



Jon Ritter

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2/1/2016

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

**Re: Notice of Exempt Modification
20 Post Office Lane, Westport CT 06880
41.123203/--73.3167055**

Dear Ms. Bachman:

T-Mobile Northeast, LLC (T-Mobile) currently maintains seven (7) antennas at the ninety (90') foot level of the existing one hundred and fifty one (151') foot Monopole at 20 Post Office Lane, Westport, CT. The monopole tower is owned by American Tower Corporation. The property is owned by American Tower Corporation too. T-Mobile now intends to add Three (3) new 700MHz antennas. These antennas would be installed at the ninety (90') foot level of the tower.

This facility was originally approved by the Connecticut Siting Council. The original zoning decision, (docket 166) dated August 29th, 1995 has been included with this filing. The decision includes the conditions that the tower shall not exceed one hundred and thirty (130') feet, approved as existing at up at 151' in Petition 600, dated January 8th, 2003.

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 the Chief Elected Official, First Selectmen, Jim Marpe for the Town of Westport, as well as the property owner and the tower owner.

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

- 1) The proposed modification will not result in an increase in the height of the existing structure.
- 2) The modifications will not require an extension of the site boundary.
- 3) The proposed modification will not increase the noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.
- 4) The operation and replacement of 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 modifications 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 Northeast LLC 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,

Jonathan H Ritter

Jon Ritter

On behalf of American Tower Corporation
c/o Tower Resource Management, Inc.
16 Chestnut Street, Suite 420
Foxboro, MA 02035
774-264-0016
jritter@trmcom.com

cc: **Chief Elected Official, First Selectmen, Jim Marpe, Town of Westport**
American Tower Corporation
American Towers, Inc.

Exhibit 1

Site Plan

Exhibit 2
Power Density Report

Exhibit 3

Structural Analysis



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

T-Mobile Existing Facility

Site ID: CT11012B

Westport/ I-95/ X18/ Sher
20 Post Office Lane
Westport, CT 06880

February 1, 2016

EBI Project Number: 6216000612

| Site Compliance Summary | |
|--|------------------|
| Compliance Status: | COMPLIANT |
| Site total MPE% of FCC general public allowable limit: | 16.78 % |



February 1, 2016

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

Emissions Analysis for Site: **CT11012B – Westport/ I-95/ X18/ Sher**

EBI Consulting was directed to analyze the proposed T-Mobile facility located at **20 Post Office Lane, Westport, 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 97-01 and ANSI/IEEE Std C95.1. The FCC regulates Maximum Permissible Exposure in units of microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$). The number of $\mu\text{W}/\text{cm}^2$ 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 public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general public would always be considered under this category when exposure is not employment related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area.

Public exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$). The general population exposure limit for the 700 MHz Band is approximately 467 $\mu\text{W}/\text{cm}^2$, and the general population exposure limit for the PCS and AWS bands is 1000 $\mu\text{W}/\text{cm}^2$. 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 **20 Post Office Lane, Westport, 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 manufacturer's supplied specifications, minus 10 dB, 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) 2 GSM / UMTS channels (PCS Band - 1900 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 30 Watts per Channel
- 2) 2 UMTS channels (AWS Band – 2100 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 30 Watts per Channel.
- 3) 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.
- 4) 1 LTE channel (700 MHz Band) was considered for each sector of the proposed installation. This channel has a transmit power of 30 Watts.
- 5) 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.

- 6) For the following calculations the sample point was the top of a six foot person standing at the base of the tower. The maximum gain of the antenna per the antenna manufacturers supplied specifications minus 10 dB 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.
- 7) The antennas used in this modeling are the **Ericsson AIR21 (B4A/B2P & B2A/B4P)** for 1900 MHz (PCS) and 2100 MHz (AWS) channels and the **Commscope LNX-6515DS-VTM** for 700 MHz channels. This is based on feedback from the carrier with regards to anticipated antenna selection. The **Ericsson AIR21 (B4A/B2P & B2A/B4P)** have a maximum gain of **15.9 dBd** at their main lobe. The **Commscope LNX-6515DS-VTM** has a maximum gain of **14.6 dBd** at its main lobe. The maximum gain of the antenna per the antenna manufacturers supplied specifications, minus 10 dB, 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.
- 8) The antenna mounting height centerline of the proposed antennas is **90 feet** above ground level (AGL).
- 9) Emissions values for additional carriers were taken from the Connecticut Siting Council active database. Values in this database are provided by the individual carriers themselves.

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



T-Mobile Site Inventory and Power Data

| Sector: | A | Sector: | B | Sector: | C |
|--------------------|-----------------------------------|--------------------|-----------------------------------|--------------------|-----------------------------------|
| Antenna #: | 1 | Antenna #: | 1 | Antenna #: | 1 |
| Make / Model: | Ericsson AIR21 B4A/B2P | Make / Model: | Ericsson AIR21 B4A/B2P | Make / Model: | Ericsson AIR21 B4A/B2P |
| Gain: | 15.9 dBd | Gain: | 15.9 dBd | Gain: | 15.9 dBd |
| Height (AGL): | 90 | Height (AGL): | 90 | Height (AGL): | 90 |
| Frequency Bands | 2100 MHz (AWS) | Frequency Bands | 2100 MHz (AWS) | Frequency Bands | 2100 MHz (AWS) |
| Channel Count | 2 | Channel Count | 2 | Channel Count | 2 |
| Total TX Power(W): | 120 | Total TX Power(W): | 120 | Total TX Power(W): | 120 |
| ERP (W): | 4,668.54 | ERP (W): | 4,668.54 | ERP (W): | 4,668.54 |
| Antenna A1 MPE% | 2.38 | Antenna B1 MPE% | 2.38 | Antenna C1 MPE% | 2.38 |
| Antenna #: | 2 | Antenna #: | 2 | Antenna #: | 2 |
| Make / Model: | Ericsson AIR21 B2A/B4P | Make / Model: | Ericsson AIR21 B2A/B4P | Make / Model: | Ericsson AIR21 B2A/B4P |
| Gain: | 15.9 dBd | Gain: | 15.9 dBd | Gain: | 15.9 dBd |
| Height (AGL): | 90 | Height (AGL): | 90 | Height (AGL): | 90 |
| 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): | 120 | Total TX Power(W): | 120 | Total TX Power(W): | 120 |
| ERP (W): | 4,668.54 | ERP (W): | 4,668.54 | ERP (W): | 4,668.54 |
| Antenna A2 MPE% | 2.38 | Antenna B2 MPE% | 2.38 | Antenna C2 MPE% | 2.38 |
| Antenna #: | 3 | Antenna #: | 3 | Antenna #: | 3 |
| Make / Model: | Commscope LNX- 6515DS-VTM | Make / Model: | Commscope LNX- 6515DS-VTM | Make / Model: | Commscope LNX- 6515DS-VTM |
| Gain: | 14.6 dBd | Gain: | 14.6 dBd | Gain: | 14.6 dBd |
| Height (AGL): | 90 | Height (AGL): | 90 | Height (AGL): | 90 |
| Frequency Bands | 700 MHz | Frequency Bands | 700 MHz | Frequency Bands | 700 MHz |
| Channel Count | 1 | Channel Count | 1 | Channel Count | 1 |
| Total TX Power(W): | 30 | Total TX Power(W): | 30 | Total TX Power(W): | 30 |
| ERP (W): | 865.21 | ERP (W): | 865.21 | ERP (W): | 865.21 |
| Antenna A3 MPE% | 0.94 | Antenna B3 MPE% | 0.94 | Antenna C3 MPE% | 0.94 |

| Site Composite MPE % | |
|---------------------------|----------------|
| Carrier | MPE% |
| T-Mobile (Per Sector Max) | 5.70 % |
| AT&T | 1.85 % |
| Enertrac | 0.00 % |
| Verizon Wireless | 6.23 % |
| MetroPCS | 1.24 % |
| Clearwire | 0.08 % |
| Sprint | 1.15 % |
| Nextel | 0.53 % |
| Site Total MPE %: | 16.78 % |

| | |
|--------------------------|----------------|
| T-Mobile Sector 1 Total: | 5.70 % |
| T-Mobile Sector 2 Total: | 5.70 % |
| T-Mobile Sector 3 Total: | 5.70 % |
| Site Total: | 16.78 % |

| T-Mobile _per sector | # Channels | Watts ERP (Per Channel) | Height (feet) | Total Power Density ($\mu\text{W}/\text{cm}^2$) | Frequency (MHz) | Allowable MPE ($\mu\text{W}/\text{cm}^2$) | Calculated % MPE |
|----------------------------------|------------|-------------------------|---------------|---|-----------------|---|------------------|
| T-Mobile 2100 MHz (AWS) LTE | 2 | 2334.27 | 90 | 23.79 | 2100 | 1000 | 2.38 % |
| T-Mobile 1900 MHz (PCS) GSM/UMTS | 2 | 1167.14 | 90 | 11.89 | 1900 | 1000 | 1.19 % |
| T-Mobile 2100 MHz (AWS) UMTS | 2 | 1167.14 | 90 | 11.89 | 2100 | 1000 | 1.19 % |
| T-Mobile 700 MHz LTE | 1 | 865.21 | 90 | 4.41 | 700 | 467 | 0.94 % |
| | | | | | | Total: | 5.70% |

Summary

All calculations performed for this analysis yielded results that were **within** the allowable limits for general public 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 public exposure to RF Emissions are shown here:

| T-Mobile Sector | Power Density Value (%) |
|------------------------------|-------------------------|
| Sector 1: | 5.70 % |
| Sector 2: | 5.70 % |
| Sector 3 : | 5.70 % |
| T-Mobile Per Sector Maximum: | 5.70 % |
| | |
| Site Total: | 16.78 % |
| | |
| Site Compliance Status: | COMPLIANT |

The anticipated composite MPE value for this site assuming all carriers present is **16.78%** of the allowable FCC established general public limit sampled at the ground level. This is based upon values listed in the Connecticut Siting Council database for existing carrier emissions.

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



Scott Heffernan
RF Engineering Director

EBI Consulting

21 B Street
Burlington, MA 01803

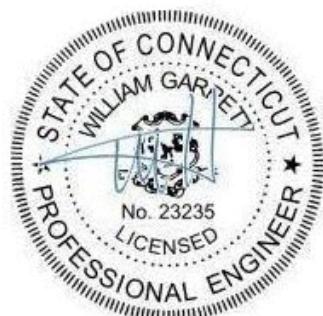


Structural Analysis Report

Structure : 142 ft Monopole
ATC Site Name : WSPT - South, CT
ATC Site Number : 302511
Engineering Number : 63916524
Proposed Carrier : T-Mobile
Carrier Site Name : N/A
Carrier Site Number : CT11012B
Site Location : 20 Post Office Lane
Westport, CT 06880-6226
41.123444,-73.313100
County : Fairfield
Date : January 25, 2016
Max Usage : 86%
Result : Pass

Reviewed by:
William Garrett, PE
Chief Engineer

Prepared By:
Santhosha Shanbhogue
Structural Engineer III



Jan 25 2016 2:48 PM

COA: PEC.0001553



Eng. Number 63916524

January 25, 2016

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Eng. Number 63916524

January 25, 2016

Page 1

Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 142 ft monopole to reflect the change in loading by T-Mobile.

Supporting Documents

| | |
|----------------------------|--|
| Tower Drawings | EEI Job #3502, dated March 2, 1998 |
| Foundation Drawing | Walker Job #W0105-988RE, dated August 2, 2001 |
| Geotechnical Report | MB&A Project #011105, dated July 17, 2001 |
| Modifications | EEI Project #11753, dated July 25, 2003 SpectraSite Drawing #CT-0047-M1, dated August 12, 2005 ATC Job #42046633, dated October 16, 2008 ATC Job #46844332/46993332, dated April 15, 2011 |

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: | 110 mph (3-Second Gust) |
| Basic Wind Speed w/ Ice: | 50 mph (3-Second Gust) w/ 3/4" radial ice concurrent |
| Code: | ANSI/TIA-222-G / 2003 IBC w/ 2005 CT Supplement & 2009 CT Amendment |
| Structure Class: | II |
| Exposure Category: | B |
| Topographic Category: | 1 |
| Crest Height: | 0 ft |
| Spectral Response: | $S_s = 0.22, S_1 = 0.07$ |
| 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.



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January 25, 2016

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Existing and Reserved Equipment

| Elevation ¹ (ft) | | Qty | Antenna | Mount Type | Lines | Carrier |
|-----------------------------|-------|-------|--|-----------------------|--|---------------|
| Mount | RAD | | | | | |
| 136.0 | 139.0 | 6 | Generic RCU (Remote Control Unit) | Flush | (6) 1 5/8" Coax (1) 3/8" Coax | Metro PCS |
| | | 3 | Kathrein 742-218 / AP20-1940/045D/ADT/XP | | | |
| 131.0 | 131.0 | 6 | Powerwave LGP219nn | Platform w/ Handrails | (12) 1 1/4" Coax (2) 0.65" 8 AWG 2C (1) 0.28" RG-6 | AT&T Mobility |
| | | 3 | Powerwave P65-16-XLH-RR | | | |
| | | 6 | Powerwave LGP21401 | | | |
| | | 1 | Raycap DC6-48-60-18-8F ("Squid") | | | |
| | | 6 | Ericsson RRUS 11 (Band 4) | | | |
| | | 6 | Powerwave 7770.00 | | | |
| 120.0 | 120.0 | 2 | DragonWave Horizon Compact | Platform w/ Handrails | (6) 5/16" Coax (4) 1 1/4" Hybriflex (2) 1/2" Coax (1) 3/8" Coax | Clearwire |
| | | 3 | NextNet BTS-2500 | | | |
| | | 3 | Argus LLPX310R | | | |
| | | 2 | DragonWave A-ANT-18G-2-C | | | |
| | | 3 | Alcatel-Lucent 800MHz 2X50W RRh w/ Filter | | | |
| | | 3 | Alcatel-Lucent 1900MHz 4x45 RRH | | | |
| | | 3 | Alcatel-Lucent TD-RRH8x20-25 w/ Solar Shield | | | |
| | | 3 | RFS RFS APXV9TM14-ALU-I20 | | | |
| | | 3 | RFS APXVSPP18-C-A20 | | | |
| 110.0 | 110.0 | 12 | Swedcom ALP 9011-Din | Platform w/ Handrails | (12) 1 5/8" Coax | |
| 100.0 | 100.0 | 104.0 | GPS | Platform w/ Handrails | (12) 1 5/8" Coax (1) 1 5/8" Hybriflex (1) 1/2" Coax | Verizon |
| | | 6 | RFS FD9R6004/1C-3L | | | |
| | | 3 | Alcatel-Lucent RRH2x40-AWS | | | |
| | | 3 | Rymsa MGD3-800TX | | | |
| | | 3 | Antel BXA-171063/12CF_2 FP | | | |
| | | 1 | RFS DB-T1-6Z-8AB-0Z | | | |
| | | 3 | Antel BXA-70080/6CF_ | | | |
| | | 3 | Powerwave P65-16-XL-2 | | | |
| 90.0 | 90.0 | 4 | RFS ATMAA1412D-1A20 | Platform w/ Handrails | (14) 1 5/8" Coax (1) 1 1/4" Fiber | T-Mobile |
| | | 4 | Ericsson AIR 21, 1.3 M, B2A B4P | | | |
| | | 3 | Ericsson AIR 21, 1.3M, B4A B2P | | | |
| 80.0 | 80.0 | 2 | 6' Omni | Stand-Off | (4) 1/2" Coax | Enertrac |
| | | 2 | Diamond X50A | | | |
| 70.0 | 70.0 | 1 | PCTEL GPS-TMG-HR-26N | Stand-Off | (2) 1/2" Coax | Sprint Nextel |

Equipment to be Removed

| Elevation ¹ (ft) | | Qty | Antenna | Mount Type | Lines | Carrier |
|--|-----|-----|---------|------------|-------|---------|
| Mount | RAD | | | | | |
| No loading considered as to be removed | | | | | | |



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January 25, 2016

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Proposed Equipment

| Elevation ¹ (ft) | | Qty | Antenna | Mount Type | Lines | Carrier |
|-----------------------------|------|-----|-----------------------|-----------------------|-------|----------|
| Mount | RAD | | | | | |
| 90.0 | 90.0 | 3 | Ericsson RRUS 11 B12 | Platform w/ Handrails | - | T-Mobile |
| | | 3 | Andrew LNX-6515DS-VTM | | | |

¹Mount 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).

Structure Usages

| Structural Component | Controlling Usage | Pass/Fail |
|----------------------|-------------------|-----------|
| Anchor Bolts | 56% | Pass |
| Shaft | 86% | Pass |
| Base Plate | 46% | Pass |
| Reinforcement | 77% | Pass |

Foundations

| Reaction Component | Analysis Reactions | % of Usage |
|--------------------|--------------------|------------|
| Moment (Kips-Ft) | 3,705.4 | 61% |
| Shear (Kips) | 41.3 | 61% |

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) (°) |
|------------------------|--------------------------|-----------|-----------------|---------------------|
| 120.0 | DragonWave A-ANT-18G-2-C | Clearwire | 1.188 | 1.186 |
| 90.0 | Ericsson RRUS 11 B12 | T-Mobile | 0.629 | 0.896 |
| | Andrew LNX-6515DS-VTM | | | |

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



Standard Conditions

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

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

It is the responsibility of the client to ensure that the information provided to A.T. Engineering Service, PLLC and used in the performance of our engineering services is correct and complete. In the absence of information to the contrary, we assume that all structures were constructed in accordance with the drawings and specifications and that their capacity has not significantly changed from the "as new" condition.

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

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

Job Information

Pole : 302511 Code: ANSI/TIA-222-G

Description : 142 ft EEI Monopole

Client : T-MOBILE

Struct Class : II

Location : WSPT - South, CT

Shape : 12 Sides

Exposure : B

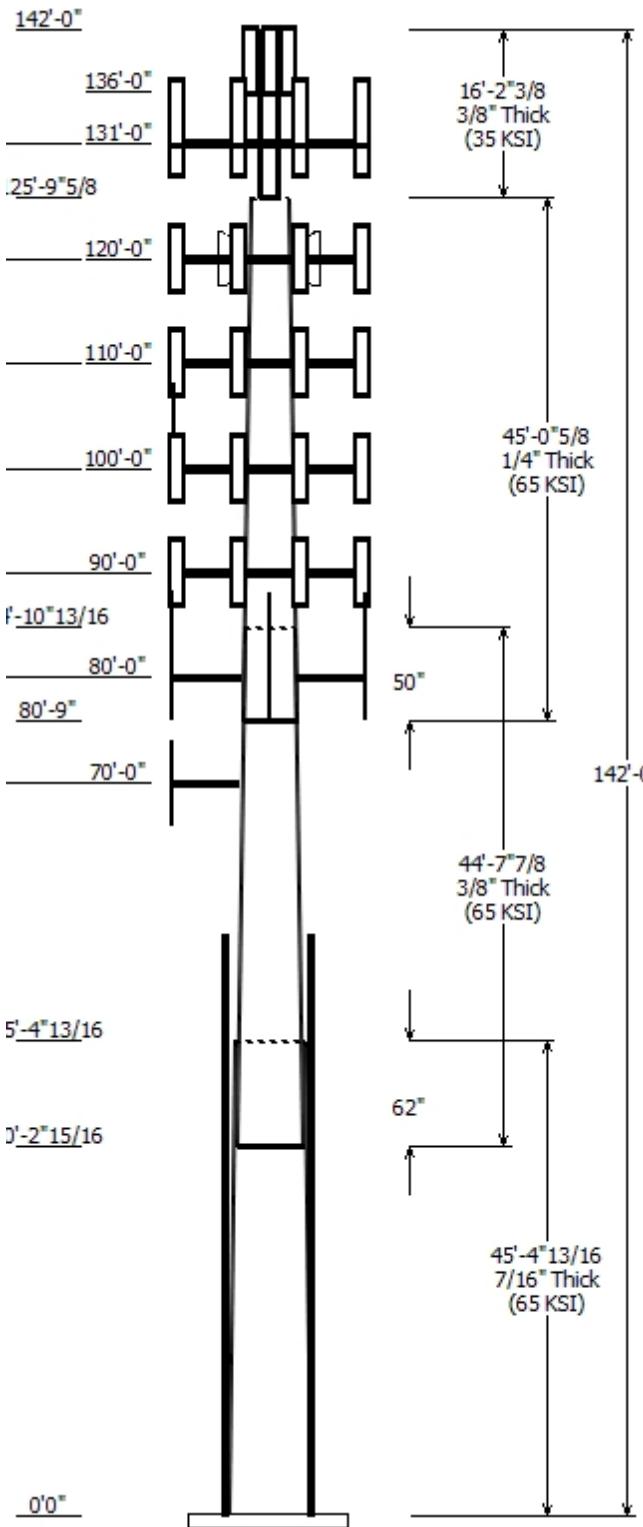
Height : 142.00 (ft)

Topo : 1

Base Elev (ft): 0.00

Taper: 0.21263/(in/ft)

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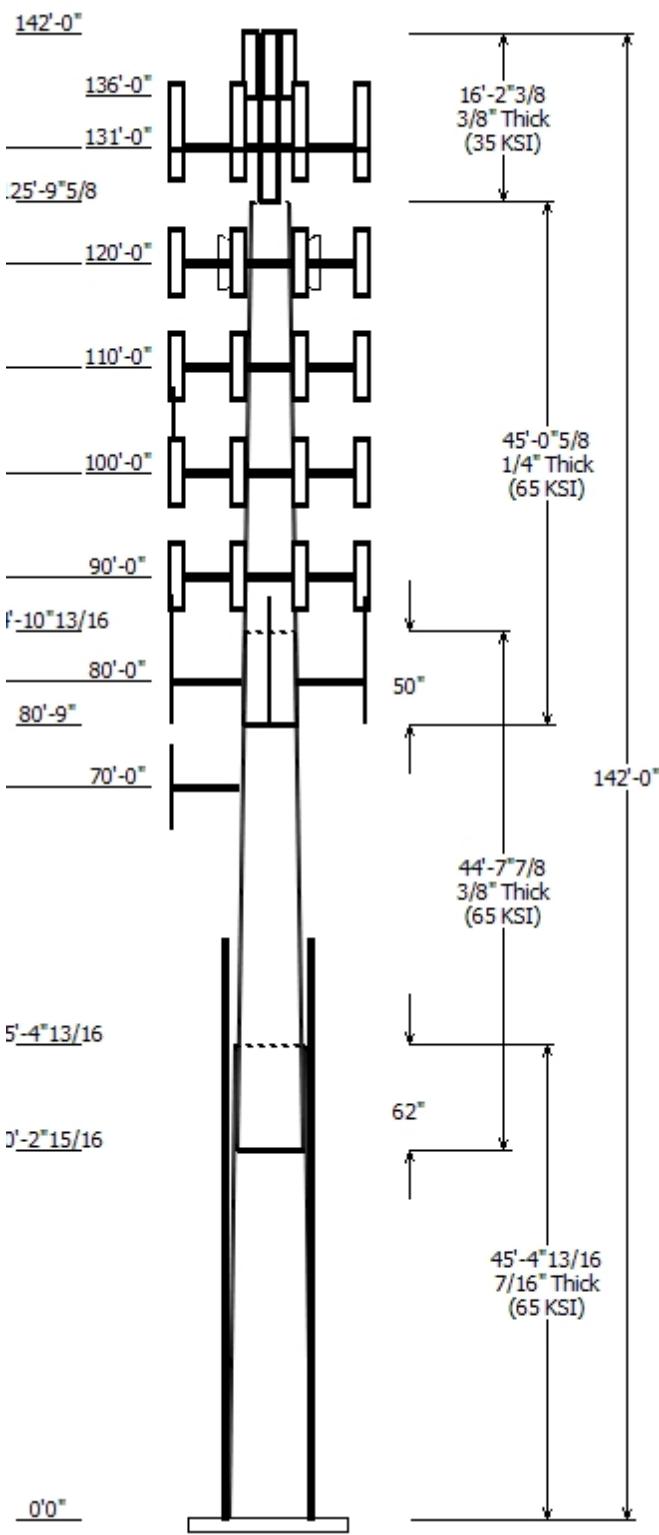


Sections Properties

| Shaft Section | Length (ft) | Diameter (in) Across Flats | Overlap Length (in) | Steel Grade |
|---------------|-------------|----------------------------|---------------------|------------------|
| | | Top | Bottom | |
| 1 | 45.400 | 35.34 | 45.00 | 0.438 |
| 2 | 44.656 | 27.69 | 37.19 | 0.375 Slip Joint |
| 3 | 45.052 | 19.50 | 29.08 | 0.250 Slip Joint |
| 4 | 16.200 | 10.75 | 10.75 | 0.375 Butt Joint |

Discrete Appurtenance

| Attach Elev (ft) | Force Elev (ft) | Qty | Description |
|------------------|-----------------|-----|--------------------------------|
| 136.000 | 139.000 | 6 | Generic RCU (Remote Control) |
| 136.000 | 139.000 | 3 | Kathrein Scala 742-218 / AP20- |
| 131.000 | 131.000 | 6 | Ericsson RRUS 11 (Band 4) |
| 131.000 | 131.000 | 1 | Raycap DC6-48-60-18-8F |
| 131.000 | 136.000 | 3 | Powerwave Allgon P65-16- |
| 131.000 | 136.000 | 6 | Powerwave Allgon LGP219nn |
| 131.000 | 131.000 | 6 | Powerwave Allgon LGP21401 |
| 131.000 | 131.000 | 6 | Powerwave Allgon 7770.00 |
| 131.000 | 131.000 | 1 | Flat Platform w/ Handrails |
| 120.000 | 120.000 | 3 | RFS RFS APXV9TM14-ALU-I20 |
| 120.000 | 120.000 | 3 | Alcatel-Lucent TD-RRH8x20-25 |
| 120.000 | 120.000 | 3 | Alcatel-Lucent 800 MHz 2X50W |
| 120.000 | 120.000 | 3 | Alcatel-Lucent 1900 MHz 4x45 |
| 120.000 | 120.000 | 3 | RFS APXVSPP18-C-A20 |
| 120.000 | 120.000 | 3 | Argus LLPX310R |
| 120.000 | 120.000 | 2 | DragonWave Horizon Compact |
| 120.000 | 120.000 | 2 | DragonWave A-ANT-18G-2-C |
| 120.000 | 120.000 | 3 | NextNet BTS-2500 |
| 120.000 | 120.000 | 1 | Flat Platform w/ Handrails |
| 110.000 | 110.000 | 12 | Swedcom ALP 9011-Din |
| 110.000 | 110.000 | 1 | Flat Platform w/ Handrails |
| 100.000 | 104.000 | 1 | GPS |
| 100.000 | 100.000 | 3 | Antel BXA-171063/12CF_2 FP |
| 100.000 | 100.000 | 3 | Antel BXA-70080/6CF_ |
| 100.000 | 100.000 | 1 | RFS DB-T1-6Z-8AB-0Z |
| 100.000 | 100.000 | 3 | Alcatel-Lucent RRH2x40-AWS |
| 100.000 | 100.000 | 6 | RFS FD9R6004/1C-3L |
| 100.000 | 100.000 | 3 | Powerwave Allgon P65-16-XL- |
| 100.000 | 100.000 | 3 | Rymsa MGD3-800TX |
| 100.000 | 100.000 | 1 | Flat Platform w/ Handrails |
| 90.000 | 90.000 | 3 | Andrew LNX-6515DS-VTM |
| 90.000 | 90.000 | 3 | Ericsson RRUS 11 B12 |
| 90.000 | 90.000 | 3 | Ericsson AIR 21, 1.3M, B4A B2P |
| 90.000 | 90.000 | 4 | Ericsson AIR 21, 1.3 M, B2A B4 |
| 90.000 | 90.000 | 4 | RFS ATMAA1412D-1A20 |
| 90.000 | 90.000 | 1 | Flat Platform w/ Handrails |
| 80.000 | 80.000 | 2 | 6' Omni |
| 80.000 | 80.000 | 2 | Stand-Offs |
| 80.000 | 83.000 | 2 | Diamond X50A |
| 70.000 | 70.000 | 1 | Stand-Off |
| 70.000 | 70.000 | 1 | PCTEL GPS-TMG-HR-26N |



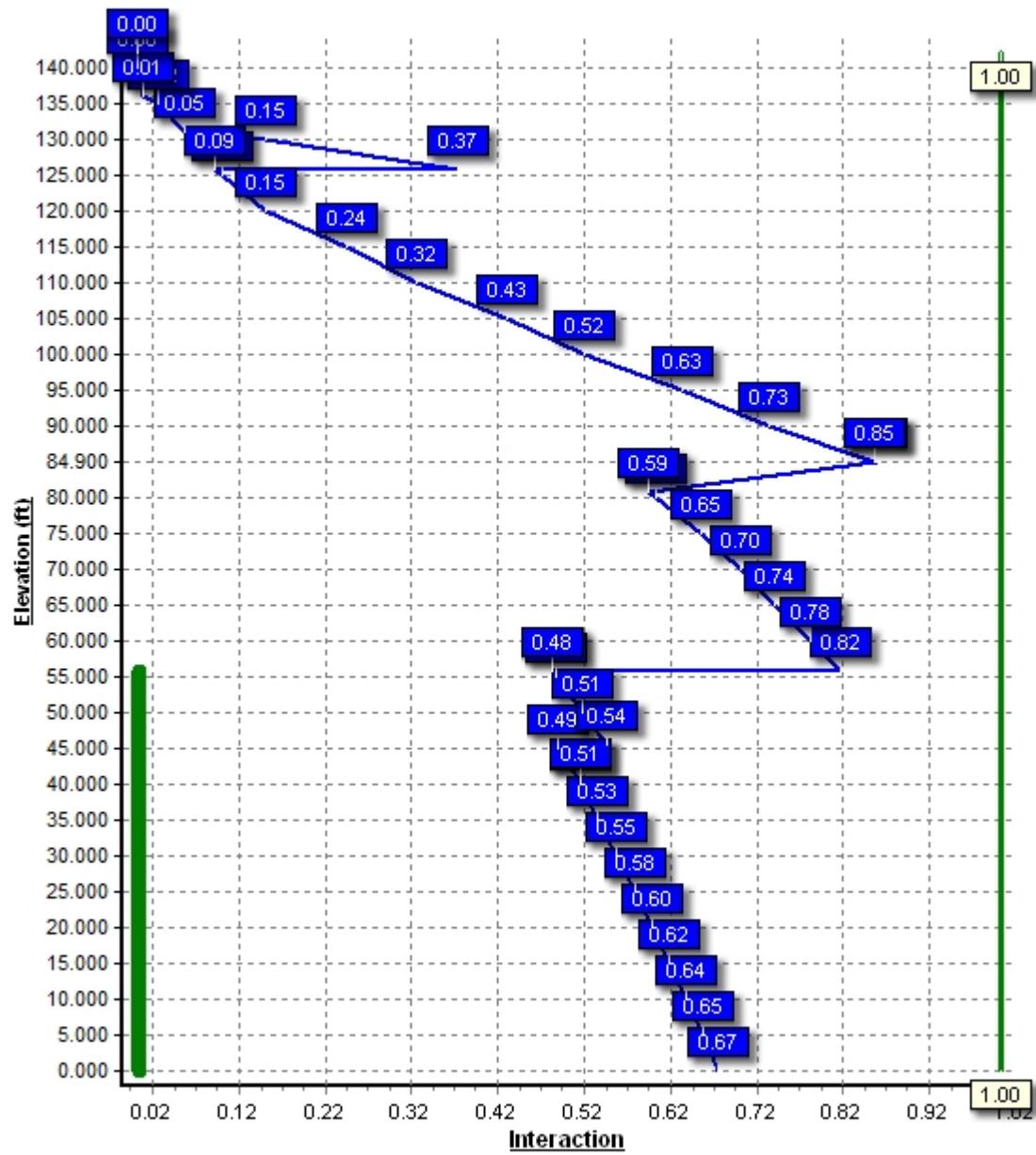
| Linear Appurtenance | | | |
|---------------------|--------|------------------|-----------------|
| From | To | Description | Exposed To Wind |
| 0.000 | 63.000 | DYWIDAG | Yes |
| 0.000 | 70.000 | 1/2" Coax | No |
| 0.000 | 80.000 | 1/2" Coax | No |
| 0.000 | 80.000 | 1/2" Coax | No |
| 0.000 | 90.000 | 1 1/4" Fiber | No |
| 0.000 | 90.000 | 1 5/8" Coax | Yes |
| 0.000 | 100.0 | 1 5/8" Coax | No |
| 0.000 | 100.0 | 1 5/8" Hybriflex | No |
| 0.000 | 100.0 | 1/2" Coax | No |
| 0.000 | 110.0 | 1 5/8" Coax | No |
| 0.000 | 120.0 | 1 1/4" Hybriflex | No |
| 0.000 | 120.0 | 1/2" Coax | No |
| 0.000 | 120.0 | 2" Conduit | No |
| 0.000 | 120.0 | 5/16" Coax | No |
| 0.000 | 131.0 | 0.28" RG-6 | No |
| 0.000 | 131.0 | 0.65" 8 AWG 2C | No |
| 0.000 | 131.0 | 1 1/4" Coax | No |
| 0.000 | 136.0 | 1 5/8" Coax | Yes |
| 0.000 | 136.0 | 3/8" Coax | No |

| Load Cases | |
|-------------------------|--|
| 1.2D + 1.6W | 110 mph with No Ice |
| 0.9D + 1.6W | 110 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 | 3705.43 | 41.26 | 50.04 |
| 0.9D + 1.6W | 3613.52 | 40.03 | 37.51 |
| 1.2D + 1.0Di + 1.0Wi | 668.08 | 6.95 | 82.17 |
| (1.2 + 0.2Sds) * DL + E ELF M | 191.30 | 1.79 | 50.01 |
| (1.2 + 0.2Sds) * DL + E EMAM | 143.62 | 1.65 | 50.01 |
| (0.9 - 0.2Sds) * DL + E ELF M | 188.67 | 1.79 | 34.20 |
| (0.9 - 0.2Sds) * DL + E EMAM | 141.46 | 1.64 | 34.20 |
| 1.0D + 1.0W | 677.45 | 7.46 | 41.77 |

| Dish Deflections | | | |
|------------------|------------------|-----------------|----------------|
| Load Case | Attach Elev (ft) | Deflection (in) | Rotation (deg) |
| 1.0D + 1.0W | 120.00 | 14.255 | 1.186 |

Load Case : 1.2D + 1.6W
Max Ratio 107.48% at 84.9ft



Site Number: 302511

Code: ANSI/TIA-222-G

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Site Name: WSPT - South, CT

Engineering Number: 63916524

1/25/2016 11:02:26 AM

Customer: T-MOBILE

Analysis Parameters

| | | | |
|--------------------|-------------------------|---------------------|-------|
| Location: | Fairfield County, CT | Height (ft): | 142 |
| Code: | ANSI/TIA-222-G | Base Diameter (in): | 45.00 |
| Shape: | 12 Sides. Sect 4: Round | Top Diameter (in): | 10.75 |
| Pole Type: | Custom | Taper (in/ft) : | 0.213 |
| Pole Manufacturer: | EEI | | |

Ice & Wind Parameters

| | | | |
|-----------------------|--------|--------------------------------|---------|
| Structure Class: | II | Design Wind Speed Without Ice: | 110 mph |
| Exposure Category: | B | Design Wind Speed With Ice: | 50 mph |
| Topographic Category: | 1 | Operational Wind Speed: | 60 mph |
| Crest Height: | 0.0 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): 2.14

| | | | | | |
|-----------------------|-------|-------------------|-------|---------------------|-------|
| T _L (sec): | 6 | p: | 1.3 | C _s : | 0.033 |
| S _s : | 0.221 | S ₁ : | 0.066 | C _s Max: | 0.033 |
| F _a : | 1.600 | F _v : | 2.400 | C _s Min: | 0.030 |
| S _{ds} : | 0.236 | S _{d1} : | 0.106 | | |

Load Cases

1.2D + 1.6W

110 mph with No Ice

0.9D + 1.6W

110 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 ELF M

Seismic Equivalent Lateral Forces Method

(1.2 + 0.2Sds) * DL + E EMAM

Seismic Equivalent Modal Analysis Method

(0.9 - 0.2Sds) * DL + E ELF M

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: 302511

Code: ANSI/TIA-222-G

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Site Name: WSPT - South, CT

Engineering Number: 63916524

1/25/2016 11:02:26 AM

Customer: T-MOBILE

Shaft Section Properties

| Sect Info | Length (ft) | Thick (in) | Fy (ksi) | Joint Type | Joint Len (in) | Weight (lb) | Bottom | | | | | | Top | | | | | | Taper (in/ft) |
|--------------|-------------|------------|----------|------------|----------------|-------------|----------|-----------|-------------------------|-----------------------|-----------|-----------|----------|-----------|-------------------------|-----------------------|-----------|-----------|---------------|
| | | | | | | | Dia (in) | Elev (ft) | Area (in ²) | Ix (in ⁴) | W/t Ratio | D/t Ratio | Dia (in) | Elev (ft) | Area (in ²) | Ix (in ⁴) | W/t Ratio | D/t Ratio | |
| 1-12 | 45.400 | 0.4375 | 65 | Slip | 0.00 | 8,648 | 45.00 | 0.00 | 62.78 | 15912.1 | 25.42 | 102.86 | 35.34 | 45.40 | 49.18 | 7649.3 | 19.50 | 80.79 | 0.212638 |
| 2-12 | 44.656 | 0.3750 | 65 | Slip | 61.88 | 5,884 | 37.19 | 40.24 | 44.46 | 7692.0 | 24.43 | 99.18 | 27.69 | 84.90 | 32.99 | 3143.5 | 17.65 | 73.86 | 0.212638 |
| 3-12 | 45.052 | 0.2500 | 65 | Slip | 49.81 | 2,967 | 29.08 | 80.75 | 23.21 | 2462.1 | 29.02 | 116.32 | 19.50 | 125.80 | 15.50 | 732.9 | 18.76 | 78.00 | 0.212638 |
| 4-R | 16.200 | 0.3750 | 35 | Butt | 0.00 | 674 | 10.75 | 125.80 | 12.22 | 164.6 | 0.00 | 28.67 | 10.75 | 142.00 | 12.22 | 164.6 | 0.00 | 28.67 | 0.000000 |
| Shaft Weight | | | | | | 18,173 | | | | | | | | | | | | | |

Discrete Appurtenance Properties

| Attach Elev (ft) | Description | Qty | No Ice | | | Ice | | | Distance From Face (ft) | Vert Ecc (ft) |
|------------------|-----------------------------|-----|-------------|-----------|--------------------|-------------|-----------|--------------------|-------------------------|---------------|
| | | | Weight (lb) | EPAa (sf) | Orientation Factor | Weight (lb) | EPAa (sf) | Orientation Factor | | |
| 136.00 | Generic RCU (Remote Control | 6 | 1.00 | 0.160 | 0.33 | 11.01 | 0.359 | 0.33 | 0.000 | 3.000 |
| 136.00 | Kathrein Scala 742-218 / | 3 | 22.50 | 3.850 | 0.73 | 110.51 | 4.762 | 0.73 | 0.000 | 3.000 |
| 131.00 | Ericsson RRUS 11 (Band 4) | 6 | 44.00 | 2.570 | 0.50 | 123.98 | 3.205 | 0.50 | 0.000 | 0.000 |
| 131.00 | Flat Platform w/ Handrails | 1 | 2000.00 | 39.500 | 1.00 | 3,404.39 | 58.807 | 1.00 | 0.000 | 0.000 |
| 131.00 | Powerwave Allgon 7770.00 | 6 | 35.00 | 5.510 | 0.65 | 167.80 | 6.544 | 0.65 | 0.000 | 0.000 |
| 131.00 | Powerwave Allgon LGP21401 | 6 | 14.10 | 1.100 | 0.50 | 47.10 | 1.556 | 0.50 | 0.000 | 0.000 |
| 131.00 | Powerwave Allgon LGP219nn | 6 | 5.50 | 0.230 | 0.50 | 17.84 | 0.425 | 0.50 | 0.000 | 5.000 |
| 131.00 | Powerwave Allgon P65-16- | 3 | 53.00 | 8.130 | 0.67 | 241.48 | 9.410 | 0.67 | 0.000 | 5.000 |
| 131.00 | Raycap DC6-48-60-18-8F | 1 | 31.80 | 1.280 | 1.00 | 123.18 | 2.843 | 1.00 | 0.000 | 0.000 |
| 120.00 | Alcatel-Lucent 1900 MHz | 3 | 60.00 | 2.320 | 0.50 | 152.37 | 2.975 | 0.50 | 0.000 | 0.000 |
| 120.00 | Alcatel-Lucent 800 MHz | 3 | 64.00 | 2.060 | 0.50 | 152.13 | 2.640 | 0.50 | 0.000 | 0.000 |
| 120.00 | Alcatel-Lucent TD-RRH8x20- | 3 | 70.00 | 4.050 | 0.50 | 159.37 | 5.675 | 0.50 | 0.000 | 0.000 |
| 120.00 | Argus LLPX310R | 3 | 28.60 | 4.290 | 0.63 | 133.23 | 5.166 | 0.63 | 0.000 | 0.000 |
| 120.00 | DragonWave A-ANT-18G-2-C | 2 | 27.10 | 4.690 | 0.90 | 122.53 | 5.936 | 0.90 | 0.000 | 0.000 |
| 120.00 | DragonWave Horizon | 2 | 10.60 | 0.430 | 0.33 | 39.85 | 0.653 | 0.33 | 0.000 | 0.000 |
| 120.00 | Flat Platform w/ Handrails | 1 | 2000.00 | 39.500 | 1.00 | 3,389.73 | 58.605 | 1.00 | 0.000 | 0.000 |
| 120.00 | NextNet BTS-2500 | 3 | 35.00 | 1.820 | 0.50 | 91.05 | 2.383 | 0.50 | 0.000 | 0.000 |
| 120.00 | RFS APXVSP18-C-A20 | 3 | 57.00 | 8.020 | 0.69 | 250.96 | 9.281 | 0.69 | 0.000 | 0.000 |
| 120.00 | RFS RFS APXV9TM14-ALU-I20 | 3 | 55.10 | 6.340 | 0.66 | 210.83 | 7.422 | 0.66 | 0.000 | 0.000 |
| 110.00 | Flat Platform w/ Handrails | 1 | 2000.00 | 42.400 | 1.00 | 3,377.42 | 62.727 | 1.00 | 0.000 | 0.000 |
| 110.00 | Swedcom ALP 9011-Din | 12 | 10.00 | 3.170 | 0.74 | 106.31 | 3.443 | 0.74 | 0.000 | 0.000 |
| 100.00 | Alcatel-Lucent RRH2x40-AWS | 3 | 44.00 | 2.160 | 0.50 | 113.66 | 2.774 | 0.50 | 0.000 | 0.000 |
| 100.00 | Antel BXA-171063/12CF_2 | 3 | 15.00 | 4.790 | 0.72 | 128.79 | 5.957 | 0.72 | 0.000 | 0.000 |
| 100.00 | Antel BXA-70080/6CF_ | 3 | 18.00 | 5.840 | 0.72 | 161.39 | 7.030 | 0.72 | 0.000 | 0.000 |
| 100.00 | Flat Platform w/ Handrails | 1 | 2000.00 | 39.600 | 1.00 | 3,364.04 | 58.400 | 1.00 | 0.000 | 0.000 |
| 100.00 | GPS | 1 | 10.00 | 1.000 | 0.50 | 46.34 | 0.921 | 0.50 | 0.000 | 4.000 |
| 100.00 | Powerwave Allgon P65-16- | 3 | 33.00 | 8.130 | 0.65 | 205.57 | 9.371 | 0.65 | 0.000 | 0.000 |
| 100.00 | RFS DB-T1-6Z-8AB-0Z | 1 | 44.00 | 4.800 | 1.00 | 175.07 | 5.634 | 1.00 | 0.000 | 0.000 |
| 100.00 | RFS FD9R6004/1C-3L | 6 | 3.10 | 0.370 | 0.33 | 15.39 | 0.568 | 0.33 | 0.000 | 0.000 |
| 100.00 | Rymsa MGD3-800TX | 3 | 15.40 | 3.340 | 0.69 | 97.74 | 4.235 | 0.69 | 0.000 | 0.000 |
| 90.00 | Andrew LNX-6515DS-VTM | 3 | 51.30 | 11.430 | 0.70 | 298.51 | 13.005 | 0.70 | 0.000 | 0.000 |
| 90.00 | Ericsson AIR 21, 1.3 M, B2A | 4 | 83.00 | 6.050 | 0.71 | 241.54 | 7.087 | 0.71 | 0.000 | 0.000 |
| 90.00 | Ericsson AIR 21, 1.3M, B4A | 3 | 81.50 | 6.090 | 0.70 | 240.00 | 7.132 | 0.70 | 0.000 | 0.000 |
| 90.00 | Ericsson RRUS 11 B12 | 3 | 50.70 | 2.790 | 0.50 | 131.59 | 3.431 | 0.50 | 0.000 | 0.000 |
| 90.00 | Flat Platform w/ Handrails | 1 | 2000.00 | 42.400 | 1.00 | 3,349.36 | 62.312 | 1.00 | 0.000 | 0.000 |
| 90.00 | RFS ATMAA1412D-1A20 | 4 | 13.00 | 1.000 | 0.33 | 45.68 | 1.407 | 0.33 | 0.000 | 0.000 |
| 80.00 | 6' Omni | 2 | 25.00 | 1.760 | 1.00 | 99.81 | 2.985 | 1.00 | 0.000 | 0.000 |
| 80.00 | Diamond X50A | 2 | 2.30 | 1.120 | 1.00 | 56.95 | 2.427 | 1.00 | 0.000 | 3.000 |
| 80.00 | Stand-Offs | 2 | 50.00 | 3.000 | 0.67 | 72.87 | 4.470 | 0.67 | 0.000 | 0.000 |
| 70.00 | PCTEL GPS-TMG-HR-26N | 1 | 0.60 | 0.090 | 1.00 | 9.93 | 0.257 | 1.00 | 0.000 | 0.000 |
| 70.00 | Stand-Off | 1 | 30.00 | 1.000 | 0.67 | 43.53 | 1.483 | 0.67 | 0.000 | 0.000 |

Totals 127 13728.90

31,427.93

Number of Loadings : 41

Site Number: 302511

Code: ANSI/TIA-222-G

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Site Name: WSPT - South, CT

Engineering Number: 63916524

1/25/2016 11:02:26 AM

Customer: T-MOBILE

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 | 136.00 | 6 | 1 5/8" Coax | 1.98 | 0.82 | N | 1.98 | Y | Metro PCS |
| 0.00 | 136.00 | 1 | 3/8" Coax | 0.44 | 0.08 | N | 0.44 | N | Metro PCS |
| 0.00 | 131.00 | 1 | 0.28" RG-6 | 0.28 | 0.03 | N | 0.00 | N | AT&T Mobility |
| 0.00 | 131.00 | 2 | 0.65" 8 AWG 2C | 0.65 | 0.31 | N | 0.00 | N | AT&T Mobility |
| 0.00 | 131.00 | 12 | 1 1/4" Coax | 1.55 | 0.63 | N | 0.00 | N | AT&T Mobility |
| 0.00 | 120.00 | 4 | 1 1/4" Hybriflex | 1.54 | 1.00 | N | 0.00 | N | Sprint Nextel |
| 0.00 | 120.00 | 2 | 1 1/2" Coax | 0.63 | 0.15 | N | 0.00 | N | Clearwire |
| 0.00 | 120.00 | 1 | 2" Conduit | 2.38 | 3.65 | N | 0.00 | N | Clearwire |
| 0.00 | 120.00 | 6 | 5/16" Coax | 0.31 | 0.05 | N | 0.00 | N | Clearwire |
| 0.00 | 110.00 | 12 | 1 5/8" Coax | 1.98 | 0.82 | N | 0.00 | N | Sprint Nextel |
| 0.00 | 100.00 | 12 | 1 5/8" Coax | 1.98 | 0.82 | N | 0.00 | N | Verizon |
| 0.00 | 100.00 | 1 | 1 5/8" Hybriflex | 1.98 | 1.30 | N | 0.00 | N | Verizon |
| 0.00 | 100.00 | 1 | 1 1/2" Coax | 0.63 | 0.15 | N | 0.00 | N | Verizon |
| 0.00 | 90.00 | 1 | 1 1/4" Fiber | 1.25 | 1.05 | N | 0.00 | N | T-Mobile |
| 0.00 | 90.00 | 14 | 1 5/8" Coax | 1.98 | 0.82 | N | 3.96 | Y | T-Mobile |
| 0.00 | 80.00 | 2 | 1 1/2" Coax | 0.63 | 0.15 | N | 0.00 | N | Enertrac |
| 0.00 | 80.00 | 2 | 1 1/2" Coax | 0.63 | 0.15 | N | 0.00 | N | Senet, Inc. |
| 0.00 | 70.00 | 2 | 1 1/2" Coax | 0.63 | 0.15 | N | 0.00 | N | Sprint Nextel |
| 0.00 | 63.00 | 4 | DYWIDAG | 4.00 | 0.00 | N | 2.50 | Y | -- |

Additional Steel

| Elev From (ft) | Elev To (ft) | Qty | Description | Fy (ksi) | Offset (in) | — Intermediate Connections — | | | Connectors | Continuation? |
|-------------------|-----------------|-----|--------------------|-------------|----------------|------------------------------|-----------------|-------------|-----------------|---------------|
| | | | | | | Description | Spacing (in) | Len (in) | | |
| 0.00 | 55.68 | 4 | SOL #20 All Thread | 80 | 2.19 | 6" Angle Bracket | 30.0 | 3.31 | 5/8" A36 U-Bolt | Yes |

Site Number: 302511

Code: ANSI/TIA-222-G

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Site Name: WSPT - South, CT

Engineering Number: 63916524

1/25/2016 11:02:26 AM

Customer: T-MOBILE

Segment Properties (Max Len : 5.ft)

| Seg Top Elev (ft) | Description | Thick (in) | Flat Dia (in) | Area (in ²) | Ix (in ⁴) | W/t Ratio | D/t Ratio | Fy (ksi) | S (in ³) | Z (in ³) | Weight (lb) | Additional Reinforcing | | |
|-------------------------|-----------------|---------------|---------------------|----------------------------|--------------------------|--------------|--------------|-------------|-------------------------|-------------------------|----------------|----------------------------|--------------------------|----------------|
| | | | | | | | | | | | | Area (in ²) | Ix (in ⁴) | Weight (lb) |
| 0.00 | | 0.4375 | 45.000 | 62.777 | 15,912.1 | 25.42 | 102.86 | 77.0 | 683.1 | 0.0 | 0.0 | 19.64 | 6,615 | 0.0 |
| 5.00 | | 0.4375 | 43.937 | 61.280 | 14,800.2 | 24.77 | 100.43 | 77.7 | 650.7 | 0.0 | 1,055.3 | 19.64 | 6,347 | 334.0 |
| 10.00 | | 0.4375 | 42.874 | 59.782 | 13,741.3 | 24.11 | 98.00 | 78.4 | 619.2 | 0.0 | 1,029.9 | 19.64 | 6,084 | 334.0 |
| 15.00 | | 0.4375 | 41.810 | 58.284 | 12,734.1 | 23.46 | 95.57 | 79.1 | 588.4 | 0.0 | 1,004.4 | 19.64 | 5,827 | 334.0 |
| 20.00 | | 0.4375 | 40.747 | 56.786 | 11,777.4 | 22.81 | 93.14 | 79.8 | 558.4 | 0.0 | 978.9 | 19.64 | 5,576 | 334.0 |
| 25.00 | | 0.4375 | 39.684 | 55.289 | 10,869.9 | 22.16 | 90.71 | 80.5 | 529.2 | 0.0 | 953.4 | 19.64 | 5,330 | 334.0 |
| 30.00 | | 0.4375 | 38.621 | 53.791 | 10,010.2 | 21.51 | 88.28 | 81.3 | 500.7 | 0.0 | 927.9 | 19.64 | 5,090 | 334.0 |
| 35.00 | | 0.4375 | 37.558 | 52.293 | 9,197.1 | 20.86 | 85.85 | 81.9 | 473.1 | 0.0 | 902.4 | 19.64 | 4,855 | 334.0 |
| 40.00 | | 0.4375 | 36.494 | 50.795 | 8,429.2 | 20.21 | 83.42 | 81.9 | 446.2 | 0.0 | 877.0 | 19.64 | 4,626 | 334.0 |
| 40.24 | Bot - Section 2 | 0.4375 | 36.443 | 50.722 | 8,392.9 | 20.18 | 83.30 | 81.9 | 444.9 | 0.0 | 42.1 | 19.64 | 4,615 | 16.3 |
| 45.00 | | 0.4375 | 35.431 | 49.297 | 7,705.4 | 19.56 | 80.99 | 81.9 | 420.1 | 0.0 | 1,519.0 | 19.64 | 4,559 | 317.7 |
| 45.40 | Top - Section 1 | 0.3750 | 36.096 | 43.133 | 7,025.1 | 23.65 | 96.26 | 78.9 | 376.0 | 0.0 | 125.8 | 19.64 | 4,542 | 26.7 |
| 50.00 | | 0.3750 | 35.118 | 41.952 | 6,463.7 | 22.95 | 93.65 | 79.7 | 355.6 | 0.0 | 665.9 | 19.64 | 4,337 | 307.3 |
| 55.00 | | 0.3750 | 34.055 | 40.668 | 5,888.2 | 22.19 | 90.81 | 80.5 | 334.0 | 0.0 | 702.9 | 19.64 | 4,121 | 334.0 |
| 55.68 | Reinf. Top | 0.3750 | 33.911 | 40.495 | 5,813.1 | 22.09 | 90.43 | 80.6 | 331.2 | 0.0 | 93.5 | 19.64 | 4,092 | 45.2 |
| 60.00 | | 0.3750 | 32.992 | 39.385 | 5,348.0 | 21.43 | 87.98 | 81.3 | 313.2 | 0.0 | 587.5 | | | |
| 65.00 | | 0.3750 | 31.929 | 38.101 | 4,841.9 | 20.67 | 85.14 | 81.9 | 293.0 | 0.0 | 659.2 | | | |
| 70.00 | | 0.3750 | 30.865 | 36.817 | 4,368.8 | 19.91 | 82.31 | 81.9 | 273.4 | 0.0 | 637.3 | | | |
| 75.00 | | 0.3750 | 29.802 | 35.533 | 3,927.5 | 19.15 | 79.47 | 81.9 | 254.6 | 0.0 | 615.5 | | | |
| 80.00 | | 0.3750 | 28.739 | 34.249 | 3,517.0 | 18.39 | 76.64 | 81.9 | 236.4 | 0.0 | 593.6 | | | |
| 80.75 | Bot - Section 3 | 0.3750 | 28.580 | 34.057 | 3,458.1 | 18.28 | 76.21 | 81.9 | 233.8 | 0.0 | 87.0 | | | |
| 84.90 | Top - Section 2 | 0.2500 | 28.197 | 22.497 | 2,242.8 | 28.08 | 112.79 | 74.1 | 153.7 | 0.0 | 796.3 | | | |
| 85.00 | | 0.2500 | 28.176 | 22.480 | 2,237.7 | 28.06 | 112.70 | 74.1 | 153.4 | 0.0 | 7.7 | | | |
| 90.00 | | 0.2500 | 27.113 | 21.624 | 1,991.7 | 26.92 | 108.45 | 75.4 | 141.9 | 0.0 | 375.2 | | | |
| 95.00 | | 0.2500 | 26.049 | 20.768 | 1,764.4 | 25.78 | 104.20 | 76.6 | 130.9 | 0.0 | 360.6 | | | |
| 100.0 | | 0.2500 | 24.986 | 19.913 | 1,555.2 | 24.64 | 99.94 | 77.8 | 120.2 | 0.0 | 346.1 | | | |
| 105.0 | | 0.2500 | 23.923 | 19.057 | 1,363.1 | 23.50 | 95.69 | 79.1 | 110.1 | 0.0 | 331.5 | | | |
| 110.0 | | 0.2500 | 22.860 | 18.201 | 1,187.6 | 22.36 | 91.44 | 80.3 | 100.4 | 0.0 | 316.9 | | | |
| 115.0 | | 0.2500 | 21.797 | 17.345 | 1,027.8 | 21.22 | 87.19 | 81.6 | 91.1 | 0.0 | 302.4 | | | |
| 120.0 | | 0.2500 | 20.733 | 16.489 | 883.1 | 20.08 | 82.93 | 81.9 | 82.3 | 0.0 | 287.8 | | | |
| 125.0 | | 0.2500 | 19.670 | 15.633 | 752.6 | 18.94 | 78.68 | 81.9 | 73.9 | 0.0 | 273.3 | | | |
| 125.8 | Top - Section 3 | 0.2500 | 19.500 | 15.496 | 732.9 | 18.76 | 78.00 | 81.9 | 72.6 | 0.0 | 42.4 | | | |
| 125.8 | Bot - Section 4 | 0.3750 | 10.750 | 12.223 | 164.6 | 0.00 | 28.67 | 35.0 | 30.6 | 40.4 | | | | |
| 130.0 | | 0.3750 | 10.750 | 12.223 | 164.6 | 0.00 | 28.67 | 35.0 | 30.6 | 40.4 | 174.7 | | | |
| 131.0 | | 0.3750 | 10.750 | 12.223 | 164.6 | 0.00 | 28.67 | 35.0 | 30.6 | 40.4 | 41.6 | | | |
| 135.0 | | 0.3750 | 10.750 | 12.223 | 164.6 | 0.00 | 28.67 | 35.0 | 30.6 | 40.4 | 166.4 | | | |
| 136.0 | | 0.3750 | 10.750 | 12.223 | 164.6 | 0.00 | 28.67 | 35.0 | 30.6 | 40.4 | 41.6 | | | |
| 140.0 | | 0.3750 | 10.750 | 12.223 | 164.6 | 0.00 | 28.67 | 35.0 | 30.6 | 40.4 | 166.4 | | | |
| 142.0 | | 0.3750 | 10.750 | 12.223 | 164.6 | 0.00 | 28.67 | 35.0 | 30.6 | 40.4 | 83.2 | | | |
| | | | | | | | | | | | 18,172.5 | | | 3,719.2 |

Site Number: 302511

Code: ANSI/TIA-222-G

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Site Name: WSPT - South, CT

Engineering Number: 63916524

1/25/2016 11:02:26 AM

Customer: T-MOBILE

Load Case: 1.2D + 1.6W

110 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 | | | EPAs (sf) | Wind Force X (lb) | Dead Load Ice (lb) | Tot Dead Load (lb) | |
|-------------------------|-----------------|------|------|-------------|---------------|---------------|-------|---------------|-------------------|------------|--------------|-------------------------|--------------------------|--------------------------|---------|
| | | | | | | | | Thick (in) | Tributary (ft) | Ap (sf) | | | | | |
| 0.00 | | 1.00 | 0.70 | 20.599 | 22.65 | 357.29 | 1.000 | 0.000 | 0.00 | 0.000 | 0.00 | 434.6 | 0.0 | 0.0 | |
| 5.00 | | 1.00 | 0.70 | 20.599 | 22.65 | 353.07 | 1.250 | * | 0.000 | 5.00 | 19.182 | 23.98 | 863.5 | 0.0 | 1,266.4 |
| 10.00 | | 1.00 | 0.70 | 20.599 | 22.65 | 344.63 | 1.263 | * | 0.000 | 5.00 | 18.723 | 23.66 | 851.8 | 0.0 | 1,235.8 |
| 15.00 | | 1.00 | 0.70 | 20.599 | 22.65 | 336.19 | 1.278 | * | 0.000 | 5.00 | 18.265 | 23.34 | 840.2 | 0.0 | 1,205.3 |
| 20.00 | | 1.00 | 0.70 | 20.599 | 22.65 | 327.75 | 1.292 | * | 0.000 | 5.00 | 17.806 | 23.01 | 794.5 | 0.0 | 1,174.7 |
| 25.00 | | 1.00 | 0.70 | 20.599 | 22.65 | 319.30 | 1.200 | * | 0.000 | 5.00 | 17.348 | 20.82 | 744.7 | 0.0 | 1,144.1 |
| 30.00 | | 1.00 | 0.70 | 20.599 | 22.65 | 310.86 | 1.200 | * | 0.000 | 5.00 | 16.889 | 20.27 | 733.4 | 0.0 | 1,113.5 |
| 35.00 | | 1.00 | 0.71 | 21.093 | 23.20 | 306.03 | 1.200 | * | 0.000 | 5.00 | 16.430 | 19.72 | 736.6 | 0.0 | 1,082.9 |
| 40.00 | | 1.00 | 0.74 | 21.974 | 24.17 | 303.63 | 1.200 | * | 0.000 | 5.00 | 15.972 | 19.17 | 388.7 | 0.0 | 1,052.4 |
| 40.24 | Bot - Section 2 | 1.00 | 0.76 | 22.402 | 24.64 | 301.96 | 1.200 | * | 0.000 | 0.24 | 0.767 | 0.92 | 380.5 | 0.0 | 50.5 |
| 45.00 | | 1.00 | 0.77 | 22.792 | 25.07 | 300.14 | 1.200 | * | 0.000 | 4.76 | 15.054 | 18.07 | 392.9 | 0.0 | 1,822.9 |
| 45.40 | Top - Section 1 | 1.00 | 0.78 | 23.178 | 25.49 | 298.05 | 1.200 | * | 0.000 | 0.40 | 1.247 | 1.50 | 381.8 | 0.0 | 150.9 |
| 50.00 | | 1.00 | 0.80 | 23.537 | 25.89 | 302.21 | 1.200 | * | 0.000 | 4.60 | 14.131 | 16.96 | 732.4 | 0.0 | 799.1 |
| 55.00 | | 1.00 | 0.82 | 24.191 | 26.61 | 297.59 | 1.200 | * | 0.000 | 5.00 | 14.919 | 17.90 | 432.6 | 0.0 | 843.4 |
| 55.68 | Reinf. Top | 1.00 | 0.83 | 24.558 | 27.01 | 294.61 | 1.200 | * | 0.000 | 0.68 | 1.985 | 2.38 | 379.1 | 0.0 | 112.2 |
| 60.00 | | 1.00 | 0.84 | 24.870 | 27.35 | 291.83 | 1.200 | * | 0.000 | 4.32 | 12.476 | 14.97 | 703.6 | 0.0 | 705.0 |
| 65.00 | | 1.00 | 0.86 | 25.427 | 27.96 | 286.34 | 1.200 | * | 0.000 | 5.00 | 14.002 | 16.80 | 762.6 | 0.0 | 791.0 |
| 70.00 | Appertunance(s) | 1.00 | 0.88 | 25.992 | 28.59 | 280.02 | 1.248 | * | 0.000 | 5.00 | 13.544 | 16.91 | 773.8 | 0.0 | 764.8 |
| 75.00 | | 1.00 | 0.90 | 26.528 | 29.18 | 273.32 | 1.267 | * | 0.000 | 5.00 | 13.085 | 16.58 | 774.1 | 0.0 | 738.6 |
| 80.00 | Appertunance(s) | 1.00 | 0.91 | 27.038 | 29.74 | 266.26 | 1.288 | * | 0.000 | 5.00 | 12.626 | 16.26 | 440.4 | 0.0 | 712.4 |
| 80.75 | Bot - Section 3 | 1.00 | 0.92 | 27.321 | 30.05 | 262.06 | 1.200 | * | 0.000 | 0.75 | 1.851 | 2.22 | 351.8 | 0.0 | 104.4 |
| 84.90 | Top - Section 2 | 1.00 | 0.93 | 27.556 | 30.31 | 258.40 | 1.200 | * | 0.000 | 4.15 | 10.256 | 12.31 | 305.6 | 0.0 | 955.6 |
| 85.00 | | 1.00 | 0.94 | 27.757 | 30.53 | 259.78 | 1.200 | * | 0.000 | 0.10 | 0.244 | 0.29 | 359.7 | 0.0 | 9.2 |
| 90.00 | Appertunance(s) | 1.00 | 0.95 | 27.992 | 30.79 | 255.86 | 1.200 | * | 0.000 | 5.00 | 11.925 | 14.31 | 639.5 | 0.0 | 450.2 |
| 95.00 | | 1.00 | 0.96 | 28.440 | 31.28 | 247.98 | 1.000 | 0.000 | 5.00 | 11.466 | 11.47 | 566.6 | 0.0 | 432.8 | |
| 100.0 | Appertunance(s) | 1.00 | 0.98 | 28.871 | 31.75 | 239.86 | 1.000 | 0.000 | 5.00 | 11.007 | 11.01 | 551.5 | 0.0 | 415.3 | |
| 105.0 | | 1.00 | 0.99 | 29.287 | 32.21 | 231.52 | 1.000 | 0.000 | 5.00 | 10.549 | 10.55 | 535.5 | 0.0 | 397.8 | |
| 110.0 | Appertunance(s) | 1.00 | 1.00 | 29.688 | 32.65 | 222.96 | 1.000 | 0.000 | 5.00 | 10.090 | 10.09 | 518.5 | 0.0 | 380.3 | |
| 115.0 | | 1.00 | 1.02 | 30.076 | 33.08 | 214.21 | 1.000 | 0.000 | 5.00 | 9.632 | 9.63 | 500.7 | 0.0 | 362.9 | |
| 120.0 | Appertunance(s) | 1.00 | 1.03 | 30.452 | 33.49 | 205.29 | 1.000 | 0.000 | 5.00 | 9.173 | 9.17 | 482.1 | 0.0 | 345.4 | |
| 125.0 | | 1.00 | 1.04 | 30.817 | 33.89 | 196.19 | 1.000 | 0.000 | 5.00 | 8.714 | 8.71 | 273.2 | 0.0 | 327.9 | |
| 125.8 | Top - Section 3 | 1.00 | 1.05 | 31.024 | 34.12 | 190.83 | 1.000 | 0.000 | 0.80 | 1.353 | 1.35 | 114.6 | 0.0 | 50.9 | |
| 130.0 | | 1.00 | 1.06 | 31.199 | 34.31 | 101.46 | 0.752 | * | 0.000 | 4.20 | 3.762 | 2.83 | 96.2 | 0.0 | 209.6 |
| 131.0 | Appertunance(s) | 1.00 | 1.06 | 31.379 | 34.51 | 101.75 | 0.752 | * | 0.000 | 1.00 | 0.896 | 0.67 | 93.4 | 0.0 | 49.9 |
| 135.0 | | 1.00 | 1.07 | 31.550 | 34.70 | 102.03 | 0.752 | * | 0.000 | 4.00 | 3.583 | 2.69 | 93.6 | 0.0 | 199.6 |
| 136.0 | Appertunance(s) | 1.00 | 1.07 | 31.718 | 34.89 | 102.30 | 0.752 | * | 0.000 | 1.00 | 0.896 | 0.67 | 79.1 | 0.0 | 49.9 |
| 140.0 | | 1.00 | 1.08 | 31.884 | 35.07 | 102.57 | 0.600 | 0.000 | 4.00 | 3.583 | 2.15 | 90.7 | 0.0 | 199.6 | |
| 142.0 | | 1.00 | 1.09 | 32.081 | 35.28 | 102.88 | 0.600 | 0.000 | 2.00 | 1.792 | 1.08 | 30.3 | 0.0 | 99.8 | |

* = Cf Adjusted By Linear Load Ra Effect

Totals: 142.00

18,224.5

0.0 21,807.0

Load Case: 1.2D + 1.6W**110 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) |
|--------------|----------------------|-----|-------------|---------------|-----------------------|------|-----------------------|----------------------|---------------------|--------------------|---------------------|---------------------|----------------------|
| 70.00 | PCTEL GPS-TMG-HR- | 1 | 26.263 | 28.890 | 1.00 | 1.00 | 0.09 | 0.000 | 0.000 | 4.16 | 0.00 | 0.00 | 0.72 |
| 70.00 | Stand-Off | 1 | 26.263 | 28.890 | 0.67 | 1.00 | 0.67 | 0.000 | 0.000 | 30.97 | 0.00 | 0.00 | 36.00 |
| 80.00 | Diamond X50A | 2 | 27.573 | 30.331 | 1.00 | 1.00 | 2.24 | 0.000 | 3.000 | 108.70 | 0.00 | 326.11 | 5.52 |
| 80.00 | 6' Omni | 2 | 27.285 | 30.013 | 1.00 | 1.00 | 3.52 | 0.000 | 0.000 | 169.03 | 0.00 | 0.00 | 60.00 |
| 80.00 | Stand-Offs | 2 | 27.285 | 30.013 | 0.67 | 1.00 | 4.02 | 0.000 | 0.000 | 193.04 | 0.00 | 0.00 | 120.00 |
| 90.00 | RFS ATMAA1412D- | 4 | 28.219 | 31.040 | 0.33 | 0.75 | 0.99 | 0.000 | 0.000 | 49.17 | 0.00 | 0.00 | 62.40 |
| 90.00 | Ericsson RRUS 11 B12 | 3 | 28.219 | 31.040 | 0.50 | 0.75 | 3.14 | 0.000 | 0.000 | 155.88 | 0.00 | 0.00 | 182.52 |
| 90.00 | Ericsson AIR 21, 1.3 | 4 | 28.219 | 31.040 | 0.71 | 0.75 | 12.89 | 0.000 | 0.000 | 640.00 | 0.00 | 0.00 | 398.40 |
| 90.00 | Ericsson AIR 21, 1.3 | 3 | 28.219 | 31.040 | 0.70 | 0.75 | 9.59 | 0.000 | 0.000 | 476.37 | 0.00 | 0.00 | 293.40 |
| 90.00 | Andrew LNX-6515DS- | 3 | 28.219 | 31.040 | 0.70 | 0.75 | 18.00 | 0.000 | 0.000 | 894.07 | 0.00 | 0.00 | 184.68 |
| 90.00 | Flat Platform w/ Han | 1 | 28.219 | 31.040 | 1.00 | 1.00 | 42.40 | 0.000 | 0.000 | 2,105.77 | 0.00 | 0.00 | 2,400.00 |
| 100.0 | RFS FD9R6004/1C-3L | 6 | 29.081 | 31.989 | 0.33 | 0.75 | 0.55 | 0.000 | 0.000 | 28.12 | 0.00 | 0.00 | 22.32 |
| 100.0 | GPS | 1 | 29.409 | 32.349 | 0.50 | 0.75 | 0.38 | 0.000 | 4.000 | 19.41 | 0.00 | 77.64 | 12.00 |
| 100.0 | Alcatel-Lucent RRH2x | 3 | 29.081 | 31.989 | 0.50 | 0.75 | 2.43 | 0.000 | 0.000 | 124.37 | 0.00 | 0.00 | 158.40 |
| 100.0 | Rymsa MGD3-800TX | 3 | 29.081 | 31.989 | 0.69 | 0.75 | 5.19 | 0.000 | 0.000 | 265.40 | 0.00 | 0.00 | 55.44 |
| 100.0 | Antel BXA-171063/12C | 3 | 29.081 | 31.989 | 0.72 | 0.75 | 7.76 | 0.000 | 0.000 | 397.16 | 0.00 | 0.00 | 54.00 |
| 100.0 | RFS DB-T1-6Z-8AB-0Z | 1 | 29.081 | 31.989 | 1.00 | 0.75 | 3.60 | 0.000 | 0.000 | 184.26 | 0.00 | 0.00 | 52.80 |
| 100.0 | Antel BXA-70080/6CF | 3 | 29.081 | 31.989 | 0.72 | 0.75 | 9.46 | 0.000 | 0.000 | 484.23 | 0.00 | 0.00 | 64.80 |
| 100.0 | Powerwave Allgon | 3 | 29.081 | 31.989 | 0.65 | 0.75 | 11.89 | 0.000 | 0.000 | 608.56 | 0.00 | 0.00 | 118.80 |
| 100.0 | Flat Platform w/ Han | 1 | 29.081 | 31.989 | 1.00 | 1.00 | 39.60 | 0.000 | 0.000 | 2,026.82 | 0.00 | 0.00 | 2,400.00 |
| 110.0 | Swedcom ALP 9011- | 12 | 29.884 | 32.872 | 0.74 | 0.75 | 21.11 | 0.000 | 0.000 | 1,110.40 | 0.00 | 0.00 | 144.00 |
| 110.0 | Flat Platform w/ Han | 1 | 29.884 | 32.872 | 1.00 | 1.00 | 42.40 | 0.000 | 0.000 | 2,230.03 | 0.00 | 0.00 | 2,400.00 |
| 120.0 | DragonWave Horizon | 2 | 30.636 | 33.699 | 0.33 | 0.75 | 0.21 | 0.000 | 0.000 | 11.48 | 0.00 | 0.00 | 25.44 |
| 120.0 | NextNet BTS-2500 | 3 | 30.636 | 33.699 | 0.50 | 0.75 | 2.05 | 0.000 | 0.000 | 110.40 | 0.00 | 0.00 | 126.00 |
| 120.0 | Alcatel-Lucent 800 M | 3 | 30.636 | 33.699 | 0.50 | 0.75 | 2.32 | 0.000 | 0.000 | 124.96 | 0.00 | 0.00 | 230.40 |
| 120.0 | Alcatel-Lucent 1900 | 3 | 30.636 | 33.699 | 0.50 | 0.75 | 2.61 | 0.000 | 0.000 | 140.73 | 0.00 | 0.00 | 216.00 |
| 120.0 | Alcatel-Lucent TD-RR | 3 | 30.636 | 33.699 | 0.50 | 0.75 | 4.56 | 0.000 | 0.000 | 245.67 | 0.00 | 0.00 | 252.00 |
| 120.0 | Argus LLPX310R | 3 | 30.636 | 33.699 | 0.63 | 0.75 | 6.08 | 0.000 | 0.000 | 327.89 | 0.00 | 0.00 | 102.96 |
| 120.0 | DragonWave A-ANT- | 2 | 30.636 | 33.699 | 0.90 | 0.75 | 6.33 | 0.000 | 0.000 | 341.39 | 0.00 | 0.00 | 65.04 |
| 120.0 | RFS RFS APXV9TM14- | 3 | 30.636 | 33.699 | 0.66 | 0.75 | 9.41 | 0.000 | 0.000 | 507.64 | 0.00 | 0.00 | 198.36 |
| 120.0 | RFS APXVSPP18-C- | 3 | 30.636 | 33.699 | 0.69 | 0.75 | 12.45 | 0.000 | 0.000 | 671.35 | 0.00 | 0.00 | 205.20 |
| 120.0 | Flat Platform w/ Han | 1 | 30.636 | 33.699 | 1.00 | 1.00 | 39.50 | 0.000 | 0.000 | 2,129.81 | 0.00 | 0.00 | 2,400.00 |
| 131.0 | Powerwave Allgon | 6 | 31.751 | 34.926 | 0.50 | 0.75 | 0.52 | 0.000 | 5.000 | 28.92 | 0.00 | 144.60 | 39.60 |
| 131.0 | Powerwave Allgon | 6 | 31.413 | 34.555 | 0.50 | 0.75 | 2.48 | 0.000 | 0.000 | 136.84 | 0.00 | 0.00 | 101.52 |
| 131.0 | Raycap DC6-48-60-18- | 1 | 31.413 | 34.555 | 1.00 | 0.75 | 0.96 | 0.000 | 0.000 | 53.08 | 0.00 | 0.00 | 38.16 |
| 131.0 | Ericsson RRUS 11 (Ba | 6 | 31.413 | 34.555 | 0.50 | 0.75 | 5.78 | 0.000 | 0.000 | 319.70 | 0.00 | 0.00 | 316.80 |
| 131.0 | Powerwave Allgon 777 | 6 | 31.413 | 34.555 | 0.65 | 0.75 | 16.12 | 0.000 | 0.000 | 891.05 | 0.00 | 0.00 | 252.00 |
| 131.0 | Powerwave Allgon | 3 | 31.751 | 34.926 | 0.67 | 0.75 | 12.26 | 0.000 | 5.000 | 684.89 | 0.00 | 3,424.46 | 190.80 |
| 131.0 | Flat Platform w/ Han | 1 | 31.413 | 34.555 | 1.00 | 1.00 | 39.50 | 0.000 | 0.000 | 2,183.85 | 0.00 | 0.00 | 2,400.00 |
| 136.0 | Generic RCU (Remote | 6 | 31.950 | 35.145 | 0.33 | 0.80 | 0.25 | 0.000 | 3.000 | 14.25 | 0.00 | 42.75 | 7.20 |
| 136.0 | Kathrein Scala 742-2 | 3 | 31.950 | 35.145 | 0.73 | 0.80 | 6.75 | 0.000 | 3.000 | 379.29 | 0.00 | 1,137.88 | 81.00 |

21,609.14

16,474.68

Load Case: 1.2D + 1.6W

110 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 | FX (lb) | Dead Load (lb) |
|-------------------------|----------------------|--------------------|----------------|------|--------------------------|----------------|----------------|-------------|-------|------------------------|------------|----------------------|
| 5.00 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 0.82 | 0.00 | 20.599 | 0.183 | 1.250 | 0.00 | 29.52 |
| 5.00 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.82 | 0.00 | 0.000 | 0.000 | 0.000 | 0.00 | 400.80 |
| 5.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 20.599 | 0.183 | 1.250 | 0.00 | 0.48 |
| 5.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.183 | 1.250 | 0.00 | 0.17 |
| 5.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.183 | 1.250 | 0.00 | 3.72 |
| 5.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.183 | 1.250 | 0.00 | 45.35 |
| 5.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.183 | 1.250 | 0.00 | 24.00 |
| 5.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.183 | 1.250 | 0.00 | 1.80 |
| 5.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.183 | 1.250 | 0.00 | 21.90 |
| 5.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.183 | 1.250 | 0.00 | 1.62 |
| 5.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.183 | 1.250 | 0.00 | 59.03 |
| 5.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.183 | 1.250 | 0.00 | 59.03 |
| 5.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.183 | 1.250 | 0.00 | 7.80 |
| 5.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.183 | 1.250 | 0.00 | 0.90 |
| 5.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.183 | 1.250 | 0.00 | 6.30 |
| 5.00 | (14) 1 5/8" Coax | Yes | 5.00 | 0.00 | 3.96 | 1.65 | 0.00 | 20.599 | 0.183 | 1.250 | 0.00 | 68.87 |
| 5.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.183 | 1.250 | 0.00 | 1.80 |
| 5.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.183 | 1.250 | 0.00 | 1.80 |
| 5.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.183 | 1.250 | 0.00 | 1.80 |
| 5.00 | (4) DYWIDAG | Yes | 5.00 | 0.00 | 2.50 | 1.04 | 0.00 | 20.599 | 0.183 | 1.250 | 0.00 | 0.00 |
| 10.00 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 0.82 | 0.00 | 20.599 | 0.188 | 1.263 | 0.00 | 29.52 |
| 10.00 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.82 | 0.00 | 0.000 | 0.000 | 0.000 | 0.00 | 400.80 |
| 10.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 20.599 | 0.188 | 1.263 | 0.00 | 0.48 |
| 10.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.188 | 1.263 | 0.00 | 0.17 |
| 10.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.188 | 1.263 | 0.00 | 3.72 |
| 10.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.188 | 1.263 | 0.00 | 45.35 |
| 10.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.188 | 1.263 | 0.00 | 24.00 |
| 10.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.188 | 1.263 | 0.00 | 1.80 |
| 10.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.188 | 1.263 | 0.00 | 21.90 |
| 10.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.188 | 1.263 | 0.00 | 1.62 |
| 10.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.188 | 1.263 | 0.00 | 59.03 |
| 10.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.188 | 1.263 | 0.00 | 59.03 |
| 10.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.188 | 1.263 | 0.00 | 7.80 |
| 10.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.188 | 1.263 | 0.00 | 0.90 |
| 10.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.188 | 1.263 | 0.00 | 6.30 |
| 10.00 | (14) 1 5/8" Coax | Yes | 5.00 | 0.00 | 3.96 | 1.65 | 0.00 | 20.599 | 0.188 | 1.263 | 0.00 | 68.87 |
| 10.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.188 | 1.263 | 0.00 | 1.80 |
| 10.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.188 | 1.263 | 0.00 | 1.80 |
| 10.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.188 | 1.263 | 0.00 | 1.80 |
| 10.00 | (4) DYWIDAG | Yes | 5.00 | 0.00 | 2.50 | 1.04 | 0.00 | 20.599 | 0.188 | 1.263 | 0.00 | 0.00 |
| 15.00 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 0.82 | 0.00 | 20.599 | 0.193 | 1.278 | 0.00 | 29.52 |
| 15.00 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.82 | 0.00 | 0.000 | 0.000 | 0.000 | 0.00 | 400.80 |
| 15.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 20.599 | 0.193 | 1.278 | 0.00 | 0.48 |
| 15.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.193 | 1.278 | 0.00 | 0.17 |
| 15.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.193 | 1.278 | 0.00 | 3.72 |
| 15.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.193 | 1.278 | 0.00 | 45.35 |
| 15.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.193 | 1.278 | 0.00 | 24.00 |
| 15.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.193 | 1.278 | 0.00 | 1.80 |
| 15.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.193 | 1.278 | 0.00 | 21.90 |
| 15.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.193 | 1.278 | 0.00 | 1.62 |
| 15.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.193 | 1.278 | 0.00 | 59.03 |

Load Case: 1.2D + 1.6W**110 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**

| | | | | | | | | | | | |
|-------|----------------------|-----|------|------|------|------|--------|--------|-------|-------|--------|
| 15.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.193 | 1.278 | 0.00 | 59.03 |
| 15.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.193 | 1.278 | 0.00 | 7.80 |
| 15.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.193 | 1.278 | 0.00 | 0.90 |
| 15.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.193 | 1.278 | 0.00 | 6.30 |
| 15.00 | (14) 1 5/8" Coax | Yes | 5.00 | 0.00 | 3.96 | 1.65 | 0.00 | 20.599 | 0.193 | 1.278 | 0.00 |
| 15.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.193 | 1.278 | 0.00 | 1.80 |
| 15.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.193 | 1.278 | 0.00 | 1.80 |
| 15.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.193 | 1.278 | 0.00 | 1.80 |
| 15.00 | (4) DYWIDAG | Yes | 5.00 | 0.00 | 2.50 | 1.04 | 0.00 | 20.599 | 0.193 | 1.278 | 0.00 |
| 20.00 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 0.82 | 0.00 | 20.599 | 0.197 | 1.292 | 0.00 |
| 20.00 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.82 | 0.00 | 0.000 | 0.000 | 0.000 | 400.80 |
| 20.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 20.599 | 0.197 | 1.292 | 0.00 |
| 20.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.197 | 1.292 | 0.00 |
| 20.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.197 | 1.292 | 0.00 |
| 20.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.197 | 1.292 | 0.00 |
| 20.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.197 | 1.292 | 0.00 |
| 20.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.197 | 1.292 | 0.00 |
| 20.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.197 | 1.292 | 0.00 |
| 20.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.197 | 1.292 | 0.00 |
| 20.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.197 | 1.292 | 0.00 |
| 20.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.197 | 1.292 | 0.00 |
| 20.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.197 | 1.292 | 0.00 |
| 20.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.197 | 1.292 | 0.00 |
| 20.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.197 | 1.292 | 0.00 |
| 20.00 | (14) 1 5/8" Coax | Yes | 5.00 | 0.00 | 3.96 | 1.65 | 0.00 | 20.599 | 0.197 | 1.292 | 0.00 |
| 20.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.197 | 1.292 | 0.00 |
| 20.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.197 | 1.292 | 0.00 |
| 20.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.197 | 1.292 | 0.00 |
| 20.00 | (4) DYWIDAG | Yes | 5.00 | 0.00 | 2.50 | 1.04 | 0.00 | 20.599 | 0.197 | 1.292 | 0.00 |
| 25.00 | (6) 1 5/8" Coax | Yes | 5.00 | 1.20 | 1.98 | 0.82 | 0.99 | 20.599 | 0.203 | 0.000 | 35.89 |
| 25.00 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.82 | 0.00 | 0.000 | 0.000 | 0.000 | 400.80 |
| 25.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 20.599 | 0.203 | 0.000 | 0.48 |
| 25.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.203 | 0.000 | 0.17 |
| 25.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.203 | 0.000 | 3.72 |
| 25.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.203 | 0.000 | 45.35 |
| 25.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.203 | 0.000 | 24.00 |
| 25.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.203 | 0.000 | 1.80 |
| 25.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.203 | 0.000 | 21.90 |
| 25.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.203 | 0.000 | 1.62 |
| 25.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.203 | 0.000 | 59.03 |
| 25.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.203 | 0.000 | 59.03 |
| 25.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.203 | 0.000 | 7.80 |
| 25.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.203 | 0.000 | 0.90 |
| 25.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.203 | 0.000 | 6.30 |
| 25.00 | (14) 1 5/8" Coax | Yes | 5.00 | 1.20 | 3.96 | 1.65 | 1.98 | 20.599 | 0.203 | 0.000 | 71.78 |
| 25.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.203 | 0.000 | 1.80 |
| 25.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.203 | 0.000 | 1.80 |
| 25.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.203 | 0.000 | 1.80 |
| 25.00 | (4) DYWIDAG | Yes | 5.00 | 1.20 | 2.50 | 1.04 | 1.25 | 20.599 | 0.203 | 0.000 | 45.32 |
| 30.00 | (6) 1 5/8" Coax | Yes | 5.00 | 1.20 | 1.98 | 0.82 | 0.99 | 20.599 | 0.208 | 0.000 | 35.89 |
| 30.00 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.82 | 0.00 | 0.000 | 0.000 | 0.000 | 400.80 |
| 30.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 20.599 | 0.208 | 0.000 | 0.48 |
| 30.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.208 | 0.000 | 0.17 |
| 30.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.208 | 0.000 | 3.72 |
| 30.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.208 | 0.000 | 45.35 |
| 30.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.208 | 0.000 | 24.00 |
| 30.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.208 | 0.000 | 1.80 |

Load Case: 1.2D + 1.6W**110 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) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.208 | 0.000 | 0.00 | 21.90 |
| 30.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.208 | 0.000 | 0.00 | 1.62 |
| 30.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.208 | 0.000 | 0.00 | 59.03 |
| 30.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.208 | 0.000 | 0.00 | 59.03 |
| 30.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.208 | 0.000 | 0.00 | 7.80 |
| 30.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.208 | 0.000 | 0.00 | 0.90 |
| 30.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.208 | 0.000 | 0.00 | 6.30 |
| 30.00 | (14) 1 5/8" Coax | Yes | 5.00 | 1.20 | 3.96 | 1.65 | 1.98 | 20.599 | 0.208 | 0.000 | 71.78 |
| 30.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.208 | 0.000 | 0.00 | 1.80 |
| 30.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.208 | 0.000 | 0.00 | 1.80 |
| 30.00 | (4) DYWIDAG | Yes | 5.00 | 1.20 | 2.50 | 1.04 | 1.25 | 20.599 | 0.208 | 0.000 | 45.32 |
| 35.00 | (6) 1 5/8" Coax | Yes | 5.00 | 1.20 | 1.98 | 0.82 | 0.99 | 21.093 | 0.214 | 0.000 | 36.75 |
| 35.00 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.82 | 0.00 | 0.000 | 0.000 | 0.00 | 400.80 |
| 35.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 21.093 | 0.214 | 0.000 | 0.00 |
| 35.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.093 | 0.214 | 0.000 | 0.00 |
| 35.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.093 | 0.214 | 0.000 | 0.00 |
| 35.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.093 | 0.214 | 0.000 | 0.00 |
| 35.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.093 | 0.214 | 0.000 | 0.00 |
| 35.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.093 | 0.214 | 0.000 | 0.00 |
| 35.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.093 | 0.214 | 0.000 | 0.00 |
| 35.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.093 | 0.214 | 0.000 | 0.00 |
| 35.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.093 | 0.214 | 0.000 | 0.00 |
| 35.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.093 | 0.214 | 0.000 | 0.00 |
| 35.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.093 | 0.214 | 0.000 | 0.00 |
| 35.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.093 | 0.214 | 0.000 | 0.00 |
| 35.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.093 | 0.214 | 0.000 | 0.00 |
| 35.00 | (14) 1 5/8" Coax | Yes | 5.00 | 1.20 | 3.96 | 1.65 | 1.98 | 21.093 | 0.214 | 0.000 | 73.51 |
| 35.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.093 | 0.214 | 0.000 | 0.00 |
| 35.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.093 | 0.214 | 0.000 | 0.00 |
| 35.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.093 | 0.214 | 0.000 | 0.00 |
| 35.00 | (4) DYWIDAG | Yes | 5.00 | 1.20 | 2.50 | 1.04 | 1.25 | 21.093 | 0.214 | 0.000 | 46.41 |
| 40.00 | (6) 1 5/8" Coax | Yes | 5.00 | 1.20 | 1.98 | 0.82 | 0.99 | 21.974 | 0.220 | 0.000 | 38.29 |
| 40.00 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.82 | 0.00 | 0.000 | 0.000 | 0.00 | 400.80 |
| 40.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 21.974 | 0.220 | 0.000 | 0.00 |
| 40.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.974 | 0.220 | 0.000 | 0.00 |
| 40.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.974 | 0.220 | 0.000 | 0.00 |
| 40.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.974 | 0.220 | 0.000 | 0.00 |
| 40.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.974 | 0.220 | 0.000 | 0.00 |
| 40.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.974 | 0.220 | 0.000 | 0.00 |
| 40.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.974 | 0.220 | 0.000 | 0.00 |
| 40.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.974 | 0.220 | 0.000 | 0.00 |
| 40.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.974 | 0.220 | 0.000 | 0.00 |
| 40.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.974 | 0.220 | 0.000 | 0.00 |
| 40.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.974 | 0.220 | 0.000 | 0.00 |
| 40.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.974 | 0.220 | 0.000 | 0.00 |
| 40.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.974 | 0.220 | 0.000 | 0.00 |
| 40.00 | (14) 1 5/8" Coax | Yes | 5.00 | 1.20 | 3.96 | 1.65 | 1.98 | 21.974 | 0.220 | 0.000 | 76.57 |
| 40.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.974 | 0.220 | 0.000 | 0.00 |
| 40.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.974 | 0.220 | 0.000 | 0.00 |
| 40.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.974 | 0.220 | 0.000 | 0.00 |
| 40.00 | (4) DYWIDAG | Yes | 5.00 | 1.20 | 2.50 | 1.04 | 1.25 | 21.974 | 0.220 | 0.000 | 48.34 |
| 40.24 | (6) 1 5/8" Coax | Yes | 0.24 | 1.20 | 1.98 | 0.04 | 0.05 | 22.402 | 0.224 | 0.000 | 1.90 |
| 40.24 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.04 | 0.00 | 0.000 | 0.000 | 0.00 | 19.53 |
| 40.24 | (1) 3/8" Coax | No | 0.24 | 0.00 | 0.44 | 0.00 | 0.00 | 22.402 | 0.224 | 0.000 | 0.00 |
| 40.24 | (1) 0.28" RG-6 | No | 0.24 | 0.00 | 0.00 | 0.00 | 0.00 | 22.402 | 0.224 | 0.000 | 0.01 |
| 40.24 | (2) 0.65" 8 AWG 2C | No | 0.24 | 0.00 | 0.00 | 0.00 | 0.00 | 22.402 | 0.224 | 0.000 | 0.18 |

Load Case: 1.2D + 1.6W**110 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**

| | | | | | | | | | | | |
|-------|----------------------|-----|------|------|------|------|--------|--------|-------|-------|--------|
| 40.24 | (12) 1 1/4" Coax | No | 0.24 | 0.00 | 0.00 | 0.00 | 22.402 | 0.224 | 0.000 | 0.00 | 2.21 |
| 40.24 | (4) 1 1/4" Hybriflex | No | 0.24 | 0.00 | 0.00 | 0.00 | 22.402 | 0.224 | 0.000 | 0.00 | 1.17 |
| 40.24 | (2) 1/2" Coax | No | 0.24 | 0.00 | 0.00 | 0.00 | 22.402 | 0.224 | 0.000 | 0.00 | 0.09 |
| 40.24 | (1) 2" Conduit | No | 0.24 | 0.00 | 0.00 | 0.00 | 22.402 | 0.224 | 0.000 | 0.00 | 1.07 |
| 40.24 | (6) 5/16" Coax | No | 0.24 | 0.00 | 0.00 | 0.00 | 22.402 | 0.224 | 0.000 | 0.00 | 0.08 |
| 40.24 | (12) 1 5/8" Coax | No | 0.24 | 0.00 | 0.00 | 0.00 | 22.402 | 0.224 | 0.000 | 0.00 | 2.88 |
| 40.24 | (12) 1 5/8" Coax | No | 0.24 | 0.00 | 0.00 | 0.00 | 22.402 | 0.224 | 0.000 | 0.00 | 2.88 |
| 40.24 | (1) 1 5/8" Hybriflex | No | 0.24 | 0.00 | 0.00 | 0.00 | 22.402 | 0.224 | 0.000 | 0.00 | 0.38 |
| 40.24 | (1) 1/2" Coax | No | 0.24 | 0.00 | 0.00 | 0.00 | 22.402 | 0.224 | 0.000 | 0.00 | 0.04 |
| 40.24 | (1) 1 1/4" Fiber | No | 0.24 | 0.00 | 0.00 | 0.00 | 22.402 | 0.224 | 0.000 | 0.00 | 0.31 |
| 40.24 | (14) 1 5/8" Coax | Yes | 0.24 | 1.20 | 3.96 | 0.08 | 0.10 | 22.402 | 0.224 | 0.000 | 3.80 |
| 40.24 | (2) 1/2" Coax | No | 0.24 | 0.00 | 0.00 | 0.00 | 22.402 | 0.224 | 0.000 | 0.00 | 0.09 |
| 40.24 | (2) 1/2" Coax | No | 0.24 | 0.00 | 0.00 | 0.00 | 22.402 | 0.224 | 0.000 | 0.00 | 0.09 |
| 40.24 | (2) 1/2" Coax | No | 0.24 | 0.00 | 0.00 | 0.00 | 22.402 | 0.224 | 0.000 | 0.00 | 0.09 |
| 40.24 | (4) DYWIDAG | Yes | 0.24 | 1.20 | 2.50 | 0.05 | 0.06 | 22.402 | 0.224 | 0.000 | 2.40 |
| 45.00 | (6) 1 5/8" Coax | Yes | 4.76 | 1.20 | 1.98 | 0.78 | 0.94 | 22.792 | 0.227 | 0.000 | 37.78 |
| 45.00 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.78 | 0.00 | 0.000 | 0.000 | 0.000 | 381.27 |
| 45.00 | (1) 3/8" Coax | No | 4.76 | 0.00 | 0.44 | 0.00 | 0.00 | 22.792 | 0.227 | 0.000 | 0.00 |
| 45.00 | (1) 0.28" RG-6 | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 22.792 | 0.227 | 0.000 | 0.00 |
| 45.00 | (2) 0.65" 8 AWG 2C | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 22.792 | 0.227 | 0.000 | 0.00 |
| 45.00 | (12) 1 1/4" Coax | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 22.792 | 0.227 | 0.000 | 0.00 |
| 45.00 | (4) 1 1/4" Hybriflex | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 22.792 | 0.227 | 0.000 | 0.00 |
| 45.00 | (2) 1/2" Coax | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 22.792 | 0.227 | 0.000 | 0.00 |
| 45.00 | (1) 2" Conduit | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 22.792 | 0.227 | 0.000 | 0.00 |
| 45.00 | (6) 5/16" Coax | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 22.792 | 0.227 | 0.000 | 0.00 |
| 45.00 | (12) 1 5/8" Coax | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 22.792 | 0.227 | 0.000 | 0.00 |
| 45.00 | (12) 1 5/8" Coax | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 22.792 | 0.227 | 0.000 | 0.00 |
| 45.00 | (1) 1 5/8" Hybriflex | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 22.792 | 0.227 | 0.000 | 0.00 |
| 45.00 | (1) 1/2" Coax | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 22.792 | 0.227 | 0.000 | 0.00 |
| 45.00 | (1) 1 1/4" Fiber | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 22.792 | 0.227 | 0.000 | 0.00 |
| 45.00 | (14) 1 5/8" Coax | Yes | 4.76 | 1.20 | 3.96 | 1.57 | 1.88 | 22.792 | 0.227 | 0.000 | 75.56 |
| 45.00 | (2) 1/2" Coax | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 22.792 | 0.227 | 0.000 | 0.00 |
| 45.00 | (2) 1/2" Coax | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 22.792 | 0.227 | 0.000 | 0.00 |
| 45.00 | (2) 1/2" Coax | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 22.792 | 0.227 | 0.000 | 0.00 |
| 45.00 | (4) DYWIDAG | Yes | 4.76 | 1.20 | 2.50 | 0.99 | 1.19 | 22.792 | 0.227 | 0.000 | 47.70 |
| 45.40 | (6) 1 5/8" Coax | Yes | 0.40 | 1.20 | 1.98 | 0.07 | 0.08 | 23.178 | 0.230 | 0.000 | 3.23 |
| 45.40 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.07 | 0.00 | 0.000 | 0.000 | 0.000 | 32.06 |
| 45.40 | (1) 3/8" Coax | No | 0.40 | 0.00 | 0.44 | 0.00 | 0.00 | 23.178 | 0.230 | 0.000 | 0.04 |
| 45.40 | (1) 0.28" RG-6 | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 23.178 | 0.230 | 0.000 | 0.01 |
| 45.40 | (2) 0.65" 8 AWG 2C | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 23.178 | 0.230 | 0.000 | 0.30 |
| 45.40 | (12) 1 1/4" Coax | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 23.178 | 0.230 | 0.000 | 0.00 |
| 45.40 | (4) 1 1/4" Hybriflex | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 23.178 | 0.230 | 0.000 | 0.00 |
| 45.40 | (2) 1/2" Coax | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 23.178 | 0.230 | 0.000 | 0.14 |
| 45.40 | (1) 2" Conduit | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 23.178 | 0.230 | 0.000 | 0.00 |
| 45.40 | (6) 5/16" Coax | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 23.178 | 0.230 | 0.000 | 0.13 |
| 45.40 | (12) 1 5/8" Coax | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 23.178 | 0.230 | 0.000 | 0.00 |
| 45.40 | (12) 1 5/8" Coax | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 23.178 | 0.230 | 0.000 | 0.00 |
| 45.40 | (1) 1 5/8" Hybriflex | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 23.178 | 0.230 | 0.000 | 0.00 |
| 45.40 | (1) 1/2" Coax | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 23.178 | 0.230 | 0.000 | 0.07 |
| 45.40 | (1) 1 1/4" Fiber | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 23.178 | 0.230 | 0.000 | 0.50 |
| 45.40 | (14) 1 5/8" Coax | Yes | 0.40 | 1.19 | 3.96 | 0.13 | 0.16 | 23.178 | 0.230 | 0.000 | 6.42 |
| 45.40 | (2) 1/2" Coax | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 23.178 | 0.230 | 0.000 | 0.14 |
| 45.40 | (2) 1/2" Coax | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 23.178 | 0.230 | 0.000 | 0.14 |
| 45.40 | (2) 1/2" Coax | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 23.178 | 0.230 | 0.000 | 0.14 |
| 45.40 | (4) DYWIDAG | Yes | 0.40 | 1.20 | 2.50 | 0.08 | 0.10 | 23.178 | 0.230 | 0.000 | 4.08 |
| 50.00 | (6) 1 5/8" Coax | Yes | 4.60 | 1.20 | 1.98 | 0.76 | 0.91 | 23.537 | 0.229 | 0.000 | 37.73 |
| 50.00 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.76 | 0.00 | 0.000 | 0.000 | 0.000 | 368.74 |

Load Case: 1.2D + 1.6W**110 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**

| | | | | | | | | | | | | |
|-------|----------------------|-----|------|------|------|------|------|--------|-------|-------|-------|--------|
| 50.00 | (1) 3/8" Coax | No | 4.60 | 0.00 | 0.44 | 0.00 | 0.00 | 23.537 | 0.229 | 0.000 | 0.00 | 0.44 |
| 50.00 | (1) 0.28" RG-6 | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 23.537 | 0.229 | 0.000 | 0.00 | 0.16 |
| 50.00 | (2) 0.65" 8 AWG 2C | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 23.537 | 0.229 | 0.000 | 0.00 | 3.42 |
| 50.00 | (12) 1 1/4" Coax | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 23.537 | 0.229 | 0.000 | 0.00 | 41.73 |
| 50.00 | (4) 1 1/4" Hybriflex | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 23.537 | 0.229 | 0.000 | 0.00 | 22.08 |
| 50.00 | (2) 1/2" Coax | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 23.537 | 0.229 | 0.000 | 0.00 | 1.66 |
| 50.00 | (1) 2" Conduit | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 23.537 | 0.229 | 0.000 | 0.00 | 20.15 |
| 50.00 | (6) 5/16" Coax | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 23.537 | 0.229 | 0.000 | 0.00 | 1.49 |
| 50.00 | (12) 1 5/8" Coax | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 23.537 | 0.229 | 0.000 | 0.00 | 54.31 |
| 50.00 | (12) 1 5/8" Coax | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 23.537 | 0.229 | 0.000 | 0.00 | 54.31 |
| 50.00 | (1) 1 5/8" Hybriflex | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 23.537 | 0.229 | 0.000 | 0.00 | 7.18 |
| 50.00 | (1) 1/2" Coax | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 23.537 | 0.229 | 0.000 | 0.00 | 0.83 |
| 50.00 | (1) 1 1/4" Fiber | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 23.537 | 0.229 | 0.000 | 0.00 | 5.80 |
| 50.00 | (14) 1 5/8" Coax | Yes | 4.60 | 1.18 | 3.96 | 1.52 | 1.80 | 23.537 | 0.229 | 0.000 | 74.38 | 63.36 |
| 50.00 | (2) 1/2" Coax | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 23.537 | 0.229 | 0.000 | 0.00 | 1.66 |
| 50.00 | (2) 1/2" Coax | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 23.537 | 0.229 | 0.000 | 0.00 | 1.66 |
| 50.00 | (2) 1/2" Coax | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 23.537 | 0.229 | 0.000 | 0.00 | 1.66 |
| 50.00 | (4) DYWIDAG | Yes | 4.60 | 1.20 | 2.50 | 0.96 | 1.15 | 23.537 | 0.229 | 0.000 | 47.64 | 0.00 |
| 55.00 | (6) 1 5/8" Coax | Yes | 5.00 | 1.20 | 1.98 | 0.82 | 0.99 | 24.191 | 0.236 | 0.000 | 42.15 | 29.52 |
| 55.00 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.82 | 0.00 | 0.000 | 0.000 | 0.000 | 0.00 | 400.80 |
| 55.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 24.191 | 0.236 | 0.000 | 0.00 | 0.48 |
| 55.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 24.191 | 0.236 | 0.000 | 0.00 | 0.17 |
| 55.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 24.191 | 0.236 | 0.000 | 0.00 | 3.72 |
| 55.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 24.191 | 0.236 | 0.000 | 0.00 | 45.35 |
| 55.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 24.191 | 0.236 | 0.000 | 0.00 | 24.00 |
| 55.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 24.191 | 0.236 | 0.000 | 0.00 | 1.80 |
| 55.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 24.191 | 0.236 | 0.000 | 0.00 | 21.90 |
| 55.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 24.191 | 0.236 | 0.000 | 0.00 | 1.62 |
| 55.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 24.191 | 0.236 | 0.000 | 0.00 | 59.03 |
| 55.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 24.191 | 0.236 | 0.000 | 0.00 | 59.03 |
| 55.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 24.191 | 0.236 | 0.000 | 0.00 | 7.80 |
| 55.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 24.191 | 0.236 | 0.000 | 0.00 | 0.90 |
| 55.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 24.191 | 0.236 | 0.000 | 0.00 | 6.30 |
| 55.00 | (14) 1 5/8" Coax | Yes | 5.00 | 1.16 | 3.96 | 1.65 | 1.93 | 24.191 | 0.236 | 0.000 | 81.96 | 68.87 |
| 55.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 24.191 | 0.236 | 0.000 | 0.00 | 1.80 |
| 55.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 24.191 | 0.236 | 0.000 | 0.00 | 1.80 |
| 55.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 24.191 | 0.236 | 0.000 | 0.00 | 1.80 |
| 55.00 | (4) DYWIDAG | Yes | 5.00 | 1.20 | 2.50 | 1.04 | 1.25 | 24.191 | 0.236 | 0.000 | 53.22 | 0.00 |
| 55.68 | (6) 1 5/8" Coax | Yes | 0.68 | 1.20 | 1.98 | 0.11 | 0.13 | 24.558 | 0.240 | 0.000 | 5.79 | 4.00 |
| 55.68 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.11 | 0.00 | 0.000 | 0.000 | 0.000 | 0.00 | 54.27 |
| 55.68 | (1) 3/8" Coax | No | 0.68 | 0.00 | 0.44 | 0.00 | 0.00 | 24.558 | 0.240 | 0.000 | 0.00 | 0.06 |
| 55.68 | (1) 0.28" RG-6 | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 24.558 | 0.240 | 0.000 | 0.00 | 0.02 |
| 55.68 | (2) 0.65" 8 AWG 2C | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 24.558 | 0.240 | 0.000 | 0.00 | 0.50 |
| 55.68 | (12) 1 1/4" Coax | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 24.558 | 0.240 | 0.000 | 0.00 | 6.14 |
| 55.68 | (4) 1 1/4" Hybriflex | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 24.558 | 0.240 | 0.000 | 0.00 | 3.25 |
| 55.68 | (2) 1/2" Coax | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 24.558 | 0.240 | 0.000 | 0.00 | 0.24 |
| 55.68 | (1) 2" Conduit | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 24.558 | 0.240 | 0.000 | 0.00 | 2.97 |
| 55.68 | (6) 5/16" Coax | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 24.558 | 0.240 | 0.000 | 0.00 | 0.22 |
| 55.68 | (12) 1 5/8" Coax | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 24.558 | 0.240 | 0.000 | 0.00 | 7.99 |
| 55.68 | (12) 1 5/8" Coax | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 24.558 | 0.240 | 0.000 | 0.00 | 7.99 |
| 55.68 | (1) 1 5/8" Hybriflex | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 24.558 | 0.240 | 0.000 | 0.00 | 1.06 |
| 55.68 | (1) 1/2" Coax | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 24.558 | 0.240 | 0.000 | 0.00 | 0.12 |
| 55.68 | (1) 1 1/4" Fiber | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 24.558 | 0.240 | 0.000 | 0.00 | 0.85 |
| 55.68 | (14) 1 5/8" Coax | Yes | 0.68 | 1.15 | 3.96 | 0.22 | 0.26 | 24.558 | 0.240 | 0.000 | 11.18 | 9.33 |
| 55.68 | (2) 1/2" Coax | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 24.558 | 0.240 | 0.000 | 0.00 | 0.24 |
| 55.68 | (2) 1/2" Coax | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 24.558 | 0.240 | 0.000 | 0.00 | 0.24 |
| 55.68 | (2) 1/2" Coax | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 24.558 | 0.240 | 0.000 | 0.00 | 0.24 |

Load Case: 1.2D + 1.6W**110 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**

| | | | | | | | | | | | | |
|-------|----------------------|-----|------|------|------|------|------|--------|-------|-------|-------|-------|
| 55.68 | (4) DYWIDAG | Yes | 0.68 | 1.20 | 2.50 | 0.14 | 0.17 | 24.558 | 0.240 | 0.000 | 7.32 | 0.00 |
| 60.00 | (6) 1 5/8" Coax | Yes | 4.32 | 1.20 | 1.98 | 0.71 | 0.86 | 24.870 | 0.244 | 0.000 | 37.47 | 25.52 |
| 60.00 | (1) 3/8" Coax | No | 4.32 | 0.00 | 0.44 | 0.00 | 0.00 | 24.870 | 0.244 | 0.000 | 0.00 | 0.42 |
| 60.00 | (1) 0.28" RG-6 | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 24.870 | 0.244 | 0.000 | 0.00 | 0.15 |
| 60.00 | (2) 0.65" 8 AWG 2C | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 24.870 | 0.244 | 0.000 | 0.00 | 3.22 |
| 60.00 | (12) 1 1/4" Coax | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 24.870 | 0.244 | 0.000 | 0.00 | 39.21 |
| 60.00 | (4) 1 1/4" Hybriflex | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 24.870 | 0.244 | 0.000 | 0.00 | 20.75 |
| 60.00 | (2) 1/2" Coax | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 24.870 | 0.244 | 0.000 | 0.00 | 1.56 |
| 60.00 | (1) 2" Conduit | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 24.870 | 0.244 | 0.000 | 0.00 | 18.93 |
| 60.00 | (6) 5/16" Coax | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 24.870 | 0.244 | 0.000 | 0.00 | 1.40 |
| 60.00 | (12) 1 5/8" Coax | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 24.870 | 0.244 | 0.000 | 0.00 | 51.04 |
| 60.00 | (12) 1 5/8" Coax | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 24.870 | 0.244 | 0.000 | 0.00 | 51.04 |
| 60.00 | (1) 1 5/8" Hybriflex | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 24.870 | 0.244 | 0.000 | 0.00 | 6.74 |
| 60.00 | (1) 1/2" Coax | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 24.870 | 0.244 | 0.000 | 0.00 | 0.78 |
| 60.00 | (1) 1 1/4" Fiber | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 24.870 | 0.244 | 0.000 | 0.00 | 5.45 |
| 60.00 | (14) 1 5/8" Coax | Yes | 4.32 | 1.15 | 3.96 | 1.43 | 1.64 | 24.870 | 0.244 | 0.000 | 71.85 | 59.55 |
| 60.00 | (2) 1/2" Coax | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 24.870 | 0.244 | 0.000 | 0.00 | 1.56 |
| 60.00 | (2) 1/2" Coax | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 24.870 | 0.244 | 0.000 | 0.00 | 1.56 |
| 60.00 | (2) 1/2" Coax | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 24.870 | 0.244 | 0.000 | 0.00 | 1.56 |
| 60.00 | (4) DYWIDAG | Yes | 4.32 | 1.20 | 2.50 | 0.90 | 1.08 | 24.870 | 0.244 | 0.000 | 47.31 | 0.00 |
| 65.00 | (6) 1 5/8" Coax | Yes | 5.00 | 1.20 | 1.98 | 0.82 | 0.99 | 25.427 | 0.221 | 0.000 | 44.30 | 29.52 |
| 65.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 25.427 | 0.221 | 0.000 | 0.00 | 0.48 |
| 65.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.427 | 0.221 | 0.000 | 0.00 | 0.17 |
| 65.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.427 | 0.221 | 0.000 | 0.00 | 3.72 |
| 65.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.427 | 0.221 | 0.000 | 0.00 | 45.35 |
| 65.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.427 | 0.221 | 0.000 | 0.00 | 24.00 |
| 65.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.427 | 0.221 | 0.000 | 0.00 | 1.80 |
| 65.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.427 | 0.221 | 0.000 | 0.00 | 21.90 |
| 65.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.427 | 0.221 | 0.000 | 0.00 | 1.62 |
| 65.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.427 | 0.221 | 0.000 | 0.00 | 59.03 |
| 65.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.427 | 0.221 | 0.000 | 0.00 | 59.03 |
| 65.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.427 | 0.221 | 0.000 | 0.00 | 7.80 |
| 65.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.427 | 0.221 | 0.000 | 0.00 | 0.90 |
| 65.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.427 | 0.221 | 0.000 | 0.00 | 6.30 |
| 65.00 | (14) 1 5/8" Coax | Yes | 5.00 | 1.13 | 3.96 | 1.65 | 1.88 | 25.427 | 0.221 | 0.000 | 84.03 | 68.87 |
| 65.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.427 | 0.221 | 0.000 | 0.00 | 1.80 |
| 65.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.427 | 0.221 | 0.000 | 0.00 | 1.80 |
| 65.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.427 | 0.221 | 0.000 | 0.00 | 1.80 |
| 65.00 | (4) DYWIDAG | Yes | 3.00 | 1.20 | 2.50 | 0.63 | 0.75 | 25.427 | 0.221 | 0.000 | 33.56 | 0.00 |
| 70.00 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 0.82 | 0.00 | 25.992 | 0.183 | 1.248 | 0.00 | 29.52 |
| 70.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 25.992 | 0.183 | 1.248 | 0.00 | 0.48 |
| 70.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.992 | 0.183 | 1.248 | 0.00 | 0.17 |
| 70.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.992 | 0.183 | 1.248 | 0.00 | 3.72 |
| 70.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.992 | 0.183 | 1.248 | 0.00 | 45.35 |
| 70.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.992 | 0.183 | 1.248 | 0.00 | 24.00 |
| 70.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.992 | 0.183 | 1.248 | 0.00 | 1.80 |
| 70.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.992 | 0.183 | 1.248 | 0.00 | 21.90 |
| 70.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.992 | 0.183 | 1.248 | 0.00 | 1.62 |
| 70.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.992 | 0.183 | 1.248 | 0.00 | 59.03 |
| 70.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.992 | 0.183 | 1.248 | 0.00 | 59.03 |
| 70.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.992 | 0.183 | 1.248 | 0.00 | 7.80 |
| 70.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.992 | 0.183 | 1.248 | 0.00 | 0.90 |
| 70.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.992 | 0.183 | 1.248 | 0.00 | 6.30 |
| 70.00 | (14) 1 5/8" Coax | Yes | 5.00 | 0.00 | 3.96 | 1.65 | 0.00 | 25.992 | 0.183 | 1.248 | 0.00 | 68.87 |
| 70.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.992 | 0.183 | 1.248 | 0.00 | 1.80 |
| 70.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.992 | 0.183 | 1.248 | 0.00 | 1.80 |
| 70.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.992 | 0.183 | 1.248 | 0.00 | 1.80 |

| Load Case: 1.2D + 1.6W | | 110 mph with No Ice | | | | | | | 25 Iterations | | | |
|------------------------------------|----------------------|----------------------------|------|------|------|------|------|--------|--------------------------------------|-------|-------|-------|
| | | | | | | | | | Wind Importance Factor : 1.00 | | | |
| Gust Response Factor : 1.10 | | | | | | | | | | | | |
| Dead Load Factor : 1.20 | | | | | | | | | | | | |
| Wind Load Factor : 1.60 | | | | | | | | | | | | |
| 75.00 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 0.82 | 0.00 | 26.528 | 0.189 | 1.267 | 0.00 | 29.52 |
| 75.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 26.528 | 0.189 | 1.267 | 0.00 | 0.48 |
| 75.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 26.528 | 0.189 | 1.267 | 0.00 | 0.17 |
| 75.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 26.528 | 0.189 | 1.267 | 0.00 | 3.72 |
| 75.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 26.528 | 0.189 | 1.267 | 0.00 | 45.35 |
| 75.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 26.528 | 0.189 | 1.267 | 0.00 | 24.00 |
| 75.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 26.528 | 0.189 | 1.267 | 0.00 | 1.80 |
| 75.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 26.528 | 0.189 | 1.267 | 0.00 | 21.90 |
| 75.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 26.528 | 0.189 | 1.267 | 0.00 | 1.62 |
| 75.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 26.528 | 0.189 | 1.267 | 0.00 | 59.03 |
| 75.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 26.528 | 0.189 | 1.267 | 0.00 | 59.03 |
| 75.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 26.528 | 0.189 | 1.267 | 0.00 | 7.80 |
| 75.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 26.528 | 0.189 | 1.267 | 0.00 | 0.90 |
| 75.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 26.528 | 0.189 | 1.267 | 0.00 | 6.30 |
| 75.00 | (14) 1 5/8" Coax | Yes | 5.00 | 0.00 | 3.96 | 1.65 | 0.00 | 26.528 | 0.189 | 1.267 | 0.00 | 68.87 |
| 75.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 26.528 | 0.189 | 1.267 | 0.00 | 1.80 |
| 75.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 26.528 | 0.189 | 1.267 | 0.00 | 1.80 |
| 80.00 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 0.82 | 0.00 | 27.038 | 0.196 | 1.288 | 0.00 | 29.52 |
| 80.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 27.038 | 0.196 | 1.288 | 0.00 | 0.48 |
| 80.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.038 | 0.196 | 1.288 | 0.00 | 0.17 |
| 80.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.038 | 0.196 | 1.288 | 0.00 | 3.72 |
| 80.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.038 | 0.196 | 1.288 | 0.00 | 45.35 |
| 80.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.038 | 0.196 | 1.288 | 0.00 | 24.00 |
| 80.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.038 | 0.196 | 1.288 | 0.00 | 1.80 |
| 80.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.038 | 0.196 | 1.288 | 0.00 | 21.90 |
| 80.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.038 | 0.196 | 1.288 | 0.00 | 1.62 |
| 80.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.038 | 0.196 | 1.288 | 0.00 | 59.03 |
| 80.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.038 | 0.196 | 1.288 | 0.00 | 59.03 |
| 80.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.038 | 0.196 | 1.288 | 0.00 | 7.80 |
| 80.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.038 | 0.196 | 1.288 | 0.00 | 0.90 |
| 80.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.038 | 0.196 | 1.288 | 0.00 | 6.30 |
| 80.00 | (14) 1 5/8" Coax | Yes | 5.00 | 0.00 | 3.96 | 1.65 | 0.00 | 27.038 | 0.196 | 1.288 | 0.00 | 68.87 |
| 80.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.038 | 0.196 | 1.288 | 0.00 | 1.80 |
| 80.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.038 | 0.196 | 1.288 | 0.00 | 1.80 |
| 80.75 | (6) 1 5/8" Coax | Yes | 0.75 | 1.20 | 1.98 | 0.12 | 0.15 | 27.321 | 0.200 | 0.000 | 7.13 | 4.42 |
| 80.75 | (1) 3/8" Coax | No | 0.75 | 0.00 | 0.44 | 0.00 | 0.00 | 27.321 | 0.200 | 0.000 | 0.00 | 0.07 |
| 80.75 | (1) 0.28" RG-6 | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 27.321 | 0.200 | 0.000 | 0.00 | 0.03 |
| 80.75 | (2) 0.65" 8 AWG 2C | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 27.321 | 0.200 | 0.000 | 0.00 | 0.56 |
| 80.75 | (12) 1 1/4" Coax | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 27.321 | 0.200 | 0.000 | 0.00 | 6.79 |
| 80.75 | (4) 1 1/4" Hybriflex | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 27.321 | 0.200 | 0.000 | 0.00 | 3.59 |
| 80.75 | (2) 1/2" Coax | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 27.321 | 0.200 | 0.000 | 0.00 | 0.27 |
| 80.75 | (1) 2" Conduit | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 27.321 | 0.200 | 0.000 | 0.00 | 3.28 |
| 80.75 | (6) 5/16" Coax | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 27.321 | 0.200 | 0.000 | 0.00 | 0.24 |
| 80.75 | (12) 1 5/8" Coax | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 27.321 | 0.200 | 0.000 | 0.00 | 8.84 |
| 80.75 | (12) 1 5/8" Coax | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 27.321 | 0.200 | 0.000 | 0.00 | 8.84 |
| 80.75 | (1) 1 5/8" Hybriflex | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 27.321 | 0.200 | 0.000 | 0.00 | 1.17 |
| 80.75 | (1) 1/2" Coax | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 27.321 | 0.200 | 0.000 | 0.00 | 0.13 |
| 80.75 | (1) 1 1/4" Fiber | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 27.321 | 0.200 | 0.000 | 0.00 | 0.94 |
| 80.75 | (14) 1 5/8" Coax | Yes | 0.75 | 1.09 | 3.96 | 0.25 | 0.27 | 27.321 | 0.200 | 0.000 | 13.04 | 10.31 |
| 84.90 | (6) 1 5/8" Coax | Yes | 4.15 | 1.20 | 1.98 | 0.68 | 0.82 | 27.556 | 0.204 | 0.000 | 39.86 | 24.50 |
| 84.90 | (1) 3/8" Coax | No | 4.15 | 0.00 | 0.44 | 0.00 | 0.00 | 27.556 | 0.204 | 0.000 | 0.00 | 0.40 |
| 84.90 | (1) 0.28" RG-6 | No | 4.15 | 0.00 | 0.00 | 0.00 | 0.00 | 27.556 | 0.204 | 0.000 | 0.00 | 0.14 |
| 84.90 | (2) 0.65" 8 AWG 2C | No | 4.15 | 0.00 | 0.00 | 0.00 | 0.00 | 27.556 | 0.204 | 0.000 | 0.00 | 3.09 |
| 84.90 | (12) 1 1/4" Coax | No | 4.15 | 0.00 | 0.00 | 0.00 | 0.00 | 27.556 | 0.204 | 0.000 | 0.00 | 37.65 |
| 84.90 | (4) 1 1/4" Hybriflex | No | 4.15 | 0.00 | 0.00 | 0.00 | 0.00 | 27.556 | 0.204 | 0.000 | 0.00 | 19.93 |
| 84.90 | (2) 1/2" Coax | No | 4.15 | 0.00 | 0.00 | 0.00 | 0.00 | 27.556 | 0.204 | 0.000 | 0.00 | 1.49 |
| 84.90 | (1) 2" Conduit | No | 4.15 | 0.00 | 0.00 | 0.00 | 0.00 | 27.556 | 0.204 | 0.000 | 0.00 | 18.18 |

Load Case: 1.2D + 1.6W**110 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**

| | | | | | | | | | | | |
|-------|----------------------|-----|------|------|------|------|--------|--------|-------|-------|-------|
| 84.90 | (6) 5/16" Coax | No | 4.15 | 0.00 | 0.00 | 0.00 | 27.556 | 0.204 | 0.000 | 0.00 | 1.34 |
| 84.90 | (12) 1 5/8" Coax | No | 4.15 | 0.00 | 0.00 | 0.00 | 27.556 | 0.204 | 0.000 | 0.00 | 49.01 |
| 84.90 | (12) 1 5/8" Coax | No | 4.15 | 0.00 | 0.00 | 0.00 | 27.556 | 0.204 | 0.000 | 0.00 | 49.01 |
| 84.90 | (1) 1 5/8" Hybriflex | No | 4.15 | 0.00 | 0.00 | 0.00 | 27.556 | 0.204 | 0.000 | 0.00 | 6.48 |
| 84.90 | (1) 1/2" Coax | No | 4.15 | 0.00 | 0.00 | 0.00 | 27.556 | 0.204 | 0.000 | 0.00 | 0.75 |
| 84.90 | (1) 1 1/4" Fiber | No | 4.15 | 0.00 | 0.00 | 0.00 | 27.556 | 0.204 | 0.000 | 0.00 | 5.23 |
| 84.90 | (14) 1 5/8" Coax | Yes | 4.15 | 1.09 | 3.96 | 1.37 | 1.50 | 27.556 | 0.204 | 0.000 | 72.63 |
| 85.00 | (6) 1 5/8" Coax | Yes | 0.10 | 1.20 | 1.98 | 0.02 | 0.02 | 27.757 | 0.204 | 0.000 | 0.97 |
| 85.00 | (1) 3/8" Coax | No | 0.10 | 0.00 | 0.44 | 0.00 | 0.00 | 27.757 | 0.204 | 0.000 | 0.00 |
| 85.00 | (1) 0.28" RG-6 | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 27.757 | 0.204 | 0.000 | 0.00 |
| 85.00 | (2) 0.65" 8 AWG 2C | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 27.757 | 0.204 | 0.000 | 0.07 |
| 85.00 | (12) 1 1/4" Coax | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 27.757 | 0.204 | 0.000 | 0.91 |
| 85.00 | (4) 1 1/4" Hybriflex | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 27.757 | 0.204 | 0.000 | 0.48 |
| 85.00 | (2) 1/2" Coax | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 27.757 | 0.204 | 0.000 | 0.04 |
| 85.00 | (1) 2" Conduit | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 27.757 | 0.204 | 0.000 | 0.44 |
| 85.00 | (6) 5/16" Coax | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 27.757 | 0.204 | 0.000 | 0.03 |
| 85.00 | (12) 1 5/8" Coax | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 27.757 | 0.204 | 0.000 | 1.19 |
| 85.00 | (12) 1 5/8" Coax | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 27.757 | 0.204 | 0.000 | 1.19 |
| 85.00 | (1) 1 5/8" Hybriflex | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 27.757 | 0.204 | 0.000 | 0.16 |
| 85.00 | (1) 1/2" Coax | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 27.757 | 0.204 | 0.000 | 0.02 |
| 85.00 | (1) 1 1/4" Fiber | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 27.757 | 0.204 | 0.000 | 0.13 |
| 85.00 | (14) 1 5/8" Coax | Yes | 0.10 | 1.08 | 3.96 | 0.03 | 0.04 | 27.757 | 0.204 | 0.000 | 1.76 |
| 90.00 | (6) 1 5/8" Coax | Yes | 5.00 | 1.20 | 1.98 | 0.82 | 0.99 | 27.992 | 0.208 | 0.000 | 48.77 |
| 90.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 27.992 | 0.208 | 0.000 | 0.48 |
| 90.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.992 | 0.208 | 0.000 | 0.17 |
| 90.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.992 | 0.208 | 0.000 | 3.72 |
| 90.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.992 | 0.208 | 0.000 | 45.35 |
| 90.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.992 | 0.208 | 0.000 | 24.00 |
| 90.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.992 | 0.208 | 0.000 | 1.80 |
| 90.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.992 | 0.208 | 0.000 | 21.90 |
| 90.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.992 | 0.208 | 0.000 | 1.62 |
| 90.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.992 | 0.208 | 0.000 | 59.03 |
| 90.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.992 | 0.208 | 0.000 | 59.03 |
| 90.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.992 | 0.208 | 0.000 | 7.80 |
| 90.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.992 | 0.208 | 0.000 | 0.90 |
| 90.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.992 | 0.208 | 0.000 | 6.30 |
| 90.00 | (14) 1 5/8" Coax | Yes | 5.00 | 1.08 | 3.96 | 1.65 | 1.79 | 27.992 | 0.208 | 0.000 | 88.17 |
| 95.00 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 0.82 | 0.00 | 28.440 | 0.072 | 0.000 | 29.52 |
| 95.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 28.440 | 0.072 | 0.000 | 0.48 |
| 95.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 28.440 | 0.072 | 0.000 | 0.17 |
| 95.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 28.440 | 0.072 | 0.000 | 3.72 |
| 95.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 28.440 | 0.072 | 0.000 | 45.35 |
| 95.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 28.440 | 0.072 | 0.000 | 24.00 |
| 95.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 28.440 | 0.072 | 0.000 | 1.80 |
| 95.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 28.440 | 0.072 | 0.000 | 21.90 |
| 95.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 28.440 | 0.072 | 0.000 | 1.62 |
| 95.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 28.440 | 0.072 | 0.000 | 59.03 |
| 95.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 28.440 | 0.072 | 0.000 | 59.03 |
| 95.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 28.440 | 0.072 | 0.000 | 7.80 |
| 95.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 28.440 | 0.072 | 0.000 | 0.90 |
| 100.0 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 0.82 | 0.00 | 28.871 | 0.075 | 0.000 | 29.52 |
| 100.0 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 28.871 | 0.075 | 0.000 | 0.48 |
| 100.0 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 28.871 | 0.075 | 0.000 | 0.17 |
| 100.0 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 28.871 | 0.075 | 0.000 | 3.72 |
| 100.0 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 28.871 | 0.075 | 0.000 | 45.35 |
| 100.0 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 28.871 | 0.075 | 0.000 | 24.00 |
| 100.0 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 28.871 | 0.075 | 0.000 | 1.80 |

| Load Case: 1.2D + 1.6W | | 110 mph with No Ice | | | | | | | 25 Iterations | | |
|------------------------------------|----------------------|----------------------------|------|------|------|------|--------|--------|--------------------------------------|-------|-------|
| | | | | | | | | | Wind Importance Factor : 1.00 | | |
| Gust Response Factor : 1.10 | | | | | | | | | | | |
| Dead Load Factor : 1.20 | | | | | | | | | | | |
| Wind Load Factor : 1.60 | | | | | | | | | | | |
| 100.0 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 28.871 | 0.075 | 0.000 | 0.00 | 21.90 |
| 100.0 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 28.871 | 0.075 | 0.000 | 0.00 | 1.62 |
| 100.0 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 28.871 | 0.075 | 0.000 | 0.00 | 59.03 |
| 100.0 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 28.871 | 0.075 | 0.000 | 0.00 | 59.03 |
| 100.0 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 28.871 | 0.075 | 0.000 | 0.00 | 7.80 |
| 100.0 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 28.871 | 0.075 | 0.000 | 0.00 | 0.90 |
| 105.0 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 0.82 | 0.00 | 29.287 | 0.078 | 0.000 | 0.00 |
| 105.0 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 29.287 | 0.078 | 0.000 | 0.00 |
| 105.0 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 29.287 | 0.078 | 0.000 | 0.00 |
| 105.0 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 29.287 | 0.078 | 0.000 | 0.00 |
| 105.0 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 29.287 | 0.078 | 0.000 | 0.00 |
| 105.0 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 29.287 | 0.078 | 0.000 | 0.00 |
| 105.0 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 29.287 | 0.078 | 0.000 | 0.00 |
| 105.0 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 29.287 | 0.078 | 0.000 | 0.00 |
| 105.0 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 29.287 | 0.078 | 0.000 | 0.00 |
| 105.0 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 29.287 | 0.078 | 0.000 | 0.00 |
| 110.0 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 0.82 | 0.00 | 29.688 | 0.082 | 0.000 | 0.00 |
| 110.0 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 29.688 | 0.082 | 0.000 | 0.00 |
| 110.0 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 29.688 | 0.082 | 0.000 | 0.00 |
| 110.0 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 29.688 | 0.082 | 0.000 | 0.00 |
| 110.0 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 29.688 | 0.082 | 0.000 | 0.00 |
| 110.0 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 29.688 | 0.082 | 0.000 | 0.00 |
| 110.0 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 29.688 | 0.082 | 0.000 | 0.00 |
| 110.0 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 29.688 | 0.082 | 0.000 | 0.00 |
| 110.0 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 29.688 | 0.082 | 0.000 | 0.00 |
| 110.0 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 29.688 | 0.082 | 0.000 | 0.00 |
| 115.0 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 0.82 | 0.00 | 30.076 | 0.086 | 0.000 | 0.00 |
| 115.0 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 30.076 | 0.086 | 0.000 | 0.00 |
| 115.0 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 30.076 | 0.086 | 0.000 | 0.00 |
| 115.0 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 30.076 | 0.086 | 0.000 | 0.00 |
| 115.0 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 30.076 | 0.086 | 0.000 | 0.00 |
| 115.0 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 30.076 | 0.086 | 0.000 | 0.00 |
| 115.0 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 30.076 | 0.086 | 0.000 | 0.00 |
| 115.0 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 30.076 | 0.086 | 0.000 | 0.00 |
| 115.0 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 30.076 | 0.086 | 0.000 | 0.00 |
| 120.0 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 0.82 | 0.00 | 30.452 | 0.090 | 0.000 | 0.00 |
| 120.0 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 30.452 | 0.090 | 0.000 | 0.00 |
| 120.0 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 30.452 | 0.090 | 0.000 | 0.00 |
| 120.0 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 30.452 | 0.090 | 0.000 | 0.00 |
| 120.0 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 30.452 | 0.090 | 0.000 | 0.00 |
| 120.0 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 30.452 | 0.090 | 0.000 | 0.00 |
| 120.0 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 30.452 | 0.090 | 0.000 | 0.00 |
| 120.0 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 30.452 | 0.090 | 0.000 | 0.00 |
| 120.0 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 30.452 | 0.090 | 0.000 | 0.00 |
| 125.0 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 0.82 | 0.00 | 30.817 | 0.095 | 0.000 | 0.00 |
| 125.0 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 30.817 | 0.095 | 0.000 | 0.00 |
| 125.0 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 30.817 | 0.095 | 0.000 | 0.00 |
| 125.0 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 30.817 | 0.095 | 0.000 | 0.00 |
| 125.0 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 30.817 | 0.095 | 0.000 | 0.00 |
| 125.0 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 30.817 | 0.095 | 0.000 | 0.00 |
| 125.0 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 30.817 | 0.095 | 0.000 | 0.00 |
| 125.0 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 30.817 | 0.095 | 0.000 | 0.00 |
| 125.0 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 30.817 | 0.095 | 0.000 | 0.00 |
| 125.8 | (6) 1 5/8" Coax | Yes | 0.80 | 0.00 | 1.98 | 0.13 | 0.00 | 31.024 | 0.098 | 0.000 | 0.00 |
| 125.8 | (1) 3/8" Coax | No | 0.80 | 0.00 | 0.44 | 0.00 | 0.00 | 31.024 | 0.098 | 0.000 | 0.00 |
| 125.8 | (1) 0.28" RG-6 | No | 0.80 | 0.00 | 0.00 | 0.00 | 0.00 | 31.024 | 0.098 | 0.000 | 0.00 |
| 125.8 | (2) 0.65" 8 AWG 2C | No | 0.80 | 0.00 | 0.00 | 0.00 | 0.00 | 31.024 | 0.098 | 0.000 | 0.00 |
| 125.8 | (12) 1 1/4" Coax | No | 0.80 | 0.00 | 0.00 | 0.00 | 0.00 | 31.024 | 0.098 | 0.000 | 0.00 |
| 130.0 | (6) 1 5/8" Coax | Yes | 4.20 | 0.00 | 1.98 | 0.69 | 0.00 | 31.199 | 0.184 | 1.253 | 0.00 |
| 130.0 | (1) 3/8" Coax | No | 4.20 | 0.00 | 0.44 | 0.00 | 0.00 | 31.199 | 0.184 | 1.253 | 0.00 |
| 130.0 | (1) 0.28" RG-6 | No | 4.20 | 0.00 | 0.00 | 0.00 | 0.00 | 31.199 | 0.184 | 1.253 | 0.00 |

Site Number: 302511

Code: ANSI/TIA-222-G

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Site Name: WSPT - South, CT

Engineering Number: 63916524

1/25/2016 11:02:29 AM

Customer: T-MOBILE

Load Case: 1.2D + 1.6W

110 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

| | | | | | | | | | | |
|--------------------------|-----|------|------|------|------|--------|--------|-------|-------|-------|
| 130.0 (2) 0.65" 8 AWG 2C | No | 4.20 | 0.00 | 0.00 | 0.00 | 31.199 | 0.184 | 1.253 | 0.00 | 3.12 |
| 130.0 (12) 1 1/4" Coax | No | 4.20 | 0.00 | 0.00 | 0.00 | 31.199 | 0.184 | 1.253 | 0.00 | 38.09 |
| 131.0 (6) 1 5/8" Coax | Yes | 1.00 | 0.00 | 1.98 | 0.17 | 0.00 | 31.379 | 0.184 | 1.253 | 0.00 |
| 131.0 (1) 3/8" Coax | No | 1.00 | 0.00 | 0.44 | 0.00 | 0.00 | 31.379 | 0.184 | 1.253 | 0.00 |
| 131.0 (1) 0.28" RG-6 | No | 1.00 | 0.00 | 0.00 | 0.00 | 0.00 | 31.379 | 0.184 | 1.253 | 0.00 |
| 131.0 (2) 0.65" 8 AWG 2C | No | 1.00 | 0.00 | 0.00 | 0.00 | 0.00 | 31.379 | 0.184 | 1.253 | 0.00 |
| 131.0 (12) 1 1/4" Coax | No | 1.00 | 0.00 | 0.00 | 0.00 | 0.00 | 31.379 | 0.184 | 1.253 | 0.00 |
| 135.0 (6) 1 5/8" Coax | Yes | 4.00 | 0.00 | 1.98 | 0.66 | 0.00 | 31.550 | 0.184 | 1.253 | 0.00 |
| 135.0 (1) 3/8" Coax | No | 4.00 | 0.00 | 0.44 | 0.00 | 0.00 | 31.550 | 0.184 | 1.253 | 0.00 |
| 136.0 (6) 1 5/8" Coax | Yes | 1.00 | 0.00 | 1.98 | 0.17 | 0.00 | 31.718 | 0.184 | 1.253 | 0.00 |
| 136.0 (1) 3/8" Coax | No | 1.00 | 0.00 | 0.44 | 0.00 | 0.00 | 31.718 | 0.184 | 1.253 | 0.00 |

Totals: 1,760.95 11,842.14

Site Number: 302511

Code: ANSI/TIA-222-G

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Site Name: WSPT - South, CT

Engineering Number: 63916524

1/25/2016 11:02:29 AM

Customer: T-MOBILE

Load Case: 1.2D + 1.6W

110 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 | | Discrete Forces | | | Linear Forces | | | Sum of Forces | | |
|---------------------|-----------------|--------------|----------------------|-----------------|---------------|---------------|---------------|----------------------|---------|----------------------|-------------------------|---------------|
| | | Wind FX | Dead Load (lb) | Torsion | Moment | Dead Load | Wind FX | Dead Load (lb) | Wind FX | Dead Load (lb) | Torsion Load (lb) | MY (lb-ft) |
| | | | | Wind FX (lb) | MY (lb-ft) | MZ (lb-ft) | | | | | | |
| 0.00 | | 434.6 | 0.0 | | | | 0.0 | 0.0 | 434.6 | 0.0 | 0.0 | 0.0 |
| 5.00 | | 863.5 | 1,266.4 | | | | 0.0 | 736.7 | 863.5 | 2,003.1 | 0.0 | 0.0 |
| 10.00 | | 851.8 | 1,235.8 | | | | 0.0 | 736.7 | 851.8 | 1,972.5 | 0.0 | 0.0 |
| 15.00 | | 840.2 | 1,205.3 | | | | 0.0 | 736.7 | 840.2 | 1,942.0 | 0.0 | 0.0 |
| 20.00 | | 794.5 | 1,174.7 | | | | 0.0 | 736.7 | 794.5 | 1,911.4 | 0.0 | 0.0 |
| 25.00 | | 744.7 | 1,144.1 | | | | 153.0 | 736.7 | 897.7 | 1,880.8 | 0.0 | 0.0 |
| 30.00 | | 733.4 | 1,113.5 | | | | 153.0 | 736.7 | 886.4 | 1,850.2 | 0.0 | 0.0 |
| 35.00 | | 736.6 | 1,082.9 | | | | 156.7 | 736.7 | 893.3 | 1,819.6 | 0.0 | 0.0 |
| 40.00 | | 388.7 | 1,052.4 | | | | 163.2 | 736.7 | 551.9 | 1,789.1 | 0.0 | 0.0 |
| 40.24 | Bot - Section 2 | 380.5 | 50.5 | | | | 8.1 | 35.9 | 388.6 | 86.4 | 0.0 | 0.0 |
| 45.00 | | 392.9 | 1,822.9 | | | | 161.0 | 700.8 | 553.9 | 2,523.7 | 0.0 | 0.0 |
| 45.40 | Top - Section 1 | 381.8 | 150.9 | | | | 13.7 | 58.9 | 395.5 | 209.8 | 0.0 | 0.0 |
| 50.00 | | 732.4 | 799.1 | | | | 159.8 | 677.8 | 892.1 | 1,476.9 | 0.0 | 0.0 |
| 55.00 | | 432.6 | 843.4 | | | | 177.3 | 736.7 | 609.9 | 1,580.1 | 0.0 | 0.0 |
| 55.68 | Reinf. Top | 379.1 | 112.2 | | | | 24.3 | 99.7 | 403.4 | 211.9 | 0.0 | 0.0 |
| 60.00 | | 703.6 | 705.0 | | | | 156.6 | 290.4 | 860.2 | 995.4 | 0.0 | 0.0 |
| 65.00 | | 762.6 | 791.0 | | | | 161.9 | 335.9 | 924.5 | 1,126.9 | 0.0 | 0.0 |
| 70.00 | Appertunance(s) | 773.8 | 764.8 | 35.1 | 0.0 | 0.0 | 36.7 | 0.0 | 335.9 | 809.0 | 1,137.4 | 0.0 |
| 75.00 | | 774.1 | 738.6 | | | | | 0.0 | 334.1 | 774.1 | 1,072.7 | 0.0 |
| 80.00 | Appertunance(s) | 440.4 | 712.4 | 470.8 | 0.0 | 326.1 | 185.5 | 0.0 | 334.1 | 911.1 | 1,232.0 | 0.0 |
| 80.75 | Bot - Section 3 | 351.8 | 104.4 | | | | | 20.2 | 49.5 | 372.0 | 153.9 | 0.0 |
| 84.90 | Top - Section 2 | 305.6 | 955.6 | | | | | 112.5 | 274.4 | 418.1 | 1,230.0 | 0.0 |
| 85.00 | | 359.7 | 9.2 | | | | | 2.7 | 6.6 | 362.4 | 15.9 | 0.0 |
| 90.00 | Appertunance(s) | 639.5 | 450.2 | 4,321.3 | 0.0 | 0.0 | 3,521.4 | 136.9 | 330.5 | 5,097.7 | 4,302.1 | 0.0 |
| 95.00 | | 566.6 | 432.8 | | | | | 0.0 | 255.3 | 566.6 | 688.1 | 0.0 |
| 100.00 | Appertunance(s) | 551.5 | 415.3 | 4,138.3 | 0.0 | 77.6 | 2,938.6 | 0.0 | 255.3 | 4,689.9 | 3,609.2 | 0.0 |
| 105.00 | | 535.5 | 397.8 | | | | | 0.0 | 187.6 | 535.5 | 585.4 | 0.0 |
| 110.00 | Appertunance(s) | 518.5 | 380.3 | 3,340.4 | 0.0 | 0.0 | 2,544.0 | 0.0 | 187.6 | 3,859.0 | 3,111.9 | 0.0 |
| 115.00 | | 500.7 | 362.9 | | | | | 0.0 | 128.6 | 500.7 | 491.4 | 0.0 |
| 120.00 | Appertunance(s) | 482.1 | 345.4 | 4,611.3 | 0.0 | 0.0 | 3,821.4 | 0.0 | 128.6 | 5,093.5 | 4,295.4 | 0.0 |
| 125.00 | | 273.2 | 327.9 | | | | | | 0.0 | 79.2 | 273.2 | 407.2 |
| 125.80 | Top - Section 3 | 114.6 | 50.9 | | | | | | 0.0 | 12.7 | 114.6 | 63.6 |
| 130.00 | | 96.2 | 209.6 | | | | | | 0.0 | 66.6 | 96.2 | 276.2 |
| 131.00 | Appertunance(s) | 93.4 | 49.9 | 4,298.3 | 0.0 | 3,569.1 | 3,338.9 | 0.0 | 15.8 | 4,391.7 | 3,404.6 | 0.0 |
| 135.00 | | 93.6 | 199.6 | | | | | | 0.0 | 24.0 | 93.6 | 223.6 |
| 136.00 | Appertunance(s) | 79.1 | 49.9 | 393.5 | 0.0 | 1,180.6 | 88.2 | 0.0 | 6.0 | 472.7 | 144.1 | 0.0 |
| 140.00 | | 90.7 | 199.6 | | | | | | 0.0 | 0.0 | 90.7 | 199.6 |
| 142.00 | | 30.3 | 99.8 | | | | | | 0.0 | 0.0 | 30.3 | 99.8 |
| Totals: | | | | | | | | | | | 41,594.6 | 50,123.8 |
| | | | | | | | | | | | 0.00 | 0.00 |

Load Case: 1.2D + 1.6W**110 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 | -50.04 | -41.26 | 0.00 | -3,705.43 | 0.00 | 3,705.43 | 4,350.13 | 2,175.06 | 7,987.32 | 3,944.64 | 0.00 | 0.00 | 0.673 |
| 5.00 | -47.88 | -40.59 | 0.00 | -3,499.12 | 0.00 | 3,499.12 | 4,285.51 | 2,142.75 | 7,679.11 | 3,792.42 | 0.12 | -0.23 | 0.655 |
| 10.00 | -45.75 | -39.91 | 0.00 | -3,296.20 | 0.00 | 3,296.20 | 4,218.97 | 2,109.49 | 7,373.27 | 3,641.38 | 0.48 | -0.46 | 0.636 |
| 15.00 | -43.66 | -39.22 | 0.00 | -3,096.67 | 0.00 | 3,096.67 | 4,150.52 | 2,075.26 | 7,070.06 | 3,491.64 | 1.09 | -0.69 | 0.617 |
| 20.00 | -41.61 | -38.57 | 0.00 | -2,900.57 | 0.00 | 2,900.57 | 4,080.16 | 2,040.08 | 6,769.73 | 3,343.32 | 1.93 | -0.92 | 0.597 |
| 25.00 | -39.59 | -37.79 | 0.00 | -2,707.74 | 0.00 | 2,707.74 | 4,007.88 | 2,003.94 | 6,472.54 | 3,196.54 | 3.01 | -1.15 | 0.576 |
| 30.00 | -37.61 | -37.02 | 0.00 | -2,518.78 | 0.00 | 2,518.78 | 3,933.69 | 1,966.85 | 6,178.73 | 3,051.44 | 4.33 | -1.37 | 0.555 |
| 35.00 | -35.67 | -36.22 | 0.00 | -2,333.69 | 0.00 | 2,333.69 | 3,854.52 | 1,927.26 | 5,883.88 | 2,905.83 | 5.90 | -1.60 | 0.533 |
| 40.00 | -33.83 | -35.68 | 0.00 | -2,152.59 | 0.00 | 2,152.59 | 3,744.12 | 1,872.06 | 5,549.75 | 2,740.81 | 7.70 | -1.83 | 0.514 |
| 40.24 | -33.68 | -35.36 | 0.00 | -2,143.90 | 0.00 | 2,143.90 | 3,738.74 | 1,869.37 | 5,533.72 | 2,732.90 | 7.79 | -1.84 | 0.513 |
| 45.00 | -31.11 | -34.78 | 0.00 | -1,975.72 | 0.00 | 1,975.72 | 3,633.72 | 1,816.86 | 5,225.39 | 2,580.62 | 9.74 | -2.06 | 0.487 |
| 45.40 | -30.85 | -34.44 | 0.00 | -1,961.81 | 0.00 | 1,961.81 | 3,063.79 | 1,531.89 | 4,506.32 | 2,225.50 | 9.91 | -2.07 | 0.543 |
| 50.00 | -29.28 | -33.60 | 0.00 | -1,803.38 | 0.00 | 1,803.38 | 3,008.67 | 1,504.34 | 4,302.82 | 2,125.00 | 12.01 | -2.28 | 0.515 |
| 55.00 | -27.65 | -32.99 | 0.00 | -1,635.37 | 0.00 | 1,635.37 | 2,946.93 | 1,473.46 | 4,084.17 | 2,017.02 | 14.52 | -2.50 | 0.484 |
| 55.68 | -27.40 | -32.63 | 0.00 | -1,613.04 | 0.00 | 1,613.04 | 2,938.42 | 1,469.21 | 4,054.78 | 2,002.51 | 14.87 | -2.53 | 0.479 |
| 55.68 | -27.40 | -32.63 | 0.00 | -1,613.04 | 0.00 | 1,613.04 | 2,938.42 | 1,469.21 | 4,054.78 | 2,002.51 | 14.87 | -2.53 | 0.815 |
| 60.00 | -26.28 | -31.86 | 0.00 | -1,471.98 | 0.00 | 1,471.98 | 2,883.27 | 1,441.64 | 3,868.42 | 1,910.47 | 17.26 | -2.73 | 0.780 |
| 65.00 | -25.01 | -31.04 | 0.00 | -1,312.70 | 0.00 | 1,312.70 | 2,808.41 | 1,404.21 | 3,643.77 | 1,799.52 | 20.31 | -3.10 | 0.739 |
| 70.00 | -23.73 | -30.31 | 0.00 | -1,157.53 | 0.00 | 1,157.53 | 2,713.79 | 1,356.89 | 3,400.96 | 1,679.60 | 23.75 | -3.46 | 0.698 |
| 75.00 | -22.53 | -29.61 | 0.00 | -1,005.97 | 0.00 | 1,005.97 | 2,619.16 | 1,309.58 | 3,166.52 | 1,563.83 | 27.56 | -3.81 | 0.652 |
| 80.00 | -21.27 | -28.68 | 0.00 | -857.61 | 0.00 | 857.61 | 2,524.53 | 1,262.26 | 2,940.46 | 1,452.18 | 31.73 | -4.15 | 0.600 |
| 80.75 | -21.06 | -28.36 | 0.00 | -836.15 | 0.00 | 836.15 | 2,510.36 | 1,255.18 | 2,907.34 | 1,435.82 | 32.39 | -4.20 | 0.591 |
| 84.90 | -19.80 | -27.90 | 0.00 | -718.42 | 0.00 | 718.42 | 1,500.18 | 750.09 | 1,728.96 | 853.87 | 36.16 | -4.47 | 0.856 |
| 85.00 | -19.71 | -27.61 | 0.00 | -715.62 | 0.00 | 715.62 | 1,499.54 | 749.77 | 1,726.89 | 852.85 | 36.25 | -4.47 | 0.854 |
| 90.00 | -15.69 | -22.28 | 0.00 | -577.58 | 0.00 | 577.58 | 1,466.64 | 733.32 | 1,624.12 | 802.09 | 41.15 | -4.88 | 0.732 |
| 95.00 | -14.92 | -21.75 | 0.00 | -466.16 | 0.00 | 466.16 | 1,431.82 | 715.91 | 1,522.23 | 751.77 | 46.47 | -5.26 | 0.631 |
| 100.00 | -11.68 | -16.80 | 0.00 | -357.33 | 0.00 | 357.33 | 1,395.09 | 697.54 | 1,421.47 | 702.01 | 52.15 | -5.59 | 0.518 |
| 105.00 | -11.08 | -16.26 | 0.00 | -273.31 | 0.00 | 273.31 | 1,356.44 | 678.22 | 1,322.10 | 652.93 | 58.15 | -5.88 | 0.427 |
| 110.00 | -8.34 | -12.13 | 0.00 | -191.99 | 0.00 | 191.99 | 1,315.88 | 657.94 | 1,224.36 | 604.67 | 64.43 | -6.12 | 0.324 |
| 115.00 | -7.87 | -11.60 | 0.00 | -131.33 | 0.00 | 131.33 | 1,273.40 | 636.70 | 1,128.51 | 557.33 | 70.93 | -6.31 | 0.242 |
| 120.00 | -4.16 | -6.07 | 0.00 | -73.30 | 0.00 | 73.30 | 1,215.41 | 607.71 | 1,023.36 | 505.40 | 77.61 | -6.45 | 0.149 |
| 125.00 | -3.78 | -5.76 | 0.00 | -42.94 | 0.00 | 42.94 | 1,152.33 | 576.16 | 919.28 | 454.00 | 84.41 | -6.55 | 0.098 |
| 125.80 | -3.73 | -5.64 | 0.00 | -38.33 | 0.00 | 38.33 | 1,142.23 | 571.11 | 903.13 | 446.02 | 85.51 | -6.56 | 0.089 |
| 125.80 | -3.73 | -5.64 | 0.00 | -38.33 | 0.00 | 38.33 | 385.02 | 192.51 | 160.54 | 106.00 | 85.51 | -6.56 | 0.372 |
| 130.00 | -3.46 | -5.51 | 0.00 | -14.65 | 0.00 | 14.65 | 385.02 | 192.51 | 160.54 | 106.00 | 91.29 | -6.60 | 0.148 |
| 131.00 | -0.58 | -0.76 | 0.00 | -5.56 | 0.00 | 5.56 | 385.02 | 192.51 | 160.54 | 106.00 | 92.67 | -6.62 | 0.054 |
| 135.00 | -0.37 | -0.64 | 0.00 | -2.52 | 0.00 | 2.52 | 385.02 | 192.51 | 160.54 | 106.00 | 98.22 | -6.65 | 0.025 |
| 136.00 | -0.28 | -0.15 | 0.00 | -0.70 | 0.00 | 0.70 | 385.02 | 192.51 | 160.54 | 106.00 | 99.61 | -6.66 | 0.007 |
| 140.00 | -0.10 | -0.04 | 0.00 | -0.08 | 0.00 | 0.08 | 385.02 | 192.51 | 160.54 | 106.00 | 105.18 | -6.66 | 0.001 |
| 142.00 | 0.00 | -0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 385.02 | 192.51 | 160.54 | 106.00 | 107.96 | -6.66 | 0.000 |

Site Number: 302511

Code: ANSI/TIA-222-G

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Site Name: WSPT - South, CT

Engineering Number: 63916524

1/25/2016 11:02:29 AM

Customer: T-MOBILE

Load Case: 0.9D + 1.6W

110 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 | | | EPAs (sf) | Wind Force X (lb) | Dead Load Ice (lb) | Tot Dead Load (lb) |
|-------------------------|-----------------|------|------|-------------|---------------|---------------|-------|-------|-------|-------|--------------|-------------------------|--------------------------|--------------------------|
| 0.00 | | 1.00 | 0.70 | 20.599 | 22.65 | 357.29 | 1.000 | 0.000 | 0.00 | 0.000 | 0.00 | 347.7 | 0.0 | 0.0 |
| 5.00 | | 1.00 | 0.70 | 20.599 | 22.65 | 353.07 | 1.000 | * | 0.000 | 5.00 | 19.182 | 19.18 | 687.1 | 0.0 |
| 10.00 | | 1.00 | 0.70 | 20.599 | 22.65 | 344.63 | 1.000 | * | 0.000 | 5.00 | 18.723 | 18.72 | 670.5 | 0.0 |
| 15.00 | | 1.00 | 0.70 | 20.599 | 22.65 | 336.19 | 1.000 | * | 0.000 | 5.00 | 18.265 | 18.26 | 653.9 | 0.0 |
| 20.00 | | 1.00 | 0.70 | 20.599 | 22.65 | 327.75 | 1.000 | * | 0.000 | 5.00 | 17.806 | 17.81 | 700.1 | 0.0 |
| 25.00 | | 1.00 | 0.70 | 20.599 | 22.65 | 319.30 | 1.200 | * | 0.000 | 5.00 | 17.348 | 20.82 | 744.7 | 0.0 |
| 30.00 | | 1.00 | 0.70 | 20.599 | 22.65 | 310.86 | 1.200 | * | 0.000 | 5.00 | 16.889 | 20.27 | 733.4 | 0.0 |
| 35.00 | | 1.00 | 0.71 | 21.093 | 23.20 | 306.03 | 1.200 | * | 0.000 | 5.00 | 16.430 | 19.72 | 736.6 | 0.0 |
| 40.00 | | 1.00 | 0.74 | 21.974 | 24.17 | 303.63 | 1.200 | * | 0.000 | 5.00 | 15.972 | 19.17 | 388.7 | 0.0 |
| 40.24 | Bot - Section 2 | 1.00 | 0.76 | 22.402 | 24.64 | 301.96 | 1.200 | * | 0.000 | 0.24 | 0.767 | 0.92 | 380.5 | 0.0 |
| 45.00 | | 1.00 | 0.77 | 22.792 | 25.07 | 300.14 | 1.200 | * | 0.000 | 4.76 | 15.054 | 18.07 | 392.9 | 0.0 |
| 45.40 | Top - Section 1 | 1.00 | 0.78 | 23.178 | 25.49 | 298.05 | 1.200 | * | 0.000 | 0.40 | 1.247 | 1.50 | 381.8 | 0.0 |
| 50.00 | | 1.00 | 0.80 | 23.537 | 25.89 | 302.21 | 1.200 | * | 0.000 | 4.60 | 14.131 | 16.96 | 732.4 | 0.0 |
| 55.00 | | 1.00 | 0.82 | 24.191 | 26.61 | 297.59 | 1.200 | * | 0.000 | 5.00 | 14.919 | 17.90 | 432.6 | 0.0 |
| 55.68 | Reinf. Top | 1.00 | 0.83 | 24.558 | 27.01 | 294.61 | 1.200 | * | 0.000 | 0.68 | 1.985 | 2.38 | 379.1 | 0.0 |
| 60.00 | | 1.00 | 0.84 | 24.870 | 27.35 | 291.83 | 1.200 | * | 0.000 | 4.32 | 12.476 | 14.97 | 703.6 | 0.0 |
| 65.00 | | 1.00 | 0.86 | 25.427 | 27.96 | 286.34 | 1.200 | * | 0.000 | 5.00 | 14.002 | 16.80 | 685.7 | 0.0 |
| 70.00 | Appertunance(s) | 1.00 | 0.88 | 25.992 | 28.59 | 280.02 | 1.000 | * | 0.000 | 5.00 | 13.544 | 13.54 | 615.2 | 0.0 |
| 75.00 | | 1.00 | 0.90 | 26.528 | 29.18 | 273.32 | 1.000 | * | 0.000 | 5.00 | 13.085 | 13.08 | 605.9 | 0.0 |
| 80.00 | Appertunance(s) | 1.00 | 0.91 | 27.038 | 29.74 | 266.26 | 1.000 | * | 0.000 | 5.00 | 12.626 | 12.63 | 353.8 | 0.0 |
| 80.75 | Bot - Section 3 | 1.00 | 0.92 | 27.321 | 30.05 | 262.06 | 1.200 | * | 0.000 | 0.75 | 1.851 | 2.22 | 351.8 | 0.0 |
| 84.90 | Top - Section 2 | 1.00 | 0.93 | 27.556 | 30.31 | 258.40 | 1.200 | * | 0.000 | 4.15 | 10.256 | 12.31 | 305.6 | 0.0 |
| 85.00 | | 1.00 | 0.94 | 27.757 | 30.53 | 259.78 | 1.200 | * | 0.000 | 0.10 | 0.244 | 0.29 | 359.7 | 0.0 |
| 90.00 | Appertunance(s) | 1.00 | 0.95 | 27.992 | 30.79 | 255.86 | 1.200 | * | 0.000 | 5.00 | 11.925 | 14.31 | 639.5 | 0.0 |
| 95.00 | | 1.00 | 0.96 | 28.440 | 31.28 | 247.98 | 1.000 | 0.000 | | 5.00 | 11.466 | 11.47 | 566.6 | 0.0 |
| 100.0 | Appertunance(s) | 1.00 | 0.98 | 28.871 | 31.75 | 239.86 | 1.000 | 0.000 | | 5.00 | 11.007 | 11.01 | 551.5 | 0.0 |
| 105.0 | | 1.00 | 0.99 | 29.287 | 32.21 | 231.52 | 1.000 | 0.000 | | 5.00 | 10.549 | 10.55 | 535.5 | 0.0 |
| 110.0 | Appertunance(s) | 1.00 | 1.00 | 29.688 | 32.65 | 222.96 | 1.000 | 0.000 | | 5.00 | 10.090 | 10.09 | 518.5 | 0.0 |
| 115.0 | | 1.00 | 1.02 | 30.076 | 33.08 | 214.21 | 1.000 | 0.000 | | 5.00 | 9.632 | 9.63 | 500.7 | 0.0 |
| 120.0 | Appertunance(s) | 1.00 | 1.03 | 30.452 | 33.49 | 205.29 | 1.000 | 0.000 | | 5.00 | 9.173 | 9.17 | 482.1 | 0.0 |
| 125.0 | | 1.00 | 1.04 | 30.817 | 33.89 | 196.19 | 1.000 | 0.000 | | 5.00 | 8.714 | 8.71 | 273.2 | 0.0 |
| 125.8 | Top - Section 3 | 1.00 | 1.05 | 31.024 | 34.12 | 190.83 | 1.000 | 0.000 | | 0.80 | 1.353 | 1.35 | 98.9 | 0.0 |
| 130.0 | | 1.00 | 1.06 | 31.199 | 34.31 | 101.46 | 0.600 | * | 0.000 | 4.20 | 3.762 | 2.26 | 76.8 | 0.0 |
| 131.0 | Appertunance(s) | 1.00 | 1.06 | 31.379 | 34.51 | 101.75 | 0.600 | * | 0.000 | 1.00 | 0.896 | 0.54 | 74.5 | 0.0 |
| 135.0 | | 1.00 | 1.07 | 31.550 | 34.70 | 102.03 | 0.600 | * | 0.000 | 4.00 | 3.583 | 2.15 | 74.7 | 0.0 |
| 136.0 | Appertunance(s) | 1.00 | 1.07 | 31.718 | 34.89 | 102.30 | 0.600 | * | 0.000 | 1.00 | 0.896 | 0.54 | 75.3 | 0.0 |
| 140.0 | | 1.00 | 1.08 | 31.884 | 35.07 | 102.57 | 0.600 | 0.000 | | 4.00 | 3.583 | 2.15 | 90.7 | 0.0 |
| 142.0 | | 1.00 | 1.09 | 32.081 | 35.28 | 102.88 | 0.600 | 0.000 | | 2.00 | 1.792 | 1.08 | 30.3 | 0.0 |

* = Cf Adjusted By Linear Load Ra Effect

Totals: 142.00

16,932.4

0.0 16,355.3

Load Case: 0.9D + 1.6W**110 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) |
|--------------|----------------------|-----|-------------|---------------|-----------------------|------|-----------------------|----------------------|---------------------|--------------------|---------------------|---------------------|----------------------|
| 70.00 | PCTEL GPS-TMG-HR- | 1 | 26.263 | 28.890 | 1.00 | 1.00 | 0.09 | 0.000 | 0.000 | 4.16 | 0.00 | 0.00 | 0.54 |
| 70.00 | Stand-Off | 1 | 26.263 | 28.890 | 0.67 | 1.00 | 0.67 | 0.000 | 0.000 | 30.97 | 0.00 | 0.00 | 27.00 |
| 80.00 | Diamond X50A | 2 | 27.573 | 30.331 | 1.00 | 1.00 | 2.24 | 0.000 | 3.000 | 108.70 | 0.00 | 326.11 | 4.14 |
| 80.00 | 6' Omni | 2 | 27.285 | 30.013 | 1.00 | 1.00 | 3.52 | 0.000 | 0.000 | 169.03 | 0.00 | 0.00 | 45.00 |
| 80.00 | Stand-Offs | 2 | 27.285 | 30.013 | 0.67 | 1.00 | 4.02 | 0.000 | 0.000 | 193.04 | 0.00 | 0.00 | 90.00 |
| 90.00 | RFS ATMAA1412D- | 4 | 28.219 | 31.040 | 0.33 | 0.75 | 0.99 | 0.000 | 0.000 | 49.17 | 0.00 | 0.00 | 46.80 |
| 90.00 | Ericsson RRUS 11 B12 | 3 | 28.219 | 31.040 | 0.50 | 0.75 | 3.14 | 0.000 | 0.000 | 155.88 | 0.00 | 0.00 | 136.89 |
| 90.00 | Ericsson AIR 21, 1.3 | 4 | 28.219 | 31.040 | 0.71 | 0.75 | 12.89 | 0.000 | 0.000 | 640.00 | 0.00 | 0.00 | 298.80 |
| 90.00 | Ericsson AIR 21, 1.3 | 3 | 28.219 | 31.040 | 0.70 | 0.75 | 9.59 | 0.000 | 0.000 | 476.37 | 0.00 | 0.00 | 220.05 |
| 90.00 | Andrew LNX-6515DS- | 3 | 28.219 | 31.040 | 0.70 | 0.75 | 18.00 | 0.000 | 0.000 | 894.07 | 0.00 | 0.00 | 138.51 |
| 90.00 | Flat Platform w/ Han | 1 | 28.219 | 31.040 | 1.00 | 1.00 | 42.40 | 0.000 | 0.000 | 2,105.77 | 0.00 | 0.00 | 1,800.00 |
| 100.0 | RFS FD9R6004/1C-3L | 6 | 29.081 | 31.989 | 0.33 | 0.75 | 0.55 | 0.000 | 0.000 | 28.12 | 0.00 | 0.00 | 16.74 |
| 100.0 | GPS | 1 | 29.409 | 32.349 | 0.50 | 0.75 | 0.38 | 0.000 | 4.000 | 19.41 | 0.00 | 77.64 | 9.00 |
| 100.0 | Alcatel-Lucent RRH2x | 3 | 29.081 | 31.989 | 0.50 | 0.75 | 2.43 | 0.000 | 0.000 | 124.37 | 0.00 | 0.00 | 118.80 |
| 100.0 | Rymsa MGD3-800TX | 3 | 29.081 | 31.989 | 0.69 | 0.75 | 5.19 | 0.000 | 0.000 | 265.40 | 0.00 | 0.00 | 41.58 |
| 100.0 | Antel BXA-171063/12C | 3 | 29.081 | 31.989 | 0.72 | 0.75 | 7.76 | 0.000 | 0.000 | 397.16 | 0.00 | 0.00 | 40.50 |
| 100.0 | RFS DB-T1-6Z-8AB-0Z | 1 | 29.081 | 31.989 | 1.00 | 0.75 | 3.60 | 0.000 | 0.000 | 184.26 | 0.00 | 0.00 | 39.60 |
| 100.0 | Antel BXA-70080/6CF | 3 | 29.081 | 31.989 | 0.72 | 0.75 | 9.46 | 0.000 | 0.000 | 484.23 | 0.00 | 0.00 | 48.60 |
| 100.0 | Powerwave Allgon | 3 | 29.081 | 31.989 | 0.65 | 0.75 | 11.89 | 0.000 | 0.000 | 608.56 | 0.00 | 0.00 | 89.10 |
| 100.0 | Flat Platform w/ Han | 1 | 29.081 | 31.989 | 1.00 | 1.00 | 39.60 | 0.000 | 0.000 | 2,026.82 | 0.00 | 0.00 | 1,800.00 |
| 110.0 | Swedcom ALP 9011- | 12 | 29.884 | 32.872 | 0.74 | 0.75 | 21.11 | 0.000 | 0.000 | 1,110.40 | 0.00 | 0.00 | 108.00 |
| 110.0 | Flat Platform w/ Han | 1 | 29.884 | 32.872 | 1.00 | 1.00 | 42.40 | 0.000 | 0.000 | 2,230.03 | 0.00 | 0.00 | 1,800.00 |
| 120.0 | DragonWave Horizon | 2 | 30.636 | 33.699 | 0.33 | 0.75 | 0.21 | 0.000 | 0.000 | 11.48 | 0.00 | 0.00 | 19.08 |
| 120.0 | NextNet BTS-2500 | 3 | 30.636 | 33.699 | 0.50 | 0.75 | 2.05 | 0.000 | 0.000 | 110.40 | 0.00 | 0.00 | 94.50 |
| 120.0 | Alcatel-Lucent 800 M | 3 | 30.636 | 33.699 | 0.50 | 0.75 | 2.32 | 0.000 | 0.000 | 124.96 | 0.00 | 0.00 | 172.80 |
| 120.0 | Alcatel-Lucent 1900 | 3 | 30.636 | 33.699 | 0.50 | 0.75 | 2.61 | 0.000 | 0.000 | 140.73 | 0.00 | 0.00 | 162.00 |
| 120.0 | Alcatel-Lucent TD-RR | 3 | 30.636 | 33.699 | 0.50 | 0.75 | 4.56 | 0.000 | 0.000 | 245.67 | 0.00 | 0.00 | 189.00 |
| 120.0 | Argus LLPX310R | 3 | 30.636 | 33.699 | 0.63 | 0.75 | 6.08 | 0.000 | 0.000 | 327.89 | 0.00 | 0.00 | 77.22 |
| 120.0 | DragonWave A-ANT- | 2 | 30.636 | 33.699 | 0.90 | 0.75 | 6.33 | 0.000 | 0.000 | 341.39 | 0.00 | 0.00 | 48.78 |
| 120.0 | RFS RFS APXV9TM14- | 3 | 30.636 | 33.699 | 0.66 | 0.75 | 9.41 | 0.000 | 0.000 | 507.64 | 0.00 | 0.00 | 148.77 |
| 120.0 | RFS APXVSPP18-C- | 3 | 30.636 | 33.699 | 0.69 | 0.75 | 12.45 | 0.000 | 0.000 | 671.35 | 0.00 | 0.00 | 153.90 |
| 120.0 | Flat Platform w/ Han | 1 | 30.636 | 33.699 | 1.00 | 1.00 | 39.50 | 0.000 | 0.000 | 2,129.81 | 0.00 | 0.00 | 1,800.00 |
| 131.0 | Powerwave Allgon | 6 | 31.751 | 34.926 | 0.50 | 0.75 | 0.52 | 0.000 | 5.000 | 28.92 | 0.00 | 144.60 | 29.70 |
| 131.0 | Powerwave Allgon | 6 | 31.413 | 34.555 | 0.50 | 0.75 | 2.48 | 0.000 | 0.000 | 136.84 | 0.00 | 0.00 | 76.14 |
| 131.0 | Raycap DC6-48-60-18- | 1 | 31.413 | 34.555 | 1.00 | 0.75 | 0.96 | 0.000 | 0.000 | 53.08 | 0.00 | 0.00 | 28.62 |
| 131.0 | Ericsson RRUS 11 (Ba | 6 | 31.413 | 34.555 | 0.50 | 0.75 | 5.78 | 0.000 | 0.000 | 319.70 | 0.00 | 0.00 | 237.60 |
| 131.0 | Powerwave Allgon 777 | 6 | 31.413 | 34.555 | 0.65 | 0.75 | 16.12 | 0.000 | 0.000 | 891.05 | 0.00 | 0.00 | 189.00 |
| 131.0 | Powerwave Allgon | 3 | 31.751 | 34.926 | 0.67 | 0.75 | 12.26 | 0.000 | 5.000 | 684.89 | 0.00 | 3,424.46 | 143.10 |
| 131.0 | Flat Platform w/ Han | 1 | 31.413 | 34.555 | 1.00 | 1.00 | 39.50 | 0.000 | 0.000 | 2,183.85 | 0.00 | 0.00 | 1,800.00 |
| 136.0 | Generic RCU (Remote | 6 | 31.950 | 35.145 | 0.33 | 0.80 | 0.25 | 0.000 | 3.000 | 14.25 | 0.00 | 42.75 | 5.40 |
| 136.0 | Kathrein Scala 742-2 | 3 | 31.950 | 35.145 | 0.73 | 0.80 | 6.75 | 0.000 | 3.000 | 379.29 | 0.00 | 1,137.88 | 60.75 |

21,609.14

12,356.01

Load Case: 0.9D + 1.6W**110 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 | FX (lb) | Dead Load (lb) |
|-------------------------|----------------------|--------------------|----------------|------|--------------------------|----------------|----------------|-------------|-------|------------------------|------------|----------------------|
| 5.00 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 0.82 | 0.00 | 20.599 | 0.183 | 1.250 | 0.00 | 22.14 |
| 5.00 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.82 | 0.00 | 0.000 | 0.000 | 0.000 | 0.00 | 300.60 |
| 5.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 20.599 | 0.183 | 1.250 | 0.00 | 0.36 |
| 5.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.183 | 1.250 | 0.00 | 0.13 |
| 5.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.183 | 1.250 | 0.00 | 2.79 |
| 5.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.183 | 1.250 | 0.00 | 34.01 |
| 5.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.183 | 1.250 | 0.00 | 18.00 |
| 5.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.183 | 1.250 | 0.00 | 1.35 |
| 5.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.183 | 1.250 | 0.00 | 16.42 |
| 5.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.183 | 1.250 | 0.00 | 1.22 |
| 5.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.183 | 1.250 | 0.00 | 44.27 |
| 5.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.183 | 1.250 | 0.00 | 44.27 |
| 5.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.183 | 1.250 | 0.00 | 5.85 |
| 5.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.183 | 1.250 | 0.00 | 0.68 |
| 5.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.183 | 1.250 | 0.00 | 4.72 |
| 5.00 | (14) 1 5/8" Coax | Yes | 5.00 | 0.00 | 3.96 | 1.65 | 0.00 | 20.599 | 0.183 | 1.250 | 0.00 | 51.65 |
| 5.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.183 | 1.250 | 0.00 | 1.35 |
| 5.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.183 | 1.250 | 0.00 | 1.35 |
| 5.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.183 | 1.250 | 0.00 | 1.35 |
| 5.00 | (4) DYWIDAG | Yes | 5.00 | 0.00 | 2.50 | 1.04 | 0.00 | 20.599 | 0.183 | 1.250 | 0.00 | 0.00 |
| 10.00 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 0.82 | 0.00 | 20.599 | 0.188 | 1.263 | 0.00 | 22.14 |
| 10.00 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.82 | 0.00 | 0.000 | 0.000 | 0.000 | 0.00 | 300.60 |
| 10.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 20.599 | 0.188 | 1.263 | 0.00 | 0.36 |
| 10.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.188 | 1.263 | 0.00 | 0.13 |
| 10.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.188 | 1.263 | 0.00 | 2.79 |
| 10.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.188 | 1.263 | 0.00 | 34.01 |
| 10.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.188 | 1.263 | 0.00 | 18.00 |
| 10.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.188 | 1.263 | 0.00 | 1.35 |
| 10.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.188 | 1.263 | 0.00 | 16.42 |
| 10.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.188 | 1.263 | 0.00 | 1.22 |
| 10.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.188 | 1.263 | 0.00 | 44.27 |
| 10.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.188 | 1.263 | 0.00 | 44.27 |
| 10.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.188 | 1.263 | 0.00 | 5.85 |
| 10.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.188 | 1.263 | 0.00 | 0.68 |
| 10.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.188 | 1.263 | 0.00 | 4.72 |
| 10.00 | (14) 1 5/8" Coax | Yes | 5.00 | 0.00 | 3.96 | 1.65 | 0.00 | 20.599 | 0.188 | 1.263 | 0.00 | 51.65 |
| 10.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.188 | 1.263 | 0.00 | 1.35 |
| 10.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.188 | 1.263 | 0.00 | 1.35 |
| 10.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.188 | 1.263 | 0.00 | 1.35 |
| 10.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.188 | 1.263 | 0.00 | 1.35 |
| 10.00 | (4) DYWIDAG | Yes | 5.00 | 0.00 | 2.50 | 1.04 | 0.00 | 20.599 | 0.188 | 1.263 | 0.00 | 0.00 |
| 15.00 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 0.82 | 0.00 | 20.599 | 0.193 | 1.278 | 0.00 | 22.14 |
| 15.00 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.82 | 0.00 | 0.000 | 0.000 | 0.000 | 0.00 | 300.60 |
| 15.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 20.599 | 0.193 | 1.278 | 0.00 | 0.36 |
| 15.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.193 | 1.278 | 0.00 | 0.13 |
| 15.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.193 | 1.278 | 0.00 | 2.79 |
| 15.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.193 | 1.278 | 0.00 | 34.01 |
| 15.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.193 | 1.278 | 0.00 | 18.00 |
| 15.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.193 | 1.278 | 0.00 | 1.35 |
| 15.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.193 | 1.278 | 0.00 | 16.42 |
| 15.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.193 | 1.278 | 0.00 | 1.22 |
| 15.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.193 | 1.278 | 0.00 | 44.27 |

Load Case: 0.9D + 1.6W**110 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**

| | | | | | | | | | | | |
|-------|----------------------|-----|------|------|------|------|--------|--------|-------|-------|--------|
| 15.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.193 | 1.278 | 0.00 | 44.27 |
| 15.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.193 | 1.278 | 0.00 | 5.85 |
| 15.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.193 | 1.278 | 0.00 | 0.68 |
| 15.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.193 | 1.278 | 0.00 | 4.72 |
| 15.00 | (14) 1 5/8" Coax | Yes | 5.00 | 0.00 | 3.96 | 1.65 | 0.00 | 20.599 | 0.193 | 1.278 | 0.00 |
| 15.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.193 | 1.278 | 0.00 | 1.35 |
| 15.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.193 | 1.278 | 0.00 | 1.35 |
| 15.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.193 | 1.278 | 0.00 | 1.35 |
| 15.00 | (4) DYWIDAG | Yes | 5.00 | 0.00 | 2.50 | 1.04 | 0.00 | 20.599 | 0.193 | 1.278 | 0.00 |
| 20.00 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 0.82 | 0.00 | 20.599 | 0.197 | 1.292 | 0.00 |
| 20.00 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.82 | 0.00 | 0.000 | 0.000 | 0.000 | 300.60 |
| 20.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 20.599 | 0.197 | 1.292 | 0.00 |
| 20.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.197 | 1.292 | 0.00 |
| 20.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.197 | 1.292 | 0.00 |
| 20.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.197 | 1.292 | 0.00 |
| 20.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.197 | 1.292 | 0.00 |
| 20.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.197 | 1.292 | 0.00 |
| 20.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.197 | 1.292 | 0.00 |
| 20.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.197 | 1.292 | 0.00 |
| 20.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.197 | 1.292 | 0.00 |
| 20.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.197 | 1.292 | 0.00 |
| 20.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.197 | 1.292 | 0.00 |
| 20.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.197 | 1.292 | 0.00 |
| 20.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.197 | 1.292 | 0.00 |
| 20.00 | (14) 1 5/8" Coax | Yes | 5.00 | 0.00 | 3.96 | 1.65 | 0.00 | 20.599 | 0.197 | 1.292 | 0.00 |
| 20.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.197 | 1.292 | 0.00 |
| 20.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.197 | 1.292 | 0.00 |
| 20.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.197 | 1.292 | 0.00 |
| 20.00 | (4) DYWIDAG | Yes | 5.00 | 0.00 | 2.50 | 1.04 | 0.00 | 20.599 | 0.197 | 1.292 | 0.00 |
| 25.00 | (6) 1 5/8" Coax | Yes | 5.00 | 1.20 | 1.98 | 0.82 | 0.99 | 20.599 | 0.203 | 0.000 | 35.89 |
| 25.00 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.82 | 0.00 | 0.000 | 0.000 | 0.000 | 300.60 |
| 25.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 20.599 | 0.203 | 0.000 | 0.36 |
| 25.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.203 | 0.000 | 0.13 |
| 25.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.203 | 0.000 | 2.79 |
| 25.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.203 | 0.000 | 34.01 |
| 25.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.203 | 0.000 | 18.00 |
| 25.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.203 | 0.000 | 1.35 |
| 25.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.203 | 0.000 | 16.42 |
| 25.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.203 | 0.000 | 1.22 |
| 25.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.203 | 0.000 | 44.27 |
| 25.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.203 | 0.000 | 44.27 |
| 25.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.203 | 0.000 | 5.85 |
| 25.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.203 | 0.000 | 0.68 |
| 25.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.203 | 0.000 | 4.72 |
| 25.00 | (14) 1 5/8" Coax | Yes | 5.00 | 1.20 | 3.96 | 1.65 | 1.98 | 20.599 | 0.203 | 0.000 | 71.78 |
| 25.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.203 | 0.000 | 1.35 |
| 25.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.203 | 0.000 | 1.35 |
| 25.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.203 | 0.000 | 1.35 |
| 25.00 | (4) DYWIDAG | Yes | 5.00 | 1.20 | 2.50 | 1.04 | 1.25 | 20.599 | 0.203 | 0.000 | 45.32 |
| 30.00 | (6) 1 5/8" Coax | Yes | 5.00 | 1.20 | 1.98 | 0.82 | 0.99 | 20.599 | 0.208 | 0.000 | 35.89 |
| 30.00 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.82 | 0.00 | 0.000 | 0.000 | 0.000 | 300.60 |
| 30.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 20.599 | 0.208 | 0.000 | 0.36 |
| 30.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.208 | 0.000 | 0.13 |
| 30.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.208 | 0.000 | 2.79 |
| 30.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.208 | 0.000 | 34.01 |
| 30.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.208 | 0.000 | 18.00 |
| 30.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.208 | 0.000 | 1.35 |

Load Case: 0.9D + 1.6W**110 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) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.208 | 0.000 | 0.00 | 16.42 | |
| 30.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.208 | 0.000 | 0.00 | 1.22 | |
| 30.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.208 | 0.000 | 0.00 | 44.27 | |
| 30.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.208 | 0.000 | 0.00 | 44.27 | |
| 30.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.208 | 0.000 | 0.00 | 5.85 | |
| 30.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.208 | 0.000 | 0.00 | 0.68 | |
| 30.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.208 | 0.000 | 0.00 | 4.72 | |
| 30.00 | (14) 1 5/8" Coax | Yes | 5.00 | 1.20 | 3.96 | 1.65 | 1.98 | 20.599 | 0.208 | 0.000 | 71.78 | 51.65 |
| 30.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.208 | 0.000 | 0.00 | 1.35 | |
| 30.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 20.599 | 0.208 | 0.000 | 0.00 | 1.35 | |
| 30.00 | (4) DYWIDAG | Yes | 5.00 | 1.20 | 2.50 | 1.04 | 1.25 | 20.599 | 0.208 | 0.000 | 45.32 | 0.00 |
| 35.00 | (6) 1 5/8" Coax | Yes | 5.00 | 1.20 | 1.98 | 0.82 | 0.99 | 21.093 | 0.214 | 0.000 | 36.75 | 22.14 |
| 35.00 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.82 | 0.00 | 0.000 | 0.000 | 0.000 | 0.00 | 300.60 |
| 35.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 21.093 | 0.214 | 0.000 | 0.00 | 0.36 |
| 35.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.093 | 0.214 | 0.000 | 0.00 | 0.13 |
| 35.00 | (2) 0.65" 8 AWG2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.093 | 0.214 | 0.000 | 0.00 | 2.79 |
| 35.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.093 | 0.214 | 0.000 | 0.00 | 34.01 |
| 35.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.093 | 0.214 | 0.000 | 0.00 | 18.00 |
| 35.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.093 | 0.214 | 0.000 | 0.00 | 1.35 |
| 35.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.093 | 0.214 | 0.000 | 0.00 | 16.42 |
| 35.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.093 | 0.214 | 0.000 | 0.00 | 1.22 |
| 35.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.093 | 0.214 | 0.000 | 0.00 | 44.27 |
| 35.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.093 | 0.214 | 0.000 | 0.00 | 44.27 |
| 35.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.093 | 0.214 | 0.000 | 0.00 | 5.85 |
| 35.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.093 | 0.214 | 0.000 | 0.00 | 0.68 |
| 35.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.093 | 0.214 | 0.000 | 0.00 | 4.72 |
| 35.00 | (14) 1 5/8" Coax | Yes | 5.00 | 1.20 | 3.96 | 1.65 | 1.98 | 21.093 | 0.214 | 0.000 | 73.51 | 51.65 |
| 35.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.093 | 0.214 | 0.000 | 0.00 | 1.35 |
| 35.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.093 | 0.214 | 0.000 | 0.00 | 1.35 |
| 35.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.093 | 0.214 | 0.000 | 0.00 | 1.35 |
| 35.00 | (4) DYWIDAG | Yes | 5.00 | 1.20 | 2.50 | 1.04 | 1.25 | 21.093 | 0.214 | 0.000 | 46.41 | 0.00 |
| 40.00 | (6) 1 5/8" Coax | Yes | 5.00 | 1.20 | 1.98 | 0.82 | 0.99 | 21.974 | 0.220 | 0.000 | 38.29 | 22.14 |
| 40.00 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.82 | 0.00 | 0.000 | 0.000 | 0.000 | 0.00 | 300.60 |
| 40.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 21.974 | 0.220 | 0.000 | 0.00 | 0.36 |
| 40.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.974 | 0.220 | 0.000 | 0.00 | 0.13 |
| 40.00 | (2) 0.65" 8 AWG2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.974 | 0.220 | 0.000 | 0.00 | 2.79 |
| 40.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.974 | 0.220 | 0.000 | 0.00 | 34.01 |
| 40.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.974 | 0.220 | 0.000 | 0.00 | 18.00 |
| 40.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.974 | 0.220 | 0.000 | 0.00 | 1.35 |
| 40.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.974 | 0.220 | 0.000 | 0.00 | 16.42 |
| 40.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.974 | 0.220 | 0.000 | 0.00 | 1.22 |
| 40.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.974 | 0.220 | 0.000 | 0.00 | 44.27 |
| 40.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.974 | 0.220 | 0.000 | 0.00 | 44.27 |
| 40.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.974 | 0.220 | 0.000 | 0.00 | 5.85 |
| 40.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.974 | 0.220 | 0.000 | 0.00 | 0.68 |
| 40.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.974 | 0.220 | 0.000 | 0.00 | 4.72 |
| 40.00 | (14) 1 5/8" Coax | Yes | 5.00 | 1.20 | 3.96 | 1.65 | 1.98 | 21.974 | 0.220 | 0.000 | 76.57 | 51.65 |
| 40.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.974 | 0.220 | 0.000 | 0.00 | 1.35 |
| 40.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.974 | 0.220 | 0.000 | 0.00 | 1.35 |
| 40.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.974 | 0.220 | 0.000 | 0.00 | 1.35 |
| 40.00 | (4) DYWIDAG | Yes | 5.00 | 1.20 | 2.50 | 1.04 | 1.25 | 21.974 | 0.220 | 0.000 | 48.34 | 0.00 |
| 40.24 | (6) 1 5/8" Coax | Yes | 0.24 | 1.20 | 1.98 | 0.04 | 0.05 | 22.402 | 0.224 | 0.000 | 1.90 | 1.08 |
| 40.24 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.04 | 0.00 | 0.000 | 0.000 | 0.000 | 0.00 | 14.65 |
| 40.24 | (1) 3/8" Coax | No | 0.24 | 0.00 | 0.44 | 0.00 | 0.00 | 22.402 | 0.224 | 0.000 | 0.00 | 0.02 |
| 40.24 | (1) 0.28" RG-6 | No | 0.24 | 0.00 | 0.00 | 0.00 | 0.00 | 22.402 | 0.224 | 0.000 | 0.00 | 0.01 |
| 40.24 | (2) 0.65" 8 AWG2C | No | 0.24 | 0.00 | 0.00 | 0.00 | 0.00 | 22.402 | 0.224 | 0.000 | 0.00 | 0.14 |

Load Case: 0.9D + 1.6W**110 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**

| | | | | | | | | | | | | |
|-------|----------------------|-----|------|------|------|------|--------|--------|-------|-------|-------|--------|
| 40.24 | (12) 1 1/4" Coax | No | 0.24 | 0.00 | 0.00 | 0.00 | 22.402 | 0.224 | 0.000 | 0.00 | 1.66 | |
| 40.24 | (4) 1 1/4" Hybriflex | No | 0.24 | 0.00 | 0.00 | 0.00 | 22.402 | 0.224 | 0.000 | 0.00 | 0.88 | |
| 40.24 | (2) 1/2" Coax | No | 0.24 | 0.00 | 0.00 | 0.00 | 22.402 | 0.224 | 0.000 | 0.00 | 0.07 | |
| 40.24 | (1) 2" Conduit | No | 0.24 | 0.00 | 0.00 | 0.00 | 22.402 | 0.224 | 0.000 | 0.00 | 0.80 | |
| 40.24 | (6) 5/16" Coax | No | 0.24 | 0.00 | 0.00 | 0.00 | 22.402 | 0.224 | 0.000 | 0.00 | 0.06 | |
| 40.24 | (12) 1 5/8" Coax | No | 0.24 | 0.00 | 0.00 | 0.00 | 22.402 | 0.224 | 0.000 | 0.00 | 2.16 | |
| 40.24 | (12) 1 5/8" Coax | No | 0.24 | 0.00 | 0.00 | 0.00 | 22.402 | 0.224 | 0.000 | 0.00 | 2.16 | |
| 40.24 | (1) 1 5/8" Hybriflex | No | 0.24 | 0.00 | 0.00 | 0.00 | 22.402 | 0.224 | 0.000 | 0.00 | 0.29 | |
| 40.24 | (1) 1/2" Coax | No | 0.24 | 0.00 | 0.00 | 0.00 | 22.402 | 0.224 | 0.000 | 0.00 | 0.03 | |
| 40.24 | (1) 1 1/4" Fiber | No | 0.24 | 0.00 | 0.00 | 0.00 | 22.402 | 0.224 | 0.000 | 0.00 | 0.23 | |
| 40.24 | (14) 1 5/8" Coax | Yes | 0.24 | 1.20 | 3.96 | 0.08 | 0.10 | 22.402 | 0.224 | 0.000 | 3.80 | 2.52 |
| 40.24 | (2) 1/2" Coax | No | 0.24 | 0.00 | 0.00 | 0.00 | 22.402 | 0.224 | 0.000 | 0.00 | 0.07 | |
| 40.24 | (2) 1/2" Coax | No | 0.24 | 0.00 | 0.00 | 0.00 | 22.402 | 0.224 | 0.000 | 0.00 | 0.07 | |
| 40.24 | (2) 1/2" Coax | No | 0.24 | 0.00 | 0.00 | 0.00 | 22.402 | 0.224 | 0.000 | 0.00 | 0.07 | |
| 40.24 | (4) DYWIDAG | Yes | 0.24 | 1.20 | 2.50 | 0.05 | 0.06 | 22.402 | 0.224 | 0.000 | 2.40 | 0.00 |
| 45.00 | (6) 1 5/8" Coax | Yes | 4.76 | 1.20 | 1.98 | 0.78 | 0.94 | 22.792 | 0.227 | 0.000 | 37.78 | 21.06 |
| 45.00 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.78 | 0.00 | 0.000 | 0.000 | 0.000 | 0.00 | 285.95 |
| 45.00 | (1) 3/8" Coax | No | 4.76 | 0.00 | 0.44 | 0.00 | 0.00 | 22.792 | 0.227 | 0.000 | 0.00 | 0.34 |
| 45.00 | (1) 0.28" RG-6 | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 22.792 | 0.227 | 0.000 | 0.00 | 0.12 |
| 45.00 | (2) 0.65" 8 AWG 2C | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 22.792 | 0.227 | 0.000 | 0.00 | 2.65 |
| 45.00 | (12) 1 1/4" Coax | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 22.792 | 0.227 | 0.000 | 0.00 | 32.36 |
| 45.00 | (4) 1 1/4" Hybriflex | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 22.792 | 0.227 | 0.000 | 0.00 | 17.12 |
| 45.00 | (2) 1/2" Coax | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 22.792 | 0.227 | 0.000 | 0.00 | 1.28 |
| 45.00 | (1) 2" Conduit | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 22.792 | 0.227 | 0.000 | 0.00 | 15.62 |
| 45.00 | (6) 5/16" Coax | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 22.792 | 0.227 | 0.000 | 0.00 | 1.16 |
| 45.00 | (12) 1 5/8" Coax | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 22.792 | 0.227 | 0.000 | 0.00 | 42.12 |
| 45.00 | (12) 1 5/8" Coax | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 22.792 | 0.227 | 0.000 | 0.00 | 42.12 |
| 45.00 | (1) 1 5/8" Hybriflex | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 22.792 | 0.227 | 0.000 | 0.00 | 5.56 |
| 45.00 | (1) 1/2" Coax | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 22.792 | 0.227 | 0.000 | 0.00 | 0.64 |
| 45.00 | (1) 1 1/4" Fiber | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 22.792 | 0.227 | 0.000 | 0.00 | 4.49 |
| 45.00 | (14) 1 5/8" Coax | Yes | 4.76 | 1.20 | 3.96 | 1.57 | 1.88 | 22.792 | 0.227 | 0.000 | 75.56 | 49.14 |
| 45.00 | (2) 1/2" Coax | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 22.792 | 0.227 | 0.000 | 0.00 | 1.28 |
| 45.00 | (2) 1/2" Coax | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 22.792 | 0.227 | 0.000 | 0.00 | 1.28 |
| 45.00 | (2) 1/2" Coax | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 22.792 | 0.227 | 0.000 | 0.00 | 1.28 |
| 45.00 | (4) DYWIDAG | Yes | 4.76 | 1.20 | 2.50 | 0.99 | 1.19 | 22.792 | 0.227 | 0.000 | 47.70 | 0.00 |
| 45.40 | (6) 1 5/8" Coax | Yes | 0.40 | 1.20 | 1.98 | 0.07 | 0.08 | 23.178 | 0.230 | 0.000 | 3.23 | 1.77 |
| 45.40 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.07 | 0.00 | 0.000 | 0.000 | 0.000 | 0.00 | 24.04 |
| 45.40 | (1) 3/8" Coax | No | 0.40 | 0.00 | 0.44 | 0.00 | 0.00 | 23.178 | 0.230 | 0.000 | 0.00 | 0.03 |
| 45.40 | (1) 0.28" RG-6 | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 23.178 | 0.230 | 0.000 | 0.00 | 0.01 |
| 45.40 | (2) 0.65" 8 AWG 2C | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 23.178 | 0.230 | 0.000 | 0.00 | 0.22 |
| 45.40 | (12) 1 1/4" Coax | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 23.178 | 0.230 | 0.000 | 0.00 | 2.72 |
| 45.40 | (4) 1 1/4" Hybriflex | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 23.178 | 0.230 | 0.000 | 0.00 | 1.44 |
| 45.40 | (2) 1/2" Coax | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 23.178 | 0.230 | 0.000 | 0.00 | 0.11 |
| 45.40 | (1) 2" Conduit | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 23.178 | 0.230 | 0.000 | 0.00 | 1.31 |
| 45.40 | (6) 5/16" Coax | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 23.178 | 0.230 | 0.000 | 0.00 | 0.10 |
| 45.40 | (12) 1 5/8" Coax | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 23.178 | 0.230 | 0.000 | 0.00 | 3.54 |
| 45.40 | (12) 1 5/8" Coax | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 23.178 | 0.230 | 0.000 | 0.00 | 3.54 |
| 45.40 | (1) 1 5/8" Hybriflex | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 23.178 | 0.230 | 0.000 | 0.00 | 0.47 |
| 45.40 | (1) 1/2" Coax | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 23.178 | 0.230 | 0.000 | 0.00 | 0.05 |
| 45.40 | (1) 1 1/4" Fiber | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 23.178 | 0.230 | 0.000 | 0.00 | 0.38 |
| 45.40 | (14) 1 5/8" Coax | Yes | 0.40 | 1.19 | 3.96 | 0.13 | 0.16 | 23.178 | 0.230 | 0.000 | 6.42 | 4.13 |
| 45.40 | (2) 1/2" Coax | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 23.178 | 0.230 | 0.000 | 0.00 | 0.11 |
| 45.40 | (2) 1/2" Coax | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 23.178 | 0.230 | 0.000 | 0.00 | 0.11 |
| 45.40 | (2) 1/2" Coax | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 23.178 | 0.230 | 0.000 | 0.00 | 0.11 |
| 45.40 | (4) DYWIDAG | Yes | 0.40 | 1.20 | 2.50 | 0.08 | 0.10 | 23.178 | 0.230 | 0.000 | 4.08 | 0.00 |
| 50.00 | (6) 1 5/8" Coax | Yes | 4.60 | 1.20 | 1.98 | 0.76 | 0.91 | 23.537 | 0.229 | 0.000 | 37.73 | 20.37 |
| 50.00 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.76 | 0.00 | 0.000 | 0.000 | 0.000 | 0.00 | 276.56 |

Load Case: 0.9D + 1.6W**110 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**

| | | | | | | | | | | | | |
|-------|----------------------|-----|------|------|------|------|------|--------|-------|-------|-------|--------|
| 50.00 | (1) 3/8" Coax | No | 4.60 | 0.00 | 0.44 | 0.00 | 0.00 | 23.537 | 0.229 | 0.000 | 0.00 | 0.33 |
| 50.00 | (1) 0.28" RG-6 | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 23.537 | 0.229 | 0.000 | 0.00 | 0.12 |
| 50.00 | (2) 0.65" 8 AWG 2C | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 23.537 | 0.229 | 0.000 | 0.00 | 2.57 |
| 50.00 | (12) 1 1/4" Coax | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 23.537 | 0.229 | 0.000 | 0.00 | 31.29 |
| 50.00 | (4) 1 1/4" Hybriflex | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 23.537 | 0.229 | 0.000 | 0.00 | 16.56 |
| 50.00 | (2) 1/2" Coax | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 23.537 | 0.229 | 0.000 | 0.00 | 1.24 |
| 50.00 | (1) 2" Conduit | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 23.537 | 0.229 | 0.000 | 0.00 | 15.11 |
| 50.00 | (6) 5/16" Coax | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 23.537 | 0.229 | 0.000 | 0.00 | 1.12 |
| 50.00 | (12) 1 5/8" Coax | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 23.537 | 0.229 | 0.000 | 0.00 | 40.73 |
| 50.00 | (12) 1 5/8" Coax | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 23.537 | 0.229 | 0.000 | 0.00 | 40.73 |
| 50.00 | (1) 1 5/8" Hybriflex | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 23.537 | 0.229 | 0.000 | 0.00 | 5.38 |
| 50.00 | (1) 1/2" Coax | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 23.537 | 0.229 | 0.000 | 0.00 | 0.62 |
| 50.00 | (1) 1 1/4" Fiber | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 23.537 | 0.229 | 0.000 | 0.00 | 4.35 |
| 50.00 | (14) 1 5/8" Coax | Yes | 4.60 | 1.18 | 3.96 | 1.52 | 1.80 | 23.537 | 0.229 | 0.000 | 74.38 | 47.52 |
| 50.00 | (2) 1/2" Coax | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 23.537 | 0.229 | 0.000 | 0.00 | 1.24 |
| 50.00 | (2) 1/2" Coax | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 23.537 | 0.229 | 0.000 | 0.00 | 1.24 |
| 50.00 | (2) 1/2" Coax | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 23.537 | 0.229 | 0.000 | 0.00 | 1.24 |
| 50.00 | (4) DYWIDAG | Yes | 4.60 | 1.20 | 2.50 | 0.96 | 1.15 | 23.537 | 0.229 | 0.000 | 47.64 | 0.00 |
| 55.00 | (6) 1 5/8" Coax | Yes | 5.00 | 1.20 | 1.98 | 0.82 | 0.99 | 24.191 | 0.236 | 0.000 | 42.15 | 22.14 |
| 55.00 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.82 | 0.00 | 0.000 | 0.000 | 0.000 | 0.00 | 300.60 |
| 55.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 24.191 | 0.236 | 0.000 | 0.00 | 0.36 |
| 55.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 24.191 | 0.236 | 0.000 | 0.00 | 0.13 |
| 55.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 24.191 | 0.236 | 0.000 | 0.00 | 2.79 |
| 55.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 24.191 | 0.236 | 0.000 | 0.00 | 34.01 |
| 55.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 24.191 | 0.236 | 0.000 | 0.00 | 18.00 |
| 55.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 24.191 | 0.236 | 0.000 | 0.00 | 1.35 |
| 55.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 24.191 | 0.236 | 0.000 | 0.00 | 16.42 |
| 55.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 24.191 | 0.236 | 0.000 | 0.00 | 1.22 |
| 55.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 24.191 | 0.236 | 0.000 | 0.00 | 44.27 |
| 55.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 24.191 | 0.236 | 0.000 | 0.00 | 44.27 |
| 55.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 24.191 | 0.236 | 0.000 | 0.00 | 5.85 |
| 55.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 24.191 | 0.236 | 0.000 | 0.00 | 0.68 |
| 55.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 24.191 | 0.236 | 0.000 | 0.00 | 4.72 |
| 55.00 | (14) 1 5/8" Coax | Yes | 5.00 | 1.16 | 3.96 | 1.65 | 1.93 | 24.191 | 0.236 | 0.000 | 81.96 | 51.65 |
| 55.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 24.191 | 0.236 | 0.000 | 0.00 | 1.35 |
| 55.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 24.191 | 0.236 | 0.000 | 0.00 | 1.35 |
| 55.00 | (4) DYWIDAG | Yes | 5.00 | 1.20 | 2.50 | 1.04 | 1.25 | 24.191 | 0.236 | 0.000 | 53.22 | 0.00 |
| 55.68 | (6) 1 5/8" Coax | Yes | 0.68 | 1.20 | 1.98 | 0.11 | 0.13 | 24.558 | 0.240 | 0.000 | 5.79 | 3.00 |
| 55.68 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.11 | 0.00 | 0.000 | 0.000 | 0.000 | 0.00 | 40.70 |
| 55.68 | (1) 3/8" Coax | No | 0.68 | 0.00 | 0.44 | 0.00 | 0.00 | 24.558 | 0.240 | 0.000 | 0.00 | 0.05 |
| 55.68 | (1) 0.28" RG-6 | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 24.558 | 0.240 | 0.000 | 0.00 | 0.02 |
| 55.68 | (2) 0.65" 8 AWG 2C | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 24.558 | 0.240 | 0.000 | 0.00 | 0.38 |
| 55.68 | (12) 1 1/4" Coax | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 24.558 | 0.240 | 0.000 | 0.00 | 4.61 |
| 55.68 | (4) 1 1/4" Hybriflex | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 24.558 | 0.240 | 0.000 | 0.00 | 2.44 |
| 55.68 | (2) 1/2" Coax | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 24.558 | 0.240 | 0.000 | 0.00 | 0.18 |
| 55.68 | (1) 2" Conduit | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 24.558 | 0.240 | 0.000 | 0.00 | 2.22 |
| 55.68 | (6) 5/16" Coax | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 24.558 | 0.240 | 0.000 | 0.00 | 0.16 |
| 55.68 | (12) 1 5/8" Coax | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 24.558 | 0.240 | 0.000 | 0.00 | 5.99 |
| 55.68 | (12) 1 5/8" Coax | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 24.558 | 0.240 | 0.000 | 0.00 | 5.99 |
| 55.68 | (1) 1 5/8" Hybriflex | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 24.558 | 0.240 | 0.000 | 0.00 | 0.79 |
| 55.68 | (1) 1/2" Coax | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 24.558 | 0.240 | 0.000 | 0.00 | 0.09 |
| 55.68 | (1) 1 1/4" Fiber | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 24.558 | 0.240 | 0.000 | 0.00 | 0.64 |
| 55.68 | (14) 1 5/8" Coax | Yes | 0.68 | 1.15 | 3.96 | 0.22 | 0.26 | 24.558 | 0.240 | 0.000 | 11.18 | 6.99 |
| 55.68 | (2) 1/2" Coax | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 24.558 | 0.240 | 0.000 | 0.00 | 0.18 |
| 55.68 | (2) 1/2" Coax | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 24.558 | 0.240 | 0.000 | 0.00 | 0.18 |
| 55.68 | (2) 1/2" Coax | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 24.558 | 0.240 | 0.000 | 0.00 | 0.18 |

| Load Case: 0.9D + 1.6W | | 110 mph with No Ice (Reduced DL) | | | | | | | | 25 Iterations | | |
|------------------------------------|----------------------|---|------|------|------|------|------|--------|-------|--------------------------------------|-------|-------|
| | | | | | | | | | | Wind Importance Factor : 1.00 | | |
| Gust Response Factor : 1.10 | | | | | | | | | | | | |
| Dead Load Factor : 0.90 | | | | | | | | | | | | |
| Wind Load Factor : 1.60 | | | | | | | | | | | | |
| 55.68 | (4) DYWIDAG | Yes | 0.68 | 1.20 | 2.50 | 0.14 | 0.17 | 24.558 | 0.240 | 0.000 | 7.32 | 0.00 |
| 60.00 | (6) 1 5/8" Coax | Yes | 4.32 | 1.20 | 1.98 | 0.71 | 0.86 | 24.870 | 0.244 | 0.000 | 37.47 | 19.14 |
| 60.00 | (1) 3/8" Coax | No | 4.32 | 0.00 | 0.44 | 0.00 | 0.00 | 24.870 | 0.244 | 0.000 | 0.00 | 0.31 |
| 60.00 | (1) 0.28" RG-6 | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 24.870 | 0.244 | 0.000 | 0.00 | 0.11 |
| 60.00 | (2) 0.65" 8 AWG 2C | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 24.870 | 0.244 | 0.000 | 0.00 | 2.41 |
| 60.00 | (12) 1 1/4" Coax | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 24.870 | 0.244 | 0.000 | 0.00 | 29.41 |
| 60.00 | (4) 1 1/4" Hybriflex | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 24.870 | 0.244 | 0.000 | 0.00 | 15.56 |
| 60.00 | (2) 1/2" Coax | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 24.870 | 0.244 | 0.000 | 0.00 | 1.17 |
| 60.00 | (1) 2" Conduit | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 24.870 | 0.244 | 0.000 | 0.00 | 14.20 |
| 60.00 | (6) 5/16" Coax | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 24.870 | 0.244 | 0.000 | 0.00 | 1.05 |
| 60.00 | (12) 1 5/8" Coax | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 24.870 | 0.244 | 0.000 | 0.00 | 38.28 |
| 60.00 | (12) 1 5/8" Coax | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 24.870 | 0.244 | 0.000 | 0.00 | 38.28 |
| 60.00 | (1) 1 5/8" Hybriflex | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 24.870 | 0.244 | 0.000 | 0.00 | 5.06 |
| 60.00 | (1) 1/2" Coax | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 24.870 | 0.244 | 0.000 | 0.00 | 0.58 |
| 60.00 | (1) 1 1/4" Fiber | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 24.870 | 0.244 | 0.000 | 0.00 | 4.09 |
| 60.00 | (14) 1 5/8" Coax | Yes | 4.32 | 1.15 | 3.96 | 1.43 | 1.64 | 24.870 | 0.244 | 0.000 | 71.85 | 44.66 |
| 60.00 | (2) 1/2" Coax | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 24.870 | 0.244 | 0.000 | 0.00 | 1.17 |
| 60.00 | (2) 1/2" Coax | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 24.870 | 0.244 | 0.000 | 0.00 | 1.17 |
| 60.00 | (2) 1/2" Coax | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 24.870 | 0.244 | 0.000 | 0.00 | 1.17 |
| 60.00 | (4) DYWIDAG | Yes | 4.32 | 1.20 | 2.50 | 0.90 | 1.08 | 24.870 | 0.244 | 0.000 | 47.31 | 0.00 |
| 65.00 | (6) 1 5/8" Coax | Yes | 5.00 | 1.20 | 1.98 | 0.82 | 0.99 | 25.427 | 0.221 | 0.000 | 44.30 | 22.14 |
| 65.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 25.427 | 0.221 | 0.000 | 0.00 | 0.36 |
| 65.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.427 | 0.221 | 0.000 | 0.00 | 0.13 |
| 65.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.427 | 0.221 | 0.000 | 0.00 | 2.79 |
| 65.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.427 | 0.221 | 0.000 | 0.00 | 34.01 |
| 65.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.427 | 0.221 | 0.000 | 0.00 | 18.00 |
| 65.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.427 | 0.221 | 0.000 | 0.00 | 1.35 |
| 65.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.427 | 0.221 | 0.000 | 0.00 | 16.42 |
| 65.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.427 | 0.221 | 0.000 | 0.00 | 1.22 |
| 65.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.427 | 0.221 | 0.000 | 0.00 | 44.27 |
| 65.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.427 | 0.221 | 0.000 | 0.00 | 44.27 |
| 65.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.427 | 0.221 | 0.000 | 0.00 | 5.85 |
| 65.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.427 | 0.221 | 0.000 | 0.00 | 0.68 |
| 65.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.427 | 0.221 | 0.000 | 0.00 | 4.72 |
| 65.00 | (14) 1 5/8" Coax | Yes | 5.00 | 1.13 | 3.96 | 1.65 | 1.88 | 25.427 | 0.221 | 0.000 | 84.03 | 51.65 |
| 65.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.427 | 0.221 | 0.000 | 0.00 | 1.35 |
| 65.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.427 | 0.221 | 0.000 | 0.00 | 1.35 |
| 65.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.427 | 0.221 | 0.000 | 0.00 | 1.35 |
| 65.00 | (4) DYWIDAG | Yes | 3.00 | 1.20 | 2.50 | 0.63 | 0.75 | 25.427 | 0.221 | 0.000 | 33.56 | 0.00 |
| 70.00 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 0.82 | 0.00 | 25.992 | 0.183 | 1.248 | 0.00 | 22.14 |
| 70.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 25.992 | 0.183 | 1.248 | 0.00 | 0.36 |
| 70.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.992 | 0.183 | 1.248 | 0.00 | 0.13 |
| 70.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.992 | 0.183 | 1.248 | 0.00 | 2.79 |
| 70.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.992 | 0.183 | 1.248 | 0.00 | 34.01 |
| 70.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.992 | 0.183 | 1.248 | 0.00 | 18.00 |
| 70.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.992 | 0.183 | 1.248 | 0.00 | 1.35 |
| 70.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.992 | 0.183 | 1.248 | 0.00 | 16.42 |
| 70.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.992 | 0.183 | 1.248 | 0.00 | 1.22 |
| 70.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.992 | 0.183 | 1.248 | 0.00 | 44.27 |
| 70.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.992 | 0.183 | 1.248 | 0.00 | 44.27 |
| 70.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.992 | 0.183 | 1.248 | 0.00 | 5.85 |
| 70.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.992 | 0.183 | 1.248 | 0.00 | 0.68 |
| 70.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.992 | 0.183 | 1.248 | 0.00 | 4.72 |
| 70.00 | (14) 1 5/8" Coax | Yes | 5.00 | 0.00 | 3.96 | 1.65 | 0.00 | 25.992 | 0.183 | 1.248 | 0.00 | 51.65 |
| 70.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.992 | 0.183 | 1.248 | 0.00 | 1.35 |
| 70.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.992 | 0.183 | 1.248 | 0.00 | 1.35 |
| 70.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.992 | 0.183 | 1.248 | 0.00 | 1.35 |

| Load Case: 0.9D + 1.6W | | 110 mph with No Ice (Reduced DL) | | | | | | | 25 Iterations | | | |
|------------------------------------|----------------------|---|------|------|------|------|------|--------|--------------------------------------|-------|-------|-------|
| | | | | | | | | | Wind Importance Factor : 1.00 | | | |
| Gust Response Factor : 1.10 | | | | | | | | | | | | |
| Dead Load Factor : 0.90 | | | | | | | | | | | | |
| Wind Load Factor : 1.60 | | | | | | | | | | | | |
| 75.00 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 0.82 | 0.00 | 26.528 | 0.189 | 1.267 | 0.00 | 22.14 |
| 75.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 26.528 | 0.189 | 1.267 | 0.00 | 0.36 |
| 75.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 26.528 | 0.189 | 1.267 | 0.00 | 0.13 |
| 75.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 26.528 | 0.189 | 1.267 | 0.00 | 2.79 |
| 75.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 26.528 | 0.189 | 1.267 | 0.00 | 34.01 |
| 75.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 26.528 | 0.189 | 1.267 | 0.00 | 18.00 |
| 75.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 26.528 | 0.189 | 1.267 | 0.00 | 1.35 |
| 75.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 26.528 | 0.189 | 1.267 | 0.00 | 16.42 |
| 75.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 26.528 | 0.189 | 1.267 | 0.00 | 1.22 |
| 75.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 26.528 | 0.189 | 1.267 | 0.00 | 44.27 |
| 75.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 26.528 | 0.189 | 1.267 | 0.00 | 44.27 |
| 75.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 26.528 | 0.189 | 1.267 | 0.00 | 5.85 |
| 75.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 26.528 | 0.189 | 1.267 | 0.00 | 0.68 |
| 75.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 26.528 | 0.189 | 1.267 | 0.00 | 4.72 |
| 75.00 | (14) 1 5/8" Coax | Yes | 5.00 | 0.00 | 3.96 | 1.65 | 0.00 | 26.528 | 0.189 | 1.267 | 0.00 | 51.65 |
| 75.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 26.528 | 0.189 | 1.267 | 0.00 | 1.35 |
| 75.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 26.528 | 0.189 | 1.267 | 0.00 | 1.35 |
| 80.00 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 0.82 | 0.00 | 27.038 | 0.196 | 1.288 | 0.00 | 22.14 |
| 80.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 27.038 | 0.196 | 1.288 | 0.00 | 0.36 |
| 80.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.038 | 0.196 | 1.288 | 0.00 | 0.13 |
| 80.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.038 | 0.196 | 1.288 | 0.00 | 2.79 |
| 80.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.038 | 0.196 | 1.288 | 0.00 | 34.01 |
| 80.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.038 | 0.196 | 1.288 | 0.00 | 18.00 |
| 80.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.038 | 0.196 | 1.288 | 0.00 | 1.35 |
| 80.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.038 | 0.196 | 1.288 | 0.00 | 16.42 |
| 80.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.038 | 0.196 | 1.288 | 0.00 | 1.22 |
| 80.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.038 | 0.196 | 1.288 | 0.00 | 44.27 |
| 80.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.038 | 0.196 | 1.288 | 0.00 | 44.27 |
| 80.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.038 | 0.196 | 1.288 | 0.00 | 5.85 |
| 80.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.038 | 0.196 | 1.288 | 0.00 | 0.68 |
| 80.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.038 | 0.196 | 1.288 | 0.00 | 4.72 |
| 80.00 | (14) 1 5/8" Coax | Yes | 5.00 | 0.00 | 3.96 | 1.65 | 0.00 | 27.038 | 0.196 | 1.288 | 0.00 | 51.65 |
| 80.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.038 | 0.196 | 1.288 | 0.00 | 1.35 |
| 80.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.038 | 0.196 | 1.288 | 0.00 | 1.35 |
| 80.75 | (6) 1 5/8" Coax | Yes | 0.75 | 1.20 | 1.98 | 0.12 | 0.15 | 27.321 | 0.200 | 0.000 | 7.13 | 3.31 |
| 80.75 | (1) 3/8" Coax | No | 0.75 | 0.00 | 0.44 | 0.00 | 0.00 | 27.321 | 0.200 | 0.000 | 0.00 | 0.05 |
| 80.75 | (1) 0.28" RG-6 | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 27.321 | 0.200 | 0.000 | 0.00 | 0.02 |
| 80.75 | (2) 0.65" 8 AWG 2C | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 27.321 | 0.200 | 0.000 | 0.00 | 0.42 |
| 80.75 | (12) 1 1/4" Coax | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 27.321 | 0.200 | 0.000 | 0.00 | 5.09 |
| 80.75 | (4) 1 1/4" Hybriflex | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 27.321 | 0.200 | 0.000 | 0.00 | 2.69 |
| 80.75 | (2) 1/2" Coax | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 27.321 | 0.200 | 0.000 | 0.00 | 0.20 |
| 80.75 | (1) 2" Conduit | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 27.321 | 0.200 | 0.000 | 0.00 | 2.46 |
| 80.75 | (6) 5/16" Coax | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 27.321 | 0.200 | 0.000 | 0.00 | 0.18 |
| 80.75 | (12) 1 5/8" Coax | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 27.321 | 0.200 | 0.000 | 0.00 | 6.63 |
| 80.75 | (12) 1 5/8" Coax | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 27.321 | 0.200 | 0.000 | 0.00 | 6.63 |
| 80.75 | (1) 1 5/8" Hybriflex | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 27.321 | 0.200 | 0.000 | 0.00 | 0.88 |
| 80.75 | (1) 1/2" Coax | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 27.321 | 0.200 | 0.000 | 0.00 | 0.10 |
| 80.75 | (1) 1 1/4" Fiber | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 27.321 | 0.200 | 0.000 | 0.00 | 0.71 |
| 80.75 | (14) 1 5/8" Coax | Yes | 0.75 | 1.09 | 3.96 | 0.25 | 0.27 | 27.321 | 0.200 | 0.000 | 13.04 | 7.73 |
| 84.90 | (6) 1 5/8" Coax | Yes | 4.15 | 1.20 | 1.98 | 0.68 | 0.82 | 27.556 | 0.204 | 0.000 | 39.86 | 18.38 |
| 84.90 | (1) 3/8" Coax | No | 4.15 | 0.00 | 0.44 | 0.00 | 0.00 | 27.556 | 0.204 | 0.000 | 0.00 | 0.30 |
| 84.90 | (1) 0.28" RG-6 | No | 4.15 | 0.00 | 0.00 | 0.00 | 0.00 | 27.556 | 0.204 | 0.000 | 0.00 | 0.11 |
| 84.90 | (2) 0.65" 8 AWG 2C | No | 4.15 | 0.00 | 0.00 | 0.00 | 0.00 | 27.556 | 0.204 | 0.000 | 0.00 | 2.32 |
| 84.90 | (12) 1 1/4" Coax | No | 4.15 | 0.00 | 0.00 | 0.00 | 0.00 | 27.556 | 0.204 | 0.000 | 0.00 | 28.24 |
| 84.90 | (4) 1 1/4" Hybriflex | No | 4.15 | 0.00 | 0.00 | 0.00 | 0.00 | 27.556 | 0.204 | 0.000 | 0.00 | 14.94 |
| 84.90 | (2) 1/2" Coax | No | 4.15 | 0.00 | 0.00 | 0.00 | 0.00 | 27.556 | 0.204 | 0.000 | 0.00 | 1.12 |
| 84.90 | (1) 2" Conduit | No | 4.15 | 0.00 | 0.00 | 0.00 | 0.00 | 27.556 | 0.204 | 0.000 | 0.00 | 13.64 |

Load Case: 0.9D + 1.6W**110 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**

| | | | | | | | | | | | |
|-------|----------------------|-----|------|------|------|------|--------|--------|-------|-------|-------|
| 84.90 | (6) 5/16" Coax | No | 4.15 | 0.00 | 0.00 | 0.00 | 27.556 | 0.204 | 0.000 | 0.00 | 1.01 |
| 84.90 | (12) 1 5/8" Coax | No | 4.15 | 0.00 | 0.00 | 0.00 | 27.556 | 0.204 | 0.000 | 0.00 | 36.76 |
| 84.90 | (12) 1 5/8" Coax | No | 4.15 | 0.00 | 0.00 | 0.00 | 27.556 | 0.204 | 0.000 | 0.00 | 36.76 |
| 84.90 | (1) 1 5/8" Hybriflex | No | 4.15 | 0.00 | 0.00 | 0.00 | 27.556 | 0.204 | 0.000 | 0.00 | 4.86 |
| 84.90 | (1) 1/2" Coax | No | 4.15 | 0.00 | 0.00 | 0.00 | 27.556 | 0.204 | 0.000 | 0.00 | 0.56 |
| 84.90 | (1) 1 1/4" Fiber | No | 4.15 | 0.00 | 0.00 | 0.00 | 27.556 | 0.204 | 0.000 | 0.00 | 3.92 |
| 84.90 | (14) 1 5/8" Coax | Yes | 4.15 | 1.09 | 3.96 | 1.37 | 1.50 | 27.556 | 0.204 | 0.000 | 72.63 |
| 85.00 | (6) 1 5/8" Coax | Yes | 0.10 | 1.20 | 1.98 | 0.02 | 0.02 | 27.757 | 0.204 | 0.000 | 0.97 |
| 85.00 | (1) 3/8" Coax | No | 0.10 | 0.00 | 0.44 | 0.00 | 0.00 | 27.757 | 0.204 | 0.000 | 0.00 |
| 85.00 | (1) 0.28" RG-6 | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 27.757 | 0.204 | 0.000 | 0.00 |
| 85.00 | (2) 0.65" 8 AWG 2C | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 27.757 | 0.204 | 0.000 | 0.06 |
| 85.00 | (12) 1 1/4" Coax | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 27.757 | 0.204 | 0.000 | 0.68 |
| 85.00 | (4) 1 1/4" Hybriflex | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 27.757 | 0.204 | 0.000 | 0.36 |
| 85.00 | (2) 1/2" Coax | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 27.757 | 0.204 | 0.000 | 0.03 |
| 85.00 | (1) 2" Conduit | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 27.757 | 0.204 | 0.000 | 0.33 |
| 85.00 | (6) 5/16" Coax | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 27.757 | 0.204 | 0.000 | 0.02 |
| 85.00 | (12) 1 5/8" Coax | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 27.757 | 0.204 | 0.000 | 0.89 |
| 85.00 | (12) 1 5/8" Coax | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 27.757 | 0.204 | 0.000 | 0.89 |
| 85.00 | (1) 1 5/8" Hybriflex | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 27.757 | 0.204 | 0.000 | 0.12 |
| 85.00 | (1) 1/2" Coax | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 27.757 | 0.204 | 0.000 | 0.01 |
| 85.00 | (1) 1 1/4" Fiber | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 27.757 | 0.204 | 0.000 | 0.09 |
| 85.00 | (14) 1 5/8" Coax | Yes | 0.10 | 1.08 | 3.96 | 0.03 | 0.04 | 27.757 | 0.204 | 0.000 | 1.76 |
| 90.00 | (6) 1 5/8" Coax | Yes | 5.00 | 1.20 | 1.98 | 0.82 | 0.99 | 27.992 | 0.208 | 0.000 | 48.77 |
| 90.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 27.992 | 0.208 | 0.000 | 0.36 |
| 90.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.992 | 0.208 | 0.000 | 0.13 |
| 90.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.992 | 0.208 | 0.000 | 2.79 |
| 90.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.992 | 0.208 | 0.000 | 34.01 |
| 90.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.992 | 0.208 | 0.000 | 18.00 |
| 90.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.992 | 0.208 | 0.000 | 1.35 |
| 90.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.992 | 0.208 | 0.000 | 16.42 |
| 90.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.992 | 0.208 | 0.000 | 1.22 |
| 90.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.992 | 0.208 | 0.000 | 44.27 |
| 90.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.992 | 0.208 | 0.000 | 44.27 |
| 90.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.992 | 0.208 | 0.000 | 5.85 |
| 90.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.992 | 0.208 | 0.000 | 0.68 |
| 90.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 27.992 | 0.208 | 0.000 | 4.72 |
| 90.00 | (14) 1 5/8" Coax | Yes | 5.00 | 1.08 | 3.96 | 1.65 | 1.79 | 27.992 | 0.208 | 0.000 | 88.17 |
| 95.00 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 0.82 | 0.00 | 28.440 | 0.072 | 0.000 | 51.65 |
| 95.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 28.440 | 0.072 | 0.000 | 0.36 |
| 95.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 28.440 | 0.072 | 0.000 | 0.13 |
| 95.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 28.440 | 0.072 | 0.000 | 2.79 |
| 95.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 28.440 | 0.072 | 0.000 | 34.01 |
| 95.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 28.440 | 0.072 | 0.000 | 18.00 |
| 95.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 28.440 | 0.072 | 0.000 | 1.35 |
| 95.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 28.440 | 0.072 | 0.000 | 16.42 |
| 95.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 28.440 | 0.072 | 0.000 | 1.22 |
| 95.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 28.440 | 0.072 | 0.000 | 44.27 |
| 95.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 28.440 | 0.072 | 0.000 | 44.27 |
| 95.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 28.440 | 0.072 | 0.000 | 5.85 |
| 95.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 28.440 | 0.072 | 0.000 | 0.68 |
| 100.0 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 0.82 | 0.00 | 28.871 | 0.075 | 0.000 | 22.14 |
| 100.0 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 28.871 | 0.075 | 0.000 | 0.36 |
| 100.0 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 28.871 | 0.075 | 0.000 | 0.13 |
| 100.0 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 28.871 | 0.075 | 0.000 | 2.79 |
| 100.0 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 28.871 | 0.075 | 0.000 | 34.01 |
| 100.0 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 28.871 | 0.075 | 0.000 | 18.00 |
| 100.0 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 28.871 | 0.075 | 0.000 | 1.35 |

Load Case: 0.9D + 1.6W**110 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**

| | | | | | | | | | | | | |
|-------|----------------------|-----|------|------|------|------|--------|--------|-------|-------|-------|-------|
| 100.0 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 28.871 | 0.075 | 0.000 | 0.00 | 16.42 | |
| 100.0 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 28.871 | 0.075 | 0.000 | 0.00 | 1.22 | |
| 100.0 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 28.871 | 0.075 | 0.000 | 0.00 | 44.27 | |
| 100.0 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 28.871 | 0.075 | 0.000 | 0.00 | 44.27 | |
| 100.0 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 28.871 | 0.075 | 0.000 | 0.00 | 5.85 | |
| 100.0 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 28.871 | 0.075 | 0.000 | 0.00 | 0.68 | |
| 105.0 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 0.82 | 0.00 | 29.287 | 0.078 | 0.000 | 0.00 | 22.14 |
| 105.0 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 29.287 | 0.078 | 0.000 | 0.00 | 0.36 |
| 105.0 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 29.287 | 0.078 | 0.000 | 0.00 | 0.13 |
| 105.0 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 29.287 | 0.078 | 0.000 | 0.00 | 2.79 |
| 105.0 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 29.287 | 0.078 | 0.000 | 0.00 | 34.01 |
| 105.0 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 29.287 | 0.078 | 0.000 | 0.00 | 18.00 |
| 105.0 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 29.287 | 0.078 | 0.000 | 0.00 | 1.35 |
| 105.0 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 29.287 | 0.078 | 0.000 | 0.00 | 16.42 |
| 105.0 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 29.287 | 0.078 | 0.000 | 0.00 | 1.22 |
| 105.0 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 29.287 | 0.078 | 0.000 | 0.00 | 44.27 |
| 110.0 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 0.82 | 0.00 | 29.688 | 0.082 | 0.000 | 0.00 | 22.14 |
| 110.0 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 29.688 | 0.082 | 0.000 | 0.00 | 0.36 |
| 110.0 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 29.688 | 0.082 | 0.000 | 0.00 | 0.13 |
| 110.0 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 29.688 | 0.082 | 0.000 | 0.00 | 2.79 |
| 110.0 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 29.688 | 0.082 | 0.000 | 0.00 | 34.01 |
| 110.0 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 29.688 | 0.082 | 0.000 | 0.00 | 18.00 |
| 110.0 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 29.688 | 0.082 | 0.000 | 0.00 | 1.35 |
| 110.0 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 29.688 | 0.082 | 0.000 | 0.00 | 16.42 |
| 110.0 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 29.688 | 0.082 | 0.000 | 0.00 | 1.22 |
| 110.0 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 29.688 | 0.082 | 0.000 | 0.00 | 44.27 |
| 115.0 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 0.82 | 0.00 | 30.076 | 0.086 | 0.000 | 0.00 | 22.14 |
| 115.0 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 30.076 | 0.086 | 0.000 | 0.00 | 0.36 |
| 115.0 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 30.076 | 0.086 | 0.000 | 0.00 | 0.13 |
| 115.0 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 30.076 | 0.086 | 0.000 | 0.00 | 2.79 |
| 115.0 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 30.076 | 0.086 | 0.000 | 0.00 | 34.01 |
| 115.0 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 30.076 | 0.086 | 0.000 | 0.00 | 18.00 |
| 115.0 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 30.076 | 0.086 | 0.000 | 0.00 | 1.35 |
| 115.0 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 30.076 | 0.086 | 0.000 | 0.00 | 16.42 |
| 115.0 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 30.076 | 0.086 | 0.000 | 0.00 | 1.22 |
| 120.0 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 0.82 | 0.00 | 30.452 | 0.090 | 0.000 | 0.00 | 22.14 |
| 120.0 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 30.452 | 0.090 | 0.000 | 0.00 | 0.36 |
| 120.0 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 30.452 | 0.090 | 0.000 | 0.00 | 0.13 |
| 120.0 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 30.452 | 0.090 | 0.000 | 0.00 | 2.79 |
| 120.0 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 30.452 | 0.090 | 0.000 | 0.00 | 34.01 |
| 120.0 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 30.452 | 0.090 | 0.000 | 0.00 | 18.00 |
| 120.0 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 30.452 | 0.090 | 0.000 | 0.00 | 1.35 |
| 120.0 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 30.452 | 0.090 | 0.000 | 0.00 | 16.42 |
| 120.0 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 30.452 | 0.090 | 0.000 | 0.00 | 1.22 |
| 125.0 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 0.82 | 0.00 | 30.817 | 0.095 | 0.000 | 0.00 | 22.14 |
| 125.0 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 30.817 | 0.095 | 0.000 | 0.00 | 0.36 |
| 125.0 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 30.817 | 0.095 | 0.000 | 0.00 | 0.13 |
| 125.0 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 30.817 | 0.095 | 0.000 | 0.00 | 2.79 |
| 125.0 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 30.817 | 0.095 | 0.000 | 0.00 | 34.01 |
| 125.8 | (6) 1 5/8" Coax | Yes | 0.80 | 0.00 | 1.98 | 0.13 | 0.00 | 31.024 | 0.098 | 0.000 | 0.00 | 3.54 |
| 125.8 | (1) 3/8" Coax | No | 0.80 | 0.00 | 0.44 | 0.00 | 0.00 | 31.024 | 0.098 | 0.000 | 0.00 | 0.06 |
| 125.8 | (1) 0.28" RG-6 | No | 0.80 | 0.00 | 0.00 | 0.00 | 0.00 | 31.024 | 0.098 | 0.000 | 0.00 | 0.02 |
| 125.8 | (2) 0.65" 8 AWG 2C | No | 0.80 | 0.00 | 0.00 | 0.00 | 0.00 | 31.024 | 0.098 | 0.000 | 0.00 | 0.45 |
| 125.8 | (12) 1 1/4" Coax | No | 0.80 | 0.00 | 0.00 | 0.00 | 0.00 | 31.024 | 0.098 | 0.000 | 0.00 | 5.45 |
| 130.0 | (6) 1 5/8" Coax | Yes | 4.20 | 0.00 | 1.98 | 0.69 | 0.00 | 31.199 | 0.184 | 1.253 | 0.00 | 18.59 |
| 130.0 | (1) 3/8" Coax | No | 4.20 | 0.00 | 0.44 | 0.00 | 0.00 | 31.199 | 0.184 | 1.253 | 0.00 | 0.30 |
| 130.0 | (1) 0.28" RG-6 | No | 4.20 | 0.00 | 0.00 | 0.00 | 0.00 | 31.199 | 0.184 | 1.253 | 0.00 | 0.11 |

Site Number: 302511

Code: ANSI/TIA-222-G

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Site Name: WSPT - South, CT

Engineering Number: 63916524

1/25/2016 11:02:32 AM

Customer: T-MOBILE

Load Case: 0.9D + 1.6W**110 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

| | | | | | | | | | | |
|--------------------------|-----|------|------|------|------|--------|--------|-------|-------|-------|
| 130.0 (2) 0.65" 8 AWG 2C | No | 4.20 | 0.00 | 0.00 | 0.00 | 31.199 | 0.184 | 1.253 | 0.00 | 2.34 |
| 130.0 (12) 1 1/4" Coax | No | 4.20 | 0.00 | 0.00 | 0.00 | 31.199 | 0.184 | 1.253 | 0.00 | 28.57 |
| 131.0 (6) 1 5/8" Coax | Yes | 1.00 | 0.00 | 1.98 | 0.17 | 0.00 | 31.379 | 0.184 | 1.253 | 0.00 |
| 131.0 (1) 3/8" Coax | No | 1.00 | 0.00 | 0.44 | 0.00 | 0.00 | 31.379 | 0.184 | 1.253 | 0.00 |
| 131.0 (1) 0.28" RG-6 | No | 1.00 | 0.00 | 0.00 | 0.00 | 0.00 | 31.379 | 0.184 | 1.253 | 0.00 |
| 131.0 (2) 0.65" 8 AWG 2C | No | 1.00 | 0.00 | 0.00 | 0.00 | 0.00 | 31.379 | 0.184 | 1.253 | 0.00 |
| 131.0 (12) 1 1/4" Coax | No | 1.00 | 0.00 | 0.00 | 0.00 | 0.00 | 31.379 | 0.184 | 1.253 | 0.00 |
| 135.0 (6) 1 5/8" Coax | Yes | 4.00 | 0.00 | 1.98 | 0.66 | 0.00 | 31.550 | 0.184 | 1.253 | 0.00 |
| 135.0 (1) 3/8" Coax | No | 4.00 | 0.00 | 0.44 | 0.00 | 0.00 | 31.550 | 0.184 | 1.253 | 0.00 |
| 136.0 (6) 1 5/8" Coax | Yes | 1.00 | 0.00 | 1.98 | 0.17 | 0.00 | 31.718 | 0.184 | 1.253 | 0.00 |
| 136.0 (1) 3/8" Coax | No | 1.00 | 0.00 | 0.44 | 0.00 | 0.00 | 31.718 | 0.184 | 1.253 | 0.07 |

Totals: 1,760.95 8,881.60

Site Number: 302511

Code: ANSI/TIA-222-G

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Site Name: WSPT - South, CT

Engineering Number: 63916524

1/25/2016 11:02:32 AM

Customer: T-MOBILE

Load Case: 0.9D + 1.6W

110 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

Applied Segment Forces Summary

| Seg Elev (ft) | Description | Shaft Forces | | Discrete Forces | | | Linear Forces | | | Sum of Forces | | | |
|---------------------|-----------------|--------------|----------------------|-----------------|---------------|---------------|---------------|----------------------|-----------------|----------------------|---------------|------------|------|
| | | Wind FX | Dead Load (lb) | Torsion | Moment | Dead Load | Wind FX | Dead Load (lb) | Wind FX (lb) | Dead Load (lb) | Torsion | Moment | |
| | | | | Wind FX (lb) | MY (lb-ft) | MZ (lb-ft) | | | | Wind FX (lb) | MY (lb-ft) | MZ (lb) | |
| 0.00 | | 347.7 | 0.0 | | | | 0.0 | 0.0 | 347.7 | 0.0 | 0.0 | 0.0 | |
| 5.00 | | 687.1 | 949.8 | | | | 0.0 | 552.5 | 687.1 | 1,502.3 | 0.0 | 0.0 | |
| 10.00 | | 670.5 | 926.9 | | | | 0.0 | 552.5 | 670.5 | 1,479.4 | 0.0 | 0.0 | |
| 15.00 | | 653.9 | 903.9 | | | | 0.0 | 552.5 | 653.9 | 1,456.5 | 0.0 | 0.0 | |
| 20.00 | | 700.1 | 881.0 | | | | 0.0 | 552.5 | 700.1 | 1,433.5 | 0.0 | 0.0 | |
| 25.00 | | 744.7 | 858.1 | | | | 153.0 | 552.5 | 897.7 | 1,410.6 | 0.0 | 0.0 | |
| 30.00 | | 733.4 | 835.1 | | | | 153.0 | 552.5 | 886.4 | 1,387.7 | 0.0 | 0.0 | |
| 35.00 | | 736.6 | 812.2 | | | | 156.7 | 552.5 | 893.3 | 1,364.7 | 0.0 | 0.0 | |
| 40.00 | | 388.7 | 789.3 | | | | 163.2 | 552.5 | 551.9 | 1,341.8 | 0.0 | 0.0 | |
| 40.24 | Bot - Section 2 | 380.5 | 37.9 | | | | 8.1 | 26.9 | 388.6 | 64.8 | 0.0 | 0.0 | |
| 45.00 | | 392.9 | 1,367.1 | | | | 161.0 | 525.6 | 553.9 | 1,892.7 | 0.0 | 0.0 | |
| 45.40 | Top - Section 1 | 381.8 | 113.2 | | | | 13.7 | 44.2 | 395.5 | 157.4 | 0.0 | 0.0 | |
| 50.00 | | 732.4 | 599.3 | | | | 159.8 | 508.3 | 892.1 | 1,107.7 | 0.0 | 0.0 | |
| 55.00 | | 432.6 | 632.6 | | | | 177.3 | 552.5 | 609.9 | 1,185.1 | 0.0 | 0.0 | |
| 55.68 | Reinf. Top | 379.1 | 84.1 | | | | 24.3 | 74.8 | 403.4 | 158.9 | 0.0 | 0.0 | |
| 60.00 | | 703.6 | 528.8 | | | | 156.6 | 217.8 | 860.2 | 746.6 | 0.0 | 0.0 | |
| 65.00 | | 685.7 | 593.2 | | | | 161.9 | 251.9 | 847.6 | 845.2 | 0.0 | 0.0 | |
| 70.00 | Appertunance(s) | 615.2 | 573.6 | 35.1 | 0.0 | 0.0 | 27.5 | 0.0 | 251.9 | 650.4 | 853.1 | 0.0 | |
| 75.00 | | 605.9 | 553.9 | | | | | 0.0 | 250.6 | 605.9 | 804.5 | 0.0 | |
| 80.00 | Appertunance(s) | 353.8 | 534.3 | 470.8 | 0.0 | 326.1 | 139.1 | 0.0 | 250.6 | 824.6 | 924.0 | 0.0 | |
| 80.75 | Bot - Section 3 | 351.8 | 78.3 | | | | | 20.2 | 37.1 | 372.0 | 115.4 | 0.0 | |
| 84.90 | Top - Section 2 | 305.6 | 716.7 | | | | | 112.5 | 205.8 | 418.1 | 922.5 | 0.0 | |
| 85.00 | | 359.7 | 6.9 | | | | | 2.7 | 5.0 | 362.4 | 11.9 | 0.0 | |
| 90.00 | Appertunance(s) | 639.5 | 337.7 | 4,321.3 | 0.0 | 0.0 | 2,641.0 | 136.9 | 247.9 | 5,097.7 | 3,226.6 | 0.0 | |
| 95.00 | | 566.6 | 324.6 | | | | | 0.0 | 191.5 | 566.6 | 516.1 | 0.0 | |
| 100.00 | Appertunance(s) | 551.5 | 311.5 | 4,138.3 | 0.0 | 77.6 | 2,203.9 | 0.0 | 191.5 | 4,689.9 | 2,706.9 | 0.0 | |
| 105.00 | | 535.5 | 298.4 | | | | | 0.0 | 140.7 | 535.5 | 439.1 | 0.0 | |
| 110.00 | Appertunance(s) | 518.5 | 285.3 | 3,340.4 | 0.0 | 0.0 | 1,908.0 | 0.0 | 140.7 | 3,859.0 | 2,334.0 | 0.0 | |
| 115.00 | | 500.7 | 272.1 | | | | | 0.0 | 96.4 | 500.7 | 368.6 | 0.0 | |
| 120.00 | Appertunance(s) | 482.1 | 259.0 | 4,611.3 | 0.0 | 0.0 | 2,866.0 | 0.0 | 96.4 | 5,093.5 | 3,221.5 | 0.0 | |
| 125.00 | | 273.2 | 245.9 | | | | | 0.0 | 59.4 | 273.2 | 305.4 | 0.0 | |
| 125.80 | Top - Section 3 | 98.9 | 38.2 | | | | | 0.0 | 9.5 | 98.9 | 47.7 | 0.0 | |
| 130.00 | | 76.8 | 157.2 | | | | | 0.0 | 49.9 | 76.8 | 207.1 | 0.0 | |
| 131.00 | Appertunance(s) | 74.5 | 37.4 | 4,298.3 | 0.0 | 3,569.1 | 2,504.2 | 0.0 | 11.9 | 4,372.9 | 2,553.5 | 0.0 | |
| 135.00 | | 74.7 | 149.7 | | | | | 0.0 | 18.0 | 74.7 | 167.7 | 0.0 | |
| 136.00 | Appertunance(s) | 75.3 | 37.4 | 393.5 | 0.0 | 1,180.6 | 66.1 | 0.0 | 4.5 | 468.9 | 108.1 | 0.0 | |
| 140.00 | | 90.7 | 149.7 | | | | | 0.0 | 0.0 | 90.7 | 149.7 | 0.0 | |
| 142.00 | | 30.3 | 74.9 | | | | | 0.0 | 0.0 | 30.3 | 74.9 | 0.0 | |
| Totals: | | | | | | | | | | | 40,302.4 | 37,592.9 | 0.00 |
| | | | | | | | | | | | | | 0.00 |

Site Number: 302511

Code: ANSI/TIA-222-G

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Site Name: WSPT - South, CT

Engineering Number: 63916524

1/25/2016 11:02:32 AM

Customer: T-MOBILE

Load Case: 0.9D + 1.6W

110 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 | Mu MZ | Mu MX | 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 | -37.51 | -40.03 | 0.00 | -3,613.52 | 0.00 | 3,613.52 | 4,350.13 | 2,175.06 | 7,987.32 | 3,944.64 | 0.00 | 0.00 | 0.654 |
| 5.00 | -35.86 | -39.48 | 0.00 | -3,413.38 | 0.00 | 3,413.38 | 4,285.51 | 2,142.75 | 7,679.11 | 3,792.42 | 0.12 | -0.22 | 0.637 |
| 10.00 | -34.23 | -38.93 | 0.00 | -3,215.99 | 0.00 | 3,215.99 | 4,218.97 | 2,109.49 | 7,373.27 | 3,641.38 | 0.47 | -0.44 | 0.619 |
| 15.00 | -32.63 | -38.39 | 0.00 | -3,021.32 | 0.00 | 3,021.32 | 4,150.52 | 2,075.26 | 7,070.06 | 3,491.64 | 1.06 | -0.67 | 0.600 |
| 20.00 | -31.06 | -37.80 | 0.00 | -2,829.36 | 0.00 | 2,829.36 | 4,080.16 | 2,040.08 | 6,769.73 | 3,343.32 | 1.88 | -0.89 | 0.580 |
| 25.00 | -29.52 | -36.99 | 0.00 | -2,640.38 | 0.00 | 2,640.38 | 4,007.88 | 2,003.94 | 6,472.54 | 3,196.54 | 2.94 | -1.12 | 0.560 |
| 30.00 | -28.01 | -36.18 | 0.00 | -2,455.44 | 0.00 | 2,455.44 | 3,933.69 | 1,966.85 | 6,178.73 | 3,051.44 | 4.23 | -1.34 | 0.539 |
| 35.00 | -26.53 | -35.36 | 0.00 | -2,274.53 | 0.00 | 2,274.53 | 3,854.52 | 1,927.26 | 5,883.88 | 2,905.83 | 5.75 | -1.56 | 0.518 |
| 40.00 | -25.14 | -34.82 | 0.00 | -2,097.75 | 0.00 | 2,097.75 | 3,744.12 | 1,872.06 | 5,549.75 | 2,740.81 | 7.51 | -1.78 | 0.499 |
| 40.24 | -25.02 | -34.48 | 0.00 | -2,089.26 | 0.00 | 2,089.26 | 3,738.74 | 1,869.37 | 5,533.72 | 2,732.90 | 7.60 | -1.80 | 0.498 |
| 45.00 | -23.08 | -33.90 | 0.00 | -1,925.29 | 0.00 | 1,925.29 | 3,633.72 | 1,816.86 | 5,225.39 | 2,580.62 | 9.50 | -2.00 | 0.474 |
| 45.40 | -22.87 | -33.55 | 0.00 | -1,911.73 | 0.00 | 1,911.73 | 3,063.79 | 1,531.89 | 4,506.32 | 2,225.50 | 9.67 | -2.02 | 0.527 |
| 50.00 | -21.68 | -32.69 | 0.00 | -1,757.41 | 0.00 | 1,757.41 | 3,008.67 | 1,504.34 | 4,302.82 | 2,125.00 | 11.71 | -2.22 | 0.500 |
| 55.00 | -20.45 | -32.08 | 0.00 | -1,593.95 | 0.00 | 1,593.95 | 2,946.93 | 1,473.46 | 4,084.17 | 2,017.02 | 14.16 | -2.44 | 0.470 |
| 55.68 | -20.25 | -31.71 | 0.00 | -1,572.23 | 0.00 | 1,572.23 | 2,938.42 | 1,469.21 | 4,054.78 | 2,002.51 | 14.51 | -2.47 | 0.466 |
| 55.68 | -20.25 | -31.71 | 0.00 | -1,572.23 | 0.00 | 1,572.23 | 2,938.42 | 1,469.21 | 4,054.78 | 2,002.51 | 14.51 | -2.47 | 0.792 |
| 60.00 | -19.39 | -30.91 | 0.00 | -1,435.15 | 0.00 | 1,435.15 | 2,883.27 | 1,441.64 | 3,868.42 | 1,910.47 | 16.83 | -2.66 | 0.758 |
| 65.00 | -18.40 | -30.14 | 0.00 | -1,280.60 | 0.00 | 1,280.60 | 2,808.41 | 1,404.21 | 3,643.77 | 1,799.52 | 19.81 | -3.02 | 0.719 |
| 70.00 | -17.41 | -29.55 | 0.00 | -1,129.92 | 0.00 | 1,129.92 | 2,713.79 | 1,356.89 | 3,400.96 | 1,679.60 | 23.16 | -3.37 | 0.680 |
| 75.00 | -16.47 | -28.99 | 0.00 | -982.19 | 0.00 | 982.19 | 2,619.16 | 1,309.58 | 3,166.52 | 1,563.83 | 26.88 | -3.72 | 0.635 |
| 80.00 | -15.52 | -28.15 | 0.00 | -836.91 | 0.00 | 836.91 | 2,524.53 | 1,262.26 | 2,940.46 | 1,452.18 | 30.95 | -4.05 | 0.583 |
| 80.75 | -15.35 | -27.82 | 0.00 | -815.84 | 0.00 | 815.84 | 2,510.36 | 1,255.18 | 2,907.34 | 1,435.82 | 31.58 | -4.10 | 0.575 |
| 84.90 | -14.40 | -27.37 | 0.00 | -700.37 | 0.00 | 700.37 | 1,500.18 | 750.09 | 1,728.96 | 853.87 | 35.26 | -4.35 | 0.831 |
| 85.00 | -14.31 | -27.06 | 0.00 | -697.62 | 0.00 | 697.62 | 1,499.54 | 749.77 | 1,726.89 | 852.85 | 35.35 | -4.36 | 0.829 |
| 90.00 | -11.36 | -21.79 | 0.00 | -562.34 | 0.00 | 562.34 | 1,466.64 | 733.32 | 1,624.12 | 802.09 | 40.14 | -4.76 | 0.710 |
| 95.00 | -10.77 | -21.25 | 0.00 | -453.37 | 0.00 | 453.37 | 1,431.82 | 715.91 | 1,522.23 | 751.77 | 45.32 | -5.12 | 0.611 |
| 100.00 | -8.42 | -16.37 | 0.00 | -347.05 | 0.00 | 347.05 | 1,395.09 | 697.54 | 1,421.47 | 702.01 | 50.86 | -5.45 | 0.501 |
| 105.00 | -7.96 | -15.83 | 0.00 | -265.18 | 0.00 | 265.18 | 1,356.44 | 678.22 | 1,322.10 | 652.93 | 56.71 | -5.73 | 0.413 |
| 110.00 | -5.99 | -11.78 | 0.00 | -186.01 | 0.00 | 186.01 | 1,315.88 | 657.94 | 1,224.36 | 604.67 | 62.83 | -5.96 | 0.312 |
| 115.00 | -5.65 | -11.26 | 0.00 | -127.11 | 0.00 | 127.11 | 1,273.40 | 636.70 | 1,128.51 | 557.33 | 69.17 | -6.15 | 0.233 |
| 120.00 | -2.99 | -5.85 | 0.00 | -70.82 | 0.00 | 70.82 | 1,215.41 | 607.71 | 1,023.36 | 505.40 | 75.68 | -6.29 | 0.143 |
| 125.00 | -2.71 | -5.55 | 0.00 | -41.56 | 0.00 | 41.56 | 1,152.33 | 576.16 | 919.28 | 454.00 | 82.30 | -6.38 | 0.094 |
| 125.80 | -2.67 | -5.45 | 0.00 | -37.12 | 0.00 | 37.12 | 1,142.23 | 571.11 | 903.13 | 446.02 | 83.37 | -6.39 | 0.086 |
| 125.80 | -2.67 | -5.45 | 0.00 | -37.12 | 0.00 | 37.12 | 385.02 | 192.51 | 160.54 | 106.00 | 83.37 | -6.39 | 0.358 |
| 130.00 | -2.47 | -5.35 | 0.00 | -14.25 | 0.00 | 14.25 | 385.02 | 192.51 | 160.54 | 106.00 | 89.00 | -6.43 | 0.142 |
| 131.00 | -0.42 | -0.72 | 0.00 | -5.33 | 0.00 | 5.33 | 385.02 | 192.51 | 160.54 | 106.00 | 90.34 | -6.45 | 0.051 |
| 135.00 | -0.26 | -0.62 | 0.00 | -2.46 | 0.00 | 2.46 | 385.02 | 192.51 | 160.54 | 106.00 | 95.75 | -6.48 | 0.024 |
| 136.00 | -0.21 | -0.15 | 0.00 | -0.66 | 0.00 | 0.66 | 385.02 | 192.51 | 160.54 | 106.00 | 97.10 | -6.48 | 0.007 |
| 140.00 | -0.07 | -0.04 | 0.00 | -0.08 | 0.00 | 0.08 | 385.02 | 192.51 | 160.54 | 106.00 | 102.52 | -6.48 | 0.001 |
| 142.00 | 0.00 | -0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 385.02 | 192.51 | 160.54 | 106.00 | 105.23 | -6.48 | 0.000 |

Site Number: 302511

Code: ANSI/TIA-222-G

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Site Name: WSPT - South, CT

Engineering Number: 63916524

1/25/2016 11:02:33 AM

Customer: T-MOBILE

Load Case: 1.2D + 1.0Di + 1.0Wi**50 mph with 0.75 in Radial Ice****23 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 | | | 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 | 56.6 | 0.0 | 0.0 | |
| 5.00 | | 1.00 | 0.70 | 4.256 | 4.682 | 0.000 | 1.200 | * | 1.159 | 5.00 | 20.148 | 24.18 | 112.2 | 338.5 | 1,604.9 |
| 10.00 | | 1.00 | 0.70 | 4.256 | 4.682 | 0.000 | 1.200 | * | 1.293 | 5.00 | 19.801 | 23.76 | 110.1 | 369.9 | 1,605.8 |
| 15.00 | | 1.00 | 0.70 | 4.256 | 4.682 | 0.000 | 1.200 | * | 1.361 | 5.00 | 19.399 | 23.28 | 107.8 | 380.5 | 1,585.8 |
| 20.00 | | 1.00 | 0.70 | 4.256 | 4.682 | 0.000 | 1.200 | * | 1.408 | 5.00 | 18.979 | 22.78 | 105.4 | 384.2 | 1,558.9 |
| 25.00 | | 1.00 | 0.70 | 4.256 | 4.682 | 0.000 | 1.200 | * | 1.444 | 5.00 | 18.551 | 22.26 | 103.0 | 384.4 | 1,528.5 |
| 30.00 | | 1.00 | 0.70 | 4.256 | 4.682 | 0.000 | 1.200 | * | 1.473 | 5.00 | 18.116 | 21.74 | 101.7 | 382.3 | 1,495.8 |
| 35.00 | | 1.00 | 0.71 | 4.358 | 4.794 | 0.000 | 1.200 | * | 1.498 | 5.00 | 17.678 | 21.21 | 102.5 | 378.7 | 1,461.6 |
| 40.00 | | 1.00 | 0.74 | 4.540 | 4.994 | 0.000 | 1.200 | * | 1.519 | 5.00 | 17.238 | 20.69 | 54.2 | 373.9 | 1,426.2 |
| 40.24 | Bot - Section 2 | 1.00 | 0.76 | 4.629 | 5.091 | 0.000 | 1.200 | * | 1.530 | 0.24 | 0.829 | 0.99 | 53.1 | 18.3 | 68.8 |
| 45.00 | | 1.00 | 0.77 | 4.709 | 5.180 | 0.000 | 1.200 | * | 1.539 | 4.76 | 16.274 | 19.53 | 54.8 | 357.4 | 2,180.3 |
| 45.40 | Top - Section 1 | 1.00 | 0.78 | 4.789 | 5.268 | 0.000 | 1.200 | * | 1.548 | 0.40 | 1.350 | 1.62 | 53.5 | 30.2 | 181.1 |
| 50.00 | | 1.00 | 0.80 | 4.863 | 5.349 | 0.000 | 1.200 | * | 1.556 | 4.60 | 15.324 | 18.39 | 102.7 | 339.9 | 1,139.0 |
| 55.00 | | 1.00 | 0.82 | 4.998 | 5.498 | 0.000 | 1.200 | * | 1.571 | 5.00 | 16.229 | 19.47 | 60.8 | 362.3 | 1,205.7 |
| 55.68 | Reinf. Top | 1.00 | 0.83 | 5.074 | 5.581 | 0.000 | 1.200 | * | 1.580 | 0.68 | 2.163 | 2.60 | 53.4 | 49.1 | 161.3 |
| 60.00 | | 1.00 | 0.84 | 5.138 | 5.652 | 0.000 | 1.200 | * | 1.587 | 4.32 | 13.619 | 16.34 | 99.4 | 307.0 | 1,012.0 |
| 65.00 | | 1.00 | 0.86 | 5.253 | 5.779 | 0.000 | 1.200 | * | 1.599 | 5.00 | 15.335 | 18.40 | 105.9 | 346.9 | 1,137.9 |
| 70.00 | Appertunance(s) | 1.00 | 0.88 | 5.370 | 5.907 | 0.000 | 1.200 | * | 1.611 | 5.00 | 14.886 | 17.86 | 105.0 | 338.6 | 1,103.4 |
| 75.00 | | 1.00 | 0.90 | 5.481 | 6.029 | 0.000 | 1.200 | * | 1.623 | 5.00 | 14.437 | 17.32 | 103.8 | 330.0 | 1,068.6 |
| 80.00 | Appertunance(s) | 1.00 | 0.91 | 5.586 | 6.145 | 0.000 | 1.200 | * | 1.634 | 5.00 | 13.988 | 16.79 | 59.2 | 321.0 | 1,033.4 |
| 80.75 | Bot - Section 3 | 1.00 | 0.92 | 5.645 | 6.209 | 0.000 | 1.200 | * | 1.640 | 0.75 | 2.055 | 2.47 | 50.5 | 48.0 | 152.4 |
| 84.90 | Top - Section 2 | 1.00 | 0.93 | 5.693 | 6.263 | 0.000 | 1.200 | * | 1.645 | 4.15 | 11.394 | 13.67 | 43.8 | 263.6 | 1,219.2 |
| 85.00 | | 1.00 | 0.94 | 5.735 | 6.308 | 0.000 | 1.200 | * | 1.649 | 0.10 | 0.272 | 0.33 | 51.8 | 6.4 | 15.6 |
| 90.00 | Appertunance(s) | 1.00 | 0.95 | 5.784 | 6.362 | 0.000 | 1.200 | * | 1.654 | 5.00 | 13.303 | 15.96 | 100.6 | 307.7 | 758.0 |
| 95.00 | | 1.00 | 0.96 | 5.876 | 6.464 | 0.000 | 1.200 | 1.663 | 5.00 | 12.852 | 15.42 | 98.7 | 298.1 | 730.8 | |
| 100.0 | Appertunance(s) | 1.00 | 0.98 | 5.965 | 6.562 | 0.000 | 1.200 | 1.672 | 5.00 | 12.400 | 14.88 | 96.5 | 288.2 | 703.5 | |
| 105.0 | | 1.00 | 0.99 | 6.051 | 6.656 | 0.000 | 1.200 | 1.680 | 5.00 | 11.949 | 14.34 | 94.3 | 278.2 | 676.0 | |
| 110.0 | Appertunance(s) | 1.00 | 1.00 | 6.134 | 6.747 | 0.000 | 1.200 | 1.688 | 5.00 | 11.497 | 13.80 | 91.8 | 268.0 | 648.3 | |
| 115.0 | | 1.00 | 1.02 | 6.214 | 6.835 | 0.000 | 1.200 | 1.696 | 5.00 | 11.045 | 13.25 | 89.3 | 257.6 | 620.4 | |
| 120.0 | Appertunance(s) | 1.00 | 1.03 | 6.292 | 6.921 | 0.000 | 1.200 | 1.703 | 5.00 | 10.592 | 12.71 | 86.6 | 247.0 | 592.4 | |
| 125.0 | | 1.00 | 1.04 | 6.367 | 7.004 | 0.000 | 1.200 | 1.710 | 5.00 | 10.140 | 12.17 | 49.3 | 236.4 | 564.3 | |
| 125.8 | Top - Section 3 | 1.00 | 1.05 | 6.410 | 7.051 | 0.000 | 1.200 | 1.714 | 0.80 | 1.581 | 1.90 | 27.8 | 37.6 | 88.5 | |
| 130.0 | | 1.00 | 1.06 | 6.446 | 7.091 | 0.000 | 1.200 | * | 1.718 | 4.20 | 4.964 | 5.96 | 26.2 | 109.8 | 319.4 |
| 131.0 | Appertunance(s) | 1.00 | 1.06 | 6.483 | 7.132 | 0.000 | 1.200 | * | 1.721 | 1.00 | 1.183 | 1.42 | 25.4 | 26.2 | 76.1 |
| 135.0 | | 1.00 | 1.07 | 6.519 | 7.170 | 0.000 | 1.200 | * | 1.724 | 4.00 | 4.733 | 5.68 | 25.5 | 105.1 | 304.7 |
| 136.0 | Appertunance(s) | 1.00 | 1.07 | 6.553 | 7.209 | 0.000 | 1.200 | * | 1.728 | 1.00 | 1.184 | 1.42 | 25.7 | 26.3 | 76.2 |
| 140.0 | | 1.00 | 1.08 | 6.588 | 7.246 | 0.000 | 1.200 | 1.731 | 4.00 | 4.737 | 5.68 | 31.0 | 105.5 | 305.1 | |
| 142.0 | | 1.00 | 1.09 | 6.628 | 7.291 | 0.000 | 1.200 | 1.734 | 2.00 | 2.370 | 2.84 | 10.4 | 52.9 | 152.7 | |

* = Cf Adjusted By Linear Load Ra Effect

Totals: 142.00

2,730.4 8,755.8 30,562.8

Load Case: 1.2D + 1.0Di + 1.0Wi**50 mph with 0.75 in Radial Ice****23 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) |
|--------------|----------------------|-----|-------------|---------------|-----------------------|------|-----------------------|----------------------|---------------------|--------------------|---------------------|---------------------|----------------------|
| 70.00 | PCTEL GPS-TMG-HR- | 1 | 5.426 | 5.969 | 1.00 | 1.00 | 0.26 | 0.000 | 0.000 | 1.53 | 0.00 | 0.00 | 10.05 |
| 70.00 | Stand-Off | 1 | 5.426 | 5.969 | 0.67 | 1.00 | 0.99 | 0.000 | 0.000 | 5.93 | 0.00 | 0.00 | 29.53 |
| 80.00 | Diamond X50A | 2 | 5.697 | 6.267 | 1.00 | 1.00 | 4.85 | 0.000 | 3.000 | 30.42 | 0.00 | 91.27 | 114.82 |
| 80.00 | 6' Omni | 2 | 5.637 | 6.201 | 1.00 | 1.00 | 5.97 | 0.000 | 0.000 | 37.03 | 0.00 | 0.00 | 209.63 |
| 80.00 | Stand-Offs | 2 | 5.637 | 6.201 | 0.67 | 1.00 | 5.99 | 0.000 | 0.000 | 37.15 | 0.00 | 0.00 | 265.74 |
| 90.00 | RFS ATMAA1412D- | 4 | 5.830 | 6.413 | 0.33 | 0.75 | 1.39 | 0.000 | 0.000 | 8.93 | 0.00 | 0.00 | 193.13 |
| 90.00 | Ericsson RRUS 11 B12 | 3 | 5.830 | 6.413 | 0.50 | 0.75 | 3.86 | 0.000 | 0.000 | 24.75 | 0.00 | 0.00 | 425.19 |
| 90.00 | Ericsson AIR 21, 1.3 | 4 | 5.830 | 6.413 | 0.71 | 0.75 | 15.10 | 0.000 | 0.000 | 96.81 | 0.00 | 0.00 | 1,032.57 |
| 90.00 | Ericsson AIR 21, 1.3 | 3 | 5.830 | 6.413 | 0.70 | 0.75 | 11.23 | 0.000 | 0.000 | 72.04 | 0.00 | 0.00 | 768.90 |
| 90.00 | Andrew LNX-6515DS- | 3 | 5.830 | 6.413 | 0.70 | 0.75 | 20.48 | 0.000 | 0.000 | 131.37 | 0.00 | 0.00 | 926.30 |
| 90.00 | Flat Platform w/ Han | 1 | 5.830 | 6.413 | 1.00 | 1.00 | 62.31 | 0.000 | 0.000 | 399.63 | 0.00 | 0.00 | 3,299.36 |
| 100.0 | RFS FD9R6004/1C-3L | 6 | 6.008 | 6.609 | 0.33 | 0.75 | 0.84 | 0.000 | 0.000 | 5.58 | 0.00 | 0.00 | 96.05 |
| 100.0 | GPS | 1 | 6.076 | 6.684 | 0.50 | 0.75 | 0.35 | 0.000 | 4.000 | 2.31 | 0.00 | 9.23 | 48.34 |
| 100.0 | Alcatel-Lucent RRH2x | 3 | 6.008 | 6.609 | 0.50 | 0.75 | 3.12 | 0.000 | 0.000 | 20.63 | 0.00 | 0.00 | 367.37 |
| 100.0 | Rymsa MGD3-800TX | 3 | 6.008 | 6.609 | 0.69 | 0.75 | 6.57 | 0.000 | 0.000 | 43.45 | 0.00 | 0.00 | 302.46 |
| 100.0 | Antel BXA-171063/12C | 3 | 6.008 | 6.609 | 0.72 | 0.75 | 9.65 | 0.000 | 0.000 | 63.79 | 0.00 | 0.00 | 395.38 |
| 100.0 | RFS DB-T1-6Z-8AB-0Z | 1 | 6.008 | 6.609 | 1.00 | 0.75 | 4.23 | 0.000 | 0.000 | 27.93 | 0.00 | 0.00 | 183.87 |
| 100.0 | Antel BXA-70080/6CF | 3 | 6.008 | 6.609 | 0.72 | 0.75 | 11.39 | 0.000 | 0.000 | 75.27 | 0.00 | 0.00 | 494.96 |
| 100.0 | Powerwave Allgon | 3 | 6.008 | 6.609 | 0.65 | 0.75 | 13.70 | 0.000 | 0.000 | 90.58 | 0.00 | 0.00 | 636.50 |
| 100.0 | Flat Platform w/ Han | 1 | 6.008 | 6.609 | 1.00 | 1.00 | 58.40 | 0.000 | 0.000 | 385.98 | 0.00 | 0.00 | 3,314.04 |
| 110.0 | Swedcom ALP 9011- | 12 | 6.174 | 6.792 | 0.74 | 0.75 | 22.93 | 0.000 | 0.000 | 155.75 | 0.00 | 0.00 | 1,299.77 |
| 110.0 | Flat Platform w/ Han | 1 | 6.174 | 6.792 | 1.00 | 1.00 | 62.73 | 0.000 | 0.000 | 426.02 | 0.00 | 0.00 | 3,327.42 |
| 120.0 | DragonWave Horizon | 2 | 6.330 | 6.963 | 0.33 | 0.75 | 0.32 | 0.000 | 0.000 | 2.25 | 0.00 | 0.00 | 83.94 |
| 120.0 | NextNet BTS-2500 | 3 | 6.330 | 6.963 | 0.50 | 0.75 | 2.68 | 0.000 | 0.000 | 18.66 | 0.00 | 0.00 | 294.15 |
| 120.0 | Alcatel-Lucent 800 M | 3 | 6.330 | 6.963 | 0.50 | 0.75 | 2.97 | 0.000 | 0.000 | 20.68 | 0.00 | 0.00 | 494.80 |
| 120.0 | Alcatel-Lucent 1900 | 3 | 6.330 | 6.963 | 0.50 | 0.75 | 3.35 | 0.000 | 0.000 | 23.31 | 0.00 | 0.00 | 493.12 |
| 120.0 | Alcatel-Lucent TD-RR | 3 | 6.330 | 6.963 | 0.50 | 0.75 | 6.38 | 0.000 | 0.000 | 44.45 | 0.00 | 0.00 | 441.50 |
| 120.0 | Argus LLPX310R | 3 | 6.330 | 6.963 | 0.63 | 0.75 | 7.32 | 0.000 | 0.000 | 50.99 | 0.00 | 0.00 | 416.86 |
| 120.0 | DragonWave A-ANT- | 2 | 6.330 | 6.963 | 0.90 | 0.75 | 8.01 | 0.000 | 0.000 | 55.80 | 0.00 | 0.00 | 199.90 |
| 120.0 | RFS RFS APXV9TM14- | 3 | 6.330 | 6.963 | 0.66 | 0.75 | 11.02 | 0.000 | 0.000 | 76.74 | 0.00 | 0.00 | 665.55 |
| 120.0 | RFS APXVSPP18-C- | 3 | 6.330 | 6.963 | 0.69 | 0.75 | 14.41 | 0.000 | 0.000 | 100.33 | 0.00 | 0.00 | 787.08 |
| 120.0 | Flat Platform w/ Han | 1 | 6.330 | 6.963 | 1.00 | 1.00 | 58.61 | 0.000 | 0.000 | 408.05 | 0.00 | 0.00 | 3,339.73 |
| 131.0 | Powerwave Allgon | 6 | 6.560 | 7.216 | 0.50 | 0.75 | 0.96 | 0.000 | 5.000 | 6.90 | 0.00 | 34.49 | 113.62 |
| 131.0 | Powerwave Allgon | 6 | 6.490 | 7.139 | 0.50 | 0.75 | 3.50 | 0.000 | 0.000 | 25.00 | 0.00 | 0.00 | 299.55 |
| 131.0 | Raycap DC6-48-60-18- | 1 | 6.490 | 7.139 | 1.00 | 0.75 | 2.13 | 0.000 | 0.000 | 15.22 | 0.00 | 0.00 | 129.54 |
| 131.0 | Ericsson RRUS 11 (Ba | 6 | 6.490 | 7.139 | 0.50 | 0.75 | 7.21 | 0.000 | 0.000 | 51.48 | 0.00 | 0.00 | 796.69 |
| 131.0 | Powerwave Allgon 777 | 6 | 6.490 | 7.139 | 0.65 | 0.75 | 19.14 | 0.000 | 0.000 | 136.66 | 0.00 | 0.00 | 1,048.79 |
| 131.0 | Powerwave Allgon | 3 | 6.560 | 7.216 | 0.67 | 0.75 | 14.19 | 0.000 | 5.000 | 102.37 | 0.00 | 511.83 | 756.25 |
| 131.0 | Flat Platform w/ Han | 1 | 6.490 | 7.139 | 1.00 | 1.00 | 58.81 | 0.000 | 0.000 | 419.85 | 0.00 | 0.00 | 3,354.39 |
| 136.0 | Generic RCU (Remote | 6 | 6.601 | 7.261 | 0.33 | 0.80 | 0.57 | 0.000 | 3.000 | 4.13 | 0.00 | 12.40 | 67.26 |
| 136.0 | Kathrein Scala 742-2 | 3 | 6.601 | 7.261 | 0.73 | 0.80 | 8.34 | 0.000 | 3.000 | 60.58 | 0.00 | 181.75 | 345.03 |

3,766.33

31,869.11

Load Case: 1.2D + 1.0Di + 1.0Wi**50 mph with 0.75 in Radial Ice****23 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 | FX (lb) | Dead Load (lb) |
|-------------------------|----------------------|--------------------|----------------|------|--------------------------|----------------|----------------|-------------|-------|------------------------|------------|----------------------|
| 5.00 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 1.79 | 0.00 | 4.256 | 0.183 | 1.250 | 0.00 | 101.08 |
| 5.00 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 1.79 | 0.00 | 0.000 | 0.000 | 0.000 | 0.00 | 400.80 |
| 5.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 4.256 | 0.183 | 1.250 | 0.00 | 0.48 |
| 5.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.183 | 1.250 | 0.00 | 0.17 |
| 5.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.183 | 1.250 | 0.00 | 3.72 |
| 5.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.183 | 1.250 | 0.00 | 45.35 |
| 5.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.183 | 1.250 | 0.00 | 24.00 |
| 5.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.183 | 1.250 | 0.00 | 1.80 |
| 5.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.183 | 1.250 | 0.00 | 21.90 |
| 5.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.183 | 1.250 | 0.00 | 1.62 |
| 5.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.183 | 1.250 | 0.00 | 59.03 |
| 5.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.183 | 1.250 | 0.00 | 59.03 |
| 5.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.183 | 1.250 | 0.00 | 7.80 |
| 5.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.183 | 1.250 | 0.00 | 0.90 |
| 5.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.183 | 1.250 | 0.00 | 6.30 |
| 5.00 | (14) 1 5/8" Coax | Yes | 5.00 | 0.00 | 3.96 | 2.62 | 0.00 | 4.256 | 0.183 | 1.250 | 0.00 | 224.90 |
| 5.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.183 | 1.250 | 0.00 | 1.80 |
| 5.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.183 | 1.250 | 0.00 | 1.80 |
| 5.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.183 | 1.250 | 0.00 | 1.80 |
| 5.00 | (4) DYWIDAG | Yes | 5.00 | 0.00 | 2.50 | 2.01 | 0.00 | 4.256 | 0.183 | 1.250 | 0.00 | 107.02 |
| 10.00 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 1.90 | 0.00 | 4.256 | 0.188 | 1.263 | 0.00 | 109.31 |
| 10.00 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 1.90 | 0.00 | 0.000 | 0.000 | 0.000 | 0.00 | 400.80 |
| 10.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 4.256 | 0.188 | 1.263 | 0.00 | 0.48 |
| 10.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.188 | 1.263 | 0.00 | 0.17 |
| 10.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.188 | 1.263 | 0.00 | 3.72 |
| 10.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.188 | 1.263 | 0.00 | 45.35 |
| 10.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.188 | 1.263 | 0.00 | 24.00 |
| 10.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.188 | 1.263 | 0.00 | 1.80 |
| 10.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.188 | 1.263 | 0.00 | 21.90 |
| 10.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.188 | 1.263 | 0.00 | 1.62 |
| 10.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.188 | 1.263 | 0.00 | 59.03 |
| 10.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.188 | 1.263 | 0.00 | 59.03 |
| 10.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.188 | 1.263 | 0.00 | 7.80 |
| 10.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.188 | 1.263 | 0.00 | 0.90 |
| 10.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.188 | 1.263 | 0.00 | 6.30 |
| 10.00 | (14) 1 5/8" Coax | Yes | 5.00 | 0.00 | 3.96 | 2.73 | 0.00 | 4.256 | 0.188 | 1.263 | 0.00 | 241.43 |
| 10.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.188 | 1.263 | 0.00 | 1.80 |
| 10.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.188 | 1.263 | 0.00 | 1.80 |
| 10.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.188 | 1.263 | 0.00 | 1.80 |
| 10.00 | (4) DYWIDAG | Yes | 5.00 | 0.00 | 2.50 | 2.12 | 0.00 | 4.256 | 0.188 | 1.263 | 0.00 | 117.41 |
| 15.00 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 1.96 | 0.00 | 4.256 | 0.193 | 1.278 | 0.00 | 113.54 |
| 15.00 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 1.96 | 0.00 | 0.000 | 0.000 | 0.000 | 0.00 | 400.80 |
| 15.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 4.256 | 0.193 | 1.278 | 0.00 | 0.48 |
| 15.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.193 | 1.278 | 0.00 | 0.17 |
| 15.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.193 | 1.278 | 0.00 | 3.72 |
| 15.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.193 | 1.278 | 0.00 | 45.35 |
| 15.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.193 | 1.278 | 0.00 | 24.00 |
| 15.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.193 | 1.278 | 0.00 | 1.80 |
| 15.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.193 | 1.278 | 0.00 | 21.90 |
| 15.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.193 | 1.278 | 0.00 | 1.62 |
| 15.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.193 | 1.278 | 0.00 | 59.03 |

Load Case: 1.2D + 1.0Di + 1.0Wi**50 mph with 0.75 in Radial Ice****23 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**

| | | | | | | | | | | | |
|-------|----------------------|-----|------|------|------|------|-------|-------|-------|-------|--------|
| 15.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.193 | 1.278 | 0.00 | 59.03 |
| 15.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.193 | 1.278 | 0.00 | 7.80 |
| 15.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.193 | 1.278 | 0.00 | 0.90 |
| 15.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.193 | 1.278 | 0.00 | 6.30 |
| 15.00 | (14) 1 5/8" Coax | Yes | 5.00 | 0.00 | 3.96 | 2.78 | 0.00 | 4.256 | 0.193 | 1.278 | 0.00 |
| 15.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.193 | 1.278 | 0.00 | 1.80 |
| 15.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.193 | 1.278 | 0.00 | 1.80 |
| 15.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.193 | 1.278 | 0.00 | 1.80 |
| 15.00 | (4) DYWIDAG | Yes | 5.00 | 0.00 | 2.50 | 2.18 | 0.00 | 4.256 | 0.193 | 1.278 | 0.00 |
| 20.00 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 2.00 | 0.00 | 4.256 | 0.197 | 1.292 | 0.00 |
| 20.00 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 2.00 | 0.00 | 0.000 | 0.000 | 0.000 | 400.80 |
| 20.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 4.256 | 0.197 | 1.292 | 0.00 |
| 20.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.197 | 1.292 | 0.00 | 0.17 |
| 20.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.197 | 1.292 | 0.00 | 3.72 |
| 20.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.197 | 1.292 | 0.00 | 45.35 |
| 20.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.197 | 1.292 | 0.00 | 24.00 |
| 20.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.197 | 1.292 | 0.00 | 1.80 |
| 20.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.197 | 1.292 | 0.00 | 21.90 |
| 20.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.197 | 1.292 | 0.00 | 1.62 |
| 20.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.197 | 1.292 | 0.00 | 59.03 |
| 20.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.197 | 1.292 | 0.00 | 59.03 |
| 20.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.197 | 1.292 | 0.00 | 7.80 |
| 20.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.197 | 1.292 | 0.00 | 0.90 |
| 20.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.197 | 1.292 | 0.00 | 6.30 |
| 20.00 | (14) 1 5/8" Coax | Yes | 5.00 | 0.00 | 3.96 | 2.82 | 0.00 | 4.256 | 0.197 | 1.292 | 0.00 |
| 20.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.197 | 1.292 | 0.00 | 1.80 |
| 20.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.197 | 1.292 | 0.00 | 1.80 |
| 20.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.197 | 1.292 | 0.00 | 1.80 |
| 20.00 | (4) DYWIDAG | Yes | 5.00 | 0.00 | 2.50 | 2.21 | 0.00 | 4.256 | 0.197 | 1.292 | 0.00 |
| 25.00 | (6) 1 5/8" Coax | Yes | 5.00 | 1.20 | 1.98 | 2.03 | 2.43 | 4.256 | 0.203 | 0.000 | 11.39 |
| 25.00 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 2.03 | 0.00 | 0.000 | 0.000 | 0.000 | 400.80 |
| 25.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 4.256 | 0.203 | 0.000 | 0.48 |
| 25.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.203 | 0.000 | 0.00 | 0.17 |
| 25.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.203 | 0.000 | 0.00 | 3.72 |
| 25.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.203 | 0.000 | 0.00 | 45.35 |
| 25.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.203 | 0.000 | 0.00 | 24.00 |
| 25.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.203 | 0.000 | 0.00 | 1.80 |
| 25.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.203 | 0.000 | 0.00 | 21.90 |
| 25.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.203 | 0.000 | 0.00 | 1.62 |
| 25.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.203 | 0.000 | 0.00 | 59.03 |
| 25.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.203 | 0.000 | 0.00 | 59.03 |
| 25.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.203 | 0.000 | 0.00 | 7.80 |
| 25.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.203 | 0.000 | 0.00 | 0.90 |
| 25.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.203 | 0.000 | 0.00 | 6.30 |
| 25.00 | (14) 1 5/8" Coax | Yes | 5.00 | 1.20 | 3.96 | 2.85 | 3.42 | 4.256 | 0.203 | 0.000 | 16.03 |
| 25.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.203 | 0.000 | 0.00 | 1.80 |
| 25.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.203 | 0.000 | 0.00 | 1.80 |
| 25.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.203 | 0.000 | 0.00 | 1.80 |
| 25.00 | (4) DYWIDAG | Yes | 5.00 | 1.20 | 2.50 | 2.24 | 2.69 | 4.256 | 0.203 | 0.000 | 12.61 |
| 30.00 | (6) 1 5/8" Coax | Yes | 5.00 | 1.20 | 1.98 | 2.05 | 2.46 | 4.256 | 0.208 | 0.000 | 11.53 |
| 30.00 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 2.05 | 0.00 | 0.000 | 0.000 | 0.000 | 400.80 |
| 30.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 4.256 | 0.208 | 0.000 | 0.48 |
| 30.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.208 | 0.000 | 0.00 | 0.17 |
| 30.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.208 | 0.000 | 0.00 | 3.72 |
| 30.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.208 | 0.000 | 0.00 | 45.35 |
| 30.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.208 | 0.000 | 0.00 | 24.00 |
| 30.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.208 | 0.000 | 0.00 | 1.80 |

Load Case: 1.2D + 1.0Di + 1.0Wi**50 mph with 0.75 in Radial Ice****23 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) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.208 | 0.000 | 0.00 | 21.90 |
| 30.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.208 | 0.000 | 0.00 | 1.62 |
| 30.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.208 | 0.000 | 0.00 | 59.03 |
| 30.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.208 | 0.000 | 0.00 | 59.03 |
| 30.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.208 | 0.000 | 0.00 | 7.80 |
| 30.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.208 | 0.000 | 0.00 | 0.90 |
| 30.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.208 | 0.000 | 0.00 | 6.30 |
| 30.00 | (14) 1 5/8" Coax | Yes | 5.00 | 1.20 | 3.96 | 2.88 | 3.45 | 4.256 | 0.208 | 0.000 | 16.17 |
| 30.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.208 | 0.000 | 0.00 | 1.80 |
| 30.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.208 | 0.000 | 0.00 | 1.80 |
| 30.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 4.256 | 0.208 | 0.000 | 0.00 | 1.80 |
| 30.00 | (4) DYWIDAG | Yes | 5.00 | 1.20 | 2.50 | 2.27 | 2.72 | 4.256 | 0.208 | 0.000 | 12.75 |
| 35.00 | (6) 1 5/8" Coax | Yes | 5.00 | 1.20 | 1.98 | 2.07 | 2.49 | 4.358 | 0.214 | 0.000 | 11.93 |
| 35.00 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 2.07 | 0.00 | 0.000 | 0.000 | 0.000 | 400.80 |
| 35.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 4.358 | 0.214 | 0.000 | 0.00 |
| 35.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.358 | 0.214 | 0.000 | 0.00 |
| 35.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.358 | 0.214 | 0.000 | 0.00 |
| 35.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.358 | 0.214 | 0.000 | 0.00 |
| 35.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.358 | 0.214 | 0.000 | 0.00 |
| 35.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.358 | 0.214 | 0.000 | 0.00 |
| 35.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.358 | 0.214 | 0.000 | 0.00 |
| 35.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.358 | 0.214 | 0.000 | 0.00 |
| 35.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.358 | 0.214 | 0.000 | 0.00 |
| 35.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.358 | 0.214 | 0.000 | 0.00 |
| 35.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.358 | 0.214 | 0.000 | 0.00 |
| 35.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.358 | 0.214 | 0.000 | 0.00 |
| 35.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.358 | 0.214 | 0.000 | 0.00 |
| 35.00 | (14) 1 5/8" Coax | Yes | 5.00 | 1.20 | 3.96 | 2.90 | 3.48 | 4.358 | 0.214 | 0.000 | 16.67 |
| 35.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.358 | 0.214 | 0.000 | 0.00 |
| 35.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.358 | 0.214 | 0.000 | 0.00 |
| 35.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.358 | 0.214 | 0.000 | 0.00 |
| 35.00 | (4) DYWIDAG | Yes | 5.00 | 1.20 | 2.50 | 2.29 | 2.75 | 4.358 | 0.214 | 0.000 | 13.17 |
| 40.00 | (6) 1 5/8" Coax | Yes | 5.00 | 1.20 | 1.98 | 2.09 | 2.51 | 4.540 | 0.220 | 0.000 | 12.53 |
| 40.00 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 2.09 | 0.00 | 0.000 | 0.000 | 0.000 | 400.80 |
| 40.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 4.540 | 0.220 | 0.000 | 0.00 |
| 40.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.540 | 0.220 | 0.000 | 0.00 |
| 40.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.540 | 0.220 | 0.000 | 0.00 |
| 40.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.540 | 0.220 | 0.000 | 0.00 |
| 40.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.540 | 0.220 | 0.000 | 0.00 |
| 40.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.540 | 0.220 | 0.000 | 0.00 |
| 40.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.540 | 0.220 | 0.000 | 0.00 |
| 40.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.540 | 0.220 | 0.000 | 0.00 |
| 40.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.540 | 0.220 | 0.000 | 0.00 |
| 40.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.540 | 0.220 | 0.000 | 0.00 |
| 40.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.540 | 0.220 | 0.000 | 0.00 |
| 40.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.540 | 0.220 | 0.000 | 0.00 |
| 40.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.540 | 0.220 | 0.000 | 0.00 |
| 40.00 | (14) 1 5/8" Coax | Yes | 5.00 | 1.20 | 3.96 | 2.92 | 3.50 | 4.540 | 0.220 | 0.000 | 17.48 |
| 40.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.540 | 0.220 | 0.000 | 0.00 |
| 40.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.540 | 0.220 | 0.000 | 0.00 |
| 40.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.540 | 0.220 | 0.000 | 0.00 |
| 40.00 | (4) DYWIDAG | Yes | 5.00 | 1.20 | 2.50 | 2.31 | 2.77 | 4.540 | 0.220 | 0.000 | 13.83 |
| 40.24 | (6) 1 5/8" Coax | Yes | 0.24 | 1.20 | 1.98 | 0.10 | 0.12 | 4.629 | 0.224 | 0.000 | 0.63 |
| 40.24 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.10 | 0.00 | 0.000 | 0.000 | 0.000 | 19.53 |
| 40.24 | (1) 3/8" Coax | No | 0.24 | 0.00 | 0.44 | 0.00 | 0.00 | 4.629 | 0.224 | 0.000 | 0.00 |
| 40.24 | (1) 0.28" RG-6 | No | 0.24 | 0.00 | 0.00 | 0.00 | 0.00 | 4.629 | 0.224 | 0.000 | 0.01 |
| 40.24 | (2) 0.65" 8 AWG 2C | No | 0.24 | 0.00 | 0.00 | 0.00 | 0.00 | 4.629 | 0.224 | 0.000 | 0.18 |

Load Case: 1.2D + 1.0Di + 1.0Wi**50 mph with 0.75 in Radial Ice****23 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**

| | | | | | | | | | | | |
|-------|----------------------|-----|------|------|------|------|-------|-------|-------|-------|--------|
| 40.24 | (12) 1 1/4" Coax | No | 0.24 | 0.00 | 0.00 | 0.00 | 4.629 | 0.224 | 0.000 | 0.00 | 2.21 |
| 40.24 | (4) 1 1/4" Hybriflex | No | 0.24 | 0.00 | 0.00 | 0.00 | 4.629 | 0.224 | 0.000 | 0.00 | 1.17 |
| 40.24 | (2) 1/2" Coax | No | 0.24 | 0.00 | 0.00 | 0.00 | 4.629 | 0.224 | 0.000 | 0.00 | 0.09 |
| 40.24 | (1) 2" Conduit | No | 0.24 | 0.00 | 0.00 | 0.00 | 4.629 | 0.224 | 0.000 | 0.00 | 1.07 |
| 40.24 | (6) 5/16" Coax | No | 0.24 | 0.00 | 0.00 | 0.00 | 4.629 | 0.224 | 0.000 | 0.00 | 0.08 |
| 40.24 | (12) 1 5/8" Coax | No | 0.24 | 0.00 | 0.00 | 0.00 | 4.629 | 0.224 | 0.000 | 0.00 | 2.88 |
| 40.24 | (12) 1 5/8" Coax | No | 0.24 | 0.00 | 0.00 | 0.00 | 4.629 | 0.224 | 0.000 | 0.00 | 2.88 |
| 40.24 | (1) 1 5/8" Hybriflex | No | 0.24 | 0.00 | 0.00 | 0.00 | 4.629 | 0.224 | 0.000 | 0.00 | 0.38 |
| 40.24 | (1) 1/2" Coax | No | 0.24 | 0.00 | 0.00 | 0.00 | 4.629 | 0.224 | 0.000 | 0.00 | 0.04 |
| 40.24 | (1) 1 1/4" Fiber | No | 0.24 | 0.00 | 0.00 | 0.00 | 4.629 | 0.224 | 0.000 | 0.00 | 0.31 |
| 40.24 | (14) 1 5/8" Coax | Yes | 0.24 | 1.20 | 3.96 | 0.14 | 0.17 | 4.629 | 0.224 | 0.000 | 0.87 |
| 40.24 | (2) 1/2" Coax | No | 0.24 | 0.00 | 0.00 | 0.00 | 4.629 | 0.224 | 0.000 | 0.00 | 0.09 |
| 40.24 | (2) 1/2" Coax | No | 0.24 | 0.00 | 0.00 | 0.00 | 4.629 | 0.224 | 0.000 | 0.00 | 0.09 |
| 40.24 | (2) 1/2" Coax | No | 0.24 | 0.00 | 0.00 | 0.00 | 4.629 | 0.224 | 0.000 | 0.00 | 0.09 |
| 40.24 | (4) DYWIDAG | Yes | 0.24 | 1.20 | 2.50 | 0.11 | 0.14 | 4.629 | 0.224 | 0.000 | 0.69 |
| 45.00 | (6) 1 5/8" Coax | Yes | 4.76 | 1.20 | 1.98 | 2.00 | 2.41 | 4.709 | 0.227 | 0.000 | 12.46 |
| 45.00 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 2.00 | 0.00 | 0.000 | 0.000 | 0.000 | 381.27 |
| 45.00 | (1) 3/8" Coax | No | 4.76 | 0.00 | 0.44 | 0.00 | 0.00 | 4.709 | 0.227 | 0.000 | 0.00 |
| 45.00 | (1) 0.28" RG-6 | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 4.709 | 0.227 | 0.000 | 0.16 |
| 45.00 | (2) 0.65" 8 AWG 2C | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 4.709 | 0.227 | 0.000 | 3.54 |
| 45.00 | (12) 1 1/4" Coax | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 4.709 | 0.227 | 0.000 | 43.14 |
| 45.00 | (4) 1 1/4" Hybriflex | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 4.709 | 0.227 | 0.000 | 22.83 |
| 45.00 | (2) 1/2" Coax | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 4.709 | 0.227 | 0.000 | 1.71 |
| 45.00 | (1) 2" Conduit | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 4.709 | 0.227 | 0.000 | 20.83 |
| 45.00 | (6) 5/16" Coax | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 4.709 | 0.227 | 0.000 | 1.54 |
| 45.00 | (12) 1 5/8" Coax | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 4.709 | 0.227 | 0.000 | 56.16 |
| 45.00 | (12) 1 5/8" Coax | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 4.709 | 0.227 | 0.000 | 56.16 |
| 45.00 | (1) 1 5/8" Hybriflex | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 4.709 | 0.227 | 0.000 | 7.42 |
| 45.00 | (1) 1/2" Coax | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 4.709 | 0.227 | 0.000 | 0.86 |
| 45.00 | (1) 1 1/4" Fiber | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 4.709 | 0.227 | 0.000 | 5.99 |
| 45.00 | (14) 1 5/8" Coax | Yes | 4.76 | 1.20 | 3.96 | 2.79 | 3.35 | 4.709 | 0.227 | 0.000 | 17.34 |
| 45.00 | (2) 1/2" Coax | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 4.709 | 0.227 | 0.000 | 1.71 |
| 45.00 | (2) 1/2" Coax | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 4.709 | 0.227 | 0.000 | 1.71 |
| 45.00 | (2) 1/2" Coax | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 4.709 | 0.227 | 0.000 | 1.71 |
| 45.00 | (4) DYWIDAG | Yes | 4.76 | 1.20 | 2.50 | 2.21 | 2.65 | 4.709 | 0.227 | 0.000 | 13.74 |
| 45.40 | (6) 1 5/8" Coax | Yes | 0.40 | 1.20 | 1.98 | 0.17 | 0.20 | 4.789 | 0.230 | 0.000 | 1.07 |
| 45.40 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.17 | 0.00 | 0.000 | 0.000 | 0.000 | 32.06 |
| 45.40 | (1) 3/8" Coax | No | 0.40 | 0.00 | 0.44 | 0.00 | 0.00 | 4.789 | 0.230 | 0.000 | 0.04 |
| 45.40 | (1) 0.28" RG-6 | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 4.789 | 0.230 | 0.000 | 0.01 |
| 45.40 | (2) 0.65" 8 AWG 2C | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 4.789 | 0.230 | 0.000 | 0.30 |
| 45.40 | (12) 1 1/4" Coax | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 4.789 | 0.230 | 0.000 | 3.63 |
| 45.40 | (4) 1 1/4" Hybriflex | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 4.789 | 0.230 | 0.000 | 1.92 |
| 45.40 | (2) 1/2" Coax | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 4.789 | 0.230 | 0.000 | 0.14 |
| 45.40 | (1) 2" Conduit | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 4.789 | 0.230 | 0.000 | 1.75 |
| 45.40 | (6) 5/16" Coax | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 4.789 | 0.230 | 0.000 | 0.13 |
| 45.40 | (12) 1 5/8" Coax | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 4.789 | 0.230 | 0.000 | 4.72 |
| 45.40 | (12) 1 5/8" Coax | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 4.789 | 0.230 | 0.000 | 4.72 |
| 45.40 | (1) 1 5/8" Hybriflex | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 4.789 | 0.230 | 0.000 | 0.62 |
| 45.40 | (1) 1/2" Coax | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 4.789 | 0.230 | 0.000 | 0.07 |
| 45.40 | (1) 1 1/4" Fiber | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 4.789 | 0.230 | 0.000 | 0.50 |
| 45.40 | (14) 1 5/8" Coax | Yes | 0.40 | 1.20 | 3.96 | 0.24 | 0.28 | 4.789 | 0.230 | 0.000 | 21.86 |
| 45.40 | (2) 1/2" Coax | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 4.789 | 0.230 | 0.000 | 0.14 |
| 45.40 | (2) 1/2" Coax | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 4.789 | 0.230 | 0.000 | 0.14 |
| 45.40 | (2) 1/2" Coax | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 4.789 | 0.230 | 0.000 | 0.14 |
| 45.40 | (4) DYWIDAG | Yes | 0.40 | 1.20 | 2.50 | 0.19 | 0.22 | 4.789 | 0.230 | 0.000 | 1.18 |
| 50.00 | (6) 1 5/8" Coax | Yes | 4.60 | 1.20 | 1.98 | 1.95 | 2.34 | 4.863 | 0.229 | 0.000 | 12.53 |
| 50.00 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 1.95 | 0.00 | 0.000 | 0.000 | 0.000 | 368.74 |

Load Case: 1.2D + 1.0Di + 1.0Wi**50 mph with 0.75 in Radial Ice****23 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**

| | | | | | | | | | | | | |
|-------|----------------------|-----|------|------|------|------|------|-------|-------|-------|-------|--------|
| 50.00 | (1) 3/8" Coax | No | 4.60 | 0.00 | 0.44 | 0.00 | 0.00 | 4.863 | 0.229 | 0.000 | 0.00 | 0.44 |
| 50.00 | (1) 0.28" RG-6 | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 4.863 | 0.229 | 0.000 | 0.00 | 0.16 |
| 50.00 | (2) 0.65" 8 AWG 2C | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 4.863 | 0.229 | 0.000 | 0.00 | 3.42 |
| 50.00 | (12) 1 1/4" Coax | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 4.863 | 0.229 | 0.000 | 0.00 | 41.73 |
| 50.00 | (4) 1 1/4" Hybriflex | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 4.863 | 0.229 | 0.000 | 0.00 | 22.08 |
| 50.00 | (2) 1/2" Coax | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 4.863 | 0.229 | 0.000 | 0.00 | 1.66 |
| 50.00 | (1) 2" Conduit | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 4.863 | 0.229 | 0.000 | 0.00 | 20.15 |
| 50.00 | (6) 5/16" Coax | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 4.863 | 0.229 | 0.000 | 0.00 | 1.49 |
| 50.00 | (12) 1 5/8" Coax | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 4.863 | 0.229 | 0.000 | 0.00 | 54.31 |
| 50.00 | (12) 1 5/8" Coax | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 4.863 | 0.229 | 0.000 | 0.00 | 54.31 |
| 50.00 | (1) 1 5/8" Hybriflex | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 4.863 | 0.229 | 0.000 | 0.00 | 7.18 |
| 50.00 | (1) 1/2" Coax | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 4.863 | 0.229 | 0.000 | 0.00 | 0.83 |
| 50.00 | (1) 1 1/4" Fiber | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 4.863 | 0.229 | 0.000 | 0.00 | 5.80 |
| 50.00 | (14) 1 5/8" Coax | Yes | 4.60 | 1.20 | 3.96 | 2.71 | 3.25 | 4.863 | 0.229 | 0.000 | 17.40 | 252.40 |
| 50.00 | (2) 1/2" Coax | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 4.863 | 0.229 | 0.000 | 0.00 | 1.66 |
| 50.00 | (2) 1/2" Coax | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 4.863 | 0.229 | 0.000 | 0.00 | 1.66 |
| 50.00 | (2) 1/2" Coax | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 4.863 | 0.229 | 0.000 | 0.00 | 1.66 |
| 50.00 | (4) DYWIDAG | Yes | 4.60 | 1.20 | 2.50 | 2.15 | 2.58 | 4.863 | 0.229 | 0.000 | 13.81 | 127.27 |
| 55.00 | (6) 1 5/8" Coax | Yes | 5.00 | 1.20 | 1.98 | 2.13 | 2.56 | 4.998 | 0.236 | 0.000 | 14.08 | 127.01 |
| 55.00 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 2.13 | 0.00 | 0.000 | 0.000 | 0.000 | 0.00 | 400.80 |
| 55.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 4.998 | 0.236 | 0.000 | 0.00 | 0.48 |
| 55.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.998 | 0.236 | 0.000 | 0.00 | 0.17 |
| 55.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.998 | 0.236 | 0.000 | 0.00 | 3.72 |
| 55.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.998 | 0.236 | 0.000 | 0.00 | 45.35 |
| 55.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.998 | 0.236 | 0.000 | 0.00 | 24.00 |
| 55.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.998 | 0.236 | 0.000 | 0.00 | 1.80 |
| 55.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.998 | 0.236 | 0.000 | 0.00 | 21.90 |
| 55.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.998 | 0.236 | 0.000 | 0.00 | 1.62 |
| 55.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.998 | 0.236 | 0.000 | 0.00 | 59.03 |
| 55.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.998 | 0.236 | 0.000 | 0.00 | 59.03 |
| 55.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.998 | 0.236 | 0.000 | 0.00 | 7.80 |
| 55.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.998 | 0.236 | 0.000 | 0.00 | 0.90 |
| 55.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.998 | 0.236 | 0.000 | 0.00 | 6.30 |
| 55.00 | (14) 1 5/8" Coax | Yes | 5.00 | 1.20 | 3.96 | 2.96 | 3.55 | 4.998 | 0.236 | 0.000 | 19.52 | 276.24 |
| 55.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.998 | 0.236 | 0.000 | 0.00 | 1.80 |
| 55.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.998 | 0.236 | 0.000 | 0.00 | 1.80 |
| 55.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.998 | 0.236 | 0.000 | 0.00 | 1.80 |
| 55.00 | (4) DYWIDAG | Yes | 5.00 | 1.20 | 2.50 | 2.35 | 2.82 | 4.998 | 0.236 | 0.000 | 15.51 | 139.56 |
| 55.68 | (6) 1 5/8" Coax | Yes | 0.68 | 1.20 | 1.98 | 0.29 | 0.35 | 5.074 | 0.240 | 0.000 | 1.94 | 17.27 |
| 55.68 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.29 | 0.00 | 0.000 | 0.000 | 0.000 | 0.00 | 54.27 |
| 55.68 | (1) 3/8" Coax | No | 0.68 | 0.00 | 0.44 | 0.00 | 0.00 | 5.074 | 0.240 | 0.000 | 0.00 | 0.06 |
| 55.68 | (1) 0.28" RG-6 | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 5.074 | 0.240 | 0.000 | 0.00 | 0.02 |
| 55.68 | (2) 0.65" 8 AWG 2C | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 5.074 | 0.240 | 0.000 | 0.00 | 0.50 |
| 55.68 | (12) 1 1/4" Coax | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 5.074 | 0.240 | 0.000 | 0.00 | 6.14 |
| 55.68 | (4) 1 1/4" Hybriflex | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 5.074 | 0.240 | 0.000 | 0.00 | 3.25 |
| 55.68 | (2) 1/2" Coax | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 5.074 | 0.240 | 0.000 | 0.00 | 0.24 |
| 55.68 | (1) 2" Conduit | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 5.074 | 0.240 | 0.000 | 0.00 | 2.97 |
| 55.68 | (6) 5/16" Coax | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 5.074 | 0.240 | 0.000 | 0.00 | 0.22 |
| 55.68 | (12) 1 5/8" Coax | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 5.074 | 0.240 | 0.000 | 0.00 | 7.99 |
| 55.68 | (12) 1 5/8" Coax | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 5.074 | 0.240 | 0.000 | 0.00 | 7.99 |
| 55.68 | (1) 1 5/8" Hybriflex | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 5.074 | 0.240 | 0.000 | 0.00 | 1.06 |
| 55.68 | (1) 1/2" Coax | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 5.074 | 0.240 | 0.000 | 0.00 | 0.12 |
| 55.68 | (1) 1 1/4" Fiber | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 5.074 | 0.240 | 0.000 | 0.00 | 0.85 |
| 55.68 | (14) 1 5/8" Coax | Yes | 0.68 | 1.20 | 3.96 | 0.40 | 0.48 | 5.074 | 0.240 | 0.000 | 2.69 | 37.55 |
| 55.68 | (2) 1/2" Coax | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 5.074 | 0.240 | 0.000 | 0.00 | 0.24 |
| 55.68 | (2) 1/2" Coax | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 5.074 | 0.240 | 0.000 | 0.00 | 0.24 |
| 55.68 | (2) 1/2" Coax | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 5.074 | 0.240 | 0.000 | 0.00 | 0.24 |

Load Case: 1.2D + 1.0Di + 1.0Wi**50 mph with 0.75 in Radial Ice****23 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**

| | | | | | | | | | | | | |
|-------|----------------------|-----|------|------|------|------|------|-------|-------|-------|-------|--------|
| 55.68 | (4) DYWIDAG | Yes | 0.68 | 1.20 | 2.50 | 0.32 | 0.38 | 5.074 | 0.240 | 0.000 | 2.14 | 18.99 |
| 60.00 | (6) 1 5/8" Coax | Yes | 4.32 | 1.20 | 1.98 | 1.86 | 2.23 | 5.138 | 0.244 | 0.000 | 12.59 | 110.68 |
| 60.00 | (1) 3/8" Coax | No | 4.32 | 0.00 | 0.44 | 0.00 | 0.00 | 5.138 | 0.244 | 0.000 | 0.00 | 0.42 |
| 60.00 | (1) 0.28" RG-6 | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 5.138 | 0.244 | 0.000 | 0.00 | 0.15 |
| 60.00 | (2) 0.65" 8 AWG 2C | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 5.138 | 0.244 | 0.000 | 0.00 | 3.22 |
| 60.00 | (12) 1 1/4" Coax | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 5.138 | 0.244 | 0.000 | 0.00 | 39.21 |
| 60.00 | (4) 1 1/4" Hybriflex | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 5.138 | 0.244 | 0.000 | 0.00 | 20.75 |
| 60.00 | (2) 1/2" Coax | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 5.138 | 0.244 | 0.000 | 0.00 | 1.56 |
| 60.00 | (1) 2" Conduit | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 5.138 | 0.244 | 0.000 | 0.00 | 18.93 |
| 60.00 | (6) 5/16" Coax | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 5.138 | 0.244 | 0.000 | 0.00 | 1.40 |
| 60.00 | (12) 1 5/8" Coax | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 5.138 | 0.244 | 0.000 | 0.00 | 51.04 |
| 60.00 | (12) 1 5/8" Coax | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 5.138 | 0.244 | 0.000 | 0.00 | 51.04 |
| 60.00 | (1) 1 5/8" Hybriflex | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 5.138 | 0.244 | 0.000 | 0.00 | 6.74 |
| 60.00 | (1) 1/2" Coax | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 5.138 | 0.244 | 0.000 | 0.00 | 0.78 |
| 60.00 | (1) 1 1/4" Fiber | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 5.138 | 0.244 | 0.000 | 0.00 | 5.45 |
| 60.00 | (14) 1 5/8" Coax | Yes | 4.32 | 1.20 | 3.96 | 2.57 | 3.08 | 5.138 | 0.244 | 0.000 | 17.43 | 240.52 |
| 60.00 | (2) 1/2" Coax | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 5.138 | 0.244 | 0.000 | 0.00 | 1.56 |
| 60.00 | (2) 1/2" Coax | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 5.138 | 0.244 | 0.000 | 0.00 | 1.56 |
| 60.00 | (2) 1/2" Coax | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 5.138 | 0.244 | 0.000 | 0.00 | 1.56 |
| 60.00 | (4) DYWIDAG | Yes | 4.32 | 1.20 | 2.50 | 2.04 | 2.45 | 5.138 | 0.244 | 0.000 | 13.86 | 121.74 |
| 65.00 | (6) 1 5/8" Coax | Yes | 5.00 | 1.20 | 1.98 | 2.16 | 2.59 | 5.253 | 0.221 | 0.000 | 14.96 | 128.82 |
| 65.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 5.253 | 0.221 | 0.000 | 0.00 | 0.48 |
| 65.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.253 | 0.221 | 0.000 | 0.00 | 0.17 |
| 65.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.253 | 0.221 | 0.000 | 0.00 | 3.72 |
| 65.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.253 | 0.221 | 0.000 | 0.00 | 45.35 |
| 65.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.253 | 0.221 | 0.000 | 0.00 | 24.00 |
| 65.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.253 | 0.221 | 0.000 | 0.00 | 1.80 |
| 65.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.253 | 0.221 | 0.000 | 0.00 | 21.90 |
| 65.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.253 | 0.221 | 0.000 | 0.00 | 1.62 |
| 65.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.253 | 0.221 | 0.000 | 0.00 | 59.03 |
| 65.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.253 | 0.221 | 0.000 | 0.00 | 59.03 |
| 65.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.253 | 0.221 | 0.000 | 0.00 | 7.80 |
| 65.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.253 | 0.221 | 0.000 | 0.00 | 0.90 |
| 65.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.253 | 0.221 | 0.000 | 0.00 | 6.30 |
| 65.00 | (14) 1 5/8" Coax | Yes | 5.00 | 1.20 | 3.96 | 2.98 | 3.58 | 5.253 | 0.221 | 0.000 | 20.68 | 279.76 |
| 65.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.253 | 0.221 | 0.000 | 0.00 | 1.80 |
| 65.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.253 | 0.221 | 0.000 | 0.00 | 1.80 |
| 65.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.253 | 0.221 | 0.000 | 0.00 | 1.80 |
| 65.00 | (4) DYWIDAG | Yes | 3.00 | 1.20 | 2.50 | 1.42 | 1.71 | 5.253 | 0.221 | 0.000 | 9.88 | 85.09 |
| 70.00 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 2.17 | 0.00 | 5.370 | 0.183 | 1.248 | 0.00 | 129.63 |
| 70.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 5.370 | 0.183 | 1.248 | 0.00 | 0.48 |
| 70.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.370 | 0.183 | 1.248 | 0.00 | 0.17 |
| 70.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.370 | 0.183 | 1.248 | 0.00 | 3.72 |
| 70.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.370 | 0.183 | 1.248 | 0.00 | 45.35 |
| 70.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.370 | 0.183 | 1.248 | 0.00 | 24.00 |
| 70.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.370 | 0.183 | 1.248 | 0.00 | 1.80 |
| 70.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.370 | 0.183 | 1.248 | 0.00 | 21.90 |
| 70.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.370 | 0.183 | 1.248 | 0.00 | 1.62 |
| 70.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.370 | 0.183 | 1.248 | 0.00 | 59.03 |
| 70.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.370 | 0.183 | 1.248 | 0.00 | 59.03 |
| 70.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.370 | 0.183 | 1.248 | 0.00 | 7.80 |
| 70.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.370 | 0.183 | 1.248 | 0.00 | 0.90 |
| 70.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.370 | 0.183 | 1.248 | 0.00 | 6.30 |
| 70.00 | (14) 1 5/8" Coax | Yes | 5.00 | 0.00 | 3.96 | 2.99 | 0.00 | 5.370 | 0.183 | 1.248 | 0.00 | 281.33 |
| 70.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.370 | 0.183 | 1.248 | 0.00 | 1.80 |
| 70.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.370 | 0.183 | 1.248 | 0.00 | 1.80 |
| 70.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.370 | 0.183 | 1.248 | 0.00 | 1.80 |

Load Case: 1.2D + 1.0Di + 1.0Wi**50 mph with 0.75 in Radial Ice****23 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**

| | | | | | | | | | | | | |
|-------|----------------------|-----|------|------|------|------|------|-------|-------|-------|-------|--------|
| 75.00 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 2.18 | 0.00 | 5.481 | 0.189 | 1.267 | 0.00 | 130.39 |
| 75.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 5.481 | 0.189 | 1.267 | 0.00 | 0.48 |
| 75.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.481 | 0.189 | 1.267 | 0.00 | 0.17 |
| 75.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.481 | 0.189 | 1.267 | 0.00 | 3.72 |
| 75.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.481 | 0.189 | 1.267 | 0.00 | 45.35 |
| 75.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.481 | 0.189 | 1.267 | 0.00 | 24.00 |
| 75.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.481 | 0.189 | 1.267 | 0.00 | 1.80 |
| 75.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.481 | 0.189 | 1.267 | 0.00 | 21.90 |
| 75.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.481 | 0.189 | 1.267 | 0.00 | 1.62 |
| 75.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.481 | 0.189 | 1.267 | 0.00 | 59.03 |
| 75.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.481 | 0.189 | 1.267 | 0.00 | 59.03 |
| 75.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.481 | 0.189 | 1.267 | 0.00 | 7.80 |
| 75.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.481 | 0.189 | 1.267 | 0.00 | 0.90 |
| 75.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.481 | 0.189 | 1.267 | 0.00 | 6.30 |
| 75.00 | (14) 1 5/8" Coax | Yes | 5.00 | 0.00 | 3.96 | 3.00 | 0.00 | 5.481 | 0.189 | 1.267 | 0.00 | 282.80 |
| 75.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.481 | 0.189 | 1.267 | 0.00 | 1.80 |
| 75.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.481 | 0.189 | 1.267 | 0.00 | 1.80 |
| 80.00 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 2.19 | 0.00 | 5.586 | 0.196 | 1.288 | 0.00 | 131.11 |
| 80.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 5.586 | 0.196 | 1.288 | 0.00 | 0.48 |
| 80.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.586 | 0.196 | 1.288 | 0.00 | 0.17 |
| 80.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.586 | 0.196 | 1.288 | 0.00 | 3.72 |
| 80.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.586 | 0.196 | 1.288 | 0.00 | 45.35 |
| 80.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.586 | 0.196 | 1.288 | 0.00 | 24.00 |
| 80.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.586 | 0.196 | 1.288 | 0.00 | 1.80 |
| 80.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.586 | 0.196 | 1.288 | 0.00 | 21.90 |
| 80.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.586 | 0.196 | 1.288 | 0.00 | 1.62 |
| 80.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.586 | 0.196 | 1.288 | 0.00 | 59.03 |
| 80.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.586 | 0.196 | 1.288 | 0.00 | 59.03 |
| 80.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.586 | 0.196 | 1.288 | 0.00 | 7.80 |
| 80.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.586 | 0.196 | 1.288 | 0.00 | 0.90 |
| 80.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.586 | 0.196 | 1.288 | 0.00 | 6.30 |
| 80.00 | (14) 1 5/8" Coax | Yes | 5.00 | 0.00 | 3.96 | 3.01 | 0.00 | 5.586 | 0.196 | 1.288 | 0.00 | 284.19 |
| 80.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.586 | 0.196 | 1.288 | 0.00 | 1.80 |
| 80.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.586 | 0.196 | 1.288 | 0.00 | 1.80 |
| 80.75 | (6) 1 5/8" Coax | Yes | 0.75 | 1.20 | 1.98 | 0.33 | 0.39 | 5.645 | 0.200 | 0.000 | 2.44 | 19.69 |
| 80.75 | (1) 3/8" Coax | No | 0.75 | 0.00 | 0.44 | 0.00 | 0.00 | 5.645 | 0.200 | 0.000 | 0.00 | 0.07 |
| 80.75 | (1) 0.28" RG-6 | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 5.645 | 0.200 | 0.000 | 0.00 | 0.03 |
| 80.75 | (2) 0.65" 8 AWG 2C | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 5.645 | 0.200 | 0.000 | 0.00 | 0.56 |
| 80.75 | (12) 1 1/4" Coax | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 5.645 | 0.200 | 0.000 | 0.00 | 6.79 |
| 80.75 | (4) 1 1/4" Hybriflex | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 5.645 | 0.200 | 0.000 | 0.00 | 3.59 |
| 80.75 | (2) 1/2" Coax | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 5.645 | 0.200 | 0.000 | 0.00 | 0.27 |
| 80.75 | (1) 2" Conduit | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 5.645 | 0.200 | 0.000 | 0.00 | 3.28 |
| 80.75 | (6) 5/16" Coax | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 5.645 | 0.200 | 0.000 | 0.00 | 0.24 |
| 80.75 | (12) 1 5/8" Coax | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 5.645 | 0.200 | 0.000 | 0.00 | 8.84 |
| 80.75 | (12) 1 5/8" Coax | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 5.645 | 0.200 | 0.000 | 0.00 | 8.84 |
| 80.75 | (1) 1 5/8" Hybriflex | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 5.645 | 0.200 | 0.000 | 0.00 | 1.17 |
| 80.75 | (1) 1/2" Coax | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 5.645 | 0.200 | 0.000 | 0.00 | 0.13 |
| 80.75 | (1) 1 1/4" Fiber | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 5.645 | 0.200 | 0.000 | 0.00 | 0.94 |
| 80.75 | (14) 1 5/8" Coax | Yes | 0.75 | 1.20 | 3.96 | 0.45 | 0.54 | 5.645 | 0.200 | 0.000 | 3.36 | 42.66 |
| 84.90 | (6) 1 5/8" Coax | Yes | 4.15 | 1.20 | 1.98 | 1.82 | 2.19 | 5.693 | 0.204 | 0.000 | 13.70 | 109.45 |
| 84.90 | (1) 3/8" Coax | No | 4.15 | 0.00 | 0.44 | 0.00 | 0.00 | 5.693 | 0.204 | 0.000 | 0.00 | 0.40 |
| 84.90 | (1) 0.28" RG-6 | No | 4.15 | 0.00 | 0.00 | 0.00 | 0.00 | 5.693 | 0.204 | 0.000 | 0.00 | 0.14 |
| 84.90 | (2) 0.65" 8 AWG 2C | No | 4.15 | 0.00 | 0.00 | 0.00 | 0.00 | 5.693 | 0.204 | 0.000 | 0.00 | 3.09 |
| 84.90 | (12) 1 1/4" Coax | No | 4.15 | 0.00 | 0.00 | 0.00 | 0.00 | 5.693 | 0.204 | 0.000 | 0.00 | 37.65 |
| 84.90 | (4) 1 1/4" Hybriflex | No | 4.15 | 0.00 | 0.00 | 0.00 | 0.00 | 5.693 | 0.204 | 0.000 | 0.00 | 19.93 |
| 84.90 | (2) 1/2" Coax | No | 4.15 | 0.00 | 0.00 | 0.00 | 0.00 | 5.693 | 0.204 | 0.000 | 0.00 | 1.49 |
| 84.90 | (1) 2" Conduit | No | 4.15 | 0.00 | 0.00 | 0.00 | 0.00 | 5.693 | 0.204 | 0.000 | 0.00 | 18.18 |

Load Case: 1.2D + 1.0Di + 1.0Wi**50 mph with 0.75 in Radial Ice****23 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**

| | | | | | | | | | | | | |
|-------|----------------------|-----|------|------|------|------|-------|-------|-------|-------|-------|--------|
| 84.90 | (6) 5/16" Coax | No | 4.15 | 0.00 | 0.00 | 0.00 | 5.693 | 0.204 | 0.000 | 0.00 | 1.34 | |
| 84.90 | (12) 1 5/8" Coax | No | 4.15 | 0.00 | 0.00 | 0.00 | 5.693 | 0.204 | 0.000 | 0.00 | 49.01 | |
| 84.90 | (12) 1 5/8" Coax | No | 4.15 | 0.00 | 0.00 | 0.00 | 5.693 | 0.204 | 0.000 | 0.00 | 49.01 | |
| 84.90 | (1) 1 5/8" Hybriflex | No | 4.15 | 0.00 | 0.00 | 0.00 | 5.693 | 0.204 | 0.000 | 0.00 | 6.48 | |
| 84.90 | (1) 1/2" Coax | No | 4.15 | 0.00 | 0.00 | 0.00 | 5.693 | 0.204 | 0.000 | 0.00 | 0.75 | |
| 84.90 | (1) 1 1/4" Fiber | No | 4.15 | 0.00 | 0.00 | 0.00 | 5.693 | 0.204 | 0.000 | 0.00 | 5.23 | |
| 84.90 | (14) 1 5/8" Coax | Yes | 4.15 | 1.20 | 3.96 | 2.51 | 3.01 | 5.693 | 0.204 | 0.000 | 18.85 | 237.09 |
| 85.00 | (6) 1 5/8" Coax | Yes | 0.10 | 1.20 | 1.98 | 0.04 | 0.05 | 5.735 | 0.204 | 0.000 | 0.33 | 2.65 |
| 85.00 | (1) 3/8" Coax | No | 0.10 | 0.00 | 0.44 | 0.00 | 0.00 | 5.735 | 0.204 | 0.000 | 0.00 | 0.01 |
| 85.00 | (1) 0.28" RG-6 | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 5.735 | 0.204 | 0.000 | 0.00 | 0.00 |
| 85.00 | (2) 0.65" 8 AWG 2C | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 5.735 | 0.204 | 0.000 | 0.00 | 0.07 |
| 85.00 | (12) 1 1/4" Coax | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 5.735 | 0.204 | 0.000 | 0.00 | 0.91 |
| 85.00 | (4) 1 1/4" Hybriflex | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 5.735 | 0.204 | 0.000 | 0.00 | 0.48 |
| 85.00 | (2) 1/2" Coax | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 5.735 | 0.204 | 0.000 | 0.00 | 0.04 |
| 85.00 | (1) 2" Conduit | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 5.735 | 0.204 | 0.000 | 0.00 | 0.44 |
| 85.00 | (6) 5/16" Coax | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 5.735 | 0.204 | 0.000 | 0.00 | 0.03 |
| 85.00 | (12) 1 5/8" Coax | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 5.735 | 0.204 | 0.000 | 0.00 | 1.19 |
| 85.00 | (12) 1 5/8" Coax | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 5.735 | 0.204 | 0.000 | 0.00 | 1.19 |
| 85.00 | (1) 1 5/8" Hybriflex | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 5.735 | 0.204 | 0.000 | 0.00 | 0.16 |
| 85.00 | (1) 1/2" Coax | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 5.735 | 0.204 | 0.000 | 0.00 | 0.02 |
| 85.00 | (1) 1 1/4" Fiber | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 5.735 | 0.204 | 0.000 | 0.00 | 0.13 |
| 85.00 | (14) 1 5/8" Coax | Yes | 0.10 | 1.20 | 3.96 | 0.06 | 0.07 | 5.735 | 0.204 | 0.000 | 0.46 | 5.75 |
| 90.00 | (6) 1 5/8" Coax | Yes | 5.00 | 1.20 | 1.98 | 2.20 | 2.64 | 5.784 | 0.208 | 0.000 | 16.82 | 132.43 |
| 90.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 5.784 | 0.208 | 0.000 | 0.00 | 0.48 |
| 90.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.784 | 0.208 | 0.000 | 0.00 | 0.17 |
| 90.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.784 | 0.208 | 0.000 | 0.00 | 3.72 |
| 90.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.784 | 0.208 | 0.000 | 0.00 | 45.35 |
| 90.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.784 | 0.208 | 0.000 | 0.00 | 24.00 |
| 90.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.784 | 0.208 | 0.000 | 0.00 | 1.80 |
| 90.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.784 | 0.208 | 0.000 | 0.00 | 21.90 |
| 90.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.784 | 0.208 | 0.000 | 0.00 | 1.62 |
| 90.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.784 | 0.208 | 0.000 | 0.00 | 59.03 |
| 90.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.784 | 0.208 | 0.000 | 0.00 | 59.03 |
| 90.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.784 | 0.208 | 0.000 | 0.00 | 7.80 |
| 90.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.784 | 0.208 | 0.000 | 0.00 | 0.90 |
| 90.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.784 | 0.208 | 0.000 | 0.00 | 6.30 |
| 90.00 | (14) 1 5/8" Coax | Yes | 5.00 | 1.20 | 3.96 | 3.03 | 3.63 | 5.784 | 0.208 | 0.000 | 23.12 | 286.74 |
| 95.00 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 2.21 | 0.00 | 5.876 | 0.072 | 0.000 | 0.00 | 133.05 |
| 95.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 5.876 | 0.072 | 0.000 | 0.00 | 0.48 |
| 95.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.876 | 0.072 | 0.000 | 0.00 | 0.17 |
| 95.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.876 | 0.072 | 0.000 | 0.00 | 3.72 |
| 95.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.876 | 0.072 | 0.000 | 0.00 | 45.35 |
| 95.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.876 | 0.072 | 0.000 | 0.00 | 24.00 |
| 95.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.876 | 0.072 | 0.000 | 0.00 | 1.80 |
| 95.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.876 | 0.072 | 0.000 | 0.00 | 21.90 |
| 95.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.876 | 0.072 | 0.000 | 0.00 | 1.62 |
| 95.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.876 | 0.072 | 0.000 | 0.00 | 59.03 |
| 95.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.876 | 0.072 | 0.000 | 0.00 | 59.03 |
| 95.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.876 | 0.072 | 0.000 | 0.00 | 7.80 |
| 95.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.876 | 0.072 | 0.000 | 0.00 | 0.90 |
| 100.0 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 2.22 | 0.00 | 5.965 | 0.075 | 0.000 | 0.00 | 133.63 |
| 100.0 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 5.965 | 0.075 | 0.000 | 0.00 | 0.48 |
| 100.0 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.965 | 0.075 | 0.000 | 0.00 | 0.17 |
| 100.0 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.965 | 0.075 | 0.000 | 0.00 | 3.72 |
| 100.0 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.965 | 0.075 | 0.000 | 0.00 | 45.35 |
| 100.0 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.965 | 0.075 | 0.000 | 0.00 | 24.00 |
| 100.0 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.965 | 0.075 | 0.000 | 0.00 | 1.80 |

Load Case: 1.2D + 1.0Di + 1.0Wi**50 mph with 0.75 in Radial Ice****23 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**

| | | | | | | | | | | | | |
|-------|----------------------|-----|------|------|------|------|-------|-------|-------|-------|-------|--------|
| 100.0 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 5.965 | 0.075 | 0.000 | 0.00 | 21.90 | |
| 100.0 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 5.965 | 0.075 | 0.000 | 0.00 | 1.62 | |
| 100.0 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 5.965 | 0.075 | 0.000 | 0.00 | 59.03 | |
| 100.0 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 5.965 | 0.075 | 0.000 | 0.00 | 59.03 | |
| 100.0 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 5.965 | 0.075 | 0.000 | 0.00 | 7.80 | |
| 100.0 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 5.965 | 0.075 | 0.000 | 0.00 | 0.90 | |
| 105.0 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 2.23 | 0.00 | 6.051 | 0.078 | 0.000 | 0.00 | 134.19 |
| 105.0 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 6.051 | 0.078 | 0.000 | 0.00 | 0.48 |
| 105.0 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.051 | 0.078 | 0.000 | 0.00 | 0.17 |
| 105.0 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.051 | 0.078 | 0.000 | 0.00 | 3.72 |
| 105.0 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.051 | 0.078 | 0.000 | 0.00 | 45.35 |
| 105.0 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.051 | 0.078 | 0.000 | 0.00 | 24.00 |
| 105.0 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.051 | 0.078 | 0.000 | 0.00 | 1.80 |
| 105.0 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.051 | 0.078 | 0.000 | 0.00 | 21.90 |
| 105.0 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.051 | 0.078 | 0.000 | 0.00 | 1.62 |
| 105.0 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.051 | 0.078 | 0.000 | 0.00 | 59.03 |
| 110.0 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 2.23 | 0.00 | 6.134 | 0.082 | 0.000 | 0.00 | 134.73 |
| 110.0 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 6.134 | 0.082 | 0.000 | 0.00 | 0.48 |
| 110.0 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.134 | 0.082 | 0.000 | 0.00 | 0.17 |
| 110.0 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.134 | 0.082 | 0.000 | 0.00 | 3.72 |
| 110.0 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.134 | 0.082 | 0.000 | 0.00 | 45.35 |
| 110.0 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.134 | 0.082 | 0.000 | 0.00 | 24.00 |
| 110.0 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.134 | 0.082 | 0.000 | 0.00 | 1.80 |
| 110.0 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.134 | 0.082 | 0.000 | 0.00 | 21.90 |
| 110.0 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.134 | 0.082 | 0.000 | 0.00 | 1.62 |
| 110.0 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.134 | 0.082 | 0.000 | 0.00 | 59.03 |
| 115.0 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 2.24 | 0.00 | 6.214 | 0.086 | 0.000 | 0.00 | 135.24 |
| 115.0 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 6.214 | 0.086 | 0.000 | 0.00 | 0.48 |
| 115.0 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.214 | 0.086 | 0.000 | 0.00 | 0.17 |
| 115.0 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.214 | 0.086 | 0.000 | 0.00 | 3.72 |
| 115.0 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.214 | 0.086 | 0.000 | 0.00 | 45.35 |
| 115.0 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.214 | 0.086 | 0.000 | 0.00 | 24.00 |
| 115.0 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.214 | 0.086 | 0.000 | 0.00 | 1.80 |
| 115.0 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.214 | 0.086 | 0.000 | 0.00 | 21.90 |
| 115.0 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.214 | 0.086 | 0.000 | 0.00 | 1.62 |
| 120.0 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 2.24 | 0.00 | 6.292 | 0.090 | 0.000 | 0.00 | 135.73 |
| 120.0 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 6.292 | 0.090 | 0.000 | 0.00 | 0.48 |
| 120.0 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.292 | 0.090 | 0.000 | 0.00 | 0.17 |
| 120.0 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.292 | 0.090 | 0.000 | 0.00 | 3.72 |
| 120.0 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.292 | 0.090 | 0.000 | 0.00 | 45.35 |
| 120.0 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.292 | 0.090 | 0.000 | 0.00 | 24.00 |
| 120.0 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.292 | 0.090 | 0.000 | 0.00 | 1.80 |
| 120.0 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.292 | 0.090 | 0.000 | 0.00 | 21.90 |
| 120.0 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.292 | 0.090 | 0.000 | 0.00 | 1.62 |
| 125.0 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 2.24 | 0.00 | 6.367 | 0.095 | 0.000 | 0.00 | 136.21 |
| 125.0 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 6.367 | 0.095 | 0.000 | 0.00 | 0.48 |
| 125.0 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.367 | 0.095 | 0.000 | 0.00 | 0.17 |
| 125.0 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.367 | 0.095 | 0.000 | 0.00 | 3.72 |
| 125.0 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.367 | 0.095 | 0.000 | 0.00 | 45.35 |
| 125.8 | (6) 1 5/8" Coax | Yes | 0.80 | 0.00 | 1.98 | 0.36 | 0.00 | 6.410 | 0.098 | 0.000 | 0.00 | 21.85 |
| 125.8 | (1) 3/8" Coax | No | 0.80 | 0.00 | 0.44 | 0.00 | 0.00 | 6.410 | 0.098 | 0.000 | 0.00 | 0.08 |
| 125.8 | (1) 0.28" RG-6 | No | 0.80 | 0.00 | 0.00 | 0.00 | 0.00 | 6.410 | 0.098 | 0.000 | 0.00 | 0.03 |
| 125.8 | (2) 0.65" 8 AWG 2C | No | 0.80 | 0.00 | 0.00 | 0.00 | 0.00 | 6.410 | 0.098 | 0.000 | 0.00 | 0.60 |
| 125.8 | (12) 1 1/4" Coax | No | 0.80 | 0.00 | 0.00 | 0.00 | 0.00 | 6.410 | 0.098 | 0.000 | 0.00 | 7.26 |
| 130.0 | (6) 1 5/8" Coax | Yes | 4.20 | 0.00 | 1.98 | 1.90 | 0.00 | 6.446 | 0.184 | 1.253 | 0.00 | 114.82 |
| 130.0 | (1) 3/8" Coax | No | 4.20 | 0.00 | 0.44 | 0.00 | 0.00 | 6.446 | 0.184 | 1.253 | 0.00 | 0.40 |
| 130.0 | (1) 0.28" RG-6 | No | 4.20 | 0.00 | 0.00 | 0.00 | 0.00 | 6.446 | 0.184 | 1.253 | 0.00 | 0.15 |

Site Number: 302511

Code: ANSI/TIA-222-G

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Site Name: WSPT - South, CT

Engineering Number: 63916524

1/25/2016 11:02:35 AM

Customer: T-MOBILE

Load Case: 1.2D + 1.0Di + 1.0Wi

50 mph with 0.75 in Radial Ice

23 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

| | | | | | | | | | | |
|--------------------------|-----|------|------|------|------|-------|-------|-------|-------|-------|
| 130.0 (2) 0.65" 8 AWG 2C | No | 4.20 | 0.00 | 0.00 | 0.00 | 6.446 | 0.184 | 1.253 | 0.00 | 3.12 |
| 130.0 (12) 1 1/4" Coax | No | 4.20 | 0.00 | 0.00 | 0.00 | 6.446 | 0.184 | 1.253 | 0.00 | 38.09 |
| 131.0 (6) 1 5/8" Coax | Yes | 1.00 | 0.00 | 1.98 | 0.45 | 0.00 | 6.483 | 0.184 | 1.253 | 0.00 |
| 131.0 (1) 3/8" Coax | No | 1.00 | 0.00 | 0.44 | 0.00 | 0.00 | 6.483 | 0.184 | 1.253 | 0.00 |
| 131.0 (1) 0.28" RG-6 | No | 1.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.483 | 0.184 | 1.253 | 0.00 |
| 131.0 (2) 0.65" 8 AWG 2C | No | 1.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.483 | 0.184 | 1.253 | 0.00 |
| 131.0 (12) 1 1/4" Coax | No | 1.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.483 | 0.184 | 1.253 | 0.00 |
| 135.0 (6) 1 5/8" Coax | Yes | 4.00 | 0.00 | 1.98 | 1.81 | 0.00 | 6.519 | 0.184 | 1.253 | 0.00 |
| 135.0 (1) 3/8" Coax | No | 4.00 | 0.00 | 0.44 | 0.00 | 0.00 | 6.519 | 0.184 | 1.253 | 0.00 |
| 136.0 (6) 1 5/8" Coax | Yes | 1.00 | 0.00 | 1.98 | 0.45 | 0.00 | 6.553 | 0.184 | 1.253 | 0.00 |
| 136.0 (1) 3/8" Coax | No | 1.00 | 0.00 | 0.44 | 0.00 | 0.00 | 6.553 | 0.184 | 1.253 | 0.10 |

Totals: 483.67 19,736.46

Site Number: 302511

Code: ANSI/TIA-222-G

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Site Name: WSPT - South, CT

Engineering Number: 63916524

1/25/2016 11:02:35 AM

Customer: T-MOBILE

Load Case: 1.2D + 1.0Di + 1.0Wi**50 mph with 0.75 in Radial Ice****23 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 | | Discrete Forces | | | Linear Forces | | | Sum of Forces | | | |
|---------------------|-----------------|--------------|----------------------|-----------------|--------------------------|-------------------------|----------------------|---------|----------------------|-----------------|----------------------|--------------------------|----------------------|
| | | Wind FX | Dead Load (lb) | Wind FX (lb) | Torsion MY (lb-ft) | Moment MZ (lb-ft) | Dead Load (lb) | Wind FX | Dead Load (lb) | Wind FX (lb) | Dead Load (lb) | Torsion MY (lb-ft) | Moment MZ (lb) |
| 0.00 | | 56.6 | 0.0 | | | | | 0.0 | 0.0 | 56.6 | 0.0 | 0.0 | 0.0 |
| 5.00 | | 112.2 | 1,604.9 | | | | | 0.0 | 1,071.3 | 112.2 | 2,676.2 | 0.0 | 0.0 |
| 10.00 | | 110.1 | 1,605.8 | | | | | 0.0 | 1,106.5 | 110.1 | 2,712.2 | 0.0 | 0.0 |
| 15.00 | | 107.8 | 1,585.8 | | | | | 0.0 | 1,124.4 | 107.8 | 2,710.2 | 0.0 | 0.0 |
| 20.00 | | 105.4 | 1,558.9 | | | | | 0.0 | 1,136.8 | 105.4 | 2,695.8 | 0.0 | 0.0 |
| 25.00 | | 103.0 | 1,528.5 | | | | | 40.0 | 1,146.5 | 143.0 | 2,675.0 | 0.0 | 0.0 |
| 30.00 | | 101.7 | 1,495.8 | | | | | 40.4 | 1,154.4 | 142.2 | 2,650.2 | 0.0 | 0.0 |
| 35.00 | | 102.5 | 1,461.6 | | | | | 41.8 | 1,161.1 | 144.3 | 2,622.7 | 0.0 | 0.0 |
| 40.00 | | 54.2 | 1,426.2 | | | | | 43.8 | 1,166.9 | 98.0 | 2,593.1 | 0.0 | 0.0 |
| 40.24 | Bot - Section 2 | 53.1 | 68.8 | | | | | 2.2 | 57.0 | 55.3 | 125.8 | 0.0 | 0.0 |
| 45.00 | | 54.8 | 2,180.3 | | | | | 43.5 | 1,115.1 | 98.4 | 3,295.4 | 0.0 | 0.0 |
| 45.40 | Top - Section 1 | 53.5 | 181.1 | | | | | 3.7 | 94.0 | 57.2 | 275.0 | 0.0 | 0.0 |
| 50.00 | | 102.7 | 1,139.0 | | | | | 43.7 | 1,082.9 | 146.5 | 2,221.9 | 0.0 | 0.0 |
| 55.00 | | 60.8 | 1,205.7 | | | | | 49.1 | 1,181.1 | 109.9 | 2,386.8 | 0.0 | 0.0 |
| 55.68 | Reinf. Top | 53.4 | 161.3 | | | | | 6.8 | 160.2 | 60.2 | 321.5 | 0.0 | 0.0 |
| 60.00 | | 99.4 | 1,012.0 | | | | | 43.9 | 678.3 | 143.2 | 1,690.3 | 0.0 | 0.0 |
| 65.00 | | 105.9 | 1,137.9 | | | | | 45.5 | 731.2 | 151.5 | 1,869.1 | 0.0 | 0.0 |
| 70.00 | Appertunance(s) | 105.0 | 1,103.4 | 7.5 | 0.0 | 0.0 | 39.6 | 0.0 | 648.5 | 112.5 | 1,791.5 | 0.0 | 0.0 |
| 75.00 | | 103.8 | 1,068.6 | | | | | 0.0 | 648.9 | 103.8 | 1,717.5 | 0.0 | 0.0 |
| 80.00 | Appertunance(s) | 59.2 | 1,033.4 | 104.6 | 0.0 | 91.3 | 590.2 | 0.0 | 651.0 | 163.8 | 2,274.6 | 0.0 | 0.0 |
| 80.75 | Bot - Section 3 | 50.5 | 152.4 | | | | | 5.8 | 97.1 | 56.3 | 249.5 | 0.0 | 0.0 |
| 84.90 | Top - Section 2 | 43.8 | 1,219.2 | | | | | 32.5 | 539.2 | 76.4 | 1,758.5 | 0.0 | 0.0 |
| 85.00 | | 51.8 | 15.6 | | | | | 0.8 | 13.1 | 52.6 | 28.7 | 0.0 | 0.0 |
| 90.00 | Appertunance(s) | 100.6 | 758.0 | 733.5 | 0.0 | 0.0 | 6,645.5 | 39.9 | 651.3 | 874.1 | 8,054.7 | 0.0 | 0.0 |
| 95.00 | | 98.7 | 730.8 | | | | | 0.0 | 358.9 | 98.7 | 1,089.7 | 0.0 | 0.0 |
| 100.00 | Appertunance(s) | 96.5 | 703.5 | 715.5 | 0.0 | 9.2 | 5,839.0 | 0.0 | 359.4 | 812.1 | 6,901.9 | 0.0 | 0.0 |
| 105.00 | | 94.3 | 676.0 | | | | | 0.0 | 292.3 | 94.3 | 968.3 | 0.0 | 0.0 |
| 110.00 | Appertunance(s) | 91.8 | 648.3 | 581.8 | 0.0 | 0.0 | 4,627.2 | 0.0 | 292.8 | 673.6 | 5,568.3 | 0.0 | 0.0 |
| 115.00 | | 89.3 | 620.4 | | | | | 0.0 | 234.3 | 89.3 | 854.7 | 0.0 | 0.0 |
| 120.00 | Appertunance(s) | 86.6 | 592.4 | 801.3 | 0.0 | 0.0 | 7,216.6 | 0.0 | 234.8 | 887.9 | 8,043.8 | 0.0 | 0.0 |
| 125.00 | | 49.3 | 564.3 | | | | | 0.0 | 185.9 | 49.3 | 750.2 | 0.0 | 0.0 |
| 125.80 | Top - Section 3 | 27.8 | 88.5 | | | | | 0.0 | 29.8 | 27.8 | 118.3 | 0.0 | 0.0 |
| 130.00 | | 26.2 | 319.4 | | | | | 0.0 | 156.6 | 26.2 | 476.0 | 0.0 | 0.0 |
| 131.00 | Appertunance(s) | 25.4 | 76.1 | 757.5 | 0.0 | 546.3 | 6,498.8 | 0.0 | 37.3 | 782.9 | 6,612.3 | 0.0 | 0.0 |
| 135.00 | | 25.5 | 304.7 | | | | | 0.0 | 110.1 | 25.5 | 414.8 | 0.0 | 0.0 |
| 136.00 | Appertunance(s) | 25.7 | 76.2 | 64.7 | 0.0 | 194.2 | 412.3 | 0.0 | 27.6 | 90.4 | 516.1 | 0.0 | 0.0 |
| 140.00 | | 31.0 | 305.1 | | | | | 0.0 | 0.0 | 31.0 | 305.1 | 0.0 | 0.0 |
| 142.00 | | 10.4 | 152.7 | | | | | 0.0 | 0.0 | 10.4 | 152.7 | 0.0 | 0.0 |
| Totals: | | | | | | | | | | 6,980.38 | 82,168.3 | 0.00 | 0.00 |

Load Case: 1.2D + 1.0Di + 1.0Wi

50 mph with 0.75 in Radial Ice

23 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 | 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 | -82.17 | -6.95 | 0.00 | -668.08 | 0.00 | 668.08 | 4,350.13 | 2,175.06 | 7,987.32 | 3,944.64 | 0.00 | 0.00 | 0.134 |
| 5.00 | -79.48 | -6.90 | 0.00 | -633.31 | 0.00 | 633.31 | 4,285.51 | 2,142.75 | 7,679.11 | 3,792.42 | 0.02 | -0.04 | 0.131 |
| 10.00 | -76.77 | -6.84 | 0.00 | -598.83 | 0.00 | 598.83 | 4,218.97 | 2,109.49 | 7,373.27 | 3,641.38 | 0.09 | -0.08 | 0.128 |
| 15.00 | -74.05 | -6.78 | 0.00 | -564.63 | 0.00 | 564.63 | 4,150.52 | 2,075.26 | 7,070.06 | 3,491.64 | 0.20 | -0.12 | 0.124 |
| 20.00 | -71.35 | -6.72 | 0.00 | -530.73 | 0.00 | 530.73 | 4,080.16 | 2,040.08 | 6,769.73 | 3,343.32 | 0.35 | -0.17 | 0.121 |
| 25.00 | -68.67 | -6.62 | 0.00 | -497.12 | 0.00 | 497.12 | 4,007.88 | 2,003.94 | 6,472.54 | 3,196.54 | 0.55 | -0.21 | 0.117 |
| 30.00 | -66.02 | -6.52 | 0.00 | -464.02 | 0.00 | 464.02 | 3,933.69 | 1,966.85 | 6,178.73 | 3,051.44 | 0.79 | -0.25 | 0.113 |
| 35.00 | -63.39 | -6.41 | 0.00 | -431.45 | 0.00 | 431.45 | 3,854.52 | 1,927.26 | 5,883.88 | 2,905.83 | 1.07 | -0.29 | 0.109 |
| 40.00 | -60.80 | -6.32 | 0.00 | -399.42 | 0.00 | 399.42 | 3,744.12 | 1,872.06 | 5,549.75 | 2,740.81 | 1.40 | -0.33 | 0.106 |
| 40.24 | -60.67 | -6.28 | 0.00 | -397.88 | 0.00 | 397.88 | 3,738.74 | 1,869.37 | 5,533.72 | 2,732.90 | 1.42 | -0.34 | 0.106 |
| 45.00 | -57.37 | -6.19 | 0.00 | -367.99 | 0.00 | 367.99 | 3,633.72 | 1,816.86 | 5,225.39 | 2,580.62 | 1.78 | -0.38 | 0.101 |
| 45.40 | -57.10 | -6.15 | 0.00 | -365.52 | 0.00 | 365.52 | 3,063.79 | 1,531.89 | 4,506.32 | 2,225.50 | 1.81 | -0.38 | 0.113 |
| 50.00 | -54.87 | -6.02 | 0.00 | -337.24 | 0.00 | 337.24 | 3,008.67 | 1,504.34 | 4,302.82 | 2,125.00 | 2.19 | -0.42 | 0.107 |
| 55.00 | -52.48 | -5.92 | 0.00 | -307.13 | 0.00 | 307.13 | 2,946.93 | 1,473.46 | 4,084.17 | 2,017.02 | 2.65 | -0.46 | 0.102 |
| 55.68 | -52.16 | -5.87 | 0.00 | -303.12 | 0.00 | 303.12 | 2,938.42 | 1,469.21 | 4,054.78 | 2,002.51 | 2.72 | -0.47 | 0.101 |
| 55.68 | -52.16 | -5.87 | 0.00 | -303.12 | 0.00 | 303.12 | 2,938.42 | 1,469.21 | 4,054.78 | 2,002.51 | 2.72 | -0.47 | 0.169 |
| 60.00 | -50.46 | -5.76 | 0.00 | -277.73 | 0.00 | 277.73 | 2,883.27 | 1,441.64 | 3,868.42 | 1,910.47 | 3.16 | -0.50 | 0.163 |
| 65.00 | -48.59 | -5.65 | 0.00 | -248.91 | 0.00 | 248.91 | 2,808.41 | 1,404.21 | 3,643.77 | 1,799.52 | 3.72 | -0.57 | 0.156 |
| 70.00 | -46.79 | -5.58 | 0.00 | -220.64 | 0.00 | 220.64 | 2,713.79 | 1,356.89 | 3,400.96 | 1,679.60 | 4.36 | -0.64 | 0.149 |
| 75.00 | -45.07 | -5.51 | 0.00 | -192.76 | 0.00 | 192.76 | 2,619.16 | 1,309.58 | 3,166.52 | 1,563.83 | 5.07 | -0.71 | 0.140 |
| 80.00 | -42.80 | -5.34 | 0.00 | -165.14 | 0.00 | 165.14 | 2,524.53 | 1,262.26 | 2,940.46 | 1,452.18 | 5.84 | -0.77 | 0.131 |
| 80.75 | -42.54 | -5.30 | 0.00 | -161.14 | 0.00 | 161.14 | 2,510.36 | 1,255.18 | 2,907.34 | 1,435.82 | 5.97 | -0.78 | 0.129 |
| 84.90 | -40.78 | -5.22 | 0.00 | -139.13 | 0.00 | 139.13 | 1,500.18 | 750.09 | 1,728.96 | 853.87 | 6.67 | -0.83 | 0.190 |
| 85.00 | -40.75 | -5.20 | 0.00 | -138.60 | 0.00 | 138.60 | 1,499.54 | 749.77 | 1,726.89 | 852.85 | 6.69 | -0.84 | 0.190 |
| 90.00 | -32.71 | -4.24 | 0.00 | -112.62 | 0.00 | 112.62 | 1,466.64 | 733.32 | 1,624.12 | 802.09 | 7.61 | -0.92 | 0.163 |
| 95.00 | -31.61 | -4.16 | 0.00 | -91.40 | 0.00 | 91.40 | 1,431.82 | 715.91 | 1,522.23 | 751.77 | 8.61 | -0.99 | 0.144 |
| 100.00 | -24.72 | -3.26 | 0.00 | -70.57 | 0.00 | 70.57 | 1,395.09 | 697.54 | 1,421.47 | 702.01 | 9.68 | -1.05 | 0.118 |
| 105.00 | -23.75 | -3.17 | 0.00 | -54.29 | 0.00 | 54.29 | 1,356.44 | 678.22 | 1,322.10 | 652.93 | 10.81 | -1.11 | 0.101 |
| 110.00 | -18.20 | -2.40 | 0.00 | -38.46 | 0.00 | 38.46 | 1,315.88 | 657.94 | 1,224.36 | 604.67 | 12.00 | -1.16 | 0.077 |
| 115.00 | -17.34 | -2.30 | 0.00 | -26.49 | 0.00 | 26.49 | 1,273.40 | 636.70 | 1,128.51 | 557.33 | 13.24 | -1.20 | 0.061 |
| 120.00 | -9.32 | -1.24 | 0.00 | -14.99 | 0.00 | 14.99 | 1,215.41 | 607.71 | 1,023.36 | 505.40 | 14.51 | -1.23 | 0.037 |
| 125.00 | -8.57 | -1.18 | 0.00 | -8.77 | 0.00 | 8.77 | 1,152.33 | 576.16 | 919.28 | 454.00 | 15.81 | -1.25 | 0.027 |
| 125.80 | -8.45 | -1.15 | 0.00 | -7.83 | 0.00 | 7.83 | 1,142.23 | 571.11 | 903.13 | 446.02 | 16.02 | -1.25 | 0.025 |
| 125.80 | -8.45 | -1.15 | 0.00 | -7.83 | 0.00 | 7.83 | 385.02 | 192.51 | 160.54 | 106.00 | 16.02 | -1.25 | 0.096 |
| 130.00 | -7.98 | -1.12 | 0.00 | -2.99 | 0.00 | 2.99 | 385.02 | 192.51 | 160.54 | 106.00 | 17.12 | -1.26 | 0.049 |
| 131.00 | -1.38 | -0.19 | 0.00 | -1.33 | 0.00 | 1.33 | 385.02 | 192.51 | 160.54 | 106.00 | 17.38 | -1.26 | 0.016 |
| 135.00 | -0.97 | -0.15 | 0.00 | -0.58 | 0.00 | 0.58 | 385.02 | 192.51 | 160.54 | 106.00 | 18.44 | -1.27 | 0.008 |
| 136.00 | -0.46 | -0.05 | 0.00 | -0.23 | 0.00 | 0.23 | 385.02 | 192.51 | 160.54 | 106.00 | 18.71 | -1.27 | 0.003 |
| 140.00 | -0.15 | -0.01 | 0.00 | -0.03 | 0.00 | 0.03 | 385.02 | 192.51 | 160.54 | 106.00 | 19.77 | -1.27 | 0.001 |
| 142.00 | 0.00 | -0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 385.02 | 192.51 | 160.54 | 106.00 | 20.30 | -1.27 | 0.000 |

Site Number: 302511

Code: ANSI/TIA-222-G

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Site Name: WSPT - South, CT

Engineering Number: 63916524

1/25/2016 11:02:36 AM

Customer: T-MOBILE

Load Case: 1.0D + 1.0W**Serviceability 60 mph****23 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 | Ice | | | | | | EPAs (sf) | Wind Force X (lb) | Dead Load Ice (lb) | Tot Dead Load (lb) | | | | |
|-------------------------|-----------------|------|------|-------------|---------------|---------------|-------|---------------|-------------------------|--------------------------|--------------------------|-------|-------|-----|---------|
| | | Kzt | Kz | qz (psf) | qzGh (psf) | C (mph-ft) | Cf | Thick (in) | Tributary (ft) | Ap (sf) | | | | | |
| 0.00 | | 1.00 | 0.70 | 6.129 | 6.742 | 194.88 | 1.000 | 0.000 | 0.00 | 0.000 | 0.00 | 64.7 | 0.0 | 0.0 | |
| 5.00 | | 1.00 | 0.70 | 6.129 | 6.742 | 192.58 | 1.000 | * | 0.000 | 5.00 | 19.182 | 19.18 | 127.8 | 0.0 | 1,055.3 |
| 10.00 | | 1.00 | 0.70 | 6.129 | 6.742 | 187.98 | 1.000 | * | 0.000 | 5.00 | 18.723 | 18.72 | 124.7 | 0.0 | 1,029.9 |
| 15.00 | | 1.00 | 0.70 | 6.129 | 6.742 | 183.37 | 1.000 | * | 0.000 | 5.00 | 18.265 | 18.26 | 121.6 | 0.0 | 1,004.4 |
| 20.00 | | 1.00 | 0.70 | 6.129 | 6.742 | 178.77 | 1.000 | * | 0.000 | 5.00 | 17.806 | 17.81 | 130.2 | 0.0 | 978.9 |
| 25.00 | | 1.00 | 0.70 | 6.129 | 6.742 | 174.16 | 1.200 | * | 0.000 | 5.00 | 17.348 | 20.82 | 138.5 | 0.0 | 953.4 |
| 30.00 | | 1.00 | 0.70 | 6.129 | 6.742 | 169.56 | 1.200 | * | 0.000 | 5.00 | 16.889 | 20.27 | 136.4 | 0.0 | 927.9 |
| 35.00 | | 1.00 | 0.71 | 6.276 | 6.903 | 166.92 | 1.200 | * | 0.000 | 5.00 | 16.430 | 19.72 | 137.0 | 0.0 | 902.4 |
| 40.00 | | 1.00 | 0.74 | 6.538 | 7.191 | 165.61 | 1.200 | * | 0.000 | 5.00 | 15.972 | 19.17 | 72.3 | 0.0 | 877.0 |
| 40.24 | Bot - Section 2 | 1.00 | 0.76 | 6.665 | 7.332 | 164.70 | 1.200 | * | 0.000 | 0.24 | 0.767 | 0.92 | 70.7 | 0.0 | 42.1 |
| 45.00 | | 1.00 | 0.77 | 6.781 | 7.459 | 163.71 | 1.200 | * | 0.000 | 4.76 | 15.054 | 18.07 | 73.1 | 0.0 | 1,519.0 |
| 45.40 | Top - Section 1 | 1.00 | 0.78 | 6.896 | 7.586 | 162.57 | 1.200 | * | 0.000 | 0.40 | 1.247 | 1.50 | 71.0 | 0.0 | 125.8 |
| 50.00 | | 1.00 | 0.80 | 7.003 | 7.703 | 164.84 | 1.200 | * | 0.000 | 4.60 | 14.131 | 16.96 | 136.2 | 0.0 | 665.9 |
| 55.00 | | 1.00 | 0.82 | 7.197 | 7.917 | 162.32 | 1.200 | * | 0.000 | 5.00 | 14.919 | 17.90 | 80.4 | 0.0 | 702.9 |
| 55.68 | Reinf. Top | 1.00 | 0.83 | 7.306 | 8.037 | 160.69 | 1.200 | * | 0.000 | 0.68 | 1.985 | 2.38 | 70.5 | 0.0 | 93.5 |
| 60.00 | | 1.00 | 0.84 | 7.399 | 8.139 | 159.18 | 1.200 | * | 0.000 | 4.32 | 12.476 | 14.97 | 130.8 | 0.0 | 587.5 |
| 65.00 | | 1.00 | 0.86 | 7.565 | 8.321 | 156.18 | 1.200 | * | 0.000 | 5.00 | 14.002 | 16.80 | 127.5 | 0.0 | 659.2 |
| 70.00 | Appertunance(s) | 1.00 | 0.88 | 7.733 | 8.506 | 152.74 | 1.000 | * | 0.000 | 5.00 | 13.544 | 13.54 | 114.4 | 0.0 | 637.3 |
| 75.00 | | 1.00 | 0.90 | 7.893 | 8.682 | 149.08 | 1.000 | * | 0.000 | 5.00 | 13.085 | 13.08 | 112.7 | 0.0 | 615.5 |
| 80.00 | Appertunance(s) | 1.00 | 0.91 | 8.044 | 8.849 | 145.23 | 1.000 | * | 0.000 | 5.00 | 12.626 | 12.63 | 65.8 | 0.0 | 593.6 |
| 80.75 | Bot - Section 3 | 1.00 | 0.92 | 8.129 | 8.941 | 142.94 | 1.200 | * | 0.000 | 0.75 | 1.851 | 2.22 | 65.4 | 0.0 | 87.0 |
| 84.90 | Top - Section 2 | 1.00 | 0.93 | 8.199 | 9.018 | 140.95 | 1.200 | * | 0.000 | 4.15 | 10.256 | 12.31 | 56.8 | 0.0 | 796.3 |
| 85.00 | | 1.00 | 0.94 | 8.258 | 9.084 | 141.70 | 1.200 | * | 0.000 | 0.10 | 0.244 | 0.29 | 66.9 | 0.0 | 7.7 |
| 90.00 | Appertunance(s) | 1.00 | 0.95 | 8.328 | 9.161 | 139.56 | 1.200 | * | 0.000 | 5.00 | 11.925 | 14.31 | 118.9 | 0.0 | 375.2 |
| 95.00 | | 1.00 | 0.96 | 8.462 | 9.308 | 135.26 | 1.000 | 0.000 | | 5.00 | 11.466 | 11.47 | 105.4 | 0.0 | 360.6 |
| 100.0 | Appertunance(s) | 1.00 | 0.98 | 8.590 | 9.449 | 130.83 | 1.000 | 0.000 | | 5.00 | 11.007 | 11.01 | 102.6 | 0.0 | 346.1 |
| 105.0 | | 1.00 | 0.99 | 8.713 | 9.585 | 126.28 | 1.000 | 0.000 | | 5.00 | 10.549 | 10.55 | 99.6 | 0.0 | 331.5 |
| 110.0 | Appertunance(s) | 1.00 | 1.00 | 8.833 | 9.716 | 121.61 | 1.000 | 0.000 | | 5.00 | 10.090 | 10.09 | 96.4 | 0.0 | 316.9 |
| 115.0 | | 1.00 | 1.02 | 8.948 | 9.843 | 116.84 | 1.000 | 0.000 | | 5.00 | 9.632 | 9.63 | 93.1 | 0.0 | 302.4 |
| 120.0 | Appertunance(s) | 1.00 | 1.03 | 9.060 | 9.966 | 111.97 | 1.000 | 0.000 | | 5.00 | 9.173 | 9.17 | 89.7 | 0.0 | 287.8 |
| 125.0 | | 1.00 | 1.04 | 9.169 | 10.08 | 107.01 | 1.000 | 0.000 | | 5.00 | 8.714 | 8.71 | 50.8 | 0.0 | 273.3 |
| 125.8 | Top - Section 3 | 1.00 | 1.05 | 9.230 | 10.15 | 104.09 | 1.000 | 0.000 | | 0.80 | 1.353 | 1.35 | 20.2 | 0.0 | 42.4 |
| 130.0 | | 1.00 | 1.06 | 9.282 | 10.21 | 55.345 | 0.694 | * | 0.000 | 4.20 | 3.762 | 2.61 | 16.5 | 0.0 | 174.7 |
| 131.0 | Appertunance(s) | 1.00 | 1.06 | 9.336 | 10.26 | 55.504 | 0.692 | * | 0.000 | 1.00 | 0.896 | 0.62 | 15.9 | 0.0 | 41.6 |
| 135.0 | | 1.00 | 1.07 | 9.387 | 10.32 | 55.655 | 0.690 | * | 0.000 | 4.00 | 3.583 | 2.47 | 16.0 | 0.0 | 166.4 |
| 136.0 | Appertunance(s) | 1.00 | 1.07 | 9.437 | 10.38 | 55.803 | 0.688 | * | 0.000 | 1.00 | 0.896 | 0.62 | 16.0 | 0.0 | 41.6 |
| 140.0 | | 1.00 | 1.08 | 9.486 | 10.43 | 55.949 | 0.686 | 0.000 | | 4.00 | 3.583 | 2.46 | 19.3 | 0.0 | 166.4 |
| 142.0 | | 1.00 | 1.09 | 9.545 | 10.49 | 56.121 | 0.684 | 0.000 | | 2.00 | 1.792 | 1.23 | 6.4 | 0.0 | 83.2 |

* = Cf Adjusted By Linear Load Ra Effect

Totals: 142.00

3,162.0

0.0 18,172.5

Load Case: 1.0D + 1.0W**Serviceability 60 mph****23 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) |
|--------------|----------------------|-----|-------------|---------------|-----------------------|------|-----------------------|----------------------|---------------------|--------------------|---------------------|---------------------|----------------------|
| 70.00 | PCTEL GPS-TMG-HR- | 1 | 7.814 | 8.595 | 1.00 | 1.00 | 0.09 | 0.000 | 0.000 | 0.77 | 0.00 | 0.00 | 0.60 |
| 70.00 | Stand-Off | 1 | 7.814 | 8.595 | 0.67 | 1.00 | 0.67 | 0.000 | 0.000 | 5.76 | 0.00 | 0.00 | 30.00 |
| 80.00 | Diamond X50A | 2 | 8.204 | 9.024 | 1.00 | 1.00 | 2.24 | 0.000 | 3.000 | 20.21 | 0.00 | 60.64 | 4.60 |
| 80.00 | 6' Omni | 2 | 8.118 | 8.930 | 1.00 | 1.00 | 3.52 | 0.000 | 0.000 | 31.43 | 0.00 | 0.00 | 50.00 |
| 80.00 | Stand-Offs | 2 | 8.118 | 8.930 | 0.67 | 1.00 | 4.02 | 0.000 | 0.000 | 35.90 | 0.00 | 0.00 | 100.00 |
| 90.00 | RFS ATMAA1412D- | 4 | 8.396 | 9.235 | 0.33 | 0.75 | 0.99 | 0.000 | 0.000 | 9.14 | 0.00 | 0.00 | 52.00 |
| 90.00 | Ericsson RRUS 11 B12 | 3 | 8.396 | 9.235 | 0.50 | 0.75 | 3.14 | 0.000 | 0.000 | 28.99 | 0.00 | 0.00 | 152.10 |
| 90.00 | Ericsson AIR 21, 1.3 | 4 | 8.396 | 9.235 | 0.71 | 0.75 | 12.89 | 0.000 | 0.000 | 119.01 | 0.00 | 0.00 | 332.00 |
| 90.00 | Ericsson AIR 21, 1.3 | 3 | 8.396 | 9.235 | 0.70 | 0.75 | 9.59 | 0.000 | 0.000 | 88.58 | 0.00 | 0.00 | 244.50 |
| 90.00 | Andrew LNX-6515DS- | 3 | 8.396 | 9.235 | 0.70 | 0.75 | 18.00 | 0.000 | 0.000 | 166.25 | 0.00 | 0.00 | 153.90 |
| 90.00 | Flat Platform w/ Han | 1 | 8.396 | 9.235 | 1.00 | 1.00 | 42.40 | 0.000 | 0.000 | 391.57 | 0.00 | 0.00 | 2,000.00 |
| 100.0 | RFS FD9R6004/1C-3L | 6 | 8.652 | 9.517 | 0.33 | 0.75 | 0.55 | 0.000 | 0.000 | 5.23 | 0.00 | 0.00 | 18.60 |
| 100.0 | GPS | 1 | 8.750 | 9.625 | 0.50 | 0.75 | 0.38 | 0.000 | 4.000 | 3.61 | 0.00 | 14.44 | 10.00 |
| 100.0 | Alcatel-Lucent RRH2x | 3 | 8.652 | 9.517 | 0.50 | 0.75 | 2.43 | 0.000 | 0.000 | 23.13 | 0.00 | 0.00 | 132.00 |
| 100.0 | Rymsa MGD3-800TX | 3 | 8.652 | 9.517 | 0.69 | 0.75 | 5.19 | 0.000 | 0.000 | 49.35 | 0.00 | 0.00 | 46.20 |
| 100.0 | Antel BXA-171063/12C | 3 | 8.652 | 9.517 | 0.72 | 0.75 | 7.76 | 0.000 | 0.000 | 73.85 | 0.00 | 0.00 | 45.00 |
| 100.0 | RFS DB-T1-6Z-8AB-0Z | 1 | 8.652 | 9.517 | 1.00 | 0.75 | 3.60 | 0.000 | 0.000 | 34.26 | 0.00 | 0.00 | 44.00 |
| 100.0 | Antel BXA-70080/6CF | 3 | 8.652 | 9.517 | 0.72 | 0.75 | 9.46 | 0.000 | 0.000 | 90.04 | 0.00 | 0.00 | 54.00 |
| 100.0 | Powerwave Allgon | 3 | 8.652 | 9.517 | 0.65 | 0.75 | 11.89 | 0.000 | 0.000 | 113.16 | 0.00 | 0.00 | 99.00 |
| 100.0 | Flat Platform w/ Han | 1 | 8.652 | 9.517 | 1.00 | 1.00 | 39.60 | 0.000 | 0.000 | 376.89 | 0.00 | 0.00 | 2,000.00 |
| 110.0 | Swedcom ALP 9011- | 12 | 8.891 | 9.780 | 0.74 | 0.75 | 21.11 | 0.000 | 0.000 | 206.48 | 0.00 | 0.00 | 120.00 |
| 110.0 | Flat Platform w/ Han | 1 | 8.891 | 9.780 | 1.00 | 1.00 | 42.40 | 0.000 | 0.000 | 414.68 | 0.00 | 0.00 | 2,000.00 |
| 120.0 | DragonWave Horizon | 2 | 9.115 | 10.026 | 0.33 | 0.75 | 0.21 | 0.000 | 0.000 | 2.13 | 0.00 | 0.00 | 21.20 |
| 120.0 | NextNet BTS-2500 | 3 | 9.115 | 10.026 | 0.50 | 0.75 | 2.05 | 0.000 | 0.000 | 20.53 | 0.00 | 0.00 | 105.00 |
| 120.0 | Alcatel-Lucent 800 M | 3 | 9.115 | 10.026 | 0.50 | 0.75 | 2.32 | 0.000 | 0.000 | 23.24 | 0.00 | 0.00 | 192.00 |
| 120.0 | Alcatel-Lucent 1900 | 3 | 9.115 | 10.026 | 0.50 | 0.75 | 2.61 | 0.000 | 0.000 | 26.17 | 0.00 | 0.00 | 180.00 |
| 120.0 | Alcatel-Lucent TD-RR | 3 | 9.115 | 10.026 | 0.50 | 0.75 | 4.56 | 0.000 | 0.000 | 45.68 | 0.00 | 0.00 | 210.00 |
| 120.0 | Argus LLPX310R | 3 | 9.115 | 10.026 | 0.63 | 0.75 | 6.08 | 0.000 | 0.000 | 60.97 | 0.00 | 0.00 | 85.80 |
| 120.0 | DragonWave A-ANT- | 2 | 9.115 | 10.026 | 0.90 | 0.75 | 6.33 | 0.000 | 0.000 | 63.48 | 0.00 | 0.00 | 54.20 |
| 120.0 | RFS RFS APXV9TM14- | 3 | 9.115 | 10.026 | 0.66 | 0.75 | 9.41 | 0.000 | 0.000 | 94.40 | 0.00 | 0.00 | 165.30 |
| 120.0 | RFS APXVSPP18-C- | 3 | 9.115 | 10.026 | 0.69 | 0.75 | 12.45 | 0.000 | 0.000 | 124.84 | 0.00 | 0.00 | 171.00 |
| 120.0 | Flat Platform w/ Han | 1 | 9.115 | 10.026 | 1.00 | 1.00 | 39.50 | 0.000 | 0.000 | 396.04 | 0.00 | 0.00 | 2,000.00 |
| 131.0 | Powerwave Allgon | 6 | 9.447 | 10.391 | 0.50 | 0.75 | 0.52 | 0.000 | 5.000 | 5.38 | 0.00 | 26.89 | 33.00 |
| 131.0 | Powerwave Allgon | 6 | 9.346 | 10.281 | 0.50 | 0.75 | 2.48 | 0.000 | 0.000 | 25.44 | 0.00 | 0.00 | 84.60 |
| 131.0 | Raycap DC6-48-60-18- | 1 | 9.346 | 10.281 | 1.00 | 0.75 | 0.96 | 0.000 | 0.000 | 9.87 | 0.00 | 0.00 | 31.80 |
| 131.0 | Ericsson RRUS 11 (Ba | 6 | 9.346 | 10.281 | 0.50 | 0.75 | 5.78 | 0.000 | 0.000 | 59.45 | 0.00 | 0.00 | 264.00 |
| 131.0 | Powerwave Allgon 777 | 6 | 9.346 | 10.281 | 0.65 | 0.75 | 16.12 | 0.000 | 0.000 | 165.69 | 0.00 | 0.00 | 210.00 |
| 131.0 | Powerwave Allgon | 3 | 9.447 | 10.391 | 0.67 | 0.75 | 12.26 | 0.000 | 5.000 | 127.36 | 0.00 | 636.78 | 159.00 |
| 131.0 | Flat Platform w/ Han | 1 | 9.346 | 10.281 | 1.00 | 1.00 | 39.50 | 0.000 | 0.000 | 406.09 | 0.00 | 0.00 | 2,000.00 |
| 136.0 | Generic RCU (Remote | 6 | 9.506 | 10.456 | 0.33 | 0.80 | 0.25 | 0.000 | 3.000 | 2.65 | 0.00 | 7.95 | 6.00 |
| 136.0 | Kathrein Scala 742-2 | 3 | 9.506 | 10.456 | 0.73 | 0.80 | 6.75 | 0.000 | 3.000 | 70.53 | 0.00 | 211.59 | 67.50 |

4,018.23

13,728.90

Load Case: 1.0D + 1.0W**Serviceability 60 mph****23 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 | FX (lb) | Dead Load (lb) |
|-------------------------|----------------------|--------------------|----------------|------|--------------------------|----------------|----------------|-------------|-------|------------------------|------------|----------------------|
| 5.00 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 0.82 | 0.00 | 6.129 | 0.183 | 1.250 | 0.00 | 24.60 |
| 5.00 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.82 | 0.00 | 0.000 | 0.000 | 0.000 | 0.00 | 334.00 |
| 5.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 6.129 | 0.183 | 1.250 | 0.00 | 0.40 |
| 5.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.183 | 1.250 | 0.00 | 0.14 |
| 5.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.183 | 1.250 | 0.00 | 3.10 |
| 5.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.183 | 1.250 | 0.00 | 37.79 |
| 5.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.183 | 1.250 | 0.00 | 20.00 |
| 5.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.183 | 1.250 | 0.00 | 1.50 |
| 5.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.183 | 1.250 | 0.00 | 18.25 |
| 5.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.183 | 1.250 | 0.00 | 1.35 |
| 5.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.183 | 1.250 | 0.00 | 49.19 |
| 5.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.183 | 1.250 | 0.00 | 49.19 |
| 5.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.183 | 1.250 | 0.00 | 6.50 |
| 5.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.183 | 1.250 | 0.00 | 0.75 |
| 5.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.183 | 1.250 | 0.00 | 5.25 |
| 5.00 | (14) 1 5/8" Coax | Yes | 5.00 | 0.00 | 3.96 | 1.65 | 0.00 | 6.129 | 0.183 | 1.250 | 0.00 | 57.39 |
| 5.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.183 | 1.250 | 0.00 | 1.50 |
| 5.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.183 | 1.250 | 0.00 | 1.50 |
| 5.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.183 | 1.250 | 0.00 | 1.50 |
| 5.00 | (4) DYWIDAG | Yes | 5.00 | 0.00 | 2.50 | 1.04 | 0.00 | 6.129 | 0.183 | 1.250 | 0.00 | 0.00 |
| 10.00 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 0.82 | 0.00 | 6.129 | 0.188 | 1.263 | 0.00 | 24.60 |
| 10.00 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.82 | 0.00 | 0.000 | 0.000 | 0.000 | 0.00 | 334.00 |
| 10.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 6.129 | 0.188 | 1.263 | 0.00 | 0.40 |
| 10.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.188 | 1.263 | 0.00 | 0.14 |
| 10.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.188 | 1.263 | 0.00 | 3.10 |
| 10.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.188 | 1.263 | 0.00 | 37.79 |
| 10.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.188 | 1.263 | 0.00 | 20.00 |
| 10.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.188 | 1.263 | 0.00 | 1.50 |
| 10.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.188 | 1.263 | 0.00 | 18.25 |
| 10.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.188 | 1.263 | 0.00 | 1.35 |
| 10.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.188 | 1.263 | 0.00 | 49.19 |
| 10.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.188 | 1.263 | 0.00 | 49.19 |
| 10.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.188 | 1.263 | 0.00 | 6.50 |
| 10.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.188 | 1.263 | 0.00 | 0.75 |
| 10.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.188 | 1.263 | 0.00 | 5.25 |
| 10.00 | (14) 1 5/8" Coax | Yes | 5.00 | 0.00 | 3.96 | 1.65 | 0.00 | 6.129 | 0.188 | 1.263 | 0.00 | 57.39 |
| 10.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.188 | 1.263 | 0.00 | 1.50 |
| 10.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.188 | 1.263 | 0.00 | 1.50 |
| 10.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.188 | 1.263 | 0.00 | 1.50 |
| 10.00 | (4) DYWIDAG | Yes | 5.00 | 0.00 | 2.50 | 1.04 | 0.00 | 6.129 | 0.188 | 1.263 | 0.00 | 0.00 |
| 15.00 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 0.82 | 0.00 | 6.129 | 0.193 | 1.278 | 0.00 | 24.60 |
| 15.00 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.82 | 0.00 | 0.000 | 0.000 | 0.000 | 0.00 | 334.00 |
| 15.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 6.129 | 0.193 | 1.278 | 0.00 | 0.40 |
| 15.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.193 | 1.278 | 0.00 | 0.14 |
| 15.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.193 | 1.278 | 0.00 | 3.10 |
| 15.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.193 | 1.278 | 0.00 | 37.79 |
| 15.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.193 | 1.278 | 0.00 | 20.00 |
| 15.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.193 | 1.278 | 0.00 | 1.50 |
| 15.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.193 | 1.278 | 0.00 | 18.25 |
| 15.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.193 | 1.278 | 0.00 | 1.35 |
| 15.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.193 | 1.278 | 0.00 | 49.19 |

Load Case: 1.0D + 1.0W**Serviceability 60 mph****23 Iterations****Gust Response Factor : 1.10****Wind Importance Factor : 1.00****Dead Load Factor : 1.00****Wind Load Factor : 1.00**

| | | | | | | | | | | | |
|-------|----------------------|-----|------|------|------|------|-------|-------|-------|-------|--------|
| 15.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.193 | 1.278 | 0.00 | 49.19 |
| 15.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.193 | 1.278 | 0.00 | 6.50 |
| 15.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.193 | 1.278 | 0.00 | 0.75 |
| 15.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.193 | 1.278 | 0.00 | 5.25 |
| 15.00 | (14) 1 5/8" Coax | Yes | 5.00 | 0.00 | 3.96 | 1.65 | 0.00 | 6.129 | 0.193 | 1.278 | 0.00 |
| 15.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.193 | 1.278 | 0.00 | 1.50 |
| 15.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.193 | 1.278 | 0.00 | 1.50 |
| 15.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.193 | 1.278 | 0.00 | 1.50 |
| 15.00 | (4) DYWIDAG | Yes | 5.00 | 0.00 | 2.50 | 1.04 | 0.00 | 6.129 | 0.193 | 1.278 | 0.00 |
| 20.00 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 0.82 | 0.00 | 6.129 | 0.197 | 1.292 | 0.00 |
| 20.00 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.82 | 0.00 | 0.000 | 0.000 | 0.000 | 334.00 |
| 20.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 6.129 | 0.197 | 1.292 | 0.00 |
| 20.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.197 | 1.292 | 0.00 |
| 20.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.197 | 1.292 | 0.00 |
| 20.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.197 | 1.292 | 0.00 |
| 20.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.197 | 1.292 | 0.00 |
| 20.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.197 | 1.292 | 0.00 |
| 20.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.197 | 1.292 | 0.00 |
| 20.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.197 | 1.292 | 0.00 |
| 20.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.197 | 1.292 | 0.00 |
| 20.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.197 | 1.292 | 0.00 |
| 20.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.197 | 1.292 | 0.00 |
| 20.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.197 | 1.292 | 0.00 |
| 20.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.197 | 1.292 | 0.00 |
| 20.00 | (14) 1 5/8" Coax | Yes | 5.00 | 0.00 | 3.96 | 1.65 | 0.00 | 6.129 | 0.197 | 1.292 | 0.00 |
| 20.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.197 | 1.292 | 0.00 |
| 20.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.197 | 1.292 | 0.00 |
| 20.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.197 | 1.292 | 0.00 |
| 20.00 | (4) DYWIDAG | Yes | 5.00 | 0.00 | 2.50 | 1.04 | 0.00 | 6.129 | 0.197 | 1.292 | 0.00 |
| 25.00 | (6) 1 5/8" Coax | Yes | 5.00 | 1.20 | 1.98 | 0.82 | 0.99 | 6.129 | 0.203 | 0.000 | 6.67 |
| 25.00 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.82 | 0.00 | 0.000 | 0.000 | 0.000 | 334.00 |
| 25.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 6.129 | 0.203 | 0.000 | 0.00 |
| 25.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.203 | 0.000 | 0.14 |
| 25.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.203 | 0.000 | 3.10 |
| 25.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.203 | 0.000 | 37.79 |
| 25.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.203 | 0.000 | 20.00 |
| 25.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.203 | 0.000 | 1.50 |
| 25.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.203 | 0.000 | 18.25 |
| 25.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.203 | 0.000 | 1.35 |
| 25.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.203 | 0.000 | 49.19 |
| 25.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.203 | 0.000 | 49.19 |
| 25.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.203 | 0.000 | 6.50 |
| 25.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.203 | 0.000 | 0.75 |
| 25.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.203 | 0.000 | 5.25 |
| 25.00 | (14) 1 5/8" Coax | Yes | 5.00 | 1.20 | 3.96 | 1.65 | 1.98 | 6.129 | 0.203 | 0.000 | 13.35 |
| 25.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.203 | 0.000 | 1.50 |
| 25.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.203 | 0.000 | 1.50 |
| 25.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.203 | 0.000 | 1.50 |
| 25.00 | (4) DYWIDAG | Yes | 5.00 | 1.20 | 2.50 | 1.04 | 1.25 | 6.129 | 0.203 | 0.000 | 8.43 |
| 30.00 | (6) 1 5/8" Coax | Yes | 5.00 | 1.20 | 1.98 | 0.82 | 0.99 | 6.129 | 0.208 | 0.000 | 6.67 |
| 30.00 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.82 | 0.00 | 0.000 | 0.000 | 0.000 | 334.00 |
| 30.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 6.129 | 0.208 | 0.000 | 0.40 |
| 30.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.208 | 0.000 | 0.14 |
| 30.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.208 | 0.000 | 3.10 |
| 30.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.208 | 0.000 | 37.79 |
| 30.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.208 | 0.000 | 20.00 |
| 30.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.208 | 0.000 | 1.50 |

| Load Case: 1.0D + 1.0W | | Serviceability 60 mph | | | | | | | | 23 Iterations | |
|------------------------------------|----------------------|------------------------------|------|------|------|------|-------|-------|-------|--------------------------------------|--------|
| | | | | | | | | | | Wind Importance Factor : 1.00 | |
| Gust Response Factor : 1.10 | | | | | | | | | | | |
| Dead Load Factor : 1.00 | | | | | | | | | | | |
| Wind Load Factor : 1.00 | | | | | | | | | | | |
| 30.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.208 | 0.000 | 0.00 | 18.25 |
| 30.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.208 | 0.000 | 0.00 | 1.35 |
| 30.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.208 | 0.000 | 0.00 | 49.19 |
| 30.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.208 | 0.000 | 0.00 | 49.19 |
| 30.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.208 | 0.000 | 0.00 | 6.50 |
| 30.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.208 | 0.000 | 0.00 | 0.75 |
| 30.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.208 | 0.000 | 0.00 | 5.25 |
| 30.00 | (14) 1 5/8" Coax | Yes | 5.00 | 1.20 | 3.96 | 1.65 | 1.98 | 6.129 | 0.208 | 0.000 | 13.35 |
| 30.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.208 | 0.000 | 0.00 | 1.50 |
| 30.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 6.129 | 0.208 | 0.000 | 0.00 | 1.50 |
| 30.00 | (4) DYWIDAG | Yes | 5.00 | 1.20 | 2.50 | 1.04 | 1.25 | 6.129 | 0.208 | 0.000 | 8.43 |
| 35.00 | (6) 1 5/8" Coax | Yes | 5.00 | 1.20 | 1.98 | 0.82 | 0.99 | 6.276 | 0.214 | 0.000 | 6.83 |
| 35.00 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.82 | 0.00 | 0.000 | 0.000 | 0.00 | 334.00 |
| 35.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 6.276 | 0.214 | 0.000 | 0.00 |
| 35.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.276 | 0.214 | 0.000 | 0.14 |
| 35.00 | (2) 0.65" 8 AWG2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.276 | 0.214 | 0.000 | 3.10 |
| 35.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.276 | 0.214 | 0.000 | 37.79 |
| 35.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.276 | 0.214 | 0.000 | 20.00 |
| 35.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.276 | 0.214 | 0.000 | 1.50 |
| 35.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.276 | 0.214 | 0.000 | 18.25 |
| 35.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.276 | 0.214 | 0.000 | 1.35 |
| 35.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.276 | 0.214 | 0.000 | 49.19 |
| 35.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.276 | 0.214 | 0.000 | 49.19 |
| 35.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.276 | 0.214 | 0.000 | 6.50 |
| 35.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.276 | 0.214 | 0.000 | 0.75 |
| 35.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.276 | 0.214 | 0.000 | 5.25 |
| 35.00 | (14) 1 5/8" Coax | Yes | 5.00 | 1.20 | 3.96 | 1.65 | 1.98 | 6.276 | 0.214 | 0.000 | 13.67 |
| 35.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.276 | 0.214 | 0.000 | 1.50 |
| 35.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.276 | 0.214 | 0.000 | 1.50 |
| 35.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.276 | 0.214 | 0.000 | 1.50 |
| 35.00 | (4) DYWIDAG | Yes | 5.00 | 1.20 | 2.50 | 1.04 | 1.25 | 6.276 | 0.214 | 0.000 | 8.63 |
| 40.00 | (6) 1 5/8" Coax | Yes | 5.00 | 1.20 | 1.98 | 0.82 | 0.99 | 6.538 | 0.220 | 0.000 | 7.12 |
| 40.00 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.82 | 0.00 | 0.000 | 0.000 | 0.00 | 334.00 |
| 40.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 6.538 | 0.220 | 0.000 | 0.40 |
| 40.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.538 | 0.220 | 0.000 | 0.14 |
| 40.00 | (2) 0.65" 8 AWG2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.538 | 0.220 | 0.000 | 3.10 |
| 40.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.538 | 0.220 | 0.000 | 37.79 |
| 40.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.538 | 0.220 | 0.000 | 20.00 |
| 40.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.538 | 0.220 | 0.000 | 1.50 |
| 40.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.538 | 0.220 | 0.000 | 18.25 |
| 40.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.538 | 0.220 | 0.000 | 1.35 |
| 40.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.538 | 0.220 | 0.000 | 49.19 |
| 40.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.538 | 0.220 | 0.000 | 49.19 |
| 40.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.538 | 0.220 | 0.000 | 6.50 |
| 40.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.538 | 0.220 | 0.000 | 0.75 |
| 40.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.538 | 0.220 | 0.000 | 5.25 |
| 40.00 | (14) 1 5/8" Coax | Yes | 5.00 | 1.20 | 3.96 | 1.65 | 1.98 | 6.538 | 0.220 | 0.000 | 14.24 |
| 40.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.538 | 0.220 | 0.000 | 1.50 |
| 40.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.538 | 0.220 | 0.000 | 1.50 |
| 40.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.538 | 0.220 | 0.000 | 1.50 |
| 40.00 | (4) DYWIDAG | Yes | 5.00 | 1.20 | 2.50 | 1.04 | 1.25 | 6.538 | 0.220 | 0.000 | 8.99 |
| 40.24 | (6) 1 5/8" Coax | Yes | 0.24 | 1.20 | 1.98 | 0.04 | 0.05 | 6.665 | 0.224 | 0.000 | 0.35 |
| 40.24 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.04 | 0.00 | 0.000 | 0.000 | 0.00 | 16.28 |
| 40.24 | (1) 3/8" Coax | No | 0.24 | 0.00 | 0.44 | 0.00 | 0.00 | 6.665 | 0.224 | 0.000 | 0.02 |
| 40.24 | (1) 0.28" RG-6 | No | 0.24 | 0.00 | 0.00 | 0.00 | 0.00 | 6.665 | 0.224 | 0.000 | 0.01 |
| 40.24 | (2) 0.65" 8 AWG2C | No | 0.24 | 0.00 | 0.00 | 0.00 | 0.00 | 6.665 | 0.224 | 0.000 | 0.15 |

Load Case: 1.0D + 1.0W**Serviceability 60 mph****23 Iterations****Gust Response Factor : 1.10****Wind Importance Factor : 1.00****Dead Load Factor : 1.00****Wind Load Factor : 1.00**

| | | | | | | | | | | | |
|-------|----------------------|-----|------|------|------|------|-------|-------|-------|-------|--------|
| 40.24 | (12) 1 1/4" Coax | No | 0.24 | 0.00 | 0.00 | 0.00 | 6.665 | 0.224 | 0.000 | 0.00 | 1.84 |
| 40.24 | (4) 1 1/4" Hybriflex | No | 0.24 | 0.00 | 0.00 | 0.00 | 6.665 | 0.224 | 0.000 | 0.00 | 0.97 |
| 40.24 | (2) 1/2" Coax | No | 0.24 | 0.00 | 0.00 | 0.00 | 6.665 | 0.224 | 0.000 | 0.00 | 0.07 |
| 40.24 | (1) 2" Conduit | No | 0.24 | 0.00 | 0.00 | 0.00 | 6.665 | 0.224 | 0.000 | 0.00 | 0.89 |
| 40.24 | (6) 5/16" Coax | No | 0.24 | 0.00 | 0.00 | 0.00 | 6.665 | 0.224 | 0.000 | 0.00 | 0.07 |
| 40.24 | (12) 1 5/8" Coax | No | 0.24 | 0.00 | 0.00 | 0.00 | 6.665 | 0.224 | 0.000 | 0.00 | 2.40 |
| 40.24 | (12) 1 5/8" Coax | No | 0.24 | 0.00 | 0.00 | 0.00 | 6.665 | 0.224 | 0.000 | 0.00 | 2.40 |
| 40.24 | (1) 1 5/8" Hybriflex | No | 0.24 | 0.00 | 0.00 | 0.00 | 6.665 | 0.224 | 0.000 | 0.00 | 0.32 |
| 40.24 | (1) 1/2" Coax | No | 0.24 | 0.00 | 0.00 | 0.00 | 6.665 | 0.224 | 0.000 | 0.00 | 0.04 |
| 40.24 | (1) 1 1/4" Fiber | No | 0.24 | 0.00 | 0.00 | 0.00 | 6.665 | 0.224 | 0.000 | 0.00 | 0.26 |
| 40.24 | (14) 1 5/8" Coax | Yes | 0.24 | 1.20 | 3.96 | 0.08 | 0.10 | 6.665 | 0.224 | 0.000 | 0.71 |
| 40.24 | (2) 1/2" Coax | No | 0.24 | 0.00 | 0.00 | 0.00 | 6.665 | 0.224 | 0.000 | 0.00 | 0.07 |
| 40.24 | (2) 1/2" Coax | No | 0.24 | 0.00 | 0.00 | 0.00 | 6.665 | 0.224 | 0.000 | 0.00 | 0.07 |
| 40.24 | (2) 1/2" Coax | No | 0.24 | 0.00 | 0.00 | 0.00 | 6.665 | 0.224 | 0.000 | 0.00 | 0.07 |
| 40.24 | (4) DYWIDAG | Yes | 0.24 | 1.20 | 2.50 | 0.05 | 0.06 | 6.665 | 0.224 | 0.000 | 0.45 |
| 45.00 | (6) 1 5/8" Coax | Yes | 4.76 | 1.20 | 1.98 | 0.78 | 0.94 | 6.781 | 0.227 | 0.000 | 7.02 |
| 45.00 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.78 | 0.00 | 0.000 | 0.000 | 0.000 | 317.72 |
| 45.00 | (1) 3/8" Coax | No | 4.76 | 0.00 | 0.44 | 0.00 | 0.00 | 6.781 | 0.227 | 0.000 | 0.00 |
| 45.00 | (1) 0.28" RG-6 | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 6.781 | 0.227 | 0.000 | 0.00 |
| 45.00 | (2) 0.65" 8 AWG 2C | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 6.781 | 0.227 | 0.000 | 0.00 |
| 45.00 | (12) 1 1/4" Coax | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 6.781 | 0.227 | 0.000 | 0.00 |
| 45.00 | (4) 1 1/4" Hybriflex | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 6.781 | 0.227 | 0.000 | 19.03 |
| 45.00 | (2) 1/2" Coax | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 6.781 | 0.227 | 0.000 | 1.43 |
| 45.00 | (1) 2" Conduit | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 6.781 | 0.227 | 0.000 | 0.00 |
| 45.00 | (6) 5/16" Coax | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 6.781 | 0.227 | 0.000 | 1.28 |
| 45.00 | (12) 1 5/8" Coax | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 6.781 | 0.227 | 0.000 | 0.00 |
| 45.00 | (12) 1 5/8" Coax | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 6.781 | 0.227 | 0.000 | 46.80 |
| 45.00 | (1) 1 5/8" Hybriflex | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 6.781 | 0.227 | 0.000 | 6.18 |
| 45.00 | (1) 1/2" Coax | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 6.781 | 0.227 | 0.000 | 0.71 |
| 45.00 | (1) 1 1/4" Fiber | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 6.781 | 0.227 | 0.000 | 4.99 |
| 45.00 | (14) 1 5/8" Coax | Yes | 4.76 | 1.20 | 3.96 | 1.57 | 1.88 | 6.781 | 0.227 | 0.000 | 14.05 |
| 45.00 | (2) 1/2" Coax | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 6.781 | 0.227 | 0.000 | 1.43 |
| 45.00 | (2) 1/2" Coax | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 6.781 | 0.227 | 0.000 | 1.43 |
| 45.00 | (2) 1/2" Coax | No | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 | 6.781 | 0.227 | 0.000 | 1.43 |
| 45.00 | (4) DYWIDAG | Yes | 4.76 | 1.20 | 2.50 | 0.99 | 1.19 | 6.781 | 0.227 | 0.000 | 8.87 |
| 45.40 | (6) 1 5/8" Coax | Yes | 0.40 | 1.20 | 1.98 | 0.07 | 0.08 | 6.896 | 0.230 | 0.000 | 0.60 |
| 45.40 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.07 | 0.00 | 0.000 | 0.000 | 0.000 | 26.71 |
| 45.40 | (1) 3/8" Coax | No | 0.40 | 0.00 | 0.44 | 0.00 | 0.00 | 6.896 | 0.230 | 0.000 | 0.03 |
| 45.40 | (1) 0.28" RG-6 | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 6.896 | 0.230 | 0.000 | 0.01 |
| 45.40 | (2) 0.65" 8 AWG 2C | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 6.896 | 0.230 | 0.000 | 0.25 |
| 45.40 | (12) 1 1/4" Coax | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 6.896 | 0.230 | 0.000 | 3.02 |
| 45.40 | (4) 1 1/4" Hybriflex | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 6.896 | 0.230 | 0.000 | 1.60 |
| 45.40 | (2) 1/2" Coax | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 6.896 | 0.230 | 0.000 | 0.12 |
| 45.40 | (1) 2" Conduit | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 6.896 | 0.230 | 0.000 | 1.46 |
| 45.40 | (6) 5/16" Coax | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 6.896 | 0.230 | 0.000 | 0.11 |
| 45.40 | (12) 1 5/8" Coax | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 6.896 | 0.230 | 0.000 | 3.93 |
| 45.40 | (12) 1 5/8" Coax | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 6.896 | 0.230 | 0.000 | 3.93 |
| 45.40 | (1) 1 5/8" Hybriflex | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 6.896 | 0.230 | 0.000 | 0.52 |
| 45.40 | (1) 1/2" Coax | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 6.896 | 0.230 | 0.000 | 0.06 |
| 45.40 | (1) 1 1/4" Fiber | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 6.896 | 0.230 | 0.000 | 0.42 |
| 45.40 | (14) 1 5/8" Coax | Yes | 0.40 | 1.20 | 3.96 | 0.13 | 0.16 | 6.896 | 0.230 | 0.000 | 1.20 |
| 45.40 | (2) 1/2" Coax | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 6.896 | 0.230 | 0.000 | 0.12 |
| 45.40 | (2) 1/2" Coax | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 6.896 | 0.230 | 0.000 | 0.12 |
| 45.40 | (2) 1/2" Coax | No | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 6.896 | 0.230 | 0.000 | 0.12 |
| 45.40 | (4) DYWIDAG | Yes | 0.40 | 1.20 | 2.50 | 0.08 | 0.10 | 6.896 | 0.230 | 0.000 | 0.76 |
| 50.00 | (6) 1 5/8" Coax | Yes | 4.60 | 1.20 | 1.98 | 0.76 | 0.91 | 7.003 | 0.229 | 0.000 | 7.02 |
| 50.00 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.76 | 0.00 | 0.000 | 0.000 | 0.000 | 307.28 |

Load Case: 1.0D + 1.0W**Serviceability 60 mph****23 Iterations****Gust Response Factor : 1.10****Wind Importance Factor : 1.00****Dead Load Factor : 1.00****Wind Load Factor : 1.00**

| | | | | | | | | | | | | |
|-------|----------------------|-----|------|------|------|------|------|-------|-------|-------|-------|--------|
| 50.00 | (1) 3/8" Coax | No | 4.60 | 0.00 | 0.44 | 0.00 | 0.00 | 7.003 | 0.229 | 0.000 | 0.00 | 0.37 |
| 50.00 | (1) 0.28" RG-6 | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 7.003 | 0.229 | 0.000 | 0.00 | 0.13 |
| 50.00 | (2) 0.65" 8 AWG 2C | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 7.003 | 0.229 | 0.000 | 0.00 | 2.85 |
| 50.00 | (12) 1 1/4" Coax | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 7.003 | 0.229 | 0.000 | 0.00 | 34.77 |
| 50.00 | (4) 1 1/4" Hybriflex | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 7.003 | 0.229 | 0.000 | 0.00 | 18.40 |
| 50.00 | (2) 1/2" Coax | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 7.003 | 0.229 | 0.000 | 0.00 | 1.38 |
| 50.00 | (1) 2" Conduit | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 7.003 | 0.229 | 0.000 | 0.00 | 16.79 |
| 50.00 | (6) 5/16" Coax | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 7.003 | 0.229 | 0.000 | 0.00 | 1.24 |
| 50.00 | (12) 1 5/8" Coax | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 7.003 | 0.229 | 0.000 | 0.00 | 45.26 |
| 50.00 | (12) 1 5/8" Coax | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 7.003 | 0.229 | 0.000 | 0.00 | 45.26 |
| 50.00 | (1) 1 5/8" Hybriflex | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 7.003 | 0.229 | 0.000 | 0.00 | 5.98 |
| 50.00 | (1) 1/2" Coax | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 7.003 | 0.229 | 0.000 | 0.00 | 0.69 |
| 50.00 | (1) 1 1/4" Fiber | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 7.003 | 0.229 | 0.000 | 0.00 | 4.83 |
| 50.00 | (14) 1 5/8" Coax | Yes | 4.60 | 1.20 | 3.96 | 1.52 | 1.82 | 7.003 | 0.229 | 0.000 | 14.03 | 52.80 |
| 50.00 | (2) 1/2" Coax | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 7.003 | 0.229 | 0.000 | 0.00 | 1.38 |
| 50.00 | (2) 1/2" Coax | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 7.003 | 0.229 | 0.000 | 0.00 | 1.38 |
| 50.00 | (2) 1/2" Coax | No | 4.60 | 0.00 | 0.00 | 0.00 | 0.00 | 7.003 | 0.229 | 0.000 | 0.00 | 1.38 |
| 50.00 | (4) DYWIDAG | Yes | 4.60 | 1.20 | 2.50 | 0.96 | 1.15 | 7.003 | 0.229 | 0.000 | 8.86 | 0.00 |
| 55.00 | (6) 1 5/8" Coax | Yes | 5.00 | 1.20 | 1.98 | 0.82 | 0.99 | 7.197 | 0.236 | 0.000 | 7.84 | 24.60 |
| 55.00 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.82 | 0.00 | 0.000 | 0.000 | 0.000 | 0.00 | 334.00 |
| 55.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 7.197 | 0.236 | 0.000 | 0.00 | 0.40 |
| 55.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.197 | 0.236 | 0.000 | 0.00 | 0.14 |
| 55.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.197 | 0.236 | 0.000 | 0.00 | 3.10 |
| 55.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.197 | 0.236 | 0.000 | 0.00 | 37.79 |
| 55.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.197 | 0.236 | 0.000 | 0.00 | 20.00 |
| 55.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.197 | 0.236 | 0.000 | 0.00 | 1.50 |
| 55.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.197 | 0.236 | 0.000 | 0.00 | 18.25 |
| 55.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.197 | 0.236 | 0.000 | 0.00 | 1.35 |
| 55.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.197 | 0.236 | 0.000 | 0.00 | 49.19 |
| 55.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.197 | 0.236 | 0.000 | 0.00 | 49.19 |
| 55.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.197 | 0.236 | 0.000 | 0.00 | 6.50 |
| 55.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.197 | 0.236 | 0.000 | 0.00 | 0.75 |
| 55.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.197 | 0.236 | 0.000 | 0.00 | 5.25 |
| 55.00 | (14) 1 5/8" Coax | Yes | 5.00 | 1.20 | 3.96 | 1.65 | 1.98 | 7.197 | 0.236 | 0.000 | 15.68 | 57.39 |
| 55.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.197 | 0.236 | 0.000 | 0.00 | 1.50 |
| 55.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.197 | 0.236 | 0.000 | 0.00 | 1.50 |
| 55.00 | (4) DYWIDAG | Yes | 5.00 | 1.20 | 2.50 | 1.04 | 1.25 | 7.197 | 0.236 | 0.000 | 9.90 | 0.00 |
| 55.68 | (6) 1 5/8" Coax | Yes | 0.68 | 1.20 | 1.98 | 0.11 | 0.13 | 7.306 | 0.240 | 0.000 | 1.08 | 3.33 |
| 55.68 | #20 All Thread Bar | Yes | 0.00 | 0.00 | 1.98 | 0.11 | 0.00 | 0.000 | 0.000 | 0.000 | 0.00 | 45.22 |
| 55.68 | (1) 3/8" Coax | No | 0.68 | 0.00 | 0.44 | 0.00 | 0.00 | 7.306 | 0.240 | 0.000 | 0.00 | 0.05 |
| 55.68 | (1) 0.28" RG-6 | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 7.306 | 0.240 | 0.000 | 0.00 | 0.02 |
| 55.68 | (2) 0.65" 8 AWG 2C | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 7.306 | 0.240 | 0.000 | 0.00 | 0.42 |
| 55.68 | (12) 1 1/4" Coax | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 7.306 | 0.240 | 0.000 | 0.00 | 5.12 |
| 55.68 | (4) 1 1/4" Hybriflex | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 7.306 | 0.240 | 0.000 | 0.00 | 2.71 |
| 55.68 | (2) 1/2" Coax | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 7.306 | 0.240 | 0.000 | 0.00 | 0.20 |
| 55.68 | (1) 2" Conduit | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 7.306 | 0.240 | 0.000 | 0.00 | 2.47 |
| 55.68 | (6) 5/16" Coax | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 7.306 | 0.240 | 0.000 | 0.00 | 0.18 |
| 55.68 | (12) 1 5/8" Coax | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 7.306 | 0.240 | 0.000 | 0.00 | 6.66 |
| 55.68 | (12) 1 5/8" Coax | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 7.306 | 0.240 | 0.000 | 0.00 | 6.66 |
| 55.68 | (1) 1 5/8" Hybriflex | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 7.306 | 0.240 | 0.000 | 0.00 | 0.88 |
| 55.68 | (1) 1/2" Coax | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 7.306 | 0.240 | 0.000 | 0.00 | 0.10 |
| 55.68 | (1) 1 1/4" Fiber | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 7.306 | 0.240 | 0.000 | 0.00 | 0.71 |
| 55.68 | (14) 1 5/8" Coax | Yes | 0.68 | 1.20 | 3.96 | 0.22 | 0.27 | 7.306 | 0.240 | 0.000 | 2.15 | 7.77 |
| 55.68 | (2) 1/2" Coax | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 7.306 | 0.240 | 0.000 | 0.00 | 0.20 |
| 55.68 | (2) 1/2" Coax | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 7.306 | 0.240 | 0.000 | 0.00 | 0.20 |
| 55.68 | (2) 1/2" Coax | No | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 7.306 | 0.240 | 0.000 | 0.00 | 0.20 |

Load Case: 1.0D + 1.0W**Serviceability 60 mph****23 Iterations****Gust Response Factor : 1.10****Wind Importance Factor : 1.00****Dead Load Factor : 1.00****Wind Load Factor : 1.00**

| | | | | | | | | | | | | |
|-------|----------------------|-----|------|------|------|------|------|-------|-------|-------|-------|-------|
| 55.68 | (4) DYWIDAG | Yes | 0.68 | 1.20 | 2.50 | 0.14 | 0.17 | 7.306 | 0.240 | 0.000 | 1.36 | 0.00 |
| 60.00 | (6) 1 5/8" Coax | Yes | 4.32 | 1.20 | 1.98 | 0.71 | 0.86 | 7.399 | 0.244 | 0.000 | 6.97 | 21.27 |
| 60.00 | (1) 3/8" Coax | No | 4.32 | 0.00 | 0.44 | 0.00 | 0.00 | 7.399 | 0.244 | 0.000 | 0.00 | 0.35 |
| 60.00 | (1) 0.28" RG-6 | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 7.399 | 0.244 | 0.000 | 0.00 | 0.12 |
| 60.00 | (2) 0.65" 8 AWG 2C | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 7.399 | 0.244 | 0.000 | 0.00 | 2.68 |
| 60.00 | (12) 1 1/4" Coax | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 7.399 | 0.244 | 0.000 | 0.00 | 32.68 |
| 60.00 | (4) 1 1/4" Hybriflex | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 7.399 | 0.244 | 0.000 | 0.00 | 17.29 |
| 60.00 | (2) 1/2" Coax | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 7.399 | 0.244 | 0.000 | 0.00 | 1.30 |
| 60.00 | (1) 2" Conduit | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 7.399 | 0.244 | 0.000 | 0.00 | 15.78 |
| 60.00 | (6) 5/16" Coax | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 7.399 | 0.244 | 0.000 | 0.00 | 1.17 |
| 60.00 | (12) 1 5/8" Coax | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 7.399 | 0.244 | 0.000 | 0.00 | 42.53 |
| 60.00 | (12) 1 5/8" Coax | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 7.399 | 0.244 | 0.000 | 0.00 | 42.53 |
| 60.00 | (1) 1 5/8" Hybriflex | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 7.399 | 0.244 | 0.000 | 0.00 | 5.62 |
| 60.00 | (1) 1/2" Coax | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 7.399 | 0.244 | 0.000 | 0.00 | 0.65 |
| 60.00 | (1) 1 1/4" Fiber | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 7.399 | 0.244 | 0.000 | 0.00 | 4.54 |
| 60.00 | (14) 1 5/8" Coax | Yes | 4.32 | 1.20 | 3.96 | 1.43 | 1.71 | 7.399 | 0.244 | 0.000 | 13.93 | 49.62 |
| 60.00 | (2) 1/2" Coax | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 7.399 | 0.244 | 0.000 | 0.00 | 1.30 |
| 60.00 | (2) 1/2" Coax | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 7.399 | 0.244 | 0.000 | 0.00 | 1.30 |
| 60.00 | (2) 1/2" Coax | No | 4.32 | 0.00 | 0.00 | 0.00 | 0.00 | 7.399 | 0.244 | 0.000 | 0.00 | 1.30 |
| 60.00 | (4) DYWIDAG | Yes | 4.32 | 1.20 | 2.50 | 0.90 | 1.08 | 7.399 | 0.244 | 0.000 | 8.80 | 0.00 |
| 65.00 | (6) 1 5/8" Coax | Yes | 5.00 | 1.20 | 1.98 | 0.82 | 0.99 | 7.565 | 0.221 | 0.000 | 8.24 | 24.60 |
| 65.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 7.565 | 0.221 | 0.000 | 0.00 | 0.40 |
| 65.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.565 | 0.221 | 0.000 | 0.00 | 0.14 |
| 65.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.565 | 0.221 | 0.000 | 0.00 | 3.10 |
| 65.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.565 | 0.221 | 0.000 | 0.00 | 37.79 |
| 65.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.565 | 0.221 | 0.000 | 0.00 | 20.00 |
| 65.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.565 | 0.221 | 0.000 | 0.00 | 1.50 |
| 65.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.565 | 0.221 | 0.000 | 0.00 | 18.25 |
| 65.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.565 | 0.221 | 0.000 | 0.00 | 1.35 |
| 65.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.565 | 0.221 | 0.000 | 0.00 | 49.19 |
| 65.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.565 | 0.221 | 0.000 | 0.00 | 49.19 |
| 65.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.565 | 0.221 | 0.000 | 0.00 | 6.50 |
| 65.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.565 | 0.221 | 0.000 | 0.00 | 0.75 |
| 65.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.565 | 0.221 | 0.000 | 0.00 | 5.25 |
| 65.00 | (14) 1 5/8" Coax | Yes | 5.00 | 1.20 | 3.96 | 1.65 | 1.98 | 7.565 | 0.221 | 0.000 | 16.48 | 57.39 |
| 65.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.565 | 0.221 | 0.000 | 0.00 | 1.50 |
| 65.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.565 | 0.221 | 0.000 | 0.00 | 1.50 |
| 65.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.565 | 0.221 | 0.000 | 0.00 | 1.50 |
| 65.00 | (4) DYWIDAG | Yes | 3.00 | 1.20 | 2.50 | 0.63 | 0.75 | 7.565 | 0.221 | 0.000 | 6.24 | 0.00 |
| 70.00 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 0.82 | 0.00 | 7.733 | 0.183 | 1.248 | 0.00 | 24.60 |
| 70.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 7.733 | 0.183 | 1.248 | 0.00 | 0.40 |
| 70.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.733 | 0.183 | 1.248 | 0.00 | 0.14 |
| 70.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.733 | 0.183 | 1.248 | 0.00 | 3.10 |
| 70.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.733 | 0.183 | 1.248 | 0.00 | 37.79 |
| 70.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.733 | 0.183 | 1.248 | 0.00 | 20.00 |
| 70.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.733 | 0.183 | 1.248 | 0.00 | 1.50 |
| 70.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.733 | 0.183 | 1.248 | 0.00 | 18.25 |
| 70.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.733 | 0.183 | 1.248 | 0.00 | 1.35 |
| 70.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.733 | 0.183 | 1.248 | 0.00 | 49.19 |
| 70.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.733 | 0.183 | 1.248 | 0.00 | 49.19 |
| 70.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.733 | 0.183 | 1.248 | 0.00 | 6.50 |
| 70.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.733 | 0.183 | 1.248 | 0.00 | 0.75 |
| 70.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.733 | 0.183 | 1.248 | 0.00 | 5.25 |
| 70.00 | (14) 1 5/8" Coax | Yes | 5.00 | 0.00 | 3.96 | 1.65 | 0.00 | 7.733 | 0.183 | 1.248 | 0.00 | 57.39 |
| 70.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.733 | 0.183 | 1.248 | 0.00 | 1.50 |
| 70.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.733 | 0.183 | 1.248 | 0.00 | 1.50 |
| 70.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.733 | 0.183 | 1.248 | 0.00 | 1.50 |

Load Case: 1.0D + 1.0W**Serviceability 60 mph****23 Iterations****Gust Response Factor : 1.10****Wind Importance Factor : 1.00****Dead Load Factor : 1.00****Wind Load Factor : 1.00**

| | | | | | | | | | | | | |
|-------|----------------------|-----|------|------|------|------|------|-------|-------|-------|------|-------|
| 75.00 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 0.82 | 0.00 | 7.893 | 0.189 | 1.267 | 0.00 | 24.60 |
| 75.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 7.893 | 0.189 | 1.267 | 0.00 | 0.40 |
| 75.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.893 | 0.189 | 1.267 | 0.00 | 0.14 |
| 75.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.893 | 0.189 | 1.267 | 0.00 | 3.10 |
| 75.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.893 | 0.189 | 1.267 | 0.00 | 37.79 |
| 75.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.893 | 0.189 | 1.267 | 0.00 | 20.00 |
| 75.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.893 | 0.189 | 1.267 | 0.00 | 1.50 |
| 75.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.893 | 0.189 | 1.267 | 0.00 | 18.25 |
| 75.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.893 | 0.189 | 1.267 | 0.00 | 1.35 |
| 75.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.893 | 0.189 | 1.267 | 0.00 | 49.19 |
| 75.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.893 | 0.189 | 1.267 | 0.00 | 49.19 |
| 75.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.893 | 0.189 | 1.267 | 0.00 | 6.50 |
| 75.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.893 | 0.189 | 1.267 | 0.00 | 0.75 |
| 75.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.893 | 0.189 | 1.267 | 0.00 | 5.25 |
| 75.00 | (14) 1 5/8" Coax | Yes | 5.00 | 0.00 | 3.96 | 1.65 | 0.00 | 7.893 | 0.189 | 1.267 | 0.00 | 57.39 |
| 75.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.893 | 0.189 | 1.267 | 0.00 | 1.50 |
| 75.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.893 | 0.189 | 1.267 | 0.00 | 1.50 |
| 80.00 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 0.82 | 0.00 | 8.044 | 0.196 | 1.288 | 0.00 | 24.60 |
| 80.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 8.044 | 0.196 | 1.288 | 0.00 | 0.40 |
| 80.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.044 | 0.196 | 1.288 | 0.00 | 0.14 |
| 80.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.044 | 0.196 | 1.288 | 0.00 | 3.10 |
| 80.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.044 | 0.196 | 1.288 | 0.00 | 37.79 |
| 80.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.044 | 0.196 | 1.288 | 0.00 | 20.00 |
| 80.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.044 | 0.196 | 1.288 | 0.00 | 1.50 |
| 80.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.044 | 0.196 | 1.288 | 0.00 | 18.25 |
| 80.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.044 | 0.196 | 1.288 | 0.00 | 1.35 |
| 80.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.044 | 0.196 | 1.288 | 0.00 | 49.19 |
| 80.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.044 | 0.196 | 1.288 | 0.00 | 49.19 |
| 80.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.044 | 0.196 | 1.288 | 0.00 | 6.50 |
| 80.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.044 | 0.196 | 1.288 | 0.00 | 0.75 |
| 80.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.044 | 0.196 | 1.288 | 0.00 | 5.25 |
| 80.00 | (14) 1 5/8" Coax | Yes | 5.00 | 0.00 | 3.96 | 1.65 | 0.00 | 8.044 | 0.196 | 1.288 | 0.00 | 57.39 |
| 80.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.044 | 0.196 | 1.288 | 0.00 | 1.50 |
| 80.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.044 | 0.196 | 1.288 | 0.00 | 1.50 |
| 80.75 | (6) 1 5/8" Coax | Yes | 0.75 | 1.20 | 1.98 | 0.12 | 0.15 | 8.129 | 0.200 | 0.000 | 1.33 | 3.68 |
| 80.75 | (1) 3/8" Coax | No | 0.75 | 0.00 | 0.44 | 0.00 | 0.00 | 8.129 | 0.200 | 0.000 | 0.00 | 0.06 |
| 80.75 | (1) 0.28" RG-6 | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 8.129 | 0.200 | 0.000 | 0.00 | 0.02 |
| 80.75 | (2) 0.65" 8 AWG 2C | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 8.129 | 0.200 | 0.000 | 0.00 | 0.46 |
| 80.75 | (12) 1 1/4" Coax | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 8.129 | 0.200 | 0.000 | 0.00 | 5.66 |
| 80.75 | (4) 1 1/4" Hybriflex | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 8.129 | 0.200 | 0.000 | 0.00 | 2.99 |
| 80.75 | (2) 1/2" Coax | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 8.129 | 0.200 | 0.000 | 0.00 | 0.22 |
| 80.75 | (1) 2" Conduit | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 8.129 | 0.200 | 0.000 | 0.00 | 2.73 |
| 80.75 | (6) 5/16" Coax | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 8.129 | 0.200 | 0.000 | 0.00 | 0.20 |
| 80.75 | (12) 1 5/8" Coax | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 8.129 | 0.200 | 0.000 | 0.00 | 7.36 |
| 80.75 | (12) 1 5/8" Coax | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 8.129 | 0.200 | 0.000 | 0.00 | 7.36 |
| 80.75 | (1) 1 5/8" Hybriflex | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 8.129 | 0.200 | 0.000 | 0.00 | 0.97 |
| 80.75 | (1) 1/2" Coax | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 8.129 | 0.200 | 0.000 | 0.00 | 0.11 |
| 80.75 | (1) 1 1/4" Fiber | No | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 8.129 | 0.200 | 0.000 | 0.00 | 0.79 |
| 80.75 | (14) 1 5/8" Coax | Yes | 0.75 | 1.20 | 3.96 | 0.25 | 0.30 | 8.129 | 0.200 | 0.000 | 2.65 | 8.59 |
| 84.90 | (6) 1 5/8" Coax | Yes | 4.15 | 1.20 | 1.98 | 0.68 | 0.82 | 8.199 | 0.204 | 0.000 | 7.41 | 20.42 |
| 84.90 | (1) 3/8" Coax | No | 4.15 | 0.00 | 0.44 | 0.00 | 0.00 | 8.199 | 0.204 | 0.000 | 0.00 | 0.33 |
| 84.90 | (1) 0.28" RG-6 | No | 4.15 | 0.00 | 0.00 | 0.00 | 0.00 | 8.199 | 0.204 | 0.000 | 0.00 | 0.12 |
| 84.90 | (2) 0.65" 8 AWG 2C | No | 4.15 | 0.00 | 0.00 | 0.00 | 0.00 | 8.199 | 0.204 | 0.000 | 0.00 | 2.57 |
| 84.90 | (12) 1 1/4" Coax | No | 4.15 | 0.00 | 0.00 | 0.00 | 0.00 | 8.199 | 0.204 | 0.000 | 0.00 | 31.38 |
| 84.90 | (4) 1 1/4" Hybriflex | No | 4.15 | 0.00 | 0.00 | 0.00 | 0.00 | 8.199 | 0.204 | 0.000 | 0.00 | 16.60 |
| 84.90 | (2) 1/2" Coax | No | 4.15 | 0.00 | 0.00 | 0.00 | 0.00 | 8.199 | 0.204 | 0.000 | 0.00 | 1.25 |
| 84.90 | (1) 2" Conduit | No | 4.15 | 0.00 | 0.00 | 0.00 | 0.00 | 8.199 | 0.204 | 0.000 | 0.00 | 15.15 |

Load Case: 1.0D + 1.0W**Serviceability 60 mph****23 Iterations****Gust Response Factor : 1.10****Wind Importance Factor : 1.00****Dead Load Factor : 1.00****Wind Load Factor : 1.00**

| | | | | | | | | | | | | |
|-------|----------------------|-----|------|------|------|------|-------|-------|-------|-------|-------|-------|
| 84.90 | (6) 5/16" Coax | No | 4.15 | 0.00 | 0.00 | 0.00 | 8.199 | 0.204 | 0.000 | 0.00 | 1.12 | |
| 84.90 | (12) 1 5/8" Coax | No | 4.15 | 0.00 | 0.00 | 0.00 | 8.199 | 0.204 | 0.000 | 0.00 | 40.84 | |
| 84.90 | (12) 1 5/8" Coax | No | 4.15 | 0.00 | 0.00 | 0.00 | 8.199 | 0.204 | 0.000 | 0.00 | 40.84 | |
| 84.90 | (1) 1 5/8" Hybriflex | No | 4.15 | 0.00 | 0.00 | 0.00 | 8.199 | 0.204 | 0.000 | 0.00 | 5.40 | |
| 84.90 | (1) 1/2" Coax | No | 4.15 | 0.00 | 0.00 | 0.00 | 8.199 | 0.204 | 0.000 | 0.00 | 0.62 | |
| 84.90 | (1) 1 1/4" Fiber | No | 4.15 | 0.00 | 0.00 | 0.00 | 8.199 | 0.204 | 0.000 | 0.00 | 4.36 | |
| 84.90 | (14) 1 5/8" Coax | Yes | 4.15 | 1.20 | 3.96 | 1.37 | 1.64 | 8.199 | 0.204 | 0.000 | 14.82 | 47.65 |
| 85.00 | (6) 1 5/8" Coax | Yes | 0.10 | 1.20 | 1.98 | 0.02 | 0.02 | 8.258 | 0.204 | 0.000 | 0.18 | 0.49 |
| 85.00 | (1) 3/8" Coax | No | 0.10 | 0.00 | 0.44 | 0.00 | 0.00 | 8.258 | 0.204 | 0.000 | 0.00 | 0.01 |
| 85.00 | (1) 0.28" RG-6 | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 8.258 | 0.204 | 0.000 | 0.00 | 0.00 |
| 85.00 | (2) 0.65" 8 AWG 2C | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 8.258 | 0.204 | 0.000 | 0.00 | 0.06 |
| 85.00 | (12) 1 1/4" Coax | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 8.258 | 0.204 | 0.000 | 0.00 | 0.76 |
| 85.00 | (4) 1 1/4" Hybriflex | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 8.258 | 0.204 | 0.000 | 0.00 | 0.40 |
| 85.00 | (2) 1/2" Coax | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 8.258 | 0.204 | 0.000 | 0.00 | 0.03 |
| 85.00 | (1) 2" Conduit | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 8.258 | 0.204 | 0.000 | 0.00 | 0.37 |
| 85.00 | (6) 5/16" Coax | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 8.258 | 0.204 | 0.000 | 0.00 | 0.03 |
| 85.00 | (12) 1 5/8" Coax | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 8.258 | 0.204 | 0.000 | 0.00 | 0.99 |
| 85.00 | (12) 1 5/8" Coax | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 8.258 | 0.204 | 0.000 | 0.00 | 0.99 |
| 85.00 | (1) 1 5/8" Hybriflex | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 8.258 | 0.204 | 0.000 | 0.00 | 0.13 |
| 85.00 | (1) 1/2" Coax | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 8.258 | 0.204 | 0.000 | 0.00 | 0.02 |
| 85.00 | (1) 1 1/4" Fiber | No | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 8.258 | 0.204 | 0.000 | 0.00 | 0.11 |
| 85.00 | (14) 1 5/8" Coax | Yes | 0.10 | 1.20 | 3.96 | 0.03 | 0.04 | 8.258 | 0.204 | 0.000 | 0.36 | 1.15 |
| 90.00 | (6) 1 5/8" Coax | Yes | 5.00 | 1.20 | 1.98 | 0.82 | 0.99 | 8.328 | 0.208 | 0.000 | 9.07 | 24.60 |
| 90.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 8.328 | 0.208 | 0.000 | 0.00 | 0.40 |
| 90.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.328 | 0.208 | 0.000 | 0.00 | 0.14 |
| 90.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.328 | 0.208 | 0.000 | 0.00 | 3.10 |
| 90.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.328 | 0.208 | 0.000 | 0.00 | 37.79 |
| 90.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.328 | 0.208 | 0.000 | 0.00 | 20.00 |
| 90.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.328 | 0.208 | 0.000 | 0.00 | 1.50 |
| 90.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.328 | 0.208 | 0.000 | 0.00 | 18.25 |
| 90.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.328 | 0.208 | 0.000 | 0.00 | 1.35 |
| 90.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.328 | 0.208 | 0.000 | 0.00 | 49.19 |
| 90.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.328 | 0.208 | 0.000 | 0.00 | 49.19 |
| 90.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.328 | 0.208 | 0.000 | 0.00 | 6.50 |
| 90.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.328 | 0.208 | 0.000 | 0.00 | 0.75 |
| 90.00 | (1) 1 1/4" Fiber | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.328 | 0.208 | 0.000 | 0.00 | 5.25 |
| 90.00 | (14) 1 5/8" Coax | Yes | 5.00 | 1.20 | 3.96 | 1.65 | 1.98 | 8.328 | 0.208 | 0.000 | 18.14 | 57.39 |
| 95.00 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 0.82 | 0.00 | 8.462 | 0.072 | 0.000 | 0.00 | 24.60 |
| 95.00 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 8.462 | 0.072 | 0.000 | 0.00 | 0.40 |
| 95.00 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.462 | 0.072 | 0.000 | 0.00 | 0.14 |
| 95.00 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.462 | 0.072 | 0.000 | 0.00 | 3.10 |
| 95.00 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.462 | 0.072 | 0.000 | 0.00 | 37.79 |
| 95.00 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.462 | 0.072 | 0.000 | 0.00 | 20.00 |
| 95.00 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.462 | 0.072 | 0.000 | 0.00 | 1.50 |
| 95.00 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.462 | 0.072 | 0.000 | 0.00 | 18.25 |
| 95.00 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.462 | 0.072 | 0.000 | 0.00 | 1.35 |
| 95.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.462 | 0.072 | 0.000 | 0.00 | 49.19 |
| 95.00 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.462 | 0.072 | 0.000 | 0.00 | 49.19 |
| 95.00 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.462 | 0.072 | 0.000 | 0.00 | 6.50 |
| 95.00 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.462 | 0.072 | 0.000 | 0.00 | 0.75 |
| 100.0 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 0.82 | 0.00 | 8.590 | 0.075 | 0.000 | 0.00 | 24.60 |
| 100.0 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 8.590 | 0.075 | 0.000 | 0.00 | 0.40 |
| 100.0 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.590 | 0.075 | 0.000 | 0.00 | 0.14 |
| 100.0 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.590 | 0.075 | 0.000 | 0.00 | 3.10 |
| 100.0 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.590 | 0.075 | 0.000 | 0.00 | 37.79 |
| 100.0 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.590 | 0.075 | 0.000 | 0.00 | 20.00 |
| 100.0 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.590 | 0.075 | 0.000 | 0.00 | 1.50 |

Load Case: 1.0D + 1.0W**Serviceability 60 mph****23 Iterations****Gust Response Factor : 1.10****Wind Importance Factor : 1.00****Dead Load Factor : 1.00****Wind Load Factor : 1.00**

| | | | | | | | | | | | | |
|-------|----------------------|-----|------|------|------|------|-------|-------|-------|-------|-------|-------|
| 100.0 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 8.590 | 0.075 | 0.000 | 0.00 | 18.25 | |
| 100.0 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 8.590 | 0.075 | 0.000 | 0.00 | 1.35 | |
| 100.0 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 8.590 | 0.075 | 0.000 | 0.00 | 49.19 | |
| 100.0 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 8.590 | 0.075 | 0.000 | 0.00 | 49.19 | |
| 100.0 | (1) 1 5/8" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 8.590 | 0.075 | 0.000 | 0.00 | 6.50 | |
| 100.0 | (1) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 8.590 | 0.075 | 0.000 | 0.00 | 0.75 | |
| 105.0 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 0.82 | 0.00 | 8.713 | 0.078 | 0.000 | 0.00 | 24.60 |
| 105.0 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 8.713 | 0.078 | 0.000 | 0.00 | 0.40 |
| 105.0 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.713 | 0.078 | 0.000 | 0.00 | 0.14 |
| 105.0 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.713 | 0.078 | 0.000 | 0.00 | 3.10 |
| 105.0 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.713 | 0.078 | 0.000 | 0.00 | 37.79 |
| 105.0 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.713 | 0.078 | 0.000 | 0.00 | 20.00 |
| 105.0 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.713 | 0.078 | 0.000 | 0.00 | 1.50 |
| 105.0 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.713 | 0.078 | 0.000 | 0.00 | 18.25 |
| 105.0 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.713 | 0.078 | 0.000 | 0.00 | 1.35 |
| 105.0 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.713 | 0.078 | 0.000 | 0.00 | 49.19 |
| 110.0 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 0.82 | 0.00 | 8.833 | 0.082 | 0.000 | 0.00 | 24.60 |
| 110.0 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 8.833 | 0.082 | 0.000 | 0.00 | 0.40 |
| 110.0 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.833 | 0.082 | 0.000 | 0.00 | 0.14 |
| 110.0 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.833 | 0.082 | 0.000 | 0.00 | 3.10 |
| 110.0 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.833 | 0.082 | 0.000 | 0.00 | 37.79 |
| 110.0 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.833 | 0.082 | 0.000 | 0.00 | 20.00 |
| 110.0 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.833 | 0.082 | 0.000 | 0.00 | 1.50 |
| 110.0 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.833 | 0.082 | 0.000 | 0.00 | 18.25 |
| 110.0 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.833 | 0.082 | 0.000 | 0.00 | 1.35 |
| 110.0 | (12) 1 5/8" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.833 | 0.082 | 0.000 | 0.00 | 49.19 |
| 115.0 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 0.82 | 0.00 | 8.948 | 0.086 | 0.000 | 0.00 | 24.60 |
| 115.0 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 8.948 | 0.086 | 0.000 | 0.00 | 0.40 |
| 115.0 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.948 | 0.086 | 0.000 | 0.00 | 0.14 |
| 115.0 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.948 | 0.086 | 0.000 | 0.00 | 3.10 |
| 115.0 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.948 | 0.086 | 0.000 | 0.00 | 37.79 |
| 115.0 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.948 | 0.086 | 0.000 | 0.00 | 20.00 |
| 115.0 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.948 | 0.086 | 0.000 | 0.00 | 1.50 |
| 115.0 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.948 | 0.086 | 0.000 | 0.00 | 18.25 |
| 115.0 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 8.948 | 0.086 | 0.000 | 0.00 | 1.35 |
| 120.0 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 0.82 | 0.00 | 9.060 | 0.090 | 0.000 | 0.00 | 24.60 |
| 120.0 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 9.060 | 0.090 | 0.000 | 0.00 | 0.40 |
| 120.0 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 9.060 | 0.090 | 0.000 | 0.00 | 0.14 |
| 120.0 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 9.060 | 0.090 | 0.000 | 0.00 | 3.10 |
| 120.0 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 9.060 | 0.090 | 0.000 | 0.00 | 37.79 |
| 120.0 | (4) 1 1/4" Hybriflex | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 9.060 | 0.090 | 0.000 | 0.00 | 20.00 |
| 120.0 | (2) 1/2" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 9.060 | 0.090 | 0.000 | 0.00 | 1.50 |
| 120.0 | (1) 2" Conduit | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 9.060 | 0.090 | 0.000 | 0.00 | 18.25 |
| 120.0 | (6) 5/16" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 9.060 | 0.090 | 0.000 | 0.00 | 1.35 |
| 125.0 | (6) 1 5/8" Coax | Yes | 5.00 | 0.00 | 1.98 | 0.82 | 0.00 | 9.169 | 0.095 | 0.000 | 0.00 | 24.60 |
| 125.0 | (1) 3/8" Coax | No | 5.00 | 0.00 | 0.44 | 0.00 | 0.00 | 9.169 | 0.095 | 0.000 | 0.00 | 0.40 |
| 125.0 | (1) 0.28" RG-6 | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 9.169 | 0.095 | 0.000 | 0.00 | 0.14 |
| 125.0 | (2) 0.65" 8 AWG 2C | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 9.169 | 0.095 | 0.000 | 0.00 | 3.10 |
| 125.0 | (12) 1 1/4" Coax | No | 5.00 | 0.00 | 0.00 | 0.00 | 0.00 | 9.169 | 0.095 | 0.000 | 0.00 | 37.79 |
| 125.8 | (6) 1 5/8" Coax | Yes | 0.80 | 0.00 | 1.98 | 0.13 | 0.00 | 9.230 | 0.098 | 0.000 | 0.00 | 3.94 |
| 125.8 | (1) 3/8" Coax | No | 0.80 | 0.00 | 0.44 | 0.00 | 0.00 | 9.230 | 0.098 | 0.000 | 0.00 | 0.06 |
| 125.8 | (1) 0.28" RG-6 | No | 0.80 | 0.00 | 0.00 | 0.00 | 0.00 | 9.230 | 0.098 | 0.000 | 0.00 | 0.02 |
| 125.8 | (2) 0.65" 8 AWG 2C | No | 0.80 | 0.00 | 0.00 | 0.00 | 0.00 | 9.230 | 0.098 | 0.000 | 0.00 | 0.50 |
| 125.8 | (12) 1 1/4" Coax | No | 0.80 | 0.00 | 0.00 | 0.00 | 0.00 | 9.230 | 0.098 | 0.000 | 0.00 | 6.05 |
| 130.0 | (6) 1 5/8" Coax | Yes | 4.20 | 0.00 | 1.98 | 0.69 | 0.00 | 9.282 | 0.184 | 1.253 | 0.00 | 20.66 |
| 130.0 | (1) 3/8" Coax | No | 4.20 | 0.00 | 0.44 | 0.00 | 0.00 | 9.282 | 0.184 | 1.253 | 0.00 | 0.34 |
| 130.0 | (1) 0.28" RG-6 | No | 4.20 | 0.00 | 0.00 | 0.00 | 0.00 | 9.282 | 0.184 | 1.253 | 0.00 | 0.12 |

Site Number: 302511

Code: ANSI/TIA-222-G

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Site Name: WSPT - South, CT

Engineering Number: 63916524

1/25/2016 11:02:38 AM

Customer: T-MOBILE

Load Case: 1.0D + 1.0W**Serviceability 60 mph****23 Iterations****Gust Response Factor : 1.10****Wind Importance Factor : 1.00****Dead Load Factor : 1.00****Wind Load Factor : 1.00**

| | | | | | | | | | | |
|--------------------------|-----|------|------|------|------|-------|-------|-------|-------|-------|
| 130.0 (2) 0.65" 8 AWG 2C | No | 4.20 | 0.00 | 0.00 | 0.00 | 9.282 | 0.184 | 1.253 | 0.00 | 2.60 |
| 130.0 (12) 1 1/4" Coax | No | 4.20 | 0.00 | 0.00 | 0.00 | 9.282 | 0.184 | 1.253 | 0.00 | 31.74 |
| 131.0 (6) 1 5/8" Coax | Yes | 1.00 | 0.00 | 1.98 | 0.17 | 0.00 | 9.336 | 0.184 | 1.253 | 0.00 |
| 131.0 (1) 3/8" Coax | No | 1.00 | 0.00 | 0.44 | 0.00 | 0.00 | 9.336 | 0.184 | 1.253 | 0.00 |
| 131.0 (1) 0.28" RG-6 | No | 1.00 | 0.00 | 0.00 | 0.00 | 0.00 | 9.336 | 0.184 | 1.253 | 0.00 |
| 131.0 (2) 0.65" 8 AWG 2C | No | 1.00 | 0.00 | 0.00 | 0.00 | 0.00 | 9.336 | 0.184 | 1.253 | 0.00 |
| 131.0 (12) 1 1/4" Coax | No | 1.00 | 0.00 | 0.00 | 0.00 | 0.00 | 9.336 | 0.184 | 1.253 | 0.00 |
| 135.0 (6) 1 5/8" Coax | Yes | 4.00 | 0.00 | 1.98 | 0.66 | 0.00 | 9.387 | 0.184 | 1.253 | 0.00 |
| 135.0 (1) 3/8" Coax | No | 4.00 | 0.00 | 0.44 | 0.00 | 0.00 | 9.387 | 0.184 | 1.253 | 0.00 |
| 136.0 (6) 1 5/8" Coax | Yes | 1.00 | 0.00 | 1.98 | 0.17 | 0.00 | 9.437 | 0.184 | 1.253 | 0.00 |
| 136.0 (1) 3/8" Coax | No | 1.00 | 0.00 | 0.44 | 0.00 | 0.00 | 9.437 | 0.184 | 1.253 | 0.08 |

Totals: 332.91 9,868.45

Site Number: 302511

Code: ANSI/TIA-222-G

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Site Name: WSPT - South, CT

Engineering Number: 63916524

1/25/2016 11:02:39 AM

Customer: T-MOBILE

Load Case: 1.0D + 1.0W

Serviceability 60 mph

23 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

| Seg Elev (ft) | Description | Shaft Forces | | Discrete Forces | | | Linear Forces | | | Sum of Forces | | | | | |
|---------------------|-----------------|--------------|----------------------|-----------------|--------------------------|-------------------------|----------------------|---------|----------------------|-----------------|----------------------|--------------------------|----------------------|------|------|
| | | Wind FX | Dead Load (lb) | Wind FX (lb) | Torsion MY (lb-ft) | Moment MZ (lb-ft) | Dead Load (lb) | Wind FX | Dead Load (lb) | Wind FX (lb) | Dead Load (lb) | Torsion MY (lb-ft) | Moment MZ (lb) | | |
| 0.00 | | 64.7 | 0.0 | | | | | 0.0 | 0.0 | 64.7 | 0.0 | 0.0 | 0.0 | | |
| 5.00 | | 127.8 | 1,055.3 | | | | | 0.0 | 613.9 | 127.8 | 1,669.3 | 0.0 | 0.0 | | |
| 10.00 | | 124.7 | 1,029.9 | | | | | 0.0 | 613.9 | 124.7 | 1,643.8 | 0.0 | 0.0 | | |
| 15.00 | | 121.6 | 1,004.4 | | | | | 0.0 | 613.9 | 121.6 | 1,618.3 | 0.0 | 0.0 | | |
| 20.00 | | 130.2 | 978.9 | | | | | 0.0 | 613.9 | 130.2 | 1,592.8 | 0.0 | 0.0 | | |
| 25.00 | | 138.5 | 953.4 | | | | | 28.4 | 613.9 | 166.9 | 1,567.3 | 0.0 | 0.0 | | |
| 30.00 | | 136.4 | 927.9 | | | | | 28.4 | 613.9 | 164.8 | 1,541.8 | 0.0 | 0.0 | | |
| 35.00 | | 137.0 | 902.4 | | | | | 29.1 | 613.9 | 166.1 | 1,516.4 | 0.0 | 0.0 | | |
| 40.00 | | 72.3 | 877.0 | | | | | 30.3 | 613.9 | 102.6 | 1,490.9 | 0.0 | 0.0 | | |
| 40.24 | Bot - Section 2 | 70.7 | 42.1 | | | | | 1.5 | 29.9 | 72.3 | 72.0 | 0.0 | 0.0 | | |
| 45.00 | | 73.1 | 1,519.0 | | | | | 29.9 | 584.0 | 103.0 | 2,103.0 | 0.0 | 0.0 | | |
| 45.40 | Top - Section 1 | 71.0 | 125.8 | | | | | 2.6 | 49.1 | 73.5 | 174.9 | 0.0 | 0.0 | | |
| 50.00 | | 136.2 | 665.9 | | | | | 29.9 | 564.8 | 166.1 | 1,230.7 | 0.0 | 0.0 | | |
| 55.00 | | 80.4 | 702.9 | | | | | 33.4 | 613.9 | 113.9 | 1,316.8 | 0.0 | 0.0 | | |
| 55.68 | Reinf. Top | 70.5 | 93.5 | | | | | 4.6 | 83.1 | 75.1 | 176.6 | 0.0 | 0.0 | | |
| 60.00 | | 130.8 | 587.5 | | | | | 29.7 | 242.0 | 160.5 | 829.5 | 0.0 | 0.0 | | |
| 65.00 | | 127.5 | 659.2 | | | | | 31.0 | 279.9 | 158.5 | 939.1 | 0.0 | 0.0 | | |
| 70.00 | Appertunance(s) | 114.4 | 637.3 | 6.5 | 0.0 | 0.0 | 30.6 | 0.0 | 279.9 | 120.9 | 947.8 | 0.0 | 0.0 | | |
| 75.00 | | 112.7 | 615.5 | | | | | 0.0 | 278.4 | 112.7 | 893.9 | 0.0 | 0.0 | | |
| 80.00 | Appertunance(s) | 65.8 | 593.6 | 87.5 | 0.0 | 60.6 | 154.6 | 0.0 | 278.4 | 153.3 | 1,026.7 | 0.0 | 0.0 | | |
| 80.75 | Bot - Section 3 | 65.4 | 87.0 | | | | | 4.0 | 41.2 | 69.4 | 128.2 | 0.0 | 0.0 | | |
| 84.90 | Top - Section 2 | 56.8 | 796.3 | | | | | 22.2 | 228.7 | 79.1 | 1,025.0 | 0.0 | 0.0 | | |
| 85.00 | | 66.9 | 7.7 | | | | | 0.5 | 5.5 | 67.4 | 13.2 | 0.0 | 0.0 | | |
| 90.00 | Appertunance(s) | 118.9 | 375.2 | 803.5 | 0.0 | 0.0 | 2,934.5 | 27.2 | 275.4 | 949.7 | 3,585.1 | 0.0 | 0.0 | | |
| 95.00 | | 105.4 | 360.6 | | | | | 0.0 | 212.8 | 105.4 | 573.4 | 0.0 | 0.0 | | |
| 100.00 | Appertunance(s) | 102.6 | 346.1 | 769.5 | 0.0 | 14.4 | 2,448.8 | 0.0 | 212.8 | 872.1 | 3,007.6 | 0.0 | 0.0 | | |
| 105.00 | | 99.6 | 331.5 | | | | | 0.0 | 156.3 | 99.6 | 487.8 | 0.0 | 0.0 | | |
| 110.00 | Appertunance(s) | 96.4 | 316.9 | 621.2 | 0.0 | 0.0 | 2,120.0 | 0.0 | 156.3 | 717.6 | 2,593.3 | 0.0 | 0.0 | | |
| 115.00 | | 93.1 | 302.4 | | | | | 0.0 | 107.1 | 93.1 | 409.5 | 0.0 | 0.0 | | |
| 120.00 | Appertunance(s) | 89.7 | 287.8 | 857.5 | 0.0 | 0.0 | 3,184.5 | 0.0 | 107.1 | 947.1 | 3,579.5 | 0.0 | 0.0 | | |
| 125.00 | | 50.8 | 273.3 | | | | | 0.0 | 66.0 | 50.8 | 339.3 | 0.0 | 0.0 | | |
| 125.80 | Top - Section 3 | 20.2 | 42.4 | | | | | 0.0 | 10.6 | 20.2 | 53.0 | 0.0 | 0.0 | | |
| 130.00 | | 16.5 | 174.7 | | | | | 0.0 | 55.5 | 16.5 | 230.1 | 0.0 | 0.0 | | |
| 131.00 | Appertunance(s) | 15.9 | 41.6 | 799.3 | 0.0 | 663.7 | 2,782.4 | 0.0 | 13.2 | 815.2 | 2,837.2 | 0.0 | 0.0 | | |
| 135.00 | | 16.0 | 166.4 | | | | | 0.0 | 20.0 | 16.0 | 186.4 | 0.0 | 0.0 | | |
| 136.00 | Appertunance(s) | 16.0 | 41.6 | 73.2 | 0.0 | 219.5 | 73.5 | 0.0 | 5.0 | 89.2 | 120.1 | 0.0 | 0.0 | | |
| 140.00 | | 19.3 | 166.4 | | | | | 0.0 | 0.0 | 19.3 | 166.4 | 0.0 | 0.0 | | |
| 142.00 | | 6.4 | 83.2 | | | | | 0.0 | 0.0 | 6.4 | 83.2 | 0.0 | 0.0 | | |
| Totals: | | | | | | | | | | | | 7,513.14 | 41,769.8 | 0.00 | 0.00 |

Load Case: 1.0D + 1.0W

Serviceability 60 mph

23 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 | 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 | -41.77 | -7.46 | 0.00 | -677.45 | 0.00 | 677.45 | 4,350.13 | 2,175.06 | 7,987.32 | 3,944.64 | 0.00 | 0.00 | 0.129 |
| 5.00 | -40.09 | -7.36 | 0.00 | -640.13 | 0.00 | 640.13 | 4,285.51 | 2,142.75 | 7,679.11 | 3,792.42 | 0.02 | -0.04 | 0.125 |
| 10.00 | -38.44 | -7.27 | 0.00 | -603.31 | 0.00 | 603.31 | 4,218.97 | 2,109.49 | 7,373.27 | 3,641.38 | 0.09 | -0.08 | 0.122 |
| 15.00 | -36.82 | -7.17 | 0.00 | -566.99 | 0.00 | 566.99 | 4,150.52 | 2,075.26 | 7,070.06 | 3,491.64 | 0.20 | -0.13 | 0.118 |
| 20.00 | -35.22 | -7.06 | 0.00 | -531.15 | 0.00 | 531.15 | 4,080.16 | 2,040.08 | 6,769.73 | 3,343.32 | 0.35 | -0.17 | 0.114 |
| 25.00 | -33.65 | -6.91 | 0.00 | -495.85 | 0.00 | 495.85 | 4,007.88 | 2,003.94 | 6,472.54 | 3,196.54 | 0.55 | -0.21 | 0.110 |
| 30.00 | -32.10 | -6.76 | 0.00 | -461.28 | 0.00 | 461.28 | 3,933.69 | 1,966.85 | 6,178.73 | 3,051.44 | 0.79 | -0.25 | 0.106 |
| 35.00 | -30.58 | -6.61 | 0.00 | -427.46 | 0.00 | 427.46 | 3,854.52 | 1,927.26 | 5,883.88 | 2,905.83 | 1.08 | -0.29 | 0.102 |
| 40.00 | -29.09 | -6.51 | 0.00 | -394.39 | 0.00 | 394.39 | 3,744.12 | 1,872.06 | 5,549.75 | 2,740.81 | 1.41 | -0.34 | 0.099 |
| 40.24 | -29.02 | -6.45 | 0.00 | -392.80 | 0.00 | 392.80 | 3,738.74 | 1,869.37 | 5,533.72 | 2,732.90 | 1.43 | -0.34 | 0.098 |
| 45.00 | -26.91 | -6.35 | 0.00 | -362.12 | 0.00 | 362.12 | 3,633.72 | 1,816.86 | 5,225.39 | 2,580.62 | 1.78 | -0.38 | 0.093 |
| 45.40 | -26.74 | -6.28 | 0.00 | -359.58 | 0.00 | 359.58 | 3,063.79 | 1,531.89 | 4,506.32 | 2,225.50 | 1.81 | -0.38 | 0.104 |
| 50.00 | -25.50 | -6.12 | 0.00 | -330.69 | 0.00 | 330.69 | 3,008.67 | 1,504.34 | 4,302.82 | 2,125.00 | 2.20 | -0.42 | 0.099 |
| 55.00 | -24.18 | -6.01 | 0.00 | -300.07 | 0.00 | 300.07 | 2,946.93 | 1,473.46 | 4,084.17 | 2,017.02 | 2.66 | -0.46 | 0.093 |
| 55.68 | -24.01 | -5.94 | 0.00 | -296.00 | 0.00 | 296.00 | 2,938.42 | 1,469.21 | 4,054.78 | 2,002.51 | 2.72 | -0.46 | 0.092 |
| 55.68 | -24.01 | -5.94 | 0.00 | -296.00 | 0.00 | 296.00 | 2,938.42 | 1,469.21 | 4,054.78 | 2,002.51 | 2.72 | -0.46 | 0.156 |
| 60.00 | -23.17 | -5.80 | 0.00 | -270.32 | 0.00 | 270.32 | 2,883.27 | 1,441.64 | 3,868.42 | 1,910.47 | 3.16 | -0.50 | 0.150 |
| 65.00 | -22.23 | -5.65 | 0.00 | -241.34 | 0.00 | 241.34 | 2,808.41 | 1,404.21 | 3,643.77 | 1,799.52 | 3.72 | -0.57 | 0.142 |
| 70.00 | -21.28 | -5.55 | 0.00 | -213.07 | 0.00 | 213.07 | 2,713.79 | 1,356.89 | 3,400.96 | 1,679.60 | 4.35 | -0.63 | 0.135 |
| 75.00 | -20.38 | -5.45 | 0.00 | -185.33 | 0.00 | 185.33 | 2,619.16 | 1,309.58 | 3,166.52 | 1,563.83 | 5.05 | -0.70 | 0.126 |
| 80.00 | -19.35 | -5.29 | 0.00 | -158.04 | 0.00 | 158.04 | 2,524.53 | 1,262.26 | 2,940.46 | 1,452.18 | 5.82 | -0.76 | 0.117 |
| 80.75 | -19.22 | -5.23 | 0.00 | -154.08 | 0.00 | 154.08 | 2,510.36 | 1,255.18 | 2,907.34 | 1,435.82 | 5.94 | -0.77 | 0.115 |
| 84.90 | -18.19 | -5.15 | 0.00 | -132.36 | 0.00 | 132.36 | 1,500.18 | 750.09 | 1,728.96 | 853.87 | 6.63 | -0.82 | 0.167 |
| 85.00 | -18.18 | -5.09 | 0.00 | -131.84 | 0.00 | 131.84 | 1,499.54 | 749.77 | 1,726.89 | 852.85 | 6.65 | -0.82 | 0.167 |
| 90.00 | -14.60 | -4.11 | 0.00 | -106.39 | 0.00 | 106.39 | 1,466.64 | 733.32 | 1,624.12 | 802.09 | 7.55 | -0.90 | 0.143 |
| 95.00 | -14.03 | -4.01 | 0.00 | -85.86 | 0.00 | 85.86 | 1,431.82 | 715.91 | 1,522.23 | 751.77 | 8.52 | -0.97 | 0.124 |
| 100.00 | -11.03 | -3.09 | 0.00 | -65.81 | 0.00 | 65.81 | 1,395.09 | 697.54 | 1,421.47 | 702.01 | 9.57 | -1.03 | 0.102 |
| 105.00 | -10.54 | -2.99 | 0.00 | -50.34 | 0.00 | 50.34 | 1,356.44 | 678.22 | 1,322.10 | 652.93 | 10.67 | -1.08 | 0.085 |
| 110.00 | -7.96 | -2.23 | 0.00 | -35.37 | 0.00 | 35.37 | 1,315.88 | 657.94 | 1,224.36 | 604.67 | 11.83 | -1.12 | 0.065 |
| 115.00 | -7.55 | -2.14 | 0.00 | -24.20 | 0.00 | 24.20 | 1,273.40 | 636.70 | 1,128.51 | 557.33 | 13.02 | -1.16 | 0.049 |
| 120.00 | -3.99 | -1.12 | 0.00 | -13.53 | 0.00 | 13.53 | 1,215.41 | 607.71 | 1,023.36 | 505.40 | 14.25 | -1.19 | 0.030 |
| 125.00 | -3.65 | -1.06 | 0.00 | -7.94 | 0.00 | 7.94 | 1,152.33 | 576.16 | 919.28 | 454.00 | 15.51 | -1.20 | 0.021 |
| 125.80 | -3.60 | -1.04 | 0.00 | -7.09 | 0.00 | 7.09 | 1,142.23 | 571.11 | 903.13 | 446.02 | 15.71 | -1.21 | 0.019 |
| 125.80 | -3.60 | -1.04 | 0.00 | -7.09 | 0.00 | 7.09 | 385.02 | 192.51 | 160.54 | 106.00 | 15.71 | -1.21 | 0.076 |
| 130.00 | -3.37 | -1.02 | 0.00 | -2.73 | 0.00 | 2.73 | 385.02 | 192.51 | 160.54 | 106.00 | 16.77 | -1.21 | 0.035 |
| 131.00 | -0.55 | -0.14 | 0.00 | -1.05 | 0.00 | 1.05 | 385.02 | 192.51 | 160.54 | 106.00 | 17.03 | -1.22 | 0.011 |
| 135.00 | -0.37 | -0.12 | 0.00 | -0.48 | 0.00 | 0.48 | 385.02 | 192.51 | 160.54 | 106.00 | 18.05 | -1.22 | 0.006 |
| 136.00 | -0.25 | -0.03 | 0.00 | -0.14 | 0.00 | 0.14 | 385.02 | 192.51 | 160.54 | 106.00 | 18.31 | -1.22 | 0.002 |
| 140.00 | -0.08 | -0.01 | 0.00 | -0.02 | 0.00 | 0.02 | 385.02 | 192.51 | 160.54 | 106.00 | 19.33 | -1.22 | 0.000 |
| 142.00 | 0.00 | -0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 385.02 | 192.51 | 160.54 | 106.00 | 19.84 | -1.22 | 0.000 |

Site Number: 302511
Site Name: WSPT - South, CT
Customer: T-MOBILE

Code: ANSI/TIA-222-G
Engineering Number: 63916524

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1/25/2016 11:02:39 AM

Equivalent Lateral Forces Method Analysis
(Based on ASCE7-10 Chapters 11, 12, 15)

| | |
|--|---------|
| Spectral Response Acceleration for Short Period (S_s): | 0.22 |
| Spectral Response Acceleration at 1.0 Second Period (S_1): | 0.07 |
| 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}): | 0.24 |
| Design Spectral Response Acceleration at 1.0 Second Period (S_{d1}): | 0.11 |
| Seismic Response Coefficient (C_s): | 0.03 |
| Upper Limit C_s | 0.03 |
| Lower Limit C_s | 0.03 |
| Period based on Rayleigh Method (sec): | 2.14 |
| Redundancy Factor (p): | 1.30 |
| Seismic Force Distribution Exponent (k): | 1.82 |
| Total Unfactored Dead Load: | 41.77 k |
| Seismic Base Shear (E): | 1.79 k |

Site Number: 302511

Code: ANSI/TIA-222-G

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Site Name: WSPT - South, CT

Engineering Number: 63916524

1/25/2016 11:02:39 AM

Customer: T-MOBILE

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): | 0.22 |
| Spectral Response Acceleration at 1.0 Second Period (S_1): | 0.07 |
| 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}): | 0.24 |
| Desing Spectral Response Acceleration at 1.0 Second Period (S_{d1}): | 0.11 |
| Period Based on Rayleigh Method (sec): | 2.14 |
| Redundancy Factor (p): | 1.30 |

Load Case (1.2 + 0.2Sds) * DL + E ELF M

Seismic Equivalent Lateral Forces Method

| Segment | Height Above Base (ft) | Weight (lb) | a | b | c | Saz | Horizontal Force (lb) | Vertical Force (lb) |
|---------|---------------------------------|----------------|-------|--------|-------|--------|-----------------------------|---------------------------|
| 37 | 141.00 | 83 | 1.863 | 1.843 | 1.090 | 0.426 | 31 | 71 |
| 36 | 138.00 | 166 | 1.785 | 1.471 | 0.952 | 0.366 | 53 | 142 |
| 35 | 135.50 | 47 | 1.721 | 1.203 | 0.847 | 0.319 | 13 | 40 |
| 34 | 133.00 | 186 | 1.658 | 0.969 | 0.752 | 0.275 | 44 | 159 |
| 33 | 130.50 | 55 | 1.596 | 0.767 | 0.665 | 0.234 | 11 | 47 |
| 32 | 127.90 | 230 | 1.533 | 0.586 | 0.583 | 0.195 | 39 | 196 |
| 31 | 125.40 | 53 | 1.474 | 0.439 | 0.512 | 0.159 | 7 | 45 |
| 30 | 122.50 | 339 | 1.407 | 0.296 | 0.439 | 0.122 | 36 | 289 |
| 29 | 117.50 | 395 | 1.294 | 0.112 | 0.331 | 0.065 | 22 | 337 |
| 28 | 112.50 | 410 | 1.186 | -0.008 | 0.245 | 0.019 | 7 | 349 |
| 27 | 107.50 | 473 | 1.083 | -0.079 | 0.177 | -0.016 | -6 | 404 |
| 26 | 102.50 | 488 | 0.985 | -0.113 | 0.124 | -0.040 | -17 | 416 |
| 25 | 97.50 | 559 | 0.891 | -0.122 | 0.084 | -0.054 | -26 | 477 |
| 24 | 92.50 | 573 | 0.802 | -0.112 | 0.054 | -0.058 | -29 | 489 |
| 23 | 87.50 | 651 | 0.718 | -0.092 | 0.033 | -0.051 | -29 | 555 |
| 22 | 84.95 | 13 | 0.676 | -0.079 | 0.025 | -0.044 | -1 | 11 |
| 21 | 82.82 | 1,025 | 0.643 | -0.068 | 0.020 | -0.037 | -33 | 874 |
| 20 | 80.37 | 128 | 0.606 | -0.055 | 0.015 | -0.027 | -3 | 109 |
| 19 | 77.50 | 872 | 0.563 | -0.039 | 0.011 | -0.015 | -11 | 744 |
| 18 | 72.50 | 894 | 0.493 | -0.013 | 0.007 | 0.009 | 7 | 762 |
| 17 | 67.50 | 917 | 0.427 | 0.009 | 0.006 | 0.030 | 24 | 782 |
| 16 | 62.50 | 939 | 0.366 | 0.028 | 0.008 | 0.046 | 37 | 801 |
| 15 | 57.84 | 830 | 0.314 | 0.042 | 0.011 | 0.056 | 40 | 707 |
| 14 | 55.34 | 177 | 0.287 | 0.048 | 0.013 | 0.060 | 9 | 151 |
| 13 | 52.50 | 1,317 | 0.258 | 0.054 | 0.016 | 0.063 | 71 | 1,123 |
| 12 | 47.70 | 1,231 | 0.213 | 0.061 | 0.021 | 0.065 | 69 | 1,050 |
| 11 | 45.20 | 175 | 0.191 | 0.064 | 0.024 | 0.065 | 10 | 149 |
| 10 | 42.62 | 2,103 | 0.170 | 0.066 | 0.027 | 0.065 | 118 | 1,794 |
| 9 | 40.12 | 72 | 0.151 | 0.068 | 0.030 | 0.065 | 4 | 61 |
| 8 | 37.50 | 1,491 | 0.132 | 0.069 | 0.033 | 0.064 | 83 | 1,272 |
| 7 | 32.50 | 1,516 | 0.099 | 0.071 | 0.037 | 0.062 | 82 | 1,293 |
| 6 | 27.50 | 1,542 | 0.071 | 0.072 | 0.041 | 0.061 | 81 | 1,315 |
| 5 | 22.50 | 1,567 | 0.047 | 0.071 | 0.042 | 0.059 | 80 | 1,337 |
| 4 | 17.50 | 1,593 | 0.029 | 0.068 | 0.040 | 0.056 | 77 | 1,358 |

Site Number: 302511

Code: ANSI/TIA-222-G

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Site Name: WSPT - South, CT

Engineering Number: 63916524

1/25/2016 11:02:39 AM

Customer: T-MOBILE

| | | | | | | | | |
|----------------------|--------|--------|--------|--------|--------|--------|-------|--------|
| 3 | 12.50 | 1,618 | 0.015 | 0.060 | 0.035 | 0.051 | 71 | 1,380 |
| 2 | 7.50 | 1,644 | 0.005 | 0.045 | 0.026 | 0.041 | 58 | 1,402 |
| 1 | 2.50 | 1,669 | 0.001 | 0.019 | 0.010 | 0.019 | 28 | 1,424 |
| Generic RCU (Remote | 136.00 | 6 | 1.734 | 1.254 | 0.867 | 0.328 | 2 | 5 |
| Kathrein Scala 742-2 | 136.00 | 68 | 1.734 | 1.254 | 0.867 | 0.328 | 19 | 58 |
| Powerwave Allgon LGP | 131.00 | 33 | 1.609 | 0.805 | 0.682 | 0.242 | 7 | 28 |
| Powerwave Allgon LGP | 131.00 | 85 | 1.609 | 0.805 | 0.682 | 0.242 | 18 | 72 |
| Raycap DC6-48-60-18- | 131.00 | 32 | 1.609 | 0.805 | 0.682 | 0.242 | 7 | 27 |
| Ericsson RRUS 11 (Ba | 131.00 | 264 | 1.609 | 0.805 | 0.682 | 0.242 | 55 | 225 |
| Powerwave Allgon 777 | 131.00 | 210 | 1.609 | 0.805 | 0.682 | 0.242 | 44 | 179 |
| Powerwave Allgon P65 | 131.00 | 159 | 1.609 | 0.805 | 0.682 | 0.242 | 33 | 136 |
| Flat Platform w/ Han | 131.00 | 2,000 | 1.609 | 0.805 | 0.682 | 0.242 | 420 | 1,706 |
| DragonWave Horizon C | 120.00 | 21 | 1.350 | 0.195 | 0.382 | 0.092 | 2 | 18 |
| NextNet BTS-2500 | 120.00 | 105 | 1.350 | 0.195 | 0.382 | 0.092 | 8 | 90 |
| Alcatel-Lucent 800 M | 120.00 | 192 | 1.350 | 0.195 | 0.382 | 0.092 | 15 | 164 |
| Alcatel-Lucent 1900 | 120.00 | 180 | 1.350 | 0.195 | 0.382 | 0.092 | 14 | 154 |
| Alcatel-Lucent TD-RR | 120.00 | 210 | 1.350 | 0.195 | 0.382 | 0.092 | 17 | 179 |
| Argus LLPX310R | 120.00 | 86 | 1.350 | 0.195 | 0.382 | 0.092 | 7 | 73 |
| DragonWave A-ANT-18G | 120.00 | 54 | 1.350 | 0.195 | 0.382 | 0.092 | 4 | 46 |
| RFS RFS APXV9TM14- | 120.00 | 165 | 1.350 | 0.195 | 0.382 | 0.092 | 13 | 141 |
| RFS APXVSPP18-C-A20 | 120.00 | 171 | 1.350 | 0.195 | 0.382 | 0.092 | 14 | 146 |
| Flat Platform w/ Han | 120.00 | 2,000 | 1.350 | 0.195 | 0.382 | 0.092 | 160 | 1,706 |
| Swedcom ALP 9011-Din | 110.00 | 120 | 1.134 | -0.049 | 0.209 | 0.001 | 0 | 102 |
| Flat Platform w/ Han | 110.00 | 2,000 | 1.134 | -0.049 | 0.209 | 0.001 | 1 | 1,706 |
| RFS FD9R6004/1C-3L | 100.00 | 19 | 0.937 | -0.120 | 0.102 | -0.049 | -1 | 16 |
| GPS | 100.00 | 10 | 0.937 | -0.120 | 0.102 | -0.049 | 0 | 9 |
| Alcatel-Lucent RRH2x | 100.00 | 132 | 0.937 | -0.120 | 0.102 | -0.049 | -6 | 113 |
| Rymsa MGD3-800TX | 100.00 | 46 | 0.937 | -0.120 | 0.102 | -0.049 | -2 | 39 |
| Antel BXA-171063/12C | 100.00 | 45 | 0.937 | -0.120 | 0.102 | -0.049 | -2 | 38 |
| RFS DB-T1-6Z-8AB-0Z | 100.00 | 44 | 0.937 | -0.120 | 0.102 | -0.049 | -2 | 38 |
| Antel BXA-70080/6CF_ | 100.00 | 54 | 0.937 | -0.120 | 0.102 | -0.049 | -2 | 46 |
| Powerwave Allgon P65 | 100.00 | 99 | 0.937 | -0.120 | 0.102 | -0.049 | -4 | 84 |
| Flat Platform w/ Han | 100.00 | 2,000 | 0.937 | -0.120 | 0.102 | -0.049 | -84 | 1,706 |
| RFS ATMAA1412D-1A20 | 90.00 | 52 | 0.759 | -0.103 | 0.043 | -0.056 | -3 | 44 |
| Ericsson RRUS 11 B12 | 90.00 | 152 | 0.759 | -0.103 | 0.043 | -0.056 | -7 | 130 |
| Ericsson AIR 21, 1.3 | 90.00 | 332 | 0.759 | -0.103 | 0.043 | -0.056 | -16 | 283 |
| Ericsson AIR 21, 1.3 | 90.00 | 244 | 0.759 | -0.103 | 0.043 | -0.056 | -12 | 209 |
| Andrew LNX-6515DS-VT | 90.00 | 154 | 0.759 | -0.103 | 0.043 | -0.056 | -7 | 131 |
| Flat Platform w/ Han | 90.00 | 2,000 | 0.759 | -0.103 | 0.043 | -0.056 | -97 | 1,706 |
| Diamond X50A | 80.00 | 5 | 0.600 | -0.053 | 0.015 | -0.026 | 0 | 4 |
| 6' Omni | 80.00 | 50 | 0.600 | -0.053 | 0.015 | -0.026 | -1 | 43 |
| Stand-Offs | 80.00 | 100 | 0.600 | -0.053 | 0.015 | -0.026 | -2 | 85 |
| PCTEL GPS-TMG-HR- | 70.00 | 1 | 0.459 | -0.002 | 0.006 | 0.020 | 0 | 1 |
| Stand-Off | 70.00 | 30 | 0.459 | -0.002 | 0.006 | 0.020 | 1 | 26 |
| | | 41,770 | 71.955 | 15.960 | 19.365 | 5.238 | 1,671 | 35,624 |

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

| Segment | Height | Weight | a | b | c | Saz | Horizontal | Vertical |
|---------|---------------|--------|-------|--------|-------|-------|------------|----------|
| | Above Base | | | | | | (lb) | (lb) |
| 37 | 141.00 | 83 | 1.863 | 1.843 | 1.090 | 0.426 | 31 | 71 |
| 36 | 138.00 | 166 | 1.785 | 1.471 | 0.952 | 0.366 | 53 | 142 |
| 35 | 135.50 | 47 | 1.721 | 1.203 | 0.847 | 0.319 | 13 | 40 |
| 34 | 133.00 | 186 | 1.658 | 0.969 | 0.752 | 0.275 | 44 | 159 |
| 33 | 130.50 | 55 | 1.596 | 0.767 | 0.665 | 0.234 | 11 | 47 |
| 32 | 127.90 | 230 | 1.533 | 0.586 | 0.583 | 0.195 | 39 | 196 |
| 31 | 125.40 | 53 | 1.474 | 0.439 | 0.512 | 0.159 | 7 | 45 |
| 30 | 122.50 | 339 | 1.407 | 0.296 | 0.439 | 0.122 | 36 | 289 |
| 29 | 117.50 | 395 | 1.294 | 0.112 | 0.331 | 0.065 | 22 | 337 |
| 28 | 112.50 | 410 | 1.186 | -0.008 | 0.245 | 0.019 | 7 | 349 |

| | | | | | | | | |
|----------------------|--------|-------|-------|--------|-------|--------|-----|-------|
| 27 | 107.50 | 473 | 1.083 | -0.079 | 0.177 | -0.016 | -6 | 404 |
| 26 | 102.50 | 488 | 0.985 | -0.113 | 0.124 | -0.040 | -17 | 416 |
| 25 | 97.50 | 559 | 0.891 | -0.122 | 0.084 | -0.054 | -26 | 477 |
| 24 | 92.50 | 573 | 0.802 | -0.112 | 0.054 | -0.058 | -29 | 489 |
| 23 | 87.50 | 651 | 0.718 | -0.092 | 0.033 | -0.051 | -29 | 555 |
| 22 | 84.95 | 13 | 0.676 | -0.079 | 0.025 | -0.044 | -1 | 11 |
| 21 | 82.82 | 1,025 | 0.643 | -0.068 | 0.020 | -0.037 | -33 | 874 |
| 20 | 80.37 | 128 | 0.606 | -0.055 | 0.015 | -0.027 | -3 | 109 |
| 19 | 77.50 | 872 | 0.563 | -0.039 | 0.011 | -0.015 | -11 | 744 |
| 18 | 72.50 | 894 | 0.493 | -0.013 | 0.007 | 0.009 | 7 | 762 |
| 17 | 67.50 | 917 | 0.427 | 0.009 | 0.006 | 0.030 | 24 | 782 |
| 16 | 62.50 | 939 | 0.366 | 0.028 | 0.008 | 0.046 | 37 | 801 |
| 15 | 57.84 | 830 | 0.314 | 0.042 | 0.011 | 0.056 | 40 | 707 |
| 14 | 55.34 | 177 | 0.287 | 0.048 | 0.013 | 0.060 | 9 | 151 |
| 13 | 52.50 | 1,317 | 0.258 | 0.054 | 0.016 | 0.063 | 71 | 1,123 |
| 12 | 47.70 | 1,231 | 0.213 | 0.061 | 0.021 | 0.065 | 69 | 1,050 |
| 11 | 45.20 | 175 | 0.191 | 0.064 | 0.024 | 0.065 | 10 | 149 |
| 10 | 42.62 | 2,103 | 0.170 | 0.066 | 0.027 | 0.065 | 118 | 1,794 |
| 9 | 40.12 | 72 | 0.151 | 0.068 | 0.030 | 0.065 | 4 | 61 |
| 8 | 37.50 | 1,491 | 0.132 | 0.069 | 0.033 | 0.064 | 83 | 1,272 |
| 7 | 32.50 | 1,516 | 0.099 | 0.071 | 0.037 | 0.062 | 82 | 1,293 |
| 6 | 27.50 | 1,542 | 0.071 | 0.072 | 0.041 | 0.061 | 81 | 1,315 |
| 5 | 22.50 | 1,567 | 0.047 | 0.071 | 0.042 | 0.059 | 80 | 1,337 |
| 4 | 17.50 | 1,593 | 0.029 | 0.068 | 0.040 | 0.056 | 77 | 1,358 |
| 3 | 12.50 | 1,618 | 0.015 | 0.060 | 0.035 | 0.051 | 71 | 1,380 |
| 2 | 7.50 | 1,644 | 0.005 | 0.045 | 0.026 | 0.041 | 58 | 1,402 |
| 1 | 2.50 | 1,669 | 0.001 | 0.019 | 0.010 | 0.019 | 28 | 1,424 |
| Generic RCU (Remote | 136.00 | 6 | 1.734 | 1.254 | 0.867 | 0.328 | 2 | 5 |
| Kathrein Scala 742-2 | 136.00 | 68 | 1.734 | 1.254 | 0.867 | 0.328 | 19 | 58 |
| Powerwave Allgon LGP | 131.00 | 33 | 1.609 | 0.805 | 0.682 | 0.242 | 7 | 28 |
| Powerwave Allgon LGP | 131.00 | 85 | 1.609 | 0.805 | 0.682 | 0.242 | 18 | 72 |
| Raycap DC6-48-60-18- | 131.00 | 32 | 1.609 | 0.805 | 0.682 | 0.242 | 7 | 27 |
| Ericsson RRUS 11 (Ba | 131.00 | 264 | 1.609 | 0.805 | 0.682 | 0.242 | 55 | 225 |
| Powerwave Allgon 777 | 131.00 | 210 | 1.609 | 0.805 | 0.682 | 0.242 | 44 | 179 |
| Powerwave Allgon P65 | 131.00 | 159 | 1.609 | 0.805 | 0.682 | 0.242 | 33 | 136 |
| Flat Platform w/ Han | 131.00 | 2,000 | 1.609 | 0.805 | 0.682 | 0.242 | 420 | 1,706 |
| DragonWave Horizon C | 120.00 | 21 | 1.350 | 0.195 | 0.382 | 0.092 | 2 | 18 |
| NextNet BTS-2500 | 120.00 | 105 | 1.350 | 0.195 | 0.382 | 0.092 | 8 | 90 |
| Alcatel-Lucent 800 M | 120.00 | 192 | 1.350 | 0.195 | 0.382 | 0.092 | 15 | 164 |
| Alcatel-Lucent 1900 | 120.00 | 180 | 1.350 | 0.195 | 0.382 | 0.092 | 14 | 154 |
| Alcatel-Lucent TD-RR | 120.00 | 210 | 1.350 | 0.195 | 0.382 | 0.092 | 17 | 179 |
| Argus LLPX310R | 120.00 | 86 | 1.350 | 0.195 | 0.382 | 0.092 | 7 | 73 |
| DragonWave A-ANT-18G | 120.00 | 54 | 1.350 | 0.195 | 0.382 | 0.092 | 4 | 46 |
| RFS RFS APXV9TM14- | 120.00 | 165 | 1.350 | 0.195 | 0.382 | 0.092 | 13 | 141 |
| RFS APXVSPP18-C-A20 | 120.00 | 171 | 1.350 | 0.195 | 0.382 | 0.092 | 14 | 146 |
| Flat Platform w/ Han | 120.00 | 2,000 | 1.350 | 0.195 | 0.382 | 0.092 | 160 | 1,706 |
| Swedcom ALP 9011-Din | 110.00 | 120 | 1.134 | -0.049 | 0.209 | 0.001 | 0 | 102 |
| Flat Platform w/ Han | 110.00 | 2,000 | 1.134 | -0.049 | 0.209 | 0.001 | 1 | 1,706 |
| RFS FD9R6004/1C-3L | 100.00 | 19 | 0.937 | -0.120 | 0.102 | -0.049 | -1 | 16 |
| GPS | 100.00 | 10 | 0.937 | -0.120 | 0.102 | -0.049 | 0 | 9 |
| Alcatel-Lucent RRH2x | 100.00 | 132 | 0.937 | -0.120 | 0.102 | -0.049 | -6 | 113 |
| Rymsa MGD3-800TX | 100.00 | 46 | 0.937 | -0.120 | 0.102 | -0.049 | -2 | 39 |
| Antel BXA-171063/12C | 100.00 | 45 | 0.937 | -0.120 | 0.102 | -0.049 | -2 | 38 |
| RFS DB-T1-6Z-8AB-0Z | 100.00 | 44 | 0.937 | -0.120 | 0.102 | -0.049 | -2 | 38 |
| Antel BXA-70080/6CF_ | 100.00 | 54 | 0.937 | -0.120 | 0.102 | -0.049 | -2 | 46 |
| Powerwave Allgon P65 | 100.00 | 99 | 0.937 | -0.120 | 0.102 | -0.049 | -4 | 84 |
| Flat Platform w/ Han | 100.00 | 2,000 | 0.937 | -0.120 | 0.102 | -0.049 | -84 | 1,706 |
| RFS ATMAA1412D-1A20 | 90.00 | 52 | 0.759 | -0.103 | 0.043 | -0.056 | -3 | 44 |
| Ericsson RRUS 11 B12 | 90.00 | 152 | 0.759 | -0.103 | 0.043 | -0.056 | -7 | 130 |
| Ericsson AIR 21, 1.3 | 90.00 | 332 | 0.759 | -0.103 | 0.043 | -0.056 | -16 | 283 |
| Ericsson AIR 21, 1.3 | 90.00 | 244 | 0.759 | -0.103 | 0.043 | -0.056 | -12 | 209 |
| Andrew LNX-6515DS-VT | 90.00 | 154 | 0.759 | -0.103 | 0.043 | -0.056 | -7 | 131 |
| Flat Platform w/ Han | 90.00 | 2,000 | 0.759 | -0.103 | 0.043 | -0.056 | -97 | 1,706 |
| Diamond X50A | 80.00 | 5 | 0.600 | -0.053 | 0.015 | -0.026 | 0 | 4 |

| | | | | |
|--------------|------------------|---------------------|----------------|---|
| Site Number: | 302511 | Code: | ANSI/TIA-222-G | © 2007 - 2016 by ATC IP LLC. All rights reserved. |
| Site Name: | WSPT - South, CT | Engineering Number: | 63916524 | 1/25/2016 11:02:39 AM |
| Customer: | T-MOBILE | | | |

| | | | | | | | | |
|-------------------|--------|--------|--------|--------|-------|--------|----|--------|
| 6' Omni | 80.00 | 50 | 0.600 | -0.053 | 0.015 | -0.026 | -1 | 43 |
| Stand-Offs | 80.00 | 100 | 0.600 | -0.053 | 0.015 | -0.026 | -2 | 85 |
| PCTEL GPS-TMG-HR- | 70.00 | 1 | 0.459 | -0.002 | 0.006 | 0.020 | 0 | 1 |
| Stand-Off | 70.00 | 30 | 0.459 | -0.002 | 0.006 | 0.020 | 1 | 26 |
| | 41,770 | 71.955 | 15.960 | 19.365 | 5.238 | 1,671 | | 35,624 |

Load Case (0.9 - 0.2Sds) * DL + E ELFM

Seismic (Reduced DL) Equivalent Lateral Forces Method

| Segment | Height Above Base (ft) | Weight (lb) | Horizontal Force | | | | Vertical Force (lb) | |
|----------------------|---------------------------------|----------------|------------------|--------|-------|--------|---------------------------|-------|
| | | | a | b | c | Saz | | |
| 37 | 141.00 | 83 | 1.863 | 1.843 | 1.090 | 0.426 | 31 | 71 |
| 36 | 138.00 | 166 | 1.785 | 1.471 | 0.952 | 0.366 | 53 | 142 |
| 35 | 135.50 | 47 | 1.721 | 1.203 | 0.847 | 0.319 | 13 | 40 |
| 34 | 133.00 | 186 | 1.658 | 0.969 | 0.752 | 0.275 | 44 | 159 |
| 33 | 130.50 | 55 | 1.596 | 0.767 | 0.665 | 0.234 | 11 | 47 |
| 32 | 127.90 | 230 | 1.533 | 0.586 | 0.583 | 0.195 | 39 | 196 |
| 31 | 125.40 | 53 | 1.474 | 0.439 | 0.512 | 0.159 | 7 | 45 |
| 30 | 122.50 | 339 | 1.407 | 0.296 | 0.439 | 0.122 | 36 | 289 |
| 29 | 117.50 | 395 | 1.294 | 0.112 | 0.331 | 0.065 | 22 | 337 |
| 28 | 112.50 | 410 | 1.186 | -0.008 | 0.245 | 0.019 | 7 | 349 |
| 27 | 107.50 | 473 | 1.083 | -0.079 | 0.177 | -0.016 | -6 | 404 |
| 26 | 102.50 | 488 | 0.985 | -0.113 | 0.124 | -0.040 | -17 | 416 |
| 25 | 97.50 | 559 | 0.891 | -0.122 | 0.084 | -0.054 | -26 | 477 |
| 24 | 92.50 | 573 | 0.802 | -0.112 | 0.054 | -0.058 | -29 | 489 |
| 23 | 87.50 | 651 | 0.718 | -0.092 | 0.033 | -0.051 | -29 | 555 |
| 22 | 84.95 | 13 | 0.676 | -0.079 | 0.025 | -0.044 | -1 | 11 |
| 21 | 82.82 | 1,025 | 0.643 | -0.068 | 0.020 | -0.037 | -33 | 874 |
| 20 | 80.37 | 128 | 0.606 | -0.055 | 0.015 | -0.027 | -3 | 109 |
| 19 | 77.50 | 872 | 0.563 | -0.039 | 0.011 | -0.015 | -11 | 744 |
| 18 | 72.50 | 894 | 0.493 | -0.013 | 0.007 | 0.009 | 7 | 762 |
| 17 | 67.50 | 917 | 0.427 | 0.009 | 0.006 | 0.030 | 24 | 782 |
| 16 | 62.50 | 939 | 0.366 | 0.028 | 0.008 | 0.046 | 37 | 801 |
| 15 | 57.84 | 830 | 0.314 | 0.042 | 0.011 | 0.056 | 40 | 707 |
| 14 | 55.34 | 177 | 0.287 | 0.048 | 0.013 | 0.060 | 9 | 151 |
| 13 | 52.50 | 1,317 | 0.258 | 0.054 | 0.016 | 0.063 | 71 | 1,123 |
| 12 | 47.70 | 1,231 | 0.213 | 0.061 | 0.021 | 0.065 | 69 | 1,050 |
| 11 | 45.20 | 175 | 0.191 | 0.064 | 0.024 | 0.065 | 10 | 149 |
| 10 | 42.62 | 2,103 | 0.170 | 0.066 | 0.027 | 0.065 | 118 | 1,794 |
| 9 | 40.12 | 72 | 0.151 | 0.068 | 0.030 | 0.065 | 4 | 61 |
| 8 | 37.50 | 1,491 | 0.132 | 0.069 | 0.033 | 0.064 | 83 | 1,272 |
| 7 | 32.50 | 1,516 | 0.099 | 0.071 | 0.037 | 0.062 | 82 | 1,293 |
| 6 | 27.50 | 1,542 | 0.071 | 0.072 | 0.041 | 0.061 | 81 | 1,315 |
| 5 | 22.50 | 1,567 | 0.047 | 0.071 | 0.042 | 0.059 | 80 | 1,337 |
| 4 | 17.50 | 1,593 | 0.029 | 0.068 | 0.040 | 0.056 | 77 | 1,358 |
| 3 | 12.50 | 1,618 | 0.015 | 0.060 | 0.035 | 0.051 | 71 | 1,380 |
| 2 | 7.50 | 1,644 | 0.005 | 0.045 | 0.026 | 0.041 | 58 | 1,402 |
| 1 | 2.50 | 1,669 | 0.001 | 0.019 | 0.010 | 0.019 | 28 | 1,424 |
| Generic RCU (Remote | 136.00 | 6 | 1.734 | 1.254 | 0.867 | 0.328 | 2 | 5 |
| Kathrein Scala 742-2 | 136.00 | 68 | 1.734 | 1.254 | 0.867 | 0.328 | 19 | 58 |
| Powerwave Allgon LGP | 131.00 | 33 | 1.609 | 0.805 | 0.682 | 0.242 | 7 | 28 |
| Powerwave Allgon LGP | 131.00 | 85 | 1.609 | 0.805 | 0.682 | 0.242 | 18 | 72 |
| Raycap DC6-48-60-18- | 131.00 | 32 | 1.609 | 0.805 | 0.682 | 0.242 | 7 | 27 |
| Ericsson RRUS 11 (Ba | 131.00 | 264 | 1.609 | 0.805 | 0.682 | 0.242 | 55 | 225 |
| Powerwave Allgon 777 | 131.00 | 210 | 1.609 | 0.805 | 0.682 | 0.242 | 44 | 179 |
| Powerwave Allgon P65 | 131.00 | 159 | 1.609 | 0.805 | 0.682 | 0.242 | 33 | 136 |
| Flat Platform w/ Han | 131.00 | 2,000 | 1.609 | 0.805 | 0.682 | 0.242 | 420 | 1,706 |
| DragonWave Horizon C | 120.00 | 21 | 1.350 | 0.195 | 0.382 | 0.092 | 2 | 18 |
| NextNet BTS-2500 | 120.00 | 105 | 1.350 | 0.195 | 0.382 | 0.092 | 8 | 90 |
| Alcatel-Lucent 800 M | 120.00 | 192 | 1.350 | 0.195 | 0.382 | 0.092 | 15 | 164 |
| Alcatel-Lucent 1900 | 120.00 | 180 | 1.350 | 0.195 | 0.382 | 0.092 | 14 | 154 |

Site Number: 302511

Code: ANSI/TIA-222-G

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Site Name: WSPT - South, CT

Engineering Number: 63916524

1/25/2016 11:02:39 AM

Customer: T-MOBILE

| | | | | | | | | |
|----------------------|--------|--------|--------|--------|-------|--------|--------|-------|
| Alcatel-Lucent TD-RR | 120.00 | 210 | 1.350 | 0.195 | 0.382 | 0.092 | 17 | 179 |
| Argus LLPX310R | 120.00 | 86 | 1.350 | 0.195 | 0.382 | 0.092 | 7 | 73 |
| DragonWave A-ANT-18G | 120.00 | 54 | 1.350 | 0.195 | 0.382 | 0.092 | 4 | 46 |
| RFS RFS APXV9TM14- | 120.00 | 165 | 1.350 | 0.195 | 0.382 | 0.092 | 13 | 141 |
| RFS APXVSPP18-C-A20 | 120.00 | 171 | 1.350 | 0.195 | 0.382 | 0.092 | 14 | 146 |
| Flat Platform w/ Han | 120.00 | 2,000 | 1.350 | 0.195 | 0.382 | 0.092 | 160 | 1,706 |
| Swedcom ALP 9011-Din | 110.00 | 120 | 1.134 | -0.049 | 0.209 | 0.001 | 0 | 102 |
| Flat Platform w/ Han | 110.00 | 2,000 | 1.134 | -0.049 | 0.209 | 0.001 | 1 | 1,706 |
| RFS FD9R6004/1C-3L | 100.00 | 19 | 0.937 | -0.120 | 0.102 | -0.049 | -1 | 16 |
| GPS | 100.00 | 10 | 0.937 | -0.120 | 0.102 | -0.049 | 0 | 9 |
| Alcatel-Lucent RRH2x | 100.00 | 132 | 0.937 | -0.120 | 0.102 | -0.049 | -6 | 113 |
| Rymsa MGD3-800TX | 100.00 | 46 | 0.937 | -0.120 | 0.102 | -0.049 | -2 | 39 |
| Antel BXA-171063/12C | 100.00 | 45 | 0.937 | -0.120 | 0.102 | -0.049 | -2 | 38 |
| RFS DB-T1-6Z-8AB-0Z | 100.00 | 44 | 0.937 | -0.120 | 0.102 | -0.049 | -2 | 38 |
| Antel BXA-70080/6CF_ | 100.00 | 54 | 0.937 | -0.120 | 0.102 | -0.049 | -2 | 46 |
| Powerwave Allgon P65 | 100.00 | 99 | 0.937 | -0.120 | 0.102 | -0.049 | -4 | 84 |
| Flat Platform w/ Han | 100.00 | 2,000 | 0.937 | -0.120 | 0.102 | -0.049 | -84 | 1,706 |
| RFS ATMAA1412D-1A20 | 90.00 | 52 | 0.759 | -0.103 | 0.043 | -0.056 | -3 | 44 |
| Ericsson RRUS 11 B12 | 90.00 | 152 | 0.759 | -0.103 | 0.043 | -0.056 | -7 | 130 |
| Ericsson AIR 21, 1.3 | 90.00 | 332 | 0.759 | -0.103 | 0.043 | -0.056 | -16 | 283 |
| Ericsson AIR 21, 1.3 | 90.00 | 244 | 0.759 | -0.103 | 0.043 | -0.056 | -12 | 209 |
| Andrew LNX-6515DS-VT | 90.00 | 154 | 0.759 | -0.103 | 0.043 | -0.056 | -7 | 131 |
| Flat Platform w/ Han | 90.00 | 2,000 | 0.759 | -0.103 | 0.043 | -0.056 | -97 | 1,706 |
| Diamond X50A | 80.00 | 5 | 0.600 | -0.053 | 0.015 | -0.026 | 0 | 4 |
| 6' Omni | 80.00 | 50 | 0.600 | -0.053 | 0.015 | -0.026 | -1 | 43 |
| Stand-Offs | 80.00 | 100 | 0.600 | -0.053 | 0.015 | -0.026 | -2 | 85 |
| PCTEL GPS-TMG-HR- | 70.00 | 1 | 0.459 | -0.002 | 0.006 | 0.020 | 0 | 1 |
| Stand-Off | 70.00 | 30 | 0.459 | -0.002 | 0.006 | 0.020 | 1 | 26 |
| | 41,770 | 71,955 | 15.960 | 19.365 | 5.238 | 1,671 | 35,624 | |

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

| Segment | Height Above Base | | Weight (lb) | a | b | c | Saz | Horizontal Force (lb) | Vertical Force (lb) |
|---------|-------------------------|--------|----------------|-------|--------|-------|--------|-----------------------------|---------------------------|
| | (ft) | (ft) | | | | | | | |
| 37 | | 141.00 | 83 | 1.863 | 1.843 | 1.090 | 0.426 | 31 | 71 |
| 36 | | 138.00 | 166 | 1.785 | 1.471 | 0.952 | 0.366 | 53 | 142 |
| 35 | | 135.50 | 47 | 1.721 | 1.203 | 0.847 | 0.319 | 13 | 40 |
| 34 | | 133.00 | 186 | 1.658 | 0.969 | 0.752 | 0.275 | 44 | 159 |
| 33 | | 130.50 | 55 | 1.596 | 0.767 | 0.665 | 0.234 | 11 | 47 |
| 32 | | 127.90 | 230 | 1.533 | 0.586 | 0.583 | 0.195 | 39 | 196 |
| 31 | | 125.40 | 53 | 1.474 | 0.439 | 0.512 | 0.159 | 7 | 45 |
| 30 | | 122.50 | 339 | 1.407 | 0.296 | 0.439 | 0.122 | 36 | 289 |
| 29 | | 117.50 | 395 | 1.294 | 0.112 | 0.331 | 0.065 | 22 | 337 |
| 28 | | 112.50 | 410 | 1.186 | -0.008 | 0.245 | 0.019 | 7 | 349 |
| 27 | | 107.50 | 473 | 1.083 | -0.079 | 0.177 | -0.016 | -6 | 404 |
| 26 | | 102.50 | 488 | 0.985 | -0.113 | 0.124 | -0.040 | -17 | 416 |
| 25 | | 97.50 | 559 | 0.891 | -0.122 | 0.084 | -0.054 | -26 | 477 |
| 24 | | 92.50 | 573 | 0.802 | -0.112 | 0.054 | -0.058 | -29 | 489 |
| 23 | | 87.50 | 651 | 0.718 | -0.092 | 0.033 | -0.051 | -29 | 555 |
| 22 | | 84.95 | 13 | 0.676 | -0.079 | 0.025 | -0.044 | -1 | 11 |
| 21 | | 82.82 | 1,025 | 0.643 | -0.068 | 0.020 | -0.037 | -33 | 874 |
| 20 | | 80.37 | 128 | 0.606 | -0.055 | 0.015 | -0.027 | -3 | 109 |
| 19 | | 77.50 | 872 | 0.563 | -0.039 | 0.011 | -0.015 | -11 | 744 |
| 18 | | 72.50 | 894 | 0.493 | -0.013 | 0.007 | 0.009 | 7 | 762 |
| 17 | | 67.50 | 917 | 0.427 | 0.009 | 0.006 | 0.030 | 24 | 782 |
| 16 | | 62.50 | 939 | 0.366 | 0.028 | 0.008 | 0.046 | 37 | 801 |
| 15 | | 57.84 | 830 | 0.314 | 0.042 | 0.011 | 0.056 | 40 | 707 |
| 14 | | 55.34 | 177 | 0.287 | 0.048 | 0.013 | 0.060 | 9 | 151 |
| 13 | | 52.50 | 1,317 | 0.258 | 0.054 | 0.016 | 0.063 | 71 | 1,123 |
| 12 | | 47.70 | 1,231 | 0.213 | 0.061 | 0.021 | 0.065 | 69 | 1,050 |

Site Number: 302511

Code: ANSI/TIA-222-G

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Site Name: WSPT - South, CT

Engineering Number: 63916524

1/25/2016 11:02:39 AM

Customer: T-MOBILE

| | | | | | | | | |
|----------------------|--------|--------|--------|--------|-------|--------|-----|--------|
| 11 | 45.20 | 175 | 0.191 | 0.064 | 0.024 | 0.065 | 10 | 149 |
| 10 | 42.62 | 2,103 | 0.170 | 0.066 | 0.027 | 0.065 | 118 | 1,794 |
| 9 | 40.12 | 72 | 0.151 | 0.068 | 0.030 | 0.065 | 4 | 61 |
| 8 | 37.50 | 1,491 | 0.132 | 0.069 | 0.033 | 0.064 | 83 | 1,272 |
| 7 | 32.50 | 1,516 | 0.099 | 0.071 | 0.037 | 0.062 | 82 | 1,293 |
| 6 | 27.50 | 1,542 | 0.071 | 0.072 | 0.041 | 0.061 | 81 | 1,315 |
| 5 | 22.50 | 1,567 | 0.047 | 0.071 | 0.042 | 0.059 | 80 | 1,337 |
| 4 | 17.50 | 1,593 | 0.029 | 0.068 | 0.040 | 0.056 | 77 | 1,358 |
| 3 | 12.50 | 1,618 | 0.015 | 0.060 | 0.035 | 0.051 | 71 | 1,380 |
| 2 | 7.50 | 1,644 | 0.005 | 0.045 | 0.026 | 0.041 | 58 | 1,402 |
| 1 | 2.50 | 1,669 | 0.001 | 0.019 | 0.010 | 0.019 | 28 | 1,424 |
| Generic RCU (Remote | 136.00 | 6 | 1.734 | 1.254 | 0.867 | 0.328 | 2 | 5 |
| Kathrein Scala 742-2 | 136.00 | 68 | 1.734 | 1.254 | 0.867 | 0.328 | 19 | 58 |
| Powerwave Allgon LGP | 131.00 | 33 | 1.609 | 0.805 | 0.682 | 0.242 | 7 | 28 |
| Powerwave Allgon LGP | 131.00 | 85 | 1.609 | 0.805 | 0.682 | 0.242 | 18 | 72 |
| Raycap DC6-48-60-18- | 131.00 | 32 | 1.609 | 0.805 | 0.682 | 0.242 | 7 | 27 |
| Ericsson RRUS 11 (Ba | 131.00 | 264 | 1.609 | 0.805 | 0.682 | 0.242 | 55 | 225 |
| Powerwave Allgon 777 | 131.00 | 210 | 1.609 | 0.805 | 0.682 | 0.242 | 44 | 179 |
| Powerwave Allgon P65 | 131.00 | 159 | 1.609 | 0.805 | 0.682 | 0.242 | 33 | 136 |
| Flat Platform w/ Han | 131.00 | 2,000 | 1.609 | 0.805 | 0.682 | 0.242 | 420 | 1,706 |
| DragonWave Horizon C | 120.00 | 21 | 1.350 | 0.195 | 0.382 | 0.092 | 2 | 18 |
| NextNet BTS-2500 | 120.00 | 105 | 1.350 | 0.195 | 0.382 | 0.092 | 8 | 90 |
| Alcatel-Lucent 800 M | 120.00 | 192 | 1.350 | 0.195 | 0.382 | 0.092 | 15 | 164 |
| Alcatel-Lucent 1900 | 120.00 | 180 | 1.350 | 0.195 | 0.382 | 0.092 | 14 | 154 |
| Alcatel-Lucent TD-RR | 120.00 | 210 | 1.350 | 0.195 | 0.382 | 0.092 | 17 | 179 |
| Argus LLPX310R | 120.00 | 86 | 1.350 | 0.195 | 0.382 | 0.092 | 7 | 73 |
| DragonWave A-ANT-18G | 120.00 | 54 | 1.350 | 0.195 | 0.382 | 0.092 | 4 | 46 |
| RFS RFS APXV9TM14- | 120.00 | 165 | 1.350 | 0.195 | 0.382 | 0.092 | 13 | 141 |
| RFS APXVSPP18-C-A20 | 120.00 | 171 | 1.350 | 0.195 | 0.382 | 0.092 | 14 | 146 |
| Flat Platform w/ Han | 120.00 | 2,000 | 1.350 | 0.195 | 0.382 | 0.092 | 160 | 1,706 |
| Swedcom ALP 9011-Din | 110.00 | 120 | 1.134 | -0.049 | 0.209 | 0.001 | 0 | 102 |
| Flat Platform w/ Han | 110.00 | 2,000 | 1.134 | -0.049 | 0.209 | 0.001 | 1 | 1,706 |
| RFS FD9R6004/1C-3L | 100.00 | 19 | 0.937 | -0.120 | 0.102 | -0.049 | -1 | 16 |
| GPS | 100.00 | 10 | 0.937 | -0.120 | 0.102 | -0.049 | 0 | 9 |
| Alcatel-Lucent RRH2x | 100.00 | 132 | 0.937 | -0.120 | 0.102 | -0.049 | -6 | 113 |
| Rymsa MGD3-800TX | 100.00 | 46 | 0.937 | -0.120 | 0.102 | -0.049 | -2 | 39 |
| Antel BXA-171063/12C | 100.00 | 45 | 0.937 | -0.120 | 0.102 | -0.049 | -2 | 38 |
| RFS DB-T1-6Z-8AB-0Z | 100.00 | 44 | 0.937 | -0.120 | 0.102 | -0.049 | -2 | 38 |
| Antel BXA-70080/6CF_ | 100.00 | 54 | 0.937 | -0.120 | 0.102 | -0.049 | -2 | 46 |
| Powerwave Allgon P65 | 100.00 | 99 | 0.937 | -0.120 | 0.102 | -0.049 | -4 | 84 |
| Flat Platform w/ Han | 100.00 | 2,000 | 0.937 | -0.120 | 0.102 | -0.049 | -84 | 1,706 |
| RFS ATMAA1412D-1A20 | 90.00 | 52 | 0.759 | -0.103 | 0.043 | -0.056 | -3 | 44 |
| Ericsson RRUS 11 B12 | 90.00 | 152 | 0.759 | -0.103 | 0.043 | -0.056 | -7 | 130 |
| Ericsson AIR 21, 1.3 | 90.00 | 332 | 0.759 | -0.103 | 0.043 | -0.056 | -16 | 283 |
| Ericsson AIR 21, 1.3 | 90.00 | 244 | 0.759 | -0.103 | 0.043 | -0.056 | -12 | 209 |
| Andrew LNX-6515DS-VT | 90.00 | 154 | 0.759 | -0.103 | 0.043 | -0.056 | -7 | 131 |
| Flat Platform w/ Han | 90.00 | 2,000 | 0.759 | -0.103 | 0.043 | -0.056 | -97 | 1,706 |
| Diamond X50A | 80.00 | 5 | 0.600 | -0.053 | 0.015 | -0.026 | 0 | 4 |
| 6' Omni | 80.00 | 50 | 0.600 | -0.053 | 0.015 | -0.026 | -1 | 43 |
| Stand-Offs | 80.00 | 100 | 0.600 | -0.053 | 0.015 | -0.026 | -2 | 85 |
| PCTEL GPS-TMG-HR- | 70.00 | 1 | 0.459 | -0.002 | 0.006 | 0.020 | 0 | 1 |
| Stand-Off | 70.00 | 30 | 0.459 | -0.002 | 0.006 | 0.020 | 1 | 26 |
| | 41,770 | 71.955 | 15.960 | 19.365 | 5.238 | 1,671 | | 35,624 |

Site Number: 302511

Code: ANSI/TIA-222-G

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Site Name: WSPT - South, CT

Engineering Number: 63916524

1/25/2016 11:02:39 AM

Customer: T-MOBILE

Analysis Summary

| Load Case | Reactions | | | | | | Max Usage | |
|------------------------------|-----------------------|-----------------------|-----------------------|---------------------------|---------------------------|---------------------------|--------------|----------------------|
| | Shear FX (kips) | Shear FZ (kips) | Axial FY (kips) | Moment MX (ft-kips) | Moment MY (ft-kips) | Moment MZ (ft-kips) | Elev (ft) | Interaction Ratio |
| 1.2D + 1.6W | 41.26 | 0.00 | 50.04 | 0.00 | 0.00 | 3705.43 | 84.90 | 0.86 |
| 0.9D + 1.6W | 40.03 | 0.00 | 37.51 | 0.00 | 0.00 | 3613.52 | 84.90 | 0.83 |
| 1.2D + 1.0Di + 1.0Wi | 6.95 | 0.00 | 82.17 | 0.00 | 0.00 | 668.08 | 84.90 | 0.19 |
| (1.2 + 0.2Sds) * DL + E ELFM | 1.79 | 0.00 | 50.01 | 0.00 | 0.00 | 191.30 | 84.90 | 0.07 |
| (1.2 + 0.2Sds) * DL + E EMAM | 1.65 | 0.00 | 50.01 | 0.00 | 0.00 | 143.62 | 84.90 | 0.07 |
| (0.9 - 0.2Sds) * DL + E ELFM | 1.79 | 0.00 | 34.20 | 0.00 | 0.00 | 188.67 | 84.90 | 0.06 |
| (0.9 - 0.2Sds) * DL + E EMAM | 1.64 | 0.00 | 34.20 | 0.00 | 0.00 | 141.46 | 84.90 | 0.07 |
| 1.0D + 1.0W | 7.46 | 0.00 | 41.77 | 0.00 | 0.00 | 677.45 | 84.90 | 0.17 |

Additional Steel Summary

| Elev From (ft) | Elev To (ft) | Member | Intermediate Connectors | | | Upper Termination Connectors | | | | Lower Termination Connectors | | | | Max Member | | |
|----------------------|--------------------|----------------------|-------------------------|-------------------|-----------------|---------------------------------|-----------------|-------------|---------------|---------------------------------|-----------------|-------------|---------------|-------------|----------------|-------|
| | | | VQ/I (lb/in) | Applied (kips) | phiVn (kips) | MQ/I (kips) | phiVn (kips) | Num Reqd | Num Actual | MQ/I (kips) | phiVn (kips) | Num Reqd | Num Actual | Pu (kip) | phiPn (kip) | Ratio |
| 0.00 | 55.6 | (4) SOL-#20 All Thre | 331.2 | 9.9 | 16.8 | 195.7 | 12.0 | 17 | 22 | 0.0 | 12.0 | 0 | 0 | 254.4 | 330.5 | 0.770 |

| | | |
|--------------------------|---------------------|------------------|
| Base/Flange Plate | Plate Type | Baseplate |
| | Pole Diameter | 45 in |
| | Pole Thickness | 0.4375 in |
| | Plate Diameter | 60 in |
| | Plate Thickness | 2 in |
| | Plate Fy | 60 ksi |
| | Weld Length | 0.25 in |
| Stiffeners | ϕ_s Resistance | 942.65 k-in |
| | Applied | 429.71 k-in |

Code Rev. **G** Date 1/25/2016
Engineer S. Shanbhogue
Site # 302511
Carrier T-Mobile

Moment 3705.4 k-ft
Axial 50.0 k

| | | |
|-------------------|--------------|----------------|
| Stiffeners | # | 16 Show |
| | Thickness | 0.5 in |
| | Length | 4 in |
| | Height | 10 in |
| | Chamfer | 0 in |
| | Offset Angle | 0 ° |
| | Fy | 36 ksi |

| | | |
|----------------------|-------------------------------------|-----------|
| Bolts | # | 16 |
| | Bolt Circle (R)adial / (S)square | 54 in |
| | R | |
| | Diameter | 2.25 in |
| | Hole Diameter | 2.625 in |
| | Type | 18J |
| | Fy | 75 ksi |
| Reinforcement | Fu | 100 ksi |
| | ϕ_s Resistance | 259.82 k |
| Reinforcement | Applied | 146.28 k |

| | | |
|----------------------|---------------------|----------|
| Reinforcement | # | 4 |
| | DYW. Circle | 52 in |
| | Offset Angle | 11.25 ° |
| | Type | #20 |
| | Diameter | 2.5 in |
| | Fu | 100 ksi |
| | ϕ_s Resistance | 392.70 k |
| Extra Bolts O | Applied | 254.74 k |

| | | |
|----------------------|---|----------|
| Extra Bolts O | # | 0 |
| | | |

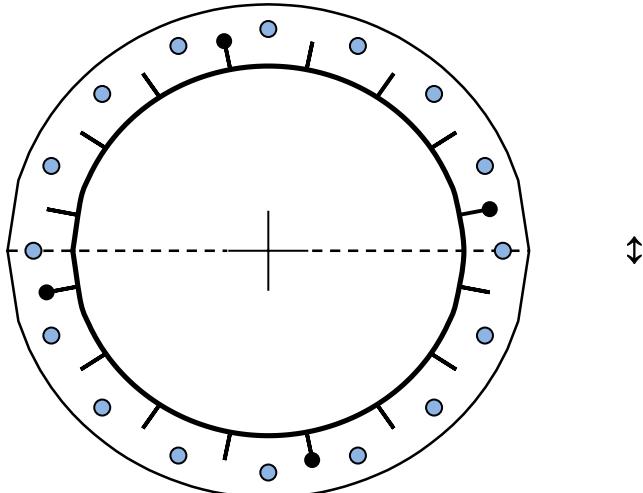


Plate Stress Ratio:

0.46 (Pass)

Bolt Stress Ratio:

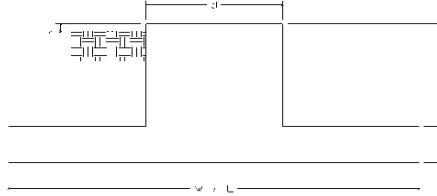
0.56 (Pass)

Reinforcement Stress Ratio:

0.65 (Pass)

Site Name: WSPT - South, CT, CT
 Site Number: 302511
 Engineering Number: 63916524
 Engineer: S Shanbhogue
 Date: 01/25/16
 Tower Type: MP

Program Last Updated: 5/13/2014



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

| Design / Analysis / Mapping: | Analysis | |
|--|---------------------|--|
| Compression/Leg: | 0.0 k | Concrete Strength (f'_c): 4000 psi |
| Uplift/Leg: | 0.0 k | Pad Tension Steel Depth: 44.00 in |
| Total Shear: | 41.3 k | ϕ_{Shear} : 0.75 |
| Moment: | 3705.4 k-ft | $\phi_{Flexure / Tension}$: 0.90 |
| Tower + Appurtenance Weight: | 50.0 k | $\phi_{Compression}$: 0.65 |
| Depth to Base of Foundation (l + t - h): | 7.00 ft | β : 0.85 |
| Diameter of Pier (d): | 7.33 ft | Bottom Pad Rebar Size #: 10 |
| Height of Pier above Ground (h): | 0.50 | # of Bottom Pad Rebar: 40 |
| Width of Pad (W): | 22.50 ft | Pad Bottom Steel Area: 50.80 in ² |
| Length of Pad (L): | 26.50 ft | Pad Steel F_y : 60000 psi |
| Thickness of Pad (t): | 4.00 ft | Top Pad Rebar Size #: 5 |
| Tower Leg Center to Center: | 0.00 ft | # of Top Pad Rebar: 40 |
| Number of Tower Legs: | 1.0 (1 if MP or GT) | Pad Top Steel Area: 12.40 in ² |
| Tower Center from Mat Center: | 2.00 ft | Pier Rebar Size #: 11 |
| Depth Below Ground Surface to Water Table: | 9.50 ft | Pier Steel Area (Single Bar): 1.56 in ² |
| Unit Weight of Concrete: | 150.0 pcf | # of Pier Rebar: 52 |
| 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: 80.0 in |
| Unit Weight of Soil Below Water Table: | 60.0 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: | 20000.0 psf | Tie Steel Area (Single Bar): 0.20 in ² |
| Ultimate Passive Pressure on Pad Face: | 500.0 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: | 4115.0 k-ft |
| OTM Resistance: | 6733.5 k-ft |
| Design OTM / OTM Resistance: | 0.61 Result: OK |

Soil Bearing Pressure Usage

| | |
|---|----------------------|
| Net Bearing Pressure: | 3039 psf |
| Factored Nominal Bearing Pressure: | 15000 psf |
| Net Bearing Pressure/Factored Nominal Bearing Pressure: | 0.20 Result: OK |
| Load Direction Controlling Design Bearing Pressure: | Diagonal to Pad Edge |

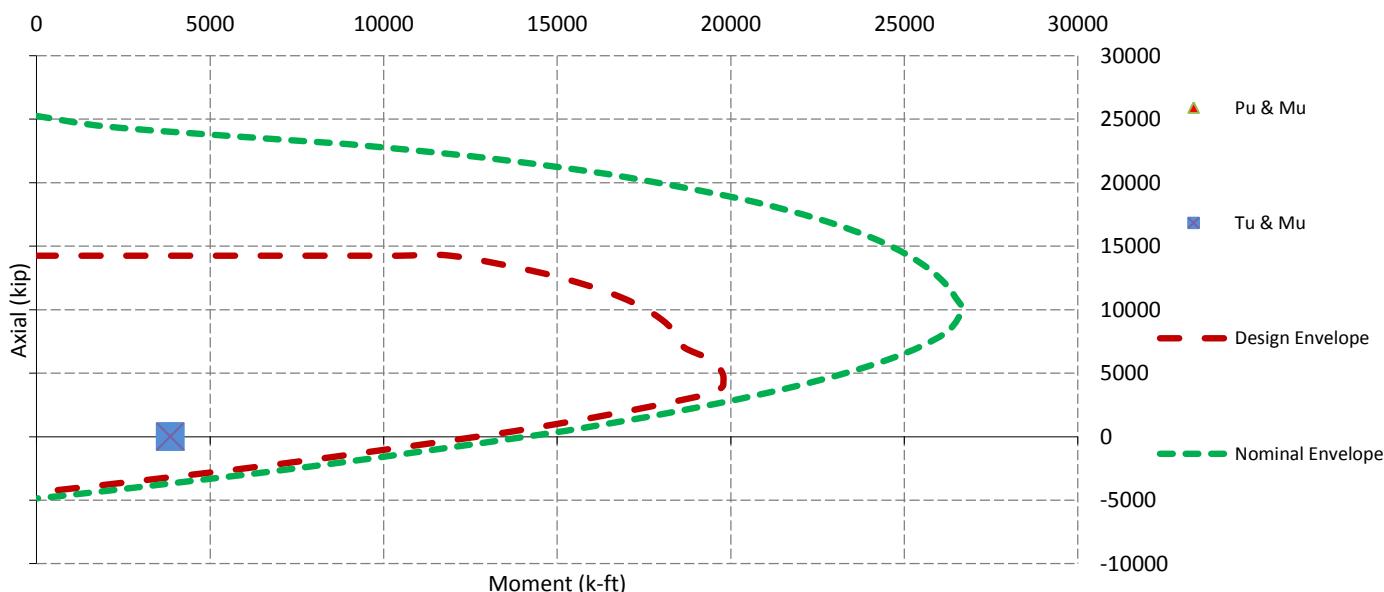
Sliding Factor of Safety

| | |
|--------------------------------------|-----------------|
| Total Factored Sliding Resistance: | 198.8 k |
| Sliding Design / Sliding Resistance: | 0.21 Result: OK |

One Way Shear, Flexual Capacity, and Punching Shear

| | |
|---|--|
| Factored One Way Shear (V_u): | 150.8 k |
| One Way Shear Capacity (ϕV_c): | 859.4 k - ACI11.3.1.1 |
| $V_u / \phi V_c$: | 0.18 Result: OK |
| Load Direction Controlling Shear Capacity: | Diagonal to Pad Edge |
| Lower Steel Pad Factored Moment (M_u): | 1211.5 k-ft |
| Lower Steel Pad Moment Capacity (ϕM_n): | 8951.4 k-ft - ACI10.3 |
| $M_u / \phi M_n$: | 0.14 Result: OK |
| Load Direction Controlling Flexural Capacity: | Diagonal to Pad Edge |
| Upper Steel Pad Factored Moment (M_u): | 960.3 k-ft |
| Upper Steel Pad Moment Capacity (ϕM_n): | 2438.9 k-ft |
| $M_u / \phi M_n$: | 0.39 Result: OK |
| Lower Pad Flexural Reinforcement Ratio: | 0.0036 OK - Minimum Reinforcement Ratio Met - ACI10.5.1 |
| Upper Pad Flexural Reinforcement Ratio: | 0.0009 OK - Minimum Reinforcement Ratio Met - ACI10.5.1 |
| Lower Pad Reinforcement Spacing: | 8 in - Pad Reinforcing Spacing OK - ACI7.12.2.2 & 10.5.4 |
| Upper Pad Reinforcement Spacing: | 8 in - Pad Reinforcing Spacing OK - ACI7.12.2.2 & 10.5.4 |
| Factored Punching Shear (V_u): | 0.0 k |
| Nominal Punching Shear Capacity ($\phi_c V_n$): | 3461.0 k - ACI11.12.2.1 |
| $V_u / \phi V_c$: | 0.00 Result: OK |
| Factored Moment in Pier (M_u): | 3849.8 k-ft |
| Pier Moment Capacity (ϕM_n): | 14271.9 k-ft |
| $M_u / \phi M_n$: | 0.27 Result: OK |
| Factored Shear in Pier (V_u): | 41.3 k |
| Pier Shear Capacity (ϕV_n): | 576.5 k |
| $V_u / \phi V_c$: | 0.07 Result: OK |
| Pier Shear Reinforcement Ratio: | 0.0003 No Ties Necessary for Shear - ACI11.5.6.1 |
| Factored Tension in Pier (T_u): | 0.0 k |
| Pier Tension Capacity (ϕT_n): | 4380.5 k |
| $T_u / \phi T_n$: | 0.00 Result: OK |
| Factored Compression in Pier (P_u): | 0.0 k |
| Pier Compression Capacity (ϕP_n): | 10600.0 k - ACI10.3.6.2 |
| $P_u / \phi P_n$: | 0.00 Result: OK |
| Pier Compression Reinforcement Ratio: | 0.013 OK - Reinforcement Ratio Met - ACI10.9.1 & 10.8.4 |
| $M_u/\phi_B M_n + T_u/\phi_T T_n$: | 0.27 Result: OK |

Nominal and Design Moment Capacity and Factored Design Loads



DOCKET NO. 166 - An application of Springwich Cellular Limited Partnership for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a cellular telecommunications facility approximately 250 feet west of Maple Lane, approximately 850 feet west of Maple Lane, or approximately 750 feet west of New Creek Road in the Town of Westport, Connecticut.

Connecticut Siting Council

August 29, 1995

DECISION AND ORDER

Pursuant to the foregoing Findings of Fact and Opinion, the Connecticut Siting Council (Council) finds that the effects associated with the construction, operation, and maintenance of a cellular telecommunications tower and equipment building at the proposed first alternate site in Westport, Connecticut, including effects on the natural environment; ecological integrity and balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish and wildlife are not disproportionate either alone or cumulatively with other effects when compared to need, are not in conflict with the policies of the State concerning such effects, and are not sufficient reason to deny the application and therefore directs that a Certificate of Environmental Compatibility and Public Need, as provided by General Statutes § 16-50k, be issued to Springwich Cellular Limited Partnership (Springwich), for the construction, operation, and maintenance of a cellular telecommunications tower, associated equipment, and building at the proposed first alternate site, located approximately 850 feet west of Maple Lane, Westport, Connecticut. We find the effects on scenic resources and adjacent land uses of the second alternate site to be significant and the prime site does not provide full coverage to Interstate 95, and therefore deny certification of these sites.

The facility shall be constructed, operated, and maintained substantially as specified in the Council's record in this matter, and subject to the following conditions:

1. The self-supporting monopole tower shall be no taller than necessary to provide the proposed communications service and the tower shall not exceed a total height of 130 feet above ground level (AGL).
2. The Certificate Holder shall prepare a Development and Management (D&M) Plan for this site in compliance with Sections 16-50j-75 through 16-50j-77 of the Regulations of Connecticut State Agencies. The D&M Plan shall be submitted to and approved by the Council prior to the commencement of facility construction and shall include detailed plans for the tower location and tower foundation; the placement of all antennas to be attached to this tower; plans for the equipment building and security fence; plans for the access road and utility line installation from Post Office Lane; plans for site clearing and tree trimming; plans for water drainage and erosion and sedimentation controls consistent with the Connecticut Guidelines for Soil Erosion and Sediment Control, as amended; and demarcation of wetlands with conditions that the building and tower shall be 65 feet or more from the wetland, and all grading and other disturbances shall be 25 feet or more from the wetland. No setback restrictions shall apply to the existing access road.
3. Upon the establishment of any new State or federal radio frequency standards applicable to frequencies of this facility, the facility granted herein shall be brought into compliance with such standards.

4. The Certificate Holder shall provide the Council a recalculated report of electromagnetic radio frequency power density if and when circumstances in operation cause a change in power density above the levels originally calculated and provided in the application.
5. The Certificate Holder shall permit public or private entities to share space on the proposed tower for fair consideration, or shall provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing.
6. If the facility does not initially provide, or permanently ceases to provide cellular services following completion of construction, this Decision and Order shall be void, and the Certificate Holder shall dismantle the tower and remove all associated equipment or reapplication for any continued or new use shall be made to the Council before any such use is made.
7. Unless otherwise approved by the Council, this Decision and Order shall be void if all construction authorized herein is not completed within three years of the effective date of this Decision and Order or within three years after all appeals to this Decision and Order have been resolved.
8. The Certificate Holder shall notify the Council upon completion of construction and provide the final cost to construct the facility.

Pursuant to General Statutes § 16-50p, we hereby direct that a copy of the Findings of Fact, Opinion, and Decision and Order be served on each person listed below, and notice of issuance shall be published in The Connecticut Post, The Hour, and the Westport News.

By this Decision and Order, the Council disposes of the legal rights, duties, and privileges of each party named or admitted to the proceeding in accordance with Section 16-50j-17 of the Regulations of Connecticut State Agencies.

The parties and intervenors to this proceeding are:

| APPLICANT | ITS REPRESENTATIVE |
|---|---|
| Springwich Cellular Limited Partnership | Peter J. Tyrrell, Esq. Springwich Cellular Limited Partnership 227 Church Street New Haven, CT 06510 |
| PARTY | ITS REPRESENTATIVE |
| Town of Westport | Joseph A. Arcudi First Selectman Town of Westport, Town Hall 110 Myrtle Avenue Westport, CT 06880 |
| INTERVENORS | ITS REPRESENTATIVES |
| Bell Atlantic NYNEX Mobile, Inc. | Kenneth C. Baldwin, Esq. Robinson & Cole One Commercial Plaza Hartford, CT 06103-3597 |

Jay Sherwood

Greens Farms Association

Richard J. Diviney, Esq.
Sherwood, Garlick, Cowell, Diviney & Atwood, P.C.
P.O. Box 390
Westport, CT 06881-0390

Robert P. Scholl
Attorney At Law
31 Imperial Avenue
Westport, CT 06880

Petition No. 600
AT&T Wireless PCS, LLC
Westport, Connecticut
Staff Report
January 8, 2003

On January 6, 2003, Connecticut Siting Council (Council) member Brian O'Neill and Derek Phelps of the Council staff met with an AT&T Wireless PCS (AT&T), LLC representative at a cellular telecommunications tower facility located at 20 Post Office Lane in Westport. AT&T, with the agreement of Springwich Cellular Limited Partnership (SCLP), proposes to modify the structure by installing antennas on a pipe mast extension and is petitioning the Council for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need (Certificate) is required for the modification.

AT&T Wireless proposes to replace existing antennas located at the 80-foot level of the existing 130-foot tower with three antennas to be mounted on a pipe mast extension at the top of the monopole. The new overall height of the tower would be 143 feet above grade. All other existing components of AT&T's existing facility at the site will remain as approved and constructed. The proposed antenna relocation would enable AT&T to extend coverage to previously unserved or underserved high traffic areas along I-95, Route 1, and other adjacent roads in Westport.

The Council issued a Certificate for this site on August 29, 1995. Thereafter, the Council issued a Declaratory Ruling (Petition 394) on August 25, 1998, that allowed for the replacement of the 130-tower, expansion of the tower compound, and the installation of antennas at the 130-, 120-, 110-, and 90-foot levels.

On March 1, 2000, the Council acknowledged SCLP's notice of an exempt modification to allow AT&T to install antennas at the 80-foot level (EM-SCLP-158-000218). However, the Town of Westport asserted that AT&T's proposed modifications required local zoning and inland wetlands approval. Despite having questions about the town's jurisdiction, AT&T complied and applied for the local approvals.

During its permitting process before the town, AT&T modified its application to request approval to place a pipe mast extension at the top of the existing tower in order to provide better overall coverage. Subsequently, AT&T received local land use approvals, including a height variance, for the attachment of the pipe mast and three antennas.

After receiving municipal approvals, AT&T filed a tower sharing request with the Council (TS-SCLP-158-000705) seeking approval for installation of antennas at the top of the existing monopole in lieu of the previous exempt modification with antennas at the 80-foot level. The

Council denied that request on July 28, 2000, without comment, which had the practical effect of requiring a docket and certificate amendment for AT&T's proposed modifications. (It should be noted that during this time there was ongoing litigation that involved an unrelated matter in Westport — Docket 188: Sunny Lane.) In light of the Council's denial, AT&T elected to place its antennas at the 80-foot level, "temporarily," in order to provide coverage, albeit limited, in the area.

AT&T now asserts that new circumstances exist which support its earlier request to locate its antennas on top of the monopole tower at the 140-foot level. These circumstances include:

- Consensus has emerged within the Council concerning the proper regulatory review process for such applications concerning attachments on top of existing tower facilities.
- The Council has repeatedly found that such attachments involving tower facilities do not have significant adverse environmental effects needing to be further evaluated in a docket.
- The Council's exclusive jurisdiction over tower facilities such as the site in question was recently confirmed by the Connecticut Supreme Court. As such, the Council has the jurisdiction to review and consider the modifications proposed by AT&T.
- AT&T has prepared and provided photosimulations to compare the existing monopole and antenna configurations with the proposed installation, and drive test data showing that the increased height of AT&T's antennas would provide coverage to currently unserved areas.

The tower is located between I-95 immediately to the north and a commuter rail line immediately to the south. There is also a high tension power line that runs parallel to the railroad. The nearest buildings are a small office and a small branch post office. A railroad station is also nearby. There are some residences on the other side of I-95. But the tower is screened from their view by the highway and vegetation, especially when the leaves are on the trees. During the site visit, there did not appear to be much development to the south of the rail line.

A structural analysis concludes that the tower is structurally adequate to accommodate the proposed addition. The worst-case power density for the telecommunications operations at the site has been calculated to be 35.59% of the applicable standard for uncontrolled environments. Staff estimates that raising AT&T's antennas from 80 to 140 feet would reduce Maximum Permissible Emission levels by 31%.

AT&T contends that the expanded coverage resulting from the requested height increase would minimize its need for other facilities in Westport. Given the location of this tower in a heavily traveled transportation corridor, its proximity to a power line, and the reduction of power density levels that would result from raising the antennas, the proposed increase in the height of this facility should not have any substantial adverse environmental effect.



OBILE NORTHEAST LLC
4 SYLVAN WAY
PARSIPPANY, NJ 07054

1033 Watervliet Shaker Rd
Albany, NY 12205
Office # (518) 690-0790
Fax # (518) 690-0793

GENERAL SITE NOTES:

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

E LEGEND

- - - - - SITE PROPERTY LINE
 - - - - - STREET OR ROAD
 - x - x - CHAIN LINK FENCE
 - o - o - OPAQUE WOODEN FENCE
 TREES/SHRUBS
 TREE LINE
 ☒ UTILITY POLE
 (E) EXISTING
 (N) NEW
 (P) PROPOSED
 (F) FUTURE

| DEPT. | DATE | APP'D | REVISIONS |
|---------|------|-------|-----------|
| RFE | | | |
| F. MAN. | | | |
| ZONING | | | |
| OPS | | | |
| ONSTR. | | | |
| EE AC | | | |

| | |
|-------------|---------|
| PROJECT NO: | 317-000 |
| DRAWN BY: | JLM |
| CHECKED BY: | ASW |

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OR USE WITHOUT EXPRESS WRITTEN
CONSENT IS STRICTLY PROHIBITED.

**NOTE: IF DRAWINGS ARE 22"X34", USE
GRAPHICAL SCALE AND/OR 1/2 TIMES
OF THE NOTED SCALE.**

SITE NUMBER:
CT11012B

SITE NAME:
WESTPORT/ I-95/ X18/ SHER

20 POST OFFICE LANE

SHEET THREE

SITE PLAN

GRAPHIC SCALE



SCALE (11x17): 1" = 20'-0"

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

SHEET NUMBER

C-1

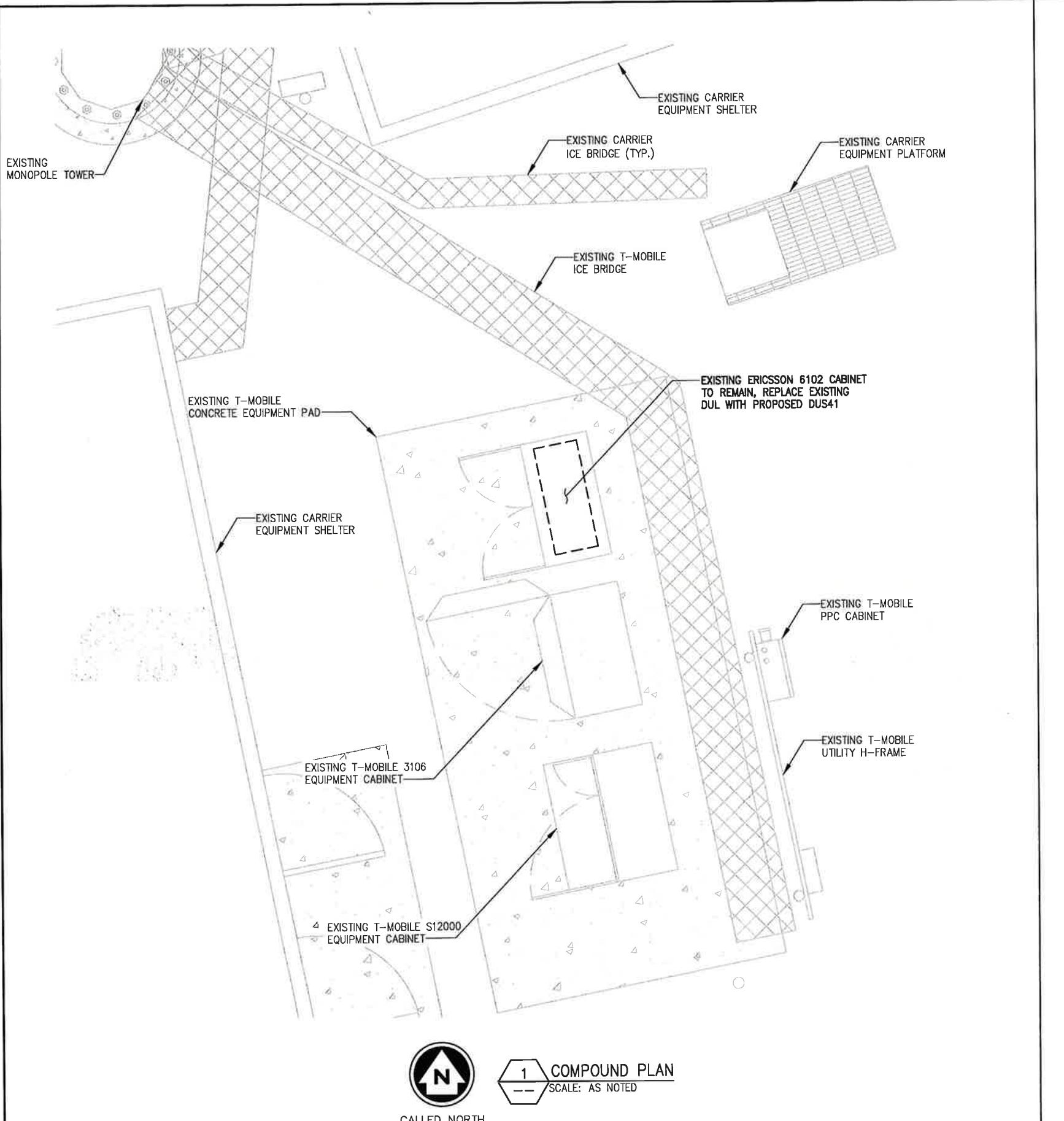
SHEET 2 OF 8 SHEETS



CALLED NORTH



1 COMPOUND PLAN



A circular icon containing a white upward-pointing arrow with a black outline, indicating the direction of North.

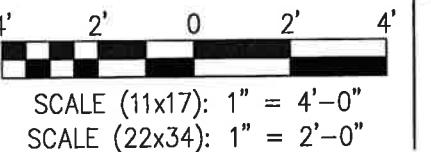
CALLED NORTH



-- / SCALE: AS NOTED

-- / SCALE: AS NOT

GRAPHIC SCALE



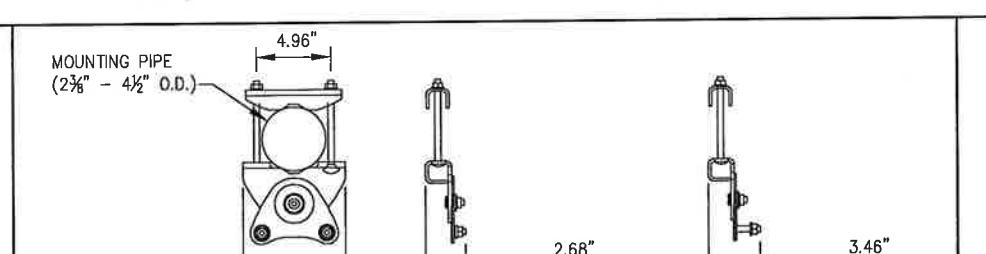
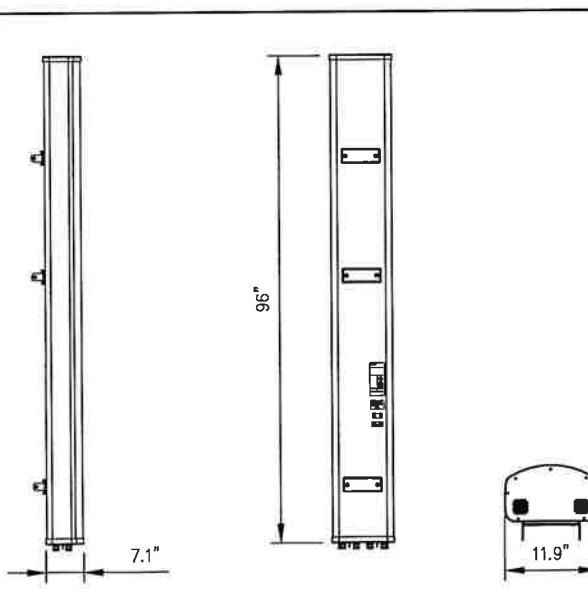
INFINIGY

1033 Waterview Shaker Rd
Albany, NY 12205
Office # (518) 660-0790
Fax # (518) 660-0793

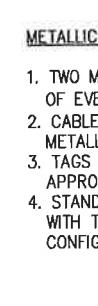
| RF SYSTEM SCHEDULE (702Cu CONFIGURATION) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|------------|--------------|---------|-----------------|-----------|---------------|-----------|---------|--------|--------|--------------------|-----------------------------|-----------------------------|---------------|---------------|--|--|------------|---------------|----------|---------------|--------------|--------------------|--------------------|--|--|---|-------|-------|---|-------|---------------|---------------|---|--|--|--|--|--|--|--|--|
| SECTOR | TECHNOLOGY | ANTENNA PORT | BAND | ANTENNA MODEL # | VENDOR | QTY (REMOVED) | QTY (NEW) | AZIMUTH | M-TILT | E-TILT | ANTENNA CENTERLINE | TMA MODEL # | VENDOR | RRU MODEL # | VENDOR | CABLE LENGTH | CABLE DIAMETER | CABLE TYPE | CABLE MODEL # | VENDOR | CABLE TAGGING | COLOR CODING | JUMPER TYPE | JUMPER TAGGING | COLOR CODING | | | | | | | | | | | | | | | | | |
| A | UMTS AWS | RF #1 | B4P | AIR21 B2A/B4P | ERICSSON | 0 | 0 | 70° | 0° | 3° | 90'-0" | - | - | - | - | EXISTING | 1½" | COAX | EXISTING | N/A | UMTS AWS A1 | - | COAX | - | - | | | | | | | | | | | | | | | | | |
| | | RF #2 | | | | | | | | | | (EXISTING) ATMAA1412D -1A20 | RFS | - | - | EXISTING | 1½" | COAX | EXISTING | N/A | UMTS AWS A2 | - | COAX | - | - | | | | | | | | | | | | | | | | | |
| | GSM | OPTICAL #1 | B2A | | | 0 | 0 | 70° | 0° | 3° | 90'-0" | - | - | - | - | (ANTENNA CONNECTED VIA EXISTING HYBRID CABLE.) | | | | | | FIBER | - | - | | | | | | | | | | | | | | | | | | |
| | UMTS | OPTICAL #2 | | | | | | | | | | LTE AWS | OPTICAL #1 | B4A | AIR21 B4A/B2P | ERICSSON | 0 | 0 | 70° | 0° | 2° | 90'-0" | - | (PROPOSED) RRUS 11 | ERICSSON | (ANTENNA CONNECTED VIA EXISTING HYBRID CABLE.) | | | | | | FIBER | LTE 700 FIBER | - | | | | | | | | |
| | LTE AWS | OPTICAL #1 | B4A | | | 0 | 0 | 70° | 0° | 3° | 90'-0" | - | - | - | - | (ANTENNA CONNECTED VIA EXISTING HYBRID CABLE.) | | | | | | FIBER | - | - | - | - | - | | | | | | | | | | | | | | | |
| B | UMTS AWS | RF #1 | B4P | | | ERICSSON | 0 | 0 | 270° | 0° | 3° | 90'-0" | - | - | - | - | EXISTING | 1½" | COAX | EXISTING | N/A | UMTS AWS A1 | - | COAX | - | - | | | | | | | | | | | | | | | | |
| | | RF #2 | | | | | | | | | | | (EXISTING) ATMAA1412D -1A20 | RFS | - | - | EXISTING | 1½" | COAX | EXISTING | N/A | UMTS AWS A2 | - | COAX | - | - | | | | | | | | | | | | | | | | |
| | GSM | OPTICAL #1 | B2A | | | | 0 | 0 | 270° | 0° | 3° | 90'-0" | - | - | - | - | (ANTENNA CONNECTED VIA EXISTING HYBRID CABLE.) | | | | | | FIBER | - | - | - | - | - | | | | | | | | | | | | | | |
| | UMTS | OPTICAL #2 | | | | | | | | | | LTE AWS | OPTICAL #1 | B4A | AIR21 B4A/B2P | ERICSSON | 0 | 0 | 270° | 0° | 2° | 90'-0" | - | (PROPOSED) RRUS 11 | ERICSSON | (ANTENNA CONNECTED VIA EXISTING HYBRID CABLE.) | | | | | | FIBER | LTE 700 FIBER | - | | | | | | | | |
| | LTE 700 | TBD | B12P | LNX-6515DS-VM | COMMSCOPE | 0 | 1 | 270° | 0° | 2° | 90'-0" | - | - | - | - | (ANTENNA CONNECTED VIA EXISTING HYBRID CABLE.) | | | | | | FIBER | - | - | - | - | - | | | | | | | | | | | | | | | |
| C | UMTS AWS | RF #1 | B4P | AIR21 B2A/B4P | ERICSSON | 0 | 0 | 350° | 0° | 3° | 90'-0" | - | - | - | - | EXISTING | 1½" | COAX | EXISTING | N/A | UMTS AWS A1 | - | COAX | - | - | | | | | | | | | | | | | | | | | |
| | | RF #2 | | | | | | | | | | (EXISTING) ATMAA1412D -1A20 | RFS | - | - | EXISTING | 1½" | COAX | EXISTING | N/A | UMTS AWS A2 | - | COAX | - | - | | | | | | | | | | | | | | | | | |
| | GSM | OPTICAL #1 | B2A | | | | | | | | | | UMTS | OPTICAL #2 | B4A | AIR21 B4A/B2P | ERICSSON | 0 | 0 | 350° | 0° | 3° | 90'-0" | - | - | - | - | - | FIBER | - | - | - | - | - | | | | | | | | |
| | LTE AWS | OPTICAL #1 | LTE 700 | | | | | | | | | TBD | B12P | LNX-6515DS-VM | COMMSCOPE | 0 | 1 | 350° | 0° | 2° | 90'-0" | - | (PROPOSED) RRUS 11 | ERICSSON | (ANTENNA CONNECTED VIA EXISTING HYBRID CABLE.) | | | | | | FIBER | LTE 700 FIBER | - | | | | | | | | | |
| | LTE 700 | TBD | B12P | LNX-6515DS-VM | COMMSCOPE | 0 | 1 | 350° | 0° | 2° | 90'-0" | - | - | - | - | (ANTENNA CONNECTED VIA EXISTING HYBRID CABLE.) | | | | | | FIBER | - | - | - | - | - | | | | | | | | | | | | | | | |
| D | UMTS AWS | RF #1 | B4P | AIR21 B2A/B4P | ERICSSON | 0 | 0 | 160° | 0° | 3° | 90'-0" | - | - | - | - | EXISTING | 1½" | COAX | EXISTING | N/A | UMTS AWS A1 | - | COAX | - | - | | | | | | | | | | | | | | | | | |
| | | RF #2 | | | | | | | | | | (EXISTING) ATMAA1412D -1A20 | RFS | - | - | EXISTING | 1½" | COAX | EXISTING | N/A | UMTS AWS A2 | - | COAX | - | - | | | | | | | | | | | | | | | | | |
| | GSM | OPTICAL #1 | B2A | | | | | | | | | UMTS | OPTICAL #2 | B4A | AIR21 B4A/B2P | ERICSSON | 0 | 0 | 160° | 0° | 3° | 90'-0" | - | - | - | - | - | FIBER | - | - | - | - | - | | | | | | | | | |
| | LTE 700 | TBD | B12P | LNX-6515DS-VM | COMMSCOPE | 0 | 1 | 160° | 0° | 2° | 90'-0" | - | - | - | - | (ANTENNA CONNECTED VIA EXISTING HYBRID CABLE.) | | | | | | FIBER | - | - | - | - | - | | | | | | | | | | | | | | | |

1 RF SCHEDULE
NOT TO SCALE

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



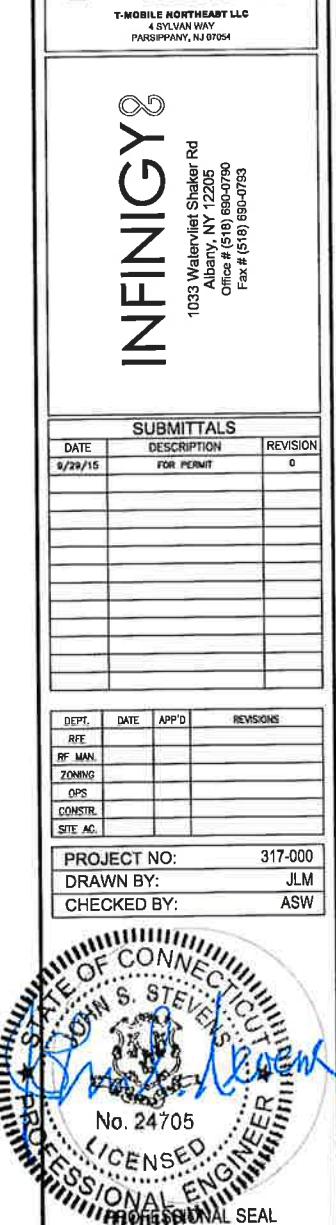
COMMSCOPE MODEL NO.: LNX-6515DS-VM
 RADOME MATERIAL: FIBERGLASS, UV RESISTANT
 RADOME COLOR: LIGHT GRAY
 DIMENSIONS, HxWxD: 96"x11.9"x7.1" (2438 x 301 x 181 mm)
 WEIGHT, W/
 PRE-MOUNTED BRACKETS: 43.7 LBS (19.8 kg)
 CONNECTOR: 7-16 DIN FEMALE

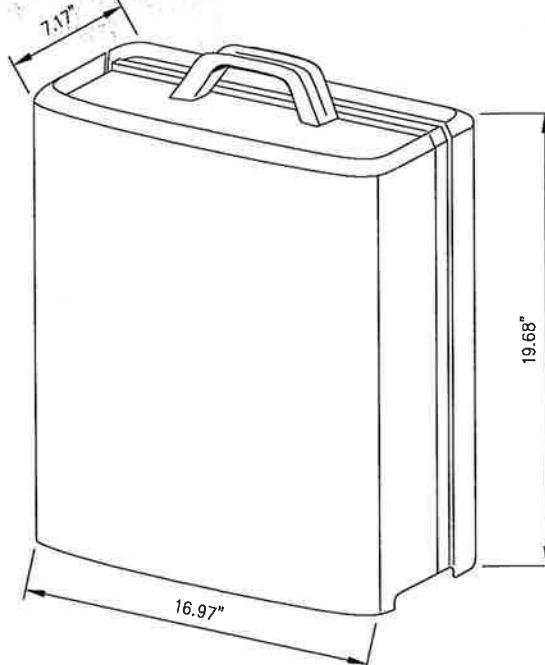
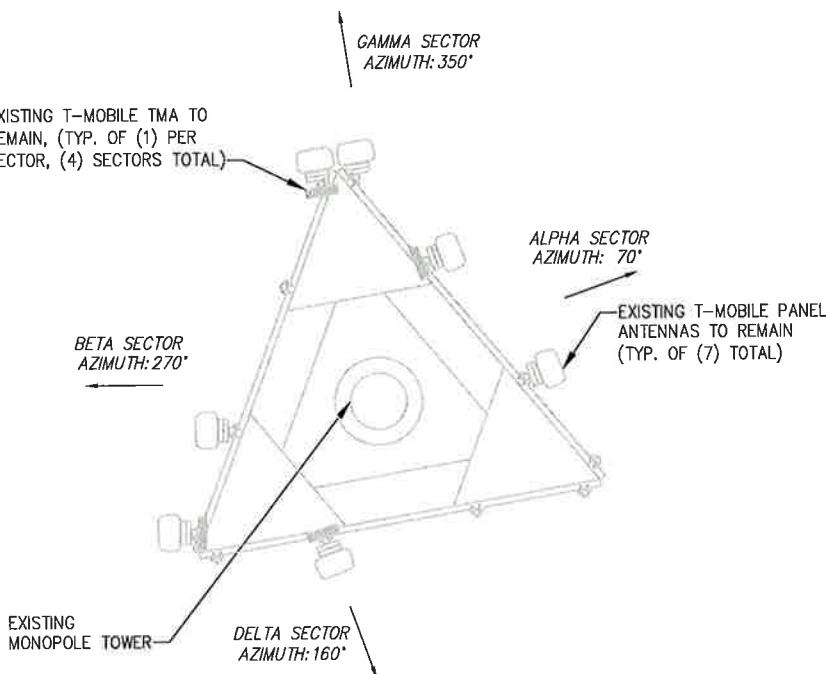


3 METALLIC TAG DETAIL
NOT TO SCALE

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| NOTE: IF DRAWINGS ARE 22"X34", USE GRAPHICAL SCALE AND/OR 1/2 TIMES OF THE NOTED SCALE. | | | |
| SITE NUMBER: CT11012B | | | |
| SITE NAME: WESTPORT/I-95/X18/ SHER 20 POST OFFICE LANE WESTPORT, CT 06880 | | | |
| SHEET TITLE | | | |
| ANTENNA DETAIL & RF SCHEDULE | | | |
| SHEET NUMBER | | | |
| C-3 | | | |
| SHEET 4 OF 8 SHEETS | | | |

INFINIGY
1033 Waterview Shaker Rd
Albany, NY 12205
Office # (518) 660-0790
Fax # (518) 660-0793

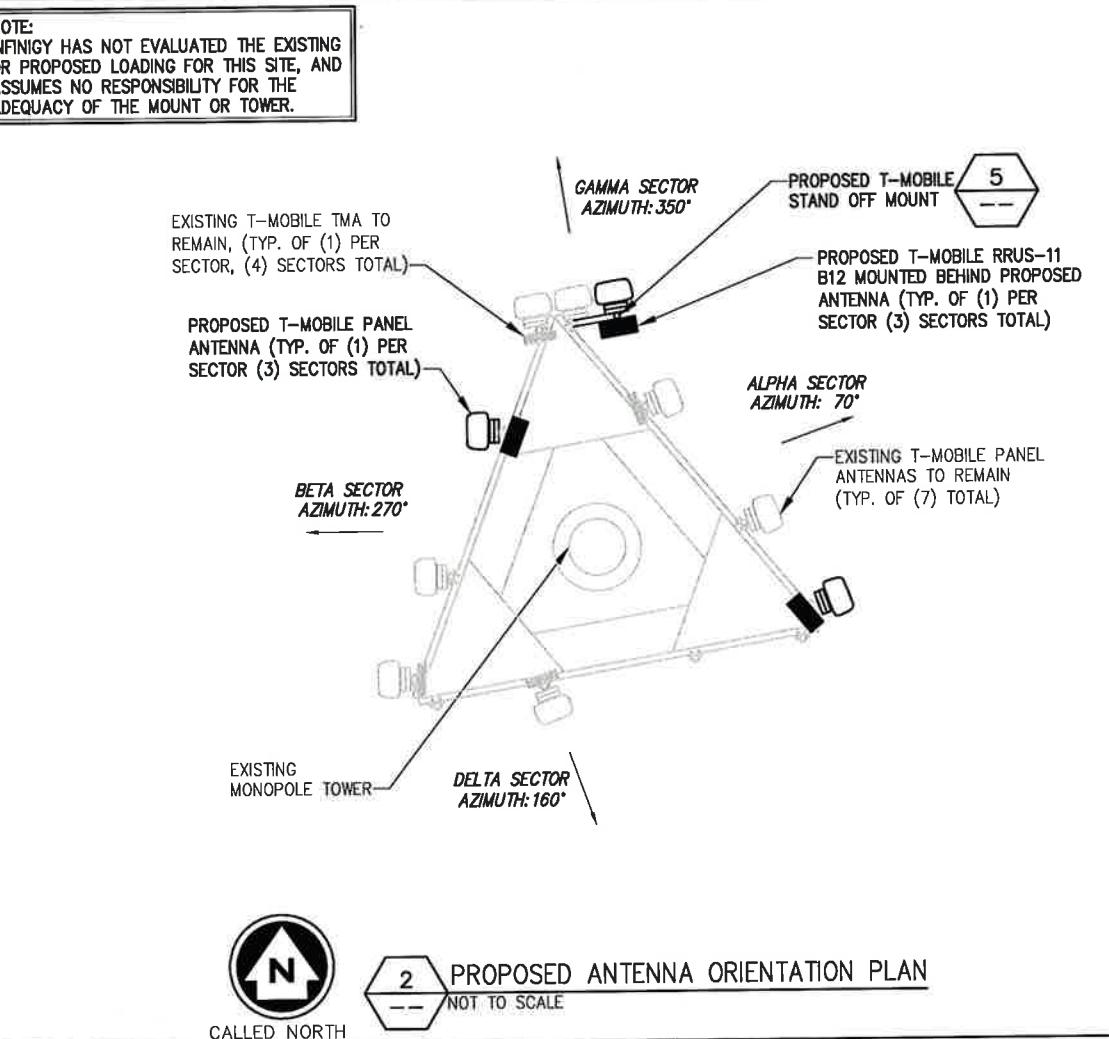




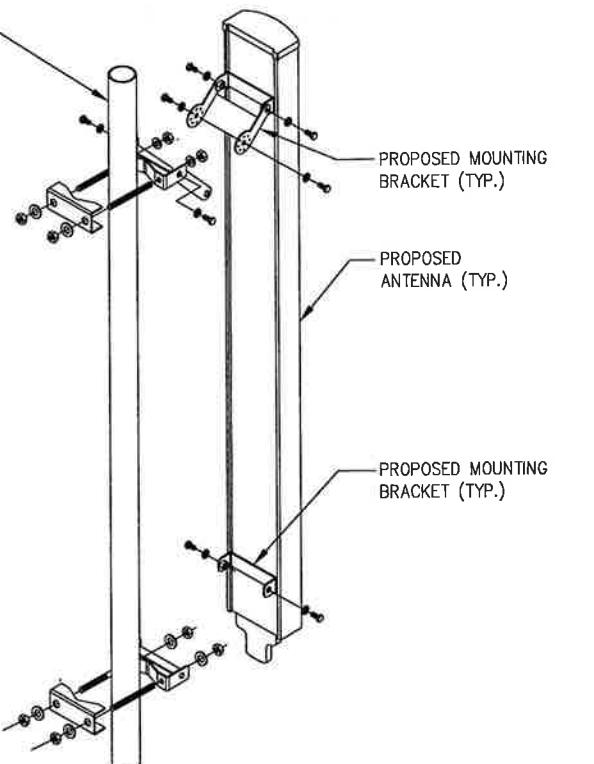
ERICSSON MODEL NO.: RRUS11-B12

COLOR: GRAY
DIMENSIONS, HxWxD: 19.68" x 16.97" x 7.17" (500 x 431 x 182 mm)
WEIGHT: 50.71 LBS (23 kg)

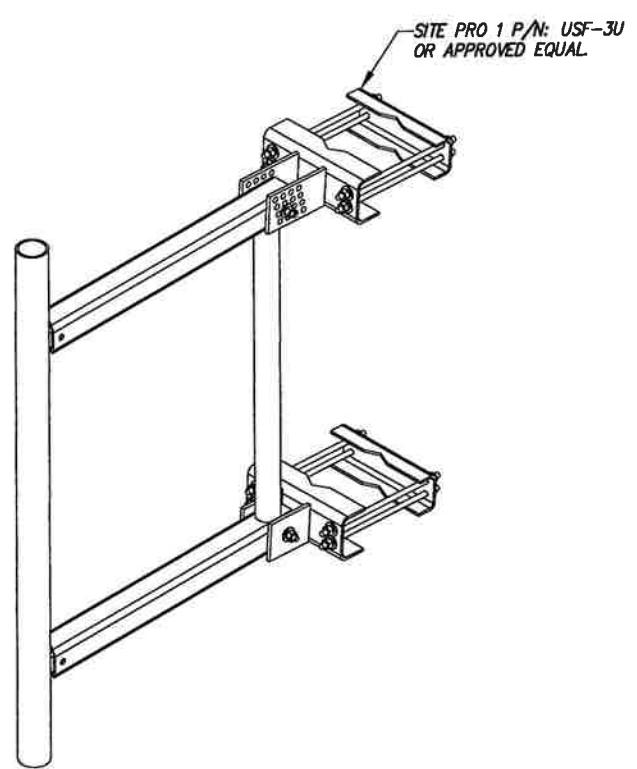
3 RRUS 11 DETAIL
--- NOT TO SCALE



PROPOSED ANTENNA ORIENTATION PLAN



4 MOUNTING DETAIL
--- NOT TO SCALE



5 STANOFF MOUNT DETAIL
--- NOT TO SCALE

STRUCTURAL NOTES:

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

| DEPT. | DATE | APP'D | REVISIONS |
|----------|------|-------|-----------|
| RFE | | | |
| F. MAN. | | | |
| ZONING | | | |
| OPS | | | |
| CONSTR. | | | |
| SITE AC. | | | |

| | |
|-------------|---------|
| PROJECT NO: | 317-000 |
| DRAWN BY: | JLM |
| CHECKED BY: | ASW |

| | |
|-------------|---------|
| PROJECT NO: | 317-000 |
| DRAWN BY: | JLM |
| CHECKED BY: | ASW |

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GRAPHICAL SCALE AND/OR 1/2 TIMES
OF THE NOTED SCALE.**

**SITE NUMBER:
CT11012B**

**SITE NAME:
WESTPORT/ I-95/ X18/ SHER**

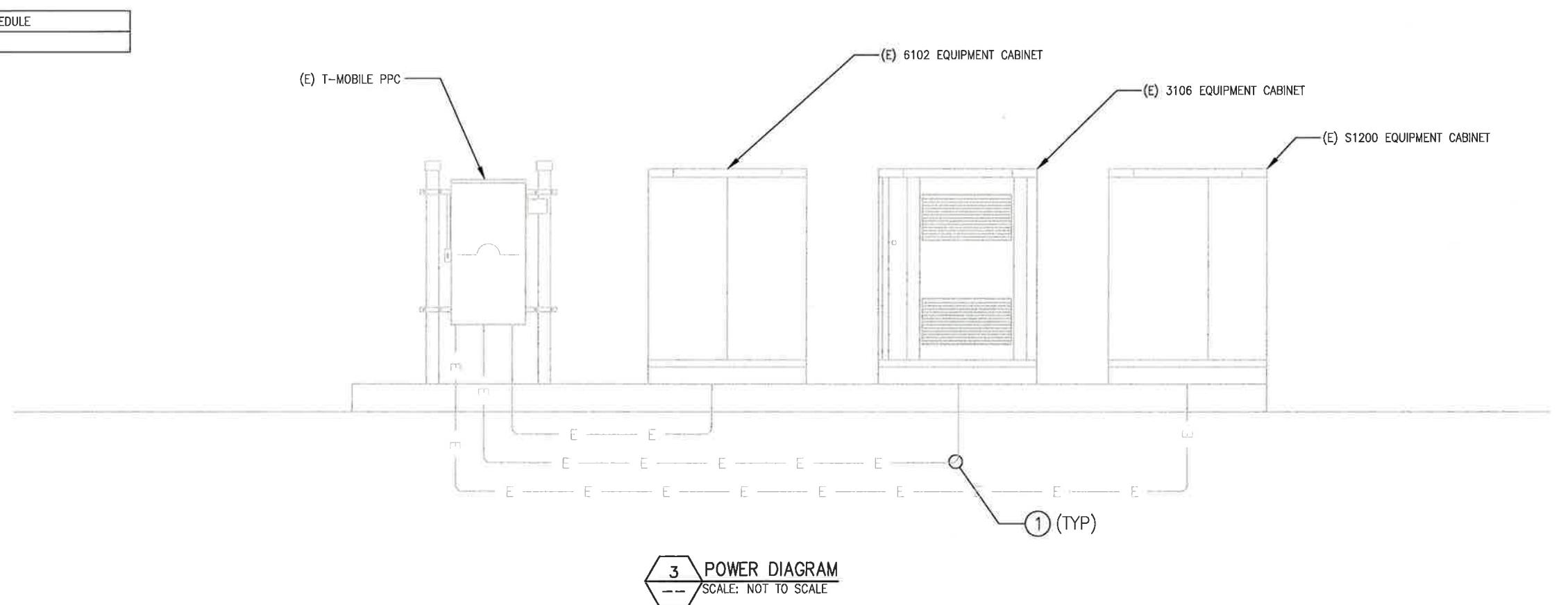
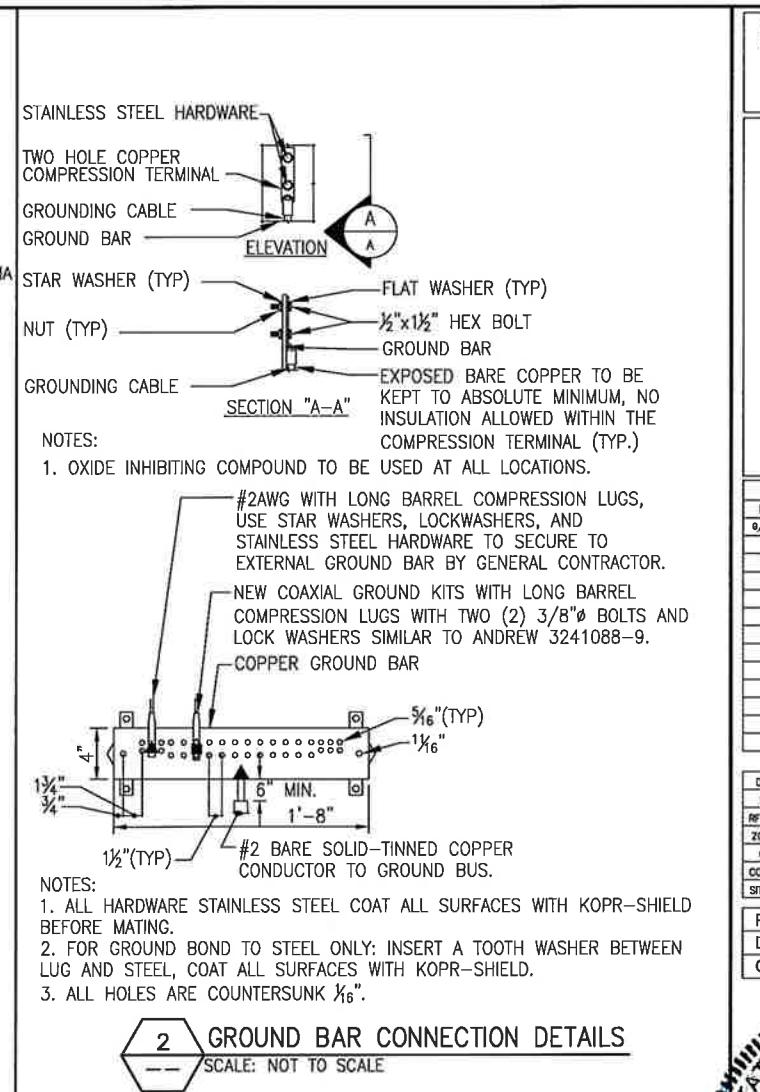
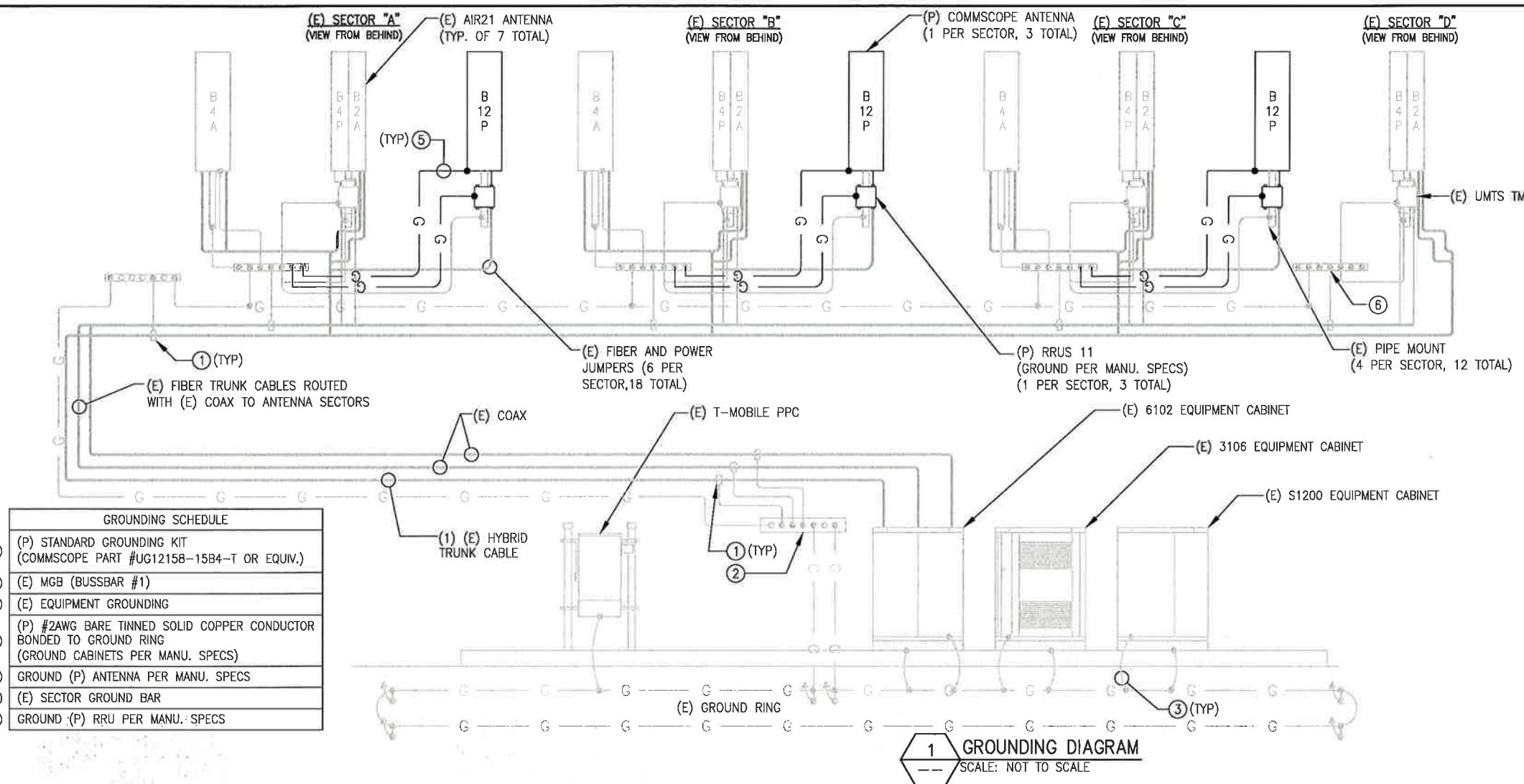
**20 POST OFFICE LANE
WESTPORT, CT 06880**

SHEET TITLE

EQUIPMENT SPECIFICATIONS

CLIMATE NUMBER

C-4



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SITE NUMBER:
CT11012B

SITE NAME:
WESTPORT/I-95/X18/SHER
20 POST OFFICE LANE
WESTPORT, CT 06880

SHEET TITLE

**GROUNDING &
POWER
DIAGRAMS**

SHEET NUMBER

E-1





1033 WaterVillet Shaker Rd
Albany, NY 12205
Office # (518) 690-0790
Fax # (518) 690-0793

1033 WaterVillet Shaker Rd
Albany, NY 12205
Office # (518) 690-0790
Fax # (518) 690-0793

| | |
|----------|---------|
| JECT NO: | 317-000 |
| WN BY: | JLM |
| CKED BY: | ASW |



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AGREEMENT IS STRICTLY PROHIBITED.

IF DRAWINGS ARE 22"X34", USE
HICAL SCALE AND/OR 1/2 TIMES
OF THE NOTED SCALE

SITE NUMBER:
CT11012B

SITE NAME:
WESTPORT/ I-95/ X18/ SHER

20 POST OFFICE LANE

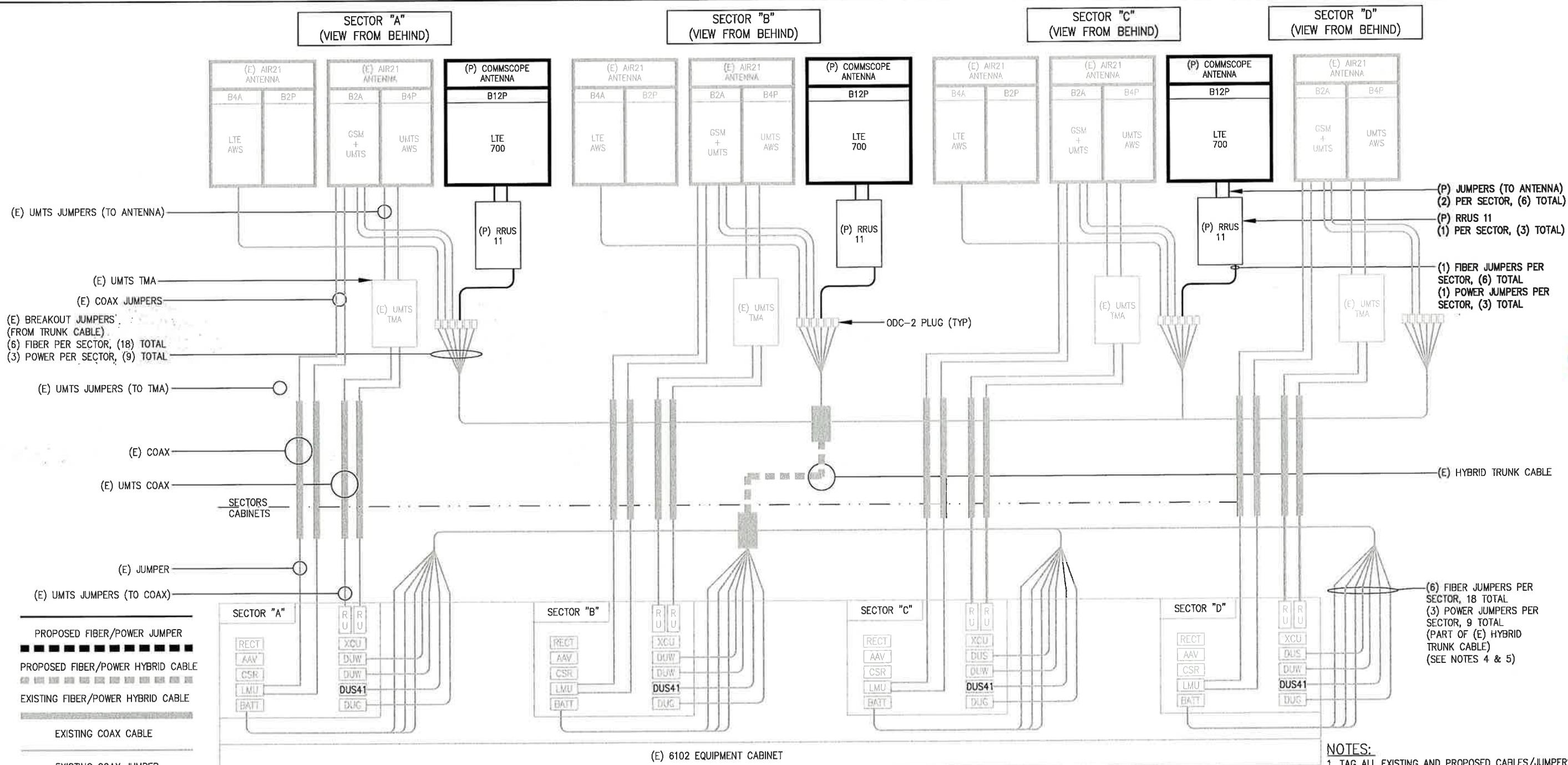
SWEET, 1995

COAX/FIBER PLUMBING DIAGRAM

SHEET NUMBER

E-2

PAGE 7 OF 8 SHEETS



OTES:

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

ELECTRICAL NOTES:

WORK INCLUDED

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

GENERAL REQUIREMENTS

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

CLEANING

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

COORDINATION AND SUPERVISION

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

SUBMITTALS

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

CUTTING AND PATCHING

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

TESTS, INSPECTION AND APPROVAL

1. BEFORE ENERGIZING ANY ELECTRICAL INSTALLATION, INSPECT EACH UNIT IN DETAIL. TIGHTEN ALL BOLTS AND CONNECTIONS (TORQUE-TIGHTEN WHERE REQUIRED) AND DETERMINE THAT ALL COMPONENTS ARE ALIGNED, AND THE EQUIPMENT IS IN SAFE, OPERATIONAL CONDITION.
2. PROVIDE THE COMPLETE ELECTRICAL SYSTEM FREE OF GROUND FAULTS AND SHORT CIRCUITS SUCH THAT THE SYSTEM WILL OPERATE SATISFACTORILY UNDER FULL LOAD CONDITIONS, WITHOUT EXCESSIVE HEATING AT ANY POINT IN THE SYSTEM.
3. WIRE PREVIOUSLY PULLED INTO CONDUIT IS CONSIDERED USED AND IS NOT TO BE RE-PULLED.
4. HOME RUNS AND BRANCH CIRCUIT WIRING FOR 20A, 120V

CIRCUITS:

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

8. VOLTAGE DROP IS NOT TO EXCEED 3%.

9. MAKE ALL CONNECTIONS WITH UL APPROVED, SOLDERLESS, PRESSURE TYPE INSULATED CONNECTORS: SCOTCHLOK OR AND APPROVED EQUAL.

WIRING DEVICES

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

DISCONNECT SWITCHES AND FUSES

1. DISCONNECT SWITCHES TO BE VOLTAGE-RATED TO SUIT THE CHARACTERISTICS OF THE SYSTEM FROM WHICH THEY ARE SUPPLIED.

2. PROVIDE HEAVY-DUTY, METAL-ENCLOSED, EXTERNALLY-OPERATED DISCONNECT SWITCHES, FUSED OR UNFUSED, OF SUCH TYPE AND SIZE AS REQUIRED TO PROPERLY PROTECT OR DISCONNECT THE LOAD FOR WHICH THEY ARE INTENDED.

3. PROVIDE NEMA 1 DISCONNECT SWITCHES FOR INTERIOR INSTALLATION, NEMA 3R FOR EXTERIOR INSTALLATION.

4. DISCONNECT SWITCHES TO BE MANUFACTURED BY:

A. GENERAL ELECTRIC COMPANY B. SQUARE-D

5. PROVIDE RK-1 TYPE FUSES, UNLESS NOTED OTHERWISE.

INSTALLATION

1. INSTALL DISCONNECT SWITCHES WHERE INDICATED ON DRAWINGS.

2. INSTALL FUSES IN FUSIBLE DISCONNECT SWITCHES. FUSES MUST MATCH IN TYPE AND RATING.

3. FUSES TO BE MOUNTED SO THAT THE LABELS SHOWING THEIR RATINGS CAN BE READ WITHOUT REQUIRING FUSE REMOVAL.

4. FURNISH AND DEPOSIT SPARE FUSES AT THE JOB SITE AS FOLLOWS:

A. THREE SPARES FOR EACH TYPE AND SIZE, IN EXCESS OF 60A, USED FOR INITIAL FUSING.

B. TEN PERCENT SPARES FOR EACH TYPE AND SIZE, UP TO AND INCLUDING 60A, USED FOR INITIAL FUSING. IN NO CASE WILL LESS THAN THREE FUSES OF ONE PARTICULAR TYPE AND SIZE BE FURNISHED.

GENERAL NOTES:

INTENT

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

RACEWAYS CONT'D

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

WIRES AND CABLES

1. CONTRACTOR TO COORDINATE WITH EQUIPMENT SUPPLIER AND VENDOR FOR EXACT EQUIPMENT OVER-CURRENT PROTECTION VOLTAGE, WIRE SIZE AND PLUG CONFIGURATION, IF APPLICABLE, PRIOR TO BID.
2. SEE MASTER CONTRACTION SERVICES AGREEMENT FOR ADDITIONAL DETAILS.

CONFLICTS

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

CONTRACTS AND WARRANTIES

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

STORAGE

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

CLEANUP

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

3. INTERIOR

- A. VISUALLY INSPECT INTERIOR SURFACE AND REMOVE ALL TRACES OF SOIL, WASTE MATERIALS, SMUDGES AND OTHER FOREIGN MATTER FROM WALLS, FLOOR, AND CEILING.
- B. REMOVE ALL TRACES OF SPLASHED MATERIALS FROM ADJACENT SURFACES.
- C. REMOVE PAINT DROPPINGS, SPOTS, STAINS, AND DIRT FROM FINISHED SURFACES.

CHANGE ORDER PROCEDURE:

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

RELATED DOCUMENTS AND COORDINATION

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

SHOP DRAWINGS

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

PRODUCTS AND SUBSTITUTIONS

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

QUALITY ASSURANCE

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

ADMINISTRATION

1. BEFORE THE COMMENCEMENT OF ANY WORK, THE CONTRACTOR WILL ASSIGN A PROJECT MANAGER WHO WILL ACT AS A SINGLE POINT OF CONTACT FOR ALL PERSONNEL INVOLVED IN THIS PROJECT. THIS PROJECT MANAGER WILL DEVELOP A MASTER SCHEDULE FOR THE PROJECT WHICH WILL BE SUBMITTED TO THE OWNER PRIOR TO THE COMMENCEMENT OF ANY WORK.
2. SUBMIT A BAR TYPE PROGRESS CHART, NOT MORE THAN 3 DAYS AFTER THE DATE ESTABLISHED FOR COMMENCEMENT OF THE WORK ON THE SCHEDULE, INDICATING A TIME BAR FOR EACH MAJOR CATEGORY OR UNIT OF WORK TO BE PERFORMED AT THE SITE, PROPERLY SEQUENCED AND COORDINATED WITH OTHER ELEMENTS OF WORK AND SHOWING COMPLETION OF THE WORK SUFFICIENTLY IN ADVANCE OF THE DATE ESTABLISHED FOR SUBSTANTIAL COMPLETION OF THE WORK.
3. PRIOR TO COMMENCING CONSTRUCTION, THE OWNER SHALL SCHEDULE AN ON-SITE MEETING WITH ALL MAJOR PARTIES. THIS WOULD INCLUDE, BUT NOT LIMITED TO, THE OWNER, PROJECT MANAGER, CONTRACTOR, LAND OWNER REPRESENTATIVE, LOCAL TELEPHONE COMPANY, TOWER ERECTION FOREMAN (IF SUBCONTRACTED).

SUBMITTALS

| DATE | DESCRIPTION | REVISION |
|---------|-------------|----------|
| 9/28/15 | FOR PERMIT | 0 |
| | | |
| | | </ |