



STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Ten Franklin Square
New Britain, Connecticut 06051
Phone: (860) 827-2935
Fax: (860) 827-2950

April 16, 2004

Christine Farrell
T-Mobile Real Estate and Zoning
100 Filley Street
Bloomfield, CT 06002

RE: **EM-T-MOBILE-060-040331** - Omnipoint Communications, Inc. (T-Mobile) notice of intent to modify an existing telecommunications facility located at 2381 Long Hill Road, Guilford, Connecticut.

Dear Ms. Farrell:

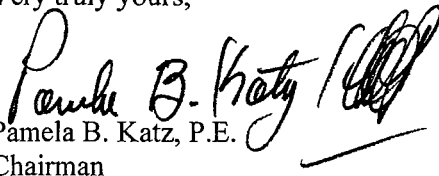
At a public meeting held on April 15, 2004, the Connecticut Siting Council (Council) acknowledged your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice dated March 30, 2004. 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 Charles E. Bishop, First Selectman, Town of Guilford
Regina Reid, Zoning Enforcement Officer, Town of Guilford
Thomas J. Regan, Esq., Brown Rudnick Berlack Israels LLP
Christopher B. Fisher, Esq., Cuddy & Feder LLP

EM-T-MOBILE-060-040331

March 30, 2004

BY HAND

Pamela B. Katz, Chairman and
Members of the Siting Council
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

RECEIVED
MAR 31 2004

RE: Notice of Exempt Modification
2381 Long Hill Road, Guilford, CT
Latitude: 41-20-48 / Longitude: 72-43-18

CONNECTICUT
SITING COUNCIL

Dear Ms. Katz and Members of the Siting Council:

Omnipoint Communications, Inc. a.k.a. T-Mobile (formerly Voicestream Wireless Corp.) ("T-Mobile") intends to co-locate antennas on the existing Sprint Sites USA ("Sprint") monopole located at 2381 Long Hill Road in Guilford, CT. Currently, the following carriers are approved to co-locate on this tower, AT&T at the 167' level and Sprint at the 177' level.

Please accept this letter as notification pursuant to Connecticut General Statutes ("C.G.S.") § 16-50j-73 for construction that constitutes an exempt modification pursuant to C.G.S. § 16-50j-72(b)(2). In accordance with C.G.S § 16-50j-73, a copy of this letter is being sent to Guilford First Selectman, Charles Bishop .

The Facility consists of an one hundred eighty (180) foot high monopole tower ("Tower") owned and operated by Sprint. T-Mobile will be at a mounting height of one hundred fifty seven (157) feet. A chain link fence surrounds the facility, sufficient ground space exists within the fenced compound as designed to accommodate T-Mobile's ground equipment.

The proposed modifications will not result in any substantial adverse environmental affect and therefore fall squarely within the activities explicitly provided for in C.G.S. § 16-50j-72(b)(2).

1. The proposed modification will not increase the overall height of the existing tower. T-Mobile's antennas will be mounted with their centerline at the 157' level on the 180' tower. (See exhibit 1, CD's)

2. The proposed installation of six (6) antennas and three (3) equipment cabinets will not require an extension of the site boundaries. (See exhibit 1, CD's)

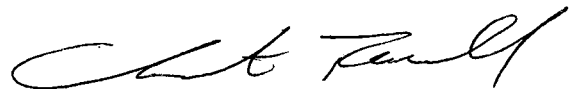
3. The proposed antenna modification will not increase noise levels at the facility by six decibels or more.

4. The operation of the antennas will not increase radio frequency (RF) power density levels at the facility at or above the Federal Communications Commission (FCC) adopted safety standard. The worst-case RF density calculations for a point at the base of the tower for T-Mobile antennas would be 1.5289% of the FCC standard. Pursuant to RF Exposure Analysis prepared by Sprint and submitted to the Siting Council the cumulative worst-case RF power density calculation for all current carriers and T-Mobile would be 10.0790% of the applicable FCC standard. A copy of the report is attached. (See exhibit 2, Power Density Calculations)

Also attached, please find a copy of Semaan Engineering Solutions certification, verifying that the tower can support the six (6) proposed T-Mobile antennas. (See exhibit 3, Structural Analysis)

For the foregoing reasons, T-Mobile respectfully submits that the proposed antenna installation at the Costello Road tower constitutes an exempt modification under C.G.S. § 16-50j-72(b)(2).

Respectfully submitted,



Christine Farrell
Real Estate and Zoning
T-Mobile
100 Filley St.
Bloomfield, CT 06002
(860) 794-6427

cc: First Selectman, Charles Bishop

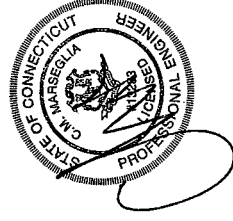
EXHIBIT 1

SPRINT GUILFORD MP

2381 LONG HILL ROAD
GUILFORD, CT 06437

SITE NUMBER: CT11-393-B

SITE TYPE: CO-LOCATE



DAWPOINT COMMUNICATIONS, INC.
A WHOLLY-OWNED SUBSIDIARY
OF T-MOBILE USA, INC.
1100 BLOOMFIELD AVENUE
BLOOMFIELD, CT 06602
OFFICE: (860)-892-7100
FAX: (860)-892-7159

Michael Paz Moran, Inc.
Professional Engineer
142 Temple Street
Bloomfield, CT 06602
TEL: (860) 798-1289 FAX: (860) 381-8391

APPROVALS
LANDLORD _____
LEASING _____
R.F. _____
ZONING _____
CONSTRUCTION _____
A/E _____

PROJECT NO: 02125.66
DRAWN BY: MZE/JJT
CHECKED BY: CHM
SUBMITTALS
D 2/28/04 CONSTRUCTION

THIS DOCUMENT IS THE CREATION, DESIGN, PROPERTY AND COPYRIGHT WORK OF MICHAEL PAZ MORAN, INC. NO REPRODUCTION OR USE WITHOUT EXPRESS WRITTEN PERMISSION IS PERMITTED. NO PART OF THIS DOCUMENT IS TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT PERMISSION IN WRITING FROM MICHAEL PAZ MORAN, INC. FUNCTIONS IS SPECIFICALLY ALLOWED.

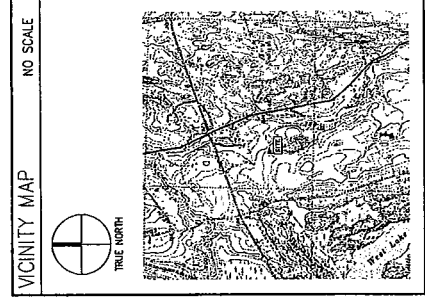
CT11-393-B
SPRINT GUILFORD MP
2381 LONG HILL ROAD
GUILFORD, CT 06437

SHEET NO. _____
TITLE SHEET

SHEET NAME
T-1

PROJECT SUMMARY	
SITE NUMBER:	CT11-393-B
SITE NAME:	SPRINT GUILFORD MP
SITE ADDRESS:	2381 LONG HILL ROAD GUILFORD, CT 06437
ASSESSOR'S PARCEL NO.:	M48 #101, LOT #2B
SITE TYPE:	CO-LOCATE
STRUCTURE OWNER:	SPRINT 353 EAST GREENTH AVENUE RAMSEY, NJ 07146
PROPERTY OWNER:	SPRINT 353 EAST GREENTH AVENUE RAMSEY, NJ 07146
APPLICANT:	DAWPOINT COMMUNICATIONS, INC.
PROJECT OWNER:	BLOOMFIELD, CT 06602

SHEET NO.	DESCRIPTION	REV. NO.
T-1	TITLE SHEET	0
A-1	PLANS, ELEVATION, DETAILS, AND NOTES	0
S-1	STRUCT. NOTES, PLANS, SECTIONS & DETAILS	0
E-1	ELEC. & GRADING NOTES, RISERS & DETAILS	0



GENERAL NOTES	
1.	THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS, APPROVALS, ORDINANCES, AND LOCAL AND STATE REGULATIONS PRIOR TO STARTING WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, APPROVALS, ORDINANCES, AND LOCAL AND STATE REGULATIONS PRIOR TO STARTING WORK.
2.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, APPROVALS, ORDINANCES, AND LOCAL AND STATE REGULATIONS PRIOR TO STARTING WORK.
3.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, APPROVALS, ORDINANCES, AND LOCAL AND STATE REGULATIONS PRIOR TO STARTING WORK.
4.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, APPROVALS, ORDINANCES, AND LOCAL AND STATE REGULATIONS PRIOR TO STARTING WORK.
5.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, APPROVALS, ORDINANCES, AND LOCAL AND STATE REGULATIONS PRIOR TO STARTING WORK.
6.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, APPROVALS, ORDINANCES, AND LOCAL AND STATE REGULATIONS PRIOR TO STARTING WORK.
7.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, APPROVALS, ORDINANCES, AND LOCAL AND STATE REGULATIONS PRIOR TO STARTING WORK.
8.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, APPROVALS, ORDINANCES, AND LOCAL AND STATE REGULATIONS PRIOR TO STARTING WORK.
9.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, APPROVALS, ORDINANCES, AND LOCAL AND STATE REGULATIONS PRIOR TO STARTING WORK.
10.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, APPROVALS, ORDINANCES, AND LOCAL AND STATE REGULATIONS PRIOR TO STARTING WORK.
11.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, APPROVALS, ORDINANCES, AND LOCAL AND STATE REGULATIONS PRIOR TO STARTING WORK.
12.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, APPROVALS, ORDINANCES, AND LOCAL AND STATE REGULATIONS PRIOR TO STARTING WORK.
13.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, APPROVALS, ORDINANCES, AND LOCAL AND STATE REGULATIONS PRIOR TO STARTING WORK.
14.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, APPROVALS, ORDINANCES, AND LOCAL AND STATE REGULATIONS PRIOR TO STARTING WORK.
15.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, APPROVALS, ORDINANCES, AND LOCAL AND STATE REGULATIONS PRIOR TO STARTING WORK.
16.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, APPROVALS, ORDINANCES, AND LOCAL AND STATE REGULATIONS PRIOR TO STARTING WORK.
17.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, APPROVALS, ORDINANCES, AND LOCAL AND STATE REGULATIONS PRIOR TO STARTING WORK.

DO NOT SCALE DRAWINGS
CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL BE RESPONSIBLE FOR ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

COMPOINT COMMUNICATIONS, INC.
A WHOLLY-OWNED SUBSIDIARY
OF T-MOBILE USA, INC.
100 FULLEY STREET
BOSTON, MASSACHUSETTS
OFFICE: (860)-682-7100
FAC: (860)-682-7159

142 Temple Street
New Haven, CT 06510
TEL: (203) 786-1067 / Fax: (203) 786-4821

Metcalf and Eppes, Inc.
142 Temple Street
New Haven, CT 06510
TEL: (203) 786-1067 / Fax: (203) 786-4821

APPROVALS

LANDLORD _____

LEASING _____

R.F. _____

ZONING _____

A/E _____

PROJECT NO. 02125.05B

DRAWN BY: A/E/J/AT

CHECKED BY: _____

SUBMITTALS

DATE: 01/27/98

THIS DOCUMENT IS THE PROPERTY OF METCALF AND EPPES, INC. AND IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREIN. IT IS TO BE RETURNED TO METCALF AND EPPES, INC. UPON COMPLETION OF THE PROJECT AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF METCALF AND EPPES, INC.

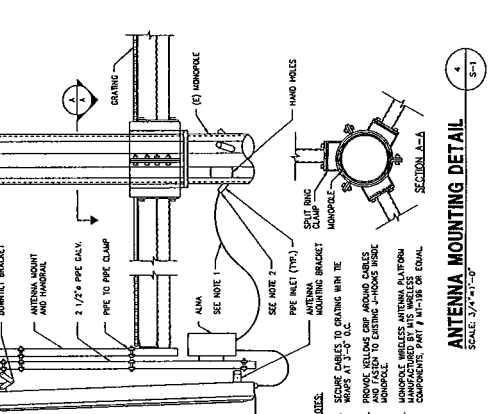
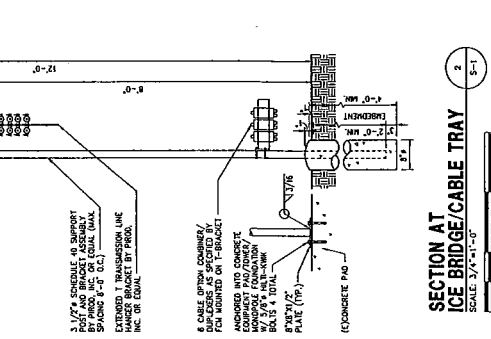
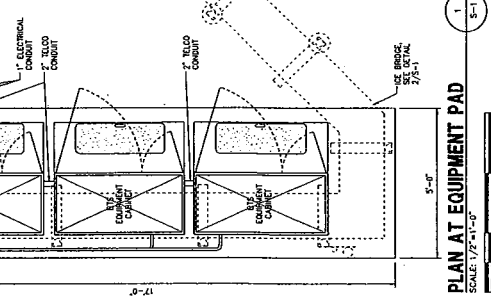
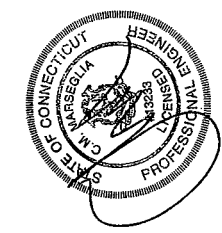
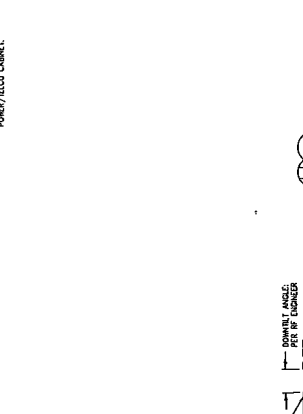
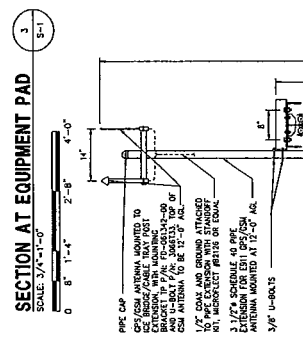
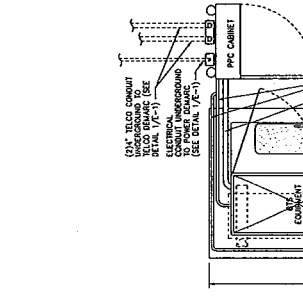
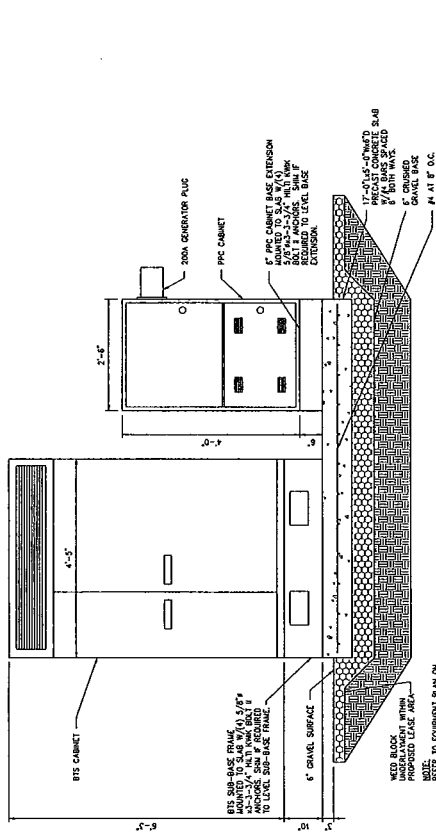
0111-393-B
SPRINT GUILFORD MP
2381 LONG HILL ROAD
GUILFORD, CT 06437

STRUCTURAL NOTES, PLAN
SECTIONS AND DETAILS

PAGE NUMBER
S-1

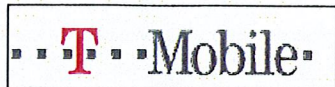
STRUCTURAL NOTES

1. SPRINT WIRELESS SYSTEMS, INC. (SWS) IS PROVIDING THE DESIGN, SUPPLIERS, AND INSTALLATION OF THE STRUCTURAL STEEL FOR BUILDINGS.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO FABRICATION AND ERECTION OF ANY MATERIAL. ANY UNUSUAL CONDITIONS SHALL BE REPORTED TO THE ATTENTION OF THE CONSTRUCTION MANAGER.
3. DESIGN AND CONSTRUCTION OF STRUCTURAL STEEL SHALL CONFORM TO THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS.
4. STRUCTURAL AND MISCELLANEOUS STEEL SHALL CONFORM TO ASTM A36 STRUCTURAL STEEL UNLESS OTHERWISE NOTED.
5. STEEL SHALL CONFORM TO THE FOLLOWING: ASTM A572 GRADE 50, 36 BARS OR 36 BARS STEEL CONNECTIONS.
6. STRUCTURAL CONNECTION BOLTS SHALL BE HIGH STRENGTH BOLTS (BEARING TYPE) AND CONFORM TO ASTM A325. ALL BOLTS SHALL BE 3/4" DIA. UNLESS OTHERWISE NOTED.
7. ALL STEEL MATERIALS SHALL BE GALVANNEAL STEEL (GALVALUME). IN ACCORDANCE WITH ASTM A103 70MG (NO-DIP GALVANIZED) COATING ON IRON AND STEEL PRODUCTS, UNLESS OTHERWISE NOTED.
8. ALL BOLTS, ANCHORS AND MISCELLANEOUS HARDWARE SHALL BE GALVANNEAL IN ACCORDANCE WITH ASTM A153 70MG. ZINC COATING (HOT-DIP) ON IRON AND STEEL HARDWARE, UNLESS OTHERWISE NOTED.
9. FIELD WELDS, DRILL HOLES, SAW CUTS AND ALL DAMAGED GALVANNEAL SURFACES SHALL BE REPAIRED WITH AN ORGANIC ZINC REPAIR PAINT CONFORMING WITH REQUIREMENTS OF ASTM A796. GALVANNEAL REPAIR PAINT SHALL BE APPLIED TO ALL GALVANNEAL SURFACES TO BE REPAIRED. REPAIR PAINT SHALL BE APPLIED TO ALL GALVANNEAL SURFACES TO BE REPAIRED. REPAIR PAINT SHALL BE APPLIED TO ALL GALVANNEAL SURFACES TO BE REPAIRED. REPAIR PAINT SHALL BE APPLIED TO ALL GALVANNEAL SURFACES TO BE REPAIRED.
10. CONTRACTOR SHALL COMPLY WITH ALL CODES FOR PROCEDURES, APPEARANCE AND QUALITY OF WELDS AND CONNECTIONS. ALL WELDS SHALL BE WELDED TO THE FULL PENETRATION. ALL WELDS SHALL BE WELDED TO THE FULL PENETRATION. ALL WELDS SHALL BE WELDED TO THE FULL PENETRATION. ALL WELDS SHALL BE WELDED TO THE FULL PENETRATION.
11. INCORRECTLY FABRICATED, DAMAGED OR OTHERWISE WRITING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE CONSTRUCTION MANAGER PRIOR TO REMOVAL OR CORRECTIVE ACTION. ANY SUCH ACTION SHALL REQUIRE CONSTRUCTION MANAGER APPROVAL.
12. UNRESTRICTED SHALL BE COMBUSTIBLE STEEL CHANNEL, STEEL FRAMING IS MANUFACTURED BY UNRESTRICTED CORP. WELDE HOT-DIP GALVANIZED AFTER FABRICATION. 1/2" x 7/8" x 5/8" IRON, UNLESS OTHERWISE NOTED, AND SHALL BE GALVANNEAL.
13. EXPANDER BOLTS SHALL CONFORM TO FEDERAL SPECIFICATION FF-S-322, GROUP II, TYPE 4, CLASS 1, IN THE SIZE AND LENGTH REQUIRED. EXPANDER BOLTS SHALL BE GALVANNEAL. EXPANDER BOLTS SHALL BE GALVANNEAL. EXPANDER BOLTS SHALL BE GALVANNEAL. EXPANDER BOLTS SHALL BE GALVANNEAL.
14. EXPANSION BOLTS SHALL CONFORM TO FEDERAL SPECIFICATION FF-S-322, GROUP II, TYPE 4, CLASS 1, IN THE SIZE AND LENGTH REQUIRED. EXPANSION BOLTS SHALL BE GALVANNEAL. EXPANSION BOLTS SHALL BE GALVANNEAL. EXPANSION BOLTS SHALL BE GALVANNEAL. EXPANSION BOLTS SHALL BE GALVANNEAL.
15. CONCRETE SHALL BE PLACED AGAINST UNRESTRICTED STEEL.
16. CONCRETE SHALL BE PLACED AGAINST UNRESTRICTED STEEL.
17. ALL CAST-IN PLACE CONCRETE SHALL BE MIXED AND PLACED IN ACCORDANCE WITH THE REQUIREMENTS OF ACI 308 AND ACI 318.
18. THE FOLLOWING MINIMUM CONCRETE COVER OVER REINFORCING STEEL SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE:
 a. REINFORCING STEEL: 3 INCHES
 b. PRECAST CONCRETE: 2 INCHES
 c. CAST-IN PLACE CONCRETE: 2 INCHES
 d. CAST-IN PLACE CONCRETE: 2 INCHES
19. ALL EXPOSED COVERS SHALL BE PROVIDED WITH A 3/4" x 1/2" x 1/4" CHAMFER UNLESS NOTED OTHERWISE.
20. LUMBER SHALL CONFORM WITH THE REQUIREMENTS OF THE AMERICAN INSTITUTE OF WOOD CONSTRUCTION AND SHALL BE PRESSURE TREATED AND SHALL BE STRUCTURAL GRADE NO. 2 OR BETTER.



1. SECURE CABLES TO CHAIRING WITH THE ANCHORS AT 3'-0" O.C.
2. SECURE CABLES TO CHAIRING WITH THE ANCHORS AT 3'-0" O.C.
3. MONOPOLE WIRELESS ANTENNA SYSTEM COMPONENTS, PART # W-136 OR EQUIV.

EXHIBIT 2



T-Mobile USA Inc.
100 Filley St, Bloomfield, CT 06002-1853
Phone: (860) 692-7100
Fax: (860) 692-7159

Technical Memo

To: Christine Farrell
From: Sumit Nahar - Radio Frequency Engineer
cc: Jason Overbey
Subject: Power Density Report for CT11393B
Date: March 30, 2004

1. Introduction:

This report is the result of an Electromagnetic Field Intensities (EMF - Power Densities) study for the T-Mobile PCS antenna installation on a Monopole at 2381 Long Hill Rd, Guilford, CT. This study incorporates the most conservative consideration for determining the practical combined worst case power density levels that would be theoretically encountered from locations surrounding the transmitting location.

2. Discussion:

The following assumptions were used in the calculations:

- 1) The emissions from T-Mobile transmitters are in the 1935-1945 MHz frequency band.
- 2) The antenna array consists of three sectors, with 3 antennas per sector.
- 3) The model number for each antenna is EMS RR90-17-02DP.
- 4) The antenna center line height is 157 ft.
- 5) The maximum transmit power from any sector is 1588.99 Watts Effective Radiated Power (EIRP) assuming 8 channels per sector.
- 6) All the antennas are simultaneously transmitting and receiving, 24 hours a day.
- 7) Power levels emitting from the antennas are increased by a factor of 2.56 to account for possible in-phase reflections from the surrounding environment. This is rarely the case, and if so, is never continuous.
- 8) The average ground level of the studied area does not change significantly with respect to the transmitting location

Equations given in "FCC OET Bulletin 65, Edition 97-01" were then used with the above information to perform the calculations.

3. Conclusion:

Based on the above worst case assumptions, the power density calculation from the T-Mobile PCS antenna installation on a Monopole at 2381 Long Hill Rd, Guilford, CT, is 0.01529 mW/cm². This value represents 1.529% of the Maximum Permissible Emission (MPE) standard of 1 milliwatt per square centimeter (mW/cm²) set forth in the FCC/ANSI/IEEE C95.1-1991. Furthermore, the proposed antenna location for T-Mobile will not interfere with existing public safety communications, AM or FM radio broadcasts, TV, Police Communications, HAM Radio communications or any other signals in the area.

The combined Power Density from other carriers is 8.5501%. The combined Power Density for the site is 10.079% of the M.P.E. standard.

New England Market



Connecticut

Worst Case Power Density

Site:	CT11393B
Site Address:	2381 Long Hill Rd
Town:	Guilford
Tower Height:	180 ft.
Tower Style:	Monopole
Base Station TX output	20 W
Number of channels	8
Antenna Model	EMS RR90-17-02DP
Cable Size	1 5/8 in.
Cable Length	175 ft.
Antenna Height	157.0 ft.
Ground Reflection	1.6
Frequency	1935.0 MHz
Jumper & Connector loss	4.50 dB
Antenna Gain	16.5 dBi
Cable Loss per foot	0.0116 dB
Total Cable Loss	2.0300 dB
Total Attenuation	6.5300 dB
Total EIRP per Channel	52.98 dBm
(In Watts)	198.62 W
Total EIRP per Sector	62.01 dBm
(In Watts)	1588.99 W
nsg	9.9700
Power Density (S) =	0.015289 mW/cm ²
T-Mobile Worst Case % MPE =	1.5289%
Equation Used :	$S = \frac{(1000)(grf)^2 (Power) * 10^{(nsg/10)}}{4\pi (R)^2}$
	Office of Engineering and Technology (OET) Bulletin 65, Edition 97-01, August 1997

Co-Location Total	
Carrier	% of Standard
Verizon	
Cingular	
Sprint PCS	4.8501 %
AT&T Wireless	3.7000 %
Nextel	
Total Excluding T-Mobile	8.5501 %
T-Mobile	1.5289
Total % MPE for Site	10.0790%

EXHIBIT 3

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

SEMAAN ENGINEERING SOLUTIONS

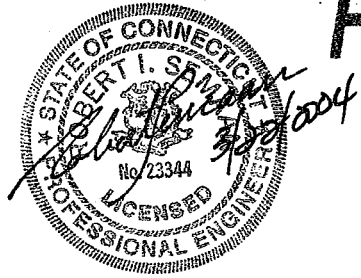
**176 ft EEI Monopole
Structural Analysis**

CT11393-B

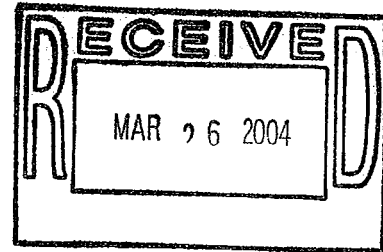
**Prepared for:
Sprint Sites USA
1 International Blvd
Mahwah, NJ 07645**

**Site: CT33XC535
T-Mobile
Guilford, CT**

APPROVED



March 18, 2004



Ms. Adean Hepburn
Sprint Sites USA
1 International Blvd
Mahwah, NJ 07645

Re: Site Number CT33XC535 – Guilford, CT.

Dear Ms. Adean Hepburn:

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 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 176 ft EEI Monopole.

Refer to EEI job #11561 dated July 7, 2003 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 and local building codes for a basic wind speed of 85 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
177.0	12	DB980H90 Mounted On a EEI 12' Low Profile platform	(12) 1-5/8	Sprint
167.0	6	Allgon 7250 Mounted On a Low Profile Platform	(12) 1-5/8	AT&T
157.0	6	DR65-19-00DPQ Mounted On a Low Profile Platform	(12) 1-5/8	T-Mobile

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: 65.1%.

Foundation:

Pole Reactions	Original Design Reactions	Current Analysis Reactions	% Of Design
Moment (ft-kips)	3,135.30	2,351.23	75.0
Shear (kips)	24.73	20.31	82.1

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 85 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

Copyright Semaan Engineering Solutions, Inc

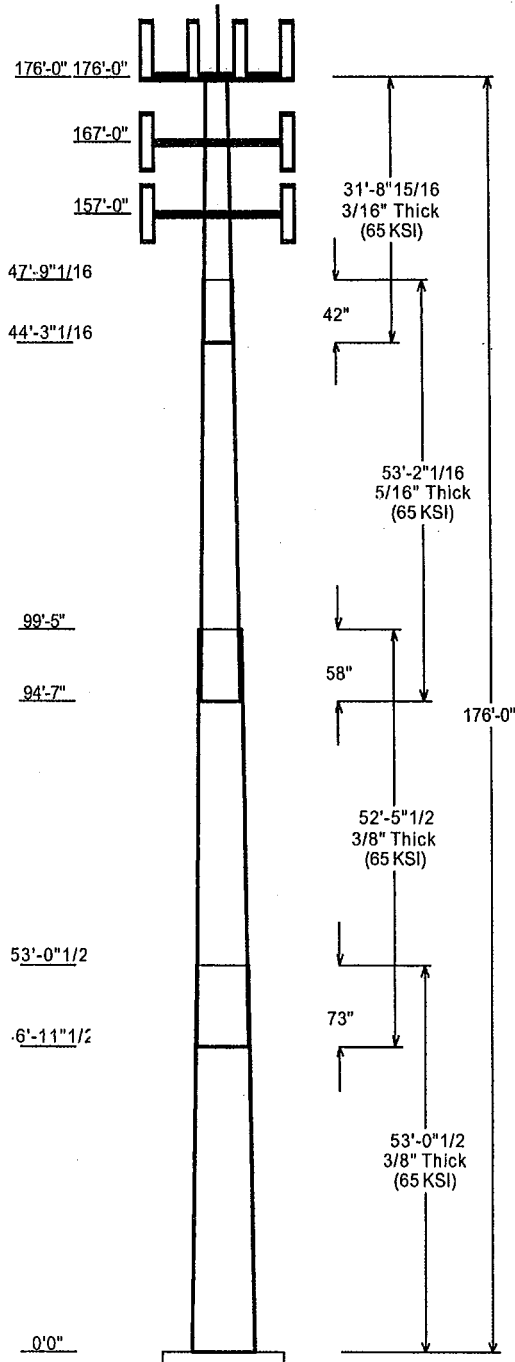
Job Information	
Pole :	CT33XC535
Description :	
Client :	Sprint Sites USA - NJ
Location :	Guilford, CT
Type :	18 Sides Base Elev (ft): 1.50
Height (ft)	176.00 Taper: 0.223010 (in/ft)

Sections Properties							
Shaft Section	Length (ft)	Diameter (in)		Thick Joint (in)	Type	Overlap Length (in)	Steel Taper Grade (ksi)
		Top	Bottom				
1	53.040	42.17	54.00	0.375		0.000	0.223010 65
2	52.460	32.57	44.27	0.375	Slip Joint	73.000	0.223010 65
3	53.170	22.42	34.28	0.313	Slip Joint	58.000	0.223010 65
4	31.747	16.50	23.58	0.188	Slip Joint	42.000	0.223010 65

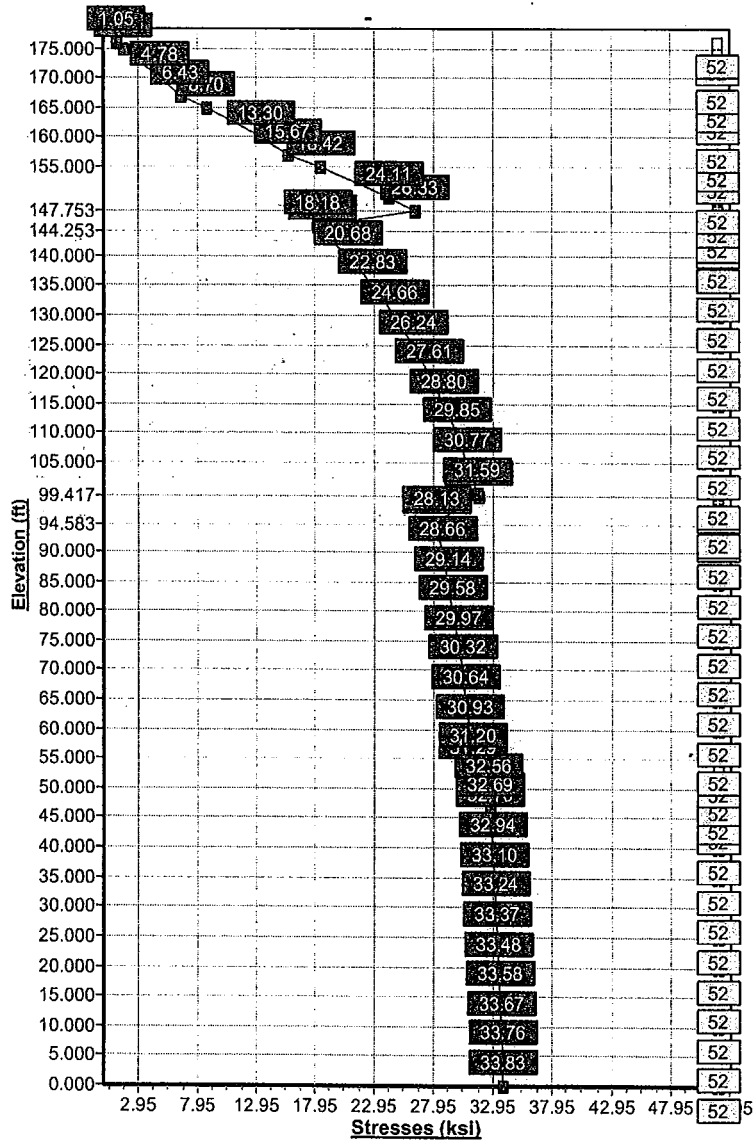
Discrete Appurtenance					
Attach Elev (ft)	Force Elev (ft)	Type	Qty	Description	
176.000	179.000	Lightning	1	Lightning Rod	
176.000	177.000	Panel	12	DB980H90	
176.000	177.000	Platform	1	EEI 12' Low Profile platform	
167.000	167.000	Platform	1	Low Profile Platform	
167.000	167.000	Panel	6	Allgon 7250	
157.000	157.000	Platform	1	Low Profile Platform	
157.000	157.000	Panel	6	DR65-19-00DPQ	

Load Cases / Deflections				
Load Case	Attach Elev (ft)	Translation (in)	Rotation (deg)	
No Ice	No Ice Wind Speed = 85.00 mph w/ No Ice			
	176.000	109.25	-5.896	
	167.000	98.21	-5.816	
Ice	Ice Wind Speed = 73.61 mph w/ Ice 0.50 in Thick			
	157.000	86.27	-5.569	
	176.000	92.39	-5.048	
	167.000	82.94	-4.974	
	157.000	72.74	-4.751	

Reactions			
Load Case	Moment (Kip-ft)	Shear (Kips)	Axial (Kips)
No Ice	2,351.232	20.309	-28.887
Ice	1,943.392	16.231	-35.403



Load Case : No Ice



Pole : CT33XC535
 Location: Guilford, CT
 Height : 176.0 (ft)
 Shape : 18 Sides
 Base Dia : 54.00 (in)
 Taper : 0.223010 (in/ft)

Sprint Sites USA - NJ

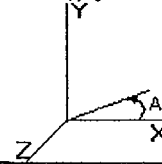
Base Elev : 1.500 (ft)

Top Dia : 16.50 (in)

Copyright Semaan Engineering Solutions, Inc

3/18/2004 4:52:50 PM

Page: 1



Shaft Section Properties

Sect Num	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Slip Joint Len (in)	Weight (lb)	Bottom				Top				Taper (in/ft)														
							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										
1	53.040	0.3750	65		0.00	10,249	54.00	0.000	63.82	23188.8	23.98	144.0	42.17	53.04	49.75	10979.9	18.42	112.46	0.22301										
2	52.460	0.3750	65	Slip Joint	73.00	8,085	44.27	46.95	52.25	12725.2	19.41	118.0	32.57	99.41	38.33	5022.4	13.91	86.88	0.22301										
3	53.170	0.3125	65	Slip Joint	58.00	5,032	34.28	94.58	33.69	4912.0	17.93	109.7	22.42	147.7	21.93	1354.8	11.24	71.76	0.22301										
4	31.747	0.1875	65	Slip Joint	42.00	1,276	23.58	144.2	13.92	962.5	20.76	125.7	16.50	176.0	9.71	326.4	14.11	88.00	0.22301										
						Shaft Weight	24,642																						

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)
176.0	Liahtnina Rod	1	75.00	1.000	1.00	100.00	2.000	1.00	0.000	0.00	3.000
176.0	DB980H90	12	9.00	3.280	0.67	28.00	3.850	0.67	0.000	0.00	1.000
176.0	EEL 12' Low Profile platform	1	1200.00	15.000	1.00	1650.00	18.400	1.00	0.000	0.00	1.000
167.0	Low Profile Platform	1	1300.00	25.550	1.00	2100.00	27.320	1.00	0.000	0.00	0.000
167.0	Allgon 7250	6	16.00	4.300	0.67	36.00	5.000	0.67	0.000	0.00	0.000
157.0	Low Profile Platform	1	1300.00	25.550	1.00	2100.00	27.320	1.00	0.000	0.00	0.000
157.0	DR65-19-00DPQ	6	32.00	8.400	0.67	74.00	9.230	0.67	0.000	0.00	0.000
Totals		28	4271.00			6946.00			Number of Loadings : 7		

Pole : CT33XC535
 Location: Guilford, CT
 Height : 176.0 (ft)
 Shape : 18 Sides
 Base Dia : 54.00 (in)
 Taper : 0.223010 (in/ft)

Sprint Sites USA - NJ

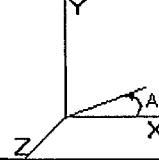
Base Elev : 1.500 (ft)

Top Dia : 16.50 (in)

Copyright Semaan Engineering Solutions, Inc

3/18/2004 4:52:50 PM

Page: 2



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	54.000	63.825	23,188.8	23.98	144.00	65	52	0.0
5.00		0.3750	52.885	62.498	21,772.1	23.46	141.03	65	52	1,074.6
10.00		0.3750	51.770	61.171	20,414.4	22.93	138.05	65	52	1,052.0
15.00		0.3750	50.655	59.843	19,114.3	22.41	135.08	65	52	1,029.5
20.00		0.3750	49.540	58.516	17,870.6	21.88	132.11	65	52	1,006.9
25.00		0.3750	48.425	57.189	16,682.0	21.36	129.13	65	52	984.3
30.00		0.3750	47.310	55.862	15,547.4	20.83	126.16	65	52	961.7
35.00		0.3750	46.195	54.535	14,465.4	20.31	123.19	65	52	939.1
40.00		0.3750	45.080	53.208	13,434.8	19.79	120.21	65	52	916.6
45.00		0.3750	43.965	51.881	12,454.4	19.26	117.24	65	52	894.0
46.96	Bot - Section 2	0.3750	43.528	51.361	12,084.1	19.06	116.08	65	52	343.7
50.00		0.3750	42.849	50.553	11,522.9	18.74	114.27	65	52	1,064.7
53.04	Top - Section 1	0.3750	42.922	50.639	11,581.6	18.77	114.46	65	52	1,046.7
55.00		0.3750	42.484	50.119	11,228.3	18.57	113.29	65	52	336.0
60.00		0.3750	41.369	48.792	10,359.7	18.04	110.32	65	52	841.4
65.00		0.3750	40.254	47.465	9,537.2	17.52	107.34	65	52	818.8
70.00		0.3750	39.139	46.138	8,759.3	16.99	104.37	65	52	796.3
75.00		0.3750	38.024	44.810	8,025.0	16.47	101.40	65	52	773.7
80.00		0.3750	36.909	43.483	7,332.9	15.94	98.42	65	52	751.1
85.00		0.3750	35.794	42.156	6,681.7	15.42	95.45	65	52	728.5
90.00		0.3750	34.679	40.829	6,070.3	14.90	92.48	65	52	705.9
94.58	Bot - Section 3	0.3750	33.657	39.612	5,543.7	14.42	89.75	65	52	627.3
95.00		0.3750	33.564	39.502	5,497.4	14.37	89.50	65	52	103.8
99.42	Top - Section 2	0.3125	33.204	32.623	4,459.1	17.32	106.25	65	52	1,082.5
100.00		0.3125	33.074	32.494	4,406.4	17.25	105.84	65	52	64.6
105.00		0.3125	31.959	31.388	3,971.6	16.62	102.27	65	52	543.4
110.00		0.3125	30.844	30.282	3,566.4	15.99	98.70	65	52	524.6
115.00		0.3125	29.729	29.176	3,189.8	15.36	95.13	65	52	505.8
120.00		0.3125	28.614	28.070	2,840.6	14.73	91.56	65	52	487.0
125.00		0.3125	27.499	26.964	2,517.9	14.11	88.00	65	52	468.2
130.00		0.3125	26.384	25.858	2,220.6	13.48	84.43	65	52	449.4
135.00		0.3125	25.269	24.752	1,947.7	12.85	80.86	65	52	430.5
140.00		0.3125	24.154	23.647	1,698.1	12.22	77.29	65	52	411.7
144.25	Bot - Section 4	0.3125	23.205	22.706	1,503.4	11.68	74.26	65	52	335.4
145.00		0.3125	23.039	22.541	1,470.8	11.59	73.72	65	52	92.7
147.75	Top - Section 3	0.1875	22.800	13.457	869.3	20.03	121.60	65	52	336.1
150.00		0.1875	22.298	13.158	812.8	19.56	118.93	65	52	101.7
155.00		0.1875	21.183	12.495	695.9	18.51	112.98	65	52	218.2
157.00		0.1875	20.737	12.229	652.5	18.09	110.60	65	52	84.1
160.00		0.1875	20.068	11.831	590.8	17.46	107.03	65	52	122.8
165.00		0.1875	18.953	11.168	496.9	16.41	101.08	65	52	195.6
167.00		0.1875	18.507	10.902	462.3	15.99	98.71	65	52	75.1
170.00		0.1875	17.838	10.504	413.5	15.36	95.14	65	52	109.3
175.00		0.1875	16.723	9.840	340.0	14.32	89.19	65	52	173.1
176.00		0.1875	16.500	9.708	326.4	14.11	88.00	65	52	33.3

24,642.0

Pole : CT33XC535
 Location: Guilford, CT
 Height : 176.0 (ft)
 Shape : 18 Sides
 Base Dia : 54.00 (in)
 Taper : 0.223010 (in/ft)

Sprint Sites USA - NJ
 Base Elev : 1.500 (ft)
 Top Dia : 16.50 (in)

Copyright Semaan Engineering Solutions, Inc
 3/18/2004 4:52:50 PM
 Page: 3



Load Case: No Ice 85 mph - No Ice 28 Iterations
Gust Response Factor: 1.69 **Effective Wind Speed:** 85.00 (mph)
Dead Load Factor: 1.00 **Note:** Pole Base Elevation is Added for Kz Calculation
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	18.49	31.25	382.50	0.650	0.00	0.000	0.000	0.00	0.00	0.0
5.00		1.00	18.49	31.25	374.60	0.650	5.00	22.268	14.474	452.43	0.00	1,074.6
10.00		1.00	18.49	31.25	366.70	0.650	5.00	21.803	14.172	442.99	0.00	1,052.0
15.00		1.00	18.49	31.25	358.81	0.650	5.00	21.338	13.870	433.55	0.00	1,029.5
20.00		1.00	18.49	31.25	350.91	0.650	5.00	20.874	13.568	424.11	0.00	1,006.9
25.00		1.00	18.49	31.25	343.01	0.650	5.00	20.409	13.266	414.67	0.00	984.3
30.00		1.00	18.49	31.25	335.11	0.650	5.00	19.945	12.964	405.23	0.00	961.7
35.00		1.02	19.03	32.17	331.96	0.650	5.00	19.480	12.662	407.36	0.00	939.1
40.00		1.06	19.74	33.37	329.94	0.650	5.00	19.015	12.360	412.50	0.00	916.6
45.00		1.10	20.40	34.47	327.05	0.650	5.00	18.551	12.058	415.72	0.00	894.0
46.96	Bot - Section 2	1.11	20.64	34.88	325.72	0.650	1.96	7.133	4.636	161.73	0.00	343.7
50.00		1.13	21.00	35.49	323.44	0.650	3.04	11.144	7.243	257.12	0.00	1,064.7
53.04	Top - Section 1	1.15	21.35	36.08	320.94	0.650	3.04	10.959	7.123	257.03	0.00	1,046.7
55.00		1.16	21.56	36.44	324.96	0.650	1.96	6.975	4.534	165.26	0.00	336.0
60.00		1.19	22.09	37.34	320.29	0.650	5.00	17.470	11.355	424.04	0.00	841.4
65.00		1.22	22.59	38.18	315.15	0.650	5.00	17.005	11.053	422.08	0.00	818.8
70.00		1.24	23.06	38.98	309.61	0.650	5.00	16.540	10.751	419.14	0.00	796.3
75.00		1.27	23.51	39.74	303.71	0.650	5.00	16.076	10.449	415.31	0.00	773.7
80.00		1.29	23.94	40.47	297.48	0.650	5.00	15.611	10.147	410.67	0.00	751.1
85.00		1.31	24.35	41.16	290.96	0.650	5.00	15.147	9.845	405.29	0.00	728.5
90.00		1.33	24.75	41.83	284.17	0.650	5.00	14.682	9.543	399.21	0.00	705.9
94.58	Bot - Section 3	1.35	25.10	42.42	277.73	0.650	4.58	13.050	8.483	359.83	0.00	627.3
95.00		1.35	25.13	42.47	277.13	0.650	0.42	1.189	0.773	32.83	0.00	103.8
99.42	Top - Section 2	1.37	25.45	43.01	270.72	0.650	4.42	12.402	8.061	346.79	0.00	1,082.5
100.00		1.37	25.49	43.09	275.06	0.650	0.58	1.611	1.047	45.13	0.00	64.6
105.00		1.39	25.85	43.68	267.62	0.650	5.00	13.549	8.807	384.73	0.00	543.4
110.00		1.41	26.19	44.26	259.98	0.650	5.00	13.084	8.505	376.44	0.00	524.6
115.00		1.43	26.52	44.82	252.16	0.650	5.00	12.619	8.203	367.65	0.00	505.8
120.00		1.45	26.84	45.36	244.16	0.650	5.00	12.155	7.901	358.39	0.00	487.0
125.00		1.46	27.15	45.88	236.00	0.650	5.00	11.690	7.599	348.68	0.00	468.2
130.00		1.48	27.45	46.39	227.69	0.650	5.00	11.226	7.297	338.56	0.00	449.4
135.00		1.50	27.74	46.89	219.23	0.650	5.00	10.761	6.995	328.02	0.00	430.5
140.00		1.51	28.03	47.38	210.64	0.650	5.00	10.296	6.693	317.10	0.00	411.7
144.25	Bot - Section 4	1.52	28.27	47.78	203.23	0.650	4.25	8.393	5.455	260.68	0.00	335.4
145.00		1.53	28.31	47.85	201.91	0.650	0.75	1.462	0.950	45.48	0.00	92.7
147.75	Top - Section 3	1.53	28.46	48.10	197.06	0.650	2.75	5.301	3.446	165.78	0.00	336.1
150.00		1.54	28.58	48.31	196.37	0.650	2.25	4.222	2.744	132.59	0.00	101.7
155.00		1.56	28.85	48.76	187.42	0.650	5.00	9.059	5.888	287.14	0.00	218.2
157.00	Appertunance(s)	1.56	28.96	48.94	183.80	0.650	2.00	3.493	2.271	111.13	0.00	84.1
160.00		1.57	29.11	49.20	178.35	0.650	3.00	5.101	3.315	163.14	0.00	122.8
165.00		1.58	29.37	49.63	169.18	0.650	5.00	8.130	5.284	262.28	0.00	195.6
167.00	Appertunance(s)	1.59	29.47	49.80	165.48	0.650	2.00	3.122	2.029	101.06	0.00	75.1
170.00		1.60	29.62	50.05	159.90	0.650	3.00	4.543	2.953	147.82	0.00	109.3
175.00		1.61	29.86	50.47	150.52	0.650	5.00	7.200	4.680	236.21	0.00	173.1
176.00	Appertunance(s)	1.61	29.91	50.55	148.63	0.650	1.00	1.384	0.900	45.49	0.00	33.3
						Totals:		176.00		13,108.40	0.00	24,642.0

Pole : CT33XC535
 Location: Guilford, CT
 Height : 176.0 (ft)
 Shape : 18 Sides
 Base Dia : 54.00 (in)
 Taper : 0.223010 (in/ft)

Sprint Sites USA - NJ
 Base Elev : 1.500 (ft)
 Top Dia : 16.50 (in)

Copyright Semaan Engineering Solutions, Inc

3/18/2004 4:52:50 PM

Page: 4



Load Case: No Ice	85 mph - No Ice	28 Iterations
Gust Response Factor : 1.69	Effective Wind Speed : 85.00 (mph)	
Dead Load Factor : 1.00	Note : Pole Base Elevation is Added for Kz Calculation	
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)
157.00	Low Profile Platform	1	28.96	48.94	25.550	1.000	0.000	0.0	0.0	1250.47	0.00	0.00	0.00	0.00	1300.0
157.00	DR65-19-00DPQ	6	28.96	48.94	33.617	0.667	0.000	0.0	0.0	1645.28	0.00	0.00	0.00	0.00	192.0
167.00	Low Profile Platform	1	29.47	49.80	25.550	1.000	0.000	0.0	0.0	1272.52	0.00	0.00	0.00	0.00	1300.0
167.00	Allgon 7250	6	29.47	49.80	17.209	0.667	0.000	0.0	0.0	857.08	0.00	0.00	0.00	0.00	96.0
176.00	Lightning Rod	1	30.05	50.79	1.000	1.000	0.000	3.0	0.0	50.79	0.00	0.00	0.00	152.38	75.0
176.00	DB980H90	12	29.96	50.63	26.253	0.667	0.000	1.0	0.0	1329.26	0.00	0.00	0.00	1329.26	108.0
176.00	EEL 12' Low Profile	1	29.96	50.63	15.000	1.000	0.000	1.0	0.0	759.49	0.00	0.00	0.00	759.49	1200.0
										7,164.89	0.00				4,271.0

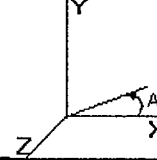
Pole : CT33XC535
 Location: Gullford, CT
 Height : 176.0 (ft)
 Shape : 18 Sides
 Base Dia : 54.00 (in)
 Taper : 0.223010 (in/ft)

Sprint Sites USA - NJ
 Base Elev : 1.500 (ft)
 Top Dia : 16.50 (in)

Copyright Semaan Engineering Solutions, Inc

3/18/2004 4:52:50 PM

Page: 5



Load Case: No Ice 85 mph - No Ice 28 Iterations

Gust Response Factor : 1.69 Effective Wind Speed : 85.00 (mph)

Dead Load Factor : 1.00 Note : Pole Base Elevation is Added for Kz Calculation

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	452.43	1,074.62	0.00	0.00	0.00	0.00
10.00	0.00	0.00	442.99	1,052.04	0.00	0.00	0.00	0.00
15.00	0.00	0.00	433.55	1,029.46	0.00	0.00	0.00	0.00
20.00	0.00	0.00	424.11	1,006.88	0.00	0.00	0.00	0.00
25.00	0.00	0.00	414.67	984.30	0.00	0.00	0.00	0.00
30.00	0.00	0.00	405.23	961.72	0.00	0.00	0.00	0.00
35.00	0.00	0.00	407.36	939.14	0.00	0.00	0.00	0.00
40.00	0.00	0.00	412.50	916.56	0.00	0.00	0.00	0.00
45.00	0.00	0.00	415.72	893.98	0.00	0.00	0.00	0.00
46.96	0.00	0.00	161.73	343.68	0.00	0.00	0.00	0.00
50.00	0.00	0.00	257.12	1,064.69	0.00	0.00	0.00	0.00
53.04	0.00	0.00	257.03	1,046.75	0.00	0.00	0.00	0.00
55.00	0.00	0.00	165.26	336.02	0.00	0.00	0.00	0.00
60.00	0.00	0.00	424.04	841.43	0.00	0.00	0.00	0.00
65.00	0.00	0.00	422.08	818.85	0.00	0.00	0.00	0.00
70.00	0.00	0.00	419.14	796.27	0.00	0.00	0.00	0.00
75.00	0.00	0.00	415.31	773.69	0.00	0.00	0.00	0.00
80.00	0.00	0.00	410.67	751.11	0.00	0.00	0.00	0.00
85.00	0.00	0.00	405.29	728.53	0.00	0.00	0.00	0.00
90.00	0.00	0.00	399.21	705.95	0.00	0.00	0.00	0.00
94.58	0.00	0.00	359.83	627.27	0.00	0.00	0.00	0.00
95.00	0.00	0.00	32.83	103.81	0.00	0.00	0.00	0.00
99.42	0.00	0.00	346.79	1,082.47	0.00	0.00	0.00	0.00
100.00	0.00	0.00	45.13	64.64	0.00	0.00	0.00	0.00
105.00	0.00	0.00	384.73	543.44	0.00	0.00	0.00	0.00
110.00	0.00	0.00	376.44	524.63	0.00	0.00	0.00	0.00
115.00	0.00	0.00	367.65	505.81	0.00	0.00	0.00	0.00
120.00	0.00	0.00	358.39	486.99	0.00	0.00	0.00	0.00
125.00	0.00	0.00	348.68	468.18	0.00	0.00	0.00	0.00
130.00	0.00	0.00	338.56	449.36	0.00	0.00	0.00	0.00
135.00	0.00	0.00	328.02	430.54	0.00	0.00	0.00	0.00
140.00	0.00	0.00	317.10	411.73	0.00	0.00	0.00	0.00
144.25	0.00	0.00	260.68	335.42	0.00	0.00	0.00	0.00
145.00	0.00	0.00	45.48	92.74	0.00	0.00	0.00	0.00
147.75	0.00	0.00	165.78	336.10	0.00	0.00	0.00	0.00
150.00	0.00	0.00	132.59	101.74	0.00	0.00	0.00	0.00
155.00	0.00	0.00	287.14	218.23	0.00	0.00	0.00	0.00
157.00	0.00	0.00	3,006.88	1,576.13	0.00	0.00	0.00	0.00
160.00	0.00	0.00	163.14	122.81	0.00	0.00	0.00	0.00
165.00	0.00	0.00	262.28	195.65	0.00	0.00	0.00	0.00
167.00	0.00	0.00	2,230.66	1,471.10	0.00	0.00	0.00	0.00
170.00	0.00	0.00	147.82	109.26	0.00	0.00	0.00	0.00
175.00	0.00	0.00	236.21	173.07	0.00	0.00	0.00	0.00
176.00	0.00	0.00	2,185.02	1,416.26	0.00	0.00	0.00	2,241.13
Totals:			20,273.29	28,913.04	0.00	0.00	0.00	2,241.13

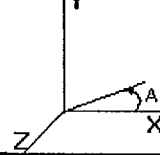
Pole : CT33XC535
 Location: Gullford, CT
 Height : 176.0 (ft)
 Shape : 18 Sides
 Base Dia : 54.00 (in)
 Taper : 0.223010 (in/ft)

Sprint Sites USA - NJ
 Base Elev : 1.500 (ft)
 Top Dia : 16.50 (in)

Copyright Semaan Engineering Solutions, Inc

3/18/2004 4:52:51 PM

Page: 6



Load Case: No Ice 85 mph - No Ice 28 Iterations
 Gust Response Factor : 1.69 Effective Wind Speed : 85.00 (mph)
 Dead Load Factor : 1.00 Note : Pole Base Elevation is Added for Kz Calculation
 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	20.309	28.887	0.000	0.000	0.000	2,351.232	0.000	0.000	0.000	0.000
5.00	19.924	27.764	0.000	0.000	0.000	2,249.689	-0.076	0.000	0.076	-0.141
10.00	19.545	26.664	0.000	0.000	0.000	2,150.069	-0.301	0.000	0.301	-0.285
15.00	19.171	25.588	0.000	0.000	0.000	2,052.346	-0.678	0.000	0.678	-0.431
20.00	18.803	24.536	0.000	0.000	0.000	1,956.493	-1.209	0.000	1.209	-0.580
25.00	18.440	23.507	0.000	0.000	0.000	1,862.481	-1.899	0.000	1.899	-0.732
30.00	18.082	22.502	0.000	0.000	0.000	1,770.284	-2.749	0.000	2.749	-0.887
35.00	17.719	21.520	0.000	0.000	0.000	1,679.874	-3.763	0.000	3.763	-1.045
40.00	17.347	20.563	0.000	0.000	0.000	1,591.280	-4.943	0.000	4.943	-1.206
45.00	16.951	19.645	0.000	0.000	0.000	1,504.546	-6.294	0.000	6.294	-1.370
46.96	16.809	19.280	0.000	0.000	0.000	1,471.382	-6.870	0.000	6.870	-1.436
50.00	16.558	18.192	0.000	0.000	0.000	1,420.225	-7.819	0.000	7.819	-1.540
53.04	16.297	17.129	0.000	0.000	0.000	1,369.892	-8.834	0.000	8.834	-1.645
55.00	16.157	16.765	0.000	0.000	0.000	1,337.948	-9.524	0.000	9.524	-1.713
60.00	15.753	15.891	0.000	0.000	0.000	1,257.166	-11.406	0.000	11.406	-1.878
65.00	15.347	15.042	0.000	0.000	0.000	1,178.404	-13.462	0.000	13.462	-2.045
70.00	14.941	14.218	0.000	0.000	0.000	1,101.670	-15.694	0.000	15.694	-2.215
75.00	14.536	13.417	0.000	0.000	0.000	1,026.965	-18.106	0.000	18.106	-2.388
80.00	14.132	12.641	0.000	0.000	0.000	954.286	-20.700	0.000	20.700	-2.564
85.00	13.731	11.889	0.000	0.000	0.000	883.625	-23.480	0.000	23.480	-2.742
90.00	13.332	11.163	0.000	0.000	0.000	814.970	-26.447	0.000	26.447	-2.923
94.58	12.956	10.535	0.000	0.000	0.000	753.869	-29.334	0.000	29.334	-3.091
95.00	12.934	10.412	0.000	0.000	0.000	748.470	-29.605	0.000	29.605	-3.107
99.42	12.543	9.331	0.000	0.000	0.000	691.345	-32.556	0.000	32.556	-3.272
100.00	12.513	9.243	0.000	0.000	0.000	684.027	-32.957	0.000	32.957	-3.294
105.00	12.129	8.678	0.000	0.000	0.000	621.461	-36.518	0.000	36.518	-3.505
110.00	11.751	8.135	0.000	0.000	0.000	560.816	-40.301	0.000	40.301	-3.717
115.00	11.378	7.613	0.000	0.000	0.000	502.064	-44.305	0.000	44.305	-3.929
120.00	11.013	7.112	0.000	0.000	0.000	445.174	-48.530	0.000	48.530	-4.140
125.00	10.654	6.632	0.000	0.000	0.000	390.112	-52.975	0.000	52.975	-4.349
130.00	10.304	6.174	0.000	0.000	0.000	336.840	-57.637	0.000	57.637	-4.555
135.00	9.961	5.738	0.000	0.000	0.000	285.322	-62.510	0.000	62.510	-4.754
140.00	9.627	5.326	0.000	0.000	0.000	235.515	-67.586	0.000	67.586	-4.944
144.25	9.345	5.000	0.000	0.000	0.000	194.571	-72.056	0.000	72.056	-5.097
145.00	9.297	4.902	0.000	0.000	0.000	187.592	-72.855	0.000	72.855	-5.124
147.75	9.108	4.569	0.000	0.000	0.000	161.996	-75.834	0.000	75.834	-5.217
150.00	8.978	4.457	0.000	0.000	0.000	141.532	-78.304	0.000	78.304	-5.289
155.00	8.682	4.246	0.000	0.000	0.000	96.641	-83.953	0.000	83.953	-5.497
157.00	5.541	2.960	0.000	0.000	0.000	79.277	-86.269	0.000	86.269	-5.569
160.00	5.372	2.843	0.000	0.000	0.000	62.653	-89.794	0.000	89.794	-5.662
165.00	5.095	2.668	0.000	0.000	0.000	35.791	-95.783	0.000	95.783	-5.781
167.00	2.728	1.428	0.000	0.000	0.000	25.601	-98.209	0.000	98.209	-5.816
170.00	2.571	1.333	0.000	0.000	0.000	17.416	-101.870	0.000	101.870	-5.856
175.00	2.319	1.184	0.000	0.000	0.000	4.560	-108.016	0.000	108.016	-5.893
176.00	2.185	0.000	0.000	0.000	0.000	2.241	-109.249	0.000	109.249	-5.896

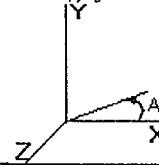
Pole : CT33XC535
 Location: Guilford, CT
 Height : 176.0 (ft)
 Shape : 18 Sides
 Base Dia : 54.00 (in)
 Taper : 0.223010 (in/ft)

Sprint Sites USA - NJ
 Base Elev : 1.500 (ft)
 Top Dia : 16.50 (in)

Copyright Semaan Engineering Solutions, Inc

3/18/2004 4:52:51 PM

Page: 7



Load Case: No Ice 85 mph - No Ice 28 Iterations

Gust Response Factor : 1.69 Effective Wind Speed : 85.00 (mph)

Dead Load Factor : 1.00 Note : Pole Base Elevation is Added for Kz Calculation

Wind Load Factor : 1.00

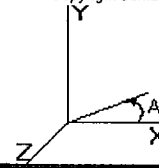
Calculated Stresses

Seg Elev (ft)	Applied Stresses							Combined Stress (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	0.453	0.641	0.000	0.000	0.000	33.359	33.830	52.0	0.651	
5.00	0.444	0.643	0.000	0.000	0.000	33.293	33.756	52.0	0.649	
10.00	0.436	0.644	0.000	0.000	0.000	33.220	33.674	52.0	0.648	
15.00	0.428	0.646	0.000	0.000	0.000	33.137	33.583	52.0	0.646	
20.00	0.419	0.648	0.000	0.000	0.000	33.044	33.482	52.0	0.644	
25.00	0.411	0.650	0.000	0.000	0.000	32.939	33.369	52.0	0.642	
30.00	0.403	0.652	0.000	0.000	0.000	32.820	33.242	52.0	0.640	
35.00	0.395	0.655	0.000	0.000	0.000	32.684	33.098	52.0	0.637	
40.00	0.386	0.657	0.000	0.000	0.000	32.531	32.937	52.0	0.634	
45.00	0.379	0.658	0.000	0.000	0.000	32.358	32.757	52.0	0.630	
46.96	0.375	0.660	0.000	0.000	0.000	32.291	32.686	52.0	0.629	
50.00	0.360	0.660	0.000	0.000	0.000	32.177	32.557	52.0	0.626	
53.04	0.338	0.649	0.000	0.000	0.000	30.931	31.289	52.0	0.602	
55.00	0.334	0.650	0.000	0.000	0.000	30.843	31.198	52.0	0.600	
60.00	0.326	0.651	0.000	0.000	0.000	30.586	30.932	52.0	0.595	
65.00	0.317	0.652	0.000	0.000	0.000	30.303	30.641	52.0	0.590	
70.00	0.308	0.653	0.000	0.000	0.000	29.991	30.320	52.0	0.583	
75.00	0.299	0.654	0.000	0.000	0.000	29.646	29.967	52.0	0.577	
80.00	0.291	0.655	0.000	0.000	0.000	29.264	29.577	52.0	0.569	
85.00	0.282	0.656	0.000	0.000	0.000	28.840	29.144	52.0	0.561	
90.00	0.273	0.658	0.000	0.000	0.000	28.366	28.662	52.0	0.551	
94.58	0.266	0.659	0.000	0.000	0.000	27.885	28.174	52.0	0.542	
95.00	0.264	0.660	0.000	0.000	0.000	27.841	28.128	52.0	0.541	
99.42	0.286	0.775	0.000	0.000	0.000	31.364	31.679	52.0	0.609	
100.00	0.284	0.776	0.000	0.000	0.000	31.281	31.594	52.0	0.608	
105.00	0.276	0.779	0.000	0.000	0.000	30.468	30.774	52.0	0.592	
110.00	0.269	0.782	0.000	0.000	0.000	29.550	29.849	52.0	0.574	
115.00	0.261	0.786	0.000	0.000	0.000	28.509	28.802	52.0	0.554	
120.00	0.253	0.791	0.000	0.000	0.000	27.321	27.608	52.0	0.531	
125.00	0.246	0.796	0.000	0.000	0.000	25.957	26.240	52.0	0.505	
130.00	0.239	0.803	0.000	0.000	0.000	24.383	24.661	52.0	0.474	
135.00	0.232	0.811	0.000	0.000	0.000	22.552	22.827	52.0	0.439	
140.00	0.225	0.820	0.000	0.000	0.000	20.409	20.683	52.0	0.398	
144.25	0.220	0.830	0.000	0.000	0.000	18.297	18.573	52.0	0.357	
145.00	0.217	0.831	0.000	0.000	0.000	17.902	18.177	52.0	0.350	
147.75	0.340	1.364	0.000	0.000	0.000	25.886	26.332	52.0	0.507	
150.00	0.339	1.375	0.000	0.000	0.000	23.657	24.114	52.0	0.464	
155.00	0.340	1.400	0.000	0.000	0.000	17.923	18.423	52.0	0.354	
157.00	0.242	0.913	0.000	0.000	0.000	15.351	15.673	52.0	0.302	
160.00	0.240	0.915	0.000	0.000	0.000	12.966	13.301	52.0	0.256	
165.00	0.239	0.920	0.000	0.000	0.000	8.318	8.704	52.0	0.167	
167.00	0.131	0.504	0.000	0.000	0.000	6.244	6.435	52.0	0.124	
170.00	0.127	0.493	0.000	0.000	0.000	4.578	4.782	52.0	0.092	
175.00	0.120	0.475	0.000	0.000	0.000	1.367	1.699	52.0	0.033	
176.00	0.000	0.454	0.000	0.000	0.000	0.690	1.046	52.0	0.020	

Pole: CT33XC535
 Location: Guilford, CT
 Height: 176.0 (ft)
 Shape: 18 Sides
 Base Dia: 54.00 (in)
 Taper: 0.223010 (in/ft)

Sprint Sites USA - NJ
 Base Elev: 1.500 (ft)
 Top Dia: 16.50 (in)

Copyright Semaan Engineering Solutions, Inc
 3/18/2004 4:52:51 PM
 Page: 8



Load Case: Ice 85 mph - With Ice - Ice Thickness = 0.5 in 28 Iterations

Gust Response Factor: 1.69 Effective Wind Speed: 73.61 (mph)

Dead Load Factor: 1.00 Note: Pole Base Elevation is Added for Kz Calculation

Wind Load Factor: 1.00

Shaft Forces

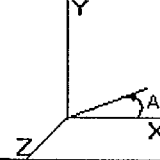
Seg Top Elev (ft)	Description	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Wind Force Z (lb)	Weight (lb)
0.00		1.00	13.87	23.44	331.24	0.650	0.00	0.000	0.000	0.00	0.00	0.0
5.00		1.00	13.87	23.44	324.40	0.650	5.00	22.684	14.745	345.65	0.00	1,239.4
10.00		1.00	13.87	23.44	317.56	0.650	5.00	22.220	14.443	338.57	0.00	1,213.3
15.00		1.00	13.87	23.44	310.72	0.650	5.00	21.755	14.141	331.49	0.00	1,187.3
20.00		1.00	13.87	23.44	303.88	0.650	5.00	21.291	13.839	324.41	0.00	1,161.3
25.00		1.00	13.87	23.44	297.05	0.650	5.00	20.826	13.537	317.33	0.00	1,135.3
30.00		1.00	13.87	23.44	290.21	0.650	5.00	20.361	13.235	310.26	0.00	1,109.2
35.00		1.02	14.27	24.12	287.48	0.650	5.00	19.897	12.933	312.03	0.00	1,083.2
40.00		1.06	14.81	25.02	285.73	0.650	5.00	19.432	12.631	316.13	0.00	1,057.2
45.00		1.10	15.29	25.85	283.23	0.650	5.00	18.968	12.329	318.77	0.00	1,031.2
46.96	Bot - Section 2	1.11	15.48	26.16	282.07	0.650	1.96	7.296	4.742	124.07	0.00	396.8
50.00		1.13	15.75	26.62	280.10	0.650	3.04	11.397	7.408	197.22	0.00	1,147.5
53.04	Top - Section 1	1.15	16.01	27.06	277.94	0.650	3.04	11.212	7.288	197.22	0.00	1,128.2
55.00		1.16	16.17	27.33	281.41	0.650	1.96	7.139	4.640	126.84	0.00	388.0
60.00		1.19	16.57	28.00	277.37	0.650	5.00	17.886	11.626	325.59	0.00	970.6
65.00		1.22	16.94	28.63	272.92	0.650	5.00	17.422	11.324	324.30	0.00	944.6
70.00		1.24	17.30	29.23	268.13	0.650	5.00	16.957	11.022	322.26	0.00	918.6
75.00		1.27	17.63	29.80	263.01	0.650	5.00	16.492	10.720	319.54	0.00	892.6
80.00		1.29	17.96	30.35	257.62	0.650	5.00	16.028	10.418	316.21	0.00	866.5
85.00		1.31	18.26	30.87	251.97	0.650	5.00	15.563	10.116	312.31	0.00	840.5
90.00		1.33	18.56	31.37	246.09	0.650	5.00	15.099	9.814	307.89	0.00	814.5
94.58	Bot - Section 3	1.35	18.82	31.81	240.51	0.650	4.58	13.432	8.731	277.75	0.00	723.9
95.00		1.35	18.84	31.85	240.00	0.650	0.42	1.224	0.795	25.34	0.00	112.7
99.42	Top - Section 2	1.37	19.09	32.26	234.45	0.650	4.42	12.770	8.300	267.79	0.00	1,174.3
100.00		1.37	19.12	32.31	238.20	0.650	0.58	1.660	1.079	34.87	0.00	76.7
105.00		1.39	19.38	32.76	231.76	0.650	5.00	13.965	9.077	297.40	0.00	643.6
110.00		1.41	19.64	33.19	225.14	0.650	5.00	13.501	8.775	291.30	0.00	621.3
115.00		1.43	19.89	33.61	218.37	0.650	5.00	13.036	8.473	284.82	0.00	599.1
120.00		1.45	20.13	34.02	211.44	0.650	5.00	12.571	8.171	277.99	0.00	576.8
125.00		1.46	20.36	34.41	204.38	0.650	5.00	12.107	7.869	270.82	0.00	554.6
130.00		1.48	20.59	34.79	197.18	0.650	5.00	11.642	7.567	263.33	0.00	532.3
135.00		1.50	20.81	35.17	189.86	0.650	5.00	11.178	7.265	255.53	0.00	510.1
140.00		1.51	21.02	35.53	182.41	0.650	5.00	10.713	6.963	247.44	0.00	487.8
144.25	Bot - Section 4	1.52	21.20	35.83	175.99	0.650	4.25	8.747	5.686	203.75	0.00	397.6
145.00		1.53	21.23	35.88	174.86	0.650	0.75	1.524	0.991	35.56	0.00	103.8
147.75	Top - Section 3	1.53	21.34	36.07	170.65	0.650	2.75	5.531	3.595	129.71	0.00	375.7
150.00		1.54	21.44	36.23	170.05	0.650	2.25	4.409	2.866	103.84	0.00	133.4
155.00		1.56	21.64	36.57	162.30	0.650	5.00	9.475	6.159	225.24	0.00	285.1
157.00	Appertunance(s)	1.56	21.71	36.70	159.17	0.650	2.00	3.660	2.379	87.32	0.00	110.3
160.00		1.57	21.83	36.90	154.45	0.650	3.00	5.351	3.478	128.34	0.00	160.9
165.00		1.58	22.02	37.22	146.51	0.650	5.00	8.546	5.555	206.78	0.00	255.7
167.00	Appertunance(s)	1.59	22.10	37.35	143.30	0.650	2.00	3.288	2.137	79.84	0.00	98.6
170.00		1.60	22.21	37.54	138.47	0.650	3.00	4.793	3.116	116.96	0.00	143.2
175.00		1.61	22.39	37.85	130.35	0.650	5.00	7.617	4.951	187.40	0.00	226.2
176.00	Appertunance(s)	1.61	22.43	37.91	128.71	0.650	1.00	1.468	0.954	36.17	0.00	43.8
				Totals:			176.00			10,123.37	0.00	28,473.5

Pole: CT33XC535
 Location: Guilford, CT
 Height: 176.0 (ft)
 Shape: 18 Sides
 Base Dia: 54.00 (in)
 Taper: 0.223010 (in/ft)

Sprint Sites USA - NJ
 Base Elev: 1.500 (ft)
 Top Dia: 16.50 (in)

Copyright Semaan Engineering Solutions, Inc

3/18/2004 4:52:51 PM
 Page: 9



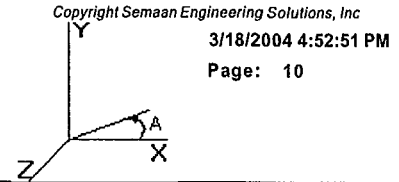
Load Case: Ice 85 mph - With Ice - Ice Thickness = 0.5 in 28 Iterations
 Gust Response Factor: 1.69 Effective Wind Speed: 73.61 (mph)
 Dead Load Factor: 1.00 Note: Pole Base Elevation is Added for Kz Calculation
 Wind Load Factor: 1.00

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)
157.00	Low Profile Platform	1	21.71	36.70	27.320	1.000	0.000	0.0	0.0	1002.76	0.00	0.00	0.00	0.00	2100.0
157.00	DR65-19-00DPQ	6	21.71	36.70	36.938	0.667	0.000	0.0	0.0	1355.80	0.00	0.00	0.00	0.00	444.0
167.00	Low Profile Platform	1	22.10	37.35	27.320	1.000	0.000	0.0	0.0	1020.45	0.00	0.00	0.00	0.00	2100.0
167.00	Allgon 7250	6	22.10	37.35	20.010	0.667	0.000	0.0	0.0	747.41	0.00	0.00	0.00	0.00	216.0
176.00	Lightning Rod	1	22.54	38.09	2.000	1.000	0.000	3.0	0.0	76.19	0.00	0.00	0.00	228.56	100.0
176.00	DB980H90	12	22.46	37.97	30.815	0.667	0.000	1.0	0.0	1170.12	0.00	0.00	0.00	1170.12	336.0
176.00	EEL 12' Low Profile	1	22.46	37.97	18.400	1.000	0.000	1.0	0.0	698.68	0.00	0.00	0.00	698.68	1650.0
										6,071.40	0.00				6,946.0

Pole : CT33XC535
 Location: Guilford, CT
 Height : 176.0 (ft)
 Shape : 18 Sides
 Base Dia : 54.00 (in)
 Taper : 0.223010 (in/ft)

Sprint Sites USA - NJ
 Base Elev : 1.500 (ft)
 Top Dia : 16.50 (in)



Load Case: Ice 85 mph - With Ice - Ice Thickness = 0.5 in 28 Iterations
 Gust Response Factor : 1.69 Effective Wind Speed : 73.61 (mph)
 Dead Load Factor : 1.00 Note : Pole Base Elevation is Added for Kz Calculation
 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	345.65	1,239.35	0.00	0.00	0.00	0.00
10.00	0.00	0.00	338.57	1,213.33	0.00	0.00	0.00	0.00
15.00	0.00	0.00	331.49	1,187.31	0.00	0.00	0.00	0.00
20.00	0.00	0.00	324.41	1,161.29	0.00	0.00	0.00	0.00
25.00	0.00	0.00	317.33	1,135.27	0.00	0.00	0.00	0.00
30.00	0.00	0.00	310.26	1,109.25	0.00	0.00	0.00	0.00
35.00	0.00	0.00	312.03	1,083.23	0.00	0.00	0.00	0.00
40.00	0.00	0.00	316.13	1,057.21	0.00	0.00	0.00	0.00
45.00	0.00	0.00	318.77	1,031.19	0.00	0.00	0.00	0.00
46.96	0.00	0.00	124.07	396.84	0.00	0.00	0.00	0.00
50.00	0.00	0.00	197.22	1,147.52	0.00	0.00	0.00	0.00
53.04	0.00	0.00	197.22	1,128.21	0.00	0.00	0.00	0.00
55.00	0.00	0.00	126.84	388.01	0.00	0.00	0.00	0.00
60.00	0.00	0.00	325.59	970.63	0.00	0.00	0.00	0.00
65.00	0.00	0.00	324.30	944.61	0.00	0.00	0.00	0.00
70.00	0.00	0.00	322.26	918.58	0.00	0.00	0.00	0.00
75.00	0.00	0.00	319.54	892.56	0.00	0.00	0.00	0.00
80.00	0.00	0.00	316.21	866.54	0.00	0.00	0.00	0.00
85.00	0.00	0.00	312.31	840.52	0.00	0.00	0.00	0.00
90.00	0.00	0.00	307.89	814.50	0.00	0.00	0.00	0.00
94.58	0.00	0.00	277.75	723.89	0.00	0.00	0.00	0.00
95.00	0.00	0.00	25.34	112.74	0.00	0.00	0.00	0.00
99.42	0.00	0.00	267.79	1,174.34	0.00	0.00	0.00	0.00
100.00	0.00	0.00	34.87	76.73	0.00	0.00	0.00	0.00
105.00	0.00	0.00	297.40	643.60	0.00	0.00	0.00	0.00
110.00	0.00	0.00	291.30	621.35	0.00	0.00	0.00	0.00
115.00	0.00	0.00	284.82	599.09	0.00	0.00	0.00	0.00
120.00	0.00	0.00	277.99	576.83	0.00	0.00	0.00	0.00
125.00	0.00	0.00	270.82	554.57	0.00	0.00	0.00	0.00
130.00	0.00	0.00	263.33	532.32	0.00	0.00	0.00	0.00
135.00	0.00	0.00	255.53	510.06	0.00	0.00	0.00	0.00
140.00	0.00	0.00	247.44	487.80	0.00	0.00	0.00	0.00
144.25	0.00	0.00	203.75	397.65	0.00	0.00	0.00	0.00
145.00	0.00	0.00	35.56	103.76	0.00	0.00	0.00	0.00
147.75	0.00	0.00	129.71	375.69	0.00	0.00	0.00	0.00
150.00	0.00	0.00	103.84	133.35	0.00	0.00	0.00	0.00
155.00	0.00	0.00	225.24	285.14	0.00	0.00	0.00	0.00
157.00	0.00	0.00	2,445.88	2,654.34	0.00	0.00	0.00	0.00
160.00	0.00	0.00	128.34	160.89	0.00	0.00	0.00	0.00
165.00	0.00	0.00	206.78	255.68	0.00	0.00	0.00	0.00
167.00	0.00	0.00	1,847.69	2,414.56	0.00	0.00	0.00	0.00
170.00	0.00	0.00	116.96	143.21	0.00	0.00	0.00	0.00
175.00	0.00	0.00	187.40	226.22	0.00	0.00	0.00	0.00
176.00	0.00	0.00	1,981.15	2,129.75	0.00	0.00	0.00	2,097.36
Totals:			16,194.77	35,419.48	0.00	0.00	0.00	2,097.36

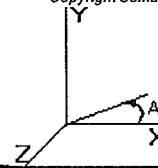
Pole : CT33XC535
 Location: Guilford, CT
 Height : 176.0 (ft)
 Shape : 18 Sides
 Base Dia : 54.00 (in)
 Taper : 0.223010 (in/ft)

Sprint Sites USA - NJ
 Base Elev : 1.500 (ft)
 Top Dia : 16.50 (in)

Copyright Semaan Engineering Solutions, Inc

3/18/2004 4:52:51 PM

Page: 11



Load Case: Ice 85 mph - With Ice - Ice Thickness = 0.5 in 28 Iterations

Gust Response Factor : 1.69 Effective Wind Speed : 73.61 (mph)

Dead Load Factor : 1.00 Note : Pole Base Elevation is Added for Kz Calculation

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	16.231	35.403	0.000	0.000	0.000	1,943.392	0.000	0.000	0.000	0.000
5.00	15.954	34.131	0.000	0.000	0.000	1,862.239	-0.063	0.000	0.063	-0.117
10.00	15.681	32.886	0.000	0.000	0.000	1,782.469	-0.249	0.000	0.249	-0.236
15.00	15.411	31.667	0.000	0.000	0.000	1,704.065	-0.561	0.000	0.561	-0.357
20.00	15.145	30.475	0.000	0.000	0.000	1,627.010	-1.001	0.000	1.001	-0.481
25.00	14.882	29.310	0.000	0.000	0.000	1,551.287	-1.573	0.000	1.573	-0.608
30.00	14.623	28.171	0.000	0.000	0.000	1,476.877	-2.279	0.000	2.279	-0.737
35.00	14.359	27.059	0.000	0.000	0.000	1,403.762	-3.121	0.000	3.121	-0.869
40.00	14.087	25.974	0.000	0.000	0.000	1,331.968	-4.103	0.000	4.103	-1.003
45.00	13.791	24.926	0.000	0.000	0.000	1,261.533	-5.227	0.000	5.227	-1.140
46.96	13.689	24.514	0.000	0.000	0.000	1,234.551	-5.706	0.000	5.706	-1.196
50.00	13.503	23.351	0.000	0.000	0.000	1,192.889	-6.497	0.000	6.497	-1.283
53.04	13.308	22.211	0.000	0.000	0.000	1,151.841	-7.342	0.000	7.342	-1.371
55.00	13.209	21.803	0.000	0.000	0.000	1,125.757	-7.918	0.000	7.918	-1.429
60.00	12.909	20.810	0.000	0.000	0.000	1,059.711	-9.488	0.000	9.488	-1.567
65.00	12.607	19.844	0.000	0.000	0.000	995.166	-11.205	0.000	11.205	-1.709
70.00	12.305	18.905	0.000	0.000	0.000	932.130	-13.071	0.000	13.071	-1.852
75.00	12.002	17.992	0.000	0.000	0.000	870.607	-15.089	0.000	15.089	-1.999
80.00	11.699	17.107	0.000	0.000	0.000	810.599	-17.262	0.000	17.262	-2.148
85.00	11.398	16.249	0.000	0.000	0.000	752.103	-19.591	0.000	19.591	-2.299
90.00	11.097	15.419	0.000	0.000	0.000	695.114	-22.081	0.000	22.081	-2.453
94.58	10.807	14.694	0.000	0.000	0.000	644.256	-24.506	0.000	24.506	-2.597
95.00	10.797	14.567	0.000	0.000	0.000	639.752	-24.734	0.000	24.734	-2.611
99.42	10.493	13.392	0.000	0.000	0.000	592.068	-27.215	0.000	27.215	-2.752
100.00	10.478	13.299	0.000	0.000	0.000	585.946	-27.552	0.000	27.552	-2.771
105.00	10.189	12.639	0.000	0.000	0.000	533.558	-30.550	0.000	30.550	-2.952
110.00	9.903	12.002	0.000	0.000	0.000	482.614	-33.738	0.000	33.738	-3.134
115.00	9.621	11.390	0.000	0.000	0.000	433.099	-37.117	0.000	37.117	-3.316
120.00	9.344	10.801	0.000	0.000	0.000	384.992	-40.686	0.000	40.686	-3.499
125.00	9.071	10.236	0.000	0.000	0.000	338.273	-44.446	0.000	44.446	-3.680
130.00	8.803	9.695	0.000	0.000	0.000	292.917	-48.393	0.000	48.393	-3.858
135.00	8.541	9.178	0.000	0.000	0.000	248.901	-52.525	0.000	52.525	-4.032
140.00	8.281	8.688	0.000	0.000	0.000	206.199	-56.835	0.000	56.835	-4.198
144.25	8.060	8.296	0.000	0.000	0.000	170.977	-60.633	0.000	60.633	-4.332
145.00	8.024	8.187	0.000	0.000	0.000	164.958	-61.313	0.000	61.313	-4.356
147.75	7.876	7.813	0.000	0.000	0.000	142.865	-63.847	0.000	63.847	-4.438
150.00	7.780	7.670	0.000	0.000	0.000	125.170	-65.949	0.000	65.949	-4.501
155.00	7.548	7.388	0.000	0.000	0.000	86.273	-70.763	0.000	70.763	-4.686
157.00	4.898	4.938	0.000	0.000	0.000	71.178	-72.738	0.000	72.738	-4.751
160.00	4.765	4.780	0.000	0.000	0.000	56.484	-75.748	0.000	75.748	-4.834
165.00	4.542	4.538	0.000	0.000	0.000	32.659	-80.867	0.000	80.867	-4.941
167.00	2.494	2.291	0.000	0.000	0.000	23.575	-82.942	0.000	82.942	-4.974
170.00	2.367	2.157	0.000	0.000	0.000	16.092	-86.076	0.000	86.076	-5.010
175.00	2.161	1.947	0.000	0.000	0.000	4.258	-91.338	0.000	91.338	-5.045
176.00	1.981	0.000	0.000	0.000	0.000	2.097	-92.394	0.000	92.394	-5.048

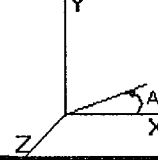
Pole : CT33XC535
 Location: Guilford, CT
 Height : 176.0 (ft)
 Shape : 18 Sides
 Base Dia : 54.00 (in)
 Taper : 0.223010 (in/ft)

Sprint Sites USA - NJ
 Base Elev : 1.500 (ft)
 Top Dia : 16.50 (in)

Copyright Semaan Engineering Solutions, Inc

3/18/2004 4:52:51 PM

Page: 12



Load Case: Ice 85 mph - With Ice - Ice Thickness = 0.5 in 28 Iterations

Gust Response Factor : 1.69 Effective Wind Speed : 73.61 (mph)

Dead Load Factor : 1.00 Note : Pole Base Elevation is Added for Kz Calculation

Wind Load Factor : 1.00

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	0.555	0.513	0.000	0.000	0.000	27.573	28.141	52.0	0.541	
5.00	0.546	0.514	0.000	0.000	0.000	27.559	28.119	52.0	0.541	
10.00	0.538	0.517	0.000	0.000	0.000	27.540	28.092	52.0	0.540	
15.00	0.529	0.519	0.000	0.000	0.000	27.514	28.057	52.0	0.540	
20.00	0.521	0.522	0.000	0.000	0.000	27.479	28.015	52.0	0.539	
25.00	0.513	0.524	0.000	0.000	0.000	27.435	27.963	52.0	0.538	
30.00	0.504	0.528	0.000	0.000	0.000	27.380	27.899	52.0	0.537	
35.00	0.496	0.531	0.000	0.000	0.000	27.312	27.823	52.0	0.535	
40.00	0.488	0.534	0.000	0.000	0.000	27.230	27.733	52.0	0.534	
45.00	0.480	0.536	0.000	0.000	0.000	27.132	27.628	52.0	0.532	
46.96	0.477	0.537	0.000	0.000	0.000	27.093	27.586	52.0	0.531	
50.00	0.462	0.538	0.000	0.000	0.000	27.026	27.504	52.0	0.529	
53.04	0.439	0.530	0.000	0.000	0.000	26.008	26.462	52.0	0.509	
55.00	0.435	0.531	0.000	0.000	0.000	25.951	26.402	52.0	0.508	
60.00	0.427	0.533	0.000	0.000	0.000	25.782	26.225	52.0	0.505	
65.00	0.418	0.535	0.000	0.000	0.000	25.591	26.026	52.0	0.501	
70.00	0.410	0.538	0.000	0.000	0.000	25.376	25.802	52.0	0.496	
75.00	0.402	0.540	0.000	0.000	0.000	25.133	25.551	52.0	0.492	
80.00	0.393	0.542	0.000	0.000	0.000	24.858	25.269	52.0	0.486	
85.00	0.385	0.545	0.000	0.000	0.000	24.547	24.950	52.0	0.480	
90.00	0.378	0.548	0.000	0.000	0.000	24.194	24.590	52.0	0.473	
94.58	0.371	0.550	0.000	0.000	0.000	23.830	24.220	52.0	0.466	
95.00	0.369	0.551	0.000	0.000	0.000	23.797	24.185	52.0	0.465	
99.42	0.411	0.648	0.000	0.000	0.000	26.860	27.294	52.0	0.525	
100.00	0.409	0.650	0.000	0.000	0.000	26.795	27.228	52.0	0.524	
105.00	0.403	0.654	0.000	0.000	0.000	26.158	26.585	52.0	0.511	
110.00	0.396	0.659	0.000	0.000	0.000	25.429	25.851	52.0	0.497	
115.00	0.390	0.665	0.000	0.000	0.000	24.593	25.009	52.0	0.481	
120.00	0.385	0.671	0.000	0.000	0.000	23.627	24.040	52.0	0.463	
125.00	0.380	0.678	0.000	0.000	0.000	22.508	22.918	52.0	0.441	
130.00	0.375	0.686	0.000	0.000	0.000	21.203	21.611	52.0	0.416	
135.00	0.371	0.695	0.000	0.000	0.000	19.674	20.080	52.0	0.386	
140.00	0.367	0.706	0.000	0.000	0.000	17.869	18.277	52.0	0.352	
144.25	0.365	0.715	0.000	0.000	0.000	16.078	16.490	52.0	0.317	
145.00	0.363	0.717	0.000	0.000	0.000	15.742	16.153	52.0	0.311	
147.75	0.581	1.180	0.000	0.000	0.000	22.829	23.499	52.0	0.452	
150.00	0.583	1.192	0.000	0.000	0.000	20.922	21.604	52.0	0.416	
155.00	0.591	1.217	0.000	0.000	0.000	16.000	16.725	52.0	0.322	
157.00	0.404	0.807	0.000	0.000	0.000	13.782	14.255	52.0	0.274	
160.00	0.404	0.812	0.000	0.000	0.000	11.689	12.175	52.0	0.234	
165.00	0.406	0.820	0.000	0.000	0.000	7.590	8.121	52.0	0.156	
167.00	0.210	0.461	0.000	0.000	0.000	5.750	6.014	52.0	0.116	
170.00	0.205	0.454	0.000	0.000	0.000	4.230	4.504	52.0	0.087	
175.00	0.198	0.443	0.000	0.000	0.000	1.276	1.661	52.0	0.032	
176.00	0.000	0.411	0.000	0.000	0.000	0.646	0.962	52.0	0.019	

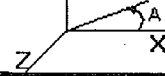
Pole : CT33XC535
 Location: Guilford, CT
 Height : 176.0 (ft)
 Shape : 18 Sides
 Base Dia : 54.00 (in)
 Taper : 0.223010 (in/ft)

Sprint Sites USA - NJ
 Base Elev : 1.500 (ft)
 Top Dia : 16.50 (in)

Copyright Semaan Engineering Solutions, Inc

3/18/2004 4:52:51 PM

Page: 13



Load Case: No Ice 85 mph - No Ice 28 Iterations

Gust Response Factor : 1.69 Effective Wind Speed : 85.00 (mph)

Dead Load Factor : 1.00 Note : Pole Base Elevation is Added for Kz Calculation

Wind Load Factor : 1.00

Analysis Summary

Load Case	Reactions						Max Stresses			
	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	20.309	0.000	28.887	0.000	0.000	2,351.232	33.830	52.0	0.000	0.651
Ice	16.231	0.000	35.403	0.000	0.000	1,943.392	28.141	52.0	0.000	0.541

Miscellaneous



100 Filley Street, Bloomfield, CT 06002
860-794-6427 fax 860-692-7159

Charles Bishop
First Selectman
Town of Guilford
31 Park Street
Guilford, CT 06437

RE: **Exempt Modification – Existing Wireless Telecommunications Facility
2381 Long Hill Road, Guilford, Connecticut**

Dear First Selectman Bishop:

Omnipoint Communications, Inc. a.k.a. T-Mobile (formerly Voicestream Wireless Corp.) intends to co-locate antennas on the existing monopole located at 2381 Long Hill Road in Guilford. Attached, please find a copy of our application to the CT Siting Council.

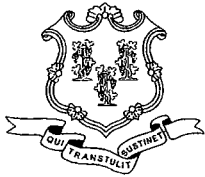
If you have any questions or concerns, please feel free to call me at 860-794-6427, or the CT Siting Council.

Very Truly Yours

Christine Farrell
T-Mobile Real Estate and Zoning

Attachments-Application

Cc: CSC



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.ct.gov/csc

April 1, 2004

Honorable Charles E. Bishop
First Selectman
Town of Guilford
31 Park Street
Guilford, CT 06437

RE: **EM-T-MOBILE-060-040331** – Omnipoint Communications, Inc. notice of intent to modify an existing telecommunications facility located at 2381 Long Hill Road, Guilford, Connecticut.

Dear Mr. Bishop:

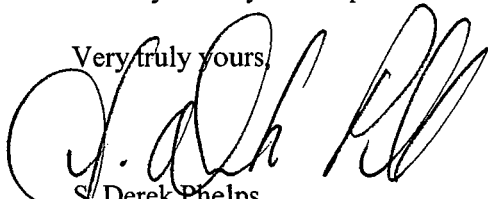
The Connecticut Siting Council (Council) received this request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72.

The Council will consider this item at the next meeting scheduled for April 15, 2004 at 1:30 p.m. in Hearing Room One, 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/cm

Enclosure: Notice of Intent

c: Regina Reid, Zoning Enforcement Officer, Town of Guilford