

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@po.state.ct.us

Web Site: www.state.ct.us/csc/index.htm

November 4, 2003

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

RE: **EM-VER-111-031021** - Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at 171 Town Hill Road, Plymouth, Connecticut.

Dear Attorney Baldwin:

At a public meeting held on October 29, 2003, 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 21, 2003. 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. 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.

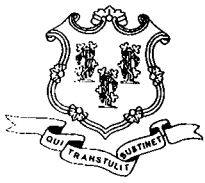
Thank you for your attention and cooperation.

Very truly yours,

Pamela B. Katz, P.E.
Chairman

PBK/laf

c: Honorable David C. Mischke, Mayor, Town of Plymouth
William Kuehn, Town Planner, Town of Plymouth
Stephen J. Humes, Esq., LeBoeuf, Lamb, Green & MacRae
Thomas J. Regan, Esq., Brown Rudnick Berlack Israels LLP
Christopher B. Fisher, Esq., Cuddy & Feder LLP



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E-Mail: siting.council@po.state.ct.us

Web Site: www.ct.gov/csc

October 21, 2003

Honorable David C. Mischke
Mayor
Town of Plymouth
Town Hall
80 Main Street
Terryville, CT 06786-1209

RE: **EM-VER-111-031021** - Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at 171 Town Hill Road, Plymouth, Connecticut.

Dear Mayor Mischke:

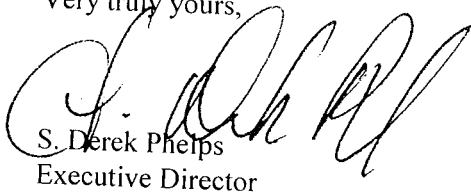
The Connecticut Siting Council (Council) received this request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72.

The Council will consider this item at the next meeting scheduled for October 29, 2003, at 1:30 p.m. in Hearing Room Two, Ten Franklin Square, New Britain, Connecticut.

Please call me or inform the Council if you have any questions or comments regarding this proposal.

Thank you for your cooperation and consideration.

Very truly yours,



S. Derek Phelps
Executive Director

SDP/ld

Enclosure: Notice of Intent

c: William Kuehn, Town Planner, Town of Plymouth

RECEIVED
OCT 21 2003

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

CONNECTICUT
SITING COUNCIL

October 21, 2003

Via Hand Delivery

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

EM-VER-111-031021

Re: **Notice of Exempt Modification**
171 Town Hill Road
Plymouth, Connecticut

Dear Mr. Phelps:

Cellco Partnership d/b/a Verizon Wireless ("Cellco") intends to install antennas on an existing telecommunications tower at 171 Town Hill Road in Plymouth, 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 the Plymouth Mayor, David C. Mischke.

The existing facility consists of a 170-foot self-supporting monopole tower, capable of supporting multiple carriers within an approximately 50' x 50' fenced site compound. The tower is owned and operated by T-Mobile and is currently shared by the Plymouth Lions Club, extending off the top of the tower; T-Mobile at the 165-foot level; Sprint at the 155-foot level and AT&T (future) at the 145-foot level. Cellco proposes to install twelve (12) panel-type antennas at the 135-foot level on the tower and a 12' x 30' single-story equipment shelter near the base of the tower. (See Attachment 1 Project Plans).

The planned modifications to the Plymouth 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 135-foot level on the 170-foot tower.



Law Offices

BOSTON

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NEW YORK

www.rc.com

HART1-1126560-1

S. Derek Phelps
October 21, 2003
Page 2

2. The proposed installation of twelve (12) panel-type antennas and a 12' x 30' equipment shelter will not require an extension of the site boundaries.

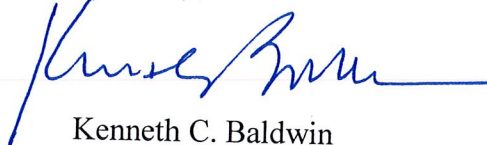
3. The proposed modification will not increase the noise levels at the facility by six decibels or more.

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. According to the RF Exposure Analysis submitted as a part of the AT&T filing to the Siting Council, the cumulative worst-case RF power density for the Lions Club, T-Mobile, Sprint and AT&T antennas would be 0.24% of the FCC Standard. The worst-case RF power density calculations for Cellco antennas would be 2.92% of the FCC standard. (See Attachment 2). The total worst-case radio frequency emission levels for the site would therefore be 3.16% of the FCC standard, as measured for mixed frequency sites.

Also included as Attachment 3 is an engineer's certification verifying that the existing tower can accommodate the existing and Cellco antennas and related equipment.

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

Sincerely,



Kenneth C. Baldwin

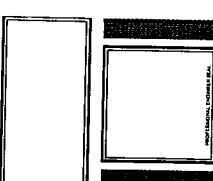
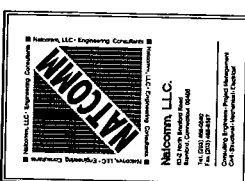
Attachments

cc: David C. Mischke, Plymouth Mayor
Sandy M. Carter



REVISIONS	
01	ISSUED FOR PERMITS
02	ISSUED FOR PERMITS
03	ISSUED FOR PERMITS
04	ISSUED FOR PERMITS
05	ISSUED FOR PERMITS
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20	ISSUED FOR PERMITS

Cellco Partnership
d.b.a. Verizon Wireless

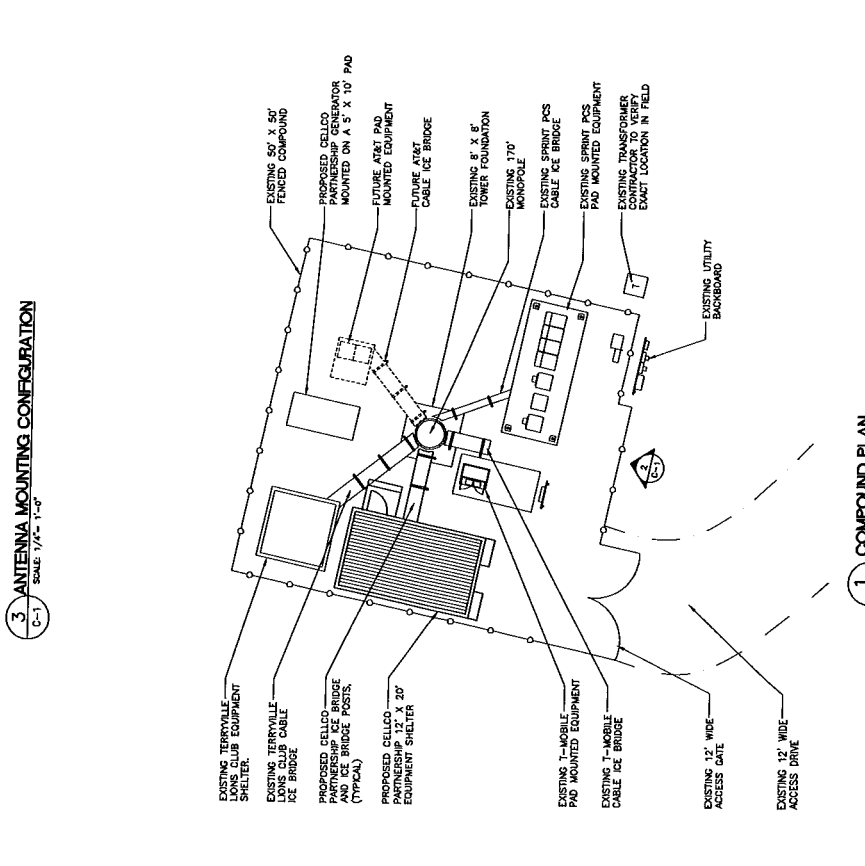
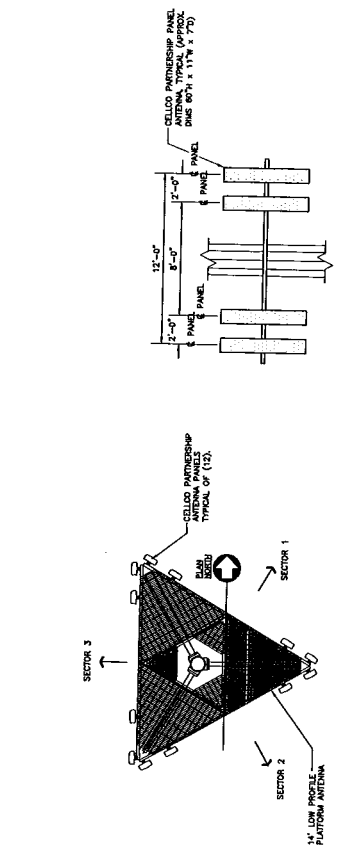
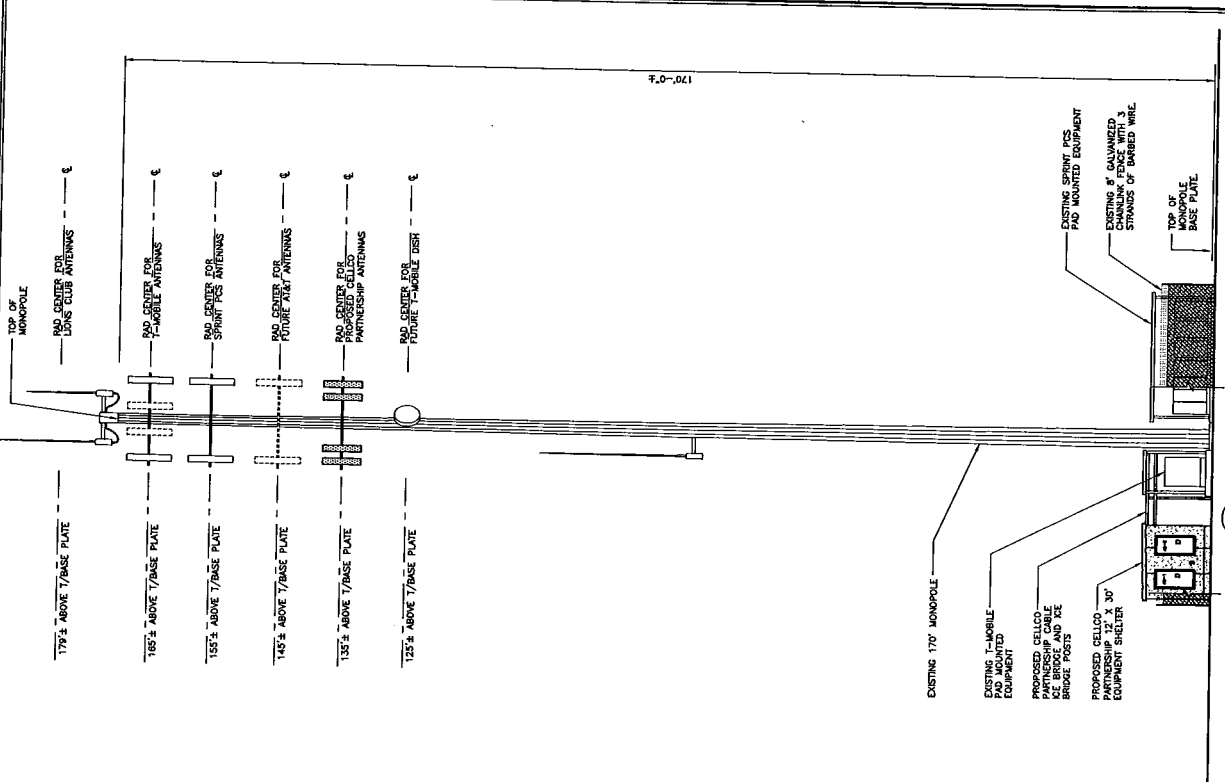


PLYMOUTH
171 TOWN HILL RD
PLYMOUTH, CT 06766

PROJECT NO: 0809
DRAWN BY: KC
CHECKED BY: AAJ
SCALE: AS NOTED
DATE: 07/14/03

**COMPOUND PLAN
AND ELEVATION**

C-1
DWG. 2 OF 2



General Power Density_WorstCase

Site Name: Plymouth, CT
 Tower Height: 135' centerline

Operator	Operating Frequency (MHz)	Number of Trans.	ERP Per Trans. (watts)	Total ERP (watts)	Distance to Target (feet)	Calculated Power Density (mW/cm ²)	Maximum Permissible Exposure (mW/cm ²)	Fraction of MPE (%)
Verizon	1900	3	494	1482	135	0.0292	1	2.92%
Total Percentage of Maximum Permissible Exposure								2.92%

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

MHz = Megahertz

mW/cm² = milliwatts per square centimeter

ERP = Effective Radiated Power

Absolute worst case scenario, maximum values used.



1047 N. 204th Avenue
Elkhorn, NE 68022
Ph:402-289-1888
Fax:402-289-1861

SEMAAN ENGINEERING SOLUTIONS

170 ft PIROD Monopole Structural Analysis

Prepared for:
T-Mobile USA
12920 SE 38th Street
Bellevue, WA 98006

Site: CT11417C / Plymouth - Rt. 6 / Verizon
Plymouth, CT



September 30, 2003

Mr. Joseph Laurenzano
T-Mobile USA
12920 SE 38th Street
Bellevue, WA 98006

Re: Site Number CT11417C – Plymouth - Rt. 6 Verizon Plymouth, CT.

Dear Mr. Laurenzano:

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 EIA/TIA-222-F standard 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 170 ft PIROD Monopole.

Refer to PIROD drawing 150737-B dated September 1, 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 **EIA/TIA-222-F for a basic wind speed of 80 mph and 1/2" radial ice with reduced wind speed.** Wind is applied to the structure, accessories and antennas.

Structure loading:

Per the loading sheet supplied, the analysis was performed using the following loading: (Proposed loading in bold)

Elev. (ft)	Qty.	Antennas and Mounts	Coax	Owner
170.0	1	ACP-305 Mounted On a 4 omni mount	(1) 1-5/8 (Inside)	Town
170.0	1	PD220 Mounted On Same 4 omni mount	(1) 1-5/8 (Inside)	Town
170.0	1	PD455 Mounted On Same 4 omni mount	(1) 1-5/8 (Inside)	Town
170.0	1	SRL-229 Mounted On Same 4 omni mount	(1) 1-5/8 (Inside)	Town
165.0	12	RR65-19-00XP w/Airtech LNA's Mounted On a 13 ft Low Profile platform	(24) 1-5/8 (Inside)	T-Mobile
155.0	9	DB980H90 Mounted On a 13 ft Low Profile platform	(9) 1-5/8 (Inside)	Sprint
145.0	6	Allgon 7250.03 Mounted On a 13 ft Low Profile platform	(12) 1-1/4 (Inside)	AT&T
135.0	12	DB950F85T2E-M Mounted On a Low Profile Platform	(12) 1-5/8 (Inside)	Verizon
125.0	1	HP MW Dish, 4' Dia.	(1) 1-5/8 (Inside)	T-Mobile
80.0	1	PD455 Mounted On a 4 FT Standoff	(1) 1-5/8 (Inside)	Town

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: 68.5%.

Foundation:

Pole Reactions	Original Design Reactions	Current Analysis Reactions	% Of Design
Moment (ft-kips)	4,181.30	3,178.50	76.0
Shear (kips)	34.20	26.66	78.0

The structure base reactions resulting from this analysis do not exceed the ones shown on the original structure drawings.

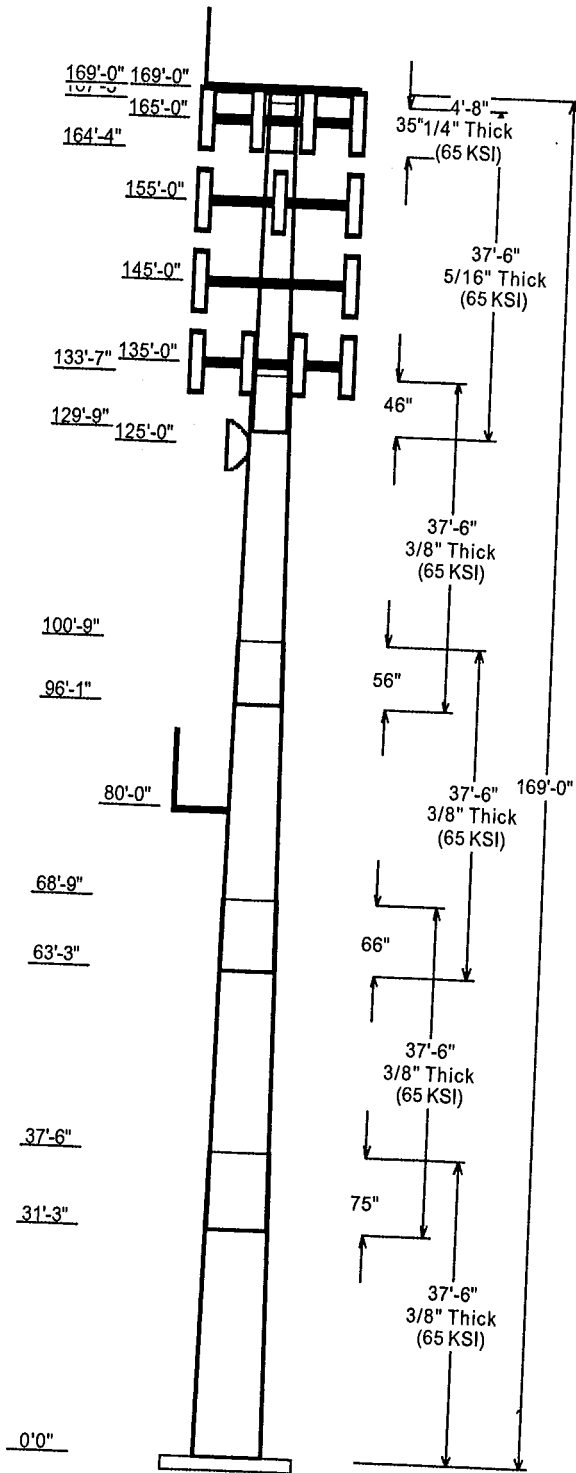
Review and Recommendations:

Based on the analysis results, the existing structure meets the requirements per the EIA/TIA-222-F standards for a basic wind speed of 80 mph and 1/2" radial ice with reduced wind speed.

SEMAAN ENGINEERING SOLUTIONS

1047 N.204th Avenue
 Elkhorn, NE 68022
 Phone: 402-289-1888
 Fax: 402-289-1861

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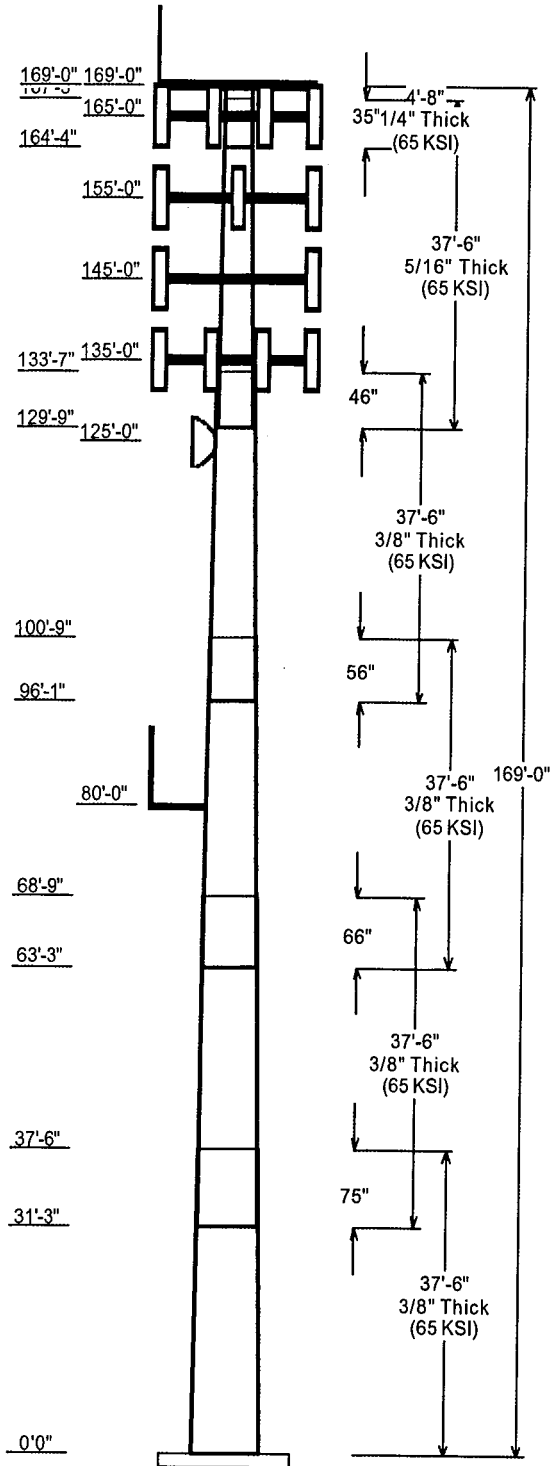
Job Information	
Pole :	CT11417C
Description :	
Client :	T-Mobile USA-WA
Location :	Plymouth - Rt. 6 Verizon Plymouth, CT
Type :	18 Sides Base Elev (ft): 0.00
Height :(ft)	169.00 Taper: 0.245310 (in/ft)

Sections Properties							
Shaft Section	Length (ft)	Diameter (in)		Joint Type	Overlap Length (in)	Taper (in/ft)	Steel Grade (ksi)
		Across Top	Flats Bottom				
1	37.500	53.73	62.93	0.375	0.000	0.245310	65
2	37.500	46.82	56.02	0.375 Slip Joint	75.000	0.245310	65
3	37.500	39.72	48.92	0.375 Slip Joint	66.000	0.245310	65
4	37.500	32.41	41.61	0.375 Slip Joint	56.000	0.245310	65
5	37.500	24.78	33.98	0.313 Slip Joint	46.000	0.245310	65
6	4.667	24.85	26.00	0.250 Slip Joint	35.000	0.245310	65

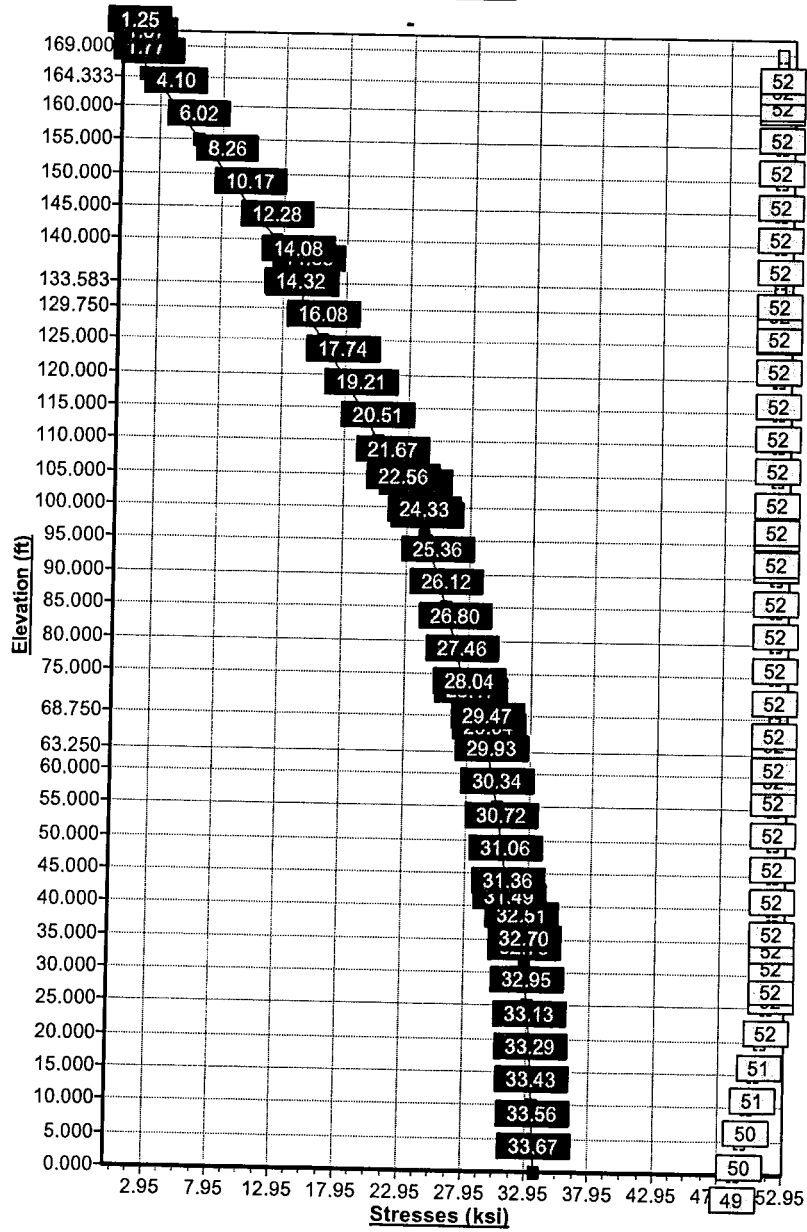
Discrete Appurtenance					
Attach Elev (ft)	Force Elev (ft)	Type	Qty	Description	
169.000	170.000	Platform	1	4 omni mount	
169.000	180.750	Whip	1	SRL-229	
169.000	181.000	Whip	1	PD455	
169.000	181.000	Whip	1	PD220	
169.000	180.750	Whip	1	ACP-305	
165.000	165.000	Platform	1	13 ft Low Profile platform	
165.000	165.000	Panel	12	RR65-19-00XP w/Airtech LNA's	
155.000	155.000	Platform	1	13 ft Low Profile platform	
155.000	155.000	Panel	9	DB980H90	
145.000	145.000	Panel	6	Allgon 7250.03	
145.000	145.000	Platform	1	13 ft Low Profile platform	
135.000	135.000	Platform	1	Low Profile Platform	
135.000	135.000	Panel	12	DB950F85T2E-M	
125.000	125.000	Dish	1	HP MW Dish, 4' Dia.	
80.000	80.000	Straight	1	4 FT Standoff	
80.000	91.000	Whip	1	PD455	

Load Cases / Deflections			
Load Case	Attach Elev (ft)	Translation (in)	Rotation (deg)
No Ice			
No Ice Wind Speed = 80.00 mph w/ No Ice			
	169.000	75.04	-3.745
	165.000	71.91	-3.735
	155.000	64.14	-3.673
	145.000	56.57	-3.553
	135.000	49.29	-3.386
	125.000	42.39	-3.199
	80.000	17.22	-2.091
Ice			
Ice Wind Speed = 69.28 mph w/ Ice 0.50 in Thick			
	169.000	64.42	-3.248
	165.000	61.70	-3.237
	155.000	54.98	-3.177
	145.000	48.43	-3.067
	135.000	42.16	-2.917
	125.000	36.22	-2.751
	80.000	14.64	-1.785
Twist/Sway			
Twist/Sway Wind Speed = 50.00 mph w/ No Ice			
	169.000	29.35	-1.464
	165.000	28.12	-1.461
	155.000	25.08	-1.436
	145.000	22.12	-1.389
	135.000	19.28	-1.324
	125.000	16.58	-1.251
	80.000	6.73	-0.817

Reactions			
Load Case	Moment (Kip-ft)	Shear (Kips)	Axial (Kips)
No Ice	3,178.499	26.664	-40.665
Ice	2,682.836	21.817	-49.964
Twist/Sway	1,242.212	10.415	-40.689

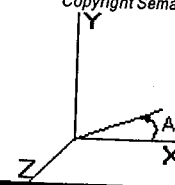


Load Case : No Ice



Pole: CT11417C
 Location: Plymouth - Rt. 6 Verizon Plymouth, CT
 Height: 169.0 (ft)
 Shape: 18 Sides
 Base Dia: 62.93 (in)
 Taper: 0.245310 (in/ft)

T-Mobile USA-WA
 Base Elev: 0.000 (ft)
 Top Dia: 24.85 (in)



Shaft Section Properties

Sect Num	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Slip Joint Len (in)	Weight (lb)	Bottom				Top								
							Dia (in)	Elev (ft)	Area (sqin)	Ix (in^4)	W/t Ratio	D/t Ratio	Dia (in)	Elev (ft)	Area (sqin)	Ix (in^4)	W/t Ratio	D/t Ratio	Taper (in/ft)
1	37.500	0.3750	65		0.00	8,803	62.93	0.000	74.46	36822.9	28.18	167.8	53.73	37.50	63.51	22851.0	23.86	143.30	0.24531
2	37.500	0.3750	65	Slip Joint	75.00	7,753	56.02	31.25	66.23	25911.4	24.93	149.3	46.82	68.75	55.28	15068.2	20.61	124.86	0.24531
3	37.500	0.3750	65	Slip Joint	66.00	6,674	48.92	63.25	57.78	17204.9	21.59	130.4	39.72	100.7	46.83	9160.7	17.27	105.93	0.24531
4	37.500	0.3750	65	Slip Joint	56.00	5,565	41.61	96.08	49.09	10548.8	18.16	110.9	32.41	133.5	38.14	4947.5	13.83	86.45	0.24531
5	37.500	0.3125	65	Slip Joint	46.00	3,679	33.98	129.7	33.40	4783.7	17.76	108.7	24.78	167.2	24.27	1836.5	12.57	79.31	0.24531
6	4.667	0.2500	65	Slip Joint	35.00	317	26.00	164.3	20.43	1711.6	16.93	104.0	24.85	169.0	19.52	1493.3	16.12	99.42	0.24531
Shaft Weight						32,792													

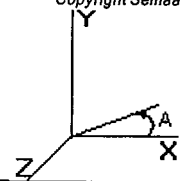
Discrete Appurtenance Properties

Attach Elev (ft)	Description	Qty	Weight (lb)	No Ice CaAa (sf)	CaAa Factor	Weight (lb)	Ice CaAa (sf)	CaAa Factor	Distance From Face (ft)	X Angle (deg)	Vert Ecc (ft)
169.0	4 omni mount	1	1642.00	24.830	1.00	2100.00	26.000	1.00	0.000	0.00	1.000
169.0	SRL-229	1	25.00	6.450	1.00	71.00	8.630	1.00	0.000	0.00	11.750
169.0	PD455	1	23.00	3.560	1.00	83.00	6.860	1.00	0.000	0.00	12.000
169.0	PD220	1	23.00	3.560	1.00	83.00	6.860	1.00	0.000	0.00	12.000
169.0	ACP-305	1	25.00	6.450	1.00	71.00	8.630	1.00	0.000	0.00	11.750
165.0	13 ft Low Profile platform	1	1346.00	15.300	1.00	2075.00	17.020	1.00	0.000	0.00	0.000
165.0	RR65-19-00XP w/Airtech	12	23.00	6.000	1.00	52.00	6.850	1.00	0.000	0.00	0.000
155.0	13 ft Low Profile platform	1	1346.00	15.300	1.00	2075.00	17.020	1.00	0.000	0.00	0.000
155.0	DB980H90	9	9.00	3.280	0.67	28.00	3.850	0.67	0.000	0.00	0.000
145.0	Allgon 7250.03	6	16.00	4.300	0.67	36.00	5.000	0.67	0.000	0.00	0.000
145.0	13 ft Low Profile platform	1	1346.00	15.300	1.00	2075.00	17.020	1.00	0.000	0.00	0.000
135.0	Low Profile Platform	1	1300.00	25.550	1.00	2100.00	27.320	1.00	0.000	0.00	0.000
135.0	DB950F85T2E-M	12	10.50	4.400	1.00	30.00	5.000	1.00	0.000	0.00	0.000
125.0	HP MW Dish. 4' Dia.	1	170.00	15.860	1.00	280.00	16.520	1.00	0.000	0.00	0.000
80.00	4 FT Standoff	1	53.32	3.500	1.00	84.00	5.790	1.00	0.000	0.00	0.000
80.00	PD455	1	23.00	3.560	1.00	83.00	6.860	1.00	0.000	0.00	0.000
Totals		51	7901.32			12632.00			0.000	0.00	11.000

Number of Loadings : 16

Pole : CT11417C
 Location: Plymouth - Rt. 6 Verizon Plymouth, CT
 Height : 169.0 (ft)
 Shape : 18 Sides
 Base Dia : 62.93 (in)
 Taper : 0.245310 (in/ft)

T-Mobile USA-WA
 Base Elev : 0.000 (ft)
 Top Dia : 24.85 (in)



Segment Properties (Max Len : 5 ft)

Seg Elev (ft)	Description	Thick (in)	Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fy (ksi)	Fb (ksi)	Weight (lb)
0.00		0.3750	62.938	74.462	36,822.9	28.18	167.83	65	49	0.0
5.00		0.3750	61.711	73.002	34,699.3	27.61	164.56	65	50	1,254.5
10.00		0.3750	60.484	71.543	32,659.0	27.03	161.29	65	50	1,229.6
15.00		0.3750	59.258	70.083	30,700.3	26.45	158.02	65	51	1,204.8
20.00		0.3750	58.031	68.623	28,821.5	25.88	154.75	65	51	1,180.0
25.00		0.3750	56.805	67.163	27,020.9	25.30	151.48	65	52	1,155.1
30.00		0.3750	55.578	65.703	25,297.0	24.72	148.21	65	52	1,130.3
31.25	Bot - Section 2	0.3750	55.272	65.338	24,877.8	24.58	147.39	65	52	278.7
35.00		0.3750	54.352	64.243	23,647.9	24.15	144.94	65	52	1,664.9
37.50	Top - Section 1	0.3750	54.488	64.406	23,828.1	24.21	145.30	65	52	1,094.4
40.00		0.3750	53.875	63.676	23,027.1	23.92	143.67	65	52	544.8
45.00		0.3750	52.649	62.216	21,479.4	23.35	140.40	65	52	1,071.0
50.00		0.3750	51.422	60.757	20,002.6	22.77	137.13	65	52	1,046.1
55.00		0.3750	50.195	59.297	18,595.1	22.19	133.85	65	52	1,021.3
60.00		0.3750	48.969	57.837	17,255.2	21.61	130.58	65	52	996.4
63.25	Bot - Section 3	0.3750	48.172	56.888	16,419.8	21.24	128.46	65	52	634.4
65.00		0.3750	47.742	56.377	15,981.3	21.04	127.31	65	52	679.8
68.75	Top - Section 2	0.3750	47.572	56.175	15,810.0	20.96	126.86	65	52	1,436.2
70.00		0.3750	47.266	55.810	15,503.8	20.81	126.04	65	52	238.2
75.00		0.3750	46.039	54.350	14,318.7	20.24	122.77	65	52	937.1
80.00		0.3750	44.813	52.890	13,195.6	19.66	119.50	65	52	912.3
85.00		0.3750	43.586	51.430	12,132.9	19.08	116.23	65	52	887.4
90.00		0.3750	42.360	49.970	11,128.7	18.51	112.96	65	52	862.6
95.00		0.3750	41.133	48.511	10,181.6	17.93	109.69	65	52	837.8
96.08	Bot - Section 4	0.3750	40.867	48.194	9,983.7	17.81	108.98	65	52	178.2
100.00		0.3750	39.907	47.051	9,289.8	17.35	106.42	65	52	1,281.3
100.75	Top - Section 3	0.3750	40.473	47.724	9,694.6	17.62	107.93	65	52	241.9
105.00		0.3750	39.430	46.483	8,957.9	17.13	105.15	65	52	681.2
110.00		0.3750	38.203	45.024	8,140.1	16.55	101.88	65	52	778.4
115.00		0.3750	36.977	43.564	7,373.7	15.98	98.60	65	52	753.6
120.00		0.3750	35.750	42.104	6,657.0	15.40	95.33	65	52	728.8
125.00		0.3750	34.524	40.644	5,988.3	14.82	92.06	65	52	703.9
129.75	Bot - Section 5	0.3750	33.359	39.257	5,395.9	14.27	88.96	65	52	645.7
130.00		0.3750	33.297	39.184	5,365.9	14.25	88.79	65	52	61.7
133.58	Top - Section 4	0.3125	33.043	32.464	4,394.0	17.23	105.74	65	52	872.6
135.00		0.3125	32.696	32.119	4,255.5	17.04	104.63	65	52	155.7
140.00		0.3125	31.469	30.902	3,790.0	16.35	100.70	65	52	536.1
145.00		0.3125	30.243	29.686	3,359.8	15.65	96.78	65	52	515.4
150.00		0.3125	29.016	28.469	2,963.5	14.96	92.85	65	52	494.7
155.00		0.3125	27.789	27.253	2,599.6	14.27	88.93	65	52	474.0
160.00		0.3125	26.563	26.036	2,266.7	13.58	85.00	65	52	453.3
164.33	Bot - Section 6	0.3125	25.500	24.982	2,002.4	12.98	81.60	65	52	376.1
165.00		0.3125	25.336	24.820	1,963.6	12.89	81.08	65	52	102.7
167.25	Top - Section 5	0.2500	25.284	19.864	1,572.9	16.42	101.14	65	52	341.7
169.00		0.2500	24.855	19.523	1,493.3	16.12	99.42	65	52	117.3
										32,792.1

Pole: CT11417C
 Location: Plymouth - Rt. 6 Verizon Plymouth, CT
 Height: 169.0 (ft)
 Shape: 18 Sides
 Base Dia: 62.93 (in)
 Taper: 0.245310 (in/ft)

T-Mobile USA-WA
 Base Elev: 0.000 (ft)
 Top Dia: 24.85 (in)

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Load Case: No Ice	80 mph - No Ice	24 Iterations
Gust Response Factor: 1.69	Effective Wind Speed: 80.00 (mph)	
Dead Load Factor: 1.00		
Wind Load Factor: 1.00		

Shaft Forces

Seg Top Elev (ft)	Description	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Wind Force Z (lb)	Weight (lb)
0.00		1.00	16.38	27.68	419.58	0.650	0.00	0.000	0.000	0.00	0.00	0.0
5.00		1.00	16.38	27.68	411.41	0.650	5.00	25.968	16.879	467.38	0.00	1,254.5
10.00		1.00	16.38	27.68	403.23	0.650	5.00	25.457	16.547	458.18	0.00	1,229.6
15.00		1.00	16.38	27.68	395.05	0.650	5.00	24.946	16.215	448.98	0.00	1,204.8
20.00		1.00	16.38	27.68	386.88	0.650	5.00	24.435	15.883	439.78	0.00	1,180.0
25.00		1.00	16.38	27.68	378.70	0.650	5.00	23.924	15.551	430.58	0.00	1,155.1
30.00		1.00	16.38	27.68	370.52	0.650	5.00	23.413	15.219	421.39	0.00	1,130.3
31.25	Bot - Section 2	1.00	16.38	27.68	368.48	0.650	1.25	5.773	3.753	103.91	0.00	278.7
35.00		1.01	16.66	28.15	365.40	0.650	3.75	17.363	11.286	317.79	0.00	1,664.9
37.50	Top - Section 1	1.03	16.99	28.71	364.86	0.650	2.50	11.416	7.420	213.10	0.00	1,094.4
40.00		1.05	17.31	29.25	369.17	0.650	2.50	11.288	7.337	214.64	0.00	544.8
45.00		1.09	17.90	30.25	366.89	0.650	5.00	22.192	14.425	436.43	0.00	1,071.0
50.00		1.12	18.44	31.17	363.78	0.650	5.00	21.681	14.093	439.41	0.00	1,046.1
55.00		1.15	18.95	32.04	359.97	0.650	5.00	21.170	13.761	440.89	0.00	1,021.3
60.00		1.18	19.43	32.84	355.57	0.650	5.00	20.659	13.429	441.08	0.00	996.4
63.25	Bot - Section 3	1.20	19.73	33.34	352.42	0.650	3.25	13.154	8.550	285.12	0.00	634.4
65.00		1.21	19.88	33.60	350.65	0.650	1.75	7.103	4.617	155.16	0.00	679.8
68.75	Top - Section 2	1.23	20.20	34.14	346.66	0.650	3.75	15.010	9.757	333.18	0.00	1,436.2
70.00		1.24	20.31	34.32	350.84	0.650	1.25	4.939	3.211	110.21	0.00	238.2
75.00		1.26	20.71	35.00	345.12	0.650	5.00	19.439	12.635	442.34	0.00	937.1
80.00	Appertunance(s)	1.28	21.10	35.66	339.04	0.650	5.00	18.927	12.303	438.72	0.00	912.3
85.00		1.31	21.46	36.28	332.63	0.650	5.00	18.416	11.971	434.34	0.00	887.4
90.00		1.33	21.82	36.88	325.92	0.650	5.00	17.905	11.638	429.24	0.00	862.6
95.00		1.35	22.16	37.45	318.93	0.650	5.00	17.394	11.306	423.48	0.00	837.8
96.08	Bot - Section 4	1.35	22.23	37.57	317.39	0.650	1.08	3.701	2.406	90.41	0.00	178.2
100.00		1.37	22.49	38.00	311.70	0.650	3.92	13.427	8.727	331.71	0.00	1,281.3
100.75	Top - Section 3	1.37	22.53	38.08	310.59	0.650	0.75	2.535	1.648	62.77	0.00	241.9
105.00		1.39	22.80	38.54	310.13	0.650	4.25	14.149	9.197	354.47	0.00	681.2
110.00		1.41	23.11	39.05	302.49	0.650	5.00	16.174	10.513	410.60	0.00	778.4
115.00		1.42	23.40	39.55	294.64	0.650	5.00	15.663	10.181	402.71	0.00	753.6
120.00		1.44	23.69	40.04	286.61	0.650	5.00	15.151	9.848	394.34	0.00	728.8
125.00	Appertunance(s)	1.46	23.97	40.51	278.39	0.650	5.00	14.640	9.516	385.50	0.00	703.9
129.75	Bot - Section 5	1.47	24.22	40.94	270.43	0.650	4.75	13.435	8.733	357.55	0.00	645.7
130.00		1.48	24.24	40.96	270.01	0.650	0.25	0.707	0.460	18.84	0.00	61.7
133.58	Top - Section 4	1.49	24.43	41.28	263.90	0.650	3.58	9.998	6.499	268.31	0.00	872.6
135.00	Appertunance(s)	1.49	24.50	41.41	266.56	0.650	1.42	3.880	2.522	104.45	0.00	155.7
140.00		1.51	24.75	41.84	257.90	0.650	5.00	13.368	8.689	363.57	0.00	536.1
145.00	Appertunance(s)	1.52	25.00	42.26	249.09	0.650	5.00	12.857	8.357	353.20	0.00	515.4
150.00		1.54	25.25	42.67	240.15	0.650	5.00	12.346	8.025	342.46	0.00	494.7
155.00	Appertunance(s)	1.55	25.49	43.07	231.08	0.650	5.00	11.834	7.692	331.37	0.00	474.0
160.00		1.57	25.72	43.47	221.89	0.650	5.00	11.323	7.360	319.95	0.00	453.3
164.33	Bot - Section 6	1.58	25.91	43.80	213.82	0.650	4.33	9.400	6.110	267.65	0.00	376.1
165.00	Appertunance(s)	1.58	25.94	43.85	212.57	0.650	0.67	1.440	0.936	41.04	0.00	102.7
167.25	Top - Section 5	1.59	26.05	44.02	208.34	0.650	2.25	4.793	3.115	137.14	0.00	341.7
169.00	Appertunance(s)	1.59	26.12	44.15	209.25	0.650	1.75	3.656	2.376	104.93	0.00	117.3
Totals:							169.00			13,768.28	0.00	32,792.1

Pole: CT11417C
 Location: Plymouth - Rt. 6 Verizon Plymouth, CT
 Height: 169.0 (ft)
 Shape: 18 Sides
 Base Dia: 62.93 (in)
 Taper: 0.245310 (in/ft)

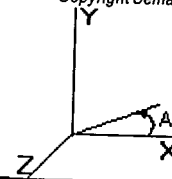
T-Mobile USA-WA

Base Elev: 0.000 (ft)
 Top Dia: 24.85 (in)

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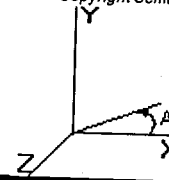
Load Case: No Ice 80 mph - No Ice 24 Iterations
 Gust Response Factor: 1.69 Effective Wind Speed: 80.00 (mph)
 Dead Load Factor: 1.00
 Wind Load Factor: 1.00

Discrete Appurtenance Forces

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Total CaAa (sf)	CaAa Factor	Horiz Ecc (ft)	Vert Ecc (ft)	X Angle (deg)	Wind Force X (lb)	Wind Force Z (lb)	Mom X (lb-ft)	Mom Y (lb-ft)	Mom Z (lb-ft)	Weight (lb)
80.00	4 FT Standoff	1	21.10	35.66	3.500	1.000	0.000	0.0	0.0	124.81	0.00	0.00	0.00	0.00	53.3
80.00	PD455	1	21.89	36.99	3.560	1.000	0.000	11.0	0.0	131.71	0.00	0.00	0.00	1448.82	23.0
125.00	HP MW Dish, 4' Dia.	1	23.97	40.51	15.860	1.000	0.000	0.0	0.0	642.49	0.00	0.00	0.00	0.00	170.0
135.00	Low Profile Platform	1	24.50	41.41	25.550	1.000	0.000	0.0	0.0	1058.04	0.00	0.00	0.00	0.00	1300.0
135.00	DB950F85T2E-M	12	24.50	41.41	52.800	1.000	0.000	0.0	0.0	2186.48	0.00	0.00	0.00	0.00	126.0
145.00	Allgon 7250.03	6	25.00	42.26	17.209	0.667	0.000	0.0	0.0	727.32	0.00	0.00	0.00	0.00	96.0
145.00	13 ft Low Profile	1	25.00	42.26	15.300	1.000	0.000	0.0	0.0	646.65	0.00	0.00	0.00	0.00	1346.0
155.00	13 ft Low Profile	1	25.49	43.07	15.300	1.000	0.000	0.0	0.0	659.09	0.00	0.00	0.00	0.00	1346.0
155.00	DB980H90	9	25.49	43.07	19.690	0.667	0.000	0.0	0.0	848.20	0.00	0.00	0.00	0.00	81.0
165.00	13 ft Low Profile	1	25.94	43.85	15.300	1.000	0.000	0.0	0.0	670.97	0.00	0.00	0.00	0.00	1346.0
165.00	RR65-19-00XP	12	25.94	43.85	72.000	1.000	0.000	0.0	0.0	3157.51	0.00	0.00	0.00	0.00	276.0
169.00	4 omni mount	1	26.17	44.23	24.830	1.000	0.000	1.0	0.0	1098.22	0.00	0.00	0.00	1098.22	1642.0
169.00	SRL-229	1	26.63	45.01	6.450	1.000	0.000	11.8	0.0	290.33	0.00	0.00	0.00	3411.32	25.0
169.00	PD455	1	26.64	45.02	3.560	1.000	0.000	12.0	0.0	160.30	0.00	0.00	0.00	1923.66	23.0
169.00	PD220	1	26.64	45.02	3.560	1.000	0.000	12.0	0.0	160.30	0.00	0.00	0.00	1923.66	23.0
169.00	ACP-305	1	26.63	45.01	6.450	1.000	0.000	11.8	0.0	290.32	0.00	0.00	0.00	3411.27	25.0
										12,852.7	0.00				7,901.3

Pole: CT11417C
 Location: Plymouth - Rt. 6 Verizon Plymouth, CT
 Height: 169.0 (ft)
 Shape: 18 Sides
 Base Dia: 62.93 (in)
 Taper: 0.245310 (in/ft)

T-Mobile USA-WA
 Base Elev: 0.000 (ft)
 Top Dia: 24.85 (in)



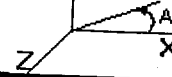
Load Case: No Ice 80 mph - No Ice 24 Iterations
 Gust Response Factor: 1.69 Effective Wind Speed: 80.00 (mph)
 Dead Load Factor: 1.00
 Wind Load Factor: 1.00

Applied Forces Summary

Seg Elev (ft)	X Coord (ft)	Z Coord (ft)	Lateral FX (-) (lb)	Axial FY (-) (lb)	Lateral FZ (lb)	Moment MX (lb-ft)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.00	0.00	0.00	467.38	1,254.47	0.00	0.00	0.00	0.00
10.00	0.00	0.00	458.18	1,229.64	0.00	0.00	0.00	0.00
15.00	0.00	0.00	448.98	1,204.80	0.00	0.00	0.00	0.00
20.00	0.00	0.00	439.78	1,179.96	0.00	0.00	0.00	0.00
25.00	0.00	0.00	430.58	1,155.12	0.00	0.00	0.00	0.00
30.00	0.00	0.00	421.39	1,130.29	0.00	0.00	0.00	0.00
31.25	0.00	0.00	103.91	278.69	0.00	0.00	0.00	0.00
35.00	0.00	0.00	317.79	1,664.91	0.00	0.00	0.00	0.00
37.50	0.00	0.00	213.10	1,094.41	0.00	0.00	0.00	0.00
40.00	0.00	0.00	214.64	544.79	0.00	0.00	0.00	0.00
45.00	0.00	0.00	436.43	1,070.96	0.00	0.00	0.00	0.00
50.00	0.00	0.00	439.41	1,046.12	0.00	0.00	0.00	0.00
55.00	0.00	0.00	440.89	1,021.29	0.00	0.00	0.00	0.00
60.00	0.00	0.00	441.08	996.45	0.00	0.00	0.00	0.00
63.25	0.00	0.00	285.12	634.37	0.00	0.00	0.00	0.00
65.00	0.00	0.00	155.16	679.79	0.00	0.00	0.00	0.00
68.75	0.00	0.00	333.18	1,436.21	0.00	0.00	0.00	0.00
70.00	0.00	0.00	110.21	238.16	0.00	0.00	0.00	0.00
75.00	0.00	0.00	442.34	937.12	0.00	0.00	0.00	0.00
80.00	0.00	0.00	695.25	988.60	0.00	0.00	0.00	0.00
85.00	0.00	0.00	434.34	887.45	0.00	0.00	0.00	1,448.82
90.00	0.00	0.00	429.24	862.61	0.00	0.00	0.00	0.00
95.00	0.00	0.00	423.48	837.77	0.00	0.00	0.00	0.00
96.08	0.00	0.00	90.41	178.24	0.00	0.00	0.00	0.00
100.00	0.00	0.00	331.71	1,281.28	0.00	0.00	0.00	0.00
100.75	0.00	0.00	62.77	241.87	0.00	0.00	0.00	0.00
105.00	0.00	0.00	354.47	681.21	0.00	0.00	0.00	0.00
110.00	0.00	0.00	410.60	778.45	0.00	0.00	0.00	0.00
115.00	0.00	0.00	402.71	753.61	0.00	0.00	0.00	0.00
120.00	0.00	0.00	394.34	728.77	0.00	0.00	0.00	0.00
125.00	0.00	0.00	1,027.99	873.93	0.00	0.00	0.00	0.00
129.75	0.00	0.00	357.55	645.73	0.00	0.00	0.00	0.00
130.00	0.00	0.00	18.84	61.75	0.00	0.00	0.00	0.00
133.58	0.00	0.00	268.31	872.56	0.00	0.00	0.00	0.00
135.00	0.00	0.00	3,348.98	1,581.66	0.00	0.00	0.00	0.00
140.00	0.00	0.00	363.57	536.12	0.00	0.00	0.00	0.00
145.00	0.00	0.00	1,727.17	1,957.42	0.00	0.00	0.00	0.00
150.00	0.00	0.00	342.46	494.72	0.00	0.00	0.00	0.00
155.00	0.00	0.00	1,838.66	1,901.02	0.00	0.00	0.00	0.00
160.00	0.00	0.00	319.95	453.33	0.00	0.00	0.00	0.00
164.33	0.00	0.00	267.65	376.14	0.00	0.00	0.00	0.00
165.00	0.00	0.00	3,869.53	1,724.69	0.00	0.00	0.00	0.00
167.25	0.00	0.00	137.14	341.69	0.00	0.00	0.00	0.00
169.00	0.00	0.00	2,104.41	1,855.27	0.00	0.00	0.00	0.00
Totals:			26,621.03	40,693.46	0.00	0.00	0.00	11,768.13
								13,216.95

Pole: CT11417C
 Location: Plymouth - Rt. 6 Verizon Plymouth, CT
 Height: 169.0 (ft)
 Shape: 18 Sides
 Base Dia: 62.93 (in)
 Taper: 0.245310 (in/ft)

T-Mobile USA-WA
 Base Elev: 0.000 (ft)
 Top Dia: 24.85 (in)



Load Case: No Ice 80 mph - No Ice 24 Iterations
 Gust Response Factor: 1.69 Effective Wind Speed: 80.00 (mph)
 Dead Load Factor: 1.00
 Wind Load Factor: 1.00

Calculated 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	26.664	40.665	0.000	0.000	0.000	3,178.499	0.000	0.000	0.000	0.000
5.00	26.279	39.355	0.000	0.000	0.000	3,045.180	-0.065	0.000	0.065	-0.120
10.00	25.899	38.071	0.000	0.000	0.000	2,913.788	-0.257	0.000	0.257	-0.242
15.00	25.524	36.813	0.000	0.000	0.000	2,784.296	-0.577	0.000	0.577	-0.366
20.00	25.154	35.581	0.000	0.000	0.000	2,656.680	-1.029	0.000	1.029	-0.493
25.00	24.790	34.374	0.000	0.000	0.000	2,530.912	-1.614	0.000	1.614	-0.621
30.00	24.402	33.215	0.000	0.000	0.000	2,406.965	-2.334	0.000	2.334	-0.751
31.25	24.333	32.909	0.000	0.000	0.000	2,376.463	-2.535	0.000	2.535	-0.784
35.00	24.037	31.214	0.000	0.000	0.000	2,285.216	-3.192	0.000	3.192	-0.884
37.50	23.842	30.095	0.000	0.000	0.000	2,225.126	-3.673	0.000	3.673	-0.952
40.00	23.669	29.512	0.000	0.000	0.000	2,165.523	-4.190	0.000	4.190	-1.020
45.00	23.277	28.397	0.000	0.000	0.000	2,047.180	-5.329	0.000	5.329	-1.150
50.00	22.879	27.307	0.000	0.000	0.000	1,930.795	-6.605	0.000	6.605	-1.282
55.00	22.476	26.244	0.000	0.000	0.000	1,816.402	-8.019	0.000	8.019	-1.415
60.00	22.058	25.217	0.000	0.000	0.000	1,704.026	-9.574	0.000	9.574	-1.550
63.25	21.785	24.564	0.000	0.000	0.000	1,632.338	-10.661	0.000	10.661	-1.639
65.00	21.642	23.860	0.000	0.000	0.000	1,594.215	-11.271	0.000	11.271	-1.688
68.75	21.292	22.409	0.000	0.000	0.000	1,513.059	-12.639	0.000	12.639	-1.792
70.00	21.207	22.144	0.000	0.000	0.000	1,486.444	-13.113	0.000	13.113	-1.827
75.00	20.783	21.174	0.000	0.000	0.000	1,380.408	-15.098	0.000	15.098	-1.959
80.00	20.100	20.164	0.000	0.000	0.000	1,275.046	-17.220	0.000	17.220	-2.091
85.00	19.677	19.249	0.000	0.000	0.000	1,174.549	-19.481	0.000	19.481	-2.223
90.00	19.256	18.360	0.000	0.000	0.000	1,076.167	-21.880	0.000	21.880	-2.355
95.00	18.821	17.514	0.000	0.000	0.000	979.890	-24.416	0.000	24.416	-2.486
96.08	18.743	17.318	0.000	0.000	0.000	959.501	-24.984	0.000	24.984	-2.516
100.00	18.372	16.034	0.000	0.000	0.000	886.090	-27.091	0.000	27.091	-2.619
100.75	18.316	15.774	0.000	0.000	0.000	872.311	-27.504	0.000	27.504	-2.639
105.00	17.960	15.074	0.000	0.000	0.000	794.469	-29.903	0.000	29.903	-2.749
110.00	17.541	14.281	0.000	0.000	0.000	704.668	-32.846	0.000	32.846	-2.868
115.00	17.127	13.515	0.000	0.000	0.000	616.963	-35.911	0.000	35.911	-2.983
120.00	16.719	12.777	0.000	0.000	0.000	531.327	-39.094	0.000	39.094	-3.094
125.00	15.665	11.934	0.000	0.000	0.000	447.733	-42.391	0.000	42.391	-3.199
129.75	15.281	11.297	0.000	0.000	0.000	373.325	-45.620	0.000	45.620	-3.291
130.00	15.266	11.227	0.000	0.000	0.000	369.505	-45.793	0.000	45.793	-3.296
133.58	14.955	10.360	0.000	0.000	0.000	314.804	-48.291	0.000	48.291	-3.361
135.00	14.955	10.360	0.000	0.000	0.000	293.617	-49.292	0.000	49.292	-3.386
140.00	11.145	8.437	0.000	0.000	0.000	235.979	-52.886	0.000	52.886	-3.475
145.00	9.309	6.577	0.000	0.000	0.000	180.253	-56.566	0.000	56.566	-3.553
150.00	8.943	6.095	0.000	0.000	0.000	133.706	-60.322	0.000	60.322	-3.619
155.00	6.991	4.310	0.000	0.000	0.000	88.991	-64.140	0.000	64.140	-3.673
160.00	6.644	3.874	0.000	0.000	0.000	54.037	-68.007	0.000	68.007	-3.712
164.33	6.353	3.515	0.000	0.000	0.000	25.245	-71.385	0.000	71.385	-3.733
165.00	2.380	2.046	0.000	0.000	0.000	21.010	-71.906	0.000	71.906	-3.735
167.25	2.221	1.714	0.000	0.000	0.000	15.655	-73.667	0.000	73.667	-3.741
169.00	2.104	0.000	0.000	0.000	0.000	11.768	-75.038	0.000	75.038	-3.745

Pole: CT11417C
 Location: Plymouth - Rt. 6 Verizon Plymouth, CT
 Height: 169.0 (ft)
 Shape: 18 Sides
 Base Dia: 62.93 (in)
 Taper: 0.245310 (in/ft)

T-Mobile USA-WA

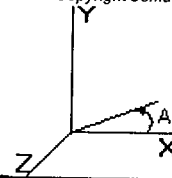
Base Elev: 0.000 (ft)

Top Dia: 24.85 (in)

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Load Case: No Ice 80 mph - No Ice 24 Iterations
 Gust Response Factor: 1.69 Effective Wind Speed: 80.00 (mph)
 Dead Load Factor: 1.00
 Wind Load Factor: 1.00

Calculated Stresses

Seg Elev (ft)	Applied Stresses							Allowable Stress (Fb) (ksi)	Stress Ratio
	Axial (Y) (ksi)	Shear (X) (ksi)	Shear (Z) (ksi)	Torsion (ksi)	Bending (X) (ksi)	Bending (Z) (ksi)	Combined (ksi)		
0.00	0.546	0.722	0.000	0.000	0.000	33.099	33.668	49.1	0.685
5.00	0.539	0.725	0.000	0.000	0.000	32.995	33.558	49.6	0.677
10.00	0.532	0.730	0.000	0.000	0.000	32.877	33.434	50.1	0.667
15.00	0.525	0.734	0.000	0.000	0.000	32.743	33.293	50.6	0.658
20.00	0.519	0.739	0.000	0.000	0.000	32.590	33.133	51.1	0.649
25.00	0.512	0.744	0.000	0.000	0.000	32.416	32.953	51.6	0.639
30.00	0.506	0.749	0.000	0.000	0.000	32.219	32.750	52.0	0.630
31.25	0.504	0.751	0.000	0.000	0.000	32.168	32.697	52.0	0.629
35.00	0.486	0.754	0.000	0.000	0.000	32.000	32.512	52.0	0.626
37.50	0.467	0.746	0.000	0.000	0.000	31.001	31.494	52.0	0.606
40.00	0.463	0.749	0.000	0.000	0.000	30.868	31.359	52.0	0.603
45.00	0.456	0.754	0.000	0.000	0.000	30.572	31.056	52.0	0.597
50.00	0.449	0.759	0.000	0.000	0.000	30.241	30.719	52.0	0.591
55.00	0.443	0.764	0.000	0.000	0.000	29.873	30.344	52.0	0.584
60.00	0.436	0.769	0.000	0.000	0.000	29.463	29.929	52.0	0.576
63.25	0.432	0.772	0.000	0.000	0.000	29.177	29.638	52.0	0.570
65.00	0.423	0.774	0.000	0.000	0.000	29.016	29.470	52.0	0.567
68.75	0.399	0.764	0.000	0.000	0.000	27.738	28.168	52.0	0.542
70.00	0.397	0.766	0.000	0.000	0.000	27.609	28.038	52.0	0.539
75.00	0.390	0.771	0.000	0.000	0.000	27.042	27.464	52.0	0.528
80.00	0.381	0.766	0.000	0.000	0.000	26.381	26.795	52.0	0.516
85.00	0.374	0.771	0.000	0.000	0.000	25.707	26.116	52.0	0.502
90.00	0.367	0.777	0.000	0.000	0.000	24.957	25.360	52.0	0.488
95.00	0.361	0.782	0.000	0.000	0.000	24.119	24.517	52.0	0.472
96.08	0.359	0.784	0.000	0.000	0.000	23.929	24.326	52.0	0.468
100.00	0.341	0.787	0.000	0.000	0.000	23.191	23.571	52.0	0.453
100.75	0.331	0.773	0.000	0.000	0.000	22.187	22.558	52.0	0.434
105.00	0.324	0.779	0.000	0.000	0.000	21.306	21.672	52.0	0.417
110.00	0.317	0.785	0.000	0.000	0.000	20.149	20.511	52.0	0.395
115.00	0.310	0.792	0.000	0.000	0.000	18.850	19.209	52.0	0.370
120.00	0.303	0.800	0.000	0.000	0.000	17.385	17.742	52.0	0.341
125.00	0.294	0.777	0.000	0.000	0.000	15.727	16.077	52.0	0.309
129.75	0.288	0.785	0.000	0.000	0.000	14.061	14.413	52.0	0.277
130.00	0.287	0.785	0.000	0.000	0.000	13.970	14.321	52.0	0.276
133.58	0.319	0.928	0.000	0.000	0.000	14.423	14.830	52.0	0.285
135.00	0.279	0.723	0.000	0.000	0.000	13.744	14.079	52.0	0.271
140.00	0.273	0.727	0.000	0.000	0.000	11.937	12.275	52.0	0.236
145.00	0.222	0.632	0.000	0.000	0.000	9.885	10.166	52.0	0.196
150.00	0.214	0.633	0.000	0.000	0.000	7.976	8.263	52.0	0.159
155.00	0.158	0.517	0.000	0.000	0.000	5.796	6.021	52.0	0.116
160.00	0.149	0.514	0.000	0.000	0.000	3.858	4.105	52.0	0.079
164.33	0.141	0.513	0.000	0.000	0.000	1.959	2.279	52.0	0.044
165.00	0.082	0.193	0.000	0.000	0.000	1.652	1.766	52.0	0.034
167.25	0.086	0.225	0.000	0.000	0.000	1.533	1.666	52.0	0.032
169.00	0.000	0.217	0.000	0.000	0.000	1.193	1.251	52.0	0.024

Pole : CT11417C
 Location: Plymouth - Rt. 6 Verizon Plymouth, CT
 Height : 169.0 (ft)
 Shape : 18 Sides
 Base Dia : 62.93 (in)
 Taper : 0.245310 (in/ft)

T-Mobile USA-WA
 Base Elev : 0.000 (ft)
 Top Dia : 24.85 (in)



Load Case: Ice 80 mph - With Ice - Ice Thickness = 0.5 in 24 Iterations

Gust Response Factor : 1.69 Effective Wind Speed : 69.28 (mph)

Dead Load Factor : 1.00

Wind Load Factor : 1.00

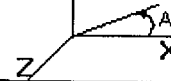
Shaft Forces

Seg Top Elev (ft)	Description	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Wind Force Z (lb)	Weight (lb)
0.00		1.00	12.28	20.76	363.36	0.650	0.00	0.000	0.000	0.00	0.00	0.0
5.00		1.00	12.28	20.76	356.28	0.650	5.00	26.385	17.150	356.13	0.00	1,446.4
10.00		1.00	12.28	20.76	349.20	0.650	5.00	25.874	16.818	349.24	0.00	1,417.8
15.00		1.00	12.28	20.76	342.12	0.650	5.00	25.363	16.486	342.34	0.00	1,389.2
20.00		1.00	12.28	20.76	335.03	0.650	5.00	24.852	16.154	335.44	0.00	1,360.6
25.00		1.00	12.28	20.76	327.95	0.650	5.00	24.341	15.822	328.54	0.00	1,332.0
30.00		1.00	12.28	20.76	320.87	0.650	5.00	23.830	15.489	321.64	0.00	1,303.3
31.25	Bot - Section 2	1.00	12.28	20.76	319.10	0.650	1.25	5.878	3.820	79.33	0.00	321.7
35.00		1.01	12.49	21.11	316.44	0.650	3.75	17.676	11.489	242.62	0.00	1,793.6
37.50	Top - Section 1	1.03	12.74	21.53	315.97	0.650	2.50	11.624	7.556	162.73	0.00	1,179.3
40.00		1.05	12.98	21.93	319.71	0.650	2.50	11.496	7.473	163.94	0.00	628.7
45.00		1.09	13.42	22.69	317.73	0.650	5.00	22.609	14.696	333.45	0.00	1,235.0
50.00		1.12	13.83	23.38	315.03	0.650	5.00	22.098	14.364	335.87	0.00	1,206.3
55.00		1.15	14.21	24.02	311.73	0.650	5.00	21.587	14.032	337.16	0.00	1,177.7
60.00		1.18	14.57	24.63	307.92	0.650	5.00	21.076	13.699	337.46	0.00	1,149.1
63.25	Bot - Section 3	1.20	14.79	25.00	305.20	0.650	3.25	13.425	8.726	218.23	0.00	732.0
65.00		1.21	14.91	25.20	303.66	0.650	1.75	7.249	4.712	118.75	0.00	732.7
68.75	Top - Section 2	1.23	15.15	25.61	300.20	0.650	3.75	15.323	9.960	255.07	0.00	1,547.5
70.00		1.24	15.23	25.74	303.83	0.650	1.25	5.044	3.278	84.39	0.00	275.0
75.00		1.26	15.53	26.25	298.88	0.650	5.00	19.855	12.906	338.85	0.00	1,080.7
80.00	Appertunance(s)	1.28	15.82	26.74	293.61	0.650	5.00	19.344	12.574	336.27	0.00	1,052.1
85.00		1.31	16.10	27.21	288.06	0.650	5.00	18.833	12.242	333.10	0.00	1,023.5
90.00		1.33	16.36	27.65	282.24	0.650	5.00	18.322	11.909	329.40	0.00	994.9
95.00		1.35	16.62	28.09	276.20	0.650	5.00	17.811	11.577	325.20	0.00	966.2
96.08	Bot - Section 4	1.35	16.67	28.18	274.86	0.650	1.08	3.792	2.465	69.45	0.00	205.9
100.00		1.37	16.86	28.50	269.93	0.650	3.92	13.753	8.939	254.81	0.00	1,380.8
100.75	Top - Section 3	1.37	16.90	28.56	268.97	0.650	0.75	2.598	1.689	48.23	0.00	260.8
105.00		1.39	17.10	28.90	268.57	0.650	4.25	14.504	9.427	272.49	0.00	785.9
110.00		1.41	17.33	29.29	261.95	0.650	5.00	16.590	10.784	315.87	0.00	897.9
115.00		1.42	17.55	29.66	255.16	0.650	5.00	16.079	10.451	310.05	0.00	869.3
120.00		1.44	17.76	30.02	248.20	0.650	5.00	15.568	10.119	303.87	0.00	840.6
125.00	Appertunance(s)	1.46	17.97	30.38	241.09	0.650	5.00	15.057	9.787	297.34	0.00	812.0
129.75	Bot - Section 5	1.47	18.16	30.70	234.19	0.650	4.75	13.831	8.990	276.05	0.00	745.0
130.00		1.48	18.17	30.72	233.83	0.650	0.25	0.728	0.473	14.54	0.00	67.1
133.58	Top - Section 4	1.49	18.32	30.96	228.54	0.650	3.58	10.297	6.693	207.23	0.00	946.7
135.00	Appertunance(s)	1.49	18.37	31.05	230.84	0.650	1.42	3.998	2.599	80.72	0.00	184.7
140.00		1.51	18.56	31.38	223.34	0.650	5.00	13.784	8.960	281.16	0.00	634.8
145.00	Appertunance(s)	1.52	18.75	31.69	215.72	0.650	5.00	13.273	8.628	273.47	0.00	610.3
150.00		1.54	18.93	32.00	207.97	0.650	5.00	12.762	8.295	265.50	0.00	585.8
155.00	Appertunance(s)	1.55	19.11	32.30	200.12	0.650	5.00	12.251	7.963	257.26	0.00	561.3
160.00		1.57	19.29	32.60	192.15	0.650	5.00	11.740	7.631	248.78	0.00	536.8
164.33	Bot - Section 6	1.58	19.43	32.85	185.17	0.650	4.33	9.761	6.345	208.43	0.00	445.7
165.00	Appertunance(s)	1.58	19.46	32.88	184.09	0.650	0.67	1.495	0.972	31.97	0.00	113.5
167.25	Top - Section 5	1.59	19.53	33.01	180.43	0.650	2.25	4.980	3.237	106.88	0.00	377.5
169.00	Appertunance(s)	1.59	19.59	33.11	181.21	0.650	1.75	3.802	2.471	81.83	0.00	144.7
Totals:							169.00			10,571.09	0.00	37,352.3

Pole: CT11417C
 Location: Plymouth - Rt. 6 Verizon Plymouth, CT
 Height: 169.0 (ft)
 Shape: 18 Sides
 Base Dia: 62.93 (in)
 Taper: 0.245310 (in/ft)

T-Mobile USA-WA
 Base Elev: 0.000 (ft)
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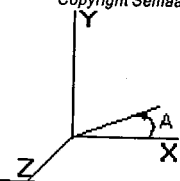
Load Case: Ice 80 mph - With Ice - Ice Thickness = 0.5 in 24 Iterations
 Gust Response Factor: 1.69 Effective Wind Speed: 69.28 (mph)
 Dead Load Factor: 1.00
 Wind Load Factor: 1.00

Discrete Appurtenance Forces

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Total CaAa (sf)	CaAa Factor	Horiz Ecc (ft)	Vert Ecc (ft)	X Angle (deg)	Wind Force X (lb)	Wind Force Z (lb)	Mom X (lb-ft)	Mom Y (lb-ft)	Mom Z (lb-ft)	Weight (lb)
80.00	4 FT Standoff	1	15.82	26.74	5.790	1.000	0.000	0.0	0.0	154.85	0.00	0.00	0.00	0.00	84.0
80.00	PD455	1	16.41	27.74	6.860	1.000	0.000	11.0	0.0	190.34	0.00	0.00	0.00	2093.75	83.0
125.00	HP MW Dish, 4' Dia.	1	17.97	30.38	16.520	1.000	0.000	0.0	0.0	501.89	0.00	0.00	0.00	0.00	280.0
135.00	Low Profile Platform	1	18.37	31.05	27.320	1.000	0.000	0.0	0.0	848.45	0.00	0.00	0.00	0.00	2100.0
135.00	DB950F85T2E-M	12	18.37	31.05	60.000	1.000	0.000	0.0	0.0	1863.37	0.00	0.00	0.00	0.00	360.0
145.00	Allgon 7250.03	6	18.75	31.69	20.010	0.667	0.000	0.0	0.0	634.25	0.00	0.00	0.00	0.00	216.0
145.00	13 ft Low Profile	1	18.75	31.69	17.020	1.000	0.000	0.0	0.0	539.48	0.00	0.00	0.00	0.00	2075.0
155.00	13 ft Low Profile	1	19.11	32.30	17.020	1.000	0.000	0.0	0.0	549.86	0.00	0.00	0.00	0.00	2075.0
155.00	DB980H90	9	19.11	32.30	23.112	0.667	0.000	0.0	0.0	746.65	0.00	0.00	0.00	0.00	252.0
165.00	13 ft Low Profile	1	19.46	32.88	17.020	1.000	0.000	0.0	0.0	559.77	0.00	0.00	0.00	0.00	2075.0
165.00	RR65-19-00XP	12	19.46	32.88	82.200	1.000	0.000	0.0	0.0	2703.46	0.00	0.00	0.00	0.00	624.0
169.00	4 omni mount	1	19.62	33.17	26.000	1.000	0.000	1.0	0.0	862.43	0.00	0.00	0.00	862.43	2100.0
169.00	SRL-229	1	19.97	33.75	8.630	1.000	0.000	11.8	0.0	291.32	0.00	0.00	0.00	3423.02	71.0
169.00	PD455	1	19.98	33.77	6.860	1.000	0.000	12.0	0.0	231.66	0.00	0.00	0.00	2779.95	83.0
169.00	PD220	1	19.98	33.77	6.860	1.000	0.000	12.0	0.0	231.66	0.00	0.00	0.00	2779.95	83.0
169.00	ACP-305	1	19.97	33.75	8.630	1.000	0.000	11.8	0.0	291.32	0.00	0.00	0.00	3423.02	71.0
										11,200.7	0.00				12,632.0

Pole: CT11417C
 Location: Plymouth - Rt. 6 Verizon Plymouth, CT
 Height: 169.0 (ft)
 Shape: 18 Sides
 Base Dia: 62.93 (in)
 Taper: 0.245310 (in/ft)

T-Mobile USA-WA
 Base Elev: 0.000 (ft)
 Top Dia: 24.85 (in)



Load Case: Ice 80 mph - With Ice - Ice Thickness = 0.5 in 24 Iterations
 Gust Response Factor: 1.69 Effective Wind Speed: 69.28 (mph)
 Dead Load Factor: 1.00
 Wind Load Factor: 1.00

Applied Forces Summary

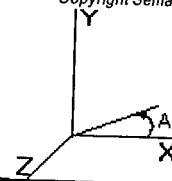
Seg Elev (ft)	X Coord (ft)	Z Coord (ft)	Lateral FX (-) (lb)	Axial FY (-) (lb)	Lateral FZ (lb)	Moment MX (lb-ft)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.00	0.00	0.00	356.13	1,446.44	0.00	0.00	0.00	0.00
10.00	0.00	0.00	349.24	1,417.82	0.00	0.00	0.00	0.00
15.00	0.00	0.00	342.34	1,389.20	0.00	0.00	0.00	0.00
20.00	0.00	0.00	335.44	1,360.57	0.00	0.00	0.00	0.00
25.00	0.00	0.00	328.54	1,331.95	0.00	0.00	0.00	0.00
30.00	0.00	0.00	321.64	1,303.33	0.00	0.00	0.00	0.00
31.25	0.00	0.00	79.33	321.71	0.00	0.00	0.00	0.00
35.00	0.00	0.00	242.62	1,793.59	0.00	0.00	0.00	0.00
37.50	0.00	0.00	162.73	1,179.25	0.00	0.00	0.00	0.00
40.00	0.00	0.00	163.94	628.69	0.00	0.00	0.00	0.00
45.00	0.00	0.00	333.45	1,234.96	0.00	0.00	0.00	0.00
50.00	0.00	0.00	335.87	1,206.34	0.00	0.00	0.00	0.00
55.00	0.00	0.00	337.16	1,177.72	0.00	0.00	0.00	0.00
60.00	0.00	0.00	337.46	1,149.10	0.00	0.00	0.00	0.00
63.25	0.00	0.00	218.23	731.99	0.00	0.00	0.00	0.00
65.00	0.00	0.00	118.75	732.70	0.00	0.00	0.00	0.00
68.75	0.00	0.00	255.07	1,547.46	0.00	0.00	0.00	0.00
70.00	0.00	0.00	84.39	275.01	0.00	0.00	0.00	0.00
75.00	0.00	0.00	338.85	1,080.73	0.00	0.00	0.00	0.00
80.00	0.00	0.00	681.45	1,219.11	0.00	0.00	0.00	0.00
85.00	0.00	0.00	333.10	1,023.48	0.00	0.00	0.00	2,093.75
90.00	0.00	0.00	329.40	994.86	0.00	0.00	0.00	0.00
95.00	0.00	0.00	325.20	966.24	0.00	0.00	0.00	0.00
96.08	0.00	0.00	69.45	205.90	0.00	0.00	0.00	0.00
100.00	0.00	0.00	254.81	1,380.76	0.00	0.00	0.00	0.00
100.75	0.00	0.00	48.23	260.84	0.00	0.00	0.00	0.00
105.00	0.00	0.00	272.49	785.94	0.00	0.00	0.00	0.00
110.00	0.00	0.00	315.87	897.87	0.00	0.00	0.00	0.00
115.00	0.00	0.00	310.05	869.25	0.00	0.00	0.00	0.00
120.00	0.00	0.00	303.87	840.63	0.00	0.00	0.00	0.00
125.00	0.00	0.00	799.23	1,092.01	0.00	0.00	0.00	0.00
129.75	0.00	0.00	276.05	744.98	0.00	0.00	0.00	0.00
130.00	0.00	0.00	14.54	67.06	0.00	0.00	0.00	0.00
133.58	0.00	0.00	207.23	946.74	0.00	0.00	0.00	0.00
135.00	0.00	0.00	2,792.54	2,644.69	0.00	0.00	0.00	0.00
140.00	0.00	0.00	281.16	634.77	0.00	0.00	0.00	0.00
145.00	0.00	0.00	1,447.20	2,901.28	0.00	0.00	0.00	0.00
150.00	0.00	0.00	265.50	585.80	0.00	0.00	0.00	0.00
155.00	0.00	0.00	1,553.78	2,888.32	0.00	0.00	0.00	0.00
160.00	0.00	0.00	248.78	536.83	0.00	0.00	0.00	0.00
164.33	0.00	0.00	208.43	445.67	0.00	0.00	0.00	0.00
165.00	0.00	0.00	3,295.20	2,812.52	0.00	0.00	0.00	0.00
167.25	0.00	0.00	106.88	377.49	0.00	0.00	0.00	0.00
169.00	0.00	0.00	1,990.23	2,552.66	0.00	0.00	0.00	0.00
Totals:			21,771.86	49,984.27	0.00	0.00	0.00	13,268.38
								15,362.13

Pole: CT11417C
 Location: Plymouth - Rt. 6 Verizon Plymouth, CT
 Height: 169.0 (ft)
 Shape: 18 Sides
 Base Dia: 62.93 (in)
 Taper: 0.245310 (in/ft)

T-Mobile USA-WA

Base Elev: 0.000 (ft)
 Top Dia: 24.85 (in)

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Load Case: Ice

80 mph - With Ice - Ice Thickness = 0.5 in

24 Iterations

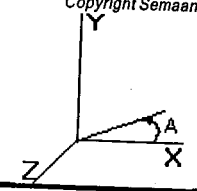
Gust Response Factor: 1.69
 Dead Load Factor: 1.00
 Wind Load Factor: 1.00
 Effective Wind Speed: 69.28 (mph)

Calculated 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	21.817	49.964	0.000	0.000	0.000	2,682.836	0.000	0.000	0.000	0.000
5.00	21.546	48.480	0.000	0.000	0.000	2,573.754	-0.055	0.000	0.055	-0.102
10.00	21.279	47.024	0.000	0.000	0.000	2,466.026	-0.217	0.000	0.217	-0.205
15.00	21.014	45.598	0.000	0.000	0.000	2,359.636	-0.488	0.000	0.488	-0.310
20.00	20.754	44.200	0.000	0.000	0.000	2,254.566	-0.870	0.000	0.870	-0.417
25.00	20.496	42.832	0.000	0.000	0.000	2,150.801	-1.365	0.000	1.365	-0.526
30.00	20.211	41.508	0.000	0.000	0.000	2,048.323	-1.975	0.000	1.975	-0.636
31.25	20.169	41.167	0.000	0.000	0.000	2,023.059	-2.146	0.000	2.146	-0.665
35.00	19.954	39.352	0.000	0.000	0.000	1,947.426	-2.702	0.000	2.702	-0.750
37.50	19.814	38.155	0.000	0.000	0.000	1,897.543	-3.111	0.000	3.111	-0.808
40.00	19.696	37.499	0.000	0.000	0.000	1,848.011	-3.550	0.000	3.550	-0.866
45.00	19.414	36.232	0.000	0.000	0.000	1,749.532	-4.516	0.000	4.516	-0.977
50.00	19.125	34.994	0.000	0.000	0.000	1,652.466	-5.600	0.000	5.600	-1.090
55.00	18.832	33.786	0.000	0.000	0.000	1,556.842	-6.803	0.000	6.803	-1.204
60.00	18.524	32.613	0.000	0.000	0.000	1,462.682	-8.126	0.000	8.126	-1.319
63.25	18.322	31.868	0.000	0.000	0.000	1,402.479	-9.051	0.000	9.051	-1.396
65.00	18.221	31.117	0.000	0.000	0.000	1,370.417	-9.571	0.000	9.571	-1.438
68.75	17.956	29.558	0.000	0.000	0.000	1,302.091	-10.737	0.000	10.737	-1.527
70.00	17.902	29.263	0.000	0.000	0.000	1,279.646	-11.141	0.000	11.141	-1.558
75.00	17.588	28.158	0.000	0.000	0.000	1,190.140	-12.833	0.000	12.833	-1.671
80.00	16.924	26.926	0.000	0.000	0.000	1,100.107	-14.645	0.000	14.645	-1.785
85.00	16.610	25.881	0.000	0.000	0.000	1,015.489	-16.575	0.000	16.575	-1.899
90.00	16.296	24.865	0.000	0.000	0.000	932.442	-18.626	0.000	18.626	-2.013
95.00	15.965	23.892	0.000	0.000	0.000	850.964	-20.795	0.000	20.795	-2.127
96.08	15.912	23.673	0.000	0.000	0.000	833.669	-21.281	0.000	21.281	-2.153
100.00	15.625	22.289	0.000	0.000	0.000	771.349	-23.085	0.000	23.085	-2.242
100.75	15.588	22.014	0.000	0.000	0.000	759.630	-23.438	0.000	23.438	-2.260
105.00	15.322	21.213	0.000	0.000	0.000	693.381	-25.494	0.000	25.494	-2.356
110.00	15.005	20.302	0.000	0.000	0.000	616.774	-28.017	0.000	28.017	-2.460
115.00	14.691	19.422	0.000	0.000	0.000	541.751	-30.647	0.000	30.647	-2.561
120.00	14.380	18.572	0.000	0.000	0.000	468.299	-33.382	0.000	33.382	-2.658
125.00	13.556	17.499	0.000	0.000	0.000	396.402	-36.216	0.000	36.216	-2.751
129.75	13.257	16.758	0.000	0.000	0.000	332.010	-38.995	0.000	38.995	-2.833
130.00	13.248	16.685	0.000	0.000	0.000	328.696	-39.143	0.000	39.143	-2.837
133.58	13.005	15.741	0.000	0.000	0.000	281.224	-41.295	0.000	41.295	-2.895
135.00	10.094	13.232	0.000	0.000	0.000	262.801	-42.157	0.000	42.157	-2.917
140.00	9.797	12.600	0.000	0.000	0.000	212.334	-45.255	0.000	45.255	-2.997
145.00	8.209	9.770	0.000	0.000	0.000	163.352	-48.432	0.000	48.432	-3.067
150.00	7.921	9.191	0.000	0.000	0.000	122.308	-51.677	0.000	51.677	-3.128
155.00	6.215	6.388	0.000	0.000	0.000	82.704	-54.979	0.000	54.979	-3.177
160.00	5.940	5.863	0.000	0.000	0.000	51.627	-58.326	0.000	58.326	-3.214
164.33	5.708	5.429	0.000	0.000	0.000	25.887	-61.253	0.000	61.253	-3.235
165.00	2.259	2.807	0.000	0.000	0.000	22.082	-61.704	0.000	61.704	-3.237
167.25	2.132	2.436	0.000	0.000	0.000	16.999	-63.231	0.000	63.231	-3.244
169.00	1.990	0.000	0.000	0.000	0.000	13.268	-64.420	0.000	64.420	-3.248

Pole: CT11417C
 Location: Plymouth - Rt. 6 Verizon Plymouth, CT
 Height: 169.0 (ft)
 Shape: 18 Sides
 Base Dia: 62.93 (in)
 Taper: 0.245310 (in/ft)

T-Mobile USA-WA
 Base Elev: 0.000 (ft)
 Top Dia: 24.85 (in)



Load Case: Ice 80 mph - With Ice - Ice Thickness = 0.5 in 24 Iterations

Gust Response Factor: 1.69 Effective Wind Speed: 69.28 (mph)

Dead Load Factor: 1.00

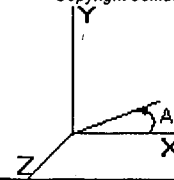
Wind Load Factor: 1.00

Calculated Stresses

Seg Elev (ft)	Applied Stresses							Allowable Stress (Fb) (ksi)	Stress Ratio
	Axial (Y) (ksi)	Shear (X) (ksi)	Shear (Z) (ksi)	Torsion (ksi)	Bending (X) (ksi)	Bending (Z) (ksi)	Combined (ksi)		
0.00	0.671	0.591	0.000	0.000	0.000	27.937	28.627	49.1	0.583
5.00	0.664	0.595	0.000	0.000	0.000	27.887	28.570	49.6	0.576
10.00	0.657	0.599	0.000	0.000	0.000	27.825	28.501	50.1	0.569
15.00	0.651	0.604	0.000	0.000	0.000	27.749	28.419	50.6	0.562
20.00	0.644	0.610	0.000	0.000	0.000	27.657	28.321	51.1	0.555
25.00	0.638	0.615	0.000	0.000	0.000	27.548	28.206	51.6	0.547
30.00	0.632	0.620	0.000	0.000	0.000	27.418	28.070	52.0	0.540
31.25	0.630	0.622	0.000	0.000	0.000	27.384	28.035	52.0	0.539
35.00	0.613	0.626	0.000	0.000	0.000	27.270	27.903	52.0	0.537
37.50	0.592	0.620	0.000	0.000	0.000	26.437	27.050	52.0	0.520
40.00	0.589	0.623	0.000	0.000	0.000	26.342	26.953	52.0	0.519
45.00	0.582	0.629	0.000	0.000	0.000	26.127	26.731	52.0	0.514
50.00	0.576	0.634	0.000	0.000	0.000	25.882	26.481	52.0	0.509
55.00	0.570	0.640	0.000	0.000	0.000	25.604	26.197	52.0	0.504
60.00	0.564	0.646	0.000	0.000	0.000	25.290	25.878	52.0	0.498
63.25	0.560	0.649	0.000	0.000	0.000	25.068	25.653	52.0	0.494
65.00	0.552	0.651	0.000	0.000	0.000	24.943	25.520	52.0	0.491
68.75	0.526	0.644	0.000	0.000	0.000	23.871	24.422	52.0	0.470
70.00	0.524	0.646	0.000	0.000	0.000	23.768	24.318	52.0	0.468
75.00	0.518	0.652	0.000	0.000	0.000	23.314	23.859	52.0	0.459
80.00	0.509	0.645	0.000	0.000	0.000	22.762	23.298	52.0	0.448
85.00	0.503	0.651	0.000	0.000	0.000	22.226	22.757	52.0	0.438
90.00	0.498	0.657	0.000	0.000	0.000	21.624	22.150	52.0	0.426
95.00	0.493	0.663	0.000	0.000	0.000	20.945	21.469	52.0	0.413
96.08	0.491	0.665	0.000	0.000	0.000	20.791	21.313	52.0	0.410
100.00	0.474	0.669	0.000	0.000	0.000	20.188	20.694	52.0	0.398
100.75	0.461	0.658	0.000	0.000	0.000	19.321	19.815	52.0	0.381
105.00	0.456	0.664	0.000	0.000	0.000	18.595	19.086	52.0	0.367
110.00	0.451	0.672	0.000	0.000	0.000	17.636	18.124	52.0	0.349
115.00	0.446	0.680	0.000	0.000	0.000	16.552	17.038	52.0	0.328
120.00	0.441	0.688	0.000	0.000	0.000	15.322	15.809	52.0	0.304
125.00	0.431	0.672	0.000	0.000	0.000	13.924	14.401	52.0	0.277
129.75	0.427	0.681	0.000	0.000	0.000	12.505	12.986	52.0	0.250
130.00	0.426	0.681	0.000	0.000	0.000	12.427	12.907	52.0	0.248
133.58	0.485	0.807	0.000	0.000	0.000	12.885	13.443	52.0	0.259
135.00	0.412	0.633	0.000	0.000	0.000	12.302	12.761	52.0	0.246
140.00	0.408	0.639	0.000	0.000	0.000	10.741	11.204	52.0	0.216
145.00	0.329	0.557	0.000	0.000	0.000	8.958	9.337	52.0	0.180
150.00	0.323	0.561	0.000	0.000	0.000	7.296	7.681	52.0	0.148
155.00	0.234	0.460	0.000	0.000	0.000	5.386	5.677	52.0	0.109
160.00	0.225	0.460	0.000	0.000	0.000	3.686	3.991	52.0	0.077
164.33	0.217	0.460	0.000	0.000	0.000	2.009	2.364	52.0	0.045
165.00	0.113	0.183	0.000	0.000	0.000	1.736	1.876	52.0	0.036
167.25	0.123	0.216	0.000	0.000	0.000	1.665	1.826	52.0	0.035
169.00	0.000	0.205	0.000	0.000	0.000	1.345	1.392	52.0	0.027

Pole : CT11417C
 Location: Plymouth - Rt. 6 Verizon Plymouth, CT
 Height : 169.0 (ft)
 Shape : 18 Sides
 Base Dia : 62.93 (in)
 Taper : 0.245310 (in/ft)

T-Mobile USA-WA
 Base Elev : 0.000 (ft)
 Top Dia : 24.85 (in)



Load Case: Twist/Sway 50 mph - No Ice

23 Iterations

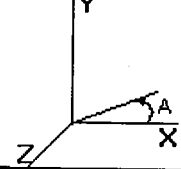
Gust Response Factor : 1.69 Effective Wind Speed : 50.00 (mph)
 Dead Load Factor : 1.00
 Wind Load Factor : 1.00

Shaft Forces

Seg Top Elev (ft)	Description	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Wind Force Z (lb)	Weight (lb)
0.00		1.00	6.400	10.81	262.24	0.650	0.00	0.000	0.000	0.00	0.00	0.0
5.00		1.00	6.400	10.81	257.13	0.650	5.00	25.968	16.879	182.57	0.00	1,254.5
10.00		1.00	6.400	10.81	252.02	0.650	5.00	25.457	16.547	178.98	0.00	1,229.6
15.00		1.00	6.400	10.81	246.91	0.650	5.00	24.946	16.215	175.38	0.00	1,204.8
20.00		1.00	6.400	10.81	241.80	0.650	5.00	24.435	15.883	171.79	0.00	1,180.0
25.00		1.00	6.400	10.81	236.69	0.650	5.00	23.924	15.551	168.20	0.00	1,155.1
30.00		1.00	6.400	10.81	231.58	0.650	5.00	23.413	15.219	164.60	0.00	1,130.3
31.25	Bot - Section 2	1.00	6.400	10.81	230.30	0.650	1.25	5.773	3.753	40.59	0.00	278.7
35.00		1.01	6.509	10.99	228.38	0.650	3.75	17.363	11.286	124.14	0.00	1,664.9
37.50	Top - Section 1	1.03	6.638	11.21	228.04	0.650	2.50	11.416	7.420	83.24	0.00	1,094.4
40.00		1.05	6.762	11.42	230.73	0.650	2.50	11.288	7.337	83.84	0.00	544.8
45.00		1.09	6.993	11.81	229.31	0.650	5.00	22.192	14.425	170.48	0.00	1,071.0
50.00		1.12	7.207	12.17	227.36	0.650	5.00	21.681	14.093	171.64	0.00	1,046.1
55.00		1.15	7.406	12.51	224.98	0.650	5.00	21.170	13.761	172.22	0.00	1,021.3
60.00		1.18	7.592	12.83	222.23	0.650	5.00	20.659	13.429	172.30	0.00	996.4
63.25	Bot - Section 3	1.20	7.707	13.02	220.26	0.650	3.25	13.154	8.550	111.37	0.00	634.4
65.00		1.21	7.768	13.12	219.15	0.650	1.75	7.103	4.617	60.61	0.00	679.8
68.75	Top - Section 2	1.23	7.893	13.34	216.66	0.650	3.75	15.010	9.757	130.15	0.00	1,436.2
70.00		1.24	7.934	13.40	219.28	0.650	1.25	4.939	3.211	43.05	0.00	238.2
75.00		1.26	8.092	13.67	215.70	0.650	5.00	19.439	12.635	172.79	0.00	937.1
80.00	Appertunance(s)	1.28	8.242	13.93	211.90	0.650	5.00	18.927	12.303	171.38	0.00	912.3
85.00		1.31	8.387	14.17	207.89	0.650	5.00	18.416	11.971	169.66	0.00	887.4
90.00		1.33	8.525	14.40	203.70	0.650	5.00	17.905	11.638	167.67	0.00	862.6
95.00		1.35	8.657	14.63	199.33	0.650	5.00	17.394	11.306	165.42	0.00	837.8
96.08	Bot - Section 4	1.35	8.685	14.67	198.37	0.650	1.08	3.701	2.406	35.31	0.00	178.2
100.00		1.37	8.785	14.84	194.81	0.650	3.92	13.427	8.727	129.57	0.00	1,281.3
100.75	Top - Section 3	1.37	8.804	14.87	194.12	0.650	0.75	2.535	1.648	24.52	0.00	241.9
105.00		1.39	8.908	15.05	193.83	0.650	4.25	14.149	9.197	138.46	0.00	681.2
110.00		1.41	9.028	15.25	189.05	0.650	5.00	16.174	10.513	160.39	0.00	778.4
115.00		1.42	9.143	15.45	184.15	0.650	5.00	15.663	10.181	157.31	0.00	753.6
120.00		1.44	9.255	15.64	179.13	0.650	5.00	15.151	9.848	154.04	0.00	728.8
125.00	Appertunance(s)	1.46	9.363	15.82	173.99	0.650	5.00	14.640	9.516	150.59	0.00	703.9
129.75	Bot - Section 5	1.47	9.464	15.99	169.02	0.650	4.75	13.435	8.733	139.67	0.00	645.7
130.00		1.48	9.469	16.00	168.76	0.650	0.25	0.707	0.460	7.36	0.00	61.7
133.58	Top - Section 4	1.49	9.543	16.12	164.94	0.650	3.58	9.998	6.499	104.81	0.00	872.6
135.00	Appertunance(s)	1.49	9.572	16.17	166.60	0.650	1.42	3.880	2.522	40.80	0.00	155.7
140.00		1.51	9.672	16.34	161.19	0.650	5.00	13.368	8.689	142.02	0.00	536.1
145.00	Appertunance(s)	1.52	9.769	16.51	155.68	0.650	5.00	12.857	8.357	137.97	0.00	515.4
150.00		1.54	9.864	16.67	150.09	0.650	5.00	12.346	8.025	133.77	0.00	494.7
155.00	Appertunance(s)	1.55	9.957	16.82	144.43	0.650	5.00	11.834	7.692	129.44	0.00	474.0
160.00		1.57	10.04	16.98	138.68	0.650	5.00	11.323	7.360	124.98	0.00	453.3
164.33	Bot - Section 6	1.58	10.12	17.11	133.64	0.650	4.33	9.400	6.110	104.55	0.00	376.1
165.00	Appertunance(s)	1.58	10.13	17.13	132.86	0.650	0.67	1.440	0.936	16.03	0.00	102.7
167.25	Top - Section 5	1.59	10.17	17.19	130.21	0.650	2.25	4.793	3.115	53.57	0.00	341.7
169.00	Appertunance(s)	1.59	10.20	17.24	130.78	0.650	1.75	3.656	2.376	40.99	0.00	117.3
				Totals:			169.00			5,378.23	0.00	32,792.1

Pole: CT11417C
 Location: Plymouth - Rt. 6 Verizon Plymouth, CT
 Height: 169.0 (ft)
 Shape: 18 Sides
 Base Dia: 62.93 (in)
 Taper: 0.245310 (in/ft)

T-Mobile USA-WA
 Base Elev: 0.000 (ft)
 Top Dia: 24.85 (in)



Load Case: Twist/Sway 50 mph - No Ice 23 Iterations

Gust Response Factor: 1.69 Effective Wind Speed: 50.00 (mph)

Dead Load Factor: 1.00

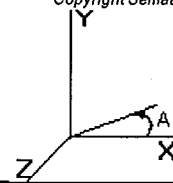
Wind Load Factor: 1.00

Discrete Appurtenance Forces

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Total CaAa (sf)	CaAa Factor	Horiz Ecc (ft)	Vert Ecc (ft)	X Angle (deg)	Wind Force X (lb)	Wind Force Z (lb)	Mom X (lb-ft)	Mom Y (lb-ft)	Mom Z (lb-ft)	Weight (lb)
80.00	4 FT Standoff	1	8.242	13.93	3.500	1.000	0.000	0.0	0.0	48.75	0.00	0.00	0.00	0.00	53.3
80.00	PD455	1	8.552	14.45	3.560	1.000	0.000	11.0	0.0	51.45	0.00	0.00	0.00	565.95	23.0
125.00	HP MW Dish, 4' Dia.	1	9.363	15.82	15.860	1.000	0.000	0.0	0.0	250.97	0.00	0.00	0.00	0.00	170.0
135.00	Low Profile Platform	1	9.572	16.17	25.550	1.000	0.000	0.0	0.0	413.30	0.00	0.00	0.00	0.00	1300.0
135.00	DB950F85T2E-M	12	9.572	16.17	52.800	1.000	0.000	0.0	0.0	854.10	0.00	0.00	0.00	0.00	126.0
145.00	Allgon 7250.03	6	9.769	16.51	17.209	0.667	0.000	0.0	0.0	284.11	0.00	0.00	0.00	0.00	96.0
145.00	13 ft Low Profile	1	9.769	16.51	15.300	1.000	0.000	0.0	0.0	252.60	0.00	0.00	0.00	0.00	1346.0
155.00	13 ft Low Profile	1	9.957	16.82	15.300	1.000	0.000	0.0	0.0	257.46	0.00	0.00	0.00	0.00	1346.0
155.00	DB980H90	9	9.957	16.82	19.690	0.667	0.000	0.0	0.0	331.33	0.00	0.00	0.00	0.00	81.0
165.00	13 ft Low Profile	1	10.13	17.13	15.300	1.000	0.000	0.0	0.0	262.10	0.00	0.00	0.00	0.00	1346.0
165.00	RR65-19-00XP	12	10.13	17.13	72.000	1.000	0.000	0.0	0.0	1233.40	0.00	0.00	0.00	0.00	276.0
169.00	4 omni mount	1	10.22	17.27	24.830	1.000	0.000	1.0	0.0	428.99	0.00	0.00	0.00	428.99	1642.0
169.00	SRL-229	1	10.40	17.58	6.450	1.000	0.000	11.8	0.0	113.41	0.00	0.00	0.00	1332.55	25.0
169.00	PD455	1	10.40	17.59	3.560	1.000	0.000	12.0	0.0	62.62	0.00	0.00	0.00	751.43	23.0
169.00	PD220	1	10.40	17.59	3.560	1.000	0.000	12.0	0.0	62.62	0.00	0.00	0.00	751.43	23.0
169.00	ACP-305	1	10.40	17.58	6.450	1.000	0.000	11.8	0.0	113.41	0.00	0.00	0.00	1332.53	25.0
										5,020.61	0.00				7,901.3

Pole: CT11417C
 Location: Plymouth - Rt. 6 Verizon Plymouth, CT
 Height: 169.0 (ft)
 Shape: 18 Sides
 Base Dia: 62.93 (in)
 Taper: 0.245310 (in/ft)

T-Mobile USA-WA
 Base Elev: 0.000 (ft)
 Top Dia: 24.85 (in)



Load Case: Twist/Sway 50 mph - No Ice

23 Iterations

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

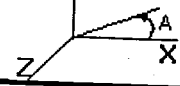
Effective Wind Speed: 50.00 (mph)

Applied Forces Summary

Seg Elev (ft)	X Coord (ft)	Z Coord (ft)	Lateral FX (-) (lb)	Axial FY (-) (lb)	Lateral FZ (lb)	Moment MX (lb-ft)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.00	0.00	0.00	182.57	1,254.47	0.00	0.00	0.00	0.00
10.00	0.00	0.00	178.98	1,229.64	0.00	0.00	0.00	0.00
15.00	0.00	0.00	175.38	1,204.80	0.00	0.00	0.00	0.00
20.00	0.00	0.00	171.79	1,179.96	0.00	0.00	0.00	0.00
25.00	0.00	0.00	168.20	1,155.12	0.00	0.00	0.00	0.00
30.00	0.00	0.00	164.60	1,130.29	0.00	0.00	0.00	0.00
31.25	0.00	0.00	40.59	278.69	0.00	0.00	0.00	0.00
35.00	0.00	0.00	124.14	1,664.91	0.00	0.00	0.00	0.00
37.50	0.00	0.00	83.24	1,094.41	0.00	0.00	0.00	0.00
40.00	0.00	0.00	83.84	544.79	0.00	0.00	0.00	0.00
45.00	0.00	0.00	170.48	1,070.96	0.00	0.00	0.00	0.00
50.00	0.00	0.00	171.64	1,046.12	0.00	0.00	0.00	0.00
55.00	0.00	0.00	172.22	1,021.29	0.00	0.00	0.00	0.00
60.00	0.00	0.00	172.30	996.45	0.00	0.00	0.00	0.00
63.25	0.00	0.00	111.37	634.37	0.00	0.00	0.00	0.00
65.00	0.00	0.00	60.61	679.79	0.00	0.00	0.00	0.00
68.75	0.00	0.00	130.15	1,436.21	0.00	0.00	0.00	0.00
70.00	0.00	0.00	43.05	238.16	0.00	0.00	0.00	0.00
75.00	0.00	0.00	172.79	937.12	0.00	0.00	0.00	0.00
80.00	0.00	0.00	271.58	988.60	0.00	0.00	0.00	565.95
85.00	0.00	0.00	169.66	887.45	0.00	0.00	0.00	0.00
90.00	0.00	0.00	167.67	862.61	0.00	0.00	0.00	0.00
95.00	0.00	0.00	165.42	837.77	0.00	0.00	0.00	0.00
96.08	0.00	0.00	35.31	178.24	0.00	0.00	0.00	0.00
100.00	0.00	0.00	129.57	1,281.28	0.00	0.00	0.00	0.00
100.75	0.00	0.00	24.52	241.87	0.00	0.00	0.00	0.00
105.00	0.00	0.00	138.46	681.21	0.00	0.00	0.00	0.00
110.00	0.00	0.00	160.39	778.45	0.00	0.00	0.00	0.00
115.00	0.00	0.00	157.31	753.61	0.00	0.00	0.00	0.00
120.00	0.00	0.00	154.04	728.77	0.00	0.00	0.00	0.00
125.00	0.00	0.00	401.56	873.93	0.00	0.00	0.00	0.00
129.75	0.00	0.00	139.67	645.73	0.00	0.00	0.00	0.00
130.00	0.00	0.00	7.36	61.75	0.00	0.00	0.00	0.00
133.58	0.00	0.00	104.81	872.56	0.00	0.00	0.00	0.00
135.00	0.00	0.00	1,308.19	1,581.66	0.00	0.00	0.00	0.00
140.00	0.00	0.00	142.02	536.12	0.00	0.00	0.00	0.00
145.00	0.00	0.00	674.68	1,957.42	0.00	0.00	0.00	0.00
150.00	0.00	0.00	133.77	494.72	0.00	0.00	0.00	0.00
155.00	0.00	0.00	718.23	1,901.02	0.00	0.00	0.00	0.00
160.00	0.00	0.00	124.98	453.33	0.00	0.00	0.00	0.00
164.33	0.00	0.00	104.55	376.14	0.00	0.00	0.00	0.00
165.00	0.00	0.00	1,511.53	1,724.69	0.00	0.00	0.00	0.00
167.25	0.00	0.00	53.57	341.69	0.00	0.00	0.00	0.00
169.00	0.00	0.00	822.03	1,855.27	0.00	0.00	0.00	4,596.92
Totals:			10,398.84	40,693.46	0.00	0.00	0.00	5,162.87

Pole: CT11417C
 Location: Plymouth - Rt. 6 Verizon Plymouth, CT
 Height: 169.0 (ft)
 Shape: 18 Sides
 Base Dia: 62.93 (in)
 Taper: 0.245310 (in/ft)

T-Mobile USA-WA
 Base Elev: 0.000 (ft)
 Top Dia: 24.85 (in)



Load Case: Twist/Sway 50 mph - No Ice

23 Iterations

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

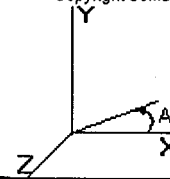
Effective Wind Speed: 50.00 (mph)

Calculated 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	10.415	40.689	0.000	0.000	0.000	1,242.212	0.000	0.000	0.000	0.000
5.00	10.265	39.426	0.000	0.000	0.000	1,190.138	-0.025	0.000	0.025	-0.047
10.00	10.116	38.188	0.000	0.000	0.000	1,138.816	-0.100	0.000	0.100	-0.095
15.00	9.970	36.975	0.000	0.000	0.000	1,088.236	-0.226	0.000	0.226	-0.143
20.00	9.826	35.787	0.000	0.000	0.000	1,038.388	-0.402	0.000	0.402	-0.192
25.00	9.683	34.624	0.000	0.000	0.000	989.261	-0.631	0.000	0.631	-0.243
30.00	9.532	33.490	0.000	0.000	0.000	940.845	-0.912	0.000	0.912	-0.293
31.25	9.505	33.207	0.000	0.000	0.000	928.930	-0.991	0.000	0.991	-0.306
35.00	9.390	31.537	0.000	0.000	0.000	893.285	-1.247	0.000	1.247	-0.346
37.50	9.314	30.439	0.000	0.000	0.000	869.812	-1.436	0.000	1.436	-0.372
40.00	9.247	29.889	0.000	0.000	0.000	846.528	-1.638	0.000	1.638	-0.399
45.00	9.094	28.811	0.000	0.000	0.000	800.296	-2.083	0.000	2.083	-0.450
50.00	8.939	27.758	0.000	0.000	0.000	754.827	-2.582	0.000	2.582	-0.501
55.00	8.781	26.730	0.000	0.000	0.000	710.135	-3.134	0.000	3.134	-0.553
60.00	8.619	25.729	0.000	0.000	0.000	666.228	-3.742	0.000	3.742	-0.606
63.25	8.512	25.092	0.000	0.000	0.000	638.218	-4.167	0.000	4.167	-0.641
65.00	8.457	24.409	0.000	0.000	0.000	623.321	-4.406	0.000	4.406	-0.660
68.75	8.320	22.970	0.000	0.000	0.000	591.609	-4.940	0.000	4.940	-0.701
70.00	8.287	22.728	0.000	0.000	0.000	581.209	-5.126	0.000	5.126	-0.714
75.00	8.122	21.786	0.000	0.000	0.000	539.773	-5.902	0.000	5.902	-0.766
80.00	7.856	20.794	0.000	0.000	0.000	498.597	-6.732	0.000	6.732	-0.817
85.00	7.691	19.902	0.000	0.000	0.000	459.319	-7.616	0.000	7.616	-0.869
90.00	7.527	19.035	0.000	0.000	0.000	420.865	-8.554	0.000	8.554	-0.921
95.00	7.358	18.196	0.000	0.000	0.000	383.231	-9.546	0.000	9.546	-0.972
96.08	7.327	18.016	0.000	0.000	0.000	375.260	-9.767	0.000	9.767	-0.983
100.00	7.182	16.734	0.000	0.000	0.000	346.561	-10.591	0.000	10.591	-1.024
100.75	7.161	16.489	0.000	0.000	0.000	341.175	-10.753	0.000	10.753	-1.032
105.00	7.022	15.805	0.000	0.000	0.000	310.741	-11.691	0.000	11.691	-1.075
110.00	6.859	15.024	0.000	0.000	0.000	275.629	-12.842	0.000	12.842	-1.121
115.00	6.698	14.269	0.000	0.000	0.000	241.334	-14.041	0.000	14.041	-1.166
120.00	6.539	13.539	0.000	0.000	0.000	207.844	-15.286	0.000	15.286	-1.210
125.00	6.127	12.669	0.000	0.000	0.000	175.151	-16.576	0.000	16.576	-1.251
129.75	5.977	12.025	0.000	0.000	0.000	146.047	-17.839	0.000	17.839	-1.287
130.00	5.971	11.962	0.000	0.000	0.000	144.553	-17.906	0.000	17.906	-1.289
133.58	5.850	11.090	0.000	0.000	0.000	123.156	-18.884	0.000	18.884	-1.314
135.00	4.510	9.537	0.000	0.000	0.000	114.869	-19.275	0.000	19.275	-1.324
140.00	4.360	9.002	0.000	0.000	0.000	92.321	-20.681	0.000	20.681	-1.359
145.00	3.642	7.060	0.000	0.000	0.000	70.520	-22.121	0.000	22.121	-1.389
150.00	3.499	6.567	0.000	0.000	0.000	52.309	-23.590	0.000	23.590	-1.415
155.00	2.735	4.684	0.000	0.000	0.000	34.813	-25.084	0.000	25.084	-1.436
160.00	2.600	4.233	0.000	0.000	0.000	21.137	-26.597	0.000	26.597	-1.451
164.33	2.486	3.860	0.000	0.000	0.000	9.871	-27.918	0.000	27.918	-1.460
165.00	0.931	2.174	0.000	0.000	0.000	8.213	-28.122	0.000	28.122	-1.461
167.25	0.869	1.834	0.000	0.000	0.000	6.118	-28.811	0.000	28.811	-1.463
169.00	0.822	0.000	0.000	0.000	0.000	4.597	-29.348	0.000	29.348	-1.464

Pole : CT11417C
 Location: Plymouth - Rt. 6 Verizon Plymouth, CT
 Height : 169.0 (ft)
 Shape : 18 Sides
 Base Dia : 62.93 (in)
 Taper : 0.245310 (in/ft)

T-Mobile USA-WA
 Base Elev : 0.000 (ft)
 Top Dia : 24.85 (in)



Load Case: Twist/Sway 50 mph - No Ice

23 Iterations

Gust Response Factor : 1.69
 Dead Load Factor : 1.00
 Wind Load Factor : 1.00
 Effective Wind Speed : 50.00 (mph)

Calculated Stresses

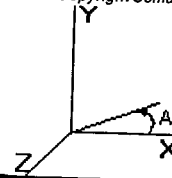
Seg Elev (ft)	Applied Stresses							Combined (ksi)	Allowable Stress (Fb) (ksi)	Stress Ratio
	Axial (Y) (ksi)	Shear (X) (ksi)	Shear (Z) (ksi)	Torsion (ksi)	Bending (X) (ksi)	Bending (Z) (ksi)				
0.00	0.546	0.282	0.000	0.000	0.000	12.936	13.491	49.1	0.275	
5.00	0.540	0.283	0.000	0.000	0.000	12.896	13.445	49.6	0.271	
10.00	0.534	0.285	0.000	0.000	0.000	12.850	13.393	50.1	0.267	
15.00	0.528	0.287	0.000	0.000	0.000	12.798	13.334	50.6	0.264	
20.00	0.522	0.289	0.000	0.000	0.000	12.738	13.269	51.1	0.260	
25.00	0.516	0.291	0.000	0.000	0.000	12.671	13.196	51.6	0.256	
30.00	0.510	0.292	0.000	0.000	0.000	12.594	13.113	52.0	0.252	
31.25	0.508	0.293	0.000	0.000	0.000	12.574	13.092	52.0	0.252	
35.00	0.491	0.295	0.000	0.000	0.000	12.509	13.010	52.0	0.250	
37.50	0.473	0.291	0.000	0.000	0.000	12.118	12.601	52.0	0.242	
40.00	0.469	0.293	0.000	0.000	0.000	12.067	12.546	52.0	0.241	
45.00	0.463	0.295	0.000	0.000	0.000	11.951	12.425	52.0	0.239	
50.00	0.457	0.297	0.000	0.000	0.000	11.823	12.290	52.0	0.236	
55.00	0.451	0.298	0.000	0.000	0.000	11.679	12.141	52.0	0.234	
60.00	0.445	0.300	0.000	0.000	0.000	11.519	11.975	52.0	0.230	
63.25	0.441	0.302	0.000	0.000	0.000	11.408	11.860	52.0	0.228	
65.00	0.433	0.302	0.000	0.000	0.000	11.345	11.790	52.0	0.227	
68.75	0.409	0.299	0.000	0.000	0.000	10.846	11.267	52.0	0.217	
70.00	0.407	0.299	0.000	0.000	0.000	10.795	11.215	52.0	0.216	
75.00	0.401	0.301	0.000	0.000	0.000	10.574	10.987	52.0	0.211	
80.00	0.393	0.299	0.000	0.000	0.000	10.316	10.722	52.0	0.206	
85.00	0.387	0.301	0.000	0.000	0.000	10.053	10.453	52.0	0.201	
90.00	0.381	0.304	0.000	0.000	0.000	9.760	10.155	52.0	0.195	
95.00	0.375	0.306	0.000	0.000	0.000	9.433	9.822	52.0	0.189	
96.08	0.374	0.306	0.000	0.000	0.000	9.359	9.747	52.0	0.188	
100.00	0.356	0.308	0.000	0.000	0.000	9.070	9.441	52.0	0.182	
100.75	0.346	0.302	0.000	0.000	0.000	8.678	9.038	52.0	0.174	
105.00	0.340	0.304	0.000	0.000	0.000	8.333	8.689	52.0	0.167	
110.00	0.334	0.307	0.000	0.000	0.000	7.881	8.232	52.0	0.158	
115.00	0.328	0.310	0.000	0.000	0.000	7.373	7.720	52.0	0.149	
120.00	0.322	0.313	0.000	0.000	0.000	6.801	7.143	52.0	0.137	
125.00	0.312	0.304	0.000	0.000	0.000	6.152	6.485	52.0	0.125	
129.75	0.306	0.307	0.000	0.000	0.000	5.501	5.831	52.0	0.112	
130.00	0.305	0.307	0.000	0.000	0.000	5.465	5.795	52.0	0.111	
133.58	0.342	0.363	0.000	0.000	0.000	5.643	6.017	52.0	0.116	
135.00	0.297	0.283	0.000	0.000	0.000	5.377	5.695	52.0	0.110	
140.00	0.291	0.284	0.000	0.000	0.000	4.670	4.986	52.0	0.096	
145.00	0.238	0.247	0.000	0.000	0.000	3.867	4.127	52.0	0.079	
150.00	0.231	0.248	0.000	0.000	0.000	3.120	3.378	52.0	0.065	
155.00	0.172	0.202	0.000	0.000	0.000	2.267	2.464	52.0	0.047	
160.00	0.163	0.201	0.000	0.000	0.000	1.509	1.708	52.0	0.033	
164.33	0.154	0.201	0.000	0.000	0.000	0.766	0.984	52.0	0.019	
165.00	0.088	0.076	0.000	0.000	0.000	0.646	0.745	52.0	0.014	
167.25	0.092	0.088	0.000	0.000	0.000	0.599	0.708	52.0	0.014	
169.00	0.000	0.085	0.000	0.000	0.000	0.466	0.489	52.0	0.009	

Pole : CT11417C
 Location: Plymouth - Rt. 6 Verizon Plymouth, CT
 Height : 169.0 (ft)
 Shape : 18 Sides
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 Taper : 0.245310 (in/ft)

T-Mobile USA-WA

Base Elev : 0.000 (ft)
 Top Dia : 24.85 (in)

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Load Case: No Ice 80 mph - No Ice 24 Iterations
 Gust Response Factor : 1.69 Effective Wind Speed : 80.00 (mph)
 Dead Load Factor : 1.00
 Wind Load Factor : 1.00

Analysis Summary

Load Case	Reactions						Combined Stress (ksi)	Max Stresses		
	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)		Allowable Stress (ksi)	Elev (ft)	Stress Ratio
No Ice	26.664	0.000	40.665	0.000	0.000	3,178.499	33.668	49.1	0.000	0.685
Ice	21.817	0.000	49.964	0.000	0.000	2,682.836	28.627	49.1	0.000	0.583
Twist/Sway	10.415	0.000	40.689	0.000	0.000	1,242.212	13.491	49.1	0.000	0.275