STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051
Phone: (860) 827-2935 Fax: (860) 827-2950
E-Mail: siting.council@ct.gov
Internet: ct.gov/csc

Daniel F. Caruso
Chairman

November 4, 2006

Kenneth C. Baldwin, Esq.
Robinson & Cole LLP
280 Trumbull Street
Hartford, CT 06103-3597

RE: **EM-VER-029-061010** - Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at 161 Pinney Street, Colebrook, Connecticut.

Dear Attorney Baldwin:

At a public meeting held on October 31, 2006, the Connecticut Siting Council (Council) acknowledged your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice dated October 10, 2006, including the placement of all necessary equipment and shelters within the tower compound. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Please be advised that the validity of this action shall expire one year from the date of this letter. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

Thank you for your attention and cooperation.

Very truly yours,

Daniel F. Caruso
Chairman

DFC/MP/laf

c: The Honorable Jerome F. Rathbun, First Selectman, Town of Colebrook
Karl Nilsen, Zoning Enforcement Officer, Town of Colebrook
Thomas J. Regan, Esq., Brown Rudnick Berlack Israels LLP
Christopher B. Fisher, Esq., Cuddy & Feder LLP
Michele G. Briggs, New Cingular Wireless PCS, LLC
Clayton M. Pitchure, Site Quest, Ltd., Project Manager (Alltel Representative)

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL
Ten Franklin Square, New Britain, CT 06051
Phone: (860) 827-2935 Fax: (860) 827-2950
E-Mail: siting.council@ct.gov
www.ct.gov/csc

October 11, 2006

The Honorable Jerome F. Rathbun
First Selectman
Town of Colebrook
Town Hall
558 Colebrook Road
P. O. Box 5
Colebrook, CT 06021

RE: **EM-VER-029-061010** – Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at 161 Pinney Street, Colebrook, Connecticut.

Dear Mr. Rathbun:

The Connecticut Siting Council (Council) received this request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72.

The Council will consider this item at the next meeting scheduled for October 31, 2006 at 1:30 p.m. in Hearing Room One, Ten Franklin Square, New Britain, Connecticut.

If you have any questions or comments regarding this proposal, please call me or inform the council by October 25, 2006.

Thank you for your cooperation and consideration.

Very truly yours,

S. Derek Phelps
Executive Director

SDP/MP/laf

'osure: Notice of Intent

Nilsen, Zoning Enforcement Officer, Town of Colebrook

G:\EM\BAM-1

CSC CONNECTICUT SITING COUNCIL

ROBINSON & COLE LLP

KENNETH C. BALDWIN

280 Trumbull Street
Hartford, CT 06103-3597
Main (860) 275-8200
Fax (860) 275-8299
kbaldwin@rc.com
Direct (860) 275-8345

EM-VER-029-061010

October 10, 2006

Via Hand Delivery

S. Derek Phelps
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: **Notice of Exempt Modification**
161 Pinney Street
Colebrook, Connecticut

Dear Mr. Phelps:

Cellco Partnership d/b/a Verizon Wireless ("Cellco") intends to install antennas on the existing 150-foot self-supporting monopole tower owned by Sprint Nextel at 161 Pinney Street in Colebrook, Connecticut. Please accept this letter as notification pursuant to R.C.S.A. § 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to Colebrook First Selectman, Jerome F. Rathburn.

The facility consists of a 150-foot self-supporting monopole tower capable of supporting multiple carriers within a fenced compound at 161 Pinney Street in Colebrook. The tower is currently shared by Sprint Nextel at the 147-foot level; New Cingular Wireless at the 137-foot level; and Alltel at the 127-foot level. Cellco proposes to install twelve (12) panel-type antennas at the 117-foot level on the tower and place a 12' x 30' single-story equipment shelter on the ground near the base of the tower within the existing fenced compound. Attached behind Tab 1 are Project Plans for the proposed Cellco facility.

The planned modifications to the Colebrook facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2).

1. The proposed modification will not increase the overall height of the existing tower. Cellco's antennas will be mounted with their centerline at the 117-foot level on the 150-foot tower.

2. The proposed installation of a 12' x 30' equipment shelter will not require an extension of the fenced compound or leased area.

3. The proposed installation will not increase the noise levels at the facility by six decibels or more.

4. The operation of the antennas will not increase radio frequency (RF) power density levels at the facility to a level at or above the Federal Communications Commission (FCC) adopted safety standard. The cumulative worst-case RF power density calculations for the existing carriers and proposed Cellco antennas would be 19.07% of the FCC standard. A copy of the cumulative power density calculations table is attached behind Tab 2.

Also attached, behind Tab 3, is a Structural Report stating that the tower can support the existing and proposed antennas and associated equipment.

For the foregoing reasons, Cellco respectfully submits that the proposed antenna installation at the facility constitutes an exempt modification under R.C.S.A. § 16-50j-72(b)(2).

Sincerely,

Kenneth C. Baldwin

Attachments
cc: Jerome F. Rathburn, Colebrook First Selectman
Sandy M. Carter

Cellco Partnership

d.b.a. verizon wireless

WIRELESS COMMUNICATIONS FACILITY

COLEBROOK SW
161 PINNEY STREET
COLEBROOK, CT 06021

PROJECT SUMMARY

SITE NAME:	COLEBROOK SW
SITE ADDRESS:	161 PINNEY STREET COLEBROOK, CT 06021
SITE LOCATION:	LATITUDE 41°-57'-57" LONGITUDE 73°-07'-13" BASE ELEV. 1253'± (AMSL) COORDINATES BASED ON CSC WEB LOG, LAST UPDATED ON 07/27/06.
PROPERTY OWNER:	ELLEN FREDSALL 161 PINNEY STREET COLEBROOK, CT 06021
LESSEE/TENANT:	CELLCO PARTNERSHIP d.b.a. VERIZON WIRELESS 99 EAST RIVER DRIVE EAST HARTFORD, CT 06108
CONSTRUCTION CONTACT:	MARK GAUGER (VERIZON) 860-803-8240

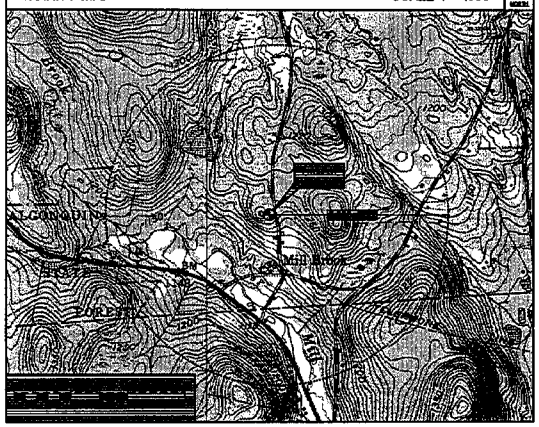
SITE DIRECTIONS

FROM: 99 EAST RIVER DRIVE, EAST HARTFORD, CONNECTICUT **TO:** 161 PINNEY STREET, COLEBROOK, CONNECTICUT

-MERGE ONTO I-84 W	1.2 MI.
-TAKE EXIT 46 ONTO SPRING STREET TOWARD ASYLUM STREET.	0.1 MI.
-TURN RIGHT ONTO ASYLUM AVE.	3.4 MI.
-TURN RIGHT ONTO NORTH MAIN STREET.	0.5 MI.
-TURN LEFT ONTO ALBANY AVE. (US-44)	2.9 MI.
-CONTINUE TO FOLLOW US-44	22.8 MI.
-TURN RIGHT ONTO PINNEY STREET.	0.4 MI.
-END AT 161 PINNEY STREET ON THE LEFT.	

VICINITY MAP

SCALE: 1" = 1000'



SHEET INDEX

SHT. NO.	DESCRIPTION	REV.
T-1	TITLE SHEET	01
C-1	COMPOUND PLAN AND ELEVATION	01

GENERAL NOTES

1. PROPOSED ANTENNA LOCATIONS AND HEIGHTS PROVIDED BY VERIZON WIRELESS.

PROJECT SCOPE

1. THE PROPOSED SCOPE OF WORK GENERALLY INCLUDES THE INSTALLATION OF A 12'x30' PREFABRICATED WIRELESS EQUIPMENT SHELTER ON A CONCRETE FOUNDATION WITHIN THE EXISTING WIRELESS COMMUNICATIONS COMPOUND.
2. TWELVE (12) PANEL ANTENNAS ARE PROPOSED TO BE MOUNTED ONTO THE EXISTING 147' MONOPOLE TOWER AT A RAD CENTER ELEVATION OF 1175'±.
3. ELECTRIC AND TELCO UTILITIES SHALL BE ROUTED UNDERGROUND TO THE VERIZON EQUIPMENT SHELTER FROM AN EXISTING UTILITY BACKBOARD LOCATED ADJACENT TO THE FENCED COMPOUND.

REVISIONS

00	08/30/06	CT SITING COUNCIL-REVIEW
01	10/09/06	CT SITING COUNCIL

Cellco Partnership
d.b.a. verizon wireless

Natcomm, LLC - Engineering Consultants

Natcomm, L.L.C.
63-2 North Branford Road
Branford, Connecticut 06405
Tel: (203) 488-0580
Fax: (203) 488-8587
Consulting Engineers - Project Management
Civil - Structural - Mechanical - Electrical

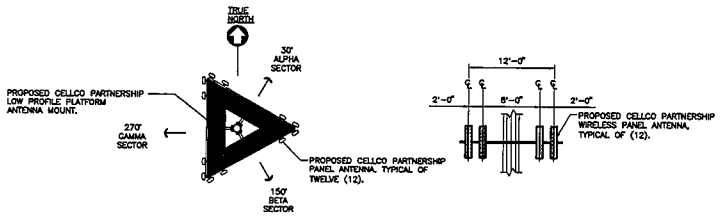
PROFESSIONAL ENGINEER SEAL

COLEBROOK SW
161 PINNEY STREET
COLEBROOK, CT 06021

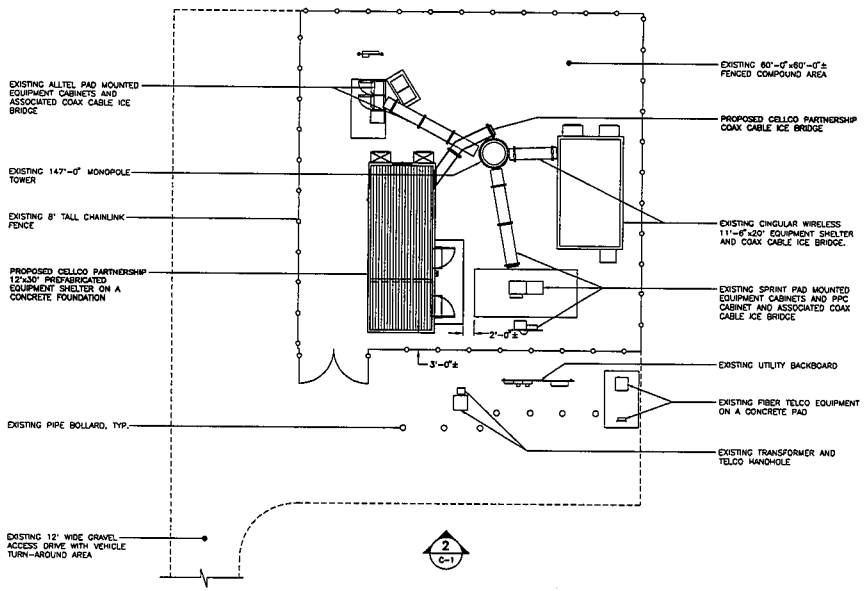
PROJECT NO:	06084
DRAWN BY:	DMD
CHECKED BY:	CFC
SCALE:	AS NOTED
DATE:	08/09/06

TITLE SHEET

T-1
DWG. 1 OF 2



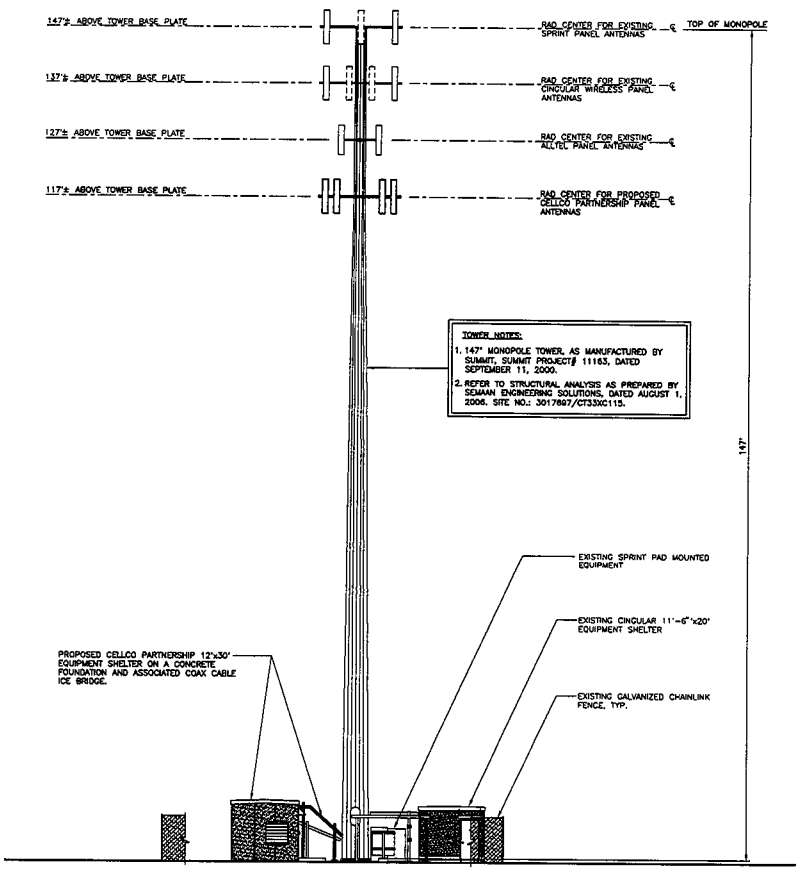
3 / C-1 **ANTENNA MOUNTING CONFIGURATION**
NOT TO SCALE



1 / C-1 **COMPOUND PLAN**
SCALE: 1" = 10'- 0"

TRUE NORTH

GRAPHIC SCALE
(IN FEET)



2 / C-1 **COMPOUND AND TOWER ELEVATION**
SCALE: 1" = 10'- 0"

GRAPHIC SCALE
(IN FEET)
1 inch = 10 ft.

REVISIONS		
00	05/20/06	CT SITING COUNCIL-REVIEW
01	10/05/06	CT SITING COUNCIL

Cellco Partnership
d.b.a. verizonwireless

NATCOMM
Natcomm, LLC.
63-2 North Branford Road
Branford, Connecticut 06405
Tel. (203) 488-0580
Fax (203) 488-8587

COLEBROOK SW

161 PINNEY STREET
COLEBROOK, CT 06021

PROJECT NO:	06084
DRAWN BY:	DMD
CHECKED BY:	CFC
SCALE:	AS NOTED
DATE:	08/09/06

COMPOUND PLAN AND ELEVATION

C-1
DWG. 2 OF 2

Site Name: Colebrook SW, CT
Cumulative Power Density

Operator	Operating Frequency	Number of Trans.	ERP Per Trans.	Total ERP	Distance to Target	Calculated Power Density	Maximum Permissable Exposure*	Fraction of MPE
	(MHz)		(watts)	(watts)	(feet)	(mW/cm^2)	(mW/cm^2)	(%)
Sprint PCS	1950	12	250	3000	147	0.0499	1.0	4.99%
Cingular	1930	2	427	854	137	0.0164	1.0	1.64%
Cingular	880	2	296	592	137	0.0113	0.587	1.93%
Alltel	1945	12	250	3000	127	0.0669	1	6.69%
VZW PCS	1970	3	485	1455	117	0.0382	1.0	3.82%

Total Percentage of Maximum Permissible Exposure 19.07%

*Guidelines adopted by the FCC on August 1, 1996, 47 CFR Part 1 based on NCRP Report 86, 1986 and generally on ANSI/IEEE C95.1-1992

MHz = Megahertz
mW/cm^2 = milliwatts per square centimeter
ERP = Effective Radiated Power

Absolute worst case maximum values used.

1086061

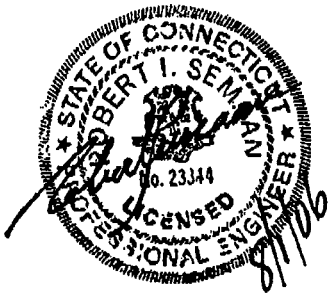
1079 N. 204th Avenue
Elkhorn, NE 68022
Ph: 402-289-1888
Fax: 402-289-1861

SEMAAN ENGINEERING SOLUTIONS

148 ft SUMMIT Monopole
Structural Analysis

Prepared for:
Global Signal
301 North Cattlemen Road, Suite 300
Sarasota, FL 34232

Site: 3017697 / CT33XC115
For Verizon
161 Pinney Street.
Colebrook, CT



August 1, 2006

Mr. Louis Belizaire
Global Signal
301 North Cattlemen Road, Suite 300
Sarasota, FL 34232

Re: Site 3017697 / CT33XC115 – 161 Pinney Street, Colebrook, CT.

Dear Mr. Belizaire:

We have completed the structural analysis for the existing monopole, located at the above referenced site. The purpose of this analysis is to determine that the existing monopole design is in conformance with the TIA/EIA-222 Rev F standard and local building codes for the proposed antennae loads installation. Refer to the Review and Recommendations section at the end of this report for the analysis results.

Description of Structure:

The structure is a 148 ft SUMMIT Monopole.

Refer to SUMMIT job #11163 dated September 11, 2000 for a detailed description of the structure.

Method of analysis:

The tower was analyzed using Semaan Engineering Solutions' software suite for communication structures. The structural analysis is performed using the SAPS finite element engine. The method is 3D, non-linear, which accounts for the second order geometric effects due to the displacements. It also treats guys as exact cable elements and therefore is ideal for guyed towers. The analysis was performed in conformance with **TIA/EIA-222 Rev F and local building codes for a basic wind speed of 80 mph and 1/2" radial ice with reduced wind speed (fastest mile)**. This wind speed is equivalent to 100 mph 3-second gust per the IBC 2003. This is in conformance with the IBC 2003: Section 1609.1.1, Exception (5) and Section 3108.4. Wind is applied to the structure, accessories and antennas.

Structure loading:

The following loads were used in the tower analysis:

Elev (ft)	Qty	Antennas	Mounts	Coax	Carrier
147.0	9	DB980H90	Low Profile Platform	(9) 1 5/8"	Sprint
137.0	3	DBC-750 combiner	Low Profile Platform	(3) 1/4" (12) 1 5/8"	Cingular
	12	DUO1417-8686			Cingular
	6	MHA			
127.0	6	Allgon 7184.14	(3) T-arms	(12) 1 1/4"	AllTel

Proposed Loads:

Elev (ft)	Qty	Antennas	Mounts	Coax	Carrier
117.0	12	LPA-185080/12CF	Low Profile Platform	(12) 1 5/8"	Verizon

All new access holes shall be reinforced with welded rims that are compatible with the pole and to be sized and supplied by pole manufacturer.

All transmission lines are assumed running inside of pole shaft.

Results of Analysis:

Refer to the attached Computer Summary sheets for detailed analysis results.

Structure:

The existing monopole is structurally capable of supporting the existing and proposed antennas. The maximum structure usage is: 97.3%.

Foundation:

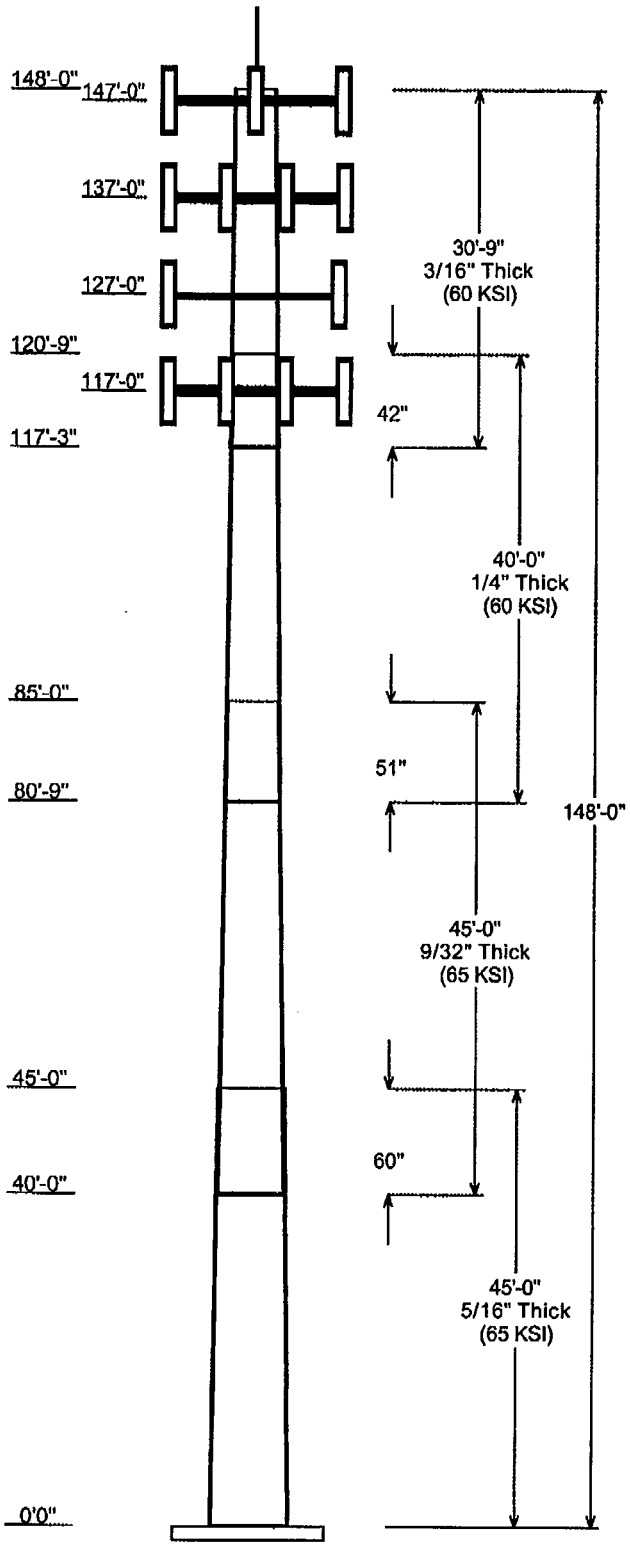
Pole Reactions	Original Design Reactions	Current Analysis Reactions	% Of Design
Moment (ft-kips)	2,200.00	2,104.36	95.7
Shear (kips)	20.00	19.27	96.4

The analysis reactions are less than the design reactions therefore no foundation modifications are required.

Review and Recommendations:

Based on the analysis results, the existing structure meets the requirements per the TIA/EIA-222 Rev F standards for a basic wind speed of 80 mph and 1/2" radial ice with reduced wind speed. This wind speed is equivalent to a 100 mph 3-second gust.

SEMAAN ENGINEERING SOLUTIONS
1079 N.204th Avenue
Elkhorn, NE 68022
Phone: 402-289-1888
Fax: 402-289-1861



Job Information

Pole :	CT33XC115	Code: TIA/EIA-222 Rev F	
Description :			
Client :	Global Signal		
Location :	3017697, 161 Pinney Street. Colebrook, CT		
Shape :	18 Sides	Base Elev (ft): 0.00	
Height :	148.00 (ft)	Taper: 0.169983(in/ft)	

Sections Properties

Shaft Section	Length (ft)	Diameter (in) Accross Flats Top	Bottom	Thick (in)	Joint Type	Overlap Length (in)	Taper (in/ft)	Steel Grade (ksi)
1	45.000	38.07	45.72	0.313		0.000	0.169983	65
2	45.000	31.83	39.48	0.281	Slip Joint	60.000	0.169983	65
3	40.000	26.25	33.05	0.250	Slip Joint	51.000	0.169983	60
4	30.750	22.00	27.22	0.188	Slip Joint	42.000	0.169983	60

Discrete Appurtenance

Attach Elev (ft)	Force Elev (ft)	Qty	Description
148.000	152.000	1	5/8" lightning rod
147.000	147.000	9	DB980H90
147.000	147.000	1	Low Profile Platform
137.000	137.000	6	MHA
137.000	137.000	12	DUO1417-8686
137.000	137.000	3	DBC-750 combiner
137.000	137.000	1	Low Profile Platform
127.000	127.000	3	T-arms
127.000	127.000	6	Allgon 7184.14
117.000	117.000	1	Low Profile Platform
117.000	117.000	12	LPA-185080/12CF

Linear Appurtenance

Elev (ft) From	To	Description	Exposed To Wind
0.000	117.0	1 5/8" Coax	No
0.000	127.0	1 1/4" Coax	No
0.000	137.0	1 5/8" Coax	No
0.000	137.0	1/4" Coax	No
0.000	147.0	1 5/8" Coax	No

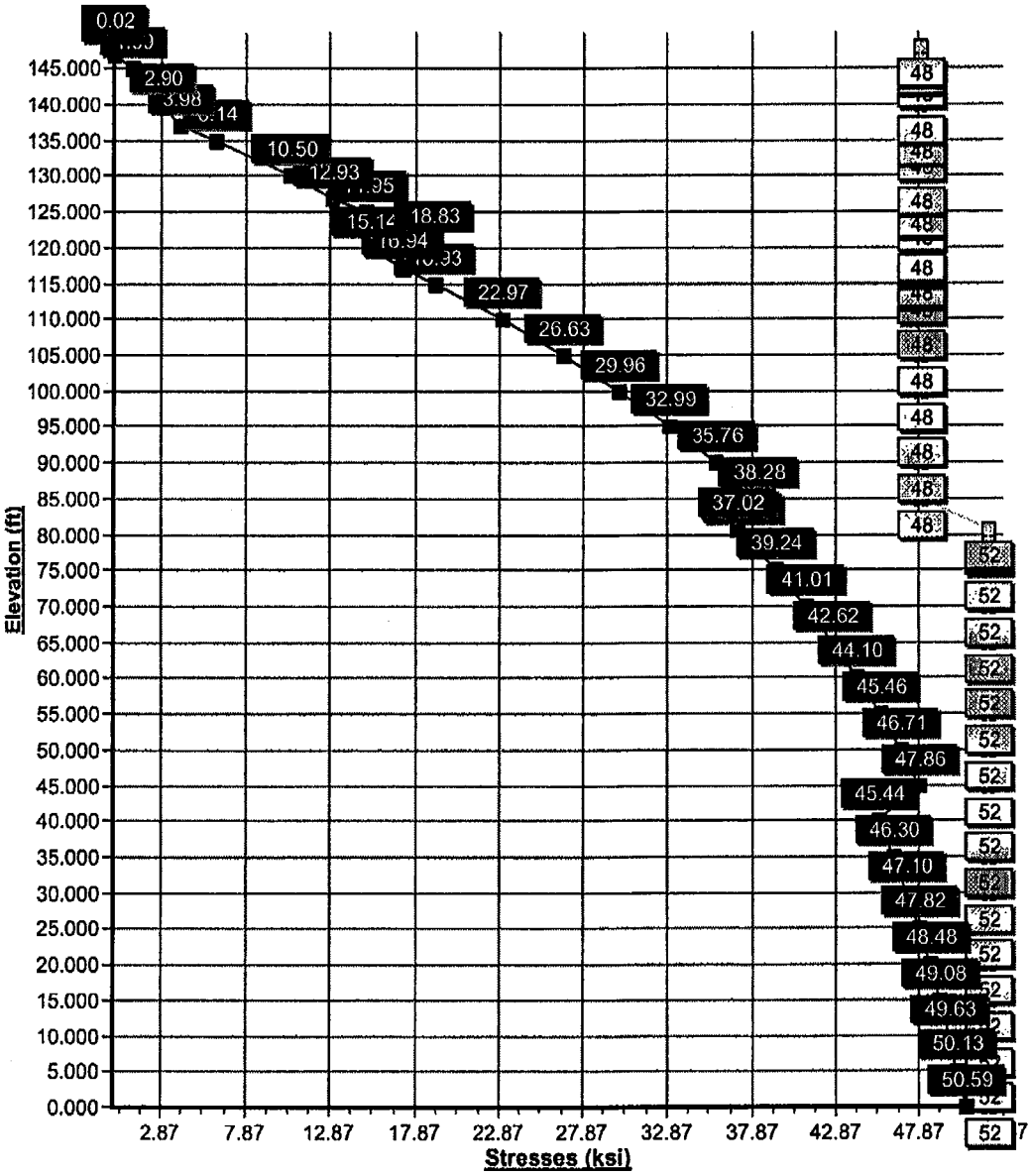
Load Cases

No Ice	80.00 mph Wind with No Ice
Ice	69.28 mph Wind with Ice

Reactions

Load Case	Moment (Kip-ft)	Shear (Kips)	Axial (Kips)
No Ice	2104.36	19.27	27.24
Ice	1836.75	16.18	33.39

Load Case : No Ice
Max Stress 97.3% at 0.0ft



Pole : CT33XC115 Code: TIA/EIA-222 Rev F

Location : 3017697, 161 Pinney Street. Colebrook, CT

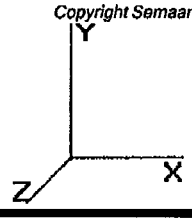
Height : 148.0 (ft)

Shape : 18 Sides

Base Dia : 45.72 (in)

Top Dia : 22.00 (in)

Taper : 0.169983 (in/ft) Base Elev : 0.000 (ft)



Shaft Section Properties

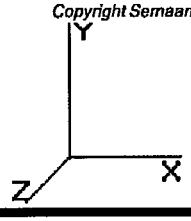
Sect Num	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Slip Joint Len (in)	Weight (lb)	Bottom Dia (in)	Bottom Elev (ft)	Bottom Area (sqin)	Bottom Ix (in^4)	Bottom W/t Ratio	Bottom D/t Ratio	Top Dia (in)	Top Elev (ft)	Top Area (sqin)	Top Ix (in^4)	Top W/t Ratio	Top D/t Ratio	Taper (in/ft)
1	45.000	0.3125	65		0.00	6,315	45.72	0.000	45.04	11731.8	24.39	146.3	38.07	45.00	37.45	6745.5	20.07	121.82	0.16998
2	45.000	0.2813	65	Slip Joint	60.00	4,836	39.48	40.00	34.99	6794.3	23.34	140.3	31.83	85.00	28.17	3542.7	18.55	113.19	0.16998
3	40.000	0.2500	60	Slip Joint	51.00	3,176	33.05	80.75	26.03	3539.5	21.90	132.2	26.25	120.7	20.64	1763.3	17.11	105.03	0.16998
4	30.750	0.1875	60	Slip Joint	42.00	1,521	27.22	117.2	16.09	1486.4	24.19	145.2	22.00	148.0	12.98	780.3	19.28	117.33	0.16998
				Shaft Weight		15,848													

Discrete Appurtenance Properties

Attach Elev (ft)	Description	Qty	No Ice Weight (lb)	No Ice CaAa (sf)	No Ice CaAa Factor	Ice Weight (lb)	Ice CaAa (sf)	Ice CaAa Factor	Distance From Face (ft)	Vert Ecc (ft)
148.0	5/8" lightning rod	1	75.00	0.500	1.00	100.00	1.500	1.00	0.000	4.000
147.0	DB980H90	9	9.00	3.280	0.67	28.00	3.850	0.67	0.000	0.000
147.0	Low Profile Platform	1	1600.00	25.550	1.00	2100.00	27.320	1.00	0.000	0.000
137.0	MHA	6	11.00	0.660	1.00	36.00	2.950	1.00	0.000	0.000
137.0	DUO1417-8686	12	30.80	6.530	0.82	73.00	7.150	0.82	0.000	0.000
137.0	DBC-750 combiner	3	5.00	0.550	1.00	7.85	0.700	1.00	0.000	0.000
137.0	Low Profile Platform	1	1300.00	25.550	1.00	2100.00	27.320	1.00	0.000	0.000
127.0	T-arms	3	242.00	8.190	1.00	301.00	11.130	1.00	0.000	0.000
127.0	Allgon 7184.14	6	10.00	2.890	0.67	24.00	3.360	0.67	0.000	0.000
117.0	Low Profile Platform	1	1600.00	25.550	1.00	2100.00	27.320	1.00	0.000	0.000
117.0	LPA-185080/12CF	12	10.50	3.525	1.00	20.00	4.175	1.00	0.000	0.000
	Totals	55	6018.60			9054.55			Number of Loadings :	11

Linear Appurtenance Properties

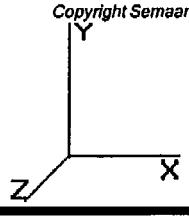
Elev From (ft)	Elev To (ft)	Description	No Ice Weight (lb/ft)	No Ice CaAa (sf/ft)	Ice Weight (lb/ft)	Ice CaAa (sf/ft)	Exposed To Wind
0.00	147.00	(9) 1 5/8" Coax	9.00	0.00	9.00	0.00	N
0.00	137.00	(12) 1 5/8" Coax	12.00	0.00	12.00	0.00	N
0.00	137.00	(3) 1/4" Coax	0.24	0.00	0.24	0.00	N
0.00	127.00	(12) 1 1/4" Coax	8.00	0.00	8.00	0.00	N
0.00	117.00	(12) 1 5/8" Coax	12.00	0.00	12.00	0.00	N
		Total Weight	5,419.88 (lb)		5,419.88 (lb)		



Segment Properties (Max Len : 5 ft)

Seg Top Elev (ft)	Description	Thick (in)	Flat Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fy (ksi)	Fb (ksi)	Weight (lb)
0.00		0.3125	45.720	45.037	11,731.8	24.39	146.30	65	52	0.0
5.00		0.3125	44.870	44.194	11,085.3	23.91	143.58	65	52	759.1
10.00		0.3125	44.020	43.351	10,463.0	23.43	140.86	65	52	744.7
15.00		0.3125	43.170	42.508	9,864.4	22.95	138.14	65	52	730.4
20.00		0.3125	42.320	41.665	9,289.1	22.47	135.42	65	52	716.0
25.00		0.3125	41.470	40.822	8,736.6	21.99	132.70	65	52	701.7
30.00		0.3125	40.620	39.979	8,206.5	21.51	129.98	65	52	687.4
35.00		0.3125	39.770	39.136	7,698.2	21.03	127.26	65	52	673.0
40.00	Bot - Section 2	0.3125	38.920	38.293	7,211.4	20.55	124.54	65	52	658.7
45.00	Top - Section 1	0.2813	38.633	34.235	6,361.9	22.81	137.36	65	52	1,233.3
50.00		0.2813	37.783	33.476	5,948.3	22.28	134.34	65	52	576.0
55.00		0.2813	36.933	32.717	5,552.9	21.74	131.32	65	52	563.1
60.00		0.2813	36.083	31.959	5,175.5	21.21	128.30	65	52	550.2
65.00		0.2813	35.233	31.200	4,815.6	20.68	125.27	65	52	537.3
70.00		0.2813	34.383	30.441	4,472.8	20.15	122.25	65	52	524.4
75.00		0.2813	33.533	29.683	4,146.6	19.61	119.23	65	52	511.5
80.00		0.2813	32.683	28.924	3,836.7	19.08	116.21	65	52	498.6
80.75	Bot - Section 3	0.2813	32.556	28.810	3,791.6	19.00	115.75	65	52	73.7
85.00	Top - Section 2	0.2500	32.334	25.457	3,310.8	21.39	129.33	60	48	784.3
90.00		0.2500	31.484	24.783	3,054.6	20.80	125.93	60	48	427.4
95.00		0.2500	30.634	24.109	2,811.9	20.20	122.53	60	48	415.9
100.0		0.2500	29.784	23.434	2,582.5	19.60	119.14	60	48	404.4
105.0		0.2500	28.934	22.760	2,365.9	19.00	115.74	60	48	393.0
110.0		0.2500	28.084	22.085	2,161.8	18.40	112.34	60	48	381.5
115.0		0.2500	27.234	21.411	1,969.7	17.80	108.94	60	48	370.0
117.0		0.2500	26.894	21.141	1,896.2	17.56	107.58	60	48	144.8
117.2	Bot - Section 4	0.2500	26.852	21.108	1,887.2	17.53	107.41	60	48	18.0
120.0		0.2500	26.384	20.737	1,789.4	17.20	105.54	60	48	345.1
120.7	Top - Section 3	0.1875	26.632	15.737	1,390.4	23.63	142.04	60	48	93.1
125.0		0.1875	25.909	15.307	1,279.5	22.95	138.18	60	48	224.5
127.0		0.1875	25.569	15.105	1,229.4	22.63	136.37	60	48	103.5
130.0		0.1875	25.059	14.801	1,156.8	22.16	133.65	60	48	152.6
135.0		0.1875	24.209	14.296	1,042.2	21.36	129.12	60	48	247.5
137.0		0.1875	23.869	14.093	998.6	21.04	127.30	60	48	96.6
140.0		0.1875	23.359	13.790	935.5	20.56	124.58	60	48	142.3
145.0		0.1875	22.510	13.284	836.3	19.76	120.05	60	48	230.3
147.0		0.1875	22.170	13.082	798.6	19.44	118.24	60	48	89.7
148.0		0.1875	22.000	12.980	780.3	19.28	117.33	60	48	44.3
										15,847.8

Pole :	CT33XC115	Code: TIA/EIA-222 Rev F	
Location :	3017697, 161 Pinney Street. Colebrook, CT		
Height :	148.0 (ft)		
Shape :	18 Sides		
Base Dia :	45.72 (in)		
Top Dia :	22.00 (in)		
Taper :	0.169983 (in/ft)	Base Elev : 0.000 (ft)	

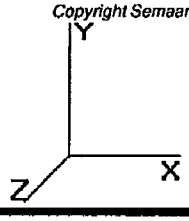


Load Case: No Ice — 80.00 mph Wind with No Ice — 28 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Shaft Segment Forces

Seg Top Elev (ft)	Description		Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		0.00	1.00	16.384	27.68	304.79	0.650	0.00	0.00	0.000	0.00	0.0	0.0	0.0
5.00		0.00	1.00	16.384	27.68	299.13	0.650	0.00	5.00	18.873	12.27	339.7	0.0	759.1
10.00		0.00	1.00	16.384	27.68	293.46	0.650	0.00	5.00	18.519	12.04	333.3	0.0	744.7
15.00		0.00	1.00	16.384	27.68	287.79	0.650	0.00	5.00	18.165	11.81	326.9	0.0	730.4
20.00		0.00	1.00	16.384	27.68	282.13	0.650	0.00	5.00	17.810	11.58	320.5	0.0	716.0
25.00		0.00	1.00	16.384	27.68	276.46	0.650	0.00	5.00	17.456	11.35	314.2	0.0	701.7
30.00		0.00	1.00	16.384	27.68	270.80	0.650	0.00	5.00	17.102	11.12	307.8	0.0	687.4
35.00		0.00	1.01	16.662	28.15	267.37	0.650	0.00	5.00	16.748	10.89	306.5	0.0	673.0
40.00	Bot - Section 2	0.00	1.05	17.310	29.25	266.69	0.650	0.00	5.00	16.394	10.66	311.7	0.0	658.7
45.00	Top - Section 1	0.00	1.09	17.902	30.25	265.30	0.650	0.00	5.00	16.274	10.58	320.0	0.0	1,233.3
50.00		0.00	1.12	18.449	31.17	267.29	0.650	0.00	5.00	15.920	10.35	322.6	0.0	576.0
55.00		0.00	1.15	18.959	32.04	264.86	0.650	0.00	5.00	15.566	10.12	324.2	0.0	563.1
60.00		0.00	1.18	19.436	32.84	262.00	0.650	0.00	5.00	15.212	9.89	324.8	0.0	550.2
65.00		0.00	1.21	19.885	33.60	258.77	0.650	0.00	5.00	14.858	9.66	324.6	0.0	537.3
70.00		0.00	1.24	20.311	34.32	255.21	0.650	0.00	5.00	14.503	9.43	323.6	0.0	524.4
75.00		0.00	1.26	20.715	35.00	251.37	0.650	0.00	5.00	14.149	9.20	322.0	0.0	511.5
80.00		0.00	1.28	21.101	35.66	247.27	0.650	0.00	5.00	13.795	8.97	319.8	0.0	498.6
80.75	Bot - Section 3	0.00	1.29	21.157	35.75	246.63	0.650	0.00	0.75	2.039	1.33	47.4	0.0	73.7
85.00	Top - Section 2	0.00	1.31	21.469	36.28	242.93	0.650	0.00	4.25	11.579	7.53	273.1	0.0	784.3
90.00		0.00	1.33	21.823	36.88	242.23	0.650	0.00	5.00	13.295	8.64	318.7	0.0	427.4
95.00		0.00	1.35	22.163	37.45	237.52	0.650	0.00	5.00	12.941	8.41	315.1	0.0	415.9
100.0		0.00	1.37	22.490	38.00	232.63	0.650	0.00	5.00	12.587	8.18	311.0	0.0	404.4
105.0		0.00	1.39	22.806	38.54	227.57	0.650	0.00	5.00	12.233	7.95	306.5	0.0	393.0
110.0		0.00	1.41	23.111	39.05	222.36	0.650	0.00	5.00	11.879	7.72	301.6	0.0	381.5
115.0		0.00	1.42	23.406	39.55	217.00	0.650	0.00	5.00	11.525	7.49	296.3	0.0	370.0
117.0	Appertunance(s)	0.00	1.43	23.522	39.75	214.82	0.650	0.00	2.00	4.511	2.93	116.5	0.0	144.8
117.2	Bot - Section 4	0.00	1.43	23.536	39.77	214.55	0.650	0.00	0.25	0.560	0.36	14.5	0.0	18.0
120.0		0.00	1.44	23.692	40.04	211.51	0.650	0.00	2.75	6.186	4.02	161.0	0.0	345.1
120.7	Top - Section 3	0.00	1.44	23.735	40.11	210.68	0.650	0.00	0.75	1.668	1.08	43.5	0.0	93.1
125.0		0.00	1.46	23.970	40.51	208.92	0.650	0.00	4.25	9.304	6.05	245.0	0.0	224.5
127.0	Appertunance(s)	0.00	1.47	24.079	40.69	206.65	0.650	0.00	2.00	4.290	2.79	113.5	0.0	103.5
130.0		0.00	1.48	24.241	40.96	203.20	0.650	0.00	3.00	6.329	4.11	168.5	0.0	152.6
135.0		0.00	1.49	24.503	41.41	197.37	0.650	0.00	5.00	10.264	6.67	276.3	0.0	247.5
137.0	Appertunance(s)	0.00	1.50	24.607	41.58	195.01	0.650	0.00	2.00	4.007	2.60	108.3	0.0	96.6
140.0		0.00	1.51	24.759	41.84	191.43	0.650	0.00	3.00	5.904	3.84	160.6	0.0	142.3
145.0		0.00	1.52	25.009	42.26	185.40	0.650	0.00	5.00	9.556	6.21	262.5	0.0	230.3
147.0	Appertunance(s)	0.00	1.53	25.107	42.43	182.95	0.650	0.00	2.00	3.723	2.42	102.7	0.0	89.7
148.0	Appertunance(s)	0.00	1.53	25.156	42.51	181.73	0.650	0.00	1.00	1.840	1.20	50.9	0.0	44.3
							Totals:		148.00			9,135.5	0.0	15,847.8



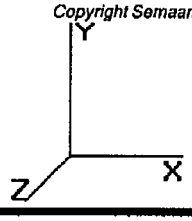
Load Case: No Ice — 80.00 mph Wind with No Ice — 28 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Discrete Appurtenance Segment Forces

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa Factor	Total CaAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
117.0	Low Profile Platform	1	23.522	39.752	1.000	25.55	0.000	0.000	1,015.66	0.00	0.00	1,600.00
117.0	LPA-185080/12CF	12	23.522	39.752	1.000	42.30	0.000	0.000	1,681.50	0.00	0.00	126.00
127.0	T-arms	3	24.079	40.694	1.000	24.57	0.000	0.000	999.86	0.00	0.00	726.00
127.0	Allgon 7184.14	6	24.079	40.694	0.670	11.62	0.000	0.000	472.78	0.00	0.00	60.00
137.0	MHA	6	24.607	41.585	1.000	3.96	0.000	0.000	164.68	0.00	0.00	66.00
137.0	DUO1417-8686	12	24.607	41.585	0.820	64.26	0.000	0.000	2,672.06	0.00	0.00	369.60
137.0	DBC-750 combiner	3	24.607	41.585	1.000	1.65	0.000	0.000	68.62	0.00	0.00	15.00
137.0	Low Profile Platform	1	24.607	41.585	1.000	25.55	0.000	0.000	1,062.50	0.00	0.00	1,300.00
147.0	DB980H90	9	25.107	42.431	0.667	19.69	0.000	0.000	835.45	0.00	0.00	81.00
147.0	Low Profile Platform	1	25.107	42.431	1.000	25.55	0.000	0.000	1,084.10	0.00	0.00	1,600.00
148.0	5/8" lightning rod	1	25.348	42.838	1.000	0.50	0.000	4.000	21.42	0.00	85.68	75.00
									10,078.60			6,018.60

Pole :	CT33XC115	Code: TIA/EIA-222 Rev F	
Location :	3017697, 161 Pinney Street. Colebrook, CT		
Height :	148.0 (ft)		
Shape :	18 Sides		
Base Dia :	45.72 (in)		
Top Dia :	22.00 (in)		
Taper :	0.169983 (in/ft)	Base Elev : 0.000 (ft)	



Load Case: No Ice — 80.00 mph Wind with No Ice — 28 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

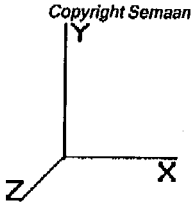
Applied Segment Forces Summary

Seg Elev (ft)	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00	0.00	0.00	0.00	0.00
5.00	339.67	965.28	0.00	0.00
10.00	333.30	950.93	0.00	0.00
15.00	326.92	936.59	0.00	0.00
20.00	320.55	922.25	0.00	0.00
25.00	314.17	907.91	0.00	0.00
30.00	307.80	893.56	0.00	0.00
35.00	306.54	879.22	0.00	0.00
40.00	311.72	864.88	0.00	0.00
45.00	320.04	1,439.46	0.00	0.00
50.00	322.64	782.21	0.00	0.00
55.00	324.17	769.30	0.00	0.00
60.00	324.77	756.40	0.00	0.00
65.00	324.55	743.49	0.00	0.00
70.00	323.59	730.58	0.00	0.00
75.00	321.98	717.67	0.00	0.00
80.00	319.76	704.76	0.00	0.00
80.75	47.38	104.60	0.00	0.00
85.00	273.09	959.56	0.00	0.00
90.00	318.72	633.59	0.00	0.00
95.00	315.06	622.12	0.00	0.00
100.0	310.96	610.64	0.00	0.00
105.0	306.46	599.17	0.00	0.00
110.0	301.57	587.70	0.00	0.00
115.0	296.32	576.22	0.00	0.00
117.0	2,813.70	1,953.28	0.00	0.00
117.2	14.47	25.28	0.00	0.00
120.0	160.99	425.46	0.00	0.00
120.7	43.50	114.98	0.00	0.00
125.0	244.99	348.75	0.00	0.00
127.0	1,586.11	947.96	0.00	0.00
130.0	168.52	216.37	0.00	0.00
135.0	276.28	353.73	0.00	0.00
137.0	4,076.14	1,889.68	0.00	0.00
140.0	160.57	169.32	0.00	0.00
145.0	262.53	275.31	0.00	0.00
147.0	2,022.24	1,788.72	0.00	0.00
148.0	72.28	119.34	0.00	85.68
Totals:	19,214.06	27,286.28	0.00	85.68

Pole : CT33XC115
Location : 3017697, 161 Pinney Street. Colebrook, CT
Height : 148.0 (ft)
Shape : 18 Sides
Base Dia : 45.72 (in)
Top Dia : 22.00 (in)
Taper : 0.169983 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)



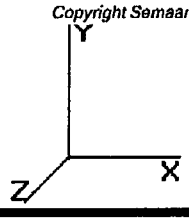
Load Case: No Ice — 80.00 mph Wind with No Ice — 28 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Calculated Shaft Forces and Deflections

Seg Elev (ft)	Lateral FX (-) (kips)	Axial FY (-) (kips)	Lateral FZ (kips)	Moment MX (ft-kips)	Torsion MY (ft-kips)	Moment MZ (ft-kips)	X Deflect (in)	Z Deflect (in)	Total Deflect (in)	Rotation (deg)
0.00	-19.274	-27.243	0.000	0.000	0.000	-2,104.364	0.000	0.000	0.000	0.000
5.00	-19.047	-26.196	0.000	0.000	0.000	-2,007.995	-0.133	0.000	0.133	-0.249
10.00	-18.819	-25.164	0.000	0.000	0.000	-1,912.763	-0.529	0.000	0.529	-0.501
15.00	-18.589	-24.149	0.000	0.000	0.000	-1,818.672	-1.189	0.000	1.189	-0.755
20.00	-18.358	-23.150	0.000	0.000	0.000	-1,725.729	-2.116	0.000	2.116	-1.010
25.00	-18.126	-22.167	0.000	0.000	0.000	-1,633.942	-3.312	0.000	3.312	-1.267
30.00	-17.892	-21.201	0.000	0.000	0.000	-1,543.315	-4.777	0.000	4.777	-1.526
35.00	-17.653	-20.251	0.000	0.000	0.000	-1,453.855	-6.514	0.000	6.514	-1.786
40.00	-17.400	-19.318	0.000	0.000	0.000	-1,365.593	-8.523	0.000	8.523	-2.046
45.00	-17.107	-17.814	0.000	0.000	0.000	-1,278.594	-10.806	0.000	10.806	-2.307
50.00	-16.831	-16.967	0.000	0.000	0.000	-1,193.061	-13.361	0.000	13.361	-2.568
55.00	-16.548	-16.135	0.000	0.000	0.000	-1,108.908	-16.196	0.000	16.196	-2.843
60.00	-16.257	-15.320	0.000	0.000	0.000	-1,026.169	-19.319	0.000	19.319	-3.116
65.00	-15.960	-14.521	0.000	0.000	0.000	-944.883	-22.727	0.000	22.727	-3.387
70.00	-15.656	-13.739	0.000	0.000	0.000	-865.086	-26.416	0.000	26.416	-3.655
75.00	-15.346	-12.975	0.000	0.000	0.000	-786.809	-30.382	0.000	30.382	-3.917
80.00	-15.008	-12.257	0.000	0.000	0.000	-710.082	-34.619	0.000	34.619	-4.174
80.75	-14.980	-12.122	0.000	0.000	0.000	-698.826	-35.278	0.000	35.278	-4.213
85.00	-14.680	-11.128	0.000	0.000	0.000	-635.160	-39.122	0.000	39.122	-4.426
90.00	-14.357	-10.461	0.000	0.000	0.000	-561.760	-43.882	0.000	43.882	-4.666
95.00	-14.032	-9.809	0.000	0.000	0.000	-489.978	-48.897	0.000	48.897	-4.911
100.0	-13.704	-9.175	0.000	0.000	0.000	-419.822	-54.159	0.000	54.159	-5.141
105.0	-13.374	-8.560	0.000	0.000	0.000	-351.304	-59.652	0.000	59.652	-5.354
110.0	-13.043	-7.963	0.000	0.000	0.000	-284.434	-65.355	0.000	65.355	-5.545
115.0	-12.706	-7.394	0.000	0.000	0.000	-219.221	-71.245	0.000	71.245	-5.710
117.0	-9.714	-5.726	0.000	0.000	0.000	-193.810	-73.647	0.000	73.647	-5.770
117.2	-9.701	-5.696	0.000	0.000	0.000	-191.382	-73.949	0.000	73.949	-5.777
120.0	-9.502	-5.281	0.000	0.000	0.000	-164.704	-77.293	0.000	77.293	-5.851
120.7	-9.452	-5.162	0.000	0.000	0.000	-157.578	-78.213	0.000	78.213	-5.870
125.0	-9.179	-4.829	0.000	0.000	0.000	-117.406	-83.474	0.000	83.474	-5.965
127.0	-7.506	-4.044	0.000	0.000	0.000	-99.049	-85.979	0.000	85.979	-6.013
130.0	-7.320	-3.838	0.000	0.000	0.000	-76.531	-89.771	0.000	89.771	-6.074
135.0	-7.011	-3.511	0.000	0.000	0.000	-39.929	-96.163	0.000	96.163	-6.145
137.0	-2.756	-2.068	0.000	0.000	0.000	-25.908	-98.737	0.000	98.737	-6.163
140.0	-2.579	-1.916	0.000	0.000	0.000	-17.640	-102.609	0.000	102.609	-6.182
145.0	-2.288	-1.671	0.000	0.000	0.000	-4.747	-109.081	0.000	109.081	-6.199
147.0	-0.085	-0.111	0.000	0.000	0.000	-0.170	-111.674	0.000	111.674	-6.201
148.0	-0.072	0.000	0.000	0.000	0.000	-0.086	-112.970	0.000	112.970	-6.201

Pole : CT33XC115 Code: TIA/EIA-222 Rev F
Location : 3017697, 161 Pinney Street. Colebrook, CT
Height : 148.0 (ft)
Shape : 18 Sides
Base Dia : 45.72 (in)
Top Dia : 22.00 (in)
Taper : 0.169983 (in/ft) Base Elev : 0.000 (ft)

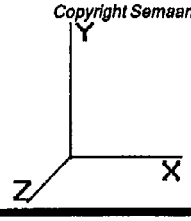


Load Case: No Ice — 80.00 mph Wind with No Ice — 28 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Calculated Stresses

Seg Elev (ft)	Applied Stresses Axial (Y) (ksi)	Shear (X) (ksi)	Shear (Z) (ksi)	Torsion (ksi)	Bending (X) (ksi)	Bending (Z) (ksi)	Combined (ksi)	Allowable Stress (Fb) (ksi)		Stress Ratio
0.00	0.60	0.86	0.00	0.00	0.00	49.96	50.59	52.0	0.0	0.973
5.00	0.59	0.87	0.00	0.00	0.00	49.52	50.13	52.0	0.0	0.965
10.00	0.58	0.87	0.00	0.00	0.00	49.03	49.63	52.0	0.0	0.955
15.00	0.57	0.88	0.00	0.00	0.00	48.49	49.08	52.0	0.0	0.944
20.00	0.56	0.89	0.00	0.00	0.00	47.90	48.48	52.0	0.0	0.933
25.00	0.54	0.89	0.00	0.00	0.00	47.25	47.82	52.0	0.0	0.920
30.00	0.53	0.90	0.00	0.00	0.00	46.54	47.10	52.0	0.0	0.906
35.00	0.52	0.91	0.00	0.00	0.00	45.76	46.30	52.0	0.0	0.891
40.00	0.50	0.92	0.00	0.00	0.00	44.90	45.44	52.0	0.0	0.874
45.00	0.52	1.01	0.00	0.00	0.00	47.30	47.86	52.0	0.0	0.921
50.00	0.51	1.01	0.00	0.00	0.00	46.17	46.71	52.0	0.0	0.899
55.00	0.49	1.02	0.00	0.00	0.00	44.94	45.46	52.0	0.0	0.875
60.00	0.48	1.03	0.00	0.00	0.00	43.59	44.10	52.0	0.0	0.849
65.00	0.47	1.03	0.00	0.00	0.00	42.12	42.62	52.0	0.0	0.820
70.00	0.45	1.04	0.00	0.00	0.00	40.52	41.01	52.0	0.0	0.789
75.00	0.44	1.04	0.00	0.00	0.00	38.77	39.24	52.0	0.0	0.755
80.00	0.42	1.05	0.00	0.00	0.00	36.85	37.32	52.0	0.0	0.718
80.75	0.42	1.05	0.00	0.00	0.00	36.56	37.02	52.0	0.0	0.712
85.00	0.44	1.16	0.00	0.00	0.00	37.79	38.28	48.0	0.0	0.798
90.00	0.42	1.17	0.00	0.00	0.00	35.28	35.76	48.0	0.0	0.745
95.00	0.41	1.17	0.00	0.00	0.00	32.52	32.99	48.0	0.0	0.688
100.00	0.39	1.18	0.00	0.00	0.00	29.50	29.96	48.0	0.0	0.624
105.00	0.38	1.18	0.00	0.00	0.00	26.18	26.63	48.0	0.0	0.555
110.00	0.36	1.19	0.00	0.00	0.00	22.51	22.97	48.0	0.0	0.479
115.00	0.35	1.20	0.00	0.00	0.00	18.47	18.93	48.0	0.0	0.394
117.00	0.27	0.93	0.00	0.00	0.00	16.75	17.09	48.0	0.0	0.356
117.25	0.27	0.93	0.00	0.00	0.00	16.59	16.94	48.0	0.0	0.353
120.00	0.25	0.92	0.00	0.00	0.00	14.80	15.14	48.0	0.0	0.315
120.75	0.33	1.21	0.00	0.00	0.00	18.39	18.83	48.0	0.0	0.393
125.00	0.32	1.21	0.00	0.00	0.00	14.48	14.95	48.0	0.0	0.312
127.00	0.27	1.00	0.00	0.00	0.00	12.55	12.93	48.0	0.0	0.270
130.00	0.26	1.00	0.00	0.00	0.00	10.10	10.50	48.0	0.0	0.219
135.00	0.25	0.99	0.00	0.00	0.00	5.65	6.14	48.0	0.0	0.128
137.00	0.15	0.39	0.00	0.00	0.00	3.77	3.98	48.0	0.0	0.083
140.00	0.14	0.38	0.00	0.00	0.00	2.68	2.90	48.0	0.0	0.060
145.00	0.13	0.35	0.00	0.00	0.00	0.78	1.09	48.0	0.0	0.023
147.00	0.01	0.01	0.00	0.00	0.00	0.03	0.04	48.0	0.0	0.001
148.00	0.00	0.01	0.00	0.00	0.00	0.01	0.02	48.0	0.0	0.001

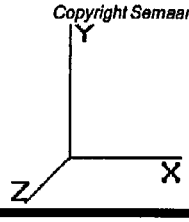


Load Case: Ice 69.28 mph Wind with Ice 28 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Shaft Segment Forces

Seg Top Elev (ft)	Description		Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		0.00	1.00	12.287	20.76	263.95	0.650	0.50	0.00	0.000	0.00	0.0	0.0	0.0
5.00		0.00	1.00	12.287	20.76	259.04	0.650	0.50	5.00	19.289	12.54	260.4	140.0	899.1
10.00		0.00	1.00	12.287	20.76	254.14	0.650	0.50	5.00	18.935	12.31	255.6	137.4	882.1
15.00		0.00	1.00	12.287	20.76	249.23	0.650	0.50	5.00	18.581	12.08	250.8	134.8	865.1
20.00		0.00	1.00	12.287	20.76	244.32	0.650	0.50	5.00	18.227	11.85	246.0	132.1	848.2
25.00		0.00	1.00	12.287	20.76	239.42	0.650	0.50	5.00	17.873	11.62	241.2	129.5	831.2
30.00		0.00	1.00	12.287	20.76	234.51	0.650	0.50	5.00	17.519	11.39	236.5	126.9	814.2
35.00		0.00	1.01	12.496	21.11	231.54	0.650	0.50	5.00	17.165	11.16	235.6	124.3	797.3
40.00	Bot - Section 2	0.00	1.05	12.982	21.93	230.96	0.650	0.50	5.00	16.811	10.93	239.7	121.6	780.3
45.00	Top - Section 1	0.00	1.09	13.426	22.69	229.75	0.650	0.50	5.00	16.691	10.85	246.2	120.8	1,354.0
50.00		0.00	1.12	13.836	23.38	231.47	0.650	0.50	5.00	16.337	10.62	248.3	118.1	694.1
55.00		0.00	1.15	14.218	24.02	229.36	0.650	0.50	5.00	15.982	10.39	249.6	115.5	678.6
60.00		0.00	1.18	14.576	24.63	226.89	0.650	0.50	5.00	15.628	10.16	250.2	112.9	663.1
65.00		0.00	1.21	14.913	25.20	224.09	0.650	0.50	5.00	15.274	9.93	250.2	110.3	647.6
70.00		0.00	1.24	15.232	25.74	221.01	0.650	0.50	5.00	14.920	9.70	249.7	107.6	632.0
75.00		0.00	1.26	15.536	26.25	217.69	0.650	0.50	5.00	14.566	9.47	248.6	105.0	616.5
80.00		0.00	1.28	15.825	26.74	214.13	0.650	0.50	5.00	14.212	9.24	247.1	102.4	601.0
80.75	Bot - Section 3	0.00	1.29	15.867	26.81	213.58	0.650	0.50	0.75	2.101	1.37	36.6	15.3	89.0
85.00	Top - Section 2	0.00	1.31	16.101	27.21	210.38	0.650	0.50	4.25	11.934	7.76	211.1	86.1	870.4
90.00		0.00	1.33	16.366	27.65	209.77	0.650	0.50	5.00	13.712	8.91	246.5	98.7	526.1
95.00		0.00	1.35	16.621	28.09	205.69	0.650	0.50	5.00	13.358	8.68	243.9	96.1	512.0
100.0		0.00	1.37	16.866	28.50	201.46	0.650	0.50	5.00	13.004	8.45	240.9	93.4	497.9
105.0		0.00	1.39	17.103	28.90	197.08	0.650	0.50	5.00	12.650	8.22	237.7	90.8	483.8
110.0		0.00	1.41	17.332	29.29	192.56	0.650	0.50	5.00	12.295	7.99	234.1	88.2	469.7
115.0		0.00	1.42	17.554	29.66	187.92	0.650	0.50	5.00	11.941	7.76	230.3	85.6	455.6
117.0	Appertunance(s)	0.00	1.43	17.640	29.81	186.04	0.650	0.50	2.00	4.677	3.04	90.6	33.8	178.6
117.2	Bot - Section 4	0.00	1.43	17.651	29.83	185.80	0.650	0.50	0.25	0.581	0.38	11.3	4.2	22.2
120.0		0.00	1.44	17.768	30.02	183.17	0.650	0.50	2.75	6.415	4.17	125.2	46.3	391.3
120.7	Top - Section 3	0.00	1.44	17.800	30.08	182.45	0.650	0.50	0.75	1.731	1.13	33.8	12.6	105.6
125.0		0.00	1.46	17.977	30.38	180.92	0.650	0.50	4.25	9.658	6.28	190.7	69.3	293.7
127.0	Appertunance(s)	0.00	1.47	18.058	30.51	178.96	0.650	0.50	2.00	4.457	2.90	88.4	32.2	135.7
130.0		0.00	1.48	18.179	30.72	175.97	0.650	0.50	3.00	6.579	4.28	131.4	47.3	200.0
135.0		0.00	1.49	18.376	31.05	170.92	0.650	0.50	5.00	10.681	6.94	215.6	76.2	323.8
137.0	Appertunance(s)	0.00	1.50	18.454	31.18	168.88	0.650	0.50	2.00	4.173	2.71	84.6	30.1	126.7
140.0		0.00	1.51	18.568	31.38	165.78	0.650	0.50	3.00	6.154	4.00	125.5	44.2	186.5
145.0		0.00	1.52	18.755	31.69	160.55	0.650	0.50	5.00	9.973	6.48	205.5	71.0	301.3
147.0	Appertunance(s)	0.00	1.53	18.829	31.82	158.44	0.650	0.50	2.00	3.890	2.53	80.5	28.0	117.7
148.0	Appertunance(s)	0.00	1.53	18.866	31.88	157.38	0.650	0.50	1.00	1.924	1.25	39.9	13.9	58.2
							Totals:		148.00			7,059.6	3,102.4	18,950.2



Load Case: Ice — 69.28 mph Wind with Ice — 28 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

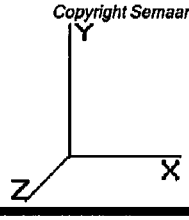
Discrete Appurtenance Segment Forces

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa Factor	Total CaAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
117.0	Low Profile Platform	1	17.640	29.812	1.000	27.32	0.000	0.000	814.46	0.00	0.00	2,100.00
117.0	LPA-185080/12CF	12	17.640	29.812	1.000	50.10	0.000	0.000	1,493.58	0.00	0.00	240.00
127.0	T-arms	3	18.058	30.519	1.000	33.39	0.000	0.000	1,019.02	0.00	0.00	903.00
127.0	Allgon 7184.14	6	18.058	30.519	0.670	13.51	0.000	0.000	412.22	0.00	0.00	144.00
137.0	MHA	6	18.454	31.187	1.000	17.70	0.000	0.000	552.01	0.00	0.00	216.00
137.0	DUO1417-8686	12	18.454	31.187	0.820	70.36	0.000	0.000	2,194.19	0.00	0.00	876.00
137.0	DBC-750 combiner	3	18.454	31.187	1.000	2.10	0.000	0.000	65.49	0.00	0.00	23.55
137.0	Low Profile Platform	1	18.454	31.187	1.000	27.32	0.000	0.000	852.03	0.00	0.00	2,100.00
147.0	DB980H90	9	18.829	31.821	0.667	23.11	0.000	0.000	735.43	0.00	0.00	252.00
147.0	Low Profile Platform	1	18.829	31.821	1.000	27.32	0.000	0.000	869.35	0.00	0.00	2,100.00
148.0	5/8" lightning rod	1	19.010	32.127	1.000	1.50	0.000	4.000	48.19	0.00	192.76	100.00
									9,055.99			9,054.55

Pole : CT33XC115
Location : 3017697, 161 Pinney Street. Colebrook, CT
Height : 148.0 (ft)
Shape : 18 Sides
Base Dia : 45.72 (in)
Top Dia : 22.00 (in)
Taper : 0.169983 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)

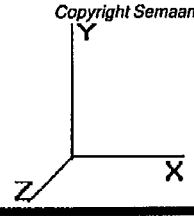


Load Case: Ice — 69.28 mph Wind with Ice — 28 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Applied Segment Forces Summary

Seg Elev (ft)	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00	0.00	0.00	0.00	0.00
5.00	260.36	1,105.27	0.00	0.00
10.00	255.58	1,088.31	0.00	0.00
15.00	250.80	1,071.34	0.00	0.00
20.00	246.02	1,054.38	0.00	0.00
25.00	241.24	1,037.41	0.00	0.00
30.00	236.46	1,020.45	0.00	0.00
35.00	235.61	1,003.48	0.00	0.00
40.00	239.72	986.52	0.00	0.00
45.00	246.16	1,560.21	0.00	0.00
50.00	248.30	900.34	0.00	0.00
55.00	249.62	884.81	0.00	0.00
60.00	250.24	869.28	0.00	0.00
65.00	250.22	853.75	0.00	0.00
70.00	249.65	838.22	0.00	0.00
75.00	248.58	822.69	0.00	0.00
80.00	247.05	807.16	0.00	0.00
80.75	36.62	119.90	0.00	0.00
85.00	211.07	1,045.68	0.00	0.00
90.00	246.52	732.28	0.00	0.00
95.00	243.89	718.19	0.00	0.00
100.0	240.93	704.09	0.00	0.00
105.0	237.66	690.00	0.00	0.00
110.0	234.09	675.90	0.00	0.00
115.0	230.26	661.80	0.00	0.00
117.0	2,398.68	2,601.09	0.00	0.00
117.2	11.26	29.50	0.00	0.00
120.0	125.21	471.73	0.00	0.00
120.7	33.85	127.54	0.00	0.00
125.0	190.73	418.01	0.00	0.00
127.0	1,519.65	1,241.14	0.00	0.00
130.0	131.37	263.69	0.00	0.00
135.0	215.61	429.97	0.00	0.00
137.0	3,748.32	3,384.71	0.00	0.00
140.0	125.52	213.49	0.00	0.00
145.0	205.47	346.32	0.00	0.00
147.0	1,685.24	2,487.70	0.00	0.00
148.0	88.06	158.23	0.00	192.76
Totals:	16,115.63	33,424.59	0.00	192.76

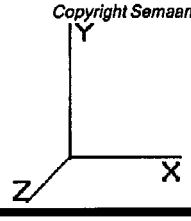


Load Case: Ice — 69.28 mph Wind with Ice — 28 Iterations

Gust Response Factor: 1.69
Dead Load Factor: 1.00
Wind Load Factor: 1.00

Calculated Shaft Forces and Deflections

Seg Elev (ft)	Lateral FX (-) (kips)	Axial FY (-) (kips)	Lateral FZ (kips)	Moment MX (ft-kips)	Torsion MY (ft-kips)	Moment MZ (ft-kips)	X Deflect (in)	Z Deflect (in)	Total Deflect (in)	Rotation (deg)
0.00	-16.180	-33.393	0.000	0.000	0.000	-1,836.749	0.000	0.000	0.000	0.000
5.00	-16.041	-32.227	0.000	0.000	0.000	-1,755.852	-0.116	0.000	0.116	-0.218
10.00	-15.899	-31.079	0.000	0.000	0.000	-1,675.651	-0.462	0.000	0.462	-0.438
15.00	-15.755	-29.949	0.000	0.000	0.000	-1,596.158	-1.040	0.000	1.040	-0.660
20.00	-15.608	-28.837	0.000	0.000	0.000	-1,517.385	-1.851	0.000	1.851	-0.885
25.00	-15.459	-27.743	0.000	0.000	0.000	-1,439.346	-2.899	0.000	2.899	-1.111
30.00	-15.307	-26.667	0.000	0.000	0.000	-1,362.053	-4.185	0.000	4.185	-1.339
35.00	-15.149	-25.609	0.000	0.000	0.000	-1,285.517	-5.710	0.000	5.710	-1.569
40.00	-14.980	-24.570	0.000	0.000	0.000	-1,209.772	-7.476	0.000	7.476	-1.799
45.00	-14.775	-22.959	0.000	0.000	0.000	-1,134.875	-9.484	0.000	9.484	-2.031
50.00	-14.584	-22.008	0.000	0.000	0.000	-1,061.004	-11.734	0.000	11.734	-2.262
55.00	-14.388	-21.073	0.000	0.000	0.000	-988.083	-14.234	0.000	14.234	-2.507
60.00	-14.184	-20.157	0.000	0.000	0.000	-916.144	-16.989	0.000	16.989	-2.751
65.00	-13.972	-19.258	0.000	0.000	0.000	-845.226	-19.999	0.000	19.999	-2.993
70.00	-13.754	-18.378	0.000	0.000	0.000	-775.366	-23.261	0.000	23.261	-3.232
75.00	-13.529	-17.516	0.000	0.000	0.000	-706.598	-26.771	0.000	26.771	-3.468
80.00	-13.270	-16.696	0.000	0.000	0.000	-638.955	-30.525	0.000	30.525	-3.699
80.75	-13.259	-16.552	0.000	0.000	0.000	-629.002	-31.109	0.000	31.109	-3.734
85.00	-13.034	-15.476	0.000	0.000	0.000	-572.652	-34.518	0.000	34.518	-3.926
90.00	-12.793	-14.714	0.000	0.000	0.000	-507.483	-38.744	0.000	38.744	-4.143
95.00	-12.549	-13.969	0.000	0.000	0.000	-443.519	-43.198	0.000	43.198	-4.364
100.0	-12.301	-13.243	0.000	0.000	0.000	-380.775	-47.878	0.000	47.878	-4.573
105.0	-12.048	-12.536	0.000	0.000	0.000	-319.274	-52.767	0.000	52.767	-4.765
110.0	-11.791	-11.849	0.000	0.000	0.000	-259.037	-57.847	0.000	57.847	-4.939
115.0	-11.523	-11.189	0.000	0.000	0.000	-200.084	-63.097	0.000	63.097	-5.090
117.0	-8.907	-8.808	0.000	0.000	0.000	-177.038	-65.239	0.000	65.239	-5.145
117.2	-8.898	-8.774	0.000	0.000	0.000	-174.811	-65.509	0.000	65.509	-5.151
120.0	-8.737	-8.309	0.000	0.000	0.000	-150.341	-68.492	0.000	68.492	-5.219
120.7	-8.700	-8.177	0.000	0.000	0.000	-143.788	-69.313	0.000	69.313	-5.236
125.0	-8.480	-7.769	0.000	0.000	0.000	-106.816	-74.008	0.000	74.008	-5.322
127.0	-6.857	-6.669	0.000	0.000	0.000	-89.856	-76.245	0.000	76.245	-5.366
130.0	-6.708	-6.411	0.000	0.000	0.000	-69.286	-79.630	0.000	79.630	-5.421
135.0	-6.457	-6.000	0.000	0.000	0.000	-35.745	-85.338	0.000	85.338	-5.486
137.0	-2.402	-2.989	0.000	0.000	0.000	-22.831	-87.637	0.000	87.637	-5.502
140.0	-2.258	-2.788	0.000	0.000	0.000	-15.624	-91.094	0.000	91.094	-5.518
145.0	-2.020	-2.463	0.000	0.000	0.000	-4.336	-96.874	0.000	96.874	-5.533
147.0	-0.103	-0.149	0.000	0.000	0.000	-0.296	-99.189	0.000	99.189	-5.535
148.0	-0.088	0.000	0.000	0.000	0.000	-0.193	-100.346	0.000	100.346	-5.535

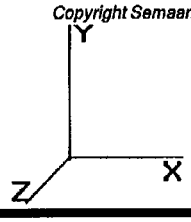


Load Case: Ice — 69.28 mph Wind with Ice — 28 Iterations

Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Calculated Stresses

Seg Elev (ft)	Applied Stresses Axial (Y) (ksi)	Shear (X) (ksi)	Shear (Z) (ksi)	Torsion (ksi)	Bending (X) (ksi)	Bending (Z) (ksi)	Combined (ksi)	Allowable Stress (Fb) (ksi)		Stress Ratio
0.00	0.74	0.72	0.00	0.00	0.00	43.61	44.37	52.0	0.0	0.854
5.00	0.73	0.73	0.00	0.00	0.00	43.30	44.05	52.0	0.0	0.847
10.00	0.72	0.74	0.00	0.00	0.00	42.95	43.69	52.0	0.0	0.841
15.00	0.70	0.75	0.00	0.00	0.00	42.56	43.28	52.0	0.0	0.833
20.00	0.69	0.76	0.00	0.00	0.00	42.12	42.83	52.0	0.0	0.824
25.00	0.68	0.76	0.00	0.00	0.00	41.63	42.33	52.0	0.0	0.814
30.00	0.67	0.77	0.00	0.00	0.00	41.08	41.76	52.0	0.0	0.804
35.00	0.65	0.78	0.00	0.00	0.00	40.46	41.14	52.0	0.0	0.791
40.00	0.64	0.79	0.00	0.00	0.00	39.78	40.44	52.0	0.0	0.778
45.00	0.67	0.87	0.00	0.00	0.00	41.99	42.68	52.0	0.0	0.821
50.00	0.66	0.88	0.00	0.00	0.00	41.06	41.75	52.0	0.0	0.803
55.00	0.64	0.89	0.00	0.00	0.00	40.04	40.71	52.0	0.0	0.783
60.00	0.63	0.89	0.00	0.00	0.00	38.91	39.58	52.0	0.0	0.761
65.00	0.62	0.90	0.00	0.00	0.00	37.68	38.33	52.0	0.0	0.737
70.00	0.60	0.91	0.00	0.00	0.00	36.31	36.95	52.0	0.0	0.711
75.00	0.59	0.92	0.00	0.00	0.00	34.81	35.44	52.0	0.0	0.682
80.00	0.58	0.92	0.00	0.00	0.00	33.16	33.78	52.0	0.0	0.650
80.75	0.57	0.93	0.00	0.00	0.00	32.90	33.52	52.0	0.0	0.645
85.00	0.61	1.03	0.00	0.00	0.00	34.07	34.73	48.0	0.0	0.724
90.00	0.59	1.04	0.00	0.00	0.00	31.87	32.51	48.0	0.0	0.678
95.00	0.58	1.05	0.00	0.00	0.00	29.44	30.07	48.0	0.0	0.627
100.00	0.57	1.06	0.00	0.00	0.00	26.76	27.38	48.0	0.0	0.571
105.00	0.55	1.07	0.00	0.00	0.00	23.79	24.41	48.0	0.0	0.509
110.00	0.54	1.08	0.00	0.00	0.00	20.50	21.12	48.0	0.0	0.440
115.00	0.52	1.08	0.00	0.00	0.00	16.85	17.48	48.0	0.0	0.364
117.00	0.42	0.85	0.00	0.00	0.00	15.30	15.78	48.0	0.0	0.329
117.25	0.42	0.85	0.00	0.00	0.00	15.15	15.64	48.0	0.0	0.326
120.00	0.40	0.85	0.00	0.00	0.00	13.51	13.98	48.0	0.0	0.291
120.75	0.52	1.11	0.00	0.00	0.00	16.78	17.41	48.0	0.0	0.363
125.00	0.51	1.12	0.00	0.00	0.00	13.18	13.82	48.0	0.0	0.288
127.00	0.44	0.91	0.00	0.00	0.00	11.39	11.93	48.0	0.0	0.249
130.00	0.43	0.91	0.00	0.00	0.00	9.14	9.71	48.0	0.0	0.202
135.00	0.42	0.91	0.00	0.00	0.00	5.06	5.70	48.0	0.0	0.119
137.00	0.21	0.34	0.00	0.00	0.00	3.32	3.59	48.0	0.0	0.075
140.00	0.20	0.33	0.00	0.00	0.00	2.38	2.64	48.0	0.0	0.055
145.00	0.19	0.31	0.00	0.00	0.00	0.71	1.04	48.0	0.0	0.022
147.00	0.01	0.02	0.00	0.00	0.00	0.05	0.07	48.0	0.0	0.001
148.00	0.00	0.01	0.00	0.00	0.00	0.03	0.04	48.0	0.0	0.001



Analysis Summary

	Reactions						Max Stresses			
Load Case	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)	Combined Stress (ksi)	Allowable Stress (ksi)	Elev (ft)	Stress Ratio
No Ice	19.3	0.00	27.24	0.00	0.00	2104.36	50.59	52.0	0.00	0.973
Ice	16.2	0.00	33.39	0.00	0.00	1836.75	44.37	52.0	0.00	0.854