



STATE OF CONNECTICUT  
*CONNECTICUT SITING COUNCIL*

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: [siting.council@ct.gov](mailto:siting.council@ct.gov)

Web Site: [portal.ct.gov/csc](http://portal.ct.gov/csc)

**VIA ELECTRONIC MAIL**

May 6, 2024

Jeffrey Barbadora  
Permitting Specialist  
Crown Castle  
1800 West Park Drive  
Westborough, MA 01581  
[Jeff.Barbadora@crowncastle.com](mailto:Jeff.Barbadora@crowncastle.com)

RE: **EM-VER-151-230802** – Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at 150 Mattatuck Heights, Waterbury, Connecticut.  
**Request for Project Change.**

Dear Jeffrey Barbadora:

The Connecticut Siting Council (Council) is in receipt of the correspondence dated May 3, 2024 and the associated Structural Analysis dated October 25, 2023, regarding a project change for the above-referenced exempt modification request acknowledged by the Council on August 21, 2023.

Pursuant to Condition No. 1 of the Council's August 21, 2023 exempt modification approval, the request to increase the number of Kaelus interference mitigation filters to be installed from two to four is hereby approved.

This approval applies only to the project change in the correspondence dated May 3, 2024.

Thank you for your attention and cooperation.

Sincerely,

Melanie A. Bachman  
Executive Director

MAB/ANM/laf

c: The Honorable Paul K. Pernerewski, Jr., Mayor, City of Waterbury ([ppernerewski@waterburyct.org](mailto:ppernerewski@waterburyct.org))

**From:** Barbadora, Jeff <Jeff.Barbadora@crowncastle.com>  
**Sent:** Friday, May 3, 2024 5:59 AM  
**To:** CSC-DL Siting Council <Siting.Council@ct.gov>  
**Subject:** EM-VER-151-230802 - 150 Mattatuck Heights Waterbury CT - 876317

Good morning,

Would the CSC please update the approval for EM-VER-151-230802 to include a total of 4 filters?

The original SA submitted with the application and dated 5/23/2023 stated only 2 filters and should have stated 4 filters.

Please see updated SA stating a total of 4 filters and let me know if you have any questions.

Thanks,

**Jeffrey Barbadora**  
Permitting Specialist  
781-970-0053

**Crown Castle**  
1800 W. Park Drive, Suite 250  
Westborough, MA 01581

Date: **October 25, 2023**



Crown Castle  
2000 Corporate Dr.  
Canonsburg, PA 15317  
(724) 416-2000

**Subject:** **Structural Analysis Report**

**Carrier Designation:** **Verizon Wireless Co-Locate**  
**Site Number:** 5000382560  
**Site Name:** WATERBURY S CT

**Crown Castle Designation:** **BU Number:** 876317  
**Site Name:** WATERBURY  
**JDE Job Number:** 2103499  
**Work Order Number:** 2265177  
**Order Number:** 658808 Rev. 0

**Engineering Firm Designation:** **Crown Castle Project Number:** 2265177

**Site Data:** **150 Mattatuck Heights, WATERBURY, NEW HAVEN County, CT**  
**Latitude 41° 32' 16.3", Longitude -72° 59' 6.1"**  
**144.25 Foot - Monopole Tower**

Crown Castle 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

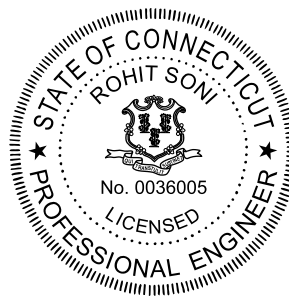
**Sufficient Capacity – 87.4%**

This analysis has been performed in accordance with the 2022 Connecticut State Building Code based upon an ultimate 3-second gust wind speed of 118 mph. Applicable Standard references and design criteria are listed in Section 2 - "Analysis Criteria".

Structural analysis prepared by: Patrick Himes

Respectfully submitted by:

Rohit Soni, P.E.  
Senior Project Engineer



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## 1) INTRODUCTION

This tower is a 144.25 ft Monopole tower designed by VALMONT. The tower has been modified multiple times in the past to accommodate additional loading.

## 2) ANALYSIS CRITERIA

<b>TIA-222 Revision:</b>	TIA-222-H
<b>Risk Category:</b>	II
<b>Wind Speed:</b>	118 mph
<b>Exposure Category:</b>	B
<b>Topographic Factor:</b>	1
<b>Ice Thickness:</b>	1 in
<b>Wind Speed with Ice:</b>	50 mph
<b>Service Wind Speed:</b>	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)
112.0	115.0	3	samsung telecommunications	MT6407-77A w/ Mount Pipe	6 2 1	1-5/8 1-1/4 1/2
		1	trimble	BULLET III		
	114.0	3	andrew	SBNHH-1D65B		
		3	andrew	SBNHH-1D65B w/ Mount Pipe		
		3	antel	BXA-80063/4CF w/ Mount Pipe		
		4	kaelus	BSF0020F3V1		
		1	raycap	RVZDC-6627-PF-48		
		3	samsung telecommunications	RFV01U-D1A		
		3	samsung telecommunications	RFV01U-D2A		
	112.0	1	tower mounts	Mount Modifications		
1		tower mounts	Platform Mount [LP 713-1_KCKR]			

**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)
144.0	146.0	3	ericsson	AIR 6419 B77G_CCIV3 w/ Mount Pipe	1 6 3	7/8 13/16 3/8
		1	ericsson	2012 B29		
	145.0	1	ericsson	RADIO 4415 B30		
		2	ericsson	RRUS 4449 B5/B12		
		3	ericsson	RRUS 4478 B14		
		2	ericsson	RRUS 8843 B2/B66A		
		3	kmw communications	EPBQ-654L8H8-L2 w/ Mount Pipe		
		3	quintel technology	QD8616-7 w/ Mount Pipe		

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
	144.0	2	ericsson	2012 B29		
		2	ericsson	RADIO 4415 B30		
		1	ericsson	RRUS 4449 B5/B12		
		1	ericsson	RRUS 8843 B2/B66A		
		2	raycap	DC6-48-60-18-8F		
		1	raycap	DC9-48-60-24-8C-EV		
		1	site pro 1	F3P-12W		
	142.0	3	ericsson	AIR 6449 B77D_CCVI2 w/ Mount Pipe		
132.0	136.0	1	andrew	VHLP2-18	1 3 3	1-1/2 1-1/4 Elliptical
		2	andrew	VHLP2-23		
		3	rfs celwave	IBC1900HB-2		
	134.0	3	alcatel lucent	1900MHZ RRH (65MHZ)		
		3	nokia	AAHC w/ Mount Pipe		
	133.0	3	alcatel lucent	800 EXTERNAL NOTCH FILTER		
		3	alcatel lucent	800MHZ RRH		
	132.0	1	tower mounts	Platform Mount [LP 602-1]		
131.0	4	rfs celwave	APXVSP18-C-A20 w/ Mount Pipe			
130.0	2	rfs celwave	PD2DE-700/2700			
120.0	120.0	3	commscope	FFVV-65B-R2 w/ Mount Pipe	1	1-1/2
		3	fujitsu	TA08025-B604		
		3	fujitsu	TA08025-B605		
		1	raycap	RDIDC-9181-PF-48		
		1	tower mounts	Commscope MC-PK8-DSH		
100.0	102.0	1	ericsson	RADIO 4460 B2/B25 B66_TMO	1 2	1-5/8 1-1/2
	101.0	3	ericsson	AIR 6419 B41_TMO w/ Mount Pipe		
		1	ericsson	RADIO 4449 B71 B85A_T-MOBILE		
		2	ericsson	RADIO 4460 B2/B25 B66_TMO		
	100.0	1	ericsson	AIR -32 B2A/B66AA w/ Mount Pipe		
		2	ericsson	RADIO 4449 B71 B85A_T-MOBILE		
		3	rfs celwave	APXVAARR24_43-U-NA20 w/ Mount Pipe		
		1	tower mounts	Platform Mount [LP 303-1_HR-1]		
99.0	2	ericsson	AIR -32 B2A/B66AA w/ Mount Pipe			
51.0	52.0	1	lucent	KS24019-L112A	1	1/2
	51.0	1	tower mounts	Side Arm Mount [SO 701-1]		

### 3) ANALYSIS PROCEDURE

**Table 3 - Documents Provided**

Document	Reference	Source
4-GEOTECHNICAL REPORTS	1529737	CCISITES
4-POST-MODIFICATION INSPECTION	8624542	CCISITES
4-POST-MODIFICATION INSPECTION	3770745	CCISITES
4-POST-MODIFICATION INSPECTION	2381112	CCISITES
4-POST-MODIFICATION INSPECTION	1956508	CCISITES
4-TOWER FOUNDATION DRAWINGS/DESIGN/SPECS	1630930	CCISITES
4-TOWER MANUFACTURER DRAWINGS	1530953	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	8142142	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	3315244	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	2381113	CCISITES

#### 3.1) Analysis Method

tnxTower (version 8.1.4.0), 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.

tnxTower was used to determine the loads on the modified structure. Additional calculations were performed to determine the stresses in the reinforcing elements. These calculations are presented in Appendix C.

#### 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. Crown Castle 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	% Capacity	Pass / Fail
L1	144.25 - 139.25	Pole	TP12.75x12.75x0.375	Pole	17.1%	Pass
L2	139.25 - 134.75	Pole	TP12.75x12.75x0.375	Pole	32.0%	Pass
L3	134.75 - 134.25	Pole	TP13.48x13.48x0.375	Pole	30.1%	Pass
L4	134.25 - 129.25	Pole	TP14.466x13.48x0.1875	Pole	61.5%	Pass
L5	129.25 - 124.25	Pole	TP15.452x14.466x0.1875	Pole	78.3%	Pass
L6	124.25 - 123.42	Pole	TP15.616x15.452x0.1875	Pole	80.8%	Pass
L7	123.42 - 123.17	Pole + Reinf.	TP15.665x15.616x0.5375	Reinf. 25 Tension Rupture	52.6%	Pass
L8	123.17 - 118.17	Pole + Reinf.	TP16.651x15.665x0.5125	Reinf. 25 Tension Rupture	64.6%	Pass
L9	118.17 - 113.17	Pole + Reinf.	TP17.637x16.651x0.4875	Reinf. 25 Tension Rupture	76.6%	Pass

Section No.	Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
L10	113.17 - 109.5	Pole + Reinf.	TP18.36x17.637x0.475	Reinf. 25 Tension Rupture	88.0%	Pass
L11	109.5 - 109.25	Pole + Reinf.	TP18.409x18.36x0.5875	Reinf. 25 Tension Rupture	74.1%	Pass
L12	109.25 - 104.75	Pole + Reinf.	TP19.296x18.409x0.5625	Reinf. 25 Tension Rupture	84.6%	Pass
L13	104.75 - 104.5	Pole + Reinf.	TP19.346x19.296x0.775	Reinf. 11 Tension Rupture	68.2%	Pass
L14	104.5 - 102.42	Pole + Reinf.	TP19.756x19.346x0.7625	Reinf. 11 Tension Rupture	72.0%	Pass
L15	102.42 - 102.17	Pole + Reinf.	TP19.806x19.756x0.5625	Reinf. 11 Tension Rupture	89.8%	Pass
L16	102.17 - 98.75	Pole + Reinf.	TP20.479x19.806x0.55	Reinf. 11 Tension Rupture	97.6%	Pass
L17	98.75 - 98.5	Pole + Reinf.	TP20.528x20.479x0.8375	Reinf. 6 Bolt-Shaft Bearing	85.3%	Pass
L18	98.5 - 97.5	Pole + Reinf.	TP20.726x20.528x0.8375	Reinf. 6 Tension Rupture	74.1%	Pass
L19	97.5 - 97.25	Pole + Reinf.	TP20.775x20.726x0.75	Reinf. 6 Tension Rupture	86.3%	Pass
L20	97.25 - 95.55	Pole + Reinf.	TP21.81x20.775x0.7375	Reinf. 6 Tension Rupture	89.7%	Pass
L21	95.55 - 90.55	Pole + Reinf.	TP21.73x20.735x0.8	Reinf. 6 Tension Rupture	92.7%	Pass
L22	90.55 - 89.25	Pole + Reinf.	TP21.989x21.73x0.775	Reinf. 6 Tension Rupture	94.7%	Pass
L23	89.25 - 89	Pole + Reinf.	TP22.039x21.989x1	Reinf. 5 Bolt-Shaft Bearing	81.8%	Pass
L24	89 - 88.25	Pole + Reinf.	TP22.189x22.039x0.975	Reinf. 11 Tension Rupture	68.4%	Pass
L25	88.25 - 88	Pole + Reinf.	TP22.238x22.189x0.7625	Reinf. 5 Tension Rupture	78.2%	Pass
L26	88 - 87.83	Pole + Reinf.	TP22.272x22.238x0.7625	Reinf. 5 Tension Rupture	78.4%	Pass
L27	87.83 - 87.58	Pole + Reinf.	TP22.321x22.272x0.675	Reinf. 5 Tension Rupture	83.1%	Pass
L28	87.58 - 82.58	Pole + Reinf.	TP23.317x22.321x0.65	Reinf. 5 Tension Rupture	89.2%	Pass
L29	82.58 - 77.58	Pole + Reinf.	TP24.312x23.317x0.625	Reinf. 5 Tension Rupture	94.7%	Pass
L30	77.58 - 77	Pole + Reinf.	TP24.428x24.312x0.625	Reinf. 5 Tension Rupture	95.3%	Pass
L31	77 - 76.75	Pole + Reinf.	TP24.478x24.428x0.825	Reinf. 10 Tension Rupture	89.4%	Pass
L32	76.75 - 76.33	Pole + Reinf.	TP24.561x24.478x0.825	Reinf. 10 Tension Rupture	89.8%	Pass
L33	76.33 - 76.08	Pole + Reinf.	TP24.611x24.561x0.825	Reinf. 10 Tension Rupture	90.9%	Pass
L34	76.08 - 74.25	Pole + Reinf.	TP24.976x24.611x0.8	Reinf. 10 Tension Rupture	92.7%	Pass
L35	74.25 - 74	Pole + Reinf.	TP25.026x24.976x0.8875	Reinf. 10 Tension Rupture	81.8%	Pass
L36	74 - 73.75	Pole + Reinf.	TP25.076x25.026x0.8875	Reinf. 10 Tension Rupture	82.0%	Pass
L37	73.75 - 73.5	Pole + Reinf.	TP25.125x25.076x0.9125	Reinf. 21 Tension Rupture	81.3%	Pass
L38	73.5 - 68.5	Pole + Reinf.	TP26.121x25.125x0.875	Reinf. 21 Tension Rupture	85.5%	Pass
L39	68.5 - 63.5	Pole + Reinf.	TP27.116x26.121x0.85	Reinf. 21 Tension Rupture	89.3%	Pass
L40	63.5 - 60.5	Pole + Reinf.	TP27.714x27.116x0.825	Reinf. 21 Tension Rupture	91.5%	Pass
L41	60.5 - 60.25	Pole + Reinf.	TP27.763x27.714x0.825	Reinf. 21 Tension Rupture	91.7%	Pass
L42	60.25 - 59.5	Pole + Reinf.	TP27.913x27.763x0.825	Reinf. 21 Tension Rupture	92.2%	Pass
L43	59.5 - 59.25	Pole + Reinf.	TP27.962x27.913x0.8875	Reinf. 21 Tension Rupture	86.2%	Pass
L44	59.25 - 54.25	Pole + Reinf.	TP28.958x27.962x0.85	Reinf. 21 Tension Rupture	89.4%	Pass
L45	54.25 - 50	Pole + Reinf.	TP30.64x28.958x0.8375	Reinf. 21 Tension Rupture	92.0%	Pass
L46	50 - 44.8	Pole + Reinf.	TP30.333x29.304x0.8375	Reinf. 9 Tension Rupture	93.6%	Pass
L47	44.8 - 43.58	Pole + Reinf.	TP30.574x30.333x0.8375	Reinf. 9 Tension Rupture	94.2%	Pass
L48	43.58 - 43.33	Pole + Reinf.	TP30.624x30.574x0.85	Reinf. 9 Tension Rupture	93.3%	Pass
L49	43.33 - 43.17	Pole + Reinf.	TP30.657x30.624x0.85	Reinf. 9 Tension Rupture	93.4%	Pass
L50	43.17 - 42.92	Pole + Reinf.	TP30.706x30.657x0.9375	Reinf. 9 Tension Rupture	88.4%	Pass
L51	42.92 - 39	Pole + Reinf.	TP31.481x30.706x0.9125	Reinf. 9 Tension Rupture	90.1%	Pass
L52	39 - 38.75	Pole + Reinf.	TP31.531x31.481x0.95	Reinf. 9 Tension Rupture	85.2%	Pass
L53	38.75 - 37.17	Pole + Reinf.	TP31.844x31.531x0.9375	Reinf. 9 Tension Rupture	85.8%	Pass



Section No.	Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
L54	37.17 - 36.92	Pole + Reinf.	TP31.894x31.844x0.8875	Reinf. 9 Tension Rupture	89.2%	Pass
L55	36.92 - 34	Pole + Reinf.	TP32.471x31.894x0.8875	Reinf. 9 Tension Rupture	90.3%	Pass
L56	34 - 33.75	Pole + Reinf.	TP32.52x32.471x0.875	Reinf. 8 Tension Rupture	90.3%	Pass
L57	33.75 - 29.75	Pole + Reinf.	TP33.312x32.52x0.8625	Reinf. 8 Tension Rupture	91.8%	Pass
L58	29.75 - 29.5	Pole + Reinf.	TP33.361x33.312x0.8625	Reinf. 8 Tension Rupture	90.8%	Pass
L59	29.5 - 24.5	Pole + Reinf.	TP34.351x33.361x0.85	Reinf. 8 Tension Rupture	92.5%	Pass
L60	24.5 - 23	Pole + Reinf.	TP34.648x34.351x0.8375	Reinf. 8 Tension Rupture	92.9%	Pass
L61	23 - 22.75	Pole + Reinf.	TP34.697x34.648x0.9625	Reinf. 8 Tension Rupture	86.2%	Pass
L62	22.75 - 21.58	Pole + Reinf.	TP34.928x34.697x0.9625	Reinf. 8 Tension Rupture	86.5%	Pass
L63	21.58 - 21.33	Pole + Reinf.	TP34.978x34.928x0.85	Reinf. 8 Tension Rupture	91.3%	Pass
L64	21.33 - 16.33	Pole + Reinf.	TP35.967x34.978x0.8375	Reinf. 8 Tension Rupture	92.7%	Pass
L65	16.33 - 12.92	Pole + Reinf.	TP36.644x35.967x0.825	Reinf. 8 Tension Rupture	93.6%	Pass
L66	12.92 - 12.67	Pole + Reinf.	TP36.693x36.644x0.9125	Reinf. 7 Tension Rupture	84.9%	Pass
L67	12.67 - 12.5	Pole + Reinf.	TP36.726x36.693x0.9125	Reinf. 7 Tension Rupture	84.9%	Pass
L68	12.5 - 12.25	Pole + Reinf.	TP36.776x36.726x0.7625	Reinf. 14 Tension Rupture	88.1%	Pass
L69	12.25 - 12	Pole + Reinf.	TP36.825x36.776x0.7625	Reinf. 14 Tension Rupture	88.1%	Pass
L70	12 - 11.75	Pole + Reinf.	TP36.874x36.825x0.6625	Reinf. 2 Tension Rupture	90.1%	Pass
L71	11.75 - 8.5	Pole + Reinf.	TP37.518x36.874x0.65	Reinf. 2 Tension Rupture	90.8%	Pass
L72	8.5 - 8.25	Pole + Reinf.	TP37.567x37.518x0.925	Reinf. 1 Tension Rupture	74.4%	Pass
L73	8.25 - 7	Pole + Reinf.	TP37.815x37.567x0.9125	Reinf. 1 Tension Rupture	74.7%	Pass
L74	7 - 6.75	Pole + Reinf.	TP37.864x37.815x0.8125	Reinf. 1 Tension Rupture	86.5%	Pass
L75	6.75 - 1.75	Pole + Reinf.	TP38.854x37.864x0.7875	Reinf. 1 Tension Rupture	87.6%	Pass
L76	1.75 - 0	Pole + Reinf.	TP39.2x38.854x0.7875	Reinf. 1 Tension Rupture	87.9%	Pass
					Summary	
				Pole	80.8%	Pass
				Reinforcement	97.6%	Pass
				Overall	97.6%	Pass

**Table 5 - Tower Component Stresses vs. Capacity - LC5**

Notes	Component	Elevation (ft)	% Capacity	Pass / Fail
1	Flange Bolts	134.25	27.2	Pass
1	Flange Plate		47.5	Pass
1	Anchor Rods	0	87.4	Pass
1	Base Plate	0	60.8	Pass
1	Base Foundation (Structure)	0	19.9	Pass
1	Base Foundation (Soil Interaction)	0	85.4	Pass

<b>Structure Rating (max from all components) =</b>	<b>97.6%</b>
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Notes:

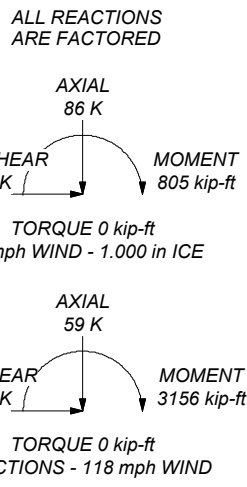
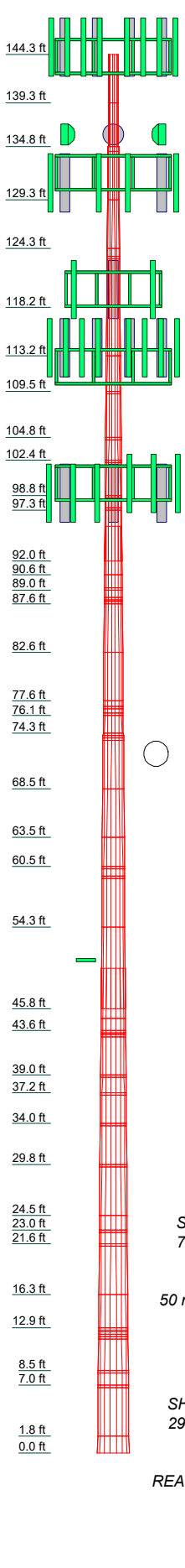
- 1) See additional documentation in "Appendix C – Additional Calculations" for calculations supporting the % capacity consumed. Rating per TIA-222-H Section 15.5.

#### **4.1) Recommendations**

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

**APPENDIX A**  
**TNXTOWER OUTPUT**

Section	Length (ft)	Number of Sides	Thickness (in)	Socket Length (ft)	Top Dia (in)	Bot Dia (in)	Grade	Weight (K)
1	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
2	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
3	5.000	0	0	3.552	13.480	14.488	A500-46	0.1
4	5.000	0	0	3.552	13.480	14.488	A500-46	0.1
5	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
6	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
7	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
8	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
9	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
10	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
11	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
12	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
13	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
14	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
15	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
16	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
17	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
18	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
19	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
20	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
21	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
22	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
23	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
24	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
25	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
26	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
27	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
28	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
29	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
30	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
31	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
32	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
33	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
34	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
35	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
36	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
37	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
38	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
39	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
40	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
41	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
42	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
43	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
44	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
45	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
46	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
47	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
48	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
49	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
50	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
51	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
52	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
53	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
54	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
55	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
56	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
57	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
58	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
59	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
60	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
61	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
62	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
63	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
64	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
65	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
66	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
67	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
68	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
69	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
70	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
71	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
72	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
73	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
74	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
75	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
76	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
77	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
78	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
79	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
80	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
81	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
82	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
83	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
84	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
85	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
86	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
87	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
88	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
89	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
90	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
91	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
92	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
93	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
94	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
95	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
96	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
97	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
98	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
99	5.000	0	0	3.552	13.480	14.488	A500-46	0.2
100	5.000	0	0	3.552	13.480	14.488	A500-46	0.2




### MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A500-46	46 ksi	62 ksi	A572-65	65 ksi	80 ksi

### TOWER DESIGN NOTES

1. Tower is located in New Haven County, Connecticut.
2. Tower designed for Exposure B to the TIA-222-H Standard.
3. Tower designed for a 118 mph basic wind in accordance with the TIA-222-H Standard.
4. Tower is also designed for a 50 mph basic wind with 1.00 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60 mph wind.
6. Tower Risk Category II.
7. Topographic Category 1 with Crest Height of 0.000 ft
8. TIA-222-H Annex S
9. TOWER RATING: 97.6%



**Crown Castle**  
2000 Corporate Dr.  
Canonsburg, PA 15317  
Phone: (724) 416-2000  
FAX:

Job: **BU# 876317**

Project:

Client: Crown Castle	Drawn by: PHimes	App'd:
Code: TIA-222-H	Date: 10/25/23	Scale: NTS
Path:	Dwg No. E-1	

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## Tower Input Data

The tower is a monopole.

This tower is designed using the TIA-222-H standard.

The following design criteria apply:

- Tower is located in New Haven County, Connecticut.
- Tower base elevation above sea level: 660.000 ft.
- Basic wind speed of 118 mph.
- Risk Category II.
- Exposure Category B.
- Simplified Topographic Factor Procedure for wind speed-up calculations is used.
- Topographic Category: 1.
- Crest Height: 0.000 ft.
- Nominal ice thickness of 1.000 in.
- Ice thickness is considered to increase with height.
- Ice density of 56.000 pcf.
- A wind speed of 50 mph is used in combination with ice.
- Temperature drop of 50.000 °F.
- Deflections calculated using a wind speed of 60 mph.
- TIA-222-H Annex S.
- TOWER RATING: 97.6%.
- A non-linear (P-delta) analysis was used.
- Pressures are calculated at each section.
- Stress ratio used in pole design is 1.
- Tower analysis based on target reliabilities in accordance with Annex S.
- Load Modification Factors used:  $K_{es}(F_w) = 0.95$ ,  $K_{es}(t_i) = 0.85$ .
- 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  
 Consider Moments - Horizontals

Distribute Leg Loads As Uniform  
 Assume Legs Pinned

Use ASCE 10 X-Brace Ly Rules  
 Calculate Forces in Supporting Bracing Members

Consider Moments - Diagonals  
 Use Moment Magnification  
 ✓ Use Code Stress Ratios  
 ✓ Use Code Safety Factors - Guys  
 Escalate Ice  
 Always Use Max Kz  
 Use Special Wind Profile  
 Include Bolts In Member Capacity  
 Leg Bolts Are At Top Of Section  
 Secondary Horizontal Braces Leg  
 Use Diamond Inner Bracing (4 Sided)  
 SR Members Have Cut Ends  
 SR Members Are Concentric

✓ Assume Rigid Index Plate  
 ✓ Use Clear Spans For Wind Area  
 Use Clear Spans For KL/r  
 Retension Guys To Initial Tension  
 ✓ Bypass Mast Stability Checks  
 ✓ Use Azimuth Dish Coefficients  
 ✓ Project Wind Area of Appurt.  
 Autocalc Torque Arm Areas  
 Add IBC .6D+W Combination  
 ✓ Sort Capacity Reports By Component  
 Triangulate Diamond Inner Bracing  
 Treat Feed Line Bundles As Cylinder  
 Ignore KL/ry For 60 Deg. Angle Legs

Ignore Redundant Members in FEA  
 SR Leg Bolts Resist Compression  
 All Leg Panels Have Same Allowable  
 Offset Girt At Foundation  
 ✓ Consider Feed Line Torque  
 Include Angle Block Shear Check  
 Use TIA-222-H Bracing Resist. Exemption  
 Use TIA-222-H Tension Splice Exemption  
**Poles**  
 ✓ Include Shear-Torsion Interaction  
 Always Use Sub-Critical Flow  
 Use Top Mounted Sockets  
 Pole Without Linear Attachments  
 Pole With Shroud Or No Appurtenances  
 Outside and Inside Corner Radii Are Known

## Tapered Pole Section Geometry

Section	Elevation ft	Section Length ft	Splice Length ft	Number of Sides	Top Diameter in	Bottom Diameter in	Wall Thickness in	Bend Radius in	Pole Grade
L1	144.250-139.250	5.000	0.000	Round	12.750	12.750	0.375		A500-46 (46 ksi)
L2	139.250-134.750	4.500	0.000	Round	12.750	12.750	0.375		A500-46 (46 ksi)
L3	134.750-134.250	0.500	0.000	Round	13.480	13.480	0.375		A500-46 (46 ksi)
L4	134.250-129.250	5.000	0.000	12	13.480	14.466	0.188	0.750	A572-65 (65 ksi)
L5	129.250-124.250	5.000	0.000	12	14.466	15.452	0.188	0.750	A572-65 (65 ksi)
L6	124.250-123.416	0.834	0.000	12	15.452	15.616	0.188	0.750	A572-65 (65 ksi)
L7	123.416-123.166	0.250	0.000	12	15.616	15.665	0.537	2.150	A572-65 (65 ksi)
L8	123.166-118.166	5.000	0.000	12	15.665	16.651	0.512	2.050	A572-65 (65 ksi)
L9	118.166-113.166	5.000	0.000	12	16.651	17.637	0.487	1.950	A572-65 (65 ksi)
L10	113.166-109.500	3.666	0.000	12	17.637	18.360	0.475	1.900	A572-65 (65 ksi)
L11	109.500-109.250	0.250	0.000	12	18.360	18.409	0.588	2.350	A572-65 (65 ksi)
L12	109.250-104.750	4.500	0.000	12	18.409	19.296	0.563	2.250	A572-65 (65 ksi)
L13	104.750-104.500	0.250	0.000	12	19.296	19.346	0.775	3.100	A572-65 (65 ksi)
L14	104.500-102.416	2.084	0.000	12	19.346	19.756	0.762	3.050	A572-65 (65 ksi)
L15	102.416-102.166	0.250	0.000	12	19.756	19.806	0.563	2.250	A572-65 (65 ksi)
L16	102.166-98.750	3.416	0.000	12	19.806	20.479	0.550	2.200	A572-65 (65 ksi)
L17	98.750-98.500	0.250	0.000	12	20.479	20.528	0.838	3.350	A572-65 (65 ksi)
L18	98.500-97.500	1.000	0.000	12	20.528	20.726	0.838	3.350	A572-65 (65 ksi)
L19	97.500-97.250	0.250	0.000	12	20.726	20.775	0.750	3.000	A572-65 (65 ksi)
L20	97.250-92.000	5.250	3.552	12	20.775	21.810	0.738	2.950	A572-65 (65 ksi)
L21	92.000-90.552	5.000	0.000	12	20.735	21.730	0.800	3.200	A572-65 (65 ksi)
L22	90.552-89.250	1.302	0.000	12	21.730	21.989	0.775	3.100	A572-65 (65 ksi)
L23	89.250-89.000	0.250	0.000	12	21.989	22.039	1.000	4.000	A572-65 (65 ksi)
L24	89.000-88.250	0.750	0.000	12	22.039	22.189	0.975	3.900	A572-65 (65 ksi)
L25	88.250-88.000	0.250	0.000	12	22.189	22.238	0.762	3.050	A572-65 (65 ksi)
L26	88.000-87.833	0.167	0.000	12	22.238	22.272	0.762	3.050	A572-65 (65 ksi)
L27	87.833-87.583	0.250	0.000	12	22.272	22.321	0.675	2.700	A572-65 (65 ksi)
L28	87.583-82.583	5.000	0.000	12	22.321	23.317	0.650	2.600	A572-65 (65 ksi)
L29	82.583-77.583	5.000	0.000	12	23.317	24.312	0.625	2.500	A572-65 (65 ksi)
L30	77.583-77.000	0.583	0.000	12	24.312	24.428	0.625	2.500	A572-65 (65 ksi)
L31	77.000-76.750	0.250	0.000	12	24.428	24.478	0.825	3.300	A572-65 (65 ksi)
L32	76.750-76.333	0.417	0.000	12	24.478	24.561	0.825	3.300	A572-65 (65 ksi)
L33	76.333-76.083	0.250	0.000	12	24.561	24.611	0.825	3.300	A572-65 (65 ksi)
L34	76.083-74.250	1.833	0.000	12	24.611	24.976	0.800	3.200	A572-65 (65 ksi)
L35	74.250-74.000	0.250	0.000	12	24.976	25.026	0.887	3.550	A572-65

Section	Elevation ft	Section Length ft	Splice Length ft	Number of Sides	Top Diameter in	Bottom Diameter in	Wall Thickness in	Bend Radius in	Pole Grade
L36	74.000-73.750	0.250	0.000	12	25.026	25.076	0.887	3.550	(65 ksi) A572-65
L37	73.750-73.500	0.250	0.000	12	25.076	25.125	0.912	3.650	(65 ksi) A572-65
L38	73.500-68.500	5.000	0.000	12	25.125	26.121	0.875	3.500	(65 ksi) A572-65
L39	68.500-63.500	5.000	0.000	12	26.121	27.116	0.850	3.400	(65 ksi) A572-65
L40	63.500-60.500	3.000	0.000	12	27.116	27.714	0.825	3.300	(65 ksi) A572-65
L41	60.500-60.250	0.250	0.000	12	27.714	27.763	0.825	3.300	(65 ksi) A572-65
L42	60.250-59.500	0.750	0.000	12	27.763	27.913	0.825	3.300	(65 ksi) A572-65
L43	59.500-59.250	0.250	0.000	12	27.913	27.962	0.887	3.550	(65 ksi) A572-65
L44	59.250-54.250	5.000	0.000	12	27.962	28.958	0.850	3.400	(65 ksi) A572-65
L45	54.250-45.802	8.448	4.198	12	28.958	30.640	0.838	3.350	(65 ksi) A572-65
L46	45.802-44.802	5.198	0.000	12	29.304	30.333	0.838	3.350	(65 ksi) A572-65
L47	44.802-43.583	1.219	0.000	12	30.333	30.574	0.838	3.350	(65 ksi) A572-65
L48	43.583-43.333	0.250	0.000	12	30.574	30.624	0.850	3.400	(65 ksi) A572-65
L49	43.333-43.166	0.167	0.000	12	30.624	30.657	0.850	3.400	(65 ksi) A572-65
L50	43.166-42.916	0.250	0.000	12	30.657	30.706	0.938	3.750	(65 ksi) A572-65
L51	42.916-39.000	3.916	0.000	12	30.706	31.481	0.912	3.650	(65 ksi) A572-65
L52	39.000-38.750	0.250	0.000	12	31.481	31.531	0.950	3.800	(65 ksi) A572-65
L53	38.750-37.166	1.584	0.000	12	31.531	31.844	0.938	3.750	(65 ksi) A572-65
L54	37.166-36.916	0.250	0.000	12	31.844	31.894	0.887	3.550	(65 ksi) A572-65
L55	36.916-34.000	2.916	0.000	12	31.894	32.471	0.887	3.550	(65 ksi) A572-65
L56	34.000-33.750	0.250	0.000	12	32.471	32.520	0.875	3.500	(65 ksi) A572-65
L57	33.750-29.750	4.000	0.000	12	32.520	33.312	0.863	3.450	(65 ksi) A572-65
L58	29.750-29.500	0.250	0.000	12	33.312	33.361	0.863	3.450	(65 ksi) A572-65
L59	29.500-24.500	5.000	0.000	12	33.361	34.351	0.850	3.400	(65 ksi) A572-65
L60	24.500-23.000	1.500	0.000	12	34.351	34.648	0.838	3.350	(65 ksi) A572-65
L61	23.000-22.750	0.250	0.000	12	34.648	34.697	0.963	3.850	(65 ksi) A572-65
L62	22.750-21.583	1.167	0.000	12	34.697	34.928	0.963	3.850	(65 ksi) A572-65
L63	21.583-21.333	0.250	0.000	12	34.928	34.978	0.850	3.400	(65 ksi) A572-65
L64	21.333-16.333	5.000	0.000	12	34.978	35.967	0.838	3.350	(65 ksi) A572-65
L65	16.333-12.917	3.416	0.000	12	35.967	36.644	0.825	3.300	(65 ksi) A572-65
L66	12.917-12.667	0.250	0.000	12	36.644	36.693	0.912	3.650	(65 ksi) A572-65
L67	12.667-12.500	0.167	0.000	12	36.693	36.726	0.912	3.650	(65 ksi) A572-65
L68	12.500-12.250	0.250	0.000	12	36.726	36.776	0.762	3.050	(65 ksi) A572-65
L69	12.250-12.000	0.250	0.000	12	36.776	36.825	0.762	3.050	(65 ksi) A572-65

Section	Elevation ft	Section Length ft	Splice Length ft	Number of Sides	Top Diameter in	Bottom Diameter in	Wall Thickness in	Bend Radius in	Pole Grade
L70	12.000-11.750	0.250	0.000	12	36.825	36.874	0.662	2.650	A572-65 (65 ksi)
L71	11.750-8.500	3.250	0.000	12	36.874	37.518	0.650	2.600	A572-65 (65 ksi)
L72	8.500-8.250	0.250	0.000	12	37.518	37.567	0.925	3.700	A572-65 (65 ksi)
L73	8.250-7.000	1.250	0.000	12	37.567	37.815	0.912	3.650	A572-65 (65 ksi)
L74	7.000-6.750	0.250	0.000	12	37.815	37.864	0.813	3.250	A572-65 (65 ksi)
L75	6.750-1.750	5.000	0.000	12	37.864	38.854	0.787	3.150	A572-65 (65 ksi)
L76	1.750-0.000	1.750		12	38.854	39.200	0.787	3.150	A572-65 (65 ksi)

### Tapered Pole Properties

Section	Tip Dia. in	Area in <sup>2</sup>	I in <sup>4</sup>	r in	C in	I/C in <sup>3</sup>	J in <sup>4</sup>	It/Q in <sup>2</sup>	w in	w/t
L1	12.750	14.579	279.335	4.377	6.375	43.817	558.670	7.285	0.000	0
	12.750	14.579	279.335	4.377	6.375	43.817	558.670	7.285	0.000	0
L2	12.750	14.579	279.335	4.377	6.375	43.817	558.670	7.285	0.000	0
	12.750	14.579	279.335	4.377	6.375	43.817	558.670	7.285	0.000	0
L3	13.480	15.439	331.709	4.635	6.740	49.215	663.419	7.715	0.000	0
	13.480	15.439	331.709	4.635	6.740	49.215	663.419	7.715	0.000	0
L4	13.889	8.025	180.994	4.759	6.983	25.921	366.742	3.950	3.110	16.587
	14.910	8.621	224.322	5.112	7.493	29.936	454.538	4.243	3.374	17.996
L5	14.910	8.621	224.322	5.112	7.493	29.936	454.538	4.243	3.374	17.996
	15.931	9.216	274.067	5.465	8.004	34.242	555.334	4.536	3.639	19.405
L6	15.931	9.216	274.067	5.465	8.004	34.242	555.334	4.536	3.639	19.405
	16.101	9.315	283.020	5.523	8.089	34.988	573.475	4.585	3.683	19.641
L7	15.977	26.097	757.351	5.398	8.089	93.626	1534.599	12.844	2.745	5.106
	16.028	26.182	764.802	5.416	8.115	94.250	1549.697	12.886	2.758	5.131
L8	16.037	25.006	732.852	5.425	8.115	90.312	1484.956	12.307	2.825	5.512
	17.058	26.633	885.390	5.778	8.625	102.651	1794.041	13.108	3.089	6.027
L9	17.067	25.373	846.120	5.787	8.625	98.098	1714.469	12.488	3.156	6.474
	18.087	26.920	1010.565	6.139	9.136	110.614	2047.680	13.249	3.420	7.016
L10	18.092	26.249	986.808	6.144	9.136	108.014	1999.541	12.919	3.454	7.271
	18.840	27.355	1116.814	6.403	9.510	117.432	2262.967	13.463	3.647	7.679
L11	18.800	33.621	1355.419	6.362	9.510	142.521	2746.446	16.547	3.346	5.695
	18.851	33.714	1366.728	6.380	9.536	143.325	2769.361	16.593	3.359	5.718
L12	18.860	32.324	1314.084	6.389	9.536	137.804	2662.690	15.909	3.426	6.091
	19.778	33.931	1519.973	6.707	9.995	152.067	3079.878	16.700	3.664	6.514
L13	19.704	46.220	2023.726	6.631	9.995	202.465	4100.618	22.748	3.094	3.993
	19.755	46.343	2039.927	6.648	10.021	203.566	4133.444	22.808	3.108	4.01
L14	19.759	45.626	2011.080	6.653	10.021	200.687	4074.993	22.456	3.141	4.119
	20.184	46.635	2147.450	6.800	10.234	209.839	4351.315	22.952	3.251	4.264
L15	20.255	34.765	1634.756	6.871	10.234	159.741	3312.459	17.110	3.787	6.733
	20.306	34.854	1647.383	6.889	10.259	160.574	3338.044	17.154	3.800	6.756
L16	20.310	34.102	1613.915	6.894	10.259	157.312	3270.230	16.784	3.834	6.971
	21.008	35.295	1789.255	7.135	10.608	168.667	3625.516	17.371	4.014	7.299
L17	20.906	52.969	2608.327	7.032	10.608	245.878	5285.177	26.070	3.244	3.873
	20.957	53.102	2628.012	7.049	10.634	247.139	5325.065	26.135	3.257	3.889
L18	20.957	53.102	2628.012	7.049	10.634	247.139	5325.065	26.135	3.257	3.889
	21.161	53.633	2707.746	7.120	10.736	252.215	5486.627	26.397	3.310	3.952
L19	21.192	48.241	2456.993	7.151	10.736	228.858	4978.534	23.743	3.544	4.726
	21.243	48.360	2475.226	7.169	10.761	230.010	5015.479	23.801	3.558	4.744
L20	21.248	47.584	2438.533	7.173	10.761	226.600	4941.129	23.419	3.591	4.869
	22.319	50.042	2836.299	7.544	11.298	251.054	5747.111	24.629	3.869	5.246
L21	21.916	51.352	2604.715	7.137	10.741	242.512	5277.859	25.274	3.413	4.266
	22.215	53.916	3014.753	7.493	11.256	267.829	6108.707	26.536	3.680	4.6
L22	22.223	52.294	2931.020	7.502	11.256	260.391	5939.041	25.737	3.747	4.834
	22.492	52.941	3041.148	7.595	11.391	266.989	6162.190	26.056	3.816	4.924
L23	22.412	67.586	3800.525	7.514	11.391	333.657	7700.895	33.264	3.213	3.213
	22.464	67.746	3827.628	7.532	11.416	335.277	7755.811	33.343	3.227	3.227



144.25 Ft Monopole Tower Structural Analysis  
Project Number 2265177, Order 658808, Revision 0

Section	Tip Dia. in	Area in <sup>2</sup>	I in <sup>4</sup>	r in	C in	I/C in <sup>3</sup>	J in <sup>4</sup>	It/Q in <sup>2</sup>	w in	w/t
L24	22.473	66.131	3745.256	7.541	11.416	328.062	7588.904	32.548	3.294	3.378
	22.627	66.600	3825.474	7.594	11.494	332.833	7751.447	32.778	3.334	3.419
L25	22.702	52.606	3082.526	7.671	11.494	268.194	6246.033	25.891	3.903	5.119
	22.754	52.728	3104.059	7.688	11.519	269.463	6289.666	25.951	3.916	5.136
L26	22.754	52.728	3104.059	7.688	11.519	269.463	6289.666	25.951	3.916	5.136
	22.788	52.810	3118.499	7.700	11.537	270.312	6318.925	25.992	3.925	5.148
L27	22.819	46.940	2794.467	7.732	11.537	242.225	5662.348	23.102	4.160	6.163
	22.871	47.048	2813.834	7.749	11.562	243.360	5701.590	23.156	4.173	6.182
L28	22.879	45.358	2719.017	7.758	11.562	235.159	5509.465	22.324	4.240	6.523
	23.910	47.442	3111.201	8.115	12.078	257.590	6304.137	23.349	4.507	6.934
L29	23.919	45.667	3001.449	8.124	12.078	248.503	6081.749	22.476	4.574	7.318
	24.950	47.671	3414.060	8.480	12.594	271.091	6917.811	23.462	4.841	7.745
L30	24.950	47.671	3414.060	8.480	12.594	271.091	6917.811	23.462	4.841	7.745
	25.070	47.904	3464.497	8.522	12.654	273.788	7020.009	23.577	4.872	7.795
L31	24.999	62.702	4458.829	8.450	12.654	352.367	9034.796	30.860	4.336	5.256
	25.051	62.835	4487.097	8.468	12.680	353.880	9092.074	30.925	4.349	5.272
L32	25.051	62.835	4487.097	8.468	12.680	353.880	9092.074	30.925	4.349	5.272
	25.137	63.055	4534.514	8.498	12.723	356.411	9188.154	31.034	4.371	5.299
L33	25.137	63.055	4534.514	8.498	12.723	356.411	9188.154	31.034	4.371	5.299
	25.188	63.188	4563.100	8.515	12.748	357.932	9246.078	31.099	4.385	5.315
L34	25.197	61.337	4438.791	8.524	12.748	348.182	8994.194	30.188	4.452	5.565
	25.575	62.277	4646.037	8.655	12.938	359.113	9414.131	30.651	4.550	5.687
L35	25.544	68.839	5098.436	8.624	12.938	394.081	10330.813	33.880	4.315	4.862
	25.595	68.981	5130.107	8.641	12.963	395.740	10394.987	33.950	4.328	4.877
L36	25.595	68.981	5130.107	8.641	12.963	395.740	10394.987	33.950	4.328	4.877
	25.647	69.123	5161.909	8.659	12.989	397.403	10459.427	34.020	4.342	4.892
L37	25.638	70.997	5290.875	8.650	12.989	407.332	10720.748	34.943	4.275	4.685
	25.690	71.143	5323.640	8.668	13.015	409.042	10787.138	35.015	4.288	4.699
L38	25.703	68.325	5128.616	8.682	13.015	394.057	10391.966	33.628	4.389	5.016
	26.734	71.130	5786.510	9.038	13.531	427.662	11725.038	35.008	4.655	5.32
L39	26.742	69.166	5637.897	9.047	13.531	416.679	11423.908	34.041	4.722	5.556
	27.773	71.891	6330.781	9.403	14.046	450.710	12827.879	35.382	4.989	5.87
L40	27.782	69.843	6162.143	9.412	14.046	438.704	12486.173	34.375	5.056	6.129
	28.400	71.430	6591.746	9.626	14.356	459.174	13356.665	35.155	5.216	6.323
L41	28.400	71.430	6591.746	9.626	14.356	459.174	13356.665	35.155	5.216	6.323
	28.452	71.562	6628.421	9.644	14.381	460.901	13430.978	35.221	5.230	6.339
L42	28.452	71.562	6628.421	9.644	14.381	460.901	13430.978	35.221	5.230	6.339
	28.606	71.958	6739.262	9.697	14.459	466.102	13655.572	35.416	5.270	6.387
L43	28.584	77.231	7199.745	9.675	14.459	497.950	14588.636	38.011	5.102	5.749
	28.636	77.374	7239.601	9.693	14.485	499.815	14669.394	38.081	5.115	5.764
L44	28.649	74.207	6962.552	9.706	14.485	480.688	14108.019	36.522	5.216	6.136
	29.680	76.932	7758.004	10.063	15.000	517.192	15719.820	37.863	5.483	6.45
L45	29.684	75.834	7654.119	10.067	15.000	510.266	15509.320	37.323	5.516	6.587
	31.425	80.370	9111.392	10.669	15.872	574.072	18462.150	39.556	5.967	7.125
L46	30.903	76.767	7940.296	10.191	15.180	523.091	16089.192	37.783	5.609	6.697
	31.108	79.542	8832.656	10.559	15.712	562.143	17897.356	39.148	5.885	7.027
L47	31.108	79.542	8832.656	10.559	15.712	562.143	17897.356	39.148	5.885	7.027
	31.357	80.192	9051.177	10.646	15.837	571.505	18340.138	39.468	5.949	7.104
L48	31.353	81.355	9174.689	10.641	15.837	579.304	18590.408	40.041	5.916	6.96
	31.404	81.491	9220.582	10.659	15.863	581.261	18683.399	40.107	5.929	6.975
L49	31.404	81.491	9220.582	10.659	15.863	581.261	18683.399	40.107	5.929	6.975
	31.438	81.581	9251.324	10.671	15.880	582.570	18745.690	40.152	5.938	6.986
L50	31.407	89.715	10114.068	10.639	15.880	636.899	20493.845	44.155	5.704	6.084
	31.459	89.864	10164.669	10.657	15.906	639.054	20596.375	44.228	5.717	6.098
L51	31.468	87.541	9918.558	10.666	15.906	623.581	20097.688	43.085	5.784	6.338
	32.270	89.819	10712.920	10.944	16.307	656.941	21707.280	44.206	5.991	6.566
L52	32.257	93.395	11112.181	10.930	16.307	681.424	22516.292	45.966	5.891	6.201
	32.308	93.546	11166.294	10.948	16.333	683.668	22625.939	46.041	5.904	6.215
L53	32.312	92.353	11032.887	10.952	16.333	675.500	22355.621	45.453	5.938	6.334
	32.637	93.300	11375.549	11.065	16.495	689.623	23049.946	45.919	6.022	6.423
L54	32.654	88.467	10821.202	11.083	16.495	656.017	21926.689	43.541	6.156	6.936
	32.706	88.608	10873.172	11.100	16.521	658.145	22031.995	43.610	6.169	6.951
L55	32.706	88.608	10873.172	11.100	16.521	658.145	22031.995	43.610	6.169	6.951
	33.303	90.257	11491.697	11.307	16.820	683.221	23285.295	44.422	6.324	7.125
L56	33.308	89.021	11343.300	11.311	16.820	674.398	22984.602	43.814	6.357	7.265
	33.359	89.161	11396.674	11.329	16.846	676.540	23092.752	43.882	6.370	7.281
L57	33.363	87.922	11247.182	11.333	16.846	667.666	22789.841	43.272	6.404	7.425
	34.183	90.120	12112.233	11.617	17.256	701.930	24542.669	44.354	6.616	7.671
L58	34.183	90.120	12112.233	11.617	17.256	701.930	24542.669	44.354	6.616	7.671
	34.234	90.258	12167.724	11.635	17.281	704.100	24655.108	44.422	6.629	7.686

Section	Tip Dia. in	Area in <sup>2</sup>	I in <sup>4</sup>	r in	C in	I/C in <sup>3</sup>	J in <sup>4</sup>	It/Q in <sup>2</sup>	w in	w/t
L59	34.238	88.984	12005.222	11.639	17.281	694.697	24325.835	43.795	6.663	7.839
	35.263	91.692	13135.172	11.993	17.794	738.186	26615.420	45.128	6.928	8.151
L60	35.267	90.378	12956.500	11.998	17.794	728.145	26253.382	44.481	6.962	8.312
	35.575	91.178	13303.879	12.104	17.948	741.261	26957.266	44.875	7.041	8.407
L61	35.531	104.400	15120.579	12.059	17.948	842.484	30638.392	51.382	6.706	6.967
	35.582	104.553	15187.307	12.077	17.973	844.995	30773.601	51.458	6.719	6.981
L62	35.582	104.553	15187.307	12.077	17.973	844.995	30773.601	51.458	6.719	6.981
	35.821	105.269	15501.390	12.160	18.093	856.767	31410.018	51.810	6.781	7.046
L63	35.861	93.272	13826.015	12.200	18.093	764.168	28015.256	45.906	7.083	8.333
	35.912	93.408	13886.327	12.218	18.119	766.416	28137.463	45.973	7.096	8.348
L64	35.916	92.068	13697.156	12.222	18.119	755.975	27754.151	45.313	7.130	8.513
	36.941	94.737	14923.078	12.577	18.631	800.976	30238.202	46.626	7.395	8.83
L65	36.945	93.356	14716.043	12.581	18.631	789.863	29818.694	45.947	7.428	9.004
	37.645	95.152	15581.827	12.823	18.981	820.902	31573.007	46.831	7.609	9.224
L66	37.614	104.987	17108.449	12.792	18.981	901.330	34666.356	51.671	7.375	8.082
	37.665	105.132	17179.621	12.809	19.007	903.859	34810.570	51.743	7.388	8.097
L67	37.665	105.132	17179.621	12.809	19.007	903.859	34810.570	51.743	7.388	8.097
	37.700	105.229	17227.274	12.821	19.024	905.550	34907.127	51.791	7.397	8.106
L68	37.753	88.299	14577.031	12.875	19.024	766.241	29537.017	43.458	7.799	10.228
	37.804	88.421	14637.280	12.893	19.050	768.372	29659.097	43.518	7.812	10.246
L69	37.804	88.421	14637.280	12.893	19.050	768.372	29659.097	43.518	7.812	10.246
	37.855	88.542	14697.694	12.910	19.075	770.507	29781.513	43.578	7.826	10.263
L70	37.890	77.144	12876.656	12.946	19.075	675.042	26091.595	37.968	8.094	12.217
	37.942	77.249	12929.583	12.964	19.101	676.907	26198.841	38.020	8.107	12.237
L71	37.946	75.818	12698.770	12.968	19.101	664.823	25731.151	37.315	8.140	12.524
	38.612	77.164	13387.320	13.199	19.434	688.855	27126.339	37.978	8.313	12.789
L72	38.515	108.991	18628.043	13.100	19.434	958.520	37745.466	53.642	7.576	8.19
	38.566	109.139	18703.710	13.118	19.460	961.146	37898.786	53.715	7.589	8.204
L73	38.571	107.701	18469.846	13.122	19.460	949.128	37424.916	53.007	7.623	8.353
	38.827	108.428	18846.355	13.211	19.588	962.140	38187.825	53.365	7.689	8.426
L74	38.862	96.807	16917.795	13.247	19.588	863.684	34280.038	47.645	7.957	9.793
	38.913	96.936	16985.752	13.264	19.614	866.020	34417.740	47.709	7.970	9.809
L75	38.922	94.017	16496.461	13.273	19.614	841.073	33426.303	46.272	8.037	10.206
	39.946	96.526	17852.914	13.628	20.126	887.049	36174.844	47.507	8.302	10.543
L76	39.946	96.526	17852.914	13.628	20.126	887.049	36174.844	47.507	8.302	10.543
	40.305	97.404	18344.678	13.752	20.306	903.430	37171.292	47.940	8.395	10.66

Tower Elevation	Gusset Area (per face)	Gusset Thickness	Gusset Grade	Adjust. Factor A <sub>r</sub>	Adjust. Factor A <sub>r</sub>	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals	Double Angle Stitch Bolt Spacing Horizontals	Double Angle Stitch Bolt Spacing Redundants
ft	ft <sup>2</sup>	in					in	in	in
L1 144.250-139.250				1	1	1			
L2 139.250-134.750				1	1	1			
L3 134.750-134.250				1	1	1			
L4 134.250-129.250				1	1	1			
L5 129.250-124.250				1	1	1			
L6 124.250-123.416				1	1	1			
L7 123.416-123.166				1	1	0.873259			
L8 123.166-118.166				1	1	0.880843			
L9 118.166-113.166				1	1	0.893543			
L10 113.166-109.500				1	1	0.895307			
L11 109.500-109.250				1	1	0.905539			
L12 109.250-104.750				1	1	0.915518			
L13 104.750-104.500				1	1	0.930283			
L14 104.500-				1	1	0.929776			

Tower Elevation	Gusset Area (per face)	Gusset Thickness	Gusset Grade	Adjust. Factor $A_r$	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
ft	ft <sup>2</sup>	in							
L15 102.416-102.166				1	1	1.12278			
L16 102.166-98.750				1	1	1.12029			
L17 98.750-98.500				1	1	1.00154			
L18 98.500-97.500				1	1	0.993827			
L19 97.500-97.250				1	1	1.04068			
L20 97.250-92.000				1	1	1.04446			
L21 92.000-90.552				1	1	1.02362			
L22 90.552-89.250				1	1	1.04642			
L23 89.250-89.000				1	1	0.966606			
L24 89.000-88.250				1	1	0.985049			
L25 88.250-88.000				1	1	1.01704			
L26 88.000-87.833				1	1	1.01598			
L27 87.833-87.583				1	1	1.00822			
L28 87.583-82.583				1	1	1.01675			
L29 82.583-77.583				1	1	1.02867			
L30 77.583-77.000				1	1	1.02561			
L31 77.000-76.750				1	1	0.973799			
L32 76.750-76.333				1	1	0.971453			
L33 76.333-76.083				1	1	0.922508			
L34 76.083-74.250				1	1	0.940709			
L35 74.250-74.000				1	1	0.893422			
L36 74.000-73.750				1	1	0.892163			
L37 73.750-73.500				1	1	0.909624			
L38 73.500-68.500				1	1	0.921059			
L39 68.500-63.500				1	1	0.922459			
L40 63.500-60.500				1	1	0.935147			
L41 60.500-60.250				1	1	0.933979			
L42 60.250-59.500				1	1	0.930501			
L43 59.500-59.250				1	1	0.9205			
L44 59.250-54.250				1	1	0.936205			
L45 54.250-45.802				1	1	0.930731			
L46 45.802-44.802				1	1	0.938065			
L47 44.802-43.583				1	1	0.933481			

Tower Elevation	Gusset Area (per face)	Gusset Thickness	Gusset Grade	Adjust. Factor $A_r$	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
ft	ft <sup>2</sup>	in							
L48 43.583-43.333				1	1	0.974523			
L49 43.333-43.166				1	1	0.97385			
L50 43.166-42.916				1	1	0.934786			
L51 42.916-39.000				1	1	0.943944			
L52 39.000-38.750				1	1	0.949681			
L53 38.750-37.166				1	1	0.955574			
L54 37.166-36.916				1	1	0.972827			
L55 36.916-34.000				1	1	0.961485			
L56 34.000-33.750				1	1	0.928941			
L57 33.750-29.750				1	1	0.927889			
L58 29.750-29.500				1	1	0.93743			
L59 29.500-24.500				1	1	0.933623			
L60 24.500-23.000				1	1	0.942163			
L61 23.000-22.750				1	1	0.90832			
L62 22.750-21.583				1	1	0.904351			
L63 21.583-21.333				1	1	0.971473			
L64 21.333-16.333				1	1	0.968358			
L65 16.333-12.917				1	1	0.971282			
L66 12.917-12.667				1	1	0.961412			
L67 12.667-12.500				1	1	0.96084			
L68 12.500-12.250				1	1	1.00814			
L69 12.250-12.000				1	1	1.00732			
L70 12.000-11.750				1	1	1.07745			
L71 11.750-8.500				1	1	1.08702			
L72 8.500-8.250				1	1	0.961703			
L73 8.250-7.000				1	1	0.970307			
L74 7.000-6.750				1	1	0.961877			
L75 6.750-1.750				1	1	0.976278			
L76 1.750-0.000				1	1	0.971053			

**Feed Line/Linear Appurtenances - Entered As Round Or Flat**

Description	Sector	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	Number Per Row	Start/End Position	Width or Diameter in	Perimeter in	Weight klf
***										
FB-L98B-034-XXX(3/8)	B	No	Surface Ar (CaAa)	144.000 - 0.000	3	2	0.000 0.030	0.394		0.000
PWRT-608-S(13/16)	B	No	Surface Ar (CaAa)	144.000 - 0.000	6	3	0.000 0.150	0.820		0.001
PWRT-606-S(7/8)	B	No	Surface Ar (CaAa)	144.000 - 0.000	1	1	0.150 0.160	0.920		0.001
*										
7983A(ELLIPTICAL)	B	No	Surface Ar (CaAa)	132.000 - 0.000	3	1	-0.380 -0.300	0.573		0.000
*										
CU12PSM9P6XXX(1-1/2)	B	No	Surface Ar (CaAa)	120.000 - 0.000	1	1	-0.100 -0.080	1.600		0.002
*										
Safety Line 3/8	B	No	Surface Ar (CaAa)	144.250 - 0.000	1	1	-0.400 -0.370	0.375		0.000
*										
PL1.25x6.875 Reinforcement	A	No	Surface Af (CaAa)	29.750 - 0.000	1	1	0.250 0.250	6.875	16.250	0.000
PL1.25x6.875 Reinforcement	B	No	Surface Af (CaAa)	29.750 - 0.000	1	1	0.250 0.250	6.875	16.250	0.000
PL1.25x6.875 Reinforcement	C	No	Surface Af (CaAa)	29.750 - 9.170	1	1	0.250 0.250	6.875	16.250	0.000
PL1.25x6.875 Reinforcement	C	No	Surface Af (CaAa)	16.420 - 0.000	1	1	0.000 0.000	6.875	16.250	0.000
PL1.25x6.875 Reinforcement	C	No	Surface Af (CaAa)	16.420 - 0.000	1	1	0.500 0.500	6.875	16.250	0.000
***										
PL1.25x6.625 Reinforcement	A	No	Surface Af (CaAa)	59.500 - 29.750	1	1	0.250 0.250	6.625	15.750	0.000
PL1.25x6.625 Reinforcement	B	No	Surface Af (CaAa)	59.500 - 29.750	1	1	0.250 0.250	6.625	15.750	0.000
PL1.25x6.625 Reinforcement	C	No	Surface Af (CaAa)	59.500 - 29.750	1	1	0.250 0.250	6.625	15.750	0.000
***										
PL1.25x5.5 Reinforcement	A	No	Surface Af (CaAa)	89.250 - 59.500	1	1	0.250 0.250	5.500	13.500	0.000
PL1.25x5.5 Reinforcement	B	No	Surface Af (CaAa)	89.250 - 59.500	1	1	0.250 0.250	5.500	13.500	0.000
PL1.25x5.5 Reinforcement	C	No	Surface Af (CaAa)	89.250 - 59.500	1	1	0.250 0.250	5.500	13.500	0.000
***										
PL1.25x3.625 Reinforcement	A	No	Surface Af (CaAa)	100.000 - 89.250	1	1	0.250 0.250	3.625	9.750	0.000
PL1.25x3.625 Reinforcement	B	No	Surface Af (CaAa)	100.000 - 89.250	1	1	0.250 0.250	3.625	9.750	0.000
PL1.25x3.625 Reinforcement	C	No	Surface Af (CaAa)	100.000 - 89.250	1	1	0.250 0.250	3.625	9.750	0.000
***										
PL1x4 Reinforcement	A	No	Surface Af (CaAa)	35.750 - 10.750	1	1	0.000 0.000	4.000	10.000	0.000
PL1x4 Reinforcement	B	No	Surface Af (CaAa)	35.750 - 10.750	1	1	-0.250 -0.250	4.000	10.000	0.000
PL1x4 Reinforcement	C	No	Surface Af (CaAa)	40.750 - 10.750	1	1	-0.250 -0.250	4.000	10.000	0.000
***										
PL1x4 Reinforcement	A	No	Surface Af (CaAa)	62.250 - 32.250	1	1	0.500 0.500	4.000	10.000	0.000
PL1x4 Reinforcement	B	No	Surface Af (CaAa)	62.250 - 32.250	1	1	0.500 0.500	4.000	10.000	0.000
PL1x4 Reinforcement	C	No	Surface Af (CaAa)	62.250 - 32.250	1	1	0.500 0.500	4.000	10.000	0.000
***										
PL1x4 Reinforcement	A	No	Surface Af (CaAa)	78.750 - 58.750	1	1	-0.250 -0.250	4.000	10.000	0.000
PL1x4 Reinforcement	B	No	Surface Af (CaAa)	78.750 - 58.750	1	1	-0.250 -0.250	4.000	10.000	0.000
PL1x4 Reinforcement	C	No	Surface Af	78.750 -	1	1	-0.250	4.000	10.000	0.000

Description	Sector	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	Number Per Row	Start/End Position	Width or Diameter in	Perimeter in	Weight klf
***			(CaAa)	58.750			-0.250			
PL1x4 Reinforcement	A	No	Surface Af (CaAa)	106.500 - 86.500	1	1	-0.250 -0.250	4.000	10.000	0.000
PL1x4 Reinforcement	B	No	Surface Af (CaAa)	106.500 - 86.500	1	1	-0.250 -0.250	4.000	10.000	0.000
PL1x4 Reinforcement	C	No	Surface Af (CaAa)	106.500 - 86.500	1	1	-0.250 -0.250	4.000	10.000	0.000
***										
Transition Stiffener 1x7	A	No	Surface Af (CaAa)	10.500 - 0.000	1	1	-0.500 -0.500	1.000	16.000	0.000
Transition Stiffener 1x7	B	No	Surface Af (CaAa)	10.500 - 0.000	1	1	-0.250 -0.250	1.000	16.000	0.000
Transition Stiffener 1x7	C	No	Surface Af (CaAa)	10.500 - 0.000	1	1	-0.250 -0.250	1.000	16.000	0.000
*										
CCI-SFP-060100	B	No	Surface Af (CaAa)	25.000 - 5.000	1	1	-0.500 -0.500	6.000	14.000	0.000
CCI-SFP-060100	C	No	Surface Af (CaAa)	25.000 - 5.000	1	1	0.000 0.000	6.000	14.000	0.000
*										
CCI-SFP-060100	C	No	Surface Af (CaAa)	25.000 - 10.000	1	1	-0.250 -0.250	6.000	14.000	0.000
*										
CCI-SFP-045100	B	No	Surface Af (CaAa)	35.083 - 20.083	1	1	0.000 0.000	4.500	11.000	0.000
*										
CCI-SFP-045100	C	No	Surface Af (CaAa)	35.083 - 25.083	1	1	0.000 0.000	4.500	11.000	0.000
*										
CCI-SFP-045100	A	No	Surface Af (CaAa)	45.080 - 25.083	1	1	-0.250 -0.250	4.500	11.000	0.000
*										
CCI-SFP-060100	B	No	Surface Af (CaAa)	45.167 - 35.167	1	1	0.000 0.000	6.000	14.000	0.000
CCI-SFP-060100	C	No	Surface Af (CaAa)	45.167 - 35.167	1	1	0.000 0.000	6.000	14.000	0.000
*										
CCI-SFP-045100	A	No	Surface Af (CaAa)	75.250 - 45.250	1	1	0.000 0.000	4.500	11.000	0.000
CCI-SFP-045100	B	No	Surface Af (CaAa)	75.250 - 45.250	1	1	0.000 0.000	4.500	11.000	0.000
*										
CCI-SFP-040075	B	No	Surface Af (CaAa)	75.250 - 45.250	1	1	0.000 0.000	4.000	9.500	0.000
*										
CCI-SFP-040075	B	No	Surface Af (CaAa)	100.330 - 75.330	1	1	0.000 0.000	4.000	9.500	0.000
CCI-SFP-040075	C	No	Surface Af (CaAa)	100.330 - 75.330	1	1	0.000 0.000	4.000	9.500	0.000
*										
CCI-SFP-040075	A	No	Surface Af (CaAa)	90.333 - 75.333	1	1	-0.500 -0.500	4.000	9.500	0.000
*										
CCI-AFP-05012520	C	No	Surface Af (CaAa)	105.330 - 85.330	1	1	0.000 0.000	5.000	12.500	0.000
*										
CCI-AFP-045100	A	No	Surface Af (CaAa)	125.416 - 100.416	1	1	0.000 0.000	4.500	11.000	0.000
CCI-AFP-045100	B	No	Surface Af (CaAa)	125.416 - 100.416	1	1	0.000 0.000	4.500	11.000	0.000
CCI-AFP-045100	C	No	Surface Af (CaAa)	125.416 - 100.416	1	1	0.000 0.000	4.500	11.000	0.000
*										
CCI-AFP-040075	A	No	Surface Af (CaAa)	111.000 - 96.000	1	1	-0.500 -0.500	4.000	9.500	0.000
*										
CCI-AFP-040075	B	No	Surface Af	111.000 -	1	1	-0.500	4.000	9.500	0.000

Description	Sector	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	Number Per Row	Start/End Position	Width or Diameter in	Perimeter in	Weight klf
*			(CaAa)	101.000			-0.500			

**Feed Line/Linear Appurtenances - Entered As Area**

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number		CAAA ft <sup>2</sup> /ft	Weight klf
MLC6C-06C-008R-008R(1-1/2)	B	No	No	Inside Pole	132.000 - 0.000	1	No Ice 1/2" Ice 1" Ice	0.000 0.000 0.000	0.002 0.002 0.002
HB114-1-0813U4-M5J(1-1/4)	B	No	No	Inside Pole	132.000 - 0.000	3	No Ice 1/2" Ice 1" Ice	0.000 0.000 0.000	0.001 0.001 0.001
* LDF7-50A(1-5/8)	B	No	No	Inside Pole	112.000 - 0.000	6	No Ice 1/2" Ice 1" Ice	0.000 0.000 0.000	0.001 0.001 0.001
HB114-U6S12-XXX-LI(1-1/4)	B	No	No	Inside Pole	112.000 - 0.000	2	No Ice 1/2" Ice 1" Ice	0.000 0.000 0.000	0.002 0.002 0.002
LDF4-50A(1/2)	B	No	No	Inside Pole	112.000 - 0.000	1	No Ice 1/2" Ice 1" Ice	0.000 0.000 0.000	0.000 0.000 0.000
* MLC HYBRID 6X12 6AWGX6(1-1/2)	C	No	No	Inside Pole	100.000 - 0.000	2	No Ice 1/2" Ice 1" Ice	0.000 0.000 0.000	0.001 0.001 0.001
HB158-21U6S24-xxM_TMO(1-5/8)	C	No	No	Inside Pole	100.000 - 0.000	1	No Ice 1/2" Ice 1" Ice	0.000 0.000 0.000	0.003 0.003 0.003
* LDF4-50A(1/2)	B	No	No	Inside Pole	51.000 - 0.000	1	No Ice 1/2" Ice 1" Ice	0.000 0.000 0.000	0.000 0.000 0.000
*									

**Feed Line/Linear Appurtenances Section Areas**

Tower Section	Tower Elevation ft	Face	A <sub>R</sub> ft <sup>2</sup>	A <sub>F</sub> ft <sup>2</sup>	CAAA In Face ft <sup>2</sup>	CAAA Out Face ft <sup>2</sup>	Weight K
L1	144.250-139.250	A	0.000	0.000	0.000	0.000	0.000
		B	0.000	0.000	2.167	0.000	0.024
		C	0.000	0.000	0.000	0.000	0.000
L2	139.250-134.750	A	0.000	0.000	0.000	0.000	0.000
		B	0.000	0.000	2.044	0.000	0.023
		C	0.000	0.000	0.000	0.000	0.000
L3	134.750-134.250	A	0.000	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.227	0.000	0.003
		C	0.000	0.000	0.000	0.000	0.000
L4	134.250-129.250	A	0.000	0.000	0.000	0.000	0.000
		B	0.000	0.000	2.429	0.000	0.040
		C	0.000	0.000	0.000	0.000	0.000
L5	129.250-124.250	A	0.000	0.000	0.875	0.000	0.000
		B	0.000	0.000	3.432	0.000	0.052
		C	0.000	0.000	0.875	0.000	0.000
L6	124.250-123.416	A	0.000	0.000	0.625	0.000	0.000
		B	0.000	0.000	1.052	0.000	0.009

Tower Section	Tower Elevation ft	Face	A <sub>R</sub> ft <sup>2</sup>	A <sub>F</sub> ft <sup>2</sup>	C <sub>AA</sub> In Face ft <sup>2</sup>	C <sub>AA</sub> Out Face ft <sup>2</sup>	Weight K
L7	123.416-123.166	C	0.000	0.000	0.625	0.000	0.000
		A	0.000	0.000	0.188	0.000	0.000
		B	0.000	0.000	0.315	0.000	0.003
L8	123.166-118.166	C	0.000	0.000	0.188	0.000	0.000
		A	0.000	0.000	3.750	0.000	0.000
		B	0.000	0.000	6.601	0.000	0.056
L9	118.166-113.166	C	0.000	0.000	3.750	0.000	0.000
		A	0.000	0.000	3.750	0.000	0.000
		B	0.000	0.000	7.108	0.000	0.064
L10	113.166-109.500	C	0.000	0.000	3.750	0.000	0.000
		A	0.000	0.000	3.749	0.000	0.000
		B	0.000	0.000	6.211	0.000	0.068
L11	109.500-109.250	C	0.000	0.000	2.749	0.000	0.000
		A	0.000	0.000	0.354	0.000	0.000
		B	0.000	0.000	0.522	0.000	0.005
L12	109.250-104.750	C	0.000	0.000	0.188	0.000	0.000
		A	0.000	0.000	7.542	0.000	0.000
		B	0.000	0.000	10.564	0.000	0.095
L13	104.750-104.500	C	0.000	0.000	5.025	0.000	0.000
		A	0.000	0.000	0.521	0.000	0.000
		B	0.000	0.000	0.689	0.000	0.005
L14	104.500-102.416	C	0.000	0.000	0.563	0.000	0.000
		A	0.000	0.000	4.342	0.000	0.000
		B	0.000	0.000	5.741	0.000	0.044
L15	102.416-102.166	C	0.000	0.000	4.689	0.000	0.000
		A	0.000	0.000	0.521	0.000	0.000
		B	0.000	0.000	0.689	0.000	0.005
L16	102.166-98.750	C	0.000	0.000	0.563	0.000	0.000
		A	0.000	0.000	6.622	0.000	0.000
		B	0.000	0.000	8.470	0.000	0.072
L17	98.750-98.500	C	0.000	0.000	8.245	0.000	0.005
		A	0.000	0.000	0.484	0.000	0.000
		B	0.000	0.000	0.652	0.000	0.005
L18	98.500-97.500	C	0.000	0.000	0.693	0.000	0.001
		A	0.000	0.000	1.938	0.000	0.000
		B	0.000	0.000	2.609	0.000	0.021
L19	97.500-97.250	C	0.000	0.000	2.771	0.000	0.004
		A	0.000	0.000	0.484	0.000	0.000
		B	0.000	0.000	0.652	0.000	0.005
L20	97.250-92.000	C	0.000	0.000	0.693	0.000	0.001
		A	0.000	0.000	7.505	0.000	0.000
		B	0.000	0.000	13.697	0.000	0.111
L21	92.000-90.552	C	0.000	0.000	14.547	0.000	0.019
		A	0.000	0.000	1.840	0.000	0.000
		B	0.000	0.000	3.778	0.000	0.031
L22	90.552-89.250	C	0.000	0.000	4.012	0.000	0.005
		A	0.000	0.000	2.377	0.000	0.000
		B	0.000	0.000	3.397	0.000	0.028
L23	89.250-89.000	C	0.000	0.000	3.608	0.000	0.005
		A	0.000	0.000	0.563	0.000	0.000
		B	0.000	0.000	0.730	0.000	0.005
L24	89.000-88.250	C	0.000	0.000	0.771	0.000	0.001
		A	0.000	0.000	1.688	0.000	0.000
		B	0.000	0.000	2.191	0.000	0.016
L25	88.250-88.000	C	0.000	0.000	2.313	0.000	0.003
		A	0.000	0.000	0.563	0.000	0.000
		B	0.000	0.000	0.730	0.000	0.005
L26	88.000-87.833	C	0.000	0.000	0.771	0.000	0.001
		A	0.000	0.000	0.376	0.000	0.000
		B	0.000	0.000	0.488	0.000	0.004
L27	87.833-87.583	C	0.000	0.000	0.515	0.000	0.001
		A	0.000	0.000	0.563	0.000	0.000
		B	0.000	0.000	0.730	0.000	0.005
L28	87.583-82.583	C	0.000	0.000	0.771	0.000	0.001
		A	0.000	0.000	8.639	0.000	0.000
		B	0.000	0.000	11.996	0.000	0.106
L29	82.583-77.583	C	0.000	0.000	10.516	0.000	0.018
		A	0.000	0.000	8.695	0.000	0.000
		B	0.000	0.000	12.052	0.000	0.106



Tower Section	Tower Elevation ft	Face	A <sub>R</sub> ft <sup>2</sup>	A <sub>F</sub> ft <sup>2</sup>	C <sub>AA</sub> In Face ft <sup>2</sup>	C <sub>AA</sub> Out Face ft <sup>2</sup>	Weight K
L30	77.583-77.000	C	0.000	0.000	8.695	0.000	0.018
		A	0.000	0.000	1.312	0.000	0.000
		B	0.000	0.000	1.703	0.000	0.012
L31	77.000-76.750	C	0.000	0.000	1.312	0.000	0.002
		A	0.000	0.000	0.563	0.000	0.000
		B	0.000	0.000	0.730	0.000	0.005
L32	76.750-76.333	C	0.000	0.000	0.563	0.000	0.001
		A	0.000	0.000	0.938	0.000	0.000
		B	0.000	0.000	1.218	0.000	0.009
L33	76.333-76.083	C	0.000	0.000	0.938	0.000	0.002
		A	0.000	0.000	0.563	0.000	0.000
		B	0.000	0.000	0.730	0.000	0.005
L34	76.083-74.250	C	0.000	0.000	0.563	0.000	0.001
		A	0.000	0.000	4.152	0.000	0.000
		B	0.000	0.000	6.052	0.000	0.039
L35	74.250-74.000	C	0.000	0.000	3.404	0.000	0.007
		A	0.000	0.000	0.583	0.000	0.000
		B	0.000	0.000	0.918	0.000	0.005
L36	74.000-73.750	C	0.000	0.000	0.396	0.000	0.001
		A	0.000	0.000	0.583	0.000	0.000
		B	0.000	0.000	0.918	0.000	0.005
L37	73.750-73.500	C	0.000	0.000	0.396	0.000	0.001
		A	0.000	0.000	0.583	0.000	0.000
		B	0.000	0.000	0.918	0.000	0.005
L38	73.500-68.500	C	0.000	0.000	0.396	0.000	0.001
		A	0.000	0.000	11.667	0.000	0.000
		B	0.000	0.000	18.358	0.000	0.106
L39	68.500-63.500	C	0.000	0.000	7.917	0.000	0.018
		A	0.000	0.000	11.667	0.000	0.000
		B	0.000	0.000	18.358	0.000	0.106
L40	63.500-60.500	C	0.000	0.000	7.917	0.000	0.018
		A	0.000	0.000	8.167	0.000	0.000
		B	0.000	0.000	12.181	0.000	0.064
L41	60.500-60.250	C	0.000	0.000	5.917	0.000	0.011
		A	0.000	0.000	0.750	0.000	0.000
		B	0.000	0.000	1.085	0.000	0.005
L42	60.250-59.500	C	0.000	0.000	0.563	0.000	0.001
		A	0.000	0.000	2.250	0.000	0.000
		B	0.000	0.000	3.254	0.000	0.016
L43	59.500-59.250	C	0.000	0.000	1.688	0.000	0.003
		A	0.000	0.000	0.797	0.000	0.000
		B	0.000	0.000	1.131	0.000	0.005
L44	59.250-54.250	C	0.000	0.000	0.609	0.000	0.001
		A	0.000	0.000	12.938	0.000	0.000
		B	0.000	0.000	19.629	0.000	0.106
L45	54.250-45.802	C	0.000	0.000	9.188	0.000	0.018
		A	0.000	0.000	21.296	0.000	0.000
		B	0.000	0.000	32.601	0.000	0.180
L46	45.802-44.802	C	0.000	0.000	14.960	0.000	0.031
		A	0.000	0.000	2.393	0.000	0.000
		B	0.000	0.000	3.557	0.000	0.021
L47	44.802-43.583	C	0.000	0.000	2.104	0.000	0.004
		A	0.000	0.000	3.073	0.000	0.000
		B	0.000	0.000	4.089	0.000	0.026
L48	43.583-43.333	C	0.000	0.000	3.271	0.000	0.004
		A	0.000	0.000	0.630	0.000	0.000
		B	0.000	0.000	0.839	0.000	0.005
L49	43.333-43.166	C	0.000	0.000	0.671	0.000	0.001
		A	0.000	0.000	0.421	0.000	0.000
		B	0.000	0.000	0.560	0.000	0.004
L50	43.166-42.916	C	0.000	0.000	0.448	0.000	0.001
		A	0.000	0.000	0.630	0.000	0.000
		B	0.000	0.000	0.839	0.000	0.005
L51	42.916-39.000	C	0.000	0.000	0.671	0.000	0.001
		A	0.000	0.000	9.872	0.000	0.000
		B	0.000	0.000	13.136	0.000	0.084
L52	39.000-38.750	C	0.000	0.000	11.673	0.000	0.014
		A	0.000	0.000	0.630	0.000	0.000
		B	0.000	0.000	0.839	0.000	0.005

Tower Sectio n	Tower Elevation ft	Face	$A_R$	$A_F$	$C_{AA}$	$C_{AA}$	Weight  K
			ft <sup>2</sup>	ft <sup>2</sup>	In Face ft <sup>2</sup>	Out Face ft <sup>2</sup>	
L53	38.750-37.166	C	0.000	0.000	0.837	0.000	0.001
		A	0.000	0.000	3.993	0.000	0.000
		B	0.000	0.000	5.314	0.000	0.034
L54	37.166-36.916	C	0.000	0.000	5.306	0.000	0.006
		A	0.000	0.000	0.630	0.000	0.000
		B	0.000	0.000	0.839	0.000	0.005
L55	36.916-34.000	C	0.000	0.000	0.837	0.000	0.001
		A	0.000	0.000	8.517	0.000	0.000
		B	0.000	0.000	10.696	0.000	0.062
L56	34.000-33.750	C	0.000	0.000	9.515	0.000	0.011
		A	0.000	0.000	0.797	0.000	0.000
		B	0.000	0.000	0.965	0.000	0.005
L57	33.750-29.750	C	0.000	0.000	0.797	0.000	0.001
		A	0.000	0.000	11.083	0.000	0.000
		B	0.000	0.000	13.769	0.000	0.085
L58	29.750-29.500	C	0.000	0.000	11.083	0.000	0.015
		A	0.000	0.000	0.641	0.000	0.000
		B	0.000	0.000	0.809	0.000	0.005
L59	29.500-24.500	C	0.000	0.000	0.641	0.000	0.001
		A	0.000	0.000	12.375	0.000	0.000
		B	0.000	0.000	16.670	0.000	0.107
L60	24.500-23.000	C	0.000	0.000	13.375	0.000	0.018
		A	0.000	0.000	2.719	0.000	0.000
		B	0.000	0.000	6.351	0.000	0.032
L61	23.000-22.750	C	0.000	0.000	5.719	0.000	0.006
		A	0.000	0.000	0.453	0.000	0.000
		B	0.000	0.000	1.059	0.000	0.005
L62	22.750-21.583	C	0.000	0.000	0.953	0.000	0.001
		A	0.000	0.000	2.115	0.000	0.000
		B	0.000	0.000	4.941	0.000	0.025
L63	21.583-21.333	C	0.000	0.000	4.449	0.000	0.004
		A	0.000	0.000	0.453	0.000	0.000
		B	0.000	0.000	1.059	0.000	0.005
L64	21.333-16.333	C	0.000	0.000	0.953	0.000	0.001
		A	0.000	0.000	9.063	0.000	0.000
		B	0.000	0.000	18.358	0.000	0.107
L65	16.333-12.917	C	0.000	0.000	19.262	0.000	0.018
		A	0.000	0.000	6.191	0.000	0.000
		B	0.000	0.000	11.901	0.000	0.073
L66	12.917-12.667	C	0.000	0.000	20.852	0.000	0.013
		A	0.000	0.000	0.453	0.000	0.000
		B	0.000	0.000	0.871	0.000	0.005
L67	12.667-12.500	C	0.000	0.000	1.526	0.000	0.001
		A	0.000	0.000	0.303	0.000	0.000
		B	0.000	0.000	0.582	0.000	0.004
L68	12.500-12.250	C	0.000	0.000	1.019	0.000	0.001
		A	0.000	0.000	0.453	0.000	0.000
		B	0.000	0.000	0.871	0.000	0.005
L69	12.250-12.000	C	0.000	0.000	1.526	0.000	0.001
		A	0.000	0.000	0.453	0.000	0.000
		B	0.000	0.000	0.871	0.000	0.005
L70	12.000-11.750	C	0.000	0.000	1.526	0.000	0.001
		A	0.000	0.000	0.453	0.000	0.000
		B	0.000	0.000	0.871	0.000	0.005
L71	11.750-8.500	C	0.000	0.000	1.526	0.000	0.001
		A	0.000	0.000	4.684	0.000	0.000
		B	0.000	0.000	10.117	0.000	0.069
L72	8.500-8.250	C	0.000	0.000	16.364	0.000	0.012
		A	0.000	0.000	0.323	0.000	0.000
		B	0.000	0.000	0.741	0.000	0.005
L73	8.250-7.000	C	0.000	0.000	0.860	0.000	0.001
		A	0.000	0.000	1.616	0.000	0.000
		B	0.000	0.000	3.705	0.000	0.027
L74	7.000-6.750	C	0.000	0.000	4.298	0.000	0.005
		A	0.000	0.000	0.323	0.000	0.000
		B	0.000	0.000	0.741	0.000	0.005
L75	6.750-1.750	C	0.000	0.000	0.860	0.000	0.001
		A	0.000	0.000	6.463	0.000	0.000
		B	0.000	0.000	11.570	0.000	0.107

Tower Section	Tower Elevation	Face	A <sub>R</sub>	A <sub>F</sub>	C <sub>AA</sub> In Face	C <sub>AA</sub> Out Face	Weight
n	ft		ft <sup>2</sup>	ft <sup>2</sup>	ft <sup>2</sup>	ft <sup>2</sup>	K
L76	1.750-0.000	C	0.000	0.000	13.942	0.000	0.018
		A	0.000	0.000	2.262	0.000	0.000
		B	0.000	0.000	3.437	0.000	0.037
		C	0.000	0.000	4.267	0.000	0.006

**Feed Line/Linear Appurtenances Section Areas - With Ice**

Tower Section	Tower Elevation	Face or Leg	Ice Thickness	A <sub>R</sub>	A <sub>F</sub>	C <sub>AA</sub> In Face	C <sub>AA</sub> Out Face	Weight
n	ft		in	ft <sup>2</sup>	ft <sup>2</sup>	ft <sup>2</sup>	ft <sup>2</sup>	K
L1	144.250-139.250	A	0.983	0.000	0.000	0.000	0.000	0.000
		B		0.000	0.000	6.806	0.000	0.074
		C		0.000	0.000	0.000	0.000	0.000
L2	139.250-134.750	A	0.980	0.000	0.000	0.000	0.000	0.000
		B		0.000	0.000	6.379	0.000	0.069
		C		0.000	0.000	0.000	0.000	0.000
L3	134.750-134.250	A	0.978	0.000	0.000	0.000	0.000	0.000
		B		0.000	0.000	0.708	0.000	0.008
		C		0.000	0.000	0.000	0.000	0.000
L4	134.250-129.250	A	0.976	0.000	0.000	0.000	0.000	0.000
		B		0.000	0.000	7.764	0.000	0.107
		C		0.000	0.000	0.000	0.000	0.000
L5	129.250-124.250	A	0.972	0.000	0.000	1.101	0.000	0.006
		B		0.000	0.000	9.413	0.000	0.137
		C		0.000	0.000	1.101	0.000	0.006
L6	124.250-123.416	A	0.970	0.000	0.000	0.787	0.000	0.005
		B		0.000	0.000	2.172	0.000	0.026
		C		0.000	0.000	0.787	0.000	0.005
L7	123.416-123.166	A	0.970	0.000	0.000	0.236	0.000	0.001
		B		0.000	0.000	0.651	0.000	0.008
		C		0.000	0.000	0.236	0.000	0.001
L8	123.166-118.166	A	0.968	0.000	0.000	4.718	0.000	0.028
		B		0.000	0.000	13.652	0.000	0.168
		C		0.000	0.000	4.718	0.000	0.028
L9	118.166-113.166	A	0.964	0.000	0.000	4.714	0.000	0.027
		B		0.000	0.000	14.740	0.000	0.184
		C		0.000	0.000	4.714	0.000	0.027
L10	113.166-109.500	A	0.960	0.000	0.000	4.741	0.000	0.027
		B		0.000	0.000	12.012	0.000	0.163
		C		0.000	0.000	3.453	0.000	0.020
L11	109.500-109.250	A	0.958	0.000	0.000	0.450	0.000	0.003
		B		0.000	0.000	0.939	0.000	0.012
		C		0.000	0.000	0.235	0.000	0.001
L12	109.250-104.750	A	0.956	0.000	0.000	9.597	0.000	0.055
		B		0.000	0.000	18.389	0.000	0.233
		C		0.000	0.000	6.331	0.000	0.037
L13	104.750-104.500	A	0.954	0.000	0.000	0.664	0.000	0.004
		B		0.000	0.000	1.152	0.000	0.014
		C		0.000	0.000	0.706	0.000	0.004
L14	104.500-102.416	A	0.953	0.000	0.000	5.533	0.000	0.032
		B		0.000	0.000	9.597	0.000	0.114
		C		0.000	0.000	5.880	0.000	0.034
L15	102.416-102.166	A	0.952	0.000	0.000	0.664	0.000	0.004
		B		0.000	0.000	1.151	0.000	0.014
		C		0.000	0.000	0.705	0.000	0.004
L16	102.166-98.750	A	0.950	0.000	0.000	8.481	0.000	0.049
		B		0.000	0.000	14.649	0.000	0.181
		C		0.000	0.000	10.404	0.000	0.065
L17	98.750-98.500	A	0.948	0.000	0.000	0.625	0.000	0.004
		B		0.000	0.000	1.121	0.000	0.014
		C		0.000	0.000	0.880	0.000	0.006
L18	98.500-97.500	A	0.948	0.000	0.000	2.499	0.000	0.015
		B		0.000	0.000	4.483	0.000	0.054
		C		0.000	0.000	3.521	0.000	0.024
L19	97.500-97.250	A	0.947	0.000	0.000	0.625	0.000	0.004
		B		0.000	0.000	1.121	0.000	0.014

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A <sub>R</sub> ft <sup>2</sup>	A <sub>F</sub> ft <sup>2</sup>	C <sub>A</sub> A <sub>A</sub> In Face ft <sup>2</sup>	C <sub>A</sub> A <sub>A</sub> Out Face ft <sup>2</sup>	Weight K
L20	97.250-92.000	C		0.000	0.000	0.880	0.000	0.006
		A	0.944	0.000	0.000	9.685	0.000	0.058
		B		0.000	0.000	23.505	0.000	0.283
L21	92.000-90.552	C		0.000	0.000	18.474	0.000	0.127
		A	0.941	0.000	0.000	2.377	0.000	0.014
		B		0.000	0.000	6.483	0.000	0.078
L22	90.552-89.250	C		0.000	0.000	5.096	0.000	0.035
		A	0.940	0.000	0.000	3.060	0.000	0.018
		B		0.000	0.000	5.818	0.000	0.070
L23	89.250-89.000	C		0.000	0.000	4.577	0.000	0.031
		A	0.939	0.000	0.000	0.703	0.000	0.004
		B		0.000	0.000	1.197	0.000	0.014
L24	89.000-88.250	C		0.000	0.000	0.959	0.000	0.006
		A	0.938	0.000	0.000	2.110	0.000	0.012
		B		0.000	0.000	3.589	0.000	0.041
L25	88.250-88.000	C		0.000	0.000	2.875	0.000	0.019
		A	0.938	0.000	0.000	0.703	0.000	0.004
		B		0.000	0.000	1.196	0.000	0.014
L26	88.000-87.833	C		0.000	0.000	0.958	0.000	0.006
		A	0.938	0.000	0.000	0.470	0.000	0.003
		B		0.000	0.000	0.799	0.000	0.009
L27	87.833-87.583	C		0.000	0.000	0.640	0.000	0.004
		A	0.937	0.000	0.000	0.703	0.000	0.004
		B		0.000	0.000	1.196	0.000	0.014
L28	87.583-82.583	C		0.000	0.000	0.958	0.000	0.006
		A	0.934	0.000	0.000	10.710	0.000	0.060
		B		0.000	0.000	20.547	0.000	0.255
L29	82.583-77.583	C		0.000	0.000	13.008	0.000	0.091
		A	0.929	0.000	0.000	10.769	0.000	0.060
		B		0.000	0.000	20.570	0.000	0.254
L30	77.583-77.000	C		0.000	0.000	10.769	0.000	0.078
		A	0.926	0.000	0.000	1.635	0.000	0.009
		B		0.000	0.000	2.776	0.000	0.032
L31	77.000-76.750	C		0.000	0.000	1.635	0.000	0.011
		A	0.925	0.000	0.000	0.701	0.000	0.004
		B		0.000	0.000	1.190	0.000	0.014
L32	76.750-76.333	C		0.000	0.000	0.701	0.000	0.005
		A	0.925	0.000	0.000	1.170	0.000	0.007
		B		0.000	0.000	1.985	0.000	0.023
L33	76.333-76.083	C		0.000	0.000	1.170	0.000	0.008
		A	0.924	0.000	0.000	0.701	0.000	0.004
		B		0.000	0.000	1.190	0.000	0.014
L34	76.083-74.250	C		0.000	0.000	0.701	0.000	0.005
		A	0.923	0.000	0.000	5.152	0.000	0.029
		B		0.000	0.000	9.585	0.000	0.104
L35	74.250-74.000	C		0.000	0.000	4.220	0.000	0.030
		A	0.922	0.000	0.000	0.722	0.000	0.004
		B		0.000	0.000	1.422	0.000	0.015
L36	74.000-73.750	C		0.000	0.000	0.488	0.000	0.004
		A	0.921	0.000	0.000	0.722	0.000	0.004
		B		0.000	0.000	1.422	0.000	0.015
L37	73.750-73.500	C		0.000	0.000	0.488	0.000	0.004
		A	0.921	0.000	0.000	0.721	0.000	0.004
		B		0.000	0.000	1.422	0.000	0.015
L38	73.500-68.500	C		0.000	0.000	0.488	0.000	0.004
		A	0.918	0.000	0.000	14.420	0.000	0.080
		B		0.000	0.000	28.399	0.000	0.296
L39	68.500-63.500	C		0.000	0.000	9.752	0.000	0.073
		A	0.911	0.000	0.000	14.400	0.000	0.079
		B		0.000	0.000	28.329	0.000	0.294
L40	63.500-60.500	C		0.000	0.000	9.739	0.000	0.072
		A	0.905	0.000	0.000	10.113	0.000	0.056
		B		0.000	0.000	18.445	0.000	0.184
L41	60.500-60.250	C		0.000	0.000	7.320	0.000	0.051
		A	0.903	0.000	0.000	0.931	0.000	0.005
		B		0.000	0.000	1.624	0.000	0.016
L42	60.250-59.500	C		0.000	0.000	0.698	0.000	0.005
		A	0.902	0.000	0.000	2.791	0.000	0.015
		B		0.000	0.000	4.871	0.000	0.047

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A <sub>R</sub> ft <sup>2</sup>	A <sub>F</sub> ft <sup>2</sup>	C <sub>A</sub> A <sub>A</sub> In Face ft <sup>2</sup>	C <sub>A</sub> A <sub>A</sub> Out Face ft <sup>2</sup>	Weight K
L43	59.500-59.250	C		0.000	0.000	2.093	0.000	0.014
		A	0.901	0.000	0.000	0.977	0.000	0.005
		B		0.000	0.000	1.670	0.000	0.016
L44	59.250-54.250	C		0.000	0.000	0.745	0.000	0.005
		A	0.897	0.000	0.000	15.719	0.000	0.084
		B		0.000	0.000	29.546	0.000	0.296
		C		0.000	0.000	11.072	0.000	0.077
L45	54.250-45.802	A	0.886	0.000	0.000	25.787	0.000	0.136
		B		0.000	0.000	49.006	0.000	0.492
		C		0.000	0.000	17.954	0.000	0.126
L46	45.802-44.802	A	0.877	0.000	0.000	2.895	0.000	0.015
		B		0.000	0.000	5.375	0.000	0.056
		C		0.000	0.000	2.493	0.000	0.017
L47	44.802-43.583	A	0.875	0.000	0.000	3.713	0.000	0.019
		B		0.000	0.000	6.117	0.000	0.066
		C		0.000	0.000	3.812	0.000	0.025
L48	43.583-43.333	A	0.874	0.000	0.000	0.761	0.000	0.004
		B		0.000	0.000	1.254	0.000	0.014
		C		0.000	0.000	0.782	0.000	0.005
L49	43.333-43.166	A	0.873	0.000	0.000	0.508	0.000	0.003
		B		0.000	0.000	0.837	0.000	0.009
		C		0.000	0.000	0.522	0.000	0.003
L50	43.166-42.916	A	0.873	0.000	0.000	0.761	0.000	0.004
		B		0.000	0.000	1.253	0.000	0.014
		C		0.000	0.000	0.782	0.000	0.005
L51	42.916-39.000	A	0.869	0.000	0.000	11.912	0.000	0.062
		B		0.000	0.000	19.602	0.000	0.212
		C		0.000	0.000	13.704	0.000	0.088
L52	39.000-38.750	A	0.864	0.000	0.000	0.760	0.000	0.004
		B		0.000	0.000	1.249	0.000	0.013
		C		0.000	0.000	0.990	0.000	0.006
L53	38.750-37.166	A	0.862	0.000	0.000	4.812	0.000	0.025
		B		0.000	0.000	7.910	0.000	0.085
		C		0.000	0.000	6.272	0.000	0.039
L54	37.166-36.916	A	0.860	0.000	0.000	0.759	0.000	0.004
		B		0.000	0.000	1.248	0.000	0.013
		C		0.000	0.000	0.990	0.000	0.006
L55	36.916-34.000	A	0.856	0.000	0.000	10.315	0.000	0.053
		B		0.000	0.000	15.823	0.000	0.162
		C		0.000	0.000	11.287	0.000	0.070
L56	34.000-33.750	A	0.852	0.000	0.000	0.967	0.000	0.005
		B		0.000	0.000	1.432	0.000	0.014
		C		0.000	0.000	0.951	0.000	0.006
L57	33.750-29.750	A	0.847	0.000	0.000	13.369	0.000	0.068
		B		0.000	0.000	20.783	0.000	0.215
		C		0.000	0.000	13.103	0.000	0.082
L58	29.750-29.500	A	0.841	0.000	0.000	0.767	0.000	0.004
		B		0.000	0.000	1.228	0.000	0.013
		C		0.000	0.000	0.750	0.000	0.005
L59	29.500-24.500	A	0.833	0.000	0.000	14.777	0.000	0.073
		B		0.000	0.000	25.074	0.000	0.260
		C		0.000	0.000	15.654	0.000	0.097
L60	24.500-23.000	A	0.822	0.000	0.000	3.212	0.000	0.016
		B		0.000	0.000	9.064	0.000	0.085
		C		0.000	0.000	6.699	0.000	0.038
L61	23.000-22.750	A	0.819	0.000	0.000	0.535	0.000	0.003
		B		0.000	0.000	1.509	0.000	0.014
		C		0.000	0.000	1.116	0.000	0.006
L62	22.750-21.583	A	0.817	0.000	0.000	2.496	0.000	0.012
		B		0.000	0.000	7.038	0.000	0.066
		C		0.000	0.000	5.207	0.000	0.029
L63	21.583-21.333	A	0.814	0.000	0.000	0.535	0.000	0.003
		B		0.000	0.000	1.506	0.000	0.014
		C		0.000	0.000	1.115	0.000	0.006
L64	21.333-16.333	A	0.804	0.000	0.000	10.670	0.000	0.051
		B		0.000	0.000	26.599	0.000	0.261
		C		0.000	0.000	22.481	0.000	0.123
L65	16.333-12.917	A	0.784	0.000	0.000	7.262	0.000	0.033
		B		0.000	0.000	17.264	0.000	0.171

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A <sub>R</sub> ft <sup>2</sup>	A <sub>F</sub> ft <sup>2</sup>	C <sub>A</sub> A <sub>A</sub> In Face ft <sup>2</sup>	C <sub>A</sub> A <sub>A</sub> Out Face ft <sup>2</sup>	Weight K
L66	12.917-12.667	C		0.000	0.000	23.972	0.000	0.121
		A	0.773	0.000	0.000	0.530	0.000	0.002
		B		0.000	0.000	1.259	0.000	0.012
L67	12.667-12.500	C		0.000	0.000	1.752	0.000	0.009
		A	0.772	0.000	0.000	0.354	0.000	0.002
		B		0.000	0.000	0.840	0.000	0.008
		C		0.000	0.000	1.170	0.000	0.006
L68	12.500-12.250	A	0.771	0.000	0.000	0.530	0.000	0.002
		B		0.000	0.000	1.257	0.000	0.012
		C		0.000	0.000	1.751	0.000	0.009
L69	12.250-12.000	A	0.769	0.000	0.000	0.530	0.000	0.002
		B		0.000	0.000	1.257	0.000	0.012
		C		0.000	0.000	1.751	0.000	0.009
L70	12.000-11.750	A	0.767	0.000	0.000	0.530	0.000	0.002
		B		0.000	0.000	1.256	0.000	0.012
		C		0.000	0.000	1.750	0.000	0.009
L71	11.750-8.500	A	0.755	0.000	0.000	5.560	0.000	0.033
		B		0.000	0.000	14.938	0.000	0.161
		C		0.000	0.000	18.812	0.000	0.103
L72	8.500-8.250	A	0.741	0.000	0.000	0.389	0.000	0.003
		B		0.000	0.000	1.105	0.000	0.012
		C		0.000	0.000	0.996	0.000	0.006
L73	8.250-7.000	A	0.734	0.000	0.000	1.941	0.000	0.013
		B		0.000	0.000	5.509	0.000	0.062
		C		0.000	0.000	4.974	0.000	0.031
L74	7.000-6.750	A	0.727	0.000	0.000	0.388	0.000	0.003
		B		0.000	0.000	1.098	0.000	0.012
		C		0.000	0.000	0.994	0.000	0.006
L75	6.750-1.750	A	0.692	0.000	0.000	7.693	0.000	0.050
		B		0.000	0.000	17.949	0.000	0.223
		C		0.000	0.000	16.073	0.000	0.102
L76	1.750-0.000	A	0.591	0.000	0.000	2.631	0.000	0.015
		B		0.000	0.000	5.293	0.000	0.069
		C		0.000	0.000	4.837	0.000	0.029

### Feed Line Center of Pressure

Section	Elevation ft	CP <sub>x</sub> in	CP <sub>z</sub> in	CP <sub>x</sub> Ice in	CP <sub>z</sub> Ice in
L1	144.250-139.250	2.283	-1.029	2.232	-1.238
L2	139.250-134.750	2.329	-1.040	2.282	-1.246
L3	134.750-134.250	2.399	-1.072	2.352	-1.286
L4	134.250-129.250	1.775	-0.907	2.379	-1.522
L5	129.250-124.250	1.434	-0.802	2.125	-1.505
L6	124.250-123.416	0.852	-0.477	1.490	-1.055
L7	123.416-123.166	0.857	-0.480	1.500	-1.062
L8	123.166-118.166	0.960	-0.566	1.630	-1.174
L9	118.166-113.166	1.140	-0.717	1.856	-1.367
L10	113.166-109.500	0.349	-0.488	1.228	-1.138
L11	109.500-109.250	-0.566	-0.212	0.432	-0.831
L12	109.250-104.750	-0.495	-0.022	0.390	-0.622
L13	104.750-104.500	-0.379	0.803	0.319	0.198
L14	104.500-102.416	-0.383	0.812	0.321	0.201
L15	102.416-102.166	-0.395	0.837	0.323	0.204
L16	102.166-98.750	0.417	1.573	1.046	0.821
L17	98.750-98.500	0.989	1.951	1.530	1.190
L18	98.500-97.500	0.993	1.960	1.537	1.196
L19	97.500-97.250	0.997	1.968	1.543	1.202
L20	97.250-92.000	1.314	1.282	1.870	0.539
L21	92.000-90.552	1.426	1.056	1.988	0.318
L22	90.552-89.250	1.099	1.891	1.669	1.111
L23	89.250-89.000	0.945	1.865	1.502	1.179
L24	89.000-88.250	0.949	1.874	1.509	1.185
L25	88.250-88.000	0.955	1.886	1.518	1.192

Section	Elevation	CP <sub>x</sub>	CP <sub>z</sub>	CP <sub>x</sub>	CP <sub>z</sub>
	ft	in	in	Ice in	Ice in
L26	88.000-87.833	0.956	1.889	1.520	1.194
L27	87.833-87.583	0.958	1.892	1.522	1.196
L28	87.583-82.583	1.235	1.774	1.880	0.914
L29	82.583-77.583	1.332	1.338	2.008	0.495
L30	77.583-77.000	1.119	1.125	1.749	0.434
L31	77.000-76.750	1.123	1.129	1.754	0.436
L32	76.750-76.333	1.126	1.132	1.758	0.437
L33	76.333-76.083	1.128	1.134	1.761	0.438
L34	76.083-74.250	1.298	-0.575	1.924	-1.123
L35	74.250-74.000	1.451	-1.848	2.062	-2.282
L36	74.000-73.750	1.453	-1.851	2.065	-2.286
L37	73.750-73.500	1.456	-1.854	2.068	-2.289
L38	73.500-68.500	1.480	-1.885	2.100	-2.324
L39	68.500-63.500	1.527	-1.945	2.159	-2.391
L40	63.500-60.500	1.402	-1.786	1.994	-2.210
L41	60.500-60.250	1.319	-1.680	1.883	-2.087
L42	60.250-59.500	1.323	-1.685	1.888	-2.093
L43	59.500-59.250	1.269	-1.616	1.832	-2.030
L44	59.250-54.250	1.529	-1.948	2.140	-2.373
L45	54.250-45.802	1.621	-2.065	2.248	-2.494
L46	45.802-44.802	1.384	-0.987	2.024	-1.584
L47	44.802-43.583	0.814	0.663	1.432	-0.097
L48	43.583-43.333	0.817	0.666	1.436	-0.096
L49	43.333-43.166	0.818	0.667	1.438	-0.096
L50	43.166-42.916	0.819	0.668	1.439	-0.096
L51	42.916-39.000	1.187	0.916	1.776	0.153
L52	39.000-38.750	1.619	1.207	2.172	0.446
L53	38.750-37.166	1.626	1.213	2.180	0.449
L54	37.166-36.916	1.634	1.218	2.188	0.452
L55	36.916-34.000	1.055	0.266	1.650	-0.417
L56	34.000-33.750	0.682	-0.333	1.335	-0.968
L57	33.750-29.750	0.762	-0.372	1.477	-1.070
L58	29.750-29.500	0.812	-0.397	1.568	-1.135
L59	29.500-24.500	0.943	-0.503	1.681	-1.222
L60	24.500-23.000	1.727	-1.053	2.325	-1.633
L61	23.000-22.750	1.733	-1.058	2.332	-1.638
L62	22.750-21.583	1.738	-1.061	2.338	-1.641
L63	21.583-21.333	1.743	-1.064	2.343	-1.644
L64	21.333-16.333	1.067	-0.681	1.756	-1.321
L65	16.333-12.917	-1.268	0.504	-0.367	-0.206
L66	12.917-12.667	-1.278	0.507	-0.379	-0.200
L67	12.667-12.500	-1.279	0.507	-0.381	-0.199
L68	12.500-12.250	-1.280	0.508	-0.382	-0.199
L69	12.250-12.000	-1.281	0.508	-0.384	-0.198
L70	12.000-11.750	-1.282	0.508	-0.386	-0.197
L71	11.750-8.500	-1.745	0.720	-0.693	0.031
L72	8.500-8.250	-1.404	-0.272	-0.267	-0.867
L73	8.250-7.000	-1.409	-0.273	-0.277	-0.864
L74	7.000-6.750	-1.413	-0.274	-0.287	-0.861
L75	6.750-1.750	-0.382	-0.313	0.733	-0.943
L76	1.750-0.000	0.295	-0.341	1.298	-0.938

Note: For pole sections, center of pressure calculations do not consider feed line shielding.

### Shielding Factor Ka

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
L1	2	FB-L98B-034-XXX(3/8)	139.25 - 144.00	1.0000	1.0000
L1	3	PWRT-608-S(13/16)	139.25 -	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
L1	4	PWRT-606-S(7/8)	144.00 139.25 - 144.00	1.0000	1.0000
L1	22	Safety Line 3/8	139.25 - 144.25	1.0000	1.0000
L2	2	FB-L98B-034-XXX(3/8)	134.75 - 139.25	1.0000	1.0000
L2	3	PWRT-608-S(13/16)	134.75 - 139.25	1.0000	1.0000
L2	4	PWRT-606-S(7/8)	134.75 - 139.25	1.0000	1.0000
L2	22	Safety Line 3/8	134.75 - 139.25	1.0000	1.0000
L3	2	FB-L98B-034-XXX(3/8)	134.25 - 134.75	1.0000	1.0000
L3	3	PWRT-608-S(13/16)	134.25 - 134.75	1.0000	1.0000
L3	4	PWRT-606-S(7/8)	134.25 - 134.75	1.0000	1.0000
L3	22	Safety Line 3/8	134.25 - 134.75	1.0000	1.0000
L4	2	FB-L98B-034-XXX(3/8)	129.25 - 134.25	1.0000	1.0000
L4	3	PWRT-608-S(13/16)	129.25 - 134.25	1.0000	1.0000
L4	4	PWRT-606-S(7/8)	129.25 - 134.25	1.0000	1.0000
L4	7	7983A(ELLIPTICAL)	129.25 - 132.00	1.0000	1.0000
L4	22	Safety Line 3/8	129.25 - 134.25	1.0000	1.0000
L5	2	FB-L98B-034-XXX(3/8)	124.25 - 129.25	1.0000	1.0000
L5	3	PWRT-608-S(13/16)	124.25 - 129.25	1.0000	1.0000
L5	4	PWRT-606-S(7/8)	124.25 - 129.25	1.0000	1.0000
L5	7	7983A(ELLIPTICAL)	124.25 - 129.25	1.0000	1.0000
L5	22	Safety Line 3/8	124.25 - 129.25	1.0000	1.0000
L5	88	CCI-AFP-045100	124.25 - 125.42	1.0000	1.0000
L5	89	CCI-AFP-045100	124.25 - 125.42	1.0000	1.0000
L5	90	CCI-AFP-045100	124.25 - 125.42	1.0000	1.0000
L6	2	FB-L98B-034-XXX(3/8)	123.42 - 124.25	1.0000	1.0000
L6	3	PWRT-608-S(13/16)	123.42 - 124.25	1.0000	1.0000
L6	4	PWRT-606-S(7/8)	123.42 - 124.25	1.0000	1.0000
L6	7	7983A(ELLIPTICAL)	123.42 - 124.25	1.0000	1.0000
L6	22	Safety Line 3/8	123.42 - 124.25	1.0000	1.0000
L6	88	CCI-AFP-045100	123.42 - 124.25	1.0000	1.0000
L6	89	CCI-AFP-045100	123.42 - 124.25	1.0000	1.0000
L6	90	CCI-AFP-045100	123.42 - 124.25	1.0000	1.0000
L7	2	FB-L98B-034-XXX(3/8)	123.17 - 123.42	1.0000	1.0000
L7	3	PWRT-608-S(13/16)	123.17 - 123.42	1.0000	1.0000
L7	4	PWRT-606-S(7/8)	123.17 - 123.42	1.0000	1.0000



Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
L7	7	7983A(ELLIPTICAL)	123.17 - 123.42	1.0000	1.0000
L7	22	Safety Line 3/8	123.17 - 123.42	1.0000	1.0000
L7	88	CCI-AFP-045100	123.17 - 123.42	1.0000	1.0000
L7	89	CCI-AFP-045100	123.17 - 123.42	1.0000	1.0000
L7	90	CCI-AFP-045100	123.17 - 123.42	1.0000	1.0000
L8	2	FB-L98B-034-XXX(3/8)	118.17 - 123.17	1.0000	1.0000
L8	3	PWRT-608-S(13/16)	118.17 - 123.17	1.0000	1.0000
L8	4	PWRT-606-S(7/8)	118.17 - 123.17	1.0000	1.0000
L8	7	7983A(ELLIPTICAL)	118.17 - 123.17	1.0000	1.0000
L8	11	CU12PSM9P6XXX(1-1/2)	118.17 - 120.00	1.0000	1.0000
L8	22	Safety Line 3/8	118.17 - 123.17	1.0000	1.0000
L8	88	CCI-AFP-045100	118.17 - 123.17	1.0000	1.0000
L8	89	CCI-AFP-045100	118.17 - 123.17	1.0000	1.0000
L8	90	CCI-AFP-045100	118.17 - 123.17	1.0000	1.0000
L9	2	FB-L98B-034-XXX(3/8)	113.17 - 118.17	1.0000	1.0000
L9	3	PWRT-608-S(13/16)	113.17 - 118.17	1.0000	1.0000
L9	4	PWRT-606-S(7/8)	113.17 - 118.17	1.0000	1.0000
L9	7	7983A(ELLIPTICAL)	113.17 - 118.17	1.0000	1.0000
L9	11	CU12PSM9P6XXX(1-1/2)	113.17 - 118.17	1.0000	1.0000
L9	22	Safety Line 3/8	113.17 - 118.17	1.0000	1.0000
L9	88	CCI-AFP-045100	113.17 - 118.17	1.0000	1.0000
L9	89	CCI-AFP-045100	113.17 - 118.17	1.0000	1.0000
L9	90	CCI-AFP-045100	113.17 - 118.17	1.0000	1.0000
L10	2	FB-L98B-034-XXX(3/8)	109.50 - 113.17	1.0000	1.0000
L10	3	PWRT-608-S(13/16)	109.50 - 113.17	1.0000	1.0000
L10	4	PWRT-606-S(7/8)	109.50 - 113.17	1.0000	1.0000
L10	7	7983A(ELLIPTICAL)	109.50 - 113.17	1.0000	1.0000
L10	11	CU12PSM9P6XXX(1-1/2)	109.50 - 113.17	1.0000	1.0000
L10	22	Safety Line 3/8	109.50 - 113.17	1.0000	1.0000
L10	88	CCI-AFP-045100	109.50 - 113.17	1.0000	1.0000
L10	89	CCI-AFP-045100	109.50 - 113.17	1.0000	1.0000
L10	90	CCI-AFP-045100	109.50 - 113.17	1.0000	1.0000
L10	92	CCI-AFP-040075	109.50 - 111.00	1.0000	1.0000
L10	94	CCI-AFP-040075	109.50 - 111.00	1.0000	1.0000
L11	2	FB-L98B-034-XXX(3/8)	109.25 -	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
L11	3	PWRT-608-S(13/16)	109.50 109.25 - 109.50	1.0000	1.0000
L11	4	PWRT-606-S(7/8)	109.25 - 109.50	1.0000	1.0000
L11	7	7983A(ELLIPTICAL)	109.25 - 109.50	1.0000	1.0000
L11	11	CU12PSM9P6XXX(1-1/2)	109.25 - 109.50	1.0000	1.0000
L11	22	Safety Line 3/8	109.25 - 109.50	1.0000	1.0000
L11	88	CCI-AFP-045100	109.25 - 109.50	1.0000	1.0000
L11	89	CCI-AFP-045100	109.25 - 109.50	1.0000	1.0000
L11	90	CCI-AFP-045100	109.25 - 109.50	1.0000	1.0000
L11	92	CCI-AFP-040075	109.25 - 109.50	1.0000	1.0000
L11	94	CCI-AFP-040075	109.25 - 109.50	1.0000	1.0000
L12	2	FB-L98B-034-XXX(3/8)	104.75 - 109.25	1.0000	1.0000
L12	3	PWRT-608-S(13/16)	104.75 - 109.25	1.0000	1.0000
L12	4	PWRT-606-S(7/8)	104.75 - 109.25	1.0000	1.0000
L12	7	7983A(ELLIPTICAL)	104.75 - 109.25	1.0000	1.0000
L12	11	CU12PSM9P6XXX(1-1/2)	104.75 - 109.25	1.0000	1.0000
L12	22	Safety Line 3/8	104.75 - 109.25	1.0000	1.0000
L12	54	PL1x4 Reinforcement	104.75 - 106.50	1.0000	1.0000
L12	55	PL1x4 Reinforcement	104.75 - 106.50	1.0000	1.0000
L12	56	PL1x4 Reinforcement	104.75 - 106.50	1.0000	1.0000
L12	86	CCI-AFP-05012520	104.75 - 105.33	1.0000	1.0000
L12	88	CCI-AFP-045100	104.75 - 109.25	1.0000	1.0000
L12	89	CCI-AFP-045100	104.75 - 109.25	1.0000	1.0000
L12	90	CCI-AFP-045100	104.75 - 109.25	1.0000	1.0000
L12	92	CCI-AFP-040075	104.75 - 109.25	1.0000	1.0000
L12	94	CCI-AFP-040075	104.75 - 109.25	1.0000	1.0000
L13	2	FB-L98B-034-XXX(3/8)	104.50 - 104.75	1.0000	1.0000
L13	3	PWRT-608-S(13/16)	104.50 - 104.75	1.0000	1.0000
L13	4	PWRT-606-S(7/8)	104.50 - 104.75	1.0000	1.0000
L13	7	7983A(ELLIPTICAL)	104.50 - 104.75	1.0000	1.0000
L13	11	CU12PSM9P6XXX(1-1/2)	104.50 - 104.75	1.0000	1.0000
L13	22	Safety Line 3/8	104.50 - 104.75	1.0000	1.0000
L13	54	PL1x4 Reinforcement	104.50 - 104.75	1.0000	1.0000
L13	55	PL1x4 Reinforcement	104.50 - 104.75	1.0000	1.0000
L13	56	PL1x4 Reinforcement	104.50 - 104.75	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
L13	86	CCI-AFP-05012520	104.50 - 104.75	1.0000	1.0000
L13	88	CCI-AFP-045100	104.50 - 104.75	1.0000	1.0000
L13	89	CCI-AFP-045100	104.50 - 104.75	1.0000	1.0000
L13	90	CCI-AFP-045100	104.50 - 104.75	1.0000	1.0000
L13	92	CCI-AFP-040075	104.50 - 104.75	1.0000	1.0000
L13	94	CCI-AFP-040075	104.50 - 104.75	1.0000	1.0000
L14	2	FB-L98B-034-XXX(3/8)	102.42 - 104.50	1.0000	1.0000
L14	3	PWRT-608-S(13/16)	102.42 - 104.50	1.0000	1.0000
L14	4	PWRT-606-S(7/8)	102.42 - 104.50	1.0000	1.0000
L14	7	7983A(ELLIPTICAL)	102.42 - 104.50	1.0000	1.0000
L14	11	CU12PSM9P6XXX(1-1/2)	102.42 - 104.50	1.0000	1.0000
L14	22	Safety Line 3/8	102.42 - 104.50	1.0000	1.0000
L14	54	PL1x4 Reinforcement	102.42 - 104.50	1.0000	1.0000
L14	55	PL1x4 Reinforcement	102.42 - 104.50	1.0000	1.0000
L14	56	PL1x4 Reinforcement	102.42 - 104.50	1.0000	1.0000
L14	86	CCI-AFP-05012520	102.42 - 104.50	1.0000	1.0000
L14	88	CCI-AFP-045100	102.42 - 104.50	1.0000	1.0000
L14	89	CCI-AFP-045100	102.42 - 104.50	1.0000	1.0000
L14	90	CCI-AFP-045100	102.42 - 104.50	1.0000	1.0000
L14	92	CCI-AFP-040075	102.42 - 104.50	1.0000	1.0000
L14	94	CCI-AFP-040075	102.42 - 104.50	1.0000	1.0000
L15	2	FB-L98B-034-XXX(3/8)	102.17 - 102.42	1.0000	1.0000
L15	3	PWRT-608-S(13/16)	102.17 - 102.42	1.0000	1.0000
L15	4	PWRT-606-S(7/8)	102.17 - 102.42	1.0000	1.0000
L15	7	7983A(ELLIPTICAL)	102.17 - 102.42	1.0000	1.0000
L15	11	CU12PSM9P6XXX(1-1/2)	102.17 - 102.42	1.0000	1.0000
L15	22	Safety Line 3/8	102.17 - 102.42	1.0000	1.0000
L15	54	PL1x4 Reinforcement	102.17 - 102.42	1.0000	1.0000
L15	55	PL1x4 Reinforcement	102.17 - 102.42	1.0000	1.0000
L15	56	PL1x4 Reinforcement	102.17 - 102.42	1.0000	1.0000
L15	86	CCI-AFP-05012520	102.17 - 102.42	1.0000	1.0000
L15	88	CCI-AFP-045100	102.17 - 102.42	1.0000	1.0000
L15	89	CCI-AFP-045100	102.17 - 102.42	1.0000	1.0000
L15	90	CCI-AFP-045100	102.17 - 102.42	1.0000	1.0000
L15	92	CCI-AFP-040075	102.17 - 102.42	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
L15	94	CCI-AFP-040075	102.42 102.17 - 102.42	1.0000	1.0000
L16	2	FB-L98B-034-XXX(3/8)	98.75 - 102.17	1.0000	1.0000
L16	3	PWRT-608-S(13/16)	98.75 - 102.17	1.0000	1.0000
L16	4	PWRT-606-S(7/8)	98.75 - 102.17	1.0000	1.0000
L16	7	7983A(ELLIPTICAL)	98.75 - 102.17	1.0000	1.0000
L16	11	CU12PSM9P6XXX(1-1/2)	98.75 - 102.17	1.0000	1.0000
L16	22	Safety Line 3/8	98.75 - 102.17	1.0000	1.0000
L16	38	PL1.25x3.625 Reinforcement	98.75 - 100.00	1.0000	1.0000
L16	39	PL1.25x3.625 Reinforcement	98.75 - 100.00	1.0000	1.0000
L16	40	PL1.25x3.625 Reinforcement	98.75 - 100.00	1.0000	1.0000
L16	54	PL1x4 Reinforcement	98.75 - 102.17	1.0000	1.0000
L16	55	PL1x4 Reinforcement	98.75 - 102.17	1.0000	1.0000
L16	56	PL1x4 Reinforcement	98.75 - 102.17	1.0000	1.0000
L16	81	CCI-SFP-040075	98.75 - 100.33	1.0000	1.0000
L16	82	CCI-SFP-040075	98.75 - 100.33	1.0000	1.0000
L16	86	CCI-AFP-05012520	98.75 - 102.17	1.0000	1.0000
L16	88	CCI-AFP-045100	100.42 - 102.17	1.0000	1.0000
L16	89	CCI-AFP-045100	100.42 - 102.17	1.0000	1.0000
L16	90	CCI-AFP-045100	100.42 - 102.17	1.0000	1.0000
L16	92	CCI-AFP-040075	98.75 - 102.17	1.0000	1.0000
L16	94	CCI-AFP-040075	101.00 - 102.17	1.0000	1.0000
L17	2	FB-L98B-034-XXX(3/8)	98.50 - 98.75	1.0000	1.0000
L17	3	PWRT-608-S(13/16)	98.50 - 98.75	1.0000	1.0000
L17	4	PWRT-606-S(7/8)	98.50 - 98.75	1.0000	1.0000
L17	7	7983A(ELLIPTICAL)	98.50 - 98.75	1.0000	1.0000
L17	11	CU12PSM9P6XXX(1-1/2)	98.50 - 98.75	1.0000	1.0000
L17	22	Safety Line 3/8	98.50 - 98.75	1.0000	1.0000
L17	38	PL1.25x3.625 Reinforcement	98.50 - 98.75	1.0000	1.0000
L17	39	PL1.25x3.625 Reinforcement	98.50 - 98.75	1.0000	1.0000
L17	40	PL1.25x3.625 Reinforcement	98.50 - 98.75	1.0000	1.0000
L17	54	PL1x4 Reinforcement	98.50 - 98.75	1.0000	1.0000
L17	55	PL1x4 Reinforcement	98.50 - 98.75	1.0000	1.0000
L17	56	PL1x4 Reinforcement	98.50 - 98.75	1.0000	1.0000
L17	81	CCI-SFP-040075	98.50 - 98.75	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
L17	82	CCI-SFP-040075	98.50 - 98.75	1.0000	1.0000
L17	86	CCI-AFP-05012520	98.50 - 98.75	1.0000	1.0000
L17	92	CCI-AFP-040075	98.50 - 98.75	1.0000	1.0000
L18	2	FB-L98B-034-XXX(3/8)	97.50 - 98.50	1.0000	1.0000
L18	3	PWRT-608-S(13/16)	97.50 - 98.50	1.0000	1.0000
L18	4	PWRT-606-S(7/8)	97.50 - 98.50	1.0000	1.0000
L18	7	7983A(ELLIPTICAL)	97.50 - 98.50	1.0000	1.0000
L18	11	CU12PSM9P6XXX(1-1/2)	97.50 - 98.50	1.0000	1.0000
L18	22	Safety Line 3/8	97.50 - 98.50	1.0000	1.0000
L18	38	PL1.25x3.625 Reinforcement	97.50 - 98.50	1.0000	1.0000
L18	39	PL1.25x3.625 Reinforcement	97.50 - 98.50	1.0000	1.0000
L18	40	PL1.25x3.625 Reinforcement	97.50 - 98.50	1.0000	1.0000
L18	54	PL1x4 Reinforcement	97.50 - 98.50	1.0000	1.0000
L18	55	PL1x4 Reinforcement	97.50 - 98.50	1.0000	1.0000
L18	56	PL1x4 Reinforcement	97.50 - 98.50	1.0000	1.0000
L18	81	CCI-SFP-040075	97.50 - 98.50	1.0000	1.0000
L18	82	CCI-SFP-040075	97.50 - 98.50	1.0000	1.0000
L18	86	CCI-AFP-05012520	97.50 - 98.50	1.0000	1.0000
L18	92	CCI-AFP-040075	97.50 - 98.50	1.0000	1.0000
L19	2	FB-L98B-034-XXX(3/8)	97.25 - 97.50	1.0000	1.0000
L19	3	PWRT-608-S(13/16)	97.25 - 97.50	1.0000	1.0000
L19	4	PWRT-606-S(7/8)	97.25 - 97.50	1.0000	1.0000
L19	7	7983A(ELLIPTICAL)	97.25 - 97.50	1.0000	1.0000
L19	11	CU12PSM9P6XXX(1-1/2)	97.25 - 97.50	1.0000	1.0000
L19	22	Safety Line 3/8	97.25 - 97.50	1.0000	1.0000
L19	38	PL1.25x3.625 Reinforcement	97.25 - 97.50	1.0000	1.0000
L19	39	PL1.25x3.625 Reinforcement	97.25 - 97.50	1.0000	1.0000
L19	40	PL1.25x3.625 Reinforcement	97.25 - 97.50	1.0000	1.0000
L19	54	PL1x4 Reinforcement	97.25 - 97.50	1.0000	1.0000
L19	55	PL1x4 Reinforcement	97.25 - 97.50	1.0000	1.0000
L19	56	PL1x4 Reinforcement	97.25 - 97.50	1.0000	1.0000
L19	81	CCI-SFP-040075	97.25 - 97.50	1.0000	1.0000
L19	82	CCI-SFP-040075	97.25 - 97.50	1.0000	1.0000
L19	86	CCI-AFP-05012520	97.25 - 97.50	1.0000	1.0000
L19	92	CCI-AFP-040075	97.25 -	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
			97.50		
L20	2	FB-L98B-034-XXX(3/8)	92.00 - 97.25	1.0000	1.0000
L20	3	PWRT-608-S(13/16)	92.00 - 97.25	1.0000	1.0000
L20	4	PWRT-606-S(7/8)	92.00 - 97.25	1.0000	1.0000
L20	7	7983A(ELLIPTICAL)	92.00 - 97.25	1.0000	1.0000
L20	11	CU12PSM9P6XXX(1-1/2)	92.00 - 97.25	1.0000	1.0000
L20	22	Safety Line 3/8	92.00 - 97.25	1.0000	1.0000
L20	38	PL 1.25x3.625 Reinforcement	92.00 - 97.25	1.0000	1.0000
L20	39	PL 1.25x3.625 Reinforcement	92.00 - 97.25	1.0000	1.0000
L20	40	PL 1.25x3.625 Reinforcement	92.00 - 97.25	1.0000	1.0000
L20	54	PL1x4 Reinforcement	92.00 - 97.25	1.0000	1.0000
L20	55	PL1x4 Reinforcement	92.00 - 97.25	1.0000	1.0000
L20	56	PL1x4 Reinforcement	92.00 - 97.25	1.0000	1.0000
L20	81	CCI-SFP-040075	92.00 - 97.25	1.0000	1.0000
L20	82	CCI-SFP-040075	92.00 - 97.25	1.0000	1.0000
L20	86	CCI-AFP-05012520	92.00 - 97.25	1.0000	1.0000
L20	92	CCI-AFP-040075	96.00 - 97.25	1.0000	1.0000
L21	2	FB-L98B-034-XXX(3/8)	90.55 - 92.00	1.0000	1.0000
L21	3	PWRT-608-S(13/16)	90.55 - 92.00	1.0000	1.0000
L21	4	PWRT-606-S(7/8)	90.55 - 92.00	1.0000	1.0000
L21	7	7983A(ELLIPTICAL)	90.55 - 92.00	1.0000	1.0000
L21	11	CU12PSM9P6XXX(1-1/2)	90.55 - 92.00	1.0000	1.0000
L21	22	Safety Line 3/8	90.55 - 92.00	1.0000	1.0000
L21	38	PL 1.25x3.625 Reinforcement	90.55 - 92.00	1.0000	1.0000
L21	39	PL 1.25x3.625 Reinforcement	90.55 - 92.00	1.0000	1.0000
L21	40	PL 1.25x3.625 Reinforcement	90.55 - 92.00	1.0000	1.0000
L21	54	PL1x4 Reinforcement	90.55 - 92.00	1.0000	1.0000
L21	55	PL1x4 Reinforcement	90.55 - 92.00	1.0000	1.0000
L21	56	PL1x4 Reinforcement	90.55 - 92.00	1.0000	1.0000
L21	81	CCI-SFP-040075	90.55 - 92.00	1.0000	1.0000
L21	82	CCI-SFP-040075	90.55 - 92.00	1.0000	1.0000
L21	86	CCI-AFP-05012520	90.55 - 92.00	1.0000	1.0000
L22	2	FB-L98B-034-XXX(3/8)	89.25 - 90.55	1.0000	1.0000
L22	3	PWRT-608-S(13/16)	89.25 - 90.55	1.0000	1.0000
L22	4	PWRT-606-S(7/8)	89.25 - 90.55	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
L22	7	7983A(ELLIPTICAL)	89.25 - 90.55	1.0000	1.0000
L22	11	CU12PSM9P6XXX(1-1/2)	89.25 - 90.55	1.0000	1.0000
L22	22	Safety Line 3/8	89.25 - 90.55	1.0000	1.0000
L22	38	PL1.25x3.625 Reinforcement	89.25 - 90.55	1.0000	1.0000
L22	39	PL1.25x3.625 Reinforcement	89.25 - 90.55	1.0000	1.0000
L22	40	PL1.25x3.625 Reinforcement	89.25 - 90.55	1.0000	1.0000
L22	54	PL1x4 Reinforcement	89.25 - 90.55	1.0000	1.0000
L22	55	PL1x4 Reinforcement	89.25 - 90.55	1.0000	1.0000
L22	56	PL1x4 Reinforcement	89.25 - 90.55	1.0000	1.0000
L22	81	CCI-SFP-040075	89.25 - 90.55	1.0000	1.0000
L22	82	CCI-SFP-040075	89.25 - 90.55	1.0000	1.0000
L22	84	CCI-SFP-040075	89.25 - 90.33	1.0000	1.0000
L22	86	CCI-AFP-05012520	89.25 - 90.55	1.0000	1.0000
L23	2	FB-L98B-034-XXX(3/8)	89.00 - 89.25	1.0000	1.0000
L23	3	PWRT-608-S(13/16)	89.00 - 89.25	1.0000	1.0000
L23	4	PWRT-606-S(7/8)	89.00 - 89.25	1.0000	1.0000
L23	7	7983A(ELLIPTICAL)	89.00 - 89.25	1.0000	1.0000
L23	11	CU12PSM9P6XXX(1-1/2)	89.00 - 89.25	1.0000	1.0000
L23	22	Safety Line 3/8	89.00 - 89.25	1.0000	1.0000
L23	34	PL1.25x5.5 Reinforcement	89.00 - 89.25	1.0000	1.0000
L23	35	PL1.25x5.5 Reinforcement	89.00 - 89.25	1.0000	1.0000
L23	36	PL1.25x5.5 Reinforcement	89.00 - 89.25	1.0000	1.0000
L23	54	PL1x4 Reinforcement	89.00 - 89.25	1.0000	1.0000
L23	55	PL1x4 Reinforcement	89.00 - 89.25	1.0000	1.0000
L23	56	PL1x4 Reinforcement	89.00 - 89.25	1.0000	1.0000
L23	81	CCI-SFP-040075	89.00 - 89.25	1.0000	1.0000
L23	82	CCI-SFP-040075	89.00 - 89.25	1.0000	1.0000
L23	84	CCI-SFP-040075	89.00 - 89.25	1.0000	1.0000
L23	86	CCI-AFP-05012520	89.00 - 89.25	1.0000	1.0000
L24	2	FB-L98B-034-XXX(3/8)	88.25 - 89.00	1.0000	1.0000
L24	3	PWRT-608-S(13/16)	88.25 - 89.00	1.0000	1.0000
L24	4	PWRT-606-S(7/8)	88.25 - 89.00	1.0000	1.0000
L24	7	7983A(ELLIPTICAL)	88.25 - 89.00	1.0000	1.0000
L24	11	CU12PSM9P6XXX(1-1/2)	88.25 - 89.00	1.0000	1.0000
L24	22	Safety Line 3/8	88.25 -	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
			89.00		
L24	34	PL1.25x5.5 Reinforcement	88.25 - 89.00	1.0000	1.0000
L24	35	PL1.25x5.5 Reinforcement	88.25 - 89.00	1.0000	1.0000
L24	36	PL1.25x5.5 Reinforcement	88.25 - 89.00	1.0000	1.0000
L24	54	PL1x4 Reinforcement	88.25 - 89.00	1.0000	1.0000
L24	55	PL1x4 Reinforcement	88.25 - 89.00	1.0000	1.0000
L24	56	PL1x4 Reinforcement	88.25 - 89.00	1.0000	1.0000
L24	81	CCI-SFP-040075	88.25 - 89.00	1.0000	1.0000
L24	82	CCI-SFP-040075	88.25 - 89.00	1.0000	1.0000
L24	84	CCI-SFP-040075	88.25 - 89.00	1.0000	1.0000
L24	86	CCI-AFP-05012520	88.25 - 89.00	1.0000	1.0000
L25	2	FB-L98B-034-XXX(3/8)	88.00 - 88.25	1.0000	1.0000
L25	3	PWRT-608-S(13/16)	88.00 - 88.25	1.0000	1.0000
L25	4	PWRT-606-S(7/8)	88.00 - 88.25	1.0000	1.0000
L25	7	7983A(ELLIPTICAL)	88.00 - 88.25	1.0000	1.0000
L25	11	CU12PSM9P6XXX(1-1/2)	88.00 - 88.25	1.0000	1.0000
L25	22	Safety Line 3/8	88.00 - 88.25	1.0000	1.0000
L25	34	PL1.25x5.5 Reinforcement	88.00 - 88.25	1.0000	1.0000
L25	35	PL1.25x5.5 Reinforcement	88.00 - 88.25	1.0000	1.0000
L25	36	PL1.25x5.5 Reinforcement	88.00 - 88.25	1.0000	1.0000
L25	54	PL1x4 Reinforcement	88.00 - 88.25	1.0000	1.0000
L25	55	PL1x4 Reinforcement	88.00 - 88.25	1.0000	1.0000
L25	56	PL1x4 Reinforcement	88.00 - 88.25	1.0000	1.0000
L25	81	CCI-SFP-040075	88.00 - 88.25	1.0000	1.0000
L25	82	CCI-SFP-040075	88.00 - 88.25	1.0000	1.0000
L25	84	CCI-SFP-040075	88.00 - 88.25	1.0000	1.0000
L25	86	CCI-AFP-05012520	88.00 - 88.25	1.0000	1.0000
L26	2	FB-L98B-034-XXX(3/8)	87.83 - 88.00	1.0000	1.0000
L26	3	PWRT-608-S(13/16)	87.83 - 88.00	1.0000	1.0000
L26	4	PWRT-606-S(7/8)	87.83 - 88.00	1.0000	1.0000
L26	7	7983A(ELLIPTICAL)	87.83 - 88.00	1.0000	1.0000
L26	11	CU12PSM9P6XXX(1-1/2)	87.83 - 88.00	1.0000	1.0000
L26	22	Safety Line 3/8	87.83 - 88.00	1.0000	1.0000
L26	34	PL1.25x5.5 Reinforcement	87.83 - 88.00	1.0000	1.0000
L26	35	PL1.25x5.5 Reinforcement	87.83 - 88.00	1.0000	1.0000



Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
L26	36	PL1.25x5.5 Reinforcement	87.83 - 88.00	1.0000	1.0000
L26	54	PL1x4 Reinforcement	87.83 - 88.00	1.0000	1.0000
L26	55	PL1x4 Reinforcement	87.83 - 88.00	1.0000	1.0000
L26	56	PL1x4 Reinforcement	87.83 - 88.00	1.0000	1.0000
L26	81	CCI-SFP-040075	87.83 - 88.00	1.0000	1.0000
L26	82	CCI-SFP-040075	87.83 - 88.00	1.0000	1.0000
L26	84	CCI-SFP-040075	87.83 - 88.00	1.0000	1.0000
L26	86	CCI-AFP-05012520	87.83 - 88.00	1.0000	1.0000
L27	2	FB-L98B-034-XXX(3/8)	87.58 - 87.83	1.0000	1.0000
L27	3	PWRT-608-S(13/16)	87.58 - 87.83	1.0000	1.0000
L27	4	PWRT-606-S(7/8)	87.58 - 87.83	1.0000	1.0000
L27	7	7983A(ELLIPTICAL)	87.58 - 87.83	1.0000	1.0000
L27	11	CU12PSM9P6XXX(1-1/2)	87.58 - 87.83	1.0000	1.0000
L27	22	Safety Line 3/8	87.58 - 87.83	1.0000	1.0000
L27	34	PL1.25x5.5 Reinforcement	87.58 - 87.83	1.0000	1.0000
L27	35	PL1.25x5.5 Reinforcement	87.58 - 87.83	1.0000	1.0000
L27	36	PL1.25x5.5 Reinforcement	87.58 - 87.83	1.0000	1.0000
L27	54	PL1x4 Reinforcement	87.58 - 87.83	1.0000	1.0000
L27	55	PL1x4 Reinforcement	87.58 - 87.83	1.0000	1.0000
L27	56	PL1x4 Reinforcement	87.58 - 87.83	1.0000	1.0000
L27	81	CCI-SFP-040075	87.58 - 87.83	1.0000	1.0000
L27	82	CCI-SFP-040075	87.58 - 87.83	1.0000	1.0000
L27	84	CCI-SFP-040075	87.58 - 87.83	1.0000	1.0000
L27	86	CCI-AFP-05012520	87.58 - 87.83	1.0000	1.0000
L28	2	FB-L98B-034-XXX(3/8)	82.58 - 87.58	1.0000	1.0000
L28	3	PWRT-608-S(13/16)	82.58 - 87.58	1.0000	1.0000
L28	4	PWRT-606-S(7/8)	82.58 - 87.58	1.0000	1.0000
L28	7	7983A(ELLIPTICAL)	82.58 - 87.58	1.0000	1.0000
L28	11	CU12PSM9P6XXX(1-1/2)	82.58 - 87.58	1.0000	1.0000
L28	22	Safety Line 3/8	82.58 - 87.58	1.0000	1.0000
L28	34	PL1.25x5.5 Reinforcement	82.58 - 87.58	1.0000	1.0000
L28	35	PL1.25x5.5 Reinforcement	82.58 - 87.58	1.0000	1.0000
L28	36	PL1.25x5.5 Reinforcement	82.58 - 87.58	1.0000	1.0000
L28	54	PL1x4 Reinforcement	86.50 - 87.58	1.0000	1.0000
L28	55	PL1x4 Reinforcement	86.50 -	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
			87.58		
L28	56	PL1x4 Reinforcement	86.50 - 87.58	1.0000	1.0000
L28	81	CCI-SFP-040075	82.58 - 87.58	1.0000	1.0000
L28	82	CCI-SFP-040075	82.58 - 87.58	1.0000	1.0000
L28	84	CCI-SFP-040075	82.58 - 87.58	1.0000	1.0000
L28	86	CCI-AFP-05012520	85.33 - 87.58	1.0000	1.0000
L29	2	FB-L98B-034-XXX(3/8)	77.58 - 82.58	1.0000	1.0000
L29	3	PWRT-608-S(13/16)	77.58 - 82.58	1.0000	1.0000
L29	4	PWRT-606-S(7/8)	77.58 - 82.58	1.0000	1.0000
L29	7	7983A(ELLIPTICAL)	77.58 - 82.58	1.0000	1.0000
L29	11	CU12PSM9P6XXX(1-1/2)	77.58 - 82.58	1.0000	1.0000
L29	22	Safety Line 3/8	77.58 - 82.58	1.0000	1.0000
L29	34	PL1.25x5.5 Reinforcement	77.58 - 82.58	1.0000	1.0000
L29	35	PL1.25x5.5 Reinforcement	77.58 - 82.58	1.0000	1.0000
L29	36	PL1.25x5.5 Reinforcement	77.58 - 82.58	1.0000	1.0000
L29	50	PL1x4 Reinforcement	77.58 - 78.75	1.0000	1.0000
L29	51	PL1x4 Reinforcement	77.58 - 78.75	1.0000	1.0000
L29	52	PL1x4 Reinforcement	77.58 - 78.75	1.0000	1.0000
L29	81	CCI-SFP-040075	77.58 - 82.58	1.0000	1.0000
L29	82	CCI-SFP-040075	77.58 - 82.58	1.0000	1.0000
L29	84	CCI-SFP-040075	77.58 - 82.58	1.0000	1.0000
L30	2	FB-L98B-034-XXX(3/8)	77.00 - 77.58	1.0000	1.0000
L30	3	PWRT-608-S(13/16)	77.00 - 77.58	1.0000	1.0000
L30	4	PWRT-606-S(7/8)	77.00 - 77.58	1.0000	1.0000
L30	7	7983A(ELLIPTICAL)	77.00 - 77.58	1.0000	1.0000
L30	11	CU12PSM9P6XXX(1-1/2)	77.00 - 77.58	1.0000	1.0000
L30	22	Safety Line 3/8	77.00 - 77.58	1.0000	1.0000
L30	34	PL1.25x5.5 Reinforcement	77.00 - 77.58	1.0000	1.0000
L30	35	PL1.25x5.5 Reinforcement	77.00 - 77.58	1.0000	1.0000
L30	36	PL1.25x5.5 Reinforcement	77.00 - 77.58	1.0000	1.0000
L30	50	PL1x4 Reinforcement	77.00 - 77.58	1.0000	1.0000
L30	51	PL1x4 Reinforcement	77.00 - 77.58	1.0000	1.0000
L30	52	PL1x4 Reinforcement	77.00 - 77.58	1.0000	1.0000
L30	81	CCI-SFP-040075	77.00 - 77.58	1.0000	1.0000
L30	82	CCI-SFP-040075	77.00 - 77.58	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
L30	84	CCI-SFP-040075	77.00 - 77.58	1.0000	1.0000
L31	2	FB-L98B-034-XXX(3/8)	76.75 - 77.00	1.0000	1.0000
L31	3	PWRT-608-S(13/16)	76.75 - 77.00	1.0000	1.0000
L31	4	PWRT-606-S(7/8)	76.75 - 77.00	1.0000	1.0000
L31	7	7983A(ELLIPTICAL)	76.75 - 77.00	1.0000	1.0000
L31	11	CU12PSM9P6XXX(1-1/2)	76.75 - 77.00	1.0000	1.0000
L31	22	Safety Line 3/8	76.75 - 77.00	1.0000	1.0000
L31	34	PL1.25x5.5 Reinforcement	76.75 - 77.00	1.0000	1.0000
L31	35	PL1.25x5.5 Reinforcement	76.75 - 77.00	1.0000	1.0000
L31	36	PL1.25x5.5 Reinforcement	76.75 - 77.00	1.0000	1.0000
L31	50	PL1x4 Reinforcement	76.75 - 77.00	1.0000	1.0000
L31	51	PL1x4 Reinforcement	76.75 - 77.00	1.0000	1.0000
L31	52	PL1x4 Reinforcement	76.75 - 77.00	1.0000	1.0000
L31	81	CCI-SFP-040075	76.75 - 77.00	1.0000	1.0000
L31	82	CCI-SFP-040075	76.75 - 77.00	1.0000	1.0000
L31	84	CCI-SFP-040075	76.75 - 77.00	1.0000	1.0000
L32	2	FB-L98B-034-XXX(3/8)	76.33 - 76.75	1.0000	1.0000
L32	3	PWRT-608-S(13/16)	76.33 - 76.75	1.0000	1.0000
L32	4	PWRT-606-S(7/8)	76.33 - 76.75	1.0000	1.0000
L32	7	7983A(ELLIPTICAL)	76.33 - 76.75	1.0000	1.0000
L32	11	CU12PSM9P6XXX(1-1/2)	76.33 - 76.75	1.0000	1.0000
L32	22	Safety Line 3/8	76.33 - 76.75	1.0000	1.0000
L32	34	PL1.25x5.5 Reinforcement	76.33 - 76.75	1.0000	1.0000
L32	35	PL1.25x5.5 Reinforcement	76.33 - 76.75	1.0000	1.0000
L32	36	PL1.25x5.5 Reinforcement	76.33 - 76.75	1.0000	1.0000
L32	50	PL1x4 Reinforcement	76.33 - 76.75	1.0000	1.0000
L32	51	PL1x4 Reinforcement	76.33 - 76.75	1.0000	1.0000
L32	52	PL1x4 Reinforcement	76.33 - 76.75	1.0000	1.0000
L32	81	CCI-SFP-040075	76.33 - 76.75	1.0000	1.0000
L32	82	CCI-SFP-040075	76.33 - 76.75	1.0000	1.0000
L32	84	CCI-SFP-040075	76.33 - 76.75	1.0000	1.0000
L33	2	FB-L98B-034-XXX(3/8)	76.08 - 76.33	1.0000	1.0000
L33	3	PWRT-608-S(13/16)	76.08 - 76.33	1.0000	1.0000
L33	4	PWRT-606-S(7/8)	76.08 - 76.33	1.0000	1.0000
L33	7	7983A(ELLIPTICAL)	76.08 -	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
L33	11	CU12PSM9P6XXX(1-1/2)	76.33 76.08 - 76.33	1.0000	1.0000
L33	22	Safety Line 3/8	76.08 - 76.33	1.0000	1.0000
L33	34	PL1.25x5.5 Reinforcement	76.08 - 76.33	1.0000	1.0000
L33	35	PL1.25x5.5 Reinforcement	76.08 - 76.33	1.0000	1.0000
L33	36	PL1.25x5.5 Reinforcement	76.08 - 76.33	1.0000	1.0000
L33	50	PL1x4 Reinforcement	76.08 - 76.33	1.0000	1.0000
L33	51	PL1x4 Reinforcement	76.08 - 76.33	1.0000	1.0000
L33	52	PL1x4 Reinforcement	76.08 - 76.33	1.0000	1.0000
L33	81	CCI-SFP-040075	76.08 - 76.33	1.0000	1.0000
L33	82	CCI-SFP-040075	76.08 - 76.33	1.0000	1.0000
L33	84	CCI-SFP-040075	76.08 - 76.33	1.0000	1.0000
L34	2	FB-L98B-034-XXX(3/8)	74.25 - 76.08	1.0000	1.0000
L34	3	PWRT-608-S(13/16)	74.25 - 76.08	1.0000	1.0000
L34	4	PWRT-606-S(7/8)	74.25 - 76.08	1.0000	1.0000
L34	7	7983A(ELLIPTICAL)	74.25 - 76.08	1.0000	1.0000
L34	11	CU12PSM9P6XXX(1-1/2)	74.25 - 76.08	1.0000	1.0000
L34	22	Safety Line 3/8	74.25 - 76.08	1.0000	1.0000
L34	34	PL1.25x5.5 Reinforcement	74.25 - 76.08	1.0000	1.0000
L34	35	PL1.25x5.5 Reinforcement	74.25 - 76.08	1.0000	1.0000
L34	36	PL1.25x5.5 Reinforcement	74.25 - 76.08	1.0000	1.0000
L34	50	PL1x4 Reinforcement	74.25 - 76.08	1.0000	1.0000
L34	51	PL1x4 Reinforcement	74.25 - 76.08	1.0000	1.0000
L34	52	PL1x4 Reinforcement	74.25 - 76.08	1.0000	1.0000
L34	76	CCI-SFP-045100	74.25 - 75.25	1.0000	1.0000
L34	77	CCI-SFP-045100	74.25 - 75.25	1.0000	1.0000
L34	79	CCI-SFP-040075	74.25 - 75.25	1.0000	1.0000
L34	81	CCI-SFP-040075	75.33 - 76.08	1.0000	1.0000
L34	82	CCI-SFP-040075	75.33 - 76.08	1.0000	1.0000
L34	84	CCI-SFP-040075	75.33 - 76.08	1.0000	1.0000
L35	2	FB-L98B-034-XXX(3/8)	74.00 - 74.25	1.0000	1.0000
L35	3	PWRT-608-S(13/16)	74.00 - 74.25	1.0000	1.0000
L35	4	PWRT-606-S(7/8)	74.00 - 74.25	1.0000	1.0000
L35	7	7983A(ELLIPTICAL)	74.00 - 74.25	1.0000	1.0000
L35	11	CU12PSM9P6XXX(1-1/2)	74.00 - 74.25	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
L35	22	Safety Line 3/8	74.00 - 74.25	1.0000	1.0000
L35	34	PL1.25x5.5 Reinforcement	74.00 - 74.25	1.0000	1.0000
L35	35	PL1.25x5.5 Reinforcement	74.00 - 74.25	1.0000	1.0000
L35	36	PL1.25x5.5 Reinforcement	74.00 - 74.25	1.0000	1.0000
L35	50	PL1x4 Reinforcement	74.00 - 74.25	1.0000	1.0000
L35	51	PL1x4 Reinforcement	74.00 - 74.25	1.0000	1.0000
L35	52	PL1x4 Reinforcement	74.00 - 74.25	1.0000	1.0000
L35	76	CCI-SFP-045100	74.00 - 74.25	1.0000	1.0000
L35	77	CCI-SFP-045100	74.00 - 74.25	1.0000	1.0000
L35	79	CCI-SFP-040075	74.00 - 74.25	1.0000	1.0000
L36	2	FB-L98B-034-XXX(3/8)	73.75 - 74.00	1.0000	1.0000
L36	3	PWRT-608-S(13/16)	73.75 - 74.00	1.0000	1.0000
L36	4	PWRT-606-S(7/8)	73.75 - 74.00	1.0000	1.0000
L36	7	7983A(ELLIPTICAL)	73.75 - 74.00	1.0000	1.0000
L36	11	CU12PSM9P6XXX(1-1/2)	73.75 - 74.00	1.0000	1.0000
L36	22	Safety Line 3/8	73.75 - 74.00	1.0000	1.0000
L36	34	PL1.25x5.5 Reinforcement	73.75 - 74.00	1.0000	1.0000
L36	35	PL1.25x5.5 Reinforcement	73.75 - 74.00	1.0000	1.0000
L36	36	PL1.25x5.5 Reinforcement	73.75 - 74.00	1.0000	1.0000
L36	50	PL1x4 Reinforcement	73.75 - 74.00	1.0000	1.0000
L36	51	PL1x4 Reinforcement	73.75 - 74.00	1.0000	1.0000
L36	52	PL1x4 Reinforcement	73.75 - 74.00	1.0000	1.0000
L36	76	CCI-SFP-045100	73.75 - 74.00	1.0000	1.0000
L36	77	CCI-SFP-045100	73.75 - 74.00	1.0000	1.0000
L36	79	CCI-SFP-040075	73.75 - 74.00	1.0000	1.0000
L37	2	FB-L98B-034-XXX(3/8)	73.50 - 73.75	1.0000	1.0000
L37	3	PWRT-608-S(13/16)	73.50 - 73.75	1.0000	1.0000
L37	4	PWRT-606-S(7/8)	73.50 - 73.75	1.0000	1.0000
L37	7	7983A(ELLIPTICAL)	73.50 - 73.75	1.0000	1.0000
L37	11	CU12PSM9P6XXX(1-1/2)	73.50 - 73.75	1.0000	1.0000
L37	22	Safety Line 3/8	73.50 - 73.75	1.0000	1.0000
L37	34	PL1.25x5.5 Reinforcement	73.50 - 73.75	1.0000	1.0000
L37	35	PL1.25x5.5 Reinforcement	73.50 - 73.75	1.0000	1.0000
L37	36	PL1.25x5.5 Reinforcement	73.50 - 73.75	1.0000	1.0000
L37	50	PL1x4 Reinforcement	73.50 -	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
L37	51	PL1x4 Reinforcement	73.75 73.50 - 73.75	1.0000	1.0000
L37	52	PL1x4 Reinforcement	73.50 - 73.75	1.0000	1.0000
L37	76	CCI-SFP-045100	73.50 - 73.75	1.0000	1.0000
L37	77	CCI-SFP-045100	73.50 - 73.75	1.0000	1.0000
L37	79	CCI-SFP-040075	73.50 - 73.75	1.0000	1.0000
L38	2	FB-L98B-034-XXX(3/8)	68.50 - 73.50	1.0000	1.0000
L38	3	PWRT-608-S(13/16)	68.50 - 73.50	1.0000	1.0000
L38	4	PWRT-606-S(7/8)	68.50 - 73.50	1.0000	1.0000
L38	7	7983A(ELLIPTICAL)	68.50 - 73.50	1.0000	1.0000
L38	11	CU12PSM9P6XXX(1-1/2)	68.50 - 73.50	1.0000	1.0000
L38	22	Safety Line 3/8	68.50 - 73.50	1.0000	1.0000
L38	34	PL1.25x5.5 Reinforcement	68.50 - 73.50	1.0000	1.0000
L38	35	PL1.25x5.5 Reinforcement	68.50 - 73.50	1.0000	1.0000
L38	36	PL1.25x5.5 Reinforcement	68.50 - 73.50	1.0000	1.0000
L38	50	PL1x4 Reinforcement	68.50 - 73.50	1.0000	1.0000
L38	51	PL1x4 Reinforcement	68.50 - 73.50	1.0000	1.0000
L38	52	PL1x4 Reinforcement	68.50 - 73.50	1.0000	1.0000
L38	76	CCI-SFP-045100	68.50 - 73.50	1.0000	1.0000
L38	77	CCI-SFP-045100	68.50 - 73.50	1.0000	1.0000
L38	79	CCI-SFP-040075	68.50 - 73.50	1.0000	1.0000
L39	2	FB-L98B-034-XXX(3/8)	63.50 - 68.50	1.0000	1.0000
L39	3	PWRT-608-S(13/16)	63.50 - 68.50	1.0000	1.0000
L39	4	PWRT-606-S(7/8)	63.50 - 68.50	1.0000	1.0000
L39	7	7983A(ELLIPTICAL)	63.50 - 68.50	1.0000	1.0000
L39	11	CU12PSM9P6XXX(1-1/2)	63.50 - 68.50	1.0000	1.0000
L39	22	Safety Line 3/8	63.50 - 68.50	1.0000	1.0000
L39	34	PL1.25x5.5 Reinforcement	63.50 - 68.50	1.0000	1.0000
L39	35	PL1.25x5.5 Reinforcement	63.50 - 68.50	1.0000	1.0000
L39	36	PL1.25x5.5 Reinforcement	63.50 - 68.50	1.0000	1.0000
L39	50	PL1x4 Reinforcement	63.50 - 68.50	1.0000	1.0000
L39	51	PL1x4 Reinforcement	63.50 - 68.50	1.0000	1.0000
L39	52	PL1x4 Reinforcement	63.50 - 68.50	1.0000	1.0000
L39	76	CCI-SFP-045100	63.50 - 68.50	1.0000	1.0000
L39	77	CCI-SFP-045100	63.50 - 68.50	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
L39	79	CCI-SFP-040075	63.50 - 68.50	1.0000	1.0000
L40	2	FB-L98B-034-XXX(3/8)	60.50 - 63.50	1.0000	1.0000
L40	3	PWRT-608-S(13/16)	60.50 - 63.50	1.0000	1.0000
L40	4	PWRT-606-S(7/8)	60.50 - 63.50	1.0000	1.0000
L40	7	7983A(ELLIPTICAL)	60.50 - 63.50	1.0000	1.0000
L40	11	CU12PSM9P6XXX(1-1/2)	60.50 - 63.50	1.0000	1.0000
L40	22	Safety Line 3/8	60.50 - 63.50	1.0000	1.0000
L40	34	PL1.25x5.5 Reinforcement	60.50 - 63.50	1.0000	1.0000
L40	35	PL1.25x5.5 Reinforcement	60.50 - 63.50	1.0000	1.0000
L40	36	PL1.25x5.5 Reinforcement	60.50 - 63.50	1.0000	1.0000
L40	46	PL1x4 Reinforcement	60.50 - 62.25	1.0000	1.0000
L40	47	PL1x4 Reinforcement	60.50 - 62.25	1.0000	1.0000
L40	48	PL1x4 Reinforcement	60.50 - 62.25	1.0000	1.0000
L40	50	PL1x4 Reinforcement	60.50 - 63.50	1.0000	1.0000
L40	51	PL1x4 Reinforcement	60.50 - 63.50	1.0000	1.0000
L40	52	PL1x4 Reinforcement	60.50 - 63.50	1.0000	1.0000
L40	76	CCI-SFP-045100	60.50 - 63.50	1.0000	1.0000
L40	77	CCI-SFP-045100	60.50 - 63.50	1.0000	1.0000
L40	79	CCI-SFP-040075	60.50 - 63.50	1.0000	1.0000
L41	2	FB-L98B-034-XXX(3/8)	60.25 - 60.50	1.0000	1.0000
L41	3	PWRT-608-S(13/16)	60.25 - 60.50	1.0000	1.0000
L41	4	PWRT-606-S(7/8)	60.25 - 60.50	1.0000	1.0000
L41	7	7983A(ELLIPTICAL)	60.25 - 60.50	1.0000	1.0000
L41	11	CU12PSM9P6XXX(1-1/2)	60.25 - 60.50	1.0000	1.0000
L41	22	Safety Line 3/8	60.25 - 60.50	1.0000	1.0000
L41	34	PL1.25x5.5 Reinforcement	60.25 - 60.50	1.0000	1.0000
L41	35	PL1.25x5.5 Reinforcement	60.25 - 60.50	1.0000	1.0000
L41	36	PL1.25x5.5 Reinforcement	60.25 - 60.50	1.0000	1.0000
L41	46	PL1x4 Reinforcement	60.25 - 60.50	1.0000	1.0000
L41	47	PL1x4 Reinforcement	60.25 - 60.50	1.0000	1.0000
L41	48	PL1x4 Reinforcement	60.25 - 60.50	1.0000	1.0000
L41	50	PL1x4 Reinforcement	60.25 - 60.50	1.0000	1.0000
L41	51	PL1x4 Reinforcement	60.25 - 60.50	1.0000	1.0000
L41	52	PL1x4 Reinforcement	60.25 - 60.50	1.0000	1.0000
L41	76	CCI-SFP-045100	60.25 -	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
L41	77	CCI-SFP-045100	60.50 60.25 -	1.0000	1.0000
L41	79	CCI-SFP-040075	60.50 60.25 -	1.0000	1.0000
L42	2	FB-L98B-034-XXX(3/8)	60.50 59.50 -	1.0000	1.0000
L42	3	PWRT-608-S(13/16)	60.25 59.50 -	1.0000	1.0000
L42	4	PWRT-606-S(7/8)	60.25 59.50 -	1.0000	1.0000
L42	7	7983A(ELLIPTICAL)	60.25 59.50 -	1.0000	1.0000
L42	11	CU12PSM9P6XXX(1-1/2)	60.25 59.50 -	1.0000	1.0000
L42	22	Safety Line 3/8	60.25 59.50 -	1.0000	1.0000
L42	34	PL1.25x5.5 Reinforcement	60.25 59.50 -	1.0000	1.0000
L42	35	PL1.25x5.5 Reinforcement	60.25 59.50 -	1.0000	1.0000
L42	36	PL1.25x5.5 Reinforcement	60.25 59.50 -	1.0000	1.0000
L42	46	PL1x4 Reinforcement	60.25 59.50 -	1.0000	1.0000
L42	47	PL1x4 Reinforcement	60.25 59.50 -	1.0000	1.0000
L42	48	PL1x4 Reinforcement	60.25 59.50 -	1.0000	1.0000
L42	50	PL1x4 Reinforcement	60.25 59.50 -	1.0000	1.0000
L42	51	PL1x4 Reinforcement	60.25 59.50 -	1.0000	1.0000
L42	52	PL1x4 Reinforcement	60.25 59.50 -	1.0000	1.0000
L42	76	CCI-SFP-045100	60.25 59.50 -	1.0000	1.0000
L42	77	CCI-SFP-045100	60.25 59.50 -	1.0000	1.0000
L42	79	CCI-SFP-040075	60.25 59.50 -	1.0000	1.0000
L43	2	FB-L98B-034-XXX(3/8)	60.25 59.25 - 59.50	1.0000	1.0000
L43	3	PWRT-608-S(13/16)	59.25 - 59.50	1.0000	1.0000
L43	4	PWRT-606-S(7/8)	59.25 - 59.50	1.0000	1.0000
L43	7	7983A(ELLIPTICAL)	59.25 - 59.50	1.0000	1.0000
L43	11	CU12PSM9P6XXX(1-1/2)	59.25 - 59.50	1.0000	1.0000
L43	22	Safety Line 3/8	59.25 - 59.50	1.0000	1.0000
L43	30	PL1.25x6.625 Reinforcement	59.25 - 59.50	1.0000	1.0000
L43	31	PL1.25x6.625 Reinforcement	59.25 - 59.50	1.0000	1.0000
L43	32	PL1.25x6.625 Reinforcement	59.25 - 59.50	1.0000	1.0000
L43	46	PL1x4 Reinforcement	59.25 - 59.50	1.0000	1.0000
L43	47	PL1x4 Reinforcement	59.25 - 59.50	1.0000	1.0000
L43	48	PL1x4 Reinforcement	59.25 - 59.50	1.0000	1.0000
L43	50	PL1x4 Reinforcement	59.25 - 59.50	1.0000	1.0000
L43	51	PL1x4 Reinforcement	59.25 - 59.50	1.0000	1.0000



Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
L43	52	PL1x4 Reinforcement	59.25 - 59.50	1.0000	1.0000
L43	76	CCI-SFP-045100	59.25 - 59.50	1.0000	1.0000
L43	77	CCI-SFP-045100	59.25 - 59.50	1.0000	1.0000
L43	79	CCI-SFP-040075	59.25 - 59.50	1.0000	1.0000
L44	2	FB-L98B-034-XXX(3/8)	54.25 - 59.25	1.0000	1.0000
L44	3	PWRT-608-S(13/16)	54.25 - 59.25	1.0000	1.0000
L44	4	PWRT-606-S(7/8)	54.25 - 59.25	1.0000	1.0000
L44	7	7983A(ELLIPTICAL)	54.25 - 59.25	1.0000	1.0000
L44	11	CU12PSM9P6XXX(1-1/2)	54.25 - 59.25	1.0000	1.0000
L44	22	Safety Line 3/8	54.25 - 59.25	1.0000	1.0000
L44	30	PL1.25x6.625 Reinforcement	54.25 - 59.25	1.0000	1.0000
L44	31	PL1.25x6.625 Reinforcement	54.25 - 59.25	1.0000	1.0000
L44	32	PL1.25x6.625 Reinforcement	54.25 - 59.25	1.0000	1.0000
L44	46	PL1x4 Reinforcement	54.25 - 59.25	1.0000	1.0000
L44	47	PL1x4 Reinforcement	54.25 - 59.25	1.0000	1.0000
L44	48	PL1x4 Reinforcement	54.25 - 59.25	1.0000	1.0000
L44	50	PL1x4 Reinforcement	58.75 - 59.25	1.0000	1.0000
L44	51	PL1x4 Reinforcement	58.75 - 59.25	1.0000	1.0000
L44	52	PL1x4 Reinforcement	58.75 - 59.25	1.0000	1.0000
L44	76	CCI-SFP-045100	54.25 - 59.25	1.0000	1.0000
L44	77	CCI-SFP-045100	54.25 - 59.25	1.0000	1.0000
L44	79	CCI-SFP-040075	54.25 - 59.25	1.0000	1.0000
L45	2	FB-L98B-034-XXX(3/8)	45.80 - 54.25	1.0000	1.0000
L45	3	PWRT-608-S(13/16)	45.80 - 54.25	1.0000	1.0000
L45	4	PWRT-606-S(7/8)	45.80 - 54.25	1.0000	1.0000
L45	7	7983A(ELLIPTICAL)	45.80 - 54.25	1.0000	1.0000
L45	11	CU12PSM9P6XXX(1-1/2)	45.80 - 54.25	1.0000	1.0000
L45	22	Safety Line 3/8	45.80 - 54.25	1.0000	1.0000
L45	30	PL1.25x6.625 Reinforcement	45.80 - 54.25	1.0000	1.0000
L45	31	PL1.25x6.625 Reinforcement	45.80 - 54.25	1.0000	1.0000
L45	32	PL1.25x6.625 Reinforcement	45.80 - 54.25	1.0000	1.0000
L45	46	PL1x4 Reinforcement	45.80 - 54.25	1.0000	1.0000
L45	47	PL1x4 Reinforcement	45.80 - 54.25	1.0000	1.0000
L45	48	PL1x4 Reinforcement	45.80 - 54.25	1.0000	1.0000
L45	76	CCI-SFP-045100	45.80 - 54.25	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
L45	77	CCI-SFP-045100	54.25 45.80 -	1.0000	1.0000
L45	79	CCI-SFP-040075	54.25 45.80 -	1.0000	1.0000
L46	2	FB-L98B-034-XXX(3/8)	54.25 44.80 -	1.0000	1.0000
L46	3	PWRT-608-S(13/16)	45.80 44.80 -	1.0000	1.0000
L46	4	PWRT-606-S(7/8)	45.80 44.80 -	1.0000	1.0000
L46	7	7983A(ELLIPTICAL)	45.80 44.80 -	1.0000	1.0000
L46	11	CU12PSM9P6XXX(1-1/2)	45.80 44.80 -	1.0000	1.0000
L46	22	Safety Line 3/8	45.80 44.80 -	1.0000	1.0000
L46	30	PL1.25x6.625 Reinforcement	45.80 44.80 -	1.0000	1.0000
L46	31	PL1.25x6.625 Reinforcement	45.80 44.80 -	1.0000	1.0000
L46	32	PL1.25x6.625 Reinforcement	45.80 44.80 -	1.0000	1.0000
L46	46	PL1x4 Reinforcement	45.80 44.80 -	1.0000	1.0000
L46	47	PL1x4 Reinforcement	45.80 44.80 -	1.0000	1.0000
L46	48	PL1x4 Reinforcement	45.80 44.80 -	1.0000	1.0000
L46	71	CCI-SFP-045100	45.80 44.80 -	1.0000	1.0000
L46	73	CCI-SFP-060100	45.08 44.80 -	1.0000	1.0000
L46	74	CCI-SFP-060100	45.17 44.80 -	1.0000	1.0000
L46	76	CCI-SFP-045100	45.17 45.25 -	1.0000	1.0000
L46	77	CCI-SFP-045100	45.80 45.25 -	1.0000	1.0000
L46	79	CCI-SFP-040075	45.80 45.25 -	1.0000	1.0000
L47	2	FB-L98B-034-XXX(3/8)	45.80 43.58 -	1.0000	1.0000
L47	3	PWRT-608-S(13/16)	44.80 43.58 -	1.0000	1.0000
L47	4	PWRT-606-S(7/8)	44.80 43.58 -	1.0000	1.0000
L47	7	7983A(ELLIPTICAL)	44.80 43.58 -	1.0000	1.0000
L47	11	CU12PSM9P6XXX(1-1/2)	44.80 43.58 -	1.0000	1.0000
L47	22	Safety Line 3/8	44.80 43.58 -	1.0000	1.0000
L47	30	PL1.25x6.625 Reinforcement	44.80 43.58 -	1.0000	1.0000
L47	31	PL1.25x6.625 Reinforcement	44.80 43.58 -	1.0000	1.0000
L47	32	PL1.25x6.625 Reinforcement	44.80 43.58 -	1.0000	1.0000
L47	46	PL1x4 Reinforcement	44.80 43.58 -	1.0000	1.0000
L47	47	PL1x4 Reinforcement	44.80 43.58 -	1.0000	1.0000
L47	48	PL1x4 Reinforcement	44.80 43.58 -	1.0000	1.0000
L47	71	CCI-SFP-045100	44.80 43.58 -	1.0000	1.0000
L47	73	CCI-SFP-060100	44.80 43.58 -	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
L47	74	CCI-SFP-060100	43.58 - 44.80	1.0000	1.0000
L48	2	FB-L98B-034-XXX(3/8)	43.33 - 43.58	1.0000	1.0000
L48	3	PWRT-608-S(13/16)	43.33 - 43.58	1.0000	1.0000
L48	4	PWRT-606-S(7/8)	43.33 - 43.58	1.0000	1.0000
L48	7	7983A(ELLIPTICAL)	43.33 - 43.58	1.0000	1.0000
L48	11	CU12PSM9P6XXX(1-1/2)	43.33 - 43.58	1.0000	1.0000
L48	22	Safety Line 3/8	43.33 - 43.58	1.0000	1.0000
L48	30	PL1.25x6.625 Reinforcement	43.33 - 43.58	1.0000	1.0000
L48	31	PL1.25x6.625 Reinforcement	43.33 - 43.58	1.0000	1.0000
L48	32	PL1.25x6.625 Reinforcement	43.33 - 43.58	1.0000	1.0000
L48	46	PL1x4 Reinforcement	43.33 - 43.58	1.0000	1.0000
L48	47	PL1x4 Reinforcement	43.33 - 43.58	1.0000	1.0000
L48	48	PL1x4 Reinforcement	43.33 - 43.58	1.0000	1.0000
L48	71	CCI-SFP-045100	43.33 - 43.58	1.0000	1.0000
L48	73	CCI-SFP-060100	43.33 - 43.58	1.0000	1.0000
L48	74	CCI-SFP-060100	43.33 - 43.58	1.0000	1.0000
L49	2	FB-L98B-034-XXX(3/8)	43.17 - 43.33	1.0000	1.0000
L49	3	PWRT-608-S(13/16)	43.17 - 43.33	1.0000	1.0000
L49	4	PWRT-606-S(7/8)	43.17 - 43.33	1.0000	1.0000
L49	7	7983A(ELLIPTICAL)	43.17 - 43.33	1.0000	1.0000
L49	11	CU12PSM9P6XXX(1-1/2)	43.17 - 43.33	1.0000	1.0000
L49	22	Safety Line 3/8	43.17 - 43.33	1.0000	1.0000
L49	30	PL1.25x6.625 Reinforcement	43.17 - 43.33	1.0000	1.0000
L49	31	PL1.25x6.625 Reinforcement	43.17 - 43.33	1.0000	1.0000
L49	32	PL1.25x6.625 Reinforcement	43.17 - 43.33	1.0000	1.0000
L49	46	PL1x4 Reinforcement	43.17 - 43.33	1.0000	1.0000
L49	47	PL1x4 Reinforcement	43.17 - 43.33	1.0000	1.0000
L49	48	PL1x4 Reinforcement	43.17 - 43.33	1.0000	1.0000
L49	71	CCI-SFP-045100	43.17 - 43.33	1.0000	1.0000
L49	73	CCI-SFP-060100	43.17 - 43.33	1.0000	1.0000
L49	74	CCI-SFP-060100	43.17 - 43.33	1.0000	1.0000
L50	2	FB-L98B-034-XXX(3/8)	42.92 - 43.17	1.0000	1.0000
L50	3	PWRT-608-S(13/16)	42.92 - 43.17	1.0000	1.0000
L50	4	PWRT-606-S(7/8)	42.92 - 43.17	1.0000	1.0000
L50	7	7983A(ELLIPTICAL)	42.92 -	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
L50	11	CU12PSM9P6XXX(1-1/2)	43.17 42.92 -	1.0000	1.0000
L50	22	Safety Line 3/8	43.17 42.92 -	1.0000	1.0000
L50	30	PL1.25x6.625 Reinforcement	43.17 42.92 -	1.0000	1.0000
L50	31	PL1.25x6.625 Reinforcement	43.17 42.92 -	1.0000	1.0000
L50	32	PL1.25x6.625 Reinforcement	43.17 42.92 -	1.0000	1.0000
L50	46	PL1x4 Reinforcement	43.17 42.92 -	1.0000	1.0000
L50	47	PL1x4 Reinforcement	43.17 42.92 -	1.0000	1.0000
L50	48	PL1x4 Reinforcement	43.17 42.92 -	1.0000	1.0000
L50	71	CCI-SFP-045100	43.17 42.92 -	1.0000	1.0000
L50	73	CCI-SFP-060100	43.17 42.92 -	1.0000	1.0000
L50	74	CCI-SFP-060100	43.17 42.92 -	1.0000	1.0000
L51	2	FB-L98B-034-XXX(3/8)	43.17 39.00 -	1.0000	1.0000
L51	3	PWRT-608-S(13/16)	42.92 39.00 -	1.0000	1.0000
L51	4	PWRT-606-S(7/8)	42.92 39.00 -	1.0000	1.0000
L51	7	7983A(ELLIPTICAL)	42.92 39.00 -	1.0000	1.0000
L51	11	CU12PSM9P6XXX(1-1/2)	42.92 39.00 -	1.0000	1.0000
L51	22	Safety Line 3/8	42.92 39.00 -	1.0000	1.0000
L51	30	PL1.25x6.625 Reinforcement	42.92 39.00 -	1.0000	1.0000
L51	31	PL1.25x6.625 Reinforcement	42.92 39.00 -	1.0000	1.0000
L51	32	PL1.25x6.625 Reinforcement	42.92 39.00 -	1.0000	1.0000
L51	44	PL1x4 Reinforcement	42.92 39.00 -	1.0000	1.0000
L51	46	PL1x4 Reinforcement	40.75 39.00 -	1.0000	1.0000
L51	47	PL1x4 Reinforcement	42.92 39.00 -	1.0000	1.0000
L51	48	PL1x4 Reinforcement	42.92 39.00 -	1.0000	1.0000
L51	71	CCI-SFP-045100	42.92 39.00 -	1.0000	1.0000
L51	73	CCI-SFP-060100	42.92 39.00 -	1.0000	1.0000
L51	74	CCI-SFP-060100	42.92 39.00 -	1.0000	1.0000
L52	2	FB-L98B-034-XXX(3/8)	42.92 38.75 -	1.0000	1.0000
L52	3	PWRT-608-S(13/16)	39.00 38.75 -	1.0000	1.0000
L52	4	PWRT-606-S(7/8)	39.00 38.75 -	1.0000	1.0000
L52	7	7983A(ELLIPTICAL)	39.00 38.75 -	1.0000	1.0000
L52	11	CU12PSM9P6XXX(1-1/2)	39.00 38.75 -	1.0000	1.0000
L52	22	Safety Line 3/8	39.00 38.75 -	1.0000	1.0000
L52	30	PL1.25x6.625 Reinforcement	39.00 38.75 -	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
L52	31	PL1.25x6.625 Reinforcement	38.75 - 39.00	1.0000	1.0000
L52	32	PL1.25x6.625 Reinforcement	38.75 - 39.00	1.0000	1.0000
L52	44	PL1x4 Reinforcement	38.75 - 39.00	1.0000	1.0000
L52	46	PL1x4 Reinforcement	38.75 - 39.00	1.0000	1.0000
L52	47	PL1x4 Reinforcement	38.75 - 39.00	1.0000	1.0000
L52	48	PL1x4 Reinforcement	38.75 - 39.00	1.0000	1.0000
L52	71	CCI-SFP-045100	38.75 - 39.00	1.0000	1.0000
L52	73	CCI-SFP-060100	38.75 - 39.00	1.0000	1.0000
L52	74	CCI-SFP-060100	38.75 - 39.00	1.0000	1.0000
L53	2	FB-L98B-034-XXX(3/8)	37.17 - 38.75	1.0000	1.0000
L53	3	PWRT-608-S(13/16)	37.17 - 38.75	1.0000	1.0000
L53	4	PWRT-606-S(7/8)	37.17 - 38.75	1.0000	1.0000
L53	7	7983A(ELLIPTICAL)	37.17 - 38.75	1.0000	1.0000
L53	11	CU12PSM9P6XXX(1-1/2)	37.17 - 38.75	1.0000	1.0000
L53	22	Safety Line 3/8	37.17 - 38.75	1.0000	1.0000
L53	30	PL1.25x6.625 Reinforcement	37.17 - 38.75	1.0000	1.0000
L53	31	PL1.25x6.625 Reinforcement	37.17 - 38.75	1.0000	1.0000
L53	32	PL1.25x6.625 Reinforcement	37.17 - 38.75	1.0000	1.0000
L53	44	PL1x4 Reinforcement	37.17 - 38.75	1.0000	1.0000
L53	46	PL1x4 Reinforcement	37.17 - 38.75	1.0000	1.0000
L53	47	PL1x4 Reinforcement	37.17 - 38.75	1.0000	1.0000
L53	48	PL1x4 Reinforcement	37.17 - 38.75	1.0000	1.0000
L53	71	CCI-SFP-045100	37.17 - 38.75	1.0000	1.0000
L53	73	CCI-SFP-060100	37.17 - 38.75	1.0000	1.0000
L53	74	CCI-SFP-060100	37.17 - 38.75	1.0000	1.0000
L54	2	FB-L98B-034-XXX(3/8)	36.92 - 37.17	1.0000	1.0000
L54	3	PWRT-608-S(13/16)	36.92 - 37.17	1.0000	1.0000
L54	4	PWRT-606-S(7/8)	36.92 - 37.17	1.0000	1.0000
L54	7	7983A(ELLIPTICAL)	36.92 - 37.17	1.0000	1.0000
L54	11	CU12PSM9P6XXX(1-1/2)	36.92 - 37.17	1.0000	1.0000
L54	22	Safety Line 3/8	36.92 - 37.17	1.0000	1.0000
L54	30	PL1.25x6.625 Reinforcement	36.92 - 37.17	1.0000	1.0000
L54	31	PL1.25x6.625 Reinforcement	36.92 - 37.17	1.0000	1.0000
L54	32	PL1.25x6.625 Reinforcement	36.92 - 37.17	1.0000	1.0000
L54	44	PL1x4 Reinforcement	36.92 -	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
			37.17		
L54	46	PL1x4 Reinforcement	36.92 - 37.17	1.0000	1.0000
L54	47	PL1x4 Reinforcement	36.92 - 37.17	1.0000	1.0000
L54	48	PL1x4 Reinforcement	36.92 - 37.17	1.0000	1.0000
L54	71	CCI-SFP-045100	36.92 - 37.17	1.0000	1.0000
L54	73	CCI-SFP-060100	36.92 - 37.17	1.0000	1.0000
L54	74	CCI-SFP-060100	36.92 - 37.17	1.0000	1.0000
L55	2	FB-L98B-034-XXX(3/8)	34.00 - 36.92	1.0000	1.0000
L55	3	PWRT-608-S(13/16)	34.00 - 36.92	1.0000	1.0000
L55	4	PWRT-606-S(7/8)	34.00 - 36.92	1.0000	1.0000
L55	7	7983A(ELLIPTICAL)	34.00 - 36.92	1.0000	1.0000
L55	11	CU12PSM9P6XXX(1-1/2)	34.00 - 36.92	1.0000	1.0000
L55	22	Safety Line 3/8	34.00 - 36.92	1.0000	1.0000
L55	30	PL1.25x6.625 Reinforcement	34.00 - 36.92	1.0000	1.0000
L55	31	PL1.25x6.625 Reinforcement	34.00 - 36.92	1.0000	1.0000
L55	32	PL1.25x6.625 Reinforcement	34.00 - 36.92	1.0000	1.0000
L55	42	PL1x4 Reinforcement	34.00 - 35.75	1.0000	1.0000
L55	43	PL1x4 Reinforcement	34.00 - 35.75	1.0000	1.0000
L55	44	PL1x4 Reinforcement	34.00 - 36.92	1.0000	1.0000
L55	46	PL1x4 Reinforcement	34.00 - 36.92	1.0000	1.0000
L55	47	PL1x4 Reinforcement	34.00 - 36.92	1.0000	1.0000
L55	48	PL1x4 Reinforcement	34.00 - 36.92	1.0000	1.0000
L55	67	CCI-SFP-045100	34.00 - 35.08	1.0000	1.0000
L55	69	CCI-SFP-045100	34.00 - 35.08	1.0000	1.0000
L55	71	CCI-SFP-045100	34.00 - 36.92	1.0000	1.0000
L55	73	CCI-SFP-060100	35.17 - 36.92	1.0000	1.0000
L55	74	CCI-SFP-060100	35.17 - 36.92	1.0000	1.0000
L56	2	FB-L98B-034-XXX(3/8)	33.75 - 34.00	1.0000	1.0000
L56	3	PWRT-608-S(13/16)	33.75 - 34.00	1.0000	1.0000
L56	4	PWRT-606-S(7/8)	33.75 - 34.00	1.0000	1.0000
L56	7	7983A(ELLIPTICAL)	33.75 - 34.00	1.0000	1.0000
L56	11	CU12PSM9P6XXX(1-1/2)	33.75 - 34.00	1.0000	1.0000
L56	22	Safety Line 3/8	33.75 - 34.00	1.0000	1.0000
L56	30	PL1.25x6.625 Reinforcement	33.75 - 34.00	1.0000	1.0000
L56	31	PL1.25x6.625 Reinforcement	33.75 - 34.00	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
L56	32	PL1.25x6.625 Reinforcement	33.75 - 34.00	1.0000	1.0000
L56	42	PL1x4 Reinforcement	33.75 - 34.00	1.0000	1.0000
L56	43	PL1x4 Reinforcement	33.75 - 34.00	1.0000	1.0000
L56	44	PL1x4 Reinforcement	33.75 - 34.00	1.0000	1.0000
L56	46	PL1x4 Reinforcement	33.75 - 34.00	1.0000	1.0000
L56	47	PL1x4 Reinforcement	33.75 - 34.00	1.0000	1.0000
L56	48	PL1x4 Reinforcement	33.75 - 34.00	1.0000	1.0000
L56	67	CCI-SFP-045100	33.75 - 34.00	1.0000	1.0000
L56	69	CCI-SFP-045100	33.75 - 34.00	1.0000	1.0000
L56	71	CCI-SFP-045100	33.75 - 34.00	1.0000	1.0000
L57	2	FB-L98B-034-XXX(3/8)	29.75 - 33.75	1.0000	1.0000
L57	3	PWRT-608-S(13/16)	29.75 - 33.75	1.0000	1.0000
L57	4	PWRT-606-S(7/8)	29.75 - 33.75	1.0000	1.0000
L57	7	7983A(ELLIPTICAL)	29.75 - 33.75	1.0000	1.0000
L57	11	CU12PSM9P6XXX(1-1/2)	29.75 - 33.75	1.0000	1.0000
L57	22	Safety Line 3/8	29.75 - 33.75	1.0000	1.0000
L57	30	PL1.25x6.625 Reinforcement	29.75 - 33.75	1.0000	1.0000
L57	31	PL1.25x6.625 Reinforcement	29.75 - 33.75	1.0000	1.0000
L57	32	PL1.25x6.625 Reinforcement	29.75 - 33.75	1.0000	1.0000
L57	42	PL1x4 Reinforcement	29.75 - 33.75	1.0000	1.0000
L57	43	PL1x4 Reinforcement	29.75 - 33.75	1.0000	1.0000
L57	44	PL1x4 Reinforcement	29.75 - 33.75	1.0000	1.0000
L57	46	PL1x4 Reinforcement	32.25 - 33.75	1.0000	1.0000
L57	47	PL1x4 Reinforcement	32.25 - 33.75	1.0000	1.0000
L57	48	PL1x4 Reinforcement	32.25 - 33.75	1.0000	1.0000
L57	67	CCI-SFP-045100	29.75 - 33.75	1.0000	1.0000
L57	69	CCI-SFP-045100	29.75 - 33.75	1.0000	1.0000
L57	71	CCI-SFP-045100	29.75 - 33.75	1.0000	1.0000
L58	2	FB-L98B-034-XXX(3/8)	29.50 - 29.75	1.0000	1.0000
L58	3	PWRT-608-S(13/16)	29.50 - 29.75	1.0000	1.0000
L58	4	PWRT-606-S(7/8)	29.50 - 29.75	1.0000	1.0000
L58	7	7983A(ELLIPTICAL)	29.50 - 29.75	1.0000	1.0000
L58	11	CU12PSM9P6XXX(1-1/2)	29.50 - 29.75	1.0000	1.0000
L58	22	Safety Line 3/8	29.50 - 29.75	1.0000	1.0000
L58	24	PL1.25x6.875	29.50 -	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
L58	25	Reinforcement PL1.25x6.875	29.75 29.50 -	1.0000	1.0000
L58	26	Reinforcement PL1.25x6.875	29.75 29.50 -	1.0000	1.0000
L58	42	Reinforcement PL1x4 Reinforcement	29.75 29.50 -	1.0000	1.0000
L58	43	PL1x4 Reinforcement	29.75 29.50 -	1.0000	1.0000
L58	44	PL1x4 Reinforcement	29.75 29.50 -	1.0000	1.0000
L58	67	CCI-SFP-045100	29.75 29.50 -	1.0000	1.0000
L58	69	CCI-SFP-045100	29.75 29.50 -	1.0000	1.0000
L58	71	CCI-SFP-045100	29.75 29.50 -	1.0000	1.0000
L59	2	FB-L98B-034-XXX(3/8)	29.50 24.50 -	1.0000	1.0000
L59	3	PWRT-608-S(13/16)	29.50 24.50 -	1.0000	1.0000
L59	4	PWRT-606-S(7/8)	29.50 24.50 -	1.0000	1.0000
L59	7	7983A(ELLIPTICAL)	29.50 24.50 -	1.0000	1.0000
L59	11	CU12PSM9P6XXX(1-1/2)	29.50 24.50 -	1.0000	1.0000
L59	22	Safety Line 3/8	29.50 24.50 -	1.0000	1.0000
L59	24	PL1.25x6.875 Reinforcement	29.50 24.50 -	1.0000	1.0000
L59	25	PL1.25x6.875 Reinforcement	29.50 24.50 -	1.0000	1.0000
L59	26	PL1.25x6.875 Reinforcement	29.50 24.50 -	1.0000	1.0000
L59	42	PL1x4 Reinforcement	29.50 24.50 -	1.0000	1.0000
L59	43	PL1x4 Reinforcement	29.50 24.50 -	1.0000	1.0000
L59	44	PL1x4 Reinforcement	29.50 24.50 -	1.0000	1.0000
L59	62	CCI-SFP-060100	25.00 24.50 -	1.0000	1.0000
L59	63	CCI-SFP-060100	25.00 24.50 -	1.0000	1.0000
L59	65	CCI-SFP-060100	25.00 24.50 -	1.0000	1.0000
L59	67	CCI-SFP-045100	29.50 25.08 -	1.0000	1.0000
L59	69	CCI-SFP-045100	29.50 25.08 -	1.0000	1.0000
L59	71	CCI-SFP-045100	29.50 23.00 -	1.0000	1.0000
L60	2	FB-L98B-034-XXX(3/8)	24.50 23.00 -	1.0000	1.0000
L60	3	PWRT-608-S(13/16)	24.50 23.00 -	1.0000	1.0000
L60	4	PWRT-606-S(7/8)	24.50 23.00 -	1.0000	1.0000
L60	7	7983A(ELLIPTICAL)	24.50 23.00 -	1.0000	1.0000
L60	11	CU12PSM9P6XXX(1-1/2)	24.50 23.00 -	1.0000	1.0000
L60	22	Safety Line 3/8	24.50 23.00 -	1.0000	1.0000
L60	24	PL1.25x6.875 Reinforcement	24.50 23.00 -	1.0000	1.0000
L60	25	PL1.25x6.875 Reinforcement	24.50 23.00 -	1.0000	1.0000



Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
L60	26	PL1.25x6.875 Reinforcement	23.00 - 24.50	1.0000	1.0000
L60	42	PL1x4 Reinforcement	23.00 - 24.50	1.0000	1.0000
L60	43	PL1x4 Reinforcement	23.00 - 24.50	1.0000	1.0000
L60	44	PL1x4 Reinforcement	23.00 - 24.50	1.0000	1.0000
L60	62	CCI-SFP-060100	23.00 - 24.50	1.0000	1.0000
L60	63	CCI-SFP-060100	23.00 - 24.50	1.0000	1.0000
L60	65	CCI-SFP-060100	23.00 - 24.50	1.0000	1.0000
L60	67	CCI-SFP-045100	23.00 - 24.50	1.0000	1.0000
L61	2	FB-L98B-034-XXX(3/8)	22.75 - 23.00	1.0000	1.0000
L61	3	PWRT-608-S(13/16)	22.75 - 23.00	1.0000	1.0000
L61	4	PWRT-606-S(7/8)	22.75 - 23.00	1.0000	1.0000
L61	7	7983A(ELLIPTICAL)	22.75 - 23.00	1.0000	1.0000
L61	11	CU12PSM9P6XXX(1-1/2)	22.75 - 23.00	1.0000	1.0000
L61	22	Safety Line 3/8	22.75 - 23.00	1.0000	1.0000
L61	24	PL1.25x6.875 Reinforcement	22.75 - 23.00	1.0000	1.0000
L61	25	PL1.25x6.875 Reinforcement	22.75 - 23.00	1.0000	1.0000
L61	26	PL1.25x6.875 Reinforcement	22.75 - 23.00	1.0000	1.0000
L61	42	PL1x4 Reinforcement	22.75 - 23.00	1.0000	1.0000
L61	43	PL1x4 Reinforcement	22.75 - 23.00	1.0000	1.0000
L61	44	PL1x4 Reinforcement	22.75 - 23.00	1.0000	1.0000
L61	62	CCI-SFP-060100	22.75 - 23.00	1.0000	1.0000
L61	63	CCI-SFP-060100	22.75 - 23.00	1.0000	1.0000
L61	65	CCI-SFP-060100	22.75 - 23.00	1.0000	1.0000
L61	67	CCI-SFP-045100	22.75 - 23.00	1.0000	1.0000
L62	2	FB-L98B-034-XXX(3/8)	21.58 - 22.75	1.0000	1.0000
L62	3	PWRT-608-S(13/16)	21.58 - 22.75	1.0000	1.0000
L62	4	PWRT-606-S(7/8)	21.58 - 22.75	1.0000	1.0000
L62	7	7983A(ELLIPTICAL)	21.58 - 22.75	1.0000	1.0000
L62	11	CU12PSM9P6XXX(1-1/2)	21.58 - 22.75	1.0000	1.0000
L62	22	Safety Line 3/8	21.58 - 22.75	1.0000	1.0000
L62	24	PL1.25x6.875 Reinforcement	21.58 - 22.75	1.0000	1.0000
L62	25	PL1.25x6.875 Reinforcement	21.58 - 22.75	1.0000	1.0000
L62	26	PL1.25x6.875 Reinforcement	21.58 - 22.75	1.0000	1.0000
L62	42	PL1x4 Reinforcement	21.58 - 22.75	1.0000	1.0000
L62	43	PL1x4 Reinforcement	21.58 - 22.75	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
			22.75		
L62	44	PL1x4 Reinforcement	21.58 -	1.0000	1.0000
			22.75		
L62	62	CCI-SFP-060100	21.58 -	1.0000	1.0000
			22.75		
L62	63	CCI-SFP-060100	21.58 -	1.0000	1.0000
			22.75		
L62	65	CCI-SFP-060100	21.58 -	1.0000	1.0000
			22.75		
L62	67	CCI-SFP-045100	21.58 -	1.0000	1.0000
			22.75		
L63	2	FB-L98B-034-XXX(3/8)	21.33 -	1.0000	1.0000
			21.58		
L63	3	PWRT-608-S(13/16)	21.33 -	1.0000	1.0000
			21.58		
L63	4	PWRT-606-S(7/8)	21.33 -	1.0000	1.0000
			21.58		
L63	7	7983A(ELLIPTICAL)	21.33 -	1.0000	1.0000
			21.58		
L63	11	CU12PSM9P6XXX(1-1/2)	21.33 -	1.0000	1.0000
			21.58		
L63	22	Safety Line 3/8	21.33 -	1.0000	1.0000
			21.58		
L63	24	PL1.25x6.875 Reinforcement	21.33 -	1.0000	1.0000
			21.58		
L63	25	PL1.25x6.875 Reinforcement	21.33 -	1.0000	1.0000
			21.58		
L63	26	PL1.25x6.875 Reinforcement	21.33 -	1.0000	1.0000
			21.58		
L63	42	PL1x4 Reinforcement	21.33 -	1.0000	1.0000
			21.58		
L63	43	PL1x4 Reinforcement	21.33 -	1.0000	1.0000
			21.58		
L63	44	PL1x4 Reinforcement	21.33 -	1.0000	1.0000
			21.58		
L63	62	CCI-SFP-060100	21.33 -	1.0000	1.0000
			21.58		
L63	63	CCI-SFP-060100	21.33 -	1.0000	1.0000
			21.58		
L63	65	CCI-SFP-060100	21.33 -	1.0000	1.0000
			21.58		
L63	67	CCI-SFP-045100	21.33 -	1.0000	1.0000
			21.58		
L64	2	FB-L98B-034-XXX(3/8)	16.33 -	1.0000	1.0000
			21.33		
L64	3	PWRT-608-S(13/16)	16.33 -	1.0000	1.0000
			21.33		
L64	4	PWRT-606-S(7/8)	16.33 -	1.0000	1.0000
			21.33		
L64	7	7983A(ELLIPTICAL)	16.33 -	1.0000	1.0000
			21.33		
L64	11	CU12PSM9P6XXX(1-1/2)	16.33 -	1.0000	1.0000
			21.33		
L64	22	Safety Line 3/8	16.33 -	1.0000	1.0000
			21.33		
L64	24	PL1.25x6.875 Reinforcement	16.33 -	1.0000	1.0000
			21.33		
L64	25	PL1.25x6.875 Reinforcement	16.33 -	1.0000	1.0000
			21.33		
L64	26	PL1.25x6.875 Reinforcement	16.33 -	1.0000	1.0000
			21.33		
L64	27	PL1.25x6.875 Reinforcement	16.33 -	1.0000	1.0000
			16.42		
L64	28	PL1.25x6.875 Reinforcement	16.33 -	1.0000	1.0000
			16.42		
L64	42	PL1x4 Reinforcement	16.33 -	1.0000	1.0000
			21.33		
L64	43	PL1x4 Reinforcement	16.33 -	1.0000	1.0000
			21.33		

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
L64	44	PL1x4 Reinforcement	16.33 - 21.33	1.0000	1.0000
L64	62	CCI-SFP-060100	16.33 - 21.33	1.0000	1.0000
L64	63	CCI-SFP-060100	16.33 - 21.33	1.0000	1.0000
L64	65	CCI-SFP-060100	16.33 - 21.33	1.0000	1.0000
L64	67	CCI-SFP-045100	20.08 - 21.33	1.0000	1.0000
L65	2	FB-L98B-034-XXX(3/8)	12.92 - 16.33	1.0000	1.0000
L65	3	PWRT-608-S(13/16)	12.92 - 16.33	1.0000	1.0000
L65	4	PWRT-606-S(7/8)	12.92 - 16.33	1.0000	1.0000
L65	7	7983A(ELLIPTICAL)	12.92 - 16.33	1.0000	1.0000
L65	11	CU12PSM9P6XXX(1-1/2)	12.92 - 16.33	1.0000	1.0000
L65	22	Safety Line 3/8	12.92 - 16.33	1.0000	1.0000
L65	24	PL1.25x6.875 Reinforcement	12.92 - 16.33	1.0000	1.0000
L65	25	PL1.25x6.875 Reinforcement	12.92 - 16.33	1.0000	1.0000
L65	26	PL1.25x6.875 Reinforcement	12.92 - 16.33	1.0000	1.0000
L65	27	PL1.25x6.875 Reinforcement	12.92 - 16.33	1.0000	1.0000
L65	28	PL1.25x6.875 Reinforcement	12.92 - 16.33	1.0000	1.0000
L65	42	PL1x4 Reinforcement	12.92 - 16.33	1.0000	1.0000
L65	43	PL1x4 Reinforcement	12.92 - 16.33	1.0000	1.0000
L65	44	PL1x4 Reinforcement	12.92 - 16.33	1.0000	1.0000
L65	62	CCI-SFP-060100	12.92 - 16.33	1.0000	1.0000
L65	63	CCI-SFP-060100	12.92 - 16.33	1.0000	1.0000
L65	65	CCI-SFP-060100	12.92 - 16.33	1.0000	1.0000
L66	2	FB-L98B-034-XXX(3/8)	12.67 - 12.92	1.0000	1.0000
L66	3	PWRT-608-S(13/16)	12.67 - 12.92	1.0000	1.0000
L66	4	PWRT-606-S(7/8)	12.67 - 12.92	1.0000	1.0000
L66	7	7983A(ELLIPTICAL)	12.67 - 12.92	1.0000	1.0000
L66	11	CU12PSM9P6XXX(1-1/2)	12.67 - 12.92	1.0000	1.0000
L66	22	Safety Line 3/8	12.67 - 12.92	1.0000	1.0000
L66	24	PL1.25x6.875 Reinforcement	12.67 - 12.92	1.0000	1.0000
L66	25	PL1.25x6.875 Reinforcement	12.67 - 12.92	1.0000	1.0000
L66	26	PL1.25x6.875 Reinforcement	12.67 - 12.92	1.0000	1.0000
L66	27	PL1.25x6.875 Reinforcement	12.67 - 12.92	1.0000	1.0000
L66	28	PL1.25x6.875 Reinforcement	12.67 - 12.92	1.0000	1.0000
L66	42	PL1x4 Reinforcement	12.67 - 12.92	1.0000	1.0000
L66	43	PL1x4 Reinforcement	12.67 - 12.92	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
L66	44	PL1x4 Reinforcement	12.92 12.67 -	1.0000	1.0000
L66	62	CCI-SFP-060100	12.92 12.67 -	1.0000	1.0000
L66	63	CCI-SFP-060100	12.92 12.67 -	1.0000	1.0000
L66	65	CCI-SFP-060100	12.92 12.67 -	1.0000	1.0000
L67	2	FB-L98B-034-XXX(3/8)	12.92 12.50 -	1.0000	1.0000
L67	3	PWRT-608-S(13/16)	12.67 12.50 -	1.0000	1.0000
L67	4	PWRT-606-S(7/8)	12.67 12.50 -	1.0000	1.0000
L67	7	7983A(ELLIPTICAL)	12.67 12.50 -	1.0000	1.0000
L67	11	CU12PSM9P6XXX(1-1/2)	12.67 12.50 -	1.0000	1.0000
L67	22	Safety Line 3/8	12.67 12.50 -	1.0000	1.0000
L67	24	PL1.25x6.875 Reinforcement	12.67 12.50 -	1.0000	1.0000
L67	25	PL1.25x6.875 Reinforcement	12.67 12.50 -	1.0000	1.0000
L67	26	PL1.25x6.875 Reinforcement	12.67 12.50 -	1.0000	1.0000
L67	27	PL1.25x6.875 Reinforcement	12.67 12.50 -	1.0000	1.0000
L67	28	PL1.25x6.875 Reinforcement	12.67 12.50 -	1.0000	1.0000
L67	42	PL1x4 Reinforcement	12.67 12.50 -	1.0000	1.0000
L67	43	PL1x4 Reinforcement	12.67 12.50 -	1.0000	1.0000
L67	44	PL1x4 Reinforcement	12.67 12.50 -	1.0000	1.0000
L67	62	CCI-SFP-060100	12.67 12.50 -	1.0000	1.0000
L67	63	CCI-SFP-060100	12.67 12.50 -	1.0000	1.0000
L67	65	CCI-SFP-060100	12.67 12.50 -	1.0000	1.0000
L68	2	FB-L98B-034-XXX(3/8)	12.67 12.25 -	1.0000	1.0000
L68	3	PWRT-608-S(13/16)	12.50 12.25 -	1.0000	1.0000
L68	4	PWRT-606-S(7/8)	12.50 12.25 -	1.0000	1.0000
L68	7	7983A(ELLIPTICAL)	12.50 12.25 -	1.0000	1.0000
L68	11	CU12PSM9P6XXX(1-1/2)	12.50 12.25 -	1.0000	1.0000
L68	22	Safety Line 3/8	12.50 12.25 -	1.0000	1.0000
L68	24	PL1.25x6.875 Reinforcement	12.50 12.25 -	1.0000	1.0000
L68	25	PL1.25x6.875 Reinforcement	12.50 12.25 -	1.0000	1.0000
L68	26	PL1.25x6.875 Reinforcement	12.50 12.25 -	1.0000	1.0000
L68	27	PL1.25x6.875 Reinforcement	12.50 12.25 -	1.0000	1.0000
L68	28	PL1.25x6.875 Reinforcement	12.50 12.25 -	1.0000	1.0000
L68	42	PL1x4 Reinforcement	12.50 12.25 -	1.0000	1.0000
L68	43	PL1x4 Reinforcement	12.50 12.25 -	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
L68	44	PL1x4 Reinforcement	12.25 - 12.50	1.0000	1.0000
L68	62	CCI-SFP-060100	12.25 - 12.50	1.0000	1.0000
L68	63	CCI-SFP-060100	12.25 - 12.50	1.0000	1.0000
L68	65	CCI-SFP-060100	12.25 - 12.50	1.0000	1.0000
L69	2	FB-L98B-034-XXX(3/8)	12.00 - 12.25	1.0000	1.0000
L69	3	PWRT-608-S(13/16)	12.00 - 12.25	1.0000	1.0000
L69	4	PWRT-606-S(7/8)	12.00 - 12.25	1.0000	1.0000
L69	7	7983A(ELLIPTICAL)	12.00 - 12.25	1.0000	1.0000
L69	11	CU12PSM9P6XXX(1-1/2)	12.00 - 12.25	1.0000	1.0000
L69	22	Safety Line 3/8	12.00 - 12.25	1.0000	1.0000
L69	24	PL1.25x6.875 Reinforcement	12.00 - 12.25	1.0000	1.0000
L69	25	PL1.25x6.875 Reinforcement	12.00 - 12.25	1.0000	1.0000
L69	26	PL1.25x6.875 Reinforcement	12.00 - 12.25	1.0000	1.0000
L69	27	PL1.25x6.875 Reinforcement	12.00 - 12.25	1.0000	1.0000
L69	28	PL1.25x6.875 Reinforcement	12.00 - 12.25	1.0000	1.0000
L69	42	PL1x4 Reinforcement	12.00 - 12.25	1.0000	1.0000
L69	43	PL1x4 Reinforcement	12.00 - 12.25	1.0000	1.0000
L69	44	PL1x4 Reinforcement	12.00 - 12.25	1.0000	1.0000
L69	62	CCI-SFP-060100	12.00 - 12.25	1.0000	1.0000
L69	63	CCI-SFP-060100	12.00 - 12.25	1.0000	1.0000
L69	65	CCI-SFP-060100	12.00 - 12.25	1.0000	1.0000
L70	2	FB-L98B-034-XXX(3/8)	11.75 - 12.00	1.0000	1.0000
L70	3	PWRT-608-S(13/16)	11.75 - 12.00	1.0000	1.0000
L70	4	PWRT-606-S(7/8)	11.75 - 12.00	1.0000	1.0000
L70	7	7983A(ELLIPTICAL)	11.75 - 12.00	1.0000	1.0000
L70	11	CU12PSM9P6XXX(1-1/2)	11.75 - 12.00	1.0000	1.0000
L70	22	Safety Line 3/8	11.75 - 12.00	1.0000	1.0000
L70	24	PL1.25x6.875 Reinforcement	11.75 - 12.00	1.0000	1.0000
L70	25	PL1.25x6.875 Reinforcement	11.75 - 12.00	1.0000	1.0000
L70	26	PL1.25x6.875 Reinforcement	11.75 - 12.00	1.0000	1.0000
L70	27	PL1.25x6.875 Reinforcement	11.75 - 12.00	1.0000	1.0000
L70	28	PL1.25x6.875 Reinforcement	11.75 - 12.00	1.0000	1.0000
L70	42	PL1x4 Reinforcement	11.75 - 12.00	1.0000	1.0000
L70	43	PL1x4 Reinforcement	11.75 - 12.00	1.0000	1.0000
L70	44	PL1x4 Reinforcement	11.75 - 12.00	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
L70	62	CCI-SFP-060100	12.00 11.75 -	1.0000	1.0000
L70	63	CCI-SFP-060100	12.00 11.75 -	1.0000	1.0000
L70	65	CCI-SFP-060100	12.00 11.75 -	1.0000	1.0000
L71	2	FB-L98B-034-XXX(3/8)	8.50 - 11.75	1.0000	1.0000
L71	3	PWRT-608-S(13/16)	8.50 - 11.75	1.0000	1.0000
L71	4	PWRT-606-S(7/8)	8.50 - 11.75	1.0000	1.0000
L71	7	7983A(ELLIPTICAL)	8.50 - 11.75	1.0000	1.0000
L71	11	CU12PSM9P6XXX(1-1/2)	8.50 - 11.75	1.0000	1.0000
L71	22	Safety Line 3/8	8.50 - 11.75	1.0000	1.0000
L71	24	PL1.25x6.875 Reinforcement	8.50 - 11.75	1.0000	1.0000
L71	25	PL1.25x6.875 Reinforcement	8.50 - 11.75	1.0000	1.0000
L71	26	PL1.25x6.875 Reinforcement	9.17 - 11.75	1.0000	1.0000
L71	27	PL1.25x6.875 Reinforcement	8.50 - 11.75	1.0000	1.0000
L71	28	PL1.25x6.875 Reinforcement	8.50 - 11.75	1.0000	1.0000
L71	42	PL1x4 Reinforcement	10.75 - 11.75	1.0000	1.0000
L71	43	PL1x4 Reinforcement	10.75 - 11.75	1.0000	1.0000
L71	44	PL1x4 Reinforcement	10.75 - 11.75	1.0000	1.0000
L71	58	Transition Stiffener 1x7	8.50 - 10.50	1.0000	1.0000
L71	59	Transition Stiffener 1x7	8.50 - 10.50	1.0000	1.0000
L71	60	Transition Stiffener 1x7	8.50 - 10.50	1.0000	1.0000
L71	62	CCI-SFP-060100	8.50 - 11.75	1.0000	1.0000
L71	63	CCI-SFP-060100	8.50 - 11.75	1.0000	1.0000
L71	65	CCI-SFP-060100	10.00 - 11.75	1.0000	1.0000
L72	2	FB-L98B-034-XXX(3/8)	8.25 - 8.50	1.0000	1.0000
L72	3	PWRT-608-S(13/16)	8.25 - 8.50	1.0000	1.0000
L72	4	PWRT-606-S(7/8)	8.25 - 8.50	1.0000	1.0000
L72	7	7983A(ELLIPTICAL)	8.25 - 8.50	1.0000	1.0000
L72	11	CU12PSM9P6XXX(1-1/2)	8.25 - 8.50	1.0000	1.0000
L72	22	Safety Line 3/8	8.25 - 8.50	1.0000	1.0000
L72	24	PL1.25x6.875 Reinforcement	8.25 - 8.50	1.0000	1.0000
L72	25	PL1.25x6.875 Reinforcement	8.25 - 8.50	1.0000	1.0000
L72	27	PL1.25x6.875 Reinforcement	8.25 - 8.50	1.0000	1.0000
L72	28	PL1.25x6.875 Reinforcement	8.25 - 8.50	1.0000	1.0000
L72	58	Transition Stiffener 1x7	8.25 - 8.50	1.0000	1.0000
L72	59	Transition Stiffener 1x7	8.25 - 8.50	1.0000	1.0000
L72	60	Transition Stiffener 1x7	8.25 - 8.50	1.0000	1.0000
L72	62	CCI-SFP-060100	8.25 - 8.50	1.0000	1.0000
L72	63	CCI-SFP-060100	8.25 - 8.50	1.0000	1.0000
L73	2	FB-L98B-034-XXX(3/8)	7.00 - 8.25	1.0000	1.0000
L73	3	PWRT-608-S(13/16)	7.00 - 8.25	1.0000	1.0000
L73	4	PWRT-606-S(7/8)	7.00 - 8.25	1.0000	1.0000
L73	7	7983A(ELLIPTICAL)	7.00 - 8.25	1.0000	1.0000
L73	11	CU12PSM9P6XXX(1-1/2)	7.00 - 8.25	1.0000	1.0000
L73	22	Safety Line 3/8	7.00 - 8.25	1.0000	1.0000
L73	24	PL1.25x6.875 Reinforcement	7.00 - 8.25	1.0000	1.0000
L73	25	PL1.25x6.875 Reinforcement	7.00 - 8.25	1.0000	1.0000
L73	27	PL1.25x6.875 Reinforcement	7.00 - 8.25	1.0000	1.0000
L73	28	PL1.25x6.875 Reinforcement	7.00 - 8.25	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
L73	58	Transition Stiffener 1x7	7.00 - 8.25	1.0000	1.0000
L73	59	Transition Stiffener 1x7	7.00 - 8.25	1.0000	1.0000
L73	60	Transition Stiffener 1x7	7.00 - 8.25	1.0000	1.0000
L73	62	CCI-SFP-060100	7.00 - 8.25	1.0000	1.0000
L73	63	CCI-SFP-060100	7.00 - 8.25	1.0000	1.0000
L74	2	FB-L98B-034-XXX(3/8)	6.75 - 7.00	1.0000	1.0000
L74	3	PWRT-608-S(13/16)	6.75 - 7.00	1.0000	1.0000
L74	4	PWRT-606-S(7/8)	6.75 - 7.00	1.0000	1.0000
L74	7	7983A(ELLIPTICAL)	6.75 - 7.00	1.0000	1.0000
L74	11	CU12PSM9P6XXX(1-1/2)	6.75 - 7.00	1.0000	1.0000
L74	22	Safety Line 3/8	6.75 - 7.00	1.0000	1.0000
L74	24	PL1.25x6.875 Reinforcement	6.75 - 7.00	1.0000	1.0000
L74	25	PL1.25x6.875 Reinforcement	6.75 - 7.00	1.0000	1.0000
L74	27	PL1.25x6.875 Reinforcement	6.75 - 7.00	1.0000	1.0000
L74	28	PL1.25x6.875 Reinforcement	6.75 - 7.00	1.0000	1.0000
L74	58	Transition Stiffener 1x7	6.75 - 7.00	1.0000	1.0000
L74	59	Transition Stiffener 1x7	6.75 - 7.00	1.0000	1.0000
L74	60	Transition Stiffener 1x7	6.75 - 7.00	1.0000	1.0000
L74	62	CCI-SFP-060100	6.75 - 7.00	1.0000	1.0000
L74	63	CCI-SFP-060100	6.75 - 7.00	1.0000	1.0000
L75	2	FB-L98B-034-XXX(3/8)	1.75 - 6.75	1.0000	1.0000
L75	3	PWRT-608-S(13/16)	1.75 - 6.75	1.0000	1.0000
L75	4	PWRT-606-S(7/8)	1.75 - 6.75	1.0000	1.0000
L75	7	7983A(ELLIPTICAL)	1.75 - 6.75	1.0000	1.0000
L75	11	CU12PSM9P6XXX(1-1/2)	1.75 - 6.75	1.0000	1.0000
L75	22	Safety Line 3/8	1.75 - 6.75	1.0000	1.0000
L75	24	PL1.25x6.875 Reinforcement	1.75 - 6.75	1.0000	1.0000
L75	25	PL1.25x6.875 Reinforcement	1.75 - 6.75	1.0000	1.0000
L75	27	PL1.25x6.875 Reinforcement	1.75 - 6.75	1.0000	1.0000
L75	28	PL1.25x6.875 Reinforcement	1.75 - 6.75	1.0000	1.0000
L75	58	Transition Stiffener 1x7	1.75 - 6.75	1.0000	1.0000
L75	59	Transition Stiffener 1x7	1.75 - 6.75	1.0000	1.0000
L75	60	Transition Stiffener 1x7	1.75 - 6.75	1.0000	1.0000
L75	62	CCI-SFP-060100	5.00 - 6.75	1.0000	1.0000
L75	63	CCI-SFP-060100	5.00 - 6.75	1.0000	1.0000
L76	2	FB-L98B-034-XXX(3/8)	0.00 - 1.75	1.0000	1.0000
L76	3	PWRT-608-S(13/16)	0.00 - 1.75	1.0000	1.0000
L76	4	PWRT-606-S(7/8)	0.00 - 1.75	1.0000	1.0000
L76	7	7983A(ELLIPTICAL)	0.00 - 1.75	1.0000	1.0000
L76	11	CU12PSM9P6XXX(1-1/2)	0.00 - 1.75	1.0000	1.0000
L76	22	Safety Line 3/8	0.00 - 1.75	1.0000	1.0000
L76	24	PL1.25x6.875 Reinforcement	0.00 - 1.75	1.0000	1.0000
L76	25	PL1.25x6.875 Reinforcement	0.00 - 1.75	1.0000	1.0000
L76	27	PL1.25x6.875 Reinforcement	0.00 - 1.75	1.0000	1.0000
L76	28	PL1.25x6.875 Reinforcement	0.00 - 1.75	1.0000	1.0000
L76	58	Transition Stiffener 1x7	0.00 - 1.75	1.0000	1.0000
L76	59	Transition Stiffener 1x7	0.00 - 1.75	1.0000	1.0000
L76	60	Transition Stiffener 1x7	0.00 - 1.75	1.0000	1.0000

**Effective Width of Flat Linear Attachments / Feed Lines**

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L5	88	CCI-AFP-045100	124.25 - 125.42	Auto	0.1983
L5	89	CCI-AFP-045100	124.25 - 125.42	Auto	0.1983
L5	90	CCI-AFP-045100	124.25 - 125.42	Auto	0.1983
L6	88	CCI-AFP-045100	123.42 - 124.25	Auto	0.1865
L6	89	CCI-AFP-045100	123.42 - 124.25	Auto	0.1865
L6	90	CCI-AFP-045100	123.42 - 124.25	Auto	0.1865
L7	88	CCI-AFP-045100	123.17 - 123.42	Auto	0.3886
L7	89	CCI-AFP-045100	123.17 - 123.42	Auto	0.3886
L7	90	CCI-AFP-045100	123.17 - 123.42	Auto	0.3886
L8	88	CCI-AFP-045100	118.17 - 123.17	Auto	0.3429
L8	89	CCI-AFP-045100	118.17 - 123.17	Auto	0.3429
L8	90	CCI-AFP-045100	118.17 - 123.17	Auto	0.3429
L9	88	CCI-AFP-045100	113.17 - 118.17	Auto	0.2693
L9	89	CCI-AFP-045100	113.17 - 118.17	Auto	0.2693
L9	90	CCI-AFP-045100	113.17 - 118.17	Auto	0.2693
L10	88	CCI-AFP-045100	109.50 - 113.17	Auto	0.2110
L10	89	CCI-AFP-045100	109.50 - 113.17	Auto	0.2110
L10	90	CCI-AFP-045100	109.50 - 113.17	Auto	0.2110
L10	92	CCI-AFP-040075	109.50 - 111.00	Auto	0.0981
L10	94	CCI-AFP-040075	109.50 - 111.00	Auto	0.0981
L11	88	CCI-AFP-045100	109.25 - 109.50	Auto	0.2550
L11	89	CCI-AFP-045100	109.25 - 109.50	Auto	0.2550
L11	90	CCI-AFP-045100	109.25 - 109.50	Auto	0.2550
L11	92	CCI-AFP-040075	109.25 - 109.50	Auto	0.1619
L11	94	CCI-AFP-040075	109.25 - 109.50	Auto	0.1619
L12	54	PL1x4 Reinforcement	104.75 - 106.50	Auto	0.0956
L12	55	PL1x4 Reinforcement	104.75 - 106.50	Auto	0.0956
L12	56	PL1x4 Reinforcement	104.75 - 106.50	Auto	0.0956
L12	86	CCI-AFP-05012520	104.75 - 105.33	Auto	0.2703
L12	88	CCI-AFP-045100	104.75 - 109.25	Auto	0.2122
L12	89	CCI-AFP-045100	104.75 - 109.25	Auto	0.2122
L12	90	CCI-AFP-045100	104.75 - 109.25	Auto	0.2122
L12	92	CCI-AFP-040075	104.75 -	Auto	0.1138



Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L12	94	CCI-AFP-040075	109.25 104.75 - 109.25	Auto	0.1138
L13	54	PL1x4 Reinforcement	104.50 - 104.75	Auto	0.2248
L13	55	PL1x4 Reinforcement	104.50 - 104.75	Auto	0.2248
L13	56	PL1x4 Reinforcement	104.50 - 104.75	Auto	0.2248
L13	86	CCI-AFP-05012520	104.50 - 104.75	Auto	0.3798
L13	88	CCI-AFP-045100	104.50 - 104.75	Auto	0.3109
L13	89	CCI-AFP-045100	104.50 - 104.75	Auto	0.3109
L13	90	CCI-AFP-045100	104.50 - 104.75	Auto	0.3109
L13	92	CCI-AFP-040075	104.50 - 104.75	Auto	0.2248
L13	94	CCI-AFP-040075	104.50 - 104.75	Auto	0.2248
L14	54	PL1x4 Reinforcement	102.42 - 104.50	Auto	0.2010
L14	55	PL1x4 Reinforcement	102.42 - 104.50	Auto	0.2010
L14	56	PL1x4 Reinforcement	102.42 - 104.50	Auto	0.2010
L14	86	CCI-AFP-05012520	102.42 - 104.50	Auto	0.3608
L14	88	CCI-AFP-045100	102.42 - 104.50	Auto	0.2897
L14	89	CCI-AFP-045100	102.42 - 104.50	Auto	0.2897
L14	90	CCI-AFP-045100	102.42 - 104.50	Auto	0.2897
L14	92	CCI-AFP-040075	102.42 - 104.50	Auto	0.2010
L14	94	CCI-AFP-040075	102.42 - 104.50	Auto	0.2010
L15	54	PL1x4 Reinforcement	102.17 - 102.42	Auto	0.0515
L15	55	PL1x4 Reinforcement	102.17 - 102.42	Auto	0.0515
L15	56	PL1x4 Reinforcement	102.17 - 102.42	Auto	0.0515
L15	86	CCI-AFP-05012520	102.17 - 102.42	Auto	0.2412
L15	88	CCI-AFP-045100	102.17 - 102.42	Auto	0.1569
L15	89	CCI-AFP-045100	102.17 - 102.42	Auto	0.1569
L15	90	CCI-AFP-045100	102.17 - 102.42	Auto	0.1569
L15	92	CCI-AFP-040075	102.17 - 102.42	Auto	0.0515
L15	94	CCI-AFP-040075	102.17 - 102.42	Auto	0.0515
L16	38	PL 1.25x3.625 Reinforcement	98.75 - 100.00	Auto	0.0000
L16	39	PL 1.25x3.625 Reinforcement	98.75 - 100.00	Auto	0.0000
L16	40	PL 1.25x3.625 Reinforcement	98.75 - 100.00	Auto	0.0000
L16	54	PL1x4 Reinforcement	98.75 - 102.17	Auto	0.0191
L16	55	PL1x4 Reinforcement	98.75 - 102.17	Auto	0.0191
L16	56	PL1x4 Reinforcement	98.75 -	Auto	0.0191

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L16	81	CCI-SFP-040075	102.17 98.75 - 100.33	Auto	0.0071
L16	82	CCI-SFP-040075	98.75 - 100.33	Auto	0.0071
L16	86	CCI-AFP-05012520	98.75 - 102.17	Auto	0.2152
L16	88	CCI-AFP-045100	100.42 - 102.17	Auto	0.1377
L16	89	CCI-AFP-045100	100.42 - 102.17	Auto	0.1377
L16	90	CCI-AFP-045100	100.42 - 102.17	Auto	0.1377
L16	92	CCI-AFP-040075	98.75 - 102.17	Auto	0.0191
L16	94	CCI-AFP-040075	101.00 - 102.17	Auto	0.0338
L17	38	PL1.25x3.625 Reinforcement	98.50 - 98.75	Auto	0.1033
L17	39	PL1.25x3.625 Reinforcement	98.50 - 98.75	Auto	0.1033
L17	40	PL1.25x3.625 Reinforcement	98.50 - 98.75	Auto	0.1033
L17	54	PL1x4 Reinforcement	98.50 - 98.75	Auto	0.1874
L17	55	PL1x4 Reinforcement	98.50 - 98.75	Auto	0.1874
L17	56	PL1x4 Reinforcement	98.50 - 98.75	Auto	0.1874
L17	81	CCI-SFP-040075	98.50 - 98.75	Auto	0.1874
L17	82	CCI-SFP-040075	98.50 - 98.75	Auto	0.1874
L17	86	CCI-AFP-05012520	98.50 - 98.75	Auto	0.3499
L17	92	CCI-AFP-040075	98.50 - 98.75	Auto	0.1874
L18	38	PL1.25x3.625 Reinforcement	97.50 - 98.50	Auto	0.0942
L18	39	PL1.25x3.625 Reinforcement	97.50 - 98.50	Auto	0.0942
L18	40	PL1.25x3.625 Reinforcement	97.50 - 98.50	Auto	0.0942
L18	54	PL1x4 Reinforcement	97.50 - 98.50	Auto	0.1791
L18	55	PL1x4 Reinforcement	97.50 - 98.50	Auto	0.1791
L18	56	PL1x4 Reinforcement	97.50 - 98.50	Auto	0.1791
L18	81	CCI-SFP-040075	97.50 - 98.50	Auto	0.1791
L18	82	CCI-SFP-040075	97.50 - 98.50	Auto	0.1791
L18	86	CCI-AFP-05012520	97.50 - 98.50	Auto	0.3433
L18	92	CCI-AFP-040075	97.50 - 98.50	Auto	0.1791
L19	38	PL1.25x3.625 Reinforcement	97.25 - 97.50	Auto	0.0204
L19	39	PL1.25x3.625 Reinforcement	97.25 - 97.50	Auto	0.0204
L19	40	PL1.25x3.625 Reinforcement	97.25 - 97.50	Auto	0.0204
L19	54	PL1x4 Reinforcement	97.25 - 97.50	Auto	0.1122
L19	55	PL1x4 Reinforcement	97.25 - 97.50	Auto	0.1122
L19	56	PL1x4 Reinforcement	97.25 -	Auto	0.1122

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L19	81	CCI-SFP-040075	97.50 97.25 - 97.50	Auto	0.1122
L19	82	CCI-SFP-040075	97.25 - 97.50	Auto	0.1122
L19	86	CCI-AFP-05012520	97.25 - 97.50	Auto	0.2898
L19	92	CCI-AFP-040075	97.25 - 97.50	Auto	0.1122
L20	38	PL1.25x3.625 Reinforcement	92.00 - 97.25	Auto	0.0006
L20	39	PL1.25x3.625 Reinforcement	92.00 - 97.25	Auto	0.0006
L20	40	PL1.25x3.625 Reinforcement	92.00 - 97.25	Auto	0.0006
L20	54	PL1x4 Reinforcement	92.00 - 97.25	Auto	0.0675
L20	55	PL1x4 Reinforcement	92.00 - 97.25	Auto	0.0675
L20	56	PL1x4 Reinforcement	92.00 - 97.25	Auto	0.0675
L20	81	CCI-SFP-040075	92.00 - 97.25	Auto	0.0675
L20	82	CCI-SFP-040075	92.00 - 97.25	Auto	0.0675
L20	86	CCI-AFP-05012520	92.00 - 97.25	Auto	0.2540
L20	92	CCI-AFP-040075	96.00 - 97.25	Auto	0.0939
L21	38	PL1.25x3.625 Reinforcement	90.55 - 92.00	Auto	0.0009
L21	39	PL1.25x3.625 Reinforcement	90.55 - 92.00	Auto	0.0009
L21	40	PL1.25x3.625 Reinforcement	90.55 - 92.00	Auto	0.0009
L21	54	PL1x4 Reinforcement	90.55 - 92.00	Auto	0.0897
L21	55	PL1x4 Reinforcement	90.55 - 92.00	Auto	0.0897
L21	56	PL1x4 Reinforcement	90.55 - 92.00	Auto	0.0897
L21	81	CCI-SFP-040075	90.55 - 92.00	Auto	0.0897
L21	82	CCI-SFP-040075	90.55 - 92.00	Auto	0.0897
L21	86	CCI-AFP-05012520	90.55 - 92.00	Auto	0.2718
L22	38	PL1.25x3.625 Reinforcement	89.25 - 90.55	Auto	0.0000
L22	39	PL1.25x3.625 Reinforcement	89.25 - 90.55	Auto	0.0000
L22	40	PL1.25x3.625 Reinforcement	89.25 - 90.55	Auto	0.0000
L22	54	PL1x4 Reinforcement	89.25 - 90.55	Auto	0.0546
L22	55	PL1x4 Reinforcement	89.25 - 90.55	Auto	0.0546
L22	56	PL1x4 Reinforcement	89.25 - 90.55	Auto	0.0546
L22	81	CCI-SFP-040075	89.25 - 90.55	Auto	0.0546
L22	82	CCI-SFP-040075	89.25 - 90.55	Auto	0.0546
L22	84	CCI-SFP-040075	89.25 - 90.33	Auto	0.0532
L22	86	CCI-AFP-05012520	89.25 - 90.55	Auto	0.2437
L23	34	PL1.25x5.5 Reinforcement	89.00 -	Auto	0.4146

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L23	35	PL1.25x5.5 Reinforcement	89.25 89.00 - 89.25	Auto	0.4146
L23	36	PL1.25x5.5 Reinforcement	89.00 - 89.25	Auto	0.4146
L23	54	PL1x4 Reinforcement	89.00 - 89.25	Auto	0.1950
L23	55	PL1x4 Reinforcement	89.00 - 89.25	Auto	0.1950
L23	56	PL1x4 Reinforcement	89.00 - 89.25	Auto	0.1950
L23	81	CCI-SFP-040075	89.00 - 89.25	Auto	0.1950
L23	82	CCI-SFP-040075	89.00 - 89.25	Auto	0.1950
L23	84	CCI-SFP-040075	89.00 - 89.25	Auto	0.1950
L23	86	CCI-AFP-05012520	89.00 - 89.25	Auto	0.3560
L24	34	PL1.25x5.5 Reinforcement	88.25 - 89.00	Auto	0.3975
L24	35	PL1.25x5.5 Reinforcement	88.25 - 89.00	Auto	0.3975
L24	36	PL1.25x5.5 Reinforcement	88.25 - 89.00	Auto	0.3975
L24	54	PL1x4 Reinforcement	88.25 - 89.00	Auto	0.1716
L24	55	PL1x4 Reinforcement	88.25 - 89.00	Auto	0.1716
L24	56	PL1x4 Reinforcement	88.25 - 89.00	Auto	0.1716
L24	81	CCI-SFP-040075	88.25 - 89.00	Auto	0.1716
L24	82	CCI-SFP-040075	88.25 - 89.00	Auto	0.1716
L24	84	CCI-SFP-040075	88.25 - 89.00	Auto	0.1716
L24	86	CCI-AFP-05012520	88.25 - 89.00	Auto	0.3373
L25	34	PL1.25x5.5 Reinforcement	88.00 - 88.25	Auto	0.2891
L25	35	PL1.25x5.5 Reinforcement	88.00 - 88.25	Auto	0.2891
L25	36	PL1.25x5.5 Reinforcement	88.00 - 88.25	Auto	0.2891
L25	54	PL1x4 Reinforcement	88.00 - 88.25	Auto	0.0226
L25	55	PL1x4 Reinforcement	88.00 - 88.25	Auto	0.0226
L25	56	PL1x4 Reinforcement	88.00 - 88.25	Auto	0.0226
L25	81	CCI-SFP-040075	88.00 - 88.25	Auto	0.0226
L25	82	CCI-SFP-040075	88.00 - 88.25	Auto	0.0226
L25	84	CCI-SFP-040075	88.00 - 88.25	Auto	0.0226
L25	86	CCI-AFP-05012520	88.00 - 88.25	Auto	0.2181
L26	34	PL1.25x5.5 Reinforcement	87.83 - 88.00	Auto	0.2871
L26	35	PL1.25x5.5 Reinforcement	87.83 - 88.00	Auto	0.2871
L26	36	PL1.25x5.5 Reinforcement	87.83 - 88.00	Auto	0.2871
L26	54	PL1x4 Reinforcement	87.83 - 88.00	Auto	0.0198
L26	55	PL1x4 Reinforcement	87.83 -	Auto	0.0198

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L26	56	PL1x4 Reinforcement	88.00 87.83 - 88.00	Auto	0.0198
L26	81	CCI-SFP-040075	87.83 - 88.00	Auto	0.0198
L26	82	CCI-SFP-040075	87.83 - 88.00	Auto	0.0198
L26	84	CCI-SFP-040075	87.83 - 88.00	Auto	0.0198
L26	86	CCI-AFP-05012520	87.83 - 88.00	Auto	0.2158
L27	34	PL1.25x5.5 Reinforcement	87.58 - 87.83	Auto	0.2425
L27	35	PL1.25x5.5 Reinforcement	87.58 - 87.83	Auto	0.2425
L27	36	PL1.25x5.5 Reinforcement	87.58 - 87.83	Auto	0.2425
L27	54	PL1x4 Reinforcement	87.58 - 87.83	Auto	0.0000
L27	55	PL1x4 Reinforcement	87.58 - 87.83	Auto	0.0000
L27	56	PL1x4 Reinforcement	87.58 - 87.83	Auto	0.0000
L27	81	CCI-SFP-040075	87.58 - 87.83	Auto	0.0000
L27	82	CCI-SFP-040075	87.58 - 87.83	Auto	0.0000
L27	84	CCI-SFP-040075	87.58 - 87.83	Auto	0.0000
L27	86	CCI-AFP-05012520	87.58 - 87.83	Auto	0.1667
L28	34	PL1.25x5.5 Reinforcement	82.58 - 87.58	Auto	0.2048
L28	35	PL1.25x5.5 Reinforcement	82.58 - 87.58	Auto	0.2048
L28	36	PL1.25x5.5 Reinforcement	82.58 - 87.58	Auto	0.2048
L28	54	PL1x4 Reinforcement	86.50 - 87.58	Auto	0.0000
L28	55	PL1x4 Reinforcement	86.50 - 87.58	Auto	0.0000
L28	56	PL1x4 Reinforcement	86.50 - 87.58	Auto	0.0000
L28	81	CCI-SFP-040075	82.58 - 87.58	Auto	0.0000
L28	82	CCI-SFP-040075	82.58 - 87.58	Auto	0.0000
L28	84	CCI-SFP-040075	82.58 - 87.58	Auto	0.0000
L28	86	CCI-AFP-05012520	85.33 - 87.58	Auto	0.1400
L29	34	PL1.25x5.5 Reinforcement	77.58 - 82.58	Auto	0.1441
L29	35	PL1.25x5.5 Reinforcement	77.58 - 82.58	Auto	0.1441
L29	36	PL1.25x5.5 Reinforcement	77.58 - 82.58	Auto	0.1441
L29	50	PL1x4 Reinforcement	77.58 - 78.75	Auto	0.0000
L29	51	PL1x4 Reinforcement	77.58 - 78.75	Auto	0.0000
L29	52	PL1x4 Reinforcement	77.58 - 78.75	Auto	0.0000
L29	81	CCI-SFP-040075	77.58 - 82.58	Auto	0.0000
L29	82	CCI-SFP-040075	77.58 - 82.58	Auto	0.0000
L29	84	CCI-SFP-040075	77.58 -	Auto	0.0000

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L30	34	PL1.25x5.5 Reinforcement	82.58 77.00 - 77.58	Auto	0.1170
L30	35	PL1.25x5.5 Reinforcement	77.00 - 77.58	Auto	0.1170
L30	36	PL1.25x5.5 Reinforcement	77.00 - 77.58	Auto	0.1170
L30	50	PL1x4 Reinforcement	77.00 - 77.58	Auto	0.0000
L30	51	PL1x4 Reinforcement	77.00 - 77.58	Auto	0.0000
L30	52	PL1x4 Reinforcement	77.00 - 77.58	Auto	0.0000
L30	81	CCI-SFP-040075	77.00 - 77.58	Auto	0.0000
L30	82	CCI-SFP-040075	77.00 - 77.58	Auto	0.0000
L30	84	CCI-SFP-040075	77.00 - 77.58	Auto	0.0000
L31	34	PL1.25x5.5 Reinforcement	76.75 - 77.00	Auto	0.2105
L31	35	PL1.25x5.5 Reinforcement	76.75 - 77.00	Auto	0.2105
L31	36	PL1.25x5.5 Reinforcement	76.75 - 77.00	Auto	0.2105
L31	50	PL1x4 Reinforcement	76.75 - 77.00	Auto	0.0000
L31	51	PL1x4 Reinforcement	76.75 - 77.00	Auto	0.0000
L31	52	PL1x4 Reinforcement	76.75 - 77.00	Auto	0.0000
L31	81	CCI-SFP-040075	76.75 - 77.00	Auto	0.0000
L31	82	CCI-SFP-040075	76.75 - 77.00	Auto	0.0000
L31	84	CCI-SFP-040075	76.75 - 77.00	Auto	0.0000
L32	34	PL1.25x5.5 Reinforcement	76.33 - 76.75	Auto	0.2072
L32	35	PL1.25x5.5 Reinforcement	76.33 - 76.75	Auto	0.2072
L32	36	PL1.25x5.5 Reinforcement	76.33 - 76.75	Auto	0.2072
L32	50	PL1x4 Reinforcement	76.33 - 76.75	Auto	0.0000
L32	51	PL1x4 Reinforcement	76.33 - 76.75	Auto	0.0000
L32	52	PL1x4 Reinforcement	76.33 - 76.75	Auto	0.0000
L32	81	CCI-SFP-040075	76.33 - 76.75	Auto	0.0000
L32	82	CCI-SFP-040075	76.33 - 76.75	Auto	0.0000
L32	84	CCI-SFP-040075	76.33 - 76.75	Auto	0.0000
L33	34	PL1.25x5.5 Reinforcement	76.08 - 76.33	Auto	0.2040
L33	35	PL1.25x5.5 Reinforcement	76.08 - 76.33	Auto	0.2040
L33	36	PL1.25x5.5 Reinforcement	76.08 - 76.33	Auto	0.2040
L33	50	PL1x4 Reinforcement	76.08 - 76.33	Auto	0.0000
L33	51	PL1x4 Reinforcement	76.08 - 76.33	Auto	0.0000
L33	52	PL1x4 Reinforcement	76.08 - 76.33	Auto	0.0000
L33	81	CCI-SFP-040075	76.08 -	Auto	0.0000

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L33	82	CCI-SFP-040075	76.33 76.08 - 76.33	Auto	0.0000
L33	84	CCI-SFP-040075	76.08 - 76.33	Auto	0.0000
L34	34	PL1.25x5.5 Reinforcement	74.25 - 76.08	Auto	0.1817
L34	35	PL1.25x5.5 Reinforcement	74.25 - 76.08	Auto	0.1817
L34	36	PL1.25x5.5 Reinforcement	74.25 - 76.08	Auto	0.1817
L34	50	PL1x4 Reinforcement	74.25 - 76.08	Auto	0.0000
L34	51	PL1x4 Reinforcement	74.25 - 76.08	Auto	0.0000
L34	52	PL1x4 Reinforcement	74.25 - 76.08	Auto	0.0000
L34	76	CCI-SFP-045100	74.25 - 75.25	Auto	0.0000
L34	77	CCI-SFP-045100	74.25 - 75.25	Auto	0.0000
L34	79	CCI-SFP-040075	74.25 - 75.25	Auto	0.0000
L34	81	CCI-SFP-040075	75.33 - 76.08	Auto	0.0000
L34	82	CCI-SFP-040075	75.33 - 76.08	Auto	0.0000
L34	84	CCI-SFP-040075	75.33 - 76.08	Auto	0.0000
L35	34	PL1.25x5.5 Reinforcement	74.00 - 74.25	Auto	0.2142
L35	35	PL1.25x5.5 Reinforcement	74.00 - 74.25	Auto	0.2142
L35	36	PL1.25x5.5 Reinforcement	74.00 - 74.25	Auto	0.2142
L35	50	PL1x4 Reinforcement	74.00 - 74.25	Auto	0.0000
L35	51	PL1x4 Reinforcement	74.00 - 74.25	Auto	0.0000
L35	52	PL1x4 Reinforcement	74.00 - 74.25	Auto	0.0000
L35	76	CCI-SFP-045100	74.00 - 74.25	Auto	0.0396
L35	77	CCI-SFP-045100	74.00 - 74.25	Auto	0.0396
L35	79	CCI-SFP-040075	74.00 - 74.25	Auto	0.0000
L36	34	PL1.25x5.5 Reinforcement	73.75 - 74.00	Auto	0.2118
L36	35	PL1.25x5.5 Reinforcement	73.75 - 74.00	Auto	0.2118
L36	36	PL1.25x5.5 Reinforcement	73.75 - 74.00	Auto	0.2118
L36	50	PL1x4 Reinforcement	73.75 - 74.00	Auto	0.0000
L36	51	PL1x4 Reinforcement	73.75 - 74.00	Auto	0.0000
L36	52	PL1x4 Reinforcement	73.75 - 74.00	Auto	0.0000
L36	76	CCI-SFP-045100	73.75 - 74.00	Auto	0.0367
L36	77	CCI-SFP-045100	73.75 - 74.00	Auto	0.0367
L36	79	CCI-SFP-040075	73.75 - 74.00	Auto	0.0000
L37	34	PL1.25x5.5 Reinforcement	73.50 - 73.75	Auto	0.2216
L37	35	PL1.25x5.5 Reinforcement	73.50 -	Auto	0.2216

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L37	36	PL1.25x5.5 Reinforcement	73.75 73.50 - 73.75	Auto	0.2216
L37	50	PL1x4 Reinforcement	73.50 - 73.75	Auto	0.0000
L37	51	PL1x4 Reinforcement	73.50 - 73.75	Auto	0.0000
L37	52	PL1x4 Reinforcement	73.50 - 73.75	Auto	0.0000
L37	76	CCI-SFP-045100	73.50 - 73.75	Auto	0.0486
L37	77	CCI-SFP-045100	73.50 - 73.75	Auto	0.0486
L37	79	CCI-SFP-040075	73.50 - 73.75	Auto	0.0000
L38	34	PL1.25x5.5 Reinforcement	68.50 - 73.50	Auto	0.1778
L38	35	PL1.25x5.5 Reinforcement	68.50 - 73.50	Auto	0.1778
L38	36	PL1.25x5.5 Reinforcement	68.50 - 73.50	Auto	0.1778
L38	50	PL1x4 Reinforcement	68.50 - 73.50	Auto	0.0000
L38	51	PL1x4 Reinforcement	68.50 - 73.50	Auto	0.0000
L38	52	PL1x4 Reinforcement	68.50 - 73.50	Auto	0.0000
L38	76	CCI-SFP-045100	68.50 - 73.50	Auto	0.0052
L38	77	CCI-SFP-045100	68.50 - 73.50	Auto	0.0052
L38	79	CCI-SFP-040075	68.50 - 73.50	Auto	0.0000
L39	34	PL1.25x5.5 Reinforcement	63.50 - 68.50	Auto	0.1171
L39	35	PL1.25x5.5 Reinforcement	63.50 - 68.50	Auto	0.1171
L39	36	PL1.25x5.5 Reinforcement	63.50 - 68.50	Auto	0.1171
L39	50	PL1x4 Reinforcement	63.50 - 68.50	Auto	0.0000
L39	51	PL1x4 Reinforcement	63.50 - 68.50	Auto	0.0000
L39	52	PL1x4 Reinforcement	63.50 - 68.50	Auto	0.0000
L39	76	CCI-SFP-045100	63.50 - 68.50	Auto	0.0000
L39	77	CCI-SFP-045100	63.50 - 68.50	Auto	0.0000
L39	79	CCI-SFP-040075	63.50 - 68.50	Auto	0.0000
L40	34	PL1.25x5.5 Reinforcement	60.50 - 63.50	Auto	0.0661
L40	35	PL1.25x5.5 Reinforcement	60.50 - 63.50	Auto	0.0661
L40	36	PL1.25x5.5 Reinforcement	60.50 - 63.50	Auto	0.0661
L40	46	PL1x4 Reinforcement	60.50 - 62.25	Auto	0.0000
L40	47	PL1x4 Reinforcement	60.50 - 62.25	Auto	0.0000
L40	48	PL1x4 Reinforcement	60.50 - 62.25	Auto	0.0000
L40	50	PL1x4 Reinforcement	60.50 - 63.50	Auto	0.0000
L40	51	PL1x4 Reinforcement	60.50 - 63.50	Auto	0.0000
L40	52	PL1x4 Reinforcement	60.50 -	Auto	0.0000



Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L40	76	CCI-SFP-045100	63.50 60.50 - 63.50	Auto	0.0000
L40	77	CCI-SFP-045100	60.50 - 63.50	Auto	0.0000
L40	79	CCI-SFP-040075	60.50 - 63.50	Auto	0.0000
L41	34	PL1.25x5.5 Reinforcement	60.25 - 60.50	Auto	0.0504
L41	35	PL1.25x5.5 Reinforcement	60.25 - 60.50	Auto	0.0504
L41	36	PL1.25x5.5 Reinforcement	60.25 - 60.50	Auto	0.0504
L41	46	PL1x4 Reinforcement	60.25 - 60.50	Auto	0.0000
L41	47	PL1x4 Reinforcement	60.25 - 60.50	Auto	0.0000
L41	48	PL1x4 Reinforcement	60.25 - 60.50	Auto	0.0000
L41	50	PL1x4 Reinforcement	60.25 - 60.50	Auto	0.0000
L41	51	PL1x4 Reinforcement	60.25 - 60.50	Auto	0.0000
L41	52	PL1x4 Reinforcement	60.25 - 60.50	Auto	0.0000
L41	76	CCI-SFP-045100	60.25 - 60.50	Auto	0.0000
L41	77	CCI-SFP-045100	60.25 - 60.50	Auto	0.0000
L41	79	CCI-SFP-040075	60.25 - 60.50	Auto	0.0000
L42	34	PL1.25x5.5 Reinforcement	59.50 - 60.25	Auto	0.0455
L42	35	PL1.25x5.5 Reinforcement	59.50 - 60.25	Auto	0.0455
L42	36	PL1.25x5.5 Reinforcement	59.50 - 60.25	Auto	0.0455
L42	46	PL1x4 Reinforcement	59.50 - 60.25	Auto	0.0000
L42	47	PL1x4 Reinforcement	59.50 - 60.25	Auto	0.0000
L42	48	PL1x4 Reinforcement	59.50 - 60.25	Auto	0.0000
L42	50	PL1x4 Reinforcement	59.50 - 60.25	Auto	0.0000
L42	51	PL1x4 Reinforcement	59.50 - 60.25	Auto	0.0000
L42	52	PL1x4 Reinforcement	59.50 - 60.25	Auto	0.0000
L42	76	CCI-SFP-045100	59.50 - 60.25	Auto	0.0000
L42	77	CCI-SFP-045100	59.50 - 60.25	Auto	0.0000
L42	79	CCI-SFP-040075	59.50 - 60.25	Auto	0.0000
L43	30	PL1.25x6.625 Reinforcement	59.25 - 59.50	Auto	0.2289
L43	31	PL1.25x6.625 Reinforcement	59.25 - 59.50	Auto	0.2289
L43	32	PL1.25x6.625 Reinforcement	59.25 - 59.50	Auto	0.2289
L43	46	PL1x4 Reinforcement	59.25 - 59.50	Auto	0.0000
L43	47	PL1x4 Reinforcement	59.25 - 59.50	Auto	0.0000
L43	48	PL1x4 Reinforcement	59.25 - 59.50	Auto	0.0000
L43	50	PL1x4 Reinforcement	59.25 - 59.50	Auto	0.0000

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L43	51	PL1x4 Reinforcement	59.50 59.25 - 59.50	Auto	0.0000
L43	52	PL1x4 Reinforcement	59.25 - 59.50	Auto	0.0000
L43	76	CCI-SFP-045100	59.25 - 59.50	Auto	0.0000
L43	77	CCI-SFP-045100	59.25 - 59.50	Auto	0.0000
L43	79	CCI-SFP-040075	59.25 - 59.50	Auto	0.0000
L44	30	PL1.25x6.625 Reinforcement	54.25 - 59.25	Auto	0.1926
L44	31	PL1.25x6.625 Reinforcement	54.25 - 59.25	Auto	0.1926
L44	32	PL1.25x6.625 Reinforcement	54.25 - 59.25	Auto	0.1926
L44	46	PL1x4 Reinforcement	54.25 - 59.25	Auto	0.0000
L44	47	PL1x4 Reinforcement	54.25 - 59.25	Auto	0.0000
L44	48	PL1x4 Reinforcement	54.25 - 59.25	Auto	0.0000
L44	50	PL1x4 Reinforcement	58.75 - 59.25	Auto	0.0000
L44	51	PL1x4 Reinforcement	58.75 - 59.25	Auto	0.0000
L44	52	PL1x4 Reinforcement	58.75 - 59.25	Auto	0.0000
L44	76	CCI-SFP-045100	54.25 - 59.25	Auto	0.0000
L44	77	CCI-SFP-045100	54.25 - 59.25	Auto	0.0000
L44	79	CCI-SFP-040075	54.25 - 59.25	Auto	0.0000
L45	30	PL1.25x6.625 Reinforcement	45.80 - 54.25	Auto	0.1333
L45	31	PL1.25x6.625 Reinforcement	45.80 - 54.25	Auto	0.1333
L45	32	PL1.25x6.625 Reinforcement	45.80 - 54.25	Auto	0.1333
L45	46	PL1x4 Reinforcement	45.80 - 54.25	Auto	0.0000
L45	47	PL1x4 Reinforcement	45.80 - 54.25	Auto	0.0000
L45	48	PL1x4 Reinforcement	45.80 - 54.25	Auto	0.0000
L45	76	CCI-SFP-045100	45.80 - 54.25	Auto	0.0000
L45	77	CCI-SFP-045100	45.80 - 54.25	Auto	0.0000
L45	79	CCI-SFP-040075	45.80 - 54.25	Auto	0.0000
L46	30	PL1.25x6.625 Reinforcement	44.80 - 45.80	Auto	0.1157
L46	31	PL1.25x6.625 Reinforcement	44.80 - 45.80	Auto	0.1157
L46	32	PL1.25x6.625 Reinforcement	44.80 - 45.80	Auto	0.1157
L46	46	PL1x4 Reinforcement	44.80 - 45.80	Auto	0.0000
L46	47	PL1x4 Reinforcement	44.80 - 45.80	Auto	0.0000
L46	48	PL1x4 Reinforcement	44.80 - 45.80	Auto	0.0000
L46	71	CCI-SFP-045100	44.80 - 45.08	Auto	0.0000
L46	73	CCI-SFP-060100	44.80 -	Auto	0.0208

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L46	74	CCI-SFP-060100	45.17 44.80 - 45.17	Auto	0.0208
L46	76	CCI-SFP-045100	45.25 - 45.80	Auto	0.0000
L46	77	CCI-SFP-045100	45.25 - 45.80	Auto	0.0000
L46	79	CCI-SFP-040075	45.25 - 45.80	Auto	0.0000
L47	30	PL1.25x6.625 Reinforcement	43.58 - 44.80	Auto	0.1069
L47	31	PL1.25x6.625 Reinforcement	43.58 - 44.80	Auto	0.1069
L47	32	PL1.25x6.625 Reinforcement	43.58 - 44.80	Auto	0.1069
L47	46	PL1x4 Reinforcement	43.58 - 44.80	Auto	0.0000
L47	47	PL1x4 Reinforcement	43.58 - 44.80	Auto	0.0000
L47	48	PL1x4 Reinforcement	43.58 - 44.80	Auto	0.0000
L47	71	CCI-SFP-045100	43.58 - 44.80	Auto	0.0000
L47	73	CCI-SFP-060100	43.58 - 44.80	Auto	0.0138
L47	74	CCI-SFP-060100	43.58 - 44.80	Auto	0.0138
L48	30	PL1.25x6.625 Reinforcement	43.33 - 43.58	Auto	0.1060
L48	31	PL1.25x6.625 Reinforcement	43.33 - 43.58	Auto	0.1060
L48	32	PL1.25x6.625 Reinforcement	43.33 - 43.58	Auto	0.1060
L48	46	PL1x4 Reinforcement	43.33 - 43.58	Auto	0.0000
L48	47	PL1x4 Reinforcement	43.33 - 43.58	Auto	0.0000
L48	48	PL1x4 Reinforcement	43.33 - 43.58	Auto	0.0000
L48	71	CCI-SFP-045100	43.33 - 43.58	Auto	0.0000
L48	73	CCI-SFP-060100	43.33 - 43.58	Auto	0.0129
L48	74	CCI-SFP-060100	43.33 - 43.58	Auto	0.0129
L49	30	PL1.25x6.625 Reinforcement	43.17 - 43.33	Auto	0.1044
L49	31	PL1.25x6.625 Reinforcement	43.17 - 43.33	Auto	0.1044
L49	32	PL1.25x6.625 Reinforcement	43.17 - 43.33	Auto	0.1044
L49	46	PL1x4 Reinforcement	43.17 - 43.33	Auto	0.0000
L49	47	PL1x4 Reinforcement	43.17 - 43.33	Auto	0.0000
L49	48	PL1x4 Reinforcement	43.17 - 43.33	Auto	0.0000
L49	71	CCI-SFP-045100	43.17 - 43.33	Auto	0.0000
L49	73	CCI-SFP-060100	43.17 - 43.33	Auto	0.0111
L49	74	CCI-SFP-060100	43.17 - 43.33	Auto	0.0111
L50	30	PL1.25x6.625 Reinforcement	42.92 - 43.17	Auto	0.1381
L50	31	PL1.25x6.625 Reinforcement	42.92 - 43.17	Auto	0.1381
L50	32	PL1.25x6.625 Reinforcement	42.92 -	Auto	0.1381

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L50	46	Reinforcement PL1x4 Reinforcement	43.17 42.92 - 43.17	Auto	0.0000
L50	47	PL1x4 Reinforcement	42.92 - 43.17	Auto	0.0000
L50	48	PL1x4 Reinforcement	42.92 - 43.17	Auto	0.0000
L50	71	CCI-SFP-045100	42.92 - 43.17	Auto	0.0000
L50	73	CCI-SFP-060100	42.92 - 43.17	Auto	0.0483
L50	74	CCI-SFP-060100	42.92 - 43.17	Auto	0.0483
L51	30	PL1.25x6.625 Reinforcement	39.00 - 42.92	Auto	0.1113
L51	31	PL1.25x6.625 Reinforcement	39.00 - 42.92	Auto	0.1113
L51	32	PL1.25x6.625 Reinforcement	39.00 - 42.92	Auto	0.1113
L51	44	PL1x4 Reinforcement	39.00 - 40.75	Auto	0.0000
L51	46	PL1x4 Reinforcement	39.00 - 42.92	Auto	0.0000
L51	47	PL1x4 Reinforcement	39.00 - 42.92	Auto	0.0000
L51	48	PL1x4 Reinforcement	39.00 - 42.92	Auto	0.0000
L51	71	CCI-SFP-045100	39.00 - 42.92	Auto	0.0000
L51	73	CCI-SFP-060100	39.00 - 42.92	Auto	0.0187
L51	74	CCI-SFP-060100	39.00 - 42.92	Auto	0.0187
L52	30	PL1.25x6.625 Reinforcement	38.75 - 39.00	Auto	0.1098
L52	31	PL1.25x6.625 Reinforcement	38.75 - 39.00	Auto	0.1098
L52	32	PL1.25x6.625 Reinforcement	38.75 - 39.00	Auto	0.1098
L52	44	PL1x4 Reinforcement	38.75 - 39.00	Auto	0.0000
L52	46	PL1x4 Reinforcement	38.75 - 39.00	Auto	0.0000
L52	47	PL1x4 Reinforcement	38.75 - 39.00	Auto	0.0000
L52	48	PL1x4 Reinforcement	38.75 - 39.00	Auto	0.0000
L52	71	CCI-SFP-045100	38.75 - 39.00	Auto	0.0000
L52	73	CCI-SFP-060100	38.75 - 39.00	Auto	0.0171
L52	74	CCI-SFP-060100	38.75 - 39.00	Auto	0.0171
L53	30	PL1.25x6.625 Reinforcement	37.17 - 38.75	Auto	0.0974
L53	31	PL1.25x6.625 Reinforcement	37.17 - 38.75	Auto	0.0974
L53	32	PL1.25x6.625 Reinforcement	37.17 - 38.75	Auto	0.0974
L53	44	PL1x4 Reinforcement	37.17 - 38.75	Auto	0.0000
L53	46	PL1x4 Reinforcement	37.17 - 38.75	Auto	0.0000
L53	47	PL1x4 Reinforcement	37.17 - 38.75	Auto	0.0000
L53	48	PL1x4 Reinforcement	37.17 - 38.75	Auto	0.0000
L53	71	CCI-SFP-045100	37.17 -	Auto	0.0000

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L53	73	CCI-SFP-060100	38.75 37.17 - 38.75	Auto	0.0038
L53	74	CCI-SFP-060100	37.17 - 38.75	Auto	0.0038
L54	30	PL1.25x6.625 Reinforcement	36.92 - 37.17	Auto	0.0698
L54	31	PL1.25x6.625 Reinforcement	36.92 - 37.17	Auto	0.0698
L54	32	PL1.25x6.625 Reinforcement	36.92 - 37.17	Auto	0.0698
L54	44	PL1x4 Reinforcement	36.92 - 37.17	Auto	0.0000
L54	46	PL1x4 Reinforcement	36.92 - 37.17	Auto	0.0000
L54	47	PL1x4 Reinforcement	36.92 - 37.17	Auto	0.0000
L54	48	PL1x4 Reinforcement	36.92 - 37.17	Auto	0.0000
L54	71	CCI-SFP-045100	36.92 - 37.17	Auto	0.0000
L54	73	CCI-SFP-060100	36.92 - 37.17	Auto	0.0000
L54	74	CCI-SFP-060100	36.92 - 37.17	Auto	0.0000
L55	30	PL1.25x6.625 Reinforcement	34.00 - 36.92	Auto	0.0572
L55	31	PL1.25x6.625 Reinforcement	34.00 - 36.92	Auto	0.0572
L55	32	PL1.25x6.625 Reinforcement	34.00 - 36.92	Auto	0.0572
L55	42	PL1x4 Reinforcement	34.00 - 35.75	Auto	0.0000
L55	43	PL1x4 Reinforcement	34.00 - 35.75	Auto	0.0000
L55	44	PL1x4 Reinforcement	34.00 - 36.92	Auto	0.0000
L55	46	PL1x4 Reinforcement	34.00 - 36.92	Auto	0.0000
L55	47	PL1x4 Reinforcement	34.00 - 36.92	Auto	0.0000
L55	48	PL1x4 Reinforcement	34.00 - 36.92	Auto	0.0000
L55	67	CCI-SFP-045100	34.00 - 35.08	Auto	0.0000
L55	69	CCI-SFP-045100	34.00 - 35.08	Auto	0.0000
L55	71	CCI-SFP-045100	34.00 - 36.92	Auto	0.0000
L55	73	CCI-SFP-060100	35.17 - 36.92	Auto	0.0000
L55	74	CCI-SFP-060100	35.17 - 36.92	Auto	0.0000
L56	30	PL1.25x6.625 Reinforcement	33.75 - 34.00	Auto	0.0394
L56	31	PL1.25x6.625 Reinforcement	33.75 - 34.00	Auto	0.0394
L56	32	PL1.25x6.625 Reinforcement	33.75 - 34.00	Auto	0.0394
L56	42	PL1x4 Reinforcement	33.75 - 34.00	Auto	0.0000
L56	43	PL1x4 Reinforcement	33.75 - 34.00	Auto	0.0000
L56	44	PL1x4 Reinforcement	33.75 - 34.00	Auto	0.0000
L56	46	PL1x4 Reinforcement	33.75 - 34.00	Auto	0.0000
L56	47	PL1x4 Reinforcement	33.75 -	Auto	0.0000

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L56	48	PL1x4 Reinforcement	34.00 33.75 - 34.00	Auto	0.0000
L56	67	CCI-SFP-045100	33.75 - 34.00	Auto	0.0000
L56	69	CCI-SFP-045100	33.75 - 34.00	Auto	0.0000
L56	71	CCI-SFP-045100	33.75 - 34.00	Auto	0.0000
L57	30	PL1.25x6.625 Reinforcement	29.75 - 33.75	Auto	0.0174
L57	31	PL1.25x6.625 Reinforcement	29.75 - 33.75	Auto	0.0174
L57	32	PL1.25x6.625 Reinforcement	29.75 - 33.75	Auto	0.0174
L57	42	PL1x4 Reinforcement	29.75 - 33.75	Auto	0.0000
L57	43	PL1x4 Reinforcement	29.75 - 33.75	Auto	0.0000
L57	44	PL1x4 Reinforcement	29.75 - 33.75	Auto	0.0000
L57	46	PL1x4 Reinforcement	32.25 - 33.75	Auto	0.0000
L57	47	PL1x4 Reinforcement	32.25 - 33.75	Auto	0.0000
L57	48	PL1x4 Reinforcement	32.25 - 33.75	Auto	0.0000
L57	67	CCI-SFP-045100	29.75 - 33.75	Auto	0.0000
L57	69	CCI-SFP-045100	29.75 - 33.75	Auto	0.0000
L57	71	CCI-SFP-045100	29.75 - 33.75	Auto	0.0000
L58	24	PL1.25x6.875 Reinforcement	29.50 - 29.75	Auto	0.0367
L58	25	PL1.25x6.875 Reinforcement	29.50 - 29.75	Auto	0.0367
L58	26	PL1.25x6.875 Reinforcement	29.50 - 29.75	Auto	0.0367
L58	42	PL1x4 Reinforcement	29.50 - 29.75	Auto	0.0000
L58	43	PL1x4 Reinforcement	29.50 - 29.75	Auto	0.0000
L58	44	PL1x4 Reinforcement	29.50 - 29.75	Auto	0.0000
L58	67	CCI-SFP-045100	29.50 - 29.75	Auto	0.0000
L58	69	CCI-SFP-045100	29.50 - 29.75	Auto	0.0000
L58	71	CCI-SFP-045100	29.50 - 29.75	Auto	0.0000
L59	24	PL1.25x6.875 Reinforcement	24.50 - 29.50	Auto	0.0123
L59	25	PL1.25x6.875 Reinforcement	24.50 - 29.50	Auto	0.0123
L59	26	PL1.25x6.875 Reinforcement	24.50 - 29.50	Auto	0.0123
L59	42	PL1x4 Reinforcement	24.50 - 29.50	Auto	0.0000
L59	43	PL1x4 Reinforcement	24.50 - 29.50	Auto	0.0000
L59	44	PL1x4 Reinforcement	24.50 - 29.50	Auto	0.0000
L59	62	CCI-SFP-060100	24.50 - 25.00	Auto	0.0000
L59	63	CCI-SFP-060100	24.50 - 25.00	Auto	0.0000
L59	65	CCI-SFP-060100	24.50 -	Auto	0.0000

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L59	67	CCI-SFP-045100	25.00 24.50 - 29.50	Auto	0.0000
L59	69	CCI-SFP-045100	25.08 - 29.50	Auto	0.0000
L59	71	CCI-SFP-045100	25.08 - 29.50	Auto	0.0000
L60	24	PL1.25x6.875 Reinforcement	23.00 - 24.50	Auto	0.0000
L60	25	PL1.25x6.875 Reinforcement	23.00 - 24.50	Auto	0.0000
L60	26	PL1.25x6.875 Reinforcement	23.00 - 24.50	Auto	0.0000
L60	42	PL1x4 Reinforcement	23.00 - 24.50	Auto	0.0000
L60	43	PL1x4 Reinforcement	23.00 - 24.50	Auto	0.0000
L60	44	PL1x4 Reinforcement	23.00 - 24.50	Auto	0.0000
L60	62	CCI-SFP-060100	23.00 - 24.50	Auto	0.0000
L60	63	CCI-SFP-060100	23.00 - 24.50	Auto	0.0000
L60	65	CCI-SFP-060100	23.00 - 24.50	Auto	0.0000
L60	67	CCI-SFP-045100	23.00 - 24.50	Auto	0.0000
L61	24	PL1.25x6.875 Reinforcement	22.75 - 23.00	Auto	0.0236
L61	25	PL1.25x6.875 Reinforcement	22.75 - 23.00	Auto	0.0236
L61	26	PL1.25x6.875 Reinforcement	22.75 - 23.00	Auto	0.0236
L61	42	PL1x4 Reinforcement	22.75 - 23.00	Auto	0.0000
L61	43	PL1x4 Reinforcement	22.75 - 23.00	Auto	0.0000
L61	44	PL1x4 Reinforcement	22.75 - 23.00	Auto	0.0000
L61	62	CCI-SFP-060100	22.75 - 23.00	Auto	0.0000
L61	63	CCI-SFP-060100	22.75 - 23.00	Auto	0.0000
L61	65	CCI-SFP-060100	22.75 - 23.00	Auto	0.0000
L61	67	CCI-SFP-045100	22.75 - 23.00	Auto	0.0000
L62	24	PL1.25x6.875 Reinforcement	21.58 - 22.75	Auto	0.0181
L62	25	PL1.25x6.875 Reinforcement	21.58 - 22.75	Auto	0.0181
L62	26	PL1.25x6.875 Reinforcement	21.58 - 22.75	Auto	0.0181
L62	42	PL1x4 Reinforcement	21.58 - 22.75	Auto	0.0000
L62	43	PL1x4 Reinforcement	21.58 - 22.75	Auto	0.0000
L62	44	PL1x4 Reinforcement	21.58 - 22.75	Auto	0.0000
L62	62	CCI-SFP-060100	21.58 - 22.75	Auto	0.0000
L62	63	CCI-SFP-060100	21.58 - 22.75	Auto	0.0000
L62	65	CCI-SFP-060100	21.58 - 22.75	Auto	0.0000
L62	67	CCI-SFP-045100	21.58 - 22.75	Auto	0.0000
L63	24	PL1.25x6.875	21.33 -	Auto	0.0000

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L63	25	Reinforcement PL1.25x6.875	21.58 21.33 - 21.58	Auto	0.0000
L63	26	Reinforcement PL1.25x6.875	21.58 21.33 - 21.58	Auto	0.0000
L63	42	PL1x4 Reinforcement	21.58 21.33 - 21.58	Auto	0.0000
L63	43	PL1x4 Reinforcement	21.58 21.33 - 21.58	Auto	0.0000
L63	44	PL1x4 Reinforcement	21.58 21.33 - 21.58	Auto	0.0000
L63	62	CCI-SFP-060100	21.58 21.33 - 21.58	Auto	0.0000
L63	63	CCI-SFP-060100	21.58 21.33 - 21.58	Auto	0.0000
L63	65	CCI-SFP-060100	21.58 21.33 - 21.58	Auto	0.0000
L63	67	CCI-SFP-045100	21.58 21.33 - 21.58	Auto	0.0000
L64	24	PL1.25x6.875 Reinforcement	16.33 - 21.33	Auto	0.0000
L64	25	PL1.25x6.875 Reinforcement	16.33 - 21.33	Auto	0.0000
L64	26	PL1.25x6.875 Reinforcement	16.33 - 21.33	Auto	0.0000
L64	27	PL1.25x6.875 Reinforcement	16.33 - 16.42	Auto	0.0000
L64	28	PL1.25x6.875 Reinforcement	16.33 - 16.42	Auto	0.0000
L64	42	PL1x4 Reinforcement	16.33 - 21.33	Auto	0.0000
L64	43	PL1x4 Reinforcement	16.33 - 21.33	Auto	0.0000
L64	44	PL1x4 Reinforcement	16.33 - 21.33	Auto	0.0000
L64	62	CCI-SFP-060100	16.33 - 21.33	Auto	0.0000
L64	63	CCI-SFP-060100	16.33 - 21.33	Auto	0.0000
L64	65	CCI-SFP-060100	16.33 - 21.33	Auto	0.0000
L64	67	CCI-SFP-045100	20.08 - 21.33	Auto	0.0000
L65	24	PL1.25x6.875 Reinforcement	12.92 - 16.33	Auto	0.0000
L65	25	PL1.25x6.875 Reinforcement	12.92 - 16.33	Auto	0.0000
L65	26	PL1.25x6.875 Reinforcement	12.92 - 16.33	Auto	0.0000
L65	27	PL1.25x6.875 Reinforcement	12.92 - 16.33	Auto	0.0000
L65	28	PL1.25x6.875 Reinforcement	12.92 - 16.33	Auto	0.0000
L65	42	PL1x4 Reinforcement	12.92 - 16.33	Auto	0.0000
L65	43	PL1x4 Reinforcement	12.92 - 16.33	Auto	0.0000
L65	44	PL1x4 Reinforcement	12.92 - 16.33	Auto	0.0000
L65	62	CCI-SFP-060100	12.92 - 16.33	Auto	0.0000
L65	63	CCI-SFP-060100	12.92 - 16.33	Auto	0.0000
L65	65	CCI-SFP-060100	12.92 - 16.33	Auto	0.0000
L66	24	PL1.25x6.875 Reinforcement	12.67 - 12.92	Auto	0.0000
L66	25	PL1.25x6.875	12.67 -	Auto	0.0000



Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L66	26	Reinforcement PL1.25x6.875	12.92 12.67 - 12.92	Auto	0.0000
L66	27	Reinforcement PL1.25x6.875	12.92 12.67 - 12.92	Auto	0.0000
L66	28	Reinforcement PL1.25x6.875	12.92 12.67 - 12.92	Auto	0.0000
L66	42	PL1x4 Reinforcement	12.92 12.67 - 12.92	Auto	0.0000
L66	43	PL1x4 Reinforcement	12.92 12.67 - 12.92	Auto	0.0000
L66	44	PL1x4 Reinforcement	12.92 12.67 - 12.92	Auto	0.0000
L66	62	CCI-SFP-060100	12.92 12.67 - 12.92	Auto	0.0000
L66	63	CCI-SFP-060100	12.92 12.67 - 12.92	Auto	0.0000
L66	65	CCI-SFP-060100	12.92 12.67 - 12.92	Auto	0.0000
L67	24	PL1.25x6.875 Reinforcement	12.92 12.50 - 12.67	Auto	0.0000
L67	25	PL1.25x6.875 Reinforcement	12.92 12.50 - 12.67	Auto	0.0000
L67	26	PL1.25x6.875 Reinforcement	12.92 12.50 - 12.67	Auto	0.0000
L67	27	PL1.25x6.875 Reinforcement	12.92 12.50 - 12.67	Auto	0.0000
L67	28	PL1.25x6.875 Reinforcement	12.92 12.50 - 12.67	Auto	0.0000
L67	42	PL1x4 Reinforcement	12.92 12.50 - 12.67	Auto	0.0000
L67	43	PL1x4 Reinforcement	12.92 12.50 - 12.67	Auto	0.0000
L67	44	PL1x4 Reinforcement	12.92 12.50 - 12.67	Auto	0.0000
L67	62	CCI-SFP-060100	12.92 12.50 - 12.67	Auto	0.0000
L67	63	CCI-SFP-060100	12.92 12.50 - 12.67	Auto	0.0000
L67	65	CCI-SFP-060100	12.92 12.50 - 12.67	Auto	0.0000
L68	24	PL1.25x6.875 Reinforcement	12.92 12.25 - 12.50	Auto	0.0000
L68	25	PL1.25x6.875 Reinforcement	12.92 12.25 - 12.50	Auto	0.0000
L68	26	PL1.25x6.875 Reinforcement	12.92 12.25 - 12.50	Auto	0.0000
L68	27	PL1.25x6.875 Reinforcement	12.92 12.25 - 12.50	Auto	0.0000
L68	28	PL1.25x6.875 Reinforcement	12.92 12.25 - 12.50	Auto	0.0000
L68	42	PL1x4 Reinforcement	12.92 12.25 - 12.50	Auto	0.0000
L68	43	PL1x4 Reinforcement	12.92 12.25 - 12.50	Auto	0.0000
L68	44	PL1x4 Reinforcement	12.92 12.25 - 12.50	Auto	0.0000
L68	62	CCI-SFP-060100	12.92 12.25 - 12.50	Auto	0.0000
L68	63	CCI-SFP-060100	12.92 12.25 - 12.50	Auto	0.0000
L68	65	CCI-SFP-060100	12.92 12.25 - 12.50	Auto	0.0000
L69	24	PL1.25x6.875 Reinforcement	12.92 12.00 - 12.25	Auto	0.0000
L69	25	PL1.25x6.875 Reinforcement	12.92 12.00 - 12.25	Auto	0.0000
L69	26	PL1.25x6.875	12.92 12.00 -	Auto	0.0000

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L69	27	Reinforcement PL1.25x6.875	12.25 12.00 - 12.25	Auto	0.0000
L69	28	Reinforcement PL1.25x6.875	12.25 12.00 - 12.25	Auto	0.0000
L69	42	Reinforcement PL1x4 Reinforcement	12.25 12.00 - 12.25	Auto	0.0000
L69	43	Reinforcement PL1x4 Reinforcement	12.25 12.00 - 12.25	Auto	0.0000
L69	44	Reinforcement PL1x4 Reinforcement	12.25 12.00 - 12.25	Auto	0.0000
L69	62	CCI-SFP-060100	12.25 12.00 - 12.25	Auto	0.0000
L69	63	CCI-SFP-060100	12.25 12.00 - 12.25	Auto	0.0000
L69	65	CCI-SFP-060100	12.25 12.00 - 12.25	Auto	0.0000
L70	24	Reinforcement PL1.25x6.875	12.00 11.75 - 12.00	Auto	0.0000
L70	25	Reinforcement PL1.25x6.875	12.00 11.75 - 12.00	Auto	0.0000
L70	26	Reinforcement PL1.25x6.875	12.00 11.75 - 12.00	Auto	0.0000
L70	27	Reinforcement PL1.25x6.875	12.00 11.75 - 12.00	Auto	0.0000
L70	28	Reinforcement PL1.25x6.875	12.00 11.75 - 12.00	Auto	0.0000
L70	42	Reinforcement PL1x4 Reinforcement	12.00 11.75 - 12.00	Auto	0.0000
L70	43	Reinforcement PL1x4 Reinforcement	12.00 11.75 - 12.00	Auto	0.0000
L70	44	Reinforcement PL1x4 Reinforcement	12.00 11.75 - 12.00	Auto	0.0000
L70	62	CCI-SFP-060100	12.00 11.75 - 12.00	Auto	0.0000
L70	63	CCI-SFP-060100	12.00 11.75 - 12.00	Auto	0.0000
L70	65	CCI-SFP-060100	12.00 11.75 - 12.00	Auto	0.0000
L71	24	Reinforcement PL1.25x6.875	11.75 - 12.00 8.50 - 11.75	Auto	0.0000
L71	25	Reinforcement PL1.25x6.875	11.75 - 12.00 8.50 - 11.75	Auto	0.0000
L71	26	Reinforcement PL1.25x6.875	11.75 - 12.00 9.17 - 11.75	Auto	0.0000
L71	27	Reinforcement PL1.25x6.875	11.75 - 12.00 8.50 - 11.75	Auto	0.0000
L71	28	Reinforcement PL1.25x6.875	11.75 - 12.00 8.50 - 11.75	Auto	0.0000
L71	42	Reinforcement PL1x4 Reinforcement	11.75 - 12.00 10.75 - 11.75	Auto	0.0000
L71	43	Reinforcement PL1x4 Reinforcement	11.75 - 12.00 10.75 - 11.75	Auto	0.0000
L71	44	Reinforcement PL1x4 Reinforcement	11.75 - 12.00 10.75 - 11.75	Auto	0.0000
L71	58	Transition Stiffener 1x7	8.50 - 10.50	Auto	0.0000
L71	59	Transition Stiffener 1x7	8.50 - 10.50	Auto	0.0000
L71	60	Transition Stiffener 1x7	8.50 - 10.50	Auto	0.0000
L71	62	CCI-SFP-060100	8.50 - 11.75	Auto	0.0000
L71	63	CCI-SFP-060100	8.50 - 11.75	Auto	0.0000
L71	65	CCI-SFP-060100	10.00 - 11.75	Auto	0.0000
L72	24	Reinforcement PL1.25x6.875	8.50 - 11.75 8.25 - 8.50	Auto	0.0000
L72	25	Reinforcement PL1.25x6.875	8.25 - 8.50	Auto	0.0000
L72	27	Reinforcement PL1.25x6.875	8.25 - 8.50	Auto	0.0000

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L72	28	PL1.25x6.875 Reinforcement	8.25 - 8.50	Auto	0.0000
L72	58	Transition Stiffener 1x7	8.25 - 8.50	Auto	0.0000
L72	59	Transition Stiffener 1x7	8.25 - 8.50	Auto	0.0000
L72	60	Transition Stiffener 1x7	8.25 - 8.50	Auto	0.0000
L72	62	CCI-SFP-060100	8.25 - 8.50	Auto	0.0000
L72	63	CCI-SFP-060100	8.25 - 8.50	Auto	0.0000
L73	24	PL1.25x6.875 Reinforcement	7.00 - 8.25	Auto	0.0000
L73	25	PL1.25x6.875 Reinforcement	7.00 - 8.25	Auto	0.0000
L73	27	PL1.25x6.875 Reinforcement	7.00 - 8.25	Auto	0.0000
L73	28	PL1.25x6.875 Reinforcement	7.00 - 8.25	Auto	0.0000
L73	58	Transition Stiffener 1x7	7.00 - 8.25	Auto	0.0000
L73	59	Transition Stiffener 1x7	7.00 - 8.25	Auto	0.0000
L73	60	Transition Stiffener 1x7	7.00 - 8.25	Auto	0.0000
L73	62	CCI-SFP-060100	7.00 - 8.25	Auto	0.0000
L73	63	CCI-SFP-060100	7.00 - 8.25	Auto	0.0000
L74	24	PL1.25x6.875 Reinforcement	6.75 - 7.00	Auto	0.0000
L74	25	PL1.25x6.875 Reinforcement	6.75 - 7.00	Auto	0.0000
L74	27	PL1.25x6.875 Reinforcement	6.75 - 7.00	Auto	0.0000
L74	28	PL1.25x6.875 Reinforcement	6.75 - 7.00	Auto	0.0000
L74	58	Transition Stiffener 1x7	6.75 - 7.00	Auto	0.0000
L74	59	Transition Stiffener 1x7	6.75 - 7.00	Auto	0.0000
L74	60	Transition Stiffener 1x7	6.75 - 7.00	Auto	0.0000
L74	62	CCI-SFP-060100	6.75 - 7.00	Auto	0.0000
L74	63	CCI-SFP-060100	6.75 - 7.00	Auto	0.0000
L75	24	PL1.25x6.875 Reinforcement	1.75 - 6.75	Auto	0.0000
L75	25	PL1.25x6.875 Reinforcement	1.75 - 6.75	Auto	0.0000
L75	27	PL1.25x6.875 Reinforcement	1.75 - 6.75	Auto	0.0000
L75	28	PL1.25x6.875 Reinforcement	1.75 - 6.75	Auto	0.0000
L75	58	Transition Stiffener 1x7	1.75 - 6.75	Auto	0.0000
L75	59	Transition Stiffener 1x7	1.75 - 6.75	Auto	0.0000
L75	60	Transition Stiffener 1x7	1.75 - 6.75	Auto	0.0000
L75	62	CCI-SFP-060100	5.00 - 6.75	Auto	0.0000
L75	63	CCI-SFP-060100	5.00 - 6.75	Auto	0.0000
L76	24	PL1.25x6.875 Reinforcement	0.00 - 1.75	Auto	0.0000
L76	25	PL1.25x6.875 Reinforcement	0.00 - 1.75	Auto	0.0000
L76	27	PL1.25x6.875 Reinforcement	0.00 - 1.75	Auto	0.0000
L76	28	PL1.25x6.875 Reinforcement	0.00 - 1.75	Auto	0.0000
L76	58	Transition Stiffener 1x7	0.00 - 1.75	Auto	0.0000
L76	59	Transition Stiffener 1x7	0.00 - 1.75	Auto	0.0000
L76	60	Transition Stiffener 1x7	0.00 - 1.75	Auto	0.0000

**Discrete Tower Loads**

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment  °	Placement  ft
***					
QD8616-7 w/ Mount Pipe	A	From Leg	4.000 0.000 1.000	0.000	144.000
QD8616-7 w/ Mount Pipe	B	From Leg	4.000 0.000 1.000	0.000	144.000
QD8616-7 w/ Mount Pipe	C	From Leg	4.000 0.000 1.000	0.000	144.000
AIR 6419 B77G_CCIV3 w/ Mount Pipe	A	From Leg	4.000 0.000 2.000	0.000	144.000
AIR 6419 B77G_CCIV3 w/ Mount Pipe	B	From Leg	4.000 0.000 2.000	0.000	144.000
AIR 6419 B77G_CCIV3 w/ Mount Pipe	C	From Leg	4.000 0.000 2.000	0.000	144.000
AIR 6449 B77D_CCVI2 w/ Mount Pipe	A	From Leg	4.000 0.000 -2.000	0.000	144.000
AIR 6449 B77D_CCVI2 w/ Mount Pipe	B	From Leg	4.000 0.000 -2.000	0.000	144.000
AIR 6449 B77D_CCVI2 w/ Mount Pipe	C	From Leg	4.000 0.000 -2.000	0.000	144.000
EPBQ-654L8H8-L2 w/ Mount Pipe	A	From Leg	4.000 0.000 1.000	0.000	144.000
EPBQ-654L8H8-L2 w/ Mount Pipe	B	From Leg	4.000 0.000 1.000	0.000	144.000
EPBQ-654L8H8-L2 w/ Mount Pipe	C	From Leg	4.000 0.000 1.000	0.000	144.000
RRUS 4478 B14	A	From Leg	4.000 0.000 1.000	0.000	144.000
RRUS 4478 B14	B	From Leg	4.000 0.000 1.000	0.000	144.000
RRUS 4478 B14	C	From Leg	4.000 0.000 1.000	0.000	144.000
2012 B29	A	From Leg	4.000 0.000 0.000	0.000	144.000
2012 B29	B	From Leg	4.000 0.000 0.000	0.000	144.000
2012 B29	C	From Leg	4.000 0.000 1.000	0.000	144.000
RADIO 4415 B30	A	From Leg	4.000 0.000 0.000	0.000	144.000
RADIO 4415 B30	B	From Leg	4.000 0.000 0.000	0.000	144.000
RADIO 4415 B30	C	From Leg	4.000 0.000 1.000	0.000	144.000
DC6-48-60-18-8F	A	From Leg	4.000	0.000	144.000

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft
			0.000		
DC6-48-60-18-8F	C	From Leg	0.000 4.000	0.000	144.000
RRUS 4449 B5/B12	A	From Leg	0.000 0.000 4.000	0.000	144.000
RRUS 4449 B5/B12	B	From Leg	0.000 1.000 4.000	0.000	144.000
RRUS 4449 B5/B12	C	From Leg	0.000 1.000 4.000	0.000	144.000
RRUS 8843 B2/B66A	A	From Leg	0.000 0.000 4.000	0.000	144.000
RRUS 8843 B2/B66A	B	From Leg	0.000 1.000 4.000	0.000	144.000
RRUS 8843 B2/B66A	C	From Leg	0.000 1.000 4.000	0.000	144.000
DC9-48-60-24-8C-EV	B	From Leg	0.000 0.000 4.000	0.000	144.000
10' x 2" Mount Pipe	A	From Leg	0.000 0.000 4.000	0.000	144.000
10' x 2" Mount Pipe	B	From Leg	-1.000 4.000 0.000	0.000	144.000
10' x 2" Mount Pipe	C	From Leg	-1.000 4.000 0.000	0.000	144.000
F3P-12W	C	None	-1.000	0.000	144.000
Miscellaneous [NA 507-1]	C	None		0.000	144.000
AAHC w/ Mount Pipe	A	From Leg	4.000 0.000 2.000	0.000	132.000
(2) AAHC w/ Mount Pipe	B	From Leg	4.000 0.000 2.000	0.000	132.000
(2) APXVSP18-C-A20 w/ Mount Pipe	A	From Leg	4.000 0.000 -1.000	0.000	132.000
APXVSP18-C-A20 w/ Mount Pipe	B	From Leg	4.000 0.000 -1.000	0.000	132.000
APXVSP18-C-A20 w/ Mount Pipe	C	From Leg	4.000 0.000 -1.000	0.000	132.000
800 EXTERNAL NOTCH FILTER	A	From Leg	4.000 0.000 1.000	0.000	132.000
800 EXTERNAL NOTCH FILTER	B	From Leg	4.000 0.000 1.000	0.000	132.000
800 EXTERNAL NOTCH FILTER	C	From Leg	4.000 0.000 1.000	0.000	132.000
(2) PD2DE-700/2700	A	From Leg	4.000 0.000 -2.000	0.000	132.000

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement
			Horz	Lateral		
			ft	ft	°	ft
800MHZ RRH	A	From Leg	4.000	0.000	0.000	132.000
			0.000	1.000		
800MHZ RRH	B	From Leg	4.000	0.000	0.000	132.000
			0.000	1.000		
800MHZ RRH	C	From Leg	4.000	0.000	0.000	132.000
			0.000	1.000		
IBC1900HB-2	A	From Leg	4.000	0.000	0.000	132.000
			4.000	0.000		
IBC1900HB-2	B	From Leg	4.000	0.000	0.000	132.000
			0.000	4.000		
IBC1900HB-2	C	From Leg	4.000	0.000	0.000	132.000
			0.000	4.000		
1900MHZ RRH (65MHZ)	A	From Leg	4.000	0.000	0.000	132.000
			0.000	2.000		
1900MHZ RRH (65MHZ)	B	From Leg	4.000	0.000	0.000	132.000
			0.000	2.000		
1900MHZ RRH (65MHZ)	C	From Leg	4.000	0.000	0.000	132.000
			0.000	2.000		
(2) 6' x 2" Mount Pipe	A	From Leg	4.000	0.000	0.000	132.000
			0.000	0.000		
(2) 6' x 2" Mount Pipe	B	From Leg	4.000	0.000	0.000	132.000
			0.000	0.000		
(2) 6' x 2" Mount Pipe	C	From Leg	4.000	0.000	0.000	132.000
			0.000	0.000		
Platform Mount [LP 602-1] *	C	None			0.000	132.000
FFVV-65B-R2 w/ Mount Pipe	A	From Leg	4.000	0.000	0.000	120.000
			0.000	0.000		
FFVV-65B-R2 w/ Mount Pipe	B	From Leg	4.000	0.000	0.000	120.000
			0.000	0.000		
FFVV-65B-R2 w/ Mount Pipe	C	From Leg	4.000	0.000	0.000	120.000
			0.000	0.000		
TA08025-B604	A	From Leg	4.000	0.000	0.000	120.000
			0.000	0.000		
TA08025-B604	B	From Leg	4.000	0.000	0.000	120.000
			0.000	0.000		
TA08025-B604	C	From Leg	4.000	0.000	0.000	120.000
			0.000	0.000		
TA08025-B605	A	From Leg	4.000	0.000	0.000	120.000
			0.000	0.000		
TA08025-B605	B	From Leg	4.000	0.000	0.000	120.000
			0.000	0.000		
TA08025-B605	C	From Leg	4.000	0.000	0.000	120.000
			0.000	0.000		

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment °	Placement ft
			Horz Lateral ft	Vert ft		
RDIDC-9181-PF-48	A	From Leg	4.000	0.000	0.000	120.000
Commscope MC-PK8-DSH *	C	None	0.000	0.000	0.000	120.000
MT6407-77A w/ Mount Pipe	A	From Leg	4.000	0.000	0.000	112.000
MT6407-77A w/ Mount Pipe	B	From Leg	4.000	0.000	0.000	112.000
MT6407-77A w/ Mount Pipe	C	From Leg	4.000	0.000	0.000	112.000
SBNHH-1D65B w/ Mount Pipe	A	From Leg	4.000	0.000	0.000	112.000
SBNHH-1D65B w/ Mount Pipe	B	From Leg	4.000	0.000	0.000	112.000
SBNHH-1D65B w/ Mount Pipe	C	From Leg	4.000	0.000	0.000	112.000
SBNHH-1D65B	A	From Leg	4.000	0.000	0.000	112.000
SBNHH-1D65B	B	From Leg	4.000	0.000	0.000	112.000
SBNHH-1D65B	C	From Leg	4.000	0.000	0.000	112.000
BXA-80063/4CF w/ Mount Pipe	A	From Leg	4.000	0.000	0.000	112.000
BXA-80063/4CF w/ Mount Pipe	B	From Leg	4.000	0.000	0.000	112.000
BXA-80063/4CF w/ Mount Pipe	C	From Leg	4.000	0.000	0.000	112.000
BULLET III	C	From Leg	4.000	0.000	0.000	112.000
RFV01U-D1A	A	From Leg	4.000	0.000	0.000	112.000
RFV01U-D1A	B	From Leg	4.000	0.000	0.000	112.000
RFV01U-D1A	C	From Leg	4.000	0.000	0.000	112.000
RFV01U-D2A	A	From Leg	4.000	0.000	0.000	112.000
RFV01U-D2A	B	From Leg	4.000	0.000	0.000	112.000
RFV01U-D2A	C	From Leg	4.000	0.000	0.000	112.000
RVZDC-6627-PF-48	C	From Leg	4.000	0.000	0.000	112.000

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment  °	Placement  ft
			Horz Lateral ft	Vert ft		
(2) BSF0020F3V1	A	From Leg	4.000	0.000	0.000	112.000
			0.000			
			2.000			
(2) BSF0020F3V1	B	From Leg	4.000	0.000	0.000	112.000
			0.000			
			2.000			
(3) 3' x 2" Pipe Mount	A	From Leg	4.000	0.000	0.000	112.000
			0.000			
			0.000			
(3) 3' x 2" Pipe Mount	B	From Leg	4.000	0.000	0.000	112.000
			0.000			
			0.000			
(2) 3' x 2" Pipe Mount	C	From Leg	4.000	0.000	0.000	112.000
			0.000			
			0.000			
6' x 2" Mount Pipe	A	From Leg	4.000	0.000	0.000	112.000
			0.000			
			0.000			
6' x 2" Mount Pipe	B	From Leg	4.000	0.000	0.000	112.000
			0.000			
			0.000			
(2) 6' x 2" Mount Pipe	C	From Leg	4.000	0.000	0.000	112.000
			0.000			
			0.000			
Side Arm Mount [SO 102-3]	C	None		0.000		112.000
Platform Mount [LP 713-1_KCKR]	C	None		0.000		112.000
*						
AIR 6419 B41_TMO w/ Mount Pipe	A	From Leg	4.000	0.000	0.000	100.000
			0.000			
			1.000			
AIR 6419 B41_TMO w/ Mount Pipe	B	From Leg	4.000	0.000	0.000	100.000
			0.000			
			1.000			
AIR 6419 B41_TMO w/ Mount Pipe	C	From Leg	4.000	0.000	0.000	100.000
			0.000			
			1.000			
APXVAARR24_43-U-NA20 w/ Mount Pipe	A	From Leg	4.000	0.000	0.000	100.000
			0.000			
			0.000			
APXVAARR24_43-U-NA20 w/ Mount Pipe	B	From Leg	4.000	0.000	0.000	100.000
			0.000			
			0.000			
APXVAARR24_43-U-NA20 w/ Mount Pipe	C	From Leg	4.000	0.000	0.000	100.000
			0.000			
			0.000			
AIR -32 B2A/B66AA w/ Mount Pipe	A	From Leg	4.000	0.000	0.000	100.000
			0.000			
			-1.000			
AIR -32 B2A/B66AA w/ Mount Pipe	B	From Leg	4.000	0.000	0.000	100.000
			0.000			
			0.000			
AIR -32 B2A/B66AA w/ Mount Pipe	C	From Leg	4.000	0.000	0.000	100.000
			0.000			
			-1.000			
RADIO 4449 B71 B85A_T-MOBILE	A	From Leg	4.000	0.000	0.000	100.000
			0.000			
			1.000			
RADIO 4449 B71 B85A_T-MOBILE	B	From Leg	4.000	0.000	0.000	100.000
			0.000			
			0.000			
RADIO 4449 B71 B85A_T-MOBILE	C	From Leg	4.000	0.000	0.000	100.000
			0.000			
			0.000			
RADIO 4460 B2/B25 B66_TMO	A	From Leg	4.000	0.000	0.000	100.000
			0.000			



Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft
RADIO 4460 B2/B25 B66_TMO	B	From Leg	1.000 4.000 0.000	0.000	100.000
RADIO 4460 B2/B25 B66_TMO	C	From Leg	1.000 4.000 0.000 2.000	0.000	100.000
Platform Mount [LP 303-1_HR-1] *	C	None		0.000	100.000
KS24019-L112A	C	From Leg	4.000 0.000 1.000	0.000	51.000
Side Arm Mount [SO 701-1]	C	From Leg	2.000 0.000 0.000	0.000	51.000
*					
*					
*					
*					

**Dishes**

Description	Face or Leg	Dish Type	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	3 dB Beam Width °	Elevation ft	Outside Diameter ft
VHLP2-23	A	Paraboloid w/Shroud (HP)	From Leg	4.000 0.000 4.000	0.000		132.000	2.175
VHLP2-23	B	Paraboloid w/Shroud (HP)	From Leg	4.000 0.000 4.000	-50.000		132.000	2.175
VHLP2-18	C	Paraboloid w/Shroud (HP)	From Leg	4.000 0.000 4.000	-60.000		132.000	2.175
*								
*								
*								

**Load Combinations**

Comb. No.	Description
1	Dead Only
2	1.2 Dead+1.0 Wind 0 deg - No Ice
3	0.9 Dead+1.0 Wind 0 deg - No Ice
4	1.2 Dead+1.0 Wind 30 deg - No Ice
5	0.9 Dead+1.0 Wind 30 deg - No Ice
6	1.2 Dead+1.0 Wind 60 deg - No Ice
7	0.9 Dead+1.0 Wind 60 deg - No Ice
8	1.2 Dead+1.0 Wind 90 deg - No Ice
9	0.9 Dead+1.0 Wind 90 deg - No Ice
10	1.2 Dead+1.0 Wind 120 deg - No Ice
11	0.9 Dead+1.0 Wind 120 deg - No Ice
12	1.2 Dead+1.0 Wind 150 deg - No Ice

Comb. No.	Description
13	0.9 Dead+1.0 Wind 150 deg - No Ice
14	1.2 Dead+1.0 Wind 180 deg - No Ice
15	0.9 Dead+1.0 Wind 180 deg - No Ice
16	1.2 Dead+1.0 Wind 210 deg - No Ice
17	0.9 Dead+1.0 Wind 210 deg - No Ice
18	1.2 Dead+1.0 Wind 240 deg - No Ice
19	0.9 Dead+1.0 Wind 240 deg - No Ice
20	1.2 Dead+1.0 Wind 270 deg - No Ice
21	0.9 Dead+1.0 Wind 270 deg - No Ice
22	1.2 Dead+1.0 Wind 300 deg - No Ice
23	0.9 Dead+1.0 Wind 300 deg - No Ice
24	1.2 Dead+1.0 Wind 330 deg - No Ice
25	0.9 Dead+1.0 Wind 330 deg - No Ice
26	1.2 Dead+1.0 Ice+1.0 Temp
27	1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp
28	1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp
29	1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp
30	1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp
31	1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp
32	1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp
33	1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp
34	1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp
35	1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp
36	1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp
37	1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp
38	1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp
39	Dead+Wind 0 deg - Service
40	Dead+Wind 30 deg - Service
41	Dead+Wind 60 deg - Service
42	Dead+Wind 90 deg - Service
43	Dead+Wind 120 deg - Service
44	Dead+Wind 150 deg - Service
45	Dead+Wind 180 deg - Service
46	Dead+Wind 210 deg - Service
47	Dead+Wind 240 deg - Service
48	Dead+Wind 270 deg - Service
49	Dead+Wind 300 deg - Service
50	Dead+Wind 330 deg - Service

**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
L1	144.25 - 139.25	Pole	Max Tension	26	0.000	0.000	-0.000
			Max. Compression	26	-10.282	-0.145	0.020
			Max. Mx	8	-4.969	-33.528	0.021
			Max. My	14	-4.957	-0.028	-33.546
			Max. Vy	8	6.482	-33.528	0.021
			Max. Vx	2	-6.510	-0.073	33.543
			Max. Torque	17			0.046
L2	139.25 - 134.75	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-10.929	-0.227	0.071
			Max. Mx	8	-5.328	-63.411	0.109
			Max. My	2	-5.293	-0.188	63.713
			Max. Vy	20	-6.971	63.317	0.002
			Max. Vx	2	-7.086	-0.188	63.713
			Max. Torque	23			0.718
L3	134.75 - 134.25	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-10.978	-0.236	0.077
			Max. Mx	8	-5.366	-66.884	0.124
			Max. My	2	-5.330	-0.214	67.259
			Max. Vy	20	-6.984	66.803	-0.014
			Max. Vx	2	-7.101	-0.214	67.259

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L4	134.25 - 129.25	Pole	Max. Torque	23			0.718
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-17.202	-2.085	1.337
			Max. Mx	8	-8.422	-112.850	0.517
			Max. My	2	-8.376	-1.283	113.518
			Max. Vy	20	-10.308	110.738	0.478
			Max. Vx	2	-10.473	-1.283	113.518
L5	129.25 - 124.25	Pole	Max. Torque	23			0.718
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-17.642	-2.209	1.416
			Max. Mx	8	-8.773	-164.542	0.452
			Max. My	2	-8.727	-1.332	166.236
			Max. Vy	20	-10.450	162.563	0.535
			Max. Vx	2	-10.631	-1.332	166.236
L6	124.25 - 123.416	Pole	Max. Torque	15			0.561
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-17.727	-2.228	1.428
			Max. Mx	8	-8.837	-173.232	0.441
			Max. My	2	-8.792	-1.339	175.104
			Max. Vy	20	-10.475	171.275	0.545
			Max. Vx	2	-10.654	-1.339	175.104
L7	123.416 - 123.166	Pole	Max. Torque	15			0.560
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-17.767	-2.235	1.432
			Max. Mx	8	-8.876	-175.842	0.438
			Max. My	2	-8.832	-1.342	177.767
			Max. Vy	20	-10.480	173.892	0.548
			Max. Vx	2	-10.658	-1.342	177.767
L8	123.166 - 118.166	Pole	Max. Torque	15			0.560
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-23.044	-2.360	1.807
			Max. Mx	8	-12.204	-232.763	0.477
			Max. My	2	-12.157	-1.391	235.885
			Max. Vy	20	-12.939	230.942	0.710
			Max. Vx	2	-13.133	-1.391	235.885
L9	118.166 - 113.166	Pole	Max. Torque	15			0.560
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-23.882	-2.503	1.897
			Max. Mx	8	-12.813	-297.893	0.415
			Max. My	2	-12.769	-1.447	302.108
			Max. Vy	20	-13.189	296.187	0.773
			Max. Vx	2	-13.368	-1.447	302.108
L10	113.166 - 109.5	Pole	Max. Torque	13			0.574
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-32.027	-2.378	1.839
			Max. Mx	8	-16.829	-360.347	0.367
			Max. My	2	-16.783	-1.488	365.335
			Max. Vy	20	-17.388	358.797	0.826
			Max. Vx	2	-17.554	-1.488	365.335
L11	109.5 - 109.25	Pole	Max. Torque	13			0.574
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-32.081	-2.385	1.845
			Max. Mx	8	-16.884	-364.684	0.364
			Max. My	2	-16.839	-1.491	369.722
			Max. Vy	20	-17.389	363.140	0.830
			Max. Vx	2	-17.553	-1.491	369.722
L12	109.25 - 104.75	Pole	Max. Torque	6			0.485
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-33.090	-2.507	1.947
			Max. Mx	8	-17.621	-443.350	0.304

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L13	104.75 - 104.5	Pole	Max. My	2	-17.581	-1.541	449.198
			Max. Vy	20	-17.649	441.906	0.893
			Max. Vx	2	-17.780	-1.541	449.198
			Max. Torque	6			0.485
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-33.163	-2.515	1.953
			Max. Mx	8	-17.686	-447.754	0.301
			Max. My	2	-17.647	-1.544	453.642
			Max. Vy	20	-17.660	446.316	0.897
			Max. Vx	2	-17.787	-1.544	453.642
L14	104.5 - 102.416	Pole	Max. Torque	6			0.485
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-33.768	-2.571	1.990
			Max. Mx	8	-18.116	-484.681	0.274
			Max. My	2	-18.081	-1.567	490.862
			Max. Vy	20	-17.850	483.288	0.926
			Max. Vx	2	-17.939	-1.567	490.862
			Max. Torque	6			0.485
			Max Tension	1	0.000	0.000	0.000
			L15	102.416 - 102.166	Pole	Max. Compression	26
Max. Mx	8	-18.174				-489.136	0.271
Max. My	2	-18.140				-1.570	495.347
Max. Vy	20	-17.864				487.749	0.930
Max. Vx	2	-17.946				-1.570	495.347
Max. Torque	6						0.485
Max Tension	1	0.000				0.000	0.000
Max. Compression	26	-41.489				-2.675	2.042
Max. Mx	8	-22.836				-554.161	0.244
Max. My	2	-22.800				-1.627	560.777
L16	102.166 - 98.75	Pole	Max. Vy	20	-20.805	552.849	0.960
			Max. Vx	2	-20.886	-1.627	560.777
			Max. Torque	6			0.485
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-41.574	-2.684	2.045
			Max. Mx	8	-22.917	-559.352	0.241
			Max. My	2	-22.881	-1.630	565.998
			Max. Vy	20	-20.805	558.045	0.964
			Max. Vx	2	-20.892	-1.630	565.998
			Max. Torque	6			0.484
L17	98.75 - 98.5	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-41.914	-2.714	2.056
			Max. Mx	8	-23.169	-580.157	0.228
			Max. My	2	-23.131	-1.642	586.934
			Max. Vy	20	-20.879	578.872	0.978
			Max. Vx	2	-20.988	-1.642	586.934
			Max. Torque	6			0.484
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-41.996	-2.722	2.059
			Max. Mx	8	-23.240	-585.369	0.225
L18	98.5 - 97.5	Pole	Max. My	2	-23.202	-1.645	592.181
			Max. Vy	20	-20.886	584.089	0.982
			Max. Vx	2	-21.002	-1.645	592.181
			Max. Torque	6			0.484
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-42.548	-2.782	2.080
			Max. Mx	8	-23.650	-620.864	0.203
			Max. My	2	-23.611	-1.665	627.936
			Max. Vy	20	-21.007	619.620	1.007
			Max. Vx	2	-21.133	-1.665	627.936
L19	97.5 - 97.25	Pole	Max. Torque	6			0.484
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-45.089	-2.964	2.143
			Max. Mx	8	-25.691	-726.778	0.138
			Max. My	2	-25.650	-1.725	734.721
			Max. Vy	20	-21.425	725.640	1.080
			Max. Mx	8	-23.611	-1.665	627.936
			Max. Vy	20	-21.007	619.620	1.007
			Max. Vx	2	-21.133	-1.665	627.936
			Max. Torque	6			0.484
L20	97.25 - 92	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-45.089	-2.964	2.143
			Max. Mx	8	-25.691	-726.778	0.138
			Max. My	2	-25.650	-1.725	734.721
			Max. Vy	20	-21.425	725.640	1.080
			Max. Mx	8	-23.611	-1.665	627.936
			Max. Vy	20	-21.007	619.620	1.007
			Max. Vx	2	-21.133	-1.665	627.936
			Max. Torque	6			0.484
			Max Tension	1	0.000	0.000	0.000
L21	92 - 90.552	Pole	Max. Compression	26	-45.089	-2.964	2.143
			Max. Mx	8	-25.691	-726.778	0.138
			Max. My	2	-25.650	-1.725	734.721
			Max. Vy	20	-21.425	725.640	1.080
			Max. Mx	8	-23.611	-1.665	627.936
			Max. Vy	20	-21.007	619.620	1.007
			Max. Vx	2	-21.133	-1.665	627.936
			Max. Torque	6			0.484
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-45.089	-2.964	2.143

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L22	90.552 - 89.25	Pole	Max. Vx	2	-21.583	-1.725	734.721
			Max. Torque	6			0.483
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-45.543	-3.006	2.158
			Max. Mx	8	-26.049	-754.657	0.121
			Max. My	2	-26.008	-1.740	762.853
			Max. Vy	20	-21.499	753.546	1.099
L23	89.25 - 89	Pole	Max. Vx	2	-21.665	-1.740	762.853
			Max. Torque	6			0.483
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-45.642	-3.015	2.161
			Max. Mx	8	-26.141	-760.022	0.118
			Max. My	2	-26.100	-1.744	768.268
			Max. Vy	20	-21.500	758.915	1.103
L24	89 - 88.25	Pole	Max. Vx	2	-21.668	-1.744	768.268
			Max. Torque	6			0.483
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-45.938	-3.038	2.169
			Max. Mx	8	-26.369	-776.144	0.108
			Max. My	2	-26.328	-1.753	784.540
			Max. Vy	20	-21.555	775.050	1.114
L25	88.25 - 88	Pole	Max. Vx	2	-21.729	-1.753	784.540
			Max. Torque	6			0.483
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-46.025	-3.046	2.172
			Max. Mx	8	-26.441	-781.527	0.105
			Max. My	2	-26.400	-1.756	789.973
			Max. Vy	20	-21.564	780.436	1.118
L26	88 - 87.833	Pole	Max. Vx	2	-21.740	-1.756	789.973
			Max. Torque	6			0.483
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-46.083	-3.052	2.174
			Max. Mx	8	-26.487	-785.124	0.102
			Max. My	2	-26.446	-1.758	793.604
			Max. Vy	20	-21.574	784.036	1.121
L27	87.833 - 87.583	Pole	Max. Vx	2	-21.751	-1.758	793.604
			Max. Torque	6			0.483
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-46.163	-3.059	2.177
			Max. Mx	8	-26.547	-790.512	0.099
			Max. My	2	-26.506	-1.761	799.043
			Max. Vy	20	-21.586	789.427	1.124
L28	87.583 - 82.583	Pole	Max. Vx	2	-21.766	-1.761	799.043
			Max. Torque	6			0.483
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-47.697	-3.215	2.246
			Max. Mx	8	-27.774	-898.828	0.034
			Max. My	2	-27.734	-1.821	908.459
			Max. Vy	20	-21.808	897.808	1.198
L29	82.583 - 77.583	Pole	Max. Vx	2	-22.018	-1.821	908.459
			Max. Torque	6			0.483
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-49.238	-3.371	2.328
			Max. Mx	8	-29.039	-1008.120	-0.030
			Max. My	2	-28.998	-1.882	1019.024
			Max. Vy	20	-21.992	1007.162	1.271
L30	77.583 - 77	Pole	Max. Vx	2	-22.241	-1.882	1019.024
			Max. Torque	6			0.483
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-49.427	-3.390	2.337
			Max. Mx	8	-29.195	-1020.923	-0.037
			Max. My	2	-29.155	-1.889	1031.989
			Max. Vy	20	-22.004	1019.972	1.280
			Max. Vx	2	-22.260	-1.889	1031.989
			Max. Torque	6			0.482

Sectio n No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L31	77 - 76.75	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-49.520	-3.398	2.342
			Max. Mx	8	-29.276	-1026.417	-0.040
			Max. My	2	-29.236	-1.892	1037.554
			Max. Vy	20	-22.009	1025.470	1.283
			Max. Vx	2	-22.269	-1.892	1037.554
			Max. Torque	6			0.482
L32	76.75 - 76.333	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-49.676	-3.411	2.348
			Max. Mx	8	-29.399	-1035.588	-0.046
			Max. My	2	-29.359	-1.897	1046.845
			Max. Vy	20	-22.031	1034.646	1.289
			Max. Vx	2	-22.296	-1.897	1046.845
			Max. Torque	6			0.482
L33	76.333 - 76.083	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-49.766	-3.419	2.353
			Max. Mx	8	-29.473	-1041.090	-0.049
			Max. My	2	-29.432	-1.900	1052.420
			Max. Vy	20	-22.042	1040.151	1.293
			Max. Vx	2	-22.310	-1.900	1052.420
			Max. Torque	6			0.482
L34	76.083 - 74.25	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-50.428	-3.482	2.394
			Max. Mx	8	-29.980	-1081.524	-0.072
			Max. My	2	-29.938	-1.923	1093.414
			Max. Vy	20	-22.154	1080.607	1.320
			Max. Vx	2	-22.446	-1.923	1093.414
			Max. Torque	6			0.482
L35	74.25 - 74	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-50.522	-3.493	2.402
			Max. Mx	8	-30.075	-1087.051	-0.075
			Max. My	2	-30.034	-1.926	1099.021
			Max. Vy	20	-22.141	1086.137	1.324
			Max. Vx	2	-22.435	-1.926	1099.021
			Max. Torque	6			0.482
L36	74 - 73.75	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-50.616	-3.502	2.409
			Max. Mx	8	-30.150	-1092.582	-0.078
			Max. My	2	-30.109	-1.929	1104.631
			Max. Vy	20	-22.153	1091.671	1.328
			Max. Vx	2	-22.451	-1.929	1104.631
			Max. Torque	6			0.482
L37	73.75 - 73.5	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-50.714	-3.512	2.416
			Max. Mx	8	-30.228	-1098.115	-0.081
			Max. My	2	-30.187	-1.932	1110.246
			Max. Vy	20	-22.166	1097.207	1.331
			Max. Vx	2	-22.467	-1.932	1110.246
			Max. Torque	6			0.482
L38	73.5 - 68.5	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-52.651	-3.701	2.558
			Max. Mx	8	-31.773	-1209.438	-0.144
			Max. My	2	-31.731	-1.993	1223.349
			Max. Vy	20	-22.427	1208.588	1.405
			Max. Vx	2	-22.787	-1.993	1223.349
			Max. Torque	6			0.482
L39	68.5 - 63.5	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-54.607	-3.893	2.702
			Max. Mx	8	-33.348	-1321.986	-0.206
			Max. My	2	-33.305	-2.056	1337.961
			Max. Vy	20	-22.668	1321.191	1.479
			Max. Vx	2	-23.082	-2.056	1337.961
			Max. Torque	6			0.482
L40	63.5 - 60.5	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-55.818	-4.009	2.789
			Max. Mx	8	-34.307	-1390.084	-0.243

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L41	60.5 - 60.25	Pole	Max. My	2	-34.264	-2.093	1407.425
			Max. Vy	20	-22.807	1389.321	1.524
			Max. Vx	2	-23.252	-2.093	1407.425
			Max. Torque	6			0.481
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-55.921	-4.020	2.797
			Max. Mx	8	-34.396	-1395.778	-0.246
			Max. My	2	-34.354	-2.097	1413.237
			Max. Vy	20	-22.807	1395.018	1.527
			Max. Vx	2	-23.254	-2.097	1413.237
L42	60.25 - 59.5	Pole	Max. Torque	6			0.481
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-56.230	-4.048	2.819
			Max. Mx	8	-34.632	-1412.876	-0.255
			Max. My	2	-34.590	-2.106	1430.692
			Max. Vy	20	-22.849	1412.124	1.538
			Max. Vx	2	-23.303	-2.106	1430.692
			Max. Torque	6			0.481
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-56.338	-4.059	2.827
L43	59.5 - 59.25	Pole	Max. Mx	8	-34.723	-1418.582	-0.258
			Max. My	2	-34.681	-2.109	1436.518
			Max. Vy	20	-22.853	1417.832	1.542
			Max. Vx	2	-23.310	-2.109	1436.518
			Max. Torque	6			0.481
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-58.431	-4.252	2.972
			Max. Mx	8	-36.404	-1533.304	-0.319
			Max. My	2	-36.365	-2.173	1553.687
			Max. Vy	20	-23.099	1532.604	1.617
L44	59.25 - 54.25	Pole	Max. Vx	2	-23.570	-2.173	1553.687
			Max. Torque	6			0.481
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-60.331	-4.093	2.909
			Max. Mx	8	-37.940	-1631.509	-0.517
			Max. My	2	-37.903	-1.978	1654.126
			Max. Vy	20	-23.325	1631.339	1.553
			Max. Vx	2	-23.812	-1.978	1654.126
			Max. Torque	6			0.481
			Max Tension	1	0.000	0.000	0.000
L45	54.25 - 45.802	Pole	Max. Compression	26	-63.962	-4.295	3.057
			Max. Mx	8	-40.971	-1753.542	-0.631
			Max. My	2	-40.937	-1.994	1778.843
			Max. Vy	20	-23.678	1753.421	1.683
			Max. Vx	2	-24.174	-1.994	1778.843
			Max. Torque	6			0.481
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-64.491	-4.330	3.074
			Max. Mx	8	-41.401	-1782.388	-0.657
			Max. My	2	-41.367	-1.998	1808.328
L46	45.802 - 44.802	Pole	Max. Vy	20	-23.732	1782.277	1.714
			Max. Vx	2	-24.235	-1.998	1808.328
			Max. Torque	6			0.481
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-64.605	-4.338	3.078
			Max. Mx	8	-41.506	-1788.311	-0.663
			Max. My	2	-41.473	-1.998	1814.384
			Max. Vy	20	-23.724	1788.203	1.720
			Max. Vx	2	-24.228	-1.998	1814.384
			Max. Torque	6			0.481
L47	44.802 - 43.583	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-64.681	-4.343	3.080
			Max. Mx	8	-41.570	-1792.270	-0.666
			Max. My	2	-41.537	-1.998	1820.452
			Max. Vy	20	-23.716	1792.085	1.726
			Max. Vx	2	-24.222	-1.998	1820.452
			Max. Torque	6			0.481
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-64.765	-4.351	3.084
			Max. Mx	8	-41.644	-1797.363	-0.670
L48	43.583 - 43.333	Pole	Max. My	2	-41.611	-1.998	1826.624
			Max. Vy	20	-23.708	1791.900	1.732
			Max. Vx	2	-24.216	-1.998	1826.624
			Max. Torque	6			0.481
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-64.849	-4.359	3.088
			Max. Mx	8	-41.711	-1802.455	-0.674
			Max. My	2	-41.677	-1.998	1832.796
			Max. Vy	20	-23.700	1791.715	1.738
			Max. Vx	2	-24.210	-1.998	1832.796
L49	43.333 - 43.166	Pole	Max. Torque	6			0.481
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-64.933	-4.367	3.092
			Max. Mx	8	-41.778	-1807.547	-0.678
			Max. My	2	-41.744	-1.998	1839.138
			Max. Vy	20	-23.692	1791.520	1.744
			Max. Vx	2	-24.204	-1.998	1839.138
			Max. Torque	6			0.481
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-65.017	-4.375	3.096

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L50	43.166 - 42.916	Pole	Max. My	2	-41.536	-1.999	1818.431
			Max. Vy	20	-23.731	1792.162	1.724
			Max. Vx	2	-24.236	-1.999	1818.431
			Max. Torque	6			0.481
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-64.799	-4.350	3.084
L51	42.916 - 39	Pole	Max. Mx	8	-41.667	-1798.197	-0.672
			Max. My	2	-41.633	-2.000	1824.491
			Max. Vy	20	-23.742	1798.092	1.730
			Max. Vx	2	-24.248	-2.000	1824.491
			Max. Torque	6			0.481
			Max Tension	1	0.000	0.000	0.000
L52	39 - 38.75	Pole	Max. Compression	26	-66.655	-4.468	3.126
			Max. Mx	8	-43.184	-1891.400	-0.756
			Max. My	2	-43.153	-2.012	1919.817
			Max. Vy	20	-23.928	1891.328	1.829
			Max. Vx	2	-24.456	-2.012	1919.817
			Max. Torque	6			0.481
L53	38.75 - 37.166	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-66.779	-4.477	3.128
			Max. Mx	8	-43.298	-1897.373	-0.761
			Max. My	2	-43.267	-2.013	1925.928
			Max. Vy	20	-23.920	1897.303	1.835
			Max. Vx	2	-24.449	-2.013	1925.928
L54	37.166 - 36.916	Pole	Max. Torque	6			0.481
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-67.565	-4.527	3.140
			Max. Mx	8	-43.934	-1935.277	-0.795
			Max. My	2	-43.903	-2.018	1964.717
			Max. Vy	20	-24.012	1935.220	1.875
L55	36.916 - 34	Pole	Max. Vx	2	-24.549	-2.018	1964.717
			Max. Torque	6			0.481
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-67.687	-4.536	3.142
			Max. Mx	8	-44.047	-1941.269	-0.801
			Max. My	2	-44.018	-2.019	1970.850
L56	34 - 33.75	Pole	Max. Vy	20	-23.999	1941.214	1.881
			Max. Vx	2	-24.537	-2.019	1970.850
			Max. Torque	6			0.481
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-69.113	-4.626	3.181
			Max. Mx	8	-45.201	-2011.341	-0.863
L57	33.75 - 29.75	Pole	Max. My	2	-45.173	-2.029	2042.588
			Max. Vy	20	-24.134	2011.308	1.955
			Max. Vx	2	-24.688	-2.029	2042.588
			Max. Torque	6			0.481
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-69.233	-4.634	3.186
L58	29.75 - 29.5	Pole	Max. Mx	8	-45.311	-2017.364	-0.868
			Max. My	2	-45.283	-2.030	2048.755
			Max. Vy	20	-24.120	2017.333	1.961
			Max. Vx	2	-24.676	-2.030	2048.755
			Max. Torque	6			0.480
			Max Tension	1	0.000	0.000	0.000
L59	29.5 - 29.25	Pole	Max. Compression	26	-71.110	-4.755	3.254
			Max. Mx	8	-46.850	-2114.025	-0.953
			Max. My	2	-46.824	-2.044	2147.776
			Max. Vy	20	-24.274	2114.023	2.062
			Max. Vx	2	-24.849	-2.044	2147.776
			Max. Torque	6			0.480
L60	29.25 - 29.0	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-71.228	-4.763	3.259
			Max. Mx	8	-46.956	-2120.085	-0.958
			Max. My	2	-46.931	-2.045	2153.986
			Max. Vy	20	-24.269	2120.085	2.069
			Max. Vx	2	-24.269	-2.045	2153.986



Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L59	29.5 - 24.5	Pole	Max. Vx	2	-24.844	-2.045	2153.986
			Max. Torque	6			0.480
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-73.586	-4.923	3.347
			Max. Mx	20	-48.917	2241.758	2.195
			Max. My	2	-48.896	-2.063	2278.668
			Max. Vy	20	-24.451	2241.758	2.195
L60	24.5 - 23	Pole	Max. Vx	2	-25.043	-2.063	2278.668
			Max. Torque	6			0.480
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-74.310	-4.991	3.375
			Max. Mx	20	-49.509	2278.424	2.233
			Max. My	2	-49.490	-2.069	2316.248
			Max. Vy	20	-24.512	2278.424	2.233
L61	23 - 22.75	Pole	Max. Vx	2	-25.104	-2.069	2316.248
			Max. Torque	6			0.480
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-74.440	-5.003	3.380
			Max. Mx	20	-49.631	2284.543	2.239
			Max. My	2	-49.612	-2.070	2322.519
			Max. Vy	20	-24.496	2284.543	2.239
L62	22.75 - 21.583	Pole	Max. Vx	2	-25.087	-2.070	2322.519
			Max. Torque	6			0.480
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-75.047	-5.056	3.401
			Max. Mx	20	-50.130	2313.136	2.269
			Max. My	2	-50.111	-2.074	2351.824
			Max. Vy	20	-24.558	2313.136	2.269
L63	21.583 - 21.333	Pole	Max. Vx	2	-25.148	-2.074	2351.824
			Max. Torque	6			0.480
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-75.173	-5.067	3.407
			Max. Mx	20	-50.242	2319.268	2.275
			Max. My	2	-50.224	-2.075	2358.108
			Max. Vy	20	-24.551	2319.268	2.275
L64	21.333 - 16.333	Pole	Max. Vx	2	-25.141	-2.075	2358.108
			Max. Torque	6			0.480
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-77.662	-5.272	3.485
			Max. Mx	20	-52.328	2442.352	2.402
			Max. My	2	-52.314	-2.095	2484.230
			Max. Vy	20	-24.734	2442.352	2.402
L65	16.333 - 12.917	Pole	Max. Vx	2	-25.322	-2.095	2484.230
			Max. Torque	6			0.480
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-79.406	-5.377	3.475
			Max. Mx	20	-53.772	2526.950	2.488
			Max. My	2	-53.760	-2.109	2570.868
			Max. Vy	20	-24.867	2526.950	2.488
L66	12.917 - 12.667	Pole	Max. Vx	2	-25.436	-2.109	2570.868
			Max. Torque	6			0.480
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-79.543	-5.385	3.474
			Max. Mx	20	-53.896	2533.159	2.495
			Max. My	2	-53.885	-2.110	2577.224
			Max. Vy	20	-24.859	2533.159	2.495
L67	12.667 - 12.5	Pole	Max. Vx	2	-25.426	-2.110	2577.224
			Max. Torque	6			0.480
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-79.635	-5.390	3.474
			Max. Mx	20	-53.973	2537.308	2.499
			Max. My	2	-53.963	-2.111	2581.471
			Max. Vy	20	-24.865	2537.308	2.499

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L68	12.5 - 12.25	Pole	Max. Vx	2	-25.431	-2.111	2581.471
			Max. Torque	6			0.480
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-79.759	-5.398	3.473
			Max. Mx	20	-54.076	2543.521	2.505
			Max. My	2	-54.065	-2.112	2587.830
			Max. Vy	20	-24.875	2543.521	2.505
L69	12.25 - 12	Pole	Max. Vx	2	-25.440	-2.112	2587.830
			Max. Torque	6			0.480
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-79.884	-5.405	3.472
			Max. Mx	20	-54.179	2549.736	2.512
			Max. My	2	-54.169	-2.113	2594.191
			Max. Vy	20	-24.884	2549.736	2.512
L70	12 - 11.75	Pole	Max. Vx	2	-25.447	-2.113	2594.191
			Max. Torque	6			0.480
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-80.003	-5.413	3.472
			Max. Mx	20	-54.277	2555.953	2.518
			Max. My	2	-54.267	-2.114	2600.554
			Max. Vy	20	-24.892	2555.953	2.518
L71	11.75 - 8.5	Pole	Max. Vx	2	-25.454	-2.114	2600.554
			Max. Torque	6			0.480
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-81.536	-5.502	3.467
			Max. Mx	20	-55.545	2637.146	2.600
			Max. My	2	-55.539	-2.128	2683.437
			Max. Vy	20	-25.136	2637.146	2.600
L72	8.5 - 8.25	Pole	Max. Vx	2	-25.574	-2.128	2683.437
			Max. Torque	6			0.480
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-81.674	-5.509	3.469
			Max. Mx	20	-55.675	2643.422	2.606
			Max. My	2	-55.669	-2.129	2689.827
			Max. Vy	20	-25.134	2643.422	2.606
L73	8.25 - 7	Pole	Max. Vx	2	-25.563	-2.129	2689.827
			Max. Torque	6			0.481
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-82.366	-5.542	3.479
			Max. Mx	20	-56.260	2674.889	2.638
			Max. My	2	-56.255	-2.135	2721.825
			Max. Vy	20	-25.269	2674.889	2.638
L74	7 - 6.75	Pole	Max. Vx	2	-25.650	-2.135	2721.825
			Max. Torque	6			0.484
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-82.493	-5.549	3.481
			Max. Mx	20	-56.376	2681.200	2.644
			Max. My	2	-56.372	-2.136	2728.235
			Max. Vy	20	-25.272	2681.200	2.644
L75	6.75 - 1.75	Pole	Max. Vx	2	-25.643	-2.136	2728.235
			Max. Torque	6			0.485
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-84.961	-5.672	3.512
			Max. Mx	20	-58.516	2808.490	2.771
			Max. My	2	-58.515	-2.158	2857.039
			Max. Vy	20	-25.700	2808.490	2.771
L76	1.75 - 0	Pole	Max. Vx	2	-25.893	-2.158	2857.039
			Max. Torque	6			0.493
			Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-85.806	-5.711	3.522
			Max. Mx	20	-59.269	2853.527	2.815
			Max. My	2	-59.269	-2.166	2902.398
			Max. Vy	20	-25.859	2853.527	2.815
			Max. Vx	2	-25.993	-2.166	2902.398
			Max. Torque	6			0.494

### Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Pole	Max. Vert	30	85.806	-6.208	-0.006
	Max. H <sub>x</sub>	21	44.465	25.819	0.018
	Max. H <sub>z</sub>	3	44.465	0.009	25.952
	Max. M <sub>x</sub>	2	2902.398	0.009	25.952
	Max. M <sub>z</sub>	8	2853.379	-25.790	-0.027
	Max. Torsion	6	0.494	-21.828	12.751
	Min. Vert	5	44.465	-12.395	21.655
	Min. H <sub>x</sub>	9	44.465	-25.790	-0.027
	Min. H <sub>z</sub>	15	44.465	0.011	-25.935
	Min. M <sub>x</sub>	14	-2897.799	0.011	-25.935
	Min. M <sub>z</sub>	20	-2853.527	25.819	0.018
	Min. Torsion	10	-0.196	-23.111	-13.493

### Tower Mast Reaction Summary

Load Combination	Vertical K	Shear <sub>x</sub> K	Shear <sub>z</sub> K	Overturning Moment, M <sub>x</sub> kip-ft	Overturning Moment, M <sub>z</sub> kip-ft	Torque kip-ft
Dead Only	49.405	0.000	-0.000	-1.056	-1.848	-0.000
1.2 Dead+1.0 Wind 0 deg - No Ice	59.286	-0.009	-25.952	-2902.398	-2.166	-0.064
0.9 Dead+1.0 Wind 0 deg - No Ice	44.465	-0.009	-25.952	-2842.801	-1.510	-0.055
1.2 Dead+1.0 Wind 30 deg - No Ice	59.286	12.395	-21.655	-2454.600	-1404.366	-0.272
0.9 Dead+1.0 Wind 30 deg - No Ice	44.465	12.395	-21.655	-2403.840	-1374.939	-0.267
1.2 Dead+1.0 Wind 60 deg - No Ice	59.286	21.828	-12.751	-1424.887	-2430.125	-0.494
0.9 Dead+1.0 Wind 60 deg - No Ice	44.465	21.828	-12.751	-1395.270	-2379.684	-0.493
1.2 Dead+1.0 Wind 90 deg - No Ice	59.286	25.790	0.027	1.555	-2853.379	-0.159
0.9 Dead+1.0 Wind 90 deg - No Ice	44.465	25.790	0.027	1.868	-2794.384	-0.163
1.2 Dead+1.0 Wind 120 deg - No Ice	59.286	23.111	13.493	1472.647	-2519.408	0.196
0.9 Dead+1.0 Wind 120 deg - No Ice	44.465	23.111	13.493	1443.056	-2467.670	0.189
1.2 Dead+1.0 Wind 150 deg - No Ice	59.286	14.665	25.530	2736.529	-1572.110	-0.158
0.9 Dead+1.0 Wind 150 deg - No Ice	44.465	14.665	25.530	2682.072	-1540.059	-0.168
1.2 Dead+1.0 Wind 180 deg - No Ice	59.286	-0.011	25.935	2897.799	0.412	-0.073
0.9 Dead+1.0 Wind 180 deg - No Ice	44.465	-0.011	25.935	2838.966	0.984	-0.082
1.2 Dead+1.0 Wind 210 deg - No Ice	59.286	-12.388	21.613	2448.237	1400.002	0.040
0.9 Dead+1.0 Wind 210 deg - No Ice	44.465	-12.388	21.613	2398.248	1371.837	0.035
1.2 Dead+1.0 Wind 240 deg - No Ice	59.286	-21.818	12.738	1421.380	2425.860	0.126
0.9 Dead+1.0 Wind 240 deg - No Ice	44.465	-21.818	12.738	1392.492	2376.666	0.125
1.2 Dead+1.0 Wind 270 deg - No Ice	59.286	-25.819	-0.018	-2.815	2853.527	0.124
0.9 Dead+1.0 Wind 270 deg - No Ice	44.465	-25.819	-0.018	-2.423	2795.698	0.127
1.2 Dead+1.0 Wind 300 deg - No Ice	59.286	-23.141	-13.482	-1473.668	2519.117	-0.336
0.9 Dead+1.0 Wind 300 deg - No Ice	44.465	-23.141	-13.482	-1443.368	2468.570	-0.329

Load Combination	Vertical K	Shear <sub>x</sub> K	Shear <sub>z</sub> K	Overturning Moment, M <sub>x</sub> kip-ft	Overturning Moment, M <sub>z</sub> kip-ft	Torque kip-ft
- No Ice						
1.2 Dead+1.0 Wind 330 deg	59.286	-14.655	-25.532	-2739.481	1566.001	0.056
- No Ice						
0.9 Dead+1.0 Wind 330 deg	44.465	-14.655	-25.532	-2684.279	1535.279	0.065
- No Ice						
1.2 Dead+1.0 Ice+1.0 Temp	85.806	0.000	-0.000	-3.522	-5.711	-0.000
1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp	85.806	-0.003	-6.143	-744.317	-5.811	-0.031
1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp	85.806	3.043	-5.310	-644.097	-372.458	-0.071
1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp	85.806	5.309	-3.096	-374.996	-640.719	-0.108
1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp	85.806	6.208	0.006	-2.976	-743.443	-0.035
1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp	85.806	5.446	3.176	373.096	-650.368	0.038
1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp	85.806	3.458	6.016	694.753	-406.617	-0.122
1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp	85.806	-0.001	6.142	737.026	-5.222	0.001
1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp	85.806	-3.048	5.313	637.364	361.597	0.021
1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp	85.806	-5.316	3.098	368.170	630.125	0.031
1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp	85.806	-6.215	-0.004	-3.925	732.983	0.028
1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp	85.806	-5.452	-3.174	-379.935	639.651	-0.068
1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp	85.806	-3.456	-6.016	-702.022	394.617	0.100
Dead+Wind 0 deg - Service	49.405	-0.002	-6.337	-702.235	-1.888	-0.011
Dead+Wind 30 deg - Service	49.405	3.026	-5.287	-593.744	-340.636	-0.063
Dead+Wind 60 deg - Service	49.405	5.329	-3.113	-344.981	-588.433	-0.120
Dead+Wind 90 deg - Service	49.405	6.296	0.007	-0.408	-690.684	-0.039
Dead+Wind 120 deg - Service	49.405	5.641	3.294	354.985	-610.047	0.047
Dead+Wind 150 deg - Service	49.405	3.577	6.227	659.960	-380.967	-0.044
Dead+Wind 180 deg - Service	49.405	-0.003	6.333	699.557	-1.272	-0.025
Dead+Wind 210 deg - Service	49.405	-3.025	5.277	590.638	336.843	0.005
Dead+Wind 240 deg - Service	49.405	-5.327	3.110	342.565	584.662	0.028
Dead+Wind 270 deg - Service	49.405	-6.303	-0.004	-1.461	687.979	0.031
Dead+Wind 300 deg - Service	49.405	-5.649	-3.291	-356.791	607.240	-0.082
Dead+Wind 330 deg - Service	49.405	-3.575	-6.228	-662.234	376.758	0.017

## Solution Summary

Load Comb.	Sum of Applied Forces			Sum of Reactions			% Error
	PX K	PY K	PZ K	PX K	PY K	PZ K	
1	0.000	-49.405	0.000	-0.000	49.405	0.000	0.000%
2	-0.009	-59.286	-25.952	0.009	59.286	25.952	0.000%
3	-0.009	-44.465	-25.952	0.009	44.465	25.952	0.000%
4	12.395	-59.286	-21.655	-12.395	59.286	21.655	0.000%
5	12.395	-44.465	-21.655	-12.395	44.465	21.655	0.000%
6	21.828	-59.286	-12.751	-21.828	59.286	12.751	0.000%
7	21.828	-44.465	-12.751	-21.828	44.465	12.751	0.000%
8	25.790	-59.286	0.027	-25.790	59.286	-0.027	0.000%
9	25.790	-44.465	0.027	-25.790	44.465	-0.027	0.000%
10	23.111	-59.286	13.493	-23.111	59.286	-13.493	0.000%

Load Comb.	Sum of Applied Forces			Sum of Reactions			% Error
	PX K	PY K	PZ K	PX K	PY K	PZ K	
11	23.111	-44.465	13.493	-23.111	44.465	-13.493	0.000%
12	14.665	-59.286	25.530	-14.665	59.286	-25.530	0.000%
13	14.665	-44.465	25.530	-14.665	44.465	-25.530	0.000%
14	-0.011	-59.286	25.935	0.011	59.286	-25.935	0.000%
15	-0.011	-44.465	25.935	0.011	44.465	-25.935	0.000%
16	-12.388	-59.286	21.613	12.388	59.286	-21.613	0.000%
17	-12.388	-44.465	21.613	12.388	44.465	-21.613	0.000%
18	-21.818	-59.286	12.738	21.818	59.286	-12.738	0.000%
19	-21.818	-44.465	12.738	21.818	44.465	-12.738	0.000%
20	-25.819	-59.286	-0.018	25.819	59.286	0.018	0.000%
21	-25.819	-44.465	-0.018	25.819	44.465	0.018	0.000%
22	-23.141	-59.286	-13.482	23.141	59.286	13.482	0.000%
23	-23.141	-44.465	-13.482	23.141	44.465	13.482	0.000%
24	-14.655	-59.286	-25.532	14.655	59.286	25.532	0.000%
25	-14.655	-44.465	-25.532	14.655	44.465	25.532	0.000%
26	0.000	-85.806	0.000	-0.000	85.806	0.000	0.000%
27	-0.003	-85.806	-6.143	0.003	85.806	6.143	0.000%
28	3.043	-85.806	-5.310	-3.043	85.806	5.310	0.000%
29	5.309	-85.806	-3.096	-5.309	85.806	3.096	0.000%
30	6.208	-85.806	0.006	-6.208	85.806	-0.006	0.000%
31	5.446	-85.806	3.176	-5.446	85.806	-3.176	0.000%
32	3.458	-85.806	6.016	-3.458	85.806	-6.016	0.000%
33	-0.001	-85.806	6.142	0.001	85.806	-6.142	0.000%
34	-3.048	-85.806	5.313	3.048	85.806	-5.313	0.000%
35	-5.316	-85.806	3.098	5.316	85.806	-3.098	0.000%
36	-6.215	-85.806	-0.004	6.215	85.806	0.004	0.000%
37	-5.452	-85.806	-3.174	5.452	85.806	3.174	0.000%
38	-3.456	-85.806	-6.016	3.456	85.806	6.016	0.000%
39	-0.002	-49.405	-6.337	0.002	49.405	6.337	0.000%
40	3.026	-49.405	-5.287	-3.026	49.405	5.287	0.000%
41	5.329	-49.405	-3.113	-5.329	49.405	3.113	0.000%
42	6.296	-49.405	0.007	-6.296	49.405	-0.007	0.000%
43	5.641	-49.405	3.294	-5.641	49.405	-3.294	0.000%
44	3.577	-49.405	6.227	-3.577	49.405	-6.227	0.000%
45	-0.003	-49.405	6.333	0.003	49.405	-6.333	0.000%
46	-3.025	-49.405	5.277	3.025	49.405	-5.277	0.000%
47	-5.327	-49.405	3.110	5.327	49.405	-3.110	0.000%
48	-6.303	-49.405	-0.004	6.303	49.405	0.004	0.000%
49	-5.649	-49.405	-3.291	5.649	49.405	3.291	0.000%
50	-3.575	-49.405	-6.228	3.575	49.405	6.228	0.000%

### Non-Linear Convergence Results

Load Combination	Converged?	Number of Cycles	Displacement Tolerance	Force Tolerance
1	Yes	4	0.00000001	0.00002254
2	Yes	6	0.00000001	0.00017113
3	Yes	5	0.00000001	0.00069652
4	Yes	8	0.00000001	0.00015108
5	Yes	7	0.00000001	0.00039731
6	Yes	8	0.00000001	0.00015298
7	Yes	7	0.00000001	0.00040284
8	Yes	6	0.00000001	0.00017661
9	Yes	5	0.00000001	0.00075242
10	Yes	8	0.00000001	0.00015771
11	Yes	7	0.00000001	0.00041280
12	Yes	8	0.00000001	0.00017222
13	Yes	7	0.00000001	0.00044494
14	Yes	6	0.00000001	0.00017573
15	Yes	5	0.00000001	0.00073492
16	Yes	8	0.00000001	0.00015118
17	Yes	7	0.00000001	0.00039795
18	Yes	8	0.00000001	0.00015107
19	Yes	7	0.00000001	0.00039774
20	Yes	6	0.00000001	0.00020463

21	Yes	5	0.00000001	0.00090872
22	Yes	8	0.00000001	0.00015701
23	Yes	7	0.00000001	0.00041086
24	Yes	8	0.00000001	0.00017118
25	Yes	7	0.00000001	0.00044193
26	Yes	5	0.00000001	0.00054429
27	Yes	7	0.00000001	0.00093400
28	Yes	8	0.00000001	0.00022188
29	Yes	8	0.00000001	0.00022235
30	Yes	7	0.00000001	0.00093233
31	Yes	8	0.00000001	0.00022114
32	Yes	8	0.00000001	0.00024098
33	Yes	7	0.00000001	0.00091733
34	Yes	8	0.00000001	0.00021252
35	Yes	8	0.00000001	0.00021235
36	Yes	7	0.00000001	0.00091022
37	Yes	8	0.00000001	0.00021967
38	Yes	8	0.00000001	0.00023744
39	Yes	5	0.00000001	0.00031657
40	Yes	6	0.00000001	0.00025600
41	Yes	6	0.00000001	0.00026381
42	Yes	5	0.00000001	0.00031729
43	Yes	6	0.00000001	0.00027287
44	Yes	6	0.00000001	0.00032328
45	Yes	5	0.00000001	0.00032118
46	Yes	6	0.00000001	0.00024961
47	Yes	6	0.00000001	0.00024927
48	Yes	5	0.00000001	0.00031435
49	Yes	6	0.00000001	0.00026800
50	Yes	6	0.00000001	0.00031520

### Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	144.25 - 139.25	31.990	44	2.375	0.002
L2	139.25 - 134.75	29.511	44	2.354	0.002
L3	134.75 - 134.25	27.317	44	2.300	0.002
L4	134.25 - 129.25	27.076	44	2.293	0.002
L5	129.25 - 124.25	24.752	44	2.141	0.001
L6	124.25 - 123.416	22.610	44	1.945	0.001
L7	123.416 - 123.166	22.274	44	1.909	0.001
L8	123.166 - 118.166	22.174	44	1.905	0.001
L9	118.166 - 113.166	20.225	44	1.816	0.001
L10	113.166 - 109.5	18.376	44	1.715	0.000
L11	109.5 - 109.25	17.091	44	1.633	0.000
L12	109.25 - 104.75	17.006	44	1.628	0.000
L13	104.75 - 104.5	15.514	44	1.536	0.000
L14	104.5 - 102.416	15.434	44	1.532	0.000
L15	102.416 - 102.166	14.773	44	1.499	0.000
L16	102.166 - 98.75	14.694	44	1.493	0.000
L17	98.75 - 98.5	13.653	44	1.418	0.000
L18	98.5 - 97.5	13.579	44	1.414	0.000
L19	97.5 - 97.25	13.284	44	1.399	0.000
L20	97.25 - 92	13.211	44	1.395	0.000
L21	95.552 - 90.552	12.720	44	1.366	0.000
L22	90.552 - 89.25	11.315	44	1.309	0.000
L23	89.25 - 89	10.961	44	1.287	0.000
L24	89 - 88.25	10.894	44	1.283	0.000
L25	88.25 - 88	10.693	44	1.272	0.000
L26	88 - 87.833	10.627	44	1.268	0.000
L27	87.833 - 87.583	10.582	44	1.265	0.000
L28	87.583 - 82.583	10.516	44	1.260	0.000

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L29	82.583 - 77.583	9.252	44	1.155	0.000
L30	77.583 - 77	8.100	44	1.047	0.000
L31	77 - 76.75	7.973	44	1.034	0.000
L32	76.75 - 76.333	7.919	44	1.030	0.000
L33	76.333 - 76.083	7.829	44	1.023	0.000
L34	76.083 - 74.25	7.776	44	1.019	0.000
L35	74.25 - 74	7.390	44	0.989	0.000
L36	74 - 73.75	7.338	44	0.985	0.000
L37	73.75 - 73.5	7.287	44	0.981	0.000
L38	73.5 - 68.5	7.236	44	0.977	0.000
L39	68.5 - 63.5	6.253	44	0.900	0.000
L40	63.5 - 60.5	5.351	44	0.823	0.000
L41	60.5 - 60.25	4.848	44	0.776	0.000
L42	60.25 - 59.5	4.808	44	0.772	0.000
L43	59.5 - 59.25	4.687	44	0.761	0.000
L44	59.25 - 54.25	4.648	44	0.757	0.000
L45	54.25 - 45.802	3.894	44	0.683	0.000
L46	50 - 44.802	3.313	44	0.621	0.000
L47	44.802 - 43.583	2.658	44	0.576	0.000
L48	43.583 - 43.333	2.513	44	0.558	0.000
L49	43.333 - 43.166	2.484	44	0.555	0.000
L50	43.166 - 42.916	2.465	44	0.552	0.000
L51	42.916 - 39	2.436	44	0.549	0.000
L52	39 - 38.75	2.007	44	0.497	0.000
L53	38.75 - 37.166	1.981	44	0.494	0.000
L54	37.166 - 36.916	1.820	44	0.474	0.000
L55	36.916 - 34	1.796	44	0.470	0.000
L56	34 - 33.75	1.520	44	0.432	0.000
L57	33.75 - 29.75	1.498	44	0.429	0.000
L58	29.75 - 29.5	1.161	44	0.376	0.000
L59	29.5 - 24.5	1.141	44	0.372	0.000
L60	24.5 - 23	0.785	44	0.307	0.000
L61	23 - 22.75	0.692	44	0.288	0.000
L62	22.75 - 21.583	0.677	44	0.285	0.000
L63	21.583 - 21.333	0.609	44	0.272	0.000
L64	21.333 - 16.333	0.595	44	0.269	0.000
L65	16.333 - 12.917	0.346	44	0.206	0.000
L66	12.917 - 12.667	0.213	44	0.164	0.000
L67	12.667 - 12.5	0.205	44	0.161	0.000
L68	12.5 - 12.25	0.199	44	0.159	0.000
L69	12.25 - 12	0.191	44	0.156	0.000
L70	12 - 11.75	0.183	44	0.153	0.000
L71	11.75 - 8.5	0.175	44	0.149	0.000
L72	8.5 - 8.25	0.090	44	0.100	0.000
L73	8.25 - 7	0.085	44	0.097	0.000
L74	7 - 6.75	0.061	44	0.084	0.000
L75	6.75 - 1.75	0.057	44	0.081	0.000
L76	1.75 - 0	0.004	44	0.021	0.000

### Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
144.000	QD8616-7 w/ Mount Pipe	44	31.865	2.375	0.003	6883
136.000	VHLP2-23	44	27.921	2.316	0.003	3723
132.000	AAHC w/ Mount Pipe	44	26.011	2.238	0.003	2029
120.000	FFVV-65B-R2 w/ Mount Pipe	44	20.929	1.852	0.001	2951
112.000	MT6407-77A w/ Mount Pipe	44	17.961	1.688	0.001	2671
100.000	AIR 6419 B41_TMO w/ Mount Pipe	44	14.028	1.443	0.001	2960
51.000	KS24019-L112A	44	3.445	0.633	0.000	4902

### Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	144.25 - 139.25	132.250	12	9.850	0.006
L2	139.25 - 134.75	122.055	12	9.761	0.006
L3	134.75 - 134.25	113.025	12	9.537	0.006
L4	134.25 - 129.25	112.035	12	9.509	0.006
L5	129.25 - 124.25	102.460	12	8.882	0.005
L6	124.25 - 123.416	93.627	12	8.072	0.003
L7	123.416 - 123.166	92.237	12	7.926	0.003
L8	123.166 - 118.166	91.825	12	7.909	0.003
L9	118.166 - 113.166	83.775	12	7.541	0.003
L10	113.166 - 109.5	76.132	12	7.119	0.002
L11	109.5 - 109.25	70.817	12	6.780	0.001
L12	109.25 - 104.75	70.464	12	6.760	0.001
L13	104.75 - 104.5	64.294	12	6.379	0.001
L14	104.5 - 102.416	63.962	12	6.363	0.001
L15	102.416 - 102.166	61.225	12	6.223	0.001
L16	102.166 - 98.75	60.901	12	6.201	0.001
L17	98.75 - 98.5	56.589	12	5.889	0.001
L18	98.5 - 97.5	56.282	12	5.874	0.001
L19	97.5 - 97.25	55.062	12	5.811	0.001
L20	97.25 - 92	54.759	12	5.793	0.001
L21	95.552 - 90.552	52.726	12	5.671	0.001
L22	90.552 - 89.25	46.905	12	5.438	0.001
L23	89.25 - 89	45.439	12	5.343	0.001
L24	89 - 88.25	45.161	12	5.328	0.001
L25	88.25 - 88	44.329	12	5.283	0.001
L26	88 - 87.833	44.054	12	5.264	0.001
L27	87.833 - 87.583	43.870	12	5.251	0.001
L28	87.583 - 82.583	43.597	12	5.230	0.001
L29	82.583 - 77.583	38.359	12	4.795	0.001
L30	77.583 - 77	33.582	12	4.346	0.001
L31	77 - 76.75	33.056	12	4.295	0.000
L32	76.75 - 76.333	32.832	12	4.278	0.000
L33	76.333 - 76.083	32.460	12	4.249	0.000
L34	76.083 - 74.25	32.238	12	4.232	0.000
L35	74.25 - 74	30.640	12	4.105	0.000
L36	74 - 73.75	30.426	12	4.089	0.000
L37	73.75 - 73.5	30.213	12	4.073	0.000
L38	73.5 - 68.5	30.000	12	4.058	0.000
L39	68.5 - 63.5	25.925	12	3.737	0.000
L40	63.5 - 60.5	22.184	12	3.416	0.000
L41	60.5 - 60.25	20.101	12	3.221	0.000
L42	60.25 - 59.5	19.933	12	3.205	0.000
L43	59.5 - 59.25	19.434	12	3.157	0.000
L44	59.25 - 54.25	19.269	12	3.143	0.000
L45	54.25 - 45.802	16.142	12	2.836	0.000
L46	50 - 44.802	13.735	12	2.578	0.000
L47	44.802 - 43.583	11.018	12	2.389	0.000
L48	43.583 - 43.333	10.418	12	2.316	0.000
L49	43.333 - 43.166	10.297	12	2.301	0.000
L50	43.166 - 42.916	10.217	12	2.291	0.000
L51	42.916 - 39	10.097	12	2.277	0.000
L52	39 - 38.75	8.319	12	2.061	0.000
L53	38.75 - 37.166	8.212	12	2.048	0.000
L54	37.166 - 36.916	7.546	12	1.965	0.000
L55	36.916 - 34	7.444	12	1.951	0.000
L56	34 - 33.75	6.301	12	1.791	0.000
L57	33.75 - 29.75	6.208	12	1.778	0.000
L58	29.75 - 29.5	4.811	12	1.558	0.000
L59	29.5 - 24.5	4.730	12	1.544	0.000
L60	24.5 - 23	3.255	12	1.274	0.000
L61	23 - 22.75	2.868	12	1.194	0.000



Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L62	22.75 - 21.583	2.805	12	1.183	0.000
L63	21.583 - 21.333	2.523	12	1.129	0.000
L64	21.333 - 16.333	2.464	12	1.116	0.000
L65	16.333 - 12.917	1.433	12	0.855	0.000
L66	12.917 - 12.667	0.884	12	0.680	0.000
L67	12.667 - 12.5	0.849	12	0.668	0.000
L68	12.5 - 12.25	0.825	12	0.661	0.000
L69	12.25 - 12	0.791	12	0.647	0.000
L70	12 - 11.75	0.758	12	0.633	0.000
L71	11.75 - 8.5	0.725	12	0.618	0.000
L72	8.5 - 8.25	0.373	12	0.415	0.000
L73	8.25 - 7	0.352	12	0.404	0.000
L74	7 - 6.75	0.253	12	0.349	0.000
L75	6.75 - 1.75	0.236	12	0.336	0.000
L76	1.75 - 0	0.016	12	0.085	0.000

### Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
144.000	QD8616-7 w/ Mount Pipe	12	131.739	9.847	0.011	1764
136.000	VHLP2-23	12	115.512	9.605	0.011	955
132.000	AAHC w/ Mount Pipe	12	107.649	9.281	0.010	520
120.000	FFVV-65B-R2 w/ Mount Pipe	12	86.683	7.690	0.005	742
112.000	MT6407-77A w/ Mount Pipe	12	74.414	7.007	0.004	666
100.000	AIR 6419 B41_TMO w/ Mount Pipe	12	58.141	5.991	0.003	731
51.000	KS24019-L112A	12	14.284	2.628	0.001	1186

### Compression Checks

### Pole Design Data

Section No.	Elevation ft	Size	L ft	L <sub>u</sub> ft	KI/r	A in <sup>2</sup>	P <sub>u</sub> K	φP <sub>n</sub> K	Ratio P <sub>u</sub> / φP <sub>n</sub>
L1	144.25 - 139.25 (1)	TP12.75x12.75x0.375	5.000	0.000	0.0	14.579	-4.902	603.569	0.008
L2	139.25 - 134.75 (2)	TP12.75x12.75x0.375	4.500	0.000	0.0	14.579	-5.218	603.569	0.009
L3	134.75 - 134.25 (3)	TP13.48x13.48x0.375	0.500	0.000	0.0	15.439	-5.256	639.173	0.008
L4	134.25 - 129.25 (4)	TP14.466x13.48x0.188	5.000	0.000	0.0	8.621	-8.269	504.301	0.016
L5	129.25 - 124.25 (5)	TP15.452x14.466x0.188	5.000	0.000	0.0	9.216	-8.618	539.118	0.016
L6	124.25 - 123.416 (6)	TP15.616x15.452x0.188	0.834	0.000	0.0	9.315	-8.682	544.926	0.016
L7	123.416 - 123.166 (7)	TP15.665x15.616x0.538	0.250	0.000	0.0	26.183	-8.721	1531.670	0.006
L8	123.166 - 118.166 (8)	TP16.651x15.665x0.513	5.000	0.000	0.0	26.633	-12.014	1558.020	0.008
L9	118.166 - 113.166 (9)	TP17.637x16.651x0.488	5.000	0.000	0.0	26.920	-12.608	1574.840	0.008
L10	113.166 - 109.5 (10)	TP18.36x17.637x0.475	3.666	0.000	0.0	27.355	-16.584	1600.250	0.010
L11	109.5 -	TP18.409x18.36x0.588	0.250	0.000	0.0	33.714	-16.641	1972.260	0.008

Section No.	Elevation ft	Size	L ft	L <sub>u</sub> ft	Kl/r	A in <sup>2</sup>	P <sub>u</sub> K	φP <sub>n</sub> K	Ratio P <sub>u</sub> / φP <sub>n</sub>
L12	109.25 (11) 109.25 - 104.75 (12)	TP19.296x18.409x0.563	4.500	0.000	0.0	33.931	-17.371	1984.990	0.009
L13	104.75 - 104.5 (13)	TP19.346x19.296x0.775	0.250	0.000	0.0	46.343	-17.437	2711.050	0.006
L14	104.5 - 102.416 (14)	TP19.756x19.346x0.763	2.084	0.000	0.0	46.635	-17.868	2728.130	0.007
L15	102.416 - 102.166 (15)	TP19.806x19.756x0.563	0.250	0.000	0.0	34.854	-17.927	2038.970	0.009
L16	102.166 - 98.75 (16)	TP20.479x19.806x0.55	3.416	0.000	0.0	35.295	-22.567	2064.730	0.011
L17	98.75 - 98.5 (17)	TP20.528x20.479x0.838	0.250	0.000	0.0	53.102	-22.649	3106.440	0.007
L18	98.5 - 97.5 (18)	TP20.726x20.528x0.838	1.000	0.000	0.0	53.633	-22.900	3137.550	0.007
L19	97.5 - 97.25 (19)	TP20.775x20.726x0.75	0.250	0.000	0.0	48.360	-22.971	2829.070	0.008
L20	97.25 - 92 (20)	TP21.81x20.775x0.738	5.250	0.000	0.0	48.379	-23.378	2830.160	0.008
L21	92 - 90.552 (21)	TP21.73x20.735x0.8	5.000	0.000	0.0	53.916	-25.413	3154.100	0.008
L22	90.552 - 89.25 (22)	TP21.989x21.73x0.775	1.302	0.000	0.0	52.941	-25.771	3097.030	0.008
L23	89.25 - 89 (23)	TP22.039x21.989x1	0.250	0.000	0.0	67.746	-25.865	3963.150	0.007
L24	89 - 88.25 (24)	TP22.189x22.039x0.975	0.750	0.000	0.0	66.600	-26.092	3896.090	0.007
L25	88.25 - 88 (25)	TP22.238x22.189x0.763	0.250	0.000	0.0	52.729	-26.165	3084.620	0.008
L26	88 - 87.833 (26)	TP22.272x22.238x0.763	0.167	0.000	0.0	52.810	-26.211	3089.390	0.008
L27	87.833 - 87.583 (27)	TP22.321x22.272x0.675	0.250	0.000	0.0	47.048	-26.271	2752.330	0.010
L28	87.583 - 82.583 (28)	TP23.317x22.321x0.65	5.000	0.000	0.0	47.442	-27.500	2775.340	0.010
L29	82.583 - 77.583 (29)	TP24.312x23.317x0.625	5.000	0.000	0.0	47.671	-28.770	2788.740	0.010
L30	77.583 - 77 (30)	TP24.428x24.312x0.625	0.583	0.000	0.0	47.904	-28.929	2802.410	0.010
L31	77 - 76.75 (31)	TP24.478x24.428x0.825	0.250	0.000	0.0	62.835	-29.011	3675.830	0.008
L32	76.75 - 76.333 (32)	TP24.561x24.478x0.825	0.417	0.000	0.0	63.055	-29.134	3688.730	0.008
L33	76.333 - 76.083 (33)	TP24.611x24.561x0.825	0.250	0.000	0.0	63.188	-29.208	3696.470	0.008
L34	76.083 - 74.25 (34)	TP24.976x24.611x0.8	1.833	0.000	0.0	62.277	-29.713	3643.220	0.008
L35	74.25 - 74 (35)	TP25.026x24.976x0.888	0.250	0.000	0.0	68.981	-29.811	4035.390	0.007
L36	74 - 73.75 (36)	TP25.076x25.026x0.888	0.250	0.000	0.0	69.123	-29.887	4043.710	0.007
L37	73.75 - 73.5 (37)	TP25.125x25.076x0.913	0.250	0.000	0.0	71.143	-29.965	4161.880	0.007
L38	73.5 - 68.5 (38)	TP26.121x25.125x0.875	5.000	0.000	0.0	71.130	-31.513	4161.110	0.008
L39	68.5 - 63.5 (39)	TP27.116x26.121x0.85	5.000	0.000	0.0	71.891	-33.094	4205.620	0.008
L40	63.5 - 60.5 (40)	TP27.714x27.116x0.825	3.000	0.000	0.0	71.430	-34.058	4178.630	0.008
L41	60.5 - 60.25 (41)	TP27.763x27.714x0.825	0.250	0.000	0.0	71.562	-34.150	4186.370	0.008
L42	60.25 - 59.5 (42)	TP27.913x27.763x0.825	0.750	0.000	0.0	71.959	-34.386	4209.570	0.008
L43	59.5 - 59.25 (43)	TP27.962x27.913x0.888	0.250	0.000	0.0	77.373	-34.479	4526.350	0.008
L44	59.25 - 54.25 (44)	TP28.958x27.962x0.85	5.000	0.000	0.0	76.932	-36.169	4500.500	0.008
L45	54.25 - 45.802 (45)	TP30.64x28.958x0.838	8.448	0.000	0.0	78.116	-37.715	4569.780	0.008

Section No.	Elevation ft	Size	L ft	L <sub>u</sub> ft	Kl/r	A in <sup>2</sup>	P <sub>u</sub> K	φP <sub>n</sub> K	Ratio P <sub>u</sub> φP <sub>n</sub>
L46	45.802 - 44.802 (46)	TP30.333x29.304x0.838	5.198	0.000	0.0	79.542	-40.751	4653.200	0.009
L47	44.802 - 43.583 (47)	TP30.574x30.333x0.838	1.219	0.000	0.0	80.192	-41.186	4691.260	0.009
L48	43.583 - 43.333 (48)	TP30.624x30.574x0.85	0.250	0.000	0.0	81.491	-41.294	4767.200	0.009
L49	43.333 - 43.166 (49)	TP30.657x30.624x0.85	0.167	0.000	0.0	81.581	-41.359	4772.490	0.009
L50	43.166 - 42.916 (50)	TP30.706x30.657x0.938	0.250	0.000	0.0	89.864	-41.456	5257.060	0.008
L51	42.916 - 39 (51)	TP31.481x30.706x0.913	3.916	0.000	0.0	89.819	-42.988	5254.390	0.008
L52	39 - 38.75 (52)	TP31.531x31.481x0.95	0.250	0.000	0.0	93.547	-43.105	5472.470	0.008
L53	38.75 - 37.166 (53)	TP31.844x31.531x0.938	1.584	0.000	0.0	93.300	-43.744	5458.030	0.008
L54	37.166 - 36.916 (54)	TP31.894x31.844x0.888	0.250	0.000	0.0	88.608	-43.862	5183.570	0.008
L55	36.916 - 34 (55)	TP32.471x31.894x0.888	2.916	0.000	0.0	88.608	-43.884	5183.570	0.008
L56	34 - 33.75 (56)	TP32.52x32.471x0.875	0.250	0.000	0.0	89.021	-45.048	5207.740	0.009
L57	33.75 - 29.75 (57)	TP33.312x32.52x0.863	4.000	0.000	0.0	87.922	-45.156	5143.420	0.009
L58	29.75 - 29.5 (58)	TP33.361x33.312x0.863	0.250	0.000	0.0	90.120	-46.712	5272.040	0.009
L59	29.5 - 24.5 (59)	TP34.351x33.361x0.85	5.000	0.000	0.0	88.984	-46.821	5205.560	0.009
L60	24.5 - 23 (60)	TP34.648x34.351x0.838	1.500	0.000	0.0	90.378	-48.821	5287.090	0.009
L61	23 - 22.75 (61)	TP34.697x34.648x0.963	0.250	0.000	0.0	104.40	-49.410	6107.370	0.008
L62	22.75 - 21.583 (62)	TP34.928x34.697x0.963	1.167	0.000	0.0	104.55	-49.529	6116.340	0.008
L63	21.583 - 21.333 (63)	TP34.978x34.928x0.85	0.250	0.000	0.0	93.272	-50.031	5456.440	0.009
L64	21.333 - 16.333 (64)	TP35.967x34.978x0.838	5.000	0.000	0.0	92.068	-50.147	5385.980	0.009
L65	16.333 - 12.917 (65)	TP36.644x35.967x0.825	3.416	0.000	0.0	93.356	-52.266	5461.320	0.010
L66	12.917 - 12.667 (66)	TP36.693x36.644x0.913	0.250	0.000	0.0	104.98	-53.717	6141.720	0.009
L67	12.667 - 12.5 (67)	TP36.726x36.693x0.913	0.167	0.000	0.0	105.13	-53.832	6150.220	0.009
L68	12.5 - 12.25 (68)	TP36.776x36.726x0.763	0.250	0.000	0.0	88.299	-53.911	5165.520	0.010
L69	12.25 - 12 (69)	TP36.825x36.776x0.763	0.250	0.000	0.0	88.421	-54.016	5172.630	0.010
L70	12 - 11.75 (70)	TP36.874x36.825x0.663	0.250	0.000	0.0	77.144	-54.122	4512.900	0.012
L71	11.75 - 8.5 (71)	TP37.518x36.874x0.65	3.250	0.000	0.0	75.818	-54.235	4435.340	0.012
L72	8.5 - 8.25 (72)	TP37.567x37.518x0.925	0.250	0.000	0.0	108.99	-55.519	6376.000	0.009
L73	8.25 - 7 (73)	TP37.815x37.567x0.913	1.250	0.000	0.0	107.70	-55.650	6300.490	0.009
L74	7 - 6.75 (74)	TP37.864x37.815x0.813	0.250	0.000	0.0	96.807	-56.238	5663.190	0.010
L75	6.75 - 1.75 (75)	TP38.854x37.864x0.788	5.000	0.000	0.0	94.017	-56.357	5499.990	0.010
L76	1.75 - 0 (76)	TP39.2x38.854x0.788	1.750	0.000	0.0	96.526	-58.539	5646.780	0.010

### Pole Bending Design Data

Section No.	Elevation ft	Size	M <sub>ux</sub> kip-ft	φM <sub>nx</sub> kip-ft	Ratio M <sub>ux</sub> φM <sub>nx</sub>	M <sub>uy</sub> kip-ft	φM <sub>ny</sub> kip-ft	Ratio M <sub>uy</sub> φM <sub>ny</sub>
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Section No.	Elevation ft	Size	$M_{ux}$	$\phi M_{nx}$	Ratio	$M_{uy}$	$\phi M_{ny}$	Ratio
			kip-ft	kip-ft	$\frac{M_{ux}}{\phi M_{nx}}$	kip-ft	kip-ft	$\frac{M_{uy}}{\phi M_{ny}}$
L1	144.25 - 139.25 (1)	TP12.75x12.75x0.375	33.776	198.187	0.170	0.000	198.187	0.000
L2	139.25 - 134.75 (2)	TP12.75x12.75x0.375	64.472	198.187	0.325	0.000	198.187	0.000
L3	134.75 - 134.25 (3)	TP13.48x13.48x0.375	68.102	222.251	0.306	0.000	222.251	0.000
L4	134.25 - 129.25 (4)	TP14.466x13.48x0.188	115.068	183.885	0.626	0.000	183.885	0.000
L5	129.25 - 124.25 (5)	TP15.452x14.466x0.188	169.143	210.328	0.804	0.000	210.328	0.000
L6	124.25 - 123.416 (6)	TP15.616x15.452x0.188	178.262	214.735	0.830	0.000	214.735	0.000
L7	123.416 - 123.166 (7)	TP15.665x15.616x0.538	181.004	578.929	0.313	0.000	578.929	0.000
L8	123.166 - 118.166 (8)	TP16.651x15.665x0.513	240.864	630.532	0.382	0.000	630.532	0.000
L9	118.166 - 113.166 (9)	TP17.637x16.651x0.488	309.873	679.449	0.456	0.000	679.449	0.000
L10	113.166 - 109.5 (10)	TP18.36x17.637x0.475	375.776	721.324	0.521	0.000	721.324	0.000
L11	109.5 - 109.25 (11)	TP18.409x18.36x0.588	380.363	880.375	0.432	0.000	880.375	0.000
L12	109.25 - 104.75 (12)	TP19.296x18.409x0.563	463.831	934.067	0.497	0.000	934.067	0.000
L13	104.75 - 104.5 (13)	TP19.346x19.296x0.775	468.518	1250.400	0.375	0.000	1250.400	0.000
L14	104.5 - 102.416 (14)	TP19.756x19.346x0.763	507.822	1288.933	0.394	0.000	1288.933	0.000
L15	102.416 - 102.166 (15)	TP19.806x19.756x0.563	512.565	986.325	0.520	0.000	986.325	0.000
L16	102.166 - 98.75 (16)	TP20.479x19.806x0.55	581.701	1036.033	0.561	0.000	1036.033	0.000
L17	98.75 - 98.5 (17)	TP20.528x20.479x0.838	587.210	1518.050	0.387	0.000	1518.050	0.000
L18	98.5 - 97.5 (18)	TP20.726x20.528x0.838	609.304	1549.233	0.393	0.000	1549.233	0.000
L19	97.5 - 97.25 (19)	TP20.775x20.726x0.75	614.842	1412.833	0.435	0.000	1412.833	0.000
L20	97.25 - 92 (20)	TP21.81x20.775x0.738	652.602	1439.625	0.453	0.000	1439.625	0.000
L21	92 - 90.552 (21)	TP21.73x20.735x0.8	765.666	1645.142	0.465	0.000	1645.142	0.000
L22	90.552 - 89.25 (22)	TP21.989x21.73x0.775	795.523	1639.983	0.485	0.000	1639.983	0.000
L23	89.25 - 89 (23)	TP22.039x21.989x1	801.273	2059.442	0.389	0.000	2059.442	0.000
L24	89 - 88.25 (24)	TP22.189x22.039x0.975	818.560	2044.433	0.400	0.000	2044.433	0.000
L25	88.25 - 88 (25)	TP22.238x22.189x0.763	824.335	1655.175	0.498	0.000	1655.175	0.000
L26	88 - 87.833 (26)	TP22.272x22.238x0.763	828.195	1660.392	0.499	0.000	1660.392	0.000
L27	87.833 - 87.583 (27)	TP22.321x22.272x0.675	833.975	1494.833	0.558	0.000	1494.833	0.000
L28	87.583 - 82.583 (28)	TP23.317x22.321x0.65	950.642	1582.242	0.601	0.000	1582.242	0.000
L29	82.583 - 77.583 (29)	TP24.312x23.317x0.625	1069.208	1665.175	0.642	0.000	1665.175	0.000
L30	77.583 - 77 (30)	TP24.428x24.312x0.625	1083.150	1681.742	0.644	0.000	1681.742	0.000
L31	77 - 76.75 (31)	TP24.478x24.428x0.825	1089.142	2173.708	0.501	0.000	2173.708	0.000
L32	76.75 - 76.333 (32)	TP24.561x24.478x0.825	1099.142	2189.250	0.502	0.000	2189.250	0.000
L33	76.333 - 76.083 (33)	TP24.611x24.561x0.825	1105.142	2198.600	0.503	0.000	2198.600	0.000
L34	76.083 - 74.25 (34)	TP24.976x24.611x0.8	1149.317	2205.850	0.521	0.000	2205.850	0.000
L35	74.25 - 74	TP25.026x24.976x0.888	1155.358	2430.833	0.475	0.000	2430.833	0.000

Section No.	Elevation ft	Size	$M_{ux}$ kip-ft	$\phi M_{nx}$ kip-ft	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	$M_{uy}$ kip-ft	$\phi M_{ny}$ kip-ft	Ratio $\frac{M_{uy}}{\phi M_{ny}}$
L36	(35) 74 - 73.75	TP25.076x25.026x0.888	1161.417	2441.050	0.476	0.000	2441.050	0.000
L37	(36) 73.75 - 73.5	TP25.125x25.076x0.913	1167.475	2512.542	0.465	0.000	2512.542	0.000
L38	(37) 73.5 - 68.5	TP26.121x25.125x0.875	1289.808	2626.917	0.491	0.000	2626.917	0.000
L39	(38) 68.5 - 63.5	TP27.116x26.121x0.85	1414.333	2768.483	0.511	0.000	2768.483	0.000
L40	(39) 63.5 - 60.5	TP27.714x27.116x0.825	1490.092	2820.483	0.528	0.000	2820.483	0.000
L41	(40) 60.5 - 60.25	TP27.763x27.714x0.825	1496.442	2831.083	0.529	0.000	2831.083	0.000
L42	(41) 60.25 - 59.5	TP27.913x27.763x0.825	1515.517	2863.033	0.529	0.000	2863.033	0.000
L43	(42) 59.5 - 59.25	TP27.962x27.913x0.888	1521.892	3070.117	0.496	0.000	3070.117	0.000
L44	(43) 59.25 - 54.25	TP28.958x27.962x0.85	1650.450	3176.850	0.520	0.000	3176.850	0.000
L45	(44) 54.25 - 45.802	TP30.64x28.958x0.838	1761.483	3328.592	0.529	0.000	3328.592	0.000
L46	(45) 45.802 - 44.802	TP30.333x29.304x0.838	1899.992	3452.967	0.550	0.000	3452.967	0.000
L47	(46) 44.802 - 43.583	TP30.574x30.333x0.838	1932.842	3510.467	0.551	0.000	3510.467	0.000
L48	(47) 43.583 - 43.333	TP30.624x30.574x0.85	1939.592	3570.392	0.543	0.000	3570.392	0.000
L49	(48) 43.333 - 43.166	TP30.657x30.624x0.85	1944.100	3578.433	0.543	0.000	3578.433	0.000
L50	(49) 43.166 - 42.916	TP30.706x30.657x0.938	1950.850	3925.383	0.497	0.000	3925.383	0.000
L51	(50) 42.916 - 39	TP31.481x30.706x0.913	2057.108	4035.258	0.510	0.000	4035.258	0.000
L52	(51) 39 - 38.75	TP31.531x31.481x0.95	2063.917	4199.433	0.491	0.000	4199.433	0.000
L53	(52) 38.75 - 37.166	TP31.844x31.531x0.938	2107.175	4236.008	0.497	0.000	4236.008	0.000
L54	(53) 37.166 - 36.916	TP31.894x31.844x0.888	2114.008	4042.658	0.523	0.000	4042.658	0.000
L55	(54) 36.916 - 34	TP32.471x31.894x0.888	2114.008	4042.658	0.523	0.000	4042.658	0.000
L56	(55) 34 - 33.75	TP32.52x32.471x0.875	2194.033	4142.492	0.530	0.000	4142.492	0.000
L57	(56) 33.75 - 29.75	TP33.312x32.52x0.863	2200.917	4101.142	0.537	0.000	4101.142	0.000
L58	(57) 29.75 - 29.5	TP33.361x33.312x0.863	2311.400	4311.608	0.536	0.000	4311.608	0.000
L59	(58) 29.5 - 24.5	TP34.351x33.361x0.85	2318.333	4267.175	0.543	0.000	4267.175	0.000
L60	(59) 24.5 - 23	TP34.648x34.351x0.838	2457.425	4472.633	0.549	0.000	4472.633	0.000
L61	(60) 23 - 22.75	TP34.697x34.648x0.963	2499.350	5174.958	0.483	0.000	5174.958	0.000
L62	(61) 22.75 - 21.583	TP34.928x34.697x0.963	2506.342	5190.383	0.483	0.000	5190.383	0.000
L63	(62) 21.583 - 21.333	TP34.978x34.928x0.85	2539.042	4693.900	0.541	0.000	4693.900	0.000
L64	(63) 21.333 - 16.333	TP35.967x34.978x0.838	2546.050	4643.575	0.548	0.000	4643.575	0.000
L65	(64) 16.333 - 12.917	TP36.644x35.967x0.825	2686.733	4851.733	0.554	0.000	4851.733	0.000
L66	(65) 12.917 - 12.667	TP36.693x36.644x0.913	2783.367	5536.417	0.503	0.000	5536.417	0.000
L67	(66) 12.667 - 12.5	TP36.726x36.693x0.913	2790.458	5551.958	0.503	0.000	5551.958	0.000
L68	(67) 12.5 - 12.25	TP36.776x36.726x0.763	2795.192	4706.633	0.594	0.000	4706.633	0.000
L69	(68) 12.25 - 12	TP36.825x36.776x0.763	2802.283	4719.725	0.594	0.000	4719.725	0.000
L70	(69) 12 - 11.75	TP36.874x36.825x0.663	2809.383	4146.442	0.678	0.000	4146.442	0.000

Section No.	Elevation	Size	$M_{ux}$	$\phi M_{nx}$	Ratio	$M_{uy}$	$\phi M_{ny}$	Ratio
	ft		kip-ft	kip-ft	$\frac{M_{ux}}{\phi M_{nx}}$	kip-ft	kip-ft	$\frac{M_{uy}}{\phi M_{ny}}$
L71	(70) 11.75 - 8.5	TP37.518x36.874x0.65	2816.483	4083.675	0.690	0.000	4083.675	0.000
L72	(71) 8.5 - 8.25 (72)	TP37.567x37.518x0.925	2909.142	5887.708	0.494	0.000	5887.708	0.000
L73	8.25 - 7 (73)	TP37.815x37.567x0.913	2916.300	5830.017	0.500	0.000	5830.017	0.000
L74	7 - 6.75 (74)	TP37.864x37.815x0.813	2952.200	5305.175	0.556	0.000	5305.175	0.000
L75	6.75 - 1.75 (75)	TP38.854x37.864x0.788	2959.392	5166.292	0.573	0.000	5166.292	0.000
L76	1.75 - 0 (76)	TP39.2x38.854x0.788	3104.592	5448.700	0.570	0.000	5448.700	0.000

### Pole Shear Design Data

Section No.	Elevation	Size	Actual	$\phi V_n$	Ratio	Actual	$\phi T_n$	Ratio
	ft		$V_u$	K	$\frac{V_u}{\phi V_n}$	$T_u$	kip-ft	$\frac{T_u}{\phi T_n}$
L1	144.25 - 139.25 (1)	TP12.75x12.75x0.375	6.564	181.071	0.036	0.022	197.003	0.000
L2	139.25 - 134.75 (2)	TP12.75x12.75x0.375	7.255	181.071	0.040	0.301	197.003	0.002
L3	134.75 - 134.25 (3)	TP13.48x13.48x0.375	7.272	191.752	0.038	0.294	220.931	0.001
L4	134.25 - 129.25 (4)	TP14.466x13.48x0.188	10.728	151.290	0.071	0.456	190.015	0.002
L5	129.25 - 124.25 (5)	TP15.452x14.466x0.188	10.925	161.736	0.068	0.455	217.158	0.002
L6	124.25 - 123.416 (6)	TP15.616x15.452x0.188	10.969	163.478	0.067	0.457	221.863	0.002
L7	123.416 - 123.166 (7)	TP15.665x15.616x0.538	10.980	459.502	0.024	0.458	611.454	0.001
L8	123.166 - 118.166 (8)	TP16.651x15.665x0.513	13.610	467.405	0.029	0.550	663.528	0.001
L9	118.166 - 113.166 (9)	TP17.637x16.651x0.488	14.014	472.451	0.030	0.568	712.699	0.001
L10	113.166 - 109.5 (10)	TP18.36x17.637x0.475	18.356	480.074	0.038	0.193	755.248	0.000
L11	109.5 - 109.25 (11)	TP18.409x18.36x0.588	18.365	591.677	0.031	0.193	927.533	0.000
L12	109.25 - 104.75 (12)	TP19.296x18.409x0.563	18.753	595.497	0.031	0.189	981.300	0.000
L13	104.75 - 104.5 (13)	TP19.346x19.296x0.775	18.766	813.314	0.023	0.187	1328.558	0.000
L14	104.5 - 102.416 (14)	TP19.756x19.346x0.763	18.970	818.440	0.023	0.185	1367.417	0.000
L15	102.416 - 102.166 (15)	TP19.806x19.756x0.563	18.985	611.691	0.031	0.183	1035.400	0.000
L16	102.166 - 98.75 (16)	TP20.479x19.806x0.55	22.044	619.420	0.036	0.180	1085.858	0.000
L17	98.75 - 98.5 (17)	TP20.528x20.479x0.838	22.052	931.933	0.024	0.178	1614.175	0.000
L18	98.5 - 97.5 (18)	TP20.726x20.528x0.838	22.154	941.264	0.024	0.178	1646.667	0.000
L19	97.5 - 97.25 (19)	TP20.775x20.726x0.75	22.169	848.721	0.026	0.178	1494.983	0.000
L20	97.25 - 92 (20)	TP21.81x20.775x0.738	22.336	849.049	0.026	0.180	1521.492	0.000
L21	92 - 90.552 (21)	TP21.73x20.735x0.8	22.898	946.229	0.024	0.186	1742.083	0.000
L22	90.552 - 89.25 (22)	TP21.989x21.73x0.775	23.010	929.108	0.025	0.186	1733.792	0.000
L23	89.25 - 89 (23)	TP22.039x21.989x1	23.018	1188.950	0.019	0.186	2200.350	0.000
L24	89 - 88.25 (24)	TP22.189x22.039x0.975	23.096	1168.830	0.020	0.186	2181.042	0.000
L25	88.25 - 88 (25)	TP22.238x22.189x0.763	23.113	925.385	0.025	0.186	1748.125	0.000

Section No.	Elevation ft	Size	Actual $V_u$ K	$\phi V_n$ K	Ratio $\frac{V_u}{\phi V_n}$	Actual $T_u$ kip-ft	$\phi T_n$ kip-ft	Ratio $\frac{T_u}{\phi T_n}$
L26	88 - 87.833 (26)	TP22.272x22.238x0.763	23.128	926.817	0.025	0.185	1753.542	0.000
L27	87.833 - 87.583 (27)	TP22.321x22.272x0.675	23.148	825.698	0.028	0.185	1572.192	0.000
L28	87.583 - 82.583 (28)	TP23.317x22.321x0.65	23.548	832.602	0.028	0.187	1660.075	0.000
L29	82.583 - 77.583 (29)	TP24.312x23.317x0.625	23.921	836.622	0.029	0.193	1743.192	0.000
L30	77.583 - 77 (30)	TP24.428x24.312x0.625	23.954	840.722	0.028	0.194	1760.317	0.000
L31	77 - 76.75 (31)	TP24.478x24.428x0.825	23.968	1102.750	0.022	0.194	2294.383	0.000
L32	76.75 - 76.333 (32)	TP24.561x24.478x0.825	24.007	1106.620	0.022	0.195	2310.525	0.000
L33	76.333 - 76.083 (33)	TP24.611x24.561x0.825	24.026	1108.940	0.022	0.195	2320.225	0.000
L34	76.083 - 74.25 (34)	TP24.976x24.611x0.8	24.211	1092.970	0.022	0.201	2324.292	0.000
L35	74.25 - 74 (35)	TP25.026x24.976x0.888	24.206	1210.620	0.020	0.202	2570.467	0.000
L36	74 - 73.75 (36)	TP25.076x25.026x0.888	24.228	1213.110	0.020	0.204	2581.075	0.000
L37	73.75 - 73.5 (37)	TP25.125x25.076x0.913	24.250	1248.560	0.019	0.205	2659.225	0.000
L38	73.5 - 68.5 (38)	TP26.121x25.125x0.875	24.707	1248.330	0.020	0.232	2772.167	0.000
L39	68.5 - 63.5 (39)	TP27.116x26.121x0.85	25.141	1261.680	0.020	0.260	2915.075	0.000
L40	63.5 - 60.5 (40)	TP27.714x27.116x0.825	25.402	1253.590	0.020	0.276	2964.992	0.000
L41	60.5 - 60.25 (41)	TP27.763x27.714x0.825	25.410	1255.910	0.020	0.278	2975.975	0.000
L42	60.25 - 59.5 (42)	TP27.913x27.763x0.825	25.485	1262.870	0.020	0.282	3009.058	0.000
L43	59.5 - 59.25 (43)	TP27.962x27.913x0.888	25.499	1357.910	0.019	0.283	3233.983	0.000
L44	59.25 - 54.25 (44)	TP28.958x27.962x0.85	25.953	1350.150	0.019	0.313	3338.192	0.000
L45	54.25 - 45.802 (45)	TP30.64x28.958x0.838	26.365	1370.930	0.019	0.333	3493.133	0.000
L46	45.802 - 44.802 (46)	TP30.333x29.304x0.838	26.937	1395.960	0.019	0.195	3621.825	0.000
L47	44.802 - 43.583 (47)	TP30.574x30.333x0.838	27.009	1407.380	0.019	0.195	3681.317	0.000
L48	43.583 - 43.333 (48)	TP30.624x30.574x0.85	27.002	1430.160	0.019	0.195	3745.558	0.000
L49	43.333 - 43.166 (49)	TP30.657x30.624x0.85	27.010	1431.750	0.019	0.195	3753.883	0.000
L50	43.166 - 42.916 (50)	TP30.706x30.657x0.938	27.026	1577.120	0.017	0.195	4129.758	0.000
L51	42.916 - 39 (51)	TP31.481x30.706x0.913	27.273	1576.320	0.017	0.195	4238.592	0.000
L52	39 - 38.75 (52)	TP31.531x31.481x0.95	27.266	1641.740	0.017	0.195	4416.233	0.000
L53	38.75 - 37.166 (53)	TP31.844x31.531x0.938	27.384	1637.410	0.017	0.195	4451.542	0.000
L54	37.166 - 36.916 (54)	TP31.894x31.844x0.888	27.372	1555.070	0.018	0.195	4241.300	0.000
L55	36.916 - 34 (55)	TP32.471x31.894x0.888	27.474	1569.540	0.018	0.195	4241.300	0.000
L56	34 - 33.75 (56)	TP32.52x32.471x0.875	27.538	1564.770	0.018	0.195	4342.108	0.000
L57	33.75 - 29.75 (57)	TP33.312x32.52x0.863	27.599	1552.670	0.018	0.195	4296.883	0.000
L58	29.75 - 29.5 (58)	TP33.361x33.312x0.863	27.726	1584.020	0.018	0.195	4514.475	0.000
L59	29.5 - 24.5 (59)	TP34.351x33.361x0.85	27.782	1571.170	0.018	0.195	4466.058	0.000
L60	24.5 - 23 (60)	TP34.648x34.351x0.838	28.012	1600.180	0.018	0.195	4675.825	0.000

Section No.	Elevation ft	Size	Actual $V_u$ K	$\phi V_n$ K	Ratio $\frac{V_u}{\phi V_n}$	Actual $T_u$ kip-ft	$\phi T_n$ kip-ft	Ratio $\frac{T_u}{\phi T_n}$
L61	23 - 22.75 (61)	TP34.697x34.648x0.963	27.994	1834.900	0.015	0.195	5428.967	0.000
L62	22.75 - 21.583 (62)	TP34.928x34.697x0.963	28.065	1847.470	0.015	0.195	5444.933	0.000
L63	21.583 - 21.333 (63)	TP34.978x34.928x0.85	28.057	1639.310	0.017	0.195	4906.925	0.000
L64	21.333 - 16.333 (64)	TP35.967x34.978x0.838	28.109	1625.160	0.017	0.195	4852.367	0.000
L65	16.333 - 12.917 (65)	TP36.644x35.967x0.825	28.293	1648.900	0.017	0.195	5064.658	0.000
L66	12.917 - 12.667 (66)	TP36.693x36.644x0.913	28.369	1845.070	0.015	0.195	5791.033	0.000
L67	12.667 - 12.5 (67)	TP36.726x36.693x0.913	28.375	1846.770	0.015	0.195	5807.083	0.000
L68	12.5 - 12.25 (68)	TP36.776x36.726x0.763	28.386	1551.790	0.018	0.195	4902.275	0.000
L69	12.25 - 12 (69)	TP36.825x36.776x0.763	28.395	1553.920	0.018	0.195	4915.775	0.000
L70	12 - 11.75 (70)	TP36.874x36.825x0.663	28.402	1355.720	0.021	0.195	4306.608	0.000
L71	11.75 - 8.5 (71)	TP37.518x36.874x0.65	28.505	1338.480	0.021	0.195	4239.850	0.000
L72	8.5 - 8.25 (72)	TP37.567x37.518x0.925	28.659	1915.390	0.015	0.170	6156.925	0.000
L73	8.25 - 7 (73)	TP37.815x37.567x0.913	28.807	1902.900	0.015	0.168	6094.317	0.000
L74	7 - 6.75 (74)	TP37.864x37.815x0.813	28.810	1701.230	0.017	0.160	5529.792	0.000
L75	6.75 - 1.75 (75)	TP38.854x37.864x0.788	28.922	1658.800	0.017	0.159	5381.242	0.000
L76	1.75 - 0 (76)	TP39.2x38.854x0.788	29.486	1709.450	0.017	0.158	5672.325	0.000

### Pole Interaction Design Data

Section No.	Elevation ft	Ratio $P_u$	Ratio $M_{ux}$	Ratio $M_{uy}$	Ratio $V_u$	Ratio $T_u$	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
		$\phi P_n$	$\phi M_{nx}$	$\phi M_{ny}$	$\phi V_n$	$\phi T_n$			
L1	144.25 - 139.25 (1)	0.008	0.170	0.000	0.036	0.000	0.180	1.050	4.8.2
L2	139.25 - 134.75 (2)	0.009	0.325	0.000	0.040	0.002	0.336	1.050	4.8.2
L3	134.75 - 134.25 (3)	0.008	0.306	0.000	0.038	0.001	0.316	1.050	4.8.2
L4	134.25 - 129.25 (4)	0.016	0.626	0.000	0.071	0.002	0.648	1.050	4.8.2
L5	129.25 - 124.25 (5)	0.016	0.804	0.000	0.068	0.002	0.825	1.050	4.8.2
L6	124.25 - 123.416 (6)	0.016	0.830	0.000	0.067	0.002	0.851	1.050	4.8.2
L7	123.416 - 123.166 (7)	0.006	0.313	0.000	0.024	0.001	0.319	1.050	4.8.2
L8	123.166 - 118.166 (8)	0.008	0.382	0.000	0.029	0.001	0.391	1.050	4.8.2
L9	118.166 - 113.166 (9)	0.008	0.456	0.000	0.030	0.001	0.465	1.050	4.8.2
L10	113.166 - 109.5 (10)	0.010	0.521	0.000	0.038	0.000	0.533	1.050	4.8.2
L11	109.5 - 109.25 (11)	0.008	0.432	0.000	0.031	0.000	0.441	1.050	4.8.2
L12	109.25 - 104.75 (12)	0.009	0.497	0.000	0.031	0.000	0.506	1.050	4.8.2
L13	104.75 - 104.5 (13)	0.006	0.375	0.000	0.023	0.000	0.382	1.050	4.8.2
L14	104.5 - 102.416 (14)	0.007	0.394	0.000	0.023	0.000	0.401	1.050	4.8.2
L15	102.416 -	0.009	0.520	0.000	0.031	0.000	0.529	1.050	4.8.2



Section No.	Elevation ft	Ratio	Ratio	Ratio	Ratio	Ratio	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
		$P_u$ $\phi P_n$	$M_{ux}$ $\phi M_{nx}$	$M_{uy}$ $\phi M_{ny}$	$V_u$ $\phi V_n$	$T_u$ $\phi T_n$			
L16	102.166 (15) 102.166 - 98.75 (16)	0.011	0.561	0.000	0.036	0.000	0.574	1.050	4.8.2
L17	98.75 - 98.5 (17)	0.007	0.387	0.000	0.024	0.000	0.395	1.050	4.8.2
L18	98.5 - 97.5 (18)	0.007	0.393	0.000	0.024	0.000	0.401	1.050	4.8.2
L19	97.5 - 97.25 (19)	0.008	0.435	0.000	0.026	0.000	0.444	1.050	4.8.2
L20	97.25 - 92 (20)	0.008	0.453	0.000	0.026	0.000	0.462	1.050	4.8.2
L21	92 - 90.552 (21)	0.008	0.465	0.000	0.024	0.000	0.474	1.050	4.8.2
L22	90.552 - 89.25 (22)	0.008	0.485	0.000	0.025	0.000	0.494	1.050	4.8.2
L23	89.25 - 89 (23)	0.007	0.389	0.000	0.019	0.000	0.396	1.050	4.8.2
L24	89 - 88.25 (24)	0.007	0.400	0.000	0.020	0.000	0.407	1.050	4.8.2
L25	88.25 - 88 (25)	0.008	0.498	0.000	0.025	0.000	0.507	1.050	4.8.2
L26	88 - 87.833 (26)	0.008	0.499	0.000	0.025	0.000	0.508	1.050	4.8.2
L27	87.833 - 87.583 (27)	0.010	0.558	0.000	0.028	0.000	0.568	1.050	4.8.2
L28	87.583 - 82.583 (28)	0.010	0.601	0.000	0.028	0.000	0.612	1.050	4.8.2
L29	82.583 - 77.583 (29)	0.010	0.642	0.000	0.029	0.000	0.653	1.050	4.8.2
L30	77.583 - 77 (30)	0.010	0.644	0.000	0.028	0.000	0.655	1.050	4.8.2
L31	77 - 76.75 (31)	0.008	0.501	0.000	0.022	0.000	0.509	1.050	4.8.2
L32	76.75 - 76.333 (32)	0.008	0.502	0.000	0.022	0.000	0.510	1.050	4.8.2
L33	76.333 - 76.083 (33)	0.008	0.503	0.000	0.022	0.000	0.511	1.050	4.8.2
L34	76.083 - 74.25 (34)	0.008	0.521	0.000	0.022	0.000	0.530	1.050	4.8.2
L35	74.25 - 74 (35)	0.007	0.475	0.000	0.020	0.000	0.483	1.050	4.8.2
L36	74 - 73.75 (36)	0.007	0.476	0.000	0.020	0.000	0.484	1.050	4.8.2
L37	73.75 - 73.5 (37)	0.007	0.465	0.000	0.019	0.000	0.472	1.050	4.8.2
L38	73.5 - 68.5 (38)	0.008	0.491	0.000	0.020	0.000	0.499	1.050	4.8.2
L39	68.5 - 63.5 (39)	0.008	0.511	0.000	0.020	0.000	0.519	1.050	4.8.2
L40	63.5 - 60.5 (40)	0.008	0.528	0.000	0.020	0.000	0.537	1.050	4.8.2
L41	60.5 - 60.25 (41)	0.008	0.529	0.000	0.020	0.000	0.537	1.050	4.8.2
L42	60.25 - 59.5 (42)	0.008	0.529	0.000	0.020	0.000	0.538	1.050	4.8.2
L43	59.5 - 59.25 (43)	0.008	0.496	0.000	0.019	0.000	0.504	1.050	4.8.2
L44	59.25 - 54.25 (44)	0.008	0.520	0.000	0.019	0.000	0.528	1.050	4.8.2
L45	54.25 - 45.802 (45)	0.008	0.529	0.000	0.019	0.000	0.538	1.050	4.8.2
L46	45.802 - 44.802 (46)	0.009	0.550	0.000	0.019	0.000	0.559	1.050	4.8.2
L47	44.802 - 43.583 (47)	0.009	0.551	0.000	0.019	0.000	0.560	1.050	4.8.2
L48	43.583 - 43.333 (48)	0.009	0.543	0.000	0.019	0.000	0.552	1.050	4.8.2
L49	43.333 - 43.166 (49)	0.009	0.543	0.000	0.019	0.000	0.552	1.050	4.8.2

Section No.	Elevation ft	Ratio	Ratio	Ratio	Ratio	Ratio	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
		$P_u$	$M_{ux}$	$M_{uy}$	$V_u$	$T_u$			
L50	43.166 - 42.916 (50)	0.008	0.497	0.000	0.017	0.000	0.505	1.050	4.8.2
L51	42.916 - 39 (51)	0.008	0.510	0.000	0.017	0.000	0.518	1.050	4.8.2
L52	39 - 38.75 (52)	0.008	0.491	0.000	0.017	0.000	0.500	1.050	4.8.2
L53	38.75 - 37.166 (53)	0.008	0.497	0.000	0.017	0.000	0.506	1.050	4.8.2
L54	37.166 - 36.916 (54)	0.008	0.523	0.000	0.018	0.000	0.532	1.050	4.8.2
L55	36.916 - 34 (55)	0.008	0.523	0.000	0.018	0.000	0.532	1.050	4.8.2
L56	34 - 33.75 (56)	0.009	0.530	0.000	0.018	0.000	0.539	1.050	4.8.2
L57	33.75 - 29.75 (57)	0.009	0.537	0.000	0.018	0.000	0.546	1.050	4.8.2
L58	29.75 - 29.5 (58)	0.009	0.536	0.000	0.018	0.000	0.545	1.050	4.8.2
L59	29.5 - 24.5 (59)	0.009	0.543	0.000	0.018	0.000	0.553	1.050	4.8.2
L60	24.5 - 23 (60)	0.009	0.549	0.000	0.018	0.000	0.559	1.050	4.8.2
L61	23 - 22.75 (61)	0.008	0.483	0.000	0.015	0.000	0.491	1.050	4.8.2
L62	22.75 - 21.583 (62)	0.008	0.483	0.000	0.015	0.000	0.491	1.050	4.8.2
L63	21.583 - 21.333 (63)	0.009	0.541	0.000	0.017	0.000	0.550	1.050	4.8.2
L64	21.333 - 16.333 (64)	0.009	0.548	0.000	0.017	0.000	0.558	1.050	4.8.2
L65	16.333 - 12.917 (65)	0.010	0.554	0.000	0.017	0.000	0.564	1.050	4.8.2
L66	12.917 - 12.667 (66)	0.009	0.503	0.000	0.015	0.000	0.512	1.050	4.8.2
L67	12.667 - 12.5 (67)	0.009	0.503	0.000	0.015	0.000	0.512	1.050	4.8.2
L68	12.5 - 12.25 (68)	0.010	0.594	0.000	0.018	0.000	0.605	1.050	4.8.2
L69	12.25 - 12 (69)	0.010	0.594	0.000	0.018	0.000	0.605	1.050	4.8.2
L70	12 - 11.75 (70)	0.012	0.678	0.000	0.021	0.000	0.690	1.050	4.8.2
L71	11.75 - 8.5 (71)	0.012	0.690	0.000	0.021	0.000	0.702	1.050	4.8.2
L72	8.5 - 8.25 (72)	0.009	0.494	0.000	0.015	0.000	0.503	1.050	4.8.2
L73	8.25 - 7 (73)	0.009	0.500	0.000	0.015	0.000	0.509	1.050	4.8.2
L74	7 - 6.75 (74)	0.010	0.556	0.000	0.017	0.000	0.567	1.050	4.8.2
L75	6.75 - 1.75 (75)	0.010	0.573	0.000	0.017	0.000	0.583	1.050	4.8.2
L76	1.75 - 0 (76)	0.010	0.570	0.000	0.017	0.000	0.580	1.050	4.8.2

### Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	$\phi P_{allow}$ K	% Capacity	Pass Fail
L1	144.25 - 139.25	Pole	TP12.75x12.75x0.375	1	-4.902	633.747	17.1	Pass
L2	139.25 - 134.75	Pole	TP12.75x12.75x0.375	2	-5.218	633.747	32.0	Pass
L3	134.75 - 134.25	Pole	TP13.48x13.48x0.375	3	-5.256	671.132	30.1	Pass
L4	134.25 - 129.25	Pole	TP14.466x13.48x0.188	4	-8.269	529.516	61.7	Pass
L5	129.25 - 124.25	Pole	TP15.452x14.466x0.188	5	-8.618	566.074	78.6	Pass
L6	124.25 - 123.416	Pole	TP15.616x15.452x0.188	6	-8.682	572.172	81.0	Pass
L7	123.416 -	Pole	TP15.665x15.616x0.538	7	-8.721	1608.253	30.4	Pass

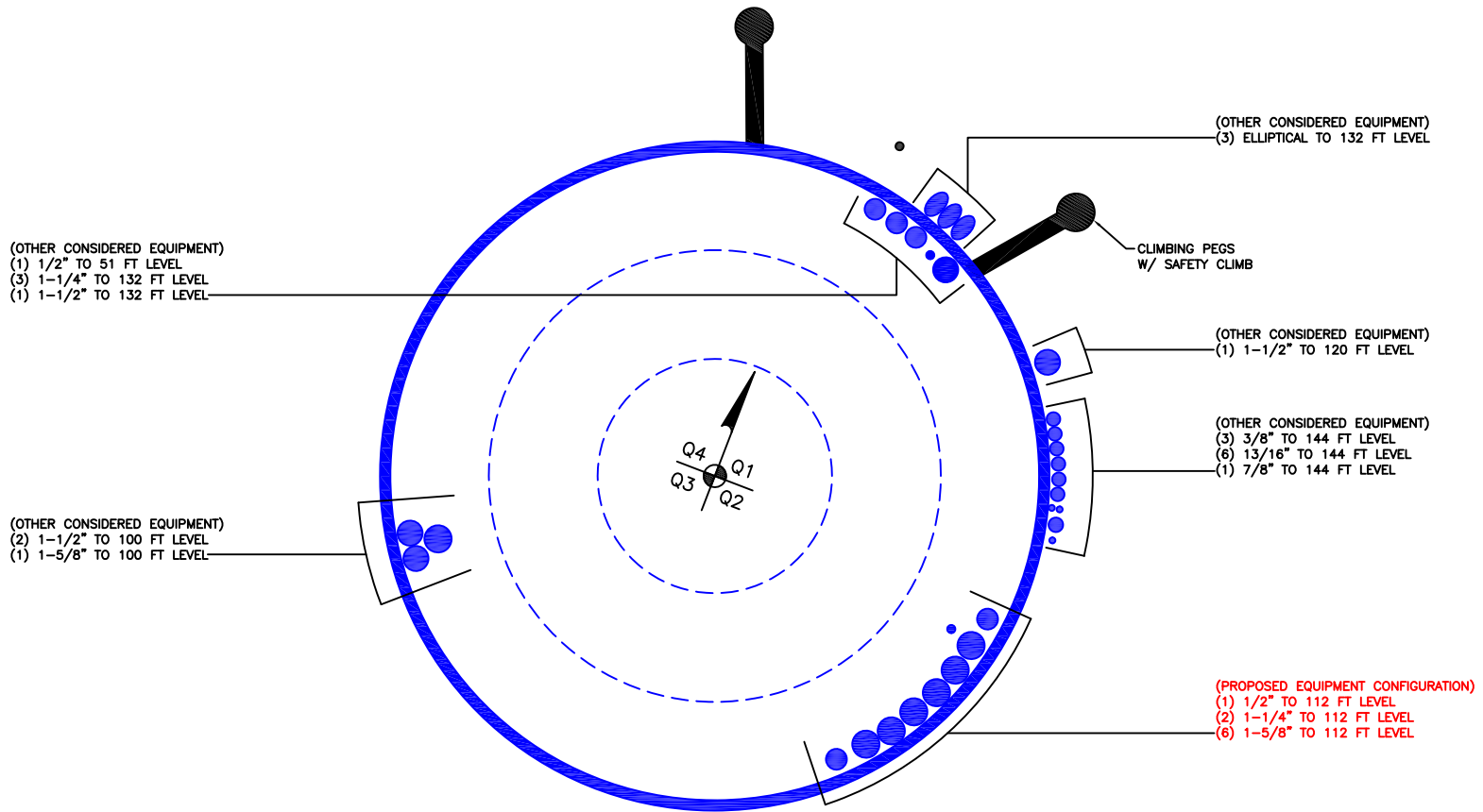
144.25 Ft Monopole Tower Structural Analysis  
Project Number 2265177, Order 658808, Revision 0

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	$\phi P_{allow}$ K	% Capacity	Pass Fail
L8	123.166 - 118.166	Pole	TP16.651x15.665x0.513	8	-12.014	1635.921	37.2	Pass
L9	118.166 - 113.166	Pole	TP17.637x16.651x0.488	9	-12.608	1653.582	44.3	Pass
L10	113.166 - 109.5	Pole	TP18.36x17.637x0.475	10	-16.584	1680.262	50.7	Pass
L11	109.5 - 109.25	Pole	TP18.409x18.36x0.588	11	-16.641	2070.873	42.0	Pass
L12	109.25 - 104.75	Pole	TP19.296x18.409x0.563	12	-17.371	2084.239	48.2	Pass
L13	104.75 - 104.5	Pole	TP19.346x19.296x0.775	13	-17.437	2846.602	36.3	Pass
L14	104.5 - 102.416	Pole	TP19.756x19.346x0.763	14	-17.868	2864.536	38.2	Pass
L15	102.416 - 102.166	Pole	TP19.806x19.756x0.563	15	-17.927	2140.918	50.4	Pass
L16	102.166 - 98.75	Pole	TP20.479x19.806x0.55	16	-22.567	2167.966	54.6	Pass
L17	98.75 - 98.5	Pole	TP20.528x20.479x0.838	17	-22.649	3261.762	37.6	Pass
L18	98.5 - 97.5	Pole	TP20.726x20.528x0.838	18	-22.900	3294.427	38.2	Pass
L19	97.5 - 97.25	Pole	TP20.775x20.726x0.75	19	-22.971	2970.523	42.3	Pass
L20	97.25 - 92	Pole	TP21.81x20.775x0.738	20	-23.378	2971.668	44.0	Pass
L21	92 - 90.552	Pole	TP21.73x20.735x0.8	21	-25.413	3311.805	45.1	Pass
L22	90.552 - 89.25	Pole	TP21.989x21.73x0.775	22	-25.771	3251.881	47.0	Pass
L23	89.25 - 89	Pole	TP22.039x21.989x1	23	-25.865	4161.307	37.7	Pass
L24	89 - 88.25	Pole	TP22.189x22.039x0.975	24	-26.092	4090.894	38.8	Pass
L25	88.25 - 88	Pole	TP22.238x22.189x0.763	25	-26.165	3238.851	48.3	Pass
L26	88 - 87.833	Pole	TP22.272x22.238x0.763	26	-26.211	3243.859	48.4	Pass
L27	87.833 - 87.583	Pole	TP22.321x22.272x0.675	27	-26.271	2889.946	54.1	Pass
L28	87.583 - 82.583	Pole	TP23.317x22.321x0.65	28	-27.500	2914.107	58.2	Pass
L29	82.583 - 77.583	Pole	TP24.312x23.317x0.625	29	-28.770	2928.177	62.2	Pass
L30	77.583 - 77	Pole	TP24.428x24.312x0.625	30	-28.929	2942.530	62.4	Pass
L31	77 - 76.75	Pole	TP24.478x24.428x0.825	31	-29.011	3859.621	48.5	Pass
L32	76.75 - 76.333	Pole	TP24.561x24.478x0.825	32	-29.134	3873.166	48.6	Pass
L33	76.333 - 76.083	Pole	TP24.611x24.561x0.825	33	-29.208	3881.293	48.7	Pass
L34	76.083 - 74.25	Pole	TP24.976x24.611x0.8	34	-29.713	3825.381	50.4	Pass
L35	74.25 - 74	Pole	TP25.026x24.976x0.888	35	-29.811	4237.159	46.0	Pass
L36	74 - 73.75	Pole	TP25.076x25.026x0.888	36	-29.887	4245.895	46.1	Pass
L37	73.75 - 73.5	Pole	TP25.125x25.076x0.913	37	-29.965	4369.974	45.0	Pass
L38	73.5 - 68.5	Pole	TP26.121x25.125x0.875	38	-31.513	4369.165	47.5	Pass
L39	68.5 - 63.5	Pole	TP27.116x26.121x0.85	39	-33.094	4415.901	49.4	Pass
L40	63.5 - 60.5	Pole	TP27.714x27.116x0.825	40	-34.058	4387.561	51.1	Pass
L41	60.5 - 60.25	Pole	TP27.763x27.714x0.825	41	-34.150	4395.688	51.2	Pass
L42	60.25 - 59.5	Pole	TP27.913x27.763x0.825	42	-34.386	4420.048	51.2	Pass
L43	59.5 - 59.25	Pole	TP27.962x27.913x0.888	43	-34.479	4752.667	48.0	Pass
L44	59.25 - 54.25	Pole	TP28.958x27.962x0.85	44	-36.169	4725.525	50.3	Pass
L45	54.25 - 45.802	Pole	TP30.64x28.958x0.838	45	-37.715	4798.269	51.2	Pass
L46	45.802 - 44.802	Pole	TP30.333x29.304x0.838	46	-40.751	4885.860	53.3	Pass
L47	44.802 - 43.583	Pole	TP30.574x30.333x0.838	47	-41.186	4925.823	53.3	Pass
L48	43.583 - 43.333	Pole	TP30.624x30.574x0.85	48	-41.294	5005.560	52.6	Pass
L49	43.333 - 43.166	Pole	TP30.657x30.624x0.85	49	-41.359	5011.114	52.6	Pass
L50	43.166 - 42.916	Pole	TP30.706x30.657x0.938	50	-41.456	5519.913	48.1	Pass
L51	42.916 - 39	Pole	TP31.481x30.706x0.913	51	-42.988	5517.109	49.4	Pass
L52	39 - 38.75	Pole	TP31.531x31.481x0.95	52	-43.105	5746.093	47.6	Pass
L53	38.75 - 37.166	Pole	TP31.844x31.531x0.938	53	-43.744	5730.931	48.2	Pass
L54	37.166 - 36.916	Pole	TP31.894x31.844x0.888	54	-43.862	5442.748	50.6	Pass
L55	36.916 - 34	Pole	TP32.471x31.894x0.888	55	-43.884	5442.748	50.6	Pass
L56	34 - 33.75	Pole	TP32.52x32.471x0.875	56	-45.048	5468.127	51.3	Pass
L57	33.75 - 29.75	Pole	TP33.312x32.52x0.863	57	-45.156	5400.591	52.0	Pass
L58	29.75 - 29.5	Pole	TP33.361x33.312x0.863	58	-46.712	5535.642	51.9	Pass
L59	29.5 - 24.5	Pole	TP34.351x33.361x0.85	59	-46.821	5465.838	52.6	Pass
L60	24.5 - 23	Pole	TP34.648x34.351x0.838	60	-48.821	5551.444	53.2	Pass
L61	23 - 22.75	Pole	TP34.697x34.648x0.963	61	-49.410	6412.738	46.8	Pass
L62	22.75 - 21.583	Pole	TP34.928x34.697x0.963	62	-49.529	6422.157	46.8	Pass
L63	21.583 - 21.333	Pole	TP34.978x34.928x0.85	63	-50.031	5729.262	52.4	Pass
L64	21.333 - 16.333	Pole	TP35.967x34.978x0.838	64	-50.147	5655.279	53.1	Pass
L65	16.333 - 12.917	Pole	TP36.644x35.967x0.825	65	-52.266	5734.386	53.7	Pass
L66	12.917 - 12.667	Pole	TP36.693x36.644x0.913	66	-53.717	6448.806	48.7	Pass
L67	12.667 - 12.5	Pole	TP36.726x36.693x0.913	67	-53.832	6457.731	48.7	Pass
L68	12.5 - 12.25	Pole	TP36.776x36.726x0.763	68	-53.911	5423.796	57.6	Pass
L69	12.25 - 12	Pole	TP36.825x36.776x0.763	69	-54.016	5431.261	57.6	Pass
L70	12 - 11.75	Pole	TP36.874x36.825x0.663	70	-54.122	4738.545	65.7	Pass
L71	11.75 - 8.5	Pole	TP37.518x36.874x0.65	71	-54.235	4657.107	66.9	Pass
L72	8.5 - 8.25	Pole	TP37.567x37.518x0.925	72	-55.519	6694.800	47.9	Pass
L73	8.25 - 7	Pole	TP37.815x37.567x0.913	73	-55.650	6615.514	48.5	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	$\phi P_{allow}$ K	% Capacity	Pass Fail	
L74	7 - 6.75	Pole	TP37.864x37.815x0.813	74	-56.238	5946.349	54.0	Pass	
L75	6.75 - 1.75	Pole	TP38.854x37.864x0.788	75	-56.357	5774.989	55.6	Pass	
L76	1.75 - 0	Pole	TP39.2x38.854x0.788	76	-58.539	5929.119	55.3	Pass	
							Summary		
							Pole (L6)	81.0	Pass
							<b>RATING =</b>	<b>81.0</b>	<b>Pass</b>

**\*NOTE: Above stress ratios for reinforced sections are approximate. More exact calculations are presented in Appendix C.**

**APPENDIX B**  
**BASE LEVEL DRAWING**



**APPENDIX C**  
**ADDITIONAL CALCULATIONS**

**Pole Geometry**

	Pole Height Above Base (ft)	Section Length (ft)	Lap Splice Length (ft)	Number of Sides	Top Diameter (in)	Bottom Diameter (in)	Wall Thickness (in)	Bend Radius (in)	Pole Material
1	144.25	9.5	0	0	12.75	12.75	0.375		A500-46
2	134.75	0.5	0	0	13.48	13.48	0.375		A500-46
3	134.25	42.25	3.552	12	13.48	21.81	0.1875	Auto	A572-65
4	95.552	49.75	4.198	12	20.73	30.64	0.25	Auto	A572-65
5	50	50	0	12	29.30	39.2	0.3125	Auto	A572-65

**Reinforcement Configuration**

	Bottom Effective Elevation (ft)	Top Effective Elevation (ft)	Type	Model	Number	1	2	3	4	5	6	7	8	9	10	11	12
1	0	29.75	plate	PL 6.875x1.25 BW	2												
2	0	12.917	plate	PL 6.875x1.25 (14)	2												
3	12.917	29.75	plate	PL 6.875x1.25	1												
4	29.75	59.5	plate	PL 6.625x1.25	3												
5	59.5	89.25	plate	PL 5.5x1.25	3												
6	89.25	98.75	plate	PL 3.625x1.25	3												
7	12.5	39	plate	PL 4x1	1												
8	12.5	34	plate	PL 4x1	2												
9	34	60.5	plate	PL 4x1	3												
10	60.5	77	plate	PL 4x1	3												
11	88.25	104.75	plate	PL 4x1	3												
12	0	8.5	plate	TS 1x7	3												
13	7	23	plate	CCI-SFP-060100	2												
14	12	23	plate	CCI-SFP-060100	1												
15	21.583	37.166	plate	CCI-SFP-045100	1												
16	23	37.166	plate	CCI-SFP-045100	1												
17	23	43.583	plate	CCI-SFP-045100	1												
18	37.166	43.166	plate	CCI-SFP-060100	2												
19	43.166	73.75	plate	CCI-SFP-045100	1												
20	46.75	73.75	plate	CCI-SFP-045100	1												
21	43.166	74.25	plate	CCI-SFP-040075	1												
22	73.75	102.416	plate	CCI-SFP-040075	2												
23	76.333	89.25	plate	CCI-SFP-040075	1												
24	87.833	102.416	plate	CCI-AFP-050125	1												
25	102.416	123.416	plate	CCI-AFP-045100	2												
26	102.416	123.416	plate	CCI-AFP-045100	1												
27	97.5	109.5	plate	CCI-AFP-040075	1												
28	102.416	109.5	plate	CCI-AFP-040075	1												
29																	

**Reinforcement Details**

	B (in)	H (in)	Gross Area (in <sup>2</sup> )	Pole Face to Centroid (in)	Bottom Termination Type	Bottom Termination Length (in)	Top Termination Type	Top Termination Length (in)	Lu (in)	Net Area (in <sup>2</sup> )	Bolt Hole Size (in)	Reinforcement Material
1	6.875	1.25	8.59375	0.625	Welded	n/a	PC 8.8 - M20 (100)	36.000	15.000	6.953	1.2500	A572-65
2	6.875	1.25	8.59375	0.625	Welded	n/a	PC 8.8 - M20 (100)	42.000	15.000	6.953	1.2500	A572-65
3	6.875	1.25	8.59375	0.625	PC 8.8 - M20 (100)	42	PC 8.8 - M20 (100)	36.000	15.000	6.953	1.2500	A572-65
4	6.625	1.25	8.28125	0.625	None	n/a	PC 8.8 - M20 (100)	30.000	18.000	6.641	1.2500	A572-65
5	5.5	1.25	6.875	0.625	None	n/a	PC 8.8 - M20 (100)	18.000	18.000	5.234	1.2500	A572-65
6	3.625	1.25	4.53125	0.625	None	n/a	PC 8.8 - M20 (100)	15.000	24.000	2.891	1.2500	A572-65
7	4	1	4	0.5	PC 8.8 - M20 (100)	21	PC 8.8 - M20 (100)	21.000	20.000	2.750	1.1875	A572-65
8	4	1	4	0.5	PC 8.8 - M20 (100)	21	PC 8.8 - M20 (100)	21.000	20.000	2.750	1.1875	A572-65
9	4	1	4	0.5	PC 8.8 - M20 (100)	21	PC 8.8 - M20 (100)	21.000	20.000	2.750	1.1875	A572-65
10	4	1	4	0.5	PC 8.8 - M20 (100)	21	PC 8.8 - M20 (100)	21.000	20.000	2.750	1.1875	A572-65
11	4	1	4	0.5	PC 8.8 - M20 (100)	21	PC 8.8 - M20 (100)	21.000	20.000	2.750	1.1875	A572-65
12	1	7	7	3.5	Welded	n/a	Welded	0.000	0.750	7.000	0.0000	A572-65
13	6	1	6	0.5	PC 8.8 - M20 (100)	24	PC 8.8 - M20 (100)	24.000	16.000	4.750	1.1875	A572-65
14	6	1	6	0.5	PC 8.8 - M20 (100)	24	PC 8.8 - M20 (100)	24.000	16.000	4.750	1.1875	A572-65
15	4.5	1	4.5	0.5	PC 8.8 - M20 (100)	18	PC 8.8 - M20 (100)	18.000	20.000	3.250	1.1875	A572-65
16	4.5	1	4.5	0.5	PC 8.8 - M20 (100)	18	PC 8.8 - M20 (100)	18.000	20.000	3.250	1.1875	A572-65
17	4.5	1	4.5	0.5	PC 8.8 - M20 (100)	18	PC 8.8 - M20 (100)	18.000	20.000	3.250	1.1875	A572-65
18	6	1	6	0.5	PC 8.8 - M20 (100)	24	PC 8.8 - M20 (100)	24.000	16.000	4.750	1.1875	A572-65
19	4.5	1	4.5	0.5	PC 8.8 - M20 (100)	18	PC 8.8 - M20 (100)	18.000	20.000	3.250	1.1875	A572-65
20	4.5	1	4.5	0.5	PC 8.8 - M20 (100)	18	PC 8.8 - M20 (100)	18.000	20.000	3.250	1.1875	A572-65
21	4	0.75	3	0.375	PC 8.8 - M20 (100)	12	PC 8.8 - M20 (100)	12.000	16.000	2.063	1.1875	A572-65
22	4	0.75	3	0.375	PC 8.8 - M20 (100)	12	PC 8.8 - M20 (100)	12.000	16.000	2.063	1.1875	A572-65
23	4	0.75	3	0.375	PC 8.8 - M20 (100)	12	PC 8.8 - M20 (100)	12.000	16.000	2.063	1.1875	A572-65
24	5	1.25	6.25	0.625	PC 8.8 - M20 (100)	30	PC 8.8 - M20 (100)	30.000	23.000	4.688	1.1875	A572-65
25	4.5	1	4.5	0.5	PC 8.8 - M20 (100)	24	PC 8.8 - M20 (100)	24.000	20.000	3.250	1.1875	A572-65
26	4.5	1	4.5	0.5	PC 8.8 - M20 (100)	24	PC 8.8 - M20 (100)	24.000	20.000	3.250	1.1875	A572-65
27	4	0.75	3	0.375	PC 8.8 - M20 (100)	18	PC 8.8 - M20 (100)	18.000	16.000	2.063	1.1875	A572-65
28	4	0.75	3	0.375	PC 8.8 - M20 (100)	18	PC 8.8 - M20 (100)	18.000	16.000	2.063	1.1875	A572-65

**Connection Details for Custom Reinforcements**

Reinforcement	End	# Bolts	N or X	Bolt Spacing (in)	Edge Dist (in)	Weld Grade (ksi)	Transverse (Horiz.) Weld Type	Horiz. Weld Length (in)	Horiz. Groove Depth (in)	Horiz. Groove Angle (deg)	Horiz. Fillet Size (in)	Vertical Weld Length (in)	Vertical Fillet Size (in)	Rev H Connection Capacity (kip)
PL 6.875x1.25 BW	Top	12	N	3	3	-	-	-	-	-	-	-	-	-
	Bottom	-	-	-	-	70	None	-	-	-	-	-	-	-
PL 6.875x1.25 (14)	Top	14	N	3	3	-	-	-	-	-	-	-	-	-
	Bottom	-	-	-	-	70	None	-	-	-	-	-	-	-
PL 6.875x1.25	Top	12	N	3	3	-	-	-	-	-	-	-	-	-
	Bottom	14	N	3	3	0	-	-	-	-	-	-	-	-
PL 6.625x1.25	Top	10	N	3	3	-	-	-	-	-	-	-	-	-
	Bottom	-	-	-	-	70	None	-	-	-	-	-	-	-
PL 5.5x1.25	Top	6	N	3	3	-	-	-	-	-	-	-	-	-
	Bottom	-	-	-	-	70	None	-	-	-	-	-	-	-
PL 3.625x1.25	Top	5	N	3	3	-	-	-	-	-	-	-	-	-
	Bottom	-	-	-	-	70	None	-	-	-	-	-	-	-
PL 4x1	Top	7	N	3	3	-	-	-	-	-	-	-	-	-
	Bottom	7	N	3	3	0	-	-	-	-	-	-	-	-
TS 1x7	Top	0	-	0	0	80	None	-	-	-	-	125.25	0.313	-
	Bottom	-	-	-	-	80	CJP Groove	12.5	0.5	45	0.3125	-	-	-



# TNX Geometry Input

Increment (ft):  [Export to TNX](#)

	Section Height (ft)	Section Length (ft)	Lap Splice Length (ft)	Number of Sides	Top Diameter (in)	Bottom Diameter (in)	Wall Thickness (in)	Tapered Pole Grade	Weight Multiplier
1	144.25 - 139.25	5		0	12.750	12.750	0.375	A500-46	1.000
2	139.25 - 134.75	4.5	0	0	12.750	12.750	0.375	A500-46	1.000
3	134.75 - 134.25	0.5	0	0	13.480	13.480	0.375	A500-46	1.000
4	134.25 - 129.25	5		12	13.480	14.466	0.1875	A572-65	1.000
5	129.25 - 124.25	5		12	14.466	15.452	0.1875	A572-65	1.000
6	124.25 - 123.416	0.834		12	15.452	15.616	0.1875	A572-65	1.000
7	123.416 - 123.166	0.25		12	15.616	15.665	0.5375	A572-65	0.873
8	123.166 - 118.166	5		12	15.665	16.651	0.5125	A572-65	0.881
9	118.166 - 113.166	5		12	16.651	17.637	0.4875	A572-65	0.894
10	113.166 - 109.5	3.666		12	17.637	18.360	0.475	A572-65	0.895
11	109.5 - 109.25	0.25		12	18.360	18.409	0.5875	A572-65	0.906
12	109.25 - 104.75	4.5		12	18.409	19.296	0.5625	A572-65	0.916
13	104.75 - 104.5	0.25		12	19.296	19.346	0.775	A572-65	0.930
14	104.5 - 102.416	2.084		12	19.346	19.756	0.7625	A572-65	0.930
15	102.416 - 102.166	0.25		12	19.756	19.806	0.5625	A572-65	1.123
16	102.166 - 98.75	3.416		12	19.806	20.479	0.55	A572-65	1.120
17	98.75 - 98.5	0.25		12	20.479	20.528	0.8375	A572-65	1.002
18	98.5 - 97.5	1		12	20.528	20.726	0.8375	A572-65	0.994
19	97.5 - 97.25	0.25		12	20.726	20.775	0.75	A572-65	1.041
20	97.25 - 95.552	5.25	3.552	12	20.775	21.810	0.7375	A572-65	1.044
21	95.552 - 90.552	5		12	20.735	21.730	0.8	A572-65	1.024
22	90.552 - 89.25	1.302		12	21.730	21.989	0.775	A572-65	1.046
23	89.25 - 89	0.25		12	21.989	22.039	1	A572-65	0.967
24	89 - 88.25	0.75		12	22.039	22.189	0.975	A572-65	0.985
25	88.25 - 88	0.25		12	22.189	22.238	0.7625	A572-65	1.017
26	88 - 87.833	0.167		12	22.238	22.272	0.7625	A572-65	1.016
27	87.833 - 87.583	0.25		12	22.272	22.321	0.675	A572-65	1.008
28	87.583 - 82.583	5		12	22.321	23.317	0.65	A572-65	1.017
29	82.583 - 77.583	5		12	23.317	24.312	0.625	A572-65	1.029
30	77.583 - 77	0.583		12	24.312	24.428	0.625	A572-65	1.026
31	77 - 76.75	0.25		12	24.428	24.478	0.825	A572-65	0.974
32	76.75 - 76.333	0.417		12	24.478	24.561	0.825	A572-65	0.971
33	76.333 - 76.083	0.25		12	24.561	24.611	0.825	A572-65	0.923
34	76.083 - 74.25	1.833		12	24.611	24.976	0.8	A572-65	0.941
35	74.25 - 74	0.25		12	24.976	25.026	0.8875	A572-65	0.893
36	74 - 73.75	0.25		12	25.026	25.076	0.8875	A572-65	0.892
37	73.75 - 73.5	0.25		12	25.076	25.125	0.9125	A572-65	0.910
38	73.5 - 68.5	5		12	25.125	26.121	0.875	A572-65	0.921
39	68.5 - 63.5	5		12	26.121	27.116	0.85	A572-65	0.922
40	63.5 - 60.5	3		12	27.116	27.714	0.825	A572-65	0.935
41	60.5 - 60.25	0.25		12	27.714	27.763	0.825	A572-65	0.934
42	60.25 - 59.5	0.75		12	27.763	27.913	0.825	A572-65	0.931
43	59.5 - 59.25	0.25		12	27.913	27.962	0.8875	A572-65	0.920
44	59.25 - 54.25	5		12	27.962	28.958	0.85	A572-65	0.936
45	54.25 - 50	8.448	4.198	12	28.958	30.640	0.8375	A572-65	0.931
46	50 - 44.802	5.198		12	29.304	30.333	0.8375	A572-65	0.938
47	44.802 - 43.583	1.219		12	30.333	30.574	0.8375	A572-65	0.933
48	43.583 - 43.333	0.25		12	30.574	30.624	0.85	A572-65	0.975
49	43.333 - 43.166	0.167		12	30.624	30.657	0.85	A572-65	0.974
50	43.166 - 42.916	0.25		12	30.657	30.706	0.9375	A572-65	0.935
51	42.916 - 39	3.916		12	30.706	31.481	0.9125	A572-65	0.944
52	39 - 38.75	0.25		12	31.481	31.531	0.95	A572-65	0.950
53	38.75 - 37.166	1.584		12	31.531	31.844	0.9375	A572-65	0.956
54	37.166 - 36.916	0.25		12	31.844	31.894	0.8875	A572-65	0.973
55	36.916 - 34	2.916		12	31.894	32.471	0.8875	A572-65	0.961
56	34 - 33.75	0.25		12	32.471	32.520	0.875	A572-65	0.929
57	33.75 - 29.75	4		12	32.520	33.312	0.8625	A572-65	0.928
58	29.75 - 29.5	0.25		12	33.312	33.361	0.8625	A572-65	0.937
59	29.5 - 24.5	5		12	33.361	34.351	0.85	A572-65	0.934
60	24.5 - 23	1.5		12	34.351	34.648	0.8375	A572-65	0.942
61	23 - 22.75	0.25		12	34.648	34.697	0.9625	A572-65	0.908
62	22.75 - 21.583	1.167		12	34.697	34.928	0.9625	A572-65	0.904
63	21.583 - 21.333	0.25		12	34.928	34.978	0.85	A572-65	0.971
64	21.333 - 16.333	5		12	34.978	35.967	0.8375	A572-65	0.968
65	16.333 - 12.917	3.416		12	35.967	36.644	0.825	A572-65	0.971
66	12.917 - 12.667	0.25		12	36.644	36.693	0.9125	A572-65	0.961
67	12.667 - 12.5	0.167		12	36.693	36.726	0.9125	A572-65	0.961
68	12.5 - 12.25	0.25		12	36.726	36.776	0.7625	A572-65	1.008
69	12.25 - 12	0.25		12	36.776	36.825	0.7625	A572-65	1.007
70	12 - 11.75	0.25		12	36.825	36.874	0.6625	A572-65	1.077
71	11.75 - 8.5	3.25		12	36.874	37.518	0.65	A572-65	1.087
72	8.5 - 8.25	0.25		12	37.518	37.567	0.925	A572-65	0.962
73	8.25 - 7	1.25		12	37.567	37.815	0.9125	A572-65	0.970
74	7 - 6.75	0.25		12	37.815	37.864	0.8125	A572-65	0.962
75	6.75 - 1.75	5		12	37.864	38.854	0.7875	A572-65	0.976
76	1.75 - 0	1.75		12	38.854	39.200	0.7875	A572-65	0.971

# TNX Section Forces

Increment (ft):		TNX Output			
5		P <sub>u</sub> (K)	M <sub>ux</sub> (kip-ft)	V <sub>u</sub> (K)	
	Section Height (ft)				
1	144.25 - 139.25	4.90	33.78	6.56	
2	139.25 - 134.75	5.22	64.47	7.26	
3	134.75 - 134.25	5.26	68.10	7.27	
4	134.25 - 129.25	8.27	115.07	10.73	
5	129.25 - 124.25	8.62	169.14	10.93	
6	124.25 - 123.416	8.68	178.26	10.97	
7	123.416 - 123.166	8.72	181.00	10.98	
8	123.166 - 118.166	12.01	240.86	13.61	
9	118.166 - 113.166	12.61	309.87	14.01	
10	113.166 - 109.5	16.58	375.78	18.36	
11	109.5 - 109.25	16.64	380.36	18.36	
12	109.25 - 104.75	17.37	463.83	18.75	
13	104.75 - 104.5	17.44	468.52	18.77	
14	104.5 - 102.416	17.87	507.82	18.97	
15	102.416 - 102.166	17.93	512.56	18.99	
16	102.166 - 98.75	22.57	581.70	22.04	
17	98.75 - 98.5	22.65	587.21	22.05	
18	98.5 - 97.5	22.90	609.30	22.15	
19	97.5 - 97.25	22.97	614.84	22.17	
20	97.25 - 95.552	23.38	652.60	22.34	
21	95.552 - 90.552	25.41	765.67	22.90	
22	90.552 - 89.25	25.77	795.52	23.01	
23	89.25 - 89	25.87	801.27	23.02	
24	89 - 88.25	26.09	818.56	23.10	
25	88.25 - 88	26.16	824.33	23.11	
26	88 - 87.833	26.21	828.19	23.13	
27	87.833 - 87.583	26.27	833.98	23.15	
28	87.583 - 82.583	27.50	950.65	23.55	
29	82.583 - 77.583	28.77	1069.20	23.92	
30	77.583 - 77	28.93	1083.15	23.95	
31	77 - 76.75	29.01	1089.14	23.97	
32	76.75 - 76.333	29.13	1099.14	24.01	
33	76.333 - 76.083	29.21	1105.14	24.03	
34	76.083 - 74.25	29.71	1149.31	24.21	
35	74.25 - 74	29.81	1155.36	24.21	
36	74 - 73.75	29.89	1161.41	24.23	
37	73.75 - 73.5	29.96	1167.47	24.25	
38	73.5 - 68.5	31.51	1289.81	24.71	
39	68.5 - 63.5	33.09	1414.33	25.14	
40	63.5 - 60.5	34.06	1490.09	25.40	
41	60.5 - 60.25	34.15	1496.44	25.41	
42	60.25 - 59.5	34.39	1515.52	25.48	
43	59.5 - 59.25	34.48	1521.89	25.50	
44	59.25 - 54.25	36.17	1650.45	25.95	
45	54.25 - 50	37.71	1761.48	26.37	
46	50 - 44.802	40.75	1899.99	26.94	
47	44.802 - 43.583	41.19	1932.84	27.01	
48	43.583 - 43.333	41.29	1939.59	27.00	
49	43.333 - 43.166	41.36	1944.10	27.01	
50	43.166 - 42.916	41.46	1950.85	27.03	
51	42.916 - 39	42.99	2057.11	27.27	
52	39 - 38.75	43.11	2063.92	27.27	
53	38.75 - 37.166	43.74	2107.17	27.38	
54	37.166 - 36.916	43.86	2114.01	27.37	
55	36.916 - 34	45.03	2194.04	27.55	
56	34 - 33.75	45.14	2200.92	27.54	
57	33.75 - 29.75	46.70	2311.40	27.73	
58	29.75 - 29.5	46.80	2318.33	27.73	
59	29.5 - 24.5	48.79	2457.43	27.94	
60	24.5 - 23	49.39	2499.35	28.01	
61	23 - 22.75	49.51	2506.35	27.99	
62	22.75 - 21.583	50.01	2539.04	28.07	
63	21.583 - 21.333	50.13	2546.05	28.06	
64	21.333 - 16.333	52.24	2686.73	28.25	
65	16.333 - 12.917	53.70	2783.36	28.38	
66	12.917 - 12.667	53.83	2790.45	28.37	
67	12.667 - 12.5	53.91	2795.19	28.37	
68	12.5 - 12.25	54.01	2802.29	28.39	
69	12.25 - 12	54.11	2809.38	28.39	
70	12 - 11.75	54.21	2816.48	28.40	
71	11.75 - 8.5	55.50	2909.14	28.66	
72	8.5 - 8.25	55.63	2916.30	28.66	
73	8.25 - 7	56.22	2952.20	28.81	
74	7 - 6.75	56.34	2959.39	28.81	
75	6.75 - 1.75	58.50	3104.59	29.30	
76	1.75 - 0	59.26	3155.97	29.49	

# Analysis Results

Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
144.25 - 139.25	Pole	TP12.75x12.75x0.375	Pole	17.1%	Pass
139.25 - 134.75	Pole	TP12.75x12.75x0.375	Pole	32.0%	Pass
134.75 - 134.25	Pole	TP13.48x13.48x0.375	Pole	30.1%	Pass
134.25 - 129.25	Pole	TP14.466x13.48x0.1875	Pole	61.5%	Pass
129.25 - 124.25	Pole	TP15.452x14.466x0.1875	Pole	78.3%	Pass
124.25 - 123.42	Pole	TP15.616x15.452x0.1875	Pole	80.8%	Pass
123.42 - 123.17	Pole + Reinf.	TP15.665x15.616x0.5375	Reinf. 25 Tension Rupture	52.6%	Pass
123.17 - 118.17	Pole + Reinf.	TP16.651x15.665x0.5125	Reinf. 25 Tension Rupture	64.6%	Pass
118.17 - 113.17	Pole + Reinf.	TP17.637x16.651x0.4875	Reinf. 25 Tension Rupture	76.6%	Pass
113.17 - 109.5	Pole + Reinf.	TP18.36x17.637x0.475	Reinf. 25 Tension Rupture	88.0%	Pass
109.5 - 109.25	Pole + Reinf.	TP18.409x18.36x0.5875	Reinf. 25 Tension Rupture	74.1%	Pass
109.25 - 104.75	Pole + Reinf.	TP19.296x18.409x0.5625	Reinf. 25 Tension Rupture	84.6%	Pass
104.75 - 104.5	Pole + Reinf.	TP19.346x19.296x0.775	Reinf. 11 Tension Rupture	68.2%	Pass
104.5 - 102.42	Pole + Reinf.	TP19.756x19.346x0.7625	Reinf. 11 Tension Rupture	72.0%	Pass
102.42 - 102.17	Pole + Reinf.	TP19.806x19.756x0.5625	Reinf. 11 Tension Rupture	89.8%	Pass
102.17 - 98.75	Pole + Reinf.	TP20.479x19.806x0.55	Reinf. 11 Tension Rupture	97.6%	Pass
98.75 - 98.5	Pole + Reinf.	TP20.528x20.479x0.8375	Reinf. 6 Bolt-Shaft Bearing	85.3%	Pass
98.5 - 97.5	Pole + Reinf.	TP20.726x20.528x0.8375	Reinf. 6 Tension Rupture	74.1%	Pass
97.5 - 97.25	Pole + Reinf.	TP20.775x20.726x0.75	Reinf. 6 Tension Rupture	86.3%	Pass
97.25 - 95.55	Pole + Reinf.	TP21.81x20.775x0.7375	Reinf. 6 Tension Rupture	89.7%	Pass
95.55 - 90.55	Pole + Reinf.	TP21.73x20.735x0.8	Reinf. 6 Tension Rupture	92.7%	Pass
90.55 - 89.25	Pole + Reinf.	TP21.989x21.73x0.775	Reinf. 6 Tension Rupture	94.7%	Pass
89.25 - 89	Pole + Reinf.	TP22.039x21.989x1	Reinf. 5 Bolt-Shaft Bearing	81.8%	Pass
89 - 88.25	Pole + Reinf.	TP22.189x22.039x0.975	Reinf. 11 Tension Rupture	68.4%	Pass
88.25 - 88	Pole + Reinf.	TP22.238x22.189x0.7625	Reinf. 5 Tension Rupture	78.2%	Pass
88 - 87.83	Pole + Reinf.	TP22.272x22.238x0.7625	Reinf. 5 Tension Rupture	78.4%	Pass
87.83 - 87.58	Pole + Reinf.	TP22.321x22.272x0.675	Reinf. 5 Tension Rupture	83.1%	Pass
87.58 - 82.58	Pole + Reinf.	TP23.317x22.321x0.65	Reinf. 5 Tension Rupture	89.2%	Pass
82.58 - 77.58	Pole + Reinf.	TP24.312x23.317x0.625	Reinf. 5 Tension Rupture	94.7%	Pass
77.58 - 77	Pole + Reinf.	TP24.428x24.312x0.625	Reinf. 5 Tension Rupture	95.3%	Pass
77 - 76.75	Pole + Reinf.	TP24.478x24.428x0.825	Reinf. 10 Tension Rupture	89.4%	Pass
76.75 - 76.33	Pole + Reinf.	TP24.561x24.478x0.825	Reinf. 10 Tension Rupture	89.8%	Pass
76.33 - 76.08	Pole + Reinf.	TP24.611x24.561x0.825	Reinf. 10 Tension Rupture	90.9%	Pass
76.08 - 74.25	Pole + Reinf.	TP24.976x24.611x0.8	Reinf. 10 Tension Rupture	92.7%	Pass
74.25 - 74	Pole + Reinf.	TP25.026x24.976x0.8875	Reinf. 10 Tension Rupture	81.8%	Pass
74 - 73.75	Pole + Reinf.	TP25.076x25.026x0.8875	Reinf. 10 Tension Rupture	82.0%	Pass
73.75 - 73.5	Pole + Reinf.	TP25.125x25.076x0.9125	Reinf. 21 Tension Rupture	81.3%	Pass
73.5 - 68.5	Pole + Reinf.	TP26.121x25.125x0.875	Reinf. 21 Tension Rupture	85.5%	Pass
68.5 - 63.5	Pole + Reinf.	TP27.116x26.121x0.85	Reinf. 21 Tension Rupture	89.3%	Pass
63.5 - 60.5	Pole + Reinf.	TP27.714x27.116x0.825	Reinf. 21 Tension Rupture	91.5%	Pass
60.5 - 60.25	Pole + Reinf.	TP27.763x27.714x0.825	Reinf. 21 Tension Rupture	91.7%	Pass
60.25 - 59.5	Pole + Reinf.	TP27.913x27.763x0.825	Reinf. 21 Tension Rupture	92.2%	Pass
59.5 - 59.25	Pole + Reinf.	TP27.962x27.913x0.8875	Reinf. 21 Tension Rupture	86.2%	Pass
59.25 - 54.25	Pole + Reinf.	TP28.958x27.962x0.85	Reinf. 21 Tension Rupture	89.4%	Pass
54.25 - 50	Pole + Reinf.	TP30.64x28.958x0.8375	Reinf. 21 Tension Rupture	92.0%	Pass
50 - 44.8	Pole + Reinf.	TP30.333x30.64x0.8375	Reinf. 9 Tension Rupture	93.6%	Pass
44.8 - 43.58	Pole + Reinf.	TP30.574x30.333x0.8375	Reinf. 9 Tension Rupture	94.2%	Pass
43.58 - 43.33	Pole + Reinf.	TP30.624x30.574x0.85	Reinf. 9 Tension Rupture	93.3%	Pass
43.33 - 43.17	Pole + Reinf.	TP30.657x30.624x0.85	Reinf. 9 Tension Rupture	93.4%	Pass
43.17 - 42.92	Pole + Reinf.	TP30.706x30.657x0.9375	Reinf. 9 Tension Rupture	88.4%	Pass
42.92 - 39	Pole + Reinf.	TP31.481x30.706x0.9125	Reinf. 9 Tension Rupture	90.1%	Pass
39 - 38.75	Pole + Reinf.	TP31.531x31.481x0.95	Reinf. 9 Tension Rupture	85.2%	Pass
38.75 - 37.17	Pole + Reinf.	TP31.844x31.531x0.9375	Reinf. 9 Tension Rupture	85.8%	Pass
37.17 - 36.92	Pole + Reinf.	TP31.894x31.844x0.8875	Reinf. 9 Tension Rupture	89.2%	Pass
36.92 - 34	Pole + Reinf.	TP32.471x31.894x0.8875	Reinf. 9 Tension Rupture	90.3%	Pass
34 - 33.75	Pole + Reinf.	TP32.52x32.471x0.875	Reinf. 8 Tension Rupture	90.3%	Pass
33.75 - 29.75	Pole + Reinf.	TP33.312x32.52x0.8625	Reinf. 8 Tension Rupture	91.8%	Pass
29.75 - 29.5	Pole + Reinf.	TP33.361x33.312x0.8625	Reinf. 8 Tension Rupture	90.8%	Pass
29.5 - 24.5	Pole + Reinf.	TP34.351x33.361x0.85	Reinf. 8 Tension Rupture	92.5%	Pass
24.5 - 23	Pole + Reinf.	TP34.648x34.351x0.8375	Reinf. 8 Tension Rupture	92.9%	Pass
23 - 22.75	Pole + Reinf.	TP34.697x34.648x0.9625	Reinf. 8 Tension Rupture	86.2%	Pass
22.75 - 21.58	Pole + Reinf.	TP34.928x34.697x0.9625	Reinf. 8 Tension Rupture	86.5%	Pass
21.58 - 21.33	Pole + Reinf.	TP34.978x34.928x0.85	Reinf. 8 Tension Rupture	91.3%	Pass
21.33 - 16.33	Pole + Reinf.	TP35.967x34.978x0.8375	Reinf. 8 Tension Rupture	92.7%	Pass
16.33 - 12.92	Pole + Reinf.	TP36.644x35.967x0.825	Reinf. 8 Tension Rupture	93.6%	Pass
12.92 - 12.67	Pole + Reinf.	TP36.693x36.644x0.9125	Reinf. 7 Tension Rupture	84.9%	Pass
12.67 - 12.5	Pole + Reinf.	TP36.726x36.693x0.9125	Reinf. 7 Tension Rupture	84.9%	Pass
12.5 - 12.25	Pole + Reinf.	TP36.776x36.726x0.7625	Reinf. 14 Tension Rupture	88.1%	Pass
12.25 - 12	Pole + Reinf.	TP36.825x36.776x0.7625	Reinf. 14 Tension Rupture	88.1%	Pass
12 - 11.75	Pole + Reinf.	TP36.874x36.825x0.6625	Reinf. 2 Tension Rupture	90.1%	Pass
11.75 - 8.5	Pole + Reinf.	TP37.518x36.874x0.65	Reinf. 2 Tension Rupture	90.8%	Pass
8.5 - 8.25	Pole + Reinf.	TP37.567x37.518x0.925	Reinf. 1 Tension Rupture	74.4%	Pass
8.25 - 7	Pole + Reinf.	TP37.815x37.567x0.9125	Reinf. 1 Tension Rupture	74.7%	Pass
7 - 6.75	Pole + Reinf.	TP37.864x37.815x0.8125	Reinf. 1 Tension Rupture	86.5%	Pass
6.75 - 1.75	Pole + Reinf.	TP38.854x37.864x0.7875	Reinf. 1 Tension Rupture	87.6%	Pass
1.75 - 0	Pole + Reinf.	TP39.2x38.854x0.7875	Reinf. 1 Tension Rupture	87.9%	Pass
				Summary	
			Pole	80.8%	Pass
			Reinforcement	97.6%	Pass
			Overall	97.6%	Pass



# Monopole Flange Plate Connection

Elevation = 134.25 ft.

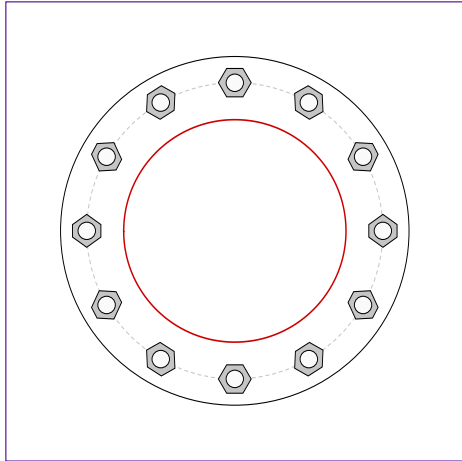


BU #	876317
Site Name	WATERBURY,CT
Order #	
TIA-222 Revision	H

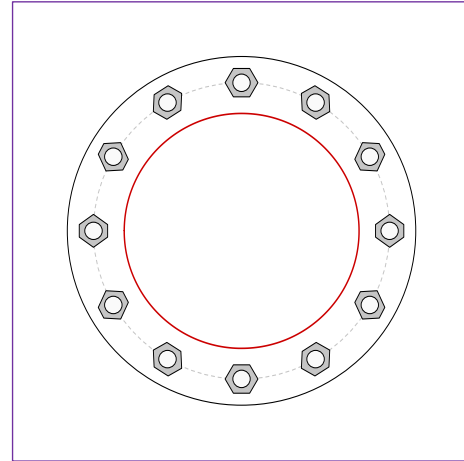
Applied Loads	
Moment (kip-ft)	68.10
Axial Force (kips)	5.26
Shear Force (kips)	7.27

\*TIA-222-H Section 15.5 Applied

Top Plate - External



Bottom Plate - External



## Connection Properties

### Bolt Data

(12) 1"  $\emptyset$  bolts (A325 N; Fy=92 ksi, Fu=120 ksi) on 17" BC

### Top Plate Data

20" OD x 1" Plate (A572-50; Fy=50 ksi, Fu=65 ksi)

### Top Stiffener Data

N/A

### Top Pole Data

12.75" x 0.375" round pole (A500-46; Fy=46 ksi, Fu=62 ksi)

### Bottom Plate Data

20" OD x 1" Plate (A572-50; Fy=50 ksi, Fu=65 ksi)

### Bottom Stiffener Data

N/A

### Bottom Pole Data

13.48" x 0.1875" 12-sided pole (A572-65; Fy=65 ksi, Fu=80 ksi)

## Analysis Results

### Bolt Capacity

Max Load (kips)	15.56
Allowable (kips)	54.53
Stress Rating:	<b>27.2% Pass</b>

### Top Plate Capacity

Max Stress (ksi):	22.46	(Flexural)
Allowable Stress (ksi):	45.00	
Stress Rating:	<b>47.5%</b>	<b>Pass</b>
Tension Side Stress Rating:	<b>29.3%</b>	<b>Pass</b>

### Bottom Plate Capacity

Max Stress (ksi):	18.05	(Flexural)
Allowable Stress (ksi):	45.00	
Stress Rating:	<b>38.2%</b>	<b>Pass</b>
Tension Side Stress Rating:	<b>21.3%</b>	<b>Pass</b>

# Monopole Base Plate Connection

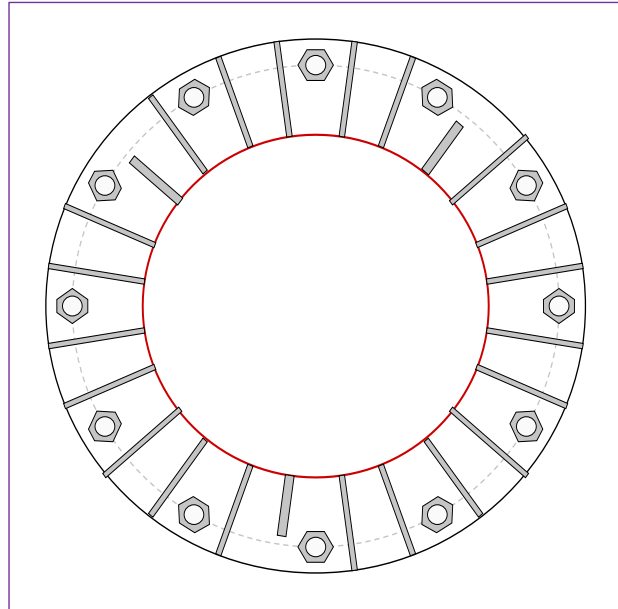


Site Info	
BU #	876317
Site Name	WATERBURY,CT
Order #	

Analysis Considerations	
TIA-222 Revision	H
Grout Considered:	No
$l_{ar}$ (in)	0.75

Applied Loads	
Moment (kip-ft)	3155.97
Axial Force (kips)	59.26
Shear Force (kips)	29.49

\*TIA-222-H Section 15.5 Applied



Connection Properties	Analysis Results
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Anchor Rod Data	
(12) 2-1/4" $\phi$ bolts (A615-75 N; $F_y=75$ ksi, $F_u=100$ ksi) on 55.16" BC	

Base Plate Data	
61.16" OD x 2.5" Plate (S-128; $F_y=60$ ksi, $F_u=80$ ksi)	

Stiffener Data	
Group 1: (21) 21.5"H x 11"W x 0.625"T, Notch: 0.75"	
plate: $F_y= 50$ ksi ; weld: $F_y= 80$ ksi	
horiz. weld: 0.3125" groove, 45° dbl bevel, 0.5" fillet	
vert. weld: 0.3125" fillet	

Group 2: (3) 126"H x 7"W x 1"T, Notch: 0.75"	
plate: $F_y= 65$ ksi ; weld: $F_y= 80$ ksi	
horiz. weld: 0.5" groove, 45° dbl bevel, 0.3125" fillet	
vert. weld: 0.3125" fillet	

Pole Data	
39.2" x 0.3125" 12-sided pole (A572-65; $F_y=65$ ksi, $F_u=80$ ksi)	

Anchor Rod Summary			<i>(units of kips, kip-in)</i>
$Pu\_t = 223.76$	$\phi Pn\_t = 243.75$		<b>Stress Rating</b>
$Vu = 2.46$	$\phi Vn = 149.1$		<b>87.4%</b>
$Mu = n/a$	$\phi Mn = n/a$		<b>Pass</b>

Base Plate Summary		
Max Stress (ksi):	30.75	(Flexural)
Allowable Stress (ksi):	54	
Stress Rating:	<b>54.2%</b>	<b>Pass</b>

Stiffener Summary		
Horizontal Weld:	<b>40.5%</b>	<b>Pass</b>
Vertical Weld:	<b>40.9%</b>	<b>Pass</b>
Plate Flexure+Shear:	<b>22.1%</b>	<b>Pass</b>
Plate Tension+Shear:	<b>42.2%</b>	<b>Pass</b>
Plate Compression:	<b>60.8%</b>	<b>Pass</b>

Pole Summary		
Punching Shear:	<b>16.5%</b>	<b>Pass</b>

# Pier and Pad Foundation



BU #: 876317  
 Site Name: WATERBURY, CT  
 App. Number:

TIA-222 Revision: H  
 Tower Type: Monopole

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

Superstructure Analysis Reactions		
Compression, $P_{comp}$ :	59.29	kips
Base Shear, $V_{u\_comp}$ :	29.44	kips
Moment, $M_u$ :	3155.97	ft-kips
Tower Height, $H$ :	144.25	ft
BP Dist. Above Fdn, $bp_{dist}$ :	2.75	in
Bolt Circle / Bearing Plate Width, $BC$ :	55.16	in

Foundation Analysis Checks				
	Capacity	Demand	Rating*	Check
<i>Lateral (Sliding) (kips)</i>	277.67	29.44	10.1%	Pass
<i>Bearing Pressure (ksf)</i>	22.50	5.67	25.2%	Pass
<i>Overtuning (kip*ft)</i>	3937.32	3361.44	85.4%	Pass
<i>Pad Flexure (kip*ft)</i>	9014.86	1880.98	19.9%	Pass
<i>Pad Shear - 1-way (kips)</i>	1732.56	156.98	8.6%	Pass
<i>Pad Shear - 2-way (Comp) (ksi)</i>	0.190	0.000	0.0%	Pass
<i>Flexural 2-way (Comp) (kip*ft)</i>	18499.97	0.00	0.0%	Pass

\*Rating per TIA-222-H Section 15.5

Structural Rating*:	19.9%
Soil Rating*:	85.4%

Pad Properties		
Depth, $D$ :	6.75	ft
Pad Width, $W_1$ :	20	ft
Pad Thickness, $T$ :	6.75	ft
Pad Rebar Size (Top dir. 2), $Sp_{top2}$ :	9	
Pad Rebar Quantity (Top dir. 2), $mp_{top2}$ :	28	
Pad Rebar Size (Bottom dir. 2), $Sp_2$ :	10	
Pad Rebar Quantity (Bottom dir. 2), $mp_2$ :	21	
Pad Clear Cover, $cc_{pad}$ :	3	in

Material Properties		
Rebar Grade, $F_y$ :	60	ksi
Concrete Compressive Strength, $F'_c$ :	4	ksi
Dry Concrete Density, $\delta_c$ :	150	pcf

Soil Properties		
Total Soil Unit Weight, $\gamma$ :	125	pcf
Ultimate Gross Bearing, $Q_{ult}$ :	30.000	ksf
Cohesion, $C_u$ :	0.000	ksf
Friction Angle, $\phi$ :	36	degrees
SPT Blow Count, $N_{blows}$ :		
Base Friction, $\mu$ :	0.5	
Neglected Depth, $N$ :	3.33	ft
Foundation Bearing on Rock?	No	
Groundwater Depth, $gw$ :	11.5	ft

B2

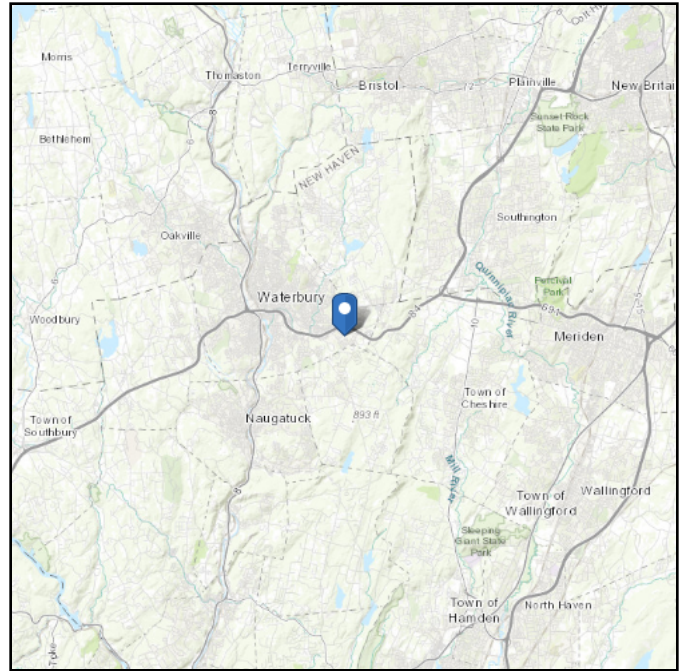
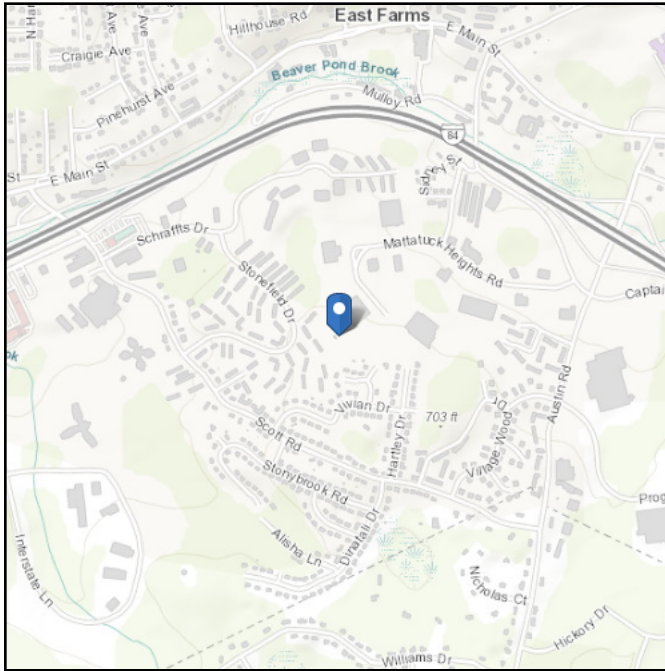
<--Toggle between Gross and Net

# ASCE 7 Hazards Report

**Address:**  
No Address at This Location

**Standard:** ASCE/SEI 7-16  
**Risk Category:** II  
**Soil Class:** D - Default (see Section 11.4.3)

**Elevation:** 660.21 ft (NAVD 88)  
**Latitude:** 41.537861  
**Longitude:** -72.985028



## Wind

### Results:

Wind Speed	118 Vmph
10-year MRI	75 Vmph
25-year MRI	84 Vmph
50-year MRI	90 Vmph
100-year MRI	97 Vmph

Data Source: ASCE/SEI 7-16, Fig. 26.5-1B and Figs. CC.2-1–CC.2-4, and Section 26.5.2  
Date Accessed: Thu Nov 03 2022

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 7-16 Standard. Wind speeds correspond to approximately a 7% probability of exceedance in 50 years (annual exceedance probability = 0.00143, MRI = 700 years).

Site is in a hurricane-prone region as defined in ASCE/SEI 7-16 Section 26.2. Glazed openings need not be protected against wind-borne debris.

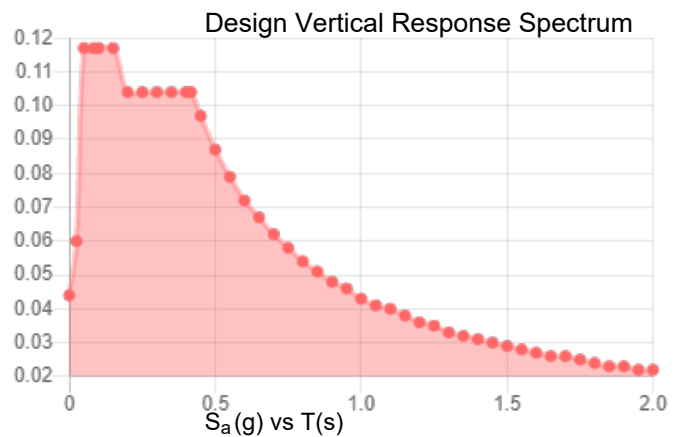
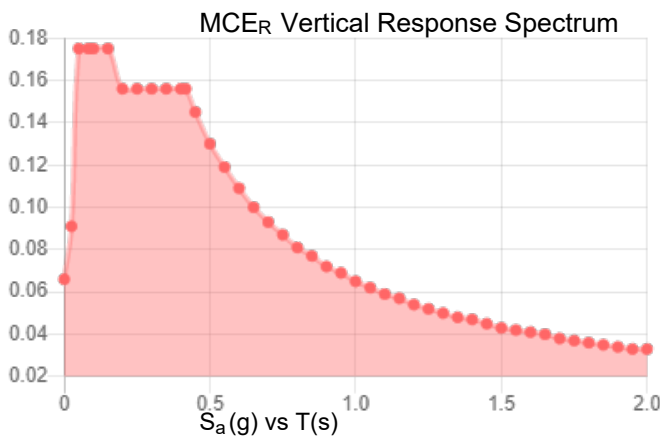
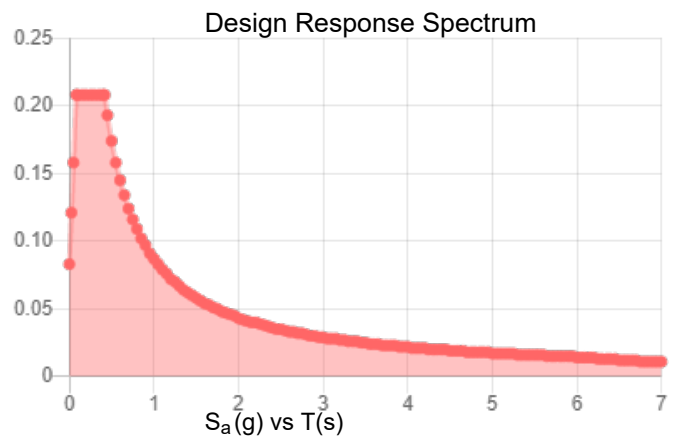
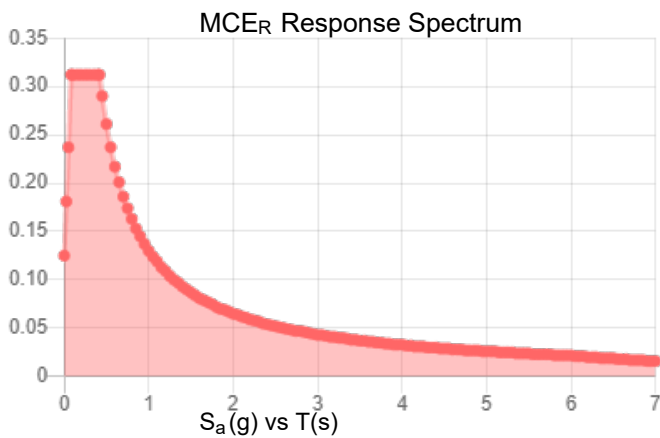


**Site Soil Class:** D - Default (see Section 11.4.3)

**Results:**

$S_s$ :	0.195	$S_{D1}$ :	0.087
$S_1$ :	0.054	$T_L$ :	6
$F_a$ :	1.6	PGA :	0.108
$F_v$ :	2.4	PGA <sub>M</sub> :	0.171
$S_{MS}$ :	0.312	$F_{PGA}$ :	1.585
$S_{M1}$ :	0.13	$I_e$ :	1
$S_{DS}$ :	0.208	$C_v$ :	0.7

**Seismic Design Category** B



**Data Accessed:** Thu Nov 03 2022

**Date Source:**

**USGS Seismic Design Maps based on ASCE/SEI 7-16 and ASCE/SEI 7-16 Table 1.5-2. Additional data for site-specific ground motion procedures in accordance with ASCE/SEI 7-16 Ch. 21 are available from USGS.**

## Ice

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**Results:**

Ice Thickness: 1.00 in.  
Concurrent Temperature: 15 F  
Gust Speed 50 mph

**Data Source:** Standard ASCE/SEI 7-16, Figs. 10-2 through 10-8

**Date Accessed:** Thu Nov 03 2022

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 with concurrent 3-second gust speeds, for a 500-year mean recurrence interval, and temperatures concurrent with ice thicknesses due to freezing rain. Thicknesses for ice accretions caused by other sources shall be obtained from local meteorological studies. Ice thicknesses in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.

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