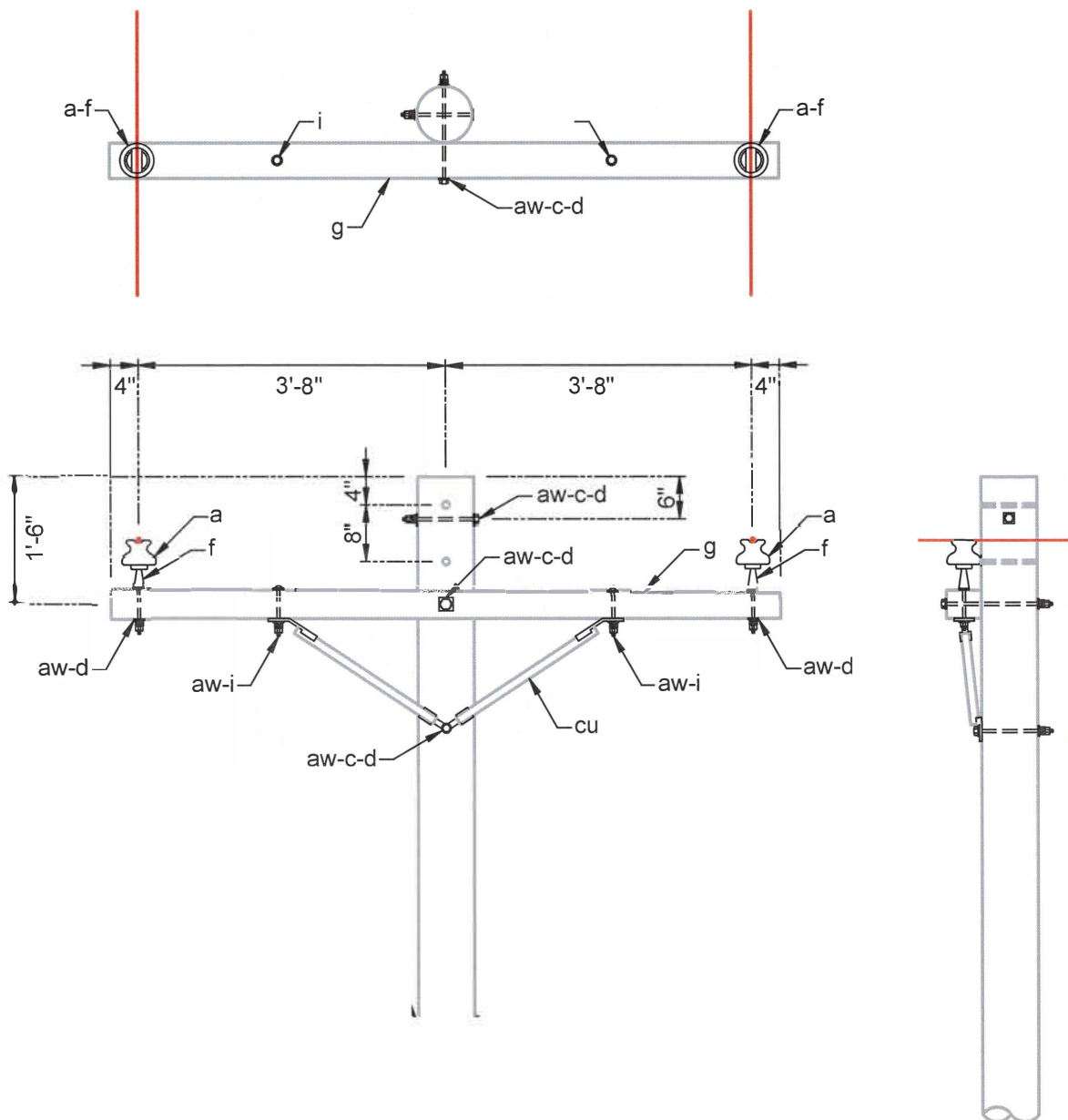


PLAN



ITEM	No.	MATERIAL	ITEM	No.	MATERIAL
a	2	Insulator, pin type	i	2	Bolt, carriage, 1/2" x 6"
aw	7	Spring washer			
c	3	Bolt, machine, 5/8" x required length			
cm	1	Spool insulator			
cu	2	Brace, wood, 36", medium duty			
d	7	Washer, square 2-1/4"			
f	2	Pin, crossman, steel			
g	1	Crossarm			

12.5/7.2 kV PRIMARY, 2-PHASE
CROSSARM CONSTRUCTION
SINGLE PRIMARY SUPPORT

DESIGN LIMITS

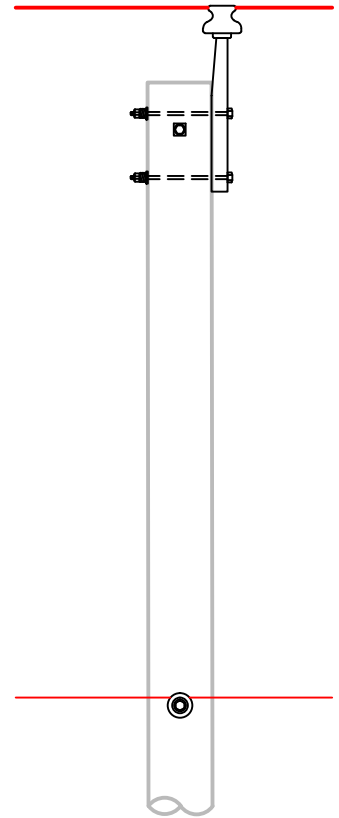
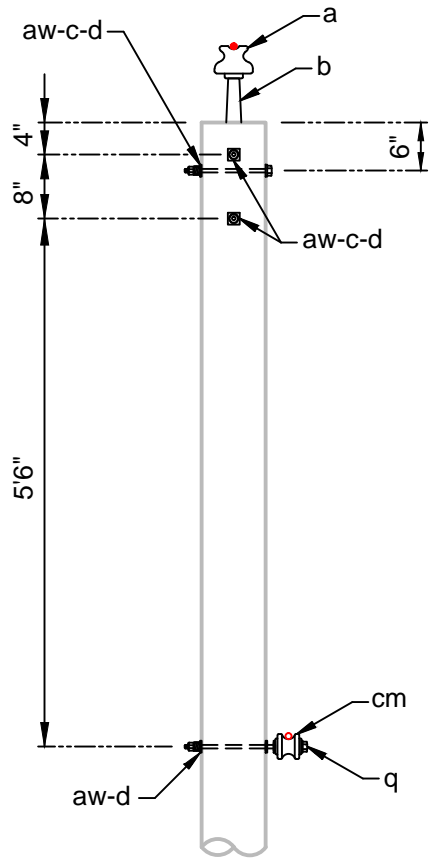
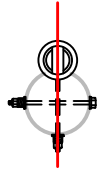
Max. transverse load: 500 lbs. per conductor.

Max. line angle within load limits: 5°

Hurtman Rescue



Minnesota Rodeo



ITEM	No.	MATERIAL	ITEM	No.	MATERIAL
a	1	Insulator, pin type			
aw	4	Spring washer			
b	1	Pin, pole top			
c	3	Bolt, machine, 5/8" x required length			
cm	1	Spool insulator			
d	5	Washer, square 2-1/4"			
q	1	Bolt, double upset			

DESIGN LIMITS

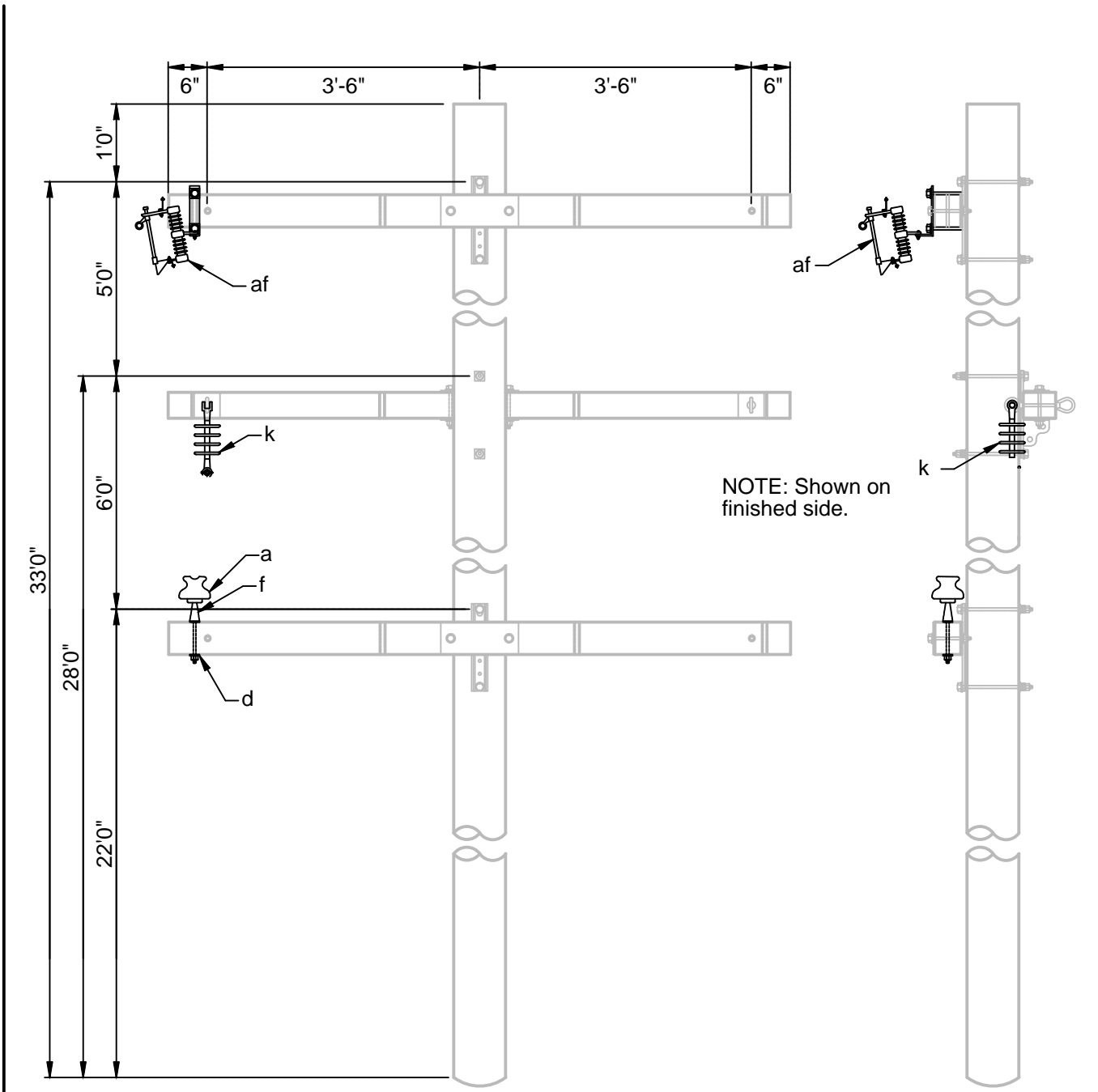
Max. transverse load: 500 lbs. per conductor.

Max. line angle within load limits: 5°


Pole Top Pin Insulator Change Out



Minnesota Rodeo



ITEM	No.	BUILD MATERIAL	ITEM	No.	COURSE MATERIAL
c	6	Bolt, machine, 5/8" x required length	a	1	Insulator, pin type
d	6	Washer, square 2-1/4"	af	1	Cutout, fuse
g	3	Crossarm, PUPI (Tangent Assembly, Series 2000)	d	1	Washer, square 2-1/4"
Note	1	40' Pole	f	1	Pin, crossman, steel
			k	1	Insulator, suspension

Obstacle Course	
 <small>Minnesota Municipal Utilities Association</small>	Minnesota Rodeo