CROWN CASTLE

Crown Castle
3 Corporate Park Drive, Suite 101
Clifton Park, NY 12065

November 20, 2019

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

RE: **Notice of Exempt Modification for Verizon Wireless: 876373**
Verizon Site ID:NG56920
136 Wright Rd. Torrington, CT 06790
Latitude: 41° -49' 38.34"/ Longitude: -73° -10' 13.97"

Dear Ms. Bachman:

Verizon currently maintains twelve (12) antennas at the 138-foot level of the existing 148-foot monopole tower at 136 Wright Road, Torrington CT 06790. The tower is owned by Crown Castle and the property is owned by John Jay and Diane Wright, William A. and Jill Jobert and Jobert Jill S ETAL, CO Sprint Spectrum LP. Verizon now intends to replace six (6) antennas with six (6) new antennas. Verizon also intends to add six (6) remote radios, add one (1) raycap and one (1) hybrid cable.

This facility was approved by the City of Torrington Planning and Zoning Commission on April 12, 2000.

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies § 16-50j- 73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.S.C.A. § 16-50j-73, a copy of this letter is being sent to Ms. Elinor Carbone City of Torrington Mayor, Mr. Martin J. Connor, City Planner of the Planning & Zoning Department and the property owners Mr. James N. Write and Ms. Carol E. Surv as well as Jobert Jill S ETAL, CO Sprint Spectrum LP . Crown Castle is the tower owner.

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

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

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

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

For the foregoing reasons, Verizon respectfully submits that the proposed modifications to the above-reference telecommunications facility constitutes an exempt modification under R.C.S.A. § 16-50j-72(b)(2). Please send approval/rejection letter to Attn: Jeffrey Barbadora.

Sincerely,

Jeffrey Barbadora
Network Real Estate
Specialist
12 Gill Street, Suite 5800, Woburn, MA 01801
781-729-0053
Jeff.Barbadora@crowncastle.com

Attachments:

Tab 1: Exhibit-1: Compound plan and elevation depicting the planned changes
Tab 2: Exhibit-2: Structural Modification Report
Tab 3: Exhibit-3: General Power Density Table Report (RF Emissions Analysis Report)

Mayor – Ms. Elinor Carbone
City of Torrington
140 Main Street,
Torrington, CT06790
860-489-2228

Mr. Martin J. Connor, City Planner - Planning and Zoning Department
City of Torrington
140 Main Street, Room324
Torrington, CT06790
860-489-2220

John Jay and Diane Wright- Property Owner
100 Stage Road
Nottingham, NH 03290
781-970-0054

William A. and Jill Jobert- Property Owner
108 Springfield Drive
Advance, NC 27006
781-970-0054

Jobert Jill S ETAL
CO Sprint Spectrum LP
6500 Sprint Parkway
Overland Park, KS
913-307-3000

City Of Torrington

PLANNING AND ZONING COMMISSION
140 Main Street • Room 311
Torrington, CT 06790

Tel.: (860) 489-2220
Fax: (860) 489-2550

April 18, 2000

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Christopher B. Fisher, Esq.
Cuddy, Feder & Worby, LLP
90 Maple Avenue
White Plains, NY 10601

Subject: Special Exception #00-3 and Site Plan #00-4
Applicant: Sprint Spectrum LP d/b/a Sprint PCS
Location: Goshen Road/136 Wright Road (Map 214-2-5)
Proposal: Construct wireless telecommunication tower and associated improvements.

Dear Attorney Fisher:

This is to confirm that at its April 12, 2000, the Planning and Zoning Commission approved the above referenced proposals with the following conditions:

1. Per Section 5.3 C. of the Regulations, the applicant shall provide a legally binding document to be reviewed and approved by the Torrington Corporation Counsel for the fall zone setback area lying outside of Sprint Spectrum's L.P.'s 75' square lease area on the John J. Wright property and within the 150' required fall zone setback, the 150' height of the tower, that prevents development within the fall zone area lying outside the 75' lease area during the time the tower is in place.
2. Per Section A12.0 of the Regulations, the special exception shall be valid for 15 years. At the end of this time period, the tower shall be removed by Sprint Spectrum LP d/b/a Sprint PCS or current owner; or a new special exception permit shall be required.
3. Per Section A 4.4.1 of the Regulations, the applicant must provide a plan for the handling of any hazardous materials using best management practices. If any hazardous materials are to be used on site, there shall be provisions for full containment of such materials. An enclosed containment area shall be provided with a sealed floor, designed to contain at least 110% of the volume of hazardous materials stored or used on the site.

[redacted]

4. Per Section A 9.0 of the Regulations, after the tower is operational, the applicant shall submit existing measurements of radio frequency radiation (RFR) from the facility, signed and sealed by an RF Engineer, stating that the RFR measurements are accurate and meet the maximum permissible exposure (MPE) limits as established by the FCC guidelines. The report shall be submitted to the office of the City Planner.
5. As offered by the applicant during the public hearing process, space shall be made available, at no charge, for municipal services equipment.
6. Per Section A 10.3 of the Regulations, the applicant shall submit a bond in an amount sufficient to cover the costs of removal of the regulated facility in the event the City must remove the facility. The bond amount must be approved by the City Engineer in a form acceptable to the Torrington Corporation Counsel.
7. As recommended by the Torrington Fire Chief, the applicant shall provide a gate at the entrance to the driveway secured by a Knox brand padlock to allow the Fire Department to open the gate with a master key. The driveway must be maintained in all weather conditions in order to allow emergency access.

Please note we will require you to submit a recording mylar of the site plan and two paper copies, these will be signed by the Planning and Zoning Commission Chairman. The approval block per Section 8.4.3p must be added to the site plan, as well as this certified letter of approval, which should be reduced and placed on the site plan, per Section 8.4.3.

Enclosed please find three copies of the completed Certification of Special Exception form. Please take all three copies to the City Clerk's Office where they will time stamp and record on the City Land Records one copy. Please deliver one time stamped copy to the Planning and Zoning Department and retain one copy for your records.

Your special exception approval does not take effect until it is recorded on the Land Records. Note that you can obtain a zoning permit only after the Certification is filed and certain conditions are complied with.

If you have any questions regarding this matter, please contact me.

Sincerely,

Martin J. Connor, AICP
City Planner

cc: Peter Ebersol

[redacted]

(078)

CUDDY & FEDER & WORBY LLP

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(203) 348-4780

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1971-1995

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THOMAS R. BERNE (also D.C.)
JOSEPH P. CARLUCCI
KENNETH J. DUBROFF
ROBERT FEDER
CHRISTOPHER S. FISHER (also CT)
ANTHONY S. GIOFFRE III (also CT)
KAREN G. GRAAEK
JOSHUA J. GRAUER
WAYNE E. HELLER (also CT)
KENNETH F. JURIST
MICHAEL L. KATZ (also NJ)
JOSHUA E. KIMERLING (also CT)
DANIEL F. LEARY (also CT)
BARRY E. LONG

WILLIAM S. NULL
ELISABETH N. RADOW
NEIL T. RINSKY
RUTH E. ROTH
CHAUNCEY L. WALKER (also CA)
ROBERT L. WOLFE
DAVID E. WORBY

Of Counsel
LAUREEN J. PETERSON-COLASACCO (also CT)
MICHAEL R. EDELMAN
ANDREW A. GLICKSON (also CT)
DEBORAH S. LEWIS (also CT)
ROBERT L. OSAR (also TX)
MARYANN M. PALERMO
ROBERT C. SCHNEIDER
LOUIS R. TAFFERA

August 21, 2000

Via Federal Express

Martin J. Connor, City Planner
City of Torrington
City Hall
140 Main Street
Torrington, Connecticut 06790

RE: Certification of Special Exception
Lease between SSLP and Wright; Torrington, CT
CT33XC078 (32244/98)

Dear Mr. Connor:

On April 12, 2000 the City of Torrington issued a Certification of Special Exception. The Certification calls for a number of documents to be provided to you. Enclosed, please find the necessary outstanding items. Kindly review the enclosed and issue a Certificate of Zoning Compliance. If there is anything else you require, please do not hesitate to call me.

This package includes the following documents:

1. Final Site Plan (mylar) along with two copies;

C&F&W: 265330.01

[redacted]

2. Fall Zone Development Restriction (This has been previously reviewed and approved by the City Attorney. The attached is a copy; the original will be recorded directly with the City Clerk.);

3. A Hazardous Waste Plan prepared by URS Greiner Woodward Clyde;

4. The original Removal Bond for Sprint's installation;

5. A time stamped copy of filed Certification of Special Exception.

Please issue a letter of zoning compliance to Sprint. Also, please let me know if it is possible for Sprint to pick up the letter at City Hall when it is complete. Kindly call me to notify me if this is possible.

Very truly yours,

Wayne E. Heller

cc: Chris Fisher, Esq. (w/ encl.)
Karen Nielsen (w/encl.)

C&F&W: 260469. 02

[redacted]

(ONP)

CUDDY & FEDER & WORBY LLP

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ROBERT L. OSAR (also TX)
MARYANN M. PALERMO
ROBERT C. SCHNEIDER
LOUIS R. TAFFERA

April 28, 2000

Via Federal Express
Ms. Karen Nielsen
Sprint PCS
1 International Blvd., Suite 800
Mahwah, New Jersey 07495

Re: Resolution of Approval, CT33XC078; Torrington, CT

Dear Ms. Nielsen:

Enclosed please find copies of an April 18, 2000 letter I just received enclosing the Planning & Zoning Commission's special permit and site plan approval resolution for the above referenced site. There are a number of post approval conditions that must be satisfied prior to the issuance of a zoning permit and ability for Sprint to obtain a building permit. Specifically, Sprint must:

1) Execute a "legally binding" document to be reviewed by the City Attorney regarding the prohibition on building in the fall zoned signed by the owner of the property. As you know, Wayne Heller in our office is already working with counsel for the landlord on this matter;
2) Provide a plan for the handling of any hazardous materials using best management practices and providing for full containment of materials used or stored on site. It is my understanding that no such materials will be used or stored on site. Nevertheless, I think we could provide a written plan noting same and providing for

[redacted]

containment of materials used during construction which URS can draft and add to the plans;

3) A removal bond must be posted with the City in an amount acceptable to the City Engineer and in a form acceptable to the City Attorney. URS can provide a removal cost estimate for review by the City Engineer. We can coordinate with the City Attorney on the bond if you could provide us with the company you are using and a standard form bond to use as a starting point;
4) The plans need to be revised to: show a gate at the entrance to the new driveway with the locks and keys as set forth in the resolution provided to the Fire Department. An approval block must also be added and the enclosed letter reduced and added to the plans. URS will need to make these revisions with ultimately a recording mylar and two paper copies provided for signature by the Commission Chairman.

Additionally, there are other conditions that Sprint should review including a reservation of space for municipal antennas and post operational emissions certifications (illegal but given our need to build out a number of sites in Torrington something Sprint may simply need to consent to).

Please let me know how you would like to coordinate satisfying the conditions. In the interim, I will have the three original copies of the approval resolution recorded in the City Clerk's office with one copy provided to the Planning & Zoning Department and another copy retained for Sprint's records. Also, I would appreciate it if URS notified the Building Department of the approval in writing and started working with them on the potential need for an independent structural engineer's certification and inspections given the 90 day statutory notice requirement and threshold issue for a tower of this height.

Finally, you will note that Mr. Connor conveniently cc:d the landlord's attorney with a copy of his letter to me. While, I think we can all agree that this "fall zone" matter was orchestrated by the Planner and Attorney Ebersol for financial reasons, it seems to be in Sprint's best interests to simply move forward, satisfy the conditions and clear the way to get operational.

C&F&W: 237598.05

[redacted]

Please do not hesitate to contact me with any questions regarding the foregoing.

Sincerely,

Christopher B. Fisher

Enc.
CBF/cd
cc: Rich Feely
Rob O'Connor
Alitz Abadjian/Doug Roberts
Wayne Heller

C:\F&W\237598.03

[redacted]

To [redacted]	From M. Conway
Co./Dept.	Co.
Phone #	Phone # 860 489 8321
Fax # 860-537-3991	Fax #

TORRINGTON
ZONING DEPARTMENT

)R GRADING PERMIT

Date: 09/18/00 Fee: $ 60.00 Bond $ 1,975.00

Project Name: Sprint PCS Site CT33XC078/Long Eddy 1: Wright Property

Address: Lot 5 - Goshen Road and Lot 6 - Wright Road, Torrington, CT **Map** 214 **Block** 2 **Lot** 5&6

Property Owner's Name: Lot 5 - Estate of John J. Wright; Lot 6 - Mildred Wright and Estate of John J. Wright

Address: 136 Wright Road, Torrington, CT

Applicant's Name: Sprint Spectrum, LP d/b/a Sprint PCS (If other than Owner)

Address: 1 International Boulevard, Mahwah, NJ 07495 **Telephone:** (201) 684-4064

Give the purpose and description of the proposed activity: Proposed installation of an unmanned wireless telecommunications facility consisting of a 150' monopole and ground mounted equipment. The project will also include the construction of a paved access drive from wright parcel road to the tower compound.

Check types of material submitted: [ ] Narrative [X] Plan [ ] Soil Report [ ] Calculations
[ ] Other _____

Size of area to be disturbed with grading work (include construction drives): 24,232 Sf/A

Name of each person who will be responsible for implementing and maintaining the Erosion and Sedimentation Controls on the project:

1. Baron Utilities -Don Alloco **Telephone:** (518) 456-8114
2. Pinnacle Site Development -Steve Florio **Telephone:** (860) 659-9248
3. _____ **Telephone:** _____

The grading Permit Application is hereby applied for by the undersigned applicant in accordance with the requirements of Section 7.3 of the City of Torrington Zoning Regulations. The Permit, if issued, is based upon the plan, narrative or other information as submitted. Falsification by misrepresentation or omission, or failure to comply with the conditions of the Permit shall constitute a violation of the Zoning Regulations of the City of Torrington.

_____
Signature of Owner/Authorized Agent

* * * * * * * * * * * * * * *

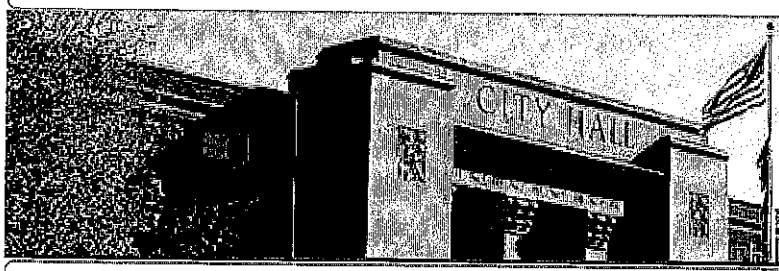
Subdivision	**Application Date** _____	**Approval Date:** _____
__ Site Plan	**Application Date** _____	**Approval Date:** _____
__ Inland Wetlands	**Application Date** _____	**Approval Date:** _____

Permit is _____ **Approved** _____ **Denied for work described above and on** _____, **with the following conditions:** _____

Approved by: _____ **Approval Date:** _____

Fee Schedule: The fee for a grading permit is $60.00 for projects involving 40,000 square feet or less of disturbed area. For projects over 40,000 square feet, $60.00 plus $1.00 per 1000 square feet of disturbed area over 40,000 square feet. The application fee shall be due and payable upon the submission of the application.

The Assessor's office is responsible for the maintenance of records on the ownership of properties. Assessments are computed at 70% of the estimated market value of real property at the time of the last revaluation which was 2014.



CITY OF TORRINGTON

Information on the Property Records for the Municipality of Torrington was last updated on 10/21/2019.

Parcel Information

Location:	125 WRIGHT RD	Property Use:	Industrial	Primary Use:	Light Industrial
Unique ID:	15373	Map Block Lot:	214/002/005/2	Acres:	1.63
490 Acres:	0.00	Zone:	R-WP	Volume / Page:	0739/0712
Developers Map / Lot:	4541/4542	Census:	4		

Value Information

	Appraised Value	Assessed Value
Land	90,063	63,050
Buildings	13,292	9,300
Detached Outbuildings	15,476	10,830
Total	118,831	83,180

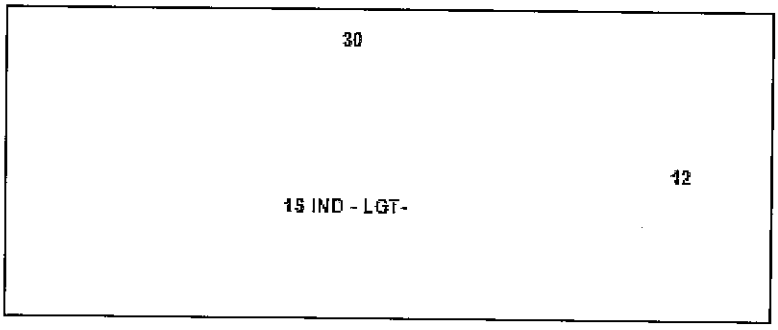
Owner's Information

Owner's Data

JOBERT JILL S ETAL
CO SPRINT SPECTRUM LP
6500 SPRINT PARKWAY
OVERLAND PARK KS 66251

Building 1

Photo Not Available



Category:	Industrial	Use:	Light Industrial	GLA:	360
Stories:	1.00	Construction:	Masonry and Wood Frame	Year Built:	2004
Heating:		Fuel:		Cooling Percent:	0

Siding:	Pre-Cast Concrete	Roof Material:	Asphalt	Beds/Units:	0

Special Features

Attached Components

Detached Outbuildings

Type:	Year Built:	Length:	Width:	Area:
Fencing	2004	0.00	0.00	200
Concrete Block/Fr Garage	2004	0.00	0.00	312
Concrete Patio	2004	0.00	0.00	528

Owner History - Sales

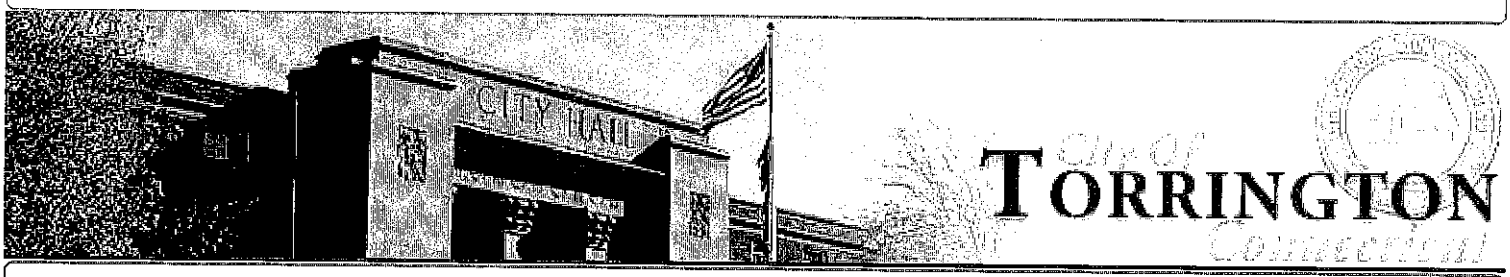
Owner Name	Volume	Page	Sale Date	Deed Type	Valid Sale	Sale Price
JOBERT JILL S ETAL	0739	0712	02/23/2001	Certificate of Devise	No	$0
WRIGHT JOHN J	0219	0370	03/09/1961	Warranty Deed	No	$0

Building Permits

Permit Number	Permit Type	Date Opened	Date Closed	Permit Status	Reason
15-469	Certificate of Completion	04/16/2015		Closed	CERT OF COMPL- 6 REPL ANTENNAS/HEADS
12-2780	Building	10/31/2012		Closed	6 NEW ANTENNAS/6 REMOTE RADIO HEADS=PP
12-2812	Building	10/31/2012		Needs Visit	6 NEW ANTENNAS & REMOTE RADIO HEADS

Permit Number	Permit Type	Date Opened	Date Closed	Permit Status	Reason
12-2489	Building	10/11/2012		Needs Visit	REPL 6 ANTENNA
03-525	Commercial	11/24/2004		Closed	
00-338	Commercial	09/27/2000		Closed	SPRINT TELECOMM TOWER

The Assessor's office is responsible for the maintenance of records on the ownership of properties. Assessments are computed at 70% of the estimated market value of real property at the time of the last revaluation which was 2014.



Information on the Property Records for the Municipality of Torrington was last updated on 10/21/2019.

Parcel Information

Location:	136 WRIGHT RD	Property Use:	Residential	Primary Use:	Residential
Unique ID:	12325	Map Block Lot:	215/005/001	Acres:	19.39
490 Acres:	18.39	Zone:	R-WP	Volume / Page:	0385/0645
Developers Map / Lot:		Census:	3108-2N		

Value Information

	Appraised Value	Assessed Value
Land	98,475	41,060
Buildings	89,199	62,440
Detached Outbuildings	557	390
Total	188,231	103,890

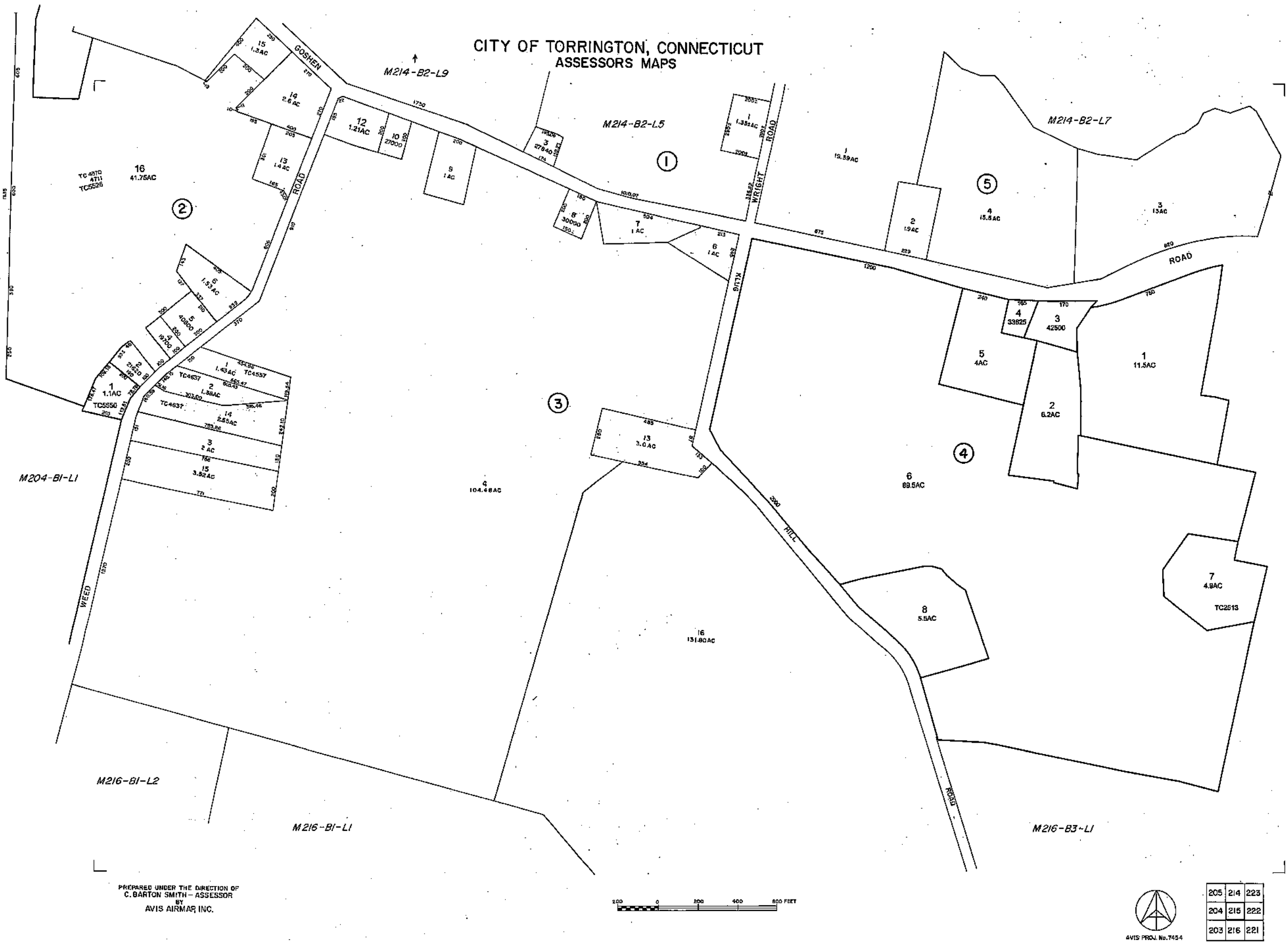
Owner's Information

Owner's Data

WRIGHT JAMES N & CAROL E SURV
104 WRIGHT RD
TORRINGTON CT 06790

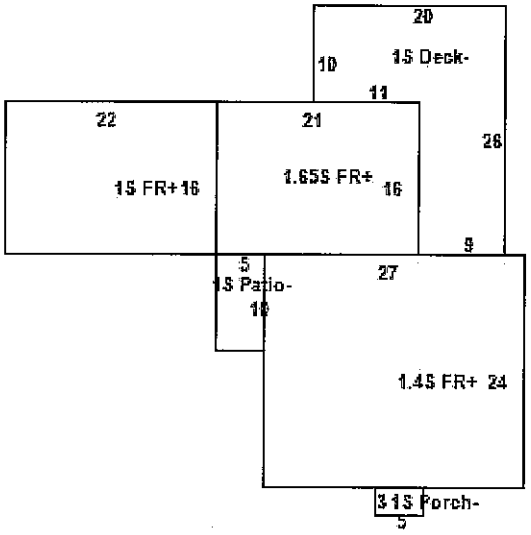
Building 1

CITY OF TORRINGTON, CONNECTICUT
ASSESSORS MAPS



REV	DATE	REVISION
DS	OCT 2017	MERGE 215/2/11 & 12
DS	MAR 2017	UPDATE 215/2/1
DS	APR 2016	UPDATE AC 215/2/16 ADD 216/4/8; UPDATE 216/4
DS	NOV 2010	UPDATE AC 215/2/1
[illegible]	SEPT. 2003	UPDATED MAP
[illegible]	NOV. 2002	UPDATED MAP
[illegible]	SEPT 2001	UPDATED MAP
RB	NOV 1999	UPDATE & REVISE
[illegible]	SEPT 1999	UPDATED MAP
[illegible]	FEB. 1999	COMB. LOT 1+2 BL 1 & CORR. [illegible]
[illegible]	Dec. 1997	Eliminate Lot 16 BL 2 & add to Lot 4 BL 2
[illegible]	Oct. 1997	[illegible]
[illegible]	June 1997	UPDATED MAP
[illegible]	MAY/90	REVISED MAP
[illegible]	[illegible] /85	UPDATED MAP 215

PREPARED UNDER THE DIRECTION OF
C. BARTON SMITH - ASSESSOR
BY
AVIS AIRMAP, INC.



Building Use:	Single Family	Style:	Cape	Living Area:	1,814
Stories:	1.65	Construction:	Wood Frame	Year Built:	1941
Total Rooms:	9	Bedrooms:	4	Full Baths:	3
Half Baths:	0	Fireplaces:	1	Heating:	FHA
Fuel:	Oil	Cooling Percent:	0	Basement Area:	1,336

Basement Finished Area:	352	Basement Garages:	0	Roof Material:	Asphalt
Siding:	Clapboards	Units:	01		

Special Features

Attached Components

Type:	Year Built:	Area:
Wood Deck	1941	344
Concrete Patio	1941	50
Open Porch	1941	15

Detached Outbuildings

Type:	Year Built:	Length:	Width:	Area:
Wood Deck	1999	0.00	0.00	128

Owner History - Sales

Owner Name	Volume	Page	Sale Date	Deed Type	Valid Sale	Sale Price
WRIGHT JAMES N & CAROL E SURV	0385	0645	01/31/1986	Warranty Deed	No	$0

Building Permits

Permit Number	Permit Type	Date Opened	Date Closed	Permit Status	Reason
19-1037 MEC	Mechanical	07/22/2019			INSTALL NEW GAS STOVE

Permit Number	Permit Type	Date Opened	Date Closed	Permit Status	Reason
18-2387	Building	12/27/2018			ADDITION TO EXISTING CELL TOWER-ANTENNAS/RADIO CABINETS/GENERATOR/10 X 15 CONC PAD= PP
18-2371 Z	Commercial	12/20/2018			NEW ANTENNA PLATFORM/8 ANTENNAS/2 RADIO CABINETS/GENERATOR
17-1851	Building	09/27/2017		Closed	SRINT TO ADD 3 ANTENNAS & 3 RRU'S TO EXISTING CELL TOWER
17-1768 Z	Commercial	09/18/2017		Closed	ADD 3 ANTENNAS & ASSOC EQUIP TO EXISTING CELL TOWER
17-1589	Electrical	08/24/2017		Closed	WIRE NEW AT&T CELL SITE/INSTALL NEW 200AMP LOADCENTER/FEEDER
17-1487	Building	08/08/2017		Closed	INSTALL 3 ANTENNAS & ASSOCIATED EQUIP ON CELL TOWER=PP
15-69	Building	01/15/2015		Closed	ANTENNA MODIFICATION=PP

Site Name: TORRINGTON W CT
Cumulative Power Density

Operator	Operating Frequency	Number of Trans.	ERP Per Trans.	Total ERP	Distance to Target	Calculated Power Density	Maximum Permissible Exposure	Fraction of MPE
	(MHz)		(watts)	(watts)	(feet)	(mW/cm^2)	(mW/cm^2)	(%)
VZW PCS	1970	4	887	3546.16	140	0.0651	1.0	6.51%
VZW Cellular CDMA	869	3	498	1494	140	0.0274	0.579333333	4.73%
VZW Cellular LTE	880	4	210	841.48	140	0.0154	0.586666667	2.63%
VZW AWS	2145	4	1109	4437.72	140	0.0814	1.0	8.14%
VZW 700	746	4	614	2456.16	140	0.0451	0.497333333	9.06%

Total Percentage of Maximum Permissible Exposure 31.07%

*Guidelines adopted by the FCC on August 1, 1996, 47 CFR Section 1.13101 based on NCRP Report 86, 1986 and generally on ANSI/IEEE C95.1-19

MHz = Megahertz
mW/cm^2 = milliwatts per square centimeter
ERP = Effective Radiated Power

Absolute worst case maximum values used, including the following assumptions:
1. closest accessible point is distance from antenna to base of pole;
2. continuous transmission from all available channels at full power for indefinite time period; and,
3. all RF energy is assumed to be directed solely to the base of the pole.

92

After printing this label:
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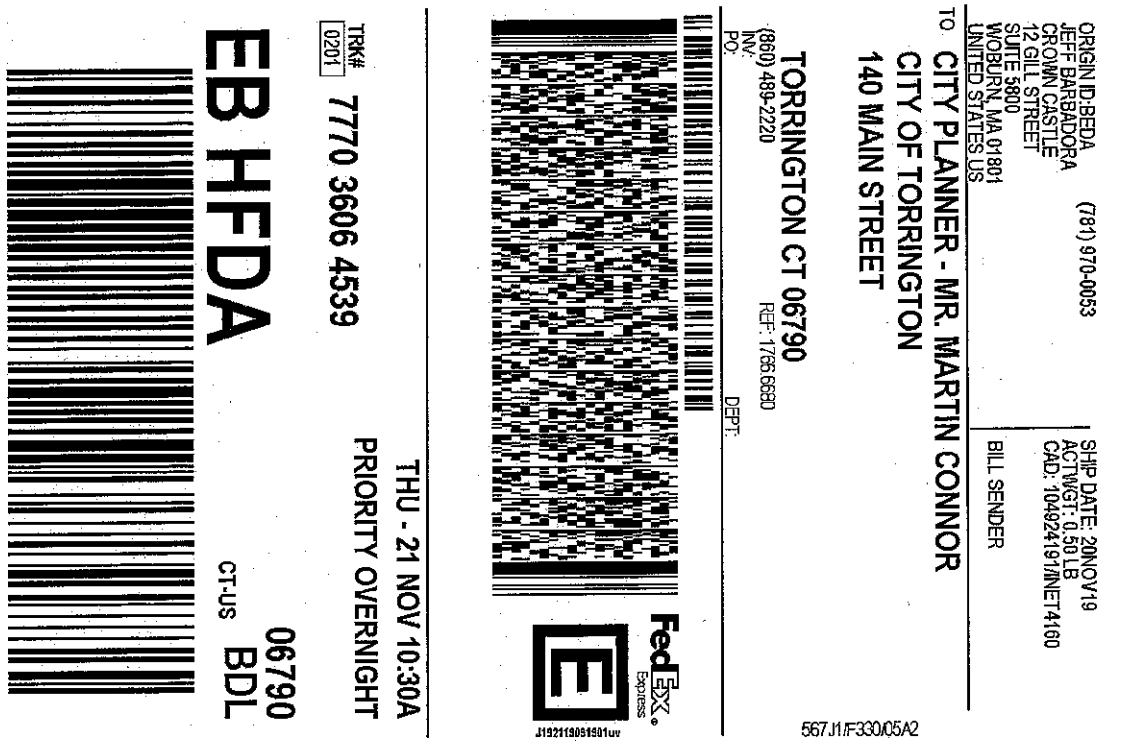
Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.



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October 31, 2019

Kevin Morrow
Crown Castle
3530 Toringdon Way, Suite 300
Charlotte, NC 28277
(704) 405-6619

Tower Engineering Professionals
326 Tryon Road
Raleigh, NC 27603
(919) 661-6351
Structures@tepgroup.net

Subject:	**Mount Analysis**	
Carrier Designation:	***Verizon Wireless* Reconfiguration**	
	Client Site Number:	NG56920
	Client Site Name:	Torrington W CT
Crown Castle Designation:	**Crown Castle BU Number:**	876373
	Crown Castle Site Name:	Long Eddy/Wright Property
	Crown Castle JDE Job Number:	588260
	Crown Castle Order Number:	503512 Rev. 0
Engineering Firm Designation:	**TEP Project Number:**	52429.298270
Site Data:	**136 Wright Rd, Torrington, Litchfield County, CT 06790** **Latitude *41° 49' 38.34"*, Longitude *-73° 10' 13.97"***	
Structure Information:	**Tower Height & Type:**	148.0± ft Monopole
	Mount Elevation:	138.0 ft
	Mount Width & Type:	12.5 ft Low Profile Platform

Dear Kevin Morrow,

Tower Engineering Professionals is pleased to submit this **"Mount Analysis"** to determine the structural integrity of Verizon Wireless's antenna mounting system with proposed appurtenance and equipment addition on the above mentioned supporting tower structure. Analysis of the existing supporting tower structure is to be completed by others and therefore is not part of this analysis. Analysis of the antenna mounting system as a tie-off point for fall protection or rigging is not part of this document.

The purpose of the analysis is to determine acceptability of the mount stress level. Based on our analysis, we have determined the mount stress level to be:

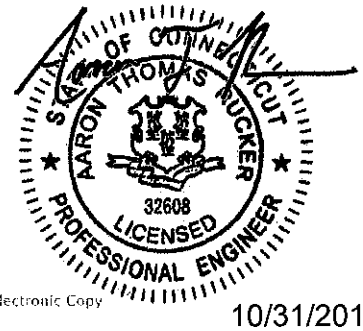
Low Profile Platform Mount **Sufficient Capacity**

This analysis utilizes an ultimate 3-second gust wind speed of 115 mph from the 2018 International Building Code. Applicable Standard references and design criteria are listed in Section 2 - Analysis Criteria.

Structural analysis prepared by: Christopher J. Bean, E.I.

Respectfully submitted by:

Aaron T. Rucker, P.E.
Structural Division Manager



Electronic Copy

10/31/2019

TABLE OF CONTENTS

1) INTRODUCTION

The mount is an existing 12.5-ft Low Profile Platform mount.

2) ANALYSIS CRITERIA

Building Code:	2018 IBC
TIA-222 Revision:	TIA-222-H
Risk Category:	II
Ultimate Wind Speed:	115 mph
Exposure Category:	B
Topographic Category at Base:	1.0
Topographic Category at Mount:	1.0
Ice Thickness:	1.00 in
Wind Speed with Ice:	50 mph
Seismic Design Category:	B
Seismic S_s:	0.173
Seismic S_1:	0.054
Live Loading Wind Speed:	30 mph
Live Loading at Mid/End-Points:	250 lb
Man Live Loading at Mount Pipes:	500 lb

Table 1 - Proposed Equipment Configuration

Mount Centerline (ft)	Antenna Centerline (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Mount / Modification Details
138.0	138.0	2	Antel	LPA-80063/6CF	Low Profile Platform Mount
		4	Antel	LPA-80080/6CF	
		6	Quintel Technology	QS6656-5	
		1	RFS/Celwave	DB-C1-12C-24AB-0Z	
		3	Samsung	RFV01U-D1A	
		3	Samsung	RFV01U-D2A	

3) ANALYSIS PROCEDURE

Table 2 - Documents Provided

Document	Remarks	Reference	Source
Loading Application	Verizon Wireless	Order 503512 Rev. 0	CCIsites

3.1) Analysis Method

RISA-3D (Version 17.0.1), a commercially available analysis software package, was used to create a three-dimensional model of the mount and calculate member stresses for various loading cases. Selected output from the analysis is included in Appendix A and Appendix C.

TEP Mount Analysis Tool, a tool internally developed by TEP using Microsoft Excel, was used to calculate member loading for various load cases. Selected output from the analysis is included in Appendix B.

This analysis was performed in accordance with Crown Castle's ENG-SOW-10208 *Tower Mount Analysis (Revision C).*

In addition, this analysis is in accordance with NSTD-445 *Antennas Mounting System Classification Standard.*

3.2) Assumptions

1) The mount was built in accordance with the manufacturer's specifications.
2) The mount has been maintained in accordance with the manufacturer's specification.
3) The configuration of antennas, mounts and other appurtenances are as specified in Table 1. All mount components have been assumed to be in sufficient condition to carry their full design capacity for this analysis. Refer to the issued mapping for any structural and/or maintenance issues found during our site visit if applicable.
4) All mount components are in sufficient condition to carry their full design capacity.
5) TEP did not analyze the collar mount connection to the pole and assumes it to have sufficient structural capacity to transfer the applied forces from the mount to the tower.
6) All material grades used for this analysis, unless verified by mount manufacturer design, were assumed per AISC Table 2-4, 15th Edition. See RISA-3D output for confirmation on grades used in this analysis.

This analysis may be affected if any assumptions are not valid or have been made in error. Tower Engineering Professionals should be notified to determine the effect on the structural integrity of the antenna mounting system.

4) ANALYSIS RESULTS

Table 3 - Mount Component Stresses vs. Capacity (Low Profile Platform Mount)

Notes	Component	Critical Member	Mount Centerline (ft)	% Capacity	Pass / Fail
1	Face Horizontals	F2	138.0	19.7	Pass
1	Support Arm	SA-2	138.0	34.8	Pass
1	Mount Pipes	MP-8	138.0	29.9	Pass
2	Connection Bolts	-	138.0	24.0	Pass
2	Connection Plate	-	138.0	45.6	Pass

Structure Rating (max from all components) =	45.6%

Notes:
1) See additional documentation in "Appendix C - Analysis Output" for calculations supporting the % capacity listed.
2) See additional documentation in "Appendix D - Additional Calculations" for calculations supporting the % capacity listed.
3) All sectors are typical.
4) Rating per TIA-222-H, Section 15.5.

Table 4 - Tieback Connection Data Table

Tower Connection Node No.	Existing/ Proposed	Resultant End Reaction (lb)	Connected Member Type	Connected Member Size	Member Compressive Capacity (lb)[3]	Notes
-	-	-	-	-	-	-

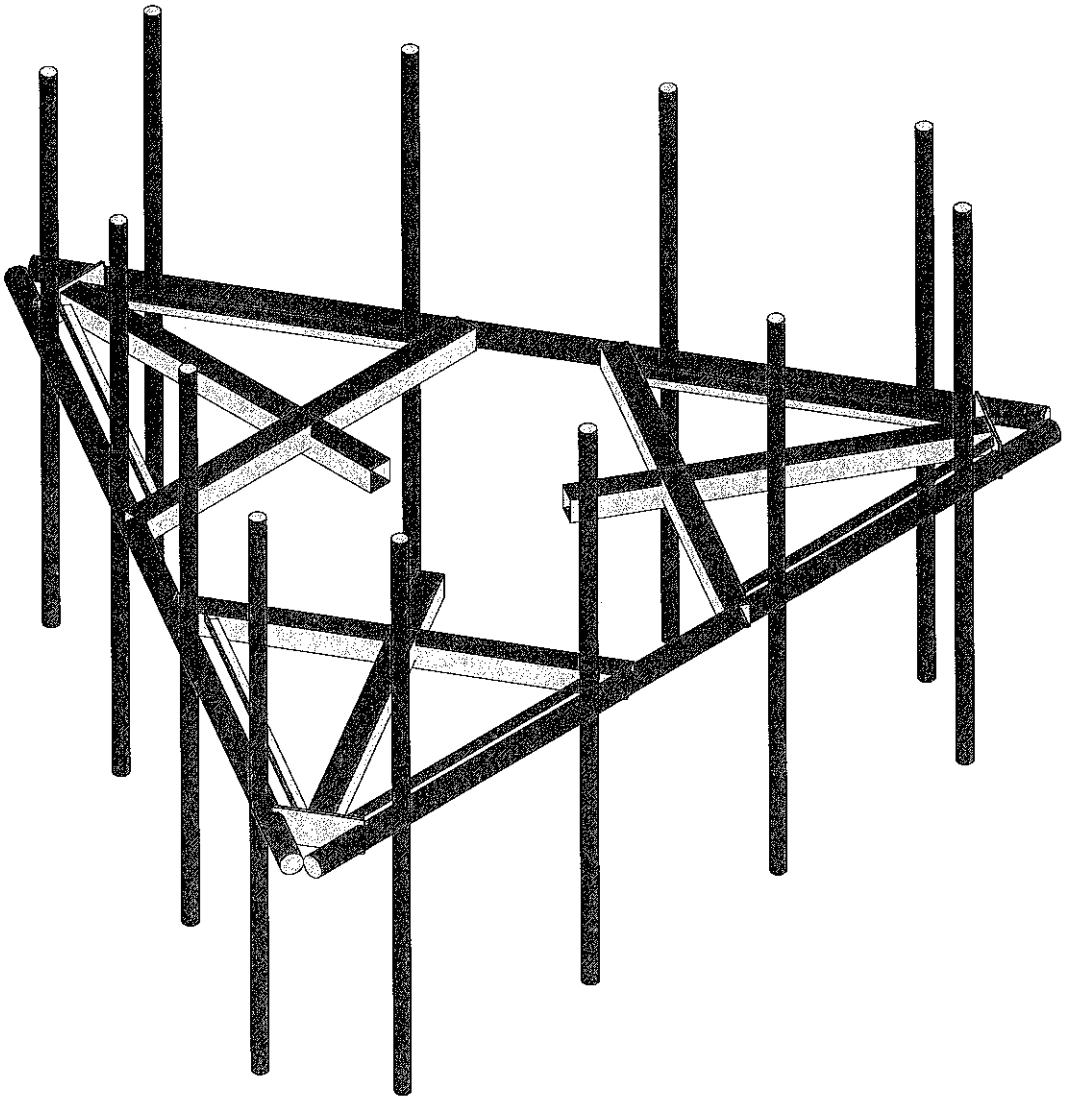
Notes:
1) Tieback connection point is within 25% of either end of the connected tower member.
2) Tower connection point is NOT within 25% of either end of the connected tower member.
3) Reduced member compressive capacity according to CED-STD-10294 *Standard for Installation of Mounts and Appurtenances.*

4.1) Recommendations

1) If the load differs from that described in Table 1 of this report or the provisions of this analysis are found to be invalid, another structural analysis should be performed.
2) The mount and its connection have sufficient capacity to carry the proposed loading configuration. No modifications are required at this time.

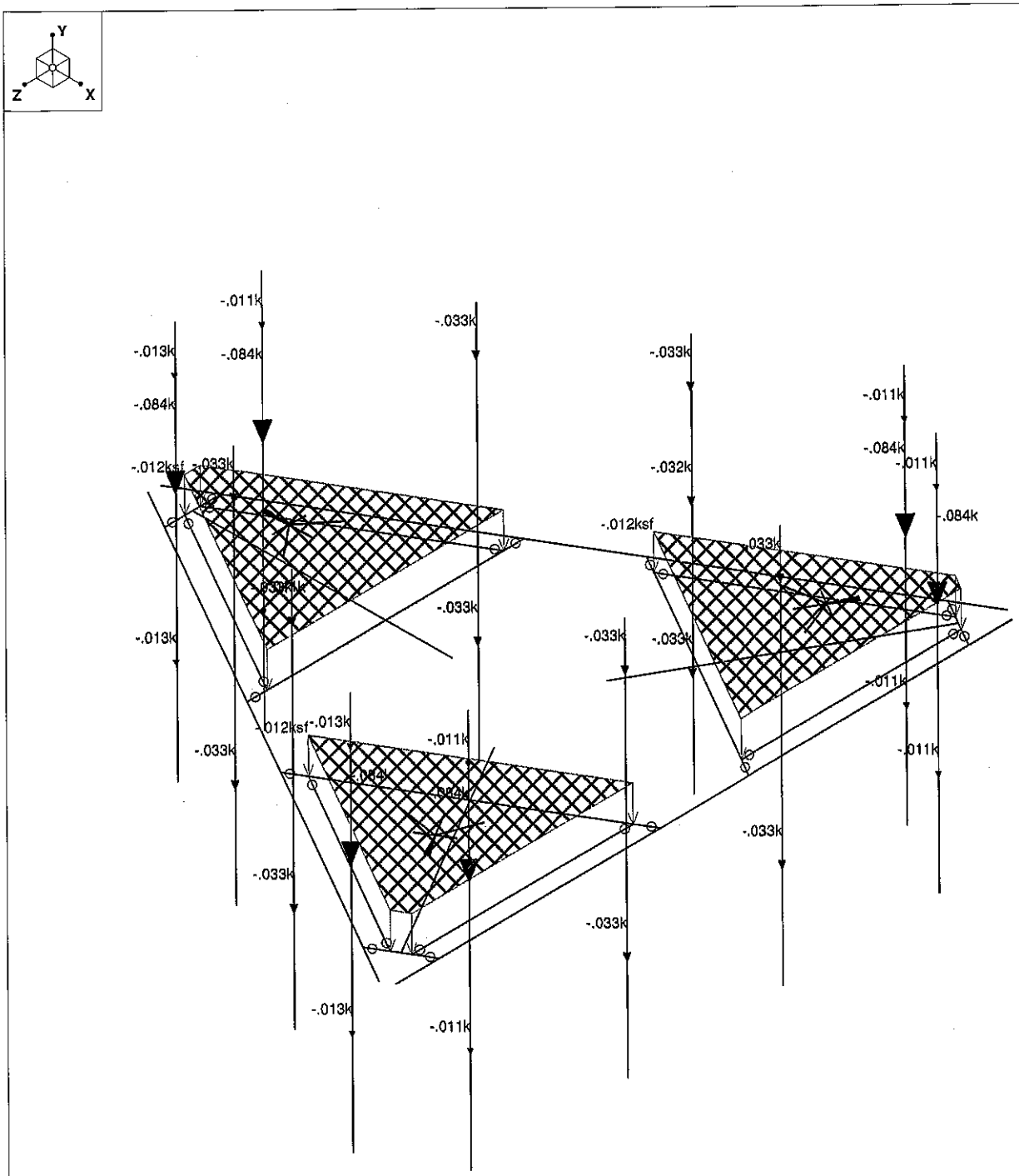
APPENDIX A

WIRE FRAME AND RENDERED MODELS



Envelope Only Solution

Tower Engineering Profess...	CCI BU No. 876373	Rev. 0
CJB		Oct 31, 2019 at 10:06 AM
52429.298270		Mount Rev H.r3d



Loads: BLC 1, Dead
Envelope Only Solution

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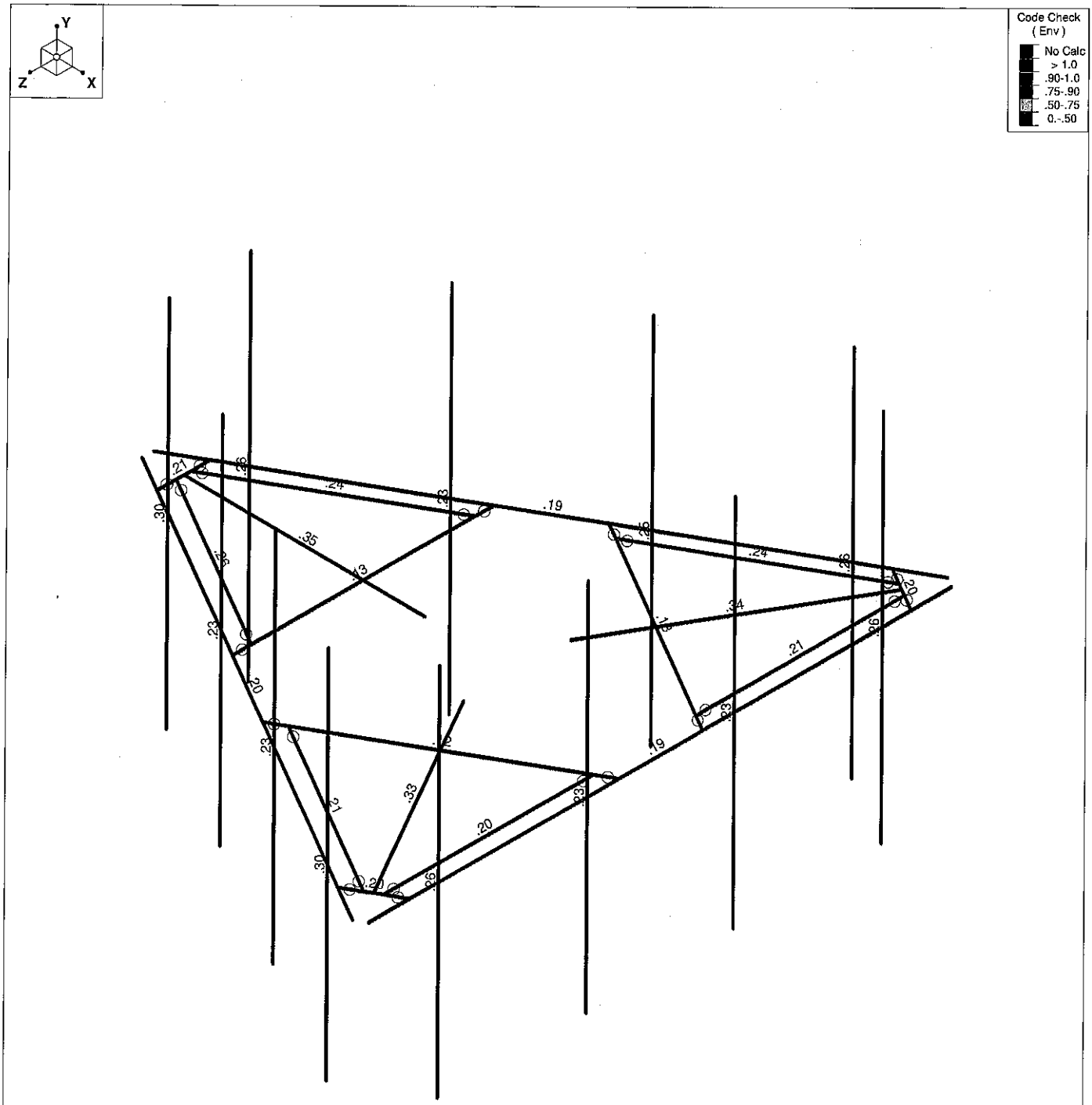
CJB		Oct 31, 2019 at 10:06 AM
52429.298270		Mount Rev H.r3d



Member Code Checks Displayed (Enveloped)
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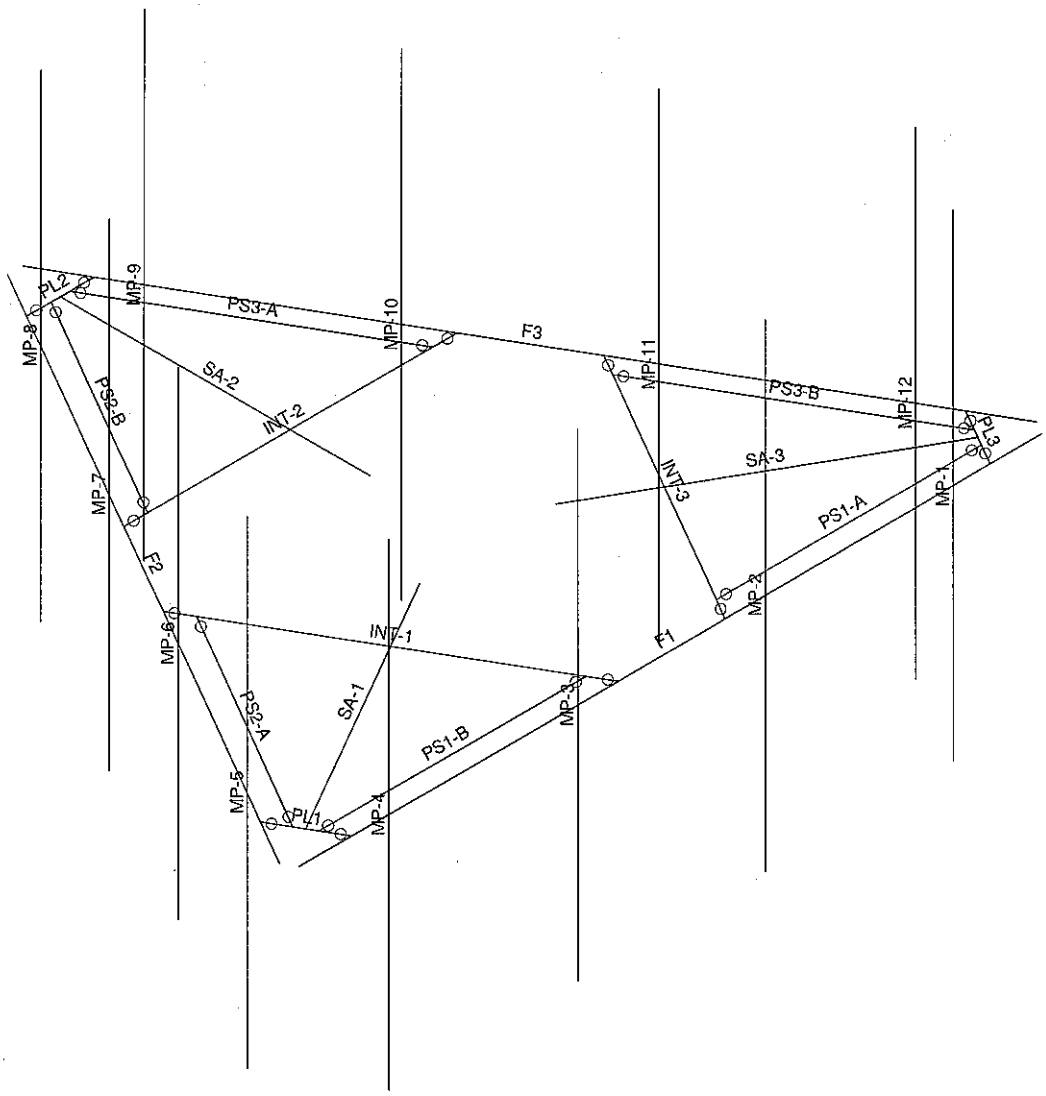
CJB	CCI BU No. 876373	Oct 31, 2019 at 10:06 AM
52429.298270		Mount Rev H.r3d



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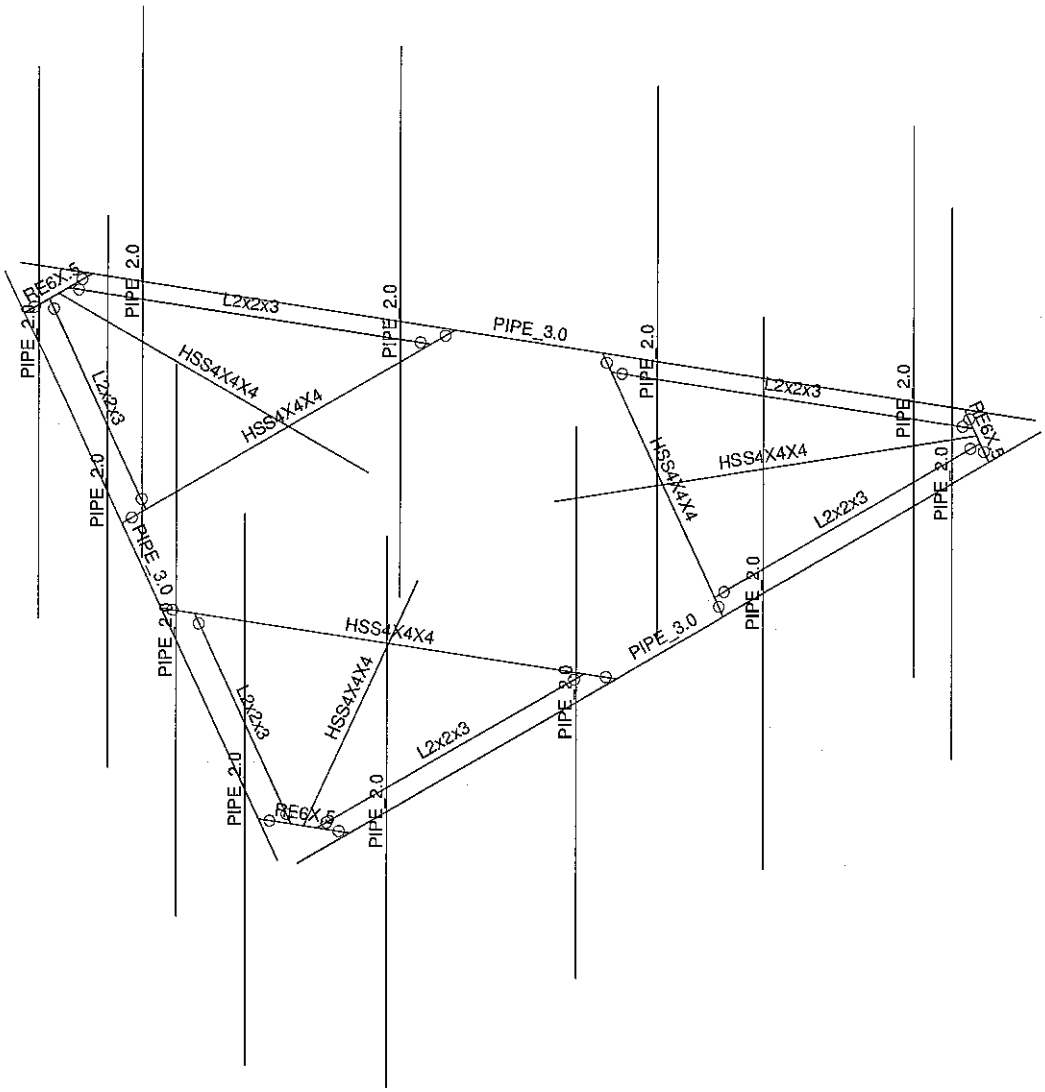
Tower Engineering Profess...	CCI BU No. 876373	Rev. 0
CJB		Oct 31, 2019 at 10:07 AM
52429.298270		Mount Rev H.r3d



Envelope Only Solution

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CJB		Oct 31, 2019 at 10:07 AM
52429.298270		Mount Rev H.r3d

APPENDIX B

SOFTWARE INPUT CALCULATIONS

TOWER ENGINEERING PROFESSIONALS

CCI BU No. 876373

TEP No.	52429.298270	
Analysis By:	CJB	10/31/2019
Checked By:	JHJ	10/31/2019

Code Revisions:	**TIA-222-H**	**IBC 2018**
Tower Type:	**Monopole**	

Wind Inputs:

Ult. Wind Velocity:	**115.0**	mph
Live Load Velocity:	**30.0**	mph
Ice Wind Velocity:	**50.0**	mph
Base Ice Thickness:	**1.00**	inches
Mount Centerline:	**138.0**	ft
Antenna Centerline:	**138.0**	ft
Exposure Category:	**B**	
Topo Category:	**1**	
Risk Category:	**II**	
Ground Elevation:	**1046**	ft

Wind Calculations:

K_{zt}:	**1.000**	Section 2.6.6
K_d:	0.950	
$K_{z\text{-}Mount}$:	1.083	Section 2.6.5.2
$K_{z\text{-}Antenna}$:	1.083	Section 2.6.5.2
K_{iz}:	1.154	Section 2.6.10
Ice Thickness:	1.154	inches - Section 2.6.10

Without Ice - (psf)		With Ice - (psf)	
$(q_zG_h)_{Mount}$:	33.55	$(q_zG_h)_{Mount}$:	6.34
$(q_zG_h)_{Antenna}$:	33.55	$(q_zG_h)_{Antenna}$:	6.34

TOWER ENGINEERING PROFESSIONALS

CCI BU No. 876373

TEP No.		52429.298270
Analysis By:	CJB	10/31/2019
Checked By:	JHJ	10/31/2019

Antenna Loads are Calculated in Accordance with TIA-222-H

Azimuth is the absolute angle measured clockwise from RISA-3D global X-axis.

MFR	Model	Height (in)	Width (in)	Depth (in)	Wt. (lbs)	Azimuth°	Qty	Shape	Member Label
Antel	LPA-80080/6CF	70.87	5.51	13.19	21.00	20.00	1	Flat	MP-1
Antel	LPA-80080/6CF	70.87	5.51	13.19	21.00	20.00	1	Flat	MP-4
Quintel Technology	QS6656-S	72.00	12.00	9.60	65.00	20.00	1	Flat	MP-2
Quintel Technology	QS6656-S	72.00	12.00	9.60	65.00	20.00	1	Flat	MP-3
Samsung Telecommunications	RFV01U-D1A	15.00	15.00	10.00	84.40	20.00	1	Flat	MP-1
Samsung Telecommunications	RFV01U-D1A	15.00	15.00	10.00	84.40	20.00	1	Flat	MP-4
Antel	LPA-80063/6CF	70.90	15.00	13.10	27.00	130.00	1	Flat	MP-5
Antel	LPA-80063/6CF	70.90	15.00	13.10	27.00	130.00	1	Flat	MP-8
Quintel Technology	QS6656-S	72.00	12.00	9.60	65.00	130.00	1	Flat	MP-6
Quintel Technology	QS6656-S	72.00	12.00	9.60	65.00	130.00	1	Flat	MP-7
Samsung Telecommunications	RFV01U-D1A	15.00	15.00	10.00	84.40	130.00	1	Flat	MP-5
Samsung Telecommunications	RFV01U-D1A	15.00	15.00	10.00	84.40	130.00	1	Flat	MP-8
Antel	LPA-80080/6CF	70.87	5.51	13.19	21.00	260.00	1	Flat	MP-9
Antel	LPA-80080/6CF	70.87	5.51	13.19	21.00	260.00	1	Flat	MP-12
Quintel Technology	QS6656-S	72.00	12.00	9.60	65.00	260.00	1	Flat	MP-10
Quintel Technology	QS6656-S	72.00	12.00	9.60	65.00	260.00	1	Flat	MP-11
Samsung Telecommunications	RFV01U-D1A	15.00	15.00	10.00	84.40	260.00	1	Flat	MP-9
Samsung Telecommunications	RFV01U-D1A	15.00	15.00	10.00	84.40	260.00	1.00	Flat	MP-12
Rfs/Celwave	DB-C1-12C-24AB-0Z	29.50	16.50	12.60	32.00	0.00	1.00	Round	MP-11

TOWER ENGINEERING PROFESSIONALS

CCI BU No. 876373

TEP No.	52429.298270	
Analysis By:	CJB	10/31/2019
Checked By:	JHJ	10/31/2019

Member Forces are Calculated in Accordance with TIA-222-H

Member Name	Wind Proj. (in)	Length (in)	Shape	θ (°)	Perimeter (in)
F1	3.500	150.00	Round	90.00	11.00
F2	3.500	150.00	Round	-30.00	11.00
F3	3.500	150.00	Round	30.00	11.00
INT-1	4.000	67.18	Flat	30.00	16.00
INT-2	4.000	67.18	Flat	90.00	16.00
INT-3	4.000	67.18	Flat	-30.00	16.00
MP-1	2.375	96.00	Round		7.46
MP-2	2.375	96.00	Round		7.46
MP-4	2.375	96.00	Round		7.46
MP-5	2.375	96.00	Round		7.46
MP-8	2.375	96.00	Round		7.46
MP-9	2.375	96.00	Round		7.46
MP-12	2.375	96.00	Round		7.46
PL1	6.000	13.50	Flat	30.00	13.00
PL2	6.000	13.50	Flat	90.00	13.00
PL3	6.000	13.50	Flat	-30.00	13.00
PS1-A	2.000	53.68	Flat	90.00	8.00
PS1-B	2.000	53.68	Flat	90.00	8.00
PS2-A	2.000	53.68	Flat	-30.00	8.00
PS2-B	6.000	53.68	Flat	-30.00	24.00
PS3-A	6.000	53.68	Flat	30.00	24.00
PS3-B	6.000	53.68	Flat	30.00	24.00
SA-1	4.000	62.49	Flat	-60.00	16.00
SA-2	4.000	62.49	Flat	0.00	16.00
SA-3	4.000	62.49	Flat	60.00	16.00
MP-3	2.375	96.00	Round		7.46
MP-10	2.375	96.00	Round		7.46
MP-11	2.375	96.00	Round		7.46
MP-6	2.375	96.00	Round		7.46
MP-7	2.375	96.00	Round		7.46

APPENDIX C

SOFTWARE ANALYSIS OUTPUT

(Global) Model Settings

Display Sections for Member Calcs	6
Max Internal Sections for Member Calcs	97
Include Shear Deformation?	Yes
Increase Nailing Capacity for Wind?	Yes
Include Warping?	Yes
Trans Load Btwn Intersecting Wood Wall?	Yes
Area Load Mesh (in^2)	144
Merge Tolerance (in)	.12
P-Delta Analysis Tolerance	0.50%
Include P-Delta for Walls?	Yes
Automatically Iterate Stiffness for Walls?	Yes
Max Iterations for Wall Stiffness	3
Gravity Acceleration (ft/sec^2)	32.2
Wall Mesh Size (in)	24
Eigensolution Convergence Tol. (1.E-)	4
Vertical Axis	Y
Global Member Orientation Plane	XZ
Static Solver	Sparse Accelerated
Dynamic Solver	Accelerated Solver

Hot Rolled Steel Code	AISC 15th(360-16): LRFD
Adjust Stiffness?	No
RISAConnection Code	None
Cold Formed Steel Code	None
Wood Code	None
Wood Temperature	< 100F
Concrete Code	None
Masonry Code	None
Aluminum Code	None - Building
Stainless Steel Code	None

Number of Shear Regions	4
Region Spacing Increment (in)	4
Biaxial Column Method	Exact Integration
Parme Beta Factor (PCA)	.65
Concrete Stress Block	Rectangular
Use Cracked Sections?	Yes
Use Cracked Sections Slab?	Yes
Bad Framing Warnings?	No
Unused Force Warnings?	Yes
Min 1 Bar Diam. Spacing?	No
Concrete Rebar Set	REBAR_SET_ASTM615
Min % Steel for Column	1
Max % Steel for Column	8

Company : Tower Engineering Professionals, Inc.
Designer : CJB
Job Number : 52429.298270
Model Name : CCI BU No. 876373

Oct 31, 2019
10:08 AM
Checked By: JHJ

(Global) Model Settings, Continued

Seismic Code	ASCE 7-10
Seismic Base Elevation (ft)	Not Entered
Add Base Weight?	Yes
Ct X	.02
Ct Z	.02
T X (sec)	Not Entered
T Z (sec)	Not Entered
R X	3
R Z	3
Ct Exp. X	.75
Ct Exp. Z	.75
SD1	1
SDS	1
S1	1
TL (sec)	5
Risk Cat	I or II
Drift Cat	Other
Om Z	1
Om X	1
Cd Z	1
Cd X	1
Rho Z	1
Rho X	1

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (1E...	Density[k/ft...	Yield[ksi]	Ry	Fu[ksi]	Rt
1	A992	29000	11154	.3	.65	.49	50	1.1	65	1.1
2	A36 Gr.36	29000	11154	.3	.65	.49	36	1.5	58	1.2
3	A572 Gr.50	29000	11154	.3	.65	.49	50	1.1	65	1.1
4	A500 Gr.B RND	29000	11154	.3	.65	.527	42	1.4	58	1.3
5	A500 Gr.B Rect	29000	11154	.3	.65	.527	46	1.4	58	1.3
6	A53 Gr.B	29000	11154	.3	.65	.49	35	1.6	60	1.2
7	A1085	29000	11154	.3	.65	.49	50	1.4	65	1.3

Cold Formed Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Rul...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	CF1A	8CU1.25X...	Beam	None	A653 SS Gr33	Typical	.581	.057	4.41	.00063

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design R...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Face Horiz.	PIPE 3.0	None	None	A53 Gr.B	Typical	2.07	2.85	2.85	5.69
2	Mount Pipe	PIPE 2.0	None	None	A53 Gr.B	Typical	1.02	.627	.627	1.25
3	Support Horiz.	HSS4X4X4	None	None	A500 Gr.B Rect	Typical	3.37	7.8	7.8	12.8
4	Internal	HSS4X4X4	None	None	A500 Gr.B Rect	Typical	3.37	7.8	7.8	12.8
5	Platform Support	L2x2x3	None	None	A36 Gr.36	Typical	.722	.271	.271	.009
6	Plates	RE6X.5	None	None	A36 Gr.36	Typical	3	.063	9	.237

Material Takeoff

	Material	Size	Pieces	Length[ft]	Weight[K]
1	Hot Rolled Steel				
2	A36 Gr.36	L2x2x3	6	28.8	0
3	A36 Gr.36	RE6X.5	3	3.4	0
4	A500 Gr.B Rect	HSS4X4X4	6	32.4	.4
5	A53 Gr.B	PIPE_2.0	12	96	.3
6	A53 Gr.B	PIPE_3.0	3	37.5	.3
7	Total HR Steel		30	196.1	1.1

Joint Boundary Conditions

	Joint Label	X [k/in]	Y [k/in]	Z [k/in]	X Rot.[k-ft/rad]	Y Rot.[k-ft/rad]	Z Rot.[k-ft/rad]
1	SA3	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
2	SA2	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
3	SA1	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	F1	N44	N43			Face Horiz.	None	None	A53 Gr.B	Typical
2	F2	N47	N45			Face Horiz.	None	None	A53 Gr.B	Typical
3	F3	N45	N46			Face Horiz.	None	None	A53 Gr.B	Typical
4	INT-1	N106	N105			Internal	None	None	A500 Gr....	Typical
5	INT-2	N58	N57			Internal	None	None	A500 Gr....	Typical
6	INT-3	N104	N103			Internal	None	None	A500 Gr....	Typical
7	MP-1	N58A	N59			Mount Pipe	None	None	A53 Gr.B	Typical
8	MP-2	N58B	N61			Mount Pipe	None	None	A53 Gr.B	Typical
9	MP-4	N57B	N60			Mount Pipe	None	None	A53 Gr.B	Typical
10	MP-5	N62	N65			Mount Pipe	None	None	A53 Gr.B	Typical
11	MP-8	N63A	N66			Mount Pipe	None	None	A53 Gr.B	Typical
12	MP-9	N68	N71			Mount Pipe	None	None	A53 Gr.B	Typical
13	MP-12	N69A	N72A			Mount Pipe	None	None	A53 Gr.B	Typical
14	PL1	N49	N54			Plates	None	None	A36 Gr.36	Typical
15	PL2	N53	N52			Plates	None	None	A36 Gr.36	Typical
16	PL3	N51	N50			Plates	None	None	A36 Gr.36	Typical
17	PS1-A	N64	N92		270	Platform Support	None	None	A36 Gr.36	Typical
18	PS1-B	N91	N57A		270	Platform Support	None	None	A36 Gr.36	Typical
19	PS2-A	N58A	N95		270	Platform Support	None	None	A36 Gr.36	Typical
20	PS2-B	N96	N55		270	Platform Support	None	None	A36 Gr.36	Typical
21	PS3-A	N56	N93		270	Platform Support	None	None	A36 Gr.36	Typical
22	PS3-B	N94	N63		270	Platform Support	None	None	A36 Gr.36	Typical
23	SA-1	SA1	N60			Support Horiz.	None	None	A500 Gr....	Typical
24	SA-2	SA3	N64			Support Horiz.	None	None	A500 Gr....	Typical
25	SA-3	SA2	N62			Support Horiz.	None	None	A500 Gr....	Typical
26	MP-3	N97	N98A			Mount Pipe	None	None	A53 Gr.B	Typical
27	MP-10	N101	N102			Mount Pipe	None	None	A53 Gr.B	Typical
28	MP-11	N105B	N106A			Mount Pipe	None	None	A53 Gr.B	Typical
29	MP-6	N109A	N110A			Mount Pipe	None	None	A53 Gr.B	Typical
30	MP-7	N113A	N114A			Mount Pipe	None	None	A53 Gr.B	Typical

Company : Tower Engineering Professionals, Inc.
Designer : CJB
Job Number : 52429.298270
Model Name : CCI BU No. 876373

Oct 31, 2019
10:08 AM
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Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Dell Ratio Options	Analysis...	Inactive	Seismi...
1	F1						Yes	** NA **			None
2	F2						Yes	** NA **			None
3	F3						Yes	** NA **			None
4	INT-1	BenPIN	BenPIN				Yes	** NA **			None
5	INT-2	BenPIN	BenPIN				Yes	** NA **			None
6	INT-3	BenPIN	BenPIN				Yes	** NA **			None
7	MP-1						Yes	** NA **			None
8	MP-2						Yes	** NA **			None
9	MP-4						Yes	** NA **			None
10	MP-5						Yes	** NA **			None
11	MP-8						Yes	** NA **			None
12	MP-9						Yes	** NA **			None
13	MP-12						Yes	** NA **			None
14	PL1	BenPIN	BenPIN				Yes	** NA **			None
15	PL2	BenPIN	BenPIN				Yes	** NA **			None
16	PL3	BenPIN	BenPIN				Yes	** NA **			None
17	PS1-A	BenPIN	BenPIN				Yes	** NA **			None
18	PS1-B	BenPIN	BenPIN				Yes	** NA **			None
19	PS2-A	BenPIN	BenPIN				Yes	** NA **			None
20	PS2-B	BenPIN	BenPIN				Yes	** NA **			None
21	PS3-A	BenPIN	BenPIN				Yes	** NA **			None
22	PS3-B	BenPIN	BenPIN				Yes	** NA **			None
23	SA-1						Yes	** NA **			None
24	SA-2						Yes	** NA **			None
25	SA-3						Yes	** NA **			None
26	MP-3						Yes	** NA **			None
27	MP-10						Yes	** NA **			None
28	MP-11						Yes	** NA **			None
29	MP-6						Yes	** NA **			None
30	MP-7						Yes	** NA **			None

Hot Rolled Steel Design Parameters

	Label	Shape	Length[ft]	Lbyy[ft]	Lbzz[ft]	Lcomp top[ft]	Lcomp bot[ft]	L-torque...	Kyy	Kzz	Cb	Function
1	F1	Face Horiz.	12.5	4.473					1	1		Lateral
2	F2	Face Horiz.	12.5	4.473					1	1		Lateral
3	F3	Face Horiz.	12.5	4.473					1	1		Lateral
4	INT-1	Internal	5.599	2.8	2.8				1	1		Lateral
5	INT-2	Internal	5.599	2.8	2.8				1	1		Lateral
6	INT-3	Internal	5.599	2.8	2.8				1	1		Lateral
7	MP-1	Mount Pipe	8	Segment	Segment				2.1	2.1		Lateral
8	MP-2	Mount Pipe	8	Segment	Segment				2.1	2.1		Lateral
9	MP-4	Mount Pipe	8	Segment	Segment				2.1	2.1		Lateral
10	MP-5	Mount Pipe	8	Segment	Segment				2.1	2.1		Lateral
11	MP-8	Mount Pipe	8	Segment	Segment				2.1	2.1		Lateral
12	MP-9	Mount Pipe	8	Segment	Segment				2.1	2.1		Lateral
13	MP-12	Mount Pipe	8	Segment	Segment				2.1	2.1		Lateral
14	PL1	Plates	1.125	.404	.404				1	1		Lateral
15	PL2	Plates	1.125	.404	.404				1	1		Lateral
16	PL3	Plates	1.125	.404	.404				1	1		Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length[ft]	Lbyy[ft]	Lbzz[ft]	Lcomp top[ft]	Lcomp bot[ft]	L-torque...	Kyy	Kzz	Cb	Function
17	PS1-A	Platform Su...	4.474						1	1		Lateral
18	PS1-B	Platform Su...	4.474						1	1		Lateral
19	PS2-A	Platform Su...	4.474						1	1		Lateral
20	PS2-B	Platform Su...	4.474						1	1		Lateral
21	PS3-A	Platform Su...	4.474						1	1		Lateral
22	PS3-B	Platform Su...	4.474						1	1		Lateral
23	SA-1	Support Hor...	5.208						2.1	2.1		Lateral
24	SA-2	Support Hor...	5.208						2.1	2.1		Lateral
25	SA-3	Support Hor...	5.208						2.1	2.1		Lateral
26	MP-3	Mount Pipe	6	Segment	Segment				2.1	2.1		Lateral
27	MP-10	Mount Pipe	6	Segment	Segment				2.1	2.1		Lateral
28	MP-11	Mount Pipe	6	Segment	Segment				2.1	2.1		Lateral
29	MP-6	Mount Pipe	6	Segment	Segment				2.1	2.1		Lateral
30	MP-7	Mount Pipe	6	Segment	Segment				2.1	2.1		Lateral

Cold Formed Steel Design Parameters

Label	Shape	Lengt...	Lbyy[ft]	Lbzz[ft]	Lcomp to...	Lcomp b...	Kyy	Kzz	Cm-yy	Cm-zz	Cb	R	y sway	z sway
No Data to Print ...														

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(P...
1	Dead	None		-1			31		3	
2	0 Wind - No Ice	None					31	30		
3	30 Wind - No Ice	None					62	60		
4	45 Wind - No Ice	None					62	60		
5	60 Wind - No Ice	None					62	60		
6	90 Wind - No Ice	None					31	30		
7	120 Wind - No Ice	None					62	60		
8	135 Wind - No Ice	None					62	60		
9	150 Wind - No Ice	None					62	60		
10	180 Wind - No Ice	None					31	30		
11	210 Wind - No Ice	None					62	60		
12	225 Wind - No Ice	None					62	60		
13	240 Wind - No Ice	None					62	60		
14	270 Wind - No Ice	None					31	30		
15	300 Wind - No Ice	None					62	60		
16	315 Wind - No Ice	None					62	60		
17	330 Wind - No Ice	None					62	60		
18	Ice Weight	None					31	30	3	
19	0 Wind - Ice	None					31	30		
20	30 Wind - Ice	None					62	60		
21	45 Wind - Ice	None					62	60		
22	60 Wind - Ice	None					62	60		
23	90 Wind - Ice	None					31	30		
24	120 Wind - Ice	None					62	60		
25	135 Wind - Ice	None					62	60		
26	150 Wind - Ice	None					62	60		
27	180 Wind - Ice	None					31	30		
28	210 Wind - Ice	None					62	60		

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Company : Tower Engineering Professionals, Inc.
Designer : CJB
Job Number : 52429.298270
Model Name : CCI BU No. 876373
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Basic Load Cases (Continued)

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(P...
29	225 Wind - Ice	None					62	60		
30	240 Wind - Ice	None					62	60		
31	270 Wind - Ice	None					31	30		
32	300 Wind - Ice	None					62	60		
33	315 Wind - Ice	None					62	60		
34	330 Wind - Ice	None					62	60		
35	Lm	None				1				
36	Lv	None				1				
37	Seismic Load X	ELX	-1				31			
38	Seismic Load Z	ELZ			-1		31			
39	BLC 1 Transient Are...	None						51		
40	BLC 19 Transient Are...	None						59		

Load Combinations

	Description	So...	P...	S...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...
1	1.4D	Yes	Y		1	1.4																		
2	0.9D+1.0 0-Wind	Yes	Y		1	.9	2	1																
3	0.9D+1.0 30-Wind	Yes	Y		1	.9	3	1																
4	0.9D+1.0 45-Wind	Yes	Y		1	.9	4	1																
5	0.9D+1.0 60-Wind	Yes	Y		1	.9	5	1																
6	0.9D+1.0 90-Wind	Yes	Y		1	.9	6	1																
7	0.9D+1.0 120-W...	Yes	Y		1	.9	7	1																
8	0.9D+1.0 135-W...	Yes	Y		1	.9	8	1																
9	0.9D+1.0 150-W...	Yes	Y		1	.9	9	1																
10	0.9D+1.0 180-W...	Yes	Y		1	.9	10	1																
11	0.9D+1.0 210-W...	Yes	Y		1	.9	11	1																
12	0.9D+1.0 225-W...	Yes	Y		1	.9	12	1																
13	0.9D+1.0 240-W...	Yes	Y		1	.9	13	1																
14	0.9D+1.0 270-W...	Yes	Y		1	.9	14	1																
15	0.9D+1.0 300-W...	Yes	Y		1	.9	15	1																
16	0.9D+1.0 315-W...	Yes	Y		1	.9	16	1																
17	0.9D+1.0 330-W...	Yes	Y		1	.9	17	1																
18	1.2D+1.0 0-Wind	Yes	Y		1	1.2	2	1																
19	1.2D+1.0 30-Wind	Yes	Y		1	1.2	3	1																
20	1.2D+1.0 45-Wind	Yes	Y		1	1.2	4	1																
21	1.2D+1.0 60-Wind	Yes	Y		1	1.2	5	1																
22	1.2D+1.0 90-Wind	Yes	Y		1	1.2	6	1																
23	1.2D+1.0 120-W...	Yes	Y		1	1.2	7	1																
24	1.2D+1.0 135-W...	Yes	Y		1	1.2	8	1																
25	1.2D+1.0 150-W...	Yes	Y		1	1.2	9	1																
26	1.2D+1.0 180-W...	Yes	Y		1	1.2	10	1																
27	1.2D+1.0 210-W...	Yes	Y		1	1.2	11	1																
28	1.2D+1.0 225-W...	Yes	Y		1	1.2	12	1																
29	1.2D+1.0 240-W...	Yes	Y		1	1.2	13	1																
30	1.2D+1.0 270-W...	Yes	Y		1	1.2	14	1																
31	1.2D+1.0 300-W...	Yes	Y		1	1.2	15	1																
32	1.2D+1.0 315-W...	Yes	Y		1	1.2	16	1																
33	1.2D+1.0 330-W...	Yes	Y		1	1.2	17	1																
34	1.2D+1.0Dl+1.0 ...	Yes	Y		1	1.2	18	1	19	1														
35	1.2D+1.0Dl+1.0 ...	Yes	Y		1	1.2	18	1	20	1														

Load Combinations (Continued)

	Description	So..	P..	S..	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac..
36	1.2D+1.0Di+1.0 ..	Yes	Y		1	1.2	18	1	21	1																		
37	1.2D+1.0Di+1.0 ..	Yes	Y		1	1.2	18	1	22	1																		
38	1.2D+1.0Di+1.0 ..	Yes	Y		1	1.2	18	1	23	1																		
39	1.2D+1.0Di+1.0 ..	Yes	Y		1	1.2	18	1	24	1																		
40	1.2D+1.0Di+1.0 ..	Yes	Y		1	1.2	18	1	25	1																		
41	1.2D+1.0Di+1.0 ..	Yes	Y		1	1.2	18	1	26	1																		
42	1.2D+1.0Di+1.0 ..	Yes	Y		1	1.2	18	1	27	1																		
43	1.2D+1.0Di+1.0 ..	Yes	Y		1	1.2	18	1	28	1																		
44	1.2D+1.0Di+1.0 ..	Yes	Y		1	1.2	18	1	29	1																		
45	1.2D+1.0Di+1.0 ..	Yes	Y		1	1.2	18	1	30	1																		
46	1.2D+1.0Di+1.0 ..	Yes	Y		1	1.2	18	1	31	1																		
47	1.2D+1.0Di+1.0 ..	Yes	Y		1	1.2	18	1	32	1																		
48	1.2D+1.0Di+1.0 ..	Yes	Y		1	1.2	18	1	33	1																		
49	1.2D+1.0Di+1.0 ..	Yes	Y		1	1.2	18	1	34	1																		
50	1.2D+1.5Lv	Yes	Y		36	1.5	1	1.2																				
51	1.2D+1.6Lm+1.0..	Yes	Y		1	1.2	2	.096	35	1.5																		
52	1.2D+1.6Lm+1.0..	Yes	Y		1	1.2	3	.096	35	1.5																		
53	1.2D+1.6Lm+1.0..	Yes	Y		1	1.2	4	.096	35	1.5																		
54	1.2D+1.6Lm+1.0..	Yes	Y		1	1.2	5	.096	35	1.5																		
55	1.2D+1.6Lm+1.0..	Yes	Y		1	1.2	6	.096	35	1.5																		
56	1.2D+1.6Lm+1.0..	Yes	Y		1	1.2	7	.096	35	1.5																		
57	1.2D+1.6Lm+1.0..	Yes	Y		1	1.2	8	.096	35	1.5																		
58	1.2D+1.6Lm+1.0..	Yes	Y		1	1.2	9	.096	35	1.5																		
59	1.2D+1.6Lm+1.0..	Yes	Y		1	1.2	10	.096	35	1.5																		
60	1.2D+1.6Lm+1.0..	Yes	Y		1	1.2	11	.096	35	1.5																		
61	1.2D+1.6Lm+1.0..	Yes	Y		1	1.2	12	.096	35	1.5																		
62	1.2D+1.6Lm+1.0..	Yes	Y		1	1.2	13	.096	35	1.5																		
63	1.2D+1.6Lm+1.0..	Yes	Y		1	1.2	14	.096	35	1.5																		
64	1.2D+1.6Lm+1.0..	Yes	Y		1	1.2	15	.096	35	1.5																		
65	1.2D+1.6Lm+1.0..	Yes	Y		1	1.2	16	.096	35	1.5																		
66	1.2D+1.6Lm+1.0..	Yes	Y		1	1.2	17	.096	35	1.5																		
67	(1.2+0.2Sds)D+...	Yes	Y		1	1.2	ELX	.03	ELZ	.03																		
68	(1.2+0.2Sds)D+...	Yes	Y		1	1.2	ELX	.026	ELZ	.015																		
69	(1.2+0.2Sds)D+...	Yes	Y		1	1.2	ELX	.021	ELZ	.021																		
70	(1.2+0.2Sds)D+...	Yes	Y		1	1.2	ELX	.015	ELZ	.026																		
71	(1.2+0.2Sds)D+...	Yes	Y		1	1.2	0		ELZ	.03																		
72	(1.2+0.2Sds)D+...	Yes	Y		1	1.2	ELX	-.015	ELZ	.026																		
73	(1.2+0.2Sds)D+...	Yes	Y		1	1.2	ELX	-.021	ELZ	.021																		
74	(1.2+0.2Sds)D+...	Yes	Y		1	1.2	ELX	-.026	ELZ	.015																		
75	(1.2+0.2Sds)D+...	Yes	Y		1	1.2	ELX	-.03	0																			
76	(1.2+0.2Sds)D+...	Yes	Y		1	1.2	ELX	-.026	ELZ	-.015																		
77	(1.2+0.2Sds)D+...	Yes	Y		1	1.2	ELX	-.021	ELZ	-.021																		
78	(1.2+0.2Sds)D+...	Yes	Y		1	1.2	ELX	-.015	ELZ	-.026																		
79	(1.2+0.2Sds)D+...	Yes	Y		1	1.2	0		ELZ	-.03																		
80	(1.2+0.2Sds)D+...	Yes	Y		1	1.2	ELX	.015	ELZ	-.026																		
81	(1.2+0.2Sds)D+...	Yes	Y		1	1.2	ELX	.021	ELZ	-.021																		
82	(1.2+0.2Sds)D+...	Yes	Y		1	1.2	ELX	.026	ELZ	-.015																		
83	(0.9-0.2Sds)*DL..	Yes	Y		1	.9	ELX	.03	0																			
84	(0.9-0.2Sds)*DL..	Yes	Y		1	.9	ELX	.026	ELZ	.015																		
85	(0.9-0.2Sds)*DL..	Yes	Y		1	.9	ELX	.021	ELZ	.021																		
86	(0.9-0.2Sds)*DL..	Yes	Y		1	.9	ELX	.015	ELZ	.026																		
87	(0.9-0.2Sds)*DL..	Yes	Y		1	.9	0		ELZ	.03																		

RISA
Company : Tower Engineering Professionals, Inc.
Designer : CJB
Job Number : 52429.298270
Model Name : CCI BU No. 876373
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Checked By: JHJ

Load Combinations (Continued)

	Description	So..	P..	S..	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac..
88	(0.9-0.2Sds)*DL..	Yes	Y		1	.9	ELX	-.015	ELZ	.026																		
89	(0.9-0.2Sds)*DL..	Yes	Y		1	.9	ELX	-.021	ELZ	.021																		
90	(0.9-0.2Sds)*DL..	Yes	Y		1	.9	ELX	-.026	ELZ	.015																		
91	(0.9-0.2Sds)*DL..	Yes	Y		1	.9	ELX	-.03	0																			
92	(0.9-0.2Sds)*DL..	Yes	Y		1	.9	ELX	-.026	ELZ	-.015																		
93	(0.9-0.2Sds)*DL..	Yes	Y		1	.9	ELX	-.021	ELZ	-.021																		
94	(0.9-0.2Sds)*DL..	Yes	Y		1	.9	ELX	-.015	ELZ	-.026																		
95	(0.9-0.2Sds)*DL..	Yes	Y		1	.9	0		ELZ	-.03																		
96	(0.9-0.2Sds)*DL..	Yes	Y		1	.9	ELX	.015	ELZ	-.026																		
97	(0.9-0.2Sds)*DL..	Yes	Y		1	.9	ELX	.021	ELZ	-.021																		
98	(0.9-0.2Sds)*DL..	Yes	Y		1	.9	ELX	.026	ELZ	-.015																		

Joint Loads and Enforced Displacements (BLC 35 : Lm)

	Joint Label	L,D,M	Direction	Magnitude[lk,k-ft], [in,rad], [k*s^2/f...
1	N92B	L	Y	-.5

Joint Loads and Enforced Displacements (BLC 36 : Lv)

	Joint Label	L,D,M	Direction	Magnitude[lk,k-ft], [in,rad], [k*s^2/f...
1	N44	L	Y	-.25

Member Point Loads (BLC 1 : Dead)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Y	-.011	1
2	MP-4	Y	-.011	1
3	MP-2	Y	-.033	1
4	MP-3	Y	-.033	1
5	MP-1	Y	-.084	3
6	MP-4	Y	-.084	3
7	MP-5	Y	-.013	1
8	MP-8	Y	-.013	1
9	MP-6	Y	-.033	1
10	MP-7	Y	-.033	1
11	MP-5	Y	-.084	3
12	MP-8	Y	-.084	3
13	MP-9	Y	-.011	1
14	MP-12	Y	-.011	1
15	MP-10	Y	-.033	1
16	MP-11	Y	-.033	1
17	MP-9	Y	-.084	3
18	MP-12	Y	-.084	3
19	MP-11	Y	-.032	3
20	MP-1	Y	-.011	6
21	MP-4	Y	-.011	6
22	MP-2	Y	-.033	6
23	MP-3	Y	-.033	6
24	MP-5	Y	-.013	6
25	MP-8	Y	-.013	6
26	MP-6	Y	-.033	6

Member Point Loads (BLC 1 : Dead) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
27	MP-7	Y	-.033	6
28	MP-9	Y	-.011	6
29	MP-12	Y	-.011	6
30	MP-10	Y	-.033	6
31	MP-11	Y	-.033	6

Member Point Loads (BLC 2 : 0 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.073	1
2	MP-4	X	-.073	1
3	MP-2	X	-.12	1
4	MP-3	X	-.12	1
5	MP-1	X	-.054	3
6	MP-4	X	-.054	3
7	MP-5	X	-.136	1
8	MP-8	X	-.136	1
9	MP-6	X	-.111	1
10	MP-7	X	-.111	1
11	MP-5	X	-.046	3
12	MP-8	X	-.046	3
13	MP-9	X	-.128	1
14	MP-12	X	-.128	1
15	MP-10	X	-.103	1
16	MP-11	X	-.103	1
17	MP-9	X	-.036	3
18	MP-12	X	-.036	3
19	MP-11	X	-.051	3
20	MP-1	X	-.073	6
21	MP-4	X	-.073	6
22	MP-2	X	-.12	6
23	MP-3	X	-.12	6
24	MP-5	X	-.136	6
25	MP-8	X	-.136	6
26	MP-6	X	-.111	6
27	MP-7	X	-.111	6
28	MP-9	X	-.128	6
29	MP-12	X	-.128	6
30	MP-10	X	-.103	6
31	MP-11	X	-.103	6

Member Point Loads (BLC 3 : 30 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.056	1
2	MP-4	X	-.056	1
3	MP-2	X	-.106	1
4	MP-3	X	-.106	1
5	MP-1	X	-.049	3
6	MP-4	X	-.049	3
7	MP-5	X	-.113	1
8	MP-8	X	-.113	1
9	MP-6	X	-.089	1

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Designer : CJB
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Member Point Loads (BLC 3 : 30 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
10	MP-7	X	-.089	1
11	MP-5	X	-.033	3
12	MP-8	X	-.033	3
13	MP-9	X	-.09	1
14	MP-12	X	-.09	1
15	MP-10	X	-.096	1
16	MP-11	X	-.096	1
17	MP-9	X	-.039	3
18	MP-12	X	-.039	3
19	MP-11	X	-.042	3
20	MP-1	X	-.058	6
21	MP-4	X	-.058	6
22	MP-2	X	-.106	6
23	MP-3	X	-.106	6
24	MP-5	X	-.113	6
25	MP-8	X	-.113	6
26	MP-6	X	-.089	6
27	MP-7	X	-.089	6
28	MP-9	X	-.09	6
29	MP-12	X	-.09	6
30	MP-10	X	-.096	6
31	MP-11	X	-.096	6
32	MP-1	Z	-.034	1
33	MP-4	Z	-.034	1
34	MP-2	Z	-.061	1
35	MP-3	Z	-.061	1
36	MP-1	Z	-.028	3
37	MP-4	Z	-.028	3
38	MP-5	Z	-.065	1
39	MP-8	Z	-.065	1
40	MP-6	Z	-.052	1
41	MP-7	Z	-.052	1
42	MP-5	Z	-.019	3
43	MP-8	Z	-.019	3
44	MP-9	Z	-.052	1
45	MP-12	Z	-.052	1
46	MP-10	Z	-.055	1
47	MP-11	Z	-.055	1
48	MP-9	Z	-.023	3
49	MP-12	Z	-.023	3
50	MP-11	Z	-.024	3
51	MP-1	Z	-.034	6
52	MP-4	Z	-.034	6
53	MP-2	Z	-.061	6
54	MP-3	Z	-.061	6
55	MP-5	Z	-.065	6
56	MP-8	Z	-.065	6
57	MP-6	Z	-.052	6
58	MP-7	Z	-.052	6
59	MP-9	Z	-.052	6
60	MP-12	Z	-.052	6
61	MP-10	Z	-.055	6

Member Point Loads (BLC 3 : 30 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
62	MP-11	Z	-.055	6

Member Point Loads (BLC 4 : 45 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.054	1
2	MP-4	X	-.054	1
3	MP-2	X	-.084	1
4	MP-3	X	-.084	1
5	MP-1	X	-.038	3
6	MP-4	X	-.038	3
7	MP-5	X	-.092	1
8	MP-8	X	-.092	1
9	MP-6	X	-.073	1
10	MP-7	X	-.073	1
11	MP-5	X	-.027	3
12	MP-8	X	-.027	3
13	MP-9	X	-.061	1
14	MP-12	X	-.061	1
15	MP-10	X	-.082	1
16	MP-11	X	-.082	1
17	MP-9	X	-.036	3
18	MP-12	X	-.036	3
19	MP-11	X	-.032	3
20	MP-1	X	-.054	6
21	MP-4	X	-.054	6
22	MP-2	X	-.084	6
23	MP-3	X	-.084	6
24	MP-5	X	-.092	6
25	MP-8	X	-.092	6
26	MP-6	X	-.073	6
27	MP-7	X	-.073	6
28	MP-9	X	-.061	6
29	MP-12	X	-.061	6
30	MP-10	X	-.082	6
31	MP-11	X	-.082	6
32	MP-1	Z	-.054	1
33	MP-4	Z	-.054	1
34	MP-2	Z	-.084	1
35	MP-3	Z	-.084	1
36	MP-1	Z	-.038	3
37	MP-4	Z	-.038	3
38	MP-5	Z	-.092	1
39	MP-8	Z	-.092	1
40	MP-6	Z	-.073	1
41	MP-7	Z	-.073	1
42	MP-5	Z	-.027	3
43	MP-8	Z	-.027	3
44	MP-9	Z	-.061	1
45	MP-12	Z	-.061	1
46	MP-10	Z	-.082	1
47	MP-11	Z	-.082	1

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Member Point Loads (BLC 4 : 45 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
48	MP-9	Z	-.036	3
49	MP-12	Z	-.036	3
50	MP-11	Z	-.032	3
51	MP-1	Z	-.054	6
52	MP-4	Z	-.054	6
53	MP-2	Z	-.084	6
54	MP-3	Z	-.084	6
55	MP-5	Z	-.092	6
56	MP-8	Z	-.092	6
57	MP-6	Z	-.073	6
58	MP-7	Z	-.073	6
59	MP-9	Z	-.061	6
60	MP-12	Z	-.061	6
61	MP-10	Z	-.082	6
62	MP-11	Z	-.082	6

Member Point Loads (BLC 5 : 60 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.046	1
2	MP-4	X	-.046	1
3	MP-2	X	-.057	1
4	MP-3	X	-.057	1
5	MP-1	X	-.024	3
6	MP-4	X	-.024	3
7	MP-5	X	-.066	1
8	MP-8	X	-.066	1
9	MP-6	X	-.053	1
10	MP-7	X	-.053	1
11	MP-5	X	-.02	3
12	MP-8	X	-.02	3
13	MP-9	X	-.036	1
14	MP-12	X	-.036	1
15	MP-10	X	-.06	1
16	MP-11	X	-.06	1
17	MP-9	X	-.027	3
18	MP-12	X	-.027	3
19	MP-11	X	-.021	3
20	MP-1	X	-.046	6
21	MP-4	X	-.046	6
22	MP-2	X	-.057	6
23	MP-3	X	-.057	6
24	MP-5	X	-.066	6
25	MP-8	X	-.066	6
26	MP-6	X	-.053	6
27	MP-7	X	-.053	6
28	MP-9	X	-.036	6
29	MP-12	X	-.036	6
30	MP-10	X	-.06	6
31	MP-11	X	-.06	6
32	MP-1	Z	-.08	1
33	MP-4	Z	-.08	1

Member Point Loads (BLC 5 : 60 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
34	MP-2	Z	-.099	1
35	MP-3	Z	-.099	1
36	MP-1	Z	-.042	3
37	MP-4	Z	-.042	3
38	MP-5	Z	-.114	1
39	MP-8	Z	-.114	1
40	MP-6	Z	-.091	1
41	MP-7	Z	-.091	1
42	MP-5	Z	-.035	3
43	MP-8	Z	-.035	3
44	MP-9	Z	-.063	1
45	MP-12	Z	-.063	1
46	MP-10	Z	-.104	1
47	MP-11	Z	-.104	1
48	MP-9	Z	-.047	3
49	MP-12	Z	-.047	3
50	MP-11	Z	-.036	3
51	MP-1	Z	-.08	6
52	MP-4	Z	-.08	6
53	MP-2	Z	-.099	6
54	MP-3	Z	-.099	6
55	MP-5	Z	-.114	6
56	MP-8	Z	-.114	6
57	MP-6	Z	-.091	6
58	MP-7	Z	-.091	6
59	MP-9	Z	-.063	6
60	MP-12	Z	-.063	6
61	MP-10	Z	-.104	6
62	MP-11	Z	-.104	6

Member Point Loads (BLC 6 : 90 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Z	-.123	1
2	MP-4	Z	-.123	1
3	MP-2	Z	-.105	1
4	MP-3	Z	-.105	1
5	MP-1	Z	-.04	3
6	MP-4	Z	-.04	3
7	MP-5	Z	-.138	1
8	MP-8	Z	-.138	1
9	MP-6	Z	-.114	1
10	MP-7	Z	-.114	1
11	MP-5	Z	-.049	3
12	MP-8	Z	-.049	3
13	MP-9	Z	-.067	1
14	MP-12	Z	-.067	1
15	MP-10	Z	-.122	1
16	MP-11	Z	-.122	1
17	MP-9	Z	-.056	3
18	MP-12	Z	-.056	3
19	MP-11	Z	-.039	3

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Member Point Loads (BLC 6 : 90 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
20	MP-1	Z	-.123	6
21	MP-4	Z	-.123	6
22	MP-2	Z	-.105	6
23	MP-3	Z	-.105	6
24	MP-5	Z	-.138	6
25	MP-8	Z	-.138	6
26	MP-6	Z	-.114	6
27	MP-7	Z	-.114	6
28	MP-9	Z	-.067	6
29	MP-12	Z	-.067	6
30	MP-10	Z	-.122	6
31	MP-11	Z	-.122	6

Member Point Loads (BLC 7 : 120 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.064	1
2	MP-4	X	.064	1
3	MP-2	X	.052	1
4	MP-3	X	.052	1
5	MP-1	X	.019	3
6	MP-4	X	.019	3
7	MP-5	X	.072	1
8	MP-8	X	.072	1
9	MP-6	X	.061	1
10	MP-7	X	.061	1
11	MP-5	X	.028	3
12	MP-8	X	.028	3
13	MP-9	X	.046	1
14	MP-12	X	.046	1
15	MP-10	X	.057	1
16	MP-11	X	.057	1
17	MP-9	X	.024	3
18	MP-12	X	.024	3
19	MP-11	X	.021	3
20	MP-1	X	.064	6
21	MP-4	X	.064	6
22	MP-2	X	.052	6
23	MP-3	X	.052	6
24	MP-5	X	.072	6
25	MP-8	X	.072	6
26	MP-6	X	.061	6
27	MP-7	X	.061	6
28	MP-9	X	.046	6
29	MP-12	X	.046	6
30	MP-10	X	.057	6
31	MP-11	X	.057	6
32	MP-1	Z	-.111	1
33	MP-4	Z	-.111	1
34	MP-2	Z	-.089	1
35	MP-3	Z	-.089	1
36	MP-1	Z	-.033	3

Member Point Loads (BLC 7 : 120 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
37	MP-4	Z	-.033	3
38	MP-5	Z	-.125	1
39	MP-8	Z	-.125	1
40	MP-6	Z	-.106	1
41	MP-7	Z	-.106	1
42	MP-5	Z	-.049	3
43	MP-8	Z	-.049	3
44	MP-9	Z	-.08	1
45	MP-12	Z	-.09	1
46	MP-10	Z	-.099	1
47	MP-11	Z	-.099	1
48	MP-9	Z	-.042	3
49	MP-12	Z	-.042	3
50	MP-11	Z	-.036	3
51	MP-1	Z	-.111	6
52	MP-4	Z	-.111	6
53	MP-2	Z	-.089	6
54	MP-3	Z	-.099	6
55	MP-5	Z	-.125	6
56	MP-8	Z	-.125	6
57	MP-6	Z	-.106	6
58	MP-7	Z	-.106	6
59	MP-9	Z	-.08	6
60	MP-12	Z	-.09	6
61	MP-10	Z	-.099	6
62	MP-11	Z	-.099	6

Member Point Loads (BLC 8 : 135 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.084	1
2	MP-4	X	.084	1
3	MP-2	X	.075	1
4	MP-3	X	.075	1
5	MP-1	X	.029	3
6	MP-4	X	.029	3
7	MP-5	X	.102	1
8	MP-8	X	.102	1
9	MP-6	X	.087	1
10	MP-7	X	.087	1
11	MP-5	X	.04	3
12	MP-8	X	.04	3
13	MP-9	X	.077	1
14	MP-12	X	.077	1
15	MP-10	X	.077	1
16	MP-11	X	.077	1
17	MP-9	X	.031	3
18	MP-12	X	.031	3
19	MP-11	X	.032	3
20	MP-1	X	.084	6
21	MP-4	X	.084	6
22	MP-2	X	.075	6

Member Point Loads (BLC 8 : 135 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
23	MP-3	X	.075	6
24	MP-5	X	.102	6
25	MP-8	X	.102	6
26	MP-6	X	.087	6
27	MP-7	X	.087	6
28	MP-9	X	.077	6
29	MP-12	X	.077	6
30	MP-10	X	.077	6
31	MP-11	X	.077	6
32	MP-1	Z	-.084	1
33	MP-4	Z	-.084	1
34	MP-2	Z	-.075	1
35	MP-3	Z	-.075	1
36	MP-1	Z	-.029	3
37	MP-4	Z	-.029	3
38	MP-5	Z	-.102	1
39	MP-8	Z	-.102	1
40	MP-6	Z	-.087	1
41	MP-7	Z	-.087	1
42	MP-5	Z	-.04	3
43	MP-8	Z	-.04	3
44	MP-9	Z	-.077	1
45	MP-12	Z	-.077	1
46	MP-10	Z	-.077	1
47	MP-11	Z	-.077	1
48	MP-9	Z	-.031	3
49	MP-12	Z	-.031	3
50	MP-11	Z	-.032	3
51	MP-1	Z	-.084	6
52	MP-4	Z	-.084	6
53	MP-2	Z	-.075	6
54	MP-3	Z	-.076	6
55	MP-5	Z	-.102	6
56	MP-8	Z	-.102	6
57	MP-6	Z	-.087	6
58	MP-7	Z	-.087	6
59	MP-9	Z	-.077	6
60	MP-12	Z	-.077	6
61	MP-10	Z	-.077	6
62	MP-11	Z	-.077	6

Member Point Loads (BLC 9 : 150 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.09	1
2	MP-4	X	.09	1
3	MP-2	X	.098	1
4	MP-3	X	.098	1
5	MP-1	X	.039	3
6	MP-4	X	.039	3
7	MP-5	X	.124	1
8	MP-8	X	.124	1

Member Point Loads (BLC 9 : 150 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
9	MP-6	X	.104	1
10	MP-7	X	.104	1
11	MP-5	X	.047	3
12	MP-8	X	.047	3
13	MP-9	X	.108	1
14	MP-12	X	.108	1
15	MP-10	X	.091	1
16	MP-11	X	.091	1
17	MP-9	X	.035	3
18	MP-12	X	.035	3
19	MP-11	X	.042	3
20	MP-1	X	.09	6
21	MP-4	X	.09	6
22	MP-2	X	.096	6
23	MP-3	X	.096	6
24	MP-5	X	.124	6
25	MP-8	X	.124	6
26	MP-6	X	.104	6
27	MP-7	X	.104	6
28	MP-9	X	.108	6
29	MP-12	X	.108	6
30	MP-10	X	.091	6
31	MP-11	X	.091	6
32	MP-1	Z	-.052	1
33	MP-4	Z	-.052	1
34	MP-2	Z	-.055	1
35	MP-3	Z	-.055	1
36	MP-1	Z	-.023	3
37	MP-4	Z	-.023	3
38	MP-5	Z	-.072	1
39	MP-8	Z	-.072	1
40	MP-6	Z	-.06	1
41	MP-7	Z	-.06	1
42	MP-5	Z	-.027	3
43	MP-8	Z	-.027	3
44	MP-9	Z	-.081	1
45	MP-12	Z	-.081	1
46	MP-10	Z	-.053	1
47	MP-11	Z	-.053	1
48	MP-9	Z	-.02	3
49	MP-12	Z	-.02	3
50	MP-11	Z	-.024	3
51	MP-1	Z	-.052	6
52	MP-4	Z	-.052	6
53	MP-2	Z	-.055	6
54	MP-3	Z	-.055	6
55	MP-5	Z	-.072	6
56	MP-8	Z	-.072	6
57	MP-6	Z	-.06	6
58	MP-7	Z	-.06	6
59	MP-9	Z	-.081	6
60	MP-12	Z	-.081	6

Company : Tower Engineering Professionals, Inc.
Designer : CJB
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Member Point Loads (BLC 9 : 150 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
61	MP-10	Z	-.053	6
62	MP-11	Z	-.053	6

Member Point Loads (BLC 10 : 180 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.073	1
2	MP-4	X	.073	1
3	MP-2	X	.12	1
4	MP-3	X	.12	1
5	MP-1	X	.054	3
6	MP-4	X	.054	3
7	MP-5	X	.136	1
8	MP-8	X	.136	1
9	MP-6	X	.111	1
10	MP-7	X	.111	1
11	MP-5	X	.046	3
12	MP-8	X	.046	3
13	MP-9	X	.128	1
14	MP-12	X	.128	1
15	MP-10	X	.103	1
16	MP-11	X	.103	1
17	MP-9	X	.038	3
18	MP-12	X	.038	3
19	MP-11	X	.051	3
20	MP-1	X	.073	6
21	MP-4	X	.073	6
22	MP-2	X	.12	6
23	MP-3	X	.12	6
24	MP-5	X	.136	6
25	MP-8	X	.136	6
26	MP-6	X	.111	6
27	MP-7	X	.111	6
28	MP-9	X	.128	6
29	MP-12	X	.128	6
30	MP-10	X	.103	6
31	MP-11	X	.103	6

Member Point Loads (BLC 11 : 210 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.058	1
2	MP-4	X	.058	1
3	MP-2	X	.106	1
4	MP-3	X	.106	1
5	MP-1	X	.049	3
6	MP-4	X	.049	3
7	MP-5	X	.113	1
8	MP-8	X	.113	1
9	MP-6	X	.089	1
10	MP-7	X	.089	1
11	MP-5	X	.033	3
12	MP-8	X	.033	3

Member Point Loads (BLC 11 : 210 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
13	MP-8	X	.09	1
14	MP-12	X	.09	1
15	MP-10	X	.098	1
16	MP-11	X	.098	1
17	MP-9	X	.039	3
18	MP-12	X	.039	3
19	MP-11	X	.042	3
20	MP-1	X	.058	6
21	MP-4	X	.058	6
22	MP-2	X	.106	6
23	MP-3	X	.106	6
24	MP-5	X	.113	6
25	MP-8	X	.113	6
26	MP-6	X	.089	6
27	MP-7	X	.089	6
28	MP-9	X	.09	6
29	MP-12	X	.09	6
30	MP-10	X	.098	6
31	MP-11	X	.098	6
32	MP-1	Z	.034	1
33	MP-4	Z	.034	1
34	MP-2	Z	.061	1
35	MP-3	Z	.061	1
36	MP-1	Z	.026	3
37	MP-4	Z	.026	3
38	MP-5	Z	.065	1
39	MP-8	Z	.065	1
40	MP-6	Z	.052	1
41	MP-7	Z	.052	1
42	MP-5	Z	.019	3
43	MP-8	Z	.019	3
44	MP-9	Z	.052	1
45	MP-12	Z	.052	1
46	MP-10	Z	.055	1
47	MP-11	Z	.055	1
48	MP-9	Z	.023	3
49	MP-12	Z	.023	3
50	MP-11	Z	.024	3
51	MP-1	Z	.034	6
52	MP-4	Z	.034	6
53	MP-2	Z	.061	6
54	MP-3	Z	.061	6
55	MP-5	Z	.065	6
56	MP-8	Z	.065	6
57	MP-6	Z	.052	6
58	MP-7	Z	.052	6
59	MP-9	Z	.052	6
60	MP-12	Z	.052	6
61	MP-10	Z	.055	6
62	MP-11	Z	.055	6

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Designer : CJB
Job Number : 52429.298270
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Member Point Loads (BLC 12 : 225 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.054	1
2	MP-4	X	.054	1
3	MP-2	X	.084	1
4	MP-3	X	.084	1
5	MP-1	X	.038	3
6	MP-4	X	.038	3
7	MP-5	X	.092	1
8	MP-8	X	.092	1
9	MP-6	X	.073	1
10	MP-7	X	.073	1
11	MP-5	X	.027	3
12	MP-8	X	.027	3
13	MP-9	X	.061	1
14	MP-12	X	.061	1
15	MP-10	X	.062	1
16	MP-11	X	.062	1
17	MP-9	X	.036	3
18	MP-12	X	.036	3
19	MP-11	X	.032	3
20	MP-1	X	.054	6
21	MP-4	X	.054	6
22	MP-2	X	.084	6
23	MP-3	X	.084	6
24	MP-5	X	.092	6
25	MP-8	X	.092	6
26	MP-6	X	.073	6
27	MP-7	X	.073	6
28	MP-9	X	.061	6
29	MP-12	X	.061	6
30	MP-10	X	.062	6
31	MP-11	X	.062	6
32	MP-1	Z	.054	1
33	MP-4	Z	.054	1
34	MP-2	Z	.084	1
35	MP-3	Z	.084	1
36	MP-1	Z	.038	3
37	MP-4	Z	.038	3
38	MP-5	Z	.092	1
39	MP-8	Z	.092	1
40	MP-6	Z	.073	1
41	MP-7	Z	.073	1
42	MP-5	Z	.027	3
43	MP-8	Z	.027	3
44	MP-9	Z	.061	1
45	MP-12	Z	.061	1
46	MP-10	Z	.062	1
47	MP-11	Z	.062	1
48	MP-8	Z	.036	3
49	MP-12	Z	.036	3
50	MP-11	Z	.032	3
51	MP-1	Z	.054	6
52	MP-4	Z	.054	6

Member Point Loads (BLC 12 : 225 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
53	MP-2	Z	.084	6
54	MP-3	Z	.084	6
55	MP-5	Z	.092	6
56	MP-8	Z	.092	6
57	MP-6	Z	.073	6
58	MP-7	Z	.073	6
59	MP-9	Z	.061	6
60	MP-12	Z	.061	6
61	MP-10	Z	.082	6
62	MP-11	Z	.082	6

Member Point Loads (BLC 13 : 240 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.046	1
2	MP-4	X	.046	1
3	MP-2	X	.057	1
4	MP-3	X	.057	1
5	MP-1	X	.024	3
6	MP-4	X	.024	3
7	MP-5	X	.066	1
8	MP-8	X	.066	1
9	MP-6	X	.053	1
10	MP-7	X	.053	1
11	MP-5	X	.02	3
12	MP-8	X	.02	3
13	MP-9	X	.036	1
14	MP-12	X	.036	1
15	MP-10	X	.06	1
16	MP-11	X	.06	1
17	MP-9	X	.027	3
18	MP-12	X	.027	3
19	MP-11	X	.021	3
20	MP-1	X	.046	6
21	MP-4	X	.046	6
22	MP-2	X	.057	6
23	MP-3	X	.057	6
24	MP-5	X	.066	6
25	MP-8	X	.066	6
26	MP-6	X	.053	6
27	MP-7	X	.053	6
28	MP-9	X	.036	6
29	MP-12	X	.036	6
30	MP-10	X	.06	6
31	MP-11	X	.06	6
32	MP-1	Z	.08	1
33	MP-4	Z	.08	1
34	MP-2	Z	.099	1
35	MP-3	Z	.099	1
36	MP-1	Z	.042	3
37	MP-4	Z	.042	3
38	MP-5	Z	.114	1

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Member Point Loads (BLC 13 : 240 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
39	MP-8	Z	.114	1
40	MP-6	Z	.091	1
41	MP-7	Z	.091	1
42	MP-5	Z	.035	3
43	MP-8	Z	.035	3
44	MP-9	Z	.063	1
45	MP-12	Z	.063	1
46	MP-10	Z	.104	1
47	MP-11	Z	.104	1
48	MP-6	Z	.047	3
49	MP-12	Z	.047	3
50	MP-11	Z	.036	3
51	MP-1	Z	.08	6
52	MP-4	Z	.08	6
53	MP-2	Z	.099	6
54	MP-3	Z	.099	6
55	MP-5	Z	.114	6
56	MP-8	Z	.114	6
57	MP-6	Z	.091	6
58	MP-7	Z	.091	6
59	MP-9	Z	.063	6
60	MP-12	Z	.063	6
61	MP-10	Z	.104	6
62	MP-11	Z	.104	6

Member Point Loads (BLC 14 : 270 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Z	.123	1
2	MP-4	Z	.123	1
3	MP-2	Z	.106	1
4	MP-3	Z	.106	1
5	MP-1	Z	.04	3
6	MP-4	Z	.04	3
7	MP-5	Z	.138	1
8	MP-8	Z	.138	1
9	MP-6	Z	.114	1
10	MP-7	Z	.114	1
11	MP-5	Z	.049	3
12	MP-8	Z	.049	3
13	MP-9	Z	.057	1
14	MP-12	Z	.057	1
15	MP-10	Z	.122	1
16	MP-11	Z	.122	1
17	MP-9	Z	.056	3
18	MP-12	Z	.056	3
19	MP-11	Z	.039	3
20	MP-1	Z	.123	6
21	MP-4	Z	.123	6
22	MP-2	Z	.105	6
23	MP-3	Z	.105	6
24	MP-5	Z	.138	6

Member Point Loads (BLC 14 : 270 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
25	MP-8	Z	.138	6
26	MP-6	Z	.114	6
27	MP-7	Z	.114	6
28	MP-9	Z	.087	6
29	MP-12	Z	.087	6
30	MP-10	Z	.122	6
31	MP-11	Z	.122	6

Member Point Loads (BLC 15 : 300 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.064	1
2	MP-4	X	-.064	1
3	MP-2	X	-.052	1
4	MP-3	X	-.052	1
5	MP-1	X	-.019	3
6	MP-4	X	-.019	3
7	MP-5	X	-.072	1
8	MP-8	X	-.072	1
9	MP-6	X	-.061	1
10	MP-7	X	-.061	1
11	MP-5	X	-.028	3
12	MP-8	X	-.028	3
13	MP-9	X	-.046	1
14	MP-12	X	-.046	1
15	MP-10	X	-.057	1
16	MP-11	X	-.057	1
17	MP-9	X	-.024	3
18	MP-12	X	-.024	3
19	MP-11	X	-.021	3
20	MP-1	X	-.064	6
21	MP-4	X	-.064	6
22	MP-2	X	-.052	6
23	MP-3	X	-.052	6
24	MP-5	X	-.072	6
25	MP-8	X	-.072	6
26	MP-6	X	-.061	6
27	MP-7	X	-.061	6
28	MP-9	X	-.046	6
29	MP-12	X	-.046	6
30	MP-10	X	-.057	6
31	MP-11	X	-.057	6
32	MP-1	Z	.111	1
33	MP-4	Z	.111	1
34	MP-2	Z	.089	1
35	MP-3	Z	.089	1
36	MP-1	Z	.033	3
37	MP-4	Z	.033	3
38	MP-5	Z	.125	1
39	MP-8	Z	.125	1
40	MP-6	Z	.106	1
41	MP-7	Z	.106	1

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Member Point Loads (BLC 15 : 300 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
42	MP-5	Z	.049	3
43	MP-8	Z	.049	3
44	MP-9	Z	.08	1
45	MP-12	Z	.08	1
46	MP-10	Z	.099	1
47	MP-11	Z	.099	1
48	MP-9	Z	.042	3
49	MP-12	Z	.042	3
50	MP-11	Z	.036	3
51	MP-1	Z	.111	6
52	MP-4	Z	.111	6
53	MP-2	Z	.089	6
54	MP-3	Z	.089	6
55	MP-5	Z	.125	6
56	MP-8	Z	.125	6
57	MP-6	Z	.106	6
58	MP-7	Z	.106	6
59	MP-9	Z	.08	6
60	MP-12	Z	.08	6
61	MP-10	Z	.099	6
62	MP-11	Z	.099	6

Member Point Loads (BLC 16 : 315 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.084	1
2	MP-4	X	-.084	1
3	MP-2	X	-.075	1
4	MP-3	X	-.075	1
5	MP-1	X	-.029	3
6	MP-4	X	-.029	3
7	MP-5	X	-.102	1
8	MP-8	X	-.102	1
9	MP-6	X	-.087	1
10	MP-7	X	-.087	1
11	MP-6	X	-.04	3
12	MP-8	X	-.04	3
13	MP-9	X	-.077	1
14	MP-12	X	-.077	1
15	MP-10	X	-.077	1
16	MP-11	X	-.077	1
17	MP-9	X	-.031	3
18	MP-12	X	-.031	3
19	MP-11	X	-.032	3
20	MP-1	X	-.084	6
21	MP-4	X	-.084	6
22	MP-2	X	-.075	6
23	MP-3	X	-.075	6
24	MP-5	X	-.102	6
25	MP-8	X	-.102	6
26	MP-6	X	-.087	6
27	MP-7	X	-.087	6

Member Point Loads (BLC 16 : 315 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
28	MP-9	X	-.077	6
29	MP-12	X	-.077	6
30	MP-10	X	-.077	6
31	MP-11	X	-.077	6
32	MP-1	Z	.084	1
33	MP-4	Z	.084	1
34	MP-2	Z	.075	1
35	MP-3	Z	.075	1
36	MP-1	Z	.029	3
37	MP-4	Z	.029	3
38	MP-5	Z	.102	1
39	MP-8	Z	.102	1
40	MP-6	Z	.087	1
41	MP-7	Z	.087	1
42	MP-5	Z	.04	3
43	MP-8	Z	.04	3
44	MP-9	Z	.077	1
45	MP-12	Z	.077	1
46	MP-10	Z	.077	1
47	MP-11	Z	.077	1
48	MP-9	Z	.031	3
49	MP-12	Z	.031	3
50	MP-11	Z	.032	3
51	MP-1	Z	.084	6
52	MP-4	Z	.084	6
53	MP-2	Z	.075	6
54	MP-3	Z	.075	6
55	MP-5	Z	.102	6
56	MP-8	Z	.102	6
57	MP-6	Z	.087	6
58	MP-7	Z	.087	6
59	MP-9	Z	.077	6
60	MP-12	Z	.077	6
61	MP-10	Z	.077	6
62	MP-11	Z	.077	6

Member Point Loads (BLC 17 : 330 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.09	1
2	MP-4	X	-.09	1
3	MP-2	X	-.096	1
4	MP-3	X	-.096	1
5	MP-1	X	-.039	3
6	MP-4	X	-.039	3
7	MP-5	X	-.124	1
8	MP-8	X	-.124	1
9	MP-6	X	-.104	1
10	MP-7	X	-.104	1
11	MP-5	X	-.047	3
12	MP-8	X	-.047	3
13	MP-9	X	-.106	1

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Member Point Loads (BLC 17 : 330 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
14	MP-12	X	-.106	1
15	MP-10	X	-.091	1
16	MP-11	X	-.091	1
17	MP-9	X	-.036	3
18	MP-12	X	-.035	3
19	MP-11	X	-.042	3
20	MP-1	X	-.09	6
21	MP-4	X	-.09	6
22	MP-2	X	-.096	6
23	MP-3	X	-.096	6
24	MP-5	X	-.124	6
25	MP-8	X	-.124	6
26	MP-6	X	-.104	6
27	MP-7	X	-.104	6
28	MP-8	X	-.106	6
29	MP-12	X	-.106	6
30	MP-10	X	-.091	6
31	MP-11	X	-.091	6
32	MP-1	Z	.052	1
33	MP-4	Z	.052	1
34	MP-2	Z	.055	1
35	MP-3	Z	.055	1
36	MP-1	Z	.023	3
37	MP-4	Z	.023	3
38	MP-5	Z	.072	1
39	MP-8	Z	.072	1
40	MP-6	Z	.06	1
41	MP-7	Z	.06	1
42	MP-5	Z	.027	3
43	MP-8	Z	.027	3
44	MP-9	Z	.061	1
45	MP-12	Z	.061	1
46	MP-10	Z	.053	1
47	MP-11	Z	.053	1
48	MP-9	Z	.02	3
49	MP-12	Z	.02	3
50	MP-11	Z	.024	3
51	MP-1	Z	.052	6
52	MP-4	Z	.052	6
53	MP-2	Z	.055	6
54	MP-3	Z	.055	6
55	MP-5	Z	.072	6
56	MP-8	Z	.072	6
57	MP-6	Z	.06	6
58	MP-7	Z	.06	6
59	MP-9	Z	.061	6
60	MP-12	Z	.061	6
61	MP-10	Z	.053	6
62	MP-11	Z	.053	6

Member Point Loads (BLC 18 : Ice Weight)

Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]

Member Point Loads (BLC 18 : Ice Weight) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Y	-.06	1
2	MP-4	Y	-.06	1
3	MP-2	Y	-.071	1
4	MP-3	Y	-.071	1
5	MP-1	Y	-.047	3
6	MP-4	Y	-.047	3
7	MP-5	Y	-.091	1
8	MP-8	Y	-.091	1
9	MP-6	Y	-.071	1
10	MP-7	Y	-.071	1
11	MP-5	Y	-.047	3
12	MP-8	Y	-.047	3
13	MP-9	Y	-.06	1
14	MP-12	Y	-.06	1
15	MP-10	Y	-.071	1
16	MP-11	Y	-.071	1
17	MP-9	Y	-.047	3
18	MP-12	Y	-.047	3
19	MP-11	Y	-.066	3
20	MP-1	Y	-.06	6
21	MP-4	Y	-.06	6
22	MP-2	Y	-.071	6
23	MP-3	Y	-.071	6
24	MP-5	Y	-.091	6
25	MP-8	Y	-.091	6
26	MP-6	Y	-.071	6
27	MP-7	Y	-.071	6
28	MP-9	Y	-.06	6
29	MP-12	Y	-.06	6
30	MP-10	Y	-.071	6
31	MP-11	Y	-.071	6

Member Point Loads (BLC 19 : 0 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.017	1
2	MP-4	X	-.017	1
3	MP-2	X	-.028	1
4	MP-3	X	-.028	1
5	MP-1	X	-.014	3
6	MP-4	X	-.014	3
7	MP-5	X	-.032	1
8	MP-8	X	-.032	1
9	MP-6	X	-.028	1
10	MP-7	X	-.028	1
11	MP-5	X	-.014	3
12	MP-8	X	-.014	3
13	MP-9	X	-.017	1
14	MP-12	X	-.017	1
15	MP-10	X	-.028	1
16	MP-11	X	-.028	1
17	MP-9	X	-.014	3

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Member Point Loads (BLC 19 : 0 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
18	MP-12	X	-.014	3
19	MP-11	X	-.012	3
20	MP-1	X	-.017	6
21	MP-4	X	-.017	6
22	MP-2	X	-.028	6
23	MP-3	X	-.028	6
24	MP-5	X	-.032	6
25	MP-8	X	-.032	6
26	MP-6	X	-.028	6
27	MP-7	X	-.028	6
28	MP-9	X	-.017	6
29	MP-12	X	-.017	6
30	MP-10	X	-.028	6
31	MP-11	X	-.028	6

Member Point Loads (BLC 20 : 30 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.015	1
2	MP-4	X	-.015	1
3	MP-2	X	-.024	1
4	MP-3	X	-.024	1
5	MP-1	X	-.012	3
6	MP-4	X	-.012	3
7	MP-5	X	-.025	1
8	MP-8	X	-.025	1
9	MP-6	X	-.021	1
10	MP-7	X	-.021	1
11	MP-5	X	-.009	3
12	MP-8	X	-.009	3
13	MP-9	X	-.021	1
14	MP-12	X	-.021	1
15	MP-10	X	-.022	1
16	MP-11	X	-.022	1
17	MP-9	X	-.01	3
18	MP-12	X	-.01	3
19	MP-11	X	-.01	3
20	MP-1	X	-.015	6
21	MP-4	X	-.015	6
22	MP-2	X	-.024	6
23	MP-3	X	-.024	6
24	MP-5	X	-.026	6
25	MP-8	X	-.025	6
26	MP-6	X	-.021	6
27	MP-7	X	-.021	6
28	MP-9	X	-.021	6
29	MP-12	X	-.021	6
30	MP-10	X	-.022	6
31	MP-11	X	-.022	6
32	MP-1	Z	-.009	1
33	MP-4	Z	-.009	1
34	MP-2	Z	-.014	1

Member Point Loads (BLC 20 : 30 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
35	MP-3	Z	-.014	1
36	MP-1	Z	-.007	3
37	MP-4	Z	-.007	3
38	MP-5	Z	-.015	1
39	MP-8	Z	-.015	1
40	MP-6	Z	-.012	1
41	MP-7	Z	-.012	1
42	MP-5	Z	-.005	3
43	MP-8	Z	-.005	3
44	MP-9	Z	-.012	1
45	MP-12	Z	-.012	1
46	MP-10	Z	-.013	1
47	MP-11	Z	-.013	1
48	MP-9	Z	-.006	3
49	MP-12	Z	-.006	3
50	MP-11	Z	-.006	3
51	MP-1	Z	-.009	6
52	MP-4	Z	-.009	6
53	MP-2	Z	-.014	6
54	MP-3	Z	-.014	6
55	MP-5	Z	-.015	6
56	MP-8	Z	-.015	6
57	MP-6	Z	-.012	6
58	MP-7	Z	-.012	6
59	MP-9	Z	-.012	6
60	MP-12	Z	-.012	6
61	MP-10	Z	-.013	6
62	MP-11	Z	-.013	6

Member Point Loads (BLC 21 : 45 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.013	1
2	MP-4	X	-.013	1
3	MP-2	X	-.019	1
4	MP-3	X	-.019	1
5	MP-1	X	-.01	3
6	MP-4	X	-.01	3
7	MP-5	X	-.021	1
8	MP-8	X	-.021	1
9	MP-6	X	-.017	1
10	MP-7	X	-.017	1
11	MP-5	X	-.007	3
12	MP-8	X	-.007	3
13	MP-9	X	-.015	1
14	MP-12	X	-.015	1
15	MP-10	X	-.019	1
16	MP-11	X	-.019	1
17	MP-9	X	-.009	3
18	MP-12	X	-.009	3
19	MP-11	X	-.008	3
20	MP-1	X	-.013	6

Company : Tower Engineering Professionals, Inc.
Designer : CJB
Job Number : 52429.296270
Model Name : CCI BU No. 876373

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Member Point Loads (BLC 21 : 45 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
21	MP-4	X	-.013	6
22	MP-2	X	-.019	6
23	MP-3	X	-.019	6
24	MP-5	X	-.021	6
25	MP-8	X	-.021	6
26	MP-6	X	-.017	6
27	MP-7	X	-.017	6
28	MP-9	X	-.015	6
29	MP-12	X	-.015	6
30	MP-10	X	-.019	6
31	MP-11	X	-.019	6
32	MP-1	Z	-.013	1
33	MP-4	Z	-.013	1
34	MP-2	Z	-.019	1
35	MP-3	Z	-.019	1
36	MP-1	Z	-.01	3
37	MP-4	Z	-.01	3
38	MP-5	Z	-.021	1
39	MP-8	Z	-.021	1
40	MP-6	Z	-.017	1
41	MP-7	Z	-.017	1
42	MP-5	Z	-.007	3
43	MP-8	Z	-.007	3
44	MP-9	Z	-.015	1
45	MP-12	Z	-.015	1
46	MP-10	Z	-.019	1
47	MP-11	Z	-.019	1
48	MP-9	Z	-.009	3
49	MP-12	Z	-.009	3
50	MP-11	Z	-.008	3
51	MP-1	Z	-.013	6
52	MP-4	Z	-.013	6
53	MP-2	Z	-.019	6
54	MP-3	Z	-.019	6
55	MP-5	Z	-.021	6
56	MP-8	Z	-.021	6
57	MP-6	Z	-.017	6
58	MP-7	Z	-.017	6
59	MP-9	Z	-.015	6
60	MP-12	Z	-.015	6
61	MP-10	Z	-.019	6
62	MP-11	Z	-.019	6

Member Point Loads (BLC 22 : 60 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.011	1
2	MP-4	X	-.011	1
3	MP-2	X	-.013	1
4	MP-3	X	-.013	1
5	MP-1	X	-.006	3
6	MP-4	X	-.006	3

Member Point Loads (BLC 22 : 60 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
7	MP-5	X	-.015	1
8	MP-8	X	-.015	1
9	MP-6	X	-.012	1
10	MP-7	X	-.012	1
11	MP-5	X	-.005	3
12	MP-8	X	-.005	3
13	MP-9	X	-.009	1
14	MP-12	X	-.009	1
15	MP-10	X	-.014	1
16	MP-11	X	-.014	1
17	MP-9	X	-.007	3
18	MP-12	X	-.007	3
19	MP-11	X	-.005	3
20	MP-1	X	-.011	6
21	MP-4	X	-.011	6
22	MP-2	X	-.013	6
23	MP-3	X	-.013	6
24	MP-5	X	-.015	6
25	MP-8	X	-.015	6
26	MP-6	X	-.012	6
27	MP-7	X	-.012	6
28	MP-9	X	-.009	6
29	MP-12	X	-.009	6
30	MP-10	X	-.014	6
31	MP-11	X	-.014	6
32	MP-1	Z	-.019	1
33	MP-4	Z	-.019	1
34	MP-2	Z	-.023	1
35	MP-3	Z	-.023	1
36	MP-1	Z	-.011	3
37	MP-4	Z	-.011	3
38	MP-5	Z	-.025	1
39	MP-8	Z	-.025	1
40	MP-6	Z	-.021	1
41	MP-7	Z	-.021	1
42	MP-5	Z	-.009	3
43	MP-8	Z	-.009	3
44	MP-9	Z	-.016	1
45	MP-12	Z	-.016	1
46	MP-10	Z	-.024	1
47	MP-11	Z	-.024	1
48	MP-9	Z	-.012	3
49	MP-12	Z	-.012	3
50	MP-11	Z	-.009	3
51	MP-1	Z	-.019	6
52	MP-4	Z	-.019	6
53	MP-2	Z	-.023	6
54	MP-3	Z	-.023	6
55	MP-5	Z	-.025	6
56	MP-8	Z	-.025	6
57	MP-6	Z	-.021	6
58	MP-7	Z	-.021	6

Member Point Loads (BLC 22 : 60 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
59	MP-9	Z	-.016	6
60	MP-12	Z	-.016	6
61	MP-10	Z	-.024	6
62	MP-11	Z	-.024	6

Member Point Loads (BLC 23 : 90 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Z	-.029	1
2	MP-4	Z	-.029	1
3	MP-2	Z	-.024	1
4	MP-3	Z	-.024	1
5	MP-1	Z	-.01	3
6	MP-4	Z	-.01	3
7	MP-5	Z	-.029	1
8	MP-8	Z	-.029	1
9	MP-6	Z	-.024	1
10	MP-7	Z	-.024	1
11	MP-5	Z	-.01	3
12	MP-8	Z	-.01	3
13	MP-9	Z	-.029	1
14	MP-12	Z	-.029	1
15	MP-10	Z	-.024	1
16	MP-11	Z	-.024	1
17	MP-9	Z	-.01	3
18	MP-12	Z	-.01	3
19	MP-11	Z	-.009	3
20	MP-1	Z	-.029	6
21	MP-4	Z	-.029	6
22	MP-2	Z	-.024	6
23	MP-3	Z	-.024	6
24	MP-5	Z	-.029	6
25	MP-8	Z	-.029	6
26	MP-6	Z	-.024	6
27	MP-7	Z	-.024	6
28	MP-9	Z	-.029	6
29	MP-12	Z	-.029	6
30	MP-10	Z	-.024	6
31	MP-11	Z	-.024	6

Member Point Loads (BLC 24 : 120 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.014	1
2	MP-4	X	.014	1
3	MP-2	X	.012	1
4	MP-3	X	.012	1
5	MP-1	X	.005	3
6	MP-4	X	.005	3
7	MP-5	X	.018	1
8	MP-8	X	.018	1
9	MP-6	X	.014	1
10	MP-7	X	.014	1

Member Point Loads (BLC 24 : 120 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
11	MP-5	X	.007	3
12	MP-8	X	.007	3
13	MP-9	X	.011	1
14	MP-12	X	.011	1
15	MP-10	X	.013	1
16	MP-11	X	.013	1
17	MP-9	X	.008	3
18	MP-12	X	.008	3
19	MP-11	X	.005	3
20	MP-1	X	.014	6
21	MP-4	X	.014	6
22	MP-2	X	.012	6
23	MP-3	X	.012	6
24	MP-5	X	.016	6
25	MP-8	X	.016	6
26	MP-6	X	.014	6
27	MP-7	X	.014	6
28	MP-9	X	.011	6
29	MP-12	X	.011	6
30	MP-10	X	.013	6
31	MP-11	X	.013	6
32	MP-1	Z	-.025	1
33	MP-4	Z	-.025	1
34	MP-2	Z	-.021	1
35	MP-3	Z	-.021	1
36	MP-1	Z	-.009	3
37	MP-4	Z	-.009	3
38	MP-5	Z	-.028	1
39	MP-8	Z	-.028	1
40	MP-6	Z	-.024	1
41	MP-7	Z	-.024	1
42	MP-5	Z	-.012	3
43	MP-8	Z	-.012	3
44	MP-9	Z	-.019	1
45	MP-12	Z	-.019	1
46	MP-10	Z	-.023	1
47	MP-11	Z	-.023	1
48	MP-9	Z	-.011	3
49	MP-12	Z	-.011	3
50	MP-11	Z	-.009	3
51	MP-1	Z	-.025	6
52	MP-4	Z	-.025	6
53	MP-2	Z	-.021	6
54	MP-3	Z	-.021	6
55	MP-5	Z	-.028	6
56	MP-8	Z	-.028	6
57	MP-6	Z	-.024	6
58	MP-7	Z	-.024	6
59	MP-9	Z	-.019	6
60	MP-12	Z	-.019	6
61	MP-10	Z	-.023	6
62	MP-11	Z	-.023	6

Member Point Loads (BLC 25 : 135 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.019	1
2	MP-4	X	.019	1
3	MP-2	X	.017	1
4	MP-3	X	.017	1
5	MP-1	X	.008	3
6	MP-4	X	.008	3
7	MP-5	X	.023	1
8	MP-8	X	.023	1
9	MP-6	X	.02	1
10	MP-7	X	.02	1
11	MP-5	X	.01	3
12	MP-8	X	.01	3
13	MP-9	X	.018	1
14	MP-12	X	.018	1
15	MP-10	X	.018	1
16	MP-11	X	.018	1
17	MP-9	X	.008	3
18	MP-12	X	.008	3
19	MP-11	X	.008	3
20	MP-1	X	.019	6
21	MP-4	X	.019	6
22	MP-2	X	.017	6
23	MP-3	X	.017	6
24	MP-5	X	.023	6
25	MP-8	X	.023	6
26	MP-6	X	.02	6
27	MP-7	X	.02	6
28	MP-9	X	.018	6
29	MP-12	X	.018	6
30	MP-10	X	.018	6
31	MP-11	X	.018	6
32	MP-1	Z	-.019	1
33	MP-4	Z	-.019	1
34	MP-2	Z	-.017	1
35	MP-3	Z	-.017	1
36	MP-1	Z	-.008	3
37	MP-4	Z	-.008	3
38	MP-5	Z	-.023	1
39	MP-8	Z	-.023	1
40	MP-6	Z	-.02	1
41	MP-7	Z	-.02	1
42	MP-5	Z	-.01	3
43	MP-8	Z	-.01	3
44	MP-9	Z	-.018	1
45	MP-12	Z	-.018	1
46	MP-10	Z	-.018	1
47	MP-11	Z	-.018	1
48	MP-9	Z	-.008	3
49	MP-12	Z	-.008	3
50	MP-11	Z	-.008	3
51	MP-1	Z	-.019	6
52	MP-4	Z	-.019	6

Member Point Loads (BLC 25 : 135 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
53	MP-2	Z	-.017	6
54	MP-3	Z	-.017	6
55	MP-5	Z	-.023	6
56	MP-8	Z	-.023	6
57	MP-6	Z	-.02	6
58	MP-7	Z	-.02	6
59	MP-9	Z	-.018	6
60	MP-12	Z	-.018	6
61	MP-10	Z	-.018	6
62	MP-11	Z	-.018	6

Member Point Loads (BLC 26 : 150 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.021	1
2	MP-4	X	.021	1
3	MP-2	X	.022	1
4	MP-3	X	.022	1
5	MP-1	X	.01	3
6	MP-4	X	.01	3
7	MP-5	X	.027	1
8	MP-8	X	.027	1
9	MP-6	X	.024	1
10	MP-7	X	.024	1
11	MP-5	X	.012	3
12	MP-8	X	.012	3
13	MP-9	X	.024	1
14	MP-12	X	.024	1
15	MP-10	X	.021	1
16	MP-11	X	.021	1
17	MP-9	X	.009	3
18	MP-12	X	.009	3
19	MP-11	X	.01	3
20	MP-1	X	.021	6
21	MP-4	X	.021	6
22	MP-2	X	.022	6
23	MP-3	X	.022	6
24	MP-5	X	.027	6
25	MP-8	X	.027	6
26	MP-6	X	.024	6
27	MP-7	X	.024	6
28	MP-9	X	.024	6
29	MP-12	X	.024	6
30	MP-10	X	.021	6
31	MP-11	X	.021	6
32	MP-1	Z	-.012	1
33	MP-4	Z	-.012	1
34	MP-2	Z	-.013	1
35	MP-3	Z	-.013	1
36	MP-1	Z	-.005	3
37	MP-4	Z	-.006	3
38	MP-5	Z	-.016	1

Company : Tower Engineering Professionals, Inc.
Designer : CJB
Job Number : 52429.298270
Model Name : CCI BU No. 876373

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Member Point Loads (BLC 26 : 150 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
39	MP-6	Z	-.016	1
40	MP-6	Z	-.014	1
41	MP-7	Z	-.014	1
42	MP-5	Z	-.007	3
43	MP-8	Z	-.007	3
44	MP-9	Z	-.014	1
45	MP-12	Z	-.014	1
46	MP-10	Z	-.012	1
47	MP-11	Z	-.012	1
48	MP-9	Z	-.005	3
49	MP-12	Z	-.005	3
50	MP-11	Z	-.006	3
51	MP-1	Z	-.012	6
52	MP-4	Z	-.012	6
53	MP-2	Z	-.013	6
54	MP-3	Z	-.013	6
55	MP-5	Z	-.016	6
56	MP-8	Z	-.016	6
57	MP-6	Z	-.014	6
58	MP-7	Z	-.014	6
59	MP-9	Z	-.014	6
60	MP-12	Z	-.014	6
61	MP-10	Z	-.012	6
62	MP-11	Z	-.012	6

Member Point Loads (BLC 27 : 180 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.017	1
2	MP-4	X	.017	1
3	MP-2	X	.028	1
4	MP-3	X	.028	1
5	MP-1	X	.014	3
6	MP-4	X	.014	3
7	MP-5	X	.032	1
8	MP-8	X	.032	1
9	MP-6	X	.028	1
10	MP-7	X	.028	1
11	MP-5	X	.014	3
12	MP-8	X	.014	3
13	MP-9	X	.017	1
14	MP-12	X	.017	1
15	MP-10	X	.028	1
16	MP-11	X	.028	1
17	MP-9	X	.014	3
18	MP-12	X	.014	3
19	MP-11	X	.012	3
20	MP-1	X	.017	6
21	MP-4	X	.017	6
22	MP-2	X	.028	6
23	MP-3	X	.028	6
24	MP-5	X	.032	6

Member Point Loads (BLC 27 : 180 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
25	MP-8	X	.032	6
26	MP-6	X	.028	6
27	MP-7	X	.028	6
28	MP-9	X	.017	6
29	MP-12	X	.017	6
30	MP-10	X	.028	6
31	MP-11	X	.028	6

Member Point Loads (BLC 28 : 210 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.015	1
2	MP-4	X	.015	1
3	MP-2	X	.024	1
4	MP-3	X	.024	1
5	MP-1	X	.012	3
6	MP-4	X	.012	3
7	MP-5	X	.025	1
8	MP-8	X	.025	1
9	MP-6	X	.021	1
10	MP-7	X	.021	1
11	MP-5	X	.009	3
12	MP-8	X	.009	3
13	MP-9	X	.021	1
14	MP-12	X	.021	1
15	MP-10	X	.022	1
16	MP-11	X	.022	1
17	MP-9	X	.01	3
18	MP-12	X	.01	3
19	MP-11	X	.01	3
20	MP-1	X	.015	6
21	MP-4	X	.015	6
22	MP-2	X	.024	6
23	MP-3	X	.024	6
24	MP-5	X	.025	6
25	MP-8	X	.025	6
26	MP-6	X	.021	6
27	MP-7	X	.021	6
28	MP-9	X	.021	6
29	MP-12	X	.021	6
30	MP-10	X	.022	6
31	MP-11	X	.022	6
32	MP-1	Z	.009	1
33	MP-4	Z	.009	1
34	MP-2	Z	.014	1
35	MP-3	Z	.014	1
36	MP-1	Z	.007	3
37	MP-4	Z	.007	3
38	MP-5	Z	.015	1
39	MP-8	Z	.015	1
40	MP-6	Z	.012	1
41	MP-7	Z	.012	1

Member Point Loads (BLC 28 : 210 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
42	MP-5	Z	.006	3
43	MP-8	Z	.005	3
44	MP-9	Z	.012	1
45	MP-12	Z	.012	1
46	MP-10	Z	.013	1
47	MP-11	Z	.013	1
48	MP-9	Z	.006	3
49	MP-12	Z	.006	3
50	MP-11	Z	.006	3
51	MP-1	Z	.009	6
52	MP-4	Z	.009	6
53	MP-2	Z	.014	6
54	MP-3	Z	.014	6
55	MP-5	Z	.015	6
56	MP-6	Z	.016	6
57	MP-8	Z	.012	6
58	MP-7	Z	.012	6
59	MP-9	Z	.012	6
60	MP-12	Z	.012	6
61	MP-10	Z	.013	6
62	MP-11	Z	.013	6

Member Point Loads (BLC 29 : 225 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.013	1
2	MP-4	X	.013	1
3	MP-2	X	.019	1
4	MP-3	X	.019	1
5	MP-1	X	.01	3
6	MP-4	X	.01	3
7	MP-5	X	.021	1
8	MP-8	X	.021	1
9	MP-6	X	.017	1
10	MP-7	X	.017	1
11	MP-6	X	.007	3
12	MP-8	X	.007	3
13	MP-9	X	.016	1
14	MP-12	X	.016	1
15	MP-10	X	.019	1
16	MP-11	X	.019	1
17	MP-9	X	.009	3
18	MP-12	X	.009	3
19	MP-11	X	.008	3
20	MP-1	X	.013	6
21	MP-4	X	.013	6
22	MP-2	X	.019	6
23	MP-3	X	.019	6
24	MP-5	X	.021	6
25	MP-8	X	.021	6
26	MP-6	X	.017	6
27	MP-7	X	.017	6

Member Point Loads (BLC 29 : 225 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
28	MP-9	X	.015	6
29	MP-12	X	.015	6
30	MP-10	X	.019	6
31	MP-11	X	.019	6
32	MP-1	Z	.013	1
33	MP-4	Z	.013	1
34	MP-2	Z	.019	1
35	MP-3	Z	.019	1
36	MP-1	Z	.01	3
37	MP-4	Z	.01	3
38	MP-5	Z	.021	1
39	MP-8	Z	.021	1
40	MP-6	Z	.017	1
41	MP-7	Z	.017	1
42	MP-5	Z	.007	3
43	MP-8	Z	.007	3
44	MP-6	Z	.015	1
45	MP-12	Z	.015	1
46	MP-10	Z	.019	1
47	MP-11	Z	.019	1
48	MP-9	Z	.009	3
49	MP-12	Z	.009	3
50	MP-11	Z	.008	3
51	MP-1	Z	.013	6
52	MP-4	Z	.013	6
53	MP-2	Z	.019	6
54	MP-3	Z	.019	6
55	MP-5	Z	.021	6
56	MP-8	Z	.021	6
57	MP-6	Z	.017	6
58	MP-7	Z	.017	6
59	MP-9	Z	.015	6
60	MP-12	Z	.015	6
61	MP-10	Z	.019	6
62	MP-11	Z	.019	6

Member Point Loads (BLC 30 : 240 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.011	1
2	MP-4	X	.011	1
3	MP-2	X	.013	1
4	MP-3	X	.013	1
5	MP-1	X	.006	3
6	MP-4	X	.006	3
7	MP-5	X	.015	1
8	MP-8	X	.015	1
9	MP-6	X	.012	1
10	MP-7	X	.012	1
11	MP-5	X	.005	3
12	MP-8	X	.005	3
13	MP-9	X	.009	1

Member Point Loads (BLC 30 : 240 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
14	MP-12	X	.009	1
15	MP-10	X	.014	1
16	MP-11	X	.014	1
17	MP-9	X	.007	3
18	MP-12	X	.007	3
19	MP-11	X	.005	3
20	MP-1	X	.011	6
21	MP-4	X	.011	6
22	MP-2	X	.013	6
23	MP-3	X	.013	6
24	MP-5	X	.015	6
25	MP-8	X	.015	6
26	MP-6	X	.012	6
27	MP-7	X	.012	6
28	MP-9	X	.009	6
29	MP-12	X	.009	6
30	MP-10	X	.014	6
31	MP-11	X	.014	6
32	MP-1	Z	.019	1
33	MP-4	Z	.019	1
34	MP-2	Z	.023	1
35	MP-3	Z	.023	1
36	MP-1	Z	.011	3
37	MP-4	Z	.011	3
38	MP-5	Z	.025	1
39	MP-8	Z	.025	1
40	MP-6	Z	.021	1
41	MP-7	Z	.021	1
42	MP-5	Z	.009	3
43	MP-8	Z	.009	3
44	MP-9	Z	.016	1
45	MP-12	Z	.016	1
46	MP-10	Z	.024	1
47	MP-11	Z	.024	1
48	MP-9	Z	.012	3
49	MP-12	Z	.012	3
50	MP-11	Z	.009	3
51	MP-1	Z	.019	6
52	MP-4	Z	.019	6
53	MP-2	Z	.023	6
54	MP-3	Z	.023	6
55	MP-5	Z	.025	6
56	MP-8	Z	.025	6
57	MP-6	Z	.021	6
58	MP-7	Z	.021	6
59	MP-9	Z	.016	6
60	MP-12	Z	.016	6
61	MP-10	Z	.024	6
62	MP-11	Z	.024	6

Member Point Loads (BLC 31 : 270 Wind - Ice)

Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]

Member Point Loads (BLC 31 : 270 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Z	.029	1
2	MP-4	Z	.029	1
3	MP-2	Z	.024	1
4	MP-3	Z	.024	1
5	MP-1	Z	.01	3
6	MP-4	Z	.01	3
7	MP-5	Z	.029	1
8	MP-8	Z	.029	1
9	MP-6	Z	.024	1
10	MP-7	Z	.024	1
11	MP-5	Z	.01	3
12	MP-8	Z	.01	3
13	MP-6	Z	.029	1
14	MP-12	Z	.029	1
15	MP-10	Z	.024	1
16	MP-11	Z	.024	1
17	MP-9	Z	.01	3
18	MP-12	Z	.01	3
19	MP-11	Z	.009	3
20	MP-1	Z	.029	6
21	MP-4	Z	.029	6
22	MP-2	Z	.024	6
23	MP-3	Z	.024	6
24	MP-5	Z	.029	6
25	MP-8	Z	.029	6
26	MP-6	Z	.024	6
27	MP-7	Z	.024	6
28	MP-9	Z	.029	6
29	MP-12	Z	.029	6
30	MP-10	Z	.024	6
31	MP-11	Z	.024	6

Member Point Loads (BLC 32 : 300 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.014	1
2	MP-4	X	-.014	1
3	MP-2	X	-.012	1
4	MP-3	X	-.012	1
5	MP-1	X	-.005	3
6	MP-4	X	-.005	3
7	MP-5	X	-.016	1
8	MP-8	X	-.016	1
9	MP-6	X	-.014	1
10	MP-7	X	-.014	1
11	MP-5	X	-.007	3
12	MP-8	X	-.007	3
13	MP-9	X	-.011	1
14	MP-12	X	-.011	1
15	MP-10	X	-.013	1
16	MP-11	X	-.013	1
17	MP-9	X	-.006	3

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Designer : CJB
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Member Point Loads (BLC 32 : 300 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
18	MP-12	X	-.006	3
19	MP-11	X	-.005	3
20	MP-1	X	-.014	6
21	MP-4	X	-.014	6
22	MP-2	X	-.012	6
23	MP-3	X	-.012	6
24	MP-5	X	-.016	6
25	MP-8	X	-.016	6
26	MP-6	X	-.014	6
27	MP-7	X	-.014	6
28	MP-9	X	-.011	6
29	MP-12	X	-.011	6
30	MP-10	X	-.013	6
31	MP-11	X	-.013	6
32	MP-1	Z	.025	1
33	MP-4	Z	.025	1
34	MP-2	Z	.021	1
35	MP-3	Z	.021	1
36	MP-1	Z	.009	3
37	MP-4	Z	.009	3
38	MP-5	Z	.028	1
39	MP-8	Z	.028	1
40	MP-6	Z	.024	1
41	MP-7	Z	.024	1
42	MP-5	Z	.012	3
43	MP-8	Z	.012	3
44	MP-9	Z	.019	1
45	MP-12	Z	.019	1
46	MP-10	Z	.023	1
47	MP-11	Z	.023	1
48	MP-9	Z	.011	3
49	MP-12	Z	.011	3
50	MP-11	Z	.009	3
51	MP-1	Z	.026	6
52	MP-4	Z	.026	6
53	MP-2	Z	.021	6
54	MP-3	Z	.021	6
55	MP-5	Z	.028	6
56	MP-8	Z	.028	6
57	MP-6	Z	.024	6
58	MP-7	Z	.024	6
59	MP-9	Z	.019	6
60	MP-12	Z	.019	6
61	MP-10	Z	.023	6
62	MP-11	Z	.023	6

Member Point Loads (BLC 33 : 315 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.019	1
2	MP-4	X	-.019	1
3	MP-2	X	-.017	1

Member Point Loads (BLC 33 : 315 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
4	MP-3	X	-.017	1
5	MP-1	X	-.008	3
6	MP-4	X	-.008	3
7	MP-5	X	-.023	1
8	MP-8	X	-.023	1
9	MP-6	X	-.02	1
10	MP-7	X	-.02	1
11	MP-5	X	-.01	3
12	MP-8	X	-.01	3
13	MP-9	X	-.019	1
14	MP-12	X	-.018	1
15	MP-10	X	-.018	1
16	MP-11	X	-.018	1
17	MP-9	X	-.008	3
18	MP-12	X	-.008	3
19	MP-11	X	-.008	3
20	MP-1	X	-.019	6
21	MP-4	X	-.019	6
22	MP-2	X	-.017	6
23	MP-3	X	-.017	6
24	MP-5	X	-.023	6
25	MP-8	X	-.023	6
26	MP-6	X	-.02	6
27	MP-7	X	-.02	6
28	MP-9	X	-.018	6
29	MP-12	X	-.018	6
30	MP-10	X	-.018	6
31	MP-11	X	-.018	6
32	MP-1	Z	.018	1
33	MP-4	Z	.018	1
34	MP-2	Z	.017	1
35	MP-3	Z	.017	1
36	MP-1	Z	.008	3
37	MP-4	Z	.008	3
38	MP-5	Z	.023	1
39	MP-8	Z	.023	1
40	MP-6	Z	.02	1
41	MP-7	Z	.02	1
42	MP-5	Z	.01	3
43	MP-8	Z	.01	3
44	MP-9	Z	.018	1
45	MP-12	Z	.018	1
46	MP-10	Z	.018	1
47	MP-11	Z	.018	1
48	MP-9	Z	.008	3
49	MP-12	Z	.008	3
50	MP-11	Z	.008	3
51	MP-1	Z	.019	6
52	MP-4	Z	.019	6
53	MP-2	Z	.017	6
54	MP-3	Z	.017	6
55	MP-5	Z	.023	6

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Member Point Loads (BLC 33 : 315 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
56	MP-8	Z	.023	6
57	MP-6	Z	.02	6
58	MP-7	Z	.02	6
59	MP-9	Z	.018	6
60	MP-12	Z	.018	6
61	MP-10	Z	.018	6
62	MP-11	Z	.018	6

Member Point Loads (BLC 34 : 330 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.021	1
2	MP-4	X	-.021	1
3	MP-2	X	-.022	1
4	MP-3	X	-.022	1
5	MP-1	X	-.01	3
6	MP-4	X	-.01	3
7	MP-5	X	-.027	1
8	MP-8	X	-.027	1
9	MP-6	X	-.024	1
10	MP-7	X	-.024	1
11	MP-5	X	-.012	3
12	MP-8	X	-.012	3
13	MP-9	X	-.024	1
14	MP-12	X	-.024	1
15	MP-10	X	-.021	1
16	MP-11	X	-.021	1
17	MP-9	X	-.009	3
18	MP-12	X	-.009	3
19	MP-11	X	-.01	3
20	MP-1	X	-.021	6
21	MP-4	X	-.021	6
22	MP-2	X	-.022	6
23	MP-3	X	-.022	6
24	MP-5	X	-.027	6
25	MP-8	X	-.027	6
26	MP-6	X	-.024	6
27	MP-7	X	-.024	6
28	MP-9	X	-.024	6
29	MP-12	X	-.024	6
30	MP-10	X	-.021	6
31	MP-11	X	-.021	6
32	MP-1	Z	.012	1
33	MP-4	Z	.012	1
34	MP-2	Z	.013	1
35	MP-3	Z	.013	1
36	MP-1	Z	.008	3
37	MP-4	Z	.008	3
38	MP-5	Z	.016	1
39	MP-8	Z	.016	1
40	MP-6	Z	.014	1
41	MP-7	Z	.014	1

Member Point Loads (BLC 34 : 330 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
42	MP-5	Z	.007	3
43	MP-6	Z	.007	3
44	MP-9	Z	.014	1
45	MP-12	Z	.014	1
46	MP-10	Z	.012	1
47	MP-11	Z	.012	1
48	MP-9	Z	.005	3
49	MP-12	Z	.005	3
50	MP-11	Z	.008	3
51	MP-1	Z	.012	6
52	MP-4	Z	.012	6
53	MP-2	Z	.013	6
54	MP-3	Z	.013	6
55	MP-5	Z	.016	6
56	MP-8	Z	.016	6
57	MP-6	Z	.014	6
58	MP-7	Z	.014	6
59	MP-9	Z	.014	6
60	MP-12	Z	.014	6
61	MP-10	Z	.012	6
62	MP-11	Z	.012	6

Member Point Loads (BLC 37 : Seismic Load X)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.011	1
2	MP-4	X	-.011	1
3	MP-2	X	-.033	1
4	MP-3	X	-.033	1
5	MP-1	X	-.084	3
6	MP-4	X	-.084	3
7	MP-5	X	-.013	1
8	MP-8	X	-.013	1
9	MP-6	X	-.033	1
10	MP-7	X	-.033	1
11	MP-5	X	-.084	3
12	MP-8	X	-.084	3
13	MP-9	X	-.011	1
14	MP-12	X	-.011	1
15	MP-10	X	-.033	1
16	MP-11	X	-.033	1
17	MP-9	X	-.084	3
18	MP-12	X	-.084	3
19	MP-11	X	-.032	3
20	MP-1	X	-.011	6
21	MP-4	X	-.011	6
22	MP-2	X	-.033	6
23	MP-3	X	-.033	6
24	MP-5	X	-.013	6
25	MP-8	X	-.013	6
26	MP-6	X	-.033	6
27	MP-7	X	-.033	6

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Member Point Loads (BLC 37 : Seismic Load X) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
28	MP-9	X	-.011	6
29	MP-12	X	-.011	6
30	MP-10	X	-.033	6
31	MP-11	X	-.033	6

Member Point Loads (BLC 38 : Seismic Load Z)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Z	-.011	1
2	MP-4	Z	-.011	1
3	MP-2	Z	-.033	1
4	MP-3	Z	-.033	1
5	MP-1	Z	-.084	3
6	MP-4	Z	-.084	3
7	MP-5	Z	-.013	1
8	MP-8	Z	-.013	1
9	MP-6	Z	-.033	1
10	MP-7	Z	-.033	1
11	MP-5	Z	-.084	3
12	MP-8	Z	-.084	3
13	MP-9	Z	-.011	1
14	MP-12	Z	-.011	1
15	MP-10	Z	-.033	1
16	MP-11	Z	-.033	1
17	MP-9	Z	-.084	3
18	MP-12	Z	-.084	3
19	MP-11	Z	-.032	3
20	MP-1	Z	-.011	6
21	MP-4	Z	-.011	6
22	MP-2	Z	-.033	6
23	MP-3	Z	-.033	6
24	MP-5	Z	-.013	6
25	MP-8	Z	-.013	6
26	MP-6	Z	-.033	6
27	MP-7	Z	-.033	6
28	MP-9	Z	-.011	6
29	MP-12	Z	-.011	6
30	MP-10	Z	-.033	6
31	MP-11	Z	-.033	6

Member Distributed Loads (BLC 2 : 0 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	F1	X	-.01	-.01	0	%100
2	F2	X	-.004	-.004	0	%100
3	F3	X	-.004	-.004	0	%100
4	INT-1	X	-.007	-.007	0	%100
5	INT-2	X	-.017	-.017	0	%100
6	INT-3	X	-.007	-.007	0	%100
7	MP-1	X	-.007	-.007	0	%100
8	MP-2	X	-.007	-.007	0	%100
9	MP-4	X	-.007	-.007	0	%100

Member Distributed Loads (BLC 2 : 0 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
10	MP-6	X	-.007	-.007	0	%100
11	MP-8	X	-.007	-.007	0	%100
12	MP-9	X	-.007	-.007	0	%100
13	MP-12	X	-.007	-.007	0	%100
14	PL1	X	-.009	-.009	0	%100
15	PL2	X	-.018	-.018	0	%100
16	PL3	X	-.009	-.009	0	%100
17	PS1-A	X	-.01	-.01	0	%100
18	PS1-B	X	-.01	-.01	0	%100
19	PS2-A	X	-.004	-.004	0	%100
20	PS2-B	X	-.01	-.01	0	%100
21	PS3-A	X	-.01	-.01	0	%100
22	PS3-B	X	-.01	-.01	0	%100
23	SA-1	X	-.014	-.014	0	%100
24	SA-2	X	0	0	0	%100
25	SA-3	X	-.014	-.014	0	%100
26	MP-3	X	-.007	-.007	0	%100
27	MP-10	X	-.007	-.007	0	%100
28	MP-11	X	-.007	-.007	0	%100
29	MP-8	X	-.007	-.007	0	%100
30	MP-7	X	-.007	-.007	0	%100

Member Distributed Loads (BLC 3 : 30 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	F1	X	-.007	-.007	0	%100
2	F2	X	0	0	0	%100
3	F3	X	-.007	-.007	0	%100
4	INT-1	X	-.011	-.011	0	%100
5	INT-2	X	-.013	-.013	0	%100
6	INT-3	X	0	0	0	%100
7	MP-1	X	-.006	-.006	0	%100
8	MP-2	X	-.006	-.006	0	%100
9	MP-4	X	-.006	-.006	0	%100
10	MP-5	X	-.006	-.006	0	%100
11	MP-8	X	-.006	-.006	0	%100
12	MP-9	X	-.006	-.006	0	%100
13	MP-12	X	-.006	-.006	0	%100
14	PL1	X	-.014	-.014	0	%100
15	PL2	X	-.014	-.014	0	%100
16	PL3	X	0	0	0	%100
17	PS1-A	X	-.008	-.008	0	%100
18	PS1-B	X	-.008	-.008	0	%100
19	PS2-A	X	0	0	0	%100
20	PS2-B	X	0	0	0	%100
21	PS3-A	X	-.016	-.016	0	%100
22	PS3-B	X	-.016	-.016	0	%100
23	SA-1	X	-.007	-.007	0	%100
24	SA-2	X	-.005	-.005	0	%100
25	SA-3	X	-.014	-.014	0	%100
26	MP-3	X	-.006	-.006	0	%100
27	MP-10	X	-.006	-.006	0	%100

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Member Distributed Loads (BLC 3 : 30 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
28	MP-11	X	-.006	-.006	0	%100
29	MP-8	X	-.006	-.006	0	%100
30	MP-7	X	-.006	-.006	0	%100
31	F1	Z	-.004	-.004	0	%100
32	F2	Z	0	0	0	%100
33	F3	Z	-.004	-.004	0	%100
34	INT-1	Z	-.007	-.007	0	%100
35	INT-2	Z	-.008	-.008	0	%100
36	INT-3	Z	0	0	0	%100
37	MP-1	Z	-.004	-.004	0	%100
38	MP-2	Z	-.004	-.004	0	%100
39	MP-4	Z	-.004	-.004	0	%100
40	MP-5	Z	-.004	-.004	0	%100
41	MP-8	Z	-.004	-.004	0	%100
42	MP-9	Z	-.004	-.004	0	%100
43	MP-12	Z	-.004	-.004	0	%100
44	PL1	Z	-.008	-.008	0	%100
45	PL2	Z	-.008	-.008	0	%100
46	PL3	Z	0	0	0	%100
47	PS1-A	Z	-.004	-.004	0	%100
48	PS1-B	Z	-.004	-.004	0	%100
49	PS2-A	Z	0	0	0	%100
50	PS2-B	Z	0	0	0	%100
51	PS3-A	Z	-.009	-.009	0	%100
52	PS3-B	Z	-.009	-.009	0	%100
53	SA-1	Z	-.004	-.004	0	%100
54	SA-2	Z	-.004	-.004	0	%100
55	SA-3	Z	-.007	-.007	0	%100
56	MP-3	Z	-.004	-.004	0	%100
57	MP-10	Z	-.004	-.004	0	%100
58	MP-11	Z	-.004	-.004	0	%100
59	MP-8	Z	-.004	-.004	0	%100
60	MP-7	Z	-.004	-.004	0	%100

Member Distributed Loads (BLC 4 : 45 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	F1	X	-.005	-.005	0	%100
2	F2	X	-.002	-.002	0	%100
3	F3	X	-.006	-.006	0	%100
4	INT-1	X	-.01	-.01	0	%100
5	INT-2	X	-.009	-.009	0	%100
6	INT-3	X	-.003	-.003	0	%100
7	MP-1	X	-.005	-.005	0	%100
8	MP-2	X	-.005	-.005	0	%100
9	MP-4	X	-.005	-.005	0	%100
10	MP-5	X	-.005	-.005	0	%100
11	MP-8	X	-.005	-.005	0	%100
12	MP-9	X	-.005	-.005	0	%100
13	MP-12	X	-.005	-.005	0	%100
14	PL1	X	-.012	-.012	0	%100
15	PL2	X	-.009	-.009	0	%100

Member Distributed Loads (BLC 4 : 45 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
16	PL3	X	-.003	-.003	0	%100
17	PS1-A	X	-.005	-.005	0	%100
18	PS1-B	X	-.005	-.005	0	%100
19	PS2-A	X	-.001	-.001	0	%100
20	PS2-B	X	-.004	-.004	0	%100
21	PS3-A	X	-.013	-.013	0	%100
22	PS3-B	X	-.013	-.013	0	%100
23	SA-1	X	-.003	-.003	0	%100
24	SA-2	X	-.008	-.008	0	%100
25	SA-3	X	-.011	-.011	0	%100
26	MP-3	X	-.005	-.005	0	%100
27	MP-10	X	-.005	-.005	0	%100
28	MP-11	X	-.005	-.005	0	%100
29	MP-6	X	-.005	-.005	0	%100
30	MP-7	X	-.005	-.005	0	%100
31	F1	Z	-.005	-.005	0	%100
32	F2	Z	-.002	-.002	0	%100
33	F3	Z	-.007	-.007	0	%100
34	INT-1	Z	-.011	-.011	0	%100
35	INT-2	Z	-.009	-.009	0	%100
36	INT-3	Z	-.003	-.003	0	%100
37	MP-1	Z	-.005	-.005	0	%100
38	MP-2	Z	-.005	-.005	0	%100
39	MP-4	Z	-.005	-.005	0	%100
40	MP-5	Z	-.005	-.005	0	%100
41	MP-8	Z	-.005	-.005	0	%100
42	MP-9	Z	-.005	-.005	0	%100
43	MP-12	Z	-.005	-.005	0	%100
44	PL1	Z	-.012	-.012	0	%100
45	PL2	Z	-.009	-.009	0	%100
46	PL3	Z	-.003	-.003	0	%100
47	PS1-A	Z	-.005	-.005	0	%100
48	PS1-B	Z	-.005	-.005	0	%100
49	PS2-A	Z	-.002	-.002	0	%100
50	PS2-B	Z	-.004	-.004	0	%100
51	PS3-A	Z	-.015	-.015	0	%100
52	PS3-B	Z	-.015	-.015	0	%100
53	SA-1	Z	-.003	-.003	0	%100
54	SA-2	Z	-.008	-.008	0	%100
55	SA-3	Z	-.01	-.01	0	%100
56	MP-3	Z	-.005	-.005	0	%100
57	MP-10	Z	-.005	-.005	0	%100
58	MP-11	Z	-.005	-.005	0	%100
59	MP-6	Z	-.005	-.005	0	%100
60	MP-7	Z	-.005	-.005	0	%100

Member Distributed Loads (BLC 5 : 60 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	F1	X	-.002	-.002	0	%100
2	F2	X	-.002	-.002	0	%100
3	F3	X	-.004	-.004	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : CJB
Job Number : 52429.298270
Model Name : CCI BU No. 876373

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Member Distributed Loads (BLC 5 : 60 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
4	INT-1	X	-.007	-.007	0	%100
5	INT-2	X	-.004	-.004	0	%100
6	INT-3	X	-.004	-.004	0	%100
7	MP-1	X	-.004	-.004	0	%100
8	MP-2	X	-.004	-.004	0	%100
9	MP-4	X	-.004	-.004	0	%100
10	MP-5	X	-.004	-.004	0	%100
11	MP-8	X	-.004	-.004	0	%100
12	MP-9	X	-.004	-.004	0	%100
13	MP-12	X	-.004	-.004	0	%100
14	PL1	X	-.009	-.009	0	%100
15	PL2	X	-.005	-.005	0	%100
16	PL3	X	-.005	-.005	0	%100
17	PS1-A	X	-.003	-.003	0	%100
18	PS1-B	X	-.003	-.003	0	%100
19	PS2-A	X	-.002	-.002	0	%100
20	PS2-B	X	-.005	-.005	0	%100
21	PS3-A	X	-.01	-.01	0	%100
22	PS3-B	X	-.01	-.01	0	%100
23	SA-1	X	0	0	0	%100
24	SA-2	X	-.005	-.005	0	%100
25	SA-3	X	-.007	-.007	0	%100
26	MP-3	X	-.004	-.004	0	%100
27	MP-10	X	-.004	-.004	0	%100
28	MP-11	X	-.004	-.004	0	%100
29	MP-6	X	-.004	-.004	0	%100
30	MP-7	X	-.004	-.004	0	%100
31	F1	Z	-.004	-.004	0	%100
32	F2	Z	-.004	-.004	0	%100
33	F3	Z	-.008	-.008	0	%100
34	INT-1	Z	-.014	-.014	0	%100
35	INT-2	Z	-.008	-.008	0	%100
36	INT-3	Z	-.007	-.007	0	%100
37	MP-1	Z	-.006	-.006	0	%100
38	MP-2	Z	-.006	-.006	0	%100
39	MP-4	Z	-.006	-.006	0	%100
40	MP-5	Z	-.006	-.006	0	%100
41	MP-8	Z	-.006	-.006	0	%100
42	MP-9	Z	-.006	-.006	0	%100
43	MP-12	Z	-.006	-.006	0	%100
44	PL1	Z	-.016	-.016	0	%100
45	PL2	Z	-.008	-.008	0	%100
46	PL3	Z	-.008	-.008	0	%100
47	PS1-A	Z	-.004	-.004	0	%100
48	PS1-B	Z	-.004	-.004	0	%100
49	PS2-A	Z	-.004	-.004	0	%100
50	PS2-B	Z	-.009	-.009	0	%100
51	PS3-A	Z	-.019	-.019	0	%100
52	PS3-B	Z	-.019	-.019	0	%100
53	SA-1	Z	0	0	0	%100
54	SA-2	Z	-.013	-.013	0	%100
55	SA-3	Z	-.011	-.011	0	%100

Member Distributed Loads (BLC 5 : 60 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
56	MP-3	Z	-.006	-.006	0	%100
57	MP-10	Z	-.006	-.006	0	%100
58	MP-11	Z	-.006	-.006	0	%100
59	MP-6	Z	-.006	-.006	0	%100
60	MP-7	Z	-.006	-.006	0	%100

Member Distributed Loads (BLC 6 : 90 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	F1	Z	0	0	0	%100
2	F2	Z	-.008	-.008	0	%100
3	F3	Z	-.009	-.008	0	%100
4	INT-1	Z	-.014	-.014	0	%100
5	INT-2	Z	0	0	0	%100
6	INT-3	Z	-.014	-.014	0	%100
7	MP-1	Z	-.007	-.007	0	%100
8	MP-2	Z	-.007	-.007	0	%100
9	MP-4	Z	-.007	-.007	0	%100
10	MP-5	Z	-.007	-.007	0	%100
11	MP-8	Z	-.007	-.007	0	%100
12	MP-9	Z	-.007	-.007	0	%100
13	MP-12	Z	-.007	-.007	0	%100
14	PL1	Z	-.016	-.016	0	%100
15	PL2	Z	0	0	0	%100
16	PL3	Z	-.016	-.016	0	%100
17	PS1-A	Z	0	0	0	%100
18	PS1-B	Z	0	0	0	%100
19	PS2-A	Z	-.008	-.008	0	%100
20	PS2-B	Z	-.019	-.019	0	%100
21	PS3-A	Z	-.019	-.019	0	%100
22	PS3-B	Z	-.019	-.019	0	%100
23	SA-1	Z	-.007	-.007	0	%100
24	SA-2	Z	-.017	-.017	0	%100
25	SA-3	Z	-.007	-.007	0	%100
26	MP-3	Z	-.007	-.007	0	%100
27	MP-10	Z	-.007	-.007	0	%100
28	MP-11	Z	-.007	-.007	0	%100
29	MP-6	Z	-.007	-.007	0	%100
30	MP-7	Z	-.007	-.007	0	%100

Member Distributed Loads (BLC 7 : 120 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	F1	X	.002	.002	0	%100
2	F2	X	.004	.004	0	%100
3	F3	X	.002	.002	0	%100
4	INT-1	X	.004	.004	0	%100
5	INT-2	X	.004	.004	0	%100
6	INT-3	X	.007	.007	0	%100
7	MP-1	X	.004	.004	0	%100
8	MP-2	X	.004	.004	0	%100
9	MP-4	X	.004	.004	0	%100
10	MP-5	X	.004	.004	0	%100

RISA A NEMETSCHEK COMPANY
Company : Tower Engineering Professionals, Inc.
Designer : CJB
Job Number : 52429.298279
Model Name : CCI BU No. 876373
Oct 31, 2019
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Checked By: JHJ

Member Distributed Loads (BLC 7 : 120 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
11	MP-8	X	.004	.004	0	%100
12	MP-9	X	.004	.004	0	%100
13	MP-12	X	.004	.004	0	%100
14	PL1	X	.005	.005	0	%100
15	PL2	X	.005	.005	0	%100
16	PL3	X	.009	.009	0	%100
17	PS1-A	X	.003	.003	0	%100
18	PS1-B	X	.003	.003	0	%100
19	PS2-A	X	.004	.004	0	%100
20	PS2-B	X	.01	.01	0	%100
21	PS3-A	X	.005	.005	0	%100
22	PS3-B	X	.005	.005	0	%100
23	SA-1	X	.007	.007	0	%100
24	SA-2	X	.005	.005	0	%100
25	SA-3	X	0	0	0	%100
26	MP-3	X	.004	.004	0	%100
27	MP-10	X	.004	.004	0	%100
28	MP-11	X	.004	.004	0	%100
29	MP-6	X	.004	.004	0	%100
30	MP-7	X	.004	.004	0	%100
31	F1	Z	-.004	-.004	0	%100
32	F2	Z	-.008	-.008	0	%100
33	F3	Z	-.004	-.004	0	%100
34	INT-1	Z	-.007	-.007	0	%100
35	INT-2	Z	-.008	-.008	0	%100
36	INT-3	Z	-.014	-.014	0	%100
37	MP-1	Z	-.006	-.006	0	%100
38	MP-2	Z	-.006	-.006	0	%100
39	MP-4	Z	-.006	-.006	0	%100
40	MP-5	Z	-.006	-.006	0	%100
41	MP-8	Z	-.006	-.006	0	%100
42	MP-9	Z	-.006	-.006	0	%100
43	MP-12	Z	-.006	-.006	0	%100
44	PL1	Z	-.008	-.008	0	%100
45	PL2	Z	-.008	-.008	0	%100
46	PL3	Z	-.016	-.016	0	%100
47	PS1-A	Z	-.004	-.004	0	%100
48	PS1-B	Z	-.004	-.004	0	%100
49	PS2-A	Z	-.008	-.008	0	%100
50	PS2-B	Z	-.019	-.019	0	%100
51	PS3-A	Z	-.009	-.009	0	%100
52	PS3-B	Z	-.009	-.009	0	%100
53	SA-1	Z	-.011	-.011	0	%100
54	SA-2	Z	-.013	-.013	0	%100
55	SA-3	Z	0	0	0	%100
56	MP-3	Z	-.006	-.006	0	%100
57	MP-10	Z	-.006	-.006	0	%100
58	MP-11	Z	-.006	-.006	0	%100
59	MP-6	Z	-.006	-.006	0	%100
60	MP-7	Z	-.006	-.006	0	%100

Member Distributed Loads (BLC 8 : 135 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	F1	X	.005	.005	0	%100
2	F2	X	.006	.006	0	%100
3	F3	X	.002	.002	0	%100
4	INT-1	X	.003	.003	0	%100
5	INT-2	X	.009	.009	0	%100
6	INT-3	X	.01	.01	0	%100
7	MP-1	X	.005	.005	0	%100
8	MP-2	X	.005	.005	0	%100
9	MP-4	X	.005	.005	0	%100
10	MP-5	X	.005	.005	0	%100
11	MP-8	X	.006	.006	0	%100
12	MP-9	X	.006	.006	0	%100
13	MP-12	X	.005	.005	0	%100
14	PL1	X	.003	.003	0	%100
15	PL2	X	.009	.009	0	%100
16	PL3	X	.012	.012	0	%100
17	PS1-A	X	.005	.005	0	%100
18	PS1-B	X	.005	.005	0	%100
19	PS2-A	X	.006	.006	0	%100
20	PS2-B	X	.013	.013	0	%100
21	PS3-A	X	.004	.004	0	%100
22	PS3-B	X	.004	.004	0	%100
23	SA-1	X	.011	.011	0	%100
24	SA-2	X	.006	.006	0	%100
25	SA-3	X	.003	.003	0	%100
26	MP-3	X	.005	.005	0	%100
27	MP-10	X	.005	.005	0	%100
28	MP-11	X	.005	.005	0	%100
29	MP-6	X	.005	.005	0	%100
30	MP-7	X	.005	.005	0	%100
31	F1	Z	-.005	-.005	0	%100
32	F2	Z	-.007	-.007	0	%100
33	F3	Z	-.002	-.002	0	%100
34	INT-1	Z	-.003	-.003	0	%100
35	INT-2	Z	-.009	-.009	0	%100
36	INT-3	Z	-.011	-.011	0	%100
37	MP-1	Z	-.005	-.005	0	%100
38	MP-2	Z	-.005	-.005	0	%100
39	MP-4	Z	-.005	-.005	0	%100
40	MP-5	Z	-.005	-.005	0	%100
41	MP-8	Z	-.005	-.005	0	%100
42	MP-9	Z	-.005	-.005	0	%100
43	MP-12	Z	-.005	-.005	0	%100
44	PL1	Z	-.003	-.003	0	%100
45	PL2	Z	-.009	-.009	0	%100
46	PL3	Z	-.012	-.012	0	%100
47	PS1-A	Z	-.005	-.005	0	%100
48	PS1-B	Z	-.005	-.005	0	%100
49	PS2-A	Z	-.007	-.007	0	%100
50	PS2-B	Z	-.016	-.016	0	%100
51	PS3-A	Z	-.004	-.004	0	%100
52	PS3-B	Z	-.004	-.004	0	%100

RISA A NEMETSCHEK COMPANY
Company : Tower Engineering Professionals, Inc.
Designer : CJB
Job Number : 52429.288270
Model Name : CCI BU No. 876373
Oct 31, 2019
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Member Distributed Loads (BLC 8 : 135 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
53	SA-1	Z	-.01	-.01	0	%100
54	SA-2	Z	-.006	-.006	0	%100
55	SA-3	Z	-.003	-.003	0	%100
56	MP-3	Z	-.005	-.005	0	%100
57	MP-10	Z	-.005	-.005	0	%100
58	MP-11	Z	-.005	-.005	0	%100
59	MP-6	Z	-.005	-.005	0	%100
60	MP-7	Z	-.005	-.005	0	%100

Member Distributed Loads (BLC 9 : 150 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	F1	X	.007	.007	0	%100
2	F2	X	.007	.007	0	%100
3	F3	X	0	0	0	%100
4	INT-1	X	0	0	0	%100
5	INT-2	X	.013	.013	0	%100
6	INT-3	X	.011	.011	0	%100
7	MP-1	X	.008	.008	0	%100
8	MP-2	X	.008	.008	0	%100
9	MP-4	X	.008	.008	0	%100
10	MP-5	X	.008	.008	0	%100
11	MP-8	X	.008	.008	0	%100
12	MP-9	X	.008	.008	0	%100
13	MP-12	X	.008	.008	0	%100
14	PL1	X	0	0	0	%100
15	PL2	X	.014	.014	0	%100
16	PL3	X	.014	.014	0	%100
17	PS1-A	X	.008	.008	0	%100
18	PS1-B	X	.008	.008	0	%100
19	PS2-A	X	.008	.008	0	%100
20	PS2-B	X	.015	.015	0	%100
21	PS3-A	X	0	0	0	%100
22	PS3-B	X	0	0	0	%100
23	SA-1	X	.014	.014	0	%100
24	SA-2	X	.005	.005	0	%100
25	SA-3	X	.007	.007	0	%100
26	MP-3	X	.008	.008	0	%100
27	MP-10	X	.008	.008	0	%100
28	MP-11	X	.008	.008	0	%100
29	MP-6	X	.008	.008	0	%100
30	MP-7	X	.008	.008	0	%100
31	F1	Z	-.004	-.004	0	%100
32	F2	Z	-.004	-.004	0	%100
33	F3	Z	0	0	0	%100
34	INT-1	Z	0	0	0	%100
35	INT-2	Z	-.008	-.008	0	%100
36	INT-3	Z	-.007	-.007	0	%100
37	MP-1	Z	-.004	-.004	0	%100
38	MP-2	Z	-.004	-.004	0	%100
39	MP-4	Z	-.004	-.004	0	%100
40	MP-5	Z	-.004	-.004	0	%100

Member Distributed Loads (BLC 9 : 150 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
41	MP-8	Z	-.004	-.004	0	%100
42	MP-9	Z	-.004	-.004	0	%100
43	MP-12	Z	-.004	-.004	0	%100
44	PL1	Z	0	0	0	%100
45	PL2	Z	-.008	-.008	0	%100
46	PL3	Z	-.008	-.008	0	%100
47	PS1-A	Z	-.004	-.004	0	%100
48	PS1-B	Z	-.004	-.004	0	%100
49	PS2-A	Z	-.004	-.004	0	%100
50	PS2-B	Z	-.009	-.009	0	%100
51	PS3-A	Z	0	0	0	%100
52	PS3-B	Z	0	0	0	%100
53	SA-1	Z	-.007	-.007	0	%100
54	SA-2	Z	-.004	-.004	0	%100
55	SA-3	Z	-.004	-.004	0	%100
56	MP-3	Z	-.004	-.004	0	%100
57	MP-10	Z	-.004	-.004	0	%100
58	MP-11	Z	-.004	-.004	0	%100
59	MP-6	Z	-.004	-.004	0	%100
60	MP-7	Z	-.004	-.004	0	%100

Member Distributed Loads (BLC 10 : 180 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	F1	X	.01	.01	0	%100
2	F2	X	.004	.004	0	%100
3	F3	X	.004	.004	0	%100
4	INT-1	X	.007	.007	0	%100
5	INT-2	X	.017	.017	0	%100
6	INT-3	X	.007	.007	0	%100
7	MP-1	X	.007	.007	0	%100
8	MP-2	X	.007	.007	0	%100
9	MP-4	X	.007	.007	0	%100
10	MP-5	X	.007	.007	0	%100
11	MP-8	X	.007	.007	0	%100
12	MP-9	X	.007	.007	0	%100
13	MP-12	X	.007	.007	0	%100
14	PL1	X	.009	.009	0	%100
15	PL2	X	.018	.018	0	%100
16	PL3	X	.009	.009	0	%100
17	PS1-A	X	.01	.01	0	%100
18	PS1-B	X	.01	.01	0	%100
19	PS2-A	X	.004	.004	0	%100
20	PS2-B	X	.01	.01	0	%100
21	PS3-A	X	.01	.01	0	%100
22	PS3-B	X	.01	.01	0	%100
23	SA-1	X	.014	.014	0	%100
24	SA-2	X	0	0	0	%100
25	SA-3	X	.014	.014	0	%100
26	MP-3	X	.007	.007	0	%100
27	MP-10	X	.007	.007	0	%100
28	MP-11	X	.007	.007	0	%100

Member Distributed Loads (BLC 10 : 180 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
29	MP-6	X	.007	.007	0	%100
30	MP-7	X	.007	.007	0	%100

Member Distributed Loads (BLC 11 : 210 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	F1	X	.007	.007	0	%100
2	F2	X	0	0	0	%100
3	F3	X	.007	.007	0	%100
4	INT-1	X	.011	.011	0	%100
5	INT-2	X	.013	.013	0	%100
6	INT-3	X	0	0	0	%100
7	MP-1	X	.006	.006	0	%100
8	MP-2	X	.006	.006	0	%100
9	MP-4	X	.006	.006	0	%100
10	MP-5	X	.006	.006	0	%100
11	MP-8	X	.006	.006	0	%100
12	MP-9	X	.006	.006	0	%100
13	MP-12	X	.006	.006	0	%100
14	PL1	X	.014	.014	0	%100
15	PL2	X	.014	.014	0	%100
16	PL3	X	0	0	0	%100
17	PS1-A	X	.008	.008	0	%100
18	PS1-B	X	.008	.008	0	%100
19	PS2-A	X	0	0	0	%100
20	PS2-B	X	0	0	0	%100
21	PS3-A	X	.015	.015	0	%100
22	PS3-B	X	.015	.015	0	%100
23	SA-1	X	.007	.007	0	%100
24	SA-2	X	.005	.005	0	%100
25	SA-3	X	.014	.014	0	%100
26	MP-3	X	.006	.006	0	%100
27	MP-10	X	.008	.008	0	%100
28	MP-11	X	.005	.005	0	%100
29	MP-6	X	.006	.006	0	%100
30	MP-7	X	.006	.006	0	%100
31	F1	Z	.004	.004	0	%100
32	F2	Z	0	0	0	%100
33	F3	Z	.004	.004	0	%100
34	INT-1	Z	.007	.007	0	%100
35	INT-2	Z	.008	.008	0	%100
36	INT-3	Z	0	0	0	%100
37	MP-1	Z	.004	.004	0	%100
38	MP-2	Z	.004	.004	0	%100
39	MP-4	Z	.004	.004	0	%100
40	MP-5	Z	.004	.004	0	%100
41	MP-8	Z	.004	.004	0	%100
42	MP-9	Z	.004	.004	0	%100
43	MP-12	Z	.004	.004	0	%100
44	PL1	Z	.008	.008	0	%100
45	PL2	Z	.008	.008	0	%100
46	PL3	Z	0	0	0	%100

Member Distributed Loads (BLC 11 : 210 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
47	PS1-A	Z	.004	.004	0	%100
48	PS1-B	Z	.004	.004	0	%100
49	PS2-A	Z	0	0	0	%100
50	PS2-B	Z	0	0	0	%100
51	PS3-A	Z	.009	.009	0	%100
52	PS3-B	Z	.009	.009	0	%100
53	SA-1	Z	.004	.004	0	%100
54	SA-2	Z	.004	.004	0	%100
55	SA-3	Z	.007	.007	0	%100
56	MP-3	Z	.004	.004	0	%100
57	MP-10	Z	.004	.004	0	%100
58	MP-11	Z	.004	.004	0	%100
59	MP-6	Z	.004	.004	0	%100
60	MP-7	Z	.004	.004	0	%100

Member Distributed Loads (BLC 12 : 225 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	F1	X	.005	.005	0	%100
2	F2	X	.002	.002	0	%100
3	F3	X	.008	.008	0	%100
4	INT-1	X	.01	.01	0	%100
5	INT-2	X	.009	.009	0	%100
6	INT-3	X	.003	.003	0	%100
7	MP-1	X	.005	.005	0	%100
8	MP-2	X	.005	.005	0	%100
9	MP-4	X	.005	.005	0	%100
10	MP-5	X	.005	.005	0	%100
11	MP-8	X	.005	.005	0	%100
12	MP-9	X	.005	.005	0	%100
13	MP-12	X	.005	.005	0	%100
14	PL1	X	.012	.012	0	%100
15	PL2	X	.009	.009	0	%100
16	PL3	X	.003	.003	0	%100
17	PS1-A	X	.005	.005	0	%100
18	PS1-B	X	.005	.005	0	%100
19	PS2-A	X	.001	.001	0	%100
20	PS2-B	X	.004	.004	0	%100
21	PS3-A	X	.013	.013	0	%100
22	PS3-B	X	.013	.013	0	%100
23	SA-1	X	.003	.003	0	%100
24	SA-2	X	.006	.006	0	%100
25	SA-3	X	.011	.011	0	%100
26	MP-3	X	.005	.005	0	%100
27	MP-10	X	.005	.005	0	%100
28	MP-11	X	.005	.005	0	%100
29	MP-6	X	.005	.005	0	%100
30	MP-7	X	.005	.005	0	%100
31	F1	Z	.005	.005	0	%100
32	F2	Z	.002	.002	0	%100
33	F3	Z	.007	.007	0	%100
34	INT-1	Z	.011	.011	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : CJB
Job Number : 52429.298270
Model Name : CCI BU No. 876373

Oct 31, 2019
10:08 AM
Checked By: JHJ

Member Distributed Loads (BLC 12 : 225 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
35	INT-2	Z	.009	.009	0	%100
36	INT-3	Z	.003	.003	0	%100
37	MP-1	Z	.005	.005	0	%100
38	MP-2	Z	.005	.005	0	%100
39	MP-4	Z	.005	.005	0	%100
40	MP-5	Z	.005	.005	0	%100
41	MP-8	Z	.005	.005	0	%100
42	MP-9	Z	.005	.005	0	%100
43	MP-12	Z	.005	.005	0	%100
44	PL1	Z	.012	.012	0	%100
45	PL2	Z	.009	.009	0	%100
46	PL3	Z	.003	.003	0	%100
47	PS1-A	Z	.005	.005	0	%100
48	PS1-B	Z	.005	.005	0	%100
49	PS2-A	Z	.002	.002	0	%100
50	PS2-B	Z	.004	.004	0	%100
51	PS3-A	Z	.015	.015	0	%100
52	PS3-B	Z	.015	.015	0	%100
53	SA-1	Z	.003	.003	0	%100
54	SA-2	Z	.008	.008	0	%100
55	SA-3	Z	.01	.01	0	%100
56	MP-3	Z	.005	.005	0	%100
57	MP-10	Z	.005	.005	0	%100
58	MP-11	Z	.005	.005	0	%100
59	MP-6	Z	.005	.005	0	%100
60	MP-7	Z	.005	.005	0	%100

Member Distributed Loads (BLC 13 : 240 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	F1	X	.002	.002	0	%100
2	F2	X	.002	.002	0	%100
3	F3	X	.004	.004	0	%100
4	INT-1	X	.007	.007	0	%100
5	INT-2	X	.004	.004	0	%100
6	INT-3	X	.004	.004	0	%100
7	MP-1	X	.004	.004	0	%100
8	MP-2	X	.004	.004	0	%100
9	MP-4	X	.004	.004	0	%100
10	MP-5	X	.004	.004	0	%100
11	MP-8	X	.004	.004	0	%100
12	MP-9	X	.004	.004	0	%100
13	MP-12	X	.004	.004	0	%100
14	PL1	X	.009	.009	0	%100
15	PL2	X	.005	.005	0	%100
16	PL3	X	.005	.005	0	%100
17	PS1-A	X	.003	.003	0	%100
18	PS1-B	X	.003	.003	0	%100
19	PS2-A	X	.002	.002	0	%100
20	PS2-B	X	.005	.005	0	%100
21	PS3-A	X	.01	.01	0	%100
22	PS3-B	X	.01	.01	0	%100

Member Distributed Loads (BLC 13 : 240 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F,...	Start Location[ft,%]	End Location[ft,%]
23	SA-1	X	0	0	0	%100
24	SA-2	X	.005	.005	0	%100
25	SA-3	X	.007	.007	0	%100
26	MP-3	X	.004	.004	0	%100
27	MP-10	X	.004	.004	0	%100
28	MP-11	X	.004	.004	0	%100
29	MP-6	X	.004	.004	0	%100
30	MP-7	X	.004	.004	0	%100
31	F1	Z	.004	.004	0	%100
32	F2	Z	.004	.004	0	%100
33	F3	Z	.008	.008	0	%100
34	INT-1	Z	.014	.014	0	%100
35	INT-2	Z	.008	.008	0	%100
36	INT-3	Z	.007	.007	0	%100
37	MP-1	Z	.008	.008	0	%100
38	MP-2	Z	.008	.008	0	%100
39	MP-4	Z	.008	.008	0	%100
40	MP-5	Z	.008	.008	0	%100
41	MP-8	Z	.008	.008	0	%100
42	MP-9	Z	.008	.008	0	%100
43	MP-12	Z	.008	.008	0	%100
44	PL1	Z	.016	.016	0	%100
45	PL2	Z	.008	.008	0	%100
46	PL3	Z	.008	.008	0	%100
47	PS1-A	Z	.004	.004	0	%100
48	PS1-B	Z	.004	.004	0	%100
49	PS2-A	Z	.004	.004	0	%100
50	PS2-B	Z	.009	.009	0	%100
51	PS3-A	Z	.019	.019	0	%100
52	PS3-B	Z	.019	.019	0	%100
53	SA-1	Z	0	0	0	%100
54	SA-2	Z	.013	.013	0	%100
55	SA-3	Z	.011	.011	0	%100
56	MP-3	Z	.006	.006	0	%100
57	MP-10	Z	.006	.006	0	%100
58	MP-11	Z	.006	.006	0	%100
59	MP-6	Z	.006	.006	0	%100
60	MP-7	Z	.006	.006	0	%100

Member Distributed Loads (BLC 14 : 270 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F,...	Start Location[ft,%]	End Location[ft,%]
1	F1	Z	0	0	0	%100
2	F2	Z	.008	.008	0	%100
3	F3	Z	.008	.008	0	%100
4	INT-1	Z	.014	.014	0	%100
5	INT-2	Z	0	0	0	%100
6	INT-3	Z	.014	.014	0	%100
7	MP-1	Z	.007	.007	0	%100
8	MP-2	Z	.007	.007	0	%100
9	MP-4	Z	.007	.007	0	%100
10	MP-5	Z	.007	.007	0	%100

Member Distributed Loads (BLC 14 : 270 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F,...	Start Location[ft,%]	End Location[ft,%]
11	MP-8	Z	.007	.007	0	%100
12	MP-9	Z	.007	.007	0	%100
13	MP-12	Z	.007	.007	0	%100
14	PL1	Z	.016	.016	0	%100
15	PL2	Z	0	0	0	%100
16	PL3	Z	.016	.016	0	%100
17	PS1-A	Z	0	0	0	%100
18	PS1-B	Z	0	0	0	%100
19	PS2-A	Z	.008	.008	0	%100
20	PS2-B	Z	.019	.019	0	%100
21	PS3-A	Z	.019	.019	0	%100
22	PS3-B	Z	.019	.019	0	%100
23	SA-1	Z	.007	.007	0	%100
24	SA-2	Z	.017	.017	0	%100
25	SA-3	Z	.007	.007	0	%100
26	MP-3	Z	.007	.007	0	%100
27	MP-10	Z	.007	.007	0	%100
28	MP-11	Z	.007	.007	0	%100
29	MP-6	Z	.007	.007	0	%100
30	MP-7	Z	.007	.007	0	%100

Member Distributed Loads (BLC 15 : 300 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F,...	Start Location[ft,%]	End Location[ft,%]
1	F1	X	-.002	-.002	0	%100
2	F2	X	-.004	-.004	0	%100
3	F3	X	-.002	-.002	0	%100
4	INT-1	X	-.004	-.004	0	%100
5	INT-2	X	-.004	-.004	0	%100
6	INT-3	X	-.007	-.007	0	%100
7	MP-1	X	-.004	-.004	0	%100
8	MP-2	X	-.004	-.004	0	%100
9	MP-4	X	-.004	-.004	0	%100
10	MP-5	X	-.004	-.004	0	%100
11	MP-8	X	-.004	-.004	0	%100
12	MP-9	X	-.004	-.004	0	%100
13	MP-12	X	-.004	-.004	0	%100
14	PL1	X	-.005	-.005	0	%100
15	PL2	X	-.005	-.005	0	%100
16	PL3	X	-.009	-.009	0	%100
17	PS1-A	X	-.003	-.003	0	%100
18	PS1-B	X	-.003	-.003	0	%100
19	PS2-A	X	-.004	-.004	0	%100
20	PS2-B	X	-.01	-.01	0	%100
21	PS3-A	X	-.005	-.005	0	%100
22	PS3-B	X	-.005	-.005	0	%100
23	SA-1	X	-.007	-.007	0	%100
24	SA-2	X	-.005	-.005	0	%100
25	SA-3	X	0	0	0	%100
26	MP-3	X	-.004	-.004	0	%100
27	MP-10	X	-.004	-.004	0	%100
28	MP-11	X	-.004	-.004	0	%100

Member Distributed Loads (BLC 15 : 300 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
29	MP-6	X	-.004	-.004	0	%100
30	MP-7	X	-.004	-.004	0	%100
31	F1	Z	.004	.004	0	%100
32	F2	Z	.008	.008	0	%100
33	F3	Z	.004	.004	0	%100
34	INT-1	Z	.007	.007	0	%100
35	INT-2	Z	.008	.008	0	%100
36	INT-3	Z	.014	.014	0	%100
37	MP-1	Z	.006	.006	0	%100
38	MP-2	Z	.006	.006	0	%100
39	MP-4	Z	.006	.006	0	%100
40	MP-5	Z	.006	.006	0	%100
41	MP-8	Z	.006	.006	0	%100
42	MP-9	Z	.008	.008	0	%100
43	MP-12	Z	.006	.006	0	%100
44	PL1	Z	.008	.008	0	%100
45	PL2	Z	.008	.008	0	%100
46	PL3	Z	.016	.016	0	%100
47	PS1-A	Z	.004	.004	0	%100
48	PS1-B	Z	.004	.004	0	%100
49	PS2-A	Z	.008	.008	0	%100
50	PS2-B	Z	.019	.019	0	%100
51	PS3-A	Z	.009	.009	0	%100
52	PS3-B	Z	.009	.009	0	%100
53	SA-1	Z	.011	.011	0	%100
54	SA-2	Z	.013	.013	0	%100
55	SA-3	Z	0	0	0	%100
56	MP-3	Z	.006	.006	0	%100
57	MP-10	Z	.008	.008	0	%100
58	MP-11	Z	.008	.008	0	%100
59	MP-6	Z	.006	.006	0	%100
60	MP-7	Z	.006	.006	0	%100

Member Distributed Loads (BLC 16 : 315 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	F1	X	-.005	-.005	0	%100
2	F2	X	-.006	-.006	0	%100
3	F3	X	-.002	-.002	0	%100
4	INT-1	X	-.003	-.003	0	%100
5	INT-2	X	-.009	-.009	0	%100
6	INT-3	X	-.01	-.01	0	%100
7	MP-1	X	-.005	-.005	0	%100
8	MP-2	X	-.005	-.005	0	%100
9	MP-4	X	-.005	-.005	0	%100
10	MP-5	X	-.006	-.006	0	%100
11	MP-8	X	-.005	-.005	0	%100
12	MP-9	X	-.005	-.005	0	%100
13	MP-12	X	-.006	-.006	0	%100
14	PL1	X	-.003	-.003	0	%100
15	PL2	X	-.009	-.009	0	%100
16	PL3	X	-.012	-.012	0	%100

RISA A NEMETSCHEK COMPANY
Company : Tower Engineering Professionals, Inc.
Designer : CJB
Job Number : 52429.298270
Model Name : CCI BU No. 876373
Oct 31, 2019
10:08 AM
Checked By: JHJ

Member Distributed Loads (BLC 16 : 315 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
17	PS1-A	X	-.005	-.005	0	%100
18	PS1-B	X	-.005	-.005	0	%100
19	PS2-A	X	-.006	-.006	0	%100
20	PS2-B	X	-.013	-.013	0	%100
21	PS3-A	X	-.004	-.004	0	%100
22	PS3-B	X	-.004	-.004	0	%100
23	SA-1	X	-.011	-.011	0	%100
24	SA-2	X	-.006	-.006	0	%100
25	SA-3	X	-.003	-.003	0	%100
26	MP-3	X	-.005	-.005	0	%100
27	MP-10	X	-.005	-.005	0	%100
28	MP-11	X	-.005	-.005	0	%100
29	MP-6	X	-.005	-.005	0	%100
30	MP-7	X	-.005	-.005	0	%100
31	F1	Z	.005	.005	0	%100
32	F2	Z	.007	.007	0	%100
33	F3	Z	.002	.002	0	%100
34	INT-1	Z	.003	.003	0	%100
35	INT-2	Z	.009	.009	0	%100
36	INT-3	Z	.011	.011	0	%100
37	MP-1	Z	.005	.005	0	%100
38	MP-2	Z	.005	.005	0	%100
39	MP-4	Z	.005	.005	0	%100
40	MP-5	Z	.005	.005	0	%100
41	MP-8	Z	.005	.005	0	%100
42	MP-9	Z	.005	.005	0	%100
43	MP-12	Z	.005	.005	0	%100
44	PL1	Z	.003	.003	0	%100
45	PL2	Z	.009	.009	0	%100
46	PL3	Z	.012	.012	0	%100
47	PS1-A	Z	.005	.005	0	%100
48	PS1-B	Z	.005	.005	0	%100
49	PS2-A	Z	.007	.007	0	%100
50	PS2-B	Z	.015	.015	0	%100
51	PS3-A	Z	.004	.004	0	%100
52	PS3-B	Z	.004	.004	0	%100
53	SA-1	Z	.01	.01	0	%100
54	SA-2	Z	.008	.008	0	%100
55	SA-3	Z	.003	.003	0	%100
56	MP-3	Z	.005	.005	0	%100
57	MP-10	Z	.005	.005	0	%100
58	MP-11	Z	.005	.005	0	%100
59	MP-6	Z	.005	.005	0	%100
60	MP-7	Z	.005	.005	0	%100

Member Distributed Loads (BLC 17 : 330 Wind - No Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	F1	X	-.007	-.007	0	%100
2	F2	X	-.007	-.007	0	%100
3	F3	X	0	0	0	%100
4	INT-1	X	0	0	0	%100

Member Distributed Loads (BLC 17 : 330 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
5	INT-2	X	-.013	-.013	0	%100
6	INT-3	X	-.011	-.011	0	%100
7	MP-1	X	-.006	-.006	0	%100
8	MP-2	X	-.006	-.006	0	%100
9	MP-4	X	-.006	-.006	0	%100
10	MP-5	X	-.006	-.006	0	%100
11	MP-8	X	-.006	-.006	0	%100
12	MP-9	X	-.006	-.006	0	%100
13	MP-12	X	-.006	-.006	0	%100
14	PL1	X	0	0	0	%100
15	PL2	X	-.014	-.014	0	%100
16	PL3	X	-.014	-.014	0	%100
17	PS1-A	X	-.008	-.008	0	%100
18	PS1-B	X	-.008	-.008	0	%100
19	PS2-A	X	-.008	-.008	0	%100
20	PS2-B	X	-.015	-.015	0	%100
21	PS3-A	X	0	0	0	%100
22	PS3-B	X	0	0	0	%100
23	SA-1	X	-.014	-.014	0	%100
24	SA-2	X	-.005	-.005	0	%100
25	SA-3	X	-.007	-.007	0	%100
26	MP-3	X	-.006	-.006	0	%100
27	MP-10	X	-.006	-.006	0	%100
28	MP-11	X	-.006	-.006	0	%100
29	MP-6	X	-.006	-.006	0	%100
30	MP-7	X	-.006	-.006	0	%100
31	F1	Z	.004	.004	0	%100
32	F2	Z	.004	.004	0	%100
33	F3	Z	0	0	0	%100
34	INT-1	Z	0	0	0	%100
35	INT-2	Z	.006	.006	0	%100
36	INT-3	Z	.007	.007	0	%100
37	MP-1	Z	.004	.004	0	%100
38	MP-2	Z	.004	.004	0	%100
39	MP-4	Z	.004	.004	0	%100
40	MP-5	Z	.004	.004	0	%100
41	MP-8	Z	.004	.004	0	%100
42	MP-9	Z	.004	.004	0	%100
43	MP-12	Z	.004	.004	0	%100
44	PL1	Z	0	0	0	%100
45	PL2	Z	.008	.008	0	%100
46	PL3	Z	.008	.008	0	%100
47	PS1-A	Z	.004	.004	0	%100
48	PS1-B	Z	.004	.004	0	%100
49	PS2-A	Z	.004	.004	0	%100
50	PS2-B	Z	.009	.009	0	%100
51	PS3-A	Z	0	0	0	%100
52	PS3-B	Z	0	0	0	%100
53	SA-1	Z	.007	.007	0	%100
54	SA-2	Z	.004	.004	0	%100
55	SA-3	Z	.004	.004	0	%100
56	MP-3	Z	.004	.004	0	%100

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Company : Tower Engineering Professionals, Inc.
Designer : CJB
Job Number : 52429.298270
Model Name : CCI BU No. 876373
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Member Distributed Loads (BLC 17 : 330 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
57	MP-10	Z	.004	.004	0	%100
58	MP-11	Z	.004	.004	0	%100
59	MP-6	Z	.004	.004	0	%100
60	MP-7	Z	.004	.004	0	%100

Member Distributed Loads (BLC 18 : Ice Weight)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	F1	Y	-.007	-.007	0	%100
2	F2	Y	-.007	-.007	0	%100
3	F3	Y	-.007	-.007	0	%100
4	INT-1	Y	-.007	-.007	0	%100
5	INT-2	Y	-.007	-.007	0	%100
6	INT-3	Y	-.007	-.007	0	%100
7	MP-1	Y	-.005	-.005	0	%100
8	MP-2	Y	-.005	-.005	0	%100
9	MP-4	Y	-.005	-.005	0	%100
10	MP-5	Y	-.005	-.005	0	%100
11	MP-8	Y	-.005	-.005	0	%100
12	MP-9	Y	-.005	-.005	0	%100
13	MP-12	Y	-.005	-.005	0	%100
14	PL1	Y	-.007	-.007	0	%100
15	PL2	Y	-.007	-.007	0	%100
16	PL3	Y	-.007	-.007	0	%100
17	PS1-A	Y	-.004	-.004	0	%100
18	PS1-B	Y	-.004	-.004	0	%100
19	PS2-A	Y	-.004	-.004	0	%100
20	PS2-B	Y	-.011	-.011	0	%100
21	PS3-A	Y	-.011	-.011	0	%100
22	PS3-B	Y	-.011	-.011	0	%100
23	SA-1	Y	-.007	-.007	0	%100
24	SA-2	Y	-.007	-.007	0	%100
25	SA-3	Y	-.007	-.007	0	%100
26	MP-3	Y	-.005	-.005	0	%100
27	MP-10	Y	-.005	-.005	0	%100
28	MP-11	Y	-.005	-.005	0	%100
29	MP-6	Y	-.005	-.005	0	%100
30	MP-7	Y	-.005	-.005	0	%100

Member Distributed Loads (BLC 19 : 0 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	F1	X	-.003	-.003	0	%100
2	F2	X	-.003	-.003	0	%100
3	F3	X	-.003	-.003	0	%100
4	INT-1	X	-.004	-.004	0	%100
5	INT-2	X	-.005	-.005	0	%100
6	INT-3	X	-.004	-.004	0	%100
7	MP-1	X	-.002	-.002	0	%100
8	MP-2	X	-.002	-.002	0	%100
9	MP-4	X	-.002	-.002	0	%100
10	MP-5	X	-.002	-.002	0	%100
11	MP-8	X	-.002	-.002	0	%100

Member Distributed Loads (BLC 19 : 0 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
12	MP-9	X	-.002	-.002	0	%100
13	MP-12	X	-.002	-.002	0	%100
14	PL1	X	-.006	-.006	0	%100
15	PL2	X	-.006	-.006	0	%100
16	PL3	X	-.006	-.006	0	%100
17	PS1-A	X	-.003	-.003	0	%100
18	PS1-B	X	-.003	-.003	0	%100
19	PS2-A	X	-.003	-.003	0	%100
20	PS2-B	X	-.005	-.005	0	%100
21	PS3-A	X	-.005	-.005	0	%100
22	PS3-B	X	-.005	-.005	0	%100
23	SA-1	X	-.005	-.005	0	%100
24	SA-2	X	-.004	-.004	0	%100
25	SA-3	X	-.005	-.005	0	%100
26	MP-3	X	-.002	-.002	0	%100
27	MP-10	X	-.002	-.002	0	%100
28	MP-11	X	-.002	-.002	0	%100
29	MP-6	X	-.002	-.002	0	%100
30	MP-7	X	-.002	-.002	0	%100

Member Distributed Loads (BLC 20 : 30 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	F1	X	-.003	-.003	0	%100
2	F2	X	0	0	0	%100
3	F3	X	-.002	-.002	0	%100
4	INT-1	X	-.003	-.003	0	%100
5	INT-2	X	-.004	-.004	0	%100
6	INT-3	X	0	0	0	%100
7	MP-1	X	-.002	-.002	0	%100
8	MP-2	X	-.002	-.002	0	%100
9	MP-4	X	-.002	-.002	0	%100
10	MP-5	X	-.002	-.002	0	%100
11	MP-8	X	-.002	-.002	0	%100
12	MP-9	X	-.002	-.002	0	%100
13	MP-12	X	-.002	-.002	0	%100
14	PL1	X	-.004	-.004	0	%100
15	PL2	X	-.004	-.004	0	%100
16	PL3	X	0	0	0	%100
17	PS1-A	X	-.003	-.003	0	%100
18	PS1-B	X	-.003	-.003	0	%100
19	PS2-A	X	0	0	0	%100
20	PS2-B	X	0	0	0	%100
21	PS3-A	X	-.004	-.004	0	%100
22	PS3-B	X	-.004	-.004	0	%100
23	SA-1	X	-.002	-.002	0	%100
24	SA-2	X	-.002	-.002	0	%100
25	SA-3	X	-.004	-.004	0	%100
26	MP-3	X	-.002	-.002	0	%100
27	MP-10	X	-.002	-.002	0	%100
28	MP-11	X	-.002	-.002	0	%100
29	MP-6	X	-.002	-.002	0	%100

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Designer : CJB
Job Number : 52429.298270
Model Name : CCI BU No. 876373
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Member Distributed Loads (BLC 20 : 30 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
30	MP-7	X	-.002	-.002	0	%100
31	F1	Z	-.001	-.001	0	%100
32	F2	Z	0	0	0	%100
33	F3	Z	-.001	-.001	0	%100
34	INT-1	Z	-.002	-.002	0	%100
35	INT-2	Z	-.002	-.002	0	%100
36	INT-3	Z	0	0	0	%100
37	MP-1	Z	-.001	-.001	0	%100
38	MP-2	Z	-.001	-.001	0	%100
39	MP-4	Z	-.001	-.001	0	%100
40	MP-5	Z	-.001	-.001	0	%100
41	MP-8	Z	-.001	-.001	0	%100
42	MP-9	Z	-.001	-.001	0	%100
43	MP-12	Z	-.001	-.001	0	%100
44	PL1	Z	-.002	-.002	0	%100
45	PL2	Z	-.002	-.002	0	%100
46	PL3	Z	0	0	0	%100
47	PS1-A	Z	-.001	-.001	0	%100
48	PS1-B	Z	-.001	-.001	0	%100
49	PS2-A	Z	0	0	0	%100
50	PS2-B	Z	0	0	0	%100
51	PS3-A	Z	-.002	-.002	0	%100
52	PS3-B	Z	-.002	-.002	0	%100
53	SA-1	Z	-.001	-.001	0	%100
54	SA-2	Z	-.001	-.001	0	%100
55	SA-3	Z	-.002	-.002	0	%100
56	MP-3	Z	-.001	-.001	0	%100
57	MP-10	Z	-.001	-.001	0	%100
58	MP-11	Z	-.001	-.001	0	%100
59	MP-6	Z	-.001	-.001	0	%100
60	MP-7	Z	-.001	-.001	0	%100

Member Distributed Loads (BLC 21 : 45 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	F1	X	-.002	-.002	0	%100
2	F2	X	-.000483	-.000483	0	%100
3	F3	X	-.002	-.002	0	%100
4	INT-1	X	-.003	-.003	0	%100
5	INT-2	X	-.002	-.002	0	%100
6	INT-3	X	-.000762	-.000762	0	%100
7	MP-1	X	-.002	-.002	0	%100
8	MP-2	X	-.002	-.002	0	%100
9	MP-4	X	-.002	-.002	0	%100
10	MP-5	X	-.002	-.002	0	%100
11	MP-8	X	-.002	-.002	0	%100
12	MP-9	X	-.002	-.002	0	%100
13	MP-12	X	-.002	-.002	0	%100
14	PL1	X	-.004	-.004	0	%100
15	PL2	X	-.003	-.003	0	%100
16	PL3	X	-.001	-.001	0	%100
17	PS1-A	X	-.002	-.002	0	%100

Member Distributed Loads (BLC 21 : 45 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
18	PS1-B	X	-.002	-.002	0	%100
19	PS2-A	X	-.000544	-.000544	0	%100
20	PS2-B	X	-.000939	-.000939	0	%100
21	PS3-A	X	-.004	-.004	0	%100
22	PS3-B	X	-.004	-.004	0	%100
23	SA-1	X	-.000834	-.000834	0	%100
24	SA-2	X	-.002	-.002	0	%100
25	SA-3	X	-.003	-.003	0	%100
26	MP-3	X	-.002	-.002	0	%100
27	MP-10	X	-.002	-.002	0	%100
28	MP-11	X	-.002	-.002	0	%100
29	MP-6	X	-.002	-.002	0	%100
30	MP-7	X	-.002	-.002	0	%100
31	F1	Z	-.002	-.002	0	%100
32	F2	Z	-.000591	-.000591	0	%100
33	F3	Z	-.002	-.002	0	%100
34	INT-1	Z	-.003	-.003	0	%100
35	INT-2	Z	-.002	-.002	0	%100
36	INT-3	Z	-.000844	-.000844	0	%100
37	MP-1	Z	-.002	-.002	0	%100
38	MP-2	Z	-.002	-.002	0	%100
39	MP-4	Z	-.002	-.002	0	%100
40	MP-5	Z	-.002	-.002	0	%100
41	MP-8	Z	-.002	-.002	0	%100
42	MP-9	Z	-.002	-.002	0	%100
43	MP-12	Z	-.002	-.002	0	%100
44	PL1	Z	-.004	-.004	0	%100
45	PL2	Z	-.002	-.002	0	%100
46	PL3	Z	-.001	-.001	0	%100
47	PS1-A	Z	-.002	-.002	0	%100
48	PS1-B	Z	-.002	-.002	0	%100
49	PS2-A	Z	-.000804	-.000804	0	%100
50	PS2-B	Z	-.001	-.001	0	%100
51	PS3-A	Z	-.004	-.004	0	%100
52	PS3-B	Z	-.004	-.004	0	%100
53	SA-1	Z	-.000755	-.000755	0	%100
54	SA-2	Z	-.002	-.002	0	%100
55	SA-3	Z	-.003	-.003	0	%100
56	MP-3	Z	-.002	-.002	0	%100
57	MP-10	Z	-.002	-.002	0	%100
58	MP-11	Z	-.002	-.002	0	%100
59	MP-6	Z	-.002	-.002	0	%100
60	MP-7	Z	-.002	-.002	0	%100

Member Distributed Loads (BLC 22 : 60 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	F1	X	-.000842	-.000842	0	%100
2	F2	X	-.000659	-.000659	0	%100
3	F3	X	-.001	-.001	0	%100
4	INT-1	X	-.002	-.002	0	%100
5	INT-2	X	-.001	-.001	0	%100

Member Distributed Loads (BLC 22 : 60 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
6	INT-3	X	-.001	-.001	0	%100
7	MP-1	X	-.001	-.001	0	%100
8	MP-2	X	-.001	-.001	0	%100
9	MP-4	X	-.001	-.001	0	%100
10	MP-5	X	-.001	-.001	0	%100
11	MP-8	X	-.001	-.001	0	%100
12	MP-9	X	-.001	-.001	0	%100
13	MP-12	X	-.001	-.001	0	%100
14	PL1	X	-.003	-.003	0	%100
15	PL2	X	-.001	-.001	0	%100
16	PL3	X	-.001	-.001	0	%100
17	PS1-A	X	-.000855	-.000855	0	%100
18	PS1-B	X	-.000855	-.000855	0	%100
19	PS2-A	X	-.000743	-.000743	0	%100
20	PS2-B	X	-.001	-.001	0	%100
21	PS3-A	X	-.003	-.003	0	%100
22	PS3-B	X	-.003	-.003	0	%100
23	SA-1	X	0	0	0	%100
24	SA-2	X	-.002	-.002	0	%100
25	SA-3	X	-.002	-.002	0	%100
26	MP-3	X	-.001	-.001	0	%100
27	MP-10	X	-.001	-.001	0	%100
28	MP-11	X	-.001	-.001	0	%100
29	MP-6	X	-.001	-.001	0	%100
30	MP-7	X	-.001	-.001	0	%100
31	F1	Z	-.001	-.001	0	%100
32	F2	Z	-.001	-.001	0	%100
33	F3	Z	-.003	-.003	0	%100
34	INT-1	Z	-.004	-.004	0	%100
35	INT-2	Z	-.002	-.002	0	%100
36	INT-3	Z	-.002	-.002	0	%100
37	MP-1	Z	-.002	-.002	0	%100
38	MP-2	Z	-.002	-.002	0	%100
39	MP-4	Z	-.002	-.002	0	%100
40	MP-5	Z	-.002	-.002	0	%100
41	MP-8	Z	-.002	-.002	0	%100
42	MP-9	Z	-.002	-.002	0	%100
43	MP-12	Z	-.002	-.002	0	%100
44	PL1	Z	-.005	-.005	0	%100
45	PL2	Z	-.002	-.002	0	%100
46	PL3	Z	-.002	-.002	0	%100
47	PS1-A	Z	-.001	-.001	0	%100
48	PS1-B	Z	-.001	-.001	0	%100
49	PS2-A	Z	-.001	-.001	0	%100
50	PS2-B	Z	-.002	-.002	0	%100
51	PS3-A	Z	-.005	-.005	0	%100
52	PS3-B	Z	-.005	-.005	0	%100
53	SA-1	Z	0	0	0	%100
54	SA-2	Z	-.004	-.004	0	%100
55	SA-3	Z	-.003	-.003	0	%100
56	MP-3	Z	-.002	-.002	0	%100
57	MP-10	Z	-.002	-.002	0	%100

Member Distributed Loads (BLC 22 : 60 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
58	MP-11	Z	-.002	-.002	0	%100
59	MP-6	Z	-.002	-.002	0	%100
60	MP-7	Z	-.002	-.002	0	%100

Member Distributed Loads (BLC 23 : 90 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	F1	Z	0	0	0	%100
2	F2	Z	-.003	-.003	0	%100
3	F3	Z	-.003	-.003	0	%100
4	INT-1	Z	-.004	-.004	0	%100
5	INT-2	Z	0	0	0	%100
6	INT-3	Z	-.004	-.004	0	%100
7	MP-1	Z	-.003	-.003	0	%100
8	MP-2	Z	-.003	-.003	0	%100
9	MP-4	Z	-.003	-.003	0	%100
10	MP-5	Z	-.003	-.003	0	%100
11	MP-8	Z	-.003	-.003	0	%100
12	MP-9	Z	-.003	-.003	0	%100
13	MP-12	Z	-.003	-.003	0	%100
14	PL1	Z	-.005	-.005	0	%100
15	PL2	Z	0	0	0	%100
16	PL3	Z	-.005	-.005	0	%100
17	PS1-A	Z	0	0	0	%100
18	PS1-B	Z	0	0	0	%100
19	PS2-A	Z	-.003	-.003	0	%100
20	PS2-B	Z	-.005	-.005	0	%100
21	PS3-A	Z	-.005	-.005	0	%100
22	PS3-B	Z	-.005	-.005	0	%100
23	SA-1	Z	-.002	-.002	0	%100
24	SA-2	Z	-.005	-.005	0	%100
25	SA-3	Z	-.002	-.002	0	%100
26	MP-3	Z	-.003	-.003	0	%100
27	MP-10	Z	-.003	-.003	0	%100
28	MP-11	Z	-.003	-.003	0	%100
29	MP-6	Z	-.003	-.003	0	%100
30	MP-7	Z	-.003	-.003	0	%100

Member Distributed Loads (BLC 24 : 120 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	F1	X	.000842	.000842	0	%100
2	F2	X	.001	.001	0	%100
3	F3	X	.000659	.000659	0	%100
4	INT-1	X	.001	.001	0	%100
5	INT-2	X	.001	.001	0	%100
6	INT-3	X	.002	.002	0	%100
7	MP-1	X	.001	.001	0	%100
8	MP-2	X	.001	.001	0	%100
9	MP-4	X	.001	.001	0	%100
10	MP-5	X	.001	.001	0	%100
11	MP-8	X	.001	.001	0	%100
12	MP-9	X	.001	.001	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : CJB
Job Number : 52429.298270
Model Name : CCI BU No. 876373

Oct 31, 2019
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Member Distributed Loads (BLC 24 : 120 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
13	MP-12	X	.001	.001	0	%100
14	PL1	X	.001	.001	0	%100
15	PL2	X	.001	.001	0	%100
16	PL3	X	.003	.003	0	%100
17	PS1-A	X	.000855	.000855	0	%100
18	PS1-B	X	.000855	.000855	0	%100
19	PS2-A	X	.001	.001	0	%100
20	PS2-B	X	.003	.003	0	%100
21	PS3-A	X	.001	.001	0	%100
22	PS3-B	X	.001	.001	0	%100
23	SA-1	X	.002	.002	0	%100
24	SA-2	X	.002	.002	0	%100
25	SA-3	X	0	0	0	%100
26	MP-3	X	.001	.001	0	%100
27	MP-10	X	.001	.001	0	%100
28	MP-11	X	.001	.001	0	%100
29	MP-6	X	.001	.001	0	%100
30	MP-7	X	.001	.001	0	%100
31	F1	Z	-.001	-.001	0	%100
32	F2	Z	-.003	-.003	0	%100
33	F3	Z	-.001	-.001	0	%100
34	INT-1	Z	-.002	-.002	0	%100
35	INT-2	Z	-.002	-.002	0	%100
36	INT-3	Z	-.004	-.004	0	%100
37	MP-1	Z	-.002	-.002	0	%100
38	MP-2	Z	-.002	-.002	0	%100
39	MP-4	Z	-.002	-.002	0	%100
40	MP-5	Z	-.002	-.002	0	%100
41	MP-8	Z	-.002	-.002	0	%100
42	MP-9	Z	-.002	-.002	0	%100
43	MP-12	Z	-.002	-.002	0	%100
44	PL1	Z	-.002	-.002	0	%100
45	PL2	Z	-.002	-.002	0	%100
46	PL3	Z	-.005	-.005	0	%100
47	PS1-A	Z	-.001	-.001	0	%100
48	PS1-B	Z	-.001	-.001	0	%100
49	PS2-A	Z	-.003	-.003	0	%100
50	PS2-B	Z	-.005	-.005	0	%100
51	PS3-A	Z	-.002	-.002	0	%100
52	PS3-B	Z	-.002	-.002	0	%100
53	SA-1	Z	-.003	-.003	0	%100
54	SA-2	Z	-.004	-.004	0	%100
55	SA-3	Z	0	0	0	%100
56	MP-3	Z	-.002	-.002	0	%100
57	MP-10	Z	-.002	-.002	0	%100
58	MP-11	Z	-.002	-.002	0	%100
59	MP-6	Z	-.002	-.002	0	%100
60	MP-7	Z	-.002	-.002	0	%100

Member Distributed Loads (BLC 25 : 135 Wind - Ice)

Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]

Member Distributed Loads (BLC 25 : 135 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	F1	X	.002	.002	0	%100
2	F2	X	.002	.002	0	%100
3	F3	X	.000483	.000483	0	%100
4	INT-1	X	.000782	.000782	0	%100
5	INT-2	X	.002	.002	0	%100
6	INT-3	X	.003	.003	0	%100
7	MP-1	X	.002	.002	0	%100
8	MP-2	X	.002	.002	0	%100
9	MP-4	X	.002	.002	0	%100
10	MP-5	X	.002	.002	0	%100
11	MP-8	X	.002	.002	0	%100
12	MP-9	X	.002	.002	0	%100
13	MP-12	X	.002	.002	0	%100
14	PL1	X	.002	.002	0	%100
15	PL2	X	.001	.001	0	%100
16	PL3	X	.003	.003	0	%100
17	PS1-A	X	.004	.004	0	%100
18	PS1-B	X	.002	.002	0	%100
19	PS2-A	X	.002	.002	0	%100
20	PS2-B	X	.002	.002	0	%100
21	PS3-A	X	.004	.004	0	%100
22	PS3-B	X	.000939	.000939	0	%100
23	SA-1	X	.000939	.000939	0	%100
24	SA-2	X	.003	.003	0	%100
25	SA-3	X	.002	.002	0	%100
26	MP-3	X	.000834	.000834	0	%100
27	MP-10	X	.002	.002	0	%100
28	MP-11	X	.002	.002	0	%100
29	MP-6	X	.002	.002	0	%100
30	MP-7	X	.002	.002	0	%100
31	F1	Z	-.002	-.002	0	%100
32	F2	Z	-.002	-.002	0	%100
33	F3	Z	-.000591	-.000591	0	%100
34	INT-1	Z	-.000844	-.000844	0	%100
35	INT-2	Z	-.002	-.002	0	%100
36	INT-3	Z	-.003	-.003	0	%100
37	MP-1	Z	-.002	-.002	0	%100
38	MP-2	Z	-.002	-.002	0	%100
39	MP-4	Z	-.002	-.002	0	%100
40	MP-5	Z	-.002	-.002	0	%100
41	MP-8	Z	-.002	-.002	0	%100
42	MP-9	Z	-.002	-.002	0	%100
43	MP-12	Z	-.002	-.002	0	%100
44	PL1	Z	-.001	-.001	0	%100
45	PL2	Z	-.002	-.002	0	%100
46	PL3	Z	-.004	-.004	0	%100
47	PS1-A	Z	-.002	-.002	0	%100
48	PS1-B	Z	-.002	-.002	0	%100
49	PS2-A	Z	-.002	-.002	0	%100
50	PS2-B	Z	-.004	-.004	0	%100
51	PS3-A	Z	-.001	-.001	0	%100
52	PS3-B	Z	-.001	-.001	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : CJB
Job Number : 52429.298270
Model Name : CCI BU No. 876373

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Member Distributed Loads (BLC 25 : 135 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
53	SA-1	Z	-.003	-.003	0	%100
54	SA-2	Z	-.002	-.002	0	%100
55	SA-3	Z	-.000755	-.000755	0	%100
56	MP-3	Z	-.002	-.002	0	%100
57	MP-10	Z	-.002	-.002	0	%100
58	MP-11	Z	-.002	-.002	0	%100
59	MP-6	Z	-.002	-.002	0	%100
60	MP-7	Z	-.002	-.002	0	%100

Member Distributed Loads (BLC 26 : 150 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	F1	X	.003	.003	0	%100
2	F2	X	.002	.002	0	%100
3	F3	X	0	0	0	%100
4	INT-1	X	0	0	0	%100
5	INT-2	X	.004	.004	0	%100
6	INT-3	X	.003	.003	0	%100
7	MP-1	X	.002	.002	0	%100
8	MP-2	X	.002	.002	0	%100
9	MP-4	X	.002	.002	0	%100
10	MP-5	X	.002	.002	0	%100
11	MP-8	X	.002	.002	0	%100
12	MP-9	X	.002	.002	0	%100
13	MP-12	X	.002	.002	0	%100
14	PL1	X	0	0	0	%100
15	PL2	X	.004	.004	0	%100
16	PL3	X	.004	.004	0	%100
17	PS1-A	X	.003	.003	0	%100
18	PS1-B	X	.003	.003	0	%100
19	PS2-A	X	.002	.002	0	%100
20	PS2-B	X	.004	.004	0	%100
21	PS3-A	X	0	0	0	%100
22	PS3-B	X	0	0	0	%100
23	SA-1	X	.004	.004	0	%100
24	SA-2	X	.002	.002	0	%100
25	SA-3	X	.002	.002	0	%100
26	MP-3	X	.002	.002	0	%100
27	MP-10	X	.002	.002	0	%100
28	MP-11	X	.002	.002	0	%100
29	MP-6	X	.002	.002	0	%100
30	MP-7	X	.002	.002	0	%100
31	F1	Z	-.001	-.001	0	%100
32	F2	Z	-.001	-.001	0	%100
33	F3	Z	0	0	0	%100
34	INT-1	Z	0	0	0	%100
35	INT-2	Z	-.002	-.002	0	%100
36	INT-3	Z	-.002	-.002	0	%100
37	MP-1	Z	-.001	-.001	0	%100
38	MP-2	Z	-.001	-.001	0	%100
39	MP-4	Z	-.001	-.001	0	%100
40	MP-5	Z	-.001	-.001	0	%100

Member Distributed Loads (BLC 26 : 150 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
41	MP-8	Z	-.001	-.001	0	%100
42	MP-9	Z	-.001	-.001	0	%100
43	MP-12	Z	-.001	-.001	0	%100
44	PL1	Z	0	0	0	%100
45	PL2	Z	-.002	-.002	0	%100
46	PL3	Z	-.002	-.002	0	%100
47	PS1-A	Z	-.001	-.001	0	%100
48	PS1-B	Z	-.001	-.001	0	%100
49	PS2-A	Z	-.001	-.001	0	%100
50	PS2-B	Z	-.002	-.002	0	%100
51	PS3-A	Z	0	0	0	%100
52	PS3-B	Z	0	0	0	%100
53	SA-1	Z	-.002	-.002	0	%100
54	SA-2	Z	-.001	-.001	0	%100
55	SA-3	Z	-.001	-.001	0	%100
56	MP-3	Z	-.001	-.001	0	%100
57	MP-10	Z	-.001	-.001	0	%100
58	MP-11	Z	-.001	-.001	0	%100
59	MP-6	Z	-.001	-.001	0	%100
60	MP-7	Z	-.001	-.001	0	%100

Member Distributed Loads (BLC 27 : 180 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	F1	X	.003	.003	0	%100
2	F2	X	.003	.003	0	%100
3	F3	X	.003	.003	0	%100
4	INT-1	X	.004	.004	0	%100
5	INT-2	X	.005	.005	0	%100
6	INT-3	X	.004	.004	0	%100
7	MP-1	X	.002	.002	0	%100
8	MP-2	X	.002	.002	0	%100
9	MP-4	X	.002	.002	0	%100
10	MP-5	X	.002	.002	0	%100
11	MP-8	X	.002	.002	0	%100
12	MP-9	X	.002	.002	0	%100
13	MP-12	X	.002	.002	0	%100
14	PL1	X	.006	.006	0	%100
15	PL2	X	.006	.006	0	%100
16	PL3	X	.006	.006	0	%100
17	PS1-A	X	.003	.003	0	%100
18	PS1-B	X	.003	.003	0	%100
19	PS2-A	X	.003	.003	0	%100
20	PS2-B	X	.005	.005	0	%100
21	PS3-A	X	.005	.005	0	%100
22	PS3-B	X	.005	.005	0	%100
23	SA-1	X	.005	.005	0	%100
24	SA-2	X	.004	.004	0	%100
25	SA-3	X	.005	.005	0	%100
26	MP-3	X	.002	.002	0	%100
27	MP-10	X	.002	.002	0	%100
28	MP-11	X	.002	.002	0	%100

Member Distributed Loads (BLC 27 : 180 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
29	MP-6	X	.002	.002	0	%100
30	MP-7	X	.002	.002	0	%100

Member Distributed Loads (BLC 28 : 210 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	F1	X	.003	.003	0	%100
2	F2	X	0	0	0	%100
3	F3	X	.002	.002	0	%100
4	INT-1	X	.003	.003	0	%100
5	INT-2	X	.004	.004	0	%100
6	INT-3	X	0	0	0	%100
7	MP-1	X	.002	.002	0	%100
8	MP-2	X	.002	.002	0	%100
9	MP-4	X	.002	.002	0	%100
10	MP-5	X	.002	.002	0	%100
11	MP-8	X	.002	.002	0	%100
12	MP-9	X	.002	.002	0	%100
13	MP-12	X	.002	.002	0	%100
14	PL1	X	.004	.004	0	%100
15	PL2	X	.004	.004	0	%100
16	PL3	X	0	0	0	%100
17	PS1-A	X	.003	.003	0	%100
18	PS1-B	X	.003	.003	0	%100
19	PS2-A	X	0	0	0	%100
20	PS2-B	X	0	0	0	%100
21	PS3-A	X	.004	.004	0	%100
22	PS3-B	X	.004	.004	0	%100
23	SA-1	X	.002	.002	0	%100
24	SA-2	X	.002	.002	0	%100
25	SA-3	X	.004	.004	0	%100
26	MP-3	X	.002	.002	0	%100
27	MP-10	X	.002	.002	0	%100
28	MP-11	X	.002	.002	0	%100
29	MP-6	X	.002	.002	0	%100
30	MP-7	X	.002	.002	0	%100
31	F1	Z	.001	.001	0	%100
32	F2	Z	0	0	0	%100
33	F3	Z	.001	.001	0	%100
34	INT-1	Z	.002	.002	0	%100
35	INT-2	Z	.002	.002	0	%100
36	INT-3	Z	0	0	0	%100
37	MP-1	Z	.001	.001	0	%100
38	MP-2	Z	.001	.001	0	%100
39	MP-4	Z	.001	.001	0	%100
40	MP-5	Z	.001	.001	0	%100
41	MP-8	Z	.001	.001	0	%100
42	MP-9	Z	.001	.001	0	%100
43	MP-12	Z	.001	.001	0	%100
44	PL1	Z	.002	.002	0	%100
45	PL2	Z	.002	.002	0	%100
46	PL3	Z	0	0	0	%100

Member Distributed Loads (BLC 28 : 210 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
47	PS1-A	Z	.001	.001	0	%100
48	PS1-B	Z	.001	.001	0	%100
49	PS2-A	Z	0	0	0	%100
50	PS2-B	Z	0	0	0	%100
51	PS3-A	Z	.002	.002	0	%100
52	PS3-B	Z	.002	.002	0	%100
53	SA-1	Z	.001	.001	0	%100
54	SA-2	Z	.001	.001	0	%100
55	SA-3	Z	.002	.002	0	%100
56	MP-3	Z	.001	.001	0	%100
57	MP-10	Z	.001	.001	0	%100
58	MP-11	Z	.001	.001	0	%100
59	MP-6	Z	.001	.001	0	%100
60	MP-7	Z	.001	.001	0	%100

Member Distributed Loads (BLC 29 : 225 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	F1	X	.002	.002	0	%100
2	F2	X	.000483	.000483	0	%100
3	F3	X	.002	.002	0	%100
4	INT-1	X	.003	.003	0	%100
5	INT-2	X	.002	.002	0	%100
6	INT-3	X	.000762	.000762	0	%100
7	MP-1	X	.002	.002	0	%100
8	MP-2	X	.002	.002	0	%100
9	MP-4	X	.002	.002	0	%100
10	MP-5	X	.002	.002	0	%100
11	MP-8	X	.002	.002	0	%100
12	MP-9	X	.002	.002	0	%100
13	MP-12	X	.002	.002	0	%100
14	PL1	X	.004	.004	0	%100
15	PL2	X	.003	.003	0	%100
16	PL3	X	.001	.001	0	%100
17	PS1-A	X	.002	.002	0	%100
18	PS1-B	X	.002	.002	0	%100
19	PS2-A	X	.000544	.000544	0	%100
20	PS2-B	X	.000939	.000939	0	%100
21	PS3-A	X	.004	.004	0	%100
22	PS3-B	X	.004	.004	0	%100
23	SA-1	X	.000834	.000834	0	%100
24	SA-2	X	.002	.002	0	%100
25	SA-3	X	.003	.003	0	%100
26	MP-3	X	.002	.002	0	%100
27	MP-10	X	.002	.002	0	%100
28	MP-11	X	.002	.002	0	%100
29	MP-6	X	.002	.002	0	%100
30	MP-7	X	.002	.002	0	%100
31	F1	Z	.002	.002	0	%100
32	F2	Z	.000591	.000591	0	%100
33	F3	Z	.002	.002	0	%100
34	INT-1	Z	.003	.003	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : CJB
Job Number : 52429.298270
Model Name : CCI BU No. 876373

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Member Distributed Loads (BLC 29 : 225 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
35	INT-2	Z	.002	.002	0	%100
36	INT-3	Z	.000844	.000844	0	%100
37	MP-1	Z	.002	.002	0	%100
38	MP-2	Z	.002	.002	0	%100
39	MP-4	Z	.002	.002	0	%100
40	MP-5	Z	.002	.002	0	%100
41	MP-8	Z	.002	.002	0	%100
42	MP-9	Z	.002	.002	0	%100
43	MP-12	Z	.002	.002	0	%100
44	PL1	Z	.004	.004	0	%100
45	PL2	Z	.002	.002	0	%100
46	PL3	Z	.001	.001	0	%100
47	PS1-A	Z	.002	.002	0	%100
48	PS1-B	Z	.002	.002	0	%100
49	PS2-A	Z	.000804	.000804	0	%100
50	PS2-B	Z	.001	.001	0	%100
51	PS3-A	Z	.004	.004	0	%100
52	PS3-B	Z	.004	.004	0	%100
53	SA-1	Z	.000755	.000755	0	%100
54	SA-2	Z	.002	.002	0	%100
55	SA-3	Z	.003	.003	0	%100
56	MP-3	Z	.002	.002	0	%100
57	MP-10	Z	.002	.002	0	%100
58	MP-11	Z	.002	.002	0	%100
59	MP-6	Z	.002	.002	0	%100
60	MP-7	Z	.002	.002	0	%100

Member Distributed Loads (BLC 30 : 240 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	F1	X	.000842	.000842	0	%100
2	F2	X	.000859	.000859	0	%100
3	F3	X	.001	.001	0	%100
4	INT-1	X	.002	.002	0	%100
5	INT-2	X	.001	.001	0	%100
6	INT-3	X	.001	.001	0	%100
7	MP-1	X	.001	.001	0	%100
8	MP-2	X	.001	.001	0	%100
9	MP-4	X	.001	.001	0	%100
10	MP-5	X	.001	.001	0	%100
11	MP-8	X	.001	.001	0	%100
12	MP-9	X	.001	.001	0	%100
13	MP-12	X	.001	.001	0	%100
14	PL1	X	.003	.003	0	%100
15	PL2	X	.001	.001	0	%100
16	PL3	X	.001	.001	0	%100
17	PS1-A	X	.000855	.000855	0	%100
18	PS1-B	X	.000855	.000855	0	%100
19	PS2-A	X	.000743	.000743	0	%100
20	PS2-B	X	.001	.001	0	%100
21	PS3-A	X	.003	.003	0	%100
22	PS3-B	X	.003	.003	0	%100

Member Distributed Loads (BLC 30 : 240 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
23	SA-1	X	0	0	0	%100
24	SA-2	X	.002	.002	0	%100
25	SA-3	X	.002	.002	0	%100
26	MP-3	X	.001	.001	0	%100
27	MP-10	X	.001	.001	0	%100
28	MP-11	X	.001	.001	0	%100
29	MP-6	X	.001	.001	0	%100
30	MP-7	X	.001	.001	0	%100
31	F1	Z	.001	.001	0	%100
32	F2	Z	.001	.001	0	%100
33	F3	Z	.003	.003	0	%100
34	INT-1	Z	.004	.004	0	%100
35	INT-2	Z	.002	.002	0	%100
36	INT-3	Z	.002	.002	0	%100
37	MP-1	Z	.002	.002	0	%100
38	MP-2	Z	.002	.002	0	%100
39	MP-4	Z	.002	.002	0	%100
40	MP-5	Z	.002	.002	0	%100
41	MP-8	Z	.002	.002	0	%100
42	MP-9	Z	.002	.002	0	%100
43	MP-12	Z	.002	.002	0	%100
44	PL1	Z	.005	.005	0	%100
45	PL2	Z	.002	.002	0	%100
46	PL3	Z	.002	.002	0	%100
47	PS1-A	Z	.001	.001	0	%100
48	PS1-B	Z	.001	.001	0	%100
49	PS2-A	Z	.001	.001	0	%100
50	PS2-B	Z	.002	.002	0	%100
51	PS3-A	Z	.005	.005	0	%100
52	PS3-B	Z	.005	.005	0	%100
53	SA-1	Z	0	0	0	%100
54	SA-2	Z	.004	.004	0	%100
55	SA-3	Z	.003	.003	0	%100
56	MP-3	Z	.002	.002	0	%100
57	MP-10	Z	.002	.002	0	%100
58	MP-11	Z	.002	.002	0	%100
59	MP-6	Z	.002	.002	0	%100
60	MP-7	Z	.002	.002	0	%100

Member Distributed Loads (BLC 31 : 270 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	F1	Z	0	0	0	%100
2	F2	Z	.003	.003	0	%100
3	F3	Z	.003	.003	0	%100
4	INT-1	Z	.004	.004	0	%100
5	INT-2	Z	0	0	0	%100
6	INT-3	Z	.004	.004	0	%100
7	MP-1	Z	.003	.003	0	%100
8	MP-2	Z	.003	.003	0	%100
9	MP-4	Z	.003	.003	0	%100
10	MP-5	Z	.003	.003	0	%100

Member Distributed Loads (BLC 31 : 270 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
11	MP-8	Z	.003	.003	0	%100
12	MP-9	Z	.003	.003	0	%100
13	MP-12	Z	.003	.003	0	%100
14	PL1	Z	.005	.005	0	%100
15	PL2	Z	0	0	0	%100
16	PL3	Z	.005	.005	0	%100
17	PS1-A	Z	0	0	0	%100
18	PS1-B	Z	0	0	0	%100
19	PS2-A	Z	.003	.003	0	%100
20	PS2-B	Z	.005	.005	0	%100
21	PS3-A	Z	.005	.005	0	%100
22	PS3-B	Z	.005	.005	0	%100
23	SA-1	Z	.002	.002	0	%100
24	SA-2	Z	.005	.005	0	%100
25	SA-3	Z	.002	.002	0	%100
26	MP-3	Z	.003	.003	0	%100
27	MP-10	Z	.003	.003	0	%100
28	MP-11	Z	.003	.003	0	%100
29	MP-6	Z	.003	.003	0	%100
30	MP-7	Z	.003	.003	0	%100

Member Distributed Loads (BLC 32 : 300 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	F1	X	-.000842	-.000842	0	%100
2	F2	X	-.001	-.001	0	%100
3	F3	X	-.000659	-.000659	0	%100
4	INT-1	X	-.001	-.001	0	%100
5	INT-2	X	-.001	-.001	0	%100
6	INT-3	X	-.002	-.002	0	%100
7	MP-1	X	-.001	-.001	0	%100
8	MP-2	X	-.001	-.001	0	%100
9	MP-4	X	-.001	-.001	0	%100
10	MP-5	X	-.001	-.001	0	%100
11	MP-8	X	-.001	-.001	0	%100
12	MP-9	X	-.001	-.001	0	%100
13	MP-12	X	-.001	-.001	0	%100
14	PL1	X	-.001	-.001	0	%100
15	PL2	X	-.001	-.001	0	%100
16	PL3	X	-.003	-.003	0	%100
17	PS1-A	X	-.000855	-.000855	0	%100
18	PS1-B	X	-.000855	-.000855	0	%100
19	PS2-A	X	-.001	-.001	0	%100
20	PS2-B	X	-.003	-.003	0	%100
21	PS3-A	X	-.001	-.001	0	%100
22	PS3-B	X	-.001	-.001	0	%100
23	SA-1	X	-.002	-.002	0	%100
24	SA-2	X	-.002	-.002	0	%100
25	SA-3	X	0	0	0	%100
26	MP-3	X	-.001	-.001	0	%100
27	MP-10	X	-.001	-.001	0	%100
28	MP-11	X	-.001	-.001	0	%100

Member Distributed Loads (BLC 32 : 300 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
29	MP-6	X	-.001	-.001	0	%100
30	MP-7	X	-.001	-.001	0	%100
31	F1	Z	.001	.001	0	%100
32	F2	Z	.003	.003	0	%100
33	F3	Z	.001	.001	0	%100
34	INT-1	Z	.002	.002	0	%100
35	INT-2	Z	.002	.002	0	%100
36	INT-3	Z	.004	.004	0	%100
37	MP-1	Z	.002	.002	0	%100
38	MP-2	Z	.002	.002	0	%100
39	MP-4	Z	.002	.002	0	%100
40	MP-5	Z	.002	.002	0	%100
41	MP-8	Z	.002	.002	0	%100
42	MP-9	Z	.002	.002	0	%100
43	MP-12	Z	.002	.002	0	%100
44	PL1	Z	.002	.002	0	%100
45	PL2	Z	.002	.002	0	%100
46	PL3	Z	.002	.002	0	%100
47	PS1-A	Z	.005	.005	0	%100
48	PS1-B	Z	.001	.001	0	%100
49	PS2-A	Z	.001	.001	0	%100
50	PS2-B	Z	.003	.003	0	%100
51	PS3-A	Z	.005	.005	0	%100
52	PS3-B	Z	.002	.002	0	%100
53	SA-1	Z	.002	.002	0	%100
54	SA-2	Z	.003	.003	0	%100
55	SA-3	Z	.004	.004	0	%100
56	MP-3	Z	0	0	0	%100
57	MP-10	Z	.002	.002	0	%100
58	MP-11	Z	.002	.002	0	%100
59	MP-6	Z	.002	.002	0	%100
60	MP-7	Z	.002	.002	0	%100

Member Distributed Loads (BLC 33 : 315 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	F1	X	-.002	-.002	0	%100
2	F2	X	-.002	-.002	0	%100
3	F3	X	-.000483	-.000483	0	%100
4	INT-1	X	-.000762	-.000762	0	%100
5	INT-2	X	-.002	-.002	0	%100
6	INT-3	X	-.003	-.003	0	%100
7	MP-1	X	-.002	-.002	0	%100
8	MP-2	X	-.002	-.002	0	%100
9	MP-4	X	-.002	-.002	0	%100
10	MP-5	X	-.002	-.002	0	%100
11	MP-8	X	-.002	-.002	0	%100
12	MP-9	X	-.002	-.002	0	%100
13	MP-12	X	-.002	-.002	0	%100
14	PL1	X	-.001	-.001	0	%100
15	PL2	X	-.003	-.003	0	%100
16	PL3	X	-.004	-.004	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : CJB
Job Number : 52429.298270
Model Name : CCI BU No. 876373

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Member Distributed Loads (BLC 33 : 315 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
17	PS1-A	X	-.002	-.002	0	%100
18	PS1-B	X	-.002	-.002	0	%100
19	PS2-A	X	-.002	-.002	0	%100
20	PS2-B	X	-.004	-.004	0	%100
21	PS3-A	X	-.000939	-.000939	0	%100
22	PS3-B	X	-.000939	-.000939	0	%100
23	SA-1	X	-.003	-.003	0	%100
24	SA-2	X	-.002	-.002	0	%100
25	SA-3	X	-.000834	-.000834	0	%100
26	MP-3	X	-.002	-.002	0	%100
27	MP-10	X	-.002	-.002	0	%100
28	MP-11	X	-.002	-.002	0	%100
29	MP-6	X	-.002	-.002	0	%100
30	MP-7	X	-.002	-.002	0	%100
31	F1	Z	.002	.002	0	%100
32	F2	Z	.002	.002	0	%100
33	F3	Z	.000591	.000591	0	%100
34	INT-1	Z	.000844	.000844	0	%100
35	INT-2	Z	.002	.002	0	%100
36	INT-3	Z	.003	.003	0	%100
37	MP-1	Z	.002	.002	0	%100
38	MP-2	Z	.002	.002	0	%100
39	MP-4	Z	.002	.002	0	%100
40	MP-5	Z	.002	.002	0	%100
41	MP-8	Z	.002	.002	0	%100
42	MP-9	Z	.002	.002	0	%100
43	MP-12	Z	.002	.002	0	%100
44	PL1	Z	.001	.001	0	%100
45	PL2	Z	.002	.002	0	%100
46	PL3	Z	.004	.004	0	%100
47	PS1-A	Z	.002	.002	0	%100
48	PS1-B	Z	.002	.002	0	%100
49	PS2-A	Z	.002	.002	0	%100
50	PS2-B	Z	.004	.004	0	%100
51	PS3-A	Z	.001	.001	0	%100
52	PS3-B	Z	.001	.001	0	%100
53	SA-1	Z	.003	.003	0	%100
54	SA-2	Z	.002	.002	0	%100
55	SA-3	Z	.000755	.000755	0	%100
56	MP-3	Z	.002	.002	0	%100
57	MP-10	Z	.002	.002	0	%100
58	MP-11	Z	.002	.002	0	%100
59	MP-6	Z	.002	.002	0	%100
60	MP-7	Z	.002	.002	0	%100

Member Distributed Loads (BLC 34 : 330 Wind - Ice)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	F1	X	-.003	-.003	0	%100
2	F2	X	-.002	-.002	0	%100
3	F3	X	0	0	0	%100
4	INT-1	X	0	0	0	%100

Member Distributed Loads (BLC 34 : 330 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
5	INT-2	X	-.004	-.004	0	%100
6	INT-3	X	-.003	-.003	0	%100
7	MP-1	X	-.002	-.002	0	%100
8	MP-2	X	-.002	-.002	0	%100
9	MP-4	X	-.002	-.002	0	%100
10	MP-5	X	-.002	-.002	0	%100
11	MP-8	X	-.002	-.002	0	%100
12	MP-9	X	-.002	-.002	0	%100
13	MP-12	X	-.002	-.002	0	%100
14	PL1	X	0	0	0	%100
15	PL2	X	-.004	-.004	0	%100
16	PL3	X	-.004	-.004	0	%100
17	PS1-A	X	-.003	-.003	0	%100
18	PS1-B	X	-.003	-.003	0	%100
19	PS2-A	X	-.002	-.002	0	%100
20	PS2-B	X	-.004	-.004	0	%100
21	PS3-A	X	0	0	0	%100
22	PS3-B	X	0	0	0	%100
23	SA-1	X	-.004	-.004	0	%100
24	SA-2	X	-.002	-.002	0	%100
25	SA-3	X	-.002	-.002	0	%100
26	MP-3	X	-.002	-.002	0	%100
27	MP-10	X	-.002	-.002	0	%100
28	MP-11	X	-.002	-.002	0	%100
29	MP-6	X	-.002	-.002	0	%100
30	MP-7	X	-.002	-.002	0	%100
31	F1	Z	.001	.001	0	%100
32	F2	Z	.001	.001	0	%100
33	F3	Z	0	0	0	%100
34	INT-1	Z	0	0	0	%100
35	INT-2	Z	.002	.002	0	%100
36	INT-3	Z	.002	.002	0	%100
37	MP-1	Z	.001	.001	0	%100
38	MP-2	Z	.001	.001	0	%100
39	MP-4	Z	.001	.001	0	%100
40	MP-5	Z	.001	.001	0	%100
41	MP-8	Z	.001	.001	0	%100
42	MP-9	Z	.001	.001	0	%100
43	MP-12	Z	.001	.001	0	%100
44	PL1	Z	0	0	0	%100
45	PL2	Z	.002	.002	0	%100
46	PL3	Z	.002	.002	0	%100
47	PS1-A	Z	.001	.001	0	%100
48	PS1-B	Z	.001	.001	0	%100
49	PS2-A	Z	.001	.001	0	%100
50	PS2-B	Z	.002	.002	0	%100
51	PS3-A	Z	0	0	0	%100
52	PS3-B	Z	0	0	0	%100
53	SA-1	Z	.002	.002	0	%100
54	SA-2	Z	.001	.001	0	%100
55	SA-3	Z	.001	.001	0	%100
56	MP-3	Z	.001	.001	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : CJB
Job Number : 52429.298270
Model Name : CCI BU No. 876373

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Member Distributed Loads (BLC 34 : 330 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
57	MP-10	Z	.001	.001	0	%100
58	MP-11	Z	.001	.001	0	%100
59	MP-6	Z	.001	.001	0	%100
60	MP-7	Z	.001	.001	0	%100

Member Distributed Loads (BLC 39 : BLC 1 Transient Area Loads)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	INT-1	Y	-.008	-.008	.626	4.973
2	PL1	Y	-.0009824	-.0009824	.982	.743
3	PS1-B	Y	-.0007986	-.003	0	.805
4	PS1-B	Y	-.003	-.006	.805	1.61
5	PS1-B	Y	-.006	-.01	1.61	2.416
6	PS1-B	Y	-.01	-.007	2.416	3.221
7	PS1-B	Y	-.007	-.000126	3.221	4.026
8	PS2-A	Y	-.000126	-.007	.447	1.253
9	PS2-A	Y	-.007	-.01	1.253	2.058
10	PS2-A	Y	-.01	-.006	2.058	2.863
11	PS2-A	Y	-.006	-.003	2.863	3.668
12	PS2-A	Y	-.003	-.0007986	3.668	4.474
13	SA-1	Y	-.019	-.014	1.562	2.291
14	SA-1	Y	-.014	-.014	2.291	3.02
15	SA-1	Y	-.014	-.012	3.02	3.749
16	SA-1	Y	-.012	-.007	3.749	4.478
17	SA-1	Y	-.007	-.002	4.478	5.208
18	INT-3	Y	-.008	-.008	.626	4.973
19	PL3	Y	-.0009824	-.0009824	.982	.743
20	PS1-A	Y	-.000126	-.007	.447	1.253
21	PS1-A	Y	-.007	-.01	1.253	2.058
22	PS1-A	Y	-.01	-.006	2.058	2.863
23	PS1-A	Y	-.006	-.003	2.863	3.668
24	PS1-A	Y	-.003	-.0007986	3.668	4.474
25	PS3-B	Y	-.0007986	-.003	0	.805
26	PS3-B	Y	-.003	-.006	.805	1.61
27	PS3-B	Y	-.006	-.01	1.61	2.416
28	PS3-B	Y	-.01	-.007	2.416	3.221
29	PS3-B	Y	-.007	-.000126	3.221	4.026
30	SA-3	Y	-.019	-.014	1.562	2.291
31	SA-3	Y	-.014	-.014	2.291	3.02
32	SA-3	Y	-.014	-.012	3.02	3.749
33	SA-3	Y	-.012	-.007	3.749	4.478
34	SA-3	Y	-.007	-.002	4.478	5.208
35	INT-2	Y	-.008	-.008	.626	4.973
36	PL2	Y	-.0009824	-.0009824	.982	.743
37	PS2-B	Y	-.0007986	-.003	0	.805
38	PS2-B	Y	-.003	-.006	.805	1.61
39	PS2-B	Y	-.006	-.01	1.61	2.416
40	PS2-B	Y	-.01	-.007	2.416	3.221
41	PS2-B	Y	-.007	-.000126	3.221	4.026
42	PS3-A	Y	-.000126	-.007	.447	1.253
43	PS3-A	Y	-.007	-.01	1.253	2.058
44	PS3-A	Y	-.01	-.006	2.058	2.863

Member Distributed Loads (BLC 39 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
45	PS3-A	Y	-.008	-.003	2.853	3.668
46	PS3-A	Y	-.003	-.0007988	3.668	4.474
47	SA-2	Y	-.019	-.014	1.562	2.291
48	SA-2	Y	-.014	-.014	2.291	3.02
49	SA-2	Y	-.014	-.012	3.02	3.749
50	SA-2	Y	-.012	-.007	3.749	4.478
51	SA-2	Y	-.007	-.002	4.478	5.206

Member Distributed Loads (BLC 40 : BLC 18 Transient Area Loads)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	INT-1	Y	-.003	-.003	.626	4.973
2	PL1	Y	-.0004405	-.0004405	.392	.743
3	PS1-B	Y	-.0003582	-.001	0	.805
4	PS1-B	Y	-.001	-.003	.805	1.61
5	PS1-B	Y	-.003	-.005	1.61	2.416
6	PS1-B	Y	-.005	-.003	2.416	3.221
7	PS1-B	Y	-.003	-5.851e-5	3.221	4.026
8	PS2-A	Y	-5.851e-5	-.003	.447	1.253
9	PS2-A	Y	-.003	-.005	1.253	2.058
10	PS2-A	Y	-.005	-.003	2.058	2.863
11	PS2-A	Y	-.003	-.001	2.863	3.668
12	PS2-A	Y	-.001	-.0003582	3.668	4.474
13	SA-1	Y	-.009	-.006	1.562	2.291
14	SA-1	Y	-.006	-.006	2.291	3.02
15	SA-1	Y	-.006	-.006	3.02	3.749
16	SA-1	Y	-.006	-.003	3.749	4.478
17	SA-1	Y	-.003	-.0007211	4.478	5.206
18	INT-2	Y	-.0008162	-.003	0	1.12
19	INT-2	Y	-.003	-.003	1.12	2.239
20	INT-2	Y	-.003	-.002	2.239	3.359
21	INT-2	Y	-.002	-.002	3.359	4.479
22	INT-2	Y	-.002	-.0002002	4.479	5.599
23	PL2	Y	0	-9.133e-5	0	.225
24	PL2	Y	-9.133e-5	-.0002145	.225	.45
25	PL2	Y	-.0002145	-.0001603	.45	.675
26	PL2	Y	-.0001603	-3.719e-5	.675	.9
27	PL2	Y	-3.719e-5	0	.9	1.125
28	PS2-B	Y	-.001	-.002	0	.805
29	PS2-B	Y	-.002	-.003	.805	1.61
30	PS2-B	Y	-.003	-.004	1.61	2.416
31	PS2-B	Y	-.004	-.003	2.416	3.221
32	PS2-B	Y	-.003	-.0004844	3.221	4.026
33	PS3-A	Y	-.0002104	-.003	0	.895
34	PS3-A	Y	-.003	-.004	.895	1.789
35	PS3-A	Y	-.004	-.003	1.789	2.684
36	PS3-A	Y	-.003	-.002	2.684	3.579
37	PS3-A	Y	-.002	-.0008756	3.579	4.474
38	SA-2	Y	-.0001338	-.003	.521	1.458
39	SA-2	Y	-.003	-.007	1.458	2.395
40	SA-2	Y	-.007	-.006	2.395	3.333
41	SA-2	Y	-.006	-.003	3.333	4.27

Member Distributed Loads (BLC 40 : BLC 18 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,...	End Magnitude[k/ft,F...	Start Location[ft,%]	End Location[ft,%]
42	SA-2	Y	-.003	-.0007397	4.27	5.206
43	INT-3	Y	-.003	-.003	.626	4.973
44	PL3	Y	-.0004405	-.0004405	.392	.743
45	PS1-A	Y	-5.851e-5	-.003	.447	1.253
46	PS1-A	Y	-.003	-.005	1.253	2.058
47	PS1-A	Y	-.005	-.003	2.058	2.863
48	PS1-A	Y	-.003	-.001	2.863	3.668
49	PS1-A	Y	-.001	-.0003582	3.668	4.474
50	PS3-B	Y	-.0003582	-.001	0	.805
51	PS3-B	Y	-.001	-.003	.805	1.61
52	PS3-B	Y	-.003	-.005	1.61	2.416
53	PS3-B	Y	-.005	-.003	2.416	3.221
54	PS3-B	Y	-.003	-5.851e-5	3.221	4.026
55	SA-3	Y	-.009	-.008	1.562	2.291
56	SA-3	Y	-.008	-.008	2.291	3.02
57	SA-3	Y	-.008	-.008	3.02	3.749
58	SA-3	Y	-.008	-.003	3.749	4.478
59	SA-3	Y	-.003	-.0007211	4.478	5.206

Member Area Loads (BLC 1 : Dead)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N58A	N57A	N91	N95	Y	Two Way	-.012
2	N83	N84	N92	N94	Y	Two Way	-.012
3	N96	N93	N56	N55	Y	Two Way	-.012

Member Area Loads (BLC 18 : Ice Weight)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N57A	N91	N95	N58A	Y	Two Way	-.005
2	N55	N96	N113	N56	Y	Two Way	-.005
3	N83	N84	N92	N94	Y	Two Way	-.005

Envelope Joint Reactions

	Joint		X [k]	LC	Y [k]	LC	Z [k]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1	SA3	max	1.976	18	2.27	34	1.185	22	.12	22	1.184	22	-.937	10
2		min	-1.976	10	.603	10	-1.185	14	-.092	14	-1.184	14	-5.46	34
3	SA2	max	1.29	18	2.184	39	1.751	23	4.564	56	1.037	27	2.951	57
4		min	-1.221	10	.607	15	-1.75	15	.863	15	-1.037	3	.46	16
5	SA1	max	1.273	18	2.102	45	1.667	22	-.859	5	1.092	33	2.636	44
6		min	-1.273	10	.691	5	-1.658	14	-4.501	45	-1.092	9	.486	4
7	Totals:	max	4.539	18	6.426	49	4.555	22						
8		min	-4.539	10	2.268	2	-4.555	14						

Envelope AISC 15th(360-16): LRFD Steel Code Checks

	Member	Shape	Code Check	Loc[ft]	LC	Shear ...	Loc[ft]	Dir	LC	phi*Pnc ...	phi*Pnt ...	phi*Mn ...	phi*Mn ...	Cb	Eqn
1	SA-2	HSS4X4X4	.348	0	47	.062	0	y	37	84.579	139.518	16.181	16.181	2..	H1-1b
2	SA-3	HSS4X4X4	.336	0	59	.070	0	y	59	84.579	139.518	16.181	16.181	2..	H1-1b
3	SA-1	HSS4X4X4	.331	0	42	.060	0	y	47	84.579	139.518	16.181	16.181	2..	H1-1b

Envelope AISC 15th(360-16): LRFD Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc[ft]	LC	Shear	Loc[ft]	Dir	LC	phi*Pnc	phi*Pnt	phi*Mn	phi*Mn	Cb	Eqn
4	MP-8	PIPE 2.0	.299	4	32	.024	4		32	13.788	32.13	1.672	1.672	1...	H1-1b
5	MP-5	PIPE 2.0	.299	4	32	.024	4		32	13.788	32.13	1.672	1.672	1...	H1-1b
6	PS2-B	L2x2x3	.264	2.237	32	.008	0	y	31	8.565	23.393	.558	1.047	1...	H2-1
7	MP-9	PIPE 2.0	.262	4	18	.020	4		18	13.788	32.13	1.672	1.672	1...	H1-1b
8	MP-1	PIPE 2.0	.262	4	23	.020	4		23	13.788	32.13	1.672	1.672	1...	H1-1b
9	MP-12	PIPE 2.0	.262	4	26	.020	4		26	13.788	32.13	1.672	1.672	1...	H1-1b
10	MP-4	PIPE 2.0	.262	4	31	.020	4		31	13.788	32.13	1.672	1.672	1...	H1-1b
11	MP-11	PIPE 2.0	.252	4	22	.020	4		31	13.788	32.13	1.672	1.672	1...	H1-1b
12	PS3-A	L2x2x3	.243	2.237	20	.008	0	z	39	8.565	23.393	.558	1.047	1...	H2-1
13	PS3-B	L2x2x3	.238	2.237	21	.008	4.474	y	21	8.565	23.393	.558	1.046	1...	H2-1
14	MP-7	PIPE 2.0	.229	4	32	.016	4		32	13.788	32.13	1.672	1.672	1...	H1-1b
15	MP-6	PIPE 2.0	.229	4	32	.016	4		32	13.788	32.13	1.672	1.672	1...	H1-1b
16	MP-3	PIPE 2.0	.228	4	27	.016	4		27	13.788	32.13	1.672	1.672	1...	H1-1b
17	MP-10	PIPE 2.0	.228	4	22	.016	4		22	13.788	32.13	1.672	1.672	1...	H1-1b
18	MP-2	PIPE 2.0	.228	4	27	.016	4		27	13.788	32.13	1.672	1.672	1...	H1-1b
19	PS2-A	L2x2x3	.214	2.19	30	.005	4.474	z	40	8.565	23.393	.558	1.078	1...	H2-1
20	PS1-A	L2x2x3	.209	2.19	25	.005	4.474	z	60	8.565	23.393	.558	1.08	1...	H2-1
21	PL2	RE6X.5	.209	.562	33	.126	.562	y	23	91.595	97.2	1.012	12.15	1...	H1-1b
22	PL1	RE6X.5	.201	.563	30	.126	.563	y	23	91.595	97.2	1.012	12.15	1...	H1-1b
23	PL3	RE6X.5	.198	.563	24	.106	.563	y	28	91.595	97.2	1.012	12.15	1...	H1-1b
24	PS1-B	L2x2x3	.197	2.263	27	.005	0	z	41	8.565	23.393	.558	1.08	1...	H2-1
25	F2	PIPE 3.0	.197	5.339	46	.081	5.339		31	28.251	65.205	5.749	5.749	1...	H1-1b
26	F3	PIPE 3.0	.195	7.031	46	.077	5.339		21	28.251	65.205	5.749	5.749	1...	H1-1b
27	F1	PIPE 3.0	.193	5.339	41	.066	7.101		26	28.251	65.205	5.749	5.749	1...	H1-1b
28	INT-2	HSS4X4X4	.132	2.799	36	.067	.35	z	32	135.018	139.518	16.181	16.181	1...	H1-1b
29	INT-3	HSS4X4X4	.126	2.799	38	.058	.35	z	21	135.018	139.518	16.181	16.181	1...	H1-1b
30	INT-1	HSS4X4X4	.119	2.799	47	.066	5.249	z	31	135.018	139.518	16.181	16.181	1...	H1-1b

Envelope None Cold Formed Steel Code Checks

Member	Shape	Code Check	Loc[ft]	L...	She...	Loc...	L...	Pr[k]	Tr[k]	Myy[...	Mnzz[...	Cb	CmyyCmzz	Eqn
No Data to Print ...														

APPENDIX D

ADDITIONAL CALCULATIONS

Job Name: CCI BU No. 839961
Job Number: TEP #52429.298270
Calc: CJB Check: JHJ
Date: 10/31/2019

Moment Bolt Group - Support Arm

Bolt Size:	0.625	in
# Bolts:	4	
Plate Width:	10	in
Plate Height:	10	in
Bolt H Gap:	7	in
Bolt V Gap:	7	in
Plate T:	0.625	in
Slip Member Ø:	N/A	in
Bolt Grade:	A325N	
Fu_{bolt}:	120	ksi
r:	4.9497	in
J:	98.00	in^4/in^2
$Bolt_{Area}$:	0.307	in^2
$Bolt_{Area, Net Tensile}$:	0.226	in^2
Pretension:	19	kips
Slotted Holes:	No	

Code Checks Per ANSI/TIA-222-H:

Bolt Capacity =	**24.0%**	**PASS**
Plate Capacity =	**45.6%**	**PASS**

Plate Bending

Horizontal Member height: 4 in
Horizontal Member width: 4 in

Plate Fy: 36 ksi

My =	3.2743	k - in	Z_y =	0.977	in^3	S_y =	0.651	in^3
Mz =	14.4395	k - in	Z_z =	0.977	in^3	S_z =	0.651	in^3

$ØMp_y$ (Z):	31.641	k - in
$ØMp_y$ (S):	33.750	k - in
$ØMp_z$ (Z):	31.641	k - in
$ØMp_z$ (S):	33.750	k - in

Date: **September 26th, 2019**

Amanda D Brown
Crown Castle
3530 Toringdon Way
Charlotte, NC 28277

B+T Group
1717 S. Boulder, Suite 300
Tulsa, OK 74119
(918) 587-4630

Subject:	**Structural Analysis Report**	
Carrier Designation:	***Verizon Wireless* Co-Locate**	
	Carrier Site Number:	NG56920
	Carrier Site Name:	TORRINGTON W CT
Crown Castle Designation:	**Crown Castle BU Number:**	876373
	Crown Castle Site Name:	Long Eddy / Wright Property
	Crown Castle JDE Job Number:	588260
	Crown Castle Work Order Number:	1789303
	Crown Castle Order Number:	503512 Rev. 0
Engineering Firm Designation:	**B+T Group Project Number:**	89028.010.01
Site Data:	**136 Wright Rd., Torrington, Litchfield County, CT** **Latitude *41° 49' 38.34"*, Longitude *-73° 10' 13.97"*** **148 Foot - Monopole Tower**	

Dear Amanda D Brown,

B+T Group is pleased to submit this **"Structural Analysis Report"** to determine the structural integrity of the above-mentioned tower.

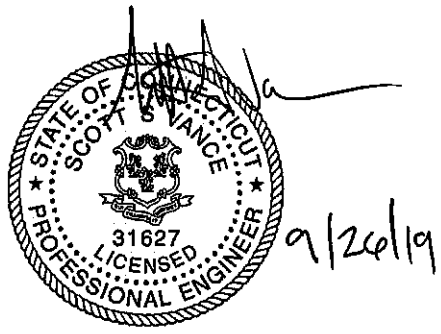
The purpose of the analysis is to determine acceptability of the tower stress level. Based on our analysis we have determined the tower stress level for the structure and foundation, under the following load case, to be:

LC7: Proposed Equipment Configuration **Sufficient Capacity – 75.6%**

This analysis utilizes an ultimate 3-second gust wind speed of 120 mph as required by the 2018 International Building Code. Applicable Standard references and design criteria are listed in Section 2 - Analysis Criteria.

Structural analysis prepared by: Tharun Cheriyan, E.I.T.

Respectfully submitted by: B+T Engineering, Inc.
COA: PEC.0001564 Expires: 02/10/2020



Scott S. Vance, P.E.

tnxTower Report - version 8.0.5.0

TABLE OF CONTENTS

1) INTRODUCTION

This tower is a 148 ft. Monopole tower designed by Summit manufacturing in June of 2000. This tower has been modified by B+T Group in February of 2014 and those modifications are incorporated into this analysis.

2) ANALYSIS CRITERIA

TIA-222 Revision:	TIA-222-H
Risk Category:	II
Wind Speed:	120 mph
Exposure Category:	B
Topographic Factor:	1
Ice Thickness:	1.5 in
Wind Speed with Ice:	50 mph
Service Wind Speed:	60 mph

Table 1 - Proposed Equipment Configuration

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
138.0	138.0	2	Antel	LPA-80063/6CF	7	1-5/8
		4	Antel	LPA-80080/6CF		
		6	Quintel Tech.	QS6656-5		
		1	RFS Celwave	DB-C1-12C-24AB-0Z		
		3	Samsung Telecomm.	RFV01U-D1A		
		3	Samsung Telecomm.	RFV01U-D2A		
		1	--	Platform Mount [LP 712-1]		

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)
149.0	150.0	3	Alcatel Lucent	1900MHZ RRH (65MHZ)	--	--
		3	Alcatel Lucent	800 EXTERNAL NOTCH FILTER		
		3	Alcatel Lucent	800MHZ RRH		
	149.0	1	--	Pipe Mount [PM 601-3]		
148.0	150.0	3	RFS Celwave	APXVSPP18-C-A20	4	1-1/4
		3	RFS Celwave	APXVTM14-ALU-I20		
	148.0	3	Alcatel Lucent	TD-RRH8x20-25		
		9	RFS Celwave	ACU-A20-N		
		1	--	Platform Mount [LP 712-1]		
128.0	128.0	3	CCI Antennas	HPA-65R-BUU-H8	5 1	3/4 3/8
		9	Ericsson	RRU-11		
		2	Raycap	DC6-48-60-18-8F		
		1	--	Platform Mount [LP 303-1]		
114.0	114.0	4	Ericsson	AIR 32 B2A/B66AA	4 1	1-5/8 1/2
		8	Ericsson	RADIO 4449 B12/B71		
		4	RFS Celwave	APXVAARR24_43-U-NA20		

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
		1	RFS Celwave	SC2-W100AB		
		1	Site Pro1	F4P-HRK12 Handrail		
		1	Site Pro1	F4P-12W Mount		
79.0	84.0	1	RFS Celwave	PD1109E	1	1/2
	79.0	1	--	Side Arm Mount [SO 701-1]		
45.0	45.0	1	GPS	GPS_A	1	1/2
		1	--	Side Arm Mount [SO 701-1]		
13.0	13.0	1	GPS	GPS_A	1	1/2
		1	--	Side Arm Mount [SO 701-1]		

3) ANALYSIS PROCEDURE

Table 3 - Documents Provided

Document	Remarks	Reference	Source
Online Order Information	Verizon Wireless Co-locate, Revision# 0	503512	CCI Sites
Tower Manufacturer Drawing	Summit, Date: 06/23/2000	1631601	CCI Sites
Mount Analysis	TEP, Project No. 52429.298270	8667272	CCI Sites
Tower Modification Drawing	B+T Group, Project No. 89028.003.01 Date: 02/25/2014	4491592	CCI Sites
Post Modification Inspection	TEP, Date: 07/31/2014	5215998	CCI Sites
Foundation Drawing	Summit, Job No. 10185	1634518	CCI Sites
Geotech Report	Clerence Welti Assoc. Inc., Date: 05/12/2000	1531964	CCI Sites
Antenna Configuration	Crown CAD Package	Date: 09/09/2019	CCI Sites

3.1) Analysis Method

tnxTower (version 8.0.5.0), 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.

3.2) Assumptions

1) The tower and structures were built and have been maintained in accordance with the manufacturer's specification.
2) The configuration of antennas, transmission cables, mounts and other appurtenances are as specified in Tables 1 and 2 and the referenced drawings.
3) Mount areas and weights are assumed based on photographs provided.

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

4) ANALYSIS RESULTS

Table 4 - Section Capacity (Summary)

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P (K)	SF*P_allow (K)	% Capacity	Pass / Fail
L1	148 - 143	Pole	TP24.87x24x0.219	1	-3.462	--	3.9	Pass
L2	143 - 138	Pole	TP25.74x24.87x0.219	2	-3.828	--	6.8	Pass
L3	138 - 133	Pole	TP26.61x25.74x0.219	3	-7.643	--	13.0	Pass
L4	133 - 128	Pole	TP27.479x26.61x0.219	4	-8.078	--	18.6	Pass
L5	128 - 123	Pole	TP28.349x27.479x0.219	5	-10.987	--	25.6	Pass
L6	123 - 120.25	Pole	TP29.48x28.349x0.219	6	-11.256	--	29.1	Pass
L7	120.25 - 115.25	Pole	TP29.26x28.39x0.25	7	-12.107	--	28.3	Pass
L8	115.25 - 110.25	Pole	TP30.13x29.26x0.25	8	-18.538	--	35.2	Pass
L9	110.25 - 105.25	Pole	TP31x30.13x0.25	9	-19.213	--	41.5	Pass
L10	105.25 - 100.25	Pole	TP31.87x31x0.25	10	-19.911	--	47.4	Pass
L11	100.25 - 98.75	Pole	TP32.131x31.87x0.25	11	-20.117	--	49.0	Pass
L12	98.75 - 98.5	Pole	TP32.175x32.131x0.25	12	-20.163	--	49.3	Pass
L13	98.5 - 98.25	Pole + Reinf.	TP32.218x32.175x0.45	13	-20.215	--	40.7	Pass
L14	98.25 - 93.25	Pole + Reinf.	TP33.088x32.218x0.444	14	-21.258	--	45.3	Pass
L15	93.25 - 88.25	Pole + Reinf.	TP33.958x33.088x0.438	15	-22.324	--	49.6	Pass
L16	88.25 - 84.75	Pole + Reinf.	TP35.35x33.958x0.438	16	-23.083	--	52.6	Pass
L17	84.75 - 79.75	Pole + Reinf.	TP34.937x34.067x0.5	17	-25.128	--	50.6	Pass
L18	79.75 - 74.75	Pole + Reinf.	TP35.808x34.937x0.488	18	-26.469	--	54.1	Pass
L19	74.75 - 69.75	Pole + Reinf.	TP36.678x35.808x0.488	19	-27.744	--	57.3	Pass
L20	69.75 - 66.75	Pole + Reinf.	TP37.2x36.678x0.488	20	-28.520	--	59.2	Pass
L21	66.75 - 66.5	Pole + Reinf.	TP37.244x37.2x0.625	21	-28.604	--	45.2	Pass
L22	66.5 - 61.5	Pole + Reinf.	TP38.114x37.244x0.613	22	-30.177	--	45.8	Pass
L23	61.5 - 56.5	Pole + Reinf.	TP38.984x38.114x0.613	23	-31.777	--	48.1	Pass
L24	56.5 - 51.5	Pole + Reinf.	TP39.855x38.984x0.6	24	-33.399	--	50.3	Pass
L25	51.5 - 46.5	Pole + Reinf.	TP40.725x39.855x0.6	25	-35.044	--	52.4	Pass
L26	46.5 - 45	Pole + Reinf.	TP41.9x40.725x0.588	26	-35.540	--	53.1	Pass
L27	45 - 38.75	Pole + Reinf.	TP41.448x40.361x0.65	27	-39.431	--	51.5	Pass
L28	38.75 - 33.75	Pole + Reinf.	TP42.318x41.448x0.65	28	-41.283	--	53.2	Pass
L29	33.75 - 31.75	Pole + Reinf.	TP42.666x42.318x0.65	29	-42.032	--	56.0	Pass
L30	31.75 - 31.5	Pole + Reinf.	TP42.71x42.666x0.65	30	-42.131	--	56.1	Pass
L31	31.5 - 26.5	Pole + Reinf.	TP43.58x42.71x0.638	31	-44.015	--	55.6	Pass
L32	26.5 - 21.5	Pole + Reinf.	TP44.45x43.58x0.625	32	-45.929	--	57.1	Pass
L33	21.5 - 17.75	Pole + Reinf.	TP45.102x44.45x0.625	33	-47.380	--	58.2	Pass
L34	17.75 - 17.5	Pole + Reinf.	TP45.145x45.102x0.725	34	-47.502	--	54.6	Pass
L35	17.5 - 14.25	Pole + Reinf.	TP45.711x45.145x0.725	35	-48.975	--	55.5	Pass
L36	14.25 - 14	Pole + Reinf.	TP45.754x45.711x0.638	36	-49.084	--	59.9	Pass
L37	14 - 9	Pole + Reinf.	TP46.624x45.754x0.625	37	-51.246	--	61.4	Pass
L38	9 - 4	Pole + Reinf.	TP47.494x46.624x0.625	38	-53.360	--	62.8	Pass
L39	4 - 0	Pole + Reinf.	TP48.19x47.494x0.625	39	-55.069	--	63.8	Pass
							Summary	
						Pole (L12)	49.3	Pass
						Reinforcement	63.8	Pass
						Rating =	63.8	Pass

Table 5 - Tower Component Stresses vs. Capacity – LC7

Notes	Component		Elevation	% Capacity	Pass / Fail
1	Anchor Rods		Base	52.2	Pass
1	Base Plate		Base	48.8	Pass
1	Base Foundation	Structure	Base	38.4	Pass
		Soil	Base	75.6	Pass

Structure Rating (max from all components) =	**75.6%**

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

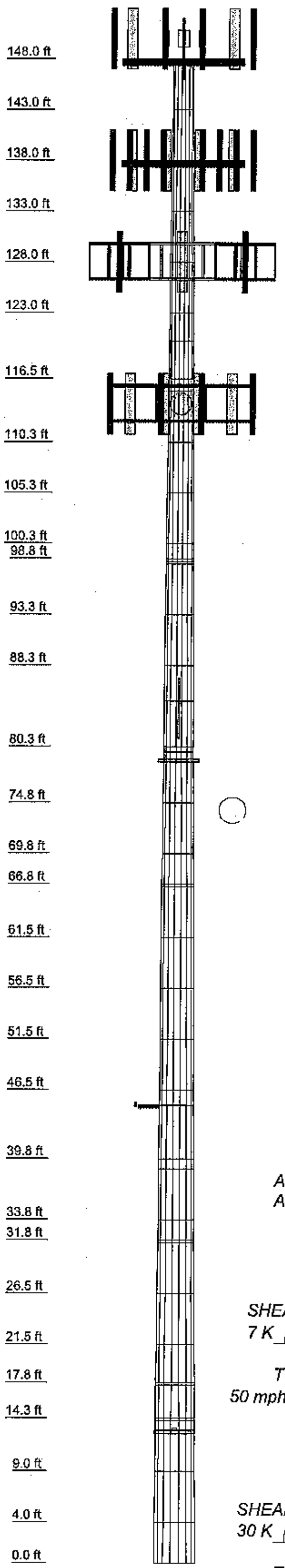
4.1) Recommendations

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	18	0.219		24.000	24.870	A607-60	0.3
2	5.000	18	0.219		24.870	25.740		0.3
3	5.000	18	0.219		25.740	26.610		0.3
4	5.000	18	0.219		26.610	27.479		0.3
5	5.000	18	0.219		27.479	28.349		0.3
6	[illegible]	18	0.219	3.750	28.349	29.480		0.4
7	[illegible]	18	[illegible]		[illegible]	[illegible]		0.4
8	5.000	18	[illegible]		[illegible]	[illegible]		0.4
9	5.000	18	0.250		30.130	31.000		0.4
10	[illegible]	18	[illegible]		[illegible]	31.870		0.4
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]		[illegible]
14	[illegible]	18	[illegible]		[illegible]	[illegible]		0.7
15	5.000	18	0.438		33.088	33.958		0.8
16	[illegible]	18	0.438	4.500	33.958	35.350		1.2
17	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]		[illegible]
18	5.000	18	[illegible]		[illegible]	[illegible]		0.9
19	5.000	18	0.487		35.808	36.678		0.9
20	[illegible]	18	[illegible]		[illegible]	[illegible]		0.6
21	[illegible]	18	[illegible]		[illegible]	[illegible]		[illegible]
22	[illegible]	18	[illegible]		[illegible]	[illegible]		1.2
23	5.000	18	0.613		38.114	38.984	A607-65	1.2
24	5.000	18	0.600		38.984	39.855		1.2
25	5.000	18	0.600		39.855	40.725		1.2
26	[illegible]	18	0.588	5.250	[illegible]	[illegible]		1.7
27	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]		[illegible]
28	5.000	18	[illegible]		[illegible]	[illegible]		1.4
29	[illegible]	18	[illegible]		[illegible]	[illegible]		0.6
30	[illegible]	18	[illegible]		[illegible]	[illegible]		[illegible]
31	[illegible]	18	[illegible]		[illegible]	[illegible]		1.4
32	5.000	18	0.625		43.580	44.450		1.4
33	[illegible]	18	[illegible]		[illegible]	[illegible]		1.1
34	[illegible]	18	[illegible]		[illegible]	[illegible]		[illegible]
35	[illegible]	18	[illegible]		[illegible]	[illegible]		[illegible]
36	[illegible]	18	[illegible]		[illegible]	[illegible]		[illegible]
37	[illegible]	18	[illegible]		[illegible]	[illegible]		1.6
38	5.000	18	0.625		46.624	47.494		1.6
39	4.000	18	0.625		47.494	48.190		1.3
								29.5



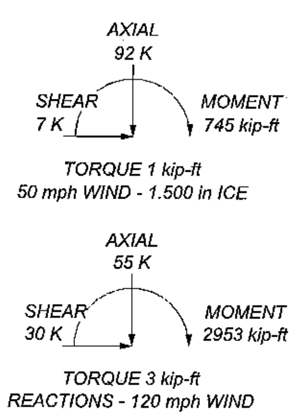
MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A607-60	60 ksi	75 ksi	A607-65	65 ksi	80 ksi

TOWER DESIGN NOTES

1. Tower is located in Litchfield County, Connecticut.
2. Tower designed for Exposure B to the TIA-222-H Standard.
3. Tower designed for a 120 mph basic wind in accordance with the TIA-222-H Standard.
4. Tower is also designed for a 50 mph basic wind with 1.50 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: 63.8%

ALL REACTIONS ARE FACTORED



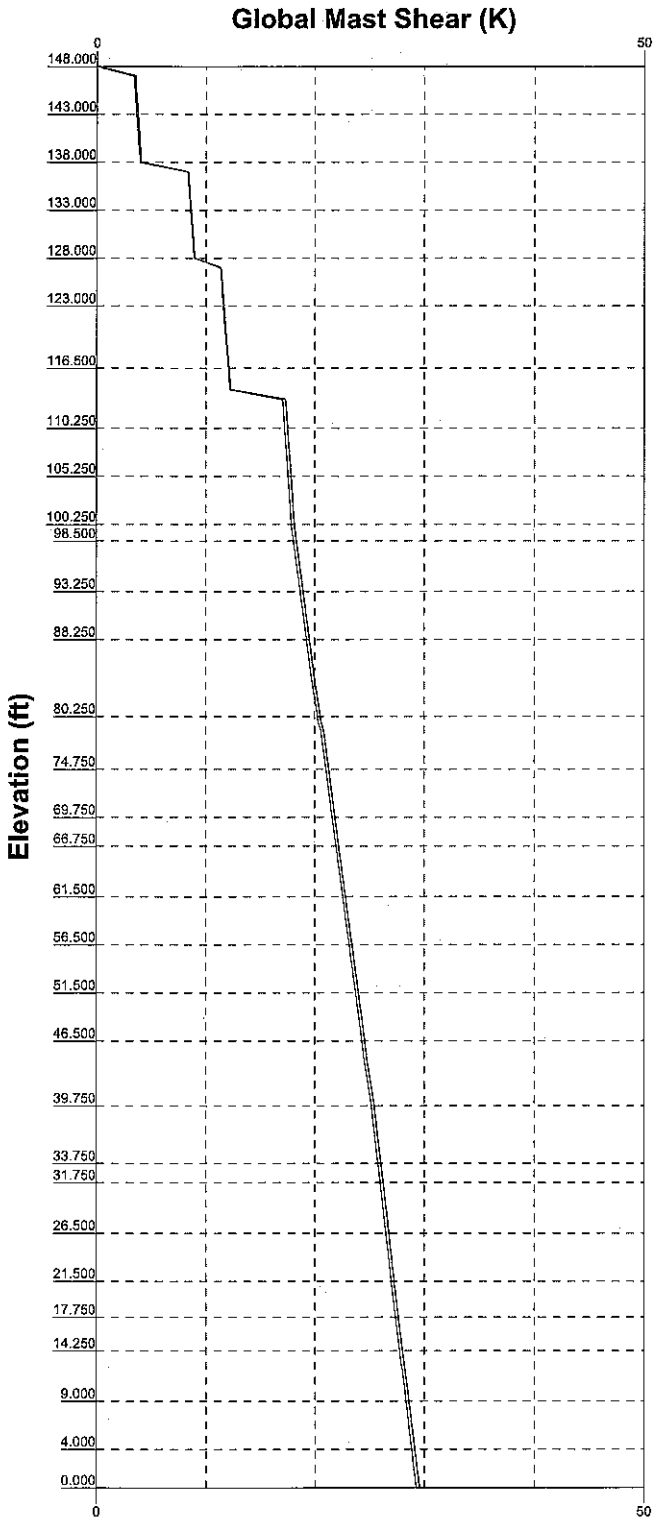
B+T Group 1717 S. Boulder, Suite 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job: **89028.010.01 - LONG EDDY / WRIGHT PROPERTY, CT (BU# 87637**		
	Project:		
	Client: Crown Castle	Drawn by: Regan	App'd:
	Code: TIA-222-H	Date: 09/26/19	Scale: NTS
	Path:		Dwg No. E-1

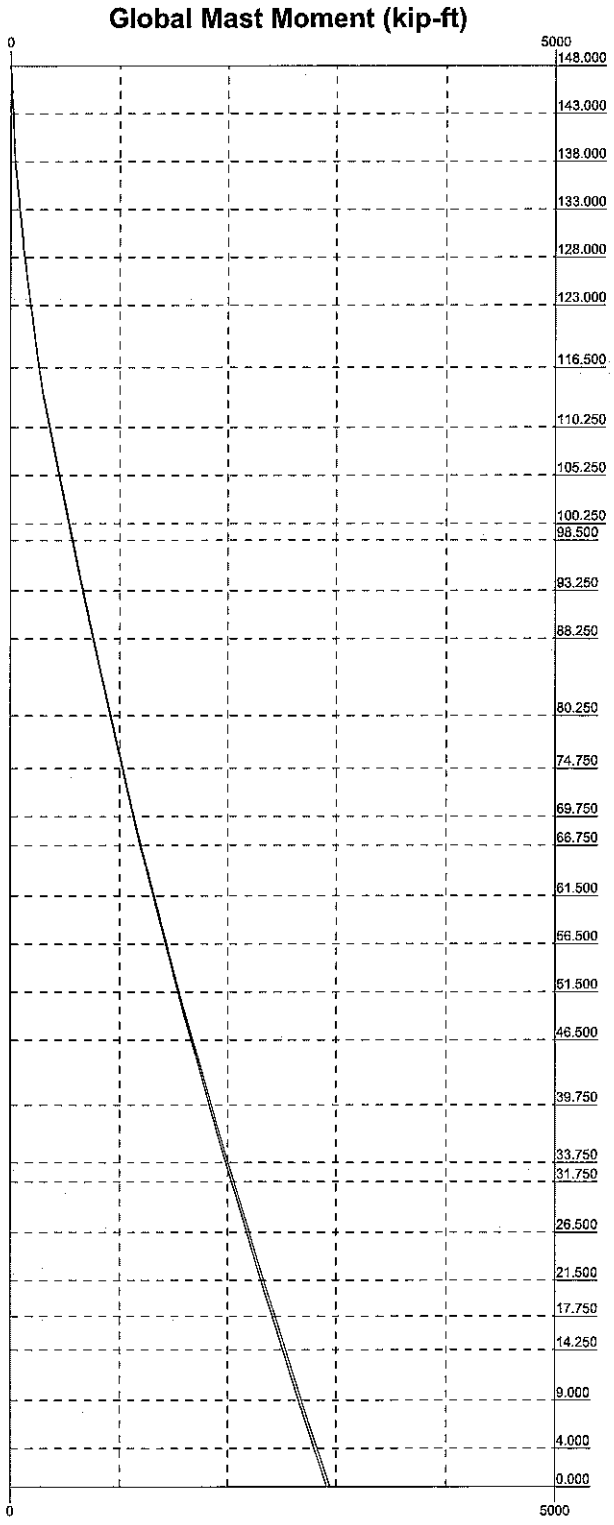
TIA-222-H - 120 mph/50 mph 1.500 in Ice Exposure B

Vx Vz

Maximum Values

Mx Mz



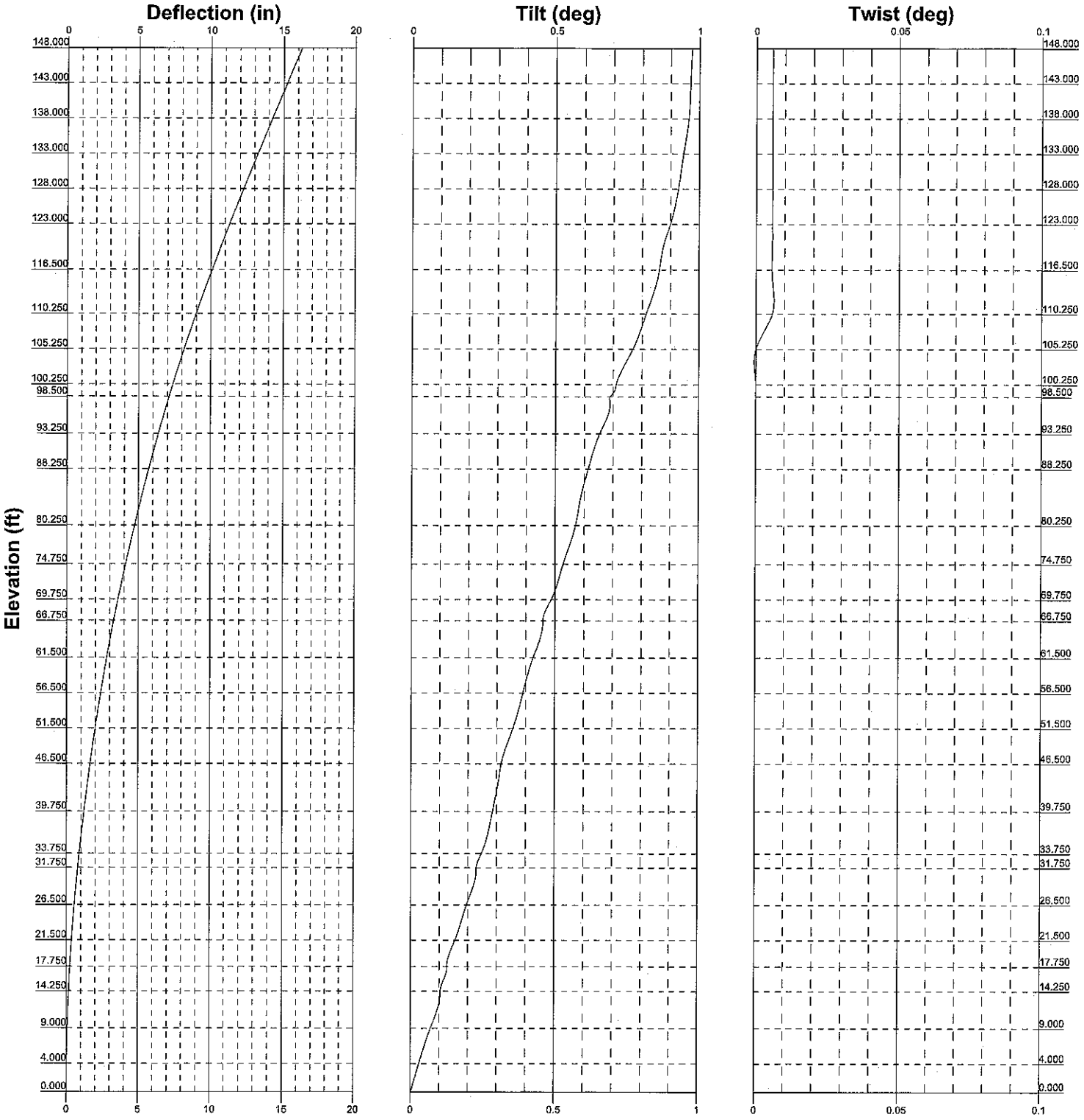


B+T Group
1717 S. Boulder, Suite 300
Tulsa, OK 74119
Phone: (918) 587-4630
FAX: (918) 295-0265

Job: 89028.010.01 - LONG EDDY / WRIGHT PROPERTY, CT (BU# 87637		
Project:		
Client: Crown Castle	Drawn by: Regan	App'd:
Code: TIA-222-H	Date: 09/26/19	Scale: NTS
Path:		Dwg No. E-4

TIA-222-H - Service - 60 mph

Maximum Values



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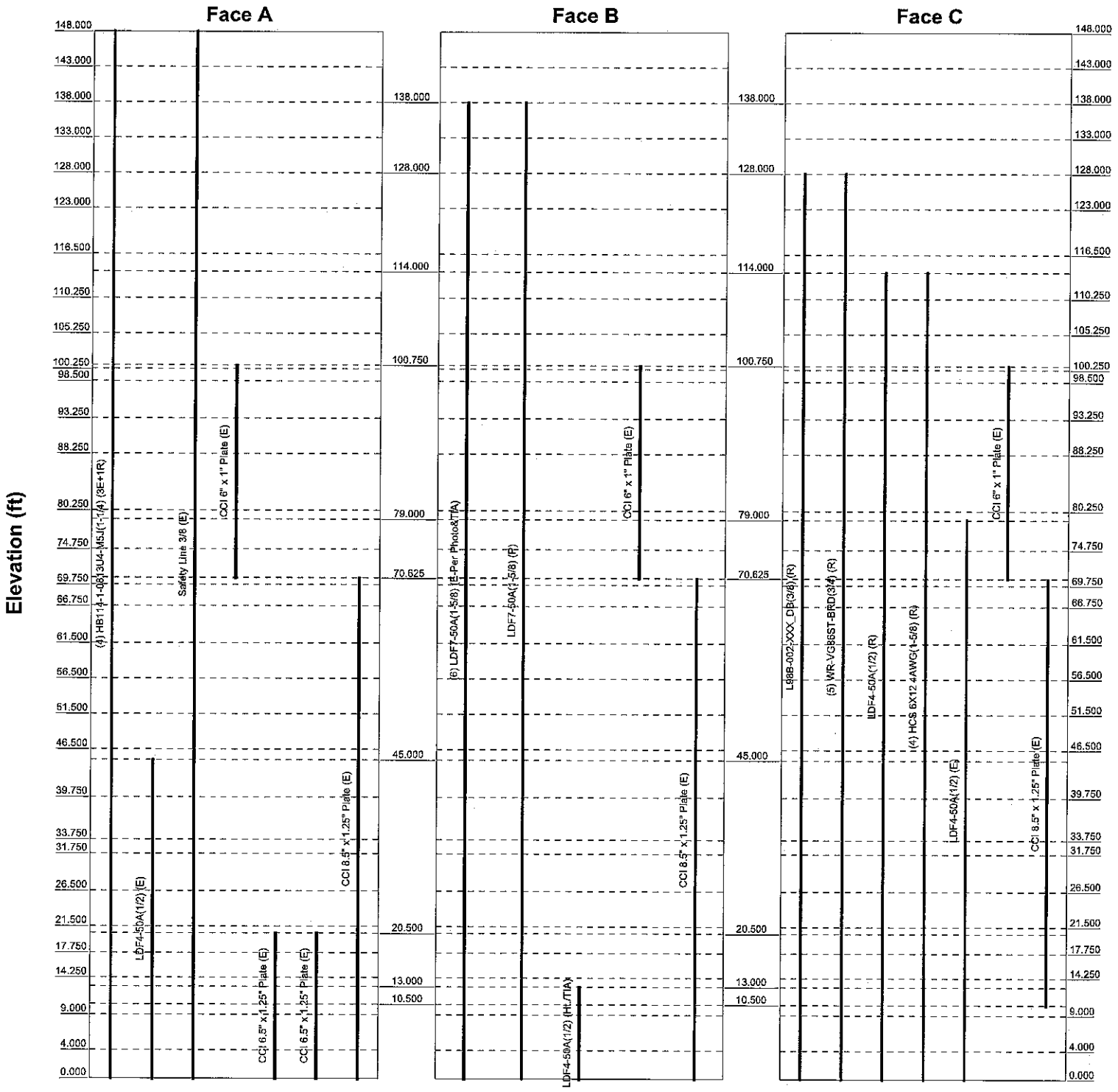
FAX: (918) 295-0265

Job: ***89028.010.01 - LONG EDDY / WRIGHT PROPERTY, CT (BU# 87637***			
Project:			
Client: Crown Castle	Drawn by: Regan	App'd:	
Code: TIA-222-H	Date: 09/26/19	Scale: NTS	
Path:		Dwg No. E-5	

Feed Line Distribution Chart
0' - 148'

Round Flat App In Face App Out Face Truss Leg



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Phone: (918) 587-4630
FAX: (918) 295-0265

Job: 89028.010.01 - LONG EDDY / WRIGHT PROPERTY, CT (BU# 87637			
Project:			
Client: Crown Castle	Drawn by: Regan	App'd:	
Code: TIA-222-H	Date: 09/26/19	Scale: NTS	
Path:		Dwg No. E-7	

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 Litchfield County, Connecticut.
Tower base elevation above sea level: 1095.000 ft.
Basic wind speed of 120 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 1.500 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: 63.8%.
A non-linear (P-delta) analysis was used.
Pressures are calculated at each section.
Stress ratio used in pole design is 1.05.
Tower analysis based on target reliabilities in accordance with Annex S.
Load Modification Factors used: $K_{es}(F_w) = 0.95$, $K_{es}(t_i) = 0.85$.
Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Options

Consider Moments - Legs	Distribute Leg Loads As Uniform	Use ASCE 10 X-Brace Ly Rules
Consider Moments - Horizontals	Assume Legs Pinned	Calculate Redundant Bracing Forces
Consider Moments - Diagonals	√ Assume Rigid Index Plate	Ignore Redundant Members in FEA
Use Moment Magnification	√ Use Clear Spans For Wind Area	SR Leg Bolts Resist Compression
Use Code Stress Ratios	Use Clear Spans For KL/r	All Leg Panels Have Same Allowable
√ Use Code Safety Factors - Guys	Retension Guys To Initial Tension	Offset Girt At Foundation
Escalate Ice	√ Bypass Mast Stability Checks	√ Consider Feed Line Torque
Always Use Max Kz	√ Use Azimuth Dish Coefficients	Include Angle Block Shear Check
Use Special Wind Profile	√ Project Wind Area of Appurt.	Use TIA-222-H Bracing Resist. Exemption
Include Bolts In Member Capacity	Autocalc Torque Arm Areas	Use TIA-222-H Tension Splice Exemption
Leg Bolts Are At Top Of Section	Add IBC .6D+W Combination	Poles
Secondary Horizontal Braces Leg	Sort Capacity Reports By Component	√ Include Shear-Torsion Interaction
Use Diamond Inner Bracing (4 Sided)	Triangulate Diamond Inner Bracing	Always Use Sub-Critical Flow
SR Members Have Cut Ends	Treat Feed Line Bundles As Cylinder	Use Top Mounted Sockets
SR Members Are Concentric	Ignore KL/ry For 60 Deg. Angle Legs	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	148.000-143.000	5.000	0.000	18	24.000	24.870	0.219	0.875	A607-60 (60 ksi)
L2	143.000-138.000	5.000	0.000	18	24.870	25.740	0.219	0.875	A607-60 (60 ksi)
L3	138.000-133.000	5.000	0.000	18	25.740	26.610	0.219	0.875	A607-60 (60 ksi)
L4	133.000-128.000	5.000	0.000	18	26.610	27.479	0.219	0.875	A607-60 (60 ksi)
L5	128.000-123.000	5.000	0.000	18	27.479	28.349	0.219	0.875	A607-60 (60 ksi)
L6	123.000-116.500	6.500	3.750	18	28.349	29.480	0.219	0.875	A607-60 (60 ksi)
L7	116.500-115.250	5.000	0.000	18	28.390	29.260	0.250	1.000	A607-65 (65 ksi)
L8	115.250-110.250	5.000	0.000	18	29.260	30.130	0.250	1.000	A607-65 (65 ksi)
L9	110.250-105.250	5.000	0.000	18	30.130	31.000	0.250	1.000	A607-65 (65 ksi)
L10	105.250-100.250	5.000	0.000	18	31.000	31.870	0.250	1.000	A607-65 (65 ksi)
L11	100.250-98.750	1.500	0.000	18	31.870	32.131	0.250	1.000	A607-65 (65 ksi)
L12	98.750-98.500	0.250	0.000	18	32.131	32.175	0.250	1.000	A607-65 (65 ksi)
L13	98.500-98.250	0.250	0.000	18	32.175	32.218	0.450	1.800	A607-65 (65 ksi)
L14	98.250-93.250	5.000	0.000	18	32.218	33.088	0.444	1.775	A607-65 (65 ksi)
L15	93.250-88.250	5.000	0.000	18	33.088	33.958	0.438	1.750	A607-65 (65 ksi)
L16	88.250-80.250	8.000	4.500	18	33.958	35.350	0.438	1.750	A607-65 (65 ksi)
L17	80.250-79.750	5.000	0.000	18	34.067	34.937	0.500	2.000	A607-65 (65 ksi)
L18	79.750-74.750	5.000	0.000	18	34.937	35.808	0.487	1.950	A607-65 (65 ksi)
L19	74.750-69.750	5.000	0.000	18	35.808	36.678	0.487	1.950	A607-65 (65 ksi)
L20	69.750-66.750	3.000	0.000	18	36.678	37.200	0.487	1.950	A607-65 (65 ksi)
L21	66.750-66.500	0.250	0.000	18	37.200	37.244	0.625	2.500	A607-65 (65 ksi)
L22	66.500-61.500	5.000	0.000	18	37.244	38.114	0.613	2.450	A607-65 (65 ksi)
L23	61.500-56.500	5.000	0.000	18	38.114	38.984	0.613	2.450	A607-65 (65 ksi)
L24	56.500-51.500	5.000	0.000	18	38.984	39.855	0.600	2.400	A607-65 (65 ksi)
L25	51.500-46.500	5.000	0.000	18	39.855	40.725	0.600	2.400	A607-65 (65 ksi)
L26	46.500-39.750	6.750	5.250	18	40.725	41.900	0.588	2.350	A607-65 (65 ksi)
L27	39.750-38.750	6.250	0.000	18	40.361	41.448	0.650	2.600	A607-65 (65 ksi)
L28	38.750-33.750	5.000	0.000	18	41.448	42.318	0.650	2.600	A607-65 (65 ksi)
L29	33.750-31.750	2.000	0.000	18	42.318	42.666	0.650	2.600	A607-65 (65 ksi)

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
L30	31.750-31.500	0.250	0.000	18	42.666	42.710	0.650	2.600	A607-65 (65 ksi)
L31	31.500-26.500	5.000	0.000	18	42.710	43.580	0.637	2.550	A607-65 (65 ksi)
L32	26.500-21.500	5.000	0.000	18	43.580	44.450	0.625	2.500	A607-65 (65 ksi)
L33	21.500-17.750	3.750	0.000	18	44.450	45.102	0.625	2.500	A607-65 (65 ksi)
L34	17.750-17.500	0.250	0.000	18	45.102	45.145	0.725	2.900	A607-65 (65 ksi)
L35	17.500-14.250	3.250	0.000	18	45.145	45.711	0.725	2.900	A607-65 (65 ksi)
L36	14.250-14.000	0.250	0.000	18	45.711	45.754	0.637	2.550	A607-65 (65 ksi)
L37	14.000-9.000	5.000	0.000	18	45.754	46.624	0.625	2.500	A607-65 (65 ksi)
L38	9.000-4.000	5.000	0.000	18	46.624	47.494	0.625	2.500	A607-65 (65 ksi)
L39	4.000-0.000	4.000		18	47.494	48.190	0.625	2.500	A607-65 (65 ksi)

Tapered Pole Properties

Section	Tip Dia. in	Area in^2	I in^4	r in	C in	I/C in^3	J in^4	It/Q in^2	w in	w/t
L1	24.336	16.512	1179.768	8.442	12.192	96.766	2361.088	8.257	3.839	17.55
	25.220	17.116	1314.017	8.751	12.634	104.007	2629.762	8.559	3.992	18.25
L2	25.220	17.116	1314.017	8.751	12.634	104.007	2629.762	8.559	3.992	18.25
	26.103	17.720	1458.082	9.060	13.076	111.510	2918.083	8.861	4.145	18.949
L3	26.103	17.720	1458.082	9.060	13.076	111.510	2918.083	8.861	4.145	18.949
	26.986	18.323	1612.311	9.369	13.518	119.275	3226.743	9.163	4.298	19.649
L4	26.986	18.323	1612.311	9.369	13.518	119.275	3226.743	9.163	4.298	19.649
	27.870	18.927	1777.049	9.678	13.960	127.300	3556.436	9.465	4.451	20.349
L5	27.870	18.927	1777.049	9.678	13.960	127.300	3556.436	9.465	4.451	20.349
	28.753	19.531	1952.643	9.986	14.401	135.587	3907.855	9.768	4.604	21.049
L6	28.753	19.531	1952.643	9.986	14.401	135.587	3907.855	9.768	4.604	21.049
	29.901	20.316	2197.713	10.388	14.976	146.751	4398.319	10.160	4.803	21.959
L7	29.452	22.329	2233.892	9.990	14.422	154.893	4470.723	11.167	4.557	18.227
	29.673	23.020	2447.554	10.299	14.864	164.662	4898.328	11.512	4.710	18.839
L8	29.673	23.020	2447.554	10.299	14.864	164.662	4898.328	11.512	4.710	18.839
	30.556	23.710	2674.423	10.607	15.306	174.729	5352.365	11.857	4.863	19.452
L9	30.556	23.710	2674.423	10.607	15.306	174.729	5352.365	11.857	4.863	19.452
	31.440	24.400	2914.895	10.916	15.748	185.096	5833.625	12.202	5.016	20.064
L10	31.440	24.400	2914.895	10.916	15.748	185.096	5833.625	12.202	5.016	20.064
	32.323	25.091	3169.366	11.225	16.190	195.761	6342.903	12.548	5.169	20.677
L11	32.323	25.091	3169.366	11.225	16.190	195.761	6342.903	12.548	5.169	20.677
	32.588	25.298	3248.497	11.318	16.323	199.019	6501.268	12.651	5.215	20.86
L12	32.588	25.298	3248.497	11.318	16.323	199.019	6501.268	12.651	5.215	20.86
	32.632	25.332	3261.812	11.333	16.345	199.564	6527.916	12.668	5.223	20.891
L13	32.601	45.312	5761.605	11.262	16.345	352.507	11530.791	22.660	4.871	10.824
	32.646	45.374	5785.338	11.278	16.367	353.481	11578.288	22.691	4.878	10.841
L14	32.647	44.753	5708.354	11.280	16.367	348.777	11424.218	22.381	4.889	11.018
	33.530	45.978	6190.196	11.589	16.809	368.273	12388.536	22.993	5.042	11.363
L15	33.531	45.339	6106.516	11.591	16.809	363.294	12221.067	22.674	5.053	11.551
	34.414	46.547	6607.769	11.900	17.251	383.044	13224.232	23.278	5.207	11.901
L16	34.414	46.547	6607.769	11.900	17.251	383.044	13224.232	23.278	5.207	11.901

Section	Tip Dia. in	Area in^2	I in^4	r in	C in	I/C in^3	J in^4	It/Q in^2	w in	w/t
	35.828	48.480	7465.610	12.394	17.958	415.731	14941.043	24.245	5.452	12.461
L17	35.311	53.271	7583.200	11.916	17.306	438.182	15176.377	26.640	5.116	10.232
	35.399	54.652	8188.481	12.225	17.748	461.370	16387.738	27.331	5.269	10.538
L18	35.401	53.305	7992.466	12.230	17.748	450.326	15995.449	26.658	5.291	10.853
	36.285	54.652	8613.658	12.539	18.190	473.530	17238.649	27.331	5.444	11.167
L19	36.285	54.652	8613.658	12.539	18.190	473.530	17238.649	27.331	5.444	11.167
	37.169	55.998	9266.230	12.848	18.632	497.317	18544.652	28.005	5.597	11.482
L20	37.169	55.998	9266.230	12.848	18.632	497.317	18544.652	28.005	5.597	11.482
	37.699	56.806	9673.157	13.033	18.898	511.869	19359.043	28.409	5.689	11.67
L21	37.678	72.556	12262.663	12.984	18.898	648.897	24541.462	36.285	5.447	8.716
	37.722	72.642	12306.485	13.000	18.920	650.455	24629.164	36.328	5.455	8.728
L22	37.724	71.214	12072.710	13.004	18.920	638.099	24161.306	35.614	5.477	8.942
	38.608	72.906	12953.835	13.313	19.362	669.036	25924.714	36.460	5.630	9.192
L23	38.608	72.906	12953.835	13.313	19.362	669.036	25924.714	36.460	5.630	9.192
	39.491	74.598	13876.821	13.622	19.804	700.706	27771.901	37.306	5.783	9.442
L24	39.493	73.099	13606.909	13.626	19.804	687.076	27231.723	36.557	5.805	9.675
	40.377	74.757	14553.628	13.935	20.246	718.833	29126.407	37.385	5.958	9.931
L25	40.377	74.757	14553.628	13.935	20.246	718.833	29126.407	37.385	5.958	9.931
	41.261	76.414	15543.272	14.244	20.688	751.306	31106.996	38.214	6.112	10.186
L26	41.263	74.845	15233.682	14.249	20.688	736.342	30487.409	37.430	6.134	10.44
	42.456	77.036	16611.034	14.666	21.285	780.403	33243.926	38.526	6.340	10.792
L27	41.811	81.928	16322.819	14.097	20.503	796.101	32667.117	40.972	5.960	9.169
	41.988	84.171	17700.684	14.483	21.056	840.655	35424.659	42.094	6.151	9.463
L28	41.988	84.171	17700.684	14.483	21.056	840.655	35424.659	42.094	6.151	9.463
	42.871	85.966	18857.194	14.792	21.498	877.171	37739.201	42.991	6.304	9.699
L29	42.871	85.966	18857.194	14.792	21.498	877.171	37739.201	42.991	6.304	9.699
	43.224	86.684	19333.547	14.916	21.674	891.996	38692.533	43.350	6.365	9.793
L30	43.224	86.684	19333.547	14.916	21.674	891.996	38692.533	43.350	6.365	9.793
	43.268	86.774	19393.649	14.931	21.697	893.857	38812.816	43.395	6.373	9.805
L31	43.270	85.130	19037.658	14.936	21.697	877.450	38100.366	42.573	6.395	10.031
	44.154	86.890	20243.088	15.244	22.138	914.385	40512.813	43.453	6.548	10.271
L32	44.156	85.211	19863.501	15.249	22.138	897.239	39753.139	42.614	6.570	10.512
	45.039	86.937	21094.867	15.558	22.580	934.213	42217.491	43.477	6.723	10.757
L33	45.039	86.937	21094.867	15.558	22.580	934.213	42217.491	43.477	6.723	10.757
	45.701	88.231	22051.062	15.789	22.912	962.433	44131.139	44.124	6.838	10.941
L34	45.686	102.118	25407.086	15.754	22.912	1108.909	50847.603	51.069	6.662	9.189
	45.730	102.218	25481.863	15.769	22.934	1111.101	50997.256	51.119	6.670	9.199
L35	45.730	102.218	25481.863	15.769	22.934	1111.101	50997.256	51.119	6.670	9.199
	46.304	103.519	26467.358	15.970	23.221	1139.797	52969.543	51.769	6.769	9.337
L36	46.318	91.203	23409.088	16.001	23.221	1008.095	46848.979	45.610	6.923	10.86
	46.362	91.291	23476.920	16.016	23.243	1010.055	46984.731	45.654	6.931	10.872
L37	46.364	89.525	23035.724	16.021	23.243	991.073	46101.759	44.771	6.953	11.124
	47.247	91.251	24393.610	16.330	23.685	1029.913	48819.319	45.634	7.106	11.369
L38	47.247	91.251	24393.610	16.330	23.685	1029.913	48819.319	45.634	7.106	11.369
	48.130	92.977	25803.837	16.639	24.127	1069.500	51641.628	46.497	7.259	11.614
L39	48.130	92.977	25803.837	16.639	24.127	1069.500	51641.628	46.497	7.259	11.614
	48.837	94.357	26970.369	16.886	24.481	1101.707	53976.227	47.188	7.381	11.81

Tower Elevation ft	Gusset Area (per face) ft^2	Gusset Thickness in	Gusset Grade	Adjust. Factor A_f	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in	Double Angle Stitch Bolt Spacing Redundants in
L1 148.000-143.000				1	1	1			
L2 143.000-138.000				1	1	1			
L3 138.000-133.0				1	1	1			

Tower Elevation ft	Gusset Area (per face) ft²	Gusset Thickness in	Gusset Grade	Adjust. Factor A_f	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in	Double Angle Stitch Bolt Spacing Redundants in
00									
L4				1	1	1			
133.000-128.000									
L5				1	1	1			
128.000-123.000									
L6				1	1	1			
123.000-116.500									
L7				1	1	1			
116.500-115.250									
L8				1	1	1			
115.250-110.250									
L9				1	1	1			
110.250-105.250									
L10				1	1	1			
105.250-100.250									
L11				1	1	1			
100.250-98.750									
L12				1	1	1			
98.750-98.500									
L13				1	1	0.955768			
98.500-98.250									
L14				1	1	0.958228			
98.250-93.250									
L15				1	1	0.961341			
93.250-88.250									
L16				1	1	0.954384			
88.250-80.250									
L17				1	1	0.957771			
80.250-79.750									
L18				1	1	0.973571			
79.750-74.750									
L19				1	1	0.965574			
74.750-69.750									
L20				1	1	0.960958			
69.750-66.750									
L21				1	1	0.943076			
66.750-66.500									
L22				1	1	0.951509			
66.500-61.500									
L23				1	1	0.9415			
61.500-56.500									
L24				1	1	0.951047			
56.500-51.500									
L25				1	1	0.941715			
51.500-46.500									
L26				1	1	0.958676			
46.500-39.750									
L27				1	1	0.959517			
39.750-38.750									
L28				1	1	0.95153			
38.750-33.750									

Tower Elevation ft	Gusset Area (per face) ft²	Gusset Thickness in	Gusset Grade	Adjust. Factor A_f	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in	Double Angle Stitch Bolt Spacing Redundants in
L29 33.750-31.750				1	1	0.948428			
L30 31.750-31.500				1	1	0.948044			
L31 31.500-26.500				1	1	0.958686			
L32 26.500-21.500				1	1	0.970081			
L33 21.500-17.750				1	1	0.964652			
L34 17.750-17.500				1	1	0.992141			
L35 17.500-14.250				1	1	0.986172			
L36 14.250-14.000				1	1	1.00245			
L37 14.000-9.000				1	1	1.01423			
L38 9.000-4.000				1	1	1.00654			
L39 4.000-0.000				1	1	1.00059			

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
LDF7-50A(1-5/8) (E-Per Photo&TIA) **R**	B	No	Surface Ar (CaAa)	138.000 - 0.000	6	6	-0.350 -0.200	1.980		0.001
LDF4-50A(1/2) (E) **R**	A	No	Surface Ar (CaAa)	45.000 - 0.000	1	1	-0.210 -0.200	0.630		0.000
LDF4-50A(1/2) (Ht./TIA) **R**	B	No	Surface Ar (CaAa)	13.000 - 0.000	1	1	0.000 0.030	0.630		0.000
Safety Line 3/8 (E) **R** **R**	A	No	Surface Ar (CaAa)	148.000 - 0.000	1	1	-0.210 -0.200	0.375		0.000
CCI 6" x 1" Plate (E)	A	No	Surface Af (CaAa)	100.750 - 70.750	1	1	0.000 0.050	6.000	14.000	0.000
CCI 6" x 1" Plate (E)	B	No	Surface Af (CaAa)	100.750 - 70.750	1	1	0.000 0.050	6.000	14.000	0.000
CCI 6" x 1" Plate (E) **R**	C	No	Surface Af (CaAa)	100.750 - 70.750	1	1	0.000 0.050	6.000	14.000	0.000
CCI 6.5" x 1.25" Plate (E)	A	No	Surface Af (CaAa)	20.500 - 0.000	1	1	0.100 0.150	6.500	15.500	0.000
CCI 6.5" x 1.25" Plate (E) **R**	A	No	Surface Af (CaAa)	20.500 - 0.000	1	1	-0.150 -0.100	6.500	15.500	0.000
CCI 8.5" x 1.25" Plate	A	No	Surface Af	70.625 -	1	1	0.000	8.500	19.500	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
(E)			(CaAa)	0.000			0.050			
CCI 8.5" x 1.25" Plate	B	No	Surface Af	70.625 -	1	1	0.000	8.500	19.500	0.000
(E)			(CaAa)	0.000			0.050			
CCI 8.5" x 1.25" Plate	C	No	Surface Af	70.625 -	1	1	0.000	8.500	19.500	0.000
(E)			(CaAa)	10.500			0.050			

Feed Line/Linear Appurtenances - Entered As Area

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number		C_AA_A ft²/ft	Weight klf
HB114-1-0813U4-M5J(1-1/4) (3E+1R)	A	No	No	Inside Pole	148.000 - 0.000	4	No Ice	0.000	0.001
							1/2" Ice	0.000	0.001
							1" Ice	0.000	0.001
							2" Ice	0.000	0.001
R									
LDF7-50A(1-5/8) (P)	B	No	No	Inside Pole	138.000 - 0.000	1	No Ice	0.000	0.001
							1/2" Ice	0.000	0.001
							1" Ice	0.000	0.001
							2" Ice	0.000	0.001
R									
L98B-002-XXX_DB (3/8) (R)	C	No	No	Inside Pole	128.000 - 0.000	1	No Ice	0.000	0.000
							1/2" Ice	0.000	0.000
							1" Ice	0.000	0.000
							2" Ice	0.000	0.000
WR-VG86ST-BRD(3/4) (R)	C	No	No	Inside Pole	128.000 - 0.000	5	No Ice	0.000	0.001
							1/2" Ice	0.000	0.001
							1" Ice	0.000	0.001
							2" Ice	0.000	0.001
R									
LDF4-50A(1/2) (R)	C	No	No	Inside Pole	114.000 - 0.000	1	No Ice	0.000	0.000
							1/2" Ice	0.000	0.000
							1" Ice	0.000	0.000
							2" Ice	0.000	0.000
HCS 6X12 4AWG(1-5/8) (R)	C	No	No	Inside Pole	114.000 - 0.000	4	No Ice	0.000	0.002
							1/2" Ice	0.000	0.002
							1" Ice	0.000	0.002
							2" Ice	0.000	0.002
R									
LDF4-50A(1/2) (E)	C	No	No	Inside Pole	79.000 - 0.000	1	No Ice	0.000	0.000
							1/2" Ice	0.000	0.000
							1" Ice	0.000	0.000
							2" Ice	0.000	0.000
R									

Feed Line/Linear Appurtenances Section Areas

Tower Section	Tower Elevation ft	Face	A_R ft²	A_F ft²	C_AA_A In Face ft²	C_AA_A Out Face ft²	Weight K

Tower Section	Tower Elevation ft	Face	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
L1	148.000-143.000	A	0.000	0.000	0.188	0.000	0.025
		B	0.000	0.000	0.000	0.000	0.000
		C	0.000	0.000	0.000	0.000	0.000
L2	143.000-138.000	A	0.000	0.000	0.188	0.000	0.025
		B	0.000	0.000	0.000	0.000	0.000
		C	0.000	0.000	0.000	0.000	0.000
L3	138.000-133.000	A	0.000	0.000	0.188	0.000	0.025
		B	0.000	0.000	5.940	0.000	0.029
		C	0.000	0.000	0.000	0.000	0.000
L4	133.000-128.000	A	0.000	0.000	0.188	0.000	0.025
		B	0.000	0.000	5.940	0.000	0.029
		C	0.000	0.000	0.000	0.000	0.000
L5	128.000-123.000	A	0.000	0.000	0.188	0.000	0.025
		B	0.000	0.000	5.940	0.000	0.029
		C	0.000	0.000	0.000	0.000	0.015
L6	123.000-116.500	A	0.000	0.000	0.244	0.000	0.033
		B	0.000	0.000	7.722	0.000	0.037
		C	0.000	0.000	0.000	0.000	0.019
L7	116.500-115.250	A	0.000	0.000	0.047	0.000	0.006
		B	0.000	0.000	1.485	0.000	0.007
		C	0.000	0.000	0.000	0.000	0.004
L8	115.250-110.250	A	0.000	0.000	0.188	0.000	0.025
		B	0.000	0.000	5.940	0.000	0.029
		C	0.000	0.000	0.000	0.000	0.051
L9	110.250-105.250	A	0.000	0.000	0.188	0.000	0.025
		B	0.000	0.000	5.940	0.000	0.029
		C	0.000	0.000	0.000	0.000	0.064
L10	105.250-100.250	A	0.000	0.000	0.688	0.000	0.025
		B	0.000	0.000	6.440	0.000	0.029
		C	0.000	0.000	0.500	0.000	0.064
L11	100.250-98.750	A	0.000	0.000	1.556	0.000	0.008
		B	0.000	0.000	3.282	0.000	0.009
		C	0.000	0.000	1.500	0.000	0.019
L12	98.750-98.500	A	0.000	0.000	0.259	0.000	0.001
		B	0.000	0.000	0.547	0.000	0.001
		C	0.000	0.000	0.250	0.000	0.003
L13	98.500-98.250	A	0.000	0.000	0.259	0.000	0.001
		B	0.000	0.000	0.547	0.000	0.001
		C	0.000	0.000	0.250	0.000	0.003
L14	98.250-93.250	A	0.000	0.000	5.188	0.000	0.025
		B	0.000	0.000	10.940	0.000	0.029
		C	0.000	0.000	5.000	0.000	0.064
L15	93.250-88.250	A	0.000	0.000	5.188	0.000	0.025
		B	0.000	0.000	10.940	0.000	0.029
		C	0.000	0.000	5.000	0.000	0.064
L16	88.250-80.250	A	0.000	0.000	8.300	0.000	0.040
		B	0.000	0.000	17.504	0.000	0.046
		C	0.000	0.000	8.000	0.000	0.102
L17	80.250-79.750	A	0.000	0.000	0.519	0.000	0.003
		B	0.000	0.000	1.094	0.000	0.003
		C	0.000	0.000	0.500	0.000	0.006
L18	79.750-74.750	A	0.000	0.000	5.188	0.000	0.025
		B	0.000	0.000	10.940	0.000	0.029
		C	0.000	0.000	5.000	0.000	0.064
L19	74.750-69.750	A	0.000	0.000	5.427	0.000	0.025
		B	0.000	0.000	11.180	0.000	0.029
		C	0.000	0.000	5.240	0.000	0.064
L20	69.750-66.750	A	0.000	0.000	4.362	0.000	0.015
		B	0.000	0.000	7.814	0.000	0.017
		C	0.000	0.000	4.250	0.000	0.039
L21	66.750-66.500	A	0.000	0.000	0.364	0.000	0.001

Tower Section	Tower Elevation ft	Face	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
		B	0.000	0.000	0.651	0.000	0.001
		C	0.000	0.000	0.354	0.000	0.003
L22	66.500-61.500	A	0.000	0.000	7.271	0.000	0.025
		B	0.000	0.000	13.023	0.000	0.029
		C	0.000	0.000	7.083	0.000	0.064
L23	61.500-56.500	A	0.000	0.000	7.271	0.000	0.025
		B	0.000	0.000	13.023	0.000	0.029
		C	0.000	0.000	7.083	0.000	0.064
L24	56.500-51.500	A	0.000	0.000	7.271	0.000	0.025
		B	0.000	0.000	13.023	0.000	0.029
		C	0.000	0.000	7.083	0.000	0.064
L25	51.500-46.500	A	0.000	0.000	7.271	0.000	0.025
		B	0.000	0.000	13.023	0.000	0.029
		C	0.000	0.000	7.083	0.000	0.064
L26	46.500-39.750	A	0.000	0.000	10.146	0.000	0.035
		B	0.000	0.000	17.581	0.000	0.039
		C	0.000	0.000	9.563	0.000	0.087
L27	39.750-38.750	A	0.000	0.000	1.517	0.000	0.005
		B	0.000	0.000	2.605	0.000	0.006
		C	0.000	0.000	1.417	0.000	0.013
L28	38.750-33.750	A	0.000	0.000	7.586	0.000	0.026
		B	0.000	0.000	13.023	0.000	0.029
		C	0.000	0.000	7.083	0.000	0.064
L29	33.750-31.750	A	0.000	0.000	3.034	0.000	0.010
		B	0.000	0.000	5.209	0.000	0.011
		C	0.000	0.000	2.833	0.000	0.026
L30	31.750-31.500	A	0.000	0.000	0.379	0.000	0.001
		B	0.000	0.000	0.651	0.000	0.001
		C	0.000	0.000	0.354	0.000	0.003
L31	31.500-26.500	A	0.000	0.000	7.586	0.000	0.026
		B	0.000	0.000	13.023	0.000	0.029
		C	0.000	0.000	7.083	0.000	0.064
L32	26.500-21.500	A	0.000	0.000	7.586	0.000	0.026
		B	0.000	0.000	13.023	0.000	0.029
		C	0.000	0.000	7.083	0.000	0.064
L33	21.500-17.750	A	0.000	0.000	11.648	0.000	0.019
		B	0.000	0.000	9.768	0.000	0.022
		C	0.000	0.000	5.313	0.000	0.048
L34	17.750-17.500	A	0.000	0.000	0.921	0.000	0.001
		B	0.000	0.000	0.651	0.000	0.001
		C	0.000	0.000	0.354	0.000	0.003
L35	17.500-14.250	A	0.000	0.000	11.972	0.000	0.017
		B	0.000	0.000	8.465	0.000	0.019
		C	0.000	0.000	4.604	0.000	0.042
L36	14.250-14.000	A	0.000	0.000	0.921	0.000	0.001
		B	0.000	0.000	0.651	0.000	0.001
		C	0.000	0.000	0.354	0.000	0.003
L37	14.000-9.000	A	0.000	0.000	18.419	0.000	0.026
		B	0.000	0.000	13.275	0.000	0.029
		C	0.000	0.000	4.958	0.000	0.064
L38	9.000-4.000	A	0.000	0.000	18.419	0.000	0.026
		B	0.000	0.000	13.338	0.000	0.029
		C	0.000	0.000	0.000	0.000	0.064
L39	4.000-0.000	A	0.000	0.000	14.735	0.000	0.021
		B	0.000	0.000	10.671	0.000	0.024
		C	0.000	0.000	0.000	0.000	0.052

Feed Line/Linear Appurtenances Section Areas - With Ice

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
L1	148.000-143.000	A	1.479	0.000	0.000	1.666	0.000	0.042
		B		0.000	0.000	0.000	0.000	0.000
		C		0.000	0.000	0.000	0.000	0.000
L2	143.000-138.000	A	1.474	0.000	0.000	1.661	0.000	0.042
		B		0.000	0.000	0.000	0.000	0.000
		C		0.000	0.000	0.000	0.000	0.000
L3	138.000-133.000	A	1.468	0.000	0.000	1.656	0.000	0.042
		B		0.000	0.000	9.261	0.000	0.124
		C		0.000	0.000	0.000	0.000	0.000
L4	133.000-128.000	A	1.463	0.000	0.000	1.650	0.000	0.042
		B		0.000	0.000	9.254	0.000	0.124
		C		0.000	0.000	0.000	0.000	0.000
L5	128.000-123.000	A	1.457	0.000	0.000	1.645	0.000	0.041
		B		0.000	0.000	9.246	0.000	0.124
		C		0.000	0.000	0.000	0.000	0.015
L6	123.000-116.500	A	1.450	0.000	0.000	2.129	0.000	0.054
		B		0.000	0.000	12.009	0.000	0.160
		C		0.000	0.000	0.000	0.000	0.019
L7	116.500-115.250	A	1.446	0.000	0.000	0.409	0.000	0.010
		B		0.000	0.000	2.309	0.000	0.031
		C		0.000	0.000	0.000	0.000	0.004
L8	115.250-110.250	A	1.442	0.000	0.000	1.629	0.000	0.041
		B		0.000	0.000	9.227	0.000	0.123
		C		0.000	0.000	0.000	0.000	0.051
L9	110.250-105.250	A	1.435	0.000	0.000	1.623	0.000	0.041
		B		0.000	0.000	9.219	0.000	0.122
		C		0.000	0.000	0.000	0.000	0.064
L10	105.250-100.250	A	1.428	0.000	0.000	2.259	0.000	0.046
		B		0.000	0.000	9.853	0.000	0.127
		C		0.000	0.000	0.643	0.000	0.069
L11	100.250-98.750	A	1.424	0.000	0.000	2.411	0.000	0.028
		B		0.000	0.000	4.689	0.000	0.052
		C		0.000	0.000	1.927	0.000	0.035
L12	98.750-98.500	A	1.423	0.000	0.000	0.402	0.000	0.005
		B		0.000	0.000	0.781	0.000	0.009
		C		0.000	0.000	0.321	0.000	0.006
L13	98.500-98.250	A	1.422	0.000	0.000	0.402	0.000	0.005
		B		0.000	0.000	0.781	0.000	0.009
		C		0.000	0.000	0.321	0.000	0.006
L14	98.250-93.250	A	1.418	0.000	0.000	8.024	0.000	0.094
		B		0.000	0.000	15.616	0.000	0.174
		C		0.000	0.000	6.418	0.000	0.117
L15	93.250-88.250	A	1.411	0.000	0.000	8.009	0.000	0.094
		B		0.000	0.000	15.599	0.000	0.173
		C		0.000	0.000	6.411	0.000	0.117
L16	88.250-80.250	A	1.400	0.000	0.000	12.781	0.000	0.149
		B		0.000	0.000	24.921	0.000	0.276
		C		0.000	0.000	10.240	0.000	0.186
L17	80.250-79.750	A	1.393	0.000	0.000	0.799	0.000	0.009
		B		0.000	0.000	1.558	0.000	0.017
		C		0.000	0.000	0.640	0.000	0.012
L18	79.750-74.750	A	1.388	0.000	0.000	7.964	0.000	0.092
		B		0.000	0.000	15.548	0.000	0.171
		C		0.000	0.000	6.388	0.000	0.116
L19	74.750-69.750	A	1.379	0.000	0.000	8.150	0.000	0.093
		B		0.000	0.000	15.733	0.000	0.171
		C		0.000	0.000	6.584	0.000	0.117
L20	69.750-66.750	A	1.371	0.000	0.000	6.008	0.000	0.063
		B		0.000	0.000	10.556	0.000	0.110
		C		0.000	0.000	5.073	0.000	0.078

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
L21	66.750-66.500	A	1.368	0.000	0.000	0.500	0.000	0.005
		B		0.000	0.000	0.879	0.000	0.009
		C		0.000	0.000	0.423	0.000	0.007
L22	66.500-61.500	A	1.362	0.000	0.000	9.995	0.000	0.105
		B		0.000	0.000	17.573	0.000	0.182
		C		0.000	0.000	8.446	0.000	0.130
L23	61.500-56.500	A	1.351	0.000	0.000	9.973	0.000	0.104
		B		0.000	0.000	17.549	0.000	0.181
		C		0.000	0.000	8.435	0.000	0.129
L24	56.500-51.500	A	1.339	0.000	0.000	9.950	0.000	0.103
		B		0.000	0.000	17.522	0.000	0.180
		C		0.000	0.000	8.423	0.000	0.128
L25	51.500-46.500	A	1.326	0.000	0.000	9.924	0.000	0.102
		B		0.000	0.000	17.493	0.000	0.178
		C		0.000	0.000	8.410	0.000	0.128
L26	46.500-39.750	A	1.310	0.000	0.000	15.057	0.000	0.153
		B		0.000	0.000	23.564	0.000	0.237
		C		0.000	0.000	11.330	0.000	0.171
L27	39.750-38.750	A	1.297	0.000	0.000	2.303	0.000	0.023
		B		0.000	0.000	3.491	0.000	0.035
		C		0.000	0.000	1.679	0.000	0.025
L28	38.750-33.750	A	1.287	0.000	0.000	11.447	0.000	0.115
		B		0.000	0.000	17.404	0.000	0.173
		C		0.000	0.000	8.370	0.000	0.125
L29	33.750-31.750	A	1.274	0.000	0.000	4.563	0.000	0.046
		B		0.000	0.000	6.950	0.000	0.069
		C		0.000	0.000	3.343	0.000	0.050
L30	31.750-31.500	A	1.270	0.000	0.000	0.570	0.000	0.006
		B		0.000	0.000	0.868	0.000	0.009
		C		0.000	0.000	0.418	0.000	0.006
L31	31.500-26.500	A	1.259	0.000	0.000	11.362	0.000	0.112
		B		0.000	0.000	17.340	0.000	0.170
		C		0.000	0.000	8.342	0.000	0.124
L32	26.500-21.500	A	1.235	0.000	0.000	11.291	0.000	0.110
		B		0.000	0.000	17.287	0.000	0.167
		C		0.000	0.000	8.318	0.000	0.122
L33	21.500-17.750	A	1.210	0.000	0.000	15.703	0.000	0.133
		B		0.000	0.000	12.924	0.000	0.123
		C		0.000	0.000	6.220	0.000	0.091
L34	17.750-17.500	A	1.197	0.000	0.000	1.220	0.000	0.010
		B		0.000	0.000	0.860	0.000	0.008
		C		0.000	0.000	0.414	0.000	0.006
L35	17.500-14.250	A	1.185	0.000	0.000	15.824	0.000	0.128
		B		0.000	0.000	11.163	0.000	0.104
		C		0.000	0.000	5.374	0.000	0.078
L36	14.250-14.000	A	1.171	0.000	0.000	1.214	0.000	0.010
		B		0.000	0.000	0.857	0.000	0.008
		C		0.000	0.000	0.413	0.000	0.006
L37	14.000-9.000	A	1.147	0.000	0.000	24.156	0.000	0.191
		B		0.000	0.000	18.260	0.000	0.167
		C		0.000	0.000	5.761	0.000	0.102
L38	9.000-4.000	A	1.084	0.000	0.000	23.838	0.000	0.179
		B		0.000	0.000	18.345	0.000	0.161
		C		0.000	0.000	0.000	0.000	0.064
L39	4.000-0.000	A	0.963	0.000	0.000	18.588	0.000	0.127
		B		0.000	0.000	14.363	0.000	0.116
		C		0.000	0.000	0.000	0.000	0.052

Feed Line Center of Pressure

Section	Elevation	CP_X	CP_Z	CP_X Ice	CP_Z Ice
	ft	in	in	in	in
L1	148.000-143.000	-0.300	-0.028	-1.325	-0.125
L2	143.000-138.000	-0.300	-0.028	-1.330	-0.126
L3	138.000-133.000	2.499	-5.263	1.298	-4.115
L4	133.000-128.000	2.528	-5.325	1.319	-4.178
L5	128.000-123.000	2.556	-5.384	1.339	-4.240
L6	123.000-116.500	2.587	-5.450	1.362	-4.308
L7	116.500-115.250	2.594	-5.466	1.366	-4.324
L8	115.250-110.250	2.610	-5.500	1.380	-4.360
L9	110.250-105.250	2.635	-5.554	1.399	-4.415
L10	105.250-100.250	2.429	-5.120	1.336	-4.209
L11	100.250-98.750	1.381	-2.910	0.887	-2.794
L12	98.750-98.500	1.385	-2.919	0.890	-2.802
L13	98.500-98.250	1.386	-2.922	0.891	-2.805
L14	98.250-93.250	1.398	-2.948	0.900	-2.830
L15	93.250-88.250	1.421	-2.996	0.916	-2.876
L16	88.250-80.250	1.450	-3.057	0.936	-2.935
L17	80.250-79.750	1.456	-3.070	0.940	-2.948
L18	79.750-74.750	1.468	-3.096	0.951	-2.972
L19	74.750-69.750	1.457	-3.073	0.956	-2.981
L20	69.750-66.750	1.059	-2.234	0.874	-2.720
L21	66.750-66.500	1.064	-2.244	0.879	-2.734
L22	66.500-61.500	1.071	-2.260	0.887	-2.755
L23	61.500-56.500	1.085	-2.289	0.902	-2.796
L24	56.500-51.500	1.099	-2.317	0.918	-2.835
L25	51.500-46.500	1.112	-2.346	0.934	-2.874
L26	46.500-39.750	1.016	-2.376	0.507	-2.900
L27	39.750-38.750	0.986	-2.377	0.385	-2.897
L28	38.750-33.750	0.992	-2.394	0.400	-2.919
L29	33.750-31.750	1.206	-2.910	0.410	-2.945
L30	31.750-31.500	1.210	-2.919	0.413	-2.953
L31	31.500-26.500	1.218	-2.939	0.422	-2.971
L32	26.500-21.500	1.233	-2.976	0.439	-3.006
L33	21.500-17.750	-1.851	-4.197	-2.001	-4.016
L34	17.750-17.500	-2.753	-4.561	-2.742	-4.329
L35	17.500-14.250	-2.766	-4.583	-2.749	-4.347
L36	14.250-14.000	-2.779	-4.604	-2.754	-4.365
L37	14.000-9.000	-2.699	-5.854	-2.407	-5.418
L38	9.000-4.000	-2.734	-9.143	-2.320	-7.917
L39	4.000-0.000	-2.764	-9.243	-2.303	-7.987

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_a No Ice	K_a Ice
L1	19	Safety Line 3/8	143.00 - 148.00	1.0000	1.0000
L2	19	Safety Line 3/8	138.00 - 143.00	1.0000	1.0000
L3	4	LDF7-50A(1-5/8)	133.00 -	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L3	19	Safety Line 3/8	138.00 - 133.00	1.0000	1.0000
L4	4	LDF7-50A(1-5/8)	138.00 - 128.00	1.0000	1.0000
L4	19	Safety Line 3/8	133.00 - 128.00	1.0000	1.0000
L5	4	LDF7-50A(1-5/8)	128.00 - 123.00	1.0000	1.0000
L5	19	Safety Line 3/8	128.00 - 123.00	1.0000	1.0000
L6	4	LDF7-50A(1-5/8)	123.00 - 116.50	1.0000	1.0000
L6	19	Safety Line 3/8	123.00 - 116.50	1.0000	1.0000
L8	4	LDF7-50A(1-5/8)	115.25 - 110.25	1.0000	1.0000
L8	19	Safety Line 3/8	115.25 - 110.25	1.0000	1.0000
L9	4	LDF7-50A(1-5/8)	110.25 - 105.25	1.0000	1.0000
L9	19	Safety Line 3/8	110.25 - 105.25	1.0000	1.0000
L10	4	LDF7-50A(1-5/8)	105.25 - 100.25	1.0000	1.0000
L10	19	Safety Line 3/8	105.25 - 100.25	1.0000	1.0000
L10	22	CCI 6" x 1" Plate	105.25 - 100.75	1.0000	1.0000
L10	23	CCI 6" x 1" Plate	100.25 - 100.75	1.0000	1.0000
L10	24	CCI 6" x 1" Plate	100.25 - 100.75	1.0000	1.0000
L11	4	LDF7-50A(1-5/8)	98.75 - 100.25	1.0000	1.0000
L11	19	Safety Line 3/8	98.75 - 100.25	1.0000	1.0000
L11	22	CCI 6" x 1" Plate	98.75 - 100.25	1.0000	1.0000
L11	23	CCI 6" x 1" Plate	98.75 - 100.25	1.0000	1.0000
L11	24	CCI 6" x 1" Plate	98.75 - 100.25	1.0000	1.0000
L12	4	LDF7-50A(1-5/8)	98.50 - 98.75	1.0000	1.0000
L12	19	Safety Line 3/8	98.50 - 98.75	1.0000	1.0000
L12	22	CCI 6" x 1" Plate	98.50 - 98.75	1.0000	1.0000
L12	23	CCI 6" x 1" Plate	98.50 - 98.75	1.0000	1.0000
L12	24	CCI 6" x 1" Plate	98.50 - 98.75	1.0000	1.0000
L13	4	LDF7-50A(1-5/8)	98.25 - 98.50	1.0000	1.0000
L13	19	Safety Line 3/8	98.25 - 98.50	1.0000	1.0000
L13	22	CCI 6" x 1" Plate	98.25 - 98.50	1.0000	1.0000
L13	23	CCI 6" x 1" Plate	98.25 - 98.50	1.0000	1.0000
L13	24	CCI 6" x 1" Plate	98.25 - 98.50	1.0000	1.0000
L14	4	LDF7-50A(1-5/8)	93.25 - 98.25	1.0000	1.0000
L14	19	Safety Line 3/8	93.25 - 98.25	1.0000	1.0000
L14	22	CCI 6" x 1" Plate	93.25 - 98.25	1.0000	1.0000
L14	23	CCI 6" x 1" Plate	93.25 - 98.25	1.0000	1.0000
L14	24	CCI 6" x 1" Plate	93.25 - 98.25	1.0000	1.0000
L15	4	LDF7-50A(1-5/8)	88.25 - 93.25	1.0000	1.0000
L15	19	Safety Line 3/8	88.25 - 93.25	1.0000	1.0000
L15	22	CCI 6" x 1" Plate	88.25 - 93.25	1.0000	1.0000
L15	23	CCI 6" x 1" Plate	88.25 - 93.25	1.0000	1.0000
L15	24	CCI 6" x 1" Plate	88.25 - 93.25	1.0000	1.0000
L16	4	LDF7-50A(1-5/8)	80.25 - 88.25	1.0000	1.0000
L16	19	Safety Line 3/8	80.25 - 88.25	1.0000	1.0000
L16	22	CCI 6" x 1" Plate	80.25 - 88.25	1.0000	1.0000
L16	23	CCI 6" x 1" Plate	80.25 - 88.25	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L16	24	CCI 6" x 1" Plate	80.25 - 88.25	1.0000	1.0000
L18	4	LDF7-50A(1-5/8)	74.75 - 79.75	1.0000	1.0000
L18	19	Safety Line 3/8	74.75 - 79.75	1.0000	1.0000
L18	22	CCI 6" x 1" Plate	74.75 - 79.75	1.0000	1.0000
L18	23	CCI 6" x 1" Plate	74.75 - 79.75	1.0000	1.0000
L18	24	CCI 6" x 1" Plate	74.75 - 79.75	1.0000	1.0000
L19	4	LDF7-50A(1-5/8)	69.75 - 74.75	1.0000	1.0000
L19	19	Safety Line 3/8	69.75 - 74.75	1.0000	1.0000
L19	22	CCI 6" x 1" Plate	70.75 - 74.75	1.0000	1.0000
L19	23	CCI 6" x 1" Plate	70.75 - 74.75	1.0000	1.0000
L19	24	CCI 6" x 1" Plate	70.75 - 74.75	1.0000	1.0000
L19	29	CCI 8.5" x 1.25" Plate	69.75 - 70.63	1.0000	1.0000
L19	30	CCI 8.5" x 1.25" Plate	69.75 - 70.63	1.0000	1.0000
L19	31	CCI 8.5" x 1.25" Plate	69.75 - 70.63	1.0000	1.0000
L20	4	LDF7-50A(1-5/8)	66.75 - 69.75	1.0000	1.0000
L20	19	Safety Line 3/8	66.75 - 69.75	1.0000	1.0000
L20	29	CCI 8.5" x 1.25" Plate	66.75 - 69.75	1.0000	1.0000
L20	30	CCI 8.5" x 1.25" Plate	66.75 - 69.75	1.0000	1.0000
L20	31	CCI 8.5" x 1.25" Plate	66.75 - 69.75	1.0000	1.0000
L21	4	LDF7-50A(1-5/8)	66.50 - 66.75	1.0000	1.0000
L21	19	Safety Line 3/8	66.50 - 66.75	1.0000	1.0000
L21	29	CCI 8.5" x 1.25" Plate	66.50 - 66.75	1.0000	1.0000
L21	30	CCI 8.5" x 1.25" Plate	66.50 - 66.75	1.0000	1.0000
L21	31	CCI 8.5" x 1.25" Plate	66.50 - 66.75	1.0000	1.0000
L22	4	LDF7-50A(1-5/8)	61.50 - 66.50	1.0000	1.0000
L22	19	Safety Line 3/8	61.50 - 66.50	1.0000	1.0000
L22	29	CCI 8.5" x 1.25" Plate	61.50 - 66.50	1.0000	1.0000
L22	30	CCI 8.5" x 1.25" Plate	61.50 - 66.50	1.0000	1.0000
L22	31	CCI 8.5" x 1.25" Plate	61.50 - 66.50	1.0000	1.0000
L23	4	LDF7-50A(1-5/8)	56.50 - 61.50	1.0000	1.0000
L23	19	Safety Line 3/8	56.50 - 61.50	1.0000	1.0000
L23	29	CCI 8.5" x 1.25" Plate	56.50 - 61.50	1.0000	1.0000
L23	30	CCI 8.5" x 1.25" Plate	56.50 - 61.50	1.0000	1.0000
L23	31	CCI 8.5" x 1.25" Plate	56.50 - 61.50	1.0000	1.0000
L24	4	LDF7-50A(1-5/8)	51.50 - 56.50	1.0000	1.0000
L24	19	Safety Line 3/8	51.50 - 56.50	1.0000	1.0000
L24	29	CCI 8.5" x 1.25" Plate	51.50 - 56.50	1.0000	1.0000
L24	30	CCI 8.5" x 1.25" Plate	51.50 - 56.50	1.0000	1.0000
L24	31	CCI 8.5" x 1.25" Plate	51.50 - 56.50	1.0000	1.0000
L25	4	LDF7-50A(1-5/8)	46.50 - 51.50	1.0000	1.0000
L25	19	Safety Line 3/8	46.50 - 51.50	1.0000	1.0000
L25	29	CCI 8.5" x 1.25" Plate	46.50 - 51.50	1.0000	1.0000
L25	30	CCI 8.5" x 1.25" Plate	46.50 - 51.50	1.0000	1.0000
L25	31	CCI 8.5" x 1.25" Plate	46.50 - 51.50	1.0000	1.0000
L26	4	LDF7-50A(1-5/8)	39.75 - 46.50	1.0000	1.0000
L26	15	LDF4-50A(1/2)	39.75 - 45.00	1.0000	1.0000
L26	19	Safety Line 3/8	39.75 - 46.50	1.0000	1.0000
L26	29	CCI 8.5" x 1.25" Plate	39.75 - 46.50	1.0000	1.0000
L26	30	CCI 8.5" x 1.25" Plate	39.75 - 46.50	1.0000	1.0000
L26	31	CCI 8.5" x 1.25" Plate	39.75 - 46.50	1.0000	1.0000
L28	4	LDF7-50A(1-5/8)	33.75 - 38.75	1.0000	1.0000
L28	15	LDF4-50A(1/2)	33.75 - 38.75	1.0000	1.0000
L28	19	Safety Line 3/8	33.75 - 38.75	1.0000	1.0000
L28	29	CCI 8.5" x 1.25" Plate	33.75 - 38.75	1.0000	1.0000
L28	30	CCI 8.5" x 1.25" Plate	33.75 - 38.75	1.0000	1.0000
L28	31	CCI 8.5" x 1.25" Plate	33.75 - 38.75	1.0000	1.0000
L29	4	LDF7-50A(1-5/8)	31.75 - 33.75	1.0000	1.0000
L29	15	LDF4-50A(1/2)	31.75 - 33.75	1.0000	1.0000
L29	19	Safety Line 3/8	31.75 - 33.75	1.0000	1.0000
L29	29	CCI 8.5" x 1.25" Plate	31.75 - 33.75	1.0000	1.0000
L29	30	CCI 8.5" x 1.25" Plate	31.75 - 33.75	1.0000	1.0000
L29	31	CCI 8.5" x 1.25" Plate	31.75 - 33.75	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L30	4	LDF7-50A(1-5/8)	31.50 - 31.75	1.0000	1.0000
L30	15	LDF4-50A(1/2)	31.50 - 31.75	1.0000	1.0000
L30	19	Safety Line 3/8	31.50 - 31.75	1.0000	1.0000
L30	29	CCI 8.5" x 1.25" Plate	31.50 - 31.75	1.0000	1.0000
L30	30	CCI 8.5" x 1.25" Plate	31.50 - 31.75	1.0000	1.0000
L30	31	CCI 8.5" x 1.25" Plate	31.50 - 31.75	1.0000	1.0000
L31	4	LDF7-50A(1-5/8)	26.50 - 31.50	1.0000	1.0000
L31	15	LDF4-50A(1/2)	26.50 - 31.50	1.0000	1.0000
L31	19	Safety Line 3/8	26.50 - 31.50	1.0000	1.0000
L31	29	CCI 8.5" x 1.25" Plate	26.50 - 31.50	1.0000	1.0000
L31	30	CCI 8.5" x 1.25" Plate	26.50 - 31.50	1.0000	1.0000
L31	31	CCI 8.5" x 1.25" Plate	26.50 - 31.50	1.0000	1.0000
L32	4	LDF7-50A(1-5/8)	21.50 - 26.50	1.0000	1.0000
L32	15	LDF4-50A(1/2)	21.50 - 26.50	1.0000	1.0000
L32	19	Safety Line 3/8	21.50 - 26.50	1.0000	1.0000
L32	29	CCI 8.5" x 1.25" Plate	21.50 - 26.50	1.0000	1.0000
L32	30	CCI 8.5" x 1.25" Plate	21.50 - 26.50	1.0000	1.0000
L32	31	CCI 8.5" x 1.25" Plate	21.50 - 26.50	1.0000	1.0000
L33	4	LDF7-50A(1-5/8)	17.75 - 21.50	1.0000	1.0000
L33	15	LDF4-50A(1/2)	17.75 - 21.50	1.0000	1.0000
L33	19	Safety Line 3/8	17.75 - 21.50	1.0000	1.0000
L33	26	CCI 6.5" x 1.25" Plate	17.75 - 20.50	1.0000	1.0000
L33	27	CCI 6.5" x 1.25" Plate	17.75 - 20.50	1.0000	1.0000
L33	29	CCI 8.5" x 1.25" Plate	17.75 - 21.50	1.0000	1.0000
L33	30	CCI 8.5" x 1.25" Plate	17.75 - 21.50	1.0000	1.0000
L33	31	CCI 8.5" x 1.25" Plate	17.75 - 21.50	1.0000	1.0000
L34	4	LDF7-50A(1-5/8)	17.50 - 17.75	1.0000	1.0000
L34	15	LDF4-50A(1/2)	17.50 - 17.75	1.0000	1.0000
L34	19	Safety Line 3/8	17.50 - 17.75	1.0000	1.0000
L34	26	CCI 6.5" x 1.25" Plate	17.50 - 17.75	1.0000	1.0000
L34	27	CCI 6.5" x 1.25" Plate	17.50 - 17.75	1.0000	1.0000
L34	29	CCI 8.5" x 1.25" Plate	17.50 - 17.75	1.0000	1.0000
L34	30	CCI 8.5" x 1.25" Plate	17.50 - 17.75	1.0000	1.0000
L34	31	CCI 8.5" x 1.25" Plate	17.50 - 17.75	1.0000	1.0000
L35	4	LDF7-50A(1-5/8)	14.25 - 17.50	1.0000	1.0000
L35	15	LDF4-50A(1/2)	14.25 - 17.50	1.0000	1.0000
L35	19	Safety Line 3/8	14.25 - 17.50	1.0000	1.0000
L35	26	CCI 6.5" x 1.25" Plate	14.25 - 17.50	1.0000	1.0000
L35	27	CCI 6.5" x 1.25" Plate	14.25 - 17.50	1.0000	1.0000
L35	29	CCI 8.5" x 1.25" Plate	14.25 - 17.50	1.0000	1.0000
L35	30	CCI 8.5" x 1.25" Plate	14.25 - 17.50	1.0000	1.0000
L35	31	CCI 8.5" x 1.25" Plate	14.25 - 17.50	1.0000	1.0000
L36	4	LDF7-50A(1-5/8)	14.00 - 14.25	1.0000	1.0000
L36	15	LDF4-50A(1/2)	14.00 - 14.25	1.0000	1.0000
L36	19	Safety Line 3/8	14.00 - 14.25	1.0000	1.0000
L36	26	CCI 6.5" x 1.25" Plate	14.00 - 14.25	1.0000	1.0000
L36	27	CCI 6.5" x 1.25" Plate	14.00 - 14.25	1.0000	1.0000
L36	29	CCI 8.5" x 1.25" Plate	14.00 - 14.25	1.0000	1.0000
L36	30	CCI 8.5" x 1.25" Plate	14.00 - 14.25	1.0000	1.0000
L36	31	CCI 8.5" x 1.25" Plate	14.00 - 14.25	1.0000	1.0000
L37	4	LDF7-50A(1-5/8)	9.00 - 14.00	1.0000	1.0000
L37	15	LDF4-50A(1/2)	9.00 - 14.00	1.0000	1.0000
L37	17	LDF4-50A(1/2)	9.00 - 13.00	1.0000	1.0000
L37	19	Safety Line 3/8	9.00 - 14.00	1.0000	1.0000
L37	26	CCI 6.5" x 1.25" Plate	9.00 - 14.00	1.0000	1.0000
L37	27	CCI 6.5" x 1.25" Plate	9.00 - 14.00	1.0000	1.0000
L37	29	CCI 8.5" x 1.25" Plate	9.00 - 14.00	1.0000	1.0000
L37	30	CCI 8.5" x 1.25" Plate	9.00 - 14.00	1.0000	1.0000
L37	31	CCI 8.5" x 1.25" Plate	10.50 - 14.00	1.0000	1.0000
L38	4	LDF7-50A(1-5/8)	4.00 - 9.00	1.0000	1.0000
L38	15	LDF4-50A(1/2)	4.00 - 9.00	1.0000	1.0000
L38	17	LDF4-50A(1/2)	4.00 - 9.00	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L38	19	Safety Line 3/8	4.00 - 9.00	1.0000	1.0000
L38	26	CCI 6.5" x 1.25" Plate	4.00 - 9.00	1.0000	1.0000
L38	27	CCI 6.5" x 1.25" Plate	4.00 - 9.00	1.0000	1.0000
L38	29	CCI 8.5" x 1.25" Plate	4.00 - 9.00	1.0000	1.0000
L38	30	CCI 8.5" x 1.25" Plate	4.00 - 9.00	1.0000	1.0000
L39	4	LDF7-50A(1-5/8)	0.00 - 4.00	1.0000	1.0000
L39	15	LDF4-50A(1/2)	0.00 - 4.00	1.0000	1.0000
L39	17	LDF4-50A(1/2)	0.00 - 4.00	1.0000	1.0000
L39	19	Safety Line 3/8	0.00 - 4.00	1.0000	1.0000
L39	26	CCI 6.5" x 1.25" Plate	0.00 - 4.00	1.0000	1.0000
L39	27	CCI 6.5" x 1.25" Plate	0.00 - 4.00	1.0000	1.0000
L39	29	CCI 8.5" x 1.25" Plate	0.00 - 4.00	1.0000	1.0000
L39	30	CCI 8.5" x 1.25" Plate	0.00 - 4.00	1.0000	1.0000

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
Top Hat (E)	C	None		0.000	149.500	No Ice	3.000	3.000	0.081
						1/2" Ice	3.480	3.480	0.111
						1" Ice	3.960	3.960	0.141
						2" Ice	4.920	4.920	0.201
R									
800MHZ RRH (E-CL/App)	A	From Leg	1.000 0.000 1.000	0.000	149.000	No Ice	2.134	1.773	0.053
						1/2" Ice	2.320	1.946	0.074
						1" Ice	2.512	2.127	0.098
						2" Ice	2.920	2.510	0.157
800MHZ RRH (E-CL/App)	B	From Leg	1.000 0.000 1.000	0.000	149.000	No Ice	2.134	1.773	0.053
						1/2" Ice	2.320	1.946	0.074
						1" Ice	2.512	2.127	0.098
						2" Ice	2.920	2.510	0.157
800MHZ RRH (E-CL/App)	C	From Leg	1.000 0.000 1.000	0.000	149.000	No Ice	2.134	1.773	0.053
						1/2" Ice	2.320	1.946	0.074
						1" Ice	2.512	2.127	0.098
						2" Ice	2.920	2.510	0.157
800 EXTERNAL NOTCH FILTER (E-CL/App)	A	From Leg	1.000 0.000 1.000	0.000	149.000	No Ice	0.660	0.321	0.011
						1/2" Ice	0.763	0.398	0.017
						1" Ice	0.873	0.483	0.024
						2" Ice	1.115	0.674	0.045
800 EXTERNAL NOTCH FILTER (E-CL/App)	B	From Leg	1.000 0.000 1.000	0.000	149.000	No Ice	0.660	0.321	0.011
						1/2" Ice	0.763	0.398	0.017
						1" Ice	0.873	0.483	0.024
						2" Ice	1.115	0.674	0.045
800 EXTERNAL NOTCH FILTER (E-CL/App)	C	From Leg	1.000 0.000 1.000	0.000	149.000	No Ice	0.660	0.321	0.011
						1/2" Ice	0.763	0.398	0.017
						1" Ice	0.873	0.483	0.024
						2" Ice	1.115	0.674	0.045
1900MHZ RRH (65MHZ) (E-CL/App)	A	From Leg	1.000 0.000 1.000	0.000	149.000	No Ice	2.313	2.375	0.060
						1/2" Ice	2.517	2.581	0.084
						1" Ice	2.728	2.794	0.111

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
						2" Ice	3.174	3.243	0.176
1900MHZ RRH (65MHZ) (E-CL/App)	B	From Leg	1.000 0.000 1.000	0.000	149.000	No Ice 1/2" Ice 1" Ice 2" Ice	2.313 2.517 2.728 3.174	2.375 2.581 2.794 3.243	0.060 0.084 0.111 0.176
1900MHZ RRH (65MHZ) (E-CL/App)	C	From Leg	1.000 0.000 1.000	0.000	149.000	No Ice 1/2" Ice 1" Ice 2" Ice	2.313 2.517 2.728 3.174	2.375 2.581 2.794 3.243	0.060 0.084 0.111 0.176
Pipe Mount [PM 601-3] (E)	C	None		0.000	149.000	No Ice 1/2" Ice 1" Ice 2" Ice	3.170 3.790 4.420 5.760	3.170 3.790 4.420 5.760	0.195 0.232 0.279 0.401
R									
APXVSPP18-C-A20 w/ Mount Pipe (E)	A	From Leg	4.000 0.000 2.000	0.000	148.000	No Ice 1/2" Ice 1" Ice 2" Ice	4.600 5.050 5.500 6.440	4.010 4.450 4.890 5.820	0.095 0.160 0.235 0.419
APXVSPP18-C-A20 w/ Mount Pipe (E)	B	From Leg	4.000 0.000 2.000	0.000	148.000	No Ice 1/2" Ice 1" Ice 2" Ice	4.600 5.050 5.500 6.440	4.010 4.450 4.890 5.820	0.095 0.160 0.235 0.419
APXVSPP18-C-A20 w/ Mount Pipe (E)	C	From Leg	4.000 0.000 2.000	0.000	148.000	No Ice 1/2" Ice 1" Ice 2" Ice	4.600 5.050 5.500 6.440	4.010 4.450 4.890 5.820	0.095 0.160 0.235 0.419
(3) ACU-A20-N (E)	A	From Leg	4.000 0.000 0.000	0.000	148.000	No Ice 1/2" Ice 1" Ice 2" Ice	0.067 0.104 0.148 0.259	0.117 0.162 0.215 0.343	0.001 0.002 0.004 0.012
(3) ACU-A20-N (E)	B	From Leg	4.000 0.000 0.000	0.000	148.000	No Ice 1/2" Ice 1" Ice 2" Ice	0.067 0.104 0.148 0.259	0.117 0.162 0.215 0.343	0.001 0.002 0.004 0.012
(3) ACU-A20-N (E)	C	From Leg	4.000 0.000 0.000	0.000	148.000	No Ice 1/2" Ice 1" Ice 2" Ice	0.067 0.104 0.148 0.259	0.117 0.162 0.215 0.343	0.001 0.002 0.004 0.012
APXVTM14-ALU-I20 w/ Mount Pipe (R-Installed Per Photo)	A	From Leg	4.000 0.000 2.000	0.000	148.000	No Ice 1/2" Ice 1" Ice 2" Ice	4.090 4.480 4.880 5.710	2.860 3.230 3.610 4.400	0.077 0.127 0.185 0.331
APXVTM14-ALU-I20 w/ Mount Pipe (R-Installed Per Photo)	B	From Leg	4.000 0.000 2.000	0.000	148.000	No Ice 1/2" Ice 1" Ice 2" Ice	4.090 4.480 4.880 5.710	2.860 3.230 3.610 4.400	0.077 0.127 0.185 0.331
APXVTM14-ALU-I20 w/ Mount Pipe (R-Installed Per Photo)	C	From Leg	4.000 0.000 2.000	0.000	148.000	No Ice 1/2" Ice 1" Ice 2" Ice	4.090 4.480 4.880 5.710	2.860 3.230 3.610 4.400	0.077 0.127 0.185 0.331
(2) TD-RRH8x20-25 (R-Installed Per Photo)	A	From Leg	4.000 0.000 0.000	0.000	148.000	No Ice 1/2" Ice 1" Ice 2" Ice	4.045 4.298 4.557 5.098	1.535 1.714 1.901 2.295	0.070 0.097 0.128 0.201
TD-RRH8x20-25 (R-Installed Per Photo)	B	From Leg	4.000 0.000 0.000	0.000	148.000	No Ice 1/2" Ice 1" Ice	4.045 4.298 4.557	1.535 1.714 1.901	0.070 0.097 0.128

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
						2" Ice	5.098	2.295	0.201
6' x 2" Mount Pipe (E)	A	From Leg	4.000 0.000 0.000	0.000	148.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.425 1.925 2.294 3.060	1.425 1.925 2.294 3.060	0.022 0.033 0.048 0.090
6' x 2" Mount Pipe (E)	B	From Leg	4.000 0.000 0.000	0.000	148.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.425 1.925 2.294 3.060	1.425 1.925 2.294 3.060	0.022 0.033 0.048 0.090
6' x 2" Mount Pipe (E)	C	From Leg	4.000 0.000 0.000	0.000	148.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.425 1.925 2.294 3.060	1.425 1.925 2.294 3.060	0.022 0.033 0.048 0.090
Platform Mount [LP 712-1] (12'/TIA)	C	None		0.000	148.000	No Ice 1/2" Ice 1" Ice 2" Ice	24.560 27.920 31.270 37.980	24.560 27.920 31.270 37.980	1.335 1.915 2.548 3.971
R									
(2) LPA-80080/6CF (E-Installed)	A	From Leg	4.000 0.000 0.000	0.000	138.000	No Ice 1/2" Ice 1" Ice 2" Ice	4.326 4.764 5.210 6.123	8.619 9.075 9.539 10.486	0.021 0.069 0.123 0.251
(2) LPA-80063/6CF (E-Installed)	B	From Leg	4.000 0.000 0.000	0.000	138.000	No Ice 1/2" Ice 1" Ice 2" Ice	9.593 10.059 10.532 11.498	8.575 9.031 9.494 10.441	0.027 0.101 0.182 0.364
(2) LPA-80080/6CF (E-Installed)	C	From Leg	4.000 0.000 0.000	0.000	138.000	No Ice 1/2" Ice 1" Ice 2" Ice	4.326 4.764 5.210 6.123	8.619 9.075 9.539 10.486	0.021 0.069 0.123 0.251
(2) QS6656-5 (P)	A	From Leg	4.000 0.000 0.000	0.000	138.000	No Ice 1/2" Ice 1" Ice 2" Ice	4.010 4.410 4.810 5.650	3.370 3.760 4.150 4.970	0.065 0.122 0.186 0.332
(2) QS6656-5 (P)	B	From Leg	4.000 0.000 0.000	0.000	138.000	No Ice 1/2" Ice 1" Ice 2" Ice	4.010 4.410 4.810 5.650	3.370 3.760 4.150 4.970	0.065 0.122 0.186 0.332
(2) QS6656-5 (P)	C	From Leg	4.000 0.000 0.000	0.000	138.000	No Ice 1/2" Ice 1" Ice 2" Ice	4.010 4.410 4.810 5.650	3.370 3.760 4.150 4.970	0.065 0.122 0.186 0.332
(2) RFV01U-D1A (P)	A	From Leg	4.000 0.000 0.000	0.000	138.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.875 2.045 2.223 2.601	1.250 1.393 1.543 1.865	0.084 0.103 0.124 0.175
RFV01U-D1A (P)	B	From Leg	4.000 0.000 0.000	0.000	138.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.875 2.045 2.223 2.601	1.250 1.393 1.543 1.865	0.084 0.103 0.124 0.175
RFV01U-D2A (P)	B	From Leg	4.000 0.000 0.000	0.000	138.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.875 2.045 2.223 2.601	1.013 1.145 1.284 1.585	0.070 0.087 0.106 0.153
(2) RFV01U-D2A (P)	C	From Leg	4.000 0.000 0.000	0.000	138.000	No Ice 1/2" Ice 1" Ice	1.875 2.045 2.223	1.013 1.145 1.284	0.070 0.087 0.106

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
						2" Ice	2.601	1.585	0.153
DB-C1-12C-24AB-0Z (P)	C	From Leg	4.000 0.000 0.000	0.000	138.000	No Ice 1/2" Ice 1" Ice 2" Ice	4.056 4.316 4.582 5.138	3.098 3.335 3.580 4.092	0.032 0.068 0.109 0.203
(4) 8' x 2.375" Mount Pipe (Per MA)	A	From Leg	4.000 0.000 0.000	0.000	138.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.900 2.728 3.401 4.396	1.900 2.728 3.401 4.396	0.061 0.075 0.095 0.150
(4) 8' x 2.375" Mount Pipe (Per MA)	B	From Leg	4.000 0.000 0.000	0.000	138.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.900 2.728 3.401 4.396	1.900 2.728 3.401 4.396	0.061 0.075 0.095 0.150
(4) 8' x 2.375" Mount Pipe (Per MA)	C	From Leg	4.000 0.000 0.000	0.000	138.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.900 2.728 3.401 4.396	1.900 2.728 3.401 4.396	0.061 0.075 0.095 0.150
Platform Mount [LP 712-1] (E-Installed)	C	None		0.000	138.000	No Ice 1/2" Ice 1" Ice 2" Ice	24.560 27.920 31.270 37.980	24.560 27.920 31.270 37.980	1.335 1.915 2.548 3.971
R									
HPA-65R-BUU-H8 w/ Mount Pipe (AT&T-R)	A	From Leg	4.000 0.000 0.000	0.000	128.000	No Ice 1/2" Ice 1" Ice 2" Ice	12.250 13.190 14.160 16.140	8.330 9.230 10.150 12.050	0.105 0.194 0.297 0.543
HPA-65R-BUU-H8 w/ Mount Pipe (R)	B	From Leg	4.000 0.000 0.000	0.000	128.000	No Ice 1/2" Ice 1" Ice 2" Ice	12.250 13.190 14.160 16.140	8.330 9.230 10.150 12.050	0.105 0.194 0.297 0.543
HPA-65R-BUU-H8 w/ Mount Pipe (R)	C	From Leg	4.000 0.000 0.000	0.000	128.000	No Ice 1/2" Ice 1" Ice 2" Ice	12.250 13.190 14.160 16.140	8.330 9.230 10.150 12.050	0.105 0.194 0.297 0.543
(3) RRU-11 (R)	A	From Leg	4.000 0.000 0.000	0.000	128.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.639 1.802 1.972 2.336	1.262 1.410 1.566 1.901	0.044 0.060 0.078 0.123
(3) RRU-11 (R)	B	From Leg	4.000 0.000 0.000	0.000	128.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.639 1.802 1.972 2.336	1.262 1.410 1.566 1.901	0.044 0.060 0.078 0.123
(3) RRU-11 (R)	C	From Leg	4.000 0.000 0.000	0.000	128.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.639 1.802 1.972 2.336	1.262 1.410 1.566 1.901	0.044 0.060 0.078 0.123
(2) DC6-48-60-18-8F (R)	B	From Leg	4.000 0.000 0.000	0.000	128.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.212 1.892 2.105 2.570	1.212 1.892 2.105 2.570	0.033 0.055 0.080 0.138
(2) 6' x 2" Mount Pipe (E)	A	From Leg	4.000 0.000 0.000	0.000	128.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.425 1.925 2.294 3.060	1.425 1.925 2.294 3.060	0.022 0.033 0.048 0.090
(2) 6' x 2" Mount Pipe (E)	B	From Leg	4.000 0.000 0.000	0.000	128.000	No Ice 1/2" Ice 1" Ice	1.425 1.925 2.294	1.425 1.925 2.294	0.022 0.033 0.048

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
						2" Ice	3.060	3.060	0.090
(2) 6' x 2" Mount Pipe (E)	C	From Leg	4.000 0.000 0.000	0.000	128.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.425 1.925 2.294 3.060	1.425 1.925 2.294 3.060	0.022 0.033 0.048 0.090
Platform Mount [LP 303-1] (E)	C	None		0.000	128.000	No Ice 1/2" Ice 1" Ice 2" Ice	14.690 18.010 21.340 28.080	14.690 18.010 21.340 28.080	1.250 1.569 1.942 2.852
R									
(2) AIR 32 B2A/B66AA w/ Mount Pipe (R)	A	From Leg	4.000 0.000 0.000	0.000	114.000	No Ice 1/2" Ice 1" Ice 2" Ice	6.747 7.202 7.648 8.565	6.070 6.867 7.583 9.063	0.153 0.214 0.282 0.441
AIR 32 B2A/B66AA w/ Mount Pipe (R)	B	From Leg	4.000 0.000 0.000	0.000	114.000	No Ice 1/2" Ice 1" Ice 2" Ice	6.747 7.202 7.648 8.565	6.070 6.867 7.583 9.063	0.153 0.214 0.282 0.441
AIR 32 B2A/B66AA w/ Mount Pipe (R)	C	From Leg	4.000 0.000 0.000	0.000	114.000	No Ice 1/2" Ice 1" Ice 2" Ice	6.747 7.202 7.648 8.565	6.070 6.867 7.583 9.063	0.153 0.214 0.282 0.441
(2) APXVAARR24_43-U-NA20 w/ Mount Pipe (R)	A	From Leg	4.000 0.000 0.000	0.000	114.000	No Ice 1/2" Ice 1" Ice 2" Ice	14.690 15.460 16.230 17.820	6.870 7.550 8.250 9.670	0.186 0.315 0.458 0.788
APXVAARR24_43-U-NA20 w/ Mount Pipe (R)	B	From Leg	4.000 0.000 0.000	0.000	114.000	No Ice 1/2" Ice 1" Ice 2" Ice	14.690 15.460 16.230 17.820	6.870 7.550 8.250 9.670	0.186 0.315 0.458 0.788
APXVAARR24_43-U-NA20 w/ Mount Pipe (R)	C	From Leg	4.000 0.000 0.000	0.000	114.000	No Ice 1/2" Ice 1" Ice 2" Ice	14.690 15.460 16.230 17.820	6.870 7.550 8.250 9.670	0.186 0.315 0.458 0.788
(3) RADIO 4449 B12/B71 (R)	A	From Leg	4.000 0.000 0.000	0.000	114.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.650 1.810 1.978 2.336	1.300 1.445 1.597 1.924	0.075 0.092 0.112 0.161
(2) RADIO 4449 B12/B71 (R)	B	From Leg	4.000 0.000 0.000	0.000	114.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.650 1.810 1.978 2.336	1.300 1.445 1.597 1.924	0.075 0.092 0.112 0.161
(3) RADIO 4449 B12/B71 (R)	C	From Leg	4.000 0.000 0.000	0.000	114.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.650 1.810 1.978 2.336	1.300 1.445 1.597 1.924	0.075 0.092 0.112 0.161
6' x 2" Mount Pipe (For Dish)	A	From Leg	4.000 0.000 0.000	0.000	114.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.425 1.925 2.294 3.060	1.425 1.925 2.294 3.060	0.022 0.033 0.048 0.090
Platform Mount [LP 701-1_HR-1] (R-F4P-12W)	C	None		0.000	114.000	No Ice 1/2" Ice 1" Ice 2" Ice	55.580 62.440 69.140 82.180	55.580 62.440 69.140 82.180	3.082 4.291 5.677 8.984
R									
PD1109E (CL/TIA)	A	From Leg	3.000 0.000	0.000	79.000	No Ice 1/2" Ice	2.854 3.924	2.854 3.924	0.017 0.038

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft Vert ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
			5.000			1" Ice	5.010	5.010	0.066
						2" Ice	6.434	6.434	0.142
Side Arm Mount [SO 701-1]	A	From Leg	1.500	0.000	79.000	No Ice	0.850	1.670	0.065
(E)			0.000			1/2" Ice	1.140	2.340	0.079
			0.000			1" Ice	1.430	3.010	0.093
						2" Ice	2.010	4.350	0.121
R									
GPS_A	C	From Leg	3.000	0.000	45.000	No Ice	0.255	0.255	0.001
(E)			0.000			1/2" Ice	0.320	0.320	0.005
			0.000			1" Ice	0.393	0.393	0.010
						2" Ice	0.561	0.561	0.025
Side Arm Mount [SO 701-1]	C	From Leg	1.500	0.000	45.000	No Ice	0.850	1.670	0.065
(E)			0.000			1/2" Ice	1.140	2.340	0.079
			0.000			1" Ice	1.430	3.010	0.093
						2" Ice	2.010	4.350	0.121
R									
GPS_A	A	From Leg	3.000	0.000	13.000	No Ice	0.255	0.255	0.001
(CL/TIA)			0.000			1/2" Ice	0.320	0.320	0.005
			0.000			1" Ice	0.393	0.393	0.010
						2" Ice	0.561	0.561	0.025
Side Arm Mount [SO 701-1]	A	From Leg	1.500	0.000	13.000	No Ice	0.850	1.670	0.065
(MCL/TIA)			0.000			1/2" Ice	1.140	2.340	0.079
			0.000			1" Ice	1.430	3.010	0.093
						2" Ice	2.010	4.350	0.121
R									

Dishes

Description	Face or Leg	Dish Type	Offset Type	Offsets: Horz Lateral ft Vert ft	Azimuth Adjustment °	3 dB Beam Width °	Elevation ft	Outside Diameter ft		Aperture Area ft^2	Weight K
SC2-W100AB	A	Paraboloid	From	4.000	0.000		114.000	2.200	No Ice	3.801	0.022
(R)		w/Shroud (HP)	Leg	0.000					1/2" Ice	4.095	0.043
				0.000					1" Ice	4.388	0.064
									2" Ice	4.975	0.106
R											

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

Comb. No.	Description
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
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	148 - 143	Pole	Max Tension	26	0.000	0.000	-0.000
			Max. Compression	26	-8.338	-0.762	1.363
			Max. Mx	8	-3.468	-20.898	0.408
			Max. My	2	-3.462	-0.143	21.808
			Max. Vy	8	3.618	-20.898	0.408
			Max. Vx	14	3.750	-0.550	-20.567
			Max. Torque	10			0.516
L2	143 - 138	Pole	Max Tension	1	0.000	0.000	0.000

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Compression	26	-8.984	-0.758	1.400
			Max. Mx	8	-3.834	-39.789	0.214
			Max. My	2	-3.828	0.061	41.342
			Max. Vy	8	3.941	-39.789	0.214
			Max. Vx	14	4.074	-0.756	-40.123
			Max. Torque	10			0.516
L3	138 - 133	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-18.844	-1.046	0.876
			Max. Mx	8	-7.660	-82.193	-0.583
			Max. My	2	-7.672	0.876	83.447
			Max. Vy	8	8.647	-82.193	-0.583
			Max. Vx	14	8.594	-1.626	-82.252
			Max. Torque	10			0.516
L4	133 - 128	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-19.657	-1.185	1.020
			Max. Mx	8	-8.095	-126.276	-1.385
			Max. My	2	-8.108	1.686	127.203
			Max. Vy	8	8.978	-126.276	-1.385
			Max. Vx	14	8.925	-2.502	-126.022
			Max. Torque	6			0.301
L5	128 - 123	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-26.037	-2.342	0.601
			Max. Mx	8	-11.007	-184.141	-2.381
			Max. My	2	-11.022	2.174	184.168
			Max. Vy	8	11.663	-184.141	-2.381
			Max. Vx	14	11.611	-3.719	-183.428
			Max. Torque	6			0.301
L6	123 - 116.5	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-26.514	-2.423	0.693
			Max. Mx	8	-11.276	-216.470	-2.823
			Max. My	2	-11.291	2.624	216.308
			Max. Vy	8	11.844	-216.470	-2.823
			Max. Vx	14	11.792	-4.207	-215.587
			Max. Torque	24			-0.214
L7	116.5 - 115.25	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-27.954	-2.571	0.863
			Max. Mx	8	-12.127	-276.626	-3.627
			Max. My	2	-12.142	3.443	276.116
			Max. Vy	8	12.206	-276.626	-3.627
			Max. Vx	14	12.154	-5.095	-275.433
			Max. Torque	24			-0.214
L8	115.25 - 110.25	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-42.150	-2.056	7.634
			Max. Mx	8	-18.576	-355.680	-1.893
			Max. My	2	-18.579	4.655	358.976
			Max. Vy	8	17.223	-355.680	-1.893
			Max. Vx	14	17.511	-5.585	-353.225
			Max. Torque	8			2.789
L9	110.25 - 105.25	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-43.175	-2.216	7.833
			Max. Mx	8	-19.248	-442.557	-2.610
			Max. My	2	-19.253	5.466	446.983
			Max. Vy	8	17.528	-442.557	-2.610
			Max. Vx	14	17.817	-6.470	-441.492
			Max. Torque	8			2.789
L10	105.25 - 100.25	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-44.235	-2.376	8.021
			Max. Mx	8	-19.945	-530.934	-3.327

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. My	2	-19.951	6.274	536.483
			Max. Vy	8	17.825	-530.934	-3.327
			Max. Vx	14	18.114	-7.352	-531.260
			Max. Torque	8			2.788
L11	100.25 - 98.75	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-44.601	-2.424	8.076
			Max. Mx	8	-20.150	-557.792	-3.543
			Max. My	2	-20.161	6.515	563.620
			Max. Vy	8	17.992	-557.792	-3.543
			Max. Vx	14	18.281	-7.616	-558.534
			Max. Torque	8			2.787
L12	98.75 - 98.5	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-44.662	-2.432	8.087
			Max. Mx	8	-20.195	-562.292	-3.578
			Max. My	2	-20.207	6.556	568.155
			Max. Vy	8	18.010	-562.292	-3.578
			Max. Vx	14	18.299	-7.660	-563.104
			Max. Torque	8			2.787
L13	98.5 - 98.25	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-44.741	-2.441	8.098
			Max. Mx	8	-20.248	-566.799	-3.614
			Max. My	2	-20.260	6.596	572.695
			Max. Vy	8	18.039	-566.799	-3.614
			Max. Vx	14	18.328	-7.704	-567.680
			Max. Torque	8			2.787
L14	98.25 - 93.25	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-46.336	-2.600	8.274
			Max. Mx	8	-21.289	-658.495	-4.331
			Max. My	2	-21.314	7.399	664.377
			Max. Vy	8	18.635	-658.495	-4.331
			Max. Vx	14	18.925	-8.584	-660.767
			Max. Torque	8			2.787
L15	93.25 - 88.25	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-47.949	-2.762	8.450
			Max. Mx	8	-22.354	-753.149	-5.048
			Max. My	2	-22.391	8.200	757.750
			Max. Vy	8	19.225	-753.149	-5.048
			Max. Vx	14	19.515	-9.463	-756.812
			Max. Torque	8			2.786
L16	88.25 - 80.25	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-49.091	-2.877	8.572
			Max. Mx	8	-23.112	-821.151	-5.549
			Max. My	14	-23.092	-10.078	-825.787
			Max. Vy	8	19.633	-821.151	-5.549
			Max. Vx	14	19.923	-10.078	-825.787
			Max. Torque	8			2.785
L17	80.25 - 79.75	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-51.984	-3.041	8.746
			Max. Mx	8	-25.156	-920.980	-6.265
			Max. My	14	-25.137	-10.958	-927.006
			Max. Vy	8	20.288	-920.980	-6.265
			Max. Vx	14	20.579	-10.958	-927.006
			Max. Torque	8			2.785
L18	79.75 - 74.75	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-53.992	-3.205	9.707
			Max. Mx	8	-26.495	-1024.996	-6.685
			Max. My	14	-26.478	-11.839	-1031.978
			Max. Vy	8	21.021	-1024.996	-6.685
			Max. Vx	14	21.284	-11.839	-1031.978
			Max. Torque	8			3.364
L19	74.75 - 69.75	Pole	Max Tension	1	0.000	0.000	0.000

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Compression	26	-55.807	-3.370	9.874
			Max. Mx	8	-27.767	-1131.524	-7.403
			Max. My	14	-27.751	-12.718	-1139.762
			Max. Vy	8	21.593	-1131.524	-7.403
			Max. Vx	14	21.856	-12.718	-1139.762
			Max. Torque	8			3.364
L20	69.75 - 66.75	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-56.931	-3.470	9.973
			Max. Mx	8	-28.542	-1196.828	-7.833
			Max. My	14	-28.527	-13.244	-1205.818
			Max. Vy	8	21.945	-1196.828	-7.833
			Max. Vx	14	22.209	-13.244	-1205.818
			Max. Torque	8			3.363
L21	66.75 - 66.5	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-57.040	-3.480	9.986
			Max. Mx	8	-28.626	-1202.318	-7.868
			Max. My	14	-28.611	-13.288	-1211.371
			Max. Vy	8	21.970	-1202.318	-7.868
			Max. Vx	14	22.233	-13.288	-1211.371
			Max. Torque	8			3.363
L22	66.5 - 61.5	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-59.208	-3.646	10.144
			Max. Mx	8	-30.198	-1313.701	-8.584
			Max. My	14	-30.184	-14.165	-1324.005
			Max. Vy	8	22.579	-1313.701	-8.584
			Max. Vx	14	22.843	-14.165	-1324.005
			Max. Torque	8			3.363
L23	61.5 - 56.5	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-61.397	-3.814	10.304
			Max. Mx	8	-31.796	-1428.082	-9.299
			Max. My	14	-31.783	-15.041	-1439.637
			Max. Vy	8	23.174	-1428.082	-9.299
			Max. Vx	14	23.437	-15.041	-1439.637
			Max. Torque	8			3.362
L24	56.5 - 51.5	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-63.604	-3.983	10.462
			Max. Mx	8	-33.417	-1545.400	-10.013
			Max. My	14	-33.405	-15.915	-1558.202
			Max. Vy	8	23.755	-1545.400	-10.013
			Max. Vx	14	24.018	-15.915	-1558.202
			Max. Torque	8			3.362
L25	51.5 - 46.5	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-65.829	-4.152	10.617
			Max. Mx	8	-35.060	-1665.586	-10.725
			Max. My	14	-35.049	-16.788	-1679.632
			Max. Vy	8	24.321	-1665.586	-10.725
			Max. Vx	14	24.584	-16.788	-1679.632
			Max. Torque	8			3.361
L26	46.5 - 39.75	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-66.505	-4.197	10.666
			Max. Mx	8	-35.556	-1702.189	-10.938
			Max. My	14	-35.545	-17.049	-1716.607
			Max. Vy	8	24.489	-1702.189	-10.938
			Max. Vx	14	24.752	-17.049	-1716.607
			Max. Torque	8			3.361
L27	39.75 - 38.75	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-71.573	-4.007	10.653
			Max. Mx	8	-39.445	-1857.685	-12.012
			Max. My	14	-39.435	-17.982	-1874.076
			Max. Vy	8	25.292	-1857.685	-12.012
			Max. Vx	14	25.566	-17.982	-1874.076

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Torque	8			3.267
L28	38.75 - 33.75	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-74.006	-4.145	10.797
			Max. Mx	8	-41.296	-1985.425	-12.771
			Max. My	14	-41.287	-18.900	-2003.112
			Max. Vy	8	25.808	-1985.425	-12.771
			Max. Vx	14	26.082	-18.900	-2003.112
			Max. Torque	8			3.267
L29	33.75 - 31.75	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-74.986	-4.198	10.850
			Max. Mx	8	-42.044	-2037.237	-13.073
			Max. My	14	-42.036	-19.267	-2055.441
			Max. Vy	8	26.008	-2037.237	-13.073
			Max. Vx	14	26.281	-19.267	-2055.441
			Max. Torque	8			3.266
L30	31.75 - 31.5	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-75.109	-4.206	10.859
			Max. Mx	8	-42.143	-2043.742	-13.111
			Max. My	14	-42.135	-19.313	-2062.010
			Max. Vy	8	26.026	-2043.742	-13.111
			Max. Vx	14	26.299	-19.313	-2062.010
			Max. Torque	8			3.266
L31	31.5 - 26.5	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-77.566	-4.339	10.987
			Max. Mx	8	-44.025	-2175.102	-13.866
			Max. My	14	-44.018	-20.227	-2194.660
			Max. Vy	8	26.517	-2175.102	-13.866
			Max. Vx	14	26.789	-20.227	-2194.660
			Max. Torque	8			3.266
L32	26.5 - 21.5	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-80.039	-4.475	11.118
			Max. Mx	8	-45.938	-2308.875	-14.618
			Max. My	14	-45.932	-21.138	-2329.716
			Max. Vy	8	26.999	-2308.875	-14.618
			Max. Vx	14	27.270	-21.138	-2329.716
			Max. Torque	8			3.266
L33	21.5 - 17.75	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-81.955	-4.491	11.266
			Max. Mx	8	-47.387	-2410.836	-15.180
			Max. My	14	-47.382	-21.818	-2432.637
			Max. Vy	8	27.391	-2410.836	-15.180
			Max. Vx	14	27.662	-21.818	-2432.637
			Max. Torque	8			3.266
L34	17.75 - 17.5	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-82.101	-4.491	11.279
			Max. Mx	8	-47.508	-2417.686	-15.217
			Max. My	14	-47.503	-21.863	-2439.550
			Max. Vy	8	27.406	-2417.686	-15.217
			Max. Vx	14	27.677	-21.863	-2439.550
			Max. Torque	8			3.265
L35	17.5 - 14.25	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-83.995	-4.479	11.420
			Max. Mx	8	-48.980	-2507.357	-15.702
			Max. My	14	-48.976	-22.451	-2530.049
			Max. Vy	8	27.774	-2507.357	-15.702
			Max. Vx	14	28.044	-22.451	-2530.049
			Max. Torque	8			3.265
L36	14.25 - 14	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-84.130	-4.479	11.433
			Max. Mx	8	-49.090	-2514.303	-15.740
			Max. My	14	-49.086	-22.496	-2537.059

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Vy	8	27.792	-2514.303	-15.740
			Max. Vx	14	28.062	-22.496	-2537.059
			Max. Torque	8			3.265
L37	14 - 9	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-86.943	-4.484	12.128
			Max. Mx	8	-51.250	-2654.788	-16.212
			Max. My	14	-51.247	-23.399	-2678.483
			Max. Vy	8	28.372	-2654.788	-16.212
			Max. Vx	14	28.631	-23.399	-2678.483
			Max. Torque	8			3.438
L38	9 - 4	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-89.586	-4.502	12.448
			Max. Mx	8	-53.361	-2797.877	-16.951
			Max. My	14	-53.360	-24.296	-2822.860
			Max. Vy	8	28.872	-2797.877	-16.951
			Max. Vx	14	29.162	-24.296	-2822.860
			Max. Torque	8			3.438
L39	4 - 0	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-91.662	-4.524	12.678
			Max. Mx	8	-55.069	-2914.145	-17.539
			Max. My	14	-55.068	-25.011	-2940.271
			Max. Vy	8	29.271	-2914.145	-17.539
			Max. Vx	14	29.587	-25.011	-2940.271
			Max. Torque	8			3.438

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Pole	Max. Vert	26	91.662	-0.000	0.000
	Max. H_x	20	55.076	25.608	0.183
	Max. H_z	2	55.076	0.168	25.821
	Max. M_x	2	2765.457	0.168	25.821
	Max. M_z	8	2914.145	-29.256	-0.153
	Max. Torsion	8	3.438	-29.256	-0.153
	Min. Vert	19	41.307	22.069	-12.825
	Min. H_x	8	55.076	-29.256	-0.153
	Min. H_z	14	55.076	-0.168	-29.572
	Min. M_x	14	-2940.271	-0.168	-29.572
	Min. M_z	20	-2732.299	25.608	0.183
	Min. Torsion	20	-3.435	25.608	0.183

Tower Mast Reaction Summary

Load Combination	Vertical K	$Shear_x$ K	$Shear_z$ K	Overturning Moment, M_x kip-ft	Overturning Moment, M_z kip-ft	Torque kip-ft
Dead Only	45.897	0.000	-0.000	-3.625	-0.973	0.000
1.2 Dead+1.0 Wind 0 deg - No Ice	55.076	-0.168	-25.821	-2765.457	22.600	-0.120
0.9 Dead+1.0 Wind 0 deg - No Ice	41.307	-0.168	-25.821	-2735.899	22.634	-0.132

Load Combination	Vertical K	$Shear_x$ K	$Shear_z$ K	Overturning Moment, M_x kip-ft	Overturning Moment, M_z kip-ft	Torque kip-ft
1.2 Dead+1.0 Wind 30 deg - No Ice	55.076	12.938	-22.805	-2392.873	-1349.700	-1.728
0.9 Dead+1.0 Wind 30 deg - No Ice	41.307	12.938	-22.805	-2367.229	-1335.591	-1.737
1.2 Dead+1.0 Wind 60 deg - No Ice	55.076	25.239	-14.617	-1457.404	-2510.323	-2.967
0.9 Dead+1.0 Wind 60 deg - No Ice	41.307	25.239	-14.617	-1441.665	-2484.823	-2.972
1.2 Dead+1.0 Wind 90 deg - No Ice	55.076	29.256	0.153	17.539	-2914.145	-3.438
0.9 Dead+1.0 Wind 90 deg - No Ice	41.307	29.256	0.153	18.455	-2884.570	-3.437
1.2 Dead+1.0 Wind 120 deg - No Ice	55.076	23.245	13.698	1409.890	-2388.229	-2.766
0.9 Dead+1.0 Wind 120 deg - No Ice	41.307	23.245	13.698	1396.559	-2363.453	-2.759
1.2 Dead+1.0 Wind 150 deg - No Ice	55.076	13.521	23.499	2414.535	-1393.451	-1.527
0.9 Dead+1.0 Wind 150 deg - No Ice	41.307	13.521	23.499	2390.932	-1378.849	-1.516
1.2 Dead+1.0 Wind 180 deg - No Ice	55.076	0.168	29.572	2940.271	-25.011	0.124
0.9 Dead+1.0 Wind 180 deg - No Ice	41.307	0.168	29.572	2911.875	-24.416	0.135
1.2 Dead+1.0 Wind 210 deg - No Ice	55.076	-14.455	25.453	2534.887	1433.037	1.741
0.9 Dead+1.0 Wind 210 deg - No Ice	41.307	-14.455	25.453	2510.573	1418.977	1.750
1.2 Dead+1.0 Wind 240 deg - No Ice	55.076	-22.069	12.825	1362.509	2351.364	2.887
0.9 Dead+1.0 Wind 240 deg - No Ice	41.307	-22.069	12.825	1349.670	2327.509	2.892
1.2 Dead+1.0 Wind 270 deg - No Ice	55.076	-25.608	-0.183	-30.073	2732.299	3.435
0.9 Dead+1.0 Wind 270 deg - No Ice	41.307	-25.608	-0.183	-28.597	2704.511	3.434
1.2 Dead+1.0 Wind 300 deg - No Ice	55.076	-24.874	-14.601	-1496.620	2528.227	2.844
0.9 Dead+1.0 Wind 300 deg - No Ice	41.307	-24.874	-14.601	-1480.400	2503.082	2.837
1.2 Dead+1.0 Wind 330 deg - No Ice	55.076	-14.448	-25.084	-2560.660	1471.650	1.518
0.9 Dead+1.0 Wind 330 deg - No Ice	41.307	-14.448	-25.084	-2533.753	1457.116	1.507
1.2 Dead+1.0 Ice+1.0 Temp	91.662	0.000	-0.000	-12.678	-4.524	0.001
1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp	91.662	-0.032	-6.482	-739.964	-0.023	0.019
1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp	91.662	3.198	-5.606	-640.649	-361.465	-0.388
1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp	91.662	5.693	-3.291	-376.432	-633.295	-0.711
1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp	91.662	6.595	0.029	-8.652	-733.616	-0.848
1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp	91.662	5.629	3.299	356.463	-632.268	-0.711
1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp	91.662	3.269	5.669	620.704	-369.683	-0.420
1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp	91.662	0.032	6.645	721.807	-9.127	-0.016
1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp	91.662	-3.265	5.726	621.369	355.659	0.392

Load Combination	Vertical K	$Shear_x$ K	$Shear_z$ K	Overturning Moment, M_x kip-ft	Overturning Moment, M_z kip-ft	Torque kip-ft
1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp	91.662	-5.567	3.226	348.397	618.252	0.696
1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp	91.662	-6.452	-0.035	-17.756	717.954	0.851
1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp	91.662	-5.694	-3.328	-384.124	628.364	0.731
1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp	91.662	-3.303	-5.725	-650.406	363.204	0.421
Dead+Wind 0 deg - Service	45.897	-0.040	-6.080	-649.732	4.570	-0.030
Dead+Wind 30 deg - Service	45.897	3.046	-5.370	-562.560	-316.522	-0.410
Dead+Wind 60 deg - Service	45.897	5.943	-3.442	-343.732	-588.177	-0.703
Dead+Wind 90 deg - Service	45.897	6.889	0.036	1.430	-682.681	-0.813
Dead+Wind 120 deg - Service	45.897	5.473	3.225	327.225	-559.528	-0.652
Dead+Wind 150 deg - Service	45.897	3.184	5.533	562.306	-326.763	-0.359
Dead+Wind 180 deg - Service	45.897	0.040	6.963	685.423	-6.561	0.031
Dead+Wind 210 deg - Service	45.897	-3.404	5.993	590.548	334.651	0.413
Dead+Wind 240 deg - Service	45.897	-5.196	3.020	316.131	549.454	0.683
Dead+Wind 270 deg - Service	45.897	-6.030	-0.043	-9.701	638.584	0.812
Dead+Wind 300 deg - Service	45.897	-5.857	-3.438	-352.905	590.943	0.672
Dead+Wind 330 deg - Service	45.897	-3.402	-5.906	-601.918	343.682	0.358

Solution Summary

	Sum of Applied Forces			Sum of Reactions			
Load Comb.	PX K	PY K	PZ K	PX K	PY K	PZ K	% Error
1	0.000	-45.897	0.000	0.000	45.897	0.000	0.000%
2	-0.168	-55.076	-25.821	0.168	55.076	25.821	0.000%
3	-0.168	-41.307	-25.821	0.168	41.307	25.821	0.000%
4	12.938	-55.076	-22.805	-12.938	55.076	22.805	0.000%
5	12.938	-41.307	-22.805	-12.938	41.307	22.805	0.000%
6	25.239	-55.076	-14.617	-25.239	55.076	14.617	0.000%
7	25.239	-41.307	-14.617	-25.239	41.307	14.617	0.000%
8	29.256	-55.076	0.153	-29.256	55.076	-0.153	0.000%
9	29.256	-41.307	0.153	-29.256	41.307	-0.153	0.000%
10	23.245	-55.076	13.698	-23.245	55.076	-13.698	0.000%
11	23.245	-41.307	13.698	-23.245	41.307	-13.698	0.000%
12	13.521	-55.076	23.499	-13.521	55.076	-23.499	0.000%
13	13.521	-41.307	23.499	-13.521	41.307	-23.499	0.000%
14	0.168	-55.076	29.572	-0.168	55.076	-29.572	0.000%
15	0.168	-41.307	29.572	-0.168	41.307	-29.572	0.000%
16	-14.455	-55.076	25.453	14.455	55.076	-25.453	0.000%
17	-14.455	-41.307	25.453	14.455	41.307	-25.453	0.000%
18	-22.069	-55.076	12.825	22.069	55.076	-12.825	0.000%
19	-22.069	-41.307	12.825	22.069	41.307	-12.825	0.000%
20	-25.608	-55.076	-0.183	25.608	55.076	0.183	0.000%
21	-25.608	-41.307	-0.183	25.608	41.307	0.183	0.000%
22	-24.874	-55.076	-14.601	24.874	55.076	14.601	0.000%
23	-24.874	-41.307	-14.601	24.874	41.307	14.601	0.000%
24	-14.448	-55.076	-25.084	14.448	55.076	25.084	0.000%
25	-14.448	-41.307	-25.084	14.448	41.307	25.084	0.000%
26	0.000	-91.662	0.000	-0.000	91.662	0.000	0.000%
27	-0.032	-91.662	-6.482	0.032	91.662	6.482	0.000%
28	3.198	-91.662	-5.606	-3.198	91.662	5.606	0.000%
29	5.693	-91.662	-3.291	-5.693	91.662	3.291	0.000%
30	6.595	-91.662	0.029	-6.595	91.662	-0.029	0.000%
31	5.629	-91.662	3.299	-5.629	91.662	-3.299	0.000%
32	3.269	-91.662	5.669	-3.269	91.662	-5.669	0.000%

Load Comb.	Sum of Applied Forces PX K	PY K	PZ K	Sum of Reactions PX K	PY K	PZ K	% Error
33	0.032	-91.662	6.645	-0.032	91.662	-6.645	0.000%
34	-3.265	-91.662	5.726	3.265	91.662	-5.726	0.000%
35	-5.567	-91.662	3.226	5.567	91.662	-3.226	0.000%
36	-6.452	-91.662	-0.035	6.452	91.662	0.035	0.000%
37	-5.694	-91.662	-3.328	5.694	91.662	3.328	0.000%
38	-3.303	-91.662	-5.725	3.303	91.662	5.725	0.000%
39	-0.040	-45.897	-6.080	0.040	45.897	6.080	0.000%
40	3.046	-45.897	-5.370	-3.046	45.897	5.370	0.000%
41	5.943	-45.897	-3.442	-5.943	45.897	3.442	0.000%
42	6.889	-45.897	0.036	-6.889	45.897	-0.036	0.000%
43	5.473	-45.897	3.225	-5.473	45.897	-3.225	0.000%
44	3.184	-45.897	5.533	-3.184	45.897	-5.533	0.000%
45	0.040	-45.897	6.963	-0.040	45.897	-6.963	0.000%
46	-3.404	-45.897	5.993	3.404	45.897	-5.993	0.000%
47	-5.196	-45.897	3.020	5.196	45.897	-3.020	0.000%
48	-6.030	-45.897	-0.043	6.030	45.897	0.043	0.000%
49	-5.857	-45.897	-3.438	5.857	45.897	3.438	0.000%
50	-3.402	-45.897	-5.906	3.402	45.897	5.906	0.000%

Non-Linear Convergence Results

Load Combination	Converged?	Number of Cycles	Displacement Tolerance	Force Tolerance
1	Yes	4	0.00000001	0.00000336
2	Yes	5	0.00000001	0.00014375
3	Yes	5	0.00000001	0.00006293
4	Yes	6	0.00000001	0.00019767
5	Yes	6	0.00000001	0.00007005
6	Yes	6	0.00000001	0.00023826
7	Yes	6	0.00000001	0.00008427
8	Yes	5	0.00000001	0.00060534
9	Yes	5	0.00000001	0.00029886
10	Yes	6	0.00000001	0.00020230
11	Yes	6	0.00000001	0.00007156
12	Yes	6	0.00000001	0.00022308
13	Yes	6	0.00000001	0.00007936
14	Yes	5	0.00000001	0.00015027
15	Yes	5	0.00000001	0.00006283
16	Yes	6	0.00000001	0.00022902
17	Yes	6	0.00000001	0.00008103
18	Yes	6	0.00000001	0.00019101
19	Yes	6	0.00000001	0.00006795
20	Yes	5	0.00000001	0.00078238
21	Yes	5	0.00000001	0.00038974
22	Yes	6	0.00000001	0.00024812
23	Yes	6	0.00000001	0.00008739
24	Yes	6	0.00000001	0.00022475
25	Yes	6	0.00000001	0.00007851
26	Yes	4	0.00000001	0.00099147
27	Yes	6	0.00000001	0.00040076
28	Yes	6	0.00000001	0.00043752
29	Yes	6	0.00000001	0.00043980
30	Yes	6	0.00000001	0.00039419
31	Yes	6	0.00000001	0.00042396
32	Yes	6	0.00000001	0.00042407
33	Yes	6	0.00000001	0.00038059

34	Yes	6	0.00000001	0.00041217
35	Yes	6	0.00000001	0.00040884
36	Yes	6	0.00000001	0.00038455
37	Yes	6	0.00000001	0.00043844
38	Yes	6	0.00000001	0.00043948
39	Yes	4	0.00000001	0.00044013
40	Yes	5	0.00000001	0.00005826
41	Yes	5	0.00000001	0.00008303
42	Yes	4	0.00000001	0.00086899
43	Yes	5	0.00000001	0.00005890
44	Yes	5	0.00000001	0.00007092
45	Yes	4	0.00000001	0.00044668
46	Yes	5	0.00000001	0.00007317
47	Yes	5	0.00000001	0.00005524
48	Yes	4	0.00000001	0.00087822
49	Yes	5	0.00000001	0.00008568
50	Yes	5	0.00000001	0.00006661

Maximum Tower Deflections - Service Wind

Section No.	*Elevation*	*Horz. Deflection*	*Gov. Load Comb.*	*Tilt*	*Twist*
	ft	*in*		°	°
L1	148 - 143	16.246	50	0.972	0.004
L2	143 - 138	15.230	50	0.968	0.004
L3	138 - 133	14.220	50	0.960	0.003
L4	133 - 128	13.221	50	0.947	0.003
L5	128 - 123	12.240	50	0.926	0.003
L6	123 - 116.5	11.285	50	0.898	0.003
L7	120.25 - 115.25	10.773	50	0.879	0.003
L8	115.25 - 110.25	9.862	50	0.856	0.003
L9	110.25 - 105.25	8.987	50	0.814	0.003
L10	105.25 - 100.25	8.159	50	0.765	0.003
L11	100.25 - 98.75	7.386	50	0.710	0.002
L12	98.75 - 98.5	7.165	50	0.693	0.002
L13	98.5 - 98.25	7.129	50	0.690	0.002
L14	98.25 - 93.25	7.093	50	0.689	0.002
L15	93.25 - 88.25	6.390	50	0.653	0.002
L16	88.25 - 80.25	5.725	50	0.616	0.002
L17	84.75 - 79.75	5.284	50	0.588	0.002
L18	79.75 - 74.75	4.679	50	0.566	0.001
L19	74.75 - 69.75	4.106	50	0.527	0.001
L20	69.75 - 66.75	3.577	50	0.485	0.001
L21	66.75 - 66.5	3.279	50	0.460	0.001
L22	66.5 - 61.5	3.255	50	0.459	0.001
L23	61.5 - 56.5	2.793	50	0.425	0.001
L24	56.5 - 51.5	2.366	50	0.390	0.001
L25	51.5 - 46.5	1.977	50	0.354	0.001
L26	46.5 - 39.75	1.625	50	0.318	0.001
L27	45 - 38.75	1.527	50	0.307	0.001
L28	38.75 - 33.75	1.141	50	0.280	0.001
L29	33.75 - 31.75	0.866	50	0.245	0.000
L30	31.75 - 31.5	0.767	50	0.230	0.000
L31	31.5 - 26.5	0.755	50	0.229	0.000
L32	26.5 - 21.5	0.534	50	0.192	0.000
L33	21.5 - 17.75	0.352	50	0.155	0.000
L34	17.75 - 17.5	0.241	50	0.127	0.000
L35	17.5 - 14.25	0.235	50	0.126	0.000
L36	14.25 - 14	0.156	50	0.105	0.000
L37	14 - 9	0.151	50	0.103	0.000

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L38	9 - 4	0.062	50	0.066	0.000
L39	4 - 0	0.012	50	0.029	0.000

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
149.500	Top Hat	50	16.246	0.972	0.004	48703
149.000	800MHZ RRH	50	16.246	0.972	0.004	48703
148.000	APXVSPP18-C-A20 w/ Mount Pipe	50	16.246	0.972	0.004	48703
138.000	(2) LPA-80080/6CF	50	14.220	0.960	0.004	27275
128.000	HPA-65R-BUU-H8 w/ Mount Pipe	50	12.240	0.926	0.003	11757
114.000	SC2-W100AB	50	9.639	0.848	0.003	7722
79.000	PD1109E	50	4.591	0.562	0.001	8678
45.000	GPS_A	50	1.527	0.307	0.001	10726
13.000	GPS_A	50	0.130	0.096	0.000	8103

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	148 - 143	69.112	24	4.132	0.016
L2	143 - 138	64.797	24	4.118	0.015
L3	138 - 133	60.507	24	4.086	0.015
L4	133 - 128	56.262	24	4.028	0.014
L5	128 - 123	52.094	24	3.939	0.014
L6	123 - 116.5	48.034	24	3.819	0.014
L7	120.25 - 115.25	45.860	24	3.740	0.014
L8	115.25 - 110.25	41.991	24	3.642	0.014
L9	110.25 - 105.25	38.271	24	3.465	0.013
L10	105.25 - 100.25	34.752	24	3.258	0.011
L11	100.25 - 98.75	31.464	24	3.025	0.009
L12	98.75 - 98.5	30.525	24	2.952	0.009
L13	98.5 - 98.25	30.371	24	2.940	0.009
L14	98.25 - 93.25	30.217	24	2.933	0.009
L15	93.25 - 88.25	27.226	24	2.784	0.008
L16	88.25 - 80.25	24.396	24	2.623	0.007
L17	84.75 - 79.75	22.517	24	2.505	0.006
L18	79.75 - 74.75	19.939	24	2.414	0.006
L19	74.75 - 69.75	17.501	24	2.244	0.005
L20	69.75 - 66.75	15.243	24	2.069	0.005
L21	66.75 - 66.5	13.977	24	1.962	0.004
L22	66.5 - 61.5	13.875	24	1.955	0.004
L23	61.5 - 56.5	11.904	24	1.810	0.004
L24	56.5 - 51.5	10.087	24	1.662	0.003
L25	51.5 - 46.5	8.427	24	1.509	0.003
L26	46.5 - 39.75	6.928	24	1.354	0.003
L27	45 - 38.75	6.510	24	1.307	0.002
L28	38.75 - 33.75	4.863	24	1.195	0.002
L29	33.75 - 31.75	3.691	24	1.043	0.002

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L30	31.75 - 31.5	3.267	24	0.982	0.002
L31	31.5 - 26.5	3.216	24	0.975	0.002
L32	26.5 - 21.5	2.277	24	0.819	0.001
L33	21.5 - 17.75	1.501	24	0.661	0.001
L34	17.75 - 17.5	1.028	24	0.543	0.001
L35	17.5 - 14.25	1.000	24	0.536	0.001
L36	14.25 - 14	0.666	24	0.447	0.001
L37	14 - 9	0.643	24	0.439	0.001
L38	9 - 4	0.265	24	0.282	0.000
L39	4 - 0	0.052	24	0.125	0.000

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
149.500	Top Hat	24	69.112	4.132	0.016	12349
149.000	800MHZ RRH	24	69.112	4.132	0.016	12349
148.000	APXVSPP18-C-A20 w/ Mount Pipe	24	69.112	4.132	0.016	12349
138.000	(2) LPA-80080/6CF	24	60.507	4.086	0.015	6658
128.000	HPA-65R-BUU-H8 w/ Mount Pipe	24	52.094	3.939	0.015	2784
114.000	SC2-W100AB	24	41.044	3.606	0.014	1837
79.000	PD1109E	24	19.563	2.394	0.006	2047
45.000	GPS_A	24	6.510	1.307	0.002	2519
13.000	GPS_A	24	0.554	0.408	0.001	1901

Compression Checks

Pole Design Data

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
L1	148 - 143 (1)	TP24.87x24x0.219	5.000	0.000	0.0	17.116	-3.462	924.240	0.004
L2	143 - 138 (2)	TP25.74x24.87x0.219	5.000	0.000	0.0	17.719	-3.828	956.853	0.004
L3	138 - 133 (3)	TP26.61x25.74x0.219	5.000	0.000	0.0	18.323	-7.643	989.466	0.008
L4	133 - 128 (4)	TP27.479x26.61x0.219	5.000	0.000	0.0	18.927	-8.078	1022.080	0.008
L5	128 - 123 (5)	TP28.349x27.479x0.219	5.000	0.000	0.0	19.531	-10.987	1054.690	0.010
L6	123 - 116.5 (6)	TP29.48x28.349x0.219	6.500	0.000	0.0	19.864	-11.256	1072.630	0.010
L7	116.5 - 115.25 (7)	TP29.26x28.39x0.25	5.000	0.000	0.0	23.020	-12.107	1346.640	0.009
L8	115.25 - 110.25 (8)	TP30.13x29.26x0.25	5.000	0.000	0.0	23.710	-18.538	1387.030	0.013
L9	110.25 - 105.25 (9)	TP31x30.13x0.25	5.000	0.000	0.0	24.400	-19.213	1427.410	0.013
L10	105.25 - 100.25 (10)	TP31.87x31x0.25	5.000	0.000	0.0	25.090	-19.911	1467.800	0.014
L11	100.25 - 98.75 (11)	TP32.131x31.87x0.25	1.500	0.000	0.0	25.298	-20.117	1479.910	0.014
L12	98.75 - 98.5	TP32.175x32.131x0.25	0.250	0.000	0.0	25.332	-20.163	1481.930	0.014

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
L13	98.5 - 98.25 (13)	TP32.218x32.175x0.45	0.250	0.000	0.0	45.374	-20.215	2654.400	0.008
L14	98.25 - 93.25 (14)	TP33.088x32.218x0.444	5.000	0.000	0.0	45.978	-21.258	2689.730	0.008
L15	93.25 - 88.25 (15)	TP33.958x33.088x0.438	5.000	0.000	0.0	46.547	-22.324	2723.030	0.008
L16	88.25 - 80.25 (16)	TP35.35x33.958x0.438	8.000	0.000	0.0	47.393	-23.083	2772.500	0.008
L17	80.25 - 79.75 (17)	TP34.937x34.067x0.5	5.000	0.000	0.0	54.652	-25.128	3197.150	0.008
L18	79.75 - 74.75 (18)	TP35.808x34.937x0.488	5.000	0.000	0.0	54.652	-26.469	3197.130	0.008
L19	74.75 - 69.75 (19)	TP36.678x35.808x0.488	5.000	0.000	0.0	55.999	-27.744	3275.910	0.008
L20	69.75 - 66.75 (20)	TP37.2x36.678x0.488	3.000	0.000	0.0	56.806	-28.520	3323.180	0.009
L21	66.75 - 66.5 (21)	TP37.244x37.2x0.625	0.250	0.000	0.0	72.642	-28.604	4249.580	0.007
L22	66.5 - 61.5 (22)	TP38.114x37.244x0.613	5.000	0.000	0.0	72.906	-30.177	4264.990	0.007
L23	61.5 - 56.5 (23)	TP38.984x38.114x0.613	5.000	0.000	0.0	74.598	-31.777	4363.970	0.007
L24	56.5 - 51.5 (24)	TP39.855x38.984x0.6	5.000	0.000	0.0	74.757	-33.399	4373.270	0.008
L25	51.5 - 46.5 (25)	TP40.725x39.855x0.6	5.000	0.000	0.0	76.414	-35.044	4470.230	0.008
L26	46.5 - 39.75 (26)	TP41.9x40.725x0.588	6.750	0.000	0.0	75.332	-35.540	4406.940	0.008
L27	39.75 - 38.75 (27)	TP41.448x40.361x0.65	6.250	0.000	0.0	84.171	-39.431	4924.030	0.008
L28	38.75 - 33.75 (28)	TP42.318x41.448x0.65	5.000	0.000	0.0	85.966	-41.283	5029.010	0.008
L29	33.75 - 31.75 (29)	TP42.666x42.318x0.65	2.000	0.000	0.0	86.684	-42.032	5071.010	0.008
L30	31.75 - 31.5 (30)	TP42.71x42.666x0.65	0.250	0.000	0.0	86.774	-42.131	5076.260	0.008
L31	31.5 - 26.5 (31)	TP43.58x42.71x0.638	5.000	0.000	0.0	86.890	-44.015	5083.080	0.009
L32	26.5 - 21.5 (32)	TP44.45x43.58x0.625	5.000	0.000	0.0	86.937	-45.929	5085.810	0.009
L33	21.5 - 17.75 (33)	TP45.102x44.45x0.625	3.750	0.000	0.0	88.231	-47.380	5161.520	0.009
L34	17.75 - 17.5 (34)	TP45.145x45.102x0.725	0.250	0.000	0.0	102.218	-47.502	5979.760	0.008
L35	17.5 - 14.25 (35)	TP45.711x45.145x0.725	3.250	0.000	0.0	103.519	-48.975	6055.870	0.008
L36	14.25 - 14 (36)	TP45.754x45.711x0.638	0.250	0.000	0.0	91.291	-49.084	5340.500	0.009
L37	14 - 9 (37)	TP46.624x45.754x0.625	5.000	0.000	0.0	91.251	-51.246	5338.180	0.010
L38	9 - 4 (38)	TP47.494x46.624x0.625	5.000	0.000	0.0	92.977	-53.360	5439.130	0.010
L39	4 - 0 (39)	TP48.19x47.494x0.625	4.000	0.000	0.0	94.357	-55.069	5519.890	0.010

Pole Bending Design Data

Section No.	Elevation ft	Size	M_{ux} kip-ft	ϕM_{nx} kip-ft	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	M_{uy} kip-ft	ϕM_{ny} kip-ft	Ratio $\frac{M_{uy}}{\phi M_{ny}}$
L1	148 - 143 (1)	TP24.87x24x0.219	21.808	574.482	0.038	0.000	574.482	0.000
L2	143 - 138 (2)	TP25.74x24.87x0.219	41.342	609.819	0.068	0.000	609.819	0.000
L3	138 - 133 (3)	TP26.61x25.74x0.219	84.111	645.749	0.130	0.000	645.749	0.000
L4	133 - 128 (4)	TP27.479x26.61x0.219	128.705	682.230	0.189	0.000	682.230	0.000
L5	128 - 123 (5)	TP28.349x27.479x0.219	186.391	719.217	0.259	0.000	719.217	0.000

Section No.	Elevation ft	Size	M_{ux} kip-ft	ϕM_{nx} kip-ft	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	M_{uy} kip-ft	ϕM_{ny} kip-ft	Ratio $\frac{M_{uy}}{\phi M_{ny}}$
L6	123 - 116.5 (6)	TP29.48x28.349x0.219	219.011	739.762	0.296	0.000	739.762	0.000
L7	116.5 - 115.25 (7)	TP29.26x28.39x0.25	279.697	965.833	0.290	0.000	965.833	0.000
L8	115.25 - 110.25 (8)	TP30.13x29.26x0.25	363.033	1015.442	0.358	0.000	1015.442	0.000
L9	110.25 - 105.25 (9)	TP31x30.13x0.25	451.587	1065.692	0.424	0.000	1065.692	0.000
L10	105.25 - 100.25 (10)	TP31.87x31x0.25	541.637	1116.517	0.485	0.000	1116.517	0.000
L11	100.25 - 98.75 (11)	TP32.131x31.87x0.25	568.995	1131.875	0.503	0.000	1131.875	0.000
L12	98.75 - 98.5 (12)	TP32.175x32.131x0.25	573.578	1134.433	0.506	0.000	1134.433	0.000
L13	98.5 - 98.25 (13)	TP32.218x32.175x0.45	578.169	2188.483	0.264	0.000	2188.483	0.000
L14	98.25 - 93.25 (14)	TP33.088x32.218x0.444	671.532	2280.067	0.295	0.000	2280.067	0.000
L15	93.25 - 88.25 (15)	TP33.958x33.088x0.438	767.851	2371.525	0.324	0.000	2371.525	0.000
L16	88.25 - 80.25 (16)	TP35.35x33.958x0.438	837.017	2459.042	0.340	0.000	2459.042	0.000
L17	80.25 - 79.75 (17)	TP34.937x34.067x0.5	938.508	2856.458	0.329	0.000	2856.458	0.000
L18	79.75 - 74.75 (18)	TP35.808x34.937x0.488	1044.383	2931.742	0.356	0.000	2931.742	0.000
L19	74.75 - 69.75 (19)	TP36.678x35.808x0.488	1152.475	3079.017	0.374	0.000	3079.017	0.000
L20	69.75 - 66.75 (20)	TP37.2x36.678x0.488	1218.708	3169.108	0.385	0.000	3169.108	0.000
L21	66.75 - 66.5 (21)	TP37.244x37.2x0.625	1224.275	4027.125	0.304	0.000	4027.125	0.000
L22	66.5 - 61.5 (22)	TP38.114x37.244x0.613	1337.208	4142.167	0.323	0.000	4142.167	0.000
L23	61.5 - 56.5 (23)	TP38.984x38.114x0.613	1453.142	4338.242	0.335	0.000	4338.242	0.000
L24	56.5 - 51.5 (24)	TP39.855x38.984x0.6	1572.008	4450.475	0.353	0.000	4450.475	0.000
L25	51.5 - 46.5 (25)	TP40.725x39.855x0.6	1693.733	4651.525	0.364	0.000	4651.525	0.000
L26	46.5 - 39.75 (26)	TP41.9x40.725x0.588	1730.792	4618.817	0.375	0.000	4618.817	0.000
L27	39.75 - 38.75 (27)	TP41.448x40.361x0.65	1888.542	5204.700	0.363	0.000	5204.700	0.000
L28	38.75 - 33.75 (28)	TP42.318x41.448x0.65	2017.900	5430.792	0.372	0.000	5430.792	0.000
L29	33.75 - 31.75 (29)	TP42.666x42.318x0.65	2070.358	5522.567	0.375	0.000	5522.567	0.000
L30	31.75 - 31.5 (30)	TP42.71x42.666x0.65	2076.942	5534.092	0.375	0.000	5534.092	0.000
L31	31.5 - 26.5 (31)	TP43.58x42.71x0.638	2209.917	5661.183	0.390	0.000	5661.183	0.000
L32	26.5 - 21.5 (32)	TP44.45x43.58x0.625	2345.292	5783.941	0.405	0.000	5783.941	0.000
L33	21.5 - 17.75 (33)	TP45.102x44.45x0.625	2448.392	5958.667	0.411	0.000	5958.667	0.000
L34	17.75 - 17.5 (34)	TP45.145x45.102x0.725	2455.317	6879.100	0.357	0.000	6879.100	0.000
L35	17.5 - 14.25 (35)	TP45.711x45.145x0.725	2545.867	7056.767	0.361	0.000	7056.767	0.000
L36	14.25 - 14 (36)	TP45.754x45.711x0.638	2552.875	6253.500	0.408	0.000	6253.500	0.000
L37	14 - 9 (37)	TP46.624x45.754x0.625	2694.667	6376.450	0.423	0.000	6376.450	0.000
L38	9 - 4 (38)	TP47.494x46.624x0.625	2837.983	6621.541	0.429	0.000	6621.541	0.000
L39	4 - 0 (39)	TP48.19x47.494x0.625	2953.425	6820.950	0.433	0.000	6820.950	0.000

Pole Shear Design Data

Section No.	Elevation ft	Size	Actual V_u K	ϕV_n K	Ratio $\frac{V_u}{\phi V_n}$	Actual T_u kip-ft	ϕT_n kip-ft	Ratio $\frac{T_u}{\phi T_n}$
L1	148 - 143 (1)	TP24.87x24x0.219	3.746	277.272	0.014	0.260	598.580	0.000
L2	143 - 138 (2)	TP25.74x24.87x0.219	4.069	287.056	0.014	0.260	641.568	0.000
L3	138 - 133 (3)	TP26.61x25.74x0.219	8.756	296.840	0.029	0.015	686.048	0.000
L4	133 - 128 (4)	TP27.479x26.61x0.219	9.087	306.624	0.030	0.015	732.018	0.000
L5	128 - 123 (5)	TP28.349x27.479x0.219	11.775	316.408	0.037	0.214	779.477	0.000
L6	123 - 116.5 (6)	TP29.48x28.349x0.219	11.956	321.789	0.037	0.214	806.216	0.000
L7	116.5 - 115.25 (7)	TP29.26x28.39x0.25	12.319	403.993	0.030	0.214	1026.367	0.000
L8	115.25 - 110.25 (8)	TP30.13x29.26x0.25	17.565	416.108	0.042	1.334	1088.850	0.001
L9	110.25 - 105.25 (9)	TP31x30.13x0.25	17.869	428.223	0.042	1.334	1153.175	0.001
L10	105.25 - 100.25 (10)	TP31.87x31x0.25	18.166	440.339	0.041	1.333	1219.350	0.001
L11	100.25 - 98.75 (11)	TP32.131x31.87x0.25	18.333	443.973	0.041	1.333	1239.567	0.001
L12	98.75 - 98.5 (12)	TP32.175x32.131x0.25	18.351	444.579	0.041	1.333	1242.950	0.001
L13	98.5 - 98.25 (13)	TP32.218x32.175x0.45	18.381	796.319	0.023	1.333	2215.425	0.001
L14	98.25 - 93.25 (14)	TP33.088x32.218x0.444	18.976	806.918	0.024	1.333	2306.833	0.001
L15	93.25 - 88.25 (15)	TP33.958x33.088x0.438	19.565	816.908	0.024	1.332	2398.083	0.001
L16	88.25 - 80.25 (16)	TP35.35x33.958x0.438	19.973	831.749	0.024	1.332	2486.008	0.001
L17	80.25 - 79.75 (17)	TP34.937x34.067x0.5	20.629	959.144	0.022	1.332	2892.633	0.000
L18	79.75 - 74.75 (18)	TP35.808x34.937x0.488	21.340	959.139	0.022	1.621	2966.775	0.001
L19	74.75 - 69.75 (19)	TP36.678x35.808x0.488	21.912	982.773	0.022	1.621	3114.783	0.001
L20	69.75 - 66.75 (20)	TP37.2x36.678x0.488	22.264	996.954	0.022	1.621	3205.325	0.001
L21	66.75 - 66.5 (21)	TP37.244x37.2x0.625	22.289	1274.870	0.017	1.621	4088.375	0.000
L22	66.5 - 61.5 (22)	TP38.114x37.244x0.613	22.897	1279.500	0.018	1.621	4202.125	0.000
L23	61.5 - 56.5 (23)	TP38.984x38.114x0.613	23.491	1309.190	0.018	1.620	4399.433	0.000
L24	56.5 - 51.5 (24)	TP39.855x38.984x0.6	24.072	1311.980	0.018	1.620	4510.233	0.000
L25	51.5 - 46.5 (25)	TP40.725x39.855x0.6	24.637	1341.070	0.018	1.620	4712.450	0.000
L26	46.5 - 39.75 (26)	TP41.9x40.725x0.588	24.805	1322.080	0.019	1.620	4677.408	0.000
L27	39.75 - 38.75 (27)	TP41.448x40.361x0.65	25.625	1477.210	0.017	1.433	5277.958	0.000
L28	38.75 - 33.75 (28)	TP42.318x41.448x0.65	26.140	1508.700	0.017	1.432	5505.417	0.000
L29	33.75 - 31.75 (29)	TP42.666x42.318x0.65	26.339	1521.300	0.017	1.432	5597.750	0.000
L30	31.75 - 31.5 (30)	TP42.71x42.666x0.65	26.356	1522.880	0.017	1.432	5609.341	0.000
L31	31.5 - 26.5 (31)	TP43.58x42.71x0.638	26.846	1524.920	0.018	1.432	5734.725	0.000
L32	26.5 - 21.5 (32)	TP44.45x43.58x0.625	27.327	1525.740	0.018	1.432	5855.700	0.000
L33	21.5 - 17.75 (33)	TP45.102x44.45x0.625	27.690	1548.460	0.018	1.432	6031.341	0.000
L34	17.75 - 17.5 (34)	TP45.145x45.102x0.725	27.702	1793.930	0.015	1.432	6978.591	0.000
L35	17.5 - 14.25	TP45.711x45.145x0.725	28.037	1816.760	0.015	1.432	7157.383	0.000

Section No.	Elevation ft	Size	Actual V_u K	ϕV_n K	Ratio $\frac{V_u}{\phi V_n}$	Actual T_u kip-ft	ϕT_n kip-ft	Ratio $\frac{T_u}{\phi T_n}$
	(35)							
L36	14.25 - 14 (36)	TP45.754x45.711x0.638	28.052	1602.150	0.018	1.432	6330.267	0.000
L37	14 - 9 (37)	TP46.624x45.754x0.625	28.566	1601.450	0.018	1.518	6451.267	0.000
L38	9 - 4 (38)	TP47.494x46.624x0.625	28.788	1631.740	0.018	1.518	6697.575	0.000
L39	4 - 0 (39)	TP48.19x47.494x0.625	28.962	1655.970	0.017	1.518	6897.933	0.000

Pole Interaction Design Data

Section No.	Elevation ft	Ratio $\frac{P_u}{\phi P_n}$	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	Ratio $\frac{M_{uy}}{\phi M_{ny}}$	Ratio $\frac{V_u}{\phi V_n}$	Ratio $\frac{T_u}{\phi T_n}$	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
L1	148 - 143 (1)	0.004	0.038	0.000	0.014	0.000	0.042 ✔	1.050	4.8.2 ✔
L2	143 - 138 (2)	0.004	0.068	0.000	0.014	0.000	0.072 ✔	1.050	4.8.2 ✔
L3	138 - 133 (3)	0.008	0.130	0.000	0.029	0.000	0.139 ✔	1.050	4.8.2 ✔
L4	133 - 128 (4)	0.008	0.189	0.000	0.030	0.000	0.197 ✔	1.050	4.8.2 ✔
L5	128 - 123 (5)	0.010	0.259	0.000	0.037	0.000	0.271 ✔	1.050	4.8.2 ✔
L6	123 - 116.5 (6)	0.010	0.296	0.000	0.037	0.000	0.308 ✔	1.050	4.8.2 ✔
L7	116.5 - 115.25 (7)	0.009	0.290	0.000	0.030	0.000	0.300 ✔	1.050	4.8.2 ✔
L8	115.25 - 110.25 (8)	0.013	0.358	0.000	0.042	0.001	0.373 ✔	1.050	4.8.2 ✔
L9	110.25 - 105.25 (9)	0.013	0.424	0.000	0.042	0.001	0.439 ✔	1.050	4.8.2 ✔
L10	105.25 - 100.25 (10)	0.014	0.485	0.000	0.041	0.001	0.500 ✔	1.050	4.8.2 ✔
L11	100.25 - 98.75 (11)	0.014	0.503	0.000	0.041	0.001	0.518 ✔	1.050	4.8.2 ✔
L12	98.75 - 98.5 (12)	0.014	0.506	0.000	0.041	0.001	0.521 ✔	1.050	4.8.2 ✔
L13	98.5 - 98.25 (13)	0.008	0.264	0.000	0.023	0.001	0.272 ✔	1.050	4.8.2 ✔
L14	98.25 - 93.25 (14)	0.008	0.295	0.000	0.024	0.001	0.303 ✔	1.050	4.8.2 ✔
L15	93.25 - 88.25 (15)	0.008	0.324	0.000	0.024	0.001	0.333 ✔	1.050	4.8.2 ✔
L16	88.25 - 80.25 (16)	0.008	0.340	0.000	0.024	0.001	0.349 ✔	1.050	4.8.2 ✔
L17	80.25 - 79.75 (17)	0.008	0.329	0.000	0.022	0.000	0.337 ✔	1.050	4.8.2 ✔
L18	79.75 - 74.75 (18)	0.008	0.356	0.000	0.022	0.001	0.365 ✔	1.050	4.8.2 ✔
L19	74.75 - 69.75 (19)	0.008	0.374	0.000	0.022	0.001	0.383 ✔	1.050	4.8.2 ✔

Section No.	Elevation ft	Ratio $\frac{P_u}{\phi P_n}$	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	Ratio $\frac{M_{uy}}{\phi M_{ny}}$	Ratio $\frac{V_u}{\phi V_n}$	Ratio $\frac{T_u}{\phi T_n}$	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
L20	69.75 - 66.75 (20)	0.009	0.385	0.000	0.022	0.001	0.394 ✔	1.050	4.8.2 ✔
L21	66.75 - 66.5 (21)	0.007	0.304	0.000	0.017	0.000	0.311 ✔	1.050	4.8.2 ✔
L22	66.5 - 61.5 (22)	0.007	0.323	0.000	0.018	0.000	0.330 ✔	1.050	4.8.2 ✔
L23	61.5 - 56.5 (23)	0.007	0.335	0.000	0.018	0.000	0.343 ✔	1.050	4.8.2 ✔
L24	56.5 - 51.5 (24)	0.008	0.353	0.000	0.018	0.000	0.361 ✔	1.050	4.8.2 ✔
L25	51.5 - 46.5 (25)	0.008	0.364	0.000	0.018	0.000	0.372 ✔	1.050	4.8.2 ✔
L26	46.5 - 39.75 (26)	0.008	0.375	0.000	0.019	0.000	0.383 ✔	1.050	4.8.2 ✔
L27	39.75 - 38.75 (27)	0.008	0.363	0.000	0.017	0.000	0.371 ✔	1.050	4.8.2 ✔
L28	38.75 - 33.75 (28)	0.008	0.372	0.000	0.017	0.000	0.380 ✔	1.050	4.8.2 ✔
L29	33.75 - 31.75 (29)	0.008	0.375	0.000	0.017	0.000	0.383 ✔	1.050	4.8.2 ✔
L30	31.75 - 31.5 (30)	0.008	0.375	0.000	0.017	0.000	0.384 ✔	1.050	4.8.2 ✔
L31	31.5 - 26.5 (31)	0.009	0.390	0.000	0.018	0.000	0.399 ✔	1.050	4.8.2 ✔
L32	26.5 - 21.5 (32)	0.009	0.405	0.000	0.018	0.000	0.415 ✔	1.050	4.8.2 ✔
L33	21.5 - 17.75 (33)	0.009	0.411	0.000	0.018	0.000	0.420 ✔	1.050	4.8.2 ✔
L34	17.75 - 17.5 (34)	0.008	0.357	0.000	0.015	0.000	0.365 ✔	1.050	4.8.2 ✔
L35	17.5 - 14.25 (35)	0.008	0.361	0.000	0.015	0.000	0.369 ✔	1.050	4.8.2 ✔
L36	14.25 - 14 (36)	0.009	0.408	0.000	0.018	0.000	0.418 ✔	1.050	4.8.2 ✔
L37	14 - 9 (37)	0.010	0.423	0.000	0.018	0.000	0.433 ✔	1.050	4.8.2 ✔
L38	9 - 4 (38)	0.010	0.429	0.000	0.018	0.000	0.439 ✔	1.050	4.8.2 ✔
L39	4 - 0 (39)	0.010	0.433	0.000	0.017	0.000	0.443 ✔	1.050	4.8.2 ✔

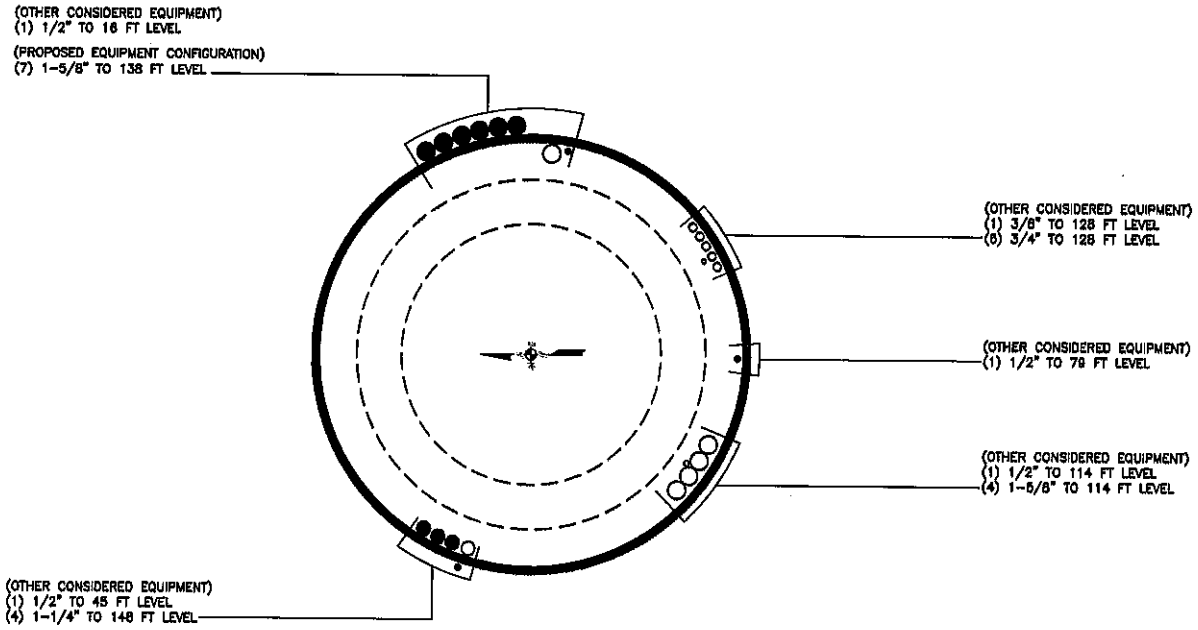
Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
L1	148 - 143	Pole	TP24.87x24x0.219	1	-3.462	--	**	**
L2	143 - 138	Pole	TP25.74x24.87x0.219	2	-3.828	--	**	**
L3	138 - 133	Pole	TP26.61x25.74x0.219	3	-7.643	--	**	**
L4	133 - 128	Pole	TP27.479x26.61x0.219	4	-8.078	--	**	**
L5	128 - 123	Pole	TP28.349x27.479x0.219	5	-10.987	--	**	**
L6	123 - 116.5	Pole	TP29.48x28.349x0.219	6	-11.256	--	**	**
L7	116.5 - 115.25	Pole	TP29.26x28.39x0.25	7	-12.107	--	**	**
L8	115.25 - 110.25	Pole	TP30.13x29.26x0.25	8	-18.538	--	**	**
L9	110.25 - 105.25	Pole	TP31x30.13x0.25	9	-19.213	--	**	**
L10	105.25 - 100.25	Pole	TP31.87x31x0.25	10	-19.911	--	**	**
L11	100.25 - 98.75	Pole	TP32.131x31.87x0.25	11	-20.117	--	**	**
L12	98.75 - 98.5	Pole	TP32.175x32.131x0.25	12	-20.163	--	**	**
L13	98.5 - 98.25	Pole	TP32.218x32.175x0.45	13	-20.215	--	**	**
L14	98.25 - 93.25	Pole	TP33.088x32.218x0.444	14	-21.258	--	**	**
L15	93.25 - 88.25	Pole	TP33.958x33.088x0.438	15	-22.324	--	**	**
L16	88.25 - 80.25	Pole	TP35.35x33.958x0.438	16	-23.083	--	**	**
L17	80.25 - 79.75	Pole	TP34.937x34.067x0.5	17	-25.128	--	**	**
L18	79.75 - 74.75	Pole	TP35.808x34.937x0.488	18	-26.469	--	**	**
L19	74.75 - 69.75	Pole	TP36.678x35.808x0.488	19	-27.744	--	**	**
L20	69.75 - 66.75	Pole	TP37.2x36.678x0.488	20	-28.520	--	**	**
L21	66.75 - 66.5	Pole	TP37.244x37.2x0.625	21	-28.604	--	**	**
L22	66.5 - 61.5	Pole	TP38.114x37.244x0.613	22	-30.177	--	**	**
L23	61.5 - 56.5	Pole	TP38.984x38.114x0.613	23	-31.777	--	**	**
L24	56.5 - 51.5	Pole	TP39.855x38.984x0.6	24	-33.399	--	**	**
L25	51.5 - 46.5	Pole	TP40.725x39.855x0.6	25	-35.044	--	**	**
L26	46.5 - 39.75	Pole	TP41.9x40.725x0.588	26	-35.540	--	**	**
L27	39.75 - 38.75	Pole	TP41.448x40.361x0.65	27	-39.431	--	**	**
L28	38.75 - 33.75	Pole	TP42.318x41.448x0.65	28	-41.283	--	**	**
L29	33.75 - 31.75	Pole	TP42.666x42.318x0.65	29	-42.032	--	**	**
L30	31.75 - 31.5	Pole	TP42.71x42.666x0.65	30	-42.131	--	**	**
L31	31.5 - 26.5	Pole	TP43.58x42.71x0.638	31	-44.015	--	**	**
L32	26.5 - 21.5	Pole	TP44.45x43.58x0.625	32	-45.929	--	**	**
L33	21.5 - 17.75	Pole	TP45.102x44.45x0.625	33	-47.380	--	**	**
L34	17.75 - 17.5	Pole	TP45.145x45.102x0.725	34	-47.502	--	**	**
L35	17.5 - 14.25	Pole	TP45.711x45.145x0.725	35	-48.975	--	**	**
L36	14.25 - 14	Pole	TP45.754x45.711x0.638	36	-49.084	--	**	**
L37	14 - 9	Pole	TP46.624x45.754x0.625	37	-51.246	--	**	**
L38	9 - 4	Pole	TP47.494x46.624x0.625	38	-53.360	--	**	**
L39	4 - 0	Pole	TP48.19x47.494x0.625	39	-55.069	--	**	**
						Summary		
						Pole (L12)	**	**
						RATING =	**	**

** Check Appendix C For Additional Calculations

APPENDIX B

BASE LEVEL DRAWING



BUSINESS UNIT: 876373

APPENDIX C

ADDITIONAL CALCULATIONS

CCIpole

per TIA-222-H

Site BU: 876373

Work Order: 1789303

CROWN CASTLE

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	148	31.5	3.75	18	24	29.48	0.21875	Auto	A607-60
2	120.25	40	4.5	18	28.39	35.35	0.25	Auto	A607-65
3	84.75	45	5.25	18	34.07	41.9	0.3125	Auto	A607-65
4	45	45	0	18	40.36	48.19	0.375	Auto	A607-65

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	13	14	15	16	17	18
1	0	17.75	plate	CCI-SFP-065125	2				E			E											
2	0	31.75	plate	CCI-SFP-085125	2												E						E
3	14.25	31.75	plate	CCI-SFP-085125	1						E												
4	31.75	66.75	plate	CCI-SFP-085125	3						E						E						E
5	66.75	98.5	plate	CCI-SFP-060100	2						E						E						
6	66.75	98.75	plate	CCI-SFP-060100	1																		E
7																							
8																							
9																							
10																							

Reinforcement Details

	B (in)	H (in)	Gross Area (in^2)	Pole Face to Centroid (in)	Bottom Termination Length (in)	Top Termination Length (in)	L_u (in)	Net Area (in^2)	Bolt Hole Size (in)	Reinforcement Material
1	6.5	1.25	8.125	0.625	33.000	33.000	19.000	6.563	1.1875	A572-65
2	8.5	1.25	10.625	0.625	45.000	45.000	17.000	9.063	1.1875	A572-65
3	8.5	1.25	10.625	0.625	45.000	45.000	17.000	9.063	1.1875	A572-65
4	8.5	1.25	10.625	0.625	45.000	45.000	17.000	9.063	1.1875	A572-65
5	6	1	6	0.5	24.000	24.000	16.000	4.750	1.1875	A572-65
6	6	1	6	0.5	24.000	24.000	16.000	4.750	1.1875	A572-65

TNX Geometry Input

Increment (ft): 5

	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	148 - 143	5		18	24.000	24.870	0.21875	A607-60	1.000
2	143 - 138	5		18	24.870	25.740	0.21875	A607-60	1.000
3	138 - 133	5		18	25.740	26.610	0.21875	A607-60	1.000
4	133 - 128	5		18	26.610	27.479	0.21875	A607-60	1.000
5	128 - 123	5		18	27.479	28.349	0.21875	A607-60	1.000
6	123 - 120.25	6.5	3.75	18	28.349	29.480	0.21875	A607-60	1.000
7	120.25 - 115.25	5		18	28.390	29.260	0.25	A607-65	1.000
8	115.25 - 110.25	5		18	29.260	30.130	0.25	A607-65	1.000
9	110.25 - 105.25	5		18	30.130	31.000	0.25	A607-65	1.000
10	105.25 - 100.25	5		18	31.000	31.870	0.25	A607-65	1.000
11	100.25 - 98.75	1.5		18	31.870	32.131	0.25	A607-65	1.000
12	98.75 - 98.5	0.25		18	32.131	32.175	0.25	A607-65	1.000
13	98.5 - 98.25	0.25		18	32.175	32.218	0.45	A607-65	0.956
14	98.25 - 93.25	5		18	32.218	33.088	0.44375	A607-65	0.958
15	93.25 - 88.25	5		18	33.088	33.958	0.4375	A607-65	0.961
16	88.25 - 84.75	8	4.5	18	33.958	35.350	0.4375	A607-65	0.954
17	84.75 - 79.75	5		18	34.067	34.937	0.5	A607-65	0.958
18	79.75 - 74.75	5		18	34.937	35.808	0.4875	A607-65	0.974
19	74.75 - 69.75	5		18	35.808	36.678	0.4875	A607-65	0.966
20	69.75 - 66.75	3		18	36.678	37.200	0.4875	A607-65	0.961
21	66.75 - 66.5	0.25		18	37.200	37.244	0.625	A607-65	0.943
22	66.5 - 61.5	5		18	37.244	38.114	0.6125	A607-65	0.952
23	61.5 - 56.5	5		18	38.114	38.984	0.6125	A607-65	0.941
24	56.5 - 51.5	5		18	38.984	39.855	0.6	A607-65	0.951
25	51.5 - 46.5	5		18	39.855	40.725	0.6	A607-65	0.942
26	46.5 - 45	6.75	5.25	18	40.725	41.900	0.5875	A607-65	0.959
27	45 - 38.75	6.25		18	40.361	41.448	0.65	A607-65	0.960
28	38.75 - 33.75	5		18	41.448	42.318	0.65	A607-65	0.952
29	33.75 - 31.75	2		18	42.318	42.666	0.65	A607-65	0.948
30	31.75 - 31.5	0.25		18	42.666	42.710	0.65	A607-65	0.948
31	31.5 - 26.5	5		18	42.710	43.580	0.6375	A607-65	0.959
32	26.5 - 21.5	5		18	43.580	44.450	0.625	A607-65	0.970
33	21.5 - 17.75	3.75		18	44.450	45.102	0.625	A607-65	0.965
34	17.75 - 17.5	0.25		18	45.102	45.145	0.725	A607-65	0.992
35	17.5 - 14.25	3.25		18	45.145	45.711	0.725	A607-65	0.986
36	14.25 - 14	0.25		18	45.711	45.754	0.6375	A607-65	1.002
37	14 - 9	5		18	45.754	46.624	0.625	A607-65	1.014
38	9 - 4	5		18	46.624	47.494	0.625	A607-65	1.007
39	4 - 0	4		18	47.494	48.190	0.625	A607-65	1.001

TNX Section Forces

Increment (ft): 5

	Section Height (ft)	TNX Output P_u (K)	M_{ux} (kip-ft)	V_u (K)
1	148 - 143	3.46	21.81	3.75
2	143 - 138	3.83	41.34	4.07
3	138 - 133	7.64	84.11	8.76
4	133 - 128	8.08	128.70	9.09
5	128 - 123	10.99	186.39	11.77
6	123 - 120.25	11.26	219.01	11.96
7	120.25 - 115.25	12.11	279.70	12.32
8	115.25 - 110.25	18.54	363.03	17.57
9	110.25 - 105.25	19.21	451.59	17.87
10	105.25 - 100.25	19.91	541.64	18.17
11	100.25 - 98.75	20.12	568.99	18.33
12	98.75 - 98.5	20.16	573.58	18.35
13	98.5 - 98.25	20.22	578.17	18.38
14	98.25 - 93.25	21.26	671.53	18.98
15	93.25 - 88.25	22.32	767.85	19.57
16	88.25 - 84.75	23.08	837.02	19.97
17	84.75 - 79.75	25.13	938.51	20.63
18	79.75 - 74.75	26.47	1044.38	21.34
19	74.75 - 69.75	27.74	1152.47	21.91
20	69.75 - 66.75	28.52	1218.71	22.26
21	66.75 - 66.5	28.60	1224.28	22.29
22	66.5 - 61.5	30.18	1337.21	22.90
23	61.5 - 56.5	31.78	1453.14	23.49
24	56.5 - 51.5	33.40	1572.01	24.07
25	51.5 - 46.5	35.04	1693.73	24.64
26	46.5 - 45	35.54	1730.80	24.81
27	45 - 38.75	39.43	1888.54	25.62
28	38.75 - 33.75	41.28	2017.90	26.14
29	33.75 - 31.75	42.03	2070.36	26.34
30	31.75 - 31.5	42.13	2076.95	26.36
31	31.5 - 26.5	44.01	2209.92	26.85
32	26.5 - 21.5	45.93	2345.29	27.33
33	21.5 - 17.75	47.38	2448.39	27.69
34	17.75 - 17.5	47.50	2455.32	27.70
35	17.5 - 14.25	48.98	2545.87	28.04
36	14.25 - 14	49.08	2552.88	28.05
37	14 - 9	51.25	2694.67	28.57
38	9 - 4	53.36	2837.98	28.79
39	4 - 0	55.07	2953.43	28.96

Analysis Results

Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
148 - 143	Pole	TP24.87x24x0.2188	Pole	3.9%	Pass
143 - 138	Pole	TP25.74x24.87x0.2188	Pole	6.8%	Pass
138 - 133	Pole	TP26.61x25.74x0.2188	Pole	13.0%	Pass
133 - 128	Pole	TP27.479x26.61x0.2188	Pole	18.6%	Pass
128 - 123	Pole	TP28.349x27.479x0.2188	Pole	25.6%	Pass
123 - 120.25	Pole	TP29.48x28.349x0.2188	Pole	29.1%	Pass
120.25 - 115.25	Pole	TP29.26x28.39x0.25	Pole	28.3%	Pass
115.25 - 110.25	Pole	TP30.13x29.26x0.25	Pole	35.2%	Pass
110.25 - 105.25	Pole	TP31x30.13x0.25	Pole	41.5%	Pass
105.25 - 100.25	Pole	TP31.87x31x0.25	Pole	47.4%	Pass
100.25 - 98.75	Pole	TP32.131x31.87x0.25	Pole	49.0%	Pass
98.75 - 98.5	Pole	TP32.175x32.131x0.25	Pole	49.3%	Pass
98.5 - 98.25	Pole + Reinf.	TP32.218x32.175x0.45	Reinf. 5 Tension Rupture	40.7%	Pass
98.25 - 93.25	Pole + Reinf.	TP33.088x32.218x0.4438	Reinf. 5 Tension Rupture	45.3%	Pass
93.25 - 88.25	Pole + Reinf.	TP33.958x33.088x0.4375	Reinf. 5 Tension Rupture	49.6%	Pass
88.25 - 84.75	Pole + Reinf.	TP35.35x33.958x0.4375	Reinf. 5 Tension Rupture	52.6%	Pass
84.75 - 79.75	Pole + Reinf.	TP34.937x34.067x0.5	Reinf. 5 Tension Rupture	50.6%	Pass
79.75 - 74.75	Pole + Reinf.	TP35.808x34.937x0.4875	Reinf. 5 Tension Rupture	54.1%	Pass
74.75 - 69.75	Pole + Reinf.	TP36.678x35.808x0.4875	Reinf. 5 Tension Rupture	57.3%	Pass
69.75 - 66.75	Pole + Reinf.	TP37.2x36.678x0.4875	Reinf. 5 Tension Rupture	59.2%	Pass
66.75 - 66.5	Pole + Reinf.	TP37.244x37.2x0.625	Reinf. 4 Bolt Shear	45.2%	Pass
66.5 - 61.5	Pole + Reinf.	TP38.114x37.244x0.6125	Reinf. 4 Compression	45.8%	Pass
61.5 - 56.5	Pole + Reinf.	TP38.984x38.114x0.6125	Reinf. 4 Compression	48.1%	Pass
56.5 - 51.5	Pole + Reinf.	TP39.855x38.984x0.6	Reinf. 4 Compression	50.3%	Pass
51.5 - 46.5	Pole + Reinf.	TP40.725x39.855x0.6	Reinf. 4 Compression	52.4%	Pass
46.5 - 45	Pole + Reinf.	TP41.9x40.725x0.5875	Reinf. 4 Compression	53.1%	Pass
45 - 38.75	Pole + Reinf.	TP41.448x40.361x0.65	Reinf. 4 Compression	51.5%	Pass
38.75 - 33.75	Pole + Reinf.	TP42.318x41.448x0.65	Reinf. 4 Compression	53.2%	Pass
33.75 - 31.75	Pole + Reinf.	TP42.666x42.318x0.65	Reinf. 4 Bolt Shear	56.0%	Pass
31.75 - 31.5	Pole + Reinf.	TP42.71x42.666x0.65	Reinf. 2 Bolt Shear	56.1%	Pass
31.5 - 26.5	Pole + Reinf.	TP43.58x42.71x0.6375	Reinf. 2 Compression	55.6%	Pass
26.5 - 21.5	Pole + Reinf.	TP44.45x43.58x0.625	Reinf. 2 Compression	57.1%	Pass
21.5 - 17.75	Pole + Reinf.	TP45.102x44.45x0.625	Reinf. 2 Compression	58.2%	Pass
17.75 - 17.5	Pole + Reinf.	TP45.145x45.102x0.725	Reinf. 2 Compression	54.6%	Pass
17.5 - 14.25	Pole + Reinf.	TP45.711x45.145x0.725	Reinf. 2 Compression	55.5%	Pass
14.25 - 14	Pole + Reinf.	TP45.754x45.711x0.6375	Reinf. 1 Tension Rupture	59.9%	Pass
14 - 9	Pole + Reinf.	TP46.624x45.754x0.625	Reinf. 1 Tension Rupture	61.4%	Pass
9 - 4	Pole + Reinf.	TP47.494x46.624x0.625	Reinf. 1 Tension Rupture	62.8%	Pass
4 - 0	Pole + Reinf.	TP48.19x47.494x0.625	Reinf. 1 Tension Rupture	63.8%	Pass
				Summary	
			Pole	49.3%	Pass
			Reinforcement	63.8%	Pass
			Overall	63.8%	Pass

Additional Calculations

Section Elevation (ft)	Moment of Inertia (in^4)			Area (in^2)			% Capacity*						
	Pole	Reinf.	Total	Pole	Reinf.	Total	Pole	R1	R2	R3	R4	R5	R6
148 - 143	1314	n/a	1314	17.11	n/a	17.11	3.9%						
143 - 138	1458	n/a	1458	17.72	n/a	17.72	6.8%						
138 - 133	1612	n/a	1612	18.32	n/a	18.32	13.0%						
133 - 128	1776	n/a	1776	18.93	n/a	18.93	18.6%						
128 - 123	1952	n/a	1952	19.53	n/a	19.53	25.6%						
123 - 120.25	2053	n/a	2053	19.86	n/a	19.86	29.1%						
120.25 - 115.25	2447	n/a	2447	23.02	n/a	23.02	28.3%						
115.25 - 110.25	2673	n/a	2673	23.71	n/a	23.71	35.2%						
110.25 - 105.25	2914	n/a	2914	24.40	n/a	24.40	41.5%						
105.25 - 100.25	3168	n/a	3168	25.09	n/a	25.09	47.4%						
100.25 - 98.75	3247	n/a	3247	25.30	n/a	25.30	49.0%						
98.75 - 98.5	3261	n/a	3261	25.33	n/a	25.33	49.3%						
98.5 - 98.25	3274	2510	5784	25.37	18.00	43.37	27.8%					40.7%	40.7%
98.25 - 93.25	3549	2642	6191	26.06	18.00	44.06	31.2%					45.3%	45.3%
93.25 - 88.25	3838	2777	6616	26.75	18.00	44.75	34.5%					49.6%	49.6%
88.25 - 84.75	4050	2874	6924	27.23	18.00	45.23	36.8%					52.6%	52.6%
84.75 - 79.75	5200	2934	8134	34.34	18.00	52.34	33.0%					50.6%	50.6%
79.75 - 74.75	5602	3076	8678	35.21	18.00	53.21	35.5%					54.1%	54.1%
74.75 - 69.75	6024	3222	9246	36.07	18.00	54.07	38.0%					57.3%	57.3%
69.75 - 66.75	6288	3311	9599	36.59	18.00	54.59	39.4%					59.2%	59.2%
66.75 - 66.5	6310	6002	12312	36.63	31.88	68.50	30.9%				45.2%		
66.5 - 61.5	6767	6272	13038	37.49	31.88	69.37	32.9%				45.8%		
61.5 - 56.5	7245	6548	13793	38.36	31.88	70.23	34.8%				48.1%		
56.5 - 51.5	7745	6830	14575	39.22	31.88	71.09	36.7%				50.3%		
51.5 - 46.5	8268	7118	15386	40.08	31.88	71.96	38.5%				52.4%		
46.5 - 45	8429	7206	15635	40.34	31.88	72.22	39.1%				53.1%		
45 - 38.75	10416	7362	17778	48.89	31.88	80.76	35.9%				51.5%		
38.75 - 33.75	11092	7661	18753	49.92	31.88	81.80	37.3%				53.2%		
33.75 - 31.75	11370	7782	19153	50.34	31.88	82.21	37.9%				56.0%		
31.75 - 31.5	11405	7798	19203	50.39	31.88	82.26	38.0%		56.1%	56.1%			
31.5 - 26.5	12123	8105	20229	51.42	31.88	83.30	39.4%		55.6%	55.6%			
26.5 - 21.5	12870	8419	21289	52.46	31.88	84.33	40.8%		57.1%	57.1%			
21.5 - 17.75	13450	8658	22109	53.23	31.88	85.11	41.8%		58.2%	58.2%			
17.75 - 17.5	13718	12037	25755	53.29	48.13	101.41	39.3%	45.6%	54.6%	40.7%			
17.5 - 14.25	14241	12332	26573	53.96	48.13	102.08	40.1%	46.4%	55.5%	43.1%			
14.25 - 14	14065	9296	23361	54.01	37.50	91.51	43.0%	59.9%	56.3%				
14 - 9	14889	9640	24528	55.05	37.50	92.55	44.3%	61.4%	57.7%				
9 - 4	15744	9989	25734	56.08	37.50	93.58	45.6%	62.8%	59.0%				
4 - 0	16452	10274	26726	56.91	37.50	94.41	46.6%	63.8%	62.3%				

Note: Section capacity checked in 5 degree increments.
Rating per TIA-222-H Section 15.5.

PROJECT	**89028.010.01 - LONG EDDY / WRIGHTPROPERTY, CT**
SUBJECT	**Anchor Rod Bracket Analysis**
DATE	**09-26-19**
V4.3.0	

B+T GRP
1717 S. Boulder, Suite 300
Tulsa, OK 74119
(918) 587-4630

TIA-222 Rev.	H
Apply TIA-222-H Section 15.5?	Yes

Analysis Criteria	
Design/Analysis	Analysis
Load Type	Current Load
Current load	146.56 kips
AR Capacity	341.3 kips

Tower Type	Monopole

Manufacturers Tower Prop.		
Pole Thickness		0.375 in
Pole Grade		Custom
Pole Sides #		18
Pole Base OD		48.19 in
Fy	60	60 ksi
Fu	75	75 ksi
Base Plate Gr.		Custom
Fy	55	55 ksi
Fu	70	70 ksi
Anchor Rods		
Size		2.25 in
Quantity		16
Bolt Circle		55 in
Grade		A615-75
Fy		75 ksi
Fu		100 ksi

Post-Installed Adhesive AR Mod.	
ARB Type	Welded
Size	2.25 in
AR Layout	Symmetric
Quantity	3
Bolt Circle	62.0 in
Grade	A193 Gr B7
Fy	105 ksi
Fu	125 ksi

Anchor Rod Bracket Analysis Checks		
Tube Bearing	[redacted]	-
Tube Compression	N/A	
Gusset Shear	[redacted]	-
Gusset Flexure	N/A	-
Welds: Gusset to Tower and BP	[redacted]	-
Welds: Gusset to Tube		-
Welds: Geometry	N/A	
Tower Punching	[redacted]	-
Tube Punching		-
Utilization	[redacted]	

Bracket Properties

Gusset		Pipe/Tube		Weld - Gusset to Pipe/Tube	
Thickness	1.25 in	Size	4 XXS Pipe	FEXX	70 ksi
Width at Tube	4.5625 in	Total Length	14 in	Weld Type	Double Bevel+Fillet
Height at Pole	54 in	Length above Gusset	0 in	Fillet Size	3/8 in
Height at Tube	14 in	Length below Gusset	0 in	Bevel Depth	3/8
Grade	A572-65	Grade	A53-B		
Fy	65 ksi	Fy	35 ksi		
Fu	80 ksi	Fu	60 ksi		

Weld - Gusset to Tower		Weld - Gusset to Base Plate	
FEXX	70 ksi	FEXX	70 ksi
Weld Type	Double Fillet	Weld Type	Double Bevel+Fillet
Fillet Size	3/8 in	Fillet Size	1/2 in
		Bevel Depth	1/2 in
Length	54 in	Gap	0 in
Load Angle	45 deg.	Notch (horiz)	0.75 in
		Notch (vert)	0.75 in
		Pipe/Tube Welded to Base/Footpad?	Yes
		Fillet Size	1/2 in

Monopole Base Plate Connection

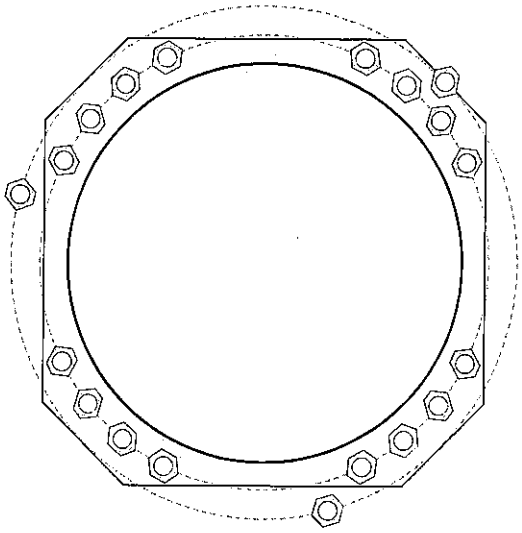
CROWN CASTLE

Site Info	
BU #	876373
Site Name	DDY / WRIGHTPROPER
Order #	503512, REV.0

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

Applied Loads	
Moment (kip-ft)	2953.43
Axial Force (kips)	55.07
Shear Force (kips)	30.00

**TIA-222-H Section 15.5 Applied*



Connection Properties

Anchor Rod Data

GROUP 1: (16) 2-1/4" ø bolts (A615-75 N; Fy=75 ksi, Fu=100 ksi) on 55" BC
Anchor Spacing: 6 in
GROUP 2: (3) 2-1/4" ø bolts (A193 Gr. B7 N; Fy=105 ksi, Fu=125 ksi) on 62" BC

Base Plate Data

54" OD x 2.75" Plate (A572-55; Fy=55 ksi, Fu=70 ksi)

Stiffener Data

N/A

Pole Data

48.19" x 0.375" 18-sided pole (A607-65; Fy=65 ksi, Fu=80 ksi)

Analysis Results

Anchor Rod Summary *(units of kips, kip-in)*

GROUP 1:		
Pu_c = 133.43	ϕPn_c = 243.75	**Stress Rating**
Vu = 1.88	ϕVn = 73.13	**52.2%**
Mu = n/a	ϕMn = n/a	**Pass**
GROUP 2:		
Pu_c = 146.56	ϕPn_c = 341.25	**Stress Rating**
Vu = 0	ϕVn = 102.38	**40.9%**
Mu = n/a	ϕMn = n/a	**Pass**

Base Plate Summary

Max Stress (ksi):	25.36	(Flexural)
Allowable Stress (ksi):	49.5	
Stress Rating:	**48.8%**	**Pass**

Pier and Pad Foundation

BU # :	876373
Site Name:	LONG EDDY /
App. Number:	503512, REV.0

TIA-222 Revision:	H
Tower Type:	Monopole

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

Superstructure Analysis Reactions		
Compression, P_{comp}:	55	kips
Base Shear, Vu_comp:	30	kips
Moment, M_u:	2953	ft-kips
Tower Height, H:	148	ft
BP Dist. Above Fdn, bp_{dist}:	3	in
Bolt Circle / Bearing Plate Width, BC:	55	in

Foundation Analysis Checks				
	Capacity	**Demand**	**Rating***	**Check**
Lateral (Sliding) (kips)	103.58	30.00	**27.6%**	**Pass**
Bearing Pressure (ksf)	9.00	3.46	**38.5%**	**Pass**
*Overturning (kip*ft)*	4072.64	3080.50	**75.6%**	**Pass**
*Pad Flexure (kip*ft)*	3944.73	1590.29	**38.4%**	**Pass**
Pad Shear - 1-way (kips)	1050.72	208.51	**18.9%**	**Pass**
Pad Shear - 2-way (Comp) (ksi)	0.164	0.003	**1.8%**	**Pass**
*Flexural 2-way (Comp) (kip*ft)*	3807.33	0.00	**0.0%**	**Pass**

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

Soil Rating*:	**75.6%**
Structural Rating*:	**38.4%**

Pad Properties		
Depth, D:	3.5	ft
Pad Width, W:	24.5	ft
Pad Thickness, T:	4	ft
Pad Rebar Size (Bottom), Sp:	8	
Pad Rebar Quantity (Bottom), mp:	26	
Pad Clear Cover, cc_{pad}:	3	in

Material Properties		
Rebar Grade, Fy:	60	ksi
Concrete Compressive Strength, F'c:	3	ksi
Dry Concrete Density, δc:	150	pcf

Soil Properties		
Total Soil Unit Weight, γ:	120	pcf
Ultimate Gross Bearing, Qult:	12.000	ksf
Cohesion, Cu:	0.000	ksf
Friction Angle, φ:	30	degrees
SPT Blow Count, N_{blows}:		
Base Friction, μ:		
Neglected Depth, N:	3.33	ft
Foundation Bearing on Rock?	Yes	
Groundwater Depth, gw:	N/A	ft

<--Toggle between Gross and Net

verizo

TORRINGTON
136 WRIGH
TORRINGTON,

PROJECT SUMMARY

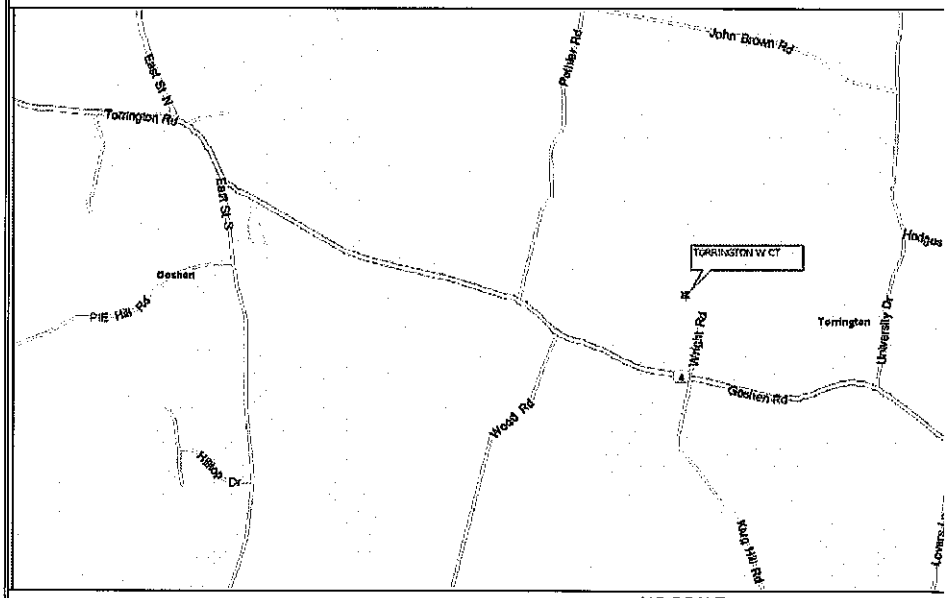
SITE NAME:	TORRINGTON W CT
SITE ADDRESS:	136 WRIGHT RD TORRINGTON, CT 06790
TOWER OWNER:	CROWN CASTLE 2000 CORPORATE DR CANONSBURG, PA 15317
BU NUMBER:	876373
MAP NUMBER:	214/002
LOT NUMBER:	005
CUSTOMER/APPLICANT:	VERIZON WIRELESS 400 FRIEBERG PARKWAY WESTBOROUGH, MA 01581
CONTACT:	DAN MYZYRI (617) 945-7288
NAD83	
LATITUDE:	41° 49' 38.3304" N
LONGITUDE:	73° 10' 13.98" W
ELEVATION:	1098'
CURRENT ZONING:	R-WP
A&E FIRM:	B+T GROUP 1717 S. BOULDER, SUITE 300 TULSA, OK 74119 STEVE THORNHILL (918) 587-4630
OCCUPANCY TYPE:	UNMANNED
A.D.A. COMPLIANCE:	FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION.

CODE COMPLIANCE

ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES:

CODE TYPE	CODE
BUILDING	2018 CT SBC
STRUCTURAL	2018 CT SBC
MECHANICAL	2018 CT SBC
ELECTRICAL	NEC 2017

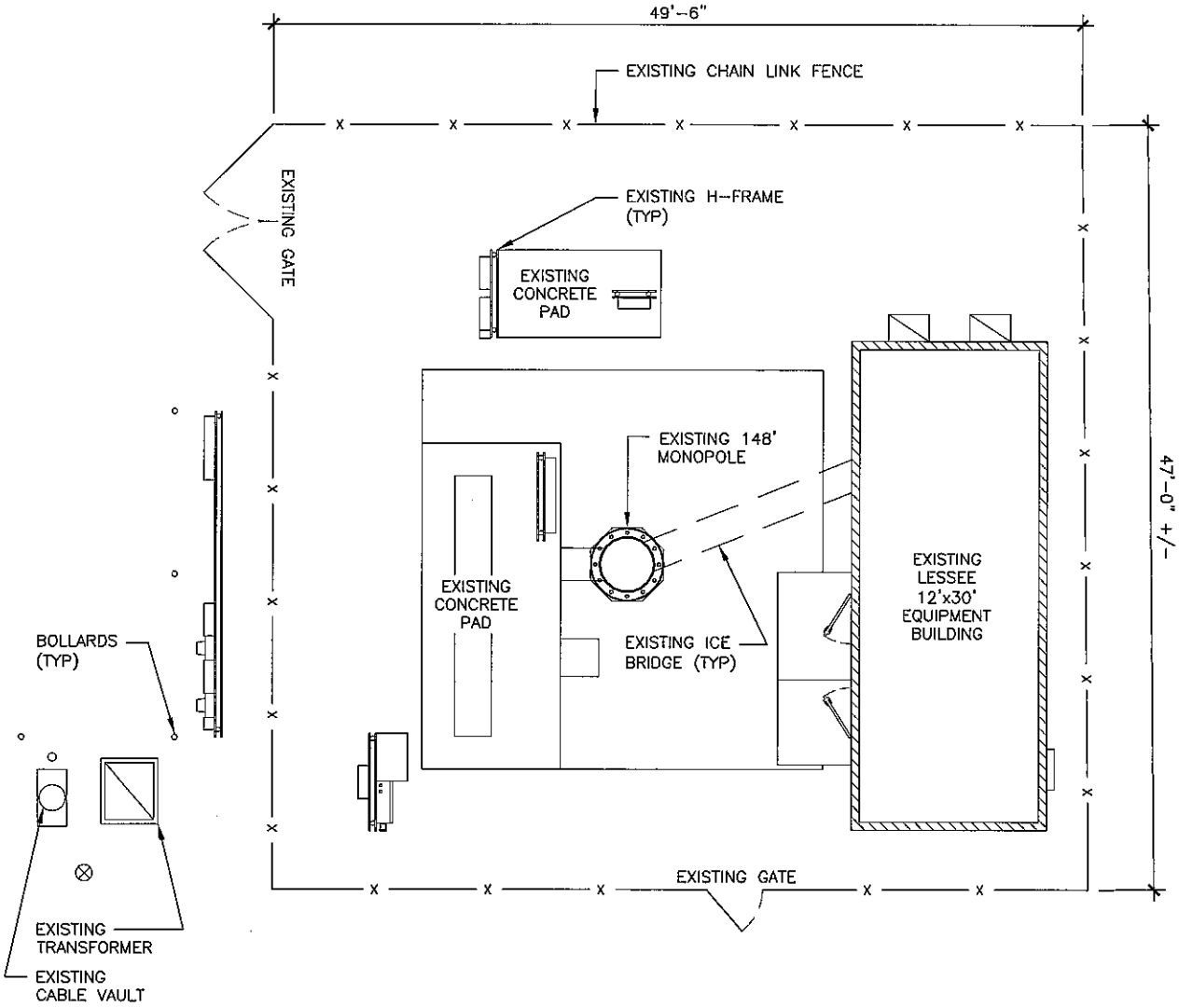
LOCATION MAP



NO SCALE

DRIVING DIRECTIONS

DEPART FROM BRADLEY INTERNATIONAL AIRPORT ON TERMINAL RD. ROAD NAME CHANGES TO BRADLEY RAMP. KEEP STRAIGHT ONTO CT-20. KEEP LEFT ONTO CT-189 [CT-20]. BEAR LEFT ONTO CT-20 CT-219 [BARKHAMSTED RD]. TURN LEFT ONTO CT-179 [CT-219]. KEEP STRAIGHT ONTO CT-219 [E CT-318 [SAVILLE DAM RD]. TURN LEFT ONTO CT-181 [CT-318]. KEEP STRAIGHT ONTO CT-318 [RI [NEW HARTFORD RD]. TURN LEFT ONTO CT-8. AT EXIT 44, KEEP RIGHT ONTO RAMP. TURN RIGHT O WRIGHT RD. BEAR LEFT ONTO ACCESS ROAD AND ARRIVE AT TORRINGTON W CT.



NOTES:
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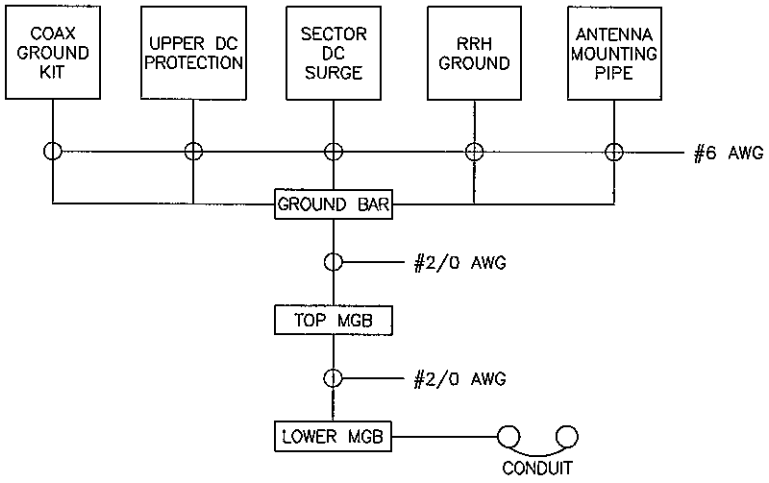
4. ESTIMATI

1 COMPOUND PLAN

SCALE: 0' 1' 4' 8' 16'

N

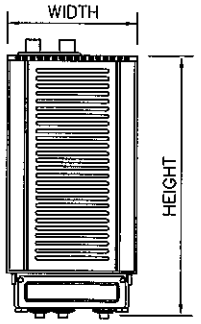
NOTE:
1. INSTALL ALL EQUIPMENT, MOUNTING BRACKETS AND HARDWARE ACCORDING WITH MANUFACTURE'S RECOMMENDATIONS.
2. GROUND DISTRIBUTION BOXES, MOUNTING PIPES AND RRHs IN ACCORDANCE WITH MANUFACTURE'S RECOMMENDATIONS.
3. INSTALLED EQUIPMENT AND MOUNTING BRACKETS SHALL NOT INTERFERE WITH CLIMBING ACCESS NOR ANT INSTALLED SAFETY DEVICES.
4. EQUIPMENT TO BE INSTALLED AT VERIZON'S RAD. CENTER IN ACCORDANCE WITH TOWER STRUCTURAL ANALYSIS (ANALYSIS BY OTHERS).



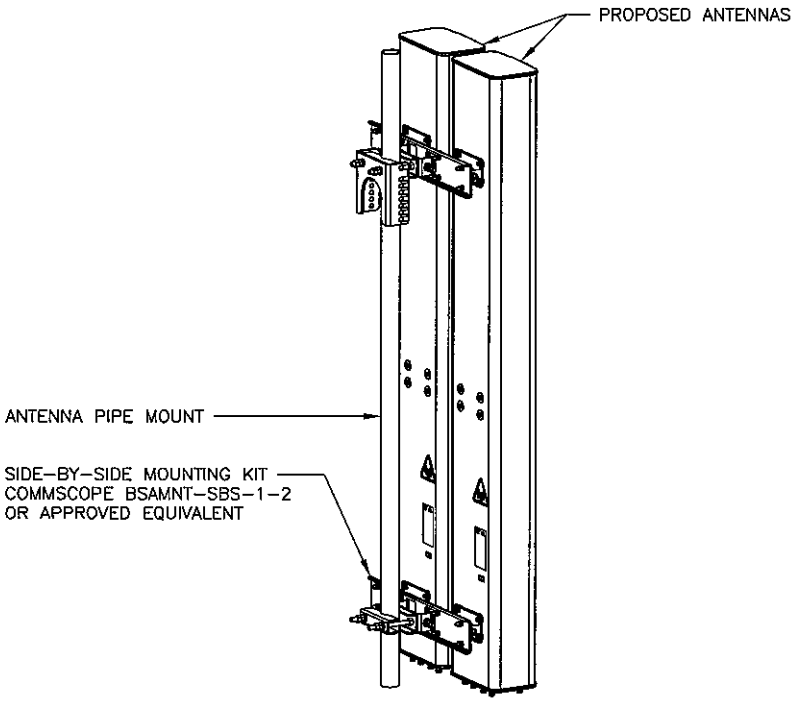
NOTE:
1. BOND ANTENNA GROUNDING KIT CABLES TO TOP CIBE.
2. BOND ANTENNA GROUNDING KIT CABLE TO BOTTOM CIBE.
3. TYPICAL FOR ALL SECTORS.

1 GROUNDING SCHEMATIC DIAGRAM
SCALE: N.T.S.

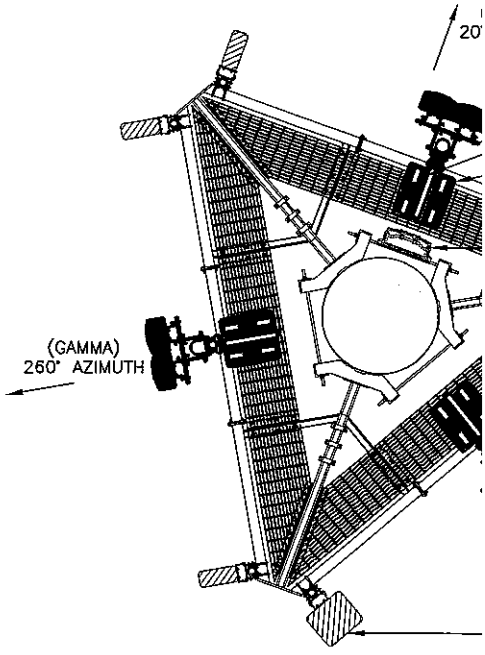
REMOTE RADIO HEAD DIMENSI		
MODEL	HEIGHT	WIDTH
RRH RFV01U-D1A	15.0"	15.0"
RRH RFV01U-D2A	15.0"	15.0"



2 RRH SPECIFICATIONS
SCALE: N.T.S.



4 ANTENNA MOUNTING DETAIL
SCALE: N.T.S.



5 PROPOSED ANTENNA ORIENTA
SCALE: N.T.S.