

General Section Property Calculator

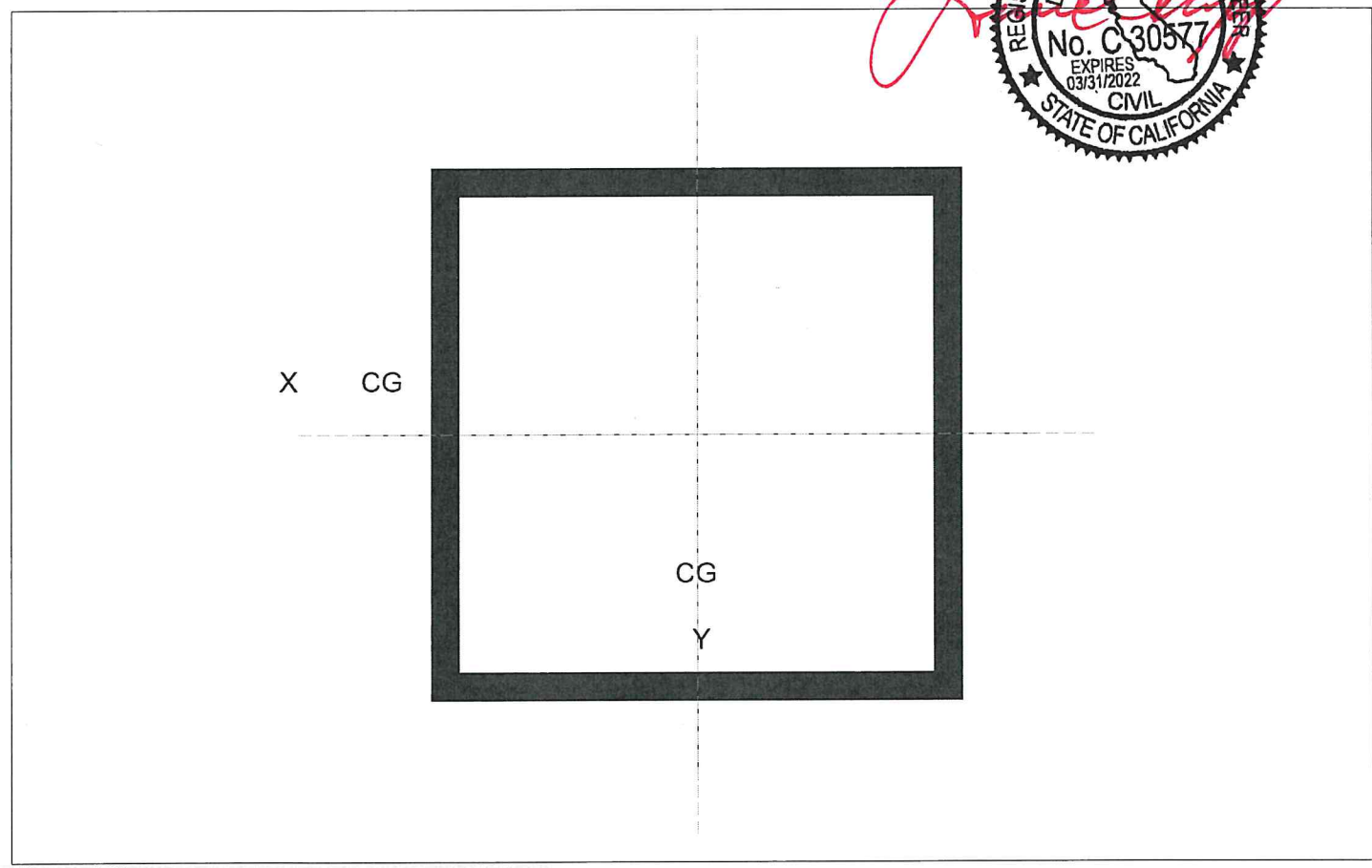
File = C:\Users\ENGINE-1\Desktop\Job12020\LOADER-1\Tube.ec6
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Final Section Properties

Total Area :	0.2969 in ²	Ixx :	0.06995 in ⁴	Sxx : - Y :	0.1119 in ³
Calculated final C.G. distance from Datum :		Iyy :	0.06995 in ⁴	Sxx : + Y :	0.1119 in ³
X cg Dist. :	0.0 in	Zxx :	0.1323 in ³	Syy : - X :	0.1119 in ³
Y cg Dist. :	0.0 in	Zyy :	0.1323 in ³	Syy : + X :	0.1119 in ³
Edge Distances from CG. :				r xx :	0.4854 in
+X :	0.6250 in	+Y :	0.6250 in	r yy :	0.4854 in
-X :	-0.6250 in	-Y :	in		

Rotation of All Components @ Angle : 0.00 deg CCW



General Shapes

Tube : #1	Xcg = 0.000 in	Ycg = 0.000 in	Rotation = 0 deg CCW
Total Height = 1.250 in	Total Width = 1.250 in	Left Thickness = 0.063 in	
Right Thickness = 0.063 in	Bottom Thickness = 0.063 in	Top Thickness = 0.063 in	

$K = 1.0, L = 39 \text{ in}$
 $KL / r = 39 / 0.4854 = 80.4 < 200 \text{ O.K.}$ ←



Member Length (ft) Displayed

		SK - 1
		June 11, 2020 at 1:28 PM
		Loader Hood.r2d



Loads: BLC 1, Dead Load

		SK - 2
		June 11, 2020 at 1:29 PM
		Loader Hood.r2d



Company :
 Designer :
 Job Number :
 Model Name :

A

June 11, 2020
 1:33 PM
 Checked By: LCK

Load Combinations

Description	So..P...	S...	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..	BLCFac..
1 DL	Yes	Y	1	1										

Hot Rolled Steel Properties

Label	E [ksi]	G [ksi]	Nu	Therm (\1E5 F)	Density[k/ft^3]	Yield[ksi]
1 A36 Gr.36	29000	11154	.3	.65	.49	36
2 A572 Gr.50	29000	11154	.3	.65	.49	50
3 A992	29000	11154	.3	.65	.49	50
4 A500 Gr.B RND	29000	11154	.3	.65	.527	42
5 A500 Gr.B Rect	29000	11154	.3	.65	.527	46
6 A53 Gr.B	29000	11154	.3	.65	.49	35
7 A1085	29000	11154	.3	.65	.49	50

Envelope AISC 14th(360-10): ASD Steel Code Checks

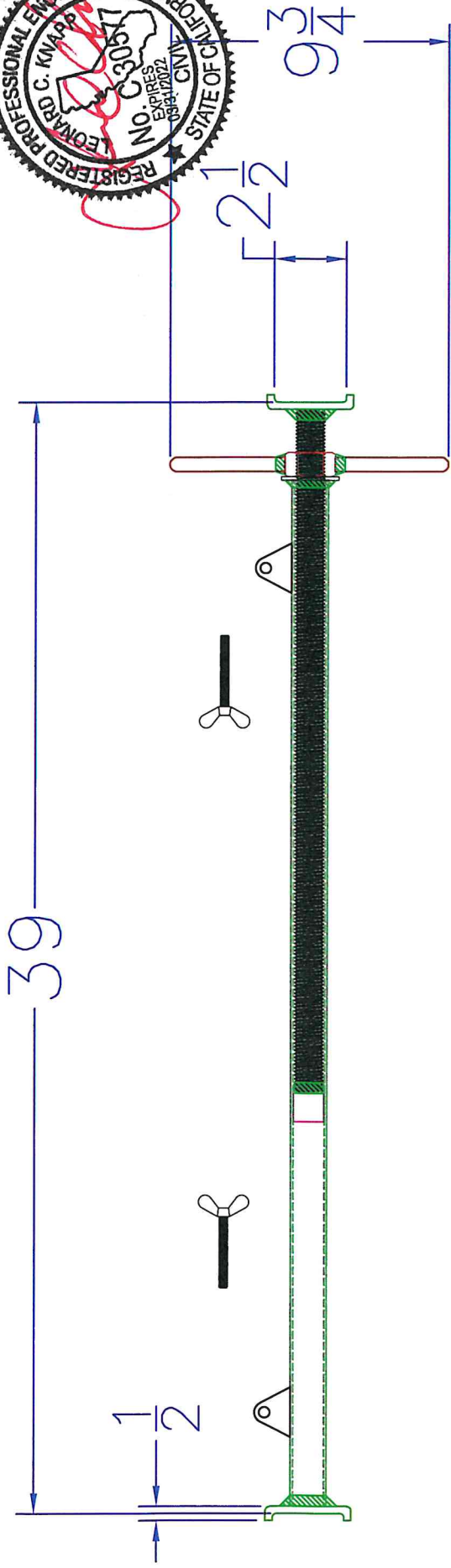
Member	Shape	Code Check	Loc[ft]	LC	Shear ..	Loc[ft]	LC	Pnc/om...	Pnt/om ...	Mn/om [..Cb	Eqn
1	M1	Custom Si... .439	0	1	.000	0	1	4.558	6.402	.237	1 H1-1a

OK

Material Takeoff

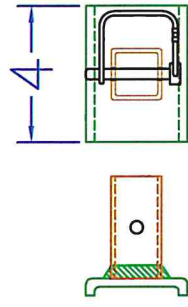
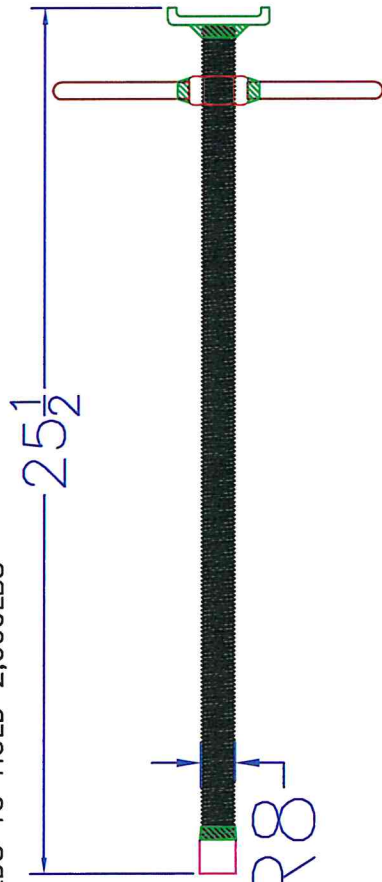
Material	Size	Pieces	Length[ft]	Weight[K]
1 Hot Rolled Steel				
2 A36 Gr.36	Custom Size Tube	1	3.3	0
3 Total HR Steel		1	3.3	0

COMPLETE ASSEMBLY



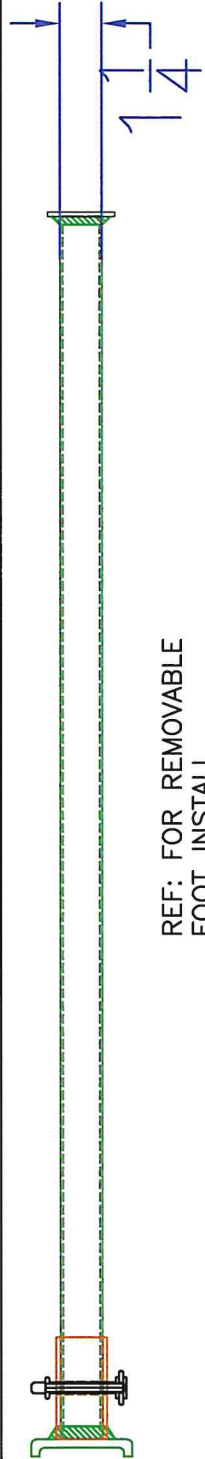
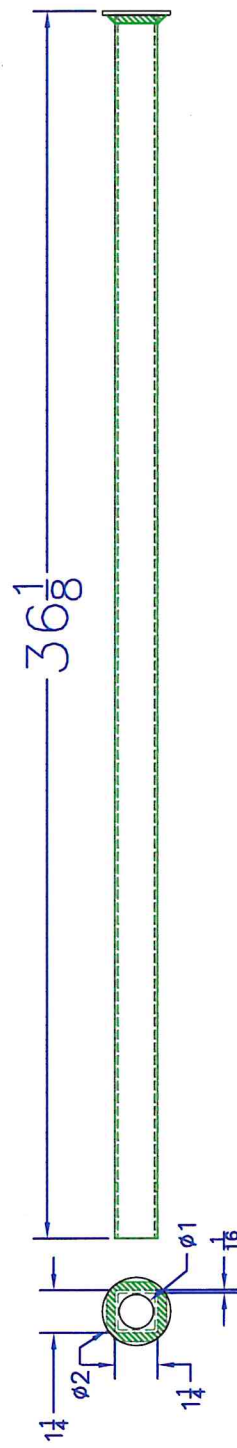
SUB ASSY-A

NEEDS TO HOLD 2,000LBS



1-8NC GR8

SUB ASSY-B



REF: FOR REMOVABLE FOOT INSTALL

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