

**NOTES CONTINUED:**  
 5. SCRIBE, ENGRAVE (A VIBRATORY TOOL MAY BE USED), LASER MARK OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE") ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS.  
 EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXXX

6. APPROXIMATE WEIGHT =  
 • -101: 67 lbs  
 • -102: 75 lbs  
 • -103: 84 lbs  
 • -201: 107 lbs  
 • -202: 124 lbs  
 • -203: 141 lbs

7. FINISH ALL ITEMS EXCEPT ITEM 10 PER:

• PAINT ALL SURFACES. USE MEDIUM BLUE SHERWIN WILLIAMS (POLANE (R) T-PLUS POLYURETHANE ENAMEL), OR EQUIVALENT. PRIME WITH SHERWIN WILLIAMS INDUSTRIAL WASH PRIMER P60G2 OR EQUIVALENT.

OR  
 • HOT DIP GALVANIZE PER ASTM A123.

DURING FINISHING, MASK ITEM 10 AS NEEDED

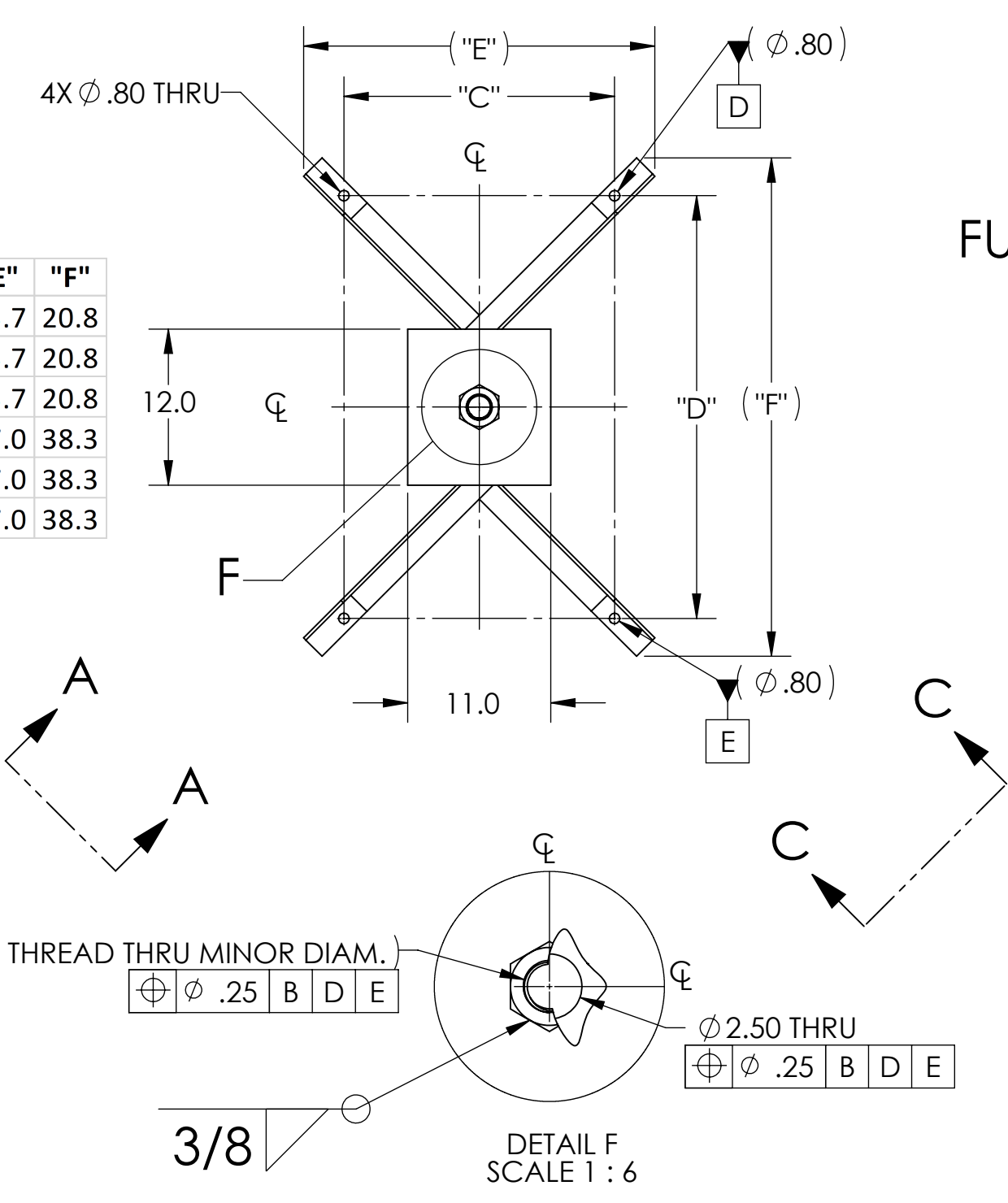
8. FOR ITEM 10, APPLY OXISOLV RUST INHIBITOR, OR EQUIVALENT, TO ALL UNPAINTED SURFACES PER MFG INSTRUCTIONS.

9. D2000440-203 DRAWN. ALL OTHER CONFIGURATIONS HAVE EQUIVALENT CONSTRUCTION.

REV.	DATE	DCN #	DRAWING TREE #
V1	15 OCT 2020	E2000547-x0	-
V3	8 DEC 2020	E2000620-x0	-
V4	04 MAR 2021	E2100073-x0	-

Type	"C"	"D"	"E"	"F"
-101	9.07	16.23	13.7	20.8
-102	9.07	16.23	13.7	20.8
-103	9.07	16.23	13.7	20.8
-201	20.81	32.51	27.0	38.3
-202	20.81	32.51	27.0	38.3
-203	20.81	32.51	27.0	38.3

D2000439 Type	"A"	"B"
-11	29.4	3
-12	39.9	3
-13	50.4	3
-21	29.4	6
-22	39.9	6
-23	50.4	6

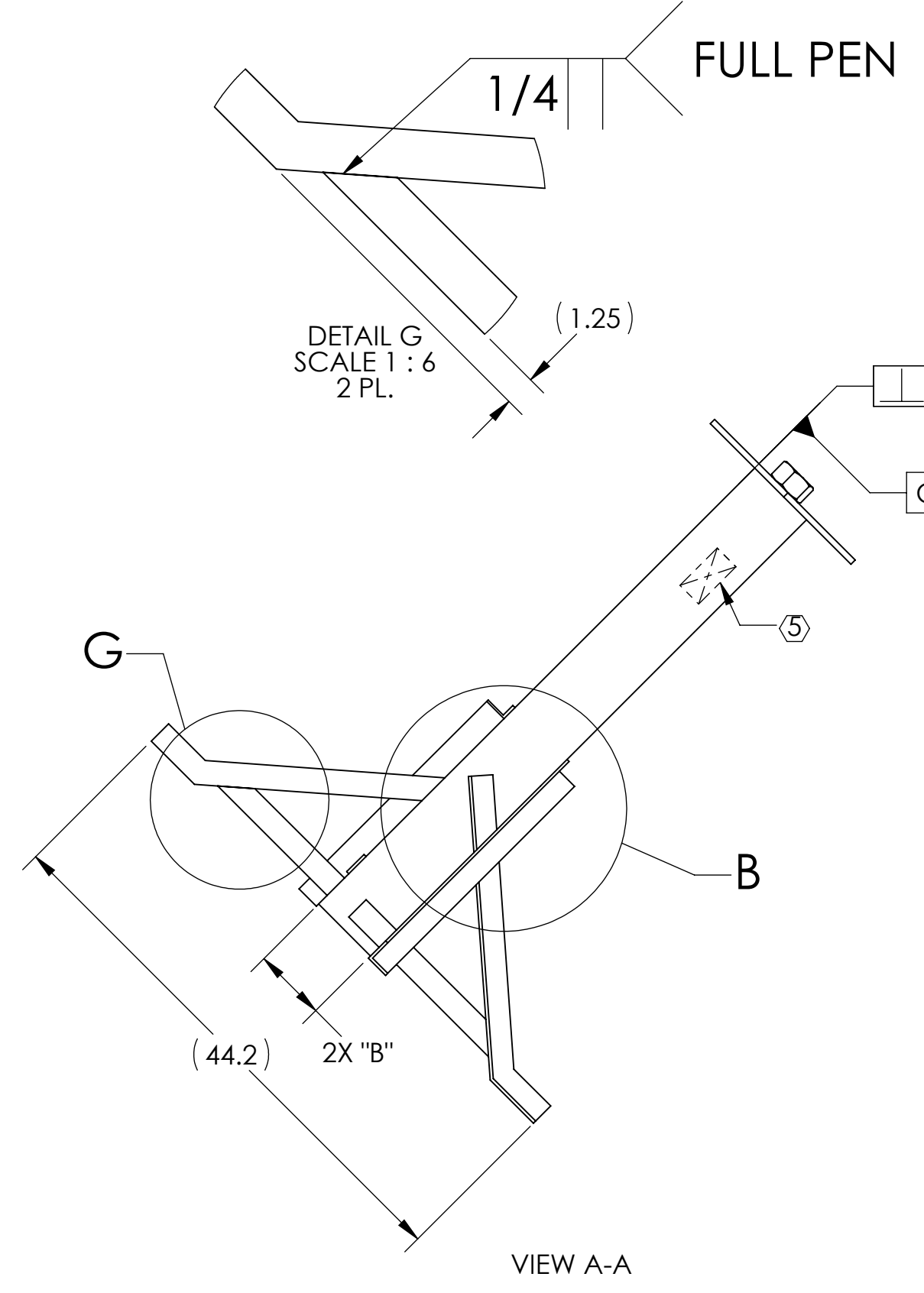


FULL PEN

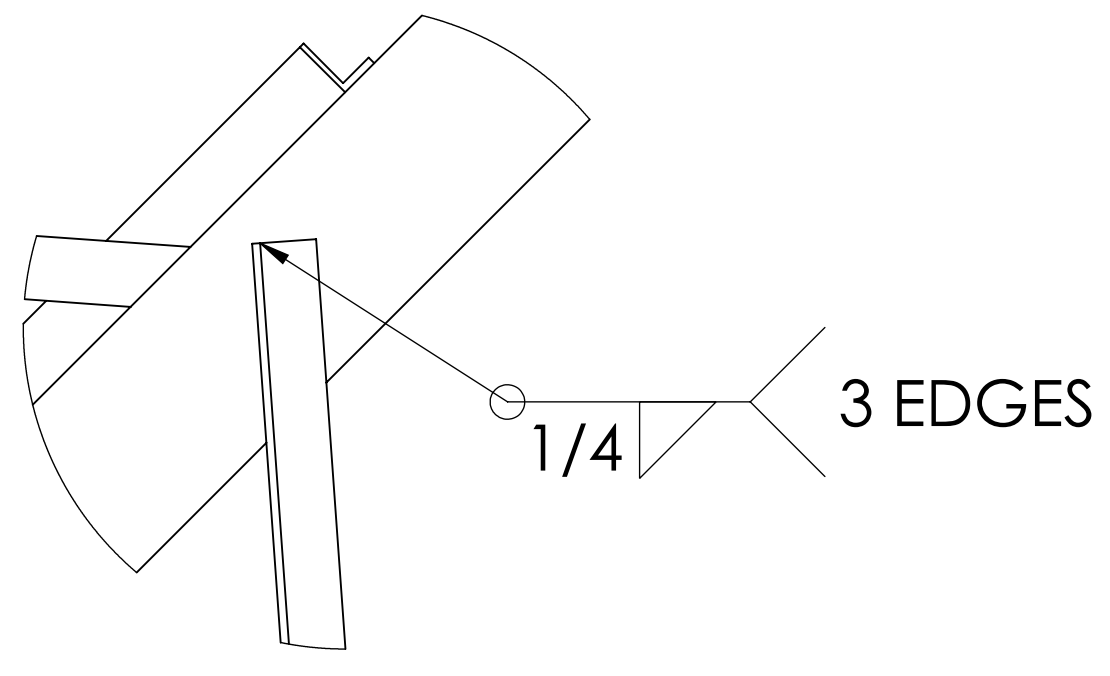
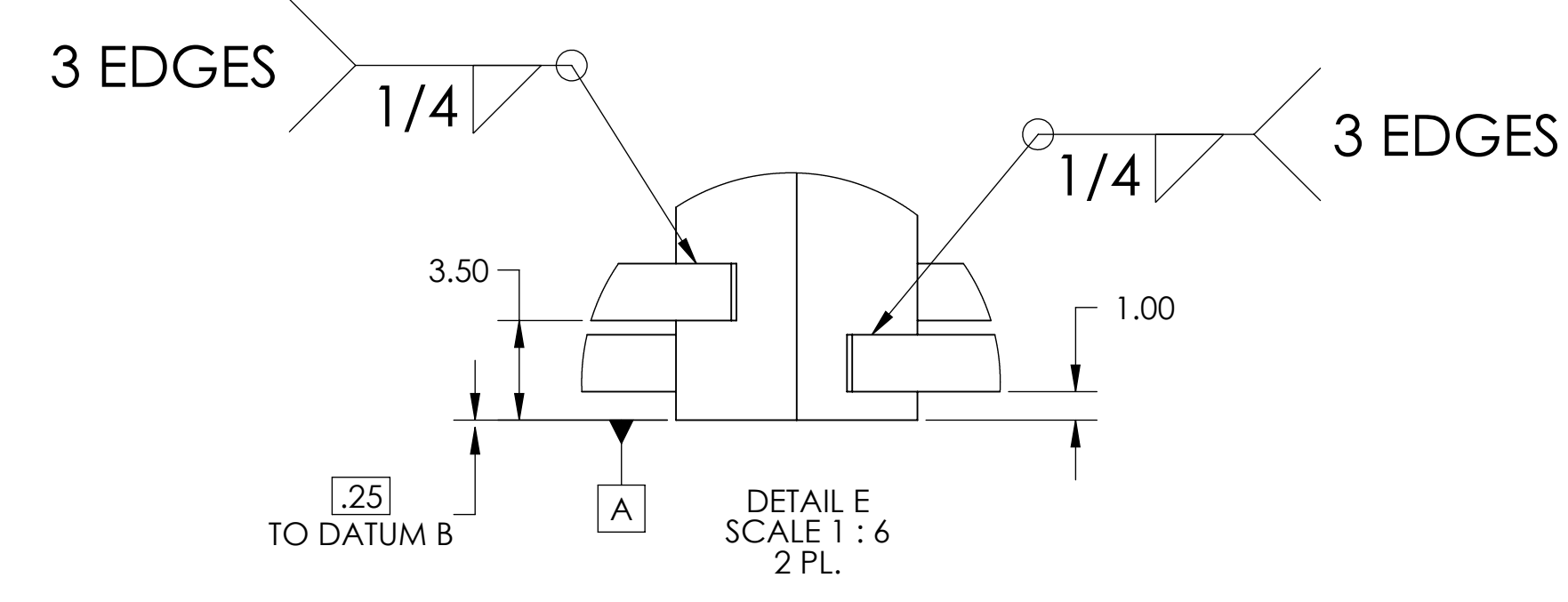
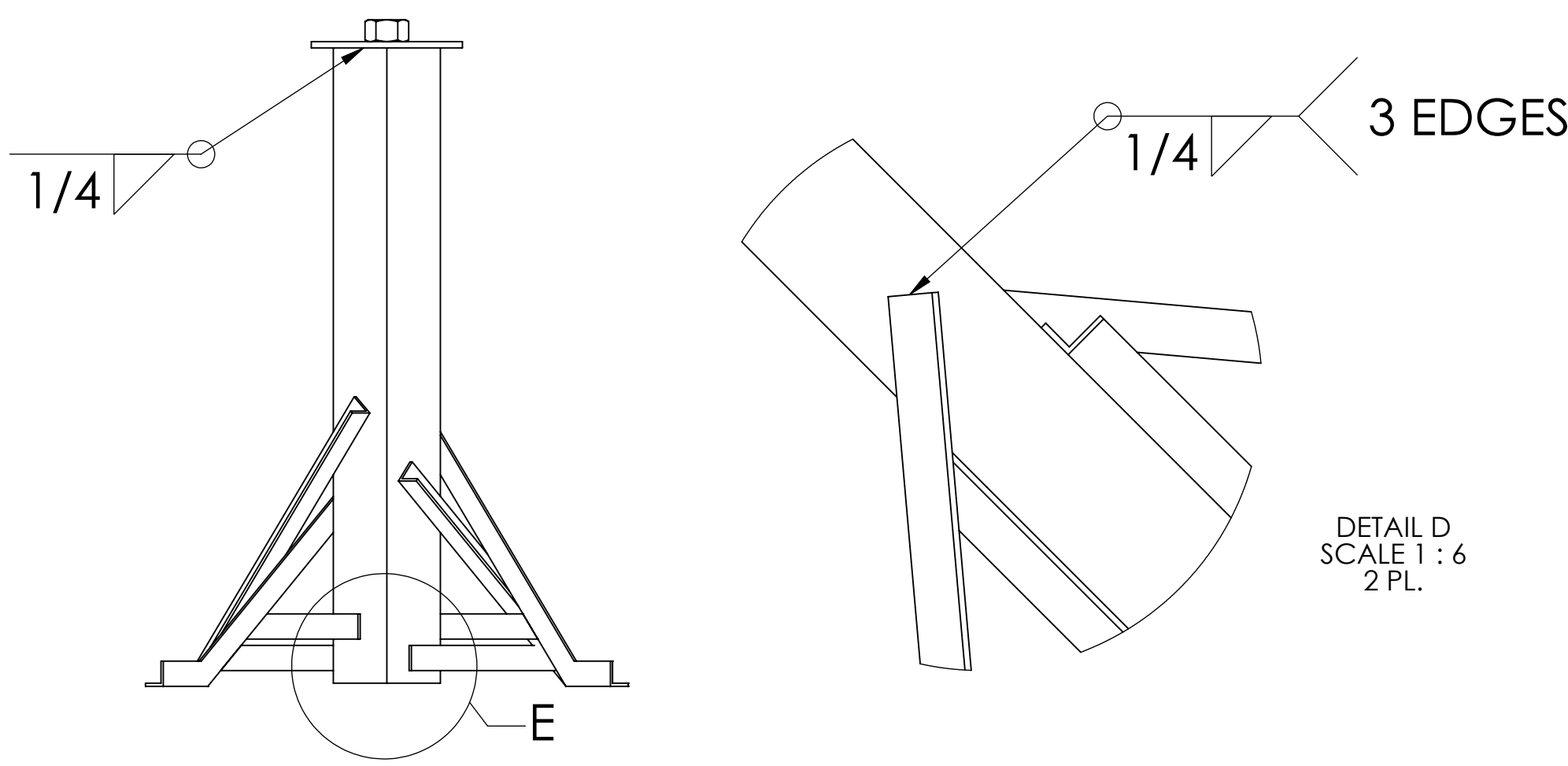
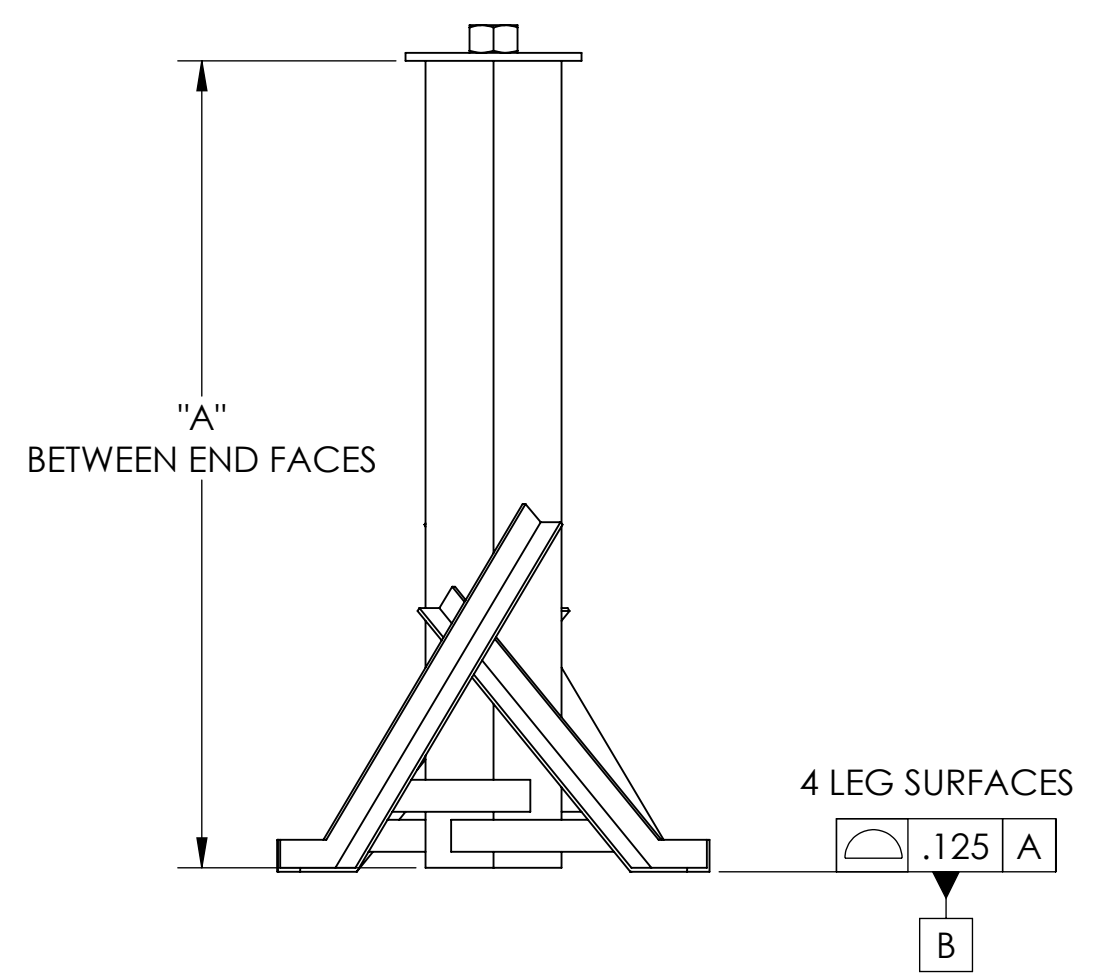
VIEW C-C

D2000440-203 ISO VIEW

D2000440-103 ISO VIEW



VIEW A-A



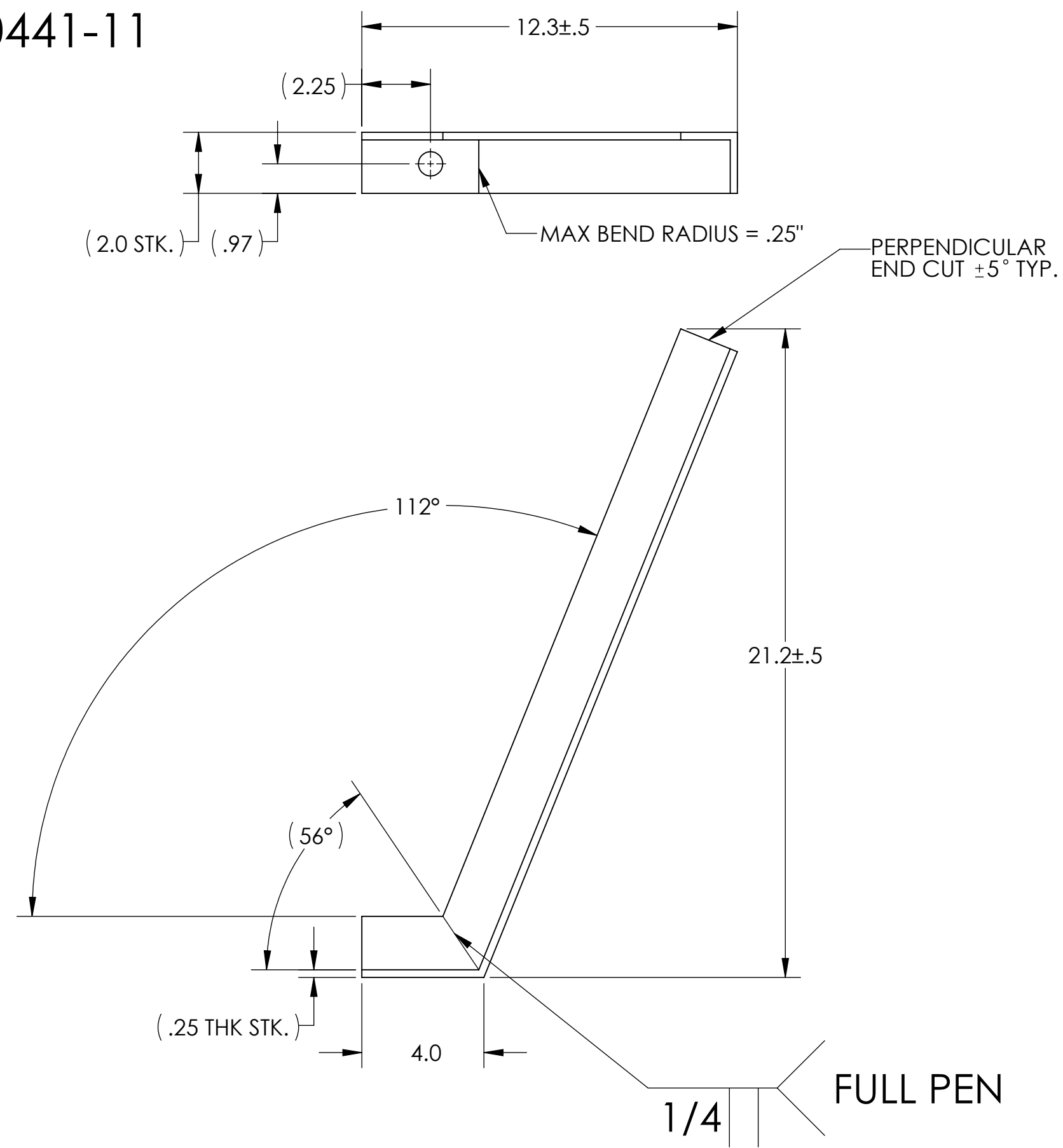
DETAIL B  
 SCALE 1:6  
 2 PL.  
 D2000441-21 HIDDEN FOR CLARITY

ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	-201/Type	-101/Type	-202/Type	-203/Type	-102/Type	-103/Type
11	D2000447	A+, VE, FC Tube Support, Vertical Stanchion End Plate	Plain Carbon Steel, 1/2" Plate	1	1	1	1	1	1
10	D2000442	2" x 4-1/2 STEEL HEX NUT	Grade 5 Steel, McMaster p/n 95505A661 or eq.	1	1	1	1	1	1
9	D2000443-11	A+, VE, FC Tube Support, Vertical Stanchion Stiffener, Brace, Upper Guided	Plain Carbon Steel, 2" x 1/4" Bar Stock	-	2	-	-	2	2
8	D2000443-12	A+, VE, FC Tube Support, Vertical Stanchion Stiffener, Brace, Lower Guided	Plain Carbon Steel, 2" x 1/4" Bar Stock	-	2	-	-	2	2
7	D2000443-21	A+, VE, FC Tube Support, Vertical Stanchion Stiffener, Brace, Upper Fixed	Plain Carbon Steel, 2" x 1/4" Bar Stock	2	-	2	2	-	-
6	D2000443-22	A+, VE, FC Tube Support, Vertical Stanchion Stiffener, Brace, Lower Fixed	Plain Carbon Steel, 2" x 1/4" Bar Stock	2	-	2	2	-	-
5	D2000441-22	A+, VE, FC Tube Support, Vertical Stanchion Stiffener, Fixed Lower	Plain Carbon Steel, 2" x 2" x 1/4" Wall Angle	2	-	2	2	-	-
4	D2000441-21	A+, VE, FC Tube Support, Vertical Stanchion Stiffener, Fixed Upper	Plain Carbon Steel, 2" x 2" x 1/4" Wall Angle	2	-	2	2	-	-
3	D2000441-12	A+, VE, FC Tube Support, Vertical Stanchion Stiffener, Guided Lower	Plain Carbon Steel, 2" x 2" x 1/4" Wall Angle	-	2	-	-	2	2
2	D2000441-11	A+, VE, FC Tube Support, Vertical Stanchion Stiffener, Guided Upper	Plain Carbon Steel, 2" x 2" x 1/4" Wall Angle	-	2	-	-	2	2
1	D2000439-13	A+, VE, FC Tube Support, Vertical Stanchion, Tall 3" SQ	Plain Carbon Steel	-	-	-	-	-	1
1	D2000439-12	A+, VE, FC Tube Support, Vertical Stanchion, Medium 3" SQ	Plain Carbon Steel	-	-	-	-	-	1
1	D2000439-23	A+, VE, FC Tube Support, Vertical Stanchion, Tall 6" SQ	Plain Carbon Steel	-	-	-	-	-	1
1	D2000439-22	A+, VE, FC Tube Support, Vertical Stanchion, Medium 6" SQ	Plain Carbon Steel	-	-	-	-	-	1
1	D2000439-11	A+, VE, FC Tube Support, Vertical Stanchion, Short 3" SQ	Plain Carbon Steel	-	1	-	-	-	-
1	D2000439-21	A+, VE, FC Tube Support, Vertical Stanchion, Short 6" SQ	Plain Carbon Steel	1	-	-	-	-	-

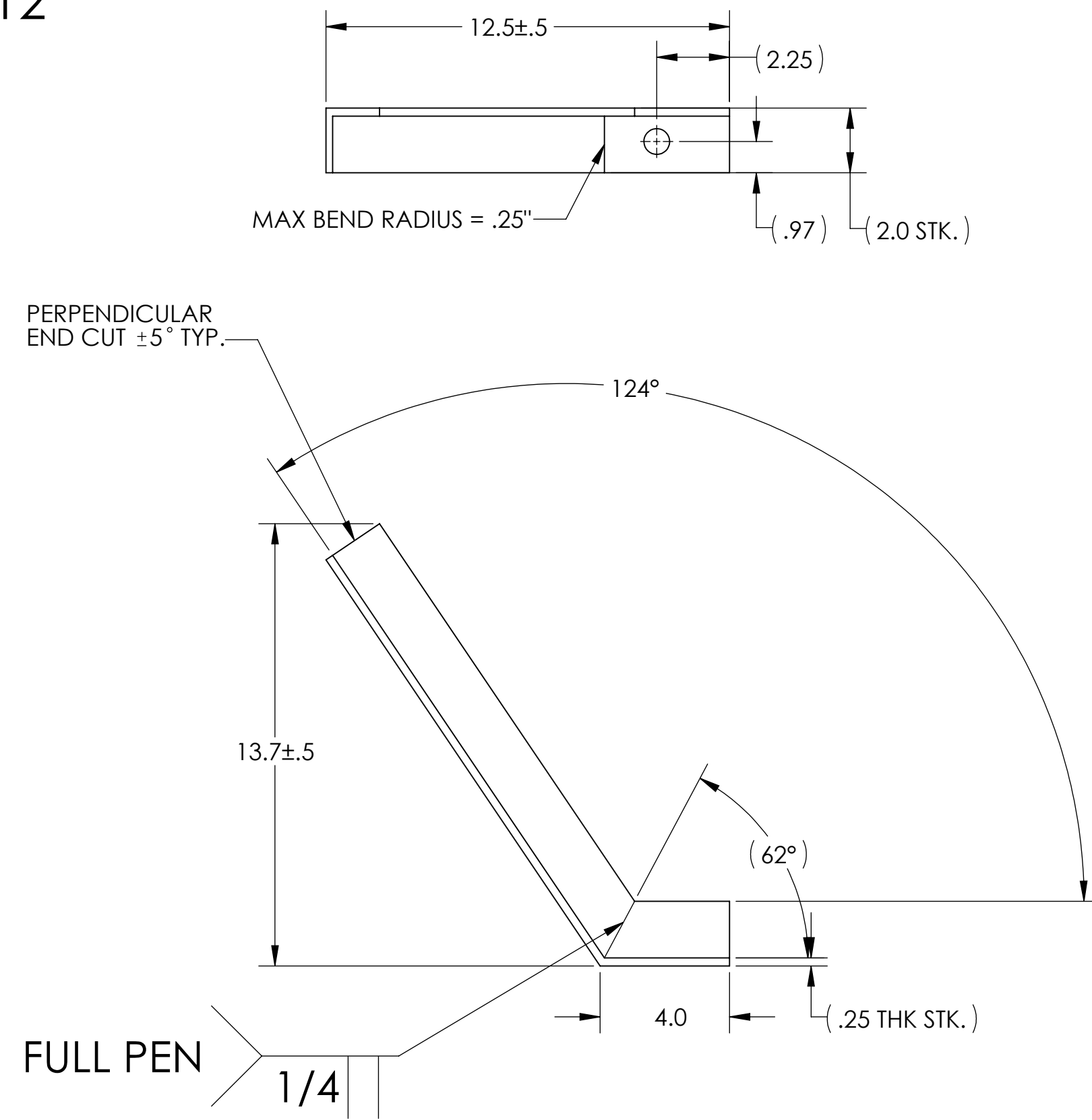
NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)	
DIMENSIONS ARE IN INCHES	
TOLERANCES: .X ± .2 .XX ± .1	
ANGULAR ± 1°	
MATERIAL	N/A
FINISH	7 μinch

CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
SYSTEM	A+	A+, VE, FC Tube Support, Vertical Stanchion Weldment	
DESIGNER	D COYNE	DATE	15 OCT 2020
DRAFTER	J VANOSKY	SIZE	D
CHECKER	SEE DCC	DWG. NO.	D2000440
APPROVAL	SEE DCC	REV.	v4
SCALE	1:12	PROJECTION	First Angle
SHEET 1 OF 2			

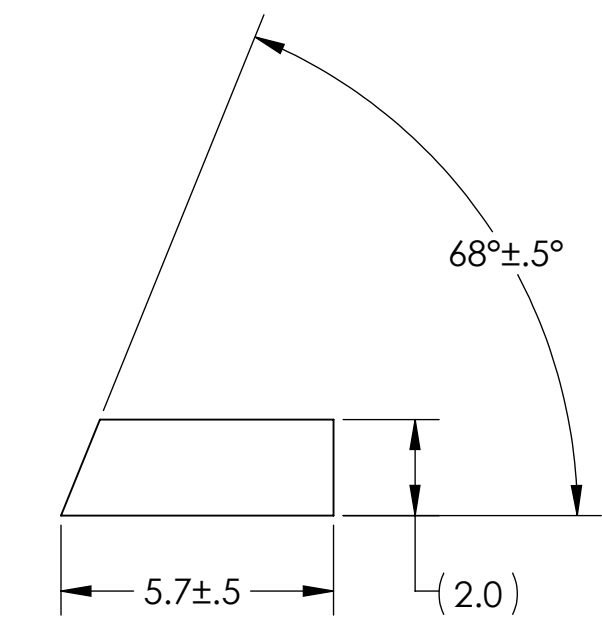
D2000441-11



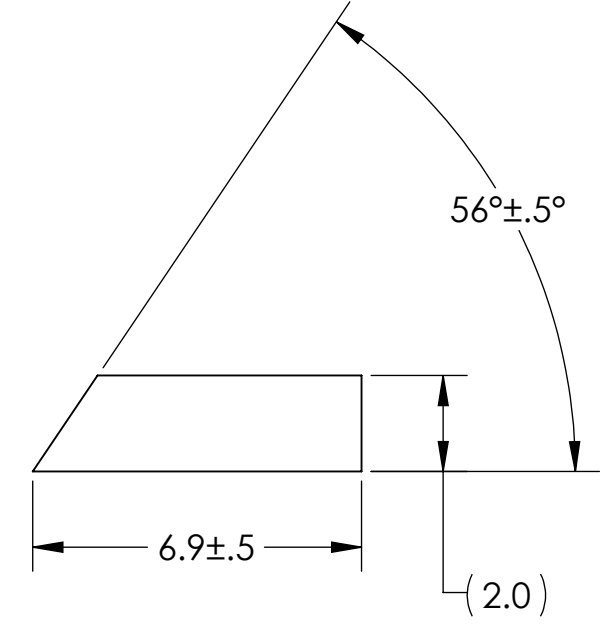
D2000441-12



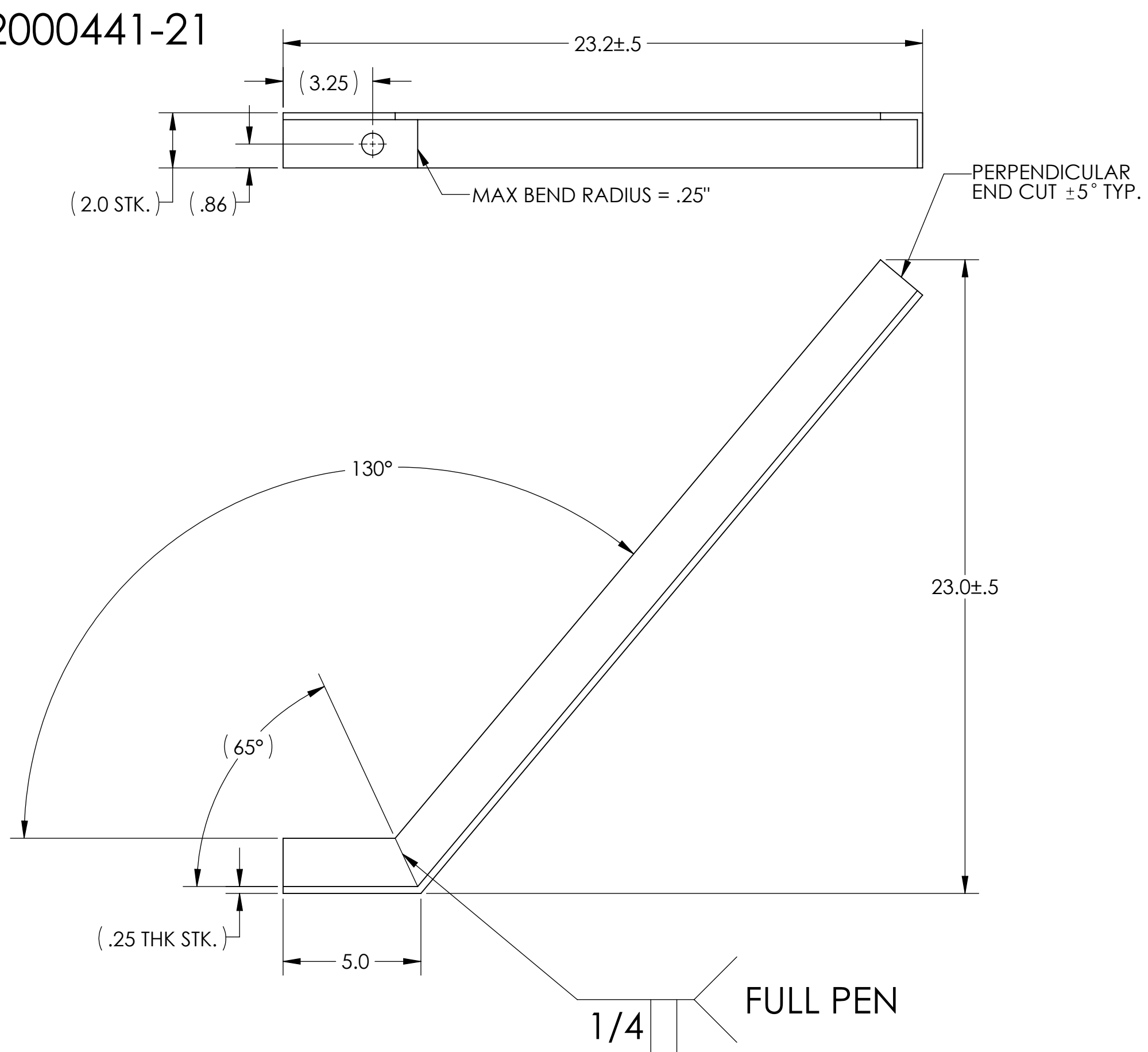
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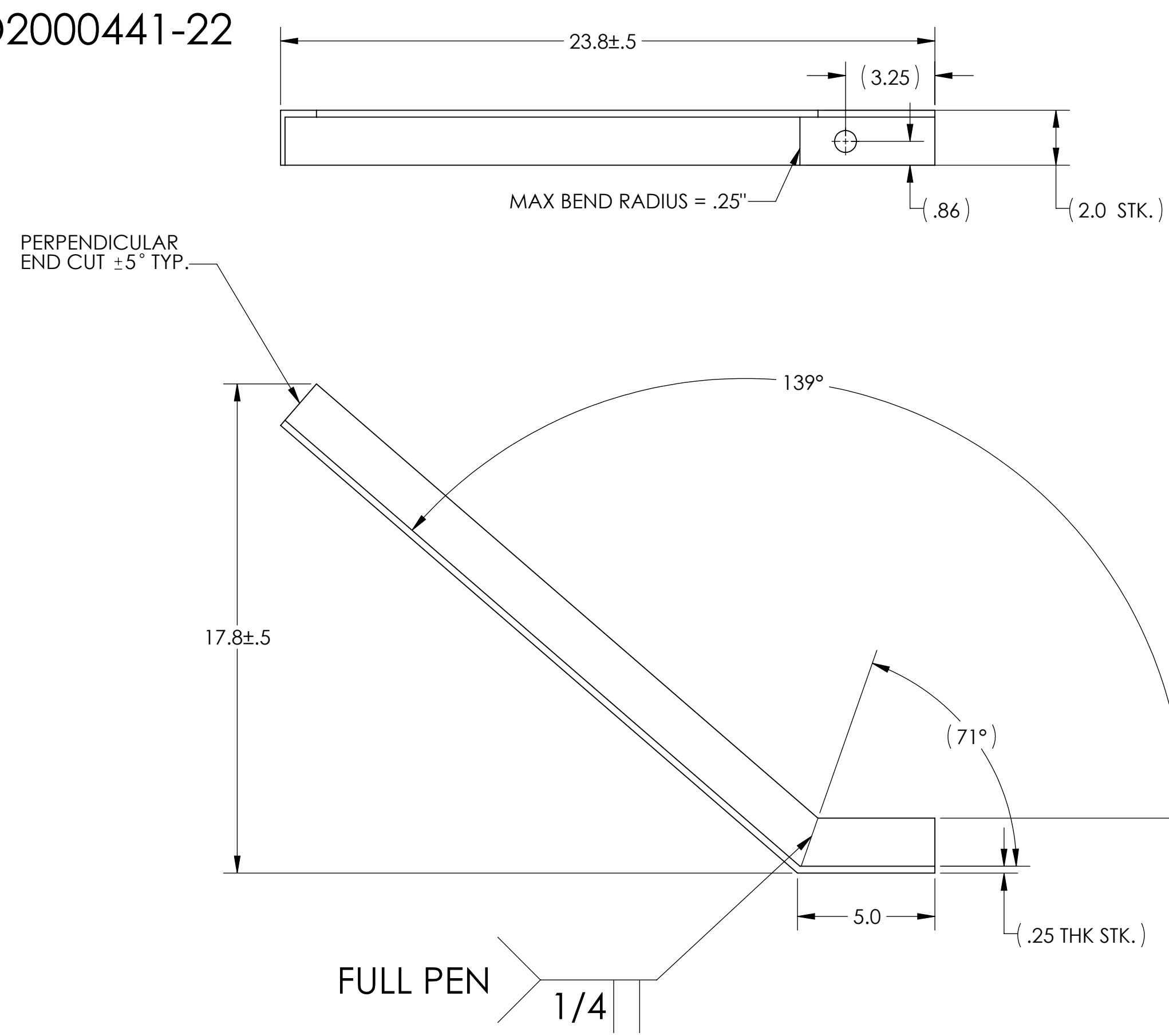
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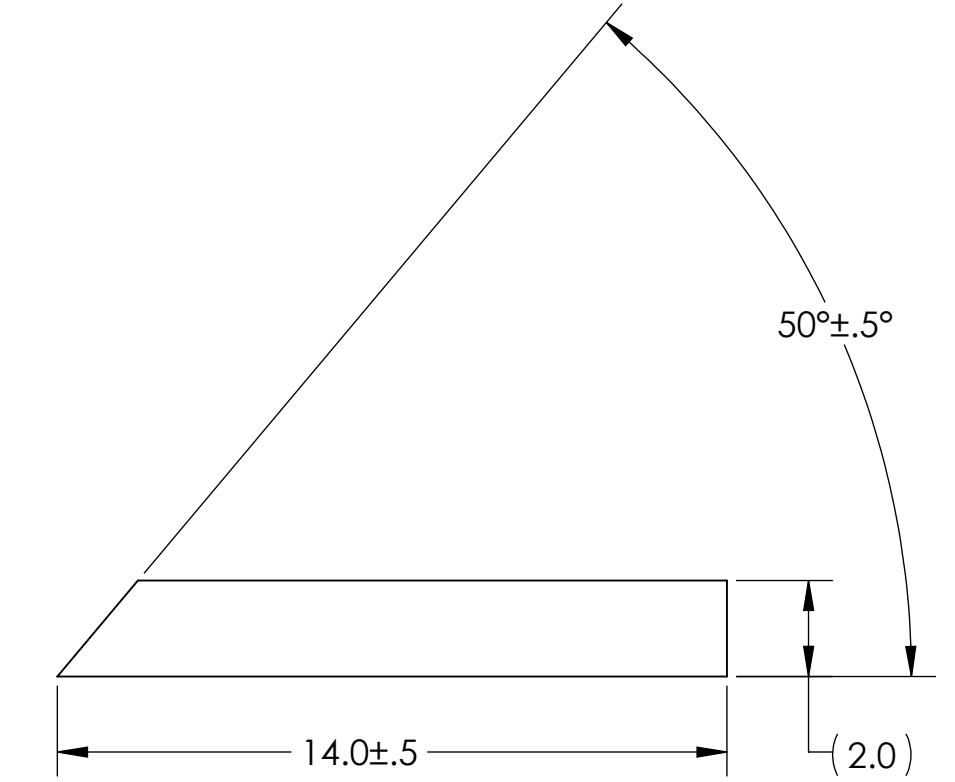
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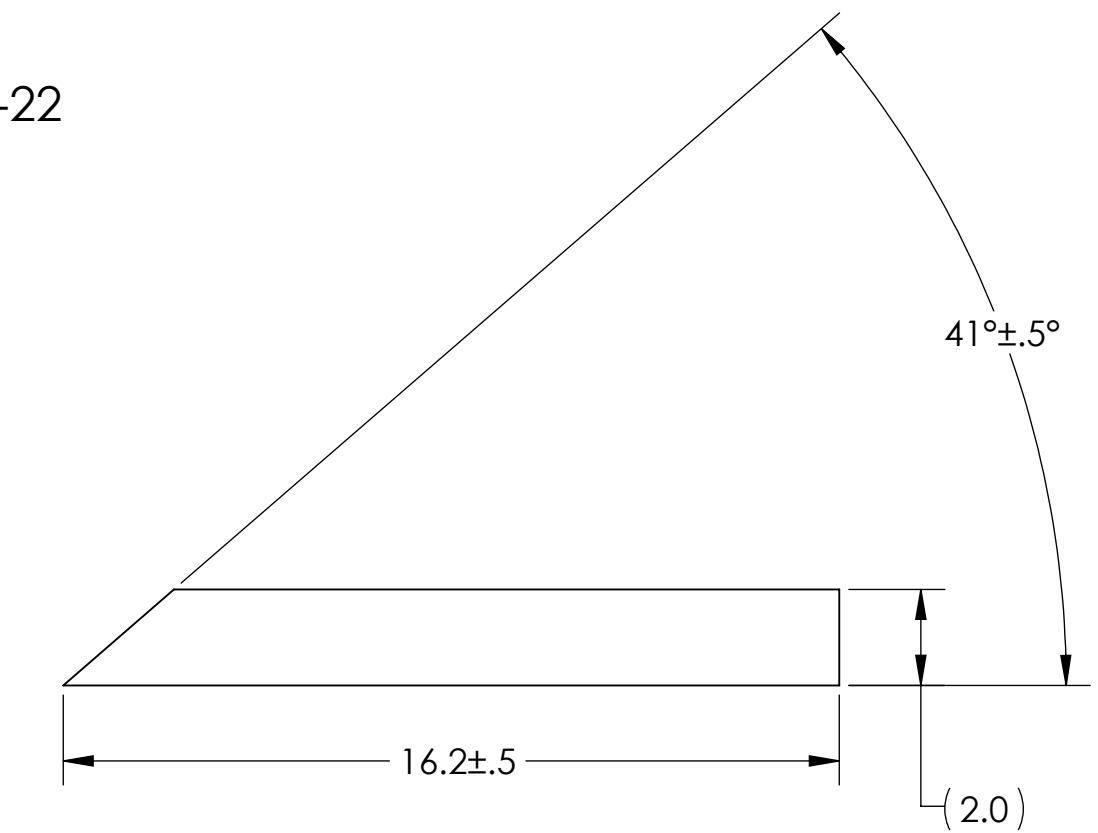
D2000441-22



D2000443-21



D2000443-22



<b>LIGO</b> CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		REV.
SIZE	DWG. NO.	REV.
D	D2000440	V4
SCALE: 1:4	PROJECTION:	SHEET 2 OF 2