Date: **March 25, 2026**

Telamon
319 Chapanoke Road, Suite 118
Raleigh, NC 27603
(405) 348-5460

Subject:	**Structural Analysis Report**	
Carrier Designation:	***AT&T Mobility* Co-Locate**	
	Site Number:	10091912
	Site Name:	FORT WHITE
	FA Number:	10091912
Crown Castle Designation:	**BU Number:**	846216
	Site Name:	FORT WHITE
	JDE Job Number:	2181316
	Work Order Number:	2477536
	Order Number:	737316 Rev. 0
Engineering Firm Designation:	**Telamon Project Number:**	42285-846216-2477536-01-STR
Site Data:	**612 Southwest Hilliard Lane, Fort White, Columbia County, FL** **Latitude *29° 54' 31.23"*, Longitude *-82° 40' 19.58"*** **300 Foot - Guyed Tower**	

Telamon is pleased to submit this **"Structural Analysis Report"** to determine the structural integrity of the above mentioned tower.

The purpose of the analysis is to determine acceptability of the tower stress level. Based on our analysis we have determined the tower stress level for the structure and foundation, under the following load case, to be:

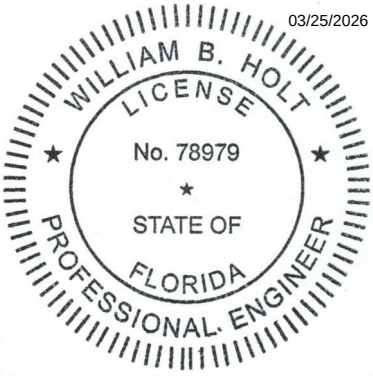
LC5: Proposed Equipment Configuration **Sufficient Capacity**

This analysis utilizes an ultimate 3-second gust wind speed of 121 mph as required by the 2023 Florida Building Code, 8th Edition. Applicable Standard references and design criteria are listed in Section 2 - Analysis Criteria.

Structural analysis prepared by: Diksha Sonkusare

Respectfully submitted by:

William Holt, P.E.
Senior Director, Engineering & Site Development



This item has been digitally signed and sealed by William Holt, PE on the date adjacent to the seal using a SHA authentication code

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies

TABLE OF CONTENTS

1) INTRODUCTION

This tower is a 300 ft Guyed tower designed by Rohn and Mapped by GPD Group, Inc.

2) ANALYSIS CRITERIA

TIA-222 Revision: TIA-222-H
Risk Category: II
Wind Speed: 121 mph
Exposure Category: C
Topographic Factor: 1
Service Wind Speed: 60 mph

Table 1 - Proposed Equipment Configuration

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
286.0	291.0	6	commscope	NNH4-85B-R6 w/ Mount Pipe	3 6 3 7	5/16 1-5/8 3/8 3/4
		3	commscope	SBNHH-1D65B w/ Mount Pipe		
		3	ericsson	4490 B5/B12		
		3	ericsson	AIR 6472 B77G B77M_20240625		
		3	ericsson	Radio 4415 B2 B25_20240920		
		1	ericsson	Radio 4494 44B14 20B29 M01_2024		
	290.0	3	ericsson	RADIO 4426		
		2	ericsson	RRUS 4478 B14		
	289.0	3	ericsson	RRUS 32		
		1	raycap	DC6-48-60-18-8C		
		2	raycap	DC6-48-60-18-8F_070710		
	286.0	1	tower mounts	Sector Mount [SM 503-3]		

Table 2 - Other Considered Equipment

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
250.0	251.0	4	ceragon	FIBEAIR IP-20A RFU-D-HP	4 4 8	1/2 2-1/8 1-5/8
		1	commscope	VHLP4-11W/A		
		1	comsat rsi	P-24A35GF-U		
		4	ericsson	RADIO 4415 B25_TMO		
		2	ericsson	RADIO 4424 B25_TMOV1		
		2	ericsson	RADIO 4449 B71 B85A_T-MOBILE		
	250.0	3	commscope	FFV4-65C-R3-V1_TMO w/ Mount Pipe		
		3	ericsson	AIR6449 B41_T-MOBILE w/ Mount Pipe		
		2	ericsson	RADIO 4424 B25_TMOV1		
		2	ericsson	RADIO 4449 B71 B85A_T-MOBILE		
		1	tower mounts	Sector Mount [SM 502-3]		
	248.0	2	ericsson	RADIO 4415 B25_TMO		
		2	ericsson	RADIO 4424 B25_TMOV1		
		4	ericsson	RADIO 4449 B71 B85A_T-MOBILE		

3) ANALYSIS PROCEDURE

Table 3 - Documents Provided

Document	Reference	Source
4-GEOTECHNICAL REPORTS	5179866	CCISITES
4-TOWER FOUNDATION DRAWINGS/DESIGN/SPECS	5183121	CCISITES
4-TOWER MANUFACTURER DRAWINGS	5183178	CCISITES

3.1) Analysis Method

tnxTower (version 8.3.1.2), a commercially available analysis software package, was used to create a three-dimensional model of the tower and calculate member stresses for various loading cases. Selected output from the analysis is included in Appendix A. When applicable, Crown Castle has calculated and provided the effective area for panel antennas using approved methods following the intent of the TIA-222 Standard.

3.2) Assumptions

1) Tower and structures were maintained in accordance with the TIA-222 Standard.
2) The configuration of antennas, transmission cables, mounts and other appurtenances are as specified in Tables 1 and 2 and the referenced drawings.

This analysis may be affected if any assumptions are not valid or have been made in error. Telamon should be notified to determine the effect on the structural integrity of the tower.

4) ANALYSIS RESULTS

Table 4 - Section Capacity (Summary)

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P (K)	SF*P_allow (K)	% Capacity	Pass / Fail
T1	300 - 280	Leg	ROHN 2.5 EH	3	-19.38	99.13	19.6	Pass
T2	280 - 260	Leg	ROHN 2.5 STD	60	-19.10	75.22	25.4	Pass
T3	260 - 240	Leg	ROHN 2.5 EH	117	-37.81	99.13	38.1	Pass
T4	240 - 220	Leg	ROHN 2.5 EH	170	-44.74	99.13	45.1	Pass
T5	220 - 200	Leg	ROHN 2.5 EH	227	-49.28	79.98	61.6	Pass
T6	200 - 180	Leg	ROHN 3 EH	261	-47.79	117.93	40.5	Pass
T7	180 - 160	Leg	ROHN 3 EH	293	-54.18	117.93	45.9	Pass
T8	160 - 140	Leg	ROHN 3 EH	326	-53.84	117.93	45.7	Pass
T9	140 - 120	Leg	ROHN 3 EH	359	-67.06	135.92	49.3	Pass
T10	120 - 100	Leg	ROHN 3 EH	416	-62.51	135.92	46.0	Pass
T11	100 - 80	Leg	ROHN 3 EH	473	-64.74	117.93	54.9	Pass
T12	80 - 60	Leg	ROHN 3 EH	506	-63.34	117.93	53.7	Pass
T13	60 - 40	Leg	ROHN 3 EH	539	-71.48	117.93	60.6	Pass
T14	40 - 20	Leg	ROHN 3 EH	572	-73.83	117.93	62.6	Pass
T15	20 - 4.81771	Leg	ROHN 3 EH	604	-70.24	117.93	59.6	Pass
T16	4.81771 - 0	Leg	ROHN 3 EH	632	-65.60	140.55	46.7	Pass
T1	300 - 280	Diagonal	ROHN 1.5 x 11GA	15	-2.64	12.40	21.3 25.7 (b)	Pass
T2	280 - 260	Diagonal	ROHN 1.5 x 11GA	113	-1.56	12.40	12.5 15.1 (b)	Pass
T3	260 - 240	Diagonal	L2x2x1/4	123	-4.59	29.99	15.3 30.9 (b)	Pass
T4	240 - 220	Diagonal	ROHN 1.5 x 11GA	223	-3.37	12.40	27.2 32.8 (b)	Pass
T5	220 - 200	Diagonal	ROHN 1.5 x 16GA	235	-2.97	6.52	45.6	Pass
T6	200 - 180	Diagonal	ROHN 1.5 x 16GA	274	-4.11	6.52	63.1 67.5 (b)	Pass
T7	180 - 160	Diagonal	ROHN 1.5 x 16GA	324	-2.82	6.52	43.3	Pass
T8	160 - 140	Diagonal	ROHN 1.5 x 16GA	334	-2.94	6.52	45.0 46.2 (b)	Pass
T9	140 - 120	Diagonal	ROHN 1.5 x 16GA	369	-3.13	6.52	48.0	Pass
T10	120 - 100	Diagonal	ROHN 1.5 x 16GA	468	-2.33	6.52	35.7	Pass
T11	100 - 80	Diagonal	ROHN 1.5 x 16GA	502	-2.14	6.52	32.8	Pass
T12	80 - 60	Diagonal	ROHN 1.5 x 16GA	515	-3.10	6.52	47.5	Pass
T13	60 - 40	Diagonal	ROHN 1.5 x 16GA	565	-3.70	6.52	56.8 59.6 (b)	Pass
T14	40 - 20	Diagonal	ROHN 1.5 x 16GA	581	-3.00	6.52	45.9	Pass
T15	20 - 4.81771	Diagonal	ROHN 1.5 x 16GA	618	-3.42	6.52	52.5 55.0 (b)	Pass
T16	4.81771 - 0	Horizontal	L4x4x1/4	639	-1.20	61.97	13.5	Pass
T1	300 - 280	Top Girt	ROHN 1.5 x 11GA	5	-0.35	14.23	2.4 3.4 (b)	Pass
T2	280 - 260	Top Girt	ROHN 1.5 x 11GA	61	0.64	16.91	3.8 6.3 (b)	Pass
T3	260 - 240	Top Girt	2L2x2x1/4x3/8	119	0.66	51.56	1.3 3.7 (b)	Pass
T4	240 - 220	Top Girt	ROHN 1.5 x 11GA	174	1.68	16.91	9.9 16.4 (b)	Pass

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P (K)	SF*P_allow (K)	% Capacity	Pass / Fail
T5	220 - 200	Top Girt	ROHN 1.5 x 16GA	229	-0.85	7.40	11.5 13.7 (b)	Pass
T6	200 - 180	Top Girt	ROHN 1.5 x 16GA	263	-0.83	7.48	11.1 13.3 (b)	Pass
T7	180 - 160	Top Girt	ROHN 1.5 x 16GA	296	-0.94	7.48	12.5 15.1 (b)	Pass
T8	160 - 140	Top Girt	ROHN 1.5 x 16GA	328	-0.93	7.48	12.5 15.0 (b)	Pass
T9	140 - 120	Top Girt	ROHN 1.5 x 16GA	361	-1.16	7.48	15.5 18.7 (b)	Pass
T10	120 - 100	Top Girt	ROHN 1.5 x 16GA	418	-1.13	7.48	15.1 18.2 (b)	Pass
T11	100 - 80	Top Girt	ROHN 1.5 x 16GA	475	-1.12	7.48	15.0 18.0 (b)	Pass
T12	80 - 60	Top Girt	ROHN 1.5 x 16GA	508	-1.11	7.48	14.8 17.8 (b)	Pass
T13	60 - 40	Top Girt	ROHN 1.5 x 16GA	541	-1.24	7.48	16.5 19.9 (b)	Pass
T14	40 - 20	Top Girt	ROHN 1.5 x 16GA	574	-1.28	7.48	17.1 20.6 (b)	Pass
T15	20 - 4.81771	Top Girt	ROHN 1.5 x 16GA	607	-1.22	7.48	16.3 19.6 (b)	Pass
T16	4.81771 - 0	Top Girt	L4x4x1/4	636	12.57	66.00	19.0	Pass
T1	300 - 280	Bottom Girt	ROHN 1.5 x 11GA	8	0.66	16.91	3.9 6.4 (b)	Pass
T2	280 - 260	Bottom Girt	ROHN 1.5 x 11GA	65	-0.35	14.23	2.4 3.4 (b)	Pass
T4	240 - 220	Bottom Girt	ROHN 1.5 x 11GA	177	0.96	16.91	5.7 9.4 (b)	Pass
T5	220 - 200	Bottom Girt	ROHN 1.5 x 16GA	232	-0.85	7.40	11.5 13.7 (b)	Pass
T6	200 - 180	Bottom Girt	ROHN 1.5 x 16GA	266	-0.83	7.48	11.1 13.3 (b)	Pass
T7	180 - 160	Bottom Girt	ROHN 1.5 x 16GA	299	-0.94	7.48	12.5 15.1 (b)	Pass
T8	160 - 140	Bottom Girt	ROHN 1.5 x 16GA	331	-0.93	7.48	12.5 15.0 (b)	Pass
T9	140 - 120	Bottom Girt	ROHN 1.5 x 16GA	364	-1.16	7.48	15.5 18.7 (b)	Pass
T10	120 - 100	Bottom Girt	ROHN 1.5 x 16GA	421	-1.13	7.48	15.1 18.2 (b)	Pass
T11	100 - 80	Bottom Girt	ROHN 1.5 x 16GA	478	-1.12	7.48	15.0 18.0 (b)	Pass
T12	80 - 60	Bottom Girt	ROHN 1.5 x 16GA	511	-1.11	7.48	14.8 17.8 (b)	Pass
T13	60 - 40	Bottom Girt	ROHN 1.5 x 16GA	544	-1.24	7.48	16.5 19.9 (b)	Pass
T14	40 - 20	Bottom Girt	ROHN 1.5 x 16GA	577	-1.28	7.48	17.1 20.6 (b)	Pass
T15	20 - 4.81771	Bottom Girt	ROHN 1.5 x 16GA	612	1.87	9.44	19.8 30.0 (b)	Pass
T1	300 - 280	Guy A@282.523	3/4 [ECP-24000]	691	14.56	36.73	39.6	Pass
T3	260 - 240	Guy A@242.523	3/4 [ECP-24000]	676	15.26	36.73	41.6	Pass
T6	200 - 180	Guy A@182.523	3/4 [ECP-24000]	663	16.09	36.73	43.8	Pass
T9	140 - 120	Guy A@122.523	3/4 [ECP-24000]	657	16.80	36.73	45.7	Pass
T13	60 - 40	Guy A@59.3854	1/2 [ECP-23000]	651	8.18	16.95	48.3	Pass
T1	300 - 280	Guy B@282.523	3/4 [ECP-24000]	687	14.89	36.73	40.5	Pass

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P (K)	SF*P_allow (K)	% Capacity	Pass / Fail
T3	260 - 240	Guy B@242.523	3/4 [ECP-24000]	672	16.39	36.73	44.6	Pass
T6	200 - 180	Guy B@182.523	3/4 [ECP-24000]	662	18.41	36.73	50.1	Pass
T9	140 - 120	Guy B@122.523	3/4 [ECP-24000]	656	20.37	36.73	55.5	Pass
T13	60 - 40	Guy B@59.3854	1/2 [ECP-23000]	650	9.89	16.95	58.4	Pass
T1	300 - 280	Guy C@282.523	3/4 [ECP-24000]	679	15.08	36.73	41.1	Pass
T3	260 - 240	Guy C@242.523	3/4 [ECP-24000]	664	16.34	36.73	44.5	Pass
T6	200 - 180	Guy C@182.523	3/4 [ECP-24000]	658	18.30	36.73	49.8	Pass
T9	140 - 120	Guy C@122.523	3/4 [ECP-24000]	652	20.05	36.73	54.6	Pass
T13	60 - 40	Guy C@59.3854	1/2 [ECP-23000]	646	9.75	16.95	57.5	Pass
T1	300 - 280	Top Guy Pull-Off@282.523	2L2x2x1/4x3/8	684	5.61	51.56	10.9 24.1 (b)	Pass
T3	260 - 240	Top Guy Pull-Off@242.523	2L2x2x1/4x3/8	670	8.51	51.56	16.5 24.6 (b)	Pass
T6	200 - 180	Top Guy Pull-Off@182.523	2L2x2x1/4x3/8	660	6.56	51.56	12.7 19.0 (b)	Pass
T9	140 - 120	Top Guy Pull-Off@122.523	2L2x2x1/4x3/8	655	7.37	51.56	14.3 21.3 (b)	Pass
T13	60 - 40	Top Guy Pull-Off@59.3854	4 1/2x3/8	649	4.08	57.41	7.1 8.2 (b)	Pass
T1	300 - 280	Torque Arm Top@282.523	C15x33.9	681	-1.18	306.34	27.4 29.6 (b)	Pass
T3	260 - 240	Torque Arm Top@242.523	C15x33.9	677	3.55	327.49	27.8	Pass
							Summary	
						Leg (T14)	62.6	Pass
						Diagonal (T6)	67.5	Pass
						Horizontal (T16)	13.5	Pass
						Top Girt (T14)	20.6	Pass
						Bottom Girt (T15)	30.0	Pass
						Guy A (T13)	48.3	Pass
						Guy B (T13)	58.4	Pass
						Guy C (T13)	57.5	Pass
						Top Guy Pull-Off (T3)	24.6	Pass
						Torque Arm Top (T1)	29.6	Pass
						Bolt Checks	67.5	Pass
						Rating =	67.5	Pass

Table 5 - Tower Component Stresses vs. Capacity - LC5

Notes	Component	Elevation (ft)	% Capacity	Pass / Fail
1	Base Foundation (Structure)	0	24.7	Pass
1	Base Foundation (Soil Interaction)	0	39.4	Pass
1	Outer Guy Anchor Foundation Soil Interaction	0	18.3	Pass
1	Inner Guy Anchor Foundation Soil Interaction	0	19.4	Pass

Structure Rating (max from all components) =	67.5%

Notes:
1) See additional documentation in “Appendix C – Additional Calculations” for calculations supporting the % capacity consumed.

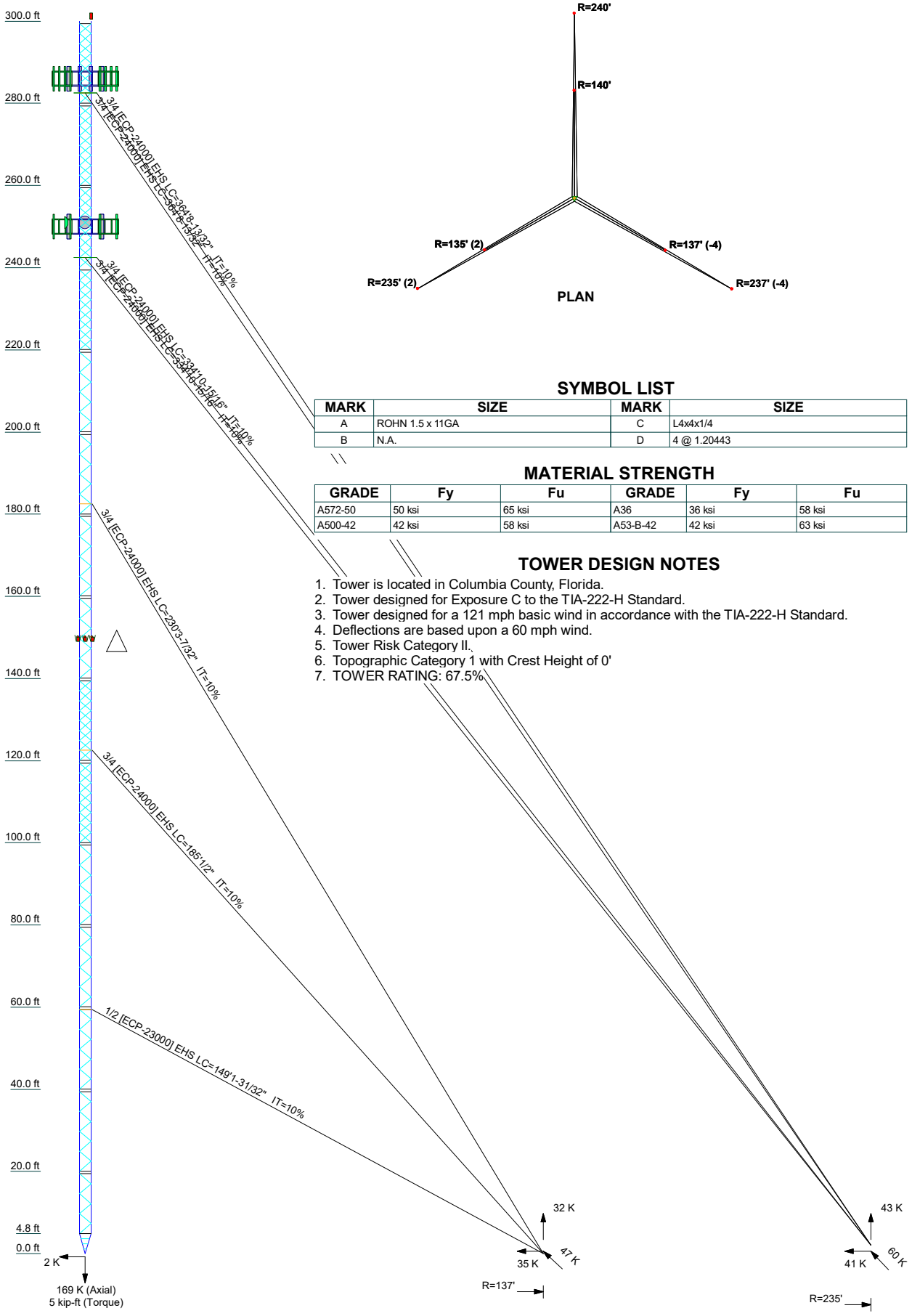
4.1) Recommendations

The tower and its base and anchor foundations have sufficient capacity to carry the proposed load configuration. No modifications are required at this time.

APPENDIX A

TNXTOWER OUTPUT

Section	T16	T15	T14	T13	T12	T11	T10	T9	T8	T7	T6	T5	T4	T3	T2	T1
Legs						ROHN 3 EH							ROHN 2.5 EH		ROHN 2.5 STD	ROHN 2.5 EH
Leg Grade									A572-50							
Diagonals	B						ROHN 1.5 x 16GA						A	L2x2x1/4	ROHN 1.5 x 11GA	
Diagonal Grade	B						A53-B-42						A500-42	A36	A500-42	
Top Girts	C						ROHN 1.5 x 16GA						A	2L2x2x1/4x3/8	ROHN 1.5 x 11GA	
Bottom Girts	B						ROHN 1.5 x 16GA						A	N.A.	ROHN 1.5 x 11GA	
Horizontals	C								N.A.							
Top Guy Pull-Offs		N.A.		4 1/2x3/8		N.A.		2L2x2x1/4x3/8	N.A.	2L2x2x1/4x3/8	2L2x2x1/4x3/8	N.A.	N.A.	2L2x2x1/4x3/8	N.A.	2L2x2x1/4x3/8
Face Width (ft)									118 @ 2.40885							3.41667
# Panels @ (ft)	D															
Weight (K)	14.4	0.3	0.6	0.8	0.9	0.8	0.9	0.9	0.8	0.8	0.9	0.6	0.9	2.0	0.8	1.7



PLAN

SYMBOL LIST

MARK	SIZE	MARK	SIZE
A	ROHN 1.5 x 11GA	C	L4x4x1/4
B	N.A.	D	4 @ 1.20443

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-50	50 ksi	65 ksi	A36	36 ksi	58 ksi
A500-42	42 ksi	58 ksi	A53-B-42	42 ksi	63 ksi

TOWER DESIGN NOTES

1. Tower is located in Columbia County, Florida.
2. Tower designed for Exposure C to the TIA-222-H Standard.
3. Tower designed for a 121 mph basic wind in accordance with the TIA-222-H Standard.
4. Deflections are based upon a 60 mph wind.
5. Tower Risk Category II.
6. Topographic Category 1 with Crest Height of 0'
7. TOWER RATING: 67.5%

ALL REACTIONS ARE FACTORED

telamon

Telamon
319 Chapanoke Road, Suite 118
Raleigh, NC 27603
Phone: (405) 348-5460
FAX: (405) 341-6334

Job: ***BU #846216 - FORT WHITE***			
Project: ***42285-846216-2477536-01-STR***			
Client: Crown Castle	Drawn by: DS	App'd:	
Code: TIA-222-H	Date: 03/25/26	Scale: NTS	
Path:		Dwg No. E-1	

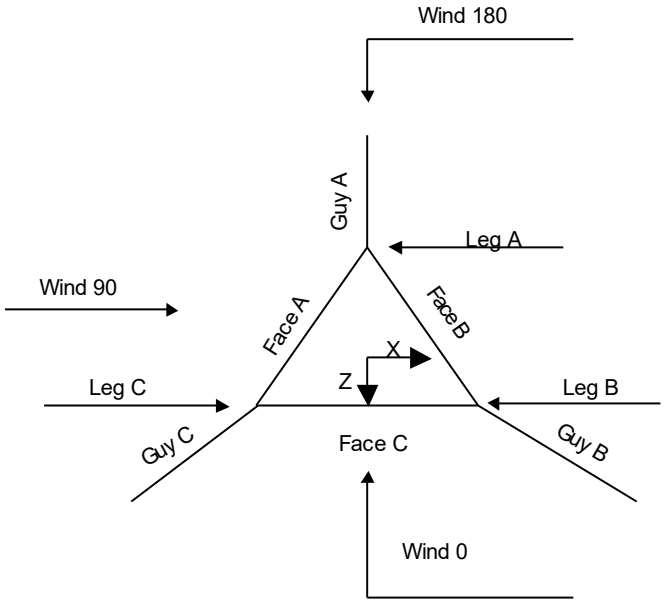
Tower Input Data

The main tower is a 3x guyed tower with an overall height of 300' above the ground line.
The base of the tower is set at an elevation of 0' above the ground line.
The face width of the tower is 3'5" at the top and tapered at the base.
This tower is designed using the TIA-222-H standard.
The following design criteria apply:

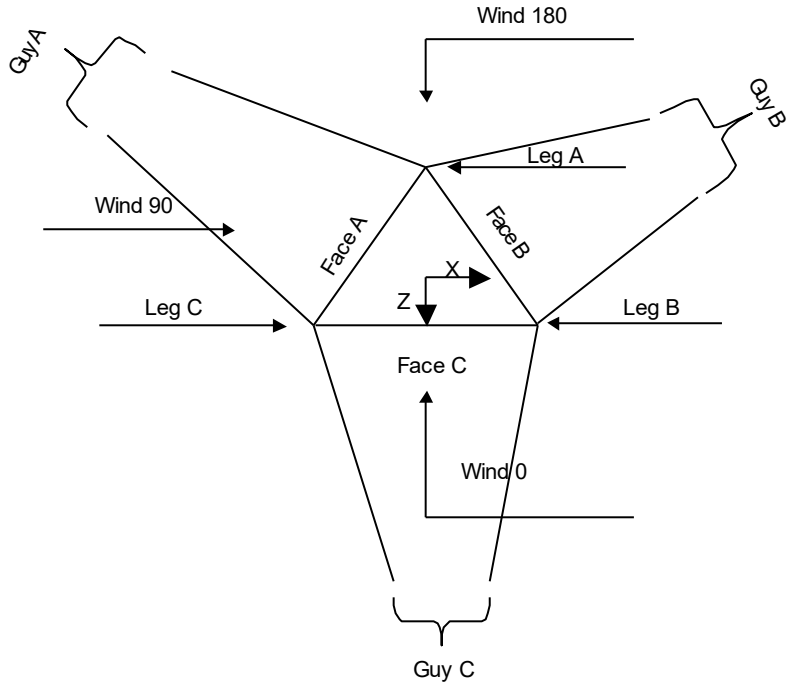
- Tower is located in Columbia County, Florida.
- Tower base elevation above sea level: 72'1-7/16".
- Basic wind speed of 121 mph.
- Risk Category II.
- Exposure Category C.
- Simplified Topographic Factor Procedure for wind speed-up calculations is used.
- Topographic Category: 1.
- Crest Height: 0'.
- Deflections calculated using a wind speed of 60 mph.
- Pressures are calculated at each section.
- Stress ratio used in tower member design is 1.
- Safety factor used in guy design is 1.
- Tower analysis based on target reliabilities in accordance with Annex S.
- Load Modification Factors used: $K_{es}(F_w) = 0.95$.
- Maximum demand-capacity ratio is: 1.05.
- Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Options

Consider Moments - Legs	Assume Legs Pinned	√ Calculate Redundant Bracing Forces
Consider Moments - Horizontals	√ Assume Rigid Index Plate	Ignore Redundant Members in FEA
Consider Moments - Diagonals	√ Use Clear Spans For Wind Area	√ SR Leg Bolts Resist Compression
Use Moment Magnification	√ Use Clear Spans For KL/r	All Leg Panels Have Same Allowable
√ Use Code Stress Ratios	√ Retension Guys To Initial Tension	Offset Girt At Foundation
√ Use Code Safety Factors - Guys	√ Bypass Mast Stability Checks	√ Consider Feed Line Torque
Escalate Ice	√ Use Azimuth Dish Coefficients	√ Include Angle Block Shear Check
Always Use Max Kz	√ Project Wind Area of Appurtenances	Use TIA-222-H Bracing Resist. Exemption
Kz In Exposure D Hurricane Region	√ Alternative Appurt. EPA Calculation	Use TIA-222-H Tension Splice Exemption
√ Include Bolts In Member Capacity	√ Autocalc Torque Arm Areas	Poles
Leg Bolts Are At Top Of Section	Add IBC .6D+W Combination	Include Shear-Torsion Interaction
√ Secondary Horizontal Braces Leg	√ Sort Capacity Reports By Component	Always Use Sub-Critical Flow
Use Diamond Inner Bracing (4 Sided)	Triangulate Diamond Inner Bracing	Use Top Mounted Sockets
SR Members Have Cut Ends	Treat Feed Line Bundles As Cylinder	Pole Without Linear Attachments
SR Members Are Concentric	Ignore KL/ry For 60 Deg. Angle Legs	Pole With Shroud Or No Appurtenances
Distribute Leg Loads As Uniform	Use ASCE 10 X-Brace Ly Rules	Outside and Inside Corner Radii Are Known
Use Special Wind Profile		



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	300'-280'			3'5-1/32"	1	20'
T2	280'-260'			3'5-1/32"	1	20'
T3	260'-240'			3'5-1/32"	1	20'
T4	240'-220'			3'5-1/32"	1	20'
T5	220'-200'			3'5-1/32"	1	20'
T6	200'-180'			3'5-1/32"	1	20'
T7	180'-160'			3'5-1/32"	1	20'
T8	160'-140'			3'5-1/32"	1	20'
T9	140'-120'			3'5-1/32"	1	20'
T10	120'-100'			3'5-1/32"	1	20'
T11	100'-80'			3'5-1/32"	1	20'
T12	80'-60'			3'5-1/32"	1	20'
T13	60'-40'			3'5-1/32"	1	20'
T14	40'-20'			3'5-1/32"	1	20'
T15	20'-4'9-27/32"			3'5-1/32"	1	15'2-5/32"
T16	4'9-27/32"-0'			3'5-1/32"	1	4'9-27/32"

Tower Section Geometry *(cont'd)*

Tower Section	*Tower Elevation*	*Diagonal Spacing*	*Bracing Type*	*Has K Brace End Panels*	*Has Horizontals*	*Top Girt Offset*	*Bottom Girt Offset*
	ft	*ft*				*in*	*in*
T1	300'-280'	2'4-29/32"	CX Brace	No	No	7.3750	1.3750
T2	280'-260'	2'4-29/32"	CX Brace	No	No	7.3750	1.3750
T3	260'-240'	2'4-29/32"	X Brace	No	No	7.3750	1.3750
T4	240'-220'	2'4-29/32"	CX Brace	No	No	7.3750	1.3750
T5	220'-200'	2'4-29/32"	K Brace Left	No	No	7.3750	1.3750
T6	200'-180'	2'4-29/32"	K Brace Left	No	No	7.3750	1.3750
T7	180'-160'	2'4-29/32"	K Brace Left	No	No	7.3750	1.3750
T8	160'-140'	2'4-29/32"	K Brace Left	No	No	7.3750	1.3750
T9	140'-120'	2'4-29/32"	CX Brace	No	No	7.3750	1.3750
T10	120'-100'	2'4-29/32"	CX Brace	No	No	7.3750	1.3750
T11	100'-80'	2'4-29/32"	K Brace Left	No	No	7.3750	1.3750
T12	80'-60'	2'4-29/32"	K Brace Left	No	No	7.3750	1.3750
T13	60'-40'	2'4-29/32"	K Brace Left	No	No	7.3750	1.3750
T14	40'-20'	2'4-29/32"	K Brace Left	No	No	7.3750	1.3750
T15	20'-4'9-27/32"	2'4-29/32"	K Brace Left	No	No	7.3750	1.3750
T16	4'9-27/32"-0'	1'2-13/32"	X 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 300'-280'	Pipe	ROHN 2.5 EH	A572-50 (50 ksi)	Pipe	ROHN 1.5 x 11GA	A500-42 (42 ksi)
T2 280'-260'	Pipe	ROHN 2.5 STD	A572-50 (50 ksi)	Pipe	ROHN 1.5 x 11GA	A500-42 (42 ksi)
T3 260'-240'	Pipe	ROHN 2.5 EH	A572-50 (50 ksi)	Equal Angle	L2x2x1/4	A36 (36 ksi)
T4 240'-220'	Pipe	ROHN 2.5 EH	A572-50 (50 ksi)	Pipe	ROHN 1.5 x 11GA	A500-42 (42 ksi)
T5 220'-200'	Pipe	ROHN 2.5 EH	A572-50 (50 ksi)	Pipe	ROHN 1.5 x 16GA	A53-B-42 (42 ksi)
T6 200'-180'	Pipe	ROHN 3 EH	A572-50 (50 ksi)	Pipe	ROHN 1.5 x 16GA	A53-B-42 (42 ksi)
T7 180'-160'	Pipe	ROHN 3 EH	A572-50 (50 ksi)	Pipe	ROHN 1.5 x 16GA	A53-B-42 (42 ksi)
T8 160'-140'	Pipe	ROHN 3 EH	A572-50 (50 ksi)	Pipe	ROHN 1.5 x 16GA	A53-B-42 (42 ksi)
T9 140'-120'	Pipe	ROHN 3 EH	A572-50 (50 ksi)	Pipe	ROHN 1.5 x 16GA	A53-B-42 (42 ksi)
T10 120'-100'	Pipe	ROHN 3 EH	A572-50 (50 ksi)	Pipe	ROHN 1.5 x 16GA	A53-B-42 (42 ksi)
T11 100'-80'	Pipe	ROHN 3 EH	A572-50 (50 ksi)	Pipe	ROHN 1.5 x 16GA	A53-B-42 (42 ksi)
T12 80'-60'	Pipe	ROHN 3 EH	A572-50 (50 ksi)	Pipe	ROHN 1.5 x 16GA	A53-B-42 (42 ksi)
T13 60'-40'	Pipe	ROHN 3 EH	A572-50 (50 ksi)	Pipe	ROHN 1.5 x 16GA	A53-B-42 (42 ksi)
T14 40'-20'	Pipe	ROHN 3 EH	A572-50 (50 ksi)	Pipe	ROHN 1.5 x 16GA	A53-B-42 (42 ksi)
T15 20'-4'9-27/32"	Pipe	ROHN 3 EH	A572-50 (50 ksi)	Pipe	ROHN 1.5 x 16GA	A53-B-42 (42 ksi)
T16 4'9-27/32"-0'	Pipe	ROHN 3 EH	A572-50 (50 ksi)	Equal Angle		A53-B-42 (42 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*

Tower Elevation ft	Top Girt Type	Top Girt Size	Top Girt Grade	Bottom Girt Type	Bottom Girt Size	Bottom Girt Grade
T1 300'-280'	Pipe	ROHN 1.5 x 11GA	A500-42 (42 ksi)	Pipe	ROHN 1.5 x 11GA	A500-42 (42 ksi)
T2 280'-260'	Pipe	ROHN 1.5 x 11GA	A500-42 (42 ksi)	Pipe	ROHN 1.5 x 11GA	A500-42 (42 ksi)
T3 260'-240'	Double Angle	2L2x2x1/4x3/8	A36 (36 ksi)	Equal Angle		A36 (36 ksi)
T4 240'-220'	Pipe	ROHN 1.5 x 11GA	A500-42 (42 ksi)	Pipe	ROHN 1.5 x 11GA	A500-42 (42 ksi)
T5 220'-200'	Pipe	ROHN 1.5 x 16GA	A53-B-42 (42 ksi)	Pipe	ROHN 1.5 x 16GA	A53-B-42 (42 ksi)
T6 200'-180'	Pipe	ROHN 1.5 x 16GA	A53-B-42 (42 ksi)	Pipe	ROHN 1.5 x 16GA	A53-B-42 (42 ksi)
T7 180'-160'	Pipe	ROHN 1.5 x 16GA	A53-B-42 (42 ksi)	Pipe	ROHN 1.5 x 16GA	A53-B-42 (42 ksi)
T8 160'-140'	Pipe	ROHN 1.5 x 16GA	A53-B-42 (42 ksi)	Pipe	ROHN 1.5 x 16GA	A53-B-42 (42 ksi)
T9 140'-120'	Pipe	ROHN 1.5 x 16GA	A53-B-42 (42 ksi)	Pipe	ROHN 1.5 x 16GA	A53-B-42 (42 ksi)
T10 120'-100'	Pipe	ROHN 1.5 x 16GA	A53-B-42 (42 ksi)	Pipe	ROHN 1.5 x 16GA	A53-B-42 (42 ksi)
T11 100'-80'	Pipe	ROHN 1.5 x 16GA	A53-B-42 (42 ksi)	Pipe	ROHN 1.5 x 16GA	A53-B-42 (42 ksi)
T12 80'-60'	Pipe	ROHN 1.5 x 16GA	A53-B-42 (42 ksi)	Pipe	ROHN 1.5 x 16GA	A53-B-42 (42 ksi)
T13 60'-40'	Pipe	ROHN 1.5 x 16GA	A53-B-42 (42 ksi)	Pipe	ROHN 1.5 x 16GA	A53-B-42 (42 ksi)
T14 40'-20'	Pipe	ROHN 1.5 x 16GA	A53-B-42 (42 ksi)	Pipe	ROHN 1.5 x 16GA	A53-B-42 (42 ksi)
T15 20'-4'9-27/32"	Pipe	ROHN 1.5 x 16GA	A53-B-42 (42 ksi)	Pipe	ROHN 1.5 x 16GA	A53-B-42 (42 ksi)
T16 4'9-27/32"-0'	Equal Angle	L4x4x1/4	A36 (36 ksi)	Equal Angle	L4x4x1/4	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
T16 4'9-27/32"-0'	None	Flat Bar		A36 (36 ksi)	Equal Angle	L4x4x1/4	A36 (36 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Gusset Area (per face) ft^2	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
T1 300'-280'	0.00	0.1757	A36 (36 ksi)	1	1	1.1	Mid-Pt	Mid-Pt	Mid-Pt
T2 280'-260'	0.00	0.1757	A36 (36 ksi)	1	1	1.1	Mid-Pt	Mid-Pt	Mid-Pt
T3 260'-240'	0.00	0.3750	A36 (36 ksi)	1	1	1.1	Mid-Pt	Mid-Pt	Mid-Pt
T4 240'-220'	0.00	0.1757	A36 (36 ksi)	1	1	1.1	Mid-Pt	Mid-Pt	Mid-Pt
T5 220'-200'	0.00	0.3750	A36 (36 ksi)	1	1	1.1	Mid-Pt	Mid-Pt	Mid-Pt
T6 200'-180'	0.00	0.3750	A36	1	1	1.1	Mid-Pt	Mid-Pt	Mid-Pt

Tower Elevation ft	Gusset Area (per face) ft^2	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
T7 180'-160'	0.00	0.3750	(36 ksi) A36 (36 ksi)	1	1	1.1	Mid-Pt	Mid-Pt	Mid-Pt
T8 160'-140'	0.00	0.3750	(36 ksi) A36 (36 ksi)	1	1	1.1	Mid-Pt	Mid-Pt	Mid-Pt
T9 140'-120'	0.00	0.3750	(36 ksi) A36 (36 ksi)	1	1	1.1	Mid-Pt	Mid-Pt	Mid-Pt
T10 120'-100'	0.00	0.3750	(36 ksi) A36 (36 ksi)	1	1	1.1	Mid-Pt	Mid-Pt	Mid-Pt
T11 100'-80'	0.00	0.3750	(36 ksi) A36 (36 ksi)	1	1	1.1	Mid-Pt	Mid-Pt	Mid-Pt
T12 80'-60'	0.00	0.3750	(36 ksi) A36 (36 ksi)	1	1	1.1	Mid-Pt	Mid-Pt	Mid-Pt
T13 60'-40'	0.00	0.3750	(36 ksi) A36 (36 ksi)	1	1	1.1	Mid-Pt	Mid-Pt	Mid-Pt
T14 40'-20'	0.00	0.3750	(36 ksi) A36 (36 ksi)	1	1	1.1	Mid-Pt	Mid-Pt	Mid-Pt
T15 20'-4'9-27/32"	0.00	0.3750	(36 ksi) A36 (36 ksi)	1	1	1.1	Mid-Pt	Mid-Pt	Mid-Pt
T16 4'9-27/32"-0'	0.00	0.0000	A36 (36 ksi)	1	1	1	Mid-Pt	Mid-Pt	Mid-Pt

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 300'-280'	No	No	1	1	1	1	1	1	1	1
				1	1	1	1	1	1	1
T2 280'-260'	No	No	1	1	1	1	1	1	1	1
				1	1	1	1	1	1	1
T3 260'-240'	Yes	No	1	1	1	1	1	1	1	1
				1	1	1	1	1	1	1
T4 240'-220'	No	No	1	1	1	1	1	1	1	1
				1	1	1	1	1	1	1
T5 220'-200'	No	No	1	1	1	1	1	1	1	1
				1	1	1	1	1	1	1
T6 200'-180'	No	No	1	1	1	1	1	1	1	1
				1	1	1	1	1	1	1
T7 180'-160'	No	No	1	1	1	1	1	1	1	1
				1	1	1	1	1	1	1
T8 160'-140'	No	No	1	1	1	1	1	1	1	1
				1	1	1	1	1	1	1
T9 140'-120'	No	No	1	1	1	1	1	1	1	1
				1	1	1	1	1	1	1
T10 120'-100'	No	No	1	1	1	1	1	1	1	1
				1	1	1	1	1	1	1
T11 100'-80'	No	No	1	1	1	1	1	1	1	1
				1	1	1	1	1	1	1
T12 80'-60'	No	No	1	1	1	1	1	1	1	1
				1	1	1	1	1	1	1
T13 60'-40'	No	No	1	1	1	1	1	1	1	1
				1	1	1	1	1	1	1
T14 40'-20'	No	No	1	1	1	1	1	1	1	1
				1	1	1	1	1	1	1
T15 20'-4'9-27/32"	No	No	1	1	1	1	1	1	1	1
				1	1	1	1	1	1	1
T16 4'9-27/32"-0'	Yes	No	1	1	1	1	1	1	1	1
				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		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
T1 300'-280'	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	0.75	0.0000	1	0.0000	0.75
T2 280'-260'	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	0.75	0.0000	1	0.0000	0.75
T3 260'-240'	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
T4 240'-220'	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	0.75	0.0000	1	0.0000	0.75
T5 220'-200'	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	0.75	0.0000	1	0.0000	0.75
T6 200'-180'	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	0.75	0.0000	1	0.0000	0.75
T7 180'-160'	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	0.75	0.0000	1	0.0000	0.75
T8 160'-140'	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	0.75	0.0000	1	0.0000	0.75
T9 140'-120'	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	0.75	0.0000	1	0.0000	0.75
T10 120'-100'	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	0.75	0.0000	1	0.0000	0.75
T11 100'-80'	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	0.75	0.0000	1	0.0000	0.75
T12 80'-60'	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	0.75	0.0000	1	0.0000	0.75
T13 60'-40'	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	0.75	0.0000	1	0.0000	0.75
T14 40'-20'	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	0.75	0.0000	1	0.0000	0.75
T15 20'-4'9-27/32"	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	0.75	0.0000	1	0.0000	0.75
T16 4'9-27/32"-0'	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 Elevation ft	Redundant Horizontal		Redundant Diagonal		Redundant Sub-Diagonal		Redundant Sub-Horizontal		Redundant Vertical		Redundant Hip		Redundant Hip Diagonal	
	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
T1 300'-280'	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)
	0.0000	0.75 (3)	0.0000	0.75 (3)							0.0000	0.75 (3)	0.0000	0.75 (3)
	0.0000	0.75 (4)	0.0000	0.75 (4)							0.0000	0.75 (4)	0.0000	0.75 (4)
T2 280'-260'	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)
	0.0000	0.75 (3)	0.0000	0.75 (3)							0.0000	0.75 (3)	0.0000	0.75 (3)
	0.0000	0.75 (4)	0.0000	0.75 (4)							0.0000	0.75 (4)	0.0000	0.75 (4)
T3 260'-240'	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)
	0.0000	0.75 (3)	0.0000	0.75 (3)							0.0000	0.75 (3)	0.0000	0.75 (3)
	0.0000	0.75 (4)	0.0000	0.75 (4)							0.0000	0.75 (4)	0.0000	0.75 (4)
T4 240'-220'	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)

Tower Elevation ft	Redundant Horizontal		Redundant Diagonal		Redundant Sub-Diagonal		Redundant Sub-Horizontal		Redundant Vertical		Redundant Hip		Redundant Hip Diagonal	
	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
	0.0000	0.75 (3)	0.0000	0.75 (3)							0.0000	0.75 (3)	0.0000	0.75 (3)
	0.0000	0.75 (4)	0.0000	0.75 (4)							0.0000	0.75 (4)	0.0000	0.75 (4)
T5 220'-200'	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)
	0.0000	0.75 (3)	0.0000	0.75 (3)							0.0000	0.75 (3)	0.0000	0.75 (3)
	0.0000	0.75 (4)	0.0000	0.75 (4)							0.0000	0.75 (4)	0.0000	0.75 (4)
T6 200'-180'	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)
	0.0000	0.75 (3)	0.0000	0.75 (3)							0.0000	0.75 (3)	0.0000	0.75 (3)
	0.0000	0.75 (4)	0.0000	0.75 (4)							0.0000	0.75 (4)	0.0000	0.75 (4)
T7 180'-160'	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)
	0.0000	0.75 (3)	0.0000	0.75 (3)							0.0000	0.75 (3)	0.0000	0.75 (3)
	0.0000	0.75 (4)	0.0000	0.75 (4)							0.0000	0.75 (4)	0.0000	0.75 (4)
T8 160'-140'	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)
	0.0000	0.75 (3)	0.0000	0.75 (3)							0.0000	0.75 (3)	0.0000	0.75 (3)
	0.0000	0.75 (4)	0.0000	0.75 (4)							0.0000	0.75 (4)	0.0000	0.75 (4)
T9 140'-120'	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)
	0.0000	0.75 (3)	0.0000	0.75 (3)							0.0000	0.75 (3)	0.0000	0.75 (3)
	0.0000	0.75 (4)	0.0000	0.75 (4)							0.0000	0.75 (4)	0.0000	0.75 (4)
T10 120'-100'	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)
	0.0000	0.75 (3)	0.0000	0.75 (3)							0.0000	0.75 (3)	0.0000	0.75 (3)
	0.0000	0.75 (4)	0.0000	0.75 (4)							0.0000	0.75 (4)	0.0000	0.75 (4)
T11 100'-80'	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)
	0.0000	0.75 (3)	0.0000	0.75 (3)							0.0000	0.75 (3)	0.0000	0.75 (3)
	0.0000	0.75 (4)	0.0000	0.75 (4)							0.0000	0.75 (4)	0.0000	0.75 (4)
T12 80'-60'	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)

Tower Elevation ft	Redundant Horizontal		Redundant Diagonal		Redundant Sub-Diagonal		Redundant Sub-Horizontal		Redundant Vertical		Redundant Hip		Redundant Hip Diagonal	
	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
	0.0000	0.75 (3)	0.0000	0.75 (3)							0.0000	0.75 (3)	0.0000	0.75 (3)
	0.0000	0.75 (4)	0.0000	0.75 (4)							0.0000	0.75 (4)	0.0000	0.75 (4)
T13 60'-40'	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)
	0.0000	0.75 (3)	0.0000	0.75 (3)							0.0000	0.75 (3)	0.0000	0.75 (3)
	0.0000	0.75 (4)	0.0000	0.75 (4)							0.0000	0.75 (4)	0.0000	0.75 (4)
T14 40'-20'	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)
	0.0000	0.75 (3)	0.0000	0.75 (3)							0.0000	0.75 (3)	0.0000	0.75 (3)
	0.0000	0.75 (4)	0.0000	0.75 (4)							0.0000	0.75 (4)	0.0000	0.75 (4)
T15 20'-4'9-27/32"	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)
	0.0000	0.75 (3)	0.0000	0.75 (3)							0.0000	0.75 (3)	0.0000	0.75 (3)
	0.0000	0.75 (4)	0.0000	0.75 (4)							0.0000	0.75 (4)	0.0000	0.75 (4)
T16 4'9-27/32"-0'	0.0000	0.75 (1)	0.0000	0.75 (1)	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75 (1)	0.0000	0.75 (1)
	0.0000	0.75 (2)	0.0000	0.75 (2)							0.0000	0.75 (2)	0.0000	0.75 (2)
	0.0000	0.75 (3)	0.0000	0.75 (3)							0.0000	0.75 (3)	0.0000	0.75 (3)
	0.0000	0.75 (4)	0.0000	0.75 (4)							0.0000	0.75 (4)	0.0000	0.75 (4)

Tower Section Geometry *(cont'd)*

Tower Elevation	Connection Offsets							
	Diagonal				K-Bracing			
	Vert. Top	Horiz. Top	Vert. Bot.	Horiz. Bot.	Vert. Top	Horiz. Top	Vert. Bot.	Horiz. Bot.
ft	in	in	in	in	in	in	in	in
T1 300'-280'	0.0000	3.5000	0.0000	3.5000	0.0000	0.0000	0.0000	0.0000
T2 280'-260'	0.0000	3.5000	0.0000	3.5000	0.0000	0.0000	0.0000	0.0000
T3 260'-240'	0.0000	3.5000	0.0000	3.5000	0.0000	0.0000	0.0000	0.0000
T4 240'-220'	0.0000	3.5000	0.0000	3.5000	0.0000	0.0000	0.0000	0.0000
T5 220'-200'	0.0000	3.5000	0.0000	3.5000	0.0000	0.0000	0.0000	0.0000
T6 200'-180'	0.0000	3.5000	0.0000	3.5000	0.0000	0.0000	0.0000	0.0000
T7 180'-160'	0.0000	3.5000	0.0000	3.5000	0.0000	0.0000	0.0000	0.0000

Tower Elevation	Connection Offsets							
	Diagonal				K-Bracing			
	Vert. Top	Horiz. Top	Vert. Bot.	Horiz. Bot.	Vert. Top	Horiz. Top	Vert. Bot.	Horiz. Bot.
ft	in	in	in	in	in	in	in	in
T8 160'-140'	0.0000	3.5000	0.0000	3.5000	0.0000	0.0000	0.0000	0.0000
T9 140'-120'	0.0000	3.5000	0.0000	3.5000	0.0000	0.0000	0.0000	0.0000
T10 120'-100'	0.0000	3.5000	0.0000	3.5000	0.0000	0.0000	0.0000	0.0000
T11 100'-80'	0.0000	3.5000	0.0000	3.5000	0.0000	0.0000	0.0000	0.0000
T12 80'-60'	0.0000	3.5000	0.0000	3.5000	0.0000	0.0000	0.0000	0.0000
T13 60'-40'	0.0000	3.5000	0.0000	3.5000	0.0000	0.0000	0.0000	0.0000
T14 40'-20'	0.0000	3.5000	0.0000	3.5000	0.0000	0.0000	0.0000	0.0000
T15 20'-4'9-27/32"	0.0000	3.5000	0.0000	3.5000	0.0000	0.0000	0.0000	0.0000
T16 4'9-27/32"-0'	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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 300'-280'	Flange	0.7500 A325X	4	0.5000 A325X	1	0.5000 A325X	1	0.5000 A325X	1	0.6250 A325X	0	0.0000 A325X	0	0.6250 A325X	0
T2 280'-260'	Flange	0.7500 A325X	4	0.5000 A325X	1	0.5000 A325X	1	0.5000 A325X	1	0.6250 A325X	0	0.0000 A325X	0	0.6250 A325X	0
T3 260'-240'	Flange	0.7500 A325X	4	0.6250 A325X	1	0.6250 A325X	1	0.6250 A325X	0	0.6250 A325X	0	0.0000 A325X	0	0.6250 A325X	0
T4 240'-220'	Flange	0.7500 A325X	4	0.5000 A325X	1	0.5000 A325X	1	0.5000 A325X	1	0.6250 A325X	0	0.0000 A325X	0	0.6250 A325X	0
T5 220'-200'	Flange	0.7500 A325X	4	0.5000 A325X	1	0.5000 A325X	1	0.5000 A325X	1	0.6250 A325X	0	0.0000 A325X	0	0.6250 A325X	0
T6 200'-180'	Flange	0.7500 A325X	4	0.5000 A325X	1	0.5000 A325X	1	0.5000 A325X	1	0.6250 A325X	0	0.0000 A325X	0	0.6250 A325X	0
T7 180'-160'	Flange	0.7500 A325X	4	0.5000 A325X	1	0.5000 A325X	1	0.5000 A325X	1	0.6250 A325X	0	0.0000 A325X	0	0.6250 A325X	0
T8 160'-140'	Flange	0.7500 A325X	4	0.5000 A325X	1	0.5000 A325X	1	0.5000 A325X	1	0.6250 A325X	0	0.0000 A325X	0	0.6250 A325X	0
T9 140'-120'	Flange	0.7500 A325X	4	0.5000 A325X	1	0.5000 A325X	1	0.5000 A325X	1	0.6250 A325X	0	0.0000 A325X	0	0.6250 A325X	0
T10 120'-100'	Flange	0.7500 A325X	4	0.5000 A325X	1	0.5000 A325X	1	0.5000 A325X	1	0.6250 A325X	0	0.0000 A325X	0	0.6250 A325X	0
T11 100'-80'	Flange	0.7500 A325X	4	0.5000 A325X	1	0.5000 A325X	1	0.5000 A325X	1	0.6250 A325X	0	0.0000 A325X	0	0.6250 A325X	0
T12 80'-60'	Flange	0.7500 A325X	4	0.5000 A325X	1	0.5000 A325X	1	0.5000 A325X	1	0.6250 A325X	0	0.0000 A325X	0	0.6250 A325X	0
T13 60'-40'	Flange	0.7500 A325X	4	0.5000 A325X	1	0.5000 A325X	1	0.5000 A325X	1	0.6250 A325X	0	0.0000 A325X	0	0.0000 A325N	2
T14 40'-20'	Flange	0.7500 A325X	4	0.5000 A325X	1	0.5000 A325X	1	0.5000 A325X	1	0.6250 A325X	0	0.0000 A325X	0	0.6250 A325X	0
T15 20'-4'9-27/32"	Flange	0.8750 A325X	4	0.5000 A325X	1	0.5000 A325X	1	0.5000 A325X	1	0.6250 A325X	0	0.0000 A325X	0	0.6250 A325X	0
T16 4'9-27/32"-0'	Flange	0.0000 A325X	0	0.0000 A325X	0	0.0000 A325X	0	0.0000 A325X	0	0.6250 A325X	0	0.0000 A325X	0	0.6250 A325X	0

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 %
59.3854	EHS	A 1/2 [ECP-23000]	2.69	10%	23000	0.517	150'1-13/16"	140'	0.0000	0'	100%
		B 1/2 [ECP-23000]	2.69	10%	23000	0.517	149'19/32"	137'	0.0000	-4'	100%
		C 1/2 [ECP-23000]	2.69	10%	23000	0.517	144'9-1/4"	135'	0.0000	2'	100%
122.523	EHS	A 3/4 [ECP-24000]	5.83	10%	24000	1.155	184'5-5/32"	140'	0.0000	0'	100%
		B 3/4 [ECP-24000]	5.83	10%	24000	1.155	184'10-29/32"	137'	0.0000	-4'	100%
		C 3/4 [ECP-24000]	5.83	10%	24000	1.155	179'4-9/16"	135'	0.0000	2'	100%
182.523	EHS	A 3/4 [ECP-24000]	5.83	10%	24000	1.155	228'8-5/32"	140'	0.0000	0'	100%
		B 3/4 [ECP-24000]	5.83	10%	24000	1.155	230'1-5/16"	137'	0.0000	-4'	100%
		C 3/4 [ECP-24000]	5.83	10%	24000	1.155	224'31/32"	135'	0.0000	2'	100%
242.523	EHS	A 3/4 [ECP-24000]	5.83	10%	24000	1.155	339'7-5/16"	240'	0.0000	0'	100%
		B 3/4 [ECP-24000]	5.83	10%	24000	1.155	340'4-13/16"	237'	0.0000	-4'	100%
		C 3/4 [ECP-24000]	5.83	10%	24000	1.155	334'8-9/32"	235'	0.0000	2'	100%
282.523	EHS	A 3/4 [ECP-24000]	5.83	10%	24000	1.155	369'2-13/32"	240'	0.0000	0'	100%
		B 3/4 [ECP-24000]	5.83	10%	24000	1.155	370'4-5/16"	237'	0.0000	-4'	100%
		C 3/4 [ECP-24000]	5.83	10%	24000	1.155	364'5-17/32"	235'	0.0000	2'	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
59.3854	Corner						
122.523	Corner						
182.523	Corner						
242.523	Torque Arm	6'9-31/32"	0.0000	Channel	A36 (36 ksi)	Channel	C15x33.9
282.523	Torque Arm	6'9-31/32"	0.0000	Channel	A36 (36 ksi)	Channel	C15x33.9

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
59'4-11/16"	A36 (36 ksi)	Solid Round			Yes	A36 (36 ksi)	Flat Bar	4 1/2x3/8
122'6-1/4"	A36 (36 ksi)	Solid Round			No	A36 (36 ksi)	Double Angle	2L2x2x1/4x3/8
182'6-1/4"	A36 (36 ksi)	Solid Round			No	A36 (36 ksi)	Double Angle	2L2x2x1/4x3/8
242'6-1/4"	A36 (36 ksi)	Solid Round			No	A36 (36 ksi)	Double Angle	2L2x2x1/4x3/8
282'6-	A36	Solid Round			No	A36	Double Angle	2L2x2x1/4x3/8

Guy Elevation ft	Diagonal Grade	Diagonal Type	Upper Diagonal Size	Lower Diagonal Size	Is Strap.	Pull-Off Grade	Pull-Off Type	Pull-Off Size
1/4"	(36 ksi)					(36 ksi)		

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
59.3854	0.08	0.08	0.07		2'1-29/32" 2.5 sec/pulse	2'1-7/16" 2.5 sec/pulse	2' 2.4 sec/pulse	
122.523	0.21	0.21	0.21		3'3-31/32" 3.2 sec/pulse	3'4-3/16" 3.2 sec/pulse	3'1-13/16" 3.1 sec/pulse	
182.523	0.26	0.27	0.26		5'1-3/32" 3.9 sec/pulse	5'1-13/16" 3.9 sec/pulse	4'10-11/16" 3.8 sec/pulse	
242.523	0.39	0.39	0.39		11'2-1/32" 5.8 sec/pulse	11'2-17/32" 5.8 sec/pulse	10'10-3/16" 5.7 sec/pulse	
282.523	0.43	0.43	0.42		13'1-13/16" 6.3 sec/pulse	13'2-5/8" 6.3 sec/pulse	12'9-23/32" 6.2 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
59.3854	No	No			1	1	1	1
122.523	No	No			1	1	1	1
182.523	No	No			1	1	1	1
242.523	No	No	1	1	1	1	1	1
282.523	No	No	1	1	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
59.3854	0.0000 A325N	0	0.0000	1	0.7500 A325X	2	0.0000	1	0.0000 A325N	0	0.0000	1
122.523	0.7500 A325N	8	0.0000	0.75	0.6250 A325X	2	0.0000	0.75	0.0000 A325N	0	0.0000	1
182.523	0.0000 A325N	0	0.0000	1	0.6250 A325X	2	0.0000	0.75	0.0000 A325N	0	0.0000	1
242.523	0.8750 A325X	2	0.0000	0.75	0.6250 A325X	2	0.0000	0.75	0.0000 A325N	0	0.0000	1
282.523	0.8750 A325X	2	0.0000	0.75	0.6250 A325X	2	0.0000	0.75	0.0000 A325N	0	0.0000	1

Guy Pressures

Guy Elevation ft	Guy Location	z ft	q_z psf	q_z Ice psf	Ice Thickness in
59.3854	A	29'8-9/32"	30		
	B	27'8-9/32"	29		
	C	30'8-9/32"	30		
122.523	A	61'3-1/8"	34		
	B	59'3-1/8"	34		
	C	62'3-1/8"	35		
182.523	A	91'3-1/8"	37		
	B	89'3-1/8"	37		
	C	92'3-1/8"	38		
242.523	A	121'3-1/8"	40		
	B	119'3-1/8"	40		
	C	122'3-1/8"	40		
282.523	A	141'3-1/8"	41		
	B	139'3-1/8"	41		
	C	142'3-1/8"	41		

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
59.3854	A	23.2795	2.72 2.69	0.00	1.11	-2.48	-2.19	0.00	0.00
	B	25.1466	2.72 2.69	2.12	1.19	1.22	1.17	0.00	-2.03
	C	23.3344	2.72 2.69	-2.15	1.11	1.24	1.09	-0.00	1.89
			Sum:	**-0.03**	3.41	**-0.02**	**0.08**	0.00	**-0.14**
122.523	A	41.5947	5.97 5.83	0.00	4.02	-4.41	-7.94	0.00	0.00
	B	43.1378	5.98 5.83	3.73	4.14	2.15	4.09	0.00	-7.08
	C	42.1767	5.97 5.83	-3.79	4.06	2.19	4.01	-0.00	6.94
			Sum:	**-0.06**	12.23	**-0.07**	**0.16**	0.00	**-0.13**
182.523	A	52.9028	6.04 5.83	0.00	4.87	-3.58	-9.60	0.00	0.00
	B	54.0986	6.05 5.83	3.01	4.94	1.74	4.87	0.00	-8.44
	C	53.6136	6.04 5.83	-3.05	4.91	1.76	4.84	-0.00	8.38
			Sum:	**-0.03**	14.71	**-0.08**	**0.12**	0.00	**-0.06**
242.523	A	45.5331	6.11 5.83	-0.06	4.46	-4.18	-8.79	14.40	-15.23
	A	45.5331	6.11 5.83	0.06	4.46	-4.18	-8.79	-14.40	15.23
	B	46.3645	6.11 5.83	3.60	4.52	2.01	17.83	14.19	0.00
	B	46.3645	6.11 5.83	3.54	4.52	2.11	-8.91	-14.19	-15.44
	C	45.9038	6.11 5.83	-3.56	4.48	2.13	-8.84	14.30	15.30
	C	45.9038	6.11 5.83	-3.63	4.48	2.02	17.67	-14.30	0.00
			Sum:	**-0.06**	26.91	**-0.09**	**0.17**	0.00	**-0.13**
282.523	A	49.8828	6.16 5.83	-0.06	4.80	-3.86	-9.46	13.30	-16.39
	A	49.8828	6.16 5.83	0.06	4.80	-3.86	-9.46	-13.30	16.39
	B	50.6359	6.16 5.83	3.32	4.85	1.85	19.13	13.09	0.00

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
	B	50.6359	6.16 5.83	3.26	4.85	1.95	-9.56	-13.09	-16.57
	C	50.2810	6.15 5.83	-3.29	4.82	1.96	-9.51	13.19	16.46
	C	50.2810	6.15 5.83	-3.34	4.82	1.86	19.01	-13.19	0.00
			Sum:	**-0.05**	28.93	**-0.09**	**0.15**	0.00	**-0.10**

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
59.3854	A	23.2795	2.72 2.69	0.00	1.11	-2.48	-2.19	0.00	0.00
	B	25.1466	2.72 2.69	2.12	1.19	1.22	1.17	0.00	-2.03
	C	23.3344	2.72 2.69	-2.15	1.11	1.24	1.09	-0.00	1.89
			Sum:	**-0.03**	3.41	**-0.02**	**0.08**	0.00	**-0.14**
122.523	A	41.5947	5.97 5.83	0.00	4.02	-4.41	-7.94	0.00	0.00
	B	43.1378	5.98 5.83	3.73	4.14	2.15	4.09	0.00	-7.08
	C	42.1767	5.97 5.83	-3.79	4.06	2.19	4.01	-0.00	6.94
			Sum:	**-0.06**	12.23	**-0.07**	**0.16**	0.00	**-0.13**
182.523	A	52.9028	6.04 5.83	0.00	4.87	-3.58	-9.60	0.00	0.00
	B	54.0986	6.05 5.83	3.01	4.94	1.74	4.87	0.00	-8.44
	C	53.6136	6.04 5.83	-3.05	4.91	1.76	4.84	-0.00	8.38
			Sum:	**-0.03**	14.71	**-0.08**	**0.12**	0.00	**-0.06**
242.523	A	45.5331	6.11 5.83	-0.06	4.46	-4.18	-8.79	14.40	-15.23
	A	45.5331	6.11 5.83	0.06	4.46	-4.18	-8.79	-14.40	15.23
	B	46.3645	6.11 5.83	3.60	4.52	2.01	17.83	14.19	0.00
	B	46.3645	6.11 5.83	3.54	4.52	2.11	-8.91	-14.19	-15.44
	C	45.9038	6.11 5.83	-3.56	4.48	2.13	-8.84	14.30	15.30
	C	45.9038	6.11 5.83	-3.63	4.48	2.02	17.67	-14.30	0.00
			Sum:	**-0.06**	26.91	**-0.09**	**0.17**	0.00	**-0.13**
282.523	A	49.8828	6.16 5.83	-0.06	4.80	-3.86	-9.46	13.30	-16.39
	A	49.8828	6.16 5.83	0.06	4.80	-3.86	-9.46	-13.30	16.39
	B	50.6359	6.16 5.83	3.32	4.85	1.85	19.13	13.09	0.00
	B	50.6359	6.16 5.83	3.26	4.85	1.95	-9.56	-13.09	-16.57
	C	50.2810	6.15 5.83	-3.29	4.82	1.96	-9.51	13.19	16.46
	C	50.2810	6.15 5.83	-3.34	4.82	1.86	19.01	-13.19	0.00
			Sum:	**-0.05**	28.93	**-0.09**	**0.15**	0.00	**-0.10**

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
59.3854	A	138.03	59.39	3.776	1.54	3.409	1.70	3.046	1.90	2.690	2.16	2.343	2.47	2.011	2.88	1.702	3.40
	B	135.03	63.39	3.746	1.53	3.389	1.69	3.037	1.88	2.690	2.12	2.352	2.43	2.027	2.81	1.723	3.31
	C	133.03	57.39	3.778	1.43	3.411	1.58	3.048	1.77	2.690	2.00	2.341	2.30	2.007	2.68	1.695	3.17
122.523	A	138.03	122.52	7.494	2.60	6.932	2.81	6.377	3.05	5.830	3.33	5.295	3.66	4.776	4.06	4.278	4.52
	B	135.03	126.52	7.417	2.64	6.881	2.84	6.352	3.08	5.830	3.35	5.318	3.67	4.820	4.04	4.341	4.48
	C	133.03	120.52	7.470	2.47	6.917	2.66	6.369	2.89	5.830	3.15	5.301	3.46	4.787	3.83	4.292	4.27
182.523	A	138.03	182.52	6.908	4.31	6.545	4.54	6.186	4.80	5.830	5.09	5.482	5.41	5.134	5.77	4.796	6.17
	B	135.03	186.52	6.850	4.40	6.507	4.63	6.167	4.88	5.830	5.15	5.497	5.46	5.170	5.80	4.848	6.18
	C	133.03	180.52	6.876	4.16	6.524	4.38	6.175	4.62	5.830	4.89	5.489	5.19	5.153	5.52	4.823	5.89
242.523	A	238.05	242.52	7.143	9.15	6.693	9.75	6.254	10.42	5.830	11.17	5.423	11.99	5.036	12.89	4.671	13.86
	B	235.05	246.52	7.108	9.23	6.670	9.83	6.243	10.49	5.830	11.21	5.433	12.02	5.054	12.89	4.696	13.85
	C	233.05	240.52	7.134	8.90	6.687	9.48	6.252	10.13	5.830	10.85	5.425	11.64	5.039	12.51	4.674	13.46
282.523	A	238.05	282.52	6.935	11.10	6.557	11.72	6.188	12.40	5.830	13.15	5.484	13.96	5.151	14.83	4.834	15.77
	B	235.05	286.52	6.903	11.21	6.537	11.83	6.178	12.50	5.830	13.22	5.493	14.02	5.168	14.87	4.858	15.79
	C	233.05	280.52	6.923	10.83	6.550	11.44	6.185	12.10	5.830	12.81	5.487	13.60	5.156	14.44	4.840	15.36

Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	#	# Per Row	Clear Spacing in	Width or Diameter in	Perimeter in	Weight plf
******													
Safety Line 3/8"	A	No	No	Ar (CaAa)	300' - 0'	0.0000	0.5	1	1	0.5000	0.3750		0.22
Lighting Cable (3/8)	B	No	No	Ar (CaAa)	300' - 149'	0.0000	0.49	1	1	0.5000	0.4400		0.08
Lighting Cable (3/8)	B	No	No	Ar (CaAa)	149' - 0'	0.0000	0.49	2	2	0.5000	0.4400		0.08
ROHN Waveguide Brackets	B	No	No	Af (CaAa)	286' - 0'	0.0000	0	1	1	0.5000	1.7500		1.27
Feedline Ladder (Af)	A	No	No	Af (CaAa)	252' - 0'	0.0000	0	1	1	0.5000	3.0000		8.40
Step Pegs 5/8" Dia, 7" L, 30" S	A	No	No	Ar (CaAa)	300' - 0'	0.0000	0.5	1	1	0.5000	0.2917		1.22
******													
FB-L98B-002-100000(3/8)	B	No	No	Ar (CaAa)	286' - 0'	1.0000	-0.19	1	1	0.5000	0.3937		0.06
FB-L98B-002-100000(3/8)	B	No	No	Ar (CaAa)	286' - 0'	1.0000	0.19	1	1	0.5000	0.3937		0.06
LDF7-50A(1-5/8)	B	No	No	Ar (CaAa)	286' - 0'	0.0000	0	6	6	0.5000	1.9800		0.82
ATCB-B01(5/16)	B	No	No	Ar (CaAa)	286' - 0'	2.0000	-0.15	3	2	0.5000	0.3150		0.07
WR-VG86T(3/4)	B	No	No	Ar (CaAa)	286' - 0'	0.0000	-0.2	2	2	0.5000	0.7560		0.53
WR-VG86T(3/4)	B	No	No	Ar (CaAa)	286' - 0'	0.0000	0.2	2	2	0.5000	0.7560		0.53
WR-VG86ST-BRD(3/4)	B	No	No	Ar (CaAa)	286' - 0'	2.0000	0.11	3	3	0.5000	0.7950		0.58
FB-L98B-034-XXX(3/8)	B	No	No	Ar (CaAa)	286' - 0'	1.0000	0.19	1	1	0.5000	0.3937		0.06
******													
LDF7-50A(1-	A	No	No	Ar (CaAa)	250' - 0'	0.0000	0	6	4	0.5000	1.9800		0.82

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	#	# Per Row	Clear Spacing in	Width or Diameter in	Perimeter in	Weight plf
5/8)													
HB158-21U6S24-xxM_TMO(1-5/8)	A	No	No	Ar (CaAa)	250' - 0'	0.0000	0.12	2	2	0.5000	1.9960		2.50
******													
LDF4-50A(1/2)	A	No	No	Ar (CaAa)	250' - 0'	2.0000	0.05	4	4	0.5000	0.6250		0.15
NTM 2013929/256.9MM(2-1/8)	A	No	No	Ar (CaAa)	250' - 0'	0.0000	0.23	4	4	0.5000	2.2400		0.00
******													

Feed Line/Linear Appurtenances - Entered As Area

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	C_AA_A ft^2/ft	Weight plf
******								

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	300'-280'	A	0.000	0.000	1.333	0.000	0.03
		B	0.000	0.000	14.279	0.000	0.06
		C	0.000	0.000	0.000	0.000	0.00
T2	280'-260'	A	0.000	0.000	1.333	0.000	0.03
		B	0.000	0.000	45.544	0.000	0.21
		C	0.000	0.000	0.000	0.000	0.00
T3	260'-240'	A	0.000	0.000	34.665	0.000	0.23
		B	0.000	0.000	45.544	0.000	0.21
		C	0.000	0.000	0.000	0.000	0.00
T4	240'-220'	A	0.000	0.000	65.997	0.000	0.41
		B	0.000	0.000	45.544	0.000	0.21
		C	0.000	0.000	0.000	0.000	0.00
T5	220'-200'	A	0.000	0.000	65.997	0.000	0.41
		B	0.000	0.000	45.544	0.000	0.21
		C	0.000	0.000	0.000	0.000	0.00
T6	200'-180'	A	0.000	0.000	65.997	0.000	0.41
		B	0.000	0.000	45.544	0.000	0.21
		C	0.000	0.000	0.000	0.000	0.00
T7	180'-160'	A	0.000	0.000	65.997	0.000	0.41
		B	0.000	0.000	45.544	0.000	0.21
		C	0.000	0.000	0.000	0.000	0.00
T8	160'-140'	A	0.000	0.000	65.997	0.000	0.41
		B	0.000	0.000	45.940	0.000	0.21
		C	0.000	0.000	0.000	0.000	0.00
T9	140'-120'	A	0.000	0.000	65.997	0.000	0.41
		B	0.000	0.000	46.424	0.000	0.21
		C	0.000	0.000	0.000	0.000	0.00
T10	120'-100'	A	0.000	0.000	65.997	0.000	0.41
		B	0.000	0.000	46.424	0.000	0.21
		C	0.000	0.000	0.000	0.000	0.00
T11	100'-80'	A	0.000	0.000	65.997	0.000	0.41

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	46.424	0.000	0.21
		C	0.000	0.000	0.000	0.000	0.00
T12	80'-60'	A	0.000	0.000	65.997	0.000	0.41
		B	0.000	0.000	46.424	0.000	0.21
		C	0.000	0.000	0.000	0.000	0.00
T13	60'-40'	A	0.000	0.000	65.997	0.000	0.41
		B	0.000	0.000	46.424	0.000	0.21
		C	0.000	0.000	0.000	0.000	0.00
T14	40'-20'	A	0.000	0.000	65.997	0.000	0.41
		B	0.000	0.000	46.424	0.000	0.21
		C	0.000	0.000	0.000	0.000	0.00
T15	20'-4'9-27/32"	A	0.000	0.000	50.100	0.000	0.31
		B	0.000	0.000	35.241	0.000	0.16
		C	0.000	0.000	0.000	0.000	0.00
T16	4'9-27/32"-0'	A	0.000	0.000	15.898	0.000	0.10
		B	0.000	0.000	11.183	0.000	0.05
		C	0.000	0.000	0.000	0.000	0.00

Feed Line Center of Pressure

Section	Elevation ft	CP_X in	CP_Z in	CP_X Ice in	CP_Z Ice in
T1	300'-280'	2.1808	-1.7117	2.1808	-1.7117
T2	280'-260'	4.8457	-3.2717	4.8457	-3.2717
T3	260'-240'	1.1777	-4.3601	1.1777	-4.3601
T4	240'-220'	-0.5455	-5.9496	-0.5455	-5.9496
T5	220'-200'	-0.5814	-6.2596	-0.5814	-6.2596
T6	200'-180'	-0.5532	-6.0303	-0.5508	-6.0091
T7	180'-160'	-0.5623	-6.0953	-0.5601	-6.0762
T8	160'-140'	-0.4952	-6.0436	-0.4936	-6.0283
T9	140'-120'	-0.3840	-5.6428	-0.3834	-5.6352
T10	120'-100'	-0.3895	-5.6958	-0.3891	-5.6910
T11	100'-80'	-0.4131	-5.9714	-0.4130	-5.9701
T12	80'-60'	-0.4130	-5.9701	-0.4130	-5.9701
T13	60'-40'	-0.3981	-5.8261	-0.3981	-5.8261
T14	40'-20'	-0.4130	-5.9701	-0.4130	-5.9701
T15	20'-4'9-27/32"	-0.4115	-5.9537	-0.4115	-5.9537
T16	4'9-27/32"-0'	-0.6419	-4.3303	-0.6419	-4.3303

Shielding Factor Ka

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T1	2	Safety Line 3/8"	280.00 - 300.00	0.6000	0.6000
T1	3	Lighting Cable (3/8)	280.00 - 300.00	0.6000	0.6000
T1	5	ROHN Waveguide Brackets	280.00 - 286.00	0.6000	0.6000
T1	7	Step Pegs 5/8" Dia, 7" L, 30" S	280.00 - 300.00	0.6000	0.6000
T1	9	FB-L98B-002-100000(3/8)	280.00 - 286.00	0.6000	0.6000
T1	10	FB-L98B-002-100000(3/8)	280.00 - 286.00	0.6000	0.6000
T1	11	LDF7-50A(1-5/8)	280.00 - 286.00	0.6000	0.6000
T1	12	ATCB-B01(5/16)	280.00 - 286.00	0.6000	0.6000

Tower Section	*Feed Line Record No.*	*Description*	*Feed Line Segment Elev.*	*K_a No Ice*	*K_a Ice*
T1	13	WR-VG86T(3/4)	280.00 - 286.00	0.6000	0.6000
T1	14	WR-VG86T(3/4)	280.00 - 286.00	0.6000	0.6000
T1	15	WR-VG86ST-BRD(3/4)	280.00 - 286.00	0.6000	0.6000
T1	16	FB-L98B-034-XXX(3/8)	280.00 - 286.00	0.6000	0.6000
T2	2	Safety Line 3/8"	260.00 - 280.00	0.6000	0.6000
T2	3	Lighting Cable (3/8)	260.00 - 280.00	0.6000	0.6000
T2	5	ROHN Waveguide Brackets	260.00 - 280.00	0.6000	0.6000
T2	7	Step Pegs 5/8" Dia, 7" L, 30" S	260.00 - 280.00	0.6000	0.6000
T2	9	FB-L98B-002-100000(3/8)	260.00 - 280.00	0.6000	0.6000
T2	10	FB-L98B-002-100000(3/8)	260.00 - 280.00	0.6000	0.6000
T2	11	LDF7-50A(1-5/8)	260.00 - 280.00	0.6000	0.6000
T2	12	ATCB-B01(5/16)	260.00 - 280.00	0.6000	0.6000
T2	13	WR-VG86T(3/4)	260.00 - 280.00	0.6000	0.6000
T2	14	WR-VG86T(3/4)	260.00 - 280.00	0.6000	0.6000
T2	15	WR-VG86ST-BRD(3/4)	260.00 - 280.00	0.6000	0.6000
T2	16	FB-L98B-034-XXX(3/8)	260.00 - 280.00	0.6000	0.6000
T3	2	Safety Line 3/8"	240.00 - 260.00	0.6000	0.6000
T3	3	Lighting Cable (3/8)	240.00 - 260.00	0.6000	0.6000
T3	5	ROHN Waveguide Brackets	240.00 - 260.00	0.6000	0.6000
T3	6	Feedline Ladder (Af)	240.00 - 252.00	0.6000	0.6000
T3	7	Step Pegs 5/8" Dia, 7" L, 30" S	240.00 - 260.00	0.6000	0.6000
T3	9	FB-L98B-002-100000(3/8)	240.00 - 260.00	0.6000	0.6000
T3	10	FB-L98B-002-100000(3/8)	240.00 - 260.00	0.6000	0.6000
T3	11	LDF7-50A(1-5/8)	240.00 - 260.00	0.6000	0.6000
T3	12	ATCB-B01(5/16)	240.00 - 260.00	0.6000	0.6000
T3	13	WR-VG86T(3/4)	240.00 - 260.00	0.6000	0.6000
T3	14	WR-VG86T(3/4)	240.00 - 260.00	0.6000	0.6000
T3	15	WR-VG86ST-BRD(3/4)	240.00 - 260.00	0.6000	0.6000
T3	16	FB-L98B-034-XXX(3/8)	240.00 - 260.00	0.6000	0.6000
T3	18	LDF7-50A(1-5/8)	240.00 - 250.00	0.6000	0.6000
T3	19	HB158-21U6S24-xxM_TMO(1-5/8)	240.00 - 250.00	0.6000	0.6000
T3	21	LDF4-50A(1/2)	240.00 - 250.00	0.6000	0.6000
T3	22	NTM 201 3929/2 56.9MM(2-1/8)	240.00 - 250.00	0.6000	0.6000
T4	2	Safety Line 3/8"	220.00 - 240.00	0.6000	0.6000
T4	3	Lighting Cable (3/8)	220.00 -	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
			240.00		
T4	5	ROHN Waveguide Brackets	220.00 - 240.00	0.6000	0.6000
T4	6	Feedline Ladder (Af)	220.00 - 240.00	0.6000	0.6000
T4	7	Step Pegs 5/8" Dia, 7" L, 30" S	220.00 - 240.00	0.6000	0.6000
T4	9	FB-L98B-002-100000(3/8)	220.00 - 240.00	0.6000	0.6000
T4	10	FB-L98B-002-100000(3/8)	220.00 - 240.00	0.6000	0.6000
T4	11	LDF7-50A(1-5/8)	220.00 - 240.00	0.6000	0.6000
T4	12	ATCB-B01(5/16)	220.00 - 240.00	0.6000	0.6000
T4	13	WR-VG86T(3/4)	220.00 - 240.00	0.6000	0.6000
T4	14	WR-VG86T(3/4)	220.00 - 240.00	0.6000	0.6000
T4	15	WR-VG86ST-BRD(3/4)	220.00 - 240.00	0.6000	0.6000
T4	16	FB-L98B-034-XXX(3/8)	220.00 - 240.00	0.6000	0.6000
T4	18	LDF7-50A(1-5/8)	220.00 - 240.00	0.6000	0.6000
T4	19	HB158-21U6S24-xxM_TMO(1-5/8)	220.00 - 240.00	0.6000	0.6000
T4	21	LDF4-50A(1/2)	220.00 - 240.00	0.6000	0.6000
T4	22	NTM 201 3929/2 56.9MM(2-1/8)	220.00 - 240.00	0.6000	0.6000
T5	2	Safety Line 3/8"	200.00 - 220.00	0.6000	0.6000
T5	3	Lighting Cable (3/8)	200.00 - 220.00	0.6000	0.6000
T5	5	ROHN Waveguide Brackets	200.00 - 220.00	0.6000	0.6000
T5	6	Feedline Ladder (Af)	200.00 - 220.00	0.6000	0.6000
T5	7	Step Pegs 5/8" Dia, 7" L, 30" S	200.00 - 220.00	0.6000	0.6000
T5	9	FB-L98B-002-100000(3/8)	200.00 - 220.00	0.6000	0.6000
T5	10	FB-L98B-002-100000(3/8)	200.00 - 220.00	0.6000	0.6000
T5	11	LDF7-50A(1-5/8)	200.00 - 220.00	0.6000	0.6000
T5	12	ATCB-B01(5/16)	200.00 - 220.00	0.6000	0.6000
T5	13	WR-VG86T(3/4)	200.00 - 220.00	0.6000	0.6000
T5	14	WR-VG86T(3/4)	200.00 - 220.00	0.6000	0.6000
T5	15	WR-VG86ST-BRD(3/4)	200.00 - 220.00	0.6000	0.6000
T5	16	FB-L98B-034-XXX(3/8)	200.00 - 220.00	0.6000	0.6000
T5	18	LDF7-50A(1-5/8)	200.00 - 220.00	0.6000	0.6000
T5	19	HB158-21U6S24-xxM_TMO(1-5/8)	200.00 - 220.00	0.6000	0.6000
T5	21	LDF4-50A(1/2)	200.00 - 220.00	0.6000	0.6000
T5	22	NTM 201 3929/2 56.9MM(2-1/8)	200.00 - 220.00	0.6000	0.6000
T6	2	Safety Line 3/8"	180.00 - 200.00	0.6000	0.6000
T6	3	Lighting Cable (3/8)	180.00 - 200.00	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T6	5	ROHN Waveguide Brackets	180.00 - 200.00	0.6000	0.6000
T6	6	Feedline Ladder (Af)	180.00 - 200.00	0.6000	0.6000
T6	7	Step Pegs 5/8" Dia, 7" L, 30" S	180.00 - 200.00	0.6000	0.6000
T6	9	FB-L98B-002-100000(3/8)	180.00 - 200.00	0.6000	0.6000
T6	10	FB-L98B-002-100000(3/8)	180.00 - 200.00	0.6000	0.6000
T6	11	LDF7-50A(1-5/8)	180.00 - 200.00	0.6000	0.6000
T6	12	ATCB-B01(5/16)	180.00 - 200.00	0.6000	0.6000
T6	13	WR-VG86T(3/4)	180.00 - 200.00	0.6000	0.6000
T6	14	WR-VG86T(3/4)	180.00 - 200.00	0.6000	0.6000
T6	15	WR-VG86ST-BRD(3/4)	180.00 - 200.00	0.6000	0.6000
T6	16	FB-L98B-034-XXX(3/8)	180.00 - 200.00	0.6000	0.6000
T6	18	LDF7-50A(1-5/8)	180.00 - 200.00	0.6000	0.6000
T6	19	HB158-21U6S24-xxM_TMO(1-5/8)	180.00 - 200.00	0.6000	0.6000
T6	21	LDF4-50A(1/2)	180.00 - 200.00	0.6000	0.6000
T6	22	NTM 201 3929/2 56.9MM(2-1/8)	180.00 - 200.00	0.6000	0.6000
T7	2	Safety Line 3/8"	160.00 - 180.00	0.6000	0.6000
T7	3	Lighting Cable (3/8)	160.00 - 180.00	0.6000	0.6000
T7	5	ROHN Waveguide Brackets	160.00 - 180.00	0.6000	0.6000
T7	6	Feedline Ladder (Af)	160.00 - 180.00	0.6000	0.6000
T7	7	Step Pegs 5/8" Dia, 7" L, 30" S	160.00 - 180.00	0.6000	0.6000
T7	9	FB-L98B-002-100000(3/8)	160.00 - 180.00	0.6000	0.6000
T7	10	FB-L98B-002-100000(3/8)	160.00 - 180.00	0.6000	0.6000
T7	11	LDF7-50A(1-5/8)	160.00 - 180.00	0.6000	0.6000
T7	12	ATCB-B01(5/16)	160.00 - 180.00	0.6000	0.6000
T7	13	WR-VG86T(3/4)	160.00 - 180.00	0.6000	0.6000
T7	14	WR-VG86T(3/4)	160.00 - 180.00	0.6000	0.6000
T7	15	WR-VG86ST-BRD(3/4)	160.00 - 180.00	0.6000	0.6000
T7	16	FB-L98B-034-XXX(3/8)	160.00 - 180.00	0.6000	0.6000
T7	18	LDF7-50A(1-5/8)	160.00 - 180.00	0.6000	0.6000
T7	19	HB158-21U6S24-xxM_TMO(1-5/8)	160.00 - 180.00	0.6000	0.6000
T7	21	LDF4-50A(1/2)	160.00 - 180.00	0.6000	0.6000
T7	22	NTM 201 3929/2 56.9MM(2-1/8)	160.00 - 180.00	0.6000	0.6000
T8	2	Safety Line 3/8"	140.00 - 160.00	0.6000	0.6000
T8	3	Lighting Cable (3/8)	149.00 - 160.00	0.6000	0.6000
T8	4	Lighting Cable (3/8)	140.00 -	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
			149.00		
T8	5	ROHN Waveguide Brackets	140.00 - 160.00	0.6000	0.6000
T8	6	Feedline Ladder (Af)	140.00 - 160.00	0.6000	0.6000
T8	7	Step Pegs 5/8" Dia, 7" L, 30" S	140.00 - 160.00	0.6000	0.6000
T8	9	FB-L98B-002-100000(3/8)	140.00 - 160.00	0.6000	0.6000
T8	10	FB-L98B-002-100000(3/8)	140.00 - 160.00	0.6000	0.6000
T8	11	LDF7-50A(1-5/8)	140.00 - 160.00	0.6000	0.6000
T8	12	ATCB-B01(5/16)	140.00 - 160.00	0.6000	0.6000
T8	13	WR-VG86T(3/4)	140.00 - 160.00	0.6000	0.6000
T8	14	WR-VG86T(3/4)	140.00 - 160.00	0.6000	0.6000
T8	15	WR-VG86ST-BRD(3/4)	140.00 - 160.00	0.6000	0.6000
T8	16	FB-L98B-034-XXX(3/8)	140.00 - 160.00	0.6000	0.6000
T8	18	LDF7-50A(1-5/8)	140.00 - 160.00	0.6000	0.6000
T8	19	HB158-21U6S24-xxM_TMO(1-5/8)	140.00 - 160.00	0.6000	0.6000
T8	21	LDF4-50A(1/2)	140.00 - 160.00	0.6000	0.6000
T8	22	NTM 201 3929/2 56.9MM(2-1/8)	140.00 - 160.00	0.6000	0.6000
T9	2	Safety Line 3/8"	120.00 - 140.00	0.6000	0.6000
T9	4	Lighting Cable (3/8)	120.00 - 140.00	0.6000	0.6000
T9	5	ROHN Waveguide Brackets	120.00 - 140.00	0.6000	0.6000
T9	6	Feedline Ladder (Af)	120.00 - 140.00	0.6000	0.6000
T9	7	Step Pegs 5/8" Dia, 7" L, 30" S	120.00 - 140.00	0.6000	0.6000
T9	9	FB-L98B-002-100000(3/8)	120.00 - 140.00	0.6000	0.6000
T9	10	FB-L98B-002-100000(3/8)	120.00 - 140.00	0.6000	0.6000
T9	11	LDF7-50A(1-5/8)	120.00 - 140.00	0.6000	0.6000
T9	12	ATCB-B01(5/16)	120.00 - 140.00	0.6000	0.6000
T9	13	WR-VG86T(3/4)	120.00 - 140.00	0.6000	0.6000
T9	14	WR-VG86T(3/4)	120.00 - 140.00	0.6000	0.6000
T9	15	WR-VG86ST-BRD(3/4)	120.00 - 140.00	0.6000	0.6000
T9	16	FB-L98B-034-XXX(3/8)	120.00 - 140.00	0.6000	0.6000
T9	18	LDF7-50A(1-5/8)	120.00 - 140.00	0.6000	0.6000
T9	19	HB158-21U6S24-xxM_TMO(1-5/8)	120.00 - 140.00	0.6000	0.6000
T9	21	LDF4-50A(1/2)	120.00 - 140.00	0.6000	0.6000
T9	22	NTM 201 3929/2 56.9MM(2-1/8)	120.00 - 140.00	0.6000	0.6000
T10	2	Safety Line 3/8"	100.00 - 120.00	0.6000	0.6000
T10	4	Lighting Cable (3/8)	100.00 - 120.00	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T10	5	ROHN Waveguide Brackets	100.00 - 120.00	0.6000	0.6000
T10	6	Feedline Ladder (Af)	100.00 - 120.00	0.6000	0.6000
T10	7	Step Pegs 5/8" Dia, 7" L, 30" S	100.00 - 120.00	0.6000	0.6000
T10	9	FB-L98B-002-100000(3/8)	100.00 - 120.00	0.6000	0.6000
T10	10	FB-L98B-002-100000(3/8)	100.00 - 120.00	0.6000	0.6000
T10	11	LDF7-50A(1-5/8)	100.00 - 120.00	0.6000	0.6000
T10	12	ATCB-B01(5/16)	100.00 - 120.00	0.6000	0.6000
T10	13	WR-VG86T(3/4)	100.00 - 120.00	0.6000	0.6000
T10	14	WR-VG86T(3/4)	100.00 - 120.00	0.6000	0.6000
T10	15	WR-VG86ST-BRD(3/4)	100.00 - 120.00	0.6000	0.6000
T10	16	FB-L98B-034-XXX(3/8)	100.00 - 120.00	0.6000	0.6000
T10	18	LDF7-50A(1-5/8)	100.00 - 120.00	0.6000	0.6000
T10	19	HB158-21U6S24-xxM_TMO(1-5/8)	100.00 - 120.00	0.6000	0.6000
T10	21	LDF4-50A(1/2)	100.00 - 120.00	0.6000	0.6000
T10	22	NTM 201 3929/2 56.9MM(2-1/8)	100.00 - 120.00	0.6000	0.6000
T11	2	Safety Line 3/8"	80.00 - 100.00	0.6000	0.6000
T11	4	Lighting Cable (3/8)	80.00 - 100.00	0.6000	0.6000
T11	5	ROHN Waveguide Brackets	80.00 - 100.00	0.6000	0.6000
T11	6	Feedline Ladder (Af)	80.00 - 100.00	0.6000	0.6000
T11	7	Step Pegs 5/8" Dia, 7" L, 30" S	80.00 - 100.00	0.6000	0.6000
T11	9	FB-L98B-002-100000(3/8)	80.00 - 100.00	0.6000	0.6000
T11	10	FB-L98B-002-100000(3/8)	80.00 - 100.00	0.6000	0.6000
T11	11	LDF7-50A(1-5/8)	80.00 - 100.00	0.6000	0.6000
T11	12	ATCB-B01(5/16)	80.00 - 100.00	0.6000	0.6000
T11	13	WR-VG86T(3/4)	80.00 - 100.00	0.6000	0.6000
T11	14	WR-VG86T(3/4)	80.00 - 100.00	0.6000	0.6000
T11	15	WR-VG86ST-BRD(3/4)	80.00 - 100.00	0.6000	0.6000
T11	16	FB-L98B-034-XXX(3/8)	80.00 - 100.00	0.6000	0.6000
T11	18	LDF7-50A(1-5/8)	80.00 - 100.00	0.6000	0.6000
T11	19	HB158-21U6S24-xxM_TMO(1-5/8)	80.00 - 100.00	0.6000	0.6000
T11	21	LDF4-50A(1/2)	80.00 - 100.00	0.6000	0.6000
T11	22	NTM 201 3929/2 56.9MM(2-1/8)	80.00 - 100.00	0.6000	0.6000
T12	2	Safety Line 3/8"	60.00 - 80.00	0.6000	0.6000
T12	4	Lighting Cable (3/8)	60.00 - 80.00	0.6000	0.6000
T12	5	ROHN Waveguide	60.00 -	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
		Brackets	80.00		
T12	6	Feedline Ladder (Af)	60.00 - 80.00	0.6000	0.6000
T12	7	Step Pegs 5/8" Dia, 7" L, 30" S	60.00 - 80.00	0.6000	0.6000
T12	9	FB-L98B-002-100000(3/8)	60.00 - 80.00	0.6000	0.6000
T12	10	FB-L98B-002-100000(3/8)	60.00 - 80.00	0.6000	0.6000
T12	11	LDF7-50A(1-5/8)	60.00 - 80.00	0.6000	0.6000
T12	12	ATCB-B01(5/16)	60.00 - 80.00	0.6000	0.6000
T12	13	WR-VG86T(3/4)	60.00 - 80.00	0.6000	0.6000
T12	14	WR-VG86T(3/4)	60.00 - 80.00	0.6000	0.6000
T12	15	WR-VG86ST-BRD(3/4)	60.00 - 80.00	0.6000	0.6000
T12	16	FB-L98B-034-XXX(3/8)	60.00 - 80.00	0.6000	0.6000
T12	18	LDF7-50A(1-5/8)	60.00 - 80.00	0.6000	0.6000
T12	19	HB158-21U6S24-xxM_TMO(1-5/8)	60.00 - 80.00	0.6000	0.6000
T12	21	LDF4-50A(1/2)	60.00 - 80.00	0.6000	0.6000
T12	22	NTM 201 3929/2 56.9MM(2-1/8)	60.00 - 80.00	0.6000	0.6000
T13	2	Safety Line 3/8"	40.00 - 60.00	0.6000	0.6000
T13	4	Lighting Cable (3/8)	40.00 - 60.00	0.6000	0.6000
T13	5	ROHN Waveguide Brackets	40.00 - 60.00	0.6000	0.6000
T13	6	Feedline Ladder (Af)	40.00 - 60.00	0.6000	0.6000
T13	7	Step Pegs 5/8" Dia, 7" L, 30" S	40.00 - 60.00	0.6000	0.6000
T13	9	FB-L98B-002-100000(3/8)	40.00 - 60.00	0.6000	0.6000
T13	10	FB-L98B-002-100000(3/8)	40.00 - 60.00	0.6000	0.6000
T13	11	LDF7-50A(1-5/8)	40.00 - 60.00	0.6000	0.6000
T13	12	ATCB-B01(5/16)	40.00 - 60.00	0.6000	0.6000
T13	13	WR-VG86T(3/4)	40.00 - 60.00	0.6000	0.6000
T13	14	WR-VG86T(3/4)	40.00 - 60.00	0.6000	0.6000
T13	15	WR-VG86ST-BRD(3/4)	40.00 - 60.00	0.6000	0.6000
T13	16	FB-L98B-034-XXX(3/8)	40.00 - 60.00	0.6000	0.6000
T13	18	LDF7-50A(1-5/8)	40.00 - 60.00	0.6000	0.6000
T13	19	HB158-21U6S24-xxM_TMO(1-5/8)	40.00 - 60.00	0.6000	0.6000
T13	21	LDF4-50A(1/2)	40.00 - 60.00	0.6000	0.6000
T13	22	NTM 201 3929/2 56.9MM(2-1/8)	40.00 - 60.00	0.6000	0.6000
T14	2	Safety Line 3/8"	20.00 - 40.00	0.6000	0.6000
T14	4	Lighting Cable (3/8)	20.00 - 40.00	0.6000	0.6000
T14	5	ROHN Waveguide Brackets	20.00 - 40.00	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T14	6	Feedline Ladder (Af)	20.00 - 40.00	0.6000	0.6000
T14	7	Step Pegs 5/8" Dia, 7" L, 30" S	20.00 - 40.00	0.6000	0.6000
T14	9	FB-L98B-002-100000(3/8)	20.00 - 40.00	0.6000	0.6000
T14	10	FB-L98B-002-100000(3/8)	20.00 - 40.00	0.6000	0.6000
T14	11	LDF7-50A(1-5/8)	20.00 - 40.00	0.6000	0.6000
T14	12	ATCB-B01(5/16)	20.00 - 40.00	0.6000	0.6000
T14	13	WR-VG86T(3/4)	20.00 - 40.00	0.6000	0.6000
T14	14	WR-VG86T(3/4)	20.00 - 40.00	0.6000	0.6000
T14	15	WR-VG86ST-BRD(3/4)	20.00 - 40.00	0.6000	0.6000
T14	16	FB-L98B-034-XXX(3/8)	20.00 - 40.00	0.6000	0.6000
T14	18	LDF7-50A(1-5/8)	20.00 - 40.00	0.6000	0.6000
T14	19	HB158-21U6S24-xxM_TMO(1-5/8)	20.00 - 40.00	0.6000	0.6000
T14	21	LDF4-50A(1/2)	20.00 - 40.00	0.6000	0.6000
T14	22	NTM 201 3929/2 56.9MM(2-1/8)	20.00 - 40.00	0.6000	0.6000
T15	2	Safety Line 3/8"	4.82 - 20.00	0.6000	0.6000
T15	4	Lighting Cable (3/8)	4.82 - 20.00	0.6000	0.6000
T15	5	ROHN Waveguide Brackets	4.82 - 20.00	0.6000	0.6000
T15	6	Feedline Ladder (Af)	4.82 - 20.00	0.6000	0.6000
T15	7	Step Pegs 5/8" Dia, 7" L, 30" S	4.82 - 20.00	0.6000	0.6000
T15	9	FB-L98B-002-100000(3/8)	4.82 - 20.00	0.6000	0.6000
T15	10	FB-L98B-002-100000(3/8)	4.82 - 20.00	0.6000	0.6000
T15	11	LDF7-50A(1-5/8)	4.82 - 20.00	0.6000	0.6000
T15	12	ATCB-B01(5/16)	4.82 - 20.00	0.6000	0.6000
T15	13	WR-VG86T(3/4)	4.82 - 20.00	0.6000	0.6000
T15	14	WR-VG86T(3/4)	4.82 - 20.00	0.6000	0.6000
T15	15	WR-VG86ST-BRD(3/4)	4.82 - 20.00	0.6000	0.6000
T15	16	FB-L98B-034-XXX(3/8)	4.82 - 20.00	0.6000	0.6000
T15	18	LDF7-50A(1-5/8)	4.82 - 20.00	0.6000	0.6000
T15	19	HB158-21U6S24-xxM_TMO(1-5/8)	4.82 - 20.00	0.6000	0.6000
T15	21	LDF4-50A(1/2)	4.82 - 20.00	0.6000	0.6000
T15	22	NTM 201 3929/2 56.9MM(2-1/8)	4.82 - 20.00	0.6000	0.6000
T16	2	Safety Line 3/8"	0.00 - 4.82	0.4347	0.4347
T16	4	Lighting Cable (3/8)	0.00 - 4.82	0.4347	0.4347
T16	5	ROHN Waveguide Brackets	0.00 - 4.82	0.4347	0.4347
T16	6	Feedline Ladder (Af)	0.00 - 4.82	0.4347	0.4347
T16	7	Step Pegs 5/8" Dia, 7" L, 30" S	0.00 - 4.82	0.4347	0.4347
T16	9	FB-L98B-002-100000(3/8)	0.00 - 4.82	0.4347	0.4347
T16	10	FB-L98B-002-100000(3/8)	0.00 - 4.82	0.4347	0.4347
T16	11	LDF7-50A(1-5/8)	0.00 - 4.82	0.4347	0.4347
T16	12	ATCB-B01(5/16)	0.00 - 4.82	0.4347	0.4347
T16	13	WR-VG86T(3/4)	0.00 - 4.82	0.4347	0.4347
T16	14	WR-VG86T(3/4)	0.00 - 4.82	0.4347	0.4347
T16	15	WR-VG86ST-BRD(3/4)	0.00 - 4.82	0.4347	0.4347
T16	16	FB-L98B-034-XXX(3/8)	0.00 - 4.82	0.4347	0.4347
T16	18	LDF7-50A(1-5/8)	0.00 - 4.82	0.4347	0.4347
T16	19	HB158-21U6S24-xxM_TMO(1-5/8)	0.00 - 4.82	0.4347	0.4347
T16	21	LDF4-50A(1/2)	0.00 - 4.82	0.4347	0.4347
T16	22	NTM 201 3929/2	0.00 - 4.82	0.4347	0.4347

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
		56.9MM(2-1/8)			

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
******									
Flash Beacon Lighting	B	From Leg	0.00 0' 6"	0.0000	300'	No Ice	2.70	2.70	0.05
Side Light	A	From Leg	0.50 0' 0'	0.0000	149'	No Ice	0.26	0.26	0.01
Side Light	B	From Leg	0.50 0' 0'	0.0000	149'	No Ice	0.26	0.26	0.01
Side Light	C	From Leg	0.50 0' 0'	0.0000	149'	No Ice	0.26	0.26	0.01
******									
(2) NNH4-85B-R6 w/ Mount Pipe	A	From Leg	4.00 0' 5'	0.0000	286'	No Ice	7.55	4.23	0.12
(2) NNH4-85B-R6 w/ Mount Pipe	B	From Leg	4.00 0' 5'	0.0000	286'	No Ice	7.55	4.23	0.12
(2) NNH4-85B-R6 w/ Mount Pipe	C	From Leg	4.00 0' 5'	0.0000	286'	No Ice	7.55	4.23	0.12
SBNHH-1D65B w/ Mount Pipe	A	From Leg	4.00 0' 5'	0.0000	286'	No Ice	4.09	3.30	0.07
SBNHH-1D65B w/ Mount Pipe	B	From Leg	4.00 0' 5'	0.0000	286'	No Ice	4.09	3.30	0.07
SBNHH-1D65B w/ Mount Pipe	C	From Leg	4.00 0' 5'	0.0000	286'	No Ice	4.09	3.30	0.07
AIR 6472 B77G B77M_20240625	A	From Leg	4.00 0' 5'	0.0000	286'	No Ice	5.34	1.86	0.07
AIR 6472 B77G B77M_20240625	B	From Leg	4.00 0' 5'	0.0000	286'	No Ice	5.34	1.86	0.07
AIR 6472 B77G B77M_20240625	C	From Leg	4.00 0' 5'	0.0000	286'	No Ice	5.34	1.86	0.07
RADIO 4426	A	From Leg	4.00 0' 4'	0.0000	286'	No Ice	1.64	0.73	0.05
RADIO 4426	B	From Leg	4.00 0' 4'	0.0000	286'	No Ice	1.64	0.73	0.05
RADIO 4426	C	From Leg	4.00 0' 4'	0.0000	286'	No Ice	1.64	0.73	0.05
(2) RRUS 32	A	From Leg	4.00	0.0000	286'	No Ice	2.86	1.78	0.06

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
RRUS 32	C	From Leg	0' 3' 4.00	0.0000	286'	No Ice	2.86	1.78	0.06
(2) DC6-48-60-18-8F_070710	A	From Leg	0' 3' 1.00	0.0000	286'	No Ice	2.20	1.81	0.02
DC6-48-60-18-8C	B	From Leg	0' 3' 1.00	0.0000	286'	No Ice	2.74	2.74	0.03
RRUS 4478 B14	A	From Leg	0' 3' 4.00	0.0000	286'	No Ice	1.84	1.06	0.06
RRUS 4478 B14	B	From Leg	0' 4' 4.00	0.0000	286'	No Ice	1.84	1.06	0.06
Radio 4415 B2 B25_20240920	A	From Leg	0' 4' 4.00	0.0000	286'	No Ice	1.65	0.68	0.04
Radio 4415 B2 B25_20240920	B	From Leg	0' 5' 4.00	0.0000	286'	No Ice	1.65	0.68	0.04
Radio 4415 B2 B25_20240920	C	From Leg	0' 5' 4.00	0.0000	286'	No Ice	1.65	0.68	0.04
4490 B5/B12	A	From Leg	0' 5' 4.00	0.0000	286'	No Ice	2.20	0.85	0.02
4490 B5/B12	B	From Leg	0' 5' 4.00	0.0000	286'	No Ice	2.20	0.85	0.02
4490 B5/B12	C	From Leg	0' 5' 4.00	0.0000	286'	No Ice	2.20	0.85	0.02
Radio 4494 44B14 20B29 M01_2024	A	From Leg	0' 5' 4.00	0.0000	286'	No Ice	2.20	0.84	0.06
Sector Mount [SM 503-3]	A	None	0' 5'	0.0000	286'	No Ice	30.43	30.43	1.69
10' x 2.875" Mount Pipe	A	From Leg	4.00 0' 0'	0.0000	286'	No Ice	2.88	2.88	0.06
10' x 2.875" Mount Pipe	B	From Leg	4.00 0' 0'	0.0000	286'	No Ice	2.88	2.88	0.06
10' x 2.875" Mount Pipe	C	From Leg	4.00 0' 0'	0.0000	286'	No Ice	2.88	2.88	0.06
5' x 2" Pipe Mount	A	From Leg	2.00 0' 0'	0.0000	286'	No Ice	1.19	1.19	0.02
5' x 2" Pipe Mount	B	From Leg	2.00 0' 0'	0.0000	286'	No Ice	1.19	1.19	0.02
5' x 2" Pipe Mount	C	From Leg	2.00 0' 0'	0.0000	286'	No Ice	1.19	1.19	0.02
10' x 2.875" Mount Pipe	A	From Leg	2.00 0' 0'	0.0000	286'	No Ice	2.88	2.88	0.06
10' x 2.875" Mount Pipe	B	From Leg	2.00 0' 0'	0.0000	286'	No Ice	2.88	2.88	0.06
10' x 2.875" Mount Pipe	C	From Leg	2.00 0'	0.0000	286'	No Ice	2.88	2.88	0.06

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
******			0'						
AIR6449 B41_T-MOBILE w/ Mount Pipe	A	From Leg	4.00 0' 0'	0.0000	250'	No Ice	5.19	2.71	0.13
AIR6449 B41_T-MOBILE w/ Mount Pipe	B	From Leg	4.00 0' 0'	0.0000	250'	No Ice	5.19	2.71	0.13
AIR6449 B41_T-MOBILE w/ Mount Pipe	C	From Leg	4.00 0' 0'	0.0000	250'	No Ice	5.19	2.71	0.13
FFV4-65C-R3-V1_TMO w/ Mount Pipe	A	From Leg	4.00 0' 0'	0.0000	250'	No Ice	12.97	6.20	0.18
FFV4-65C-R3-V1_TMO w/ Mount Pipe	B	From Leg	4.00 0' 0'	0.0000	250'	No Ice	12.97	6.20	0.18
FFV4-65C-R3-V1_TMO w/ Mount Pipe	C	From Leg	4.00 0' 0'	0.0000	250'	No Ice	12.97	6.20	0.18
(2) RADIO 4449 B71 B85A_T-MOBILE	A	From Leg	4.00 0' 0'	0.0000	250'	No Ice	1.97	1.59	0.07
(2) RADIO 4449 B71 B85A_T-MOBILE	B	From Leg	4.00 0' 1'	0.0000	250'	No Ice	1.97	1.59	0.07
(4) RADIO 4449 B71 B85A_T-MOBILE	C	From Leg	4.00 0' -2'	0.0000	250'	No Ice	1.97	1.59	0.07
(2) RADIO 4424 B25_TMOV1	A	From Leg	4.00 0' 0'	0.0000	250'	No Ice	2.05	1.61	0.10
(2) RADIO 4424 B25_TMOV1	B	From Leg	4.00 0' -2'	0.0000	250'	No Ice	2.05	1.61	0.10
(2) RADIO 4424 B25_TMOV1	C	From Leg	4.00 0' 1'	0.0000	250'	No Ice	2.05	1.61	0.10
(2) RADIO 4415 B25_TMO	A	From Leg	4.00 0' -2'	0.0000	250'	No Ice	1.86	0.87	0.05
(2) RADIO 4415 B25_TMO	B	From Leg	4.00 0' 1'	0.0000	250'	No Ice	1.86	0.87	0.05
(2) RADIO 4415 B25_TMO	C	From Leg	4.00 0' 1'	0.0000	250'	No Ice	1.86	0.87	0.05
(4) FIBEAIR IP-20A RFU-D-HP	A	From Leg	4.00 0' 1'	0.0000	250'	No Ice	1.18	0.45	0.03
Sector Mount [SM 502-3]	C	None		0.0000	250'	No Ice	29.82	29.82	1.67
8'x2.875" Mount Pipe	A	From Leg	4.00 0' 0'	0.0000	250'	No Ice	2.30	2.30	0.00
6' x 2" Mount Pipe	C	From Leg	4.00 0' 0'	0.0000	250'	No Ice	1.43	1.43	0.02
***									

Dishes

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
******											
P-24A35GF-U	C	Grid	From Leg	4.00 0' 1'	59.0000		250'	3.00	No Ice	7.10	0.05
***											
VHLP4-11W/A	A	Paraboloid w/Shroud (HP)	From Leg	4.00 0' 1'	39.0000		250'	4.00	No Ice	12.57	0.07
******											

Load Combinations

Comb. No.	Description
1	Dead Only
2	1.2 Dead+1.0 Wind 0 deg - No Ice+1.0 Guy
3	1.2 Dead+1.0 Wind 30 deg - No Ice+1.0 Guy
4	1.2 Dead+1.0 Wind 60 deg - No Ice+1.0 Guy
5	1.2 Dead+1.0 Wind 90 deg - No Ice+1.0 Guy
6	1.2 Dead+1.0 Wind 120 deg - No Ice+1.0 Guy
7	1.2 Dead+1.0 Wind 150 deg - No Ice+1.0 Guy
8	1.2 Dead+1.0 Wind 180 deg - No Ice+1.0 Guy
9	1.2 Dead+1.0 Wind 210 deg - No Ice+1.0 Guy
10	1.2 Dead+1.0 Wind 240 deg - No Ice+1.0 Guy
11	1.2 Dead+1.0 Wind 270 deg - No Ice+1.0 Guy
12	1.2 Dead+1.0 Wind 300 deg - No Ice+1.0 Guy
13	1.2 Dead+1.0 Wind 330 deg - No Ice+1.0 Guy
14	Dead+Wind 0 deg - Service+Guy
15	Dead+Wind 30 deg - Service+Guy
16	Dead+Wind 60 deg - Service+Guy
17	Dead+Wind 90 deg - Service+Guy
18	Dead+Wind 120 deg - Service+Guy
19	Dead+Wind 150 deg - Service+Guy
20	Dead+Wind 180 deg - Service+Guy
21	Dead+Wind 210 deg - Service+Guy
22	Dead+Wind 240 deg - Service+Guy
23	Dead+Wind 270 deg - Service+Guy
24	Dead+Wind 300 deg - Service+Guy
25	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	300 - 280	Leg	Max Tension	4	9.83	0.25	-0.14
			Max. Compression	13	-20.01	0.04	-0.07
			Max. Mx	5	-2.46	0.73	0.07
			Max. My	2	-9.74	0.01	0.84
			Max. Vy	11	-1.11	0.45	0.06
			Max. Vx	8	-1.26	0.07	-0.72
		Diagonal	Max Tension	7	2.52	0.00	0.00
			Max. Compression	4	-2.64	0.00	0.00
			Max. Mx	11	0.37	0.00	0.00
			Max. My	11	0.13	0.00	-0.00
			Max. Vy	11	-0.00	0.00	0.00
			Max. Vx	11	0.00	0.00	0.00
		Top Girt	Max Tension	2	0.04	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. Compression	11	-0.08	0.00	0.00
			Max. Mx	2	0.04	0.00	0.00
			Max. My	11	-0.08	0.00	-0.00
			Max. Vy	2	-0.00	0.00	0.00
			Max. Vx	11	0.00	0.00	0.00
		Bottom Girt	Max Tension	8	0.66	0.00	0.00
			Max. Compression	1	0.00	0.00	0.00
			Max. Mx	6	0.44	0.00	0.00
			Max. My	11	0.28	0.00	-0.00
			Max. Vy	2	-0.00	0.00	0.00
			Max. Vx	11	0.00	0.00	0.00
		Guy A	Bottom Tension	8	14.24		
			Top Tension	8	14.56		
			Top Cable Vert	8	11.39		
			Top Cable Norm	8	9.07		
			Top Cable Tan	8	0.01		
			Bot Cable Vert	8	-10.60		
			Bot Cable Norm	8	9.50		
			Bot Cable Tan	8	0.01		
		Guy B	Bottom Tension	12	14.56		
			Top Tension	12	14.89		
			Top Cable Vert	12	11.76		
			Top Cable Norm	12	9.13		
			Top Cable Tan	12	0.01		
			Bot Cable Vert	12	-10.97		
			Bot Cable Norm	12	9.57		
			Bot Cable Tan	12	0.00		
		Guy C	Bottom Tension	4	14.76		
			Top Tension	4	15.08		
			Top Cable Vert	4	11.85		
			Top Cable Norm	4	9.33		
			Top Cable Tan	4	0.01		
			Bot Cable Vert	4	-11.07		
			Bot Cable Norm	4	9.77		
			Bot Cable Tan	4	0.00		
		Top Guy Pull-Off	Max Tension	4	5.61	0.00	0.00
			Max. Compression	10	-4.13	0.00	0.00
			Max. Mx	2	-3.98	0.01	0.00
			Max. My	11	4.80	0.00	-0.00
			Max. Vy	2	-0.01	0.00	0.00
			Max. Vx	11	0.00	0.00	0.00
		Torque Arm Top	Max Tension	9	8.20	0.00	0.00
			Max. Compression	9	-2.00	-35.86	-0.00
			Max. Mx	4	-0.43	-38.97	-0.00
			Max. My	11	0.56	-35.33	0.00
			Max. Vy	4	11.48	-38.97	-0.00
			Max. Vx	11	0.00	-35.33	0.00
T2	280 - 260	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	13	-20.02	-0.00	-0.13
			Max. Mx	4	-12.43	-0.44	0.41
			Max. My	8	-12.61	0.05	-0.57
			Max. Vy	4	-0.92	-0.44	0.41
			Max. Vx	8	-1.26	0.05	-0.57
		Diagonal	Max Tension	4	1.13	0.00	0.00
			Max. Compression	10	-1.56	0.00	0.00
			Max. Mx	11	1.04	0.00	0.00
			Max. My	11	0.30	0.00	-0.00
			Max. Vy	11	-0.00	0.00	0.00
			Max. Vx	11	0.00	0.00	0.00
		Top Girt	Max Tension	8	0.64	0.00	0.00
			Max. Compression	1	0.00	0.00	0.00
			Max. Mx	6	0.51	0.00	0.00
			Max. My	11	0.55	0.00	-0.00
			Max. Vy	2	-0.00	0.00	0.00
			Max. Vx	11	0.00	0.00	0.00
		Bottom Girt	Max Tension	13	0.33	0.00	0.00
			Max. Compression	1	0.00	0.00	0.00
			Max. Mx	10	0.25	0.00	0.00
			Max. My	11	0.28	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	10	-0.00	0.00	0.00
			Max. Vx	11	0.00	0.00	0.00
T3	260 - 240	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	3	-37.90	-0.16	-0.19
			Max. Mx	12	-26.02	1.41	1.21
			Max. My	8	-26.24	0.01	-1.70
			Max. Vy	12	2.97	1.41	1.21
			Max. Vx	8	-3.53	0.01	-1.70
		Diagonal	Max Tension	9	2.95	-0.02	-0.00
			Max. Compression	12	-4.59	0.02	0.02
			Max. Mx	11	1.37	-0.09	0.02
			Max. My	5	-4.37	-0.07	-0.02
			Max. Vy	11	-0.05	0.00	0.00
			Max. Vx	5	-0.01	0.00	0.00
		Top Girt	Max Tension	9	0.39	0.00	0.00
			Max. Compression	1	0.00	0.00	0.00
			Max. Mx	10	0.36	0.01	0.00
			Max. My	11	0.26	0.00	-0.00
			Max. Vy	10	-0.01	0.00	0.00
			Max. Vx	11	0.00	0.00	0.00
		Guy A	Bottom Tension	8	14.99		
			Top Tension	8	15.26		
			Top Cable Vert	8	11.13		
			Top Cable Norm	8	10.45		
			Top Cable Tan	8	0.00		
			Bot Cable Vert	8	-10.43		
			Bot Cable Norm	8	10.76		
			Bot Cable Tan	8	0.00		
		Guy B	Bottom Tension	12	16.11		
			Top Tension	12	16.39		
			Top Cable Vert	12	12.09		
			Top Cable Norm	12	11.07		
			Top Cable Tan	12	0.01		
			Bot Cable Vert	12	-11.39		
			Bot Cable Norm	12	11.39		
			Bot Cable Tan	12	0.00		
		Guy C	Bottom Tension	4	16.07		
			Top Tension	4	16.34		
			Top Cable Vert	4	11.96		
			Top Cable Norm	4	11.13		
			Top Cable Tan	4	0.01		
			Bot Cable Vert	4	-11.27		
			Bot Cable Norm	4	11.45		
			Bot Cable Tan	4	0.00		
		Top Guy Pull-Off	Max Tension	12	8.51	0.00	0.00
			Max. Compression	10	-5.56	0.00	0.00
			Max. Mx	6	-5.53	0.01	0.00
			Max. My	11	1.44	0.00	0.00
			Max. Vy	6	-0.01	0.00	0.00
			Max. Vx	11	-0.00	0.00	0.00
		Torque Arm Top	Max Tension	4	10.43	-15.16	-0.00
			Max. Compression	10	-3.84	-30.41	-0.00
			Max. Mx	12	-1.57	-39.37	0.00
			Max. My	11	8.74	-24.30	0.00
			Max. Vy	12	11.60	-39.37	0.00
			Max. Vx	11	0.00	-24.30	0.00
T4	240 - 220	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	12	-46.37	-0.05	0.52
			Max. Mx	12	-26.02	1.07	0.91
			Max. My	8	-26.24	0.01	-1.29
			Max. Vy	12	2.99	1.07	0.91
			Max. Vx	8	-3.55	0.01	-1.29
		Diagonal	Max Tension	12	2.33	0.00	0.00
			Max. Compression	6	-3.37	0.00	0.00
			Max. Mx	6	2.31	0.00	0.00
			Max. My	11	1.14	0.00	-0.00
			Max. Vy	6	-0.00	0.00	0.00
			Max. Vx	11	0.00	0.00	0.00
		Top Girt	Max Tension	12	1.68	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. Compression	1	0.00	0.00	0.00
			Max. Mx	6	1.27	0.00	0.00
			Max. My	11	1.29	0.00	0.00
			Max. Vy	6	-0.00	0.00	0.00
			Max. Vx	11	-0.00	0.00	0.00
		Bottom Girt	Max Tension	5	0.96	0.00	0.00
			Max. Compression	11	-0.31	0.00	0.00
			Max. Mx	11	0.24	0.00	0.00
			Max. My	5	0.47	0.00	-0.00
			Max. Vy	11	-0.00	0.00	0.00
			Max. Vx	5	0.00	0.00	0.00
T5	220 - 200	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	11	-49.28	0.35	-0.04
			Max. Mx	11	-35.52	0.73	-0.07
			Max. My	11	-37.21	0.07	-0.66
			Max. Vy	11	-2.05	-0.43	0.02
			Max. Vx	11	1.39	-0.05	0.58
		Diagonal	Max Tension	5	2.78	0.00	0.00
			Max. Compression	11	-2.97	0.00	0.00
			Max. Mx	6	-0.41	0.00	0.00
			Max. My	11	-2.97	0.00	-0.00
			Max. Vy	6	-0.00	0.00	0.00
			Max. Vx	11	0.00	0.00	0.00
		Top Girt	Max Tension	5	0.69	0.00	0.00
			Max. Compression	11	-0.42	0.00	0.00
			Max. Mx	6	0.45	0.00	0.00
			Max. My	5	0.68	0.00	-0.00
			Max. Vy	6	-0.00	0.00	0.00
			Max. Vx	5	0.00	0.00	0.00
		Bottom Girt	Max Tension	11	0.28	0.00	0.00
			Max. Compression	5	-0.22	0.00	0.00
			Max. Mx	6	-0.01	0.00	0.00
			Max. My	5	0.04	0.00	0.00
			Max. Vy	6	-0.00	0.00	0.00
			Max. Vx	5	-0.00	0.00	0.00
T6	200 - 180	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	5	-47.79	-0.18	0.21
			Max. Mx	11	-30.92	0.99	0.11
			Max. My	8	-38.00	-0.01	-0.89
			Max. Vy	11	-2.05	0.83	0.05
			Max. Vx	12	1.75	0.33	0.87
		Diagonal	Max Tension	5	4.19	0.00	0.00
			Max. Compression	11	-4.11	0.00	0.00
			Max. Mx	8	1.85	0.00	0.00
			Max. My	11	-0.39	0.00	-0.00
			Max. Vy	8	-0.00	0.00	0.00
			Max. Vx	11	0.00	0.00	0.00
		Top Girt	Max Tension	4	0.48	0.00	0.00
			Max. Compression	11	-0.28	0.00	0.00
			Max. Mx	6	0.34	0.00	0.00
			Max. My	5	0.21	0.00	0.00
			Max. Vy	6	-0.00	0.00	0.00
			Max. Vx	5	-0.00	0.00	0.00
		Bottom Girt	Max Tension	12	0.30	0.00	0.00
			Max. Compression	5	-0.19	0.00	0.00
			Max. Mx	10	0.18	0.00	0.00
			Max. My	4	-0.11	0.00	0.00
			Max. Vy	10	-0.00	0.00	0.00
			Max. Vx	4	-0.00	0.00	0.00
		Guy A	Bottom Tension	8	15.89		
			Top Tension	8	16.09		
			Top Cable Vert	8	12.97		
			Top Cable Norm	8	9.53		
			Top Cable Tan	8	0.00		
			Bot Cable Vert	8	-12.50		
			Bot Cable Norm	8	9.81		
			Bot Cable Tan	8	0.00		
		Guy B	Bottom Tension	11	18.20		
			Top Tension	11	18.41		

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	11	15.03		
			Top Cable Norm	11	10.64		
			Top Cable Tan	11	0.08		
			Bot Cable Vert	11	-14.57		
			Bot Cable Norm	11	10.90		
			Bot Cable Tan	11	0.16		
		Guy C	Bottom Tension	5	18.09		
			Top Tension	5	18.30		
			Top Cable Vert	5	14.84		
			Top Cable Norm	5	10.70		
			Top Cable Tan	5	0.08		
			Bot Cable Vert	5	-14.39		
			Bot Cable Norm	5	10.96		
			Bot Cable Tan	5	0.15		
		Top Guy Pull-Off	Max Tension	11	6.56	0.00	0.00
			Max. Compression	1	0.00	0.00	0.00
			Max. Mx	12	1.19	0.01	0.00
			Max. My	5	3.97	0.00	0.00
			Max. Vy	12	-0.01	0.00	0.00
			Max. Vx	5	-0.00	0.00	0.00
T7	180 - 160	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	11	-54.18	0.13	0.07
			Max. Mx	12	-42.54	-0.61	-0.41
			Max. My	12	-42.54	0.18	0.67
			Max. Vy	5	-1.37	-0.27	0.47
			Max. Vx	12	1.75	0.18	0.67
		Diagonal	Max Tension	12	2.55	0.00	0.00
			Max. Compression	4	-2.82	0.00	0.00
			Max. Mx	8	-0.19	0.00	0.00
			Max. My	11	-0.80	0.00	-0.00
			Max. Vy	8	-0.00	0.00	0.00
			Max. Vx	11	0.00	0.00	0.00
		Top Girt	Max Tension	3	0.45	0.00	0.00
			Max. Compression	11	-0.11	0.00	0.00
			Max. Mx	10	0.11	0.00	0.00
			Max. My	4	0.37	0.00	0.00
			Max. Vy	10	-0.00	0.00	0.00
			Max. Vx	4	-0.00	0.00	0.00
		Bottom Girt	Max Tension	13	0.19	0.00	0.00
			Max. Compression	5	-0.03	0.00	0.00
			Max. Mx	12	0.11	0.00	0.00
			Max. My	11	0.13	0.00	-0.00
			Max. Vy	2	-0.00	0.00	0.00
			Max. Vx	11	0.00	0.00	0.00
T8	160 - 140	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	11	-53.84	0.22	-0.07
			Max. Mx	5	-41.01	0.62	0.13
			Max. My	2	-39.03	-0.14	-0.53
			Max. Vy	5	1.96	0.34	-0.06
			Max. Vx	8	1.47	0.01	0.29
		Diagonal	Max Tension	5	2.87	0.00	0.00
			Max. Compression	11	-2.94	0.00	0.00
			Max. Mx	5	2.87	0.00	0.00
			Max. My	11	1.20	0.00	-0.00
			Max. Vy	5	-0.00	0.00	0.00
			Max. Vx	11	0.00	0.00	0.00
		Top Girt	Max Tension	7	0.24	0.00	0.00
			Max. Compression	11	-0.08	0.00	0.00
			Max. Mx	12	-0.00	0.00	0.00
			Max. My	11	-0.08	0.00	-0.00
			Max. Vy	2	-0.00	0.00	0.00
			Max. Vx	11	0.00	0.00	0.00
		Bottom Girt	Max Tension	7	0.71	0.00	0.00
			Max. Compression	5	-0.60	0.00	0.00
			Max. Mx	2	0.16	0.00	0.00
			Max. My	11	0.69	0.00	-0.00
			Max. Vy	2	-0.00	0.00	0.00
			Max. Vx	11	0.00	0.00	0.00
T9	140 - 120	Leg	Max Tension	1	0.00	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. Compression	6	-67.06	-0.57	-0.44
			Max. Mx	12	-29.38	0.90	0.51
			Max. My	8	-30.67	-0.01	-1.07
			Max. Vy	12	2.25	0.90	0.51
			Max. Vx	8	-2.53	-0.01	-1.07
		Diagonal	Max Tension	11	2.08	0.00	0.00
			Max. Compression	13	-3.13	0.00	0.00
			Max. Mx	11	1.84	0.00	0.00
			Max. My	11	0.82	0.00	-0.00
			Max. Vy	11	-0.00	0.00	0.00
			Max. Vx	11	0.00	0.00	0.00
		Top Girt	Max Tension	8	0.61	0.00	0.00
			Max. Compression	5	-0.32	0.00	0.00
			Max. Mx	2	0.48	0.00	0.00
			Max. My	11	0.45	0.00	-0.00
			Max. Vy	2	-0.00	0.00	0.00
			Max. Vx	11	0.00	0.00	0.00
		Bottom Girt	Max Tension	13	0.55	0.00	0.00
			Max. Compression	1	0.00	0.00	0.00
			Max. Mx	4	0.38	0.00	0.00
			Max. My	11	0.19	0.00	-0.00
			Max. Vy	4	-0.00	0.00	0.00
			Max. Vx	11	0.00	0.00	0.00
		Guy A	Bottom Tension	7	16.66		
			Top Tension	7	16.80		
			Top Cable Vert	7	11.26		
			Top Cable Norm	7	12.47		
			Top Cable Tan	7	0.05		
			Bot Cable Vert	7	-10.92		
			Bot Cable Norm	7	12.59		
			Bot Cable Tan	7	0.11		
		Guy B	Bottom Tension	11	20.23		
			Top Tension	11	20.37		
			Top Cable Vert	11	14.02		
			Top Cable Norm	11	14.78		
			Top Cable Tan	11	0.04		
			Bot Cable Vert	11	-13.67		
			Bot Cable Norm	11	14.90		
			Bot Cable Tan	11	0.12		
		Guy C	Bottom Tension	5	19.92		
			Top Tension	5	20.05		
			Top Cable Vert	5	13.56		
			Top Cable Norm	5	14.78		
			Top Cable Tan	5	0.04		
			Bot Cable Vert	5	-13.22		
			Bot Cable Norm	5	14.90		
			Bot Cable Tan	5	0.11		
		Top Guy Pull-Off	Max Tension	6	7.37	0.00	0.00
			Max. Compression	1	0.00	0.00	0.00
			Max. Mx	4	2.37	0.01	0.00
			Max. My	11	4.25	0.00	-0.00
			Max. Vy	4	-0.01	0.00	0.00
			Max. Vx	11	0.00	0.00	0.00
T10	120 - 100	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	6	-65.27	0.62	0.43
			Max. Mx	12	-36.06	0.81	0.46
			Max. My	8	-36.55	-0.00	-0.93
			Max. Vy	12	2.25	0.64	0.36
			Max. Vx	8	-2.53	-0.00	-0.78
		Diagonal	Max Tension	11	2.01	0.00	0.00
			Max. Compression	13	-2.32	0.00	0.00
			Max. Mx	13	-2.32	0.00	0.00
			Max. My	11	-0.31	0.00	-0.00
			Max. Vy	13	-0.00	0.00	0.00
			Max. Vx	11	0.00	0.00	0.00
		Top Girt	Max Tension	8	1.10	0.00	0.00
			Max. Compression	11	-0.10	0.00	0.00
			Max. Mx	4	0.90	0.00	0.00
			Max. My	11	0.23	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	4	-0.00	0.00	0.00
			Max. Vx	11	0.00	0.00	0.00
		Bottom Girt	Max Tension	13	0.60	0.00	0.00
			Max. Compression	5	-0.12	0.00	0.00
			Max. Mx	4	0.07	0.00	0.00
			Max. My	11	0.42	0.00	-0.00
			Max. Vy	4	-0.00	0.00	0.00
			Max. Vx	11	0.00	0.00	0.00
T11	100 - 80	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	11	-64.74	0.01	0.17
			Max. Mx	5	-42.29	0.52	0.06
			Max. My	9	-53.44	0.03	0.46
			Max. Vy	5	-1.40	-0.38	-0.10
			Max. Vx	8	-1.04	0.15	-0.21
		Diagonal	Max Tension	5	1.96	0.00	0.00
			Max. Compression	11	-2.14	0.00	0.00
			Max. Mx	6	-0.54	0.00	0.00
			Max. My	11	-0.26	0.00	-0.00
			Max. Vy	6	-0.00	0.00	0.00
			Max. Vx	11	0.00	0.00	0.00
		Top Girt	Max Tension	7	0.57	0.00	0.00
			Max. Compression	5	-0.37	0.00	0.00
			Max. Mx	4	0.11	0.00	0.00
			Max. My	11	0.55	0.00	-0.00
			Max. Vy	4	-0.00	0.00	0.00
			Max. Vx	11	0.00	0.00	0.00
		Bottom Girt	Max Tension	6	0.23	0.00	0.00
			Max. Compression	11	-0.02	0.00	0.00
			Max. Mx	4	0.16	0.00	0.00
			Max. My	11	0.05	0.00	-0.00
			Max. Vy	4	-0.00	0.00	0.00
			Max. Vx	11	0.00	0.00	0.00
T12	80 - 60	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	11	-63.91	-0.10	0.34
			Max. Mx	11	-56.23	-0.59	-0.35
			Max. My	11	-54.72	0.08	0.67
			Max. Vy	11	-1.59	-0.06	-0.32
			Max. Vx	12	-1.46	-0.20	-0.24
		Diagonal	Max Tension	6	2.79	0.00	0.00
			Max. Compression	6	-3.10	0.00	0.00
			Max. Mx	11	0.92	0.00	0.00
			Max. My	11	1.65	0.00	-0.00
			Max. Vy	11	-0.00	0.00	0.00
			Max. Vx	11	0.00	0.00	0.00
		Top Girt	Max Tension	11	0.31	0.00	0.00
			Max. Compression	5	-0.09	0.00	0.00
			Max. Mx	4	0.02	0.00	0.00
			Max. My	11	0.09	0.00	-0.00
			Max. Vy	4	-0.00	0.00	0.00
			Max. Vx	11	0.00	0.00	0.00
		Bottom Girt	Max Tension	6	0.93	0.00	0.00
			Max. Compression	12	-0.52	0.00	0.00
			Max. Mx	4	0.39	0.00	0.00
			Max. My	11	0.69	0.00	-0.00
			Max. Vy	8	-0.00	0.00	0.00
			Max. Vx	11	0.00	0.00	0.00
T13	60 - 40	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	11	-71.48	-0.32	-0.03
			Max. Mx	5	-50.71	-1.17	-0.35
			Max. My	2	-46.50	0.17	1.16
			Max. Vy	5	-1.71	-0.48	-0.43
			Max. Vx	12	-1.46	0.67	0.66
		Diagonal	Max Tension	11	3.70	0.00	0.00
			Max. Compression	5	-3.70	0.00	0.00
			Max. Mx	11	-2.92	0.00	0.00
			Max. My	5	-0.04	0.00	0.00
			Max. Vy	11	-0.00	0.00	0.00
			Max. Vx	5	-0.00	0.00	0.00
		Top Girt	Max Tension	5	0.63	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. Compression	1	0.00	0.00	0.00
			Max. Mx	4	0.05	0.00	0.00
			Max. My	11	0.47	0.00	-0.00
			Max. Vy	8	-0.00	0.00	0.00
			Max. Vx	11	0.00	0.00	0.00
		Bottom Girt	Max Tension	4	0.41	0.00	0.00
			Max. Compression	11	-0.07	0.00	0.00
			Max. Mx	6	0.37	0.00	0.00
			Max. My	11	-0.07	0.00	-0.00
			Max. Vy	8	-0.00	0.00	0.00
			Max. Vx	11	0.00	0.00	0.00
		Guy A	Bottom Tension	7	8.15		
			Top Tension	7	8.18		
			Top Cable Vert	7	3.28		
			Top Cable Norm	7	7.50		
			Top Cable Tan	7	0.02		
			Bot Cable Vert	7	-3.17		
			Bot Cable Norm	7	7.51		
			Bot Cable Tan	7	0.04		
		Guy B	Bottom Tension	11	9.86		
			Top Tension	11	9.89		
			Top Cable Vert	11	4.24		
			Top Cable Norm	11	8.93		
			Top Cable Tan	11	0.01		
			Bot Cable Vert	11	-4.13		
			Bot Cable Norm	11	8.95		
			Bot Cable Tan	11	0.05		
		Guy C	Bottom Tension	5	9.72		
			Top Tension	5	9.75		
			Top Cable Vert	5	3.90		
			Top Cable Norm	5	8.94		
			Top Cable Tan	5	0.01		
			Bot Cable Vert	5	-3.79		
			Bot Cable Norm	5	8.95		
			Bot Cable Tan	5	0.04		
		Top Guy Pull-Off	Max Tension	5	4.08	0.00	0.00
			Max. Compression	1	0.00	0.00	0.00
			Max. Mx	4	0.31	0.01	0.00
			Max. My	11	2.99	0.00	-0.00
			Max. Vy	8	-0.01	0.00	0.00
			Max. Vx	11	0.00	0.00	0.00
T14	40 - 20	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	11	-73.83	-0.09	0.30
			Max. Mx	5	-70.20	0.77	-0.25
			Max. My	5	-57.61	0.08	-0.81
			Max. Vy	5	-1.71	-0.28	-0.41
			Max. Vx	5	1.73	0.04	0.53
		Diagonal	Max Tension	5	2.51	0.00	0.00
			Max. Compression	5	-3.00	0.00	0.00
			Max. Mx	11	-1.25	0.00	0.00
			Max. My	5	0.97	0.00	0.00
			Max. Vy	11	-0.00	0.00	0.00
			Max. Vx	5	-0.00	0.00	0.00
		Top Girt	Max Tension	11	0.34	0.00	0.00
			Max. Compression	5	-0.06	0.00	0.00
			Max. Mx	6	0.12	0.00	0.00
			Max. My	11	0.34	0.00	-0.00
			Max. Vy	8	-0.00	0.00	0.00
			Max. Vx	11	0.00	0.00	0.00
		Bottom Girt	Max Tension	5	0.37	0.00	0.00
			Max. Compression	11	-0.03	0.00	0.00
			Max. Mx	6	0.29	0.00	0.00
			Max. My	11	0.13	0.00	-0.00
			Max. Vy	6	-0.00	0.00	0.00
			Max. Vx	11	0.00	0.00	0.00
T15	20 - 4.81771	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	11	-70.46	-0.12	0.71
			Max. Mx	11	-61.26	1.61	0.09
			Max. My	6	-57.55	-0.67	-1.34

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Vy	11	-4.11	1.61	0.09
			Max. Vx	10	4.60	0.56	-0.72
		Diagonal	Max Tension	5	3.42	0.00	0.00
			Max. Compression	11	-3.42	0.00	0.00
			Max. Mx	11	-0.30	0.00	0.00
			Max. My	5	2.57	0.00	0.00
			Max. Vy	11	-0.00	0.00	0.00
			Max. Vx	5	-0.00	0.00	0.00
		Top Girt	Max Tension	11	0.55	0.00	0.00
			Max. Compression	5	-0.14	0.00	0.00
			Max. Mx	6	0.19	0.00	0.00
			Max. My	11	0.20	0.00	-0.00
			Max. Vy	6	-0.00	0.00	0.00
			Max. Vx	11	0.00	0.00	0.00
		Bottom Girt	Max Tension	5	1.87	0.00	0.00
			Max. Compression	1	0.00	0.00	0.00
			Max. Mx	6	1.83	0.00	0.00
			Max. My	11	1.56	0.00	-0.00
			Max. Vy	6	-0.00	0.00	0.00
			Max. Vx	11	0.00	0.00	0.00
T16	4.81771 - 0	Leg	Max Tension	1	0.00	0.00	0.00
			Max. Compression	11	-65.60	0.05	1.11
			Max. Mx	6	-61.49	1.03	-0.27
			Max. My	11	-60.57	-0.63	2.00
			Max. Vy	5	1.21	-0.59	-0.93
			Max. Vx	11	-1.29	-0.63	2.00
		Horizontal	Max Tension	6	0.98	-0.45	-0.18
			Max. Compression	11	-0.46	-0.63	-0.36
			Max. Mx	11	-0.29	1.46	-0.02
			Max. My	11	-0.46	-0.63	-0.36
			Max. Vy	11	2.76	1.46	-0.02
			Max. Vx	11	0.49	1.25	0.06
		Top Girt	Max Tension	5	12.57	-0.50	-0.19
			Max. Compression	1	0.00	0.00	0.00
			Max. Mx	11	9.54	0.84	0.16
			Max. My	11	10.53	0.39	-0.52
			Max. Vy	6	-0.43	0.83	0.01
			Max. Vx	11	0.25	-0.11	0.33

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Mast	Max. Vert	11	168.61	1.84	0.15
	Max. H_x	11	168.61	1.84	0.15
	Max. H_z	2	158.14	-0.02	1.56
	Max. M_x	1	0.00	-0.01	-0.02
	Max. M_z	1	0.00	-0.01	-0.02
	Max. Torsion	5	5.44	-1.89	0.14
	Min. Vert	1	117.17	-0.01	-0.02
	Min. H_x	5	167.73	-1.89	0.14
	Min. H_z	8	156.43	0.00	-1.77
	Min. M_x	1	0.00	-0.01	-0.02
	Min. M_z	1	0.00	-0.01	-0.02
	Min. Torsion	11	-5.45	1.84	0.15
Guy C @ 135 ft Elev 2 ft Azimuth 240 deg	Max. Vert	10	-0.87	-0.56	0.32
	Max. H_x	10	-0.87	-0.56	0.32
	Max. H_z	5	-31.41	-30.30	17.13
	Min. Vert	5	-31.41	-30.30	17.13
	Min. H_x	5	-31.41	-30.30	17.13
	Min. H_z	10	-0.87	-0.56	0.32
Guy B @ 137 ft	Max. Vert	6	-0.94	0.57	0.33

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Elev -4 ft Azimuth 120 deg					
	Max. H_x	11	-32.37	30.26	17.10
	Max. H_z	11	-32.37	30.26	17.10
	Min. Vert	11	-32.37	30.26	17.10
	Min. H_x	6	-0.94	0.57	0.33
	Min. H_z	6	-0.94	0.57	0.33
Guy A @ 140 ft Elev 0 ft Azimuth 0 deg	Max. Vert	2	-0.94	0.00	-0.74
	Max. H_x	11	-16.21	0.67	-18.20
	Max. H_z	2	-0.94	0.00	-0.74
	Min. Vert	7	-26.40	-0.29	-29.76
	Min. H_x	5	-16.22	-0.66	-18.23
	Min. H_z	7	-26.40	-0.29	-29.76
Guy C @ 235 ft Elev 2 ft Azimuth 240 deg	Max. Vert	10	-5.40	-3.54	2.04
	Max. H_x	10	-5.40	-3.54	2.04
	Max. H_z	4	-43.30	-35.64	20.60
	Min. Vert	4	-43.30	-35.64	20.60
	Min. H_x	4	-43.30	-35.64	20.60
	Min. H_z	10	-5.40	-3.54	2.04
Guy B @ 237 ft Elev -4 ft Azimuth 120 deg	Max. Vert	6	-5.91	3.85	2.22
	Max. H_x	12	-43.33	35.22	20.36
	Max. H_z	12	-43.33	35.22	20.36
	Min. Vert	12	-43.33	35.22	20.36
	Min. H_x	6	-5.91	3.85	2.22
	Min. H_z	6	-5.91	3.85	2.22
Guy A @ 240 ft Elev 0 ft Azimuth 0 deg	Max. Vert	2	-5.54	-0.00	-4.30
	Max. H_x	11	-24.61	1.91	-23.19
	Max. H_z	2	-5.54	-0.00	-4.30
	Min. Vert	8	-41.77	0.01	-40.27
	Min. H_x	5	-24.40	-1.90	-22.99
	Min. H_z	8	-41.77	0.01	-40.27

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	117.17	0.01	0.02	0.00	0.00	0.00
1.2 Dead+1.0 Wind 0 deg - No Ice+1.0 Guy	158.14	0.02	-1.56	0.00	0.00	-0.32
1.2 Dead+1.0 Wind 30 deg - No Ice+1.0 Guy	160.27	0.91	-1.34	0.00	0.00	-0.54
1.2 Dead+1.0 Wind 60 deg - No Ice+1.0 Guy	159.41	1.65	-0.93	0.00	0.00	-3.52
1.2 Dead+1.0 Wind 90 deg - No Ice+1.0 Guy	167.73	1.89	-0.14	0.00	0.00	-5.44
1.2 Dead+1.0 Wind 120 deg - No Ice+1.0 Guy	164.32	1.51	0.90	0.00	0.00	-3.49
1.2 Dead+1.0 Wind 150 deg - No Ice+1.0 Guy	159.28	0.75	1.53	0.00	0.00	-0.33
1.2 Dead+1.0 Wind 180 deg - No Ice+1.0 Guy	156.43	-0.00	1.77	0.00	0.00	0.35
1.2 Dead+1.0 Wind 210 deg - No Ice+1.0 Guy	159.37	-0.73	1.50	0.00	0.00	0.55
1.2 Dead+1.0 Wind 240 deg - No Ice+1.0 Guy	163.37	-1.43	0.87	0.00	0.00	3.34
1.2 Dead+1.0 Wind 270 deg	168.61	-1.84	-0.15	0.00	0.00	5.45

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 Wind 300 deg	159.89	-1.70	-0.96	0.00	0.00	3.71
- No Ice+1.0 Guy 1.2 Dead+1.0 Wind 330 deg	160.76	-0.90	-1.34	0.00	0.00	0.34
- No Ice+1.0 Guy Dead+Wind 0 deg - Service+Guy	118.84	0.01	-0.49	0.00	0.00	-0.09
Dead+Wind 30 deg - Service+Guy	118.83	0.26	-0.42	0.00	0.00	-0.16
Dead+Wind 60 deg - Service+Guy	118.90	0.48	-0.25	0.00	0.00	-0.96
Dead+Wind 90 deg - Service+Guy	118.89	0.63	0.02	0.00	0.00	-1.53
Dead+Wind 120 deg - Service+Guy	118.80	0.52	0.32	0.00	0.00	-1.01
Dead+Wind 150 deg - Service+Guy	118.67	0.27	0.47	0.00	0.00	-0.10
Dead+Wind 180 deg - Service+Guy	118.64	0.01	0.52	0.00	0.00	0.10
Dead+Wind 210 deg - Service+Guy	118.64	-0.25	0.46	0.00	0.00	0.16
Dead+Wind 240 deg - Service+Guy	118.71	-0.48	0.31	0.00	0.00	0.96
Dead+Wind 270 deg - Service+Guy	118.76	-0.61	0.02	0.00	0.00	1.53
Dead+Wind 300 deg - Service+Guy	118.79	-0.49	-0.27	0.00	0.00	1.01
Dead+Wind 330 deg - Service+Guy	118.76	-0.25	-0.43	0.00	0.00	0.10

Solution Summary

	Sum of Applied Forces			Sum of Reactions			
Load Comb.	PX K	PY K	PZ K	PX K	PY K	PZ K	% Error
1	0.00	-37.56	0.00	-0.00	37.56	0.00	0.005%
2	0.19	-44.24	-54.07	-0.19	44.24	54.07	0.004%
3	27.30	-43.74	-47.37	-27.30	43.74	47.37	0.003%
4	49.71	-43.26	-28.88	-49.71	43.26	28.88	0.001%
5	61.41	-43.74	-0.23	-61.41	43.74	0.23	0.002%
6	50.78	-44.22	29.26	-50.78	44.22	-29.26	0.001%
7	26.97	-43.75	47.34	-26.97	43.75	-47.34	0.002%
8	-0.25	-43.29	53.90	0.25	43.29	-53.90	0.002%
9	-27.41	-43.78	47.46	27.40	43.78	-47.46	0.003%
10	-50.04	-44.27	29.10	50.04	44.27	-29.10	0.001%
11	-61.48	-43.79	0.31	61.48	43.79	-0.31	0.001%
12	-50.53	-43.31	-29.16	50.53	43.31	29.16	0.001%
13	-27.05	-43.77	-47.30	27.05	43.77	47.30	0.003%
14	0.05	-37.68	-14.00	-0.05	37.68	14.00	0.008%
15	7.07	-37.56	-12.27	-7.07	37.56	12.27	0.007%
16	12.87	-37.43	-7.48	-12.87	37.43	7.48	0.002%
17	15.91	-37.55	-0.06	-15.90	37.55	0.06	0.003%
18	13.15	-37.68	7.58	-13.15	37.68	-7.58	0.003%
19	6.99	-37.56	12.26	-6.99	37.56	-12.26	0.007%
20	-0.06	-37.44	13.96	0.06	37.44	-13.96	0.007%
21	-7.10	-37.57	12.29	7.10	37.57	-12.29	0.007%
22	-12.96	-37.69	7.54	12.96	37.69	-7.54	0.002%
23	-15.92	-37.57	0.08	15.92	37.57	-0.08	0.003%
24	-13.09	-37.44	-7.55	13.09	37.44	7.55	0.003%
25	-7.01	-37.56	-12.25	7.00	37.56	12.25	0.002%

Non-Linear Convergence Results

Load Combination	Converged?	Number of Cycles	Displacement Tolerance	Force Tolerance
1	Yes	9	0.00000001	0.00007207
2	Yes	18	0.00009774	0.00009877
3	Yes	18	0.00000001	0.00007714
4	Yes	14	0.00000001	0.00006783
5	Yes	19	0.00000001	0.00009904
6	Yes	20	0.00000001	0.00005071
7	Yes	18	0.00000001	0.00006114
8	Yes	13	0.00000001	0.00007189
9	Yes	18	0.00000001	0.00007647
10	Yes	20	0.00000001	0.00005821
11	Yes	20	0.00000001	0.00005912
12	Yes	14	0.00000001	0.00009101
13	Yes	18	0.00007440	0.00007773
14	Yes	10	0.00000001	0.00009862
15	Yes	10	0.00000001	0.00009196
16	Yes	11	0.00000001	0.00005433
17	Yes	11	0.00000001	0.00006730
18	Yes	11	0.00000001	0.00005624
19	Yes	10	0.00000001	0.00009693
20	Yes	10	0.00000001	0.00008750
21	Yes	10	0.00000001	0.00009009
22	Yes	11	0.00000001	0.00005259
23	Yes	11	0.00000001	0.00007038
24	Yes	11	0.00000001	0.00006291
25	Yes	11	0.00000001	0.00004831

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	300 - 280	1.188	16	0.0286	0.1517
T2	280 - 260	1.200	24	0.0341	0.1555
T3	260 - 240	1.291	24	0.0354	0.1864
T4	240 - 220	1.395	24	0.0475	0.2007
T5	220 - 200	1.553	24	0.0334	0.2640
T6	200 - 180	1.574	23	0.0148	0.4565
T7	180 - 160	1.484	23	0.0156	0.5946
T8	160 - 140	1.419	23	0.0270	0.7053
T9	140 - 120	1.232	23	0.0365	0.7612
T10	120 - 100	1.076	23	0.0113	0.7691
T11	100 - 80	1.087	23	0.0046	0.7621
T12	80 - 60	1.038	23	0.0215	0.7001
T13	60 - 40	0.868	23	0.0310	0.5958
T14	40 - 20	0.718	23	0.0446	0.4657
T15	20 - 4.81771	0.421	23	0.0733	0.2960
T16	4.81771 - 0	0.091	23	0.0874	0.1381

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
300'	Flash Beacon Lighting	16	1.188	0.0286	0.1517	206843
286'	(2) NNH4-85B-R6 w/ Mount Pipe	16	1.186	0.0336	0.1513	73872
282'6-1/4"	Guy	24	1.192	0.0341	0.1532	59947
251'	P-24A35GF-U	24	1.332	0.0414	0.1939	90248
250'	AIR6449 B41_T-MOBILE w/ Mount Pipe	24	1.337	0.0422	0.1945	78272
242'6-1/4"	Guy	24	1.378	0.0468	0.1988	39104
182'6-1/4"	Guy	23	1.495	0.0150	0.5802	48008

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
149'	Side Light	23	1.327	0.0357	0.7437	58463
122'6-1/4"	Guy	23	1.086	0.0146	0.7690	20278
59'4-11/16"	Guy	23	0.863	0.0313	0.5923	48114

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	300 - 280	7.719	4	0.1993	0.8445
T2	280 - 260	7.483	4	0.2174	0.8577
T3	260 - 240	7.863	11	0.2147	0.9671
T4	240 - 220	8.788	11	0.2713	1.0136
T5	220 - 200	9.938	11	0.2100	1.2179
T6	200 - 180	10.375	11	0.1121	1.8131
T7	180 - 160	10.102	11	0.1139	2.2185
T8	160 - 140	9.726	11	0.1541	2.5435
T9	140 - 120	8.742	11	0.1988	2.6661
T10	120 - 100	7.827	11	0.1018	2.6460
T11	100 - 80	7.529	11	0.0862	2.6422
T12	80 - 60	6.929	11	0.1776	2.4448
T13	60 - 40	5.738	6	0.2425	2.0616
T14	40 - 20	4.457	11	0.3236	1.6224
T15	20 - 4.81771	2.485	11	0.4536	1.0384
T16	4.81771 - 0	0.530	11	0.5146	0.4904

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
300'	Flash Beacon Lighting	4	7.719	0.1993	0.8445	46602
286'	(2) NNH4-85B-R6 w/ Mount Pipe	4	7.536	0.2156	0.8427	16644
282'6-1/4"	Guy	4	7.503	0.2172	0.8496	13508
251'	P-24A35GF-U	11	8.249	0.2421	0.9922	18920
250'	AIR6449 B41_T-MOBILE w/ Mount Pipe	11	8.294	0.2456	0.9940	16706
242'6-1/4"	Guy	11	8.653	0.2673	1.0074	9106
182'6-1/4"	Guy	11	10.144	0.1144	2.1749	12443
149'	Side Light	11	9.240	0.1876	2.6388	11508
122'6-1/4"	Guy	11	7.905	0.1146	2.6475	5147
59'4-11/16"	Guy	6	5.701	0.2453	2.0495	14800

Bolt Design Data

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt K	Allowable Load per Bolt K	Ratio Load / Allowable	Allowable Ratio	Criteria
T1	300	Leg	A325X	0.7500	4	1.67	30.10	0.055	1.05	Bolt Tension
		Diagonal	A325X	0.5000	1	2.64	9.78	0.270	1.05	Gusset Bearing
		Top Girt	A325X	0.5000	1	0.35	9.78	0.035	1.05	Gusset Bearing
		Bottom Girt	A325X	0.5000	1	0.66	9.78	0.068	1.05	Gusset Bearing
		Top Guy Pull-Off@282.523	A325X	0.6250	2	2.81	11.07	0.253	1.05	Gusset Bearing
		Torque Arm	A325X	0.8750	2	4.10	13.21	0.310	1.05	Gusset Bearing

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt K	Allowable Load per Bolt K	Ratio Load / Allowable	Allowable Ratio	Criteria
		Top@282.523								
T2	280	Leg	A325X	0.7500	4	1.47	30.10	0.049	1.05	Bolt Tension
		Diagonal	A325X	0.5000	1	1.56	9.78	0.159	1.05	Gusset Bearing
		Top Girt	A325X	0.5000	1	0.64	9.78	0.066	1.05	Gusset Bearing
		Bottom Girt	A325X	0.5000	1	0.35	9.78	0.035	1.05	Gusset Bearing
T3	260	Leg	A325X	0.7500	4	3.16	30.10	0.105	1.05	Bolt Tension
		Diagonal	A325X	0.6250	1	2.95	9.11	0.324	1.05	Member Block Shear
		Top Girt	A325X	0.6250	1	0.66	16.96	0.039	1.05	Gusset Bearing
		Top Guy Pull-Off@242.523	A325X	0.6250	2	4.25	16.45	0.259	1.05	Member Block Shear
		Torque Arm Top@242.523	A325X	0.8750	2	5.21	26.10	0.200	1.05	Gusset Bearing
T4	240	Leg	A325X	0.7500	4	3.86	30.10	0.128	1.05	Bolt Tension
		Diagonal	A325X	0.5000	1	3.37	9.78	0.344	1.05	Gusset Bearing
		Top Girt	A325X	0.5000	1	1.68	9.78	0.172	1.05	Gusset Bearing
		Bottom Girt	A325X	0.5000	1	0.96	9.78	0.098	1.05	Gusset Bearing
T5	220	Leg	A325X	0.7500	4	3.77	30.10	0.125	1.05	Bolt Tension
		Diagonal	A325X	0.5000	1	2.78	5.92	0.470	1.05	Member Bearing
		Top Girt	A325X	0.5000	1	0.85	5.92	0.144	1.05	Member Bearing
		Bottom Girt	A325X	0.5000	1	0.85	5.92	0.144	1.05	Member Bearing
T6	200	Leg	A325X	0.7500	4	3.85	30.10	0.128	1.05	Bolt Tension
		Diagonal	A325X	0.5000	1	4.19	5.92	0.709	1.05	Member Bearing
		Top Girt	A325X	0.5000	1	0.83	5.92	0.140	1.05	Member Bearing
		Bottom Girt	A325X	0.5000	1	0.83	5.92	0.140	1.05	Member Bearing
		Top Guy Pull-Off@182.523	A325X	0.6250	2	3.28	16.45	0.199	1.05	Member Block Shear
T7	180	Leg	A325X	0.7500	4	4.46	30.10	0.148	1.05	Bolt Tension
		Diagonal	A325X	0.5000	1	2.55	5.92	0.430	1.05	Member Bearing
		Top Girt	A325X	0.5000	1	0.94	5.92	0.159	1.05	Member Bearing
		Bottom Girt	A325X	0.5000	1	0.94	5.92	0.159	1.05	Member Bearing
T8	160	Leg	A325X	0.7500	4	3.76	30.10	0.125	1.05	Bolt Tension
		Diagonal	A325X	0.5000	1	2.87	5.92	0.485	1.05	Member Bearing
		Top Girt	A325X	0.5000	1	0.93	5.92	0.158	1.05	Member Bearing
		Bottom Girt	A325X	0.5000	1	0.93	5.92	0.158	1.05	Member Bearing
T9	140	Leg	A325X	0.7500	4	5.44	30.10	0.181	1.05	Bolt Tension
		Diagonal	A325X	0.5000	1	3.13	7.02	0.446	1.05	Member Bearing
		Top Girt	A325X	0.5000	1	1.16	5.92	0.196	1.05	Member Bearing
		Bottom Girt	A325X	0.5000	1	1.16	5.92	0.196	1.05	Member Bearing
		Top Guy Pull-Off@122.523	A325X	0.6250	2	3.68	16.45	0.224	1.05	Member Block Shear
T10	120	Leg	A325X	0.7500	4	4.87	30.10	0.162	1.05	Bolt Tension
		Diagonal	A325X	0.5000	1	2.01	5.92	0.340	1.05	Member Bearing
		Top Girt	A325X	0.5000	1	1.13	5.92	0.191	1.05	Member Bearing
		Bottom Girt	A325X	0.5000	1	1.13	5.92	0.191	1.05	Member Bearing
T11	100	Leg	A325X	0.7500	4	5.33	30.10	0.177	1.05	Bolt Tension
		Diagonal	A325X	0.5000	1	1.96	5.92	0.331	1.05	Member Bearing
		Top Girt	A325X	0.5000	1	1.12	5.92	0.189	1.05	Member Bearing

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt K	Allowable Load per Bolt K	Ratio Load / Allowable	Allowable Ratio	Criteria
		Bottom Girt	A325X	0.5000	1	1.12	5.92	0.189	1.05	Member Bearing
T12	80	Leg	A325X	0.7500	4	4.56	30.10	0.152	1.05	Bolt Tension
		Diagonal	A325X	0.5000	1	2.79	5.92	0.471	1.05	Member Bearing
		Top Girt	A325X	0.5000	1	1.11	5.92	0.187	1.05	Member Bearing
		Bottom Girt	A325X	0.5000	1	1.11	5.92	0.187	1.05	Member Bearing
T13	60	Leg	A325X	0.7500	4	5.92	30.10	0.197	1.05	Bolt Tension
		Diagonal	A325X	0.5000	1	3.70	5.92	0.625	1.05	Member Bearing
		Top Girt	A325X	0.5000	1	1.24	5.92	0.209	1.05	Member Bearing
		Bottom Girt	A325X	0.5000	1	1.24	5.92	0.209	1.05	Member Bearing
		Top Guy Pull-Off@59.3854	A325X	0.7500	2	2.04	23.82	0.086	1.05	Gusset Bearing
T14	40	Leg	A325X	0.7500	4	5.87	30.10	0.195	1.05	Bolt Tension
		Diagonal	A325X	0.5000	1	3.00	7.02	0.427	1.05	Member Bearing
		Top Girt	A325X	0.5000	1	1.28	5.92	0.216	1.05	Member Bearing
		Bottom Girt	A325X	0.5000	1	1.28	5.92	0.216	1.05	Member Bearing
T15	20	Leg	A325X	0.8750	4	5.10	41.56	0.123	1.05	Bolt Tension
		Diagonal	A325X	0.5000	1	3.42	5.92	0.578	1.05	Member Bearing
		Top Girt	A325X	0.5000	1	1.22	5.92	0.206	1.05	Member Bearing
		Bottom Girt	A325X	0.5000	1	1.87	5.92	0.315	1.05	Member Bearing

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.
T1	282'6-1/4" (A) (690)	3/4 [ECP-24000] EHS	5.83	58.30	14.43	36.73	0.952	2.424
	282'6-1/4" (A) (691)	3/4 [ECP-24000] EHS	5.83	58.30	14.56	36.73	0.952	2.402
	282'6-1/4" (B) (686)	3/4 [ECP-24000] EHS	5.83	58.30	14.15	36.73	0.952	2.473
	282'6-1/4" (B) (687)	3/4 [ECP-24000] EHS	5.83	58.30	14.89	36.73	0.952	2.350
	282'6-1/4" (C) (679)	3/4 [ECP-24000] EHS	5.83	58.30	15.08	36.73	0.952	2.319
	282'6-1/4" (C) (680)	3/4 [ECP-24000] EHS	5.83	58.30	14.36	36.73	0.952	2.436
T3	242'6-1/4" (A) (675)	3/4 [ECP-24000] EHS	5.83	58.30	15.01	36.73	0.952	2.331
	242'6-1/4" (A) (676)	3/4 [ECP-24000] EHS	5.83	58.30	15.26	36.73	0.952	2.292
	242'6-1/4" (B) (671)	3/4 [ECP-24000] EHS	5.83	58.30	15.27	36.73	0.952	2.291
	242'6-1/4" (B) (672)	3/4 [ECP-24000] EHS	5.83	58.30	16.39	36.73	0.952	2.134
	242'6-1/4" (C) (664)	3/4 [ECP-24000] EHS	5.83	58.30	16.34	36.73	0.952	2.140
	242'6-1/4" (C) (665)	3/4 [ECP-24000] EHS	5.83	58.30	15.20	36.73	0.952	2.302
T6	182'6-1/4" (A)	3/4 [ECP-	5.83	58.30	16.09	36.73	0.952	2.173

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.
	(663)	24000] EHS						
	182'6-1/4" (B)	3/4 [ECP-	5.83	58.30	18.41	36.73	0.952	1.900
	(662)	24000] EHS						
	182'6-1/4" (C)	3/4 [ECP-	5.83	58.30	18.30	36.73	0.952	1.912
	(658)	24000] EHS						
T9	122'6-1/4" (A)	3/4 [ECP-	5.83	58.30	16.80	36.73	0.952	2.082
	(657)	24000] EHS						
	122'6-1/4" (B)	3/4 [ECP-	5.83	58.30	20.37	36.73	0.952	1.717
	(656)	24000] EHS						
	122'6-1/4" (C)	3/4 [ECP-	5.83	58.30	20.05	36.73	0.952	1.744
	(652)	24000] EHS						
T13	59'4-11/16"	1/2 [ECP-	2.69	26.90	8.18	16.95	0.952	1.972
	(A) (651)	23000] EHS						
	59'4-11/16"	1/2 [ECP-	2.69	26.90	9.89	16.95	0.952	1.632
	(B) (650)	23000] EHS						
	59'4-11/16"	1/2 [ECP-	2.69	26.90	9.75	16.95	0.952	1.655
	(C) (646)	23000] EHS						

Compression Checks

Leg 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	300 - 280	ROHN 2.5 EH	20'	2'4-29/32"	31.3 K=1.00	2.2535	-19.38	94.41	0.205 [1]
T2	280 - 260	ROHN 2.5 STD	20'	2'4-29/32"	30.5 K=1.00	1.7040	-19.10	71.64	0.267 [1]
T3	260 - 240	ROHN 2.5 EH	20'	2'4-29/32"	31.3 K=1.00	2.2535	-37.81	94.41	0.401 [1]
T4	240 - 220	ROHN 2.5 EH	20'	2'4-29/32"	31.3 K=1.00	2.2535	-44.74	94.41	0.474 [1]
T5	220 - 200	ROHN 2.5 EH	20'	2'4-29/32"	62.6 K=2.00	2.2535	-49.28	76.17	0.647 [1]
T6	200 - 180	ROHN 3 EH	20'	2'4-29/32"	50.9 K=2.00	3.0159	-47.79	112.32	0.425 [1]
T7	180 - 160	ROHN 3 EH	20'	2'4-29/32"	50.9 K=2.00	3.0159	-54.18	112.32	0.482 [1]
T8	160 - 140	ROHN 3 EH	20'	2'4-29/32"	50.9 K=2.00	3.0159	-53.84	112.32	0.479 [1]
T9	140 - 120	ROHN 3 EH	20'	2'4-29/32"	25.4 K=1.00	3.0159	-67.06	129.44	0.518 [1]
T10	120 - 100	ROHN 3 EH	20'	2'4-29/32"	25.4 K=1.00	3.0159	-62.51	129.44	0.483 [1]
T11	100 - 80	ROHN 3 EH	20'	2'4-29/32"	50.9 K=2.00	3.0159	-64.74	112.32	0.576 [1]
T12	80 - 60	ROHN 3 EH	20'	2'4-29/32"	50.9 K=2.00	3.0159	-63.34	112.32	0.564 [1]
T13	60 - 40	ROHN 3 EH	20'	2'4-29/32"	50.9 K=2.00	3.0159	-71.48	112.32	0.636 [1]
T14	40 - 20	ROHN 3 EH	20'	2'4-29/32"	50.9 K=2.00	3.0159	-73.83	112.32	0.657 [1]
T15	20 - 4.81771	ROHN 3 EH	15'2-5/32"	2'4-29/32"	50.9 K=2.00	3.0159	-70.24	112.32	0.625 [1]
T16	4.81771 - 0	ROHN 3 EH	5'2-17/32"	1'3-19/32"	13.7 K=1.00	3.0159	-65.60	133.85	0.490 [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	300 - 280	ROHN 1.5 x 11GA	3'8-5/8"	3'8-5/8"	91.1 K=1.00	0.5202	-2.64	11.81	0.224 [1]
T2	280 - 260	ROHN 1.5 x 11GA	3'8-5/8"	3'8-5/8"	91.1 K=1.00	0.5202	-1.56	11.81	0.132 [1]
T3	260 - 240	L2x2x1/4	3'8-5/8"	1'8-7/8"	70.0 K=1.31	0.9380	-4.59	28.56	0.161 [1]
T4	240 - 220	ROHN 1.5 x 11GA	3'8-5/8"	3'8-5/8"	91.1 K=1.00	0.5202	-3.37	11.81	0.285 [1]
T5	220 - 200	ROHN 1.5 x 16GA	3'8-5/8"	3'8-5/8"	87.5 K=1.00	0.2627	-2.97	6.21	0.479 [1]
T6	200 - 180	ROHN 1.5 x 16GA	3'8-5/8"	3'8-5/8"	87.5 K=1.00	0.2627	-4.11	6.21	0.662 [1]
T7	180 - 160	ROHN 1.5 x 16GA	3'8-5/8"	3'8-5/8"	87.5 K=1.00	0.2627	-2.82	6.21	0.454 [1]
T8	160 - 140	ROHN 1.5 x 16GA	3'8-5/8"	3'8-5/8"	87.5 K=1.00	0.2627	-2.94	6.21	0.473 [1]
T9	140 - 120	ROHN 1.5 x 16GA	3'8-5/8"	3'8-5/8"	87.5 K=1.00	0.2627	-3.13	6.21	0.504 [1]
T10	120 - 100	ROHN 1.5 x 16GA	3'8-5/8"	3'8-5/8"	87.5 K=1.00	0.2627	-2.33	6.21	0.374 [1]
T11	100 - 80	ROHN 1.5 x 16GA	3'8-5/8"	3'8-5/8"	87.5 K=1.00	0.2627	-2.14	6.21	0.345 [1]
T12	80 - 60	ROHN 1.5 x 16GA	3'8-5/8"	3'8-5/8"	87.5 K=1.00	0.2627	-3.10	6.21	0.499 [1]
T13	60 - 40	ROHN 1.5 x 16GA	3'8-5/8"	3'8-5/8"	87.5 K=1.00	0.2627	-3.70	6.21	0.596 [1]
T14	40 - 20	ROHN 1.5 x 16GA	3'8-5/8"	3'8-5/8"	87.5 K=1.00	0.2627	-3.00	6.21	0.482 [1]
T15	20 - 4.81771	ROHN 1.5 x 16GA	3'8-5/8"	3'8-5/8"	87.5 K=1.00	0.2627	-3.42	6.21	0.551 [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 $\frac{P_u}{\phi P_n}$
T16	4.81771 - 0	L4x4x1/4	2'6-23/32"	2'3-1/4"	77.1 K=2.25	1.9400	-1.20	55.28	0.022 [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	300 - 280	ROHN 1.5 x 11GA	3'5-1/32"	3'2-5/32"	77.8 K=1.00	0.5202	-0.35	13.55	0.026 [1]
T2	280 - 260	ROHN 1.5 x 11GA	3'5-1/32"	3'2-5/32"	77.8 K=1.00	0.5202	-0.35	13.55	0.026 [1]
T3	260 - 240	2L2x2x1/4x3/8	3'5-1/32"	2'11-9/32"	58.0 K=1.00	1.8800	-0.66	59.64	0.011 [1]

Section No.	Elevation	Size	L	L_u	Kl/r	A	P_u	ϕP_n	Ratio $\frac{P_u}{\phi P_n}$
	ft		ft	ft		in^2	K	K	
		ai/ri > 0.75(KL/r)o - 119							
T4	240 - 220	ROHN 1.5 x 11GA	3'5-1/32"	3'2-5/32"	77.8 K=1.00	0.5202	-0.80	13.55	0.059 [1]
T5	220 - 200	ROHN 1.5 x 16GA	3'5-1/32"	3'2-5/32"	74.7 K=1.00	0.2627	-0.85	7.05	0.121 [1]
T6	200 - 180	ROHN 1.5 x 16GA	3'5-1/32"	3'1-9/16"	73.5 K=1.00	0.2627	-0.83	7.13	0.116 [1]
T7	180 - 160	ROHN 1.5 x 16GA	3'5-1/32"	3'1-9/16"	73.5 K=1.00	0.2627	-0.94	7.13	0.132 [1]
T8	160 - 140	ROHN 1.5 x 16GA	3'5-1/32"	3'1-9/16"	73.5 K=1.00	0.2627	-0.93	7.13	0.131 [1]
T9	140 - 120	ROHN 1.5 x 16GA	3'5-1/32"	3'1-9/16"	73.5 K=1.00	0.2627	-1.16	7.13	0.163 [1]
T10	120 - 100	ROHN 1.5 x 16GA	3'5-1/32"	3'1-9/16"	73.5 K=1.00	0.2627	-1.13	7.13	0.159 [1]
T11	100 - 80	ROHN 1.5 x 16GA	3'5-1/32"	3'1-9/16"	73.5 K=1.00	0.2627	-1.12	7.13	0.157 [1]
T12	80 - 60	ROHN 1.5 x 16GA	3'5-1/32"	3'1-9/16"	73.5 K=1.00	0.2627	-1.11	7.13	0.155 [1]
T13	60 - 40	ROHN 1.5 x 16GA	3'5-1/32"	3'1-9/16"	73.5 K=1.00	0.2627	-1.24	7.13	0.174 [1]
T14	40 - 20	ROHN 1.5 x 16GA	3'5-1/32"	3'1-9/16"	73.5 K=1.00	0.2627	-1.28	7.13	0.179 [1]
T15	20 - 4.81771	ROHN 1.5 x 16GA	3'5-1/32"	3'1-9/16"	73.5 K=1.00	0.2627	-1.22	7.13	0.171 [1]
T16	4.81771 - 0	L4x4x1/4	3'5-1/32"	3'1-9/16"	83.6 K=1.77	1.9400	-1.22	53.15	0.023 [1]

[1] P_u / ϕP_n controls

Bottom Girt Design Data (Compression)

Section No.	Elevation	Size	L	L_u	Kl/r	A	P_u	ϕP_n	Ratio $\frac{P_u}{\phi P_n}$
	ft		ft	ft		in^2	K	K	
T1	300 - 280	ROHN 1.5 x 11GA	3'5-1/32"	3'2-5/32"	77.8 K=1.00	0.5202	-0.35	13.55	0.026 [1]
T2	280 - 260	ROHN 1.5 x 11GA	3'5-1/32"	3'2-5/32"	77.8 K=1.00	0.5202	-0.35	13.55	0.026 [1]
T4	240 - 220	ROHN 1.5 x 11GA	3'5-1/32"	3'2-5/32"	77.8 K=1.00	0.5202	-0.80	13.55	0.059 [1]
T5	220 - 200	ROHN 1.5 x 16GA	3'5-1/32"	3'2-5/32"	74.7 K=1.00	0.2627	-0.85	7.05	0.121 [1]
T6	200 - 180	ROHN 1.5 x 16GA	3'5-1/32"	3'1-9/16"	73.5 K=1.00	0.2627	-0.83	7.13	0.116 [1]
T7	180 - 160	ROHN 1.5 x 16GA	3'5-1/32"	3'1-9/16"	73.5 K=1.00	0.2627	-0.94	7.13	0.132 [1]
T8	160 - 140	ROHN 1.5 x 16GA	3'5-1/32"	3'1-9/16"	73.5 K=1.00	0.2627	-0.93	7.13	0.131 [1]
T9	140 - 120	ROHN 1.5 x 16GA	3'5-1/32"	3'1-9/16"	73.5 K=1.00	0.2627	-1.16	7.13	0.163 [1]
T10	120 - 100	ROHN 1.5 x 16GA	3'5-1/32"	3'1-9/16"	73.5 K=1.00	0.2627	-1.13	7.13	0.159 [1]
T11	100 - 80	ROHN 1.5 x 16GA	3'5-1/32"	3'1-9/16"	73.5 K=1.00	0.2627	-1.12	7.13	0.157 [1]
T12	80 - 60	ROHN 1.5 x 16GA	3'5-1/32"	3'1-9/16"	73.5 K=1.00	0.2627	-1.11	7.13	0.155 [1]
T13	60 - 40	ROHN 1.5 x 16GA	3'5-1/32"	3'1-9/16"	73.5 K=1.00	0.2627	-1.24	7.13	0.174 [1]
T14	40 - 20	ROHN 1.5 x 16GA	3'5-1/32"	3'1-9/16"	73.5 K=1.00	0.2627	-1.28	7.13	0.179 [1]
T15	20 - 4.81771	ROHN 1.5 x 16GA	3'5-1/32"	3'1-9/16"	73.5 K=1.00	0.2627	-1.22	7.13	0.171 [1]

[1] P_u / ϕP_n controls

Top Guy Pull-Off 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	300 - 280	2L2x2x1/4x3/8	3'5-1/32''	3'2-5/32''	62.7 K=1.00	1.8800	-4.13	58.53	0.071 [1]
		ai/ri > 0.75(KL/r)o - 684							
T3	260 - 240	2L2x2x1/4x3/8	3'5-1/32''	3'2-5/32''	62.7 K=1.00	1.8800	-5.56	58.53	0.095 [1]
		ai/ri > 0.75(KL/r)o - 669							

[1] P_u / ϕP_n controls

Top Guy Pull-Off Bending Design Data

Section No.	Elevation ft	Size	M_{ux} kip-ft	ϕM_{nx} kip-ft	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	M_{uy} kip-ft	ϕM_{ny} kip-ft	Ratio $\frac{M_{uy}}{\phi M_{ny}}$
T1	300 - 280	2L2x2x1/4x3/8	0.00	2.00	0.000	0.00	3.39	0.000
T3	260 - 240	2L2x2x1/4x3/8	0.00	2.00	0.000	0.00	3.39	0.000

Top Guy Pull-Off Interaction Design Data

Section No.	Elevation ft	Size	Ratio $\frac{P_u}{\phi P_n}$	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	Ratio $\frac{M_{uy}}{\phi M_{ny}}$	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
T1	300 - 280	2L2x2x1/4x3/8	0.071	0.000	0.000	0.071 [1]	1.050	
T3	260 - 240	2L2x2x1/4x3/8	0.095	0.000	0.000	0.095 [1]	1.050	

[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 $\frac{P_u}{\phi P_n}$
T1	300 - 280 (681)	C15x33.9	3'5-1/32''	3'3-19/32''	43.8 K=1.00	9.9600	-1.18	291.75	0.004
T1	300 - 280 (682)	C15x33.9	3'5-1/32''	3'3-19/32''	43.8 K=1.00	9.9600	-0.84	291.75	0.003
T1	300 - 280 (688)	C15x33.9	3'5-1/32''	3'3-19/32''	43.8 K=1.00	9.9600	-0.32	291.75	0.001
T1	300 - 280 (689)	C15x33.9	3'5-1/32''	3'3-19/32''	43.8 K=1.00	9.9600	-0.43	291.75	0.001
T1	300 - 280 (692)	C15x33.9	3'5-1/32''	3'3-19/32''	43.8 K=1.00	9.9600	-1.06	291.75	0.004
T1	300 - 280 (693)	C15x33.9	3'5-1/32''	3'3-19/32''	43.8 K=1.00	9.9600	-0.66	291.75	0.002
T3	260 - 240 (666)	C15x33.9	3'5-1/32''	3'3-19/32''	43.8 K=1.00	9.9600	-2.55	291.75	0.009
T3	260 - 240	C15x33.9	3'5-	3'3-	43.8	9.9600	-1.90	291.75	0.007

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
	(667)		1/32''	19/32''	K=1.00				
T3	260 - 240 (673)	C15x33.9	3'5-1/32''	3'3-19/32''	43.8 K=1.00	9.9600	-1.57	291.75	0.005
T3	260 - 240 (674)	C15x33.9	3'5-1/32''	3'3-19/32''	43.8 K=1.00	9.9600	-1.49	291.75	0.005
T3	260 - 240 (677)	C15x33.9	3'5-1/32''	3'3-19/32''	43.8 K=1.00	9.9600	-2.54	291.75	0.009
T3	260 - 240 (678)	C15x33.9	3'5-1/32''	3'3-19/32''	43.8 K=1.00	9.9600	-1.57	291.75	0.005

Torque-Arm Top Bending Design Data

Section No.	Elevation ft	Size	M_{ux} kip-ft	ϕM_{nx} kip-ft	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	M_{uy} kip-ft	ϕM_{ny} kip-ft	Ratio $\frac{M_{uy}}{\phi M_{ny}}$
T1	300 - 280 (681)	C15x33.9	-38.86	136.08	0.286	-0.00	12.60	0.000
T1	300 - 280 (682)	C15x33.9	-38.12	136.08	0.280	0.00	12.60	0.000
T1	300 - 280 (688)	C15x33.9	-38.67	136.08	0.284	0.00	12.60	0.000
T1	300 - 280 (689)	C15x33.9	-38.97	136.08	0.286	-0.00	12.60	0.000
T1	300 - 280 (692)	C15x33.9	-38.56	136.08	0.283	0.00	12.60	0.000
T1	300 - 280 (693)	C15x33.9	-38.12	136.08	0.280	0.00	12.60	0.000
T3	260 - 240 (666)	C15x33.9	-38.69	136.08	0.284	-0.00	12.60	0.000
T3	260 - 240 (667)	C15x33.9	-37.02	136.08	0.272	0.00	12.60	0.000
T3	260 - 240 (673)	C15x33.9	-39.37	136.08	0.289	0.00	12.60	0.000
T3	260 - 240 (674)	C15x33.9	-38.91	136.08	0.286	-0.00	12.60	0.000
T3	260 - 240 (677)	C15x33.9	-39.15	136.08	0.288	0.00	12.60	0.000
T3	260 - 240 (678)	C15x33.9	-37.05	136.08	0.272	0.00	12.60	0.000

Torque-Arm Top Interaction Design Data

Section No.	Elevation ft	Size	Ratio $\frac{P_u}{\phi P_n}$	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	Ratio $\frac{M_{uy}}{\phi M_{ny}}$	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
T1	300 - 280 (681)	C15x33.9	0.004	0.286	0.000	0.288	1.050	
T1	300 - 280 (682)	C15x33.9	0.003	0.280	0.000	0.282	1.050	
T1	300 - 280 (688)	C15x33.9	0.001	0.284	0.000	0.285	1.050	
T1	300 - 280 (689)	C15x33.9	0.001	0.286	0.000	0.287	1.050	
T1	300 - 280 (692)	C15x33.9	0.004	0.283	0.000	0.285	1.050	
T1	300 - 280 (693)	C15x33.9	0.002	0.280	0.000	0.281	1.050	
T3	260 - 240 (666)	C15x33.9	0.009	0.284	0.000	0.289	1.050	
T3	260 - 240 (667)	C15x33.9	0.007	0.272	0.000	0.275	1.050	

Section No.	Elevation ft	Size	Ratio $\frac{P_u}{\phi P_n}$	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	Ratio $\frac{M_{uy}}{\phi M_{ny}}$	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
T3	260 - 240 (673)	C15x33.9	0.005	0.289	0.000	0.292	1.050	
T3	260 - 240 (674)	C15x33.9	0.005	0.286	0.000	0.289	1.050	
T3	260 - 240 (677)	C15x33.9	0.009	0.288	0.000	0.292	1.050	
T3	260 - 240 (678)	C15x33.9	0.005	0.272	0.000	0.275	1.050	

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	300 - 280	ROHN 2.5 EH	20'	2'4-29/32"	31.3	2.2535	9.83	101.41	0.097 [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	300 - 280	ROHN 1.5 x 11GA	3'8-5/8"	3'8-5/8"	91.1	0.3702	2.52	16.11	0.156 [1]
T2	280 - 260	ROHN 1.5 x 11GA	3'8-5/8"	3'8-5/8"	91.1	0.3702	1.13	16.11	0.070 [1]
T3	260 - 240	L2x2x1/4	3'8-5/8"	1'8-7/8"	36.6	0.5629	2.95	24.49	0.121 [1]
T4	240 - 220	ROHN 1.5 x 11GA	3'8-5/8"	3'8-5/8"	91.1	0.3702	2.33	16.11	0.145 [1]
T5	220 - 200	ROHN 1.5 x 16GA	3'8-5/8"	3'8-5/8"	87.5	0.1902	2.78	8.99	0.309 [1]
T6	200 - 180	ROHN 1.5 x 16GA	3'8-5/8"	3'8-5/8"	87.5	0.1902	4.19	8.99	0.467 [1]
T7	180 - 160	ROHN 1.5 x 16GA	3'8-5/8"	3'8-5/8"	87.5	0.1902	2.55	8.99	0.283 [1]
T8	160 - 140	ROHN 1.5 x 16GA	3'8-5/8"	3'8-5/8"	87.5	0.1902	2.87	8.99	0.319 [1]
T9	140 - 120	ROHN 1.5 x 16GA	3'8-5/8"	3'8-5/8"	87.5	0.1902	2.08	8.99	0.232 [1]
T10	120 - 100	ROHN 1.5 x 16GA	3'8-5/8"	3'8-5/8"	87.5	0.1902	2.01	8.99	0.224 [1]
T11	100 - 80	ROHN 1.5 x 16GA	3'8-5/8"	3'8-5/8"	87.5	0.1902	1.96	8.99	0.218 [1]
T12	80 - 60	ROHN 1.5 x 16GA	3'8-5/8"	3'8-5/8"	87.5	0.1902	2.79	8.99	0.310 [1]
T13	60 - 40	ROHN 1.5 x 16GA	3'8-5/8"	3'8-5/8"	87.5	0.1902	3.70	8.99	0.412 [1]
T14	40 - 20	ROHN 1.5 x 16GA	3'8-5/8"	3'8-5/8"	87.5	0.1902	2.51	8.99	0.280 [1]
T15	20 - 4.81771	ROHN 1.5 x 16GA	3'8-5/8"	3'8-5/8"	87.5	0.1902	3.42	8.99	0.380 [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 $\frac{P_u}{\phi P_n}$
T16	4.81771 - 0	L4x4x1/4	10-3/16"	6-23/32"	5.4	1.9400	1.20	62.86	0.019 [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	300 - 280	ROHN 1.5 x 11GA	3'5-1/32"	3'2-5/32"	77.8	0.3702	0.35	16.11	0.022 [1]
T2	280 - 260	ROHN 1.5 x 11GA	3'5-1/32"	3'2-5/32"	77.8	0.3702	0.64	16.11	0.040 [1]
T3	260 - 240	2L2x2x1/4x3/8 ai/ri > 0.75(KL/r)o - 119	3'5-1/32"	2'11-9/32"	62.6	1.1287	0.66	49.10	0.013 [1]
T4	240 - 220	ROHN 1.5 x 11GA	3'5-1/32"	3'2-5/32"	77.8	0.3702	1.68	16.11	0.104 [1]
T5	220 - 200	ROHN 1.5 x 16GA	3'5-1/32"	3'2-5/32"	74.7	0.1902	0.85	8.99	0.095 [1]
T6	200 - 180	ROHN 1.5 x 16GA	3'5-1/32"	3'1-9/16"	73.5	0.1902	0.83	8.99	0.092 [1]
T7	180 - 160	ROHN 1.5 x 16GA	3'5-1/32"	3'1-9/16"	73.5	0.1902	0.94	8.99	0.104 [1]
T8	160 - 140	ROHN 1.5 x 16GA	3'5-1/32"	3'1-9/16"	73.5	0.1902	0.93	8.99	0.104 [1]
T9	140 - 120	ROHN 1.5 x 16GA	3'5-1/32"	3'1-9/16"	73.5	0.1902	1.16	8.99	0.129 [1]
T10	120 - 100	ROHN 1.5 x 16GA	3'5-1/32"	3'1-9/16"	73.5	0.1902	1.13	8.99	0.126 [1]
T11	100 - 80	ROHN 1.5 x 16GA	3'5-1/32"	3'1-9/16"	73.5	0.1902	1.12	8.99	0.125 [1]
T12	80 - 60	ROHN 1.5 x 16GA	3'5-1/32"	3'1-9/16"	73.5	0.1902	1.11	8.99	0.123 [1]
T13	60 - 40	ROHN 1.5 x 16GA	3'5-1/32"	3'1-9/16"	73.5	0.1902	1.24	8.99	0.138 [1]
T14	40 - 20	ROHN 1.5 x 16GA	3'5-1/32"	3'1-9/16"	73.5	0.1902	1.28	8.99	0.142 [1]
T15	20 - 4.81771	ROHN 1.5 x 16GA	3'5-1/32"	3'1-9/16"	73.5	0.1902	1.22	8.99	0.136 [1]
T16	4.81771 - 0	L4x4x1/4	3'5-1/32"	3'1-9/16"	30.0	1.9400	12.57	62.86	0.200 [1]

[1] P_u / ϕP_n controls

Bottom 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	300 - 280	ROHN 1.5 x 11GA	3'5-1/32"	3'2-5/32"	77.8	0.3702	0.66	16.11	0.041 [1]
T2	280 - 260	ROHN 1.5 x 11GA	3'5-1/32"	3'2-5/32"	77.8	0.3702	0.35	16.11	0.022 [1]
T4	240 - 220	ROHN 1.5 x 11GA	3'5-1/32"	3'2-5/32"	77.8	0.3702	0.96	16.11	0.060 [1]
T5	220 - 200	ROHN 1.5 x 16GA	3'5-1/32"	3'2-5/32"	74.7	0.1902	0.85	8.99	0.095 [1]
T6	200 - 180	ROHN 1.5 x 16GA	3'5-1/32"	3'1-9/16"	73.5	0.1902	0.83	8.99	0.092 [1]
T7	180 - 160	ROHN 1.5 x 16GA	3'5-1/32"	3'1-9/16"	73.5	0.1902	0.94	8.99	0.104 [1]
T8	160 - 140	ROHN 1.5 x 16GA	3'5-1/32"	3'1-9/16"	73.5	0.1902	0.93	8.99	0.104 [1]
T9	140 - 120	ROHN 1.5 x 16GA	3'5-1/32"	3'1-9/16"	73.5	0.1902	1.16	8.99	0.129 [1]

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T10	120 - 100	ROHN 1.5 x 16GA	3'5-1/32''	3'1-9/16''	73.5	0.1902	1.13	8.99	0.126 [1]
T11	100 - 80	ROHN 1.5 x 16GA	3'5-1/32''	3'1-9/16''	73.5	0.1902	1.12	8.99	0.125 [1]
T12	80 - 60	ROHN 1.5 x 16GA	3'5-1/32''	3'1-9/16''	73.5	0.1902	1.11	8.99	0.123 [1]
T13	60 - 40	ROHN 1.5 x 16GA	3'5-1/32''	3'1-9/16''	73.5	0.1902	1.24	8.99	0.138 [1]
T14	40 - 20	ROHN 1.5 x 16GA	3'5-1/32''	3'1-9/16''	73.5	0.1902	1.28	8.99	0.142 [1]
T15	20 - 4.81771	ROHN 1.5 x 16GA	3'5-1/32''	3'1-9/16''	73.5	0.1902	1.87	8.99	0.208 [1]

[1] P_u / ϕP_n controls

Top Guy Pull-Off 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	300 - 280	2L2x2x1/4x3/8	3'5-1/32''	3'2-5/32''	62.6	1.1287	5.61	49.10	0.114 [1]
T3	260 - 240	ai/ri > 0.75(KL/r)o - 684 2L2x2x1/4x3/8	3'5-1/32''	3'2-5/32''	62.6	1.1287	8.51	49.10	0.173 [1]
T6	200 - 180	ai/ri > 0.75(KL/r)o - 670 2L2x2x1/4x3/8	3'5-1/32''	3'1-9/16''	61.6	1.1287	6.56	49.10	0.134 [1]
T9	140 - 120	ai/ri > 0.75(KL/r)o - 660 2L2x2x1/4x3/8	3'5-1/32''	3'1-9/16''	61.6	1.1287	7.37	49.10	0.150 [1]
T13	60 - 40	ai/ri > 0.75(KL/r)o - 655 4 1/2x3/8	3'5-1/32''	3'1-9/16''	346.4	1.6875	4.08	54.67	0.075 [1]

[1] P_u / ϕP_n controls

Top Guy Pull-Off Bending Design Data

Section No.	Elevation ft	Size	M_{ux} kip-ft	ϕM_{nx} kip-ft	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	M_{uy} kip-ft	ϕM_{ny} kip-ft	Ratio $\frac{M_{uy}}{\phi M_{ny}}$
T1	300 - 280	2L2x2x1/4x3/8	0.00	2.00	0.000	0.00	3.39	0.000
T3	260 - 240	2L2x2x1/4x3/8	0.00	2.00	0.000	0.00	3.39	0.000
T6	200 - 180	2L2x2x1/4x3/8	0.00	2.00	0.000	0.00	3.39	0.000
T9	140 - 120	2L2x2x1/4x3/8	0.00	2.00	0.000	0.00	3.39	0.000
T13	60 - 40	4 1/2x3/8	0.00	5.13	0.000	0.00	0.43	0.000

Top Guy Pull-Off Interaction Design Data

Section No.	Elevation ft	Size	Ratio $\frac{P_u}{\phi P_n}$	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	Ratio $\frac{M_{uy}}{\phi M_{ny}}$	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
T1	300 - 280	2L2x2x1/4x3/8	0.114	0.000	0.000	0.114 [1]	1.050	
T3	260 - 240	2L2x2x1/4x3/8	0.173	0.000	0.000	0.173 [1]	1.050	

Section No.	Elevation ft	Size	Ratio $\frac{P_u}{\phi P_n}$	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	Ratio $\frac{M_{uy}}{\phi M_{ny}}$	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
T6	200 - 180	2L2x2x1/4x3/8	0.134	0.000	0.000	0.134 [1]	1.050	
T9	140 - 120	2L2x2x1/4x3/8	0.150	0.000	0.000	0.150 [1]	1.050	
T13	60 - 40	4 1/2x3/8	0.075	0.000	0.000	0.075 [1]	1.050	

[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 $\frac{P_u}{\phi P_n}$
T1	300 - 280 (681)	C15x33.9	3'5-1/32"	3'3-19/32"	43.8	7.1700	0.50	311.89	0.002
T1	300 - 280 (682)	C15x33.9	3'5-1/32"	3'3-19/32"	43.8	7.1700	1.10	311.89	0.004
T1	300 - 280 (688)	C15x33.9	3'5-1/32"	3'3-19/32"	43.8	7.1700	1.22	311.89	0.004
T1	300 - 280 (689)	C15x33.9	3'5-1/32"	3'3-19/32"	43.8	7.1700	1.17	311.89	0.004
T1	300 - 280 (692)	C15x33.9	3'5-1/32"	3'3-19/32"	43.8	7.1700	0.56	311.89	0.002
T1	300 - 280 (693)	C15x33.9	3'5-1/32"	3'3-19/32"	43.8	7.1700	1.14	311.89	0.004
T3	260 - 240 (666)	C15x33.9	3'5-1/32"	3'3-19/32"	43.8	7.1700	3.49	311.89	0.011
T3	260 - 240 (667)	C15x33.9	3'5-1/32"	3'3-19/32"	43.8	7.1700	0.82	311.89	0.003
T3	260 - 240 (673)	C15x33.9	3'5-1/32"	3'3-19/32"	43.8	7.1700	0.96	311.89	0.003
T3	260 - 240 (674)	C15x33.9	3'5-1/32"	3'3-19/32"	43.8	7.1700	1.01	311.89	0.003
T3	260 - 240 (677)	C15x33.9	3'5-1/32"	3'3-19/32"	43.8	7.1700	3.55	311.89	0.011
T3	260 - 240 (678)	C15x33.9	3'5-1/32"	3'3-19/32"	43.8	7.1700	1.04	311.89	0.003

Torque-Arm Top Bending Design Data

Section No.	Elevation ft	Size	M_{ux} kip-ft	ϕM_{nx} kip-ft	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	M_{uy} kip-ft	ϕM_{ny} kip-ft	Ratio $\frac{M_{uy}}{\phi M_{ny}}$
T1	300 - 280 (681)	C15x33.9	-35.20	136.08	0.259	-0.00	12.60	0.000
T1	300 - 280 (682)	C15x33.9	-34.87	136.08	0.256	0.00	12.60	0.000
T1	300 - 280 (688)	C15x33.9	-35.49	136.08	0.261	0.00	12.60	0.000
T1	300 - 280 (689)	C15x33.9	-36.25	136.08	0.266	-0.00	12.60	0.000
T1	300 - 280 (692)	C15x33.9	-35.33	136.08	0.260	0.00	12.60	0.000
T1	300 - 280 (693)	C15x33.9	-35.83	136.08	0.263	0.00	12.60	0.000
T3	260 - 240 (666)	C15x33.9	-28.30	136.08	0.208	-0.00	12.60	0.000
T3	260 - 240 (667)	C15x33.9	-34.50	136.08	0.254	0.00	12.60	0.000
T3	260 - 240 (673)	C15x33.9	-35.34	136.08	0.260	0.00	12.60	0.000
T3	260 - 240	C15x33.9	-35.52	136.08	0.261	-0.00	12.60	0.000

Section No.	Elevation ft	Size	M_{ux} kip-ft	ϕM_{nx} kip-ft	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	M_{uy} kip-ft	ϕM_{ny} kip-ft	Ratio $\frac{M_{uy}}{\phi M_{ny}}$
T3	260 - 240 (674)	C15x33.9	-28.70	136.08	0.211	0.00	12.60	0.000
T3	260 - 240 (677)	C15x33.9	-35.13	136.08	0.258	0.00	12.60	0.000
T3	260 - 240 (678)							

Torque-Arm Top Interaction Design Data

Section No.	Elevation ft	Size	Ratio $\frac{P_u}{\phi P_n}$	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	Ratio $\frac{M_{uy}}{\phi M_{ny}}$	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
T1	300 - 280 (681)	C15x33.9	0.002	0.259	0.000	0.259	1.050	
T1	300 - 280 (682)	C15x33.9	0.004	0.256	0.000	0.258	1.050	
T1	300 - 280 (688)	C15x33.9	0.004	0.261	0.000	0.263	1.050	
T1	300 - 280 (689)	C15x33.9	0.004	0.266	0.000	0.268	1.050	
T1	300 - 280 (692)	C15x33.9	0.002	0.260	0.000	0.260	1.050	
T1	300 - 280 (693)	C15x33.9	0.004	0.263	0.000	0.265	1.050	
T3	260 - 240 (666)	C15x33.9	0.011	0.208	0.000	0.214	1.050	
T3	260 - 240 (667)	C15x33.9	0.003	0.254	0.000	0.255	1.050	
T3	260 - 240 (673)	C15x33.9	0.003	0.260	0.000	0.261	1.050	
T3	260 - 240 (674)	C15x33.9	0.003	0.261	0.000	0.263	1.050	
T3	260 - 240 (677)	C15x33.9	0.011	0.211	0.000	0.217	1.050	
T3	260 - 240 (678)	C15x33.9	0.003	0.258	0.000	0.260	1.050	

Section Capacity Table

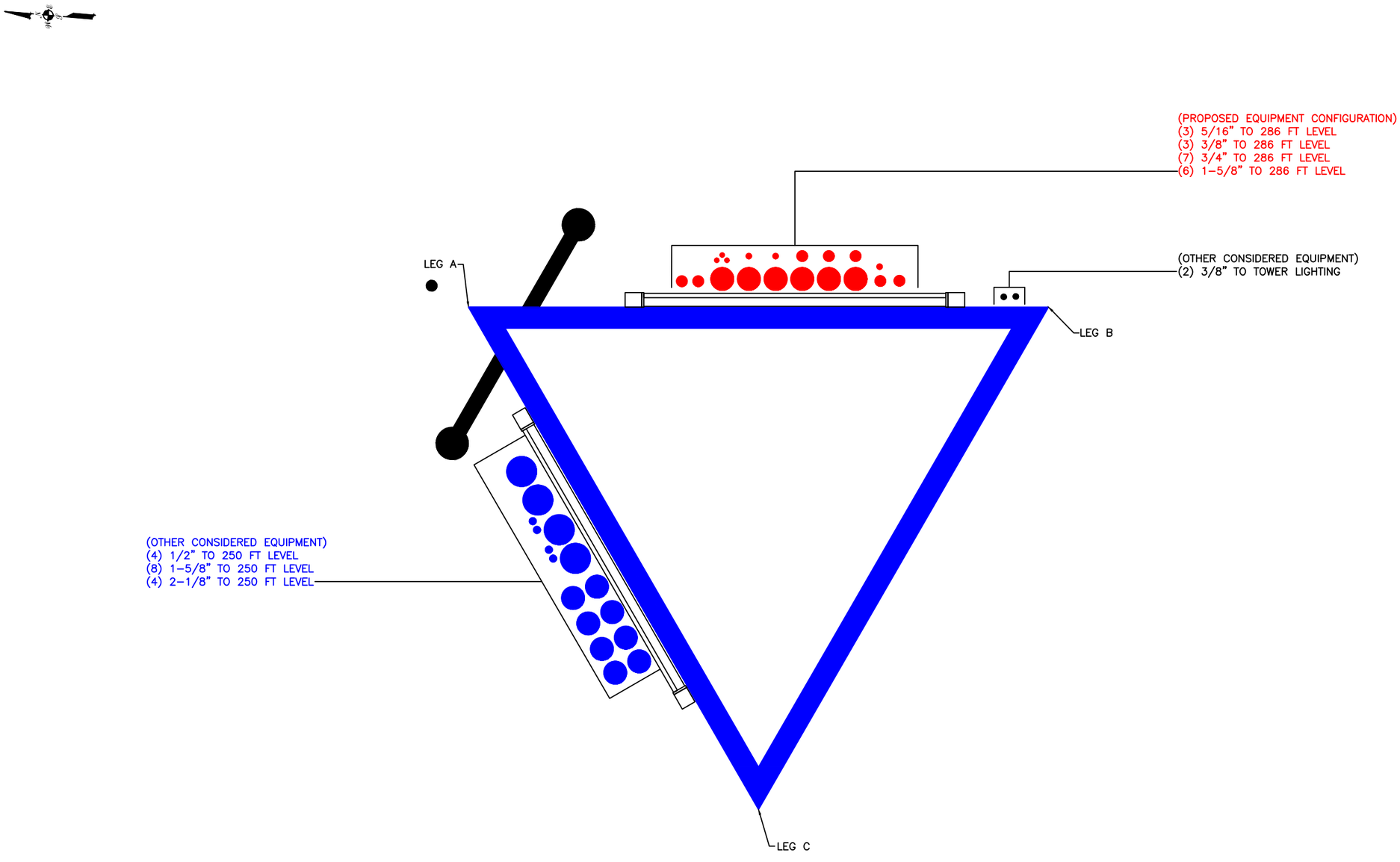
Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
T1	300 - 280	Leg	ROHN 2.5 EH	3	-19.38	99.13	19.6	Pass
T2	280 - 260	Leg	ROHN 2.5 STD	60	-19.10	75.22	25.4	Pass
T3	260 - 240	Leg	ROHN 2.5 EH	117	-37.81	99.13	38.1	Pass
T4	240 - 220	Leg	ROHN 2.5 EH	170	-44.74	99.13	45.1	Pass
T5	220 - 200	Leg	ROHN 2.5 EH	227	-49.28	79.98	61.6	Pass
T6	200 - 180	Leg	ROHN 3 EH	261	-47.79	117.93	40.5	Pass
T7	180 - 160	Leg	ROHN 3 EH	293	-54.18	117.93	45.9	Pass
T8	160 - 140	Leg	ROHN 3 EH	326	-53.84	117.93	45.7	Pass
T9	140 - 120	Leg	ROHN 3 EH	359	-67.06	135.92	49.3	Pass
T10	120 - 100	Leg	ROHN 3 EH	416	-62.51	135.92	46.0	Pass
T11	100 - 80	Leg	ROHN 3 EH	473	-64.74	117.93	54.9	Pass
T12	80 - 60	Leg	ROHN 3 EH	506	-63.34	117.93	53.7	Pass
T13	60 - 40	Leg	ROHN 3 EH	539	-71.48	117.93	60.6	Pass
T14	40 - 20	Leg	ROHN 3 EH	572	-73.83	117.93	62.6	Pass
T15	20 - 4.81771	Leg	ROHN 3 EH	604	-70.24	117.93	59.6	Pass
T16	4.81771 - 0	Leg	ROHN 3 EH	632	-65.60	140.55	46.7	Pass
T1	300 - 280	Diagonal	ROHN 1.5 x 11GA	15	-2.64	12.40	21.3	Pass
T2	280 - 260	Diagonal	ROHN 1.5 x 11GA	113	-1.56	12.40	25.7 (b) 12.5 15.1 (b)	Pass
T3	260 - 240	Diagonal	L2x2x1/4	123	-4.59	29.99	15.3	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
							30.9 (b)	
T4	240 - 220	Diagonal	ROHN 1.5 x 11GA	223	-3.37	12.40	27.2	Pass
							32.8 (b)	
T5	220 - 200	Diagonal	ROHN 1.5 x 16GA	235	-2.97	6.52	45.6	Pass
T6	200 - 180	Diagonal	ROHN 1.5 x 16GA	274	-4.11	6.52	63.1	Pass
							67.5 (b)	
T7	180 - 160	Diagonal	ROHN 1.5 x 16GA	324	-2.82	6.52	43.3	Pass
T8	160 - 140	Diagonal	ROHN 1.5 x 16GA	334	-2.94	6.52	45.0	Pass
							46.2 (b)	
T9	140 - 120	Diagonal	ROHN 1.5 x 16GA	369	-3.13	6.52	48.0	Pass
T10	120 - 100	Diagonal	ROHN 1.5 x 16GA	468	-2.33	6.52	35.7	Pass
T11	100 - 80	Diagonal	ROHN 1.5 x 16GA	502	-2.14	6.52	32.8	Pass
T12	80 - 60	Diagonal	ROHN 1.5 x 16GA	515	-3.10	6.52	47.5	Pass
T13	60 - 40	Diagonal	ROHN 1.5 x 16GA	565	-3.70	6.52	56.8	Pass
							59.6 (b)	
T14	40 - 20	Diagonal	ROHN 1.5 x 16GA	581	-3.00	6.52	45.9	Pass
T15	20 - 4.81771	Diagonal	ROHN 1.5 x 16GA	618	-3.42	6.52	52.5	Pass
							55.0 (b)	
T16	4.81771 - 0	Horizontal	L4x4x1/4	639	-1.20	61.97	13.5	Pass
T1	300 - 280	Top Girt	ROHN 1.5 x 11GA	5	-0.35	14.23	2.4	Pass
							3.4 (b)	
T2	280 - 260	Top Girt	ROHN 1.5 x 11GA	61	0.64	16.91	3.8	Pass
							6.3 (b)	
T3	260 - 240	Top Girt	2L2x2x1/4x3/8	119	0.66	51.56	1.3	Pass
							3.7 (b)	
T4	240 - 220	Top Girt	ROHN 1.5 x 11GA	174	1.68	16.91	9.9	Pass
							16.4 (b)	
T5	220 - 200	Top Girt	ROHN 1.5 x 16GA	229	-0.85	7.40	11.5	Pass
							13.7 (b)	
T6	200 - 180	Top Girt	ROHN 1.5 x 16GA	263	-0.83	7.48	11.1	Pass
							13.3 (b)	
T7	180 - 160	Top Girt	ROHN 1.5 x 16GA	296	-0.94	7.48	12.5	Pass
							15.1 (b)	
T8	160 - 140	Top Girt	ROHN 1.5 x 16GA	328	-0.93	7.48	12.5	Pass
							15.0 (b)	
T9	140 - 120	Top Girt	ROHN 1.5 x 16GA	361	-1.16	7.48	15.5	Pass
							18.7 (b)	
T10	120 - 100	Top Girt	ROHN 1.5 x 16GA	418	-1.13	7.48	15.1	Pass
							18.2 (b)	
T11	100 - 80	Top Girt	ROHN 1.5 x 16GA	475	-1.12	7.48	15.0	Pass
							18.0 (b)	
T12	80 - 60	Top Girt	ROHN 1.5 x 16GA	508	-1.11	7.48	14.8	Pass
							17.8 (b)	
T13	60 - 40	Top Girt	ROHN 1.5 x 16GA	541	-1.24	7.48	16.5	Pass
							19.9 (b)	
T14	40 - 20	Top Girt	ROHN 1.5 x 16GA	574	-1.28	7.48	17.1	Pass
							20.6 (b)	
T15	20 - 4.81771	Top Girt	ROHN 1.5 x 16GA	607	-1.22	7.48	16.3	Pass
							19.6 (b)	
T16	4.81771 - 0	Top Girt	L4x4x1/4	636	12.57	66.00	19.0	Pass
T1	300 - 280	Bottom Girt	ROHN 1.5 x 11GA	8	0.66	16.91	3.9	Pass
							6.4 (b)	
T2	280 - 260	Bottom Girt	ROHN 1.5 x 11GA	65	-0.35	14.23	2.4	Pass
							3.4 (b)	
T4	240 - 220	Bottom Girt	ROHN 1.5 x 11GA	177	0.96	16.91	5.7	Pass
							9.4 (b)	
T5	220 - 200	Bottom Girt	ROHN 1.5 x 16GA	232	-0.85	7.40	11.5	Pass
							13.7 (b)	
T6	200 - 180	Bottom Girt	ROHN 1.5 x 16GA	266	-0.83	7.48	11.1	Pass
							13.3 (b)	
T7	180 - 160	Bottom Girt	ROHN 1.5 x 16GA	299	-0.94	7.48	12.5	Pass
							15.1 (b)	
T8	160 - 140	Bottom Girt	ROHN 1.5 x 16GA	331	-0.93	7.48	12.5	Pass
							15.0 (b)	
T9	140 - 120	Bottom Girt	ROHN 1.5 x 16GA	364	-1.16	7.48	15.5	Pass
							18.7 (b)	
T10	120 - 100	Bottom Girt	ROHN 1.5 x 16GA	421	-1.13	7.48	15.1	Pass
							18.2 (b)	
T11	100 - 80	Bottom Girt	ROHN 1.5 x 16GA	478	-1.12	7.48	15.0	Pass
							18.0 (b)	

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
T12	80 - 60	Bottom Girt	ROHN 1.5 x 16GA	511	-1.11	7.48	14.8 17.8 (b)	Pass
T13	60 - 40	Bottom Girt	ROHN 1.5 x 16GA	544	-1.24	7.48	16.5 19.9 (b)	Pass
T14	40 - 20	Bottom Girt	ROHN 1.5 x 16GA	577	-1.28	7.48	17.1 20.6 (b)	Pass
T15	20 - 4.81771	Bottom Girt	ROHN 1.5 x 16GA	612	1.87	9.44	19.8 30.0 (b)	Pass
T1	300 - 280	Guy A@282.523	3/4 [ECP-24000]	691	14.56	36.73	39.6	Pass
T3	260 - 240	Guy A@242.523	3/4 [ECP-24000]	676	15.26	36.73	41.6	Pass
T6	200 - 180	Guy A@182.523	3/4 [ECP-24000]	663	16.09	36.73	43.8	Pass
T9	140 - 120	Guy A@122.523	3/4 [ECP-24000]	657	16.80	36.73	45.7	Pass
T13	60 - 40	Guy A@59.3854	1/2 [ECP-23000]	651	8.18	16.95	48.3	Pass
T1	300 - 280	Guy B@282.523	3/4 [ECP-24000]	687	14.89	36.73	40.5	Pass
T3	260 - 240	Guy B@242.523	3/4 [ECP-24000]	672	16.39	36.73	44.6	Pass
T6	200 - 180	Guy B@182.523	3/4 [ECP-24000]	662	18.41	36.73	50.1	Pass
T9	140 - 120	Guy B@122.523	3/4 [ECP-24000]	656	20.37	36.73	55.5	Pass
T13	60 - 40	Guy B@59.3854	1/2 [ECP-23000]	650	9.89	16.95	58.4	Pass
T1	300 - 280	Guy C@282.523	3/4 [ECP-24000]	679	15.08	36.73	41.1	Pass
T3	260 - 240	Guy C@242.523	3/4 [ECP-24000]	664	16.34	36.73	44.5	Pass
T6	200 - 180	Guy C@182.523	3/4 [ECP-24000]	658	18.30	36.73	49.8	Pass
T9	140 - 120	Guy C@122.523	3/4 [ECP-24000]	652	20.05	36.73	54.6	Pass
T13	60 - 40	Guy C@59.3854	1/2 [ECP-23000]	646	9.75	16.95	57.5	Pass
T1	300 - 280	Top Guy Pull-Off@282.523	2L2x2x1/4x3/8	684	5.61	51.56	10.9 24.1 (b)	Pass
T3	260 - 240	Top Guy Pull-Off@242.523	2L2x2x1/4x3/8	670	8.51	51.56	16.5 24.6 (b)	Pass
T6	200 - 180	Top Guy Pull-Off@182.523	2L2x2x1/4x3/8	660	6.56	51.56	12.7 19.0 (b)	Pass
T9	140 - 120	Top Guy Pull-Off@122.523	2L2x2x1/4x3/8	655	7.37	51.56	14.3 21.3 (b)	Pass
T13	60 - 40	Top Guy Pull-Off@59.3854	4 1/2x3/8	649	4.08	57.41	7.1 8.2 (b)	Pass
T1	300 - 280	Torque Arm Top@282.523	C15x33.9	681	-1.18	306.34	27.4 29.6 (b)	Pass
T3	260 - 240	Torque Arm Top@242.523	C15x33.9	677	3.55	327.49	27.8	Pass
							Summary	
						Leg (T14)	62.6	Pass
						Diagonal (T6)	67.5	Pass
						Horizontal (T16)	13.5	Pass
						Top Girt (T14)	20.6	Pass
						Bottom Girt (T15)	30.0	Pass
						Guy A (T13)	48.3	Pass
						Guy B (T13)	58.4	Pass
						Guy C (T13)	57.5	Pass
						Top Guy Pull-Off (T3)	24.6	Pass
						Torque Arm Top (T1)	29.6	Pass
						Bolt Checks	67.5	Pass
						RATING =	**67.5**	**Pass**

APPENDIX B

BASE LEVEL DRAWING


(PROPOSED EQUIPMENT CONFIGURATION)
(3) 5/16" TO 286 FT LEVEL
(3) 3/8" TO 286 FT LEVEL
(7) 3/4" TO 286 FT LEVEL
(6) 1-5/8" TO 286 FT LEVEL
(OTHER CONSIDERED EQUIPMENT)
(2) 3/8" TO TOWER LIGHTING
LEG A
LEG B
LEG C
(OTHER CONSIDERED EQUIPMENT)
(4) 1/2" TO 250 FT LEVEL
(8) 1-5/8" TO 250 FT LEVEL
(4) 2-1/8" TO 250 FT LEVEL

APPENDIX C

ADDITIONAL CALCULATIONS

Pier and Pad Foundation

BU # :	846216
Site Name:	FORT WHITE
App. Number:	737316 Rev. 0

TIA-222 Revision:	H
Tower Type:	Guyed

Top & Bot. Pad Rein. Different?:	☐
Block Foundation?:	☐
Rectangular Pad?:	☐

Superstructure Analysis Reactions

Compression, P_{comp}:	168.61	kips
Base Shear, Vu_comp:	1.85	kips
Moment, M_u:	0	ft-kips
Tower Height, **H**:	300	ft
BP Dist. Above Fdn, bp_{dist}:	3	in
Bolt Circle / Bearing Plate Width, **BC**:	18	in

Pier Properties

Pier Shape:	Circular	
Pier Diameter, **dpier**:	3	ft
Ext. Above Grade, **E**:	1	ft
Pier Rebar Size, **Sc**:	9	
Pier Rebar Quantity, **mc**:	6	
Pier Tie/Spiral Size, **St**:	3	
Pier Tie/Spiral Quantity, **mt**:	14	
Pier Reinforcement Type:	Tie	
Pier Clear Cover, cc_{pier}:	3	in

*Min steel asssumed

Pad Properties

Depth, **D**:	10	ft
Pad Width, W_1:	11	ft
Pad Thickness, **T**:	2	ft
Pad Rebar Size (Bottom dir. 2), Sp_2:	9	
Pad Rebar Quantity (Bottom dir. 2), mp_2:	6	
Pad Clear Cover, cc_{pad}:	3	

*Min steel asssumed

Material Properties

Pier Rebar Grade, **Fy**:	60	ksi
Concrete Compressive Strength, **F'c**:	3	ksi
Dry Concrete Density, δ**c**:	150	pcf

Soil Properties

Total Soil Unit Weight, γ:	120	pcf
Ultimate Gross Bearing, Qult:	12.000	ksf
Cohesion, **Cu**:	2.000	ksf
Friction Angle, φ:	0	degrees
SPT Blow Count, N_{blows}:		
Base Friction, μ:	0.35	
Neglected Depth, **N**:	2.00	ft
Foundation Bearing on Rock?	No	
Groundwater Depth, **gw**:	N/A	ft

<--Toggle between Gross and Net

Foundation Analysis Checks

	Capacity	Demand	Rating*	Check
Lateral (Sliding) (kips)	172.63	1.85	**1.0%**	**Pass**
Bearing Pressure (ksf)	7.20	2.98	**39.4%**	**Pass**
*Overturning (kip*ft)*	1177.81	20.81	**1.8%**	**Pass**
*Pier Flexure (Comp.) (kip*ft)*	516.46	16.65	**3.1%**	**Pass**
Pier Compression (kip)	1528.95	180.06	**11.2%**	**Pass**
*Pad Flexure (kip*ft)*	506.88	131.29	**24.7%**	**Pass**
Pad Shear - 1-way (kips)	209.39	39.30	**17.9%**	**Pass**
Pad Shear - 2-way (Comp) (ksi)	0.164	0.035	**20.1%**	**Pass**
*Flexural 2-way (Comp) (kip*ft)*	733.13	9.99	**1.3%**	**Pass**

**Rating per TIA-222-H Section 15.5*

Structural Rating*:	**24.7%**
Soil Rating*:	**39.4%**

Guyed Anchor Block Foundation

Checks capacity of anchor blocks for a guyed tower.

BU#:	846216
Site Name:	FORT WHITE
Order Number:	737316 Rev. 0
Location:	Guy A @ 240 ft (Elev 0 ft)

TIA-222 Revision:	H

Design Reactions		
Shear, **S**:	40.27	kips
Uplift, **Ua**:	41.77	kips
Resultant Force, **Rf**:	58.02	kips
Tower Height, **H**:	300.00	ft
Guy Anchor Radius, **R**:	240.00	ft
Resultant Angle to Horizontal, **θ**:	46.0	deg

Guy Anchor Properties		
Depth to Bottom of Deadman, **Da**:	10	ft
Anchor Width, **Wa**:	4	ft
Anchor Thickness, **Ta**:	2	ft
Anchor Length, **La**:	18	ft
Concrete Volume, **Vc**:	5.3	yd^3
Toe Width, **toe**:	0	ft

Material Properties		
Wt. Avg.Concrete Density, **δx**:	0.150	kcf

Design Checks				
	Capacity	**Demand**	**Rating***	**Check**
Lateral Capacity (kips):	209.47	40.27	**18.3%**	**Pass**
Uplift Capacity (kips):	252.55	41.77	**15.8%**	**Pass**

**Rating per TIA-222-H Section 15.5*

Anchor Shaft Rating:	**N/A**
Structural Rating:	**N/A**
Soil Rating:	**18.3%**

Neglect Depth, **Neg**:	2	ft
Groundwater Level, **gw**:	N/A	ft

Soil Properties:			No. of Soil Layers: 3			
Layer	**φ, deg**	**cu, ksf**	**δ, pcf**	**d, ft**	**Ultimate fs (ksf)**	**N (blows/ft)**
1	0	0.000	120	2.00	0.000	
2	35	0.000	135	6.00	0.350	
3	40	0.000	135	10.00	1.000	

*key: φ = *Internal Angle of Friction*
cu = Cohesion / Undrained Shear Strength
δ = *Buoyant Soil Unit Weight*
d = Depth to Bottom of Layer
Ultimate fs = Geotechnical Report-provided skin friction / adhesion
N = SPT Blow Count

Version 5.1.7

Guyed Anchor Block Foundation

Checks capacity of anchor blocks for a guyed tower.

BU#:	846216
Site Name:	FORT WHITE
Order Number:	737316 Rev. 0
Location:	Guy B @ 237 ft (Elev -4 ft)

TIA-222 Revision:	H

Design Reactions		
Shear, **S**:	40.68	kips
Uplift, **Ua**:	43.33	kips
Resultant Force, **Rf**:	59.43	kips
Tower Height, **H**:	300.00	ft
Guy Anchor Radius, **R**:	237.00	ft
Resultant Angle to Horizontal, **θ**:	46.8	deg

Guy Anchor Properties		
Depth to Bottom of Deadman, **Da**:	10	ft
Anchor Width, **Wa**:	4	ft
Anchor Thickness, **Ta**:	2	ft
Anchor Length, **La**:	18	ft
Concrete Volume, **Vc**:	5.3	yd^3
Toe Width, **toe**:	0	ft

Material Properties		
Wt. Avg.Concrete Density, **δx**:	0.150	kcf

Design Checks				
	Capacity	**Demand**	**Rating***	**Check**
Lateral Capacity (kips):	291.05	40.68	**13.3%**	**Pass**
Uplift Capacity (kips):	352.48	43.33	**11.7%**	**Pass**

**Rating per TIA-222-H Section 15.5*

Anchor Shaft Rating:	**N/A**
Structural Rating:	**N/A**
Soil Rating:	**13.3%**

Neglect Depth, **Neg**:	2	ft
Groundwater Level, **gw**:	N/A	ft

Soil Properties:			No. of Soil Layers: 3			
Layer	**φ, deg**	**cu, ksf**	**δ, pcf**	**d, ft**	**Ultimate fs (ksf)**	**N (blows/ft)**
1	0	0.000	110	2.00	0.000	
2	0	1.250	125	4.00	1.250	
3	0	2.250	125	10.00	2.250	

*key: φ = *Internal Angle of Friction*
cu = Cohesion / Undrained Shear Strength
δ = *Buoyant Soil Unit Weight*
d = Depth to Bottom of Layer
Ultimate fs = Geotechnical Report-provided skin friction / adhesion
N = SPT Blow Count

Version 5.1.7

Guyed Anchor Block Foundation

Checks capacity of anchor blocks for a guyed tower.

BU#:	846216
Site Name:	FORT WHITE
Order Number:	737316 Rev. 0
Location:	Guy C @ 235 ft (Elev 2 ft)

TIA-222 Revision:	H

Design Reactions		
Shear, **S**:	41.17	kips
Uplift, **Ua**:	43.30	kips
Resultant Force, **Rf**:	59.74	kips
Tower Height, **H**:	300.00	ft
Guy Anchor Radius, **R**:	235.00	ft
Resultant Angle to Horizontal, **θ**:	46.4	deg

Guy Anchor Properties		
Depth to Bottom of Deadman, **Da**:	10	ft
Anchor Width, **Wa**:	4	ft
Anchor Thickness, **Ta**:	2	ft
Anchor Length, **La**:	18	ft
Concrete Volume, **Vc**:	5.3	yd^3
Toe Width, **toe**:	0	ft

Material Properties		
Wt. Avg.Concrete Density, **δx**:	0.150	kcf

Design Checks				
	Capacity	**Demand**	**Rating***	**Check**
Lateral Capacity (kips):	291.17	41.17	**13.5%**	**Pass**
Uplift Capacity (kips):	352.36	43.30	**11.7%**	**Pass**

**Rating per TIA-222-H Section 15.5*

Anchor Shaft Rating:	**N/A**
Structural Rating:	**N/A**
Soil Rating:	**13.5%**

Neglect Depth, **Neg**:	2	ft
Groundwater Level, **gw**:	N/A	ft

Soil Properties:			No. of Soil Layers: 3			
Layer	**φ, deg**	**cu, ksf**	**δ, pcf**	**d, ft**	**Ultimate fs (ksf)**	**N (blows/ft)**
1	0	0.000	110	2.00	0.000	
2	0	1.250	125	4.00	1.250	
3	0	2.250	125	10.00	2.250	

*key: φ = *Internal Angle of Friction*
cu = Cohesion / Undrained Shear Strength
δ = *Buoyant Soil Unit Weight*
d = Depth to Bottom of Layer
Ultimate fs = Geotechnical Report-provided skin friction / adhesion
N = SPT Blow Count

Version 5.1.7

Guyed Anchor Block Foundation

Checks capacity of anchor blocks for a guyed tower.

BU#:	846216
Site Name:	FORT WHITE
Order Number:	737316 Rev. 0
Location:	Guy A @ 140 ft (Elev 0 ft)

TIA-222 Revision:	H

Design Reactions		
Shear, **S**:	29.76	kips
Uplift, **Ua**:	26.40	kips
Resultant Force, **Rf**:	39.78	kips
Tower Height, **H**:	300.00	ft
Guy Anchor Radius, **R**:	140.00	ft
Resultant Angle to Horizontal, **θ**:	41.6	deg

Guy Anchor Properties		
Depth to Bottom of Deadman, **Da**:	8.5	ft
Anchor Width, **Wa**:	4	ft
Anchor Thickness, **Ta**:	2	ft
Anchor Length, **La**:	14	ft
Concrete Volume, **Vc**:	4.1	yd^3
Toe Width, **toe**:	0	ft

Material Properties		
Wt. Avg.Concrete Density, **δx**:	0.150	kcf

Design Checks				
	Capacity	**Demand**	**Rating***	**Check**
Lateral Capacity (kips):	145.86	29.76	**19.4%**	**Pass**
Uplift Capacity (kips):	148.49	26.40	**16.9%**	**Pass**

**Rating per TIA-222-H Section 15.5*

Anchor Shaft Rating:	**N/A**
Structural Rating:	**N/A**
Soil Rating:	**19.4%**

Neglect Depth, **Neg**:	2	ft
Groundwater Level, **gw**:	N/A	ft

Soil Properties:			No. of Soil Layers: 3			
Layer	**φ, deg**	**cu, ksf**	**δ, pcf**	**d, ft**	**Ultimate fs (ksf)**	**N (blows/ft)**
1	0	0.000	120	2.00	0.000	
2	35	0.000	135	6.00	0.350	
3	40	0.000	135	8.50	1.000	

*key: φ = *Internal Angle of Friction*
cu = Cohesion / Undrained Shear Strength
δ = *Buoyant Soil Unit Weight*
d = Depth to Bottom of Layer
Ultimate fs = Geotechnical Report-provided skin friction / adhesion
N = SPT Blow Count

Version 5.1.7

Guyed Anchor Block Foundation

Checks capacity of anchor blocks for a guyed tower.

BU#:	846216
Site Name:	FORT WHITE
Order Number:	737316 Rev. 0
Location:	Guy B @ 137 ft (Elev -4 ft)

TIA-222 Revision:	H

Design Reactions		
Shear, **S**:	34.76	kips
Uplift, **Ua**:	32.37	kips
Resultant Force, **Rf**:	47.50	kips
Tower Height, **H**:	300.00	ft
Guy Anchor Radius, **R**:	137.00	ft
Resultant Angle to Horizontal, **θ**:	43.0	deg

Guy Anchor Properties		
Depth to Bottom of Deadman, **Da**:	8.5	ft
Anchor Width, **Wa**:	4	ft
Anchor Thickness, **Ta**:	2	ft
Anchor Length, **La**:	14	ft
Concrete Volume, **Vc**:	4.1	yd^3
Toe Width, **toe**:	0	ft

Material Properties		
Wt. Avg.Concrete Density, **δx**:	0.150	kcf

Design Checks				
	Capacity	**Demand**	**Rating***	**Check**
Lateral Capacity (kips):	227.82	34.76	**14.5%**	**Pass**
Uplift Capacity (kips):	229.90	32.37	**13.4%**	**Pass**

**Rating per TIA-222-H Section 15.5*

Anchor Shaft Rating:	**N/A**
Structural Rating:	**N/A**
Soil Rating:	**14.5%**

Neglect Depth, **Neg**:	2	ft
Groundwater Level, **gw**:	N/A	ft

Soil Properties:			No. of Soil Layers: 3			
Layer	**φ, deg**	**cu, ksf**	**δ, pcf**	**d, ft**	**Ultimate fs (ksf)**	**N (blows/ft)**
1	0	0.000	110	2.00	0.000	
2	0	1.250	125	4.00	1.250	
3	0	2.250	125	8.50	2.250	

*key: φ = *Internal Angle of Friction*
cu = Cohesion / Undrained Shear Strength
δ = *Buoyant Soil Unit Weight*
d = Depth to Bottom of Layer
Ultimate fs = Geotechnical Report-provided skin friction / adhesion
N = SPT Blow Count

Version 5.1.7

Guyed Anchor Block Foundation

Checks capacity of anchor blocks for a guyed tower.

BU#:	846216
Site Name:	FORT WHITE
Order Number:	737316 Rev. 0
Location:	Guy C @ 135 ft (Elev 2 ft)

TIA-222 Revision:	H

Design Reactions		
Shear, **S**:	34.81	kips
Uplift, **Ua**:	31.41	kips
Resultant Force, **Rf**:	46.88	kips
Tower Height, **H**:	300.00	ft
Guy Anchor Radius, **R**:	135.00	ft
Resultant Angle to Horizontal, **θ**:	42.1	deg

Guy Anchor Properties		
Depth to Bottom of Deadman, **Da**:	8.5	ft
Anchor Width, **Wa**:	4	ft
Anchor Thickness, **Ta**:	2	ft
Anchor Length, **La**:	14	ft
Concrete Volume, **Vc**:	4.1	yd^3
Toe Width, **toe**:	0	ft

Material Properties		
Wt. Avg.Concrete Density, **δx**:	0.150	kcf

Design Checks				
	Capacity	**Demand**	**Rating***	**Check**
Lateral Capacity (kips):	228.10	34.81	**14.5%**	**Pass**
Uplift Capacity (kips):	229.58	31.41	**13.0%**	**Pass**

**Rating per TIA-222-H Section 15.5*

Anchor Shaft Rating:	**N/A**
Structural Rating:	**N/A**
Soil Rating:	**14.5%**

Neglect Depth, **Neg**:	2	ft
Groundwater Level, **gw**:	N/A	ft

Soil Properties:			No. of Soil Layers: 3			
Layer	**φ, deg**	**cu, ksf**	**δ, pcf**	**d, ft**	**Ultimate fs (ksf)**	**N (blows/ft)**
1	0	0.000	110	2.00	0.000	
2	0	1.250	125	4.00	1.250	
3	0	2.250	125	8.50	2.250	

*key: φ = *Internal Angle of Friction*
cu = Cohesion / Undrained Shear Strength
δ = *Buoyant Soil Unit Weight*
d = Depth to Bottom of Layer
Ultimate fs = Geotechnical Report-provided skin friction / adhesion
N = SPT Blow Count

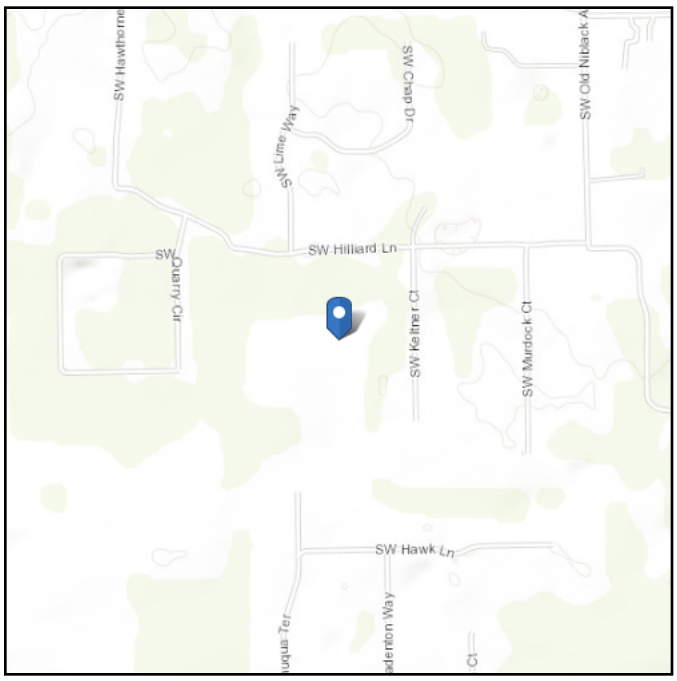
Version 5.1.7

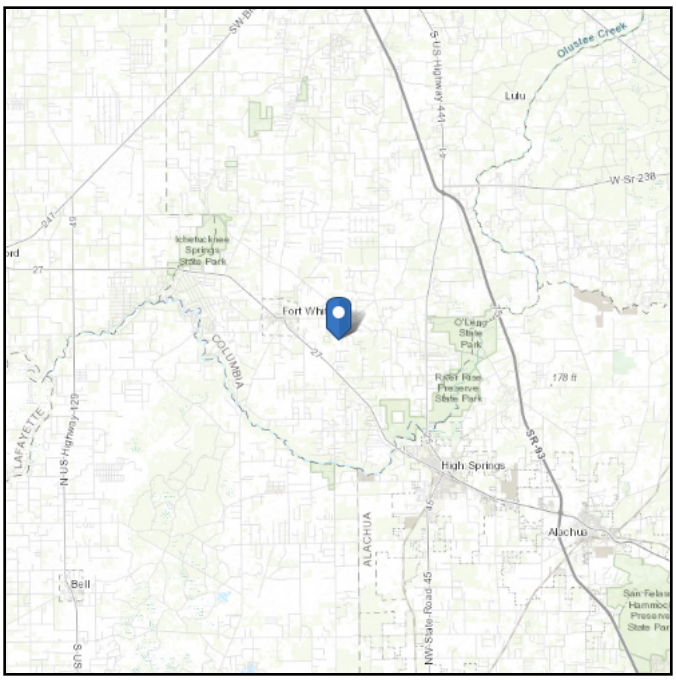
ASCE Hazards Report

Address:
No Address at This Location

Standard: ASCE/SEI 7-22
Risk Category: II
Soil Class: Default

Latitude: 29.908675
Longitude: -82.672106
Elevation: 72.12069634657612 ft (NAVD 88)





Wind

Results:

Wind Speed	121 Vmph
10-year MRI	75 Vmph
25-year MRI	84 Vmph
50-year MRI	90 Vmph
100-year MRI	99 Vmph
300-year MRI	111 Vmph
700-year MRI	121 Vmph
1,700-year MRI	131 Vmph
3,000-year MRI	137 Vmph
10,000-year MRI	146 Vmph
100,000-year MRI	155 Vmph
1,000,000-year MRI	168 Vmph

Data Source: ASCE/SEI 7-22, Fig. 26.5-1B and Figs. CC.2-1–CC.2-4, and Section 26.5.2
Date Accessed: Mon Mar 23 2026

Value provided is 3-second gust wind speeds at 33 ft above ground for Exposure C Category, based on linear interpolation between contours. Wind speeds are interpolated in accordance with the 7-22 Standard. Wind speeds correspond to approximately a 7% probability of exceedance in 50 years (annual exceedance probability = 0.00143, MRI = 700 years). Values for 10-year MRI, 25-year MRI, 50-year MRI and 100-year MRI are Service Level wind speeds, all other wind speeds are Ultimate wind speeds.

Site is in a hurricane-prone region as defined in ASCE/SEI 7-22 Section 26.2. Glazed openings need not be protected against wind-borne debris.

Seismic

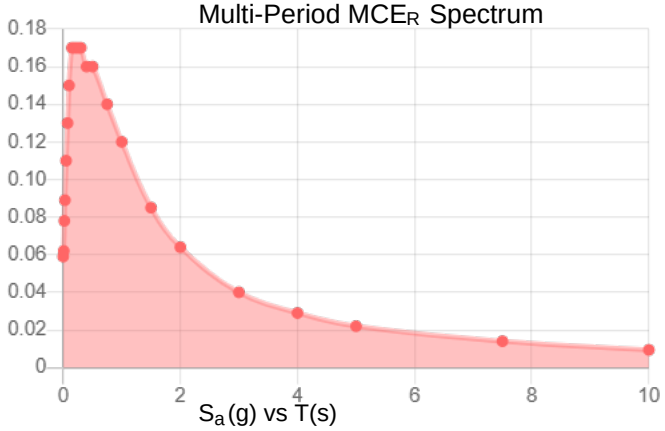
Site Soil Class: Default

Results:

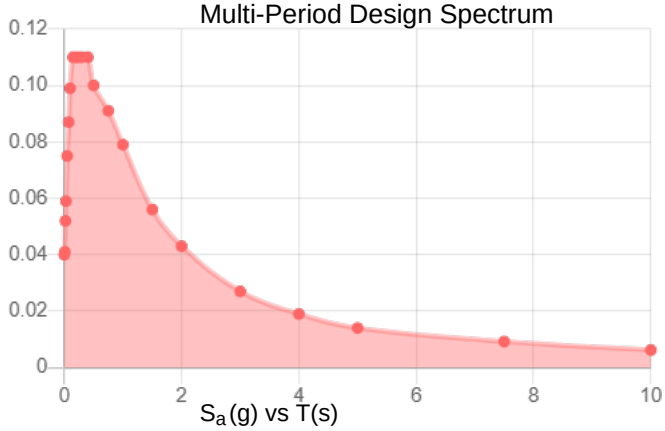
PGA_M :	0.055	T_L :	8
S_{MS} :	0.15	S_S :	0.12
S_{M1} :	0.12	S_1 :	0.056
S_{DS} :	0.1	V_{S30} :	260
S_{D1} :	0.079		

Seismic Design Category: B

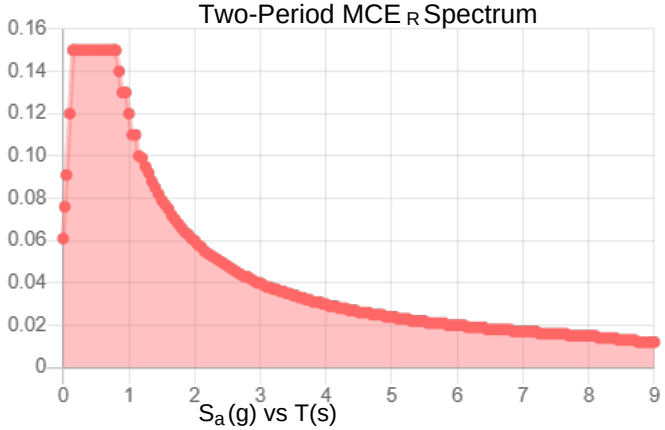
Multi-Period MCE_R Spectrum



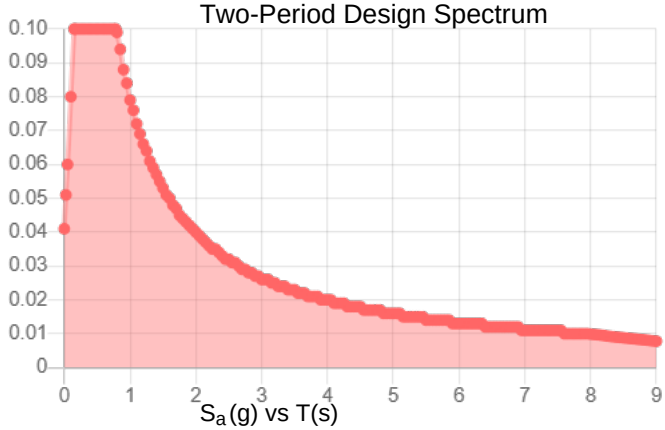
Multi-Period Design Spectrum



Two-Period MCE_R Spectrum



Two-Period Design Spectrum



MCE_R Vertical Response Spectrum

Vertical ground motion data has not yet been made available by USGS.

Design Vertical Response Spectrum

Vertical ground motion data has not yet been made available by USGS.

Data Accessed: **Mon Mar 23 2026**

Date Source:
USGS Seismic Design Maps based on ASCE/SEI 7-22 and ASCE/SEI 7-22 Table 1.5-2. Additional data for site-specific ground motion procedures in accordance with ASCE/SEI 7-22 Ch. 21 are available from USGS.

Ice

Results:

Ice Thickness:	N/A
Concurrent Temperature:	N/A
3-s Gust Speed	N/A
Data Source:	Standard ASCE/SEI 7-22, Figs. 10-2 through 10-8
Date Accessed:	Mon Mar 23 2026

Ice thicknesses on structures in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.

Values provided are equivalent radial ice thicknesses due to freezing rain for 250, 500, 1,000, and 1,400-year mean recurrence intervals along with concurrent 3-s gust speeds and concurrent air temperatures. The shading indicates special icing regions, with elevations above 2,100 ft (640 m) in the east, 6,000 ft (1829 m) in the west, and 1,600 ft (488 m) in Alaska, with sparse weather station data for determining design ice loads. In these regions, as well as in regions with complex terrain causing unusual icing conditions and regions where snow or in-cloud icing results in larger loads, the mapped values should be adjusted based on a combination of local historical records and experience, reanalysis data, and numerical weather prediction systems.

Tornado

Results:

Not Applicable to Risk Category 2

The ASCE Hazard Tool is provided for your convenience, for informational purposes only, and is provided “as is” and without warranties of any kind. The location data included herein has been obtained from information developed, produced, and maintained by third party providers; or has been extrapolated from maps incorporated in the ASCE standard. While ASCE has made every effort to use data obtained from reliable sources or methodologies, ASCE does not make any representations or warranties as to the accuracy, completeness, reliability, currency, or quality of any data provided herein. Any third-party links provided by this Tool should not be construed as an endorsement, affiliation, relationship, or sponsorship of such third-party content by or from ASCE.

ASCE does not intend, nor should anyone interpret, the results provided by this Tool to replace the sound judgment of a competent professional, having knowledge and experience in the appropriate field(s) of practice, nor to substitute for the standard of care required of such professionals in interpreting and applying the contents of this Tool or the ASCE standard.

In using this Tool, you expressly assume all risks associated with your use. Under no circumstances shall ASCE or its officers, directors, employees, members, affiliates, or agents be liable to you or any other person for any direct, indirect, special, incidental, or consequential damages arising from or related to your use of, or reliance on, the Tool or any information obtained therein. To the fullest extent permitted by law, you agree to release and hold harmless ASCE from any and all liability of any nature arising out of or resulting from any use of data provided by the ASCE Hazard Tool.