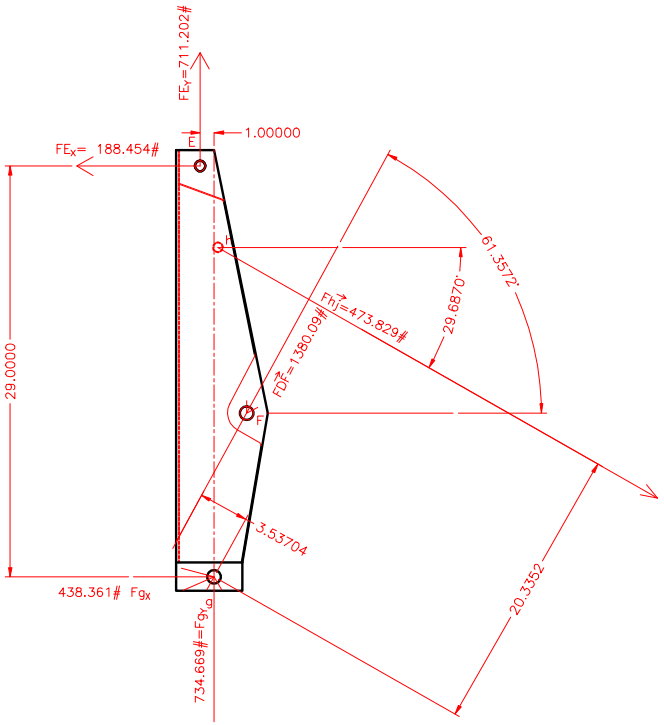
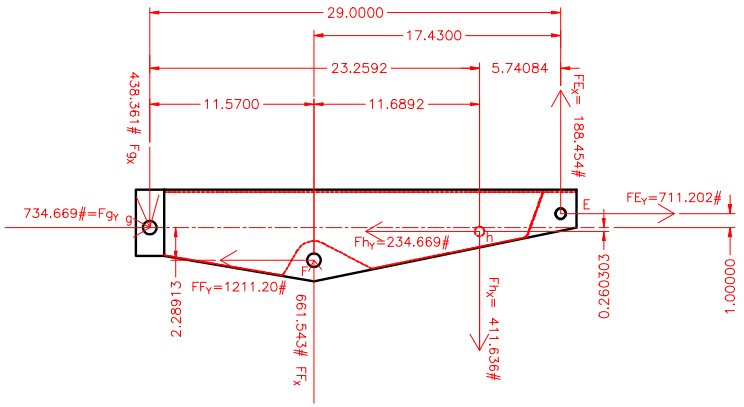
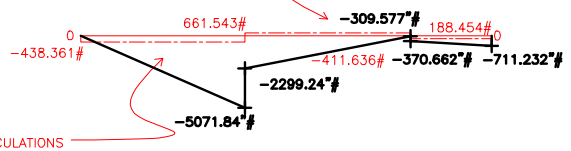




SHEAR DIAGRAM CALCULATIONS

$Fg_X+FF_X+Fh_X+FE_X=0$

$-438.361\#+661.543\#-411.636\#+188.454\#=0$



MOMENT CALCULATIONS

$M_{11.5700}=-438.361\#*11.5700"=-5071.84"\#$

$M_{11.5700}+=-438.361\#*11.5700"+(1211.20\#*2.28913")=-2299.24"\#$

$M_{23.2592}=-438.361\#*23.2592"+(1211.20\#*2.28913")+661.543\#*11.6892"=309.577"\#$

$M_{23.2592}+=-438.361\#*23.2592"+(1211.20\#*2.28913")+661.543\#*11.6892"+(234.669\#*0.260303)=370.662"\#$

$M_{29.0000}=-438.361\#*29.0000"+(1211.20\#*2.28913")+661.543\#*17.4300"+(234.669\#*0.260303")-411.636\#*5.74084"=-711.232"\#$

$M_{29.0000}+=-438.361\#*29.0000"+(1211.20\#*2.28913")+661.543\#*17.4300"+(234.669\#*0.260303")-411.636\#*5.74084"+711.202\#*1.00000=-0.02962"\#$

$\Sigma M_g^{\circlearrowleft}= -(FE_X*29.0000") + FE_Y*1.00000- (FFD"*3.53704"\#) + (Fjh*20.3352") = 0$

$M_g^{\circlearrowleft}= -(188.454\# * 29.0000") +711.202\# * 1.00000"- (1380.09\# * 3.53704") + (Fjh*20.3352") = 0$

$473.829=Fhj$

$\Sigma F_X^{\rightarrow}=+FE_X - FDF\ COS61.3572° + hj\ COS29.6870° - Fg_X=0$

$-188.454\# - 1380.09\# * COS61.3572° + 473.829\# * COS29.6870° + Fg_X=0$

$438.361\# =Fg_X$

$\Sigma F_Y^{\uparrow}=-FE_Y - FDF\ SIN61.3572° + hj\ SIN29.6870° - Fg_Y=0$

$711.202\# - 1380.09\# * SIN61.3572° - 473.829\# * SIN29.6870° + Fg_Y=0$

$734.669\# =Fg_Y$