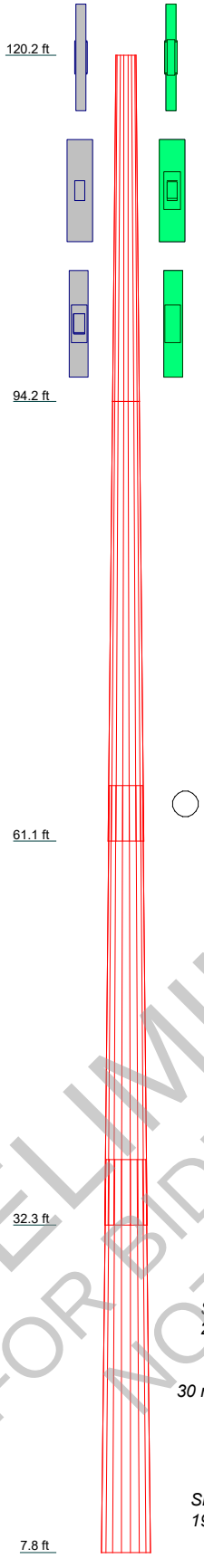
Section	Length (ft)	Number of Sides	Thickness (in)	Socket Length (ft)	Top Dia (in)	Bot Dia (in)	Grade	Weight (K)
1	26.00	16	0.1970		18.2000	24.5000		1.2
2	33.00	16	0.1970	4.18	24.5000	31.7000		2.0
3	33.00	16	0.2360	4.93	30.3933	37.7000		2.9
4	29.51	16	0.3150		36.1375	43.4000	A572-65	4.0
								10.0



ALL REACTIONS ARE FACTORED

AXIAL 42 K
SHEAR 2 K
MOMENT 204 kip-ft
TORQUE 1 kip-ft
30 mph WIND - 0.7500 in ICE

AXIAL 25 K
SHEAR 19 K
MOMENT 1558 kip-ft
TORQUE 10 kip-ft
REACTIONS - 89 mph WIND

DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
SBNHH-1D65C_TIA w/ Mount Pipe	120	4449	110
SBNHH-1D65C_TIA w/ Mount Pipe	120	8843	110
SBNHH-1D65C_TIA w/ Mount Pipe	120	8843	110
AIR 6449 B77D_TIA w/ Mount Pipe	120	8843	110
AIR 6449 B77D_TIA w/ Mount Pipe	120	Universal Quad Mount w/ 36" Standoff	110
AIR 6449 B77D_TIA w/ Mount Pipe	120	APXVAALL24_43-U-NA20_TMO_TIA w/ Mount Pipe	100
AIR 6419 B77G_TIA	120	APXVAALL24_43-U-NA20_TMO_TIA w/ Mount Pipe	100
AIR 6419 B77G_TIA	120	APXVAALL24_43-U-NA20_TMO_TIA w/ Mount Pipe	100
AIR 6419 B77G_TIA	120	AIR 6449 B41_TIA w/ Mount Pipe	100
DC6-48-60-18-8C-EV	120	AIR 6449 B41_TIA w/ Mount Pipe	100
Universal Quad Mount w/ 36" Standoff	120	AIR 6449 B41_TIA w/ Mount Pipe	100
TWIN458CU000G w/ Mount Pipe	110	RADIO 4449 B71 B85A_T-MOBILE	100
TWIN458CU000G w/ Mount Pipe	110	RADIO 4449 B71 B85A_T-MOBILE	100
TWIN458CU000G w/ Mount Pipe	110	RADIO 4449 B71 B85A_T-MOBILE	100
AIR 6449_TIA w/ Mount Pipe	110	RADIO 4460 B2/B25 B66_TMO	100
AIR 6449_TIA w/ Mount Pipe	110	RADIO 4460 B2/B25 B66_TMO	100
AIR 6449_TIA w/ Mount Pipe	110	RADIO 4460 B2/B25 B66_TMO	100
4408_TIA	110	Universal Quad Mount w/ 36" Standoff	100
4408_TIA	110		
4408_TIA	110		
4449	110		
4449	110		

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-65	65 ksi	80 ksi			

TOWER DESIGN NOTES

1. Tower designed for Exposure C to the TIA-222-G Standard.
2. Tower designed for a 89 mph basic wind in accordance with the TIA-222-G Standard.
3. Tower is also designed for a 30 mph basic wind with 0.75 in ice. Ice is considered to increase in thickness with height.
4. Deflections are based upon a 60 mph wind.
5. Tower Structure Class II.
6. Topographic Category 1 with Crest Height of 0.00 ft
7. TOWER RATING: 81.9%

TOWER USAGE: 81.9%
AFS1700 FOUNDATION USAGE: 94.2%
*LOOSE PLATE REQUIRED AT KING POST

DESIGN STANDARD:	TIA-222-G
ULTIMATE DESIGN WIND SPEED:	115 MPH
NOMINAL DESIGN WIND SPEED:	89 MPH
TOPOGRAPHIC:	1
K_{zt}:	1
EXPOSURE:	C
POLE MODEL:	42.72m Hyd Pole AFS1700, Rev. A, 09/03/2020
FOUNDATION TYPE	AFS-1700
MIN ULTIMATE BEARING PRESSURE:	4000 PSF
MIN ALLOWABLE BEARING PRESSURE:	2000 PSF
FACTOR OF SAFETY:	2
PJF RECOMMENDS THAT A SITE-SPECIFIC GEOTECHNICAL REPORT BE OBTAINED PRIOR TO CONSTRUCTION TO VERIFY THAT THE IN-SITU SOILS ARE CAPABILE OF PROVIDING THE MINIMUM ULTIMATE BEARING PRESSURE.	

Paul J. Ford & Company
250 East Broad Street, Suite 600
Columbus, OH 43215
Phone: 614.221.6679
FAX:

Job: *45.72m (150ft) Slip Joint Pole*			
Project: *PJF 21223-0048.001.7000*			
Client: ARE Telecom and Wind	Drawn by: tdehnke	App'd:	
Code: TIA-222-G	Date: 05/04/23	Scale: NTS	
Path: G:\TOWER\212_ARE\2023\21223-0048_Raleigh-Elite\21223-0048.001.7000_Prelim\45_72m Pole SSSJ rev4.eri		Dwg No. E-1	