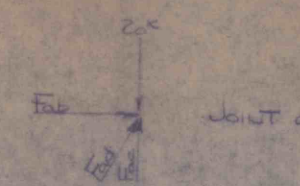
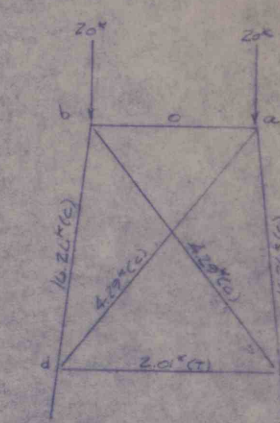


LOADING
100' CONVEYOR REACTION = 40k
LOAD EACH TRUSS = 20k



$\sum F_x = 0$
 $F_{cd} \sin 20^\circ + F_{ac} \sin 71.25^\circ$
 $F_{cd} = 2.04 F_{ac}$

$\sum F_y = 0$
 $20k = F_{ac} \cos 71.25^\circ + F_{cd} \cos 20^\circ$
 $20k = F_{ac} \cos 71.25^\circ + 2.04 F_{ac} \cos 20^\circ$
 $F_{ac} = 16.26k (c)$
 $F_{cd} = 4.27k (c)$

NOTE: SAME REACTIONS
OCCUR AT JOINT B



$\sum F_x = 0$
 $4.27 \sin 20^\circ + 16.26 \sin 71.25^\circ =$
 $16.26 \cos 71.25^\circ + F_{cd}$
 $F_{cd} = 4.27 \sin 20^\circ$
 $F_{cd} = 2.04$

MAX. COMPRESSION MEMBERS
 $\frac{4.27k}{22k} = 0.195 \sin^2$ $4.30 \times 4 = 1.44 \sin^2 > 0.195 \sin^2$

MAX TENSION MEMBER = $\frac{2.04}{22} = 0.09 \sin^2$ $4.30 \times 4 = 1.44 \sin^2 > 0.09 \sin^2$

MAX. COMPRESSION MAIN SUPPORT MEMBER 16.26k
 W8x24 13.7162k (FROM AISC MANUAL)
 OVER 80' EFFECTIVE LENGTH



HEFFMAN CONSTRUCTION CO. INC.	
P.O. BOX 70 WEST DECATUR, GA 30085	
JOBS: DEC-01-00	SCALE: 1/4" = 1'-0"
PIN: C&M Co	DRAWN BY: JY
FORCE LOADING DIAGRAMS (75' DEEP TRUSS)	
DATE: 7/18/84	C-5