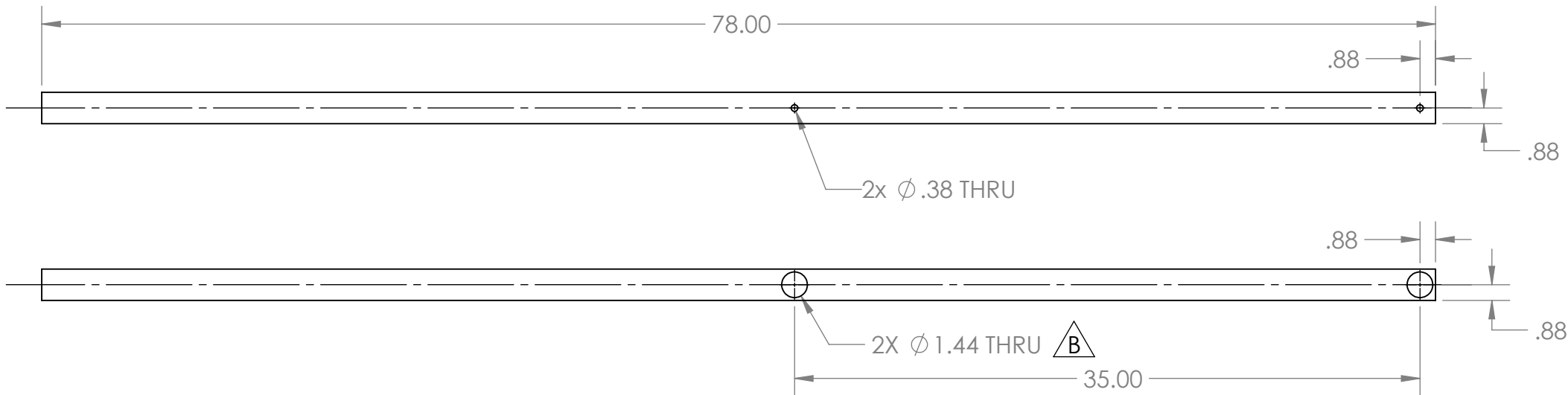
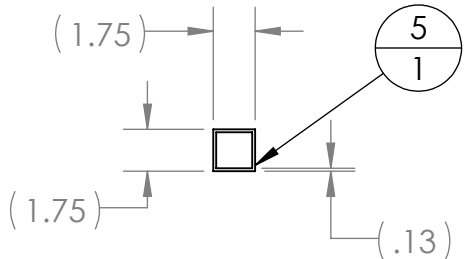
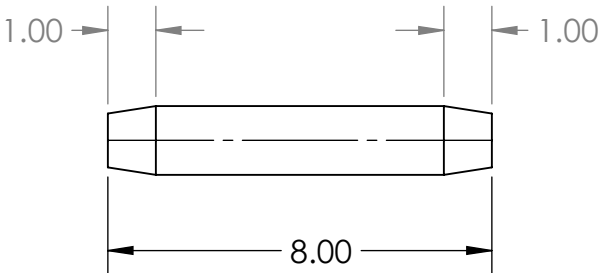
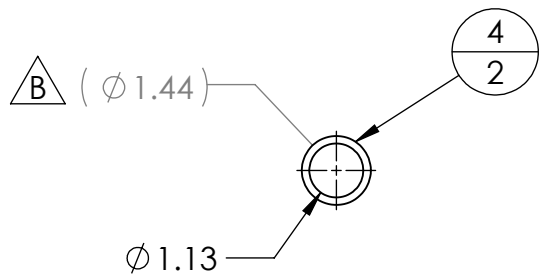
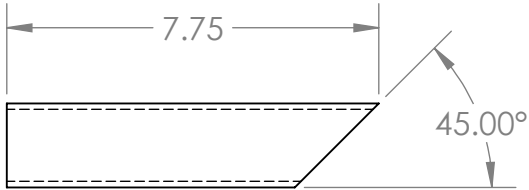
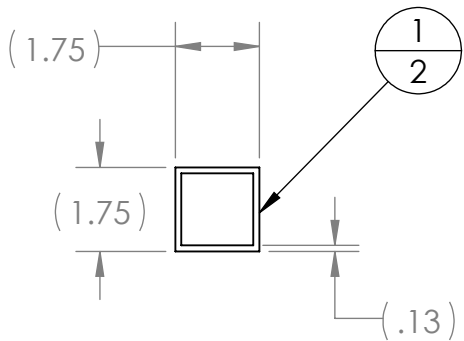
SIZE B	DWG. NO. FE-00001	REV B
SCALE: 1:9 WEIGHT:		SHEET 1 OF 3

4



3

2

1



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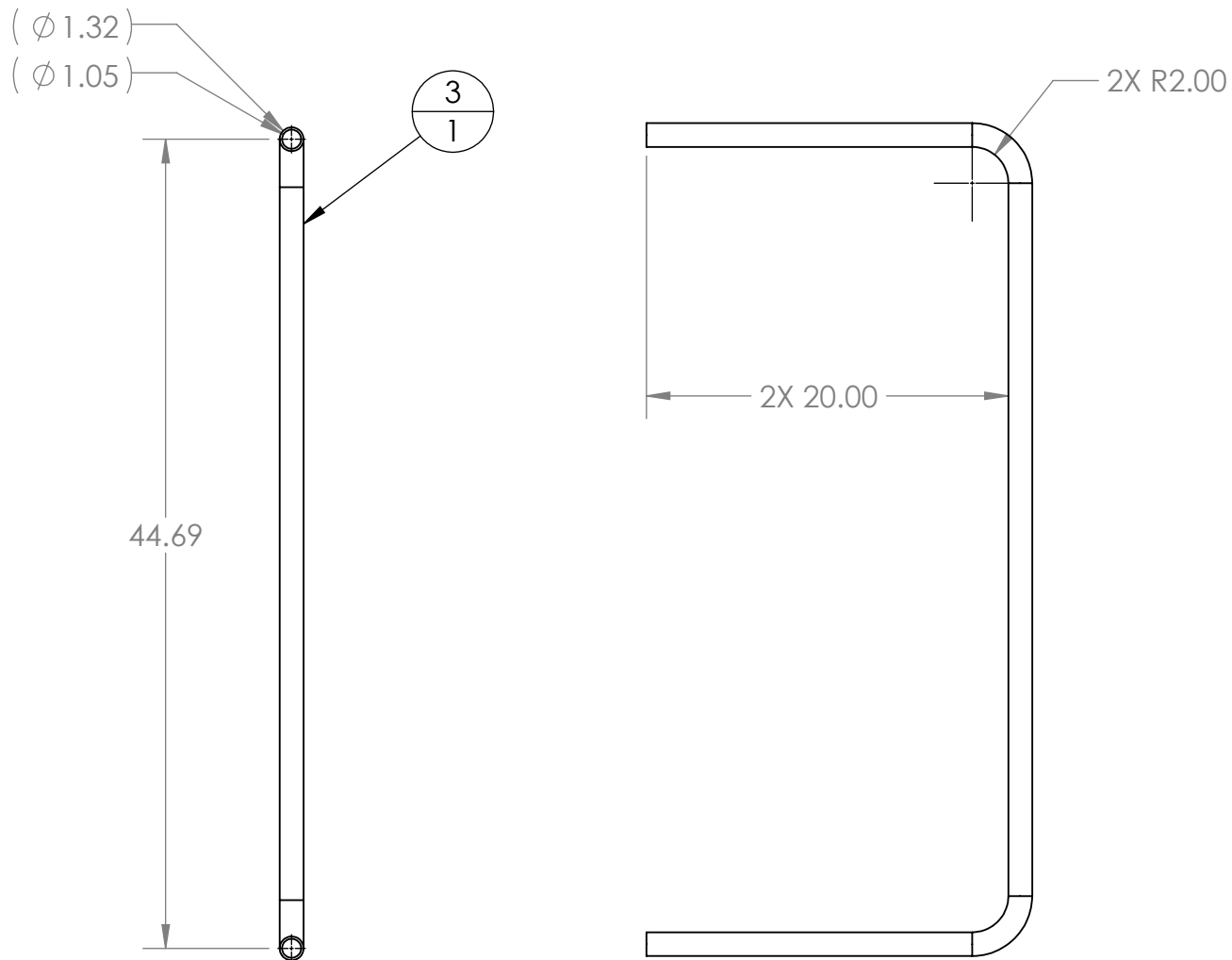
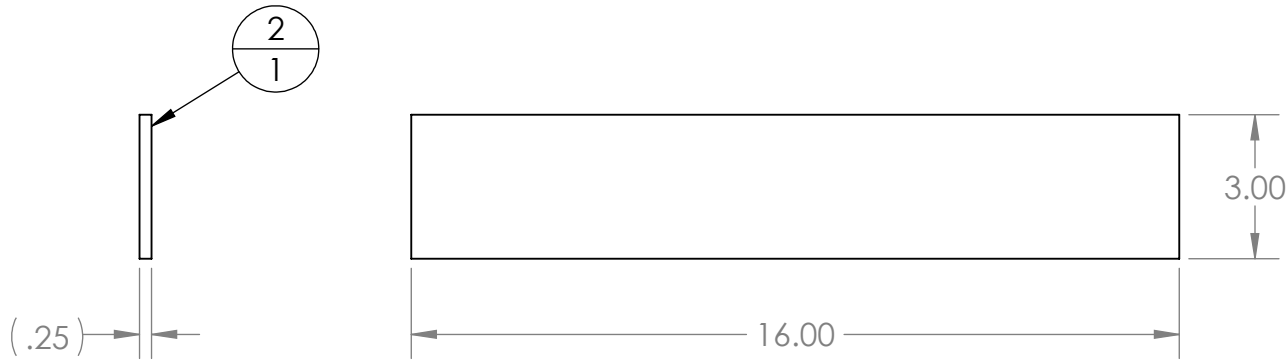
		UNLESS OTHERWISE SPECIFIED:		NAME	DATE	<div><div>FIRST ROBOTICS COMPETTITION</div><div>SOLIDWORKS Modeling Solutions Partner</div></div>		
		DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/16$ ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$ TWO PLACE DECIMAL $\pm .01$ THREE PLACE DECIMAL $\pm .001$	DRAWN			TITLE: Drivers Station Support		
			CHECKED					
			ENG APPR.					
			MFG APPR.					
			Q.A.					
		INTERPRET GEOMETRIC TOLERANCING PER:	COMMENTS:			SIZE DWG. NO. REV B FE-00001 B		
		MATERIAL						
		FINISH						
NEXT ASSY	USED ON							
APPLICATION		DO NOT SCALE DRAWING				SCALE: 1:2 WEIGHT: SHEET 2 OF 3		

4



3

2

1



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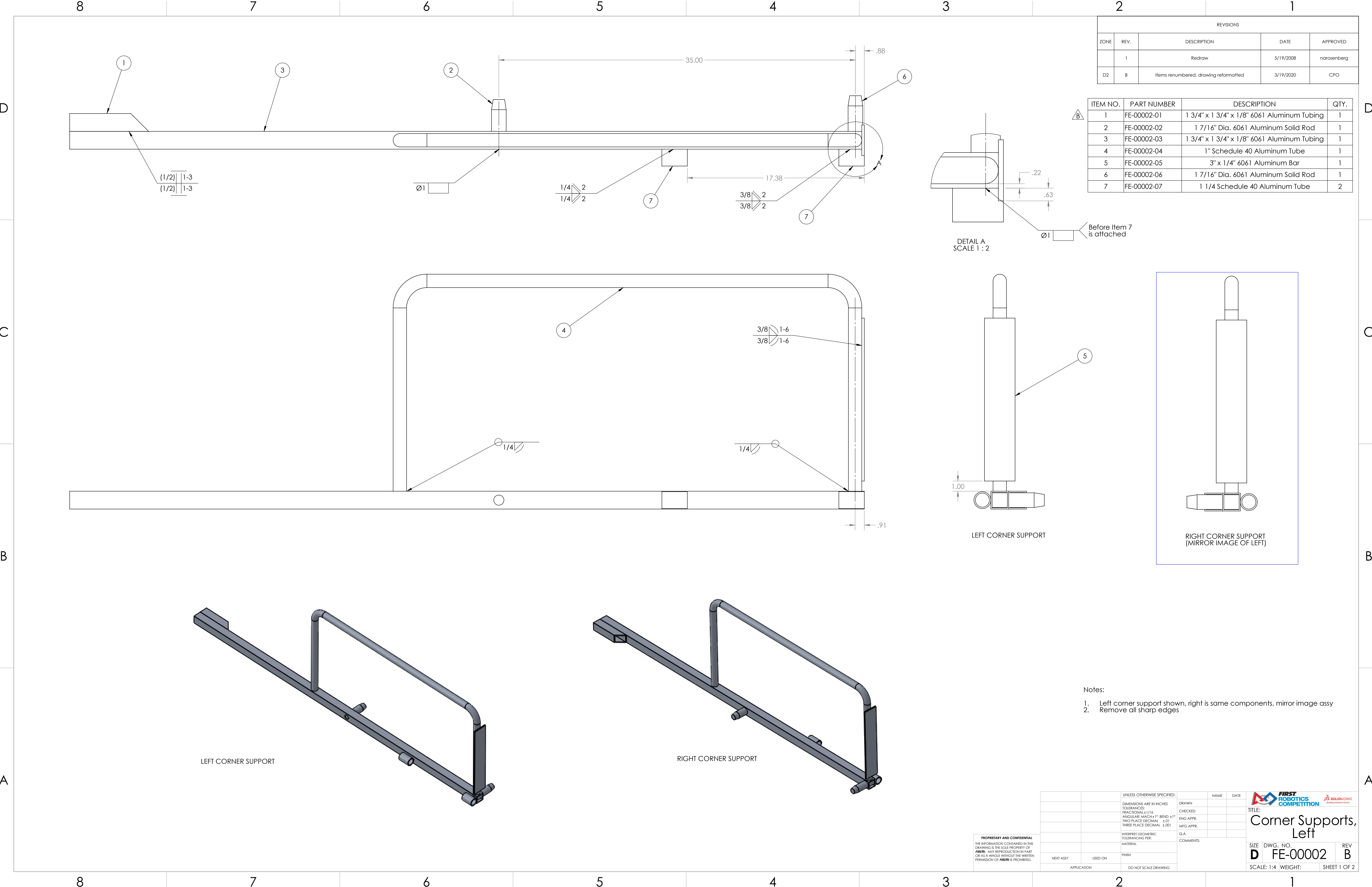
		UNLESS OTHERWISE SPECIFIED:		NAME	DATE	 		
		DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.001	DRAWN			TITLE: <h1>Drivers Station Support</h1>		
			CHECKED					
			ENG APPR.					
			MFG APPR.					
			Q.A.					
		INTERPRET GEOMETRIC TOLERANCING PER:	COMMENTS:			SIZE DWG. NO. REV B FE-00001 B		
		MATERIAL						
		FINISH						
NEXT ASSY	USED ON							
APPLICATION		DO NOT SCALE DRAWING					WEIGHT:	SHEET 3 OF 3

4

3

2

1



REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	1	Redraw	5/19/2008	narosenberg
D2	B	Items renumbered, drawing reformatted	3/19/2020	CPO

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	FE-00002-01	1 3/4" x 1 3/4" x 1/8" 6061 Aluminum Tubing	1
2	FE-00002-02	1 7/16" Dia. 6061 Aluminum Solid Rod	1
3	FE-00002-03	1 3/4" x 1 3/4" x 1/8" 6061 Aluminum Tubing	1
4	FE-00002-04	1" Schedule 40 Aluminum Tube	1
5	FE-00002-05	3" x 1/4" 6061 Aluminum Bar	1
6	FE-00002-06	1 7/16" Dia. 6061 Aluminum Solid Rod	1
7	FE-00002-07	1 1/4 Schedule 40 Aluminum Tube	2

Before Item 7
is attached

DETAIL A
SCALE 1 : 2

LEFT CORNER SUPPORT

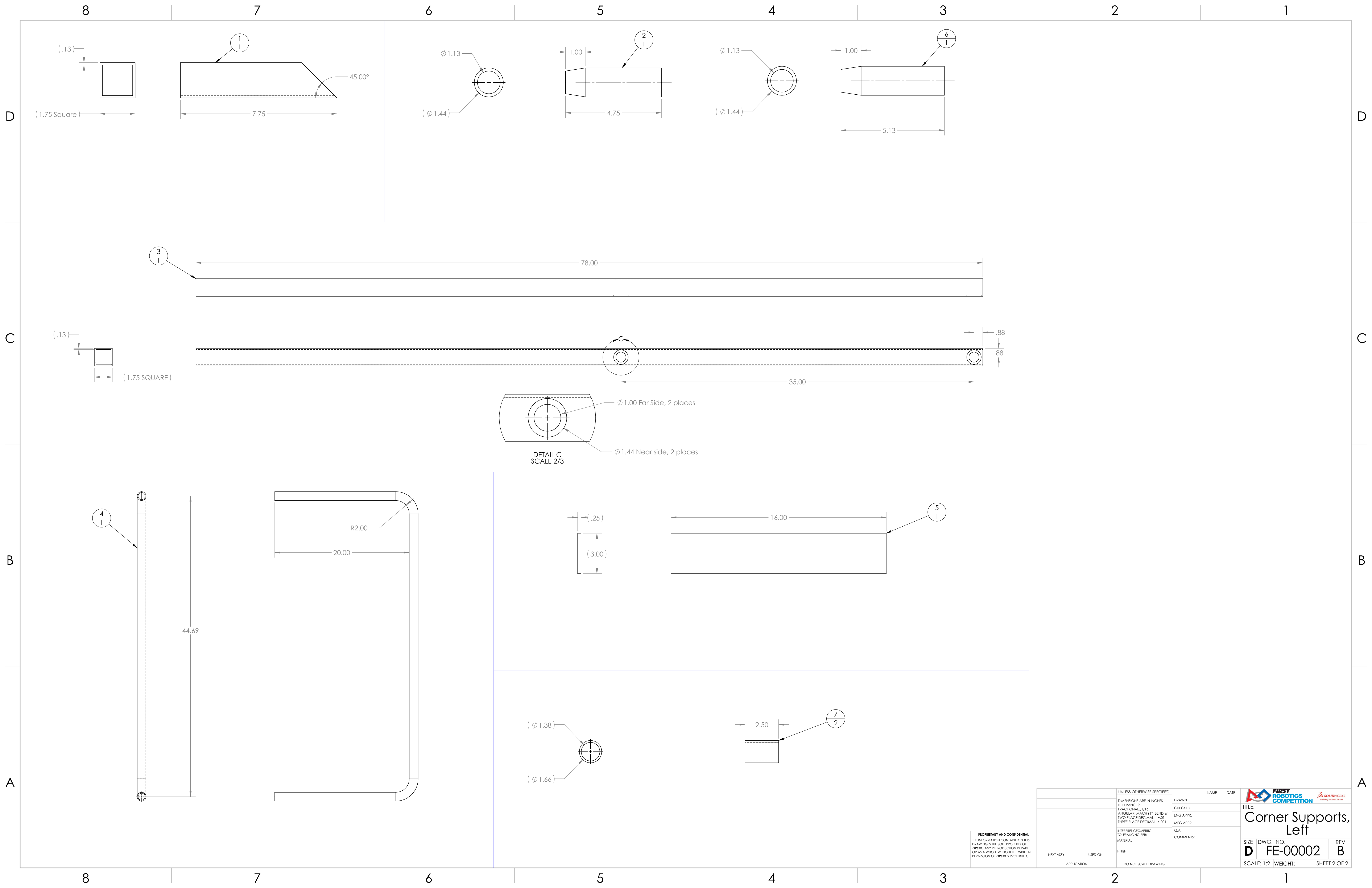
RIGHT CORNER SUPPORT
(MIRROR IMAGE OF LEFT)

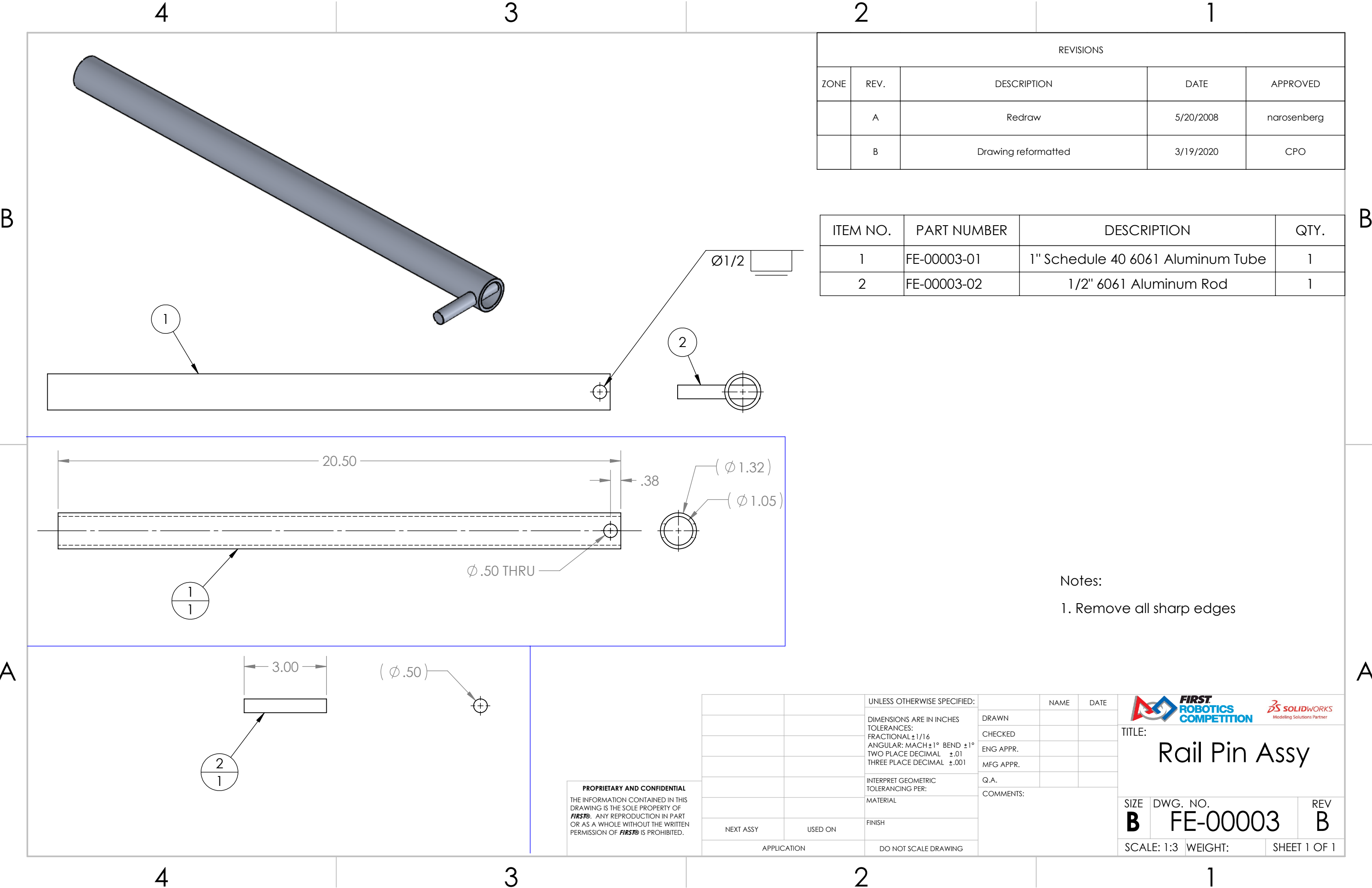
- Notes:
- Left corner support shown, right is same components, mirror image assy
 - Remove all sharp edges

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DIMENSIONS ARE IN INCHES	DRAWN		
FRACTIONAL: ±1/16	CHECKED		
TOLERANCES:	ENG APPR.		
ANGULAR: MACH ±1° BEND ±1°	MFG APPR.		
TWO PLACE DECIMAL ±.01			
THREE PLACE DECIMAL ±.001			
INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.		
MATERIAL	COMMENTS:		
FINISH			
NEXT ASSY	USED ON		
APPLICATION	DO NOT SCALE DRAWING		

TITLE:		SIZE	DWG. NO.	REV
Corner Supports, Left		D	FE-00002	B
SCALE: 1:4		WEIGHT:	SHEET 1 OF 2	







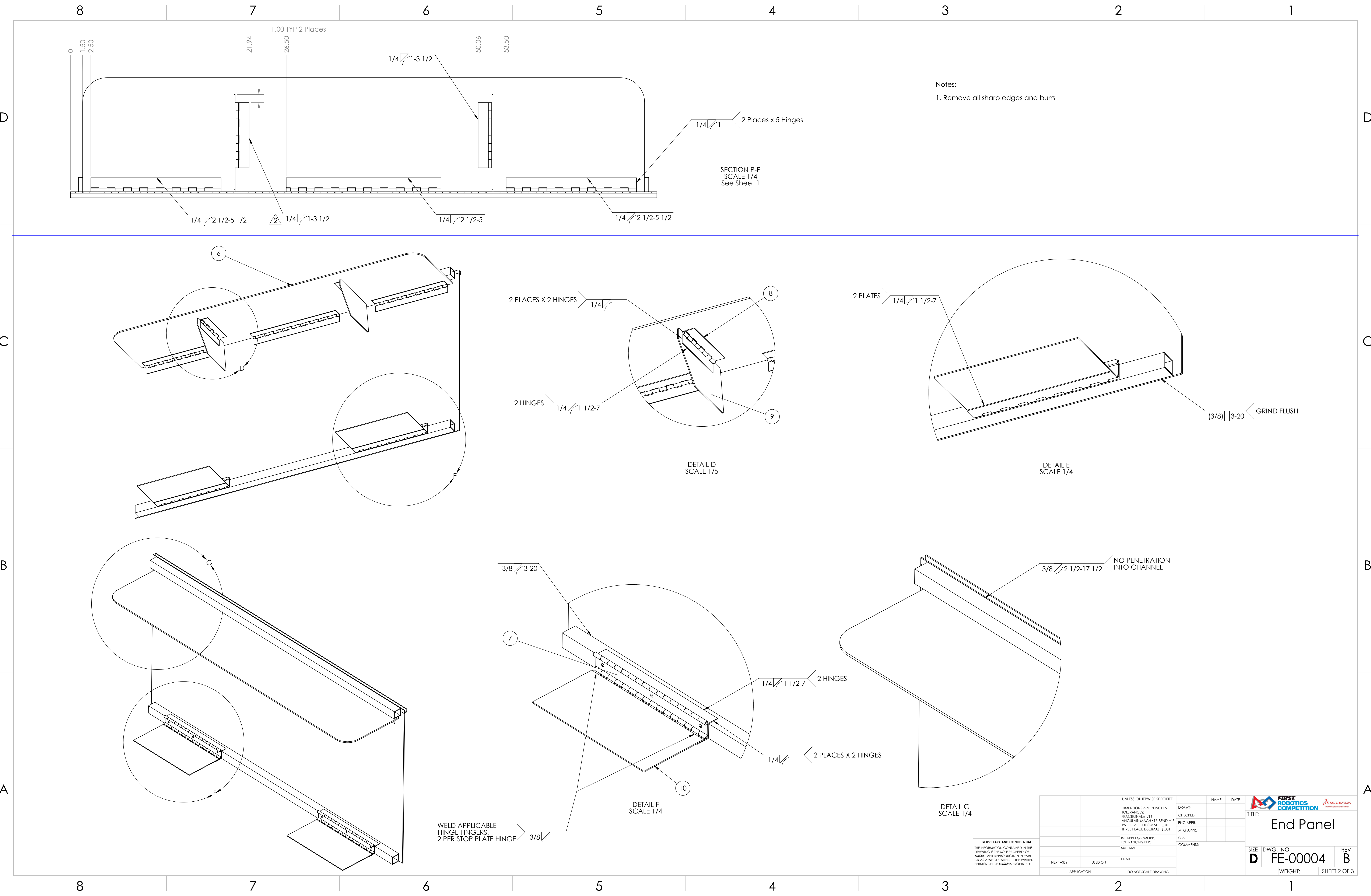
REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	Redraw	5/20/2008	narosenberg
	B	Drawing reformatted	3/19/2020	CPO

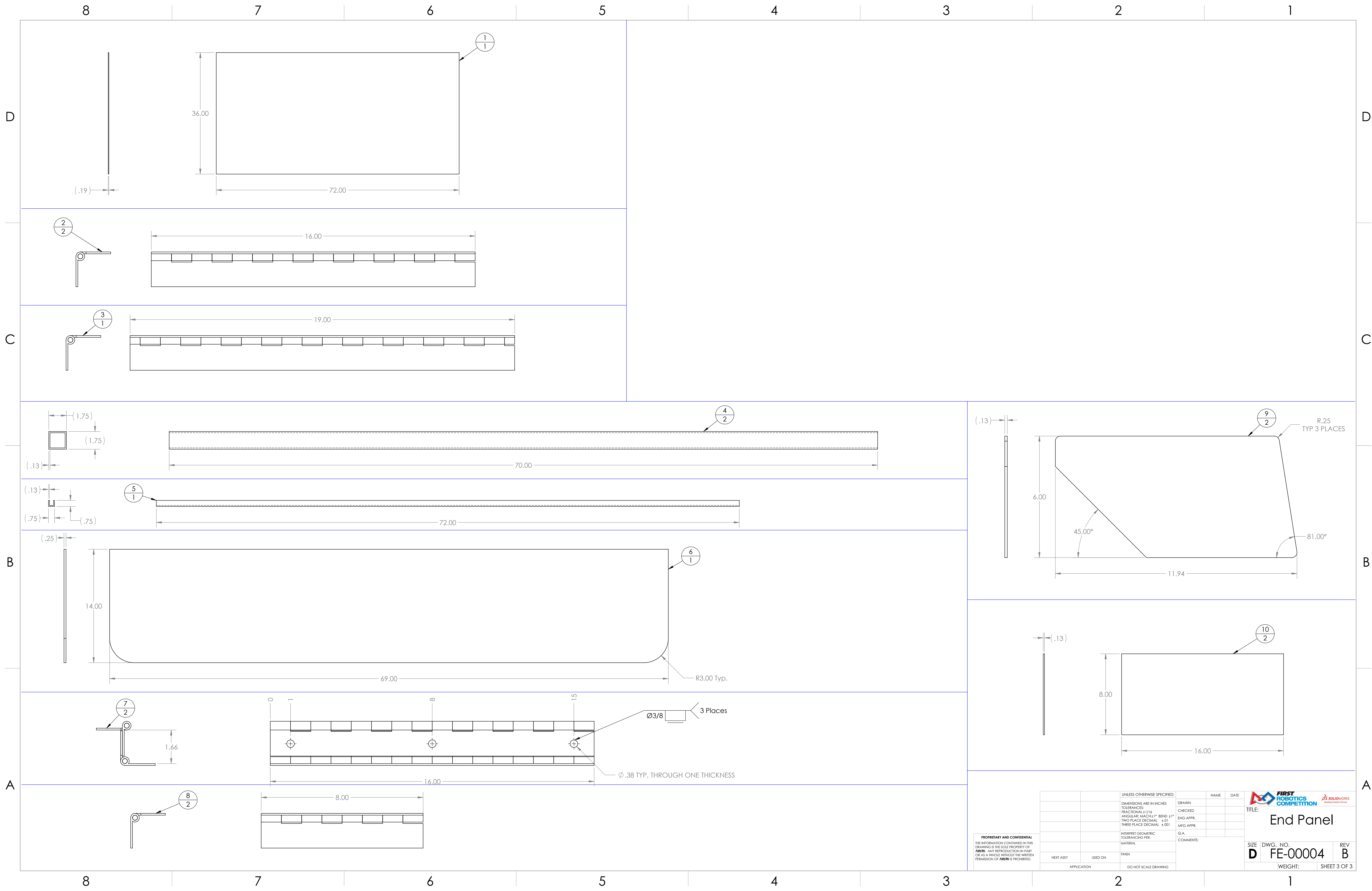
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	FE-00003-01	1" Schedule 40 6061 Aluminum Tube	1
2	FE-00003-02	1/2" 6061 Aluminum Rod	1

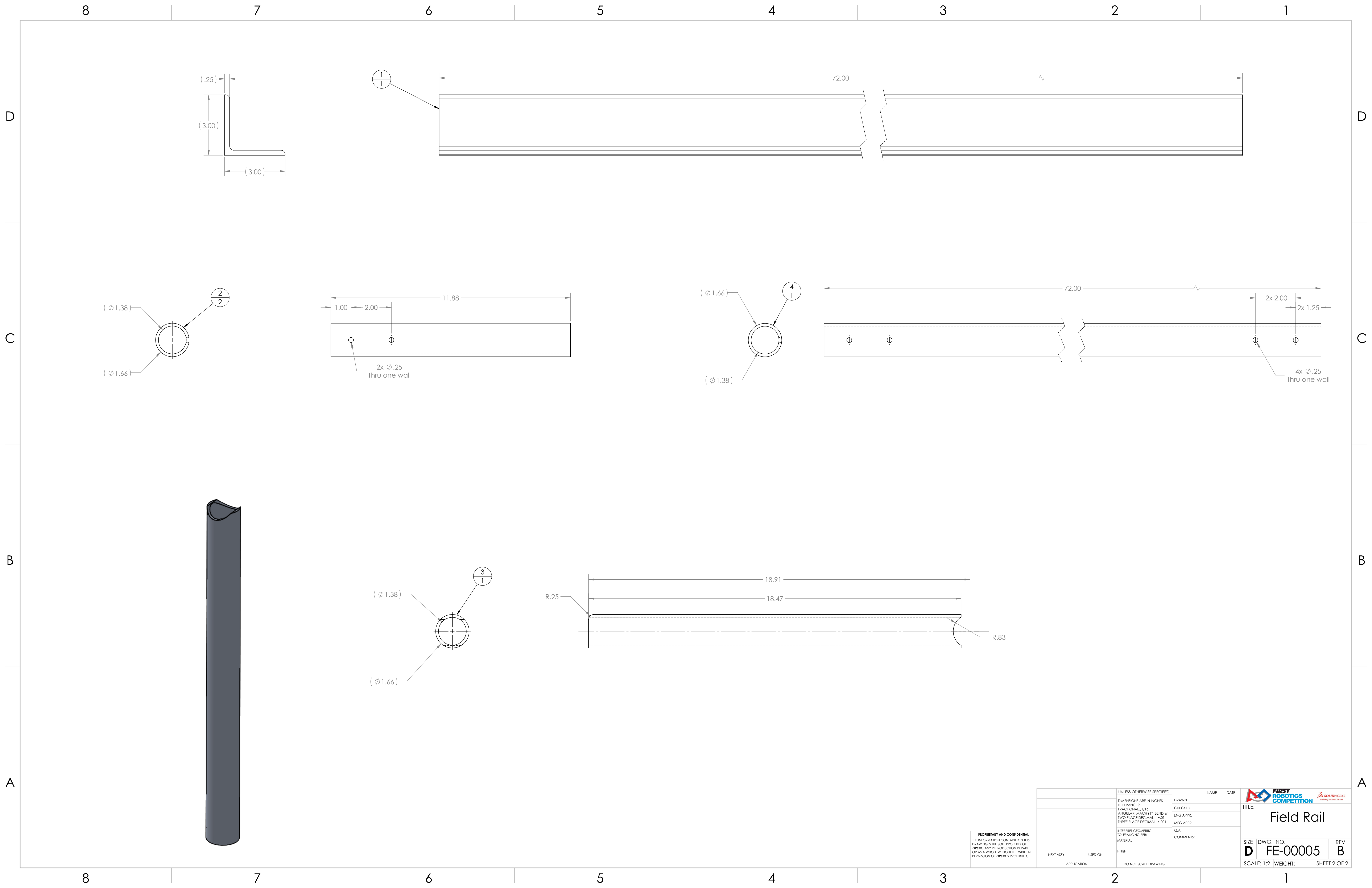
Notes:
1. Remove all sharp edges

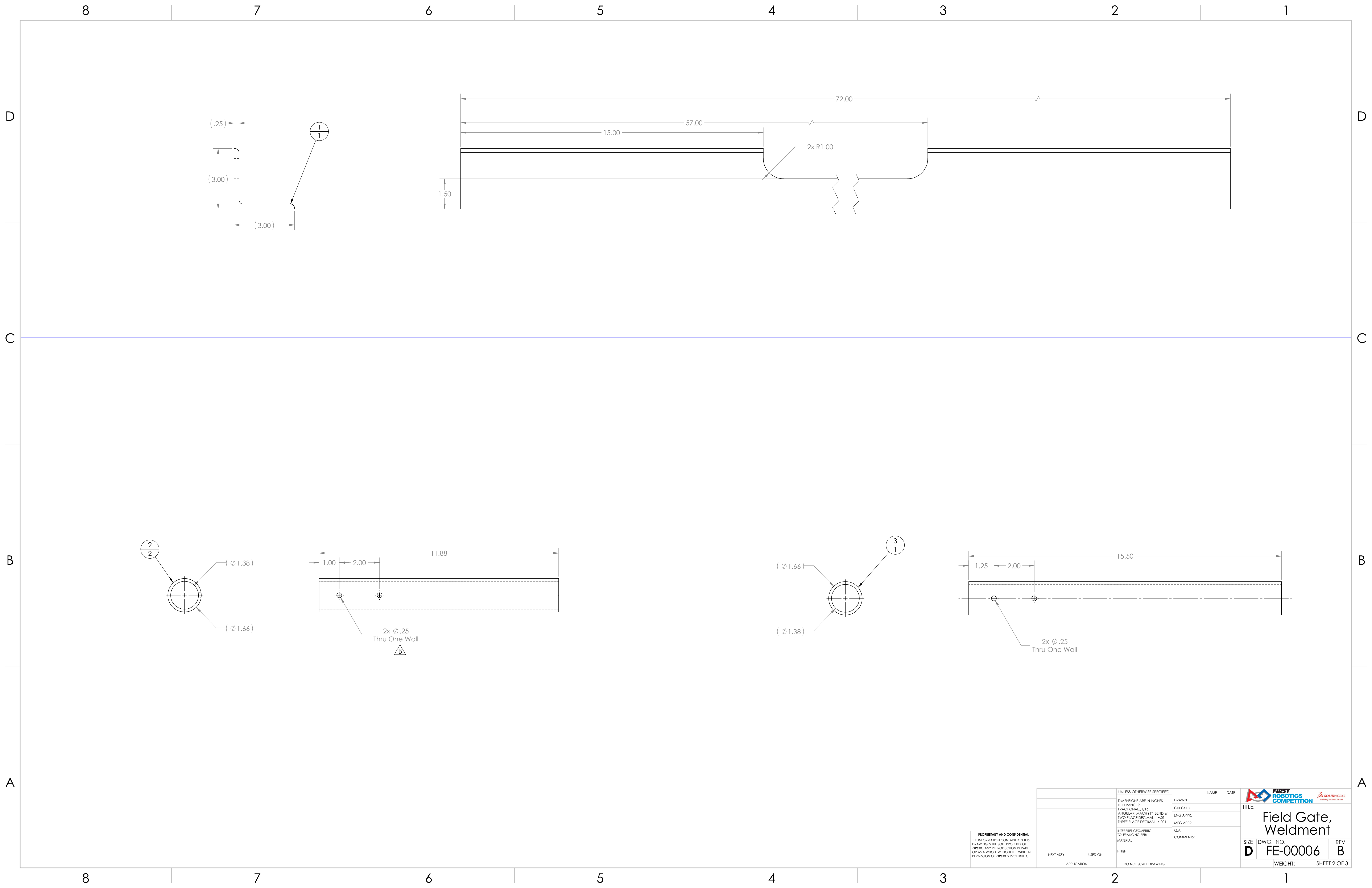
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		UNLESS OTHERWISE SPECIFIED:		NAME	DATE	<div></div>		
		DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/16$ ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$ TWO PLACE DECIMAL $\pm .01$ THREE PLACE DECIMAL $\pm .001$	DRAWN			TITLE: <h1>Rail Pin Assy</h1>		
			CHECKED					
			ENG APPR.					
			MFG APPR.					
			Q.A.					
		INTERPRET GEOMETRIC TOLERANCING PER:	COMMENTS:			SIZE DWG. NO. REV B FE-00003 B		
		MATERIAL						
		FINISH						
NEXT ASSY	USED ON							
APPLICATION		DO NOT SCALE DRAWING				SCALE: 1:3 WEIGHT: SHEET 1 OF 1		







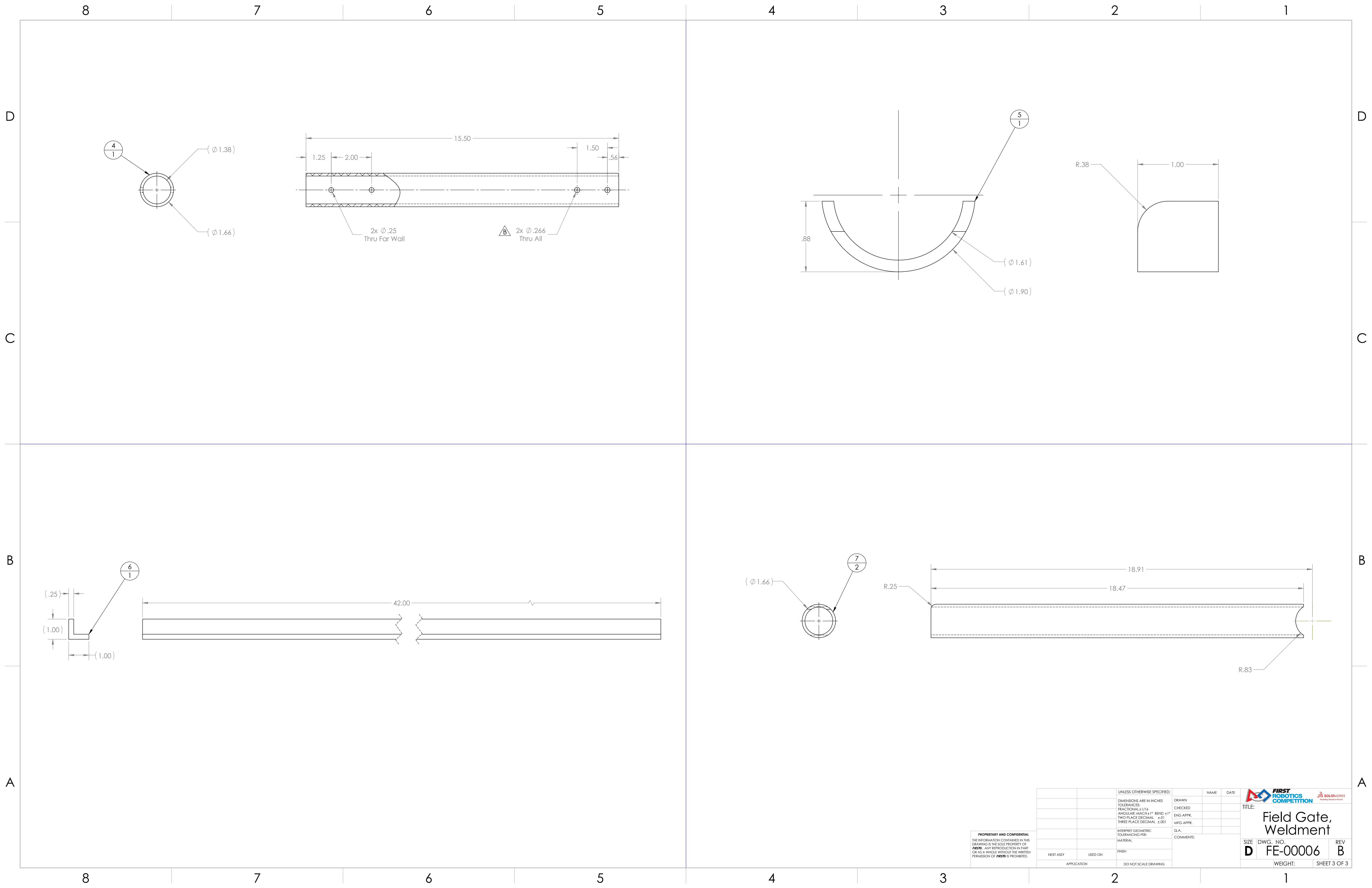




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		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
		DIMENSIONS ARE IN INCHES	DRAWN		
		TOLERANCES:	CHECKED		
		FRACTIONAL: $\pm 1/16$	ENG APPR.		
		ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$	MFG APPR.		
		TWO PLACE DECIMAL $\pm .01$			
		THREE PLACE DECIMAL $\pm .001$			
		INTERPRET GEOMETRIC TOLERANCING PER:			
		MATERIAL			
		FINISH			
NEXT ASSY	USED ON				
APPLICATION		DO NOT SCALE DRAWING			

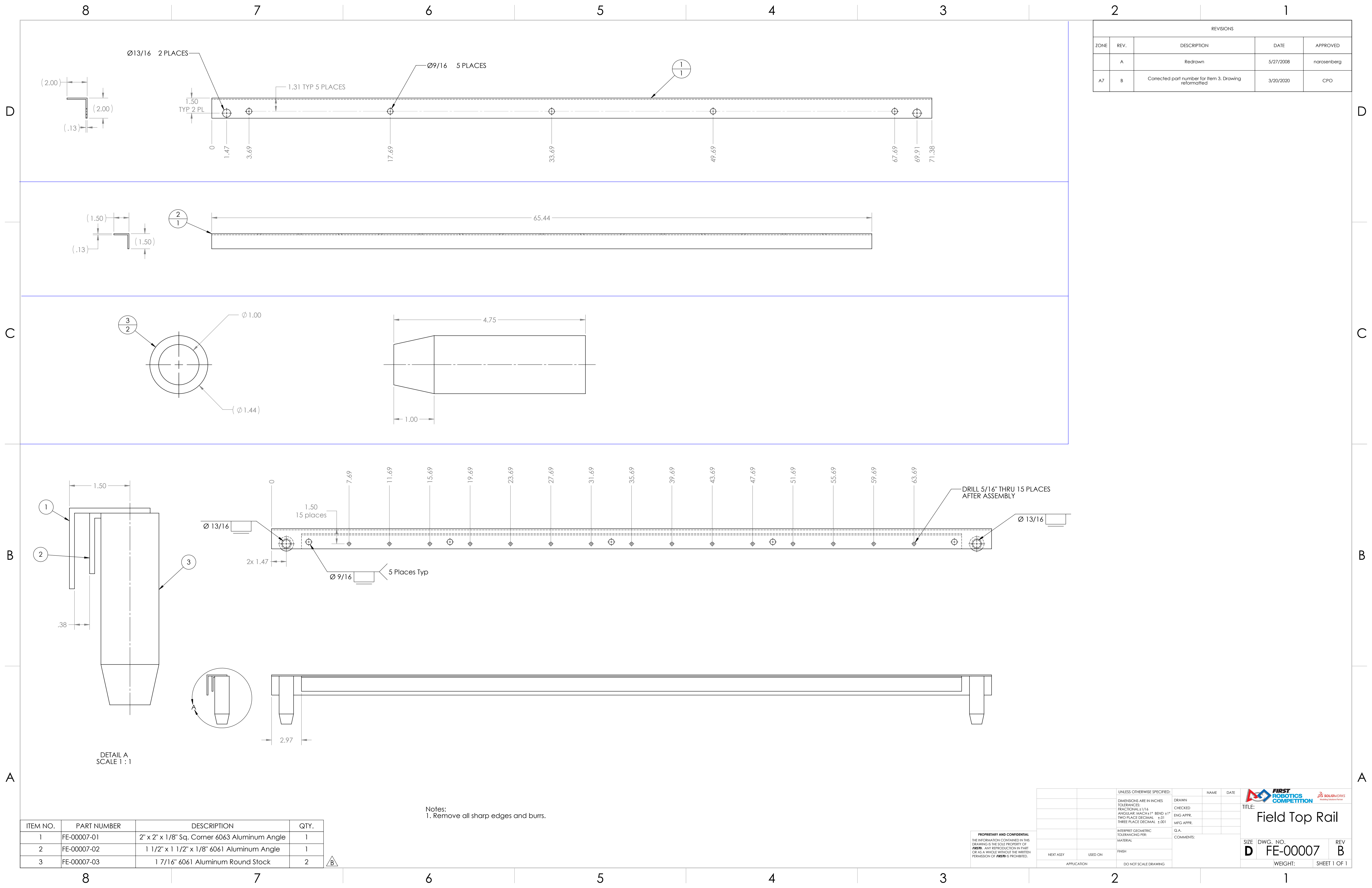
			
TITLE: Field Gate, Weldment			
SIZE	DWG. NO.	REV	
D	FE-00006	B	
WEIGHT:		SHEET 2 OF 3	



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		DIMENSIONS ARE IN INCHES	DRAWN		
		TOLERANCES:	CHECKED		
		FRACTIONAL: $\pm 1/16$	ENG APPR.		
		ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$	MFG APPR.		
		TWO PLACE DECIMAL $\pm .01$	Q.A.		
		THREE PLACE DECIMAL $\pm .001$	COMMENTS:		
		INTERPRET GEOMETRIC TOLERANCING PER:			
		MATERIAL			
		FINISH			
NEXT ASSY	USED ON				
APPLICATION		DO NOT SCALE DRAWING			

 FIRST ROBOTICS COMPETITION		 SOLIDWORKS Modeling Solutions Partner
TITLE:		
Field Gate, Weldment		
SIZE	DWG. NO.	REV
D	FE-00006	B
WEIGHT:		SHEET 3 OF 3



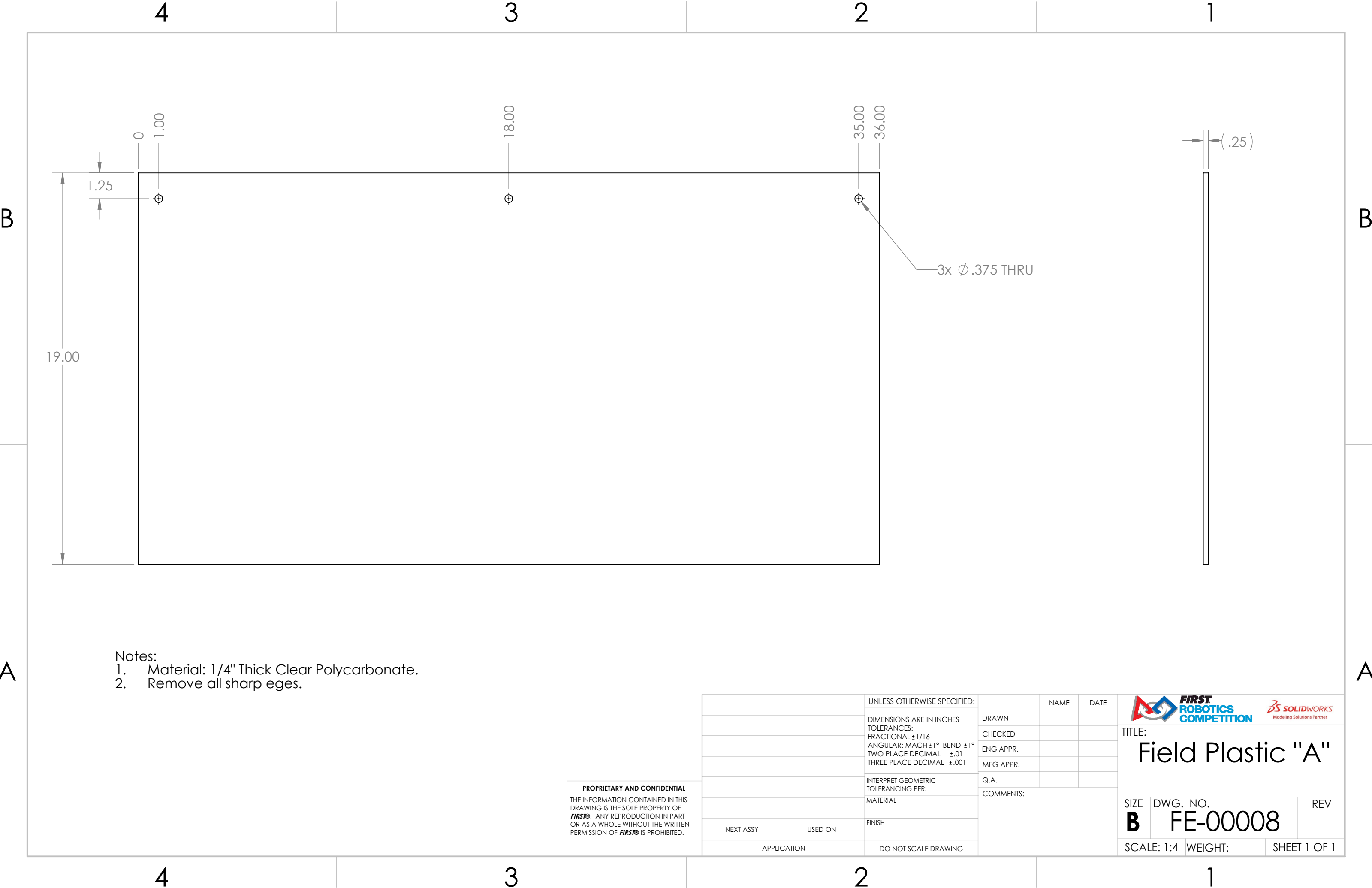
REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	Redrawn	5/27/2008	narosenberg
A7	B	Corrected part number for item 3. Drawing reformatted	3/20/2020	CPO

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	FE-00007-01	2" x 2" x 1/8" Sq. Corner 6063 Aluminum Angle	1
2	FE-00007-02	1 1/2" x 1 1/2" x 1/8" 6061 Aluminum Angle	1
3	FE-00007-03	1 7/16" 6061 Aluminum Round Stock	2

Notes:
1. Remove all sharp edges and burrs.



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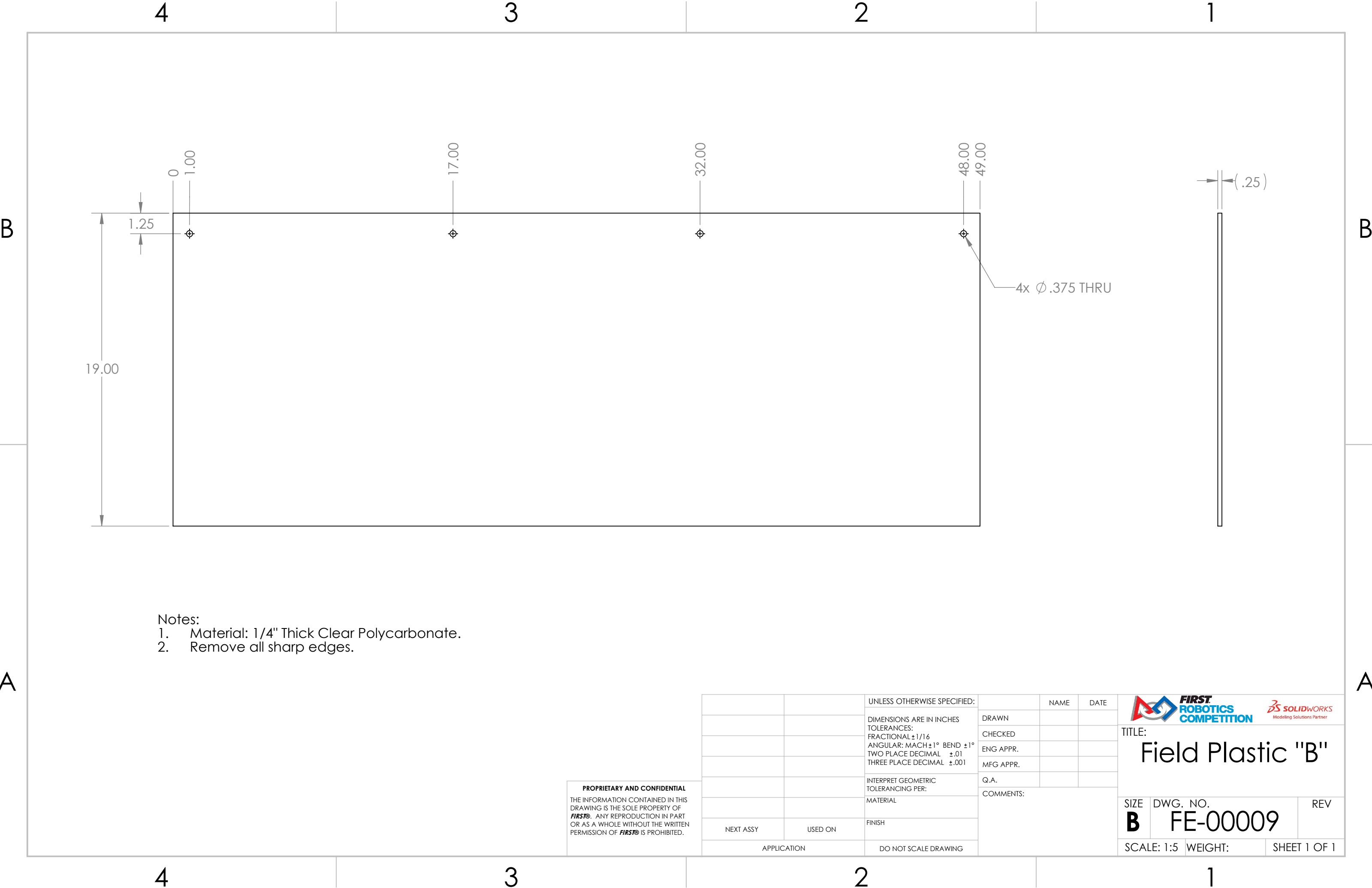
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DIMENSIONS ARE IN INCHES							
TOLERANCES:							
FRACTIONAL: ±1/16							
ANGULAR: MACH ±1° BEND ±1°							
TWO PLACE DECIMAL: ±.01							
THREE PLACE DECIMAL: ±.001							
INTERPRET GEOMETRIC TOLERANCING PER:							
MATERIAL							
FINISH							
DO NOT SCALE DRAWING							
APPLICATION							
USED ON							
NEXT ASSY							
DATE							
NAME							
TITLE:							
Field Top Rail							
SIZE DWG. NO.							
D FE-00007							
REV							
B							
WEIGHT:							
SHEET 1 OF 1							



- Notes:
- 1. Material: 1/4" Thick Clear Polycarbonate.
 - 2. Remove all sharp edges.



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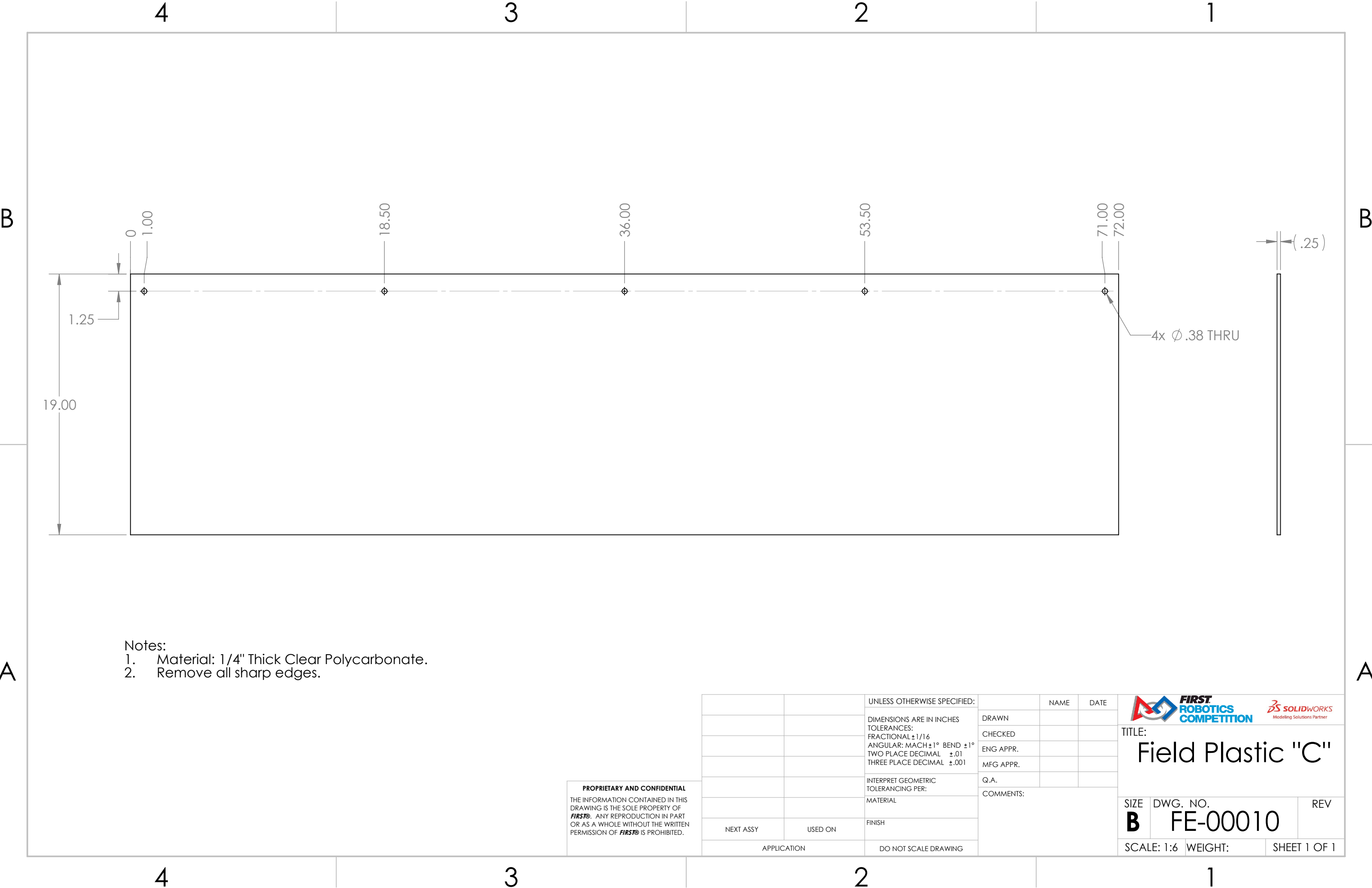
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			CHECKED					
			ENG APPR.					
			MFG APPR.					
		INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.			SIZE DWG. NO. REV B FE-00008		
		MATERIAL	COMMENTS:					
		FINISH						
NEXT ASSY	USED ON							
APPLICATION		DO NOT SCALE DRAWING				SCALE: 1:4 WEIGHT: SHEET 1 OF 1		



- Notes:
- 1. Material: 1/4" Thick Clear Polycarbonate.
 - 2. Remove all sharp edges.

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		DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.001	DRAWN			TITLE: Field Plastic "B"		
			CHECKED					
			ENG APPR.					
			MFG APPR.					
		INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.			SIZE DWG. NO. REV B FE-00009		
		MATERIAL	COMMENTS:					
NEXT ASSY	USED ON	FINISH						
APPLICATION		DO NOT SCALE DRAWING				SCALE: 1:5	WEIGHT:	SHEET 1 OF 1

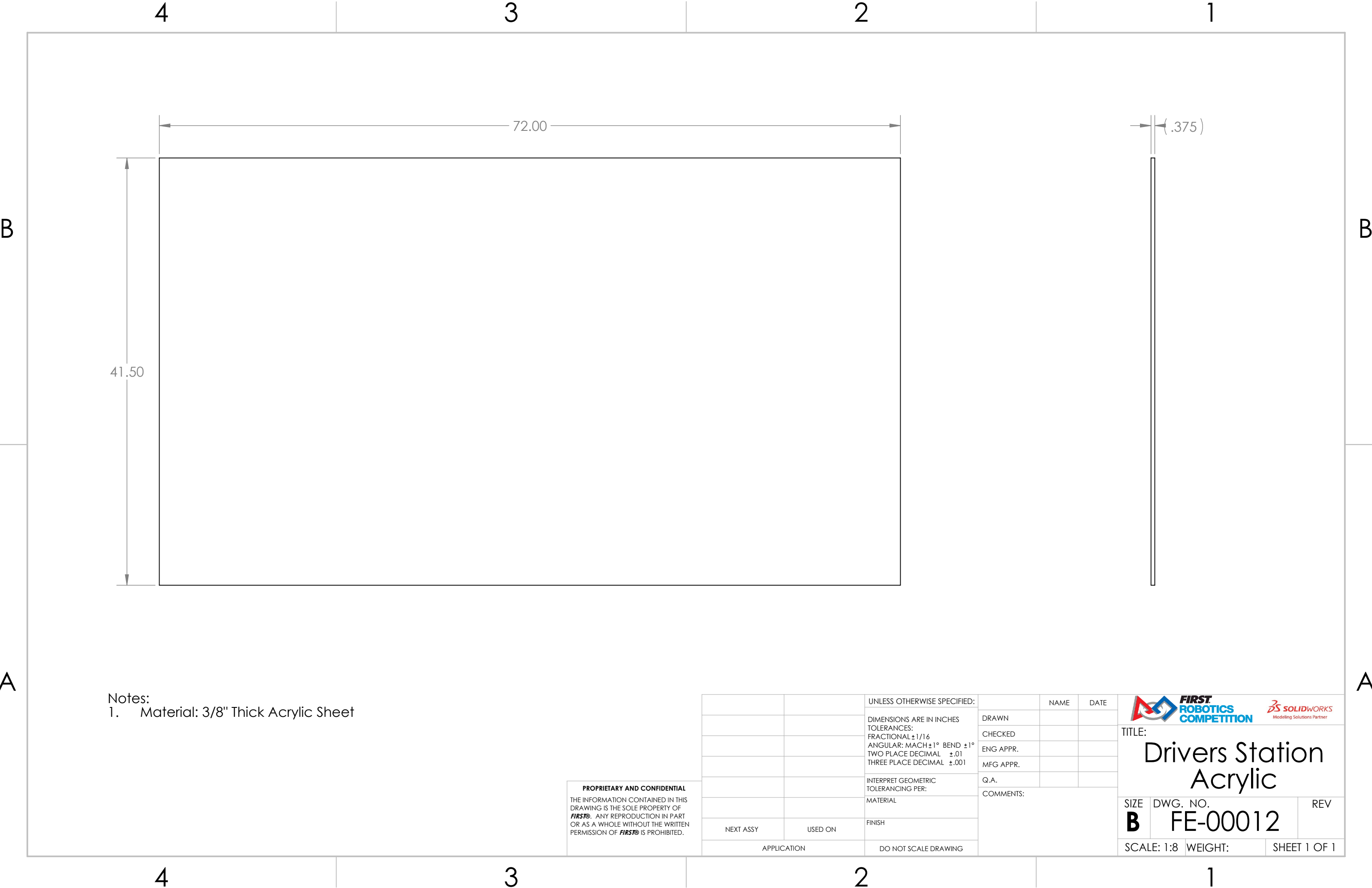


Notes:

- 1. Material: 1/4" Thick Clear Polycarbonate.
- 2. Remove all sharp edges.



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			CHECKED		
			ENG APPR.		
			MFG APPR.		
		INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.		
		MATERIAL	COMMENTS:		
		FINISH			
NEXT ASSY	USED ON				
APPLICATION		DO NOT SCALE DRAWING			
			TITLE: Field Plastic "C"		
SIZE B	DWG. NO. FE-00010	REV			
SCALE: 1:6	WEIGHT:	SHEET 1 OF 1			

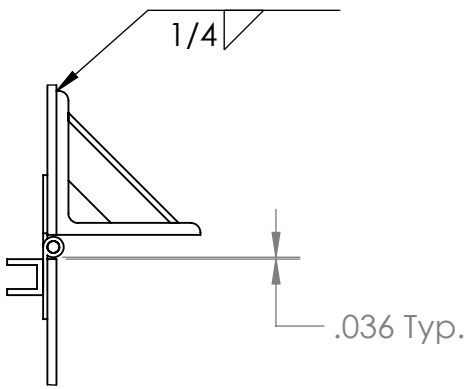


Notes:
1. Material: 3/8" Thick Acrylic Sheet

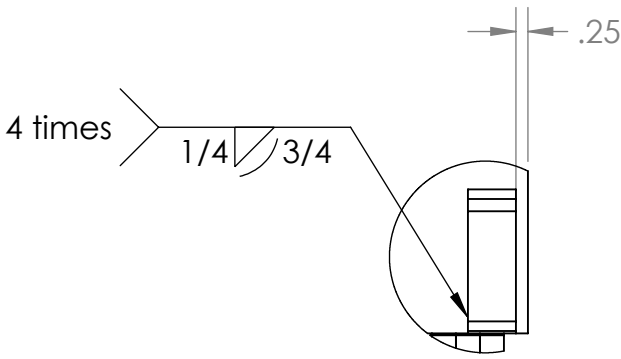
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		DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/16$ ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$ TWO PLACE DECIMAL $\pm .01$ THREE PLACE DECIMAL $\pm .001$	DRAWN			TITLE: Drivers Station Acrylic		
			CHECKED					
			ENG APPR.					
			MFG APPR.					
		INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.			SIZE DWG. NO. REV B FE-00012		
		MATERIAL	COMMENTS:					
NEXT ASSY	USED ON	FINISH						
APPLICATION		DO NOT SCALE DRAWING						
						SCALE: 1:8	WEIGHT:	SHEET 1 OF 1

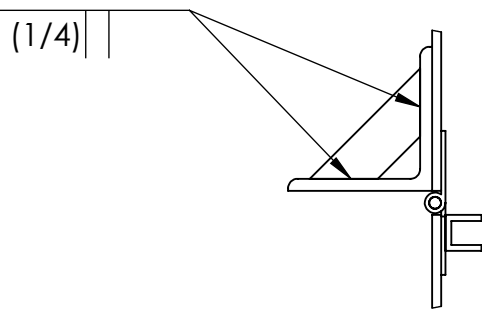
REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	Redrawn	5/27/2008	narosenberg
	B	Drawing Reformatted	3/20/2020	CPO



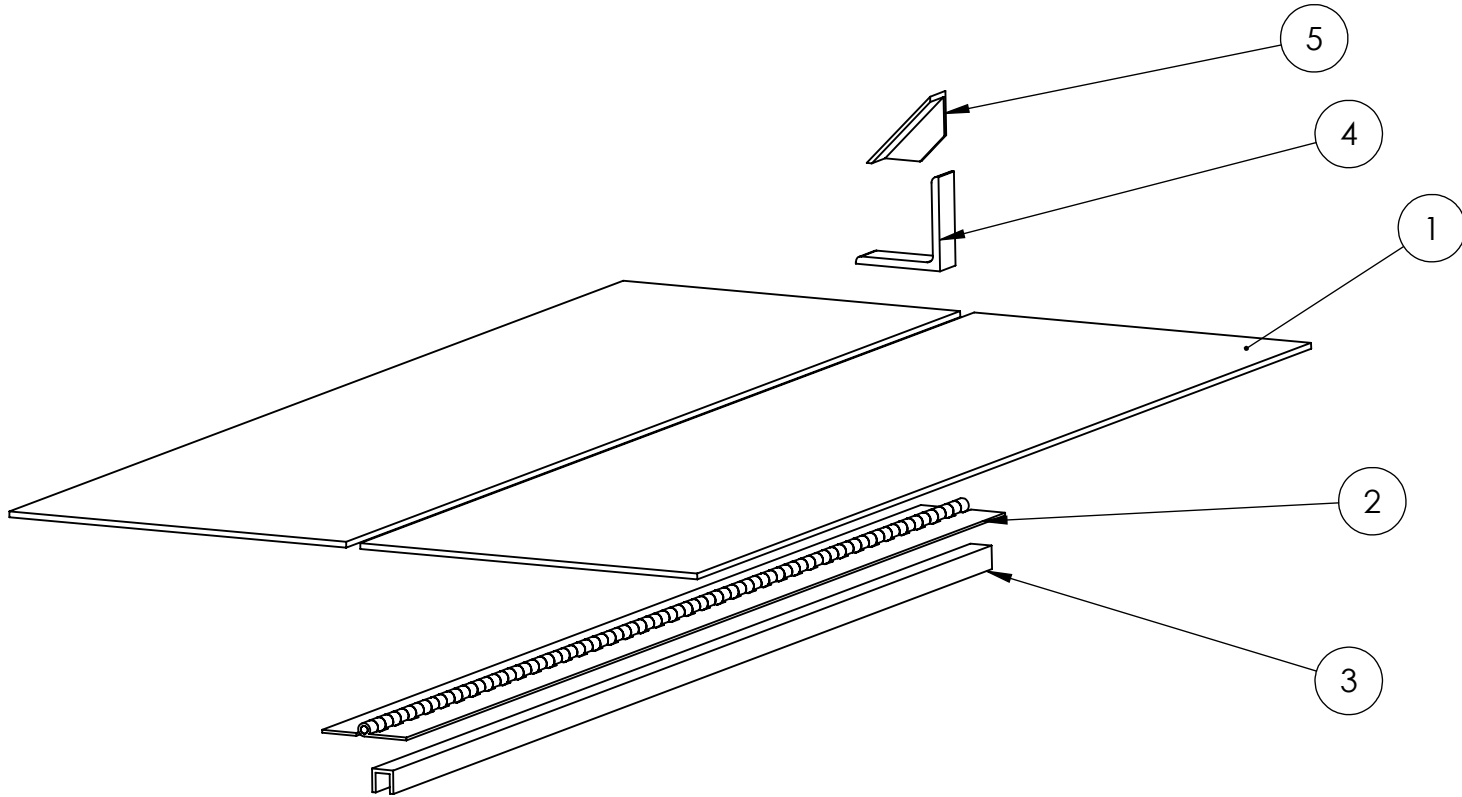
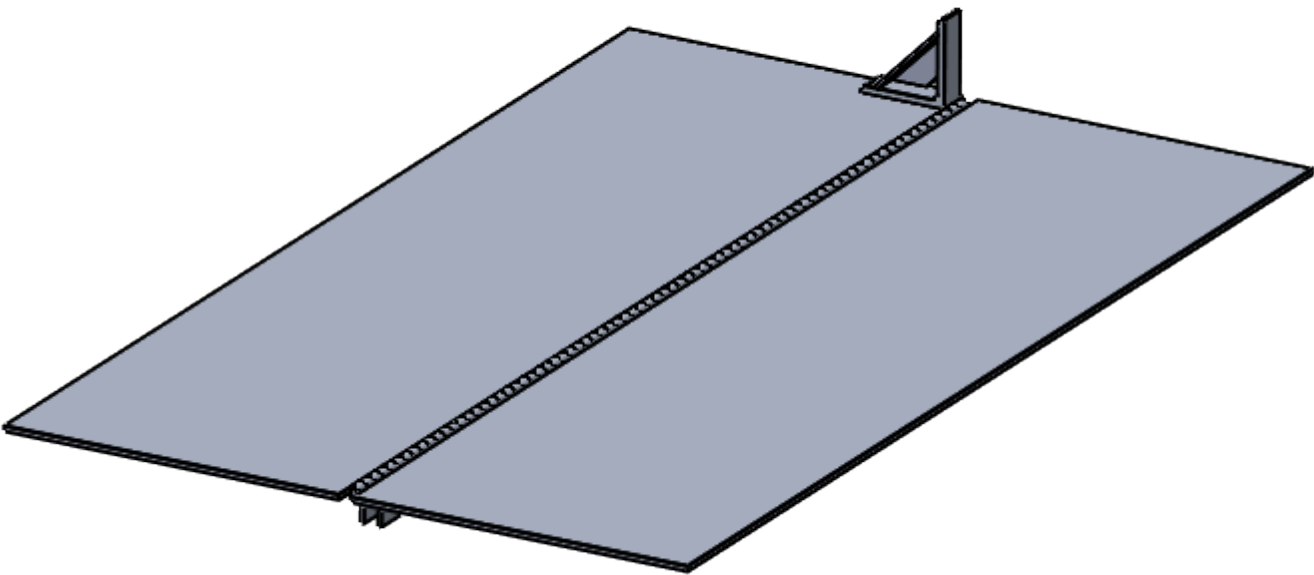
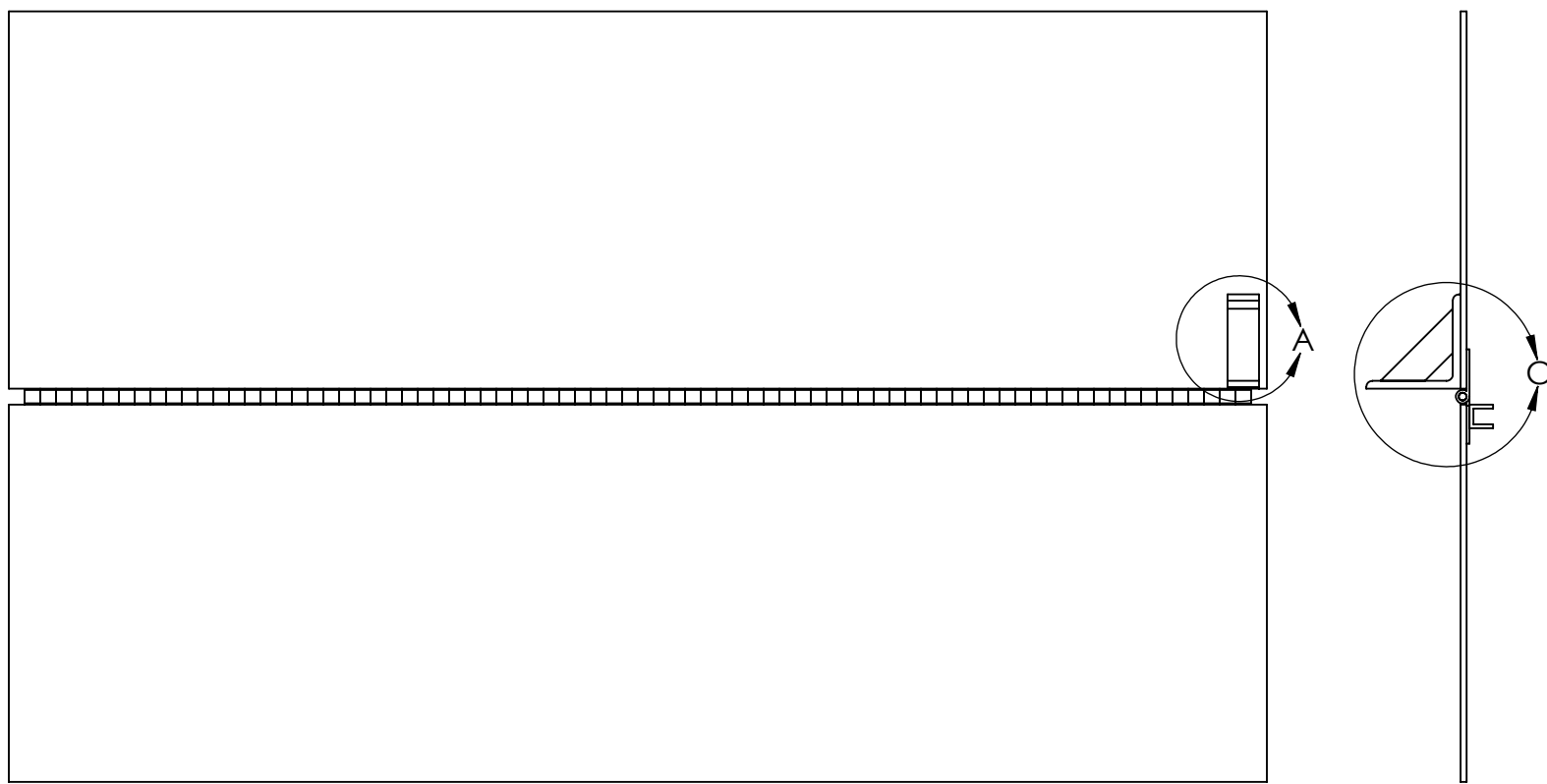
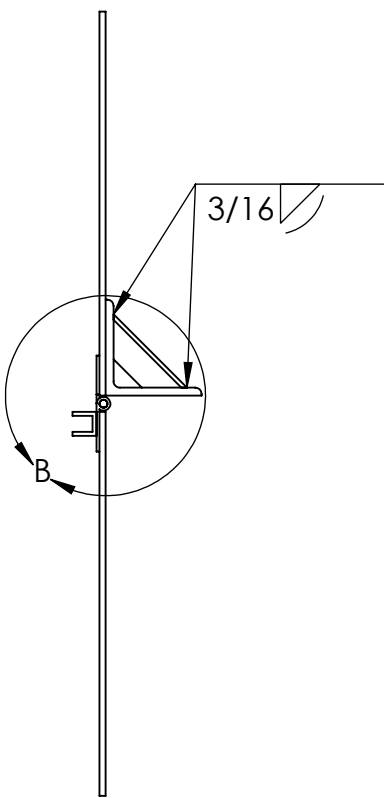
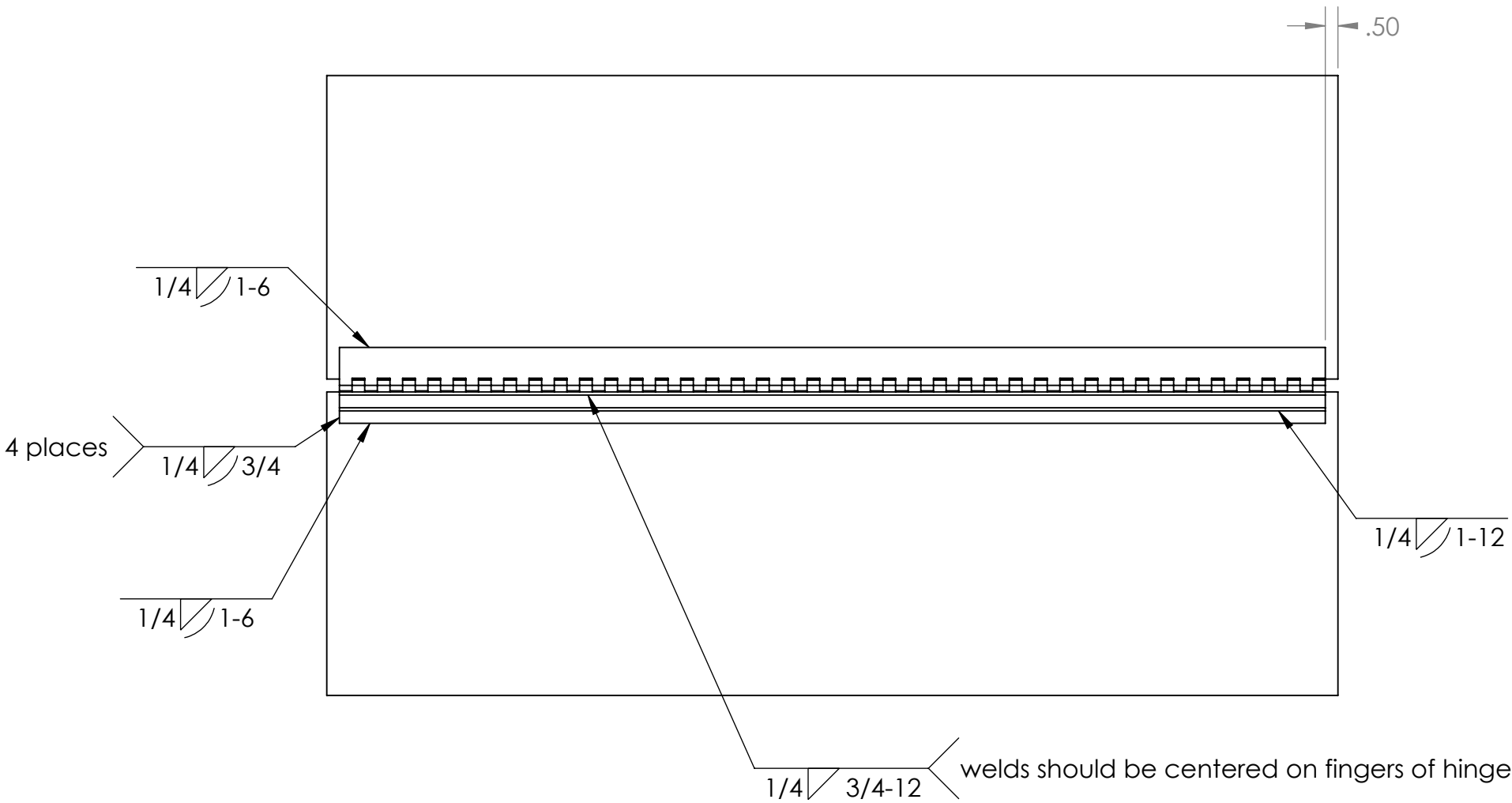
DETAIL B
SCALE 1 : 4



DETAIL A
SCALE 1 : 4



DETAIL C
SCALE 1 : 4



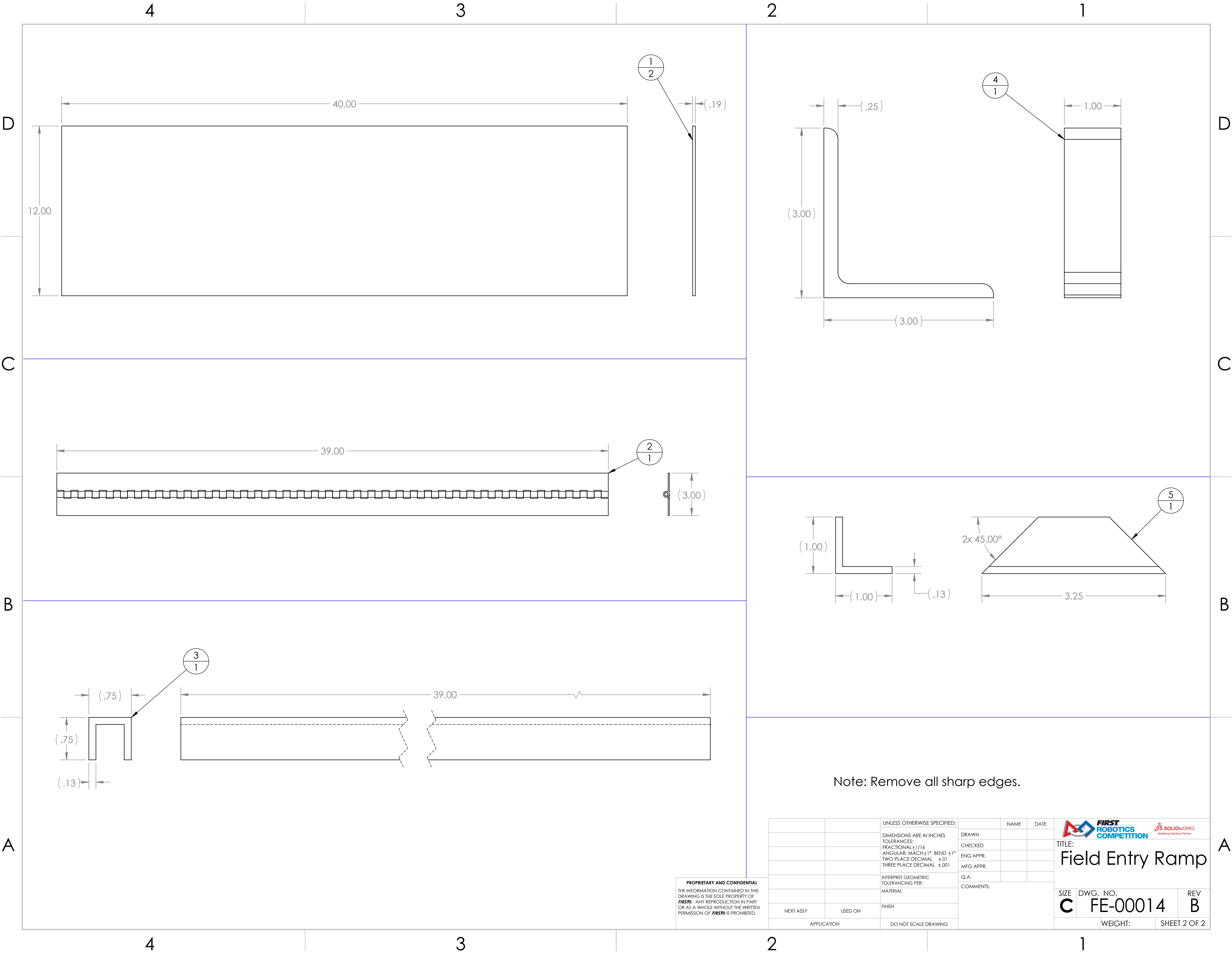
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	FE-00014-01	3/16" 3003 Aluminum Diamond Plate	2
2	FE-00014-02	3" Aluminum Hinge, 1/4" Pin	1
3	FE-00014-03	3/4" x 3/4" x 1/8" 6061-T6 Aluminum 'U' Channel	1
4	FE-00014-04	3" x 3" x 1/4" 6061-T6 Aluminum Angle	1
5	FE-00014-05	1" x 1" x 1/8" 6061-T6 Aluminum Angle	1

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DIMENSIONS ARE IN INCHES		DRAWN	
TOLERANCES:		CHECKED	
FRACTIONAL: 1/16		ENG APPR.	
ANGULAR: MACH ±1° BEND ±1°		MFG APPR.	
TWO PLACE DECIMAL ±.01		Q.A.	
THREE PLACE DECIMAL ±.001		COMMENTS:	
INTERPRET GEOMETRIC TOLERANCING PER:			
MATERIAL			
FINISH			
NEXT ASSY	USED ON		
APPLICATION			
DO NOT SCALE DRAWING			

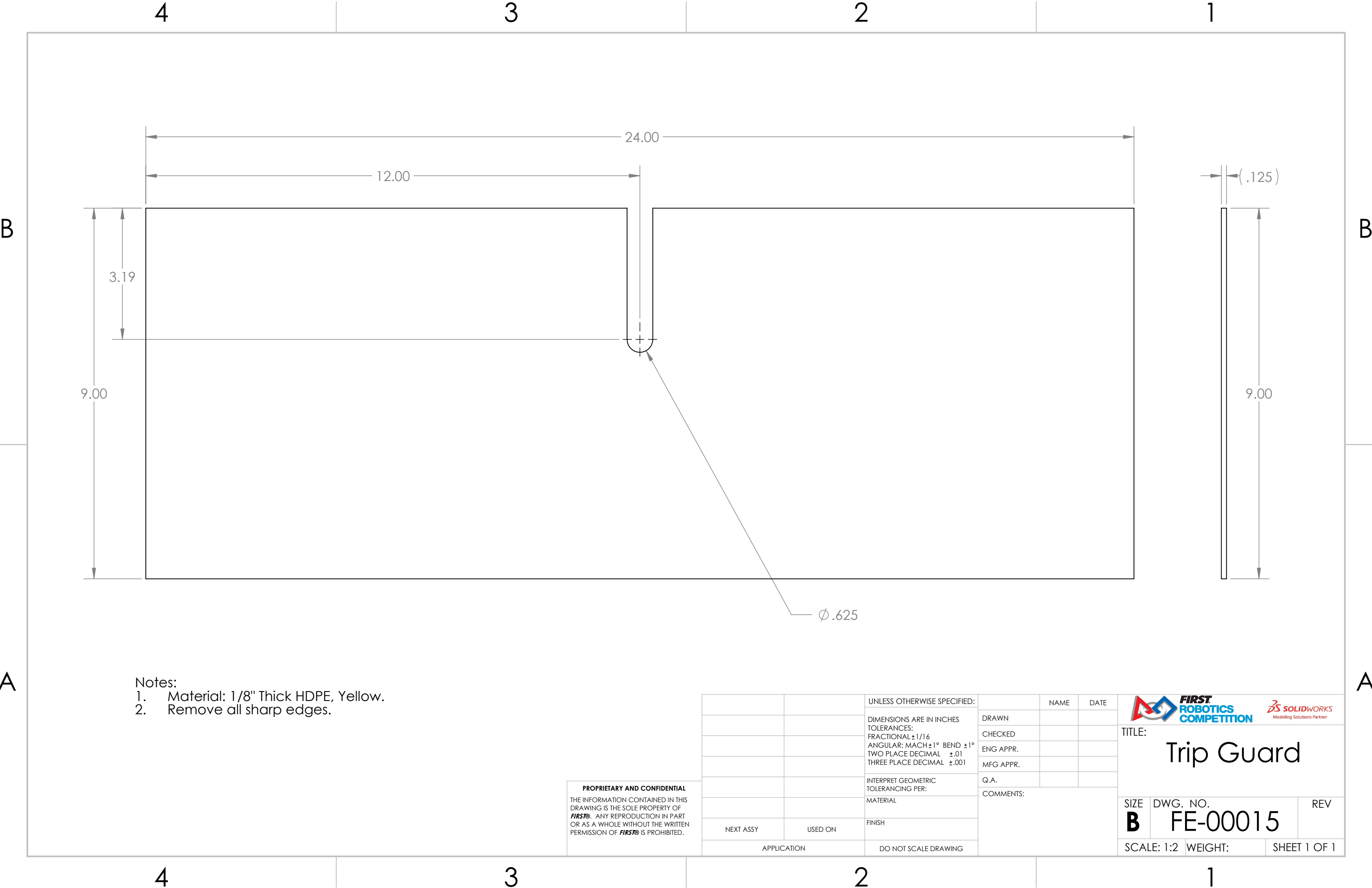


TITLE:		
Field Entry Ramp		
SIZE	DWG. NO.	REV
C	FE-00014	B
SCALE: 1:6 WEIGHT:		SHEET 1 OF 2





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		TOLERANCES:	CHECKED			
		FRACTIONAL ±1/16	ENG APPR.			
		ANGULAR: MACH ±1° BEND ±1°	MFG APPR.			
		TWO PLACE DECIMAL ±.01	Q.A.			
		THREE PLACE DECIMAL ±.001	COMMENTS:			
		INTERPRET GEOMETRIC TOLERANCING PER:				
		MATERIAL				
		FINISH				
NEXT ASSY	USED ON	DO NOT SCALE DRAWING				
APPLICATION						
TITLE:						Field Entry Ramp
SIZE	DWG. NO.				REV	
C	FE-00014				B	
WEIGHT:				SHEET 2 OF 2		



- Notes:
- 1. Material: 1/8" Thick HDPE, Yellow.
 - 2. Remove all sharp edges.

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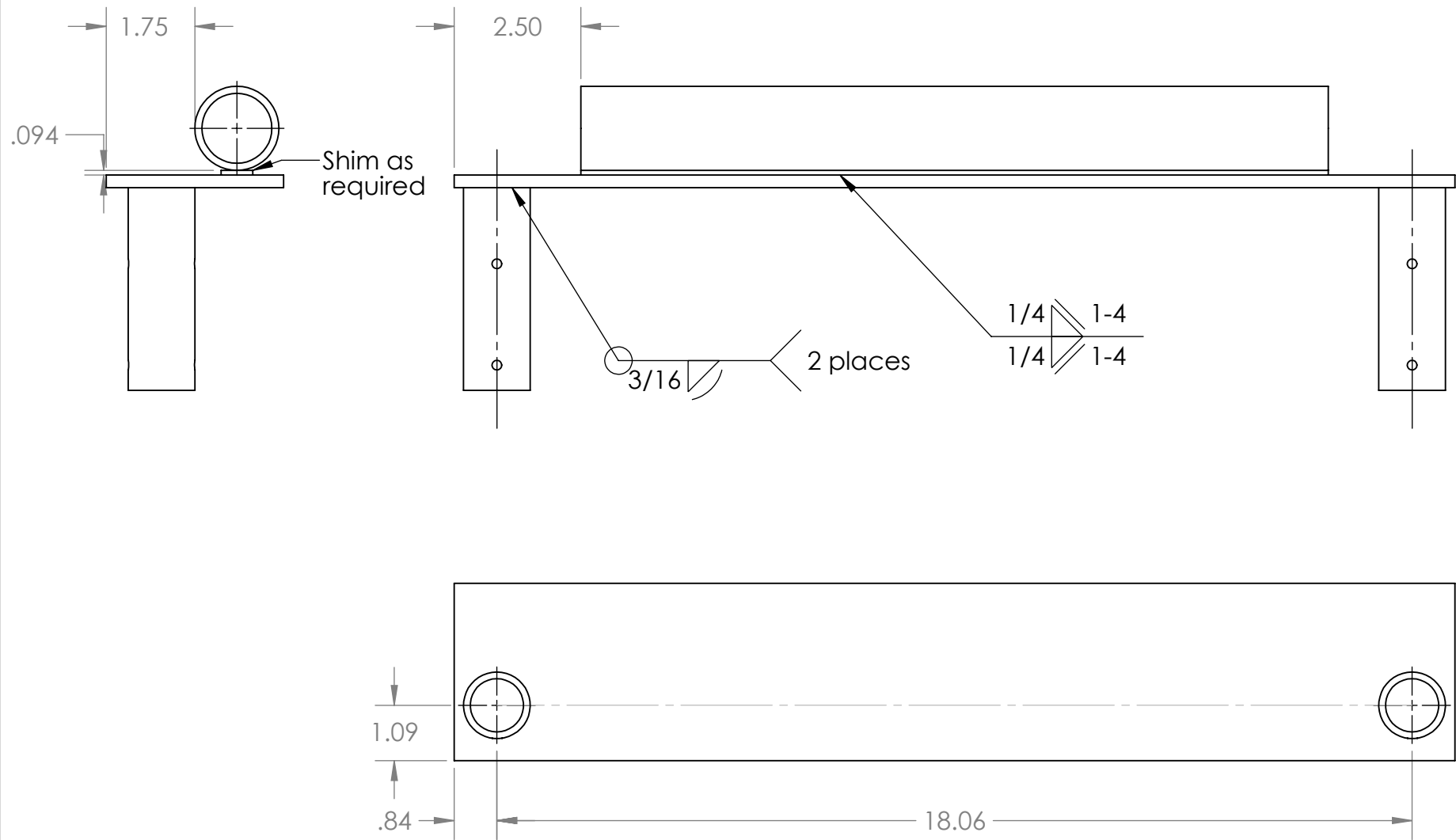
		UNLESS OTHERWISE SPECIFIED:		NAME	DATE	<div><div>FIRST ROBOTICS COMPETITION</div><div>SOLIDWORKS Modeling Solutions Partner</div></div>			
		DIMENSIONS ARE IN INCHES	DRAWN			TITLE: Trip Guard			
		TOLERANCES:	CHECKED						
		FRACTIONAL $\pm 1/16$	ENG APPR.						
		ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$	MFG APPR.						
		TWO PLACE DECIMAL $\pm .01$	Q.A.						
		THREE PLACE DECIMAL $\pm .001$	COMMENTS:			SIZE DWG. NO. REV B FE-00015			
		INTERPRET GEOMETRIC TOLERANCING PER:							
		MATERIAL							
		FINISH				SCALE: 1:2 WEIGHT: SHEET 1 OF 1			
NEXT ASSY	USED ON								
APPLICATION		DO NOT SCALE DRAWING							

B

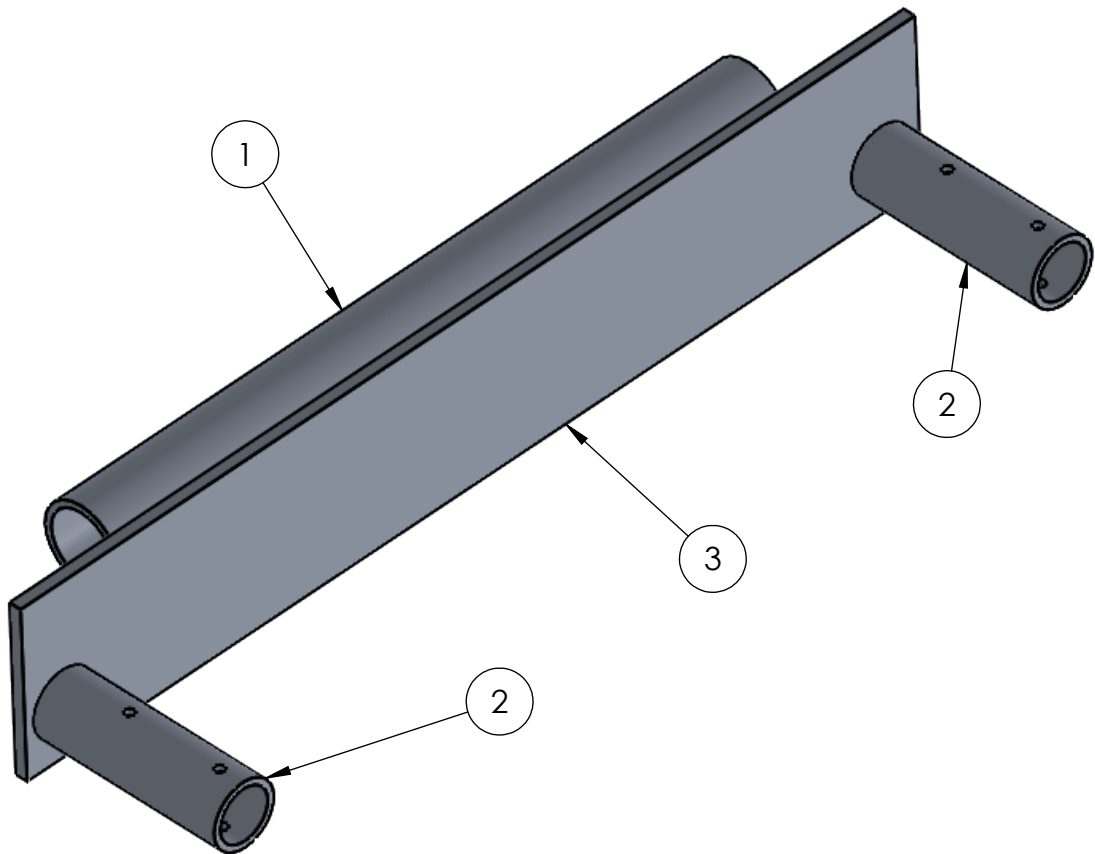
A

B

A





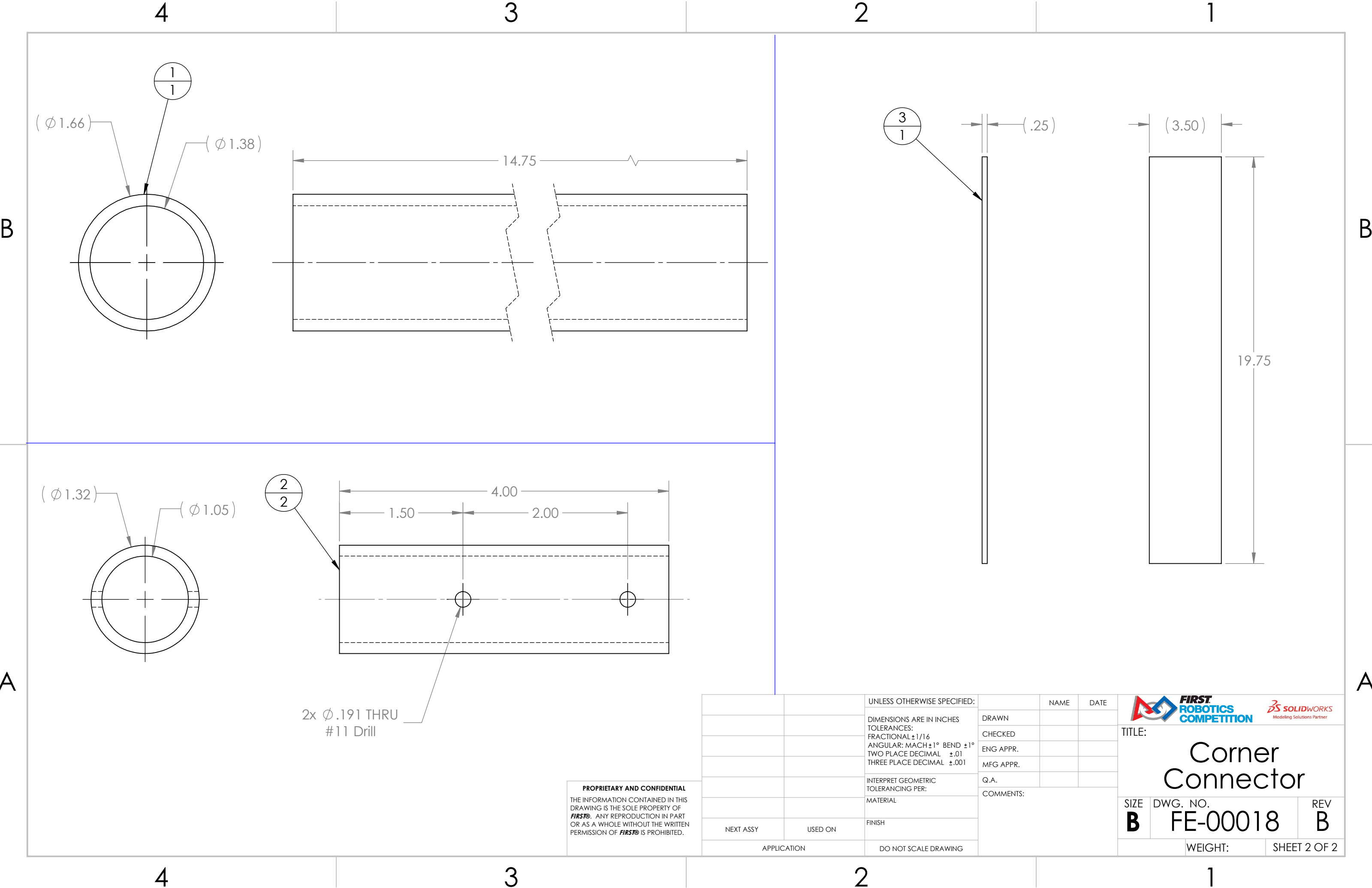
REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	Redrawn	5/30/2008	narosenberg
	B	Drawing reformatted.	3/20/2020	CPO





ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	FE-00018-01	1 1/4" Schedule 40 6061-T6 Aluminum Pipe	1
2	FE-00018-02	1" Schedule 40 6061-T6 Aluminum Pipe	2
3	FE-00018-03	3 1/2" x 1/4" 6061-T6 Aluminum Bar	1

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		UNLESS OTHERWISE SPECIFIED:		NAME	DATE	 			
		DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.001	DRAWN			TITLE: <h1>Corner Connector</h1>			
			CHECKED						
			ENG APPR.						
			MFG APPR.						
			Q.A.						
		INTERPRET GEOMETRIC TOLERANCING PER:	COMMENTS:			SIZE DWG. NO. REV B FE-00018 B			
		MATERIAL							
NEXT ASSY	USED ON	FINISH							
APPLICATION		DO NOT SCALE DRAWING				SCALE: 1:3 WEIGHT: SHEET 1 OF 2			

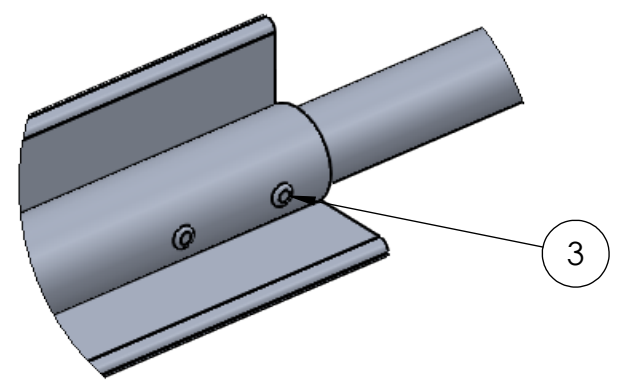
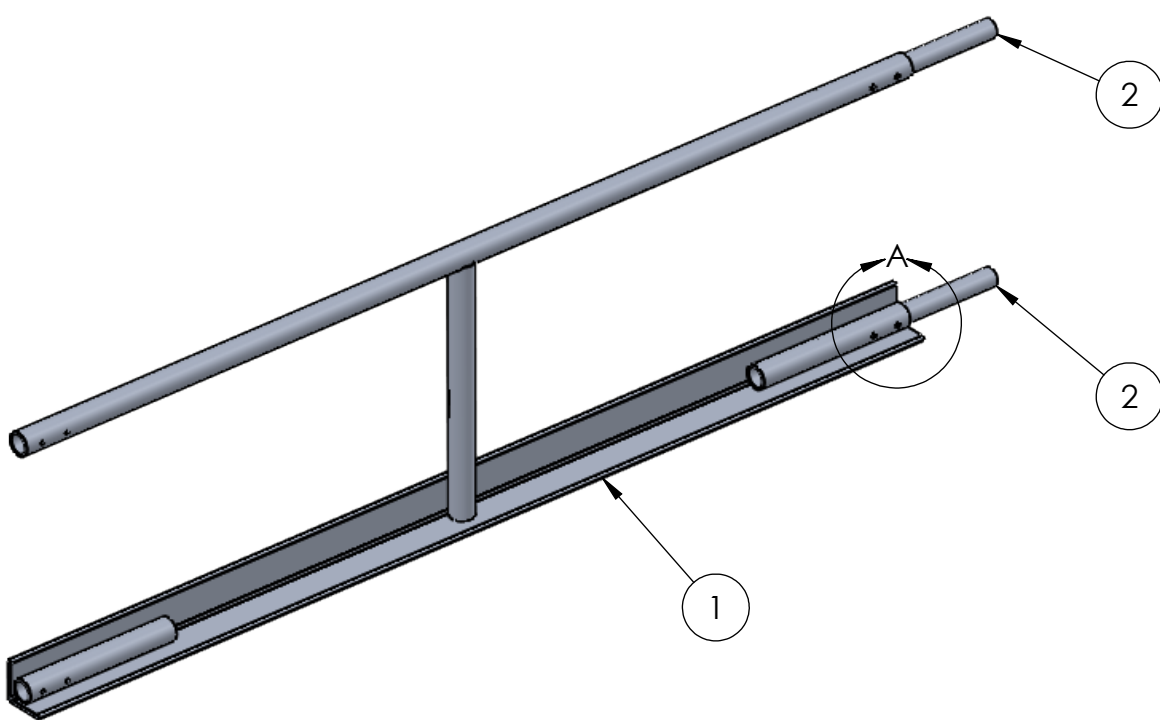
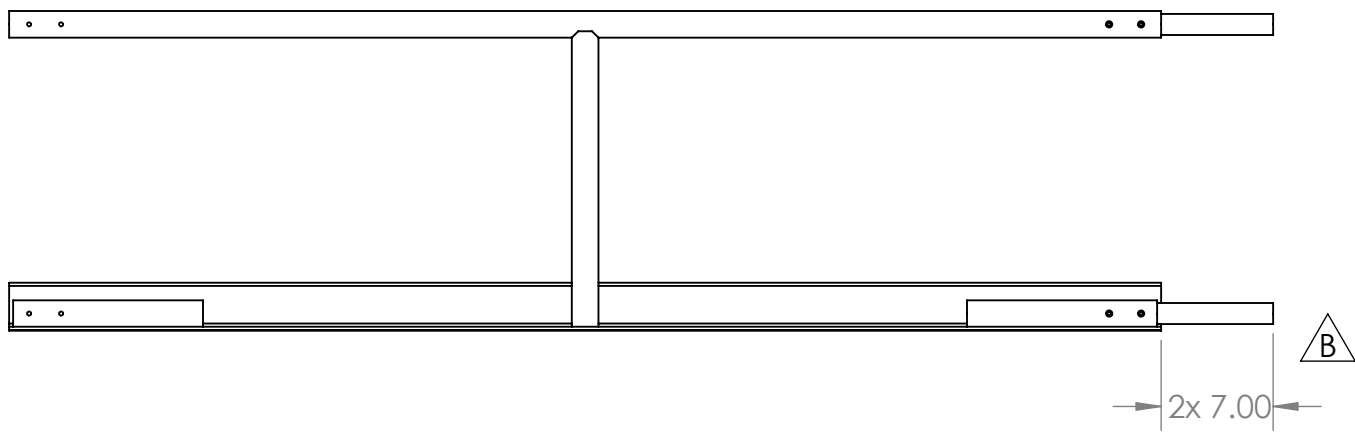


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		UNLESS OTHERWISE SPECIFIED:		NAME	DATE	<div></div>		
		DIMENSIONS ARE IN INCHES	DRAWN			TITLE: <h1>Corner Connector</h1>		
		TOLERANCES:	CHECKED					
		FRACTIONAL $\pm 1/16$	ENG APPR.					
		ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$	MFG APPR.					
		TWO PLACE DECIMAL $\pm .01$	Q.A.					
		THREE PLACE DECIMAL $\pm .001$	COMMENTS:			SIZE DWG. NO. REV B FE-00018 B		
		INTERPRET GEOMETRIC TOLERANCING PER:						
		MATERIAL				WEIGHT: SHEET 2 OF 2		
		FINISH						
NEXT ASSY	USED ON							
APPLICATION		DO NOT SCALE DRAWING						

B

B



DETAIL A
SCALE 1 : 3

A



A

C

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	FE-00005	Field Rail	1
2	FE-00026	Connector Pin	2
3	rivet_.1875_.251-.375	3/16" Aluminum Rivet, .251-.375 Grip Range	4

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		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
		DIMENSIONS ARE IN INCHES	DRAWN		
		TOLERANCES:	CHECKED		
		FRACTIONAL ±1/16	ENG APPR.		
		ANGULAR: MACH ±1° BEND ±1°	MFG APPR.		
		TWO PLACE DECIMAL ±.01	Q.A.		
		THREE PLACE DECIMAL ±.001	COMMENTS:		
		INTERPRET GEOMETRIC TOLERANCING PER:			
		MATERIAL			
		FINISH			
NEXT ASSY	USED ON				
APPLICATION		DO NOT SCALE DRAWING			



TITLE:

Field Rail Assy - Mid

SIZE	DWG. NO.	REV
B	FE-00022	C

SCALE: 1:12 WEIGHT: SHEET 1 OF 1

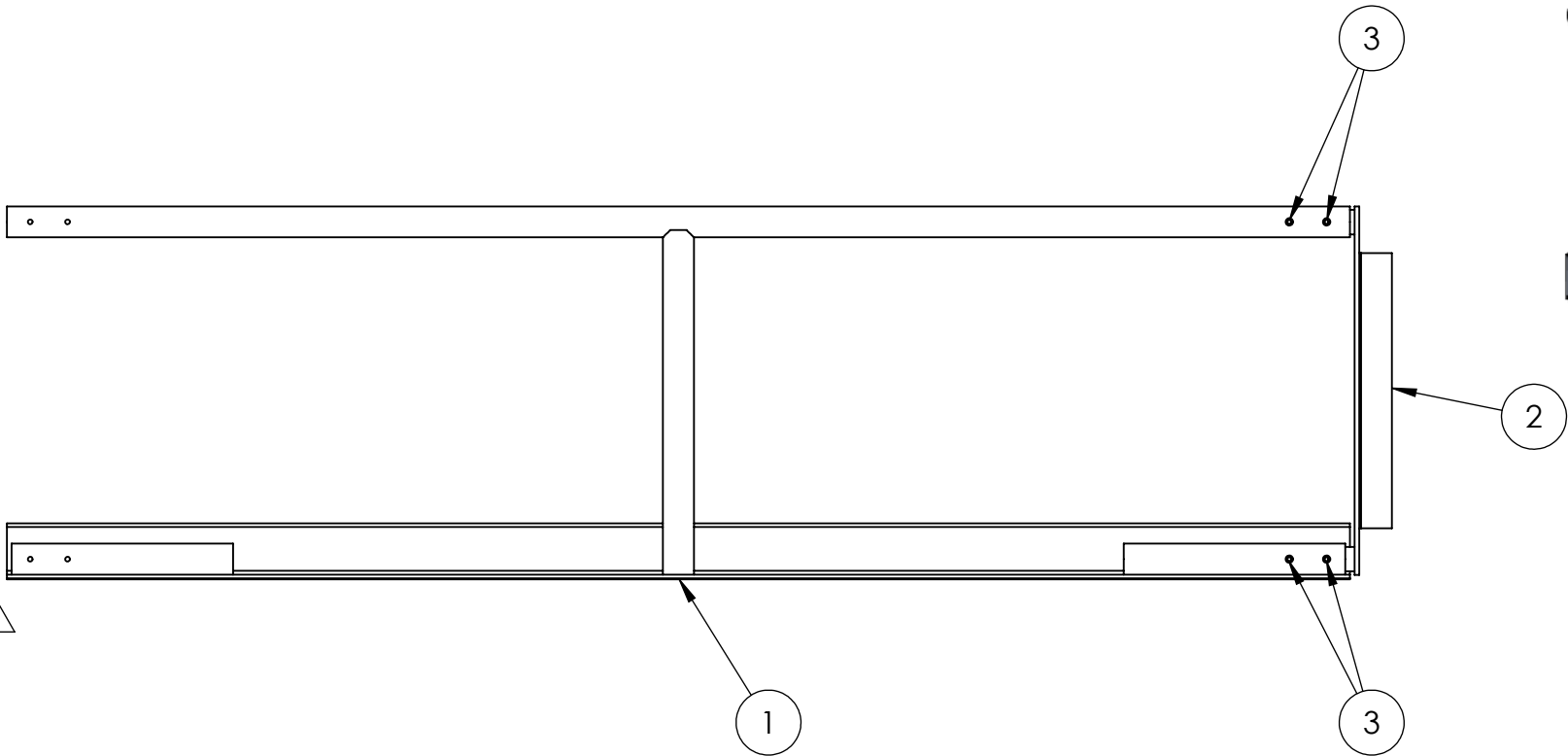
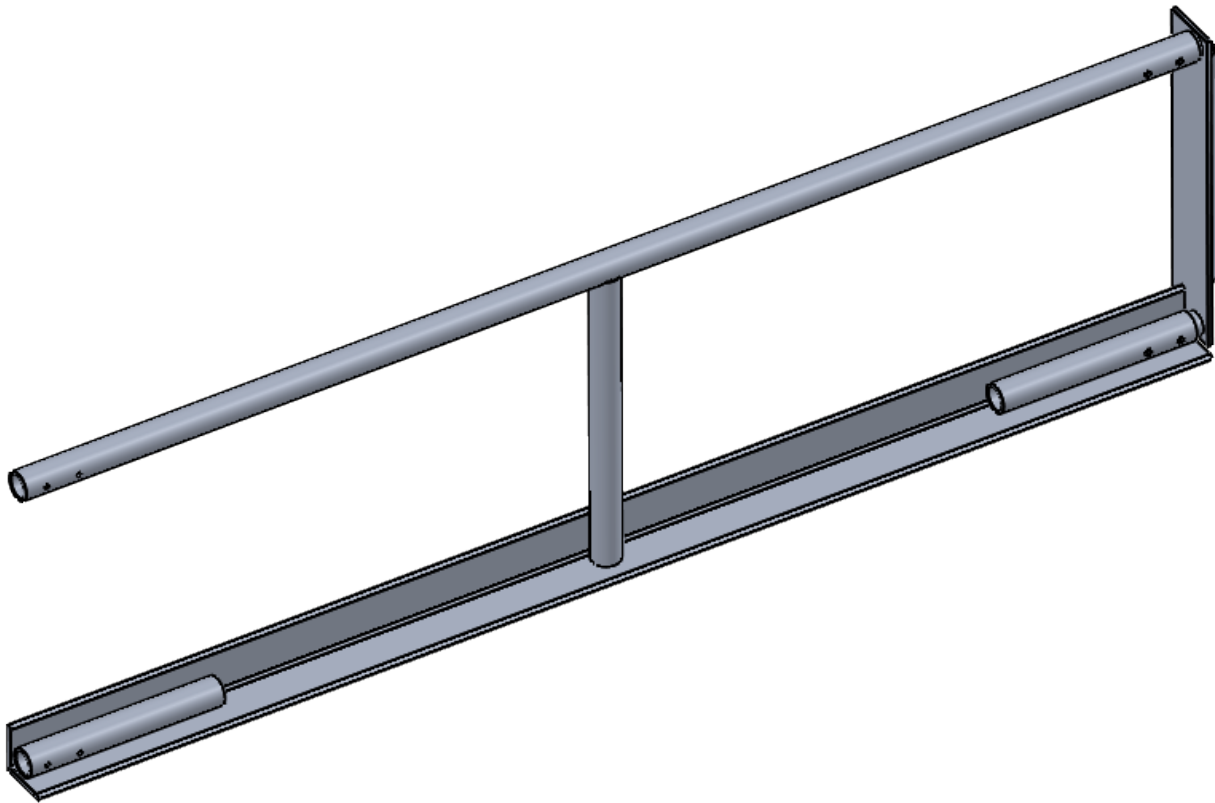
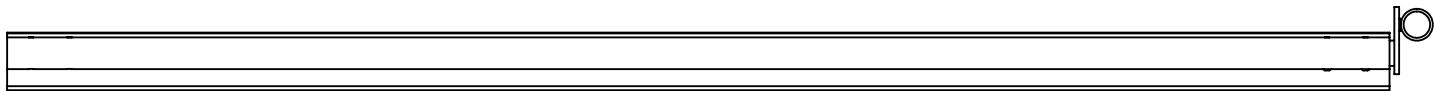
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3

2

1

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
A4	B	Removed use of FE-00018 Connector Pin, modified rivet part number and description.	3/20/2020	CPO



B

B

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	FE-00005	Field Rail	1
2	FE-00018	Corner Connector	1
3	rivet_.1875_.251-.375	3/16" Aluminum Rivet, .251-.375 Grip Range	4

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		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
		DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/16$ ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$ TWO PLACE DECIMAL $\pm .01$ THREE PLACE DECIMAL $\pm .001$	DRAWN		
			CHECKED		
			ENG APPR.		
			MFG APPR.		
		INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.		
		MATERIAL	COMMENTS:		
		FINISH			
NEXT ASSY	USED ON				
APPLICATION		DO NOT SCALE DRAWING			
			TITLE: Field Rail Assy - Left		
			SIZE B	DWG. NO. FE-00023	REV B
			SCALE: 1:10 WEIGHT:		SHEET 1 OF 1

4

3

2

1

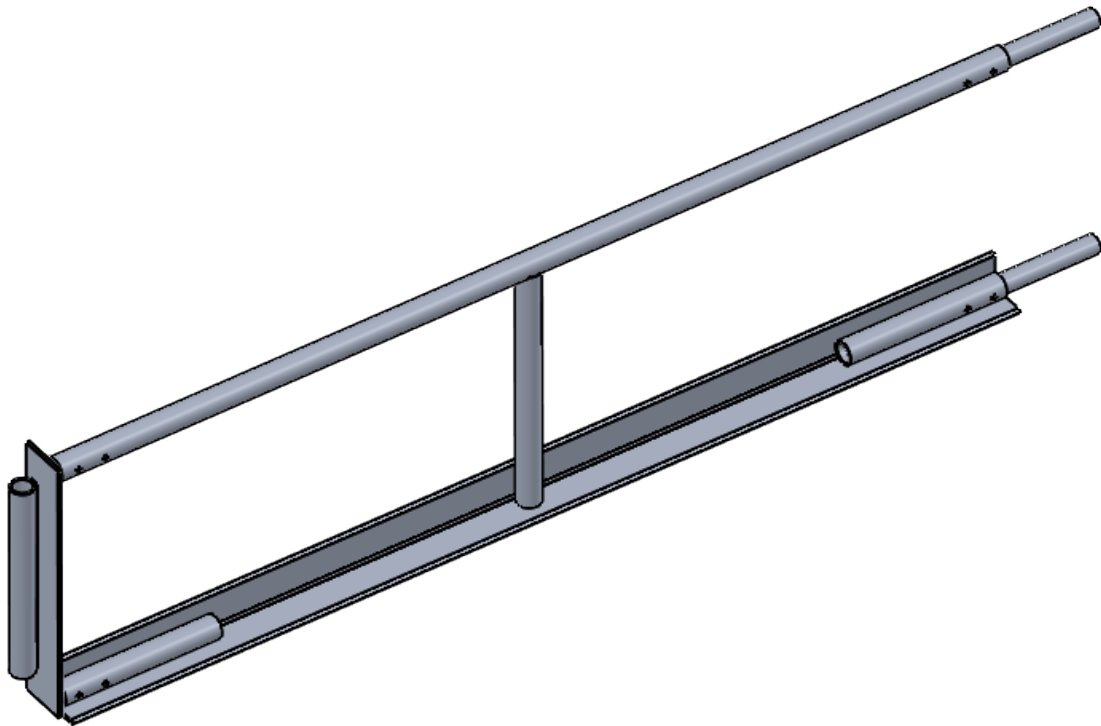
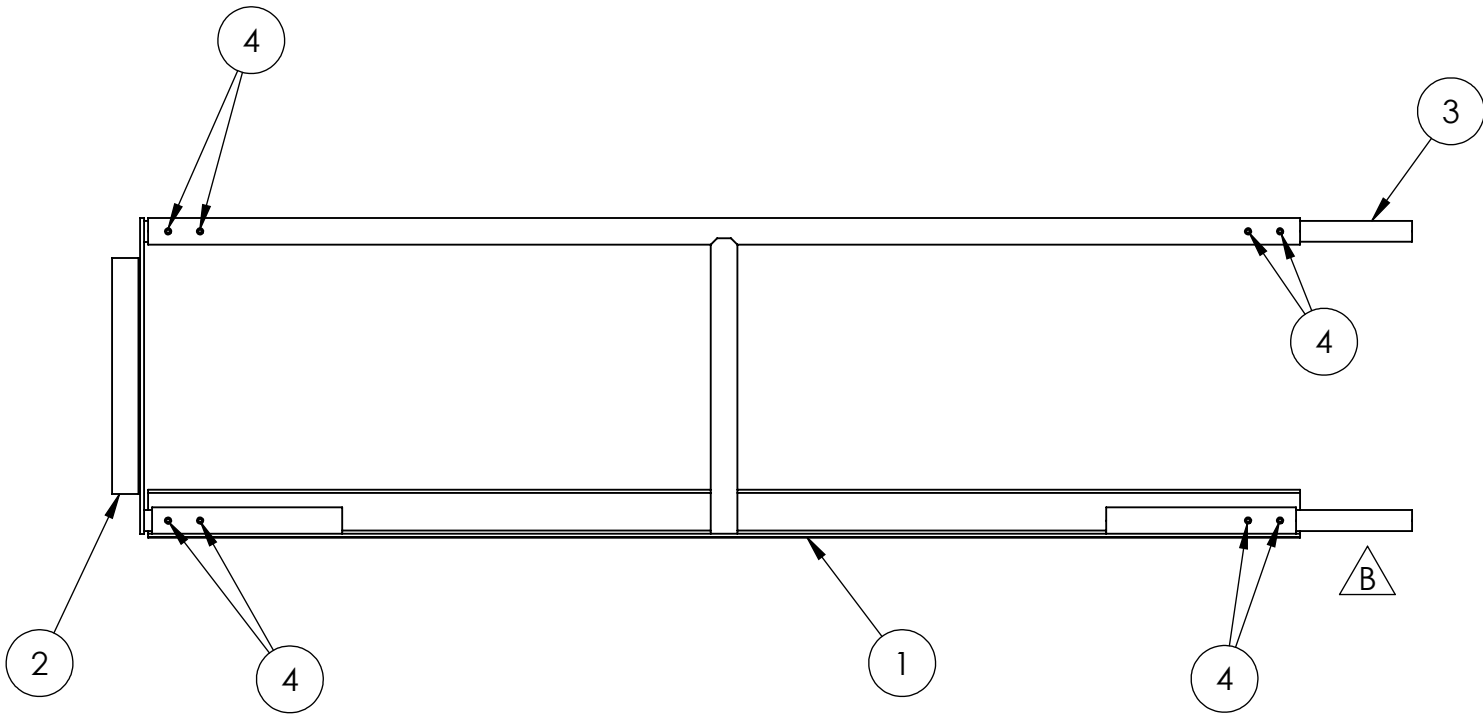
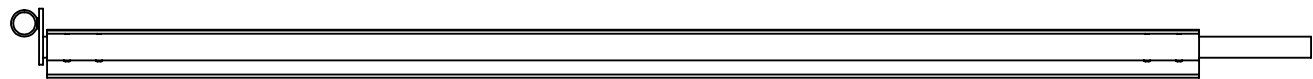
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3

2

1



REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
A3, A4	B	Additional FE-00026 Connector Pin added to assembly, rivet part number and description modified	3/20/2020	CPO



B

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	FE-00005	Field Rail	1
2	FE-00018	Corner Connector	1
3	FE-00026	Connector Pin	2
4	rivet_.1875_.251-.375	3/16" Aluminum Rivet, .251-.375 Grip Range	8

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		UNLESS OTHERWISE SPECIFIED:		NAME	DATE	 			
		DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.001	DRAWN			TITLE: Field Rail Assy - Right			
			CHECKED						
			ENG APPR.						
			MFG APPR.						
			Q.A.						
		INTERPRET GEOMETRIC TOLERANCING PER:	COMMENTS:			SIZE DWG. NO. REV B FE-00024 B			
		MATERIAL							
		FINISH							
NEXT ASSY	USED ON								
APPLICATION		DO NOT SCALE DRAWING							

4

3

2

1

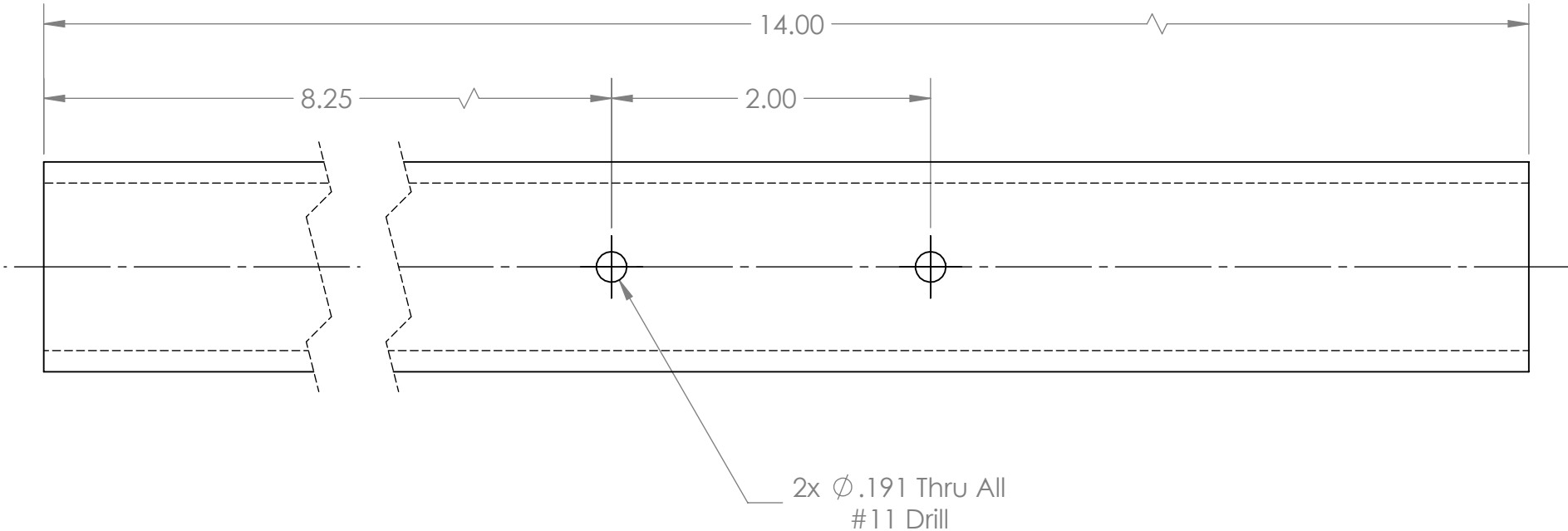
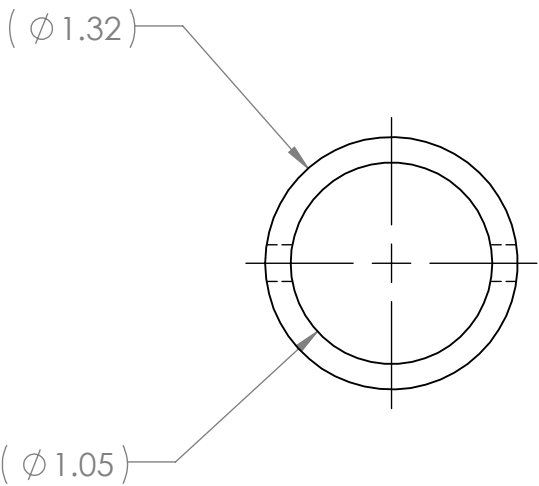
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3

2



1

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	redrawn	6/5/2008	dfoster



- Notes:
- 1. Material: 1" Schedule 40 Pipe, 6061-T6 Aluminum
 - 2. Remove all sharp edges

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		UNLESS OTHERWISE SPECIFIED:		NAME	DATE	 		
		DIMENSIONS ARE IN INCHES	DRAWN			TITLE: <h1>Connector Pin</h1>		
		TOLERANCES:	CHECKED					
		FRACTIONAL $\pm 1/16$	ENG APPR.					
		ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$	MFG APPR.					
		TWO PLACE DECIMAL $\pm .01$	Q.A.					
		THREE PLACE DECIMAL $\pm .001$	COMMENTS:			SIZE DWG. NO. REV B FE-00026 A		
		INTERPRET GEOMETRIC TOLERANCING PER:						
		MATERIAL				SCALE: 1:1 WEIGHT: SHEET 1 OF 1		
		FINISH						
NEXT ASSY	USED ON							
APPLICATION		DO NOT SCALE DRAWING						

4

3

2

1

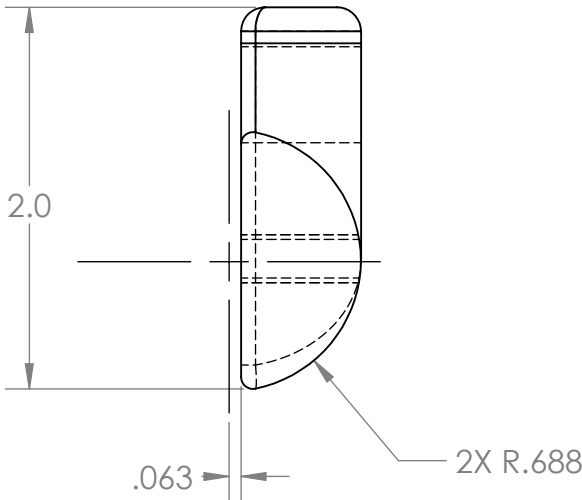
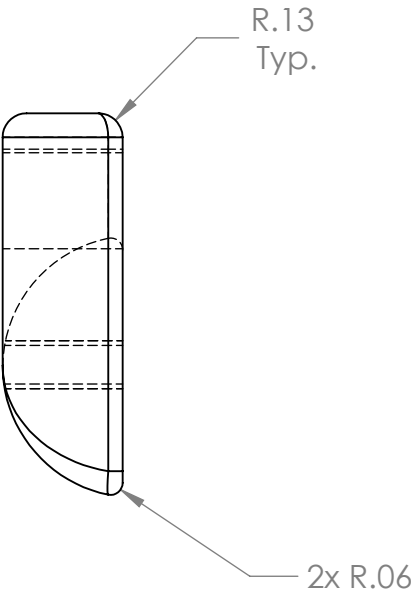
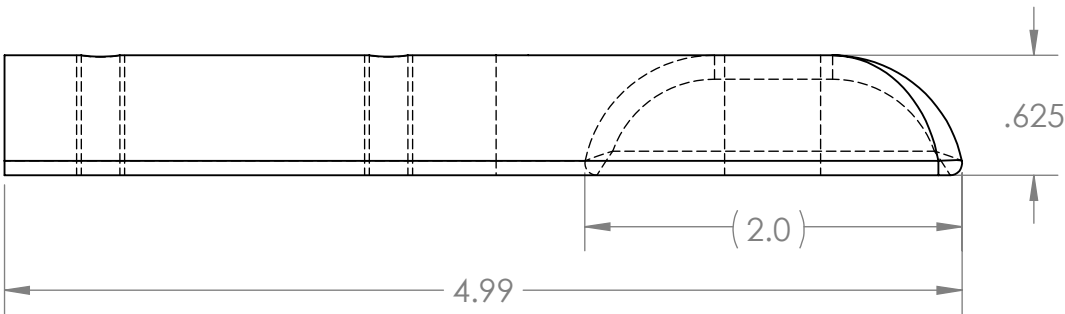
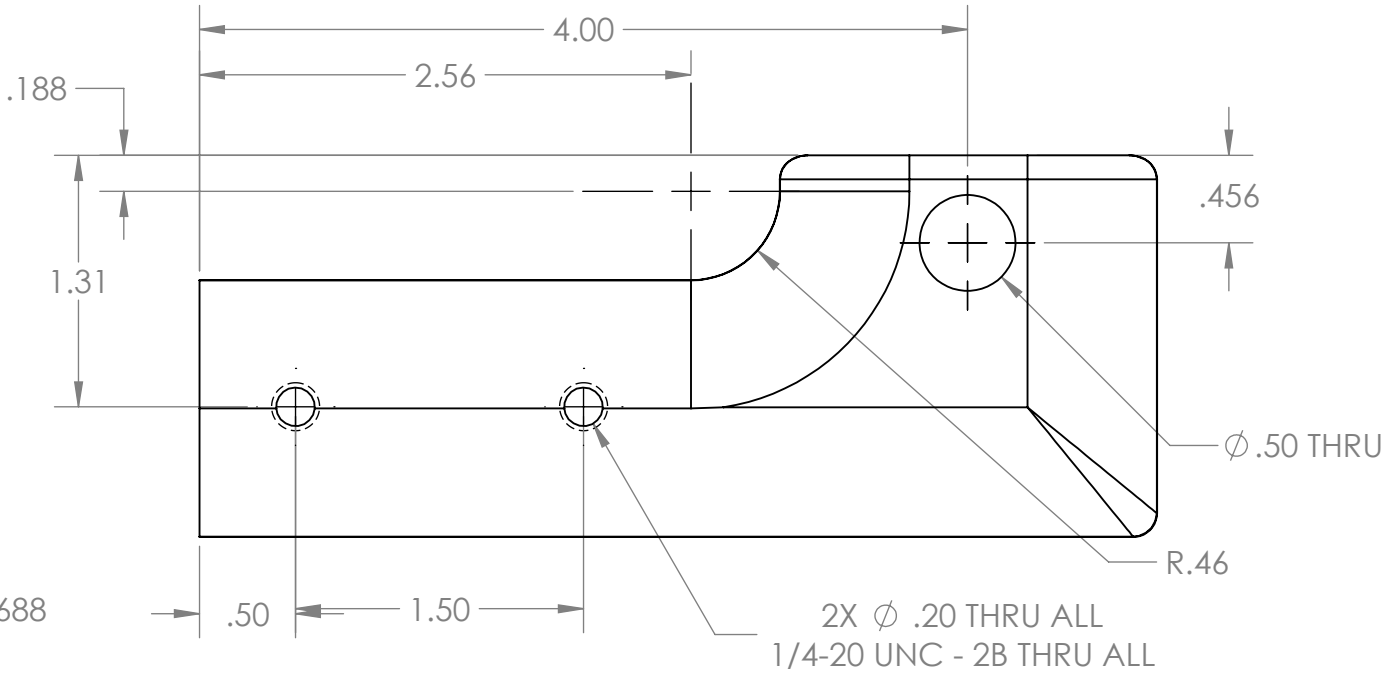
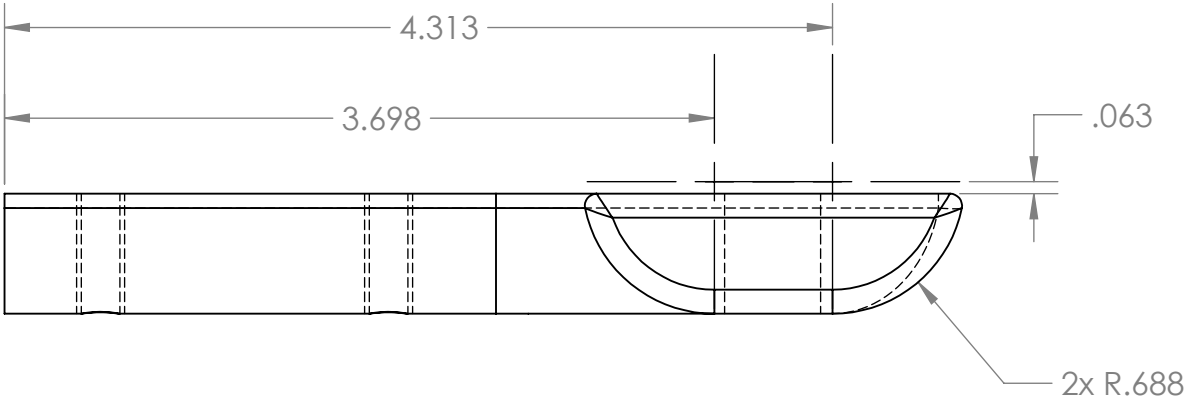
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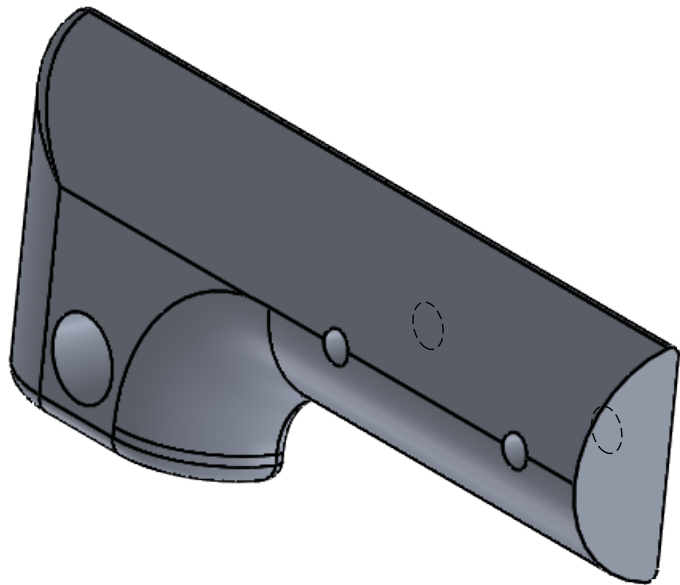
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1



REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	redrawn	8/8/2008	dfoster



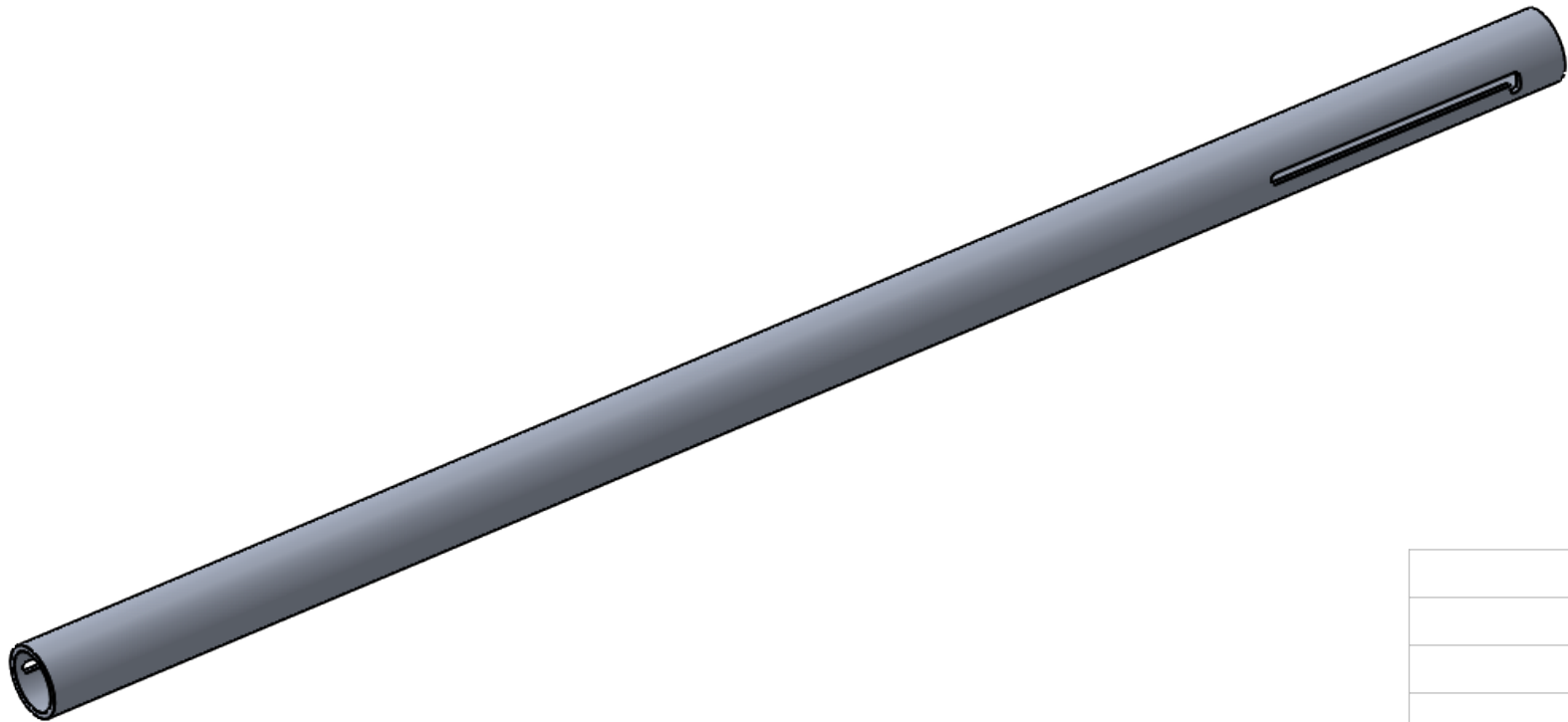
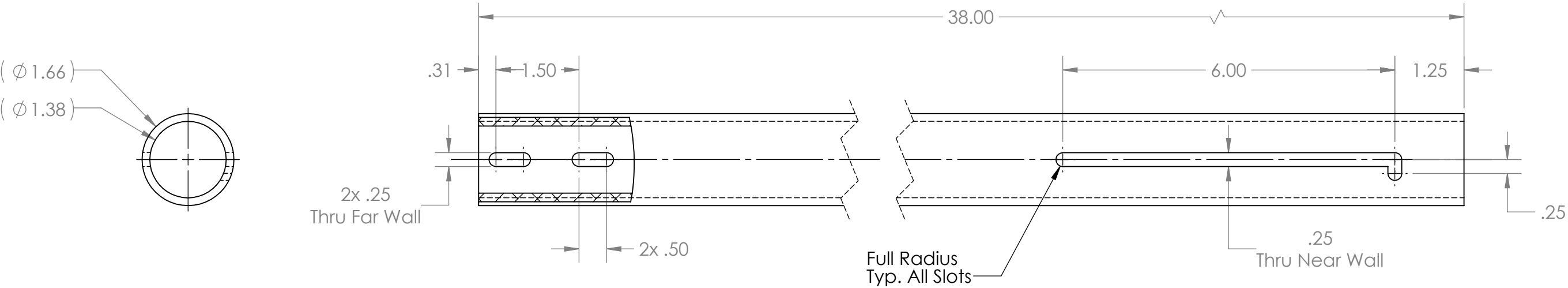
- Notes:
1. Material: 6063 Aluminum
 2. Remove all sharp edges



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		UNLESS OTHERWISE SPECIFIED:		NAME	DATE	 		
		DIMENSIONS ARE IN INCHES	DRAWN			TITLE: <h1>Hinge, Insert</h1>		
		TOLERANCES:	CHECKED					
		FRACTIONAL $\pm 1/16$	ENG APPR.					
		ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$	MFG APPR.					
		TWO PLACE DECIMAL $\pm .01$	Q.A.					
		THREE PLACE DECIMAL $\pm .001$	COMMENTS:			SIZE DWG. NO. REV B FE-00027 A		
		INTERPRET GEOMETRIC TOLERANCING PER:						
		MATERIAL						
		FINISH						
NEXT ASSY	USED ON							
APPLICATION		DO NOT SCALE DRAWING				SCALE: 1:1 WEIGHT: SHEET 1 OF 1		

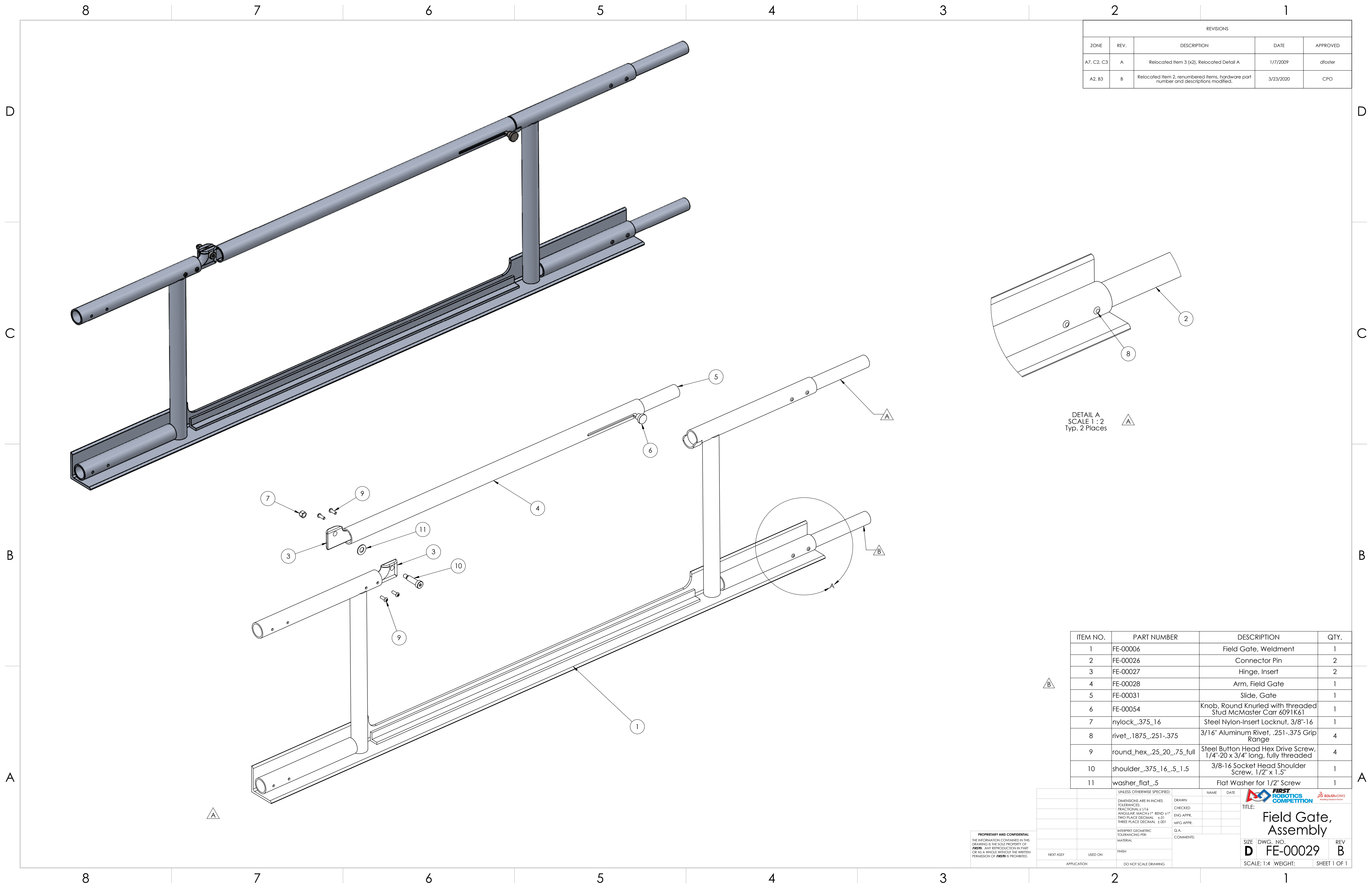
REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	Redrawn	8/6/2008	dfoster



- Notes:
1. Material: 1-1/4" Aluminum 6061-T6 Schedule 40 Pipe
 2. Remove all sharp edges.

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		UNLESS OTHERWISE SPECIFIED:		NAME	DATE	<div></div>		
		DIMENSIONS ARE IN INCHES	DRAWN			TITLE: <h1>Arm, Field Gate</h1>		
		TOLERANCES:	CHECKED					
		FRACTIONAL $\pm 1/16$	ENG APPR.					
		ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$	MFG APPR.					
		TWO PLACE DECIMAL $\pm .01$	Q.A.					
		THREE PLACE DECIMAL $\pm .001$	COMMENTS:			SIZE DWG. NO. REV B FE-00028 A		
		INTERPRET GEOMETRIC TOLERANCING PER:						
		MATERIAL						
		FINISH						
NEXT ASSY	USED ON							
APPLICATION		DO NOT SCALE DRAWING						



REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
A7, C2, C3	A	Relocated Item 3 (x2), Relocated Detail A	1/7/2009	dfoster
A2, B3	B	Relocated Item 2, renumbered items, hardware part number and descriptions modified.	3/23/2020	CPO

DETAIL A
SCALE 1 : 2
Typ. 2 Places

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	FE-00006	Field Gate, Weldment	1
2	FE-00026	Connector Pin	2
3	FE-00027	Hinge, Insert	2
4	FE-00028	Arm, Field Gate	1
5	FE-00031	Slide, Gate	1
6	FE-00054	Knob, Round Knurled with threaded Stud McMaster Carr 6091K61	1
7	nylock_.375_16	Steel Nylon-Insert Locknut, 3/8"-16	1
8	rivet_.1875_.251-.375	3/16" Aluminum Rivet, .251-.375 Grip Range	4
9	round_hex_.25_20_.75_full	Steel Button Head Hex Drive Screw, 1/4"-20 x 3/4" long, fully threaded	4
10	shoulder_.375_16_.5_1.5	3/8-16 Socket Head Shoulder Screw, 1/2" x 1.5"	1
11	washer_flat_.5	Flat Washer for 1/2" Screw	1

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UNLESS OTHERWISE SPECIFIED:		NAME	DATE
DIMENSIONS ARE IN INCHES	DRAWN		
FRACTIONAL: ±1/16	CHECKED		
TOLERANCES:	ENG APPR.		
ANGULAR: MACH ±1° BEND ±1°	MFG APPR.		
TWO PLACE DECIMAL ±.01			
THREE PLACE DECIMAL ±.001			
INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.		
MATERIAL	COMMENTS:		
FINISH			
NEXT ASSY	USED ON		
APPLICATION	DO NOT SCALE DRAWING		

TITLE:		FIRST ROBOTICS COMPETITION		SOLIDWORKS	
SIZE		DWG. NO.		REV	
D		FE-00029		B	
SCALE: 1:4		WEIGHT:		SHEET 1 OF 1	

4

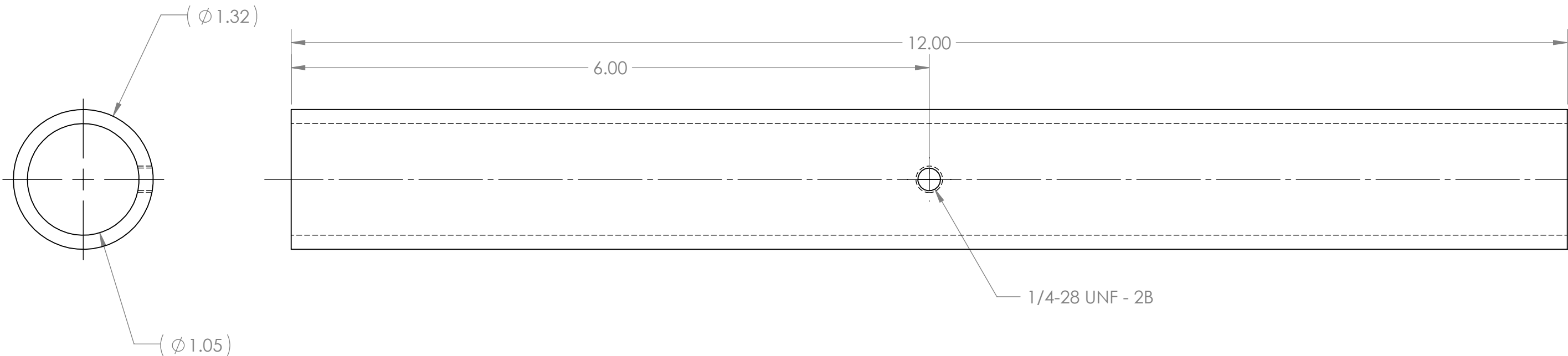
3

2

1

B

B





Notes:

1. Material: 1" Schedule 40 Aluminum 6061-T6.
2. Remove all sharp edges.

A

A

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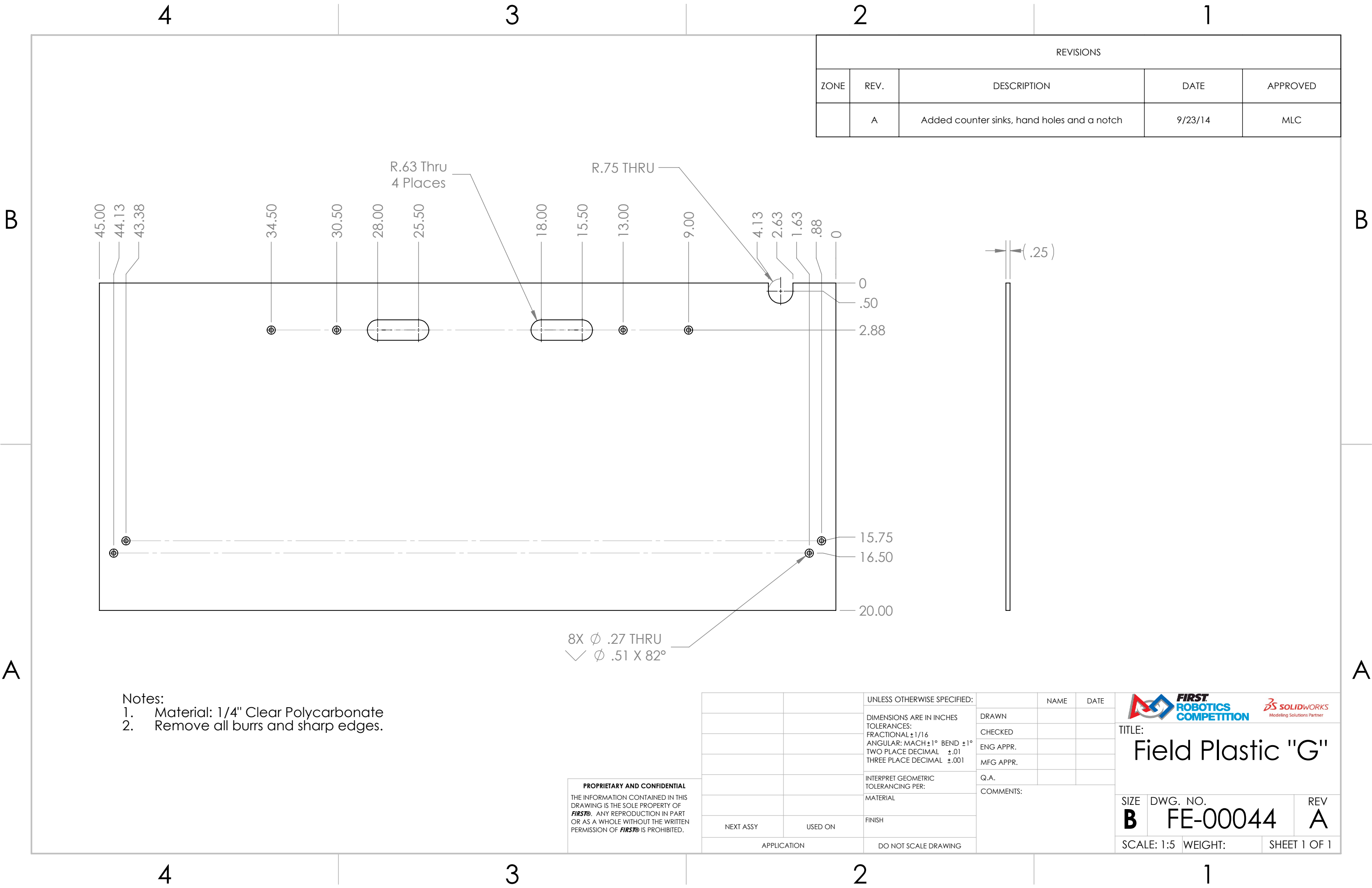
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			DRAWN			
			CHECKED			
			ENG APPR.			
			MFG APPR.			
			Q.A.			SIZE DWG. NO. REV B FE-00031
		COMMENTS:				
NEXT ASSY	USED ON					
APPLICATION		DO NOT SCALE DRAWING				SCALE: 1:1 WEIGHT: SHEET 1 OF 1

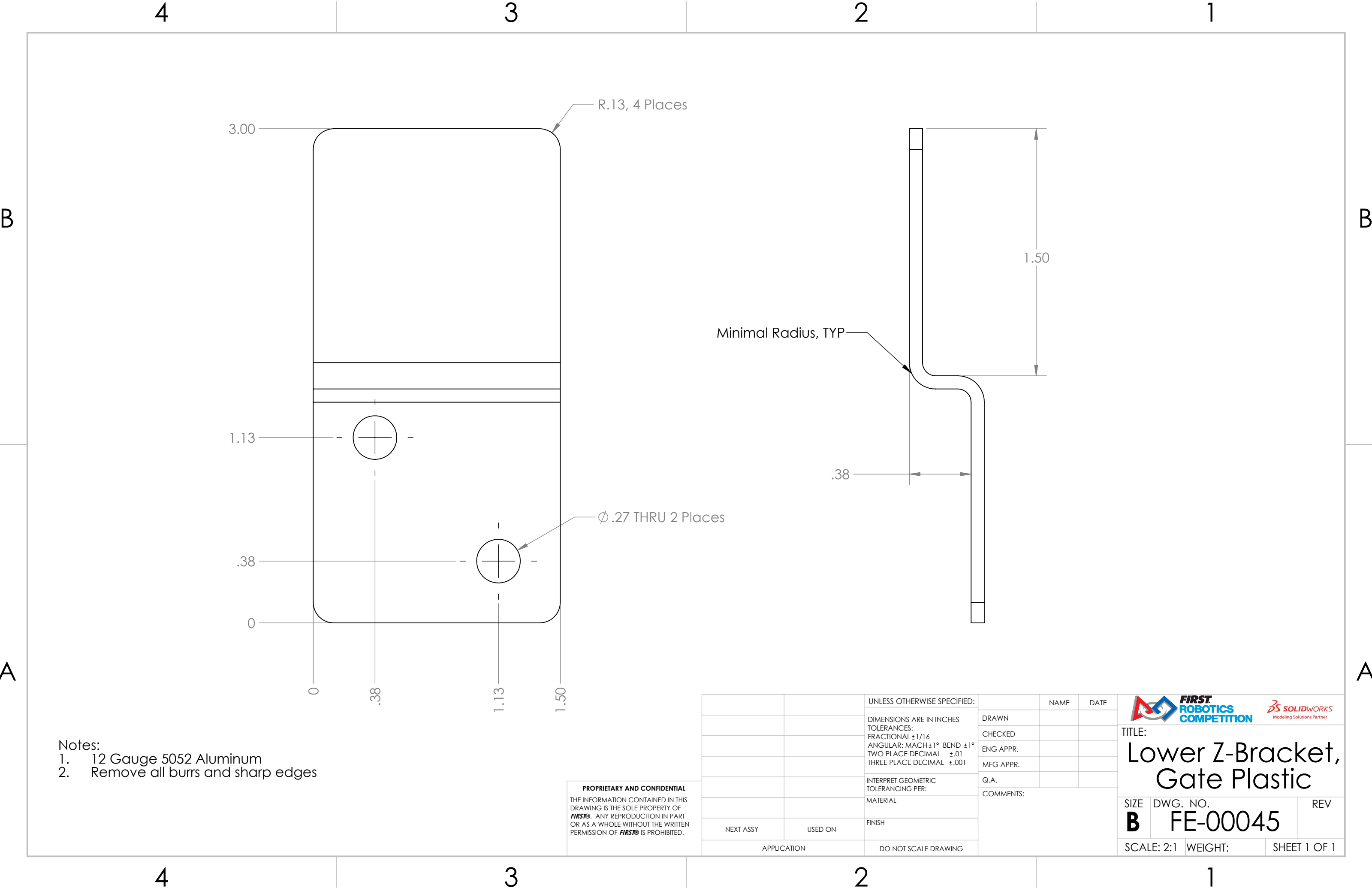
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3

2



1

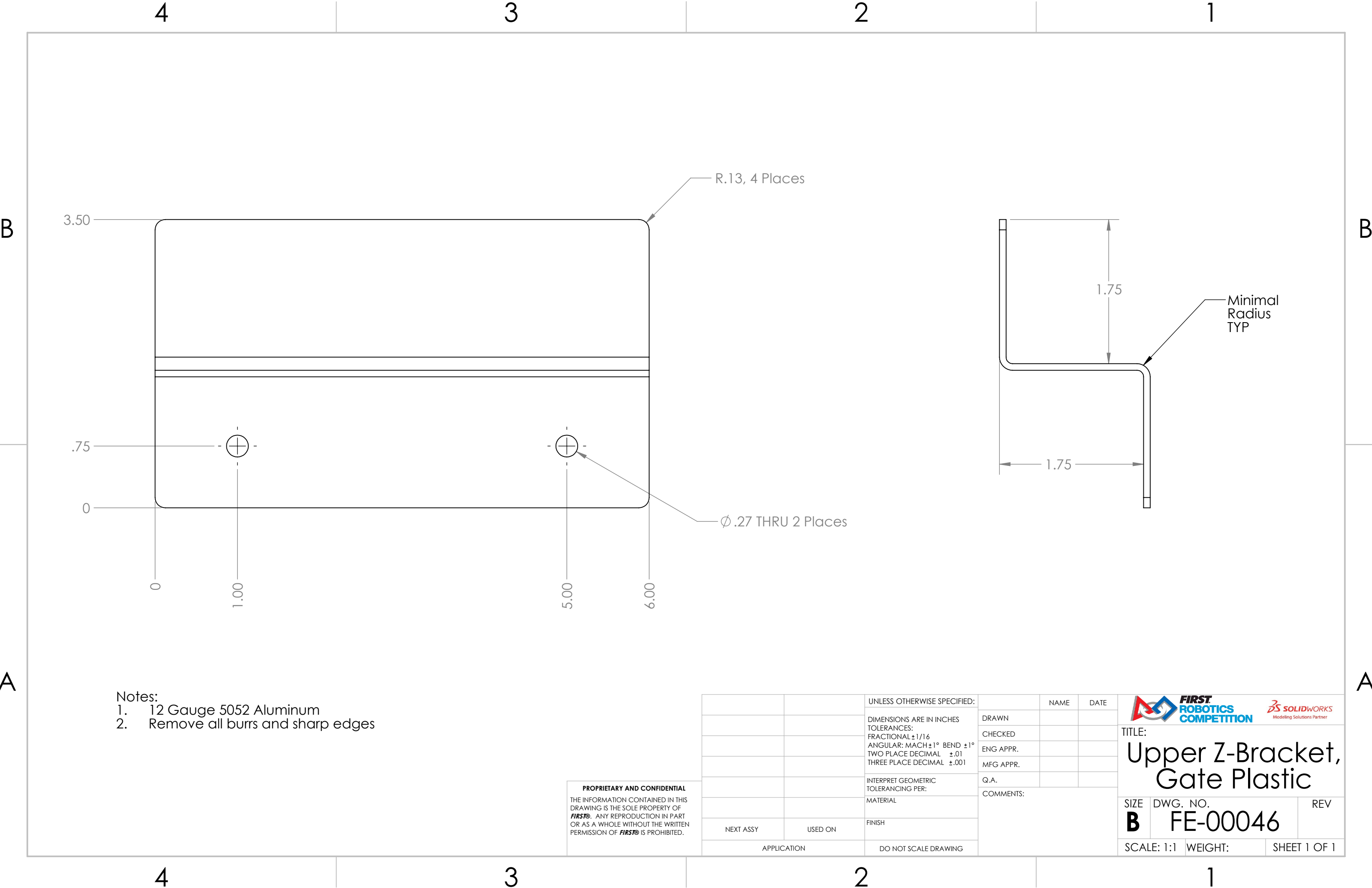






- Notes:
- 12 Gauge 5052 Aluminum
 - Remove all burrs and sharp edges

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		UNLESS OTHERWISE SPECIFIED:		NAME	DATE	<div><div></div><div>TITLE: Lower Z-Bracket, Gate Plastic</div><div><table><tr><td>SIZE</td><td>DWG. NO.</td><td colspan="2">REV</td></tr><tr><td>B</td><td>FE-00045</td><td colspan="2"></td></tr></table></div><div><table><tr><td>SCALE: 2:1</td><td>WEIGHT:</td><td colspan="2">SHEET 1 OF 1</td></tr></table></div></div>				SIZE	DWG. NO.	REV		B	FE-00045			SCALE: 2:1	WEIGHT:	SHEET 1 OF 1	
SIZE	DWG. NO.	REV																			
B	FE-00045																				
SCALE: 2:1	WEIGHT:	SHEET 1 OF 1																			
		DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/16$ ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$ TWO PLACE DECIMAL $\pm .01$ THREE PLACE DECIMAL $\pm .001$	DRAWN																		
			CHECKED																		
			ENG APPR.																		
			MFG APPR.																		
		INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.																		
		MATERIAL	COMMENTS:																		
		FINISH																			
NEXT ASSY	USED ON																				
APPLICATION		DO NOT SCALE DRAWING																			



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		UNLESS OTHERWISE SPECIFIED:		NAME	DATE	<div><div>FIRST ROBOTICS COMPETITION</div><div>SOLIDWORKS Modeling Solutions Partner</div></div>			
		DIMENSIONS ARE IN INCHES	DRAWN			TITLE: <div>Upper Z-Bracket, Gate Plastic</div>			
		TOLERANCES:	CHECKED						
		FRACTIONAL $\pm 1/16$	ENG APPR.						
		ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$	MFG APPR.						
		TWO PLACE DECIMAL $\pm .01$	Q.A.						
		THREE PLACE DECIMAL $\pm .001$	COMMENTS:			SIZE DWG. NO. REV <div>B FE-00046</div>			
		INTERPRET GEOMETRIC TOLERANCING PER:							
		MATERIAL							
		FINISH							
NEXT ASSY	USED ON								
APPLICATION		DO NOT SCALE DRAWING				SCALE: 1:1 WEIGHT: SHEET 1 OF 1			

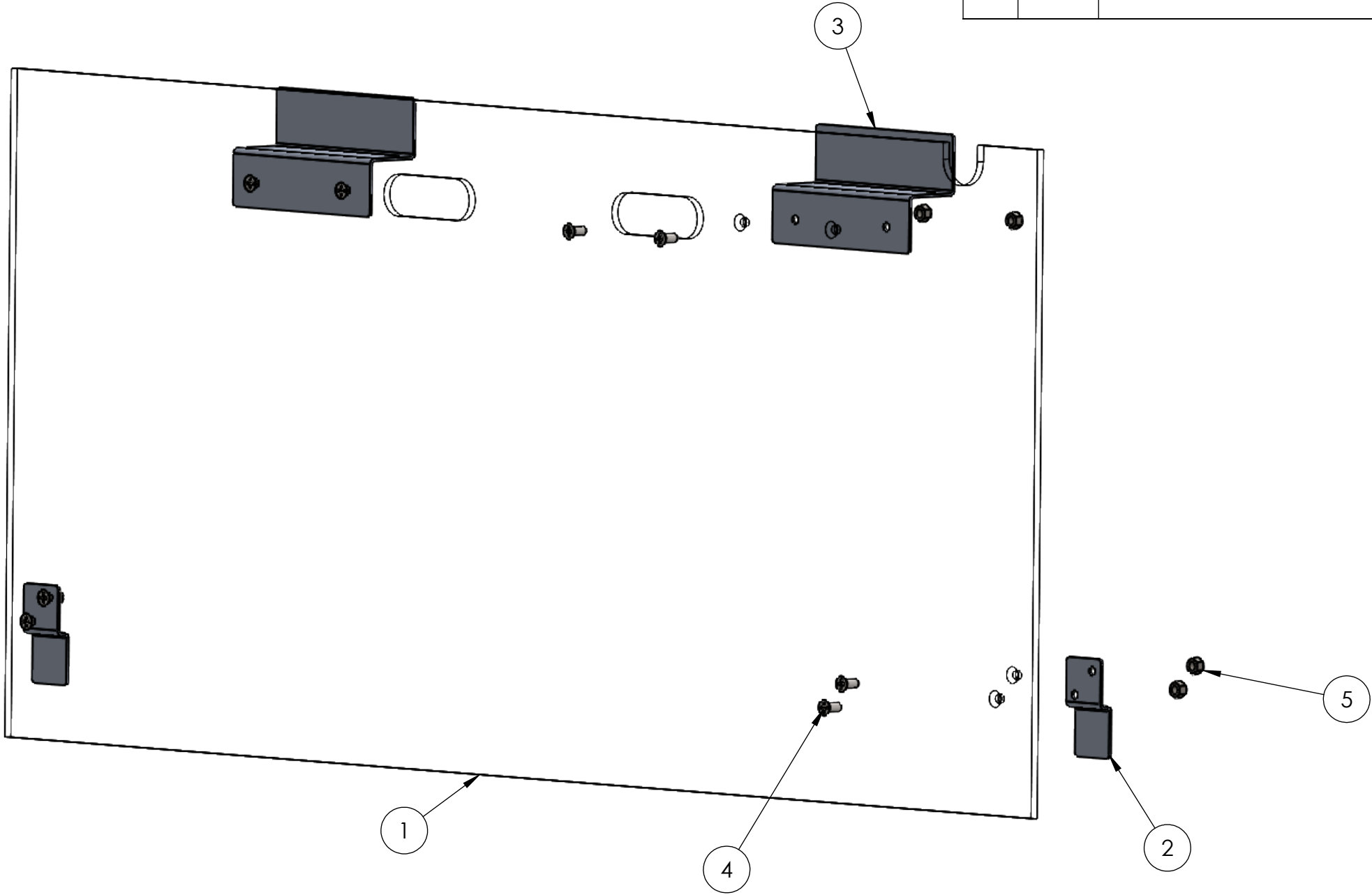
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3

2

1

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
A4	A	Fastener part number and descriptions modified.	3/23/2020	CPO





A

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	FE-00044	Field Plastic "G"	1
2	FE-00045	Lower Z-Bracket, Gate Plastic	2
3	FE-00046	Upper Z-Bracket, Gate Plastic	2
4	flat_phil_.25_20_.625	Steel Phillips Flat Head Screw, 1/4"x20 x 5/8" long, fully threaded	8
5	nylock_.25_20	Steel Nylon-Insert Locknut, 1/4"-20	8

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		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
		DIMENSIONS ARE IN INCHES	DRAWN		
		TOLERANCES:	CHECKED		
		FRACTIONAL $\pm 1/16$	ENG APPR.		
		ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$	MFG APPR.		
		TWO PLACE DECIMAL $\pm .01$	Q.A.		
		THREE PLACE DECIMAL $\pm .001$	COMMENTS:		
		INTERPRET GEOMETRIC TOLERANCING PER:			
		MATERIAL			
		FINISH			
NEXT ASSY	USED ON				
APPLICATION		DO NOT SCALE DRAWING			



TITLE:
Gate Plastic Assembly

SIZE
B

DWG. NO.
FE-00047

REV
A

SCALE: 1:4 WEIGHT: SHEET 1 OF 1

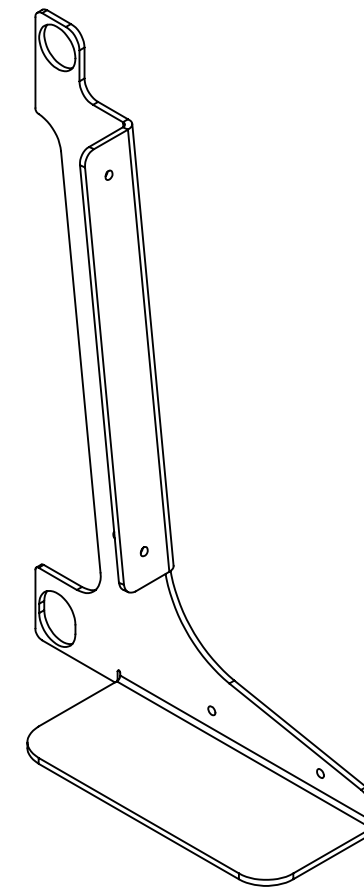
4

3

2

1

1



SHEET 1 OF 1

1

4

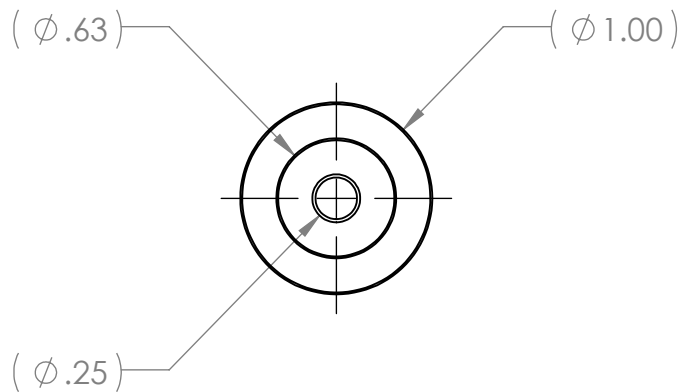
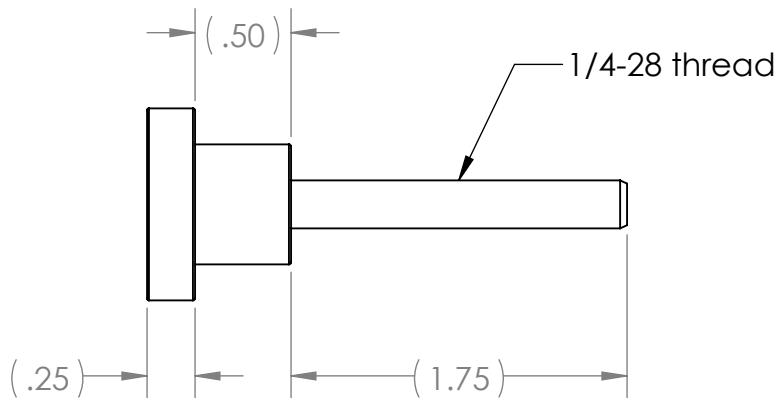
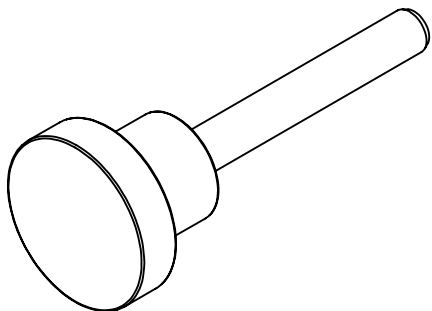
3

2

1

B

B



Notes:

1. Description: 303 Stainless Steel Knurled Knob with 1/4"-28 Thread 1-3/4" Long Stud, 1" Head Diameter
2. Vendor: McMaster-Carr
3. Part Number: 6091K61
4. Equivalent substitutions allowed

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		DIMENSIONS ARE IN INCHES	DRAWN		
		TOLERANCES:	CHECKED		
		FRACTIONAL $\pm 1/16$	ENG APPR.		
		ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$	MFG APPR.		
		TWO PLACE DECIMAL $\pm .01$	Q.A.		
		THREE PLACE DECIMAL $\pm .001$	COMMENTS:		
		INTERPRET GEOMETRIC TOLERANCING PER:			
		MATERIAL			
		FINISH			
NEXT ASSY	USED ON				
APPLICATION		DO NOT SCALE DRAWING			
			TITLE: Knob, Round Knurled with threaded Stud McMaster Carr 6091K61		
			SIZE B	DWG. NO. FE-00054	REV
			SCALE: 1:1	WEIGHT:	SHEET 1 OF 1

4

3

2

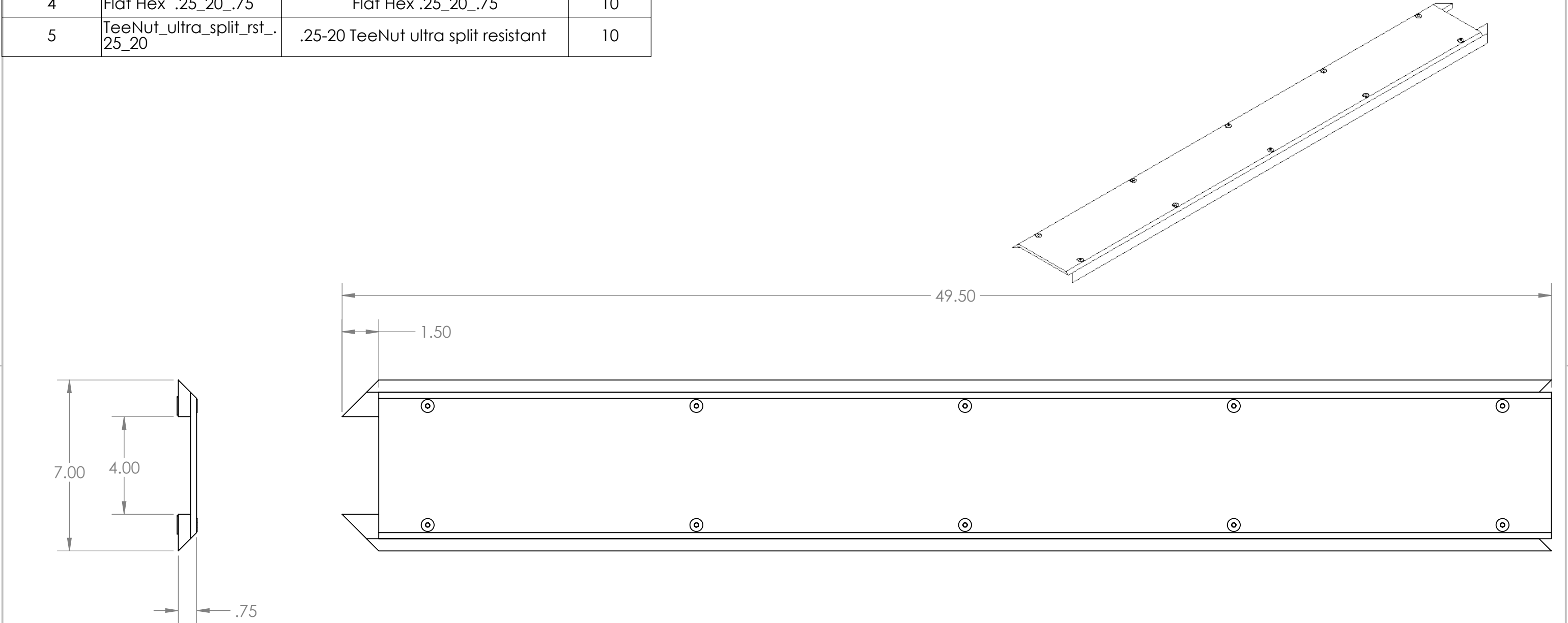
1

A



A

4			3		
ITEM NO.	PART NUMBER	DESCRIPTION			
1	FE-00301	Side angle left		1	
2	FE-00303	Side angle right		1	
3	FE-00302	Cable protector top		1	
4	Flat Hex .25_20_.75	Flat Hex .25_20_.75		10	
5	TeeNut_ultra_split_rst_.25_20	.25-20 TeeNut ultra split resistant		10	

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	Added sheet 3	1/5/2022	DAF



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		UNLESS OTHERWISE SPECIFIED:		NAME	DATE	 		
		DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± 1/16 ANGULAR: MACH ± 1° BEND ± 1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.001	DRAWN			TITLE: HDPE Cable Protector		
			CHECKED					
			ENG APPR.					
			MFG APPR.					
		INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.			COMMENTS:		
		MATERIAL						
		FINISH						
NEXT ASSY	USED ON					SIZE B	DWG. NO. FE-00300	REV A
APPLICATION		DO NOT SCALE DRAWING				SCALE: 1:12 WEIGHT:		SHEET 1 OF 3

4

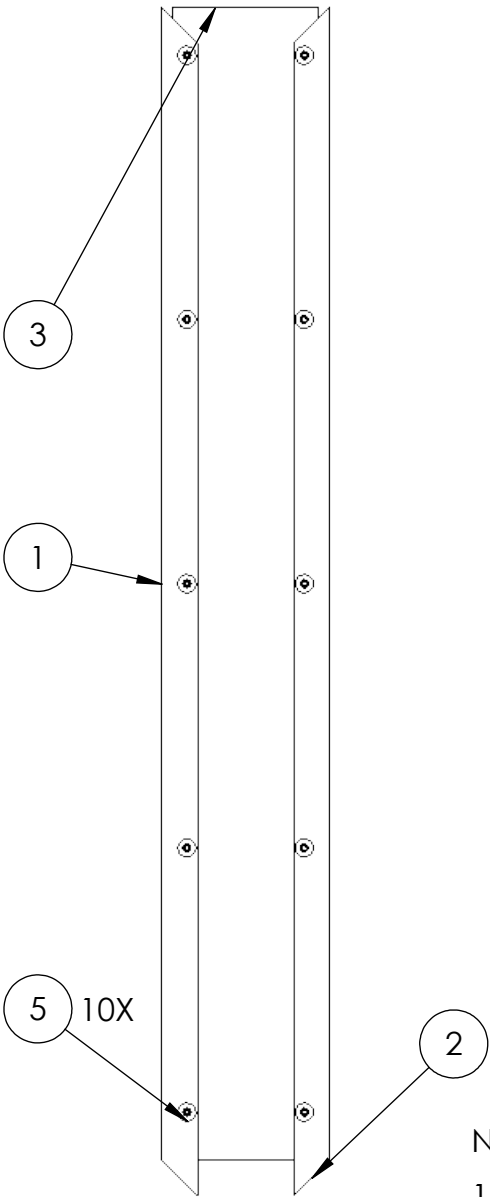
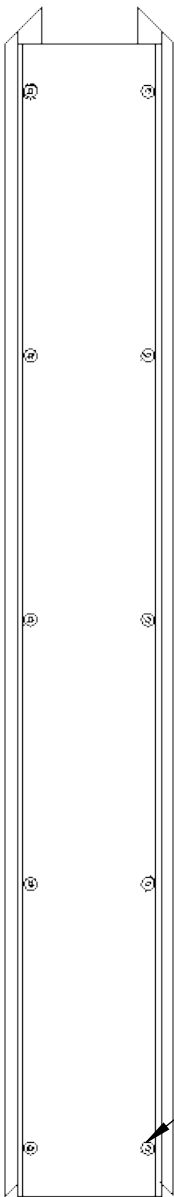
3

2

1

B

B





- Notes:
- 1. Insert (5) 10X in to the bottom of (1) and (2) .
 - 2. Attach (3) to (1) an (2) with (4) 10X .

A

A

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		UNLESS OTHERWISE SPECIFIED:		NAME	DATE	 		
		DIMENSIONS ARE IN INCHES	DRAWN			TITLE: <h1>HDPE Cable Protector</h1>		
		TOLERANCES:	CHECKED					
		FRACTIONAL $\pm 1/16$	ENG APPR.					
		ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$	MFG APPR.					
		TWO PLACE DECIMAL $\pm .01$	Q.A.					
		THREE PLACE DECIMAL $\pm .001$	COMMENTS:			SIZE DWG. NO. REV B FE-00300 A		
		INTERPRET GEOMETRIC TOLERANCING PER:						
		MATERIAL						
		FINISH						
NEXT ASSY	USED ON					SCALE: 1:12 WEIGHT: SHEET 2 OF 3		
APPLICATION		DO NOT SCALE DRAWING						

4

3

2

1

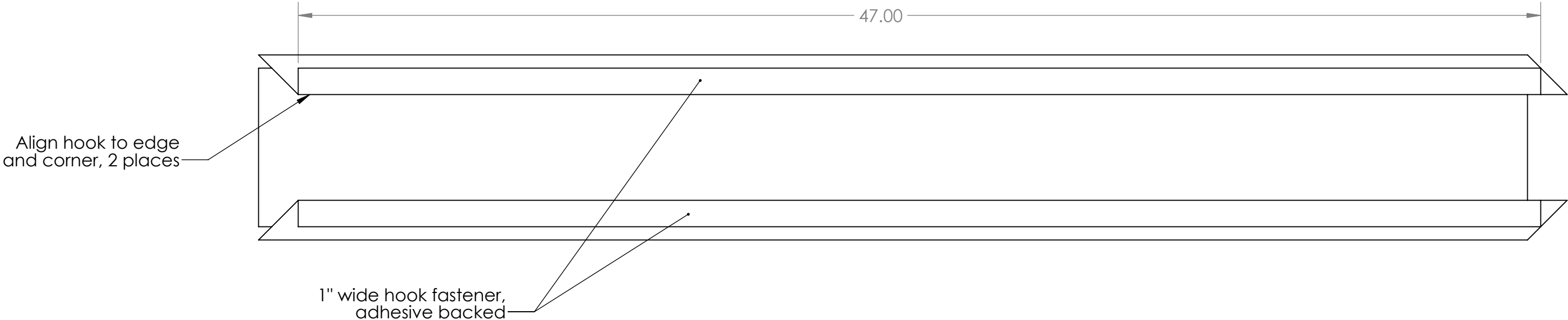
4

3

2

1

Post Manufacturing Instructions





B

B

A

A

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PERMISSION OF **FIRST®** IS PROHIBITED.

		UNLESS OTHERWISE SPECIFIED:		NAME	DATE	<div></div>			
		DIMENSIONS ARE IN INCHES	DRAWN			TITLE: <h1>HDPE Cable Protector</h1>			
		TOLERANCES:	CHECKED						
		FRACTIONAL $\pm 1/16$	ENG APPR.						
		ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$	MFG APPR.						
		TWO PLACE DECIMAL $\pm .01$	Q.A.						
		THREE PLACE DECIMAL $\pm .001$	COMMENTS:			SIZE B			
		INTERPRET GEOMETRIC TOLERANCING PER:							
		MATERIAL							
		FINISH							DWG. NO. FE-00300
NEXT ASSY	USED ON								
APPLICATION		DO NOT SCALE DRAWING	SCALE: 1:12						WEIGHT:

4

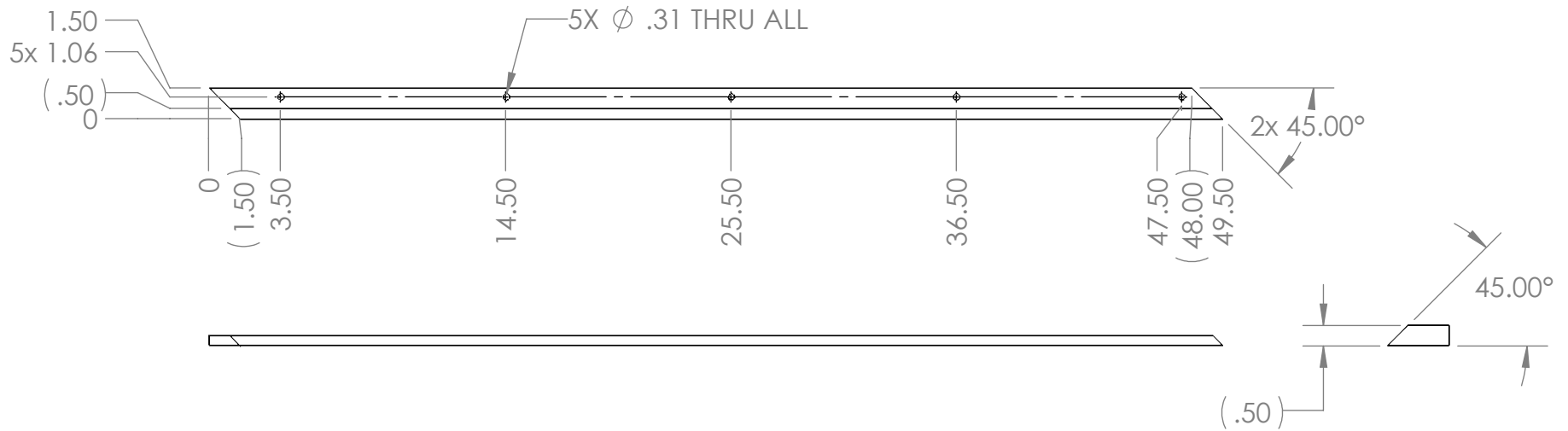
3

2

1

B

B



A

A

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		UNLESS OTHERWISE SPECIFIED:
		DIMENSIONS ARE IN INCHES
		TOLERANCES:
		FRACTIONAL $\pm 1/16$
		ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
		TWO PLACE DECIMAL $\pm .01$
		THREE PLACE DECIMAL $\pm .001$
		INTERPRET GEOMETRIC TOLERANCING PER:
		MATERIAL
		HDPE Black
		FINISH
NEXT ASSY	USED ON	
APPLICATION		DO NOT SCALE DRAWING

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		

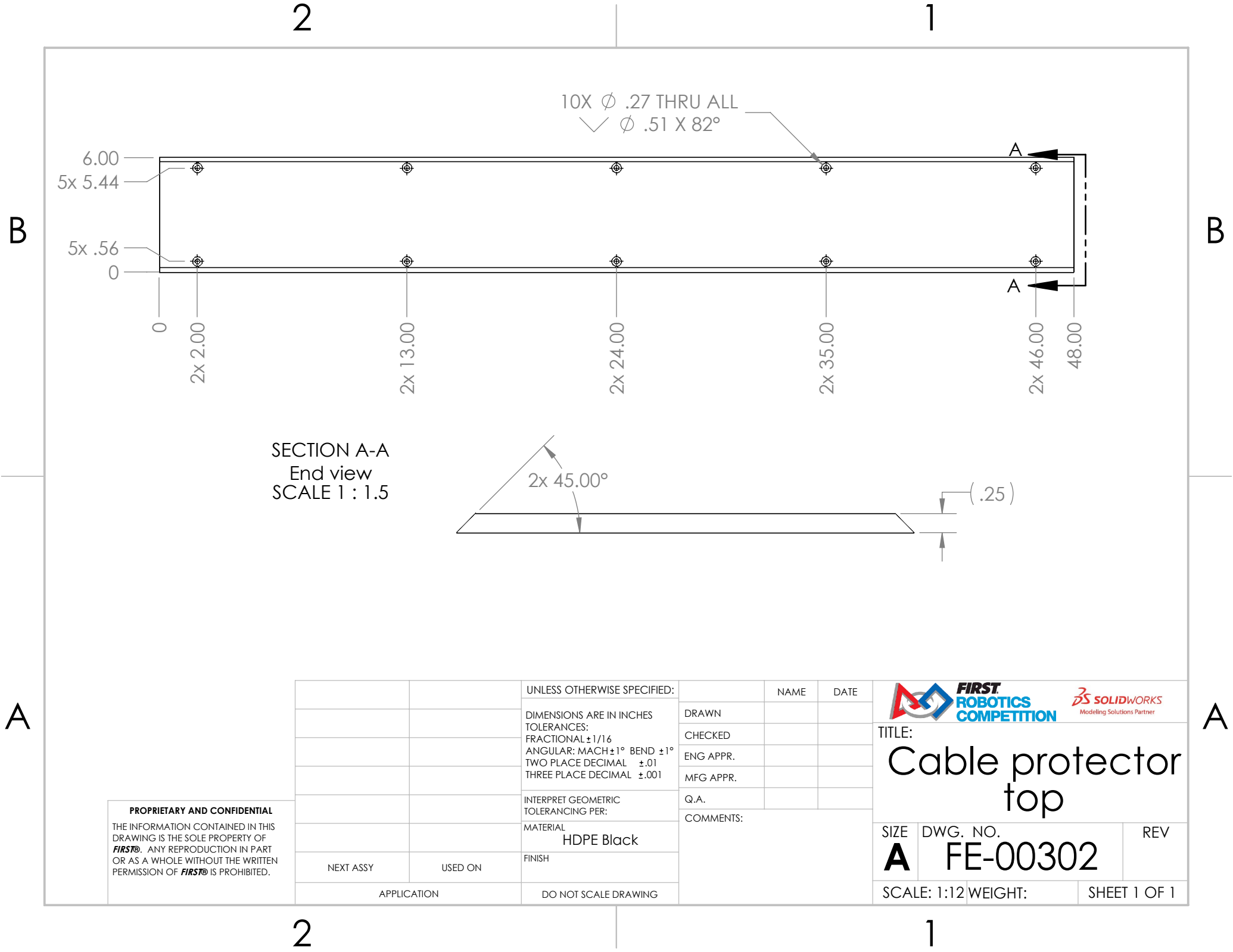


TITLE:
Side angle left

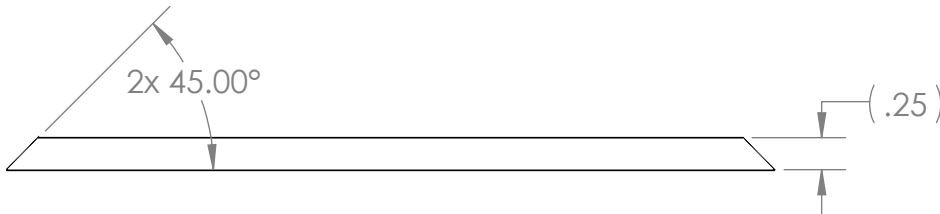
SIZE	DWG. NO.	REV
A	FE-00301	
SCALE: 1:12		WEIGHT:
		SHEET 1 OF 1

2

1





SECTION A-A
End view
SCALE 1 : 1.5



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		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
		DIMENSIONS ARE IN INCHES	DRAWN		
		TOLERANCES:	CHECKED		
		FRACTIONAL ±1/16	ENG APPR.		
		ANGULAR: MACH ±1° BEND ±1°	MFG APPR.		
		TWO PLACE DECIMAL ±.01	Q.A.		
		THREE PLACE DECIMAL ±.001	COMMENTS:		
		INTERPRET GEOMETRIC TOLERANCING PER:			
		MATERIAL			
		HDPE Black			
		FINISH			
NEXT ASSY	USED ON				
APPLICATION		DO NOT SCALE DRAWING			



TITLE:

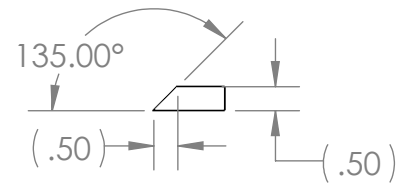
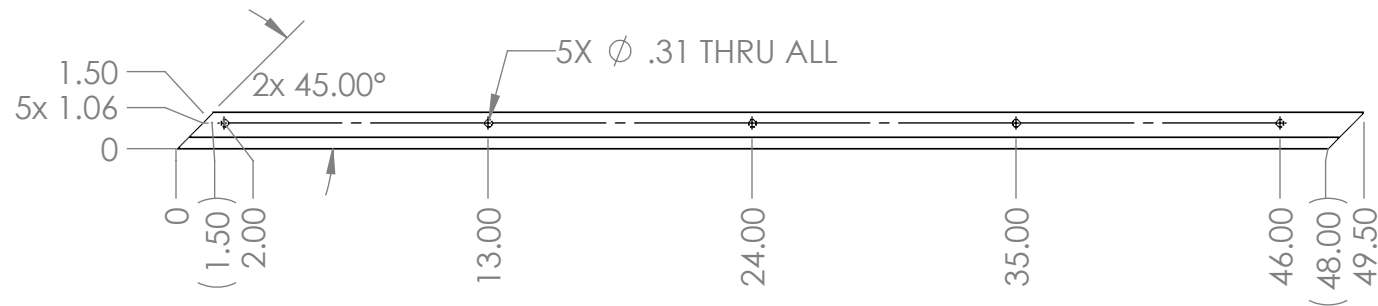
Cable protector top

SIZE	DWG. NO.	REV
A	FE-00302	

SCALE: 1:12	WEIGHT:	SHEET 1 OF 1
-------------	---------	--------------

B

B



A

A

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		UNLESS OTHERWISE SPECIFIED:
		DIMENSIONS ARE IN INCHES
		TOLERANCES:
		FRACTIONAL $\pm 1/16$
		ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
		TWO PLACE DECIMAL $\pm .01$
		THREE PLACE DECIMAL $\pm .001$
		INTERPRET GEOMETRIC TOLERANCING PER:
		MATERIAL
		HDPE Black
NEXT ASSY	USED ON	FINISH
APPLICATION		DO NOT SCALE DRAWING

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		



TITLE:
Side angle right

SIZE	DWG. NO.	REV
A	FE-00303	
SCALE: 1:12 WEIGHT:		SHEET 1 OF 1

2

1

4

3

2

1

D

D

C

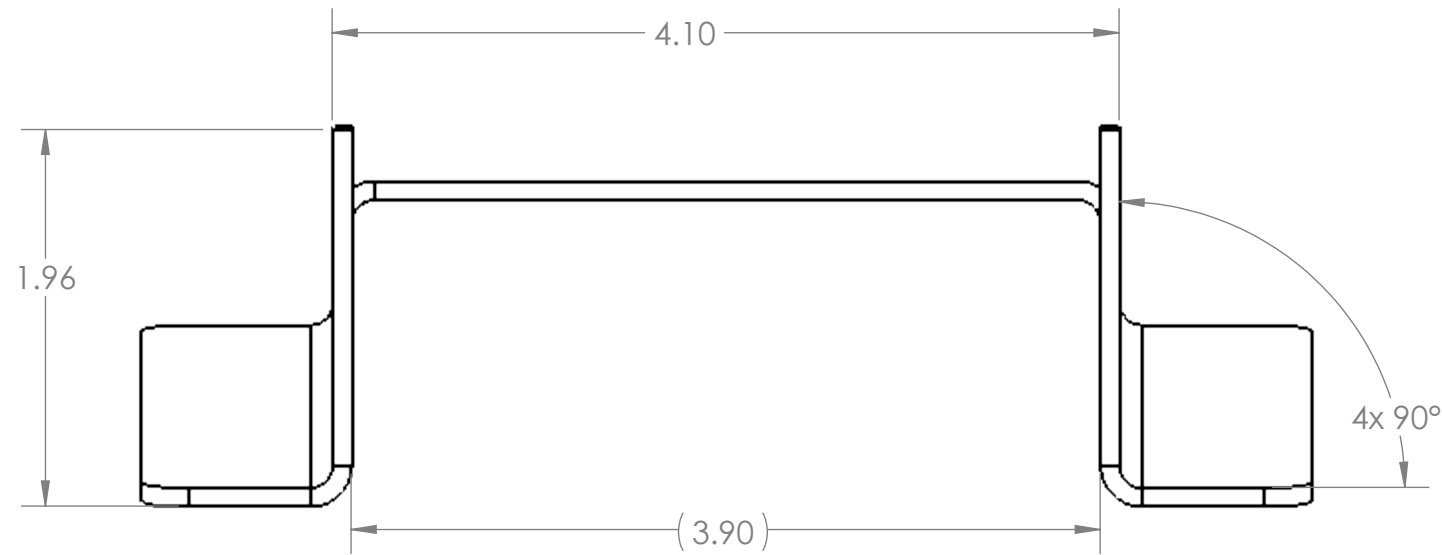
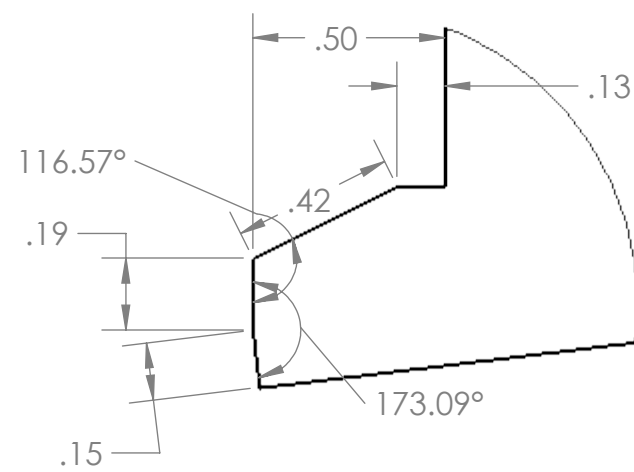
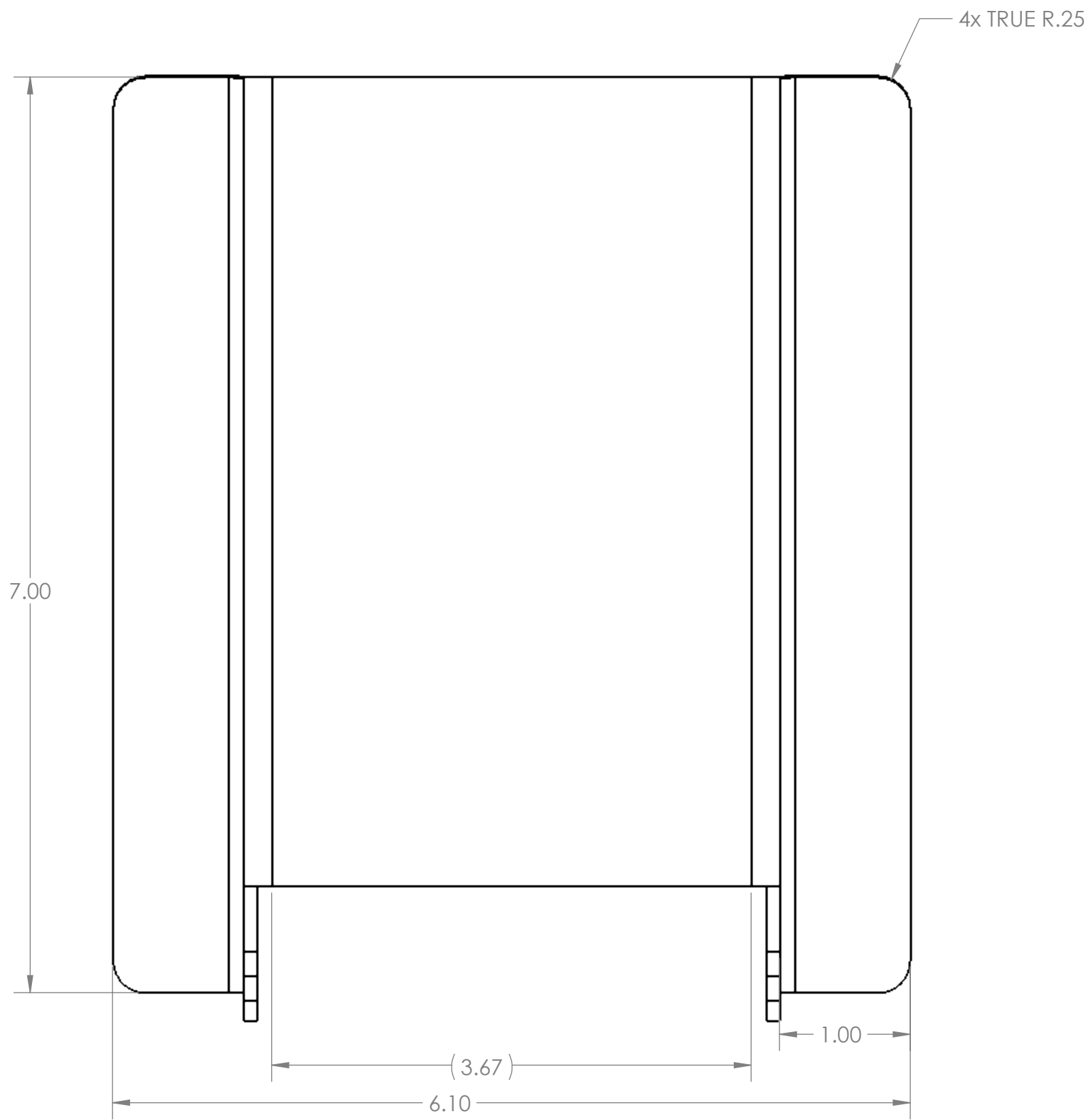
C

B

B

A

A



DETAIL A
SCALE 2 : 1

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/16$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .02$
THREE PLACE DECIMAL $\pm .010$

MATERIAL/FINISH:
12 gau steel podwer coated
black

DO NOT SCALE DRAWING

BEND

DRAWN

NAME

NW

DATE

7/8/2021

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COMMENTS:

REMOVE ALL BURRS AND SHARP
EDGES.



**FIRST
ROBOTICS
COMPETITION**



TITLE:

Cable protector
exit segment

SIZE

C

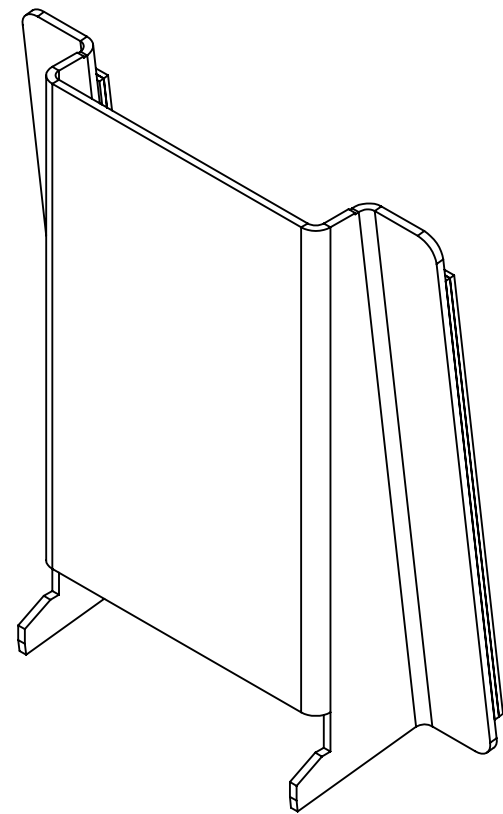
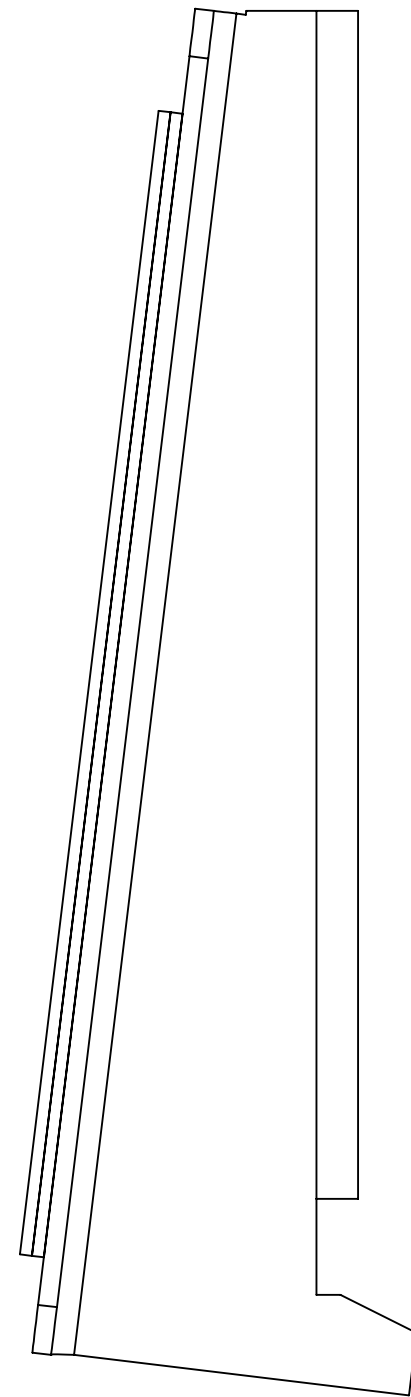
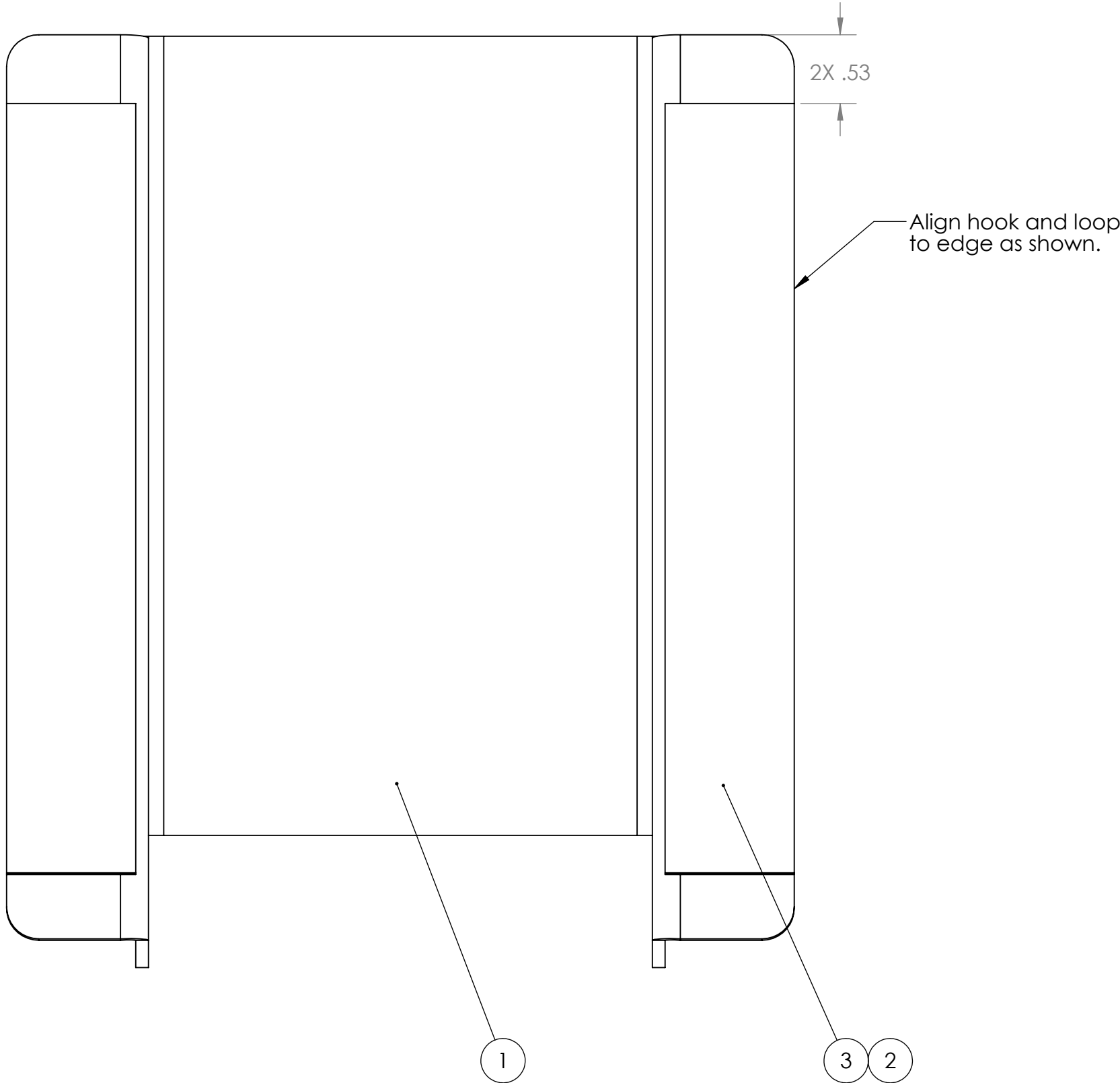
DWG. NO.

FE-00304

REV

SCALE: 1:1

SHEET 1 OF 1



- Assembly Notes:
1. Apply hook fastener to FE-00304.
 2. Apply loop fastener to the hook fastener, but leave the plastic backing on the adhesive until assembly on the field

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	FE-00304	Cable protector exit segment	1
2	Hook_1_6	1" x 6" Hook, Adhesive Backed	2
3	Loop_1_6	1" x 6" Loop, Adhesive Backed	2

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL $\pm 1/2$
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
TWO PLACE DECIMAL $\pm .50$

MATERIAL/FINISH:

DO NOT SCALE DRAWING

FIELD	NAME	DATE
DRAWN	DF	1/5/2022

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COMMENTS:
REMOVE ALL BURRS AND SHARP EDGES.



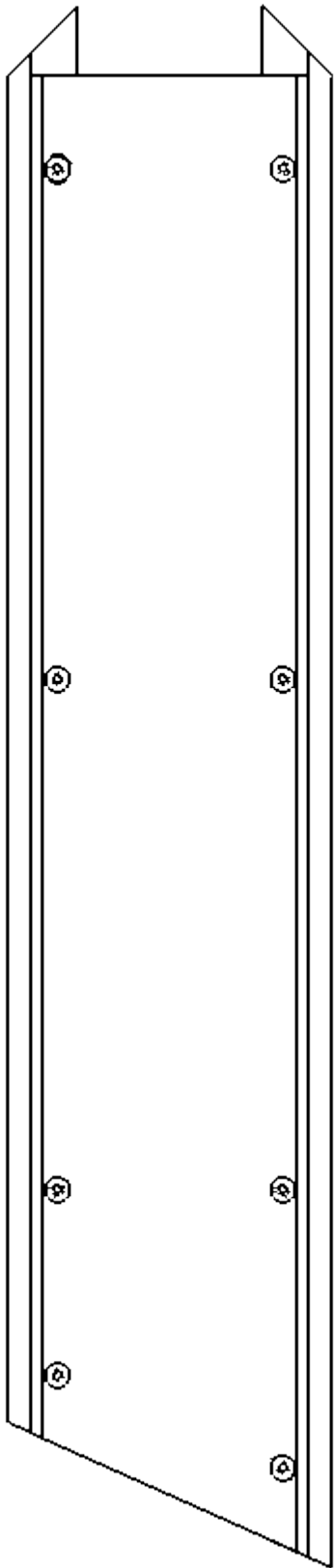
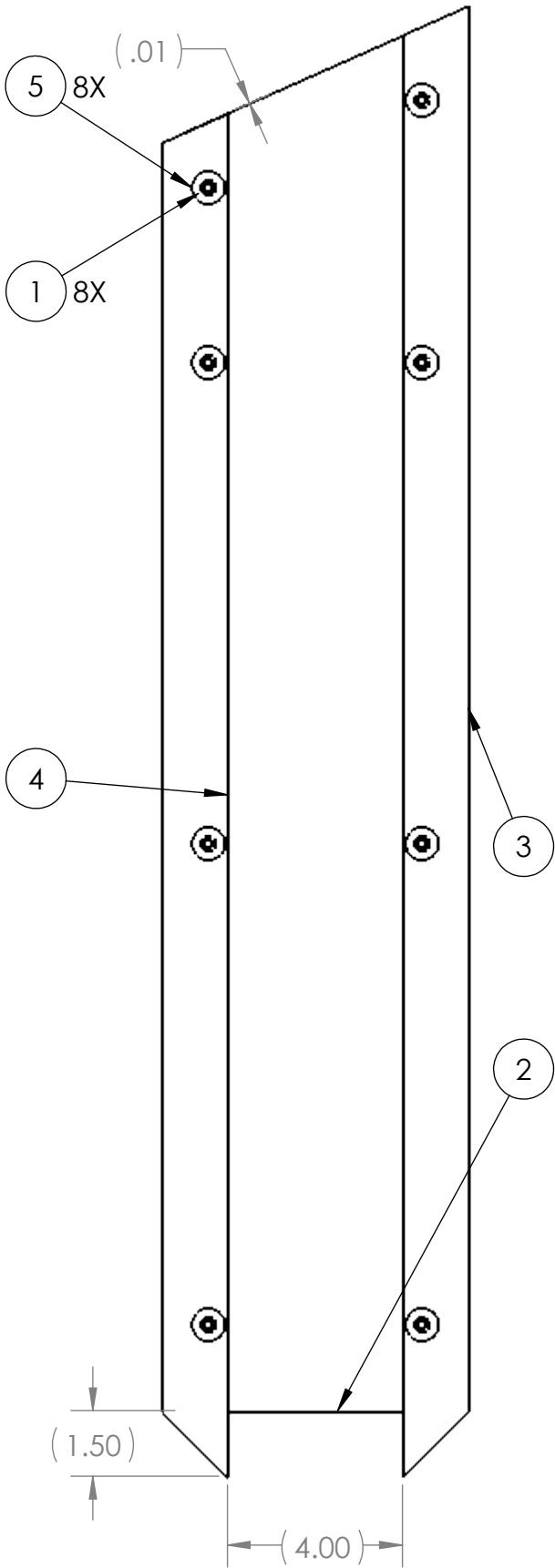
TITLE: Cable protector exit segment with hook

SIZE	DWG. NO.	REV
C	FE-00305	



SCALE: 1:1 SHEET 1 OF 1

4			
ITEM NO.	PART NUMBER	DESCRIPTION	
1	Flat Hex .25_20_.75	Flat Hex .25_20_.75	8
2	GE-22601	Cable protector top angled	1
3	GE-22602	Cable protector side right angled	1
4	GE-22603	Cable protector side left angled	1
5	TeeNut_ultra_split_rst_.25_20	.25-20 TeeNut ultra split resistant	8

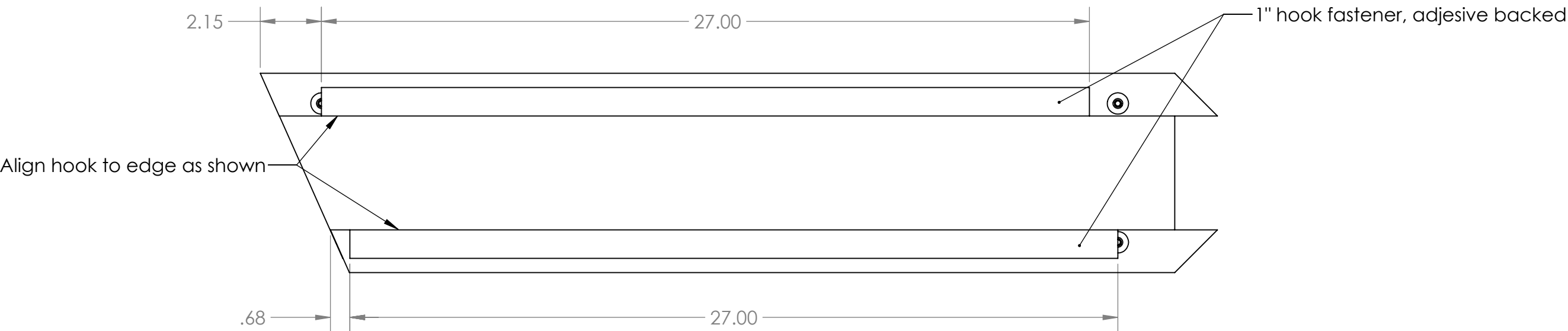
1				
REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	Added sheet 2	1/5/2022	DAF





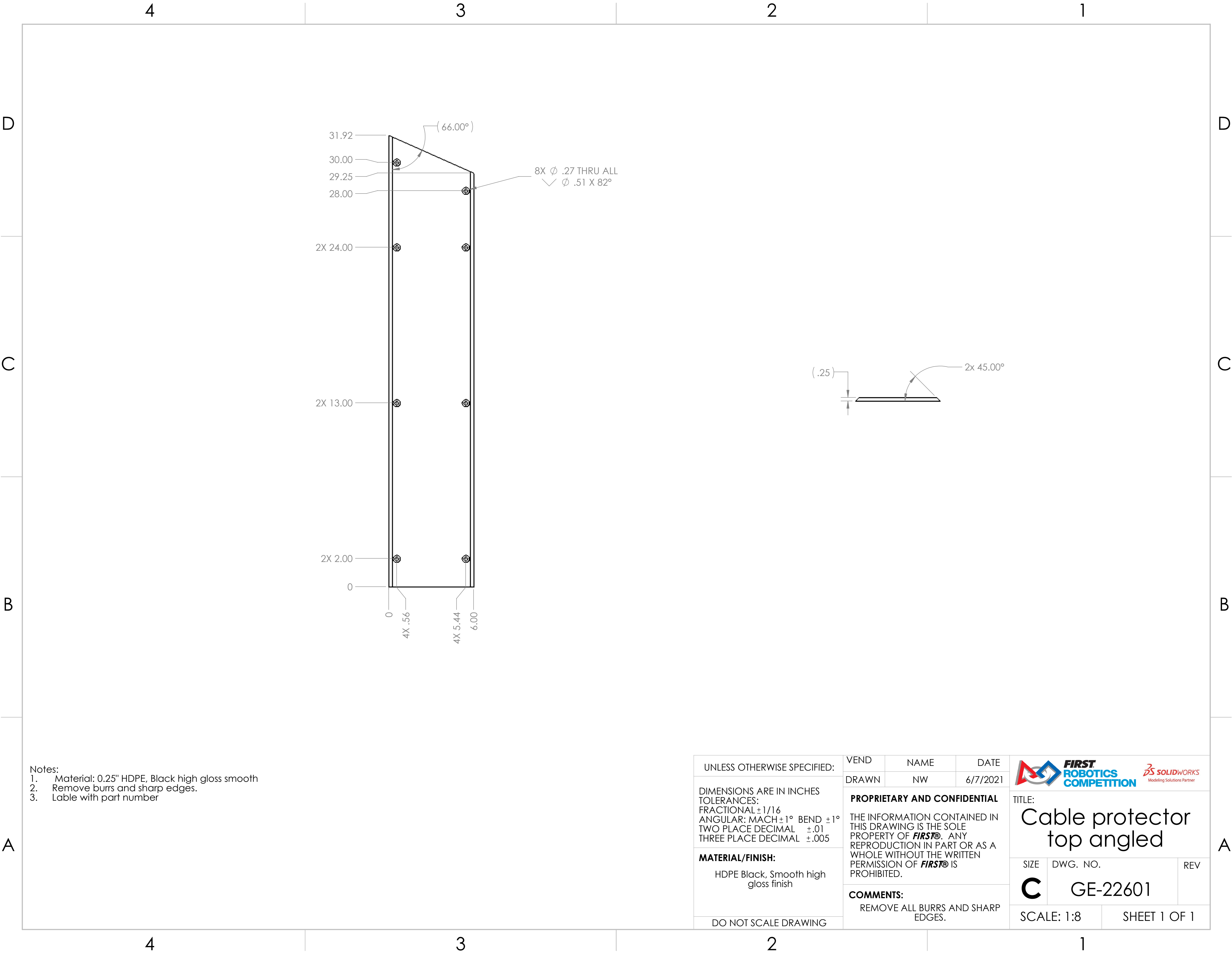
- Notes:
- Insert (5) 8X to (4) and (3) .
 - Attach (2) to (4) and (3) with (1) 8X .

UNLESS OTHERWISE SPECIFIED:	VEND	NAME	DATE	<div></div> <div>TITLE: <h1>Angled cable protector</h1></div>		
	DRAWN	NW	7/29/2021			
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.005	PROPRIETARY AND CONFIDENTIAL			THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.		
	COMMENTS:					
MATERIAL/FINISH:	REMOVE ALL BURRS AND SHARP EDGES.			SIZE	DWG. NO.	REV
DO NOT SCALE DRAWING				C	GE-22600	A
				SCALE: 1:4		SHEET 1 OF 2



Post Manufaturing Instructions

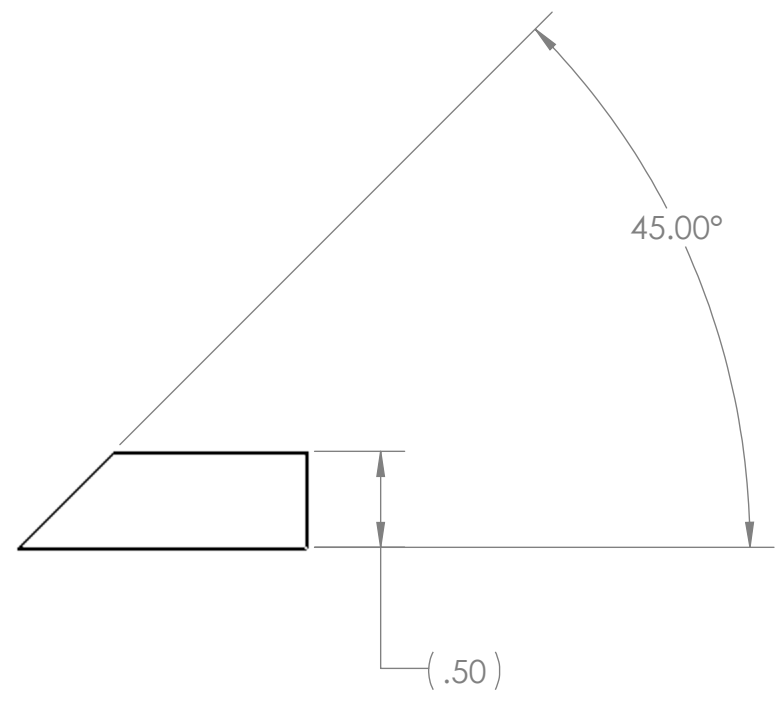
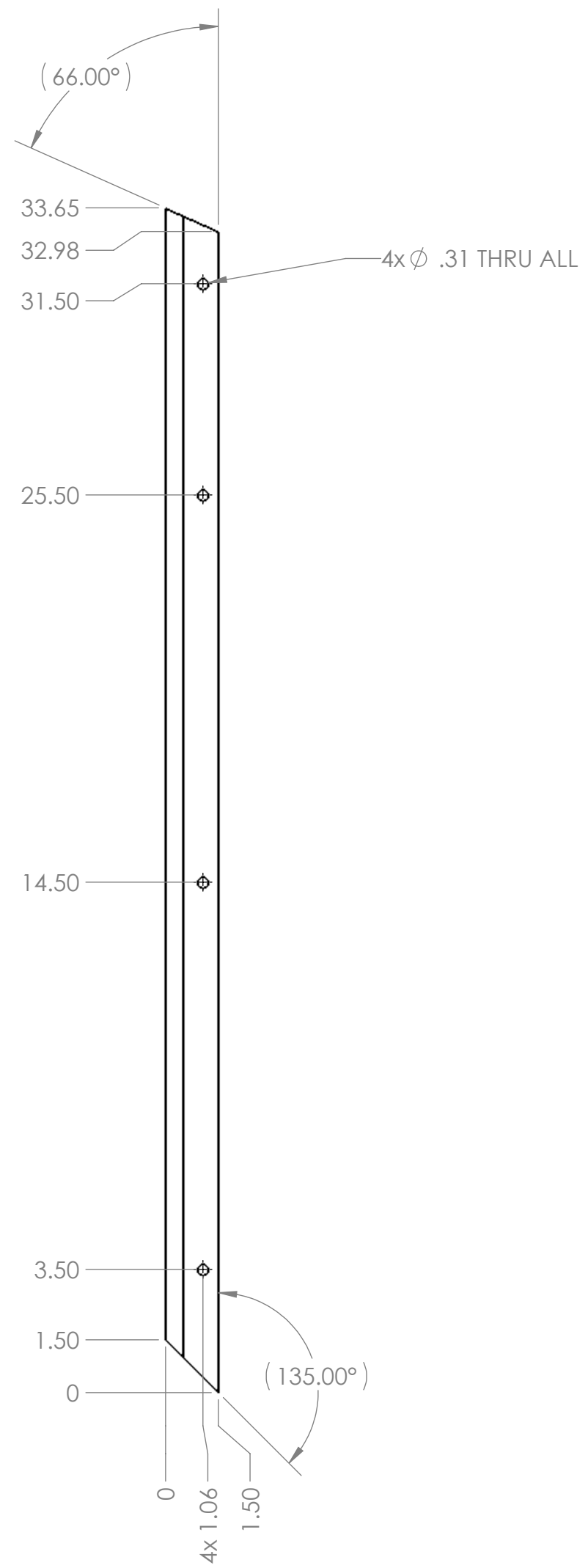


UNLESS OTHERWISE SPECIFIED:	VEND	NAME	DATE	<div></div> <div>TITLE: Angled cable protector</div>		
	DRAWN	NW	7/29/2021			
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.005	PROPRIETARY AND CONFIDENTIAL			THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.		
	COMMENTS:					
	REMOVE ALL BURRS AND SHARP EDGES.					
MATERIAL/FINISH:				SIZE	DWG. NO.	REV
				C	GE-22600	A
DO NOT SCALE DRAWING				SCALE: 1:4		SHEET 2 OF 2





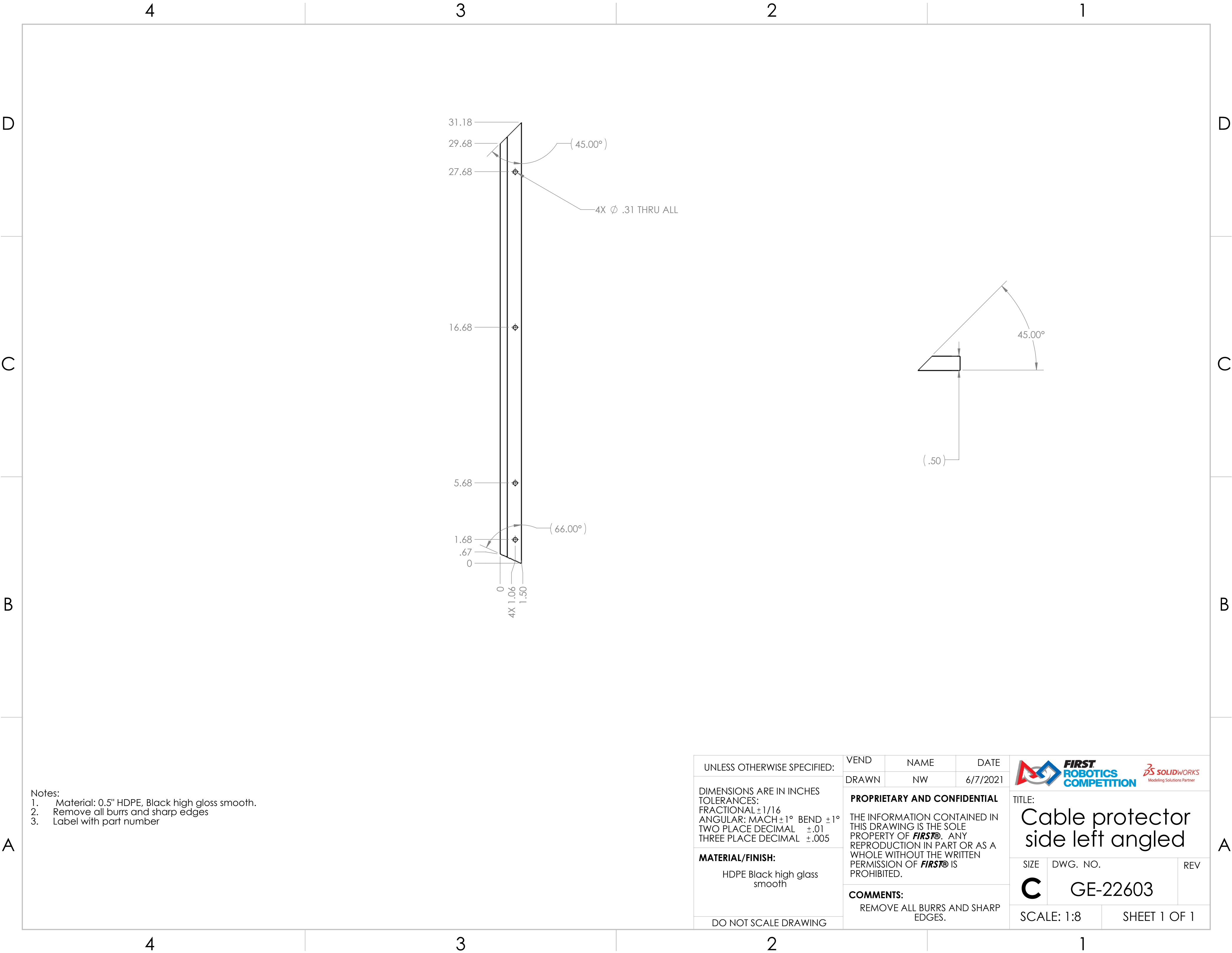
- Notes:
- 1. Material: 0.25" HDPE, Black high gloss smooth
 - 2. Remove burrs and sharp edges.
 - 3. Lable with part number

UNLESS OTHERWISE SPECIFIED:	VEND	NAME	DATE	<div></div>	
	DRAWN	NW	6/7/2021		
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.005	PROPRIETARY AND CONFIDENTIAL			TITLE: Cable protector top angled	
	THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.				
	MATERIAL/FINISH: HDPE Black, Smooth high gloss finish	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.			SIZE C
DO NOT SCALE DRAWING				SCALE: 1:8	SHEET 1 OF 1





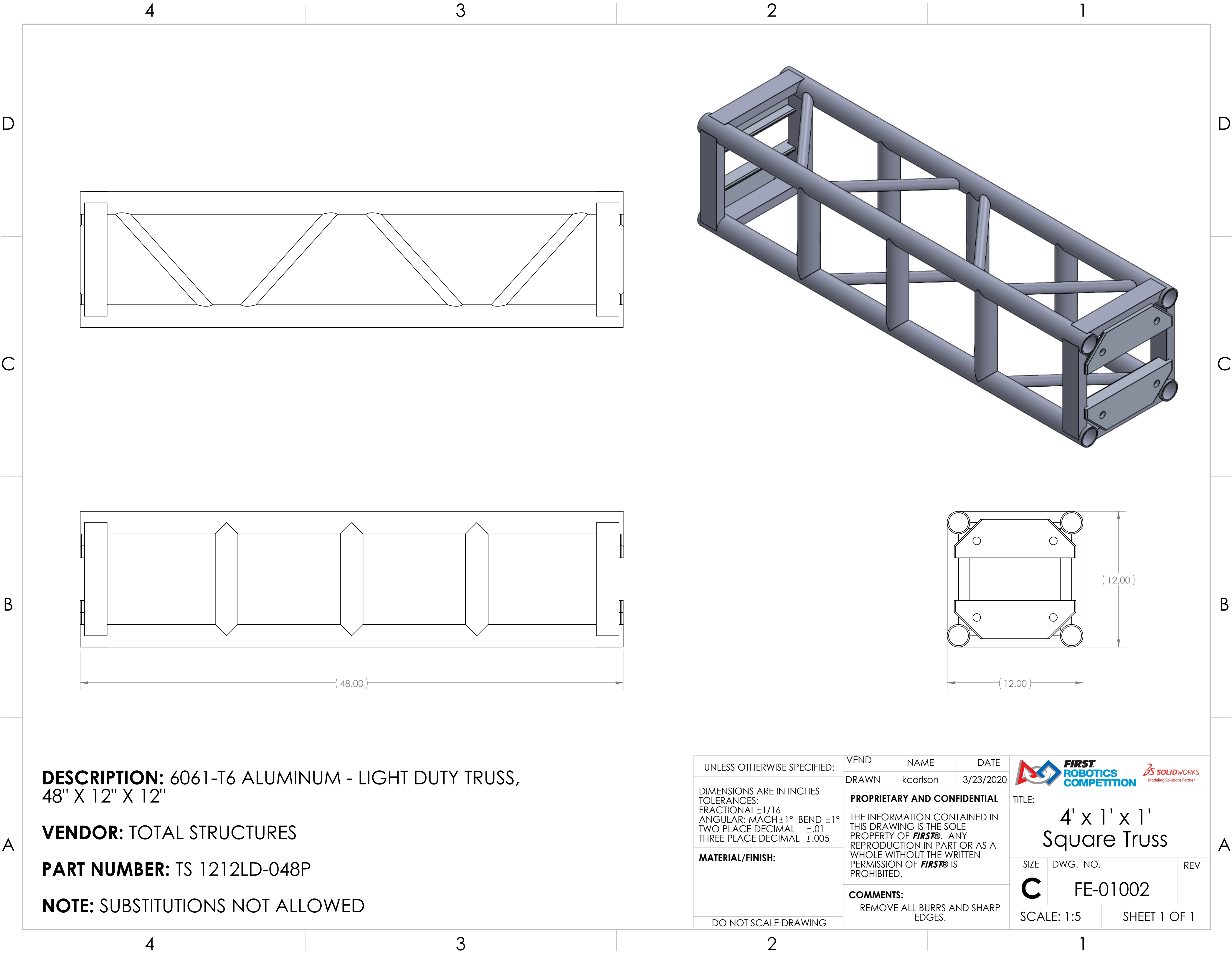
Notes:
1. Material: 0.5" HDPE,Black high gloss smooth.
2. Remove all burrs and sharp edges.
3. Label with part number.

UNLESS OTHERWISE SPECIFIED:	VEND	NAME	DATE	<div><div></div><div>TITLE: Cable protector side right angled</div></div>		
	DRAWN	NW	6/8/2021			
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.005	PROPRIETARY AND CONFIDENTIAL			SIZE DWG. NO. REV		
	THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.					
MATERIAL/FINISH:	COMMENTS:			C GE-22602		
HDPE Black high gloss smooth	REMOVE ALL BURRS AND SHARP EDGES.					
DO NOT SCALE DRAWING				SCALE: 1:8		SHEET 1 OF 1



- Notes:
- 1. Material: 0.5" HDPE, Black high gloss smooth.
 - 2. Remove all burrs and sharp edges
 - 3. Label with part number

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/16$ ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$ TWO PLACE DECIMAL $\pm .01$ THREE PLACE DECIMAL $\pm .005$ MATERIAL/FINISH: HDPE Black high glass smooth DO NOT SCALE DRAWING	VEND	NAME	DATE	<div></div> <div>TITLE: Cable protector side left angled</div>		
	DRAWN	NW	6/7/2021			
	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.			SIZE	DWG. NO.	REV
	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.			C	GE-22603	
		SCALE: 1:8		SHEET 1 OF 1		





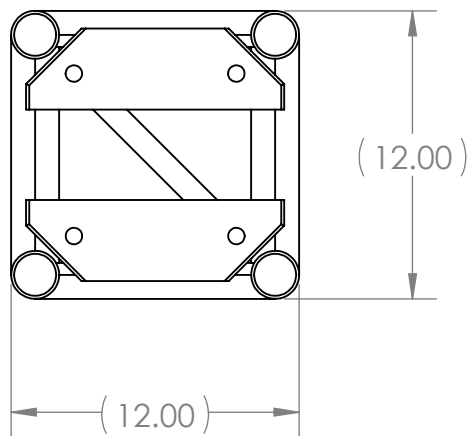
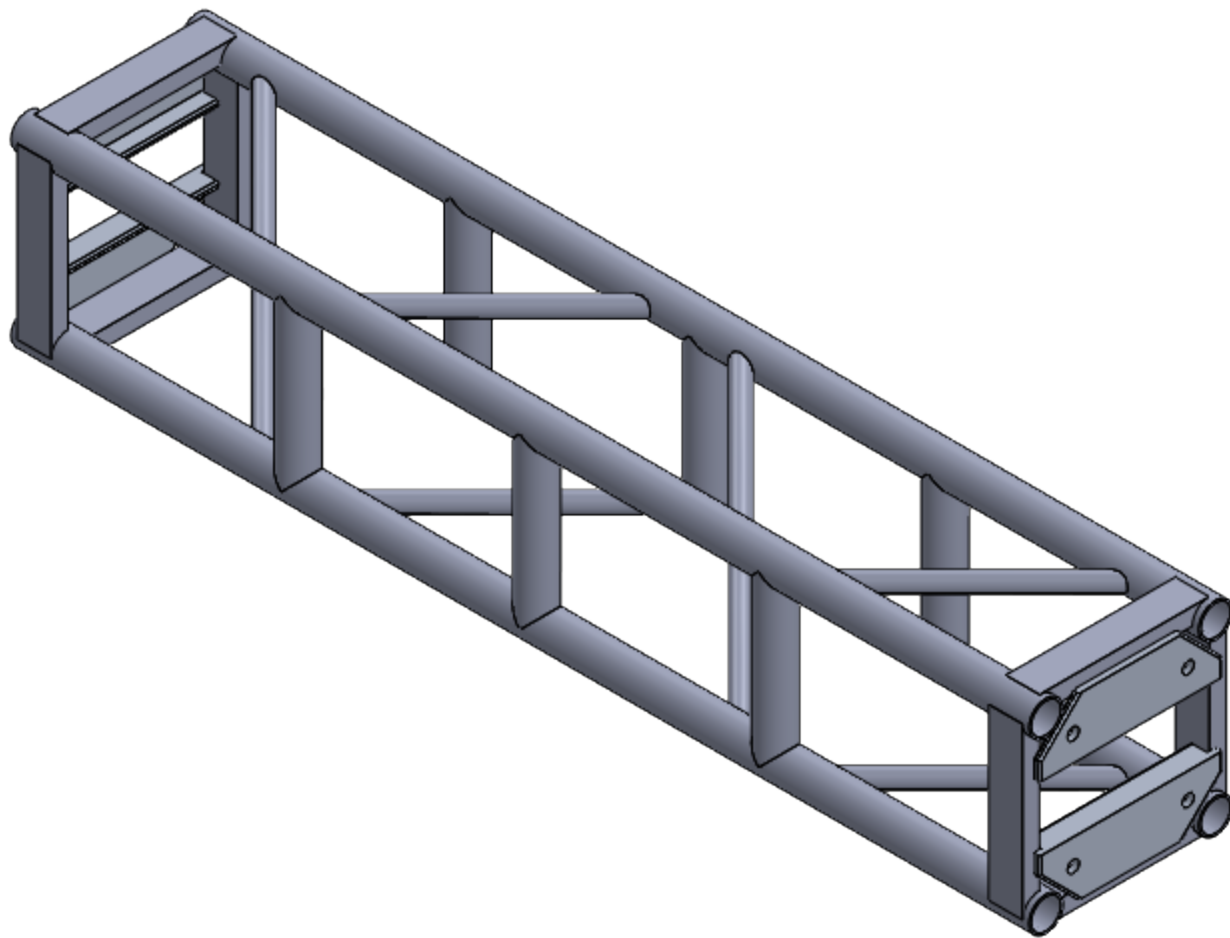
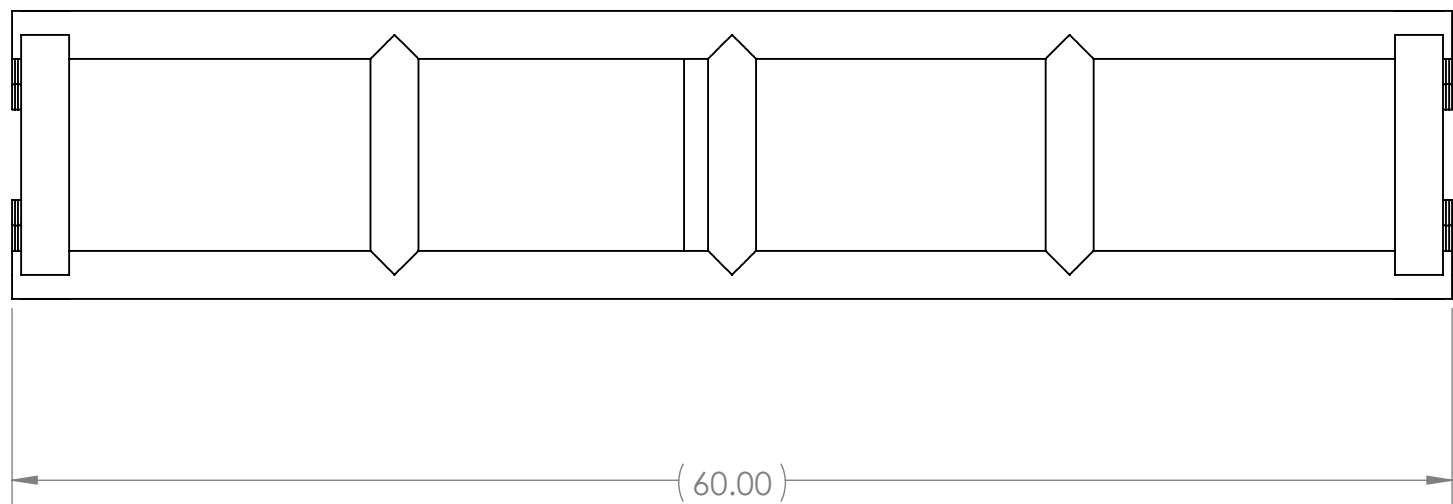
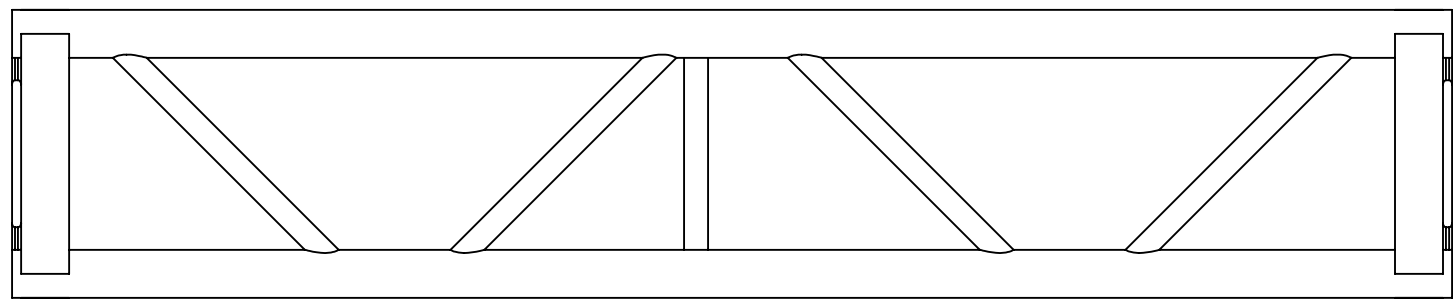
DESCRIPTION: 6061-T6 ALUMINUM - LIGHT DUTY TRUSS,
48" X 12" X 12"

VENDOR: TOTAL STRUCTURES

PART NUMBER: TS 1212LD-048P

NOTE: SUBSTITUTIONS NOT ALLOWED

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.005 MATERIAL/FINISH: DO NOT SCALE DRAWING	VEND	NAME	DATE	 	
	DRAWN	kcarlson	3/23/2020		
	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED. COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.				TITLE: 4' x 1' x 1' Square Truss
SIZE C		DWG. NO. FE-01002		REV	
SCALE: 1:5			SHEET 1 OF 1		





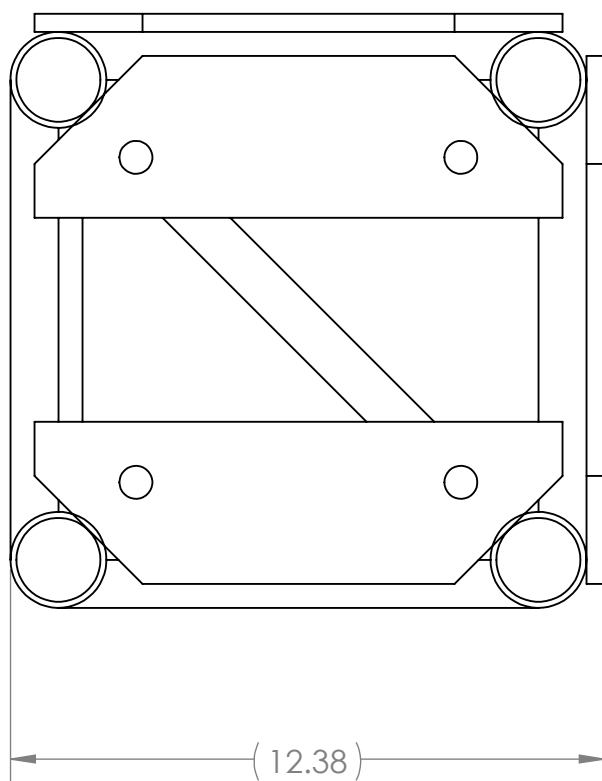
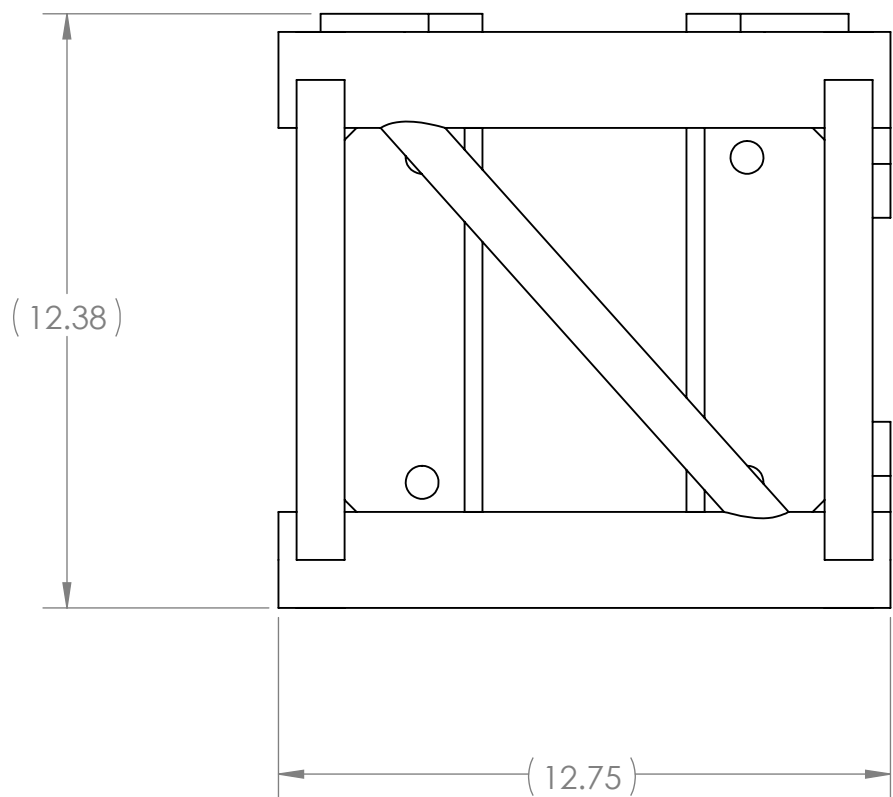
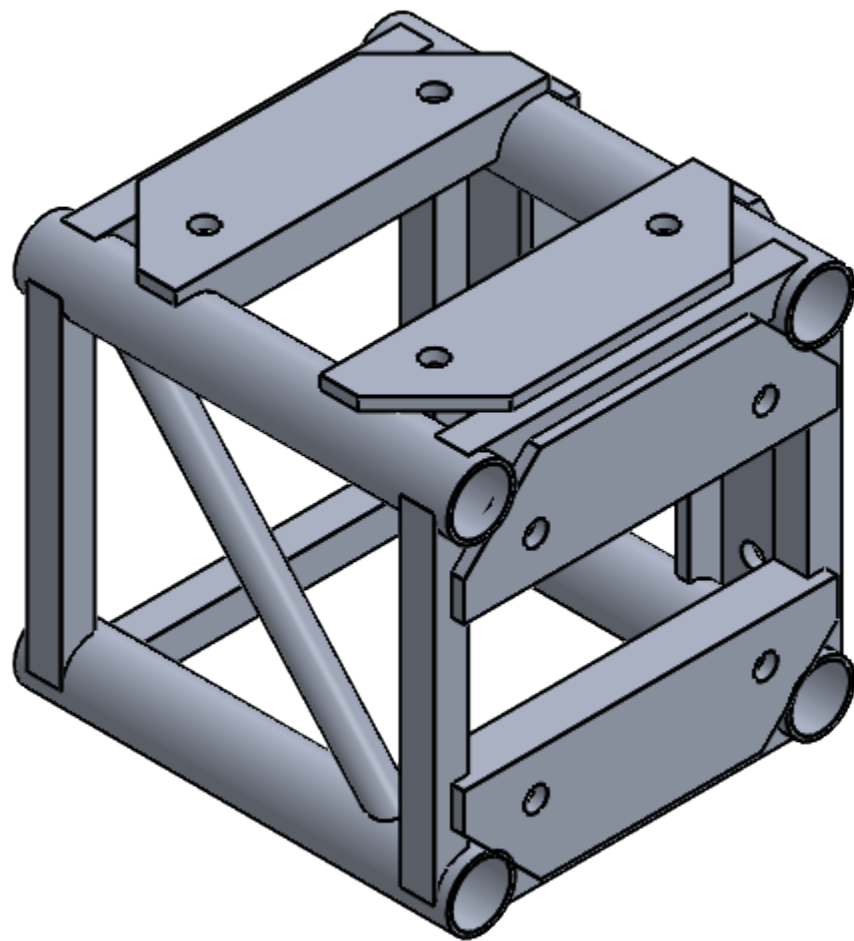
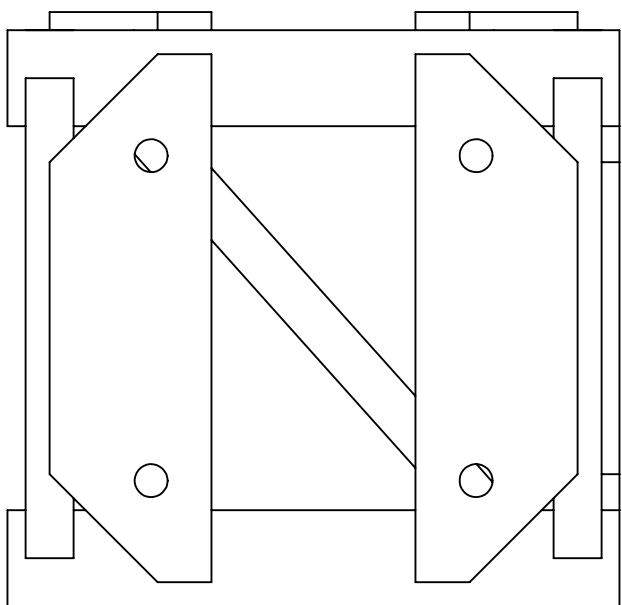
DESCRIPTION: 6061-T6 ALUMINUM - LIGHT DUTY TRUSS,
60" X 12" X 12"

VENDOR: TOTAL STRUCTURES

PART NUMBER: TS 1212LD-060P

NOTE: SUBSTITUTIONS NOT ALLOWED

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/16$ ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$ TWO PLACE DECIMAL $\pm .01$ THREE PLACE DECIMAL $\pm .005$ MATERIAL/FINISH: DO NOT SCALE DRAWING	VEND	NAME	DATE	  TITLE: 5' x 1' x 1' Square Truss	
	DRAWN	kcarlson	3/23/2020		
	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST IS PROHIBITED.			SIZE	DWG. NO.
	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.			C	FE-01003
SCALE: 1:8		SHEET 1 OF 1			





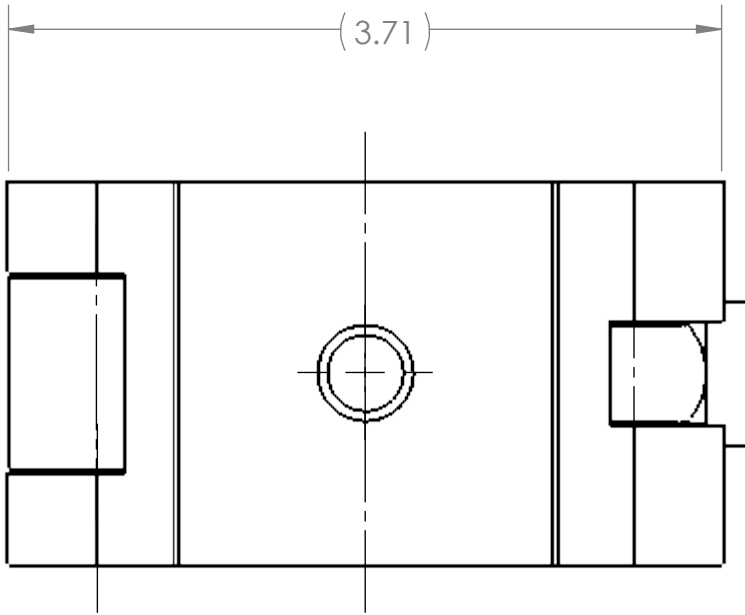
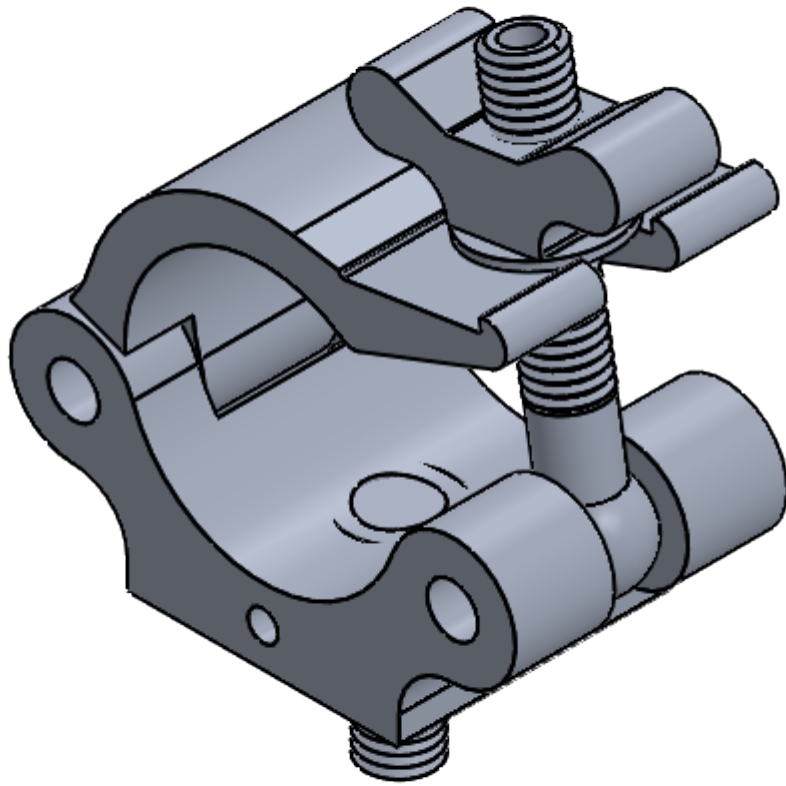
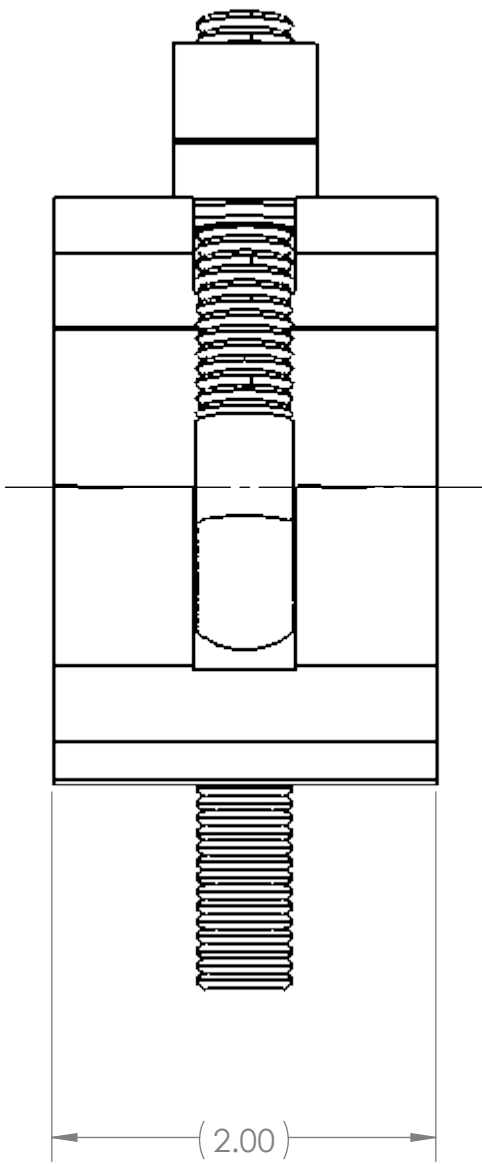
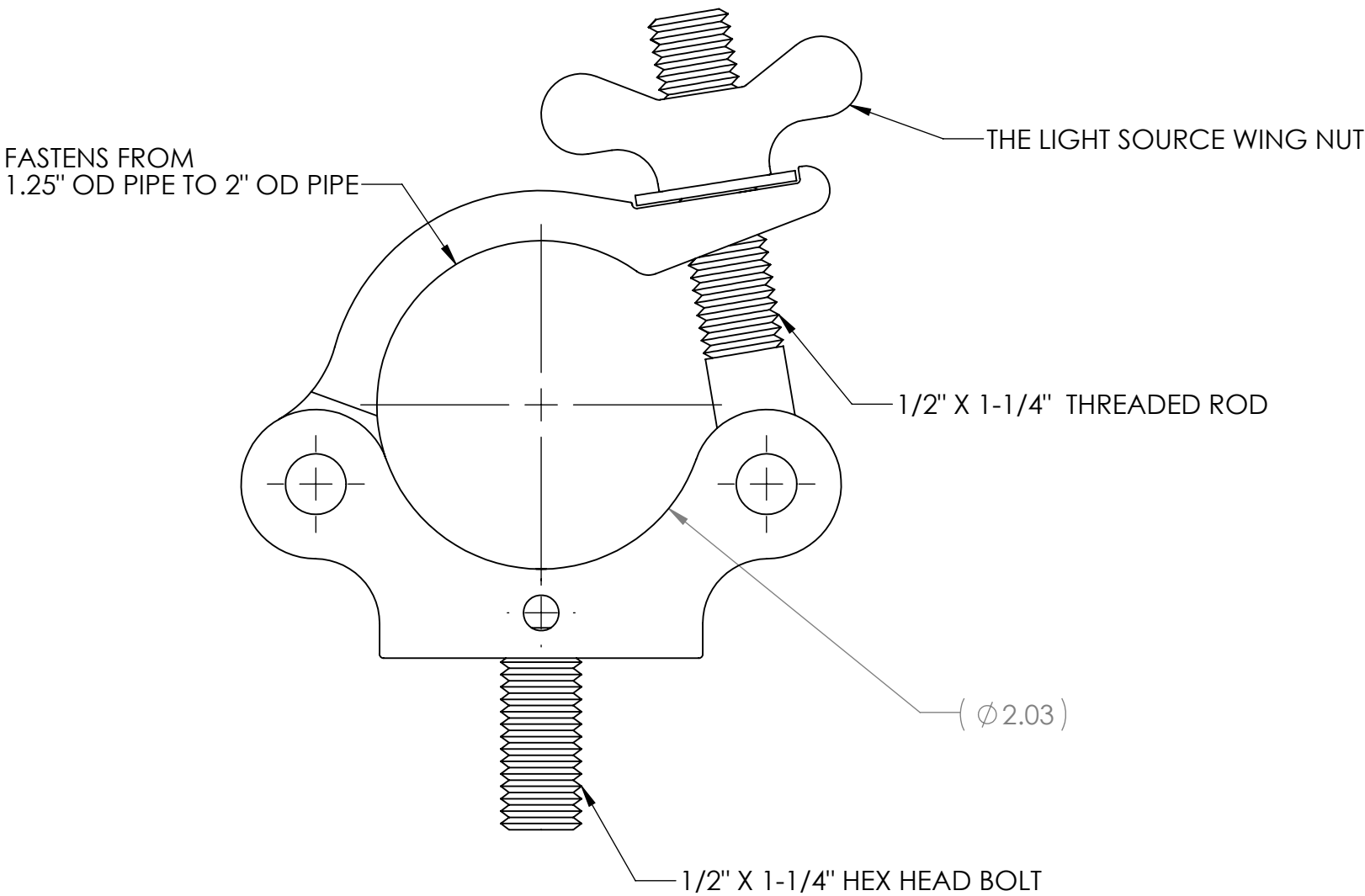
DESCRIPTION: 6061-T6 ALUMINUM - LIGHT DUTY TRUSS, 3-SIDED CORNER BLOCK

VENDOR: TOTAL STRUCTURES

PART NUMBER: TS 1212LD-C3P

NOTE: SUBSTITUTIONS NOT ALLOWED

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL $\pm 1/16$ ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$ TWO PLACE DECIMAL $\pm .01$ THREE PLACE DECIMAL $\pm .005$ MATERIAL/FINISH: DO NOT SCALE DRAWING	VEND	NAME	DATE	<div><div></div><div>TITLE: 3 Way Corner Block</div></div>	
	DRAWN	kcarlson	3/23/2020		
	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.			SIZE	DWG. NO.
	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.			C	FE-01012
SCALE: 1:4		SHEET 1 OF 1			





DESCRIPTION: CHEESE BOROUGH FOR TRUSS - MLM MEGA COUPLER, SILVER

VENDOR: TOTAL STRUCTURES VIA THE LIGHT SOURCE

PART NUMBER: MLM MEGA COUPLER

NOTE: SUBSTITUTIONS NOT ALLOWED

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/16 ANGULAR: MACH ±1° BEND ±1° TWO PLACE DECIMAL ±.01 THREE PLACE DECIMAL ±.005 MATERIAL/FINISH: DO NOT SCALE DRAWING	VEND	NAME	DATE	<div><div></div><div>TITLE: Cheeseborough for Truss _ Single</div></div>	
	DRAWN	kcarlson	3/23/2020		
	PROPRIETARY AND CONFIDENTIAL			THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIRST® . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIRST® IS PROHIBITED.	
	COMMENTS: REMOVE ALL BURRS AND SHARP EDGES.				
SIZE		DWG. NO.		REV	
C		FE-01016			
SCALE: 1:1		SHEET 1 OF 1			