Transcend Wireless

10 Industrial Ave,
Suite 3
Mahwah NJ 07430

Phone: 201.684.0055
Fax: 201.684.0066

October 16, 2018

Melanie Bachman
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Notice of Exempt Modification
23 Stonybrook Road, Stratford, CT 06614
Latitude- 41.203300
Longitude- -73.148600

Dear Ms. Bachman,

T-Mobile currently maintains (6) existing antennas at the 97' and 87' level of the existing 119' monopole at 23 Stonybrook Road in Stratford, Connecticut. The tower is owned by American Tower. The property is owned by Stonybrook Management LLC. T-Mobile now intends to remove (3) of the existing antennas and add (3) new 600/700/1900/2100 MHz antennas. These antennas would be installed at the same 97' and 87' level of the tower. T-Mobile also intends to swap (3) remote radio heads and add (1) hybrid cable.

This tower facility was originally approved by the Siting Council through Docket No. 385 dated February 25, 2010. This approval did not come with conditions that would be violated by this proposed modification.

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. 16-50j-72(b)(2). In accordance with R.C.S.A. 16-50j-73, a copy of this letter is being sent to Laura Hoydick, Mayor of the Town of Stratford, John Rusatsky, Zoning Enforcement Officer of the Town of Stratford, as well as the tower owner and property owner.

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

1. The proposed modification will not result in an increase in the height of the existing structure

2. The proposed modifications will not require the extension of the site boundary.

3. The proposed modifications will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.

4. The operation of the replacement antennas will not increase radio frequency emissions at the facility to a level at or above the Federal Communications Commission safety standard.

5. The proposed modification will not cause a change or alteration in the physical or environmental characteristics of the site.

6. The existing structure and its foundation can support the proposed loading.

For the foregoing reasons, T-Mobile respectfully submits that the proposed modifications to the above-referenced telecommunications facility constitute an exempt modification under R.C.S.A. 16-50j-72(b)(2).

Sincerely,

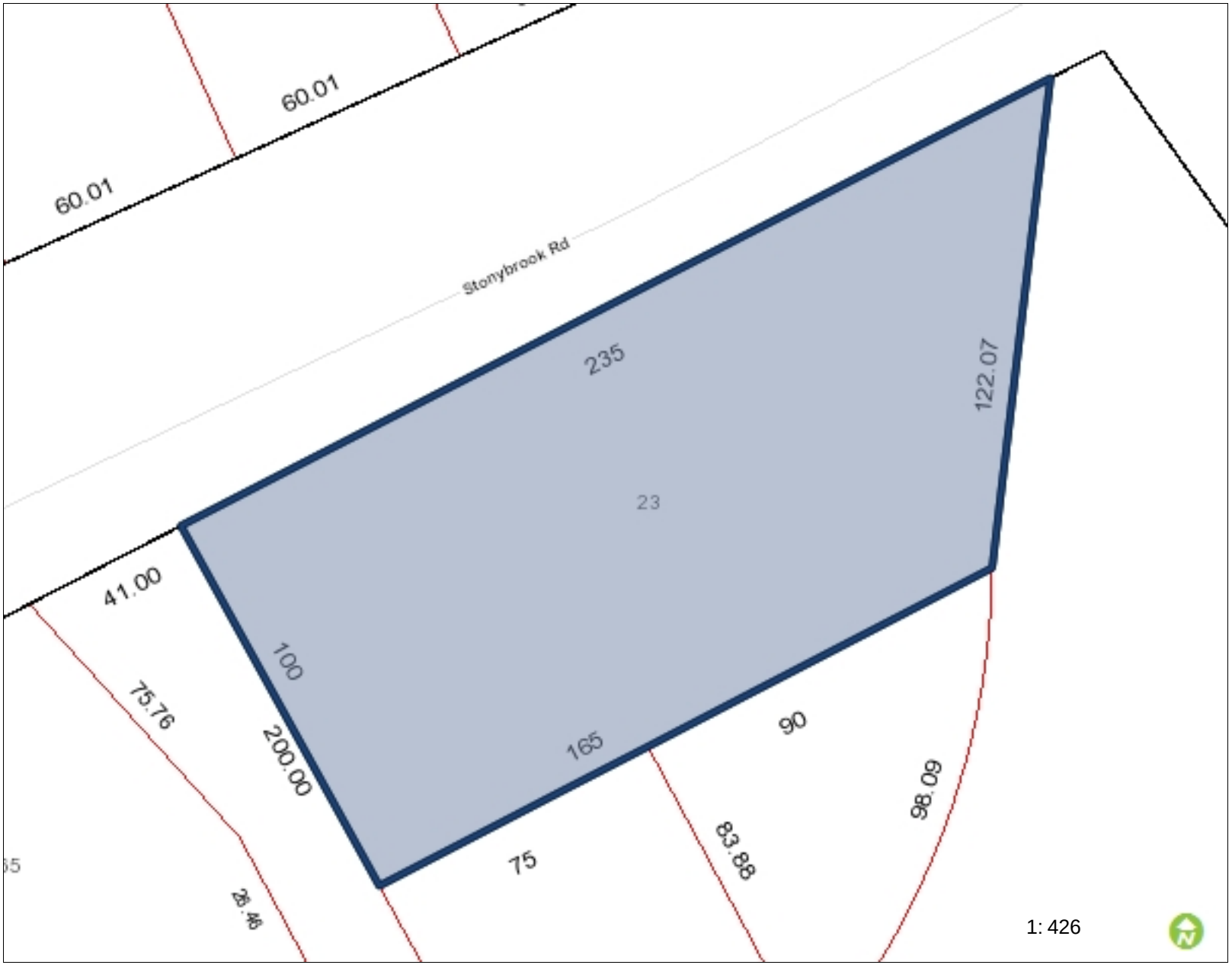
Kyle Richers

Kyle Richers
Transcend Wireless
10 Industrial Ave., Suite 3
Mahwah, New Jersey 07430
908-447-4716
krichers@transcendwireless.com

cc: Laura Hoydick- as elected official
John Rusatsky- as zoning official
American Tower- as tower owner
Stonybrook Management LLC- as property owner

Town of Stratford

CTFF310D



1: 426

Legend

Streetname

Roadways

- Local
- Collector
- Minor Collector
- Minor Arterial
- Major Collector
- PA Other
- PA Other Expwy
- PA Interstate

71.0 0 35.49 71.0 Feet

WGS_1984_Web_Mercator_Auxiliary_Sphere
Created by Greater Bridgeport Regional Council

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TOWN OF STRATFORD

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Owner and Parcel Information

Owner Name	STONYBROOK MANAGEMENT LLC	**Today's Date**	October 16, 2018
Mailing Address	124 KNAPP ST	**Account #**	1626900
	EASTON, CT 06612		
Location Address	23 STONYBROOK RD	**Census Tract**	0810
Map / Block / Lot	30 /11 / 10 / 16/ Dev Lot: LTS 126-133 S/S	**Acreage**	0.46
Use Class / Description	323 Nbhd Ctr	**Parcel Map**	Show Parcel Map Owner List By Radius

Current Appraised Value Information

Building Value	OB Value	Land Value	Special Land Value	Total Appraised Value	Net Appraised Value	Current Assessment
No Apprasial Information available for this parcel						

Assessment History

Year	Building	OB/Misc	Land	Total Assessment
2017	$ 499,310	$ 9,240	$ 148,960	$ 657,510
2016	$ 499,310	$ 9,240	$ 148,960	$ 657,510

Land Information

Use	Class	Zoning	Area	Value
Nbhd Ctr	C		0.46 AC	$ 212,800

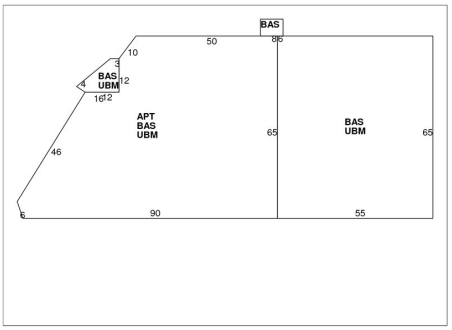
Commercial Building Information

Style	Year Built	Eff Year Built	Gross Area	Stories	Grade	Exterior Wall	Interior Wall	Wall Height	# Units
Retail Strip Ctr	1969	1982	21,718	2	C	Concr/Cinder	Drywall/Sheet	9	8
Roof Cover	**Roof Structure**	**Floor Type**	**Heat Type**	**Heat Fuel**	**AC Type**	**Sprinkler**	**Construction**	**Plumbing**	**Comm Walls**
Built Up	Flat	Carpet	Gas	Hot Water	Heat/AC Split	%	Masonry	Average	0%

Building Sub Areas

Code	Description	Living Area	Gross Area	Effective Area
APT	Apartment	4,762	4,762	
BAS	First Floor	8,502	8,502	
UBM	Unfinished Basement	0	8,454	
	Totals	**13,264**	**21,718**	**15,378**

Building Sketch Enlarge



Building Photo Enlarge

Out Buildings / Extra Features

Description	Sub Description	Area	Year Built	Value
Air Condition		5,680 S.F.	1980	$ 10,300
Paving	Asphalt	16,000 S.F.	1969	$ 13,200
Sprinklers - Wet		3,000 S.F.	1980	$ 4,100

Sale Information

Sale Date	Sale Price	Deed Book/Page	Sale Qualification	Reason	Vacant or Improved	Owner
03/24/2005	$ 900,000	2604/ 275	Qualified	Verified by Deed	Improved	STONYBROOK MANAGEMENT LLC
08/13/1969	$ 90,000	0451/0378	Qualified	WD	Improved	STONYBROOK CENTER INC THE

Permit Information

Permit ID	Issue Date	Type	Description	Amount	Inspection Date	% Complete	Date Complete	Comments
23661	06/15/2017	BP	Building Permi	$ 15,000		100		REPLACE ANTENNAS
17802	05/09/2017	PL	Plumbing Permi	$ 1,800		100		GAS TO GENERATOR
25242	04/10/2017	EL	Electrical Per	$ 20,000		100		CELL TOWER SHELTER
21865	11/24/2014	BP	Building Permi	$ 13,000		100		TOWER EXTENSION
21746	10/01/2014	BP	Building Permi	$ 15,000		100		1 ANTENNA TRANSCEND WIRELESS
16222	03/28/2014	PL	Plumbing Permi	$ 4,000		100		GAS LINE
20473	02/21/2014	EL	Electrical Per	$ 5,000		100		GROUNDING/CONDUITS
21142	11/27/2013	BP	Building Permi	$ 23,000		100		9 ANTENNAS
20139	08/29/2012	BP	Building Permi	$ 8,500		100		REPL ANTENNAS/ADD EQUIP
19882	04/23/2012	BP	Building Permi	$ 800		100		NEW FOP REAR

18872	05/23/2011	EL	Electrical Per	$ 30,000		100		
11692	04/29/2011	HA	HVAC Permit	$ 800		100		REPAIR 371 STONYBROOK
13114	04/29/2011	PL	Plumbing Permi	$ 800		100		371 STONYBROOK
19040	02/07/2011	BP	Building Permi	$ 120,000		100		MONOPOLE FOR TELECOMMUNICATIONS
17766	02/03/2009	BP	Building Permi	$ 800		100		SEPERATION WALL
12382	02/02/2009	PL	Plumbing Permi	$ 1,500		100		PLUMBING
13536	01/23/2009	EL	Electrical Per	$ 800		100		ELECTRICAL
12129	03/19/2008	PL	Plumbing Permi	$ 2,250		100		FIRE SUPRESSION SYST
17144	03/04/2008	BP	Building Permi	$ 20,000		100		CONVERT BAKERY TO GROC STORE
S2975	03/04/2008	SN	Sign Permit	$ 500		100		SIGN FOR MARTINS FAMILY MARKET
9865	02/29/2008	HA	HVAC Permit	$ 12,508		100		HOOD SYSTEM
11632	09/26/2006	PL	Plumbing Permi	$ 5,000		100		NEW PLUMBING
12303	09/25/2006	EL	Electrical Per	$ 3,500		100		REFIT BAKERY SPACE
15952	09/21/2006	BP	Building Permi	$ 1,000		100		UPDATE EXISTING BAKERY
15825	07/24/2006	BP	Building Permi	$ 18,000		100		REROOF RESIDENCE

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

T-Mobile Existing Facility

Site ID: CTFF310D

23 Stonybrook Rd
23 Stonybrook Rd
Stratford, CT 06614

September 13, 2018

EBI Project Number: 6218006174

Site Compliance Summary	
Compliance Status:	COMPLIANT
Site total MPE% of FCC general population allowable limit:	22.06 %

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

EBI Consulting
environmental | engineering | due diligence

September 13, 2018

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

Emissions Analysis for Site: **CTFF310D – 23 Stonybrook Rd**

EBI Consulting was directed to analyze the proposed T-Mobile facility located at **23 Stonybrook Rd, Stratford, 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 $\mu W/cm^2$ 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 population 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 population 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 ($\mu W/cm^2$). The general population exposure limits for the 600 MHz and 700 MHz frequency bands are approximately 400 $\mu W/cm^2$ and 467 $\mu W/cm^2$ respectively. The general population exposure limit for the 1900 MHz (PCS) and 2100 MHz (AWS) frequency bands is 1000 $\mu W/cm^2$. 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 **23 Stonybrook Rd, Stratford, 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, all calculations were performed assuming a lobe representing the maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB for directional panel antennas, was focused at the base of the tower. For this report the sample point is the top of a 6-foot person standing at the base of the tower.

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

1) 1 GSM channels (PCS Band - 1900 MHz) was considered for each sector of the proposed installation. These Channels have a transmit power of 15 Watts per Channel.

2) 1 UMTS channel (AWS Band – 2100 MHz) was considered for each sector of the proposed installation. These Channels have a transmit power of 40 Watts per Channel.

3) 2 LTE channels (PCS Band - 1900 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 40 Watts per Channel.

4) 2 LTE channels (AWS Band – 2100 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 60 Watts per Channel.

5) 2 LTE channels (600 MHz Band) were considered for each sector of the proposed installation. These Channels have a transmit power of 40 Watts per Channel.

6) 2 LTE channels (700 MHz Band) were considered for each sector of the proposed installation. These Channels have a transmit power of 20 Watts per Channel.

7) 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.

8) For the following calculations the sample point was the top of a 6-foot person standing at the base of the tower. The maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB for directional panel antennas, was used in this direction. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.

9) The antennas used in this modeling are the **Ericsson AIR32 B66aA/B2A** & **RFS APXVAARR24_43-U-NA20** for 600 MHz, 700 MHz, 1900 MHz (PCS) and 2100 MHz (AWS) channels. This is based on feedback from the carrier with regard to anticipated antenna selection. All Antenna gain values and associated transmit power levels are shown in the Site Inventory and Power Data table below. The maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB for directional panel antennas, was used for all calculations. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.

10) The antenna mounting height centerlines of the proposed antennas are **87 feet & 97 feet** above ground level (AGL).

11) 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.

12) All calculations were done with respect to uncontrolled / general population threshold limits.

T-Mobile Site Inventory and Power Data

Sector:	A	Sector:	B	Sector:	C
Antenna #:	**1**	Antenna #:	**1**	Antenna #:	**1**
Make / Model:	Ericsson AIR32 B66aA/B2A	Make / Model:	Ericsson AIR32 B66aA/B2A	Make / Model:	Ericsson AIR32 B66aA/B2A
Gain:	15.9 dBd	Gain:	15.9 dBd	Gain:	15.9 dBd
Height (AGL):	87 feet	Height (AGL):	87 feet	Height (AGL):	87 feet
Frequency Bands	1900 MHz (PCS) / 2100 MHz (AWS)	Frequency Bands	1900 MHz (PCS) / 2100 MHz (AWS)	Frequency Bands	1900 MHz (PCS) / 2100 MHz (AWS)
Channel Count	4	Channel Count	4	Channel Count	4
Total TX Power(W):	200	Total TX Power(W):	200	Total TX Power(W):	200
ERP (W):	7,780.90	ERP (W):	7,780.90	ERP (W):	7,780.90
Antenna A1 MPE%	**4.26**	Antenna B1 MPE%	**4.26**	Antenna C1 MPE%	**4.26**
Antenna #:	**2**	Antenna #:	**2**	Antenna #:	**2**
Make / Model:	RFS APXVAARR24_43-U-NA20	Make / Model:	RFS APXVAARR24_43-U-NA20	Make / Model:	RFS APXVAARR24_43-U-NA20
Gain:	15.65 / 16.35 / 12.95 / 13.35 dBd	Gain:	15.65 / 16.35 / 12.95 / 13.35 dBd	Gain:	15.65 / 16.35 / 12.95 / 13.35 dBd
Height (AGL):	97 feet	Height (AGL):	97 feet	Height (AGL):	97 feet
Frequency Bands	1900 MHz (PCS) / 2100 MHz (AWS) / 600 MHz / 700 MHz	Frequency Bands	1900 MHz (PCS) / 2100 MHz (AWS) / 600 MHz / 700 MHz	Frequency Bands	1900 MHz (PCS) / 2100 MHz (AWS) / 600 MHz / 700 MHz
Channel Count	6	Channel Count	6	Channel Count	6
Total TX Power(W):	175	Total TX Power(W):	175	Total TX Power(W):	175
ERP (W):	4,720.03	ERP (W):	4,720.03	ERP (W):	4,720.03
Antenna A2 MPE%	**3.51**	Antenna B2 MPE%	**3.51**	Antenna C2 MPE%	**3.51**

Site Composite MPE%	
Carrier	**MPE%**
T-Mobile (Per Sector Max)	**7.77 %**
Verizon Wireless	**12.16** %
AT&T	**2.13** %
Site Total MPE %:	**22.06 %**

T-Mobile Sector A Total:	7.77 %
T-Mobile Sector B Total:	7.77 %
T-Mobile Sector C Total:	7.77 %
Site Total:	22.06 %

T-Mobile Maximum MPE Power Values (Per Sector)

T-Mobile _Frequency Band / Technology (Per Sector)	# Channels	Watts ERP (Per Channel)	Height (feet)	Total Power Density ($\mu W/cm^2$)	Frequency (MHz)	Allowable MPE ($\mu W/cm^2$)	Calculated % MPE
T-Mobile PCS - 1900 MHz LTE	2	1,556.18	87	17.05	PCS - 1900 MHz	1000.00	1.71%
T-Mobile AWS - 2100 MHz LTE	2	2,334.27	87	25.58	AWS - 2100 MHz	1000.00	2.56%
T-Mobile PCS - 1900 MHz GSM	1	550.92	97	2.39	PCS - 1900 MHz	1000.00	0.24%
T-Mobile AWS - 2100 MHz UMTS	1	1,726.08	97	7.49	AWS - 2100 MHz	1000.00	0.75%
T-Mobile 600 MHz LTE	2	788.97	97	6.85	600 MHz	400.00	1.71%
T-Mobile 700 MHz LTE	2	432.54	97	3.76	700 MHz	467.00	0.80%
						Total:	**7.77%**

Summary

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

The anticipated maximum composite contributions from the T-Mobile facility as well as the site composite emissions value with regards to compliance with FCC's allowable limits for general population exposure to RF Emissions are shown here:

T-Mobile Sector	Power Density Value (%)
Sector A:	7.77 %
Sector B:	7.77 %
Sector C:	7.77 %
T-Mobile Maximum MPE % (Per Sector):	7.77 %
Site Total:	22.06 %
Site Compliance Status:	**COMPLIANT**

The anticipated composite MPE value for this site assuming all carriers present is **22.06%** of the allowable FCC established general population 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 well within the allowable 100% threshold standard per the federal government.

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Structural Analysis Report

Structure	:	**119 ft Monopole**
ATC Site Name	:	**Stoneybrook Rd CT, CT**
ATC Site Number	:	**283420**
Engineering Number	:	**12598484_C3_01**
Proposed Carrier	:	**T-Mobile**
Carrier Site Name	:	**CTFF310D**
Carrier Site Number	:	**CTFF310D**
Site Location	:	**23 Stonybrook Road** **Stratford, CT 06614-3715** **41.203300,-73.148600**
County	:	**Fairfield**
Date	:	**August 27, 2018**
Max Usage	:	**65%**
Result	:	**Pass**

Prepared By:
Kelsey Sargent, E.I.
Structural Engineer I

Kelsey L Sargent

Reviewed By:

STATE OF CONNECTICUT
ESHA KAUSHAL MODI
32593
LICENSED
PROFESSIONAL ENGINEER

Authorized by "EOR"
Aug 27 2018 4:51 PM cosign

COA: PEC.0001553

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Table of Contents

Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 119 ft monopole to reflect the change in loading by T-Mobile.

Supporting Documents

Tower Drawings	Valmont Order #20380-60, dated June 11, 2010
Foundation Drawing	Valmont Order #20380-60, dated January 7, 2011
Geotechnical Report	Terracon Project #J2105132, dated April 2, 2010
Modifications	TES Job #13142, dated November 12, 2014

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/TIA-222.

Basic Wind Speed:	97 mph (3-Second Gust, Vasd) / 125 mph (3-Second Gust Vult)
Basic Wind Speed w/ Ice:	50 mph (3-Second Gust) w/ 3/4" radial ice concurrent
Code:	ANSI/TIA-222-G / 2012 IBC / 2016 Connecticut State Building Code
Structure Class:	II
Exposure Category:	B
Topographic Category:	1
Crest Height:	0 ft
Spectral Response:	Ss = 0.20, S_1 = 0.06
Site Class:	D - Stiff Soil

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					
117.0	117.0	6	CCI TPX-070821	T-Arms	(4) 7/8" Fiber (12) 1 5/8" Coax (3) 0.38" Cable (2) 0.78" 8 AWG 6 (1) 3" Conduit (1) 0.39" Fiber Trunk	AT&T Mobility
		2	Raycap DC6-48-60-18-8F(32.8 lbs)			
		3	Ericsson RRUS 32 B2			
		3	Ericsson RRUS-32 B30 (77 lbs)			
		3	Ericsson RRUS-11			
		3	Antel BXA-171063-12CF			
		3	CCI OPA-65R-LCUU-H6			
109.0	109.0	3	Antel BXA-171063-12CF	Flush	-	
		3	CCI OPA-65R-LCUU-H6			
97.0	97.0	3	Ericsson RRUS 01 B2 w/ Solar Shield	Side Arms	-	T-Mobile
87.0	87.0	3	Ericsson AIR32 B66Aa/B2a	Side Arms	(12) 1 5/8" Coax	
77.0	77.0	6	Antel BXA-171063-12CF	Side Arms	(12) 1 5/8" Coax	Verizon
		6	Antel BXA-70063-6CF-6			
		3	Alcatel-Lucent 9442 RRH2x40-AWS			
		3	Alcatel-Lucent 9442 RRH 2x40 700U			

Equipment to be Removed

Elevation[1] (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
97.0	97.0	3	Ericsson AIR 21 B4A B2P	-	-	T-Mobile
		3	Andrew SBNHH-1D65C			
87.0	89.0	3	Ericsson RRUS 11 B12	-	(1) 1 5/8" Fiber	
		3	RFS ATMAA1412D-1A20			

Proposed Equipment

Elevation[1] (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
97.0	97.0	3	Ericsson KRY 112 144/2	Side Arms	(2) 1 1/4" Fiber (1) 1 5/8" Fiber	T-Mobile
		3	Ericsson Radio 4449 B12,B71			
		3	RFS APXVAARR24_43-U-NA20			

[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	38%	Pass
Shaft	60%	Pass
Base Plate	20%	Pass
Flanges	50%	Pass
Reinforcement	65%	Pass

Foundations

Reaction Component	Analysis Reactions	% of Usage
Moment (Kips-Ft)	1,173.8	48%
Axial (Kips)	40.1	46%
Shear (Kips)	13.8	22%

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

Deflection and Sway*

Antenna Elevation (ft)	Antenna	Carrier	Deflection (ft)	Sway (Rotation) (°)
97.0	Ericsson KRY 112 144/2	T-Mobile	0.813	0.981
	Ericsson Radio 4449 B12,B71			
	Ericsson RRUS 01 B2 w/ Solar Shield			
	RFS APXVAARR24_43-U-NA20			
87.0	Ericsson AIR32 B66Aa/B2a		0.655	0.855

***Deflection and Sway was evaluated considering a design wind speed of 60 mph (3-Second Gust) per ANSI/TIA-222-G**

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Standard Conditions

All engineering services performed by A.T. Engineering Service, PLLC are prepared on the basis that the information used is current and correct. This information may consist of, but is not limited to the following:

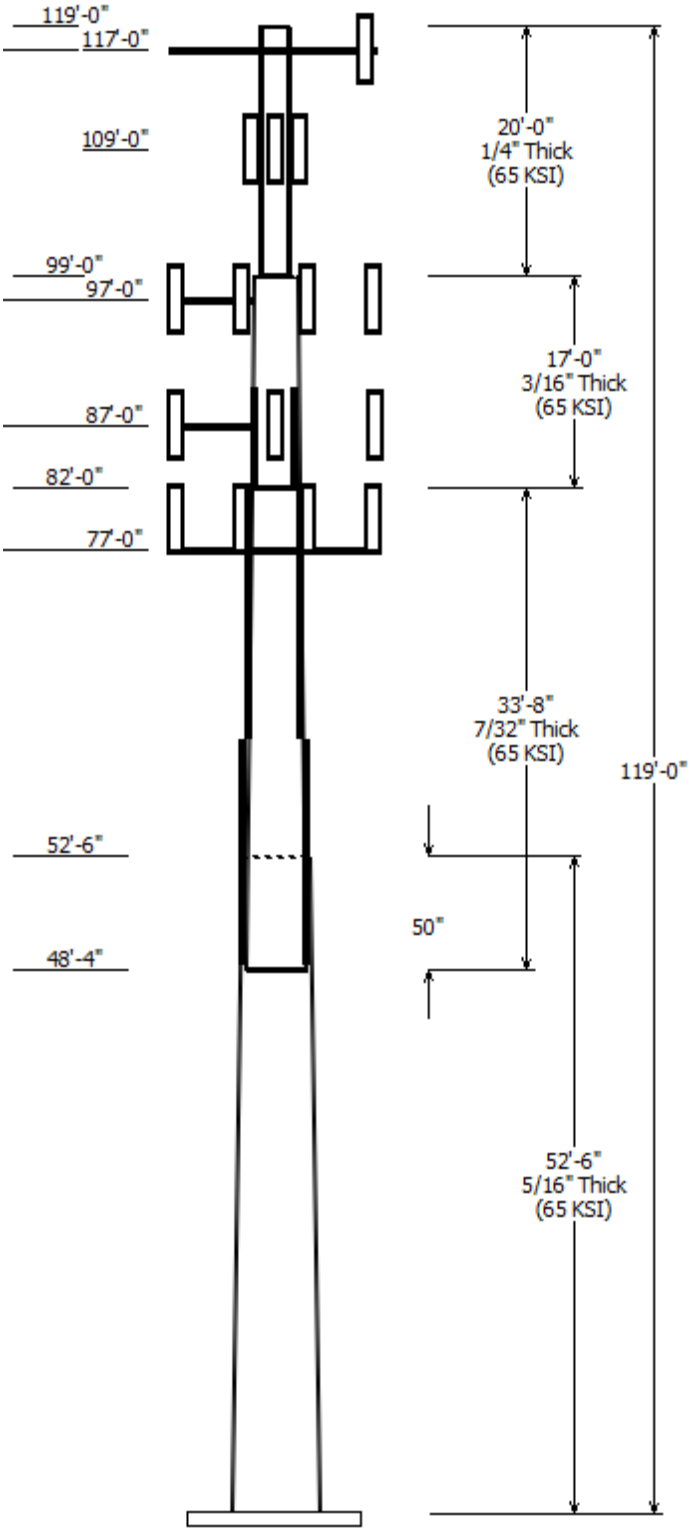
- Information supplied by the client regarding antenna, mounts and feed line loading
- Information from drawings, design and analysis documents, and field notes in the possession of A.T. Engineering Service, PLLC

It is the responsibility of the client to ensure that the information provided to A.T. Engineering Service, PLLC and used in the performance of our engineering services is correct and complete.

All assets of American Tower Corporation, its affiliates and subsidiaries (collectively "American Tower") are inspected at regular intervals. Based upon these inspections and in the absence of information to the contrary, American Tower assumes that all structures were constructed in accordance with the drawings and specifications.

Unless explicitly agreed by both the client and A.T. Engineering Service, PLLC, all services will be performed in accordance with the current revision of ANSI/TIA-222.

All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. A.T. Engineering Service, PLLC is not responsible for the conclusions, opinions and recommendations made by others based on the information supplied herein.



Job Information

Pole :	283420	Code:	ANSI/TIA-222-G
Location :	STONEYBROOK RD CT, CT		
Description :			
Client :	T-MOBILE	Struct Class :	II
Shape :	18 Sides	Exposure :	B
Height :	119.00 (ft)	Topo :	1
Base Elev (ft):	0.00		
Taper:	0.300000 (in/ft)		

Sections Properties

Shaft Section	Length (ft)	Diameter (in) Accross Flats Top	Bottom	Thick (in)	Joint Type	Overlap Length (in)	Shape	Steel Grade (ksi)
1	52.500	26.25	42.00	0.313		0.000	18 Sides	65
2	33.667	17.83	27.93	0.219	Slip Joint	50.000	18 Sides	65
3	17.000	12.73	17.83	0.188	Butt Joint	0.000	18 Sides	65
4	20.000	12.56	12.56	0.250	Butt Joint	0.000	18 Sides	65

Discrete Appurtenance

Attach Elev (ft)	Force Elev (ft)	Qty	Description
117.000	117.000	2	Raycap DC6-48-60-18-8F(32.8 lb
117.000	117.000	3	Ericsson RRUS-11
117.000	117.000	3	Ericsson RRUS 32 B2
117.000	117.000	3	Ericsson RRUS-32 B30 (77 lbs)
117.000	117.000	6	CCI TPX-070821
117.000	117.000	3	CCI OPA-65R-LCUU-H6
117.000	117.000	3	Flat T-Arm
117.000	117.000	3	Amphenol Antel BXA-171063-
109.000	109.000	3	CCI OPA-65R-LCUU-H6
109.000	109.000	3	Amphenol Antel BXA-171063-
97.000	97.000	3	RFS APXVAARR24_43-U-NA20
97.000	97.000	3	Ericsson RRUS 01 B2 w/ Solar S
97.000	97.000	3	Ericsson Radio 4449 B12,B71
97.000	97.000	3	Ericsson KRY 112 144/2
97.000	97.000	1	Side Arms
87.000	87.000	3	Ericsson AIR32 B66Aa/B2a
87.000	87.000	1	Side Arms
77.000	79.000	6	Amphenol Antel BXA-70063-
77.000	79.000	6	Amphenol Antel BXA-171063-
77.000	77.000	3	Alcatel-Lucent 9442 RRH 2x40 7
77.000	77.000	3	Flat Side Arm
77.000	77.000	3	Alcatel-Lucent 9442 RRH2x40-

Linear Appurtenance

Elev (ft) From	To	Description	Exposed To Wind
42.000	92.000	Flat Bar	Yes
0.000	97.000	1 1/4" Fiber	No
0.000	97.000	1 5/8" Fiber	No
0.000	117.0	0.38" Cable	No
0.000	117.0	0.39" Fiber Trunk	No
0.000	117.0	0.78" 8 AWG 6	No
0.000	117.0	1 5/8" Coax	No
0.000	117.0	3" Conduit	No
0.000	117.0	7/8" Fiber	No
0.000	77.000	1 5/8" Coax	No
0.000	87.000	1 5/8" Coax	No

Load Cases

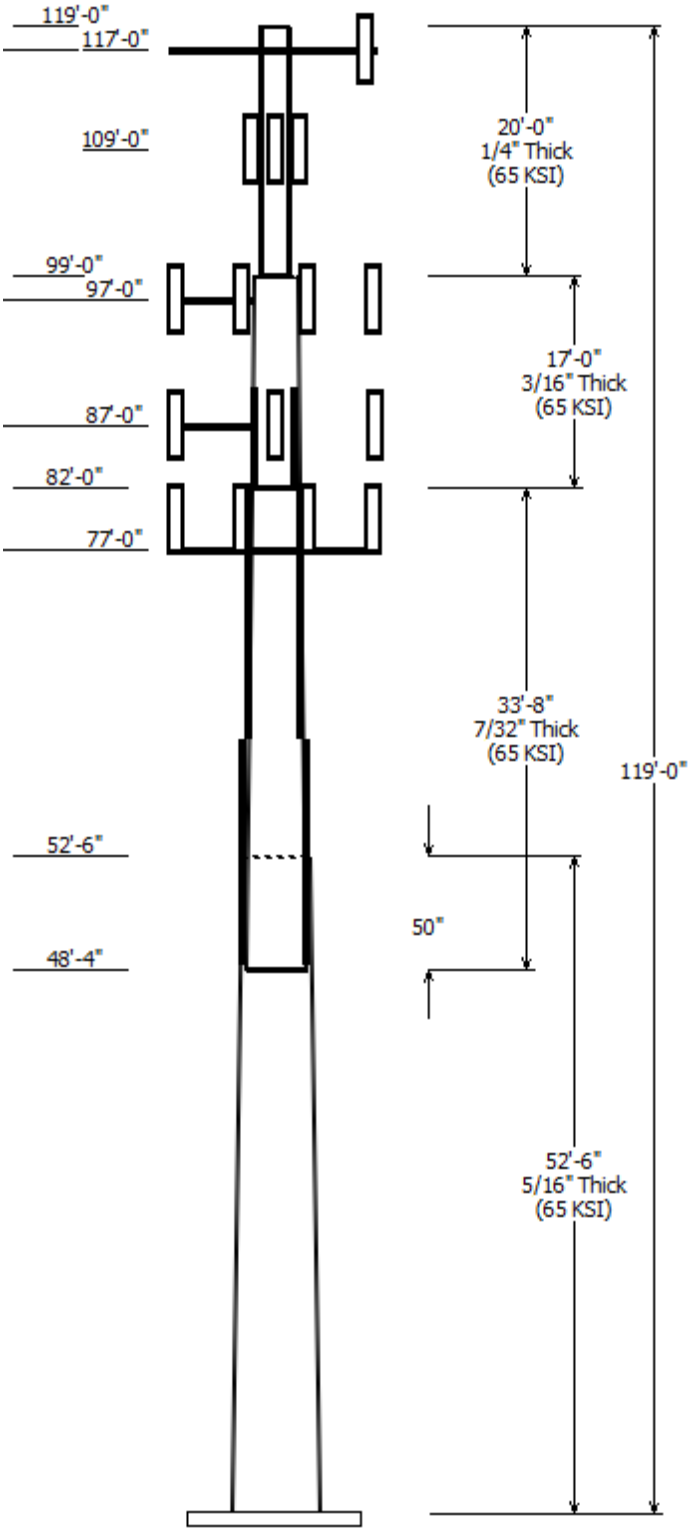
1.2D + 1.6W	97 mph with No Ice
0.9D + 1.6W	97 mph with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi	50 mph with 0.75 in Radial Ice
(1.2 + 0.2Sds) * DL + E	Seismic Equivalent Lateral Forces Method
(1.2 + 0.2Sds) * DL + E	Seismic Equivalent Modal Analysis Method
(0.9 - 0.2Sds) * DL + E	Seismic (Reduced DL) Equivalent Lateral
(0.9 - 0.2Sds) * DL + E	Seismic (Reduced DL) Equivalent Modal
1.0D + 1.0W	Serviceability 60 mph

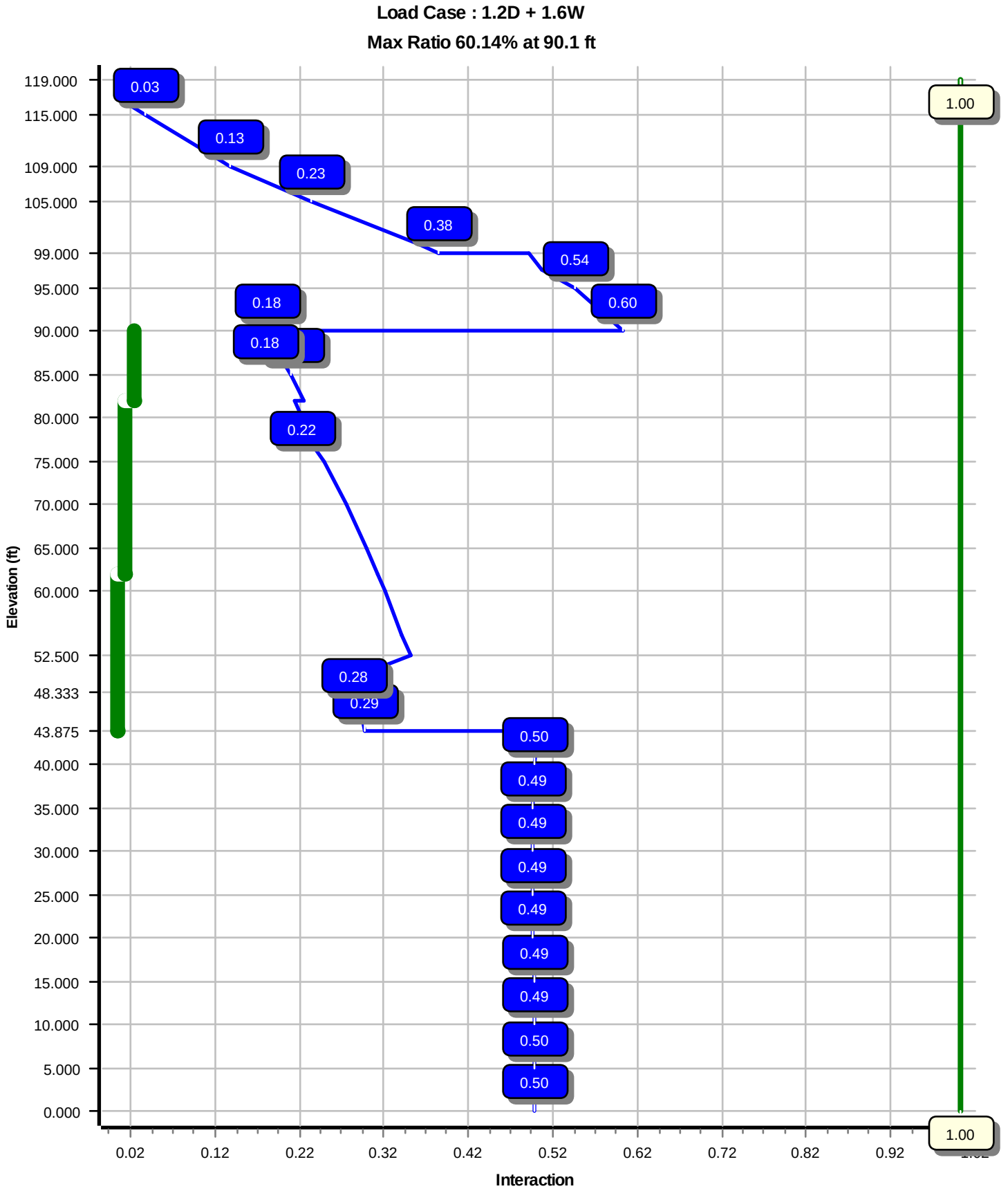
Reactions

Load Case	Moment (kip-ft)	Shear (kip)	Axial (kip)
1.2D + 1.6W	1173.76	13.84	25.80
0.9D + 1.6W	1159.66	13.81	19.34
1.2D + 1.0Di + 1.0Wi	316.80	3.79	40.07
(1.2 + 0.2Sds) * DL + E ELFM	89.15	0.99	25.61
(1.2 + 0.2Sds) * DL + E EMAM	101.45	1.10	25.61
(0.9 - 0.2Sds) * DL + E ELFM	88.01	0.99	17.65
(0.9 - 0.2Sds) * DL + E EMAM	99.99	1.10	17.65
1.0D + 1.0W	278.50	3.30	21.52

Dish Deflections

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




Load Case : 1.2D + 1.6W
Max Ratio 60.14% at 90.1 ft
119.000
115.000
109.000
105.000
99.000
95.000
90.000
85.000
80.000
75.000
70.000
65.000
60.000
52.500
48.333
43.875
40.000
35.000
30.000
25.000
20.000
15.000
10.000
5.000
0.000
Elevation (ft)
0.02
0.12
0.22
0.32
0.42
0.52
0.62
0.72
0.82
0.92
Interaction
0.03
0.13
0.23
0.38
0.54
0.60
0.18
0.18
0.22
0.28
0.29
0.50
0.49
0.49
0.49
0.49
0.49
0.50
0.50
1.00
1.00

Site Number:	283420	Code: ANSI/TIA-222-G	
Site Name:	STONEYBROOK RD CT, CT	Engineering Number:12598484_C3_01	8/27/2018 4:13:05 PM
Customer:	T-MOBILE		

Analysis Parameters

Location :	FAIRFIELD County, CT	Height (ft) :	119
Code :	ANSI/TIA-222-G	Base Diameter (in) :	42.00
Shape :	18 Sides	Top Diameter (in) :	12.56
Pole Type :	Custom	Taper (in/ft) :	0.300
Pole Manfacturer :	Valmont	Rotation (deg) :	0.00

Ice & Wind Parameters

Structure Class:	II	Design Wind Speed Without Ice:	97 mph
Exposure Category:	B	Design Wind Speed With Ice:	50 mph
Topographic Category:	1	Operational Wind Speed:	60 mph
Crest Height:	0 ft	Design Ice Thickness:	0.75 in

Seismic Parameters

Analysis Method:	Equivalent Modal Analysis & Equivalent Lateral Force Methods				
Site Class:	D - Stiff Soil				
Period Based on Rayleigh Method (sec):	1.94				
T_L (sec):	6	p:	1.3	C_s:	0.035
S_s:	0.203	S_1:	0.064	C_s Max:	0.035
F_a:	1.600	F_v:	2.400	C_s Min:	0.030
S_{ds}:	0.217	S_{d1}:	0.102		

Load Cases

1.2D + 1.6W	97 mph with No Ice
0.9D + 1.6W	97 mph with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi	50 mph with 0.75 in Radial Ice
(1.2 + 0.2Sds) * DL + E ELFM	Seismic Equivalent Lateral Forces Method
(1.2 + 0.2Sds) * DL + E EMAM	Seismic Equivalent Modal Analysis Method
(0.9 - 0.2Sds) * DL + E ELFM	Seismic (Reduced DL) Equivalent Lateral Forces Method
(0.9 - 0.2Sds) * DL + E EMAM	Seismic (Reduced DL) Equivalent Modal Analysis Method
1.0D + 1.0W	Serviceability 60 mph

Site Number: 283420 Code: ANSI/TIA-222-G

Site Name: STONEYBROOK RD CT, CT Engineering Number:12598484_C3_01 8/27/2018 4:13:05 PM

Customer: T-MOBILE

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 (in²)	Bottom Ix (in⁴)	Bottom W/t Ratio	Bottom D/t Ratio	Top Dia (in)	Top Elev (ft)	Top Area (in²)	Top Ix (in⁴)	Top W/t Ratio	Top D/t Ratio	Taper (in/ft)
1-18	52.500	0.3125	65		0.00	5,991	42.00	0.00	41.35	9078.5	21.94	134.40	26.25	52.50	25.73	2186.6	13.05	84.00	0.300000
2-18	33.667	0.2188	65	Slip	50.00	1,803	27.93	48.33	19.24	1868.2	20.76	127.71	17.83	82.00	12.23	479.8	12.61	81.54	0.300000
3-18	17.000	0.1875	65	Butt	0.00	520	17.83	82.00	10.50	413.4	15.01	95.13	12.73	99.00	7.47	148.6	10.22	67.93	0.300000
4-18	20.000	0.2500	65	Butt	0.00	665	12.56	99.00	9.77	187.1	7.10	50.25	12.56	119.00	9.77	187.1	7.10	50.25	0.000000
				Shaft Weight		8,979													

Discrete Appurtenance Properties

Attach Elev (ft)	Description	Qty	Distance From Face (ft)	Vert Ecc (ft)	Weight (lb)	No Ice EPAa (sf)	Orientation Factor
117.00	Amphenol Antel BXA-171063-	3	0.000	0.000	12.80	4.790	0.72
117.00	CCI OPA-65R-LCUU-H6	3	0.000	0.000	73.00	9.660	0.66
117.00	CCI TPX-070821	6	0.000	0.000	7.50	0.550	0.50
117.00	Ericsson RRUS 32 B2	3	0.000	0.000	53.00	2.740	0.67
117.00	Ericsson RRUS-11	3	0.000	0.000	55.00	3.790	0.67
117.00	Ericsson RRUS-32 B30 (77 lbs)	3	0.000	0.000	77.00	3.310	0.67
117.00	Flat T-Arm	3	0.000	0.000	250.00	12.900	0.67
117.00	Raycap DC6-48-60-18-8F(32.8 lb	2	0.000	0.000	32.80	1.280	1.00
109.00	Amphenol Antel BXA-171063-	3	0.000	0.000	12.80	4.790	0.72
109.00	CCI OPA-65R-LCUU-H6	3	0.000	0.000	73.00	9.660	0.66
97.00	Ericsson KRY 112 144/2	3	0.000	0.000	9.70	0.560	0.50
97.00	Ericsson Radio 4449 B12,B71	3	0.000	0.000	74.00	1.640	0.50
97.00	Ericsson RRUS 01 B2 w/ Solar S	3	0.000	0.000	44.00	3.150	0.67
97.00	RFS APXVAARR24_43-U-NA20	3	0.000	0.000	127.90	20.240	0.63
97.00	Side Arms	1	0.000	0.000	560.00	8.500	1.00
87.00	Ericsson AIR32 B66Aa/B2a	3	0.000	0.000	132.20	6.510	0.71
87.00	Side Arms	1	0.000	0.000	560.00	8.500	1.00
77.00	Alcatel-Lucent 9442 RRH 2x40 7	3	0.000	0.000	50.70	2.740	0.67
77.00	Alcatel-Lucent 9442 RRH2x40-	3	0.000	0.000	49.00	2.500	0.67
77.00	Amphenol Antel BXA-171063-	6	0.000	2.000	12.80	4.790	0.72
77.00	Amphenol Antel BXA-70063-6CF-	6	0.000	2.000	17.00	7.570	0.66
77.00	Flat Side Arm	3	0.000	0.000	150.00	6.300	0.67
Totals	Num Loadings:22	70			5141.70		

Linear Appurtenance Properties

Elev From (ft)	Elev To (ft)	Qty	Description	Coax Diameter (in)	Coax Weight (lb/ft)	Flat	Projected Width (in)	Exposed To Wind	Carrier
0.00	117.00	3	0.38" Cable	0.38	0.23	N	0.00	N	AT&T Mobility
0.00	117.00	1	0.39" Fiber Trunk	0.39	0.06	N	0.00	N	AT&T Mobility
0.00	117.00	2	0.78" 8 AWG 6	0.78	0.59	N	0.00	N	AT&T Mobility
0.00	117.00	12	1 5/8" Coax	1.98	0.82	N	0.00	N	AT&T Mobility
0.00	117.00	1	3" Conduit	3.50	7.58	N	0.00	N	AT&T Mobility
0.00	117.00	4	7/8" Fiber	0.88	0.70	N	0.00	N	AT&T Mobility
0.00	97.00	2	1 1/4" Fiber	1.25	1.05	N	0.00	N	T-Mobile
0.00	97.00	1	1 5/8" Fiber	1.63	1.61	N	0.00	N	T-Mobile
42.00	92.00	3	Flat Bar	1.00	0.00	Y	2.00	Y	--
0.00	87.00	12	1 5/8" Coax	1.98	0.82	N	0.00	N	T-Mobile
0.00	77.00	12	1 5/8" Coax	1.98	0.82	N	0.00	N	Verizon

Additional Steel

Elev From (ft)	Elev To (ft)	Qty	Description		Fy (ksi)	Offset (in)	Intermediate Connections: Description	Spacing (in)	Len (in)	Connectors	Continuation?
43.88	62.00	3	PL	PL 6" x 1"	65	0.00	5/8" Hollo Bolt	24.0	3.00	5/8" Hollo Bolt	No
62.00	82.00	3	PL	PL 6" x 1"	65	0.00	5/8" Hollo Bolt	24.0	3.00	5/8" Hollo Bolt	Yes
82.00	90.13	3	PL	PL 6" x 1"	65	0.00	5/8" Hollo Bolt	24.0	3.00	5/8" Hollo Bolt	Yes

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	F'y (ksi)	S (in^3)	Z (in^3)	Weight (lb)	Additional Reinforcing Area (in^2)	Additional Reinforcing Ix (in^4)	Additional Reinforcing Weight (lb)
0.00		0.3125	42.000	41.347	9,078.5	21.94	134.40	75.6	425.7	0.0	0.0			
5.00		0.3125	40.500	39.860	8,133.3	21.09	129.60	76.6	395.5	0.0	690.8			
10.00		0.3125	39.000	38.372	7,256.2	20.24	124.80	77.6	366.5	0.0	665.5			
15.00		0.3125	37.500	36.884	6,444.4	19.40	120.00	78.6	338.5	0.0	640.2			
20.00		0.3125	36.000	35.396	5,695.6	18.55	115.20	79.6	311.6	0.0	614.9			
25.00		0.3125	34.500	33.909	5,007.2	17.70	110.40	80.6	285.9	0.0	589.6			
30.00		0.3125	33.000	32.421	4,376.6	16.86	105.60	81.6	261.2	0.0	564.3			
35.00		0.3125	31.500	30.933	3,801.3	16.01	100.80	82.6	237.7	0.0	538.9			
40.00		0.3125	30.000	29.445	3,278.8	15.16	96.00	82.6	215.3	0.0	513.6			
43.88	Reinf Bottom	0.3125	28.838	28.292	2,908.5	14.51	92.28	82.6	198.7	0.0	380.7			
45.00		0.3125	28.500	27.957	2,806.5	14.32	91.20	82.6	194.0	0.0	107.7	18.00	1,985	68.9
48.33	Bot - Section 2	0.3125	27.500	26.966	2,518.3	13.75	88.00	82.6	180.4	0.0	311.5	18.00	1,855	204.2
50.00		0.3125	27.000	26.470	2,381.9	13.47	86.40	82.6	173.8	0.0	259.7	18.00	1,847	102.1
52.50	Top - Section 1	0.2188	26.688	18.377	1,626.6	19.75	122.00	78.2	120.1	0.0	380.6	18.00	1,752	153.1
55.00		0.2188	25.938	17.856	1,492.3	19.14	118.57	78.9	113.3	0.0	154.1	18.00	1,660	153.1
60.00		0.2188	24.438	16.815	1,246.1	17.93	111.71	80.3	100.4	0.0	294.9	18.00	1,483	306.3
62.00	Reinf. Top Reinf	0.2188	23.837	16.398	1,155.7	17.45	108.97	80.9	95.5	0.0	113.0	18.00	1,415	122.5
65.00		0.2188	22.938	15.773	1,028.6	16.73	104.86	81.7	88.3	0.0	164.2	18.00	1,317	183.8
70.00		0.2188	21.438	14.732	838.0	15.52	98.00	82.6	77.0	0.0	259.5	18.00	1,160	306.3
75.00		0.2188	19.938	13.690	672.6	14.31	91.14	82.6	66.4	0.0	241.8	18.00	1,014	306.3
77.00		0.2188	19.337	13.274	613.0	13.82	88.40	82.6	62.4	0.0	91.8	18.00	958.4	122.5
80.00		0.2188	18.438	12.649	530.5	13.10	84.29	82.6	56.7	0.0	132.3	18.00	877.9	183.8
82.00	Top - Section 2	0.2188	17.837	12.232	479.8	12.61	81.54	82.6	53.0	0.0	84.7	18.00	826.2	122.5
82.00	Bot - Section 3	0.1875	17.837	10.504	413.4	15.01	95.13	82.6	45.6	0.0		18.00	826.2	
85.00		0.1875	16.938	9.968	353.3	14.16	90.33	82.6	41.1	0.0	104.5	18.00	751.7	183.8
87.00		0.1875	16.337	9.611	316.7	13.60	87.13	82.6	38.2	0.0	66.6	18.00	704.1	122.5
90.00		0.1875	15.438	9.075	266.7	12.75	82.33	82.6	34.0	0.0	95.4	18.00	635.7	183.8
90.13	Reinf. Top	0.1875	15.400	9.053	264.7	12.72	82.13	82.6	33.9	0.0	3.9	18.00	633.0	7.7
95.00		0.1875	13.938	8.183	195.5	11.34	74.33	82.6	27.6	0.0	143.0			
97.00		0.1875	13.337	7.826	171.0	10.78	71.13	82.6	25.2	0.0	54.5			
99.00	Top - Section 3	0.1875	12.738	7.469	148.6	10.22	67.93	82.6	23.0	0.0	52.0			
99.00	Bot - Section 4	0.2500	12.563	9.770	187.1	7.10	50.25	82.6	29.3	0.0				
100.0		0.2500	12.563	9.770	187.1	7.10	50.25	82.6	29.3	0.0	33.2			
105.0		0.2500	12.563	9.770	187.1	7.10	50.25	82.6	29.3	0.0	166.2			
109.0		0.2500	12.563	9.770	187.1	7.10	50.25	82.6	29.3	0.0	133.0			
110.0		0.2500	12.563	9.770	187.1	7.10	50.25	82.6	29.3	0.0	33.2			
115.0		0.2500	12.563	9.770	187.1	7.10	50.25	82.6	29.3	0.0	166.2			
117.0		0.2500	12.563	9.770	187.1	7.10	50.25	82.6	29.3	0.0	66.5			
119.0		0.2500	12.563	9.770	187.1	7.10	50.25	82.6	29.3	0.0	66.5			
											8,978.9			2,832.9

Site Number: 283420 Code: ANSI/TIA-222-G

Site Name: STONEYBROOK RD CT, CT Engineering Number:12598484_C3_01 8/27/2018 4:13:06 PM

Customer: T-MOBILE

Load Case: 1.2D + 1.6W 97 mph with No Ice 25 Iterations

Gust Response Factor :1.10 Wind Importance Factor 1.00

Dead Load Factor :1.20

Wind Load Factor :1.60

Shaft Segment Forces (Factored)

Seg Top Elev (ft)	Description	Kzt	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		1.00	0.70	16.018	17.62	288.42	0.650		0.000	0.00	0.000	0.00	159.9	0.0	0.0
5.00		1.00	0.70	16.018	17.62	283.27	0.650		0.000	5.00	17.453	11.34	314.0	0.0	829.0
10.00		1.00	0.70	16.018	17.62	272.97	0.650		0.000	5.00	16.818	10.93	302.4	0.0	798.6
15.00		1.00	0.70	16.018	17.62	262.67	0.650		0.000	5.00	16.183	10.52	290.7	0.0	768.2
20.00		1.00	0.70	16.018	17.62	252.37	0.650		0.000	5.00	15.549	10.11	279.1	0.0	737.9
25.00		1.00	0.70	16.018	17.62	242.07	0.650		0.000	5.00	14.914	9.69	267.5	0.0	707.5
30.00		1.00	0.70	16.018	17.62	231.77	0.650		0.000	5.00	14.279	9.28	258.8	0.0	677.1
35.00		1.00	0.72	16.402	18.04	224.11	0.650		0.000	5.00	13.645	8.87	255.2	0.0	646.7
40.00		1.00	0.75	17.087	18.79	218.10	0.650		0.000	5.00	13.010	8.46	224.5	0.0	616.4
43.88	Reinf Bottom	1.00	0.77	17.642	19.40	212.02	0.650		0.000	3.88	9.646	6.27	125.3	0.0	456.8
45.00		1.00	0.78	17.936	19.72	208.33	0.650		0.000	1.13	2.729	1.77	110.2	0.0	129.2
48.33	Bot - Section 2	1.00	0.79	18.188	20.00	204.90	0.650		0.000	3.33	7.898	5.13	123.4	0.0	373.8
50.00		1.00	0.81	18.462	20.30	200.90	0.650		0.000	1.67	3.905	2.54	102.4	0.0	311.6
52.50	Top - Section 1	1.00	0.82	18.682	20.55	197.46	0.650		0.000	2.50	5.725	3.72	121.5	0.0	456.7
55.00		1.00	0.83	18.938	20.83	196.47	0.650		0.000	2.50	5.566	3.62	178.0	0.0	184.9
60.00		1.00	0.84	19.306	21.23	189.89	0.650		0.000	5.00	10.657	6.93	163.6	0.0	353.9
62.00	Reinf. Top Reinf	1.00	0.86	19.635	21.59	183.52	0.650		0.000	2.00	4.085	2.66	113.3	0.0	135.6
65.00		1.00	0.87	19.862	21.84	178.84	0.650		0.000	3.00	5.937	3.86	176.0	0.0	197.1
70.00		1.00	0.88	20.211	22.23	171.15	0.650		0.000	5.00	9.387	6.10	211.8	0.0	311.4
75.00		1.00	0.90	20.628	22.69	161.22	0.650		0.000	5.00	8.753	5.69	143.1	0.0	290.1
77.00	Appurtenance(s)	1.00	0.91	20.908	22.99	154.07	0.651	*	0.000	2.00	3.323	2.16	98.4	0.0	110.1
80.00		1.00	0.92	21.102	23.21	148.87	0.658	*	0.000	3.00	4.795	3.16	97.0	0.0	158.8
82.00	Top - Section 2 Reinf.	1.00	0.93	21.292	23.42	143.60	0.667	*	0.000	2.00	3.070	2.05	94.7	0.0	101.6
85.00		1.00	0.94	21.478	23.62	138.26	0.676	*	0.000	3.00	4.414	2.98	93.2	0.0	125.4
87.00	Appurtenance(s)	1.00	0.95	21.660	23.82	132.86	0.686	*	0.000	2.00	2.816	1.93	90.8	0.0	79.9
90.00		1.00	0.95	21.838	24.02	127.39	0.697	*	0.000	3.00	4.033	2.81	56.2	0.0	114.5
90.13	Reinf. Top	1.00	0.96	21.947	24.14	123.94	0.704	*	0.000	0.13	0.163	0.11	78.8	0.0	4.6
95.00		1.00	0.97	22.120	24.33	118.37	0.650		0.000	4.88	6.051	3.93	106.1	0.0	171.5
97.00	Appurtenance(s)	1.00	0.98	22.351	24.58	110.62	0.650		0.000	2.00	2.308	1.50	57.9	0.0	65.4
99.00	Top - Section 3	1.00	0.98	22.483	24.73	106.07	0.650		0.000	2.00	2.206	1.43	42.1	0.0	62.5
100.0		1.00	0.99	22.581	24.83	102.43	0.650		0.000	1.00	1.063	0.69	83.0	0.0	39.9
105.0		1.00	1.00	22.773	25.05	102.86	0.650		0.000	5.00	5.315	3.45	125.3	0.0	199.5
109.0	Appurtenance(s)	1.00	1.01	23.055	25.36	103.50	0.650		0.000	4.00	4.252	2.76	70.2	0.0	159.6
110.0		1.00	1.01	23.207	25.52	103.84	0.650		0.000	1.00	1.063	0.69	85.2	0.0	39.9
115.0		1.00	1.02	23.387	25.72	104.24	0.650		0.000	5.00	5.315	3.45	99.8	0.0	199.5
117.0	Appurtenance(s)	1.00	1.03	23.593	25.95	104.70	0.650		0.000	2.00	2.126	1.38	57.5	0.0	79.8
119.0		1.00	1.04	23.708	26.07	104.95	0.650		0.000	2.00	2.126	1.38	28.8	0.0	79.8
* = Cf Adjusted By Linear Load Ra Effect							Totals:		119.00				5,285.6	0.0	10,774.7

Site Number: 283420 Code: ANSI/TIA-222-G

Site Name: STONEYBROOK RD CT, CT Engineering Number:12598484_C3_01 8/27/2018 4:13:06 PM

Customer: T-MOBILE

Load Case: 1.2D + 1.6W 97 mph with No Ice 25 Iterations

Gust Response Factor :1.10 Wind Importance Factor 1.00

Dead Load Factor :1.20

Wind Load Factor :1.60

Discrete Appurtenance Segment Forces (Factored)

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orientation Factor	Ka	Total EPAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
77.00	Alcatel-Lucent 9442	3	20.986	23.085	0.67	0.80	4.02	0.000	0.000	148.48	0.00	0.00	176.40
77.00	Alcatel-Lucent 9442	3	20.986	23.085	0.67	0.80	4.41	0.000	0.000	162.74	0.00	0.00	182.52
77.00	Amphenol Antel BXA-1	6	21.141	23.255	0.72	0.80	16.55	0.000	2.000	615.94	0.00	1,231.88	92.16
77.00	Amphenol Antel BXA-7	6	21.141	23.255	0.66	0.80	23.98	0.000	2.000	892.30	0.00	1,784.60	122.40
77.00	Flat Side Arm	3	20.986	23.085	0.67	1.00	12.66	0.000	0.000	467.72	0.00	0.00	540.00
87.00	Ericsson AIR32 B66Aa	3	21.731	23.904	0.71	0.80	11.09	0.000	0.000	424.28	0.00	0.00	475.92
87.00	Side Arms	1	21.731	23.904	1.00	1.00	8.50	0.000	0.000	325.10	0.00	0.00	672.00
97.00	Ericsson KRY 112 144	3	22.417	24.659	0.50	0.80	0.67	0.000	0.000	26.51	0.00	0.00	34.92
97.00	Ericsson Radio 4449	3	22.417	24.659	0.50	0.80	1.97	0.000	0.000	77.65	0.00	0.00	266.40
97.00	Ericsson RRUS 01 B2	3	22.417	24.659	0.67	0.80	5.07	0.000	0.000	199.85	0.00	0.00	158.40
97.00	RFS APXVAARR24_43-	3	22.417	24.659	0.63	0.80	30.60	0.000	0.000	1,207.43	0.00	0.00	460.44
97.00	Side Arms	1	22.417	24.659	1.00	1.00	8.50	0.000	0.000	335.36	0.00	0.00	672.00
109.0	Amphenol Antel BXA-1	3	23.177	25.495	0.72	1.00	10.35	0.000	0.000	422.05	0.00	0.00	46.08
109.0	CCI OPA-65R-LCUU-H6	3	23.177	25.495	0.66	1.00	19.13	0.000	0.000	780.21	0.00	0.00	262.80
117.0	Amphenol Antel BXA-1	3	23.651	26.016	0.72	0.80	8.28	0.000	0.000	344.54	0.00	0.00	46.08
117.0	CCI OPA-65R-LCUU-H6	3	23.651	26.016	0.66	0.80	15.30	0.000	0.000	636.93	0.00	0.00	262.80
117.0	CCI TPX-070821	6	23.651	26.016	0.50	0.80	1.32	0.000	0.000	54.95	0.00	0.00	54.00
117.0	Ericsson RRUS 32 B2	3	23.651	26.016	0.67	0.80	4.41	0.000	0.000	183.40	0.00	0.00	190.80
117.0	Ericsson RRUS-11	3	23.651	26.016	0.67	0.80	6.09	0.000	0.000	253.68	0.00	0.00	198.00
117.0	Ericsson RRUS-32 B30	3	23.651	26.016	0.67	0.80	5.32	0.000	0.000	221.55	0.00	0.00	277.20
117.0	Flat T-Arm	3	23.651	26.016	0.67	0.75	19.45	0.000	0.000	809.48	0.00	0.00	900.00
117.0	Raycap DC6-48-60-18-	2	23.651	26.016	1.00	0.80	2.05	0.000	0.000	85.25	0.00	0.00	78.72
										8,675.39			6,170.04

Load Case: 1.2D + 1.6W 97 mph with No Ice 25 Iterations

Gust Response Factor :1.10 Wind Importance Factor 1.00
Dead Load Factor :1.20
Wind Load Factor :1.60

Linear Appurtenance Segment Forces (Factored)

Seg Top Elev (ft)	Description	Exposed To Wind	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	qz (psf)	Ra	Cf Adjust Factor	F X (lb)	Dead Load (lb)
5.00	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	4.14
5.00	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	0.36
5.00	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	7.08
5.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	59.04
5.00	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	45.48
5.00	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	16.80
5.00	(2) 1 1/4" Fiber	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	12.60
5.00	(1) 1 5/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	9.66
5.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	59.04
5.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	59.04
10.00	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	4.14
10.00	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	0.36
10.00	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	7.08
10.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	59.04
10.00	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	45.48
10.00	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	16.80
10.00	(2) 1 1/4" Fiber	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	12.60
10.00	(1) 1 5/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	9.66
10.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	59.04
10.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	59.04
15.00	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	4.14
15.00	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	0.36
15.00	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	7.08
15.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	59.04
15.00	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	45.48
15.00	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	16.80
15.00	(2) 1 1/4" Fiber	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	12.60
15.00	(1) 1 5/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	9.66
15.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	59.04
15.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	59.04
20.00	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	4.14
20.00	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	0.36
20.00	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	7.08
20.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	59.04
20.00	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	45.48
20.00	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	16.80
20.00	(2) 1 1/4" Fiber	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	12.60
20.00	(1) 1 5/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	9.66
20.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	59.04
20.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	59.04
25.00	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	4.14
25.00	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	0.36
25.00	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	7.08
25.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	59.04
25.00	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	45.48
25.00	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	16.80
25.00	(2) 1 1/4" Fiber	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	12.60
25.00	(1) 1 5/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	9.66
25.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	59.04
25.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	59.04
30.00	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	4.14

Load Case: 1.2D + 1.6W 97 mph with No Ice 25 Iterations

Gust Response Factor :1.10 Wind Importance Factor 1.00
Dead Load Factor :1.20
Wind Load Factor :1.60

30.00	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	0.36
30.00	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	7.08
30.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	59.04
30.00	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	45.48
30.00	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	16.80
30.00	(2) 1 1/4" Fiber	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	12.60
30.00	(1) 1 5/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	9.66
30.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	59.04
30.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	59.04
35.00	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	16.40	0.00	0.00	0.00	4.14
35.00	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	16.40	0.00	0.00	0.00	0.36
35.00	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	16.40	0.00	0.00	0.00	7.08
35.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	16.40	0.00	0.00	0.00	59.04
35.00	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	16.40	0.00	0.00	0.00	45.48
35.00	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	16.40	0.00	0.00	0.00	16.80
35.00	(2) 1 1/4" Fiber	No	5.00	0.00	0.00	0.00	0.00	16.40	0.00	0.00	0.00	12.60
35.00	(1) 1 5/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	16.40	0.00	0.00	0.00	9.66
35.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	16.40	0.00	0.00	0.00	59.04
35.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	16.40	0.00	0.00	0.00	59.04
40.00	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	17.09	0.00	0.00	0.00	4.14
40.00	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	17.09	0.00	0.00	0.00	0.36
40.00	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	17.09	0.00	0.00	0.00	7.08
40.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	17.09	0.00	0.00	0.00	59.04
40.00	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	17.09	0.00	0.00	0.00	45.48
40.00	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	17.09	0.00	0.00	0.00	16.80
40.00	(2) 1 1/4" Fiber	No	5.00	0.00	0.00	0.00	0.00	17.09	0.00	0.00	0.00	12.60
40.00	(1) 1 5/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	17.09	0.00	0.00	0.00	9.66
40.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	17.09	0.00	0.00	0.00	59.04
40.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	17.09	0.00	0.00	0.00	59.04
43.88	(3) 0.38" Cable	No	3.88	0.00	0.00	0.00	0.00	17.64	0.03	0.00	0.00	3.21
43.88	(1) 0.39" Fiber Trunk	No	3.88	0.00	0.00	0.00	0.00	17.64	0.03	0.00	0.00	0.28
43.88	(2) 0.78" 8 AWG 6	No	3.88	0.00	0.00	0.00	0.00	17.64	0.03	0.00	0.00	5.49
43.88	(12) 1 5/8" Coax	No	3.88	0.00	0.00	0.00	0.00	17.64	0.03	0.00	0.00	45.76
43.88	(1) 3" Conduit	No	3.88	0.00	0.00	0.00	0.00	17.64	0.03	0.00	0.00	35.25
43.88	(4) 7/8" Fiber	No	3.88	0.00	0.00	0.00	0.00	17.64	0.03	0.00	0.00	13.02
43.88	(2) 1 1/4" Fiber	No	3.88	0.00	0.00	0.00	0.00	17.64	0.03	0.00	0.00	9.77
43.88	(1) 1 5/8" Fiber	No	3.88	0.00	0.00	0.00	0.00	17.64	0.03	0.00	0.00	7.49
43.88	(3) Flat Bar	Yes	1.88	0.00	2.00	0.31	0.00	17.64	0.03	0.00	0.00	0.00
43.88	(12) 1 5/8" Coax	No	3.88	0.00	0.00	0.00	0.00	17.64	0.03	0.00	0.00	45.76
43.88	(12) 1 5/8" Coax	No	3.88	0.00	0.00	0.00	0.00	17.64	0.03	0.00	0.00	45.76
45.00	(3) 0.38" Cable	No	1.13	0.00	0.00	0.00	0.00	17.94	0.07	0.00	0.00	0.93
45.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	82.69
45.00	(1) 0.39" Fiber Trunk	No	1.13	0.00	0.00	0.00	0.00	17.94	0.07	0.00	0.00	0.08
45.00	(2) 0.78" 8 AWG 6	No	1.13	0.00	0.00	0.00	0.00	17.94	0.07	0.00	0.00	1.59
45.00	(12) 1 5/8" Coax	No	1.13	0.00	0.00	0.00	0.00	17.94	0.07	0.00	0.00	13.28
45.00	(1) 3" Conduit	No	1.13	0.00	0.00	0.00	0.00	17.94	0.07	0.00	0.00	10.23
45.00	(4) 7/8" Fiber	No	1.13	0.00	0.00	0.00	0.00	17.94	0.07	0.00	0.00	3.78
45.00	(2) 1 1/4" Fiber	No	1.13	0.00	0.00	0.00	0.00	17.94	0.07	0.00	0.00	2.84
45.00	(1) 1 5/8" Fiber	No	1.13	0.00	0.00	0.00	0.00	17.94	0.07	0.00	0.00	2.17
45.00	(3) Flat Bar	Yes	1.13	0.00	2.00	0.19	0.00	17.94	0.07	0.00	0.00	0.00
45.00	(12) 1 5/8" Coax	No	1.13	0.00	0.00	0.00	0.00	17.94	0.07	0.00	0.00	13.28
45.00	(12) 1 5/8" Coax	No	1.13	0.00	0.00	0.00	0.00	17.94	0.07	0.00	0.00	13.28
48.33	(3) 0.38" Cable	No	3.33	0.00	0.00	0.00	0.00	18.19	0.07	0.00	0.00	2.76
48.33	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	245.00
48.33	(1) 0.39" Fiber Trunk	No	3.33	0.00	0.00	0.00	0.00	18.19	0.07	0.00	0.00	0.24
48.33	(2) 0.78" 8 AWG 6	No	3.33	0.00	0.00	0.00	0.00	18.19	0.07	0.00	0.00	4.72
48.33	(12) 1 5/8" Coax	No	3.33	0.00	0.00	0.00	0.00	18.19	0.07	0.00	0.00	39.36

Load Case: 1.2D + 1.6W 97 mph with No Ice 25 Iterations

Gust Response Factor :1.10 Wind Importance Factor 1.00
Dead Load Factor :1.20
Wind Load Factor :1.60

48.33	(1) 3" Conduit	No	3.33	0.00	0.00	0.00	0.00	18.19	0.07	0.00	0.00	30.32
48.33	(4) 7/8" Fiber	No	3.33	0.00	0.00	0.00	0.00	18.19	0.07	0.00	0.00	11.20
48.33	(2) 1 1/4" Fiber	No	3.33	0.00	0.00	0.00	0.00	18.19	0.07	0.00	0.00	8.40
48.33	(1) 1 5/8" Fiber	No	3.33	0.00	0.00	0.00	0.00	18.19	0.07	0.00	0.00	6.44
48.33	(3) Flat Bar	Yes	3.33	0.00	2.00	0.56	0.00	18.19	0.07	0.00	0.00	0.00
48.33	(12) 1 5/8" Coax	No	3.33	0.00	0.00	0.00	0.00	18.19	0.07	0.00	0.00	39.36
48.33	(12) 1 5/8" Coax	No	3.33	0.00	0.00	0.00	0.00	18.19	0.07	0.00	0.00	39.36
50.00	(3) 0.38" Cable	No	1.67	0.00	0.00	0.00	0.00	18.46	0.07	0.00	0.00	1.38
50.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	122.50
50.00	(1) 0.39" Fiber Trunk	No	1.67	0.00	0.00	0.00	0.00	18.46	0.07	0.00	0.00	0.12
50.00	(2) 0.78" 8 AWG 6	No	1.67	0.00	0.00	0.00	0.00	18.46	0.07	0.00	0.00	2.36
50.00	(12) 1 5/8" Coax	No	1.67	0.00	0.00	0.00	0.00	18.46	0.07	0.00	0.00	19.68
50.00	(1) 3" Conduit	No	1.67	0.00	0.00	0.00	0.00	18.46	0.07	0.00	0.00	15.16
50.00	(4) 7/8" Fiber	No	1.67	0.00	0.00	0.00	0.00	18.46	0.07	0.00	0.00	5.60
50.00	(2) 1 1/4" Fiber	No	1.67	0.00	0.00	0.00	0.00	18.46	0.07	0.00	0.00	4.20
50.00	(1) 1 5/8" Fiber	No	1.67	0.00	0.00	0.00	0.00	18.46	0.07	0.00	0.00	3.22
50.00	(3) Flat Bar	Yes	1.67	0.00	2.00	0.28	0.00	18.46	0.07	0.00	0.00	0.00
50.00	(12) 1 5/8" Coax	No	1.67	0.00	0.00	0.00	0.00	18.46	0.07	0.00	0.00	19.68
50.00	(12) 1 5/8" Coax	No	1.67	0.00	0.00	0.00	0.00	18.46	0.07	0.00	0.00	19.68
52.50	(3) 0.38" Cable	No	2.50	0.00	0.00	0.00	0.00	18.68	0.07	0.00	0.00	2.07
52.50	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	183.75
52.50	(1) 0.39" Fiber Trunk	No	2.50	0.00	0.00	0.00	0.00	18.68	0.07	0.00	0.00	0.18
52.50	(2) 0.78" 8 AWG 6	No	2.50	0.00	0.00	0.00	0.00	18.68	0.07	0.00	0.00	3.54
52.50	(12) 1 5/8" Coax	No	2.50	0.00	0.00	0.00	0.00	18.68	0.07	0.00	0.00	29.52
52.50	(1) 3" Conduit	No	2.50	0.00	0.00	0.00	0.00	18.68	0.07	0.00	0.00	22.74
52.50	(4) 7/8" Fiber	No	2.50	0.00	0.00	0.00	0.00	18.68	0.07	0.00	0.00	8.40
52.50	(2) 1 1/4" Fiber	No	2.50	0.00	0.00	0.00	0.00	18.68	0.07	0.00	0.00	6.30
52.50	(1) 1 5/8" Fiber	No	2.50	0.00	0.00	0.00	0.00	18.68	0.07	0.00	0.00	4.83
52.50	(3) Flat Bar	Yes	2.50	0.00	2.00	0.42	0.00	18.68	0.07	0.00	0.00	0.00
52.50	(12) 1 5/8" Coax	No	2.50	0.00	0.00	0.00	0.00	18.68	0.07	0.00	0.00	29.52
52.50	(12) 1 5/8" Coax	No	2.50	0.00	0.00	0.00	0.00	18.68	0.07	0.00	0.00	29.52
55.00	(3) 0.38" Cable	No	2.50	0.00	0.00	0.00	0.00	18.94	0.07	0.00	0.00	2.07
55.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	183.75
55.00	(1) 0.39" Fiber Trunk	No	2.50	0.00	0.00	0.00	0.00	18.94	0.07	0.00	0.00	0.18
55.00	(2) 0.78" 8 AWG 6	No	2.50	0.00	0.00	0.00	0.00	18.94	0.07	0.00	0.00	3.54
55.00	(12) 1 5/8" Coax	No	2.50	0.00	0.00	0.00	0.00	18.94	0.07	0.00	0.00	29.52
55.00	(1) 3" Conduit	No	2.50	0.00	0.00	0.00	0.00	18.94	0.07	0.00	0.00	22.74
55.00	(4) 7/8" Fiber	No	2.50	0.00	0.00	0.00	0.00	18.94	0.07	0.00	0.00	8.40
55.00	(2) 1 1/4" Fiber	No	2.50	0.00	0.00	0.00	0.00	18.94	0.07	0.00	0.00	6.30
55.00	(1) 1 5/8" Fiber	No	2.50	0.00	0.00	0.00	0.00	18.94	0.07	0.00	0.00	4.83
55.00	(3) Flat Bar	Yes	2.50	0.00	2.00	0.42	0.00	18.94	0.07	0.00	0.00	0.00
55.00	(12) 1 5/8" Coax	No	2.50	0.00	0.00	0.00	0.00	18.94	0.07	0.00	0.00	29.52
55.00	(12) 1 5/8" Coax	No	2.50	0.00	0.00	0.00	0.00	18.94	0.07	0.00	0.00	29.52
60.00	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	19.31	0.08	0.00	0.00	4.14
60.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	367.51
60.00	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	19.31	0.08	0.00	0.00	0.36
60.00	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	19.31	0.08	0.00	0.00	7.08
60.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	19.31	0.08	0.00	0.00	59.04
60.00	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	19.31	0.08	0.00	0.00	45.48
60.00	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	19.31	0.08	0.00	0.00	16.80
60.00	(2) 1 1/4" Fiber	No	5.00	0.00	0.00	0.00	0.00	19.31	0.08	0.00	0.00	12.60
60.00	(1) 1 5/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	19.31	0.08	0.00	0.00	9.66
60.00	(3) Flat Bar	Yes	5.00	0.00	2.00	0.83	0.00	19.31	0.08	0.00	0.00	0.00
60.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	19.31	0.08	0.00	0.00	59.04
60.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	19.31	0.08	0.00	0.00	59.04
62.00	(3) 0.38" Cable	No	2.00	0.00	0.00	0.00	0.00	19.64	0.08	0.00	0.00	1.66
62.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	147.00

Load Case: 1.2D + 1.6W 97 mph with No Ice 25 Iterations

Gust Response Factor :1.10 Wind Importance Factor 1.00
Dead Load Factor :1.20
Wind Load Factor :1.60

62.00	(1) 0.39" Fiber Trunk	No	2.00	0.00	0.00	0.00	0.00	19.64	0.08	0.00	0.00	0.14
62.00	(2) 0.78" 8 AWG 6	No	2.00	0.00	0.00	0.00	0.00	19.64	0.08	0.00	0.00	2.83
62.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	19.64	0.08	0.00	0.00	23.62
62.00	(1) 3" Conduit	No	2.00	0.00	0.00	0.00	0.00	19.64	0.08	0.00	0.00	18.19
62.00	(4) 7/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	19.64	0.08	0.00	0.00	6.72
62.00	(2) 1 1/4" Fiber	No	2.00	0.00	0.00	0.00	0.00	19.64	0.08	0.00	0.00	5.04
62.00	(1) 1 5/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	19.64	0.08	0.00	0.00	3.86
62.00	(3) Flat Bar	Yes	2.00	0.00	2.00	0.33	0.00	19.64	0.08	0.00	0.00	0.00
62.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	19.64	0.08	0.00	0.00	23.62
62.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	19.64	0.08	0.00	0.00	23.62
65.00	(3) 0.38" Cable	No	3.00	0.00	0.00	0.00	0.00	19.86	0.08	0.00	0.00	2.48
65.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	220.50
65.00	(1) 0.39" Fiber Trunk	No	3.00	0.00	0.00	0.00	0.00	19.86	0.08	0.00	0.00	0.22
65.00	(2) 0.78" 8 AWG 6	No	3.00	0.00	0.00	0.00	0.00	19.86	0.08	0.00	0.00	4.25
65.00	(12) 1 5/8" Coax	No	3.00	0.00	0.00	0.00	0.00	19.86	0.08	0.00	0.00	35.42
65.00	(1) 3" Conduit	No	3.00	0.00	0.00	0.00	0.00	19.86	0.08	0.00	0.00	27.29
65.00	(4) 7/8" Fiber	No	3.00	0.00	0.00	0.00	0.00	19.86	0.08	0.00	0.00	10.08
65.00	(2) 1 1/4" Fiber	No	3.00	0.00	0.00	0.00	0.00	19.86	0.08	0.00	0.00	7.56
65.00	(1) 1 5/8" Fiber	No	3.00	0.00	0.00	0.00	0.00	19.86	0.08	0.00	0.00	5.80
65.00	(3) Flat Bar	Yes	3.00	0.00	2.00	0.50	0.00	19.86	0.08	0.00	0.00	0.00
65.00	(12) 1 5/8" Coax	No	3.00	0.00	0.00	0.00	0.00	19.86	0.08	0.00	0.00	35.42
65.00	(12) 1 5/8" Coax	No	3.00	0.00	0.00	0.00	0.00	19.86	0.08	0.00	0.00	35.42
70.00	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	20.21	0.09	0.00	0.00	4.14
70.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	367.51
70.00	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	20.21	0.09	0.00	0.00	0.36
70.00	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	20.21	0.09	0.00	0.00	7.08
70.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	20.21	0.09	0.00	0.00	59.04
70.00	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	20.21	0.09	0.00	0.00	45.48
70.00	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	20.21	0.09	0.00	0.00	16.80
70.00	(2) 1 1/4" Fiber	No	5.00	0.00	0.00	0.00	0.00	20.21	0.09	0.00	0.00	12.60
70.00	(1) 1 5/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	20.21	0.09	0.00	0.00	9.66
70.00	(3) Flat Bar	Yes	5.00	0.00	2.00	0.83	0.00	20.21	0.09	0.00	0.00	0.00
70.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	20.21	0.09	0.00	0.00	59.04
70.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	20.21	0.09	0.00	0.00	59.04
75.00	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	20.63	0.10	0.00	0.00	4.14
75.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	367.51
75.00	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	20.63	0.10	0.00	0.00	0.36
75.00	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	20.63	0.10	0.00	0.00	7.08
75.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	20.63	0.10	0.00	0.00	59.04
75.00	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	20.63	0.10	0.00	0.00	45.48
75.00	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	20.63	0.10	0.00	0.00	16.80
75.00	(2) 1 1/4" Fiber	No	5.00	0.00	0.00	0.00	0.00	20.63	0.10	0.00	0.00	12.60
75.00	(1) 1 5/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	20.63	0.10	0.00	0.00	9.66
75.00	(3) Flat Bar	Yes	5.00	0.00	2.00	0.83	0.00	20.63	0.10	0.00	0.00	0.00
75.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	20.63	0.10	0.00	0.00	59.04
75.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	20.63	0.10	0.00	0.00	59.04
77.00	(3) 0.38" Cable	No	2.00	0.00	0.00	0.00	0.00	20.91	0.10	1.00	0.00	1.66
77.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	147.00
77.00	(1) 0.39" Fiber Trunk	No	2.00	0.00	0.00	0.00	0.00	20.91	0.10	1.00	0.00	0.14
77.00	(2) 0.78" 8 AWG 6	No	2.00	0.00	0.00	0.00	0.00	20.91	0.10	1.00	0.00	2.83
77.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	20.91	0.10	1.00	0.00	23.62
77.00	(1) 3" Conduit	No	2.00	0.00	0.00	0.00	0.00	20.91	0.10	1.00	0.00	18.19
77.00	(4) 7/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	20.91	0.10	1.00	0.00	6.72
77.00	(2) 1 1/4" Fiber	No	2.00	0.00	0.00	0.00	0.00	20.91	0.10	1.00	0.00	5.04
77.00	(1) 1 5/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	20.91	0.10	1.00	0.00	3.86
77.00	(3) Flat Bar	Yes	2.00	0.00	2.00	0.33	0.00	20.91	0.10	1.00	0.00	0.00
77.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	20.91	0.10	1.00	0.00	23.62

Load Case: 1.2D + 1.6W 97 mph with No Ice 25 Iterations

Gust Response Factor :1.10 Wind Importance Factor 1.00
Dead Load Factor :1.20
Wind Load Factor :1.60

77.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	20.91	0.10	1.00	0.00	23.62
80.00	(3) 0.38" Cable	No	3.00	0.00	0.00	0.00	0.00	21.10	0.10	1.01	0.00	2.48
80.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	220.50
80.00	(1) 0.39" Fiber Trunk	No	3.00	0.00	0.00	0.00	0.00	21.10	0.10	1.01	0.00	0.22
80.00	(2) 0.78" 8 AWG 6	No	3.00	0.00	0.00	0.00	0.00	21.10	0.10	1.01	0.00	4.25
80.00	(12) 1 5/8" Coax	No	3.00	0.00	0.00	0.00	0.00	21.10	0.10	1.01	0.00	35.42
80.00	(1) 3" Conduit	No	3.00	0.00	0.00	0.00	0.00	21.10	0.10	1.01	0.00	27.29
80.00	(4) 7/8" Fiber	No	3.00	0.00	0.00	0.00	0.00	21.10	0.10	1.01	0.00	10.08
80.00	(2) 1 1/4" Fiber	No	3.00	0.00	0.00	0.00	0.00	21.10	0.10	1.01	0.00	7.56
80.00	(1) 1 5/8" Fiber	No	3.00	0.00	0.00	0.00	0.00	21.10	0.10	1.01	0.00	5.80
80.00	(3) Flat Bar	Yes	3.00	0.00	2.00	0.50	0.00	21.10	0.10	1.01	0.00	0.00
80.00	(12) 1 5/8" Coax	No	3.00	0.00	0.00	0.00	0.00	21.10	0.10	1.01	0.00	35.42
82.00	(3) 0.38" Cable	No	2.00	0.00	0.00	0.00	0.00	21.29	0.11	1.03	0.00	1.66
82.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	147.00
82.00	(1) 0.39" Fiber Trunk	No	2.00	0.00	0.00	0.00	0.00	21.29	0.11	1.03	0.00	0.14
82.00	(2) 0.78" 8 AWG 6	No	2.00	0.00	0.00	0.00	0.00	21.29	0.11	1.03	0.00	2.83
82.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	21.29	0.11	1.03	0.00	23.62
82.00	(1) 3" Conduit	No	2.00	0.00	0.00	0.00	0.00	21.29	0.11	1.03	0.00	18.19
82.00	(4) 7/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	21.29	0.11	1.03	0.00	6.72
82.00	(2) 1 1/4" Fiber	No	2.00	0.00	0.00	0.00	0.00	21.29	0.11	1.03	0.00	5.04
82.00	(1) 1 5/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	21.29	0.11	1.03	0.00	3.86
82.00	(3) Flat Bar	Yes	2.00	0.00	2.00	0.33	0.00	21.29	0.11	1.03	0.00	0.00
82.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	21.29	0.11	1.03	0.00	23.62
85.00	(3) 0.38" Cable	No	3.00	0.00	0.00	0.00	0.00	21.48	0.11	1.04	0.00	2.48
85.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	220.50
85.00	(1) 0.39" Fiber Trunk	No	3.00	0.00	0.00	0.00	0.00	21.48	0.11	1.04	0.00	0.22
85.00	(2) 0.78" 8 AWG 6	No	3.00	0.00	0.00	0.00	0.00	21.48	0.11	1.04	0.00	4.25
85.00	(12) 1 5/8" Coax	No	3.00	0.00	0.00	0.00	0.00	21.48	0.11	1.04	0.00	35.42
85.00	(1) 3" Conduit	No	3.00	0.00	0.00	0.00	0.00	21.48	0.11	1.04	0.00	27.29
85.00	(4) 7/8" Fiber	No	3.00	0.00	0.00	0.00	0.00	21.48	0.11	1.04	0.00	10.08
85.00	(2) 1 1/4" Fiber	No	3.00	0.00	0.00	0.00	0.00	21.48	0.11	1.04	0.00	7.56
85.00	(1) 1 5/8" Fiber	No	3.00	0.00	0.00	0.00	0.00	21.48	0.11	1.04	0.00	5.80
85.00	(3) Flat Bar	Yes	3.00	0.00	2.00	0.50	0.00	21.48	0.11	1.04	0.00	0.00
85.00	(12) 1 5/8" Coax	No	3.00	0.00	0.00	0.00	0.00	21.48	0.11	1.04	0.00	35.42
87.00	(3) 0.38" Cable	No	2.00	0.00	0.00	0.00	0.00	21.66	0.12	1.06	0.00	1.66
87.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	147.00
87.00	(1) 0.39" Fiber Trunk	No	2.00	0.00	0.00	0.00	0.00	21.66	0.12	1.06	0.00	0.14
87.00	(2) 0.78" 8 AWG 6	No	2.00	0.00	0.00	0.00	0.00	21.66	0.12	1.06	0.00	2.83
87.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	21.66	0.12	1.06	0.00	23.62
87.00	(1) 3" Conduit	No	2.00	0.00	0.00	0.00	0.00	21.66	0.12	1.06	0.00	18.19
87.00	(4) 7/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	21.66	0.12	1.06	0.00	6.72
87.00	(2) 1 1/4" Fiber	No	2.00	0.00	0.00	0.00	0.00	21.66	0.12	1.06	0.00	5.04
87.00	(1) 1 5/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	21.66	0.12	1.06	0.00	3.86
87.00	(3) Flat Bar	Yes	2.00	0.00	2.00	0.33	0.00	21.66	0.12	1.06	0.00	0.00
87.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	21.66	0.12	1.06	0.00	23.62
90.00	(3) 0.38" Cable	No	3.00	0.00	0.00	0.00	0.00	21.84	0.12	1.07	0.00	2.48
90.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	220.50
90.00	(1) 0.39" Fiber Trunk	No	3.00	0.00	0.00	0.00	0.00	21.84	0.12	1.07	0.00	0.22
90.00	(2) 0.78" 8 AWG 6	No	3.00	0.00	0.00	0.00	0.00	21.84	0.12	1.07	0.00	4.25
90.00	(12) 1 5/8" Coax	No	3.00	0.00	0.00	0.00	0.00	21.84	0.12	1.07	0.00	35.42
90.00	(1) 3" Conduit	No	3.00	0.00	0.00	0.00	0.00	21.84	0.12	1.07	0.00	27.29
90.00	(4) 7/8" Fiber	No	3.00	0.00	0.00	0.00	0.00	21.84	0.12	1.07	0.00	10.08
90.00	(2) 1 1/4" Fiber	No	3.00	0.00	0.00	0.00	0.00	21.84	0.12	1.07	0.00	7.56
90.00	(1) 1 5/8" Fiber	No	3.00	0.00	0.00	0.00	0.00	21.84	0.12	1.07	0.00	5.80
90.00	(3) Flat Bar	Yes	3.00	0.00	2.00	0.50	0.00	21.84	0.12	1.07	0.00	0.00
90.13	(3) 0.38" Cable	No	0.13	0.00	0.00	0.00	0.00	21.95	0.13	1.08	0.00	0.10
90.13	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.19

Load Case: 1.2D + 1.6W 97 mph with No Ice 25 Iterations

Gust Response Factor :1.10 Wind Importance Factor 1.00
Dead Load Factor :1.20
Wind Load Factor :1.60

90.13	(1) 0.39" Fiber Trunk	No	0.13	0.00	0.00	0.00	0.00	21.95	0.13	1.08	0.00	0.01
90.13	(2) 0.78" 8 AWG 6	No	0.13	0.00	0.00	0.00	0.00	21.95	0.13	1.08	0.00	0.18
90.13	(12) 1 5/8" Coax	No	0.13	0.00	0.00	0.00	0.00	21.95	0.13	1.08	0.00	1.48
90.13	(1) 3" Conduit	No	0.13	0.00	0.00	0.00	0.00	21.95	0.13	1.08	0.00	1.14
90.13	(4) 7/8" Fiber	No	0.13	0.00	0.00	0.00	0.00	21.95	0.13	1.08	0.00	0.42
90.13	(2) 1 1/4" Fiber	No	0.13	0.00	0.00	0.00	0.00	21.95	0.13	1.08	0.00	0.31
90.13	(1) 1 5/8" Fiber	No	0.13	0.00	0.00	0.00	0.00	21.95	0.13	1.08	0.00	0.24
90.13	(3) Flat Bar	Yes	0.13	0.00	2.00	0.02	0.00	21.95	0.13	1.08	0.00	0.00
95.00	(3) 0.38" Cable	No	4.88	0.00	0.00	0.00	0.00	22.12	0.05	0.00	0.00	4.04
95.00	(1) 0.39" Fiber Trunk	No	4.88	0.00	0.00	0.00	0.00	22.12	0.05	0.00	0.00	0.35
95.00	(2) 0.78" 8 AWG 6	No	4.88	0.00	0.00	0.00	0.00	22.12	0.05	0.00	0.00	6.90
95.00	(12) 1 5/8" Coax	No	4.88	0.00	0.00	0.00	0.00	22.12	0.05	0.00	0.00	57.56
95.00	(1) 3" Conduit	No	4.88	0.00	0.00	0.00	0.00	22.12	0.05	0.00	0.00	44.34
95.00	(4) 7/8" Fiber	No	4.88	0.00	0.00	0.00	0.00	22.12	0.05	0.00	0.00	16.38
95.00	(2) 1 1/4" Fiber	No	4.88	0.00	0.00	0.00	0.00	22.12	0.05	0.00	0.00	12.28
95.00	(1) 1 5/8" Fiber	No	4.88	0.00	0.00	0.00	0.00	22.12	0.05	0.00	0.00	9.42
95.00	(3) Flat Bar	Yes	1.88	0.00	2.00	0.31	0.00	22.12	0.05	0.00	0.00	0.00
97.00	(3) 0.38" Cable	No	2.00	0.00	0.00	0.00	0.00	22.35	0.00	0.00	0.00	1.66
97.00	(1) 0.39" Fiber Trunk	No	2.00	0.00	0.00	0.00	0.00	22.35	0.00	0.00	0.00	0.14
97.00	(2) 0.78" 8 AWG 6	No	2.00	0.00	0.00	0.00	0.00	22.35	0.00	0.00	0.00	2.83
97.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	22.35	0.00	0.00	0.00	23.62
97.00	(1) 3" Conduit	No	2.00	0.00	0.00	0.00	0.00	22.35	0.00	0.00	0.00	18.19
97.00	(4) 7/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	22.35	0.00	0.00	0.00	6.72
97.00	(2) 1 1/4" Fiber	No	2.00	0.00	0.00	0.00	0.00	22.35	0.00	0.00	0.00	5.04
97.00	(1) 1 5/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	22.35	0.00	0.00	0.00	3.86
99.00	(3) 0.38" Cable	No	2.00	0.00	0.00	0.00	0.00	22.48	0.00	0.00	0.00	1.66
99.00	(1) 0.39" Fiber Trunk	No	2.00	0.00	0.00	0.00	0.00	22.48	0.00	0.00	0.00	0.14
99.00	(2) 0.78" 8 AWG 6	No	2.00	0.00	0.00	0.00	0.00	22.48	0.00	0.00	0.00	2.83
99.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	22.48	0.00	0.00	0.00	23.62
99.00	(1) 3" Conduit	No	2.00	0.00	0.00	0.00	0.00	22.48	0.00	0.00	0.00	18.19
99.00	(4) 7/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	22.48	0.00	0.00	0.00	6.72
100.0	(3) 0.38" Cable	No	1.00	0.00	0.00	0.00	0.00	22.58	0.00	0.00	0.00	0.83
100.0	(1) 0.39" Fiber Trunk	No	1.00	0.00	0.00	0.00	0.00	22.58	0.00	0.00	0.00	0.07
100.0	(2) 0.78" 8 AWG 6	No	1.00	0.00	0.00	0.00	0.00	22.58	0.00	0.00	0.00	1.42
100.0	(12) 1 5/8" Coax	No	1.00	0.00	0.00	0.00	0.00	22.58	0.00	0.00	0.00	11.81
100.0	(1) 3" Conduit	No	1.00	0.00	0.00	0.00	0.00	22.58	0.00	0.00	0.00	9.10
100.0	(4) 7/8" Fiber	No	1.00	0.00	0.00	0.00	0.00	22.58	0.00	0.00	0.00	3.36
105.0	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	22.77	0.00	0.00	0.00	4.14
105.0	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	22.77	0.00	0.00	0.00	0.36
105.0	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	22.77	0.00	0.00	0.00	7.08
105.0	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	22.77	0.00	0.00	0.00	59.04
105.0	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	22.77	0.00	0.00	0.00	45.48
105.0	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	22.77	0.00	0.00	0.00	16.80
109.0	(3) 0.38" Cable	No	4.00	0.00	0.00	0.00	0.00	23.05	0.00	0.00	0.00	3.31
109.0	(1) 0.39" Fiber Trunk	No	4.00	0.00	0.00	0.00	0.00	23.05	0.00	0.00	0.00	0.29
109.0	(2) 0.78" 8 AWG 6	No	4.00	0.00	0.00	0.00	0.00	23.05	0.00	0.00	0.00	5.66
109.0	(12) 1 5/8" Coax	No	4.00	0.00	0.00	0.00	0.00	23.05	0.00	0.00	0.00	47.23
109.0	(1) 3" Conduit	No	4.00	0.00	0.00	0.00	0.00	23.05	0.00	0.00	0.00	36.38
109.0	(4) 7/8" Fiber	No	4.00	0.00	0.00	0.00	0.00	23.05	0.00	0.00	0.00	13.44
110.0	(3) 0.38" Cable	No	1.00	0.00	0.00	0.00	0.00	23.21	0.00	0.00	0.00	0.83
110.0	(1) 0.39" Fiber Trunk	No	1.00	0.00	0.00	0.00	0.00	23.21	0.00	0.00	0.00	0.07
110.0	(2) 0.78" 8 AWG 6	No	1.00	0.00	0.00	0.00	0.00	23.21	0.00	0.00	0.00	1.42
110.0	(12) 1 5/8" Coax	No	1.00	0.00	0.00	0.00	0.00	23.21	0.00	0.00	0.00	11.81
110.0	(1) 3" Conduit	No	1.00	0.00	0.00	0.00	0.00	23.21	0.00	0.00	0.00	9.10
110.0	(4) 7/8" Fiber	No	1.00	0.00	0.00	0.00	0.00	23.21	0.00	0.00	0.00	3.36
115.0	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	23.39	0.00	0.00	0.00	4.14
115.0	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	23.39	0.00	0.00	0.00	0.36

Load Case: 1.2D + 1.6W 97 mph with No Ice 25 Iterations

Gust Response Factor :1.10 Wind Importance Factor 1.00
Dead Load Factor :1.20
Wind Load Factor :1.60

115.0	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	23.39	0.00	0.00	0.00	7.08
115.0	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	23.39	0.00	0.00	0.00	59.04
115.0	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	23.39	0.00	0.00	0.00	45.48
115.0	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	23.39	0.00	0.00	0.00	16.80
117.0	(3) 0.38" Cable	No	2.00	0.00	0.00	0.00	0.00	23.59	0.00	0.00	0.00	1.66
117.0	(1) 0.39" Fiber Trunk	No	2.00	0.00	0.00	0.00	0.00	23.59	0.00	0.00	0.00	0.14
117.0	(2) 0.78" 8 AWG 6	No	2.00	0.00	0.00	0.00	0.00	23.59	0.00	0.00	0.00	2.83
117.0	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	23.59	0.00	0.00	0.00	23.62
117.0	(1) 3" Conduit	No	2.00	0.00	0.00	0.00	0.00	23.59	0.00	0.00	0.00	18.19
117.0	(4) 7/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	23.59	0.00	0.00	0.00	6.72
										Totals:	0.00	8,877.65

Site Number: 283420 Code: ANSI/TIA-222-G

Site Name: STONEYBROOK RD CT, CT Engineering Number:12598484_C3_01 8/27/2018 4:13:10 PM

Customer: T-MOBILE

Load Case: 1.2D + 1.6W 97 mph with No Ice 25 Iterations

Gust Response Factor :1.10 Wind Importance Factor 1.00

Dead Load Factor :1.20

Wind Load Factor :1.60

Applied Segment Forces Summary

Seg Elev (ft)	Description	Shaft Forces Wind FX (lb)	Shaft Forces Dead Load (lb)	Discrete Forces Wind FX (lb)	Discrete Forces Torsion MY (lb-ft)	Discrete Forces Moment MZ (lb-ft)	Discrete Forces Dead Load (lb)	Linear Forces Wind FX (lb)	Linear Forces Dead Load (lb)	Sum of Forces Wind FX (lb)	Sum of Forces Dead Load (lb)	Sum of Forces Torsion MY (lb-ft)	Sum of Forces Moment MZ (lb)
0.00		159.9	0.0					0.0	0.0	159.9	0.0	0.0	0.0
5.00		314.0	829.0					0.0	273.2	314.0	1,102.2	0.0	0.0
10.00		302.4	798.6					0.0	273.2	302.4	1,071.9	0.0	0.0
15.00		290.7	768.2					0.0	273.2	290.7	1,041.5	0.0	0.0
20.00		279.1	737.9					0.0	273.2	279.1	1,011.1	0.0	0.0
25.00		267.5	707.5					0.0	273.2	267.5	980.7	0.0	0.0
30.00		258.8	677.1					0.0	273.2	258.8	950.4	0.0	0.0
35.00		255.2	646.7					0.0	273.2	255.2	920.0	0.0	0.0
40.00		224.5	616.4					0.0	273.2	224.5	889.6	0.0	0.0
43.88	Reinf Bottom	125.3	456.8					0.0	211.8	125.3	668.5	0.0	0.0
45.00		110.2	129.2					0.0	144.2	110.2	273.4	0.0	0.0
48.33	Bot - Section 2	123.4	373.8					0.0	427.2	123.4	800.9	0.0	0.0
50.00		102.4	311.6					0.0	213.6	102.4	525.2	0.0	0.0
52.50	Top - Section 1	121.5	456.7					0.0	320.4	121.5	777.0	0.0	0.0
55.00		178.0	184.9					0.0	320.4	178.0	505.3	0.0	0.0
60.00		163.6	353.9					0.0	640.7	163.6	994.7	0.0	0.0
62.00	Reinf. Top Reinf	113.3	135.6					0.0	256.3	113.3	391.9	0.0	0.0
65.00		176.0	197.1					0.0	384.4	176.0	581.5	0.0	0.0
70.00		211.8	311.4					0.0	640.7	211.8	952.2	0.0	0.0
75.00		143.1	290.1					0.0	640.7	143.1	930.9	0.0	0.0
77.00	Appurtenance(s)	98.4	110.1	2,287.2	0.0	3,016.5	1,113.5	0.0	256.3	2,385.6	1,479.9	0.0	0.0
80.00		97.0	158.8					0.0	349.0	97.0	507.8	0.0	0.0
82.00	Top - Section 2	94.7	101.6					0.0	232.7	94.7	334.3	0.0	0.0
85.00		93.2	125.4					0.0	349.0	93.2	474.4	0.0	0.0
87.00	Appurtenance(s)	90.8	79.9	749.4	0.0	0.0	1,147.9	0.0	232.7	840.2	1,460.5	0.0	0.0
90.00		56.2	114.5					0.0	313.6	56.2	428.1	0.0	0.0
90.13	Reinf. Top	78.8	4.6					0.0	13.1	78.8	17.7	0.0	0.0
95.00		106.1	171.5					0.0	151.3	106.1	322.8	0.0	0.0
97.00	Appurtenance(s)	57.9	65.4	1,846.8	0.0	0.0	1,592.2	0.0	62.1	1,904.7	1,719.6	0.0	0.0
99.00	Top - Section 3	42.1	62.5					0.0	53.2	42.1	115.6	0.0	0.0
100.00		83.0	39.9					0.0	26.6	83.0	66.5	0.0	0.0
105.00		125.3	199.5					0.0	132.9	125.3	332.4	0.0	0.0
109.00	Appurtenance(s)	70.2	159.6	1,202.3	0.0	0.0	308.9	0.0	106.3	1,272.4	574.8	0.0	0.0
110.00		85.2	39.9					0.0	26.6	85.2	66.5	0.0	0.0
115.00		99.8	199.5					0.0	132.9	99.8	332.4	0.0	0.0
117.00	Appurtenance(s)	57.5	79.8	2,589.8	0.0	0.0	2,007.6	0.0	53.2	2,647.3	2,140.5	0.0	0.0
119.00		28.8	79.8					0.0	0.0	28.8	79.8	0.0	0.0
								Totals:		13,960.9	25,822.3	0.00	0.00

Site Number: 283420 Code: ANSI/TIA-222-G

Site Name: STONEYBROOK RD CT, CT Engineering Number:12598484_C3_01 8/27/2018 4:13:10 PM

Customer: T-MOBILE

Load Case: 1.2D + 1.6W 97 mph with No Ice 25 Iterations

Gust Response Factor :1.10 Wind Importance Factor 1.00

Dead Load Factor :1.20

Wind Load Factor :1.60

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-25.80	-13.84	0.00	-1,173.76	0.00	1,173.76	2,813.31	1,406.66	4,820.79	2,413.98	0.00	0.00	0.496
5.00	-24.66	-13.60	0.00	-1,104.55	0.00	1,104.55	2,747.79	1,373.90	4,537.84	2,272.29	0.10	-0.18	0.495
10.00	-23.54	-13.38	0.00	-1,036.53	0.00	1,036.53	2,679.61	1,339.80	4,258.79	2,132.56	0.38	-0.37	0.495
15.00	-22.45	-13.16	0.00	-969.66	0.00	969.66	2,608.76	1,304.38	3,984.14	1,995.03	0.87	-0.56	0.495
20.00	-21.40	-12.94	0.00	-903.88	0.00	903.88	2,535.24	1,267.62	3,714.39	1,859.96	1.57	-0.77	0.495
25.00	-20.37	-12.74	0.00	-839.16	0.00	839.16	2,459.06	1,229.53	3,450.04	1,727.58	2.49	-0.99	0.494
30.00	-19.38	-12.54	0.00	-775.46	0.00	775.46	2,380.22	1,190.11	3,191.57	1,598.16	3.65	-1.22	0.493
35.00	-18.41	-12.35	0.00	-712.74	0.00	712.74	2,298.17	1,149.08	2,938.80	1,471.58	5.05	-1.46	0.492
40.00	-17.48	-12.17	0.00	-651.00	0.00	651.00	2,187.63	1,093.82	2,661.58	1,332.77	6.72	-1.71	0.497
43.88	-16.78	-12.06	0.00	-603.85	0.00	603.85	2,101.97	1,050.99	2,456.17	1,229.91	8.20	-1.92	0.499
45.00	-16.50	-11.97	0.00	-590.28	0.00	590.28	2,077.10	1,038.55	2,398.08	1,200.82	8.66	-1.99	0.293
48.33	-15.68	-11.84	0.00	-550.38	0.00	550.38	2,003.41	1,001.71	2,230.05	1,116.68	10.09	-2.10	0.289
50.00	-15.15	-11.74	0.00	-530.64	0.00	530.64	1,966.57	983.28	2,148.32	1,075.76	10.83	-2.16	0.283
52.50	-14.36	-11.61	0.00	-501.30	0.00	501.30	1,292.92	646.46	1,405.62	703.85	11.99	-2.25	0.349
55.00	-13.83	-11.45	0.00	-472.28	0.00	472.28	1,267.71	633.85	1,338.84	670.42	13.19	-2.34	0.339
60.00	-12.82	-11.27	0.00	-415.05	0.00	415.05	1,215.29	607.65	1,208.00	604.90	15.74	-2.54	0.319
62.00	-12.41	-11.16	0.00	-392.50	0.00	392.50	1,193.58	596.79	1,156.76	579.24	16.82	-2.62	0.310
62.00	-12.41	-11.16	0.00	-392.50	0.00	392.50	1,193.58	596.79	1,156.76	579.24	16.82	-2.62	0.310
65.00	-11.80	-10.99	0.00	-359.01	0.00	359.01	1,160.21	580.11	1,081.18	541.39	18.51	-2.75	0.296
70.00	-10.83	-10.77	0.00	-304.04	0.00	304.04	1,094.51	547.25	951.97	476.69	21.50	-2.95	0.272
75.00	-9.88	-10.61	0.00	-250.17	0.00	250.17	1,017.13	508.57	821.49	411.36	24.69	-3.14	0.247
77.00	-8.52	-8.16	0.00	-225.94	0.00	225.94	986.19	493.09	772.00	386.57	26.02	-3.22	0.232
80.00	-8.01	-8.04	0.00	-201.48	0.00	201.48	939.76	469.88	700.63	350.84	28.09	-3.34	0.220
82.00	-7.66	-7.94	0.00	-185.39	0.00	185.39	908.81	454.41	654.98	327.98	29.50	-3.42	0.211
82.00	-7.66	-7.94	0.00	-185.39	0.00	185.39	780.36	390.18	564.40	282.62	29.50	-3.42	0.000
85.00	-7.18	-7.83	0.00	-161.56	0.00	161.56	740.57	370.29	508.03	254.39	31.69	-3.53	0.207
87.00	-5.77	-6.91	0.00	-145.90	0.00	145.90	714.04	357.02	472.09	236.39	33.18	-3.61	0.195
90.00	-5.34	-6.83	0.00	-125.16	0.00	125.16	674.25	337.13	420.65	210.64	35.49	-3.72	0.179
90.13	-5.31	-6.76	0.00	-124.31	0.00	124.31	672.59	336.30	418.57	209.60	35.59	-3.73	0.178
90.13	-5.31	-6.76	0.00	-124.31	0.00	124.31	672.59	336.30	418.57	209.60	35.59	-3.73	0.601
95.00	-4.97	-6.65	0.00	-91.34	0.00	91.34	607.93	303.97	341.52	171.01	39.48	-3.90	0.543
97.00	-3.37	-4.65	0.00	-78.03	0.00	78.03	581.40	290.70	312.17	156.32	41.17	-4.14	0.505
99.00	-3.24	-4.61	0.00	-68.74	0.00	68.74	554.88	277.44	284.14	142.28	42.96	-4.39	0.489
99.00	-3.24	-4.61	0.00	-68.74	0.00	68.74	725.83	362.92	362.74	181.64	42.96	-4.39	0.383
100.00	-3.16	-4.53	0.00	-64.13	0.00	64.13	725.83	362.92	362.74	181.64	43.89	-4.51	0.358
105.00	-2.82	-4.40	0.00	-41.46	0.00	41.46	725.83	362.92	362.74	181.64	48.84	-4.92	0.232
109.00	-2.35	-3.08	0.00	-23.87	0.00	23.87	725.83	362.92	362.74	181.64	53.04	-5.11	0.135
110.00	-2.29	-3.00	0.00	-20.79	0.00	20.79	725.83	362.92	362.74	181.64	54.11	-5.15	0.118
115.00	-1.97	-2.87	0.00	-5.81	0.00	5.81	725.83	362.92	362.74	181.64	59.56	-5.25	0.035
117.00	-0.08	-0.04	0.00	-0.07	0.00	0.07	725.83	362.92	362.74	181.64	61.76	-5.26	0.001
119.00	0.00	-0.03	0.00	0.00	0.00	0.00	725.83	362.92	362.74	181.64	63.96	-5.26	0.000

Load Case: 0.9D + 1.6W — 97 mph with No Ice (Reduced DL) — 25 Iterations

Gust Response Factor :1.10 — Wind Importance Factor 1.00
Dead Load Factor :0.90
Wind Load Factor :1.60

Shaft Segment Forces (Factored)

Seg Top Elev (ft)	Description	Kzt	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		1.00	0.70	16.018	17.62	288.42	0.650		0.000	0.00	0.000	0.00	159.9	0.0	0.0
5.00		1.00	0.70	16.018	17.62	283.27	0.650		0.000	5.00	17.453	11.34	314.0	0.0	621.7
10.00		1.00	0.70	16.018	17.62	272.97	0.650		0.000	5.00	16.818	10.93	302.4	0.0	599.0
15.00		1.00	0.70	16.018	17.62	262.67	0.650		0.000	5.00	16.183	10.52	290.7	0.0	576.2
20.00		1.00	0.70	16.018	17.62	252.37	0.650		0.000	5.00	15.549	10.11	279.1	0.0	553.4
25.00		1.00	0.70	16.018	17.62	242.07	0.650		0.000	5.00	14.914	9.69	267.5	0.0	530.6
30.00		1.00	0.70	16.018	17.62	231.77	0.650		0.000	5.00	14.279	9.28	258.8	0.0	507.8
35.00		1.00	0.72	16.402	18.04	224.11	0.650		0.000	5.00	13.645	8.87	255.2	0.0	485.1
40.00		1.00	0.75	17.087	18.79	218.10	0.650		0.000	5.00	13.010	8.46	224.5	0.0	462.3
43.88	Reinf Bottom	1.00	0.77	17.642	19.40	212.02	0.650		0.000	3.88	9.646	6.27	125.3	0.0	342.6
45.00		1.00	0.78	17.936	19.72	208.33	0.650		0.000	1.13	2.729	1.77	110.2	0.0	96.9
48.33	Bot - Section 2	1.00	0.79	18.188	20.00	204.90	0.650		0.000	3.33	7.898	5.13	123.4	0.0	280.3
50.00		1.00	0.81	18.462	20.30	200.90	0.650		0.000	1.67	3.905	2.54	102.4	0.0	233.7
52.50	Top - Section 1	1.00	0.82	18.682	20.55	197.46	0.650		0.000	2.50	5.725	3.72	121.5	0.0	342.5
55.00		1.00	0.83	18.938	20.83	196.47	0.650		0.000	2.50	5.566	3.62	178.0	0.0	138.7
60.00		1.00	0.84	19.306	21.23	189.89	0.650		0.000	5.00	10.657	6.93	163.6	0.0	265.4
62.00	Reinf. Top Reinf	1.00	0.86	19.635	21.59	183.52	0.650		0.000	2.00	4.085	2.66	113.3	0.0	101.7
65.00		1.00	0.87	19.862	21.84	178.84	0.650		0.000	3.00	5.937	3.86	176.0	0.0	147.8
70.00		1.00	0.88	20.211	22.23	171.15	0.650		0.000	5.00	9.387	6.10	211.8	0.0	233.6
75.00		1.00	0.90	20.628	22.69	161.22	0.650		0.000	5.00	8.753	5.69	143.0	0.0	217.6
77.00	Appurtenance(s)	1.00	0.91	20.908	22.99	154.07	0.650	*	0.000	2.00	3.323	2.16	97.6	0.0	82.6
80.00		1.00	0.92	21.102	23.21	148.87	0.650	*	0.000	3.00	4.795	3.12	95.3	0.0	119.1
82.00	Top - Section 2 Reinf.	1.00	0.93	21.292	23.42	143.60	0.650	*	0.000	2.00	3.070	2.00	91.6	0.0	76.2
85.00		1.00	0.94	21.478	23.62	138.26	0.650	*	0.000	3.00	4.414	2.87	89.1	0.0	94.0
87.00	Appurtenance(s)	1.00	0.95	21.660	23.82	132.86	0.650	*	0.000	2.00	2.816	1.83	85.3	0.0	60.0
90.00		1.00	0.95	21.838	24.02	127.39	0.650	*	0.000	3.00	4.033	2.62	52.4	0.0	85.8
90.13	Reinf. Top	1.00	0.96	21.947	24.14	123.94	0.650	*	0.000	0.13	0.163	0.11	78.6	0.0	3.5
95.00		1.00	0.97	22.120	24.33	118.37	0.650		0.000	4.88	6.051	3.93	106.1	0.0	128.7
97.00	Appurtenance(s)	1.00	0.98	22.351	24.58	110.62	0.650		0.000	2.00	2.308	1.50	57.9	0.0	49.0
99.00	Top - Section 3	1.00	0.98	22.483	24.73	106.07	0.650		0.000	2.00	2.206	1.43	42.1	0.0	46.8
100.0		1.00	0.99	22.581	24.83	102.43	0.650		0.000	1.00	1.063	0.69	83.0	0.0	29.9
105.0		1.00	1.00	22.773	25.05	102.86	0.650		0.000	5.00	5.315	3.45	125.3	0.0	149.6
109.0	Appurtenance(s)	1.00	1.01	23.055	25.36	103.50	0.650		0.000	4.00	4.252	2.76	70.2	0.0	119.7
110.0		1.00	1.01	23.207	25.52	103.84	0.650		0.000	1.00	1.063	0.69	85.2	0.0	29.9
115.0		1.00	1.02	23.387	25.72	104.24	0.650		0.000	5.00	5.315	3.45	99.8	0.0	149.6
117.0	Appurtenance(s)	1.00	1.03	23.593	25.95	104.70	0.650		0.000	2.00	2.126	1.38	57.5	0.0	59.8
119.0		1.00	1.04	23.708	26.07	104.95	0.650		0.000	2.00	2.126	1.38	28.8	0.0	59.8
* = Cf Adjusted By Linear Load Ra Effect							Totals:		119.00				5,266.4	0.0	8,081.0

Site Number: 283420 Code: ANSI/TIA-222-G

Site Name: STONEYBROOK RD CT, CT Engineering Number:12598484_C3_01 8/27/2018 4:13:10 PM

Customer: T-MOBILE

Load Case: 0.9D + 1.6W 97 mph with No Ice (Reduced DL) 25 Iterations

Gust Response Factor :1.10 Wind Importance Factor 1.00

Dead Load Factor :0.90

Wind Load Factor :1.60

Discrete Appurtenance Segment Forces (Factored)

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orientation Factor	Ka	Total EPAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
77.00	Alcatel-Lucent 9442	3	20.986	23.085	0.67	0.80	4.02	0.000	0.000	148.48	0.00	0.00	132.30
77.00	Alcatel-Lucent 9442	3	20.986	23.085	0.67	0.80	4.41	0.000	0.000	162.74	0.00	0.00	136.89
77.00	Amphenol Antel BXA-1	6	21.141	23.255	0.72	0.80	16.55	0.000	2.000	615.94	0.00	1,231.88	69.12
77.00	Amphenol Antel BXA-7	6	21.141	23.255	0.66	0.80	23.98	0.000	2.000	892.30	0.00	1,784.60	91.80
77.00	Flat Side Arm	3	20.986	23.085	0.67	1.00	12.66	0.000	0.000	467.72	0.00	0.00	405.00
87.00	Ericsson AIR32 B66Aa	3	21.731	23.904	0.71	0.80	11.09	0.000	0.000	424.28	0.00	0.00	356.94
87.00	Side Arms	1	21.731	23.904	1.00	1.00	8.50	0.000	0.000	325.10	0.00	0.00	504.00
97.00	Ericsson KRY 112 144	3	22.417	24.659	0.50	0.80	0.67	0.000	0.000	26.51	0.00	0.00	26.19
97.00	Ericsson Radio 4449	3	22.417	24.659	0.50	0.80	1.97	0.000	0.000	77.65	0.00	0.00	199.80
97.00	Ericsson RRUS 01 B2	3	22.417	24.659	0.67	0.80	5.07	0.000	0.000	199.85	0.00	0.00	118.80
97.00	RFS APXVAARR24_43-	3	22.417	24.659	0.63	0.80	30.60	0.000	0.000	1,207.43	0.00	0.00	345.33
97.00	Side Arms	1	22.417	24.659	1.00	1.00	8.50	0.000	0.000	335.36	0.00	0.00	504.00
109.0	Amphenol Antel BXA-1	3	23.177	25.495	0.72	1.00	10.35	0.000	0.000	422.05	0.00	0.00	34.56
109.0	CCI OPA-65R-LCUU-H6	3	23.177	25.495	0.66	1.00	19.13	0.000	0.000	780.21	0.00	0.00	197.10
117.0	Amphenol Antel BXA-1	3	23.651	26.016	0.72	0.80	8.28	0.000	0.000	344.54	0.00	0.00	34.56
117.0	CCI OPA-65R-LCUU-H6	3	23.651	26.016	0.66	0.80	15.30	0.000	0.000	636.93	0.00	0.00	197.10
117.0	CCI TPX-070821	6	23.651	26.016	0.50	0.80	1.32	0.000	0.000	54.95	0.00	0.00	40.50
117.0	Ericsson RRUS 32 B2	3	23.651	26.016	0.67	0.80	4.41	0.000	0.000	183.40	0.00	0.00	143.10
117.0	Ericsson RRUS-11	3	23.651	26.016	0.67	0.80	6.09	0.000	0.000	253.68	0.00	0.00	148.50
117.0	Ericsson RRUS-32 B30	3	23.651	26.016	0.67	0.80	5.32	0.000	0.000	221.55	0.00	0.00	207.90
117.0	Flat T-Arm	3	23.651	26.016	0.67	0.75	19.45	0.000	0.000	809.48	0.00	0.00	675.00
117.0	Raycap DC6-48-60-18-	2	23.651	26.016	1.00	0.80	2.05	0.000	0.000	85.25	0.00	0.00	59.04
										8,675.39			4,627.53

Load Case: 0.9D + 1.6W 97 mph with No Ice (Reduced DL) 25 Iterations

Gust Response Factor :1.10 Wind Importance Factor 1.00
Dead Load Factor :0.90
Wind Load Factor :1.60

Linear Appurtenance Segment Forces (Factored)

Seg Top Elev (ft)	Description	Exposed To Wind	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	qz (psf)	Ra	Cf Adjust Factor	F X (lb)	Dead Load (lb)
5.00	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	3.11
5.00	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	0.27
5.00	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	5.31
5.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	44.28
5.00	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	34.11
5.00	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	12.60
5.00	(2) 1 1/4" Fiber	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	9.45
5.00	(1) 1 5/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	7.24
5.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	44.28
5.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	44.28
10.00	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	3.11
10.00	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	0.27
10.00	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	5.31
10.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	44.28
10.00	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	34.11
10.00	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	12.60
10.00	(2) 1 1/4" Fiber	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	9.45
10.00	(1) 1 5/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	7.24
10.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	44.28
10.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	44.28
15.00	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	3.11
15.00	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	0.27
15.00	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	5.31
15.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	44.28
15.00	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	34.11
15.00	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	12.60
15.00	(2) 1 1/4" Fiber	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	9.45
15.00	(1) 1 5/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	7.24
15.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	44.28
15.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	44.28
20.00	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	3.11
20.00	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	0.27
20.00	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	5.31
20.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	44.28
20.00	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	34.11
20.00	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	12.60
20.00	(2) 1 1/4" Fiber	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	9.45
20.00	(1) 1 5/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	7.24
20.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	44.28
20.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	44.28
25.00	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	3.11
25.00	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	0.27
25.00	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	5.31
25.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	44.28
25.00	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	34.11
25.00	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	12.60
25.00	(2) 1 1/4" Fiber	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	9.45
25.00	(1) 1 5/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	7.24
25.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	44.28
25.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	44.28
30.00	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	3.11

Load Case: 0.9D + 1.6W — 97 mph with No Ice (Reduced DL) — 25 Iterations

Gust Response Factor :1.10 — Wind Importance Factor 1.00
Dead Load Factor :0.90
Wind Load Factor :1.60

30.00	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	0.27
30.00	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	5.31
30.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	44.28
30.00	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	34.11
30.00	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	12.60
30.00	(2) 1 1/4" Fiber	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	9.45
30.00	(1) 1 5/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	7.24
30.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	44.28
30.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.00	44.28
35.00	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	16.40	0.00	0.00	0.00	3.11
35.00	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	16.40	0.00	0.00	0.00	0.27
35.00	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	16.40	0.00	0.00	0.00	5.31
35.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	16.40	0.00	0.00	0.00	44.28
35.00	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	16.40	0.00	0.00	0.00	34.11
35.00	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	16.40	0.00	0.00	0.00	12.60
35.00	(2) 1 1/4" Fiber	No	5.00	0.00	0.00	0.00	0.00	16.40	0.00	0.00	0.00	9.45
35.00	(1) 1 5/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	16.40	0.00	0.00	0.00	7.24
35.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	16.40	0.00	0.00	0.00	44.28
35.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	16.40	0.00	0.00	0.00	44.28
40.00	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	17.09	0.00	0.00	0.00	3.11
40.00	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	17.09	0.00	0.00	0.00	0.27
40.00	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	17.09	0.00	0.00	0.00	5.31
40.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	17.09	0.00	0.00	0.00	44.28
40.00	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	17.09	0.00	0.00	0.00	34.11
40.00	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	17.09	0.00	0.00	0.00	12.60
40.00	(2) 1 1/4" Fiber	No	5.00	0.00	0.00	0.00	0.00	17.09	0.00	0.00	0.00	9.45
40.00	(1) 1 5/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	17.09	0.00	0.00	0.00	7.24
40.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	17.09	0.00	0.00	0.00	44.28
40.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	17.09	0.00	0.00	0.00	44.28
43.88	(3) 0.38" Cable	No	3.88	0.00	0.00	0.00	0.00	17.64	0.03	0.00	0.00	2.41
43.88	(1) 0.39" Fiber Trunk	No	3.88	0.00	0.00	0.00	0.00	17.64	0.03	0.00	0.00	0.21
43.88	(2) 0.78" 8 AWG 6	No	3.88	0.00	0.00	0.00	0.00	17.64	0.03	0.00	0.00	4.12
43.88	(12) 1 5/8" Coax	No	3.88	0.00	0.00	0.00	0.00	17.64	0.03	0.00	0.00	34.32
43.88	(1) 3" Conduit	No	3.88	0.00	0.00	0.00	0.00	17.64	0.03	0.00	0.00	26.44
43.88	(4) 7/8" Fiber	No	3.88	0.00	0.00	0.00	0.00	17.64	0.03	0.00	0.00	9.76
43.88	(2) 1 1/4" Fiber	No	3.88	0.00	0.00	0.00	0.00	17.64	0.03	0.00	0.00	7.32
43.88	(1) 1 5/8" Fiber	No	3.88	0.00	0.00	0.00	0.00	17.64	0.03	0.00	0.00	5.61
43.88	(3) Flat Bar	Yes	1.88	0.00	2.00	0.31	0.00	17.64	0.03	0.00	0.00	0.00
43.88	(12) 1 5/8" Coax	No	3.88	0.00	0.00	0.00	0.00	17.64	0.03	0.00	0.00	34.32
43.88	(12) 1 5/8" Coax	No	3.88	0.00	0.00	0.00	0.00	17.64	0.03	0.00	0.00	34.32
45.00	(3) 0.38" Cable	No	1.13	0.00	0.00	0.00	0.00	17.94	0.07	0.00	0.00	0.70
45.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.02
45.00	(1) 0.39" Fiber Trunk	No	1.13	0.00	0.00	0.00	0.00	17.94	0.07	0.00	0.00	0.06
45.00	(2) 0.78" 8 AWG 6	No	1.13	0.00	0.00	0.00	0.00	17.94	0.07	0.00	0.00	1.19
45.00	(12) 1 5/8" Coax	No	1.13	0.00	0.00	0.00	0.00	17.94	0.07	0.00	0.00	9.96
45.00	(1) 3" Conduit	No	1.13	0.00	0.00	0.00	0.00	17.94	0.07	0.00	0.00	7.67
45.00	(4) 7/8" Fiber	No	1.13	0.00	0.00	0.00	0.00	17.94	0.07	0.00	0.00	2.83
45.00	(2) 1 1/4" Fiber	No	1.13	0.00	0.00	0.00	0.00	17.94	0.07	0.00	0.00	2.13
45.00	(1) 1 5/8" Fiber	No	1.13	0.00	0.00	0.00	0.00	17.94	0.07	0.00	0.00	1.63
45.00	(3) Flat Bar	Yes	1.13	0.00	2.00	0.19	0.00	17.94	0.07	0.00	0.00	0.00
45.00	(12) 1 5/8" Coax	No	1.13	0.00	0.00	0.00	0.00	17.94	0.07	0.00	0.00	9.96
45.00	(12) 1 5/8" Coax	No	1.13	0.00	0.00	0.00	0.00	17.94	0.07	0.00	0.00	9.96
48.33	(3) 0.38" Cable	No	3.33	0.00	0.00	0.00	0.00	18.19	0.07	0.00	0.00	2.07
48.33	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	183.75
48.33	(1) 0.39" Fiber Trunk	No	3.33	0.00	0.00	0.00	0.00	18.19	0.07	0.00	0.00	0.18
48.33	(2) 0.78" 8 AWG 6	No	3.33	0.00	0.00	0.00	0.00	18.19	0.07	0.00	0.00	3.54
48.33	(12) 1 5/8" Coax	No	3.33	0.00	0.00	0.00	0.00	18.19	0.07	0.00	0.00	29.52

Load Case: 0.9D + 1.6W — 97 mph with No Ice (Reduced DL) — 25 Iterations

Gust Response Factor :1.10 — Wind Importance Factor 1.00
Dead Load Factor :0.90
Wind Load Factor :1.60

48.33	(1) 3" Conduit	No	3.33	0.00	0.00	0.00	0.00	18.19	0.07	0.00	0.00	22.74
48.33	(4) 7/8" Fiber	No	3.33	0.00	0.00	0.00	0.00	18.19	0.07	0.00	0.00	8.40
48.33	(2) 1 1/4" Fiber	No	3.33	0.00	0.00	0.00	0.00	18.19	0.07	0.00	0.00	6.30
48.33	(1) 1 5/8" Fiber	No	3.33	0.00	0.00	0.00	0.00	18.19	0.07	0.00	0.00	4.83
48.33	(3) Flat Bar	Yes	3.33	0.00	2.00	0.56	0.00	18.19	0.07	0.00	0.00	0.00
48.33	(12) 1 5/8" Coax	No	3.33	0.00	0.00	0.00	0.00	18.19	0.07	0.00	0.00	29.52
48.33	(12) 1 5/8" Coax	No	3.33	0.00	0.00	0.00	0.00	18.19	0.07	0.00	0.00	29.52
50.00	(3) 0.38" Cable	No	1.67	0.00	0.00	0.00	0.00	18.46	0.07	0.00	0.00	1.04
50.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	91.88
50.00	(1) 0.39" Fiber Trunk	No	1.67	0.00	0.00	0.00	0.00	18.46	0.07	0.00	0.00	0.09
50.00	(2) 0.78" 8 AWG 6	No	1.67	0.00	0.00	0.00	0.00	18.46	0.07	0.00	0.00	1.77
50.00	(12) 1 5/8" Coax	No	1.67	0.00	0.00	0.00	0.00	18.46	0.07	0.00	0.00	14.76
50.00	(1) 3" Conduit	No	1.67	0.00	0.00	0.00	0.00	18.46	0.07	0.00	0.00	11.37
50.00	(4) 7/8" Fiber	No	1.67	0.00	0.00	0.00	0.00	18.46	0.07	0.00	0.00	4.20
50.00	(2) 1 1/4" Fiber	No	1.67	0.00	0.00	0.00	0.00	18.46	0.07	0.00	0.00	3.15
50.00	(1) 1 5/8" Fiber	No	1.67	0.00	0.00	0.00	0.00	18.46	0.07	0.00	0.00	2.42
50.00	(3) Flat Bar	Yes	1.67	0.00	2.00	0.28	0.00	18.46	0.07	0.00	0.00	0.00
50.00	(12) 1 5/8" Coax	No	1.67	0.00	0.00	0.00	0.00	18.46	0.07	0.00	0.00	14.76
50.00	(12) 1 5/8" Coax	No	1.67	0.00	0.00	0.00	0.00	18.46	0.07	0.00	0.00	14.76
52.50	(3) 0.38" Cable	No	2.50	0.00	0.00	0.00	0.00	18.68	0.07	0.00	0.00	1.55
52.50	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	137.81
52.50	(1) 0.39" Fiber Trunk	No	2.50	0.00	0.00	0.00	0.00	18.68	0.07	0.00	0.00	0.13
52.50	(2) 0.78" 8 AWG 6	No	2.50	0.00	0.00	0.00	0.00	18.68	0.07	0.00	0.00	2.65
52.50	(12) 1 5/8" Coax	No	2.50	0.00	0.00	0.00	0.00	18.68	0.07	0.00	0.00	22.14
52.50	(1) 3" Conduit	No	2.50	0.00	0.00	0.00	0.00	18.68	0.07	0.00	0.00	17.06
52.50	(4) 7/8" Fiber	No	2.50	0.00	0.00	0.00	0.00	18.68	0.07	0.00	0.00	6.30
52.50	(2) 1 1/4" Fiber	No	2.50	0.00	0.00	0.00	0.00	18.68	0.07	0.00	0.00	4.72
52.50	(1) 1 5/8" Fiber	No	2.50	0.00	0.00	0.00	0.00	18.68	0.07	0.00	0.00	3.62
52.50	(3) Flat Bar	Yes	2.50	0.00	2.00	0.42	0.00	18.68	0.07	0.00	0.00	0.00
52.50	(12) 1 5/8" Coax	No	2.50	0.00	0.00	0.00	0.00	18.68	0.07	0.00	0.00	22.14
52.50	(12) 1 5/8" Coax	No	2.50	0.00	0.00	0.00	0.00	18.68	0.07	0.00	0.00	22.14
55.00	(3) 0.38" Cable	No	2.50	0.00	0.00	0.00	0.00	18.94	0.07	0.00	0.00	1.55
55.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	137.81
55.00	(1) 0.39" Fiber Trunk	No	2.50	0.00	0.00	0.00	0.00	18.94	0.07	0.00	0.00	0.13
55.00	(2) 0.78" 8 AWG 6	No	2.50	0.00	0.00	0.00	0.00	18.94	0.07	0.00	0.00	2.65
55.00	(12) 1 5/8" Coax	No	2.50	0.00	0.00	0.00	0.00	18.94	0.07	0.00	0.00	22.14
55.00	(1) 3" Conduit	No	2.50	0.00	0.00	0.00	0.00	18.94	0.07	0.00	0.00	17.06
55.00	(4) 7/8" Fiber	No	2.50	0.00	0.00	0.00	0.00	18.94	0.07	0.00	0.00	6.30
55.00	(2) 1 1/4" Fiber	No	2.50	0.00	0.00	0.00	0.00	18.94	0.07	0.00	0.00	4.72
55.00	(1) 1 5/8" Fiber	No	2.50	0.00	0.00	0.00	0.00	18.94	0.07	0.00	0.00	3.62
55.00	(3) Flat Bar	Yes	2.50	0.00	2.00	0.42	0.00	18.94	0.07	0.00	0.00	0.00
55.00	(12) 1 5/8" Coax	No	2.50	0.00	0.00	0.00	0.00	18.94	0.07	0.00	0.00	22.14
55.00	(12) 1 5/8" Coax	No	2.50	0.00	0.00	0.00	0.00	18.94	0.07	0.00	0.00	22.14
60.00	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	19.31	0.08	0.00	0.00	3.11
60.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	275.63
60.00	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	19.31	0.08	0.00	0.00	0.27
60.00	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	19.31	0.08	0.00	0.00	5.31
60.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	19.31	0.08	0.00	0.00	44.28
60.00	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	19.31	0.08	0.00	0.00	34.11
60.00	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	19.31	0.08	0.00	0.00	12.60
60.00	(2) 1 1/4" Fiber	No	5.00	0.00	0.00	0.00	0.00	19.31	0.08	0.00	0.00	9.45
60.00	(1) 1 5/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	19.31	0.08	0.00	0.00	7.24
60.00	(3) Flat Bar	Yes	5.00	0.00	2.00	0.83	0.00	19.31	0.08	0.00	0.00	0.00
60.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	19.31	0.08	0.00	0.00	44.28
60.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	19.31	0.08	0.00	0.00	44.28
62.00	(3) 0.38" Cable	No	2.00	0.00	0.00	0.00	0.00	19.64	0.08	0.00	0.00	1.24
62.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	110.25

Load Case: 0.9D + 1.6W — 97 mph with No Ice (Reduced DL) — 25 Iterations

Gust Response Factor :1.10 — Wind Importance Factor 1.00
Dead Load Factor :0.90
Wind Load Factor :1.60

62.00	(1) 0.39" Fiber Trunk	No	2.00	0.00	0.00	0.00	0.00	19.64	0.08	0.00	0.00	0.11
62.00	(2) 0.78" 8 AWG 6	No	2.00	0.00	0.00	0.00	0.00	19.64	0.08	0.00	0.00	2.12
62.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	19.64	0.08	0.00	0.00	17.71
62.00	(1) 3" Conduit	No	2.00	0.00	0.00	0.00	0.00	19.64	0.08	0.00	0.00	13.64
62.00	(4) 7/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	19.64	0.08	0.00	0.00	5.04
62.00	(2) 1 1/4" Fiber	No	2.00	0.00	0.00	0.00	0.00	19.64	0.08	0.00	0.00	3.78
62.00	(1) 1 5/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	19.64	0.08	0.00	0.00	2.90
62.00	(3) Flat Bar	Yes	2.00	0.00	2.00	0.33	0.00	19.64	0.08	0.00	0.00	0.00
62.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	19.64	0.08	0.00	0.00	17.71
62.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	19.64	0.08	0.00	0.00	17.71
65.00	(3) 0.38" Cable	No	3.00	0.00	0.00	0.00	0.00	19.86	0.08	0.00	0.00	1.86
65.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	165.38
65.00	(1) 0.39" Fiber Trunk	No	3.00	0.00	0.00	0.00	0.00	19.86	0.08	0.00	0.00	0.16
65.00	(2) 0.78" 8 AWG 6	No	3.00	0.00	0.00	0.00	0.00	19.86	0.08	0.00	0.00	3.19
65.00	(12) 1 5/8" Coax	No	3.00	0.00	0.00	0.00	0.00	19.86	0.08	0.00	0.00	26.57
65.00	(1) 3" Conduit	No	3.00	0.00	0.00	0.00	0.00	19.86	0.08	0.00	0.00	20.47
65.00	(4) 7/8" Fiber	No	3.00	0.00	0.00	0.00	0.00	19.86	0.08	0.00	0.00	7.56
65.00	(2) 1 1/4" Fiber	No	3.00	0.00	0.00	0.00	0.00	19.86	0.08	0.00	0.00	5.67
65.00	(1) 1 5/8" Fiber	No	3.00	0.00	0.00	0.00	0.00	19.86	0.08	0.00	0.00	4.35
65.00	(3) Flat Bar	Yes	3.00	0.00	2.00	0.50	0.00	19.86	0.08	0.00	0.00	0.00
65.00	(12) 1 5/8" Coax	No	3.00	0.00	0.00	0.00	0.00	19.86	0.08	0.00	0.00	26.57
65.00	(12) 1 5/8" Coax	No	3.00	0.00	0.00	0.00	0.00	19.86	0.08	0.00	0.00	26.57
70.00	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	20.21	0.09	0.00	0.00	3.11
70.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	275.63
70.00	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	20.21	0.09	0.00	0.00	0.27
70.00	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	20.21	0.09	0.00	0.00	5.31
70.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	20.21	0.09	0.00	0.00	44.28
70.00	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	20.21	0.09	0.00	0.00	34.11
70.00	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	20.21	0.09	0.00	0.00	12.60
70.00	(2) 1 1/4" Fiber	No	5.00	0.00	0.00	0.00	0.00	20.21	0.09	0.00	0.00	9.45
70.00	(1) 1 5/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	20.21	0.09	0.00	0.00	7.24
70.00	(3) Flat Bar	Yes	5.00	0.00	2.00	0.83	0.00	20.21	0.09	0.00	0.00	0.00
70.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	20.21	0.09	0.00	0.00	44.28
70.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	20.21	0.09	0.00	0.00	44.28
75.00	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	20.63	0.10	0.00	0.00	3.11
75.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	275.63
75.00	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	20.63	0.10	0.00	0.00	0.27
75.00	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	20.63	0.10	0.00	0.00	5.31
75.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	20.63	0.10	0.00	0.00	44.28
75.00	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	20.63	0.10	0.00	0.00	34.11
75.00	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	20.63	0.10	0.00	0.00	12.60
75.00	(2) 1 1/4" Fiber	No	5.00	0.00	0.00	0.00	0.00	20.63	0.10	0.00	0.00	9.45
75.00	(1) 1 5/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	20.63	0.10	0.00	0.00	7.24
75.00	(3) Flat Bar	Yes	5.00	0.00	2.00	0.83	0.00	20.63	0.10	0.00	0.00	0.00
75.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	20.63	0.10	0.00	0.00	44.28
75.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	20.63	0.10	0.00	0.00	44.28
77.00	(3) 0.38" Cable	No	2.00	0.00	0.00	0.00	0.00	20.91	0.10	1.00	0.00	1.24
77.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	110.25
77.00	(1) 0.39" Fiber Trunk	No	2.00	0.00	0.00	0.00	0.00	20.91	0.10	1.00	0.00	0.11
77.00	(2) 0.78" 8 AWG 6	No	2.00	0.00	0.00	0.00	0.00	20.91	0.10	1.00	0.00	2.12
77.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	20.91	0.10	1.00	0.00	17.71
77.00	(1) 3" Conduit	No	2.00	0.00	0.00	0.00	0.00	20.91	0.10	1.00	0.00	13.64
77.00	(4) 7/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	20.91	0.10	1.00	0.00	5.04
77.00	(2) 1 1/4" Fiber	No	2.00	0.00	0.00	0.00	0.00	20.91	0.10	1.00	0.00	3.78
77.00	(1) 1 5/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	20.91	0.10	1.00	0.00	2.90
77.00	(3) Flat Bar	Yes	2.00	0.00	2.00	0.33	0.00	20.91	0.10	1.00	0.00	0.00
77.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	20.91	0.10	1.00	0.00	17.71

Load Case: 0.9D + 1.6W — 97 mph with No Ice (Reduced DL) — 25 Iterations

Gust Response Factor :1.10 — Wind Importance Factor 1.00
Dead Load Factor :0.90
Wind Load Factor :1.60

77.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	20.91	0.10	1.00	0.00	17.71
80.00	(3) 0.38" Cable	No	3.00	0.00	0.00	0.00	0.00	21.10	0.10	1.01	0.00	1.86
80.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	165.38
80.00	(1) 0.39" Fiber Trunk	No	3.00	0.00	0.00	0.00	0.00	21.10	0.10	1.01	0.00	0.16
80.00	(2) 0.78" 8 AWG 6	No	3.00	0.00	0.00	0.00	0.00	21.10	0.10	1.01	0.00	3.19
80.00	(12) 1 5/8" Coax	No	3.00	0.00	0.00	0.00	0.00	21.10	0.10	1.01	0.00	26.57
80.00	(1) 3" Conduit	No	3.00	0.00	0.00	0.00	0.00	21.10	0.10	1.01	0.00	20.47
80.00	(4) 7/8" Fiber	No	3.00	0.00	0.00	0.00	0.00	21.10	0.10	1.01	0.00	7.56
80.00	(2) 1 1/4" Fiber	No	3.00	0.00	0.00	0.00	0.00	21.10	0.10	1.01	0.00	5.67
80.00	(1) 1 5/8" Fiber	No	3.00	0.00	0.00	0.00	0.00	21.10	0.10	1.01	0.00	4.35
80.00	(3) Flat Bar	Yes	3.00	0.00	2.00	0.50	0.00	21.10	0.10	1.01	0.00	0.00
80.00	(12) 1 5/8" Coax	No	3.00	0.00	0.00	0.00	0.00	21.10	0.10	1.01	0.00	26.57
82.00	(3) 0.38" Cable	No	2.00	0.00	0.00	0.00	0.00	21.29	0.11	1.03	0.00	1.24
82.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	110.25
82.00	(1) 0.39" Fiber Trunk	No	2.00	0.00	0.00	0.00	0.00	21.29	0.11	1.03	0.00	0.11
82.00	(2) 0.78" 8 AWG 6	No	2.00	0.00	0.00	0.00	0.00	21.29	0.11	1.03	0.00	2.12
82.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	21.29	0.11	1.03	0.00	17.71
82.00	(1) 3" Conduit	No	2.00	0.00	0.00	0.00	0.00	21.29	0.11	1.03	0.00	13.64
82.00	(4) 7/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	21.29	0.11	1.03	0.00	5.04
82.00	(2) 1 1/4" Fiber	No	2.00	0.00	0.00	0.00	0.00	21.29	0.11	1.03	0.00	3.78
82.00	(1) 1 5/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	21.29	0.11	1.03	0.00	2.90
82.00	(3) Flat Bar	Yes	2.00	0.00	2.00	0.33	0.00	21.29	0.11	1.03	0.00	0.00
82.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	21.29	0.11	1.03	0.00	17.71
85.00	(3) 0.38" Cable	No	3.00	0.00	0.00	0.00	0.00	21.48	0.11	1.04	0.00	1.86
85.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	165.38
85.00	(1) 0.39" Fiber Trunk	No	3.00	0.00	0.00	0.00	0.00	21.48	0.11	1.04	0.00	0.16
85.00	(2) 0.78" 8 AWG 6	No	3.00	0.00	0.00	0.00	0.00	21.48	0.11	1.04	0.00	3.19
85.00	(12) 1 5/8" Coax	No	3.00	0.00	0.00	0.00	0.00	21.48	0.11	1.04	0.00	26.57
85.00	(1) 3" Conduit	No	3.00	0.00	0.00	0.00	0.00	21.48	0.11	1.04	0.00	20.47
85.00	(4) 7/8" Fiber	No	3.00	0.00	0.00	0.00	0.00	21.48	0.11	1.04	0.00	7.56
85.00	(2) 1 1/4" Fiber	No	3.00	0.00	0.00	0.00	0.00	21.48	0.11	1.04	0.00	5.67
85.00	(1) 1 5/8" Fiber	No	3.00	0.00	0.00	0.00	0.00	21.48	0.11	1.04	0.00	4.35
85.00	(3) Flat Bar	Yes	3.00	0.00	2.00	0.50	0.00	21.48	0.11	1.04	0.00	0.00
85.00	(12) 1 5/8" Coax	No	3.00	0.00	0.00	0.00	0.00	21.48	0.11	1.04	0.00	26.57
87.00	(3) 0.38" Cable	No	2.00	0.00	0.00	0.00	0.00	21.66	0.12	1.06	0.00	1.24
87.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	110.25
87.00	(1) 0.39" Fiber Trunk	No	2.00	0.00	0.00	0.00	0.00	21.66	0.12	1.06	0.00	0.11
87.00	(2) 0.78" 8 AWG 6	No	2.00	0.00	0.00	0.00	0.00	21.66	0.12	1.06	0.00	2.12
87.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	21.66	0.12	1.06	0.00	17.71
87.00	(1) 3" Conduit	No	2.00	0.00	0.00	0.00	0.00	21.66	0.12	1.06	0.00	13.64
87.00	(4) 7/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	21.66	0.12	1.06	0.00	5.04
87.00	(2) 1 1/4" Fiber	No	2.00	0.00	0.00	0.00	0.00	21.66	0.12	1.06	0.00	3.78
87.00	(1) 1 5/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	21.66	0.12	1.06	0.00	2.90
87.00	(3) Flat Bar	Yes	2.00	0.00	2.00	0.33	0.00	21.66	0.12	1.06	0.00	0.00
87.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	21.66	0.12	1.06	0.00	17.71
90.00	(3) 0.38" Cable	No	3.00	0.00	0.00	0.00	0.00	21.84	0.12	1.07	0.00	1.86
90.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	165.38
90.00	(1) 0.39" Fiber Trunk	No	3.00	0.00	0.00	0.00	0.00	21.84	0.12	1.07	0.00	0.16
90.00	(2) 0.78" 8 AWG 6	No	3.00	0.00	0.00	0.00	0.00	21.84	0.12	1.07	0.00	3.19
90.00	(12) 1 5/8" Coax	No	3.00	0.00	0.00	0.00	0.00	21.84	0.12	1.07	0.00	26.57
90.00	(1) 3" Conduit	No	3.00	0.00	0.00	0.00	0.00	21.84	0.12	1.07	0.00	20.47
90.00	(4) 7/8" Fiber	No	3.00	0.00	0.00	0.00	0.00	21.84	0.12	1.07	0.00	7.56
90.00	(2) 1 1/4" Fiber	No	3.00	0.00	0.00	0.00	0.00	21.84	0.12	1.07	0.00	5.67
90.00	(1) 1 5/8" Fiber	No	3.00	0.00	0.00	0.00	0.00	21.84	0.12	1.07	0.00	4.35
90.00	(3) Flat Bar	Yes	3.00	0.00	2.00	0.50	0.00	21.84	0.12	1.07	0.00	0.00
90.13	(3) 0.38" Cable	No	0.13	0.00	0.00	0.00	0.00	21.95	0.13	1.08	0.00	0.08
90.13	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.89

Load Case: 0.9D + 1.6W — 97 mph with No Ice (Reduced DL) — 25 Iterations

Gust Response Factor :1.10 — Wind Importance Factor 1.00
Dead Load Factor :0.90
Wind Load Factor :1.60

90.13	(1) 0.39" Fiber Trunk	No	0.13	0.00	0.00	0.00	0.00	21.95	0.13	1.08	0.00	0.01
90.13	(2) 0.78" 8 AWG 6	No	0.13	0.00	0.00	0.00	0.00	21.95	0.13	1.08	0.00	0.13
90.13	(12) 1 5/8" Coax	No	0.13	0.00	0.00	0.00	0.00	21.95	0.13	1.08	0.00	1.11
90.13	(1) 3" Conduit	No	0.13	0.00	0.00	0.00	0.00	21.95	0.13	1.08	0.00	0.85
90.13	(4) 7/8" Fiber	No	0.13	0.00	0.00	0.00	0.00	21.95	0.13	1.08	0.00	0.31
90.13	(2) 1 1/4" Fiber	No	0.13	0.00	0.00	0.00	0.00	21.95	0.13	1.08	0.00	0.24
90.13	(1) 1 5/8" Fiber	No	0.13	0.00	0.00	0.00	0.00	21.95	0.13	1.08	0.00	0.18
90.13	(3) Flat Bar	Yes	0.13	0.00	2.00	0.02	0.00	21.95	0.13	1.08	0.00	0.00
95.00	(3) 0.38" Cable	No	4.88	0.00	0.00	0.00	0.00	22.12	0.05	0.00	0.00	3.03
95.00	(1) 0.39" Fiber Trunk	No	4.88	0.00	0.00	0.00	0.00	22.12	0.05	0.00	0.00	0.26
95.00	(2) 0.78" 8 AWG 6	No	4.88	0.00	0.00	0.00	0.00	22.12	0.05	0.00	0.00	5.18
95.00	(12) 1 5/8" Coax	No	4.88	0.00	0.00	0.00	0.00	22.12	0.05	0.00	0.00	43.17
95.00	(1) 3" Conduit	No	4.88	0.00	0.00	0.00	0.00	22.12	0.05	0.00	0.00	33.26
95.00	(4) 7/8" Fiber	No	4.88	0.00	0.00	0.00	0.00	22.12	0.05	0.00	0.00	12.28
95.00	(2) 1 1/4" Fiber	No	4.88	0.00	0.00	0.00	0.00	22.12	0.05	0.00	0.00	9.21
95.00	(1) 1 5/8" Fiber	No	4.88	0.00	0.00	0.00	0.00	22.12	0.05	0.00	0.00	7.06
95.00	(3) Flat Bar	Yes	1.88	0.00	2.00	0.31	0.00	22.12	0.05	0.00	0.00	0.00
97.00	(3) 0.38" Cable	No	2.00	0.00	0.00	0.00	0.00	22.35	0.00	0.00	0.00	1.24
97.00	(1) 0.39" Fiber Trunk	No	2.00	0.00	0.00	0.00	0.00	22.35	0.00	0.00	0.00	0.11
97.00	(2) 0.78" 8 AWG 6	No	2.00	0.00	0.00	0.00	0.00	22.35	0.00	0.00	0.00	2.12
97.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	22.35	0.00	0.00	0.00	17.71
97.00	(1) 3" Conduit	No	2.00	0.00	0.00	0.00	0.00	22.35	0.00	0.00	0.00	13.64
97.00	(4) 7/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	22.35	0.00	0.00	0.00	5.04
97.00	(2) 1 1/4" Fiber	No	2.00	0.00	0.00	0.00	0.00	22.35	0.00	0.00	0.00	3.78
97.00	(1) 1 5/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	22.35	0.00	0.00	0.00	2.90
99.00	(3) 0.38" Cable	No	2.00	0.00	0.00	0.00	0.00	22.48	0.00	0.00	0.00	1.24
99.00	(1) 0.39" Fiber Trunk	No	2.00	0.00	0.00	0.00	0.00	22.48	0.00	0.00	0.00	0.11
99.00	(2) 0.78" 8 AWG 6	No	2.00	0.00	0.00	0.00	0.00	22.48	0.00	0.00	0.00	2.12
99.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	22.48	0.00	0.00	0.00	17.71
99.00	(1) 3" Conduit	No	2.00	0.00	0.00	0.00	0.00	22.48	0.00	0.00	0.00	13.64
99.00	(4) 7/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	22.48	0.00	0.00	0.00	5.04
100.0	(3) 0.38" Cable	No	1.00	0.00	0.00	0.00	0.00	22.58	0.00	0.00	0.00	0.62
100.0	(1) 0.39" Fiber Trunk	No	1.00	0.00	0.00	0.00	0.00	22.58	0.00	0.00	0.00	0.05
100.0	(2) 0.78" 8 AWG 6	No	1.00	0.00	0.00	0.00	0.00	22.58	0.00	0.00	0.00	1.06
100.0	(12) 1 5/8" Coax	No	1.00	0.00	0.00	0.00	0.00	22.58	0.00	0.00	0.00	8.86
100.0	(1) 3" Conduit	No	1.00	0.00	0.00	0.00	0.00	22.58	0.00	0.00	0.00	6.82
100.0	(4) 7/8" Fiber	No	1.00	0.00	0.00	0.00	0.00	22.58	0.00	0.00	0.00	2.52
105.0	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	22.77	0.00	0.00	0.00	3.11
105.0	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	22.77	0.00	0.00	0.00	0.27
105.0	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	22.77	0.00	0.00	0.00	5.31
105.0	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	22.77	0.00	0.00	0.00	44.28
105.0	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	22.77	0.00	0.00	0.00	34.11
105.0	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	22.77	0.00	0.00	0.00	12.60
109.0	(3) 0.38" Cable	No	4.00	0.00	0.00	0.00	0.00	23.05	0.00	0.00	0.00	2.48
109.0	(1) 0.39" Fiber Trunk	No	4.00	0.00	0.00	0.00	0.00	23.05	0.00	0.00	0.00	0.22
109.0	(2) 0.78" 8 AWG 6	No	4.00	0.00	0.00	0.00	0.00	23.05	0.00	0.00	0.00	4.25
109.0	(12) 1 5/8" Coax	No	4.00	0.00	0.00	0.00	0.00	23.05	0.00	0.00	0.00	35.42
109.0	(1) 3" Conduit	No	4.00	0.00	0.00	0.00	0.00	23.05	0.00	0.00	0.00	27.29
109.0	(4) 7/8" Fiber	No	4.00	0.00	0.00	0.00	0.00	23.05	0.00	0.00	0.00	10.08
110.0	(3) 0.38" Cable	No	1.00	0.00	0.00	0.00	0.00	23.21	0.00	0.00	0.00	0.62
110.0	(1) 0.39" Fiber Trunk	No	1.00	0.00	0.00	0.00	0.00	23.21	0.00	0.00	0.00	0.05
110.0	(2) 0.78" 8 AWG 6	No	1.00	0.00	0.00	0.00	0.00	23.21	0.00	0.00	0.00	1.06
110.0	(12) 1 5/8" Coax	No	1.00	0.00	0.00	0.00	0.00	23.21	0.00	0.00	0.00	8.86
110.0	(1) 3" Conduit	No	1.00	0.00	0.00	0.00	0.00	23.21	0.00	0.00	0.00	6.82
110.0	(4) 7/8" Fiber	No	1.00	0.00	0.00	0.00	0.00	23.21	0.00	0.00	0.00	2.52
115.0	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	23.39	0.00	0.00	0.00	3.11
115.0	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	23.39	0.00	0.00	0.00	0.27

Site Number: 283420 Code: ANSI/TIA-222-G

Site Name: STONEYBROOK RD CT, CT Engineering Number:12598484_C3_01 8/27/2018 4:13:13 PM

Customer: T-MOBILE

Load Case: 0.9D + 1.6W 97 mph with No Ice (Reduced DL) 25 Iterations

Gust Response Factor :1.10 Wind Importance Factor 1.00

Dead Load Factor :0.90

Wind Load Factor :1.60

115.0	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	23.39	0.00	0.00	0.00	5.31
115.0	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	23.39	0.00	0.00	0.00	44.28
115.0	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	23.39	0.00	0.00	0.00	34.11
115.0	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	23.39	0.00	0.00	0.00	12.60
117.0	(3) 0.38" Cable	No	2.00	0.00	0.00	0.00	0.00	23.59	0.00	0.00	0.00	1.24
117.0	(1) 0.39" Fiber Trunk	No	2.00	0.00	0.00	0.00	0.00	23.59	0.00	0.00	0.00	0.11
117.0	(2) 0.78" 8 AWG 6	No	2.00	0.00	0.00	0.00	0.00	23.59	0.00	0.00	0.00	2.12
117.0	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	23.59	0.00	0.00	0.00	17.71
117.0	(1) 3" Conduit	No	2.00	0.00	0.00	0.00	0.00	23.59	0.00	0.00	0.00	13.64
117.0	(4) 7/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	23.59	0.00	0.00	0.00	5.04
										Totals:	0.00	6,658.23

Load Case: 0.9D + 1.6W — 97 mph with No Ice (Reduced DL) — 25 Iterations

Gust Response Factor :1.10
Dead Load Factor :0.90
Wind Load Factor :1.60

Wind Importance Factor 1.00

Applied Segment Forces Summary

Seg Elev (ft)	Description	Shaft Forces Wind FX (lb)	Shaft Forces Dead Load (lb)	Discrete Forces Wind FX (lb)	Discrete Forces Torsion MY (lb-ft)	Discrete Forces Moment MZ (lb-ft)	Discrete Forces Dead Load (lb)	Linear Forces Wind FX (lb)	Linear Forces Dead Load (lb)	Sum of Forces Wind FX (lb)	Sum of Forces Dead Load (lb)	Sum of Forces Torsion MY (lb-ft)	Sum of Forces Moment MZ (lb)
0.00		159.9	0.0					0.0	0.0	159.9	0.0	0.0	0.0
5.00		314.0	621.7					0.0	204.9	314.0	826.7	0.0	0.0
10.00		302.4	599.0					0.0	204.9	302.4	803.9	0.0	0.0
15.00		290.7	576.2					0.0	204.9	290.7	781.1	0.0	0.0
20.00		279.1	553.4					0.0	204.9	279.1	758.3	0.0	0.0
25.00		267.5	530.6					0.0	204.9	267.5	735.5	0.0	0.0
30.00		258.8	507.8					0.0	204.9	258.8	712.8	0.0	0.0
35.00		255.2	485.1					0.0	204.9	255.2	690.0	0.0	0.0
40.00		224.5	462.3					0.0	204.9	224.5	667.2	0.0	0.0
43.88	Reinf Bottom	125.3	342.6					0.0	158.8	125.3	501.4	0.0	0.0
45.00		110.2	96.9					0.0	108.1	110.2	205.0	0.0	0.0
48.33	Bot - Section 2	123.4	280.3					0.0	320.4	123.4	600.7	0.0	0.0
50.00		102.4	233.7					0.0	160.2	102.4	393.9	0.0	0.0
52.50	Top - Section 1	121.5	342.5					0.0	240.3	121.5	582.8	0.0	0.0
55.00		178.0	138.7					0.0	240.3	178.0	379.0	0.0	0.0
60.00		163.6	265.4					0.0	480.6	163.6	746.0	0.0	0.0
62.00	Reinf. Top Reinf	113.3	101.7					0.0	192.2	113.3	293.9	0.0	0.0
65.00		176.0	147.8					0.0	288.3	176.0	436.1	0.0	0.0
70.00		211.8	233.6					0.0	480.6	211.8	714.1	0.0	0.0
75.00		143.0	217.6					0.0	480.6	143.0	698.2	0.0	0.0
77.00	Appurtenance(s)	97.6	82.6	2,287.2	0.0	3,016.5	835.1	0.0	192.2	2,384.8	1,109.9	0.0	0.0
80.00		95.3	119.1					0.0	261.8	95.3	380.9	0.0	0.0
82.00	Top - Section 2	91.6	76.2					0.0	174.5	91.6	250.7	0.0	0.0
85.00		89.1	94.0					0.0	261.8	89.1	355.8	0.0	0.0
87.00	Appurtenance(s)	85.3	60.0	749.4	0.0	0.0	860.9	0.0	174.5	834.6	1,095.4	0.0	0.0
90.00		52.4	85.8					0.0	235.2	52.4	321.0	0.0	0.0
90.13	Reinf. Top	78.6	3.5					0.0	9.8	78.6	13.3	0.0	0.0
95.00		106.1	128.7					0.0	113.5	106.1	242.1	0.0	0.0
97.00	Appurtenance(s)	57.9	49.0	1,846.8	0.0	0.0	1,194.1	0.0	46.5	1,904.7	1,289.7	0.0	0.0
99.00	Top - Section 3	42.1	46.8					0.0	39.9	42.1	86.7	0.0	0.0
100.00		83.0	29.9					0.0	19.9	83.0	49.9	0.0	0.0
105.00		125.3	149.6					0.0	99.7	125.3	249.3	0.0	0.0
109.00	Appurtenance(s)	70.2	119.7	1,202.3	0.0	0.0	231.7	0.0	79.7	1,272.4	431.1	0.0	0.0
110.00		85.2	29.9					0.0	19.9	85.2	49.9	0.0	0.0
115.00		99.8	149.6					0.0	99.7	99.8	249.3	0.0	0.0
117.00	Appurtenance(s)	57.5	59.8	2,589.8	0.0	0.0	1,505.7	0.0	39.9	2,647.3	1,605.4	0.0	0.0
119.00		28.8	59.8					0.0	0.0	28.8	59.8	0.0	0.0
								Totals:		13,941.7	19,366.7	0.00	0.00

Site Number: 283420 Code: ANSI/TIA-222-G

Site Name: STONEYBROOK RD CT, CT Engineering Number:12598484_C3_01 8/27/2018 4:13:14 PM

Customer: T-MOBILE

Load Case: 0.9D + 1.6W 97 mph with No Ice (Reduced DL) 25 Iterations

Gust Response Factor :1.10 Wind Importance Factor 1.00

Dead Load Factor :0.90

Wind Load Factor :1.60

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-19.34	-13.81	0.00	-1,159.66	0.00	1,159.66	2,813.31	1,406.66	4,820.79	2,413.98	0.00	0.00	0.487
5.00	-18.48	-13.55	0.00	-1,090.61	0.00	1,090.61	2,747.79	1,373.90	4,537.84	2,272.29	0.09	-0.18	0.487
10.00	-17.63	-13.31	0.00	-1,022.84	0.00	1,022.84	2,679.61	1,339.80	4,258.79	2,132.56	0.38	-0.36	0.486
15.00	-16.81	-13.07	0.00	-956.31	0.00	956.31	2,608.76	1,304.38	3,984.14	1,995.03	0.86	-0.56	0.486
20.00	-16.00	-12.84	0.00	-890.97	0.00	890.97	2,535.24	1,267.62	3,714.39	1,859.96	1.55	-0.76	0.485
25.00	-15.22	-12.62	0.00	-826.78	0.00	826.78	2,459.06	1,229.53	3,450.04	1,727.58	2.46	-0.97	0.485
30.00	-14.47	-12.41	0.00	-763.68	0.00	763.68	2,380.22	1,190.11	3,191.57	1,598.16	3.60	-1.20	0.484
35.00	-13.73	-12.19	0.00	-701.66	0.00	701.66	2,298.17	1,149.08	2,938.80	1,471.58	4.99	-1.44	0.483
40.00	-13.02	-12.00	0.00	-640.70	0.00	640.70	2,187.63	1,093.82	2,661.58	1,332.77	6.63	-1.69	0.487
43.88	-12.50	-11.89	0.00	-594.19	0.00	594.19	2,101.97	1,050.99	2,456.17	1,229.91	8.08	-1.90	0.489
45.00	-12.28	-11.79	0.00	-580.81	0.00	580.81	2,077.10	1,038.55	2,398.08	1,200.82	8.54	-1.96	0.287
48.33	-11.66	-11.67	0.00	-541.50	0.00	541.50	2,003.41	1,001.71	2,230.05	1,116.68	9.95	-2.07	0.283
50.00	-11.26	-11.56	0.00	-522.06	0.00	522.06	1,966.57	983.28	2,148.32	1,075.76	10.68	-2.13	0.277
52.50	-10.66	-11.44	0.00	-493.15	0.00	493.15	1,292.92	646.46	1,405.62	703.85	11.82	-2.22	0.342
55.00	-10.26	-11.27	0.00	-464.56	0.00	464.56	1,267.71	633.85	1,338.84	670.42	13.00	-2.30	0.332
60.00	-9.50	-11.10	0.00	-408.22	0.00	408.22	1,215.29	607.65	1,208.00	604.90	15.52	-2.50	0.312
62.00	-9.19	-10.99	0.00	-386.03	0.00	386.03	1,193.58	596.79	1,156.76	579.24	16.58	-2.58	0.304
62.00	-9.19	-10.99	0.00	-386.03	0.00	386.03	1,193.58	596.79	1,156.76	579.24	16.58	-2.58	0.304
65.00	-8.73	-10.82	0.00	-353.07	0.00	353.07	1,160.21	580.11	1,081.18	541.39	18.25	-2.70	0.290
70.00	-7.99	-10.60	0.00	-298.99	0.00	298.99	1,094.51	547.25	951.97	476.69	21.19	-2.90	0.267
75.00	-7.28	-10.43	0.00	-246.01	0.00	246.01	1,017.13	508.57	821.49	411.36	24.33	-3.10	0.242
77.00	-6.29	-8.00	0.00	-222.12	0.00	222.12	986.19	493.09	772.00	386.57	25.65	-3.17	0.227
80.00	-5.90	-7.90	0.00	-198.11	0.00	198.11	939.76	469.88	700.63	350.84	27.68	-3.29	0.216
82.00	-5.64	-7.80	0.00	-182.32	0.00	182.32	908.81	454.41	654.98	327.98	29.07	-3.37	0.207
82.00	-5.64	-7.80	0.00	-182.32	0.00	182.32	780.36	390.18	564.40	282.62	29.07	-3.37	0.000
85.00	-5.28	-7.70	0.00	-158.92	0.00	158.92	740.57	370.29	508.03	254.39	31.22	-3.48	0.203
87.00	-4.23	-6.81	0.00	-143.52	0.00	143.52	714.04	357.02	472.09	236.39	32.70	-3.56	0.191
90.00	-3.90	-6.74	0.00	-123.11	0.00	123.11	674.25	337.13	420.65	210.64	34.97	-3.67	0.175
90.13	-3.88	-6.66	0.00	-122.27	0.00	122.27	672.59	336.30	418.57	209.60	35.06	-3.67	0.174
90.13	-3.88	-6.66	0.00	-122.27	0.00	122.27	672.59	336.30	418.57	209.60	35.06	-3.67	0.590
95.00	-3.63	-6.55	0.00	-89.78	0.00	89.78	607.93	303.97	341.52	171.01	38.90	-3.84	0.531
97.00	-2.45	-4.58	0.00	-76.68	0.00	76.68	581.40	290.70	312.17	156.32	40.56	-4.08	0.495
99.00	-2.35	-4.53	0.00	-67.53	0.00	67.53	554.88	277.44	284.14	142.28	42.32	-4.32	0.479
99.00	-2.35	-4.53	0.00	-67.53	0.00	67.53	725.83	362.92	362.74	181.64	42.32	-4.32	0.375
100.00	-2.29	-4.46	0.00	-62.99	0.00	62.99	725.83	362.92	362.74	181.64	43.23	-4.44	0.350
105.00	-2.03	-4.32	0.00	-40.70	0.00	40.70	725.83	362.92	362.74	181.64	48.10	-4.84	0.227
109.00	-1.70	-3.02	0.00	-23.40	0.00	23.40	725.83	362.92	362.74	181.64	52.24	-5.03	0.131
110.00	-1.66	-2.94	0.00	-20.38	0.00	20.38	725.83	362.92	362.74	181.64	53.30	-5.06	0.115
115.00	-1.42	-2.82	0.00	-5.70	0.00	5.70	725.83	362.92	362.74	181.64	58.66	-5.16	0.033
117.00	-0.06	-0.03	0.00	-0.07	0.00	0.07	725.83	362.92	362.74	181.64	60.82	-5.17	0.000
119.00	0.00	-0.03	0.00	0.00	0.00	0.00	725.83	362.92	362.74	181.64	62.98	-5.17	0.000

Site Number: 283420 Code: ANSI/TIA-222-G

Site Name: STONEYBROOK RD CT, CT Engineering Number:12598484_C3_01 8/27/2018 4:13:14 PM

Customer: T-MOBILE

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph with 0.75 in Radial Ice 24 Iterations

Gust Response Factor :1.10 Ice Dead Load Factor :1.00 Wind Importance Factor :1.00

Dead Load Factor :1.20 Ice Importance Factor :1.00

Wind Load Factor :1.00

Shaft Segment Forces (Factored)

Seg Top Elev (ft)	Description	Kzt	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		1.00	0.70	4.256	4.682	0.000	1.200		0.000	0.00	0.000	0.00	51.7	0.0	0.0
5.00		1.00	0.70	4.256	4.682	0.000	1.200		1.159	5.00	18.418	22.10	102.0	302.4	1,131.4
10.00		1.00	0.70	4.256	4.682	0.000	1.200		1.293	5.00	17.896	21.48	98.9	326.4	1,125.1
15.00		1.00	0.70	4.256	4.682	0.000	1.200		1.361	5.00	17.318	20.78	95.6	331.3	1,099.6
20.00		1.00	0.70	4.256	4.682	0.000	1.200		1.408	5.00	16.722	20.07	92.2	329.8	1,067.7
25.00		1.00	0.70	4.256	4.682	0.000	1.200		1.444	5.00	16.117	19.34	88.8	325.0	1,032.5
30.00		1.00	0.70	4.256	4.682	0.000	1.200		1.473	5.00	15.507	18.61	86.4	318.0	995.1
35.00		1.00	0.72	4.358	4.794	0.000	1.200		1.498	5.00	14.893	17.87	85.6	309.5	956.2
40.00		1.00	0.75	4.540	4.994	0.000	1.200		1.519	5.00	14.276	17.13	75.7	299.9	916.2
43.88	Reinf Bottom	1.00	0.77	4.687	5.156	0.000	1.200		1.536	3.88	10.639	12.77	42.4	226.5	683.3
45.00		1.00	0.78	4.766	5.242	0.000	1.200		1.545	1.13	3.019	3.62	37.4	65.4	194.6
48.33	Bot - Section 2	1.00	0.79	4.833	5.316	0.000	1.200		1.553	3.33	8.760	10.51	42.0	188.3	562.1
50.00		1.00	0.81	4.905	5.396	0.000	1.200		1.561	1.67	4.338	5.21	34.9	94.5	406.1
52.50	Top - Section 1	1.00	0.82	4.964	5.460	0.000	1.200		1.568	2.50	6.378	7.65	41.6	138.7	595.3
55.00		1.00	0.83	5.032	5.535	0.000	1.200		1.575	2.50	6.223	7.47	61.2	135.7	320.6
60.00		1.00	0.84	5.130	5.643	0.000	1.200		1.586	5.00	11.978	14.37	56.4	258.3	612.3
62.00	Reinf. Top Reinf	1.00	0.86	5.217	5.739	0.000	1.200		1.595	2.00	4.617	5.54	39.4	101.6	237.2
65.00		1.00	0.87	5.277	5.805	0.000	1.200		1.601	3.00	6.738	8.09	61.5	147.6	344.7
70.00		1.00	0.88	5.370	5.907	0.000	1.200		1.611	5.00	10.730	12.88	74.6	232.5	543.9
75.00		1.00	0.90	5.481	6.029	0.000	1.200		1.623	5.00	10.105	12.13	50.7	219.0	509.2
77.00	Appurtenance(s)	1.00	0.91	5.555	6.111	0.000	1.200	*	1.631	2.00	3.867	4.64	34.9	85.6	195.7
80.00		1.00	0.92	5.607	6.168	0.000	1.200	*	1.636	3.00	5.613	6.74	34.3	123.3	282.1
82.00	Top - Section 2 Reinf.	1.00	0.93	5.657	6.223	0.000	1.200	*	1.641	2.00	3.617	4.34	33.2	80.0	181.6
85.00		1.00	0.94	5.707	6.277	0.000	1.200	*	1.646	3.00	5.237	6.28	32.5	114.9	240.2
87.00	Appurtenance(s)	1.00	0.95	5.755	6.331	0.000	1.200	*	1.651	2.00	3.366	4.04	31.4	74.3	154.3
90.00		1.00	0.95	5.802	6.383	0.000	1.200	*	1.656	3.00	4.861	5.83	19.4	106.2	220.7
90.13	Reinf. Top	1.00	0.96	5.831	6.415	0.000	1.200	*	1.658	0.13	0.198	0.24	29.5	4.4	9.1
95.00		1.00	0.97	5.877	6.465	0.000	1.200		1.663	4.88	7.402	8.88	39.9	158.3	329.8
97.00	Appurtenance(s)	1.00	0.98	5.939	6.533	0.000	1.200		1.669	2.00	2.864	3.44	22.1	62.7	128.0
99.00	Top - Section 3	1.00	0.98	5.974	6.571	0.000	1.200		1.672	2.00	2.764	3.32	16.2	60.3	122.8
100.0		1.00	0.99	6.000	6.600	0.000	1.200		1.675	1.00	1.342	1.61	32.1	29.8	69.7
105.0		1.00	1.00	6.051	6.656	0.000	1.200		1.680	5.00	6.715	8.06	48.6	149.7	349.1
109.0	Appurtenance(s)	1.00	1.01	6.126	6.738	0.000	1.200		1.687	4.00	5.377	6.45	27.2	120.3	279.9
110.0		1.00	1.01	6.166	6.783	0.000	1.200		1.691	1.00	1.345	1.61	33.1	30.2	70.0
115.0		1.00	1.02	6.214	6.835	0.000	1.200		1.696	5.00	6.728	8.07	38.7	151.2	350.7
117.0	Appurtenance(s)	1.00	1.03	6.269	6.896	0.000	1.200		1.701	2.00	2.693	3.23	22.3	60.7	140.5
119.0		1.00	1.04	6.299	6.929	0.000	1.200		1.704	2.00	2.694	3.23	11.2	60.8	140.6
* = Cf Adjusted By Linear Load Ra Effect							Totals:		119.00				1,826.0	5,823.1	16,597.8

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph with 0.75 in Radial Ice 24 Iterations

Gust Response Factor :1.10 Ice Dead Load Factor :1.00 Wind Importance Factor :1.00
Dead Load Factor :1.20 Ice Importance Factor :1.00
Wind Load Factor :1.00

Discrete Appurtenance Segment Forces (Factored)

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orientation Factor	Ka	Total EPAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
77.00	Alcatel-Lucent 9442	3	5.576	6.134	0.67	0.80	5.68	0.000	0.000	34.84	0.00	0.00	326.02
77.00	Alcatel-Lucent 9442	3	5.576	6.134	0.67	0.80	6.04	0.000	0.000	37.04	0.00	0.00	346.22
77.00	Amphenol Antel BXA-1	6	5.617	6.179	0.72	0.80	24.19	0.000	2.000	149.45	0.00	298.90	465.02
77.00	Amphenol Antel BXA-7	6	5.617	6.179	0.66	0.80	35.04	0.000	2.000	216.51	0.00	433.01	938.74
77.00	Flat Side Arm	3	5.576	6.134	0.67	1.00	17.29	0.000	0.000	106.04	0.00	0.00	505.44
87.00	Ericsson AIR32 B66Aa	3	5.774	6.351	0.71	0.80	12.90	0.000	0.000	81.96	0.00	0.00	991.06
87.00	Side Arms	1	5.774	6.351	1.00	1.00	15.24	0.000	0.000	96.77	0.00	0.00	1,675.73
97.00	Ericsson KRY 112 144	3	5.956	6.552	0.50	0.80	0.94	0.000	0.000	6.18	0.00	0.00	93.34
97.00	Ericsson Radio 4449	3	5.956	6.552	0.50	0.80	2.58	0.000	0.000	16.88	0.00	0.00	459.01
97.00	Ericsson RRUS 01 B2	3	5.956	6.552	0.67	0.80	6.18	0.000	0.000	40.51	0.00	0.00	422.09
97.00	RFS APXVAARR24_43-	3	5.956	6.552	0.63	0.80	33.34	0.000	0.000	218.43	0.00	0.00	1,688.62
97.00	Side Arms	1	5.956	6.552	1.00	1.00	15.31	0.000	0.000	100.31	0.00	0.00	1,680.64
109.0	Amphenol Antel BXA-1	3	6.158	6.774	0.72	1.00	15.28	0.000	0.000	103.53	0.00	0.00	241.87
109.0	CCI OPA-65R-LCUU-H6	3	6.158	6.774	0.66	1.00	24.45	0.000	0.000	165.59	0.00	0.00	679.11
117.0	Amphenol Antel BXA-1	3	6.284	6.913	0.72	0.80	12.26	0.000	0.000	84.74	0.00	0.00	244.12
117.0	CCI OPA-65R-LCUU-H6	3	6.284	6.913	0.66	0.80	19.59	0.000	0.000	135.42	0.00	0.00	683.90
117.0	CCI TPX-070821	6	6.284	6.913	0.50	0.80	2.64	0.000	0.000	18.23	0.00	0.00	104.66
117.0	Ericsson RRUS 32 B2	3	6.284	6.913	0.67	0.80	6.24	0.000	0.000	43.14	0.00	0.00	342.99
117.0	Ericsson RRUS-11	3	6.284	6.913	0.67	0.80	8.11	0.000	0.000	56.06	0.00	0.00	383.93
117.0	Ericsson RRUS-32 B30	3	6.284	6.913	0.67	0.80	7.34	0.000	0.000	50.71	0.00	0.00	478.44
117.0	Flat T-Arm	3	6.284	6.913	0.67	0.75	31.49	0.000	0.000	217.65	0.00	0.00	1,320.33
117.0	Raycap DC6-48-60-18-	2	6.284	6.913	1.00	0.80	3.00	0.000	0.000	20.73	0.00	0.00	163.83
										2,000.69			14,235.11

Load Case: 1.2D + 1.0Di + 1.0Wi — 50 mph with 0.75 in Radial Ice — 24 Iterations

Gust Response Factor :1.10 | Ice Dead Load Factor :1.00 | Wind Importance Factor :1.00
Dead Load Factor :1.20 | Ice Importance Factor :1.00
Wind Load Factor :1.00

Linear Appurtenance Segment Forces (Factored)

Seg Top Elev (ft)	Description	Exposed To Wind	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	qz (psf)	Ra	Cf Adjust Factor	F X (lb)	Dead Load (lb)
5.00	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	4.14
5.00	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	0.36
5.00	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	7.08
5.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	59.04
5.00	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	45.48
5.00	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	16.80
5.00	(2) 1 1/4" Fiber	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	12.60
5.00	(1) 1 5/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	9.66
5.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	59.04
5.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	59.04
10.00	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	4.14
10.00	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	0.36
10.00	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	7.08
10.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	59.04
10.00	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	45.48
10.00	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	16.80
10.00	(2) 1 1/4" Fiber	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	12.60
10.00	(1) 1 5/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	9.66
10.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	59.04
10.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	59.04
15.00	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	4.14
15.00	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	0.36
15.00	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	7.08
15.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	59.04
15.00	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	45.48
15.00	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	16.80
15.00	(2) 1 1/4" Fiber	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	12.60
15.00	(1) 1 5/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	9.66
15.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	59.04
15.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	59.04
20.00	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	4.14
20.00	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	0.36
20.00	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	7.08
20.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	59.04
20.00	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	45.48
20.00	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	16.80
20.00	(2) 1 1/4" Fiber	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	12.60
20.00	(1) 1 5/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	9.66
20.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	59.04
20.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	59.04
25.00	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	4.14
25.00	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	0.36
25.00	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	7.08
25.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	59.04
25.00	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	45.48
25.00	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	16.80
25.00	(2) 1 1/4" Fiber	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	12.60
25.00	(1) 1 5/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	9.66
25.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	59.04
25.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	59.04
30.00	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	4.14

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph with 0.75 in Radial Ice 24 Iterations

Gust Response Factor :1.10 Ice Dead Load Factor :1.00 Wind Importance Factor :1.00
Dead Load Factor :1.20 Ice Importance Factor :1.00
Wind Load Factor :1.00

30.00	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	0.36
30.00	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	7.08
30.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	59.04
30.00	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	45.48
30.00	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	16.80
30.00	(2) 1 1/4" Fiber	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	12.60
30.00	(1) 1 5/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	9.66
30.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	59.04
30.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	4.26	0.00	0.00	0.00	59.04
35.00	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	4.36	0.00	0.00	0.00	4.14
35.00	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	4.36	0.00	0.00	0.00	0.36
35.00	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	4.36	0.00	0.00	0.00	7.08
35.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	4.36	0.00	0.00	0.00	59.04
35.00	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	4.36	0.00	0.00	0.00	45.48
35.00	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	4.36	0.00	0.00	0.00	16.80
35.00	(2) 1 1/4" Fiber	No	5.00	0.00	0.00	0.00	0.00	4.36	0.00	0.00	0.00	12.60
35.00	(1) 1 5/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	4.36	0.00	0.00	0.00	9.66
35.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	4.36	0.00	0.00	0.00	59.04
35.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	4.36	0.00	0.00	0.00	59.04
40.00	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	4.54	0.00	0.00	0.00	4.14
40.00	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	4.54	0.00	0.00	0.00	0.36
40.00	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	4.54	0.00	0.00	0.00	7.08
40.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	4.54	0.00	0.00	0.00	59.04
40.00	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	4.54	0.00	0.00	0.00	45.48
40.00	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	4.54	0.00	0.00	0.00	16.80
40.00	(2) 1 1/4" Fiber	No	5.00	0.00	0.00	0.00	0.00	4.54	0.00	0.00	0.00	12.60
40.00	(1) 1 5/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	4.54	0.00	0.00	0.00	9.66
40.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	4.54	0.00	0.00	0.00	59.04
40.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	4.54	0.00	0.00	0.00	59.04
43.88	(3) 0.38" Cable	No	3.88	0.00	0.00	0.00	0.00	4.69	0.03	0.00	0.00	3.21
43.88	(1) 0.39" Fiber Trunk	No	3.88	0.00	0.00	0.00	0.00	4.69	0.03	0.00	0.00	0.28
43.88	(2) 0.78" 8 AWG 6	No	3.88	0.00	0.00	0.00	0.00	4.69	0.03	0.00	0.00	5.49
43.88	(12) 1 5/8" Coax	No	3.88	0.00	0.00	0.00	0.00	4.69	0.03	0.00	0.00	45.76
43.88	(1) 3" Conduit	No	3.88	0.00	0.00	0.00	0.00	4.69	0.03	0.00	0.00	35.25
43.88	(4) 7/8" Fiber	No	3.88	0.00	0.00	0.00	0.00	4.69	0.03	0.00	0.00	13.02
43.88	(2) 1 1/4" Fiber	No	3.88	0.00	0.00	0.00	0.00	4.69	0.03	0.00	0.00	9.77
43.88	(1) 1 5/8" Fiber	No	3.88	0.00	0.00	0.00	0.00	4.69	0.03	0.00	0.00	7.49
43.88	(3) Flat Bar	Yes	1.88	0.00	2.00	0.79	0.00	4.69	0.03	0.00	0.00	12.60
43.88	(12) 1 5/8" Coax	No	3.88	0.00	0.00	0.00	0.00	4.69	0.03	0.00	0.00	45.76
43.88	(12) 1 5/8" Coax	No	3.88	0.00	0.00	0.00	0.00	4.69	0.03	0.00	0.00	45.76
45.00	(3) 0.38" Cable	No	1.13	0.00	0.00	0.00	0.00	4.77	0.07	0.00	0.00	0.93
45.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	82.69
45.00	(1) 0.39" Fiber Trunk	No	1.13	0.00	0.00	0.00	0.00	4.77	0.07	0.00	0.00	0.08
45.00	(2) 0.78" 8 AWG 6	No	1.13	0.00	0.00	0.00	0.00	4.77	0.07	0.00	0.00	1.59
45.00	(12) 1 5/8" Coax	No	1.13	0.00	0.00	0.00	0.00	4.77	0.07	0.00	0.00	13.28
45.00	(1) 3" Conduit	No	1.13	0.00	0.00	0.00	0.00	4.77	0.07	0.00	0.00	10.23
45.00	(4) 7/8" Fiber	No	1.13	0.00	0.00	0.00	0.00	4.77	0.07	0.00	0.00	3.78
45.00	(2) 1 1/4" Fiber	No	1.13	0.00	0.00	0.00	0.00	4.77	0.07	0.00	0.00	2.84
45.00	(1) 1 5/8" Fiber	No	1.13	0.00	0.00	0.00	0.00	4.77	0.07	0.00	0.00	2.17
45.00	(3) Flat Bar	Yes	1.13	0.00	2.00	0.48	0.00	4.77	0.07	0.00	0.00	7.62
45.00	(12) 1 5/8" Coax	No	1.13	0.00	0.00	0.00	0.00	4.77	0.07	0.00	0.00	13.28
45.00	(12) 1 5/8" Coax	No	1.13	0.00	0.00	0.00	0.00	4.77	0.07	0.00	0.00	13.28
48.33	(3) 0.38" Cable	No	3.33	0.00	0.00	0.00	0.00	4.83	0.07	0.00	0.00	2.76
48.33	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	245.00
48.33	(1) 0.39" Fiber Trunk	No	3.33	0.00	0.00	0.00	0.00	4.83	0.07	0.00	0.00	0.24
48.33	(2) 0.78" 8 AWG 6	No	3.33	0.00	0.00	0.00	0.00	4.83	0.07	0.00	0.00	4.72
48.33	(12) 1 5/8" Coax	No	3.33	0.00	0.00	0.00	0.00	4.83	0.07	0.00	0.00	39.36

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph with 0.75 in Radial Ice 24 Iterations

Gust Response Factor :1.10 Ice Dead Load Factor :1.00 Wind Importance Factor :1.00
Dead Load Factor :1.20 Ice Importance Factor :1.00
Wind Load Factor :1.00

48.33	(1) 3" Conduit	No	3.33	0.00	0.00	0.00	0.00	4.83	0.07	0.00	0.00	30.32
48.33	(4) 7/8" Fiber	No	3.33	0.00	0.00	0.00	0.00	4.83	0.07	0.00	0.00	11.20
48.33	(2) 1 1/4" Fiber	No	3.33	0.00	0.00	0.00	0.00	4.83	0.07	0.00	0.00	8.40
48.33	(1) 1 5/8" Fiber	No	3.33	0.00	0.00	0.00	0.00	4.83	0.07	0.00	0.00	6.44
48.33	(3) Flat Bar	Yes	3.33	0.00	2.00	1.42	0.00	4.83	0.07	0.00	0.00	22.73
48.33	(12) 1 5/8" Coax	No	3.33	0.00	0.00	0.00	0.00	4.83	0.07	0.00	0.00	39.36
48.33	(12) 1 5/8" Coax	No	3.33	0.00	0.00	0.00	0.00	4.83	0.07	0.00	0.00	39.36
50.00	(3) 0.38" Cable	No	1.67	0.00	0.00	0.00	0.00	4.91	0.07	0.00	0.00	1.38
50.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	122.50
50.00	(1) 0.39" Fiber Trunk	No	1.67	0.00	0.00	0.00	0.00	4.91	0.07	0.00	0.00	0.12
50.00	(2) 0.78" 8 AWG 6	No	1.67	0.00	0.00	0.00	0.00	4.91	0.07	0.00	0.00	2.36
50.00	(12) 1 5/8" Coax	No	1.67	0.00	0.00	0.00	0.00	4.91	0.07	0.00	0.00	19.68
50.00	(1) 3" Conduit	No	1.67	0.00	0.00	0.00	0.00	4.91	0.07	0.00	0.00	15.16
50.00	(4) 7/8" Fiber	No	1.67	0.00	0.00	0.00	0.00	4.91	0.07	0.00	0.00	5.60
50.00	(2) 1 1/4" Fiber	No	1.67	0.00	0.00	0.00	0.00	4.91	0.07	0.00	0.00	4.20
50.00	(1) 1 5/8" Fiber	No	1.67	0.00	0.00	0.00	0.00	4.91	0.07	0.00	0.00	3.22
50.00	(3) Flat Bar	Yes	1.67	0.00	2.00	0.71	0.00	4.91	0.07	0.00	0.00	11.45
50.00	(12) 1 5/8" Coax	No	1.67	0.00	0.00	0.00	0.00	4.91	0.07	0.00	0.00	19.68
50.00	(12) 1 5/8" Coax	No	1.67	0.00	0.00	0.00	0.00	4.91	0.07	0.00	0.00	19.68
52.50	(3) 0.38" Cable	No	2.50	0.00	0.00	0.00	0.00	4.96	0.07	0.00	0.00	2.07
52.50	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	183.75
52.50	(1) 0.39" Fiber Trunk	No	2.50	0.00	0.00	0.00	0.00	4.96	0.07	0.00	0.00	0.18
52.50	(2) 0.78" 8 AWG 6	No	2.50	0.00	0.00	0.00	0.00	4.96	0.07	0.00	0.00	3.54
52.50	(12) 1 5/8" Coax	No	2.50	0.00	0.00	0.00	0.00	4.96	0.07	0.00	0.00	29.52
52.50	(1) 3" Conduit	No	2.50	0.00	0.00	0.00	0.00	4.96	0.07	0.00	0.00	22.74
52.50	(4) 7/8" Fiber	No	2.50	0.00	0.00	0.00	0.00	4.96	0.07	0.00	0.00	8.40
52.50	(2) 1 1/4" Fiber	No	2.50	0.00	0.00	0.00	0.00	4.96	0.07	0.00	0.00	6.30
52.50	(1) 1 5/8" Fiber	No	2.50	0.00	0.00	0.00	0.00	4.96	0.07	0.00	0.00	4.83
52.50	(3) Flat Bar	Yes	2.50	0.00	2.00	1.07	0.00	4.96	0.07	0.00	0.00	17.27
52.50	(12) 1 5/8" Coax	No	2.50	0.00	0.00	0.00	0.00	4.96	0.07	0.00	0.00	29.52
52.50	(12) 1 5/8" Coax	No	2.50	0.00	0.00	0.00	0.00	4.96	0.07	0.00	0.00	29.52
55.00	(3) 0.38" Cable	No	2.50	0.00	0.00	0.00	0.00	5.03	0.07	0.00	0.00	2.07
55.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	183.75
55.00	(1) 0.39" Fiber Trunk	No	2.50	0.00	0.00	0.00	0.00	5.03	0.07	0.00	0.00	0.18
55.00	(2) 0.78" 8 AWG 6	No	2.50	0.00	0.00	0.00	0.00	5.03	0.07	0.00	0.00	3.54
55.00	(12) 1 5/8" Coax	No	2.50	0.00	0.00	0.00	0.00	5.03	0.07	0.00	0.00	29.52
55.00	(1) 3" Conduit	No	2.50	0.00	0.00	0.00	0.00	5.03	0.07	0.00	0.00	22.74
55.00	(4) 7/8" Fiber	No	2.50	0.00	0.00	0.00	0.00	5.03	0.07	0.00	0.00	8.40
55.00	(2) 1 1/4" Fiber	No	2.50	0.00	0.00	0.00	0.00	5.03	0.07	0.00	0.00	6.30
55.00	(1) 1 5/8" Fiber	No	2.50	0.00	0.00	0.00	0.00	5.03	0.07	0.00	0.00	4.83
55.00	(3) Flat Bar	Yes	2.50	0.00	2.00	1.07	0.00	5.03	0.07	0.00	0.00	17.39
55.00	(12) 1 5/8" Coax	No	2.50	0.00	0.00	0.00	0.00	5.03	0.07	0.00	0.00	29.52
55.00	(12) 1 5/8" Coax	No	2.50	0.00	0.00	0.00	0.00	5.03	0.07	0.00	0.00	29.52
60.00	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	5.13	0.08	0.00	0.00	4.14
60.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	367.51
60.00	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	5.13	0.08	0.00	0.00	0.36
60.00	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	5.13	0.08	0.00	0.00	7.08
60.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	5.13	0.08	0.00	0.00	59.04
60.00	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	5.13	0.08	0.00	0.00	45.48
60.00	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	5.13	0.08	0.00	0.00	16.80
60.00	(2) 1 1/4" Fiber	No	5.00	0.00	0.00	0.00	0.00	5.13	0.08	0.00	0.00	12.60
60.00	(1) 1 5/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	5.13	0.08	0.00	0.00	9.66
60.00	(3) Flat Bar	Yes	5.00	0.00	2.00	2.15	0.00	5.13	0.08	0.00	0.00	35.11
60.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	5.13	0.08	0.00	0.00	59.04
60.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	5.13	0.08	0.00	0.00	59.04
62.00	(3) 0.38" Cable	No	2.00	0.00	0.00	0.00	0.00	5.22	0.08	0.00	0.00	1.66
62.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	147.00

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph with 0.75 in Radial Ice 24 Iterations

Gust Response Factor :1.10 Ice Dead Load Factor :1.00 Wind Importance Factor :1.00
Dead Load Factor :1.20 Ice Importance Factor :1.00
Wind Load Factor :1.00

62.00	(1) 0.39" Fiber Trunk	No	2.00	0.00	0.00	0.00	0.00	5.22	0.08	0.00	0.00	0.14
62.00	(2) 0.78" 8 AWG 6	No	2.00	0.00	0.00	0.00	0.00	5.22	0.08	0.00	0.00	2.83
62.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	5.22	0.08	0.00	0.00	23.62
62.00	(1) 3" Conduit	No	2.00	0.00	0.00	0.00	0.00	5.22	0.08	0.00	0.00	18.19
62.00	(4) 7/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	5.22	0.08	0.00	0.00	6.72
62.00	(2) 1 1/4" Fiber	No	2.00	0.00	0.00	0.00	0.00	5.22	0.08	0.00	0.00	5.04
62.00	(1) 1 5/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	5.22	0.08	0.00	0.00	3.86
62.00	(3) Flat Bar	Yes	2.00	0.00	2.00	0.87	0.00	5.22	0.08	0.00	0.00	14.16
62.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	5.22	0.08	0.00	0.00	23.62
62.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	5.22	0.08	0.00	0.00	23.62
65.00	(3) 0.38" Cable	No	3.00	0.00	0.00	0.00	0.00	5.28	0.08	0.00	0.00	2.48
65.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	220.50
65.00	(1) 0.39" Fiber Trunk	No	3.00	0.00	0.00	0.00	0.00	5.28	0.08	0.00	0.00	0.22
65.00	(2) 0.78" 8 AWG 6	No	3.00	0.00	0.00	0.00	0.00	5.28	0.08	0.00	0.00	4.25
65.00	(12) 1 5/8" Coax	No	3.00	0.00	0.00	0.00	0.00	5.28	0.08	0.00	0.00	35.42
65.00	(1) 3" Conduit	No	3.00	0.00	0.00	0.00	0.00	5.28	0.08	0.00	0.00	27.29
65.00	(4) 7/8" Fiber	No	3.00	0.00	0.00	0.00	0.00	5.28	0.08	0.00	0.00	10.08
65.00	(2) 1 1/4" Fiber	No	3.00	0.00	0.00	0.00	0.00	5.28	0.08	0.00	0.00	7.56
65.00	(1) 1 5/8" Fiber	No	3.00	0.00	0.00	0.00	0.00	5.28	0.08	0.00	0.00	5.80
65.00	(3) Flat Bar	Yes	3.00	0.00	2.00	1.30	0.00	5.28	0.08	0.00	0.00	21.36
65.00	(12) 1 5/8" Coax	No	3.00	0.00	0.00	0.00	0.00	5.28	0.08	0.00	0.00	35.42
65.00	(12) 1 5/8" Coax	No	3.00	0.00	0.00	0.00	0.00	5.28	0.08	0.00	0.00	35.42
70.00	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	5.37	0.09	0.00	0.00	4.14
70.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	367.51
70.00	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	5.37	0.09	0.00	0.00	0.36
70.00	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	5.37	0.09	0.00	0.00	7.08
70.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	5.37	0.09	0.00	0.00	59.04
70.00	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	5.37	0.09	0.00	0.00	45.48
70.00	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	5.37	0.09	0.00	0.00	16.80
70.00	(2) 1 1/4" Fiber	No	5.00	0.00	0.00	0.00	0.00	5.37	0.09	0.00	0.00	12.60
70.00	(1) 1 5/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	5.37	0.09	0.00	0.00	9.66
70.00	(3) Flat Bar	Yes	5.00	0.00	2.00	2.18	0.00	5.37	0.09	0.00	0.00	35.91
70.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	5.37	0.09	0.00	0.00	59.04
70.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	5.37	0.09	0.00	0.00	59.04
75.00	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	5.48	0.10	0.00	0.00	4.14
75.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	367.51
75.00	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	5.48	0.10	0.00	0.00	0.36
75.00	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	5.48	0.10	0.00	0.00	7.08
75.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	5.48	0.10	0.00	0.00	59.04
75.00	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	5.48	0.10	0.00	0.00	45.48
75.00	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	5.48	0.10	0.00	0.00	16.80
75.00	(2) 1 1/4" Fiber	No	5.00	0.00	0.00	0.00	0.00	5.48	0.10	0.00	0.00	12.60
75.00	(1) 1 5/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	5.48	0.10	0.00	0.00	9.66
75.00	(3) Flat Bar	Yes	5.00	0.00	2.00	2.19	0.00	5.48	0.10	0.00	0.00	36.27
75.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	5.48	0.10	0.00	0.00	59.04
75.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	5.48	0.10	0.00	0.00	59.04
77.00	(3) 0.38" Cable	No	2.00	0.00	0.00	0.00	0.00	5.56	0.10	1.00	0.00	1.66
77.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	147.00
77.00	(1) 0.39" Fiber Trunk	No	2.00	0.00	0.00	0.00	0.00	5.56	0.10	1.00	0.00	0.14
77.00	(2) 0.78" 8 AWG 6	No	2.00	0.00	0.00	0.00	0.00	5.56	0.10	1.00	0.00	2.83
77.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	5.56	0.10	1.00	0.00	23.62
77.00	(1) 3" Conduit	No	2.00	0.00	0.00	0.00	0.00	5.56	0.10	1.00	0.00	18.19
77.00	(4) 7/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	5.56	0.10	1.00	0.00	6.72
77.00	(2) 1 1/4" Fiber	No	2.00	0.00	0.00	0.00	0.00	5.56	0.10	1.00	0.00	5.04
77.00	(1) 1 5/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	5.56	0.10	1.00	0.00	3.86
77.00	(3) Flat Bar	Yes	2.00	0.00	2.00	0.88	0.00	5.56	0.10	1.00	0.00	14.61
77.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	5.56	0.10	1.00	0.00	23.62

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph with 0.75 in Radial Ice 24 Iterations

Gust Response Factor :1.10 Ice Dead Load Factor :1.00 Wind Importance Factor :1.00
Dead Load Factor :1.20 Ice Importance Factor :1.00
Wind Load Factor :1.00

77.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	5.56	0.10	1.00	0.00	23.62
80.00	(3) 0.38" Cable	No	3.00	0.00	0.00	0.00	0.00	5.61	0.10	1.01	0.00	2.48
80.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	220.50
80.00	(1) 0.39" Fiber Trunk	No	3.00	0.00	0.00	0.00	0.00	5.61	0.10	1.01	0.00	0.22
80.00	(2) 0.78" 8 AWG 6	No	3.00	0.00	0.00	0.00	0.00	5.61	0.10	1.01	0.00	4.25
80.00	(12) 1 5/8" Coax	No	3.00	0.00	0.00	0.00	0.00	5.61	0.10	1.01	0.00	35.42
80.00	(1) 3" Conduit	No	3.00	0.00	0.00	0.00	0.00	5.61	0.10	1.01	0.00	27.29
80.00	(4) 7/8" Fiber	No	3.00	0.00	0.00	0.00	0.00	5.61	0.10	1.01	0.00	10.08
80.00	(2) 1 1/4" Fiber	No	3.00	0.00	0.00	0.00	0.00	5.61	0.10	1.01	0.00	7.56
80.00	(1) 1 5/8" Fiber	No	3.00	0.00	0.00	0.00	0.00	5.61	0.10	1.01	0.00	5.80
80.00	(3) Flat Bar	Yes	3.00	0.00	2.00	1.32	0.00	5.61	0.10	1.01	0.00	22.01
80.00	(12) 1 5/8" Coax	No	3.00	0.00	0.00	0.00	0.00	5.61	0.10	1.01	0.00	35.42
82.00	(3) 0.38" Cable	No	2.00	0.00	0.00	0.00	0.00	5.66	0.11	1.03	0.00	1.66
82.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	147.00
82.00	(1) 0.39" Fiber Trunk	No	2.00	0.00	0.00	0.00	0.00	5.66	0.11	1.03	0.00	0.14
82.00	(2) 0.78" 8 AWG 6	No	2.00	0.00	0.00	0.00	0.00	5.66	0.11	1.03	0.00	2.83
82.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	5.66	0.11	1.03	0.00	23.62
82.00	(1) 3" Conduit	No	2.00	0.00	0.00	0.00	0.00	5.66	0.11	1.03	0.00	18.19
82.00	(4) 7/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	5.66	0.11	1.03	0.00	6.72
82.00	(2) 1 1/4" Fiber	No	2.00	0.00	0.00	0.00	0.00	5.66	0.11	1.03	0.00	5.04
82.00	(1) 1 5/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	5.66	0.11	1.03	0.00	3.86
82.00	(3) Flat Bar	Yes	2.00	0.00	2.00	0.88	0.00	5.66	0.11	1.03	0.00	14.74
82.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	5.66	0.11	1.03	0.00	23.62
85.00	(3) 0.38" Cable	No	3.00	0.00	0.00	0.00	0.00	5.71	0.11	1.04	0.00	2.48
85.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	220.50
85.00	(1) 0.39" Fiber Trunk	No	3.00	0.00	0.00	0.00	0.00	5.71	0.11	1.04	0.00	0.22
85.00	(2) 0.78" 8 AWG 6	No	3.00	0.00	0.00	0.00	0.00	5.71	0.11	1.04	0.00	4.25
85.00	(12) 1 5/8" Coax	No	3.00	0.00	0.00	0.00	0.00	5.71	0.11	1.04	0.00	35.42
85.00	(1) 3" Conduit	No	3.00	0.00	0.00	0.00	0.00	5.71	0.11	1.04	0.00	27.29
85.00	(4) 7/8" Fiber	No	3.00	0.00	0.00	0.00	0.00	5.71	0.11	1.04	0.00	10.08
85.00	(2) 1 1/4" Fiber	No	3.00	0.00	0.00	0.00	0.00	5.71	0.11	1.04	0.00	7.56
85.00	(1) 1 5/8" Fiber	No	3.00	0.00	0.00	0.00	0.00	5.71	0.11	1.04	0.00	5.80
85.00	(3) Flat Bar	Yes	3.00	0.00	2.00	1.32	0.00	5.71	0.11	1.04	0.00	22.20
85.00	(12) 1 5/8" Coax	No	3.00	0.00	0.00	0.00	0.00	5.71	0.11	1.04	0.00	35.42
87.00	(3) 0.38" Cable	No	2.00	0.00	0.00	0.00	0.00	5.76	0.12	1.06	0.00	1.66
87.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	147.00
87.00	(1) 0.39" Fiber Trunk	No	2.00	0.00	0.00	0.00	0.00	5.76	0.12	1.06	0.00	0.14
87.00	(2) 0.78" 8 AWG 6	No	2.00	0.00	0.00	0.00	0.00	5.76	0.12	1.06	0.00	2.83
87.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	5.76	0.12	1.06	0.00	23.62
87.00	(1) 3" Conduit	No	2.00	0.00	0.00	0.00	0.00	5.76	0.12	1.06	0.00	18.19
87.00	(4) 7/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	5.76	0.12	1.06	0.00	6.72
87.00	(2) 1 1/4" Fiber	No	2.00	0.00	0.00	0.00	0.00	5.76	0.12	1.06	0.00	5.04
87.00	(1) 1 5/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	5.76	0.12	1.06	0.00	3.86
87.00	(3) Flat Bar	Yes	2.00	0.00	2.00	0.88	0.00	5.76	0.12	1.06	0.00	14.86
87.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	5.76	0.12	1.06	0.00	23.62
90.00	(3) 0.38" Cable	No	3.00	0.00	0.00	0.00	0.00	5.80	0.12	1.07	0.00	2.48
90.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	220.50
90.00	(1) 0.39" Fiber Trunk	No	3.00	0.00	0.00	0.00	0.00	5.80	0.12	1.07	0.00	0.22
90.00	(2) 0.78" 8 AWG 6	No	3.00	0.00	0.00	0.00	0.00	5.80	0.12	1.07	0.00	4.25
90.00	(12) 1 5/8" Coax	No	3.00	0.00	0.00	0.00	0.00	5.80	0.12	1.07	0.00	35.42
90.00	(1) 3" Conduit	No	3.00	0.00	0.00	0.00	0.00	5.80	0.12	1.07	0.00	27.29
90.00	(4) 7/8" Fiber	No	3.00	0.00	0.00	0.00	0.00	5.80	0.12	1.07	0.00	10.08
90.00	(2) 1 1/4" Fiber	No	3.00	0.00	0.00	0.00	0.00	5.80	0.12	1.07	0.00	7.56
90.00	(1) 1 5/8" Fiber	No	3.00	0.00	0.00	0.00	0.00	5.80	0.12	1.07	0.00	5.80
90.00	(3) Flat Bar	Yes	3.00	0.00	2.00	1.33	0.00	5.80	0.12	1.07	0.00	22.39
90.13	(3) 0.38" Cable	No	0.13	0.00	0.00	0.00	0.00	5.83	0.13	1.08	0.00	0.10
90.13	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.19

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph with 0.75 in Radial Ice 24 Iterations

Gust Response Factor :1.10 Ice Dead Load Factor :1.00 Wind Importance Factor :1.00
Dead Load Factor :1.20 Ice Importance Factor :1.00
Wind Load Factor :1.00

90.13	(1) 0.39" Fiber Trunk	No	0.13	0.00	0.00	0.00	0.00	5.83	0.13	1.08	0.00	0.01
90.13	(2) 0.78" 8 AWG 6	No	0.13	0.00	0.00	0.00	0.00	5.83	0.13	1.08	0.00	0.18
90.13	(12) 1 5/8" Coax	No	0.13	0.00	0.00	0.00	0.00	5.83	0.13	1.08	0.00	1.48
90.13	(1) 3" Conduit	No	0.13	0.00	0.00	0.00	0.00	5.83	0.13	1.08	0.00	1.14
90.13	(4) 7/8" Fiber	No	0.13	0.00	0.00	0.00	0.00	5.83	0.13	1.08	0.00	0.42
90.13	(2) 1 1/4" Fiber	No	0.13	0.00	0.00	0.00	0.00	5.83	0.13	1.08	0.00	0.31
90.13	(1) 1 5/8" Fiber	No	0.13	0.00	0.00	0.00	0.00	5.83	0.13	1.08	0.00	0.24
90.13	(3) Flat Bar	Yes	0.13	0.00	2.00	0.06	0.00	5.83	0.13	1.08	0.00	0.94
95.00	(3) 0.38" Cable	No	4.88	0.00	0.00	0.00	0.00	5.88	0.05	0.00	0.00	4.04
95.00	(1) 0.39" Fiber Trunk	No	4.88	0.00	0.00	0.00	0.00	5.88	0.05	0.00	0.00	0.35
95.00	(2) 0.78" 8 AWG 6	No	4.88	0.00	0.00	0.00	0.00	5.88	0.05	0.00	0.00	6.90
95.00	(12) 1 5/8" Coax	No	4.88	0.00	0.00	0.00	0.00	5.88	0.05	0.00	0.00	57.56
95.00	(1) 3" Conduit	No	4.88	0.00	0.00	0.00	0.00	5.88	0.05	0.00	0.00	44.34
95.00	(4) 7/8" Fiber	No	4.88	0.00	0.00	0.00	0.00	5.88	0.05	0.00	0.00	16.38
95.00	(2) 1 1/4" Fiber	No	4.88	0.00	0.00	0.00	0.00	5.88	0.05	0.00	0.00	12.28
95.00	(1) 1 5/8" Fiber	No	4.88	0.00	0.00	0.00	0.00	5.88	0.05	0.00	0.00	9.42
95.00	(3) Flat Bar	Yes	1.88	0.00	2.00	0.83	0.00	5.88	0.05	0.00	0.00	14.08
97.00	(3) 0.38" Cable	No	2.00	0.00	0.00	0.00	0.00	5.94	0.00	0.00	0.00	1.66
97.00	(1) 0.39" Fiber Trunk	No	2.00	0.00	0.00	0.00	0.00	5.94	0.00	0.00	0.00	0.14
97.00	(2) 0.78" 8 AWG 6	No	2.00	0.00	0.00	0.00	0.00	5.94	0.00	0.00	0.00	2.83
97.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	5.94	0.00	0.00	0.00	23.62
97.00	(1) 3" Conduit	No	2.00	0.00	0.00	0.00	0.00	5.94	0.00	0.00	0.00	18.19
97.00	(4) 7/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	5.94	0.00	0.00	0.00	6.72
97.00	(2) 1 1/4" Fiber	No	2.00	0.00	0.00	0.00	0.00	5.94	0.00	0.00	0.00	5.04
97.00	(1) 1 5/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	5.94	0.00	0.00	0.00	3.86
99.00	(3) 0.38" Cable	No	2.00	0.00	0.00	0.00	0.00	5.97	0.00	0.00	0.00	1.66
99.00	(1) 0.39" Fiber Trunk	No	2.00	0.00	0.00	0.00	0.00	5.97	0.00	0.00	0.00	0.14
99.00	(2) 0.78" 8 AWG 6	No	2.00	0.00	0.00	0.00	0.00	5.97	0.00	0.00	0.00	2.83
99.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	5.97	0.00	0.00	0.00	23.62
99.00	(1) 3" Conduit	No	2.00	0.00	0.00	0.00	0.00	5.97	0.00	0.00	0.00	18.19
99.00	(4) 7/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	5.97	0.00	0.00	0.00	6.72
100.0	(3) 0.38" Cable	No	1.00	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	0.83
100.0	(1) 0.39" Fiber Trunk	No	1.00	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	0.07
100.0	(2) 0.78" 8 AWG 6	No	1.00	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	1.42
100.0	(12) 1 5/8" Coax	No	1.00	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	11.81
100.0	(1) 3" Conduit	No	1.00	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	9.10
100.0	(4) 7/8" Fiber	No	1.00	0.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00	3.36
105.0	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	6.05	0.00	0.00	0.00	4.14
105.0	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	6.05	0.00	0.00	0.00	0.36
105.0	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	6.05	0.00	0.00	0.00	7.08
105.0	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	6.05	0.00	0.00	0.00	59.04
105.0	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	6.05	0.00	0.00	0.00	45.48
105.0	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	6.05	0.00	0.00	0.00	16.80
109.0	(3) 0.38" Cable	No	4.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	3.31
109.0	(1) 0.39" Fiber Trunk	No	4.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	0.29
109.0	(2) 0.78" 8 AWG 6	No	4.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	5.66
109.0	(12) 1 5/8" Coax	No	4.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	47.23
109.0	(1) 3" Conduit	No	4.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	36.38
109.0	(4) 7/8" Fiber	No	4.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	13.44
110.0	(3) 0.38" Cable	No	1.00	0.00	0.00	0.00	0.00	6.17	0.00	0.00	0.00	0.83
110.0	(1) 0.39" Fiber Trunk	No	1.00	0.00	0.00	0.00	0.00	6.17	0.00	0.00	0.00	0.07
110.0	(2) 0.78" 8 AWG 6	No	1.00	0.00	0.00	0.00	0.00	6.17	0.00	0.00	0.00	1.42
110.0	(12) 1 5/8" Coax	No	1.00	0.00	0.00	0.00	0.00	6.17	0.00	0.00	0.00	11.81
110.0	(1) 3" Conduit	No	1.00	0.00	0.00	0.00	0.00	6.17	0.00	0.00	0.00	9.10
110.0	(4) 7/8" Fiber	No	1.00	0.00	0.00	0.00	0.00	6.17	0.00	0.00	0.00	3.36
115.0	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	6.21	0.00	0.00	0.00	4.14
115.0	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	6.21	0.00	0.00	0.00	0.36

Load Case: 1.2D + 1.0Di + 1.0Wi — 50 mph with 0.75 in Radial Ice — 24 Iterations

Gust Response Factor :1.10 Ice Dead Load Factor :1.00 Wind Importance Factor :1.00
Dead Load Factor :1.20 Ice Importance Factor :1.00
Wind Load Factor :1.00

115.0	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	6.21	0.00	0.00	0.00	7.08
115.0	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	6.21	0.00	0.00	0.00	59.04
115.0	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	6.21	0.00	0.00	0.00	45.48
115.0	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	6.21	0.00	0.00	0.00	16.80
117.0	(3) 0.38" Cable	No	2.00	0.00	0.00	0.00	0.00	6.27	0.00	0.00	0.00	1.66
117.0	(1) 0.39" Fiber Trunk	No	2.00	0.00	0.00	0.00	0.00	6.27	0.00	0.00	0.00	0.14
117.0	(2) 0.78" 8 AWG 6	No	2.00	0.00	0.00	0.00	0.00	6.27	0.00	0.00	0.00	2.83
117.0	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	6.27	0.00	0.00	0.00	23.62
117.0	(1) 3" Conduit	No	2.00	0.00	0.00	0.00	0.00	6.27	0.00	0.00	0.00	18.19
117.0	(4) 7/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	6.27	0.00	0.00	0.00	6.72
										Totals:	0.00	9,235.34

Load Case: 1.2D + 1.0Di + 1.0Wi — 50 mph with 0.75 in Radial Ice — 24 Iterations

Gust Response Factor :1.10 | Ice Dead Load Factor :1.00 | Wind Importance Factor :1.00
Dead Load Factor :1.20 | Ice Importance Factor :1.00
Wind Load Factor :1.00

Applied Segment Forces Summary

Seg Elev (ft)	Description	Shaft Forces Wind FX (lb)	Shaft Forces Dead Load (lb)	Discrete Forces Wind FX (lb)	Discrete Forces Torsion MY (lb-ft)	Discrete Forces Moment MZ (lb-ft)	Discrete Forces Dead Load (lb)	Linear Forces Wind FX (lb)	Linear Forces Dead Load (lb)	Sum of Forces Wind FX (lb)	Sum of Forces Dead Load (lb)	Sum of Forces Torsion MY (lb-ft)	Sum of Forces Moment MZ (lb)
0.00		51.7	0.0					0.0	0.0	51.7	0.0	0.0	0.0
5.00		102.0	1,131.4					0.0	273.2	102.0	1,404.6	0.0	0.0
10.00		98.9	1,125.1					0.0	273.2	98.9	1,398.3	0.0	0.0
15.00		95.6	1,099.6					0.0	273.2	95.6	1,372.8	0.0	0.0
20.00		92.2	1,067.7					0.0	273.2	92.2	1,340.9	0.0	0.0
25.00		88.8	1,032.5					0.0	273.2	88.8	1,305.7	0.0	0.0
30.00		86.4	995.1					0.0	273.2	86.4	1,268.3	0.0	0.0
35.00		85.6	956.2					0.0	273.2	85.6	1,229.5	0.0	0.0
40.00		75.7	916.2					0.0	273.2	75.7	1,189.5	0.0	0.0
43.88	Reinf Bottom	42.4	683.3					0.0	224.4	42.4	907.6	0.0	0.0
45.00		37.4	194.6					0.0	151.8	37.4	346.4	0.0	0.0
48.33	Bot - Section 2	42.0	562.1					0.0	449.9	42.0	1,012.0	0.0	0.0
50.00		34.9	406.1					0.0	225.0	34.9	631.1	0.0	0.0
52.50	Top - Section 1	41.6	595.3					0.0	337.6	41.6	933.0	0.0	0.0
55.00		61.2	320.6					0.0	337.8	61.2	658.4	0.0	0.0
60.00		56.4	612.3					0.0	675.9	56.4	1,288.1	0.0	0.0
62.00	Reinf. Top Reinf	39.4	237.2					0.0	270.5	39.4	507.7	0.0	0.0
65.00		61.5	344.7					0.0	405.8	61.5	750.5	0.0	0.0
70.00		74.6	543.9					0.0	676.7	74.6	1,220.5	0.0	0.0
75.00		50.7	509.2					0.0	677.0	50.7	1,186.2	0.0	0.0
77.00	Appurtenance(s)	34.9	195.7	543.9	0.0	731.9	2,581.4	0.0	270.9	578.8	3,048.0	0.0	0.0
80.00		34.3	282.1					0.0	371.0	34.3	653.1	0.0	0.0
82.00	Top - Section 2	33.2	181.6					0.0	247.4	33.2	429.0	0.0	0.0
85.00		32.5	240.2					0.0	371.2	32.5	611.5	0.0	0.0
87.00	Appurtenance(s)	31.4	154.3	178.7	0.0	0.0	2,666.8	0.0	247.5	210.1	3,068.6	0.0	0.0
90.00		19.4	220.7					0.0	336.0	19.4	556.7	0.0	0.0
90.13	Reinf. Top	29.5	9.1					0.0	14.0	29.5	23.1	0.0	0.0
95.00		39.9	329.8					0.0	165.4	39.9	495.2	0.0	0.0
97.00	Appurtenance(s)	22.1	128.0	382.3	0.0	0.0	4,343.7	0.0	62.1	404.4	4,533.8	0.0	0.0
99.00	Top - Section 3	16.2	122.8					0.0	53.2	16.2	175.9	0.0	0.0
100.00		32.1	69.7					0.0	26.6	32.1	96.3	0.0	0.0
105.00		48.6	349.1					0.0	132.9	48.6	482.0	0.0	0.0
109.00	Appurtenance(s)	27.2	279.9	269.1	0.0	0.0	921.0	0.0	106.3	296.3	1,307.2	0.0	0.0
110.00		33.1	70.0					0.0	26.6	33.1	96.6	0.0	0.0
115.00		38.7	350.7					0.0	132.9	38.7	483.6	0.0	0.0
117.00	Appurtenance(s)	22.3	140.5	626.7	0.0	0.0	3,722.2	0.0	53.2	649.0	3,915.9	0.0	0.0
119.00		11.2	140.6					0.0	0.0	11.2	140.6	0.0	0.0
								Totals:		3,826.66	40,068.2	0.00	0.00

Site Number: 283420 Code: ANSI/TIA-222-G

Site Name: STONEYBROOK RD CT, CT Engineering Number:12598484_C3_01 8/27/2018 4:13:18 PM

Customer: T-MOBILE

Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph with 0.75 in Radial Ice 24 Iterations

Gust Response Factor :1.10 Ice Dead Load Factor :1.00 Wind Importance Factor :1.00

Dead Load Factor :1.20 Ice Importance Factor :1.00

Wind Load Factor :1.00

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-40.07	-3.79	0.00	-316.80	0.00	316.80	2,813.31	1,406.66	4,820.79	2,413.98	0.00	0.00	0.145
5.00	-38.66	-3.72	0.00	-297.85	0.00	297.85	2,747.79	1,373.90	4,537.84	2,272.29	0.03	-0.05	0.145
10.00	-37.26	-3.65	0.00	-279.24	0.00	279.24	2,679.61	1,339.80	4,258.79	2,132.56	0.10	-0.10	0.145
15.00	-35.88	-3.59	0.00	-260.97	0.00	260.97	2,608.76	1,304.38	3,984.14	1,995.03	0.24	-0.15	0.145
20.00	-34.54	-3.53	0.00	-243.02	0.00	243.02	2,535.24	1,267.62	3,714.39	1,859.96	0.42	-0.21	0.144
25.00	-33.23	-3.47	0.00	-225.38	0.00	225.38	2,459.06	1,229.53	3,450.04	1,727.58	0.67	-0.27	0.144
30.00	-31.96	-3.41	0.00	-208.04	0.00	208.04	2,380.22	1,190.11	3,191.57	1,598.16	0.98	-0.33	0.144
35.00	-30.72	-3.35	0.00	-190.99	0.00	190.99	2,298.17	1,149.08	2,938.80	1,471.58	1.36	-0.39	0.143
40.00	-29.53	-3.30	0.00	-174.22	0.00	174.22	2,187.63	1,093.82	2,661.58	1,332.77	1.81	-0.46	0.144
43.88	-28.62	-3.27	0.00	-161.43	0.00	161.43	2,101.97	1,050.99	2,456.17	1,229.91	2.21	-0.52	0.145
45.00	-28.27	-3.24	0.00	-157.75	0.00	157.75	2,077.10	1,038.55	2,398.08	1,200.82	2.33	-0.53	0.085
48.33	-27.26	-3.20	0.00	-146.95	0.00	146.95	2,003.41	1,001.71	2,230.05	1,116.68	2.71	-0.56	0.084
50.00	-26.63	-3.17	0.00	-141.62	0.00	141.62	1,966.57	983.28	2,148.32	1,075.76	2.91	-0.58	0.082
52.50	-25.70	-3.13	0.00	-133.70	0.00	133.70	1,292.92	646.46	1,405.62	703.85	3.22	-0.60	0.102
55.00	-25.04	-3.08	0.00	-125.89	0.00	125.89	1,267.71	633.85	1,338.84	670.42	3.55	-0.63	0.099
60.00	-23.75	-3.02	0.00	-110.51	0.00	110.51	1,215.29	607.65	1,208.00	604.90	4.23	-0.68	0.093
62.00	-23.24	-2.99	0.00	-104.47	0.00	104.47	1,193.58	596.79	1,156.76	579.24	4.52	-0.70	0.090
62.00	-23.24	-2.99	0.00	-104.47	0.00	104.47	1,193.58	596.79	1,156.76	579.24	4.52	-0.70	0.090
65.00	-22.49	-2.93	0.00	-95.52	0.00	95.52	1,160.21	580.11	1,081.18	541.39	4.97	-0.74	0.086
70.00	-21.26	-2.86	0.00	-80.86	0.00	80.86	1,094.51	547.25	951.97	476.69	5.77	-0.79	0.080
75.00	-20.08	-2.81	0.00	-66.55	0.00	66.55	1,017.13	508.57	821.49	411.36	6.63	-0.84	0.073
77.00	-17.04	-2.19	0.00	-60.21	0.00	60.21	986.19	493.09	772.00	386.57	6.99	-0.86	0.068
80.00	-16.38	-2.15	0.00	-53.64	0.00	53.64	939.76	469.88	700.63	350.84	7.54	-0.89	0.065
82.00	-15.95	-2.12	0.00	-49.34	0.00	49.34	908.81	454.41	654.98	327.98	7.92	-0.91	0.062
82.00	-15.95	-2.12	0.00	-49.34	0.00	49.34	780.36	390.18	564.40	282.62	7.92	-0.91	0.000
85.00	-15.34	-2.08	0.00	-42.98	0.00	42.98	740.57	370.29	508.03	254.39	8.50	-0.95	0.061
87.00	-12.28	-1.83	0.00	-38.81	0.00	38.81	714.04	357.02	472.09	236.39	8.90	-0.97	0.057
90.00	-11.72	-1.80	0.00	-33.33	0.00	33.33	674.25	337.13	420.65	210.64	9.52	-1.00	0.053
90.13	-11.70	-1.78	0.00	-33.10	0.00	33.10	672.59	336.30	418.57	209.60	9.55	-1.00	0.052
90.13	-11.70	-1.78	0.00	-33.10	0.00	33.10	672.59	336.30	418.57	209.60	9.55	-1.00	0.175
95.00	-11.20	-1.74	0.00	-24.43	0.00	24.43	607.93	303.97	341.52	171.01	10.59	-1.04	0.161
97.00	-6.67	-1.26	0.00	-20.95	0.00	20.95	581.40	290.70	312.17	156.32	11.04	-1.11	0.146
99.00	-6.50	-1.24	0.00	-18.44	0.00	18.44	554.88	277.44	284.14	142.28	11.52	-1.17	0.141
99.00	-6.50	-1.24	0.00	-18.44	0.00	18.44	725.83	362.92	362.74	181.64	11.52	-1.17	0.110
100.00	-6.40	-1.22	0.00	-17.19	0.00	17.19	725.83	362.92	362.74	181.64	11.77	-1.21	0.103
105.00	-5.92	-1.17	0.00	-11.10	0.00	11.10	725.83	362.92	362.74	181.64	13.10	-1.32	0.069
109.00	-4.62	-0.84	0.00	-6.44	0.00	6.44	725.83	362.92	362.74	181.64	14.22	-1.37	0.042
110.00	-4.52	-0.81	0.00	-5.59	0.00	5.59	725.83	362.92	362.74	181.64	14.51	-1.38	0.037
115.00	-4.04	-0.76	0.00	-1.55	0.00	1.55	725.83	362.92	362.74	181.64	15.97	-1.40	0.014
117.00	-0.14	-0.01	0.00	-0.03	0.00	0.03	725.83	362.92	362.74	181.64	16.56	-1.41	0.000
119.00	0.00	-0.01	0.00	0.00	0.00	0.00	725.83	362.92	362.74	181.64	17.15	-1.41	0.000

Load Case: 1.0D + 1.0W Serviceability 60 mph 24 Iterations

Gust Response Factor :1.10 Wind Importance Factor 1.00
Dead Load Factor :1.00
Wind Load Factor :1.00

Shaft Segment Forces (Factored)

Seg Top Elev (ft)	Description	Kzt	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		1.00	0.70	6.129	6.742	178.40	0.650		0.000	0.00	0.000	0.00	38.2	0.0	0.0
5.00		1.00	0.70	6.129	6.742	175.22	0.650		0.000	5.00	17.453	11.34	75.1	0.0	690.8
10.00		1.00	0.70	6.129	6.742	168.85	0.650		0.000	5.00	16.818	10.93	72.3	0.0	665.5
15.00		1.00	0.70	6.129	6.742	162.48	0.650		0.000	5.00	16.183	10.52	69.5	0.0	640.2
20.00		1.00	0.70	6.129	6.742	156.10	0.650		0.000	5.00	15.549	10.11	66.7	0.0	614.9
25.00		1.00	0.70	6.129	6.742	149.73	0.650		0.000	5.00	14.914	9.69	64.0	0.0	589.6
30.00		1.00	0.70	6.129	6.742	143.36	0.650		0.000	5.00	14.279	9.28	61.9	0.0	564.3
35.00		1.00	0.72	6.276	6.903	138.62	0.650		0.000	5.00	13.645	8.87	61.0	0.0	538.9
40.00		1.00	0.75	6.538	7.191	134.90	0.650		0.000	5.00	13.010	8.46	53.7	0.0	513.6
43.88	Reinf Bottom	1.00	0.77	6.750	7.425	131.14	0.650		0.000	3.88	9.646	6.27	30.0	0.0	380.7
45.00		1.00	0.78	6.862	7.549	128.86	0.650		0.000	1.13	2.729	1.77	26.3	0.0	107.7
48.33	Bot - Section 2	1.00	0.79	6.959	7.655	126.74	0.650		0.000	3.33	7.898	5.13	29.5	0.0	311.5
50.00		1.00	0.81	7.064	7.770	124.27	0.650		0.000	1.67	3.905	2.54	24.5	0.0	259.7
52.50	Top - Section 1	1.00	0.82	7.148	7.863	122.14	0.650		0.000	2.50	5.725	3.72	29.0	0.0	380.6
55.00		1.00	0.83	7.246	7.970	121.53	0.650		0.000	2.50	5.566	3.62	42.6	0.0	154.1
60.00		1.00	0.84	7.387	8.126	117.46	0.650		0.000	5.00	10.657	6.93	39.1	0.0	294.9
62.00	Reinf. Top Reinf	1.00	0.86	7.513	8.264	113.52	0.650		0.000	2.00	4.085	2.66	27.1	0.0	113.0
65.00		1.00	0.87	7.599	8.359	110.62	0.650		0.000	3.00	5.937	3.86	42.1	0.0	164.2
70.00		1.00	0.88	7.733	8.506	105.87	0.650		0.000	5.00	9.387	6.10	50.6	0.0	259.5
75.00		1.00	0.90	7.893	8.682	99.725	0.650		0.000	5.00	8.753	5.69	34.2	0.0	241.8
77.00	Appurtenance(s)	1.00	0.91	8.000	8.800	95.303	0.650	*	0.000	2.00	3.323	2.16	23.3	0.0	91.8
80.00		1.00	0.92	8.074	8.881	92.088	0.650	*	0.000	3.00	4.795	3.12	22.8	0.0	132.3
82.00	Top - Section 2 Reinf.	1.00	0.93	8.147	8.961	88.828	0.650	*	0.000	2.00	3.070	2.00	21.9	0.0	84.7
85.00		1.00	0.94	8.218	9.039	85.526	0.650	*	0.000	3.00	4.414	2.87	21.3	0.0	104.5
87.00	Appurtenance(s)	1.00	0.95	8.287	9.116	82.182	0.650	*	0.000	2.00	2.816	1.83	20.4	0.0	66.6
90.00		1.00	0.95	8.355	9.191	78.800	0.650	*	0.000	3.00	4.033	2.62	12.5	0.0	95.4
90.13	Reinf. Top	1.00	0.96	8.397	9.237	76.666	0.650	*	0.000	0.13	0.163	0.11	18.8	0.0	3.9
95.00		1.00	0.97	8.463	9.310	73.223	0.650		0.000	4.88	6.051	3.93	25.4	0.0	143.0
97.00	Appurtenance(s)	1.00	0.98	8.552	9.407	68.431	0.650		0.000	2.00	2.308	1.50	13.8	0.0	54.5
99.00	Top - Section 3	1.00	0.98	8.602	9.463	65.613	0.650		0.000	2.00	2.206	1.43	10.1	0.0	52.0
100.0		1.00	0.99	8.640	9.504	63.360	0.656		0.000	1.00	1.063	0.70	20.0	0.0	33.2
105.0		1.00	1.00	8.713	9.585	63.629	0.654		0.000	5.00	5.315	3.47	30.1	0.0	166.2
109.0	Appurtenance(s)	1.00	1.01	8.821	9.703	64.021	0.650		0.000	4.00	4.252	2.76	16.8	0.0	133.0
110.0		1.00	1.01	8.879	9.767	64.232	0.650		0.000	1.00	1.063	0.69	20.4	0.0	33.2
115.0		1.00	1.02	8.948	9.843	64.481	0.650		0.000	5.00	5.315	3.45	23.9	0.0	166.2
117.0	Appurtenance(s)	1.00	1.03	9.027	9.930	64.764	0.650		0.000	2.00	2.126	1.38	13.8	0.0	66.5
119.0		1.00	1.04	9.071	9.978	64.922	0.650		0.000	2.00	2.126	1.38	6.9	0.0	66.5
* = Cf Adjusted By Linear Load Ra Effect							Totals:		119.00				1,259.6	0.0	8,978.9

Load Case: 1.0D + 1.0W Serviceability 60 mph 24 Iterations

Gust Response Factor :1.10 Wind Importance Factor 1.00
Dead Load Factor :1.00
Wind Load Factor :1.00

Discrete Appurtenance Segment Forces (Factored)

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orientation Factor	Ka	Total EPAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
77.00	Alcatel-Lucent 9442	3	8.030	8.833	0.67	0.80	4.02	0.000	0.000	35.51	0.00	0.00	147.00
77.00	Alcatel-Lucent 9442	3	8.030	8.833	0.67	0.80	4.41	0.000	0.000	38.92	0.00	0.00	152.10
77.00	Amphenol Antel BXA-1	6	8.089	8.897	0.72	0.80	16.55	0.000	2.000	147.29	0.00	294.58	76.80
77.00	Amphenol Antel BXA-7	6	8.089	8.897	0.66	0.80	23.98	0.000	2.000	213.38	0.00	426.76	102.00
77.00	Flat Side Arm	3	8.030	8.833	0.67	1.00	12.66	0.000	0.000	111.85	0.00	0.00	450.00
87.00	Ericsson AIR32 B66Aa	3	8.315	9.146	0.71	0.80	11.09	0.000	0.000	101.46	0.00	0.00	396.60
87.00	Side Arms	1	8.315	9.146	1.00	1.00	8.50	0.000	0.000	77.74	0.00	0.00	560.00
97.00	Ericsson KRY 112 144	3	8.577	9.435	0.50	0.80	0.67	0.000	0.000	6.34	0.00	0.00	29.10
97.00	Ericsson Radio 4449	3	8.577	9.435	0.50	0.80	1.97	0.000	0.000	18.57	0.00	0.00	222.00
97.00	Ericsson RRUS 01 B2	3	8.577	9.435	0.67	0.80	5.07	0.000	0.000	47.79	0.00	0.00	132.00
97.00	RFS APXVAARR24_43-	3	8.577	9.435	0.63	0.80	30.60	0.000	0.000	288.74	0.00	0.00	383.70
97.00	Side Arms	1	8.577	9.435	1.00	1.00	8.50	0.000	0.000	80.20	0.00	0.00	560.00
109.0	Amphenol Antel BXA-1	3	8.868	9.755	0.72	1.00	10.35	0.000	0.000	100.93	0.00	0.00	38.40
109.0	CCI OPA-65R-LCUU-H6	3	8.868	9.755	0.66	1.00	19.13	0.000	0.000	186.57	0.00	0.00	219.00
117.0	Amphenol Antel BXA-1	3	9.049	9.954	0.72	0.80	8.28	0.000	0.000	82.39	0.00	0.00	38.40
117.0	CCI OPA-65R-LCUU-H6	3	9.049	9.954	0.66	0.80	15.30	0.000	0.000	152.31	0.00	0.00	219.00
117.0	CCI TPX-070821	6	9.049	9.954	0.50	0.80	1.32	0.000	0.000	13.14	0.00	0.00	45.00
117.0	Ericsson RRUS 32 B2	3	9.049	9.954	0.67	0.80	4.41	0.000	0.000	43.86	0.00	0.00	159.00
117.0	Ericsson RRUS-11	3	9.049	9.954	0.67	0.80	6.09	0.000	0.000	60.66	0.00	0.00	165.00
117.0	Ericsson RRUS-32 B30	3	9.049	9.954	0.67	0.80	5.32	0.000	0.000	52.98	0.00	0.00	231.00
117.0	Flat T-Arm	3	9.049	9.954	0.67	0.75	19.45	0.000	0.000	193.57	0.00	0.00	750.00
117.0	Raycap DC6-48-60-18-	2	9.049	9.954	1.00	0.80	2.05	0.000	0.000	20.39	0.00	0.00	65.60
										2,074.57			5,141.70

Load Case: 1.0D + 1.0W Serviceability 60 mph 24 Iterations

Gust Response Factor :1.10 Wind Importance Factor 1.00
Dead Load Factor :1.00
Wind Load Factor :1.00

Linear Appurtenance Segment Forces (Factored)

Seg Top Elev (ft)	Description	Exposed To Wind	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	qz (psf)	Ra	Cf Adjust Factor	F X (lb)	Dead Load (lb)
5.00	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	3.45
5.00	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	0.30
5.00	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	5.90
5.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	49.20
5.00	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	37.90
5.00	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	14.00
5.00	(2) 1 1/4" Fiber	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	10.50
5.00	(1) 1 5/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	8.05
5.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	49.20
5.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	49.20
10.00	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	3.45
10.00	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	0.30
10.00	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	5.90
10.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	49.20
10.00	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	37.90
10.00	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	14.00
10.00	(2) 1 1/4" Fiber	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	10.50
10.00	(1) 1 5/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	8.05
10.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	49.20
10.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	49.20
15.00	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	3.45
15.00	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	0.30
15.00	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	5.90
15.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	49.20
15.00	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	37.90
15.00	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	14.00
15.00	(2) 1 1/4" Fiber	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	10.50
15.00	(1) 1 5/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	8.05
15.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	49.20
15.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	49.20
20.00	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	3.45
20.00	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	0.30
20.00	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	5.90
20.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	49.20
20.00	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	37.90
20.00	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	14.00
20.00	(2) 1 1/4" Fiber	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	10.50
20.00	(1) 1 5/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	8.05
20.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	49.20
20.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	49.20
25.00	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	3.45
25.00	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	0.30
25.00	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	5.90
25.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	49.20
25.00	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	37.90
25.00	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	14.00
25.00	(2) 1 1/4" Fiber	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	10.50
25.00	(1) 1 5/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	8.05
25.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	49.20
25.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	49.20
30.00	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	3.45

Load Case: 1.0D + 1.0W Serviceability 60 mph 24 Iterations

Gust Response Factor :1.10 Wind Importance Factor 1.00
Dead Load Factor :1.00
Wind Load Factor :1.00

30.00	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	0.30
30.00	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	5.90
30.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	49.20
30.00	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	37.90
30.00	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	14.00
30.00	(2) 1 1/4" Fiber	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	10.50
30.00	(1) 1 5/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	8.05
30.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	49.20
30.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	6.13	0.00	0.00	0.00	49.20
35.00	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	6.28	0.00	0.00	0.00	3.45
35.00	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	6.28	0.00	0.00	0.00	0.30
35.00	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	6.28	0.00	0.00	0.00	5.90
35.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	6.28	0.00	0.00	0.00	49.20
35.00	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	6.28	0.00	0.00	0.00	37.90
35.00	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	6.28	0.00	0.00	0.00	14.00
35.00	(2) 1 1/4" Fiber	No	5.00	0.00	0.00	0.00	0.00	6.28	0.00	0.00	0.00	10.50
35.00	(1) 1 5/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	6.28	0.00	0.00	0.00	8.05
35.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	6.28	0.00	0.00	0.00	49.20
35.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	6.28	0.00	0.00	0.00	49.20
40.00	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	6.54	0.00	0.00	0.00	3.45
40.00	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	6.54	0.00	0.00	0.00	0.30
40.00	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	6.54	0.00	0.00	0.00	5.90
40.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	6.54	0.00	0.00	0.00	49.20
40.00	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	6.54	0.00	0.00	0.00	37.90
40.00	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	6.54	0.00	0.00	0.00	14.00
40.00	(2) 1 1/4" Fiber	No	5.00	0.00	0.00	0.00	0.00	6.54	0.00	0.00	0.00	10.50
40.00	(1) 1 5/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	6.54	0.00	0.00	0.00	8.05
40.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	6.54	0.00	0.00	0.00	49.20
40.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	6.54	0.00	0.00	0.00	49.20
43.88	(3) 0.38" Cable	No	3.88	0.00	0.00	0.00	0.00	6.75	0.03	0.00	0.00	2.67
43.88	(1) 0.39" Fiber Trunk	No	3.88	0.00	0.00	0.00	0.00	6.75	0.03	0.00	0.00	0.23
43.88	(2) 0.78" 8 AWG 6	No	3.88	0.00	0.00	0.00	0.00	6.75	0.03	0.00	0.00	4.57
43.88	(12) 1 5/8" Coax	No	3.88	0.00	0.00	0.00	0.00	6.75	0.03	0.00	0.00	38.13
43.88	(1) 3" Conduit	No	3.88	0.00	0.00	0.00	0.00	6.75	0.03	0.00	0.00	29.37
43.88	(4) 7/8" Fiber	No	3.88	0.00	0.00	0.00	0.00	6.75	0.03	0.00	0.00	10.85
43.88	(2) 1 1/4" Fiber	No	3.88	0.00	0.00	0.00	0.00	6.75	0.03	0.00	0.00	8.14
43.88	(1) 1 5/8" Fiber	No	3.88	0.00	0.00	0.00	0.00	6.75	0.03	0.00	0.00	6.24
43.88	(3) Flat Bar	Yes	1.88	0.00	2.00	0.31	0.00	6.75	0.03	0.00	0.00	0.00
43.88	(12) 1 5/8" Coax	No	3.88	0.00	0.00	0.00	0.00	6.75	0.03	0.00	0.00	38.13
43.88	(12) 1 5/8" Coax	No	3.88	0.00	0.00	0.00	0.00	6.75	0.03	0.00	0.00	38.13
45.00	(3) 0.38" Cable	No	1.13	0.00	0.00	0.00	0.00	6.86	0.07	0.00	0.00	0.78
45.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	68.91
45.00	(1) 0.39" Fiber Trunk	No	1.13	0.00	0.00	0.00	0.00	6.86	0.07	0.00	0.00	0.07
45.00	(2) 0.78" 8 AWG 6	No	1.13	0.00	0.00	0.00	0.00	6.86	0.07	0.00	0.00	1.33
45.00	(12) 1 5/8" Coax	No	1.13	0.00	0.00	0.00	0.00	6.86	0.07	0.00	0.00	11.07
45.00	(1) 3" Conduit	No	1.13	0.00	0.00	0.00	0.00	6.86	0.07	0.00	0.00	8.53
45.00	(4) 7/8" Fiber	No	1.13	0.00	0.00	0.00	0.00	6.86	0.07	0.00	0.00	3.15
45.00	(2) 1 1/4" Fiber	No	1.13	0.00	0.00	0.00	0.00	6.86	0.07	0.00	0.00	2.36
45.00	(1) 1 5/8" Fiber	No	1.13	0.00	0.00	0.00	0.00	6.86	0.07	0.00	0.00	1.81
45.00	(3) Flat Bar	Yes	1.13	0.00	2.00	0.19	0.00	6.86	0.07	0.00	0.00	0.00
45.00	(12) 1 5/8" Coax	No	1.13	0.00	0.00	0.00	0.00	6.86	0.07	0.00	0.00	11.07
45.00	(12) 1 5/8" Coax	No	1.13	0.00	0.00	0.00	0.00	6.86	0.07	0.00	0.00	11.07
48.33	(3) 0.38" Cable	No	3.33	0.00	0.00	0.00	0.00	6.96	0.07	0.00	0.00	2.30
48.33	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	204.17
48.33	(1) 0.39" Fiber Trunk	No	3.33	0.00	0.00	0.00	0.00	6.96	0.07	0.00	0.00	0.20
48.33	(2) 0.78" 8 AWG 6	No	3.33	0.00	0.00	0.00	0.00	6.96	0.07	0.00	0.00	3.93
48.33	(12) 1 5/8" Coax	No	3.33	0.00	0.00	0.00	0.00	6.96	0.07	0.00	0.00	32.80

Load Case: 1.0D + 1.0W Serviceability 60 mph 24 Iterations

Gust Response Factor :1.10 Wind Importance Factor 1.00
Dead Load Factor :1.00
Wind Load Factor :1.00

48.33	(1) 3" Conduit	No	3.33	0.00	0.00	0.00	0.00	6.96	0.07	0.00	0.00	25.27
48.33	(4) 7/8" Fiber	No	3.33	0.00	0.00	0.00	0.00	6.96	0.07	0.00	0.00	9.33
48.33	(2) 1 1/4" Fiber	No	3.33	0.00	0.00	0.00	0.00	6.96	0.07	0.00	0.00	7.00
48.33	(1) 1 5/8" Fiber	No	3.33	0.00	0.00	0.00	0.00	6.96	0.07	0.00	0.00	5.37
48.33	(3) Flat Bar	Yes	3.33	0.00	2.00	0.56	0.00	6.96	0.07	0.00	0.00	0.00
48.33	(12) 1 5/8" Coax	No	3.33	0.00	0.00	0.00	0.00	6.96	0.07	0.00	0.00	32.80
48.33	(12) 1 5/8" Coax	No	3.33	0.00	0.00	0.00	0.00	6.96	0.07	0.00	0.00	32.80
50.00	(3) 0.38" Cable	No	1.67	0.00	0.00	0.00	0.00	7.06	0.07	0.00	0.00	1.15
50.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	102.09
50.00	(1) 0.39" Fiber Trunk	No	1.67	0.00	0.00	0.00	0.00	7.06	0.07	0.00	0.00	0.10
50.00	(2) 0.78" 8 AWG 6	No	1.67	0.00	0.00	0.00	0.00	7.06	0.07	0.00	0.00	1.97
50.00	(12) 1 5/8" Coax	No	1.67	0.00	0.00	0.00	0.00	7.06	0.07	0.00	0.00	16.40
50.00	(1) 3" Conduit	No	1.67	0.00	0.00	0.00	0.00	7.06	0.07	0.00	0.00	12.63
50.00	(4) 7/8" Fiber	No	1.67	0.00	0.00	0.00	0.00	7.06	0.07	0.00	0.00	4.67
50.00	(2) 1 1/4" Fiber	No	1.67	0.00	0.00	0.00	0.00	7.06	0.07	0.00	0.00	3.50
50.00	(1) 1 5/8" Fiber	No	1.67	0.00	0.00	0.00	0.00	7.06	0.07	0.00	0.00	2.68
50.00	(3) Flat Bar	Yes	1.67	0.00	2.00	0.28	0.00	7.06	0.07	0.00	0.00	0.00
50.00	(12) 1 5/8" Coax	No	1.67	0.00	0.00	0.00	0.00	7.06	0.07	0.00	0.00	16.40
50.00	(12) 1 5/8" Coax	No	1.67	0.00	0.00	0.00	0.00	7.06	0.07	0.00	0.00	16.40
52.50	(3) 0.38" Cable	No	2.50	0.00	0.00	0.00	0.00	7.15	0.07	0.00	0.00	1.73
52.50	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	153.13
52.50	(1) 0.39" Fiber Trunk	No	2.50	0.00	0.00	0.00	0.00	7.15	0.07	0.00	0.00	0.15
52.50	(2) 0.78" 8 AWG 6	No	2.50	0.00	0.00	0.00	0.00	7.15	0.07	0.00	0.00	2.95
52.50	(12) 1 5/8" Coax	No	2.50	0.00	0.00	0.00	0.00	7.15	0.07	0.00	0.00	24.60
52.50	(1) 3" Conduit	No	2.50	0.00	0.00	0.00	0.00	7.15	0.07	0.00	0.00	18.95
52.50	(4) 7/8" Fiber	No	2.50	0.00	0.00	0.00	0.00	7.15	0.07	0.00	0.00	7.00
52.50	(2) 1 1/4" Fiber	No	2.50	0.00	0.00	0.00	0.00	7.15	0.07	0.00	0.00	5.25
52.50	(1) 1 5/8" Fiber	No	2.50	0.00	0.00	0.00	0.00	7.15	0.07	0.00	0.00	4.03
52.50	(3) Flat Bar	Yes	2.50	0.00	2.00	0.42	0.00	7.15	0.07	0.00	0.00	0.00
52.50	(12) 1 5/8" Coax	No	2.50	0.00	0.00	0.00	0.00	7.15	0.07	0.00	0.00	24.60
52.50	(12) 1 5/8" Coax	No	2.50	0.00	0.00	0.00	0.00	7.15	0.07	0.00	0.00	24.60
55.00	(3) 0.38" Cable	No	2.50	0.00	0.00	0.00	0.00	7.25	0.07	0.00	0.00	1.73
55.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	153.13
55.00	(1) 0.39" Fiber Trunk	No	2.50	0.00	0.00	0.00	0.00	7.25	0.07	0.00	0.00	0.15
55.00	(2) 0.78" 8 AWG 6	No	2.50	0.00	0.00	0.00	0.00	7.25	0.07	0.00	0.00	2.95
55.00	(12) 1 5/8" Coax	No	2.50	0.00	0.00	0.00	0.00	7.25	0.07	0.00	0.00	24.60
55.00	(1) 3" Conduit	No	2.50	0.00	0.00	0.00	0.00	7.25	0.07	0.00	0.00	18.95
55.00	(4) 7/8" Fiber	No	2.50	0.00	0.00	0.00	0.00	7.25	0.07	0.00	0.00	7.00
55.00	(2) 1 1/4" Fiber	No	2.50	0.00	0.00	0.00	0.00	7.25	0.07	0.00	0.00	5.25
55.00	(1) 1 5/8" Fiber	No	2.50	0.00	0.00	0.00	0.00	7.25	0.07	0.00	0.00	4.03
55.00	(3) Flat Bar	Yes	2.50	0.00	2.00	0.42	0.00	7.25	0.07	0.00	0.00	0.00
55.00	(12) 1 5/8" Coax	No	2.50	0.00	0.00	0.00	0.00	7.25	0.07	0.00	0.00	24.60
55.00	(12) 1 5/8" Coax	No	2.50	0.00	0.00	0.00	0.00	7.25	0.07	0.00	0.00	24.60
60.00	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	7.39	0.08	0.00	0.00	3.45
60.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	306.26
60.00	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	7.39	0.08	0.00	0.00	0.30
60.00	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	7.39	0.08	0.00	0.00	5.90
60.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	7.39	0.08	0.00	0.00	49.20
60.00	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	7.39	0.08	0.00	0.00	37.90
60.00	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	7.39	0.08	0.00	0.00	14.00
60.00	(2) 1 1/4" Fiber	No	5.00	0.00	0.00	0.00	0.00	7.39	0.08	0.00	0.00	10.50
60.00	(1) 1 5/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	7.39	0.08	0.00	0.00	8.05
60.00	(3) Flat Bar	Yes	5.00	0.00	2.00	0.83	0.00	7.39	0.08	0.00	0.00	0.00
60.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	7.39	0.08	0.00	0.00	49.20
60.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	7.39	0.08	0.00	0.00	49.20
62.00	(3) 0.38" Cable	No	2.00	0.00	0.00	0.00	0.00	7.51	0.08	0.00	0.00	1.38
62.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	122.50

Load Case: 1.0D + 1.0W Serviceability 60 mph 24 Iterations

Gust Response Factor :1.10 Wind Importance Factor 1.00
Dead Load Factor :1.00
Wind Load Factor :1.00

62.00	(1) 0.39" Fiber Trunk	No	2.00	0.00	0.00	0.00	0.00	7.51	0.08	0.00	0.00	0.12
62.00	(2) 0.78" 8 AWG 6	No	2.00	0.00	0.00	0.00	0.00	7.51	0.08	0.00	0.00	2.36
62.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	7.51	0.08	0.00	0.00	19.68
62.00	(1) 3" Conduit	No	2.00	0.00	0.00	0.00	0.00	7.51	0.08	0.00	0.00	15.16
62.00	(4) 7/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	7.51	0.08	0.00	0.00	5.60
62.00	(2) 1 1/4" Fiber	No	2.00	0.00	0.00	0.00	0.00	7.51	0.08	0.00	0.00	4.20
62.00	(1) 1 5/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	7.51	0.08	0.00	0.00	3.22
62.00	(3) Flat Bar	Yes	2.00	0.00	2.00	0.33	0.00	7.51	0.08	0.00	0.00	0.00
62.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	7.51	0.08	0.00	0.00	19.68
62.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	7.51	0.08	0.00	0.00	19.68
65.00	(3) 0.38" Cable	No	3.00	0.00	0.00	0.00	0.00	7.60	0.08	0.00	0.00	2.07
65.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	183.75
65.00	(1) 0.39" Fiber Trunk	No	3.00	0.00	0.00	0.00	0.00	7.60	0.08	0.00	0.00	0.18
65.00	(2) 0.78" 8 AWG 6	No	3.00	0.00	0.00	0.00	0.00	7.60	0.08	0.00	0.00	3.54
65.00	(12) 1 5/8" Coax	No	3.00	0.00	0.00	0.00	0.00	7.60	0.08	0.00	0.00	29.52
65.00	(1) 3" Conduit	No	3.00	0.00	0.00	0.00	0.00	7.60	0.08	0.00	0.00	22.74
65.00	(4) 7/8" Fiber	No	3.00	0.00	0.00	0.00	0.00	7.60	0.08	0.00	0.00	8.40
65.00	(2) 1 1/4" Fiber	No	3.00	0.00	0.00	0.00	0.00	7.60	0.08	0.00	0.00	6.30
65.00	(1) 1 5/8" Fiber	No	3.00	0.00	0.00	0.00	0.00	7.60	0.08	0.00	0.00	4.83
65.00	(3) Flat Bar	Yes	3.00	0.00	2.00	0.50	0.00	7.60	0.08	0.00	0.00	0.00
65.00	(12) 1 5/8" Coax	No	3.00	0.00	0.00	0.00	0.00	7.60	0.08	0.00	0.00	29.52
65.00	(12) 1 5/8" Coax	No	3.00	0.00	0.00	0.00	0.00	7.60	0.08	0.00	0.00	29.52
70.00	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	7.73	0.09	0.00	0.00	3.45
70.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	306.26
70.00	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	7.73	0.09	0.00	0.00	0.30
70.00	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	7.73	0.09	0.00	0.00	5.90
70.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	7.73	0.09	0.00	0.00	49.20
70.00	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	7.73	0.09	0.00	0.00	37.90
70.00	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	7.73	0.09	0.00	0.00	14.00
70.00	(2) 1 1/4" Fiber	No	5.00	0.00	0.00	0.00	0.00	7.73	0.09	0.00	0.00	10.50
70.00	(1) 1 5/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	7.73	0.09	0.00	0.00	8.05
70.00	(3) Flat Bar	Yes	5.00	0.00	2.00	0.83	0.00	7.73	0.09	0.00	0.00	0.00
70.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	7.73	0.09	0.00	0.00	49.20
70.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	7.73	0.09	0.00	0.00	49.20
75.00	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	7.89	0.10	0.00	0.00	3.45
75.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	306.26
75.00	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	7.89	0.10	0.00	0.00	0.30
75.00	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	7.89	0.10	0.00	0.00	5.90
75.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	7.89	0.10	0.00	0.00	49.20
75.00	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	7.89	0.10	0.00	0.00	37.90
75.00	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	7.89	0.10	0.00	0.00	14.00
75.00	(2) 1 1/4" Fiber	No	5.00	0.00	0.00	0.00	0.00	7.89	0.10	0.00	0.00	10.50
75.00	(1) 1 5/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	7.89	0.10	0.00	0.00	8.05
75.00	(3) Flat Bar	Yes	5.00	0.00	2.00	0.83	0.00	7.89	0.10	0.00	0.00	0.00
75.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	7.89	0.10	0.00	0.00	49.20
75.00	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	7.89	0.10	0.00	0.00	49.20
77.00	(3) 0.38" Cable	No	2.00	0.00	0.00	0.00	0.00	8.00	0.10	1.00	0.00	1.38
77.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	122.50
77.00	(1) 0.39" Fiber Trunk	No	2.00	0.00	0.00	0.00	0.00	8.00	0.10	1.00	0.00	0.12
77.00	(2) 0.78" 8 AWG 6	No	2.00	0.00	0.00	0.00	0.00	8.00	0.10	1.00	0.00	2.36
77.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	8.00	0.10	1.00	0.00	19.68
77.00	(1) 3" Conduit	No	2.00	0.00	0.00	0.00	0.00	8.00	0.10	1.00	0.00	15.16
77.00	(4) 7/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	8.00	0.10	1.00	0.00	5.60
77.00	(2) 1 1/4" Fiber	No	2.00	0.00	0.00	0.00	0.00	8.00	0.10	1.00	0.00	4.20
77.00	(1) 1 5/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	8.00	0.10	1.00	0.00	3.22
77.00	(3) Flat Bar	Yes	2.00	0.00	2.00	0.33	0.00	8.00	0.10	1.00	0.00	0.00
77.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	8.00	0.10	1.00	0.00	19.68

Load Case: 1.0D + 1.0W Serviceability 60 mph 24 Iterations

Gust Response Factor :1.10 Wind Importance Factor 1.00
Dead Load Factor :1.00
Wind Load Factor :1.00

77.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	8.00	0.10	1.00	0.00	19.68
80.00	(3) 0.38" Cable	No	3.00	0.00	0.00	0.00	0.00	8.07	0.10	1.01	0.00	2.07
80.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	183.75
80.00	(1) 0.39" Fiber Trunk	No	3.00	0.00	0.00	0.00	0.00	8.07	0.10	1.01	0.00	0.18
80.00	(2) 0.78" 8 AWG 6	No	3.00	0.00	0.00	0.00	0.00	8.07	0.10	1.01	0.00	3.54
80.00	(12) 1 5/8" Coax	No	3.00	0.00	0.00	0.00	0.00	8.07	0.10	1.01	0.00	29.52
80.00	(1) 3" Conduit	No	3.00	0.00	0.00	0.00	0.00	8.07	0.10	1.01	0.00	22.74
80.00	(4) 7/8" Fiber	No	3.00	0.00	0.00	0.00	0.00	8.07	0.10	1.01	0.00	8.40
80.00	(2) 1 1/4" Fiber	No	3.00	0.00	0.00	0.00	0.00	8.07	0.10	1.01	0.00	6.30
80.00	(1) 1 5/8" Fiber	No	3.00	0.00	0.00	0.00	0.00	8.07	0.10	1.01	0.00	4.83
80.00	(3) Flat Bar	Yes	3.00	0.00	2.00	0.50	0.00	8.07	0.10	1.01	0.00	0.00
80.00	(12) 1 5/8" Coax	No	3.00	0.00	0.00	0.00	0.00	8.07	0.10	1.01	0.00	29.52
82.00	(3) 0.38" Cable	No	2.00	0.00	0.00	0.00	0.00	8.15	0.11	1.03	0.00	1.38
82.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	122.50
82.00	(1) 0.39" Fiber Trunk	No	2.00	0.00	0.00	0.00	0.00	8.15	0.11	1.03	0.00	0.12
82.00	(2) 0.78" 8 AWG 6	No	2.00	0.00	0.00	0.00	0.00	8.15	0.11	1.03	0.00	2.36
82.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	8.15	0.11	1.03	0.00	19.68
82.00	(1) 3" Conduit	No	2.00	0.00	0.00	0.00	0.00	8.15	0.11	1.03	0.00	15.16
82.00	(4) 7/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	8.15	0.11	1.03	0.00	5.60
82.00	(2) 1 1/4" Fiber	No	2.00	0.00	0.00	0.00	0.00	8.15	0.11	1.03	0.00	4.20
82.00	(1) 1 5/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	8.15	0.11	1.03	0.00	3.22
82.00	(3) Flat Bar	Yes	2.00	0.00	2.00	0.33	0.00	8.15	0.11	1.03	0.00	0.00
82.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	8.15	0.11	1.03	0.00	19.68
85.00	(3) 0.38" Cable	No	3.00	0.00	0.00	0.00	0.00	8.22	0.11	1.04	0.00	2.07
85.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	183.75
85.00	(1) 0.39" Fiber Trunk	No	3.00	0.00	0.00	0.00	0.00	8.22	0.11	1.04	0.00	0.18
85.00	(2) 0.78" 8 AWG 6	No	3.00	0.00	0.00	0.00	0.00	8.22	0.11	1.04	0.00	3.54
85.00	(12) 1 5/8" Coax	No	3.00	0.00	0.00	0.00	0.00	8.22	0.11	1.04	0.00	29.52
85.00	(1) 3" Conduit	No	3.00	0.00	0.00	0.00	0.00	8.22	0.11	1.04	0.00	22.74
85.00	(4) 7/8" Fiber	No	3.00	0.00	0.00	0.00	0.00	8.22	0.11	1.04	0.00	8.40
85.00	(2) 1 1/4" Fiber	No	3.00	0.00	0.00	0.00	0.00	8.22	0.11	1.04	0.00	6.30
85.00	(1) 1 5/8" Fiber	No	3.00	0.00	0.00	0.00	0.00	8.22	0.11	1.04	0.00	4.83
85.00	(3) Flat Bar	Yes	3.00	0.00	2.00	0.50	0.00	8.22	0.11	1.04	0.00	0.00
85.00	(12) 1 5/8" Coax	No	3.00	0.00	0.00	0.00	0.00	8.22	0.11	1.04	0.00	29.52
87.00	(3) 0.38" Cable	No	2.00	0.00	0.00	0.00	0.00	8.29	0.12	1.06	0.00	1.38
87.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	122.50
87.00	(1) 0.39" Fiber Trunk	No	2.00	0.00	0.00	0.00	0.00	8.29	0.12	1.06	0.00	0.12
87.00	(2) 0.78" 8 AWG 6	No	2.00	0.00	0.00	0.00	0.00	8.29	0.12	1.06	0.00	2.36
87.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	8.29	0.12	1.06	0.00	19.68
87.00	(1) 3" Conduit	No	2.00	0.00	0.00	0.00	0.00	8.29	0.12	1.06	0.00	15.16
87.00	(4) 7/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	8.29	0.12	1.06	0.00	5.60
87.00	(2) 1 1/4" Fiber	No	2.00	0.00	0.00	0.00	0.00	8.29	0.12	1.06	0.00	4.20
87.00	(1) 1 5/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	8.29	0.12	1.06	0.00	3.22
87.00	(3) Flat Bar	Yes	2.00	0.00	2.00	0.33	0.00	8.29	0.12	1.06	0.00	0.00
87.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	8.29	0.12	1.06	0.00	19.68
90.00	(3) 0.38" Cable	No	3.00	0.00	0.00	0.00	0.00	8.36	0.12	1.07	0.00	2.07
90.00	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	183.75
90.00	(1) 0.39" Fiber Trunk	No	3.00	0.00	0.00	0.00	0.00	8.36	0.12	1.07	0.00	0.18
90.00	(2) 0.78" 8 AWG 6	No	3.00	0.00	0.00	0.00	0.00	8.36	0.12	1.07	0.00	3.54
90.00	(12) 1 5/8" Coax	No	3.00	0.00	0.00	0.00	0.00	8.36	0.12	1.07	0.00	29.52
90.00	(1) 3" Conduit	No	3.00	0.00	0.00	0.00	0.00	8.36	0.12	1.07	0.00	22.74
90.00	(4) 7/8" Fiber	No	3.00	0.00	0.00	0.00	0.00	8.36	0.12	1.07	0.00	8.40
90.00	(2) 1 1/4" Fiber	No	3.00	0.00	0.00	0.00	0.00	8.36	0.12	1.07	0.00	6.30
90.00	(1) 1 5/8" Fiber	No	3.00	0.00	0.00	0.00	0.00	8.36	0.12	1.07	0.00	4.83
90.00	(3) Flat Bar	Yes	3.00	0.00	2.00	0.50	0.00	8.36	0.12	1.07	0.00	0.00
90.13	(3) 0.38" Cable	No	0.13	0.00	0.00	0.00	0.00	8.40	0.13	1.08	0.00	0.09
90.13	PL 6" x 1"	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.66

Load Case: 1.0D + 1.0W Serviceability 60 mph 24 Iterations

Gust Response Factor :1.10 Wind Importance Factor 1.00
Dead Load Factor :1.00
Wind Load Factor :1.00

90.13	(1) 0.39" Fiber Trunk	No	0.13	0.00	0.00	0.00	0.00	8.40	0.13	1.08	0.00	0.01
90.13	(2) 0.78" 8 AWG 6	No	0.13	0.00	0.00	0.00	0.00	8.40	0.13	1.08	0.00	0.15
90.13	(12) 1 5/8" Coax	No	0.13	0.00	0.00	0.00	0.00	8.40	0.13	1.08	0.00	1.23
90.13	(1) 3" Conduit	No	0.13	0.00	0.00	0.00	0.00	8.40	0.13	1.08	0.00	0.95
90.13	(4) 7/8" Fiber	No	0.13	0.00	0.00	0.00	0.00	8.40	0.13	1.08	0.00	0.35
90.13	(2) 1 1/4" Fiber	No	0.13	0.00	0.00	0.00	0.00	8.40	0.13	1.08	0.00	0.26
90.13	(1) 1 5/8" Fiber	No	0.13	0.00	0.00	0.00	0.00	8.40	0.13	1.08	0.00	0.20
90.13	(3) Flat Bar	Yes	0.13	0.00	2.00	0.02	0.00	8.40	0.13	1.08	0.00	0.00
95.00	(3) 0.38" Cable	No	4.88	0.00	0.00	0.00	0.00	8.46	0.05	0.00	0.00	3.36
95.00	(1) 0.39" Fiber Trunk	No	4.88	0.00	0.00	0.00	0.00	8.46	0.05	0.00	0.00	0.29
95.00	(2) 0.78" 8 AWG 6	No	4.88	0.00	0.00	0.00	0.00	8.46	0.05	0.00	0.00	5.75
95.00	(12) 1 5/8" Coax	No	4.88	0.00	0.00	0.00	0.00	8.46	0.05	0.00	0.00	47.97
95.00	(1) 3" Conduit	No	4.88	0.00	0.00	0.00	0.00	8.46	0.05	0.00	0.00	36.95
95.00	(4) 7/8" Fiber	No	4.88	0.00	0.00	0.00	0.00	8.46	0.05	0.00	0.00	13.65
95.00	(2) 1 1/4" Fiber	No	4.88	0.00	0.00	0.00	0.00	8.46	0.05	0.00	0.00	10.24
95.00	(1) 1 5/8" Fiber	No	4.88	0.00	0.00	0.00	0.00	8.46	0.05	0.00	0.00	7.85
95.00	(3) Flat Bar	Yes	1.88	0.00	2.00	0.31	0.00	8.46	0.05	0.00	0.00	0.00
97.00	(3) 0.38" Cable	No	2.00	0.00	0.00	0.00	0.00	8.55	0.00	0.00	0.00	1.38
97.00	(1) 0.39" Fiber Trunk	No	2.00	0.00	0.00	0.00	0.00	8.55	0.00	0.00	0.00	0.12
97.00	(2) 0.78" 8 AWG 6	No	2.00	0.00	0.00	0.00	0.00	8.55	0.00	0.00	0.00	2.36
97.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	8.55	0.00	0.00	0.00	19.68
97.00	(1) 3" Conduit	No	2.00	0.00	0.00	0.00	0.00	8.55	0.00	0.00	0.00	15.16
97.00	(4) 7/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	8.55	0.00	0.00	0.00	5.60
97.00	(2) 1 1/4" Fiber	No	2.00	0.00	0.00	0.00	0.00	8.55	0.00	0.00	0.00	4.20
97.00	(1) 1 5/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	8.55	0.00	0.00	0.00	3.22
99.00	(3) 0.38" Cable	No	2.00	0.00	0.00	0.00	0.00	8.60	0.00	0.00	0.00	1.38
99.00	(1) 0.39" Fiber Trunk	No	2.00	0.00	0.00	0.00	0.00	8.60	0.00	0.00	0.00	0.12
99.00	(2) 0.78" 8 AWG 6	No	2.00	0.00	0.00	0.00	0.00	8.60	0.00	0.00	0.00	2.36
99.00	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	8.60	0.00	0.00	0.00	19.68
99.00	(1) 3" Conduit	No	2.00	0.00	0.00	0.00	0.00	8.60	0.00	0.00	0.00	15.16
99.00	(4) 7/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	8.60	0.00	0.00	0.00	5.60
100.0	(3) 0.38" Cable	No	1.00	0.00	0.00	0.00	0.00	8.64	0.00	0.00	0.00	0.69
100.0	(1) 0.39" Fiber Trunk	No	1.00	0.00	0.00	0.00	0.00	8.64	0.00	0.00	0.00	0.06
100.0	(2) 0.78" 8 AWG 6	No	1.00	0.00	0.00	0.00	0.00	8.64	0.00	0.00	0.00	1.18
100.0	(12) 1 5/8" Coax	No	1.00	0.00	0.00	0.00	0.00	8.64	0.00	0.00	0.00	9.84
100.0	(1) 3" Conduit	No	1.00	0.00	0.00	0.00	0.00	8.64	0.00	0.00	0.00	7.58
100.0	(4) 7/8" Fiber	No	1.00	0.00	0.00	0.00	0.00	8.64	0.00	0.00	0.00	2.80
105.0	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	8.71	0.00	0.00	0.00	3.45
105.0	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	8.71	0.00	0.00	0.00	0.30
105.0	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	8.71	0.00	0.00	0.00	5.90
105.0	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	8.71	0.00	0.00	0.00	49.20
105.0	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	8.71	0.00	0.00	0.00	37.90
105.0	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	8.71	0.00	0.00	0.00	14.00
109.0	(3) 0.38" Cable	No	4.00	0.00	0.00	0.00	0.00	8.82	0.00	0.00	0.00	2.76
109.0	(1) 0.39" Fiber Trunk	No	4.00	0.00	0.00	0.00	0.00	8.82	0.00	0.00	0.00	0.24
109.0	(2) 0.78" 8 AWG 6	No	4.00	0.00	0.00	0.00	0.00	8.82	0.00	0.00	0.00	4.72
109.0	(12) 1 5/8" Coax	No	4.00	0.00	0.00	0.00	0.00	8.82	0.00	0.00	0.00	39.36
109.0	(1) 3" Conduit	No	4.00	0.00	0.00	0.00	0.00	8.82	0.00	0.00	0.00	30.32
109.0	(4) 7/8" Fiber	No	4.00	0.00	0.00	0.00	0.00	8.82	0.00	0.00	0.00	11.20
110.0	(3) 0.38" Cable	No	1.00	0.00	0.00	0.00	0.00	8.88	0.00	0.00	0.00	0.69
110.0	(1) 0.39" Fiber Trunk	No	1.00	0.00	0.00	0.00	0.00	8.88	0.00	0.00	0.00	0.06
110.0	(2) 0.78" 8 AWG 6	No	1.00	0.00	0.00	0.00	0.00	8.88	0.00	0.00	0.00	1.18
110.0	(12) 1 5/8" Coax	No	1.00	0.00	0.00	0.00	0.00	8.88	0.00	0.00	0.00	9.84
110.0	(1) 3" Conduit	No	1.00	0.00	0.00	0.00	0.00	8.88	0.00	0.00	0.00	7.58
110.0	(4) 7/8" Fiber	No	1.00	0.00	0.00	0.00	0.00	8.88	0.00	0.00	0.00	2.80
115.0	(3) 0.38" Cable	No	5.00	0.00	0.00	0.00	0.00	8.95	0.00	0.00	0.00	3.45
115.0	(1) 0.39" Fiber Trunk	No	5.00	0.00	0.00	0.00	0.00	8.95	0.00	0.00	0.00	0.30

Load Case: 1.0D + 1.0W Serviceability 60 mph 24 Iterations

Gust Response Factor :1.10 Wind Importance Factor 1.00
Dead Load Factor :1.00
Wind Load Factor :1.00

115.0	(2) 0.78" 8 AWG 6	No	5.00	0.00	0.00	0.00	0.00	8.95	0.00	0.00	0.00	5.90
115.0	(12) 1 5/8" Coax	No	5.00	0.00	0.00	0.00	0.00	8.95	0.00	0.00	0.00	49.20
115.0	(1) 3" Conduit	No	5.00	0.00	0.00	0.00	0.00	8.95	0.00	0.00	0.00	37.90
115.0	(4) 7/8" Fiber	No	5.00	0.00	0.00	0.00	0.00	8.95	0.00	0.00	0.00	14.00
117.0	(3) 0.38" Cable	No	2.00	0.00	0.00	0.00	0.00	9.03	0.00	0.00	0.00	1.38
117.0	(1) 0.39" Fiber Trunk	No	2.00	0.00	0.00	0.00	0.00	9.03	0.00	0.00	0.00	0.12
117.0	(2) 0.78" 8 AWG 6	No	2.00	0.00	0.00	0.00	0.00	9.03	0.00	0.00	0.00	2.36
117.0	(12) 1 5/8" Coax	No	2.00	0.00	0.00	0.00	0.00	9.03	0.00	0.00	0.00	19.68
117.0	(1) 3" Conduit	No	2.00	0.00	0.00	0.00	0.00	9.03	0.00	0.00	0.00	15.16
117.0	(4) 7/8" Fiber	No	2.00	0.00	0.00	0.00	0.00	9.03	0.00	0.00	0.00	5.60
										Totals:	0.00	7,398.04

Site Number: 283420 Code: ANSI/TIA-222-G

Site Name: STONEYBROOK RD CT, CT Engineering Number:12598484_C3_01 8/27/2018 4:13:22 PM

Customer: T-MOBILE

Load Case: 1.0D + 1.0W Serviceability 60 mph 24 Iterations

Gust Response Factor :1.10 Wind Importance Factor 1.00

Dead Load Factor :1.00

Wind Load Factor :1.00

Applied Segment Forces Summary

		Shaft Forces		Discrete Forces				Linear Forces		Sum of Forces			
Seg Elev (ft)	Description	Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Torsion MY (lb-ft)	Moment MZ (lb)
0.00		38.2	0.0					0.0	0.0	38.2	0.0	0.0	0.0
5.00		75.1	690.8					0.0	227.7	75.1	918.5	0.0	0.0
10.00		72.3	665.5					0.0	227.7	72.3	893.2	0.0	0.0
15.00		69.5	640.2					0.0	227.7	69.5	867.9	0.0	0.0
20.00		66.7	614.9					0.0	227.7	66.7	842.6	0.0	0.0
25.00		64.0	589.6					0.0	227.7	64.0	817.3	0.0	0.0
30.00		61.9	564.3					0.0	227.7	61.9	792.0	0.0	0.0
35.00		61.0	538.9					0.0	227.7	61.0	766.6	0.0	0.0
40.00		53.7	513.6					0.0	227.7	53.7	741.3	0.0	0.0
43.88	Reinf Bottom	30.0	380.7					0.0	176.5	30.0	557.1	0.0	0.0
45.00		26.3	107.7					0.0	120.1	26.3	227.8	0.0	0.0
48.33	Bot - Section 2	29.5	311.5					0.0	356.0	29.5	667.5	0.0	0.0
50.00		24.5	259.7					0.0	178.0	24.5	437.7	0.0	0.0
52.50	Top - Section 1	29.0	380.6					0.0	267.0	29.0	647.5	0.0	0.0
55.00		42.6	154.1					0.0	267.0	42.6	421.1	0.0	0.0
60.00		39.1	294.9					0.0	534.0	39.1	828.9	0.0	0.0
62.00	Reinf. Top Reinf	27.1	113.0					0.0	213.6	27.1	326.6	0.0	0.0
65.00		42.1	164.2					0.0	320.4	42.1	484.6	0.0	0.0
70.00		50.6	259.5					0.0	534.0	50.6	793.5	0.0	0.0
75.00		34.2	241.8					0.0	534.0	34.2	775.7	0.0	0.0
77.00	Appurtenance(s)	23.3	91.8	546.9	0.0	721.3	927.9	0.0	213.6	570.3	1,233.2	0.0	0.0
80.00		22.8	132.3					0.0	290.9	22.8	423.2	0.0	0.0
82.00	Top - Section 2	21.9	84.7					0.0	193.9	21.9	278.6	0.0	0.0
85.00		21.3	104.5					0.0	290.9	21.3	395.3	0.0	0.0
87.00	Appurtenance(s)	20.4	66.6	179.2	0.0	0.0	956.6	0.0	193.9	199.6	1,217.1	0.0	0.0
90.00		12.5	95.4					0.0	261.3	12.5	356.7	0.0	0.0
90.13	Reinf. Top	18.8	3.9					0.0	10.9	18.8	14.7	0.0	0.0
95.00		25.4	143.0					0.0	126.1	25.4	269.0	0.0	0.0
97.00	Appurtenance(s)	13.8	54.5	441.6	0.0	0.0	1,326.8	0.0	51.7	455.5	1,433.0	0.0	0.0
99.00	Top - Section 3	10.1	52.0					0.0	44.3	10.1	96.3	0.0	0.0
100.00		20.0	33.2					0.0	22.1	20.0	55.4	0.0	0.0
105.00		30.1	166.2					0.0	110.8	30.1	277.0	0.0	0.0
109.00	Appurtenance(s)	16.8	133.0	287.5	0.0	0.0	257.4	0.0	88.6	304.3	479.0	0.0	0.0
110.00		20.4	33.2					0.0	22.1	20.4	55.4	0.0	0.0
115.00		23.9	166.2					0.0	110.8	23.9	277.0	0.0	0.0
117.00	Appurtenance(s)	13.8	66.5	619.3	0.0	0.0	1,673.0	0.0	44.3	633.1	1,783.8	0.0	0.0
119.00		6.9	66.5					0.0	0.0	6.9	66.5	0.0	0.0
								Totals:		3,334.18	21,518.6	0.00	0.00

Load Case: 1.0D + 1.0W Serviceability 60 mph 24 Iterations

Gust Response Factor :1.10 Wind Importance Factor 1.00
Dead Load Factor :1.00
Wind Load Factor :1.00

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-21.52	-3.30	0.00	-278.50	0.00	278.50	2,813.31	1,406.66	4,820.79	2,413.98	0.00	0.00	0.123
5.00	-20.60	-3.24	0.00	-261.98	0.00	261.98	2,747.79	1,373.90	4,537.84	2,272.29	0.02	-0.04	0.123
10.00	-19.70	-3.19	0.00	-245.77	0.00	245.77	2,679.61	1,339.80	4,258.79	2,132.56	0.09	-0.09	0.123
15.00	-18.83	-3.13	0.00	-229.84	0.00	229.84	2,608.76	1,304.38	3,984.14	1,995.03	0.21	-0.13	0.122
20.00	-17.99	-3.08	0.00	-214.19	0.00	214.19	2,535.24	1,267.62	3,714.39	1,859.96	0.37	-0.18	0.122
25.00	-17.17	-3.03	0.00	-198.80	0.00	198.80	2,459.06	1,229.53	3,450.04	1,727.58	0.59	-0.23	0.122
30.00	-16.37	-2.98	0.00	-183.67	0.00	183.67	2,380.22	1,190.11	3,191.57	1,598.16	0.87	-0.29	0.122
35.00	-15.60	-2.93	0.00	-168.79	0.00	168.79	2,298.17	1,149.08	2,938.80	1,471.58	1.20	-0.35	0.121
40.00	-14.86	-2.88	0.00	-154.16	0.00	154.16	2,187.63	1,093.82	2,661.58	1,332.77	1.59	-0.41	0.122
43.88	-14.30	-2.86	0.00	-142.98	0.00	142.98	2,101.97	1,050.99	2,456.17	1,229.91	1.94	-0.46	0.123
45.00	-14.07	-2.83	0.00	-139.77	0.00	139.77	2,077.10	1,038.55	2,398.08	1,200.82	2.05	-0.47	0.072
48.33	-13.40	-2.80	0.00	-130.32	0.00	130.32	2,003.41	1,001.71	2,230.05	1,116.68	2.39	-0.50	0.071
50.00	-12.96	-2.78	0.00	-125.65	0.00	125.65	1,966.57	983.28	2,148.32	1,075.76	2.57	-0.51	0.070
52.50	-12.32	-2.75	0.00	-118.70	0.00	118.70	1,292.92	646.46	1,405.62	703.85	2.84	-0.53	0.086
55.00	-11.89	-2.71	0.00	-111.83	0.00	111.83	1,267.71	633.85	1,338.84	670.42	3.13	-0.55	0.084
60.00	-11.06	-2.67	0.00	-98.29	0.00	98.29	1,215.29	607.65	1,208.00	604.90	3.73	-0.60	0.079
62.00	-10.74	-2.64	0.00	-92.95	0.00	92.95	1,193.58	596.79	1,156.76	579.24	3.99	-0.62	0.076
62.00	-10.74	-2.64	0.00	-92.95	0.00	92.95	1,193.58	596.79	1,156.76	579.24	3.99	-0.62	0.076
65.00	-10.25	-2.60	0.00	-85.02	0.00	85.02	1,160.21	580.11	1,081.18	541.39	4.39	-0.65	0.073
70.00	-9.46	-2.55	0.00	-72.02	0.00	72.02	1,094.51	547.25	951.97	476.69	5.09	-0.70	0.067
75.00	-8.68	-2.51	0.00	-59.27	0.00	59.27	1,017.13	508.57	821.49	411.36	5.85	-0.74	0.061
77.00	-7.45	-1.93	0.00	-53.53	0.00	53.53	986.19	493.09	772.00	386.57	6.17	-0.76	0.057
80.00	-7.03	-1.90	0.00	-47.74	0.00	47.74	939.76	469.88	700.63	350.84	6.66	-0.79	0.054
82.00	-6.75	-1.88	0.00	-43.94	0.00	43.94	908.81	454.41	654.98	327.98	6.99	-0.81	0.052
82.00	-6.75	-1.88	0.00	-43.94	0.00	43.94	780.36	390.18	564.40	282.62	6.99	-0.81	0.000
85.00	-6.35	-1.85	0.00	-38.31	0.00	38.31	740.57	370.29	508.03	254.39	7.51	-0.84	0.051
87.00	-5.14	-1.64	0.00	-34.60	0.00	34.60	714.04	357.02	472.09	236.39	7.87	-0.86	0.048
90.00	-4.78	-1.62	0.00	-29.68	0.00	29.68	674.25	337.13	420.65	210.64	8.41	-0.88	0.044
90.13	-4.77	-1.60	0.00	-29.48	0.00	29.48	672.59	336.30	418.57	209.60	8.43	-0.88	0.044
90.13	-4.77	-1.60	0.00	-29.48	0.00	29.48	672.59	336.30	418.57	209.60	8.43	-0.88	0.148
95.00	-4.50	-1.58	0.00	-21.66	0.00	21.66	607.93	303.97	341.52	171.01	9.36	-0.92	0.134
97.00	-3.07	-1.10	0.00	-18.50	0.00	18.50	581.40	290.70	312.17	156.32	9.76	-0.98	0.124
99.00	-2.97	-1.09	0.00	-16.30	0.00	16.30	554.88	277.44	284.14	142.28	10.18	-1.04	0.120
99.00	-2.97	-1.09	0.00	-16.30	0.00	16.30	725.83	362.92	362.74	181.64	10.18	-1.04	0.094
100.00	-2.92	-1.08	0.00	-15.20	0.00	15.20	725.83	362.92	362.74	181.64	10.40	-1.07	0.088
105.00	-2.64	-1.04	0.00	-9.83	0.00	9.83	725.83	362.92	362.74	181.64	11.58	-1.16	0.058
109.00	-2.17	-0.73	0.00	-5.65	0.00	5.65	725.83	362.92	362.74	181.64	12.57	-1.21	0.034
110.00	-2.11	-0.71	0.00	-4.92	0.00	4.92	725.83	362.92	362.74	181.64	12.83	-1.22	0.030
115.00	-1.84	-0.68	0.00	-1.38	0.00	1.38	725.83	362.92	362.74	181.64	14.12	-1.24	0.010
117.00	-0.07	-0.01	0.00	-0.02	0.00	0.02	725.83	362.92	362.74	181.64	14.64	-1.25	0.000
119.00	0.00	-0.01	0.00	0.00	0.00	0.00	725.83	362.92	362.74	181.64	15.16	-1.25	0.000

Equivalent Lateral Forces Method Analysis

(Based on ASCE7-10 Chapters 11, 12, 15)

Spectral Response Acceleration for Short Period (S_s):	0.20	
Spectral Response Acceleration at 1.0 Second Period (S_1):	0.06	
Long-Period Transition Period (T_L):	6	
Importance Factor (I_E):	1.00	
Site Coefficient F_a:	1.60	
Site Coeffiecient F_v:	2.40	
Response Modification Coefficient (R):	1.50	
Design Spectral Response Acceleration at Short Period (S_{ds}):	0.22	
Design Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.10	
Seismic Response Coefficient (C_s):	0.04	
Upper Limit C_s	0.04	
Lower Limit C_s	0.03	
Period based on Rayleigh Method (sec):	1.94	
Redundancy Factor (p):	1.30	
Seismic Force Distribution Exponent (k):	1.72	
Total Unfactored Dead Load:	21.52	k
Seismic Base Shear (E):	0.99	k

Load Case (1.2 + 0.2Sds) * DL + E ELFM Seismic Equivalent Lateral Forces Method

Segment	Height Above Base (ft)	Weight (lb)	W_z (lb-ft)	C_{vx}	Horizontal Force (lb)	Vertical Force (lb)
36	118.00	66	243	0.008	8	83
35	116.00	111	392	0.013	13	138
34	112.50	277	931	0.031	30	344
33	109.50	55	178	0.006	6	69
32	107.00	222	683	0.023	22	275
31	102.50	277	793	0.026	26	344
30	99.50	55	151	0.005	5	69
29	98.00	96	255	0.008	8	120
28	96.00	106	272	0.009	9	132
27	92.56	269	646	0.021	21	334
26	90.06	15	34	0.001	1	18
25	88.50	357	794	0.026	26	444
24	86.00	261	552	0.018	18	324
23	83.50	395	796	0.026	26	492
22	81.00	279	532	0.018	17	346
21	78.50	423	766	0.025	25	526
20	76.00	305	523	0.017	17	380
19	72.50	776	1,225	0.040	40	964
18	67.50	793	1,108	0.037	36	987
17	63.50	485	609	0.020	20	602
16	61.00	327	383	0.013	12	406
15	57.50	829	879	0.029	29	1,031
14	53.75	421	397	0.013	13	524

13	51.25	648	563	0.019	18	805
12	49.17	438	354	0.012	12	544
11	46.67	667	494	0.016	16	830
10	44.44	228	155	0.005	5	283
9	41.94	557	343	0.011	11	693
8	37.50	741	377	0.012	12	922
7	32.50	767	305	0.010	10	953
6	27.50	792	236	0.008	8	985
5	22.50	817	173	0.006	6	1,016
4	17.50	843	116	0.004	4	1,048
3	12.50	868	67	0.002	2	1,079
2	7.50	893	29	0.001	1	1,111
1	2.50	919	4	0.000	0	1,142
CCI TPX-070821	117.00	45	162	0.005	5	56
Raycap DC6-48-60-18-	117.00	66	236	0.008	8	82
Ericsson RRUS 32 B2	117.00	159	572	0.019	19	198
Ericsson RRUS-32 B30	117.00	231	830	0.027	27	287
Ericsson RRUS-11	117.00	165	593	0.020	19	205
Amphenol Antel BXA-1	117.00	38	138	0.005	4	48
CCI OPA-65R-LCUU-H6	117.00	219	787	0.026	26	272
Flat T-Arm	117.00	750	2,696	0.089	88	932
Amphenol Antel BXA-1	109.00	38	122	0.004	4	48
CCI OPA-65R-LCUU-H6	109.00	219	697	0.023	23	272
Ericsson KRY 112 144	97.00	29	76	0.002	2	36
Ericsson Radio 4449	97.00	222	578	0.019	19	276
Ericsson RRUS 01 B2	97.00	132	344	0.011	11	164
Side Arms	97.00	560	1,459	0.048	47	696
RFS APXVAARR24_43-U-	97.00	384	999	0.033	32	477
Ericsson AIR32 B66Aa	87.00	397	857	0.028	28	493
Side Arms	87.00	560	1,210	0.040	39	696
Alcatel-Lucent 9442	77.00	147	257	0.008	8	183
Alcatel-Lucent 9442	77.00	152	266	0.009	9	189
Amphenol Antel BXA-1	77.00	77	134	0.004	4	95
Flat Side Arm	77.00	450	788	0.026	26	559
Amphenol Antel BXA-7	77.00	102	179	0.006	6	127
		21,519	30,337	1.000	985	26,754

Load Case (0.9 - 0.2Sds) * DL + E ELFM Seismic (Reduced DL) Equivalent Lateral Forces Method

Segment	Height Above Base (ft)	Weight (lb)	W_z (lb-ft)	C_{vx}	Horizontal Force (lb)	Vertical Force (lb)
36	118.00	66	243	0.008	8	57
35	116.00	111	392	0.013	13	95
34	112.50	277	931	0.031	30	237
33	109.50	55	178	0.006	6	47
32	107.00	222	683	0.023	22	190
31	102.50	277	793	0.026	26	237
30	99.50	55	151	0.005	5	47
29	98.00	96	255	0.008	8	83
28	96.00	106	272	0.009	9	91
27	92.56	269	646	0.021	21	230
26	90.06	15	34	0.001	1	13
25	88.50	357	794	0.026	26	306
24	86.00	261	552	0.018	18	223
23	83.50	395	796	0.026	26	339
22	81.00	279	532	0.018	17	239
21	78.50	423	766	0.025	25	363
20	76.00	305	523	0.017	17	262
19	72.50	776	1,225	0.040	40	665
18	67.50	793	1,108	0.037	36	680

17	63.50	485	609	0.020	20	415
16	61.00	327	383	0.013	12	280
15	57.50	829	879	0.029	29	710
14	53.75	421	397	0.013	13	361
13	51.25	648	563	0.019	18	555
12	49.17	438	354	0.012	12	375
11	46.67	667	494	0.016	16	572
10	44.44	228	155	0.005	5	195
9	41.94	557	343	0.011	11	477
8	37.50	741	377	0.012	12	635
7	32.50	767	305	0.010	10	657
6	27.50	792	236	0.008	8	678
5	22.50	817	173	0.006	6	700
4	17.50	843	116	0.004	4	722
3	12.50	868	67	0.002	2	744
2	7.50	893	29	0.001	1	765
1	2.50	919	4	0.000	0	787
CCI TPX-070821	117.00	45	162	0.005	5	39
Raycap DC6-48-60-18-	117.00	66	236	0.008	8	56
Ericsson RRUS 32 B2	117.00	159	572	0.019	19	136
Ericsson RRUS-32 B30	117.00	231	830	0.027	27	198
Ericsson RRUS-11	117.00	165	593	0.020	19	141
Amphenol Antel BXA-1	117.00	38	138	0.005	4	33
CCI OPA-65R-LCUU-H6	117.00	219	787	0.026	26	188
Flat T-Arm	117.00	750	2,696	0.089	88	643
Amphenol Antel BXA-1	109.00	38	122	0.004	4	33
CCI OPA-65R-LCUU-H6	109.00	219	697	0.023	23	188
Ericsson KRY 112 144	97.00	29	76	0.002	2	25
Ericsson Radio 4449	97.00	222	578	0.019	19	190
Ericsson RRUS 01 B2	97.00	132	344	0.011	11	113
Side Arms	97.00	560	1,459	0.048	47	480
RFS APXVAARR24_43-U-	97.00	384	999	0.033	32	329
Ericsson AIR32 B66Aa	87.00	397	857	0.028	28	340
Side Arms	87.00	560	1,210	0.040	39	480
Alcatel-Lucent 9442	77.00	147	257	0.008	8	126
Alcatel-Lucent 9442	77.00	152	266	0.009	9	130
Amphenol Antel BXA-1	77.00	77	134	0.004	4	66
Flat Side Arm	77.00	450	788	0.026	26	386
Amphenol Antel BXA-7	77.00	102	179	0.006	6	87
		21,519	30,337	1.000	985	18,435

Load Case (1.2 + 0.2Sds) * DL + E ELFM Seismic Equivalent Lateral Forces Method

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-25.61	-0.99	0.00	-89.15	0.00	89.15	2,813.31	1,406.66	4,820.79	2,413.98	0.00	0.00	0.046
5.00	-24.50	-0.99	0.00	-84.22	0.00	84.22	2,747.79	1,373.90	4,537.84	2,272.29	0.01	-0.01	0.046
10.00	-23.42	-1.00	0.00	-79.25	0.00	79.25	2,679.61	1,339.80	4,258.79	2,132.56	0.03	-0.03	0.046
15.00	-22.37	-1.00	0.00	-74.28	0.00	74.28	2,608.76	1,304.38	3,984.14	1,995.03	0.07	-0.04	0.046
20.00	-21.36	-1.00	0.00	-69.29	0.00	69.29	2,535.24	1,267.62	3,714.39	1,859.96	0.12	-0.06	0.046
25.00	-20.37	-0.99	0.00	-64.31	0.00	64.31	2,459.06	1,229.53	3,450.04	1,727.58	0.19	-0.08	0.046
30.00	-19.42	-0.99	0.00	-59.34	0.00	59.34	2,380.22	1,190.11	3,191.57	1,598.16	0.28	-0.09	0.045
35.00	-18.50	-0.98	0.00	-54.39	0.00	54.39	2,298.17	1,149.08	2,938.80	1,471.58	0.39	-0.11	0.045
40.00	-17.80	-0.97	0.00	-49.48	0.00	49.48	2,187.63	1,093.82	2,661.58	1,332.77	0.51	-0.13	0.045
43.88	-17.52	-0.97	0.00	-45.71	0.00	45.71	2,101.97	1,050.99	2,456.17	1,229.91	0.63	-0.15	0.046
45.00	-16.69	-0.96	0.00	-44.62	0.00	44.62	2,077.10	1,038.55	2,398.08	1,200.82	0.66	-0.15	0.027
48.33	-16.15	-0.94	0.00	-41.43	0.00	41.43	2,003.41	1,001.71	2,230.05	1,116.68	0.77	-0.16	0.026
50.00	-15.34	-0.93	0.00	-39.86	0.00	39.86	1,966.57	983.28	2,148.32	1,075.76	0.83	-0.16	0.026
52.50	-14.82	-0.91	0.00	-37.55	0.00	37.55	1,292.92	646.46	1,405.62	703.85	0.92	-0.17	0.031
55.00	-13.79	-0.88	0.00	-35.27	0.00	35.27	1,267.71	633.85	1,338.84	670.42	1.01	-0.18	0.030
60.00	-13.38	-0.87	0.00	-30.85	0.00	30.85	1,215.29	607.65	1,208.00	604.90	1.20	-0.19	0.029
62.00	-12.78	-0.85	0.00	-29.11	0.00	29.11	1,193.58	596.79	1,156.76	579.24	1.28	-0.20	0.028
62.00	-12.78	-0.85	0.00	-29.11	0.00	29.11	1,193.58	596.79	1,156.76	579.24	1.28	-0.20	0.028
65.00	-11.79	-0.81	0.00	-26.55	0.00	26.55	1,160.21	580.11	1,081.18	541.39	1.41	-0.21	0.026
70.00	-10.83	-0.77	0.00	-22.48	0.00	22.48	1,094.51	547.25	951.97	476.69	1.64	-0.22	0.024
75.00	-10.45	-0.76	0.00	-18.60	0.00	18.60	1,017.13	508.57	821.49	411.36	1.88	-0.24	0.022
77.00	-8.77	-0.67	0.00	-17.09	0.00	17.09	986.19	493.09	772.00	386.57	1.98	-0.24	0.021
80.00	-8.42	-0.66	0.00	-15.07	0.00	15.07	939.76	469.88	700.63	350.84	2.14	-0.25	0.020
82.00	-7.93	-0.63	0.00	-13.75	0.00	13.75	908.81	454.41	654.98	327.98	2.24	-0.26	0.019
82.00	-7.93	-0.63	0.00	-13.75	0.00	13.75	780.36	390.18	564.40	282.62	2.24	-0.26	0.000
85.00	-7.61	-0.61	0.00	-11.87	0.00	11.87	740.57	370.29	508.03	254.39	2.41	-0.27	0.019
87.00	-5.97	-0.51	0.00	-10.64	0.00	10.64	714.04	357.02	472.09	236.39	2.52	-0.27	0.017
90.00	-5.96	-0.51	0.00	-9.11	0.00	9.11	674.25	337.13	420.65	210.64	2.70	-0.28	0.016
90.13	-5.62	-0.49	0.00	-9.05	0.00	9.05	672.59	336.30	418.57	209.60	2.70	-0.28	0.016
90.13	-5.62	-0.49	0.00	-9.05	0.00	9.05	672.59	336.30	418.57	209.60	2.70	-0.28	0.052
95.00	-5.49	-0.48	0.00	-6.67	0.00	6.67	607.93	303.97	341.52	171.01	3.00	-0.29	0.048
97.00	-3.72	-0.35	0.00	-5.70	0.00	5.70	581.40	290.70	312.17	156.32	3.12	-0.31	0.043
99.00	-3.65	-0.35	0.00	-5.00	0.00	5.00	554.88	277.44	284.14	142.28	3.26	-0.33	0.042
99.00	-3.65	-0.35	0.00	-5.00	0.00	5.00	725.83	362.92	362.74	181.64	3.26	-0.33	0.033
100.00	-3.31	-0.32	0.00	-4.65	0.00	4.65	725.83	362.92	362.74	181.64	3.33	-0.34	0.030
105.00	-3.03	-0.30	0.00	-3.05	0.00	3.05	725.83	362.92	362.74	181.64	3.70	-0.37	0.021
109.00	-2.64	-0.26	0.00	-1.86	0.00	1.86	725.83	362.92	362.74	181.64	4.01	-0.38	0.014
110.00	-2.30	-0.23	0.00	-1.59	0.00	1.59	725.83	362.92	362.74	181.64	4.10	-0.39	0.012
115.00	-2.16	-0.22	0.00	-0.44	0.00	0.44	725.83	362.92	362.74	181.64	4.50	-0.39	0.005
117.00	0.00	0.00	0.00	0.00	0.00	0.00	725.83	362.92	362.74	181.64	4.67	-0.39	0.000
119.00	0.00	0.00	0.00	0.00	0.00	0.00	725.83	362.92	362.74	181.64	4.83	-0.39	0.000

Load Case (0.9 - 0.2Sds) * DL + E ELFM Seismic (Reduced DL) Equivalent Lateral Forces Method

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-17.65	-0.99	0.00	-88.01	0.00	88.01	2,813.31	1,406.66	4,820.79	2,413.98	0.00	0.00	0.043
5.00	-16.88	-0.99	0.00	-83.08	0.00	83.08	2,747.79	1,373.90	4,537.84	2,272.29	0.01	-0.01	0.043
10.00	-16.14	-0.99	0.00	-78.13	0.00	78.13	2,679.61	1,339.80	4,258.79	2,132.56	0.03	-0.03	0.043
15.00	-15.42	-0.99	0.00	-73.18	0.00	73.18	2,608.76	1,304.38	3,984.14	1,995.03	0.07	-0.04	0.043
20.00	-14.72	-0.99	0.00	-68.22	0.00	68.22	2,535.24	1,267.62	3,714.39	1,859.96	0.12	-0.06	0.042
25.00	-14.04	-0.98	0.00	-63.28	0.00	63.28	2,459.06	1,229.53	3,450.04	1,727.58	0.19	-0.07	0.042
30.00	-13.38	-0.98	0.00	-58.36	0.00	58.36	2,380.22	1,190.11	3,191.57	1,598.16	0.27	-0.09	0.042
35.00	-12.74	-0.97	0.00	-53.47	0.00	53.47	2,298.17	1,149.08	2,938.80	1,471.58	0.38	-0.11	0.042
40.00	-12.27	-0.96	0.00	-48.62	0.00	48.62	2,187.63	1,093.82	2,661.58	1,332.77	0.51	-0.13	0.042
43.88	-12.07	-0.96	0.00	-44.90	0.00	44.90	2,101.97	1,050.99	2,456.17	1,229.91	0.62	-0.14	0.042
45.00	-11.50	-0.94	0.00	-43.83	0.00	43.83	2,077.10	1,038.55	2,398.08	1,200.82	0.65	-0.15	0.025
48.33	-11.13	-0.93	0.00	-40.69	0.00	40.69	2,003.41	1,001.71	2,230.05	1,116.68	0.76	-0.16	0.024
50.00	-10.57	-0.91	0.00	-39.14	0.00	39.14	1,966.57	983.28	2,148.32	1,075.76	0.82	-0.16	0.024
52.50	-10.21	-0.90	0.00	-36.87	0.00	36.87	1,292.92	646.46	1,405.62	703.85	0.90	-0.17	0.029
55.00	-9.50	-0.87	0.00	-34.62	0.00	34.62	1,267.71	633.85	1,338.84	670.42	0.99	-0.18	0.028
60.00	-9.22	-0.86	0.00	-30.28	0.00	30.28	1,215.29	607.65	1,208.00	604.90	1.18	-0.19	0.027
62.00	-8.80	-0.84	0.00	-28.56	0.00	28.56	1,193.58	596.79	1,156.76	579.24	1.26	-0.20	0.026
62.00	-8.80	-0.84	0.00	-28.56	0.00	28.56	1,193.58	596.79	1,156.76	579.24	1.26	-0.20	0.026
65.00	-8.12	-0.80	0.00	-26.05	0.00	26.05	1,160.21	580.11	1,081.18	541.39	1.39	-0.20	0.024
70.00	-7.46	-0.76	0.00	-22.05	0.00	22.05	1,094.51	547.25	951.97	476.69	1.61	-0.22	0.022
75.00	-7.20	-0.74	0.00	-18.25	0.00	18.25	1,017.13	508.57	821.49	411.36	1.85	-0.23	0.021
77.00	-6.04	-0.66	0.00	-16.76	0.00	16.76	986.19	493.09	772.00	386.57	1.95	-0.24	0.020
80.00	-5.80	-0.64	0.00	-14.77	0.00	14.77	939.76	469.88	700.63	350.84	2.10	-0.25	0.018
82.00	-5.46	-0.62	0.00	-13.48	0.00	13.48	908.81	454.41	654.98	327.98	2.21	-0.25	0.018
82.00	-5.46	-0.62	0.00	-13.48	0.00	13.48	780.36	390.18	564.40	282.62	2.21	-0.25	0.000
85.00	-5.24	-0.60	0.00	-11.63	0.00	11.63	740.57	370.29	508.03	254.39	2.37	-0.26	0.017
87.00	-4.12	-0.50	0.00	-10.43	0.00	10.43	714.04	357.02	472.09	236.39	2.48	-0.27	0.016
90.00	-4.10	-0.50	0.00	-8.93	0.00	8.93	674.25	337.13	420.65	210.64	2.65	-0.28	0.015
90.13	-3.87	-0.48	0.00	-8.86	0.00	8.86	672.59	336.30	418.57	209.60	2.66	-0.28	0.014
90.13	-3.87	-0.48	0.00	-8.86	0.00	8.86	672.59	336.30	418.57	209.60	2.66	-0.28	0.048
95.00	-3.78	-0.47	0.00	-6.53	0.00	6.53	607.93	303.97	341.52	171.01	2.95	-0.29	0.044
97.00	-2.56	-0.35	0.00	-5.59	0.00	5.59	581.40	290.70	312.17	156.32	3.07	-0.31	0.040
99.00	-2.52	-0.34	0.00	-4.89	0.00	4.89	554.88	277.44	284.14	142.28	3.21	-0.32	0.039
99.00	-2.52	-0.34	0.00	-4.89	0.00	4.89	725.83	362.92	362.74	181.64	3.21	-0.32	0.030
100.00	-2.28	-0.31	0.00	-4.55	0.00	4.55	725.83	362.92	362.74	181.64	3.27	-0.33	0.028
105.00	-2.09	-0.29	0.00	-2.98	0.00	2.98	725.83	362.92	362.74	181.64	3.64	-0.36	0.019
109.00	-1.82	-0.26	0.00	-1.82	0.00	1.82	725.83	362.92	362.74	181.64	3.95	-0.38	0.013
110.00	-1.58	-0.23	0.00	-1.56	0.00	1.56	725.83	362.92	362.74	181.64	4.03	-0.38	0.011
115.00	-1.49	-0.21	0.00	-0.43	0.00	0.43	725.83	362.92	362.74	181.64	4.43	-0.39	0.004
117.00	0.00	0.00	0.00	0.00	0.00	0.00	725.83	362.92	362.74	181.64	4.59	-0.39	0.000
119.00	0.00	0.00	0.00	0.00	0.00	0.00	725.83	362.92	362.74	181.64	4.75	-0.39	0.000

Equivalent Modal Forces Analysis

(Based on ASCE7-10 Chapters 11, 12 & 15 and ANSI/TIA-G, section 2.7)

Spectral Response Acceleration for Short Period (S_s):	0.20
Spectral Response Acceleration at 1.0 Second Period (S_1):	0.06
Importance Factor (I_E):	1.00
Site Coefficient F_a:	1.60
Site Coefficient F_v	2.40
Response Modification Coefficient (R):	1.50
Design Spectral Response Acceleration at Short Period (S_{ds}):	0.22
Desing Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.10
Period Based on Rayleigh Method (sec):	1.94
Redundancy Factor (p):	1.30

Load Case (1.2 + 0.2Sds) * DL + E EMAM Seismic Equivalent Modal Analysis Method

Segment	Height Above Base (ft)	Weight (lb)	a	b	c	Saz	Horizontal Force (lb)	Vertical Force (lb)
36	118.00	66	1.858	1.817	1.081	0.391	23	83
35	116.00	111	1.796	1.520	0.970	0.347	33	138
34	112.50	277	1.689	1.082	0.798	0.276	66	344
33	109.50	55	1.600	0.779	0.670	0.222	11	69
32	107.00	222	1.528	0.573	0.577	0.180	35	275
31	102.50	277	1.402	0.288	0.434	0.115	27	344
30	99.50	55	1.321	0.151	0.355	0.077	4	69
29	98.00	96	1.282	0.096	0.320	0.061	5	120
28	96.00	106	1.230	0.035	0.278	0.040	4	132
27	92.56	269	1.144	-0.042	0.215	0.011	3	334
26	90.06	15	1.083	-0.079	0.176	-0.007	0	18
25	88.50	357	1.045	-0.096	0.155	-0.016	-5	444
24	86.00	261	0.987	-0.113	0.125	-0.027	-6	324
23	83.50	395	0.931	-0.121	0.100	-0.035	-12	492
22	81.00	279	0.876	-0.121	0.078	-0.040	-10	346
21	78.50	423	0.822	-0.116	0.060	-0.042	-15	526
20	76.00	305	0.771	-0.106	0.046	-0.040	-11	380
19	72.50	776	0.702	-0.087	0.030	-0.033	-22	964
18	67.50	793	0.608	-0.056	0.015	-0.016	-11	987
17	63.50	485	0.538	-0.030	0.009	0.002	1	602
16	61.00	327	0.497	-0.015	0.007	0.012	3	406
15	57.50	829	0.441	0.005	0.006	0.026	19	1,031
14	53.75	421	0.386	0.023	0.007	0.038	14	524
13	51.25	648	0.351	0.033	0.009	0.044	25	805
12	49.17	438	0.323	0.040	0.010	0.048	18	544
11	46.67	667	0.291	0.047	0.013	0.052	30	830
10	44.44	228	0.264	0.053	0.016	0.054	11	283
9	41.94	557	0.235	0.058	0.019	0.056	27	693
8	37.50	741	0.188	0.064	0.025	0.056	36	922
7	32.50	767	0.141	0.069	0.031	0.055	37	953
6	27.50	792	0.101	0.071	0.037	0.054	37	985
5	22.50	817	0.068	0.072	0.041	0.052	37	1,016
4	17.50	843	0.041	0.070	0.042	0.049	36	1,048
3	12.50	868	0.021	0.065	0.038	0.046	34	1,079

2	7.50	893	0.008	0.051	0.029	0.037	29	1,111
1	2.50	919	0.001	0.022	0.012	0.018	14	1,142
CCI TPX-070821	117.00	45	1.827	1.664	1.024	0.369	14	56
Raycap DC6-48-60-18-	117.00	66	1.827	1.664	1.024	0.369	21	82
Ericsson RRUS 32 B2	117.00	159	1.827	1.664	1.024	0.369	51	198
Ericsson RRUS-32 B30	117.00	231	1.827	1.664	1.024	0.369	74	287
Ericsson RRUS-11	117.00	165	1.827	1.664	1.024	0.369	53	205
Amphenol Antel BXA-1	117.00	38	1.827	1.664	1.024	0.369	12	48
CCI OPA-65R-LCUU-H6	117.00	219	1.827	1.664	1.024	0.369	70	272
Flat T-Arm	117.00	750	1.827	1.664	1.024	0.369	240	932
Amphenol Antel BXA-1	109.00	38	1.586	0.735	0.651	0.213	7	48
CCI OPA-65R-LCUU-H6	109.00	219	1.586	0.735	0.651	0.213	40	272
Ericsson KRY 112 144	97.00	29	1.256	0.064	0.298	0.050	1	36
Ericsson Radio 4449	97.00	222	1.256	0.064	0.298	0.050	10	276
Ericsson RRUS 01 B2	97.00	132	1.256	0.064	0.298	0.050	6	164
Side Arms	97.00	560	1.256	0.064	0.298	0.050	24	696
RFS APXVAARR24_43-U-	97.00	384	1.256	0.064	0.298	0.050	17	477
Ericsson AIR32 B66Aa	87.00	397	1.010	-0.107	0.136	-0.023	-8	493
Side Arms	87.00	560	1.010	-0.107	0.136	-0.023	-11	696
Alcatel-Lucent 9442	77.00	147	0.791	-0.110	0.051	-0.041	-5	183
Alcatel-Lucent 9442	77.00	152	0.791	-0.110	0.051	-0.041	-5	189
Amphenol Antel BXA-1	77.00	77	0.791	-0.110	0.051	-0.041	-3	95
Flat Side Arm	77.00	450	0.791	-0.110	0.051	-0.041	-16	559
Amphenol Antel BXA-7	77.00	102	0.791	-0.110	0.051	-0.041	-4	127
		21,519	56.609	20.436	18.354	5.539	1,113	26,754

Load Case (0.9 - 0.2Sds) * DL + E EMAM Seismic (Reduced DL) Equivalent Modal Analysis Method

Segment	Height Above Base (ft)	Weight (lb)	a	b	c	Saz	Horizontal Force (lb)	Vertical Force (lb)
36	118.00	66	1.858	1.817	1.081	0.391	23	57
35	116.00	111	1.796	1.520	0.970	0.347	33	95
34	112.50	277	1.689	1.082	0.798	0.276	66	237
33	109.50	55	1.600	0.779	0.670	0.222	11	47
32	107.00	222	1.528	0.573	0.577	0.180	35	190
31	102.50	277	1.402	0.288	0.434	0.115	27	237
30	99.50	55	1.321	0.151	0.355	0.077	4	47
29	98.00	96	1.282	0.096	0.320	0.061	5	83
28	96.00	106	1.230	0.035	0.278	0.040	4	91
27	92.56	269	1.144	-0.042	0.215	0.011	3	230
26	90.06	15	1.083	-0.079	0.176	-0.007	0	13
25	88.50	357	1.045	-0.096	0.155	-0.016	-5	306
24	86.00	261	0.987	-0.113	0.125	-0.027	-6	223
23	83.50	395	0.931	-0.121	0.100	-0.035	-12	339
22	81.00	279	0.876	-0.121	0.078	-0.040	-10	239
21	78.50	423	0.822	-0.116	0.060	-0.042	-15	363
20	76.00	305	0.771	-0.106	0.046	-0.040	-11	262
19	72.50	776	0.702	-0.087	0.030	-0.033	-22	665
18	67.50	793	0.608	-0.056	0.015	-0.016	-11	680
17	63.50	485	0.538	-0.030	0.009	0.002	1	415
16	61.00	327	0.497	-0.015	0.007	0.012	3	280
15	57.50	829	0.441	0.005	0.006	0.026	19	710
14	53.75	421	0.386	0.023	0.007	0.038	14	361
13	51.25	648	0.351	0.033	0.009	0.044	25	555
12	49.17	438	0.323	0.040	0.010	0.048	18	375
11	46.67	667	0.291	0.047	0.013	0.052	30	572
10	44.44	228	0.264	0.053	0.016	0.054	11	195
9	41.94	557	0.235	0.058	0.019	0.056	27	477
8	37.50	741	0.188	0.064	0.025	0.056	36	635

7	32.50	767	0.141	0.069	0.031	0.055	37	657
6	27.50	792	0.101	0.071	0.037	0.054	37	678
5	22.50	817	0.068	0.072	0.041	0.052	37	700
4	17.50	843	0.041	0.070	0.042	0.049	36	722
3	12.50	868	0.021	0.065	0.038	0.046	34	744
2	7.50	893	0.008	0.051	0.029	0.037	29	765
1	2.50	919	0.001	0.022	0.012	0.018	14	787
CCI TPX-070821	117.00	45	1.827	1.664	1.024	0.369	14	39
Raycap DC6-48-60-18-	117.00	66	1.827	1.664	1.024	0.369	21	56
Ericsson RRUS 32 B2	117.00	159	1.827	1.664	1.024	0.369	51	136
Ericsson RRUS-32 B30	117.00	231	1.827	1.664	1.024	0.369	74	198
Ericsson RRUS-11	117.00	165	1.827	1.664	1.024	0.369	53	141
Amphenol Antel BXA-1	117.00	38	1.827	1.664	1.024	0.369	12	33
CCI OPA-65R-LCUU-H6	117.00	219	1.827	1.664	1.024	0.369	70	188
Flat T-Arm	117.00	750	1.827	1.664	1.024	0.369	240	643
Amphenol Antel BXA-1	109.00	38	1.586	0.735	0.651	0.213	7	33
CCI OPA-65R-LCUU-H6	109.00	219	1.586	0.735	0.651	0.213	40	188
Ericsson KRY 112 144	97.00	29	1.256	0.064	0.298	0.050	1	25
Ericsson Radio 4449	97.00	222	1.256	0.064	0.298	0.050	10	190
Ericsson RRUS 01 B2	97.00	132	1.256	0.064	0.298	0.050	6	113
Side Arms	97.00	560	1.256	0.064	0.298	0.050	24	480
RFS APXVAARR24_43-U-	97.00	384	1.256	0.064	0.298	0.050	17	329
Ericsson AIR32 B66Aa	87.00	397	1.010	-0.107	0.136	-0.023	-8	340
Side Arms	87.00	560	1.010	-0.107	0.136	-0.023	-11	480
Alcatel-Lucent 9442	77.00	147	0.791	-0.110	0.051	-0.041	-5	126
Alcatel-Lucent 9442	77.00	152	0.791	-0.110	0.051	-0.041	-5	130
Amphenol Antel BXA-1	77.00	77	0.791	-0.110	0.051	-0.041	-3	66
Flat Side Arm	77.00	450	0.791	-0.110	0.051	-0.041	-16	386
Amphenol Antel BXA-7	77.00	102	0.791	-0.110	0.051	-0.041	-4	87
		21,519	56.609	20.436	18.354	5.539	1,113	18,435

Load Case (1.2 + 0.2Sds) * DL + E EMAM Seismic Equivalent Modal Analysis Method

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-25.61	-1.10	0.00	-101.45	0.00	101.45	2,813.31	1,406.66	4,820.79	2,413.98	0.00	0.00	0.051
5.00	-24.50	-1.08	0.00	-95.95	0.00	95.95	2,747.79	1,373.90	4,537.84	2,272.29	0.01	-0.02	0.051
10.00	-23.42	-1.05	0.00	-90.55	0.00	90.55	2,679.61	1,339.80	4,258.79	2,132.56	0.03	-0.03	0.051
15.00	-22.37	-1.02	0.00	-85.29	0.00	85.29	2,608.76	1,304.38	3,984.14	1,995.03	0.08	-0.05	0.051
20.00	-21.36	-0.99	0.00	-80.18	0.00	80.18	2,535.24	1,267.62	3,714.39	1,859.96	0.14	-0.07	0.052
25.00	-20.37	-0.96	0.00	-75.23	0.00	75.23	2,459.06	1,229.53	3,450.04	1,727.58	0.22	-0.09	0.052
30.00	-19.42	-0.93	0.00	-70.43	0.00	70.43	2,380.22	1,190.11	3,191.57	1,598.16	0.32	-0.11	0.052
35.00	-18.50	-0.90	0.00	-65.79	0.00	65.79	2,298.17	1,149.08	2,938.80	1,471.58	0.44	-0.13	0.053
40.00	-17.80	-0.88	0.00	-61.30	0.00	61.30	2,187.63	1,093.82	2,661.58	1,332.77	0.59	-0.15	0.054
43.88	-17.52	-0.87	0.00	-57.90	0.00	57.90	2,101.97	1,050.99	2,456.17	1,229.91	0.72	-0.17	0.055
45.00	-16.69	-0.84	0.00	-56.92	0.00	56.92	2,077.10	1,038.55	2,398.08	1,200.82	0.77	-0.18	0.033
48.33	-16.15	-0.82	0.00	-54.13	0.00	54.13	2,003.41	1,001.71	2,230.05	1,116.68	0.90	-0.19	0.033
50.00	-15.34	-0.80	0.00	-52.76	0.00	52.76	1,966.57	983.28	2,148.32	1,075.76	0.96	-0.20	0.032
52.50	-14.82	-0.78	0.00	-50.77	0.00	50.77	1,292.92	646.46	1,405.62	703.85	1.07	-0.21	0.041
55.00	-13.79	-0.76	0.00	-48.81	0.00	48.81	1,267.71	633.85	1,338.84	670.42	1.18	-0.21	0.040
60.00	-13.38	-0.76	0.00	-45.00	0.00	45.00	1,215.29	607.65	1,208.00	604.90	1.41	-0.24	0.039
62.00	-12.78	-0.76	0.00	-43.47	0.00	43.47	1,193.58	596.79	1,156.76	579.24	1.51	-0.24	0.039
62.00	-12.78	-0.76	0.00	-43.47	0.00	43.47	1,193.58	596.79	1,156.76	579.24	1.51	-0.24	0.039
65.00	-11.79	-0.77	0.00	-41.19	0.00	41.19	1,160.21	580.11	1,081.18	541.39	1.67	-0.26	0.038
70.00	-10.83	-0.79	0.00	-37.33	0.00	37.33	1,094.51	547.25	951.97	476.69	1.96	-0.28	0.037
75.00	-10.45	-0.81	0.00	-33.37	0.00	33.37	1,017.13	508.57	821.49	411.36	2.27	-0.31	0.037
77.00	-8.77	-0.85	0.00	-31.75	0.00	31.75	986.19	493.09	772.00	386.57	2.40	-0.32	0.036
80.00	-8.42	-0.86	0.00	-29.21	0.00	29.21	939.76	469.88	700.63	350.84	2.60	-0.34	0.035
82.00	-7.93	-0.87	0.00	-27.50	0.00	27.50	908.81	454.41	654.98	327.98	2.75	-0.35	0.034
82.00	-7.93	-0.87	0.00	-27.50	0.00	27.50	780.36	390.18	564.40	282.62	2.75	-0.35	0.000
85.00	-7.60	-0.87	0.00	-24.90	0.00	24.90	740.57	370.29	508.03	254.39	2.97	-0.36	0.035
87.00	-5.97	-0.89	0.00	-23.15	0.00	23.15	714.04	357.02	472.09	236.39	3.12	-0.38	0.033
90.00	-5.95	-0.89	0.00	-20.48	0.00	20.48	674.25	337.13	420.65	210.64	3.37	-0.39	0.032
90.13	-5.62	-0.89	0.00	-20.37	0.00	20.37	672.59	336.30	418.57	209.60	3.38	-0.40	0.031
90.13	-5.62	-0.89	0.00	-20.37	0.00	20.37	672.59	336.30	418.57	209.60	3.38	-0.40	0.106
95.00	-5.49	-0.89	0.00	-16.05	0.00	16.05	607.93	303.97	341.52	171.01	3.80	-0.42	0.103
97.00	-3.72	-0.81	0.00	-14.28	0.00	14.28	581.40	290.70	312.17	156.32	3.98	-0.47	0.098
99.00	-3.65	-0.81	0.00	-12.65	0.00	12.65	554.88	277.44	284.14	142.28	4.19	-0.51	0.095
99.00	-3.65	-0.81	0.00	-12.65	0.00	12.65	725.83	362.92	362.74	181.64	4.19	-0.51	0.075
100.00	-3.30	-0.78	0.00	-11.84	0.00	11.84	725.83	362.92	362.74	181.64	4.30	-0.54	0.070
105.00	-3.03	-0.75	0.00	-7.93	0.00	7.93	725.83	362.92	362.74	181.64	4.90	-0.61	0.048
109.00	-2.64	-0.69	0.00	-4.94	0.00	4.94	725.83	362.92	362.74	181.64	5.43	-0.65	0.031
110.00	-2.29	-0.62	0.00	-4.25	0.00	4.25	725.83	362.92	362.74	181.64	5.57	-0.66	0.027
115.00	-2.16	-0.58	0.00	-1.16	0.00	1.16	725.83	362.92	362.74	181.64	6.27	-0.68	0.009
117.00	0.00	0.00	0.00	0.00	0.00	0.00	725.83	362.92	362.74	181.64	6.55	-0.68	0.000
119.00	0.00	0.00	0.00	0.00	0.00	0.00	725.83	362.92	362.74	181.64	6.84	-0.68	0.000

Load Case (0.9 - 0.2Sds) * DL + E EMAM Seismic (Reduced DL) Equivalent Modal Analysis Method

Calculated Forces

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-17.65	-1.10	0.00	-99.99	0.00	99.99	2,813.31	1,406.66	4,820.79	2,413.98	0.00	0.00	0.048
5.00	-16.88	-1.08	0.00	-94.49	0.00	94.49	2,747.79	1,373.90	4,537.84	2,272.29	0.01	-0.02	0.048
10.00	-16.14	-1.05	0.00	-89.11	0.00	89.11	2,679.61	1,339.80	4,258.79	2,132.56	0.03	-0.03	0.048
15.00	-15.42	-1.01	0.00	-83.88	0.00	83.88	2,608.76	1,304.38	3,984.14	1,995.03	0.07	-0.05	0.048
20.00	-14.72	-0.98	0.00	-78.81	0.00	78.81	2,535.24	1,267.62	3,714.39	1,859.96	0.13	-0.07	0.048
25.00	-14.04	-0.95	0.00	-73.90	0.00	73.90	2,459.06	1,229.53	3,450.04	1,727.58	0.21	-0.09	0.048
30.00	-13.38	-0.92	0.00	-69.16	0.00	69.16	2,380.22	1,190.11	3,191.57	1,598.16	0.31	-0.11	0.049
35.00	-12.74	-0.88	0.00	-64.58	0.00	64.58	2,298.17	1,149.08	2,938.80	1,471.58	0.44	-0.13	0.049
40.00	-12.27	-0.86	0.00	-60.16	0.00	60.16	2,187.63	1,093.82	2,661.58	1,332.77	0.58	-0.15	0.051
43.88	-12.07	-0.85	0.00	-56.83	0.00	56.83	2,101.97	1,050.99	2,456.17	1,229.91	0.71	-0.17	0.052
45.00	-11.50	-0.82	0.00	-55.87	0.00	55.87	2,077.10	1,038.55	2,398.08	1,200.82	0.75	-0.18	0.031
48.33	-11.13	-0.80	0.00	-53.13	0.00	53.13	2,003.41	1,001.71	2,230.05	1,116.68	0.88	-0.19	0.031
50.00	-10.57	-0.78	0.00	-51.79	0.00	51.79	1,966.57	983.28	2,148.32	1,075.76	0.95	-0.19	0.030
52.50	-10.21	-0.76	0.00	-49.84	0.00	49.84	1,292.92	646.46	1,405.62	703.85	1.05	-0.20	0.038
55.00	-9.50	-0.75	0.00	-47.93	0.00	47.93	1,267.71	633.85	1,338.84	670.42	1.16	-0.21	0.038
60.00	-9.22	-0.74	0.00	-44.20	0.00	44.20	1,215.29	607.65	1,208.00	604.90	1.39	-0.23	0.037
62.00	-8.80	-0.74	0.00	-42.72	0.00	42.72	1,193.58	596.79	1,156.76	579.24	1.49	-0.24	0.037
62.00	-8.80	-0.74	0.00	-42.72	0.00	42.72	1,193.58	596.79	1,156.76	579.24	1.49	-0.24	0.037
65.00	-8.12	-0.75	0.00	-40.49	0.00	40.49	1,160.21	580.11	1,081.18	541.39	1.64	-0.25	0.036
70.00	-7.46	-0.78	0.00	-36.72	0.00	36.72	1,094.51	547.25	951.97	476.69	1.92	-0.28	0.035
75.00	-7.20	-0.79	0.00	-32.84	0.00	32.84	1,017.13	508.57	821.49	411.36	2.23	-0.30	0.035
77.00	-6.04	-0.83	0.00	-31.27	0.00	31.27	986.19	493.09	772.00	386.57	2.36	-0.31	0.034
80.00	-5.80	-0.84	0.00	-28.78	0.00	28.78	939.76	469.88	700.63	350.84	2.56	-0.33	0.033
82.00	-5.46	-0.85	0.00	-27.09	0.00	27.09	908.81	454.41	654.98	327.98	2.70	-0.34	0.033
82.00	-5.46	-0.85	0.00	-27.09	0.00	27.09	780.36	390.18	564.40	282.62	2.70	-0.34	0.000
85.00	-5.24	-0.86	0.00	-24.54	0.00	24.54	740.57	370.29	508.03	254.39	2.92	-0.36	0.033
87.00	-4.11	-0.88	0.00	-22.82	0.00	22.82	714.04	357.02	472.09	236.39	3.07	-0.37	0.032
90.00	-4.10	-0.88	0.00	-20.19	0.00	20.19	674.25	337.13	420.65	210.64	3.31	-0.39	0.030
90.13	-3.87	-0.87	0.00	-20.08	0.00	20.08	672.59	336.30	418.57	209.60	3.32	-0.39	0.030
90.13	-3.87	-0.87	0.00	-20.08	0.00	20.08	672.59	336.30	418.57	209.60	3.32	-0.39	0.102
95.00	-3.78	-0.87	0.00	-15.82	0.00	15.82	607.93	303.97	341.52	171.01	3.73	-0.42	0.099
97.00	-2.56	-0.80	0.00	-14.08	0.00	14.08	581.40	290.70	312.17	156.32	3.91	-0.46	0.094
99.00	-2.51	-0.80	0.00	-12.47	0.00	12.47	554.88	277.44	284.14	142.28	4.12	-0.50	0.092
99.00	-2.51	-0.80	0.00	-12.47	0.00	12.47	725.83	362.92	362.74	181.64	4.12	-0.50	0.072
100.00	-2.27	-0.77	0.00	-11.68	0.00	11.68	725.83	362.92	362.74	181.64	4.22	-0.53	0.067
105.00	-2.08	-0.74	0.00	-7.82	0.00	7.82	725.83	362.92	362.74	181.64	4.82	-0.60	0.046
109.00	-1.81	-0.68	0.00	-4.87	0.00	4.87	725.83	362.92	362.74	181.64	5.34	-0.64	0.029
110.00	-1.58	-0.61	0.00	-4.19	0.00	4.19	725.83	362.92	362.74	181.64	5.47	-0.65	0.025
115.00	-1.48	-0.57	0.00	-1.15	0.00	1.15	725.83	362.92	362.74	181.64	6.16	-0.67	0.008
117.00	0.00	0.00	0.00	0.00	0.00	0.00	725.83	362.92	362.74	181.64	6.44	-0.67	0.000
119.00	0.00	0.00	0.00	0.00	0.00	0.00	725.83	362.92	362.74	181.64	6.72	-0.67	0.000

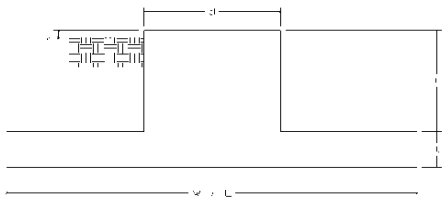
Analysis Summary

Load Case	Reactions Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)	Max Usage Elev (ft)	Interaction Ratio
1.2D + 1.6W	13.84	0.00	25.80	0.00	0.00	1173.76	90.13	0.60
0.9D + 1.6W	13.81	0.00	19.34	0.00	0.00	1159.66	90.13	0.59
1.2D + 1.0Di + 1.0Wi	3.79	0.00	40.07	0.00	0.00	316.80	90.13	0.18
(1.2 + 0.2Sds) * DL + E ELFM	0.99	0.00	25.61	0.00	0.00	89.15	90.13	0.05
(1.2 + 0.2Sds) * DL + E EMAM	1.10	0.00	25.61	0.00	0.00	101.45	90.13	0.11
(0.9 - 0.2Sds) * DL + E ELFM	0.99	0.00	17.65	0.00	0.00	88.01	90.13	0.05
(0.9 - 0.2Sds) * DL + E EMAM	1.10	0.00	17.65	0.00	0.00	99.99	90.13	0.10
1.0D + 1.0W	3.30	0.00	21.52	0.00	0.00	278.50	90.13	0.15

Additional Steel Summary

Elev From (ft)	Elev To (ft)	Member	Intermediate Connectors VQ/I (lb/in)	Shear Applied (kips)	Shear phiVn (kips)	Upper Termination Connectors MQ/I (kips)	phiVn (kips)	Num Reqd	Num Actual	Lower Termination Connectors MQ/I (kips)	phiVn (kips)	Num Reqd	Num Actual	Max Member Pu (kip)	phiPn (kip)	Ratio
43.8	62.0	(3) PL-PL 6" x 1"	323.5	7.8	25.3	0.0	25.3	0	0	131.3	25.3	6	8	147.6	300.9	0.491
62.0	82.0	(3) PL-PL 6" x 1"	394.9	9.5	25.3	0.0	25.3	0	0	0.0	25.3	0	0	138.6	300.9	0.461
82.0	90.1	(3) PL-PL 6" x 1"	381.4	9.2	25.3	81.8	25.3	4	8	0.0	25.3	0	0	97.8	300.9	0.325

Site Name:	STONEYBROOK RD CT, CT	*Program Last Updated:*	*5/13/2014*
Site Number:	283420		
Engineering Number:	12598484		
Engineer:	Kelsey.Sargent		
Date:	08/27/18		
Tower Type:	MP		



Design Loads (Factored) - Analysis per TIA-222-G Standards

Design / Analysis / Mapping:	Analysis				
Compression/Leg:	25.8	k	Concrete Strength (f'_c):	4000	psi
Uplift/Leg:	0.0	k	Pad Tension Steel Depth:	20.00	in
Total Shear:	13.8	k	ϕ_{Shear}:	0.75	
Moment:	1173.8	k-ft	$\phi_{Flexure\ /\ Tension}$:	0.90	
Tower + Appurtenance Weight:	10.8	k	$\phi_{Compression:}$	0.65	
Depth to Base of Foundation (l + t - h):	7.00	ft	β:	0.85	
Diameter of Pier (d):	6.50	ft	Bottom Pad Rebar Size #:	7	
Height of Pier above Ground (h):	0.50		# of Bottom Pad Rebar:	16	
Width of Pad (W):	18.00	ft	Pad Bottom Steel Area:	9.60	in^2
Length of Pad (L):	18.00	ft	Pad Steel F_y:	60000	psi
Thickness of Pad (t):	2.00	ft	Top Pad Rebar Size #:	7	
Tower Leg Center to Center:	0.00	ft	# of Top Pad Rebar:	13	
Number of Tower Legs:	1.0	(1 if MP or GT)	Pad Top Steel Area:	7.80	in^2
Tower Center from Mat Center:	0.00	ft	Pier Rebar Size #:	9	
Depth Below Ground Surface to Water Table:	6.50	ft	Pier Steel Area (Single Bar):	1.00	in^2
Unit Weight of Concrete:	150.0	pcf	# of Pier Rebar:	24	
Unit Weight of Soil Above Water Table:	120.0	pcf	Pier Steel F_y:	60000	psi
Unit Weight of Water:	62.4	pcf	Pier Cage Diameter:	70.0	in
Unit Weight of Soil Below Water Table:	57.6	pcf	Rebar Strain Limit:	0.008	
Friction Angle of Uplift:	15.0	Degrees	Steel Elastic Modulus:	29000	ksi
Ultimate Coefficient of Shear Friction:	0.35		Tie Rebar Size #:	4	
Ultimate Compressive Bearing Pressure:	6000.0	psf	Tie Steel Area (Single Bar):	0.20	in^2
Ultimate Passive Pressure on Pad Face:	0.0	psf	Tie Spacing:	12	in
$\phi_{Soil\ and\ Concrete\ Weight}$:	0.9		Tie Steel F_y:	60000	psi
ϕ_{Soil}:	0.75				

Overturning Moment Usage

Design OTM:	1277.6	k-ft
OTM Resistance:	2650.3	k-ft
Design OTM / OTM Resistance:	0.48	Result: OK

Soil Bearing Pressure Usage

Net Bearing Pressure:	2053	psf
Factored Nominal Bearing Pressure:	4500	psf
Net Bearing Pressure/Factored Nominal Bearing Pressure:	0.46	Result: OK
Load Direction Controling Design Bearing Pressure:	Diagonal to Pad Edge	

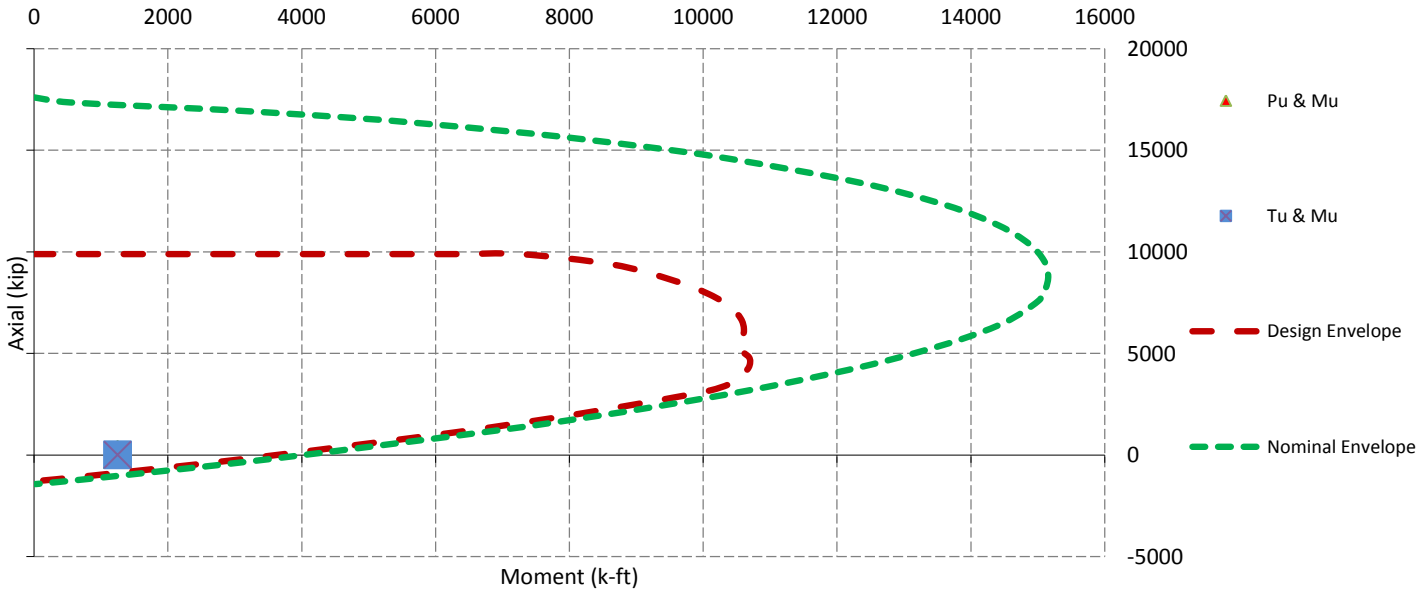
Sliding Factor of Safety

Total Factored Sliding Resistance:	78.2	k
Sliding Design / Sliding Resistance:	0.18	Result: OK

One Way Shear, Flexual Capacity, and Punching Shear

Factored One Way Shear (V_u):	78.5	k
One Way Shear Capacity (ϕV_c):	355.7	k - ACI11.3.1.1
V_u / ϕV_c:	0.22	Result: OK
Load Direction Controling Shear Capacity:	Diagonal to Pad Edge	
Lower Steel Pad Factored Moment (M_u):	384.5	k-ft
Lower Steel Pad Moment Capacity (ϕM_n):	898.3	k-ft - ACI10.3
M_u / ϕM_n:	0.43	Result: OK
Load Direction Controling Flexural Capacity:	Diagonal to Pad Edge	
Upper Steel Pad Factored Moment (M_u):	275.6	k-ft
Upper Steel Pad Moment Capacity (ϕM_n):	692.5	k-ft
M_u / ϕM_n:	0.40	Result: OK
Lower Pad Flexural Reinforcement Ratio:	0.0022	OK - Minimum Reinforcement Ratio Met - ACI10.5.1
Upper Pad Flexural Reinforcement Ratio:	0.0018	OK - Minimum Reinforcement Ratio Met - ACI10.5.1
Lower Pad Reinforcement Spacing:	14	in - Pad Reinforcing Spacing OK - ACI7.12.2.2 & 10.5.4
Upper Pad Reinforcement Spacing:	17	in - Pad Reinforcing Spacing OK - ACI7.12.2.2 & 10.5.4
Factored Punching Shear (V_u):	0.0	k
Nominal Punching Shear Capacity ($\phi_c V_n$):	1168.3	k - ACI11.12.2.1
V_u / ϕV_c:	0.00	Result: OK
Factored Moment in Pier (M_u):	1249.9	k-ft
Pier Moment Capacity (ϕM_n):	3701.8	k-ft
M_u / ϕM_n:	0.34	Result: OK
Factored Shear in Pier (V_u):	13.8	k
Pier Shear Capacity (ϕV_n):	454.5	k
V_u / ϕV_c:	0.03	Result: OK
Pier Shear Reinforcement Ratio:	0.0004	No Ties Necessary for Shear - ACI11.5.6.1
Factored Tension in Pier (T_u):	0.0	k
Pier Tension Capacity (ϕT_n):	1296.0	k
T_u / ϕT_n:	0.00	Result: OK
Factored Compression in Pier (P_u):	25.8	k
Pier Compression Capacity (ϕP_n):	8405.7	k - ACI10.3.6.2
P_u / ϕP_n:	0.00	Result: OK
Pier Compression Reinforcement Ratio:	0.005	OK - Reinforcement Ratio Met - ACI10.9.1 & 10.8.4
$M_u/\phi_B M_n + T_u/\phi_T T_n$:	0.34	Result: OK

Nominal and Design Moment Capacity and Factored Design Loads



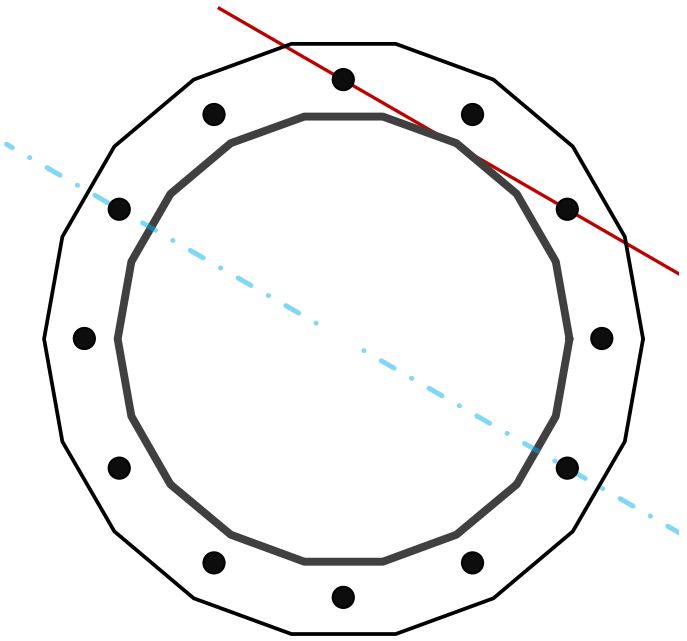
Base Plate & Anchor Rod Analysis

Pole Dimensions		
Number of Sides	18	-
Diameter	42	in
Thickness	0.3125	in
Orientation Offset		°

Base Reactions		
Moment, Mu	1173.8	k-ft
Axial, Pu	25.8	k
Shear, Vu	13.8	k
Neutral Axis	330	°

Report Capacities		
Component	Capacity	Result
Base Plate	20%	Pass
Anchor Rods	38%	Pass
Dwyidag	-	-

Base Plate		
Number of Sides	18	-
Diameter, ø	56	in
Thickness	2	in
Grade	A572-50	-
Yield Strength, Fy	50	ksi
Tensile Strength, Fu	65	ksi
Clip	N/A	in
Orientation Offset		°
Anchor Rod Detail	d	η=0.5
Clear Distance	3	in
Applied Moment, Mu	363.4	k
Bending Stress, ϕMn	1842.6	k



Original Anchor Rods		
Arrangement	Radial	-
Quantity	12	-
Diameter, ø	2 1/4	in
Bolt Circle	49.15	in
Grade	A615-75	
Yield Strength, Fy	75	ksi
Tensile Strength, Fu	100	ksi
Spacing	12.9	in
Orientation Offset	0	°
Applied Force, Pu	97.6	k
Anchor Rods, ϕPn	259.8	k

Calculations for Monopole Base Plate & Anchor Rod Analysis

Reaction Distribution

Reaction	Shear Vu	Moment Mu	Factor
-	k	k-ft	-
Base Forces	13.8	1173.8	1.00
Anchor Rod Forces	13.8	1173.8	1.00
Additional Bolt (Grp1) Forces	0.0	0.0	0.00
Additional Bolt (Grp2) Forces	0.0	0.0	0.00
Dywidag Forces	0.0	0.0	0.00
Stiffener Forces	0.0	0.0	0.00

Geometric Properties

Section	Gross Area	Net Area	Individual Inertia	Threads per Inch	Moment of Inertia
-	in^2	in^2	in^4	#	in^4
Pole	40.7191	2.2622	0.0739		8846.79
Bolt	3.9761	3.2477	0.8393	4.5	11778.35
Bolt1	0.0000	0.0000	0.0000	0	0.00
Bolt2	0.0000	0.0000	0.0000	0	0.00
Dywidag	0.0000	0.0000	0.0000		0.00
Stiffener	0.0000	0.0000	0.0000		0.00

Base Plate		
Shape	18	-
Width, W	56	in
Thickness, t	2	in
Yield Strength, Fy	50	ksi
Tensile Strength, Fu	65	ksi
Base Plate Chord	37.041	in
Detail Type	d	-
Detail Factor	0.50	-
Clear Distance	3	-

Anchor Rods		
Anchor Rod Quantity, N	12	-
Rod Diameter, d	2.25	in
Bolt Circle, BC	49.15	in
Yield Strength, Fy	75	ksi
Tensile Strength, Fu	100	ksi
Applied Axial, Pu	97.6	k
Applied Shear, Vu	0.0	k
Compressive Capacity, ϕPn	259.8	k
Tensile Capacity, ϕRnt	0.376	OK
Interaction Capacity	0.376	OK

External Base Plate		
Chord Length AA	36.946	in
Additional AA	4.000	in
Section Modulus, Z	40.946	in^3
Applied Moment, Mu	363.4	k-ft
Bending Capacity, ϕMn	1842.6	k-ft
Capacity, Mu/ϕMn	0.197	OK
Chord Length AB	36.294	in
Additional AB	4.000	in
Section Modulus, Z	40.294	in^3
Applied Moment, Mu	304.9	k-ft
Bending Capacity, ϕMn	1813.2	k-ft
Capacity, Mu/ϕMn	0.168	OK
Bend Line Length	42.418	in
Additional Bend Line	0.000	in
Section Modulus, Z	42.418	in^3
Applied Moment, Mu	363.4	k-ft
Bending Capacity, ϕMn	1908.8	k-ft
Capacity, Mu/ϕMn	0.190	OK

Internal Base Plate		
Arc Length	0.000	in
Section Modulus, Z	0.000	in^3
Moment Arm	0.000	in
Applied Moment, Mu	0.0	k-ft
Bending Capacity, ϕMn	0.0	k-ft
Capacity, Mu/ϕMn		

Code Rev.	G	Date	8/27/2018
		Engineer	Kelsey.Sargent
		Site #	283420
Moment	185.4 k-ft	Carrier	T-MOBILE
Axial	7.7 k		

Base/Flange Plate	Plate Type	*Flange*	*@ 82.0 ft*
	Pole Diameter	17.8375	in
	Pole Thickness	0.1875	in
	Plate Diameter	24.2	in
	Plate Thickness	1.5	in
	Plate Fy	50	ksi
	Weld Length	0.1875	in
	ϕ_s Resistance	6527.34	k-in
	Applied	-11.74	k-in
Stiffeners	#	*6*	*Show*
	Thickness	1	in
	Length	8	in
	Height	12	in
	Chamfer	0	in
	Offset Angle	30	°
	Fy	65	ksi
Bolts	#	*3*	
	Bolt Circle	21.7	in
	(R)adial / (S)quare	R	
	Diameter	1	in
	Hole Diameter	1.125	in
	Type	A325	
	Fy	92	ksi
	Fu	120	ksi
	ϕ_s Resistance	54.52	k
	Applied	2.55	k
Bypass	#	*6*	
	DYW. Circle	28.25	in
	Offset Angle		°
	Type	Other	
	Diameter	2.2567	in
	Fu	50	ksi
	ϕ_s Resistance	159.99	k
	Applied	42.08	k
Flat Plate O	#	*3*	
	Bolt Circle	19	in
	(R)adial / (S)quare	R	
	Offset Angle		°
	Diameter	2.76395	in
	Type	Other	
	Fy	50	ksi
	Fu	65	ksi
	ϕ_s Resistance	243.22	k
	Applied	22.76	k

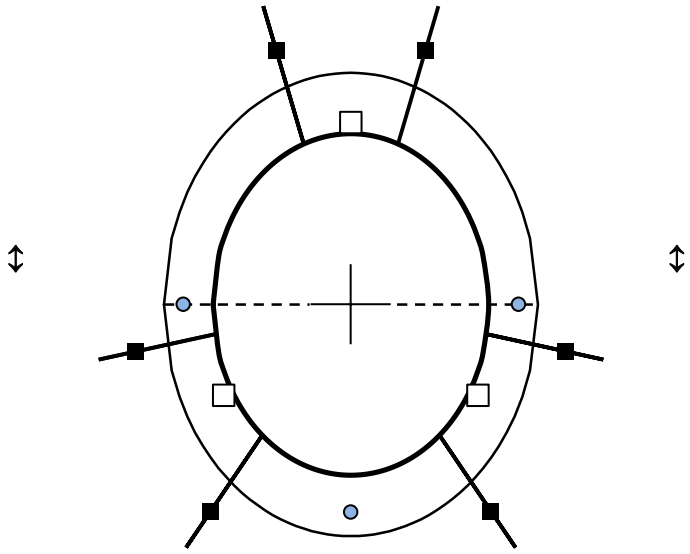


Plate Stress Ratio:
0.00 (Pass)

Bolt Stress Ratio:
0.05 (Pass)

Flat Plate Stress Ratio:
0.09 (Pass)

Bypass Stress Ratio:
0.26 (Pass)

Base/Flange Plate	Plate Type	***Flange***	***@ 99.0 ft***
	Pole Diameter	12.5625	in
	Pole Thickness	0.25	in
	Plate Diameter	18	in
	Plate Thickness	1.125	in
	Plate Fy	50	ksi
	Weld Length	0.1875	in
	ϕ_s Resistance	50.86	k-in
	Applied	13.52	k-in
Stiffeners	#	***0***	

Bolts	#	***8***	
	Bolt Circle	15	in
	(R)adial / (S)quare	R	
●	Diameter	1	in
	Hole Diameter	1.0625	in
	Type	A325	
	Fy	92	ksi
	Fu	120	ksi
	ϕ_s Resistance	54.52	k
	Applied	27.04	k
Reinforcement ●	#	***0***	
Extra Bolts O	#	***0***	

Code Rev. ***G***

Moment	68.7 k-ft
Axial	3.2 k

Date	8/27/2018
Engineer	Kelsey.Sargent
Site #	283420
Carrier	T-MOBILE

Required Flange Thickness:

0.58 in OK

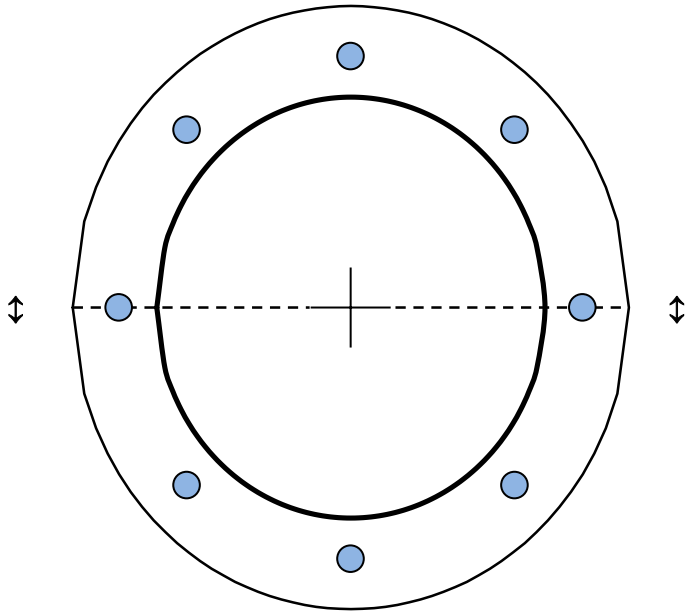


Plate Stress Ratio:

0.27 (Pass)

Bolt Stress Ratio:

0.50 (Pass)

CENTEK engineering

Centered on Solutions℠

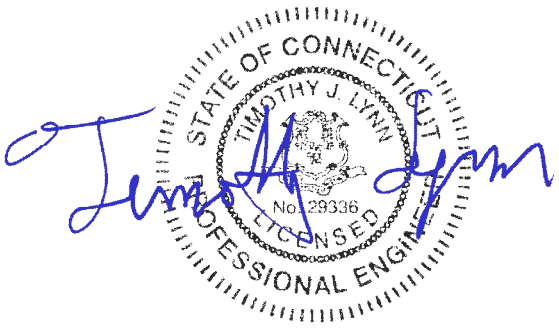
Structural Analysis Report

Antenna Mount Analysis

T-Mobile Site #: CTFF310D

23 Stonybrook Road
Stratford, CT 06614

Centek Project No. 18058.71



Date: June 20, 2018

Max Stress Ratio = 42.5%

Prepared for:

T-Mobile USA
35 Griffin Road
Bloomfield, CT 06002

Table of Contents

CENTEK engineering

Centered on Solutions℠

June 20, 2018

Mr. Dan Reid
Transcend Wireless
10 Industrial Ave
Mahwah, NJ 07430

Re: Structural Letter ~ Antenna Mount
T-Mobile – Site Ref: CTFF310D
23 Stonybrook Road
Stratford, CT 06614

Centek Project No. 18058.71

Dear Mr. Reid,

Centek Engineering, Inc. has reviewed the T-Mobile antenna installation at the above referenced site. The purpose of the review is to determine the structural adequacy of the existing mount, consisting of six (6) standoff arms (three each at two elevations) to support the equipment configuration. The review considered the effects of wind load, dead load and ice load in accordance with the 2012 International Building Code as modified by the 2016 Connecticut State Building Code (CTBC) including ASCE 7-10 and ANSI/TIA-222-G *Structural Standards for Steel Antenna Towers and Supporting Structures*.

The loads considered in this analysis consist of the following:

- T-Mobile:
  Standoff Arms: Three (3) RFS APXVAARR24-43-NA20 panel antennas, three (3) TMAs, three (3) Ericsson RRUS-32 remote radio units and three (3) Ericsson 4449 B71_B12 remote radio units mounted on three (3) Standoff Arms with a RAD center elevation of 97-ft +/- AGL.
  Standoff Arms: Three (3) Ericsson AIR32 panel antennas mounted on three (3) Standoff Arms with a RAD center elevation of 87-ft +/- AGL.

The antenna mount was analyzed per the requirements of the 2012 International Building Code as modified by the 2016 Connecticut State Building Code considering a nominal design wind speed of 97 mph for Stratford as required in Appendix N of the 2016 Connecticut State Building Code.

A structural analysis of tower and foundation needs to be completed prior to any work.

Based on our review of the installation, it is our opinion that the subject antenna mount has sufficient capacity to support the aforementioned antenna configuration. If there are any questions regarding this matter, please feel free to call.

Respectfully Submitted by:

Timothy J. Lynn, PE
Structural Engineer

STATE OF CONNECTICUT
TIMOTHY J. LYNN
No. 29336
LICENSED
PROFESSIONAL ENGINEER

Section 2 - Calculations

CENTEK engineering
Centered on Solutions℠ www.centekeng.com
63-2 North Branford Road P: (203) 488-0580
Branford, CT 06405 F: (203) 488-8587

Subject: TIA-222-G Loads

Location: Stratford, CT

Rev. 0: 6/20/18

Prepared by: T.J.L. Checked by: C.F.C.
Job No. 18058.71

Development of Design Heights, Exposure Coefficients, and Velocity Pressures Per TIA-222-G

Wind Speeds

Basic Wind Speed: $V := 97$ mph (User Input - 2016 CSBC Appendix N)

Basic Wind Speed with Ice: $V_i := 50$ mph (User Input per Annex B of TIA-222-G)

Input

Structure Type = $Structure\_Type := Pole$ (User Input)

Structure Category = $SC := II$ (User Input)

Exposure Category = $Exp := C$ (User Input)

Structure Height = $h := 119$ ft (User Input)

Height to Center of Antennas = $z_{Ant} := 97$ ft (User Input)

Radial Ice Thickness = $t_i := 0.75$ in (User Input per Annex B of TIA-222-G)

Radial Ice Density = $Id := 56.00$ pcf (User Input)

Topograpic Factor = $K_{zt} := 1.0$ (User Input)

$K_a := 1.0$ (User Input)

Gust Response Factor = $G_H = 1.1$ (User Input)

Output

Wind Direction Probability Factor = $K_d := \begin{cases} 0.95 & \text{if } Structure\_Type = Pole \\ 0.85 & \text{if } Structure\_Type = Lattice \end{cases} = 0.95$ (Per Table 2-2 of TIA-222-G)

Importance Factors = $I_{Wind} := \begin{cases} 0.87 & \text{if } SC = 1 \\ 1.00 & \text{if } SC = 2 \\ 1.15 & \text{if } SC = 3 \end{cases} = 1$ (Per Table 2-3 of TIA-222-G)

$I_{Wind\_w\_Ice} := \begin{cases} 0 & \text{if } SC = 1 \\ 1.00 & \text{if } SC = 2 \\ 1.00 & \text{if } SC = 3 \end{cases} = 1$

$I_{ice} := \begin{cases} 0 & \text{if } SC = 1 \\ 1.00 & \text{if } SC = 2 \\ 1.25 & \text{if } SC = 3 \end{cases} = 1$

$K_{iz} := \left(\frac{z_{Ant}}{33}\right)^{0.1} = 1.114$

$t_{iz} := 2.0 \cdot t_i \cdot I_{ice} \cdot K_{iz} \cdot K_{zt}^{0.35} = 1.671$

Velocity Pressure Coefficient Antennas = $Kz_{Ant} := 2.01\left(\left(\frac{z_{Ant}}{zg}\right)\right)^{\frac{2}{\alpha}} = 1.258$

Velocity Pressure w/o Ice Antennas = $qz_{Ant} := 0.00256 \cdot K_d \cdot Kz_{Ant} \cdot V^2 \cdot I_{Wind} = 28.776$

Velocity Pressure with Ice Antennas = $qz_{ice.Ant} := 0.00256 \cdot K_d \cdot Kz_{Ant} \cdot V_i^2 \cdot I_{Wind} = 7.646$

Development of Wind & Ice Load on Antennas

Antenna Data:

Antenna Model =	RFSAPXVAARR24-43		
Antenna Shape =	Flat		(User Input)
Antenna Height =	$L_{ant} := 95.9$	in	(User Input)
Antenna Width =	$W_{ant} := 24$	in	(User Input)
Antenna Thickness =	$T_{ant} := 8.7$	in	(User Input)
Antenna Weight =	$WT_{ant} := 153$	lbs	(User Input)
Number of Antennas =	$N_{ant} := 1$		(User Input)
Antenna Aspect Ratio =	$Ar_{ant} := \frac{L_{ant}}{W_{ant}} = 4.0$		
Antenna Force Coefficient =	$Ca_{ant} = 1.27$		

Wind Load (without ice)

Surface Area for One Antenna =	$SA_{antF} := \frac{L_{ant} \cdot W_{ant}}{144} = 16$	sf
Total Antenna Wind Force =	$F_{ant} := qz_{Ant} \cdot G_H \cdot Ca_{ant} \cdot K_a \cdot SA_{antF} = 641$	lbs
Surface Area for One Antenna =	$SA_{antS} := \frac{L_{ant} \cdot T_{ant}}{144} = 5.8$	sf
Total Antenna Wind Force =	$F_{ant} := qz_{Ant} \cdot G_H \cdot Ca_{ant} \cdot K_a \cdot SA_{antS} = 232$	lbs

Wind Load (with ice)

Surface Area for One Antenna w/ Ice =	$SA_{ICEantF} := \frac{(L_{ant} + 2 \cdot t_{iz}) \cdot (W_{ant} + 2 \cdot t_{iz})}{144} = 18.8$	sf
Total Antenna Wind Force w/ Ice =	$Fi_{ant} := qz_{ice.Ant} \cdot G_H \cdot Ca_{ant} \cdot K_a \cdot SA_{ICEantF} = 201$	lbs
Surface Area for One Antenna w/ Ice =	$SA_{ICEantS} := \frac{(L_{ant} + 2 \cdot t_{iz}) \cdot (T_{ant} + 2 \cdot t_{iz})}{144} = 8.3$	sf
Total Antenna Wind Force w/ Ice =	$Fi_{ant} := qz_{ice.Ant} \cdot G_H \cdot Ca_{ant} \cdot K_a \cdot SA_{ICEantS} = 88$	lbs

Gravity Load (without ice)

Weight of All Antennas =	$WT_{ant} \cdot N_{ant} = 153$	lbs

Gravity Loads (ice only)

Volume of Each Antenna =	$V_{ant} := L_{ant} \cdot W_{ant} \cdot T_{ant} = 2 \times 10^4$	cu in
Volume of Ice on Each Antenna =	$V_{ice} := (L_{ant} + 2 \cdot t_{iz})(W_{ant} + 2 \cdot t_{iz}) \cdot (T_{ant} + 2 \cdot t_{iz}) - V_{ant} = 1 \times 10^4$	cu in
Weight of Ice on Each Antenna =	$W_{ICEant} := \frac{V_{ice}}{1728} \cdot Id = 410$	lbs
Weight of Ice on All Antennas =	$W_{ICEant} \cdot N_{ant} = 410$	lbs

Development of Wind & Ice Load on Antennas

Antenna Data:

Antenna Model =	Ericsson AIR32		
Antenna Shape =	Flat		(User Input)
Antenna Height =	$L_{ant} := 56.6$	in	(User Input)
Antenna Width =	$W_{ant} := 12.9$	in	(User Input)
Antenna Thickness =	$T_{ant} := 8.7$	in	(User Input)
Antenna Weight =	$WT_{ant} := 133$	lbs	(User Input)
Number of Antennas =	$N_{ant} := 1$		(User Input)
Antenna Aspect Ratio =	$Ar_{ant} := \frac{L_{ant}}{W_{ant}} = 4.4$		
Antenna Force Coefficient =	$Ca_{ant} = 1.28$		

Wind Load (without ice)

Surface Area for One Antenna =	$SA_{antF} := \frac{L_{ant} \cdot W_{ant}}{144} = 5.1$	sf
Total Antenna Wind Force =	$F_{ant} := qz_{Ant} \cdot G_H \cdot Ca_{ant} \cdot K_a \cdot SA_{antF} = 206$	lbs
Surface Area for One Antenna =	$SA_{antS} := \frac{L_{ant} \cdot T_{ant}}{144} = 3.4$	sf
Total Antenna Wind Force =	$F_{ant} := qz_{Ant} \cdot G_H \cdot Ca_{ant} \cdot K_a \cdot SA_{antS} = 139$	lbs

Wind Load (with ice)

Surface Area for One Antenna w/ Ice =	$SA_{ICEantF} := \frac{(L_{ant} + 2 \cdot t_{iz}) \cdot (W_{ant} + 2 \cdot t_{iz})}{144} = 6.8$	sf
Total Antenna Wind Force w/ Ice =	$Fi_{ant} := qz_{ice.Ant} \cdot G_H \cdot Ca_{ant} \cdot K_a \cdot SA_{ICEantF} = 73$	lbs
Surface Area for One Antenna w/ Ice =	$SA_{ICEantS} := \frac{(L_{ant} + 2 \cdot t_{iz}) \cdot (T_{ant} + 2 \cdot t_{iz})}{144} = 5$	sf
Total Antenna Wind Force w/ Ice =	$Fi_{ant} := qz_{ice.Ant} \cdot G_H \cdot Ca_{ant} \cdot K_a \cdot SA_{ICEantS} = 54$	lbs

Gravity Load (without ice)

Weight of All Antennas =	$WT_{ant} \cdot N_{ant} = 133$	lbs

Gravity Loads (ice only)

Volume of Each Antenna =	$V_{ant} := L_{ant} \cdot W_{ant} \cdot T_{ant} = 6352$	cu in
Volume of Ice on Each Antenna =	$V_{ice} := (L_{ant} + 2 \cdot t_{iz})(W_{ant} + 2 \cdot t_{iz}) \cdot (T_{ant} + 2 \cdot t_{iz}) - V_{ant} = 5371$	cu in
Weight of Ice on Each Antenna =	$W_{ICEant} := \frac{V_{ice}}{1728} \cdot Id = 174$	lbs
Weight of Ice on All Antennas =	$W_{ICEant} \cdot N_{ant} = 174$	lbs

Development of Wind & Ice Load on TMA's

TMA Data:

TMA Model =	Ericsson KRY112 TMA		
TMA Shape =	Flat		(User Input)
TMA Height =	$L_{TMA} := 7.7$	in	(User Input)
TMA Width =	$W_{TMA} := 7.5$	in	(User Input)
TMA Thickness =	$T_{TMA} := 3.4$	in	(User Input)
TMA Weight =	$WT_{TMA} := 11$	lbs	(User Input)
Number of TMA's =	$N_{TMA} := 1$		(User Input)
TMA Aspect Ratio =	$Ar_{TMA} := \frac{L_{TMA}}{W_{TMA}} = 1$		
TMA Force Coefficient =	$Ca_{TMA} = 1.2$		

Wind Load (without ice)

Surface Area for One TMA =	$SA_{TMAF} := \frac{L_{TMA} \cdot W_{TMA}}{144} = 0.4$	sf
Total TMA Wind Force =	$F_{TMA} := qz_{Ant} \cdot G_H \cdot Ca_{TMA} \cdot K_a \cdot SA_{TMAF} = 15$	lbs
Surface Area for One TMA =	$SA_{TMAS} := \frac{L_{TMA} \cdot T_{TMA}}{144} = 0.2$	sf
Total TMA Wind Force =	$F_{TMA} := qz_{Ant} \cdot G_H \cdot Ca_{TMA} \cdot K_a \cdot SA_{TMAS} = 7$	lbs

Wind Load (with ice)

Surface Area for One TMA w/ Ice =	$SA_{ICETMAF} := \frac{(L_{TMA} + 2 \cdot t_{iz}) \cdot (W_{TMA} + 2 \cdot t_{iz})}{144} = 0.8$	sf
Total TMA Wind Force w/ Ice =	$Fi_{TMA} := qz_{ice.Ant} \cdot G_H \cdot Ca_{TMA} \cdot K_a \cdot SA_{ICETMAF} = 8$	lbs
Surface Area for One TMA w/ Ice =	$SA_{ICETMAS} := \frac{(L_{TMA} + 2 \cdot t_{iz}) \cdot (T_{TMA} + 2 \cdot t_{iz})}{144} = 0.5$	sf
Total TMA Wind Force w/ Ice =	$Fi_{TMA} := qz_{ice.Ant} \cdot G_H \cdot Ca_{TMA} \cdot K_a \cdot SA_{ICETMAS} = 5$	lbs

Gravity Load (without ice)

Weight of All TMAs =	$WT_{TMA} \cdot N_{TMA} = 11$	lbs

Gravity Loads (ice only)

Volume of Each TMA =	$V_{TMA} := L_{TMA} \cdot W_{TMA} \cdot T_{TMA} = 196$	cu in
Volume of Ice on Each TMA =	$V_{ice} := (L_{TMA} + 2 \cdot t_{iz})(W_{TMA} + 2 \cdot t_{iz}) \cdot (T_{TMA} + 2 \cdot t_{iz}) - V_{TMA} = 611$	cu in
Weight of Ice on Each TMA =	$W_{ICETMA} := \frac{V_{ice}}{1728} \cdot Id = 20$	lbs
Weight of Ice on All TMAs =	$W_{ICETMA} \cdot N_{TMA} = 20$	lbs

Development of Wind & Ice Load on RRUS's

RRUS Data:

RRUS Model = Ericsson 4449 B71B12

RRUS Shape = Flat (User Input)

RRUS Height = $L_{RRUS} := 14.9$ in (User Input)

RRUS Width = $W_{RRUS} := 13.2$ in (User Input)

RRUS Thickness = $T_{RRUS} := 10.4$ in (User Input)

RRUS Weight = $WT_{RRUS} := 74$ lbs (User Input)

Number of RRUS's = $N_{RRUS} := 1$ (User Input)

RRUS Aspect Ratio = $Ar_{RRUS} := \frac{L_{RRUS}}{W_{RRUS}} = 1.1$

RRUS Force Coefficient = $Ca_{RRUS} = 1.2$

Wind Load (without ice)

Surface Area for One RRUS = $SA_{RRUSF} := \frac{L_{RRUS} \cdot W_{RRUS}}{144} = 1.4$ sf

Total RRUS Wind Force = $F_{RRUS} := qz_{Ant} \cdot G_H \cdot Ca_{RRUS} \cdot K_a \cdot SA_{RRUSF} = 52$ lbs

Surface Area for One RRUS = $SA_{RRUSS} := \frac{L_{RRUS} \cdot T_{RRUS}}{144} = 1.1$ sf

Total RRUS Wind Force = $F_{RRUS} := qz_{Ant} \cdot G_H \cdot Ca_{RRUS} \cdot K_a \cdot SA_{RRUSS} = 41$ lbs

Wind Load (with ice)

Surface Area for One RRUS w/ Ice = $SA_{ICERRUSF} := \frac{(L_{RRUS} + 2 \cdot t_{iz}) \cdot (W_{RRUS} + 2 \cdot t_{iz})}{144} = 2.1$ sf

Total RRUS Wind Force w/ Ice = $Fi_{RRUS} := qz_{ice.Ant} \cdot G_H \cdot Ca_{RRUS} \cdot K_a \cdot SA_{ICERRUSF} = 21$ lbs

Surface Area for One RRUS w/ Ice = $SA_{ICERRUSS} := \frac{(L_{RRUS} + 2 \cdot t_{iz}) \cdot (T_{RRUS} + 2 \cdot t_{iz})}{144} = 1.7$ sf

Total RRUS Wind Force w/ Ice = $Fi_{RRUS} := qz_{ice.Ant} \cdot G_H \cdot Ca_{RRUS} \cdot K_a \cdot SA_{ICERRUSS} = 18$ lbs

Gravity Load (without ice)

Weight of All RRUSs = $WT_{RRUS} \cdot N_{RRUS} = 74$ lbs

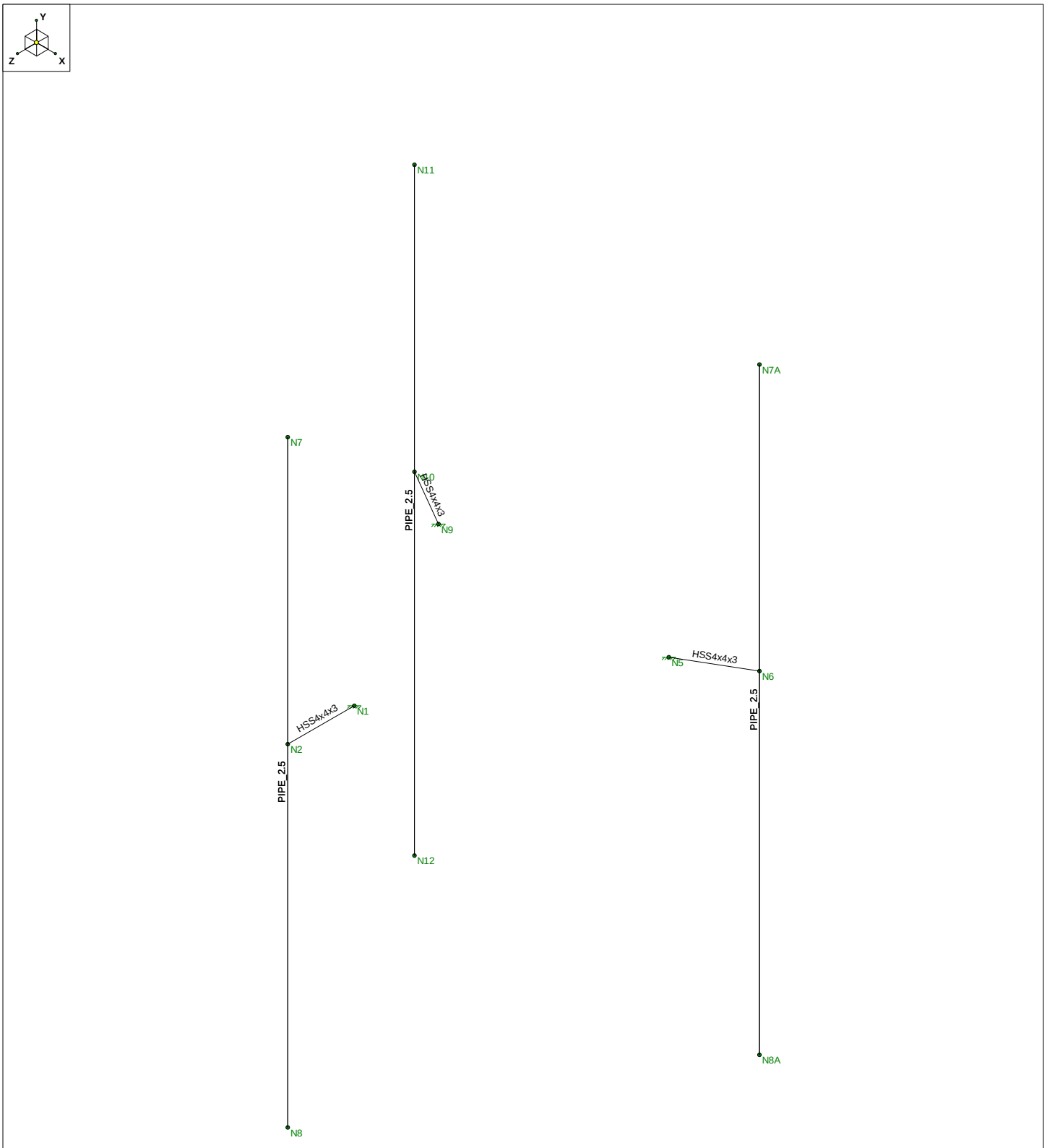
Gravity Loads (ice only)

Volume of Each RRUS = $V_{RRUS} := L_{RRUS} \cdot W_{RRUS} \cdot T_{RRUS} = 2045$ cu in

Volume of Ice on Each RRUS = $V_{ice} := (L_{RRUS} + 2 \cdot t_{iz})(W_{RRUS} + 2 \cdot t_{iz}) \cdot (T_{RRUS} + 2 \cdot t_{iz}) - V_{RRUS} = 2101$ cu in

Weight of Ice on Each RRUS = $W_{ICERRUS} := \frac{V_{ice}}{1728} \cdot Id = 68$ lbs

Weight of Ice on All RRUSs = $W_{ICERRUS} \cdot N_{RRUS} = 68$ lbs



Envelope Only Solution

Centek		
TJL	CTFF310D - Mount	June 20, 2018 at 8:10 AM
18058.71	Member Framing	Mount.r3d

(Global) Model Settings

Display Sections for Member Calcs	5
Max Internal Sections for Member Calcs	97
Include Shear Deformation?	Yes
Increase Nailing Capacity for Wind?	Yes
Include Warping?	Yes
Trans Load Btwn Intersecting Wood Wall?	Yes
Area Load Mesh (in^2)	144
Merge Tolerance (in)	.12
P-Delta Analysis Tolerance	0.50%
Include P-Delta for Walls?	Yes
Automatically Iterate Stiffness for Walls?	Yes
Max Iterations for Wall Stiffness	3
Gravity Acceleration (ft/sec^2)	32.2
Wall Mesh Size (in)	12
Eigensolution Convergence Tol. (1.E-)	4
Vertical Axis	Y
Global Member Orientation Plane	XZ
Static Solver	Sparse Accelerated
Dynamic Solver	Accelerated Solver

Hot Rolled Steel Code	AISC 14th(360-10): LRFD
Adjust Stiffness?	Yes(Iterative)
RISAConnection Code	AISC 14th(360-10): ASD
Cold Formed Steel Code	AISI S100-10: ASD
Wood Code	AWC NDS-12: ASD
Wood Temperature	< 100F
Concrete Code	ACI 318-11
Masonry Code	ACI 530-11: ASD
Aluminum Code	AA ADM1-10: ASD - Building
	AISC 14th(360-10): ASD

Number of Shear Regions	4
Region Spacing Increment (in)	4
Biaxial Column Method	Exact Integration
Parme Beta Factor (PCA)	.65
Concrete Stress Block	Rectangular
Use Cracked Sections?	Yes
Use Cracked Sections Slab?	No
Bad Framing Warnings?	No
Unused Force Warnings?	Yes
Min 1 Bar Diam. Spacing?	No
Concrete Rebar Set	REBAR_SET_ASTMA615
Min % Steel for Column	1
Max % Steel for Column	8

(Global) Model Settings, Continued

Seismic Code	ASCE 7-10
Seismic Base Elevation (ft)	Not Entered
Add Base Weight?	Yes
Ct X	.02
Ct Z	.02
T X (sec)	Not Entered
T Z (sec)	Not Entered
R X	3
R Z	3
Ct Exp. X	.75
Ct Exp. Z	.75
SD1	1
SDS	1
S1	1
TL (sec)	5
Risk Cat	I or II
Drift Cat	Other
Om Z	1
Om X	1
Cd Z	4
Cd X	4
Rho Z	1
Rho X	1
Footing Overturning Safety Factor	1
Optimize for OTM/Sliding	No
Check Concrete Bearing	No
Footing Concrete Weight (k/ft^3)	150.001
Footing Concrete f'c (ksi)	4
Footing Concrete Ec (ksi)	3644
Lambda	1
Footing Steel fy (ksi)	60
Minimum Steel	0.0018
Maximum Steel	0.0075
Footing Top Bar	#3
Footing Top Bar Cover (in)	2
Footing Bottom Bar	#3
Footing Bottom Bar Cover (in)	3.5
Pedestal Bar	#3
Pedestal Bar Cover (in)	1.5
Pedestal Ties	#3

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (\1...	Density[k/ft^3]	Yield[ksi]	Ry	Fu[ksi]	Rt
1	A36 Gr.36	29000	11154	.3	.65	.49	36	1.5	58	1.2
2	A572 Gr.50	29000	11154	.3	.65	.49	50	1.1	58	1.2
3	A992	29000	11154	.3	.65	.49	50	1.1	58	1.2
4	A500 Gr.42	29000	11154	.3	.65	.49	42	1.3	58	1.1
5	A500 Gr.46	29000	11154	.3	.65	.49	46	1.2	58	1.1
6	A53 Grade B	29000	11154	.3	.65	.49	35	1.5	58	1.2

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design ...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Outrigger	HSS4x4x3	Beam	Tube	A500 Gr.46	Typical	2.58	6.21	6.21	10
2	Antenna Mast	PIPE_2.5	Beam	Pipe	A53 Grade B	Typical	1.61	1.45	1.45	2.89

Hot Rolled Steel Design Parameters

	Label	Shape	Length[ft]	Lbyy[ft]	Lbzz[ft]	Lcomp top[ft]	Lcomp bot[ft]	L-torqu...	Kyy	Kzz	Cb	Function
1	M1	Outrigger	1			Lbyy						Lateral
2	M3	Antenna Mast	9			Lbyy						Lateral
3	M3A	Outrigger	1			Lbyy						Lateral
4	M4	Antenna Mast	9			Lbyy						Lateral
5	M5	Outrigger	1			Lbyy						Lateral
6	M6	Antenna Mast	9			Lbyy						Lateral

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(d...	Section/Shape	Type	Design List	Material	Design Rul...
1	M1	N1	N2			Outrigger	Beam	Tube	A500 Gr...	Typical
2	M3	N7	N8			Antenna Mast	Beam	Pipe	A53 Gra...	Typical
3	M3A	N5	N6			Outrigger	Beam	Tube	A500 Gr...	Typical
4	M4	N7A	N8A			Antenna Mast	Beam	Pipe	A53 Gra...	Typical
5	M5	N9	N10			Outrigger	Beam	Tube	A500 Gr...	Typical
6	M6	N11	N12			Antenna Mast	Beam	Pipe	A53 Gra...	Typical

Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Dia...
1	N1	0	0	2	0	
2	N2	0	0	3	0	
3	N7	0	4	3	0	
4	N8	0	-5	3	0	
5	N5	1.732051	0	-1.	0	
6	N6	2.598076	0	-1.5	0	
7	N7A	2.598076	4	-1.5	0	
8	N8A	2.598076	-5	-1.5	0	
9	N9	-1.732051	0	-1.	0	
10	N10	-2.598076	0	-1.5	0	
11	N11	-2.598076	4	-1.5	0	
12	N12	-2.598076	-5	-1.5	0	

Joint Boundary Conditions

	Joint Label	X [k/in]	Y [k/in]	Z [k/in]	X Rot.[k-ft/rad]	Y Rot.[k-ft/rad]	Z Rot.[k-ft/rad]
1	N1	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
2	N5	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
3	N9	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction

Member Point Loads (BLC 2 : Equipment Weight)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	M3	Y	-.077	1
2	M3	Y	-.077	7
3	M3	Y	-.074	2
4	M3	Y	-.074	8
5	M4	Y	-.077	1
6	M4	Y	-.077	7
7	M4	Y	-.074	2
8	M4	Y	-.074	8
9	M6	Y	-.077	1
10	M6	Y	-.077	7
11	M6	Y	-.074	2
12	M6	Y	-.074	8

Member Point Loads (BLC 3 : Ice Weight)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	M3	Y	-.205	1
2	M3	Y	-.205	7
3	M3	Y	-.068	2
4	M3	Y	-.068	8
5	M4	Y	-.205	1
6	M4	Y	-.205	7
7	M4	Y	-.068	2
8	M4	Y	-.068	8
9	M6	Y	-.205	1
10	M6	Y	-.205	7
11	M6	Y	-.068	2
12	M6	Y	-.068	8

Member Point Loads (BLC 4 : Wind w/ Ice X)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	M3	X	.044	1
2	M3	X	.044	7
3	M3	X	.018	2
4	M3	X	.018	8
5	M4	X	.044	1
6	M4	X	.044	7
7	M4	X	.018	2
8	M4	X	.018	8
9	M6	X	.044	1
10	M6	X	.044	7
11	M6	X	.018	2
12	M6	X	.018	8

Member Point Loads (BLC 5 : Wind X)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	M3	X	.116	1
2	M3	X	.116	7
3	M3	X	.041	2
4	M3	X	.041	8

Member Point Loads (BLC 5 : Wind X) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
5	M4	X	.116	1
6	M4	X	.116	7
7	M4	X	.041	2
8	M4	X	.041	8
9	M6	X	.116	1
10	M6	X	.116	7
11	M6	X	.041	2
12	M6	X	.041	8

Member Point Loads (BLC 6 : Wind w/ Ice Z)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	M3	Z	.101	1
2	M3	Z	.101	7
3	M4	Z	.101	1
4	M4	Z	.101	7
5	M6	Z	.101	1
6	M6	Z	.101	7

Member Point Loads (BLC 7 : Wind Z)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	M3	Z	.321	1
2	M3	Z	.321	7
3	M4	Z	.321	1
4	M4	Z	.321	7
5	M6	Z	.321	1
6	M6	Z	.321	7

Member Distributed Loads (BLC 4 : Wind w/ Ice X)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.002	.002	0	0
2	M3	X	.002	.002	0	0
3	M3A	X	.002	.002	0	0
4	M4	X	.002	.002	0	0
5	M5	X	.002	.002	0	0
6	M6	X	.002	.002	0	0
7	M1	X	.002	.002	0	1
8	M3	X	.002	.002	0	9

Member Distributed Loads (BLC 5 : Wind X)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.008	.008	0	0
2	M3	X	.008	.008	0	0
3	M3A	X	.008	.008	0	0
4	M4	X	.008	.008	0	0
5	M5	X	.008	.008	0	0
6	M6	X	.008	.008	0	0
7	M1	X	.008	.008	0	1
8	M3	X	.008	.008	0	9

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distribut...	Area(Me...	Surface(...
1	Self Weight	DL		-1						
2	Equipment Weight	None					12			
3	Ice Weight	None					12			
4	Wind w/ Ice X	None					12	8		
5	Wind X	None					12	8		
6	Wind w/ Ice Z	None					6			
7	Wind Z	None					6			

Load Combinations

	Description	So...	P...	S...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...
1	1.2D + 1.6W (X-d..	Yes	Y		1	1.2	2	1.2	5	1.6														
2	0.9D + 1.6W (X-d..	Yes	Y		1	.9	2	.9	5	1.6														
3	1.2D + 1.0Di + 1....	Yes	Y		1	1.2	2	1.2	3	1	4	1												
4	1.2D + 1.6W (Z-d..	Yes	Y		1	1.2	2	1.2	7	1.6														
5	0.9D + 1.6W (Z-d..	Yes	Y		1	.9	2	.9	7	1.6														
6	1.2D + 1.0Di + 1....	Yes	Y		1	1.2	2	1.2	3	1	6	1												

Envelope Joint Reactions

	Joint		X [k]	LC	Y [k]	LC	Z [k]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1	N1	max	0	4	.978	3	0	3	-.32	2	0	4	0	4
2		min	-.758	2	.324	5	-1.027	4	-.976	6	-.746	1	-.243	2
3	N5	max	0	4	.978	3	0	1	.486	3	.89	4	.842	6
4		min	-.63	1	.324	2	-1.027	4	.155	5	.071	3	.092	2
5	N9	max	0	4	.978	3	0	1	.486	3	.312	1	-.277	5
6		min	-.63	1	.324	2	-1.027	4	.155	5	-.89	4	-.885	3
7	Totals:	max	0	4	2.934	3	0	1						
8		min	-2.019	1	.972	2	-3.082	4						

Envelope Joint Displacements

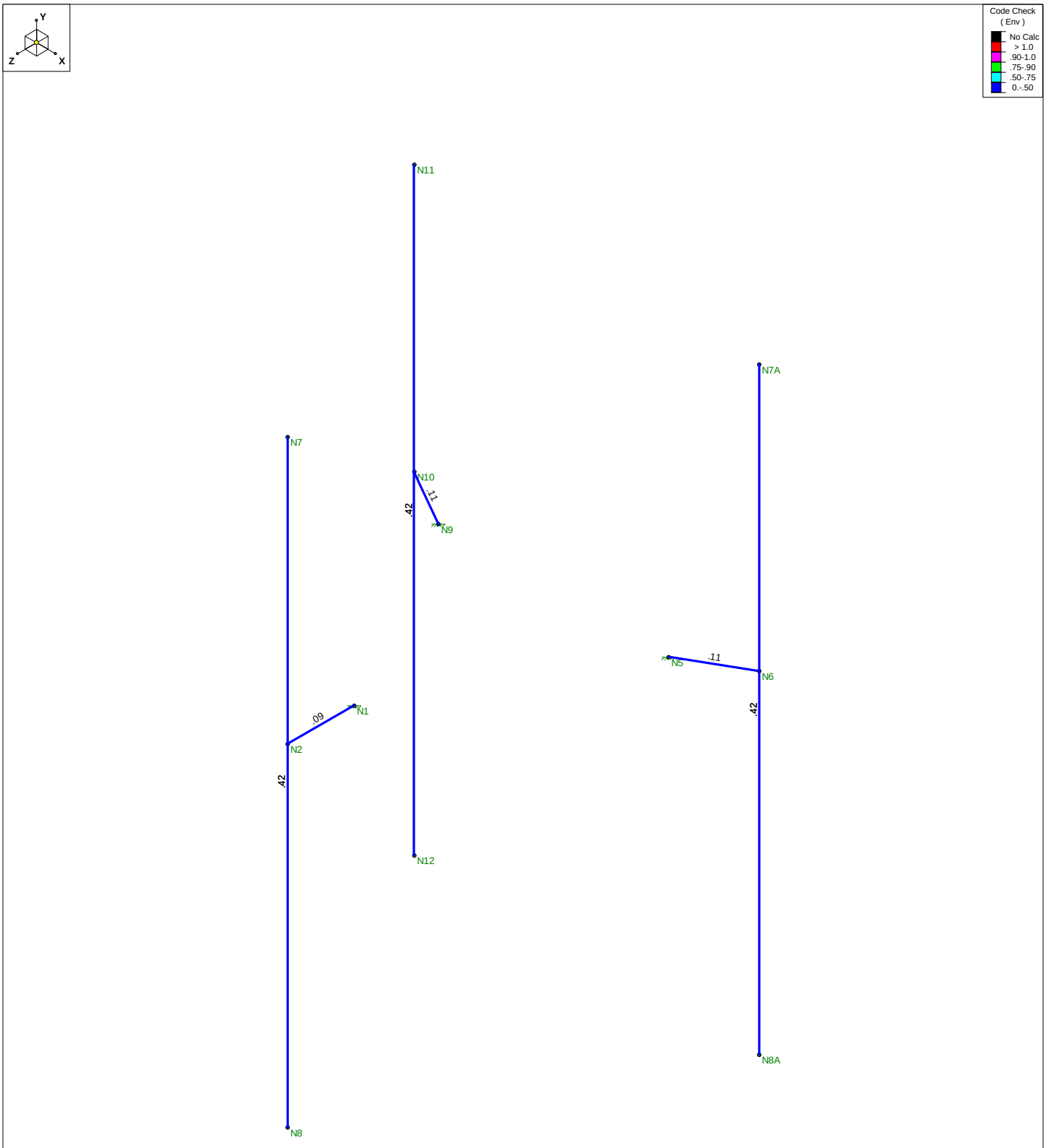
	Joint		X [in]	LC	Y [in]	LC	Z [in]	LC	X Rotation [...	LC	Y Rotation [...	LC	Z Rotation [...	LC
1	N1	max	0	2	0	5	0	4	0	6	0	2	0	2
2		min	0	4	0	3	0	3	0	2	0	4	0	4
3	N2	max	.004	2	-.002	2	0	4	4.884e-04	6	3.705e-04	2	3.132e-04	2
4		min	0	4	-.005	6	0	3	1.593e-04	2	0	4	0	4
5	N7	max	.184	1	-.002	2	.37	4	1.014e-02	4	3.705e-04	2	0	4
6		min	0	4	-.005	6	.008	2	1.597e-04	2	0	4	-5.007e-03	1
7	N8	max	.396	2	-.002	2	.466	5	4.789e-04	3	3.705e-04	2	8.39e-03	2
8		min	0	4	-.005	6	-.029	3	-9.695e-03	5	0	4	0	4
9	N5	max	0	1	0	2	0	4	0	5	0	3	0	2
10		min	0	4	0	3	0	1	0	3	0	4	0	6
11	N6	max	.002	4	0	2	.004	4	-7.296e-05	5	-3.565e-05	3	6.097e-05	2
12		min	0	3	-.005	6	0	3	-2.48e-04	3	-4.447e-04	4	-4.206e-04	6
13	N7A	max	.174	1	0	2	.359	5	9.84e-03	5	-3.565e-05	3	-1.391e-04	5
14		min	.009	5	-.005	6	-.012	3	-2.5e-04	3	-4.447e-04	4	-4.72e-03	1
15	N8A	max	.327	2	0	2	.485	4	-1.026e-04	2	-3.565e-05	3	7.001e-03	2
16		min	-.025	6	-.005	6	.007	2	-9.945e-03	4	-4.447e-04	4	-4.152e-04	6

Envelope Joint Displacements (Continued)

	Joint		X [in]	LC	Y [in]	LC	Z [in]	LC	X Rotation [...	LC	Y Rotation [...	LC	Z Rotation [...	LC
17	N9	max	0	1	0	2	0	4	0	5	0	4	0	3
18		min	0	4	0	3	0	1	0	3	0	1	0	5
19	N10	max	0	1	-.002	5	.004	4	-5.627e-05	2	4.447e-04	4	4.659e-04	3
20		min	-.002	4	-.005	3	-.001	1	-2.386e-04	6	-1.554e-04	1	1.387e-04	5
21	N11	max	.158	2	-.002	5	.359	5	9.84e-03	5	4.447e-04	4	4.241e-04	6
22		min	-.021	6	-.005	3	-.012	3	-2.392e-04	3	-1.554e-04	1	-4.393e-03	2
23	N12	max	.346	1	-.002	5	.485	4	-5.603e-05	2	4.447e-04	4	7.312e-03	1
24		min	.006	5	-.005	3	.002	2	-9.945e-03	4	-1.554e-04	1	1.381e-04	5

Envelope AISC 14th(360-10): LRFD Steel Code Checks

	Member	Shape	Code Check	Loc...	LC	Shea..	Loc.....	L..	phi*Pn..	phi*Pn..	phi*M...	phi*M...	...	Eqn
1	M1	HSS4x4x3	.093	0	1	.048	0	z	2	106.383	106.812	12.662	12.662	1..	H1-1b
2	M3	PIPE_2.5	.425	4.0...	4	.034	1.0...		4	26.137	50.715	3.596	3.596	1	H1-1b
3	M3A	HSS4x4x3	.106	0	4	.035	0	y	3	106.383	106.812	12.662	12.662	1..	H1-1b
4	M4	PIPE_2.5	.425	4.0...	4	.034	1.0...		4	26.137	50.715	3.596	3.596	1..	H1-1b
5	M5	HSS4x4x3	.106	0	4	.035	0	y	3	106.383	106.812	12.662	12.662	1..	H1-1b
6	M6	PIPE_2.5	.425	4.0...	4	.034	1.0...		4	26.137	50.715	3.596	3.596	1..	H1-1b



Member Code Checks Displayed (Enveloped)
Envelope Only Solution

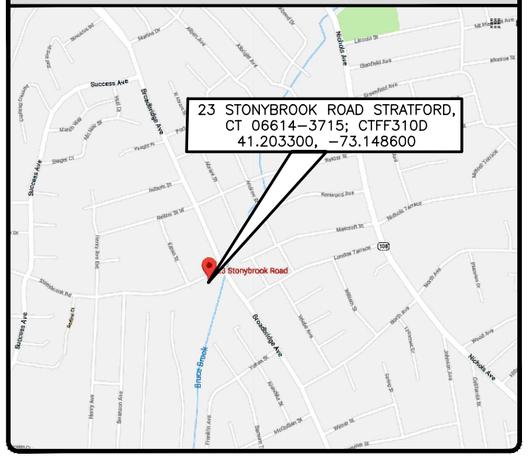
Centek		
TJL	CTFF310D - Mount	June 20, 2018 at 8:10 AM
18058.71	Unity Check	Mount.r3d

AMERICAN TOWER®

ATC SITE NAME:	**STONYBROOK RD CT**
ATC SITE NUMBER:	**283420**
T-MOBILE SITE ID	**CTFF310D**
SITE ADDRESS:	**23 STONYBROOK ROAD STRATFORD, CT 06614-3715**
PROJECT:	**T-MOBILE AMENDMENT PLAN**
STRUCTURE TYPE:	**119'-0" MONOPOLE**

AERIAL PHOTO

LOCATION MAP



PROJECT INFORMATION

LATITUDE: (NAD 83)	41.203300°
LONGITUDE: (NAD 83)	-73.148600°
SITE ADDRESS:	23 STONYBROOK ROAD STRATFORD, CT 06614-3715
GROUND ELEVATION:	75' AMSL
JURISDICTION:	CITY OF STRATFORD
COUNTY:	FAIRFIELD
APN:	30-11-10-16
OCCUPANCY TYPE:	UNMANNED
A.D.A. COMPLIANCE:	FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION.

DRAWING INDEX

T1	TITLE SHEET	0
GN1	GENERAL NOTES	0
A1	COMPOUND PLAN AND ELEVATION	0
A2	ANTENNA PLANS AND EQUIPMENT TABLE	0
A3	EQUIPMENT DETAILS	0
A4	PLUMBING DIAGRAM	0

TOWER ELEVATION

DRIVING DIRECTIONS

FROM LA GUARDIA AIRPORT, QUEENS, NY:

- TRAVEL ALONG GRAND CENTRAL PARKWAY TOWARDS AIRPORT EXIT.
- MERGE ONTO I-95N TO STRATFORD AND TRAVEL 56.1 MILES.
- GET OFF AT EXIT #32 W BROAD STREET/STATFORD.
- TURN LEFT FROM EXIT RAMP ONTO W BROAD STREET.
- TURN RIGHT ONTO CALIFORNIA STREET.
- TURN LEFT AT THE 1ST CROSS STREET ONTO BROADBRIDGE AVENUE.
- TURN LEFT ONTO STONYBROOK ROAD.
- SITE WILL BE IMMEDIATELY ON YOUR LEFT BEHIND THE FIRST BUILDING.

ONE CALL

CALL CONNECTICUT ONE-CALL
3 DAYS BEFORE YOU DIG
811 OR 1-800-922-4455

PROJECT TEAM

ENGINEER/ARCHITECT:
CLS ENGINEERING, PLLC
319 CHAPANOKE ROAD, SUITE 118
RALEIGH, NC 27603
PM: CAITLIN RATHJEN
OFFICE: 405-348-5460 X485

CUSTOMER:
T-MOBILE
185 FAIRCHILD STREET
CHARLESTON, SC 29492

TOWER OWNER:
AMERICAN TOWER CORPORATION
10 PRESIDENTIAL WAY
WOBURN, MA 1801
CONTACT NAME: HALEY NOLAN

CODE COMPLIANCE

ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING APPLICABLE CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES.

BUILDING/DWELLING CODE:	IBC 2012, CSBC 2016-N
STRUCTURAL CODE:	IBC 2012, CSBC 2016-N
PLUMBING CODE:	IPC 2015
MECHANICAL CODE:	IMC 2015
ELECTRICAL CODE:	NEC 2014
FIRE & LIFE SAFETY CODE:	IFC 2015

DO NOT SCALE DRAWINGS

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

SCOPE OF WORK

1. REMOVE (3) ANTENNAS AND (3) RRU'S AT THE 97' RAD CENTER.
2. (3) RRU'S TO REMAIN AT THE 97' RAD CENTER.
3. (3) TMAs TO REMAIN AT THE 87' RAD CENTER.
4. (3) ANTENNAS TO REMAIN AT THE 97' RAD CENTER.
5. (12) CABLES TO REMAIN AT THE 97' AND 87' RAD CENTERS.
6. INSTALL (3) ANTENNAS (3) RRUS AT THE 97' RAD CENTER.
7. INSTALL (1) HYBRID CABLE AT THE 97' RAD CENTER.
8. INSTALL (1) 150A CABINET BREAKER UPGRADE.

AMERICAN TOWER®
ATC TOWER SERVICES, LLC
3500 REGENCY PARKWAY
SUITE 100
CARY, NC 27518
PHONE: (919) 468-0112

T-Mobile

CLS ENGINEERING PLLC
319 CHAPANOKE RD, SUITE 118 RALEIGH, NC 27603
PH: (405) 348-5460 FAX:(405) 341-4625
COA# PEC.001833 EXP. 8/14/2019

REVISIONS

REV.	DATE	DESCRIPTION	INITIALS
A	08/31/2018	PRELIMINARY ISSUE	KGRL
B	09/26/2018	CLIENT COMMENTS	JM
0	10/11/2018	CONSTRUCTION	BNM

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

STATE OF CONNECTICUT
TYLER M BARKER
No. 32402
LICENSED PROFESSIONAL ENGINEER

Tyler M. Barker
CLS Engineering, PLLC
Director of Engineering
PE # 32402 Exp. 1/31/2019
COA # PEC.001833 Exp. 8/14/2019

10/11/2018

Digitally signed by Tyler M. Barker
Date: 2018.10.11 16:55:07 -04'00'

PE# 32402 EXP: 1/31/2019

ATC SITE NAME:
STONYBROOK RD CT
ATC SITE NUMBER:
283420
T-MOBILE SITE ID
CTFF310D
SITE ADDRESS:
23 STONYBROOK ROAD, STRATFORD, CT 06614-3715

SHEET TITLE
TITLE SHEET

SHEET NUMBER
T1

T:\AMERICAN TOWER\41123 - ATC AZP A+E\283420-1259848A\00 - A&E (PHASE 1)\41123 283420 CTFF310D.DWG

GENERAL NOTES

GENERAL CONSTRUCTION NOTES:

1. ALL WORK SHALL CONFORM TO ALL CURRENT APPLICABLE FEDERAL, STATE, AND LOCAL CODES, INCLUDING ANSI/EIA/TIA-222, AND COMPLY WITH ATC MASTER SPECIFICATIONS.
2. CONTRACTOR SHALL CONTACT LOCAL 811 FOR IDENTIFICATION OF UNDERGROUND UTILITIES PRIOR TO START OF CONSTRUCTION.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REQUIRED INSPECTIONS.
4. ALL DIMENSIONS TO, OF, AND ON EXISTING BUILDINGS, DRAINAGE STRUCTURES, AND SITE IMPROVEMENTS SHALL BE VERIFIED IN FIELD BY CONTRACTOR WITH ALL DISCREPANCIES REPORTED TO THE ENGINEER.
5. DO NOT CHANGE SIZE OR SPACING OF STRUCTURAL ELEMENTS.
6. DETAILS SHOWN ARE TYPICAL; SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.
7. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
8. CONTRACTOR SHALL BRACE STRUCTURES UNTIL ALL STRUCTURAL ELEMENTS NEEDED FOR STABILITY ARE INSTALLED. THESE ELEMENTS ARE AS FOLLOWS: LATERAL BRACING, ANCHOR BOLTS, ETC.
9. CONTRACTOR SHALL DETERMINE EXACT LOCATION OF EXISTING UTILITIES, GROUNDS DRAINS, DRAIN PIPES, VENTS, ETC. BEFORE COMMENCING WORK.
10. INCORRECTLY FABRICATED, DAMAGED, OR OTHERWISE MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE T-MOBILE WIRELESS REP PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH REMEDIAL ACTION SHALL REQUIRE WRITTEN APPROVAL BY THE T-MOBILE WIRELESS REP PRIOR TO PROCEEDING.
11. EACH CONTRACTOR SHALL COOPERATE WITH THE T-MOBILE WIRELESS REP, AND COORDINATE HIS WORK WITH THE WORK OF OTHERS.
12. CONTRACTOR SHALL REPAIR ANY DAMAGE CAUSED BY CONSTRUCTION OF THIS PROJECT TO MATCH EXISTING PRE-CONSTRUCTION CONDITIONS TO THE SATISFACTION OF THE T-MOBILE WIRELESS CONSTRUCTION MANAGER.
13. ALL CABLE/CONDUIT ENTRY/EXIT PORTS SHALL BE WEATHERPROOFED DURING INSTALLATION USING A SILICONE SEALANT.
14. WHERE EXISTING CONDITIONS DO NOT MATCH THOSE SHOWN IN THIS PLAN SET, CONTRACTOR SHALL NOTIFY THE T-MOBILE WIRELESS REP IMMEDIATELY.
15. CONTRACTOR SHALL ENSURE ALL SUBCONTRACTORS ARE PROVIDED WITH A COMPLETE AND CURRENT SET OF DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.
16. CONTRACTOR SHALL REMOVE ALL RUBBISH AND DEBRIS FROM THE SITE AT THE END OF EACH DAY.
17. CONTRACTOR SHALL COORDINATE WORK SCHEDULE WITH LANDLORD AND TAKE PRECAUTIONS TO MINIMIZE IMPACT AND DISRUPTION OF OTHER OCCUPANTS OF THE FACILITY.
18. CONTRACTOR SHALL FURNISH T-MOBILE WIRELESS WITH A PDF MARKED UP AS-BUILT SET OF DRAWINGS UPON COMPLETION OF WORK.
19. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH T-MOBILE WIRELESS REP TO DETERMINE WHAT, IF ANY, ITEMS WILL BE PROVIDED. ALL ITEMS NOT PROVIDED SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR. CONTRACTOR WILL INSTALL ALL ITEMS PROVIDED.
20. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH T-MOBILE WIRELESS REP TO DETERMINE IF ANY PERMITS WILL BE OBTAINED BY CONTRACTOR. ALL REQUIRED PERMITS NOT OBTAINED BY T-MOBILE WIRELESS MUST BE OBTAINED, AND PAID FOR, BY THE CONTRACTOR.
21. CONTRACTOR SHALL INSTALL ALL SITE SIGNAGE IN ACCORDANCE WITH T-MOBILE WIRELESS SPECIFICATIONS AND REQUIREMENTS.
22. CONTRACTOR SHALL SUBMIT ALL SHOP DRAWINGS TO T-MOBILE WIRELESS FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
23. ALL EQUIPMENT SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND LOCATED ACCORDING TO T-MOBILE WIRELESS SPECIFICATIONS, AND AS SHOWN IN THESE PLANS.
24. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
25. CONTRACTOR SHALL NOTIFY T-MOBILE WIRELESS REP A MINIMUM OF 48 HOURS IN ADVANCE OF POURING CONCRETE OR BACKFILLING ANY UNDERGROUND UTILITIES, FOUNDATIONS OR SEALING ANY WALL, FLOOR OR ROOF PENETRATIONS FOR ENGINEERING REVIEW AND APPROVAL.
26. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SAFETY INCLUDING COMPLIANCE WITH ALL APPLICABLE OSHA STANDARDS AND RECOMMENDATIONS AND SHALL PROVIDE ALL NECESSARY SAFETY DEVICES INCLUDING PPE AND PPM AND CONSTRUCTION DEVICES SUCH AS WELDING AND FIRE PREVENTION, TEMPORARY SHORING, SCAFFOLDING, TRENCH BOXES/SLOPING, BARRIERS, ETC.
27. THE CONTRACTOR SHALL PROTECT AT HIS OWN EXPENSE, ALL EXISTING FACILITIES AND SUCH OF HIS NEW WORK LIABLE TO INJURY DURING THE CONSTRUCTION PERIOD. ANY DAMAGE CAUSED BY NEGLECT ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, OR BY THE ELEMENTS DUE TO NEGLECT ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, EITHER TO THE EXISTING WORK, OR TO HIS WORK OR THE WORK OF ANY OTHER CONTRACTOR, SHALL BE REPAIRED AT HIS EXPENSE TO THE OWNER'S SATISFACTION.
28. ALL WORK SHALL BE INSTALLED IN A FIRST CLASS, NEAT AND WORKMANLIKE MANNER BY MECHANICS SKILLED IN THE TRADE INVOLVED. THE QUALITY OF WORKMANSHIP SHALL BE SUBJECT TO THE APPROVAL OF THE T-MOBILE WIRELESS REP. ANY WORK FOUND BY THE T-MOBILE WIRELESS REP TO BE OF INFERIOR QUALITY AND/OR WORKMANSHIP SHALL BE REPLACED AND/OR REWORKED AT CONTRACTOR EXPENSE UNTIL APPROVAL IS OBTAINED.
29. IN ORDER TO ESTABLISH STANDARDS OF QUALITY AND PERFORMANCE, ALL TYPES OF MATERIALS LISTED HEREINAFTER BY MANUFACTURER'S NAMES AND/OR MANUFACTURER'S CATALOG NUMBER SHALL BE PROVIDED BY THESE MANUFACTURERS AS SPECIFIED.
30. ITEMS REFERENCED ARE OWNER/CLIENT DICTATED ITEMS, OR SUPPLIED ITEMS WHICH ARE REPRODUCED WITHOUT ALTERATION AS DIRECTED BY OWNER/CLIENT, AND OWNER/CLIENT ASSUMES ANY AND ALL LIABILITY FOR USE OF, CONSEQUENCES OF, OR INTERPRETATION OF SAID ITEM, SPECIFICATION, OR DIRECTIVE; AND AGREES TO INDEMNIFY AND HOLD ENGINEER COMPLETELY HARMLESS.

STRUCTURAL STEEL NOTES:

1. STRUCTURAL STEEL SHALL CONFORM TO THE LATEST EDITION OF THE AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS."
2. STRUCTURAL STEEL ROLLED SHAPES, PLATES AND BARS SHALL CONFORM TO THE FOLLOWING ASTM DESIGNATIONS:
   - A. ASTM A-572, GRADE 50 - ALL W SHAPES, UNLESS NOTED OR A992 OTHERWISE
   - B. ASTM A-36 - ALL OTHER ROLLED SHAPES, PLATES AND BARS UNLESS NOTED OTHERWISE.
   - C. ASTM A-500, GRADE B - HSS SECTION (SQUARE, RECTANGULAR, AND ROUND)
   - D. ASTM A-325, TYPE SC OR N- ALL BOLTS FOR CONNECTING STRUCTURAL MEMBERS
   - E. ASTM F-1554 07 - ALL ANCHOR BOLTS, UNLESS NOTED OTHERWISE
3. ALL EXPOSED STRUCTURAL STEEL MEMBERS SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION PER ASTM A123. EXPOSED STEEL HARDWARE AND ANCHOR BOLTS SHALL BE GALVANIZED PER ASTM A153 OR B695.
4. ALL FIELD CUT SURFACES, FIELD DRILLED HOLES AND GROUND SURFACES WHERE EXISTING PAINT OR GALVANIZATION REMOVAL WAS REQUIRED SHALL BE REPAIRED WITH (2) BRUSHED COATS OF ZRC GALVILITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURER'S RECOMMENDATIONS.
5. DO NOT DRILL HOLES THROUGH STRUCTURAL STEEL MEMBERS EXCEPT AS SHOWN AND DETAILED ON STRUCTURAL DRAWINGS.
6. CONNECTIONS:
   - A. ALL WELDING TO BE PERFORMED BY AWS CERTIFIED WELDERS AND CONDUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE AWS WELDING CODE D1.1.
   - B. ALL WELDS SHALL BE INSPECTED VISUALLY. 25% OF WELDS SHALL BE INSPECTED WITH DYE PENETRANT OR MAGNETIC PARTICLE TO MEET THE ACCEPTANCE CRITERIA OF AWS D1.1. REPAIR ALL WELDS AS NECESSARY.
   - C. INSPECTION SHALL BE PERFORMED BY AN AWS CERTIFIED WELD INSPECTOR.
   - D. IT IS THE CONTRACTORS RESPONSIBILITY TO PROVIDE BURNING/WELDING PERMITS AS REQUIRED BY LOCAL GOVERNING AUTHORITY AND IF REQUIRED SHALL HAVE FIRE DEPARTMENT DETAIL FOR ANY WELDING ACTIVITY.
   - E. ALL ELECTRODES TO BE LOW HYDROGEN, MATCHING FILLER METAL, PER AWS D1.1, UNLESS NOTED OTHERWISE.
   - F. MINIMUM WELD SIZE TO BE 0.1875 INCH FILLET WELDS, UNLESS NOTED OTHERWISE.
   - G. PRIOR TO FIELD WELDING GALVANIZING MATERIAL, CONTRACTOR SHALL GRIND OFF GALVANIZING ½" BEYOND ALL FIELD WELD SURFACES. AFTER WELD AND WELD INSPECTION IS COMPLETE, REPAIR ALL GROUND AND WELDED SURFACES WITH ZRC GALVILITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURERS RECOMMENDATIONS.

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Tyler M. Barker
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Director of Engineering
PE # 32402 Exp. 1/31/2019
COA # PEC.001833 Exp. 8/14/2019

10/11/2018

PE# 32402 EXP: 1/31/2019

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ATC SITE NUMBER:
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T-MOBILE SITE ID
CTFF310D
SITE ADDRESS:
23 STONYBROOK ROAD, STRATFORD, CT 06614-3715

SHEET TITLE

GENERAL NOTES

SHEET NUMBER

GN1

NOTES:

MONOPOLE IS SHOWN FOR ILLUSTRATION ONLY AND FOR LOCATION OF APPURTENANCE(S).

REFER TO MONOPOLE SURVEY FOR ALL EXISTING MONOPOLE COMPONENTS TO INCLUDE ANTENNAS, LIGHTS, LIGHTNING ROD AND MONOPOLE HEIGHT.

CONTRACTOR(S) TO COMPLY WITH ALL FCC AND FAA REGULATIONS ON THIS PROJECT. COAX ROUTING MUST BE PER STRUCTURAL ANALYSIS.

PRIOR TO CONSTRUCTION:
CONTRACTOR SHALL VERIFY THAT A MONOPOLE AND MOUNT STRUCTURAL ANALYSIS, DEPICTING THE LOADING SHOWN, HAS BEEN PERFORMED AND SHOWS A "PASS" OR AN "ACCEPTABLE" RATING. UNDER NO CIRCUMSTANCE WHAT SO EVER SHALL THE PROPOSED EQUIPMENT BE INSTALLED WITHOUT SAID STRUCTURAL ANALYSIS. IF SAID STRUCTURAL ANALYSIS REQUIRES THAT THE MONOPOLE AND/OR MOUNT BE MODIFIED, SUCH MODIFICATIONS SHALL BE COMPLETED PRIOR TO INSTALLATION OF THE PROPOSED EQUIPMENT.

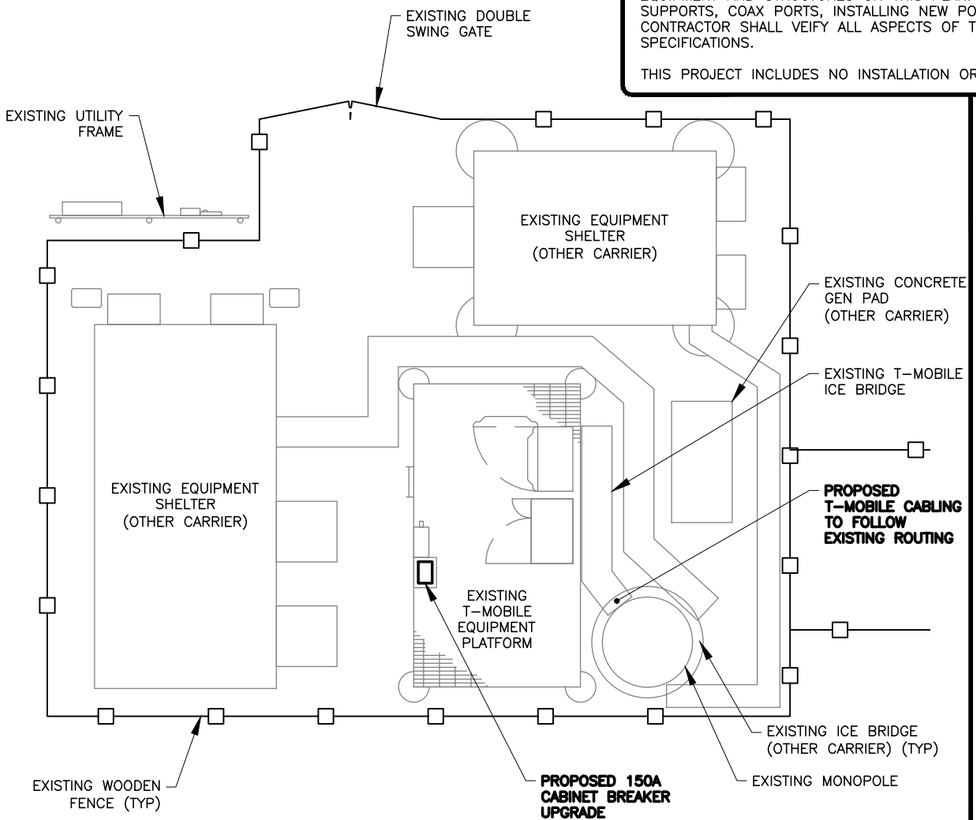
MOUNT ANALYSIS DONE BY OTHERS.

STRUCTURAL ANALYSIS DONE BY ATC, ENG# 12598484_C3_01, DATED AUGUST 27, 2018.

THE SITE PLAN REPRESENTS THE BEST KNOWLEDGE AVAILALBE TO THE ENGINEER AT THE TIME OF THIS DESIGN. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO CONSTRUCTION AND VERIFY ALL EXISTING CONDITIONS RELATED TO THE SCOPE OF WORK FOR THIS PROJECT.

ICE BRIDGE, CABLE LADDER, COAX PORT AND CABLING ARE SHOWN FOR REFERENCE ONLY. OTHER CARRIER EQUIPMENT MAY BE OMITTED FOR CLARITY PURPOSES. CONTRACTOR SHALL CONFIRM THE EXACT LOCATION OF ALL PROPOSED AND EXISTING EQUIPMENT AND STRUCTURES ON THIS PLAN. BEFORE UTILIZING EXISTING CABLE SUPPORTS, COAX PORTS, INSTALLING NEW PORTS OR ANY OTHER EQUIPMENT, CONTRACTOR SHALL VEIFY ALL ASPECTS OF THE COMPONENENTS MEET THE ATC SPECIFICATIONS.

THIS PROJECT INCLUDES NO INSTALLATION OR MODIFICATION AT-GRADE.



1 COMPOUND PLAN

SCALE: 0' 5' 10' 20' 1"=10' 1"=5'

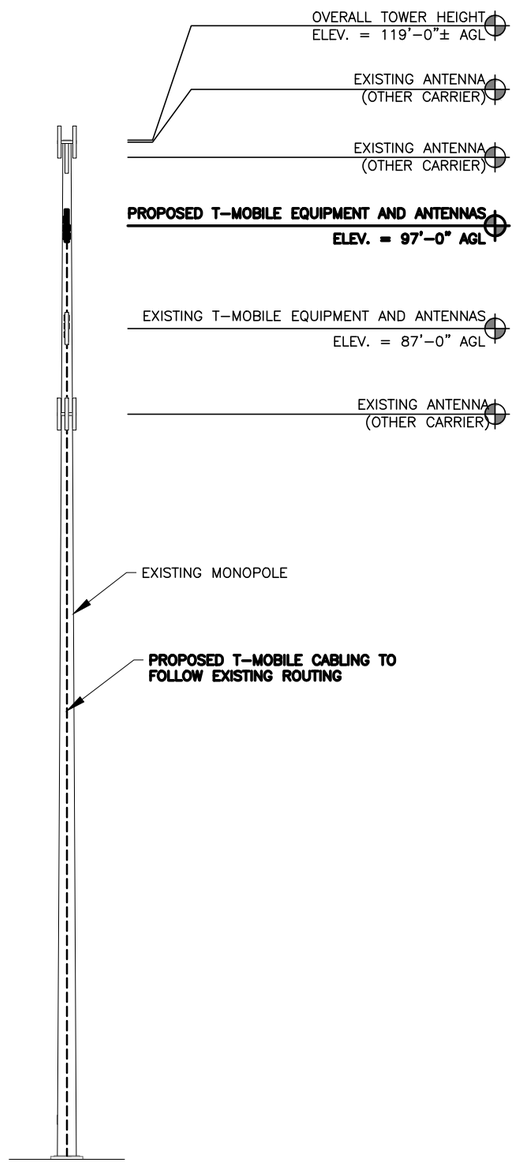
11" X 17"
24" X 36"

RE: 30/GN1

TRUE NORTH

LOADING NOTE:

OTHER CARRIER EQUIPMENT MAY BE OMITTED FOR CLARITY.



2 PROPOSED ELEVATION

SCALE: N.T.S.

RE: 30/GN1

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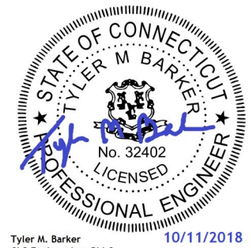

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10/11/2018

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23 STONYBROOK ROAD, STRATFORD, CT 06614-3715

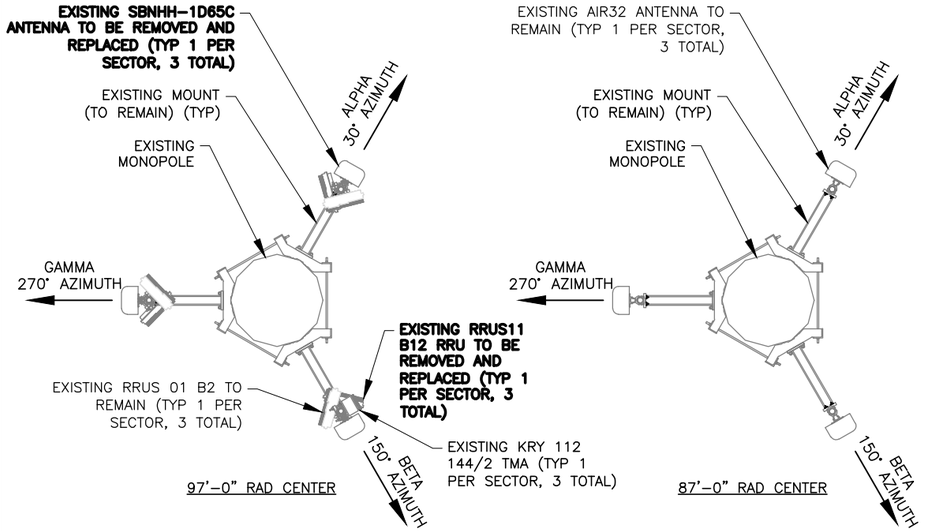
SHEET TITLE

COMPOUND PLAN AND ELEVATION

SHEET NUMBER

A1

T:\AMERICAN TOWER\41123 - ATC AZP A+E\283420-12598484\00 - A&E (PHASE 1)\41123_283420_CTFF310D.DWG

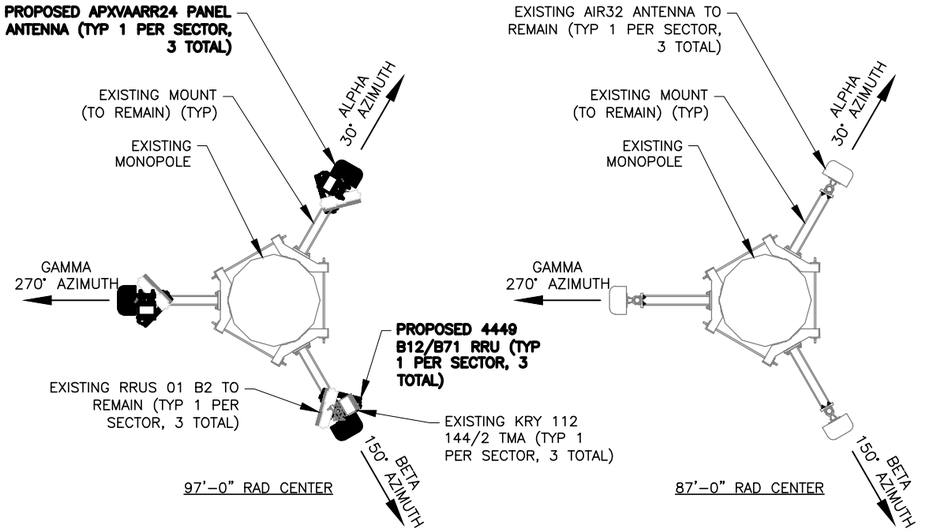


TRUE NORTH

RE: 30/GN1

1 EXISTING ANTENNA PLAN

SCALE: N.T.S.



TRUE NORTH

RE: 30/GN1

2 PROPOSED ANTENNA PLAN

SCALE: N.T.S.

ANTENNA AND COAXIAL CABLE SCHEDULE
(**BOLD** DENOTES PROPOSED OR RECONFIGURED EQUIPMENT)
(E) = EXISTING **(P) = PROPOSED**

ANTENNA MARK	SECTOR	RAD CENTER	AZIMUTH	ANTENNAS	TMAS	SURGE PROTECTION	RRUS	COAX/CABLE	CABLE LENGTH
A1	**ALPHA**	**97'-0"**	**30°**	**(P) RFS APXVAARR24_43-U-NA20**	(E) KRY 112 144/2 TMA	**--**	(E) RRUS 01 B2 **(P) 4449 B12/B71**	**(P) (1) 1-1/4" FIBER (SHARED)**	**125'**
A2	ALPHA	87'-0"	30°	(E) AIR32 B66A	--	--	--	(E) (4) 1-5/8" COAX	115'
A3	ALPHA	--	--	--	--	--	--	--	--
A4	ALPHA	--	--	--	--	--	--	--	--
B1	**BETA**	**97'-0"**	**150°**	**(P) RFS APXVAARR24_43-U-NA20**	(E) KRY 112 144/2 TMA	**--**	(E) RRUS 01 B2 **(P) 4449 B12/B71**	**SHARED**	**125'**
B2	BETA	87'-0"	150°	(E) AIR32 B66A	--	--	--	(E) (4) 1-5/8" COAX	115'
B3	BETA	--	--	--	--	--	--	--	--
B4	BETA	--	--	--	--	--	--	--	--
G1	**GAMMA**	**97'-0"**	**270°**	**(P) RFS APXVAARR24_43-U-NA20**	(E) KRY 112 144/2 TMA	**--**	(E) RRUS 01 B2 **(P) 4449 B12/B71**	**SHARED**	**125'**
G2	GAMMA	87'-0"	270°	(E) AIR32 B66A	--	--	--	(E) (4) 1-5/8" COAX	115'
G3	GAMMA	--	--	--	--	--	--	--	--
G4	GAMMA	--	--	--	--	--	--	--	--

3 FINAL EQUIPMENT TABLE

SCALE: N.T.S.

RE: 30/GN1

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10/11/2018

PE# 32402 EXP: 1/31/2019

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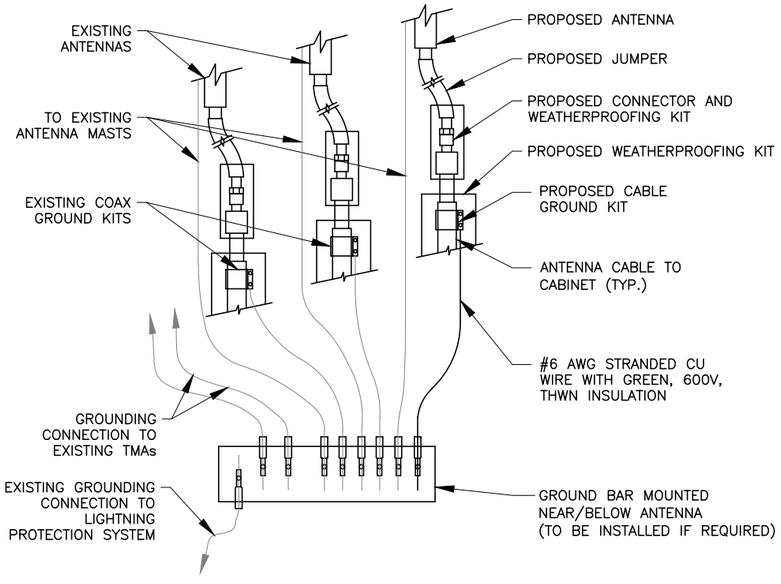
SHEET TITLE

ANTENNA PLANS AND EQUIPMENT TABLE

SHEET NUMBER

A2

T:\AMERICAN TOWER\41123 - ATC AZP A+E\283420-12598484\00 - A&E (PHASE 1)\41123_283420_CTFF310D.DWG

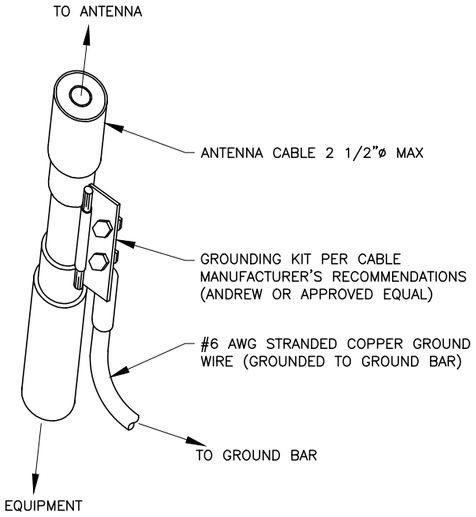


NOTES:

1. THIS DETAIL IS INTENDED TO SHOW THE GENERAL GROUNDING REQUIREMENTS. SLIGHT ADJUSTMENTS MAY BE REQUIRED BASED ON EXISTING SITE CONDITIONS. THE CONTRACTOR SHALL MAKE FIELD ADJUSTMENTS AS NEEDED AND INFORM THE CONSTRUCTION MANAGER OF ANY CONFLICTS.
2. SITE GROUNDING SHALL COMPLY WITH T-MOBILE GROUNDING STANDARDS, LATEST EDITION, AND COMPLY WITH T-MOBILE GROUNDING CHECKLIST, LATEST VERSION. WHEN NATIONAL AND LOCAL GROUNDING CODES ARE MORE STRINGENT THEY SHALL GOVERN.

1 TYPICAL ANTENNA GROUNDING DIAGRAM

SCALE: N.T.S. RE: 30/GN1

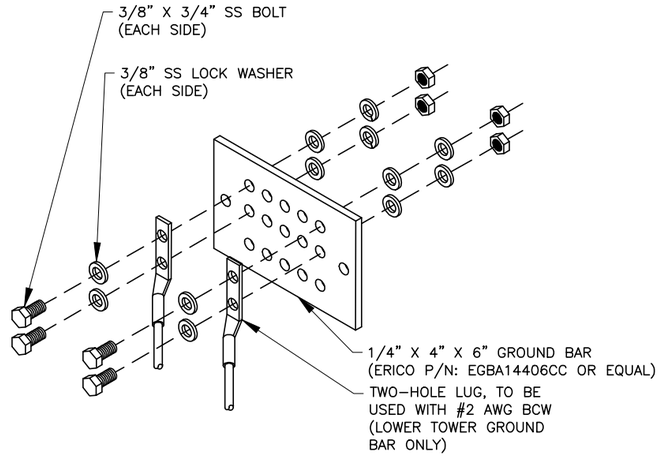


GROUND KIT NOTES:

1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
2. CONTRACTOR SHALL PROVIDE WEATHERPROOFING KIT (ANDREW PART NUMBER 221213) AND INSTALL/TAPE PER MANUFACTURER'S SPECIFICATIONS.

2 CABLE GROUND KIT CONNECTION DETAIL

SCALE: N.T.S. RE: 30/GN1



GROUND BAR NOTES:

1. GROUND BAR KITS COME WITH ALL HARDWARE, NUTS, BOLTS, WASHERS, ETC. EXCEPT THE STRUCTURAL MOUNTING MEMBER(S).
2. GROUND BAR TO BE BONDED DIRECTLY TO TOWER.

3 TOWER GROUND BAR DETAIL

SCALE: N.T.S. RE: 30/GN1

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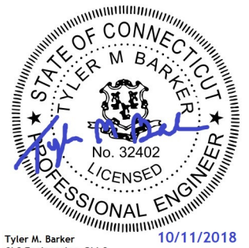

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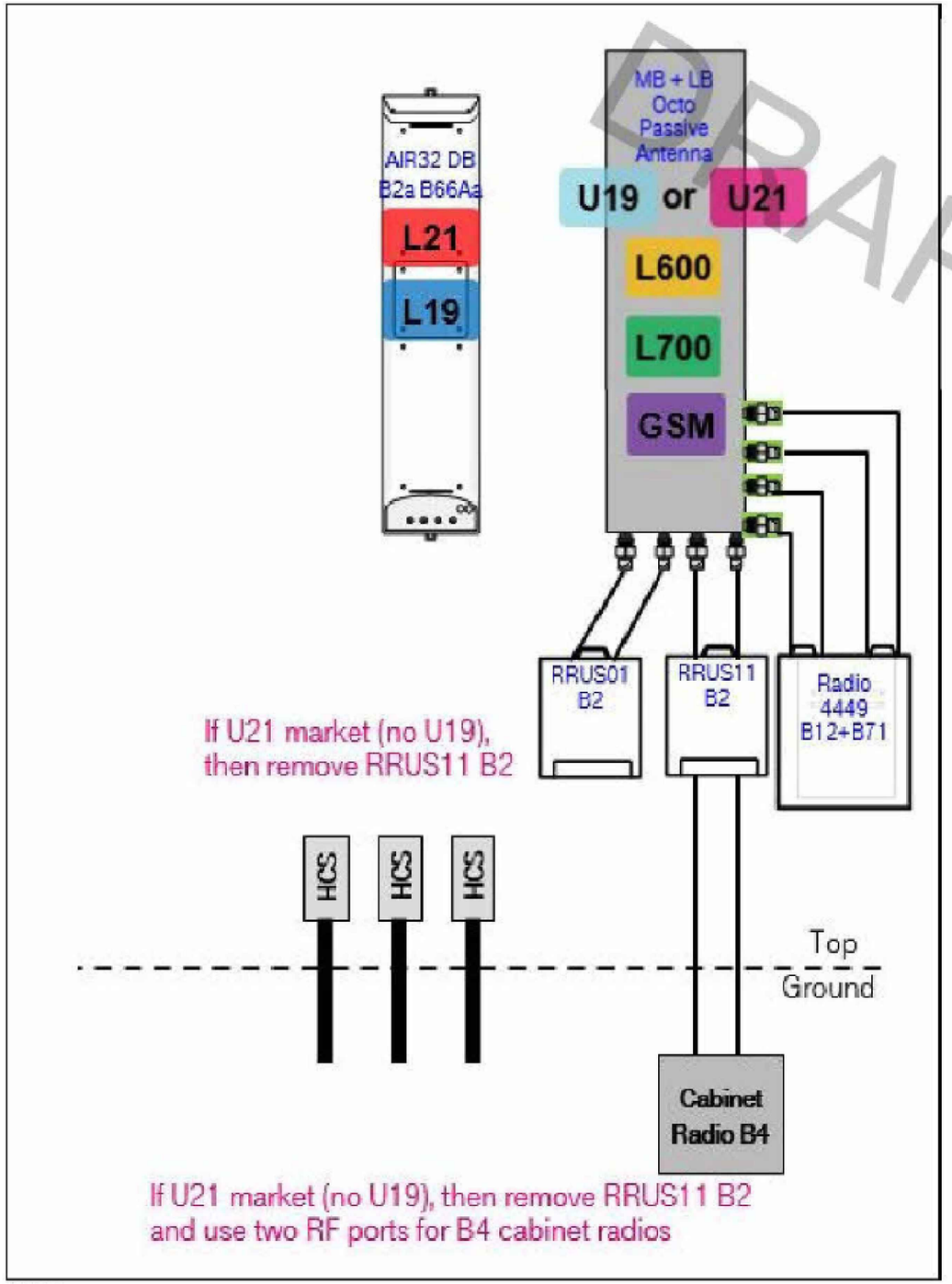
SHEET TITLE

EQUIPMENT DETAILS

SHEET NUMBER

A3



1 TYPICAL PLUMBING DIAGRAM
SCALE: N.T.S.

RE: 30/GN1

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STATE OF CONNECTICUT
TYLER M BARKER
No. 32402
LICENSED
PROFESSIONAL ENGINEER

Tyler M. Barker
CLS Engineering, PLLC
Director of Engineering
PE # 32402 Exp. 1/31/2019
COA # PEC.001833 Exp. 8/14/2019

10/11/2018

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STRATFORD, CT 06614-3715

SHEET TITLE
PLUMBING DIAGRAM

SHEET NUMBER
A4

T:\AMERICAN TOWER\41123 - ATC AZP A+E\283420-12598484\00 - A&E (PHASE 1)\41123 283420 CTFF310D.DWG

Kyle Richers

From: UPS Quantum View <pkginfo@ups.com>
Sent: Tuesday, October 23, 2018 4:02 PM
To: krichers@transcendwireless.com
Subject: UPS Exception Notification, Reference Number 1: CTFF310D CSC PO

The status of your package has changed.

Exception Reason:	The receiver was not available at the time of the final delivery attempt.

Change Delivery | Manage Preferences | View Delivery Planner

At the request of TRANSCEND WIRELESS, this notice alerts you that the status of the shipment listed below has changed.

Signature Required:	A signature is required for package delivery

Shipment Detail

Tracking Number:	1ZV257424291664470
Ship To:	Stonybrook Management LLC 124 Knapp Street EASTON, CT 066121078 US
UPS Service:	UPS GROUND
Package Weight:	1.0 LBS

Kyle Richers

From: UPS Quantum View <pkginfo@ups.com>
Sent: Monday, October 22, 2018 10:05 AM
To: krichers@transcendwireless.com
Subject: UPS Delivery Notification, Reference Number 1: CTFF310D CSC TO

Your package has been delivered.

Delivery Date: Monday, 10/22/2018
Delivery Time: 09:57 AM

At the request of TRANSCEND WIRELESS this notice alerts you that the status of the shipment listed below has changed.

Shipment Detail

Tracking Number:	1ZV257424291874467
Ship To:	American Tower Corporation 10 PRESIDENTIAL WAY WOBURN, MA 01801 US
UPS Service:	UPS GROUND
Number of Packages:	1
Weight:	1.0 LBS
Delivery Location:	OFFICE ANCRI
Signature Required:	A signature is required for package delivery
Reference Number 1:	CTFF310D CSC TO

Download the UPS mobile app

Kyle Richers

From: UPS Quantum View <pkginfo@ups.com>
Sent: Friday, October 19, 2018 10:18 AM
To: krichers@transcendwireless.com
Subject: UPS Delivery Notification, Reference Number 1: CTFF310 CSC Mayor

Your package has been delivered.

Delivery Date: Friday, 10/19/2018
Delivery Time: 10:14 AM

At the request of TRANSCEND WIRELESS this notice alerts you that the status of the shipment listed below has changed.

Shipment Detail

Tracking Number:	1ZV257424293906446
Ship To:	Laura Hoydick Town of Stratford 2725 MAIN ST STRATFORD, CT 06615 US
UPS Service:	UPS GROUND
Number of Packages:	1
Weight:	1.0 LBS
Delivery Location:	OFFICE KAT
Signature Required:	A signature is required for package delivery
Reference Number 1:	CTFF310 CSC Mayor

Download the UPS mobile app

Kyle Richers

From: UPS Quantum View <pkginfo@ups.com>
Sent: Friday, October 19, 2018 10:18 AM
To: krichers@transcendwireless.com
Subject: UPS Delivery Notification, Reference Number 1: CTFF310D CSC ZO

Your package has been delivered.

Delivery Date: Friday, 10/19/2018
Delivery Time: 10:14 AM

At the request of TRANSCEND WIRELESS this notice alerts you that the status of the shipment listed below has changed.

Shipment Detail

Tracking Number:	1ZV257424291488456
Ship To:	John Rusatsky Town of Stratford 2725 MAIN ST STRATFORD, CT 06615 US
UPS Service:	UPS GROUND
Number of Packages:	1
Weight:	1.0 LBS
Delivery Location:	OFFICE KAT
Signature Required:	A signature is required for package delivery
Reference Number 1:	CTFF310D CSC ZO

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