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December 4, 2017

Melanie A. Bachman, Esq.
Executive Director/Staff Attorney
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: **Notice of Exempt Modification – Facility Modification**
689 Old Colchester Road, Montville, Connecticut

Dear Ms. Bachman:

Cellco Partnership d/b/a Verizon Wireless ("Cellco") currently maintains twelve (12) antennas at the 305-foot level of an existing 370-foot guyed lattice tower at 689 Old Colchester Road in Montville, Connecticut (the "Property"). The tower and Property are owned by Atlantic Broadband (CT) LLC. Cellco's use of the tower was approved by the Council in 1988. Cellco now intends to replace three (3) of its existing antennas with three (3) model QUAD656C000, 700 MHz antennas, at the same level on the tower. Cellco also intends to replace three (3) remote radio heads ("RRHs") and install three (3) new RRHs behind its antennas. Included in Attachment 1 are specifications for Cellco's replacement antennas and RRHs.

Please accept this letter as notification pursuant to R.C.S.A. § 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 Ronald K. McDaniel, Mayor of the Town of Montville; Marcia Vlaun, Montville's Town Planner; and Atlantic Broadband (CT) LLC.

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

1. The proposed modifications will not result in an increase in the height of the existing tower. Cellco's replacement antennas and RRHs will be installed at the 305-foot level of the 370-foot tower.

2. The proposed modifications will not involve any change to ground-mounted equipment and, therefore, will not require the extension of the site boundary.

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

4. The operation of the replacement antennas will not increase radio frequency (RF) emissions at the facility to a level at or above the Federal Communications Commission (FCC) safety standard. A cumulative General Power Density table for the modified facility is included behind Attachment 2.

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

6. The tower, its foundation and guys can support Cellco's proposed modifications. (*See* Structural Analysis Report included in Attachment 3).

A copy of the parcel map and owner information for the Property is included in Attachment 4. A Certificate of Mailing verifying that this filing was sent to municipal officials and the owner of the Property is included in Attachment 5.

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

Sincerely,

Kenneth C. Baldwin

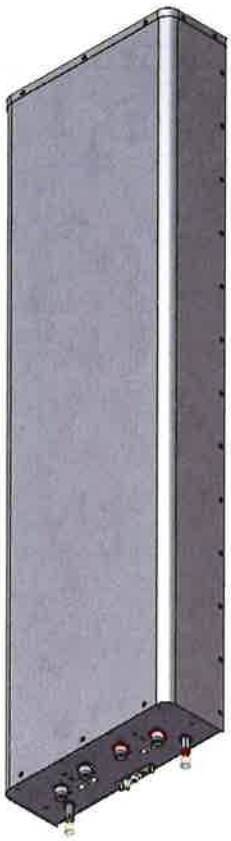
Enclosures
Copy to:
Ronald K. McDaniel, Montville Mayor
Marcia Vlaun, Montville Town Planner
Atlantic Broadband (CT) LLC
Tim Parks

ATTACHMENT 1

QUAD656C0000x

Twin Band | Quad Port | Panel Antenna | (2x) X-Pol | 65° / 65° | 15.0 / 15.0 dBi | Variable Tilt

- Twin band, quad-port panel antenna with variable electrical tilt
- 4x4 MIMO
- Patented internal RET actuator adds no additional length to the antenna



Ordering Options	Model Number
When ordering, replace "x" in the model number with one of the options listed below.	
Manual Electrical Tilt	QUAD656C0000M
Remote Electrical Tilt AISG v2.0 / 3GPP with an MDCU RET Actuator	QUAD656C0000G
Remote Electrical Tilt AISG v2.0 / 3GPP with an MDDU RET Actuator	QUAD656C0000L
Mounting bracket kits and other accessories are ordered separately.	

Electrical Characteristics		(2x) 696-900 MHz	
Frequency Bands		696-806 MHz	806-900 MHz
Polarization		(2x) ±45° (Quad-Pol)	
Horizontal Beamwidth		67°	66°
Vertical Beamwidth		13.6°	12.4°
Gain		14.5 dBi	15.0 dBi
Electrical Downtilt		0-12°	
Impedance		50Ω	
VSWR		≤ 1.5:1	
Upper Sidelobe Suppression		18 dB	18 dB
Front-to-Back Ratio		> 25 dB	> 25 dB
Inband Isolation		25 dB	
Isolation Between Bands		28 dB	
IM3 (2x20W carrier)		< -153 dBc	
Input Power		(4x) 500 W	
Total Number of Connectors		Antennas has 4 connectors located at the bottom	
Connectors Per Band	696-900 MHz	(2x) 7/16-DIN Female	
	696-900 MHz	(2x) 7/16-DIN Female	
Diplexed		No	
Lightning Protection		Direct Ground	
Operating Temperature		-40° to +60° C (-40° to +140° F)	

Mechanical Characteristics			
Dimensions (Length x Width x Depth)		1889 x 520 x 182 mm	74.4 x 20.5 x 7.2 in
Depth with Z-Brackets		227 mm	8.9 in
Weight without Mounting Brackets: MET		24.5 kg	54.0 lbs
Weight without Mounting Brackets: RET		24.8 kg	54.7 lbs
Survival Wind Speed		> 241 km/hr	> 150 mph
Wind Area	Front	0.98 m²	10.6 ft²
	Side	0.34 m²	3.7 ft²
Wind Loads (160 km/hr or 100 mph)	Front	1200 N	270 lbf
	Side	415 N	93 lbf

Quoted performance parameters are provided to offer typical, peak or range values only and may vary as a result of normal testing, manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to products may be made without notice.

QUAD656C0000x

Twin Band | Quad Port | Panel Antenna | (2x) X-Pol | 65° / 65° | 15.0 / 15.0 dBi | Variable Tilt

Electrical Downtilt Control		
Electrical downtilt for each band can be controlled separately. Tilt indicator(s) are covered by removable transparent cap(s).		
Manual Electrical Tilt (MET) Control	A colored knob at the end of the tilt indicator allows change of the tilt without need of a tool. The knob color is identical to the corresponding connector ring color. To access the knob, remove the cap by turning it counter-clockwise. It is re-installed by opposite rotation. Do not remove the transparent cap(s) from the antenna.	
Remote Electrical Tilt (RET) Control	The remote control of the electrical tilt is managed by either a Multi-Device Control Unit (MDCU) or a Multi-Device Dual Unit (MDDU) inserted in the bottom of the antenna. A single actuator individually controls the tilt of each band (no need for daisy chain cables between the bands). This module does not add any additional length to the antenna. For RET control, the transparent caps must be in place and locked. The tilt angle indicators always remain visible and the antenna still has manual tilt control (manual override).	
RET Actuator	Select one of the following RET actuators when ordering this antenna.	
	Multi-Device Control Unit (MCDU)	The MDCU is an electronic module that allows the remote control of the electrical downtilt (RET) in Amphenol antennas with factory embedded motors. The MDCU is factory installed. Refer to ordering options.
	Multi-Device Dual Unit (MDDU)	The MDDU allows two separate RET Controllers to independently drive the RETs in Amphenol antennas with factory installed motors (for antenna sharing). The MDDU is factory installed. Refer to ordering options.
Important Installation Instructions 	In order to operate RET control, the transparent caps covering the tilt adjustment indicators must be engaged and locked. Do not cut them from the antenna.	
	Do not install the antenna with the connectors facing upward.	

Mounting Options	Part Number	Image	Fits Pipe Diameter	Weight
All mounting bracket kits are ordered separately unless otherwise indicated. Select from the options listed below.				
3-Point Mounting and Downtilt Bracket Kit	36210008		40-115 mm 1.6-4.5 in	6.9 kg 15.2 lbs

Configuration Options
This antenna model **cannot** be used with Amphenol's UNICELL 3-sector antenna enclosures.

QUAD656C0000x

Twin Band | Quad Port | Panel Antenna | (2x) X-Pol | 65° / 65° | 15.0 / 15.0 dBi | Variable Tilt

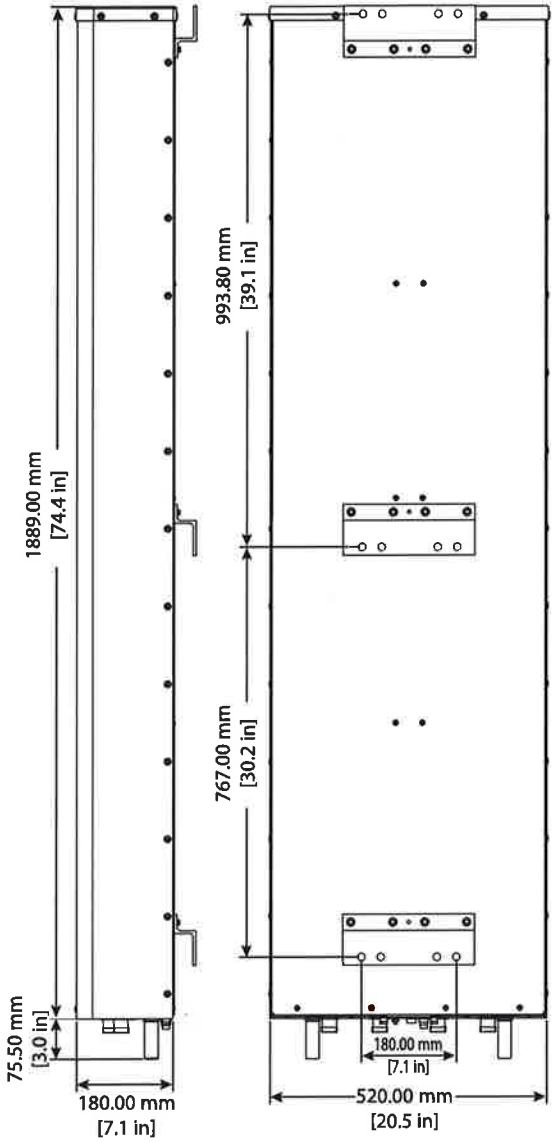
Bottom View of Antenna

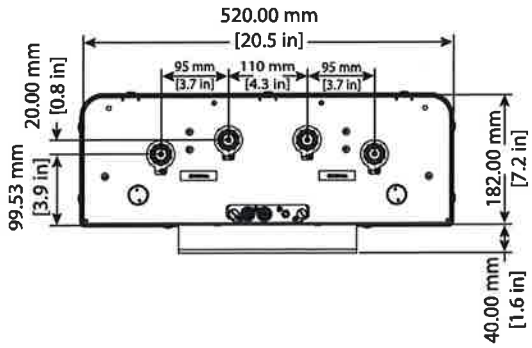
Location of the MDCU or MDDU for RET Control *(MDCU shown)*

Tilt indicators covered by transparent caps.
Manual adjustment is accessed by removing the caps.
Knob colors are the same as the connectors.

In order to operate RET control, the transparent caps covering the tilt adjustment indicators must be engaged and locked. Do not cut them from the antenna.

Dimensions

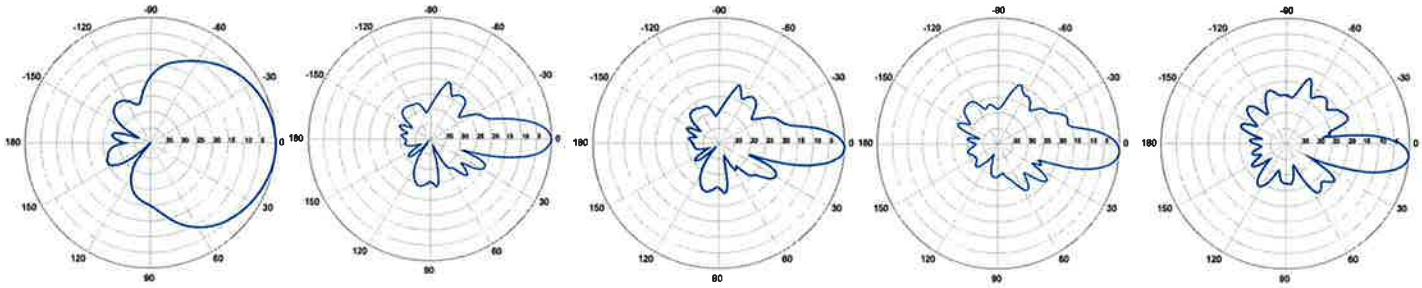




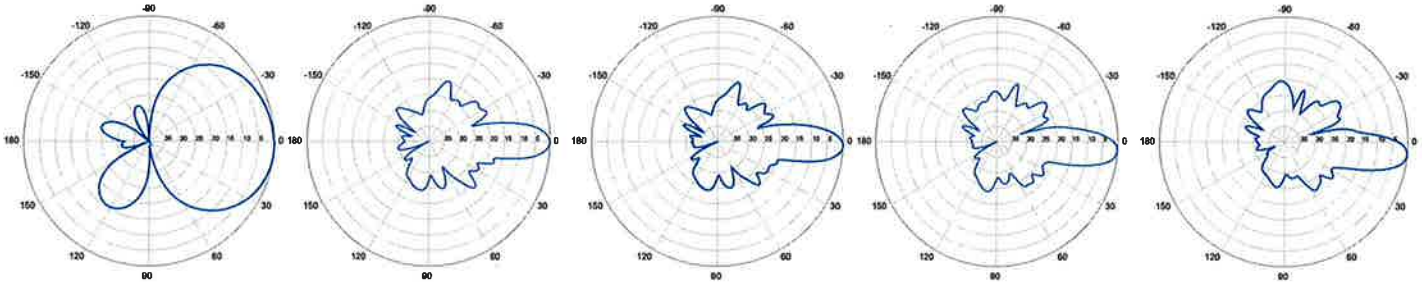
QUAD656C0000x

Twin Band | Quad Port | Panel Antenna | (2x) X-Pol | 65° / 65° | 15.0 / 15.0 dBi | Variable Tilt

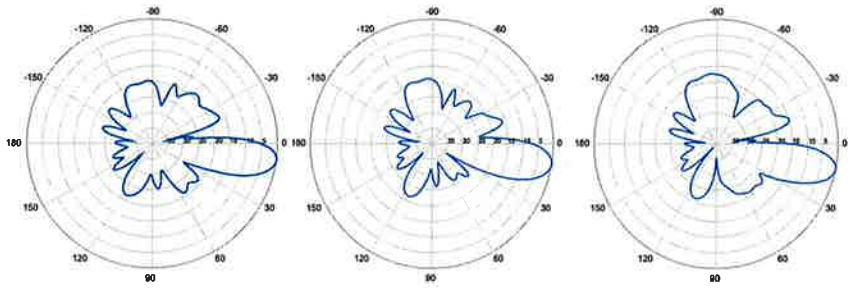
696-900 MHz



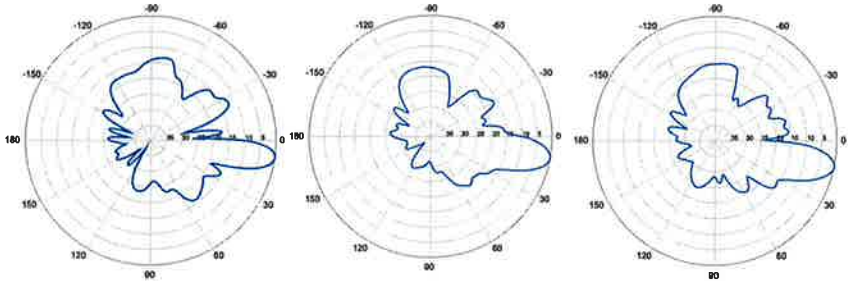
Horizontal | 750 MHz | 0° | Vertical | 750 MHz | 2° | Vertical | 750 MHz | 4° | Vertical | 750 MHz | 6° | Vertical | 750 MHz



Horizontal | 850 MHz | 0° | Vertical | 850 MHz | 2° | Vertical | 850 MHz | 4° | Vertical | 850 MHz | 6° | Vertical | 850 MHz



8° | Vertical | 750 MHz | 10° | Vertical | 750 MHz | 12° | Vertical | 750 MHz



8° | Vertical | 850 MHz | 10° | Vertical | 850 MHz | 12° | Vertical | 850 MHz

ALCATEL-LUCENT B13 RRH4X30-4R

Alcatel-Lucent B13 Remote Radio Head 4x30-4R is the newest addition of Remote Radio Head to the extended product line of Alcatel-Lucent's distributed Base Station solutions, aimed at facilitating smooth RF site acquisition and related civil engineering.

Supporting 2Tx/4Tx MIMO and 4-way Rx diversity, Alcatel-Lucent B13 RRH4x30-4R allows operators to have a compact radio solution to deploy LTE in the 700U band (700 MHz, 3GPP band 13), providing them with the means to achieve high capacity, high quality and high coverage with minimum site requirements.

The Alcatel-Lucent B13 RRH4x30-4R product has four transmit RF paths, offering the possibility to **select, via software only, 2Tx or 4Tx MIMO configurations** with either 2x60 W or 4x30 W RF output power. It supports also 4-way Rx diversity and up to 10MHz instantaneous bandwidth.

The Alcatel-Lucent B13 RRH4x30-4R is a near zero-footprint solution and operates noise free, simplifying negotiations with site property owners and minimizing environmental impacts.

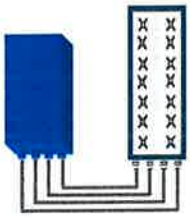
Its compactness and slim design makes the Alcatel-Lucent B13 RRH4x30-4R easy to install close to the antenna: operators can therefore locate this Remote Radio Head where RF design conditions are deemed ideal, minimizing trade-offs between available sites and RF optimum sites, together with reducing the RF feeder needs and installation costs.

FEATURES

- Supporting LTE in 700 MHz band (700U, 3GPP band 13)
- LTE 2Tx or 4Tx MIMO (SW switchable)
- Output power: Up to 2x60W or 4x30W
- 10MHz LTE carrier with 4Rx Diversity
- Convection-cooled (fan-less)
- Supports AISG 2.0 ALD devices (RET, TMA) through RS485 or RF ports

BENEFITS

- Compact to reduce additional footprint when adding LTE in 700U band
- MIMO scheme operation selection (2Tx or 4Tx) by software only
- Improves downlink spectral efficiency through MIMO4
- Increases LTE coverage thanks to 4Rx diversity capability and best in class Rx sensitivity
- Flexible mounting options: Pole or Wall



4x30W with 4T4R
or
2x60W with 2T4R

Can be switched between modes via SW w/o site visit

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TECHNICAL SPECIFICATIONS

Features & performance	
Number of TX/RX paths	4 duplexed (either 4T4R or 2T4R by SW)
Frequency band	U700 (C) (3GPP bands 13): DL: 746 - 756 MHz / UL: 777 - 787 MHz
Instantaneous bandwidth - #carriers	10MHz – 1 LTE carrier (in 10MHz occupied bandwidth)
LTE carrier bandwidth	10 MHz
RF output power	2x60W or 4x30W (by SW)
Noise figure – RX Diversity scheme	2 dB typ. (<2.5 dB max) – 2 or 4 way Rx diversity
Sizes (HxWxD) in mm (in.) Volume in L Weight in kg (lb) (w/o mounting HW)	550 x 305 x 230 (21.6" x 12.0" x 9") (with solar shield) 38 (with solar shield) 26 (57.2) (with solar shield)
DC voltage range DC power consumption	-40.5 to -57V at full performance, -38 to -57V with relaxation on power consumption 550W typical @100% RF load (in 2Tx or 4TX mode)
Environmental conditions Wind load (@150km/h or 93mph)	-40°C (-40°F) /+55°C (+131°F) IP65 Frontal: <200N / Lateral : <150N
Antenna ports	4 ports 7/16 DIN female (50 ohms) VSWR < 1.5
CPRI ports	2 CPRI ports (HW ready for Rate7, 9.8 Gbps) SFP single mode dual fiber
AISG interfaces	1 AISG2.0 output (RS485) Integrated Smart Bias Tees (x2)
Misc. Interfaces	4 external alarms (1 connector) – 4 RF Tx & 4 RF Rx monitor ports - 1 DC connector (2 pins)
Installation conditions	Pole and wall mounting
Regulatory compliance	3GPP 36.141 / 3GPP 36.113 / GR-1089-CORE / GR-3108-CORE / UL 60950-1 / FCC Part 27

ALCATEL-LUCENT B66A RRH4X45

The Alcatel-Lucent B66a Remote Radio Head 4x45 is the newest addition of Remote Radio Head to the extended product line of Alcatel-Lucent's distributed Base Station solutions, aimed at facilitating smooth RF site acquisition and related civil engineering. Its operational range covers beyond that of B4 (AWS) and B10 (AWS+).

Supporting 2Tx/4Tx MIMO and 2-way/4-way Rx diversity, the Alcatel-Lucent B66a RRH4x45 allows operators to have a compact radio solution to deploy LTE in the 2100 band (3GPP band 4, 10, and 66), providing them with the means to achieve high capacity, high quality, high reliability, large instantaneous bandwidth, and high coverage with minimum site requirements.

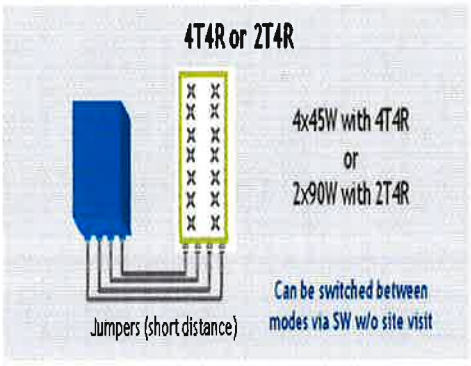
The Alcatel-Lucent B66a RRH4x45 product has four transmit RF paths, offering the possibility to **select, via software only, 2Tx or 4Tx MIMO configurations** with either 2x90W or 4x45W RF output power. It also supports 4-way Rx diversity at the 70 MHz instantaneous bandwidth.

The Alcatel-Lucent B66a RRH4x45 is a compact (near zero-footprint) solution and operates noise free, simplifying negotiations with site property owners and minimizing environmental impacts.

Its compactness and slim design makes the Alcatel-Lucent B66a RRH4x45 easy to install close to the antenna: operators can therefore locate this Remote Radio Head where RF design conditions are deemed ideal, minimizing trade-offs between available sites and RF optimum sites, together with reducing the RF feeder needs and installation costs.

FEATURES

- Supporting LTE in 2110 - 2180 MHz band/DL, 1710-1780MHz/UL (3GPP band 4, 10, and 66a)
- LTE 2Tx or 4Tx MIMO (SW selectable)
- Configuration: 2T2R/2T4R/4T4R
- Output power: Up to 2x90W or 4x45W (SW configurable)
- 70MHz LTE carrier with 4Rx Diversity
- Convection-cooled (fan-less)
- Supports AISG 2.0 ALD devices (RET, TMA) through RS485 or RF ports



BENEFITS

- Compact to reduce additional footprint when adding LTE in AWS 1-3 band
- Selection of MIMO configuration (2Tx or 4Tx) by software only
- Improves downlink spectral efficiency through 4Tx MIMO
- Increases LTE coverage thanks to 4Rx diversity capability and best in class Rx sensitivity
- Flexible mounting options: Pole or Wall

Features & Performance	
Number of TX/RX paths	4 duplexed (either 4T4R or 2T4R selectable by SW)
Frequency band	AWS 1-3, B4/B66a DL: 2110-2180 MHz / UL: 1710-1780 MHz
Instantaneous bandwidth - #carriers	70 MHz – 4 LTE MIMO carriers (in 70 MHz occupied bandwidth)
LTE carrier bandwidth	5, 10, 15, 20 MHz
RF output power	2x90W or 4x45W (selectable by SW)
Noise figure – RX Diversity scheme Receiver Sensivity (FRC A1-3)	2 dB typical (<2.5 dB max) – 2 or 4 way Rx diversity -104.5 dBm maximum
Sizes (HxWxD) in mm (in.) Volume in Liters Weight in kg (lb) (w/o mounting HW)	655x299x182 (25.8x11.8x7.2) (with solar shield) 640x290x160 (25.2x11.4x6.3) (without solar shield) 35.5 (with solar shield) 29.7 (without solar shield) 25.8kg (56.8lb) (with solar shield)
DC voltage range DC power consumption	Nominal: -48V, -40.5 to -57V at full performance, -38 to -57V with relaxation on power consumption 750W typical @100% RF load (in 2Tx or 4Tx mode); Add 58W for 2A*29V for AISG
Environmental conditions Wind load (@150km/h or 93mph)	-40°C (-40°F) /+55°C (+131°F) UL50E Type 4 Enclosure 250N (56lb) Frontal/150N (34lb) Lateral
Antenna ports	4 ports 4.3-10 female (50 ohms) VSWR < 1.5
CPRI ports	2 CPRI ports (HW ready for Rate 7, 9.8 Gbps) SFP: SMDF (HW supports also SMSF and MMDF)
AISG interfaces	1 AISG 2.0 output (RS485) Integrated Smart Bias Tees (x2)
Misc. Interfaces	4 external alarms (1 connector) 1 DC connector (2 pins)
Installation conditions	Pole and wall mounting
Regulatory compliance	3GPP 36.141 / 3GPP 36.113 / GR-487 / GR-1089-CORE / GR-3108-CORE / UL 60950-1 / FCC Part 27 / FCC Part 15 / GR-3178-CORE

Alcatel·Lucent

ATTACHMENT 2

	General	Power	Density					
Site Name: Montville								
Tower Height: 370Ft.								
CARRIER	# OF CHAN.	WATTS ERP	HEIGHT	CALC. POWER DENS	FREQ.	MAX. PERMISS. EXP.	FRACTION MPE	Total
*AT&T-GSM	2	414	240	850	0.0054	0.5667	0.10%	
*AT&T-PCS-UMTS	2	656	240	1900	0.0086	1.0000	0.09%	
*AT&T-UMTS	2	414	240	850	0.0054	0.5667	0.10%	
*AT&T-PCS-LTE	2	1791	240	1900	0.0235	1.0000	0.24%	
*AT&T-LTE	2	940	240	700	0.0123	0.4667	0.26%	
Verizon PCS	**0**	**0**	**305**	**0.0000**	**1970**	**1.0000**	**0.00%**	
Verizon Cellular	**9**	**475**	**305**	**0.0165**	**869**	**0.5793**	**2.85%**	
Verizon AWS	**1**	**9130**	**305**	**0.0353**	**2145**	**1.0000**	**3.53%**	
Verizon 700	**1**	**2063**	**305**	**0.0080**	**746**	**0.4973**	**1.60%**	
								8.76%
* Source: Siting Council								

ATTACHMENT 3

CENTEK engineering

Centered on Solutions℠

Structural Analysis Report

370-ft Existing Guyed Lattice Tower

Proposed Verizon Wireless
Antenna Upgrade

Verizon Site Ref: Montville

689 Old Colchester Road
Montville, CT

Centek Project No. 16001.53

~~Date: September 15, 2016~~
Rev 1: October 13, 2016

Prepared for:

Verizon Wireless
99 East River Road, 9th Floor
East Hartford, CT 06108

Table of Contents

Introduction

The purpose of this report is to summarize the results of the non-linear, P-Δ structural analysis of the antenna upgrade proposed by Verizon on the existing guyed lattice tower located in Montville, Connecticut.

The host tower is a 370-ft, three face, guyed steel lattice tower originally designed and manufactured by PiROD. The original design documents were unavailable for use in this report. The tower geometry, structure member sizes, reinforcement information and foundation information were obtained from a previous structural analysis prepared by Centek. Job No. 16071.44 dated September 9, 2016.

Antenna and appurtenance inventory were taken from the aforementioned structural report and a Verizon RF data sheet.

The tower consists of fifteen (15) vertical sections constructed of solid round pipe legs conforming to ASTM A36. Diagonal and horizontal lateral support bracing consists of a combination of steel angle and solid round pipe construction conforming to ASTM A36. The vertical tower sections are connected by bolted flange plates with the diagonal and horizontal bracing to pipe legs consisting of bolted connections. The width of the tower face is 5-ft at throughout its length.

Verizon proposes the removal of three (3) panel antennas and three (3) remote radio heads and the installation of three (3) panel antennas and six (6) remote radio heads mounted on three (3) existing mounts. Refer to the Antenna and Appurtenance Summary below for a detailed description of the proposed antenna and appurtenance configuration.

Antenna and Appurtenance Summary

The existing tower supports several communication antennas. The existing and proposed loads considered in the analysis consist of the following:

- WGBH (Existing):
  Antenna: One (1) Search Antenna leg mounted with an elevation of ±370-ft above grade level.
  Coax Cable: One (1) 7/8" coax cable running on a leg/face of the existing tower as specified in Section 3 of this report.
- UNKNOWN (Existing):
  Antenna: One (1) 8-ft microwave dish pipe mounted with an elevation of ±355-ft above the tower base.
  Coax Cable: One (1) 7/8" coax cable running on a leg/face of the existing tower as specified in Section 3 of this report.
- UNKNOWN (Existing):
  Antenna: One (1) 20' by 3" ∅ Omni-directional (whip) antenna pipe mounted with an elevation of ±350-ft above the tower base.
  Coax Cable: Two (2) 7/8" coax cables running on a leg/face of the existing tower as specified in Section 3 of this report.

- UNKNOWN (Existing):
  Antenna: One (1) 10' by 3" ∅ Omni-directional (whip) antenna mounted on a 3-ft side arm with an elevation of ±325-ft above the tower base.
  Coax Cable: One (1) 1-5/8" coax cables running on a leg/face of the existing tower as specified in Section 3 of this report.
- Secret Service (Existing):
  Antenna: One (1) 20' by 3" ∅ Omni-directional (whip) antenna pipe mounted with an elevation of ±250-ft above the tower base.
  Coax Cable: None
- AT&T (Existing to Remain):
  Antennas: Six (6) Powerwave 7770 panel antennas, one (1) CCI HPA-65R-BUU-H6 panel antenna, two (2) CCI HPA-65R-BUU-H8 panel antennas, six (6) TMA's, six (6) diplexers, three (3) Ericsson RRUS-32 remote radio heads, three (3) Ericsson RRUS-11 remote radio heads and one (1) DC6-48-60-18-8F Surge Arrestor mounted on three (3) 12-ft T-frames with a RAD center elevation of ±242.5-ft above the existing tower base.
  Coax Cables: Twelve (12) 1-5/8" ∅ coax cables, one (1) fiber line, and two (2) DC power cables running on a leg/face of the existing tower as specified in Section 3 of this report.
- UNKNOWN (Existing):
  Antenna: One (1) 4' yagi antenna leg mounted with an elevation of ±200-ft above the tower base.
  Coax Cable: One (1) 7/8" coax cables running on a leg/face of the existing tower as specified in Section 3 of this report.
- UNKNOWN (Existing):
  Antenna: Four (4) 5' yagi antennas mounted on two (2) pipe mounts with an elevation of ±180-ft above the tower base.
  Coax Cable: One (1) 7/8" coax cables running on a leg/face of the existing tower as specified in Section 3 of this report.
- UNKNOWN (Existing):
  Antenna: One (1) 5' yagi antenna leg mounted with an elevation of ±148-ft above the tower base.
  Coax Cable: One (1) 1/2" coax cables running on a leg/face of the existing tower as specified in Section 3 of this report.
- UNKNOWN (Existing):
  Antenna: One (1) 8' yagi antenna leg mounted with an elevation of ±140-ft above the tower base.
  Coax Cable: One (1) 7/8" coax cables running on a leg/face of the existing tower as specified in Section 3 of this report.
- UNKNOWN (Existing):
  Antenna: One (1) 4' yagi antenna leg mounted with an elevation of ±125-ft above the tower base.
  Coax Cable: One (1) 1/2" coax cables running on a leg/face of the existing tower as specified in Section 3 of this report.

- UNKNOWN (Existing):
  Antenna: Four (4) antennas leg mounted with an elevation of ±88-ft above the tower base.
  Coax Cable: One (1) 7/8" coax cables running on a leg/face of the existing tower as specified in Section 3 of this report.
- UNKNOWN (Existing):
  Antenna: One (1) 6' yagi antenna leg mounted with an elevation of ±62-ft above the tower base.
  Coax Cable: One (1) 7/8" coax cables running on a leg/face of the existing tower as specified in Section 3 of this report.
- UNKNOWN (Existing):
  Antenna: One (1) 5' yagi antenna leg mounted with an elevation of ±40-ft above the tower base.
  Coax Cable: One (1) 7/8" coax cables running on a leg/face of the existing tower as specified in Section 3 of this report.
- VERIZON (Existing to Remain):
  Antennas: Three (3) Andrew LNX-6514DS panel antennas, six (6) Andrew HBXX-6517DS panel antennas and two (2) RFS DB-T1-6Z-8AB-0Z main distribution boxes mounted on three (3) boom gates with a RAD center elevation of ±305-ft above the existing tower base.
  Coax Cables: Twelve (12) 1-5/8" ∅ coax cables and two (2) 1-5/8" ∅ Hybriflex fiber lines running on the face of the existing tower as specified in Section 3 of this report.
- VERIZON (Existing to Remove):
  Antennas: Three (3) Andrew LNX-6514DS panel antennas and three (3) Alcatel-Lucent RRH2x60-AWS Remote Radio Heads mounted on three (3) boom gates with a RAD center elevation of ±305-ft above the existing tower base.
- **VERIZON (Proposed):**
  Antennas: Three (3) Antel QUAD656C0000 panel antennas, three (3) Alcatel-Lucent RRH4x45-AWS Remote Radio Heads and three (3) Alcatel-Lucent RRH4x30-B13 Remote Radio Heads mounted on three (3) boom gates with a RAD center elevation of ±305-ft above the existing tower base.

Primary Assumptions Used in the Analysis

- The tower structure's theoretical capacity not including any assessment of the condition of the tower.
- The tower carries the horizontal and vertical loads due to the weight of antennas, ice load and wind.
- Tower is properly installed and maintained.
- Tower is in plumb condition.
- Tower loading for antennas and mounts as listed in this report.
- All bolts are appropriately tightened providing the necessary connection continuity.
- All welds are fabricated with ER-70S-6 electrodes.
- All members are assumed to be as specified in the original tower design documents.
- All members are "hot dipped" galvanized in accordance with ASTM A123 and ASTM A153 Standards.
- All member protective coatings are in good condition.
- All tower members were properly designed, detailed, fabricated, installed and have been properly maintained since erection.
- Any deviation from the analyzed antenna loading will require a new analysis for verification of structural adequacy.
- All previous reinforcements per the aforementioned URS report dated July 24, 2013 are complete as detailed.

Analysis

The existing tower was analyzed using a comprehensive computer program entitled tnxTower. The program analyzes the tower, considering the worst case loading condition. The tower is considered as loaded by concentric forces along the tower, and the model assumes that the tower members are subjected to bending, axial, and shear forces.

The existing tower was analyzed for the controlling basic wind speed (3-second gust) with no ice and the applicable wind and ice combination to determine stresses in members as per guidelines of TIA-222-G-2005 entitled "Structural Standard for Antenna Support Structures and Antennas", the American Institute of Steel Construction (AISC) and the Manual of Steel Construction; Load and Resistance Factor Design (LRFD).

The controlling wind speed is determined by evaluating the local available wind speed data as provided in Appendix N of the CSBC[1] and the wind speed data available in the TIA-222-G-2005 Standard.

Tower Loading

Tower loading was determined by the basic wind speed as applied to projected surface areas with modification factors per TIA-222-G-2005, gravity loads of the tower structure and its components, and the application of 0.75" radial ice on the tower structure and its components.

Basic Wind Speed:	New London; v = 105-120 mph (3-second gust)	*[Annex B of TIA-222-G-2005]*
	Montville; v = 105 mph (3 second gust)	*[Appendix N of the 2016 CT Building Code]*
Load Cases:	Load Case 1; 105 mph wind speed w/ no ice plus gravity load – used in calculation of tower stresses and rotation.	*[Appendix N of the 2016 CT Building Code]*
	Load Case 2; 50 mph wind speed w/ 0.75" radial ice plus gravity load – used in calculation of tower stresses.	*[Annex B of TIA-222-G-2005]*

[1] The 2012 International Building Code as amended by the 2016 Connecticut State Building Code (CSBC).

Tower Capacity

Tower stresses were calculated utilizing the structural analysis software tnxTower. Allowable stresses were determined based on Table 4-8 of the TIA code.

- Calculated stresses were found to be within allowable limits. In Load Case 2, per tnxTower "Section Capacity Table", this tower was found to be at **90.8%** of its total capacity.

Tower Section	Elevation	Stress Ratio (percentage of capacity)	Result
Leg (4)	343.75' - 350.00'	88.4%	**PASS**
Diagonal (T22)	231.25' - 237.5'	90.8%	**PASS**
Guy A @ 201.41' radius (T31)	162.5'-0"	69.3%	**PASS**

Foundations and Anchorage

The existing tower base foundation consists of a 3.0-ft square x 3-ft long reinforced concrete pedestal with a 7.0-ft square x 2.0-ft thick reinforced concrete pad bearing directly on the existing sub grade. Additionally, guy wire loading is transferred to twelve (12) existing concrete anchor support blocks. The sub-grade conditions used as the basis for the foundation analysis were derived from the aforementioned structural report.

- The worst case tower base and guy anchor reactions developed from the governing Load Case 1 were used in the verification of the anchorage foundations:

Tower Guy Reactions				
Vector	**Inner**	**Mid-Inner**	**Mid-Outer**	**Outer**
Horizontal (In Plane of GW)	12 kips	42 kips	63 kips	27 kips
Horizontal (Out of Plane of GW)	0 kips	1 kips	3 kips	2 kips
Vertical	6 kips	27 kips	72 kips	37 kips
Resultant Force at end of Guy Wire	13 kips	50 kips	96 kips	45 kips

Tower Base Reactions	
Vector	**Proposed Reaction**
Horizontal Shear	1.0 kips
Axial Compression	450.0 kips

Foundation	Design Limit	TIA-222-G Section 9.4 FS[1]	Proposed Loading (FS)[1]	Result
Reinf. Conc. Anchor Block (C) at 114.41-ft radius.	Uplift	1.0	8.14	**PASS**
	Sliding	1.0	5.70	**PASS**
Reinf. Conc. Anchor Block (B) at 193.65-ft radius.	Uplift	1.0	3.65	**PASS**
	Sliding	1.0	3.30	**PASS**
Reinf. Conc. Anchor Block (A) at 224.79-ft radius.	Uplift	1.0	2.67	**PASS**
	Sliding	1.0	3.50	**PASS**
Reinf. Conc. Anchor Block (A) at 247.15-ft radius.	Uplift	1.0	3.41	**PASS**
	Sliding	1.0	5.00	**PASS**
		Ultimate Bearing	**Proposed**	
Base Foundation	Bearing	16.0 ksf	9.57 ksf	**PASS**

Note 1: FS denotes 'Factor of Safety'.

Conclusion

This analysis shows that the subject tower **is adequate** to support the proposed modified antenna configuration.

The analysis is based, in part, on the information provided to this office by Verizon. If the existing conditions are different than the information in this report, Centek Engineering, Inc. must be contacted for resolution of any potential issues.

Please feel free to call with any questions or comments.

Respectfully Submitted by:

Timothy J. Lynn, PE
Structural Engineer

Standard Conditions for Furnishing of Professional Engineering Services on Existing Structures

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:

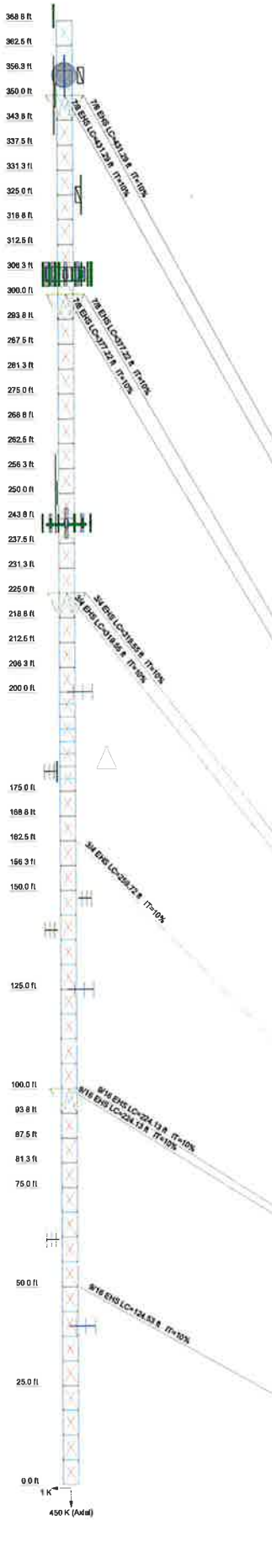
- Information supplied by the client regarding the structure itself, its foundations, the soil conditions, the antenna and feed line loading on the structure and its components, or other relevant information.
- Information from the field and/or drawings in the possession of Centek Engineering, Inc. or generated by field inspections or measurements of the structure.
- It is the responsibility of the client to ensure that the information provided to Centek Engineering, Inc. and used in the performance of our engineering services is correct and complete. In the absence of information to the contrary, we assume that all structures were constructed in accordance with the drawings and specifications and are in an un-corroded condition and have not deteriorated. It is therefore assumed that its capacity has not significantly changed from the "as new" condition.
- All services will be performed to the codes specified by the client, and we do not imply to meet any other codes or requirements unless explicitly agreed in writing. If wind and ice loads or other relevant parameters are to be different from the minimum values recommended by the codes, the client shall specify the exact requirement. In the absence of information to the contrary, all work will be performed in accordance with the latest revision of ANSI/ASCE10 & ANSI/EIA-222
- All services performed, results obtained, and recommendations made are in accordance with generally accepted engineering principles and practices. Centek Engineering, Inc. is not responsible for the conclusions, opinions and recommendations made by others based on the information we supply.

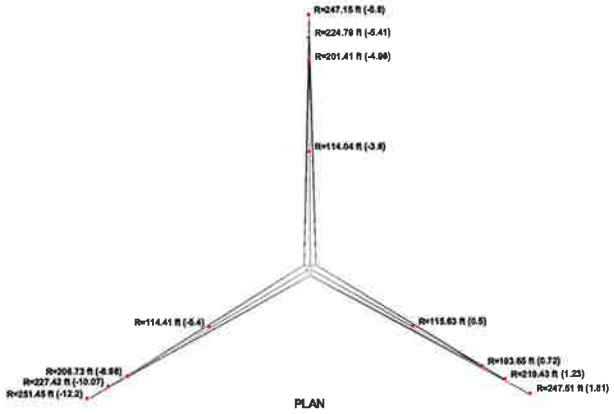
GENERAL DESCRIPTION OF STRUCTURAL ANALYSIS PROGRAM

tnxTower, is an integrated structural analysis and design software package for Designed specifically for the telecommunications industry, tnxTower, formerly ERITower and RISATower, automates much of the tower analysis and design required by the TIA/EIA 222 Standard.

tnxTower Features:

- tnxTower can analyze and design 3- and 4-sided guyed towers, 3- and 4-sided self-supporting towers and either round or tapered ground mounted poles with or without guys.
- The program analyzes towers using the TIA-222-G (2005) standard or any of the previous TIA/EIA standards back to RS-222 (1959). Steel design is checked using the AISC ASD 9th Edition or the AISC LRFD specifications.
- Linear and non-linear (P-delta) analyses can be used in determining displacements and forces in the structure. Wind pressures and forces are automatically calculated.
- Extensive graphics plots include material take-off, shear-moment, leg compression, displacement, twist, feed line, guy anchor and stress plots.
- tnxTower contains unique features such as True Cable behavior, hog rod take-up, foundation stiffness and much more.





PLAN

DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
Search Antenna	370	RRUS-11 (ATT)	242.5
10'6"x4" Pipe Mount	355	RRUS-11 (ATT)	242.5
Rohn 6' Side Arm(1)	355	RRUS-32 (ATT)	242.5
8' Dish	355	RRUS-32 (ATT)	242.5
6'x4" Pipe Mount	350	RRUS-32 (ATT)	242.5
20' x 3" Dia Omni	350	DC6-48-60-18-8F Surge Arrestor (ATT)	242.5
ROHN 3-ft Side Arm	325	Pirod 12' T-Frame Sector Mount (1) (ATT)	242.5
10' x 3" Dia Omni	325	Pirod 12' T-Frame Sector Mount (1) (ATT)	242.5
QUAD66C0000 (Verizon Existing)	305	Pirod 12' T-Frame Sector Mount (1) (ATT)	242.5
HBXX-6517DS (Verizon Existing)	305	(2) LGP21901 Diplexer (ATT)	242.5
LNX-6514DS-T4M (Verizon Existing)	305	(2) 7770.00 (ATT)	242.5
HBXX-6517DS (Verizon Existing)	305	(2) 7770.00 (ATT)	242.5
QUAD66C0000 (Verizon Existing)	305	(2) 7770.00 (ATT)	242.5
HBXX-6517DS (Verizon Existing)	305	HPA-65R-BUU-H6 (ATT)	242.5
LNX-6514DS-T4M (Verizon Existing)	305	HPA-65R-BUU-H6 (ATT)	242.5
HBXX-6517DS (Verizon Existing)	305	HPA-65R-BUU-H6 (ATT)	242.5
QUAD66C0000 (Verizon Existing)	305	(2) LPG21401 TMA (ATT)	242.5
HBXX-6517DS (Verizon Existing)	305	(2) LPG21401 TMA (ATT)	242.5
LNX-6514DS-T4M (Verizon Existing)	305	(2) LPG21401 TMA (ATT)	242.5
HBXX-6517DS (Verizon Existing)	305	(2) LGP21901 Diplexer (ATT)	242.5
RRH4x45/2x90-AWS (Verizon Proposed)	305	(2) LGP21901 Diplexer (ATT)	242.5
RRH4x45/2x90-AWS (Verizon Proposed)	305	RRUS-11 (ATT)	242.5
RRH4x45/2x90-AWS (Verizon Proposed)	305	Yagi	200
RRH4x30-B13 (Verizon Proposed)	305	(2) 6'3"x4" Pipe Mount	180
RRH4x30-B13 (Verizon Proposed)	305	(4) Yagi	180
RRH4x30-B13 (Verizon Proposed)	305	Yagi	148
DB-T1-6Z-8AB-0Z (Verizon Existing)	305	Yagi	140
DB-T1-6Z-8AB-0Z (Verizon Existing)	305	Yagi	125
Rohn 6' x 12' Boom Gate (1) (Verizon Existing)	305	(2) X-Style	88
Rohn 6' x 12' Boom Gate (1) (Verizon Existing)	305	X-Style	88
Rohn 6' x 12' Boom Gate (1) (Verizon Existing)	305	X-Style	88
6'x4" Pipe Mount	250	Yagi	62
20' x 3" Dia Omni	250	Yagi	40

SYMBOL LIST

MARK	SIZE	MARK	SIZE
A	L2 1/2x2 1/2x1/4	D	2L2 1/2x2x1/4
B	L3x2 1/2x1/4	E	2L2 1/2x3x1/4
C	2L2 1/2x2 1/2x1/4		

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A36	36 ksi	58 ksi			

TOWER DESIGN NOTES

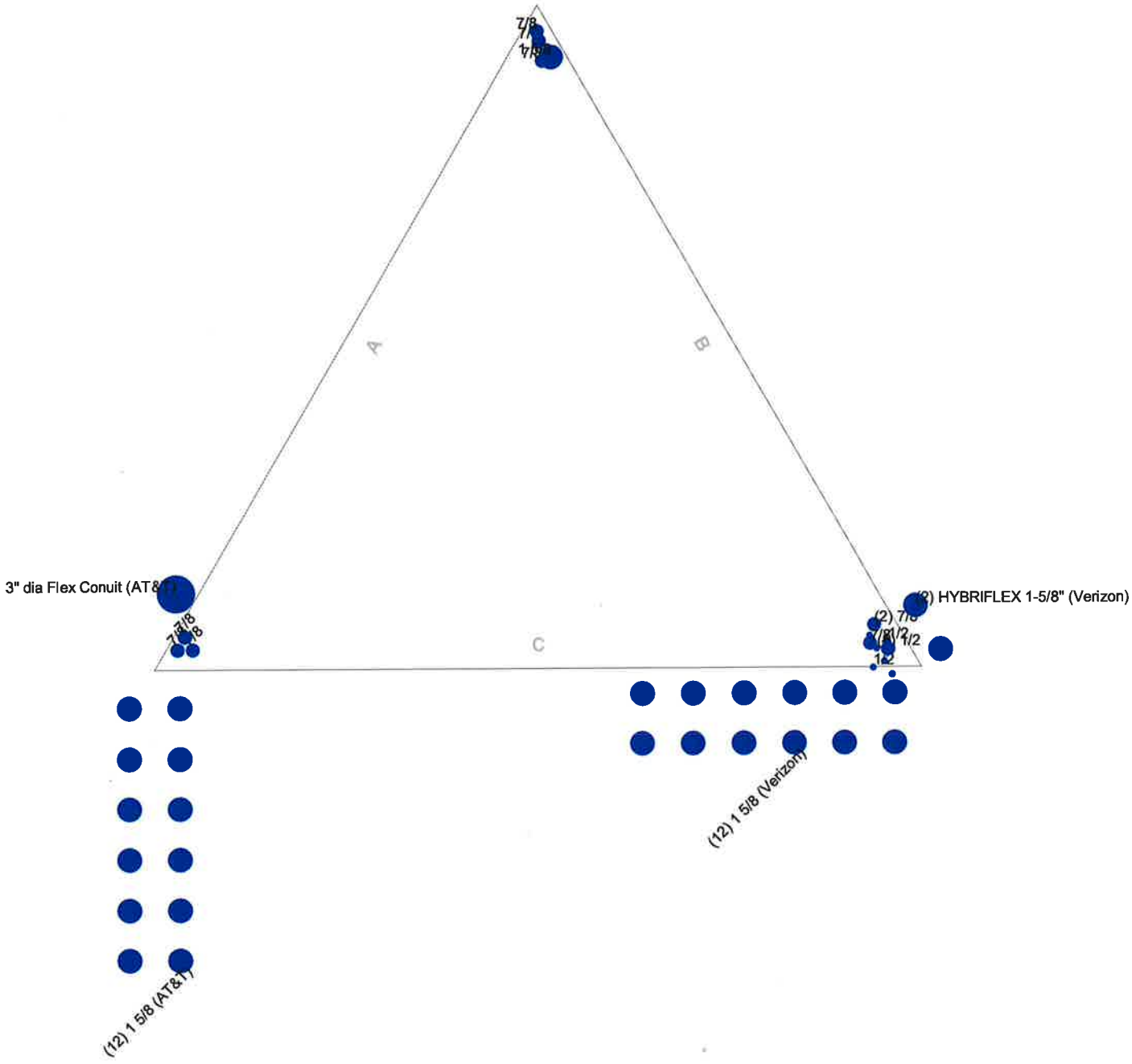
1. Tower designed for Exposure C to the TIA-222-G Standard.
2. Tower designed for a 105 mph basic wind in accordance with the TIA-222-G Standard.
3. Tower is also designed for a 50 mph basic wind with 0.75 in ice. Ice is considered to increase in thickness with height.
4. Deflections are based upon a 60 mph wind.
5. Tower Structure Class II.
6. Topographic Category 1 with Crest Height of 0.00 ft
7. TOWER RATING: 90.8%

ALL REACTIONS ARE FACTORED

Centek Engineering Inc.
63-2 North Branford Rd.
Branford, CT 06405
Phone: (203) 488-0580
FAX: (203) 488-8587

Job: 16001.53 - Montville			
Project: 370' Guyed Tower - 689 Old Colchester Road, Montville, CT			
Client: Verizon Wireless	Drawn by: TJL		Appd:
Code: TIA-222-G	Date: 10/13/16		Scale: NTS
Path:			Dwg No: E-1

Round Flat App In Face App Out Face



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Job: **16001.53 - Montville**		
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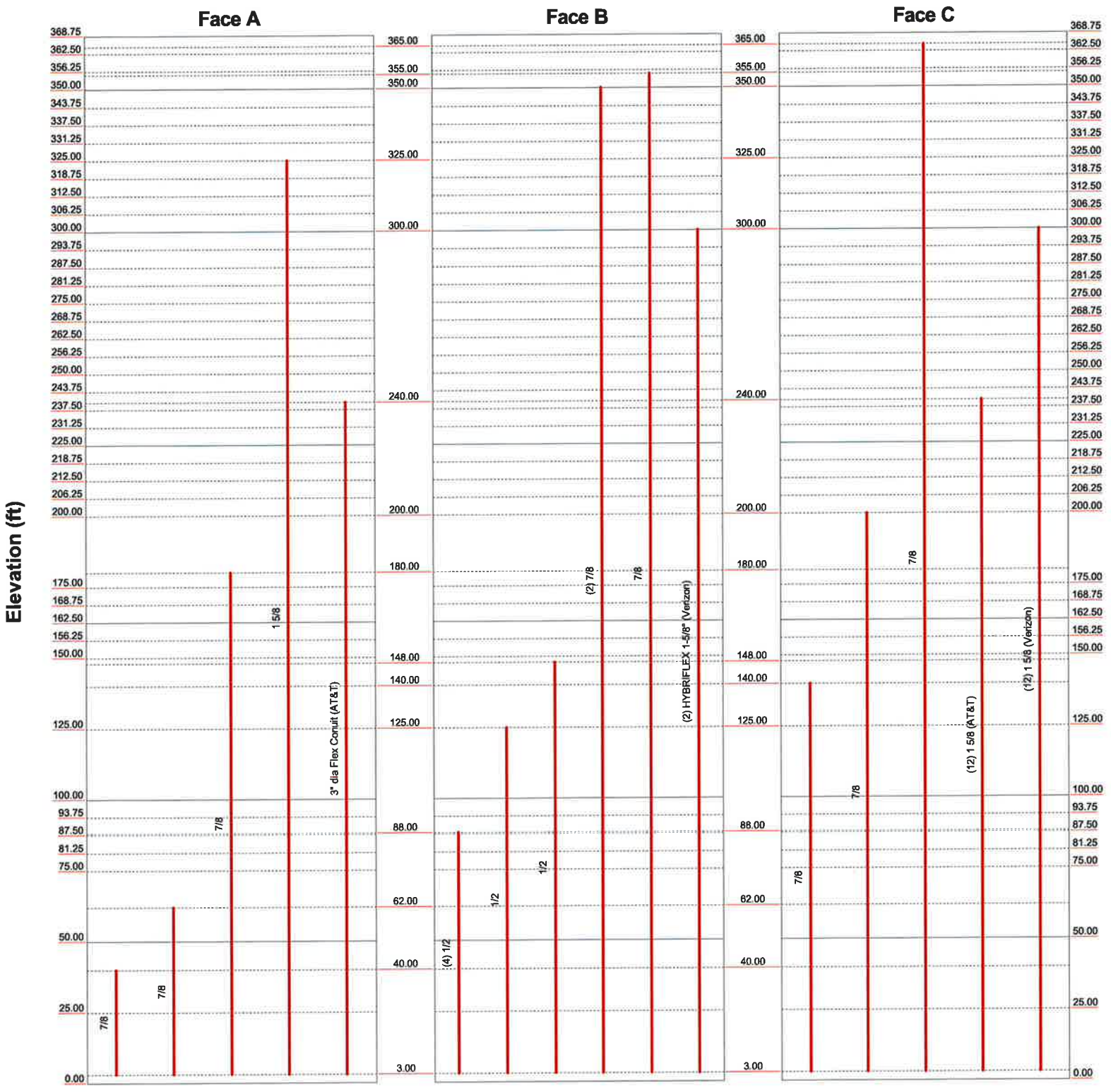
Client: Verizon Wireless	Drawn by: TJL	App'd:
Code: TIA-222-G	Date: 10/13/16	Scale: NTS
Path:		Dwg No. E-7

0' - 368'9"

Round | Flat | App In Face | App Out Face | Truss Leg



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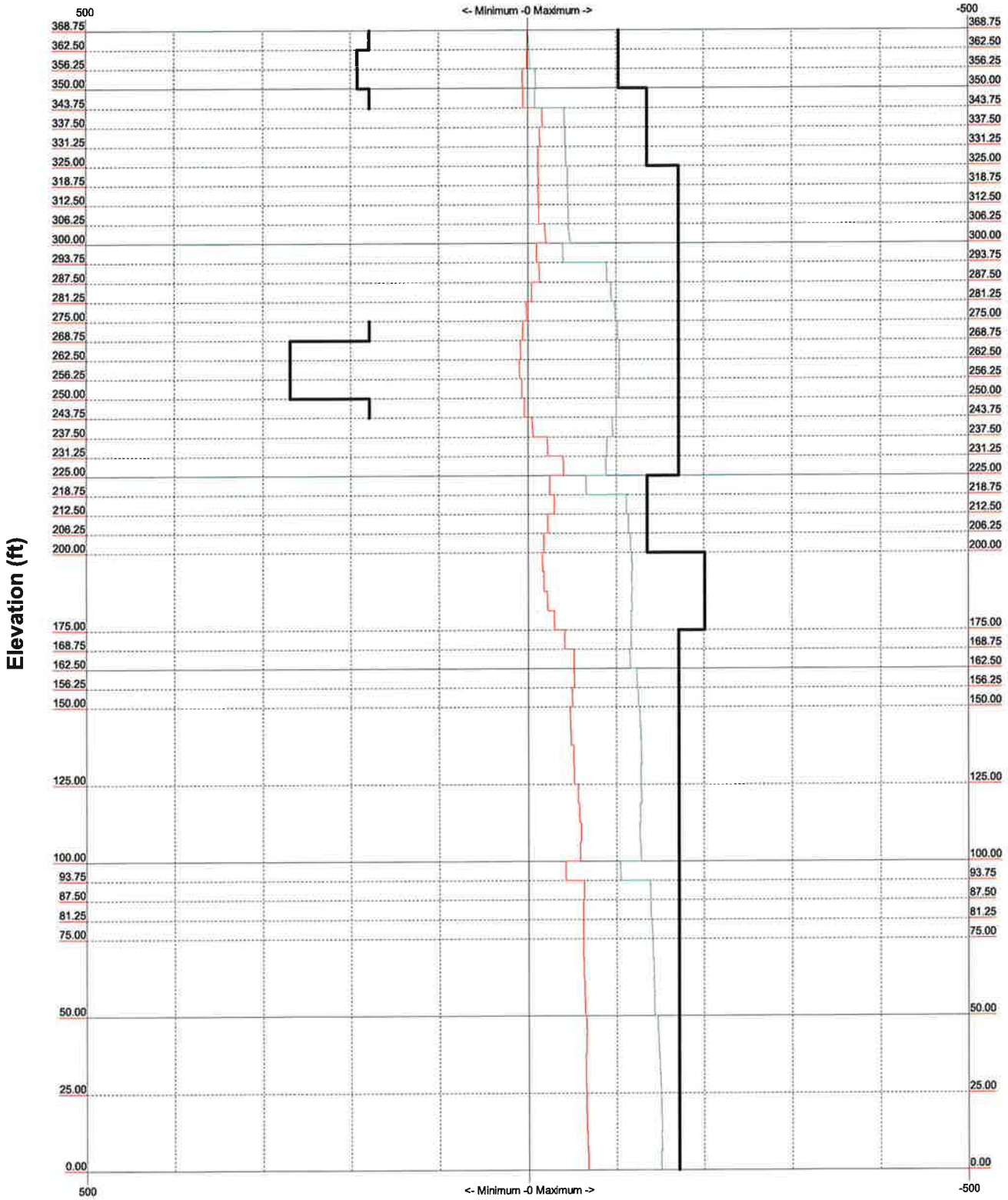
Code: TIA-222-G	Date: 10/13/16	Scale: NTS	
Path:		Dwg No. E-7	

TIA-222-G - 105 mph/50 mph 0.7500 in Ice Exposure C

Leg Capacity ——— **Leg Compression (K)**



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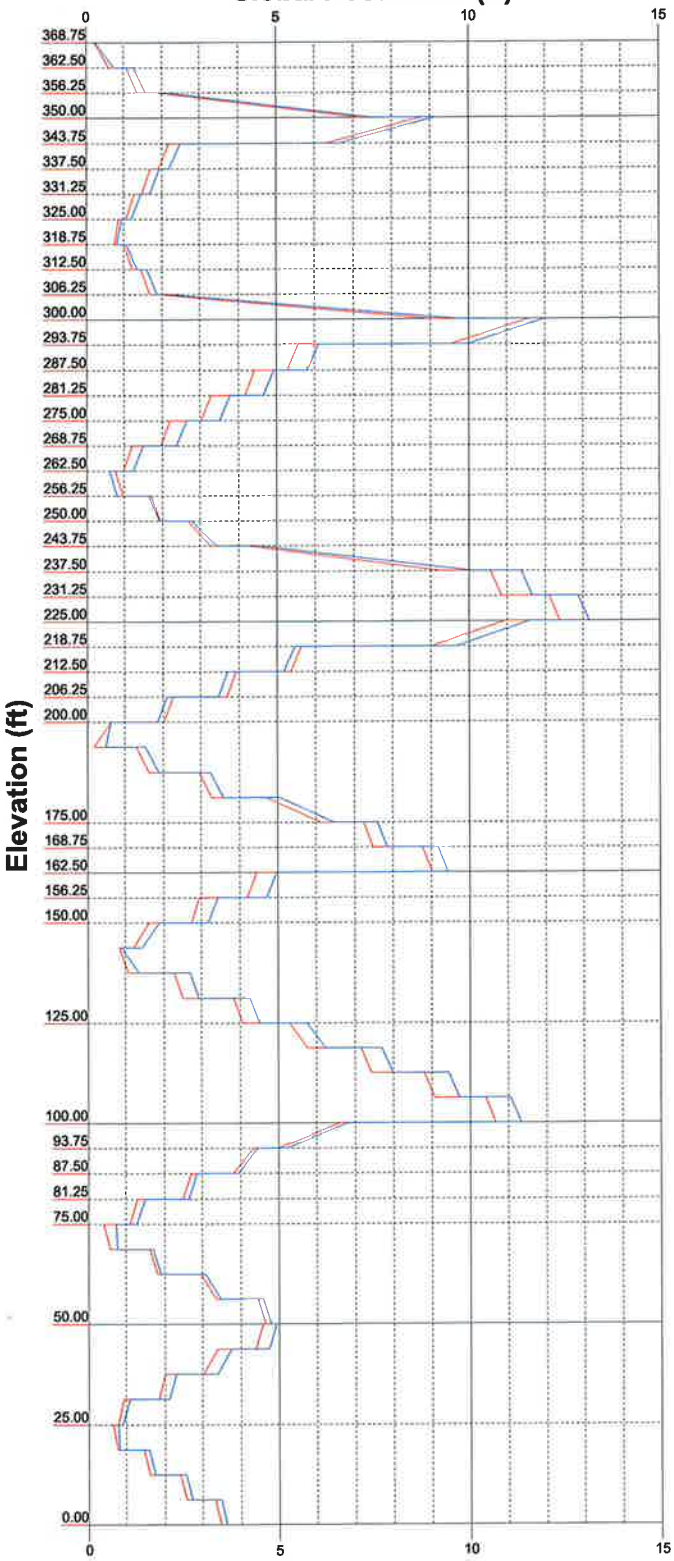
Job: ***16001.53 - Montville***			
Project: ***370' Guyed Tower - 689 Old Colchester Road, Montville,***			
Client: Verizon Wireless	Drawn by: TJL	App'd:	
Code: TIA-222-G	Date: 10/13/16	Scale: NTS	
Path:		Dwg No. E-3	

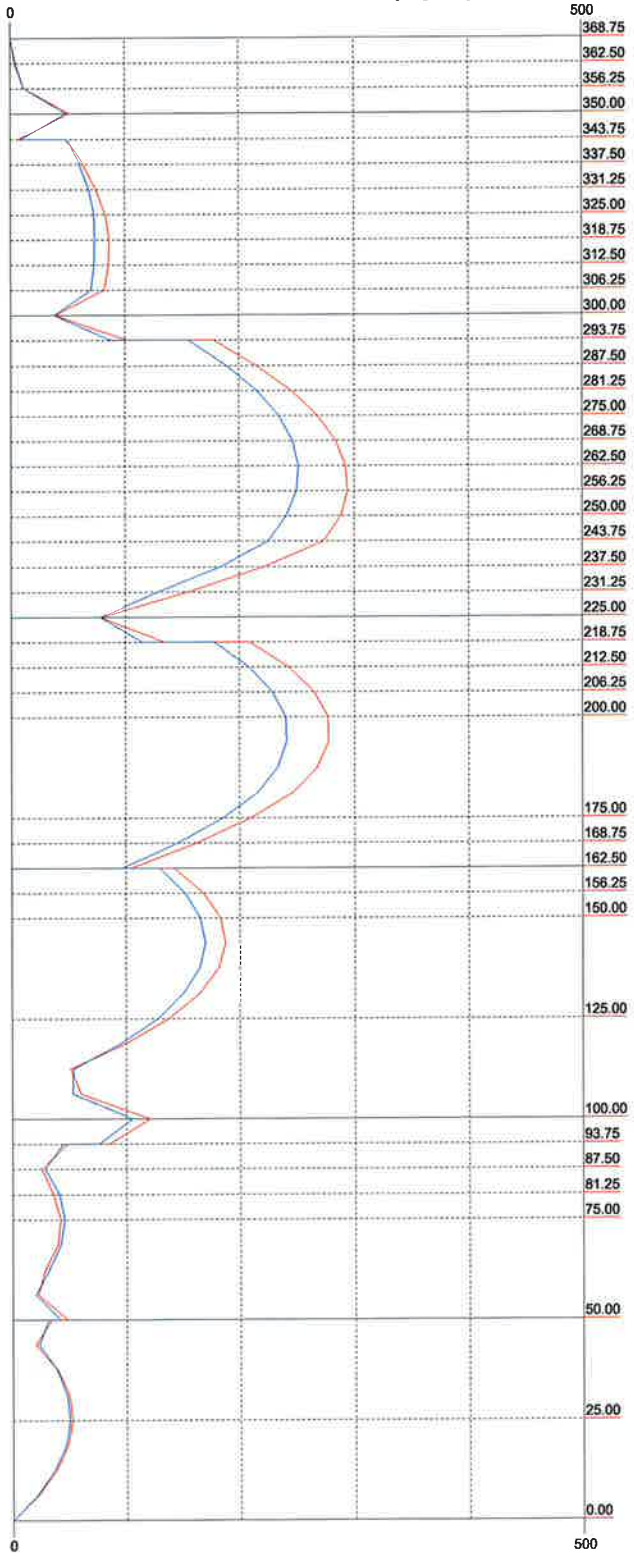
Vx Vz

Mx Mz

Global Mast Shear (K)



Global Mast Moment (kip-ft)



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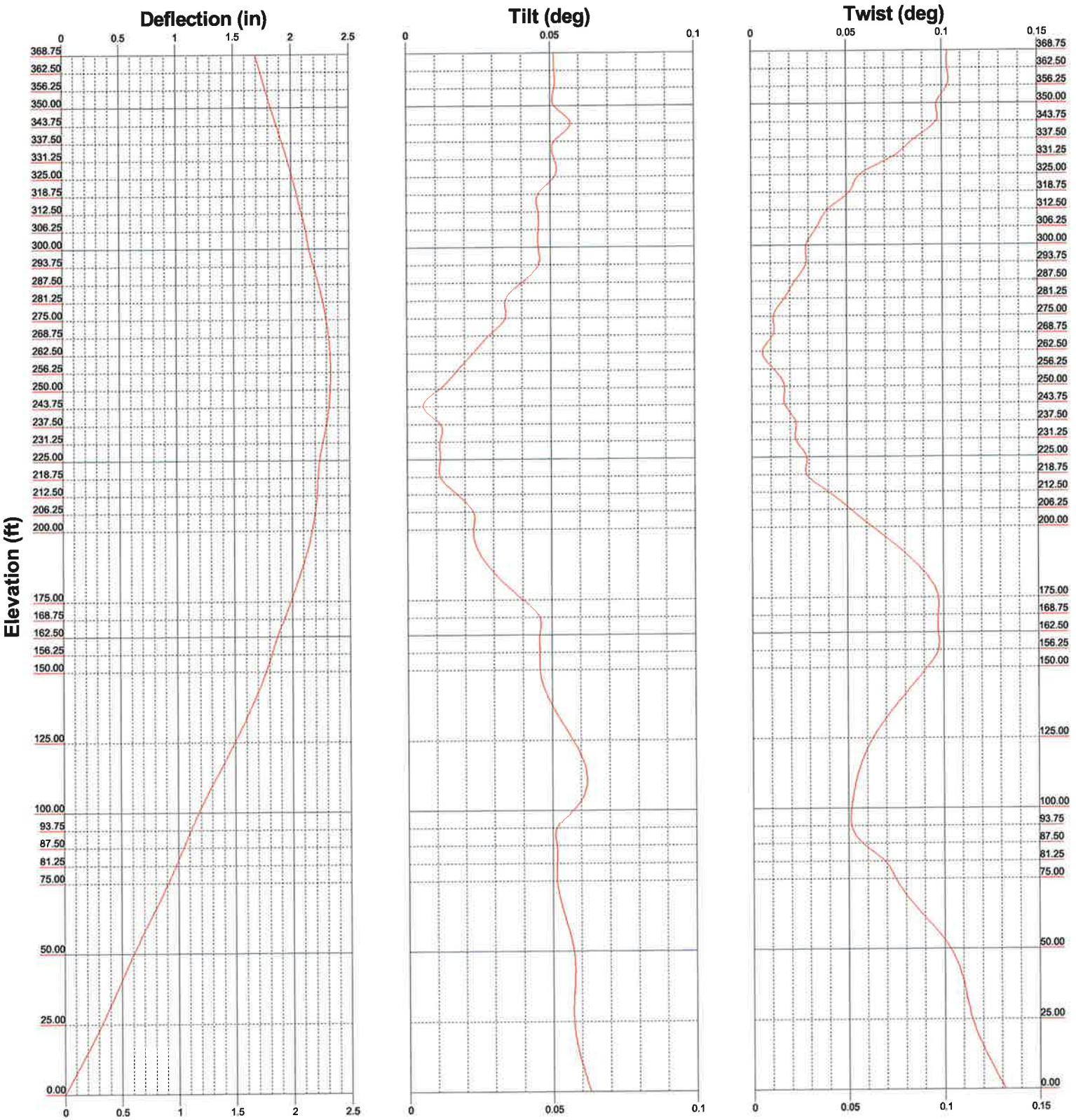
Job: *16001.53 - Montville*			
Project: *370' Guyed Tower - 689 Old Colchester Road, Montville,*			
Client: Verizon Wireless	Drawn by: TJL	App'd:	
Code: TIA-222-G	Date: 10/13/16	Scale: NTS	
Path:		Dwg No. E-4	

TIA-222-G - Service - 60 mph

Maximum Values



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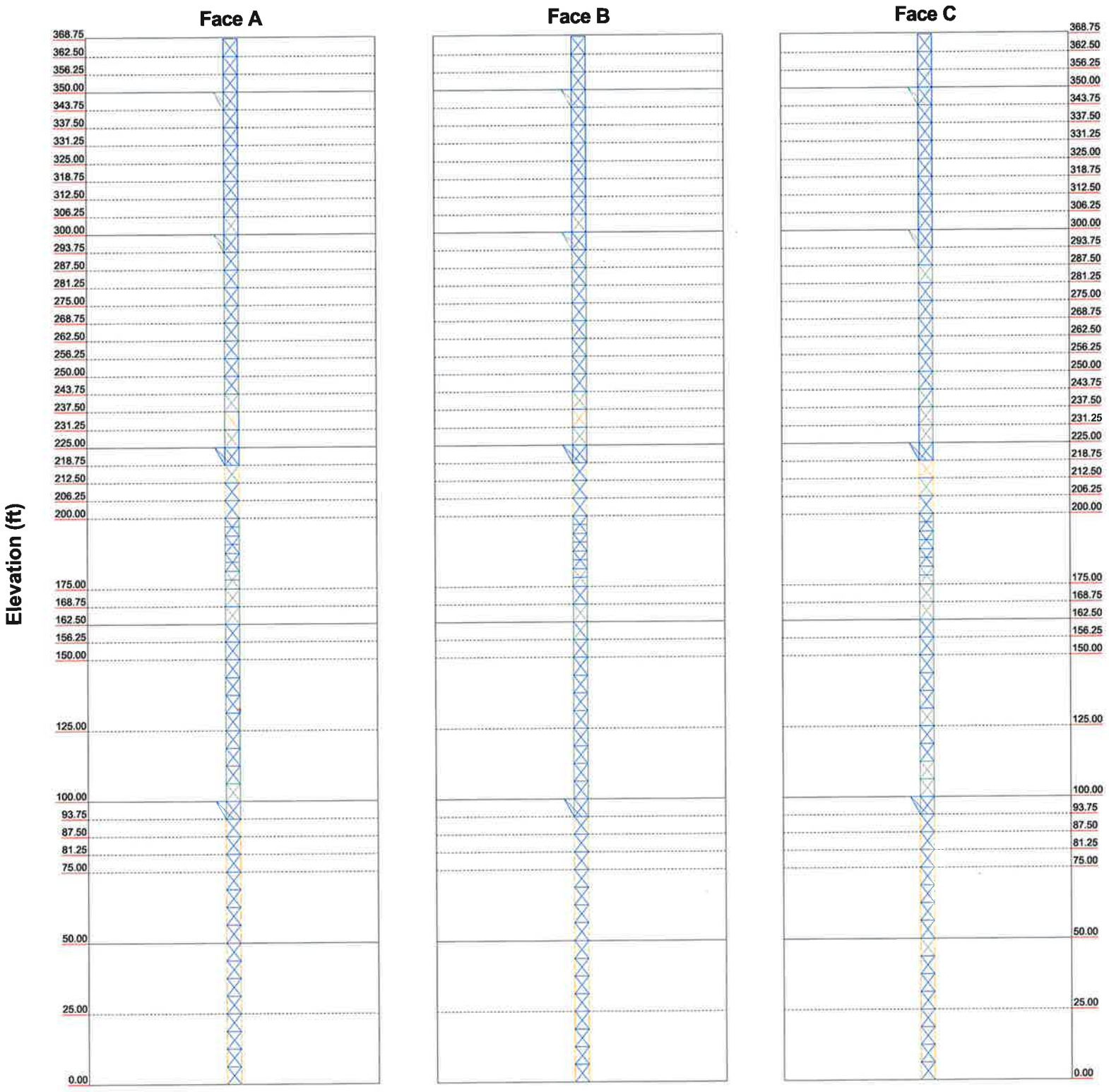
FAX: (203) 488-8587

Job: ***16001.53 - Montville***			
Project: ***370' Guyed Tower - 689 Old Colchester Road, Montville,***			
Client: Verizon Wireless	Drawn by: TJL	App'd:	
Code: TIA-222-G	Date: 10/13/16	Scale: NTS	
Path:		Dwg No. E-5	

0' - 368'9"

> 100% | 90%-100% | 75%-90% | 50%-75% | < 50% Overstress



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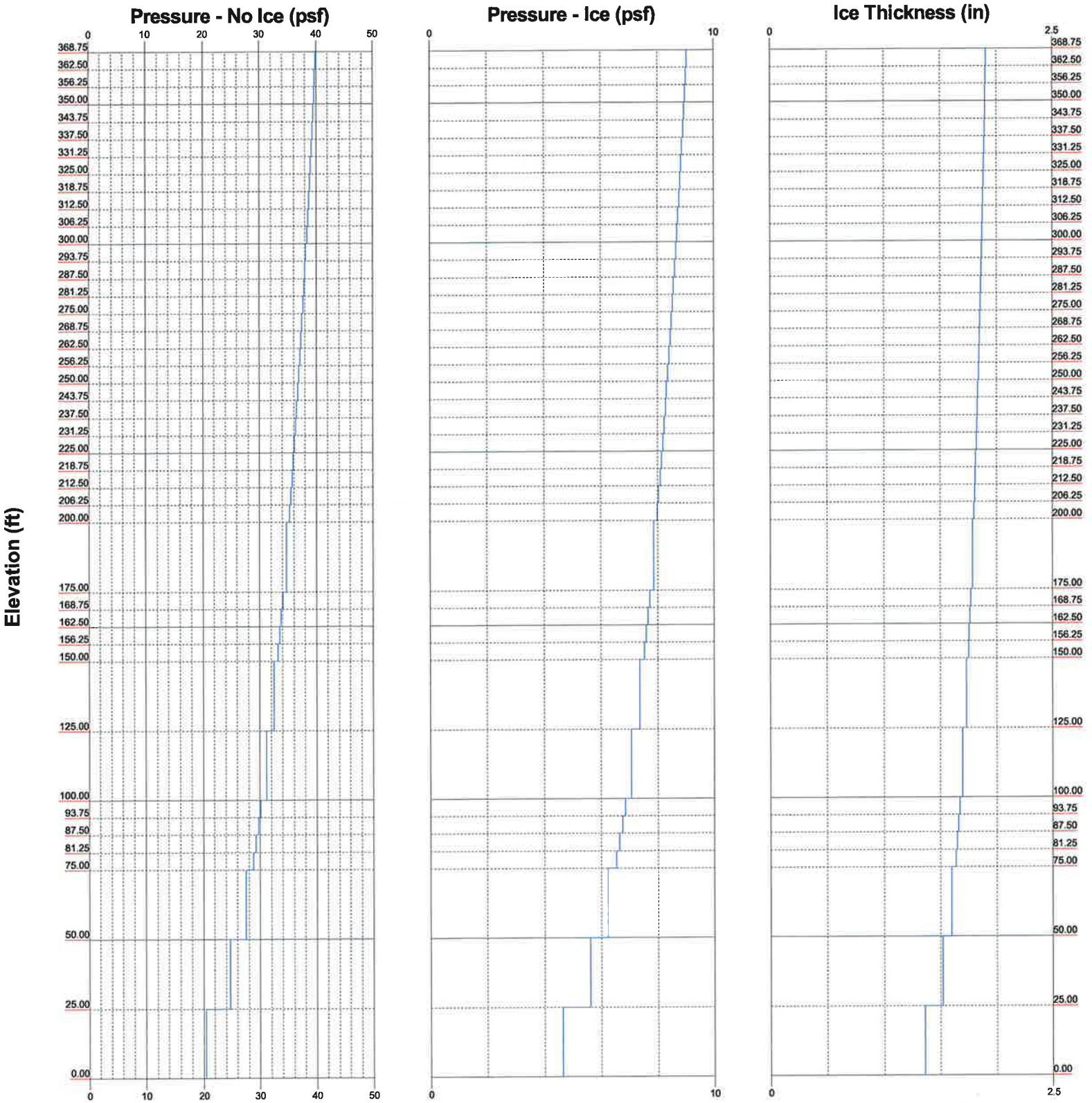
Job: ***16001.53 - Montville***		
Project: ***370' Guyed Tower - 689 Old Colchester Road, Montville,***		
Client: Verizon Wireless	Drawn by: TJL	App'd:
Code: TIA-222-G	Date: 10/13/16	Scale: NTS
Path:		Dwg No. E-8

Wind Pressures and Ice Thickness

TIA-222-G - 105 mph/50 mph 0.7500 in Ice Exposure C



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Job: ***16001.53 - Montville***		
Project: ***370' Guyed Tower - 689 Old Colchester Road, Montville,***		
Client: Verizon Wireless	Drawn by: TJL	App'd:
Code: TIA-222-G	Date: 10/13/16	Scale: NTS
Path:		Dwg No. E-9

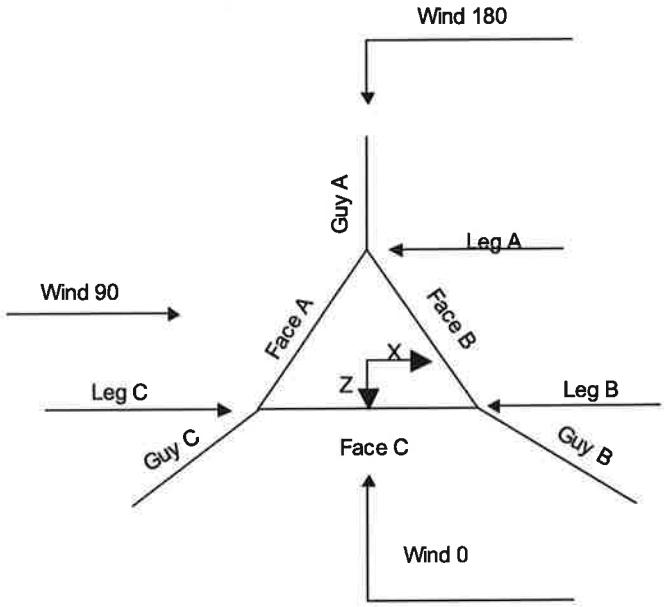
Tower Input Data

The main tower is a 3x guyed tower with an overall height of 368.75 ft above the ground line.
The base of the tower is set at an elevation of 0.00 ft above the ground line.
The face width of the tower is 5.00 ft at the top and 5.00 ft at the base.
This tower is designed using the TIA-222-G standard.
The following design criteria apply:

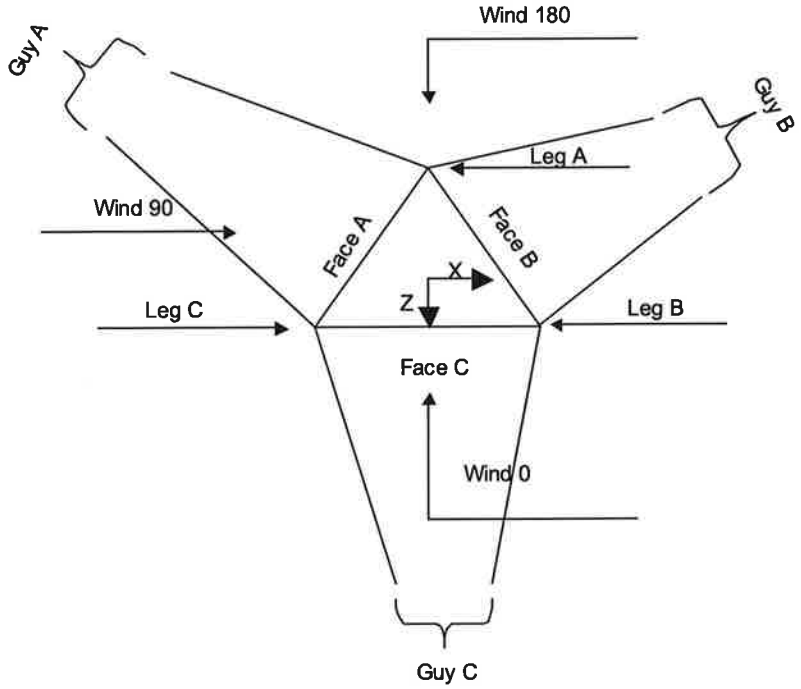
Basic wind speed of 105 mph.
Structure Class II.
Exposure Category C.
Topographic Category 1.
Crest Height 0.00 ft.
Nominal ice thickness of 0.7500 in.
Ice thickness is considered to increase with height.
Ice density of 56 pcf.
A wind speed of 50 mph is used in combination with ice.
Temperature drop of 50 °F.
Deflections calculated using a wind speed of 60 mph.
Tension only take-up is 0.0313 in.
Pressures are calculated at each section.
Safety factor used in guy design is 1.
Stress ratio used in tower member design is 1.
Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Options

	Consider Moments - Legs		Distribute Leg Loads As Uniform		Use ASCE 10 X-Brace Ly Rules
	Consider Moments - Horizontals		Assume Legs Pinned	√	Calculate Redundant Bracing Forces
	Consider Moments - Diagonals	√	Assume Rigid Index Plate		Ignore Redundant Members in FEA
	Use Moment Magnification	√	Use Clear Spans For Wind Area		SR Leg Bolts Resist Compression
√	Use Code Stress Ratios	√	Use Clear Spans For KL/r	√	All Leg Panels Have Same Allowable
√	Use Code Safety Factors - Guys	√	Retension Guys To Initial Tension		Offset Girt At Foundation
	Escalate Ice		Bypass Mast Stability Checks	√	Consider Feed Line Torque
	Always Use Max Kz		Use Azimuth Dish Coefficients		Include Angle Block Shear Check
	Use Special Wind Profile	√	Project Wind Area of Appurt.		Use TIA-222-G Bracing Resist. Exemption
√	Include Bolts In Member Capacity	√	Autocalc Torque Arm Areas		Use TIA-222-G Tension Splice Exemption
√	Leg Bolts Are At Top Of Section		Add IBC .6D+W Combination		Poles
√	Secondary Horizontal Braces Leg	√	Sort Capacity Reports By Component		Include Shear-Torsion Interaction
	Use Diamond Inner Bracing (4 Sided)		Triangulate Diamond Inner Bracing		Always Use Sub-Critical Flow
	SR Members Have Cut Ends		Treat Feed Line Bundles As Cylinder		Use Top Mounted Sockets
	SR Members Are Concentric				



Corner & Starmount Guyed Tower



Face Guyed

Tower Section Geometry

Tower Section	*Tower Elevation*	*Assembly Database*	*Description*	*Section Width*	*Number of Sections*	*Section Length*
	ft			*ft*		*ft*
T1	368.75-362.50			5.00	1	6.25
T2	362.50-356.25			5.00	1	6.25
T3	356.25-350.00			5.00	1	6.25
T4	350.00-343.75			5.00	1	6.25
T5	343.75-337.50			5.00	1	6.25
T6	337.50-331.25			5.00	1	6.25
T7	331.25-325.00			5.00	1	6.25
T8	325.00-318.75			5.00	1	6.25
T9	318.75-312.50			5.00	1	6.25
T10	312.50-306.25			5.00	1	6.25
T11	306.25-300.00			5.00	1	6.25
T12	300.00-293.75			5.00	1	6.25
T13	293.75-287.50			5.00	1	6.25
T14	287.50-281.25			5.00	1	6.25
T15	281.25-275.00			5.00	1	6.25
T16	275.00-268.75			5.00	1	6.25

Tower Section	Tower Elevation ft	Assembly Database	Description	Section Width ft	Number of Sections	Section Length ft
T17	268.75-262.50			5.00	1	6.25
T18	262.50-256.25			5.00	1	6.25
T19	256.25-250.00			5.00	1	6.25
T20	250.00-243.75			5.00	1	6.25
T21	243.75-237.50			5.00	1	6.25
T22	237.50-231.25			5.00	1	6.25
T23	231.25-225.00			5.00	1	6.25
T24	225.00-218.75			5.00	1	6.25
T25	218.75-212.50			5.00	1	6.25
T26	212.50-206.25			5.00	1	6.25
T27	206.25-200.00			5.00	1	6.25
T28	200.00-175.00			5.00	1	25.00
T29	175.00-168.75			5.00	1	6.25
T30	168.75-162.50			5.00	1	6.25
T31	162.50-156.25			5.00	1	6.25
T32	156.25-150.00			5.00	1	6.25
T33	150.00-125.00			5.00	1	25.00
T34	125.00-100.00			5.00	1	25.00
T35	100.00-93.75			5.00	1	6.25
T36	93.75-87.50			5.00	1	6.25
T37	87.50-81.25			5.00	1	6.25
T38	81.25-75.00			5.00	1	6.25
T39	75.00-50.00			5.00	1	25.00
T40	50.00-25.00			5.00	1	25.00
T41	25.00-0.00			5.00	1	25.00

Tower Section Geometry *(cont'd)*

Tower Section	Tower Elevation ft	Diagonal Spacing ft	Bracing Type	Has K Brace End Panels	Has Horizontals	Top Girt Offset in	Bottom Girt Offset in
T1	368.75-362.50	6.25	X Brace	No	No	0.0000	0.0000
T2	362.50-356.25	6.25	X Brace	No	No	0.0000	0.0000
T3	356.25-350.00	6.25	X Brace	No	No	0.0000	0.0000
T4	350.00-343.75	6.25	X Brace	No	Yes	0.0000	0.0000
T5	343.75-337.50	6.25	TX Brace	No	Yes	0.0000	0.0000
T6	337.50-331.25	6.25	TX Brace	No	Yes	0.0000	0.0000
T7	331.25-325.00	6.25	TX Brace	No	Yes	0.0000	0.0000
T8	325.00-318.75	6.25	TX Brace	No	Yes	0.0000	0.0000
T9	318.75-312.50	6.25	TX Brace	No	Yes	0.0000	0.0000
T10	312.50-306.25	6.25	TX Brace	No	Yes	0.0000	0.0000
T11	306.25-300.00	6.25	TX Brace	No	Yes	0.0000	0.0000
T12	300.00-293.75	6.25	X Brace	No	Yes	0.0000	0.0000
T13	293.75-287.50	6.25	TX Brace	No	Yes	0.0000	0.0000
T14	287.50-281.25	6.25	TX Brace	No	Yes	0.0000	0.0000
T15	281.25-275.00	6.25	TX Brace	No	Yes	0.0000	0.0000
T16	275.00-268.75	6.25	TX Brace	No	Yes	0.0000	0.0000
T17	268.75-262.50	6.25	TX Brace	No	Yes	0.0000	0.0000
T18	262.50-256.25	6.25	TX Brace	No	Yes	0.0000	0.0000
T19	256.25-250.00	6.25	TX Brace	No	Yes	0.0000	0.0000
T20	250.00-243.75	6.25	TX Brace	No	Yes	0.0000	0.0000
T21	243.75-237.50	6.25	TX Brace	No	Yes	0.0000	0.0000
T22	237.50-231.25	6.25	TX Brace	No	Yes	0.0000	0.0000
T23	231.25-225.00	6.25	TX Brace	No	Yes	0.0000	0.0000

Tower Section	Tower Elevation ft	Diagonal Spacing ft	Bracing Type	Has K Brace End Panels	Has Horizontals	Top Girt Offset in	Bottom Girt Offset in
T24	225.00-218.75	6.25	X Brace	No	Yes	0.0000	0.0000
T25	218.75-212.50	6.25	TX Brace	No	Yes	0.0000	0.0000
T26	212.50-206.25	6.25	TX Brace	No	Yes	0.0000	0.0000
T27	206.25-200.00	6.25	TX Brace	No	Yes	0.0000	0.0000
T28	200.00-175.00	6.25	TX Brace	No	Yes	0.0000	0.0000
T29	175.00-168.75	6.25	TX Brace	No	Yes	0.0000	0.0000
T30	168.75-162.50	6.25	TX Brace	No	Yes	0.0000	0.0000
T31	162.50-156.25	6.25	TX Brace	No	Yes	0.0000	0.0000
T32	156.25-150.00	6.25	TX Brace	No	Yes	0.0000	0.0000
T33	150.00-125.00	6.25	TX Brace	No	Yes	0.0000	0.0000
T34	125.00-100.00	6.25	TX Brace	No	Yes	0.0000	0.0000
T35	100.00-93.75	6.25	X Brace	No	Yes	0.0000	0.0000
T36	93.75-87.50	6.25	TX Brace	No	Yes	0.0000	0.0000
T37	87.50-81.25	6.25	TX Brace	No	Yes	0.0000	0.0000
T38	81.25-75.00	6.25	TX Brace	No	Yes	0.0000	0.0000
T39	75.00-50.00	6.25	TX Brace	No	Yes	0.0000	0.0000
T40	50.00-25.00	6.25	TX Brace	No	Yes	0.0000	0.0000
T41	25.00-0.00	6.25	TX Brace	No	Yes	0.0000	0.0000

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Leg Type	Leg Size	Leg Grade	Diagonal Type	Diagonal Size	Diagonal Grade
T1 368.75-362.50	Solid Round	2 3/4	A36 (36 ksi)	Single Angle	L2 1/2x2 1/2x1/4	A36 (36 ksi)
T2 362.50-356.25	Solid Round	2 3/4	A36 (36 ksi)	Double Angle	2L3x3x5/16	A36 (36 ksi)
T3 356.25-350.00	Solid Round	2 3/4	A36 (36 ksi)	Double Angle	2L3x3x5/16	A36 (36 ksi)
T4 350.00-343.75	Solid Round	3	A36 (36 ksi)	Single Angle	L3x2 1/2x1/4	A36 (36 ksi)
T5 343.75-337.50	Solid Round	3	A36 (36 ksi)	Solid Round	5/8	A36 (36 ksi)
T6 337.50-331.25	Solid Round	3	A36 (36 ksi)	Solid Round	5/8	A36 (36 ksi)
T7 331.25-325.00	Solid Round	3	A36 (36 ksi)	Solid Round	5/8	A36 (36 ksi)
T8 325.00-318.75	Solid Round	3 1/4	A36 (36 ksi)	Solid Round	3/4	A36 (36 ksi)
T9 318.75-312.50	Solid Round	3 1/4	A36 (36 ksi)	Solid Round	3/4	A36 (36 ksi)
T10 312.50-306.25	Solid Round	3 1/4	A36 (36 ksi)	Solid Round	3/4	A36 (36 ksi)
T11 306.25-300.00	Solid Round	3 1/4	A36 (36 ksi)	Solid Round	3/4	A36 (36 ksi)
T12 300.00-293.75	Solid Round	3 1/4	A36 (36 ksi)	Single Angle	L3x2 1/2x1/4	A36 (36 ksi)
T13 293.75-287.50	Solid Round	3 1/4	A36 (36 ksi)	Solid Round	3/4	A36 (36 ksi)
T14 287.50-281.25	Solid Round	3 1/4	A36 (36 ksi)	Solid Round	5/8	A36 (36 ksi)
T15 281.25-275.00	Solid Round	3 1/4	A36 (36 ksi)	Solid Round	5/8	A36 (36 ksi)
T16 275.00-268.75	Solid Round	3 1/4	A36 (36 ksi)	Solid Round	5/8	A36 (36 ksi)
T17	Solid Round	3 1/4	A36	Solid Round	5/8	A36

Tower Elevation ft	Leg Type	Leg Size	Leg Grade	Diagonal Type	Diagonal Size	Diagonal Grade
268.75-262.50 T18	Solid Round	3 1/4	(36 ksi) A36 (36 ksi)	Solid Round	5/8	(36 ksi) A36 (36 ksi)
262.50-256.25 T19	Solid Round	3 1/4	(36 ksi) A36 (36 ksi)	Solid Round	3/4	(36 ksi) A36 (36 ksi)
256.25-250.00 T20	Solid Round	3 1/4	(36 ksi) A36 (36 ksi)	Solid Round	3/4	(36 ksi) A36 (36 ksi)
250.00-243.75 T21	Solid Round	3 1/4	(36 ksi) A36 (36 ksi)	Solid Round	3/4	(36 ksi) A36 (36 ksi)
243.75-237.50 T22	Solid Round	3 1/4	(36 ksi) A36 (36 ksi)	Solid Round	3/4	(36 ksi) A36 (36 ksi)
237.50-231.25 T23	Solid Round	3 1/4	(36 ksi) A36 (36 ksi)	Solid Round	1	(36 ksi) A36 (36 ksi)
231.25-225.00 T24	Solid Round	3	(36 ksi) A36 (36 ksi)	Double Angle	2L2 1/2x2 1/2x1/4	(36 ksi) A36 (36 ksi)
225.00-218.75 T25	Solid Round	3	(36 ksi) A36 (36 ksi)	Solid Round	5/8	(36 ksi) A36 (36 ksi)
218.75-212.50 T26	Solid Round	3	(36 ksi) A36 (36 ksi)	Solid Round	5/8	(36 ksi) A36 (36 ksi)
212.50-206.25 T27	Solid Round	3	(36 ksi) A36 (36 ksi)	Solid Round	5/8	(36 ksi) A36 (36 ksi)
206.25-200.00 T28	Solid Round	3	(36 ksi) A36 (36 ksi)	Solid Round	5/8	(36 ksi) A36 (36 ksi)
200.00-175.00 T29	Solid Round	3 1/4	(36 ksi) A36 (36 ksi)	Solid Round	1	(36 ksi) A36 (36 ksi)
175.00-168.75 T30	Solid Round	3 1/4	(36 ksi) A36 (36 ksi)	Solid Round	1	(36 ksi) A36 (36 ksi)
168.75-162.50 T31	Solid Round	3 1/4	(36 ksi) A36 (36 ksi)	Solid Round	5/8	(36 ksi) A36 (36 ksi)
162.50-156.25 T32	Solid Round	3 1/4	(36 ksi) A36 (36 ksi)	Solid Round	5/8	(36 ksi) A36 (36 ksi)
156.25-150.00 T33	Solid Round	3 1/4	(36 ksi) A36 (36 ksi)	Solid Round	5/8	(36 ksi) A36 (36 ksi)
150.00-125.00 T34	Solid Round	3 1/4	(36 ksi) A36 (36 ksi)	Single Angle	L2 1/2x2 1/2x3/16	(36 ksi) A36 (36 ksi)
125.00-100.00 T35	100.00-93.75 Solid Round	3 1/4	(36 ksi) A36 (36 ksi)	Double Angle	2L2 1/2x2 1/2x1/4	(36 ksi) A36 (36 ksi)
T36	93.75-87.50 Solid Round	3 1/4	(36 ksi) A36 (36 ksi)	Solid Round	3/4	(36 ksi) A36 (36 ksi)
T37	87.50-81.25 Solid Round	3 1/4	(36 ksi) A36 (36 ksi)	Solid Round	5/8	(36 ksi) A36 (36 ksi)
T38	81.25-75.00 Solid Round	3 1/4	(36 ksi) A36 (36 ksi)	Solid Round	5/8	(36 ksi) A36 (36 ksi)
T39	75.00-50.00 Solid Round	3 1/4	(36 ksi) A36 (36 ksi)	Solid Round	5/8	(36 ksi) A36 (36 ksi)
T40	50.00-25.00 Solid Round	3 1/4	(36 ksi) A36 (36 ksi)	Solid Round	5/8	(36 ksi) A36 (36 ksi)
T41	25.00-0.00 Solid Round	3 1/4	(36 ksi) A36 (36 ksi)	Solid Round	5/8	(36 ksi) A36 (36 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Top Girt Type	Top Girt Size	Top Girt Grade	Bottom Girt Type	Bottom Girt Size	Bottom Girt Grade
T1 368.75-362.50	Double Angle	2L2 1/2x2x1/4	A36	Pipe		A36

Tower Elevation ft	Top Girt Type	Top Girt Size	Top Girt Grade	Bottom Girt Type	Bottom Girt Size	Bottom Girt Grade
T2 362.50-356.25	Double Angle	2L2 1/2x3x1/4	(36 ksi) A36 (36 ksi)	Pipe		(36 ksi) A36 (36 ksi)
T3 356.25-350.00	Double Angle	2L2 1/2x3x1/4	(36 ksi) A36 (36 ksi)	Pipe		(36 ksi) A36 (36 ksi)
T4 350.00-343.75	Double Angle	2L2 1/2x2x1/4	(36 ksi) A36 (36 ksi)	Pipe		(36 ksi) A36 (36 ksi)
T5 343.75-337.50	Double Angle	2L2 1/2x2x1/4	(36 ksi) A36 (36 ksi)	Pipe		(36 ksi) A36 (36 ksi)
T6 337.50-331.25	Pipe	P1.25x.14	(36 ksi) A36 (36 ksi)	Pipe		(36 ksi) A36 (36 ksi)
T7 331.25-325.00	Pipe	P1.25x.14	(36 ksi) A36 (36 ksi)	Pipe		(36 ksi) A36 (36 ksi)
T8 325.00-318.75	Pipe	P1.25x.14	(36 ksi) A36 (36 ksi)	Pipe		(36 ksi) A36 (36 ksi)
T9 318.75-312.50	Pipe	P1.25x.14	(36 ksi) A36 (36 ksi)	Pipe		(36 ksi) A36 (36 ksi)
T10 312.50-306.25	Pipe	P1.25x.14	(36 ksi) A36 (36 ksi)	Pipe		(36 ksi) A36 (36 ksi)
T11 306.25-300.00	Double Angle	2L2 1/2x2x1/4	(36 ksi) A36 (36 ksi)	Pipe		(36 ksi) A36 (36 ksi)
T12 300.00-293.75	Double Angle	2L2 1/2x2x1/4	(36 ksi) A36 (36 ksi)	Pipe		(36 ksi) A36 (36 ksi)
T13 293.75-287.50	Double Angle	2L2 1/2x2x1/4	(36 ksi) A36 (36 ksi)	Pipe		(36 ksi) A36 (36 ksi)
T14 287.50-281.25	Pipe	P1.25x.14	(36 ksi) A36 (36 ksi)	Pipe		(36 ksi) A36 (36 ksi)
T15 281.25-275.00	Pipe	P1.25x.14	(36 ksi) A36 (36 ksi)	Pipe		(36 ksi) A36 (36 ksi)
T16 275.00-268.75	Pipe	P1.25x.14	(36 ksi) A36 (36 ksi)	Pipe		(36 ksi) A36 (36 ksi)
T17 268.75-262.50	Pipe	P1.25x.14	(36 ksi) A36 (36 ksi)	Pipe		(36 ksi) A36 (36 ksi)
T18 262.50-256.25	Pipe	P1.25x.14	(36 ksi) A36 (36 ksi)	Pipe		(36 ksi) A36 (36 ksi)
T19 256.25-250.00	Pipe	P1.25x.14	(36 ksi) A36 (36 ksi)	Pipe		(36 ksi) A36 (36 ksi)
T20 250.00-243.75	Double Angle	2L2 1/2x2x1/4	(36 ksi) A36 (36 ksi)	Pipe		(36 ksi) A36 (36 ksi)
T21 243.75-237.50	Double Angle	2L2 1/2x2x1/4	(36 ksi) A36 (36 ksi)	Pipe		(36 ksi) A36 (36 ksi)
T22 237.50-231.25	Double Angle	2L2 1/2x2x1/4	(36 ksi) A36 (36 ksi)	Pipe		(36 ksi) A36 (36 ksi)
T23 231.25-225.00	Double Angle	2L2 1/2x2x1/4	(36 ksi) A36 (36 ksi)	Pipe		(36 ksi) A36 (36 ksi)
T24 225.00-218.75	Double Angle	2L2 1/2x2x1/4	(36 ksi) A36 (36 ksi)	Pipe		(36 ksi) A36 (36 ksi)
T25 218.75-212.50	Double Angle	2L2 1/2x2x1/4	(36 ksi) A36 (36 ksi)	Pipe		(36 ksi) A36 (36 ksi)
T26 212.50-206.25	Pipe	P1.25x.14	(36 ksi) A36 (36 ksi)	Pipe		(36 ksi) A36 (36 ksi)
T27 206.25-200.00	Pipe	P1.25x.14	(36 ksi) A36 (36 ksi)	Pipe		(36 ksi) A36 (36 ksi)
T28 200.00-175.00	Pipe	P1.25x.14	(36 ksi) A36 (36 ksi)	Pipe		(36 ksi) A36 (36 ksi)
T29 175.00-168.75	Pipe	P1.25x.14	(36 ksi) A36 (36 ksi)	Pipe		(36 ksi) A36 (36 ksi)
T30 168.75-162.50	Pipe	P1.25x.14	(36 ksi) A36 (36 ksi)	Pipe		(36 ksi) A36 (36 ksi)
T31 162.50-156.25	Double Angle	2L2 1/2x2x1/4	(36 ksi) A36 (36 ksi)	Pipe		(36 ksi) A36 (36 ksi)

Tower Elevation ft	Top Girt Type	Top Girt Size	Top Girt Grade	Bottom Girt Type	Bottom Girt Size	Bottom Girt Grade
T32 156.25-150.00	Pipe	P1.25x.14	A36 (36 ksi)	Pipe		A36 (36 ksi)
T33 150.00-125.00	Pipe	P1.25x.14	A36 (36 ksi)	Pipe		A36 (36 ksi)
T34 125.00-100.00	Pipe	P1.25x.14	A36 (36 ksi)	Pipe		A36 (36 ksi)
T35 100.00-93.75	Double Angle	2L2 1/2x2x1/4	A36 (36 ksi)	Pipe		A36 (36 ksi)
T36 93.75-87.50	Double Angle	2L2 1/2x2x1/4	A36 (36 ksi)	Pipe		A36 (36 ksi)
T37 87.50-81.25	Pipe	P1.25x.14	A36 (36 ksi)	Pipe		A36 (36 ksi)
T38 81.25-75.00	Pipe	P1.25x.14	A36 (36 ksi)	Pipe		A36 (36 ksi)
T39 75.00-50.00	Pipe	P1.25x.14	A36 (36 ksi)	Pipe		A36 (36 ksi)
T40 50.00-25.00	Single Angle	L2 1/2x2x1/4	A36 (36 ksi)	Pipe		A36 (36 ksi)
T41 25.00-0.00	Pipe	P1.25x.14	A36 (36 ksi)	Pipe		A36 (36 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	No. of Mid Girts	Mid Girt Type	Mid Girt Size	Mid Girt Grade	Horizontal Type	Horizontal Size	Horizontal Grade
T4 350.00-343.75	None	Flat Bar		A36 (36 ksi)	Pipe	P1.25x.14	A36 (36 ksi)
T5 343.75-337.50	None	Flat Bar		A36 (36 ksi)	Pipe	P1.25x.14	A36 (36 ksi)
T6 337.50-331.25	None	Flat Bar		A36 (36 ksi)	Pipe	P1.25x.14	A36 (36 ksi)
T7 331.25-325.00	None	Flat Bar		A36 (36 ksi)	Pipe	P1.25x.14	A36 (36 ksi)
T8 325.00-318.75	None	Flat Bar		A36 (36 ksi)	Pipe	P1.25x.14	A36 (36 ksi)
T9 318.75-312.50	None	Flat Bar		A36 (36 ksi)	Pipe	P1.25x.14	A36 (36 ksi)
T10 312.50-306.25	None	Flat Bar		A36 (36 ksi)	Pipe	P1.25x.14	A36 (36 ksi)
T11 306.25-300.00	None	Flat Bar		A36 (36 ksi)	Pipe	P1.25x.14	A36 (36 ksi)
T12 300.00-293.75	None	Flat Bar		A36 (36 ksi)	Pipe	P1.25x.14	A36 (36 ksi)
T13 293.75-287.50	None	Flat Bar		A36 (36 ksi)	Pipe	P1.25x.14	A36 (36 ksi)
T14 287.50-281.25	None	Flat Bar		A36 (36 ksi)	Pipe	P1.25x.14	A36 (36 ksi)
T15 281.25-275.00	None	Flat Bar		A36 (36 ksi)	Pipe	P1.25x.14	A36 (36 ksi)
T16 275.00-268.75	None	Flat Bar		A36 (36 ksi)	Pipe	P1.25x.14	A36 (36 ksi)
T17 268.75-262.50	None	Flat Bar		A36 (36 ksi)	Pipe	P1.25x.14	A36 (36 ksi)
T18	None	Flat Bar		A36	Pipe	P1.25x.14	A36

Tower Elevation ft	No. of Mid Girts	Mid Girt Type	Mid Girt Size	Mid Girt Grade	Horizontal Type	Horizontal Size	Horizontal Grade
262.50-256.25 T19	None	Flat Bar		(36 ksi) A36 (36 ksi)	Pipe	P1.25x.14	(36 ksi) A36 (36 ksi)
256.25-250.00 T20	None	Flat Bar		(36 ksi) A36 (36 ksi)	Pipe	P1.25x.14	(36 ksi) A36 (36 ksi)
250.00-243.75 T21	None	Flat Bar		(36 ksi) A36 (36 ksi)	Pipe	P1.25x.14	(36 ksi) A36 (36 ksi)
243.75-237.50 T22	None	Flat Bar		(36 ksi) A36 (36 ksi)	Pipe	P1.25x.14	(36 ksi) A36 (36 ksi)
237.50-231.25 T23	None	Flat Bar		(36 ksi) A36 (36 ksi)	Pipe	P1.25x.14	(36 ksi) A36 (36 ksi)
231.25-225.00 T24	None	Flat Bar		(36 ksi) A36 (36 ksi)	Pipe	P1.25x.14	(36 ksi) A36 (36 ksi)
225.00-218.75 T25	None	Flat Bar		(36 ksi) A36 (36 ksi)	Pipe	P1.25x.14	(36 ksi) A36 (36 ksi)
218.75-212.50 T26	None	Flat Bar		(36 ksi) A36 (36 ksi)	Pipe	P1.25x.14	(36 ksi) A36 (36 ksi)
212.50-206.25 T27	None	Flat Bar		(36 ksi) A36 (36 ksi)	Pipe	P1.25x.14	(36 ksi) A36 (36 ksi)
206.25-200.00 T28	None	Flat Bar		(36 ksi) A36 (36 ksi)	Pipe	P1.25x.14	(36 ksi) A36 (36 ksi)
200.00-175.00 T29	None	Single Angle		(36 ksi) A36 (36 ksi)	Pipe	P1.25x.14	(36 ksi) A36 (36 ksi)
175.00-168.75 T30	None	Single Angle		(36 ksi) A36 (36 ksi)	Pipe	P1.25x.14	(36 ksi) A36 (36 ksi)
168.75-162.50 T31	None	Single Angle		(36 ksi) A36 (36 ksi)	Pipe	P1.25x.14	(36 ksi) A36 (36 ksi)
162.50-156.25 T32	None	Single Angle		(36 ksi) A36 (36 ksi)	Pipe	P1.25x.14	(36 ksi) A36 (36 ksi)
156.25-150.00 T33	None	Single Angle		(36 ksi) A36 (36 ksi)	Pipe	P1.25x.14	(36 ksi) A36 (36 ksi)
150.00-125.00 T34	None	Single Angle		(36 ksi) A36 (36 ksi)	Pipe	P1.25x.14	(36 ksi) A36 (36 ksi)
125.00-100.00 T35	100.00-93.75 None	Single Angle		(36 ksi) A36 (36 ksi)	Pipe	P1.25x.14	(36 ksi) A36 (36 ksi)
T36	93.75-87.50 None	Single Angle		(36 ksi) A36 (36 ksi)	Pipe	P1.25x.14	(36 ksi) A36 (36 ksi)
T37	87.50-81.25 None	Single Angle		(36 ksi) A36 (36 ksi)	Pipe	P1.25x.14	(36 ksi) A36 (36 ksi)
T38	81.25-75.00 None	Single Angle		(36 ksi) A36 (36 ksi)	Pipe	P1.25x.14	(36 ksi) A36 (36 ksi)
T39	75.00-50.00 None	Single Angle		(36 ksi) A36 (36 ksi)	Pipe	P1.25x.14	(36 ksi) A36 (36 ksi)
T40	50.00-25.00 None	Single Angle		(36 ksi) A36 (36 ksi)	Pipe	P1.25x.14	(36 ksi) A36 (36 ksi)
T41	25.00-0.00 None	Single Angle		(36 ksi) A36 (36 ksi)	Pipe	P1.25x.14	(36 ksi) A36 (36 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Secondary Horizontal Type	Secondary Horizontal Size	Secondary Horizontal Grade	Inner Bracing Type	Inner Bracing Size	Inner Bracing Grade
T28	Pipe	P1.25x.14	A36	Solid Round		A572-50

Tower Elevation	Secondary Horizontal Type	Secondary Horizontal Size	Secondary Horizontal Grade	Inner Bracing Type	Inner Bracing Size	Inner Bracing Grade
ft						
200.00-175.00			(36 ksi)			(50 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation	Gusset Area (per face)	Gusset Thickness	Gusset Grade	Adjust. Factor A_f	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals	Double Angle Stitch Bolt Spacing Horizontals	Double Angle Stitch Bolt Spacing Redundants
ft	ft^2	in					in	in	in
T1 368.75-362.50	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T2 362.50-356.25	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T3 356.25-350.00	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T4 350.00-343.75	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T5 343.75-337.50	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T6 337.50-331.25	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T7 331.25-325.00	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T8 325.00-318.75	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T9 318.75-312.50	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T10 312.50-306.25	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T11 306.25-300.00	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T12 300.00-293.75	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T13 293.75-287.50	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T14 287.50-281.25	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T15 281.25-275.00	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T16 275.00-268.75	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T17 268.75-262.50	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T18 262.50-256.25	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T19 256.25-250.00	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T20 250.00-243.75	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T21 243.75-237.50	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T22 237.50-231.25	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T23 231.25-225.00	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000

Tower Elevation ft	Gusset Area (per face) ft²	Gusset Thickness in	Gusset Grade	Adjust. Factor A_f	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in	Double Angle Stitch Bolt Spacing Redundants in
T24 225.00-218.75	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T25 218.75-212.50	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T26 212.50-206.25	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T27 206.25-200.00	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T28 200.00-175.00	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T29 175.00-168.75	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T30 168.75-162.50	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T31 162.50-156.25	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T32 156.25-150.00	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T33 150.00-125.00	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T34 125.00-100.00	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T35 100.00-93.75	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T36 93.75-87.50	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T37 87.50-81.25	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T38 81.25-75.00	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T39 75.00-50.00	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T40 50.00-25.00	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000
T41 25.00-0.00	0.00	0.0000	A36 (36 ksi)	1	1	1	36.0000	36.0000	36.0000

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Calc K Single Angles	Calc K Solid Rounds	K Factors[1] Legs	X Brace Diags X Y	K Brace Diags X Y	Single Diags X Y	Girts X Y	Horiz. X Y	Sec. Horiz. X Y	Inner Brace X Y
T1 368.75-362.50	Yes	Yes	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T2 362.50-356.25	Yes	Yes	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T3 356.25-350.00	Yes	Yes	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T4 350.00-343.75	Yes	Yes	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T5 343.75-337.50	Yes	Yes	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1

Tower Elevation ft	Calc K Single Angles	Calc K Solid Rounds	K Factors[1] Legs	X Brace Diags X Y	K Brace Diags X Y	Single Diags X Y	Girts X Y	Horiz. X Y	Sec. Horiz. X Y	Inner Brace X Y
T6	Yes	Yes	1	1	1	1	1	1	1	1
337.50-331.25				1	1	1	1	1	1	1
T7	Yes	Yes	1	1	1	1	1	1	1	1
331.25-325.00				1	1	1	1	1	1	1
T8	Yes	Yes	1	1	1	1	1	1	1	1
325.00-318.75				1	1	1	1	1	1	1
T9	Yes	Yes	1	1	1	1	1	1	1	1
318.75-312.50				1	1	1	1	1	1	1
T10	Yes	Yes	1	1	1	1	1	1	1	1
312.50-306.25				1	1	1	1	1	1	1
T11	Yes	Yes	1	1	1	1	1	1	1	1
306.25-300.00				1	1	1	1	1	1	1
T12	Yes	Yes	1	1	1	1	1	1	1	1
300.00-293.75				1	1	1	1	1	1	1
T13	Yes	Yes	1	1	1	1	1	1	1	1
293.75-287.50				1	1	1	1	1	1	1
T14	Yes	Yes	1	1	1	1	1	1	1	1
287.50-281.25				1	1	1	1	1	1	1
T15	Yes	Yes	1	1	1	1	1	1	1	1
281.25-275.00				1	1	1	1	1	1	1
T16	Yes	Yes	1	1	1	1	1	1	1	1
275.00-268.75				1	1	1	1	1	1	1
T17	Yes	Yes	1	1	1	1	1	1	1	1
268.75-262.50				1	1	1	1	1	1	1
T18	Yes	Yes	1	1	1	1	1	1	1	1
262.50-256.25				1	1	1	1	1	1	1
T19	Yes	Yes	1	1	1	1	1	1	1	1
256.25-250.00				1	1	1	1	1	1	1
T20	Yes	Yes	1	1	1	1	1	1	1	1
250.00-243.75				1	1	1	1	1	1	1
T21	Yes	Yes	1	1	1	1	1	1	1	1
243.75-237.50				1	1	1	1	1	1	1
T22	Yes	Yes	1	1	1	1	1	1	1	1
237.50-231.25				1	1	1	1	1	1	1
T23	Yes	Yes	1	1	1	1	1	1	1	1
231.25-225.00				1	1	1	1	1	1	1
T24	Yes	Yes	1	1	1	1	1	1	1	1
225.00-218.75				1	1	1	1	1	1	1
T25	Yes	Yes	1	1	1	1	1	1	1	1
218.75-212.50				1	1	1	1	1	1	1
T26	Yes	Yes	1	1	1	1	1	1	1	1
212.50-206.25				1	1	1	1	1	1	1
T27	Yes	Yes	1	1	1	1	1	1	1	1
206.25-200.00				1	1	1	1	1	1	1
T28	Yes	Yes	1	1	1	1	1	1	1	1
200.00-175.00				1	1	1	1	1	1	1
T29	Yes	Yes	1	1	1	1	1	1	1	1
175.00-168.75				1	1	1	1	1	1	1
T30	Yes	Yes	1	1	1	1	1	1	1	1
168.75-162.50				1	1	1	1	1	1	1
T31	Yes	Yes	1	1	1	1	1	1	1	1
162.50-156.25				1	1	1	1	1	1	1
T32	Yes	Yes	1	1	1	1	1	1	1	1
156.25-150.00				1	1	1	1	1	1	1
T33	Yes	Yes	1	1	1	1	1	1	1	1
150.00-125.00				1	1	1	1	1	1	1
T34	Yes	Yes	1	1	1	1	1	1	1	1
125.00-100.00				1	1	1	1	1	1	1

Tower Elevation ft	Calc K Single Angles	Calc K Solid Rounds	K Factors[1] Legs	X Brace Diags X Y	K Brace Diags X Y	Single Diags X Y	Girts X Y	Horiz. X Y	Sec. Horiz. X Y	Inner Brace X Y
T35	Yes	Yes	1	1	1	1	1	1	1	1
100.00-93.75				1	1	1	1	1	1	1
T36	Yes	Yes	1	1	1	1	1	1	1	1
93.75-87.50				1	1	1	1	1	1	1
T37	Yes	Yes	1	1	1	1	1	1	1	1
87.50-81.25				1	1	1	1	1	1	1
T38	Yes	Yes	1	1	1	1	1	1	1	1
81.25-75.00				1	1	1	1	1	1	1
T39	Yes	Yes	1	1	1	1	1	1	1	1
75.00-50.00				1	1	1	1	1	1	1
T40	Yes	Yes	1	1	1	1	1	1	1	1
50.00-25.00				1	1	1	1	1	1	1
T41	Yes	Yes	1	1	1	1	1	1	1	1
25.00-0.00				1	1	1	1	1	1	1

[1]*Note: K factors are applied to member segment lengths. K-braces without inner supporting members will have the K factor in the out-of-plane direction applied to the overall length.*

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Leg Net Width Deduct in	Leg U	Diagonal Net Width Deduct in	Diagonal U	Top Girt Net Width Deduct in	Top Girt U	Bottom Girt Net Width Deduct in	Bottom Girt U	Mid Girt Net Width Deduct in	Mid Girt U	Long Horizontal Net Width Deduct in	Long Horizontal U	Short Horizontal Net Width Deduct in	Short Horizontal U
T1	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
368.75-362.50														
T2	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
362.50-356.25														
T3	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
356.25-350.00														
T4	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
350.00-343.75														
T5	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
343.75-337.50														
T6	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
337.50-331.25														
T7	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
331.25-325.00														
T8	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
325.00-318.75														
T9	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
318.75-312.50														
T10	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
312.50-306.25														
T11	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
306.25-300.00														
T12	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
300.00-293.75														
T13	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
293.75-287.50														
T14	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
287.50-281.25														

Tower Elevation ft	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U
T15 281.25-275.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T16 275.00-268.75	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T17 268.75-262.50	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T18 262.50-256.25	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T19 256.25-250.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T20 250.00-243.75	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T21 243.75-237.50	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T22 237.50-231.25	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T23 231.25-225.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T24 225.00-218.75	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T25 218.75-212.50	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T26 212.50-206.25	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T27 206.25-200.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T28 200.00-175.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T29 175.00-168.75	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T30 168.75-162.50	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T31 162.50-156.25	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T32 156.25-150.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T33 150.00-125.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T34 125.00-100.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T35 100.00-93.75	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T36 93.75-87.50	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T37 87.50-81.25	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T38 81.25-75.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T39 75.00-50.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T40 50.00-25.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T41 25.00-0.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Leg Connection Type	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
		Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.
T1 368.75-362.50	Flange	0.7500 A325N	6	0.5000 A325N	2	0.6250 A325N	2	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T2 362.50-356.25	Flange	0.7500 A325N	0	0.5000 A325N	2	0.5000 A325N	2	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T3 356.25-350.00	Flange	0.7500 A325N	0	0.5000 A325N	2	0.5000 A325N	2	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T4 350.00-343.75	Flange	0.7500 A325N	6	0.6250 A325N	2	0.6250 A325N	2	0.0000 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T5 343.75-337.50	Flange	0.7500 A325N	0	0.5000 A325N	2	0.6250 A325N	2	0.0000 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T6 337.50-331.25	Flange	0.7500 A325N	0	0.5000 A325N	2	0.5000 A325N	2	0.0000 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T7 331.25-325.00	Flange	0.7500 A325N	0	0.5000 A325N	2	0.5000 A325N	2	0.5000 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T8 325.00-318.75	Flange	0.7500 A325N	6	0.5000 A325N	2	0.5000 A325N	2	0.0000 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	1
T9 318.75-312.50	Flange	0.7500 A325N	0	0.5000 A325N	2	0.5000 A325N	2	0.0000 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	1
T10 312.50-306.25	Flange	0.7500 A325N	0	0.5000 A325N	2	0.5000 A325N	2	0.0000 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	1
T11 306.25-300.00	Flange	0.7500 A325N	0	0.5000 A325N	2	0.6250 A325N	2	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	1
T12 300.00-293.75	Flange	0.7500 A325N	6	0.6250 A325N	2	0.6250 A325N	2	0.0000 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T13 293.75-287.50	Flange	0.7500 A325N	0	0.5000 A325N	2	0.6250 A325N	2	0.0000 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T14 287.50-281.25	Flange	0.7500 A325N	0	0.5000 A325N	2	0.5000 A325N	2	0.0000 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T15 281.25-275.00	Flange	0.7500 A325N	0	0.5000 A325N	2	0.6250 A325N	2	0.5000 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T16 275.00-268.75	Flange	0.7500 A325N	6	0.5000 A325N	2	0.5000 A325N	2	0.0000 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T17 268.75-262.50	Flange	0.7500 A325N	0	0.5000 A325N	2	0.5000 A325N	2	0.0000 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T18 262.50-256.25	Flange	0.7500 A325N	0	0.5000 A325N	2	0.5000 A325N	2	0.0000 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T19 256.25-250.00	Flange	0.7500 A325N	0	0.5000 A325N	2	0.5000 A325N	2	0.5000 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T20 250.00-243.75	Flange	0.7500 A325N	6	0.5000 A325N	2	0.5000 A325N	2	0.0000 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T21 243.75-237.50	Flange	0.7500 A325N	0	0.5000 A325N	2	0.6250 A325N	2	0.0000 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T22 237.50-231.25	Flange	0.7500 A325N	0	0.5000 A325X	2	0.6250 A325N	2	0.0000 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T23 231.25-225.00	Flange	0.7500 A325N	0	0.5000 A325X	2	0.6250 A325N	2	0.5000 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T24 225.00-218.75	Flange	0.7500 A325N	6	0.6250 A325N	2	0.6250 A325N	2	0.0000 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T25 218.75-212.50	Flange	0.7500 A325N	0	0.5000 A325N	2	0.6250 A325N	2	0.0000 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T26 212.50-206.25	Flange	0.7500 A325N	0	0.5000 A325N	2	0.5000 A325N	2	0.0000 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T27 206.25-200.00	Flange	0.7500 A325N	0	0.5000 A325N	2	0.5000 A325N	2	0.5000 A325N	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0
T28 200.00-175.00	Flange	0.7500 A325N	6	0.5000 A325N	2	0.5000 A325N	2	0.6250 A490X	0	0.6250 A325N	0	0.6250 A325N	2	0.6250 A325N	0

Tower Elevation ft	Leg Connection Type	Leg Bolt Size in	Leg No.	Diagonal Bolt Size in	Diagonal No.	Top Girt Bolt Size in	Top Girt No.	Bottom Girt Bolt Size in	Bottom Girt No.	Mid Girt Bolt Size in	Mid Girt No.	Long Horizontal Bolt Size in	Long Horizontal No.	Short Horizontal Bolt Size in	Short Horizontal No.
T29	Flange	0.7500	6	0.5000	2	0.5000	2	0.0000	0	0.6250	0	0.6250	2	0.6250	0
175.00-168.75		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T30	Flange	0.7500	0	0.5000	2	0.5000	2	0.0000	0	0.6250	0	0.6250	2	0.6250	0
168.75-162.50		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T31	Flange	0.7500	0	0.5000	2	0.5000	2	0.0000	0	0.6250	0	0.6250	2	0.6250	0
162.50-156.25		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T32	Flange	0.7500	0	0.5000	2	0.5000	2	0.5000	0	0.6250	0	0.6250	2	0.6250	0
156.25-150.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T33	Flange	0.7500	6	0.5000	2	0.5000	2	0.5000	0	0.6250	0	0.6250	2	0.6250	0
150.00-125.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T34	Flange	0.7500	6	0.6250	2	0.6250	2	0.5000	0	0.6250	0	0.6250	2	0.6250	0
125.00-100.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T35	Flange	0.7500	6	0.6250	2	0.6250	2	0.0000	0	0.6250	0	0.6250	2	0.6250	0
100.00-93.75		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T36	Flange	0.7500	0	0.5000	2	0.5000	2	0.0000	0	0.6250	0	0.6250	2	0.6250	0
93.75-87.50		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T37	Flange	0.7500	0	0.5000	2	0.5000	2	0.0000	0	0.6250	0	0.6250	2	0.6250	0
87.50-81.25		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T38	Flange	0.7500	0	0.5000	2	0.5000	2	0.0000	0	0.6250	0	0.6250	2	0.6250	0
81.25-75.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T39	Flange	0.7500	6	0.5000	2	0.5000	2	0.0000	0	0.6250	0	0.6250	2	0.6250	0
75.00-50.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T40	Flange	0.7500	6	0.5000	2	0.5000	2	0.5000	0	0.6250	0	0.6250	2	0.6250	0
50.00-25.00		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T41 25.00-0.00	Flange	0.7500	6	0.5000	2	0.5000	2	0.5000	0	0.6250	0	0.6250	2	0.6250	0
		A325N		A325N		A325N		A325N		A325N		A325N		A325N	

Guy Data

Guy Elevation ft	Guy Grade		Guy Size	Initial Tension K	%	Guy Modulus ksi	Guy Weight plf	L_u ft	Anchor Radius ft	Anchor Azimuth Adj. °	Anchor Elevation ft	End Fitting Efficiency %
350	EHS	A	7/8	7.97	10%	19000	1.581	430.92	247.15	0.0000	-5.80	100%
		B	7/8	7.97	10%	19000	1.581	424.88	247.51	0.0000	1.81	100%
		C	7/8	7.97	10%	19000	1.581	438.63	251.45	0.0000	-12.20	100%
300	EHS	A	7/8	7.97	10%	19000	1.581	376.90	224.79	0.0000	-5.41	100%
		B	7/8	7.97	10%	19000	1.581	368.38	219.43	0.0000	1.23	100%
		C	7/8	7.97	10%	19000	1.581	382.21	227.42	0.0000	-10.07	100%
225	EHS	A	3/4	5.83	10%	19000	1.155	319.27	224.79	0.0000	-5.41	100%
		B	3/4	5.83	10%	19000	1.155	310.78	219.43	0.0000	1.23	100%
		C	3/4	5.83	10%	19000	1.155	324.45	227.42	0.0000	-10.07	100%
162.5	EHS	A	3/4	5.83	10%	19000	1.155	259.49	201.41	0.0000	-4.96	100%
		B	3/4	5.83	10%	19000	1.155	249.91	193.65	0.0000	0.72	100%
		C	3/4	5.83	10%	19000	1.155	266.15	206.73	0.0000	-8.98	100%
100	EHS	A	9/16	3.50	10%	21000	0.671	223.95	201.41	0.0000	-4.96	100%
		B	9/16	3.50	10%	21000	0.671	214.45	193.65	0.0000	0.72	100%
		C	9/16	3.50	10%	21000	0.671	230.53	206.73	0.0000	-8.98	100%
50	EHS	A	9/16	3.50	10%	21000	0.671	123.30	114.04	0.0000	-3.60	100%
		B	9/16	3.50	10%	21000	0.671	123.03	115.63	0.0000	0.50	100%
		C	9/16	3.50	10%	21000	0.671	124.42	114.41	0.0000	-5.40	100%

Guy Data(cont'd)

Guy Elevation ft	Mount Type	Torque-Arm Spread ft	Torque-Arm Leg Angle °	Torque-Arm Style	Torque-Arm Grade	Torque-Arm Type	Torque-Arm Size
350	Torque Arm	12.00	49.0000	Bat Ear	A36 (36 ksi)	Double Angle	2L3x2 1/2x1/4
300	Torque Arm	12.00	49.0000	Bat Ear	A36 (36 ksi)	Double Angle	2L3x2 1/2x1/4
225	Torque Arm	12.00	49.0000	Bat Ear	A36 (36 ksi)	Double Angle	2L3x2 1/2x1/4
162.5	Corner						
100	Torque Arm	12.00	49.0000	Bat Ear	A36 (36 ksi)	Double Angle	2L3x2 1/2x1/4
50	Corner						

Guy Data (cont'd)

Guy Elevation ft	Diagonal Grade	Diagonal Type	Upper Diagonal Size	Lower Diagonal Size	Is Strap.	Pull-Off Grade	Pull-Off Type	Pull-Off Size
350.00	A572-50 (50 ksi)	Solid Round				A36 (36 ksi)	Channel	
300.00	A572-50 (50 ksi)	Solid Round				A36 (36 ksi)	Channel	
225.00	A572-50 (50 ksi)	Solid Round				A36 (36 ksi)	Channel	
162.50	A572-50 (50 ksi)	Solid Round				A36 (36 ksi)	Channel	
100.00	A572-50 (50 ksi)	Solid Round				A36 (36 ksi)	Channel	
50.00	A572-50 (50 ksi)	Solid Round				A36 (36 ksi)	Channel	

Guy Data (cont'd)

Guy Elevation ft	Cable Weight A K	Cable Weight B K	Cable Weight C K	Cable Weight D K	Tower Intercept A ft	Tower Intercept B ft	Tower Intercept C ft	Tower Intercept D ft
350	0.68	0.67	0.69		17.81 7.3 sec/pulse	17.33 7.2 sec/pulse	18.44 7.4 sec/pulse	
300	0.60	0.58	0.60		13.69 6.4 sec/pulse	13.09 6.2 sec/pulse	14.07 6.5 sec/pulse	
225	0.37	0.36	0.37		9.88 5.4 sec/pulse	9.37 5.3 sec/pulse	10.20 5.5 sec/pulse	
162.5	0.30	0.29	0.31		6.57 4.4 sec/pulse	6.10 4.3 sec/pulse	6.91 4.5 sec/pulse	
100	0.15	0.14	0.15		4.76 3.8 sec/pulse	4.37 3.6 sec/pulse	5.05 3.9 sec/pulse	
50	0.08	0.08	0.08		1.45	1.45	1.48	

Guy Elevation ft	Cable Weight A K	Cable Weight B K	Cable Weight C K	Cable Weight D K	Tower Intercept A ft	Tower Intercept B ft	Tower Intercept C ft	Tower Intercept D ft
					2.1 sec/pulse	2.1 sec/pulse	2.1 sec/pulse	

Guy Data (cont'd)

Guy Elevation ft	Calc K Single Angles	Calc K Solid Rounds	Torque Arm K_x	Torque Arm K_y	Pull Off K_x	Pull Off K_y	Diagonal K_x	Diagonal K_y
350	No	No	1	1	1	1	1	1
300	No	No	1	1	1	1	1	1
225	No	No	1	1	1	1	1	1
162.5	No	No			1	1	1	1
100	No	No	1	1	1	1	1	1
50	No	No			1	1	1	1

Guy Data (cont'd)

Guy Elevation ft	Torque-Arm Bolt Size in	Torque-Arm Number	Torque-Arm Net Width Deduct in	Torque-Arm U	Pull Off Bolt Size in	Pull Off Number	Pull Off Net Width Deduct in	Pull Off U	Diagonal Bolt Size in	Diagonal Number	Diagonal Net Width Deduct in	Diagonal U
350	0.8750 A325N	0	0.0000	1	0.6250 A325N	0	0.0000	0.75	0.6250 A325N	0	0.0000	0.75
300	0.8750 A325N	0	0.0000	1	0.6250 A325N	0	0.0000	0.75	0.6250 A325N	0	0.0000	0.75
225	0.8750 A325N	0	0.0000	1	0.6250 A325N	0	0.0000	0.75	0.6250 A325N	0	0.0000	0.75
162.5	0.8750 A325N	0	0.0000	1	0.6250 A325N	0	0.0000	0.75	0.6250 A325N	0	0.0000	0.75
100	0.8750 A325N	0	0.0000	1	0.6250 A325N	0	0.0000	0.75	0.6250 A325N	0	0.0000	0.75
50	0.6250 A325N	0	0.0000	0.75	0.6250 A325N	0	0.0000	0.75	0.6250 A325N	0	0.0000	0.75

Guy Pressures

Guy Elevation ft	Guy Location	z ft	q_z psf	q_z Ice psf	Ice Thickness in
350	A	172.10	34	8	1.7694
	B	175.91	34	8	1.7732
	C	168.90	34	8	1.7660
300	A	147.30	33	7	1.7420
	B	150.62	33	8	1.7459
	C	144.97	33	7	1.7393
225	A	109.80	31	7	1.6916
	B	113.12	31	7	1.6966
	C	107.47	31	7	1.6880

Guy Elevation ft	Guy Location	z ft	q_z psf	q_z Ice psf	Ice Thickness in
162.5	A	78.77	29	7	1.6363
	B	81.61	29	7	1.6422
	C	76.76	29	7	1.6321
100	A	47.52	26	6	1.5557
	B	50.36	26	6	1.5648
	C	45.51	26	6	1.5490
50	A	23.20	22	5	1.4481
	B	25.25	23	5	1.4604
	C	22.30	22	5	1.4423

Guy-Mast Forces (Excluding Wind) - No Ice

Guy Elevation ft	Guy Location	Chord Angle °	Guy Tension Top Bottom K	F_x K	F_y K	F_z K	M_x kip-ft	M_y kip-ft	M_z kip-ft
350	A	55.5848	8.53 7.97	-0.11	7.15	-4.66	-24.76	28.35	-42.88
	A	55.5848	8.53 7.97	0.11	7.15	-4.66	-24.76	-28.35	42.88
	B	54.9653	8.52 7.97	4.15	7.09	2.26	49.10	28.78	0.00
	B	54.9653	8.52 7.97	4.04	7.09	2.47	-24.55	-28.78	-42.52
	C	55.5941	8.54 7.97	-3.98	7.16	2.43	-24.80	28.35	42.95
	C	55.5941	8.54 7.97	-4.09	7.16	2.23	49.59	-28.35	0.00
			Sum:	**0.12**	42.78	**0.07**	**-0.17**	0.00	**0.43**
300	A	54.0597	8.45 7.97	-0.13	6.95	-4.82	-24.06	29.34	-41.67
	A	54.0597	8.45 7.97	0.13	6.95	-4.82	-24.06	-29.34	41.67
	B	54.1282	8.44 7.97	4.23	6.94	2.29	48.08	29.29	0.00
	B	54.1282	8.44 7.97	4.09	6.94	2.52	-24.04	-29.29	-41.64
	C	54.1506	8.46 7.97	-4.10	6.96	2.51	-24.11	29.29	41.76
	C	54.1506	8.46 7.97	-4.23	6.96	2.29	48.22	-29.29	0.00
			Sum:	**-0.00**	41.69	**-0.02**	**0.03**	0.00	**0.12**
225	A	46.1415	6.10 5.83	-0.11	4.48	-4.13	-15.53	25.16	-26.90
	A	46.1415	6.10 5.83	0.11	4.48	-4.13	-15.53	-25.16	26.90
	B	46.0057	6.09 5.83	3.64	4.47	1.97	30.94	25.21	0.00
	B	46.0057	6.09 5.83	3.52	4.47	2.17	-15.47	-25.21	-26.80
	C	46.3767	6.10 5.83	-3.51	4.51	2.15	-15.61	25.06	27.03
	C	46.3767	6.10 5.83	-3.62	4.51	1.96	31.21	-25.06	0.00
			Sum:	**0.04**	26.91	**-0.01**	**0.02**	0.00	**0.24**
162.5	A	40.1486	6.02 5.83	0.00	3.97	-4.53	-11.46	0.00	0.00

Guy Elevation	Guy Location	Chord Angle	Guy Tension Top Bottom K	F_x	F_y	F_z	M_x	M_y	M_z
ft		°		K	K	K	kip-ft	kip-ft	kip-ft
	B	40.3002	6.02 5.83	3.91	3.98	2.26	5.74	0.00	-9.94
	C	40.0717	6.03 5.83	-3.93	3.97	2.27	5.73	-0.00	9.93
			Sum:	**-0.02**	11.92	**-0.00**	**0.01**	0.00	**-0.01**
100	A	27.9237	3.57 3.50	-0.09	1.73	-3.12	-5.99	19.06	-10.38
	A	27.9237	3.57 3.50	0.09	1.73	-3.12	-5.99	-19.06	10.38
	B	27.5536	3.57 3.50	2.76	1.71	1.48	11.82	19.12	0.00
	B	27.5536	3.57 3.50	2.66	1.71	1.65	-5.91	-19.12	-10.24
	C	28.1874	3.57 3.50	-2.65	1.75	1.64	-6.05	19.01	10.49
	C	28.1874	3.57 3.50	-2.74	1.75	1.48	12.11	-19.01	0.00
			Sum:	**0.03**	10.37	**0.00**	**-0.02**	0.00	**0.25**
50	A	25.7442	3.54 3.50	0.00	1.57	-3.17	-4.53	0.00	0.00
	B	23.7039	3.53 3.50	2.79	1.45	1.61	2.10	0.00	-3.64
	C	26.4162	3.54 3.50	-2.73	1.61	1.58	2.32	-0.00	4.02
			Sum:	**0.06**	4.63	**0.02**	**-0.11**	0.00	**0.38**

Guy-Mast Forces (Excluding Wind) - Ice

Guy Elevation	Guy Location	Chord Angle	Guy Tension Top Bottom K	F_x	F_y	F_z	M_x	M_y	M_z
ft		°		K	K	K	kip-ft	kip-ft	kip-ft
350	A	55.5848	16.57 13.98	-0.21	14.17	-8.60	-49.08	52.31	-85.01
	A	55.5848	16.57 13.98	0.21	14.17	-8.60	-49.08	-52.31	85.01
	B	54.9653	16.57 14.02	7.68	14.07	4.19	97.49	53.20	0.00
	B	54.9653	16.57 14.02	7.46	14.07	4.56	-48.75	-53.20	-84.43
	C	55.5941	16.67 14.04	-7.38	14.26	4.50	-49.39	52.55	85.55
	C	55.5941	16.67 14.04	-7.58	14.26	4.14	98.78	-52.55	0.00
			Sum:	**0.18**	84.99	**0.19**	**-0.02**	0.00	**1.11**
300	A	54.0597	15.75 13.57	-0.23	13.21	-8.57	-45.77	52.25	-79.28
	A	54.0597	15.75 13.57	0.23	13.21	-8.57	-45.77	-52.25	79.28
	B	54.1282	15.63 13.49	7.48	13.12	4.05	90.87	51.84	0.00
	B	54.1282	15.63 13.49	7.25	13.12	4.46	-45.44	-51.84	-78.70

Guy Elevation	Guy Location	Chord Angle	Guy Tension Top / Bottom	F_x	F_y	F_z	M_x	M_y	M_z
ft		°	K	K	K	K	kip-ft	kip-ft	kip-ft
	C	54.1506	15.81 13.60	-7.32	13.28	4.49	-46.01	52.29	79.68
	C	54.1506	15.81 13.60	-7.55	13.28	4.09	92.01	-52.29	0.00
			Sum:	**-0.14**	79.22	**-0.06**	**-0.10**	0.00	**0.98**
225	A	46.1415	12.14 10.71	-0.21	9.22	-7.89	-31.95	48.07	-55.33
	A	46.1415	12.14 10.71	0.21	9.22	-7.89	-31.95	-48.07	55.33
	B	46.0057	12.04 10.65	6.91	9.12	3.74	63.20	47.86	0.00
	B	46.0057	12.04 10.65	6.69	9.12	4.11	-31.60	-47.86	-54.73
	C	46.3767	12.19 10.73	-6.72	9.29	4.12	-32.19	48.00	55.76
	C	46.3767	12.19 10.73	-6.93	9.29	3.76	64.39	-48.00	0.00
			Sum:	**-0.05**	55.27	**-0.05**	**-0.10**	0.00	**1.03**
162.5	A	40.1486	11.28 10.29	0.00	7.72	-8.22	-22.28	0.00	0.00
	B	40.3002	11.14 10.18	7.03	7.63	4.06	11.02	0.00	-19.09
	C	40.0717	11.37 10.36	-7.18	7.78	4.15	11.22	-0.00	19.44
			Sum:	**-0.16**	23.13	**-0.02**	**-0.03**	0.00	**0.35**
100	A	27.9237	7.60 7.10	-0.20	3.97	-6.48	-13.74	39.54	-23.80
	A	27.9237	7.60 7.10	0.20	3.97	-6.48	-13.74	-39.54	23.80
	B	27.5536	7.50 7.03	5.66	3.86	3.03	26.78	39.22	0.00
	B	27.5536	7.50 7.03	5.46	3.86	3.39	-13.39	-39.22	-23.19
	C	28.1874	7.66 7.15	-5.54	4.04	3.42	-13.98	39.73	24.21
	C	28.1874	7.66 7.15	-5.74	4.04	3.09	27.96	-39.73	0.00
			Sum:	**-0.16**	23.73	**-0.02**	**-0.11**	0.00	**1.02**
50	A	25.7442	5.98 5.75	0.00	2.81	-5.28	-8.10	0.00	0.00
	B	23.7039	6.01 5.80	4.68	2.64	2.70	3.81	0.00	-6.59
	C	26.4162	5.98 5.74	-4.54	2.87	2.62	4.14	-0.00	7.17
			Sum:	**0.14**	8.31	**0.05**	**-0.16**	0.00	**0.58**

Guy-Mast Forces (Excluding Wind) - Service

Guy Elevation	Guy Location	Chord Angle	Guy Tension Top / Bottom	F_x	F_y	F_z	M_x	M_y	M_z
ft		°	K	K	K	K	kip-ft	kip-ft	kip-ft
350	A	55.5848	8.53	-0.11	7.15	-4.66	-24.76	28.35	-42.88

Guy Elevation	Guy Location	Chord Angle	Guy Tension Top / Bottom	F_x	F_y	F_z	M_x	M_y	M_z
ft		°	K	K	K	K	kip-ft	kip-ft	kip-ft
			7.97						
	A	55.5848	8.53	0.11	7.15	-4.66	-24.76	-28.35	42.88
			7.97						
	B	54.9653	8.52	4.15	7.09	2.26	49.10	28.78	0.00
			7.97						
	B	54.9653	8.52	4.04	7.09	2.47	-24.55	-28.78	-42.52
			7.97						
	C	55.5941	8.54	-3.98	7.16	2.43	-24.80	28.35	42.95
			7.97						
	C	55.5941	8.54	-4.09	7.16	2.23	49.59	-28.35	0.00
			7.97						
			Sum:	**0.12**	42.78	**0.07**	**-0.17**	0.00	**0.43**
300	A	54.0597	8.45	-0.13	6.95	-4.82	-24.06	29.34	-41.67
			7.97						
	A	54.0597	8.45	0.13	6.95	-4.82	-24.06	-29.34	41.67
			7.97						
	B	54.1282	8.44	4.23	6.94	2.29	48.08	29.29	0.00
			7.97						
	B	54.1282	8.44	4.09	6.94	2.52	-24.04	-29.29	-41.64
			7.97						
	C	54.1506	8.46	-4.10	6.96	2.51	-24.11	29.29	41.76
			7.97						
	C	54.1506	8.46	-4.23	6.96	2.29	48.22	-29.29	0.00
			7.97						
			Sum:	**-0.00**	41.69	**-0.02**	**0.03**	0.00	**0.12**
225	A	46.1415	6.10	-0.11	4.48	-4.13	-15.53	25.16	-26.90
			5.83						
	A	46.1415	6.10	0.11	4.48	-4.13	-15.53	-25.16	26.90
			5.83						
	B	46.0057	6.09	3.64	4.47	1.97	30.94	25.21	0.00
			5.83						
	B	46.0057	6.09	3.52	4.47	2.17	-15.47	-25.21	-26.80
			5.83						
	C	46.3767	6.10	-3.51	4.51	2.15	-15.61	25.06	27.03
			5.83						
	C	46.3767	6.10	-3.62	4.51	1.96	31.21	-25.06	0.00
			5.83						
			Sum:	**0.04**	26.91	**-0.01**	**0.02**	0.00	**0.24**
162.5	A	40.1486	6.02	0.00	3.97	-4.53	-11.46	0.00	0.00
			5.83						
	B	40.3002	6.02	3.91	3.98	2.26	5.74	0.00	-9.94
			5.83						
	C	40.0717	6.03	-3.93	3.97	2.27	5.73	-0.00	9.93
			5.83						
			Sum:	**-0.02**	11.92	**-0.00**	**0.01**	0.00	**-0.01**
100	A	27.9237	3.57	-0.09	1.73	-3.12	-5.99	19.06	-10.38
			3.50						
	A	27.9237	3.57	0.09	1.73	-3.12	-5.99	-19.06	10.38
			3.50						
	B	27.5536	3.57	2.76	1.71	1.48	11.82	19.12	0.00
			3.50						
	B	27.5536	3.57	2.66	1.71	1.65	-5.91	-19.12	-10.24
			3.50						
	C	28.1874	3.57	-2.65	1.75	1.64	-6.05	19.01	10.49
			3.50						
	C	28.1874	3.57	-2.74	1.75	1.48	12.11	-19.01	0.00
			3.50						
			Sum:	**0.03**	10.37	**0.00**	**-0.02**	0.00	**0.25**
50	A	25.7442	3.54	0.00	1.57	-3.17	-4.53	0.00	0.00

Guy Elevation	Guy Location	Chord Angle	Guy Tension Top Bottom K	F_x	F_y	F_z	M_x	M_y	M_z
ft		°		K	K	K	kip-ft	kip-ft	kip-ft
			3.50						
	B	23.7039	3.53	2.79	1.45	1.61	2.10	0.00	-3.64
			3.50						
	C	26.4162	3.54	-2.73	1.61	1.58	2.32	-0.00	4.02
			3.50						
			Sum:	**0.06**	4.63	**0.02**	**-0.11**	0.00	**0.38**

Guy-Tensioning Information

Guy Elevation		H	V	Temperature At Time Of Tensioning: 0 F Initial Tension	0 F Intercept	20 F Initial Tension	20 F Intercept	40 F Initial Tension	40 F Intercept	60 F Initial Tension	60 F Intercept	80 F Initial Tension	80 F Intercept	100 F Initial Tension	100 F Intercept	120 F Initial Tension	120 F Intercept
ft		ft	ft	K	ft	K	ft	K	ft	K	ft	K	ft	K	ft	K	ft
350	A	243.76	355.80	8.905	15.99	8.589	16.56	8.277	17.17	7.970	17.81	7.669	18.49	7.374	19.20	7.085	19.96
	B	244.12	348.19	8.934	15.51	8.608	16.08	8.286	16.68	7.970	17.33	7.660	18.01	7.356	18.73	7.059	19.49
	C	248.06	362.20	8.900	16.57	8.585	17.16	8.275	17.78	7.970	18.44	7.671	19.14	7.377	19.87	7.091	20.65
300	A	221.41	305.41	9.004	12.15	8.654	12.63	8.310	13.14	7.970	13.69	7.636	14.27	7.309	14.89	6.989	15.55
	B	216.05	298.77	9.006	11.61	8.656	12.07	8.311	12.56	7.970	13.09	7.635	13.65	7.307	14.24	6.985	14.88
	C	224.04	310.07	8.997	12.50	8.650	12.99	8.307	13.52	7.970	14.07	7.639	14.67	7.314	15.30	6.997	15.97
225	A	221.41	230.41	6.891	8.39	6.531	8.84	6.177	9.34	5.830	9.88	5.492	10.48	5.163	11.13	4.846	11.84
	B	216.05	223.77	6.902	7.94	6.538	8.37	6.181	8.85	5.830	9.37	5.488	9.94	5.155	10.57	4.834	11.26
	C	224.04	235.07	6.878	8.67	6.522	9.14	6.173	9.65	5.830	10.20	5.496	10.81	5.171	11.47	4.858	12.19
162.5	A	198.52	167.46	7.154	5.37	6.705	5.72	6.263	6.12	5.830	6.57	5.408	7.07	5.000	7.64	4.609	8.28
	B	190.76	161.78	7.157	4.98	6.707	5.31	6.264	5.68	5.830	6.10	5.406	6.57	4.995	7.10	4.600	7.70
	C	203.84	171.48	7.150	5.65	6.702	6.02	6.261	6.44	5.830	6.91	5.410	7.43	5.005	8.03	4.616	8.69
100	A	198.04	104.96	4.641	3.60	4.252	3.93	3.871	4.31	3.500	4.76	3.143	5.30	2.804	5.94	2.488	6.68
	B	190.28	99.28	4.656	3.29	4.263	3.59	3.877	3.95	3.500	4.37	3.137	4.87	2.791	5.47	2.469	6.18
	C	203.35	108.98	4.630	3.82	4.245	4.17	3.867	4.57	3.500	5.05	3.147	5.61	2.812	6.27	2.501	7.04
50	A	111.15	53.60	4.758	1.07	4.335	1.17	3.916	1.30	3.500	1.45	3.091	1.64	2.690	1.89	2.305	2.20
	B	112.74	49.50	4.799	1.05	4.363	1.16	3.929	1.29	3.500	1.45	3.078	1.64	2.665	1.90	2.270	2.22
	C	111.52	55.40	4.743	1.09	4.326	1.20	3.911	1.32	3.500	1.48	3.095	1.67	2.700	1.91	2.319	2.23

Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	Face or Leg	Allow Shield	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	#	# Per Row	Clear Spacing in	Width or Diameter in	Perimeter in	Weight plf
7/8	A	No	Ar (CaAa)	40.00 - 3.00	-1.0000	0.46	1	1	1.1100	1.1100		0.54
7/8	A	No	Ar (CaAa)	62.00 - 3.00	-0.5000	0.47	1	1	1.1100	1.1100		0.54
1/2	B	No	Ar (CaAa)	88.00 - 3.00	-2.0000	0.46	4	4	0.5800	0.5800		0.25
1/2	B	No	Ar (CaAa)	125.00 - 3.00	-1.0000	0.45	1	1	0.5800	0.5800		0.25
7/8	C	No	Ar (CaAa)	140.00 - 3.00	-1.0000	0.47	1	1	1.1100	1.1100		0.54
1/2	B	No	Ar (CaAa)	148.00 - 3.00	-3.0000	0.47	1	1	0.5800	0.5800		0.25
7/8	A	No	Ar (CaAa)	180.00 - 3.00	-2.0000	0.44	1	1	1.1100	1.1100		0.54
7/8	C	No	Ar (CaAa)	200.00 - 3.00	-1.0000	0.45	1	1	1.1100	1.1100		0.54
1 5/8	A	No	Ar (CaAa)	325.00 - 3.00	-2.0000	0.45	1	1	1.9800	1.9800		1.04
7/8	B	No	Ar (CaAa)	350.00 - 3.00	-1.0000	0.44	2	2	1.1100	1.1100		0.54
7/8	B	No	Ar (CaAa)	355.00 - 3.00	-2.0000	0.44	1	1	1.1100	1.1100		0.54
7/8	C	No	Ar (CaAa)	365.00 - 3.00	-2.0000	0.46	1	1	1.1100	1.1100		0.54
3" dia Flex Conuit (AT&T)	A	No	Ar (CaAa)	240.00 - 3.00	0.0000	-0.4	1	1	3.0000	3.0000		5.00
1 5/8 (AT&T)	C	No	Ar (CaAa)	240.00 - 3.00	2.0000	0.5	12	2	1.9800	1.9800		1.04

Description	Face or Leg	Allow Shield	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	#	# Per Row	Clear Spacing in	Width or Diameter in	Perimeter in	Weight plf
1 5/8 (Verizon)	C	No	Ar (CaAa)	300.00 - 3.00	1.0000	-0.3	12	6	1.9800	1.9800		1.04
HYBRIFLEX 1-5/8" (Verizon)	B	No	Ar (CaAa)	300.00 - 3.00	1.0000	0.46	2	2	1.9800	1.9800		1.90

Feed Line/Linear Appurtenances Section Areas

Tower Section	Tower Elevation ft	Face	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
T1	368.75-362.50	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.278	0.000	0.00
T2	362.50-356.25	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.694	0.000	0.00
T3	356.25-350.00	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.555	0.000	0.00
		C	0.000	0.000	0.694	0.000	0.00
T4	350.00-343.75	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	2.081	0.000	0.01
		C	0.000	0.000	0.694	0.000	0.00
T5	343.75-337.50	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	2.081	0.000	0.01
		C	0.000	0.000	0.694	0.000	0.00
T6	337.50-331.25	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	2.081	0.000	0.01
		C	0.000	0.000	0.694	0.000	0.00
T7	331.25-325.00	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	2.081	0.000	0.01
		C	0.000	0.000	0.694	0.000	0.00
T8	325.00-318.75	A	0.000	0.000	1.238	0.000	0.01
		B	0.000	0.000	2.081	0.000	0.01
		C	0.000	0.000	0.694	0.000	0.00
T9	318.75-312.50	A	0.000	0.000	1.238	0.000	0.01
		B	0.000	0.000	2.081	0.000	0.01
		C	0.000	0.000	0.694	0.000	0.00
T10	312.50-306.25	A	0.000	0.000	1.238	0.000	0.01
		B	0.000	0.000	2.081	0.000	0.01
		C	0.000	0.000	0.694	0.000	0.00
T11	306.25-300.00	A	0.000	0.000	1.238	0.000	0.01
		B	0.000	0.000	2.081	0.000	0.01
		C	0.000	0.000	0.694	0.000	0.00
T12	300.00-293.75	A	0.000	0.000	1.238	0.000	0.01
		B	0.000	0.000	4.556	0.000	0.03
		C	0.000	0.000	15.544	0.000	0.08
T13	293.75-287.50	A	0.000	0.000	1.238	0.000	0.01
		B	0.000	0.000	4.556	0.000	0.03
		C	0.000	0.000	15.544	0.000	0.08
T14	287.50-281.25	A	0.000	0.000	1.238	0.000	0.01
		B	0.000	0.000	4.556	0.000	0.03
		C	0.000	0.000	15.544	0.000	0.08
T15	281.25-275.00	A	0.000	0.000	1.238	0.000	0.01
		B	0.000	0.000	4.556	0.000	0.03
		C	0.000	0.000	15.544	0.000	0.08
T16	275.00-268.75	A	0.000	0.000	1.238	0.000	0.01

Tower Section	Tower Elevation ft	Face	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
		B	0.000	0.000	4.556	0.000	0.03
		C	0.000	0.000	15.544	0.000	0.08
T17	268.75-262.50	A	0.000	0.000	1.238	0.000	0.01
		B	0.000	0.000	4.556	0.000	0.03
		C	0.000	0.000	15.544	0.000	0.08
T18	262.50-256.25	A	0.000	0.000	1.238	0.000	0.01
		B	0.000	0.000	4.556	0.000	0.03
		C	0.000	0.000	15.544	0.000	0.08
T19	256.25-250.00	A	0.000	0.000	1.238	0.000	0.01
		B	0.000	0.000	4.556	0.000	0.03
		C	0.000	0.000	15.544	0.000	0.08
T20	250.00-243.75	A	0.000	0.000	1.238	0.000	0.01
		B	0.000	0.000	4.556	0.000	0.03
		C	0.000	0.000	15.544	0.000	0.08
T21	243.75-237.50	A	0.000	0.000	1.979	0.000	0.02
		B	0.000	0.000	4.556	0.000	0.03
		C	0.000	0.000	21.484	0.000	0.11
T22	237.50-231.25	A	0.000	0.000	3.095	0.000	0.04
		B	0.000	0.000	4.556	0.000	0.03
		C	0.000	0.000	30.394	0.000	0.16
T23	231.25-225.00	A	0.000	0.000	3.100	0.000	0.04
		B	0.000	0.000	4.556	0.000	0.03
		C	0.000	0.000	30.394	0.000	0.16
T24	225.00-218.75	A	0.000	0.000	3.106	0.000	0.04
		B	0.000	0.000	4.556	0.000	0.03
		C	0.000	0.000	30.394	0.000	0.16
T25	218.75-212.50	A	0.000	0.000	3.111	0.000	0.04
		B	0.000	0.000	4.556	0.000	0.03
		C	0.000	0.000	30.394	0.000	0.16
T26	212.50-206.25	A	0.000	0.000	3.112	0.000	0.04
		B	0.000	0.000	4.556	0.000	0.03
		C	0.000	0.000	30.394	0.000	0.16
T27	206.25-200.00	A	0.000	0.000	3.112	0.000	0.04
		B	0.000	0.000	4.556	0.000	0.03
		C	0.000	0.000	30.394	0.000	0.16
T28	200.00-175.00	A	0.000	0.000	13.005	0.000	0.15
		B	0.000	0.000	18.225	0.000	0.14
		C	0.000	0.000	124.350	0.000	0.65
T29	175.00-168.75	A	0.000	0.000	3.806	0.000	0.04
		B	0.000	0.000	4.556	0.000	0.03
		C	0.000	0.000	31.087	0.000	0.16
T30	168.75-162.50	A	0.000	0.000	3.806	0.000	0.04
		B	0.000	0.000	4.556	0.000	0.03
		C	0.000	0.000	31.087	0.000	0.16
T31	162.50-156.25	A	0.000	0.000	3.806	0.000	0.04
		B	0.000	0.000	4.556	0.000	0.03
		C	0.000	0.000	31.087	0.000	0.16
T32	156.25-150.00	A	0.000	0.000	3.806	0.000	0.04
		B	0.000	0.000	4.556	0.000	0.03
		C	0.000	0.000	31.087	0.000	0.16
T33	150.00-125.00	A	0.000	0.000	15.225	0.000	0.16
		B	0.000	0.000	19.559	0.000	0.14
		C	0.000	0.000	126.015	0.000	0.66
T34	125.00-100.00	A	0.000	0.000	15.225	0.000	0.16
		B	0.000	0.000	21.125	0.000	0.15
		C	0.000	0.000	127.125	0.000	0.66
T35	100.00-93.75	A	0.000	0.000	3.806	0.000	0.04
		B	0.000	0.000	5.281	0.000	0.04
		C	0.000	0.000	31.781	0.000	0.17
T36	93.75-87.50	A	0.000	0.000	3.806	0.000	0.04
		B	0.000	0.000	5.397	0.000	0.04

Tower Section	Tower Elevation ft	Face	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
		C	0.000	0.000	31.781	0.000	0.17
T37	87.50-81.25	A	0.000	0.000	3.806	0.000	0.04
		B	0.000	0.000	6.731	0.000	0.04
		C	0.000	0.000	31.781	0.000	0.17
T38	81.25-75.00	A	0.000	0.000	3.806	0.000	0.04
		B	0.000	0.000	6.731	0.000	0.04
		C	0.000	0.000	31.781	0.000	0.17
T39	75.00-50.00	A	0.000	0.000	16.557	0.000	0.17
		B	0.000	0.000	26.925	0.000	0.17
		C	0.000	0.000	127.125	0.000	0.66
T40	50.00-25.00	A	0.000	0.000	19.665	0.000	0.19
		B	0.000	0.000	26.925	0.000	0.17
		C	0.000	0.000	127.125	0.000	0.66
T41	25.00-0.00	A	0.000	0.000	18.282	0.000	0.17
		B	0.000	0.000	23.694	0.000	0.15
		C	0.000	0.000	111.870	0.000	0.58

Feed Line/Linear Appurtenances Section Areas - With Ice

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
T1	368.75-362.50	A	1.908	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	1.231	0.000	0.02
T2	362.50-356.25	A	1.905	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	3.074	0.000	0.05
T3	356.25-350.00	A	1.901	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	2.456	0.000	0.04
		C		0.000	0.000	3.070	0.000	0.05
T4	350.00-343.75	A	1.898	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	9.825	0.000	0.12
		C		0.000	0.000	3.066	0.000	0.05
T5	343.75-337.50	A	1.894	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	9.813	0.000	0.12
		C		0.000	0.000	3.062	0.000	0.05
T6	337.50-331.25	A	1.891	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	9.801	0.000	0.12
		C		0.000	0.000	3.057	0.000	0.05
T7	331.25-325.00	A	1.887	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	9.789	0.000	0.12
		C		0.000	0.000	3.053	0.000	0.05
T8	325.00-318.75	A	1.884	0.000	0.000	3.592	0.000	0.06
		B		0.000	0.000	9.776	0.000	0.12
		C		0.000	0.000	3.048	0.000	0.05
T9	318.75-312.50	A	1.880	0.000	0.000	3.587	0.000	0.06
		B		0.000	0.000	9.764	0.000	0.12
		C		0.000	0.000	3.044	0.000	0.05
T10	312.50-306.25	A	1.876	0.000	0.000	3.583	0.000	0.06
		B		0.000	0.000	9.751	0.000	0.12
		C		0.000	0.000	3.039	0.000	0.05
T11	306.25-300.00	A	1.872	0.000	0.000	3.578	0.000	0.06
		B		0.000	0.000	9.738	0.000	0.12
		C		0.000	0.000	3.034	0.000	0.05
T12	300.00-293.75	A	1.869	0.000	0.000	3.573	0.000	0.06
		B		0.000	0.000	18.505	0.000	0.25
		C		0.000	0.000	24.350	0.000	0.62

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
T13	293.75-287.50	A	1.865	0.000	0.000	3.568	0.000	0.06
		B		0.000	0.000	18.483	0.000	0.24
		C		0.000	0.000	24.337	0.000	0.62
T14	287.50-281.25	A	1.860	0.000	0.000	3.563	0.000	0.06
		B		0.000	0.000	18.461	0.000	0.24
		C		0.000	0.000	24.324	0.000	0.62
T15	281.25-275.00	A	1.856	0.000	0.000	3.558	0.000	0.06
		B		0.000	0.000	18.438	0.000	0.24
		C		0.000	0.000	24.310	0.000	0.61
T16	275.00-268.75	A	1.852	0.000	0.000	3.553	0.000	0.06
		B		0.000	0.000	18.414	0.000	0.24
		C		0.000	0.000	24.297	0.000	0.61
T17	268.75-262.50	A	1.848	0.000	0.000	3.547	0.000	0.06
		B		0.000	0.000	18.390	0.000	0.24
		C		0.000	0.000	24.283	0.000	0.61
T18	262.50-256.25	A	1.843	0.000	0.000	3.542	0.000	0.06
		B		0.000	0.000	18.366	0.000	0.24
		C		0.000	0.000	24.268	0.000	0.61
T19	256.25-250.00	A	1.839	0.000	0.000	3.536	0.000	0.06
		B		0.000	0.000	18.341	0.000	0.24
		C		0.000	0.000	24.254	0.000	0.61
T20	250.00-243.75	A	1.834	0.000	0.000	3.530	0.000	0.06
		B		0.000	0.000	18.315	0.000	0.24
		C		0.000	0.000	24.239	0.000	0.61
T21	243.75-237.50	A	1.830	0.000	0.000	5.189	0.000	0.10
		B		0.000	0.000	18.289	0.000	0.24
		C		0.000	0.000	32.720	0.000	0.84
T22	237.50-231.25	A	1.825	0.000	0.000	7.675	0.000	0.16
		B		0.000	0.000	18.263	0.000	0.24
		C		0.000	0.000	45.440	0.000	1.17
T23	231.25-225.00	A	1.820	0.000	0.000	7.662	0.000	0.16
		B		0.000	0.000	18.235	0.000	0.24
		C		0.000	0.000	45.414	0.000	1.17
T24	225.00-218.75	A	1.815	0.000	0.000	7.650	0.000	0.16
		B		0.000	0.000	18.207	0.000	0.24
		C		0.000	0.000	45.388	0.000	1.17
T25	218.75-212.50	A	1.810	0.000	0.000	7.637	0.000	0.16
		B		0.000	0.000	18.178	0.000	0.24
		C		0.000	0.000	45.360	0.000	1.17
T26	212.50-206.25	A	1.804	0.000	0.000	7.623	0.000	0.16
		B		0.000	0.000	18.149	0.000	0.24
		C		0.000	0.000	45.332	0.000	1.17
T27	206.25-200.00	A	1.799	0.000	0.000	7.610	0.000	0.16
		B		0.000	0.000	18.118	0.000	0.23
		C		0.000	0.000	45.303	0.000	1.16
T28	200.00-175.00	A	1.785	0.000	0.000	32.636	0.000	0.65
		B		0.000	0.000	72.155	0.000	0.93
		C		0.000	0.000	192.609	0.000	4.81
T29	175.00-168.75	A	1.769	0.000	0.000	10.441	0.000	0.20
		B		0.000	0.000	17.953	0.000	0.23
		C		0.000	0.000	48.051	0.000	1.20
T30	168.75-162.50	A	1.763	0.000	0.000	10.416	0.000	0.19
		B		0.000	0.000	17.916	0.000	0.23
		C		0.000	0.000	48.009	0.000	1.19
T31	162.50-156.25	A	1.756	0.000	0.000	10.391	0.000	0.19
		B		0.000	0.000	17.879	0.000	0.23
		C		0.000	0.000	47.965	0.000	1.19
T32	156.25-150.00	A	1.749	0.000	0.000	10.364	0.000	0.19
		B		0.000	0.000	17.840	0.000	0.23
		C		0.000	0.000	47.919	0.000	1.19
T33	150.00-125.00	A	1.730	0.000	0.000	41.176	0.000	0.76

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft²	A_F ft²	C_AA_A In Face ft²	C_AA_A Out Face ft²	Weight K
		B		0.000	0.000	80.236	0.000	1.02
		C		0.000	0.000	198.043	0.000	4.82
T34	125.00-100.00	A	1.696	0.000	0.000	40.661	0.000	0.74
		B		0.000	0.000	90.038	0.000	1.13
		C		0.000	0.000	201.545	0.000	4.83
T35	100.00-93.75	A	1.671	0.000	0.000	10.071	0.000	0.18
		B		0.000	0.000	22.307	0.000	0.28
		C		0.000	0.000	50.191	0.000	1.20
T36	93.75-87.50	A	1.659	0.000	0.000	10.029	0.000	0.18
		B		0.000	0.000	22.739	0.000	0.28
		C		0.000	0.000	50.105	0.000	1.19
T37	87.50-81.25	A	1.648	0.000	0.000	9.985	0.000	0.18
		B		0.000	0.000	28.617	0.000	0.34
		C		0.000	0.000	50.013	0.000	1.19
T38	81.25-75.00	A	1.635	0.000	0.000	9.938	0.000	0.18
		B		0.000	0.000	28.489	0.000	0.33
		C		0.000	0.000	49.915	0.000	1.18
T39	75.00-50.00	A	1.599	0.000	0.000	44.378	0.000	0.77
		B		0.000	0.000	112.491	0.000	1.30
		C		0.000	0.000	198.539	0.000	4.67
T40	50.00-25.00	A	1.519	0.000	0.000	54.609	0.000	0.88
		B		0.000	0.000	109.259	0.000	1.23
		C		0.000	0.000	196.069	0.000	4.54
T41	25.00-0.00	A	1.361	0.000	0.000	48.229	0.000	0.72
		B		0.000	0.000	90.513	0.000	0.96
		C		0.000	0.000	168.232	0.000	3.77

Feed Line Center of Pressure

Section	Elevation ft	CP_X in	CP_Z in	CP_X Ice in	CP_Z Ice in
T1	368.75-362.50	-0.2109	0.1128	-0.3101	0.1659
T2	362.50-356.25	-0.4652	0.2489	-0.6804	0.3640
T3	356.25-350.00	-0.1089	0.4342	-0.1557	0.6207
T4	350.00-343.75	0.7122	0.8231	0.2578	0.7352
T5	343.75-337.50	1.0142	1.1722	0.3271	0.9316
T6	337.50-331.25	1.0639	1.2295	0.3358	0.9553
T7	331.25-325.00	1.0639	1.2295	0.3365	0.9560
T8	325.00-318.75	0.9143	0.0967	0.3222	0.0597
T9	318.75-312.50	0.9148	0.0968	0.3233	0.0600
T10	312.50-306.25	0.9148	0.0968	0.3239	0.0601
T11	306.25-300.00	0.8793	0.0930	0.3175	0.0589
T12	300.00-293.75	3.0154	2.8177	1.4801	1.3559
T13	293.75-287.50	3.3978	3.1750	1.6680	1.5281
T14	287.50-281.25	3.4737	3.2458	1.7009	1.5581
T15	281.25-275.00	3.4737	3.2458	1.7032	1.5603
T16	275.00-268.75	3.4737	3.2458	1.7055	1.5624
T17	268.75-262.50	3.4737	3.2458	1.7079	1.5646
T18	262.50-256.25	3.4737	3.2458	1.7104	1.5668
T19	256.25-250.00	3.4488	3.2226	1.7030	1.5601
T20	250.00-243.75	3.3978	3.1750	1.6848	1.5434
T21	243.75-237.50	1.1886	3.9029	0.6463	2.0604
T22	237.50-231.25	-0.8316	4.5680	-0.4793	2.6200
T23	231.25-225.00	-0.8257	4.5288	-0.4753	2.6008
T24	225.00-218.75	-0.7919	4.3368	-0.4524	2.4784
T25	218.75-212.50	-0.8447	4.6185	-0.4843	2.6554

Section	Elevation	CP_X	CP_Z	CP_X Ice	CP_Z Ice
	ft	in	in	in	in
T26	212.50-206.25	-0.6751	4.7130	-0.4886	2.6820
T27	206.25-200.00	-0.6751	4.7130	-0.4887	2.6857
T28	200.00-175.00	-0.7533	4.5785	-0.6560	2.5261
T29	175.00-168.75	-0.7414	4.4229	-0.6610	2.3736
T30	168.75-162.50	-0.7415	4.4236	-0.6613	2.3793
T31	162.50-156.25	-0.7444	4.4407	-0.6636	2.3923
T32	156.25-150.00	-0.7512	4.4811	-0.6689	2.4164
T33	150.00-125.00	-0.7551	4.4753	-0.6061	2.5047
T34	125.00-100.00	-0.6859	4.2022	-0.4490	2.4391
T35	100.00-93.75	-0.6802	4.1677	-0.4462	2.4331
T36	93.75-87.50	-0.7017	4.4090	-0.4543	2.5726
T37	87.50-81.25	-0.5062	4.4561	-0.2688	2.5696
T38	81.25-75.00	-0.5062	4.4561	-0.2685	2.5761
T39	75.00-50.00	-0.5027	4.3699	-0.2642	2.4577
T40	50.00-25.00	-0.4935	4.1664	-0.2539	2.1995
T41	25.00-0.00	-0.4835	4.0406	-0.2426	2.1590

Shielding Factor Ka

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T1	12	7/8	362.50 - 365.00	0.6000	0.4984
T2	12	7/8	356.25 - 362.50	0.6000	0.4805
T3	11	7/8	350.00 - 355.00	0.6000	0.4810
T3	12	7/8	350.00 - 356.25	0.6000	0.4810
T4	10	7/8	343.75 - 350.00	0.6000	0.4765
T4	11	7/8	343.75 - 350.00	0.6000	0.4765
T4	12	7/8	343.75 - 350.00	0.6000	0.4765
T5	10	7/8	337.50 - 343.75	0.6000	0.5644
T5	11	7/8	337.50 - 343.75	0.6000	0.5644
T5	12	7/8	337.50 - 343.75	0.6000	0.5644
T6	10	7/8	331.25 - 337.50	0.6000	0.5744
T6	11	7/8	331.25 - 337.50	0.6000	0.5744
T6	12	7/8	331.25 - 337.50	0.6000	0.5744
T7	10	7/8	325.00 - 331.25	0.6000	0.5749
T7	11	7/8	325.00 - 331.25	0.6000	0.5749
T7	12	7/8	325.00 - 331.25	0.6000	0.5749
T8	9	1 5/8	318.75 - 325.00	0.6000	0.5654

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T8	10	7/8	318.75 - 325.00	0.6000	0.5654
T8	11	7/8	318.75 - 325.00	0.6000	0.5654
T8	12	7/8	318.75 - 325.00	0.6000	0.5654
T9	9	1 5/8	312.50 - 318.75	0.6000	0.5665
T9	10	7/8	312.50 - 318.75	0.6000	0.5665
T9	11	7/8	312.50 - 318.75	0.6000	0.5665
T9	12	7/8	312.50 - 318.75	0.6000	0.5665
T10	9	1 5/8	306.25 - 312.50	0.6000	0.5671
T10	10	7/8	306.25 - 312.50	0.6000	0.5671
T10	11	7/8	306.25 - 312.50	0.6000	0.5671
T10	12	7/8	306.25 - 312.50	0.6000	0.5671
T11	9	1 5/8	300.00 - 306.25	0.6000	0.5581
T11	10	7/8	300.00 - 306.25	0.6000	0.5581
T11	11	7/8	300.00 - 306.25	0.6000	0.5581
T11	12	7/8	300.00 - 306.25	0.6000	0.5581
T12	9	1 5/8	293.75 - 300.00	0.6000	0.4773
T12	10	7/8	293.75 - 300.00	0.6000	0.4773
T12	11	7/8	293.75 - 300.00	0.6000	0.4773
T12	12	7/8	293.75 - 300.00	0.6000	0.4773
T12	15	1 5/8	293.75 - 300.00	0.6000	0.4773
T12	16	HYBRIFLEX 1-5/8"	293.75 - 300.00	0.6000	0.4773
T13	9	1 5/8	287.50 - 293.75	0.6000	0.5592
T13	10	7/8	287.50 - 293.75	0.6000	0.5592
T13	11	7/8	287.50 - 293.75	0.6000	0.5592
T13	12	7/8	287.50 - 293.75	0.6000	0.5592
T13	15	1 5/8	287.50 - 293.75	0.6000	0.5592
T13	16	HYBRIFLEX 1-5/8"	287.50 - 293.75	0.6000	0.5592
T14	9	1 5/8	281.25 - 287.50	0.6000	0.5738
T14	10	7/8	281.25 - 287.50	0.6000	0.5738
T14	11	7/8	281.25 - 287.50	0.6000	0.5738
T14	12	7/8	281.25 - 287.50	0.6000	0.5738

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T14	15	1 5/8	281.25 - 287.50	0.6000	0.5738
T14	16	HYBRIFLEX 1-5/8"	281.25 - 287.50	0.6000	0.5738
T15	9	1 5/8	275.00 - 281.25	0.6000	0.5744
T15	10	7/8	275.00 - 281.25	0.6000	0.5744
T15	11	7/8	275.00 - 281.25	0.6000	0.5744
T15	12	7/8	275.00 - 281.25	0.6000	0.5744
T15	15	1 5/8	275.00 - 281.25	0.6000	0.5744
T15	16	HYBRIFLEX 1-5/8"	275.00 - 281.25	0.6000	0.5744
T16	9	1 5/8	268.75 - 275.00	0.6000	0.5750
T16	10	7/8	268.75 - 275.00	0.6000	0.5750
T16	11	7/8	268.75 - 275.00	0.6000	0.5750
T16	12	7/8	268.75 - 275.00	0.6000	0.5750
T16	15	1 5/8	268.75 - 275.00	0.6000	0.5750
T16	16	HYBRIFLEX 1-5/8"	268.75 - 275.00	0.6000	0.5750
T17	9	1 5/8	262.50 - 268.75	0.6000	0.5756
T17	10	7/8	262.50 - 268.75	0.6000	0.5756
T17	11	7/8	262.50 - 268.75	0.6000	0.5756
T17	12	7/8	262.50 - 268.75	0.6000	0.5756
T17	15	1 5/8	262.50 - 268.75	0.6000	0.5756
T17	16	HYBRIFLEX 1-5/8"	262.50 - 268.75	0.6000	0.5756
T18	9	1 5/8	256.25 - 262.50	0.6000	0.5762
T18	10	7/8	256.25 - 262.50	0.6000	0.5762
T18	11	7/8	256.25 - 262.50	0.6000	0.5762
T18	12	7/8	256.25 - 262.50	0.6000	0.5762
T18	15	1 5/8	256.25 - 262.50	0.6000	0.5762
T18	16	HYBRIFLEX 1-5/8"	256.25 - 262.50	0.6000	0.5762
T19	9	1 5/8	250.00 - 256.25	0.6000	0.5724
T19	10	7/8	250.00 - 256.25	0.6000	0.5724
T19	11	7/8	250.00 - 256.25	0.6000	0.5724
T19	12	7/8	250.00 - 256.25	0.6000	0.5724
T19	15	1 5/8	250.00 - 256.25	0.6000	0.5724

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T19	16	HYBRIFLEX 1-5/8"	250.00 - 256.25	0.6000	0.5724
T20	9	1 5/8	243.75 - 250.00	0.6000	0.5635
T20	10	7/8	243.75 - 250.00	0.6000	0.5635
T20	11	7/8	243.75 - 250.00	0.6000	0.5635
T20	12	7/8	243.75 - 250.00	0.6000	0.5635
T20	15	1 5/8	243.75 - 250.00	0.6000	0.5635
T20	16	HYBRIFLEX 1-5/8"	243.75 - 250.00	0.6000	0.5635
T21	9	1 5/8	237.50 - 243.75	0.6000	0.5642
T21	10	7/8	237.50 - 243.75	0.6000	0.5642
T21	11	7/8	237.50 - 243.75	0.6000	0.5642
T21	12	7/8	237.50 - 243.75	0.6000	0.5642
T21	13	3" dia Flex Conuit	237.50 - 240.00	1.0000	0.5642
T21	14	1 5/8	237.50 - 240.00	0.6000	0.5642
T21	15	1 5/8	237.50 - 243.75	0.6000	0.5642
T21	16	HYBRIFLEX 1-5/8"	237.50 - 243.75	0.6000	0.5642
T22	9	1 5/8	231.25 - 237.50	0.6000	0.5649
T22	10	7/8	231.25 - 237.50	0.6000	0.5649
T22	11	7/8	231.25 - 237.50	0.6000	0.5649
T22	12	7/8	231.25 - 237.50	0.6000	0.5649
T22	13	3" dia Flex Conuit	231.25 - 237.50	1.0000	0.5649
T22	14	1 5/8	231.25 - 237.50	0.6000	0.5649
T22	15	1 5/8	231.25 - 237.50	0.6000	0.5649
T22	16	HYBRIFLEX 1-5/8"	231.25 - 237.50	0.6000	0.5649
T23	9	1 5/8	225.00 - 231.25	0.6000	0.5565
T23	10	7/8	225.00 - 231.25	0.6000	0.5565
T23	11	7/8	225.00 - 231.25	0.6000	0.5565
T23	12	7/8	225.00 - 231.25	0.6000	0.5565
T23	13	3" dia Flex Conuit	225.00 - 231.25	1.0000	0.5565
T23	14	1 5/8	225.00 - 231.25	0.6000	0.5565
T23	15	1 5/8	225.00 - 231.25	0.6000	0.5565
T23	16	HYBRIFLEX 1-5/8"	225.00 - 231.25	0.6000	0.5565

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T24	9	1 5/8	218.75 - 225.00	0.6000	0.5080
T24	10	7/8	218.75 - 225.00	0.6000	0.5080
T24	11	7/8	218.75 - 225.00	0.6000	0.5080
T24	12	7/8	218.75 - 225.00	0.6000	0.5080
T24	13	3" dia Flex Conuit	218.75 - 225.00	1.0000	0.5080
T24	14	1 5/8	218.75 - 225.00	0.6000	0.5080
T24	15	1 5/8	218.75 - 225.00	0.6000	0.5080
T24	16	HYBRIFLEX 1-5/8"	218.75 - 225.00	0.6000	0.5080
T25	9	1 5/8	212.50 - 218.75	0.6000	0.5764
T25	10	7/8	212.50 - 218.75	0.6000	0.5764
T25	11	7/8	212.50 - 218.75	0.6000	0.5764
T25	12	7/8	212.50 - 218.75	0.6000	0.5764
T25	13	3" dia Flex Conuit	212.50 - 218.75	1.0000	0.5764
T25	14	1 5/8	212.50 - 218.75	0.6000	0.5764
T25	15	1 5/8	212.50 - 218.75	0.6000	0.5764
T25	16	HYBRIFLEX 1-5/8"	212.50 - 218.75	0.6000	0.5764
T26	9	1 5/8	206.25 - 212.50	0.6000	0.5868
T26	10	7/8	206.25 - 212.50	0.6000	0.5868
T26	11	7/8	206.25 - 212.50	0.6000	0.5868
T26	12	7/8	206.25 - 212.50	0.6000	0.5868
T26	13	3" dia Flex Conuit	206.25 - 212.50	0.6000	0.5868
T26	14	1 5/8	206.25 - 212.50	0.6000	0.5868
T26	15	1 5/8	206.25 - 212.50	0.6000	0.5868
T26	16	HYBRIFLEX 1-5/8"	206.25 - 212.50	0.6000	0.5868
T27	9	1 5/8	200.00 - 206.25	0.6000	0.5876
T27	10	7/8	200.00 - 206.25	0.6000	0.5876
T27	11	7/8	200.00 - 206.25	0.6000	0.5876
T27	12	7/8	200.00 - 206.25	0.6000	0.5876
T27	13	3" dia Flex Conuit	200.00 - 206.25	0.6000	0.5876
T27	14	1 5/8	200.00 - 206.25	0.6000	0.5876
T27	15	1 5/8	200.00 - 206.25	0.6000	0.5876

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T27	16	HYBRIFLEX 1-5/8"	200.00 - 206.25	0.6000	0.5876
T28	7	7/8	175.00 - 180.00	0.6000	0.5299
T28	8	7/8	175.00 - 200.00	0.6000	0.5299
T28	9	1 5/8	175.00 - 200.00	0.6000	0.5299
T28	10	7/8	175.00 - 200.00	0.6000	0.5299
T28	11	7/8	175.00 - 200.00	0.6000	0.5299
T28	12	7/8	175.00 - 200.00	0.6000	0.5299
T28	13	3" dia Flex Conuit	175.00 - 200.00	0.6000	0.5299
T28	14	1 5/8	175.00 - 200.00	0.6000	0.5299
T28	15	1 5/8	175.00 - 200.00	0.6000	0.5299
T28	16	HYBRIFLEX 1-5/8"	175.00 - 200.00	0.6000	0.5299
T29	7	7/8	168.75 - 175.00	0.6000	0.5726
T29	8	7/8	168.75 - 175.00	0.6000	0.5726
T29	9	1 5/8	168.75 - 175.00	0.6000	0.5726
T29	10	7/8	168.75 - 175.00	0.6000	0.5726
T29	11	7/8	168.75 - 175.00	0.6000	0.5726
T29	12	7/8	168.75 - 175.00	0.6000	0.5726
T29	13	3" dia Flex Conuit	168.75 - 175.00	0.6000	0.5726
T29	14	1 5/8	168.75 - 175.00	0.6000	0.5726
T29	15	1 5/8	168.75 - 175.00	0.6000	0.5726
T29	16	HYBRIFLEX 1-5/8"	168.75 - 175.00	0.6000	0.5726
T30	7	7/8	162.50 - 168.75	0.6000	0.5742
T30	8	7/8	162.50 - 168.75	0.6000	0.5742
T30	9	1 5/8	162.50 - 168.75	0.6000	0.5742
T30	10	7/8	162.50 - 168.75	0.6000	0.5742
T30	11	7/8	162.50 - 168.75	0.6000	0.5742
T30	12	7/8	162.50 - 168.75	0.6000	0.5742
T30	13	3" dia Flex Conuit	162.50 - 168.75	0.6000	0.5742
T30	14	1 5/8	162.50 - 168.75	0.6000	0.5742
T30	15	1 5/8	162.50 - 168.75	0.6000	0.5742
T30	16	HYBRIFLEX 1-5/8"	162.50 - 168.75	0.6000	0.5742

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T31	7	7/8	156.25 - 162.50	0.6000	0.5792
T31	8	7/8	156.25 - 162.50	0.6000	0.5792
T31	9	1 5/8	156.25 - 162.50	0.6000	0.5792
T31	10	7/8	156.25 - 162.50	0.6000	0.5792
T31	11	7/8	156.25 - 162.50	0.6000	0.5792
T31	12	7/8	156.25 - 162.50	0.6000	0.5792
T31	13	3" dia Flex Conuit	156.25 - 162.50	0.6000	0.5792
T31	14	1 5/8	156.25 - 162.50	0.6000	0.5792
T31	15	1 5/8	156.25 - 162.50	0.6000	0.5792
T31	16	HYBRIFLEX 1-5/8"	156.25 - 162.50	0.6000	0.5792
T32	7	7/8	150.00 - 156.25	0.6000	0.5897
T32	8	7/8	150.00 - 156.25	0.6000	0.5897
T32	9	1 5/8	150.00 - 156.25	0.6000	0.5897
T32	10	7/8	150.00 - 156.25	0.6000	0.5897
T32	11	7/8	150.00 - 156.25	0.6000	0.5897
T32	12	7/8	150.00 - 156.25	0.6000	0.5897
T32	13	3" dia Flex Conuit	150.00 - 156.25	0.6000	0.5897
T32	14	1 5/8	150.00 - 156.25	0.6000	0.5897
T32	15	1 5/8	150.00 - 156.25	0.6000	0.5897
T32	16	HYBRIFLEX 1-5/8"	150.00 - 156.25	0.6000	0.5897
T33	5	7/8	125.00 - 140.00	0.6000	0.5924
T33	6	1/2	125.00 - 148.00	0.6000	0.5924
T33	7	7/8	125.00 - 150.00	0.6000	0.5924
T33	8	7/8	125.00 - 150.00	0.6000	0.5924
T33	9	1 5/8	125.00 - 150.00	0.6000	0.5924
T33	10	7/8	125.00 - 150.00	0.6000	0.5924
T33	11	7/8	125.00 - 150.00	0.6000	0.5924
T33	12	7/8	125.00 - 150.00	0.6000	0.5924
T33	13	3" dia Flex Conuit	125.00 - 150.00	0.6000	0.5924
T33	14	1 5/8	125.00 - 150.00	0.6000	0.5924
T33	15	1 5/8	125.00 - 150.00	0.6000	0.5924

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T33	16	HYBRIFLEX 1-5/8"	125.00 - 150.00	0.6000	0.5924
T34	4	1/2	100.00 - 125.00	0.6000	0.5292
T34	5	7/8	100.00 - 125.00	0.6000	0.5292
T34	6	1/2	100.00 - 125.00	0.6000	0.5292
T34	7	7/8	100.00 - 125.00	0.6000	0.5292
T34	8	7/8	100.00 - 125.00	0.6000	0.5292
T34	9	1 5/8	100.00 - 125.00	0.6000	0.5292
T34	10	7/8	100.00 - 125.00	0.6000	0.5292
T34	11	7/8	100.00 - 125.00	0.6000	0.5292
T34	12	7/8	100.00 - 125.00	0.6000	0.5292
T34	13	3" dia Flex Conuit	100.00 - 125.00	0.6000	0.5292
T34	14	1 5/8	100.00 - 125.00	0.6000	0.5292
T34	15	1 5/8	100.00 - 125.00	0.6000	0.5292
T34	16	HYBRIFLEX 1-5/8"	100.00 - 125.00	0.6000	0.5292
T35	4	1/2	93.75 - 100.00	0.6000	0.5232
T35	5	7/8	93.75 - 100.00	0.6000	0.5232
T35	6	1/2	93.75 - 100.00	0.6000	0.5232
T35	7	7/8	93.75 - 100.00	0.6000	0.5232
T35	8	7/8	93.75 - 100.00	0.6000	0.5232
T35	9	1 5/8	93.75 - 100.00	0.6000	0.5232
T35	10	7/8	93.75 - 100.00	0.6000	0.5232
T35	11	7/8	93.75 - 100.00	0.6000	0.5232
T35	12	7/8	93.75 - 100.00	0.6000	0.5232
T35	13	3" dia Flex Conuit	93.75 - 100.00	0.6000	0.5232
T35	14	1 5/8	93.75 - 100.00	0.6000	0.5232
T35	15	1 5/8	93.75 - 100.00	0.6000	0.5232
T35	16	HYBRIFLEX 1-5/8"	93.75 - 100.00	0.6000	0.5232
T36	3	1/2	87.50 - 88.00	0.6000	0.5884
T36	4	1/2	87.50 - 93.75	0.6000	0.5884
T36	5	7/8	87.50 - 93.75	0.6000	0.5884
T36	6	1/2	87.50 - 93.75	0.6000	0.5884
T36	7	7/8	87.50 - 93.75	0.6000	0.5884
T36	8	7/8	87.50 - 93.75	0.6000	0.5884
T36	9	1 5/8	87.50 - 93.75	0.6000	0.5884
T36	10	7/8	87.50 - 93.75	0.6000	0.5884
T36	11	7/8	87.50 - 93.75	0.6000	0.5884
T36	12	7/8	87.50 - 93.75	0.6000	0.5884
T36	13	3" dia Flex Conuit	87.50 - 93.75	0.6000	0.5884
T36	14	1 5/8	87.50 - 93.75	0.6000	0.5884
T36	15	1 5/8	87.50 - 93.75	0.6000	0.5884
T36	16	HYBRIFLEX 1-5/8"	87.50 - 93.75	0.6000	0.5884
T37	3	1/2	81.25 - 87.50	0.6000	0.6000
T37	4	1/2	81.25 - 87.50	0.6000	0.6000
T37	5	7/8	81.25 - 87.50	0.6000	0.6000
T37	6	1/2	81.25 - 87.50	0.6000	0.6000
T37	7	7/8	81.25 - 87.50	0.6000	0.6000
T37	8	7/8	81.25 - 87.50	0.6000	0.6000
T37	9	1 5/8	81.25 - 87.50	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T37	10	7/8	81.25 - 87.50	0.6000	0.6000
T37	11	7/8	81.25 - 87.50	0.6000	0.6000
T37	12	7/8	81.25 - 87.50	0.6000	0.6000
T37	13	3" dia Flex Conuit	81.25 - 87.50	0.6000	0.6000
T37	14	1 5/8	81.25 - 87.50	0.6000	0.6000
T37	15	1 5/8	81.25 - 87.50	0.6000	0.6000
T37	16	HYBRIFLEX 1-5/8"	81.25 - 87.50	0.6000	0.6000
T38	3	1/2	75.00 - 81.25	0.6000	0.6000
T38	4	1/2	75.00 - 81.25	0.6000	0.6000
T38	5	7/8	75.00 - 81.25	0.6000	0.6000
T38	6	1/2	75.00 - 81.25	0.6000	0.6000
T38	7	7/8	75.00 - 81.25	0.6000	0.6000
T38	8	7/8	75.00 - 81.25	0.6000	0.6000
T38	9	1 5/8	75.00 - 81.25	0.6000	0.6000
T38	10	7/8	75.00 - 81.25	0.6000	0.6000
T38	11	7/8	75.00 - 81.25	0.6000	0.6000
T38	12	7/8	75.00 - 81.25	0.6000	0.6000
T38	13	3" dia Flex Conuit	75.00 - 81.25	0.6000	0.6000
T38	14	1 5/8	75.00 - 81.25	0.6000	0.6000
T38	15	1 5/8	75.00 - 81.25	0.6000	0.6000
T38	16	HYBRIFLEX 1-5/8"	75.00 - 81.25	0.6000	0.6000
T39	2	7/8	50.00 - 62.00	0.6000	0.6000
T39	3	1/2	50.00 - 75.00	0.6000	0.6000
T39	4	1/2	50.00 - 75.00	0.6000	0.6000
T39	5	7/8	50.00 - 75.00	0.6000	0.6000
T39	6	1/2	50.00 - 75.00	0.6000	0.6000
T39	7	7/8	50.00 - 75.00	0.6000	0.6000
T39	8	7/8	50.00 - 75.00	0.6000	0.6000
T39	9	1 5/8	50.00 - 75.00	0.6000	0.6000
T39	10	7/8	50.00 - 75.00	0.6000	0.6000
T39	11	7/8	50.00 - 75.00	0.6000	0.6000
T39	12	7/8	50.00 - 75.00	0.6000	0.6000
T39	13	3" dia Flex Conuit	50.00 - 75.00	0.6000	0.6000
T39	14	1 5/8	50.00 - 75.00	0.6000	0.6000
T39	15	1 5/8	50.00 - 75.00	0.6000	0.6000
T39	16	HYBRIFLEX 1-5/8"	50.00 - 75.00	0.6000	0.6000
T40	1	7/8	25.00 - 40.00	0.6000	0.6000
T40	2	7/8	25.00 - 50.00	0.6000	0.6000
T40	3	1/2	25.00 - 50.00	0.6000	0.6000
T40	4	1/2	25.00 - 50.00	0.6000	0.6000
T40	5	7/8	25.00 - 50.00	0.6000	0.6000
T40	6	1/2	25.00 - 50.00	0.6000	0.6000
T40	7	7/8	25.00 - 50.00	0.6000	0.6000
T40	8	7/8	25.00 - 50.00	0.6000	0.6000
T40	9	1 5/8	25.00 - 50.00	0.6000	0.6000
T40	10	7/8	25.00 - 50.00	0.6000	0.6000
T40	11	7/8	25.00 - 50.00	0.6000	0.6000
T40	12	7/8	25.00 - 50.00	0.6000	0.6000
T40	13	3" dia Flex Conuit	25.00 - 50.00	0.6000	0.6000
T40	14	1 5/8	25.00 - 50.00	0.6000	0.6000
T40	15	1 5/8	25.00 - 50.00	0.6000	0.6000
T40	16	HYBRIFLEX 1-5/8"	25.00 - 50.00	0.6000	0.6000
T41	1	7/8	3.00 - 25.00	0.6000	0.6000
T41	2	7/8	3.00 - 25.00	0.6000	0.6000
T41	3	1/2	3.00 - 25.00	0.6000	0.6000
T41	4	1/2	3.00 - 25.00	0.6000	0.6000
T41	5	7/8	3.00 - 25.00	0.6000	0.6000
T41	6	1/2	3.00 - 25.00	0.6000	0.6000
T41	7	7/8	3.00 - 25.00	0.6000	0.6000
T41	8	7/8	3.00 - 25.00	0.6000	0.6000
T41	9	1 5/8	3.00 - 25.00	0.6000	0.6000
T41	10	7/8	3.00 - 25.00	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T41	11	7/8	3.00 - 25.00	0.6000	0.6000
T41	12	7/8	3.00 - 25.00	0.6000	0.6000
T41	13	3" dia Flex Conuit	3.00 - 25.00	0.6000	0.6000
T41	14	1 5/8	3.00 - 25.00	0.6000	0.6000
T41	15	1 5/8	3.00 - 25.00	0.6000	0.6000
T41	16	HYBRIFLEX 1-5/8"	3.00 - 25.00	0.6000	0.6000

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
Search Antenna	C	From Leg	1.00 0.00 0.00	0.0000	370.00	No Ice 1/2" Ice 1" Ice	1.28 3.73 6.18	3.73 4.39 5.05	0.30 0.45 0.60
10'6"x4" Pipe Mount	A	From Leg	0.50 0.00 0.00	0.0000	355.00	No Ice 1/2" Ice 1" Ice	2.99 5.62 6.25	2.99 5.62 6.25	0.11 0.15 0.19
Rohn 6' Side-Arm(1)	B	From Leg	3.00 0.00 0.00	0.0000	355.00	No Ice 1/2" Ice 1" Ice	6.00 8.50 11.00	6.00 8.50 11.00	0.14 0.21 0.28
20' x 3" Dia Omni	C	From Leg	1.00 0.00 0.00	0.0000	350.00	No Ice 1/2" Ice 1" Ice	5.70 8.03 10.08	5.70 8.03 10.08	0.05 0.09 0.15
6'x4" Pipe Mount	C	From Leg	0.50 0.00 0.00	0.0000	350.00	No Ice 1/2" Ice 1" Ice	1.59 2.46 2.83	1.59 2.46 2.83	0.05 0.07 0.09
10' x 3" Dia Omni	B	From Leg	3.00 0.00 0.00	0.0000	325.00	No Ice 1/2" Ice 1" Ice	2.87 4.03 5.03	2.87 4.03 5.03	0.03 0.05 0.08
ROHN 3-ft Side Arm	B	From Leg	2.00 0.00 0.00	0.0000	325.00	No Ice 1/2" Ice 1" Ice	3.10 5.00 6.90	3.10 5.00 6.90	0.07 0.10 0.13
20' x 3" Dia Omni	C	From Leg	1.00 0.00 0.00	0.0000	250.00	No Ice 1/2" Ice 1" Ice	5.90 8.03 10.08	5.90 8.03 10.08	0.05 0.09 0.15
6'x4" Pipe Mount	C	From Leg	0.50 0.00 0.00	0.0000	250.00	No Ice 1/2" Ice 1" Ice	1.63 2.46 2.83	1.63 2.46 2.83	0.05 0.07 0.09
Yagi	A	From Leg	1.00 0.00 0.00	0.0000	200.00	No Ice 1/2" Ice 1" Ice	5.00 6.50 8.00	5.00 6.50 8.00	0.04 0.06 0.08
(4) Yagi	C	From Leg	1.00 0.00 0.00	0.0000	180.00	No Ice 1/2" Ice 1" Ice	5.00 6.50 8.00	5.00 6.50 8.00	0.04 0.06 0.08
(2) 5'3"x4" Pipe Mount	C	From Leg	1.00 0.00 0.00	0.0000	180.00	No Ice 1/2" Ice 1" Ice	1.44 2.21 2.54	1.44 2.21 2.54	0.06 0.07 0.09
Yagi	B	From Leg	1.00 0.00 0.00	0.0000	148.00	No Ice 1/2" Ice 1" Ice	5.00 6.50 8.00	5.00 6.50 8.00	0.04 0.06 0.08

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
Yagi	C	From Leg	1.00 0.00 0.00	0.0000	140.00	No Ice 1/2" Ice 1" Ice	5.00 6.50 8.00	5.00 6.50 8.00	0.04 0.06 0.08
Yagi	A	From Leg	1.00 0.00 0.00	0.0000	125.00	No Ice 1/2" Ice 1" Ice	5.00 6.50 8.00	5.00 6.50 8.00	0.04 0.06 0.08
X-Style	A	From Leg	1.00 0.00 0.00	0.0000	88.00	No Ice 1/2" Ice 1" Ice	1.50 1.50 1.50	2.00 2.00 2.00	0.02 0.03 0.04
(2) X-Style	B	From Leg	1.00 0.00 0.00	0.0000	88.00	No Ice 1/2" Ice 1" Ice	1.50 1.50 1.50	2.00 2.00 2.00	0.02 0.03 0.04
X-Style	A	From Leg	1.00 0.00 0.00	0.0000	88.00	No Ice 1/2" Ice 1" Ice	1.50 1.50 1.50	2.00 2.00 2.00	0.02 0.03 0.04
Yagi	C	From Leg	1.00 0.00 0.00	0.0000	62.00	No Ice 1/2" Ice 1" Ice	5.00 6.50 8.00	5.00 6.50 8.00	0.04 0.06 0.08
Yagi	A	From Leg	1.00 0.00 0.00	0.0000	40.00	No Ice 1/2" Ice 1" Ice	5.00 6.50 8.00	5.00 6.50 8.00	0.04 0.06 0.08
(2) 7770.00 (AT&T)	A	From Leg	3.00 0.00 0.00	0.0000	242.50	No Ice 1/2" Ice 1" Ice	5.51 5.87 6.23	2.93 3.27 3.63	0.04 0.07 0.11
(2) 7770.00 (AT&T)	B	From Leg	3.00 0.00 0.00	0.0000	242.50	No Ice 1/2" Ice 1" Ice	5.51 5.87 6.23	2.93 3.27 3.63	0.04 0.07 0.11
(2) 7770.00 (AT&T)	C	From Leg	3.00 0.00 0.00	0.0000	242.50	No Ice 1/2" Ice 1" Ice	5.51 5.87 6.23	2.93 3.27 3.63	0.04 0.07 0.11
HPA-65R-BUU-H6 (AT&T)	A	From Leg	3.00 0.00 0.00	0.0000	242.50	No Ice 1/2" Ice 1" Ice	9.66 10.13 10.61	6.45 6.91 7.38	0.05 0.11 0.18
HPA-65R-BUU-H8 (AT&T)	A	From Leg	3.00 0.00 0.00	0.0000	242.50	No Ice 1/2" Ice 1" Ice	12.98 13.56 14.15	7.52 8.09 8.67	0.07 0.14 0.22
HPA-65R-BUU-H8 (AT&T)	A	From Leg	3.00 0.00 0.00	0.0000	242.50	No Ice 1/2" Ice 1" Ice	12.98 13.56 14.15	7.52 8.09 8.67	0.07 0.14 0.22
(2) LPG21401 TMA (AT&T)	A	From Leg	3.00 0.00 0.00	0.0000	242.50	No Ice 1/2" Ice 1" Ice	0.82 0.94 1.06	0.35 0.44 0.54	0.02 0.02 0.03
(2) LPG21401 TMA (AT&T)	B	From Leg	3.00 0.00 0.00	0.0000	242.50	No Ice 1/2" Ice 1" Ice	0.82 0.94 1.06	0.35 0.44 0.54	0.02 0.02 0.03
(2) LPG21401 TMA (AT&T)	C	From Leg	3.00 0.00 0.00	0.0000	242.50	No Ice 1/2" Ice 1" Ice	0.82 0.94 1.06	0.35 0.44 0.54	0.02 0.02 0.03
(2) LGP21901 Diplexer (AT&T)	A	From Leg	3.00 0.00 0.00	0.0000	242.50	No Ice 1/2" Ice 1" Ice	0.20 0.26 0.33	0.10 0.14 0.19	0.01 0.01 0.01
(2) LGP21901 Diplexer (AT&T)	B	From Leg	3.00 0.00 0.00	0.0000	242.50	No Ice 1/2" Ice 1" Ice	0.20 0.26 0.33	0.10 0.14 0.19	0.01 0.01 0.01
(2) LGP21901 Diplexer (AT&T)	C	From Leg	3.00 0.00 0.00	0.0000	242.50	No Ice 1/2" Ice 1" Ice	0.20 0.26 0.33	0.10 0.14 0.19	0.01 0.01 0.01

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
RRUS-11 (AT&T)	A	From Leg	3.00 0.00 0.00	0.0000	242.50	No Ice 1/2" Ice 1" Ice	2.57 2.76 2.97	1.07 1.21 1.36	0.05 0.07 0.09
RRUS-11 (AT&T)	B	From Leg	3.00 0.00 0.00	0.0000	242.50	No Ice 1/2" Ice 1" Ice	2.57 2.76 2.97	1.07 1.21 1.36	0.05 0.07 0.09
RRUS-11 (AT&T)	C	From Leg	3.00 0.00 0.00	0.0000	242.50	No Ice 1/2" Ice 1" Ice	2.57 2.76 2.97	1.07 1.21 1.36	0.05 0.07 0.09
RRUS-32 (AT&T)	A	From Leg	3.00 0.00 0.00	0.0000	242.50	No Ice 1/2" Ice 1" Ice	3.31 3.56 3.81	2.42 2.64 2.86	0.08 0.10 0.14
RRUS-32 (AT&T)	B	From Leg	3.00 0.00 0.00	0.0000	242.50	No Ice 1/2" Ice 1" Ice	3.31 3.56 3.81	2.42 2.64 2.86	0.08 0.10 0.14
RRUS-32 (AT&T)	C	From Leg	3.00 0.00 0.00	0.0000	242.50	No Ice 1/2" Ice 1" Ice	3.31 3.56 3.81	2.42 2.64 2.86	0.08 0.10 0.14
DC6-48-60-18-8F Surge Arrestor (AT&T)	A	From Leg	3.00 0.00 0.00	0.0000	242.50	No Ice 1/2" Ice 1" Ice	1.91 2.10 2.29	1.91 2.10 2.29	0.02 0.04 0.06
Pirod 12' T-Frame Sector Mount (1) (AT&T)	A	From Leg	1.00 0.00 0.00	0.0000	242.50	No Ice 1/2" Ice 1" Ice	13.60 18.40 23.20	13.60 18.40 23.20	0.47 0.60 0.73
Pirod 12' T-Frame Sector Mount (1) (AT&T)	B	From Leg	1.00 0.00 0.00	0.0000	242.50	No Ice 1/2" Ice 1" Ice	13.60 18.40 23.20	13.60 18.40 23.20	0.47 0.60 0.73
Pirod 12' T-Frame Sector Mount (1) (AT&T)	C	From Leg	1.00 0.00 0.00	0.0000	242.50	No Ice 1/2" Ice 1" Ice	13.60 18.40 23.20	13.60 18.40 23.20	0.47 0.60 0.73
QUAD656C0000 (Verizon Existing)	A	From Leg	3.00 -6.00 0.00	0.0000	305.00	No Ice 1/2" Ice 1" Ice	13.24 13.75 14.27	5.62 6.09 6.56	0.06 0.13 0.21
HBXX-6517DS (Verizon Existing)	A	From Leg	3.00 -4.00 0.00	0.0000	305.00	No Ice 1/2" Ice 1" Ice	8.53 9.00 9.48	5.24 5.71 6.18	0.05 0.10 0.16
LNX-6514DS-T4M (Verizon Existing)	A	From Leg	3.00 0.00 0.00	0.0000	305.00	No Ice 1/2" Ice 1" Ice	8.17 8.63 9.10	5.41 5.86 6.33	0.04 0.09 0.15
HBXX-6517DS (Verizon Existing)	A	From Leg	3.00 4.00 0.00	0.0000	305.00	No Ice 1/2" Ice 1" Ice	8.53 9.00 9.48	5.24 5.71 6.18	0.05 0.10 0.16
QUAD656C0000 (Verizon Existing)	B	From Leg	3.00 -6.00 0.00	0.0000	305.00	No Ice 1/2" Ice 1" Ice	13.24 13.75 14.27	5.62 6.09 6.56	0.06 0.13 0.21
HBXX-6517DS (Verizon Existing)	B	From Leg	3.00 -4.00 0.00	0.0000	305.00	No Ice 1/2" Ice 1" Ice	8.53 9.00 9.48	5.24 5.71 6.18	0.05 0.10 0.16
LNX-6514DS-T4M (Verizon Existing)	B	From Leg	3.00 0.00 0.00	0.0000	305.00	No Ice 1/2" Ice 1" Ice	8.17 8.63 9.10	5.41 5.86 6.33	0.04 0.09 0.15
HBXX-6517DS (Verizon Existing)	B	From Leg	3.00 4.00 0.00	0.0000	305.00	No Ice 1/2" Ice 1" Ice	8.53 9.00 9.48	5.24 5.71 6.18	0.05 0.10 0.16
QUAD656C0000 (Verizon Existing)	C	From Leg	3.00 -6.00 0.00	0.0000	305.00	No Ice 1/2" Ice 1" Ice	13.24 13.75 14.27	5.62 6.09 6.56	0.06 0.13 0.21

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
HBXX-6517DS	C	From Leg	3.00	0.0000	305.00	No Ice	8.53	5.24	0.05
(Verizon Existing)			-4.00			1/2" Ice	9.00	5.71	0.10
			0.00			1" Ice	9.48	6.18	0.16
LNX-6514DS-T4M	C	From Leg	3.00	0.0000	305.00	No Ice	8.17	5.41	0.04
(Verizon Existing)			0.00			1/2" Ice	8.63	5.86	0.09
			0.00			1" Ice	9.10	6.33	0.15
HBXX-6517DS	C	From Leg	3.00	0.0000	305.00	No Ice	8.53	5.24	0.05
(Verizon Existing)			4.00			1/2" Ice	9.00	5.71	0.10
			0.00			1" Ice	9.48	6.18	0.16
RRH4x45/2x90-AWS	A	From Leg	3.00	0.0000	305.00	No Ice	2.58	1.69	0.08
(Verizon Proposed)			4.00			1/2" Ice	2.79	1.87	0.10
			0.00			1" Ice	3.01	2.06	0.12
RRH4x45/2x90-AWS	B	From Leg	3.00	0.0000	305.00	No Ice	2.58	1.69	0.08
(Verizon Proposed)			4.00			1/2" Ice	2.79	1.87	0.10
			0.00			1" Ice	3.01	2.06	0.12
RRH4x45/2x90-AWS	C	From Leg	3.00	0.0000	305.00	No Ice	2.58	1.69	0.08
(Verizon Proposed)			4.00			1/2" Ice	2.79	1.87	0.10
			0.00			1" Ice	3.01	2.06	0.12
RRH4x30-B13	A	From Leg	3.00	0.0000	305.00	No Ice	2.16	1.62	0.06
(Verizon Proposed)			-4.00			1/2" Ice	2.35	1.79	0.08
			0.00			1" Ice	2.55	1.97	0.10
RRH4x30-B13	B	From Leg	3.00	0.0000	305.00	No Ice	2.16	1.62	0.06
(Verizon Proposed)			-4.00			1/2" Ice	2.35	1.79	0.08
			0.00			1" Ice	2.55	1.97	0.10
RRH4x30-B13	C	From Leg	3.00	0.0000	305.00	No Ice	2.16	1.62	0.06
(Verizon Proposed)			-4.00			1/2" Ice	2.35	1.79	0.08
			0.00			1" Ice	2.55	1.97	0.10
DB-T1-6Z-8AB-0Z	A	From Leg	3.00	0.0000	305.00	No Ice	4.80	2.00	0.04
(Verizon Existing)			0.00			1/2" Ice	5.07	2.19	0.08
			0.00			1" Ice	5.35	2.39	0.12
DB-T1-6Z-8AB-0Z	B	From Leg	3.00	0.0000	305.00	No Ice	4.80	2.00	0.04
(Verizon Existing)			0.00			1/2" Ice	5.07	2.19	0.08
			0.00			1" Ice	5.35	2.39	0.12
Rohn 6' x 12' Boom Gate (1)	A	From Leg	1.00	0.0000	305.00	No Ice	16.60	16.60	0.56
(Verizon Existing)			0.00			1/2" Ice	19.80	19.80	0.70
			0.00			1" Ice	23.00	23.00	0.84
Rohn 6' x 12' Boom Gate (1)	B	From Leg	1.00	0.0000	305.00	No Ice	16.60	16.60	0.56
(Verizon Existing)			0.00			1/2" Ice	19.80	19.80	0.70
			0.00			1" Ice	23.00	23.00	0.84
Rohn 6' x 12' Boom Gate (1)	C	From Leg	1.00	0.0000	305.00	No Ice	16.60	16.60	0.56
(Verizon Existing)			0.00			1/2" Ice	19.80	19.80	0.70
			0.00			1" Ice	23.00	23.00	0.84

Dishes

Description	Face or Leg	Dish Type	Offset Type	Offsets: Horz Lateral ft / Vert ft	Azimuth Adjustment °	3 dB Beam Width °	Elevation ft	Outside Diameter ft		Aperture Area ft^2	Weight K
8' Dish	A	Paraboloid w/o	From	1.00	Worst		355.00	8.00	No Ice	50.27	0.10

Description	Face or Leg	Dish Type	Offset Type	Offsets: Horz Lateral Vert ft	Azimuth Adjustment °	3 dB Beam Width °	Elevation ft	Outside Diameter ft		Aperture Area ft^2	Weight K
		Radome	Leg	0.00					1/2" Ice	51.32	0.26
				0.00					1" Ice	52.37	0.49

Tower Pressures - No Ice

$G_H = 0.850$

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft^2	Face	A_F ft^2	A_R ft^2	A_{leg} ft^2	Leg % %	C_AA_A In Face ft^2	C_AA_A Out Face ft^2
T1	365.63	1.663	40	32.682	A	4.176	2.865	2.865	40.69	0.000	0.000
368.75-362.50					B	4.176	2.865		40.69	0.000	0.000
					C	4.176	2.865		40.69	0.278	0.000
T2	359.38	1.657	40	32.682	A	4.812	2.865	2.865	37.31	0.000	0.000
362.50-356.25					B	4.812	2.865		37.31	0.000	0.000
					C	4.812	2.865		37.31	0.694	0.000
T3	353.13	1.651	40	32.682	A	4.812	2.865	2.865	37.31	0.000	0.000
356.25-350.00					B	4.812	2.865		37.31	0.555	0.000
					C	4.812	2.865		37.31	0.694	0.000
T4	346.88	1.644	39	32.813	A	4.804	3.125	3.125	39.41	0.000	0.000
350.00-343.75					B	4.804	3.125		39.41	2.081	0.000
					C	4.804	3.125		39.41	0.694	0.000
T5	340.63	1.638	39	32.813	A	0.990	3.917	3.125	63.69	0.000	0.000
343.75-337.50					B	0.990	3.917		63.69	2.081	0.000
					C	0.990	3.917		63.69	0.694	0.000
T6	334.38	1.632	39	32.813	A	0.000	4.574	3.125	68.32	0.000	0.000
337.50-331.25					B	0.000	4.574		68.32	2.081	0.000
					C	0.000	4.574		68.32	0.694	0.000
T7	328.13	1.625	39	32.813	A	0.000	4.574	3.125	68.32	0.000	0.000
331.25-325.00					B	0.000	4.574		68.32	2.081	0.000
					C	0.000	4.574		68.32	0.694	0.000
T8	321.88	1.619	39	32.943	A	0.000	4.991	3.385	67.83	1.238	0.000
325.00-318.75					B	0.000	4.991		67.83	2.081	0.000
					C	0.000	4.991		67.83	0.694	0.000
T9	315.63	1.612	39	32.943	A	0.000	4.986	3.385	67.90	1.238	0.000
318.75-312.50					B	0.000	4.986		67.90	2.081	0.000
					C	0.000	4.986		67.90	0.694	0.000
T10	309.38	1.605	39	32.943	A	0.000	4.986	3.385	67.90	1.238	0.000
312.50-306.25					B	0.000	4.986		67.90	2.081	0.000
					C	0.000	4.986		67.90	0.694	0.000
T11	303.13	1.598	38	32.943	A	0.985	4.332	3.385	63.67	1.238	0.000
306.25-300.00					B	0.985	4.332		63.67	2.081	0.000
					C	0.985	4.332		63.67	0.694	0.000
T12	296.88	1.591	38	32.943	A	4.770	3.385	3.385	41.51	1.238	0.000
300.00-293.75					B	4.770	3.385		41.51	4.556	0.000
					C	4.770	3.385		41.51	15.544	0.000
T13	290.63	1.584	38	32.943	A	0.985	4.332	3.385	63.67	1.238	0.000
293.75-287.50					B	0.985	4.332		63.67	4.556	0.000
					C	0.985	4.332		63.67	15.544	0.000
T14	284.38	1.577	38	32.943	A	0.000	4.828	3.385	70.12	1.238	0.000
287.50-281.25					B	0.000	4.828		70.12	4.556	0.000
					C	0.000	4.828		70.12	15.544	0.000
T15	278.13	1.57	38	32.943	A	0.000	4.828	3.385	70.12	1.238	0.000
281.25-275.00					B	0.000	4.828		70.12	4.556	0.000

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
					C	0.000	4.828		70.12	15.544	0.000
T16	271.88	1.562	37	32.943	A	0.000	4.828	3.385	70.12	1.238	0.000
275.00-268.75					B	0.000	4.828		70.12	4.556	0.000
					C	0.000	4.828		70.12	15.544	0.000
T17	265.63	1.555	37	32.943	A	0.000	4.828	3.385	70.12	1.238	0.000
268.75-262.50					B	0.000	4.828		70.12	4.556	0.000
					C	0.000	4.828		70.12	15.544	0.000
T18	259.38	1.547	37	32.943	A	0.000	4.828	3.385	70.12	1.238	0.000
262.50-256.25					B	0.000	4.828		70.12	4.556	0.000
					C	0.000	4.828		70.12	15.544	0.000
T19	253.13	1.539	37	32.943	A	0.000	4.986	3.385	67.90	1.238	0.000
256.25-250.00					B	0.000	4.986		67.90	4.556	0.000
					C	0.000	4.986		67.90	15.544	0.000
T20	246.88	1.531	37	32.943	A	0.985	4.332	3.385	63.67	1.238	0.000
250.00-243.75					B	0.985	4.332		63.67	4.556	0.000
					C	0.985	4.332		63.67	15.544	0.000
T21	240.63	1.523	37	32.943	A	0.985	4.332	3.385	63.67	1.979	0.000
243.75-237.50					B	0.985	4.332		63.67	4.556	0.000
					C	0.985	4.332		63.67	21.484	0.000
T22	234.38	1.514	36	32.943	A	0.985	4.332	3.385	63.67	3.095	0.000
237.50-231.25					B	0.985	4.332		63.67	4.556	0.000
					C	0.985	4.332		63.67	30.394	0.000
T23	228.13	1.506	36	32.943	A	0.985	4.647	3.385	60.11	3.100	0.000
231.25-225.00					B	0.985	4.647		60.11	4.556	0.000
					C	0.985	4.647		60.11	30.394	0.000
T24	221.88	1.497	36	32.813	A	4.147	3.125	3.125	42.98	3.106	0.000
225.00-218.75					B	4.147	3.125		42.98	4.556	0.000
					C	4.147	3.125		42.98	30.394	0.000
T25	215.63	1.488	36	32.813	A	0.990	3.917	3.125	63.69	3.111	0.000
218.75-212.50					B	0.990	3.917		63.69	4.556	0.000
					C	0.990	3.917		63.69	30.394	0.000
T26	209.38	1.479	35	32.813	A	0.000	4.574	3.125	68.32	3.112	0.000
212.50-206.25					B	0.000	4.574		68.32	4.556	0.000
					C	0.000	4.574		68.32	30.394	0.000
T27	203.13	1.469	35	32.813	A	0.000	4.574	3.125	68.32	3.112	0.000
206.25-200.00					B	0.000	4.574		68.32	4.556	0.000
					C	0.000	4.574		68.32	30.394	0.000
T28	187.50	1.445	35	131.250	A	0.000	20.925	12.500	59.74	13.005	0.000
200.00-175.00					B	0.000	20.925		59.74	18.225	0.000
					C	0.000	20.925		59.74	124.350	0.000
T29	171.88	1.418	34	32.943	A	0.000	5.307	3.385	63.79	3.806	0.000
175.00-168.75					B	0.000	5.307		63.79	4.556	0.000
					C	0.000	5.307		63.79	31.087	0.000
T30	165.63	1.407	34	32.943	A	0.000	5.301	3.385	63.86	3.806	0.000
168.75-162.50					B	0.000	5.301		63.86	4.556	0.000
					C	0.000	5.301		63.86	31.087	0.000
T31	159.38	1.396	33	32.943	A	0.985	4.174	3.385	65.62	3.806	0.000
162.50-156.25					B	0.985	4.174		65.62	4.556	0.000
					C	0.985	4.174		65.62	31.087	0.000
T32	153.13	1.384	33	32.943	A	0.000	4.828	3.385	70.12	3.806	0.000
156.25-150.00					B	0.000	4.828		70.12	4.556	0.000
					C	0.000	4.828		70.12	31.087	0.000
T33	137.50	1.353	32	131.771	A	0.000	19.313	13.542	70.12	15.225	0.000
150.00-125.00					B	0.000	19.313		70.12	19.559	0.000
					C	0.000	19.313		70.12	126.015	0.000
T34	112.50	1.297	31	131.771	A	12.617	16.158	13.542	47.06	15.225	0.000
125.00-100.00					B	12.617	16.158		47.06	21.125	0.000
					C	12.617	16.158		47.06	127.125	0.000
T35	96.88	1.257	30	32.943	A	4.140	3.385	3.385	44.99	3.806	0.000
100.00-93.75					B	4.140	3.385		44.99	5.281	0.000

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
					C	4.140	3.385		44.99	31.781	0.000
T36	90.63	1.24	30	32.943	A	0.985	4.332	3.385	63.67	3.806	0.000
93.75-87.50					B	0.985	4.332		63.67	5.397	0.000
					C	0.985	4.332		63.67	31.781	0.000
T37	84.38	1.221	29	32.943	A	0.000	4.828	3.385	70.12	3.806	0.000
87.50-81.25					B	0.000	4.828		70.12	6.731	0.000
					C	0.000	4.828		70.12	31.781	0.000
T38	78.13	1.202	29	32.943	A	0.000	4.828	3.385	70.12	3.806	0.000
81.25-75.00					B	0.000	4.828		70.12	6.731	0.000
					C	0.000	4.828		70.12	31.781	0.000
T39	62.50	1.146	28	131.771	A	0.000	19.313	13.542	70.12	16.557	0.000
75.00-50.00					B	0.000	19.313		70.12	26.925	0.000
					C	0.000	19.313		70.12	127.125	0.000
T40	37.50	1.029	25	131.771	A	0.985	18.659	13.542	68.94	19.665	0.000
50.00-25.00					B	0.985	18.659		68.94	26.925	0.000
					C	0.985	18.659		68.94	127.125	0.000
T41 25.00-0.00	12.50	0.85	20	131.771	A	0.000	19.313	13.542	70.12	18.282	0.000
					B	0.000	19.313		70.12	23.694	0.000
					C	0.000	19.313		70.12	111.870	0.000

Tower Pressure - With Ice

$G_H = 0.850$

Section Elevation ft	z ft	K_Z	q_z psf	t_Z in	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
T1	365.63	1.663	9	1.9078	34.670	A	4.176	13.213	6.839	39.33	0.000	0.000
368.75-362.50						B	4.176	13.213		39.33	0.000	0.000
						C	4.176	13.213		39.33	1.231	0.000
T2	359.38	1.657	9	1.9046	34.666	A	4.812	13.195	6.832	37.94	0.000	0.000
362.50-356.25						B	4.812	13.195		37.94	0.000	0.000
						C	4.812	13.195		37.94	3.074	0.000
T3	353.13	1.651	9	1.9012	34.663	A	4.812	13.177	6.825	37.94	0.000	0.000
356.25-350.00						B	4.812	13.177		37.94	2.456	0.000
						C	4.812	13.177		37.94	3.070	0.000
T4	346.88	1.644	9	1.8978	34.789	A	4.804	13.409	7.079	38.87	0.000	0.000
350.00-343.75						B	4.804	13.409		38.87	9.825	0.000
						C	4.804	13.409		38.87	3.066	0.000
T5	340.63	1.638	9	1.8944	34.786	A	0.990	14.165	7.072	46.66	0.000	0.000
343.75-337.50						B	0.990	14.165		46.66	9.813	0.000
						C	0.990	14.165		46.66	3.062	0.000
T6	334.38	1.632	9	1.8909	34.782	A	0.000	14.803	7.064	47.72	0.000	0.000
337.50-331.25						B	0.000	14.803		47.72	9.801	0.000
						C	0.000	14.803		47.72	3.057	0.000
T7	328.13	1.625	9	1.8873	34.778	A	0.000	14.784	7.057	47.73	0.000	0.000
331.25-325.00						B	0.000	14.784		47.73	9.789	0.000
						C	0.000	14.784		47.73	3.053	0.000
T8	321.88	1.619	9	1.8837	34.905	A	0.000	15.170	7.310	48.18	3.592	0.000
325.00-318.75						B	0.000	15.170		48.18	9.776	0.000
						C	0.000	15.170		48.18	3.048	0.000
T9	315.63	1.612	9	1.8800	34.901	A	0.000	15.128	7.302	48.27	3.587	0.000
318.75-312.50						B	0.000	15.128		48.27	9.764	0.000
						C	0.000	15.128		48.27	3.044	0.000
T10	309.38	1.605	9	1.8762	34.897	A	0.000	15.108	7.294	48.28	3.583	0.000

Section Elevation ft	z ft	K_Z	q_z psf	t_Z in	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
312.50-306.25						B	0.000	15.108		48.28	9.751	0.000
						C	0.000	15.108		48.28	3.039	0.000
T11	303.13	1.598	9	1.8724	34.893	A	0.985	14.433	7.286	47.26	3.578	0.000
306.25-300.00						B	0.985	14.433		47.26	9.738	0.000
						C	0.985	14.433		47.26	3.034	0.000
T12	296.88	1.591	9	1.8685	34.889	A	4.770	13.466	7.278	39.91	3.573	0.000
300.00-293.75						B	4.770	13.466		39.91	18.505	0.000
						C	4.770	13.466		39.91	24.350	0.000
T13	290.63	1.584	9	1.8645	34.885	A	0.985	14.391	7.270	47.28	3.568	0.000
293.75-287.50						B	0.985	14.391		47.28	18.483	0.000
						C	0.985	14.391		47.28	24.337	0.000
T14	284.38	1.577	9	1.8605	34.881	A	0.000	14.866	7.261	48.85	3.563	0.000
287.50-281.25						B	0.000	14.866		48.85	18.461	0.000
						C	0.000	14.866		48.85	24.324	0.000
T15	278.13	1.57	9	1.8564	34.876	A	0.000	14.843	7.253	48.86	3.558	0.000
281.25-275.00						B	0.000	14.843		48.86	18.438	0.000
						C	0.000	14.843		48.86	24.310	0.000
T16	271.88	1.562	8	1.8522	34.872	A	0.000	14.821	7.244	48.88	3.553	0.000
275.00-268.75						B	0.000	14.821		48.88	18.414	0.000
						C	0.000	14.821		48.88	24.297	0.000
T17	265.63	1.555	8	1.8479	34.868	A	0.000	14.797	7.235	48.89	3.547	0.000
268.75-262.50						B	0.000	14.797		48.89	18.390	0.000
						C	0.000	14.797		48.89	24.283	0.000
T18	259.38	1.547	8	1.8435	34.863	A	0.000	14.774	7.226	48.91	3.542	0.000
262.50-256.25						B	0.000	14.774		48.91	18.366	0.000
						C	0.000	14.774		48.91	24.268	0.000
T19	253.13	1.539	8	1.8390	34.858	A	0.000	14.907	7.217	48.41	3.536	0.000
256.25-250.00						B	0.000	14.907		48.41	18.341	0.000
						C	0.000	14.907		48.41	24.254	0.000
T20	246.88	1.531	8	1.8344	34.854	A	0.985	14.228	7.207	47.37	3.530	0.000
250.00-243.75						B	0.985	14.228		47.37	18.315	0.000
						C	0.985	14.228		47.37	24.239	0.000
T21	240.63	1.523	8	1.8297	34.849	A	0.985	14.203	7.197	47.39	5.189	0.000
243.75-237.50						B	0.985	14.203		47.39	18.289	0.000
						C	0.985	14.203		47.39	32.720	0.000
T22	234.38	1.514	8	1.8249	34.844	A	0.985	14.177	7.187	47.40	7.675	0.000
237.50-231.25						B	0.985	14.177		47.40	18.263	0.000
						C	0.985	14.177		47.40	45.440	0.000
T23	228.13	1.506	8	1.8199	34.838	A	0.985	14.466	7.177	46.45	7.662	0.000
231.25-225.00						B	0.985	14.466		46.45	18.235	0.000
						C	0.985	14.466		46.45	45.414	0.000
T24	221.88	1.497	8	1.8149	34.703	A	4.147	12.926	6.906	40.45	7.650	0.000
225.00-218.75						B	4.147	12.926		40.45	18.207	0.000
						C	4.147	12.926		40.45	45.388	0.000
T25	215.63	1.488	8	1.8097	34.698	A	0.990	13.707	6.895	46.92	7.637	0.000
218.75-212.50						B	0.990	13.707		46.92	18.178	0.000
						C	0.990	13.707		46.92	45.360	0.000
T26	209.38	1.479	8	1.8044	34.692	A	0.000	14.335	6.884	48.02	7.623	0.000
212.50-206.25						B	0.000	14.335		48.02	18.149	0.000
						C	0.000	14.335		48.02	45.332	0.000
T27	203.13	1.469	8	1.7989	34.686	A	0.000	14.306	6.873	48.04	7.610	0.000
206.25-200.00						B	0.000	14.306		48.04	18.118	0.000
						C	0.000	14.306		48.04	45.303	0.000
T28	187.50	1.445	8	1.7846	138.686	A	0.000	65.192	27.372	41.99	32.636	0.000
200.00-175.00						B	0.000	65.192		41.99	72.155	0.000
						C	0.000	65.192		41.99	192.609	0.000
T29	171.88	1.418	8	1.7691	34.786	A	0.000	14.867	7.071	47.56	10.441	0.000
175.00-168.75						B	0.000	14.867		47.56	17.953	0.000
						C	0.000	14.867		47.56	48.051	0.000
T30	165.63	1.407	8	1.7626	34.779	A	0.000	14.811	7.057	47.65	10.416	0.000

Section Elevation ft	z ft	K_Z	q_z psf	t_Z in	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
168.75-162.50						B	0.000	14.811		47.65	17.916	0.000
						C	0.000	14.811		47.65	48.009	0.000
T31	159.38	1.396	8	1.7558	34.772	A	0.985	13.647	7.043	48.14	10.391	0.000
162.50-156.25						B	0.985	13.647		48.14	17.879	0.000
						C	0.985	13.647		48.14	47.965	0.000
T32	153.13	1.384	8	1.7488	34.764	A	0.000	14.263	7.029	49.28	10.364	0.000
156.25-150.00						B	0.000	14.263		49.28	17.840	0.000
						C	0.000	14.263		49.28	47.919	0.000
T33	137.50	1.353	7	1.7301	138.980	A	0.000	56.648	27.959	49.36	41.176	0.000
150.00-125.00						B	0.000	56.648		49.36	80.236	0.000
						C	0.000	56.648		49.36	198.043	0.000
T34	112.50	1.297	7	1.6957	138.836	A	12.617	52.752	27.673	42.33	40.661	0.000
125.00-100.00						B	12.617	52.752		42.33	90.038	0.000
						C	12.617	52.752		42.33	201.545	0.000
T35	96.88	1.257	7	1.6706	34.683	A	4.140	12.398	6.866	41.52	10.071	0.000
100.00-93.75						B	4.140	12.398		41.52	22.307	0.000
						C	4.140	12.398		41.52	50.191	0.000
T36 93.75-87.50	90.63	1.24	7	1.6595	34.671	A	0.985	13.284	6.843	47.95	10.029	0.000
						B	0.985	13.284		47.95	22.739	0.000
						C	0.985	13.284		47.95	50.105	0.000
T37 87.50-81.25	84.38	1.221	7	1.6476	34.659	A	0.000	13.717	6.818	49.70	9.985	0.000
						B	0.000	13.717		49.70	28.617	0.000
						C	0.000	13.717		49.70	50.013	0.000
T38 81.25-75.00	78.13	1.202	7	1.6350	34.646	A	0.000	13.649	6.792	49.76	9.938	0.000
						B	0.000	13.649		49.76	28.489	0.000
						C	0.000	13.649		49.76	49.915	0.000
T39 75.00-50.00	62.50	1.146	6	1.5989	138.433	A	0.000	53.817	26.866	49.92	44.378	0.000
						B	0.000	53.817		49.92	112.491	0.000
						C	0.000	53.817		49.92	198.539	0.000
T40 50.00-25.00	37.50	1.029	6	1.5193	138.101	A	0.985	51.445	26.202	49.98	54.609	0.000
						B	0.985	51.445		49.98	109.259	0.000
						C	0.985	51.445		49.98	196.069	0.000
T41 25.00-0.00	12.50	0.85	5	1.3612	137.443	A	0.000	48.688	24.885	51.11	48.229	0.000
						B	0.000	48.688		51.11	90.513	0.000
						C	0.000	48.688		51.11	168.232	0.000

Tower Pressure - Service

$G_H = 0.850$

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
T1	365.63	1.663	13	32.682	A	4.176	2.865	2.865	40.69	0.000	0.000
368.75-362.50					B	4.176	2.865		40.69	0.000	0.000
					C	4.176	2.865		40.69	0.278	0.000
T2	359.38	1.657	13	32.682	A	4.812	2.865	2.865	37.31	0.000	0.000
362.50-356.25					B	4.812	2.865		37.31	0.000	0.000
					C	4.812	2.865		37.31	0.694	0.000
T3	353.13	1.651	13	32.682	A	4.812	2.865	2.865	37.31	0.000	0.000
356.25-350.00					B	4.812	2.865		37.31	0.555	0.000
					C	4.812	2.865		37.31	0.694	0.000
T4	346.88	1.644	13	32.813	A	4.804	3.125	3.125	39.41	0.000	0.000
350.00-343.75					B	4.804	3.125		39.41	2.081	0.000

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
					C	4.804	3.125		39.41	0.694	0.000
T5	340.63	1.638	13	32.813	A	0.990	3.917	3.125	63.69	0.000	0.000
343.75-337.50					B	0.990	3.917		63.69	2.081	0.000
					C	0.990	3.917		63.69	0.694	0.000
T6	334.38	1.632	13	32.813	A	0.000	4.574	3.125	68.32	0.000	0.000
337.50-331.25					B	0.000	4.574		68.32	2.081	0.000
					C	0.000	4.574		68.32	0.694	0.000
T7	328.13	1.625	13	32.813	A	0.000	4.574	3.125	68.32	0.000	0.000
331.25-325.00					B	0.000	4.574		68.32	2.081	0.000
					C	0.000	4.574		68.32	0.694	0.000
T8	321.88	1.619	13	32.943	A	0.000	4.991	3.385	67.83	1.238	0.000
325.00-318.75					B	0.000	4.991		67.83	2.081	0.000
					C	0.000	4.991		67.83	0.694	0.000
T9	315.63	1.612	13	32.943	A	0.000	4.986	3.385	67.90	1.238	0.000
318.75-312.50					B	0.000	4.986		67.90	2.081	0.000
					C	0.000	4.986		67.90	0.694	0.000
T10	309.38	1.605	13	32.943	A	0.000	4.986	3.385	67.90	1.238	0.000
312.50-306.25					B	0.000	4.986		67.90	2.081	0.000
					C	0.000	4.986		67.90	0.694	0.000
T11	303.13	1.598	13	32.943	A	0.985	4.332	3.385	63.67	1.238	0.000
306.25-300.00					B	0.985	4.332		63.67	2.081	0.000
					C	0.985	4.332		63.67	0.694	0.000
T12	296.88	1.591	12	32.943	A	4.770	3.385	3.385	41.51	1.238	0.000
300.00-293.75					B	4.770	3.385		41.51	4.556	0.000
					C	4.770	3.385		41.51	15.544	0.000
T13	290.63	1.584	12	32.943	A	0.985	4.332	3.385	63.67	1.238	0.000
293.75-287.50					B	0.985	4.332		63.67	4.556	0.000
					C	0.985	4.332		63.67	15.544	0.000
T14	284.38	1.577	12	32.943	A	0.000	4.828	3.385	70.12	1.238	0.000
287.50-281.25					B	0.000	4.828		70.12	4.556	0.000
					C	0.000	4.828		70.12	15.544	0.000
T15	278.13	1.57	12	32.943	A	0.000	4.828	3.385	70.12	1.238	0.000
281.25-275.00					B	0.000	4.828		70.12	4.556	0.000
					C	0.000	4.828		70.12	15.544	0.000
T16	271.88	1.562	12	32.943	A	0.000	4.828	3.385	70.12	1.238	0.000
275.00-268.75					B	0.000	4.828		70.12	4.556	0.000
					C	0.000	4.828		70.12	15.544	0.000
T17	265.63	1.555	12	32.943	A	0.000	4.828	3.385	70.12	1.238	0.000
268.75-262.50					B	0.000	4.828		70.12	4.556	0.000
					C	0.000	4.828		70.12	15.544	0.000
T18	259.38	1.547	12	32.943	A	0.000	4.828	3.385	70.12	1.238	0.000
262.50-256.25					B	0.000	4.828		70.12	4.556	0.000
					C	0.000	4.828		70.12	15.544	0.000
T19	253.13	1.539	12	32.943	A	0.000	4.986	3.385	67.90	1.238	0.000
256.25-250.00					B	0.000	4.986		67.90	4.556	0.000
					C	0.000	4.986		67.90	15.544	0.000
T20	246.88	1.531	12	32.943	A	0.985	4.332	3.385	63.67	1.238	0.000
250.00-243.75					B	0.985	4.332		63.67	4.556	0.000
					C	0.985	4.332		63.67	15.544	0.000
T21	240.63	1.523	12	32.943	A	0.985	4.332	3.385	63.67	1.979	0.000
243.75-237.50					B	0.985	4.332		63.67	4.556	0.000
					C	0.985	4.332		63.67	21.484	0.000
T22	234.38	1.514	12	32.943	A	0.985	4.332	3.385	63.67	3.095	0.000
237.50-231.25					B	0.985	4.332		63.67	4.556	0.000
					C	0.985	4.332		63.67	30.394	0.000
T23	228.13	1.506	12	32.943	A	0.985	4.647	3.385	60.11	3.100	0.000
231.25-225.00					B	0.985	4.647		60.11	4.556	0.000
					C	0.985	4.647		60.11	30.394	0.000
T24	221.88	1.497	12	32.813	A	4.147	3.125	3.125	42.98	3.106	0.000
225.00-218.75					B	4.147	3.125		42.98	4.556	0.000

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
					C	4.147	3.125		42.98	30.394	0.000
T25	215.63	1.488	12	32.813	A	0.990	3.917	3.125	63.69	3.111	0.000
218.75-212.50					B	0.990	3.917		63.69	4.556	0.000
					C	0.990	3.917		63.69	30.394	0.000
T26	209.38	1.479	12	32.813	A	0.000	4.574	3.125	68.32	3.112	0.000
212.50-206.25					B	0.000	4.574		68.32	4.556	0.000
					C	0.000	4.574		68.32	30.394	0.000
T27	203.13	1.469	12	32.813	A	0.000	4.574	3.125	68.32	3.112	0.000
206.25-200.00					B	0.000	4.574		68.32	4.556	0.000
					C	0.000	4.574		68.32	30.394	0.000
T28	187.50	1.445	11	131.250	A	0.000	20.925	12.500	59.74	13.005	0.000
200.00-175.00					B	0.000	20.925		59.74	18.225	0.000
					C	0.000	20.925		59.74	124.350	0.000
T29	171.88	1.418	11	32.943	A	0.000	5.307	3.385	63.79	3.806	0.000
175.00-168.75					B	0.000	5.307		63.79	4.556	0.000
					C	0.000	5.307		63.79	31.087	0.000
T30	165.63	1.407	11	32.943	A	0.000	5.301	3.385	63.86	3.806	0.000
168.75-162.50					B	0.000	5.301		63.86	4.556	0.000
					C	0.000	5.301		63.86	31.087	0.000
T31	159.38	1.396	11	32.943	A	0.985	4.174	3.385	65.62	3.806	0.000
162.50-156.25					B	0.985	4.174		65.62	4.556	0.000
					C	0.985	4.174		65.62	31.087	0.000
T32	153.13	1.384	11	32.943	A	0.000	4.828	3.385	70.12	3.806	0.000
156.25-150.00					B	0.000	4.828		70.12	4.556	0.000
					C	0.000	4.828		70.12	31.087	0.000
T33	137.50	1.353	11	131.771	A	0.000	19.313	13.542	70.12	15.225	0.000
150.00-125.00					B	0.000	19.313		70.12	19.559	0.000
					C	0.000	19.313		70.12	126.015	0.000
T34	112.50	1.297	10	131.771	A	12.617	16.158	13.542	47.06	15.225	0.000
125.00-100.00					B	12.617	16.158		47.06	21.125	0.000
					C	12.617	16.158		47.06	127.125	0.000
T35	96.88	1.257	10	32.943	A	4.140	3.385	3.385	44.99	3.806	0.000
100.00-93.75					B	4.140	3.385		44.99	5.281	0.000
					C	4.140	3.385		44.99	31.781	0.000
T36	90.63	1.24	10	32.943	A	0.985	4.332	3.385	63.67	3.806	0.000
93.75-87.50					B	0.985	4.332		63.67	5.397	0.000
					C	0.985	4.332		63.67	31.781	0.000
T37	84.38	1.221	10	32.943	A	0.000	4.828	3.385	70.12	3.806	0.000
87.50-81.25					B	0.000	4.828		70.12	6.731	0.000
					C	0.000	4.828		70.12	31.781	0.000
T38	78.13	1.202	9	32.943	A	0.000	4.828	3.385	70.12	3.806	0.000
81.25-75.00					B	0.000	4.828		70.12	6.731	0.000
					C	0.000	4.828		70.12	31.781	0.000
T39	62.50	1.146	9	131.771	A	0.000	19.313	13.542	70.12	16.557	0.000
75.00-50.00					B	0.000	19.313		70.12	26.925	0.000
					C	0.000	19.313		70.12	127.125	0.000
T40	37.50	1.029	8	131.771	A	0.985	18.659	13.542	68.94	19.665	0.000
50.00-25.00					B	0.985	18.659		68.94	26.925	0.000
					C	0.985	18.659		68.94	127.125	0.000
T41 25.00-0.00	12.50	0.85	7	131.771	A	0.000	19.313	13.542	70.12	18.282	0.000
					B	0.000	19.313		70.12	23.694	0.000
					C	0.000	19.313		70.12	111.870	0.000

Tower Forces - No Ice - Wind Normal To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
T1	0.00	0.68	A	0.215	2.545	40	1	1	5.830	0.51	81.41	C
368.75-362.50			B	0.215	2.545		1	1	5.830			
			C	0.215	2.545		1	1	5.830			
T2	0.00	1.09	A	0.235	2.484	40	1	1	6.478	0.56	89.22	C
362.50-356.25			B	0.235	2.484		1	1	6.478			
			C	0.235	2.484		1	1	6.478			
T3	0.01	1.09	A	0.235	2.484	40	1	1	6.478	0.57	90.68	C
356.25-350.00			B	0.235	2.484		1	1	6.478			
			C	0.235	2.484		1	1	6.478			
T4	0.01	0.77	A	0.242	2.463	39	1	1	6.608	0.60	96.25	C
350.00-343.75		TA 0.79	B	0.242	2.463		1	1	6.608			
			C	0.242	2.463		1	1	6.608			
T5	0.01	0.61	A	0.15	2.773	39	1	1	3.189	0.35	56.17	C
343.75-337.50			B	0.15	2.773		1	1	3.189			
			C	0.15	2.773		1	1	3.189			
T6	0.01	0.54	A	0.139	2.811	39	1	1	2.569	0.30	47.30	C
337.50-331.25			B	0.139	2.811		1	1	2.569			
			C	0.139	2.811		1	1	2.569			
T7	0.01	0.54	A	0.139	2.811	39	1	1	2.570	0.29	47.13	C
331.25-325.00			B	0.139	2.811		1	1	2.570			
			C	0.139	2.811		1	1	2.570			
T8	0.02	0.64	A	0.152	2.766	39	1	1	2.768	0.33	53.15	C
325.00-318.75			B	0.152	2.766		1	1	2.768			
			C	0.152	2.766		1	1	2.768			
T9	0.02	0.64	A	0.151	2.767	39	1	1	2.766	0.33	52.91	C
318.75-312.50			B	0.151	2.767		1	1	2.766			
			C	0.151	2.767		1	1	2.766			
T10	0.02	0.64	A	0.151	2.767	39	1	1	2.767	0.33	52.71	C
312.50-306.25			B	0.151	2.767		1	1	2.767			
			C	0.151	2.767		1	1	2.767			
T11	0.02	0.71	A	0.161	2.73	38	1	1	3.389	0.38	60.80	C
306.25-300.00			B	0.161	2.73		1	1	3.389			
			C	0.161	2.73		1	1	3.389			
T12	0.12	0.85	A	0.248	2.445	38	1	1	6.704	0.95	151.58	C
300.00-293.75		TA 0.79	B	0.248	2.445		1	1	6.704			
			C	0.248	2.445		1	1	6.704			
T13	0.12	0.71	A	0.161	2.73	38	1	1	3.391	0.71	114.04	C
293.75-287.50			B	0.161	2.73		1	1	3.391			
			C	0.161	2.73		1	1	3.391			
T14	0.12	0.61	A	0.147	2.784	38	1	1	2.680	0.65	104.26	C
287.50-281.25			B	0.147	2.784		1	1	2.680			
			C	0.147	2.784		1	1	2.680			
T15	0.12	0.61	A	0.147	2.784	38	1	1	2.681	0.65	103.80	C
281.25-275.00			B	0.147	2.784		1	1	2.681			
			C	0.147	2.784		1	1	2.681			
T16	0.12	0.61	A	0.147	2.784	37	1	1	2.682	0.65	103.32	C
275.00-268.75			B	0.147	2.784		1	1	2.682			
			C	0.147	2.784		1	1	2.682			
T17	0.12	0.61	A	0.147	2.784	37	1	1	2.684	0.64	102.84	C
268.75-262.50			B	0.147	2.784		1	1	2.684			
			C	0.147	2.784		1	1	2.684			
T18	0.12	0.61	A	0.147	2.784	37	1	1	2.685	0.64	102.34	C
262.50-256.25			B	0.147	2.784		1	1	2.685			
			C	0.147	2.784		1	1	2.685			
T19	0.12	0.64	A	0.151	2.767	37	1	1	2.779	0.64	102.88	C
256.25-250.00			B	0.151	2.767		1	1	2.779			
			C	0.151	2.767		1	1	2.779			
T20	0.12	0.71	A	0.161	2.73	37	1	1	3.401	0.69	110.31	C
250.00-243.75			B	0.161	2.73		1	1	3.401			
			C	0.161	2.73		1	1	3.401			

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
T21	0.17	0.71	A	0.161	2.73	37	1	1	3.402	0.82	131.13	C
243.75-237.50			B	0.161	2.73		1	1	3.402			
			C	0.161	2.73		1	1	3.402			
T22	0.23	0.71	A	0.161	2.73	36	1	1	3.403	1.01	162.35	C
237.50-231.25			B	0.161	2.73		1	1	3.403			
			C	0.161	2.73		1	1	3.403			
T23	0.23	0.77	A	0.171	2.696	36	1	1	3.591	1.02	163.37	C
231.25-225.00			B	0.171	2.696		1	1	3.591			
			C	0.171	2.696		1	1	3.591			
T24	0.23	0.95	A	0.222	2.525	36	1	1	5.953	1.18	188.58	C
225.00-218.75		TA 0.79	B	0.222	2.525		1	1	5.953			
			C	0.222	2.525		1	1	5.953			
T25	0.23	0.61	A	0.15	2.773	36	1	1	3.212	0.99	157.74	C
218.75-212.50			B	0.15	2.773		1	1	3.212			
			C	0.15	2.773		1	1	3.212			
T26	0.23	0.54	A	0.139	2.811	35	1	1	2.591	0.91	145.32	C
212.50-206.25			B	0.139	2.811		1	1	2.591			
			C	0.139	2.811		1	1	2.591			
T27	0.23	0.54	A	0.139	2.811	35	1	1	2.591	0.90	144.40	C
206.25-200.00			B	0.139	2.811		1	1	2.591			
			C	0.139	2.811		1	1	2.591			
T28	0.94	2.28	A	0.159	2.737	35	1	1	11.897	3.71	148.37	C
200.00-175.00			B	0.159	2.737		1	1	11.897			
			C	0.159	2.737		1	1	11.897			
T29	0.24	0.69	A	0.161	2.731	34	1	1	2.990	0.92	147.34	C
175.00-168.75			B	0.161	2.731		1	1	2.990			
			C	0.161	2.731		1	1	2.990			
T30	0.24	0.69	A	0.161	2.732	34	1	1	2.989	0.91	146.18	C
168.75-162.50			B	0.161	2.732		1	1	2.989			
			C	0.161	2.732		1	1	2.989			
T31	0.24	0.69	A	0.157	2.747	33	1	1	3.332	0.93	149.52	C
162.50-156.25			B	0.157	2.747		1	1	3.332			
			C	0.157	2.747		1	1	3.332			
T32	0.24	0.61	A	0.147	2.784	33	1	1	2.715	0.88	141.06	C
156.25-150.00			B	0.147	2.784		1	1	2.715			
			C	0.147	2.784		1	1	2.715			
T33	0.96	2.45	A	0.147	2.784	32	1	1	10.885	3.50	139.96	C
150.00-125.00			B	0.147	2.784		1	1	10.885			
			C	0.147	2.784		1	1	10.885			
T34	0.98	2.84	A	0.218	2.536	31	1	1	21.936	4.07	162.66	C
125.00-100.00			B	0.218	2.536		1	1	21.936			
			C	0.218	2.536		1	1	21.936			
T35	0.24	1.03	A	0.228	2.504	30	1	1	6.103	1.02	163.26	C
100.00-93.75		TA 0.79	B	0.228	2.504		1	1	6.103			
			C	0.228	2.504		1	1	6.103			
T36	0.24	0.71	A	0.161	2.73	30	1	1	3.449	0.86	137.55	C
93.75-87.50			B	0.161	2.73		1	1	3.449			
			C	0.161	2.73		1	1	3.449			
T37	0.25	0.61	A	0.147	2.784	29	1	1	2.739	0.82	131.54	C
87.50-81.25			B	0.147	2.784		1	1	2.739			
			C	0.147	2.784		1	1	2.739			
T38	0.25	0.61	A	0.147	2.784	29	1	1	2.739	0.81	129.43	C
81.25-75.00			B	0.147	2.784		1	1	2.739			
			C	0.147	2.784		1	1	2.739			
T39	1.01	2.45	A	0.147	2.784	28	1	1	10.954	3.11	124.24	C
75.00-50.00			B	0.147	2.784		1	1	10.954			
			C	0.147	2.784		1	1	10.954			
T40	1.02	2.47	A	0.149	2.775	25	1	1	11.573	2.86	114.49	C
50.00-25.00			B	0.149	2.775		1	1	11.573			
			C	0.149	2.775		1	1	11.573			

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
T41	0.91	2.45	A	0.147	2.784	20	1	1	10.954	2.13	85.14	C
25.00-0.00			B	0.147	2.784		1	1	10.954			
			C	0.147	2.784		1	1	10.954			
Sum Weight:	10.55	42.50								44.13		

Tower Forces - No Ice - Wind 60 To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
T1	0.00	0.68	A	0.215	2.545	40	0.8	1	4.995	0.44	69.87	C
368.75-362.50			B	0.215	2.545		0.8	1	4.995			
			C	0.215	2.545		0.8	1	4.995			
T2	0.00	1.09	A	0.235	2.484	40	0.8	1	5.516	0.48	76.30	C
362.50-356.25			B	0.235	2.484		0.8	1	5.516			
			C	0.235	2.484		0.8	1	5.516			
T3	0.01	1.09	A	0.235	2.484	40	0.8	1	5.516	0.49	77.81	C
356.25-350.00			B	0.235	2.484		0.8	1	5.516			
			C	0.235	2.484		0.8	1	5.516			
T4	0.01	0.77	A	0.242	2.463	39	0.8	1	5.647	0.52	83.55	C
350.00-343.75		TA 0.79	B	0.242	2.463		0.8	1	5.647			
			C	0.242	2.463		0.8	1	5.647			
T5	0.01	0.61	A	0.15	2.773	39	0.8	1	2.991	0.33	53.24	C
343.75-337.50			B	0.15	2.773		0.8	1	2.991			
			C	0.15	2.773		0.8	1	2.991			
T6	0.01	0.54	A	0.139	2.811	39	0.8	1	2.569	0.30	47.30	C
337.50-331.25			B	0.139	2.811		0.8	1	2.569			
			C	0.139	2.811		0.8	1	2.569			
T7	0.01	0.54	A	0.139	2.811	39	0.8	1	2.570	0.29	47.13	C
331.25-325.00			B	0.139	2.811		0.8	1	2.570			
			C	0.139	2.811		0.8	1	2.570			
T8	0.02	0.64	A	0.152	2.766	39	0.8	1	2.768	0.33	53.15	C
325.00-318.75			B	0.152	2.766		0.8	1	2.768			
			C	0.152	2.766		0.8	1	2.768			
T9	0.02	0.64	A	0.151	2.767	39	0.8	1	2.766	0.33	52.91	C
318.75-312.50			B	0.151	2.767		0.8	1	2.766			
			C	0.151	2.767		0.8	1	2.766			
T10	0.02	0.64	A	0.151	2.767	39	0.8	1	2.767	0.33	52.71	C
312.50-306.25			B	0.151	2.767		0.8	1	2.767			
			C	0.151	2.767		0.8	1	2.767			
T11	0.02	0.71	A	0.161	2.73	38	0.8	1	3.192	0.36	58.00	C
306.25-300.00			B	0.161	2.73		0.8	1	3.192			
			C	0.161	2.73		0.8	1	3.192			
T12	0.12	0.85	A	0.248	2.445	38	0.8	1	5.750	0.87	139.46	C
300.00-293.75		TA 0.79	B	0.248	2.445		0.8	1	5.750			
			C	0.248	2.445		0.8	1	5.750			
T13	0.12	0.71	A	0.161	2.73	38	0.8	1	3.194	0.70	111.25	C
293.75-287.50			B	0.161	2.73		0.8	1	3.194			
			C	0.161	2.73		0.8	1	3.194			
T14	0.12	0.61	A	0.147	2.784	38	0.8	1	2.680	0.65	104.26	C
287.50-281.25			B	0.147	2.784		0.8	1	2.680			
			C	0.147	2.784		0.8	1	2.680			
T15	0.12	0.61	A	0.147	2.784	38	0.8	1	2.681	0.65	103.80	C

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
281.25-275.00			B	0.147	2.784		0.8	1	2.681			
			C	0.147	2.784		0.8	1	2.681			
T16	0.12	0.61	A	0.147	2.784	37	0.8	1	2.682	0.65	103.32	C
275.00-268.75			B	0.147	2.784		0.8	1	2.682			
			C	0.147	2.784		0.8	1	2.682			
T17	0.12	0.61	A	0.147	2.784	37	0.8	1	2.684	0.64	102.84	C
268.75-262.50			B	0.147	2.784		0.8	1	2.684			
			C	0.147	2.784		0.8	1	2.684			
T18	0.12	0.61	A	0.147	2.784	37	0.8	1	2.685	0.64	102.34	C
262.50-256.25			B	0.147	2.784		0.8	1	2.685			
			C	0.147	2.784		0.8	1	2.685			
T19	0.12	0.64	A	0.151	2.767	37	0.8	1	2.779	0.64	102.88	C
256.25-250.00			B	0.151	2.767		0.8	1	2.779			
			C	0.151	2.767		0.8	1	2.779			
T20	0.12	0.71	A	0.161	2.73	37	0.8	1	3.203	0.67	107.62	C
250.00-243.75			B	0.161	2.73		0.8	1	3.203			
			C	0.161	2.73		0.8	1	3.203			
T21	0.17	0.71	A	0.161	2.73	37	0.8	1	3.205	0.80	128.45	C
243.75-237.50			B	0.161	2.73		0.8	1	3.205			
			C	0.161	2.73		0.8	1	3.205			
T22	0.23	0.71	A	0.161	2.73	36	0.8	1	3.206	1.00	159.69	C
237.50-231.25			B	0.161	2.73		0.8	1	3.206			
			C	0.161	2.73		0.8	1	3.206			
T23	0.23	0.77	A	0.171	2.696	36	0.8	1	3.394	1.00	160.76	C
231.25-225.00			B	0.171	2.696		0.8	1	3.394			
			C	0.171	2.696		0.8	1	3.394			
T24	0.23	0.95	A	0.222	2.525	36	0.8	1	5.124	1.11	178.36	C
225.00-218.75		TA 0.79	B	0.222	2.525		0.8	1	5.124			
			C	0.222	2.525		0.8	1	5.124			
T25	0.23	0.61	A	0.15	2.773	36	0.8	1	3.014	0.97	155.08	C
218.75-212.50			B	0.15	2.773		0.8	1	3.014			
			C	0.15	2.773		0.8	1	3.014			
T26	0.23	0.54	A	0.139	2.811	35	0.8	1	2.591	0.91	145.32	C
212.50-206.25			B	0.139	2.811		0.8	1	2.591			
			C	0.139	2.811		0.8	1	2.591			
T27	0.23	0.54	A	0.139	2.811	35	0.8	1	2.591	0.90	144.40	C
206.25-200.00			B	0.139	2.811		0.8	1	2.591			
			C	0.139	2.811		0.8	1	2.591			
T28	0.94	2.28	A	0.159	2.737	35	0.8	1	11.897	3.71	148.37	C
200.00-175.00			B	0.159	2.737		0.8	1	11.897			
			C	0.159	2.737		0.8	1	11.897			
T29	0.24	0.69	A	0.161	2.731	34	0.8	1	2.990	0.92	147.34	C
175.00-168.75			B	0.161	2.731		0.8	1	2.990			
			C	0.161	2.731		0.8	1	2.990			
T30	0.24	0.69	A	0.161	2.732	34	0.8	1	2.989	0.91	146.18	C
168.75-162.50			B	0.161	2.732		0.8	1	2.989			
			C	0.161	2.732		0.8	1	2.989			
T31	0.24	0.69	A	0.157	2.747	33	0.8	1	3.135	0.92	147.05	C
162.50-156.25			B	0.157	2.747		0.8	1	3.135			
			C	0.157	2.747		0.8	1	3.135			
T32	0.24	0.61	A	0.147	2.784	33	0.8	1	2.715	0.88	141.06	C
156.25-150.00			B	0.147	2.784		0.8	1	2.715			
			C	0.147	2.784		0.8	1	2.715			
T33	0.96	2.45	A	0.147	2.784	32	0.8	1	10.885	3.50	139.96	C
150.00-125.00			B	0.147	2.784		0.8	1	10.885			
			C	0.147	2.784		0.8	1	10.885			
T34	0.98	2.84	A	0.218	2.536	31	0.8	1	19.412	3.90	155.89	C
125.00-100.00			B	0.218	2.536		0.8	1	19.412			
			C	0.218	2.536		0.8	1	19.412			
T35	0.24	1.03	A	0.228	2.504	30	0.8	1	5.275	0.97	154.76	C

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
100.00-93.75		TA 0.79	B	0.228	2.504		0.8	1	5.275			
			C	0.228	2.504		0.8	1	5.275			
T36	0.24	0.71	A	0.161	2.73	30	0.8	1	3.252	0.85	135.37	C
93.75-87.50			B	0.161	2.73		0.8	1	3.252			
			C	0.161	2.73		0.8	1	3.252			
T37	0.25	0.61	A	0.147	2.784	29	0.8	1	2.739	0.82	131.54	C
87.50-81.25			B	0.147	2.784		0.8	1	2.739			
			C	0.147	2.784		0.8	1	2.739			
T38	0.25	0.61	A	0.147	2.784	29	0.8	1	2.739	0.81	129.43	C
81.25-75.00			B	0.147	2.784		0.8	1	2.739			
			C	0.147	2.784		0.8	1	2.739			
T39	1.01	2.45	A	0.147	2.784	28	0.8	1	10.954	3.11	124.24	C
75.00-50.00			B	0.147	2.784		0.8	1	10.954			
			C	0.147	2.784		0.8	1	10.954			
T40	1.02	2.47	A	0.149	2.775	25	0.8	1	11.376	2.85	114.03	C
50.00-25.00			B	0.149	2.775		0.8	1	11.376			
			C	0.149	2.775		0.8	1	11.376			
T41	0.91	2.45	A	0.147	2.784	20	0.8	1	10.954	2.13	85.14	C
25.00-0.00			B	0.147	2.784		0.8	1	10.954			
			C	0.147	2.784		0.8	1	10.954			
Sum Weight:	10.55	42.50								43.28		

Tower Forces - No Ice - Wind 90 To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
T1	0.00	0.68	A	0.215	2.545	40	0.85	1	5.204	0.45	72.76	C
368.75-362.50			B	0.215	2.545		0.85	1	5.204			
			C	0.215	2.545		0.85	1	5.204			
T2	0.00	1.09	A	0.235	2.484	40	0.85	1	5.756	0.50	79.53	C
362.50-356.25			B	0.235	2.484		0.85	1	5.756			
			C	0.235	2.484		0.85	1	5.756			
T3	0.01	1.09	A	0.235	2.484	40	0.85	1	5.756	0.51	81.03	C
356.25-350.00			B	0.235	2.484		0.85	1	5.756			
			C	0.235	2.484		0.85	1	5.756			
T4	0.01	0.77	A	0.242	2.463	39	0.85	1	5.887	0.54	86.72	C
350.00-343.75		TA 0.79	B	0.242	2.463		0.85	1	5.887			
			C	0.242	2.463		0.85	1	5.887			
T5	0.01	0.61	A	0.15	2.773	39	0.85	1	3.041	0.34	53.97	C
343.75-337.50			B	0.15	2.773		0.85	1	3.041			
			C	0.15	2.773		0.85	1	3.041			
T6	0.01	0.54	A	0.139	2.811	39	0.85	1	2.569	0.30	47.30	C
337.50-331.25			B	0.139	2.811		0.85	1	2.569			
			C	0.139	2.811		0.85	1	2.569			
T7	0.01	0.54	A	0.139	2.811	39	0.85	1	2.570	0.29	47.13	C
331.25-325.00			B	0.139	2.811		0.85	1	2.570			
			C	0.139	2.811		0.85	1	2.570			
T8	0.02	0.64	A	0.152	2.766	39	0.85	1	2.768	0.33	53.15	C
325.00-318.75			B	0.152	2.766		0.85	1	2.768			
			C	0.152	2.766		0.85	1	2.768			
T9	0.02	0.64	A	0.151	2.767	39	0.85	1	2.766	0.33	52.91	C
318.75-312.50			B	0.151	2.767		0.85	1	2.766			

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
			C	0.151	2.767		0.85	1	2.766			
T10	0.02	0.64	A	0.151	2.767	39	0.85	1	2.767	0.33	52.71	C
312.50-306.25			B	0.151	2.767		0.85	1	2.767			
			C	0.151	2.767		0.85	1	2.767			
T11	0.02	0.71	A	0.161	2.73	38	0.85	1	3.241	0.37	58.70	C
306.25-300.00			B	0.161	2.73		0.85	1	3.241			
			C	0.161	2.73		0.85	1	3.241			
T12	0.12	0.85	A	0.248	2.445	38	0.85	1	5.988	0.89	142.49	C
300.00-293.75		TA 0.79	B	0.248	2.445		0.85	1	5.988			
			C	0.248	2.445		0.85	1	5.988			
T13	0.12	0.71	A	0.161	2.73	38	0.85	1	3.243	0.70	111.95	C
293.75-287.50			B	0.161	2.73		0.85	1	3.243			
			C	0.161	2.73		0.85	1	3.243			
T14	0.12	0.61	A	0.147	2.784	38	0.85	1	2.680	0.65	104.26	C
287.50-281.25			B	0.147	2.784		0.85	1	2.680			
			C	0.147	2.784		0.85	1	2.680			
T15	0.12	0.61	A	0.147	2.784	38	0.85	1	2.681	0.65	103.80	C
281.25-275.00			B	0.147	2.784		0.85	1	2.681			
			C	0.147	2.784		0.85	1	2.681			
T16	0.12	0.61	A	0.147	2.784	37	0.85	1	2.682	0.65	103.32	C
275.00-268.75			B	0.147	2.784		0.85	1	2.682			
			C	0.147	2.784		0.85	1	2.682			
T17	0.12	0.61	A	0.147	2.784	37	0.85	1	2.684	0.64	102.84	C
268.75-262.50			B	0.147	2.784		0.85	1	2.684			
			C	0.147	2.784		0.85	1	2.684			
T18	0.12	0.61	A	0.147	2.784	37	0.85	1	2.685	0.64	102.34	C
262.50-256.25			B	0.147	2.784		0.85	1	2.685			
			C	0.147	2.784		0.85	1	2.685			
T19	0.12	0.64	A	0.151	2.767	37	0.85	1	2.779	0.64	102.88	C
256.25-250.00			B	0.151	2.767		0.85	1	2.779			
			C	0.151	2.767		0.85	1	2.779			
T20	0.12	0.71	A	0.161	2.73	37	0.85	1	3.253	0.68	108.30	C
250.00-243.75			B	0.161	2.73		0.85	1	3.253			
			C	0.161	2.73		0.85	1	3.253			
T21	0.17	0.71	A	0.161	2.73	37	0.85	1	3.254	0.81	129.12	C
243.75-237.50			B	0.161	2.73		0.85	1	3.254			
			C	0.161	2.73		0.85	1	3.254			
T22	0.23	0.71	A	0.161	2.73	36	0.85	1	3.256	1.00	160.35	C
237.50-231.25			B	0.161	2.73		0.85	1	3.256			
			C	0.161	2.73		0.85	1	3.256			
T23	0.23	0.77	A	0.171	2.696	36	0.85	1	3.443	1.01	161.41	C
231.25-225.00			B	0.171	2.696		0.85	1	3.443			
			C	0.171	2.696		0.85	1	3.443			
T24	0.23	0.95	A	0.222	2.525	36	0.85	1	5.331	1.13	180.91	C
225.00-218.75		TA 0.79	B	0.222	2.525		0.85	1	5.331			
			C	0.222	2.525		0.85	1	5.331			
T25	0.23	0.61	A	0.15	2.773	36	0.85	1	3.064	0.97	155.74	C
218.75-212.50			B	0.15	2.773		0.85	1	3.064			
			C	0.15	2.773		0.85	1	3.064			
T26	0.23	0.54	A	0.139	2.811	35	0.85	1	2.591	0.91	145.32	C
212.50-206.25			B	0.139	2.811		0.85	1	2.591			
			C	0.139	2.811		0.85	1	2.591			
T27	0.23	0.54	A	0.139	2.811	35	0.85	1	2.591	0.90	144.40	C
206.25-200.00			B	0.139	2.811		0.85	1	2.591			
			C	0.139	2.811		0.85	1	2.591			
T28	0.94	2.28	A	0.159	2.737	35	0.85	1	11.897	3.71	148.37	C
200.00-175.00			B	0.159	2.737		0.85	1	11.897			
			C	0.159	2.737		0.85	1	11.897			
T29	0.24	0.69	A	0.161	2.731	34	0.85	1	2.990	0.92	147.34	C
175.00-168.75			B	0.161	2.731		0.85	1	2.990			

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
			C	0.161	2.731		0.85	1	2.990			
T30	0.24	0.69	A	0.161	2.732	34	0.85	1	2.989	0.91	146.18	C
168.75-162.50			B	0.161	2.732		0.85	1	2.989			
			C	0.161	2.732		0.85	1	2.989			
T31	0.24	0.69	A	0.157	2.747	33	0.85	1	3.185	0.92	147.67	C
162.50-156.25			B	0.157	2.747		0.85	1	3.185			
			C	0.157	2.747		0.85	1	3.185			
T32	0.24	0.61	A	0.147	2.784	33	0.85	1	2.715	0.88	141.06	C
156.25-150.00			B	0.147	2.784		0.85	1	2.715			
			C	0.147	2.784		0.85	1	2.715			
T33	0.96	2.45	A	0.147	2.784	32	0.85	1	10.885	3.50	139.96	C
150.00-125.00			B	0.147	2.784		0.85	1	10.885			
			C	0.147	2.784		0.85	1	10.885			
T34	0.98	2.84	A	0.218	2.536	31	0.85	1	20.043	3.94	157.58	C
125.00-100.00			B	0.218	2.536		0.85	1	20.043			
			C	0.218	2.536		0.85	1	20.043			
T35	0.24	1.03	A	0.228	2.504	30	0.85	1	5.482	0.98	156.89	C
100.00-93.75		TA 0.79	B	0.228	2.504		0.85	1	5.482			
			C	0.228	2.504		0.85	1	5.482			
T36	0.24	0.71	A	0.161	2.73	30	0.85	1	3.301	0.85	135.91	C
93.75-87.50			B	0.161	2.73		0.85	1	3.301			
			C	0.161	2.73		0.85	1	3.301			
T37	0.25	0.61	A	0.147	2.784	29	0.85	1	2.739	0.82	131.54	C
87.50-81.25			B	0.147	2.784		0.85	1	2.739			
			C	0.147	2.784		0.85	1	2.739			
T38	0.25	0.61	A	0.147	2.784	29	0.85	1	2.739	0.81	129.43	C
81.25-75.00			B	0.147	2.784		0.85	1	2.739			
			C	0.147	2.784		0.85	1	2.739			
T39	1.01	2.45	A	0.147	2.784	28	0.85	1	10.954	3.11	124.24	C
75.00-50.00			B	0.147	2.784		0.85	1	10.954			
			C	0.147	2.784		0.85	1	10.954			
T40	1.02	2.47	A	0.149	2.775	25	0.85	1	11.425	2.85	114.15	C
50.00-25.00			B	0.149	2.775		0.85	1	11.425			
			C	0.149	2.775		0.85	1	11.425			
T41	0.91	2.45	A	0.147	2.784	20	0.85	1	10.954	2.13	85.14	C
25.00-0.00			B	0.147	2.784		0.85	1	10.954			
			C	0.147	2.784		0.85	1	10.954			
Sum Weight:	10.55	42.50								43.49		

Tower Forces - With Ice - Wind Normal To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
T1	0.02	1.74	A	0.502	1.898	9	1	1	13.238	0.20	31.66	C
368.75-362.50			B	0.502	1.898		1	1	13.238			
			C	0.502	1.898		1	1	13.238			
T2	0.05	2.42	A	0.519	1.876	9	1	1	13.992	0.21	33.99	C
362.50-356.25			B	0.519	1.876		1	1	13.992			
			C	0.519	1.876		1	1	13.992			
T3	0.08	2.42	A	0.519	1.877	9	1	1	13.976	0.22	35.28	C
356.25-350.00			B	0.519	1.877		1	1	13.976			
			C	0.519	1.877		1	1	13.976			

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
T4	0.17	1.87	A	0.524	1.871	9	1	1	14.163	0.25	39.72	C
350.00-343.75		TA 2.41	B	0.524	1.871		1	1	14.163			
			C	0.524	1.871		1	1	14.163			
T5	0.17	1.34	A	0.436	1.998	9	1	1	10.231	0.21	33.58	C
343.75-337.50			B	0.436	1.998		1	1	10.231			
			C	0.436	1.998		1	1	10.231			
T6	0.17	1.15	A	0.426	2.016	9	1	1	9.588	0.20	32.25	C
337.50-331.25			B	0.426	2.016		1	1	9.588			
			C	0.426	2.016		1	1	9.588			
T7	0.17	1.15	A	0.425	2.016	9	1	1	9.572	0.20	32.09	C
331.25-325.00			B	0.425	2.016		1	1	9.572			
			C	0.425	2.016		1	1	9.572			
T8	0.23	1.27	A	0.435	2	9	1	1	9.890	0.22	34.80	C
325.00-318.75			B	0.435	2		1	1	9.890			
			C	0.435	2		1	1	9.890			
T9	0.23	1.27	A	0.433	2.002	9	1	1	9.854	0.22	34.60	C
318.75-312.50			B	0.433	2.002		1	1	9.854			
			C	0.433	2.002		1	1	9.854			
T10	0.23	1.27	A	0.433	2.002	9	1	1	9.837	0.22	34.42	C
312.50-306.25			B	0.433	2.002		1	1	9.837			
			C	0.433	2.002		1	1	9.837			
T11	0.23	1.45	A	0.442	1.987	9	1	1	10.444	0.22	35.33	C
306.25-300.00			B	0.442	1.987		1	1	10.444			
			C	0.442	1.987		1	1	10.444			
T12	0.92	1.94	A	0.523	1.872	9	1	1	14.163	0.36	57.31	C
300.00-293.75		TA 2.38	B	0.523	1.872		1	1	14.163			
			C	0.523	1.872		1	1	14.163			
T13	0.92	1.45	A	0.441	1.989	9	1	1	10.409	0.34	54.67	C
293.75-287.50			B	0.441	1.989		1	1	10.409			
			C	0.441	1.989		1	1	10.409			
T14	0.92	1.22	A	0.426	2.014	9	1	1	9.632	0.34	53.67	C
287.50-281.25			B	0.426	2.014		1	1	9.632			
			C	0.426	2.014		1	1	9.632			
T15	0.92	1.22	A	0.426	2.016	9	1	1	9.614	0.33	53.39	C
281.25-275.00			B	0.426	2.016		1	1	9.614			
			C	0.426	2.016		1	1	9.614			
T16	0.92	1.22	A	0.425	2.017	8	1	1	9.595	0.33	53.11	C
275.00-268.75			B	0.425	2.017		1	1	9.595			
			C	0.425	2.017		1	1	9.595			
T17	0.92	1.22	A	0.424	2.018	8	1	1	9.576	0.33	52.82	C
268.75-262.50			B	0.424	2.018		1	1	9.576			
			C	0.424	2.018		1	1	9.576			
T18	0.91	1.21	A	0.424	2.019	8	1	1	9.556	0.33	52.53	C
262.50-256.25			B	0.424	2.019		1	1	9.556			
			C	0.424	2.019		1	1	9.556			
T19	0.91	1.25	A	0.428	2.012	8	1	1	9.669	0.33	52.21	C
256.25-250.00			B	0.428	2.012		1	1	9.669			
			C	0.428	2.012		1	1	9.669			
T20	0.91	1.43	A	0.436	1.996	8	1	1	10.273	0.33	52.64	C
250.00-243.75			B	0.436	1.996		1	1	10.273			
			C	0.436	1.996		1	1	10.273			
T21	1.17	1.43	A	0.436	1.997	8	1	1	10.252	0.37	58.78	C
243.75-237.50			B	0.436	1.997		1	1	10.252			
			C	0.436	1.997		1	1	10.252			
T22	1.57	1.43	A	0.435	1.999	8	1	1	10.231	0.43	68.07	C
237.50-231.25			B	0.435	1.999		1	1	10.231			
			C	0.435	1.999		1	1	10.231			
T23	1.57	1.51	A	0.444	1.984	8	1	1	10.477	0.42	67.36	C
231.25-225.00			B	0.444	1.984		1	1	10.477			
			C	0.444	1.984		1	1	10.477			

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
T24	1.56	2.10	A	0.492	1.911	8	1	1	12.945	0.42	67.47	C
225.00-218.75		TA 2.32	B	0.492	1.911		1	1	12.945			
			C	0.492	1.911		1	1	12.945			
T25	1.56	1.29	A	0.424	2.019	8	1	1	9.854	0.42	67.07	C
218.75-212.50			B	0.424	2.019		1	1	9.854			
			C	0.424	2.019		1	1	9.854			
T26	1.56	1.11	A	0.413	2.038	8	1	1	9.204	0.41	66.17	C
212.50-206.25			B	0.413	2.038		1	1	9.204			
			C	0.413	2.038		1	1	9.204			
T27	1.55	1.10	A	0.412	2.04	8	1	1	9.180	0.41	65.72	C
206.25-200.00			B	0.412	2.04		1	1	9.180			
			C	0.412	2.04		1	1	9.180			
T28	6.39	4.97	A	0.47	1.942	8	1	1	43.632	1.62	64.75	C
200.00-175.00			B	0.47	1.942		1	1	43.632			
			C	0.47	1.942		1	1	43.632			
T29	1.62	1.29	A	0.427	2.012	8	1	1	9.642	0.41	66.30	C
175.00-168.75			B	0.427	2.012		1	1	9.642			
			C	0.427	2.012		1	1	9.642			
T30	1.62	1.29	A	0.426	2.015	8	1	1	9.594	0.41	65.77	C
168.75-162.50			B	0.426	2.015		1	1	9.594			
			C	0.426	2.015		1	1	9.594			
T31	1.61	1.35	A	0.421	2.024	8	1	1	9.794	0.41	66.09	C
162.50-156.25			B	0.421	2.024		1	1	9.794			
			C	0.421	2.024		1	1	9.794			
T32	1.61	1.17	A	0.41	2.044	8	1	1	9.139	0.41	65.11	C
156.25-150.00			B	0.41	2.044		1	1	9.139			
			C	0.41	2.044		1	1	9.139			
T33	6.60	4.63	A	0.408	2.049	7	1	1	36.230	1.65	65.96	C
150.00-125.00			B	0.408	2.049		1	1	36.230			
			C	0.408	2.049		1	1	36.230			
T34	6.70	6.11	A	0.471	1.941	7	1	1	47.944	1.61	64.52	C
125.00-100.00			B	0.471	1.941		1	1	47.944			
			C	0.471	1.941		1	1	47.944			
T35	1.66	2.07	A	0.477	1.932	7	1	1	12.480	0.39	62.61	C
100.00-93.75		TA 2.17	B	0.477	1.932		1	1	12.480			
			C	0.477	1.932		1	1	12.480			
T36	1.65	1.33	A	0.412	2.042	7	1	1	9.505	0.39	62.52	C
93.75-87.50			B	0.412	2.042		1	1	9.505			
			C	0.412	2.042		1	1	9.505			
T37	1.71	1.12	A	0.396	2.072	7	1	1	8.702	0.40	64.33	C
87.50-81.25			B	0.396	2.072		1	1	8.702			
			C	0.396	2.072		1	1	8.702			
T38	1.70	1.11	A	0.394	2.076	7	1	1	8.649	0.39	63.08	C
81.25-75.00			B	0.394	2.076		1	1	8.649			
			C	0.394	2.076		1	1	8.649			
T39	6.74	4.38	A	0.389	2.087	6	1	1	33.983	1.51	60.25	C
75.00-50.00			B	0.389	2.087		1	1	33.983			
			C	0.389	2.087		1	1	33.983			
T40	6.65	4.30	A	0.38	2.106	6	1	1	33.276	1.36	54.46	C
50.00-25.00			B	0.38	2.106		1	1	33.276			
			C	0.38	2.106		1	1	33.276			
T41	5.45	3.97	A	0.354	2.162	5	1	1	30.072	0.98	39.18	C
25.00-0.00			B	0.354	2.162		1	1	30.072			
			C	0.354	2.162		1	1	30.072			
Sum Weight:	72.24	87.84								20.21		

Tower Forces - With Ice - Wind 60 To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
T1	0.02	1.74	A	0.502	1.898	9	0.8	1	12.403	0.19	29.71	C
368.75-362.50			B	0.502	1.898		0.8	1	12.403			
			C	0.502	1.898		0.8	1	12.403			
T2	0.05	2.42	A	0.519	1.876	9	0.8	1	13.030	0.20	31.77	C
362.50-356.25			B	0.519	1.876		0.8	1	13.030			
			C	0.519	1.876		0.8	1	13.030			
T3	0.08	2.42	A	0.519	1.877	9	0.8	1	13.014	0.21	33.07	C
356.25-350.00			B	0.519	1.877		0.8	1	13.014			
			C	0.519	1.877		0.8	1	13.014			
T4	0.17	1.87	A	0.524	1.871	9	0.8	1	13.202	0.23	37.53	C
350.00-343.75		TA 2.41	B	0.524	1.871		0.8	1	13.202			
			C	0.524	1.871		0.8	1	13.202			
T5	0.17	1.34	A	0.436	1.998	9	0.8	1	10.033	0.21	33.10	C
343.75-337.50			B	0.436	1.998		0.8	1	10.033			
			C	0.436	1.998		0.8	1	10.033			
T6	0.17	1.15	A	0.426	2.016	9	0.8	1	9.588	0.20	32.25	C
337.50-331.25			B	0.426	2.016		0.8	1	9.588			
			C	0.426	2.016		0.8	1	9.588			
T7	0.17	1.15	A	0.425	2.016	9	0.8	1	9.572	0.20	32.09	C
331.25-325.00			B	0.425	2.016		0.8	1	9.572			
			C	0.425	2.016		0.8	1	9.572			
T8	0.23	1.27	A	0.435	2	9	0.8	1	9.890	0.22	34.80	C
325.00-318.75			B	0.435	2		0.8	1	9.890			
			C	0.435	2		0.8	1	9.890			
T9	0.23	1.27	A	0.433	2.002	9	0.8	1	9.854	0.22	34.60	C
318.75-312.50			B	0.433	2.002		0.8	1	9.854			
			C	0.433	2.002		0.8	1	9.854			
T10	0.23	1.27	A	0.433	2.002	9	0.8	1	9.837	0.22	34.42	C
312.50-306.25			B	0.433	2.002		0.8	1	9.837			
			C	0.433	2.002		0.8	1	9.837			
T11	0.23	1.45	A	0.442	1.987	9	0.8	1	10.247	0.22	34.87	C
306.25-300.00			B	0.442	1.987		0.8	1	10.247			
			C	0.442	1.987		0.8	1	10.247			
T12	0.92	1.94	A	0.523	1.872	9	0.8	1	13.209	0.35	55.21	C
300.00-293.75		TA 2.38	B	0.523	1.872		0.8	1	13.209			
			C	0.523	1.872		0.8	1	13.209			
T13	0.92	1.45	A	0.441	1.989	9	0.8	1	10.212	0.34	54.21	C
293.75-287.50			B	0.441	1.989		0.8	1	10.212			
			C	0.441	1.989		0.8	1	10.212			
T14	0.92	1.22	A	0.426	2.014	9	0.8	1	9.632	0.34	53.67	C
287.50-281.25			B	0.426	2.014		0.8	1	9.632			
			C	0.426	2.014		0.8	1	9.632			
T15	0.92	1.22	A	0.426	2.016	9	0.8	1	9.614	0.33	53.39	C
281.25-275.00			B	0.426	2.016		0.8	1	9.614			
			C	0.426	2.016		0.8	1	9.614			
T16	0.92	1.22	A	0.425	2.017	8	0.8	1	9.595	0.33	53.11	C
275.00-268.75			B	0.425	2.017		0.8	1	9.595			
			C	0.425	2.017		0.8	1	9.595			
T17	0.92	1.22	A	0.424	2.018	8	0.8	1	9.576	0.33	52.82	C
268.75-262.50			B	0.424	2.018		0.8	1	9.576			
			C	0.424	2.018		0.8	1	9.576			
T18	0.91	1.21	A	0.424	2.019	8	0.8	1	9.556	0.33	52.53	C
262.50-256.25			B	0.424	2.019		0.8	1	9.556			
			C	0.424	2.019		0.8	1	9.556			
T19	0.91	1.25	A	0.428	2.012	8	0.8	1	9.669	0.33	52.21	C
256.25-250.00			B	0.428	2.012		0.8	1	9.669			
			C	0.428	2.012		0.8	1	9.669			

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
T20	0.91	1.43	A	0.436	1.996	8	0.8	1	10.076	0.33	52.19	C
250.00-243.75			B	0.436	1.996		0.8	1	10.076			
			C	0.436	1.996		0.8	1	10.076			
T21	1.17	1.43	A	0.436	1.997	8	0.8	1	10.055	0.36	58.34	C
243.75-237.50			B	0.436	1.997		0.8	1	10.055			
			C	0.436	1.997		0.8	1	10.055			
T22	1.57	1.43	A	0.435	1.999	8	0.8	1	10.034	0.42	67.63	C
237.50-231.25			B	0.435	1.999		0.8	1	10.034			
			C	0.435	1.999		0.8	1	10.034			
T23	1.57	1.51	A	0.444	1.984	8	0.8	1	10.280	0.42	66.93	C
231.25-225.00			B	0.444	1.984		0.8	1	10.280			
			C	0.444	1.984		0.8	1	10.280			
T24	1.56	2.10	A	0.492	1.911	8	0.8	1	12.116	0.41	65.72	C
225.00-218.75		TA 2.32	B	0.492	1.911		0.8	1	12.116			
			C	0.492	1.911		0.8	1	12.116			
T25	1.56	1.29	A	0.424	2.019	8	0.8	1	9.657	0.42	66.63	C
218.75-212.50			B	0.424	2.019		0.8	1	9.657			
			C	0.424	2.019		0.8	1	9.657			
T26	1.56	1.11	A	0.413	2.038	8	0.8	1	9.204	0.41	66.17	C
212.50-206.25			B	0.413	2.038		0.8	1	9.204			
			C	0.413	2.038		0.8	1	9.204			
T27	1.55	1.10	A	0.412	2.04	8	0.8	1	9.180	0.41	65.72	C
206.25-200.00			B	0.412	2.04		0.8	1	9.180			
			C	0.412	2.04		0.8	1	9.180			
T28	6.39	4.97	A	0.47	1.942	8	0.8	1	43.632	1.62	64.75	C
200.00-175.00			B	0.47	1.942		0.8	1	43.632			
			C	0.47	1.942		0.8	1	43.632			
T29	1.62	1.29	A	0.427	2.012	8	0.8	1	9.642	0.41	66.30	C
175.00-168.75			B	0.427	2.012		0.8	1	9.642			
			C	0.427	2.012		0.8	1	9.642			
T30	1.62	1.29	A	0.426	2.015	8	0.8	1	9.594	0.41	65.77	C
168.75-162.50			B	0.426	2.015		0.8	1	9.594			
			C	0.426	2.015		0.8	1	9.594			
T31	1.61	1.35	A	0.421	2.024	8	0.8	1	9.597	0.41	65.67	C
162.50-156.25			B	0.421	2.024		0.8	1	9.597			
			C	0.421	2.024		0.8	1	9.597			
T32	1.61	1.17	A	0.41	2.044	8	0.8	1	9.139	0.41	65.11	C
156.25-150.00			B	0.41	2.044		0.8	1	9.139			
			C	0.41	2.044		0.8	1	9.139			
T33	6.60	4.63	A	0.408	2.049	7	0.8	1	36.230	1.65	65.96	C
150.00-125.00			B	0.408	2.049		0.8	1	36.230			
			C	0.408	2.049		0.8	1	36.230			
T34	6.70	6.11	A	0.471	1.941	7	0.8	1	45.421	1.58	63.34	C
125.00-100.00			B	0.471	1.941		0.8	1	45.421			
			C	0.471	1.941		0.8	1	45.421			
T35	1.66	2.07	A	0.477	1.932	7	0.8	1	11.653	0.38	61.12	C
100.00-93.75		TA 2.17	B	0.477	1.932		0.8	1	11.653			
			C	0.477	1.932		0.8	1	11.653			
T36	1.65	1.33	A	0.412	2.042	7	0.8	1	9.308	0.39	62.15	C
93.75-87.50			B	0.412	2.042		0.8	1	9.308			
			C	0.412	2.042		0.8	1	9.308			
T37	1.71	1.12	A	0.396	2.072	7	0.8	1	8.702	0.40	64.33	C
87.50-81.25			B	0.396	2.072		0.8	1	8.702			
			C	0.396	2.072		0.8	1	8.702			
T38	1.70	1.11	A	0.394	2.076	7	0.8	1	8.649	0.39	63.08	C
81.25-75.00			B	0.394	2.076		0.8	1	8.649			
			C	0.394	2.076		0.8	1	8.649			
T39	6.74	4.38	A	0.389	2.087	6	0.8	1	33.983	1.51	60.25	C
75.00-50.00			B	0.389	2.087		0.8	1	33.983			
			C	0.389	2.087		0.8	1	33.983			

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
T40	6.65	4.30	A	0.38	2.106	6	0.8	1	33.079	1.36	54.39	C
50.00-25.00			B	0.38	2.106		0.8	1	33.079			
			C	0.38	2.106		0.8	1	33.079			
T41	5.45	3.97	A	0.354	2.162	5	0.8	1	30.072	0.98	39.18	C
25.00-0.00			B	0.354	2.162		0.8	1	30.072			
			C	0.354	2.162		0.8	1	30.072			
Sum Weight:	72.24	87.84								20.06		

Tower Forces - With Ice - Wind 90 To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
T1	0.02	1.74	A	0.502	1.898	9	0.85	1	12.612	0.19	30.20	C
368.75-362.50			B	0.502	1.898		0.85	1	12.612			
			C	0.502	1.898		0.85	1	12.612			
T2	0.05	2.42	A	0.519	1.876	9	0.85	1	13.270	0.20	32.33	C
362.50-356.25			B	0.519	1.876		0.85	1	13.270			
			C	0.519	1.876		0.85	1	13.270			
T3	0.08	2.42	A	0.519	1.877	9	0.85	1	13.254	0.21	33.62	C
356.25-350.00			B	0.519	1.877		0.85	1	13.254			
			C	0.519	1.877		0.85	1	13.254			
T4	0.17	1.87	A	0.524	1.871	9	0.85	1	13.442	0.24	38.08	C
350.00-343.75		TA 2.41	B	0.524	1.871		0.85	1	13.442			
			C	0.524	1.871		0.85	1	13.442			
T5	0.17	1.34	A	0.436	1.998	9	0.85	1	10.082	0.21	33.22	C
343.75-337.50			B	0.436	1.998		0.85	1	10.082			
			C	0.436	1.998		0.85	1	10.082			
T6	0.17	1.15	A	0.426	2.016	9	0.85	1	9.588	0.20	32.25	C
337.50-331.25			B	0.426	2.016		0.85	1	9.588			
			C	0.426	2.016		0.85	1	9.588			
T7	0.17	1.15	A	0.425	2.016	9	0.85	1	9.572	0.20	32.09	C
331.25-325.00			B	0.425	2.016		0.85	1	9.572			
			C	0.425	2.016		0.85	1	9.572			
T8	0.23	1.27	A	0.435	2	9	0.85	1	9.890	0.22	34.80	C
325.00-318.75			B	0.435	2		0.85	1	9.890			
			C	0.435	2		0.85	1	9.890			
T9	0.23	1.27	A	0.433	2.002	9	0.85	1	9.854	0.22	34.60	C
318.75-312.50			B	0.433	2.002		0.85	1	9.854			
			C	0.433	2.002		0.85	1	9.854			
T10	0.23	1.27	A	0.433	2.002	9	0.85	1	9.837	0.22	34.42	C
312.50-306.25			B	0.433	2.002		0.85	1	9.837			
			C	0.433	2.002		0.85	1	9.837			
T11	0.23	1.45	A	0.442	1.987	9	0.85	1	10.296	0.22	34.99	C
306.25-300.00			B	0.442	1.987		0.85	1	10.296			
			C	0.442	1.987		0.85	1	10.296			
T12	0.92	1.94	A	0.523	1.872	9	0.85	1	13.448	0.35	55.74	C
300.00-293.75		TA 2.38	B	0.523	1.872		0.85	1	13.448			
			C	0.523	1.872		0.85	1	13.448			
T13	0.92	1.45	A	0.441	1.989	9	0.85	1	10.261	0.34	54.33	C
293.75-287.50			B	0.441	1.989		0.85	1	10.261			
			C	0.441	1.989		0.85	1	10.261			
T14	0.92	1.22	A	0.426	2.014	9	0.85	1	9.632	0.34	53.67	C

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
287.50-281.25			B	0.426	2.014		0.85	1	9.632			
			C	0.426	2.014		0.85	1	9.632			
T15	0.92	1.22	A	0.426	2.016	9	0.85	1	9.614	0.33	53.39	C
281.25-275.00			B	0.426	2.016		0.85	1	9.614			
			C	0.426	2.016		0.85	1	9.614			
T16	0.92	1.22	A	0.425	2.017	8	0.85	1	9.595	0.33	53.11	C
275.00-268.75			B	0.425	2.017		0.85	1	9.595			
			C	0.425	2.017		0.85	1	9.595			
T17	0.92	1.22	A	0.424	2.018	8	0.85	1	9.576	0.33	52.82	C
268.75-262.50			B	0.424	2.018		0.85	1	9.576			
			C	0.424	2.018		0.85	1	9.576			
T18	0.91	1.21	A	0.424	2.019	8	0.85	1	9.556	0.33	52.53	C
262.50-256.25			B	0.424	2.019		0.85	1	9.556			
			C	0.424	2.019		0.85	1	9.556			
T19	0.91	1.25	A	0.428	2.012	8	0.85	1	9.669	0.33	52.21	C
256.25-250.00			B	0.428	2.012		0.85	1	9.669			
			C	0.428	2.012		0.85	1	9.669			
T20	0.91	1.43	A	0.436	1.996	8	0.85	1	10.125	0.33	52.30	C
250.00-243.75			B	0.436	1.996		0.85	1	10.125			
			C	0.436	1.996		0.85	1	10.125			
T21	1.17	1.43	A	0.436	1.997	8	0.85	1	10.104	0.37	58.45	C
243.75-237.50			B	0.436	1.997		0.85	1	10.104			
			C	0.436	1.997		0.85	1	10.104			
T22	1.57	1.43	A	0.435	1.999	8	0.85	1	10.083	0.42	67.74	C
237.50-231.25			B	0.435	1.999		0.85	1	10.083			
			C	0.435	1.999		0.85	1	10.083			
T23	1.57	1.51	A	0.444	1.984	8	0.85	1	10.329	0.42	67.03	C
231.25-225.00			B	0.444	1.984		0.85	1	10.329			
			C	0.444	1.984		0.85	1	10.329			
T24	1.56	2.10	A	0.492	1.911	8	0.85	1	12.323	0.41	66.16	C
225.00-218.75		TA 2.32	B	0.492	1.911		0.85	1	12.323			
			C	0.492	1.911		0.85	1	12.323			
T25	1.56	1.29	A	0.424	2.019	8	0.85	1	9.706	0.42	66.74	C
218.75-212.50			B	0.424	2.019		0.85	1	9.706			
			C	0.424	2.019		0.85	1	9.706			
T26	1.56	1.11	A	0.413	2.038	8	0.85	1	9.204	0.41	66.17	C
212.50-206.25			B	0.413	2.038		0.85	1	9.204			
			C	0.413	2.038		0.85	1	9.204			
T27	1.55	1.10	A	0.412	2.04	8	0.85	1	9.180	0.41	65.72	C
206.25-200.00			B	0.412	2.04		0.85	1	9.180			
			C	0.412	2.04		0.85	1	9.180			
T28	6.39	4.97	A	0.47	1.942	8	0.85	1	43.632	1.62	64.75	C
200.00-175.00			B	0.47	1.942		0.85	1	43.632			
			C	0.47	1.942		0.85	1	43.632			
T29	1.62	1.29	A	0.427	2.012	8	0.85	1	9.642	0.41	66.30	C
175.00-168.75			B	0.427	2.012		0.85	1	9.642			
			C	0.427	2.012		0.85	1	9.642			
T30	1.62	1.29	A	0.426	2.015	8	0.85	1	9.594	0.41	65.77	C
168.75-162.50			B	0.426	2.015		0.85	1	9.594			
			C	0.426	2.015		0.85	1	9.594			
T31	1.61	1.35	A	0.421	2.024	8	0.85	1	9.646	0.41	65.78	C
162.50-156.25			B	0.421	2.024		0.85	1	9.646			
			C	0.421	2.024		0.85	1	9.646			
T32	1.61	1.17	A	0.41	2.044	8	0.85	1	9.139	0.41	65.11	C
156.25-150.00			B	0.41	2.044		0.85	1	9.139			
			C	0.41	2.044		0.85	1	9.139			
T33	6.60	4.63	A	0.408	2.049	7	0.85	1	36.230	1.65	65.96	C
150.00-125.00			B	0.408	2.049		0.85	1	36.230			
			C	0.408	2.049		0.85	1	36.230			
T34	6.70	6.11	A	0.471	1.941	7	0.85	1	46.052	1.59	63.64	C

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
125.00-100.00			B	0.471	1.941		0.85	1	46.052			
			C	0.471	1.941		0.85	1	46.052			
T35	1.66	2.07	A	0.477	1.932	7	0.85	1	11.859	0.38	61.49	C
100.00-93.75		TA 2.17	B	0.477	1.932		0.85	1	11.859			
			C	0.477	1.932		0.85	1	11.859			
T36	1.65	1.33	A	0.412	2.042	7	0.85	1	9.357	0.39	62.24	C
93.75-87.50			B	0.412	2.042		0.85	1	9.357			
			C	0.412	2.042		0.85	1	9.357			
T37	1.71	1.12	A	0.396	2.072	7	0.85	1	8.702	0.40	64.33	C
87.50-81.25			B	0.396	2.072		0.85	1	8.702			
			C	0.396	2.072		0.85	1	8.702			
T38	1.70	1.11	A	0.394	2.076	7	0.85	1	8.649	0.39	63.08	C
81.25-75.00			B	0.394	2.076		0.85	1	8.649			
			C	0.394	2.076		0.85	1	8.649			
T39	6.74	4.38	A	0.389	2.087	6	0.85	1	33.983	1.51	60.25	C
75.00-50.00			B	0.389	2.087		0.85	1	33.983			
			C	0.389	2.087		0.85	1	33.983			
T40	6.65	4.30	A	0.38	2.106	6	0.85	1	33.128	1.36	54.41	C
50.00-25.00			B	0.38	2.106		0.85	1	33.128			
			C	0.38	2.106		0.85	1	33.128			
T41	5.45	3.97	A	0.354	2.162	5	0.85	1	30.072	0.98	39.18	C
25.00-0.00			B	0.354	2.162		0.85	1	30.072			
			C	0.354	2.162		0.85	1	30.072			
Sum Weight:	72.24	87.84								20.10		

Tower Forces - Service - Wind Normal To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
T1	0.00	0.68	A	0.215	2.545	13	1	1	5.830	0.17	26.58	C
368.75-362.50			B	0.215	2.545		1	1	5.830			
			C	0.215	2.545		1	1	5.830			
T2	0.00	1.09	A	0.235	2.484	13	1	1	6.478	0.18	29.13	C
362.50-356.25			B	0.235	2.484		1	1	6.478			
			C	0.235	2.484		1	1	6.478			
T3	0.01	1.09	A	0.235	2.484	13	1	1	6.478	0.19	29.61	C
356.25-350.00			B	0.235	2.484		1	1	6.478			
			C	0.235	2.484		1	1	6.478			
T4	0.01	0.77	A	0.242	2.463	13	1	1	6.608	0.20	31.43	C
350.00-343.75		TA 0.79	B	0.242	2.463		1	1	6.608			
			C	0.242	2.463		1	1	6.608			
T5	0.01	0.61	A	0.15	2.773	13	1	1	3.189	0.11	18.34	C
343.75-337.50			B	0.15	2.773		1	1	3.189			
			C	0.15	2.773		1	1	3.189			
T6	0.01	0.54	A	0.139	2.811	13	1	1	2.569	0.10	15.45	C
337.50-331.25			B	0.139	2.811		1	1	2.569			
			C	0.139	2.811		1	1	2.569			
T7	0.01	0.54	A	0.139	2.811	13	1	1	2.570	0.10	15.39	C
331.25-325.00			B	0.139	2.811		1	1	2.570			
			C	0.139	2.811		1	1	2.570			
T8	0.02	0.64	A	0.152	2.766	13	1	1	2.768	0.11	17.35	C
325.00-318.75			B	0.152	2.766		1	1	2.768			

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
			C	0.152	2.766		1	1	2.768			
T9	0.02	0.64	A	0.151	2.767	13	1	1	2.766	0.11	17.28	C
318.75-312.50			B	0.151	2.767		1	1	2.766			
			C	0.151	2.767		1	1	2.766			
T10	0.02	0.64	A	0.151	2.767	13	1	1	2.767	0.11	17.21	C
312.50-306.25			B	0.151	2.767		1	1	2.767			
			C	0.151	2.767		1	1	2.767			
T11	0.02	0.71	A	0.161	2.73	13	1	1	3.389	0.12	19.85	C
306.25-300.00			B	0.161	2.73		1	1	3.389			
			C	0.161	2.73		1	1	3.389			
T12	0.12	0.85	A	0.248	2.445	12	1	1	6.704	0.31	49.49	C
300.00-293.75		TA 0.79	B	0.248	2.445		1	1	6.704			
			C	0.248	2.445		1	1	6.704			
T13	0.12	0.71	A	0.161	2.73	12	1	1	3.391	0.23	37.24	C
293.75-287.50			B	0.161	2.73		1	1	3.391			
			C	0.161	2.73		1	1	3.391			
T14	0.12	0.61	A	0.147	2.784	12	1	1	2.680	0.21	34.05	C
287.50-281.25			B	0.147	2.784		1	1	2.680			
			C	0.147	2.784		1	1	2.680			
T15	0.12	0.61	A	0.147	2.784	12	1	1	2.681	0.21	33.89	C
281.25-275.00			B	0.147	2.784		1	1	2.681			
			C	0.147	2.784		1	1	2.681			
T16	0.12	0.61	A	0.147	2.784	12	1	1	2.682	0.21	33.74	C
275.00-268.75			B	0.147	2.784		1	1	2.682			
			C	0.147	2.784		1	1	2.682			
T17	0.12	0.61	A	0.147	2.784	12	1	1	2.684	0.21	33.58	C
268.75-262.50			B	0.147	2.784		1	1	2.684			
			C	0.147	2.784		1	1	2.684			
T18	0.12	0.61	A	0.147	2.784	12	1	1	2.685	0.21	33.42	C
262.50-256.25			B	0.147	2.784		1	1	2.685			
			C	0.147	2.784		1	1	2.685			
T19	0.12	0.64	A	0.151	2.767	12	1	1	2.779	0.21	33.59	C
256.25-250.00			B	0.151	2.767		1	1	2.779			
			C	0.151	2.767		1	1	2.779			
T20	0.12	0.71	A	0.161	2.73	12	1	1	3.401	0.23	36.02	C
250.00-243.75			B	0.161	2.73		1	1	3.401			
			C	0.161	2.73		1	1	3.401			
T21	0.17	0.71	A	0.161	2.73	12	1	1	3.402	0.27	42.82	C
243.75-237.50			B	0.161	2.73		1	1	3.402			
			C	0.161	2.73		1	1	3.402			
T22	0.23	0.71	A	0.161	2.73	12	1	1	3.403	0.33	53.01	C
237.50-231.25			B	0.161	2.73		1	1	3.403			
			C	0.161	2.73		1	1	3.403			
T23	0.23	0.77	A	0.171	2.696	12	1	1	3.591	0.33	53.34	C
231.25-225.00			B	0.171	2.696		1	1	3.591			
			C	0.171	2.696		1	1	3.591			
T24	0.23	0.95	A	0.222	2.525	12	1	1	5.953	0.38	61.58	C
225.00-218.75		TA 0.79	B	0.222	2.525		1	1	5.953			
			C	0.222	2.525		1	1	5.953			
T25	0.23	0.61	A	0.15	2.773	12	1	1	3.212	0.32	51.51	C
218.75-212.50			B	0.15	2.773		1	1	3.212			
			C	0.15	2.773		1	1	3.212			
T26	0.23	0.54	A	0.139	2.811	12	1	1	2.591	0.30	47.45	C
212.50-206.25			B	0.139	2.811		1	1	2.591			
			C	0.139	2.811		1	1	2.591			
T27	0.23	0.54	A	0.139	2.811	12	1	1	2.591	0.29	47.15	C
206.25-200.00			B	0.139	2.811		1	1	2.591			
			C	0.139	2.811		1	1	2.591			
T28	0.94	2.28	A	0.159	2.737	11	1	1	11.897	1.21	48.45	C
200.00-175.00			B	0.159	2.737		1	1	11.897			

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
			C	0.159	2.737		1	1	11.897			
T29	0.24	0.69	A	0.161	2.731	11	1	1	2.990	0.30	48.11	C
175.00-168.75			B	0.161	2.731		1	1	2.990			
			C	0.161	2.731		1	1	2.990			
T30	0.24	0.69	A	0.161	2.732	11	1	1	2.989	0.30	47.73	C
168.75-162.50			B	0.161	2.732		1	1	2.989			
			C	0.161	2.732		1	1	2.989			
T31	0.24	0.69	A	0.157	2.747	11	1	1	3.332	0.31	48.82	C
162.50-156.25			B	0.157	2.747		1	1	3.332			
			C	0.157	2.747		1	1	3.332			
T32	0.24	0.61	A	0.147	2.784	11	1	1	2.715	0.29	46.06	C
156.25-150.00			B	0.147	2.784		1	1	2.715			
			C	0.147	2.784		1	1	2.715			
T33	0.96	2.45	A	0.147	2.784	11	1	1	10.885	1.14	45.70	C
150.00-125.00			B	0.147	2.784		1	1	10.885			
			C	0.147	2.784		1	1	10.885			
T34	0.98	2.84	A	0.218	2.536	10	1	1	21.936	1.33	53.11	C
125.00-100.00			B	0.218	2.536		1	1	21.936			
			C	0.218	2.536		1	1	21.936			
T35	0.24	1.03	A	0.228	2.504	10	1	1	6.103	0.33	53.31	C
100.00-93.75		TA 0.79	B	0.228	2.504		1	1	6.103			
			C	0.228	2.504		1	1	6.103			
T36	0.24	0.71	A	0.161	2.73	10	1	1	3.449	0.28	44.91	C
93.75-87.50			B	0.161	2.73		1	1	3.449			
			C	0.161	2.73		1	1	3.449			
T37	0.25	0.61	A	0.147	2.784	10	1	1	2.739	0.27	42.95	C
87.50-81.25			B	0.147	2.784		1	1	2.739			
			C	0.147	2.784		1	1	2.739			
T38	0.25	0.61	A	0.147	2.784	9	1	1	2.739	0.26	42.26	C
81.25-75.00			B	0.147	2.784		1	1	2.739			
			C	0.147	2.784		1	1	2.739			
T39	1.01	2.45	A	0.147	2.784	9	1	1	10.954	1.01	40.57	C
75.00-50.00			B	0.147	2.784		1	1	10.954			
			C	0.147	2.784		1	1	10.954			
T40	1.02	2.47	A	0.149	2.775	8	1	1	11.573	0.93	37.39	C
50.00-25.00			B	0.149	2.775		1	1	11.573			
			C	0.149	2.775		1	1	11.573			
T41	0.91	2.45	A	0.147	2.784	7	1	1	10.954	0.70	27.80	C
25.00-0.00			B	0.147	2.784		1	1	10.954			
			C	0.147	2.784		1	1	10.954			
Sum Weight:	10.55	42.50								14.41		

Tower Forces - Service - Wind 60 To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
T1	0.00	0.68	A	0.215	2.545	13	0.8	1	4.995	0.14	22.82	C
368.75-362.50			B	0.215	2.545		0.8	1	4.995			
			C	0.215	2.545		0.8	1	4.995			
T2	0.00	1.09	A	0.235	2.484	13	0.8	1	5.516	0.16	24.91	C
362.50-356.25			B	0.235	2.484		0.8	1	5.516			
			C	0.235	2.484		0.8	1	5.516			

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
T3	0.01	1.09	A	0.235	2.484	13	0.8	1	5.516	0.16	25.41	C
356.25-350.00			B	0.235	2.484		0.8	1	5.516			
			C	0.235	2.484		0.8	1	5.516			
T4	0.01	0.77	A	0.242	2.463	13	0.8	1	5.647	0.17	27.28	C
350.00-343.75		TA 0.79	B	0.242	2.463		0.8	1	5.647			
			C	0.242	2.463		0.8	1	5.647			
T5	0.01	0.61	A	0.15	2.773	13	0.8	1	2.991	0.11	17.38	C
343.75-337.50			B	0.15	2.773		0.8	1	2.991			
			C	0.15	2.773		0.8	1	2.991			
T6	0.01	0.54	A	0.139	2.811	13	0.8	1	2.569	0.10	15.45	C
337.50-331.25			B	0.139	2.811		0.8	1	2.569			
			C	0.139	2.811		0.8	1	2.569			
T7	0.01	0.54	A	0.139	2.811	13	0.8	1	2.570	0.10	15.39	C
331.25-325.00			B	0.139	2.811		0.8	1	2.570			
			C	0.139	2.811		0.8	1	2.570			
T8	0.02	0.64	A	0.152	2.766	13	0.8	1	2.768	0.11	17.35	C
325.00-318.75			B	0.152	2.766		0.8	1	2.768			
			C	0.152	2.766		0.8	1	2.768			
T9	0.02	0.64	A	0.151	2.767	13	0.8	1	2.766	0.11	17.28	C
318.75-312.50			B	0.151	2.767		0.8	1	2.766			
			C	0.151	2.767		0.8	1	2.766			
T10	0.02	0.64	A	0.151	2.767	13	0.8	1	2.767	0.11	17.21	C
312.50-306.25			B	0.151	2.767		0.8	1	2.767			
			C	0.151	2.767		0.8	1	2.767			
T11	0.02	0.71	A	0.161	2.73	13	0.8	1	3.192	0.12	18.94	C
306.25-300.00			B	0.161	2.73		0.8	1	3.192			
			C	0.161	2.73		0.8	1	3.192			
T12	0.12	0.85	A	0.248	2.445	12	0.8	1	5.750	0.28	45.54	C
300.00-293.75		TA 0.79	B	0.248	2.445		0.8	1	5.750			
			C	0.248	2.445		0.8	1	5.750			
T13	0.12	0.71	A	0.161	2.73	12	0.8	1	3.194	0.23	36.33	C
293.75-287.50			B	0.161	2.73		0.8	1	3.194			
			C	0.161	2.73		0.8	1	3.194			
T14	0.12	0.61	A	0.147	2.784	12	0.8	1	2.680	0.21	34.05	C
287.50-281.25			B	0.147	2.784		0.8	1	2.680			
			C	0.147	2.784		0.8	1	2.680			
T15	0.12	0.61	A	0.147	2.784	12	0.8	1	2.681	0.21	33.89	C
281.25-275.00			B	0.147	2.784		0.8	1	2.681			
			C	0.147	2.784		0.8	1	2.681			
T16	0.12	0.61	A	0.147	2.784	12	0.8	1	2.682	0.21	33.74	C
275.00-268.75			B	0.147	2.784		0.8	1	2.682			
			C	0.147	2.784		0.8	1	2.682			
T17	0.12	0.61	A	0.147	2.784	12	0.8	1	2.684	0.21	33.58	C
268.75-262.50			B	0.147	2.784		0.8	1	2.684			
			C	0.147	2.784		0.8	1	2.684			
T18	0.12	0.61	A	0.147	2.784	12	0.8	1	2.685	0.21	33.42	C
262.50-256.25			B	0.147	2.784		0.8	1	2.685			
			C	0.147	2.784		0.8	1	2.685			
T19	0.12	0.64	A	0.151	2.767	12	0.8	1	2.779	0.21	33.59	C
256.25-250.00			B	0.151	2.767		0.8	1	2.779			
			C	0.151	2.767		0.8	1	2.779			
T20	0.12	0.71	A	0.161	2.73	12	0.8	1	3.203	0.22	35.14	C
250.00-243.75			B	0.161	2.73		0.8	1	3.203			
			C	0.161	2.73		0.8	1	3.203			
T21	0.17	0.71	A	0.161	2.73	12	0.8	1	3.205	0.26	41.94	C
243.75-237.50			B	0.161	2.73		0.8	1	3.205			
			C	0.161	2.73		0.8	1	3.205			
T22	0.23	0.71	A	0.161	2.73	12	0.8	1	3.206	0.33	52.14	C
237.50-231.25			B	0.161	2.73		0.8	1	3.206			
			C	0.161	2.73		0.8	1	3.206			

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
T23	0.23	0.77	A	0.171	2.696	12	0.8	1	3.394	0.33	52.49	C
231.25-225.00			B	0.171	2.696		0.8	1	3.394			
			C	0.171	2.696		0.8	1	3.394			
T24	0.23	0.95	A	0.222	2.525	12	0.8	1	5.124	0.36	58.24	C
225.00-218.75		TA 0.79	B	0.222	2.525		0.8	1	5.124			
			C	0.222	2.525		0.8	1	5.124			
T25	0.23	0.61	A	0.15	2.773	12	0.8	1	3.014	0.32	50.64	C
218.75-212.50			B	0.15	2.773		0.8	1	3.014			
			C	0.15	2.773		0.8	1	3.014			
T26	0.23	0.54	A	0.139	2.811	12	0.8	1	2.591	0.30	47.45	C
212.50-206.25			B	0.139	2.811		0.8	1	2.591			
			C	0.139	2.811		0.8	1	2.591			
T27	0.23	0.54	A	0.139	2.811	12	0.8	1	2.591	0.29	47.15	C
206.25-200.00			B	0.139	2.811		0.8	1	2.591			
			C	0.139	2.811		0.8	1	2.591			
T28	0.94	2.28	A	0.159	2.737	11	0.8	1	11.897	1.21	48.45	C
200.00-175.00			B	0.159	2.737		0.8	1	11.897			
			C	0.159	2.737		0.8	1	11.897			
T29	0.24	0.69	A	0.161	2.731	11	0.8	1	2.990	0.30	48.11	C
175.00-168.75			B	0.161	2.731		0.8	1	2.990			
			C	0.161	2.731		0.8	1	2.990			
T30	0.24	0.69	A	0.161	2.732	11	0.8	1	2.989	0.30	47.73	C
168.75-162.50			B	0.161	2.732		0.8	1	2.989			
			C	0.161	2.732		0.8	1	2.989			
T31	0.24	0.69	A	0.157	2.747	11	0.8	1	3.135	0.30	48.02	C
162.50-156.25			B	0.157	2.747		0.8	1	3.135			
			C	0.157	2.747		0.8	1	3.135			
T32	0.24	0.61	A	0.147	2.784	11	0.8	1	2.715	0.29	46.06	C
156.25-150.00			B	0.147	2.784		0.8	1	2.715			
			C	0.147	2.784		0.8	1	2.715			
T33	0.96	2.45	A	0.147	2.784	11	0.8	1	10.885	1.14	45.70	C
150.00-125.00			B	0.147	2.784		0.8	1	10.885			
			C	0.147	2.784		0.8	1	10.885			
T34	0.98	2.84	A	0.218	2.536	10	0.8	1	19.412	1.27	50.90	C
125.00-100.00			B	0.218	2.536		0.8	1	19.412			
			C	0.218	2.536		0.8	1	19.412			
T35	0.24	1.03	A	0.228	2.504	10	0.8	1	5.275	0.32	50.53	C
100.00-93.75		TA 0.79	B	0.228	2.504		0.8	1	5.275			
			C	0.228	2.504		0.8	1	5.275			
T36	0.24	0.71	A	0.161	2.73	10	0.8	1	3.252	0.28	44.20	C
93.75-87.50			B	0.161	2.73		0.8	1	3.252			
			C	0.161	2.73		0.8	1	3.252			
T37	0.25	0.61	A	0.147	2.784	10	0.8	1	2.739	0.27	42.95	C
87.50-81.25			B	0.147	2.784		0.8	1	2.739			
			C	0.147	2.784		0.8	1	2.739			
T38	0.25	0.61	A	0.147	2.784	9	0.8	1	2.739	0.26	42.26	C
81.25-75.00			B	0.147	2.784		0.8	1	2.739			
			C	0.147	2.784		0.8	1	2.739			
T39	1.01	2.45	A	0.147	2.784	9	0.8	1	10.954	1.01	40.57	C
75.00-50.00			B	0.147	2.784		0.8	1	10.954			
			C	0.147	2.784		0.8	1	10.954			
T40	1.02	2.47	A	0.149	2.775	8	0.8	1	11.376	0.93	37.24	C
50.00-25.00			B	0.149	2.775		0.8	1	11.376			
			C	0.149	2.775		0.8	1	11.376			
T41	0.91	2.45	A	0.147	2.784	7	0.8	1	10.954	0.70	27.80	C
25.00-0.00			B	0.147	2.784		0.8	1	10.954			
			C	0.147	2.784		0.8	1	10.954			
Sum Weight:	10.55	42.50								14.13		

Tower Forces - Service - Wind 90 To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
T1	0.00	0.68	A	0.215	2.545	13	0.85	1	5.204	0.15	23.76	C
368.75-362.50			B	0.215	2.545		0.85	1	5.204			
			C	0.215	2.545		0.85	1	5.204			
T2	0.00	1.09	A	0.235	2.484	13	0.85	1	5.756	0.16	25.97	C
362.50-356.25			B	0.235	2.484		0.85	1	5.756			
			C	0.235	2.484		0.85	1	5.756			
T3	0.01	1.09	A	0.235	2.484	13	0.85	1	5.756	0.17	26.46	C
356.25-350.00			B	0.235	2.484		0.85	1	5.756			
			C	0.235	2.484		0.85	1	5.756			
T4	0.01	0.77	A	0.242	2.463	13	0.85	1	5.887	0.18	28.32	C
350.00-343.75		TA 0.79	B	0.242	2.463		0.85	1	5.887			
			C	0.242	2.463		0.85	1	5.887			
T5	0.01	0.61	A	0.15	2.773	13	0.85	1	3.041	0.11	17.62	C
343.75-337.50			B	0.15	2.773		0.85	1	3.041			
			C	0.15	2.773		0.85	1	3.041			
T6	0.01	0.54	A	0.139	2.811	13	0.85	1	2.569	0.10	15.45	C
337.50-331.25			B	0.139	2.811		0.85	1	2.569			
			C	0.139	2.811		0.85	1	2.569			
T7	0.01	0.54	A	0.139	2.811	13	0.85	1	2.570	0.10	15.39	C
331.25-325.00			B	0.139	2.811		0.85	1	2.570			
			C	0.139	2.811		0.85	1	2.570			
T8	0.02	0.64	A	0.152	2.766	13	0.85	1	2.768	0.11	17.35	C
325.00-318.75			B	0.152	2.766		0.85	1	2.768			
			C	0.152	2.766		0.85	1	2.768			
T9	0.02	0.64	A	0.151	2.767	13	0.85	1	2.766	0.11	17.28	C
318.75-312.50			B	0.151	2.767		0.85	1	2.766			
			C	0.151	2.767		0.85	1	2.766			
T10	0.02	0.64	A	0.151	2.767	13	0.85	1	2.767	0.11	17.21	C
312.50-306.25			B	0.151	2.767		0.85	1	2.767			
			C	0.151	2.767		0.85	1	2.767			
T11	0.02	0.71	A	0.161	2.73	13	0.85	1	3.241	0.12	19.17	C
306.25-300.00			B	0.161	2.73		0.85	1	3.241			
			C	0.161	2.73		0.85	1	3.241			
T12	0.12	0.85	A	0.248	2.445	12	0.85	1	5.988	0.29	46.53	C
300.00-293.75		TA 0.79	B	0.248	2.445		0.85	1	5.988			
			C	0.248	2.445		0.85	1	5.988			
T13	0.12	0.71	A	0.161	2.73	12	0.85	1	3.243	0.23	36.55	C
293.75-287.50			B	0.161	2.73		0.85	1	3.243			
			C	0.161	2.73		0.85	1	3.243			
T14	0.12	0.61	A	0.147	2.784	12	0.85	1	2.680	0.21	34.05	C
287.50-281.25			B	0.147	2.784		0.85	1	2.680			
			C	0.147	2.784		0.85	1	2.680			
T15	0.12	0.61	A	0.147	2.784	12	0.85	1	2.681	0.21	33.89	C
281.25-275.00			B	0.147	2.784		0.85	1	2.681			
			C	0.147	2.784		0.85	1	2.681			
T16	0.12	0.61	A	0.147	2.784	12	0.85	1	2.682	0.21	33.74	C
275.00-268.75			B	0.147	2.784		0.85	1	2.682			
			C	0.147	2.784		0.85	1	2.682			
T17	0.12	0.61	A	0.147	2.784	12	0.85	1	2.684	0.21	33.58	C
268.75-262.50			B	0.147	2.784		0.85	1	2.684			
			C	0.147	2.784		0.85	1	2.684			
T18	0.12	0.61	A	0.147	2.784	12	0.85	1	2.685	0.21	33.42	C
262.50-256.25			B	0.147	2.784		0.85	1	2.685			

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft^2	F K	w plf	Ctrl. Face
			C	0.147	2.784		0.85	1	2.685			
T19	0.12	0.64	A	0.151	2.767	12	0.85	1	2.779	0.21	33.59	C
256.25-250.00			B	0.151	2.767		0.85	1	2.779			
			C	0.151	2.767		0.85	1	2.779			
T20	0.12	0.71	A	0.161	2.73	12	0.85	1	3.253	0.22	35.36	C
250.00-243.75			B	0.161	2.73		0.85	1	3.253			
			C	0.161	2.73		0.85	1	3.253			
T21	0.17	0.71	A	0.161	2.73	12	0.85	1	3.254	0.26	42.16	C
243.75-237.50			B	0.161	2.73		0.85	1	3.254			
			C	0.161	2.73		0.85	1	3.254			
T22	0.23	0.71	A	0.161	2.73	12	0.85	1	3.256	0.33	52.36	C
237.50-231.25			B	0.161	2.73		0.85	1	3.256			
			C	0.161	2.73		0.85	1	3.256			
T23	0.23	0.77	A	0.171	2.696	12	0.85	1	3.443	0.33	52.70	C
231.25-225.00			B	0.171	2.696		0.85	1	3.443			
			C	0.171	2.696		0.85	1	3.443			
T24	0.23	0.95	A	0.222	2.525	12	0.85	1	5.331	0.37	59.07	C
225.00-218.75		TA 0.79	B	0.222	2.525		0.85	1	5.331			
			C	0.222	2.525		0.85	1	5.331			
T25	0.23	0.61	A	0.15	2.773	12	0.85	1	3.064	0.32	50.85	C
218.75-212.50			B	0.15	2.773		0.85	1	3.064			
			C	0.15	2.773		0.85	1	3.064			
T26	0.23	0.54	A	0.139	2.811	12	0.85	1	2.591	0.30	47.45	C
212.50-206.25			B	0.139	2.811		0.85	1	2.591			
			C	0.139	2.811		0.85	1	2.591			
T27	0.23	0.54	A	0.139	2.811	12	0.85	1	2.591	0.29	47.15	C
206.25-200.00			B	0.139	2.811		0.85	1	2.591			
			C	0.139	2.811		0.85	1	2.591			
T28	0.94	2.28	A	0.159	2.737	11	0.85	1	11.897	1.21	48.45	C
200.00-175.00			B	0.159	2.737		0.85	1	11.897			
			C	0.159	2.737		0.85	1	11.897			
T29	0.24	0.69	A	0.161	2.731	11	0.85	1	2.990	0.30	48.11	C
175.00-168.75			B	0.161	2.731		0.85	1	2.990			
			C	0.161	2.731		0.85	1	2.990			
T30	0.24	0.69	A	0.161	2.732	11	0.85	1	2.989	0.30	47.73	C
168.75-162.50			B	0.161	2.732		0.85	1	2.989			
			C	0.161	2.732		0.85	1	2.989			
T31	0.24	0.69	A	0.157	2.747	11	0.85	1	3.185	0.30	48.22	C
162.50-156.25			B	0.157	2.747		0.85	1	3.185			
			C	0.157	2.747		0.85	1	3.185			
T32	0.24	0.61	A	0.147	2.784	11	0.85	1	2.715	0.29	46.06	C
156.25-150.00			B	0.147	2.784		0.85	1	2.715			
			C	0.147	2.784		0.85	1	2.715			
T33	0.96	2.45	A	0.147	2.784	11	0.85	1	10.885	1.14	45.70	C
150.00-125.00			B	0.147	2.784		0.85	1	10.885			
			C	0.147	2.784		0.85	1	10.885			
T34	0.98	2.84	A	0.218	2.536	10	0.85	1	20.043	1.29	51.46	C
125.00-100.00			B	0.218	2.536		0.85	1	20.043			
			C	0.218	2.536		0.85	1	20.043			
T35	0.24	1.03	A	0.228	2.504	10	0.85	1	5.482	0.32	51.23	C
100.00-93.75		TA 0.79	B	0.228	2.504		0.85	1	5.482			
			C	0.228	2.504		0.85	1	5.482			
T36	0.24	0.71	A	0.161	2.73	10	0.85	1	3.301	0.28	44.38	C
93.75-87.50			B	0.161	2.73		0.85	1	3.301			
			C	0.161	2.73		0.85	1	3.301			
T37	0.25	0.61	A	0.147	2.784	10	0.85	1	2.739	0.27	42.95	C
87.50-81.25			B	0.147	2.784		0.85	1	2.739			
			C	0.147	2.784		0.85	1	2.739			
T38	0.25	0.61	A	0.147	2.784	9	0.85	1	2.739	0.26	42.26	C
81.25-75.00			B	0.147	2.784		0.85	1	2.739			

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
			C	0.147	2.784		0.85	1	2.739			
T39	1.01	2.45	A	0.147	2.784	9	0.85	1	10.954	1.01	40.57	C
75.00-50.00			B	0.147	2.784		0.85	1	10.954			
			C	0.147	2.784		0.85	1	10.954			
T40	1.02	2.47	A	0.149	2.775	8	0.85	1	11.425	0.93	37.27	C
50.00-25.00			B	0.149	2.775		0.85	1	11.425			
			C	0.149	2.775		0.85	1	11.425			
T41	0.91	2.45	A	0.147	2.784	7	0.85	1	10.954	0.70	27.80	C
25.00-0.00			B	0.147	2.784		0.85	1	10.954			
			C	0.147	2.784		0.85	1	10.954			
Sum Weight:	10.55	42.50								14.20		

Force Totals (Does not include forces on guys)

Load Case	Vertical Forces K	Sum of Forces X K	Sum of Forces Z K	Sum of Torques kip-ft
Leg Weight	29.84			
Bracing Weight	12.66			
Total Member Self-Weight	42.50			
Guy Weight	11.91			
Total Weight	71.68			
Wind 0 deg - No Ice		-0.06	-61.50	-1.87
Wind 30 deg - No Ice		30.17	-52.68	-0.82
Wind 60 deg - No Ice		52.13	-30.27	0.41
Wind 90 deg - No Ice		60.44	0.06	1.61
Wind 120 deg - No Ice		52.93	30.80	2.45
Wind 150 deg - No Ice		30.27	52.74	2.44
Wind 180 deg - No Ice		0.06	60.65	1.88
Wind 210 deg - No Ice		-30.17	52.68	0.82
Wind 240 deg - No Ice		-52.87	30.70	-0.58
Wind 270 deg - No Ice		-60.44	-0.06	-1.61
Wind 300 deg - No Ice		-52.19	-30.37	-2.30
Wind 330 deg - No Ice		-30.27	-52.74	-2.44
Member Ice	45.34			
Guy Ice	47.42			
Total Weight Ice	239.32			
Wind 0 deg - Ice		0.01	-26.36	-0.98
Wind 30 deg - Ice		13.10	-22.74	-0.34
Wind 60 deg - Ice		22.64	-13.11	0.39
Wind 90 deg - Ice		26.18	-0.01	1.03
Wind 120 deg - Ice		22.76	13.17	1.39
Wind 150 deg - Ice		13.08	22.73	1.37
Wind 180 deg - Ice		-0.01	26.21	0.98
Wind 210 deg - Ice		-13.10	22.74	0.34
Wind 240 deg - Ice		-22.77	13.19	-0.41
Wind 270 deg - Ice		-26.18	0.01	-1.03
Wind 300 deg - Ice		-22.64	-13.10	-1.38
Wind 330 deg - Ice		-13.08	-22.73	-1.37
Total Weight	71.68			
Wind 0 deg - Service		-0.02	-20.08	-0.61
Wind 30 deg - Service		9.85	-17.20	-0.27
Wind 60 deg - Service		17.02	-9.89	0.14

Load Case	Vertical Forces K	Sum of Forces X K	Sum of Forces Z K	Sum of Torques kip-ft
Wind 90 deg - Service		19.74	0.02	0.53
Wind 120 deg - Service		17.28	10.06	0.80
Wind 150 deg - Service		9.88	17.22	0.80
Wind 180 deg - Service		0.02	19.80	0.62
Wind 210 deg - Service		-9.85	17.20	0.27
Wind 240 deg - Service		-17.26	10.02	-0.19
Wind 270 deg - Service		-19.74	-0.02	-0.53
Wind 300 deg - Service		-17.04	-9.92	-0.75
Wind 330 deg - Service		-9.88	-17.22	-0.80

Load Combinations

Comb. No.	Description
1	Dead Only
2	1.2 Dead+1.6 Wind 0 deg - No Ice+1.0 Guy
3	1.2 Dead+1.6 Wind 30 deg - No Ice+1.0 Guy
4	1.2 Dead+1.6 Wind 60 deg - No Ice+1.0 Guy
5	1.2 Dead+1.6 Wind 90 deg - No Ice+1.0 Guy
6	1.2 Dead+1.6 Wind 120 deg - No Ice+1.0 Guy
7	1.2 Dead+1.6 Wind 150 deg - No Ice+1.0 Guy
8	1.2 Dead+1.6 Wind 180 deg - No Ice+1.0 Guy
9	1.2 Dead+1.6 Wind 210 deg - No Ice+1.0 Guy
10	1.2 Dead+1.6 Wind 240 deg - No Ice+1.0 Guy
11	1.2 Dead+1.6 Wind 270 deg - No Ice+1.0 Guy
12	1.2 Dead+1.6 Wind 300 deg - No Ice+1.0 Guy
13	1.2 Dead+1.6 Wind 330 deg - No Ice+1.0 Guy
14	1.2 Dead+1.0 Ice+1.0 Temp+Guy
15	1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp+1.0 Guy
16	1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp+1.0 Guy
17	1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp+1.0 Guy
18	1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp+1.0 Guy
19	1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp+1.0 Guy
20	1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp+1.0 Guy
21	1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp+1.0 Guy
22	1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp+1.0 Guy
23	1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp+1.0 Guy
24	1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp+1.0 Guy
25	1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp+1.0 Guy
26	1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp+1.0 Guy
27	Dead+Wind 0 deg - Service+Guy
28	Dead+Wind 30 deg - Service+Guy
29	Dead+Wind 60 deg - Service+Guy
30	Dead+Wind 90 deg - Service+Guy
31	Dead+Wind 120 deg - Service+Guy
32	Dead+Wind 150 deg - Service+Guy
33	Dead+Wind 180 deg - Service+Guy
34	Dead+Wind 210 deg - Service+Guy
35	Dead+Wind 240 deg - Service+Guy
36	Dead+Wind 270 deg - Service+Guy
37	Dead+Wind 300 deg - Service+Guy
38	Dead+Wind 330 deg - Service+Guy

Maximum Member Forces

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
T1	368.75 - 362.5	Leg	Max Tension	12	0.34	-0.00	-0.00
			Max. Compression	23	-1.67	0.00	0.02
			Max. Mx	5	-0.11	0.27	0.00
			Max. My	12	0.28	0.01	-0.20
			Max. Vy	6	-0.12	-0.00	0.00
			Max. Vx	2	0.19	-0.00	-0.00
		Diagonal	Max Tension	8	0.37	0.00	0.00
			Max. Compression	2	-0.45	0.00	0.00
			Max. Mx	24	0.04	0.02	0.00
			Max. My	2	-0.42	0.01	0.00
			Max. Vy	18	-0.03	0.02	-0.00
			Max. Vx	7	-0.00	0.00	0.00
		Top Girt	Max Tension	2	0.11	0.00	0.00
			Max. Compression	12	-0.09	0.00	0.00
			Max. Mx	14	0.01	0.08	0.00
			Max. My	5	-0.08	0.00	-0.00
			Max. Vy	14	-0.06	0.00	0.00
			Max. Vx	5	0.00	0.00	0.00
T2	362.5 - 356.25	Leg	Max Tension	12	0.92	0.01	-0.20
			Max. Compression	23	-2.35	0.06	-0.13
			Max. Mx	11	-0.51	1.41	-0.01
			Max. My	6	-1.66	-0.21	-0.97
			Max. Vy	11	-0.32	1.41	-0.01
			Max. Vx	7	0.22	-0.10	-0.96
		Diagonal	Max Tension	12	0.92	0.00	0.00
			Max. Compression	6	-1.33	0.00	0.00
			Max. Mx	24	-0.07	-0.05	0.00
			Max. My	6	-0.20	-0.02	0.01
			Max. Vy	24	0.05	-0.05	0.00
			Max. Vx	6	0.00	0.00	0.00
		Top Girt	Max Tension	8	0.32	0.00	0.00
			Max. Compression	10	-0.17	0.00	0.00
			Max. Mx	14	0.21	0.08	0.00
			Max. My	5	0.22	0.00	-0.00
			Max. Vy	14	0.07	0.00	0.00
			Max. Vx	5	0.00	0.00	0.00
T3	356.25 - 350	Leg	Max Tension	8	6.18	-0.07	-0.66
			Max. Compression	6	-9.20	-0.40	-0.80
			Max. Mx	5	-0.82	2.29	-0.01
			Max. My	7	-7.48	-0.10	1.53
			Max. Vy	11	2.97	1.41	-0.01
			Max. Vx	7	-2.00	-0.10	-0.96
		Diagonal	Max Tension	6	5.77	0.00	0.00
			Max. Compression	12	-5.45	0.00	0.00
			Max. Mx	7	-0.55	-0.06	-0.01
			Max. My	6	-4.44	-0.00	-0.09
			Max. Vy	25	0.05	-0.05	-0.00
			Max. Vx	6	0.02	-0.00	-0.09
		Top Girt	Max Tension	6	1.33	0.00	0.00
			Max. Compression	4	-1.28	0.00	0.00
			Max. Mx	14	0.32	0.08	0.00
			Max. My	5	-1.11	0.00	-0.00
			Max. Vy	14	-0.07	0.00	0.00
			Max. Vx	5	0.00	0.00	0.00
T4	350 - 343.75	Leg	Max Tension	12	5.30	0.43	0.78
			Max. Compression	2	-8.09	0.02	0.17
			Max. Mx	5	-1.54	-1.35	-0.02
			Max. My	7	-6.74	-0.19	-0.94

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Vy	5	-0.74	-1.35	-0.02
			Max. Vx	2	0.83	0.00	0.78
		Diagonal	Max Tension	5	3.66	0.00	0.00
			Max. Compression	5	-4.05	0.00	0.00
			Max. Mx	21	-0.20	0.04	-0.00
			Max. My	5	-4.02	0.02	0.01
			Max. Vy	21	-0.03	0.04	-0.00
			Max. Vx	5	-0.00	0.02	0.01
		Top Girt	Max Tension	8	9.83	0.00	0.00
			Max. Compression	6	-6.79	0.00	0.00
			Max. Mx	14	2.21	0.08	0.00
			Max. My	5	2.10	0.00	0.00
			Max. Vy	14	-0.06	0.00	0.00
			Max. Vx	5	-0.00	0.00	0.00
		Guy A	Bottom Tension	8	22.75		
			Top Tension	8	23.31		
			Top Cable Vert	8	19.63		
			Top Cable Norm	8	12.57		
			Top Cable Tan	8	0.02		
			Bot Cable Vert	8	-18.28		
			Bot Cable Norm	8	13.55		
			Bot Cable Tan	8	0.02		
		Guy B	Bottom Tension	12	23.15		
			Top Tension	12	23.70		
			Top Cable Vert	12	19.81		
			Top Cable Norm	12	13.01		
			Top Cable Tan	12	0.02		
			Bot Cable Vert	12	-18.47		
			Bot Cable Norm	12	13.96		
			Bot Cable Tan	12	0.02		
		Guy C	Bottom Tension	4	23.06		
			Top Tension	4	23.62		
			Top Cable Vert	4	19.90		
			Top Cable Norm	4	12.73		
			Top Cable Tan	4	0.02		
			Bot Cable Vert	4	-18.53		
			Bot Cable Norm	4	13.73		
			Bot Cable Tan	4	0.02		
		Torque Arm Top	Max Tension	11	22.28	0.00	0.00
			Max. Compression	1	0.00	0.00	0.00
			Max. Mx	23	17.66	0.13	0.00
			Max. My	5	22.05	0.00	-0.00
			Max. Vy	23	-0.09	0.00	0.00
			Max. Vx	5	0.00	0.00	0.00
		Torque Arm Bottom	Max Tension	1	0.00	0.00	0.00
			Max. Compression	4	-24.72	0.00	0.00
			Max. Mx	23	-20.47	0.19	0.00
			Max. My	5	-8.54	0.00	0.00
			Max. Vy	23	0.09	0.00	0.00
			Max. Vx	5	-0.00	0.00	0.00
T5	343.75 - 337.5	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	17	-41.64	0.02	-0.00
			Max. Mx	11	-17.69	0.28	0.19
			Max. My	10	-34.99	0.24	-0.24
			Max. Vy	11	0.10	0.28	-0.21
			Max. Vx	3	0.08	-0.10	0.21
		Diagonal	Max Tension	11	4.65	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	8	-4.28	0.00	0.00
			Max. Mx	14	-2.39	0.08	0.00
			Max. My	5	-2.61	0.00	0.00

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Vy	14	0.06	0.00	0.00
			Max. Vx	5	-0.00	0.00	0.00
T6	337.5 - 331.25	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	17	-42.52	-0.01	0.00
			Max. Mx	5	-40.44	0.08	-0.02
			Max. My	3	-31.08	-0.02	-0.06
			Max. Vy	11	-0.06	0.05	-0.02
			Max. Vx	2	-0.05	0.00	0.04
		Diagonal	Max Tension	10	4.37	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	4	-3.09	0.00	0.00
			Max. Mx	14	-2.70	0.03	0.00
			Max. My	5	-2.89	0.00	0.00
			Max. Vy	14	-0.03	0.00	0.00
			Max. Vx	5	-0.00	0.00	0.00
T7	331.25 - 325	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	17	-43.29	0.02	0.01
			Max. Mx	5	-13.19	0.07	0.03
			Max. My	3	-32.37	0.02	-0.08
			Max. Vy	11	0.06	0.05	-0.02
			Max. Vx	2	0.06	0.00	0.04
		Diagonal	Max Tension	10	4.04	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	4	-2.99	0.00	0.00
			Max. Mx	14	-2.57	0.03	0.00
			Max. My	5	-2.96	0.00	-0.00
			Max. Vy	14	0.03	0.00	0.00
			Max. Vx	5	0.00	0.00	0.00
T8	325 - 318.75	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	25	-45.26	0.01	0.00
			Max. Mx	5	-43.11	-0.07	-0.00
			Max. My	3	-35.38	-0.04	-0.08
			Max. Vy	4	-0.20	0.03	-0.05
			Max. Vx	9	-0.29	-0.04	0.04
		Diagonal	Max Tension	6	4.44	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	4	-3.60	0.00	0.00
			Max. Mx	14	-3.11	0.03	0.00
			Max. My	5	-3.56	0.00	-0.00
			Max. Vy	14	-0.03	0.00	0.00
			Max. Vx	5	0.00	0.00	0.00
T9	318.75 - 312.5	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	25	-45.48	-0.05	-0.03
			Max. Mx	11	-42.90	-0.19	-0.00
			Max. My	8	-42.32	-0.00	0.18
			Max. Vy	11	0.09	0.07	-0.00
			Max. Vx	8	-0.09	-0.01	-0.07
		Diagonal	Max Tension	5	4.46	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	12	-4.09	0.00	0.00
			Max. Mx	14	-3.62	0.03	0.00
			Max. My	5	-4.07	0.00	-0.00
			Max. Vy	14	-0.03	0.00	0.00
			Max. Vx	5	0.00	0.00	0.00
T10	312.5 - 306.25	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	25	-46.00	0.13	0.07
			Max. Mx	5	-41.75	-0.74	0.01
			Max. My	8	-41.17	0.00	-0.76
			Max. Vy	11	-0.19	0.74	0.03
			Max. Vx	8	0.19	0.00	-0.76
		Diagonal	Max Tension	5	4.80	0.00	0.00

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	13	-4.09	0.00	0.00
			Max. Mx	14	-3.72	0.03	0.00
			Max. My	5	-4.07	0.00	-0.00
			Max. Vy	14	0.03	0.00	0.00
			Max. Vx	5	0.00	0.00	0.00
T11	306.25 - 300	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	25	-48.69	0.21	0.14
			Max. Mx	5	-41.52	1.67	0.00
			Max. My	8	-33.63	0.09	1.69
			Max. Vy	11	1.88	0.74	0.03
			Max. Vx	2	1.91	0.05	0.69
		Diagonal	Max Tension	12	9.13	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	12	-5.94	0.00	0.00
			Max. Mx	14	-4.16	0.08	0.00
			Max. My	5	-5.76	0.00	-0.00
			Max. Vy	14	-0.06	0.00	0.00
			Max. Vx	5	0.00	0.00	0.00
T12	300 - 293.75	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	25	-40.13	0.02	-0.00
			Max. Mx	5	-32.21	-1.37	0.00
			Max. My	8	-23.52	0.09	-1.30
			Max. Vy	5	-0.67	-1.37	0.00
			Max. Vx	8	-0.68	0.09	-1.30
		Diagonal	Max Tension	5	3.12	0.00	0.00
			Max. Compression	8	-7.80	0.00	0.00
			Max. Mx	22	-1.93	0.05	-0.00
			Max. My	5	-7.43	0.01	0.01
			Max. Vy	22	-0.03	0.05	-0.00
			Max. Vx	5	-0.00	0.01	0.01
		Top Girt	Max Tension	8	12.08	0.00	0.00
			Max. Compression	6	-9.12	0.00	0.00
			Max. Mx	14	1.21	0.08	0.00
			Max. My	5	10.27	0.00	-0.00
			Max. Vy	14	0.06	0.00	0.00
			Max. Vx	5	0.00	0.00	0.00
		Guy A	Bottom Tension	8	25.62		
			Top Tension	8	26.10		
			Top Cable Vert	8	21.46		
			Top Cable Norm	8	14.84		
			Top Cable Tan	8	0.01		
			Bot Cable Vert	8	-20.30		
			Bot Cable Norm	8	15.63		
			Bot Cable Tan	8	0.02		
		Guy B	Bottom Tension	12	25.61		
			Top Tension	12	26.07		
			Top Cable Vert	12	21.46		
			Top Cable Norm	12	14.81		
			Top Cable Tan	12	0.01		
			Bot Cable Vert	12	-20.32		
			Bot Cable Norm	12	15.58		
			Bot Cable Tan	12	0.02		
		Guy C	Bottom Tension	4	25.54		
			Top Tension	4	26.02		
			Top Cable Vert	4	21.43		
			Top Cable Norm	4	14.76		
			Top Cable Tan	4	0.02		
			Bot Cable Vert	4	-20.25		
			Bot Cable Norm	4	15.55		
			Bot Cable Tan	4	0.02		

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
		Torque Arm Top	Max Tension	5	23.42	0.00	0.00
			Max. Compression	1	0.00	0.00	0.00
			Max. Mx	23	16.39	0.13	0.00
			Max. My	5	23.42	0.00	-0.00
			Max. Vy	23	0.09	0.00	0.00
			Max. Vx	5	0.00	0.00	0.00
		Torque Arm Bottom	Max Tension	1	0.00	0.00	0.00
			Max. Compression	8	-28.07	0.00	0.00
			Max. Mx	23	-19.17	0.19	0.00
			Max. My	24	-13.65	0.00	-0.00
			Max. Vy	23	-0.09	0.00	0.00
			Max. Vx	24	-0.00	0.00	0.00
T13	293.75 - 287.5	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	12	-89.43	0.01	-0.03
			Max. Mx	4	-39.18	0.14	0.01
			Max. My	8	-40.72	-0.01	0.09
			Max. Vy	5	-0.07	-0.13	-0.07
			Max. Vx	8	0.07	-0.01	-0.04
		Diagonal	Max Tension	5	6.90	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	4	-3.06	0.00	0.00
			Max. Mx	14	-0.83	0.08	0.00
			Max. My	5	-2.68	0.00	-0.00
			Max. Vy	14	-0.06	0.00	0.00
			Max. Vx	5	0.00	0.00	0.00
T14	287.5 - 281.25	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	12	-94.49	-0.07	0.00
			Max. Mx	11	-92.36	-0.14	0.04
			Max. My	2	-83.84	0.00	-0.13
			Max. Vy	5	-0.08	-0.08	0.05
			Max. Vx	8	-0.07	-0.01	-0.04
		Diagonal	Max Tension	5	5.56	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	5	-3.88	0.00	0.00
			Max. Mx	14	-2.54	0.03	0.00
			Max. My	5	-3.42	0.00	-0.00
			Max. Vy	14	-0.03	0.00	0.00
			Max. Vx	5	0.00	0.00	0.00
T15	281.25 - 275	Leg	Max Tension	2	1.90	0.03	-0.11
			Max. Compression	12	-98.78	-0.03	-0.03
			Max. Mx	5	-6.49	0.18	0.01
			Max. My	2	-86.80	0.00	-0.16
			Max. Vy	11	-0.06	-0.06	0.02
			Max. Vx	8	0.06	0.00	0.03
		Diagonal	Max Tension	5	4.34	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	5	-3.13	0.00	0.00
			Max. Mx	14	-2.01	0.03	0.00
			Max. My	5	-2.81	0.00	-0.00
			Max. Vy	14	0.03	0.00	0.00
			Max. Vx	5	0.00	0.00	0.00
T16	275 - 268.75	Leg	Max Tension	2	6.07	0.01	-0.07
			Max. Compression	12	-101.79	-0.05	-0.03
			Max. Mx	5	-98.21	0.14	0.01
			Max. My	2	-89.55	-0.01	-0.16
			Max. Vy	5	0.05	0.06	0.03
			Max. Vx	2	0.06	-0.01	-0.06
		Diagonal	Max Tension	6	3.55	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	4	-2.96	0.00	0.00
			Max. Mx	14	-2.01	0.03	0.00

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. My	24	-1.97	0.00	0.00
			Max. Vy	14	0.03	0.00	0.00
			Max. Vx	24	-0.00	0.00	0.00
T17	268.75 - 262.5	Leg	Max Tension	2	8.59	0.01	-0.08
			Max. Compression	8	-103.43	-0.01	0.06
			Max. Mx	11	-1.65	-0.15	0.04
			Max. My	2	-91.19	-0.00	-0.17
			Max. Vy	5	-0.06	0.06	0.03
			Max. Vx	8	-0.06	0.00	0.04
		Diagonal	Max Tension	6	3.02	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	8	-2.98	0.00	0.00
			Max. Mx	14	-2.00	0.03	0.00
			Max. My	26	-1.94	0.00	0.00
			Max. Vy	14	-0.03	0.00	0.00
			Max. Vx	26	-0.00	0.00	0.00
T18	262.5 - 256.25	Leg	Max Tension	2	9.56	0.01	-0.11
			Max. Compression	8	-103.48	-0.03	0.02
			Max. Mx	5	-100.07	0.14	0.01
			Max. My	2	-91.69	-0.00	-0.15
			Max. Vy	11	-0.06	-0.00	0.01
			Max. Vx	8	0.07	-0.02	-0.02
		Diagonal	Max Tension	13	2.66	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	8	-2.94	0.00	0.00
			Max. Mx	14	-1.96	0.03	0.00
			Max. My	26	-1.91	0.00	0.00
			Max. Vy	14	0.03	0.00	0.00
			Max. Vx	26	0.00	0.00	0.00
T19	256.25 - 250	Leg	Max Tension	2	7.16	0.02	-0.01
			Max. Compression	8	-103.13	-0.04	0.18
			Max. Mx	5	-71.65	0.23	0.01
			Max. My	2	7.00	0.04	-0.26
			Max. Vy	11	0.08	-0.00	0.01
			Max. Vx	8	-0.09	-0.02	-0.02
		Diagonal	Max Tension	2	3.90	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	8	-3.59	0.00	0.00
			Max. Mx	14	-2.40	0.03	0.00
			Max. My	26	-2.32	0.00	0.00
			Max. Vy	14	0.03	0.00	0.00
			Max. Vx	26	0.00	0.00	0.00
T20	250 - 243.75	Leg	Max Tension	2	4.32	0.04	-0.26
			Max. Compression	8	-100.19	0.02	-0.53
			Max. Mx	5	-72.96	-0.63	-0.01
			Max. My	2	4.16	-0.02	0.56
			Max. Vy	5	0.17	-0.63	-0.01
			Max. Vx	13	0.19	-0.10	-0.19
		Diagonal	Max Tension	10	4.48	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	8	-4.35	0.00	0.00
			Max. Mx	14	-2.97	0.08	0.00
			Max. My	26	-2.87	0.00	0.00
			Max. Vy	14	-0.06	0.00	0.00
			Max. Vx	26	-0.00	0.00	0.00
T21	243.75 - 237.5	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	7	-96.22	-0.14	-0.22
			Max. Mx	11	-75.12	-1.66	-0.01
			Max. My	13	-94.33	0.24	-1.41
			Max. Vy	5	-1.84	-0.63	-0.01
			Max. Vx	7	-1.52	-0.20	-0.50

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
		Diagonal	Max Tension	13	10.09	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	6	-5.35	0.00	0.00
			Max. Mx	14	-3.00	0.07	0.00
			Max. My	26	-3.42	0.00	-0.00
			Max. Vy	14	-0.06	0.00	0.00
			Max. Vx	26	0.00	0.00	0.00
T22	237.5 - 231.25	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	21	-89.26	-0.00	-0.08
			Max. Mx	5	-77.99	-0.32	0.01
			Max. My	8	-54.09	0.02	-0.28
			Max. Vy	6	-0.09	-0.15	-0.05
			Max. Vx	13	0.12	0.11	0.23
		Diagonal	Max Tension	13	13.00	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	13	-7.25	0.00	0.00
			Max. Mx	14	-2.89	0.07	0.00
			Max. My	13	-7.25	0.00	-0.00
			Max. Vy	14	-0.06	0.00	0.00
			Max. Vx	13	0.00	0.00	0.00
T23	231.25 - 225	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	24	-88.23	0.13	0.01
			Max. Mx	12	-66.07	0.61	0.24
			Max. My	8	-66.31	0.08	-0.62
			Max. Vy	11	-0.13	0.45	0.03
			Max. Vx	13	-0.15	0.28	0.47
		Diagonal	Max Tension	13	14.04	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	13	-8.40	0.00	0.00
			Max. Mx	23	-3.51	0.07	0.00
			Max. My	13	-8.40	0.00	-0.00
			Max. Vy	23	0.06	0.00	0.00
			Max. Vx	13	0.00	0.00	0.00
T24	225 - 218.75	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	23	-66.04	0.06	-0.03
			Max. Mx	12	-46.01	0.61	0.24
			Max. My	8	-46.53	0.08	-0.62
			Max. Vy	11	0.47	0.61	0.01
			Max. Vx	8	-0.48	0.08	-0.62
		Diagonal	Max Tension	1	0.00	0.00	0.00
			Max. Compression	13	-14.39	0.00	0.00
			Max. Mx	13	-3.22	-0.09	0.01
			Max. My	11	-12.30	0.02	0.03
			Max. Vy	22	0.05	-0.08	0.00
			Max. Vx	11	0.01	0.00	0.00
		Top Girt	Max Tension	8	16.23	0.00	0.00
			Max. Compression	2	-7.32	0.00	0.00
			Max. Mx	14	4.78	0.07	0.00
			Max. My	13	0.73	0.00	-0.00
			Max. Vy	14	0.06	0.00	0.00
			Max. Vx	13	0.00	0.00	0.00
		Guy A	Bottom Tension	8	22.63		
			Top Tension	8	22.89		
			Top Cable Vert	8	16.73		
			Top Cable Norm	8	15.63		
			Top Cable Tan	8	0.01		
			Bot Cable Vert	8	-16.00		
			Bot Cable Norm	8	16.00		
			Bot Cable Tan	8	0.01		
		Guy B	Bottom Tension	12	22.67		
			Top Tension	12	22.92		

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Top Cable Vert	12	16.71		
			Top Cable Norm	12	15.69		
			Top Cable Tan	12	0.01		
			Bot Cable Vert	12	-15.99		
			Bot Cable Norm	12	16.06		
			Bot Cable Tan	12	0.01		
		Guy C	Bottom Tension	4	22.38		
			Top Tension	4	22.65		
			Top Cable Vert	4	16.62		
			Top Cable Norm	4	15.38		
			Top Cable Tan	4	0.01		
			Bot Cable Vert	4	-15.88		
			Bot Cable Norm	4	15.77		
			Bot Cable Tan	4	0.01		
		Torque Arm Top	Max Tension	11	21.91	0.00	0.00
			Max. Compression	1	0.00	0.00	0.00
			Max. Mx	14	12.09	0.13	0.00
			Max. My	13	4.74	0.00	-0.00
			Max. Vy	14	-0.08	0.00	0.00
			Max. Vx	13	0.00	0.00	0.00
		Torque Arm Bottom	Max Tension	1	0.00	0.00	0.00
			Max. Compression	5	-23.03	0.00	0.00
			Max. Mx	15	-14.30	0.18	0.00
			Max. My	26	-9.26	0.00	0.00
			Max. Vy	15	-0.08	0.00	0.00
			Max. Vx	26	-0.00	0.00	0.00
T25	218.75 - 212.5	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	25	-111.44	-0.05	-0.02
			Max. Mx	5	-107.14	-0.49	-0.18
			Max. My	7	-94.33	-0.19	-0.39
			Max. Vy	5	-0.17	-0.49	-0.18
			Max. Vx	2	0.14	-0.01	0.37
		Diagonal	Max Tension	5	7.75	0.00	0.00
		Top Girt	Max Tension	23	5.77	0.00	0.00
			Max. Compression	1	0.00	0.00	0.00
			Max. Mx	14	4.79	0.07	0.00
			Max. My	13	2.58	0.00	-0.00
			Max. Vy	14	0.06	0.00	0.00
			Max. Vx	13	0.00	0.00	0.00
T26	212.5 - 206.25	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	25	-113.86	-0.01	-0.00
			Max. Mx	5	-112.25	0.22	0.04
			Max. My	2	-109.77	0.02	-0.21
			Max. Vy	5	0.08	0.04	0.03
			Max. Vx	13	-0.07	-0.02	-0.05
		Diagonal	Max Tension	5	6.15	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	5	-4.36	0.00	0.00
			Max. Mx	14	-1.06	0.03	0.00
			Max. My	13	-1.98	0.00	-0.00
			Max. Vy	14	0.03	0.00	0.00
			Max. Vx	13	0.00	0.00	0.00
T27	206.25 - 200	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	3	-116.12	0.01	-0.09
			Max. Mx	5	-115.67	0.16	-0.02
			Max. My	2	-111.67	0.01	-0.15
			Max. Vy	11	-0.07	-0.02	0.01
			Max. Vx	13	0.06	-0.02	-0.05
		Diagonal	Max Tension	5	4.06	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	5	-3.26	0.00	0.00

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Mx	14	-0.92	0.03	0.00
			Max. My	13	-1.66	0.00	-0.00
			Max. Vy	14	-0.03	0.00	0.00
			Max. Vx	13	0.00	0.00	0.00
T28	200 - 175	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	25	-117.98	-0.02	-0.07
			Max. Mx	6	-108.47	0.52	0.34
			Max. My	2	-109.25	-0.16	-0.72
			Max. Vy	6	-0.57	-0.24	-0.03
			Max. Vx	7	-0.64	0.02	-0.13
		Diagonal	Max Tension	3	6.44	0.00	0.00
		Horizontal	Max Tension	25	2.04	0.00	0.00
			Max. Compression	13	-3.20	0.00	0.00
			Max. Mx	14	1.77	0.03	0.00
			Max. My	6	1.95	0.00	-0.00
			Max. Vy	14	-0.03	0.00	0.00
			Max. Vx	6	0.00	0.00	0.00
		Secondary Horizontal	Max Tension	25	2.04	0.00	0.00
			Max. Compression	25	-2.04	0.00	0.00
			Max. Mx	14	1.77	0.03	0.00
			Max. My	6	1.95	0.00	-0.00
			Max. Vy	14	-0.03	0.00	0.00
			Max. Vx	6	0.00	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	4	-2.27	0.00	0.00
			Max. Mx	14	-0.88	0.03	0.00
			Max. My	13	-1.63	0.00	-0.00
			Max. Vy	14	-0.03	0.00	0.00
			Max. Vx	13	0.00	0.00	0.00
T29	175 - 168.75	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	25	-116.74	-0.08	-0.04
			Max. Mx	11	-47.29	0.43	0.05
			Max. My	8	-70.29	-0.02	-0.52
			Max. Vy	11	0.15	0.43	0.05
			Max. Vx	8	-0.15	-0.02	-0.52
		Diagonal	Max Tension	3	8.82	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	3	-4.67	0.00	0.00
			Max. Mx	14	-1.55	0.03	0.00
			Max. My	6	-3.94	0.00	-0.00
			Max. Vy	14	-0.03	0.00	0.00
			Max. Vx	6	0.00	0.00	0.00
T30	168.75 - 162.5	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	23	-115.68	0.11	-0.03
			Max. Mx	11	-95.17	0.51	-0.03
			Max. My	8	-87.39	-0.03	-0.52
			Max. Vy	5	0.17	-0.51	-0.03
			Max. Vx	8	0.16	-0.03	-0.52
		Diagonal	Max Tension	3	9.74	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	3	-5.81	0.00	0.00
			Max. Mx	14	-2.65	0.03	0.00
			Max. My	6	-4.64	0.00	-0.00
			Max. Vy	14	0.03	0.00	0.00
			Max. Vx	6	0.00	0.00	0.00
T31	162.5 - 156.25	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	24	-123.46	-0.07	-0.01
			Max. Mx	11	-105.32	0.51	-0.03
			Max. My	8	-97.63	-0.03	-0.52
			Max. Vy	5	-0.18	-0.51	-0.03

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Vx	8	-0.16	-0.03	-0.52
		Diagonal	Max Tension	7	5.06	0.00	0.00
		Top Girt	Max Tension	2	6.98	0.00	0.00
			Max. Compression	4	-2.05	0.00	0.00
			Max. Mx	14	2.28	0.07	0.00
			Max. My	6	0.49	0.00	-0.00
			Max. Vy	14	0.06	0.00	0.00
			Max. Vx	6	0.00	0.00	0.00
		Guy A	Bottom Tension	9	24.04		
			Top Tension	9	24.23		
			Top Cable Vert	9	15.78		
			Top Cable Norm	9	18.38		
			Top Cable Tan	9	0.06		
			Bot Cable Vert	9	-15.24		
			Bot Cable Norm	9	18.59		
			Bot Cable Tan	9	0.23		
		Guy B	Bottom Tension	13	24.01		
			Top Tension	13	24.20		
			Top Cable Vert	13	15.80		
			Top Cable Norm	13	18.32		
			Top Cable Tan	13	0.05		
			Bot Cable Vert	13	-15.28		
			Bot Cable Norm	13	18.52		
			Bot Cable Tan	13	0.22		
		Guy C	Bottom Tension	3	23.99		
			Top Tension	3	24.19		
			Top Cable Vert	3	15.74		
			Top Cable Norm	3	18.37		
			Top Cable Tan	3	0.06		
			Bot Cable Vert	3	-15.18		
			Bot Cable Norm	3	18.58		
			Bot Cable Tan	3	0.23		
T32	156.25 - 150	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	24	-125.34	0.00	0.00
			Max. Mx	5	-111.11	0.22	0.02
			Max. My	2	-111.24	-0.03	-0.21
			Max. Vy	5	0.09	-0.02	-0.01
			Max. Vx	2	-0.07	-0.00	0.02
		Diagonal	Max Tension	7	3.91	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	7	-2.80	0.00	0.00
			Max. Mx	14	-1.04	0.03	0.00
			Max. My	6	-2.29	0.00	-0.00
			Max. Vy	14	-0.03	0.00	0.00
			Max. Vx	6	0.00	0.00	0.00
T33	150 - 125	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	17	-128.49	0.02	-0.02
			Max. Mx	6	-48.35	0.25	0.04
			Max. My	2	-114.32	0.01	-0.29
			Max. Vy	10	0.12	0.03	-0.03
			Max. Vx	3	0.15	-0.01	0.02
		Diagonal	Max Tension	6	5.36	0.00	0.00
		Horizontal	Max Tension	17	2.23	0.00	0.00
			Max. Compression	6	-3.07	0.00	0.00
			Max. Mx	14	2.03	0.03	0.00
			Max. My	6	1.97	0.00	-0.00
			Max. Vy	14	0.02	0.00	0.00
			Max. Vx	6	0.00	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	4	-2.10	0.00	0.00
			Max. Mx	14	-0.94	0.03	0.00

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. My	6	-1.94	0.00	-0.00
			Max. Vy	14	0.02	0.00	0.00
			Max. Vx	6	0.00	0.00	0.00
T34	125 - 100	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	16	-128.60	0.01	-0.03
			Max. Mx	11	-82.50	0.60	-0.15
			Max. My	2	-95.85	0.04	0.65
			Max. Vy	5	0.17	-0.60	-0.15
			Max. Vx	2	-0.18	0.04	0.65
		Diagonal	Max Tension	5	12.65	0.00	0.00
		Horizontal	Max Tension	16	2.23	0.00	0.00
			Max. Compression	5	-7.41	0.00	0.00
			Max. Mx	14	2.14	0.03	0.00
			Max. My	6	1.93	0.00	0.00
			Max. Vy	14	-0.02	0.00	0.00
			Max. Vx	6	-0.00	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	6	-4.09	0.00	0.00
			Max. Mx	14	-1.36	0.03	0.00
			Max. My	6	-4.09	0.00	0.00
			Max. Vy	14	-0.02	0.00	0.00
			Max. Vx	6	-0.00	0.00	0.00
T35	100 - 93.75	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	25	-104.48	0.03	0.03
			Max. Mx	11	-55.59	0.60	-0.15
			Max. My	2	-69.92	0.04	0.65
			Max. Vy	5	-0.41	-0.60	-0.15
			Max. Vx	2	0.44	0.04	0.65
		Diagonal	Max Tension	1	0.00	0.00	0.00
			Max. Compression	22	-15.29	0.00	0.00
			Max. Mx	25	-14.06	-0.09	0.00
			Max. My	11	-13.74	0.01	0.02
			Max. Vy	25	0.05	-0.09	0.00
			Max. Vx	11	0.01	0.00	0.00
		Top Girt	Max Tension	12	15.28	0.00	0.00
			Max. Compression	2	-4.88	0.00	0.00
			Max. Mx	14	8.08	0.07	0.00
			Max. My	6	10.38	0.00	-0.00
			Max. Vy	14	0.06	0.00	0.00
			Max. Vx	6	0.00	0.00	0.00
		Guy A	Bottom Tension	7	13.69		
			Top Tension	7	13.76		
			Top Cable Vert	7	6.54		
			Top Cable Norm	7	12.11		
			Top Cable Tan	7	0.04		
			Bot Cable Vert	7	-6.29		
			Bot Cable Norm	7	12.16		
			Bot Cable Tan	7	0.11		
		Guy B	Bottom Tension	13	13.77		
			Top Tension	13	13.83		
			Top Cable Vert	13	6.49		
			Top Cable Norm	13	12.22		
			Top Cable Tan	13	0.04		
			Bot Cable Vert	13	-6.25		
			Bot Cable Norm	13	12.27		
			Bot Cable Tan	13	0.11		
		Guy C	Bottom Tension	5	13.61		
			Top Tension	5	13.68		
			Top Cable Vert	5	6.55		
			Top Cable Norm	5	12.01		
			Top Cable Tan	5	0.03		

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Bot Cable Vert	5	-6.29		
			Bot Cable Norm	5	12.06		
			Bot Cable Tan	5	0.10		
		Torque Arm Top	Max Tension	11	14.54	0.00	0.00
			Max. Compression	2	-1.30	0.00	0.00
			Max. Mx	23	8.81	0.12	0.00
			Max. My	6	11.24	0.00	-0.00
			Max. Vy	23	-0.08	0.00	0.00
			Max. Vx	6	0.00	0.00	0.00
		Torque Arm Bottom	Max Tension	6	1.63	0.00	0.00
			Max. Compression	5	-11.30	0.00	0.00
			Max. Mx	22	-5.97	0.17	0.00
			Max. My	6	1.63	0.00	-0.00
			Max. Vy	22	-0.08	0.00	0.00
			Max. Vx	6	0.00	0.00	0.00
T36	93.75 - 87.5	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	15	-138.69	0.03	-0.02
			Max. Mx	11	-98.09	0.36	-0.07
			Max. My	8	-87.85	0.00	-0.30
			Max. Vy	6	0.12	0.05	0.03
			Max. Vx	8	0.14	-0.03	-0.03
		Diagonal	Max Tension	11	6.19	0.00	0.00
		Top Girt	Max Tension	21	8.08	0.00	0.00
			Max. Compression	1	0.00	0.00	0.00
			Max. Mx	14	7.68	0.07	0.00
			Max. My	6	5.34	0.00	0.00
			Max. Vy	14	0.06	0.00	0.00
			Max. Vx	6	-0.00	0.00	0.00
T37	87.5 - 81.25	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	15	-139.53	-0.01	-0.01
			Max. Mx	12	-97.41	0.11	0.06
			Max. My	7	-104.85	-0.00	-0.12
			Max. Vy	11	0.08	0.10	0.05
			Max. Vx	7	-0.07	-0.00	-0.12
		Diagonal	Max Tension	11	4.52	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	11	-3.34	0.00	0.00
			Max. Mx	14	-0.82	0.03	0.00
			Max. My	6	-2.94	0.00	0.00
			Max. Vy	14	-0.02	0.00	0.00
			Max. Vx	6	-0.00	0.00	0.00
T38	81.25 - 75	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	15	-140.86	0.00	-0.01
			Max. Mx	5	-91.72	0.12	-0.01
			Max. My	7	-104.28	0.01	0.09
			Max. Vy	5	0.06	0.01	0.01
			Max. Vx	7	0.05	-0.00	-0.01
		Diagonal	Max Tension	12	2.94	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	11	-2.32	0.00	0.00
			Max. Mx	14	-0.49	0.03	0.00
			Max. My	6	-2.06	0.00	0.00
			Max. Vy	14	0.02	0.00	0.00
			Max. Vx	6	-0.00	0.00	0.00
T39	75 - 50	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-143.47	0.04	0.13
			Max. Mx	5	-99.55	-0.61	-0.10
			Max. My	2	-106.06	-0.06	0.55
			Max. Vy	5	0.17	-0.61	-0.10
			Max. Vx	13	0.17	0.01	0.03
		Diagonal	Max Tension	3	4.90	0.00	0.00

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
		Horizontal	Max Tension	26	2.49	0.00	0.00
			Max. Compression	6	-2.77	0.00	0.00
			Max. Mx	14	2.38	0.03	0.00
			Max. My	6	1.91	0.00	0.00
			Max. Vy	14	0.02	0.00	0.00
			Max. Vx	6	-0.00	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	4	-1.59	0.00	0.00
			Max. Mx	14	-0.48	0.03	0.00
			Max. My	6	-1.46	0.00	0.00
			Max. Vy	14	0.02	0.00	0.00
			Max. Vx	6	-0.00	0.00	0.00
T40	50 - 25	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	18	-150.54	0.00	-0.00
			Max. Mx	5	-105.87	-0.61	-0.10
			Max. My	2	-110.81	-0.06	0.55
			Max. Vy	5	-0.16	-0.61	-0.10
			Max. Vx	2	0.14	-0.06	0.55
		Diagonal	Max Tension	11	5.27	0.00	0.00
		Horizontal	Max Tension	18	2.61	0.00	0.00
			Max. Compression	11	-2.97	0.00	0.00
			Max. Mx	14	2.48	0.03	0.00
			Max. My	6	2.01	0.00	0.00
			Max. Vy	14	-0.02	0.00	0.00
			Max. Vx	6	-0.00	0.00	0.00
		Top Girt	Max Tension	6	4.59	0.00	0.00
			Max. Compression	4	-0.90	0.00	0.00
			Max. Mx	14	2.35	-0.04	0.00
			Max. My	6	0.38	0.00	-0.00
			Max. Vy	14	0.03	0.00	0.00
			Max. Vx	6	0.00	0.00	0.00
		Guy A	Bottom Tension	9	12.84		
			Top Tension	9	12.88		
			Top Cable Vert	9	5.64		
			Top Cable Norm	9	11.58		
			Top Cable Tan	9	0.00		
			Bot Cable Vert	9	-5.51		
			Bot Cable Norm	9	11.60		
			Bot Cable Tan	9	0.06		
		Guy B	Bottom Tension	11	12.59		
			Top Tension	11	12.63		
			Top Cable Vert	11	5.12		
			Top Cable Norm	11	11.54		
			Top Cable Tan	11	0.00		
			Bot Cable Vert	11	-4.99		
			Bot Cable Norm	11	11.56		
			Bot Cable Tan	11	0.07		
		Guy C	Bottom Tension	3	13.01		
			Top Tension	3	13.04		
			Top Cable Vert	3	5.85		
			Top Cable Norm	3	11.66		
			Top Cable Tan	3	0.00		
			Bot Cable Vert	3	-5.72		
			Bot Cable Norm	3	11.68		
			Bot Cable Tan	3	0.06		
T41	25 - 0	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	17	-151.68	-0.11	0.06
			Max. Mx	18	-151.26	-1.82	0.96
			Max. My	21	-150.28	-0.03	-1.96
			Max. Vy	18	0.38	-1.82	0.96
			Max. Vx	21	0.40	-0.03	-1.96

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
		Diagonal	Max Tension	3	3.40	0.00	0.00
		Horizontal	Max Tension	17	2.63	0.00	0.00
			Max. Compression	17	-2.63	0.00	0.00
			Max. Mx	14	2.55	0.02	0.00
			Max. My	6	2.01	0.00	0.00
			Max. Vy	14	-0.02	0.00	0.00
			Max. Vx	6	-0.00	0.00	0.00
		Top Girt	Max Tension	1	0.00	0.00	0.00
			Max. Compression	4	-1.52	0.00	0.00
			Max. Mx	14	-0.25	0.02	0.00
			Max. My	6	-1.18	0.00	0.00
			Max. Vy	14	-0.02	0.00	0.00
			Max. Vx	6	-0.00	0.00	0.00
		Base Beam	Max Tension	6	0.04	-314.61	-0.01
			Max. Compression	4	-3.06	1.55	0.00
			Max. Mx	19	-150.14	-431.42	-0.87
			Max. My	6	-109.80	-315.31	2.40
			Max. Vy	15	-150.15	-431.42	1.29
			Max. Vx	6	-0.83	-315.17	-2.40

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Guy C @ 251.45 ft Elev -12.2 ft Azimuth 240 deg	Max. Vert	10	-6.68	-3.11	1.79
	Max. H_x	10	-6.68	-3.11	1.79
	Max. H_z	3	-34.67	-21.79	13.59
	Min. Vert	4	-36.22	-23.26	13.45
	Min. H_x	4	-36.22	-23.26	13.45
	Min. H_z	10	-6.68	-3.11	1.79
Guy B @ 247.51 ft Elev 1.81 ft Azimuth 120 deg	Max. Vert	6	-6.16	2.92	1.68
	Max. H_x	12	-36.03	23.61	13.65
	Max. H_z	13	-34.36	22.07	13.72
	Min. Vert	12	-36.03	23.61	13.65
	Min. H_x	6	-6.16	2.92	1.68
	Min. H_z	6	-6.16	2.92	1.68
Guy A @ 247.15 ft Elev -5.8 ft Azimuth 0 deg	Max. Vert	2	-6.52	-0.00	-3.48
	Max. H_x	11	-22.55	1.85	-15.92
	Max. H_z	2	-6.52	-0.00	-3.48
	Min. Vert	8	-36.51	0.00	-27.05
	Min. H_x	5	-22.37	-1.85	-15.80
	Min. H_z	8	-36.51	0.00	-27.05
Guy C @ 227.42 ft Elev -10.07 ft Azimuth 240 deg	Max. Vert	10	-5.82	-2.93	1.69
	Max. H_x	10	-5.82	-2.93	1.69

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
	Max. H_z	3	-70.08	-51.98	31.57
	Min. Vert	4	-71.86	-53.95	31.16
	Min. H_x	4	-71.86	-53.95	31.16
	Min. H_z	10	-5.82	-2.93	1.69
Guy B @ 219.43 ft Elev 1.23 ft Azimuth 120 deg	Max. Vert	6	-5.47	2.73	1.58
	Max. H_x	12	-71.92	54.28	31.34
	Max. H_z	13	-69.77	52.04	31.58
	Min. Vert	12	-71.92	54.28	31.34
	Min. H_x	6	-5.47	2.73	1.58
	Min. H_z	6	-5.47	2.73	1.58
Guy A @ 224.79 ft Elev -5.41 ft Azimuth 0 deg	Max. Vert	2	-5.62	-0.00	-3.26
	Max. H_x	11	-38.70	2.74	-32.77
	Max. H_z	2	-5.62	-0.00	-3.26
	Min. Vert	8	-72.30	0.01	-62.97
	Min. H_x	5	-38.33	-2.74	-32.46
	Min. H_z	8	-72.30	0.01	-62.97
Guy C @ 206.73 ft Elev -8.98 ft Azimuth 240 deg	Max. Vert	10	-0.23	-0.28	0.16
	Max. H_x	10	-0.23	-0.28	0.16
	Max. H_z	3	-27.45	-36.23	21.42
	Min. Vert	3	-27.45	-36.23	21.42
	Min. H_x	5	-27.31	-36.50	20.53
	Min. H_z	10	-0.23	-0.28	0.16
Guy B @ 193.65 ft Elev 0.72 ft Azimuth 120 deg	Max. Vert	6	-0.22	0.27	0.15
	Max. H_x	11	-27.31	36.76	20.69
	Max. H_z	13	-27.34	36.36	21.46
	Min. Vert	13	-27.34	36.36	21.46
	Min. H_x	6	-0.22	0.27	0.15
	Min. H_z	6	-0.22	0.27	0.15
Guy A @ 201.41 ft Elev -4.96 ft Azimuth 0 deg	Max. Vert	2	-0.23	-0.00	-0.32
	Max. H_x	11	-14.35	0.92	-22.17
	Max. H_z	2	-0.23	-0.00	-0.32
	Min. Vert	9	-27.43	0.43	-42.19
	Min. H_x	5	-14.20	-0.92	-21.94
	Min. H_z	9	-27.43	0.43	-42.19
Guy C @ 114.41 ft Elev -5.4 ft Azimuth 240 deg	Max. Vert	10	-0.03	-0.09	0.05
	Max. H_x	10	-0.03	-0.09	0.05
	Max. H_z	3	-5.72	-10.09	5.90
	Min. Vert	3	-5.72	-10.09	5.90
	Min. H_x	5	-5.71	-10.14	5.78
	Min. H_z	10	-0.03	-0.09	0.05
Guy B @ 115.63 ft Elev 0.5 ft	Max. Vert	6	-0.04	0.11	0.06

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Azimuth 120 deg					
	Max. H_x	11	-4.99	10.04	5.72
	Max. H_z	13	-4.98	9.95	5.81
	Min. Vert	11	-4.99	10.04	5.72
	Min. H_x	6	-0.04	0.11	0.06
	Min. H_z	6	-0.04	0.11	0.06
Guy A @ 114.04 ft Elev -3.6 ft Azimuth 0 deg	Max. Vert	2	-0.03	-0.00	-0.11
	Max. H_x	11	-2.89	0.13	-6.08
	Max. H_z	2	-0.03	-0.00	-0.11
	Min. Vert	9	-5.51	0.06	-11.60
	Min. H_x	5	-2.86	-0.13	-6.03
	Min. H_z	9	-5.51	0.06	-11.60
Mast	Max. Vert	19	450.17	-0.41	0.22
	Max. H_x	12	300.38	1.14	0.74
	Max. H_z	12	300.38	1.14	0.74
	Max. M_x	1	0.00	-0.04	0.05
	Max. M_z	1	0.00	-0.04	0.05
	Max. Torsion	1	0.00	-0.04	0.05
	Min. Vert	1	197.99	-0.04	0.05
	Min. H_x	4	298.54	-1.20	0.66
	Min. H_z	8	299.88	-0.10	-1.25
	Min. M_x	1	0.00	-0.04	0.05
	Min. M_z	1	0.00	-0.04	0.05
	Min. Torsion	1	0.00	-0.04	0.05

Tower Mast Reaction Summary

Load Combination	Vertical K	$Shear_x$ K	$Shear_z$ K	Overturning Moment, M_x kip-ft	Overturning Moment, M_z kip-ft	Torque kip-ft
Dead Only	197.99	0.04	-0.05	0.00	0.00	0.00
1.2 Dead+1.6 Wind 0 deg - No Ice+1.0 Guy	329.42	-0.02	-0.39	0.00	0.00	0.00
1.2 Dead+1.6 Wind 30 deg - No Ice+1.0 Guy	318.03	0.88	-0.43	0.00	0.00	0.00
1.2 Dead+1.6 Wind 60 deg - No Ice+1.0 Guy	298.54	1.20	-0.66	0.00	0.00	0.00
1.2 Dead+1.6 Wind 90 deg - No Ice+1.0 Guy	316.89	0.83	-0.56	0.00	0.00	0.00
1.2 Dead+1.6 Wind 120 deg - No Ice+1.0 Guy	328.85	0.33	0.13	0.00	0.00	0.00
1.2 Dead+1.6 Wind 150 deg - No Ice+1.0 Guy	317.52	-0.02	0.90	0.00	0.00	0.00
1.2 Dead+1.6 Wind 180 deg - No Ice+1.0 Guy	299.88	0.10	1.25	0.00	0.00	0.00
1.2 Dead+1.6 Wind 210 deg - No Ice+1.0 Guy	318.23	0.11	0.89	0.00	0.00	0.00
1.2 Dead+1.6 Wind 240 deg - No Ice+1.0 Guy	328.64	-0.33	0.12	0.00	0.00	0.00
1.2 Dead+1.6 Wind 270 deg - No Ice+1.0 Guy	317.69	-0.83	-0.60	0.00	0.00	0.00
1.2 Dead+1.6 Wind 300 deg - No Ice+1.0 Guy	300.38	-1.14	-0.74	0.00	0.00	0.00
1.2 Dead+1.6 Wind 330 deg -	318.12	-0.88	-0.49	0.00	0.00	0.00

Load Combination	Vertical K	$Shear_x$ K	$Shear_z$ K	Overturning Moment, M_x kip-ft	Overturning Moment, M_z kip-ft	Torque kip-ft
No Ice+1.0 Guy						
1.2 Dead+1.0 Ice+1.0 Temp+Guy	440.87	0.18	-0.38	0.00	0.00	0.00
1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp+1.0 Guy	450.16	0.16	-0.63	0.00	0.00	0.00
1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp+1.0 Guy	449.11	0.16	-0.59	0.00	0.00	0.00
1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp+1.0 Guy	448.56	0.25	-0.40	0.00	0.00	0.00
1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp+1.0 Guy	449.17	0.37	-0.23	0.00	0.00	0.00
1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp+1.0 Guy	450.17	0.41	-0.22	0.00	0.00	0.00
1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp+1.0 Guy	449.50	0.39	-0.24	0.00	0.00	0.00
1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp+1.0 Guy	448.95	0.20	-0.26	0.00	0.00	0.00
1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp+1.0 Guy	449.31	-0.01	-0.25	0.00	0.00	0.00
1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp+1.0 Guy	450.15	-0.05	-0.25	0.00	0.00	0.00
1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp+1.0 Guy	449.45	-0.04	-0.28	0.00	0.00	0.00
1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp+1.0 Guy	449.10	0.06	-0.45	0.00	0.00	0.00
1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp+1.0 Guy	449.57	0.15	-0.62	0.00	0.00	0.00
Dead+Wind 0 deg - Service+Guy	200.81	0.03	-0.58	0.00	0.00	0.00
Dead+Wind 30 deg - Service+Guy	200.61	0.27	-0.50	0.00	0.00	0.00
Dead+Wind 60 deg - Service+Guy	200.60	0.46	-0.29	0.00	0.00	0.00
Dead+Wind 90 deg - Service+Guy	200.50	0.55	-0.03	0.00	0.00	0.00
Dead+Wind 120 deg - Service+Guy	200.57	0.50	0.21	0.00	0.00	0.00
Dead+Wind 150 deg - Service+Guy	200.69	0.32	0.38	0.00	0.00	0.00
Dead+Wind 180 deg - Service+Guy	200.87	0.04	0.44	0.00	0.00	0.00
Dead+Wind 210 deg - Service+Guy	200.85	-0.24	0.38	0.00	0.00	0.00
Dead+Wind 240 deg - Service+Guy	200.96	-0.42	0.21	0.00	0.00	0.00
Dead+Wind 270 deg - Service+Guy	201.07	-0.48	-0.03	0.00	0.00	0.00
Dead+Wind 300 deg - Service+Guy	201.20	-0.39	-0.30	0.00	0.00	0.00
Dead+Wind 330 deg - Service+Guy	201.01	-0.20	-0.51	0.00	0.00	0.00

Solution Summary

Load Comb.	Sum of Applied Forces PX K	PY K	PZ K	Sum of Reactions PX K	PY K	PZ K	% Error
1	0.00	-71.68	0.00	0.01	71.68	0.00	0.008%

Load Comb.	Sum of Applied Forces PX K	PY K	PZ K	Sum of Reactions PX K	PY K	PZ K	% Error
2	-0.12	-84.56	-120.40	0.12	84.56	120.39	0.003%
3	59.23	-83.68	-103.29	-59.23	83.68	103.28	0.002%
4	102.43	-82.78	-59.40	-102.44	82.78	59.40	0.002%
5	118.68	-83.74	0.12	-118.68	83.74	-0.12	0.003%
6	103.76	-84.67	60.31	-103.76	84.67	-60.31	0.004%
7	59.46	-83.69	103.44	-59.45	83.69	-103.44	0.003%
8	0.12	-82.69	119.04	-0.13	82.69	-119.04	0.002%
9	-59.23	-83.58	103.29	59.22	83.58	-103.29	0.002%
10	-103.61	-84.48	60.09	103.61	84.48	-60.08	0.003%
11	-118.68	-83.52	-0.12	118.68	83.52	0.13	0.002%
12	-102.58	-82.59	-59.63	102.59	82.59	59.63	0.002%
13	-59.46	-83.57	-103.44	59.46	83.57	103.43	0.002%
14	0.00	-251.27	0.00	-0.00	251.27	0.00	0.000%
15	-0.01	-251.99	-42.70	0.01	251.99	42.70	0.001%
16	21.24	-251.30	-36.85	-21.24	251.30	36.85	0.001%
17	36.78	-250.60	-21.26	-36.78	250.60	21.26	0.000%
18	42.50	-251.34	0.01	-42.50	251.34	-0.01	0.001%
19	36.93	-252.07	21.36	-36.93	252.07	-21.36	0.001%
20	21.26	-251.31	36.88	-21.26	251.31	-36.88	0.001%
21	0.01	-250.54	42.56	-0.01	250.54	-42.55	0.000%
22	-21.24	-251.24	36.85	21.23	251.24	-36.85	0.001%
23	-36.90	-251.94	21.34	36.90	251.94	-21.34	0.000%
24	-42.50	-251.19	-0.01	42.50	251.19	0.01	0.001%
25	-36.80	-250.47	-21.29	36.80	250.47	21.29	0.001%
26	-21.26	-251.23	-36.88	21.26	251.23	36.88	0.001%
27	-0.03	-71.87	-24.57	0.03	71.87	24.57	0.001%
28	12.09	-71.69	-21.08	-12.09	71.69	21.08	0.001%
29	20.91	-71.50	-12.12	-20.90	71.50	12.12	0.004%
30	24.22	-71.70	0.03	-24.22	71.70	-0.02	0.001%
31	21.18	-71.89	12.31	-21.18	71.89	-12.31	0.001%
32	12.13	-71.69	21.11	-12.13	71.69	-21.11	0.001%
33	0.03	-71.48	24.29	-0.03	71.48	-24.29	0.004%
34	-12.09	-71.67	21.08	12.09	71.67	-21.08	0.001%
35	-21.15	-71.85	12.26	21.14	71.85	-12.26	0.001%
36	-24.22	-71.65	-0.03	24.22	71.65	0.03	0.001%
37	-20.94	-71.46	-12.17	20.93	71.46	12.17	0.004%
38	-12.13	-71.66	-21.11	12.13	71.66	21.11	0.001%

Non-Linear Convergence Results

Load Combination	Converged?	Number of Cycles	Displacement Tolerance	Force Tolerance
1	Yes	7	0.00000001	0.00004465
2	Yes	14	0.00004933	0.00007490
3	Yes	14	0.00000001	0.00005466
4	Yes	11	0.00000001	0.00005315
5	Yes	14	0.00004387	0.00006220
6	Yes	14	0.00005662	0.00008304
7	Yes	14	0.00004612	0.00006380
8	Yes	11	0.00000001	0.00005745
9	Yes	14	0.00000001	0.00004925
10	Yes	14	0.00004424	0.00006789
11	Yes	14	0.00000001	0.00004897
12	Yes	10	0.00000001	0.00005597
13	Yes	14	0.00000001	0.00005580
14	Yes	9	0.00000001	0.00003020

15	Yes	11	0.00000001	0.00009197
16	Yes	11	0.00000001	0.00006702
17	Yes	11	0.00000001	0.00001701
18	Yes	11	0.00000001	0.00005994
19	Yes	11	0.00000001	0.00008593
20	Yes	11	0.00000001	0.00005744
21	Yes	11	0.00000001	0.00001779
22	Yes	11	0.00000001	0.00007531
23	Yes	12	0.00000001	0.00003203
24	Yes	11	0.00000001	0.00007287
25	Yes	10	0.00000001	0.00005249
26	Yes	11	0.00000001	0.00006275
27	Yes	9	0.00000001	0.00005147
28	Yes	9	0.00000001	0.00003730
29	Yes	8	0.00000001	0.00005356
30	Yes	9	0.00000001	0.00003294
31	Yes	9	0.00000001	0.00004702
32	Yes	9	0.00000001	0.00003266
33	Yes	8	0.00000001	0.00005115
34	Yes	9	0.00000001	0.00003872
35	Yes	9	0.00000001	0.00005252
36	Yes	9	0.00000001	0.00003744
37	Yes	8	0.00000001	0.00004830
38	Yes	9	0.00000001	0.00003607

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	368.75 - 362.5	1.695	33	0.0526	0.1014
T2	362.5 - 356.25	1.739	33	0.0526	0.1014
T3	356.25 - 350	1.783	33	0.0527	0.1018
T4	350 - 343.75	1.827	33	0.0538	0.0993
T5	343.75 - 337.5	1.876	33	0.0546	0.0986
T6	337.5 - 331.25	1.925	33	0.0532	0.0859
T7	331.25 - 325	1.971	33	0.0516	0.0721
T8	325 - 318.75	2.014	33	0.0500	0.0589
T9	318.75 - 312.5	2.053	33	0.0486	0.0507
T10	312.5 - 306.25	2.091	33	0.0472	0.0428
T11	306.25 - 300	2.127	33	0.0460	0.0348
T12	300 - 293.75	2.152	33	0.0454	0.0268
T13	293.75 - 287.5	2.193	33	0.0448	0.0265
T14	287.5 - 281.25	2.234	33	0.0412	0.0228
T15	281.25 - 275	2.270	33	0.0370	0.0177
T16	275 - 268.75	2.298	33	0.0323	0.0134
T17	268.75 - 262.5	2.319	33	0.0273	0.0096
T18	262.5 - 256.25	2.331	33	0.0222	0.0080
T19	256.25 - 250	2.335	33	0.0171	0.0121
T20	250 - 243.75	2.331	33	0.0122	0.0151
T21	243.75 - 237.5	2.320	33	0.0086	0.0160
T22	237.5 - 231.25	2.297	33	0.0114	0.0204
T23	231.25 - 225	2.266	33	0.0133	0.0254
T24	225 - 218.75	2.238	33	0.0134	0.0277
T25	218.75 - 212.5	2.224	33	0.0132	0.0280
T26	212.5 - 206.25	2.215	33	0.0164	0.0394
T27	206.25 - 200	2.198	33	0.0203	0.0512
T28	200 - 175	2.173	33	0.0248	0.0629
T29	175 - 168.75	1.988	29	0.0416	0.0988
T30	168.75 - 162.5	1.930	29	0.0435	0.0984

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T31	162.5 - 156.25	1.869	29	0.0442	0.0978
T32	156.25 - 150	1.821	29	0.0456	0.0956
T33	150 - 125	1.769	29	0.0475	0.0922
T34	125 - 100	1.497	29	0.0567	0.0639
T35	100 - 93.75	1.180	29	0.0564	0.0494
T36	93.75 - 87.5	1.110	29	0.0543	0.0496
T37	87.5 - 81.25	1.045	29	0.0538	0.0567
T38	81.25 - 75	0.979	29	0.0539	0.0673
T39	75 - 50	0.910	29	0.0543	0.0769
T40	50 - 25	0.605	29	0.0557	0.1031
T41	25 - 0	0.327	29	0.0581	0.1174

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
370.00	Search Antenna	33	1.695	0.0526	0.1014	290649
355.00	8' Dish	33	1.792	0.0528	0.1013	553824
350.00	Guy	33	1.827	0.0538	0.0993	62234
325.00	10' x 3" Dia Omni	33	2.014	0.0500	0.0589	137780
305.00	QUAD656C0000	33	2.132	0.0458	0.0329	52532
300.00	Guy	33	2.152	0.0454	0.0268	25464
250.00	20' x 3" Dia Omni	33	2.331	0.0122	0.0151	67897
242.50	(2) 7770.00	33	2.317	0.0087	0.0165	33890
225.00	Guy	33	2.238	0.0134	0.0277	32586
200.00	Yagi	33	2.173	0.0248	0.0629	39413
180.00	(4) Yagi	29	2.032	0.0391	0.0959	92916
162.50	Guy	29	1.869	0.0442	0.0978	29673
148.00	Yagi	29	1.751	0.0483	0.0907	65067
140.00	Yagi	29	1.671	0.0514	0.0822	72844
125.00	Yagi	29	1.497	0.0567	0.0639	95377
100.00	Guy	29	1.180	0.0564	0.0494	71250
88.00	X-Style	29	1.050	0.0538	0.0559	404221
62.00	Yagi	29	0.752	0.0552	0.0927	833863
50.00	Guy	29	0.605	0.0557	0.1031	86454
40.00	Yagi	29	0.493	0.0565	0.1095	339881

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	368.75 - 362.5	17.855	6	0.2639	0.6844
T2	362.5 - 356.25	18.195	6	0.2641	0.6847
T3	356.25 - 350	18.538	6	0.2650	0.6863
T4	350 - 343.75	18.877	6	0.2705	0.6741
T5	343.75 - 337.5	19.249	6	0.2745	0.6707
T6	337.5 - 331.25	19.620	6	0.2667	0.5967
T7	331.25 - 325	19.975	6	0.2571	0.5171
T8	325 - 318.75	20.312	6	0.2462	0.4406
T9	318.75 - 312.5	20.628	6	0.2361	0.3927

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T10	312.5 - 306.25	20.925	6	0.2260	0.3461
T11	306.25 - 300	21.210	6	0.2159	0.2998
T12	300 - 293.75	21.438	6	0.2087	0.2530
T13	293.75 - 287.5	21.728	6	0.2008	0.2516
T14	287.5 - 281.25	22.014	6	0.1776	0.2215
T15	281.25 - 275	22.277	6	0.1649	0.1738
T16	275 - 268.75	22.488	6	0.1542	0.1424
T17	268.75 - 262.5	22.648	6	0.1429	0.1197
T18	262.5 - 256.25	22.754	6	0.1310	0.0999
T19	256.25 - 250	22.807	6	0.1191	0.0835
T20	250 - 243.75	22.806	6	0.1096	0.0737
T21	243.75 - 237.5	22.756	6	0.1312	0.0739
T22	237.5 - 231.25	22.619	6	0.1489	0.1043
T23	231.25 - 225	22.415	6	0.1593	0.1725
T24	225 - 218.75	22.236	6	0.1599	0.1977
T25	218.75 - 212.5	22.104	6	0.1584	0.1990
T26	212.5 - 206.25	22.002	6	0.1747	0.2882
T27	206.25 - 200	21.837	6	0.1945	0.3816
T28	200 - 175	21.598	6	0.2299	0.4615
T29	175 - 168.75	19.906	6	0.3729	0.6991
T30	168.75 - 162.5	19.375	6	0.3945	0.6940
T31	162.5 - 156.25	18.818	6	0.4101	0.6871
T32	156.25 - 150	18.318	6	0.4284	0.6735
T33	150 - 125	17.775	6	0.4491	0.6509
T34	125 - 100	15.120	6	0.5310	0.4865
T35	100 - 93.75	12.071	6	0.5538	0.3623
T36	93.75 - 87.5	11.359	6	0.5473	0.3630
T37	87.5 - 81.25	10.675	6	0.5494	0.4122
T38	81.25 - 75	9.986	6	0.5537	0.4883
T39	75 - 50	9.270	6	0.5592	0.5440
T40	50 - 25	6.159	6	0.5723	0.7031
T41	25 - 0	3.245	6	0.5897	0.8227

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
370.00	Search Antenna	6	17.855	0.2639	0.6844	16527
355.00	8' Dish	6	18.605	0.2657	0.6839	15830
350.00	Guy	6	18.877	0.2705	0.6741	12711
325.00	10' x 3" Dia Omni	6	20.312	0.2462	0.4406	9967
305.00	QUAD656C0000	6	21.258	0.2142	0.2888	9293
300.00	Guy	6	21.438	0.2087	0.2530	4674
250.00	20' x 3" Dia Omni	6	22.806	0.1096	0.0737	10010
242.50	(2) 7770.00	6	22.736	0.1351	0.0678	4747
225.00	Guy	6	22.236	0.1599	0.1977	5832
200.00	Yagi	6	21.598	0.2299	0.4615	5244
180.00	(4) Yagi	6	20.308	0.3497	0.6805	13373
162.50	Guy	6	18.818	0.4101	0.6871	4730
148.00	Yagi	6	17.589	0.4561	0.6413	9378
140.00	Yagi	6	16.796	0.4843	0.5938	10638
125.00	Yagi	6	15.120	0.5310	0.4865	14413
100.00	Guy	6	12.071	0.5538	0.3623	11792
88.00	X-Style	6	10.730	0.5490	0.4067	49351
62.00	Yagi	6	7.660	0.5671	0.6342	104005
50.00	Guy	6	6.159	0.5723	0.7031	12491

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
40.00	Yagi	6	4.988	0.5785	0.7531	40993

Bolt Design Data

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt K	Allowable Load K	Ratio Load / Allowable	Allowable Ratio	Criteria
T1	368.75	Leg	A325N	0.7500	6	0.09	29.82	0.003 ✓	1	Bolt Tension
		Diagonal	A325N	0.5000	2	0.22	7.95	0.028 ✓	1	Bolt Shear
		Top Girt	A325N	0.6250	2	0.06	24.85	0.002 ✓	1	Bolt Shear
T2	362.5	Diagonal	A325N	0.5000	2	0.66	15.90	0.042 ✓	1	Bolt Shear
		Top Girt	A325N	0.5000	2	0.16	15.90	0.010 ✓	1	Bolt Shear
T3	356.25	Diagonal	A325N	0.5000	2	2.88	15.90	0.181 ✓	1	Bolt Shear
		Top Girt	A325N	0.5000	2	0.67	15.90	0.042 ✓	1	Bolt Shear
T4	350	Leg	A325N	0.7500	6	0.88	29.82	0.030 ✓	1	Bolt Tension
		Diagonal	A325N	0.6250	2	2.02	12.43	0.163 ✓	1	Bolt Shear
		Top Girt	A325N	0.6250	2	4.91	24.85	0.198 ✓	1	Bolt Shear
T5	343.75	Diagonal	A325N	0.5000	2	2.33	7.95	0.293 ✓	1	Bolt Shear
		Top Girt	A325N	0.6250	2	2.14	24.85	0.086 ✓	1	Bolt Shear
T6	337.5	Diagonal	A325N	0.5000	2	2.19	7.95	0.275 ✓	1	Bolt Shear
		Top Girt	A325N	0.5000	2	1.54	7.95	0.194 ✓	1	Bolt Shear
T7	331.25	Diagonal	A325N	0.5000	2	2.02	7.95	0.254 ✓	1	Bolt Shear
		Top Girt	A325N	0.5000	2	1.49	7.95	0.188 ✓	1	Bolt Shear
T8	325	Leg	A325N	0.7500	6	2.51	29.82	0.084 ✓	1	Bolt Tension
		Diagonal	A325N	0.5000	2	2.22	7.95	0.279 ✓	1	Bolt Shear
		Top Girt	A325N	0.5000	2	1.80	7.95	0.226 ✓	1	Bolt Shear
T9	318.75	Diagonal	A325N	0.5000	2	2.23	7.95	0.281 ✓	1	Bolt Shear
		Top Girt	A325N	0.5000	2	2.05	7.95	0.257 ✓	1	Bolt Shear
T10	312.5	Diagonal	A325N	0.5000	2	2.40	7.95	0.302 ✓	1	Bolt Shear
		Top Girt	A325N	0.5000	2	2.04	7.95	0.257 ✓	1	Bolt Shear
T11	306.25	Diagonal	A325N	0.5000	2	4.56	7.95	0.574 ✓	1	Bolt Shear
		Top Girt	A325N	0.6250	2	2.97	24.85	0.119 ✓	1	Bolt Shear
T12	300	Leg	A325N	0.7500	6	2.23	29.82	0.075 ✓	1	Bolt Tension
		Diagonal	A325N	0.6250	2	3.90	12.43	0.314 ✓	1	Bolt Shear
		Top Girt	A325N	0.6250	2	6.04	24.85	0.243 ✓	1	Bolt Shear
T13	293.75	Diagonal	A325N	0.5000	2	3.45	7.95	0.434 ✓	1	Bolt Shear
		Top Girt	A325N	0.6250	2	1.53	24.85	0.062 ✓	1	Bolt Shear
T14	287.5	Diagonal	A325N	0.5000	2	2.78	7.95	0.350 ✓	1	Bolt Shear
		Top Girt	A325N	0.5000	2	1.94	7.95	0.244 ✓	1	Bolt Shear

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt K	Allowable Load K	Ratio Load / Allowable	Allowable Ratio	Criteria
T15	281.25	Diagonal	A325N	0.5000	2	2.17	7.95	0.273 ✔	1	Bolt Shear
		Top Girt	A325N	0.6250	2	1.56	12.43	0.126 ✔	1	Bolt Shear
T16	275	Leg	A325N	0.7500	6	5.65	29.82	0.190 ✔	1	Bolt Tension
		Diagonal	A325N	0.5000	2	1.77	7.95	0.223 ✔	1	Bolt Shear
		Top Girt	A325N	0.5000	2	1.48	7.95	0.186 ✔	1	Bolt Shear
T17	268.75	Diagonal	A325N	0.5000	2	1.51	7.95	0.190 ✔	1	Bolt Shear
		Top Girt	A325N	0.5000	2	1.49	7.95	0.187 ✔	1	Bolt Shear
T18	262.5	Diagonal	A325N	0.5000	2	1.33	7.95	0.167 ✔	1	Bolt Shear
		Top Girt	A325N	0.5000	2	1.47	7.95	0.185 ✔	1	Bolt Shear
T19	256.25	Diagonal	A325N	0.5000	2	1.95	7.95	0.245 ✔	1	Bolt Shear
		Top Girt	A325N	0.5000	2	1.79	7.95	0.225 ✔	1	Bolt Shear
T20	250	Leg	A325N	0.7500	6	5.57	29.82	0.187 ✔	1	Bolt Tension
		Diagonal	A325N	0.5000	2	2.24	7.95	0.282 ✔	1	Bolt Shear
		Top Girt	A325N	0.5000	2	2.18	15.90	0.137 ✔	1	Bolt Shear
T21	243.75	Diagonal	A325N	0.5000	2	5.05	7.95	0.635 ✔	1	Bolt Shear
		Top Girt	A325N	0.6250	2	2.68	24.85	0.108 ✔	1	Bolt Shear
T22	237.5	Diagonal	A325X	0.5000	2	6.50	9.72	0.669 ✔	1	Bolt Shear
		Top Girt	A325N	0.6250	2	3.62	24.85	0.146 ✔	1	Bolt Shear
T23	231.25	Diagonal	A325X	0.5000	2	7.02	9.72	0.722 ✔	1	Bolt Shear
		Top Girt	A325N	0.6250	2	4.20	24.85	0.169 ✔	1	Bolt Shear
T24	225	Leg	A325N	0.7500	6	3.67	29.82	0.123 ✔	1	Bolt Tension
		Diagonal	A325N	0.6250	2	7.19	24.85	0.289 ✔	1	Bolt Shear
		Top Girt	A325N	0.6250	2	8.12	24.85	0.327 ✔	1	Bolt Shear
T25	218.75	Diagonal	A325N	0.5000	2	3.87	7.95	0.487 ✔	1	Bolt Shear
		Top Girt	A325N	0.6250	2	2.88	24.85	0.116 ✔	1	Bolt Shear
T26	212.5	Diagonal	A325N	0.5000	2	3.07	7.95	0.387 ✔	1	Bolt Shear
		Top Girt	A325N	0.5000	2	2.18	7.95	0.274 ✔	1	Bolt Shear
T27	206.25	Diagonal	A325N	0.5000	2	2.03	7.95	0.256 ✔	1	Bolt Shear
		Top Girt	A325N	0.5000	2	1.63	7.95	0.205 ✔	1	Bolt Shear
T28	200	Leg	A325N	0.7500	6	6.54	29.82	0.219 ✔	1	Bolt Tension
		Diagonal	A325N	0.5000	2	3.22	7.95	0.405 ✔	1	Bolt Shear
		Horizontal	A325N	0.6250	2	1.60	12.43	0.129 ✔	1	Bolt Shear
		Top Girt	A325N	0.5000	2	1.14	7.95	0.143 ✔	1	Bolt Shear
T29	175	Leg	A325N	0.7500	6	6.49	29.82	0.217 ✔	1	Bolt Tension
		Diagonal	A325N	0.5000	2	4.41	7.95	0.555 ✔	1	Bolt Shear
		Top Girt	A325N	0.5000	2	2.33	7.95	0.293 ✔	1	Bolt Shear
T30	168.75	Diagonal	A325N	0.5000	2	4.87	7.95	0.612 ✔	1	Bolt Shear
		Top Girt	A325N	0.5000	2	2.90	7.95	0.365 ✔	1	Bolt Shear
T31	162.5	Diagonal	A325N	0.5000	2	2.53	7.95	0.318 ✔	1	Bolt Shear
		Top Girt	A325N	0.5000	2	3.49	15.90	0.219 ✔	1	Bolt Shear

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt K	Allowable Load K	Ratio Load / Allowable	Allowable Ratio	Criteria
T32	156.25	Diagonal	A325N	0.5000	2	1.96	7.95	0.246 ✔	1	Bolt Shear
		Top Girt	A325N	0.5000	2	1.40	7.95	0.176 ✔	1	Bolt Shear
T33	150	Leg	A325N	0.7500	6	7.07	29.82	0.237 ✔	1	Bolt Tension
		Diagonal	A325N	0.5000	2	2.68	7.95	0.337 ✔	1	Bolt Shear
		Horizontal	A325N	0.6250	2	1.54	12.43	0.124 ✔	1	Bolt Shear
		Top Girt	A325N	0.5000	2	1.05	7.95	0.132 ✔	1	Bolt Shear
T34	125	Leg	A325N	0.7500	6	7.14	29.82	0.240 ✔	1	Bolt Tension
		Diagonal	A325N	0.6250	2	6.32	10.44	0.606 ✔	1	Member Bearing
		Horizontal	A325N	0.6250	2	3.70	12.43	0.298 ✔	1	Bolt Shear
		Top Girt	A325N	0.6250	2	2.04	12.43	0.165 ✔	1	Bolt Shear
T35	100	Leg	A325N	0.7500	6	5.80	29.82	0.195 ✔	1	Bolt Tension
		Diagonal	A325N	0.6250	2	7.65	24.85	0.308 ✔	1	Bolt Shear
		Top Girt	A325N	0.6250	2	7.64	24.85	0.307 ✔	1	Bolt Shear
T36	93.75	Diagonal	A325N	0.5000	2	3.09	7.95	0.389 ✔	1	Bolt Shear
		Top Girt	A325N	0.5000	2	4.04	15.90	0.254 ✔	1	Bolt Shear
T37	87.5	Diagonal	A325N	0.5000	2	2.26	7.95	0.284 ✔	1	Bolt Shear
		Top Girt	A325N	0.5000	2	1.67	7.95	0.210 ✔	1	Bolt Shear
T38	81.25	Diagonal	A325N	0.5000	2	1.47	7.95	0.185 ✔	1	Bolt Shear
		Top Girt	A325N	0.5000	2	1.16	7.95	0.146 ✔	1	Bolt Shear
T39	75	Leg	A325N	0.7500	6	7.88	29.82	0.264 ✔	1	Bolt Tension
		Diagonal	A325N	0.5000	2	2.45	7.95	0.308 ✔	1	Bolt Shear
		Horizontal	A325N	0.6250	2	1.39	12.43	0.112 ✔	1	Bolt Shear
		Top Girt	A325N	0.5000	2	0.80	7.95	0.100 ✔	1	Bolt Shear
T40	50	Leg	A325N	0.7500	6	8.17	29.82	0.274 ✔	1	Bolt Tension
		Diagonal	A325N	0.5000	2	2.64	7.95	0.332 ✔	1	Bolt Shear
		Horizontal	A325N	0.6250	2	1.48	12.43	0.119 ✔	1	Bolt Shear
		Top Girt	A325N	0.5000	2	2.29	7.95	0.289 ✔	1	Bolt Shear
T41	25	Leg	A325N	0.7500	6	8.41	29.82	0.282 ✔	1	Bolt Tension
		Diagonal	A325N	0.5000	2	1.70	7.95	0.214 ✔	1	Bolt Shear
		Horizontal	A325N	0.6250	2	1.31	12.43	0.106 ✔	1	Bolt Shear
		Top Girt	A325N	0.5000	2	0.76	7.95	0.096 ✔	1	Bolt Shear

Guy Design Data

Section No.	Elevation ft	Size	Initial Tension K	Breaking Load K	Actual T_u K	Allowable ϕT_n K	Required S.F.	Actual S.F.
T4	350.00 (A) (679)	7/8 EHS	7.97	79.70	23.31	47.82	1.000	2.051 ✔

Section No.	Elevation ft	Size	Initial Tension K	Breaking Load K	Actual T_u K	Allowable ϕT_n K	Required S.F.	Actual S.F.
	350.00 (A) (680)	7/8 EHS	7.97	79.70	23.24	47.82	1.000	2.057 ✔
	350.00 (B) (673)	7/8 EHS	7.97	79.70	22.59	47.82	1.000	2.117 ✔
	350.00 (B) (674)	7/8 EHS	7.97	79.70	23.70	47.82	1.000	2.018 ✔
	350.00 (C) (667)	7/8 EHS	7.97	79.70	23.63	47.82	1.000	2.024 ✔
	350.00 (C) (668)	7/8 EHS	7.97	79.70	22.61	47.82	1.000	2.115 ✔
T12	300.00 (A) (697)	7/8 EHS	7.97	79.70	26.10	47.82	1.000	1.832 ✔
	300.00 (A) (698)	7/8 EHS	7.97	79.70	25.97	47.82	1.000	1.841 ✔
	300.00 (B) (691)	7/8 EHS	7.97	79.70	25.62	47.82	1.000	1.867 ✔
	300.00 (B) (692)	7/8 EHS	7.97	79.70	26.07	47.82	1.000	1.834 ✔
	300.00 (C) (685)	7/8 EHS	7.97	79.70	26.02	47.82	1.000	1.838 ✔
	300.00 (C) (686)	7/8 EHS	7.97	79.70	25.69	47.82	1.000	1.861 ✔
T24	225.00 (A) (715)	3/4 EHS	5.83	58.30	22.61	34.98	1.000	1.547 ✔
	225.00 (A) (716)	3/4 EHS	5.83	58.30	22.89	34.98	1.000	1.528 ✔
	225.00 (B) (709)	3/4 EHS	5.83	58.30	22.92	34.98	1.000	1.526 ✔
	225.00 (B) (710)	3/4 EHS	5.83	58.30	22.46	34.98	1.000	1.558 ✔
	225.00 (C) (703)	3/4 EHS	5.83	58.30	22.59	34.98	1.000	1.548 ✔
	225.00 (C) (704)	3/4 EHS	5.83	58.30	22.65	34.98	1.000	1.545 ✔
T31	162.50 (A) (723)	3/4 EHS	5.83	58.30	24.23	34.98	1.000	1.444 ✔
	162.50 (B) (722)	3/4 EHS	5.83	58.30	24.20	34.98	1.000	1.446 ✔
	162.50 (C) (721)	3/4 EHS	5.83	58.30	24.19	34.98	1.000	1.446 ✔
T35	100.00 (A) (736)	9/16 EHS	3.50	35.00	13.55	21.00	1.000	1.550 ✔
	100.00 (A) (737)	9/16 EHS	3.50	35.00	13.76	21.00	1.000	1.526 ✔
	100.00 (B) (730)	9/16 EHS	3.50	35.00	13.83	21.00	1.000	1.518 ✔
	100.00 (B) (731)	9/16 EHS	3.50	35.00	12.92	21.00	1.000	1.625 ✔
	100.00 (C) (724)	9/16 EHS	3.50	35.00	13.15	21.00	1.000	1.597 ✔
	100.00 (C) (725)	9/16 EHS	3.50	35.00	13.68	21.00	1.000	1.535 ✔
T40	50.00 (A) (744)	9/16 EHS	3.50	35.00	12.88	21.00	1.000	1.630 ✔
	50.00 (B) (743)	9/16 EHS	3.50	35.00	12.63	21.00	1.000	1.663 ✔
	50.00 (C) (742)	9/16 EHS	3.50	35.00	13.04	21.00	1.000	1.610 ✔

Compression Checks

Leg Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	Mast Stability Index	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	368.75 - 362.5	2 3/4	6.25	6.25	109.1 K=1.00	5.9396	1.00	-1.67	102.85	0.016 [1] ✓
T2	362.5 - 356.25	2 3/4	6.25	6.25	109.1 K=1.00	5.9396	1.00	-2.35	102.85	0.023 [1] ✓
T3	356.25 - 350	2 3/4	6.25	6.25	109.1 K=1.00	5.9396	1.00	-9.20	102.85	0.089 [1] ✓
T4	350 - 343.75	3	6.25	6.25	100.0 K=1.00	7.0686	1.00	-8.09	135.28	0.060 [1] ✓
T5	343.75 - 337.5	3	6.25	6.25	100.0 K=1.00	7.0686	1.00	-41.64	135.28	0.308 [1] ✓
T6	337.5 - 331.25	3	6.25	6.25	100.0 K=1.00	7.0686	1.00	-42.52	135.28	0.314 [1] ✓
T7	331.25 - 325	3	6.25	6.25	100.0 K=1.00	7.0686	1.00	-43.29	135.28	0.320 [1] ✓
T8	325 - 318.75	3 1/4	6.25	6.25	92.3 K=1.00	8.2958	1.00	-45.26	171.63	0.264 [1] ✓
T9	318.75 - 312.5	3 1/4	6.25	6.25	92.3 K=1.00	8.2958	1.00	-45.48	171.63	0.265 [1] ✓
T10	312.5 - 306.25	3 1/4	6.25	6.25	92.3 K=1.00	8.2958	1.00	-46.00	171.63	0.268 [1] ✓
T11	306.25 - 300	3 1/4	6.25	6.25	92.3 K=1.00	8.2958	1.00	-48.69	171.63	0.284 [1] ✓
T12	300 - 293.75	3 1/4	6.25	6.25	92.3 K=1.00	8.2958	1.00	-40.13	171.63	0.234 [1] ✓
T13	293.75 - 287.5	3 1/4	6.25	6.25	92.3 K=1.00	8.2958	1.00	-89.43	171.63	0.521 [1] ✓
T14	287.5 - 281.25	3 1/4	6.25	6.25	92.3 K=1.00	8.2958	1.00	-94.49	171.63	0.551 [1] ✓
T15	281.25 - 275	3 1/4	6.25	6.25	92.3 K=1.00	8.2958	1.00	-98.78	171.63	0.576 [1] ✓
T16	275 - 268.75	3 1/4	6.25	6.25	92.3 K=1.00	8.2958	1.00	-101.79	171.63	0.593 [1] ✓
T17	268.75 - 262.5	3 1/4	6.25	6.25	92.3 K=1.00	8.2958	1.00	-103.44	171.63	0.603 [1] ✓
T18	262.5 - 256.25	3 1/4	6.25	6.25	92.3 K=1.00	8.2958	1.00	-103.47	171.63	0.603 [1] ✓
T19	256.25 - 250	3 1/4	6.25	6.25	92.3 K=1.00	8.2958	1.00	-103.13	171.63	0.601 [1] ✓
T20	250 - 243.75	3 1/4	6.25	6.25	92.3 K=1.00	8.2958	1.00	-100.19	171.63	0.584 [1] ✓
T21	243.75 - 237.5	3 1/4	6.25	6.25	92.3 K=1.00	8.2958	1.00	-96.22	171.63	0.561 [1] ✓
T22	237.5 - 231.25	3 1/4	6.25	6.25	92.3 K=1.00	8.2958	1.00	-89.26	171.63	0.520 [1] ✓
T23	231.25 - 225	3 1/4	6.25	6.25	92.3	8.2958	1.00	-88.23	171.63	0.514 [1]

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	Mast Stability Index	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
					K=1.00					✔
T24	225 - 218.75	3	6.25	6.25	100.0 K=1.00	7.0686	1.00	-66.04	135.28	0.488 [1] ✔
T25	218.75 - 212.5	3	6.25	6.25	100.0 K=1.00	7.0686	1.00	-111.44	135.28	0.824 [1] ✔
T26	212.5 - 206.25	3	6.25	6.25	100.0 K=1.00	7.0686	1.00	-113.86	135.28	0.842 [1] ✔
T27	206.25 - 200	3	6.25	6.25	100.0 K=1.00	7.0686	1.00	-116.11	135.28	0.858 [1] ✔
T28	200 - 175	3	25.00	3.13	50.0 K=1.00	7.0686	1.00	-117.98	200.78	0.588 [1] ✔
T29	175 - 168.75	3 1/4	6.25	6.25	92.3 K=1.00	8.2958	1.00	-116.74	171.63	0.680 [1] ✔
T30	168.75 - 162.5	3 1/4	6.25	6.25	92.3 K=1.00	8.2958	1.00	-115.68	171.63	0.674 [1] ✔
T31	162.5 - 156.25	3 1/4	6.25	6.25	92.3 K=1.00	8.2958	1.00	-123.46	171.63	0.719 [1] ✔
T32	156.25 - 150	3 1/4	6.25	6.25	92.3 K=1.00	8.2958	1.00	-125.34	171.63	0.730 [1] ✔
T33	150 - 125	3 1/4	25.00	6.25	92.3 K=1.00	8.2958	1.00	-128.49	171.63	0.749 [1] ✔
T34	125 - 100	3 1/4	25.00	6.25	92.3 K=1.00	8.2958	1.00	-128.60	171.63	0.749 [1] ✔
T35	100 - 93.75	3 1/4	6.25	6.25	92.3 K=1.00	8.2958	1.00	-104.48	171.63	0.609 [1] ✔
T36	93.75 - 87.5	3 1/4	6.25	6.25	92.3 K=1.00	8.2958	1.00	-138.69	171.63	0.808 [1] ✔
T37	87.5 - 81.25	3 1/4	6.25	6.25	92.3 K=1.00	8.2958	1.00	-139.53	171.63	0.813 [1] ✔
T38	81.25 - 75	3 1/4	6.25	6.25	92.3 K=1.00	8.2958	1.00	-140.86	171.63	0.821 [1] ✔
T39	75 - 50	3 1/4	25.00	6.25	92.3 K=1.00	8.2958	1.00	-143.47	171.63	0.836 [1] ✔
T40	50 - 25	3 1/4	25.00	6.25	92.3 K=1.00	8.2958	1.00	-150.54	171.63	0.877 [1] ✔
T41	25 - 0	3 1/4	25.00	6.25	92.3 K=1.00	8.2958	1.00	-151.68	171.63	0.884 [1] ✔

[1] P_u / ϕP_n controls

Diagonal Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	368.75 - 362.5	L2 1/2x2 1/2x1/4	8.00	3.65	96.9 K=1.09	1.1900	-0.45	23.51	0.019 [1] ✔
T2	362.5 - 356.25	2L3x3x5/16	8.00	3.65	47.5 K=1.00	3.5500	-1.33	102.12	0.013 [1] ✔

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T3	356.25 - 350	2L3x3x5/16	8.00	3.65	47.5 K=1.00	3.5500	-5.45	102.12	0.053 [1] ✔
T4	350 - 343.75	L3x2 1/2x1/4	8.00	3.62	91.7 K=1.11	1.3100	-4.05	27.26	0.149 [1] ✔
T12	300 - 293.75	L3x2 1/2x1/4	8.00	3.59	91.1 K=1.12	1.3100	-7.80	27.41	0.285 [1] ✔
T24	225 - 218.75	2L2 1/2x2 1/2x1/4	8.00	3.60	56.2 K=1.00	2.3800	-14.39	65.28	0.220 [1] ✔
T35	100 - 93.75	2L2 1/2x2 1/2x1/4	8.00	3.59	56.0 K=1.00	2.3800	-15.29	65.39	0.234 [1] ✔

[1] P_u / ϕP_n controls

Horizontal Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T28	200 - 175	P1.25x.14	5.00	4.75	105.6 K=1.00	0.6685	-3.20	12.04	0.266 [1] ✔
T33	150 - 125	P1.25x.14	5.00	4.73	105.2 K=1.00	0.6685	-3.07	12.10	0.254 [1] ✔
T34	125 - 100	P1.25x.14	5.00	4.73	105.2 K=1.00	0.6685	-7.41	12.10	0.612 [1] ✔
T39	75 - 50	P1.25x.14	5.00	4.73	105.2 K=1.00	0.6685	-2.77	12.10	0.229 [1] ✔
T40	50 - 25	P1.25x.14	5.00	4.73	105.2 K=1.00	0.6685	-2.97	12.10	0.245 [1] ✔
T41	25 - 0	P1.25x.14	5.00	4.73	105.2 K=1.00	0.6685	-2.63	12.10	0.217 [1] ✔

[1] P_u / ϕP_n controls

Secondary Horizontal Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T28	200 - 175	P1.25x.14	5.00	4.75	105.6 K=1.00	0.6685	-2.04	12.04	0.170 [1] ✔

[1] P_u / ϕP_n controls

Top Girt Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	368.75 - 362.5	2L2 1/2x2x1/4	5.00	4.38	67.0 K=1.00	2.1300	-0.09	54.50	0.002 [1] ✔
T2	362.5 - 356.25	2L2 1/2x3x1/4	5.00	4.44	70.7 K=1.00	2.6300	-0.17	65.49	0.003 [1] ✔
T3	356.25 - 350	2L2 1/2x3x1/4	5.00	4.44	70.7 K=1.00	2.6300	-1.28	65.49	0.020 [1] ✔
T4	350 - 343.75	2L2 1/2x2x1/4	5.00	4.38	67.0 K=1.00	2.1300	-6.79	54.50	0.125 [1] ✔
T5	343.75 - 337.5	2L2 1/2x2x1/4	5.00	4.35	66.6 K=1.00	2.1300	-4.28	54.62	0.078 [1] ✔
T6	337.5 - 331.25	P1.25x.14	5.00	4.75	105.6 K=1.00	0.6685	-3.09	12.04	0.256 [1] ✔
T7	331.25 - 325	P1.25x.14	5.00	4.75	105.6 K=1.00	0.6685	-2.99	12.04	0.248 [1] ✔
T8	325 - 318.75	P1.25x.14	5.00	4.75	105.6 K=1.00	0.6685	-3.60	12.04	0.299 [1] ✔
T9	318.75 - 312.5	P1.25x.14	5.00	4.73	105.2 K=1.00	0.6685	-4.09	12.10	0.338 [1] ✔
T10	312.5 - 306.25	P1.25x.14	5.00	4.73	105.2 K=1.00	0.6685	-4.09	12.10	0.338 [1] ✔
T11	306.25 - 300	2L2 1/2x2x1/4	5.00	4.33	66.3 K=1.00	2.1300	-5.94	54.74	0.108 [1] ✔
T12	300 - 293.75	2L2 1/2x2x1/4	5.00	4.33	66.3 K=1.00	2.1300	-9.12	54.74	0.167 [1] ✔
T13	293.75 - 287.5	2L2 1/2x2x1/4	5.00	4.33	66.3 K=1.00	2.1300	-3.06	54.74	0.056 [1] ✔
T14	287.5 - 281.25	P1.25x.14	5.00	4.73	105.2 K=1.00	0.6685	-3.88	12.10	0.321 [1] ✔
T15	281.25 - 275	P1.25x.14	5.00	4.73	105.2 K=1.00	0.6685	-3.13	12.10	0.258 [1] ✔
T16	275 - 268.75	P1.25x.14	5.00	4.73	105.2 K=1.00	0.6685	-2.96	12.10	0.245 [1] ✔
T17	268.75 - 262.5	P1.25x.14	5.00	4.73	105.2 K=1.00	0.6685	-2.98	12.10	0.246 [1] ✔
T18	262.5 - 256.25	P1.25x.14	5.00	4.73	105.2 K=1.00	0.6685	-2.94	12.10	0.243 [1] ✔
T19	256.25 - 250	P1.25x.14	5.00	4.73	105.2 K=1.00	0.6685	-3.59	12.10	0.296 [1] ✔
T20	250 - 243.75	2L2 1/2x2x1/4	5.00	4.40	67.3 K=1.00	2.1300	-4.35	54.38	0.080 [1] ✔
T21	243.75 - 237.5	2L2 1/2x2x1/4	5.00	4.33	66.3 K=1.00	2.1300	-5.35	54.74	0.098 [1] ✔
T22	237.5 - 231.25	2L2 1/2x2x1/4	5.00	4.33	66.3 K=1.00	2.1300	-7.25	54.74	0.132 [1] ✔
T23	231.25 - 225	2L2 1/2x2x1/4	5.00	4.33	66.3 K=1.00	2.1300	-8.40	54.74	0.154 [1] ✔
T24	225 - 218.75	2L2 1/2x2x1/4	5.00	4.33	66.3 K=1.00	2.1300	-7.32	54.74	0.134 [1] ✔
T26	212.5 - 206.25	P1.25x.14	5.00	4.75	105.6 K=1.00	0.6685	-4.36	12.04	0.362 [1] ✔

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T27	206.25 - 200	P1.25x.14	5.00	4.75	105.6 K=1.00	0.6685	-3.26	12.04	0.271 [1] ✔
T28	200 - 175	P1.25x.14	5.00	4.75	105.6 K=1.00	0.6685	-2.27	12.04	0.189 [1] ✔
T29	175 - 168.75	P1.25x.14	5.00	4.75	105.6 K=1.00	0.6685	-4.67	12.04	0.388 [1] ✔
T30	168.75 - 162.5	P1.25x.14	5.00	4.73	105.2 K=1.00	0.6685	-5.81	12.10	0.480 [1] ✔
T31	162.5 - 156.25	2L2 1/2x2x1/4	5.00	4.40	67.3 K=1.00	2.1300	-2.05	54.38	0.038 [1] ✔
T32	156.25 - 150	P1.25x.14	5.00	4.73	105.2 K=1.00	0.6685	-2.80	12.10	0.232 [1] ✔
T33	150 - 125	P1.25x.14	5.00	4.73	105.2 K=1.00	0.6685	-2.10	12.10	0.174 [1] ✔
T34	125 - 100	P1.25x.14	5.00	4.73	105.2 K=1.00	0.6685	-4.09	12.10	0.338 [1] ✔
T35	100 - 93.75	2L2 1/2x2x1/4	5.00	4.33	66.3 K=1.00	2.1300	-4.88	54.74	0.089 [1] ✔
T37	87.5 - 81.25	P1.25x.14	5.00	4.73	105.2 K=1.00	0.6685	-3.34	12.10	0.276 [1] ✔
T38	81.25 - 75	P1.25x.14	5.00	4.73	105.2 K=1.00	0.6685	-2.32	12.10	0.192 [1] ✔
T39	75 - 50	P1.25x.14	5.00	4.73	105.2 K=1.00	0.6685	-1.59	12.10	0.132 [1] ✔
T40	50 - 25	L2 1/2x2x1/4	5.00	4.40	122.7 K=0.99	1.0600	-0.90	15.54	0.058 [1] ✔
T41	25 - 0	P1.25x.14	5.00	4.73	105.2 K=1.00	0.6685	-1.52	12.10	0.126 [1] ✔

[1] P_u / ϕP_n controls

Torque-Arm Top Design Data

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T35	100 - 93.75 (726)	2L3x2 1/2x1/4	6.03	5.89	74.8 K=1.00	2.6300	-1.20	63.46	0.019 [1] ✔
T35	100 - 93.75 (727)	2L3x2 1/2x1/4	6.03	5.89	74.8 K=1.00	2.6300	-1.22	63.46	0.019 [1] ✔
T35	100 - 93.75 (732)	2L3x2 1/2x1/4	6.03	5.89	74.8 K=1.00	2.6300	-1.14	63.46	0.018 [1] ✔
T35	100 - 93.75 (733)	2L3x2 1/2x1/4	6.03	5.89	74.8 K=1.00	2.6300	-1.30	63.46	0.020 [1] ✔
T35	100 - 93.75 (738)	2L3x2 1/2x1/4	6.03	5.89	74.8 K=1.00	2.6300	-1.30	63.46	0.021 [1] ✔
T35	100 - 93.75 (739)	2L3x2 1/2x1/4	6.03	5.89	74.8 K=1.00	2.6300	-1.16	63.46	0.018 [1] ✔

[1] P_u / ϕP_n controls

Torque-Arm Bottom Design Data

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T4	350 - 343.75 (671)	2L3x2 1/2x1/4	8.68	8.50	108.0 K=1.00	2.6300	-24.01	46.13	0.521 [1] ✔
T4	350 - 343.75 (672)	2L3x2 1/2x1/4	8.68	8.50	108.0 K=1.00	2.6300	-24.47	46.13	0.530 [1] ✔
T4	350 - 343.75 (677)	2L3x2 1/2x1/4	8.68	8.50	108.0 K=1.00	2.6300	-24.72	46.13	0.536 [1] ✔
T4	350 - 343.75 (678)	2L3x2 1/2x1/4	8.68	8.50	108.0 K=1.00	2.6300	-24.70	46.13	0.536 [1] ✔
T4	350 - 343.75 (683)	2L3x2 1/2x1/4	8.68	8.50	108.0 K=1.00	2.6300	-24.11	46.13	0.523 [1] ✔
T4	350 - 343.75 (684)	2L3x2 1/2x1/4	8.68	8.50	108.0 K=1.00	2.6300	-24.55	46.13	0.532 [1] ✔
T12	300 - 293.75 (689)	2L3x2 1/2x1/4	8.68	8.49	107.8 K=1.00	2.6300	-27.71	46.23	0.599 [1] ✔
T12	300 - 293.75 (690)	2L3x2 1/2x1/4	8.68	8.49	107.8 K=1.00	2.6300	-28.07	46.23	0.607 [1] ✔
T12	300 - 293.75 (695)	2L3x2 1/2x1/4	8.68	8.49	107.8 K=1.00	2.6300	-28.01	46.23	0.606 [1] ✔
T12	300 - 293.75 (696)	2L3x2 1/2x1/4	8.68	8.49	107.8 K=1.00	2.6300	-28.04	46.23	0.607 [1] ✔
T12	300 - 293.75 (701)	2L3x2 1/2x1/4	8.68	8.49	107.8 K=1.00	2.6300	-27.72	46.23	0.600 [1] ✔
T12	300 - 293.75 (702)	2L3x2 1/2x1/4	8.68	8.49	107.8 K=1.00	2.6300	-28.03	46.23	0.606 [1] ✔
T24	225 - 218.75 (707)	2L3x2 1/2x1/4	8.68	8.50	108.0 K=1.00	2.6300	-22.66	46.13	0.491 [1] ✔
T24	225 - 218.75 (708)	2L3x2 1/2x1/4	8.68	8.50	108.0 K=1.00	2.6300	-22.73	46.13	0.493 [1] ✔
T24	225 - 218.75 (713)	2L3x2 1/2x1/4	8.68	8.50	108.0 K=1.00	2.6300	-23.03	46.13	0.499 [1] ✔
T24	225 - 218.75 (714)	2L3x2 1/2x1/4	8.68	8.50	108.0 K=1.00	2.6300	-23.02	46.13	0.499 [1] ✔
T24	225 - 218.75 (719)	2L3x2 1/2x1/4	8.68	8.50	108.0 K=1.00	2.6300	-22.07	46.13	0.478 [1] ✔
T24	225 - 218.75 (720)	2L3x2 1/2x1/4	8.68	8.50	108.0 K=1.00	2.6300	-22.12	46.13	0.479 [1] ✔
T35	100 - 93.75 (728)	2L3x2 1/2x1/4	8.68	8.49	107.8 K=1.00	2.6300	-10.59	46.23	0.229 [1] ✔
T35	100 - 93.75 (729)	2L3x2 1/2x1/4	8.68	8.49	107.8 K=1.00	2.6300	-10.55	46.23	0.228 [1] ✔
T35	100 - 93.75 (734)	2L3x2 1/2x1/4	8.68	8.49	107.8 K=1.00	2.6300	-11.30	46.23	0.244 [1] ✔
T35	100 - 93.75 (735)	2L3x2 1/2x1/4	8.68	8.49	107.8 K=1.00	2.6300	-11.19	46.23	0.242 [1] ✔
T35	100 - 93.75 (740)	2L3x2 1/2x1/4	8.68	8.49	107.8 K=1.00	2.6300	-10.24	46.23	0.222 [1]

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T35	100 - 93.75 (741)	2L3x2 1/2x1/4	8.68	8.49	107.8 K=1.00	2.6300	-10.32	46.23	0.223 [1] ✔

[1] P_u / ϕP_n controls

Tension Checks

Leg Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	368.75 - 362.5	2 3/4	6.25	6.25	109.1	5.9396	0.34	192.44	0.002 [1] ✔
T2	362.5 - 356.25	2 3/4	6.25	6.25	109.1	5.9396	0.92	192.44	0.005 [1] ✔
T3	356.25 - 350	2 3/4	6.25	6.25	109.1	5.9396	6.18	192.44	0.032 [1] ✔
T4	350 - 343.75	3	6.25	6.25	100.0	7.0686	5.30	229.02	0.023 [1] ✔
T15	281.25 - 275	3 1/4	6.25	6.25	92.3	8.2958	1.90	268.78	0.007 [1] ✔
T16	275 - 268.75	3 1/4	6.25	6.25	92.3	8.2958	6.07	268.78	0.023 [1] ✔
T17	268.75 - 262.5	3 1/4	6.25	6.25	92.3	8.2958	8.59	268.78	0.032 [1] ✔
T18	262.5 - 256.25	3 1/4	6.25	6.25	92.3	8.2958	9.56	268.78	0.036 [1] ✔
T19	256.25 - 250	3 1/4	6.25	6.25	92.3	8.2958	7.16	268.78	0.027 [1] ✔
T20	250 - 243.75	3 1/4	6.25	6.25	92.3	8.2958	4.32	268.78	0.016 [1] ✔

[1] P_u / ϕP_n controls

Diagonal Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	368.75 - 362.5	L2 1/2x2 1/2x1/4	8.00	3.65	59.6	0.7753	0.37	33.73	0.011 [1] ✔
T2	362.5 - 356.25	2L3x3x5/16	8.00	3.65	49.7	2.3695	0.92	103.08	0.009 [1] ✔

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T3	356.25 - 350	2L3x3x5/16	8.00	3.65	49.7	2.3695	5.77	103.08	0.056 [1] ✔
T4	350 - 343.75	L3x2 1/2x1/4	8.00	3.62	61.0	0.8419	3.66	36.62	0.100 [1] ✔
T5	343.75 - 337.5	5/8	8.00	7.60	584.0	0.3068	4.65	9.94	0.468 [1] ✔
T6	337.5 - 331.25	5/8	8.00	7.60	584.0	0.3068	4.37	9.94	0.440 [1] ✔
T7	331.25 - 325	5/8	8.00	7.60	584.0	0.3068	4.04	9.94	0.406 [1] ✔
T8	325 - 318.75	3/4	8.00	7.59	485.6	0.4418	4.44	14.31	0.310 [1] ✔
T9	318.75 - 312.5	3/4	8.00	7.57	484.5	0.4418	4.46	14.31	0.312 [1] ✔
T10	312.5 - 306.25	3/4	8.00	7.57	484.5	0.4418	4.80	14.31	0.335 [1] ✔
T11	306.25 - 300	3/4	8.00	7.57	484.5	0.4418	9.13	14.31	0.638 [1] ✔
T12	300 - 293.75	L3x2 1/2x1/4	8.00	3.59	60.4	0.8419	3.12	36.62	0.085 [1] ✔
T13	293.75 - 287.5	3/4	8.00	7.57	484.5	0.4418	6.90	14.31	0.482 [1] ✔
T14	287.5 - 281.25	5/8	8.00	7.57	581.4	0.3068	5.56	9.94	0.559 [1] ✔
T15	281.25 - 275	5/8	8.00	7.57	581.4	0.3068	4.34	9.94	0.436 [1] ✔
T16	275 - 268.75	5/8	8.00	7.57	581.4	0.3068	3.55	9.94	0.357 [1] ✔
T17	268.75 - 262.5	5/8	8.00	7.57	581.4	0.3068	3.02	9.94	0.303 [1] ✔
T18	262.5 - 256.25	5/8	8.00	7.57	581.4	0.3068	2.66	9.94	0.268 [1] ✔
T19	256.25 - 250	3/4	8.00	7.57	484.5	0.4418	3.90	14.31	0.272 [1] ✔
T20	250 - 243.75	3/4	8.00	7.57	484.5	0.4418	4.48	14.31	0.313 [1] ✔
T21	243.75 - 237.5	3/4	8.00	7.57	484.5	0.4418	10.09	14.31	0.705 [1] ✔
T22	237.5 - 231.25	3/4	8.00	7.57	484.5	0.4418	13.00	14.31	0.908 [1] ✔
T23	231.25 - 225	1	8.00	7.57	363.4	0.7854	14.04	25.45	0.552 [1] ✔
T25	218.75 - 212.5	5/8	8.00	7.60	584.0	0.3068	7.75	9.94	0.780 [1] ✔
T26	212.5 - 206.25	5/8	8.00	7.60	584.0	0.3068	6.15	9.94	0.619 [1] ✔
T27	206.25 - 200	5/8	8.00	7.60	584.0	0.3068	4.06	9.94	0.409 [1] ✔
T28	200 - 175	5/8	8.00	7.60	584.0	0.3068	6.44	9.94	0.648 [1] ✔
T29	175 - 168.75	1	8.00	7.59	364.2	0.7854	8.82	25.45	0.347 [1] ✔

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T30	168.75 - 162.5	1	8.00	7.57	363.4	0.7854	9.74	25.45	0.383 [1] ✔
T31	162.5 - 156.25	5/8	8.00	7.57	581.4	0.3068	5.06	9.94	0.509 [1] ✔
T32	156.25 - 150	5/8	8.00	7.57	581.4	0.3068	3.91	9.94	0.394 [1] ✔
T33	150 - 125	5/8	8.00	7.57	581.4	0.3068	5.36	9.94	0.539 [1] ✔
T34	125 - 100	L2 1/2x2 1/2x3/16	8.00	7.17	116.8	0.5710	12.65	24.84	0.509 [1] ✔
T36	93.75 - 87.5	3/4	8.00	7.57	484.5	0.4418	6.19	14.31	0.432 [1] ✔
T37	87.5 - 81.25	5/8	8.00	7.57	581.4	0.3068	4.52	9.94	0.455 [1] ✔
T38	81.25 - 75	5/8	8.00	7.57	581.4	0.3068	2.94	9.94	0.296 [1] ✔
T39	75 - 50	5/8	8.00	7.57	581.4	0.3068	4.90	9.94	0.493 [1] ✔
T40	50 - 25	5/8	8.00	7.57	581.4	0.3068	5.27	9.94	0.530 [1] ✔
T41	25 - 0	5/8	8.00	7.57	581.4	0.3068	3.40	9.94	0.342 [1] ✔

[1] P_u / ϕP_n controls

Horizontal Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T28	200 - 175	P1.25x.14	5.00	4.75	105.6	0.6685	2.04	21.66	0.094 [1] ✔
T33	150 - 125	P1.25x.14	5.00	4.73	105.2	0.6685	2.23	21.66	0.103 [1] ✔
T34	125 - 100	P1.25x.14	5.00	4.73	105.2	0.6685	2.23	21.66	0.103 [1] ✔
T39	75 - 50	P1.25x.14	5.00	4.73	105.2	0.6685	2.49	21.66	0.115 [1] ✔
T40	50 - 25	P1.25x.14	5.00	4.73	105.2	0.6685	2.61	21.66	0.120 [1] ✔
T41	25 - 0	P1.25x.14	5.00	4.73	105.2	0.6685	2.63	21.66	0.121 [1] ✔

[1] P_u / ϕP_n controls

Secondary Horizontal Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T28	200 - 175	P1.25x.14	5.00	4.75	105.6	0.6685	2.04	21.66	0.094 [1] ✔

[1] P_u / ϕP_n controls

Top Girt Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	368.75 - 362.5	2L2 1/2x2x1/4	5.00	4.38	73.0	1.3162	0.11	57.26	0.002 [1] ✔
T2	362.5 - 356.25	2L2 1/2x3x1/4	5.00	4.44	76.0	1.7381	0.32	75.61	0.004 [1] ✔
T3	356.25 - 350	2L2 1/2x3x1/4	5.00	4.44	76.0	1.7381	1.33	75.61	0.018 [1] ✔
T4	350 - 343.75	2L2 1/2x2x1/4	5.00	4.38	73.0	1.3162	9.83	57.26	0.172 [1] ✔
T12	300 - 293.75	2L2 1/2x2x1/4	5.00	4.33	72.4	1.3162	12.07	57.26	0.211 [1] ✔
T24	225 - 218.75	2L2 1/2x2x1/4	5.00	4.33	72.4	1.3162	16.23	57.26	0.284 [1] ✔
T25	218.75 - 212.5	2L2 1/2x2x1/4	5.00	4.35	72.7	1.3162	5.77	57.26	0.101 [1] ✔
T31	162.5 - 156.25	2L2 1/2x2x1/4	5.00	4.40	72.4	1.3631	6.98	59.30	0.118 [1] ✔
T35	100 - 93.75	2L2 1/2x2x1/4	5.00	4.33	72.4	1.3162	15.28	57.26	0.267 [1] ✔
T36	93.75 - 87.5	2L2 1/2x2x1/4	5.00	4.40	72.4	1.3631	8.08	59.30	0.136 [1] ✔
T40	50 - 25	L2 1/2x2x1/4	5.00	4.40	95.8	0.6778	4.59	29.48	0.156 [1] ✔

[1] P_u / ϕP_n controls

Torque-Arm Top Design Data

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T4	350 - 343.75 (669)	2L3x2 1/2x1/4	6.03	5.91	75.1	2.6300	20.93	85.21	0.246 [1] ✔
T4	350 - 343.75 (670)	2L3x2 1/2x1/4	6.03	5.91	75.1	2.6300	22.05	85.21	0.259 [1] ✔
T4	350 - 343.75 (675)	2L3x2 1/2x1/4	6.03	5.91	75.1	2.6300	20.47	85.21	0.240 [1] ✔

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T4	350 - 343.75 (676)	2L3x2 1/2x1/4	6.03	5.91	75.1	2.6300	20.19	85.21	0.237 [1] ✔
T4	350 - 343.75 (681)	2L3x2 1/2x1/4	6.03	5.91	75.1	2.6300	20.81	85.21	0.244 [1] ✔
T4	350 - 343.75 (682)	2L3x2 1/2x1/4	6.03	5.91	75.1	2.6300	22.28	85.21	0.262 [1] ✔
T12	300 - 293.75 (687)	2L3x2 1/2x1/4	6.03	5.89	74.8	2.6300	22.76	85.21	0.267 [1] ✔
T12	300 - 293.75 (688)	2L3x2 1/2x1/4	6.03	5.89	74.8	2.6300	23.42	85.21	0.275 [1] ✔
T12	300 - 293.75 (693)	2L3x2 1/2x1/4	6.03	5.89	74.8	2.6300	22.68	85.21	0.266 [1] ✔
T12	300 - 293.75 (694)	2L3x2 1/2x1/4	6.03	5.89	74.8	2.6300	22.93	85.21	0.269 [1] ✔
T12	300 - 293.75 (699)	2L3x2 1/2x1/4	6.03	5.89	74.8	2.6300	23.01	85.21	0.270 [1] ✔
T12	300 - 293.75 (700)	2L3x2 1/2x1/4	6.03	5.89	74.8	2.6300	23.41	85.21	0.275 [1] ✔
T24	225 - 218.75 (705)	2L3x2 1/2x1/4	6.03	5.89	74.8	2.6300	21.78	85.21	0.256 [1] ✔
T24	225 - 218.75 (706)	2L3x2 1/2x1/4	6.03	5.89	74.8	2.6300	21.73	85.21	0.255 [1] ✔
T24	225 - 218.75 (711)	2L3x2 1/2x1/4	6.03	5.89	74.8	2.6300	21.87	85.21	0.257 [1] ✔
T24	225 - 218.75 (712)	2L3x2 1/2x1/4	6.03	5.89	74.8	2.6300	21.71	85.21	0.255 [1] ✔
T24	225 - 218.75 (717)	2L3x2 1/2x1/4	6.03	5.89	74.8	2.6300	21.83	85.21	0.256 [1] ✔
T24	225 - 218.75 (718)	2L3x2 1/2x1/4	6.03	5.89	74.8	2.6300	21.91	85.21	0.257 [1] ✔
T35	100 - 93.75 (726)	2L3x2 1/2x1/4	6.03	5.89	74.8	2.6300	14.00	85.21	0.164 [1] ✔
T35	100 - 93.75 (727)	2L3x2 1/2x1/4	6.03	5.89	74.8	2.6300	13.96	85.21	0.164 [1] ✔
T35	100 - 93.75 (732)	2L3x2 1/2x1/4	6.03	5.89	74.8	2.6300	14.54	85.21	0.171 [1] ✔
T35	100 - 93.75 (733)	2L3x2 1/2x1/4	6.03	5.89	74.8	2.6300	14.35	85.21	0.168 [1] ✔
T35	100 - 93.75 (738)	2L3x2 1/2x1/4	6.03	5.89	74.8	2.6300	13.63	85.21	0.160 [1] ✔
T35	100 - 93.75 (739)	2L3x2 1/2x1/4	6.03	5.89	74.8	2.6300	13.75	85.21	0.161 [1] ✔

[1] P_u / ϕP_n controls

Torque-Arm Bottom Design Data

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T35	100 - 93.75 (728)	2L3x2 1/2x1/4	8.68	8.49	107.8	2.6300	1.18	85.21	0.014 [1] ✔
T35	100 - 93.75 (729)	2L3x2 1/2x1/4	8.68	8.49	107.8	2.6300	1.35	85.21	0.016 [1] ✔
T35	100 - 93.75 (734)	2L3x2 1/2x1/4	8.68	8.49	107.8	2.6300	1.61	85.21	0.019 [1] ✔
T35	100 - 93.75 (735)	2L3x2 1/2x1/4	8.68	8.49	107.8	2.6300	1.63	85.21	0.019 [1] ✔
T35	100 - 93.75 (740)	2L3x2 1/2x1/4	8.68	8.49	107.8	2.6300	1.20	85.21	0.014 [1] ✔
T35	100 - 93.75 (741)	2L3x2 1/2x1/4	8.68	8.49	107.8	2.6300	1.35	85.21	0.016 [1] ✔

[1] P_u / ϕP_n controls

Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
T1	368.75 - 362.5	Leg	2 3/4	1	-1.67	102.85	1.6	Pass
T2	362.5 - 356.25	Leg	2 3/4	13	-2.35	102.85	2.3	Pass
T3	356.25 - 350	Leg	2 3/4	26	-9.20	102.85	8.9	Pass
T4	350 - 343.75	Leg	3	39	-8.09	135.28	6.0	Pass
T5	343.75 - 337.5	Leg	3	49	-41.64	135.28	30.8	Pass
T6	337.5 - 331.25	Leg	3	61	-42.52	135.28	31.4	Pass
T7	331.25 - 325	Leg	3	73	-43.29	135.28	32.0	Pass
T8	325 - 318.75	Leg	3 1/4	86	-45.26	171.63	26.4	Pass
T9	318.75 - 312.5	Leg	3 1/4	98	-45.48	171.63	26.5	Pass
T10	312.5 - 306.25	Leg	3 1/4	110	-46.00	171.63	26.8	Pass
T11	306.25 - 300	Leg	3 1/4	122	-48.69	171.63	28.4	Pass
T12	300 - 293.75	Leg	3 1/4	134	-40.13	171.63	23.4	Pass
T13	293.75 - 287.5	Leg	3 1/4	146	-89.43	171.63	52.1	Pass
T14	287.5 - 281.25	Leg	3 1/4	158	-94.49	171.63	55.1	Pass
T15	281.25 - 275	Leg	3 1/4	170	-98.78	171.63	57.6	Pass
T16	275 - 268.75	Leg	3 1/4	182	-101.79	171.63	59.3	Pass
T17	268.75 - 262.5	Leg	3 1/4	195	-103.44	171.63	60.3	Pass
T18	262.5 - 256.25	Leg	3 1/4	207	-103.47	171.63	60.3	Pass
T19	256.25 - 250	Leg	3 1/4	219	-103.13	171.63	60.1	Pass
T20	250 - 243.75	Leg	3 1/4	231	-100.19	171.63	58.4	Pass
T21	243.75 - 237.5	Leg	3 1/4	243	-96.22	171.63	56.1	Pass
T22	237.5 - 231.25	Leg	3 1/4	255	-89.26	171.63	52.0	Pass
T23	231.25 - 225	Leg	3 1/4	266	-88.23	171.63	51.4	Pass
T24	225 - 218.75	Leg	3	278	-66.04	135.28	48.8	Pass
T25	218.75 - 212.5	Leg	3	290	-111.44	135.28	82.4	Pass
T26	212.5 - 206.25	Leg	3	302	-113.86	135.28	84.2	Pass
T27	206.25 - 200	Leg	3	313	-116.11	135.28	85.8	Pass
T28	200 - 175	Leg	3	326	-117.98	200.78	58.8	Pass
T29	175 - 168.75	Leg	3 1/4	377	-116.74	171.63	68.0	Pass
T30	168.75 - 162.5	Leg	3 1/4	389	-115.68	171.63	67.4	Pass
T31	162.5 - 156.25	Leg	3 1/4	401	-123.46	171.63	71.9	Pass
T32	156.25 - 150	Leg	3 1/4	413	-125.34	171.63	73.0	Pass
T33	150 - 125	Leg	3 1/4	424	-128.49	171.63	74.9	Pass
T34	125 - 100	Leg	3 1/4	463	-128.60	171.63	74.9	Pass
T35	100 - 93.75	Leg	3 1/4	502	-104.48	171.63	60.9	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
T36	93.75 - 87.5	Leg	3 1/4	514	-138.69	171.63	80.8	Pass
T37	87.5 - 81.25	Leg	3 1/4	526	-139.53	171.63	81.3	Pass
T38	81.25 - 75	Leg	3 1/4	538	-140.86	171.63	82.1	Pass
T39	75 - 50	Leg	3 1/4	550	-143.47	171.63	83.6	Pass
T40	50 - 25	Leg	3 1/4	589	-150.54	171.63	87.7	Pass
T41	25 - 0	Leg	3 1/4	628	-151.68	171.63	88.4	Pass
T1	368.75 - 362.5	Diagonal	L2 1/2x2 1/2x1/4	11	-0.45	23.51	1.9	Pass
							2.8 (b)	
T2	362.5 - 356.25	Diagonal	2L3x3x5/16	20	-1.33	102.12	1.3	Pass
							4.2 (b)	
T3	356.25 - 350	Diagonal	2L3x3x5/16	34	5.77	103.08	5.6	Pass
							18.1 (b)	
T4	350 - 343.75	Diagonal	L3x2 1/2x1/4	43	-4.05	27.26	14.9	Pass
							16.3 (b)	
T5	343.75 - 337.5	Diagonal	5/8	55	4.65	9.94	46.8	Pass
T6	337.5 - 331.25	Diagonal	5/8	67	4.37	9.94	44.0	Pass
T7	331.25 - 325	Diagonal	5/8	79	4.04	9.94	40.6	Pass
T8	325 - 318.75	Diagonal	3/4	92	4.44	14.31	31.0	Pass
T9	318.75 - 312.5	Diagonal	3/4	108	4.46	14.31	31.2	Pass
T10	312.5 - 306.25	Diagonal	3/4	120	4.80	14.31	33.5	Pass
T11	306.25 - 300	Diagonal	3/4	129	9.13	14.31	63.8	Pass
T12	300 - 293.75	Diagonal	L3x2 1/2x1/4	142	-7.80	27.41	28.5	Pass
							31.4 (b)	
T13	293.75 - 287.5	Diagonal	3/4	152	6.90	14.31	48.2	Pass
T14	287.5 - 281.25	Diagonal	5/8	164	5.56	9.94	55.9	Pass
T15	281.25 - 275	Diagonal	5/8	176	4.34	9.94	43.6	Pass
T16	275 - 268.75	Diagonal	5/8	188	3.55	9.94	35.7	Pass
T17	268.75 - 262.5	Diagonal	5/8	200	3.02	9.94	30.3	Pass
T18	262.5 - 256.25	Diagonal	5/8	215	2.66	9.94	26.8	Pass
T19	256.25 - 250	Diagonal	3/4	225	3.90	14.31	27.2	Pass
T20	250 - 243.75	Diagonal	3/4	236	4.48	14.31	31.3	Pass
T21	243.75 - 237.5	Diagonal	3/4	249	10.09	14.31	70.5	Pass
T22	237.5 - 231.25	Diagonal	3/4	261	13.00	14.31	90.8	Pass
T23	231.25 - 225	Diagonal	1	273	14.04	25.45	55.2	Pass
							72.2 (b)	
T24	225 - 218.75	Diagonal	2L2 1/2x2 1/2x1/4	284	-14.39	65.28	22.0	Pass
							28.9 (b)	
T25	218.75 - 212.5	Diagonal	5/8	296	7.75	9.94	78.0	Pass
T26	212.5 - 206.25	Diagonal	5/8	308	6.15	9.94	61.9	Pass
T27	206.25 - 200	Diagonal	5/8	320	4.06	9.94	40.9	Pass
T28	200 - 175	Diagonal	5/8	336	6.44	9.94	64.8	Pass
T29	175 - 168.75	Diagonal	1	387	8.82	25.45	34.7	Pass
							55.5 (b)	
T30	168.75 - 162.5	Diagonal	1	399	9.74	25.45	38.3	Pass
							61.2 (b)	
T31	162.5 - 156.25	Diagonal	5/8	408	5.06	9.94	50.9	Pass
T32	156.25 - 150	Diagonal	5/8	420	3.91	9.94	39.4	Pass
T33	150 - 125	Diagonal	5/8	430	5.36	9.94	53.9	Pass
T34	125 - 100	Diagonal	L2 1/2x2 1/2x3/16	469	12.65	24.84	50.9	Pass
							60.6 (b)	
T35	100 - 93.75	Diagonal	2L2 1/2x2 1/2x1/4	511	-15.29	65.39	23.4	Pass
							30.8 (b)	
T36	93.75 - 87.5	Diagonal	3/4	520	6.19	14.31	43.2	Pass
T37	87.5 - 81.25	Diagonal	5/8	532	4.52	9.94	45.5	Pass
T38	81.25 - 75	Diagonal	5/8	544	2.94	9.94	29.6	Pass
T39	75 - 50	Diagonal	5/8	561	4.90	9.94	49.3	Pass
T40	50 - 25	Diagonal	5/8	622	5.27	9.94	53.0	Pass
T41	25 - 0	Diagonal	5/8	639	3.40	9.94	34.2	Pass
T28	200 - 175	Horizontal	P1.25x.14	338	-3.20	12.04	26.6	Pass
T33	150 - 125	Horizontal	P1.25x.14	436	-3.07	12.10	25.4	Pass
T34	125 - 100	Horizontal	P1.25x.14	475	-7.41	12.10	61.2	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
T39	75 - 50	Horizontal	P1.25x.14	563	-2.77	12.10	22.9	Pass
T40	50 - 25	Horizontal	P1.25x.14	619	-2.97	12.10	24.5	Pass
T41	25 - 0	Horizontal	P1.25x.14	651	-2.63	12.10	21.7	Pass
T28	200 - 175	Secondary Horizontal	P1.25x.14	340	-2.04	12.04	17.0	Pass
T1	368.75 - 362.5	Top Girt	2L2 1/2x2x1/4	4	0.11	57.26	0.3	Pass
T2	362.5 - 356.25	Top Girt	2L2 1/2x3x1/4	16	0.32	75.61	0.4 1.0 (b)	Pass
T3	356.25 - 350	Top Girt	2L2 1/2x3x1/4	29	-1.28	65.49	2.0 4.2 (b)	Pass
T4	350 - 343.75	Top Girt	2L2 1/2x2x1/4	40	9.83	57.26	17.2 19.8 (b)	Pass
T5	343.75 - 337.5	Top Girt	2L2 1/2x2x1/4	52	-4.28	54.62	7.8 8.6 (b)	Pass
T6	337.5 - 331.25	Top Girt	P1.25x.14	65	-3.09	12.04	25.6	Pass
T7	331.25 - 325	Top Girt	P1.25x.14	77	-2.99	12.04	24.8	Pass
T8	325 - 318.75	Top Girt	P1.25x.14	89	-3.60	12.04	29.9	Pass
T9	318.75 - 312.5	Top Girt	P1.25x.14	102	-4.09	12.10	33.8	Pass
T10	312.5 - 306.25	Top Girt	P1.25x.14	114	-4.09	12.10	33.8	Pass
T11	306.25 - 300	Top Girt	2L2 1/2x2x1/4	126	-5.94	54.74	10.8 11.9 (b)	Pass
T12	300 - 293.75	Top Girt	2L2 1/2x2x1/4	136	12.07	57.26	21.1 24.3 (b)	Pass
T13	293.75 - 287.5	Top Girt	2L2 1/2x2x1/4	149	-3.06	54.74	5.6 6.2 (b)	Pass
T14	287.5 - 281.25	Top Girt	P1.25x.14	160	-3.88	12.10	32.1	Pass
T15	281.25 - 275	Top Girt	P1.25x.14	172	-3.13	12.10	25.8	Pass
T16	275 - 268.75	Top Girt	P1.25x.14	185	-2.96	12.10	24.5	Pass
T17	268.75 - 262.5	Top Girt	P1.25x.14	196	-2.98	12.10	24.6	Pass
T18	262.5 - 256.25	Top Girt	P1.25x.14	208	-2.94	12.10	24.3	Pass
T19	256.25 - 250	Top Girt	P1.25x.14	220	-3.59	12.10	29.6	Pass
T20	250 - 243.75	Top Girt	2L2 1/2x2x1/4	232	-4.35	54.38	8.0 13.7 (b)	Pass
T21	243.75 - 237.5	Top Girt	2L2 1/2x2x1/4	245	-5.35	54.74	9.8 10.8 (b)	Pass
T22	237.5 - 231.25	Top Girt	2L2 1/2x2x1/4	257	-7.25	54.74	13.2 14.6 (b)	Pass
T23	231.25 - 225	Top Girt	2L2 1/2x2x1/4	269	-8.40	54.74	15.4 16.9 (b)	Pass
T24	225 - 218.75	Top Girt	2L2 1/2x2x1/4	280	16.23	57.26	28.4 32.7 (b)	Pass
T25	218.75 - 212.5	Top Girt	2L2 1/2x2x1/4	293	5.77	57.26	10.1 11.6 (b)	Pass
T26	212.5 - 206.25	Top Girt	P1.25x.14	304	-4.36	12.04	36.2	Pass
T27	206.25 - 200	Top Girt	P1.25x.14	316	-3.26	12.04	27.1	Pass
T28	200 - 175	Top Girt	P1.25x.14	329	-2.27	12.04	18.9	Pass
T29	175 - 168.75	Top Girt	P1.25x.14	381	-4.67	12.04	38.8	Pass
T30	168.75 - 162.5	Top Girt	P1.25x.14	393	-5.81	12.10	48.0	Pass
T31	162.5 - 156.25	Top Girt	2L2 1/2x2x1/4	403	6.98	59.30	11.8 21.9 (b)	Pass
T32	156.25 - 150	Top Girt	P1.25x.14	416	-2.80	12.10	23.2	Pass
T33	150 - 125	Top Girt	P1.25x.14	428	-2.10	12.10	17.4	Pass
T34	125 - 100	Top Girt	P1.25x.14	466	-4.09	12.10	33.8	Pass
T35	100 - 93.75	Top Girt	2L2 1/2x2x1/4	507	15.28	57.26	26.7 30.7 (b)	Pass
T36	93.75 - 87.5	Top Girt	2L2 1/2x2x1/4	517	8.08	59.30	13.6 25.4 (b)	Pass
T37	87.5 - 81.25	Top Girt	P1.25x.14	529	-3.34	12.10	27.6	Pass
T38	81.25 - 75	Top Girt	P1.25x.14	541	-2.32	12.10	19.2	Pass
T39	75 - 50	Top Girt	P1.25x.14	554	-1.59	12.10	13.2	Pass
T40	50 - 25	Top Girt	L2 1/2x2x1/4	594	4.59	29.48	15.6 28.9 (b)	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
T41	25 - 0	Top Girt	P1.25x.14	632	-1.52	12.10	12.6	Pass
T4	350 - 343.75	Guy A@350	7/8	679	23.31	47.82	48.7	Pass
T12	300 - 293.75	Guy A@300	7/8	697	26.10	47.82	54.6	Pass
T24	225 - 218.75	Guy A@225	3/4	716	22.89	34.98	65.4	Pass
T31	162.5 - 156.25	Guy A@162.5	3/4	723	24.23	34.98	69.3	Pass
T35	100 - 93.75	Guy A@100	9/16	737	13.76	21.00	65.5	Pass
T40	50 - 25	Guy A@50	9/16	744	12.88	21.00	61.3	Pass
T4	350 - 343.75	Guy B@350	7/8	674	23.70	47.82	49.6	Pass
T12	300 - 293.75	Guy B@300	7/8	692	26.07	47.82	54.5	Pass
T24	225 - 218.75	Guy B@225	3/4	709	22.92	34.98	65.5	Pass
T31	162.5 - 156.25	Guy B@162.5	3/4	722	24.20	34.98	69.2	Pass
T35	100 - 93.75	Guy B@100	9/16	730	13.83	21.00	65.9	Pass
T40	50 - 25	Guy B@50	9/16	743	12.63	21.00	60.1	Pass
T4	350 - 343.75	Guy C@350	7/8	667	23.63	47.82	49.4	Pass
T12	300 - 293.75	Guy C@300	7/8	685	26.02	47.82	54.4	Pass
T24	225 - 218.75	Guy C@225	3/4	704	22.65	34.98	64.7	Pass
T31	162.5 - 156.25	Guy C@162.5	3/4	721	24.19	34.98	69.1	Pass
T35	100 - 93.75	Guy C@100	9/16	725	13.68	21.00	65.1	Pass
T40	50 - 25	Guy C@50	9/16	742	13.04	21.00	62.1	Pass
T4	350 - 343.75	Torque Arm Top@350	2L3x2 1/2x1/4	682	22.28	85.21	26.2	Pass
T12	300 - 293.75	Torque Arm Top@300	2L3x2 1/2x1/4	688	23.42	85.21	27.5	Pass
T24	225 - 218.75	Torque Arm Top@225	2L3x2 1/2x1/4	718	21.91	85.21	25.7	Pass
T35	100 - 93.75	Torque Arm Top@100	2L3x2 1/2x1/4	732	14.54	85.21	17.1	Pass
T4	350 - 343.75	Torque Arm Bottom@350	2L3x2 1/2x1/4	677	-24.72	46.13	53.6	Pass
T12	300 - 293.75	Torque Arm Bottom@300	2L3x2 1/2x1/4	690	-28.07	46.23	60.7	Pass
T24	225 - 218.75	Torque Arm Bottom@225	2L3x2 1/2x1/4	713	-23.03	46.13	49.9	Pass
T35	100 - 93.75	Torque Arm Bottom@100	2L3x2 1/2x1/4	734	-11.30	46.23	24.4	Pass

Summary		
Leg (T41)	88.4	Pass
Diagonal (T22)	90.8	Pass
Horizontal (T34)	61.2	Pass
Secondary Horizontal (T28)	17.0	Pass
Top Girt (T30)	48.0	Pass
Guy A (T31)	69.3	Pass
Guy B (T31)	69.2	Pass
Guy C (T31)	69.1	Pass
Torque Arm Top (T12)	27.5	Pass
Torque Arm Bottom (T12)	60.7	Pass
Bolt Checks	72.2	Pass
RATING =	**90.8**	**Pass**

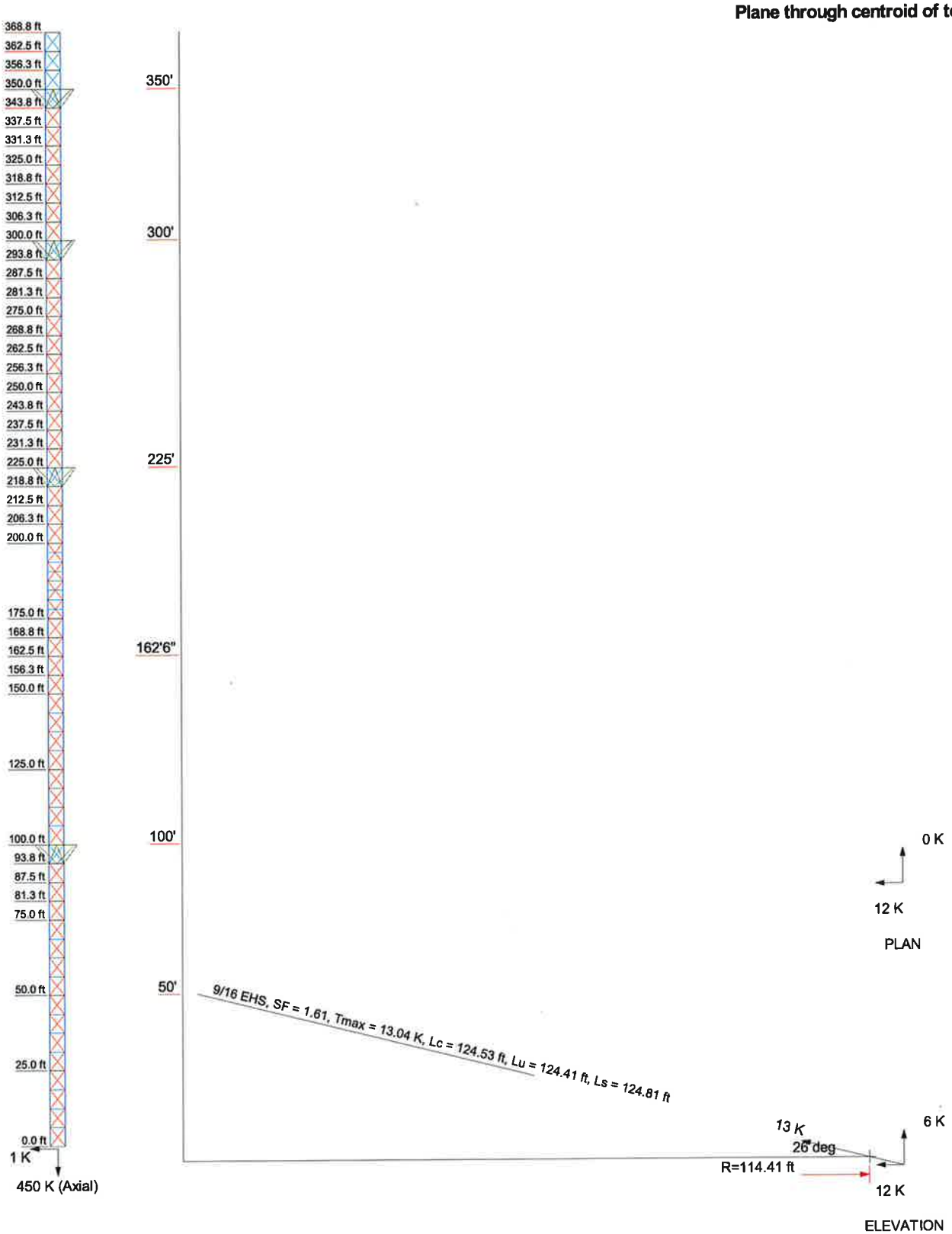
Guy Tensions and Tower Reactions

TIA-222-G - 105 mph/50 mph 0.7500 in Ice Exposure C

Maximum Values

Anchor 'C'@114.41 ft Azimuth 240 deg Elev -5.4 ft

Plane through centroid of tower



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Job: ***16001.53 - Montville***		
Project: ***370' Guyed Tower - 689 Old Colchester Road, Montville,***		
Client: Verizon Wireless	Drawn by: TJL	App'd:
Code: TIA-222-G	Date: 10/13/16	Scale: NTS
Path:		Dwg No. E-6

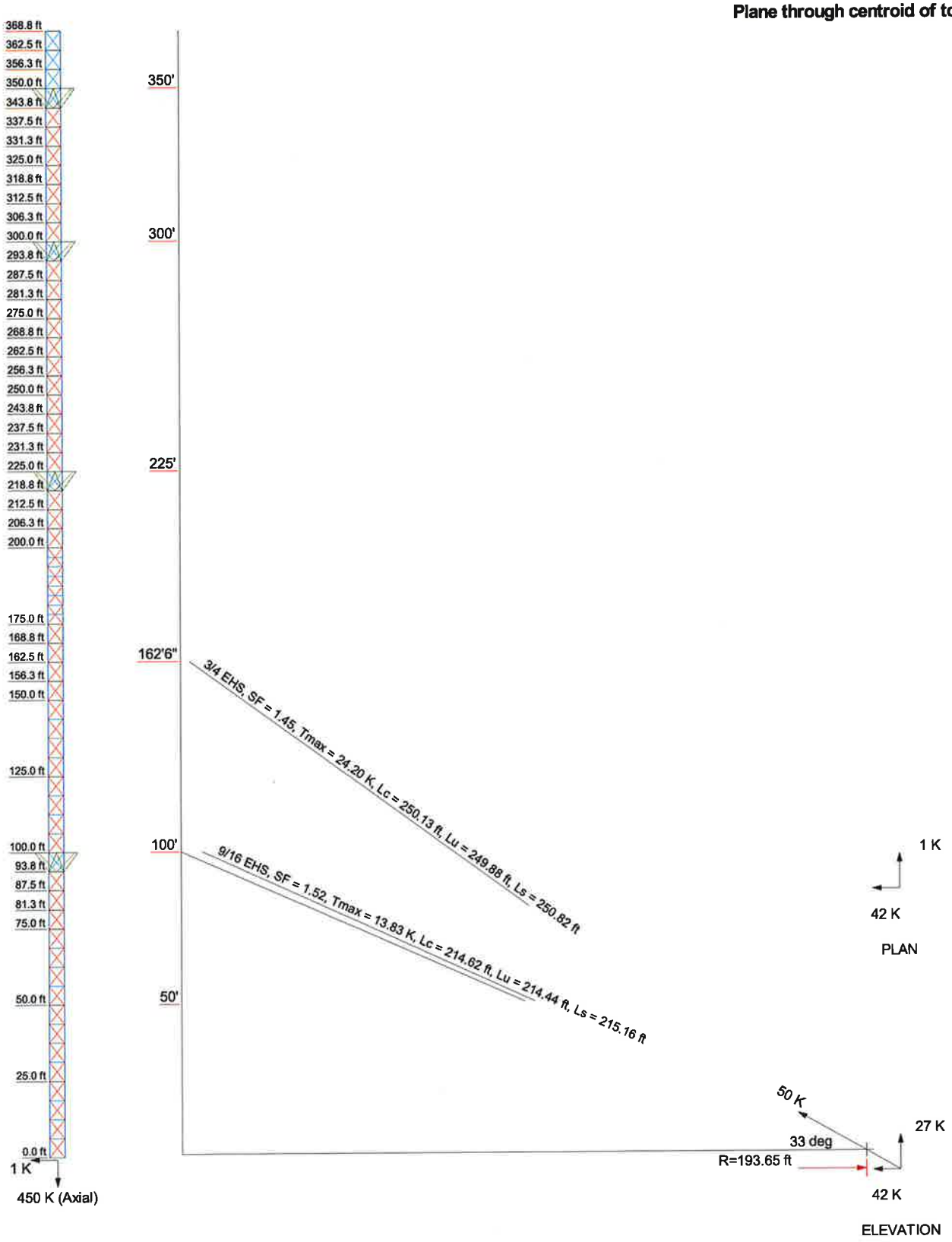
Guy Tensions and Tower Reactions

TIA-222-G - 105 mph/50 mph 0.7500 in Ice Exposure C

Maximum Values

Anchor 'B'@193.65 ft Azimuth 120 deg Elev 0.72 ft

Plane through centroid of tower



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	Code: TIA-222-G	Date: 10/13/16	Scale: NTS
	Path:		Dwg No. E-6

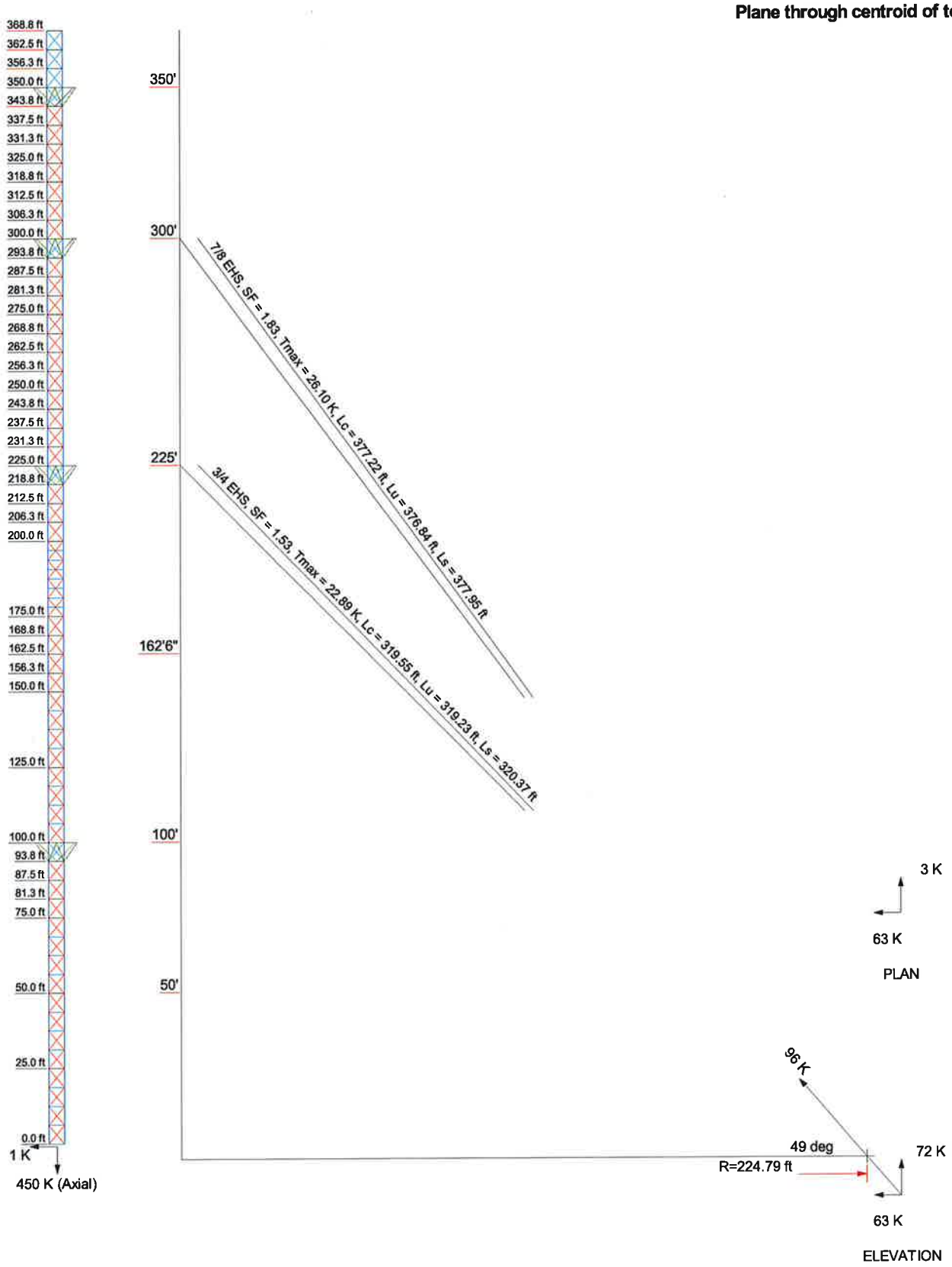
Guy Tensions and Tower Reactions

TIA-222-G - 105 mph/50 mph 0.7500 in Ice Exposure C

Maximum Values

Anchor 'A'@224.79 ft Azimuth 0 deg Elev -5.41 ft

Plane through centroid of tower



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Job: ***16001.53 - Montville***			
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Client: Verizon Wireless	Drawn by: TJL	App'd:	
Code: TIA-222-G	Date: 10/13/16	Scale: NTS	
Path:		Dwg No. E-6	

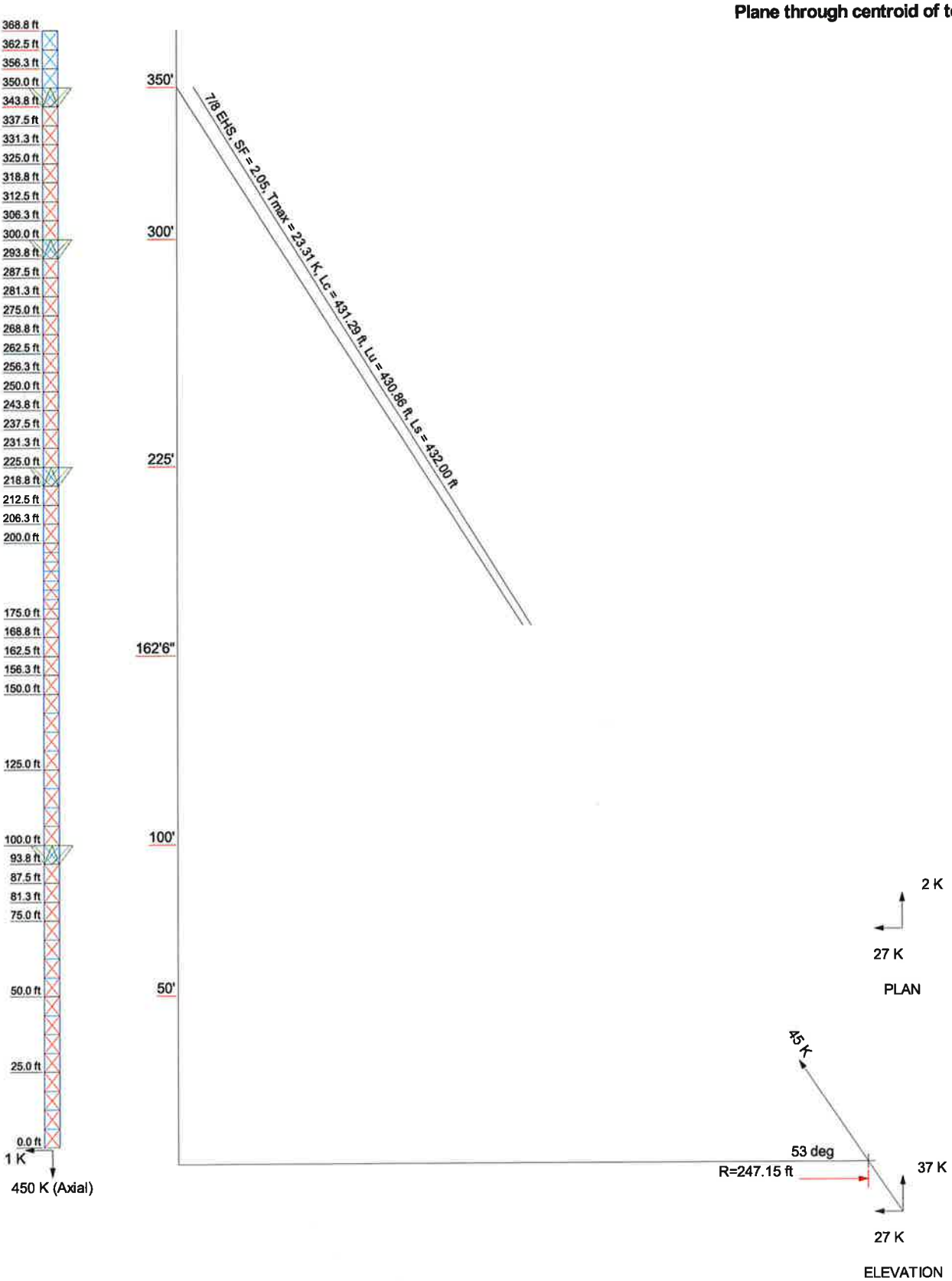
Guy Tensions and Tower Reactions

TIA-222-G - 105 mph/50 mph 0.7500 in Ice Exposure C

Maximum Values

Anchor 'A'@247.15 ft Azimuth 0 deg Elev -5.8 ft

Plane through centroid of tower



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	Project: **370' Guyed Tower - 689 Old Colchester Road, Montville,**		
	Client: Verizon Wireless	Drawn by: TJL	App'd:
	Code: TIA-222-G	Date: 10/13/16	Scale: NTS
	Path:		Dwg No. E-6

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Subject: Base Foundation Analysis

Location: 370-ft Guyed Lattice Tower
Montville, CT

Rev. 1: 10/13/16

Prepared by: T.J.L. Checked by: C.F.C.
Job No. 16001.53

Guyed Tower Base Foundation:

Input Data:

Tower Data

Shear Force =	Shear := 1·kip	(User Input from tnxTower)	
Axial Force =	Axial := 450·kip	(User Input from tnxTower)	
Tower Height =	$H_t := 370 \cdot ft$	(User Input)	

Footing Data:

Overall Depth of Footing =	$D_f := 3.5 \cdot ft$	(User Input)	
Length of Pier =	$L_p := 3.0 \cdot ft$	(User Input)	
Extension of Pier Above Grade =	$L_{pag} := 1.50 \cdot ft$	(User Input)	
Width of Pier =	$W_p := 3.0 \cdot ft$	(User Input)	
Thickness of Footing =	$T_f := 2.0 \cdot ft$	(User Input)	
Width of Footing =	$W_{f1} := 7 \cdot ft$	(User Input)	
Length of Footing =	$W_{f2} := 7 \cdot ft$	(User Input)	

Material Properties:

Concrete Compressive Strength =	$f_c := 3000 \cdot psi$	(User Input)	
Steel Reinforcment Yield Strength =	$f_y := 60000 \cdot psi$	(User Input)	
Internal Friction Angle of Soil =	$\Phi_s := 30 \cdot deg$	(User Input)	
Ultimate Soil Bearing Capacity =	$q_s := 16000 \cdot psf$	(User Input)	
Unit Weight of Soil =	$\gamma_{soil} := 120 \cdot pcf$	(User Input)	
Unit Weight of Concrete =	$\gamma_{conc} := 150 \cdot pcf$	(User Input)	
Foundation Bouyancy =	Bouyancy := 0	(User Input)	(Yes=1 / No=0)
Depth to Neglect =	$n := 0 \cdot ft$	(User Input)	
Cohesion of Clay Type Soil =	$c := 0 \cdot ksf$	(User Input)	(Use 0 for Sandy Soil)
Seismic Zone Factor =	Z := 2	(User Input)	
Coefficient of Friction Between Concrete =	$\mu := 0.45$	(User Input)	

Calculated Factors:

Coefficient of Lateral Soil Pressure =

$$K_p := \frac{1 + \sin(\Phi_s)}{1 - \sin(\Phi_s)} = 3$$

Load Factor =

$$LF := \begin{cases} 1.333 & \text{if } H_t \le 700 \cdot ft \\ 1.7 & \text{if } H_t \ge 1200 \cdot ft \\ 1.333 + \left(\frac{H_t - 700ft}{1200ft - 700ft}\right) \cdot 0.4 & \text{otherwise} \end{cases} = 1.333$$

Stability of Footing:

Adjusted Concrete Unit Weight = $\gamma_c := if(Bouyancy = 1, \gamma_{conc} - 62.4pcf, \gamma_{conc}) = 150 \cdot pcf$

Adjusted Soil Unit Weight = $\gamma_s := if(Bouyancy = 1, \gamma_{soil} - 62.4pcf, \gamma_{soil}) = 120 \cdot pcf$

Passive Pressure = $P_{pn} := K_p \cdot \gamma_s \cdot n + c \cdot 2 \cdot \sqrt{K_p} = 0 \cdot ksf$

$P_{pt} := K_p \cdot \gamma_s \cdot (D_f - T_f) + c \cdot 2 \cdot \sqrt{K_p} = 0.54 \cdot ksf$

$P_{top} := if[n < (D_f - T_f), P_{pt}, P_{pn}] = 0.54 \cdot ksf$

$P_{bot} := K_p \cdot \gamma_s \cdot D_f + c \cdot 2 \cdot \sqrt{K_p} = 1.26 \cdot ksf$

$P_{ave} := \frac{P_{top} + P_{bot}}{2} = 0.9 \cdot ksf$

$T_p := if[n < (D_f - T_f), T_f, (D_f - n)] = 2$

$A_p := W_{f1} \cdot T_p = 14$

Soil Shear Resistance = $Sl_1 := P_{ave} \cdot A_p = 12.6 \cdot kip$

Weight of Concrete = $WT_c := [(W_{f1} \cdot W_{f2} \cdot T_f) + W_p{}^2 L_p] \cdot \gamma_c = 18.75 \cdot kip$

Total Weight = $WT_{tot} := WT_c + Axial = 468.75 \cdot kip$

Soil/Concrete Friction Resistance = $Sl_2 := \mu \cdot WT_{tot} = 210.94 \cdot kips$

Total Sliding Resistance = $Sl_{tot} := Sl_1 + Sl_2 = 223.54 \cdot kips$

Sliding Resistance Ratio = $Sliding\_Resistance_{ratio} := \frac{0.75 Sl_{tot}}{Shear} = 167.65$

$Sliding\_Resistance\_Check := if\left[\left(\frac{Shear}{0.75 Sl_{tot}} < 1.0\right), "Okay", "No\ Good"\right]$

Sliding_Resistance_Check = "Okay"

Bearing Pressure Caused by Footing:

Area of the Mat = $A_{mat} := W_{f1} \cdot W_{f2} = 49$

Maximum Pressure in Mat = $P_{max} := \frac{WT_{tot}}{A_{mat}} = 9.57 \cdot ksf$

$Max\_Pressure\_Check := if(P_{max} < 0.6 q_s, "Okay", "No\ Good")$

Max_Pressure_Check = "Okay"

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Job :	Verizon ~ Montville: 370-ft Guyed Lattice Tower	**Project No.**	16001.53	**Sheet**	1	of	2
Address:	689 Old Colchester Rd., Montville, CT	**Computed by**	TJL	**Date**		10/13/16	
Description:	Guy Anchor Evaluation	**Checked by**	CFC	**Date**			

CHECK UPLIFT RESISTANCE

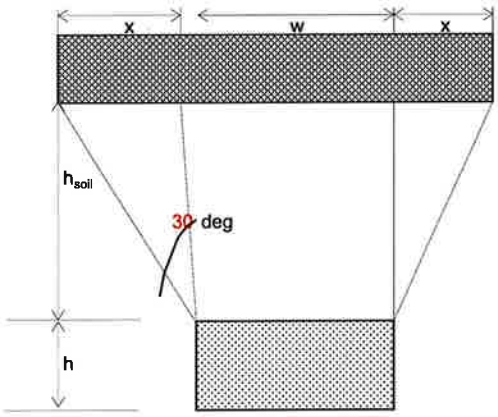
ANCHOR (C) AT 114.41ft RADIUS

RESULTS FROM COMPUTER ANALYSIS:

Uplift =	6	kips
Sliding =	12	kips
Wdepth =	50	ft

CONCRETE PARAMETERS:

γ_{conc} =	150	pcf
$\gamma_{conc.sub}$ =	87.6	pcf
w =	4	ft
h =	3	ft
d =	10	ft
Vol. =	120.00	ft^3
Vol.sub =	0.00	ft^3
Wc =	*18.00*	kips
ø =	*0.90*	
	16.20	



Foundation Section

SOIL PARAMETERS:

γ_{soil} =	120	pcf
$\gamma_{soil.sub}$ =	57.6	pcf
h_{soil} =	3.5	ft
x =	*2.02*	ft

Soil Weight (Wr):

B1 =	40.00
B2 =	40.00
B3 =	112.91

W.soil =	30.82	kips
W.soil.sub =	0.00	kips
Total =	*30.82*	kips
ø =	*0.75*	
	23.11	

SF AGAINST SLIDING

8.14 > *1* ***OK***

GUY ANCHORS AGAINST UPLIFT ARE ADEQUATE

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Description:	Guy Anchor Evaluation	**Checked by**	CFC	**Date**			

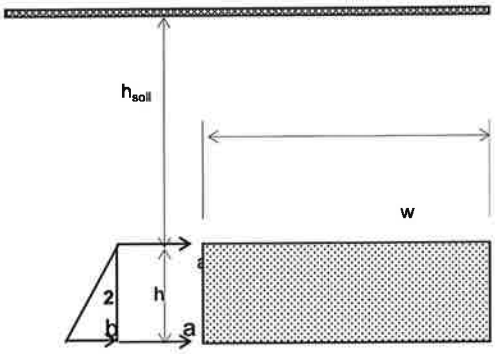
CHECK SLIDING RESISTANCE

SOIL PARAMETERS

γ soil =	120	pcf
γ soil =	57.6	pcf
h_{soil} =	3.5	ft
h =	3	ft
ϕ =	30	degrees

ANCHOR PARAMETERS

w =	4.0	ft
h =	3.0	ft
d =	10.0	ft



Foundation Elevation View

K_p = 3.00

HORIZONTAL FORCES

	1.26	ksf
	2.34	ksf
RESIST TO SLIDING =	54.00	k

SOIL & CONCRETE WEIGHT =	Wr + Wc =	39.31	k
UPLIFT REACTIONS =		-6	k
SUM =		33.31	k

COEF. OF FRICTION, (0.45) =	14.99	k
RESIST TO SLIDING =	54.00	k
SUM =	68.99	k

SF AGAINST SLIDING

SF = ***5.7*** ***>*** ***1*** ***OK***

GUY ANCHORS AGAINST SLIDING ARE ADEQUATE

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Address:	689 Old Colchester Rd., Montville, CT	**Computed by**	TJL	**Date**		10/13/16	
Description:	Guy Anchor Evaluation	**Checked by**	CFC	**Date**			

CHECK UPLIFT RESISTANCE

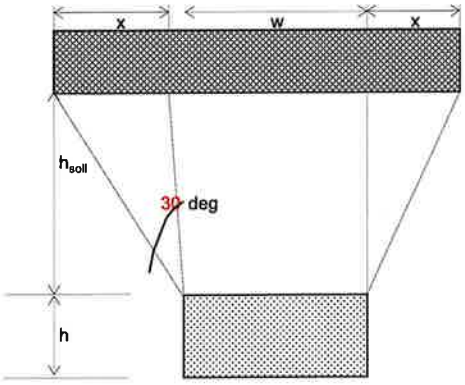
ANCHOR (B) AT 193.65ft RADIUS

RESULTS FROM COMPUTER ANALYSIS:

Uplift =	27	kips
Sliding =	42	kips
Wdepth =	50	ft

CONCRETE PARAMETERS:

γ_{conc} =	150	pcf
$\gamma_{conc.sub}$ =	87.6	pcf
w =	4	ft
h =	4	ft
d =	10	ft
Vol. =	160.00	ft^3
Vol.sub =	0.00	ft^3
Wc =	*24.00*	kips
ø =	*0.90*	
	21.60	



Foundation Section

SOIL PARAMETERS:

γ_{soil} =	120	pcf
$\gamma_{soil.sub}$ =	57.6	pcf
h_{soil} =	6	ft
x =	*3.46*	ft

Soil Weight (Wr):

B1 =	40.00	
B2 =	40.00	
B3 =	184.99	
W.soil =	74.64	kips
W.soil.sub =	0.00	kips
Total =	*74.64*	kips
ø =	*0.75*	
	55.98	

SF AGAINST SLIDING

3.65 > *1* ***OK***

GUY ANCHORS AGAINST UPLIFT ARE ADEQUATE

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Description:	Guy Anchor Evaluation	**Checked by**	CFC	**Date**			

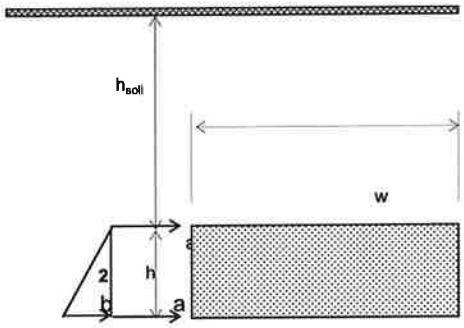
CHECK SLIDING RESISTANCE

SOIL PARAMETERS

γ soil =	120	pcf
γ soil =	57.6	pcf
h_{soil} =	6	ft
h =	4	ft
ϕ =	30	degrees

ANCHOR PARAMETERS

w =	4.0	ft
h =	4.0	ft
d =	10.0	ft



Foundation Elevation View

K_p = 3.00

HORIZONTAL FORCES

	2.16	ksf
	3.60	ksf
RESIST TO SLIDING =	115.20	k

SOIL & CONCRETE WEIGHT =	Wr + Wc =	77.58	k
UPLIFT REACTIONS =		-27	k
SUM =		50.58	k

COEF. OF FRICTION, (0.45) =	22.76	k
RESIST TO SLIDING =	115.20	k
SUM =	137.96	k

SF AGAINST SLIDING

SF = 3.3 > 1 OK

GUY ANCHORS AGAINST SLIDING ARE ADEQUATE

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Description:	Guy Anchor Evaluation	**Checked by**	CFC	**Date**			

CHECK UPLIFT RESISTANCE

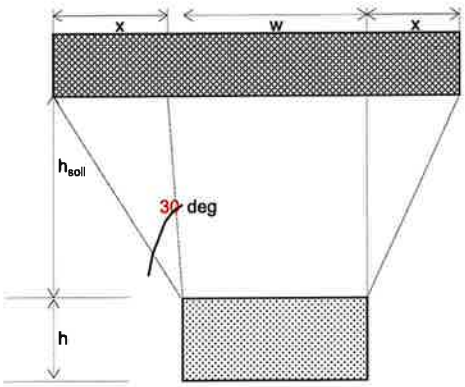
ANCHOR (A) AT 224.79ft RADIUS

RESULTS FROM COMPUTER ANALYSIS:

Uplift =	72	kips
Sliding =	63	kips
Wdepth =	50	ft

CONCRETE PARAMETERS:

γ_{conc} =	150	pcf
$\gamma_{conc.sub}$ =	87.6	pcf
w =	6	ft
h =	4	ft
d =	16	ft
Vol. =	384.00	ft^3
Vol.sub =	0.00	ft^3
Wc =	*57.60*	kips
ø =	*0.90*	
	51.84	



Foundation Section

SOIL PARAMETERS:

γ_{soil} =	120	pcf
$\gamma_{soil.sub}$ =	57.6	pcf
h_{soil} =	6	ft
x =	*3.46*	ft

Soil Weight (Wr):

B1 =	96.00	
B2 =	96.00	
B3 =	296.42	
W.soil =	134.67	kips
W.soil.sub =	0.00	kips
Total =	*134.67*	kips
ø =	*0.75*	
	101.00	

SF AGAINST SLIDING

2.67 > *1* ***OK***

GUY ANCHORS AGAINST UPLIFT ARE ADEQUATE

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Description:	Guy Anchor Evaluation	**Checked by**	CFC	**Date**			

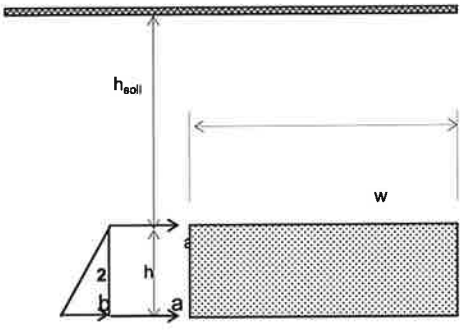
CHECK SLIDING RESISTANCE

SOIL PARAMETERS

γ soil =	120	pcf
γ soil =	57.6	pcf
h_{soil} =	6	ft
h =	4	ft
ϕ =	30	degrees

ANCHOR PARAMETERS

w =	6.0	ft
h =	4.0	ft
d =	16.0	ft



Foundation Elevation View

K_p = 3.00

HORIZONTAL FORCES

	2.16	ksf
	3.60	ksf
RESIST TO SLIDING =	184.32	k

SOIL & CONCRETE WEIGHT =	Wr + Wc =	152.84	k
UPLIFT REACTIONS =		-72	k
SUM =		80.84	k

COEF. OF FRICTION, (0.45) =	36.38	k
RESIST TO SLIDING =	184.32	k
SUM =	220.70	k

SF AGAINST SLIDING

SF = 3.5 > 1 OK

GUY ANCHORS AGAINST SLIDING ARE ADEQUATE

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Description:	Guy Anchor Evaluation	**Checked by**	CFC	**Date**			

CHECK UPLIFT RESISTANCE

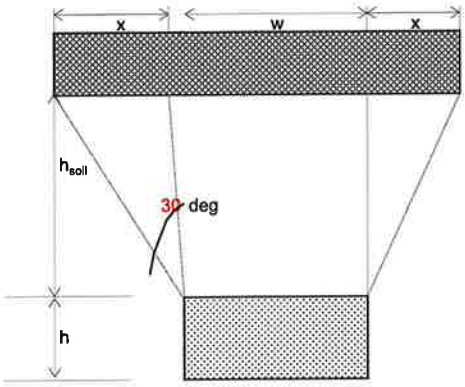
ANCHOR (A) AT 247.15ft RADIUS

RESULTS FROM COMPUTER ANALYSIS:

Uplift =	37	kips
Sliding =	27	kips
Wdepth =	50	ft

CONCRETE PARAMETERS:

γ conc =	150	pcf
γ conc.sub =	87.6	pcf
w =	4	ft
h =	3	ft
d =	12	ft
Vol. =	144.00	ft^3
Vol.sub =	0.00	ft^3
Wc =	*21.60*	kips
Ø =	*0.90*	
	19.44	



Foundation Section

SOIL PARAMETERS:

γ_{soil} =	120	pcf
$\gamma_{soil.sub}$ =	57.6	pcf
h_{soil} =	6.75	ft
x =	*3.90*	ft

Soil Weight (Wr):

B1 =	48.00	
B2 =	48.00	
B3 =	233.46	
W.soil =	104.58	kips
W.soil.sub =	0.00	kips
Total =	*104.58*	kips
Ø =	*0.75*	
	78.43	

SF AGAINST SLIDING

3.41 > *1* ***OK***

→ ***GUY ANCHORS AGAINST UPLIFT ARE ADEQUATE***

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

Job :	Verizon ~ Montville: 370-ft Guyed Lattice Tower	**Project No.**	16001.53	**Sheet**	2	of	2
Address:	689 Old Colchester Rd., Montville, CT	**Computed by**	TJL	**Date**		10/13/16	
Description:	Guy Anchor Evaluation	**Checked by**	CFC	**Date**			

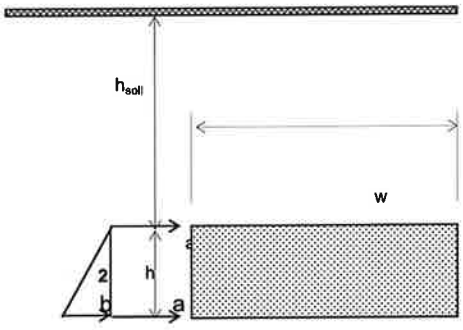
CHECK SLIDING RESISTANCE

SOIL PARAMETERS

γ soil =	120	pcf
γ soil =	57.6	pcf
h_{soil} =	6.75	ft
h =	3	ft
ϕ =	30	degrees

ANCHOR PARAMETERS

w =	4.0	ft
h =	3.0	ft
d =	12.0	ft



Foundation Elevation View

K_p = 3.00

HORIZONTAL FORCES

	2.43	ksf
	3.51	ksf
RESIST TO SLIDING =	106.92	k

SOIL & CONCRETE WEIGHT =	Wr + Wc =	97.87	k
UPLIFT REACTIONS =		-37	k
SUM =		60.87	k

COEF. OF FRICTION, (0.45) =	27.39	k
RESIST TO SLIDING =	106.92	k
SUM =	134.31	k

SF AGAINST SLIDING

SF = 5.0 > 1 OK

→ ***GUY ANCHORS AGAINST SLIDING ARE ADEQUATE***

SITE NAME		MONTVILLE CT		
SITE NO.	PROJECT NO.	2-0013		
LATITUDE		41-27-11 N		
LONGITUDE		72-9-14 W		

Additional Comments:
Change 700 to Quad
Add RRH 2X 60 700
Add Mechanical tilts to 700, PCS, AWS
Change Electrical tilts on PCS and AWS

verizon

FOR LEASING ONLY
DO NOT ORDER

700 MHz (LTE-700U) - BEFORE	ALPHA	BETA	GAMMA	
EQUIPMENT TYPE	700 MHz TRDU	700 MHz TRDU	700 MHz TRDU	
ANTENNA TYPE	LNX-6514DS-A1M_8DT_750MHZ	LNX-6514DS-A1M_10DT_750MHZ	LNX-6513DS-VTM_08DT_0750	
ANTENNA QUANTITY	1	1	1	
ORIENTATION (°)	350	145	235	
TILT (MDT°|EDT°)	0 | 8	0 | 10	0 | 8	
RAD CENTER (ft)	305.0	305.0	305.0	
TMA (QTY)				
DIPLEXER (QTY/MODEL)				
RRH MODEL				
700 MHz (LTE-700U) - AFTER	**ALPHA**	**BETA**	**GAMMA**	
EQUIPMENT TYPE	700 MHz RRH	700 MHz RRH	700 MHz RRH	☐
ANTENNA TYPE	Quad656c000x	Quad656c000x	Quad656c000x	☐
ANTENNA QUANTITY	1	1	1	
ORIENTATION (°)	350	145	235	
TILT (MDT°|EDT°)	4 | 4	4 | 6	4 | 4	
RAD CENTER (ft)	305.0	305.0	305.0	
TMA (QTY)				☐
DIPLEXER (QTY/MODEL)				☐
RRH MODEL	RRH 2X60 700	RRH 2X60 700	RRH 2X60 700	☐
850 MHz (Cellular) - BEFORE	**ALPHA**	**BETA**	**GAMMA**	
EQUIPMENT TYPE	Cellular Mod 4.0B	Cellular Mod 4.0B	Cellular Mod 4.0B	
ANTENNA TYPE	LNX-6514DS-A1M_4DT_850MHZ	LNX-6514DS-A1M_7DT_850MHZ	LNX-6514DS-A1M_0DT_850MHZ	
ANTENNA QUANTITY				
ORIENTATION (°)	30	150	270	
TILT (MDT°|EDT°)	0 | 4	0 | 7	0 | 0	
RAD CENTER (ft)	305.0	305.0	305.0	
TMA (QTY)				
DIPLEXER (QTY/MODEL)				
RRH (QTY/MODEL)				
850 MHz (Cellular) - AFTER	**ALPHA**	**BETA**	**GAMMA**	
EQUIPMENT TYPE	Cellular Mod 4.0B	Cellular Mod 4.0B	Cellular Mod 4.0B	☐
ANTENNA TYPE	LNX-6514DS-A1M_4DT_850MHZ	LNX-6514DS-A1M_7DT_850MHZ	LNX-6514DS-A1M_0DT_850MHZ	☐
ANTENNA QUANTITY				
ORIENTATION (°)	30	150	270	
TILT (MDT°|EDT°)	0 | 4	0 | 7	0 | 0	
RAD CENTER (ft)	305.0	305.0	305.0	
TMA (QTY)				☐
DIPLEXER (QTY/MODEL)				☐
RRH (QTY/MODEL)				☐
1900 MHz (PCS) - BEFORE	**ALPHA**	**BETA**	**GAMMA**	
EQUIPMENT TYPE	PCS Mod 4.0B	PCS Mod 4.0B	PCS Mod 4.0B	
ANTENNA TYPE	3XX-6517DS-A2M_PORT4--45_04DT_19	3XX-6517DS-A2M_PORT4--45_05DT_19	3XX-6517DS-A2M_PORT4--45_04DT_19	
ANTENNA QUANTITY				
ORIENTATION (°)	350	145	235	
TILT (MDT°|EDT°)	0 | 4	0 | 5	0 | 4	
RAD CENTER (ft)	305.0	305.0	305.0	
TMA (QTY)				
DIPLEXER (QTY/MODEL)				
RRH (QTY/MODEL)				
1900 MHz (PCS) - AFTER	**ALPHA**	**BETA**	**GAMMA**	
EQUIPMENT TYPE	PCS Mod 4.0B	PCS Mod 4.0B	PCS Mod 4.0B	☐
ANTENNA TYPE	3XX-6517DS-A2M_PORT4--45_01DT_19	3XX-6517DS-A2M_PORT4--45_02DT_19	3XX-6517DS-A2M_PORT4--45_01DT_19	☐
ANTENNA QUANTITY				
ORIENTATION (°)	350	145	235	
TILT (MDT°|EDT°)	3 | 1	3 | 2	3 | 1	
RAD CENTER (ft)	305.0	305.0	305.0	
TMA (QTY)				☐
DIPLEXER (QTY/MODEL)				☐
RRH (QTY/MODEL)				☐

2100 MHz (AWS) - BEFORE	ALPHA		BETA		GAMMA	
EQUIPMENT TYPE	2100 MHz BBU+RRH		2100 MHz BBU+RRH		2100 MHz BBU+RRH	
ANTENNA TYPE	8XX-6517DS-A2M_PORT4--45_04DT_21		8XX-6517DS-A2M_PORT4--45_05DT_21		8XX-6517DS-A2M_PORT4--45_04DT_21	
ANTENNA QUANTITY						
ORIENTATION (°)	350		145		235	
TILT (MDT°|EDT°)	0	4	0	5	0	4
RAD CENTER (ft)	305.0		305.0		305.0	
TMA (QTY)						
DIPLEXER (QTY/MODEL)						
RRH (QTY/MODEL)	ALU RH_2X60-AWS		ALU RH_2X60-AWS		ALU RH_2X60-AWS	
2100 MHz (AWS) - AFTER	ALPHA		BETA		GAMMA	
EQUIPMENT TYPE	2100 MHz BBU+RRH		2100 MHz BBU+RRH		2100 MHz BBU+RRH	
ANTENNA TYPE	8XX-6517DS-A2M_PORT4--45_01DT_21		8XX-6517DS-A2M_PORT4--45_02DT_21		8XX-6517DS-A2M_PORT4--45_01DT_21	
ANTENNA QUANTITY						
ORIENTATION (°)	350		145		235	
TILT (MDT°|EDT°)	3	1	3	2	3	1
RAD CENTER (ft)	305.0		305.0		305.0	
TMA (QTY)						
DIPLEXER (QTY/MODEL)						
RRH (QTY/MODEL)	ALU RH_4X45-AWS		ALU RH_4X45-AWS		ALU RH_4X45-AWS	
COAX CABLE	QUANTITY	SIZE	FIBER CABLE		QUANTITY	SIZE
MAIN LINE			FIBER LINE			
TOP COAX JUMPER			FIBER JUMPER			
RET CONNECTIVITY REQUIRED	☑ LTE-700U	☑ PCS	OTHER RET RELATED INFO		☐ HOMERUN	☑ DAISY CHAIN
	☑ 850	☑ AWS	RET KIT		☐ BIAS-T	Other:

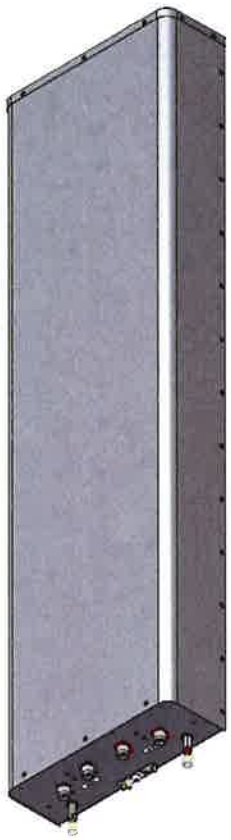
Special Instructions:

RF ENGINEER	RF MANAGER	RF INITIALS	DATE
Ray Paradis	ALEX RESTREPO	RLP	8/5/2016

QUAD656C0000x

Twin Band | Quad Port | Panel Antenna | (2x) X-Pol | 65° / 65° | 15.0 / 15.0 dBi | Variable Tilt

- Twin band, quad-port panel antenna with variable electrical tilt
- 4x4 MIMO
- Patented internal RET actuator adds no additional length to the antenna



Ordering Options	Model Number
When ordering, replace "x" in the model number with one of the options listed below.	
Manual Electrical Tilt	QUAD656C0000M
Remote Electrical Tilt AISG v2.0 / 3GPP with an MDCU RET Actuator	QUAD656C0000G
Remote Electrical Tilt AISG v2.0 / 3GPP with an MDDU RET Actuator	QUAD656C0000L
Mounting bracket kits and other accessories are ordered separately.	

Electrical Characteristics		(2x) 696-900 MHz	
Frequency Bands		696-806 MHz	806-900 MHz
Polarization		(2x) ±45° (Quad-Pol)	
Horizontal Beamwidth		67°	66°
Vertical Beamwidth		13.6°	12.4°
Gain		14.5 dBi	15.0 dBi
Electrical Downtilt		0-12°	
Impedance		50Ω	
VSWR		≤ 1.5:1	
Upper Sidelobe Suppression		18 dB	18 dB
Front-to-Back Ratio		> 25 dB	> 25 dB
Inband Isolation		25 dB	
Isolation Between Bands		28 dB	
IM3 (2x20W carrier)		< -153 dBc	
Input Power		(4x) 500 W	
Total Number of Connectors		Antennas has 4 connectors located at the bottom	
Connectors Per Band	696-900 MHz	(2x) 7/16-DIN Female	
	696-900 MHz	(2x) 7/16-DIN Female	
Diplexed		No	
Lightning Protection		Direct Ground	
Operating Temperature		-40° to +60° C (-40° to +140° F)	
Mechanical Characteristics			
Dimensions (Length x Width x Depth)		1889 x 520 x 182 mm	74.4 x 20.5 x 7.2 in
Depth with Z-Brackets		227 mm	8.9 in
Weight without Mounting Brackets: MET		24.5 kg	54.0 lbs
Weight without Mounting Brackets: RET		24.8 kg	54.7 lbs
Survival Wind Speed		> 241 km/hr	> 150 mph
Wind Area	Front	0.98 m^2	10.6 ft^2
	Side	0.34 m^2	3.7 ft^2
Wind Loads (160 km/hr or 100 mph)	Front	1200 N	270 lbf
	Side	415 N	93 lbf

Quoted performance parameters are provided to offer typical, peak or range values only and may vary as a result of normal testing, manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to products may be made without notice.

ALCATEL-LUCENT B13 RRH4X30-4R

Alcatel-Lucent B13 Remote Radio Head 4x30-4R is the newest addition of Remote Radio Head to the extended product line of Alcatel-Lucent's distributed Base Station solutions, aimed at facilitating smooth RF site acquisition and related civil engineering.

Supporting 2Tx/4Tx MIMO and 4-way Rx diversity, Alcatel-Lucent B13 RRH4x30-4R allows operators to have a compact radio solution to deploy LTE in the 700U band (700 MHz, 3GPP band 13), providing them with the means to achieve high capacity, high quality and high coverage with minimum site requirements.

The Alcatel-Lucent B13 RRH4x30-4R product has four transmit RF paths, offering the possibility to **select, via software only, 2Tx or 4Tx MIMO configurations** with either 2x60 W or 4x30 W RF output power. It supports also 4-way Rx diversity and up to 10MHz instantaneous bandwidth.

The Alcatel-Lucent B13 RRH4x30-4R is a near zero-footprint solution and operates noise free, simplifying negotiations with site property owners and minimizing environmental impacts.

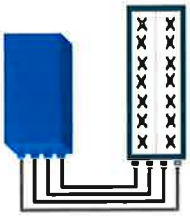
Its compactness and slim design makes the Alcatel-Lucent B13 RRH4x30-4R easy to install close to the antenna: operators can therefore locate this Remote Radio Head where RF design conditions are deemed ideal, minimizing trade-offs between available sites and RF optimum sites, together with reducing the RF feeder needs and installation costs.

FEATURES

- Supporting LTE in 700 MHz band (700U, 3GPP band 13)
- LTE 2Tx or 4Tx MIMO (SW switchable)
- Output power: Up to 2x60W or 4x30W
- 10MHz LTE carrier with 4Rx Diversity
- Convection-cooled (fan-less)
- Supports AISG 2.0 ALD devices (RET, TMA) through RS485 or RF ports

BENEFITS

- Compact to reduce additional footprint when adding LTE in 700U band
- MIMO scheme operation selection (2Tx or 4Tx) by software only
- Improves downlink spectral efficiency through MIMO4
- Increases LTE coverage thanks to 4Rx diversity capability and best in class Rx sensitivity
- Flexible mounting options: Pole or Wall



4x30W with 4T4R
or
2x60W with 2T4R

Can be switched between modes via SW w/o site visit

Alcatel·Lucent

TECHNICAL SPECIFICATIONS

Features & performance	
Number of TX/RX paths	4 duplexed (either 4T4R or 2T4R by SW)
Frequency band	U700 (C) (3GPP bands 13): DL: 746 - 756 MHz / UL: 777 - 787 MHz
Instantaneous bandwidth - #carriers	10MHz – 1 LTE carrier (in 10MHz occupied bandwidth)
LTE carrier bandwidth	10 MHz
RF output power	2x60W or 4x30W (by SW)
Noise figure – RX Diversity scheme	2 dB typ. (<2.5 dB max) – 2 or 4 way Rx diversity
Sizes (HxWxD) in mm (in.) Volume in L Weight in kg (lb) (w/o mounting HW)	550 x 305 x 230 (21.6" x 12.0" x 9") (with solar shield) 38 (with solar shield) 26 (57.2) (with solar shield)
DC voltage range DC power consumption	-40.5 to -57V at full performance, -38 to -57V with relaxation on power consumption 550W typical @100% RF load (in 2Tx or 4TX mode)
Environmental conditions Wind load (@150km/h or 93mph)	-40°C (-40°F) /+55°C (+131°F) IP65 Frontal:<200N / Lateral :<150N
Antenna ports	4 ports 7/16 DIN female (50 ohms) VSWR < 1.5
CPRI ports	2 CPRI ports (HW ready for Rate7, 9.8 Gbps) SFP single mode dual fiber
AISG interfaces	1 AISG2.0 output (RS485) Integrated Smart Bias Tees (x2)
Misc. Interfaces	4 external alarms (1 connector) – 4 RF Tx & 4 RF Rx monitor ports - 1 DC connector (2 pins)
Installation conditions	Pole and wall mounting
Regulatory compliance	3GPP 36.141 / 3GPP 36.113 / GR-1089-CORE / GR-3108-CORE / UL 60950-1 / FCC Part 27

VZW Network Equipment Reporting Form (NERF)

Vendor	Alcatel-Lucent		Model	B66a RRH 4Tx/4Rx 4x45W or 2x 90W (SW selectable)		Function	RRH for distributed architecture with a CPRI interface between digital and RF processing components. The RRH has 4 Tx ports and 4 Rx ports. Can be SW configured for 2 Tx with 90W rf per port or 4 Tx with 45W rf per port. The RRH has passive cooling only.		
*1)Equipment Configuration	*2)Heat Release @50°F Intake Temp [W]		*3)Airflow Rate @ 100% Activity Rate [cfm]		*4)Dimensions [in]		Non-Thermal Data		
	100% Activity	50% Activity	Nominal (70°F)	Max (95°F)	External (WxDxH)	Clear (F/R/S)	Installed Weight [lb]	*5)Sound @ Nominal [L_{WAd}]	*6)Name Plate [W]
Minimum			N/A Convection cooled	N/A Convection cooled	w/o Solar Shield W = 11.4in D = 6.7in H = 25.2in (W=290mm) (D=170mm) (H=640mm)	Front: 12" Rear: 7.5" Right: 12" Left: 12" Top: 12" Bottom: 24"			
Typical			N/A Convection cooled	N/A Convection cooled	with Solar Shield W = 12in D = 7.6in H = 25.8in (W=304mm) (D=193mm) (H=655mm)		62lb 72 lb(w mounting brackets)	N/A Convection cooled	
Full	825W (add 60W for AISG)	TBD	N/A Convection cooled	N/A Convection cooled	N/A			N/A Convection cooled	

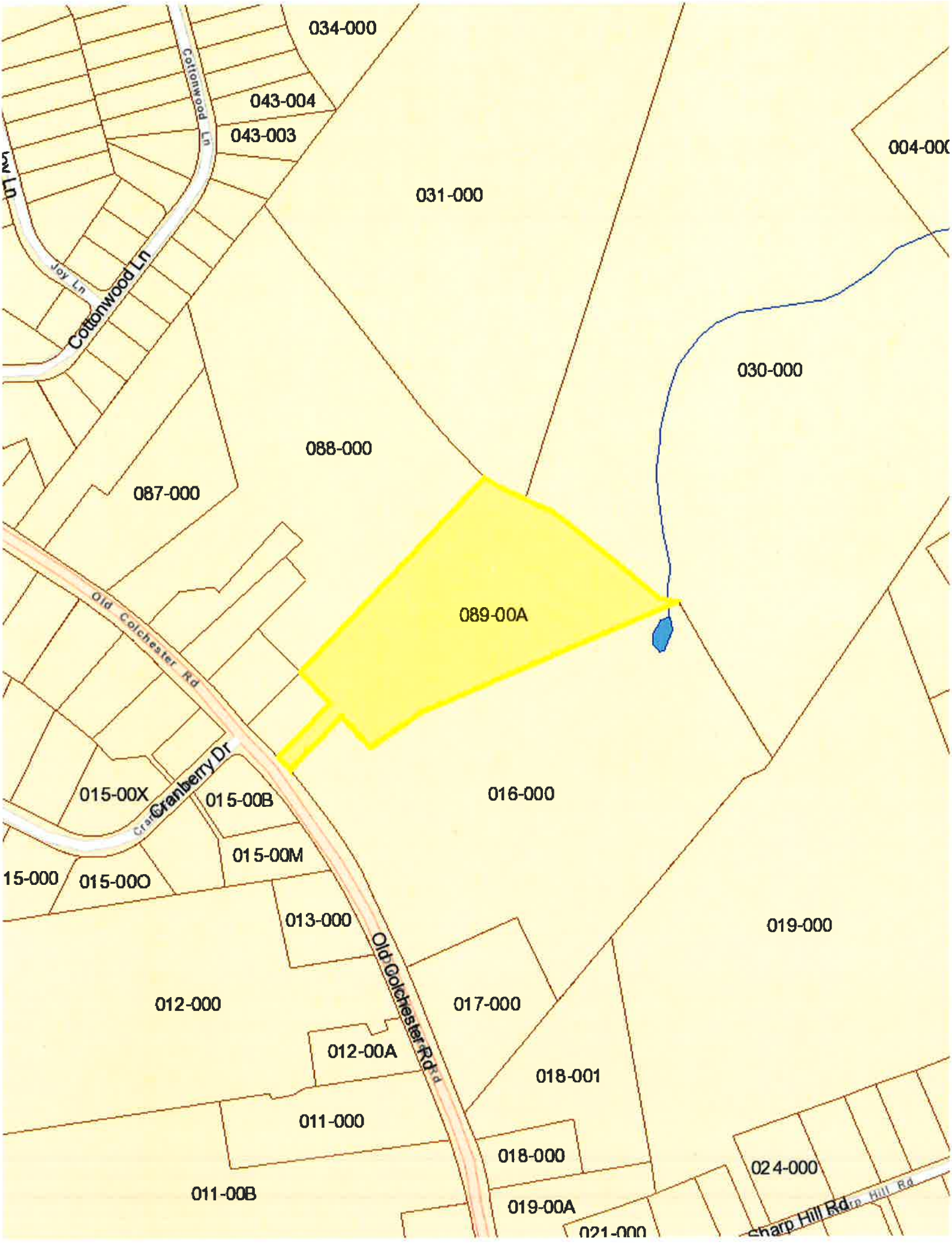
*7)Equipment EC-Class	N/A Convection cooled	*10)Fan Speed	N/A Convection cooled	*13)Fan Hot-Swap	N/A Convection cooled	*16)Environ. Tests	N/A Convection cooled	*18)Temp. Rise [°F]	N/A Convection cooled
*8)Non-Optimal EC-Class	N/A Convection cooled	*11)Fan Logic	N/A Convection cooled	*14)Shut-Down	N/A Convection cooled	*17)Allow. Max [°F]	N/A Convection cooled	*19)Rec. Max [°F]	N/A Convection cooled
*9)Exhaust Openings	N/A Convection cooled	*12)Fan Alarm	N/A Convection cooled	*15)Temp. Access	N/A Convection cooled	*17)Allow. Min [°F]	N/A Convection cooled	*19)Rec. Min [°F]	N/A Convection cooled

Power Reporting					
Power Input	-48V	No. Power Supplies	N/A (Customer provided power plant)	Number of Inputs per Power Supply	1
*24)Maximum Demand (total system in Watts)	825W (add 60W for AISG)	Maximum Input (each power supply in Watts)	N/A (Customer provided power plant)	Maximum Output (each power supply in Watts)	58W (to AISG port, 29V/2A)
Power Supply Connection Type	DC entry via Conduit Box	Power Supply Make & Model	N/A (Customer provided power plant)		
Input Protection	no input fuse	Input Protection Make & Model	N/A (Customer provided power plant)		
Redundancy Scheme	N/A				
Nominal Voltage	-48VDC	Maximum Voltage	-57V	Minimum Voltage	-38V
*25)Max Current at Nominal Voltage	17.2A (add 1.2A if AISG port loaded 2A*29V)	*25)Max Current at Maximum Voltage	14.5A (add 1A if AISG port loaded 2A*29V)	*25)Max Current at Minimum Voltage	21.7A (add 1.5A if AISG port loaded 2A*29V)

Return completed forms to Engineering and Operations Support (EOS)

Richard.damiano@verizonwireless.com

ATTACHMENT 4


034-000
043-004
043-003
031-000
004-000
Cottonwood Ln
Joy Ln
030-000
088-000
087-000
089-00A
Old Colchester Rd
Cranberry Dr
015-00X
015-00B
016-000
015-00M
015-00O
013-000
019-000
012-000
017-000
012-00A
018-001
011-000
018-000
024-000
011-00B
019-00A
Sharp Hill Rd
021-000

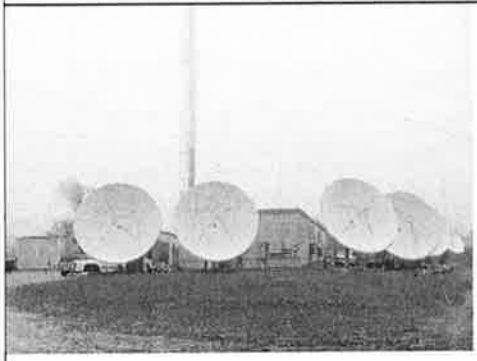
Property Card: **689 OLD COLCHESTER RD**

Town of Montville, CT

Parcel Information	
Parcel ID: 030-089-00A	**Map:** 030
Vision ID: 1790	**Lot:** 089-00A
Owner: ATLANTIC BROADBAND (CT) LLC	**Use Description:** Industrial Bldg
Co-Owner:	**Zone:** R40
Mailing Address: TWO BATTERYMARCH PARK STE 205	**Land Area in Acres:** 8.3
QUINCY, MA 02169	

Sale History	Assessed Value
Book/Page: 608/350	**Land:** $82,300
Sale Date: 8/24/2015	**Buildings:** $188,520
Sale Price: $777,060	**Extra Bldg Features:** $1,300
	Outbuildings: $273,530
	Total Buildings: $463,350
	Total: $545,650

Building Details: Building # 1



Model:	Industrial	**Int Wall Desc 1:**	Minimum
Living Area:	1600	**Int Wall Desc 2:**	
Appr. Year Built:	2008	**Ext Wall Desc 1:**	Pre-cast Concr
Style:	Telephone Bldg	**Ext Wall Desc 2:**	
Stories:	1	**Roof Cover:**	Concrete Tile
Occupancy:	1.00	**Roof Structure:**	Flat
No. Total Rooms:		**Heat Type:**	Forced Air
No. Bedrooms:		**Heat Fuel:**	Electric
No. Baths:		**A/C Type:**	Central
No. Half Baths:			

ATTACHMENT 5

UNITED STATES POSTAL SERVICE®

Certificate of Mailing — Firm

Name and Address of Sender	TOTAL NO. of Pieces Listed by Sender	TOTAL NO. of Pieces Received at Post Office™	Affix Stamp Here *Postmark with Date of Receipt.*
Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103	3	3	OLD STATE HOUSE STATION 06103 DEC 4 2017 USPS US POSTAGE $002.38 ZIP 06103 041L12203380
	Postmaster, per *(name of receiving employee)*		

	USPS® Tracking Number / Firm-specific Identifier	Address (Name, Street, City, State, and ZIP Code™)	Postage	Fee	Special Handling	Parcel Airlift
1.		Ronald K. McDaniel, Mayor Town of Montville 310 Norwich-New London Turnpike Uncasville, CT 06382				
2.		Marcia Vlaun, Town Planner Town of Montville 310 Norwich-New London Turnpike Uncasville, CT 06382				
3.		Atlantic Broadband (CT) LLC 2 Batterymarch Park, Suite 205 Quincy, MA 02169				
4.						
5.		[redacted]				
6.		[redacted]				

OLD STATE HOUSE STATION 06103 DEC - 4 2017 USPS

PS Form **3665**, January 2017 (Page ___ of ___) PSN 7530-17-000-5549

See Reverse for Instructions