Transcend Wireless
48 Spruce Street
Oakland, NJ 07436
Phone: (203) 217-6200
Chris Bisson
Real Estate Consultant

April 11, 2014

Hand Delivered

Ms. Melanie A. Bachman
Acting Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

RE: T-Mobile Northeast LLC notice of intent to modify an existing telecommunications facility located at 8 Old Route 79, Madison CT, 06443, Known to T-Mobile Northeast LLC as site CT11167A.

Dear Ms. Roberts:

In order to accommodate technological changes, implement Global System for Mobile Communications Access ("GSM") and/or Long Term Evolution ("LTE") capabilities, and enhance system performance in the state of Connecticut, T-Mobile Northeast LLC plans to modify the equipment configurations at many of its existing cell sites. Please accept this letter and attachments as notification, pursuant to R.C.S.A. Section 16-50j-73, of construction which constitutes an exempt modification pursuant to R.C.S.A. Section 16-50j-72(b)(2). In compliance with R.C.S.A. Section 16-50j-73, a copy of this letter and its attachments is being sent to the chief elected official of the municipality in which affected cell site is located.

GSM employs Spread-Spectrum technology and special coding scheme to allow multiple users to be multiplexed over the same physical channel. LTE is a new high-performance air interface for cellular mobile communications. It is designed to increase the capacity and speed of mobile telephone networks.

As part of the project the new multi-mode 800/1900 antenna will replace existing antennas. These antennas will provide more flexibility for optimization by allowing fast and easy electrical tilt adjustment from remote location and will enable the transmission of multiple technologies from a single antenna. As T-Mobile Northeast LLC network evolves to meet the demands of its customers, it is essential for T-Mobile Northeast LLC to install modern equipment and antennas in order to provide reliable wireless voice and data services. The proposed equipment will include multi-mode radios that will allow T-Mobile Northeast LLC to transmit at different frequencies using different technologies, including LTE technology. Likewise, the proposed antennas are quad-pole multi-band

high gain antennas that will allow T-Mobile Northeast LLC to operate using its multiple frequency bands and technologies, including LTE technology. The proposed equipment and antennas will improve the reliability, coverage and capacity of T-Mobile Northeast LLC voice and data networks across T-Mobile Northeast LLC various FCC licensed frequency bands and significantly increase the data speeds of T-Mobile Northeast LLC 's network by utilizing the latest LTE technology. Without the proposed modifications T-Mobile Northeast LLC will be unable to provide reliable wireless voice and data service using the latest technologies.

T-Mobile Northeast LLC will have an interim (testing) period during the modification/installation prior to the final configuration. This antenna configuration is shown on the attached drawings of the planned modifications. Also included is the power density calculation reflecting the change in T-Mobile Northeast LLC operations at the site and documentation of the structural sufficiency of the tower to accommodate the revised antenna configuration.

The changes to the facility do not constitute modification as defined Connecticut General Statues ("C.G.S.") Section 16-50i(d) because the general physical characteristics of the facility will not be significantly changed or altered. Rather, the planned changes to the facility fall squarely within those activities explicitly provided for the R.C.S.A. Section 16-50j-72(b)(2).

1. The height of the overall structure will not be affected.
2. The proposed changes will not extend the site boundaries. There will be no effect on the site compound.
3. The proposed changes will not increase the noise level at the existing facility by 6 decibels or more.
4. Radio Frequency power density may increase due to the use of one or more GSM transmissions. Moreover, LTE will utilize additional radio frequencies newly licensed by the FCC for cellular mobile communications. However, the changes will not increase the calculated "worst case" power density for the combined operations at the site to a level at or above the applicable standard for uncontrolled environments as calculated for a mixed frequency site.

For the foregoing reasons T-Mobile Northeast LLC respectfully submits that the proposed changes at the referenced site constitute exempt modifications under R.C.S.A. Section 16-50j-72(b)(2).

Please feel free to call me at (203) 217-6200 or email cbisson@transcendwireless.com with questions concerning this matter.

Thank you for your consideration.

Sincerely,

Chris Bisson
(203) 217-6200

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RADIO FREQUENCY EMISSIONS ANALYSIS REPORT
EVALUATION OF HUMAN EXPOSURE POTENTIAL TO NON-IONIZING EMISSIONS

T-Mobile Existing Facility

Site ID: CT11167A
Madison South / Route 1

8 Old Route 79
Madison, CT 06443

April 7, 2014

EBI PROJECT NUMBER: 62142267

21 B Street · Burlington, MA 01803 · Tel: (781) 273.2500 · Fax: (781) 273.3311

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April 7, 2014

T-Mobile USA
Attn: Jason Overbey, RF Manager
35 Griffin Road South
Bloomfield, CT 06002

Re: Emissions Values for Site: **CT11167A - Madison South / Route 1**

EBI Consulting was directed to analyze the proposed T-Mobile facility located at 8 Old Route 79, Madison, CT, for the purpose of determining whether the emissions from the Proposed T-Mobile Antenna Installation located on this property are within specified federal limits.

All information used in this report was analyzed as a percentage of current Maximum Permissible Exposure (% MPE) as listed in the FCC OET Bulletin 65 Edition 97-01and ANSI/IEEE Std C95.1. The FCC regulates Maximum Permissible Exposure in units of microwatts per square centimeter (µW/cm2). The number of µW/cm2 calculated at each sample point is called the power density. The exposure limit for power density varies depending upon the frequencies being utilized. Wireless Carriers and Paging Services use different frequency bands each with different exposure limits, therefore it is necessary to report results and limits in terms of percent MPE rather than power density.

All results were compared to the FCC (Federal Communications Commission) radio frequency exposure rules, 47 CFR 1.1307(b)(1) – (b)(3), to determine compliance with the Maximum Permissible Exposure (MPE) limits for General Population/Uncontrolled environments as defined below.

General population/uncontrolled exposure limits apply to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general public would always be considered under this category when exposure is not employment related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area.

Public exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter (µW/cm2). The general population exposure limit for the cellular band is 567 µW/cm2, and the general population exposure limit for the PCS and AWS bands is 1000 µW/cm2. Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.

Occupational/controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general population/uncontrolled limits (see below), as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

Additional details can be found in FCC OET 65.

CALCULATIONS

Calculations were done for the proposed T-Mobile Wireless antenna facility located at 8 Old Route 79, Madison, CT, using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. Since T-Mobile is proposing highly focused directional panel antennas, which project most of the emitted energy out toward the horizon, the actual antenna pattern gain value in the direction of the sample area was used. For this report the sample point is a 6 foot person standing at the base of the tower.

For all calculations, all equipment was calculated using the following assumptions:

1) 2 GSM channels (1935.000 MHz—to 1945.000 MHz / 1980.000 MHz—to 1985.000 MHz) were considered for each sector of the proposed installation.
2) 2 UMTS channels (2110.000 to 2120.000 MHz / 2140.000 MHz to 2145.000 MHz) were considered for each sector of the proposed installation.
3) 2 LTE channels (2110.000 to 2120.000 MHz / 2140.000 MHz to 2145.000 MHz) were considered for each sector of the proposed installation.
4) All radios at the proposed installation were considered to be running at full power and were uncombined in their RF transmissions paths per carrier prescribed configuration. Per FCC OET Bulletin No. 65 - Edition 97-01 recommendations to achieve the maximum anticipated value at each sample point, all power levels emitting from the proposed antenna installation 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.
5) For the following calculations the sample point was the top of a six foot person standing at the base of the tower. The actual gain in this direction was used per the manufactures supplied specifications.
6) The antenna used in this modeling is the Ericsson AIR21 for LTE, UMTS and GSM. This is based on feedback from the carrier with regards to anticipated antenna selection. This antenna has a 15.6 dBd gain value at its main lobe. Actual antenna gain values were used for all calculations as per the manufacturers specifications.

7) The antenna mounting height centerline of the proposed antennas is **120 feet** above ground level (AGL).
8) Emissions values for additional carriers were taken from the Connecticut Siting Council active database. Values in this database are provided by the individual carriers themselves.

All calculations were done with respect to uncontrolled / general public threshold limits.

Site ID	CT11167A - Madison South/Rt 1
Site Addresss	8 Old Route 79, Madison, CT 06443
Site Type	Monopole

Sector 1

Antenna Number	Antenna Make	Antenna Model	Status	Frequency Band	Technology	Power Out Per Channel (Watts)	Number of Channels	Composite Power	Antenna Gain in direction of sample point (dBd)	Antenna Height (ft)	analysis height	Cable Size	Cable Loss (dB)	Additional Loss	ERP	Power Density Value	Power Density Percentage
1a	Ericsson	AIR21 B4A/B2P	Active	AWS - 2100 MHz	LTE	60	2	120	-3.95	120	114	None	0	0	48.326044	1.336834	0.13368%
1b	Ericsson	AIR21 B4A/B2P	Not Used	-	-			0	-3.95	120	114	None	0	0	0	0	0.00000%
2a	Ericsson	AIR21 B2A / B4P	Active	PCS - 1950 MHz	GSM / UMTS	30	2	60	-3.95	120	114	1-5/8"	0	0	24.163022	0.668417	0.06684%
2b	Ericsson	AIR21 B2A / B4P	Passive	AWS - 2100 MHz	UMTS	30	2	60	-3.95	120	114	1-5/8"	0	0	24.163022	0.668417	0.06684%
														Sector total Power Density Value:		0.267%	

Sector 2

Antenna Number	Antenna Make	Antenna Model	Status	Frequency Band	Technology	Power Out Per Channel (Watts)	Number of Channels	Composite Power	Antenna Gain in direction of sample point (dBd)	Antenna Height (ft)	analysis height	Cable Size	Cable Loss (dB)	Additional Loss	ERP	Power Density Value	Power Density Percentage
1a	Ericsson	AIR21 B4A/B2P	Active	AWS - 2100 MHz	LTE	60	2	120	-3.95	120	114	None	0	0	48.326044	1.336834	0.13368%
1b	Ericsson	AIR21 B4A/B2P	Not Used	-	-			0	-3.95	120	114	None	0	0	0	0	0.00000%
2a	Ericsson	AIR21 B2A / B4P	Active	PCS - 1950 MHz	GSM / UMTS	30	2	60	-3.95	120	114	1-5/8"	0	0	24.163022	0.668417	0.06684%
2b	Ericsson	AIR21 B2A / B4P	Passive	AWS - 2100 MHz	UMTS	30	2	60	-3.95	120	114	1-5/8"	0	0	24.163022	0.668417	0.06684%
														Sector total Power Density Value:		0.267%	

Sector 3

Antenna Number	Antenna Make	Antenna Model	Status	Frequency Band	Technology	Power Out Per Channel (Watts)	Number of Channels	Composite Power	Antenna Gain in direction of sample point (dBd)	Antenna Height (ft)	analysis height	Cable Size	Cable Loss (dB)	Additional Loss	ERP	Power Density Value	Power Density Percentage
1a	Ericsson	AIR21 B4A/B2P	Active	AWS - 2100 MHz	LTE	60	2	120	-3.95	120	114	None	0	0	48.326044	1.336834	0.13368%
1b	Ericsson	AIR21 B4A/B2P	Not Used	-	-			0	-3.95	120	114	None	0	0	0	0	0.00000%
2a	Ericsson	AIR21 B2A / B4P	Active	PCS - 1950 MHz	GSM / UMTS	30	2	60	-3.95	120	114	1-5/8"	0	0	24.163022	0.668417	0.06684%
2b	Ericsson	AIR21 B2A / B4P	Passive	AWS - 2100 MHz	UMTS	30	2	60	-3.95	120	114	1-5/8"	0	0	24.163022	0.668417	0.06684%
														Sector total Power Density Value:		0.267%	

Sector 4

Antenna Number	Antenna Make	Antenna Model	Status	Frequency Band	Technology	Power Out Per Channel (Watts)	Number of Channels	Composite Power	Antenna Gain in direction of sample point (dBd)	Antenna Height (ft)	analysis height	Cable Size	Cable Loss (dB)	Additional Loss	ERP	Power Density Value	Power Density Percentage
1a	Ericsson	AIR21 B4A/B2P	Active	AWS - 2100 MHz	LTE	60	2	120	-3.95	120	114	None	0	0	48.326044	1.336834	0.13368%
1b	Ericsson	AIR21 B4A/B2P	Not Used	-	-			0	-3.95	120	114	None	0	0	0	0	0.00000%
2a	Ericsson	AIR21 B2A / B4P	Active	PCS - 1950 MHz	GSM / UMTS	30	2	60	-3.95	120	114	1-5/8"	0	0	24.163022	0.668417	0.06684%
2b	Ericsson	AIR21 B2A / B4P	Passive	AWS - 2100 MHz	UMTS	30	2	60	-3.95	120	114	1-5/8"	0	0	24.163022	0.668417	0.06684%
														Sector total Power Density Value:		0.267%	

Site Composite MPE %	
Carrier	MPE %
T-Mobile	1.069%
AT&T	16.420%
Metro PCS	9.200%
Nextel	3.100%
Verizon	19.080%
Town	1.800%
Town Fire Dept.	1.040%
Sprint	8.670%
Total Site MPE %	**60.379%**

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Summary

All calculations performed for this analysis yielded results that were well within the allowable limits for general public exposure to RF Emissions.

The anticipated Maximum Composite contributions from the T-Mobile facility are **0.267% (1.069% from each sector)** of the allowable FCC established general public limit considering all four sectors simultaneously sampled at the ground level.

The anticipated composite MPE value for this site assuming all carriers present is **60.379%** of the allowable FCC established general public limit sampled at the ground level. This is based upon values listed in the Connecticut Siting Council database for existing carrier emissions.

FCC guidelines state that if a site is found to be out of compliance (over allowable thresholds), that carriers over a 5% contribution to the composite value will require measures to bring the site into compliance. For this facility, the composite values calculated were within the allowable 100% threshold standard per the federal government.

Scott Heffernan
RF Engineering Director

EBI Consulting
21 B Street
Burlington, MA 01803

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Structural Analysis Report

Structure	:	**148 ft Monopole**
ATC Site Name	:	**Madison CT 6, CT**
ATC Site Number	:	**302540**
Engineering Number	:	**57303221**
Proposed Carrier	:	**T-Mobile**
Carrier Site Name	:	**Madison CT 6**
Carrier Site Number	:	**CT11167A**
Site Location	:	**8 Old 79** **Madison, CT 06443-2685** **41.285533,-72.601342**
County	:	**New Haven**
Date	:	**March 26, 2014**
Max Usage	:	**85%**
Result	:	**Pass**

Tyler M. Barker
Structural Engineer II

Tyler M Barker

STATE OF CONNECTICUT
RAPHAEL I. MOHAMED
No. 25112
LICENSED
PROFESSIONAL ENGINEER

Mar 27 2014 11:13 AM

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Table of Contents

Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 148 ft monopole to reflect the change in loading by T-Mobile.

Supporting Documents

Tower Drawings	Summit Manufacturing, PJF Job #29299-729, dated November 12, 1999
Foundation Drawing	Spectrasite Communcations Project #F301896.00, dated August 13, 2003
Geotechnical Report	Dr. Clarence Welti, P.E., P.C. Geotechnical Engineering, Site: Madison Police Station, dated November 19, 1999

Analysis

The tower was analyzed using American Tower Corporation's tower analysis software. This program considers an elastic three-dimensional model and second-order effects per ANSI/EIA-222.

Basic Wind Speed:	85 mph (Fastest Mile)
Basic Wind Speed w/ Ice:	74 mph (Fastest Mile)w/ 1/2" radial ice concurrent
Code:	ANSI/TIA/EIA-222-F / 2003 IBC , Sec. 1609.1.1, Exception (4) & Sec. 3108.4 w/ 2005 CT Supplement & 2009 CT Amendment

Conclusion

Based on the analysis results, the structure meets the requirements per the applicable codes listed above. The tower and foundation can support the equipment as described in this report.

If you have any questions or require additional information, please contact American Tower via email at Engineering@americantower.com. Please include the American Tower site name, site number, and engineering number in the subject line for any questions.

Existing and Reserved Equipment

Elevation[1] (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
148.0	153.0	1	6' Omni	Low Profile Platform	(5) 7/8" Coax	Town Of Branford
		1	6' Dipole			
	155.5	1	11' Dipole			
	149.0	9	48" x 12" Panel		(12) 1 5/8" Coax	Sprint Nextel
		3	72" x 12" Panel			
140.0	140.0	1	2" x 8" GPS	Low Profile Platform	(12) 1 5/8" Coax (1) 1/2" Coax	Verizon
		6	RFS FD9R6004/1C-3L			
		3	Antel BXA-171085-8BF-EDIN-X			
		3	Antel BXA-70063-6CF-EDIN-2			
		4	Antel LPA-80080/6CF			
		2	Antel LPA-80063/6CF			
134.0	135.0	1	Raycap DC6-48-60-18-8F	Flush	(2) 1.1" Hybrid (1) 0.28" RG6 (1) 3" Conduit	AT&T Mobility
		6	Ericsson RRUS 11 (Band 12)			
132.0	132.0	6	Powerwave LGP13519	Low Profile Platform	(12) 1 5/8" Coax	
		6	ADC DD700			
		12	77" x 14" Panel			
117.0	-	-	-	Low Profile Platform	(16) 1 5/8" Coax	T-Mobile
106.0	107.0	1	2" x 4" GPS	Flush	-	-
		3	60" x 8" Panel			
100.0	100.0	3	Alcatel-Lucent 800MHz 2X50W	Flush	-	Sprint Nextel
		3	Alcatel-Lucent 800MHz RRH			
		3	Alcatel-Lucent 1900MHz 4x45			
96.0	96.0	6	Decibel DB980H90E-M	Low Profile Platform	(6) 1 5/8" Coax (3) 1 1/4" Hybriflex	
		3	RFS APXVSPP18-C-A20			
86.0	86.0	3	RFS APXV18-206517S-C	Flush	(6) 1 5/8" Coax	Metro PCS
70.0	73.0	1	GPS	Flush	-	Sprint Nextel

Equipment to be Removed

Elevation[1] (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
120.0	120.0	4	RFS ATMPP1412D-1CWA	-	-	T-Mobile
		4	RFS ATMAA1412D-1A20			
		4	RFS APX16DWV-16DWV-S-E-ACU			

Proposed Equipment

Elevation[1] (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
117.0	120.0	4	Ericsson KRY 112 144/1	Low Profile Platform	(1) 1 5/8" Fiber	T-Mobile
		4	Ericsson AIR 21, 1.3M, B2A B4P			
		4	Ericsson AIR 21, 1.3M, B4A B2P			

[1]Mount elevation is defined as height above bottom of steel structure to the bottom of mount, RAD elevation is defined as center of antenna above ground level (AGL).

Install proposed coax inside the pole shaft.

Structure Usages

Structural Component	Controlling Usage	Pass/Fail
Anchor Bolts	78%	Pass
Shaft	85%	Pass
Base Plate	47%	Pass

Foundations

Reaction Component	Original Design Reactions	Analysis Reactions	% of Design
Moment (Kips-Ft)	5,050.0	4304.3	85%
Shear (Kips)	47.0	39.4	84%

The structure base reactions resulting from this analysis are acceptable when compared to those shown on the original structure drawings, therefore no modification or reinforcement of the foundation will be required.

Deflection and Sway*

Antenna Elevation (ft)	Deflection (ft)	Sway (Rotation) (°)
117.0	1.355	1.430

***Deflection and Sway was evaluated considering a design wind speed of 50 mph (Fastest Mile) per ANSI/TIA/EIA-222-F.**

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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:

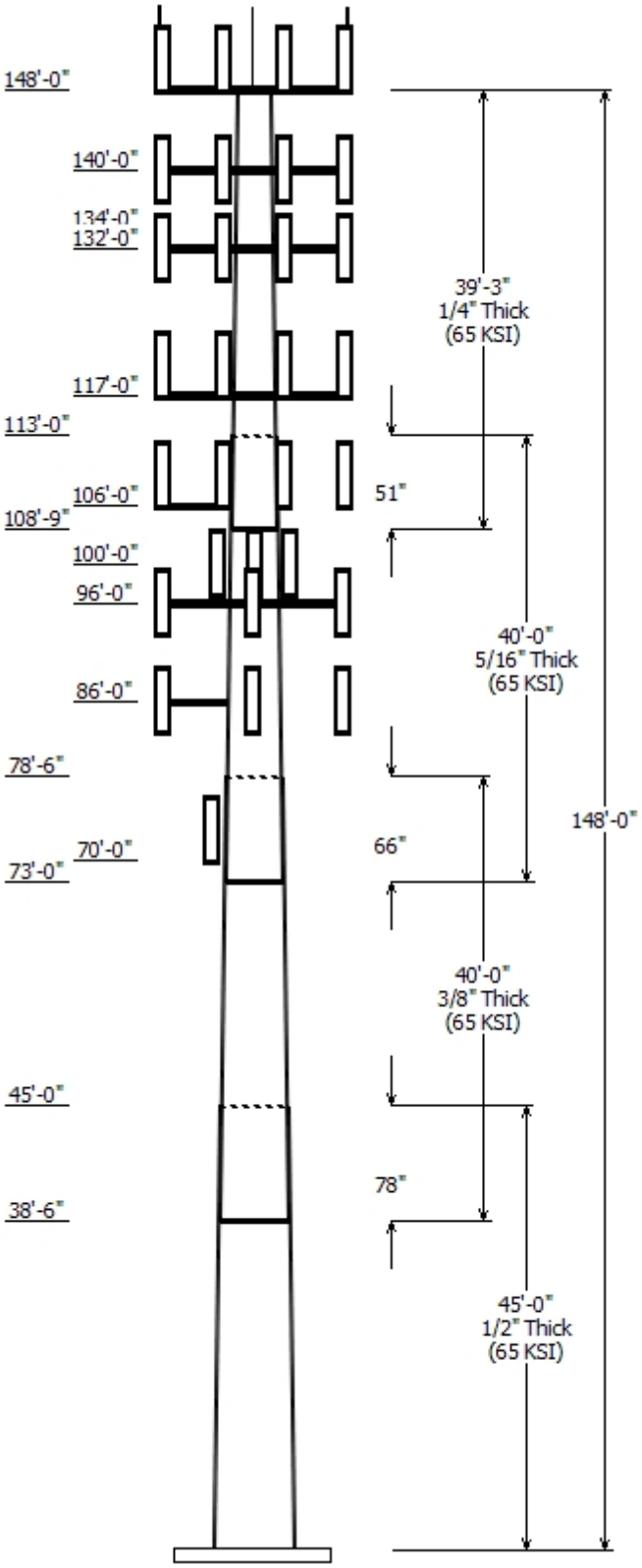
-- Information supplied by the client regarding the structure itself, antenna, mounts and feed line loading on the structure and its components, or other relevant information.

-- 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 Tower Services, Inc. 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 that their capacity has not significantly changed from the "as new" condition.

Unless explicitly agreed by both the client and American Tower Corporation, all services will be performed in accordance with the current revision of ANSI/TIA -222. The design basic wind speed will be determined based on the minimum basic wind speed as prescribed in ANSI/TIA-222. Although every effort is taken to ensure that the loading considered is adequate to meet the requirements of all applicable regulatory entities, we can provide no assurance to meet any other local and state codes or requirements. 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.

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



Job Information

Pole :	302540
Code:	TIA/EIA-222 Rev F
Description :	148 ft Summit Monopole
Client :	T- Mobile
Location :	Madison CT 6, CT
Shape :	18 Sides
Height :	148.00 (ft)
Base Elev (ft):	0.00
Taper:	0.26300 (in/ft)

Sections Properties

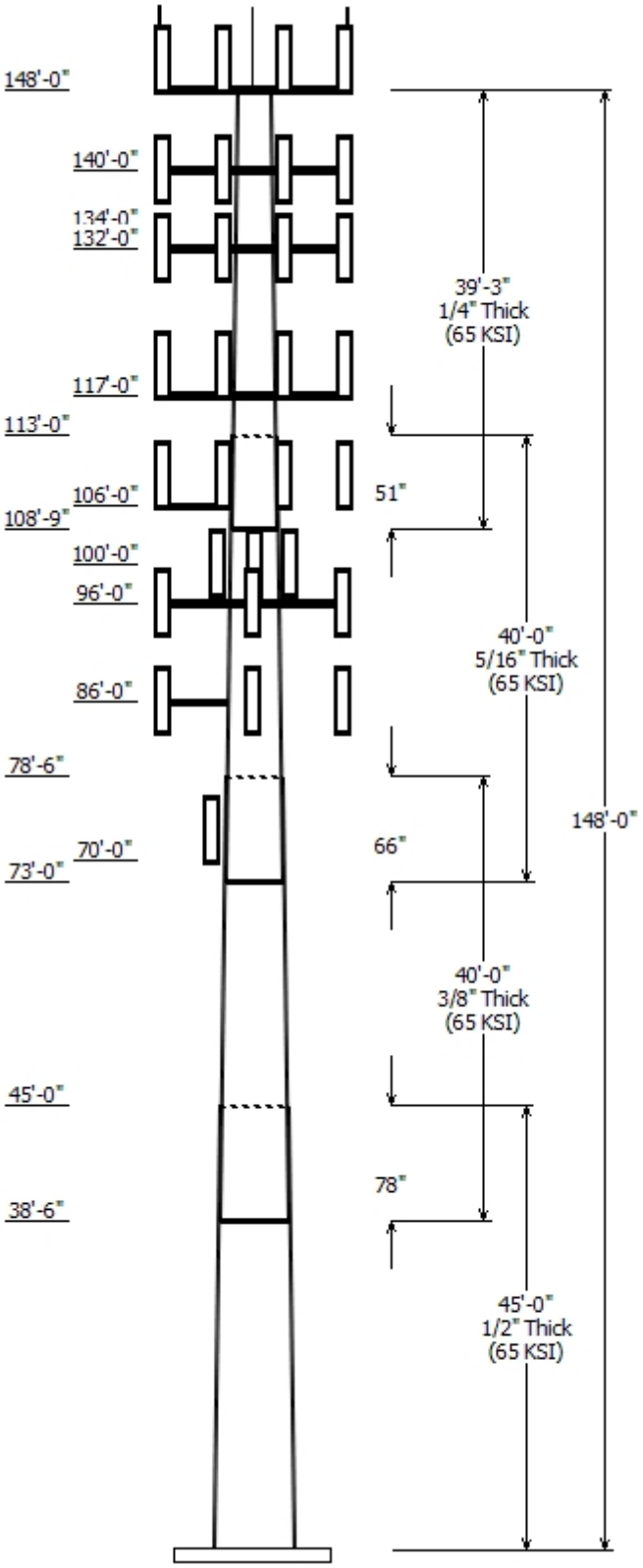
Shaft Section	Length (ft)	Diameter (in) Accross Flats Top	Bottom	Thick (in)	Joint Type	Overlap Length (in)	Taper (in/ft)	Steel Grade (ksi)
1	45.000	49.21	61.05	0.500		0.000	0.263006	65
2	40.000	41.15	51.67	0.375	Slip Joint	78.000	0.263006	65
3	40.000	32.70	43.22	0.313	Slip Joint	66.000	0.263006	65
4	39.250	24.00	34.32	0.250	Slip Joint	51.000	0.263006	65

Discrete Appurtenance

Attach Elev (ft)	Force Elev (ft)	Qty	Description
148.000	149.000	3	72" x 12" Panel
148.000	149.000	9	48" x 12" Panel
148.000	153.000	1	6' Dipole
148.000	148.000	1	Flat Low Profile Platform
148.000	155.500	1	11' Dipole
148.000	153.000	1	6' Omni
140.000	140.000	1	2" x 8" GPS
140.000	140.000	6	RFS FD9R6004/1C-3L
140.000	140.000	3	Antel BXA-171085-8BF-EDIN-X
140.000	140.000	1	Flat Low Profile Platform
140.000	140.000	3	Antel BXA-70063-6CF-EDIN-2
140.000	140.000	2	Antel LPA-80063/6CF
140.000	140.000	4	Antel LPA-80080/6CF
134.000	135.000	6	Ericsson RRUS 11 (Band 12)
134.000	135.000	1	Raycap DC6-48-60-18-8F
132.000	132.000	1	Flat Low Profile Platform
132.000	132.000	6	Powerwave LGP13519
132.000	132.000	12	77" x 14" Panel
132.000	132.000	6	ADC DD700
117.000	120.000	4	Ericsson AIR 21, 1.3M, B4A B2P
117.000	120.000	4	Ericsson AIR 21, 1.3M, B2A B4P
117.000	120.000	4	Ericsson KRY 112 144/1
117.000	117.000	1	Flat Low Profile Platform
106.000	107.000	1	2" x 4" GPS
106.000	106.000	1	Flush
106.000	107.000	3	60" x 8" Panel
100.000	100.000	3	Alcatel-Lucent 800 MHz RRH
100.000	100.000	3	Alcatel-Lucent 1900 MHz 4x45
100.000	100.000	3	Alcatel-Lucent 800 MHz 2X50W
96.000	96.000	3	RFS APXVSPP18-C-A20
96.000	96.000	6	Decibel DB980H90E-M
96.000	96.000	1	Flat Low Profile Platform
86.000	86.000	1	Flush
86.000	86.000	3	RFS APXV18-206517S-C
70.000	73.000	1	GPS

Linear Appurtenance

Elev (ft) From	To	Description	Exposed To Wind
0.000	86.000	1 5/8" Coax	No
0.000	96.000	1 1/4" Hybriflex	No
0.000	96.000	1 5/8" Coax	No



0.000	117.0	1 5/8" Coax	Yes
0.000	117.0	1 5/8" Fiber	No
0.000	132.0	1 5/8" Coax	No
0.000	134.0	0.28" RG6	No
0.000	134.0	1.1" Hybrid	No
0.000	134.0	3" Conduit	No
0.000	140.0	1 5/8" Coax	No
0.000	140.0	1/2" Coax	No
0.000	148.0	1 5/8" Coax	No
0.000	148.0	7/8" Coax	No

Load Cases

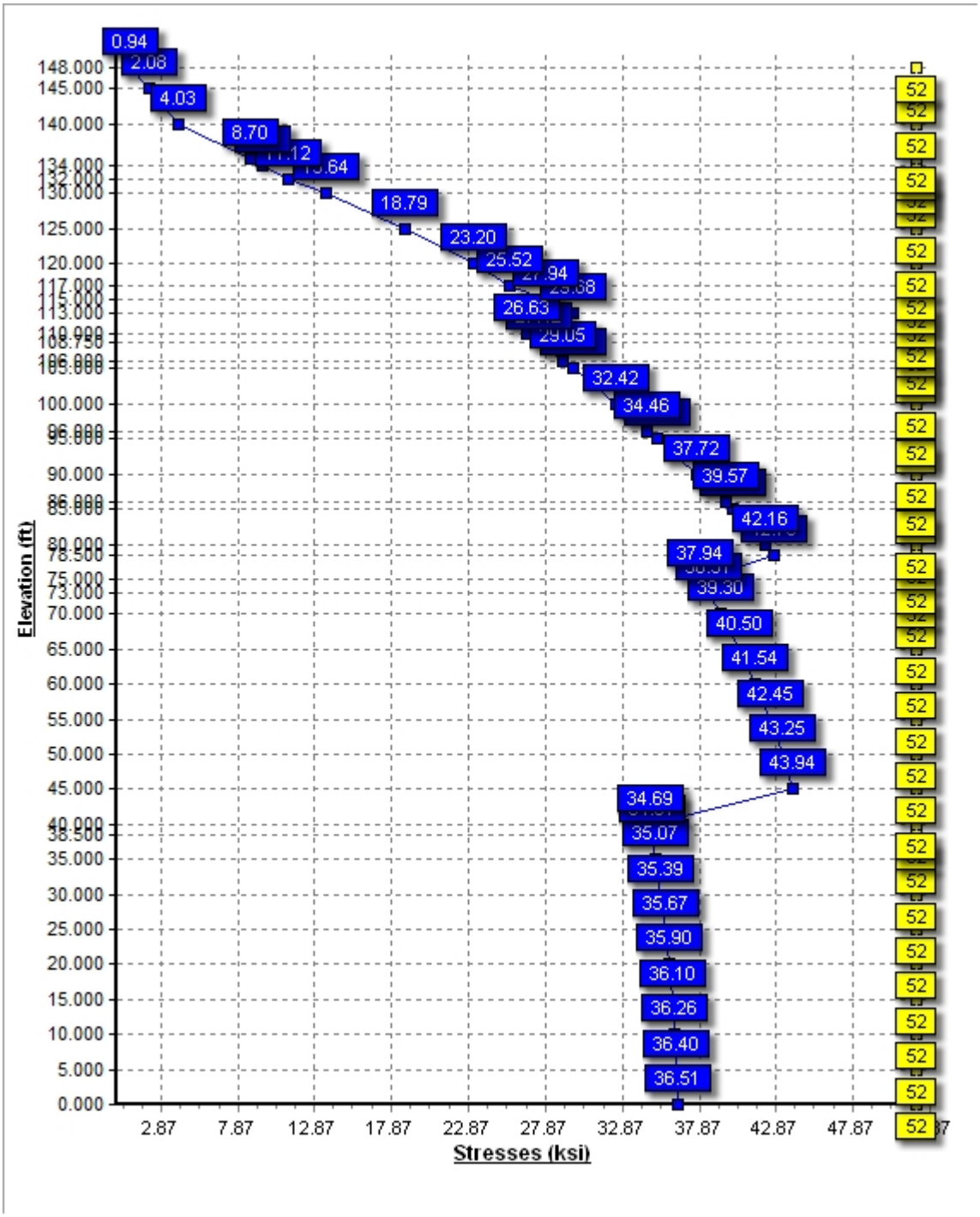
No Ice	85.00 mph Wind with No Ice
Ice	73.61 mph Wind with Ice
Twist/Sway	50.00 mph Wind with No Ice

Reactions

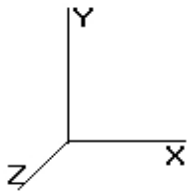
Load Case	Moment (kip-ft)	Shear (kip)	Axial (kip)
No Ice	4304.29	39.43	49.15
Ice	3434.17	31.54	59.98
Twist/Sway	1490.50	13.64	49.20

Dish Deflections

Load Case	Attach Elev (ft)	Deflection (in)	Rotation (deg)
	0.00	0.000	0.000


0.94
2.08
4.03
8.70
18.79
23.20
25.52
26.63
29.05
32.42
34.46
37.72
39.57
42.16
37.94
39.30
40.50
41.54
42.45
43.25
43.94
34.69
35.07
35.39
35.67
35.90
36.10
36.26
36.40
36.51
Elevation (ft)
Stresses (ksi)
2.87
7.87
12.87
17.87
22.87
27.87
32.87
37.87
42.87
47.87

Pole :	**302540**	**Code: TIA/EIA-222 Rev F**	**3/26/2014 4:12:31 PM**
Location :	**Madison CT 6, CT**		**Page: 1**
Height :	**148.0 (ft)**		
Base Dia :	**61.05 (in)**		
Top Dia :	**24.00 (in)**	**Base Elev : 0.000 (ft)**	
Shape :	**18 Sides**		
Taper :	**0.263006 (in/ft)**		



Shaft Section Properties

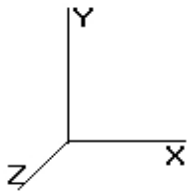
Sect Info	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Slip Joint Len (in)	Weight (lb)	Bottom Dia (in)	Bottom Elev (ft)	Bottom Area (sqin)	Bottom Ix (in^4)	Bottom W/t Ratio	Bottom D/t Ratio	Top Dia (in)	Top Elev (ft)	Top Area (sqin)	Top Ix (in^4)	Top W/t Ratio	Top D/t Ratio	Taper (in/ft)
1-18	45.000	0.5000	65		0.00	13,276	61.05	0.00	96.09	44509.7	20.12	122.10	49.21	45.00	77.31	23178.9	15.95	98.43	0.263006
2-18	40.000	0.3750	65	Slip	78.00	7,458	51.67	38.50	61.06	20300.4	22.89	137.80	41.15	78.50	48.54	10197.2	17.94	109.74	0.263006
3-18	40.000	0.3125	65	Slip	66.00	5,083	43.22	73.00	42.56	9902.8	22.98	138.32	32.70	113.00	32.13	4259.3	17.04	104.66	0.263006
4-18	39.250	0.2500	65	Slip	51.00	3,064	34.32	108.75	27.04	3965.6	22.80	137.29	24.00	148.00	18.84	1343.0	15.52	96.00	0.263006
				Shaft Weight		28,881													

Discrete Appurtenance Properties

Attach Elev (ft)	Description	Qty	No Ice Weight (lb)	No Ice EPAa (sf)	No Ice Orientation Factor	Ice Weight (lb)	Ice EPAa (sf)	Ice Orientation Factor	Distance From Face (ft)	Vert Ecc (ft)
148.00	11' Dipole	1	40.00	3.580	1.00	25.00	4.000	1.00	0.000	7.500
148.00	48" x 12" Panel	9	30.00	5.600	0.67	63.00	6.190	0.67	0.000	1.000
148.00	6' Dipole	1	20.00	2.220	1.00	39.30	3.000	1.00	0.000	5.000
148.00	6' Omni	1	25.00	1.760	1.00	38.24	2.130	1.00	0.000	5.000
148.00	72" x 12" Panel	3	45.00	8.400	0.67	92.28	9.230	0.67	0.000	1.000
148.00	Flat Low Profile Platform	1	1500.00	26.100	1.00	1,700.00	31.600	1.00	0.000	0.000
140.00	2" x 8" GPS	1	1.00	0.160	1.00	2.50	0.260	1.00	0.000	0.000
140.00	Antel BXA-171085-8BF-EDIN-X	3	10.50	2.940	0.87	27.56	3.811	0.87	0.000	0.000
140.00	Antel BXA-70063-6CF-EDIN-2	3	17.00	7.570	0.77	40.30	3.573	0.77	0.000	0.000
140.00	Antel LPA-80063/6CF	2	27.00	9.590	1.00	101.00	11.180	1.00	0.000	0.000
140.00	Antel LPA-80080/6CF	4	21.00	8.630	1.83	50.00	4.983	1.83	0.000	0.000
140.00	Flat Low Profile Platform	1	1500.00	26.100	1.00	1,700.00	31.600	1.00	0.000	0.000
140.00	RFS FD9R6004/1C-3L	6	3.10	0.370	0.50	5.40	0.500	0.50	0.000	0.000
134.00	Ericsson RRUS 11 (Band 12)	6	50.00	2.940	0.50	69.90	3.340	0.50	0.000	1.000
134.00	Raycap DC6-48-60-18-8F	1	31.80	1.470	1.00	49.50	1.670	1.00	0.000	1.000
132.00	77" x 14" Panel	12	35.00	10.480	0.67	93.70	11.380	0.67	0.000	0.000
132.00	ADC DD700	6	15.90	1.250	0.50	23.40	1.480	0.50	0.000	0.000
132.00	Flat Low Profile Platform	1	1500.00	26.100	1.00	1,700.00	31.600	1.00	0.000	0.000
132.00	Powerwave LGP13519	6	5.00	0.340	0.50	14.00	0.440	0.50	0.000	0.000
117.00	Ericsson AIR 21, 1.3M, B2A	4	83.00	6.530	1.00	132.60	7.200	1.00	0.000	3.000
117.00	Ericsson AIR 21, 1.3M, B4A	4	81.50	6.580	1.00	132.60	7.200	1.00	0.000	3.000
117.00	Ericsson KRY 112 144/1	4	11.00	0.410	1.00	14.10	0.550	1.00	0.000	3.000
117.00	Flat Low Profile Platform	1	1500.00	26.100	1.00	1,700.00	31.600	1.00	0.000	0.000
106.00	2" x 4" GPS	1	1.00	0.160	1.00	2.50	0.260	1.00	0.000	1.000
106.00	60" x 8" Panel	3	30.00	4.720	0.75	56.74	5.400	0.75	0.000	1.000
106.00	Flush	1	560.00	8.500	0.67	680.00	10.500	0.67	0.000	0.000
100.00	Alcatel-Lucent 1900 MHz	3	60.00	2.710	0.67	83.10	3.070	0.67	0.000	0.000
100.00	Alcatel-Lucent 800 MHz	3	64.00	2.400	0.67	86.10	2.720	0.67	0.000	0.000
100.00	Alcatel-Lucent 800 MHz RRH	3	53.00	2.490	0.67	74.10	2.820	0.67	0.000	0.000
96.00	Decibel DB980H90E-M	6	9.50	3.750	0.81	29.85	4.320	0.81	0.000	0.000
96.00	Flat Low Profile Platform	1	1500.00	26.100	1.00	1,700.00	31.600	1.00	0.000	0.000
96.00	RFS APXVSPP18-C-A20	3	57.00	8.260	0.82	106.50	9.080	0.82	0.000	0.000
86.00	Flush	1	560.00	8.500	0.67	680.00	10.500	0.67	0.000	0.000
86.00	RFS APXV18-206517S-C	3	26.40	5.170	0.80	53.13	5.850	0.80	0.000	0.000
70.00	GPS	1	7.00	1.000	1.00	15.00	1.300	1.00	0.000	3.000
	Totals	110	11865.50			15,957.37			Number of Loadings :	35

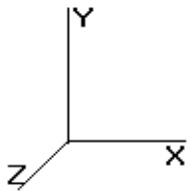
Linear Appurtenance Properties

Elev From (ft)	Elev To (ft)	Description	No Ice Weight (lb/ft)	No Ice CaAa (sf/ft)	Ice Weight (lb/ft)	Ice CaAa (sf/ft)	Exposed To Wind



0.00	148.00	(12) 1 5/8" Coax	9.84	0.00	0.00	0.00	N
0.00	148.00	(5) 7/8" Coax	1.65	0.00	0.00	0.00	N
0.00	140.00	(12) 1 5/8" Coax	9.84	0.00	0.00	0.00	N
0.00	140.00	(1) 1/2" Coax	0.15	0.00	0.00	0.00	N
0.00	134.00	(1) 0.28" RG6	0.03	0.00	0.00	0.00	N
0.00	134.00	(2) 1.1" Hybrid	0.98	0.00	0.00	0.00	N
0.00	134.00	(1) 3" Conduit	7.58	0.00	0.00	0.00	N
0.00	132.00	(12) 1 5/8" Coax	9.84	0.00	0.00	0.00	N
0.00	117.00	(16) 1 5/8" Coax	13.12	0.40	37.36	0.60	Y
0.00	117.00	(1) 1 5/8" Fiber	1.61	0.00	0.00	0.00	N
0.00	96.00	(3) 1 1/4" Hybriflex	3.00	0.00	0.00	0.00	N
0.00	96.00	(6) 1 5/8" Coax	4.92	0.00	0.00	0.00	N
0.00	86.00	(6) 1 5/8" Coax	4.92	0.00	0.00	0.00	N
		Total Weight	8,455.75 (lb)		4,371.11 (lb)		

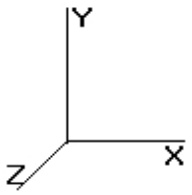
Pole :	**302540**	**Code: TIA/EIA-222 Rev F**	**3/26/2014 4:12:31 PM**
Location :	**Madison CT 6, CT**		**Page: 3**
Height :	**148.0 (ft)**		
Base Dia :	**61.05 (in)**		
Top Dia :	**24.00 (in)**	**Base Elev : 0.000 (ft)**	
Shape :	**18 Sides**		
Taper :	**0.263006 (in/ft)**		



Segment Properties (Max Len : 5 ft)

Seg Top Elev (ft)	Description	Thick (in)	Flat Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fy (ksi)	Fb (ksi)	Weight (lb)
0.00		0.5000	61.050	96.089	44,509.7	20.12	122.10	65	52	0.0
5.00		0.5000	59.735	94.002	41,672.2	19.66	119.47	65	52	1,617.1
10.00		0.5000	58.420	91.915	38,958.0	19.19	116.84	65	52	1,581.6
15.00		0.5000	57.105	89.829	36,364.2	18.73	114.21	65	52	1,546.1
20.00		0.5000	55.790	87.742	33,888.2	18.26	111.58	65	52	1,510.6
25.00		0.5000	54.475	85.655	31,527.3	17.80	108.95	65	52	1,475.1
30.00		0.5000	53.160	83.568	29,278.6	17.34	106.32	65	52	1,439.6
35.00		0.5000	51.845	81.481	27,139.4	16.87	103.69	65	52	1,404.1
38.50	Bot - Section 2	0.5000	50.924	80.020	25,705.8	16.55	101.85	65	52	961.7
40.00		0.5000	50.530	79.394	25,107.1	16.41	101.06	65	52	717.3
45.00	Top - Section 1	0.3750	49.965	59.022	18,337.8	22.08	133.24	65	52	2,350.6
50.00		0.3750	48.650	57.457	16,917.3	21.46	129.73	65	52	990.9
55.00		0.3750	47.335	55.892	15,572.1	20.85	126.23	65	52	964.2
60.00		0.3750	46.020	54.326	14,300.2	20.23	122.72	65	52	937.6
65.00		0.3750	44.705	52.761	13,099.5	19.61	119.21	65	52	911.0
70.00		0.3750	43.389	51.196	11,967.9	18.99	115.71	65	52	884.4
73.00	Bot - Section 3	0.3750	42.600	50.257	11,321.4	18.62	113.60	65	52	517.8
75.00		0.3750	42.074	49.631	10,903.5	18.37	112.20	65	52	627.8
78.50	Top - Section 2	0.3125	41.779	41.128	8,934.8	22.16	133.69	65	52	1,079.8
80.00		0.3125	41.384	40.737	8,682.2	21.94	132.43	65	52	208.9
85.00		0.3125	40.069	39.432	7,874.7	21.20	128.22	65	52	682.0
86.00		0.3125	39.806	39.172	7,719.4	21.05	127.38	65	52	133.7
90.00		0.3125	38.754	38.128	7,118.8	20.46	124.01	65	52	526.1
95.00		0.3125	37.439	36.824	6,412.9	19.71	119.81	65	52	637.6
96.00		0.3125	37.176	36.563	6,277.6	19.57	118.96	65	52	124.9
100.0		0.3125	36.124	35.520	5,755.4	18.97	115.60	65	52	490.6
105.0		0.3125	34.809	34.215	5,144.3	18.23	111.39	65	52	593.2
106.0		0.3125	34.546	33.954	5,027.6	18.08	110.55	65	52	116.0
108.7	Bot - Section 4	0.3125	33.823	33.237	4,715.6	17.67	108.23	65	52	314.4
110.0		0.3125	33.494	32.911	4,578.2	17.49	107.18	65	52	255.1
113.0	Top - Section 3	0.2500	33.205	26.149	3,588.0	22.01	132.82	65	52	602.1
115.0		0.2500	32.679	25.732	3,419.0	21.64	130.72	65	52	176.5
117.0		0.2500	32.153	25.314	3,255.3	21.27	128.61	65	52	173.7
120.0		0.2500	31.364	24.688	3,019.7	20.71	125.46	65	52	255.2
125.0		0.2500	30.049	23.645	2,652.7	19.78	120.20	65	52	411.2
130.0		0.2500	28.734	22.601	2,316.8	18.86	114.94	65	52	393.4
132.0		0.2500	28.208	22.184	2,190.8	18.48	112.83	65	52	152.4
134.0		0.2500	27.682	21.767	2,069.5	18.11	110.73	65	52	149.6
135.0		0.2500	27.419	21.558	2,010.5	17.93	109.68	65	52	73.7
140.0		0.2500	26.104	20.514	1,732.5	17.00	104.42	65	52	357.9
145.0		0.2500	24.789	19.471	1,481.3	16.07	99.16	65	52	340.2
148.0		0.2500	24.000	18.845	1,343.0	15.52	96.00	65	52	195.6
										28,881.1

Pole :	**302540**	**Code: TIA/EIA-222 Rev F**	**3/26/2014 4:12:31 PM**
Location :	**Madison CT 6, CT**		**Page: 4**
Height :	**148.0 (ft)**		
Base Dia :	**61.05 (in)**		
Top Dia :	**24.00 (in)**	**Base Elev : 0.000 (ft)**	
Shape :	**18 Sides**		
Taper :	**0.263006 (in/ft)**		



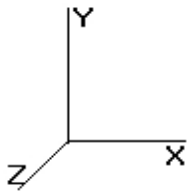
Load Case: **No Ice** — **85.00 mph Wind with No Ice** — **22 Iterations**

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)	Ap (sf)	EPAs (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		0.00	1.00	18.496	31.25	432.43	0.650	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		0.00	1.00	18.496	31.25	423.12	0.650	0.000	5.00	25.163	16.36	511.3	0.0	1,617.1
10.00		0.00	1.00	18.496	31.25	413.80	0.650	0.000	5.00	24.616	16.00	500.1	0.0	1,581.6
15.00		0.00	1.00	18.496	31.25	404.49	0.650	0.000	5.00	24.068	15.64	489.0	0.0	1,546.1
20.00		0.00	1.00	18.496	31.25	395.17	0.650	0.000	5.00	23.520	15.29	477.9	0.0	1,510.6
25.00		0.00	1.00	18.496	31.25	385.86	0.650	0.000	5.00	22.972	14.93	466.7	0.0	1,475.1
30.00		0.00	1.00	18.496	31.25	376.54	0.650	0.000	5.00	22.424	14.58	455.6	0.0	1,439.6
35.00		0.00	1.01	18.810	31.78	370.33	0.650	0.000	5.00	21.876	14.22	452.0	0.0	1,404.1
38.50	Bot - Section 2	0.00	1.04	19.329	32.66	368.74	0.650	0.000	3.50	14.987	9.74	318.2	0.0	961.7
40.00		0.00	1.05	19.541	33.02	367.89	0.650	0.000	1.50	6.435	4.18	138.1	0.0	717.3
45.00	Top - Section 1	0.00	1.09	20.210	34.15	364.39	0.650	0.000	5.00	21.093	13.71	468.3	0.0	2,350.6
50.00		0.00	1.12	20.827	35.19	365.67	0.650	0.000	5.00	20.545	13.35	470.0	0.0	990.9
55.00		0.00	1.15	21.402	36.17	360.66	0.650	0.000	5.00	19.997	13.00	470.1	0.0	964.2
60.00		0.00	1.18	21.941	37.08	355.03	0.650	0.000	5.00	19.449	12.64	468.8	0.0	937.6
65.00		0.00	1.21	22.449	37.93	348.85	0.650	0.000	5.00	18.901	12.29	466.1	0.0	911.0
70.00	Appertunance(s)	0.00	1.24	22.929	38.75	342.19	0.650	0.000	5.00	18.353	11.93	462.3	0.0	884.4
73.00	Bot - Section 3	0.00	1.25	23.206	39.21	337.99	0.650	0.000	3.00	10.749	6.99	274.0	0.0	517.8
75.00		0.00	1.26	23.386	39.52	335.11	0.650	0.000	2.00	7.160	4.65	183.9	0.0	627.8
78.50	Top - Section 2	0.00	1.28	23.692	40.04	329.92	0.650	0.000	3.50	12.320	8.01	320.6	0.0	1,079.8
80.00		0.00	1.28	23.821	40.25	332.67	0.650	0.000	1.50	5.198	3.38	136.0	0.0	208.9
85.00		0.00	1.31	24.237	40.96	324.90	0.650	0.000	5.00	16.970	11.03	451.8	0.0	682.0
86.00	Appertunance(s)	0.00	1.31	24.318	41.09	323.30	0.650	0.000	1.00	3.328	2.16	88.9	0.0	133.7
90.00		0.00	1.33	24.636	41.63	316.81	0.650	0.000	4.00	13.093	8.51	354.3	0.0	526.1
95.00		0.00	1.35	25.020	42.28	308.43	0.650	0.000	5.00	15.874	10.32	436.3	0.0	637.6
96.00	Appertunance(s)	0.00	1.35	25.095	42.41	306.72	0.650	0.000	1.00	3.109	2.02	85.7	0.0	124.9
100.0	Appertunance(s)	0.00	1.37	25.389	42.90	299.79	0.650	0.000	4.00	12.217	7.94	340.7	0.0	490.6
105.0		0.00	1.39	25.745	43.51	290.90	0.650	0.000	5.00	14.778	9.61	417.9	0.0	593.2
106.0	Appertunance(s)	0.00	1.39	25.815	43.62	289.09	0.650	0.000	1.00	2.890	1.88	81.9	0.0	116.0
108.7	Bot - Section 4	0.00	1.40	26.005	43.94	284.07	0.650	0.000	2.75	7.834	5.09	223.8	0.0	314.4
110.0		0.00	1.41	26.090	44.09	281.77	0.650	0.000	1.25	3.558	2.31	102.0	0.0	255.1
113.0	Top - Section 3	0.00	1.42	26.291	44.43	276.19	0.650	0.000	3.00	8.400	5.46	242.6	0.0	602.1
115.0		0.00	1.42	26.423	44.65	276.67	0.650	0.000	2.00	5.490	3.57	159.4	0.0	176.5
117.0	Appertunance(s)	0.00	1.43	26.554	44.87	272.88	0.650	0.000	2.00	5.403	3.51	157.6	0.0	173.7
120.0		0.00	1.44	26.747	45.20	267.15	0.650	0.000	3.00	7.940	5.16	233.3	0.0	255.2
125.0		0.00	1.46	27.060	45.73	257.45	0.650	0.000	5.00	12.794	8.32	380.3	0.0	411.2
130.0		0.00	1.48	27.365	46.24	247.56	0.650	0.000	5.00	12.247	7.96	368.1	0.0	393.4
132.0	Appertunance(s)	0.00	1.48	27.485	46.45	243.56	0.650	0.000	2.00	4.745	3.08	143.3	0.0	152.4
134.0	Appertunance(s)	0.00	1.49	27.603	46.65	239.54	0.650	0.000	2.00	4.658	3.03	141.2	0.0	149.6
135.0		0.00	1.49	27.662	46.74	237.51	0.650	0.000	1.00	2.296	1.49	69.8	0.0	73.7
140.0	Appertunance(s)	0.00	1.51	27.951	47.23	227.30	0.650	0.000	5.00	11.151	7.25	342.4	0.0	357.9
145.0		0.00	1.52	28.233	47.71	216.93	0.650	0.000	5.00	10.603	6.89	328.8	0.0	340.2
148.0	Appertunance(s)	0.00	1.53	28.398	47.99	210.64	0.650	0.000	3.00	6.099	3.96	190.2	0.0	195.6
							Totals:		148.00			12,869.5	0.0	28,881.1

Pole :	**302540**	**Code: TIA/EIA-222 Rev F**	**3/26/2014 4:12:31 PM**
Location :	**Madison CT 6, CT**		**Page: 5**
Height :	**148.0 (ft)**		
Base Dia :	**61.05 (in)**		
Top Dia :	**24.00 (in)**	**Base Elev : 0.000 (ft)**	
Shape :	**18 Sides**		
Taper :	**0.263006 (in/ft)**		



Load Case: No Ice — 85.00 mph Wind with No Ice — 22 Iterations

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

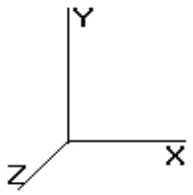
Discrete Appurtenance Segment Forces

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orientation Factor	Total EPAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
70.00	GPS	1	23.206	39.218	1.00	1.00	0.000	3.000	39.22	0.00	117.65	7.00
86.00	RFS APXV18-206517S-	3	24.318	41.098	0.80	12.36	0.000	0.000	508.03	0.00	0.00	79.20
86.00	Flush	1	24.318	41.098	0.67	5.70	0.000	0.000	234.05	0.00	0.00	560.00
96.00	Flat Low Profile Pla	1	25.095	42.410	1.00	26.10	0.000	0.000	1,106.90	0.00	0.00	1,500.00
96.00	Decibel DB980H90E-M	6	25.095	42.410	0.81	18.14	0.000	0.000	769.10	0.00	0.00	57.00
96.00	RFS APXVSPP18-C-	3	25.095	42.410	0.82	20.32	0.000	0.000	861.75	0.00	0.00	171.00
100.0	Alcatel-Lucent 800 M	3	25.389	42.907	0.67	4.82	0.000	0.000	206.99	0.00	0.00	192.00
100.0	Alcatel-Lucent 1900	3	25.389	42.907	0.67	5.45	0.000	0.000	233.72	0.00	0.00	180.00
100.0	Alcatel-Lucent 800 M	3	25.389	42.907	0.67	5.00	0.000	0.000	214.75	0.00	0.00	159.00
106.0	60" x 8" Panel	3	25.885	43.745	0.75	10.62	0.000	1.000	464.57	0.00	464.57	90.00
106.0	Flush	1	25.815	43.628	0.67	5.70	0.000	0.000	248.46	0.00	0.00	560.00
106.0	2" x 4" GPS	1	25.885	43.745	1.00	0.16	0.000	1.000	7.00	0.00	7.00	1.00
117.0	Flat Low Profile Pla	1	26.554	44.876	1.00	26.10	0.000	0.000	1,171.26	0.00	0.00	1,500.00
117.0	Ericsson KRY 112 144	4	26.747	45.202	1.00	1.64	0.000	3.000	74.13	0.00	222.39	44.00
117.0	Ericsson AIR 21, 1.3	4	26.747	45.202	1.00	26.12	0.000	3.000	1,180.67	0.00	3,542.01	332.00
117.0	Ericsson AIR 21, 1.3	4	26.747	45.202	1.00	26.32	0.000	3.000	1,189.71	0.00	3,569.13	326.00
132.0	ADC DD700	6	27.485	46.450	0.50	3.75	0.000	0.000	174.19	0.00	0.00	95.40
132.0	77" x 14" Panel	12	27.485	46.450	0.67	84.26	0.000	0.000	3,913.80	0.00	0.00	420.00
132.0	Powerwave LGP13519	6	27.485	46.450	0.50	1.02	0.000	0.000	47.38	0.00	0.00	30.00
132.0	Flat Low Profile Pla	1	27.485	46.450	1.00	26.10	0.000	0.000	1,212.33	0.00	0.00	1,500.00
134.0	Raycap DC6-48-60-18-	1	27.662	46.749	1.00	1.47	0.000	1.000	68.72	0.00	68.72	31.80
134.0	Ericsson RRUS 11 (Ba	6	27.662	46.749	0.50	8.82	0.000	1.000	412.32	0.00	412.32	300.00
140.0	2" x 8" GPS	1	27.951	47.237	1.00	0.16	0.000	0.000	7.56	0.00	0.00	1.00
140.0	Antel LPA-80080/6CF	4	27.951	47.237	1.83	63.14	0.000	0.000	2,982.41	0.00	0.00	84.00
140.0	Antel LPA-80063/6CF	2	27.951	47.237	1.00	19.18	0.000	0.000	906.01	0.00	0.00	54.00
140.0	Antel BXA-70063-6CF-	3	27.951	47.237	0.77	17.49	0.000	0.000	826.02	0.00	0.00	51.00
140.0	Flat Low Profile Pla	1	27.951	47.237	1.00	26.10	0.000	0.000	1,232.89	0.00	0.00	1,500.00
140.0	Antel BXA-171085-8BF	3	27.951	47.237	0.87	7.67	0.000	0.000	362.47	0.00	0.00	31.50
140.0	RFS FD9R6004/1C-3L	6	27.951	47.237	0.50	1.11	0.000	0.000	52.43	0.00	0.00	18.60
148.0	6' Omni	1	28.669	48.451	1.00	1.76	0.000	5.000	85.27	0.00	426.37	25.00
148.0	11' Dipole	1	28.802	48.676	1.00	3.58	0.000	7.500	174.26	0.00	1,306.94	40.00
148.0	Flat Low Profile Pla	1	28.398	47.993	1.00	26.10	0.000	0.000	1,252.62	0.00	0.00	1,500.00
148.0	6' Dipole	1	28.669	48.451	1.00	2.22	0.000	5.000	107.56	0.00	537.80	20.00
148.0	48" x 12" Panel	9	28.453	48.085	0.67	33.77	0.000	1.000	1,623.75	0.00	1,623.75	270.00
148.0	72" x 12" Panel	3	28.453	48.085	0.67	16.88	0.000	1.000	811.87	0.00	811.87	135.00
									24,764.17			11,865.50

Pole : 302540
Location : Madison CT 6, CT
Height : 148.0 (ft)
Base Dia : 61.05 (in)
Top Dia : 24.00 (in)
Shape : 18 Sides
Taper : 0.263006 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)



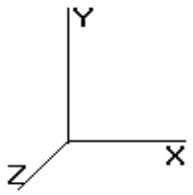
Load Case: No Ice — 85.00 mph Wind with No Ice — 22 Iterations

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)
5.00	(16) 1 5/8" Coax	Yes	5.00	13.12	0.40	18.496	62.52	65.60
10.00	(16) 1 5/8" Coax	Yes	5.00	13.12	0.40	18.496	62.52	65.60
15.00	(16) 1 5/8" Coax	Yes	5.00	13.12	0.40	18.496	62.52	65.60
20.00	(16) 1 5/8" Coax	Yes	5.00	13.12	0.40	18.496	62.52	65.60
25.00	(16) 1 5/8" Coax	Yes	5.00	13.12	0.40	18.496	62.52	65.60
30.00	(16) 1 5/8" Coax	Yes	5.00	13.12	0.40	18.496	62.52	65.60
35.00	(16) 1 5/8" Coax	Yes	5.00	13.12	0.40	18.810	63.58	65.60
38.50	(16) 1 5/8" Coax	Yes	3.50	13.12	0.40	19.329	45.73	45.92
40.00	(16) 1 5/8" Coax	Yes	1.50	13.12	0.40	19.541	19.81	19.68
45.00	(16) 1 5/8" Coax	Yes	5.00	13.12	0.40	20.210	68.31	65.60
50.00	(16) 1 5/8" Coax	Yes	5.00	13.12	0.40	20.827	70.40	65.60
55.00	(16) 1 5/8" Coax	Yes	5.00	13.12	0.40	21.402	72.34	65.60
60.00	(16) 1 5/8" Coax	Yes	5.00	13.12	0.40	21.941	74.16	65.60
65.00	(16) 1 5/8" Coax	Yes	5.00	13.12	0.40	22.449	75.88	65.60
70.00	(16) 1 5/8" Coax	Yes	5.00	13.12	0.40	22.929	77.50	65.60
73.00	(16) 1 5/8" Coax	Yes	3.00	13.12	0.40	23.206	47.06	39.36
75.00	(16) 1 5/8" Coax	Yes	2.00	13.12	0.40	23.386	31.62	26.24
78.50	(16) 1 5/8" Coax	Yes	3.50	13.12	0.40	23.692	56.06	45.92
80.00	(16) 1 5/8" Coax	Yes	1.50	13.12	0.40	23.821	24.15	19.68
85.00	(16) 1 5/8" Coax	Yes	5.00	13.12	0.40	24.237	81.92	65.60
86.00	(16) 1 5/8" Coax	Yes	1.00	13.12	0.40	24.318	16.44	13.12
90.00	(16) 1 5/8" Coax	Yes	4.00	13.12	0.40	24.636	66.62	52.48
95.00	(16) 1 5/8" Coax	Yes	5.00	13.12	0.40	25.020	84.57	65.60
96.00	(16) 1 5/8" Coax	Yes	1.00	13.12	0.40	25.095	16.96	13.12
100.0	(16) 1 5/8" Coax	Yes	4.00	13.12	0.40	25.389	68.65	52.48
105.0	(16) 1 5/8" Coax	Yes	5.00	13.12	0.40	25.745	87.02	65.60
106.0	(16) 1 5/8" Coax	Yes	1.00	13.12	0.40	25.815	17.45	13.12
108.7	(16) 1 5/8" Coax	Yes	2.75	13.12	0.40	26.005	48.34	36.08
110.0	(16) 1 5/8" Coax	Yes	1.25	13.12	0.40	26.090	22.05	16.40
113.0	(16) 1 5/8" Coax	Yes	3.00	13.12	0.40	26.291	53.32	39.36
115.0	(16) 1 5/8" Coax	Yes	2.00	13.12	0.40	26.423	35.72	26.24
117.0	(16) 1 5/8" Coax	Yes	2.00	13.12	0.40	26.554	35.90	26.24
						Totals:	1,736.66	1,535.03

Pole :	**302540**	**Code: TIA/EIA-222 Rev F**	**3/26/2014 4:12:31 PM**
Location :	**Madison CT 6, CT**		**Page: 7**
Height :	**148.0 (ft)**		
Base Dia :	**61.05 (in)**		
Top Dia :	**24.00 (in)**	**Base Elev : 0.000 (ft)**	
Shape :	**18 Sides**		
Taper :	**0.263006 (in/ft)**		



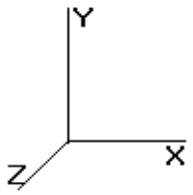
Load Case: **No Ice** — **85.00 mph Wind with No Ice** — **22 Iterations**

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	573.78	1,954.49	0.00	0.00
10.00	562.65	1,918.99	0.00	0.00
15.00	551.52	1,883.48	0.00	0.00
20.00	540.39	1,847.97	0.00	0.00
25.00	529.25	1,812.47	0.00	0.00
30.00	518.12	1,776.96	0.00	0.00
35.00	515.58	1,741.46	0.00	0.00
38.50	363.95	1,197.89	0.00	0.00
40.00	157.94	818.50	0.00	0.00
45.00	536.58	2,687.95	0.00	0.00
50.00	540.44	1,328.27	0.00	0.00
55.00	542.47	1,301.64	0.00	0.00
60.00	542.92	1,275.01	0.00	0.00
65.00	541.97	1,248.38	0.00	0.00
70.00	578.98	1,228.75	0.00	117.65
73.00	321.06	720.27	0.00	0.00
75.00	215.56	762.74	0.00	0.00
78.50	376.69	1,316.00	0.00	0.00
80.00	160.16	310.14	0.00	0.00
85.00	533.72	1,019.39	0.00	0.00
86.00	847.42	840.41	0.00	0.00
90.00	420.96	776.30	0.00	0.00
95.00	520.84	950.41	0.00	0.00
96.00	2,840.42	1,915.42	0.00	0.00
100.0	1,064.83	1,240.12	0.00	0.00
105.0	504.96	866.42	0.00	0.00
106.0	819.43	821.62	0.00	471.57
108.7	272.13	464.63	0.00	0.00
110.0	124.02	323.42	0.00	0.00
113.0	295.92	766.02	0.00	0.00
115.0	195.09	285.82	0.00	0.00
117.0	3,809.27	2,484.98	0.00	7,333.53
120.0	233.28	374.95	0.00	0.00
125.0	380.33	610.71	0.00	0.00
130.0	368.14	592.96	0.00	0.00
132.0	5,490.97	2,277.61	0.00	0.00
134.0	622.27	541.49	0.00	481.04
135.0	69.76	95.19	0.00	0.00
140.0	6,712.15	2,205.41	0.00	0.00
145.0	328.83	397.60	0.00	0.00
148.0	4,245.59	2,220.04	0.00	4,706.74
Totals:	39,370.35	49,202.32	0.00	13,110.54

Pole :	**302540**	**Code: TIA/EIA-222 Rev F**	**3/26/2014 4:12:32 PM**
Location :	**Madison CT 6, CT**		**Page: 8**
Height :	**148.0 (ft)**		
Base Dia :	**61.05 (in)**		
Top Dia :	**24.00 (in)**	**Base Elev : 0.000 (ft)**	
Shape :	**18 Sides**		
Taper :	**0.263006 (in/ft)**		



Load Case: **No Ice** **85.00 mph Wind with No Ice** **22 Iterations**

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

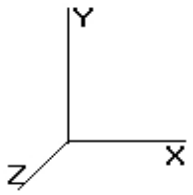
Calculated Shaft Forces and Deflections

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	-39.429	-49.155	0.000	0.000	0.000	-4,304.288	0.000	0.000	0.000	0.000
5.00	-38.965	-47.109	0.000	0.000	0.000	-4,107.145	-0.073	0.000	0.073	-0.134
10.00	-38.504	-45.099	0.000	0.000	0.000	-3,912.323	-0.287	0.000	0.287	-0.271
15.00	-38.047	-43.126	0.000	0.000	0.000	-3,719.805	-0.647	0.000	0.647	-0.411
20.00	-37.594	-41.188	0.000	0.000	0.000	-3,529.571	-1.153	0.000	1.153	-0.552
25.00	-37.145	-39.288	0.000	0.000	0.000	-3,341.602	-1.810	0.000	1.810	-0.697
30.00	-36.700	-37.423	0.000	0.000	0.000	-3,155.879	-2.619	0.000	2.619	-0.843
35.00	-36.236	-35.610	0.000	0.000	0.000	-2,972.383	-3.582	0.000	3.582	-0.992
38.50	-35.896	-34.371	0.000	0.000	0.000	-2,845.559	-4.350	0.000	4.350	-1.099
40.00	-35.781	-33.493	0.000	0.000	0.000	-2,791.717	-4.703	0.000	4.703	-1.146
45.00	-35.270	-30.722	0.000	0.000	0.000	-2,612.815	-5.986	0.000	5.986	-1.299
50.00	-34.788	-29.300	0.000	0.000	0.000	-2,436.470	-7.429	0.000	7.429	-1.454
55.00	-34.307	-27.895	0.000	0.000	0.000	-2,262.532	-9.059	0.000	9.059	-1.651
60.00	-33.818	-26.520	0.000	0.000	0.000	-2,090.998	-10.896	0.000	10.896	-1.850
65.00	-33.322	-25.174	0.000	0.000	0.000	-1,921.911	-12.941	0.000	12.941	-2.050
70.00	-32.764	-23.877	0.000	0.000	0.000	-1,755.187	-15.196	0.000	15.196	-2.249
73.00	-32.455	-23.113	0.000	0.000	0.000	-1,656.897	-16.649	0.000	16.649	-2.371
75.00	-32.251	-22.297	0.000	0.000	0.000	-1,591.988	-17.660	0.000	17.660	-2.453
78.50	-31.853	-20.944	0.000	0.000	0.000	-1,479.111	-19.511	0.000	19.511	-2.593
80.00	-31.731	-20.562	0.000	0.000	0.000	-1,431.333	-20.336	0.000	20.336	-2.654
85.00	-31.193	-19.498	0.000	0.000	0.000	-1,272.682	-23.235	0.000	23.235	-2.875
86.00	-30.340	-18.643	0.000	0.000	0.000	-1,241.490	-23.842	0.000	23.842	-2.921
90.00	-29.939	-17.789	0.000	0.000	0.000	-1,120.130	-26.365	0.000	26.365	-3.095
95.00	-29.402	-16.806	0.000	0.000	0.000	-970.437	-29.719	0.000	29.719	-3.304
96.00	-26.482	-15.011	0.000	0.000	0.000	-941.035	-30.416	0.000	30.416	-3.346
100.0	-25.388	-13.759	0.000	0.000	0.000	-835.107	-33.288	0.000	33.288	-3.507
105.0	-24.855	-12.877	0.000	0.000	0.000	-708.169	-37.064	0.000	37.064	-3.698
106.0	-23.999	-12.081	0.000	0.000	0.000	-682.843	-37.842	0.000	37.842	-3.736
108.7	-23.711	-11.605	0.000	0.000	0.000	-616.848	-40.024	0.000	40.024	-3.837
110.0	-23.580	-11.260	0.000	0.000	0.000	-587.209	-41.034	0.000	41.034	-3.883
113.0	-23.248	-10.482	0.000	0.000	0.000	-516.469	-43.507	0.000	43.507	-3.986
115.0	-23.046	-10.182	0.000	0.000	0.000	-469.974	-45.190	0.000	45.190	-4.052
117.0	-19.081	-7.946	0.000	0.000	0.000	-416.549	-46.903	0.000	46.903	-4.126
120.0	-18.838	-7.547	0.000	0.000	0.000	-359.306	-49.528	0.000	49.528	-4.228
125.0	-18.429	-6.924	0.000	0.000	0.000	-265.117	-54.035	0.000	54.035	-4.375
130.0	-18.024	-6.338	0.000	0.000	0.000	-172.974	-58.680	0.000	58.680	-4.492
132.0	-12.374	-4.492	0.000	0.000	0.000	-136.925	-60.570	0.000	60.570	-4.530
134.0	-11.712	-3.997	0.000	0.000	0.000	-111.697	-62.473	0.000	62.473	-4.563
135.0	-11.637	-3.901	0.000	0.000	0.000	-99.985	-63.430	0.000	63.430	-4.577
140.0	-4.771	-2.239	0.000	0.000	0.000	-41.798	-68.250	0.000	68.250	-4.627
145.0	-4.412	-1.868	0.000	0.000	0.000	-17.942	-73.106	0.000	73.106	-4.652
148.0	-4.246	0.000	0.000	0.000	0.000	-4.707	-76.028	0.000	76.028	-4.658

Pole : 302540
Location : Madison CT 6, CT
Height : 148.0 (ft)
Base Dia : 61.05 (in)
Top Dia : 24.00 (in)
Shape : 18 Sides
Taper : 0.263006 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)

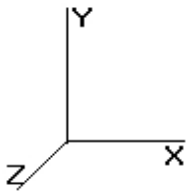


Load Case: No Ice — 85.00 mph Wind with No Ice — 22 Iterations

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

Calculated Stresses

Seg Elev (ft)	Applied Stresses Axial (Y) (ksi)	Shear (X) (ksi)	Shear (Z) (ksi)	Torsion (ksi)	Bending (X) (ksi)	Bending (Z) (ksi)	Combined (ksi)	Allowable Stress (Fb) (ksi)		Stress Ratio
0.00	0.51	0.83	0.00	0.00	0.00	35.97	36.51	52.0	0.0	0.702
5.00	0.50	0.84	0.00	0.00	0.00	35.87	36.40	52.0	0.0	0.700
10.00	0.49	0.84	0.00	0.00	0.00	35.74	36.26	52.0	0.0	0.698
15.00	0.48	0.85	0.00	0.00	0.00	35.59	36.10	52.0	0.0	0.694
20.00	0.47	0.86	0.00	0.00	0.00	35.40	35.90	52.0	0.0	0.691
25.00	0.46	0.87	0.00	0.00	0.00	35.18	35.67	52.0	0.0	0.686
30.00	0.45	0.89	0.00	0.00	0.00	34.91	35.39	52.0	0.0	0.681
35.00	0.44	0.90	0.00	0.00	0.00	34.59	35.07	52.0	0.0	0.675
38.50	0.43	0.90	0.00	0.00	0.00	34.34	34.81	52.0	0.0	0.670
40.00	0.42	0.91	0.00	0.00	0.00	34.23	34.69	52.0	0.0	0.667
45.00	0.52	1.20	0.00	0.00	0.00	43.37	43.94	52.0	0.0	0.845
50.00	0.51	1.22	0.00	0.00	0.00	42.69	43.25	52.0	0.0	0.832
55.00	0.50	1.24	0.00	0.00	0.00	41.90	42.45	52.0	0.0	0.817
60.00	0.49	1.25	0.00	0.00	0.00	41.00	41.54	52.0	0.0	0.799
65.00	0.48	1.27	0.00	0.00	0.00	39.96	40.50	52.0	0.0	0.779
70.00	0.47	1.29	0.00	0.00	0.00	38.77	39.30	52.0	0.0	0.756
73.00	0.46	1.30	0.00	0.00	0.00	37.98	38.51	52.0	0.0	0.741
75.00	0.45	1.31	0.00	0.00	0.00	37.43	37.94	52.0	0.0	0.730
78.50	0.51	1.56	0.00	0.00	0.00	42.14	42.73	52.0	0.0	0.822
80.00	0.50	1.57	0.00	0.00	0.00	41.57	42.16	52.0	0.0	0.811
85.00	0.49	1.59	0.00	0.00	0.00	39.45	40.04	52.0	0.0	0.770
86.00	0.48	1.56	0.00	0.00	0.00	39.00	39.57	52.0	0.0	0.761
90.00	0.47	1.58	0.00	0.00	0.00	37.15	37.72	52.0	0.0	0.726
95.00	0.46	1.61	0.00	0.00	0.00	34.52	35.08	52.0	0.0	0.675
96.00	0.41	1.46	0.00	0.00	0.00	33.95	34.46	52.0	0.0	0.663
100.00	0.39	1.44	0.00	0.00	0.00	31.94	32.42	52.0	0.0	0.624
105.00	0.38	1.46	0.00	0.00	0.00	29.19	29.68	52.0	0.0	0.571
106.00	0.36	1.42	0.00	0.00	0.00	28.59	29.05	52.0	0.0	0.559
108.75	0.35	1.44	0.00	0.00	0.00	26.96	27.42	52.0	0.0	0.527
110.00	0.34	1.44	0.00	0.00	0.00	26.17	26.63	52.0	0.0	0.512
113.00	0.40	1.79	0.00	0.00	0.00	29.12	29.68	52.0	0.0	0.571
115.00	0.40	1.81	0.00	0.00	0.00	27.37	27.94	52.0	0.0	0.538
117.00	0.31	1.52	0.00	0.00	0.00	25.07	25.52	52.0	0.0	0.491
120.00	0.31	1.54	0.00	0.00	0.00	22.74	23.20	52.0	0.0	0.446
125.00	0.29	1.57	0.00	0.00	0.00	18.30	18.79	52.0	0.0	0.361
130.00	0.28	1.61	0.00	0.00	0.00	13.07	13.64	52.0	0.0	0.262
132.00	0.20	1.12	0.00	0.00	0.00	10.74	11.12	52.0	0.0	0.214
134.00	0.18	1.08	0.00	0.00	0.00	9.10	9.47	52.0	0.0	0.182
135.00	0.18	1.09	0.00	0.00	0.00	8.31	8.70	52.0	0.0	0.167
140.00	0.11	0.47	0.00	0.00	0.00	3.84	4.03	52.0	0.0	0.078
145.00	0.10	0.46	0.00	0.00	0.00	1.83	2.08	52.0	0.0	0.040
148.00	0.00	0.45	0.00	0.00	0.00	0.51	0.94	52.0	0.0	0.018



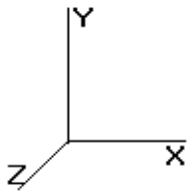
Load Case: Ice — 73.61 mph Wind with Ice — 22 Iterations

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)	Ap (sf)	EPAs (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		0.00	1.00	13.871	23.44	374.49	0.650	0.500	0.00	0.000	0.00	0.0	0.0	0.0
5.00		0.00	1.00	13.871	23.44	366.42	0.650	0.500	5.00	25.580	16.63	389.8	185.9	1,803.0
10.00		0.00	1.00	13.871	23.44	358.35	0.650	0.500	5.00	25.032	16.27	381.4	181.8	1,763.4
15.00		0.00	1.00	13.871	23.44	350.29	0.650	0.500	5.00	24.484	15.91	373.1	177.8	1,723.8
20.00		0.00	1.00	13.871	23.44	342.22	0.650	0.500	5.00	23.936	15.56	364.7	173.7	1,684.3
25.00		0.00	1.00	13.871	23.44	334.15	0.650	0.500	5.00	23.388	15.20	356.4	169.6	1,644.7
30.00		0.00	1.00	13.871	23.44	326.09	0.650	0.500	5.00	22.841	14.85	348.0	165.6	1,605.1
35.00		0.00	1.01	14.106	23.84	320.70	0.650	0.500	5.00	22.293	14.49	345.4	161.5	1,565.6
38.50	Bot - Section 2	0.00	1.04	14.496	24.49	319.33	0.650	0.500	3.50	15.279	9.93	243.3	111.1	1,072.8
40.00		0.00	1.05	14.655	24.76	318.59	0.650	0.500	1.50	6.560	4.26	105.6	47.9	765.2
45.00	Top - Section 1	0.00	1.09	15.156	25.61	315.56	0.650	0.500	5.00	21.509	13.98	358.1	155.7	2,506.3
50.00		0.00	1.12	15.620	26.39	316.67	0.650	0.500	5.00	20.961	13.62	359.7	151.7	1,142.5
55.00		0.00	1.15	16.051	27.12	312.33	0.650	0.500	5.00	20.413	13.27	359.9	147.6	1,111.9
60.00		0.00	1.18	16.455	27.80	307.46	0.650	0.500	5.00	19.865	12.91	359.1	143.5	1,081.2
65.00		0.00	1.21	16.836	28.45	302.10	0.650	0.500	5.00	19.318	12.56	357.3	139.5	1,050.5
70.00	Appertunance(s)	0.00	1.24	17.196	29.06	296.34	0.650	0.500	5.00	18.770	12.20	354.6	135.4	1,019.8
73.00	Bot - Section 3	0.00	1.25	17.403	29.41	292.70	0.650	0.500	3.00	10.999	7.15	210.3	79.8	597.6
75.00		0.00	1.26	17.538	29.64	290.20	0.650	0.500	2.00	7.327	4.76	141.2	53.3	681.1
78.50	Top - Section 2	0.00	1.28	17.768	30.02	285.71	0.650	0.500	3.50	12.611	8.20	246.2	91.3	1,171.1
80.00		0.00	1.28	17.865	30.19	288.09	0.650	0.500	1.50	5.323	3.46	104.5	38.8	247.7
85.00		0.00	1.31	18.177	30.71	281.36	0.650	0.500	5.00	17.386	11.30	347.2	125.2	807.2
86.00	Appertunance(s)	0.00	1.31	18.238	30.82	279.98	0.650	0.500	1.00	3.411	2.22	68.3	24.9	158.6
90.00		0.00	1.33	18.476	31.22	274.36	0.650	0.500	4.00	13.427	8.73	272.5	96.9	623.0
95.00		0.00	1.35	18.764	31.71	267.10	0.650	0.500	5.00	16.290	10.59	335.8	117.1	754.7
96.00	Appertunance(s)	0.00	1.35	18.820	31.80	265.62	0.650	0.500	1.00	3.192	2.08	66.0	23.3	148.1
100.0	Appertunance(s)	0.00	1.37	19.041	32.17	259.62	0.650	0.500	4.00	12.550	8.16	262.5	90.4	581.0
105.0		0.00	1.39	19.308	32.63	251.91	0.650	0.500	5.00	15.194	9.88	322.3	109.0	702.2
106.0	Appertunance(s)	0.00	1.39	19.360	32.71	250.35	0.650	0.500	1.00	2.973	1.93	63.2	21.6	137.6
108.7	Bot - Section 4	0.00	1.40	19.502	32.95	246.01	0.650	0.500	2.75	8.063	5.24	172.7	58.3	372.6
110.0		0.00	1.41	19.566	33.06	244.01	0.650	0.500	1.25	3.662	2.38	78.7	26.6	281.7
113.0	Top - Section 3	0.00	1.42	19.717	33.32	239.18	0.650	0.500	3.00	8.650	5.62	187.4	62.4	664.5
115.0		0.00	1.42	19.816	33.49	239.59	0.650	0.500	2.00	5.657	3.68	123.1	41.0	217.5
117.0	Appertunance(s)	0.00	1.43	19.914	33.65	236.32	0.650	0.500	2.00	5.569	3.62	121.8	40.3	214.0
120.0		0.00	1.44	20.059	33.89	231.35	0.650	0.500	3.00	8.190	5.32	180.5	59.0	314.2
125.0		0.00	1.46	20.294	34.29	222.95	0.650	0.500	5.00	13.211	8.59	294.5	94.3	505.4
130.0		0.00	1.48	20.523	34.68	214.39	0.650	0.500	5.00	12.663	8.23	285.5	90.2	483.6
132.0	Appertunance(s)	0.00	1.48	20.613	34.83	210.93	0.650	0.500	2.00	4.912	3.19	111.2	35.4	187.8
134.0	Appertunance(s)	0.00	1.49	20.701	34.98	207.44	0.650	0.500	2.00	4.824	3.14	109.7	34.8	184.3
135.0		0.00	1.49	20.745	35.06	205.68	0.650	0.500	1.00	2.379	1.55	54.2	17.2	90.9
140.0	Appertunance(s)	0.00	1.51	20.962	35.42	196.84	0.650	0.500	5.00	11.567	7.52	266.4	82.1	440.0
145.0		0.00	1.52	21.173	35.78	187.86	0.650	0.500	5.00	11.019	7.16	256.3	78.0	418.2
148.0	Appertunance(s)	0.00	1.53	21.297	35.99	182.42	0.650	0.500	3.00	6.349	4.13	148.5	45.4	240.9
							Totals:		148.00			9,886.7	3,884.7	32,765.8

Pole :	**302540**	**Code: TIA/EIA-222 Rev F**	**3/26/2014 4:12:32 PM**
Location :	**Madison CT 6, CT**		**Page: 11**
Height :	**148.0 (ft)**		
Base Dia :	**61.05 (in)**		
Top Dia :	**24.00 (in)**	**Base Elev : 0.000 (ft)**	
Shape :	**18 Sides**		
Taper :	**0.263006 (in/ft)**		

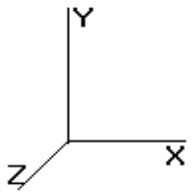


Load Case: **Ice** **73.61 mph Wind with Ice** **22 Iterations**

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)	Orientation Factor	Total EPAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
70.00	GPS	1	17.403	29.411	1.00	1.30	0.000	3.000	38.23	0.00	114.70	15.00
86.00	RFS APXV18-206517S-	3	18.238	30.821	0.80	13.99	0.000	0.000	431.11	0.00	0.00	159.39
86.00	Flush	1	18.238	30.821	0.67	7.04	0.000	0.000	216.83	0.00	0.00	680.00
96.00	Flat Low Profile Pla	1	18.820	31.806	1.00	31.60	0.000	0.000	1,005.05	0.00	0.00	1,700.00
96.00	Decibel DB980H90E-M	6	18.820	31.806	0.81	20.89	0.000	0.000	664.47	0.00	0.00	179.11
96.00	RFS APXVSPP18-C-	3	18.820	31.806	0.82	22.34	0.000	0.000	710.43	0.00	0.00	319.50
100.0	Alcatel-Lucent 800 M	3	19.041	32.179	0.67	5.47	0.000	0.000	175.93	0.00	0.00	258.30
100.0	Alcatel-Lucent 1900	3	19.041	32.179	0.67	6.17	0.000	0.000	198.56	0.00	0.00	249.30
100.0	Alcatel-Lucent 800 M	3	19.041	32.179	0.67	5.67	0.000	0.000	182.40	0.00	0.00	222.30
106.0	60" x 8" Panel	3	19.412	32.807	0.75	12.15	0.000	1.000	398.60	0.00	398.60	170.22
106.0	Flush	1	19.360	32.719	0.67	7.04	0.000	0.000	230.18	0.00	0.00	680.00
106.0	2" x 4" GPS	1	19.412	32.807	1.00	0.26	0.000	1.000	8.53	0.00	8.53	2.50
117.0	Flat Low Profile Pla	1	19.914	33.655	1.00	31.60	0.000	0.000	1,063.50	0.00	0.00	1,700.00
117.0	Ericsson KRY 112 144	4	20.059	33.899	1.00	2.20	0.000	3.000	74.58	0.00	223.74	56.40
117.0	Ericsson AIR 21, 1.3	4	20.059	33.899	1.00	28.80	0.000	3.000	976.30	0.00	2,928.90	530.40
117.0	Ericsson AIR 21, 1.3	4	20.059	33.899	1.00	28.80	0.000	3.000	976.30	0.00	2,928.90	530.40
132.0	ADC DD700	6	20.613	34.835	0.50	4.44	0.000	0.000	154.67	0.00	0.00	140.40
132.0	77" x 14" Panel	12	20.613	34.835	0.67	91.50	0.000	0.000	3,187.25	0.00	0.00	1,124.40
132.0	Powerwave LGP13519	6	20.613	34.835	0.50	1.32	0.000	0.000	45.98	0.00	0.00	84.00
132.0	Flat Low Profile Pla	1	20.613	34.835	1.00	31.60	0.000	0.000	1,100.79	0.00	0.00	1,700.00
134.0	Raycap DC6-48-60-18-	1	20.745	35.060	1.00	1.67	0.000	1.000	58.55	0.00	58.55	49.50
134.0	Ericsson RRUS 11 (Ba	6	20.745	35.060	0.50	10.02	0.000	1.000	351.30	0.00	351.30	419.40
140.0	2" x 8" GPS	1	20.962	35.426	1.00	0.26	0.000	0.000	9.21	0.00	0.00	2.50
140.0	Antel LPA-80080/6CF	4	20.962	35.426	1.83	36.46	0.000	0.000	1,291.49	0.00	0.00	200.00
140.0	Antel LPA-80063/6CF	2	20.962	35.426	1.00	22.36	0.000	0.000	792.12	0.00	0.00	202.00
140.0	Antel BXA-70063-6CF-	3	20.962	35.426	0.77	8.25	0.000	0.000	292.38	0.00	0.00	120.90
140.0	Flat Low Profile Pla	1	20.962	35.426	1.00	31.60	0.000	0.000	1,119.45	0.00	0.00	1,700.00
140.0	Antel BXA-171085-8BF	3	20.962	35.426	0.87	9.95	0.000	0.000	352.37	0.00	0.00	82.67
140.0	RFS FD9R6004/1C-3L	6	20.962	35.426	0.50	1.50	0.000	0.000	53.14	0.00	0.00	32.40
148.0	6' Omni	1	21.501	36.336	1.00	2.13	0.000	5.000	77.40	0.00	386.98	38.24
148.0	11' Dipole	1	21.600	36.505	1.00	4.00	0.000	7.500	146.02	0.00	1,095.14	25.00
148.0	Flat Low Profile Pla	1	21.297	35.993	1.00	31.60	0.000	0.000	1,137.37	0.00	0.00	1,700.00
148.0	6' Dipole	1	21.501	36.336	1.00	3.00	0.000	5.000	109.01	0.00	545.04	39.30
148.0	48" x 12" Panel	9	21.338	36.062	0.67	37.33	0.000	1.000	1,346.04	0.00	1,346.04	567.00
148.0	72" x 12" Panel	3	21.338	36.062	0.67	18.55	0.000	1.000	669.03	0.00	669.03	276.84
									19,644.56			15,957.37



Load Case: Ice — 73.61 mph Wind with Ice — 22 Iterations

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

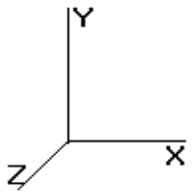
Linear Appurtenance Segment Forces

Seg Top Elev (ft)	Description	Exposed To Wind	Length (ft)	Weight (lb/ft)	CaAa (sf/ft)	qz (psf)	FX (lb)	Dead Load (lb)
5.00	(16) 1 5/8" Coax	Yes	5.00	37.36	0.60	13.871	70.33	186.80
10.00	(16) 1 5/8" Coax	Yes	5.00	37.36	0.60	13.871	70.33	186.80
15.00	(16) 1 5/8" Coax	Yes	5.00	37.36	0.60	13.871	70.33	186.80
20.00	(16) 1 5/8" Coax	Yes	5.00	37.36	0.60	13.871	70.33	186.80
25.00	(16) 1 5/8" Coax	Yes	5.00	37.36	0.60	13.871	70.33	186.80
30.00	(16) 1 5/8" Coax	Yes	5.00	37.36	0.60	13.871	70.33	186.80
35.00	(16) 1 5/8" Coax	Yes	5.00	37.36	0.60	14.106	71.52	186.80
38.50	(16) 1 5/8" Coax	Yes	3.50	37.36	0.60	14.496	51.45	130.76
40.00	(16) 1 5/8" Coax	Yes	1.50	37.36	0.60	14.655	22.29	56.04
45.00	(16) 1 5/8" Coax	Yes	5.00	37.36	0.60	15.156	76.84	186.80
50.00	(16) 1 5/8" Coax	Yes	5.00	37.36	0.60	15.620	79.19	186.80
55.00	(16) 1 5/8" Coax	Yes	5.00	37.36	0.60	16.051	81.38	186.80
60.00	(16) 1 5/8" Coax	Yes	5.00	37.36	0.60	16.455	83.43	186.80
65.00	(16) 1 5/8" Coax	Yes	5.00	37.36	0.60	16.836	85.36	186.80
70.00	(16) 1 5/8" Coax	Yes	5.00	37.36	0.60	17.196	87.18	186.80
73.00	(16) 1 5/8" Coax	Yes	3.00	37.36	0.60	17.403	52.94	112.08
75.00	(16) 1 5/8" Coax	Yes	2.00	37.36	0.60	17.538	35.57	74.72
78.50	(16) 1 5/8" Coax	Yes	3.50	37.36	0.60	17.768	63.06	130.76
80.00	(16) 1 5/8" Coax	Yes	1.50	37.36	0.60	17.865	27.17	56.04
85.00	(16) 1 5/8" Coax	Yes	5.00	37.36	0.60	18.177	92.16	186.80
86.00	(16) 1 5/8" Coax	Yes	1.00	37.36	0.60	18.238	18.49	37.36
90.00	(16) 1 5/8" Coax	Yes	4.00	37.36	0.60	18.476	74.94	149.44
95.00	(16) 1 5/8" Coax	Yes	5.00	37.36	0.60	18.764	95.13	186.80
96.00	(16) 1 5/8" Coax	Yes	1.00	37.36	0.60	18.820	19.08	37.36
100.0	(16) 1 5/8" Coax	Yes	4.00	37.36	0.60	19.041	77.23	149.44
105.0	(16) 1 5/8" Coax	Yes	5.00	37.36	0.60	19.308	97.89	186.80
106.0	(16) 1 5/8" Coax	Yes	1.00	37.36	0.60	19.360	19.63	37.36
108.7	(16) 1 5/8" Coax	Yes	2.75	37.36	0.60	19.502	54.38	102.74
110.0	(16) 1 5/8" Coax	Yes	1.25	37.36	0.60	19.566	24.80	46.70
113.0	(16) 1 5/8" Coax	Yes	3.00	37.36	0.60	19.717	59.98	112.08
115.0	(16) 1 5/8" Coax	Yes	2.00	37.36	0.60	19.816	40.19	74.72
117.0	(16) 1 5/8" Coax	Yes	2.00	37.36	0.60	19.914	40.39	74.72
						Totals:	1,953.62	4,371.11

Pole : 302540
Location : Madison CT 6, CT
Height : 148.0 (ft)
Base Dia : 61.05 (in)
Top Dia : 24.00 (in)
Shape : 18 Sides
Taper : 0.263006 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)



Load Case: Ice — 73.61 mph Wind with Ice — 22 Iterations

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

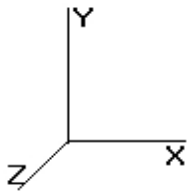
Applied Segment Forces Summary

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	460.10	2,261.56	0.00	0.00
10.00	451.76	2,222.00	0.00	0.00
15.00	443.41	2,182.43	0.00	0.00
20.00	435.06	2,142.87	0.00	0.00
25.00	426.71	2,103.31	0.00	0.00
30.00	418.36	2,063.74	0.00	0.00
35.00	416.96	2,024.18	0.00	0.00
38.50	294.74	1,393.81	0.00	0.00
40.00	127.89	902.80	0.00	0.00
45.00	434.96	2,964.87	0.00	0.00
50.00	438.85	1,601.13	0.00	0.00
55.00	441.30	1,570.45	0.00	0.00
60.00	442.51	1,539.76	0.00	0.00
65.00	442.61	1,509.07	0.00	0.00
70.00	479.97	1,493.38	0.00	114.70
73.00	263.21	872.79	0.00	0.00
75.00	176.73	864.54	0.00	0.00
78.50	309.21	1,492.17	0.00	0.00
80.00	131.63	385.28	0.00	0.00
85.00	439.31	1,265.77	0.00	0.00
86.00	734.78	1,089.72	0.00	0.00
90.00	347.45	970.17	0.00	0.00
95.00	430.91	1,188.68	0.00	0.00
96.00	2,465.03	2,433.52	0.00	0.00
100.0	896.62	1,626.39	0.00	0.00
105.0	420.16	1,096.58	0.00	0.00
106.0	720.17	1,069.21	0.00	407.13
108.7	227.12	589.54	0.00	0.00
110.0	103.52	380.33	0.00	0.00
113.0	247.33	901.14	0.00	0.00
115.0	163.33	375.25	0.00	0.00
117.0	3,252.90	3,188.96	0.00	6,081.54
120.0	180.46	433.94	0.00	0.00
125.0	294.52	704.98	0.00	0.00
130.0	285.48	683.17	0.00	0.00
132.0	4,599.91	3,316.45	0.00	0.00
134.0	519.55	713.38	0.00	409.85
135.0	54.22	112.42	0.00	0.00
140.0	4,176.52	2,887.87	0.00	0.00
145.0	256.30	475.64	0.00	0.00
148.0	3,633.39	2,921.78	0.00	4,042.23
Totals:	31,484.92	60,015.01	0.00	11,055.45

Pole : 302540
Location : Madison CT 6, CT
Height : 148.0 (ft)
Base Dia : 61.05 (in)
Top Dia : 24.00 (in)
Shape : 18 Sides
Taper : 0.263006 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)



Load Case: Ice — 73.61 mph Wind with Ice — 22 Iterations

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

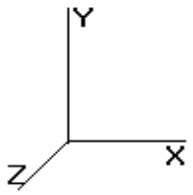
Calculated Shaft Forces and Deflections

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	-31.543	-59.985	0.000	0.000	0.000	-3,434.167	0.000	0.000	0.000	0.000
5.00	-31.189	-57.665	0.000	0.000	0.000	-3,276.458	-0.058	0.000	0.058	-0.107
10.00	-30.838	-55.385	0.000	0.000	0.000	-3,120.515	-0.229	0.000	0.229	-0.216
15.00	-30.488	-53.145	0.000	0.000	0.000	-2,966.330	-0.516	0.000	0.516	-0.328
20.00	-30.140	-50.945	0.000	0.000	0.000	-2,813.893	-0.920	0.000	0.920	-0.441
25.00	-29.794	-48.785	0.000	0.000	0.000	-2,663.197	-1.444	0.000	1.444	-0.556
30.00	-29.449	-46.666	0.000	0.000	0.000	-2,514.231	-2.089	0.000	2.089	-0.672
35.00	-29.085	-44.596	0.000	0.000	0.000	-2,366.988	-2.857	0.000	2.857	-0.791
38.50	-28.816	-43.176	0.000	0.000	0.000	-2,265.192	-3.469	0.000	3.469	-0.876
40.00	-28.733	-42.235	0.000	0.000	0.000	-2,221.968	-3.750	0.000	3.750	-0.913
45.00	-28.332	-39.217	0.000	0.000	0.000	-2,078.305	-4.773	0.000	4.773	-1.035
50.00	-27.955	-37.556	0.000	0.000	0.000	-1,936.648	-5.923	0.000	5.923	-1.158
55.00	-27.578	-35.920	0.000	0.000	0.000	-1,796.877	-7.221	0.000	7.221	-1.315
60.00	-27.193	-34.317	0.000	0.000	0.000	-1,658.988	-8.684	0.000	8.684	-1.473
65.00	-26.801	-32.746	0.000	0.000	0.000	-1,523.024	-10.312	0.000	10.312	-1.631
70.00	-26.345	-31.210	0.000	0.000	0.000	-1,388.909	-12.106	0.000	12.106	-1.789
73.00	-26.096	-30.310	0.000	0.000	0.000	-1,309.876	-13.262	0.000	13.262	-1.886
75.00	-25.936	-29.412	0.000	0.000	0.000	-1,257.684	-14.066	0.000	14.066	-1.950
78.50	-25.613	-27.896	0.000	0.000	0.000	-1,166.910	-15.538	0.000	15.538	-2.061
80.00	-25.522	-27.465	0.000	0.000	0.000	-1,128.491	-16.194	0.000	16.194	-2.109
85.00	-25.082	-26.172	0.000	0.000	0.000	-1,000.884	-18.497	0.000	18.497	-2.283
86.00	-24.342	-25.076	0.000	0.000	0.000	-975.803	-18.980	0.000	18.980	-2.319
90.00	-24.018	-24.058	0.000	0.000	0.000	-878.437	-20.982	0.000	20.982	-2.456
95.00	-23.573	-22.850	0.000	0.000	0.000	-758.351	-23.643	0.000	23.643	-2.619
96.00	-21.027	-20.503	0.000	0.000	0.000	-734.779	-24.196	0.000	24.196	-2.652
100.0	-20.100	-18.872	0.000	0.000	0.000	-650.671	-26.472	0.000	26.472	-2.778
105.0	-19.653	-17.768	0.000	0.000	0.000	-550.172	-29.462	0.000	29.462	-2.926
106.0	-18.895	-16.719	0.000	0.000	0.000	-530.113	-30.078	0.000	30.078	-2.956
108.7	-18.653	-16.124	0.000	0.000	0.000	-478.153	-31.805	0.000	31.805	-3.035
110.0	-18.545	-15.731	0.000	0.000	0.000	-454.837	-32.604	0.000	32.604	-3.070
113.0	-18.266	-14.824	0.000	0.000	0.000	-399.202	-34.559	0.000	34.559	-3.149
115.0	-18.096	-14.441	0.000	0.000	0.000	-362.671	-35.889	0.000	35.889	-3.200
117.0	-14.682	-11.423	0.000	0.000	0.000	-320.398	-37.242	0.000	37.242	-3.258
120.0	-14.496	-10.976	0.000	0.000	0.000	-276.352	-39.315	0.000	39.315	-3.336
125.0	-14.178	-10.264	0.000	0.000	0.000	-203.875	-42.870	0.000	42.870	-3.449
130.0	-13.861	-9.586	0.000	0.000	0.000	-132.985	-46.533	0.000	46.533	-3.539
132.0	-9.067	-6.557	0.000	0.000	0.000	-105.263	-48.022	0.000	48.022	-3.569
134.0	-8.506	-5.875	0.000	0.000	0.000	-86.718	-49.522	0.000	49.522	-3.594
135.0	-8.448	-5.762	0.000	0.000	0.000	-78.212	-50.276	0.000	50.276	-3.605
140.0	-4.098	-3.142	0.000	0.000	0.000	-35.973	-54.074	0.000	54.074	-3.645
145.0	-3.813	-2.683	0.000	0.000	0.000	-15.481	-57.902	0.000	57.902	-3.666
148.0	-3.633	0.000	0.000	0.000	0.000	-4.042	-60.206	0.000	60.206	-3.672

Pole : 302540
Location : Madison CT 6, CT
Height : 148.0 (ft)
Base Dia : 61.05 (in)
Top Dia : 24.00 (in)
Shape : 18 Sides
Taper : 0.263006 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)



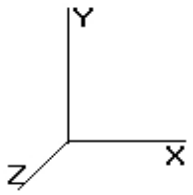
Load Case: Ice — 73.61 mph Wind with Ice — 22 Iterations

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

Calculated Stresses

Seg Elev (ft)	Applied Stresses Axial (Y) (ksi)	Shear (X) (ksi)	Shear (Z) (ksi)	Torsion (ksi)	Bending (X) (ksi)	Bending (Z) (ksi)	Combined (ksi)	Allowable Stress (Fb) (ksi)		Stress Ratio
0.00	0.62	0.66	0.00	0.00	0.00	28.70	29.34	52.0	0.0	0.565
5.00	0.61	0.67	0.00	0.00	0.00	28.61	29.25	52.0	0.0	0.563
10.00	0.60	0.68	0.00	0.00	0.00	28.51	29.14	52.0	0.0	0.561
15.00	0.59	0.68	0.00	0.00	0.00	28.38	29.00	52.0	0.0	0.558
20.00	0.58	0.69	0.00	0.00	0.00	28.22	28.83	52.0	0.0	0.555
25.00	0.57	0.70	0.00	0.00	0.00	28.04	28.63	52.0	0.0	0.551
30.00	0.56	0.71	0.00	0.00	0.00	27.81	28.40	52.0	0.0	0.546
35.00	0.55	0.72	0.00	0.00	0.00	27.55	28.12	52.0	0.0	0.541
38.50	0.54	0.73	0.00	0.00	0.00	27.34	27.91	52.0	0.0	0.537
40.00	0.53	0.73	0.00	0.00	0.00	27.25	27.81	52.0	0.0	0.535
45.00	0.66	0.97	0.00	0.00	0.00	34.50	35.20	52.0	0.0	0.677
50.00	0.65	0.98	0.00	0.00	0.00	33.93	34.63	52.0	0.0	0.666
55.00	0.64	0.99	0.00	0.00	0.00	33.28	33.96	52.0	0.0	0.653
60.00	0.63	1.01	0.00	0.00	0.00	32.53	33.20	52.0	0.0	0.639
65.00	0.62	1.02	0.00	0.00	0.00	31.67	32.34	52.0	0.0	0.622
70.00	0.61	1.04	0.00	0.00	0.00	30.68	31.34	52.0	0.0	0.603
73.00	0.60	1.05	0.00	0.00	0.00	30.03	30.69	52.0	0.0	0.590
75.00	0.59	1.05	0.00	0.00	0.00	29.57	30.22	52.0	0.0	0.581
78.50	0.68	1.26	0.00	0.00	0.00	33.24	33.99	52.0	0.0	0.654
80.00	0.67	1.26	0.00	0.00	0.00	32.77	33.52	52.0	0.0	0.645
85.00	0.66	1.28	0.00	0.00	0.00	31.03	31.77	52.0	0.0	0.611
86.00	0.64	1.25	0.00	0.00	0.00	30.66	31.37	52.0	0.0	0.604
90.00	0.63	1.27	0.00	0.00	0.00	29.14	29.85	52.0	0.0	0.574
95.00	0.62	1.29	0.00	0.00	0.00	26.97	27.68	52.0	0.0	0.533
96.00	0.56	1.16	0.00	0.00	0.00	26.51	27.15	52.0	0.0	0.522
100.00	0.53	1.14	0.00	0.00	0.00	24.88	25.49	52.0	0.0	0.490
105.00	0.52	1.16	0.00	0.00	0.00	22.68	23.29	52.0	0.0	0.448
106.00	0.49	1.12	0.00	0.00	0.00	22.19	22.77	52.0	0.0	0.438
108.75	0.49	1.13	0.00	0.00	0.00	20.89	21.47	52.0	0.0	0.413
110.00	0.48	1.14	0.00	0.00	0.00	20.27	20.84	52.0	0.0	0.401
113.00	0.57	1.41	0.00	0.00	0.00	22.51	23.20	52.0	0.0	0.446
115.00	0.56	1.42	0.00	0.00	0.00	21.12	21.82	52.0	0.0	0.420
117.00	0.45	1.17	0.00	0.00	0.00	19.28	19.84	52.0	0.0	0.382
120.00	0.44	1.18	0.00	0.00	0.00	17.49	18.05	52.0	0.0	0.347
125.00	0.43	1.21	0.00	0.00	0.00	14.07	14.65	52.0	0.0	0.282
130.00	0.42	1.24	0.00	0.00	0.00	10.05	10.69	52.0	0.0	0.206
132.00	0.30	0.82	0.00	0.00	0.00	8.26	8.67	52.0	0.0	0.167
134.00	0.27	0.79	0.00	0.00	0.00	7.07	7.46	52.0	0.0	0.144
135.00	0.27	0.79	0.00	0.00	0.00	6.50	6.90	52.0	0.0	0.133
140.00	0.15	0.40	0.00	0.00	0.00	3.30	3.53	52.0	0.0	0.068
145.00	0.14	0.39	0.00	0.00	0.00	1.58	1.85	52.0	0.0	0.036
148.00	0.00	0.39	0.00	0.00	0.00	0.44	0.80	52.0	0.0	0.015

Pole :	**302540**	**Code: TIA/EIA-222 Rev F**	**3/26/2014 4:12:32 PM**
Location :	**Madison CT 6, CT**		**Page: 16**
Height :	**148.0 (ft)**		
Base Dia :	**61.05 (in)**		
Top Dia :	**24.00 (in)**	**Base Elev : 0.000 (ft)**	
Shape :	**18 Sides**		
Taper :	**0.263006 (in/ft)**		

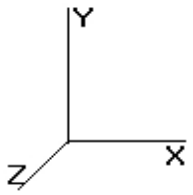


Load Case: Twist/Sway — **50.00 mph Wind with No Ice** — **21 Iterations**

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)	Ap (sf)	EPAs (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		0.00	1.00	6.400	10.81	254.37	0.650	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		0.00	1.00	6.400	10.81	248.89	0.650	0.000	5.00	25.163	16.36	176.9	0.0	1,617.1
10.00		0.00	1.00	6.400	10.81	243.41	0.650	0.000	5.00	24.616	16.00	173.1	0.0	1,581.6
15.00		0.00	1.00	6.400	10.81	237.93	0.650	0.000	5.00	24.068	15.64	169.2	0.0	1,546.1
20.00		0.00	1.00	6.400	10.81	232.45	0.650	0.000	5.00	23.520	15.29	165.4	0.0	1,510.6
25.00		0.00	1.00	6.400	10.81	226.97	0.650	0.000	5.00	22.972	14.93	161.5	0.0	1,475.1
30.00		0.00	1.00	6.400	10.81	221.49	0.650	0.000	5.00	22.424	14.58	157.6	0.0	1,439.6
35.00		0.00	1.01	6.509	10.99	217.84	0.650	0.000	5.00	21.876	14.22	156.4	0.0	1,404.1
38.50	Bot - Section 2	0.00	1.04	6.688	11.30	216.90	0.650	0.000	3.50	14.987	9.74	110.1	0.0	961.7
40.00		0.00	1.05	6.762	11.42	216.40	0.650	0.000	1.50	6.435	4.18	47.8	0.0	717.3
45.00	Top - Section 1	0.00	1.09	6.993	11.81	214.35	0.650	0.000	5.00	21.093	13.71	162.0	0.0	2,350.6
50.00		0.00	1.12	7.207	12.17	215.10	0.650	0.000	5.00	20.545	13.35	162.6	0.0	990.9
55.00		0.00	1.15	7.406	12.51	212.15	0.650	0.000	5.00	19.997	13.00	162.7	0.0	964.2
60.00		0.00	1.18	7.592	12.83	208.84	0.650	0.000	5.00	19.449	12.64	162.2	0.0	937.6
65.00		0.00	1.21	7.768	13.12	205.20	0.650	0.000	5.00	18.901	12.29	161.3	0.0	911.0
70.00	Appertunance(s)	0.00	1.24	7.934	13.40	201.29	0.650	0.000	5.00	18.353	11.93	160.0	0.0	884.4
73.00	Bot - Section 3	0.00	1.25	8.030	13.57	198.82	0.650	0.000	3.00	10.749	6.99	94.8	0.0	517.8
75.00		0.00	1.26	8.092	13.67	197.12	0.650	0.000	2.00	7.160	4.65	63.6	0.0	627.8
78.50	Top - Section 2	0.00	1.28	8.198	13.85	194.07	0.650	0.000	3.50	12.320	8.01	110.9	0.0	1,079.8
80.00		0.00	1.28	8.242	13.93	195.68	0.650	0.000	1.50	5.198	3.38	47.1	0.0	208.9
85.00		0.00	1.31	8.387	14.17	191.11	0.650	0.000	5.00	16.970	11.03	156.3	0.0	682.0
86.00	Appertunance(s)	0.00	1.31	8.415	14.22	190.18	0.650	0.000	1.00	3.328	2.16	30.8	0.0	133.7
90.00		0.00	1.33	8.525	14.40	186.36	0.650	0.000	4.00	13.093	8.51	122.6	0.0	526.1
95.00		0.00	1.35	8.657	14.63	181.43	0.650	0.000	5.00	15.874	10.32	151.0	0.0	637.6
96.00	Appertunance(s)	0.00	1.35	8.683	14.67	180.42	0.650	0.000	1.00	3.109	2.02	29.7	0.0	124.9
100.0	Appertunance(s)	0.00	1.37	8.785	14.84	176.34	0.650	0.000	4.00	12.217	7.94	117.9	0.0	490.6
105.0		0.00	1.39	8.908	15.05	171.11	0.650	0.000	5.00	14.778	9.61	144.6	0.0	593.2
106.0	Appertunance(s)	0.00	1.39	8.933	15.09	170.05	0.650	0.000	1.00	2.890	1.88	28.4	0.0	116.0
108.7	Bot - Section 4	0.00	1.40	8.998	15.20	167.10	0.650	0.000	2.75	7.834	5.09	77.4	0.0	314.4
110.0		0.00	1.41	9.028	15.25	165.75	0.650	0.000	1.25	3.558	2.31	35.3	0.0	255.1
113.0	Top - Section 3	0.00	1.42	9.097	15.37	162.47	0.650	0.000	3.00	8.400	5.46	83.9	0.0	602.1
115.0		0.00	1.42	9.143	15.45	162.74	0.650	0.000	2.00	5.490	3.57	55.1	0.0	176.5
117.0	Appertunance(s)	0.00	1.43	9.188	15.52	160.52	0.650	0.000	2.00	5.403	3.51	54.5	0.0	173.7
120.0		0.00	1.44	9.255	15.64	157.15	0.650	0.000	3.00	7.940	5.16	80.7	0.0	255.2
125.0		0.00	1.46	9.363	15.82	151.44	0.650	0.000	5.00	12.794	8.32	131.6	0.0	411.2
130.0		0.00	1.48	9.469	16.00	145.62	0.650	0.000	5.00	12.247	7.96	127.4	0.0	393.4
132.0	Appertunance(s)	0.00	1.48	9.510	16.07	143.27	0.650	0.000	2.00	4.745	3.08	49.6	0.0	152.4
134.0	Appertunance(s)	0.00	1.49	9.551	16.14	140.90	0.650	0.000	2.00	4.658	3.03	48.9	0.0	149.6
135.0		0.00	1.49	9.572	16.17	139.71	0.650	0.000	1.00	2.296	1.49	24.1	0.0	73.7
140.0	Appertunance(s)	0.00	1.51	9.672	16.34	133.70	0.650	0.000	5.00	11.151	7.25	118.5	0.0	357.9
145.0		0.00	1.52	9.769	16.51	127.61	0.650	0.000	5.00	10.603	6.89	113.8	0.0	340.2
148.0	Appertunance(s)	0.00	1.53	9.826	16.60	123.91	0.650	0.000	3.00	6.099	3.96	65.8	0.0	195.6
							Totals:		148.00			4,453.1	0.0	28,881.1



Load Case: Twist/Sway — 50.00 mph Wind with No Ice — 21 Iterations

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

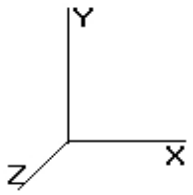
Discrete Appurtenance Segment Forces

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orientation Factor	Total EPAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
70.00	GPS	1	8.030	13.570	1.00	1.00	0.000	3.000	13.57	0.00	40.71	7.00
86.00	RFS APXV18-206517S-	3	8.415	14.221	0.80	12.36	0.000	0.000	175.79	0.00	0.00	79.20
86.00	Flush	1	8.415	14.221	0.67	5.70	0.000	0.000	80.99	0.00	0.00	560.00
96.00	Flat Low Profile Pla	1	8.683	14.675	1.00	26.10	0.000	0.000	383.01	0.00	0.00	1,500.00
96.00	Decibel DB980H90E-M	6	8.683	14.675	0.81	18.14	0.000	0.000	266.13	0.00	0.00	57.00
96.00	RFS APXVSPP18-C-	3	8.683	14.675	0.82	20.32	0.000	0.000	298.18	0.00	0.00	171.00
100.0	Alcatel-Lucent 800 M	3	8.785	14.847	0.67	4.82	0.000	0.000	71.62	0.00	0.00	192.00
100.0	Alcatel-Lucent 1900	3	8.785	14.847	0.67	5.45	0.000	0.000	80.87	0.00	0.00	180.00
100.0	Alcatel-Lucent 800 M	3	8.785	14.847	0.67	5.00	0.000	0.000	74.31	0.00	0.00	159.00
106.0	60" x 8" Panel	3	8.957	15.137	0.75	10.62	0.000	1.000	160.75	0.00	160.75	90.00
106.0	Flush	1	8.933	15.096	0.67	5.70	0.000	0.000	85.97	0.00	0.00	560.00
106.0	2" x 4" GPS	1	8.957	15.137	1.00	0.16	0.000	1.000	2.42	0.00	2.42	1.00
117.0	Flat Low Profile Pla	1	9.188	15.528	1.00	26.10	0.000	0.000	405.28	0.00	0.00	1,500.00
117.0	Ericsson KRY 112 144	4	9.255	15.641	1.00	1.64	0.000	3.000	25.65	0.00	76.95	44.00
117.0	Ericsson AIR 21, 1.3	4	9.255	15.641	1.00	26.12	0.000	3.000	408.54	0.00	1,225.61	332.00
117.0	Ericsson AIR 21, 1.3	4	9.255	15.641	1.00	26.32	0.000	3.000	411.66	0.00	1,234.99	326.00
132.0	ADC DD700	6	9.510	16.073	0.50	3.75	0.000	0.000	60.27	0.00	0.00	95.40
132.0	77" x 14" Panel	12	9.510	16.073	0.67	84.26	0.000	0.000	1,354.26	0.00	0.00	420.00
132.0	Powerwave LGP13519	6	9.510	16.073	0.50	1.02	0.000	0.000	16.39	0.00	0.00	30.00
132.0	Flat Low Profile Pla	1	9.510	16.073	1.00	26.10	0.000	0.000	419.49	0.00	0.00	1,500.00
134.0	Raycap DC6-48-60-18-	1	9.572	16.176	1.00	1.47	0.000	1.000	23.78	0.00	23.78	31.80
134.0	Ericsson RRUS 11 (Ba	6	9.572	16.176	0.50	8.82	0.000	1.000	142.67	0.00	142.67	300.00
140.0	2" x 8" GPS	1	9.672	16.345	1.00	0.16	0.000	0.000	2.62	0.00	0.00	1.00
140.0	Antel LPA-80080/6CF	4	9.672	16.345	1.83	63.14	0.000	0.000	1,031.98	0.00	0.00	84.00
140.0	Antel LPA-80063/6CF	2	9.672	16.345	1.00	19.18	0.000	0.000	313.50	0.00	0.00	54.00
140.0	Antel BXA-70063-6CF-	3	9.672	16.345	0.77	17.49	0.000	0.000	285.82	0.00	0.00	51.00
140.0	Flat Low Profile Pla	1	9.672	16.345	1.00	26.10	0.000	0.000	426.60	0.00	0.00	1,500.00
140.0	Antel BXA-171085-8BF	3	9.672	16.345	0.87	7.67	0.000	0.000	125.42	0.00	0.00	31.50
140.0	RFS FD9R6004/1C-3L	6	9.672	16.345	0.50	1.11	0.000	0.000	18.14	0.00	0.00	18.60
148.0	6' Omni	1	9.920	16.765	1.00	1.76	0.000	5.000	29.51	0.00	147.53	25.00
148.0	11' Dipole	1	9.966	16.843	1.00	3.58	0.000	7.500	60.30	0.00	452.23	40.00
148.0	Flat Low Profile Pla	1	9.826	16.607	1.00	26.10	0.000	0.000	433.43	0.00	0.00	1,500.00
148.0	6' Dipole	1	9.920	16.765	1.00	2.22	0.000	5.000	37.22	0.00	186.09	20.00
148.0	48" x 12" Panel	9	9.845	16.639	0.67	33.77	0.000	1.000	561.85	0.00	561.85	270.00
148.0	72" x 12" Panel	3	9.845	16.639	0.67	16.88	0.000	1.000	280.93	0.00	280.93	135.00
									8,568.92			11,865.50

Pole : 302540
Location : Madison CT 6, CT
Height : 148.0 (ft)
Base Dia : 61.05 (in)
Top Dia : 24.00 (in)
Shape : 18 Sides
Taper : 0.263006 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)



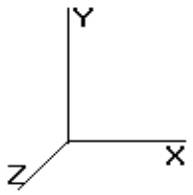
Load Case: Twist/Sway — 50.00 mph Wind with No Ice — 21 Iterations

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)
5.00	(16) 1 5/8" Coax	Yes	5.00	13.12	0.40	6.400	21.63	65.60
10.00	(16) 1 5/8" Coax	Yes	5.00	13.12	0.40	6.400	21.63	65.60
15.00	(16) 1 5/8" Coax	Yes	5.00	13.12	0.40	6.400	21.63	65.60
20.00	(16) 1 5/8" Coax	Yes	5.00	13.12	0.40	6.400	21.63	65.60
25.00	(16) 1 5/8" Coax	Yes	5.00	13.12	0.40	6.400	21.63	65.60
30.00	(16) 1 5/8" Coax	Yes	5.00	13.12	0.40	6.400	21.63	65.60
35.00	(16) 1 5/8" Coax	Yes	5.00	13.12	0.40	6.509	22.00	65.60
38.50	(16) 1 5/8" Coax	Yes	3.50	13.12	0.40	6.688	15.82	45.92
40.00	(16) 1 5/8" Coax	Yes	1.50	13.12	0.40	6.762	6.86	19.68
45.00	(16) 1 5/8" Coax	Yes	5.00	13.12	0.40	6.993	23.64	65.60
50.00	(16) 1 5/8" Coax	Yes	5.00	13.12	0.40	7.207	24.36	65.60
55.00	(16) 1 5/8" Coax	Yes	5.00	13.12	0.40	7.406	25.03	65.60
60.00	(16) 1 5/8" Coax	Yes	5.00	13.12	0.40	7.592	25.66	65.60
65.00	(16) 1 5/8" Coax	Yes	5.00	13.12	0.40	7.768	26.25	65.60
70.00	(16) 1 5/8" Coax	Yes	5.00	13.12	0.40	7.934	26.82	65.60
73.00	(16) 1 5/8" Coax	Yes	3.00	13.12	0.40	8.030	16.28	39.36
75.00	(16) 1 5/8" Coax	Yes	2.00	13.12	0.40	8.092	10.94	26.24
78.50	(16) 1 5/8" Coax	Yes	3.50	13.12	0.40	8.198	19.40	45.92
80.00	(16) 1 5/8" Coax	Yes	1.50	13.12	0.40	8.242	8.36	19.68
85.00	(16) 1 5/8" Coax	Yes	5.00	13.12	0.40	8.387	28.35	65.60
86.00	(16) 1 5/8" Coax	Yes	1.00	13.12	0.40	8.415	5.69	13.12
90.00	(16) 1 5/8" Coax	Yes	4.00	13.12	0.40	8.525	23.05	52.48
95.00	(16) 1 5/8" Coax	Yes	5.00	13.12	0.40	8.657	29.26	65.60
96.00	(16) 1 5/8" Coax	Yes	1.00	13.12	0.40	8.683	5.87	13.12
100.0	(16) 1 5/8" Coax	Yes	4.00	13.12	0.40	8.785	23.75	52.48
105.0	(16) 1 5/8" Coax	Yes	5.00	13.12	0.40	8.908	30.11	65.60
106.0	(16) 1 5/8" Coax	Yes	1.00	13.12	0.40	8.933	6.04	13.12
108.7	(16) 1 5/8" Coax	Yes	2.75	13.12	0.40	8.998	16.73	36.08
110.0	(16) 1 5/8" Coax	Yes	1.25	13.12	0.40	9.028	7.63	16.40
113.0	(16) 1 5/8" Coax	Yes	3.00	13.12	0.40	9.097	18.45	39.36
115.0	(16) 1 5/8" Coax	Yes	2.00	13.12	0.40	9.143	12.36	26.24
117.0	(16) 1 5/8" Coax	Yes	2.00	13.12	0.40	9.188	12.42	26.24
						Totals:	600.92	1,535.03

Pole :	**302540**	**Code: TIA/EIA-222 Rev F**	**3/26/2014 4:12:32 PM**
Location :	**Madison CT 6, CT**		**Page: 19**
Height :	**148.0 (ft)**		
Base Dia :	**61.05 (in)**		
Top Dia :	**24.00 (in)**	**Base Elev : 0.000 (ft)**	
Shape :	**18 Sides**		
Taper :	**0.263006 (in/ft)**		



Load Case: Twist/Sway — **50.00 mph Wind with No Ice** — **21 Iterations**

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

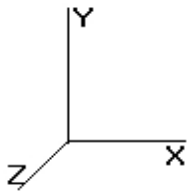
Applied Segment Forces Summary

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	198.54	1,954.49	0.00	0.00
10.00	194.69	1,918.99	0.00	0.00
15.00	190.84	1,883.48	0.00	0.00
20.00	186.98	1,847.97	0.00	0.00
25.00	183.13	1,812.47	0.00	0.00
30.00	179.28	1,776.96	0.00	0.00
35.00	178.40	1,741.46	0.00	0.00
38.50	125.93	1,197.89	0.00	0.00
40.00	54.65	818.50	0.00	0.00
45.00	185.67	2,687.95	0.00	0.00
50.00	187.00	1,328.27	0.00	0.00
55.00	187.71	1,301.64	0.00	0.00
60.00	187.86	1,275.01	0.00	0.00
65.00	187.53	1,248.38	0.00	0.00
70.00	200.34	1,228.75	0.00	40.71
73.00	111.09	720.27	0.00	0.00
75.00	74.59	762.74	0.00	0.00
78.50	130.34	1,316.00	0.00	0.00
80.00	55.42	310.14	0.00	0.00
85.00	184.68	1,019.39	0.00	0.00
86.00	293.23	840.41	0.00	0.00
90.00	145.66	776.30	0.00	0.00
95.00	180.22	950.41	0.00	0.00
96.00	982.84	1,915.42	0.00	0.00
100.0	368.45	1,240.12	0.00	0.00
105.0	174.73	866.42	0.00	0.00
106.0	283.54	821.62	0.00	163.17
108.7	94.16	464.63	0.00	0.00
110.0	42.91	323.42	0.00	0.00
113.0	102.39	766.02	0.00	0.00
115.0	67.50	285.82	0.00	0.00
117.0	1,318.09	2,484.98	0.00	2,537.55
120.0	80.72	374.95	0.00	0.00
125.0	131.60	610.71	0.00	0.00
130.0	127.38	592.96	0.00	0.00
132.0	1,899.99	2,277.61	0.00	0.00
134.0	215.32	541.49	0.00	166.45
135.0	24.14	95.19	0.00	0.00
140.0	2,322.54	2,205.41	0.00	0.00
145.0	113.78	397.60	0.00	0.00
148.0	1,469.06	2,220.04	0.00	1,628.63
Totals:	13,622.96	49,202.32	0.00	4,536.52

Pole : 302540
Location : Madison CT 6, CT
Height : 148.0 (ft)
Base Dia : 61.05 (in)
Top Dia : 24.00 (in)
Shape : 18 Sides
Taper : 0.263006 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)



Load Case: Twist/Sway — 50.00 mph Wind with No Ice — 21 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	-13.643	-49.197	0.000	0.000	0.000	-1,490.505	0.000	0.000	0.000	0.000
5.00	-13.482	-47.231	0.000	0.000	0.000	-1,422.292	-0.025	0.000	0.025	-0.047
10.00	-13.323	-45.301	0.000	0.000	0.000	-1,354.882	-0.100	0.000	0.100	-0.094
15.00	-13.165	-43.407	0.000	0.000	0.000	-1,288.268	-0.224	0.000	0.224	-0.142
20.00	-13.009	-41.548	0.000	0.000	0.000	-1,222.443	-0.399	0.000	0.399	-0.191
25.00	-12.854	-39.725	0.000	0.000	0.000	-1,157.400	-0.627	0.000	0.627	-0.241
30.00	-12.700	-37.938	0.000	0.000	0.000	-1,093.133	-0.907	0.000	0.907	-0.292
35.00	-12.540	-36.188	0.000	0.000	0.000	-1,029.634	-1.241	0.000	1.241	-0.344
38.50	-12.422	-34.985	0.000	0.000	0.000	-985.746	-1.507	0.000	1.507	-0.381
40.00	-12.383	-34.159	0.000	0.000	0.000	-967.112	-1.629	0.000	1.629	-0.397
45.00	-12.207	-31.461	0.000	0.000	0.000	-905.198	-2.073	0.000	2.073	-0.450
50.00	-12.041	-30.122	0.000	0.000	0.000	-844.165	-2.573	0.000	2.573	-0.504
55.00	-11.876	-28.808	0.000	0.000	0.000	-783.961	-3.138	0.000	3.138	-0.572
60.00	-11.707	-27.521	0.000	0.000	0.000	-724.583	-3.774	0.000	3.774	-0.641
65.00	-11.537	-26.261	0.000	0.000	0.000	-666.047	-4.483	0.000	4.483	-0.710
70.00	-11.345	-25.024	0.000	0.000	0.000	-608.322	-5.264	0.000	5.264	-0.779
73.00	-11.239	-24.298	0.000	0.000	0.000	-574.288	-5.767	0.000	5.767	-0.821
75.00	-11.169	-23.529	0.000	0.000	0.000	-551.812	-6.118	0.000	6.118	-0.850
78.50	-11.032	-22.209	0.000	0.000	0.000	-512.722	-6.759	0.000	6.759	-0.898
80.00	-10.991	-21.890	0.000	0.000	0.000	-496.174	-7.045	0.000	7.045	-0.919
85.00	-10.805	-20.865	0.000	0.000	0.000	-441.223	-8.050	0.000	8.050	-0.996
86.00	-10.511	-20.023	0.000	0.000	0.000	-430.418	-8.260	0.000	8.260	-1.012
90.00	-10.374	-19.237	0.000	0.000	0.000	-388.375	-9.135	0.000	9.135	-1.072
95.00	-10.189	-18.283	0.000	0.000	0.000	-336.508	-10.297	0.000	10.297	-1.145
96.00	-9.178	-16.382	0.000	0.000	0.000	-326.319	-10.539	0.000	10.539	-1.159
100.0	-8.800	-15.140	0.000	0.000	0.000	-289.609	-11.535	0.000	11.535	-1.215
105.0	-8.616	-14.272	0.000	0.000	0.000	-245.611	-12.844	0.000	12.844	-1.281
106.0	-8.320	-13.454	0.000	0.000	0.000	-236.832	-13.114	0.000	13.114	-1.295
108.7	-8.221	-12.988	0.000	0.000	0.000	-213.953	-13.870	0.000	13.870	-1.330
110.0	-8.176	-12.662	0.000	0.000	0.000	-203.677	-14.221	0.000	14.221	-1.346
113.0	-8.061	-11.894	0.000	0.000	0.000	-179.149	-15.078	0.000	15.078	-1.381
115.0	-7.992	-11.607	0.000	0.000	0.000	-163.027	-15.662	0.000	15.662	-1.404
117.0	-6.618	-9.152	0.000	0.000	0.000	-144.505	-16.256	0.000	16.256	-1.430
120.0	-6.534	-8.774	0.000	0.000	0.000	-124.652	-17.166	0.000	17.166	-1.465
125.0	-6.393	-8.162	0.000	0.000	0.000	-91.981	-18.730	0.000	18.730	-1.516
130.0	-6.254	-7.569	0.000	0.000	0.000	-60.014	-20.341	0.000	20.341	-1.557
132.0	-4.293	-5.344	0.000	0.000	0.000	-47.507	-20.997	0.000	20.997	-1.570
134.0	-4.064	-4.808	0.000	0.000	0.000	-38.754	-21.657	0.000	21.657	-1.581
135.0	-4.038	-4.712	0.000	0.000	0.000	-34.690	-21.989	0.000	21.989	-1.586
140.0	-1.656	-2.572	0.000	0.000	0.000	-14.500	-23.661	0.000	23.661	-1.604
145.0	-1.531	-2.178	0.000	0.000	0.000	-6.222	-25.346	0.000	25.346	-1.612
148.0	-1.469	0.000	0.000	0.000	0.000	-1.629	-26.360	0.000	26.360	-1.615

Pole : 302540
Location : Madison CT 6, CT
Height : 148.0 (ft)
Base Dia : 61.05 (in)
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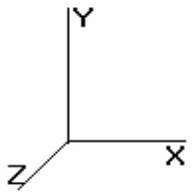
Shape : 18 Sides
Taper : 0.263006 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)



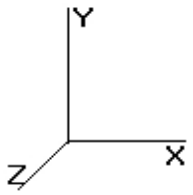
Load Case: Twist/Sway — 50.00 mph Wind with No Ice — 21 Iterations

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

Calculated Stresses

Seg Elev (ft)	Applied Stresses Axial (Y) (ksi)	Shear (X) (ksi)	Shear (Z) (ksi)	Torsion (ksi)	Bending (X) (ksi)	Bending (Z) (ksi)	Combined (ksi)	Allowable Stress (Fb) (ksi)		Stress Ratio
0.00	0.51	0.29	0.00	0.00	0.00	12.46	12.98	52.0	0.0	0.250
5.00	0.50	0.29	0.00	0.00	0.00	12.42	12.93	52.0	0.0	0.249
10.00	0.49	0.29	0.00	0.00	0.00	12.38	12.88	52.0	0.0	0.248
15.00	0.48	0.30	0.00	0.00	0.00	12.33	12.82	52.0	0.0	0.247
20.00	0.47	0.30	0.00	0.00	0.00	12.26	12.75	52.0	0.0	0.245
25.00	0.46	0.30	0.00	0.00	0.00	12.18	12.66	52.0	0.0	0.244
30.00	0.45	0.31	0.00	0.00	0.00	12.09	12.56	52.0	0.0	0.242
35.00	0.44	0.31	0.00	0.00	0.00	11.98	12.44	52.0	0.0	0.239
38.50	0.44	0.31	0.00	0.00	0.00	11.90	12.35	52.0	0.0	0.238
40.00	0.43	0.31	0.00	0.00	0.00	11.86	12.30	52.0	0.0	0.237
45.00	0.53	0.42	0.00	0.00	0.00	15.03	15.58	52.0	0.0	0.300
50.00	0.52	0.42	0.00	0.00	0.00	14.79	15.33	52.0	0.0	0.295
55.00	0.52	0.43	0.00	0.00	0.00	14.52	15.05	52.0	0.0	0.290
60.00	0.51	0.43	0.00	0.00	0.00	14.21	14.73	52.0	0.0	0.283
65.00	0.50	0.44	0.00	0.00	0.00	13.85	14.37	52.0	0.0	0.276
70.00	0.49	0.45	0.00	0.00	0.00	13.44	13.95	52.0	0.0	0.268
73.00	0.48	0.45	0.00	0.00	0.00	13.17	13.67	52.0	0.0	0.263
75.00	0.47	0.45	0.00	0.00	0.00	12.97	13.47	52.0	0.0	0.259
78.50	0.54	0.54	0.00	0.00	0.00	14.61	15.18	52.0	0.0	0.292
80.00	0.54	0.54	0.00	0.00	0.00	14.41	14.98	52.0	0.0	0.288
85.00	0.53	0.55	0.00	0.00	0.00	13.68	14.24	52.0	0.0	0.274
86.00	0.51	0.54	0.00	0.00	0.00	13.52	14.06	52.0	0.0	0.271
90.00	0.50	0.55	0.00	0.00	0.00	12.88	13.42	52.0	0.0	0.258
95.00	0.50	0.56	0.00	0.00	0.00	11.97	12.50	52.0	0.0	0.241
96.00	0.45	0.51	0.00	0.00	0.00	11.77	12.25	52.0	0.0	0.236
100.00	0.43	0.50	0.00	0.00	0.00	11.07	11.53	52.0	0.0	0.222
105.00	0.42	0.51	0.00	0.00	0.00	10.13	10.58	52.0	0.0	0.204
106.00	0.40	0.49	0.00	0.00	0.00	9.91	10.35	52.0	0.0	0.199
108.75	0.39	0.50	0.00	0.00	0.00	9.35	9.78	52.0	0.0	0.188
110.00	0.38	0.50	0.00	0.00	0.00	9.08	9.50	52.0	0.0	0.183
113.00	0.45	0.62	0.00	0.00	0.00	10.10	10.61	52.0	0.0	0.204
115.00	0.45	0.63	0.00	0.00	0.00	9.49	10.00	52.0	0.0	0.192
117.00	0.36	0.53	0.00	0.00	0.00	8.70	9.10	52.0	0.0	0.175
120.00	0.36	0.53	0.00	0.00	0.00	7.89	8.30	52.0	0.0	0.160
125.00	0.35	0.54	0.00	0.00	0.00	6.35	6.76	52.0	0.0	0.130
130.00	0.33	0.56	0.00	0.00	0.00	4.53	4.96	52.0	0.0	0.096
132.00	0.24	0.39	0.00	0.00	0.00	3.73	4.02	52.0	0.0	0.077
134.00	0.22	0.38	0.00	0.00	0.00	3.16	3.44	52.0	0.0	0.066
135.00	0.22	0.38	0.00	0.00	0.00	2.88	3.17	52.0	0.0	0.061
140.00	0.13	0.16	0.00	0.00	0.00	1.33	1.48	52.0	0.0	0.029
145.00	0.11	0.16	0.00	0.00	0.00	0.63	0.80	52.0	0.0	0.015
148.00	0.00	0.16	0.00	0.00	0.00	0.18	0.32	52.0	0.0	0.006

Pole :	**302540**	**Code: TIA/EIA-222 Rev F**	**3/26/2014 4:12:32 PM**
Location :	**Madison CT 6, CT**		**Page: 22**
Height :	**148.0 (ft)**		
Base Dia :	**61.05 (in)**		
Top Dia :	**24.00 (in)**	**Base Elev : 0.000 (ft)**	
Shape :	**18 Sides**		
Taper :	**0.263006 (in/ft)**		



Analysis Summary

	Reactions						Max Stresses			
Load Case	**Shear FX (kips)**	**Shear FZ (kips)**	**Axial FY (kips)**	**Moment MX (ft-kips)**	**Moment MY (ft-kips)**	**Moment MZ (ft-kips)**	**Combined Stress (ksi)**	**Allowable Stress (ksi)**	**Elev (ft)**	**Stress Ratio**
No Ice	**39.4**	**0.00**	**49.15**	**0.00**	**0.00**	**4304.29**	**43.94**	**52.0**	**45.00**	**0.845**
Ice	**31.5**	**0.00**	**59.98**	**0.00**	**0.00**	**3434.17**	**35.20**	**52.0**	**45.00**	**0.677**
Twist/Sway	**13.6**	**0.00**	**49.20**	**0.00**	**0.00**	**1490.50**	**15.58**	**52.0**	**45.00**	**0.300**

Pole : 302540
Location : Madison CT 6, CT
Height : 148.0 (ft)
Base Dia : 61.05 (in)
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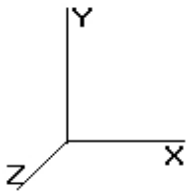
Shape : 18 Sides
Taper : 0.263006 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)



Base Summary

Reactions

Original Design			Analysis			
Moment (kip-ft)	Axial (kip)	Shear (kip)	Moment (kip-ft)	Axial (kip)	Shear (kip)	Moment Design %
5,050.00	35.00	47.00	4,304.29	59.98	39.43	85.23

Base Plate

Yield (ksi)	Thick (in)	Width (in)	Style	Poly Sides	Clip Len (in)	Effective Len (in)	Moment (kip-in)	Allow Stress (ksi)	Applied Stress (ksi)	Stress Ratio
50.0	3.250	68.000	Clipped	0	15.00	9.688	397.01	50.00	23.28	0.47

Anchor Bolts

								Start	Compression			Tension		
Bolt Circle	Num Bolts	Bolt Type	Bolt Dia (in)	Yield (ksi)	Ultimate (ksi)	Arrange	Cluster Dist (in)	Angle (deg)	Force (kip)	Allow (kip)	Ratio	Force (kip)	Allow (kip)	Ratio
69.00	20	2.25" 18J	2.25	75.00	100.00	Clustered	6.00	45.0	152.71	195.00	0.78	146.72	195.00	0.75

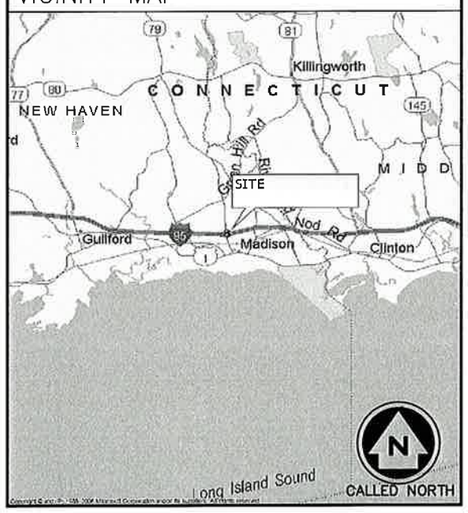
T-MOBILE NORTHEAST LLC

CT11167A
MADISON SOUTH / RT 1

8 OLD ROUTE 79
MADISON, CT 06443

(4SEC-2C CONFIGURATION)

VICINITY MAP



DO NOT SCALE DRAWINGS

CONTRACTOR SHALL VERIFY PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

CALL:
"CALL BEFORE YOU DIG"
WWW.CBYD.COM
CALL 811, OR 1-800-922-4455
CALL THREE WORKING DAYS PRIOR TO DIGGING
SAFETY PRECAUTIONS SHALL BE IMPLEMENTED BY CONTRACTOR(S) AT ALL TRENCHING IN ACCORDANCE WITH CURRENT OSHA STANDARDS.

COLOR CODE FOR UTILITY LOCATIONS

ELECTRIC	– RED	SEWER	– GREEN
GAS/OIL	– YELLOW	SURVEY	– PINK
TEL/CATV	– ORANGE	PROPOSED EXCAVATION	– WHITE
WATER	– BLUE	RECLAIMED WATER	– PURPLE

GENERAL NOTES

1. THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES. RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK. THE WORK PERFORMED ON THE PROJECT AND THE MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES.
2. THE ARCHITECT/ENGINEER HAVE MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONSTRUCT DOCUMENTS THE COMPLETE SCOPE OF WORK. THE CONTRACTOR BIDDING THE JOB IS NEVERTHELESS CAUTIONED THAT MINOR OMISSIONS OR ERRORS IN THE DRAWINGS AND OR SPECIFICATIONS SHALL NOT EXCUSE SAID CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS.
3. THE CONTRACTOR OR BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) THE T–MOBILE REPRESENTATIVE OF ANY CONFLICTS, ERRORS, OR OMISSIONS PRIOR TO THE SUBMISSION OF THE CONTRACTOR'S PROPOSAL OR PERFORMANCE OF WORK. IN THE EVENT OF DISCREPANCIES, THE CONTRACTOR SHALL PRICE THE MORE COSTLY OR EXPENSIVE WORK, UNLESS DIRECTED IN WRITING OTHERWISE.
4. THE SCOPE OF WORK SHALL INCLUDE FURNISHING OF ALL MATERIALS, EQUIPMENT, LABOR AND ALL OTHER MATERIALS AND LABOR DEEMED NECESSARY TO COMPLETE THE WORK/PROJECT AS DESCRIBED HEREIN.
5. THE CONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO THE SUBMISSION OF BIDS OR PERFORMING WORK TO FAMILIARIZE HIMSELF WITH THE FIELD CONDITIONS AND TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
6. THE CONTRACTOR SHALL OBTAIN AUTHORIZATION TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DRAWINGS/CONTRACT DOCUMENTS.
7. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO THE MANUFACTURER'S/VENDOR'S SPECIFICATIONS UNLESS NOTED OTHERWISE OR WHERE LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
8. THE CONTRACTOR SHALL PROVIDE A FULL SET OF CONSTRUCTION DOCUMENTS AT THE SITE UPDATED WITH THE LATEST REVISIONS AND ADDENDUM OR CLARIFICATIONS AVAILABLE FOR THE USE BY ALL PERSONNEL INVOLVED WITH THE PROJECT.
9. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER CONTRACT.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY PERMITS AND INSPECTIONS WHICH ARE REQUIRED FOR THE WORK BY THE ARCHITECT/ENGINEER, THE STATE, COUNTY, OR LOCAL GOVERNMENT AUTHORITY.
11. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVING, CURBING, ETC., DURING CONSTRUCTION. UPON COMPLETION OF WORK, THE CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY.
12. THE CONTRACTOR SHALL KEEP THE GENERAL WORK AREA CLEAN AND HAZARD FREE DURING CONSTRUCTION AND DISPOSE OF ALL DIRT, DEBRIS, RUBBISH AND REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON PROPERTY. PREMISES SHALL BE LEFT IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE.
13. THE CONTRACTOR SHALL COMPLY WITH ALL OSHA REQUIREMENTS, AS WELL AS THE LATEST EDITIONS OF ANY PERTINENT STATE SAFETY REGULATIONS.
14. THE CONTRACTOR SHALL NOTIFY THE T–MOBILE REPRESENTATIVE WHERE A CONFLICT OCCURS ON ANY OF THE CONTRACT DOCUMENTS. THE CONTRACTOR IS NOT TO ORDER MATERIAL OR CONSTRUCT ANY PORTION OF THE WORK THAT IS IN CONFLICT UNTIL CONFLICT IS RESOLVED BY THE T–MOBILE REPRESENTATIVE.
15. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, PROPERTY LINES, ETC., ON THE JOB.
16. THE CONTRACTOR SHALL RETURN ALL DISTURBED AREAS TO THEIR ORIGINAL CONDITION AT THE COMPLETION OF WORK.

PROJECT SUMMARY

SITE NUMBER:	CT11167A	APPLICANT:	T–MOBILE NORTHEAST LLC 35 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002 (860)–692–7100
SITE NAME:	MADISON SOUTH / RT 1		
SITE ADDRESS:	8 OLD ROUTE 79 MADISON, CT 06443		
PROPERTY OWNER:	TBD	PROJECT MANAGER:	AMERICAN TOWER CORPORATION 10 PRESIDENTIAL WAY WOBURN, MA 01801
PARCEL:	TBD		
CURRENT ZONING:	TBD	CONTACT:	TARA RUSSO 717–695–2942
JURISDICTION:	TBD		
ATC SITE NUMBER:	302540	ARCHITECT/ENGINEER:	INFINIGY ENGINEERING 1033 WATERVLIET SHAKER ROAD ALBANY, NY 12205
LAT./LONG.:	N 41.28562° / W 72.60131°		
CONSTRUCTION TYPE:	–	CONTACT:	AJ DESANTIS 518–690–0790
USE GROUP:	–		

PROJECT DESCRIPTION

☒ EXISTING MONOPOLE	☒ EXISTING CABINET(S)	☒ OUTDOOR
☐ EXISTING LATTICE TOWER	☐ EXISTING RBS 2106	☐ INDOOR
☐ EXISTING TRANSMISSION TOWER	☒ EXISTING RBS 3106	☒ EXISTING CONCRETE PAD
☐ EXISTING WATER TANK	☐ PROPOSED RBS 6102	☐ EXISTING STEEL PLATFORM
☐ EXISTING BUILDING	☐ SITE SUPPORT KIT	☒ EXISTING PPC
☐ EXISTING FLAGPOLE	☐ SITE SUPPORT CABINET	☐ PANELBOARD
☐ EXISTING FORT WORTH	☒ GPS	

T–MOBILE NORTHEAST LLC PROPOSES THE MODIFICATION OF AN UNMANNED WIRELESS BROADBAND FACILITY. REPLACEMENT OF EXISTING PANEL ANTENNAS & TMA'S WITH PROPOSED AIR21 PANEL ANTENNAS AND ASSOCIATED CABLING. REUSE EXISTING GPS ANTENNA AND EXISTING EQUIPMENT CABINETS.

SHEET INDEX

T-MOBILE NORTHEAST LLC
35 GRIFFIN ROAD SOUTH
BLOOMFIELD, CT 06002

INFINIGY Design. Build. Deliver.
1033 WATERVLIET SHAKER ROAD
ALBANY, NY 12205
OFFICE: (518) 690–0790
FAX: (518) 690–0793

SUBMITTALS

DATE	DESCRIPTION	REVISION
3/28/14	REVIEW	A
4/9/14	FOR PERMIT	0

DEPT.	DATE	APP'D	REVISIONS
RFE			
RF MAN.			
ZONING			
OPS			
CONSTR.			
SITE AC.			

PROJECT NO:	317-1186
DRAWN BY:	JLM
CHECKED BY:	AJD

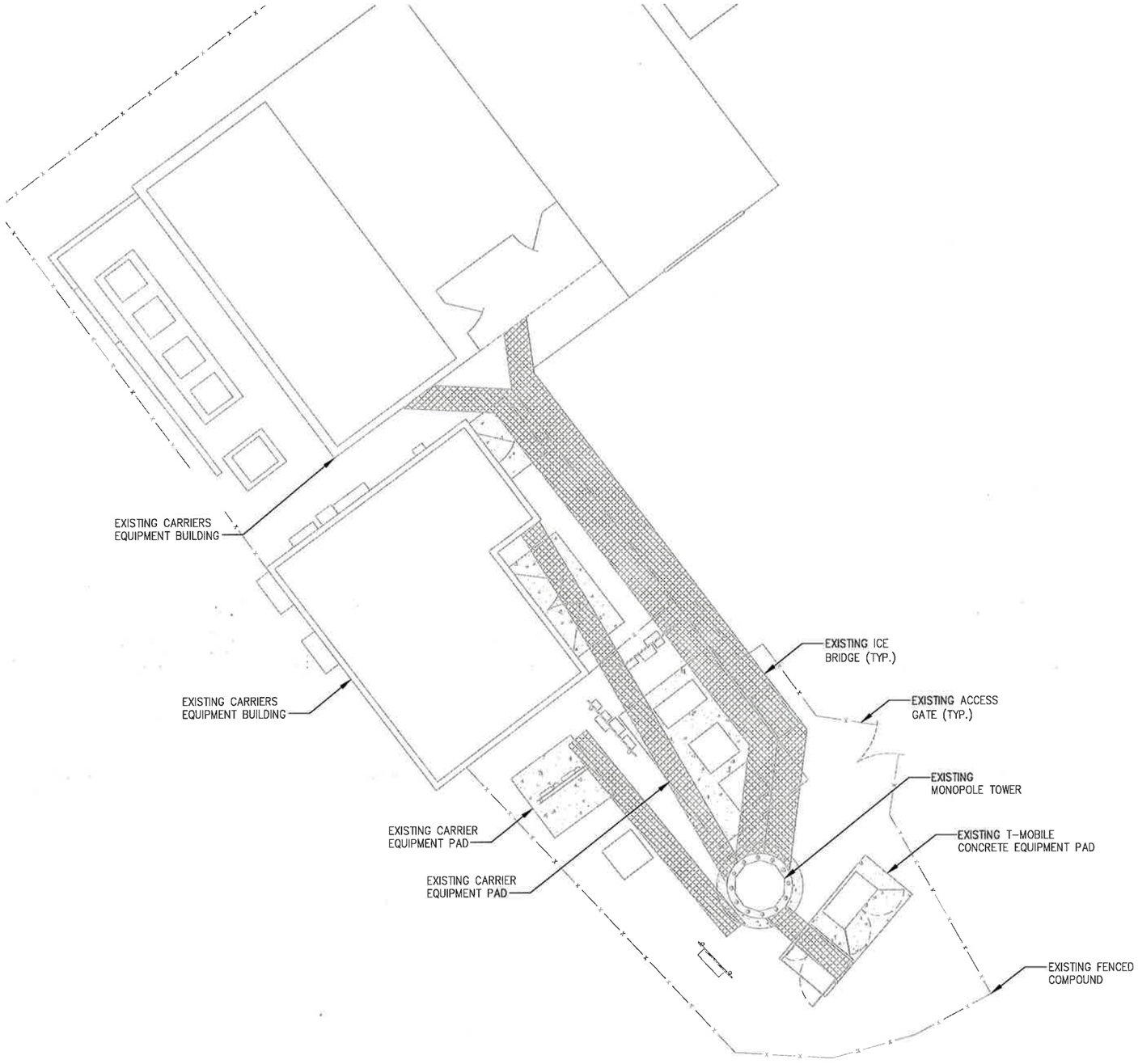
STATE OF CONNECTICUT
JOHN S. STEVENS
No. 24705
LICENSED
PROFESSIONAL ENGINEER
PROFESSIONAL SEAL

NOTE: IF DRAWINGS ARE 22"x34", USE GRAPHICAL SCALE AND/OR 1/2 TIMES OF THE NOTED SCALE.

SITE NAME
CT11167A
MADISON SOUTH / RT 1
8 OLD ROUTE 79
MADISON, CT 06443

SHEET TITLE
TITLE SHEET

SHEET NUMBER
T-1
SHEET 1 OF 8 SHEETS



CALLED NORTH

1 SITE PLAN
SCALE: AS NOTED

GENERAL SITE NOTES:

1. A COMPLETE BOUNDARY SURVEY OF THE HOST PARCEL HAS NOT BEEN PERFORMED BY INFINIGY ENGINEERING. BOUNDARY INFORMATION WAS OBTAINED FROM INFORMATION PROVIDED BY OTHERS. PROPERTY IS SUBJECT TO ALL EASEMENTS AND RESTRICTIONS OF RECORD.
2. BASEMAPPING INFORMATION BASED ON PROVIDED INFORMATION.
3. CONTRACTOR TO FIELD VERIFY DIMENSIONS AS NECESSARY BEFORE CONSTRUCTION.
4. THE PROPOSED DEVELOPMENT DOES NOT INCLUDE SIGNS OF ADVERTISING.
5. THE PROPOSED DEVELOPMENT IS UNMANNED AND THEREFORE DOES NOT REQUIRE A MEANS OF WATER SUPPLY OR SEWAGE DISPOSAL.
6. NO LANDSCAPING WORK IS PROPOSED IN CONJUNCTION WITH THIS DEVELOPMENT OTHER THAN THAT WHICH IS SHOWN.
7. THE PROPOSED DEVELOPMENT DOES NOT INCLUDE OUTDOOR STORAGE OR ANY SOLID WASTE RECEPTACLES.
8. UTILITIES SHOWN ON PLAN ARE TAKEN FROM OWNERS RECORDS AND FIELD LOCATION OF VISIBLE SURFACE FEATURES. THE EXISTENCE, EXTENT AND EXACT HORIZONTAL AND VERTICAL LOCATIONS OF UTILITIES HAS NOT BEEN VERIFIED. ANY CONTRACTOR PERFORMING WORK ON THIS SITE MUST CONTACT MISS UTILITY AT LEAST 48 HOURS PRIOR TO COMMENCING WORK.
9. ALL OBSOLETE OR UNUSED FACILITIES SHALL BE REMOVED WITHIN 12 MONTHS OF CESSATION OF OPERATIONS.

SITE LEGEND

- SITE PROPERTY LINE
- STREET OR ROAD
- CHAIN LINK FENCE
- OPAQUE WOODEN FENCE
- BOARD ON BOARD FENCE
- DECIDUOUS TREES/SHRUBS
- EVERGREEN TREES/SHRUBS
- TREE LINE
- UTILITY POLE
- (E) EXISTING
- (N) NEW
- (P) PROPOSED
- (F) FUTURE
- PROP. GSM ANTENNA
- PROP. UMTS ANTENNA
- EX. GSM ANTENNA
- EX. UMTS ANTENNA

GRAPHIC SCALE

10' 5' 0 5' 10'

SCALE (11x17): 1" = 10'-0"
SCALE (22x34): 1" = 5'-0"

T-Mobile
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SITE NAME
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MADISON SOUTH / RT 1
8 OLD ROUTE 79
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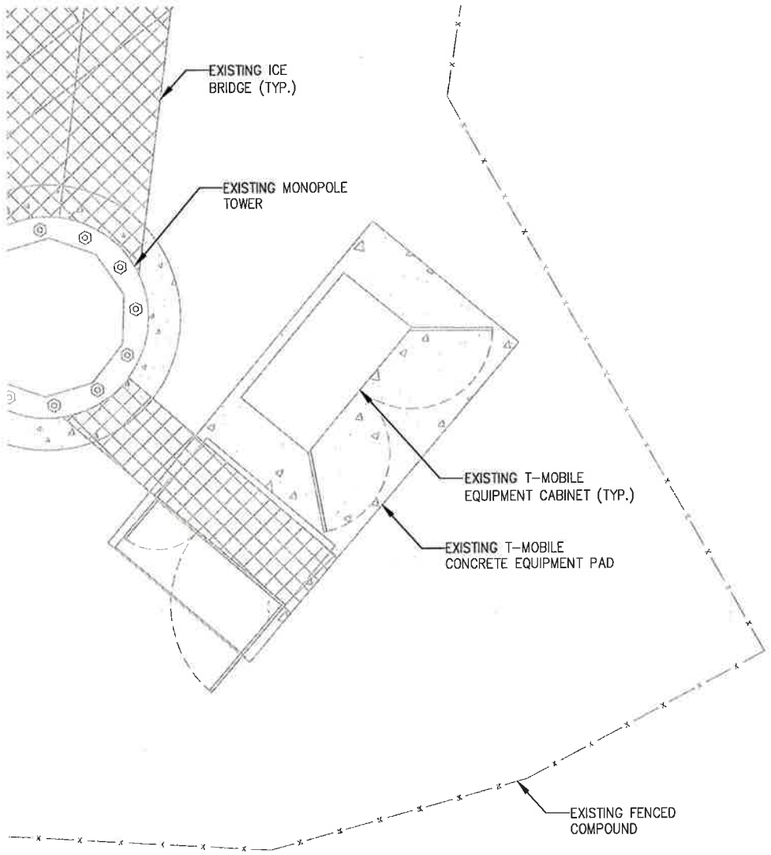
SHEET TITLE
SITE PLAN

SHEET NUMBER
C-1
SHEET 2 OF **8** SHEETS



CALLED NORTH

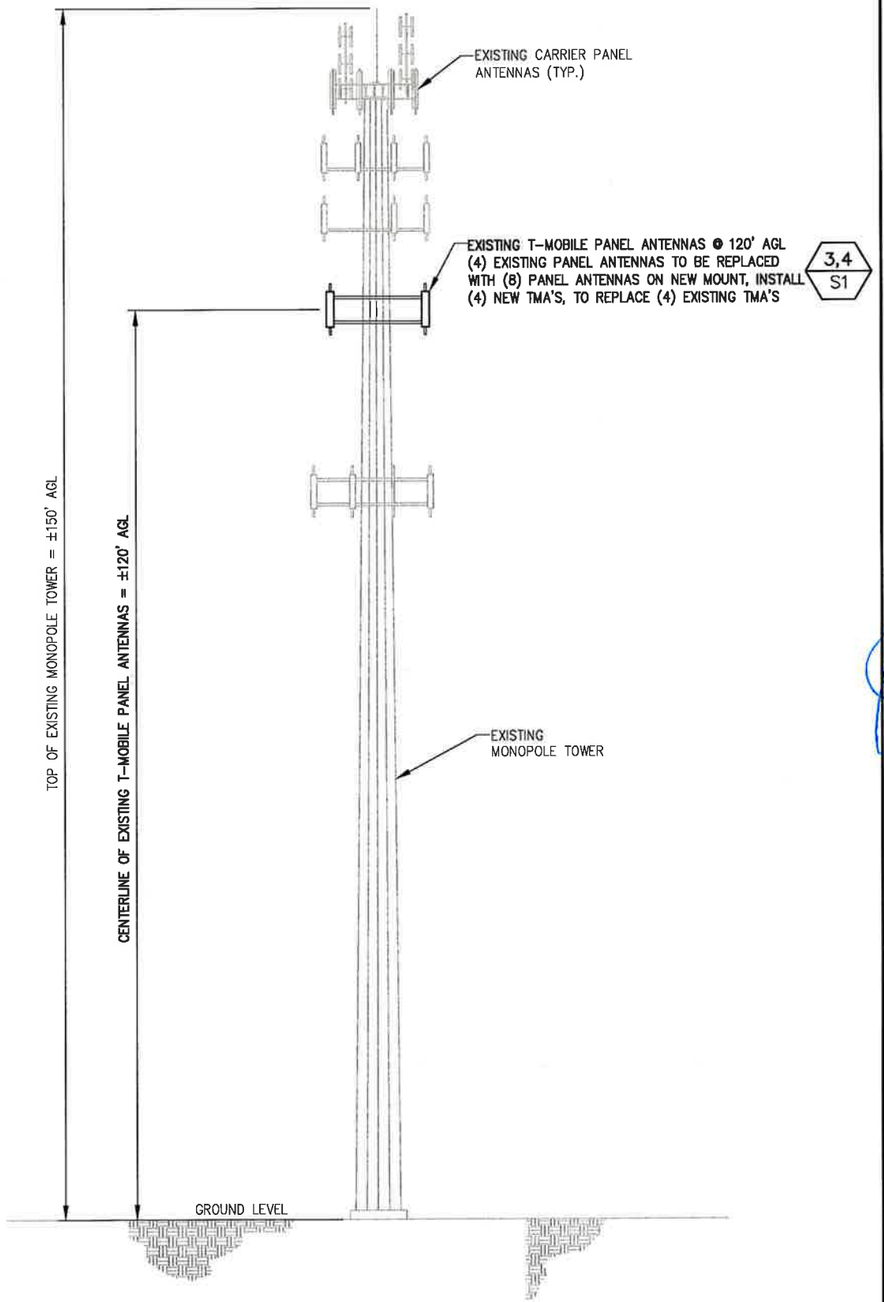
1 — COMPOUND PLAN
SCALE: AS NOTED

GRAPHIC SCALE

4' 2' 0 2' 4'

SCALE (11x17): 1" = 4'-0"
SCALE (22x34): 1" = 2'-0"

NOTE:
INFINIGY ENGINEERING HAS NOT EVALUATED THE TOWER OR LOADING FOR THIS SITE, AND ASSUMES NO RESPONSIBILITY FOR ITS STRUCTURAL INTEGRITY REGARDING ITS EXISTING OR PROPOSED LOADING. FINAL INSTALLATION TO COMPLY WITH RESULTS OF PASSING STRUCTURAL ANALYSIS.



2 — TOWER ELEVATION (SOUTHERN)
NOT TO SCALE

T-Mobile
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OPS			
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PROJECT NO: 317-1186
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SHEET TITLE
COMPOUND PLAN & ELEVATION

SHEET NUMBER
C-2
SHEET 3 OF 8 SHEETS

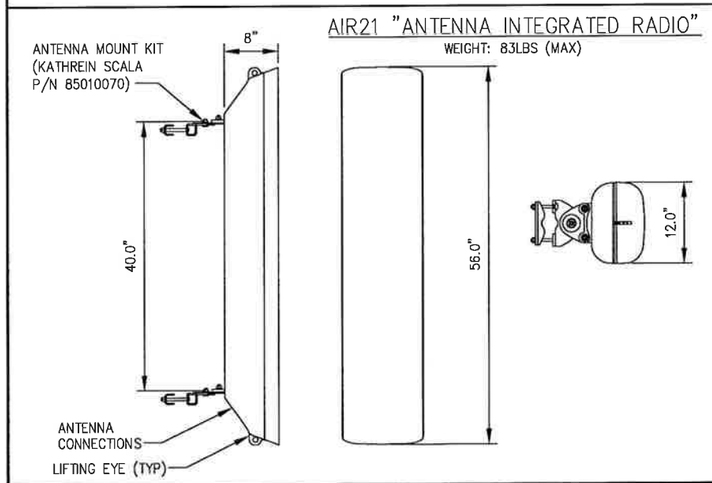
RF SYSTEM SCHEDULE (4SEC – 2C CONFIGURATION)

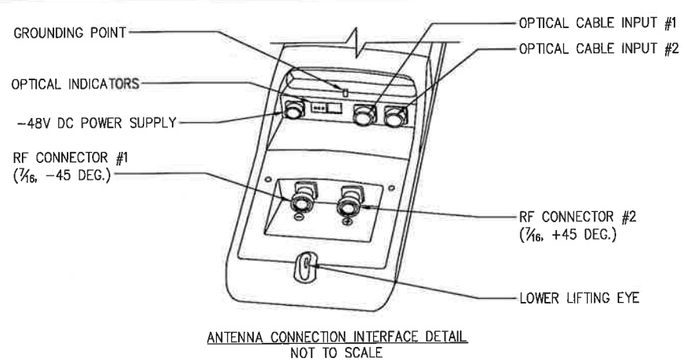
SECTOR	TECHNOLOGY	ANTENNA PORT	BAND	ANTENNA MODEL #	VENDOR	AZIMUTH	M-TILT	E-TILT	ANTENNA CENTERLINE	TMA MODEL #	VENDOR	CABLE LENGTH	CABLE DIAMETER	CABLE TYPE	CABLE MODEL #	VENDOR	CABLE TAGGING	COLOR CODING	JUMPER TYPE	JUMPER TAGGING	COLOR CODING
A	UMTS AWS	RF #1	B4P	AIR21	ERICSSON	20°	0°	2°	120'-0"	KRY 112 144/1	N/A	EXISTING	1-5/8"	COAX	EXISTING	N/A	UMTS AWS A1	B	COAX	UMTS AWS A1	B
		RF #2										EXISTING	1-5/8"	COAX	EXISTING	N/A	UMTS AWS A2	B	COAX	UMTS AWS A2	B
	LMU	LMU #1	–							–	–	EXISTING	1-5/8"	COAX	EXISTING	N/A	LMU A1	–	COAX	LMU A1	–
		LMU #2										EXISTING	1-5/8"	COAX	EXISTING	N/A	LMU A2	–	COAX	LMU A2	–
	GSM	**OPTICAL #1**	**B2A**							–	–	168'±	–	**HYBRID**	**MASTERLINE EXTREME HYBRID (9x18)**	**ERICSSON**	**FIBER 1**	**O**	**FIBER**	**GSM 1900 A1**	**R**
	UMTS	**OPTICAL #2**																	**FIBER**	**UMTS 1900 A2**	**G**
	LTE AWS	**OPTICAL #1**	**B4A**	AIR21	ERICSSON	20°	0°	2°	120'-0"	–	–								**FIBER**	**LTE FIBER 1**	**Y**
B	UMTS AWS	RF #1	B4P	AIR21	ERICSSON	110°	0°	2°	120'-0"	KRY 112 144/1	N/A	EXISTING	1-5/8"	COAX	EXISTING	N/A	UMTS AWS B1	BB	COAX	UMTS AWS B1	BB
		RF #2										EXISTING	1-5/8"	COAX	EXISTING	N/A	UMTS AWS B2	BB	COAX	UMTS AWS B2	BB
	LMU	LMU #1	–							–	–	EXISTING	1-5/8"	COAX	EXISTING	N/A	LMU B1	–	COAX	LMU B1	–
		LMU #2										EXISTING	1-5/8"	COAX	EXISTING	N/A	LMU B2	–	COAX	LMU B2	–
	GSM	**OPTICAL #1**	**B2A**							–	–	**(ANTENNA CONNECTED VIA SINGLE SHARED MLE HYBRID GEN2 CABLE. SEE SECTOR "A")**							**HYBRID**	**GSM 1900 B1**	**RR**
	UMTS	**OPTICAL #2**																	**HYBRID**	**UMTS 1900 B2**	**GG**
	LTE AWS	**OPTICAL #1**	**B4A**	AIR21	ERICSSON	110°	0°	2°	120'-0"	–	–								**HYBRID**	**LTE FIBER 2**	**YY**
C	UMTS AWS	RF #1	B4P	AIR21	ERICSSON	200°	0°	2°	120'-0"	KRY 112 144/1	N/A	EXISTING	1-5/8"	COAX	EXISTING	N/A	UMTS AWS C1	BBB	COAX	UMTS AWS C1	BBB
		RF #2										EXISTING	1-5/8"	COAX	EXISTING	N/A	UMTS AWS C2	BBB	COAX	UMTS AWS C2	BBB
	LMU	LMU #1	–							–	–	EXISTING	1-5/8"	COAX	EXISTING	N/A	LMU C1	–	COAX	LMU C1	–
		LMU #2										EXISTING	1-5/8"	COAX	EXISTING	N/A	LMU C2	–	COAX	LMU C2	–
	GSM	**OPTICAL #1**	**B2A**							–	–	**(ANTENNA CONNECTED VIA SINGLE SHARED MLE HYBRID GEN2 CABLE. SEE SECTOR "A")**							**HYBRID**	**GSM 1900 C1**	**RRR**
	UMTS	**OPTICAL #2**																	**HYBRID**	**UMTS 1900 C2**	**GGG**
	LTE AWS	**OPTICAL #1**	**B4A**	AIR21	ERICSSON	200°	0°	2°	120'-0"	–	–								**HYBRID**	**LTE FIBER 3**	**YYY**
D	UMTS AWS	RF #1	B4P	AIR21	ERICSSON	290°	0°	2°	120'-0"	KRY 112 144/1	N/A	EXISTING	1-5/8"	COAX	EXISTING	N/A	UMTS AWS C1	BBBB	COAX	UMTS AWS C1	BBBB
		RF #2										EXISTING	1-5/8"	COAX	EXISTING	N/A	UMTS AWS C2	BBBB	COAX	UMTS AWS C2	BBBB
	LMU	LMU #1	–							–	–	EXISTING	1-5/8"	COAX	EXISTING	N/A	LMU C1	–	COAX	LMU C1	–
		LMU #2										EXISTING	1-5/8"	COAX	EXISTING	N/A	LMU C2	–	COAX	LMU C2	–
	GSM	**OPTICAL #1**	**B2A**							–	–	**(ANTENNA CONNECTED VIA SINGLE SHARED MLE HYBRID GEN2 CABLE. SEE SECTOR "A")**							**HYBRID**	**GSM 1900 C1**	**RRRR**
	UMTS	**OPTICAL #2**																	**HYBRID**	**UMTS 1900 C2**	**GGGG**
	LTE AWS	**OPTICAL #1**	**B4A**	AIR21	ERICSSON	290°	0°	2°	120'-0"	–	–								**HYBRID**	**LTE FIBER 3**	**YYYY**

1 RF SCHEDULE
NOT TO SCALE

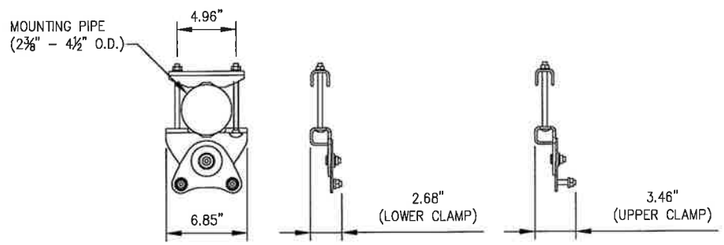
KEY

EXISTING	R – RED – GSM
PROPOSED	G – GREEN – UMTS 1900
FIBER CONNECTION	B – BLUE – UMTS AWS
	Y – YELLOW – LTE
	O – ORANGE – FIBER CABLE





ANTENNA CONNECTION INTERFACE DETAIL
NOT TO SCALE



2 ANTENNA DETAIL
NOT TO SCALE

T-MOBILE NORTHEAST LLC
35 GRIFFIN ROAD SOUTH
BLOOMFIELD, CT 06002

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OPS			
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SITE AC.			

PROJECT NO: 317-1186
DRAWN BY: JLM
CHECKED BY: AJD

STATE OF CONNECTICUT
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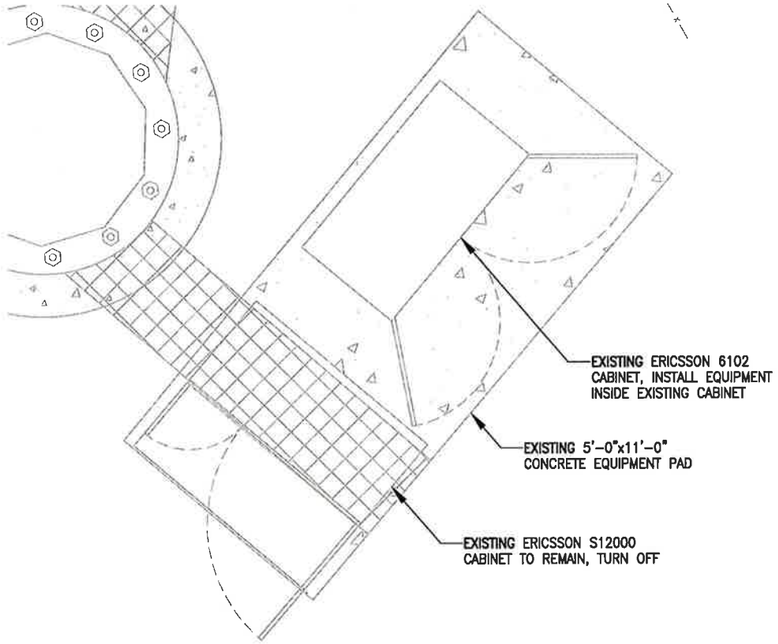
SITE NAME
CT11167A
MADISON SOUTH / RT 1
8 OLD ROUTE 79
MADISON, CT 06443

SHEET TITLE
ANTENNA DETAIL & RF SCHEDULE

SHEET NUMBER
C-3
SHEET 4 OF 8 SHEETS



CALLED NORTH

1 EQUIPMENT PAD LAYOUT PLAN
NOT TO SCALE

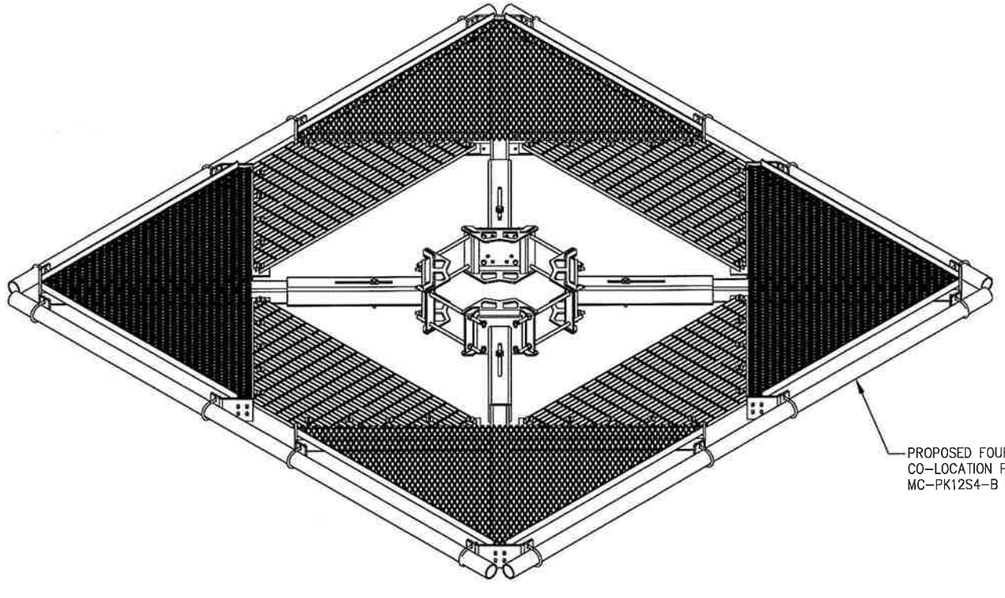
METALLIC TAG NOTES:

1. TWO METALLIC TAGS SHALL BE ATTACHED AT EACH END OF EVERY CABLE LONGER THAN (3) THREE FEET.
2. CABLES LESS THAN (3) THREE FEET WILL HAVE TWO METALLIC TAGS ATTACHED AT THE CENTER OF THE CABLE.
3. TAGS WILL BE FASTENED WITH STAINLESS STEEL ZIP TIES APPROPRIATE FOR CABLE DIAMETER.
4. STANDARDIZED METALLIC TAG KITS WILL BE ASSEMBLED WITH TAGS ALREADY ENGRAVED TO ACCOMMODATE ALL CONFIGURATIONS.

2 METALLIC TAG DETAIL
NOT TO SCALE

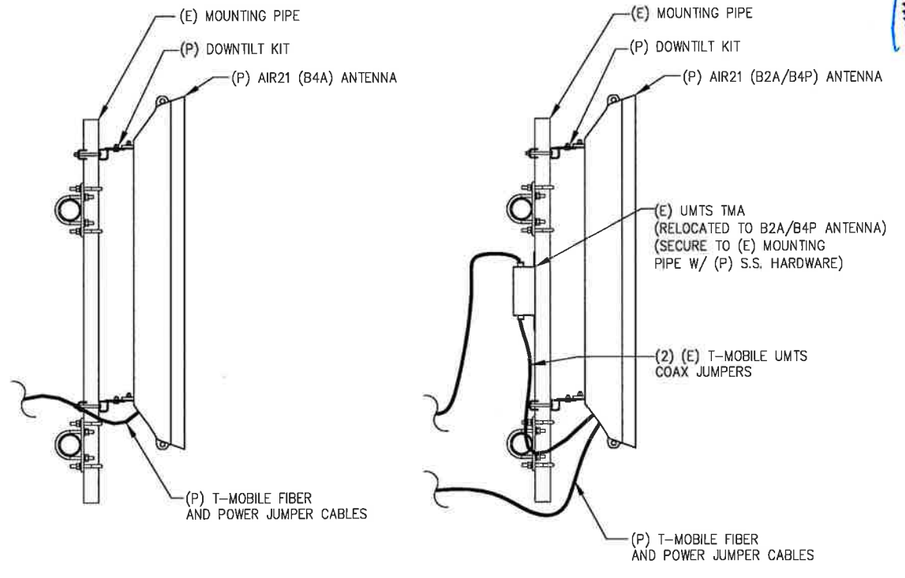
STRUCTURAL NOTES:

1. SPECIFICATIONS / CODES:
   - CONCRETE WORK SHALL BE PERFORMED IN ACCORDANCE WITH LATEST EDITION OF THE ACI CODE.
   - STEEL WORK SHALL BE PERFORMED IN ACCORDANCE WITH AISC STEEL CONSTRUCTION MANUAL, 9TH EDITION.
   - WELDING SHALL BE PERFORMED IN ACCORDANCE WITH AMERICAN WELDING SOCIETY (AWS) D1.1-92 "STRUCTURAL WELDING" CODE-STEEL.
   - REINFORCING STEEL SHALL BE PLACED IN ACCORDANCE WITH THE CONCRETE REINFORCING STEEL INSTITUTE (CRSI), "MANUAL OF STANDARD PRACTICE."
2. MATERIALS:
   - CONCRETE: fc' - 3000psi. (MIN. U.N.O.)
   - REINFORCING STEEL: ASTM A615, GRADE 60.
   - WIRE MESH: ASTM A185.
   - STRUCTURAL STEEL: ASTM A36.
   - ELECTRODES FOR WELDING: E 70xx.
   - GALVANIZING: ASTM A153 (BOLTS) OR ASTM A123 (SHAPES, PLATES).
   - EXPANSION BOLTS: HILTI KWIK BOLT II, STAINLESS STEEL, 3/4"ø x 43/4" EMBEDMENT OR AN APPROVED EQUAL.



3 PROPOSED ANTENNA MOUNT
NOT TO SCALE

NOTE:
INSTALL NEW MOUNT, VERTICAL PIPES, AND UPPER RAIL PER STRUCTURAL ANALYSIS COMPLETED BY OTHERS



4 ANTENNA MOUNTING DETAIL
NOT TO SCALE

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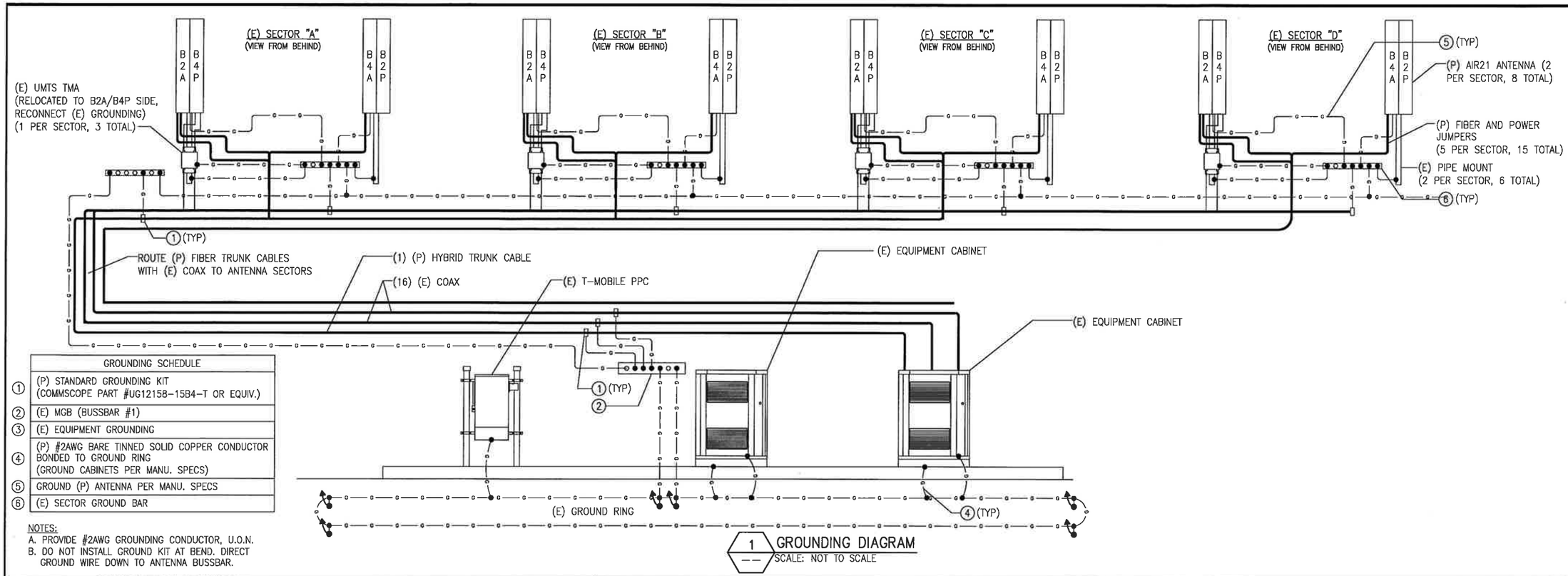
SHEET TITLE
EQUIPMENT SPECIFICATIONS

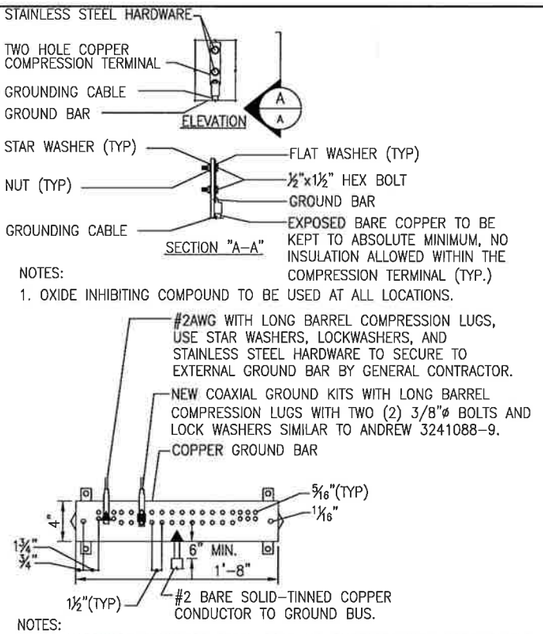
SHEET NUMBER
S-1
SHEET 5 OF **8** SHEETS



GROUNDING SCHEDULE	
①	(P) STANDARD GROUNDING KIT (COMMSCOPE PART #UG12158-15B4-T OR EQUIV.)
②	(E) MGB (BUSSBAR #1)
③	(E) EQUIPMENT GROUNDING
④	(P) #2AWG BARE TINNED SOLID COPPER CONDUCTOR BONDED TO GROUND RING (GROUND CABINETS PER MANU. SPECS)
⑤	GROUND (P) ANTENNA PER MANU. SPECS
⑥	(E) SECTOR GROUND BAR

NOTES:
A. PROVIDE #2AWG GROUNDING CONDUCTOR, U.O.N.
B. DO NOT INSTALL GROUND KIT AT BEND. DIRECT GROUND WIRE DOWN TO ANTENNA BUSSBAR.

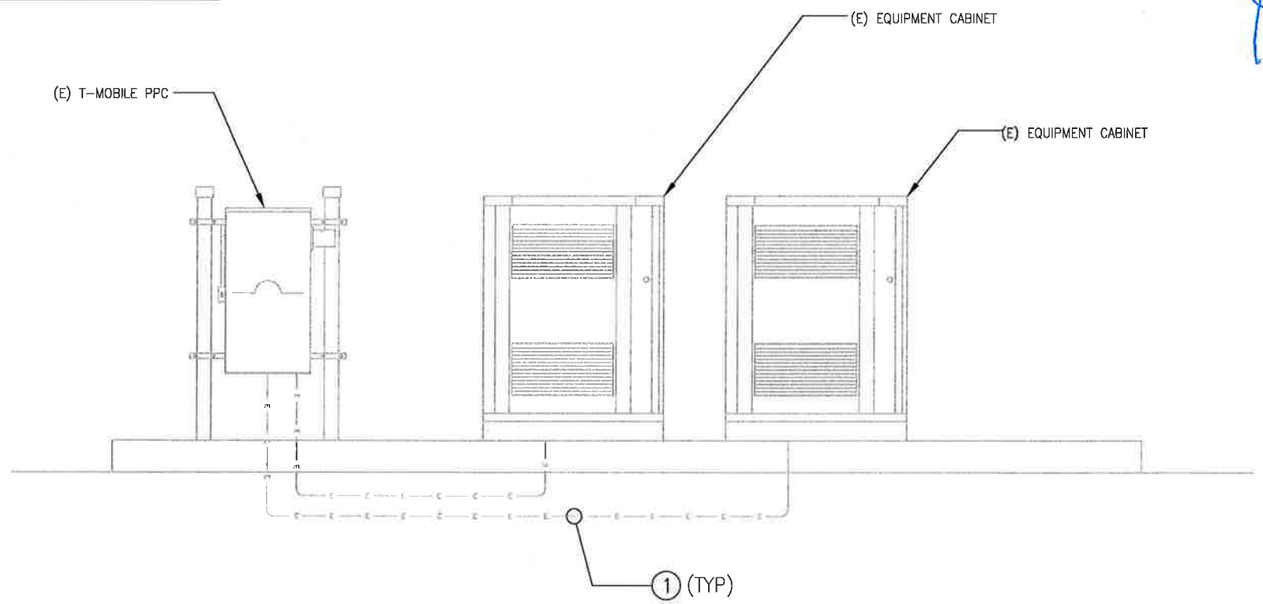
1 GROUNDING DIAGRAM
SCALE: NOT TO SCALE



NOTES:
1. OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATIONS.
1. ALL HARDWARE STAINLESS STEEL COAT ALL SURFACES WITH KOPR-SHIELD BEFORE MATING.
2. FOR GROUND BOND TO STEEL ONLY: INSERT A TOOTH WASHER BETWEEN LUG AND STEEL, COAT ALL SURFACES WITH KOPR-SHIELD.
3. ALL HOLES ARE COUNTERSUNK 1/16".

2 GROUND BAR CONNECTION DETAILS
SCALE: NOT TO SCALE

CONDUIT SCHEDULE	
①	(E) POWER CONDUIT



3 POWER DIAGRAM
SCALE: NOT TO SCALE

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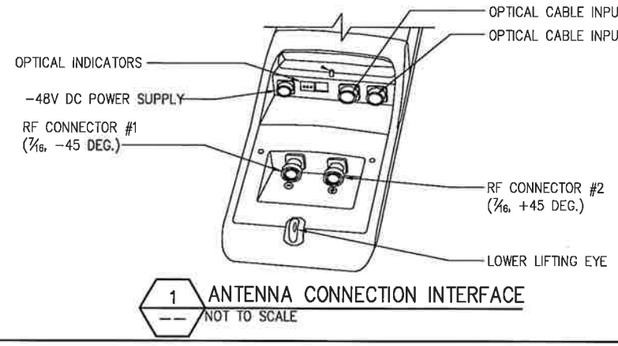
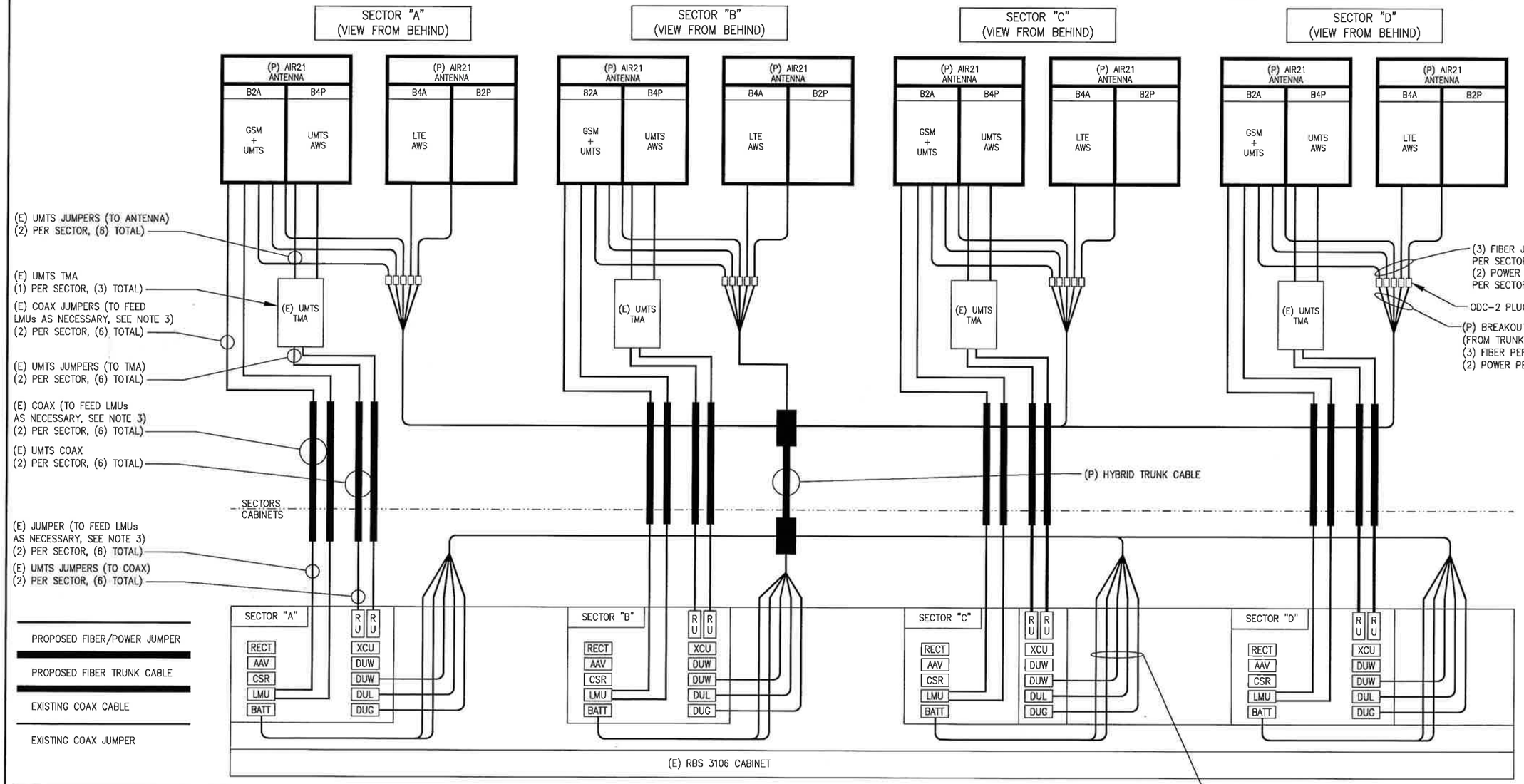
SHEET TITLE
GROUNDING & POWER DIAGRAMS

SHEET NUMBER
E-1
SHEET 6 OF 8 SHEETS



1 ANTENNA CONNECTION INTERFACE
NOT TO SCALE



NOTES:
1. TAG ALL EXISTING AND PROPOSED CABLES/JUMPERS PER T-MOBILE SPECIFICATIONS (SEE RF SCHEDULE/C-3)
2. SEE RF SCHEDULE/C-3 FOR CABLE AND JUMPER LENGTHS.
3. IF NEW GPS ADDED TO SITE, CAP AND WEATHERPROOF ANY UNUSED COAX FOR FUTURE USE.
4. TRIM POWER JUMPERS PER MANU. SPECS TO CORRECT LENGTH FOR CONNECTION.
5. COIL EXCESS FIBER IN CABINET BASE.

3 4SEC-2C CONFIGURATION COAX/FIBER PLUMBING DIAGRAM
NOT TO SCALE

T-Mobile
T-MOBILE NORTHEAST LLC
35 GRIFFIN ROAD SOUTH
BLOOMFIELD, CT 06002

INFINIGY Design. Build. Deliver.
1033 WATERVLIET SHAKER ROAD
ALBANY, NY 12205
OFFICE: (518) 690-0798
FAX: (518) 690-0793

SUBMITTALS

DATE	DESCRIPTION	REVISION
3/28/14	REVIEW	A
4/9/14	FOR PERMIT	0

DEPT.	DATE	APP'D	REVISIONS
RFE			
RF MAN.			
ZONING			
OPS			
CONSTR.			
SITE AC.			

PROJECT NO: 317-1186
DRAWN BY: JLM
CHECKED BY: AJD

STATE OF CONNECTICUT
JOHN S. STEVENS
No. 24705
LICENSED PROFESSIONAL ENGINEER
PROFESSIONAL SEAL

NOTE: IF DRAWINGS ARE 22"x34", USE GRAPHICAL SCALE AND/OR 1/2 TIMES OF THE NOTED SCALE.

SITE NAME
CT11167A
MADISON SOUTH / RT 1
8 OLD ROUTE 79
MADISON, CT 06443

SHEET TITLE
COAX/FIBER PLUMBING DIAGRAM

SHEET NUMBER
E-2
SHEET 7 OF 8 SHEETS

ELECTRICAL NOTES:

WORK INCLUDED

1. INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, PLANT SERVICES AND ADMINISTRATIVE TASKS REQUIRED TO COMPLETE AND MAKE OPERABLE THE ELECTRICAL WORK SHOWN ON THE DRAWINGS AND SPECIFIED HEREIN, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
   A. PREPARE AND SUBMIT SHOP DRAWINGS, DIAGRAMS AND ILLUSTRATIONS.
   B. PROCURE ALL NECESSARY PERMITS AND APPROVALS AND PAY ALL REQUIRED FEES AND CHARGES IN CONNECTION WITH THE WORK OF THIS CONTRACT.
   C. SUBMIT AS-BUILT DRAWINGS, OPERATING AND MAINTENANCE INSTRUCTIONS AND MANUALS.
   D. EXECUTE ALL CUTTING, DRILLING, ROUGH AND FINISH PATCHING OF EXISTING OR NEWLY INSTALLED CONSTRUCTION REQUIRED FOR THE WORK OF THIS CONTRACT. FOR SLAB PENETRATIONS THROUGH POST TENSION SLABS, X-RAY EXACT AREA OF PENETRATION PRIOR TO PERFORMING WORK. COORDINATE ALL X-RAY WORK WITH BUILDING ENGINEER.
   E. PROVIDE HANGERS, SUPPORTS, FOUNDATIONS, STRUCTURAL FRAMING SUPPORTS, AND BASES FOR CONDUIT AND EQUIPMENT PROVIDED OR INSTALLED UNDER THE WORK OF HIS CONTRACT. PROVIDE COUNTER FLASHING, SLEEVES AND SEALS FOR FLOOR AND WALL PENETRATIONS.
   F. MAINTAIN ALL EXISTING ELECTRICAL SERVICES IN THE BUILDING AREAS NOT AFFECTED BY THE ALTERATION DURING THE PROGRESS OF THE WORK INCLUDING PROVIDING ALL TEMPORARY JUMPERS, CONDUITS, CAPS, PROTECTIVE DEVICES, CONNECTIONS AND EQUIPMENT REQUIRED. PROVIDE TEMPORARY LIGHT AND POWER FOR CONSTRUCTION PURPOSES.
2. IT IS THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS TO CALL FOR AN INSTALLATION THAT IS COMPLETE IN EVERY RESPECT. IT IS NOT THE INTENT TO GIVE EVERY DETAIL ON THE DRAWINGS AND IN THE SPECIFICATIONS. IF AN ITEM OF WORK IS INDICATED IN THE DRAWINGS, IT IS CONSIDERED SUFFICIENT FOR INCLUSION IN THE CONTRACT. FURNISH AND INSTALL ALL MATERIAL AND EQUIPMENT USUALLY FURNISHED OR NEEDED TO MAKE A COMPLETE INSTALLATION WHETHER OR NOT SPECIFICALLY MENTIONED IN THE CONTRACT DOCUMENTS.

GENERAL REQUIREMENTS

1. PROVIDE ALL WORK IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC) AND LOCAL AND STATE ELECTRICAL CODES.
2. THE ELECTRICAL PLANS ARE DIAGRAMMATIC ONLY. REFER TO THE ARCHITECTURAL PLANS FOR THE EXACT DIMENSIONS OF THE BUILDING.
3. LOAD CALCULATIONS ARE BASED ON EXISTING BUILDING INFORMATION/DRAWINGS PROVIDED TO ENGINEERING. CONTRACTOR IS TO VERIFY ALL EXISTING RATINGS AND LOADS PRIOR TO PURCHASING OF SPECIFIED EQUIPMENT FOR COMPLIANCE TO NEC. CONTRACTOR TO NOTIFY ENGINEER OF ANY DISCREPANCIES AND REQUEST FURTHER DIRECTION BY ENGINEER.
4. EXISTING BUILDING EQUIPMENT IS NOTED ON THE DRAWINGS. NEW OR RELOCATED EQUIPMENT IS SHOWN WITH SOLID LINES. FUTURE EQUIPMENT (NOT IN THIS CONTRACT) IS DEPICTED WITH SHADED LINES. REQUEST CLARIFICATION OF DRAWINGS OR OF SPECIFICATIONS PRIOR TO PRICING OR INSTALLATION.
5. GENERAL
   A. AFTER CAREFULLY STUDYING THE DRAWINGS AND SPECIFICATIONS, AND BEFORE SUBMITTING THE PROPOSAL, MAKE A MANDATORY SITE VISIT TO ASCERTAIN CONDITIONS OF THE SITE, AND THE NATURE AND EXACT QUANTITY OF WORK TO BE PERFORMED. NO EXTRA COMPENSATION WILL BE ALLOWED FOR FAILURE TO NOTIFY THE OWNER, IN WRITING, OF ANY DISCREPANCIES THAT MAY HAVE BEEN NOTED BETWEEN THE EXISTING CONDITIONS AND THE DRAWINGS AND SPECIFICATIONS.
   B. VERIFY ALL MEASUREMENTS AT THE SITE AND BE RESPONSIBLE FOR CORRECTNESS OF SAME.
6. QUALITY, WORKMANSHIP, MATERIALS AND SAFETY
   A. PROVIDE NEW MATERIALS AND EQUIPMENT OF A DOMESTIC MANUFACTURER BY THOSE REGULARLY ENGAGED IN THE PRODUCTION AND MANUFACTURE OF SPECIFIED MATERIALS AND EQUIPMENT. WHERE UL, OR OTHER AGENCY, HAS ESTABLISHED STANDARDS FOR MATERIALS, PROVIDE MATERIALS WHICH ARE LISTED AND LABELED ACCORDINGLY. THE COMMERCIALLY STANDARD ITEMS OF EQUIPMENT AND THE SPECIFIC NAMES MENTIONED HEREIN ARE INTENDED FOR THE PROPER FUNCTIONING OF THE WORK.
   B. WORK SHALL BE PERFORMED BY WORKMEN SKILLED IN THE TRADE REQUIRED FOR THE WORK. INSTALL MATERIALS AND EQUIPMENT TO PRESENT A NEAT APPEARANCE WHEN COMPLETED AND IN ACCORDANCE WITH THE APPROVED RECOMMENDATIONS OF THE MANUFACTURER AND IN ACCORDANCE WITH CONTRACT DOCUMENTS.
   C. PROVIDE LABOR, MATERIALS, APPARATUS AND APPLIANCES ESSENTIAL TO THE FUNCTIONING OF THE SYSTEMS DESCRIBED OR INDICATED HEREIN, OR WHICH MAY BE REASONABLY IMPLIED AS ESSENTIAL WHENEVER MENTIONED IN THE CONTRACT DOCUMENT OR NOT.
   D. MAKE WRITTEN REQUESTS FOR SUPPLEMENTARY INSTRUCTIONS TO ARCHITECT/ENGINEER IN CASE OF DOUBT AS TO WORK INTENDED OR IN EVENT OF NEED FOR EXPLANATION THEREOF.
   E. PERFORMANCE AND MATERIAL REQUIREMENTS SCHEDULED OR SPECIFIED ARE MINIMUM STANDARD ACCEPTABLE. THE RIGHT TO JUDGE THE QUALITY OF EQUIPMENT THAT DEVIATES FROM THE CONTRACT DOCUMENT REMAINS SOLELY WITH ARCHITECT/ENGINEER. CONTRACT DOCUMENT OR NOT.

GUARANTEE

1. GUARANTEE MATERIALS, PARTS AND LABOR FOR WORK FOR ONE YEAR FROM THE DATE OF ISSUANCE OF OCCUPANCY PERMIT. DURING THAT PERIOD, MAKE GOOD FAULTS OR IMPERFECTIONS THAT MAY ARISE DUE TO DEFECTS OR OMISSIONS IN MATERIALS OR WORKMANSHIP WITH NO ADDITIONAL COMPENSATION AND AS DIRECTED BY ARCHITECT.

CLEANING

1. REMOVE ALL CONSTRUCTION DEBRIS RESULTING FROM THE WORK.
2. CLEAN EQUIPMENT AND SYSTEMS FOLLOWING THE COMPLETION OF THE PROJECT TO THE SATISFACTION OF THE ENGINEER.

COORDINATION AND SUPERVISION

1. CAREFULLY LAY OUT ALL WORK IN ADVANCE TO AVOID UNNECESSARY CUTTING, CHANNELING, CHASING OR DRILLING OF FLOORS, WALLS, PARTITIONS, CEILINGS OR OTHER SURFACES. WHERE SUCH WORK IS NECESSARY, HOWEVER, PATCH AND REPAIR THE WORK IN AN APPROVED MANNER BY SKILLED MECHANICS AT NO ADDITIONAL COST TO THE OWNER. RENDER FULL COOPERATION TO OTHER TRADES WHERE WORK WILL BE INSTALLED IN CLOSE PROXIMITY TO WORK OF OTHER TRADES. ASSIST IN WORKING OUT SPACE CONDITIONS. IF WORK IS INSTALLED BEFORE COORDINATION WITH OTHER TRADES, OR CAUSES INTERFERENCE, MAKE CHANGES NECESSARY TO CORRECT CONDITIONS WITHOUT EXTRA CHARGE.

SUBMITTALS

1. AS-BUILT DRAWINGS:
   A. UPON COMPLETION OF THE WORK, FURNISH TO THE OWNER "AS-BUILT" DRAWINGS.
2. SERVICE MANUALS:
   A. UPON COMPLETION OF THE WORK, FULLY INSTRUCT T-MOBILE AS TO THE OPERATION AND MAINTENANCE OF ALL MATERIAL, EQUIPMENT AND SYSTEMS.
   B. PROVIDE 3 COMPLETE BOUND SETS OF INSTRUCTIONS FOR OPERATING AND MAINTAINING ALL SYSTEMS AND EQUIPMENT.

CUTTING AND PATCHING

1. PROVIDE ALL CUTTING, DRILLING, ROUGH AND FINISH PATCHING REQUIRED TO COMPLETE THE WORK.
2. OBTAIN OWNER APPROVAL PRIOR TO CUTTING THROUGH FLOORS OR WALLS FOR PIPING OR CONDUIT.

TESTS, INSPECTION AND APPROVAL

1. BEFORE ENERGIZING ANY ELECTRICAL INSTALLATION, INSPECT EACH UNIT IN DETAIL. TIGHTEN ALL BOLTS AND CONNECTIONS (TORQUE-TIGHTEN WHERE REQUIRED) AND DETERMINE THAT ALL COMPONENTS ARE ALIGNED, AND THE EQUIPMENT IS IN SAFE, OPERATIONAL CONDITION.
2. PROVIDE THE COMPLETE ELECTRICAL SYSTEM FREE OF GROUND FAULTS AND SHORT CIRCUITS SUCH THAT THE SYSTEM WILL OPERATE SATISFACTORILY UNDER FULL LOAD CONDITIONS, WITHOUT EXCESSIVE HEATING AT ANY POINT IN THE SYSTEM.

SPECIAL REQUIREMENTS

1. DO NOT LEAVE ANY WORK INCOMPLETE NOR ANY HAZARDOUS SITUATIONS CREATED WHICH WILL AFFECT THE LIFE OR SAFETY OF THE PUBLIC AND/OR BUILDING OCCUPANTS. DO NOT INTERFERE WITH OR CUTOFF ANY OF THE EXISTING SERVICES WITHOUT THE OWNER'S WRITTEN PERMISSION.
2. WHEN NECESSARY TO TEMPORARILY DISCONNECT ANY EXISTING BUILDING UTILITIES AND SERVICE SYSTEMS, INCLUDING FEEDER OR BRANCH CIRCUITING SUPPLYING EXISTING FACILITIES, CONFER WITH THE OWNER AND ARRANGE THE PERIOD OF INTERRUPTION FOR A TIME MUTUALLY AGREED UPON. SHUTDOWN NOTE: SCHEDULE AND NOTIFY OWNER 48 HOURS PRIOR TO SHUTDOWN. ALL SHUTDOWN WORK TO BE SCHEDULED AT A TIME CONVENIENT TO OWNER.

GROUNDING

1. ROUTE ALL GROUNDING CONDUCTORS AS SHOWN ON CONDUIT/GROUNDING RISER.
2. ROUTE 500 KCMIL CU. THHN CONDUCTOR FROM THE MGB LOCATION TO BUILDING STEEL. VERIFY BUILDING STEEL IS EFFECTIVELY GROUNDED PER NEC TO THE MAIN SERVICE GROUNDING ELECTRODE CONDUCTOR (GEC).
3. MAKE ALL GROUND CONNECTIONS FROM MGB TO ELECTRICAL EQUIPMENT WITH 2 HOLE, CRIMP TYPE, BURNDY COMPRESSION TERMINATIONS, SIZED AS REQUIRED.
4. USE 1 HOLE, CRIMP TYPE, BURNDY COMPRESSIONS TERMINATIONS, SIZED AS REQUIRED, AT EQUIPMENT GROUND CONNECTIONS.
5. HIRE AN INDEPENDENT LAB TO PERFORM THE SPECIFIED OHMS TESTING. PROVIDE 4 SETS OF THE CERTIFIED DOCUMENTS TO THE OWNER FOR VERIFICATION PRIOR TO THE PROJECT COMPLETION.

RACEWAYS

1. ALL WIRING TO BE INSTALLED IN CONDUIT SYSTEMS IN ACCORDANCE WITH THE FOLLOWING:
   A. EXTERIOR FEEDERS AND CONTROL, WHERE UNDERGROUND, TO BE IN SCH 40 PVC.
   B. EXTERIOR, ABOVE GROUND POWER CONDUITS TO BE GALVANIZED RIGID STEEL (RGS).
   C. ALL TELECOMMUNICATION CONDUITS, INTERIOR/EXTERIOR, TO BE EMT.
   D. INSTALL PULL ROPES IN ALL NEW EMPTY CONDUITS INSTALLED ON THIS PROJECT.
   E. ALL TELECOM CONDUITS AND PULL BOXES INSTALLED ON THIS PROJECT TO BE LABELED "T-MOBILE". OWNER WILL PROVIDE LABELS FOR CONTRACTOR TO INSTALL.
   F. INTERIOR FEEDERS TO BE INSTALLED IN E.M.T. WITH STEEL COMPRESSION FITTINGS.
   G. MINIMUM SIZE CONDUIT TO BE ¾" TRADE SIZE UNLESS OTHERWISE INDICATED ON THE DRAWINGS.
   H. FINAL CONNECTIONS TO MOTORS AND VIBRATING EQUIPMENT TO BE INSTALLED IN LIQUID-TIGHT FLEXIBLE METAL CONDUIT.
   I. CONDUIT TO BE RUN CONCEALED IN CEILINGS, FINISHED AREAS OR DRYWALL PARTITIONS, UNLESS OTHERWISE NOTED.
   J. THE ROUTING OF CONDUITS INDICATED ON THE DRAWINGS IS DIAGRAMMATIC. BEFORE INSTALLING ANY WORK, EXAMINE THE WORKING LAYOUTS AND SHOP DRAWINGS OF THE OTHER TRADES TO DETERMINE THE EXACT LOCATIONS AND CLEARANCES.
   K. ALL EXTERIOR MOUNTING HARDWARE TO BE GALVANIZED STEEL. COORDINATE WITH BUILDING ENGINEER PRIOR TO ATTACHING TO BUILDING STRUCTURE.

RACEWAYS CONT'D

   L. PENETRATIONS OF WALLS, FLOORS AND ROOFS, FOR THE PASSAGE OF ELECTRICAL RACEWAYS, TO BE PROPERLY SEALED AFTER INSTALLATION OF RACEWAYS SO AS TO MAINTAIN THE STRUCTURAL OR WATERPROOF INTEGRITY OF THE WALL, FLOOR OR ROOF SYSTEM TO BE PENETRATED. SEAL ALL CONDUIT PENETRATIONS THROUGH FIRE OR SMOKE RATED WALLS, CEILINGS OR SMOKE TIGHT CORRIDOR PARTITIONS TO MAINTAIN PROPER RATING OF WALL OR CEILING.
   M. PROVIDE ALL CONDUIT ENDS WITH INSULATED METALLIC GROUNDING BUSHINGS.
   N. CONDUIT TO BE SUPPORTED AT MAXIMUM DISTANCE OF 8'-0", OR AS REQUIRED BY NEC, IN HORIZONTAL AND VERTICAL DIRECTIONS.
   O. PROVIDE STAINLESS STEEL BLANK COVER PLATES FOR ALL JUNCTION BOXES AND/OR OUTLET BOXES NOT USED IN EXPOSED AREAS. PROVIDE ALL OTHER UNUSED BOXES WITH STANDARD STEEL COVER PLATES.
   P. WHERE APPLICABLE, PROVIDE ROOFTOP CONDUIT SUPPORT SYSTEM, CONFORMING TO ROOFTOP WARRANTY REQUIREMENTS, PER BUILDING.

WIRES AND CABLES

1. CONTRACTOR TO COORDINATE WITH EQUIPMENT SUPPLIER AND VENDOR FOR EXACT EQUIPMENT OVER-CURRENT PROTECTION VOLTAGE, WIRE SIZE AND PLUG CONFIGURATION, IF APPLICABLE, PRIOR TO BID.
2. ALL EQUIPMENT/DEVICES TO BE PROVIDED WITH INSULATED GROUND CONDUCTOR.
3. ALL WIRE AND CABLE TO BE 600VOLT, COPPER, WITH THWN/THHN INSULATION, EXCEPT AS NOTED.
4. WIRE FOR POWER AND LIGHTING WILL NOT BE LESS THAN NO. 12AWG. ALL WIRE NO. 8 AND LARGER TO BE STRANDED.
5. CONTROL WIRING IS NOT TO BE LESS THAN NO. 14AWG, FLEXIBLE IN SINGLE CONDUCTORS OR MULTI-CONDUCTOR CABLES. CONTROL WIRING WILL CONSIST OF MULTI-CONDUCTOR CABLES WHEREVER POSSIBLE. CABLES TO BE PROVIDED WITH AN OVERALL FLAME-RETARDANT, EXTRUDED JACKET AND RATED FOR PLENUM USE. ALL CONTROL WIRE TO BE 600VOLT RATED.
6. WIRE PREVIOUSLY PULLED INTO CONDUIT IS CONSIDERED USED AND IS NOT TO BE RE-PULLED.
7. HOME RUNS AND BRANCH CIRCUIT WIRING FOR 20A, 120V CIRCUITS:

LENGTH (FT.)	HOME RUN WIRE SIZE
0 TO 50	NO. 12
51 TO 100	NO. 10
101 TO 150	NO. 8

8. VOLTAGE DROP IS NOT TO EXCEED 3%.
9. MAKE ALL CONNECTIONS WITH UL APPROVED, SOLDERLESS, PRESSURE TYPE INSULATED CONNECTORS: SCOTCHLOK OR AND APPROVED EQUAL.

WIRING DEVICES

1. ALL RECEPTACLES INSTALLED IN THIS PROJECT TO BE GROUNDING TYPE, WITH GROUNDING PIN SLOT CONNECTED TO DEVICE GROUND SCREW FOR GROUND WIRE CONNECTION.

DISCONNECT SWITCHES AND FUSES

1. DISCONNECT SWITCHES TO BE VOLTAGE-RATED TO SUIT THE CHARACTERISTICS OF THE SYSTEM FROM WHICH THEY ARE SUPPLIED.
2. PROVIDE HEAVY-DUTY, METAL-ENCLOSED, EXTERNALLY-OPERATED DISCONNECT SWITCHES, FUSED OR UNFUSED, OF SUCH TYPE AND SIZE AS REQUIRED TO PROPERLY PROTECT OR DISCONNECT THE LOAD FOR WHICH THEY ARE INTENDED.
3. PROVIDE NEMA 1 DISCONNECT SWITCHES FOR INTERIOR INSTALLATION, NEMA 3R FOR EXTERIOR INSTALLATION.
4. DISCONNECT SWITCHES TO BE MANUFACTURED BY:
   A. GENERAL ELECTRIC COMPANY
   B. SQUARE-D
5. PROVIDE RK-1 TYPE FUSES, UNLESS NOTED OTHERWISE.

INSTALLATION

1. INSTALL DISCONNECT SWITCHES WHERE INDICATED ON DRAWINGS.
2. INSTALL FUSES IN FUSIBLE DISCONNECT SWITCHES. FUSES MUST MATCH IN TYPE AND RATING.
3. FUSES TO BE MOUNTED SO THAT THE LABELS SHOWING THEIR RATINGS CAN BE READ WITHOUT REQUIRING FUSE REMOVAL.
4. FURNISH AND DEPOSIT SPARE FUSES AT THE JOB SITE AS FOLLOWS:
   A. THREE SPARES FOR EACH TYPE AND SIZE, IN EXCESS OF 60A, USED FOR INITIAL FUSING.
   B. TEN PERCENT SPARES FOR EACH TYPE AND SIZE, UP TO AND INCLUDING 60A, USED FOR INITIAL FUSING. IN NO CASE WILL LESS THAN THREE FUSES OF ONE PARTICULAR TYPE AND SIZE BE FURNISHED.

GENERAL NOTES:

INTENT

1. THESE SPECIFICATIONS AND CONSTRUCTION DRAWINGS ACCOMPANYING THEM DESCRIBE THE WORK TO BE DONE AND THE MATERIALS TO BE FURNISHED FOR CONSTRUCTION.
2. THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO BE FULLY EXPLANATORY AND SUPPLEMENTARY. HOWEVER, SHOULD ANYTHING BE SHOWN, INDICATED, OR SPECIFIED ON ONE AND NOT THE OTHER, IT SHALL BE DONE THE SAME AS IF SHOWN, INDICATED OR SPECIFIED IN BOTH
3. THE INTENTION OF THE DOCUMENTS IS TO INCLUDE ALL LABOR AND MATERIALS REASONABLY NECESSARY FOR THE PROPER EXECUTION AND COMPLETION OF THE WORK AS STIPULATED IN THE CONTRACT.
4. THE PURPOSE OF THE SPECIFICATIONS IS TO INTERPRET THE INTENT OF THE DRAWINGS AND TO DESIGNATE THE METHOD OF THE PROCEDURE, TYPE AND QUALITY OF MATERIALS REQUIRED TO COMPLETE THE WORK.
5. MINOR DEVIATIONS FROM THE DESIGN LAYOUT ARE ANTICIPATED AND SHALL BE CONSIDERED AS PART OF THE WORK. NO CHANGES THAT ALTER THE CHARACTER OF THE WORK WILL BE MADE OR PERMITTED BY THE OWNER WITHOUT ISSUING A CHANGE ORDER.

CONFLICTS

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATIONS OF ALL MEASUREMENTS AT THE SITE BEFORE ORDERING ANY MATERIALS OR DOING ANY WORK. NO EXTRA CHARGE OR COMPENSATION SHALL BE ALLOWED DUE TO DIFFERENCE BETWEEN ACTUAL DIMENSIONS AND DIMENSIONS INDICATED ON THE CONSTRUCTION DRAWINGS. ANY SUCH DISCREPANCY IN DIMENSION WHICH MAY BE FOUND SHALL BE SUBMITTED TO THE OWNER FOR CONSIDERATION BEFORE THE CONTRACTOR PROCEEDS WITH THE WORK IN THE AFFECTED AREAS.
2. THE BIDDER, IF AWARDED THE CONTRACT, WILL NOT BE ALLOWED ANY EXTRA COMPENSATION BY REASON OF ANY MATTER OR THING CONCERNING SUCH BIDDER MIGHT HAVE FULLY INFORMED THEMSELVES PRIOR TO THE BIDDING.
3. NO PLEA OF IGNORANCE OF CONDITIONS THAT EXIST, OR OF DIFFICULTIES OR CONDITIONS THAT MAY BE ENCOUNTERED, OR OF ANY OTHER RELEVANT MATTER CONCERNING THE WORK TO BE PERFORMED IN THE EXECUTION OF THE WORK WILL BE ACCEPTED AS AN EXCUSE FOR ANY FAILURE OR OMISSION ON THE PART OF THE CONTRACTOR TO FULFILL EVERY DETAIL OF ALL THE REQUIREMENTS OF THE CONTRACT DOCUMENTS GOVERNING THE WORK.

CONTRACTS AND WARRANTIES

1. CONTRACTOR IS RESPONSIBLE FOR APPLICATION AND PAYMENT OF CONTRACTOR LICENSES AND BONDS.
2. SEE MASTER CONTRACTION SERVICES AGREEMENT FOR ADDITIONAL DETAILS.

STORAGE

1. ALL MATERIALS MUST BE STORED IN A LEVEL AND DRY FASHION AND IN A MANNER THAT DOES NOT NECESSARILY OBSTRUCT THE FLOW OF OTHER WORK. ANY STORAGE METHOD MUST MEET ALL RECOMMENDATIONS OF THE ASSOCIATED MANUFACTURER.

CLEANUP

1. THE CONTRACTORS SHALL, AT ALL TIMES, KEEP THE SITE FREE FROM ACCUMULATION OF WASTE MATERIALS OR RUBBISH CAUSED BY THEIR EMPLOYEES AT WORK AND AT THE COMPLETION OF THE WORK. THEY SHALL REMOVE ALL RUBBISH FROM AND ABOUT THE BUILDING AREA, INCLUDING ALL THEIR TOOLS, SCAFFOLDING AND SURPLUS MATERIALS AND SHALL LEAVE THEIR WORK CLEAN AND READY TO USE.
2. EXTERIOR
   A. VISUALLY INSPECT EXTERIOR SURFACES AND REMOVE ALL TRACES OF SOIL, WASTE MATERIALS, SMUDGES AND OTHER FOREIGN MATTER.
   B. REMOVE ALL TRACES OF SPLASHED MATERIALS FROM ADJACENT SURFACES.
   C. IF NECESSARY, TO ACHIEVE A UNIFORM DEGREE OF CLEANLINESS, HOSE DOWN THE EXTERIOR OF THE STRUCTURE.
3. INTERIOR
   A. VISUALLY INSPECT INTERIOR SURFACE AND REMOVE ALL TRACES OF SOIL, WASTE MATERIALS, SMUDGES AND OTHER FOREIGN MATTER FROM WALLS, FLOOR, AND CEILING.
   B. REMOVE ALL TRACES OF SPLASHED MATERIALS FROM ADJACENT SURFACES.
   C. REMOVE PAINT DROPPINGS, SPOTS, STAINS, AND DIRT FROM FINISHED SURFACES.

CHANGE ORDER PROCEDURE:

1. REFER TO SECTION 17 OF SIGNED MCSA: SEE PROFESSIONAL SERVICE AGREEMENT FOR MCSA.

RELATED DOCUMENTS AND COORDINATION

1. GENERAL CARPENTRY, ELECTRICAL AND ANTENNA DRAWINGS ARE INTERRELATED. IN PERFORMANCE OF THE WORK, THE CONTRACTOR MUST REFER TO ALL DRAWINGS. ALL COORDINATION TO BE THE RESPONSIBILITY OF THE CONTRACTOR.

SHOP DRAWINGS

1. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AS REQUIRED AND LISTED IN THESE SPECIFICATIONS TO THE OWNER FOR APPROVAL.
2. ALL SHOP DRAWINGS SHALL BE REVIEWED, CHECKED AND CORRECTED BY CONTRACTOR PRIOR TO SUBMITTAL TO THE OWNER.

PRODUCTS AND SUBSTITUTIONS

1. SUBMIT 3 COPIES OF EACH REQUEST FOR SUBSTITUTION. IN EACH REQUEST, IDENTIFY THE PRODUCT OR FABRICATION OR INSTALLATION METHOD TO BE REPLACED BY THE SUBSTITUTION. INCLUDE RELATED SPECIFICATION SECTION AND DRAWING NUMBERS AND COMPLETE DOCUMENTATION SHOWING COMPLIANCE WITH THE REQUIREMENTS FOR SUBSTITUTIONS.
2. SUBMIT ALL NECESSARY PRODUCT DATA AND CUT SHEETS WHICH PROPERLY INDICATE AND DESCRIBE THE ITEMS, PRODUCTS AND MATERIALS BEING INSTALLED. THE CONTRACTOR SHALL, IF DEEMED NECESSARY BY THE OWNER, SUBMIT ACTUAL SAMPLES TO THE OWNER FOR APPROVAL IN LIEU OF CUT SHEETS.

QUALITY ASSURANCE

1. ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS. THESE SHALL INCLUDE, BUT NOT BE LIMITED TO THE APPLICABLE CODES SET FORTH BY THE LOCAL GOVERNING BODY. SEE "CODE COMPLIANCE" T-1.

ADMINISTRATION

1. BEFORE THE COMMENCEMENT OF ANY WORK, THE CONTRACTOR WILL ASSIGN A PROJECT MANAGER WHO WILL ACT AS A SINGLE POINT OF CONTACT FOR ALL PERSONNEL INVOLVED IN THIS PROJECT. THIS PROJECT MANAGER WILL DEVELOP A MASTER SCHEDULE FOR THE PROJECT WHICH WILL BE SUBMITTED TO THE OWNER PRIOR TO THE COMMENCEMENT OF ANY WORK.
2. SUBMIT A BAR TYPE PROGRESS CHART, NOT MORE THAN 3 DAYS AFTER THE DATE ESTABLISHED FOR COMMENCEMENT OF THE WORK ON THE SCHEDULE, INDICATING A TIME BAR FOR EACH MAJOR CATEGORY OR UNIT OF WORK TO BE PERFORMED AT THE SITE, PROPERLY SEQUENCED AND COORDINATED WITH OTHER ELEMENTS OF WORK AND SHOWING COMPLETION OF THE WORK SUFFICIENTLY IN ADVANCE OF THE DATE ESTABLISHED FOR SUBSTANTIAL COMPLETION OF THE WORK.
3. PRIOR TO COMMENCING CONSTRUCTION, THE OWNER SHALL SCHEDULE AN ON-SITE MEETING WITH ALL MAJOR PARTIES. THIS WOULD INCLUDE, BUT NOT LIMITED TO, THE OWNER, PROJECT MANAGER, CONTRACTOR, LAND OWNER REPRESENTATIVE, LOCAL TELEPHONE COMPANY, TOWER ERECTION FOREMAN (IF SUBCONTRACTED).
4. CONTRACTOR SHALL BE EQUIPPED WITH SOME MEANS OF CONSTANT COMMUNICATIONS, SUCH AS A MOBILE PHONE OR A BEEPER. THIS EQUIPMENT WILL NOT BE SUPPLIED BY THE OWNER, NOR WILL WIRELESS SERVICE BE ARRANGED.
5. DURING CONSTRUCTION, CONTRACTOR MUST ENSURE THAT EMPLOYEES AND SUBCONTRACTORS WEAR HARD HATS AT ALL TIMES. CONTRACTOR WILL COMPLY WITH ALL WPCS SAFETY REQUIREMENTS IN THEIR AGREEMENT.
6. PROVIDE WRITTEN DAILY UPDATES ON SITE PROGRESS TO THE OWNER.
7. COMPLETE INVENTORY OF CONSTRUCTION MATERIALS AND EQUIPMENT IS REQUIRED PRIOR TO START OF CONSTRUCTION.
8. NOTIFY THE OWNER/PROJECT MANAGER IN WRITING NO LESS THAN 48 HOURS IN ADVANCE OF CONCRETE POURS, TOWER ERECTIONS, AND EQUIPMENT CABINET PLACEMENTS.

INSURANCE AND BONDS

1. CONTRACTOR, AT THEIR OWN EXPENSE, SHALL CARRY AND MAINTAIN, FOR THE DURATION OF THE PROJECT, ALL INSURANCE, AS REQUIRED AND LISTED, AND SHALL NOT COMMENCE WITH THEIR WORK UNTIL THEY HAVE PRESENTED AN ORIGINAL CERTIFICATE OF INSURANCE STATING ALL COVERAGES TO THE OWNER. REFER TO THE MASTER AGREEMENT FOR REQUIRED INSURANCE LIMITS.
2. THE OWNER SHALL BE NAMED AS AN ADDITIONAL INSURED ON ALL POLICIES.
3. CONTRACTOR MUST PROVIDE PROOF OF INSURANCE.

ABBREVIATIONS

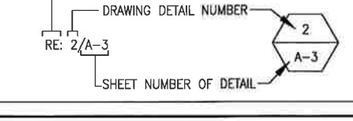
ADJ	ADJUSTABLE
AGL	ABOVE GROUND LINE
&	AND
APPROX	APPROXIMATE
@	AT
BTS	BASE TRANSMISSION STATION
CAB	CABINET
CLG	CEILING
CONC	CONCRETE
CONT	CONTINUOUS
DIA OR ø	DIAMETER
DWG	DRAWING
EA	EACH
ELEC	ELECTRICAL
ELEV	ELEVATION
EQ	EQUAL
EQUIP	EQUIPMENT
EGB	EQUIPMENT GROUND BAR
(E)	EXISTING
EXT	EXTERIOR
FF	FINISHED FLOOR
GA	GAUGE
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GRND	GROUND
LG	LONG
MAX	MAXIMUM
MECH	MECHANICAL
MW	MICROWAVE DISH
MFR	MANUFACTURER
MGB	MASTER GROUND BAR
MIN	MINIMUM
MTL	METAL
(N)	NEW
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OC	ON CENTER
OPP	OPPOSITE
(P)	PROPOSED
PCS	PERSONAL COMMUNICATION SYSTEM
PPC	POWER PROTECTION CABINET
SF	SQUARE FOOT
SHT	SHEET
SIM	SIMILAR
SS	STAINLESS STEEL
STL	STEEL
TOC	TOP OF CONCRETE
TOM	TOP OF MASONRY
TYP	TYPICAL
VIF	VERIFY IN FIELD
UON	UNLESS OTHERWISE NOTED
WWF	WELDED WIRE FABRIC
W/	WITH

ARCHITECTURAL SYMBOLS

ROOM ###

(X) →

DETAIL REFERENCE KEY



T-Mobile

T-MOBILE NORTHEAST LLC
35 GRIFFIN ROAD SOUTH
BLOOMFIELD, CT 06002

INFINIGY Design. Build. Deliver.
1033 WATERVLIET SHAKER ROAD
ALBANY, NY 12205
OFFICE: (518) 865-0793
FAX: (518) 880-0783

SUBMITTALS

DATE	DESCRIPTION	REVISION
3/28/14	REVIEW	A
4/9/14	FOR PERMIT	0

DEPT.	DATE	APP'D	REVISIONS
RFE			
RF MAN.			
ZONING			
OPS			
CONSTR.			
SITE AC.			

PROJECT NO:	317-1188
DRAWN BY:	JLM
CHECKED BY:	AJD

STATE OF CONNECTICUT
JOHN S. STEVENS
No. 24705
LICENSED
PROFESSIONAL ENGINEER

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NOTE: IF DRAWINGS ARE 22"x34", USE GRAPHICAL SCALE AND/OR 1/2 TIMES OF THE NOTED SCALE.

SITE NAME
CT11167A
MADISON SOUTH / RT 1
8 OLD ROUTE 79
MADISON, CT 06443

SHEET TITLE
GENERAL AND ELECTRICAL NOTES

SHEET NUMBER
N-1
SHEET 8 OF 8 SHEETS