

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@ct.gov

Internet: ct.gov/csc

Daniel F. Caruso
Chairman

May 11, 2009

Thomas J. Regan, Esq.
Brown Rudnick LLP
CityPlace I, 185 Asylum Street
Hartford, CT 06103

RE: **EM-T-MOBILE-064-090406** - T-Mobile USA, Inc. notice of intent to modify an existing telecommunications facility located at 305 West Service Road, Hartford, Connecticut.

Dear Attorney Regan:

The Connecticut Siting Council (Council) hereby acknowledges 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 April 6, 2009, including the placement of all necessary equipment and shelters within the tower compound. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

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

Thank you for your attention and cooperation.

Very truly yours,

S. Derek Phelps
Executive Director

SDP/MP/laf

- c: The Honorable Eddie A. Perez, Mayor, City of Hartford
Lee C. Erdmann, Chief Operating Officer, City of Hartford
Roger J. O'Brien, Director of Planning, City of Hartford
American Tower



CONNECTICUT SITING COUNCIL

Affirmative Action / Equal Opportunity Employer

THOMAS J. REGAN
Direct Dial: (860) 509-6522
tregan@brownrudnick.com



CityPlace I
185 Asylum
Street
Hartford
Connecticut
06103
tel 860.509.6500
fax 860.509.6501

Via Hand Delivery

April 6, 2009

Daniel F. Caruso, Chairman
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

RE: T-Mobile USA, Inc - Exempt Modification

Dear Mr. Caruso:

On behalf of T-Mobile USA, Inc., enclosed for filing are an original and five (5) copies of a Notice to Make an Exempt Modification to an Existing Facility for each of the following:

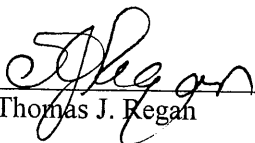
1. Berlin @ 260 Beckley Road;
2. Bloomfield @ 28 Brewer Street;
3. Enfield @ 5 Town Farm Road, a/k/a 85 Post Office Road;
4. Farmington @ 130 Birdseye Road;
5. Hartford @ 305 West Service Road;
6. Rocky Hill @ 949 France Street;
7. South Windsor @ 59 McGuire Road;
8. Suffield @ 848 East Street South;
9. Vernon @ 197 South Street;
10. Wallingford @ 90 North Plains Industrial Road;
11. Wallingford @ 992 Northrop Road; and
12. Windsor @ 440 Hayden Station Road.

I have also enclosed a sixth copy of each Notice which I would like to have date-stamped and returned to the courier delivering this package.

Also enclosed are twelve (12) checks in the amount of \$500.00 each to cover the filing fee. If you have any questions, please feel free to contact me.

Very truly yours,

BROWN RUDNICK BERLACK ISRAELS LLP

By: 
Thomas J. Regan

TJR/bh
Enclosures

b
r
o
w
n
r
u
d
n
i
c
k
c
o
m

Daniel F. Caruso, Chairman
April 6, 2009
Re: T-Mobile USA, Inc. Notice of Exempt Modifications
Page 2

cc/encls: via 1st Class Mail:

Adam P. Salina, Mayor
Town of Berlin
240 Kensington Road
Berlin, CT 06037

Sydney T. Schulman, Mayor
Town of Bloomfield
Town Hall
800 Bloomfield Avenue
Bloomfield, CT 06002

Scott R. Kaupin, Mayor
Town of Enfield
Town Hall
820 Enfield Street
Enfield, CT 06082

Michael Clark, Chairman
Town Council
Town of Farmington
One Monteith Drive
Farmington, CT 06032-1053

Eddie A. Perez, Mayor
City of Hartford
Municipal Building
550 Main Street
Hartford, CT 06103-2992

Anthony LaRosa, Mayor
Town of Rocky Hill
Town Hall
761 Old Main Street
Rocky Hill, CT 06067-1519

Cary Prague, Mayor
Town of South Windsor
Town Hall
1540 Sullivan Avenue
South Windsor, CT 06074



Daniel F. Caruso, Chairman
April 6, 2009
Re: T-Mobile USA, Inc. Notice of Exempt Modifications
Page 3

Scott Lingenfelter, First Selectman
Town of Suffield
Town Hall
83 Mountain Road
Suffield, CT 06078

Jason L. McCoy, Mayor
Town of Vernon
Memorial Building
14 Park Place
Vernon, CT 06066

William W. Dickinson, Jr., Mayor
Town of Wallingford
Town Hall
45 South Main Street, Room 310
Wallingford, CT 06492

Donald Trinks, Mayor
Town of Windsor
Town Hall
275 Broad Street
PO Box 472
Windsor, CT 06095-0472

C

EM-T-MOBILE-064-090406

In re:

T-Mobile USA, Inc. Notice to Make an Exempt Modification to an Existing Facility at 305 West Service Road, Hartford, Connecticut. : **EXEMPT MODIFICATION NO.** _____
: April 6, 2009

ORIGINAL

RECEIVED
APR - 6 2009

NOTICE OF EXEMPT MODIFICATION **CONNECTICUT SITING COUNCIL**

Pursuant to Conn. Agencies Regs. §§ 16-50j-73 and 16-50j-72(b), T-Mobile USA, Inc. ("T-Mobile") hereby gives notice to the Connecticut Siting Council ("Council") and the City of Hartford of T-Mobile's intent to make an exempt modification to an existing monopole (the "Tower") located at 305 West Service Road in Hartford, Connecticut. Specifically, T-Mobile plans to upgrade its wireless system in Connecticut by implementing its Universal Mobile Telecommunications System ("UMTS"). UMTS is a third-generation ("3G") technology that utilizes a code division multiple access ("CDMA") base to allow for fast and large data transfers. To accomplish this upgrade, T-Mobile must modify its antenna and equipment configurations at many of its existing sites.

Once the UMTS upgrade is complete, T-Mobile will operate on a more unified communication system, allowing international wireless telephones to function world-wide. Furthermore, UMTS will enhance GPS navigation capabilities and provide emergency responders with more advanced tracking capabilities. The proposed UMTS technology is compatible with the existing second-generation ("2G") Global System for Mobile Communication ("GSM") currently on the Tower and the proposed upgrade is expected to enhance the existing 2G system. In order to accomplish the upgrade at this site, T-Mobile plans

to add UMTS technology, upgrade GSM technology and install associated equipment at the base of the tower.

Under the Council's regulations (Conn. Agencies Regs. § 16-50j-72(b)), T-Mobile's plans do not constitute a modification subject to the Council's review because T-Mobile will not change the height of the Tower, will not extend the boundaries of the compound, will not increase the noise levels at the site, and will not increase the total radio frequency electromagnetic radiation power density at the site to levels above applicable standards.

The Tower is a 150-foot monopole located at 305 West Service Road in Hartford, Connecticut (41.7998, -72.6569). There are multiple carriers on the Tower. The Tower is owned by the American Tower Company. Currently, T-Mobile has 3 antennas and 6 Tower Mounted Amplifiers ("TMA") located on the Tower with a centerline of 125 feet. A site plan with Tower specifications is attached.

T-Mobile plans to add 3 UMTS antennas, remove and replace 6 TMA and add 3 TMA on the Tower. T-Mobile proposes to remove and replace 6 of the existing single GSM TMA with 3 GSM Twin TMA. T-Mobile also proposes to add 3 UMTS Twin TMA. The proposed antennas and TMA will have the same centerline as the existing antennas and TMA – 125 feet. To confirm the Tower can support these changes, T-Mobile commissioned American Tower Engineering Services to perform a structural analysis of the Tower (attached). According to the structural analysis, dated March 16, 2009; "The tower and foundation can support the existing and proposed antennas ..." (Page 2, Structural Analysis Report).

T-Mobile proposes to locate 6, 1 5/8 inch coax cables under the existing ice bridge that will run from the proposed UMTS equipment cabinet to the proposed UMTS antennas. T-

3A + 3A
6 TMA - 6 TMA
+ 3 TMA

6A
9 TMA

Mobile proposes to install the UMTS equipment cabinet on its existing 39 foot by 20 foot (approximately) concrete pad. Hence, no increase in the size of the concrete pad is necessary.

T-Mobile proposes to install power wiring and telephone wiring to run in the existing underground conduit to the existing power protection cabinet.

Therefore, excluding brief, minor, construction-related noise during the addition of the antennas and the installation of the equipment cabinet, T-Mobile's changes to the Tower will not increase noise levels at the site.

The proposed antennas and TMA will not adversely impact the health and safety of the surrounding community or the people working on the Tower. The total radio frequency exposure measured around the Tower will be well below the National Council on Radiation Protection and Measurements' ("NCRP") standard adopted by the Federal Communications Commission ("FCC"). The worst-case power density analysis measured at the base of the Tower indicates that T-Mobile's antennas will emit 6.66% of the NCRP's standard for maximum permissible exposure. A cumulative power density analysis indicates that together, all of the antennas on the Tower will emit only 21.88% of the NCRP's standard for maximum permissible exposure. Therefore, the power density levels will be well below the FCC mandated radio frequency exposure limits in all locations around the Tower, even with extremely conservative assumptions. The power density analysis is attached.

In conclusion, T-Mobile's proposed plan to add antennas, remove and replace TMA and add TMA at this site does not constitute a modification subject to the Council's jurisdiction because T-Mobile will not increase the height of the Tower, will not extend the boundaries of the site, will not increase the noise levels at the site, and the total radio frequency electromagnetic

radiation power density will stay within all applicable standards. *See* Conn. Agencies Regs. §
16-50j-72.

T-Mobile USA, Inc.

By: 

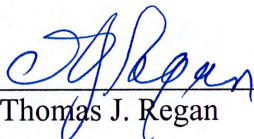
Thomas J. Regan
Brown Rudnick LLP
185 Asylum Street, CityPlace I
Hartford, CT 06103-3402
Email - tregan@brownrudnick.com
Phone - 860.509.6522
Fax - 860.509.6622

Certificate of Service

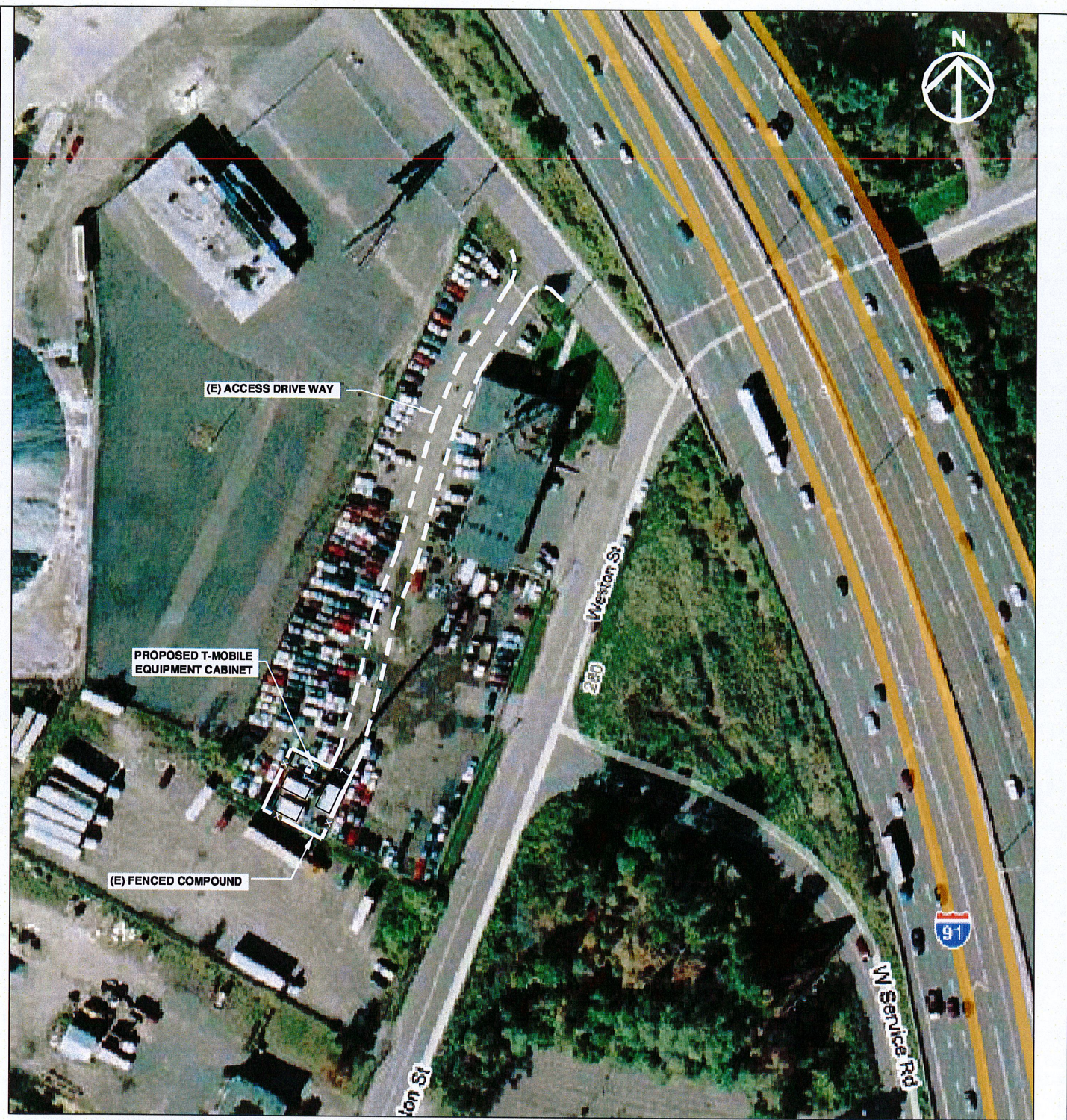
This is to certify that on this 6th day of April, 2009, the foregoing Notice of Exempt

Modification was sent, via first class mail, to the following:

City of Hartford
Municipal Building
Mayor Eddie A. Perez
550 Main Street
Hartford, CT 06103

By:  _____
Thomas J. Regan

40258215 v1 - 025064/0016



ALL EQUIPMENT LOCATIONS ARE APPROXIMATE AND ARE SUBJECT TO APPROVAL BY LESSEE/LICENSEE'S STRUCTURAL & RF ENGINEERS. LOCATIONS OF POWER & TELEPHONE FACILITIES ARE SUBJECT TO APPROVAL BY UTILITY COMPANIES.

OVERALL SITE PLAN
N.T.S.

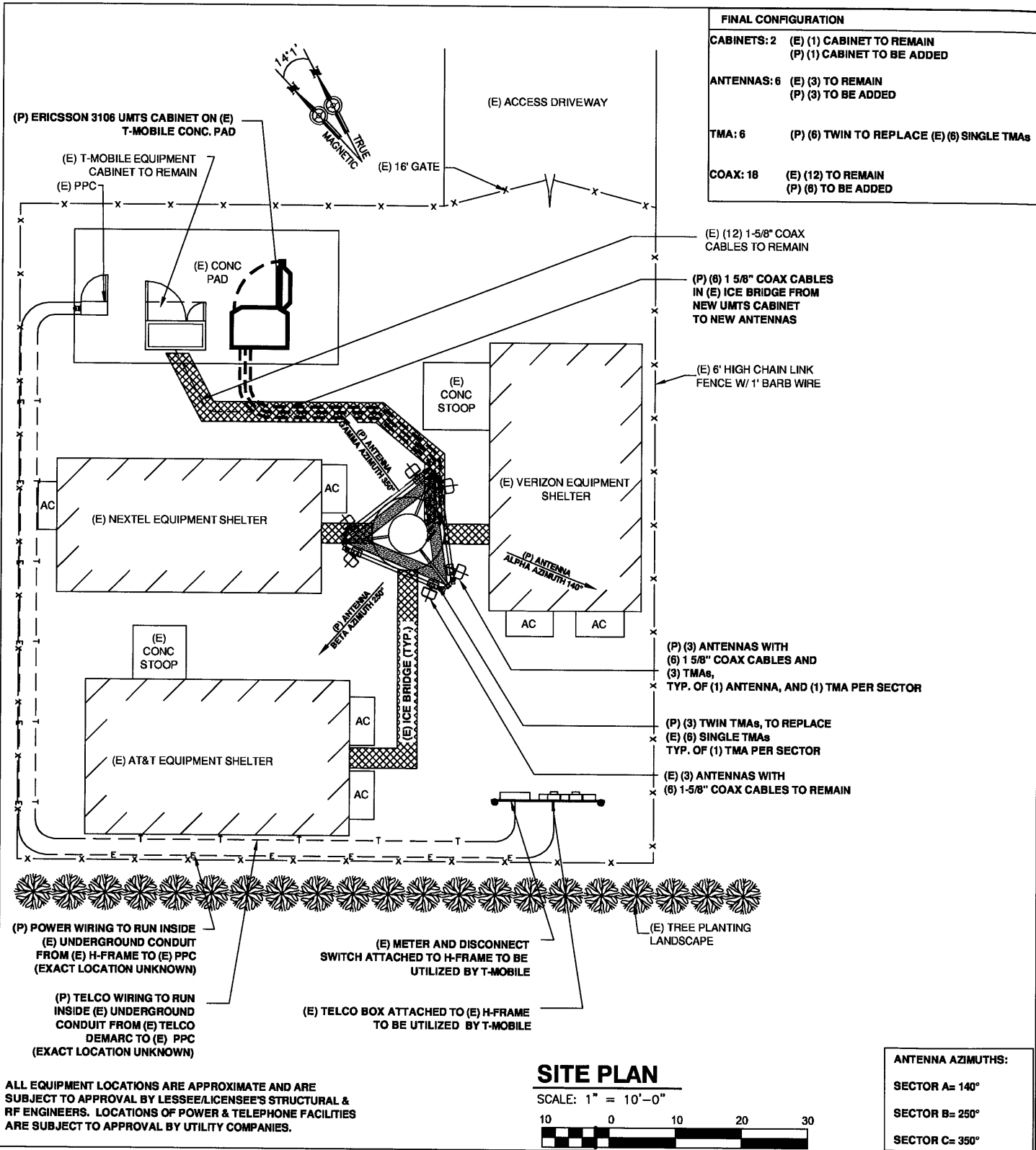
TRANSCEND WIRELESS
10 INDUSTRIAL AVENUE
MAHWAH, NJ 07430
OFFICE: 201-316-2885
FAX: 201-684-9866

FOR
OMNIPPOINT COMMUNICATIONS, INC.
DBA T-MOBILE USA, INC
35 GRIFIN ROAD SOUTH
BLOOMFIELD, CT 06002
OFFICE: (860) 692-7100
FAX: (860) 692-7159

ATLANTIS GROUP
15 Cypress St., Suite 300
Newton Centre, MA 02459
Office: 617-965-0789
Fax: 617-663-8032

SITE NAME: CT491/SSITE HARTFORD_MP1		
SITE NUMBER: CT11491B		
ADDRESS: 305 WEST SERVICE ROAD HARTFORD, CT 06120		
0:	FINALE	03-12-09
A:	REVIEW	02-03-09
NUMBER	REVISION	DATE
DRAWN BY S.B.		DRAWING NO: LE-1

APPROVALS	
Site Owner	Date
Construction Manager	Date
RF Engineer	Date
Site Acquisition	Date
The above parties hereby approve and accept these documents and authorize the contractor to proceed with the construction described herein, all construction documents are subject to review by the local building department and any changes or modifications they may impose.	



FINAL CONFIGURATION	
CABINETS: 2	(E) (1) CABINET TO REMAIN (P) (1) CABINET TO BE ADDED
ANTENNAS: 6	(E) (3) TO REMAIN (P) (3) TO BE ADDED
TMA: 6	(P) (6) TWIN TO REPLACE (E) (6) SINGLE TMAs
COAX: 18	(E) (12) TO REMAIN (P) (6) TO BE ADDED

- (E) (12) 1-5/8" COAX CABLES TO REMAIN
- (P) (6) 1 5/8" COAX CABLES IN (E) ICE BRIDGE FROM NEW UMTS CABINET TO NEW ANTENNAS
- (E) 6' HIGH CHAIN LINK FENCE W/ 1' BARB WIRE
- (P) (3) ANTENNAS WITH (6) 1 5/8" COAX CABLES AND (3) TMAs, TYP. OF (1) ANTENNA, AND (1) TMA PER SECTOR
- (P) (3) TWIN TMAs, TO REPLACE (E) (6) SINGLE TMAs TYP. OF (1) TMA PER SECTOR
- (E) (3) ANTENNAS WITH (6) 1-5/8" COAX CABLES TO REMAIN

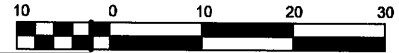
(P) POWER WIRING TO RUN INSIDE (E) UNDERGROUND CONDUIT FROM (E) H-FRAME TO (E) PPC (EXACT LOCATION UNKNOWN)

(P) TELCO WIRING TO RUN INSIDE (E) UNDERGROUND CONDUIT FROM (E) TELCO DEMARC TO (E) PPC (EXACT LOCATION UNKNOWN)

ALL EQUIPMENT LOCATIONS ARE APPROXIMATE AND ARE SUBJECT TO APPROVAL BY LESSEE/LICENSEE'S STRUCTURAL & RF ENGINEERS. LOCATIONS OF POWER & TELEPHONE FACILITIES ARE SUBJECT TO APPROVAL BY UTILITY COMPANIES.

SITE PLAN

SCALE: 1" = 10'-0"



ANTENNA AZIMUTHS:	
SECTOR A=	140°
SECTOR B=	250°
SECTOR C=	350°

TRANSCEND WIRELESS
 10 INDUSTRIAL AVENUE
 MAHWAH, NJ 07430
 OFFICE: 201-316-2885
 FAX: 201-684-8666

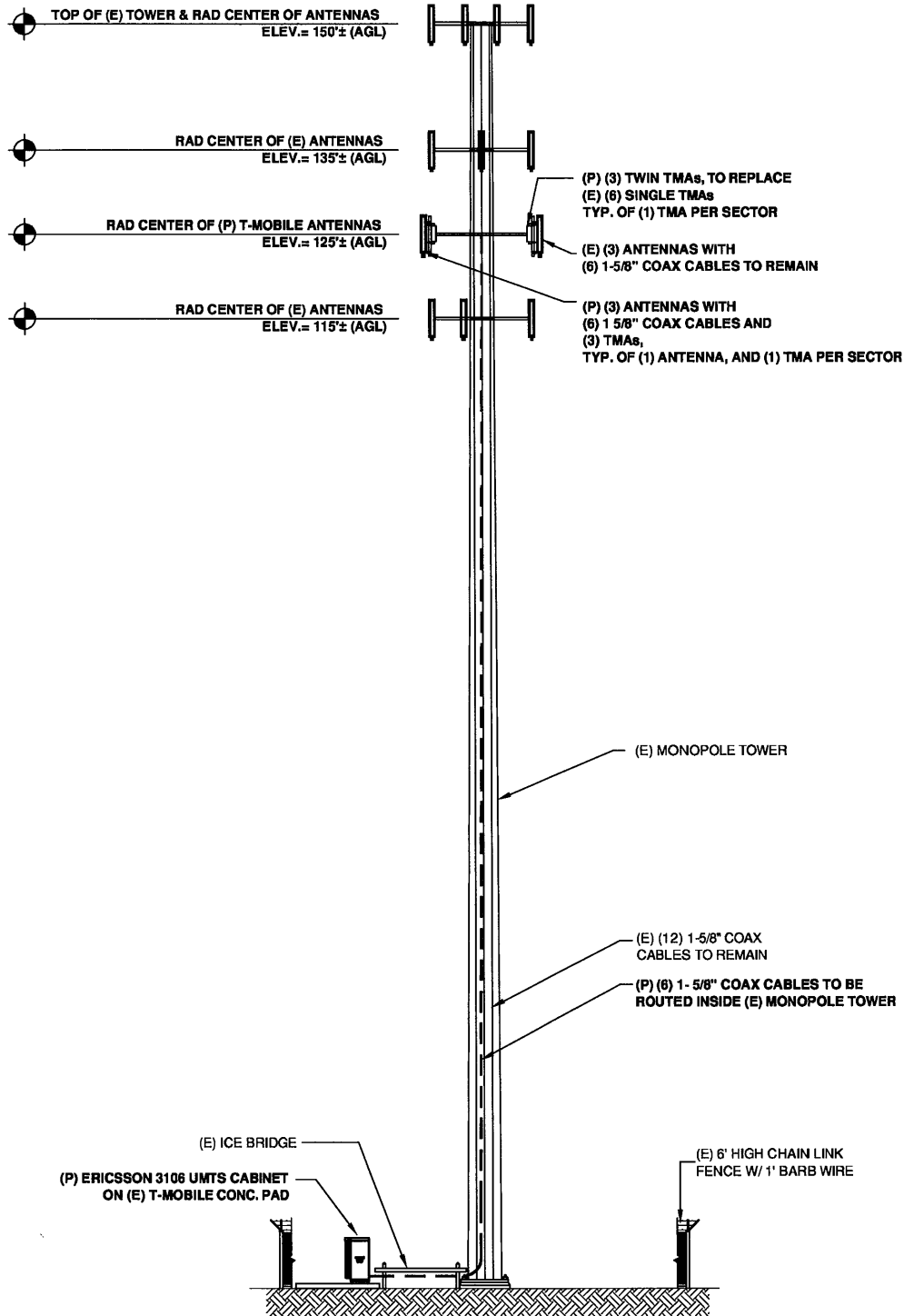
FOR
OMNIPPOINT COMMUNICATIONS, INC.
 DBA T-MOBILE USA, INC
 35 GRIFIN ROAD SOUTH
 BLOOMFIELD, CT 06002
 OFFICE: (860) 692-7100
 FAX: (860) 692-7159

ATLANTIS GROUP
 15 Cypress St., Suite 300
 Newton Centre, MA 02459
 Office: 617-865-0789
 Fax: 617-863-6032

SITE NAME: CT491/SSITE HARTFORD_MP1		
SITE NUMBER: CT11491B		
ADDRESS: 305 WEST SERVICE ROAD HARTFORD, CT 06120		
0:	FINAL	03-12-09
A:	REVIEW	02-03-09
NUMBER	REVISION	DATE
DRAWN BY S.B.		DRAWING NO. LE-2

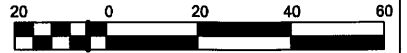
APPROVALS	
Site Owner	_____ Date _____
Construction Manager	_____ Date _____
RF Engineer	_____ Date _____
Site Acquisition	_____ Date _____

The above parties hereby approve and accept these documents and authorize the contractor to proceed with the construction described herein, all construction documents are subject to review by the local building department and any changes or modifications they may impose.



WEST ELEVATION VIEW

SCALE: 1" = 20'-0"



TRANSCEND WIRELESS 10 INDUSTRIAL AVENUE MAHWAH, NJ 07430 OFFICE: 201-316-2885 FAX: 201-684-9066 FOR OMNIPOINT COMMUNICATIONS, INC. DBA T-MOBILE USA, INC 35 GRIFIN ROAD SOUTH BLOOMFIELD, CT 06002 OFFICE: (860) 692-7100 FAX: (860) 692-7159	 ATLANTIS GROUP 15 Cypress St., Suite 300 Newton Centre, MA 02459 Office: 617-865-0789 Fax: 617-863-6032	SITE NAME: CT491/SSITE HARTFORD_MP1	APPROVALS										
		SITE NUMBER: CT11491B	ADDRESS: 305 WEST SERVICE ROAD HARTFORD, CT 06120	Site Owner _____ Date _____	Construction Manager _____ Date _____								
		<table border="1"> <tr> <td>0:</td> <td>FINAL LE</td> <td>03-12-09</td> </tr> <tr> <td>A:</td> <td>REVIEW</td> <td>02-03-09</td> </tr> <tr> <td>NUMBER</td> <td>REVISION</td> <td>DATE</td> </tr> </table>	0:	FINAL LE	03-12-09	A:	REVIEW	02-03-09	NUMBER	REVISION	DATE	RF Engineer _____ Date _____	Site Acquisition _____ Date _____
0:	FINAL LE	03-12-09											
A:	REVIEW	02-03-09											
NUMBER	REVISION	DATE											
DRAWN BY S.B.		DRAWING NO: LE-3	The above parties hereby approve and accept these documents and authorize the contractor to proceed with the construction described herein, all construction documents are subject to review by the local building department and any changes or modifications they may impose.										



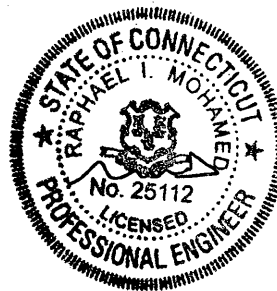
AMERICAN TOWER

Structural Analysis Report

Structure : 148 ft FWT Monopole
ATC Site Name : West Service Road, CT
ATC Site Number : 302466
Proposed Carrier : T-Mobile
Carrier Site Name : CT 491 / SSite Hartford_MP1
Carrier Site Number : CT11491B
County : Hartford
Eng. Number : 43091021
Date : March 16, 2009*
Usage : 93%
Portholes Required : No

Submitted by:
David Johnson, E.I.
Design Engineer

American Tower Engineering Services
400 Regency Forest Drive
Cary, NC 27518
Phone: 919-468-0112



3/17/07

Introduction

The purpose of this report is to summarize results of the structural analysis performed on the 148 ft FWT Monopole located at 305 W. Service Road, Hartford, CT 06120, Hartford County (ATC site #302466). The tower was originally designed and manufactured by FWT (Job #18053, dated September 10, 1998).

Analysis

The tower was analyzed using Semaan Engineering Solutions, Inc., Software. The analysis assumes that the tower is in good, undamaged, and non-corroded condition.

Basic Wind Speed: 80 mph (Fastest Mile)
 Radial Ice: 69 mph (Fastest Mile) w/ 1/2" ice
 Code: ANSI/TIA-222-F / 2003 IBC Section 1609.1.1, Exception (5) and Section 3108.4 / 2005 CT Supplement & 2008 CT Amendments

Antenna Loads

The following antenna loads were used in the tower analysis.

Existing Antennas

Elev. (ft)	Qty	Antennas	Mount	Coax (in)	Carrier
150.0	9	48" x 12" Panels	Flat Platform w/ Handrails	(9) 1 5/8	Sprint Nextel
	3	72" x 12" Panels		(3) 1 5/8	
137.0	9	48" x 4" Panels	Flat Low Profile Platform	(9) 1 5/8	AT&T Mobility
125.0	3	RFS APX16PV-16PVL-E-00	(3) Round T-Arm	(12) 1 5/8	T-Mobile
115.0	6	Andrew DB948F85E-M	Flat Low Profile Platform	(12) 1 5/8	Verizon
	6	Decibel DB844H80E-XY			
97.0	1	Antel BCD-87010	Side Arm	(1) 7/8	SMS

Proposed Antennas

Elev. (ft)	Qty	Antennas	Mount	Coax (in)	Carrier
125.0	3	RFS APX16DWV-16DWVL-S-E-ACU	(3) Round T-Arm	(6) 1 5/8	T-Mobile
	6	Andrew ETW200VS12UB		--	

Install proposed coax inside monopole.

Results

The maximum structure usage is: 93%

Additional exit and/or entry ports may be required to accommodate the running of the proposed lines to the proposed antennas. These additional ports **may not** be installed without installation drawings providing the location, size and welding requirements of each port.

To ensure compliance with all conditions of this structural analysis, port installation drawings shall be provided by American Tower's Engineering Department under a subsequent project.

Pole Reactions	Original Design Reactions	Current Analysis Reactions	% Of Design
Moment (ft-kips)	3,969.0	2,331.6	59
Shear (kips)	29.4	22.3	76

The structure base reactions resulting from this analysis were found to be acceptable through analysis based on geotechnical and foundation information, therefore no modification or reinforcement of the foundation will be required.

The structure's baseplate and anchor bolts also have sufficient strength to resist the base reactions from the analysis. Factor of safety exceeding two was noted for the baseplate and anchor bolts. Detailed calculation is shown at the end of the analysis.

Conclusion

Based on the analysis results, the structure meets the requirements per TIA/EIA-222-F, 2003 IBC and 2005 CT Supplement & 2008 CT Amendments standards. The tower and foundation can support the existing and proposed antennas with the TX line distribution as described in this report.

If you have any questions or require additional information, please call 919-463-6281.

Standard Conditions

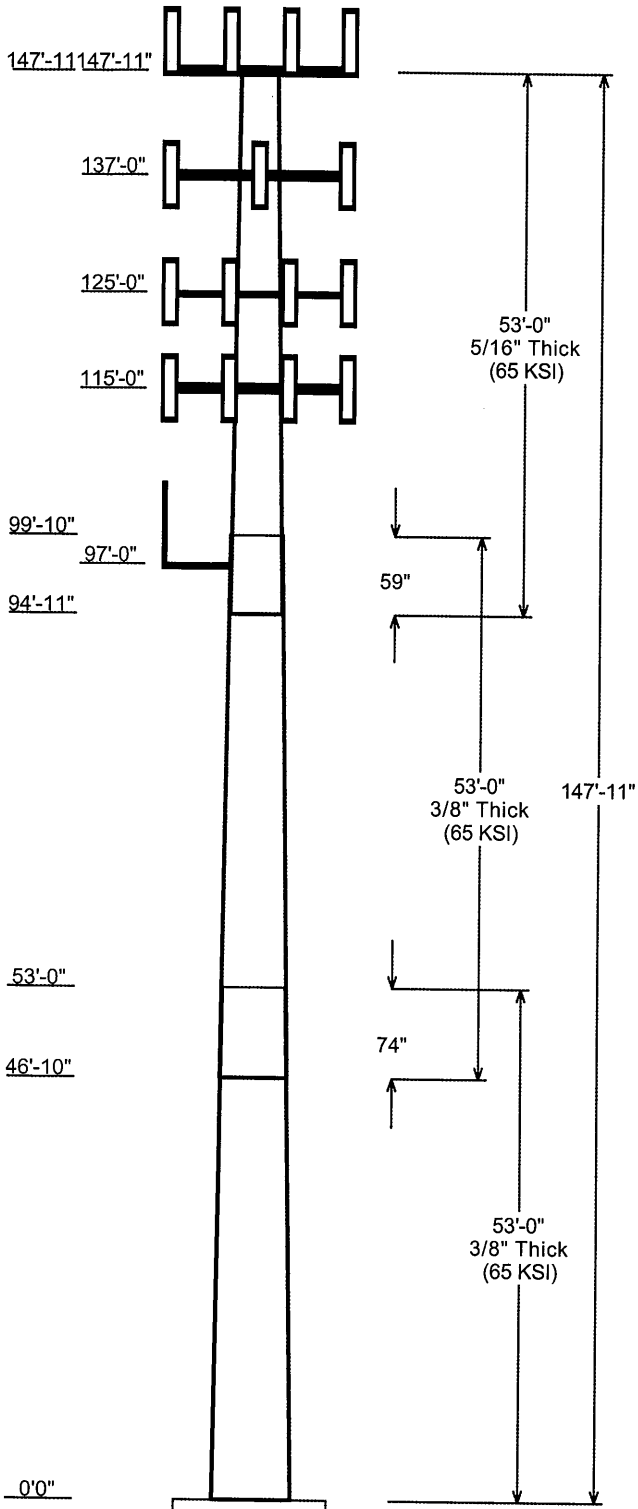
All engineering services are performed on the basis that the information used is current and correct. This information may consist of, but is not necessary limited, to:

- Information supplied by the client regarding the structure itself, the antenna and feed line loading on the structure and its components, or other relevant information.
- Information from drawings in the possession of American Tower Corporation, or generated by field inspections or measurements of the structure.

It is the responsibility of the client to ensure that the information provided to ATC Engineering Services and used in the performance of our engineering services is correct and complete. In the absence of information to the contrary, we assume that all structures were constructed in accordance with the drawings and specifications and are in an un-corroded condition and have not deteriorated; and we, therefore, assume that their capacity has not significantly changed from the "as new" condition.

All services will be performed to the codes specified by the client, and we do not imply to meet any other codes or requirements unless explicitly agreed in writing. If wind and ice loads or other relevant parameters are to be different from the minimum values recommended by the codes, the client shall specify the exact requirement. In the absence of information to the contrary, all work will be performed in accordance with the latest relevant revision of ANSI/EIA-222.

All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. ATC Engineering Services is not responsible for the conclusions, opinions and recommendations made by others based on the information we supply.



Job Information			
Pole :	302466	Code:	TIA/EIA-222 Rev F
Description :	148 ft FWT Monopole		
Client :	T-Mobile		
Location :	West Service Road, CT		
Shape :	18 Sides	Base Elev (ft):	0.00
Height :	147.92 (ft)	Taper:	0.214565(in/ft)

Sections Properties							
Section	Length (ft)	Diameter (in)		Thick Joint (in)	Type	Overlap Length (in)	Steel Grade (ksi)
		Across Flats Top	Across Flats Bottom				
1	53.000	45.20	56.58	0.375		0.000	65
2	53.000	35.90	47.28	0.375	Slip Joint	74.000	65
3	53.000	26.21	37.58	0.313	Slip Joint	59.000	65

Discrete Appurtenance			
Attach Elev (ft)	Force Elev (ft)	Qty	Description
147.916	147.916	1	Flat Platform with Handrails
147.916	150.000	9	48" x 12" Panels
147.916	150.000	3	72" x 12" Panels
137.000	137.000	9	48" x 4" Panels
137.000	137.000	1	Flat Low Profile Platform
125.000	125.000	3	RFS APX16DWV-16DWVL-S-E-
125.000	125.000	6	Andrew ETW200VS12UB
125.000	125.000	3	RFS APX16PV-16PVL-E-00
125.000	125.000	3	Round T-Arm
115.000	115.000	6	Andrew DB948F85E-M
115.000	115.000	6	Decibel DB844H80E-XY
115.000	115.000	1	Flat Low Profile Platform
97.000	102.583	1	Antel BCD-87010
97.000	97.000	1	Side Arm

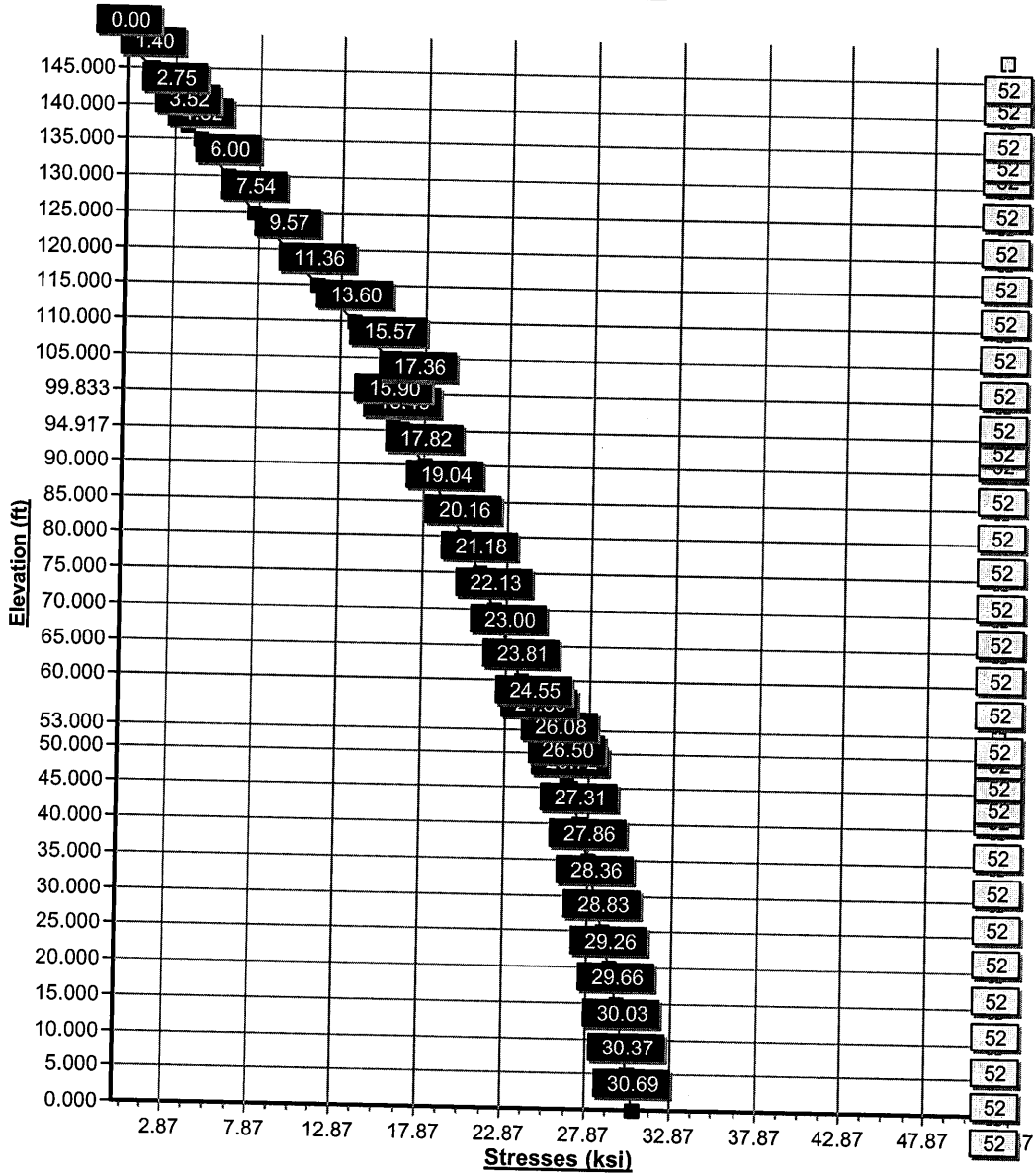
Linear Appurtenance			
Elev (ft)		Description	Exposed To Wind
From	To		
5.000	97.000	7/8" Coax	Yes
5.000	115.0	1 5/8" Coax	No
5.000	125.0	1 5/8" Coax	No
5.000	137.0	1 5/8" Coax	No
5.000	150.0	1 5/8" Coax	No

Load Cases	
No Ice	80.00 mph Wind with No Ice
Ice	69.28 mph Wind with Ice
Twist/Sway	50.00 mph Wind with No Ice

Reactions			
Load Case	Moment (Kip-ft)	Shear (Kips)	Axial (Kips)
No Ice	2331.62	22.30	37.53
Ice	1958.08	18.35	43.60
Twist/Sway	911.13	8.71	37.55

Dish Deflections			
Load Case	Attach Elev (ft)	Deflection (in)	Rotation (deg)
Twist/Sway	0.00	0.000	0.000

Load Case : No Ice
Max Stress 59.1% at 0.0ft

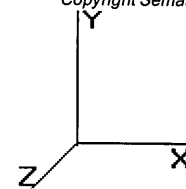


Pole : 302466
 Location : West Service Road, CT
 Height : 147.9 (ft)
 Shape : 18 Sides
 Base Dia : 56.58 (in)
 Top Dia : 26.21 (in)
 Taper : 0.214565 (in/ft)

Code: TIA/EIA-222 Rev F

Copyright Semaan Engineering Solutions, Inc
 3/16/2009 11:01:18 A
 Page: 1

Base Elev : 0.000 (ft)



Shaft Section Properties

Sect Num	Length (ft)	Thick (in)	Fv (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	53.000	0.3750	65		0.00	10,844	56.58	0.000	66.90	26698.9	24.84	150.8	45.20	53.00	53.36	13550.7	19.49	120.55	0.21456
2	53.000	0.3750	65	Slip Joint	74.00	8,848	47.28	46.83	55.83	15518.8	20.47	126.0	35.90	99.83	42.29	6746.9	15.12	95.76	0.21456
3	53.000	0.3125	65	Slip Joint	59.00	5,651	37.58	94.91	36.97	6490.8	19.45	120.2	26.21	147.9	25.69	2178.3	13.03	83.89	0.21456
Shaft Weight						25,343													

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)	Vert Ecc (ft)
147.9	Flat Platform with Handrails	1	2000.00	42.400	1.00	2450.00	48.400	1.00	0.000	0.000
147.9	48" x 12" Panels	9	30.00	5.600	0.67	63.00	6.190	0.67	0.000	2.084
147.9	72" x 12" Panels	3	45.00	8.400	0.67	92.28	9.230	0.67	0.000	2.084
137.0	48" x 4" Panels	9	20.00	2.090	0.81	31.40	2.540	0.81	0.000	0.000
137.0	Flat Low Profile Platform	1	1500.00	26.100	1.00	1700.00	31.600	1.00	0.000	0.000
125.0	RFS APX16DWV-16DWVL-S-E-	3	39.60	6.700	1.00	69.38	7.350	1.00	0.000	0.000
125.0	Andrew ETW200VS12UB	6	11.00	0.470	1.00	14.52	0.620	1.00	0.000	0.000
125.0	RFS APX16PV-16PVL-E-00	3	39.60	6.647	0.68	70.65	7.298	0.68	0.000	0.000
125.0	Round T-Arm	3	250.00	9.700	0.67	314.00	12.100	0.67	0.000	0.000
115.0	Andrew DB948F85E-M	6	8.50	3.270	0.82	27.00	3.810	0.82	0.000	0.000
115.0	Decibel DB844H80E-XY	6	14.00	3.730	0.92	40.30	4.290	0.92	0.000	0.000
115.0	Flat Low Profile Platform	1	1500.00	26.100	1.00	1700.00	31.600	1.00	0.000	0.000
97.00	Antel BCD-87010	1	26.50	2.900	1.00	47.98	4.050	1.00	0.000	5.583
97.00	Side Arm	1	150.00	6.300	1.00	230.00	7.000	1.00	0.000	0.000
Totals		53	6950.10			9107.41			Number of Loadings :	14

Linear Appurtenance Properties

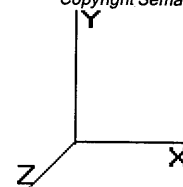
Elev From (ft)	Elev To (ft)	Description	No Ice Weight (lb/ft)	No Ice CaAa (sf/ft)	Ice Weight (lb/ft)	Ice CaAa (sf/ft)	Exposed To Wind
5.00	150.00	(12) 1 5/8" Coax	9.84	0.00	0.00	0.00	N
5.00	137.00	(9) 1 5/8" Coax	7.38	0.00	0.00	0.00	N
5.00	125.00	(18) 1 5/8" Coax	14.76	0.00	0.00	0.00	N
5.00	115.00	(12) 1 5/8" Coax	9.84	0.00	0.00	0.00	N
5.00	97.00	(1) 7/8" Coax	0.33	0.11	1.64	0.16	Y
Total Weight			5,284.92 (lb)		150.88 (lb)		

Pole : 302466
 Location : West Service Road, CT
 Height : 147.9 (ft)
 Shape : 18 Sides
 Base Dia : 56.58 (in)
 Top Dia : 26.21 (in)
 Taper : 0.214565 (in/ft)

Code: TIA/EIA-222 Rev F

Copyright Semaan Engineering Solutions, Inc
 3/16/2009 11:01:18 A
 Page: 2

Base Elev : 0.000 (ft)



Segment Properties (Max Len : 5 ft)

Seq Top Elev (ft)	Description	Thick (in)	Flat Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fy (ksi)	Fb (ksi)	Weight (lb)
0.00		0.3750	56.580	66.895	26,698.9	24.84	150.88	65	52	0.0
5.00		0.3750	55.507	65.618	25,199.0	24.34	148.02	65	52	1,127.3
10.00		0.3750	54.434	64.341	23,756.4	23.83	145.16	65	52	1,105.6
15.00		0.3750	53.361	63.065	22,369.9	23.33	142.30	65	52	1,083.8
20.00		0.3750	52.288	61.788	21,038.5	22.82	139.44	65	52	1,062.1
25.00		0.3750	51.216	60.511	19,760.9	22.32	136.57	65	52	1,040.4
30.00		0.3750	50.143	59.234	18,536.2	21.81	133.71	65	52	1,018.7
35.00		0.3750	49.070	57.957	17,363.1	21.31	130.85	65	52	996.9
40.00		0.3750	47.997	56.680	16,240.6	20.81	127.99	65	52	975.2
45.00		0.3750	46.924	55.403	15,167.5	20.30	125.13	65	52	953.5
46.83	Bot - Section 2	0.3750	46.531	54.935	14,786.2	20.12	124.08	65	52	344.2
50.00		0.3750	45.851	54.126	14,142.8	19.80	122.27	65	52	1,184.8
53.00	Top - Section 1	0.3750	45.958	54.253	14,242.2	19.85	122.55	65	52	1,106.4
55.00		0.3750	45.529	53.742	13,843.7	19.64	121.41	65	52	367.5
60.00		0.3750	44.456	52.465	12,880.2	19.14	118.55	65	52	903.5
65.00		0.3750	43.383	51.188	11,962.5	18.64	115.69	65	52	881.8
70.00		0.3750	42.310	49.912	11,089.5	18.13	112.83	65	52	860.1
75.00		0.3750	41.237	48.635	10,259.9	17.63	109.97	65	52	838.3
80.00		0.3750	40.165	47.358	9,472.9	17.12	107.11	65	52	816.6
85.00		0.3750	39.092	46.081	8,727.1	16.62	104.24	65	52	794.9
90.00		0.3750	38.019	44.804	8,021.5	16.11	101.38	65	52	773.2
94.92	Bot - Section 3	0.3750	36.964	43.548	7,365.9	15.62	98.57	65	52	739.1
95.00		0.3750	36.964	43.527	7,355.1	15.61	98.52	65	52	22.8
97.00		0.3750	36.517	43.016	7,099.2	15.41	97.38	65	52	544.5
99.83	Top - Section 2	0.3125	36.534	35.926	5,955.1	18.85	116.91	65	52	760.5
100.0		0.3125	36.498	35.890	5,937.5	18.83	116.79	65	52	20.4
105.0		0.3125	35.425	34.826	5,424.9	18.23	113.36	65	52	601.6
110.0		0.3125	34.353	33.762	4,942.7	17.62	109.93	65	52	583.5
115.0		0.3125	33.280	32.698	4,490.0	17.01	106.50	65	52	565.4
120.0		0.3125	32.207	31.634	4,065.7	16.41	103.06	65	52	547.3
125.0		0.3125	31.134	30.570	3,669.1	15.80	99.63	65	52	529.2
130.0		0.3125	30.061	29.506	3,299.1	15.20	96.20	65	52	511.1
135.0		0.3125	28.988	28.442	2,954.9	14.59	92.76	65	52	493.0
137.0		0.3125	28.559	28.016	2,824.2	14.35	91.39	65	52	192.1
140.0		0.3125	27.916	27.378	2,635.5	13.99	89.33	65	52	282.7
145.0		0.3125	26.843	26.314	2,340.0	13.38	85.90	65	52	456.8
147.9		0.3125	26.217	25.693	2,178.3	13.03	83.89	65	52	258.0
147.9		0.3125	26.217	25.693	2,178.3	13.03	83.89	65	52	0.1

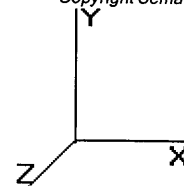
25,342.5

Pole : 302466
 Location : West Service Road, CT
 Height : 147.9 (ft)
 Shape : 18 Sides
 Base Dia : 56.58 (in)
 Top Dia : 26.21 (in)
 Taper : 0.214565 (in/ft)

Code: TIA/EIA-222 Rev F

Copyright Semaan Engineering Solutions, Inc
 3/16/2009 11:01:18 A
 Page: 3

Base Elev : 0.000 (ft)



Load Case: No Ice 80.00 mph Wind with No Ice 22 Iterations

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

Shaft Segment Forces

Seg Top Elev (ft)	Description	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		0.00	1.00 16.384	27.68 377.19	0.650		0.00	0.00	0.000	0.00	0.0	0.0	0.0
5.00		0.00	1.00 16.384	27.68 370.04	0.650		0.00	5.00	23.351	15.18	420.3	0.0	1,127.3
10.00		0.00	1.00 16.384	27.68 362.89	0.650		0.00	5.00	22.904	14.89	412.2	0.0	1,105.6
15.00		0.00	1.00 16.384	27.68 355.74	0.650		0.00	5.00	22.457	14.60	404.2	0.0	1,083.8
20.00		0.00	1.00 16.384	27.68 348.58	0.650		0.00	5.00	22.010	14.31	396.1	0.0	1,062.1
25.00		0.00	1.00 16.384	27.68 341.43	0.650		0.00	5.00	21.563	14.02	388.1	0.0	1,040.4
30.00		0.00	1.00 16.384	27.68 334.28	0.650		0.00	5.00	21.116	13.73	380.0	0.0	1,018.7
35.00		0.00	1.01 16.662	28.15 329.89	0.650		0.00	5.00	20.669	13.44	378.3	0.0	996.9
40.00		0.00	1.05 17.310	29.25 328.89	0.650		0.00	5.00	20.222	13.14	384.5	0.0	975.2
45.00		0.00	1.09 17.902	30.25 327.00	0.650		0.00	5.00	19.775	12.85	388.9	0.0	953.5
46.83	Bot - Section 2	0.00	1.10 18.108	30.60 326.11	0.650		0.00	1.83	7.139	4.64	142.0	0.0	344.2
50.00		0.00	1.12 18.449	31.17 324.37	0.650		0.00	3.17	12.387	8.05	251.0	0.0	1,184.8
53.00	Top - Section 1	0.00	1.14 18.759	31.70 322.49	0.650		0.00	3.00	11.570	7.52	238.4	0.0	1,106.4
55.00		0.00	1.15 18.959	32.04 326.50	0.650		0.00	2.00	7.624	4.96	158.8	0.0	367.5
60.00		0.00	1.18 19.436	32.84 322.79	0.650		0.00	5.00	18.747	12.19	400.2	0.0	903.5
65.00		0.00	1.21 19.885	33.60 318.62	0.650		0.00	5.00	18.300	11.89	399.7	0.0	881.8
70.00		0.00	1.24 20.311	34.32 314.05	0.650		0.00	5.00	17.853	11.60	398.3	0.0	860.1
75.00		0.00	1.26 20.715	35.00 309.12	0.650		0.00	5.00	17.406	11.31	396.1	0.0	838.3
80.00		0.00	1.28 21.101	35.66 303.87	0.650		0.00	5.00	16.959	11.02	393.1	0.0	816.6
85.00		0.00	1.31 21.469	36.28 298.32	0.650		0.00	5.00	16.512	10.73	389.4	0.0	794.9
90.00		0.00	1.33 21.823	36.88 292.51	0.650		0.00	5.00	16.065	10.44	385.1	0.0	773.2
94.92	Bot - Section 3	0.00	1.35 22.157	37.44 286.57	0.650		0.00	4.92	15.361	9.98	373.9	0.0	739.1
95.00		0.00	1.35 22.163	37.45 286.46	0.650		0.00	0.08	0.261	0.17	6.4	0.0	22.8
97.00	Appertunance(s)	0.00	1.36 22.295	37.67 283.98	0.650		0.00	2.00	6.226	4.05	152.5	0.0	544.5
99.83	Top - Section 2	0.00	1.37 22.479	37.99 280.40	0.650		0.00	2.83	8.698	5.65	214.8	0.0	760.5
100.0		0.00	1.37 22.490	38.00 285.07	0.650		0.00	0.17	0.507	0.33	12.5	0.0	20.4
105.0		0.00	1.39 22.806	38.54 278.63	0.650		0.00	5.00	14.984	9.74	375.4	0.0	601.6
110.0		0.00	1.41 23.111	39.05 271.99	0.650		0.00	5.00	14.537	9.45	369.1	0.0	583.5
115.0	Appertunance(s)	0.00	1.42 23.406	39.55 265.18	0.650		0.00	5.00	14.090	9.16	362.3	0.0	565.4
120.0		0.00	1.44 23.692	40.04 258.19	0.650		0.00	5.00	13.643	8.87	355.1	0.0	547.3
125.0	Appertunance(s)	0.00	1.46 23.970	40.51 251.05	0.650		0.00	5.00	13.196	8.58	347.5	0.0	529.2
130.0		0.00	1.48 24.241	40.96 243.76	0.650		0.00	5.00	12.749	8.29	339.5	0.0	511.1
135.0		0.00	1.49 24.503	41.41 236.33	0.650		0.00	5.00	12.302	8.00	331.1	0.0	493.0
137.0	Appertunance(s)	0.00	1.50 24.607	41.58 233.33	0.650		0.00	2.00	4.796	3.12	129.6	0.0	192.1
140.0		0.00	1.51 24.759	41.84 228.77	0.650		0.00	3.00	7.059	4.59	192.0	0.0	282.7
145.0		0.00	1.52 25.009	42.26 221.09	0.650		0.00	5.00	11.408	7.42	313.4	0.0	456.8
147.9	Appertunance(s)	0.00	1.53 25.151	42.50 216.55	0.650		0.00	2.92	6.447	4.19	178.1	0.0	258.0
147.9		0.00	1.53 25.152	42.50 216.55	0.650		0.00	0.00	0.002	0.00	0.1	0.0	0.1
Totals:								147.92			11,158.1	0.0	25,342.5

Pole : 302466
 Location : West Service Road, CT
 Height : 147.9 (ft)
 Shape : 18 Sides
 Base Dia : 56.58 (in)
 Top Dia : 26.21 (in)
 Taper : 0.214565 (in/ft)

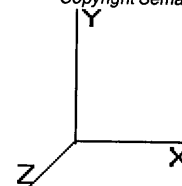
Code: TIA/EIA-222 Rev F

Copyright Semaan Engineering Solutions, Inc

3/16/2009 11:01:19 A

Page: 4

Base Elev : 0.000 (ft)



Load Case: No Ice

80.00 mph Wind with No Ice

22 Iterations

Gust Response Factor : 1.69

Dead Load Factor : 1.00

Wind Load Factor : 1.00

Discrete Appurtenance Segment Forces

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa Factor	Total CaAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
97.00	Antel BCD-87010	1	22.654	38.286	1.00	2.90	0.000	5.583	111.03	0.00	619.91	26.50
97.00	Side Arm	1	22.295	37.679	1.00	6.30	0.000	0.000	237.38	0.00	0.00	150.00
115.0	Andrew DB948F85E-M	6	23.406	39.556	0.82	16.09	0.000	0.000	636.40	0.00	0.00	51.00
115.0	Decibel DB844H80E-	6	23.406	39.556	0.92	20.59	0.000	0.000	814.45	0.00	0.00	84.00
115.0	Flat Low Profile Pla	1	23.406	39.556	1.00	26.10	0.000	0.000	1,032.42	0.00	0.00	1,500.00
125.0	RFS APX16DWV-	3	23.970	40.510	1.00	20.10	0.000	0.000	814.25	0.00	0.00	118.80
125.0	Andrew	6	23.970	40.510	1.00	2.82	0.000	0.000	114.24	0.00	0.00	66.00
125.0	RFS APX16PV-16PVL-	3	23.970	40.510	0.68	13.56	0.000	0.000	549.31	0.00	0.00	118.80
125.0	Round T-Arm	3	23.970	40.510	0.67	19.50	0.000	0.000	789.82	0.00	0.00	750.00
137.0	48" x 4" Panels	9	24.607	41.585	0.81	15.24	0.000	0.000	633.59	0.00	0.00	180.00
137.0	Flat Low Profile Pla	1	24.607	41.585	1.00	26.10	0.000	0.000	1,085.37	0.00	0.00	1,500.00
147.9	Flat Platform with H	1	25.151	42.506	1.00	42.40	0.000	0.000	1,802.25	0.00	0.00	2,000.00
147.9	48" x 12" Panels	9	25.252	42.676	0.67	33.77	0.000	2.084	1,441.09	0.00	3,003.23	270.00
147.9	72" x 12" Panels	3	25.252	42.676	0.67	16.88	0.000	2.084	720.55	0.00	1,501.62	135.00
									10,782.14			6,950.10

Pole : 302466
 Location : West Service Road, CT
 Height : 147.9 (ft)
 Shape : 18 Sides
 Base Dia : 56.58 (in)
 Top Dia : 26.21 (in)
 Taper : 0.214565 (in/ft)

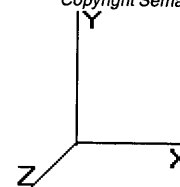
Code: TIA/EIA-222 Rev F

Copyright Semaan Engineering Solutions, Inc

3/16/2009 11:01:19 A

Page: 5

Base Elev : 0.000 (ft)



Load Case: No Ice 80.00 mph Wind with No Ice 22 Iterations

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

Linear Appurtenance Segment Forces

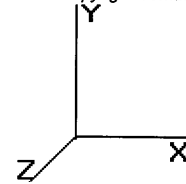
Seg Top Elev (ft)	Description	Exposed To Wind	Length (ft)	Weight (lb/ft)	CaAa (sf/ft)	qz (psf)	FX (lb)	Dead Load (lb)
10.00	(1) 7/8" Coax	Yes	5.00	0.33	0.11	16.384	15.09	1.65
15.00	(1) 7/8" Coax	Yes	5.00	0.33	0.11	16.384	15.09	1.65
20.00	(1) 7/8" Coax	Yes	5.00	0.33	0.11	16.384	15.09	1.65
25.00	(1) 7/8" Coax	Yes	5.00	0.33	0.11	16.384	15.09	1.65
30.00	(1) 7/8" Coax	Yes	5.00	0.33	0.11	16.384	15.09	1.65
35.00	(1) 7/8" Coax	Yes	5.00	0.33	0.11	16.662	15.35	1.65
40.00	(1) 7/8" Coax	Yes	5.00	0.33	0.11	17.310	15.94	1.65
45.00	(1) 7/8" Coax	Yes	5.00	0.33	0.11	17.902	16.49	1.65
46.83	(1) 7/8" Coax	Yes	1.83	0.33	0.11	18.108	6.12	0.61
50.00	(1) 7/8" Coax	Yes	3.17	0.33	0.11	18.449	10.76	1.04
53.00	(1) 7/8" Coax	Yes	3.00	0.33	0.11	18.759	10.37	0.99
55.00	(1) 7/8" Coax	Yes	2.00	0.33	0.11	18.959	6.98	0.66
60.00	(1) 7/8" Coax	Yes	5.00	0.33	0.11	19.436	17.90	1.65
65.00	(1) 7/8" Coax	Yes	5.00	0.33	0.11	19.885	18.32	1.65
70.00	(1) 7/8" Coax	Yes	5.00	0.33	0.11	20.311	18.71	1.65
75.00	(1) 7/8" Coax	Yes	5.00	0.33	0.11	20.715	19.08	1.65
80.00	(1) 7/8" Coax	Yes	5.00	0.33	0.11	21.101	19.43	1.65
85.00	(1) 7/8" Coax	Yes	5.00	0.33	0.11	21.469	19.77	1.65
90.00	(1) 7/8" Coax	Yes	5.00	0.33	0.11	21.823	20.10	1.62
94.92	(1) 7/8" Coax	Yes	4.92	0.33	0.11	22.157	20.07	1.62
95.00	(1) 7/8" Coax	Yes	0.08	0.33	0.11	22.163	0.34	0.03
97.00	(1) 7/8" Coax	Yes	2.00	0.33	0.11	22.295	8.21	0.66
Totals:							319.39	30.36

Pole : 302466
Location : West Service Road, CT
Height : 147.9 (ft)
Shape : 18 Sides
Base Dia : 56.58 (in)
Top Dia : 26.21 (in)
Taper : 0.214565 (in/ft)

Code: TIA/EIA-222 Rev F

Copyright Semaan Engineering Solutions, Inc
 3/16/2009 11:01:19 A
 Page: 6

Base Elev : 0.000 (ft)



Load Case: No Ice 80.00 mph Wind with No Ice 22 Iterations
Gust Response Factor : 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Applied Segment Forces Summary

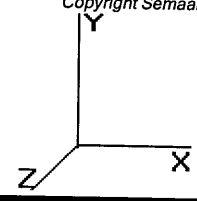
Seg Elev (ft)	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00	0.00	0.00	0.00	0.00
5.00	420.27	1,127.29	0.00	0.00
10.00	427.32	1,316.31	0.00	0.00
15.00	419.27	1,294.59	0.00	0.00
20.00	411.23	1,272.86	0.00	0.00
25.00	403.18	1,251.14	0.00	0.00
30.00	395.14	1,229.41	0.00	0.00
35.00	393.66	1,207.69	0.00	0.00
40.00	400.46	1,185.96	0.00	0.00
45.00	405.38	1,164.24	0.00	0.00
46.83	148.12	421.44	0.00	0.00
50.00	261.81	1,318.28	0.00	0.00
53.00	248.78	1,232.82	0.00	0.00
55.00	165.76	451.78	0.00	0.00
60.00	418.15	1,114.25	0.00	0.00
65.00	418.06	1,092.53	0.00	0.00
70.00	417.03	1,070.80	0.00	0.00
75.00	415.16	1,049.08	0.00	0.00
80.00	412.52	1,027.35	0.00	0.00
85.00	409.19	1,005.63	0.00	0.00
90.00	405.21	983.90	0.00	0.00
94.92	393.95	946.32	0.00	0.00
95.00	6.69	26.34	0.00	0.00
97.00	509.10	805.34	0.00	619.91
99.83	214.78	879.01	0.00	0.00
100.0	12.53	27.33	0.00	0.00
105.0	375.38	810.68	0.00	0.00
110.0	369.05	792.58	0.00	0.00
115.0	2,845.55	2,409.48	0.00	0.00
120.0	355.08	707.17	0.00	0.00
125.0	2,615.09	1,742.67	0.00	0.00
130.0	339.48	597.16	0.00	0.00
135.0	331.13	579.06	0.00	0.00
137.0	1,848.59	1,906.55	0.00	0.00
140.0	192.00	312.26	0.00	0.00
145.0	313.40	505.95	0.00	0.00
147.9	4,142.00	2,691.71	0.00	4,504.85
147.9	0.06	0.10	0.00	0.00
Totals:	22,259.58	37,557.06	0.00	5,124.76

Pole : 302466
 Location : West Service Road, CT
 Height : 147.9 (ft)
 Shape : 18 Sides
 Base Dia : 56.58 (in)
 Top Dia : 26.21 (in)
 Taper : 0.214565 (in/ft)

Code: TIA/EIA-222 Rev F

Copyright Semaan Engineering Solutions, Inc
 3/16/2009 11:01:19 A
 Page: 7

Base Elev : 0.000 (ft)



Load Case: No Ice 80.00 mph Wind with No Ice 22 Iterations

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

Calculated Shaft Forces and Deflections

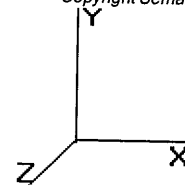
Seg Elev (ft)	Lateral FX (-) (kips)	Axial FY (-) (kips)	Lateral FZ (kips)	Moment MX (ft-kips)	Torsion MY (ft-kips)	Moment MZ (ft-kips)	X Deflect (in)	Z Deflect (in)	Total Deflect (in)	Rotation (deg)
0.00	-22.299	-37.533	0.000	0.000	0.000	-2,331.624	0.000	0.000	0.000	0.000
5.00	-21.955	-36.359	0.000	0.000	0.000	-2,220.130	-0.065	0.000	0.065	-0.121
10.00	-21.599	-34.998	0.000	0.000	0.000	-2,110.356	-0.258	0.000	0.258	-0.243
15.00	-21.245	-33.660	0.000	0.000	0.000	-2,002.366	-0.580	0.000	0.580	-0.367
20.00	-20.894	-32.345	0.000	0.000	0.000	-1,896.142	-1.030	0.000	1.030	-0.491
25.00	-20.547	-31.053	0.000	0.000	0.000	-1,791.672	-1.611	0.000	1.611	-0.615
30.00	-20.203	-29.784	0.000	0.000	0.000	-1,688.939	-2.323	0.000	2.323	-0.741
35.00	-19.855	-28.539	0.000	0.000	0.000	-1,587.928	-3.167	0.000	3.167	-0.866
40.00	-19.495	-27.317	0.000	0.000	0.000	-1,488.655	-4.142	0.000	4.142	-0.992
45.00	-19.108	-26.131	0.000	0.000	0.000	-1,391.180	-5.249	0.000	5.249	-1.118
46.83	-18.980	-25.692	0.000	0.000	0.000	-1,356.150	-5.688	0.000	5.688	-1.166
50.00	-18.724	-24.354	0.000	0.000	0.000	-1,296.047	-6.489	0.000	6.489	-1.246
53.00	-18.473	-23.106	0.000	0.000	0.000	-1,239.876	-7.297	0.000	7.297	-1.323
55.00	-18.331	-22.631	0.000	0.000	0.000	-1,202.930	-7.863	0.000	7.863	-1.374
60.00	-17.929	-21.491	0.000	0.000	0.000	-1,111.277	-9.366	0.000	9.366	-1.493
65.00	-17.524	-20.374	0.000	0.000	0.000	-1,021.631	-10.994	0.000	10.994	-1.611
70.00	-17.114	-19.281	0.000	0.000	0.000	-934.014	-12.744	0.000	12.744	-1.727
75.00	-16.703	-18.213	0.000	0.000	0.000	-848.444	-14.614	0.000	14.614	-1.842
80.00	-16.289	-17.168	0.000	0.000	0.000	-764.931	-16.603	0.000	16.603	-1.953
85.00	-15.875	-16.148	0.000	0.000	0.000	-683.485	-18.708	0.000	18.708	-2.062
90.00	-15.461	-15.152	0.000	0.000	0.000	-604.109	-20.924	0.000	20.924	-2.167
94.92	-15.043	-14.209	0.000	0.000	0.000	-528.092	-23.209	0.000	23.209	-2.266
95.00	-15.041	-14.178	0.000	0.000	0.000	-526.839	-23.248	0.000	23.248	-2.267
97.00	-14.511	-13.381	0.000	0.000	0.000	-496.138	-24.207	0.000	24.207	-2.307
99.83	-14.267	-12.505	0.000	0.000	0.000	-455.025	-25.592	0.000	25.592	-2.361
100.0	-14.264	-12.465	0.000	0.000	0.000	-452.647	-25.675	0.000	25.675	-2.364
105.0	-13.875	-11.648	0.000	0.000	0.000	-381.326	-28.205	0.000	28.205	-2.464
110.0	-13.488	-10.852	0.000	0.000	0.000	-311.953	-30.836	0.000	30.836	-2.555
115.0	-10.547	-8.560	0.000	0.000	0.000	-244.516	-33.556	0.000	33.556	-2.635
120.0	-10.168	-7.859	0.000	0.000	0.000	-191.783	-36.353	0.000	36.353	-2.704
125.0	-7.478	-6.236	0.000	0.000	0.000	-140.944	-39.217	0.000	39.217	-2.762
130.0	-7.114	-5.651	0.000	0.000	0.000	-103.552	-42.136	0.000	42.136	-2.810
135.0	-6.757	-5.086	0.000	0.000	0.000	-67.980	-45.099	0.000	45.099	-2.847
137.0	-4.817	-3.273	0.000	0.000	0.000	-54.466	-46.294	0.000	46.294	-2.859
140.0	-4.610	-2.970	0.000	0.000	0.000	-40.015	-48.095	0.000	48.095	-2.873
145.0	-4.272	-2.479	0.000	0.000	0.000	-16.963	-51.112	0.000	51.112	-2.888
147.9	0.000	0.000	0.000	0.000	0.000	0.000	-52.877	0.000	52.877	-2.892
147.9	0.000	0.000	0.000	0.000	0.000	0.000	-52.877	0.000	52.877	-2.892

Pole : 302466
 Location : West Service Road, CT
 Height : 147.9 (ft)
 Shape : 18 Sides
 Base Dia : 56.58 (in)
 Top Dia : 26.21 (in)
 Taper : 0.214565 (in/ft)

Code: TIA/EIA-222 Rev F

Copyright Semaan Engineering Solutions, Inc
 3/16/2009 11:01:19 A
 Page: 8

Base Elev : 0.000 (ft)



Load Case: No Ice

80.00 mph Wind with No Ice

22 Iterations

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

Calculated Stresses

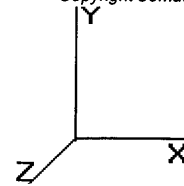
Seg Elev (ft)	Applied Stresses							Allowable Stress (Fb) (ksi)	Stress Ratio	
	Axial (Y) (ksi)	Shear (X) (ksi)	Shear (Z) (ksi)	Torsion (ksi)	Bending (X) (ksi)	Bending (Z) (ksi)	Combined (ksi)			
0.00	0.56	0.67	0.00	0.00	0.00	30.10	30.69	51.9	0.0	0.591
5.00	0.55	0.67	0.00	0.00	0.00	29.79	30.37	52.0	0.0	0.584
10.00	0.54	0.68	0.00	0.00	0.00	29.46	30.03	52.0	0.0	0.578
15.00	0.53	0.68	0.00	0.00	0.00	29.10	29.66	52.0	0.0	0.571
20.00	0.52	0.68	0.00	0.00	0.00	28.71	29.26	52.0	0.0	0.563
25.00	0.51	0.68	0.00	0.00	0.00	28.29	28.83	52.0	0.0	0.555
30.00	0.50	0.69	0.00	0.00	0.00	27.84	28.36	52.0	0.0	0.546
35.00	0.49	0.69	0.00	0.00	0.00	27.34	27.86	52.0	0.0	0.536
40.00	0.48	0.69	0.00	0.00	0.00	26.80	27.31	52.0	0.0	0.525
45.00	0.47	0.70	0.00	0.00	0.00	26.22	26.72	52.0	0.0	0.514
46.83	0.47	0.70	0.00	0.00	0.00	26.00	26.50	52.0	0.0	0.510
50.00	0.45	0.70	0.00	0.00	0.00	25.60	26.08	52.0	0.0	0.502
53.00	0.43	0.69	0.00	0.00	0.00	24.38	24.83	52.0	0.0	0.478
55.00	0.42	0.69	0.00	0.00	0.00	24.10	24.55	52.0	0.0	0.472
60.00	0.41	0.69	0.00	0.00	0.00	23.37	23.81	52.0	0.0	0.458
65.00	0.40	0.69	0.00	0.00	0.00	22.57	23.00	52.0	0.0	0.443
70.00	0.39	0.69	0.00	0.00	0.00	21.71	22.13	52.0	0.0	0.426
75.00	0.37	0.69	0.00	0.00	0.00	20.78	21.18	52.0	0.0	0.408
80.00	0.36	0.69	0.00	0.00	0.00	19.76	20.16	52.0	0.0	0.388
85.00	0.35	0.69	0.00	0.00	0.00	18.65	19.04	52.0	0.0	0.366
90.00	0.34	0.70	0.00	0.00	0.00	17.44	17.82	52.0	0.0	0.343
94.92	0.33	0.70	0.00	0.00	0.00	16.15	16.52	52.0	0.0	0.318
95.00	0.33	0.70	0.00	0.00	0.00	16.12	16.49	52.0	0.0	0.317
97.00	0.31	0.68	0.00	0.00	0.00	15.55	15.90	52.0	0.0	0.306
99.83	0.35	0.80	0.00	0.00	0.00	17.01	17.41	52.0	0.0	0.335
100.00	0.35	0.80	0.00	0.00	0.00	16.95	17.36	52.0	0.0	0.334
105.00	0.33	0.80	0.00	0.00	0.00	15.17	15.57	52.0	0.0	0.300
110.00	0.32	0.81	0.00	0.00	0.00	13.21	13.60	52.0	0.0	0.262
115.00	0.26	0.65	0.00	0.00	0.00	11.04	11.36	52.0	0.0	0.219
120.00	0.25	0.65	0.00	0.00	0.00	9.26	9.57	52.0	0.0	0.184
125.00	0.20	0.49	0.00	0.00	0.00	7.29	7.54	52.0	0.0	0.145
130.00	0.19	0.49	0.00	0.00	0.00	5.75	6.00	52.0	0.0	0.115
135.00	0.18	0.48	0.00	0.00	0.00	4.06	4.32	52.0	0.0	0.083
137.00	0.12	0.35	0.00	0.00	0.00	3.36	3.52	52.0	0.0	0.068
140.00	0.11	0.34	0.00	0.00	0.00	2.58	2.75	52.0	0.0	0.053
145.00	0.09	0.33	0.00	0.00	0.00	1.19	1.40	52.0	0.0	0.027
147.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	52.0	0.0	0.000
147.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	52.0	0.0	0.000

Pole : 302466
 Location : West Service Road, CT
 Height : 147.9 (ft)
 Shape : 18 Sides
 Base Dia : 56.58 (in)
 Top Dia : 26.21 (in)
 Taper : 0.214565 (in/ft)

Code: TIA/EIA-222 Rev F

Copyright Semaan Engineering Solutions, Inc
 3/16/2009 11:01:19 A
 Page: 9

Base Elev : 0.000 (ft)



Load Case: Ice

69.28 mph Wind with Ice

22 Iterations

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

Shaft Segment Forces

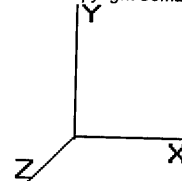
Seg Top Elev (ft)	Description	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)	
0.00		0.00	1.00	12.287	20.76	326.65	0.650	0.50	0.00	0.000	0.00	0.0	0.0	
5.00		0.00	1.00	12.287	20.76	320.46	0.650	0.50	5.00	23.768	15.45	320.8	172.8	1,300.1
10.00		0.00	1.00	12.287	20.76	314.26	0.650	0.50	5.00	23.321	15.16	314.8	169.5	1,275.1
15.00		0.00	1.00	12.287	20.76	308.07	0.650	0.50	5.00	22.874	14.87	308.7	166.2	1,250.0
20.00		0.00	1.00	12.287	20.76	301.87	0.650	0.50	5.00	22.427	14.58	302.7	162.9	1,225.0
25.00		0.00	1.00	12.287	20.76	295.68	0.650	0.50	5.00	21.980	14.29	296.7	159.6	1,200.0
30.00		0.00	1.00	12.287	20.76	289.49	0.650	0.50	5.00	21.533	14.00	290.6	156.3	1,174.9
35.00		0.00	1.01	12.496	21.11	285.68	0.650	0.50	5.00	21.086	13.71	289.4	153.0	1,149.9
40.00		0.00	1.05	12.982	21.93	284.82	0.650	0.50	5.00	20.639	13.42	294.3	149.6	1,124.9
45.00		0.00	1.09	13.426	22.69	283.18	0.650	0.50	5.00	20.192	13.12	297.8	146.3	1,099.8
46.83	Bot - Section 2	0.00	1.10	13.580	22.95	282.41	0.650	0.50	1.83	7.292	4.74	108.8	53.2	397.4
50.00		0.00	1.12	13.836	23.38	280.90	0.650	0.50	3.17	12.651	8.22	192.3	92.0	1,276.9
53.00	Top - Section 1	0.00	1.14	14.068	23.77	279.27	0.650	0.50	3.00	11.820	7.68	182.7	86.0	1,192.4
55.00		0.00	1.15	14.218	24.02	282.75	0.650	0.50	2.00	7.791	5.06	121.7	56.8	424.3
60.00		0.00	1.18	14.576	24.63	279.54	0.650	0.50	5.00	19.163	12.46	306.8	138.7	1,042.2
65.00		0.00	1.21	14.913	25.20	275.93	0.650	0.50	5.00	18.716	12.17	306.6	135.4	1,017.2
70.00		0.00	1.24	15.232	25.74	271.97	0.650	0.50	5.00	18.269	11.88	305.7	132.1	992.2
75.00		0.00	1.26	15.536	26.25	267.70	0.650	0.50	5.00	17.822	11.58	304.2	128.8	967.1
80.00		0.00	1.28	15.825	26.74	263.15	0.650	0.50	5.00	17.375	11.29	302.0	125.5	942.1
85.00		0.00	1.31	16.101	27.21	258.35	0.650	0.50	5.00	16.928	11.00	299.4	122.2	917.0
90.00		0.00	1.33	16.366	27.65	253.32	0.650	0.50	5.00	16.481	10.71	296.3	118.9	892.0
94.92	Bot - Section 3	0.00	1.35	16.617	28.08	248.17	0.650	0.50	4.92	15.771	10.25	287.9	113.7	852.8
95.00		0.00	1.35	16.621	28.09	248.08	0.650	0.50	0.08	0.268	0.17	4.9	2.0	24.8
97.00	Appertunance(s)	0.00	1.36	16.720	28.25	245.93	0.650	0.50	2.00	6.393	4.16	117.4	46.5	591.0
99.83	Top - Section 2	0.00	1.37	16.858	28.49	242.83	0.650	0.50	2.83	8.934	5.81	165.4	64.8	825.3
100.00		0.00	1.37	16.866	28.50	246.87	0.650	0.50	0.17	0.521	0.34	9.7	3.8	24.2
105.00		0.00	1.39	17.103	28.90	241.29	0.650	0.50	5.00	15.401	10.01	289.3	110.9	712.4
110.00		0.00	1.41	17.332	29.29	235.55	0.650	0.50	5.00	14.954	9.72	284.7	107.5	691.0
115.00	Appertunance(s)	0.00	1.42	17.554	29.66	229.64	0.650	0.50	5.00	14.507	9.43	279.7	104.2	669.6
120.00		0.00	1.44	17.768	30.02	223.60	0.650	0.50	5.00	14.060	9.14	274.4	100.9	648.2
125.00	Appertunance(s)	0.00	1.46	17.977	30.38	217.41	0.650	0.50	5.00	13.613	8.85	268.8	97.6	626.8
130.00		0.00	1.48	18.179	30.72	211.10	0.650	0.50	5.00	13.166	8.56	262.9	94.3	605.4
135.00		0.00	1.49	18.376	31.05	204.67	0.650	0.50	5.00	12.719	8.27	256.7	91.0	584.0
137.00	Appertunance(s)	0.00	1.50	18.454	31.18	202.06	0.650	0.50	2.00	4.962	3.23	100.6	35.9	228.0
140.00		0.00	1.51	18.568	31.38	198.12	0.650	0.50	3.00	7.309	4.75	149.1	52.6	335.4
145.00		0.00	1.52	18.755	31.69	191.46	0.650	0.50	5.00	11.825	7.69	243.6	84.4	541.1
147.9	Appertunance(s)	0.00	1.53	18.862	31.87	187.53	0.650	0.50	2.92	6.690	4.35	138.6	48.1	306.1
147.9		0.00	1.53	18.863	31.87	187.53	0.650	0.50	0.00	0.002	0.00	0.0	0.0	0.1
Totals:								147.92				8,576.3	3,783.9	29,126.4

Pole : 302466
 Location : West Service Road, CT
 Height : 147.9 (ft)
 Shape : 18 Sides
 Base Dia : 56.58 (in)
 Top Dia : 26.21 (in)
 Taper : 0.214565 (in/ft)

Code: TIA/EIA-222 Rev F

Copyright Semaan Engineering Solutions, Inc
 3/16/2009 11:01:20 A
 Page: 10

Base Elev : 0.000 (ft)



Load Case: Ice 69.28 mph Wind with Ice 22 Iterations
 Gust Response Factor : 1.69
 Dead Load Factor : 1.00
 Wind Load Factor : 1.00

Discrete Appurtenance Segment Forces

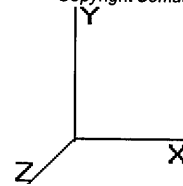
Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa Factor	Total CaAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
97.00	Antel BCD-87010	1	16.990	28.713	1.00	4.05	0.000	5.583	116.29	0.00	649.26	47.98
97.00	Side Arm	1	16.720	28.257	1.00	7.00	0.000	0.000	197.80	0.00	0.00	230.00
115.0	Andrew DB948F85E-M	6	17.554	29.666	0.82	18.75	0.000	0.000	556.09	0.00	0.00	162.00
115.0	Decibel DB844H80E-	6	17.554	29.666	0.92	23.68	0.000	0.000	702.50	0.00	0.00	241.79
115.0	Flat Low Profile Pla	1	17.554	29.666	1.00	31.60	0.000	0.000	937.43	0.00	0.00	1,700.00
125.0	RFS APX16DWV-	3	17.977	30.381	1.00	22.05	0.000	0.000	669.90	0.00	0.00	208.14
125.0	Andrew	6	17.977	30.381	1.00	3.72	0.000	0.000	113.02	0.00	0.00	87.12
125.0	RFS APX16PV-16PVL-	3	17.977	30.381	0.68	14.89	0.000	0.000	452.31	0.00	0.00	211.94
125.0	Round T-Arm	3	17.977	30.381	0.67	24.32	0.000	0.000	738.89	0.00	0.00	942.00
137.0	48" x 4" Panels	9	18.454	31.187	0.81	18.52	0.000	0.000	577.48	0.00	0.00	282.60
137.0	Flat Low Profile Pla	1	18.454	31.187	1.00	31.60	0.000	0.000	985.51	0.00	0.00	1,700.00
147.9	Flat Platform with H	1	18.862	31.878	1.00	48.40	0.000	0.000	1,542.87	0.00	0.00	2,450.00
147.9	48" x 12" Panels	9	18.938	32.005	0.67	37.33	0.000	2.084	1,194.62	0.00	2,489.59	567.00
147.9	72" x 12" Panels	3	18.938	32.005	0.67	18.55	0.000	2.084	593.77	0.00	1,237.42	276.84
									9,378.46			9,107.41

Pole : 302466
 Location : West Service Road, CT
 Height : 147.9 (ft)
 Shape : 18 Sides
 Base Dia : 56.58 (in)
 Top Dia : 26.21 (in)
 Taper : 0.214565 (in/ft)

Code: TIA/EIA-222 Rev F

Copyright Semaan Engineering Solutions, Inc
 3/16/2009 11:01:20 A
 Page: 11

Base Elev : 0.000 (ft)



Load Case: Ice 69.28 mph Wind with Ice 22 Iterations
 Gust Response Factor : 1.69
 Dead Load Factor : 1.00
 Wind Load Factor : 1.00

Linear Appurtenance Segment Forces

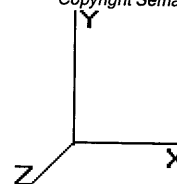
Seg Top Elev (ft)	Description	Exposed To Wind	Length (ft)	Weight (lb/ft)	CaAa (sf/ft)	qz (psf)	FX (lb)	Dead Load (lb)
10.00	(1) 7/8" Coax	Yes	5.00	1.64	0.16	12.287	16.61	8.20
15.00	(1) 7/8" Coax	Yes	5.00	1.64	0.16	12.287	16.61	8.20
20.00	(1) 7/8" Coax	Yes	5.00	1.64	0.16	12.287	16.61	8.20
25.00	(1) 7/8" Coax	Yes	5.00	1.64	0.16	12.287	16.61	8.20
30.00	(1) 7/8" Coax	Yes	5.00	1.64	0.16	12.287	16.61	8.20
35.00	(1) 7/8" Coax	Yes	5.00	1.64	0.16	12.496	16.89	8.20
40.00	(1) 7/8" Coax	Yes	5.00	1.64	0.16	12.982	17.55	8.20
45.00	(1) 7/8" Coax	Yes	5.00	1.64	0.16	13.426	18.15	8.20
46.83	(1) 7/8" Coax	Yes	1.83	1.64	0.16	13.580	6.73	3.01
50.00	(1) 7/8" Coax	Yes	3.17	1.64	0.16	13.836	11.85	5.19
53.00	(1) 7/8" Coax	Yes	3.00	1.64	0.16	14.068	11.41	4.92
55.00	(1) 7/8" Coax	Yes	2.00	1.64	0.16	14.218	7.69	3.28
60.00	(1) 7/8" Coax	Yes	5.00	1.64	0.16	14.576	19.71	8.20
65.00	(1) 7/8" Coax	Yes	5.00	1.64	0.16	14.913	20.16	8.20
70.00	(1) 7/8" Coax	Yes	5.00	1.64	0.16	15.232	20.59	8.20
75.00	(1) 7/8" Coax	Yes	5.00	1.64	0.16	15.536	21.00	8.20
80.00	(1) 7/8" Coax	Yes	5.00	1.64	0.16	15.825	21.39	8.20
85.00	(1) 7/8" Coax	Yes	5.00	1.64	0.16	16.101	21.77	8.20
90.00	(1) 7/8" Coax	Yes	5.00	1.64	0.16	16.366	22.13	8.20
94.92	(1) 7/8" Coax	Yes	4.92	1.64	0.16	16.617	22.09	8.06
95.00	(1) 7/8" Coax	Yes	0.08	1.64	0.16	16.621	0.37	0.14
97.00	(1) 7/8" Coax	Yes	2.00	1.64	0.16	16.720	9.04	3.28
Totals:							351.61	150.88

Pole : 302466
 Location : West Service Road, CT
 Height : 147.9 (ft)
 Shape : 18 Sides
 Base Dia : 56.58 (in)
 Top Dia : 26.21 (in)
 Taper : 0.214565 (in/ft)

Code: TIA/EIA-222 Rev F

Copyright Semaan Engineering Solutions, Inc
 3/16/2009 11:01:20 A
 Page: 12

Base Elev : 0.000 (ft)



Load Case: Ice 69.28 mph Wind with Ice 22 Iterations
 Gust Response Factor : 1.69
 Dead Load Factor : 1.00
 Wind Load Factor : 1.00

Applied Segment Forces Summary

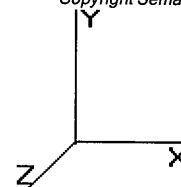
Seg Elev (ft)	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00	0.00	0.00	0.00	0.00
5.00	320.81	1,300.11	0.00	0.00
10.00	331.39	1,492.37	0.00	0.00
15.00	325.36	1,467.34	0.00	0.00
20.00	319.32	1,442.30	0.00	0.00
25.00	313.29	1,417.27	0.00	0.00
30.00	307.26	1,392.23	0.00	0.00
35.00	306.33	1,367.20	0.00	0.00
40.00	311.87	1,342.16	0.00	0.00
45.00	315.95	1,317.13	0.00	0.00
46.83	115.51	477.06	0.00	0.00
50.00	204.13	1,414.48	0.00	0.00
53.00	194.08	1,322.77	0.00	0.00
55.00	129.37	511.22	0.00	0.00
60.00	326.55	1,259.52	0.00	0.00
65.00	326.78	1,234.49	0.00	0.00
70.00	326.29	1,209.45	0.00	0.00
75.00	325.16	1,184.42	0.00	0.00
80.00	323.44	1,159.38	0.00	0.00
85.00	321.18	1,134.35	0.00	0.00
90.00	318.43	1,109.31	0.00	0.00
94.92	309.97	1,066.44	0.00	0.00
95.00	5.27	28.41	0.00	0.00
97.00	440.55	955.90	0.00	649.26
99.83	165.45	943.76	0.00	0.00
100.0	9.65	31.14	0.00	0.00
105.0	289.35	921.54	0.00	0.00
110.0	284.71	900.12	0.00	0.00
115.0	2,475.75	2,982.50	0.00	0.00
120.0	274.42	808.10	0.00	0.00
125.0	2,242.92	2,235.88	0.00	0.00
130.0	262.92	691.47	0.00	0.00
135.0	256.75	670.05	0.00	0.00
137.0	1,663.58	2,245.02	0.00	0.00
140.0	149.09	364.87	0.00	0.00
145.0	243.62	590.32	0.00	0.00
147.9	3,469.88	3,628.63	0.00	3,727.01
147.9	0.05	0.11	0.00	0.00
Totals:	18,306.39	43,618.80	0.00	4,376.27

Pole : 302466
 Location : West Service Road, CT
 Height : 147.9 (ft)
 Shape : 18 Sides
 Base Dia : 56.58 (in)
 Top Dia : 26.21 (in)
 Taper : 0.214565 (in/ft)

Code: TIA/EIA-222 Rev F

Copyright Semaan Engineering Solutions, Inc
 3/16/2009 11:01:20 A
 Page: 13

Base Elev : 0.000 (ft)



Load Case: Ice

69.28 mph Wind with Ice

22 Iterations

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

Calculated Shaft Forces and Deflections

Seg Elev (ft)	Lateral FX (-) (kips)	Axial FY (-) (kips)	Lateral FZ (kips)	Moment MX (ft-kips)	Torsion MY (ft-kips)	Moment MZ (ft-kips)	X Deflect (in)	Z Deflect (in)	Total Deflect (in)	Rotation (deg)
0.00	-18.345	-43.602	0.000	0.000	0.000	-1,958.084	0.000	0.000	0.000	0.000
5.00	-18.099	-42.270	0.000	0.000	0.000	-1,866.360	-0.055	0.000	0.055	-0.102
10.00	-17.837	-40.746	0.000	0.000	0.000	-1,775.868	-0.217	0.000	0.217	-0.205
15.00	-17.576	-39.249	0.000	0.000	0.000	-1,686.685	-0.487	0.000	0.487	-0.308
20.00	-17.317	-37.777	0.000	0.000	0.000	-1,598.806	-0.866	0.000	0.866	-0.413
25.00	-17.059	-36.331	0.000	0.000	0.000	-1,512.223	-1.356	0.000	1.356	-0.518
30.00	-16.803	-34.911	0.000	0.000	0.000	-1,426.929	-1.955	0.000	1.955	-0.624
35.00	-16.542	-33.516	0.000	0.000	0.000	-1,342.918	-2.666	0.000	2.666	-0.730
40.00	-16.272	-32.148	0.000	0.000	0.000	-1,260.207	-3.488	0.000	3.488	-0.837
45.00	-15.975	-30.816	0.000	0.000	0.000	-1,178.848	-4.422	0.000	4.422	-0.944
46.83	-15.880	-30.326	0.000	0.000	0.000	-1,149.561	-4.792	0.000	4.792	-0.984
50.00	-15.685	-28.897	0.000	0.000	0.000	-1,099.275	-5.468	0.000	5.468	-1.052
53.00	-15.492	-27.564	0.000	0.000	0.000	-1,052.222	-6.150	0.000	6.150	-1.117
55.00	-15.386	-27.036	0.000	0.000	0.000	-1,021.239	-6.628	0.000	6.628	-1.161
60.00	-15.079	-25.757	0.000	0.000	0.000	-944.308	-7.898	0.000	7.898	-1.262
65.00	-14.766	-24.505	0.000	0.000	0.000	-868.917	-9.273	0.000	9.273	-1.362
70.00	-14.450	-23.279	0.000	0.000	0.000	-795.087	-10.752	0.000	10.752	-1.461
75.00	-14.131	-22.080	0.000	0.000	0.000	-722.837	-12.335	0.000	12.335	-1.558
80.00	-13.810	-20.907	0.000	0.000	0.000	-652.183	-14.018	0.000	14.018	-1.653
85.00	-13.486	-19.761	0.000	0.000	0.000	-583.136	-15.799	0.000	15.799	-1.746
90.00	-13.162	-18.643	0.000	0.000	0.000	-515.706	-17.677	0.000	17.677	-1.836
94.92	-12.830	-17.577	0.000	0.000	0.000	-450.995	-19.612	0.000	19.612	-1.920
95.00	-12.829	-17.545	0.000	0.000	0.000	-449.926	-19.645	0.000	19.645	-1.921
97.00	-12.368	-16.596	0.000	0.000	0.000	-423.619	-20.458	0.000	20.458	-1.955
99.83	-12.177	-15.654	0.000	0.000	0.000	-388.576	-21.632	0.000	21.632	-2.001
100.0	-12.178	-15.613	0.000	0.000	0.000	-386.547	-21.702	0.000	21.702	-2.004
105.0	-11.877	-14.686	0.000	0.000	0.000	-325.656	-23.847	0.000	23.847	-2.089
110.0	-11.577	-13.782	0.000	0.000	0.000	-266.270	-26.078	0.000	26.078	-2.167
115.0	-9.000	-10.887	0.000	0.000	0.000	-208.387	-28.385	0.000	28.385	-2.235
120.0	-8.704	-10.082	0.000	0.000	0.000	-163.385	-30.759	0.000	30.759	-2.294
125.0	-6.378	-7.934	0.000	0.000	0.000	-119.867	-33.189	0.000	33.189	-2.344
130.0	-6.092	-7.250	0.000	0.000	0.000	-87.975	-35.665	0.000	35.665	-2.384
135.0	-5.809	-6.589	0.000	0.000	0.000	-57.517	-38.179	0.000	38.179	-2.415
137.0	-4.053	-4.416	0.000	0.000	0.000	-45.898	-39.193	0.000	39.193	-2.425
140.0	-3.890	-4.057	0.000	0.000	0.000	-33.738	-40.721	0.000	40.721	-2.437
145.0	-3.622	-3.477	0.000	0.000	0.000	-14.288	-43.281	0.000	43.281	-2.450
147.9	0.000	0.000	0.000	0.000	0.000	0.000	-44.778	0.000	44.778	-2.453
147.9	0.000	0.000	0.000	0.000	0.000	0.000	-44.779	0.000	44.779	-2.453

Pole : 302466
 Location : West Service Road, CT
 Height : 147.9 (ft)
 Shape : 18 Sides
 Base Dia : 56.58 (in)
 Top Dia : 26.21 (in)
 Taper : 0.214565 (in/ft)

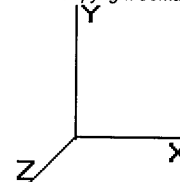
Code: TIA/EIA-222 Rev F

Copyright Semaan Engineering Solutions, Inc

3/16/2009 11:01:20 A

Page: 14

Base Elev : 0.000 (ft)



Load Case: Ice	69.28 mph Wind with Ice	22 Iterations
Gust Response Factor : 1.69		
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	0.65	0.55	0.00	0.00	0.00	25.28	25.95	51.9	0.0	0.500
5.00	0.64	0.56	0.00	0.00	0.00	25.05	25.71	52.0	0.0	0.495
10.00	0.63	0.56	0.00	0.00	0.00	24.79	25.44	52.0	0.0	0.490
15.00	0.62	0.56	0.00	0.00	0.00	24.51	25.15	52.0	0.0	0.484
20.00	0.61	0.56	0.00	0.00	0.00	24.21	24.84	52.0	0.0	0.478
25.00	0.60	0.57	0.00	0.00	0.00	23.88	24.50	52.0	0.0	0.471
30.00	0.59	0.57	0.00	0.00	0.00	23.52	24.13	52.0	0.0	0.464
35.00	0.58	0.58	0.00	0.00	0.00	23.12	23.72	52.0	0.0	0.456
40.00	0.57	0.58	0.00	0.00	0.00	22.69	23.28	52.0	0.0	0.448
45.00	0.56	0.58	0.00	0.00	0.00	22.22	22.80	52.0	0.0	0.439
46.83	0.55	0.58	0.00	0.00	0.00	22.04	22.61	52.0	0.0	0.435
50.00	0.53	0.58	0.00	0.00	0.00	21.71	22.27	52.0	0.0	0.428
53.00	0.51	0.58	0.00	0.00	0.00	20.69	21.22	52.0	0.0	0.408
55.00	0.50	0.58	0.00	0.00	0.00	20.46	20.99	52.0	0.0	0.404
60.00	0.49	0.58	0.00	0.00	0.00	19.86	20.37	52.0	0.0	0.392
65.00	0.48	0.58	0.00	0.00	0.00	19.20	19.70	52.0	0.0	0.379
70.00	0.47	0.58	0.00	0.00	0.00	18.48	18.98	52.0	0.0	0.365
75.00	0.45	0.59	0.00	0.00	0.00	17.70	18.18	52.0	0.0	0.350
80.00	0.44	0.59	0.00	0.00	0.00	16.85	17.32	52.0	0.0	0.333
85.00	0.43	0.59	0.00	0.00	0.00	15.91	16.37	52.0	0.0	0.315
90.00	0.42	0.59	0.00	0.00	0.00	14.89	15.34	52.0	0.0	0.295
94.92	0.40	0.59	0.00	0.00	0.00	13.79	14.23	52.0	0.0	0.274
95.00	0.40	0.59	0.00	0.00	0.00	13.77	14.21	52.0	0.0	0.273
97.00	0.39	0.58	0.00	0.00	0.00	13.28	13.70	52.0	0.0	0.264
99.83	0.44	0.68	0.00	0.00	0.00	14.52	15.01	52.0	0.0	0.289
100.00	0.44	0.68	0.00	0.00	0.00	14.48	14.96	52.0	0.0	0.288
105.00	0.42	0.69	0.00	0.00	0.00	12.96	13.43	52.0	0.0	0.258
110.00	0.41	0.69	0.00	0.00	0.00	11.27	11.74	52.0	0.0	0.226
115.00	0.33	0.55	0.00	0.00	0.00	9.41	9.79	52.0	0.0	0.188
120.00	0.32	0.55	0.00	0.00	0.00	7.89	8.26	52.0	0.0	0.159
125.00	0.26	0.42	0.00	0.00	0.00	6.20	6.50	52.0	0.0	0.125
130.00	0.25	0.42	0.00	0.00	0.00	4.88	5.18	52.0	0.0	0.100
135.00	0.23	0.41	0.00	0.00	0.00	3.44	3.74	52.0	0.0	0.072
137.00	0.16	0.29	0.00	0.00	0.00	2.83	3.03	52.0	0.0	0.058
140.00	0.15	0.29	0.00	0.00	0.00	2.18	2.38	52.0	0.0	0.046
145.00	0.13	0.28	0.00	0.00	0.00	1.00	1.23	52.0	0.0	0.024
147.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	52.0	0.0	0.000
147.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	52.0	0.0	0.000

Pole : 302466
 Location : West Service Road, CT
 Height : 147.9 (ft)
 Shape : 18 Sides
 Base Dia : 56.58 (in)
 Top Dia : 26.21 (in)
 Taper : 0.214565 (in/ft)

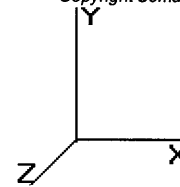
Code: TIA/EIA-222 Rev F

Copyright Semaan Engineering Solutions, Inc

3/16/2009 11:01:20 A

Page: 15

Base Elev : 0.000 (ft)



Load Case: Twist/Sway 50.00 mph Wind with No Ice 22 Iterations

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

Shaft Segment Forces

Seg Top Elev (ft)	Description	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)	
0.00		0.00	1.00	6.400	10.81	235.74	0.650	0.00	0.00	0.000	0.00	0.0	0.0	
5.00		0.00	1.00	6.400	10.81	231.27	0.650	0.00	5.00	23.351	15.18	164.2	0.0	1,127.3
10.00		0.00	1.00	6.400	10.81	226.80	0.650	0.00	5.00	22.904	14.89	161.0	0.0	1,105.6
15.00		0.00	1.00	6.400	10.81	222.33	0.650	0.00	5.00	22.457	14.60	157.9	0.0	1,083.8
20.00		0.00	1.00	6.400	10.81	217.86	0.650	0.00	5.00	22.010	14.31	154.7	0.0	1,062.1
25.00		0.00	1.00	6.400	10.81	213.39	0.650	0.00	5.00	21.563	14.02	151.6	0.0	1,040.4
30.00		0.00	1.00	6.400	10.81	208.92	0.650	0.00	5.00	21.116	13.73	148.5	0.0	1,018.7
35.00		0.00	1.01	6.509	10.99	206.18	0.650	0.00	5.00	20.669	13.44	147.8	0.0	996.9
40.00		0.00	1.05	6.762	11.42	205.56	0.650	0.00	5.00	20.222	13.14	150.2	0.0	975.2
45.00		0.00	1.09	6.993	11.81	204.37	0.650	0.00	5.00	19.775	12.85	151.9	0.0	953.5
46.83	Bot - Section 2	0.00	1.10	7.073	11.95	203.82	0.650	0.00	1.83	7.139	4.64	55.5	0.0	344.2
50.00		0.00	1.12	7.207	12.17	202.73	0.650	0.00	3.17	12.387	8.05	98.1	0.0	1,184.8
53.00	Top - Section 1	0.00	1.14	7.328	12.38	201.55	0.650	0.00	3.00	11.570	7.52	93.1	0.0	1,106.4
55.00		0.00	1.15	7.406	12.51	204.06	0.650	0.00	2.00	7.624	4.96	62.0	0.0	367.5
60.00		0.00	1.18	7.592	12.83	201.74	0.650	0.00	5.00	18.747	12.19	156.3	0.0	903.5
65.00		0.00	1.21	7.768	13.12	199.14	0.650	0.00	5.00	18.300	11.89	156.1	0.0	881.8
70.00		0.00	1.24	7.934	13.40	196.28	0.650	0.00	5.00	17.853	11.60	155.6	0.0	860.1
75.00		0.00	1.26	8.092	13.67	193.20	0.650	0.00	5.00	17.406	11.31	154.7	0.0	838.3
80.00		0.00	1.28	8.242	13.93	189.92	0.650	0.00	5.00	16.959	11.02	153.6	0.0	816.6
85.00		0.00	1.31	8.387	14.17	186.45	0.650	0.00	5.00	16.512	10.73	152.1	0.0	794.9
90.00		0.00	1.33	8.525	14.40	182.82	0.650	0.00	5.00	16.065	10.44	150.4	0.0	773.2
94.92	Bot - Section 3	0.00	1.35	8.655	14.62	179.10	0.650	0.00	4.92	15.361	9.98	146.0	0.0	739.1
95.00		0.00	1.35	8.657	14.63	179.04	0.650	0.00	0.08	0.261	0.17	2.5	0.0	22.8
97.00	Appertunance(s)	0.00	1.36	8.709	14.71	177.49	0.650	0.00	2.00	6.226	4.05	59.6	0.0	544.5
99.83	Top - Section 2	0.00	1.37	8.781	14.84	175.25	0.650	0.00	2.83	8.698	5.65	83.9	0.0	760.5
100.0		0.00	1.37	8.785	14.84	178.17	0.650	0.00	0.17	0.507	0.33	4.9	0.0	20.4
105.0		0.00	1.39	8.908	15.05	174.14	0.650	0.00	5.00	14.984	9.74	146.6	0.0	601.6
110.0		0.00	1.41	9.028	15.25	169.99	0.650	0.00	5.00	14.537	9.45	144.2	0.0	583.5
115.0	Appertunance(s)	0.00	1.42	9.143	15.45	165.73	0.650	0.00	5.00	14.090	9.16	141.5	0.0	565.4
120.0		0.00	1.44	9.255	15.64	161.37	0.650	0.00	5.00	13.643	8.87	138.7	0.0	547.3
125.0	Appertunance(s)	0.00	1.46	9.363	15.82	156.91	0.650	0.00	5.00	13.196	8.58	135.7	0.0	529.2
130.0		0.00	1.48	9.469	16.00	152.35	0.650	0.00	5.00	12.749	8.29	132.6	0.0	511.1
135.0		0.00	1.49	9.572	16.17	147.71	0.650	0.00	5.00	12.302	8.00	129.3	0.0	493.0
137.0	Appertunance(s)	0.00	1.50	9.612	16.24	145.83	0.650	0.00	2.00	4.796	3.12	50.6	0.0	192.1
140.0		0.00	1.51	9.672	16.34	142.98	0.650	0.00	3.00	7.059	4.59	75.0	0.0	282.7
145.0		0.00	1.52	9.769	16.51	138.18	0.650	0.00	5.00	11.408	7.42	122.4	0.0	456.8
147.9	Appertunance(s)	0.00	1.53	9.825	16.60	135.34	0.650	0.00	2.92	6.447	4.19	69.6	0.0	258.0
147.9		0.00	1.53	9.825	16.60	135.34	0.650	0.00	0.00	0.002	0.00	0.0	0.0	0.1
Totals:								147.92				4,358.6	0.0	25,342.5

Pole : 302466
 Location : West Service Road, CT
 Height : 147.9 (ft)
 Shape : 18 Sides
 Base Dia : 56.58 (in)
 Top Dia : 26.21 (in)
 Taper : 0.214565 (in/ft)

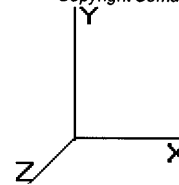
Code: TIA/EIA-222 Rev F

Copyright Semaan Engineering Solutions, Inc

3/16/2009 11:01:21 A

Page: 16

Base Elev : 0.000 (ft)



Load Case: Twist/Sway	50.00 mph Wind with No Ice	22 Iterations
Gust Response Factor: 1.69		
Dead Load Factor: 1.00		
Wind Load Factor: 1.00		

Discrete Appurtenance Segment Forces

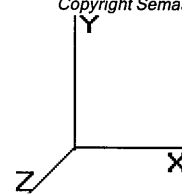
Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa Factor	Total CaAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
97.00	Antel BCD-87010	1	8.849	14.955	1.00	2.90	0.000	5.583	43.37	0.00	242.15	26.50
97.00	Side Arm	1	8.709	14.718	1.00	6.30	0.000	0.000	92.72	0.00	0.00	150.00
115.0	Andrew DB948F85E-M	6	9.143	15.452	0.82	16.09	0.000	0.000	248.59	0.00	0.00	51.00
115.0	Decibel DB844H80E-	6	9.143	15.452	0.92	20.59	0.000	0.000	318.14	0.00	0.00	84.00
115.0	Flat Low Profile Pla	1	9.143	15.452	1.00	26.10	0.000	0.000	403.29	0.00	0.00	1,500.00
125.0	RFS APX16DWV-	3	9.363	15.824	1.00	20.10	0.000	0.000	318.07	0.00	0.00	118.80
125.0	Andrew	6	9.363	15.824	1.00	2.82	0.000	0.000	44.62	0.00	0.00	66.00
125.0	RFS APX16PV-16PVL-	3	9.363	15.824	0.68	13.56	0.000	0.000	214.57	0.00	0.00	118.80
125.0	Round T-Arm	3	9.363	15.824	0.67	19.50	0.000	0.000	308.52	0.00	0.00	750.00
137.0	48" x 4" Panels	9	9.612	16.244	0.81	15.24	0.000	0.000	247.50	0.00	0.00	180.00
137.0	Flat Low Profile Pla	1	9.612	16.244	1.00	26.10	0.000	0.000	423.97	0.00	0.00	1,500.00
147.9	Flat Platform with H	1	9.825	16.604	1.00	42.40	0.000	0.000	704.00	0.00	0.00	2,000.00
147.9	48" x 12" Panels	9	9.864	16.670	0.67	33.77	0.000	2.084	562.93	0.00	1,173.14	270.00
147.9	72" x 12" Panels	3	9.864	16.670	0.67	16.88	0.000	2.084	281.46	0.00	586.57	135.00
									4,211.77			6,950.10

Pole : 302466
 Location : West Service Road, CT
 Height : 147.9 (ft)
 Shape : 18 Sides
 Base Dia : 56.58 (in)
 Top Dia : 26.21 (in)
 Taper : 0.214565 (in/ft)

Code: TIA/EIA-222 Rev F

Copyright Semaan Engineering Solutions, Inc
 3/16/2009 11:01:21 A
 Page: 17

Base Elev : 0.000 (ft)



Load Case: Twist/Sway 50.00 mph Wind with No Ice 22 Iterations
 Gust Response Factor : 1.69
 Dead Load Factor : 1.00
 Wind Load Factor : 1.00

Linear Appurtenance Segment Forces

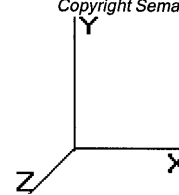
Seg Top Elev (ft)	Description	Exposed To Wind	Length (ft)	Weight (lb/ft)	CaAa (sf/ft)	qz (psf)	FX (lb)	Dead Load (lb)
10.00	(1) 7/8" Coax	Yes	5.00	0.33	0.11	6.400	5.89	1.65
15.00	(1) 7/8" Coax	Yes	5.00	0.33	0.11	6.400	5.89	1.65
20.00	(1) 7/8" Coax	Yes	5.00	0.33	0.11	6.400	5.89	1.65
25.00	(1) 7/8" Coax	Yes	5.00	0.33	0.11	6.400	5.89	1.65
30.00	(1) 7/8" Coax	Yes	5.00	0.33	0.11	6.400	5.89	1.65
35.00	(1) 7/8" Coax	Yes	5.00	0.33	0.11	6.509	5.99	1.65
40.00	(1) 7/8" Coax	Yes	5.00	0.33	0.11	6.762	6.23	1.65
45.00	(1) 7/8" Coax	Yes	5.00	0.33	0.11	6.993	6.44	1.65
46.83	(1) 7/8" Coax	Yes	1.83	0.33	0.11	7.073	2.39	0.61
50.00	(1) 7/8" Coax	Yes	3.17	0.33	0.11	7.207	4.20	1.04
53.00	(1) 7/8" Coax	Yes	3.00	0.33	0.11	7.328	4.05	0.99
55.00	(1) 7/8" Coax	Yes	2.00	0.33	0.11	7.406	2.73	0.66
60.00	(1) 7/8" Coax	Yes	5.00	0.33	0.11	7.592	6.99	1.65
65.00	(1) 7/8" Coax	Yes	5.00	0.33	0.11	7.768	7.15	1.65
70.00	(1) 7/8" Coax	Yes	5.00	0.33	0.11	7.934	7.31	1.65
75.00	(1) 7/8" Coax	Yes	5.00	0.33	0.11	8.092	7.45	1.65
80.00	(1) 7/8" Coax	Yes	5.00	0.33	0.11	8.242	7.59	1.65
85.00	(1) 7/8" Coax	Yes	5.00	0.33	0.11	8.387	7.72	1.65
90.00	(1) 7/8" Coax	Yes	5.00	0.33	0.11	8.525	7.85	1.65
94.92	(1) 7/8" Coax	Yes	4.92	0.33	0.11	8.655	7.84	1.62
95.00	(1) 7/8" Coax	Yes	0.08	0.33	0.11	8.657	0.13	0.03
97.00	(1) 7/8" Coax	Yes	2.00	0.33	0.11	8.709	3.21	0.66
Totals:							124.76	30.36

Pole : 302466
 Location : West Service Road, CT
 Height : 147.9 (ft)
 Shape : 18 Sides
 Base Dia : 56.58 (in)
 Top Dia : 26.21 (in)
 Taper : 0.214565 (in/ft)

Code: TIA/EIA-222 Rev F

Copyright Semaan Engineering Solutions, Inc
 3/16/2009 11:01:21 A
 Page: 18

Base Elev : 0.000 (ft)



Load Case: Twist/Sway	50.00 mph Wind with No Ice	22 Iterations
Gust Response Factor: 1.69		
Dead Load Factor: 1.00		
Wind Load Factor: 1.00		

Applied Segment Forces Summary

Seg Elev (ft)	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00	0.00	0.00	0.00	0.00
5.00	164.17	1,127.29	0.00	0.00
10.00	166.92	1,316.31	0.00	0.00
15.00	163.78	1,294.59	0.00	0.00
20.00	160.64	1,272.86	0.00	0.00
25.00	157.49	1,251.14	0.00	0.00
30.00	154.35	1,229.41	0.00	0.00
35.00	153.77	1,207.69	0.00	0.00
40.00	156.43	1,185.96	0.00	0.00
45.00	158.35	1,164.24	0.00	0.00
46.83	57.86	421.44	0.00	0.00
50.00	102.27	1,318.28	0.00	0.00
53.00	97.18	1,232.82	0.00	0.00
55.00	64.75	451.78	0.00	0.00
60.00	163.34	1,114.25	0.00	0.00
65.00	163.30	1,092.53	0.00	0.00
70.00	162.90	1,070.80	0.00	0.00
75.00	162.17	1,049.08	0.00	0.00
80.00	161.14	1,027.35	0.00	0.00
85.00	159.84	1,005.63	0.00	0.00
90.00	158.29	983.90	0.00	0.00
94.92	153.89	946.32	0.00	0.00
95.00	2.61	26.34	0.00	0.00
97.00	198.87	805.34	0.00	242.15
99.83	83.90	879.01	0.00	0.00
100.0	4.89	27.33	0.00	0.00
105.0	146.63	810.68	0.00	0.00
110.0	144.16	792.58	0.00	0.00
115.0	1,111.54	2,409.48	0.00	0.00
120.0	138.70	707.17	0.00	0.00
125.0	1,021.52	1,742.67	0.00	0.00
130.0	132.61	597.16	0.00	0.00
135.0	129.35	579.06	0.00	0.00
137.0	722.11	1,906.55	0.00	0.00
140.0	75.00	312.26	0.00	0.00
145.0	122.42	505.95	0.00	0.00
147.9	1,617.97	2,691.71	0.00	1,759.71
147.9	0.02	0.10	0.00	0.00
Totals:	8,695.15	37,557.06	0.00	2,001.86

Pole : 302466
 Location : West Service Road, CT
 Height : 147.9 (ft)
 Shape : 18 Sides
 Base Dia : 56.58 (in)
 Top Dia : 26.21 (in)
 Taper : 0.214565 (in/ft)

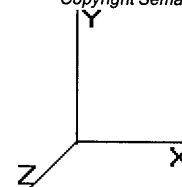
Code: TIA/EIA-222 Rev F

Copyright Semaan Engineering Solutions, Inc

3/16/2009 11:01:21 A

Page: 19

Base Elev : 0.000 (ft)



Load Case: Twist/Sway

50.00 mph Wind with No Ice

22 Iterations

Gust Response Factor : 1.69

Dead Load Factor : 1.00

Wind Load Factor : 1.00

Calculated Shaft Forces and Deflections

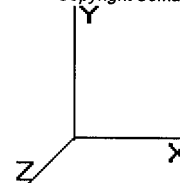
Seg Elev (ft)	Lateral FX (-) (kips)	Axial FY (-) (kips)	Lateral FZ (kips)	Moment MX (ft-kips)	Torsion MY (ft-kips)	Moment MZ (ft-kips)	X Deflect (in)	Z Deflect (in)	Total Deflect (in)	Rotation (deg)
0.00	-8.711	-37.553	0.000	0.000	0.000	-911.125	0.000	0.000	0.000	0.000
5.00	-8.576	-36.419	0.000	0.000	0.000	-867.573	-0.026	0.000	0.026	-0.047
10.00	-8.437	-35.096	0.000	0.000	0.000	-824.692	-0.101	0.000	0.101	-0.095
15.00	-8.299	-33.795	0.000	0.000	0.000	-782.508	-0.227	0.000	0.227	-0.143
20.00	-8.162	-32.515	0.000	0.000	0.000	-741.013	-0.403	0.000	0.403	-0.192
25.00	-8.027	-31.258	0.000	0.000	0.000	-700.202	-0.630	0.000	0.630	-0.240
30.00	-7.892	-30.023	0.000	0.000	0.000	-660.070	-0.908	0.000	0.908	-0.289
35.00	-7.757	-28.809	0.000	0.000	0.000	-620.609	-1.238	0.000	1.238	-0.339
40.00	-7.617	-27.618	0.000	0.000	0.000	-581.826	-1.619	0.000	1.619	-0.388
45.00	-7.465	-26.450	0.000	0.000	0.000	-543.744	-2.051	0.000	2.051	-0.437
46.83	-7.416	-26.026	0.000	0.000	0.000	-530.057	-2.223	0.000	2.223	-0.456
50.00	-7.316	-24.705	0.000	0.000	0.000	-506.575	-2.536	0.000	2.536	-0.487
53.00	-7.218	-23.470	0.000	0.000	0.000	-484.628	-2.852	0.000	2.852	-0.517
55.00	-7.162	-23.014	0.000	0.000	0.000	-470.193	-3.073	0.000	3.073	-0.537
60.00	-7.006	-21.896	0.000	0.000	0.000	-434.381	-3.661	0.000	3.661	-0.584
65.00	-6.848	-20.800	0.000	0.000	0.000	-399.352	-4.297	0.000	4.297	-0.630
70.00	-6.688	-19.726	0.000	0.000	0.000	-365.114	-4.981	0.000	4.981	-0.675
75.00	-6.528	-18.674	0.000	0.000	0.000	-331.674	-5.712	0.000	5.712	-0.720
80.00	-6.366	-17.644	0.000	0.000	0.000	-299.036	-6.489	0.000	6.489	-0.763
85.00	-6.205	-16.636	0.000	0.000	0.000	-267.204	-7.312	0.000	7.312	-0.806
90.00	-6.043	-15.650	0.000	0.000	0.000	-236.180	-8.179	0.000	8.179	-0.847
94.92	-5.880	-14.704	0.000	0.000	0.000	-206.467	-9.072	0.000	9.072	-0.886
95.00	-5.879	-14.677	0.000	0.000	0.000	-205.977	-9.087	0.000	9.087	-0.886
97.00	-5.672	-13.873	0.000	0.000	0.000	-193.976	-9.462	0.000	9.462	-0.902
99.83	-5.577	-12.994	0.000	0.000	0.000	-177.905	-10.003	0.000	10.003	-0.923
100.0	-5.576	-12.965	0.000	0.000	0.000	-176.976	-10.036	0.000	10.036	-0.924
105.0	-5.424	-12.154	0.000	0.000	0.000	-149.094	-11.025	0.000	11.025	-0.963
110.0	-5.273	-11.360	0.000	0.000	0.000	-121.974	-12.054	0.000	12.054	-0.999
115.0	-4.124	-8.969	0.000	0.000	0.000	-95.608	-13.117	0.000	13.117	-1.030
120.0	-3.976	-8.263	0.000	0.000	0.000	-74.990	-14.211	0.000	14.211	-1.057
125.0	-2.924	-6.538	0.000	0.000	0.000	-55.112	-15.331	0.000	15.331	-1.080
130.0	-2.782	-5.943	0.000	0.000	0.000	-40.491	-16.472	0.000	16.472	-1.098
135.0	-2.642	-5.366	0.000	0.000	0.000	-26.581	-17.631	0.000	17.631	-1.113
137.0	-1.884	-3.474	0.000	0.000	0.000	-21.296	-18.098	0.000	18.098	-1.117
140.0	-1.803	-3.163	0.000	0.000	0.000	-15.646	-18.802	0.000	18.802	-1.123
145.0	-1.671	-2.659	0.000	0.000	0.000	-6.631	-19.982	0.000	19.982	-1.129
147.9	0.000	0.000	0.000	0.000	0.000	0.000	-20.672	0.000	20.672	-1.130
147.9	0.000	0.000	0.000	0.000	0.000	0.000	-20.672	0.000	20.672	-1.130

Pole : 302466
 Location : West Service Road, CT
 Height : 147.9 (ft)
 Shape : 18 Sides
 Base Dia : 56.58 (in)
 Top Dia : 26.21 (in)
 Taper : 0.214565 (in/ft)

Code: TIA/EIA-222 Rev F

Copyright Semaan Engineering Solutions, Inc
 3/16/2009 11:01:21 A
 Page: 20

Base Elev : 0.000 (ft)



Load Case: Twist/Sway 50.00 mph Wind with No Ice 22 Iterations

Gust Response Factor : 1.69
 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	0.56	0.26	0.00	0.00	0.00	11.76	12.33	51.9	0.0	0.237
5.00	0.56	0.26	0.00	0.00	0.00	11.64	12.21	52.0	0.0	0.235
10.00	0.55	0.26	0.00	0.00	0.00	11.51	12.07	52.0	0.0	0.232
15.00	0.54	0.27	0.00	0.00	0.00	11.37	11.92	52.0	0.0	0.229
20.00	0.53	0.27	0.00	0.00	0.00	11.22	11.76	52.0	0.0	0.226
25.00	0.52	0.27	0.00	0.00	0.00	11.06	11.58	52.0	0.0	0.223
30.00	0.51	0.27	0.00	0.00	0.00	10.88	11.40	52.0	0.0	0.219
35.00	0.50	0.27	0.00	0.00	0.00	10.69	11.19	52.0	0.0	0.215
40.00	0.49	0.27	0.00	0.00	0.00	10.48	10.97	52.0	0.0	0.211
45.00	0.48	0.27	0.00	0.00	0.00	10.25	10.74	52.0	0.0	0.207
46.83	0.47	0.27	0.00	0.00	0.00	10.16	10.65	52.0	0.0	0.205
50.00	0.46	0.27	0.00	0.00	0.00	10.01	10.47	52.0	0.0	0.201
53.00	0.43	0.27	0.00	0.00	0.00	9.53	9.97	52.0	0.0	0.192
55.00	0.43	0.27	0.00	0.00	0.00	9.42	9.86	52.0	0.0	0.190
60.00	0.42	0.27	0.00	0.00	0.00	9.13	9.56	52.0	0.0	0.184
65.00	0.41	0.27	0.00	0.00	0.00	8.82	9.24	52.0	0.0	0.178
70.00	0.40	0.27	0.00	0.00	0.00	8.49	8.89	52.0	0.0	0.171
75.00	0.38	0.27	0.00	0.00	0.00	8.12	8.52	52.0	0.0	0.164
80.00	0.37	0.27	0.00	0.00	0.00	7.72	8.11	52.0	0.0	0.156
85.00	0.36	0.27	0.00	0.00	0.00	7.29	7.67	52.0	0.0	0.148
90.00	0.35	0.27	0.00	0.00	0.00	6.82	7.18	52.0	0.0	0.138
94.92	0.34	0.27	0.00	0.00	0.00	6.31	6.67	52.0	0.0	0.128
95.00	0.34	0.27	0.00	0.00	0.00	6.30	6.66	52.0	0.0	0.128
97.00	0.32	0.27	0.00	0.00	0.00	6.08	6.42	52.0	0.0	0.123
99.83	0.36	0.31	0.00	0.00	0.00	6.65	7.03	52.0	0.0	0.135
100.00	0.36	0.31	0.00	0.00	0.00	6.63	7.01	52.0	0.0	0.135
105.00	0.35	0.31	0.00	0.00	0.00	5.93	6.30	52.0	0.0	0.121
110.00	0.34	0.31	0.00	0.00	0.00	5.16	5.53	52.0	0.0	0.106
115.00	0.27	0.25	0.00	0.00	0.00	4.32	4.61	52.0	0.0	0.089
120.00	0.26	0.25	0.00	0.00	0.00	3.62	3.91	52.0	0.0	0.075
125.00	0.21	0.19	0.00	0.00	0.00	2.85	3.08	52.0	0.0	0.059
130.00	0.20	0.19	0.00	0.00	0.00	2.25	2.47	52.0	0.0	0.048
135.00	0.19	0.19	0.00	0.00	0.00	1.59	1.81	52.0	0.0	0.035
137.00	0.12	0.14	0.00	0.00	0.00	1.31	1.46	52.0	0.0	0.028
140.00	0.12	0.13	0.00	0.00	0.00	1.01	1.15	52.0	0.0	0.022
145.00	0.10	0.13	0.00	0.00	0.00	0.46	0.61	52.0	0.0	0.012
147.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	52.0	0.0	0.000
147.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	52.0	0.0	0.000

Pole : 302466
 Location : West Service Road, CT
 Height : 147.9 (ft)
 Shape : 18 Sides
 Base Dia : 56.58 (in)
 Top Dia : 26.21 (in)
 Taper : 0.214565 (in/ft)

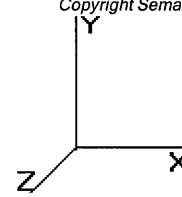
Code: TIA/EIA-222 Rev F

Copyright Semaan Engineering Solutions, Inc

3/16/2009 11:01:21 A

Page: 21

Base Elev : 0.000 (ft)



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	22.3	0.00	37.53	0.00	0.00	2331.62	30.69	51.9	0.00	0.591
Ice	18.3	0.00	43.60	0.00	0.00	1958.08	25.95	51.9	0.00	0.500
Twist/Sway	8.7	0.00	37.55	0.00	0.00	911.13	12.33	51.9	0.00	0.237

Base/Flange Plate	Plate Type	Baseplate
	Pole Diameter	56.58 in
	Pole Thickness	0.375 in
	Plate Diameter	69 in
	Plate Thickness	2.5 in
	Plate Fy	60 ksi
	Weld Length	0.313 in
	Allowable	313.61 k-in
	Applied	193.71 k-in
	Stiffeners	#

Code Rev. **F**
A.S.I. **1.33**
Moment **2331.6 k-ft**
Axial **37.5 k**

Date **3/16/2009**
Engineer **DRJ**
Site # **302466**
Carrier **T-Mobile**

Bolts	#	16
	Bolt Circle (R)adial / (S)quare	63 in R
	Diameter	2.25 in
	Hole Diameter	2.375 in
	Type	#18J
	Fy	75 ksi
	Fu	100 ksi
Reinforcement	Allowable	121.79 k
	Applied	113.31 k
Extra Bolts	#	0

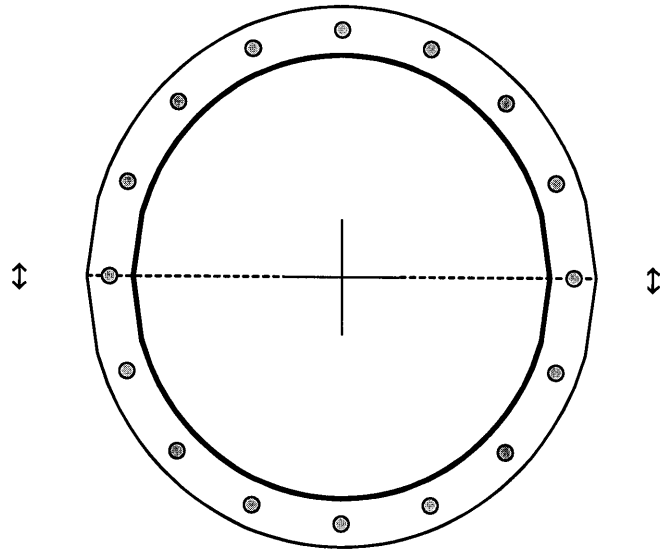
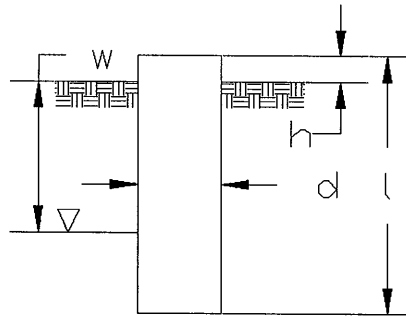


Plate Stress Ratio FS=2:
0.62 (Pass)

Bolt Stress Ratio FS=2:
0.93 (Pass)

Site Name: West Service Road, CT
 Site Number: 302466
 Engineer: DRJ
 Date: 3/16/2009



Design Base Loads (Unfactored)

Moment: 2331.6 k-ft
 Shear/Leg: 22.3 k
 Compression/Leg: 43.6 k
 Uplift/Leg: 0.0 k

Diameter of Caisson (d): 7.0 ft
 Length of Caisson (l): 34.0 ft
 Caisson Height Above Ground (h): 0.5 ft
 Depth Below Ground Surface to Water Table (w): 4.0 ft
 Unit Weight of Concrete: 150.0 pcf
 Unit Weight of Water: 62.4 pcf
 Tension Skin Friction/Compression Skin Friction: 1.00
 Allowable Compressive Bearing Pressure: 40000.0 psf
 Allowable Capacity Increase (Due to Transient Loads): 1.33

Axial Capacities

Allowable Skin Friction/Depth

Depth (ft)		Allowable Skin Friction (psf)	Resistance per Depth (k)
Top	Bottom		

Volume of Concrete: 1308.5 ft³
 Weight of Concrete (Buoyancy Effect Considered): 124.4 k
 Skin Friction Resistance: 0.0 k
 Compressive Bearing Resistance: 2047.4 k
 Allowable Uplift per Leg (FS on Concrete is 1.5): 82.9 k
 Allowable Compression per Leg: 2047.4 k
 Uplift Design Load/Uplift Capacity: 0.00 Result: OK
 Compression Design Load/Compression Capacity: 0.02 Result: OK

Lateral Capacity

Lateral Bearing Pressure/Depth

Depth (ft)		Ultimate Lateral Bearing Pressure (psf)	Increment (psf/ft)	γ_{Soil} (pcf)	Cohesion (pcf)	ϕ (degree)
Top	Bottom					
0.0	2.0	0.0	146.3	110	0	0
2.0	4.0	877.8	438.9	110	0	30
4.0	20.0	1755.6	189.9	48	0	30
20.0	29.0	4794.4	189.9	48	0	30
29.0	34.0	15467.9	89.9	68	5000	0

Total Lateral Resistance: 1292.4 k
 Inflection Point (Below Ground Surface): 28.2 ft
 Design Overturning Moment (At Inflection Point): 2971.7 k-ft
 Overturning Moment Capacity: 9087.1 k-ft
 OTM Capacity / Design OTM Factor of Safety: 3.06 Result: OK

Caisson Strength Capacity

Concrete Compressive Strength (f'_c):	3000 psi
Vertical Steel Rebar Area:	1.56 in ²
# of Vertical Steel Rebars:	21 Minimum # of vertical rebar met
Vertical Steel Rebar Yield Strength (F_y):	60 ksi
Horizontal Tie / Stirrup Area:	0.31 in ²
Horizontal Tie / Stirrup Spacing:	18.0 in
Horizontal Tie / Stirrup Steel Yield Strength (F_y):	60 ksi
Rebar Cage Diameter:	76.0 in
Wind Load Factor:	1.30 ACI318-005 - 9.2.1
Strength Bending/Tension Reduction Factor (ϕ_B):	0.90 ACI318-005 - 9.3.2.1
Strength Shear Reduction Factor (ϕ_V):	0.75 ACI318-005 - 9.3.2.3
Strength Compression Reduction Factor (ϕ_V):	0.65 ACI318-005 - 9.3.2.2
Steel Elastic Modulus:	29000 ksi
Maximum Allowable Strain in Rebar:	0.004 ACI318-005 - 10.3.5
Design Moment (M_u):	3993.0 k-ft
Nominal Moment Capacity ($\phi_B M_n$):	4585.9 k-ft - ACI318-005 - 10.2
$M_u / \phi_B M_n$:	0.87 Result: OK
Design Shear (V_u):	291.3 k
Nominal Shear Capacity ($\phi_V V_n$):	594.2 k - ACI318-005 - 11.3.1.1 or 11.5.7.2
$V_u / \phi_V V_n$:	0.49 Result: OK
Design Tension (T_u):	0.0 k
Nominal Tension Capacity ($\phi_T T_n$):	1769.0 k - ACI318-005 - 10.2
$T_u / \phi_T T_n$:	0.00 Result: OK
Design Compression (P_u):	56.7 k
Nominal Compression Capacity ($\phi_P P_n$):	9131.2 k - ACI318-005 - 10.3.6.2
$P_u / \phi_P P_n$:	0.01 Result: OK
Bending Reinforcement Ratio:	0.006 Reinforcement Ratio is Satisfactory - ACI318-005 - 10.5.1

Technical Memo

To: Transcend
From: Farid Marbough - Radio Frequency Engineer
cc: Jason Overbey
Subject: Power Density Report for CT11491B
Date: March 27, 2009

1. Introduction:

This report is the result of an Electromagnetic Field Intensities (EMF - Power Densities) study for the T-Mobile antenna installation on a Monopole at 305 W. Service Rd, Hartford, 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 (1935-1944.8), (2140-2145), (2110-2120)MHz frequency Band.
- 2) The antenna array consists of three sectors, with 2 antennas per sector.
- 3) The model number for GSM antenna is APX16PV-16PVL.
- 3) The model number for UMTS antenna is APX16DWV-16DWV.
- 4) GSM antenna center line height is 125 ft.
- 4) UMTS antenna center line height is 125 ft.
- 5) The maximum transmit power from any GSM sector is 2103.78 Watts Effective Radiated Power (EiRP) assuming 8 channels per sector.
- 5) The maximum transmit power from any UMTS sector is 2197.71 Watts Effective Radiated Power (EiRP) assuming 2 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 antenna installation on a Monopole at 305 W. Service Rd, Hartford, CT, is 0.06664 mW/cm². This value represents 6.664% of the Maximum Permissible Exposure (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 15.22%. The combined Power Density for the site is 21.884% of the M.P.E. standard.

Connecticut Market



Worst Case Power Density

Site: CT11491B
Site Address: 305 W. Service Rd
Town: Hartford
Tower Height: 150 ft.
Tower Style: Monopole

GSM Data		UMTS Data	
Base Station TX output	20 W	Base Station TX output	40 W
Number of channels	8	Number of channels	2
Antenna Model	APX16PV-16PVL	Antenna Model	APX16DWV-16DWV
Cable Size	1 5/8 in.	Cable Size	1 5/8 in.
Cable Length	182 ft.	Cable Length	182 ft.
Antenna Height	125.0 ft.	Antenna Height	125.0 ft.
Ground Reflection	1.6	Ground Reflection	1.6
Frequency	1945.0 MHz	Frequency	2.1 GHz
Jumper & Connector loss	4.50 dB	Jumper & Connector loss	1.50 dB
Antenna Gain	17.8 dBi	Antenna Gain	18.0 dBi
Cable Loss per foot	0.0116 dB	Cable Loss per foot	0.0116 dB
Total Cable Loss	2.1112 dB	Total Cable Loss	2.1112 dB
Total Attenuation	6.6112 dB	Total Attenuation	3.6112 dB
Total EIRP per Channel (In Watts)	54.20 dBm 262.97 W	Total EIRP per Channel (In Watts)	60.41 dBm 1098.85 W
Total EIRP per Sector (In Watts)	63.23 dBm 2103.78 W	Total EIRP per Sector (In Watts)	63.42 dBm 2197.71 W
nsg	11.1888	nsg	14.3888

Power Density (S) = 0.032593 mW/cm²

Power Density (S) = 0.034048 mW/cm²

T-Mobile Worst Case % MPE =

6.6642%

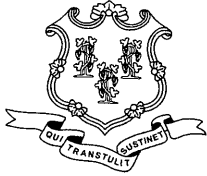
Equation Used :

$$S = \frac{(1000)(grf)^2 (Power)^{nsg}}{4\pi (R)^2}$$

Office of Engineering and Technology (OET) Bulletin 65, Edition 97-01, August 1997

Co-Location Total

Carrier	% of Standard
Verizon	10.6700 %
Cingular	
Sprint	
AT&T Wireless	
Nextel	2.5400 %
MetroPCS	
Other Antenna Systems	2.0100 %
Total Excluding T-Mobile	15.2200 %
T-Mobile	6.6642
Total % MPE for Site	21.8842%



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@ct.gov

www.ct.gov/csc

April 8, 2009

The Honorable Eddie A. Perez
Mayor
City of Hartford
Municipal Building
550 Main Street
Hartford, CT 06103

RE: **EM-T-MOBILE-064-090406** - Omnipoint Communications, as subsidiary of T-Mobile USA, Inc., notice of intent to modify an existing telecommunications facility located at 305 West Service Road, Hartford, Connecticut.

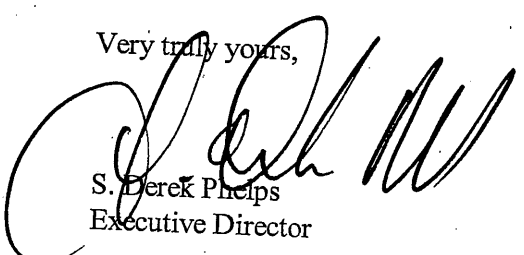
Dear Mayor Perez:

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.

If you have any questions or comments regarding this proposal, please call me or inform the Council by April 22, 2009.

Thank you for your cooperation and consideration.

Very truly yours,


S. Derek Phelps
Executive Director

SDP/jb

Enclosure: Notice of Intent

c: Roger J. O'Brien, Director of Planning, City of Hartford
Lee C. Erdmann, Chief Operating Officer, City of Hartford