

September 19, 2023

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

RE: **Notice of Exempt Modification for Verizon
Crown #841294_Crown_VZW
225/230 Guinea Road, Monroe, CT 06468
Latitude: 41° 20' 30.68" / Longitude: -73° 16' 28.28"**

Dear Ms. Bachman:

Verizon Wireless is requesting to file an exempt modification for an existing tower located at 225/230 Guinea Road, Monroe, CT 06468. The property is owned by the Town of Monroe and the tower is owned by Crown Castle. Verizon now intends to add two (2) interference mitigation filters to be installed at the 212-foot level of the tower of the 240-foot monopole. This modification may include B2, B5, B17, B14, B29, B30, B66 & n77 hardware that is 4G(LTE) and/or 5GNR capable through remote software configuration and either or both services may be turned on or off at various times.

Panned Modification:

Tower:

Installed New:

(2) Kaelus BSF0020F3V1-1 Twin Bandstop 900MHZ Interference Mitigation Filters

The proposed work in this application only pertains to the installation of interference mitigation filter(s) and does not involve any additional equipment that may be called out in the Mount Analysis and/or in Table 1 of the Structural Analysis Reports.

The facility was approved by the Connecticut Siting Council by way of a Certificate of Environmental Compatibility on January 16, 1990. Please see attached.

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies §16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-SOj-73, a copy of this letter is being sent to First Selectman Ken Kellogg and Zoning Enforcement Officer Cheryl Vallerie for the municipality and as property owner. Crown Castle is the tower owner. The proposed modifications will not result in an increase in the height of the existing tower.

1. The proposed modifications will not require the extension of the site boundary.
2. 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.

Melanie A. Bachman

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3. 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.
4. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.
5. 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: Domenica Tatasciore.

Sincerely,



Domenica Tatasciore
Site Acquisition Specialist
1800 W. Park Drive
Westborough, MA 01581
(508) 621-9161/ Domenica.Tatasciore@crowncastle.com

Attachments

cc:

First Selectman Ken Kellogg
Town of Monroe
7 Fan Hill Road
Monroe, CT 06468
203-452-2800

Cheryl Vallerie , ZEO
Town of Monroe
7 Fan Hill Road
Monroe, CT 06468
203-452-2800

Crown Castle, Tower Owner

From: TrackingUpdates@fedex.com
To: [Tatasciore, Domenica](#)
Subject: FedEx Shipment 773364525089: Your package has been delivered
Date: Tuesday, September 19, 2023 10:23:38 AM

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.



Hi. Your package was
delivered Tue, 09/19/2023 at
10:17am.



Delivered to 7 FAN HILL RD, MONROE, CT 06468
Received by M.MORLEY

[OBTAIN PROOF OF DELIVERY](#)

How was your delivery ?



TRACKING NUMBER	773364525089
FROM	Crown Castle 1800 West Park Drive Suite 200 WESTBOROUGH, MA, US, 01581
TO	Town of Monroe First Selectman Ken Kellogg 7 Fan Hill Road MONROE, CT, US, 06468
REFERENCE	799001.7680
SHIPPER REFERENCE	799001.7680
SHIP DATE	Mon 9/18/2023 05:50 PM
DELIVERED TO	Receptionist/Front Desk
PACKAGING TYPE	FedEx Envelope
ORIGIN	WESTBOROUGH, MA, US, 01581
DESTINATION	MONROE, CT, US, 06468
NUMBER OF PIECES	1
TOTAL SHIPMENT WEIGHT	0.50 LB
SERVICE TYPE	FedEx Priority Overnight

Wondering when a package will arrive?

Enter your tracking number to see your estimated delivery time within a 4-hour window.

[TRACK A PACKAGE](#)

From: TrackingUpdates@fedex.com
To: [Tatasciore, Domenica](#)
Subject: FedEx Shipment 773364536936: Your package has been delivered
Date: Tuesday, September 19, 2023 10:22:51 AM

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Hi. Your package was
delivered Tue, 09/19/2023 at
10:17am.



Delivered to 7 FAN HILL RD, MONROE, CT 06468
Received by K.KALAKAY

[OBTAIN PROOF OF DELIVERY](#)

How was your delivery ?



TRACKING NUMBER	773364536936
FROM	Crown Castle 1800 West Park Drive Suite 200 WESTBOROUGH, MA, US, 01581
TO	Town of Monroe Cheryl Vallerie, ZEO 7 Fan Hill Road MONROE, CT, US, 06468
REFERENCE	799001.7680
SHIPPER REFERENCE	799001.7680
SHIP DATE	Mon 9/18/2023 05:50 PM
DELIVERED TO	Receptionist/Front Desk
PACKAGING TYPE	FedEx Envelope
ORIGIN	WESTBOROUGH, MA, US, 01581
DESTINATION	MONROE, CT, US, 06468
NUMBER OF PIECES	1
TOTAL SHIPMENT WEIGHT	0.50 LB
SERVICE TYPE	FedEx Priority Overnight

Wondering when a package will arrive?

Enter your tracking number to see your estimated delivery time within a 4-hour window.

[TRACK A PACKAGE](#)

DOCKET NO. 114 - An application : Connecticut
of SNET Cellular, Inc., for a :
Certificate of Environmental : Siting
Compatibility and Public Need :
for a cellular telephone tower : Council
and associated equipment in the :
Town of Monroe, Connecticut. : January 16, 1990

DECISION AND ORDER

Pursuant to the foregoing Findings of Fact and Opinion, the Connecticut Siting Council finds that the effects associated with the construction, operation, and maintenance of a cellular telephone facility at the proposed Monroe site, including effects on the natural environment; ecological integrity and balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish and wildlife are not significant either alone or cumulatively with other effects, are not in conflict with the policies of the State concerning such effects, and are not sufficient reason to deny the application, and therefore directs that a Certificate of Environmental Compatibility and Public Need, as provided by Section 16-50k of the General Statutes of Connecticut (CGS), be issued to SNET Cellular, Inc. (SNET), for the construction, operation, and maintenance of a cellular telecommunications tower, associated equipment, and building at the proposed site in Monroe, Connecticut.

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

1. All SNET cellular antennas shall extend no higher than 252 feet above ground level (AGL). If the Town of Monroe and SNET reach an agreement to place the Town of Monroe's antennas for public radio station WMNR on the tower, then the tower shall be no higher than 260 feet AGL for the attachment of such town antennas; otherwise the tower shall be no higher than 240 feet AGL. Prior to the raising of the tower from 240 feet AGL to 260 feet AGL, notice of such sharing and raising of the tower shall be provided to the Council.
2. The facility shall be constructed in accordance with the State of Connecticut Basic Building Code.
3. The Certificate Holder shall prepare a Development and Management (D&M) Plan for this site in compliance with Sections 16-50j-75 through 16-50j-77 of the Regulations of State Agencies. The D&M plan shall include detailed plans for site preparation including a profile and cross-section of the proposed access road, placement of the proposed tower and equipment building within the leased parcel, and erosion and sedimentation control.

4. The Certificate Holder shall comply with any future radio frequency (RF) standard, promulgated by State or federal regulatory agencies. Upon the establishment of any new governmental RF standards, the facility granted in this Decision and Order shall be brought into compliance with such standards.
5. The Certificate Holder or its successor shall provide the Council a recalculated report of power density if and when additional channels over the proposed 45 channels, higher wattage over the proposed 100 watts per channel, or other circumstances in operation cause a change in power density above the levels originally calculated in the application.
6. The Certificate Holder or its successor shall permit public or private entities to share space on the proposed Monroe tower for fair consideration, or shall provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing.
7. If this facility does not initially provide, or permanently ceases to provide cellular service following completion of construction, this Decision and Order shall be void, and the tower and all associated equipment in this application shall be dismantled and removed or reapplication for any new use shall be made to the Council before any such new use is made.
8. Unless otherwise approved by the Council, this Decision and Order shall be void if all construction authorized herein is not completed within three years of the issuance of this Decision and Order, or within three years after the completion of any appeal from this Decision and Order.

Pursuant to Section 16-50p, we hereby direct that a copy of the Findings of Fact, Opinion, and Decision and Order be served on each person listed below. A notice of issuance shall be published in the Bridgeport Post and the Monroe Courier.

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

The parties or intervenors to this proceeding are:

SNET Cellular, Inc. (Applicant)
227 Church Street
New Haven, CT 06506

Peter J. Tyrrell (Its Representative)
SNET Cellular, Inc.
Room 1021
227 Church Street
New Haven, CT 06506

Metro Mobile CTS of (Intervenor)
Fairfield County, Inc.

Micheal W. Riley (Its Representatives)
Vice-President North East Region
Metro Mobile CTS, Inc.
110 East 59th Street
New York, New York 10022

Philip Mayberry, General Manager
David S. Malko
Metro Mobile CTS of
Fairfield County, Inc.
50 Rockland Road
South Norwalk, Connecticut 06854

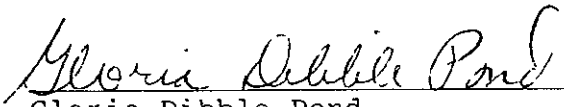
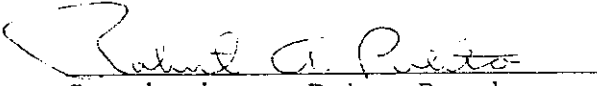

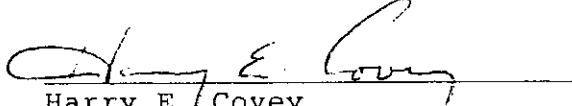
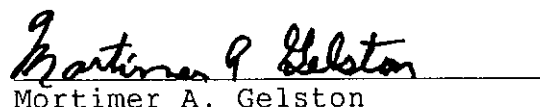
Paul M. Hancock, General Partner (Party)
Housatonic Cable Vision Company
2 East Street
P.O. Box 1540
New Milford, Connecticut 06766

Howard L. Slater, Esq. (Its Representative)
Bryne, Slater, Sandler,
Shulman, & Rouse, P.C.
330 Main Street
P.O. Box 3216
Hartford, Connecticut 06103
Attn: Jennifer Young Gaudet, Esq.

CERTIFICATION

The undersigned members of the Connecticut Siting Council hereby certify that they have heard this case in Docket 114 or read the record thereof, and that we voted as follows:

Dated at New Britain, Connecticut the 16 day of January, 1990.

<u>Council Members</u>	<u>Vote Cast</u>
<u></u> Gloria Dibble Pond Chairperson	Yes
<u></u> Commissioner Peter Boucher Designee: Robert A. Pulito	Yes
<u></u> Commissioner Leslie Carothers Designee: Brian Emerick	Yes
<u></u> Harry E. Covey	Yes
<u></u> Mortimer A. Gelston	Yes
_____ Daniel P. Lynch, Jr.	Absent
_____ Paulann H. Sheets	Absent
_____ William H. Smith	Absent
_____ Colin C. Tait	Absent

230 GUINEA RD

Location 230 GUINEA RD

Map/Lot 081/ 008/ 00/ /

Acct# 08100800

Owner MONROE TOWN OF (OPEN SPACE)

Assessment \$16,400

Appraisal \$23,400

PID 11950

Building Count 1

Survey 1814 C

Affordable

Current Value

Appraisal			
Valuation Year	Improvements	Land	Total
2019	\$0	\$23,400	\$23,400

Assessment			
Valuation Year	Improvements	Land	Total
2019	\$0	\$16,400	\$16,400

Owner of Record

Owner MONROE TOWN OF (OPEN SPACE)
Co-Owner
Address 7 FAN HILL RD
 MONROE, CT 06468-1800

Sale Price \$0
Certificate 1
Book & Page 297/ 119
Sale Date 10/30/1985

Ownership History

Ownership History				
Owner	Sale Price	Certificate	Book & Page	Sale Date
MONROE TOWN OF (OPEN SPACE)	\$0	1	297/ 119	10/30/1985

Building Information

Building 1 : Section 1

Year Built:

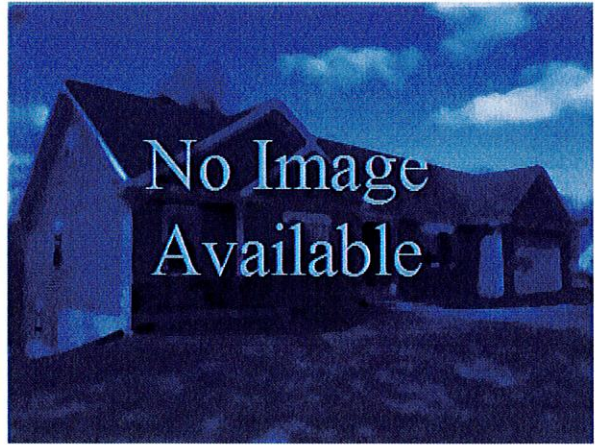
Living Area: 0

Building Attributes

Field	Description

Style	Vacant Land
Model	
Grade:	
Stories:	
Occupancy	
Exterior Wall 1	
Exterior Wall 2	
Roof Structure:	
Roof Cover	
Interior Wall 1	
Interior Wall 2	
Interior Flr 1	
Interior Flr 2	
Heat Fuel	
Heat Type:	
AC Type:	
Total Bedrooms:	
Total Bthrms:	
Total Half Baths:	
Total Xtra Fixtrs:	
Total Rooms:	
Bath Style:	
Kitchen Style:	
Fireplaces	
Wdstv Flues	
Basement Gar.	
Attic	
Basement	
In Law Apt	

Building Photo



(<https://images.vgsi.com/photos/MonroeCTPhotos//default.jpg>)

Building Layout

(https://images.vgsi.com/photos/MonroeCTPhotos//Sketches/11950_11950)

Building Sub-Areas (sq ft)	Legend
No Data for Building Sub-Areas	

Extra Features

Extra Features	Legend
No Data for Extra Features	

Parcel Information

Use Code 903
Description Municipal
Deeded Acres 3.02

Land

Land Use

Use Code 903
Description Municipal
Zone RF2
Neighborhood Stepney
Alt Land Approved No
Category

Land Line Valuation

Size (Acres) 3.02
Appraised Value \$23,400

Outbuildings

Outbuildings		Legend
No Data for Outbuildings		

Valuation History

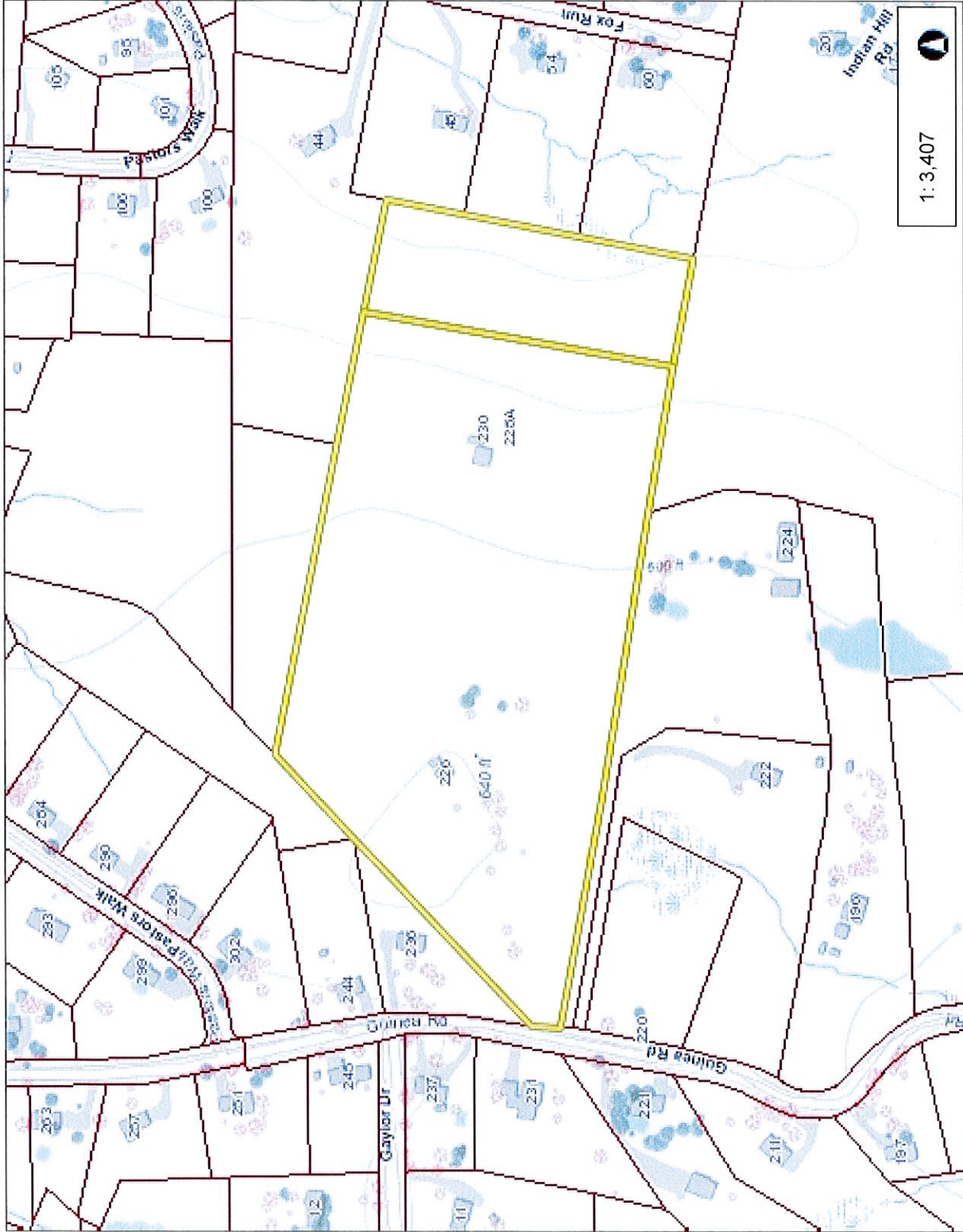
Appraisal			
Valuation Year	Improvements	Land	Total
2018	\$0	\$24,200	\$24,200

Assessment			
Valuation Year	Improvements	Land	Total
2018	\$0	\$16,900	\$16,900



Town of Monroe

Map Title



Legend

- Parcels
- Streetname
- Roadways
 - Local
 - Collector
 - Minor Collector
 - Minor Arterial
 - Major Collector
 - PA Other
 - PA Other Expwy
 - PA Interstate

1: 3,407



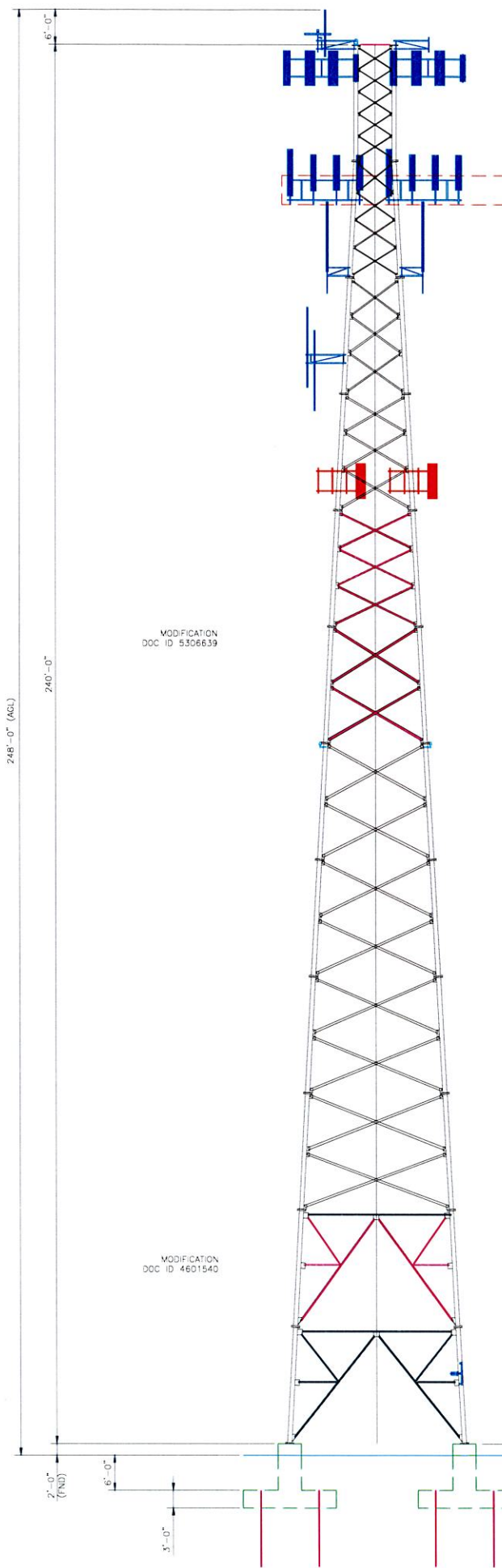
This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.
THIS MAP IS NOT TO BE USED FOR NAVIGATION

567.8
0 283.90 567.8 Feet
WGS_1984_Web_Mercator_Auxiliary_Sphere
Created by Greater Bridgeport Regional Council



246 FT TIP OF EQUIPMENT
240 FT BASE OF 1 FT BEACON

120 FT SIDE LIGHTS



MODIFICATION
DOC ID 5306639

MODIFICATION
DOC ID 4601540

- 240 FT LEVEL
REF. DWG. B41294_A_240_I
 - 236 FT LEVEL
REF. DWG. B41294_A_236_I
 - 215 FT LEVEL (PROPOSED)
REF. DWG. B41294_A_215_I&_P
 - 201 FT LEVEL
REF. DWG. B41294_A_201_I
 - 186 FT LEVEL
REF. DWG. B41294_A_186_I
 - 165 FT LEVEL (PROPOSED)
REF. DWG. B41294_A_165_P
 - 12 FT LEVEL
REF. DWG. B41294_A_12_I
- UNKNOWN
AT&T MOBILITY AREA TO 238 FT 8 IN
AT&T MOBILITY
AT&T MOBILITY AREA TO 228 FT 8 IN
- VERIZON WIRELESS
- AT&T MOBILITY
AT&T MOBILITY AREA TO 201 FT
- EVERSOURCE--NORTHEAST UTILITIES
- DISH NETWORK
- UNKNOWN
- BOTTOM OF TOWER STEEL
BASE PLATE ELEV 0'-0"

2'-0"
(FWD)

16'-0"

3'-0"

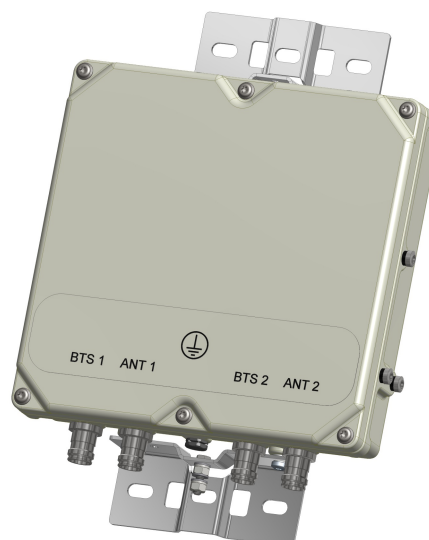
BSF0020F3V1-1

TWIN BANDSTOP 900MHZ INTERFERENCE MITIGATION FILTER

The BSF0020 is ideal for co-located 700, 850 and 900 networks. Utilising a 2.6MHz guardband the BSF0020 provides rejection of the 900 UL band while passing 700/850 UL and DL bands. Capable of being used in an outdoor environment the BSF0020 contains two identical bandstop filters, suitable for 2x2 MIMO configuration, offering excellent insertion loss, group delay and rejection.

FEATURES

- Passes full 700 and 850 bands
- Low insertion loss
- Rejection of 900MHz uplink
- DC/AISG pass
- Twin unit
- Dual twin mounting available



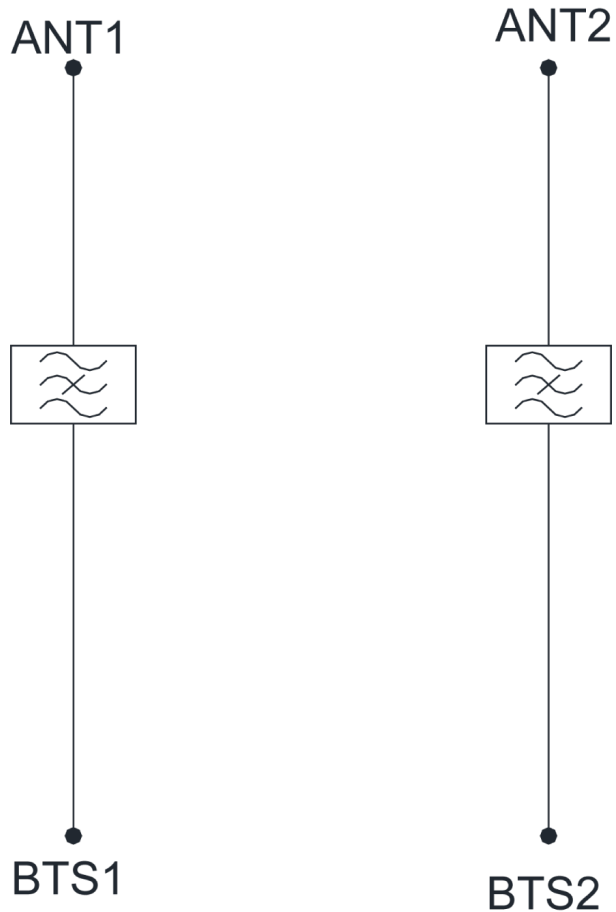
TECHNICAL SPECIFICATIONS

BAND NAME	700 PATH / 850 UPLINK PATH	850 DOWNLINK PATH
Passband	698 - 849MHz	869 - 891.5MHz
Insertion loss	0.1dB typical / 0.3dB maximum	0.5dB typical, 1.45dB maximum
Return loss	24dB typical, 18dB minimum	
Maximum input power (Per Port)	100W average	200W average and 66W per 5MHz
Rejection	53dB minimum @ 894.1 - 896.5MHz	
ELECTRICAL		
Impedance	50Ohms	
Intermodulation products	-160dBc maximum in UL Band (assuming 20MHz Signal), with 2 x 43dBm carriers -153dBc maximum with 2 x 43dBm	
DC / AISG		
Passband	0 - 13MHz	
Insertion loss	0.3dB maximum	
Return loss	15dB minimum	
Input voltage range	± 33V	
DC current rating	2A continuous, 4A peak	
Compliance	3GPP TS 25.461	
ENVIRONMENTAL		
For further details of environmental compliance, please contact Kaelus.		
Temperature range	-20°C to +60°C -4°F to +140°F	
Ingress protection	IP67	
Altitude	2600m 8530ft	
Lightning protection	RF port: ±5kA maximum (8/20us), IEC 61000-4-5 – Unit must be terminated with some lightning protection circuits.	
MTBF	>1,000,000 hours	
Compliance	ETSI EN 300 019 class 4.1H, RoHS, NEBS GR-487-CORE	
MECHANICAL		
Dimensions H x D x W	269 x 277 x 80mm 10.60 x 10.90 x 3.15in (Excluding brackets and connectors)	
Weight	8.0 kg 17.6 lbs (no bracket)	
Finish	Powder coated, light grey (RAL7035)	
Connectors	RF: 4.3-10 (F) x 4	
Mounting	Optional pole/wall bracket supplied with two metal clamps 45-178mm diameter poles or custom bracket. See ordering information.	

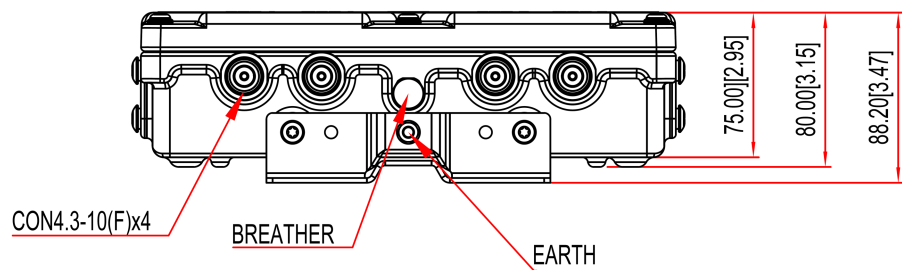
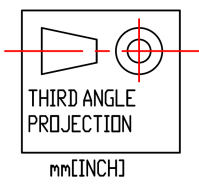
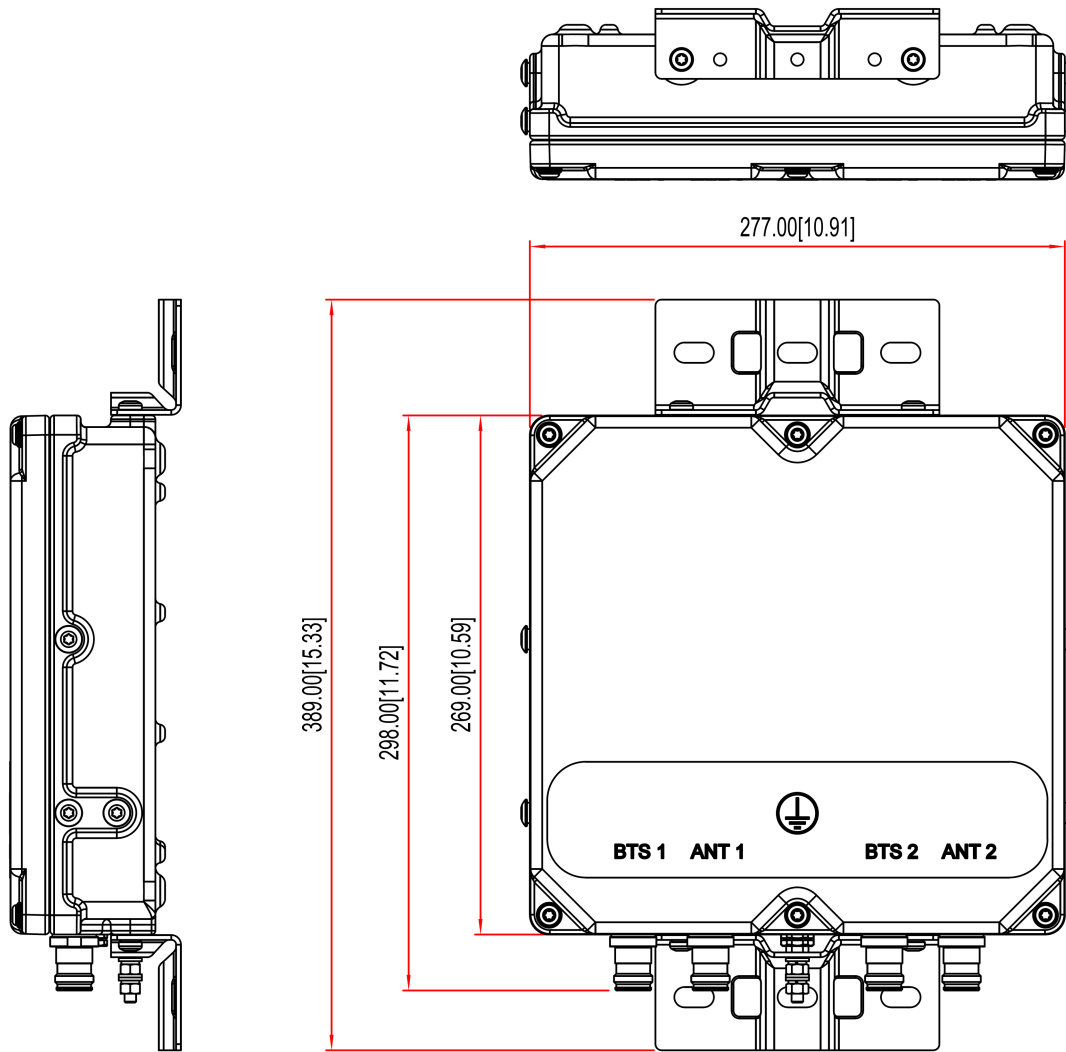
ORDERING INFORMATION

PART NUMBER	CONFIGURATION	OPTIONAL FEATURES	CONNECTORS
BSF0020F3V1	TWIN, 2 in / 2 out	DC/AISG PASS NO BRACKET	4.3-10 (F)
BSF0020F3V1-1	TWIN, 2 in / 2 out	DC/AISG PASS	4.3-10 (F)
BSF0020F3V1-2	QUAD, 4 in / 4 out	DC/AISG PASS	4.3-10 (F)

ELECTRICAL BLOCK DIAGRAM



MECHANICAL BLOCK DIAGRAM





Colliers Engineering & Design CT, P.C.
1055 Washington Boulevard
Stamford, CT 06901
203.324.0800
peter.albano@collierseng.com

Antenna Mount Analysis Report and PMI Requirements

Mount Re-Analysis

SMART Tool Project #: 10122359
Colliers Engineering & Design CT, P.C. Project #: 23777066

July 10, 2023

Site Information

Site ID: 5000384436-VZW / MONROE CT
Site Name: MONROE CT
Carrier Name: Verizon Wireless
Address: 226 Guinea Rd.
Monroe, Connecticut 06468
Fairfield County
Latitude: 41.341856°
Longitude: -73.274522°

Structure Information

Tower Type: 240-Ft Self Support
Mount Type: 15.00-Ft Sector Frame

FUZE ID # 17123813

Analysis Results

Sector Frame: 74.4% Pass*

***Antennas and equipment to be installed in compliance with PMI Requirements of this mount analysis.**

***Contractor PMI Requirements:

Included at the end of this MA report

Available & Submitted via portal at <https://pmi.vzwsmart.com>

**For additional questions and support, please reach out to:
pmisupport@colliersengineering.com**

Report Prepared By: Grant Walters

Executive Summary:

The objective of this report is to determine the capacity of the antenna support mount at the subject facility for the final wireless telecommunications configuration, per the applicable codes and standards. Any modification listed under Sources of Information was assumed completed and was included in this analysis.

This analysis is inclusive of the mount structure only and does not address the structural capacity of the supporting structure. This mounting frame was not analyzed as an anchor attachment point for fall protection. All climbing activities are required to have a fall protection plan completed by a competent person.

Sources of Information:

Document Type	Remarks
<i>Radio Frequency Data Sheet (RFDS)</i>	<i>Verizon RFDS, Site ID: 324390, Dated October 6, 2021</i>
<i>Mount Mapping Report</i>	<i>Hudson Design Group, LLC., Site ID: 467875 Dated June 2, 2021</i>
<i>Previous Mount Analysis</i>	<i>Maser Consulting Connecticut, Project #: 21777988 (Rev 2) Dated December 10, 2021</i>
<i>Filter Add Scope</i>	<i>Provided by Verizon Wireless</i>

Analysis Criteria:

Codes and Standards:	ANSI/TIA-222-H 2022 Connecticut State Building Code (CSBC), Effective October 1, 2022
Wind Parameters:	Basic Wind Speed (Ultimate 3-sec. Gust), V_{ULT} : 120 mph Ice Wind Speed (3-sec. Gust): 50 mph Design Ice Thickness: 1.00 in Risk Category: II Exposure Category: B Topographic Category: 1 Topographic Feature Considered: N/A Topographic Method: N/A Ground Elevation Factor, K_e : 0.979
Seismic Parameters:	S_s : 0.208 g S_1 : 0.055 g
Maintenance Parameters:	Wind Speed (3-sec. Gust): 30 mph Maintenance Live Load, L_v : 250 lbs. Maintenance Live Load, L_m : 500 lbs.
Analysis Software:	RISA-3D (V17)

Final Loading Configuration:

The following equipment has been considered for the analysis of the mounts:

Mount Elevation (ft)	Equipment Elevation (ft)	Quantity	Manufacturer	Model	Status
211.00	212.00	4	KAelus	BSF0020F3V1-1	Added
		3	Samsung	MT6407-77A	Retained
		3	Samsung	RF4439d-25A	
		3	Samsung	RF4440d-13A	
		3	Andrew	LNx-8514DS-VTM	
		1	Raycap	RVZDC-6627-PF-48	
		6	Commscope	JAHH-65B-R3B	

The recent mount mapping reported existing OVP units. It is acceptable to install up to any three (3) of the OVP model numbers listed below as required at any location other than the mount face without affecting the structural capacity of the mount. If OVP units are installed on the mount face, a mount re-analysis may be required unless replacing an existing OVP.

Model Number	Ports	AKA
DB-B1-6C-12AB-0Z	6	OVP-6
RVZDC-6627-PF-48	12	OVP-12

Standard Conditions:

1. All engineering services are performed on the basis that the information provided to Colliers Engineering & Design and used in this analysis is current and correct. The existing equipment loading has been applied at locations determined from the supplied documentation. Any deviation from the loading locations specified in this report shall be communicated to Colliers Engineering & Design to verify deviation will not adversely impact the analysis.
2. Mounts are assumed to have been properly fabricated, installed and maintained in good condition, twist free and plumb in accordance with its original design and manufacturer’s specifications.

Obvious safety and structural issues/deficiencies noticed at the time of the mount mapping and reported in the Mount Mapping Report are assumed to be corrected and documented as part of the PMI process and are not considered in the mount analysis.

The mount analysis and the mount mapping are not a condition assessment of the mount. Proper maintenance and condition assessments are still required post analysis.

3. For mount analyses completed from other data sources (including new replacement mounts) and not specifically mapped in accordance with the NSTD-446 Standard, the mounts are assumed to have been properly fabricated, installed and maintained in good condition, twist free and plumb in accordance with its original design and manufacturer’s specifications.
4. All member connections are assumed to have been designed to meet or exceed the load carrying capacity of the connected member unless otherwise specified in this report.
5. The mount was checked up to, and including, the bolts that fasten it to the mount collar/attachment and threaded rod connections in collar members if applicable. Local deformation and interaction between the mount collar/attachment and the supporting tower structure are outside the scope of this analysis.

6. All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. Colliers Engineering & Design is not responsible for the conclusion, opinions, and recommendations made by others based on the information supplied.
7. Structural Steel Grades have been assumed as follows, if applicable, unless otherwise noted in this analysis:
 - o Channel, Solid Round, Angle, Plate ASTM A36 (Gr. 36)
 - o HSS (Rectangular) ASTM 500 (Gr. B-46)
 - o Pipe ASTM A53 (Gr. B-35)
 - o Threaded Rod F1554 (Gr. 36)
 - o Bolts ASTM A325

Discrepancies between in-field conditions and the assumptions listed above may render this analysis invalid unless explicitly approved by Colliers Engineering & Design.

Analysis Results:

Component	Utilization %	Pass/Fail
Standoff Bar	74.4 %	Pass
Face Horizontal	16.1 %	Pass
Standoff Horizontal	17.6 %	Pass
Standoff Diagonal	15.8 %	Pass
Standoff Vertical	33.1 %	Pass
Antenna Pipe	19.3 %	Pass
Tie Back	12.8 %	Pass
Large Mount Pipe	13.9 %	Pass
Mount Connection	42.7 %	Pass

Structure Rating – (Controlling Utilization of all Components)	74.4%
---	--------------

Mount Steel (EPA)a per ANSI/TIA-222-H Section 2.6.11.2:

Ice Thickness (In)	Mount Pipes Excluded		Mount Pipes Included	
	Front (EPA)a (Sq. Ft.)	Side (EPA)a (Sq. Ft.)	Front (EPA)a (Sq. Ft.)	Side (EPA)a (Sq. Ft.)
0	23.2	17.3	32.4	26.5
0.5	33.1	26.1	46.7	38.6
1	42.5	33.8	60.2	49.9

Notes:

- (EPA)a values listed above may be used in the absence of more precise information
- (EPA)a values in the table above include 1 sector(s).
- Ka factors included in (EPA)a calculations

Requirements:

The existing mounts are **SUFFICIENT** for the final loading configuration shown in attachment 2 and do not require modifications. Additional requirements are noted below.

Contractor shall install proposed OVP unit on Beta sector standoff horizontal

If required, ANSI/ASSP rigging plan review services compliant with the requirements of ANSI/TIA 322 are available for a Construction Class IV site or other. Separate review fees will apply.

Attachments:

1. **Contractor Required Post Installation Inspection (PMI) Report Deliverables**
2. Antenna Placement Diagrams
3. Mount Photos
4. Mount Mapping Report (for reference only)
5. Analysis Calculations

Mount Desktop – Post Modification Inspection (PMI) Report Requirements

Documents & Photos Required from Contractor – **Passing Mount Analysis**

Passing Mount Analysis requires a PMI due to a modification in loading.

Electronic pdf version of this can be downloaded at <https://pmi.vzwsmart.com>.

For additional questions and support, please reach out to pmisupport@colliersengineering.com

MDG #: 5000384436

SMART Project #: 10122359

Fuze Project ID: 16272183

Purpose – to provide SMART Tool structural vendor the proper documentation in order to complete the required Mount Desktop review of the Post Modification Inspection Report.

- Contractor is responsible for making certain the photos provided as noted below provide confirmation that the installation was completed in accordance with this Passing Mount Analysis.
- Contractor shall relay any data that can impact the performance of the mount, this includes safety issues.

Base Requirements:

- If installation will cause damage to the structure, the climbing facility, or safety climb if present or any installed system, SMART Tool vendor to be notified prior to install. Any special photos outside of the standard requirements will be indicated on the drawings.
- Provide “as built mount drawings” showing contractor’s name, contact information, preparer’s signature, and date. Any deviations from the drawings (Proposed modification) shall be shown. NOTE: If loading is different than what is conveyed in the passing mount analysis (MA) contact the SMART Tool vendor immediately.
- Each photo should be time and date stamped
- Photos should be high resolution.
- Contractor shall ensure that the safety climb wire rope is supported and not adversely impacted by the install of the modification components. This may involve the install of wire rope guides, or other items to protect the wire rope. If there is conflict, contact the SMART Tool engineer for recommendations.
- The PMI can be accessed at the following portal: <https://pmi.vzwsmart.com>

Photo Requirements:

- Photos taken at ground level
 - Photo of Gate Signs showing the tower owner, site name, and number.
 - Overall tower structure after installation.
 - Photos of the mount after installation; if the mounts are at different rad elevations, pictures must be provided for all elevations that equipment was installed.
- Photos taken at Mount Elevation
 - Photos showing the safety climb wire rope above and below the mount prior to installation.
 - Photos showing the climbing facility and safety climb if present.
 - Photos showing each individual sector after installation. Each entire sector shall be in one photo to show the interconnection of members.

- These photos shall also certify that the placement and geometry of the equipment on the mount is as depicted in the antenna placement diagram in this form.
- Photos that show the model number of each antenna and piece of equipment installed per sector.

Antenna & equipment placement and Geometry Confirmation:

- The contractor shall certify that the antenna & equipment placement and geometry is in accordance with the sketch and table as included in the mount analysis and noted below.
 - The contractor certifies that the photos support and the equipment on the mount is as depicted on the sketch and table included in this form and with the mount analysis provided.

OR

- The contractor notes that the equipment on the mount is not in accordance with the sketch and has noted the differences below and provided photo documentation of any alterations.

Special Instructions / Validation as required from the MA or any other information the contractor deems necessary to share that was identified:

Issue:

Contractor shall install proposed OVP unit to Beta sector standoff horizontal

Response:

Special Instruction Confirmation:

- The contractor has read and acknowledges the above special instructions.
- All hardware listed in the Special Instructions above (if applicable) has been properly installed, and the existing hardware was inspected.
- The material utilized was as specified in the SMART Tool engineering vendor Special Instructions above (if applicable) and included in the material certification folder is a packing list or invoice for these materials.

OR

- The material utilized was approved by a SMART Tool engineering vendor as an “equivalent” and this approval is included as part of the contractor submission.

Comments:

--

Contractor certifies that the climbing facility / safety climb was not damaged prior to starting work:

Yes No

Contractor certifies no new damage created during the current installation:

Yes No

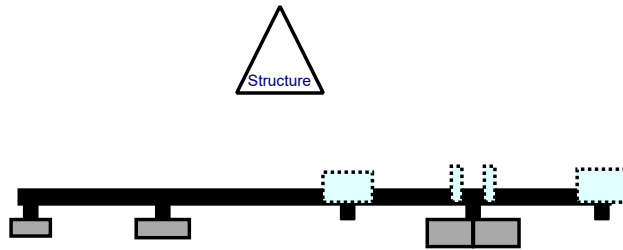
Contractor to certify the condition of the safety climb and verify no damage when leaving the site:

Safety Climb in Good Condition Safety Climb Damaged

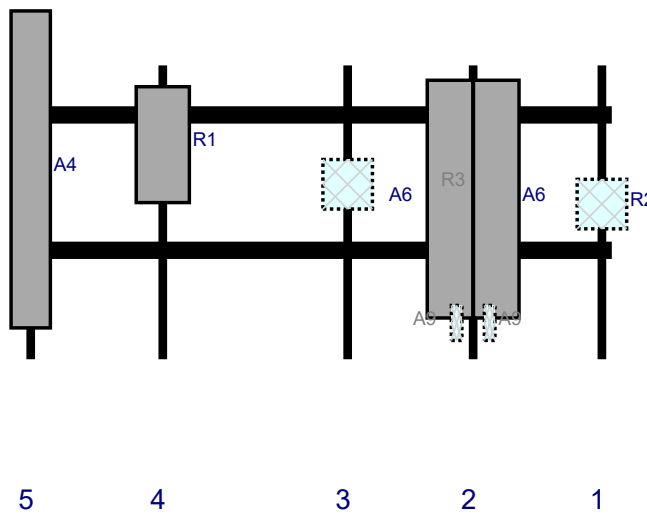
Certifying Individual:

Company:	
Employee Name:	
Contact Phone:	
Email:	
Date:	

Plan View

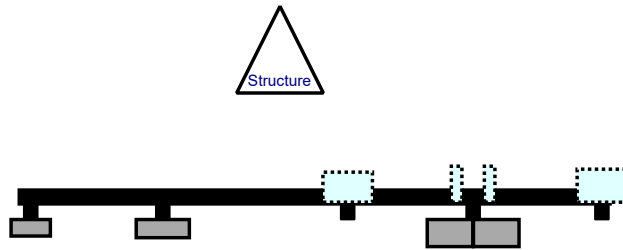


Front View - Looking at Structure

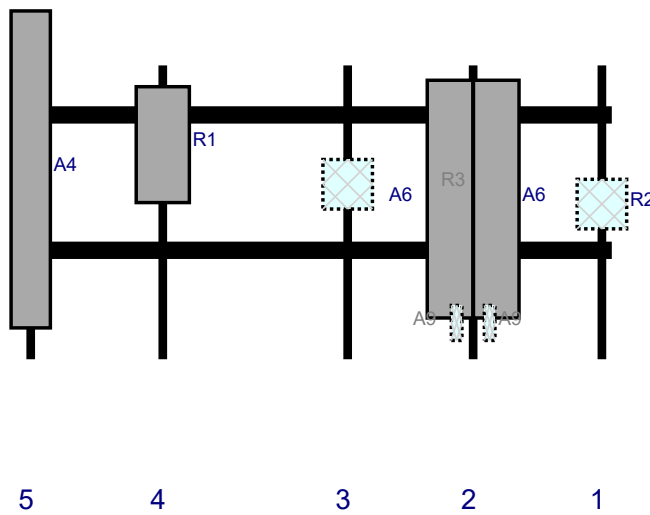


Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
R2	RF4439d-25A	15	15	177	1	a	Behind	42	0	Retained	
A6	JAHH-65B-R3B	72	13.8	138	2	a	Front	40.5	7	Retained	06/02/2021
A6	JAHH-65B-R3B	72	13.8	138	2	b	Front	40.5	-7	Retained	06/02/2021
A9	BSF0020F3V1-1	10.6	3.2	138	2	a	Behind	78	5	Added	
A9	BSF0020F3V1-1	10.6	3.2	138	2	b	Behind	78	-5	Added	
R3	RF4440d-13A	15	15	100	3	a	Behind	36	0	Retained	
R1	MT6407-77A	35.1	16.1	44	4	a	Front	24	0	Retained	
A4	LNx-8514DS-VTM	96	11.9	4	5	a	Front	31.5	0	Retained	06/02/2021
M11	RVZDC-6627-PF-48	29.5	16.5			Member				Retained	

Plan View

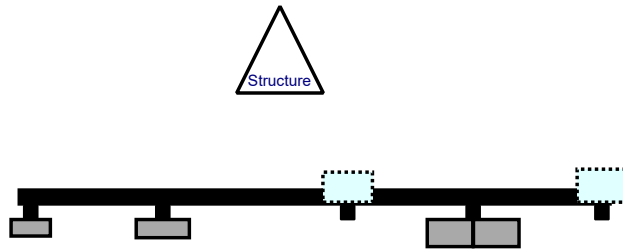


Front View - Looking at Structure

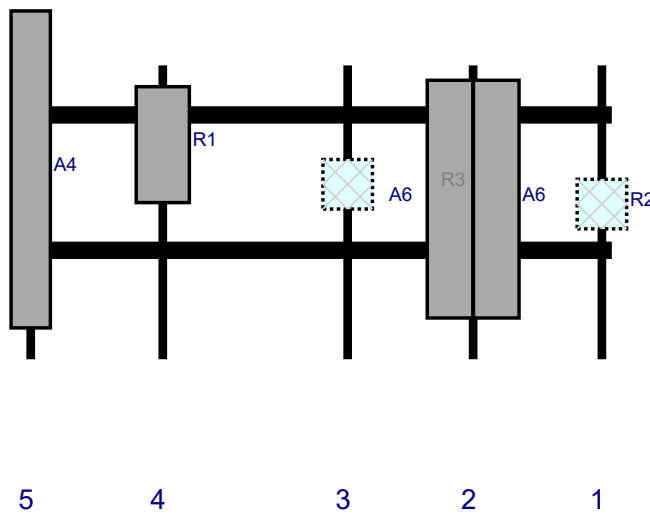


Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
R2	RF4439d-25A	15	15	177	1	a	Behind	42	0	Retained	
A6	JAHH-65B-R3B	72	13.8	138	2	a	Front	40.5	7	Retained	06/02/2021
A6	JAHH-65B-R3B	72	13.8	138	2	b	Front	40.5	-7	Retained	06/02/2021
A9	BSF0020F3V1-1	10.6	3.2	138	2	a	Behind	78	5	Added	
A9	BSF0020F3V1-1	10.6	3.2	138	2	b	Behind	78	-5	Added	
R3	RF4440d-13A	15	15	100	3	a	Behind	36	0	Retained	
R1	MT6407-77A	35.1	16.1	44	4	a	Front	24	0	Retained	
A4	LNx-8514DS-VTM	96	11.9	4	5	a	Front	31.5	0	Retained	06/02/2021

Plan View



Front View - Looking at Structure



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
R2	RF4439d-25A	15	15	177	1	a	Behind	42	0	Retained	
A6	JAHH-65B-R3B	72	13.8	138	2	a	Front	40.5	7	Retained	06/02/2021
A6	JAHH-65B-R3B	72	13.8	138	2	b	Front	40.5	-7	Retained	06/02/2021
R3	RF4440d-13A	15	15	100	3	a	Behind	36	0	Retained	
R1	MT6407-77A	35.1	16.1	44	4	a	Front	24	0	Retained	
A4	LNx-8514DS-VTM	96	11.9	4	5	a	Front	31.5	0	Retained	06/02/2021





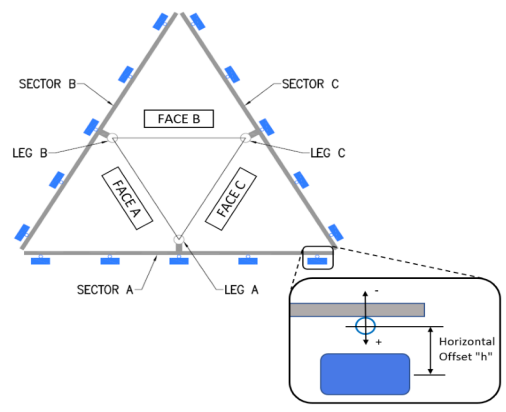
Antenna Mount Mapping Form (PATENT PENDING)

FCC #
1044917

Tower Owner:	ATT	Mapping Date:	6/2/2021
Site Name:	MONROE CT	Tower Type:	Self Support
Site Number or ID:	467875	Tower Height (Ft.):	240
Mapping Contractor:	HUDSON DESIGN GROUP,LLC.	Mount Elevation (Ft.):	218.89

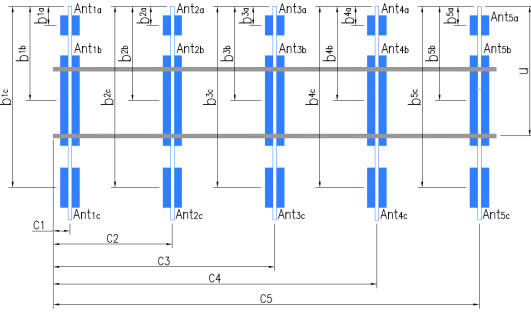
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Please insert the sketches of the antenna mount from the "Sketches" tab with dimensions and members here.



Mount Pipe Configuration and Geometries [Unit = Inches]							
Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "U"	Horizontal Offset "C1, C2, C3, etc."	Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "U"	Horizontal Offset "C1, C2, C3, etc."
A1	2" STD. PIPE X 96" LONG	83.00	3.00	C1	2" STD. PIPE X 96" LONG	83.00	3.00
A2	2.5" STD. PIPE X 84" LONG	71.00	42.00	C2	2.5" STD. PIPE X 84" LONG	71.00	42.00
A3	2" STD. PIPE X 69" LONG	62.50	80.00	C3	2" STD. PIPE X 69" LONG	62.50	80.00
A4	2" STD. PIPE X 69" LONG	56.00	136.00	C4	2" STD. PIPE X 69" LONG	56.00	136.00
A5	2" STD. PIPE X 69" LONG	56.00	176.00	C5	2" STD. PIPE X 69" LONG	56.00	176.00
A6				C6			
B1	2" STD. PIPE X 96" LONG	83.00	3.00	D1			
B2	2.5" STD. PIPE X 84" LONG	71.00	42.00	D2			
B3	2" STD. PIPE X 69" LONG	62.50	80.00	D3			
B4	2" STD. PIPE X 69" LONG	56.00	136.00	D4			
B5	2" STD. PIPE X 69" LONG	56.00	176.00	D5			
B6				D6			
Distance between bottom rail and mount CL elevation (dim d). Unit is inches. See 'Mount Elev Ref' tab for details.:							20.50
Distance from top of bottom support rail to lowest tip of ant./eqpt. of Carrier above. (N/A if > 10 ft.):							
Distance from top of bottom support rail to highest tip of ant./eqpt. of Carrier below. (N/A if > 10 ft.):							4
Please enter additional information or comments below.							
Tower Face Width at Mount Elev. (ft.):		7		Tower Leg Size or Pole Shaft Diameter at Mount Elev. (in.):		3.5	
For T-Arms/Platforms on monopoles, report the weld size from the main standoff to the plate bolting into the collar mount.							

Ants. Items	Enter antenna model. If not labeled, enter "Unknown".						Mounting Locations [Units are inches and degrees]			Photos of antennas
	Antenna Models if Known	Width (in.)	Depth (in.)	Height (in.)	Coax Size and Qty	Antenna Center-line (Ft.)	Vertical Distances "b _{1a} , b _{2a} , b _{3a} , b _{1b} ,..." (Inches)	Horiz. Offset "h" (Use "-" if Ant. is behind)	Antenna Azimuth (Degrees)	Photo Numbers
Sector A										
Ant _{1a}	UHIE,B66A RRH 4X45	12.00	7.00	25.00		222.432	20.00	-7.00		1,61
Ant _{1b}										
Ant _{1c}										
Ant _{2a}										
Ant _{2b}	(2) JAHH-65B-R3B	14.00	9.00	72.00		220.015	37.00	14.00	35.00	1,63
Ant _{2c}										
Ant _{3a}	B13 RRH 4X30	12.00	7.50	20.50		221.973	5.00	-7.00		2,64
Ant _{3b}										
Ant _{3c}										
Ant _{4a}										
Ant _{4b}	HBXX6517DS-A2M	12.00	6.50	75.00		219.765	25.00	10.00	35.00	3,65
Ant _{4c}										
Ant _{5a}										
Ant _{5b}	UNKNOWN	12.00	7.50	96.00		219.765	25.00	7.00	35.00	3,66
Ant _{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										



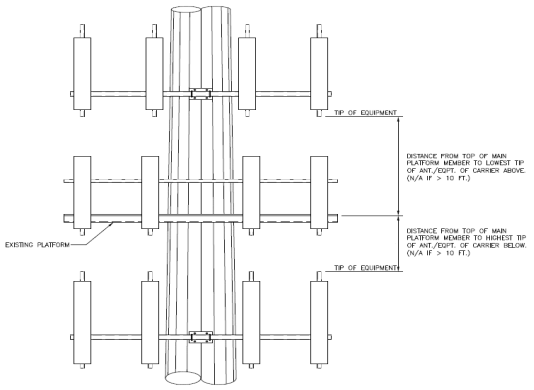
Antenna Layout (Looking Out From Tower)

Mount Azimuth (Degree) for Each Sector			Tower Leg Azimuth (Degree) for Each Sector			Sector B										
Sector A:	50.00	Deg	Leg A:	15.00	Deg	Ant _{1a}	UHIE,B66A RRH 4X45	12.00	7.00	25.00		222.432	20.00	-7.00		4,70
Sector B:	170.00	Deg	Leg B:	135.00	Deg	Ant _{1b}										
Sector C:	290.00	Deg	Leg C:	255.00	Deg	Ant _{1c}										
Sector D:		Deg	Leg D:		Deg	Ant _{2a}										

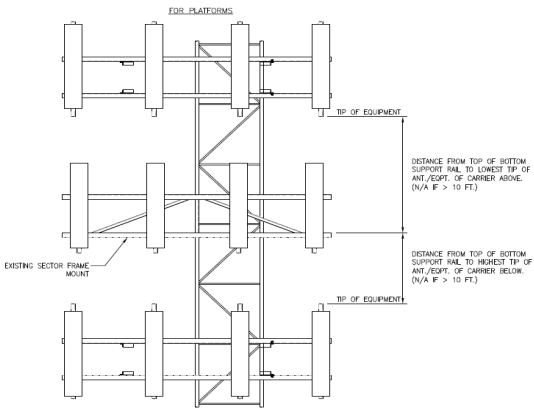
Climbing Facility Information		
Location:	15.00	Deg
Climbing Facility	Corrosion Type:	Good condition.
	Access:	Climbing path was unobstructed.
	Condition:	Good condition.

Ant _{2b}	(2) JAHH-65B-R3B	14.00	9.00	72.00		220.015	37.00	14.00	165.00	4,72
Ant _{2c}										
Ant _{3a}	B13 RRH 4X30	12.00	7.00	20.50		221.973	5.00	-7.00		4,72
Ant _{3b}										
Ant _{3c}										
Ant _{4a}										
Ant _{4b}	HBXX6517DS-A2M	12.00	6.50	75.00		219.765	25.00	10.00	165.00	5,73
Ant _{4c}										
Ant _{5a}										
Ant _{5b}	UNKNOWN	12.00	7.50	96.00		219.765	25.00	7.00	165.00	5,74
Ant _{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										

Please insert a photo of the mount centerline measurement here.

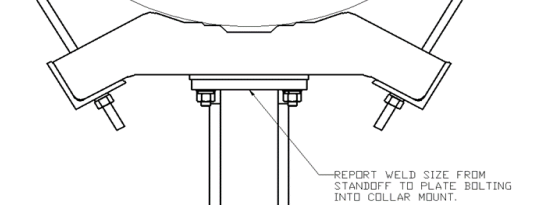


Sector C											
Ant _{1a}	UHIE,B66A RRH 4X45	12.00	7.00	25.00		222.432	20.00	-7.00		6,78	
Ant _{1b}											
Ant _{1c}											
Ant _{2a}											
Ant _{2b}	(2) JAHH-65B-R3B	14.00	9.00	72.00		220.015	37.00	14.00	275.00	6,78	
Ant _{2c}											
Ant _{3a}	B13 RRH 4X30	12.00	7.00	20.50		221.973	5.00	-7.00		6,79	
Ant _{3b}											
Ant _{3c}											
Ant _{4a}											
Ant _{4b}	HBXX6517DS-A2M	12.00	6.50	75.00		219.765	25.00	10.00	275.00	7,79	
Ant _{4c}											
Ant _{5a}											
Ant _{5b}	UNKNOWN	12.00	7.50	96.00		219.765	25.00	7.00	275.00	7,80	
Ant _{5c}											
Ant on Standoff											
Ant on Standoff											
Ant on Tower											
Ant on Tower											



Sector D											
Ant _{1a}											
Ant _{1b}											
Ant _{1c}											
Ant _{2a}											
Ant _{2b}											
Ant _{2c}											
Ant _{3a}											
Ant _{3b}											
Ant _{3c}											
Ant _{4a}											
Ant _{4b}											
Ant _{4c}											
Ant _{5a}											
Ant _{5b}											
Ant _{5c}											
Ant on Standoff											
Ant on Standoff											
Ant on Tower											
Ant on Tower											

For T-Arms/Platforms on monopoles, record the weld size from the main standoff member to the plate bolting into the collar. See below for reference.



Observed Safety and Structural Issues During the Mount Mapping

Issue #	Description of Issue	Photo #
1		
2		
3		
4		
5		
6		
7		
8		

Observed Obstructions to Tower Lighting System

If the tower lighting system is being obstructed by the carrier's equipment (for example: a light nested by the antennas), please provide photos and fill in the information below.		Photo #
Description of Obstruction:		
Type of Light:	Photo #	Additional Comments:
Lighting Technology:	Photo #	
Elevation (AGL) at base of light (Ft.):	Photo #	
Is a service loop available?	Photo #	
Is beacon installed on an extension?	Photo #	

Mapping Notes

1. Please report any visible structural or safety issues observed on the antenna mounts (Damaged members, loose connections, tilting mounts, safety climb issues, etc.)
2. If the thickness of the existing pipes or tubing can't be obtained from a general tool (such as Caliper), please use an ultrasonic measurement tool (thickness gauge) to measure the thickness.
3. Please create all required detail sketches of the mounts and insert them into the "Sketches" tab.
4. Please measure and enter the bolt sizes and types under the Members Box in the spreadsheet of the mount type.
5. Take and label the photos of the tower, mounts, connections, antennas and all measurements. Minimum 50 photos are required.
6. Please measure and report the size and length of all existing antenna mounting pipes.
7. Please measure and report the antenna information for all sectors.
8. Don't delete or rearrange any sheet or contents of any sheet from this mapping form.

Standard Conditions

1. Obvious safety and structural issues/deficiencies noticed at the time of the mount mapping are to be reported in this mapping. However, this mount mapping is not a condition assessment of the mount.



Antenna Mount Mapping Form (PATENT PENDING)

FCC #
1044917

Tower Owner:	ATT	Mapping Date:	6/2/2021
Site Name:	MONROE CT	Tower Type:	Self Support
Site Number or ID:	467875	Tower Height (Ft.):	240
Mapping Contractor:	HUDSON DESIGN GROUP, LLC.	Mount Elevation (Ft.):	218.89

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Please Insert Sketches of the Antenna Mount

DATE: 6-02-21
 Project Name: MONROE CT
 Project No.: _____
 Design By: PETER Chk'd By: _____ Page 1 of 1

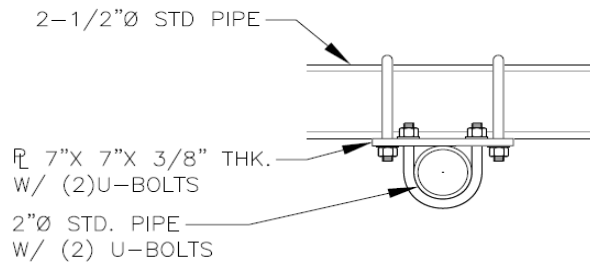
45 BEECHWOOD DRIVE
 NORTH ANDOVER, MA 01845
 TEL: (978) 557-5553
 FAX: (978) 336-5584

Mount CL: 218" 11"
 Ant Pipes: 2 3/8"
 Face Pipes: 2 3/8" x .15'
 O-Bolts: 1/2"
 Plates: 5" x 8" x 3/8"
 S/o Pipe: 2 3/8"
 S/o outer support: 2 3/8" w/ 6" x 3/8" x 1/4"
 S/o supports: 2 3/8"
 S/o Paddles: 6" x 3 1/2" x 5/16"
 Bolt: 3/4"
 L: 4" x 5 7/8" x 6 3/4" x 5/16"
 O-Bolt: 1/2"
 Twr Lea: 3 1/2"
 Twr Face: 7"

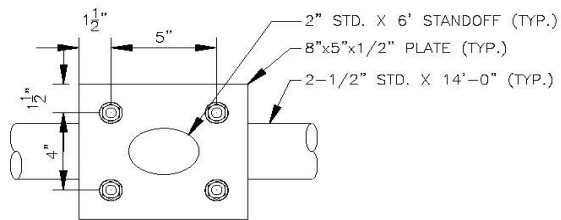
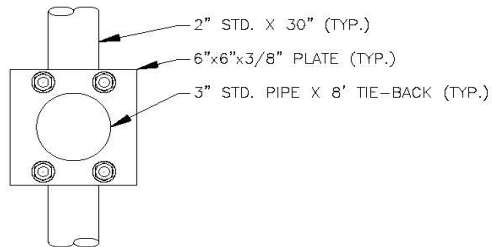
#1 UHFIE, B66a RRH 4x45
 #2 (2) JAHH-65B-R3B
 #3 B13 RRH 4x30
 #4 HBXX6517DS-A2M
 #5 12'-7 1/2"-96"

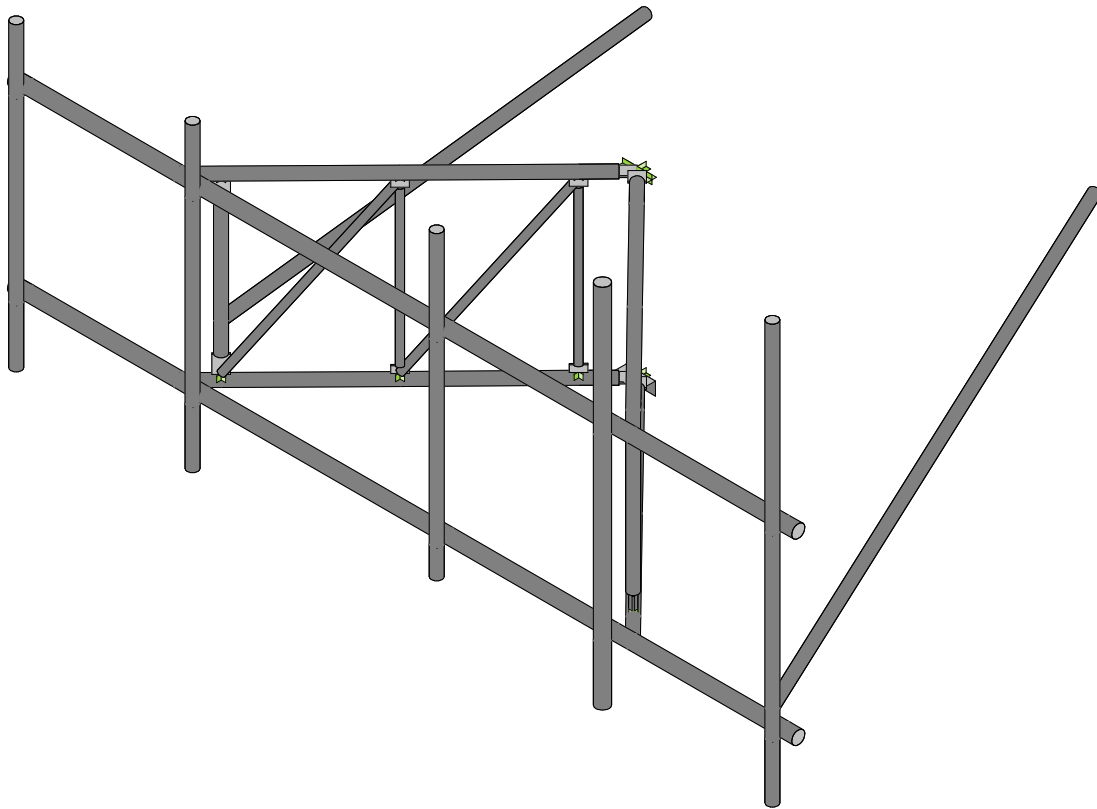
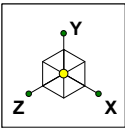
L 2 3/8" stiff arm
 R 3 1/2" stiff arm

① ovp on B leg

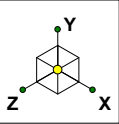


ANTENNA PIPE MAST MOUNT CONNECTION

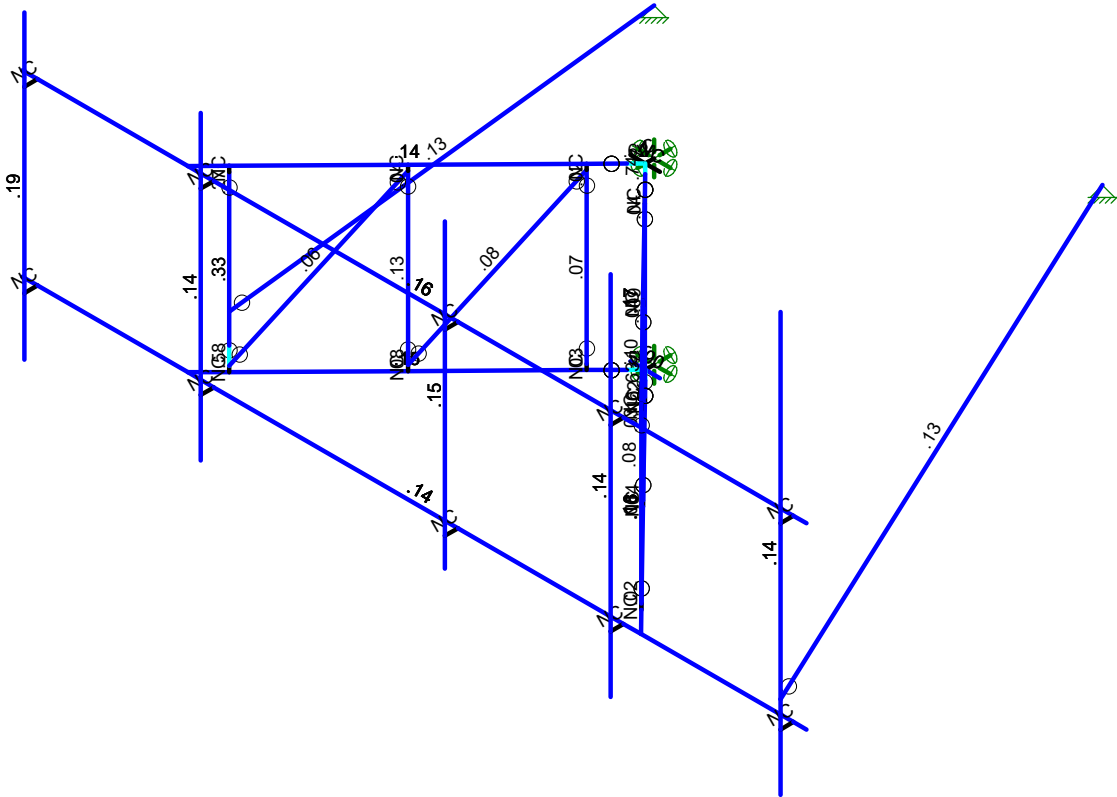




Colliers Engineering & De...	5000384436-VZW_MT_LOT_SectorA_H	SK - 1
NL		July 7, 2023 at 8:43 AM
Project No. 10206419		5000384436-VZW_MT_LOT_A_H....

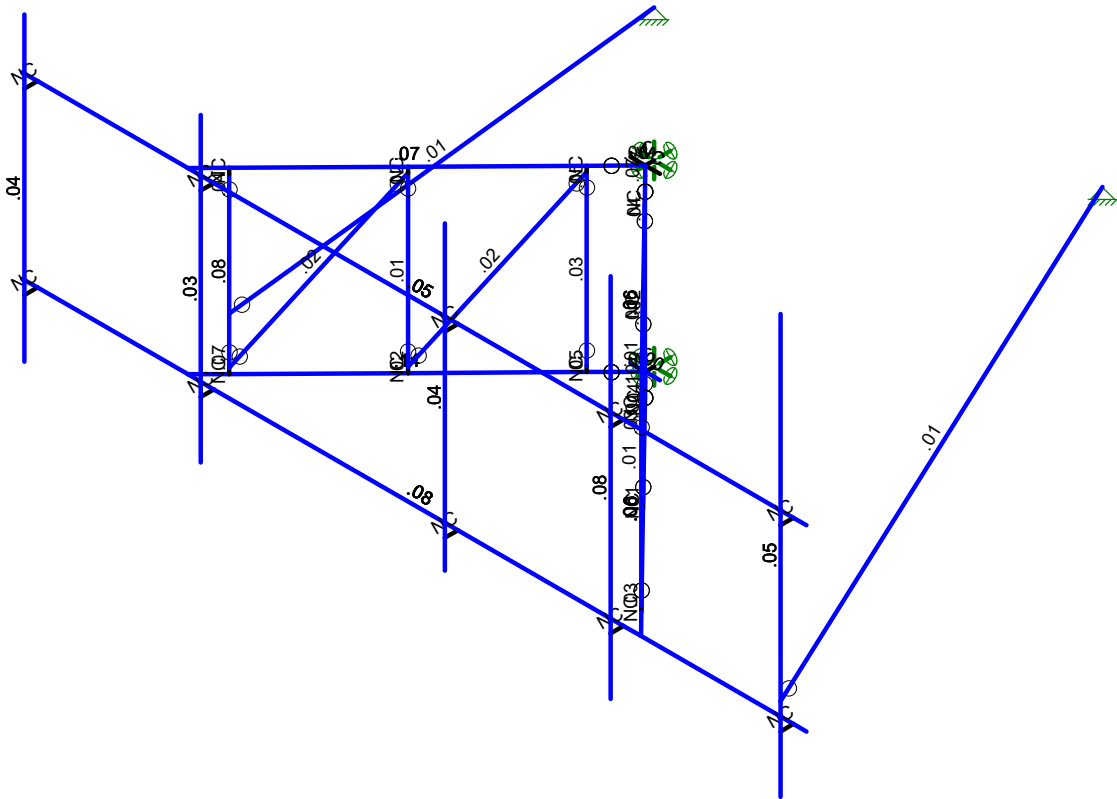
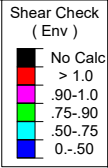
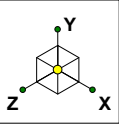


Code Check (Env)	
Black	No Calc
Red	> 1.0
Pink	.90-1.0
Green	.75-.90
Cyan	.50-.75
Blue	0-.50



Member Code Checks Displayed (Enveloped)
Results for LC 1, 1.2D+1.0Wo (0 Deg)

Colliers Engineering & De...	5000384436-VZW_MT_LOT_SectorA_H	SK - 2
NL		July 7, 2023 at 8:43 AM
Project No. 10206419		5000384436-VZW_MT_LOT_A_H....



Member Shear Checks Displayed (Enveloped)
Results for LC 1, 1.2D+1.0Wo (0 Deg)

Colliers Engineering & De...	5000384436-VZW_MT_LOT_SectorA_H	SK - 3
NL		July 7, 2023 at 8:43 AM
Project No. 10206419		5000384436-VZW_MT_LOT_A_H....



Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	DistributedArea(Me... Surface(...
1	Antenna D	None					36	
2	Antenna Di	None					36	
3	Antenna Wo (0 Deg)	None					36	
4	Antenna Wo (30 Deg)	None					36	
5	Antenna Wo (60 Deg)	None					36	
6	Antenna Wo (90 Deg)	None					36	
7	Antenna Wo (120 Deg)	None					36	
8	Antenna Wo (150 Deg)	None					36	
9	Antenna Wo (180 Deg)	None					36	
10	Antenna Wo (210 Deg)	None					36	
11	Antenna Wo (240 Deg)	None					36	
12	Antenna Wo (270 Deg)	None					36	
13	Antenna Wo (300 Deg)	None					36	
14	Antenna Wo (330 Deg)	None					36	
15	Antenna Wi (0 Deg)	None					36	
16	Antenna Wi (30 Deg)	None					36	
17	Antenna Wi (60 Deg)	None					36	
18	Antenna Wi (90 Deg)	None					36	
19	Antenna Wi (120 Deg)	None					36	
20	Antenna Wi (150 Deg)	None					36	
21	Antenna Wi (180 Deg)	None					36	
22	Antenna Wi (210 Deg)	None					36	
23	Antenna Wi (240 Deg)	None					36	
24	Antenna Wi (270 Deg)	None					36	
25	Antenna Wi (300 Deg)	None					36	
26	Antenna Wi (330 Deg)	None					36	
27	Antenna Wm (0 Deg)	None					36	
28	Antenna Wm (30 Deg)	None					36	
29	Antenna Wm (60 Deg)	None					36	
30	Antenna Wm (90 Deg)	None					36	
31	Antenna Wm (120 Deg)	None					36	
32	Antenna Wm (150 Deg)	None					36	
33	Antenna Wm (180 Deg)	None					36	
34	Antenna Wm (210 Deg)	None					36	
35	Antenna Wm (240 Deg)	None					36	
36	Antenna Wm (270 Deg)	None					36	
37	Antenna Wm (300 Deg)	None					36	
38	Antenna Wm (330 Deg)	None					36	
39	Structure D	None		-1				
40	Structure Di	None						40
41	Structure Wo (0 Deg)	None						80
42	Structure Wo (30 Deg)	None						80
43	Structure Wo (60 Deg)	None						80
44	Structure Wo (90 Deg)	None						80
45	Structure Wo (120 Deg)	None						80
46	Structure Wo (150 Deg)	None						80
47	Structure Wo (180 Deg)	None						80
48	Structure Wo (210 Deg)	None						80
49	Structure Wo (240 Deg)	None						80
50	Structure Wo (270 Deg)	None						80
51	Structure Wo (300 Deg)	None						80
52	Structure Wo (330 Deg)	None						80
53	Structure Wi (0 Deg)	None						80
54	Structure Wi (30 Deg)	None						80
55	Structure Wi (60 Deg)	None						80
56	Structure Wi (90 Deg)	None						80



Basic Load Cases (Continued)

BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	DistributedArea(Me... Surface(...
57 Structure Wi (120 Deg)	None						80
58 Structure Wi (150 Deg)	None						80
59 Structure Wi (180 Deg)	None						80
60 Structure Wi (210 Deg)	None						80
61 Structure Wi (240 Deg)	None						80
62 Structure Wi (270 Deg)	None						80
63 Structure Wi (300 Deg)	None						80
64 Structure Wi (330 Deg)	None						80
65 Structure Wm (0 Deg)	None						80
66 Structure Wm (30 Deg)	None						80
67 Structure Wm (60 Deg)	None						80
68 Structure Wm (90 Deg)	None						80
69 Structure Wm (120 Deg)	None						80
70 Structure Wm (150 Deg)	None						80
71 Structure Wm (180 Deg)	None						80
72 Structure Wm (210 Deg)	None						80
73 Structure Wm (240 Deg)	None						80
74 Structure Wm (270 Deg)	None						80
75 Structure Wm (300 Deg)	None						80
76 Structure Wm (330 Deg)	None						80
77 Lm1	None					1	
78 Lm2	None					1	
79 Lv1	None					1	
80 Lv2	None					1	
81 Antenna Ev	None					36	
82 Antenna Eh (0 Deg)	None					24	
83 Antenna Eh (90 Deg)	None					24	
84 Structure Ev	ELY		-044				
85 Structure Eh (0 Deg)	ELZ			-111			
86 Structure Eh (90 Deg)	ELX	.111					

Load Combinations

Description	Solve	PDelta	S...	B...	Fa...	B...	Fa...	B...	Fa...	BLCFa...	BLC Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
1 1.2D+1.0Wo (0 Deg)	Yes	Y		1	1.2	39	1.2	3	1	41	1								
2 1.2D+1.0Wo (30 D...	Yes	Y		1	1.2	39	1.2	4	1	42	1								
3 1.2D+1.0Wo (60 D...	Yes	Y		1	1.2	39	1.2	5	1	43	1								
4 1.2D+1.0Wo (90 D...	Yes	Y		1	1.2	39	1.2	6	1	44	1								
5 1.2D+1.0Wo (120 ...	Yes	Y		1	1.2	39	1.2	7	1	45	1								
6 1.2D+1.0Wo (150 ...	Yes	Y		1	1.2	39	1.2	8	1	46	1								
7 1.2D+1.0Wo (180 ...	Yes	Y		1	1.2	39	1.2	9	1	47	1								
8 1.2D+1.0Wo (210 ...	Yes	Y		1	1.2	39	1.2	10	1	48	1								
9 1.2D+1.0Wo (240 ...	Yes	Y		1	1.2	39	1.2	11	1	49	1								
10 1.2D+1.0Wo (270 ...	Yes	Y		1	1.2	39	1.2	12	1	50	1								
11 1.2D+1.0Wo (300 ...	Yes	Y		1	1.2	39	1.2	13	1	51	1								
12 1.2D+1.0Wo (330 ...	Yes	Y		1	1.2	39	1.2	14	1	52	1								
13 1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	15	1	53	1				
14 1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	16	1	54	1				
15 1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	17	1	55	1				
16 1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	18	1	56	1				
17 1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	19	1	57	1				
18 1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	20	1	58	1				
19 1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	21	1	59	1				
20 1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	22	1	60	1				
21 1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	23	1	61	1				
22 1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	24	1	62	1				



Load Combinations (Continued)

Description	Solve	PDelta	S...	B...	Fa...	B...	Fa...	B...	Fa...	BLCFa...	BLCFa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	
23	1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	25	1	63	1						
24	1.2D + 1.0Di + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	26	1	64	1						
25	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	27	1	65	1								
26	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	28	1	66	1								
27	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	29	1	67	1								
28	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	30	1	68	1								
29	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	31	1	69	1								
30	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	32	1	70	1								
31	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	33	1	71	1								
32	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	34	1	72	1								
33	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	35	1	73	1								
34	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	36	1	74	1								
35	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	37	1	75	1								
36	1.2D + 1.5Lm1 + 1...	Yes	Y		1	1.2	39	1.2	77	1.5	38	1	76	1								
37	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	27	1	65	1								
38	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	28	1	66	1								
39	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	29	1	67	1								
40	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	30	1	68	1								
41	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	31	1	69	1								
42	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	32	1	70	1								
43	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	33	1	71	1								
44	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	34	1	72	1								
45	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	35	1	73	1								
46	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	36	1	74	1								
47	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	37	1	75	1								
48	1.2D + 1.5Lm2 + 1...	Yes	Y		1	1.2	39	1.2	78	1.5	38	1	76	1								
49	1.2D + 1.5Lv1	Yes	Y		1	1.2	39	1.2	79	1.5												
50	1.2D + 1.5Lv2	Yes	Y		1	1.2	39	1.2	80	1.5												
51	1.4D	Yes	Y		1	1.4	39	1.4														
52	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	1	83		E...	1	E...			
53	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	.866	83	.5	E...	.866	E...	.5		
54	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	.5	83	.866	E...	.5	E...	.866		
55	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82		83	1	E...		E...	1		
56	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-.5	83	.866	E...	-.5	E...	.866		
57	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-.8...	83	.5	E...	-.8...	E...	.5		
58	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-1	83		E...	-1	E...			
59	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-.8...	83	-.5	E...	-.8...	E...	-.5		
60	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-.5	83	-.8...	E...	-.5	E...	-.8...		
61	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82		83	-1	E...		E...	-1		
62	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	.5	83	-.8...	E...	.5	E...	-.8...		
63	1.2D + 1.0Ev + 1.0...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	.866	83	-.5	E...	.866	E...	-.5		
64	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	1	83		E...	1	E...			
65	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	.866	83	.5	E...	.866	E...	.5		
66	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	.5	83	.866	E...	.5	E...	.866		
67	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82		83	1	E...		E...	1		
68	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-.5	83	.866	E...	-.5	E...	.866		
69	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-.8...	83	.5	E...	-.8...	E...	.5		
70	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-1	83		E...	-1	E...			
71	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-.8...	83	-.5	E...	-.8...	E...	-.5		
72	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-.5	83	-.8...	E...	-.5	E...	-.8...		
73	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82		83	-1	E...		E...	-1		
74	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	.5	83	-.8...	E...	.5	E...	-.8...		
75	0.9D - 1.0Ev + 1.0...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	.866	83	-.5	E...	.866	E...	-.5		



Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	N1	-0.166667	0	0.166667	0	
2	N2	-0.447917	0	0.166667	0	
3	N3	0.114583	0	0.166667	0	
4	N4	-0.166667	0	0.	0	
5	N5	-0.166667	-3.416667	0.166667	0	
6	N6	-0.447917	-3.416667	0.166667	0	
7	N7	0.114583	-3.416667	0.166667	0	
8	N10	-4.5	0	4.583333	0	
9	N11	4.166667	0	4.583333	0	
10	N11A	-7.666667	0	4.583333	0	
11	N12	7.333333	0	4.583333	0	
12	N14	-4.5	-3.416667	4.583333	0	
13	N15	4.166667	-3.416667	4.583333	0	
14	N16	-7.666667	-3.416667	4.583333	0	
15	N17	7.333333	-3.416667	4.583333	0	
16	N17A	-0.341752	0	0.345119	0	
17	N18	0.008419	0	0.345119	0	
18	N19	-0.341752	-3.416667	0.345119	0	
19	N20	0.008419	-3.416667	0.345119	0	
20	N21	0.38777	-0.104167	0.731765	0	
21	N22	0.38777	-3.3125	0.731765	0	
22	N23	2.08026	-0.104167	2.456803	0	
23	N24	2.08026	-3.3125	2.456803	0	
24	N25	3.77275	-0.104167	4.181841	0	
25	N26	3.77275	-3.3125	4.181841	0	
26	N27	0.38777	-3.1875	0.731765	0	
27	N28	2.08026	-3.1875	2.456803	0	
28	N29	0.38777	-0.229167	0.731765	0	
29	N30	2.08026	-0.229167	2.456803	0	
30	N31	3.77275	-2.979167	4.181841	0	
31	N32	3.77275	-0.4375	4.181841	0	
32	N33	-0.721103	-0.104167	0.731765	0	
33	N34	-0.721103	-3.3125	0.731765	0	
34	N35	-2.413593	-0.104167	2.456803	0	
35	N36	-2.413593	-3.3125	2.456803	0	
36	N37	-4.106083	-0.104167	4.181841	0	
37	N38	-4.106083	-3.3125	4.181841	0	
38	N39	-0.721103	-3.1875	0.731765	0	
39	N40	-2.413593	-3.1875	2.456803	0	
40	N41	-0.721103	-0.229167	0.731765	0	
41	N42	-2.413593	-0.229167	2.456803	0	
42	N43	-4.106083	-2.979167	4.181841	0	
43	N44	-4.106083	-0.4375	4.181841	0	
44	N65	-0.166667	-3.416667	0.	0	
45	N46	-7.375	0	4.583333	0	
46	N47	-7.375	-3.416667	4.583333	0	
47	N48	-7.375	0	4.833333	0	
48	N49	-7.375	-3.416667	4.833333	0	
49	N50	-4	0	4.583333	0	
50	N51	-4	-3.416667	4.583333	0	
51	N52	-4	0	4.833333	0	
52	N53	-4	-3.416667	4.833333	0	
53	N54	0.666667	0	4.583333	0	
54	N55	0.666667	-3.416667	4.583333	0	
55	N56	0.666667	0	4.833333	0	
56	N57	0.666667	-3.416667	4.833333	0	



Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
57	N62	7.083333	0	4.583333	0	
58	N63	7.083333	-3.416667	4.583333	0	
59	N64	7.083333	0	4.833333	0	
60	N65A	7.083333	-3.416667	4.833333	0	
61	N66	-7.375	1.229167	4.833333	0	
62	N67	0.666667	1.791667	4.833333	0	
63	N68	7.083333	3.5	4.833333	0	
64	N69	-7.375	-4.520833	4.833333	0	
65	N70	0.666667	-3.958333	4.833333	0	
66	N71	7.083333	-4.5	4.833333	0	
67	N72	-4	1.25	4.833333	0	
68	N73	-4	-4.5	4.833333	0	
69	N71A	3.833333	0	4.583333	0	
70	N72A	3.833333	-3.416667	4.583333	0	
71	N73A	3.833333	0	4.833333	0	
72	N74	3.833333	-3.416667	4.833333	0	
73	N75	3.833333	2.5	4.833333	0	
74	N76	3.833333	-4.5	4.833333	0	
75	N77	0.38777	0	0.731765	0	
76	N78	2.08026	0	2.456803	0	
77	N79A	3.77275	0	4.181841	0	
78	N80	-0.721103	0	0.731765	0	
79	N81	-2.413593	0	2.456803	0	
80	N82	-4.106083	0	4.181841	0	
81	N83	0.38777	-3.416667	0.731765	0	
82	N84	2.08026	-3.416667	2.456803	0	
83	N85	3.77275	-3.416667	4.181841	0	
84	N86	-0.721103	-3.416667	0.731765	0	
85	N87	-2.413593	-3.416667	2.456803	0	
86	N88	-4.106083	-3.416667	4.181841	0	
87	N89	7.083333	-2.916667	4.833333	0	
88	N90	-4.106083	-2.416667	4.181841	0	
89	N91	1.645067	-2.916667	-6.761481	0	
90	N92	-5.116414	-2.416667	-4.949747	0	

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design ...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Antenna Pipe	PIPE 2.0	Column	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
2	Standoff Horizontal	PIPE 2.0	Beam	Pipe	A500 Gr. C 50	Typical	1.02	.627	.627	1.25
3	Standoff Vertical	PIPE 2.0	Beam	Pipe	A500 Gr. C 50	Typical	1.02	.627	.627	1.25
4	Standoff Diagonal	HSS1.500x.06	Beam	Pipe	A500 Gr. C 50	Typical	.282	.073	.073	.146
5	Face Horizontal	PIPE 2.5	Beam	Pipe	A500 Gr. C 50	Typical	1.61	1.45	1.45	2.89
6	Tie Back	PIPE 2.0	Beam	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
7	Standoff Bar	PL3/8X3	Beam	RECT	A36 Gr.36	Typical	1.125	.013	.844	.049
8	Mount Angle	L4X3X6	Beam	Single Angle	A572 Gr. 50	Typical	2.49	1.89	3.94	.123
9	Kickers	L2.5x2.5x3	Beam	Single Angle	A36 Gr.36	Typical	.901	.535	.535	.011
10	TES Standoff Diagonal	PIPE 1.5	Beam	Single Angle	A500 Gr. C 50	Typical	.749	.293	.293	.586
11	Large Mount Pipe	PIPE 2.5	Beam	Pipe	A53 Gr. B	Typical	1.61	1.45	1.45	2.89

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (/1...	Density[k/ft^3]	Yield[ksi]	Ry	Fu[ksi]	Rt
1	A36 Gr.36	29000	11154	.3	.65	.49	36	1.5	58	1.2
2	A53 Gr. B	29000	11154	.3	.65	.49	35	1.5	60	1.2
3	A572 Gr. 50	29000	11154	.3	.65	.49	50	1.1	65	1.1



Hot Rolled Steel Properties (Continued)

	Label	E [ksi]	G [ksi]	Nu	Therm (/1...	Density[k/ft^3]	Yield[ksi]	Rv	Fu[ksi]	Rt
4	A992	29000	11154	.3	.65	.49	50	1.1	65	1.1
5	A500 Gr. B 42	29000	11154	.3	.65	.49	42	1.4	58	1.3
6	A500 Gr. B 46	29000	11154	.3	.65	.49	46	1.4	58	1.3
7	A500 Gr. C 50	29000	11154	.3	.65	.49	50	1.5	62	1.1

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	M1	N2	N3		90	RIGID	None	None	RIGID	Typical
2	M2	N1	N4			RIGID	None	None	RIGID	Typical
3	M3	N6	N7		90	Mount Angle	Beam	Single Angle	A572 Gr. 50	Typical
4	M5	N1	N17A		90	Standoff Bar	Beam	RECT	A36 Gr.36	Typical
5	M6	N1	N18		90	Standoff Bar	Beam	RECT	A36 Gr.36	Typical
6	M7	N11A	N12			Face Horizontal	Beam	Pipe	A500 Gr. ...	Typical
7	M8	N5	N19		90	Standoff Bar	Beam	RECT	A36 Gr.36	Typical
8	M9	N5	N20		90	Standoff Bar	Beam	RECT	A36 Gr.36	Typical
9	M10	N16	N17			Face Horizontal	Beam	Pipe	A500 Gr. ...	Typical
10	M11	N17A	N10			Standoff Horizontal	Beam	Pipe	A500 Gr. ...	Typical
11	M12	N18	N11			Standoff Horizontal	Beam	Pipe	A500 Gr. ...	Typical
12	M13	N19	N14			Standoff Horizontal	Beam	Pipe	A500 Gr. ...	Typical
13	M14	N20	N15			Standoff Horizontal	Beam	Pipe	A500 Gr. ...	Typical
14	M15	N21	N29	N1		Standoff Bar	Beam	RECT	A36 Gr.36	Typical
15	M17	N23	N30	N1		Standoff Bar	Beam	RECT	A36 Gr.36	Typical
16	M19	N26	N31	N1		Standoff Bar	Beam	RECT	A36 Gr.36	Typical
17	M20	N27	N22	N1		Standoff Bar	Beam	RECT	A36 Gr.36	Typical
18	M21	N28	N24	N1		Standoff Bar	Beam	RECT	A36 Gr.36	Typical
19	M22	N29	N27	N1		Standoff Diagonal	Beam	Pipe	A500 Gr. ...	Typical
20	M23	N30	N28	N1		Standoff Diagonal	Beam	Pipe	A500 Gr. ...	Typical
21	M24	N31	N32	N1		Standoff Vertical	Beam	Pipe	A500 Gr. ...	Typical
22	M25	N32	N25	N1		Standoff Bar	Beam	RECT	A36 Gr.36	Typical
23	M26	N33	N41	N1		Standoff Bar	Beam	RECT	A36 Gr.36	Typical
24	M27	N33	N36		90	Standoff Diagonal	Beam	Pipe	A500 Gr. ...	Typical
25	M28	N35	N42	N1		Standoff Bar	Beam	RECT	A36 Gr.36	Typical
26	M29	N35	N38		90	Standoff Diagonal	Beam	Pipe	A500 Gr. ...	Typical
27	M30	N38	N43	N1		Standoff Bar	Beam	RECT	A36 Gr.36	Typical
28	M31	N39	N34	N1		Standoff Bar	Beam	RECT	A36 Gr.36	Typical
29	M32	N40	N36	N1		Standoff Bar	Beam	RECT	A36 Gr.36	Typical
30	M33	N41	N39	N1		Standoff Diagonal	Beam	Pipe	A500 Gr. ...	Typical
31	M34	N42	N40	N1		Standoff Diagonal	Beam	Pipe	A500 Gr. ...	Typical
32	M35	N43	N44	N1		Standoff Vertical	Beam	Pipe	A500 Gr. ...	Typical
33	M36	N44	N37	N1		Standoff Bar	Beam	RECT	A36 Gr.36	Typical
34	M46A	N5	N65			RIGID	None	None	RIGID	Typical
35	M37	N46	N48			RIGID	None	None	RIGID	Typical
36	M38	N47	N49			RIGID	None	None	RIGID	Typical
37	M39	N50	N52			RIGID	None	None	RIGID	Typical
38	M40	N51	N53			RIGID	None	None	RIGID	Typical
39	M41	N54	N56			RIGID	None	None	RIGID	Typical
40	M42	N55	N57			RIGID	None	None	RIGID	Typical
41	M45	N62	N64			RIGID	None	None	RIGID	Typical
42	M46	N63	N65A			RIGID	None	None	RIGID	Typical
43	MP5A	N66	N69			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
44	MP3A	N67	N70			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
45	MP1A	N68	N71			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
46	M52	N89	N91			Tie Back	Beam	Pipe	A53 Gr. B	Typical
47	M53	N21	N24		90	Standoff Diagonal	Beam	Pipe	A500 Gr. ...	Typical
48	M54	N23	N26		90	Standoff Diagonal	Beam	Pipe	A500 Gr. ...	Typical



Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
49	MP4A	N72	N73			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
50	M50	N71A	N73A			RIGID	None	None	RIGID	Typical
51	M51	N72A	N74			RIGID	None	None	RIGID	Typical
52	MP2A	N75	N76			Large Mount Pipe	Beam	Pipe	A53 Gr. B	Typical
53	M53A	N82	N37			RIGID	None	None	RIGID	Typical
54	M54A	N81	N35			RIGID	None	None	RIGID	Typical
55	M55	N80	N33			RIGID	None	None	RIGID	Typical
56	M56	N77	N21			RIGID	None	None	RIGID	Typical
57	M57	N78	N23			RIGID	None	None	RIGID	Typical
58	M58	N79A	N25			RIGID	None	None	RIGID	Typical
59	M59	N38	N88			RIGID	None	None	RIGID	Typical
60	M60	N36	N87			RIGID	None	None	RIGID	Typical
61	M61	N34	N86			RIGID	None	None	RIGID	Typical
62	M62	N22	N83			RIGID	None	None	RIGID	Typical
63	M63	N24	N84			RIGID	None	None	RIGID	Typical
64	M64	N26	N85			RIGID	None	None	RIGID	Typical
65	M65	N90	N92			Tie Back	Beam	Pipe	A53 Gr. B	Typical

Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rati...A...	Inactive	Seismic ...
1	M1						Yes	** NA **		None
2	M2						Yes	** NA **		None
3	M3						Yes			None
4	M5						Yes	Default		None
5	M6						Yes	Default		None
6	M7						Yes			None
7	M8						Yes	Default		None
8	M9						Yes	Default		None
9	M10						Yes			None
10	M11	OOOOOX					Yes			None
11	M12	OOOOOX					Yes			None
12	M13	OOOOOX					Yes			None
13	M14	OOOOOX					Yes			None
14	M15	OOOOOX					Yes			None
15	M17	OOOOOX					Yes			None
16	M19	OOOOOX					Yes			None
17	M20		OOOOOO				Yes			None
18	M21		OOOOOO				Yes			None
19	M22						Yes			None
20	M23						Yes			None
21	M24						Yes			None
22	M25		OOOOOO				Yes	Default		None
23	M26	OOOOOX					Yes			None
24	M27	BenPIN	BenPIN				Yes			None
25	M28	OOOOOX					Yes			None
26	M29	BenPIN	BenPIN				Yes	Default		None
27	M30	OOOOOX					Yes			None
28	M31		OOOOOO				Yes			None
29	M32		OOOOOO				Yes			None
30	M33						Yes			None
31	M34						Yes			None
32	M35						Yes			None
33	M36		OOOOOO				Yes			None
34	M46A						Yes	** NA **		None
35	M37						Yes	** NA **		None



Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rati...A...	Inactive	Seismic ...
36	M38						Yes	** NA **		None
37	M39						Yes	** NA **		None
38	M40						Yes	** NA **		None
39	M41						Yes	** NA **		None
40	M42						Yes	** NA **		None
41	M45						Yes	** NA **		None
42	M46						Yes	** NA **		None
43	MP5A						Yes	** NA **		None
44	MP3A						Yes	** NA **		None
45	MP1A						Yes	** NA **		None
46	M52	OOOOXO					Yes	Default		None
47	M53	BenPIN	BenPIN				Yes	Default		None
48	M54	BenPIN	BenPIN				Yes	Default		None
49	MP4A						Yes	** NA **		None
50	M50						Yes	** NA **		None
51	M51						Yes	** NA **		None
52	MP2A						Yes			None
53	M53A						Yes	** NA **		None
54	M54A						Yes	** NA **		None
55	M55						Yes	** NA **		None
56	M56						Yes	** NA **		None
57	M57						Yes	** NA **		None
58	M58						Yes	** NA **		None
59	M59						Yes	** NA **		None
60	M60						Yes	** NA **		None
61	M61						Yes	** NA **		None
62	M62						Yes	** NA **		None
63	M63						Yes	** NA **		None
64	M64						Yes	** NA **		None
65	M65	OOOOXO					Yes	Default		None

Member Point Loads (BLC 1 : Antenna D)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	Y	-17.6	6.5
2	MP2A	My	.015	6.5
3	MP2A	Mz	0	6.5
4	MP4A	Y	-43.55	1
5	MP4A	My	-.022	1
6	MP4A	Mz	0	1
7	MP4A	Y	-43.55	3
8	MP4A	My	-.022	3
9	MP4A	Mz	0	3
10	MP1A	Y	-74.7	3.5
11	MP1A	My	.025	3.5
12	MP1A	Mz	0	3.5
13	MP3A	Y	-70.3	3
14	MP3A	My	.023	3
15	MP3A	Mz	0	3
16	MP5A	Y	-19.85	.25
17	MP5A	My	-.005	.25
18	MP5A	Mz	0	.25
19	MP5A	Y	-19.85	5
20	MP5A	My	-.005	5
21	MP5A	Mz	0	5
22	M11	Y	-32	2



Member Point Loads (BLC 1 : Antenna D) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
23	M11	My	0	2
24	M11	Mz	0	2
25	MP2A	Y	-31.65	1.25
26	MP2A	My	-.016	1.25
27	MP2A	Mz	.018	1.25
28	MP2A	Y	-31.65	5.5
29	MP2A	My	-.016	5.5
30	MP2A	Mz	.018	5.5
31	MP2A	Y	-31.65	1.25
32	MP2A	My	-.016	1.25
33	MP2A	Mz	-.018	1.25
34	MP2A	Y	-31.65	5.5
35	MP2A	My	-.016	5.5
36	MP2A	Mz	-.018	5.5

Member Point Loads (BLC 2 : Antenna Di)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	Y	-18.265	6.5
2	MP2A	My	.015	6.5
3	MP2A	Mz	0	6.5
4	MP4A	Y	-37.335	1
5	MP4A	My	-.019	1
6	MP4A	Mz	0	1
7	MP4A	Y	-37.335	3
8	MP4A	My	-.019	3
9	MP4A	Mz	0	3
10	MP1A	Y	-47.104	3.5
11	MP1A	My	.016	3.5
12	MP1A	Mz	0	3.5
13	MP3A	Y	-44.864	3
14	MP3A	My	.015	3
15	MP3A	Mz	0	3
16	MP5A	Y	-74.066	.25
17	MP5A	My	-.019	.25
18	MP5A	Mz	0	.25
19	MP5A	Y	-74.066	5
20	MP5A	My	-.019	5
21	MP5A	Mz	0	5
22	M11	Y	-92.089	2
23	M11	My	0	2
24	M11	Mz	0	2
25	MP2A	Y	-73.267	1.25
26	MP2A	My	-.037	1.25
27	MP2A	Mz	.043	1.25
28	MP2A	Y	-73.267	5.5
29	MP2A	My	-.037	5.5
30	MP2A	Mz	.043	5.5
31	MP2A	Y	-73.267	1.25
32	MP2A	My	-.037	1.25
33	MP2A	Mz	-.043	1.25
34	MP2A	Y	-73.267	5.5
35	MP2A	My	-.037	5.5
36	MP2A	Mz	-.043	5.5

Member Point Loads (BLC 3 : Antenna Wo (0 Deg))

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
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Member Point Loads (BLC 3 : Antenna Wo (0 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
1	MP2A	X	0	6.5
2	MP2A	Z	-36.24	6.5
3	MP2A	Mx	0	6.5
4	MP4A	X	0	1
5	MP4A	Z	-73.989	1
6	MP4A	Mx	0	1
7	MP4A	X	0	3
8	MP4A	Z	-73.989	3
9	MP4A	Mx	0	3
10	MP1A	X	0	3.5
11	MP1A	Z	-58.512	3.5
12	MP1A	Mx	0	3.5
13	MP3A	X	0	3
14	MP3A	Z	-58.512	3
15	MP3A	Mx	0	3
16	MP5A	X	0	.25
17	MP5A	Z	-215.55	.25
18	MP5A	Mx	0	.25
19	MP5A	X	0	5
20	MP5A	Z	-215.55	5
21	MP5A	Mx	0	5
22	M11	X	0	2
23	M11	Z	-98.149	2
24	M11	Mx	0	2
25	MP2A	X	0	1.25
26	MP2A	Z	-171.949	1.25
27	MP2A	Mx	-.1	1.25
28	MP2A	X	0	5.5
29	MP2A	Z	-171.949	5.5
30	MP2A	Mx	-.1	5.5
31	MP2A	X	0	1.25
32	MP2A	Z	-171.949	1.25
33	MP2A	Mx	.1	1.25
34	MP2A	X	0	5.5
35	MP2A	Z	-171.949	5.5
36	MP2A	Mx	.1	5.5

Member Point Loads (BLC 4 : Antenna Wo (30 Deg))

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
1	MP2A	X	14.964	6.5
2	MP2A	Z	-25.918	6.5
3	MP2A	Mx	.012	6.5
4	MP4A	X	30.931	1
5	MP4A	Z	-53.574	1
6	MP4A	Mx	-.015	1
7	MP4A	X	30.931	3
8	MP4A	Z	-53.574	3
9	MP4A	Mx	-.015	3
10	MP1A	X	26.849	3.5
11	MP1A	Z	-46.505	3.5
12	MP1A	Mx	.009	3.5
13	MP3A	X	26.378	3
14	MP3A	Z	-45.687	3
15	MP3A	Mx	.009	3
16	MP5A	X	95.04	.25
17	MP5A	Z	-164.614	.25



Member Point Loads (BLC 4 : Antenna Wo (30 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
18	MP5A	Mx	-.024	.25
19	MP5A	X	95.04	5
20	MP5A	Z	-164.614	5
21	MP5A	Mx	-.024	5
22	M11	X	45.488	2
23	M11	Z	-78.788	2
24	M11	Mx	0	2
25	MP2A	X	78.598	1.25
26	MP2A	Z	-136.135	1.25
27	MP2A	Mx	-.119	1.25
28	MP2A	X	78.598	5.5
29	MP2A	Z	-136.135	5.5
30	MP2A	Mx	-.119	5.5
31	MP2A	X	78.598	1.25
32	MP2A	Z	-136.135	1.25
33	MP2A	Mx	.04	1.25
34	MP2A	X	78.598	5.5
35	MP2A	Z	-136.135	5.5
36	MP2A	Mx	.04	5.5

Member Point Loads (BLC 5 : Antenna Wo (60 Deg))

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	14.985	6.5
2	MP2A	Z	-8.652	6.5
3	MP2A	Mx	.012	6.5
4	MP4A	X	32.57	1
5	MP4A	Z	-18.804	1
6	MP4A	Mx	-.016	1
7	MP4A	X	32.57	3
8	MP4A	Z	-18.804	3
9	MP4A	Mx	-.016	3
10	MP1A	X	38.168	3.5
11	MP1A	Z	-22.036	3.5
12	MP1A	Mx	.013	3.5
13	MP3A	X	35.716	3
14	MP3A	Z	-20.621	3
15	MP3A	Mx	.012	3
16	MP5A	X	120.498	.25
17	MP5A	Z	-69.569	.25
18	MP5A	Mx	-.03	.25
19	MP5A	X	120.498	5
20	MP5A	Z	-69.569	5
21	MP5A	Mx	-.03	5
22	M11	X	85	2
23	M11	Z	-49.074	2
24	M11	Mx	0	2
25	MP2A	X	110.581	1.25
26	MP2A	Z	-63.844	1.25
27	MP2A	Mx	-.093	1.25
28	MP2A	X	110.581	5.5
29	MP2A	Z	-63.844	5.5
30	MP2A	Mx	-.093	5.5
31	MP2A	X	110.581	1.25
32	MP2A	Z	-63.844	1.25
33	MP2A	Mx	-.018	1.25
34	MP2A	X	110.581	5.5



Member Point Loads (BLC 5 : Antenna Wo (60 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
35	MP2A	Z	-63.844	5.5
36	MP2A	Mx	-.018	5.5

Member Point Loads (BLC 6 : Antenna Wo (90 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	10.992	6.5
2	MP2A	Z	0	6.5
3	MP2A	Mx	.009	6.5
4	MP4A	X	25.481	1
5	MP4A	Z	0	1
6	MP4A	Mx	-.013	1
7	MP4A	X	25.481	3
8	MP4A	Z	0	3
9	MP4A	Mx	-.013	3
10	MP1A	X	39.26	3.5
11	MP1A	Z	0	3.5
12	MP1A	Mx	.013	3.5
13	MP3A	X	35.485	3
14	MP3A	Z	0	3
15	MP3A	Mx	.012	3
16	MP5A	X	113.668	.25
17	MP5A	Z	0	.25
18	MP5A	Mx	-.028	.25
19	MP5A	X	113.668	5
20	MP5A	Z	0	5
21	MP5A	Mx	-.028	5
22	M11	X	112.494	2
23	M11	Z	0	2
24	M11	Mx	0	2
25	MP2A	X	112.934	1.25
26	MP2A	Z	0	1.25
27	MP2A	Mx	-.056	1.25
28	MP2A	X	112.934	5.5
29	MP2A	Z	0	5.5
30	MP2A	Mx	-.056	5.5
31	MP2A	X	112.934	1.25
32	MP2A	Z	0	1.25
33	MP2A	Mx	-.056	1.25
34	MP2A	X	112.934	5.5
35	MP2A	Z	0	5.5
36	MP2A	Mx	-.056	5.5

Member Point Loads (BLC 7 : Antenna Wo (120 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	14.985	6.5
2	MP2A	Z	8.652	6.5
3	MP2A	Mx	.012	6.5
4	MP4A	X	32.57	1
5	MP4A	Z	18.804	1
6	MP4A	Mx	-.016	1
7	MP4A	X	32.57	3
8	MP4A	Z	18.804	3
9	MP4A	Mx	-.016	3
10	MP1A	X	38.168	3.5
11	MP1A	Z	22.036	3.5
12	MP1A	Mx	.013	3.5



Member Point Loads (BLC 7 : Antenna Wo (120 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
13	MP3A	X	35.716	3
14	MP3A	Z	20.621	3
15	MP3A	Mx	.012	3
16	MP5A	X	120.498	.25
17	MP5A	Z	69.569	.25
18	MP5A	Mx	-.03	.25
19	MP5A	X	120.498	5
20	MP5A	Z	69.569	5
21	MP5A	Mx	-.03	5
22	M11	X	103.634	2
23	M11	Z	59.833	2
24	M11	Mx	0	2
25	MP2A	X	110.581	1.25
26	MP2A	Z	63.844	1.25
27	MP2A	Mx	-.018	1.25
28	MP2A	X	110.581	5.5
29	MP2A	Z	63.844	5.5
30	MP2A	Mx	-.018	5.5
31	MP2A	X	110.581	1.25
32	MP2A	Z	63.844	1.25
33	MP2A	Mx	-.093	1.25
34	MP2A	X	110.581	5.5
35	MP2A	Z	63.844	5.5
36	MP2A	Mx	-.093	5.5

Member Point Loads (BLC 8 : Antenna Wo (150 Deg))

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	14.964	6.5
2	MP2A	Z	25.918	6.5
3	MP2A	Mx	.012	6.5
4	MP4A	X	30.931	1
5	MP4A	Z	53.574	1
6	MP4A	Mx	-.015	1
7	MP4A	X	30.931	3
8	MP4A	Z	53.574	3
9	MP4A	Mx	-.015	3
10	MP1A	X	26.849	3.5
11	MP1A	Z	46.505	3.5
12	MP1A	Mx	.009	3.5
13	MP3A	X	26.378	3
14	MP3A	Z	45.687	3
15	MP3A	Mx	.009	3
16	MP5A	X	95.04	.25
17	MP5A	Z	164.614	.25
18	MP5A	Mx	-.024	.25
19	MP5A	X	95.04	5
20	MP5A	Z	164.614	5
21	MP5A	Mx	-.024	5
22	M11	X	56.247	2
23	M11	Z	97.423	2
24	M11	Mx	0	2
25	MP2A	X	78.598	1.25
26	MP2A	Z	136.135	1.25
27	MP2A	Mx	.04	1.25
28	MP2A	X	78.598	5.5
29	MP2A	Z	136.135	5.5



Member Point Loads (BLC 8 : Antenna Wo (150 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
30	MP2A	Mx	.04	5.5
31	MP2A	X	78.598	1.25
32	MP2A	Z	136.135	1.25
33	MP2A	Mx	-.119	1.25
34	MP2A	X	78.598	5.5
35	MP2A	Z	136.135	5.5
36	MP2A	Mx	-.119	5.5

Member Point Loads (BLC 9 : Antenna Wo (180 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	6.5
2	MP2A	Z	36.24	6.5
3	MP2A	Mx	0	6.5
4	MP4A	X	0	1
5	MP4A	Z	73.989	1
6	MP4A	Mx	0	1
7	MP4A	X	0	3
8	MP4A	Z	73.989	3
9	MP4A	Mx	0	3
10	MP1A	X	0	3.5
11	MP1A	Z	58.512	3.5
12	MP1A	Mx	0	3.5
13	MP3A	X	0	3
14	MP3A	Z	58.512	3
15	MP3A	Mx	0	3
16	MP5A	X	0	.25
17	MP5A	Z	215.55	.25
18	MP5A	Mx	0	.25
19	MP5A	X	0	5
20	MP5A	Z	215.55	5
21	MP5A	Mx	0	5
22	M11	X	0	2
23	M11	Z	98.149	2
24	M11	Mx	0	2
25	MP2A	X	0	1.25
26	MP2A	Z	171.949	1.25
27	MP2A	Mx	.1	1.25
28	MP2A	X	0	5.5
29	MP2A	Z	171.949	5.5
30	MP2A	Mx	.1	5.5
31	MP2A	X	0	1.25
32	MP2A	Z	171.949	1.25
33	MP2A	Mx	-.1	1.25
34	MP2A	X	0	5.5
35	MP2A	Z	171.949	5.5
36	MP2A	Mx	-.1	5.5

Member Point Loads (BLC 10 : Antenna Wo (210 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-14.964	6.5
2	MP2A	Z	25.918	6.5
3	MP2A	Mx	-.012	6.5
4	MP4A	X	-30.931	1
5	MP4A	Z	53.574	1
6	MP4A	Mx	.015	1
7	MP4A	X	-30.931	3



Member Point Loads (BLC 10 : Antenna Wo (210 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
8	MP4A	Z	53.574	3
9	MP4A	Mx	.015	3
10	MP1A	X	-26.849	3.5
11	MP1A	Z	46.505	3.5
12	MP1A	Mx	-.009	3.5
13	MP3A	X	-26.378	3
14	MP3A	Z	45.687	3
15	MP3A	Mx	-.009	3
16	MP5A	X	-95.04	.25
17	MP5A	Z	164.614	.25
18	MP5A	Mx	.024	.25
19	MP5A	X	-95.04	5
20	MP5A	Z	164.614	5
21	MP5A	Mx	.024	5
22	M11	X	-45.488	2
23	M11	Z	78.788	2
24	M11	Mx	0	2
25	MP2A	X	-78.598	1.25
26	MP2A	Z	136.135	1.25
27	MP2A	Mx	.119	1.25
28	MP2A	X	-78.598	5.5
29	MP2A	Z	136.135	5.5
30	MP2A	Mx	.119	5.5
31	MP2A	X	-78.598	1.25
32	MP2A	Z	136.135	1.25
33	MP2A	Mx	-.04	1.25
34	MP2A	X	-78.598	5.5
35	MP2A	Z	136.135	5.5
36	MP2A	Mx	-.04	5.5

Member Point Loads (BLC 11 : Antenna Wo (240 Deg))

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-14.985	6.5
2	MP2A	Z	8.652	6.5
3	MP2A	Mx	-.012	6.5
4	MP4A	X	-32.57	1
5	MP4A	Z	18.804	1
6	MP4A	Mx	.016	1
7	MP4A	X	-32.57	3
8	MP4A	Z	18.804	3
9	MP4A	Mx	.016	3
10	MP1A	X	-38.168	3.5
11	MP1A	Z	22.036	3.5
12	MP1A	Mx	-.013	3.5
13	MP3A	X	-35.716	3
14	MP3A	Z	20.621	3
15	MP3A	Mx	-.012	3
16	MP5A	X	-120.498	.25
17	MP5A	Z	69.569	.25
18	MP5A	Mx	.03	.25
19	MP5A	X	-120.498	5
20	MP5A	Z	69.569	5
21	MP5A	Mx	.03	5
22	M11	X	-85	2
23	M11	Z	49.074	2
24	M11	Mx	0	2



Member Point Loads (BLC 11 : Antenna Wo (240 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
25	MP2A	X	-110.581	1.25
26	MP2A	Z	63.844	1.25
27	MP2A	Mx	.093	1.25
28	MP2A	X	-110.581	5.5
29	MP2A	Z	63.844	5.5
30	MP2A	Mx	.093	5.5
31	MP2A	X	-110.581	1.25
32	MP2A	Z	63.844	1.25
33	MP2A	Mx	.018	1.25
34	MP2A	X	-110.581	5.5
35	MP2A	Z	63.844	5.5
36	MP2A	Mx	.018	5.5

Member Point Loads (BLC 12 : Antenna Wo (270 Deg))

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-10.992	6.5
2	MP2A	Z	0	6.5
3	MP2A	Mx	-.009	6.5
4	MP4A	X	-25.481	1
5	MP4A	Z	0	1
6	MP4A	Mx	.013	1
7	MP4A	X	-25.481	3
8	MP4A	Z	0	3
9	MP4A	Mx	.013	3
10	MP1A	X	-39.26	3.5
11	MP1A	Z	0	3.5
12	MP1A	Mx	-.013	3.5
13	MP3A	X	-35.485	3
14	MP3A	Z	0	3
15	MP3A	Mx	-.012	3
16	MP5A	X	-113.668	.25
17	MP5A	Z	0	.25
18	MP5A	Mx	.028	.25
19	MP5A	X	-113.668	5
20	MP5A	Z	0	5
21	MP5A	Mx	.028	5
22	M11	X	-112.494	2
23	M11	Z	0	2
24	M11	Mx	0	2
25	MP2A	X	-112.934	1.25
26	MP2A	Z	0	1.25
27	MP2A	Mx	.056	1.25
28	MP2A	X	-112.934	5.5
29	MP2A	Z	0	5.5
30	MP2A	Mx	.056	5.5
31	MP2A	X	-112.934	1.25
32	MP2A	Z	0	1.25
33	MP2A	Mx	.056	1.25
34	MP2A	X	-112.934	5.5
35	MP2A	Z	0	5.5
36	MP2A	Mx	.056	5.5

Member Point Loads (BLC 13 : Antenna Wo (300 Deg))

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-14.985	6.5
2	MP2A	Z	-8.652	6.5



Member Point Loads (BLC 13 : Antenna Wo (300 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
3	MP2A	Mx	-.012	6.5
4	MP4A	X	-32.57	1
5	MP4A	Z	-18.804	1
6	MP4A	Mx	.016	1
7	MP4A	X	-32.57	3
8	MP4A	Z	-18.804	3
9	MP4A	Mx	.016	3
10	MP1A	X	-38.168	3.5
11	MP1A	Z	-22.036	3.5
12	MP1A	Mx	-.013	3.5
13	MP3A	X	-35.716	3
14	MP3A	Z	-20.621	3
15	MP3A	Mx	-.012	3
16	MP5A	X	-120.498	.25
17	MP5A	Z	-69.569	.25
18	MP5A	Mx	.03	.25
19	MP5A	X	-120.498	5
20	MP5A	Z	-69.569	5
21	MP5A	Mx	.03	5
22	M11	X	-103.634	2
23	M11	Z	-59.833	2
24	M11	Mx	0	2
25	MP2A	X	-110.581	1.25
26	MP2A	Z	-63.844	1.25
27	MP2A	Mx	.018	1.25
28	MP2A	X	-110.581	5.5
29	MP2A	Z	-63.844	5.5
30	MP2A	Mx	.018	5.5
31	MP2A	X	-110.581	1.25
32	MP2A	Z	-63.844	1.25
33	MP2A	Mx	.093	1.25
34	MP2A	X	-110.581	5.5
35	MP2A	Z	-63.844	5.5
36	MP2A	Mx	.093	5.5

Member Point Loads (BLC 14 : Antenna Wo (330 Deg))

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-14.964	6.5
2	MP2A	Z	-25.918	6.5
3	MP2A	Mx	-.012	6.5
4	MP4A	X	-30.931	1
5	MP4A	Z	-53.574	1
6	MP4A	Mx	.015	1
7	MP4A	X	-30.931	3
8	MP4A	Z	-53.574	3
9	MP4A	Mx	.015	3
10	MP1A	X	-26.849	3.5
11	MP1A	Z	-46.505	3.5
12	MP1A	Mx	-.009	3.5
13	MP3A	X	-26.378	3
14	MP3A	Z	-45.687	3
15	MP3A	Mx	-.009	3
16	MP5A	X	-95.04	.25
17	MP5A	Z	-164.614	.25
18	MP5A	Mx	.024	.25
19	MP5A	X	-95.04	5



Member Point Loads (BLC 14 : Antenna Wo (330 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
20	MP5A	Z	-164.614	5
21	MP5A	Mx	.024	5
22	M11	X	-56.247	2
23	M11	Z	-97.423	2
24	M11	Mx	0	2
25	MP2A	X	-78.598	1.25
26	MP2A	Z	-136.135	1.25
27	MP2A	Mx	-.04	1.25
28	MP2A	X	-78.598	5.5
29	MP2A	Z	-136.135	5.5
30	MP2A	Mx	-.04	5.5
31	MP2A	X	-78.598	1.25
32	MP2A	Z	-136.135	1.25
33	MP2A	Mx	.119	1.25
34	MP2A	X	-78.598	5.5
35	MP2A	Z	-136.135	5.5
36	MP2A	Mx	.119	5.5

Member Point Loads (BLC 15 : Antenna Wi (0 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	6.5
2	MP2A	Z	-8.144	6.5
3	MP2A	Mx	0	6.5
4	MP4A	X	0	1
5	MP4A	Z	-17.488	1
6	MP4A	Mx	0	1
7	MP4A	X	0	3
8	MP4A	Z	-17.488	3
9	MP4A	Mx	0	3
10	MP1A	X	0	3.5
11	MP1A	Z	-14.774	3.5
12	MP1A	Mx	0	3.5
13	MP3A	X	0	3
14	MP3A	Z	-14.774	3
15	MP3A	Mx	0	3
16	MP5A	X	0	.25
17	MP5A	Z	-41.073	.25
18	MP5A	Mx	0	.25
19	MP5A	X	0	5
20	MP5A	Z	-41.073	5
21	MP5A	Mx	0	5
22	M11	X	0	2
23	M11	Z	-25.36	2
24	M11	Mx	0	2
25	MP2A	X	0	1.25
26	MP2A	Z	-32.841	1.25
27	MP2A	Mx	-.019	1.25
28	MP2A	X	0	5.5
29	MP2A	Z	-32.841	5.5
30	MP2A	Mx	-.019	5.5
31	MP2A	X	0	1.25
32	MP2A	Z	-32.841	1.25
33	MP2A	Mx	.019	1.25
34	MP2A	X	0	5.5
35	MP2A	Z	-32.841	5.5
36	MP2A	Mx	.019	5.5



Member Point Loads (BLC 16 : Antenna Wi (30 Deg))

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
1	MP2A	X	3.441	6.5
2	MP2A	Z	-5.96	6.5
3	MP2A	Mx	.003	6.5
4	MP4A	X	7.492	1
5	MP4A	Z	-12.977	1
6	MP4A	Mx	-.004	1
7	MP4A	X	7.492	3
8	MP4A	Z	-12.977	3
9	MP4A	Mx	-.004	3
10	MP1A	X	6.827	3.5
11	MP1A	Z	-11.825	3.5
12	MP1A	Mx	.002	3.5
13	MP3A	X	6.726	3
14	MP3A	Z	-11.65	3
15	MP3A	Mx	.002	3
16	MP5A	X	18.265	.25
17	MP5A	Z	-31.636	.25
18	MP5A	Mx	-.005	.25
19	MP5A	X	18.265	5
20	MP5A	Z	-31.636	5
21	MP5A	Mx	-.005	5
22	M11	X	11.857	2
23	M11	Z	-20.537	2
24	M11	Mx	0	2
25	MP2A	X	15.12	1.25
26	MP2A	Z	-26.189	1.25
27	MP2A	Mx	-.023	1.25
28	MP2A	X	15.12	5.5
29	MP2A	Z	-26.189	5.5
30	MP2A	Mx	-.023	5.5
31	MP2A	X	15.12	1.25
32	MP2A	Z	-26.189	1.25
33	MP2A	Mx	.008	1.25
34	MP2A	X	15.12	5.5
35	MP2A	Z	-26.189	5.5
36	MP2A	Mx	.008	5.5

Member Point Loads (BLC 17 : Antenna Wi (60 Deg))

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
1	MP2A	X	3.774	6.5
2	MP2A	Z	-2.179	6.5
3	MP2A	Mx	.003	6.5
4	MP4A	X	8.642	1
5	MP4A	Z	-4.99	1
6	MP4A	Mx	-.004	1
7	MP4A	X	8.642	3
8	MP4A	Z	-4.99	3
9	MP4A	Mx	-.004	3
10	MP1A	X	9.885	3.5
11	MP1A	Z	-5.707	3.5
12	MP1A	Mx	.003	3.5
13	MP3A	X	9.361	3
14	MP3A	Z	-5.405	3
15	MP3A	Mx	.003	3
16	MP5A	X	23.769	.25
17	MP5A	Z	-13.723	.25



Member Point Loads (BLC 17 : Antenna Wi (60 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
18	MP5A	Mx	-.006	.25
19	MP5A	X	23.769	5
20	MP5A	Z	-13.723	5
21	MP5A	Mx	-.006	5
22	M11	X	21.962	2
23	M11	Z	-12.68	2
24	M11	Mx	0	2
25	MP2A	X	21.684	1.25
26	MP2A	Z	-12.519	1.25
27	MP2A	Mx	-.018	1.25
28	MP2A	X	21.684	5.5
29	MP2A	Z	-12.519	5.5
30	MP2A	Mx	-.018	5.5
31	MP2A	X	21.684	1.25
32	MP2A	Z	-12.519	1.25
33	MP2A	Mx	-.004	1.25
34	MP2A	X	21.684	5.5
35	MP2A	Z	-12.519	5.5
36	MP2A	Mx	-.004	5.5

Member Point Loads (BLC 18 : Antenna Wi (90 Deg))

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	3.096	6.5
2	MP2A	Z	0	6.5
3	MP2A	Mx	.003	6.5
4	MP4A	X	7.477	1
5	MP4A	Z	0	1
6	MP4A	Mx	-.004	1
7	MP4A	X	7.477	3
8	MP4A	Z	0	3
9	MP4A	Mx	-.004	3
10	MP1A	X	10.295	3.5
11	MP1A	Z	0	3.5
12	MP1A	Mx	.003	3.5
13	MP3A	X	9.488	3
14	MP3A	Z	0	3
15	MP3A	Mx	.003	3
16	MP5A	X	22.904	.25
17	MP5A	Z	0	.25
18	MP5A	Mx	-.006	.25
19	MP5A	X	22.904	5
20	MP5A	Z	0	5
21	MP5A	Mx	-.006	5
22	M11	X	28.651	2
23	M11	Z	0	2
24	M11	Mx	0	2
25	MP2A	X	22.438	1.25
26	MP2A	Z	0	1.25
27	MP2A	Mx	-.011	1.25
28	MP2A	X	22.438	5.5
29	MP2A	Z	0	5.5
30	MP2A	Mx	-.011	5.5
31	MP2A	X	22.438	1.25
32	MP2A	Z	0	1.25
33	MP2A	Mx	-.011	1.25
34	MP2A	X	22.438	5.5



Member Point Loads (BLC 18 : Antenna Wi (90 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
35	MP2A	Z	0	5.5
36	MP2A	Mx	-.011	5.5

Member Point Loads (BLC 19 : Antenna Wi (120 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	3.774	6.5
2	MP2A	Z	2.179	6.5
3	MP2A	Mx	.003	6.5
4	MP4A	X	8.642	1
5	MP4A	Z	4.99	1
6	MP4A	Mx	-.004	1
7	MP4A	X	8.642	3
8	MP4A	Z	4.99	3
9	MP4A	Mx	-.004	3
10	MP1A	X	9.885	3.5
11	MP1A	Z	5.707	3.5
12	MP1A	Mx	.003	3.5
13	MP3A	X	9.361	3
14	MP3A	Z	5.405	3
15	MP3A	Mx	.003	3
16	MP5A	X	23.769	.25
17	MP5A	Z	13.723	.25
18	MP5A	Mx	-.006	.25
19	MP5A	X	23.769	5
20	MP5A	Z	13.723	5
21	MP5A	Mx	-.006	5
22	M11	X	26.238	2
23	M11	Z	15.148	2
24	M11	Mx	0	2
25	MP2A	X	21.684	1.25
26	MP2A	Z	12.519	1.25
27	MP2A	Mx	-.004	1.25
28	MP2A	X	21.684	5.5
29	MP2A	Z	12.519	5.5
30	MP2A	Mx	-.004	5.5
31	MP2A	X	21.684	1.25
32	MP2A	Z	12.519	1.25
33	MP2A	Mx	-.018	1.25
34	MP2A	X	21.684	5.5
35	MP2A	Z	12.519	5.5
36	MP2A	Mx	-.018	5.5

Member Point Loads (BLC 20 : Antenna Wi (150 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	3.441	6.5
2	MP2A	Z	5.96	6.5
3	MP2A	Mx	.003	6.5
4	MP4A	X	7.492	1
5	MP4A	Z	12.977	1
6	MP4A	Mx	-.004	1
7	MP4A	X	7.492	3
8	MP4A	Z	12.977	3
9	MP4A	Mx	-.004	3
10	MP1A	X	6.827	3.5
11	MP1A	Z	11.825	3.5
12	MP1A	Mx	.002	3.5



Member Point Loads (BLC 20 : Antenna Wi (150 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
13	MP3A	X	6.726	3
14	MP3A	Z	11.65	3
15	MP3A	Mx	.002	3
16	MP5A	X	18.265	.25
17	MP5A	Z	31.636	.25
18	MP5A	Mx	-.005	.25
19	MP5A	X	18.265	5
20	MP5A	Z	31.636	5
21	MP5A	Mx	-.005	5
22	M11	X	14.326	2
23	M11	Z	24.813	2
24	M11	Mx	0	2
25	MP2A	X	15.12	1.25
26	MP2A	Z	26.189	1.25
27	MP2A	Mx	.008	1.25
28	MP2A	X	15.12	5.5
29	MP2A	Z	26.189	5.5
30	MP2A	Mx	.008	5.5
31	MP2A	X	15.12	1.25
32	MP2A	Z	26.189	1.25
33	MP2A	Mx	-.023	1.25
34	MP2A	X	15.12	5.5
35	MP2A	Z	26.189	5.5
36	MP2A	Mx	-.023	5.5

Member Point Loads (BLC 21 : Antenna Wi (180 Deg))

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	0	6.5
2	MP2A	Z	8.144	6.5
3	MP2A	Mx	0	6.5
4	MP4A	X	0	1
5	MP4A	Z	17.488	1
6	MP4A	Mx	0	1
7	MP4A	X	0	3
8	MP4A	Z	17.488	3
9	MP4A	Mx	0	3
10	MP1A	X	0	3.5
11	MP1A	Z	14.774	3.5
12	MP1A	Mx	0	3.5
13	MP3A	X	0	3
14	MP3A	Z	14.774	3
15	MP3A	Mx	0	3
16	MP5A	X	0	.25
17	MP5A	Z	41.073	.25
18	MP5A	Mx	0	.25
19	MP5A	X	0	5
20	MP5A	Z	41.073	5
21	MP5A	Mx	0	5
22	M11	X	0	2
23	M11	Z	25.36	2
24	M11	Mx	0	2
25	MP2A	X	0	1.25
26	MP2A	Z	32.841	1.25
27	MP2A	Mx	.019	1.25
28	MP2A	X	0	5.5
29	MP2A	Z	32.841	5.5



Member Point Loads (BLC 21 : Antenna Wi (180 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
30	MP2A	Mx	.019	5.5
31	MP2A	X	0	1.25
32	MP2A	Z	32.841	1.25
33	MP2A	Mx	-.019	1.25
34	MP2A	X	0	5.5
35	MP2A	Z	32.841	5.5
36	MP2A	Mx	-.019	5.5

Member Point Loads (BLC 22 : Antenna Wi (210 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-3.441	6.5
2	MP2A	Z	5.96	6.5
3	MP2A	Mx	-.003	6.5
4	MP4A	X	-7.492	1
5	MP4A	Z	12.977	1
6	MP4A	Mx	.004	1
7	MP4A	X	-7.492	3
8	MP4A	Z	12.977	3
9	MP4A	Mx	.004	3
10	MP1A	X	-6.827	3.5
11	MP1A	Z	11.825	3.5
12	MP1A	Mx	-.002	3.5
13	MP3A	X	-6.726	3
14	MP3A	Z	11.65	3
15	MP3A	Mx	-.002	3
16	MP5A	X	-18.265	.25
17	MP5A	Z	31.636	.25
18	MP5A	Mx	.005	.25
19	MP5A	X	-18.265	5
20	MP5A	Z	31.636	5
21	MP5A	Mx	.005	5
22	M11	X	-11.857	2
23	M11	Z	20.537	2
24	M11	Mx	0	2
25	MP2A	X	-15.12	1.25
26	MP2A	Z	26.189	1.25
27	MP2A	Mx	.023	1.25
28	MP2A	X	-15.12	5.5
29	MP2A	Z	26.189	5.5
30	MP2A	Mx	.023	5.5
31	MP2A	X	-15.12	1.25
32	MP2A	Z	26.189	1.25
33	MP2A	Mx	-.008	1.25
34	MP2A	X	-15.12	5.5
35	MP2A	Z	26.189	5.5
36	MP2A	Mx	-.008	5.5

Member Point Loads (BLC 23 : Antenna Wi (240 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-3.774	6.5
2	MP2A	Z	2.179	6.5
3	MP2A	Mx	-.003	6.5
4	MP4A	X	-8.642	1
5	MP4A	Z	4.99	1
6	MP4A	Mx	.004	1
7	MP4A	X	-8.642	3



Member Point Loads (BLC 23 : Antenna Wi (240 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
8	MP4A	Z	4.99	3
9	MP4A	Mx	.004	3
10	MP1A	X	-9.885	3.5
11	MP1A	Z	5.707	3.5
12	MP1A	Mx	-.003	3.5
13	MP3A	X	-9.361	3
14	MP3A	Z	5.405	3
15	MP3A	Mx	-.003	3
16	MP5A	X	-23.769	.25
17	MP5A	Z	13.723	.25
18	MP5A	Mx	.006	.25
19	MP5A	X	-23.769	5
20	MP5A	Z	13.723	5
21	MP5A	Mx	.006	5
22	M11	X	-21.962	2
23	M11	Z	12.68	2
24	M11	Mx	0	2
25	MP2A	X	-21.684	1.25
26	MP2A	Z	12.519	1.25
27	MP2A	Mx	.018	1.25
28	MP2A	X	-21.684	5.5
29	MP2A	Z	12.519	5.5
30	MP2A	Mx	.018	5.5
31	MP2A	X	-21.684	1.25
32	MP2A	Z	12.519	1.25
33	MP2A	Mx	.004	1.25
34	MP2A	X	-21.684	5.5
35	MP2A	Z	12.519	5.5
36	MP2A	Mx	.004	5.5

Member Point Loads (BLC 24 : Antenna Wi (270 Deg))

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-3.096	6.5
2	MP2A	Z	0	6.5
3	MP2A	Mx	-.003	6.5
4	MP4A	X	-7.477	1
5	MP4A	Z	0	1
6	MP4A	Mx	.004	1
7	MP4A	X	-7.477	3
8	MP4A	Z	0	3
9	MP4A	Mx	.004	3
10	MP1A	X	-10.295	3.5
11	MP1A	Z	0	3.5
12	MP1A	Mx	-.003	3.5
13	MP3A	X	-9.488	3
14	MP3A	Z	0	3
15	MP3A	Mx	-.003	3
16	MP5A	X	-22.904	.25
17	MP5A	Z	0	.25
18	MP5A	Mx	.006	.25
19	MP5A	X	-22.904	5
20	MP5A	Z	0	5
21	MP5A	Mx	.006	5
22	M11	X	-28.651	2
23	M11	Z	0	2
24	M11	Mx	0	2



Member Point Loads (BLC 24 : Antenna Wi (270 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
25	MP2A	X	-22.438	1.25
26	MP2A	Z	0	1.25
27	MP2A	Mx	.011	1.25
28	MP2A	X	-22.438	5.5
29	MP2A	Z	0	5.5
30	MP2A	Mx	.011	5.5
31	MP2A	X	-22.438	1.25
32	MP2A	Z	0	1.25
33	MP2A	Mx	.011	1.25
34	MP2A	X	-22.438	5.5
35	MP2A	Z	0	5.5
36	MP2A	Mx	.011	5.5

Member Point Loads (BLC 25 : Antenna Wi (300 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-3.774	6.5
2	MP2A	Z	-2.179	6.5
3	MP2A	Mx	-.003	6.5
4	MP4A	X	-8.642	1
5	MP4A	Z	-4.99	1
6	MP4A	Mx	.004	1
7	MP4A	X	-8.642	3
8	MP4A	Z	-4.99	3
9	MP4A	Mx	.004	3
10	MP1A	X	-9.885	3.5
11	MP1A	Z	-5.707	3.5
12	MP1A	Mx	-.003	3.5
13	MP3A	X	-9.361	3
14	MP3A	Z	-5.405	3
15	MP3A	Mx	-.003	3
16	MP5A	X	-23.769	.25
17	MP5A	Z	-13.723	.25
18	MP5A	Mx	.006	.25
19	MP5A	X	-23.769	5
20	MP5A	Z	-13.723	5
21	MP5A	Mx	.006	5
22	M11	X	-26.238	2
23	M11	Z	-15.148	2
24	M11	Mx	0	2
25	MP2A	X	-21.684	1.25
26	MP2A	Z	-12.519	1.25
27	MP2A	Mx	.004	1.25
28	MP2A	X	-21.684	5.5
29	MP2A	Z	-12.519	5.5
30	MP2A	Mx	.004	5.5
31	MP2A	X	-21.684	1.25
32	MP2A	Z	-12.519	1.25
33	MP2A	Mx	.018	1.25
34	MP2A	X	-21.684	5.5
35	MP2A	Z	-12.519	5.5
36	MP2A	Mx	.018	5.5

Member Point Loads (BLC 26 : Antenna Wi (330 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-3.441	6.5
2	MP2A	Z	-5.96	6.5



Member Point Loads (BLC 26 : Antenna Wi (330 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
3	MP2A	Mx	-0.003	6.5
4	MP4A	X	-7.492	1
5	MP4A	Z	-12.977	1
6	MP4A	Mx	.004	1
7	MP4A	X	-7.492	3
8	MP4A	Z	-12.977	3
9	MP4A	Mx	.004	3
10	MP1A	X	-6.827	3.5
11	MP1A	Z	-11.825	3.5
12	MP1A	Mx	-.002	3.5
13	MP3A	X	-6.726	3
14	MP3A	Z	-11.65	3
15	MP3A	Mx	-.002	3
16	MP5A	X	-18.265	.25
17	MP5A	Z	-31.636	.25
18	MP5A	Mx	.005	.25
19	MP5A	X	-18.265	5
20	MP5A	Z	-31.636	5
21	MP5A	Mx	.005	5
22	M11	X	-14.326	2
23	M11	Z	-24.813	2
24	M11	Mx	0	2
25	MP2A	X	-15.12	1.25
26	MP2A	Z	-26.189	1.25
27	MP2A	Mx	-.008	1.25
28	MP2A	X	-15.12	5.5
29	MP2A	Z	-26.189	5.5
30	MP2A	Mx	-.008	5.5
31	MP2A	X	-15.12	1.25
32	MP2A	Z	-26.189	1.25
33	MP2A	Mx	.023	1.25
34	MP2A	X	-15.12	5.5
35	MP2A	Z	-26.189	5.5
36	MP2A	Mx	.023	5.5

Member Point Loads (BLC 27 : Antenna Wm (0 Deg))

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	0	6.5
2	MP2A	Z	-2.265	6.5
3	MP2A	Mx	0	6.5
4	MP4A	X	0	1
5	MP4A	Z	-4.624	1
6	MP4A	Mx	0	1
7	MP4A	X	0	3
8	MP4A	Z	-4.624	3
9	MP4A	Mx	0	3
10	MP1A	X	0	3.5
11	MP1A	Z	-3.657	3.5
12	MP1A	Mx	0	3.5
13	MP3A	X	0	3
14	MP3A	Z	-3.657	3
15	MP3A	Mx	0	3
16	MP5A	X	0	.25
17	MP5A	Z	-13.472	.25
18	MP5A	Mx	0	.25
19	MP5A	X	0	5



Member Point Loads (BLC 27 : Antenna Wm (0 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
20	MP5A	Z	-13.472	5
21	MP5A	Mx	0	5
22	M11	X	0	2
23	M11	Z	-6.134	2
24	M11	Mx	0	2
25	MP2A	X	0	1.25
26	MP2A	Z	-10.747	1.25
27	MP2A	Mx	-.006	1.25
28	MP2A	X	0	5.5
29	MP2A	Z	-10.747	5.5
30	MP2A	Mx	-.006	5.5
31	MP2A	X	0	1.25
32	MP2A	Z	-10.747	1.25
33	MP2A	Mx	.006	1.25
34	MP2A	X	0	5.5
35	MP2A	Z	-10.747	5.5
36	MP2A	Mx	.006	5.5

Member Point Loads (BLC 28 : Antenna Wm (30 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	.935	6.5
2	MP2A	Z	-1.62	6.5
3	MP2A	Mx	.000779	6.5
4	MP4A	X	1.933	1
5	MP4A	Z	-3.348	1
6	MP4A	Mx	-.000966	1
7	MP4A	X	1.933	3
8	MP4A	Z	-3.348	3
9	MP4A	Mx	-.000966	3
10	MP1A	X	1.678	3.5
11	MP1A	Z	-2.907	3.5
12	MP1A	Mx	.000559	3.5
13	MP3A	X	1.649	3
14	MP3A	Z	-2.855	3
15	MP3A	Mx	.00055	3
16	MP5A	X	5.94	.25
17	MP5A	Z	-10.288	.25
18	MP5A	Mx	-.001	.25
19	MP5A	X	5.94	5
20	MP5A	Z	-10.288	5
21	MP5A	Mx	-.001	5
22	M11	X	2.843	2
23	M11	Z	-4.924	2
24	M11	Mx	0	2
25	MP2A	X	4.912	1.25
26	MP2A	Z	-8.508	1.25
27	MP2A	Mx	-.007	1.25
28	MP2A	X	4.912	5.5
29	MP2A	Z	-8.508	5.5
30	MP2A	Mx	-.007	5.5
31	MP2A	X	4.912	1.25
32	MP2A	Z	-8.508	1.25
33	MP2A	Mx	.003	1.25
34	MP2A	X	4.912	5.5
35	MP2A	Z	-8.508	5.5
36	MP2A	Mx	.003	5.5



Member Point Loads (BLC 29 : Antenna Wm (60 Deg))

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
1	MP2A	X	.937	6.5
2	MP2A	Z	-.541	6.5
3	MP2A	Mx	.000781	6.5
4	MP4A	X	2.036	1
5	MP4A	Z	-1.175	1
6	MP4A	Mx	-.001	1
7	MP4A	X	2.036	3
8	MP4A	Z	-1.175	3
9	MP4A	Mx	-.001	3
10	MP1A	X	2.386	3.5
11	MP1A	Z	-1.377	3.5
12	MP1A	Mx	.000795	3.5
13	MP3A	X	2.232	3
14	MP3A	Z	-1.289	3
15	MP3A	Mx	.000744	3
16	MP5A	X	7.531	.25
17	MP5A	Z	-4.348	.25
18	MP5A	Mx	-.002	.25
19	MP5A	X	7.531	5
20	MP5A	Z	-4.348	5
21	MP5A	Mx	-.002	5
22	M11	X	5.312	2
23	M11	Z	-3.067	2
24	M11	Mx	0	2
25	MP2A	X	6.911	1.25
26	MP2A	Z	-3.99	1.25
27	MP2A	Mx	-.006	1.25
28	MP2A	X	6.911	5.5
29	MP2A	Z	-3.99	5.5
30	MP2A	Mx	-.006	5.5
31	MP2A	X	6.911	1.25
32	MP2A	Z	-3.99	1.25
33	MP2A	Mx	-.001	1.25
34	MP2A	X	6.911	5.5
35	MP2A	Z	-3.99	5.5
36	MP2A	Mx	-.001	5.5

Member Point Loads (BLC 30 : Antenna Wm (90 Deg))

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
1	MP2A	X	.687	6.5
2	MP2A	Z	0	6.5
3	MP2A	Mx	.000573	6.5
4	MP4A	X	1.593	1
5	MP4A	Z	0	1
6	MP4A	Mx	-.000796	1
7	MP4A	X	1.593	3
8	MP4A	Z	0	3
9	MP4A	Mx	-.000796	3
10	MP1A	X	2.454	3.5
11	MP1A	Z	0	3.5
12	MP1A	Mx	.000818	3.5
13	MP3A	X	2.218	3
14	MP3A	Z	0	3
15	MP3A	Mx	.000739	3
16	MP5A	X	7.104	.25
17	MP5A	Z	0	.25



Member Point Loads (BLC 30 : Antenna Wm (90 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
18	MP5A	Mx	-.002	.25
19	MP5A	X	7.104	5
20	MP5A	Z	0	5
21	MP5A	Mx	-.002	5
22	M11	X	7.031	2
23	M11	Z	0	2
24	M11	Mx	0	2
25	MP2A	X	7.058	1.25
26	MP2A	Z	0	1.25
27	MP2A	Mx	-.004	1.25
28	MP2A	X	7.058	5.5
29	MP2A	Z	0	5.5
30	MP2A	Mx	-.004	5.5
31	MP2A	X	7.058	1.25
32	MP2A	Z	0	1.25
33	MP2A	Mx	-.004	1.25
34	MP2A	X	7.058	5.5
35	MP2A	Z	0	5.5
36	MP2A	Mx	-.004	5.5

Member Point Loads (BLC 31 : Antenna Wm (120 Deg))

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	X	.937	6.5
2	MP2A	Z	.541	6.5
3	MP2A	Mx	.000781	6.5
4	MP4A	X	2.036	1
5	MP4A	Z	1.175	1
6	MP4A	Mx	-.001	1
7	MP4A	X	2.036	3
8	MP4A	Z	1.175	3
9	MP4A	Mx	-.001	3
10	MP1A	X	2.386	3.5
11	MP1A	Z	1.377	3.5
12	MP1A	Mx	.000795	3.5
13	MP3A	X	2.232	3
14	MP3A	Z	1.289	3
15	MP3A	Mx	.000744	3
16	MP5A	X	7.531	.25
17	MP5A	Z	4.348	.25
18	MP5A	Mx	-.002	.25
19	MP5A	X	7.531	5
20	MP5A	Z	4.348	5
21	MP5A	Mx	-.002	5
22	M11	X	6.477	2
23	M11	Z	3.74	2
24	M11	Mx	0	2
25	MP2A	X	6.911	1.25
26	MP2A	Z	3.99	1.25
27	MP2A	Mx	-.001	1.25
28	MP2A	X	6.911	5.5
29	MP2A	Z	3.99	5.5
30	MP2A	Mx	-.001	5.5
31	MP2A	X	6.911	1.25
32	MP2A	Z	3.99	1.25
33	MP2A	Mx	-.006	1.25
34	MP2A	X	6.911	5.5



Member Point Loads (BLC 31 : Antenna Wm (120 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
35	MP2A	Z	3.99	5.5
36	MP2A	Mx	-.006	5.5

Member Point Loads (BLC 32 : Antenna Wm (150 Deg))

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	.935	6.5
2	MP2A	Z	1.62	6.5
3	MP2A	Mx	.000779	6.5
4	MP4A	X	1.933	1
5	MP4A	Z	3.348	1
6	MP4A	Mx	-.000966	1
7	MP4A	X	1.933	3
8	MP4A	Z	3.348	3
9	MP4A	Mx	-.000966	3
10	MP1A	X	1.678	3.5
11	MP1A	Z	2.907	3.5
12	MP1A	Mx	.000559	3.5
13	MP3A	X	1.649	3
14	MP3A	Z	2.855	3
15	MP3A	Mx	.00055	3
16	MP5A	X	5.94	.25
17	MP5A	Z	10.288	.25
18	MP5A	Mx	-.001	.25
19	MP5A	X	5.94	5
20	MP5A	Z	10.288	5
21	MP5A	Mx	-.001	5
22	M11	X	3.515	2
23	M11	Z	6.089	2
24	M11	Mx	0	2
25	MP2A	X	4.912	1.25
26	MP2A	Z	8.508	1.25
27	MP2A	Mx	.003	1.25
28	MP2A	X	4.912	5.5
29	MP2A	Z	8.508	5.5
30	MP2A	Mx	.003	5.5
31	MP2A	X	4.912	1.25
32	MP2A	Z	8.508	1.25
33	MP2A	Mx	-.007	1.25
34	MP2A	X	4.912	5.5
35	MP2A	Z	8.508	5.5
36	MP2A	Mx	-.007	5.5

Member Point Loads (BLC 33 : Antenna Wm (180 Deg))

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	0	6.5
2	MP2A	Z	2.265	6.5
3	MP2A	Mx	0	6.5
4	MP4A	X	0	1
5	MP4A	Z	4.624	1
6	MP4A	Mx	0	1
7	MP4A	X	0	3
8	MP4A	Z	4.624	3
9	MP4A	Mx	0	3
10	MP1A	X	0	3.5
11	MP1A	Z	3.657	3.5
12	MP1A	Mx	0	3.5



Member Point Loads (BLC 33 : Antenna Wm (180 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
13	MP3A	X	0	3
14	MP3A	Z	3.657	3
15	MP3A	Mx	0	3
16	MP5A	X	0	.25
17	MP5A	Z	13.472	.25
18	MP5A	Mx	0	.25
19	MP5A	X	0	5
20	MP5A	Z	13.472	5
21	MP5A	Mx	0	5
22	M11	X	0	2
23	M11	Z	6.134	2
24	M11	Mx	0	2
25	MP2A	X	0	1.25
26	MP2A	Z	10.747	1.25
27	MP2A	Mx	.006	1.25
28	MP2A	X	0	5.5
29	MP2A	Z	10.747	5.5
30	MP2A	Mx	.006	5.5
31	MP2A	X	0	1.25
32	MP2A	Z	10.747	1.25
33	MP2A	Mx	-.006	1.25
34	MP2A	X	0	5.5
35	MP2A	Z	10.747	5.5
36	MP2A	Mx	-.006	5.5

Member Point Loads (BLC 34 : Antenna Wm (210 Deg))

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-.935	6.5
2	MP2A	Z	1.62	6.5
3	MP2A	Mx	-.000779	6.5
4	MP4A	X	-1.933	1
5	MP4A	Z	3.348	1
6	MP4A	Mx	.000966	1
7	MP4A	X	-1.933	3
8	MP4A	Z	3.348	3
9	MP4A	Mx	.000966	3
10	MP1A	X	-1.678	3.5
11	MP1A	Z	2.907	3.5
12	MP1A	Mx	-.000559	3.5
13	MP3A	X	-1.649	3
14	MP3A	Z	2.855	3
15	MP3A	Mx	-.00055	3
16	MP5A	X	-5.94	.25
17	MP5A	Z	10.288	.25
18	MP5A	Mx	.001	.25
19	MP5A	X	-5.94	5
20	MP5A	Z	10.288	5
21	MP5A	Mx	.001	5
22	M11	X	-2.843	2
23	M11	Z	4.924	2
24	M11	Mx	0	2
25	MP2A	X	-4.912	1.25
26	MP2A	Z	8.508	1.25
27	MP2A	Mx	.007	1.25
28	MP2A	X	-4.912	5.5
29	MP2A	Z	8.508	5.5



Member Point Loads (BLC 34 : Antenna Wm (210 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
30	MP2A	Mx	.007	5.5
31	MP2A	X	-4.912	1.25
32	MP2A	Z	8.508	1.25
33	MP2A	Mx	-.003	1.25
34	MP2A	X	-4.912	5.5
35	MP2A	Z	8.508	5.5
36	MP2A	Mx	-.003	5.5

Member Point Loads (BLC 35 : Antenna Wm (240 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-.937	6.5
2	MP2A	Z	.541	6.5
3	MP2A	Mx	-.000781	6.5
4	MP4A	X	-2.036	1
5	MP4A	Z	1.175	1
6	MP4A	Mx	.001	1
7	MP4A	X	-2.036	3
8	MP4A	Z	1.175	3
9	MP4A	Mx	.001	3
10	MP1A	X	-2.386	3.5
11	MP1A	Z	1.377	3.5
12	MP1A	Mx	-.000795	3.5
13	MP3A	X	-2.232	3
14	MP3A	Z	1.289	3
15	MP3A	Mx	-.000744	3
16	MP5A	X	-7.531	.25
17	MP5A	Z	4.348	.25
18	MP5A	Mx	.002	.25
19	MP5A	X	-7.531	5
20	MP5A	Z	4.348	5
21	MP5A	Mx	.002	5
22	M11	X	-5.312	2
23	M11	Z	3.067	2
24	M11	Mx	0	2
25	MP2A	X	-6.911	1.25
26	MP2A	Z	3.99	1.25
27	MP2A	Mx	.006	1.25
28	MP2A	X	-6.911	5.5
29	MP2A	Z	3.99	5.5
30	MP2A	Mx	.006	5.5
31	MP2A	X	-6.911	1.25
32	MP2A	Z	3.99	1.25
33	MP2A	Mx	.001	1.25
34	MP2A	X	-6.911	5.5
35	MP2A	Z	3.99	5.5
36	MP2A	Mx	.001	5.5

Member Point Loads (BLC 36 : Antenna Wm (270 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-.687	6.5
2	MP2A	Z	0	6.5
3	MP2A	Mx	-.000573	6.5
4	MP4A	X	-1.593	1
5	MP4A	Z	0	1
6	MP4A	Mx	.000796	1
7	MP4A	X	-1.593	3



Member Point Loads (BLC 36 : Antenna Wm (270 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
8	MP4A	Z	0	3
9	MP4A	Mx	.000796	3
10	MP1A	X	-2.454	3.5
11	MP1A	Z	0	3.5
12	MP1A	Mx	-.000818	3.5
13	MP3A	X	-2.218	3
14	MP3A	Z	0	3
15	MP3A	Mx	-.000739	3
16	MP5A	X	-7.104	.25
17	MP5A	Z	0	.25
18	MP5A	Mx	.002	.25
19	MP5A	X	-7.104	5
20	MP5A	Z	0	5
21	MP5A	Mx	.002	5
22	M11	X	-7.031	2
23	M11	Z	0	2
24	M11	Mx	0	2
25	MP2A	X	-7.058	1.25
26	MP2A	Z	0	1.25
27	MP2A	Mx	.004	1.25
28	MP2A	X	-7.058	5.5
29	MP2A	Z	0	5.5
30	MP2A	Mx	.004	5.5
31	MP2A	X	-7.058	1.25
32	MP2A	Z	0	1.25
33	MP2A	Mx	.004	1.25
34	MP2A	X	-7.058	5.5
35	MP2A	Z	0	5.5
36	MP2A	Mx	.004	5.5

Member Point Loads (BLC 37 : Antenna Wm (300 Deg))

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-.937	6.5
2	MP2A	Z	-.541	6.5
3	MP2A	Mx	-.000781	6.5
4	MP4A	X	-2.036	1
5	MP4A	Z	-1.175	1
6	MP4A	Mx	.001	1
7	MP4A	X	-2.036	3
8	MP4A	Z	-1.175	3
9	MP4A	Mx	.001	3
10	MP1A	X	-2.386	3.5
11	MP1A	Z	-1.377	3.5
12	MP1A	Mx	-.000795	3.5
13	MP3A	X	-2.232	3
14	MP3A	Z	-1.289	3
15	MP3A	Mx	-.000744	3
16	MP5A	X	-7.531	.25
17	MP5A	Z	-4.348	.25
18	MP5A	Mx	.002	.25
19	MP5A	X	-7.531	5
20	MP5A	Z	-4.348	5
21	MP5A	Mx	.002	5
22	M11	X	-6.477	2
23	M11	Z	-3.74	2
24	M11	Mx	0	2



Member Point Loads (BLC 37 : Antenna Wm (300 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
25	MP2A	X	-6.911	1.25
26	MP2A	Z	-3.99	1.25
27	MP2A	Mx	.001	1.25
28	MP2A	X	-6.911	5.5
29	MP2A	Z	-3.99	5.5
30	MP2A	Mx	.001	5.5
31	MP2A	X	-6.911	1.25
32	MP2A	Z	-3.99	1.25
33	MP2A	Mx	.006	1.25
34	MP2A	X	-6.911	5.5
35	MP2A	Z	-3.99	5.5
36	MP2A	Mx	.006	5.5

Member Point Loads (BLC 38 : Antenna Wm (330 Deg))

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-.935	6.5
2	MP2A	Z	-1.62	6.5
3	MP2A	Mx	-.000779	6.5
4	MP4A	X	-1.933	1
5	MP4A	Z	-3.348	1
6	MP4A	Mx	.000966	1
7	MP4A	X	-1.933	3
8	MP4A	Z	-3.348	3
9	MP4A	Mx	.000966	3
10	MP1A	X	-1.678	3.5
11	MP1A	Z	-2.907	3.5
12	MP1A	Mx	-.000559	3.5
13	MP3A	X	-1.649	3
14	MP3A	Z	-2.855	3
15	MP3A	Mx	-.00055	3
16	MP5A	X	-5.94	.25
17	MP5A	Z	-10.288	.25
18	MP5A	Mx	.001	.25
19	MP5A	X	-5.94	5
20	MP5A	Z	-10.288	5
21	MP5A	Mx	.001	5
22	M11	X	-3.515	2
23	M11	Z	-6.089	2
24	M11	Mx	0	2
25	MP2A	X	-4.912	1.25
26	MP2A	Z	-8.508	1.25
27	MP2A	Mx	-.003	1.25
28	MP2A	X	-4.912	5.5
29	MP2A	Z	-8.508	5.5
30	MP2A	Mx	-.003	5.5
31	MP2A	X	-4.912	1.25
32	MP2A	Z	-8.508	1.25
33	MP2A	Mx	.007	1.25
34	MP2A	X	-4.912	5.5
35	MP2A	Z	-8.508	5.5
36	MP2A	Mx	.007	5.5

Member Point Loads (BLC 77 : Lm1)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	M40	Y	-500	0



Member Point Loads (BLC 78 : Lm2)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	M51	Y	-500	0

Member Point Loads (BLC 79 : Lv1)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	M10	Y	-250	%50

Member Point Loads (BLC 80 : Lv2)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	M10	Y	-250	0

Member Point Loads (BLC 81 : Antenna Ev)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	Y	-.781	6.5
2	MP2A	My	.000651	6.5
3	MP2A	Mz	0	6.5
4	MP4A	Y	-1.932	1
5	MP4A	My	-.000966	1
6	MP4A	Mz	0	1
7	MP4A	Y	-1.932	3
8	MP4A	My	-.000966	3
9	MP4A	Mz	0	3
10	MP1A	Y	-3.315	3.5
11	MP1A	My	.001	3.5
12	MP1A	Mz	0	3.5
13	MP3A	Y	-3.119	3
14	MP3A	My	.001	3
15	MP3A	Mz	0	3
16	MP5A	Y	-.881	.25
17	MP5A	My	-.00022	.25
18	MP5A	Mz	0	.25
19	MP5A	Y	-.881	5
20	MP5A	My	-.00022	5
21	MP5A	Mz	0	5
22	M11	Y	-1.42	2
23	M11	My	0	2
24	M11	Mz	0	2
25	MP2A	Y	-1.404	1.25
26	MP2A	My	-.000702	1.25
27	MP2A	Mz	.000819	1.25
28	MP2A	Y	-1.404	5.5
29	MP2A	My	-.000702	5.5
30	MP2A	Mz	.000819	5.5
31	MP2A	Y	-1.404	1.25
32	MP2A	My	-.000702	1.25
33	MP2A	Mz	-.000819	1.25
34	MP2A	Y	-1.404	5.5
35	MP2A	My	-.000702	5.5
36	MP2A	Mz	-.000819	5.5

Member Point Loads (BLC 82 : Antenna Eh (0 Deg))

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	Z	-1.952	6.5
2	MP2A	Mx	0	6.5
3	MP4A	Z	-4.831	1
4	MP4A	Mx	0	1



Member Point Loads (BLC 82 : Antenna Eh (0 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
5	MP4A	Z	-4.831	3
6	MP4A	Mx	0	3
7	MP1A	Z	-8.287	3.5
8	MP1A	Mx	0	3.5
9	MP3A	Z	-7.799	3
10	MP3A	Mx	0	3
11	MP5A	Z	-2.202	.25
12	MP5A	Mx	0	.25
13	MP5A	Z	-2.202	5
14	MP5A	Mx	0	5
15	M11	Z	-3.55	2
16	M11	Mx	0	2
17	MP2A	Z	-3.511	1.25
18	MP2A	Mx	-.002	1.25
19	MP2A	Z	-3.511	5.5
20	MP2A	Mx	-.002	5.5
21	MP2A	Z	-3.511	1.25
22	MP2A	Mx	.002	1.25
23	MP2A	Z	-3.511	5.5
24	MP2A	Mx	.002	5.5

Member Point Loads (BLC 83 : Antenna Eh (90 Deg))

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	X	1.952	6.5
2	MP2A	Mx	.002	6.5
3	MP4A	X	4.831	1
4	MP4A	Mx	-.002	1
5	MP4A	X	4.831	3
6	MP4A	Mx	-.002	3
7	MP1A	X	8.287	3.5
8	MP1A	Mx	.003	3.5
9	MP3A	X	7.799	3
10	MP3A	Mx	.003	3
11	MP5A	X	2.202	.25
12	MP5A	Mx	-.000551	.25
13	MP5A	X	2.202	5
14	MP5A	Mx	-.000551	5
15	M11	X	3.55	2
16	M11	Mx	0	2
17	MP2A	X	3.511	1.25
18	MP2A	Mx	-.002	1.25
19	MP2A	X	3.511	5.5
20	MP2A	Mx	-.002	5.5
21	MP2A	X	3.511	1.25
22	MP2A	Mx	-.002	1.25
23	MP2A	X	3.511	5.5
24	MP2A	Mx	-.002	5.5

Member Distributed Loads (BLC 40 : Structure Di)

	Member Label	Direction	Start Magnitude[lb/ft. ...]	End Magnitude[lb/ft. F...]	Start Location[ft. %]	End Location[ft. %]
1	M3	Y	-9.125	-9.125	0	%100
2	M5	Y	-6.217	-6.217	0	%100
3	M6	Y	-6.217	-6.217	0	%100
4	M7	Y	-5.999	-5.999	0	%100
5	M8	Y	-6.217	-6.217	0	%100



Member Distributed Loads (BLC 40 : Structure Di) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
6	M9	Y	-6.217	-6.217	0	%100
7	M10	Y	-5.999	-5.999	0	%100
8	M11	Y	-5.264	-5.264	0	%100
9	M12	Y	-5.264	-5.264	0	%100
10	M13	Y	-5.264	-5.264	0	%100
11	M14	Y	-5.264	-5.264	0	%100
12	M15	Y	-6.217	-6.217	0	%100
13	M17	Y	-6.217	-6.217	0	%100
14	M19	Y	-6.217	-6.217	0	%100
15	M20	Y	-6.217	-6.217	0	%100
16	M21	Y	-6.217	-6.217	0	%100
17	M22	Y	-4.212	-4.212	0	%100
18	M23	Y	-4.212	-4.212	0	%100
19	M24	Y	-5.264	-5.264	0	%100
20	M25	Y	-6.217	-6.217	0	%100
21	M26	Y	-6.217	-6.217	0	%100
22	M27	Y	-4.212	-4.212	0	%100
23	M28	Y	-6.217	-6.217	0	%100
24	M29	Y	-4.212	-4.212	0	%100
25	M30	Y	-6.217	-6.217	0	%100
26	M31	Y	-6.217	-6.217	0	%100
27	M32	Y	-6.217	-6.217	0	%100
28	M33	Y	-4.212	-4.212	0	%100
29	M34	Y	-4.212	-4.212	0	%100
30	M35	Y	-5.264	-5.264	0	%100
31	M36	Y	-6.217	-6.217	0	%100
32	MP5A	Y	-5.264	-5.264	0	%100
33	MP3A	Y	-5.264	-5.264	0	%100
34	MP1A	Y	-5.264	-5.264	0	%100
35	M52	Y	-5.264	-5.264	0	%100
36	M53	Y	-4.212	-4.212	0	%100
37	M54	Y	-4.212	-4.212	0	%100
38	MP4A	Y	-5.264	-5.264	0	%100
39	MP2A	Y	-5.999	-5.999	0	%100
40	M65	Y	-5.264	-5.264	0	%100

Member Distributed Loads (BLC 41 : Structure Wo (0 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M3	X	0	0	0	%100
2	M3	Z	-11.325	-11.325	0	%100
3	M5	X	0	0	0	%100
4	M5	Z	-.694	-.694	0	%100
5	M6	X	0	0	0	%100
6	M6	Z	-.694	-.694	0	%100
7	M7	X	0	0	0	%100
8	M7	Z	-10.853	-10.853	0	%100
9	M8	X	0	0	0	%100
10	M8	Z	-.694	-.694	0	%100
11	M9	X	0	0	0	%100
12	M9	Z	-.694	-.694	0	%100
13	M10	X	0	0	0	%100
14	M10	Z	-10.853	-10.853	0	%100
15	M11	X	0	0	0	%100
16	M11	Z	-4.397	-4.397	0	%100
17	M12	X	0	0	0	%100
18	M12	Z	-4.397	-4.397	0	%100



Member Distributed Loads (BLC 41 : Structure Wo (0 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
19	M13	X	0	0	0	%100
20	M13	Z	-4.397	-4.397	0	%100
21	M14	X	0	0	0	%100
22	M14	Z	-4.397	-4.397	0	%100
23	M15	X	0	0	0	%100
24	M15	Z	-1.494	-1.494	0	%100
25	M17	X	0	0	0	%100
26	M17	Z	-1.494	-1.494	0	%100
27	M19	X	0	0	0	%100
28	M19	Z	-1.796	-1.796	0	%100
29	M20	X	0	0	0	%100
30	M20	Z	-1.494	-1.494	0	%100
31	M21	X	0	0	0	%100
32	M21	Z	-1.494	-1.494	0	%100
33	M22	X	0	0	0	%100
34	M22	Z	-5.847	-5.847	0	%100
35	M23	X	0	0	0	%100
36	M23	Z	-5.847	-5.847	0	%100
37	M24	X	0	0	0	%100
38	M24	Z	-6.947	-6.947	0	%100
39	M25	X	0	0	0	%100
40	M25	Z	-1.796	-1.796	0	%100
41	M26	X	0	0	0	%100
42	M26	Z	-1.494	-1.494	0	%100
43	M27	X	0	0	0	%100
44	M27	Z	-5.111	-5.111	0	%100
45	M28	X	0	0	0	%100
46	M28	Z	-1.494	-1.494	0	%100
47	M29	X	0	0	0	%100
48	M29	Z	-5.111	-5.111	0	%100
49	M30	X	0	0	0	%100
50	M30	Z	-1.796	-1.796	0	%100
51	M31	X	0	0	0	%100
52	M31	Z	-1.494	-1.494	0	%100
53	M32	X	0	0	0	%100
54	M32	Z	-1.494	-1.494	0	%100
55	M33	X	0	0	0	%100
56	M33	Z	-5.847	-5.847	0	%100
57	M34	X	0	0	0	%100
58	M34	Z	-5.847	-5.847	0	%100
59	M35	X	0	0	0	%100
60	M35	Z	-6.947	-6.947	0	%100
61	M36	X	0	0	0	%100
62	M36	Z	-1.796	-1.796	0	%100
63	MP5A	X	0	0	0	%100
64	MP5A	Z	-8.966	-8.966	0	%100
65	MP3A	X	0	0	0	%100
66	MP3A	Z	-8.966	-8.966	0	%100
67	MP1A	X	0	0	0	%100
68	MP1A	Z	-8.966	-8.966	0	%100
69	M52	X	0	0	0	%100
70	M52	Z	-1.617	-1.617	0	%100
71	M53	X	0	0	0	%100
72	M53	Z	-5.111	-5.111	0	%100
73	M54	X	0	0	0	%100
74	M54	Z	-5.111	-5.111	0	%100
75	MP4A	X	0	0	0	%100



Member Distributed Loads (BLC 41 : Structure Wo (0 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
76	MP4A	Z	-8.966	-8.966	0	%100
77	MP2A	X	0	0	0	%100
78	MP2A	Z	-10.853	-10.853	0	%100
79	M65	X	0	0	0	%100
80	M65	Z	-.108	-.108	0	%100

Member Distributed Loads (BLC 42 : Structure Wo (30 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M3	X	4.247	4.247	0	%100
2	M3	Z	-7.356	-7.356	0	%100
3	M5	X	.044	.044	0	%100
4	M5	Z	-.076	-.076	0	%100
5	M6	X	.657	.657	0	%100
6	M6	Z	-1.138	-1.138	0	%100
7	M7	X	4.07	4.07	0	%100
8	M7	Z	-7.049	-7.049	0	%100
9	M8	X	.044	.044	0	%100
10	M8	Z	-.076	-.076	0	%100
11	M9	X	.657	.657	0	%100
12	M9	Z	-1.138	-1.138	0	%100
13	M10	X	4.07	4.07	0	%100
14	M10	Z	-7.049	-7.049	0	%100
15	M11	X	.279	.279	0	%100
16	M11	Z	-.484	-.484	0	%100
17	M12	X	4.161	4.161	0	%100
18	M12	Z	-7.207	-7.207	0	%100
19	M13	X	.279	.279	0	%100
20	M13	Z	-.484	-.484	0	%100
21	M14	X	4.161	4.161	0	%100
22	M14	Z	-7.207	-7.207	0	%100
23	M15	X	1.976	1.976	0	%100
24	M15	Z	-3.422	-3.422	0	%100
25	M17	X	1.976	1.976	0	%100
26	M17	Z	-3.422	-3.422	0	%100
27	M19	X	2.089	2.089	0	%100
28	M19	Z	-3.618	-3.618	0	%100
29	M20	X	1.976	1.976	0	%100
30	M20	Z	-3.422	-3.422	0	%100
31	M21	X	1.976	1.976	0	%100
32	M21	Z	-3.422	-3.422	0	%100
33	M22	X	2.923	2.923	0	%100
34	M22	Z	-5.064	-5.064	0	%100
35	M23	X	2.923	2.923	0	%100
36	M23	Z	-5.064	-5.064	0	%100
37	M24	X	3.473	3.473	0	%100
38	M24	Z	-6.016	-6.016	0	%100
39	M25	X	2.089	2.089	0	%100
40	M25	Z	-3.618	-3.618	0	%100
41	M26	X	1.976	1.976	0	%100
42	M26	Z	-3.422	-3.422	0	%100
43	M27	X	2.07	2.07	0	%100
44	M27	Z	-3.585	-3.585	0	%100
45	M28	X	1.976	1.976	0	%100
46	M28	Z	-3.422	-3.422	0	%100
47	M29	X	2.07	2.07	0	%100
48	M29	Z	-3.585	-3.585	0	%100



Member Distributed Loads (BLC 42 : Structure Wo (30 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
49	M30	X	2.089	2.089	0	%100
50	M30	Z	-3.618	-3.618	0	%100
51	M31	X	1.976	1.976	0	%100
52	M31	Z	-3.422	-3.422	0	%100
53	M32	X	1.976	1.976	0	%100
54	M32	Z	-3.422	-3.422	0	%100
55	M33	X	2.923	2.923	0	%100
56	M33	Z	-5.064	-5.064	0	%100
57	M34	X	2.923	2.923	0	%100
58	M34	Z	-5.064	-5.064	0	%100
59	M35	X	3.473	3.473	0	%100
60	M35	Z	-6.016	-6.016	0	%100
61	M36	X	2.089	2.089	0	%100
62	M36	Z	-3.618	-3.618	0	%100
63	MP5A	X	4.483	4.483	0	%100
64	MP5A	Z	-7.764	-7.764	0	%100
65	MP3A	X	4.483	4.483	0	%100
66	MP3A	Z	-7.764	-7.764	0	%100
67	MP1A	X	4.483	4.483	0	%100
68	MP1A	Z	-7.764	-7.764	0	%100
69	M52	X	3.017	3.017	0	%100
70	M52	Z	-5.226	-5.226	0	%100
71	M53	X	3.052	3.052	0	%100
72	M53	Z	-5.286	-5.286	0	%100
73	M54	X	3.052	3.052	0	%100
74	M54	Z	-5.286	-5.286	0	%100
75	MP4A	X	4.483	4.483	0	%100
76	MP4A	Z	-7.764	-7.764	0	%100
77	MP2A	X	5.427	5.427	0	%100
78	MP2A	Z	-9.399	-9.399	0	%100
79	M65	X	1.572	1.572	0	%100
80	M65	Z	-2.723	-2.723	0	%100

Member Distributed Loads (BLC 43 : Structure Wo (60 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M3	X	2.452	2.452	0	%100
2	M3	Z	-1.416	-1.416	0	%100
3	M5	X	.088	.088	0	%100
4	M5	Z	-.051	-.051	0	%100
5	M6	X	1.15	1.15	0	%100
6	M6	Z	-.664	-.664	0	%100
7	M7	X	2.35	2.35	0	%100
8	M7	Z	-1.357	-1.357	0	%100
9	M8	X	.088	.088	0	%100
10	M8	Z	-.051	-.051	0	%100
11	M9	X	1.15	1.15	0	%100
12	M9	Z	-.664	-.664	0	%100
13	M10	X	2.35	2.35	0	%100
14	M10	Z	-1.357	-1.357	0	%100
15	M11	X	.558	.558	0	%100
16	M11	Z	-.322	-.322	0	%100
17	M12	X	7.281	7.281	0	%100
18	M12	Z	-4.203	-4.203	0	%100
19	M13	X	.558	.558	0	%100
20	M13	Z	-.322	-.322	0	%100
21	M14	X	7.281	7.281	0	%100



Company : Colliers Engineering & Design
 Designer : NL
 Job Number : Project No. 10206419
 Model Name : 5000384436-VZW_MT_LOT_SectorA_H

July 7, 2023
 8:43 AM
 Checked By: PMA

Member Distributed Loads (BLC 43 : Structure Wo (60 Deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
22	M14	Z	-4.203	-4.203	0 %100
23	M15	X	7.679	7.679	0 %100
24	M15	Z	-4.434	-4.434	0 %100
25	M17	X	7.679	7.679	0 %100
26	M17	Z	-4.434	-4.434	0 %100
27	M19	X	7.745	7.745	0 %100
28	M19	Z	-4.471	-4.471	0 %100
29	M20	X	7.679	7.679	0 %100
30	M20	Z	-4.434	-4.434	0 %100
31	M21	X	7.679	7.679	0 %100
32	M21	Z	-4.434	-4.434	0 %100
33	M22	X	5.064	5.064	0 %100
34	M22	Z	-2.923	-2.923	0 %100
35	M23	X	5.064	5.064	0 %100
36	M23	Z	-2.923	-2.923	0 %100
37	M24	X	6.016	6.016	0 %100
38	M24	Z	-3.473	-3.473	0 %100
39	M25	X	7.745	7.745	0 %100
40	M25	Z	-4.471	-4.471	0 %100
41	M26	X	7.679	7.679	0 %100
42	M26	Z	-4.434	-4.434	0 %100
43	M27	X	3.603	3.603	0 %100
44	M27	Z	-2.08	-2.08	0 %100
45	M28	X	7.679	7.679	0 %100
46	M28	Z	-4.434	-4.434	0 %100
47	M29	X	3.603	3.603	0 %100
48	M29	Z	-2.08	-2.08	0 %100
49	M30	X	7.745	7.745	0 %100
50	M30	Z	-4.471	-4.471	0 %100
51	M31	X	7.679	7.679	0 %100
52	M31	Z	-4.434	-4.434	0 %100
53	M32	X	7.679	7.679	0 %100
54	M32	Z	-4.434	-4.434	0 %100
55	M33	X	5.064	5.064	0 %100
56	M33	Z	-2.923	-2.923	0 %100
57	M34	X	5.064	5.064	0 %100
58	M34	Z	-2.923	-2.923	0 %100
59	M35	X	6.016	6.016	0 %100
60	M35	Z	-3.473	-3.473	0 %100
61	M36	X	7.745	7.745	0 %100
62	M36	Z	-4.471	-4.471	0 %100
63	MP5A	X	7.764	7.764	0 %100
64	MP5A	Z	-4.483	-4.483	0 %100
65	MP3A	X	7.764	7.764	0 %100
66	MP3A	Z	-4.483	-4.483	0 %100
67	MP1A	X	7.764	7.764	0 %100
68	MP1A	Z	-4.483	-4.483	0 %100
69	M52	X	7.708	7.708	0 %100
70	M52	Z	-4.45	-4.45	0 %100
71	M53	X	5.304	5.304	0 %100
72	M53	Z	-3.063	-3.063	0 %100
73	M54	X	5.304	5.304	0 %100
74	M54	Z	-3.063	-3.063	0 %100
75	MP4A	X	7.764	7.764	0 %100
76	MP4A	Z	-4.483	-4.483	0 %100
77	MP2A	X	9.399	9.399	0 %100
78	MP2A	Z	-5.427	-5.427	0 %100



Member Distributed Loads (BLC 43 : Structure Wo (60 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
79	M65	X	6.511	6.511	0	%100
80	M65	Z	-3.759	-3.759	0	%100

Member Distributed Loads (BLC 44 : Structure Wo (90 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M3	X	0	0	0	%100
2	M3	Z	0	0	0	%100
3	M5	X	.721	.721	0	%100
4	M5	Z	0	0	0	%100
5	M6	X	.721	.721	0	%100
6	M6	Z	0	0	0	%100
7	M7	X	0	0	0	%100
8	M7	Z	0	0	0	%100
9	M8	X	.721	.721	0	%100
10	M8	Z	0	0	0	%100
11	M9	X	.721	.721	0	%100
12	M9	Z	0	0	0	%100
13	M10	X	0	0	0	%100
14	M10	Z	0	0	0	%100
15	M11	X	4.568	4.568	0	%100
16	M11	Z	0	0	0	%100
17	M12	X	4.568	4.568	0	%100
18	M12	Z	0	0	0	%100
19	M13	X	4.568	4.568	0	%100
20	M13	Z	0	0	0	%100
21	M14	X	4.568	4.568	0	%100
22	M14	Z	0	0	0	%100
23	M15	X	11.325	11.325	0	%100
24	M15	Z	0	0	0	%100
25	M17	X	11.325	11.325	0	%100
26	M17	Z	0	0	0	%100
27	M19	X	11.325	11.325	0	%100
28	M19	Z	0	0	0	%100
29	M20	X	11.325	11.325	0	%100
30	M20	Z	0	0	0	%100
31	M21	X	11.325	11.325	0	%100
32	M21	Z	0	0	0	%100
33	M22	X	5.847	5.847	0	%100
34	M22	Z	0	0	0	%100
35	M23	X	5.847	5.847	0	%100
36	M23	Z	0	0	0	%100
37	M24	X	6.947	6.947	0	%100
38	M24	Z	0	0	0	%100
39	M25	X	11.325	11.325	0	%100
40	M25	Z	0	0	0	%100
41	M26	X	11.325	11.325	0	%100
42	M26	Z	0	0	0	%100
43	M27	X	5.154	5.154	0	%100
44	M27	Z	0	0	0	%100
45	M28	X	11.325	11.325	0	%100
46	M28	Z	0	0	0	%100
47	M29	X	5.154	5.154	0	%100
48	M29	Z	0	0	0	%100
49	M30	X	11.325	11.325	0	%100
50	M30	Z	0	0	0	%100
51	M31	X	11.325	11.325	0	%100



Member Distributed Loads (BLC 44 : Structure Wo (90 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
52	M31	Z	0	0	0	%100
53	M32	X	11.325	11.325	0	%100
54	M32	Z	0	0	0	%100
55	M33	X	5.847	5.847	0	%100
56	M33	Z	0	0	0	%100
57	M34	X	5.847	5.847	0	%100
58	M34	Z	0	0	0	%100
59	M35	X	6.947	6.947	0	%100
60	M35	Z	0	0	0	%100
61	M36	X	11.325	11.325	0	%100
62	M36	Z	0	0	0	%100
63	MP5A	X	8.966	8.966	0	%100
64	MP5A	Z	0	0	0	%100
65	MP3A	X	8.966	8.966	0	%100
66	MP3A	Z	0	0	0	%100
67	MP1A	X	8.966	8.966	0	%100
68	MP1A	Z	0	0	0	%100
69	M52	X	7.349	7.349	0	%100
70	M52	Z	0	0	0	%100
71	M53	X	5.154	5.154	0	%100
72	M53	Z	0	0	0	%100
73	M54	X	5.154	5.154	0	%100
74	M54	Z	0	0	0	%100
75	MP4A	X	8.966	8.966	0	%100
76	MP4A	Z	0	0	0	%100
77	MP2A	X	10.853	10.853	0	%100
78	MP2A	Z	0	0	0	%100
79	M65	X	8.857	8.857	0	%100
80	M65	Z	0	0	0	%100

Member Distributed Loads (BLC 45 : Structure Wo (120 Deg))

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M3	X	2.452	2.452	0	%100
2	M3	Z	1.416	1.416	0	%100
3	M5	X	1.15	1.15	0	%100
4	M5	Z	.664	.664	0	%100
5	M6	X	.088	.088	0	%100
6	M6	Z	.051	.051	0	%100
7	M7	X	2.35	2.35	0	%100
8	M7	Z	1.357	1.357	0	%100
9	M8	X	1.15	1.15	0	%100
10	M8	Z	.664	.664	0	%100
11	M9	X	.088	.088	0	%100
12	M9	Z	.051	.051	0	%100
13	M10	X	2.35	2.35	0	%100
14	M10	Z	1.357	1.357	0	%100
15	M11	X	7.281	7.281	0	%100
16	M11	Z	4.203	4.203	0	%100
17	M12	X	.558	.558	0	%100
18	M12	Z	.322	.322	0	%100
19	M13	X	7.281	7.281	0	%100
20	M13	Z	4.203	4.203	0	%100
21	M14	X	.558	.558	0	%100
22	M14	Z	.322	.322	0	%100
23	M15	X	7.679	7.679	0	%100
24	M15	Z	4.434	4.434	0	%100



Member Distributed Loads (BLC 45 : Structure Wo (120 Deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
25	M17	X	7.679	7.679	0 %100
26	M17	Z	4.434	4.434	0 %100
27	M19	X	7.745	7.745	0 %100
28	M19	Z	4.471	4.471	0 %100
29	M20	X	7.679	7.679	0 %100
30	M20	Z	4.434	4.434	0 %100
31	M21	X	7.679	7.679	0 %100
32	M21	Z	4.434	4.434	0 %100
33	M22	X	5.064	5.064	0 %100
34	M22	Z	2.923	2.923	0 %100
35	M23	X	5.064	5.064	0 %100
36	M23	Z	2.923	2.923	0 %100
37	M24	X	6.016	6.016	0 %100
38	M24	Z	3.473	3.473	0 %100
39	M25	X	7.745	7.745	0 %100
40	M25	Z	4.471	4.471	0 %100
41	M26	X	7.679	7.679	0 %100
42	M26	Z	4.434	4.434	0 %100
43	M27	X	5.304	5.304	0 %100
44	M27	Z	3.063	3.063	0 %100
45	M28	X	7.679	7.679	0 %100
46	M28	Z	4.434	4.434	0 %100
47	M29	X	5.304	5.304	0 %100
48	M29	Z	3.063	3.063	0 %100
49	M30	X	7.745	7.745	0 %100
50	M30	Z	4.471	4.471	0 %100
51	M31	X	7.679	7.679	0 %100
52	M31	Z	4.434	4.434	0 %100
53	M32	X	7.679	7.679	0 %100
54	M32	Z	4.434	4.434	0 %100
55	M33	X	5.064	5.064	0 %100
56	M33	Z	2.923	2.923	0 %100
57	M34	X	5.064	5.064	0 %100
58	M34	Z	2.923	2.923	0 %100
59	M35	X	6.016	6.016	0 %100
60	M35	Z	3.473	3.473	0 %100
61	M36	X	7.745	7.745	0 %100
62	M36	Z	4.471	4.471	0 %100
63	MP5A	X	7.764	7.764	0 %100
64	MP5A	Z	4.483	4.483	0 %100
65	MP3A	X	7.764	7.764	0 %100
66	MP3A	Z	4.483	4.483	0 %100
67	MP1A	X	7.764	7.764	0 %100
68	MP1A	Z	4.483	4.483	0 %100
69	M52	X	2.538	2.538	0 %100
70	M52	Z	1.465	1.465	0 %100
71	M53	X	3.603	3.603	0 %100
72	M53	Z	2.08	2.08	0 %100
73	M54	X	3.603	3.603	0 %100
74	M54	Z	2.08	2.08	0 %100
75	MP4A	X	7.764	7.764	0 %100
76	MP4A	Z	4.483	4.483	0 %100
77	MP2A	X	9.399	9.399	0 %100
78	MP2A	Z	5.427	5.427	0 %100
79	M65	X	5.041	5.041	0 %100
80	M65	Z	2.911	2.911	0 %100



Member Distributed Loads (BLC 46 : Structure Wo (150 Deg))

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M3	X	4.247	4.247	0 %100
2	M3	Z	7.356	7.356	0 %100
3	M5	X	.657	.657	0 %100
4	M5	Z	1.138	1.138	0 %100
5	M6	X	.044	.044	0 %100
6	M6	Z	.076	.076	0 %100
7	M7	X	4.07	4.07	0 %100
8	M7	Z	7.049	7.049	0 %100
9	M8	X	.657	.657	0 %100
10	M8	Z	1.138	1.138	0 %100
11	M9	X	.044	.044	0 %100
12	M9	Z	.076	.076	0 %100
13	M10	X	4.07	4.07	0 %100
14	M10	Z	7.049	7.049	0 %100
15	M11	X	4.161	4.161	0 %100
16	M11	Z	7.207	7.207	0 %100
17	M12	X	.279	.279	0 %100
18	M12	Z	.484	.484	0 %100
19	M13	X	4.161	4.161	0 %100
20	M13	Z	7.207	7.207	0 %100
21	M14	X	.279	.279	0 %100
22	M14	Z	.484	.484	0 %100
23	M15	X	1.976	1.976	0 %100
24	M15	Z	3.422	3.422	0 %100
25	M17	X	1.976	1.976	0 %100
26	M17	Z	3.422	3.422	0 %100
27	M19	X	2.089	2.089	0 %100
28	M19	Z	3.618	3.618	0 %100
29	M20	X	1.976	1.976	0 %100
30	M20	Z	3.422	3.422	0 %100
31	M21	X	1.976	1.976	0 %100
32	M21	Z	3.422	3.422	0 %100
33	M22	X	2.923	2.923	0 %100
34	M22	Z	5.064	5.064	0 %100
35	M23	X	2.923	2.923	0 %100
36	M23	Z	5.064	5.064	0 %100
37	M24	X	3.473	3.473	0 %100
38	M24	Z	6.016	6.016	0 %100
39	M25	X	2.089	2.089	0 %100
40	M25	Z	3.618	3.618	0 %100
41	M26	X	1.976	1.976	0 %100
42	M26	Z	3.422	3.422	0 %100
43	M27	X	3.052	3.052	0 %100
44	M27	Z	5.286	5.286	0 %100
45	M28	X	1.976	1.976	0 %100
46	M28	Z	3.422	3.422	0 %100
47	M29	X	3.052	3.052	0 %100
48	M29	Z	5.286	5.286	0 %100
49	M30	X	2.089	2.089	0 %100
50	M30	Z	3.618	3.618	0 %100
51	M31	X	1.976	1.976	0 %100
52	M31	Z	3.422	3.422	0 %100
53	M32	X	1.976	1.976	0 %100
54	M32	Z	3.422	3.422	0 %100
55	M33	X	2.923	2.923	0 %100
56	M33	Z	5.064	5.064	0 %100
57	M34	X	2.923	2.923	0 %100



Member Distributed Loads (BLC 46 : Structure Wo (150 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
58	M34	Z	5.064	5.064	0	%100
59	M35	X	3.473	3.473	0	%100
60	M35	Z	6.016	6.016	0	%100
61	M36	X	2.089	2.089	0	%100
62	M36	Z	3.618	3.618	0	%100
63	MP5A	X	4.483	4.483	0	%100
64	MP5A	Z	7.764	7.764	0	%100
65	MP3A	X	4.483	4.483	0	%100
66	MP3A	Z	7.764	7.764	0	%100
67	MP1A	X	4.483	4.483	0	%100
68	MP1A	Z	7.764	7.764	0	%100
69	M52	X	.032	.032	0	%100
70	M52	Z	.056	.056	0	%100
71	M53	X	2.07	2.07	0	%100
72	M53	Z	3.585	3.585	0	%100
73	M54	X	2.07	2.07	0	%100
74	M54	Z	3.585	3.585	0	%100
75	MP4A	X	4.483	4.483	0	%100
76	MP4A	Z	7.764	7.764	0	%100
77	MP2A	X	5.427	5.427	0	%100
78	MP2A	Z	9.399	9.399	0	%100
79	M65	X	.723	.723	0	%100
80	M65	Z	1.253	1.253	0	%100

Member Distributed Loads (BLC 47 : Structure Wo (180 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M3	X	0	0	0	%100
2	M3	Z	11.325	11.325	0	%100
3	M5	X	0	0	0	%100
4	M5	Z	.694	.694	0	%100
5	M6	X	0	0	0	%100
6	M6	Z	.694	.694	0	%100
7	M7	X	0	0	0	%100
8	M7	Z	10.853	10.853	0	%100
9	M8	X	0	0	0	%100
10	M8	Z	.694	.694	0	%100
11	M9	X	0	0	0	%100
12	M9	Z	.694	.694	0	%100
13	M10	X	0	0	0	%100
14	M10	Z	10.853	10.853	0	%100
15	M11	X	0	0	0	%100
16	M11	Z	4.397	4.397	0	%100
17	M12	X	0	0	0	%100
18	M12	Z	4.397	4.397	0	%100
19	M13	X	0	0	0	%100
20	M13	Z	4.397	4.397	0	%100
21	M14	X	0	0	0	%100
22	M14	Z	4.397	4.397	0	%100
23	M15	X	0	0	0	%100
24	M15	Z	1.494	1.494	0	%100
25	M17	X	0	0	0	%100
26	M17	Z	1.494	1.494	0	%100
27	M19	X	0	0	0	%100
28	M19	Z	1.796	1.796	0	%100
29	M20	X	0	0	0	%100
30	M20	Z	1.494	1.494	0	%100



Member Distributed Loads (BLC 47 : Structure Wo (180 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
31	M21	X	0	0	0	%100
32	M21	Z	1.494	1.494	0	%100
33	M22	X	0	0	0	%100
34	M22	Z	5.847	5.847	0	%100
35	M23	X	0	0	0	%100
36	M23	Z	5.847	5.847	0	%100
37	M24	X	0	0	0	%100
38	M24	Z	6.947	6.947	0	%100
39	M25	X	0	0	0	%100
40	M25	Z	1.796	1.796	0	%100
41	M26	X	0	0	0	%100
42	M26	Z	1.494	1.494	0	%100
43	M27	X	0	0	0	%100
44	M27	Z	5.111	5.111	0	%100
45	M28	X	0	0	0	%100
46	M28	Z	1.494	1.494	0	%100
47	M29	X	0	0	0	%100
48	M29	Z	5.111	5.111	0	%100
49	M30	X	0	0	0	%100
50	M30	Z	1.796	1.796	0	%100
51	M31	X	0	0	0	%100
52	M31	Z	1.494	1.494	0	%100
53	M32	X	0	0	0	%100
54	M32	Z	1.494	1.494	0	%100
55	M33	X	0	0	0	%100
56	M33	Z	5.847	5.847	0	%100
57	M34	X	0	0	0	%100
58	M34	Z	5.847	5.847	0	%100
59	M35	X	0	0	0	%100
60	M35	Z	6.947	6.947	0	%100
61	M36	X	0	0	0	%100
62	M36	Z	1.796	1.796	0	%100
63	MP5A	X	0	0	0	%100
64	MP5A	Z	8.966	8.966	0	%100
65	MP3A	X	0	0	0	%100
66	MP3A	Z	8.966	8.966	0	%100
67	MP1A	X	0	0	0	%100
68	MP1A	Z	8.966	8.966	0	%100
69	M52	X	0	0	0	%100
70	M52	Z	1.617	1.617	0	%100
71	M53	X	0	0	0	%100
72	M53	Z	5.111	5.111	0	%100
73	M54	X	0	0	0	%100
74	M54	Z	5.111	5.111	0	%100
75	MP4A	X	0	0	0	%100
76	MP4A	Z	8.966	8.966	0	%100
77	MP2A	X	0	0	0	%100
78	MP2A	Z	10.853	10.853	0	%100
79	M65	X	0	0	0	%100
80	M65	Z	.108	.108	0	%100

Member Distributed Loads (BLC 48 : Structure Wo (210 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M3	X	-4.247	-4.247	0	%100
2	M3	Z	7.356	7.356	0	%100
3	M5	X	-.044	-.044	0	%100



Member Distributed Loads (BLC 48 : Structure Wo (210 Deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
4	M5	Z	.076	.076	0 %100
5	M6	X	-.657	-.657	0 %100
6	M6	Z	1.138	1.138	0 %100
7	M7	X	-4.07	-4.07	0 %100
8	M7	Z	7.049	7.049	0 %100
9	M8	X	-.044	-.044	0 %100
10	M8	Z	.076	.076	0 %100
11	M9	X	-.657	-.657	0 %100
12	M9	Z	1.138	1.138	0 %100
13	M10	X	-4.07	-4.07	0 %100
14	M10	Z	7.049	7.049	0 %100
15	M11	X	-.279	-.279	0 %100
16	M11	Z	.484	.484	0 %100
17	M12	X	-4.161	-4.161	0 %100
18	M12	Z	7.207	7.207	0 %100
19	M13	X	-.279	-.279	0 %100
20	M13	Z	.484	.484	0 %100
21	M14	X	-4.161	-4.161	0 %100
22	M14	Z	7.207	7.207	0 %100
23	M15	X	-1.976	-1.976	0 %100
24	M15	Z	3.422	3.422	0 %100
25	M17	X	-1.976	-1.976	0 %100
26	M17	Z	3.422	3.422	0 %100
27	M19	X	-2.089	-2.089	0 %100
28	M19	Z	3.618	3.618	0 %100
29	M20	X	-1.976	-1.976	0 %100
30	M20	Z	3.422	3.422	0 %100
31	M21	X	-1.976	-1.976	0 %100
32	M21	Z	3.422	3.422	0 %100
33	M22	X	-2.923	-2.923	0 %100
34	M22	Z	5.064	5.064	0 %100
35	M23	X	-2.923	-2.923	0 %100
36	M23	Z	5.064	5.064	0 %100
37	M24	X	-3.473	-3.473	0 %100
38	M24	Z	6.016	6.016	0 %100
39	M25	X	-2.089	-2.089	0 %100
40	M25	Z	3.618	3.618	0 %100
41	M26	X	-1.976	-1.976	0 %100
42	M26	Z	3.422	3.422	0 %100
43	M27	X	-2.07	-2.07	0 %100
44	M27	Z	3.585	3.585	0 %100
45	M28	X	-1.976	-1.976	0 %100
46	M28	Z	3.422	3.422	0 %100
47	M29	X	-2.07	-2.07	0 %100
48	M29	Z	3.585	3.585	0 %100
49	M30	X	-2.089	-2.089	0 %100
50	M30	Z	3.618	3.618	0 %100
51	M31	X	-1.976	-1.976	0 %100
52	M31	Z	3.422	3.422	0 %100
53	M32	X	-1.976	-1.976	0 %100
54	M32	Z	3.422	3.422	0 %100
55	M33	X	-2.923	-2.923	0 %100
56	M33	Z	5.064	5.064	0 %100
57	M34	X	-2.923	-2.923	0 %100
58	M34	Z	5.064	5.064	0 %100
59	M35	X	-3.473	-3.473	0 %100
60	M35	Z	6.016	6.016	0 %100



Member Distributed Loads (BLC 48 : Structure Wo (210 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
61	M36	X	-2.089	-2.089	0	%100
62	M36	Z	3.618	3.618	0	%100
63	MP5A	X	-4.483	-4.483	0	%100
64	MP5A	Z	7.764	7.764	0	%100
65	MP3A	X	-4.483	-4.483	0	%100
66	MP3A	Z	7.764	7.764	0	%100
67	MP1A	X	-4.483	-4.483	0	%100
68	MP1A	Z	7.764	7.764	0	%100
69	M52	X	-3.017	-3.017	0	%100
70	M52	Z	5.226	5.226	0	%100
71	M53	X	-3.052	-3.052	0	%100
72	M53	Z	5.286	5.286	0	%100
73	M54	X	-3.052	-3.052	0	%100
74	M54	Z	5.286	5.286	0	%100
75	MP4A	X	-4.483	-4.483	0	%100
76	MP4A	Z	7.764	7.764	0	%100
77	MP2A	X	-5.427	-5.427	0	%100
78	MP2A	Z	9.399	9.399	0	%100
79	M65	X	-1.572	-1.572	0	%100
80	M65	Z	2.723	2.723	0	%100

Member Distributed Loads (BLC 49 : Structure Wo (240 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M3	X	-2.452	-2.452	0	%100
2	M3	Z	1.416	1.416	0	%100
3	M5	X	-0.088	-0.088	0	%100
4	M5	Z	.051	.051	0	%100
5	M6	X	-1.15	-1.15	0	%100
6	M6	Z	.664	.664	0	%100
7	M7	X	-2.35	-2.35	0	%100
8	M7	Z	1.357	1.357	0	%100
9	M8	X	-0.088	-0.088	0	%100
10	M8	Z	.051	.051	0	%100
11	M9	X	-1.15	-1.15	0	%100
12	M9	Z	.664	.664	0	%100
13	M10	X	-2.35	-2.35	0	%100
14	M10	Z	1.357	1.357	0	%100
15	M11	X	-.558	-.558	0	%100
16	M11	Z	.322	.322	0	%100
17	M12	X	-7.281	-7.281	0	%100
18	M12	Z	4.203	4.203	0	%100
19	M13	X	-.558	-.558	0	%100
20	M13	Z	.322	.322	0	%100
21	M14	X	-7.281	-7.281	0	%100
22	M14	Z	4.203	4.203	0	%100
23	M15	X	-7.679	-7.679	0	%100
24	M15	Z	4.434	4.434	0	%100
25	M17	X	-7.679	-7.679	0	%100
26	M17	Z	4.434	4.434	0	%100
27	M19	X	-7.745	-7.745	0	%100
28	M19	Z	4.471	4.471	0	%100
29	M20	X	-7.679	-7.679	0	%100
30	M20	Z	4.434	4.434	0	%100
31	M21	X	-7.679	-7.679	0	%100
32	M21	Z	4.434	4.434	0	%100
33	M22	X	-5.064	-5.064	0	%100



Member Distributed Loads (BLC 49 : Structure Wo (240 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
34	M22	Z	2.923	2.923	0	%100
35	M23	X	-5.064	-5.064	0	%100
36	M23	Z	2.923	2.923	0	%100
37	M24	X	-6.016	-6.016	0	%100
38	M24	Z	3.473	3.473	0	%100
39	M25	X	-7.745	-7.745	0	%100
40	M25	Z	4.471	4.471	0	%100
41	M26	X	-7.679	-7.679	0	%100
42	M26	Z	4.434	4.434	0	%100
43	M27	X	-3.603	-3.603	0	%100
44	M27	Z	2.08	2.08	0	%100
45	M28	X	-7.679	-7.679	0	%100
46	M28	Z	4.434	4.434	0	%100
47	M29	X	-3.603	-3.603	0	%100
48	M29	Z	2.08	2.08	0	%100
49	M30	X	-7.745	-7.745	0	%100
50	M30	Z	4.471	4.471	0	%100
51	M31	X	-7.679	-7.679	0	%100
52	M31	Z	4.434	4.434	0	%100
53	M32	X	-7.679	-7.679	0	%100
54	M32	Z	4.434	4.434	0	%100
55	M33	X	-5.064	-5.064	0	%100
56	M33	Z	2.923	2.923	0	%100
57	M34	X	-5.064	-5.064	0	%100
58	M34	Z	2.923	2.923	0	%100
59	M35	X	-6.016	-6.016	0	%100
60	M35	Z	3.473	3.473	0	%100
61	M36	X	-7.745	-7.745	0	%100
62	M36	Z	4.471	4.471	0	%100
63	MP5A	X	-7.764	-7.764	0	%100
64	MP5A	Z	4.483	4.483	0	%100
65	MP3A	X	-7.764	-7.764	0	%100
66	MP3A	Z	4.483	4.483	0	%100
67	MP1A	X	-7.764	-7.764	0	%100
68	MP1A	Z	4.483	4.483	0	%100
69	M52	X	-7.708	-7.708	0	%100
70	M52	Z	4.45	4.45	0	%100
71	M53	X	-5.304	-5.304	0	%100
72	M53	Z	3.063	3.063	0	%100
73	M54	X	-5.304	-5.304	0	%100
74	M54	Z	3.063	3.063	0	%100
75	MP4A	X	-7.764	-7.764	0	%100
76	MP4A	Z	4.483	4.483	0	%100
77	MP2A	X	-9.399	-9.399	0	%100
78	MP2A	Z	5.427	5.427	0	%100
79	M65	X	-6.511	-6.511	0	%100
80	M65	Z	3.759	3.759	0	%100

Member Distributed Loads (BLC 50 : Structure Wo (270 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M3	X	0	0	0	%100
2	M3	Z	0	0	0	%100
3	M5	X	-.721	-.721	0	%100
4	M5	Z	0	0	0	%100
5	M6	X	-.721	-.721	0	%100
6	M6	Z	0	0	0	%100



Member Distributed Loads (BLC 50 : Structure Wo (270 Deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]	
7	M7	X	0	0	0	%100
8	M7	Z	0	0	0	%100
9	M8	X	-7.21	-7.21	0	%100
10	M8	Z	0	0	0	%100
11	M9	X	-7.21	-7.21	0	%100
12	M9	Z	0	0	0	%100
13	M10	X	0	0	0	%100
14	M10	Z	0	0	0	%100
15	M11	X	-4.568	-4.568	0	%100
16	M11	Z	0	0	0	%100
17	M12	X	-4.568	-4.568	0	%100
18	M12	Z	0	0	0	%100
19	M13	X	-4.568	-4.568	0	%100
20	M13	Z	0	0	0	%100
21	M14	X	-4.568	-4.568	0	%100
22	M14	Z	0	0	0	%100
23	M15	X	-11.325	-11.325	0	%100
24	M15	Z	0	0	0	%100
25	M17	X	-11.325	-11.325	0	%100
26	M17	Z	0	0	0	%100
27	M19	X	-11.325	-11.325	0	%100
28	M19	Z	0	0	0	%100
29	M20	X	-11.325	-11.325	0	%100
30	M20	Z	0	0	0	%100
31	M21	X	-11.325	-11.325	0	%100
32	M21	Z	0	0	0	%100
33	M22	X	-5.847	-5.847	0	%100
34	M22	Z	0	0	0	%100
35	M23	X	-5.847	-5.847	0	%100
36	M23	Z	0	0	0	%100
37	M24	X	-6.947	-6.947	0	%100
38	M24	Z	0	0	0	%100
39	M25	X	-11.325	-11.325	0	%100
40	M25	Z	0	0	0	%100
41	M26	X	-11.325	-11.325	0	%100
42	M26	Z	0	0	0	%100
43	M27	X	-5.154	-5.154	0	%100
44	M27	Z	0	0	0	%100
45	M28	X	-11.325	-11.325	0	%100
46	M28	Z	0	0	0	%100
47	M29	X	-5.154	-5.154	0	%100
48	M29	Z	0	0	0	%100
49	M30	X	-11.325	-11.325	0	%100
50	M30	Z	0	0	0	%100
51	M31	X	-11.325	-11.325	0	%100
52	M31	Z	0	0	0	%100
53	M32	X	-11.325	-11.325	0	%100
54	M32	Z	0	0	0	%100
55	M33	X	-5.847	-5.847	0	%100
56	M33	Z	0	0	0	%100
57	M34	X	-5.847	-5.847	0	%100
58	M34	Z	0	0	0	%100
59	M35	X	-6.947	-6.947	0	%100
60	M35	Z	0	0	0	%100
61	M36	X	-11.325	-11.325	0	%100
62	M36	Z	0	0	0	%100
63	MP5A	X	-8.966	-8.966	0	%100



Member Distributed Loads (BLC 50 : Structure Wo (270 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
64	MP5A	Z	0	0	0	%100
65	MP3A	X	-8.966	-8.966	0	%100
66	MP3A	Z	0	0	0	%100
67	MP1A	X	-8.966	-8.966	0	%100
68	MP1A	Z	0	0	0	%100
69	M52	X	-7.349	-7.349	0	%100
70	M52	Z	0	0	0	%100
71	M53	X	-5.154	-5.154	0	%100
72	M53	Z	0	0	0	%100
73	M54	X	-5.154	-5.154	0	%100
74	M54	Z	0	0	0	%100
75	MP4A	X	-8.966	-8.966	0	%100
76	MP4A	Z	0	0	0	%100
77	MP2A	X	-10.853	-10.853	0	%100
78	MP2A	Z	0	0	0	%100
79	M65	X	-8.857	-8.857	0	%100
80	M65	Z	0	0	0	%100

Member Distributed Loads (BLC 51 : Structure Wo (300 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M3	X	-2.452	-2.452	0	%100
2	M3	Z	-1.416	-1.416	0	%100
3	M5	X	-1.15	-1.15	0	%100
4	M5	Z	-.664	-.664	0	%100
5	M6	X	-.088	-.088	0	%100
6	M6	Z	-.051	-.051	0	%100
7	M7	X	-2.35	-2.35	0	%100
8	M7	Z	-1.357	-1.357	0	%100
9	M8	X	-1.15	-1.15	0	%100
10	M8	Z	-.664	-.664	0	%100
11	M9	X	-.088	-.088	0	%100
12	M9	Z	-.051	-.051	0	%100
13	M10	X	-2.35	-2.35	0	%100
14	M10	Z	-1.357	-1.357	0	%100
15	M11	X	-7.281	-7.281	0	%100
16	M11	Z	-4.203	-4.203	0	%100
17	M12	X	-.558	-.558	0	%100
18	M12	Z	-.322	-.322	0	%100
19	M13	X	-7.281	-7.281	0	%100
20	M13	Z	-4.203	-4.203	0	%100
21	M14	X	-.558	-.558	0	%100
22	M14	Z	-.322	-.322	0	%100
23	M15	X	-7.679	-7.679	0	%100
24	M15	Z	-4.434	-4.434	0	%100
25	M17	X	-7.679	-7.679	0	%100
26	M17	Z	-4.434	-4.434	0	%100
27	M19	X	-7.745	-7.745	0	%100
28	M19	Z	-4.471	-4.471	0	%100
29	M20	X	-7.679	-7.679	0	%100
30	M20	Z	-4.434	-4.434	0	%100
31	M21	X	-7.679	-7.679	0	%100
32	M21	Z	-4.434	-4.434	0	%100
33	M22	X	-5.064	-5.064	0	%100
34	M22	Z	-2.923	-2.923	0	%100
35	M23	X	-5.064	-5.064	0	%100
36	M23	Z	-2.923	-2.923	0	%100



Member Distributed Loads (BLC 51 : Structure Wo (300 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
37	M24	X	-6.016	-6.016	0	%100
38	M24	Z	-3.473	-3.473	0	%100
39	M25	X	-7.745	-7.745	0	%100
40	M25	Z	-4.471	-4.471	0	%100
41	M26	X	-7.679	-7.679	0	%100
42	M26	Z	-4.434	-4.434	0	%100
43	M27	X	-5.304	-5.304	0	%100
44	M27	Z	-3.063	-3.063	0	%100
45	M28	X	-7.679	-7.679	0	%100
46	M28	Z	-4.434	-4.434	0	%100
47	M29	X	-5.304	-5.304	0	%100
48	M29	Z	-3.063	-3.063	0	%100
49	M30	X	-7.745	-7.745	0	%100
50	M30	Z	-4.471	-4.471	0	%100
51	M31	X	-7.679	-7.679	0	%100
52	M31	Z	-4.434	-4.434	0	%100
53	M32	X	-7.679	-7.679	0	%100
54	M32	Z	-4.434	-4.434	0	%100
55	M33	X	-5.064	-5.064	0	%100
56	M33	Z	-2.923	-2.923	0	%100
57	M34	X	-5.064	-5.064	0	%100
58	M34	Z	-2.923	-2.923	0	%100
59	M35	X	-6.016	-6.016	0	%100
60	M35	Z	-3.473	-3.473	0	%100
61	M36	X	-7.745	-7.745	0	%100
62	M36	Z	-4.471	-4.471	0	%100
63	MP5A	X	-7.764	-7.764	0	%100
64	MP5A	Z	-4.483	-4.483	0	%100
65	MP3A	X	-7.764	-7.764	0	%100
66	MP3A	Z	-4.483	-4.483	0	%100
67	MP1A	X	-7.764	-7.764	0	%100
68	MP1A	Z	-4.483	-4.483	0	%100
69	M52	X	-2.538	-2.538	0	%100
70	M52	Z	-1.465	-1.465	0	%100
71	M53	X	-3.603	-3.603	0	%100
72	M53	Z	-2.08	-2.08	0	%100
73	M54	X	-3.603	-3.603	0	%100
74	M54	Z	-2.08	-2.08	0	%100
75	MP4A	X	-7.764	-7.764	0	%100
76	MP4A	Z	-4.483	-4.483	0	%100
77	MP2A	X	-9.399	-9.399	0	%100
78	MP2A	Z	-5.427	-5.427	0	%100
79	M65	X	-5.041	-5.041	0	%100
80	M65	Z	-2.911	-2.911	0	%100

Member Distributed Loads (BLC 52 : Structure Wo (330 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M3	X	-4.247	-4.247	0	%100
2	M3	Z	-7.356	-7.356	0	%100
3	M5	X	-.657	-.657	0	%100
4	M5	Z	-1.138	-1.138	0	%100
5	M6	X	-.044	-.044	0	%100
6	M6	Z	-.076	-.076	0	%100
7	M7	X	-4.07	-4.07	0	%100
8	M7	Z	-7.049	-7.049	0	%100
9	M8	X	-.657	-.657	0	%100



Company : Colliers Engineering & Design
 Designer : NL
 Job Number : Project No. 10206419
 Model Name : 5000384436-VZW_MT_LOT_SectorA_H

July 7, 2023
 8:43 AM
 Checked By: PMA

Member Distributed Loads (BLC 52 : Structure Wo (330 Deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
10	M8	Z	-1.138	-1.138	0 %100
11	M9	X	-0.044	-0.044	0 %100
12	M9	Z	-0.076	-0.076	0 %100
13	M10	X	-4.07	-4.07	0 %100
14	M10	Z	-7.049	-7.049	0 %100
15	M11	X	-4.161	-4.161	0 %100
16	M11	Z	-7.207	-7.207	0 %100
17	M12	X	-0.279	-0.279	0 %100
18	M12	Z	-0.484	-0.484	0 %100
19	M13	X	-4.161	-4.161	0 %100
20	M13	Z	-7.207	-7.207	0 %100
21	M14	X	-0.279	-0.279	0 %100
22	M14	Z	-0.484	-0.484	0 %100
23	M15	X	-1.976	-1.976	0 %100
24	M15	Z	-3.422	-3.422	0 %100
25	M17	X	-1.976	-1.976	0 %100
26	M17	Z	-3.422	-3.422	0 %100
27	M19	X	-2.089	-2.089	0 %100
28	M19	Z	-3.618	-3.618	0 %100
29	M20	X	-1.976	-1.976	0 %100
30	M20	Z	-3.422	-3.422	0 %100
31	M21	X	-1.976	-1.976	0 %100
32	M21	Z	-3.422	-3.422	0 %100
33	M22	X	-2.923	-2.923	0 %100
34	M22	Z	-5.064	-5.064	0 %100
35	M23	X	-2.923	-2.923	0 %100
36	M23	Z	-5.064	-5.064	0 %100
37	M24	X	-3.473	-3.473	0 %100
38	M24	Z	-6.016	-6.016	0 %100
39	M25	X	-2.089	-2.089	0 %100
40	M25	Z	-3.618	-3.618	0 %100
41	M26	X	-1.976	-1.976	0 %100
42	M26	Z	-3.422	-3.422	0 %100
43	M27	X	-3.052	-3.052	0 %100
44	M27	Z	-5.286	-5.286	0 %100
45	M28	X	-1.976	-1.976	0 %100
46	M28	Z	-3.422	-3.422	0 %100
47	M29	X	-3.052	-3.052	0 %100
48	M29	Z	-5.286	-5.286	0 %100
49	M30	X	-2.089	-2.089	0 %100
50	M30	Z	-3.618	-3.618	0 %100
51	M31	X	-1.976	-1.976	0 %100
52	M31	Z	-3.422	-3.422	0 %100
53	M32	X	-1.976	-1.976	0 %100
54	M32	Z	-3.422	-3.422	0 %100
55	M33	X	-2.923	-2.923	0 %100
56	M33	Z	-5.064	-5.064	0 %100
57	M34	X	-2.923	-2.923	0 %100
58	M34	Z	-5.064	-5.064	0 %100
59	M35	X	-3.473	-3.473	0 %100
60	M35	Z	-6.016	-6.016	0 %100
61	M36	X	-2.089	-2.089	0 %100
62	M36	Z	-3.618	-3.618	0 %100
63	MP5A	X	-4.483	-4.483	0 %100
64	MP5A	Z	-7.764	-7.764	0 %100
65	MP3A	X	-4.483	-4.483	0 %100
66	MP3A	Z	-7.764	-7.764	0 %100



Member Distributed Loads (BLC 52 : Structure Wo (330 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
67	MP1A	X	-4.483	-4.483	0	%100
68	MP1A	Z	-7.764	-7.764	0	%100
69	M52	X	-.032	-.032	0	%100
70	M52	Z	-.056	-.056	0	%100
71	M53	X	-2.07	-2.07	0	%100
72	M53	Z	-3.585	-3.585	0	%100
73	M54	X	-2.07	-2.07	0	%100
74	M54	Z	-3.585	-3.585	0	%100
75	MP4A	X	-4.483	-4.483	0	%100
76	MP4A	Z	-7.764	-7.764	0	%100
77	MP2A	X	-5.427	-5.427	0	%100
78	MP2A	Z	-9.399	-9.399	0	%100
79	M65	X	-.723	-.723	0	%100
80	M65	Z	-1.253	-1.253	0	%100

Member Distributed Loads (BLC 53 : Structure Wi (0 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M3	X	0	0	0	%100
2	M3	Z	-2.895	-2.895	0	%100
3	M5	X	0	0	0	%100
4	M5	Z	-.572	-.572	0	%100
5	M6	X	0	0	0	%100
6	M6	Z	-.572	-.572	0	%100
7	M7	X	0	0	0	%100
8	M7	Z	-3.462	-3.462	0	%100
9	M8	X	0	0	0	%100
10	M8	Z	-.572	-.572	0	%100
11	M9	X	0	0	0	%100
12	M9	Z	-.572	-.572	0	%100
13	M10	X	0	0	0	%100
14	M10	Z	-3.462	-3.462	0	%100
15	M11	X	0	0	0	%100
16	M11	Z	-1.537	-1.537	0	%100
17	M12	X	0	0	0	%100
18	M12	Z	-1.537	-1.537	0	%100
19	M13	X	0	0	0	%100
20	M13	Z	-1.537	-1.537	0	%100
21	M14	X	0	0	0	%100
22	M14	Z	-1.537	-1.537	0	%100
23	M15	X	0	0	0	%100
24	M15	Z	-1.18	-1.18	0	%100
25	M17	X	0	0	0	%100
26	M17	Z	-1.18	-1.18	0	%100
27	M19	X	0	0	0	%100
28	M19	Z	-1.232	-1.232	0	%100
29	M20	X	0	0	0	%100
30	M20	Z	-1.18	-1.18	0	%100
31	M21	X	0	0	0	%100
32	M21	Z	-1.18	-1.18	0	%100
33	M22	X	0	0	0	%100
34	M22	Z	-2.293	-2.293	0	%100
35	M23	X	0	0	0	%100
36	M23	Z	-2.293	-2.293	0	%100
37	M24	X	0	0	0	%100
38	M24	Z	-2.424	-2.424	0	%100
39	M25	X	0	0	0	%100



Member Distributed Loads (BLC 53 : Structure Wi (0 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
40	M25	Z	-1.232	-1.232	0	%100
41	M26	X	0	0	0	%100
42	M26	Z	-1.18	-1.18	0	%100
43	M27	X	0	0	0	%100
44	M27	Z	-2.055	-2.055	0	%100
45	M28	X	0	0	0	%100
46	M28	Z	-1.18	-1.18	0	%100
47	M29	X	0	0	0	%100
48	M29	Z	-2.055	-2.055	0	%100
49	M30	X	0	0	0	%100
50	M30	Z	-1.232	-1.232	0	%100
51	M31	X	0	0	0	%100
52	M31	Z	-1.18	-1.18	0	%100
53	M32	X	0	0	0	%100
54	M32	Z	-1.18	-1.18	0	%100
55	M33	X	0	0	0	%100
56	M33	Z	-2.293	-2.293	0	%100
57	M34	X	0	0	0	%100
58	M34	Z	-2.293	-2.293	0	%100
59	M35	X	0	0	0	%100
60	M35	Z	-2.424	-2.424	0	%100
61	M36	X	0	0	0	%100
62	M36	Z	-1.232	-1.232	0	%100
63	MP5A	X	0	0	0	%100
64	MP5A	Z	-3.134	-3.134	0	%100
65	MP3A	X	0	0	0	%100
66	MP3A	Z	-3.134	-3.134	0	%100
67	MP1A	X	0	0	0	%100
68	MP1A	Z	-3.134	-3.134	0	%100
69	M52	X	0	0	0	%100
70	M52	Z	-.565	-.565	0	%100
71	M53	X	0	0	0	%100
72	M53	Z	-2.055	-2.055	0	%100
73	M54	X	0	0	0	%100
74	M54	Z	-2.055	-2.055	0	%100
75	MP4A	X	0	0	0	%100
76	MP4A	Z	-3.134	-3.134	0	%100
77	MP2A	X	0	0	0	%100
78	MP2A	Z	-3.462	-3.462	0	%100
79	M65	X	0	0	0	%100
80	M65	Z	-.038	-.038	0	%100

Member Distributed Loads (BLC 54 : Structure Wi (30 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M3	X	1.086	1.086	0	%100
2	M3	Z	-1.881	-1.881	0	%100
3	M5	X	.036	.036	0	%100
4	M5	Z	-.063	-.063	0	%100
5	M6	X	.541	.541	0	%100
6	M6	Z	-.937	-.937	0	%100
7	M7	X	1.298	1.298	0	%100
8	M7	Z	-2.249	-2.249	0	%100
9	M8	X	.036	.036	0	%100
10	M8	Z	-.063	-.063	0	%100
11	M9	X	.541	.541	0	%100
12	M9	Z	-.937	-.937	0	%100



Member Distributed Loads (BLC 54 : Structure Wi (30 Deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
13	M10	X	1.298	1.298	0 %100
14	M10	Z	-2.249	-2.249	0 %100
15	M11	X	.098	.098	0 %100
16	M11	Z	-.169	-.169	0 %100
17	M12	X	1.455	1.455	0 %100
18	M12	Z	-2.52	-2.52	0 %100
19	M13	X	.098	.098	0 %100
20	M13	Z	-.169	-.169	0 %100
21	M14	X	1.455	1.455	0 %100
22	M14	Z	-2.52	-2.52	0 %100
23	M15	X	.803	.803	0 %100
24	M15	Z	-1.391	-1.391	0 %100
25	M17	X	.803	.803	0 %100
26	M17	Z	-1.391	-1.391	0 %100
27	M19	X	.823	.823	0 %100
28	M19	Z	-1.425	-1.425	0 %100
29	M20	X	.803	.803	0 %100
30	M20	Z	-1.391	-1.391	0 %100
31	M21	X	.803	.803	0 %100
32	M21	Z	-1.391	-1.391	0 %100
33	M22	X	1.147	1.147	0 %100
34	M22	Z	-1.986	-1.986	0 %100
35	M23	X	1.147	1.147	0 %100
36	M23	Z	-1.986	-1.986	0 %100
37	M24	X	1.212	1.212	0 %100
38	M24	Z	-2.099	-2.099	0 %100
39	M25	X	.823	.823	0 %100
40	M25	Z	-1.425	-1.425	0 %100
41	M26	X	.803	.803	0 %100
42	M26	Z	-1.391	-1.391	0 %100
43	M27	X	.832	.832	0 %100
44	M27	Z	-1.442	-1.442	0 %100
45	M28	X	.803	.803	0 %100
46	M28	Z	-1.391	-1.391	0 %100
47	M29	X	.832	.832	0 %100
48	M29	Z	-1.442	-1.442	0 %100
49	M30	X	.823	.823	0 %100
50	M30	Z	-1.425	-1.425	0 %100
51	M31	X	.803	.803	0 %100
52	M31	Z	-1.391	-1.391	0 %100
53	M32	X	.803	.803	0 %100
54	M32	Z	-1.391	-1.391	0 %100
55	M33	X	1.147	1.147	0 %100
56	M33	Z	-1.986	-1.986	0 %100
57	M34	X	1.147	1.147	0 %100
58	M34	Z	-1.986	-1.986	0 %100
59	M35	X	1.212	1.212	0 %100
60	M35	Z	-2.099	-2.099	0 %100
61	M36	X	.823	.823	0 %100
62	M36	Z	-1.425	-1.425	0 %100
63	MP5A	X	1.567	1.567	0 %100
64	MP5A	Z	-2.715	-2.715	0 %100
65	MP3A	X	1.567	1.567	0 %100
66	MP3A	Z	-2.715	-2.715	0 %100
67	MP1A	X	1.567	1.567	0 %100
68	MP1A	Z	-2.715	-2.715	0 %100
69	M52	X	1.055	1.055	0 %100



Member Distributed Loads (BLC 54 : Structure Wi (30 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
70	M52	Z	-1.827	-1.827	0	%100
71	M53	X	1.227	1.227	0	%100
72	M53	Z	-2.126	-2.126	0	%100
73	M54	X	1.227	1.227	0	%100
74	M54	Z	-2.126	-2.126	0	%100
75	MP4A	X	1.567	1.567	0	%100
76	MP4A	Z	-2.715	-2.715	0	%100
77	MP2A	X	1.731	1.731	0	%100
78	MP2A	Z	-2.998	-2.998	0	%100
79	M65	X	.55	.55	0	%100
80	M65	Z	-.952	-.952	0	%100

Member Distributed Loads (BLC 55 : Structure Wi (60 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M3	X	.627	.627	0	%100
2	M3	Z	-.362	-.362	0	%100
3	M5	X	.073	.073	0	%100
4	M5	Z	-.042	-.042	0	%100
5	M6	X	.947	.947	0	%100
6	M6	Z	-.547	-.547	0	%100
7	M7	X	.75	.75	0	%100
8	M7	Z	-.433	-.433	0	%100
9	M8	X	.073	.073	0	%100
10	M8	Z	-.042	-.042	0	%100
11	M9	X	.947	.947	0	%100
12	M9	Z	-.547	-.547	0	%100
13	M10	X	.75	.75	0	%100
14	M10	Z	-.433	-.433	0	%100
15	M11	X	.195	.195	0	%100
16	M11	Z	-.113	-.113	0	%100
17	M12	X	2.545	2.545	0	%100
18	M12	Z	-1.47	-1.47	0	%100
19	M13	X	.195	.195	0	%100
20	M13	Z	-.113	-.113	0	%100
21	M14	X	2.545	2.545	0	%100
22	M14	Z	-1.47	-1.47	0	%100
23	M15	X	2.13	2.13	0	%100
24	M15	Z	-1.23	-1.23	0	%100
25	M17	X	2.13	2.13	0	%100
26	M17	Z	-1.23	-1.23	0	%100
27	M19	X	2.142	2.142	0	%100
28	M19	Z	-1.237	-1.237	0	%100
29	M20	X	2.13	2.13	0	%100
30	M20	Z	-1.23	-1.23	0	%100
31	M21	X	2.13	2.13	0	%100
32	M21	Z	-1.23	-1.23	0	%100
33	M22	X	1.986	1.986	0	%100
34	M22	Z	-1.147	-1.147	0	%100
35	M23	X	1.986	1.986	0	%100
36	M23	Z	-1.147	-1.147	0	%100
37	M24	X	2.099	2.099	0	%100
38	M24	Z	-1.212	-1.212	0	%100
39	M25	X	2.142	2.142	0	%100
40	M25	Z	-1.237	-1.237	0	%100
41	M26	X	2.13	2.13	0	%100
42	M26	Z	-1.23	-1.23	0	%100



Member Distributed Loads (BLC 55 : Structure Wi (60 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
43	M27	X	1.449	1.449	0	%100
44	M27	Z	-.837	-.837	0	%100
45	M28	X	2.13	2.13	0	%100
46	M28	Z	-1.23	-1.23	0	%100
47	M29	X	1.449	1.449	0	%100
48	M29	Z	-.837	-.837	0	%100
49	M30	X	2.142	2.142	0	%100
50	M30	Z	-1.237	-1.237	0	%100
51	M31	X	2.13	2.13	0	%100
52	M31	Z	-1.23	-1.23	0	%100
53	M32	X	2.13	2.13	0	%100
54	M32	Z	-1.23	-1.23	0	%100
55	M33	X	1.986	1.986	0	%100
56	M33	Z	-1.147	-1.147	0	%100
57	M34	X	1.986	1.986	0	%100
58	M34	Z	-1.147	-1.147	0	%100
59	M35	X	2.099	2.099	0	%100
60	M35	Z	-1.212	-1.212	0	%100
61	M36	X	2.142	2.142	0	%100
62	M36	Z	-1.237	-1.237	0	%100
63	MP5A	X	2.715	2.715	0	%100
64	MP5A	Z	-1.567	-1.567	0	%100
65	MP3A	X	2.715	2.715	0	%100
66	MP3A	Z	-1.567	-1.567	0	%100
67	MP1A	X	2.715	2.715	0	%100
68	MP1A	Z	-1.567	-1.567	0	%100
69	M52	X	2.695	2.695	0	%100
70	M52	Z	-1.556	-1.556	0	%100
71	M53	X	2.133	2.133	0	%100
72	M53	Z	-1.232	-1.232	0	%100
73	M54	X	2.133	2.133	0	%100
74	M54	Z	-1.232	-1.232	0	%100
75	MP4A	X	2.715	2.715	0	%100
76	MP4A	Z	-1.567	-1.567	0	%100
77	MP2A	X	2.998	2.998	0	%100
78	MP2A	Z	-1.731	-1.731	0	%100
79	M65	X	2.276	2.276	0	%100
80	M65	Z	-1.314	-1.314	0	%100

Member Distributed Loads (BLC 56 : Structure Wi (90 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M3	X	0	0	0	%100
2	M3	Z	0	0	0	%100
3	M5	X	.594	.594	0	%100
4	M5	Z	0	0	0	%100
5	M6	X	.594	.594	0	%100
6	M6	Z	0	0	0	%100
7	M7	X	0	0	0	%100
8	M7	Z	0	0	0	%100
9	M8	X	.594	.594	0	%100
10	M8	Z	0	0	0	%100
11	M9	X	.594	.594	0	%100
12	M9	Z	0	0	0	%100
13	M10	X	0	0	0	%100
14	M10	Z	0	0	0	%100
15	M11	X	1.597	1.597	0	%100



Member Distributed Loads (BLC 56 : Structure Wi (90 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
16	M11	Z	0	0	0	%100
17	M12	X	1.597	1.597	0	%100
18	M12	Z	0	0	0	%100
19	M13	X	1.597	1.597	0	%100
20	M13	Z	0	0	0	%100
21	M14	X	1.597	1.597	0	%100
22	M14	Z	0	0	0	%100
23	M15	X	2.887	2.887	0	%100
24	M15	Z	0	0	0	%100
25	M17	X	2.887	2.887	0	%100
26	M17	Z	0	0	0	%100
27	M19	X	2.887	2.887	0	%100
28	M19	Z	0	0	0	%100
29	M20	X	2.887	2.887	0	%100
30	M20	Z	0	0	0	%100
31	M21	X	2.887	2.887	0	%100
32	M21	Z	0	0	0	%100
33	M22	X	2.293	2.293	0	%100
34	M22	Z	0	0	0	%100
35	M23	X	2.293	2.293	0	%100
36	M23	Z	0	0	0	%100
37	M24	X	2.424	2.424	0	%100
38	M24	Z	0	0	0	%100
39	M25	X	2.887	2.887	0	%100
40	M25	Z	0	0	0	%100
41	M26	X	2.887	2.887	0	%100
42	M26	Z	0	0	0	%100
43	M27	X	2.073	2.073	0	%100
44	M27	Z	0	0	0	%100
45	M28	X	2.887	2.887	0	%100
46	M28	Z	0	0	0	%100
47	M29	X	2.073	2.073	0	%100
48	M29	Z	0	0	0	%100
49	M30	X	2.887	2.887	0	%100
50	M30	Z	0	0	0	%100
51	M31	X	2.887	2.887	0	%100
52	M31	Z	0	0	0	%100
53	M32	X	2.887	2.887	0	%100
54	M32	Z	0	0	0	%100
55	M33	X	2.293	2.293	0	%100
56	M33	Z	0	0	0	%100
57	M34	X	2.293	2.293	0	%100
58	M34	Z	0	0	0	%100
59	M35	X	2.424	2.424	0	%100
60	M35	Z	0	0	0	%100
61	M36	X	2.887	2.887	0	%100
62	M36	Z	0	0	0	%100
63	MP5A	X	3.134	3.134	0	%100
64	MP5A	Z	0	0	0	%100
65	MP3A	X	3.134	3.134	0	%100
66	MP3A	Z	0	0	0	%100
67	MP1A	X	3.134	3.134	0	%100
68	MP1A	Z	0	0	0	%100
69	M52	X	2.569	2.569	0	%100
70	M52	Z	0	0	0	%100
71	M53	X	2.073	2.073	0	%100
72	M53	Z	0	0	0	%100



Member Distributed Loads (BLC 56 : Structure Wi (90 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
73	M54	X	2.073	2.073	0	%100
74	M54	Z	0	0	0	%100
75	MP4A	X	3.134	3.134	0	%100
76	MP4A	Z	0	0	0	%100
77	MP2A	X	3.462	3.462	0	%100
78	MP2A	Z	0	0	0	%100
79	M65	X	3.097	3.097	0	%100
80	M65	Z	0	0	0	%100

Member Distributed Loads (BLC 57 : Structure Wi (120 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M3	X	.627	.627	0	%100
2	M3	Z	.362	.362	0	%100
3	M5	X	.947	.947	0	%100
4	M5	Z	.547	.547	0	%100
5	M6	X	.073	.073	0	%100
6	M6	Z	.042	.042	0	%100
7	M7	X	.75	.75	0	%100
8	M7	Z	.433	.433	0	%100
9	M8	X	.947	.947	0	%100
10	M8	Z	.547	.547	0	%100
11	M9	X	.073	.073	0	%100
12	M9	Z	.042	.042	0	%100
13	M10	X	.75	.75	0	%100
14	M10	Z	.433	.433	0	%100
15	M11	X	2.545	2.545	0	%100
16	M11	Z	1.47	1.47	0	%100
17	M12	X	.195	.195	0	%100
18	M12	Z	.113	.113	0	%100
19	M13	X	2.545	2.545	0	%100
20	M13	Z	1.47	1.47	0	%100
21	M14	X	.195	.195	0	%100
22	M14	Z	.113	.113	0	%100
23	M15	X	2.13	2.13	0	%100
24	M15	Z	1.23	1.23	0	%100
25	M17	X	2.13	2.13	0	%100
26	M17	Z	1.23	1.23	0	%100
27	M19	X	2.142	2.142	0	%100
28	M19	Z	1.237	1.237	0	%100
29	M20	X	2.13	2.13	0	%100
30	M20	Z	1.23	1.23	0	%100
31	M21	X	2.13	2.13	0	%100
32	M21	Z	1.23	1.23	0	%100
33	M22	X	1.986	1.986	0	%100
34	M22	Z	1.147	1.147	0	%100
35	M23	X	1.986	1.986	0	%100
36	M23	Z	1.147	1.147	0	%100
37	M24	X	2.099	2.099	0	%100
38	M24	Z	1.212	1.212	0	%100
39	M25	X	2.142	2.142	0	%100
40	M25	Z	1.237	1.237	0	%100
41	M26	X	2.13	2.13	0	%100
42	M26	Z	1.23	1.23	0	%100
43	M27	X	2.133	2.133	0	%100
44	M27	Z	1.232	1.232	0	%100
45	M28	X	2.13	2.13	0	%100



Member Distributed Loads (BLC 57 : Structure Wi (120 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
46	M28	Z	1.23	1.23	0	%100
47	M29	X	2.133	2.133	0	%100
48	M29	Z	1.232	1.232	0	%100
49	M30	X	2.142	2.142	0	%100
50	M30	Z	1.237	1.237	0	%100
51	M31	X	2.13	2.13	0	%100
52	M31	Z	1.23	1.23	0	%100
53	M32	X	2.13	2.13	0	%100
54	M32	Z	1.23	1.23	0	%100
55	M33	X	1.986	1.986	0	%100
56	M33	Z	1.147	1.147	0	%100
57	M34	X	1.986	1.986	0	%100
58	M34	Z	1.147	1.147	0	%100
59	M35	X	2.099	2.099	0	%100
60	M35	Z	1.212	1.212	0	%100
61	M36	X	2.142	2.142	0	%100
62	M36	Z	1.237	1.237	0	%100
63	MP5A	X	2.715	2.715	0	%100
64	MP5A	Z	1.567	1.567	0	%100
65	MP3A	X	2.715	2.715	0	%100
66	MP3A	Z	1.567	1.567	0	%100
67	MP1A	X	2.715	2.715	0	%100
68	MP1A	Z	1.567	1.567	0	%100
69	M52	X	.887	.887	0	%100
70	M52	Z	.512	.512	0	%100
71	M53	X	1.449	1.449	0	%100
72	M53	Z	.837	.837	0	%100
73	M54	X	1.449	1.449	0	%100
74	M54	Z	.837	.837	0	%100
75	MP4A	X	2.715	2.715	0	%100
76	MP4A	Z	1.567	1.567	0	%100
77	MP2A	X	2.998	2.998	0	%100
78	MP2A	Z	1.731	1.731	0	%100
79	M65	X	1.763	1.763	0	%100
80	M65	Z	1.018	1.018	0	%100

Member Distributed Loads (BLC 58 : Structure Wi (150 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M3	X	1.086	1.086	0	%100
2	M3	Z	1.881	1.881	0	%100
3	M5	X	.541	.541	0	%100
4	M5	Z	.937	.937	0	%100
5	M6	X	.036	.036	0	%100
6	M6	Z	.063	.063	0	%100
7	M7	X	1.298	1.298	0	%100
8	M7	Z	2.249	2.249	0	%100
9	M8	X	.541	.541	0	%100
10	M8	Z	.937	.937	0	%100
11	M9	X	.036	.036	0	%100
12	M9	Z	.063	.063	0	%100
13	M10	X	1.298	1.298	0	%100
14	M10	Z	2.249	2.249	0	%100
15	M11	X	1.455	1.455	0	%100
16	M11	Z	2.52	2.52	0	%100
17	M12	X	.098	.098	0	%100
18	M12	Z	.169	.169	0	%100



Member Distributed Loads (BLC 58 : Structure Wi (150 Deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
19	M13	X	1.455	1.455	0 %100
20	M13	Z	2.52	2.52	0 %100
21	M14	X	.098	.098	0 %100
22	M14	Z	.169	.169	0 %100
23	M15	X	.803	.803	0 %100
24	M15	Z	1.391	1.391	0 %100
25	M17	X	.803	.803	0 %100
26	M17	Z	1.391	1.391	0 %100
27	M19	X	.823	.823	0 %100
28	M19	Z	1.425	1.425	0 %100
29	M20	X	.803	.803	0 %100
30	M20	Z	1.391	1.391	0 %100
31	M21	X	.803	.803	0 %100
32	M21	Z	1.391	1.391	0 %100
33	M22	X	1.147	1.147	0 %100
34	M22	Z	1.986	1.986	0 %100
35	M23	X	1.147	1.147	0 %100
36	M23	Z	1.986	1.986	0 %100
37	M24	X	1.212	1.212	0 %100
38	M24	Z	2.099	2.099	0 %100
39	M25	X	.823	.823	0 %100
40	M25	Z	1.425	1.425	0 %100
41	M26	X	.803	.803	0 %100
42	M26	Z	1.391	1.391	0 %100
43	M27	X	1.227	1.227	0 %100
44	M27	Z	2.126	2.126	0 %100
45	M28	X	.803	.803	0 %100
46	M28	Z	1.391	1.391	0 %100
47	M29	X	1.227	1.227	0 %100
48	M29	Z	2.126	2.126	0 %100
49	M30	X	.823	.823	0 %100
50	M30	Z	1.425	1.425	0 %100
51	M31	X	.803	.803	0 %100
52	M31	Z	1.391	1.391	0 %100
53	M32	X	.803	.803	0 %100
54	M32	Z	1.391	1.391	0 %100
55	M33	X	1.147	1.147	0 %100
56	M33	Z	1.986	1.986	0 %100
57	M34	X	1.147	1.147	0 %100
58	M34	Z	1.986	1.986	0 %100
59	M35	X	1.212	1.212	0 %100
60	M35	Z	2.099	2.099	0 %100
61	M36	X	.823	.823	0 %100
62	M36	Z	1.425	1.425	0 %100
63	MP5A	X	1.567	1.567	0 %100
64	MP5A	Z	2.715	2.715	0 %100
65	MP3A	X	1.567	1.567	0 %100
66	MP3A	Z	2.715	2.715	0 %100
67	MP1A	X	1.567	1.567	0 %100
68	MP1A	Z	2.715	2.715	0 %100
69	M52	X	.011	.011	0 %100
70	M52	Z	.02	.02	0 %100
71	M53	X	.832	.832	0 %100
72	M53	Z	1.442	1.442	0 %100
73	M54	X	.832	.832	0 %100
74	M54	Z	1.442	1.442	0 %100
75	MP4A	X	1.567	1.567	0 %100



Member Distributed Loads (BLC 58 : Structure Wi (150 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
76	MP4A	Z	2.715	2.715	0	%100
77	MP2A	X	1.731	1.731	0	%100
78	MP2A	Z	2.998	2.998	0	%100
79	M65	X	.253	.253	0	%100
80	M65	Z	.438	.438	0	%100

Member Distributed Loads (BLC 59 : Structure Wi (180 Deg))

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M3	X	0	0	0	%100
2	M3	Z	2.895	2.895	0	%100
3	M5	X	0	0	0	%100
4	M5	Z	.572	.572	0	%100
5	M6	X	0	0	0	%100
6	M6	Z	.572	.572	0	%100
7	M7	X	0	0	0	%100
8	M7	Z	3.462	3.462	0	%100
9	M8	X	0	0	0	%100
10	M8	Z	.572	.572	0	%100
11	M9	X	0	0	0	%100
12	M9	Z	.572	.572	0	%100
13	M10	X	0	0	0	%100
14	M10	Z	3.462	3.462	0	%100
15	M11	X	0	0	0	%100
16	M11	Z	1.537	1.537	0	%100
17	M12	X	0	0	0	%100
18	M12	Z	1.537	1.537	0	%100
19	M13	X	0	0	0	%100
20	M13	Z	1.537	1.537	0	%100
21	M14	X	0	0	0	%100
22	M14	Z	1.537	1.537	0	%100
23	M15	X	0	0	0	%100
24	M15	Z	1.18	1.18	0	%100
25	M17	X	0	0	0	%100
26	M17	Z	1.18	1.18	0	%100
27	M19	X	0	0	0	%100
28	M19	Z	1.232	1.232	0	%100
29	M20	X	0	0	0	%100
30	M20	Z	1.18	1.18	0	%100
31	M21	X	0	0	0	%100
32	M21	Z	1.18	1.18	0	%100
33	M22	X	0	0	0	%100
34	M22	Z	2.293	2.293	0	%100
35	M23	X	0	0	0	%100
36	M23	Z	2.293	2.293	0	%100
37	M24	X	0	0	0	%100
38	M24	Z	2.424	2.424	0	%100
39	M25	X	0	0	0	%100
40	M25	Z	1.232	1.232	0	%100
41	M26	X	0	0	0	%100
42	M26	Z	1.18	1.18	0	%100
43	M27	X	0	0	0	%100
44	M27	Z	2.055	2.055	0	%100
45	M28	X	0	0	0	%100
46	M28	Z	1.18	1.18	0	%100
47	M29	X	0	0	0	%100
48	M29	Z	2.055	2.055	0	%100



Member Distributed Loads (BLC 59 : Structure Wi (180 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
49	M30	X	0	0	0	%100
50	M30	Z	1.232	1.232	0	%100
51	M31	X	0	0	0	%100
52	M31	Z	1.18	1.18	0	%100
53	M32	X	0	0	0	%100
54	M32	Z	1.18	1.18	0	%100
55	M33	X	0	0	0	%100
56	M33	Z	2.293	2.293	0	%100
57	M34	X	0	0	0	%100
58	M34	Z	2.293	2.293	0	%100
59	M35	X	0	0	0	%100
60	M35	Z	2.424	2.424	0	%100
61	M36	X	0	0	0	%100
62	M36	Z	1.232	1.232	0	%100
63	MP5A	X	0	0	0	%100
64	MP5A	Z	3.134	3.134	0	%100
65	MP3A	X	0	0	0	%100
66	MP3A	Z	3.134	3.134	0	%100
67	MP1A	X	0	0	0	%100
68	MP1A	Z	3.134	3.134	0	%100
69	M52	X	0	0	0	%100
70	M52	Z	.565	.565	0	%100
71	M53	X	0	0	0	%100
72	M53	Z	2.055	2.055	0	%100
73	M54	X	0	0	0	%100
74	M54	Z	2.055	2.055	0	%100
75	MP4A	X	0	0	0	%100
76	MP4A	Z	3.134	3.134	0	%100
77	MP2A	X	0	0	0	%100
78	MP2A	Z	3.462	3.462	0	%100
79	M65	X	0	0	0	%100
80	M65	Z	.038	.038	0	%100

Member Distributed Loads (BLC 60 : Structure Wi (210 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M3	X	-1.086	-1.086	0	%100
2	M3	Z	1.881	1.881	0	%100
3	M5	X	-.036	-.036	0	%100
4	M5	Z	.063	.063	0	%100
5	M6	X	-.541	-.541	0	%100
6	M6	Z	.937	.937	0	%100
7	M7	X	-1.298	-1.298	0	%100
8	M7	Z	2.249	2.249	0	%100
9	M8	X	-.036	-.036	0	%100
10	M8	Z	.063	.063	0	%100
11	M9	X	-.541	-.541	0	%100
12	M9	Z	.937	.937	0	%100
13	M10	X	-1.298	-1.298	0	%100
14	M10	Z	2.249	2.249	0	%100
15	M11	X	-.098	-.098	0	%100
16	M11	Z	.169	.169	0	%100
17	M12	X	-1.455	-1.455	0	%100
18	M12	Z	2.52	2.52	0	%100
19	M13	X	-.098	-.098	0	%100
20	M13	Z	.169	.169	0	%100
21	M14	X	-1.455	-1.455	0	%100



Member Distributed Loads (BLC 60 : Structure Wi (210 Deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
22	M14	Z	2.52	2.52	0 %100
23	M15	X	-0.803	-0.803	0 %100
24	M15	Z	1.391	1.391	0 %100
25	M17	X	-0.803	-0.803	0 %100
26	M17	Z	1.391	1.391	0 %100
27	M19	X	-0.823	-0.823	0 %100
28	M19	Z	1.425	1.425	0 %100
29	M20	X	-0.803	-0.803	0 %100
30	M20	Z	1.391	1.391	0 %100
31	M21	X	-0.803	-0.803	0 %100
32	M21	Z	1.391	1.391	0 %100
33	M22	X	-1.147	-1.147	0 %100
34	M22	Z	1.986	1.986	0 %100
35	M23	X	-1.147	-1.147	0 %100
36	M23	Z	1.986	1.986	0 %100
37	M24	X	-1.212	-1.212	0 %100
38	M24	Z	2.099	2.099	0 %100
39	M25	X	-0.823	-0.823	0 %100
40	M25	Z	1.425	1.425	0 %100
41	M26	X	-0.803	-0.803	0 %100
42	M26	Z	1.391	1.391	0 %100
43	M27	X	-0.832	-0.832	0 %100
44	M27	Z	1.442	1.442	0 %100
45	M28	X	-0.803	-0.803	0 %100
46	M28	Z	1.391	1.391	0 %100
47	M29	X	-0.832	-0.832	0 %100
48	M29	Z	1.442	1.442	0 %100
49	M30	X	-0.823	-0.823	0 %100
50	M30	Z	1.425	1.425	0 %100
51	M31	X	-0.803	-0.803	0 %100
52	M31	Z	1.391	1.391	0 %100
53	M32	X	-0.803	-0.803	0 %100
54	M32	Z	1.391	1.391	0 %100
55	M33	X	-1.147	-1.147	0 %100
56	M33	Z	1.986	1.986	0 %100
57	M34	X	-1.147	-1.147	0 %100
58	M34	Z	1.986	1.986	0 %100
59	M35	X	-1.212	-1.212	0 %100
60	M35	Z	2.099	2.099	0 %100
61	M36	X	-0.823	-0.823	0 %100
62	M36	Z	1.425	1.425	0 %100
63	MP5A	X	-1.567	-1.567	0 %100
64	MP5A	Z	2.715	2.715	0 %100
65	MP3A	X	-1.567	-1.567	0 %100
66	MP3A	Z	2.715	2.715	0 %100
67	MP1A	X	-1.567	-1.567	0 %100
68	MP1A	Z	2.715	2.715	0 %100
69	M52	X	-1.055	-1.055	0 %100
70	M52	Z	1.827	1.827	0 %100
71	M53	X	-1.227	-1.227	0 %100
72	M53	Z	2.126	2.126	0 %100
73	M54	X	-1.227	-1.227	0 %100
74	M54	Z	2.126	2.126	0 %100
75	MP4A	X	-1.567	-1.567	0 %100
76	MP4A	Z	2.715	2.715	0 %100
77	MP2A	X	-1.731	-1.731	0 %100
78	MP2A	Z	2.998	2.998	0 %100



Member Distributed Loads (BLC 60 : Structure Wi (210 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
79	M65	X	-.55	-.55	0	%100
80	M65	Z	.952	.952	0	%100

Member Distributed Loads (BLC 61 : Structure Wi (240 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M3	X	-.627	-.627	0	%100
2	M3	Z	.362	.362	0	%100
3	M5	X	-.073	-.073	0	%100
4	M5	Z	.042	.042	0	%100
5	M6	X	-.947	-.947	0	%100
6	M6	Z	.547	.547	0	%100
7	M7	X	-.75	-.75	0	%100
8	M7	Z	.433	.433	0	%100
9	M8	X	-.073	-.073	0	%100
10	M8	Z	.042	.042	0	%100
11	M9	X	-.947	-.947	0	%100
12	M9	Z	.547	.547	0	%100
13	M10	X	-.75	-.75	0	%100
14	M10	Z	.433	.433	0	%100
15	M11	X	-.195	-.195	0	%100
16	M11	Z	.113	.113	0	%100
17	M12	X	-2.545	-2.545	0	%100
18	M12	Z	1.47	1.47	0	%100
19	M13	X	-.195	-.195	0	%100
20	M13	Z	.113	.113	0	%100
21	M14	X	-2.545	-2.545	0	%100
22	M14	Z	1.47	1.47	0	%100
23	M15	X	-2.13	-2.13	0	%100
24	M15	Z	1.23	1.23	0	%100
25	M17	X	-2.13	-2.13	0	%100
26	M17	Z	1.23	1.23	0	%100
27	M19	X	-2.142	-2.142	0	%100
28	M19	Z	1.237	1.237	0	%100
29	M20	X	-2.13	-2.13	0	%100
30	M20	Z	1.23	1.23	0	%100
31	M21	X	-2.13	-2.13	0	%100
32	M21	Z	1.23	1.23	0	%100
33	M22	X	-1.986	-1.986	0	%100
34	M22	Z	1.147	1.147	0	%100
35	M23	X	-1.986	-1.986	0	%100
36	M23	Z	1.147	1.147	0	%100
37	M24	X	-2.099	-2.099	0	%100
38	M24	Z	1.212	1.212	0	%100
39	M25	X	-2.142	-2.142	0	%100
40	M25	Z	1.237	1.237	0	%100
41	M26	X	-2.13	-2.13	0	%100
42	M26	Z	1.23	1.23	0	%100
43	M27	X	-1.449	-1.449	0	%100
44	M27	Z	.837	.837	0	%100
45	M28	X	-2.13	-2.13	0	%100
46	M28	Z	1.23	1.23	0	%100
47	M29	X	-1.449	-1.449	0	%100
48	M29	Z	.837	.837	0	%100
49	M30	X	-2.142	-2.142	0	%100
50	M30	Z	1.237	1.237	0	%100
51	M31	X	-2.13	-2.13	0	%100



Member Distributed Loads (BLC 61 : Structure Wi (240 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
52	M31	Z	1.23	1.23	0	%100
53	M32	X	-2.13	-2.13	0	%100
54	M32	Z	1.23	1.23	0	%100
55	M33	X	-1.986	-1.986	0	%100
56	M33	Z	1.147	1.147	0	%100
57	M34	X	-1.986	-1.986	0	%100
58	M34	Z	1.147	1.147	0	%100
59	M35	X	-2.099	-2.099	0	%100
60	M35	Z	1.212	1.212	0	%100
61	M36	X	-2.142	-2.142	0	%100
62	M36	Z	1.237	1.237	0	%100
63	MP5A	X	-2.715	-2.715	0	%100
64	MP5A	Z	1.567	1.567	0	%100
65	MP3A	X	-2.715	-2.715	0	%100
66	MP3A	Z	1.567	1.567	0	%100
67	MP1A	X	-2.715	-2.715	0	%100
68	MP1A	Z	1.567	1.567	0	%100
69	M52	X	-2.695	-2.695	0	%100
70	M52	Z	1.556	1.556	0	%100
71	M53	X	-2.133	-2.133	0	%100
72	M53	Z	1.232	1.232	0	%100
73	M54	X	-2.133	-2.133	0	%100
74	M54	Z	1.232	1.232	0	%100
75	MP4A	X	-2.715	-2.715	0	%100
76	MP4A	Z	1.567	1.567	0	%100
77	MP2A	X	-2.998	-2.998	0	%100
78	MP2A	Z	1.731	1.731	0	%100
79	M65	X	-2.276	-2.276	0	%100
80	M65	Z	1.314	1.314	0	%100

Member Distributed Loads (BLC 62 : Structure Wi (270 Deg))

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M3	X	0	0	0	%100
2	M3	Z	0	0	0	%100
3	M5	X	-0.594	-0.594	0	%100
4	M5	Z	0	0	0	%100
5	M6	X	-0.594	-0.594	0	%100
6	M6	Z	0	0	0	%100
7	M7	X	0	0	0	%100
8	M7	Z	0	0	0	%100
9	M8	X	-0.594	-0.594	0	%100
10	M8	Z	0	0	0	%100
11	M9	X	-0.594	-0.594	0	%100
12	M9	Z	0	0	0	%100
13	M10	X	0	0	0	%100
14	M10	Z	0	0	0	%100
15	M11	X	-1.597	-1.597	0	%100
16	M11	Z	0	0	0	%100
17	M12	X	-1.597	-1.597	0	%100
18	M12	Z	0	0	0	%100
19	M13	X	-1.597	-1.597	0	%100
20	M13	Z	0	0	0	%100
21	M14	X	-1.597	-1.597	0	%100
22	M14	Z	0	0	0	%100
23	M15	X	-2.887	-2.887	0	%100
24	M15	Z	0	0	0	%100



Member Distributed Loads (BLC 62 : Structure Wi (270 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
25	M17	X	-2.887	-2.887	0	%100
26	M17	Z	0	0	0	%100
27	M19	X	-2.887	-2.887	0	%100
28	M19	Z	0	0	0	%100
29	M20	X	-2.887	-2.887	0	%100
30	M20	Z	0	0	0	%100
31	M21	X	-2.887	-2.887	0	%100
32	M21	Z	0	0	0	%100
33	M22	X	-2.293	-2.293	0	%100
34	M22	Z	0	0	0	%100
35	M23	X	-2.293	-2.293	0	%100
36	M23	Z	0	0	0	%100
37	M24	X	-2.424	-2.424	0	%100
38	M24	Z	0	0	0	%100
39	M25	X	-2.887	-2.887	0	%100
40	M25	Z	0	0	0	%100
41	M26	X	-2.887	-2.887	0	%100
42	M26	Z	0	0	0	%100
43	M27	X	-2.073	-2.073	0	%100
44	M27	Z	0	0	0	%100
45	M28	X	-2.887	-2.887	0	%100
46	M28	Z	0	0	0	%100
47	M29	X	-2.073	-2.073	0	%100
48	M29	Z	0	0	0	%100
49	M30	X	-2.887	-2.887	0	%100
50	M30	Z	0	0	0	%100
51	M31	X	-2.887	-2.887	0	%100
52	M31	Z	0	0	0	%100
53	M32	X	-2.887	-2.887	0	%100
54	M32	Z	0	0	0	%100
55	M33	X	-2.293	-2.293	0	%100
56	M33	Z	0	0	0	%100
57	M34	X	-2.293	-2.293	0	%100
58	M34	Z	0	0	0	%100
59	M35	X	-2.424	-2.424	0	%100
60	M35	Z	0	0	0	%100
61	M36	X	-2.887	-2.887	0	%100
62	M36	Z	0	0	0	%100
63	MP5A	X	-3.134	-3.134	0	%100
64	MP5A	Z	0	0	0	%100
65	MP3A	X	-3.134	-3.134	0	%100
66	MP3A	Z	0	0	0	%100
67	MP1A	X	-3.134	-3.134	0	%100
68	MP1A	Z	0	0	0	%100
69	M52	X	-2.569	-2.569	0	%100
70	M52	Z	0	0	0	%100
71	M53	X	-2.073	-2.073	0	%100
72	M53	Z	0	0	0	%100
73	M54	X	-2.073	-2.073	0	%100
74	M54	Z	0	0	0	%100
75	MP4A	X	-3.134	-3.134	0	%100
76	MP4A	Z	0	0	0	%100
77	MP2A	X	-3.462	-3.462	0	%100
78	MP2A	Z	0	0	0	%100
79	M65	X	-3.097	-3.097	0	%100
80	M65	Z	0	0	0	%100



Member Distributed Loads (BLC 63 : Structure Wi (300 Deg))

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M3	X	-.627	-.627	0 %100
2	M3	Z	-.362	-.362	0 %100
3	M5	X	-.947	-.947	0 %100
4	M5	Z	-.547	-.547	0 %100
5	M6	X	-.073	-.073	0 %100
6	M6	Z	-.042	-.042	0 %100
7	M7	X	-.75	-.75	0 %100
8	M7	Z	-.433	-.433	0 %100
9	M8	X	-.947	-.947	0 %100
10	M8	Z	-.547	-.547	0 %100
11	M9	X	-.073	-.073	0 %100
12	M9	Z	-.042	-.042	0 %100
13	M10	X	-.75	-.75	0 %100
14	M10	Z	-.433	-.433	0 %100
15	M11	X	-2.545	-2.545	0 %100
16	M11	Z	-1.47	-1.47	0 %100
17	M12	X	-.195	-.195	0 %100
18	M12	Z	-.113	-.113	0 %100
19	M13	X	-2.545	-2.545	0 %100
20	M13	Z	-1.47	-1.47	0 %100
21	M14	X	-.195	-.195	0 %100
22	M14	Z	-.113	-.113	0 %100
23	M15	X	-2.13	-2.13	0 %100
24	M15	Z	-1.23	-1.23	0 %100
25	M17	X	-2.13	-2.13	0 %100
26	M17	Z	-1.23	-1.23	0 %100
27	M19	X	-2.142	-2.142	0 %100
28	M19	Z	-1.237	-1.237	0 %100
29	M20	X	-2.13	-2.13	0 %100
30	M20	Z	-1.23	-1.23	0 %100
31	M21	X	-2.13	-2.13	0 %100
32	M21	Z	-1.23	-1.23	0 %100
33	M22	X	-1.986	-1.986	0 %100
34	M22	Z	-1.147	-1.147	0 %100
35	M23	X	-1.986	-1.986	0 %100
36	M23	Z	-1.147	-1.147	0 %100
37	M24	X	-2.099	-2.099	0 %100
38	M24	Z	-1.212	-1.212	0 %100
39	M25	X	-2.142	-2.142	0 %100
40	M25	Z	-1.237	-1.237	0 %100
41	M26	X	-2.13	-2.13	0 %100
42	M26	Z	-1.23	-1.23	0 %100
43	M27	X	-2.133	-2.133	0 %100
44	M27	Z	-1.232	-1.232	0 %100
45	M28	X	-2.13	-2.13	0 %100
46	M28	Z	-1.23	-1.23	0 %100
47	M29	X	-2.133	-2.133	0 %100
48	M29	Z	-1.232	-1.232	0 %100
49	M30	X	-2.142	-2.142	0 %100
50	M30	Z	-1.237	-1.237	0 %100
51	M31	X	-2.13	-2.13	0 %100
52	M31	Z	-1.23	-1.23	0 %100
53	M32	X	-2.13	-2.13	0 %100
54	M32	Z	-1.23	-1.23	0 %100
55	M33	X	-1.986	-1.986	0 %100
56	M33	Z	-1.147	-1.147	0 %100
57	M34	X	-1.986	-1.986	0 %100



Member Distributed Loads (BLC 63 : Structure Wi (300 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
58	M34	Z	-1.147	-1.147	0	%100
59	M35	X	-2.099	-2.099	0	%100
60	M35	Z	-1.212	-1.212	0	%100
61	M36	X	-2.142	-2.142	0	%100
62	M36	Z	-1.237	-1.237	0	%100
63	MP5A	X	-2.715	-2.715	0	%100
64	MP5A	Z	-1.567	-1.567	0	%100
65	MP3A	X	-2.715	-2.715	0	%100
66	MP3A	Z	-1.567	-1.567	0	%100
67	MP1A	X	-2.715	-2.715	0	%100
68	MP1A	Z	-1.567	-1.567	0	%100
69	M52	X	-.887	-.887	0	%100
70	M52	Z	-.512	-.512	0	%100
71	M53	X	-1.449	-1.449	0	%100
72	M53	Z	-.837	-.837	0	%100
73	M54	X	-1.449	-1.449	0	%100
74	M54	Z	-.837	-.837	0	%100
75	MP4A	X	-2.715	-2.715	0	%100
76	MP4A	Z	-1.567	-1.567	0	%100
77	MP2A	X	-2.998	-2.998	0	%100
78	MP2A	Z	-1.731	-1.731	0	%100
79	M65	X	-1.763	-1.763	0	%100
80	M65	Z	-1.018	-1.018	0	%100

Member Distributed Loads (BLC 64 : Structure Wi (330 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M3	X	-1.086	-1.086	0	%100
2	M3	Z	-1.881	-1.881	0	%100
3	M5	X	-.541	-.541	0	%100
4	M5	Z	-.937	-.937	0	%100
5	M6	X	-.036	-.036	0	%100
6	M6	Z	-.063	-.063	0	%100
7	M7	X	-1.298	-1.298	0	%100
8	M7	Z	-2.249	-2.249	0	%100
9	M8	X	-.541	-.541	0	%100
10	M8	Z	-.937	-.937	0	%100
11	M9	X	-.036	-.036	0	%100
12	M9	Z	-.063	-.063	0	%100
13	M10	X	-1.298	-1.298	0	%100
14	M10	Z	-2.249	-2.249	0	%100
15	M11	X	-1.455	-1.455	0	%100
16	M11	Z	-2.52	-2.52	0	%100
17	M12	X	-.098	-.098	0	%100
18	M12	Z	-.169	-.169	0	%100
19	M13	X	-1.455	-1.455	0	%100
20	M13	Z	-2.52	-2.52	0	%100
21	M14	X	-.098	-.098	0	%100
22	M14	Z	-.169	-.169	0	%100
23	M15	X	-.803	-.803	0	%100
24	M15	Z	-1.391	-1.391	0	%100
25	M17	X	-.803	-.803	0	%100
26	M17	Z	-1.391	-1.391	0	%100
27	M19	X	-.823	-.823	0	%100
28	M19	Z	-1.425	-1.425	0	%100
29	M20	X	-.803	-.803	0	%100
30	M20	Z	-1.391	-1.391	0	%100



Member Distributed Loads (BLC 64 : Structure Wi (330 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
31	M21	X	- .803	- .803	0	%100
32	M21	Z	-1.391	-1.391	0	%100
33	M22	X	-1.147	-1.147	0	%100
34	M22	Z	-1.986	-1.986	0	%100
35	M23	X	-1.147	-1.147	0	%100
36	M23	Z	-1.986	-1.986	0	%100
37	M24	X	-1.212	-1.212	0	%100
38	M24	Z	-2.099	-2.099	0	%100
39	M25	X	- .823	- .823	0	%100
40	M25	Z	-1.425	-1.425	0	%100
41	M26	X	- .803	- .803	0	%100
42	M26	Z	-1.391	-1.391	0	%100
43	M27	X	-1.227	-1.227	0	%100
44	M27	Z	-2.126	-2.126	0	%100
45	M28	X	- .803	- .803	0	%100
46	M28	Z	-1.391	-1.391	0	%100
47	M29	X	-1.227	-1.227	0	%100
48	M29	Z	-2.126	-2.126	0	%100
49	M30	X	- .823	- .823	0	%100
50	M30	Z	-1.425	-1.425	0	%100
51	M31	X	- .803	- .803	0	%100
52	M31	Z	-1.391	-1.391	0	%100
53	M32	X	- .803	- .803	0	%100
54	M32	Z	-1.391	-1.391	0	%100
55	M33	X	-1.147	-1.147	0	%100
56	M33	Z	-1.986	-1.986	0	%100
57	M34	X	-1.147	-1.147	0	%100
58	M34	Z	-1.986	-1.986	0	%100
59	M35	X	-1.212	-1.212	0	%100
60	M35	Z	-2.099	-2.099	0	%100
61	M36	X	- .823	- .823	0	%100
62	M36	Z	-1.425	-1.425	0	%100
63	MP5A	X	-1.567	-1.567	0	%100
64	MP5A	Z	-2.715	-2.715	0	%100
65	MP3A	X	-1.567	-1.567	0	%100
66	MP3A	Z	-2.715	-2.715	0	%100
67	MP1A	X	-1.567	-1.567	0	%100
68	MP1A	Z	-2.715	-2.715	0	%100
69	M52	X	- .011	- .011	0	%100
70	M52	Z	- .02	- .02	0	%100
71	M53	X	- .832	- .832	0	%100
72	M53	Z	-1.442	-1.442	0	%100
73	M54	X	- .832	- .832	0	%100
74	M54	Z	-1.442	-1.442	0	%100
75	MP4A	X	-1.567	-1.567	0	%100
76	MP4A	Z	-2.715	-2.715	0	%100
77	MP2A	X	-1.731	-1.731	0	%100
78	MP2A	Z	-2.998	-2.998	0	%100
79	M65	X	- .253	- .253	0	%100
80	M65	Z	- .438	- .438	0	%100

Member Distributed Loads (BLC 65 : Structure Wm (0 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M3	X	0	0	0	%100
2	M3	Z	- .708	- .708	0	%100
3	M5	X	0	0	0	%100



Member Distributed Loads (BLC 65 : Structure Wm (0 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
4	M5	Z	-.043	-.043	0	%100
5	M6	X	0	0	0	%100
6	M6	Z	-.043	-.043	0	%100
7	M7	X	0	0	0	%100
8	M7	Z	-.678	-.678	0	%100
9	M8	X	0	0	0	%100
10	M8	Z	-.043	-.043	0	%100
11	M9	X	0	0	0	%100
12	M9	Z	-.043	-.043	0	%100
13	M10	X	0	0	0	%100
14	M10	Z	-.678	-.678	0	%100
15	M11	X	0	0	0	%100
16	M11	Z	-.275	-.275	0	%100
17	M12	X	0	0	0	%100
18	M12	Z	-.275	-.275	0	%100
19	M13	X	0	0	0	%100
20	M13	Z	-.275	-.275	0	%100
21	M14	X	0	0	0	%100
22	M14	Z	-.275	-.275	0	%100
23	M15	X	0	0	0	%100
24	M15	Z	-.093	-.093	0	%100
25	M17	X	0	0	0	%100
26	M17	Z	-.093	-.093	0	%100
27	M19	X	0	0	0	%100
28	M19	Z	-.112	-.112	0	%100
29	M20	X	0	0	0	%100
30	M20	Z	-.093	-.093	0	%100
31	M21	X	0	0	0	%100
32	M21	Z	-.093	-.093	0	%100
33	M22	X	0	0	0	%100
34	M22	Z	-.365	-.365	0	%100
35	M23	X	0	0	0	%100
36	M23	Z	-.365	-.365	0	%100
37	M24	X	0	0	0	%100
38	M24	Z	-.434	-.434	0	%100
39	M25	X	0	0	0	%100
40	M25	Z	-.112	-.112	0	%100
41	M26	X	0	0	0	%100
42	M26	Z	-.093	-.093	0	%100
43	M27	X	0	0	0	%100
44	M27	Z	-.319	-.319	0	%100
45	M28	X	0	0	0	%100
46	M28	Z	-.093	-.093	0	%100
47	M29	X	0	0	0	%100
48	M29	Z	-.319	-.319	0	%100
49	M30	X	0	0	0	%100
50	M30	Z	-.112	-.112	0	%100
51	M31	X	0	0	0	%100
52	M31	Z	-.093	-.093	0	%100
53	M32	X	0	0	0	%100
54	M32	Z	-.093	-.093	0	%100
55	M33	X	0	0	0	%100
56	M33	Z	-.365	-.365	0	%100
57	M34	X	0	0	0	%100
58	M34	Z	-.365	-.365	0	%100
59	M35	X	0	0	0	%100
60	M35	Z	-.434	-.434	0	%100



Member Distributed Loads (BLC 65 : Structure Wm (0 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
61	M36	X	0	0	0	%100
62	M36	Z	-.112	-.112	0	%100
63	MP5A	X	0	0	0	%100
64	MP5A	Z	-.56	-.56	0	%100
65	MP3A	X	0	0	0	%100
66	MP3A	Z	-.56	-.56	0	%100
67	MP1A	X	0	0	0	%100
68	MP1A	Z	-.56	-.56	0	%100
69	M52	X	0	0	0	%100
70	M52	Z	-.101	-.101	0	%100
71	M53	X	0	0	0	%100
72	M53	Z	-.319	-.319	0	%100
73	M54	X	0	0	0	%100
74	M54	Z	-.319	-.319	0	%100
75	MP4A	X	0	0	0	%100
76	MP4A	Z	-.56	-.56	0	%100
77	MP2A	X	0	0	0	%100
78	MP2A	Z	-.678	-.678	0	%100
79	M65	X	0	0	0	%100
80	M65	Z	-.007	-.007	0	%100

Member Distributed Loads (BLC 66 : Structure Wm (30 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M3	X	.265	.265	0	%100
2	M3	Z	-.46	-.46	0	%100
3	M5	X	.003	.003	0	%100
4	M5	Z	-.005	-.005	0	%100
5	M6	X	.041	.041	0	%100
6	M6	Z	-.071	-.071	0	%100
7	M7	X	.254	.254	0	%100
8	M7	Z	-.441	-.441	0	%100
9	M8	X	.003	.003	0	%100
10	M8	Z	-.005	-.005	0	%100
11	M9	X	.041	.041	0	%100
12	M9	Z	-.071	-.071	0	%100
13	M10	X	.254	.254	0	%100
14	M10	Z	-.441	-.441	0	%100
15	M11	X	.017	.017	0	%100
16	M11	Z	-.03	-.03	0	%100
17	M12	X	.26	.26	0	%100
18	M12	Z	-.45	-.45	0	%100
19	M13	X	.017	.017	0	%100
20	M13	Z	-.03	-.03	0	%100
21	M14	X	.26	.26	0	%100
22	M14	Z	-.45	-.45	0	%100
23	M15	X	.123	.123	0	%100
24	M15	Z	-.214	-.214	0	%100
25	M17	X	.123	.123	0	%100
26	M17	Z	-.214	-.214	0	%100
27	M19	X	.131	.131	0	%100
28	M19	Z	-.226	-.226	0	%100
29	M20	X	.123	.123	0	%100
30	M20	Z	-.214	-.214	0	%100
31	M21	X	.123	.123	0	%100
32	M21	Z	-.214	-.214	0	%100
33	M22	X	.183	.183	0	%100



Member Distributed Loads (BLC 66 : Structure Wm (30 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
34	M22	Z	-.316	-.316	0	%100
35	M23	X	.183	.183	0	%100
36	M23	Z	-.316	-.316	0	%100
37	M24	X	.217	.217	0	%100
38	M24	Z	-.376	-.376	0	%100
39	M25	X	.131	.131	0	%100
40	M25	Z	-.226	-.226	0	%100
41	M26	X	.123	.123	0	%100
42	M26	Z	-.214	-.214	0	%100
43	M27	X	.129	.129	0	%100
44	M27	Z	-.224	-.224	0	%100
45	M28	X	.123	.123	0	%100
46	M28	Z	-.214	-.214	0	%100
47	M29	X	.129	.129	0	%100
48	M29	Z	-.224	-.224	0	%100
49	M30	X	.131	.131	0	%100
50	M30	Z	-.226	-.226	0	%100
51	M31	X	.123	.123	0	%100
52	M31	Z	-.214	-.214	0	%100
53	M32	X	.123	.123	0	%100
54	M32	Z	-.214	-.214	0	%100
55	M33	X	.183	.183	0	%100
56	M33	Z	-.316	-.316	0	%100
57	M34	X	.183	.183	0	%100
58	M34	Z	-.316	-.316	0	%100
59	M35	X	.217	.217	0	%100
60	M35	Z	-.376	-.376	0	%100
61	M36	X	.131	.131	0	%100
62	M36	Z	-.226	-.226	0	%100
63	MP5A	X	.28	.28	0	%100
64	MP5A	Z	-.485	-.485	0	%100
65	MP3A	X	.28	.28	0	%100
66	MP3A	Z	-.485	-.485	0	%100
67	MP1A	X	.28	.28	0	%100
68	MP1A	Z	-.485	-.485	0	%100
69	M52	X	.189	.189	0	%100
70	M52	Z	-.327	-.327	0	%100
71	M53	X	.191	.191	0	%100
72	M53	Z	-.33	-.33	0	%100
73	M54	X	.191	.191	0	%100
74	M54	Z	-.33	-.33	0	%100
75	MP4A	X	.28	.28	0	%100
76	MP4A	Z	-.485	-.485	0	%100
77	MP2A	X	.339	.339	0	%100
78	MP2A	Z	-.587	-.587	0	%100
79	M65	X	.098	.098	0	%100
80	M65	Z	-.17	-.17	0	%100

Member Distributed Loads (BLC 67 : Structure Wm (60 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M3	X	.153	.153	0	%100
2	M3	Z	-.088	-.088	0	%100
3	M5	X	.006	.006	0	%100
4	M5	Z	-.003	-.003	0	%100
5	M6	X	.072	.072	0	%100
6	M6	Z	-.041	-.041	0	%100



Company : Colliers Engineering & Design
 Designer : NL
 Job Number : Project No. 10206419
 Model Name : 5000384436-VZW_MT_LOT_SectorA_H

July 7, 2023
 8:43 AM
 Checked By: PMA

Member Distributed Loads (BLC 67 : Structure Wm (60 Deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
7	M7	X	.147	.147	0 %100
8	M7	Z	-.085	-.085	0 %100
9	M8	X	.006	.006	0 %100
10	M8	Z	-.003	-.003	0 %100
11	M9	X	.072	.072	0 %100
12	M9	Z	-.041	-.041	0 %100
13	M10	X	.147	.147	0 %100
14	M10	Z	-.085	-.085	0 %100
15	M11	X	.035	.035	0 %100
16	M11	Z	-.02	-.02	0 %100
17	M12	X	.455	.455	0 %100
18	M12	Z	-.263	-.263	0 %100
19	M13	X	.035	.035	0 %100
20	M13	Z	-.02	-.02	0 %100
21	M14	X	.455	.455	0 %100
22	M14	Z	-.263	-.263	0 %100
23	M15	X	.48	.48	0 %100
24	M15	Z	-.277	-.277	0 %100
25	M17	X	.48	.48	0 %100
26	M17	Z	-.277	-.277	0 %100
27	M19	X	.484	.484	0 %100
28	M19	Z	-.279	-.279	0 %100
29	M20	X	.48	.48	0 %100
30	M20	Z	-.277	-.277	0 %100
31	M21	X	.48	.48	0 %100
32	M21	Z	-.277	-.277	0 %100
33	M22	X	.316	.316	0 %100
34	M22	Z	-.183	-.183	0 %100
35	M23	X	.316	.316	0 %100
36	M23	Z	-.183	-.183	0 %100
37	M24	X	.376	.376	0 %100
38	M24	Z	-.217	-.217	0 %100
39	M25	X	.484	.484	0 %100
40	M25	Z	-.279	-.279	0 %100
41	M26	X	.48	.48	0 %100
42	M26	Z	-.277	-.277	0 %100
43	M27	X	.225	.225	0 %100
44	M27	Z	-.13	-.13	0 %100
45	M28	X	.48	.48	0 %100
46	M28	Z	-.277	-.277	0 %100
47	M29	X	.225	.225	0 %100
48	M29	Z	-.13	-.13	0 %100
49	M30	X	.484	.484	0 %100
50	M30	Z	-.279	-.279	0 %100
51	M31	X	.48	.48	0 %100
52	M31	Z	-.277	-.277	0 %100
53	M32	X	.48	.48	0 %100
54	M32	Z	-.277	-.277	0 %100
55	M33	X	.316	.316	0 %100
56	M33	Z	-.183	-.183	0 %100
57	M34	X	.316	.316	0 %100
58	M34	Z	-.183	-.183	0 %100
59	M35	X	.376	.376	0 %100
60	M35	Z	-.217	-.217	0 %100
61	M36	X	.484	.484	0 %100
62	M36	Z	-.279	-.279	0 %100
63	MP5A	X	.485	.485	0 %100



Member Distributed Loads (BLC 67 : Structure Wm (60 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
64	MP5A	Z	-28	-28	0	%100
65	MP3A	X	.485	.485	0	%100
66	MP3A	Z	-28	-28	0	%100
67	MP1A	X	.485	.485	0	%100
68	MP1A	Z	-28	-28	0	%100
69	M52	X	.482	.482	0	%100
70	M52	Z	-.278	-.278	0	%100
71	M53	X	.332	.332	0	%100
72	M53	Z	-.191	-.191	0	%100
73	M54	X	.332	.332	0	%100
74	M54	Z	-.191	-.191	0	%100
75	MP4A	X	.485	.485	0	%100
76	MP4A	Z	-28	-28	0	%100
77	MP2A	X	.587	.587	0	%100
78	MP2A	Z	-.339	-.339	0	%100
79	M65	X	.407	.407	0	%100
80	M65	Z	-.235	-.235	0	%100

Member Distributed Loads (BLC 68 : Structure Wm (90 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M3	X	0	0	0	%100
2	M3	Z	0	0	0	%100
3	M5	X	.045	.045	0	%100
4	M5	Z	0	0	0	%100
5	M6	X	.045	.045	0	%100
6	M6	Z	0	0	0	%100
7	M7	X	0	0	0	%100
8	M7	Z	0	0	0	%100
9	M8	X	.045	.045	0	%100
10	M8	Z	0	0	0	%100
11	M9	X	.045	.045	0	%100
12	M9	Z	0	0	0	%100
13	M10	X	0	0	0	%100
14	M10	Z	0	0	0	%100
15	M11	X	.286	.286	0	%100
16	M11	Z	0	0	0	%100
17	M12	X	.286	.286	0	%100
18	M12	Z	0	0	0	%100
19	M13	X	.286	.286	0	%100
20	M13	Z	0	0	0	%100
21	M14	X	.286	.286	0	%100
22	M14	Z	0	0	0	%100
23	M15	X	.708	.708	0	%100
24	M15	Z	0	0	0	%100
25	M17	X	.708	.708	0	%100
26	M17	Z	0	0	0	%100
27	M19	X	.708	.708	0	%100
28	M19	Z	0	0	0	%100
29	M20	X	.708	.708	0	%100
30	M20	Z	0	0	0	%100
31	M21	X	.708	.708	0	%100
32	M21	Z	0	0	0	%100
33	M22	X	.365	.365	0	%100
34	M22	Z	0	0	0	%100
35	M23	X	.365	.365	0	%100
36	M23	Z	0	0	0	%100



Member Distributed Loads (BLC 68 : Structure Wm (90 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
37	M24	X	.434	.434	0	%100
38	M24	Z	0	0	0	%100
39	M25	X	.708	.708	0	%100
40	M25	Z	0	0	0	%100
41	M26	X	.708	.708	0	%100
42	M26	Z	0	0	0	%100
43	M27	X	.322	.322	0	%100
44	M27	Z	0	0	0	%100
45	M28	X	.708	.708	0	%100
46	M28	Z	0	0	0	%100
47	M29	X	.322	.322	0	%100
48	M29	Z	0	0	0	%100
49	M30	X	.708	.708	0	%100
50	M30	Z	0	0	0	%100
51	M31	X	.708	.708	0	%100
52	M31	Z	0	0	0	%100
53	M32	X	.708	.708	0	%100
54	M32	Z	0	0	0	%100
55	M33	X	.365	.365	0	%100
56	M33	Z	0	0	0	%100
57	M34	X	.365	.365	0	%100
58	M34	Z	0	0	0	%100
59	M35	X	.434	.434	0	%100
60	M35	Z	0	0	0	%100
61	M36	X	.708	.708	0	%100
62	M36	Z	0	0	0	%100
63	MP5A	X	.56	.56	0	%100
64	MP5A	Z	0	0	0	%100
65	MP3A	X	.56	.56	0	%100
66	MP3A	Z	0	0	0	%100
67	MP1A	X	.56	.56	0	%100
68	MP1A	Z	0	0	0	%100
69	M52	X	.459	.459	0	%100
70	M52	Z	0	0	0	%100
71	M53	X	.322	.322	0	%100
72	M53	Z	0	0	0	%100
73	M54	X	.322	.322	0	%100
74	M54	Z	0	0	0	%100
75	MP4A	X	.56	.56	0	%100
76	MP4A	Z	0	0	0	%100
77	MP2A	X	.678	.678	0	%100
78	MP2A	Z	0	0	0	%100
79	M65	X	.554	.554	0	%100
80	M65	Z	0	0	0	%100

Member Distributed Loads (BLC 69 : Structure Wm (120 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M3	X	.153	.153	0	%100
2	M3	Z	.088	.088	0	%100
3	M5	X	.072	.072	0	%100
4	M5	Z	.041	.041	0	%100
5	M6	X	.006	.006	0	%100
6	M6	Z	.003	.003	0	%100
7	M7	X	.147	.147	0	%100
8	M7	Z	.085	.085	0	%100
9	M8	X	.072	.072	0	%100



Member Distributed Loads (BLC 69 : Structure Wm (120 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
10	M8	Z	.041	.041	0	%100
11	M9	X	.006	.006	0	%100
12	M9	Z	.003	.003	0	%100
13	M10	X	.147	.147	0	%100
14	M10	Z	.085	.085	0	%100
15	M11	X	.455	.455	0	%100
16	M11	Z	.263	.263	0	%100
17	M12	X	.035	.035	0	%100
18	M12	Z	.02	.02	0	%100
19	M13	X	.455	.455	0	%100
20	M13	Z	.263	.263	0	%100
21	M14	X	.035	.035	0	%100
22	M14	Z	.02	.02	0	%100
23	M15	X	.48	.48	0	%100
24	M15	Z	.277	.277	0	%100
25	M17	X	.48	.48	0	%100
26	M17	Z	.277	.277	0	%100
27	M19	X	.484	.484	0	%100
28	M19	Z	.279	.279	0	%100
29	M20	X	.48	.48	0	%100
30	M20	Z	.277	.277	0	%100
31	M21	X	.48	.48	0	%100
32	M21	Z	.277	.277	0	%100
33	M22	X	.316	.316	0	%100
34	M22	Z	.183	.183	0	%100
35	M23	X	.316	.316	0	%100
36	M23	Z	.183	.183	0	%100
37	M24	X	.376	.376	0	%100
38	M24	Z	.217	.217	0	%100
39	M25	X	.484	.484	0	%100
40	M25	Z	.279	.279	0	%100
41	M26	X	.48	.48	0	%100
42	M26	Z	.277	.277	0	%100
43	M27	X	.332	.332	0	%100
44	M27	Z	.191	.191	0	%100
45	M28	X	.48	.48	0	%100
46	M28	Z	.277	.277	0	%100
47	M29	X	.332	.332	0	%100
48	M29	Z	.191	.191	0	%100
49	M30	X	.484	.484	0	%100
50	M30	Z	.279	.279	0	%100
51	M31	X	.48	.48	0	%100
52	M31	Z	.277	.277	0	%100
53	M32	X	.48	.48	0	%100
54	M32	Z	.277	.277	0	%100
55	M33	X	.316	.316	0	%100
56	M33	Z	.183	.183	0	%100
57	M34	X	.316	.316	0	%100
58	M34	Z	.183	.183	0	%100
59	M35	X	.376	.376	0	%100
60	M35	Z	.217	.217	0	%100
61	M36	X	.484	.484	0	%100
62	M36	Z	.279	.279	0	%100
63	MP5A	X	.485	.485	0	%100
64	MP5A	Z	.28	.28	0	%100
65	MP3A	X	.485	.485	0	%100
66	MP3A	Z	.28	.28	0	%100



Member Distributed Loads (BLC 69 : Structure Wm (120 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft.%]	End Location[ft.%]
67	MP1A	X	.485	.485	0	%100
68	MP1A	Z	.28	.28	0	%100
69	M52	X	.159	.159	0	%100
70	M52	Z	.092	.092	0	%100
71	M53	X	.225	.225	0	%100
72	M53	Z	.13	.13	0	%100
73	M54	X	.225	.225	0	%100
74	M54	Z	.13	.13	0	%100
75	MP4A	X	.485	.485	0	%100
76	MP4A	Z	.28	.28	0	%100
77	MP2A	X	.587	.587	0	%100
78	MP2A	Z	.339	.339	0	%100
79	M65	X	.315	.315	0	%100
80	M65	Z	.182	.182	0	%100

Member Distributed Loads (BLC 70 : Structure Wm (150 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft.%]	End Location[ft.%]
1	M3	X	.265	.265	0	%100
2	M3	Z	.46	.46	0	%100
3	M5	X	.041	.041	0	%100
4	M5	Z	.071	.071	0	%100
5	M6	X	.003	.003	0	%100
6	M6	Z	.005	.005	0	%100
7	M7	X	.254	.254	0	%100
8	M7	Z	.441	.441	0	%100
9	M8	X	.041	.041	0	%100
10	M8	Z	.071	.071	0	%100
11	M9	X	.003	.003	0	%100
12	M9	Z	.005	.005	0	%100
13	M10	X	.254	.254	0	%100
14	M10	Z	.441	.441	0	%100
15	M11	X	.26	.26	0	%100
16	M11	Z	.45	.45	0	%100
17	M12	X	.017	.017	0	%100
18	M12	Z	.03	.03	0	%100
19	M13	X	.26	.26	0	%100
20	M13	Z	.45	.45	0	%100
21	M14	X	.017	.017	0	%100
22	M14	Z	.03	.03	0	%100
23	M15	X	.123	.123	0	%100
24	M15	Z	.214	.214	0	%100
25	M17	X	.123	.123	0	%100
26	M17	Z	.214	.214	0	%100
27	M19	X	.131	.131	0	%100
28	M19	Z	.226	.226	0	%100
29	M20	X	.123	.123	0	%100
30	M20	Z	.214	.214	0	%100
31	M21	X	.123	.123	0	%100
32	M21	Z	.214	.214	0	%100
33	M22	X	.183	.183	0	%100
34	M22	Z	.316	.316	0	%100
35	M23	X	.183	.183	0	%100
36	M23	Z	.316	.316	0	%100
37	M24	X	.217	.217	0	%100
38	M24	Z	.376	.376	0	%100
39	M25	X	.131	.131	0	%100



Member Distributed Loads (BLC 70 : Structure Wm (150 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
40	M25	Z	.226	.226	0	%100
41	M26	X	.123	.123	0	%100
42	M26	Z	.214	.214	0	%100
43	M27	X	.191	.191	0	%100
44	M27	Z	.33	.33	0	%100
45	M28	X	.123	.123	0	%100
46	M28	Z	.214	.214	0	%100
47	M29	X	.191	.191	0	%100
48	M29	Z	.33	.33	0	%100
49	M30	X	.131	.131	0	%100
50	M30	Z	.226	.226	0	%100
51	M31	X	.123	.123	0	%100
52	M31	Z	.214	.214	0	%100
53	M32	X	.123	.123	0	%100
54	M32	Z	.214	.214	0	%100
55	M33	X	.183	.183	0	%100
56	M33	Z	.316	.316	0	%100
57	M34	X	.183	.183	0	%100
58	M34	Z	.316	.316	0	%100
59	M35	X	.217	.217	0	%100
60	M35	Z	.376	.376	0	%100
61	M36	X	.131	.131	0	%100
62	M36	Z	.226	.226	0	%100
63	MP5A	X	.28	.28	0	%100
64	MP5A	Z	.485	.485	0	%100
65	MP3A	X	.28	.28	0	%100
66	MP3A	Z	.485	.485	0	%100
67	MP1A	X	.28	.28	0	%100
68	MP1A	Z	.485	.485	0	%100
69	M52	X	.002	.002	0	%100
70	M52	Z	.004	.004	0	%100
71	M53	X	.129	.129	0	%100
72	M53	Z	.224	.224	0	%100
73	M54	X	.129	.129	0	%100
74	M54	Z	.224	.224	0	%100
75	MP4A	X	.28	.28	0	%100
76	MP4A	Z	.485	.485	0	%100
77	MP2A	X	.339	.339	0	%100
78	MP2A	Z	.587	.587	0	%100
79	M65	X	.045	.045	0	%100
80	M65	Z	.078	.078	0	%100

Member Distributed Loads (BLC 71 : Structure Wm (180 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M3	X	0	0	0	%100
2	M3	Z	.708	.708	0	%100
3	M5	X	0	0	0	%100
4	M5	Z	.043	.043	0	%100
5	M6	X	0	0	0	%100
6	M6	Z	.043	.043	0	%100
7	M7	X	0	0	0	%100
8	M7	Z	.678	.678	0	%100
9	M8	X	0	0	0	%100
10	M8	Z	.043	.043	0	%100
11	M9	X	0	0	0	%100
12	M9	Z	.043	.043	0	%100



Member Distributed Loads (BLC 71 : Structure Wm (180 Deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]	
13	M10	X	0	0	0	%100
14	M10	Z	.678	.678	0	%100
15	M11	X	0	0	0	%100
16	M11	Z	.275	.275	0	%100
17	M12	X	0	0	0	%100
18	M12	Z	.275	.275	0	%100
19	M13	X	0	0	0	%100
20	M13	Z	.275	.275	0	%100
21	M14	X	0	0	0	%100
22	M14	Z	.275	.275	0	%100
23	M15	X	0	0	0	%100
24	M15	Z	.093	.093	0	%100
25	M17	X	0	0	0	%100
26	M17	Z	.093	.093	0	%100
27	M19	X	0	0	0	%100
28	M19	Z	.112	.112	0	%100
29	M20	X	0	0	0	%100
30	M20	Z	.093	.093	0	%100
31	M21	X	0	0	0	%100
32	M21	Z	.093	.093	0	%100
33	M22	X	0	0	0	%100
34	M22	Z	.365	.365	0	%100
35	M23	X	0	0	0	%100
36	M23	Z	.365	.365	0	%100
37	M24	X	0	0	0	%100
38	M24	Z	.434	.434	0	%100
39	M25	X	0	0	0	%100
40	M25	Z	.112	.112	0	%100
41	M26	X	0	0	0	%100
42	M26	Z	.093	.093	0	%100
43	M27	X	0	0	0	%100
44	M27	Z	.319	.319	0	%100
45	M28	X	0	0	0	%100
46	M28	Z	.093	.093	0	%100
47	M29	X	0	0	0	%100
48	M29	Z	.319	.319	0	%100
49	M30	X	0	0	0	%100
50	M30	Z	.112	.112	0	%100
51	M31	X	0	0	0	%100
52	M31	Z	.093	.093	0	%100
53	M32	X	0	0	0	%100
54	M32	Z	.093	.093	0	%100
55	M33	X	0	0	0	%100
56	M33	Z	.365	.365	0	%100
57	M34	X	0	0	0	%100
58	M34	Z	.365	.365	0	%100
59	M35	X	0	0	0	%100
60	M35	Z	.434	.434	0	%100
61	M36	X	0	0	0	%100
62	M36	Z	.112	.112	0	%100
63	MP5A	X	0	0	0	%100
64	MP5A	Z	.56	.56	0	%100
65	MP3A	X	0	0	0	%100
66	MP3A	Z	.56	.56	0	%100
67	MP1A	X	0	0	0	%100
68	MP1A	Z	.56	.56	0	%100
69	M52	X	0	0	0	%100



Member Distributed Loads (BLC 71 : Structure Wm (180 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
70	M52	Z	.101	.101	0	%100
71	M53	X	0	0	0	%100
72	M53	Z	.319	.319	0	%100
73	M54	X	0	0	0	%100
74	M54	Z	.319	.319	0	%100
75	MP4A	X	0	0	0	%100
76	MP4A	Z	.56	.56	0	%100
77	MP2A	X	0	0	0	%100
78	MP2A	Z	.678	.678	0	%100
79	M65	X	0	0	0	%100
80	M65	Z	.007	.007	0	%100

Member Distributed Loads (BLC 72 : Structure Wm (210 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M3	X	-.265	-.265	0	%100
2	M3	Z	.46	.46	0	%100
3	M5	X	-.003	-.003	0	%100
4	M5	Z	.005	.005	0	%100
5	M6	X	-.041	-.041	0	%100
6	M6	Z	.071	.071	0	%100
7	M7	X	-.254	-.254	0	%100
8	M7	Z	.441	.441	0	%100
9	M8	X	-.003	-.003	0	%100
10	M8	Z	.005	.005	0	%100
11	M9	X	-.041	-.041	0	%100
12	M9	Z	.071	.071	0	%100
13	M10	X	-.254	-.254	0	%100
14	M10	Z	.441	.441	0	%100
15	M11	X	-.017	-.017	0	%100
16	M11	Z	.03	.03	0	%100
17	M12	X	-.26	-.26	0	%100
18	M12	Z	.45	.45	0	%100
19	M13	X	-.017	-.017	0	%100
20	M13	Z	.03	.03	0	%100
21	M14	X	-.26	-.26	0	%100
22	M14	Z	.45	.45	0	%100
23	M15	X	-.123	-.123	0	%100
24	M15	Z	.214	.214	0	%100
25	M17	X	-.123	-.123	0	%100
26	M17	Z	.214	.214	0	%100
27	M19	X	-.131	-.131	0	%100
28	M19	Z	.226	.226	0	%100
29	M20	X	-.123	-.123	0	%100
30	M20	Z	.214	.214	0	%100
31	M21	X	-.123	-.123	0	%100
32	M21	Z	.214	.214	0	%100
33	M22	X	-.183	-.183	0	%100
34	M22	Z	.316	.316	0	%100
35	M23	X	-.183	-.183	0	%100
36	M23	Z	.316	.316	0	%100
37	M24	X	-.217	-.217	0	%100
38	M24	Z	.376	.376	0	%100
39	M25	X	-.131	-.131	0	%100
40	M25	Z	.226	.226	0	%100
41	M26	X	-.123	-.123	0	%100
42	M26	Z	.214	.214	0	%100



Member Distributed Loads (BLC 72 : Structure Wm (210 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
43	M27	X	-.129	-.129	0	%100
44	M27	Z	.224	.224	0	%100
45	M28	X	-.123	-.123	0	%100
46	M28	Z	.214	.214	0	%100
47	M29	X	-.129	-.129	0	%100
48	M29	Z	.224	.224	0	%100
49	M30	X	-.131	-.131	0	%100
50	M30	Z	.226	.226	0	%100
51	M31	X	-.123	-.123	0	%100
52	M31	Z	.214	.214	0	%100
53	M32	X	-.123	-.123	0	%100
54	M32	Z	.214	.214	0	%100
55	M33	X	-.183	-.183	0	%100
56	M33	Z	.316	.316	0	%100
57	M34	X	-.183	-.183	0	%100
58	M34	Z	.316	.316	0	%100
59	M35	X	-.217	-.217	0	%100
60	M35	Z	.376	.376	0	%100
61	M36	X	-.131	-.131	0	%100
62	M36	Z	.226	.226	0	%100
63	MP5A	X	-.28	-.28	0	%100
64	MP5A	Z	.485	.485	0	%100
65	MP3A	X	-.28	-.28	0	%100
66	MP3A	Z	.485	.485	0	%100
67	MP1A	X	-.28	-.28	0	%100
68	MP1A	Z	.485	.485	0	%100
69	M52	X	-.189	-.189	0	%100
70	M52	Z	.327	.327	0	%100
71	M53	X	-.191	-.191	0	%100
72	M53	Z	.33	.33	0	%100
73	M54	X	-.191	-.191	0	%100
74	M54	Z	.33	.33	0	%100
75	MP4A	X	-.28	-.28	0	%100
76	MP4A	Z	.485	.485	0	%100
77	MP2A	X	-.339	-.339	0	%100
78	MP2A	Z	.587	.587	0	%100
79	M65	X	-.098	-.098	0	%100
80	M65	Z	.17	.17	0	%100

Member Distributed Loads (BLC 73 : Structure Wm (240 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M3	X	-.153	-.153	0	%100
2	M3	Z	.088	.088	0	%100
3	M5	X	-.006	-.006	0	%100
4	M5	Z	.003	.003	0	%100
5	M6	X	-.072	-.072	0	%100
6	M6	Z	.041	.041	0	%100
7	M7	X	-.147	-.147	0	%100
8	M7	Z	.085	.085	0	%100
9	M8	X	-.006	-.006	0	%100
10	M8	Z	.003	.003	0	%100
11	M9	X	-.072	-.072	0	%100
12	M9	Z	.041	.041	0	%100
13	M10	X	-.147	-.147	0	%100
14	M10	Z	.085	.085	0	%100
15	M11	X	-.035	-.035	0	%100



Member Distributed Loads (BLC 73 : Structure Wm (240 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
16	M11	Z	.02	.02	0	%100
17	M12	X	-.455	-.455	0	%100
18	M12	Z	.263	.263	0	%100
19	M13	X	-.035	-.035	0	%100
20	M13	Z	.02	.02	0	%100
21	M14	X	-.455	-.455	0	%100
22	M14	Z	.263	.263	0	%100
23	M15	X	-.48	-.48	0	%100
24	M15	Z	.277	.277	0	%100
25	M17	X	-.48	-.48	0	%100
26	M17	Z	.277	.277	0	%100
27	M19	X	-.484	-.484	0	%100
28	M19	Z	.279	.279	0	%100
29	M20	X	-.48	-.48	0	%100
30	M20	Z	.277	.277	0	%100
31	M21	X	-.48	-.48	0	%100
32	M21	Z	.277	.277	0	%100
33	M22	X	-.316	-.316	0	%100
34	M22	Z	.183	.183	0	%100
35	M23	X	-.316	-.316	0	%100
36	M23	Z	.183	.183	0	%100
37	M24	X	-.376	-.376	0	%100
38	M24	Z	.217	.217	0	%100
39	M25	X	-.484	-.484	0	%100
40	M25	Z	.279	.279	0	%100
41	M26	X	-.48	-.48	0	%100
42	M26	Z	.277	.277	0	%100
43	M27	X	-.225	-.225	0	%100
44	M27	Z	.13	.13	0	%100
45	M28	X	-.48	-.48	0	%100
46	M28	Z	.277	.277	0	%100
47	M29	X	-.225	-.225	0	%100
48	M29	Z	.13	.13	0	%100
49	M30	X	-.484	-.484	0	%100
50	M30	Z	.279	.279	0	%100
51	M31	X	-.48	-.48	0	%100
52	M31	Z	.277	.277	0	%100
53	M32	X	-.48	-.48	0	%100
54	M32	Z	.277	.277	0	%100
55	M33	X	-.316	-.316	0	%100
56	M33	Z	.183	.183	0	%100
57	M34	X	-.316	-.316	0	%100
58	M34	Z	.183	.183	0	%100
59	M35	X	-.376	-.376	0	%100
60	M35	Z	.217	.217	0	%100
61	M36	X	-.484	-.484	0	%100
62	M36	Z	.279	.279	0	%100
63	MP5A	X	-.485	-.485	0	%100
64	MP5A	Z	.28	.28	0	%100
65	MP3A	X	-.485	-.485	0	%100
66	MP3A	Z	.28	.28	0	%100
67	MP1A	X	-.485	-.485	0	%100
68	MP1A	Z	.28	.28	0	%100
69	M52	X	-.482	-.482	0	%100
70	M52	Z	.278	.278	0	%100
71	M53	X	-.332	-.332	0	%100
72	M53	Z	.191	.191	0	%100



Member Distributed Loads (BLC 73 : Structure Wm (240 Deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
73	M54	X	-.332	-.332	0 %100
74	M54	Z	.191	.191	0 %100
75	MP4A	X	-.485	-.485	0 %100
76	MP4A	Z	.28	.28	0 %100
77	MP2A	X	-.587	-.587	0 %100
78	MP2A	Z	.339	.339	0 %100
79	M65	X	-.407	-.407	0 %100
80	M65	Z	.235	.235	0 %100

Member Distributed Loads (BLC 74 : Structure Wm (270 Deg))

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M3	X	0	0	0 %100
2	M3	Z	0	0	0 %100
3	M5	X	-.045	-.045	0 %100
4	M5	Z	0	0	0 %100
5	M6	X	-.045	-.045	0 %100
6	M6	Z	0	0	0 %100
7	M7	X	0	0	0 %100
8	M7	Z	0	0	0 %100
9	M8	X	-.045	-.045	0 %100
10	M8	Z	0	0	0 %100
11	M9	X	-.045	-.045	0 %100
12	M9	Z	0	0	0 %100
13	M10	X	0	0	0 %100
14	M10	Z	0	0	0 %100
15	M11	X	-.286	-.286	0 %100
16	M11	Z	0	0	0 %100
17	M12	X	-.286	-.286	0 %100
18	M12	Z	0	0	0 %100
19	M13	X	-.286	-.286	0 %100
20	M13	Z	0	0	0 %100
21	M14	X	-.286	-.286	0 %100
22	M14	Z	0	0	0 %100
23	M15	X	-.708	-.708	0 %100
24	M15	Z	0	0	0 %100
25	M17	X	-.708	-.708	0 %100
26	M17	Z	0	0	0 %100
27	M19	X	-.708	-.708	0 %100
28	M19	Z	0	0	0 %100
29	M20	X	-.708	-.708	0 %100
30	M20	Z	0	0	0 %100
31	M21	X	-.708	-.708	0 %100
32	M21	Z	0	0	0 %100
33	M22	X	-.365	-.365	0 %100
34	M22	Z	0	0	0 %100
35	M23	X	-.365	-.365	0 %100
36	M23	Z	0	0	0 %100
37	M24	X	-.434	-.434	0 %100
38	M24	Z	0	0	0 %100
39	M25	X	-.708	-.708	0 %100
40	M25	Z	0	0	0 %100
41	M26	X	-.708	-.708	0 %100
42	M26	Z	0	0	0 %100
43	M27	X	-.322	-.322	0 %100
44	M27	Z	0	0	0 %100
45	M28	X	-.708	-.708	0 %100



Member Distributed Loads (BLC 74 : Structure Wm (270 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
46	M28	Z	0	0	0	%100
47	M29	X	-.322	-.322	0	%100
48	M29	Z	0	0	0	%100
49	M30	X	-.708	-.708	0	%100
50	M30	Z	0	0	0	%100
51	M31	X	-.708	-.708	0	%100
52	M31	Z	0	0	0	%100
53	M32	X	-.708	-.708	0	%100
54	M32	Z	0	0	0	%100
55	M33	X	-.365	-.365	0	%100
56	M33	Z	0	0	0	%100
57	M34	X	-.365	-.365	0	%100
58	M34	Z	0	0	0	%100
59	M35	X	-.434	-.434	0	%100
60	M35	Z	0	0	0	%100
61	M36	X	-.708	-.708	0	%100
62	M36	Z	0	0	0	%100
63	MP5A	X	-.56	-.56	0	%100
64	MP5A	Z	0	0	0	%100
65	MP3A	X	-.56	-.56	0	%100
66	MP3A	Z	0	0	0	%100
67	MP1A	X	-.56	-.56	0	%100
68	MP1A	Z	0	0	0	%100
69	M52	X	-.459	-.459	0	%100
70	M52	Z	0	0	0	%100
71	M53	X	-.322	-.322	0	%100
72	M53	Z	0	0	0	%100
73	M54	X	-.322	-.322	0	%100
74	M54	Z	0	0	0	%100
75	MP4A	X	-.56	-.56	0	%100
76	MP4A	Z	0	0	0	%100
77	MP2A	X	-.678	-.678	0	%100
78	MP2A	Z	0	0	0	%100
79	M65	X	-.554	-.554	0	%100
80	M65	Z	0	0	0	%100

Member Distributed Loads (BLC 75 : Structure Wm (300 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M3	X	-.153	-.153	0	%100
2	M3	Z	-.088	-.088	0	%100
3	M5	X	-.072	-.072	0	%100
4	M5	Z	-.041	-.041	0	%100
5	M6	X	-.006	-.006	0	%100
6	M6	Z	-.003	-.003	0	%100
7	M7	X	-.147	-.147	0	%100
8	M7	Z	-.085	-.085	0	%100
9	M8	X	-.072	-.072	0	%100
10	M8	Z	-.041	-.041	0	%100
11	M9	X	-.006	-.006	0	%100
12	M9	Z	-.003	-.003	0	%100
13	M10	X	-.147	-.147	0	%100
14	M10	Z	-.085	-.085	0	%100
15	M11	X	-.455	-.455	0	%100
16	M11	Z	-.263	-.263	0	%100
17	M12	X	-.035	-.035	0	%100
18	M12	Z	-.02	-.02	0	%100



Company : Colliers Engineering & Design
 Designer : NL
 Job Number : Project No. 10206419
 Model Name : 5000384436-VZW_MT_LOT_SectorA_H

July 7, 2023
 8:43 AM
 Checked By: PMA

Member Distributed Loads (BLC 75 : Structure Wm (300 Deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
19	M13	X	-455	-455	0 %100
20	M13	Z	-263	-263	0 %100
21	M14	X	-035	-035	0 %100
22	M14	Z	-02	-02	0 %100
23	M15	X	-48	-48	0 %100
24	M15	Z	-277	-277	0 %100
25	M17	X	-48	-48	0 %100
26	M17	Z	-277	-277	0 %100
27	M19	X	-484	-484	0 %100
28	M19	Z	-279	-279	0 %100
29	M20	X	-48	-48	0 %100
30	M20	Z	-277	-277	0 %100
31	M21	X	-48	-48	0 %100
32	M21	Z	-277	-277	0 %100
33	M22	X	-316	-316	0 %100
34	M22	Z	-183	-183	0 %100
35	M23	X	-316	-316	0 %100
36	M23	Z	-183	-183	0 %100
37	M24	X	-376	-376	0 %100
38	M24	Z	-217	-217	0 %100
39	M25	X	-484	-484	0 %100
40	M25	Z	-279	-279	0 %100
41	M26	X	-48	-48	0 %100
42	M26	Z	-277	-277	0 %100
43	M27	X	-332	-332	0 %100
44	M27	Z	-191	-191	0 %100
45	M28	X	-48	-48	0 %100
46	M28	Z	-277	-277	0 %100
47	M29	X	-332	-332	0 %100
48	M29	Z	-191	-191	0 %100
49	M30	X	-484	-484	0 %100
50	M30	Z	-279	-279	0 %100
51	M31	X	-48	-48	0 %100
52	M31	Z	-277	-277	0 %100
53	M32	X	-48	-48	0 %100
54	M32	Z	-277	-277	0 %100
55	M33	X	-316	-316	0 %100
56	M33	Z	-183	-183	0 %100
57	M34	X	-316	-316	0 %100
58	M34	Z	-183	-183	0 %100
59	M35	X	-376	-376	0 %100
60	M35	Z	-217	-217	0 %100
61	M36	X	-484	-484	0 %100
62	M36	Z	-279	-279	0 %100
63	MP5A	X	-485	-485	0 %100
64	MP5A	Z	-28	-28	0 %100
65	MP3A	X	-485	-485	0 %100
66	MP3A	Z	-28	-28	0 %100
67	MP1A	X	-485	-485	0 %100
68	MP1A	Z	-28	-28	0 %100
69	M52	X	-159	-159	0 %100
70	M52	Z	-092	-092	0 %100
71	M53	X	-225	-225	0 %100
72	M53	Z	-13	-13	0 %100
73	M54	X	-225	-225	0 %100
74	M54	Z	-13	-13	0 %100
75	MP4A	X	-485	-485	0 %100



Member Distributed Loads (BLC 75 : Structure Wm (300 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
76	MP4A	Z	-28	-28	0	%100
77	MP2A	X	-587	-587	0	%100
78	MP2A	Z	-339	-339	0	%100
79	M65	X	-315	-315	0	%100
80	M65	Z	-182	-182	0	%100

Member Distributed Loads (BLC 76 : Structure Wm (330 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M3	X	-265	-265	0	%100
2	M3	Z	-46	-46	0	%100
3	M5	X	-041	-041	0	%100
4	M5	Z	-071	-071	0	%100
5	M6	X	-003	-003	0	%100
6	M6	Z	-005	-005	0	%100
7	M7	X	-254	-254	0	%100
8	M7	Z	-441	-441	0	%100
9	M8	X	-041	-041	0	%100
10	M8	Z	-071	-071	0	%100
11	M9	X	-003	-003	0	%100
12	M9	Z	-005	-005	0	%100
13	M10	X	-254	-254	0	%100
14	M10	Z	-441	-441	0	%100
15	M11	X	-26	-26	0	%100
16	M11	Z	-45	-45	0	%100
17	M12	X	-017	-017	0	%100
18	M12	Z	-03	-03	0	%100
19	M13	X	-26	-26	0	%100
20	M13	Z	-45	-45	0	%100
21	M14	X	-017	-017	0	%100
22	M14	Z	-03	-03	0	%100
23	M15	X	-123	-123	0	%100
24	M15	Z	-214	-214	0	%100
25	M17	X	-123	-123	0	%100
26	M17	Z	-214	-214	0	%100
27	M19	X	-131	-131	0	%100
28	M19	Z	-226	-226	0	%100
29	M20	X	-123	-123	0	%100
30	M20	Z	-214	-214	0	%100
31	M21	X	-123	-123	0	%100
32	M21	Z	-214	-214	0	%100
33	M22	X	-183	-183	0	%100
34	M22	Z	-316	-316	0	%100
35	M23	X	-183	-183	0	%100
36	M23	Z	-316	-316	0	%100
37	M24	X	-217	-217	0	%100
38	M24	Z	-376	-376	0	%100
39	M25	X	-131	-131	0	%100
40	M25	Z	-226	-226	0	%100
41	M26	X	-123	-123	0	%100
42	M26	Z	-214	-214	0	%100
43	M27	X	-191	-191	0	%100
44	M27	Z	-33	-33	0	%100
45	M28	X	-123	-123	0	%100
46	M28	Z	-214	-214	0	%100
47	M29	X	-191	-191	0	%100
48	M29	Z	-33	-33	0	%100



Member Distributed Loads (BLC 76 : Structure Wm (330 Deg)) (Continued)

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
49	M30	X	-131	-131	0 %100
50	M30	Z	-226	-226	0 %100
51	M31	X	-123	-123	0 %100
52	M31	Z	-214	-214	0 %100
53	M32	X	-123	-123	0 %100
54	M32	Z	-214	-214	0 %100
55	M33	X	-183	-183	0 %100
56	M33	Z	-316	-316	0 %100
57	M34	X	-183	-183	0 %100
58	M34	Z	-316	-316	0 %100
59	M35	X	-217	-217	0 %100
60	M35	Z	-376	-376	0 %100
61	M36	X	-131	-131	0 %100
62	M36	Z	-226	-226	0 %100
63	MP5A	X	-28	-28	0 %100
64	MP5A	Z	-485	-485	0 %100
65	MP3A	X	-28	-28	0 %100
66	MP3A	Z	-485	-485	0 %100
67	MP1A	X	-28	-28	0 %100
68	MP1A	Z	-485	-485	0 %100
69	M52	X	-002	-002	0 %100
70	M52	Z	-004	-004	0 %100
71	M53	X	-129	-129	0 %100
72	M53	Z	-224	-224	0 %100
73	M54	X	-129	-129	0 %100
74	M54	Z	-224	-224	0 %100
75	MP4A	X	-28	-28	0 %100
76	MP4A	Z	-485	-485	0 %100
77	MP2A	X	-339	-339	0 %100
78	MP2A	Z	-587	-587	0 %100
79	M65	X	-045	-045	0 %100
80	M65	Z	-078	-078	0 %100

Member Area Loads

Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[psf]
No Data to Print ...						

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

Member	Shape	Code Check	L...	LC	Shear C...	Loc.....	phi*P...	phi*P...	phi*M...	phi*M...	Egn		
1	M3	L4X3X6	.000	.2...	18	.000	.281	z 24	11113..	112050	3.731	9.809	... H2-1
2	M5	PL3/8X3	.623	0	33	.079	.25	y 3	34985..	36450	.284	2.279	... H1-1b
3	M6	PL3/8X3	.744	0	17	.070	0	y 3	34985..	36450	.284	2.279	... H1-1b
4	M7	PIPE_2.5	.161	3...	7	.053	11...	1	10110..	72450	5.138	5.138	... H1-1b
5	M8	PL3/8X3	.537	0	21	.053	0	z 50	34985..	36450	.284	2.279	... H1-1b
6	M9	PL3/8X3	.626	0	39	.101	0	y 3	34985..	36450	.284	2.279	... H1-1b
7	M10	PIPE_2.5	.137	3...	1	.077	11...	43	10110..	72450	5.138	5.138	... H1-1b
8	M11	PIPE_2.0	.144	4...	33	.070	5.3...	9	25094..	45900	2.674	2.674	... H1-1b
9	M12	PIPE_2.0	.173	4...	17	.058	0	15	25094..	45900	2.674	2.674	... H1-1b
10	M13	PIPE_2.0	.147	5...	26	.144	5.3...	3	25094..	45900	2.674	2.674	... H1-1b
11	M14	PIPE_2.0	.176	5...	14	.061	5.3...	43	25094..	45900	2.674	2.674	... H1-1b
12	M15	PL3/8X3	.036	0	2	.036	0	y 5	36078..	36450	.284	2.279	... H1-1b
13	M17	PL3/8X3	.039	.1...	39	.015	0	y 9	36078..	36450	.284	2.279	... H1-1...
14	M19	PL3/8X3	.018	3...	1	.029	0	y 3	33887..	36450	.284	2.279	... H1-1b
15	M20	PL3/8X3	.021	.1...	15	.036	.125	y 5	36078..	36450	.284	2.279	... H1-1...



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

Member	Shape	Code Check	L...	LC	Shear C...	Loc.....	phi*P...	phi*P...	phi*M...	phi*M.....	Egn				
16	M21	PL3/8X3	.039	.1...	39	.015	.125	y	9	36078...	36450	.284	2.279	...	H1-1...
17	M22	HSS1.50...	.086	2...	15	.020	0		4	8896....	12701...	.485	.485	...	H1-1...
18	M23	HSS1.50...	.158	2...	39	.010	0		9	8896....	12701...	.485	.485	...	H1-1...
19	M24	PIPE_2.0	.014	0	14	.003	2.5...		3	41092...	45900	2.674	2.674	...	H1-1...
20	M25	PL3/8X3	.026	.3...	1	.029	.333	y	3	33887...	36450	.284	2.279	...	H1-1b
21	M26	PL3/8X3	.023	0	30	.050	0	y	5	36078...	36450	.284	2.279	...	H1-1b
22	M27	HSS1.50...	.083	2...	24	.025	4.0...		5	6588....	12701...	.485	.485	...	H1-1b
23	M28	PL3/8X3	.041	0	9	.022	0	y	3	36078...	36450	.284	2.279	...	H1-1b
24	M29	HSS1.50...	.061	2...	24	.018	0		6	6588....	12701...	.485	.485	...	H1-1b
25	M30	PL3/8X3	.583	.3...	9	.067	0	y	11	33887...	36450	.284	2.279	...	H1-1b
26	M31	PL3/8X3	.028	.1...	11	.050	.125	y	5	36078...	36450	.284	2.279	...	H1-1b
27	M32	PL3/8X3	.085	.1...	11	.022	.125	y	3	36078...	36450	.284	2.279	...	H1-1b
28	M33	HSS1.50...	.074	2...	21	.026	2.9...		5	8896....	12701...	.485	.485	...	H1-1...
29	M34	HSS1.50...	.135	2...	33	.014	2.9...		3	8896....	12701...	.485	.485	...	H1-1...
30	M35	PIPE_2.0	.331	.5...	9	.081	0		9	41092...	45900	2.674	2.674	...	H1-1b
31	M36	PL3/8X3	.269	.3...	3	.038	.333	y	11	33887...	36450	.284	2.279	...	H1-1b
32	MP5A	PIPE_2.0	.193	4...	50	.035	1.1...		6	21614...	32130	1.872	1.872	...	H1-1b
33	MP3A	PIPE_2.0	.148	5...	3	.043	2.9...		3	21614...	32130	1.872	1.872	...	H1-1b
34	MP1A	PIPE_2.0	.143	6...	21	.049	6.9...		3	14916...	32130	1.872	1.872	...	H1-1b
35	M52	PIPE_2.0	.128	6...	3	.008	0		21	5997....	32130	1.872	1.872	...	H1-1b
36	M53	HSS1.50...	.098	2...	14	.014	4.0...		3	6588....	12701...	.485	.485	...	H1-1b
37	M54	HSS1.50...	.078	2...	14	.014	4.0...		9	6588....	12701...	.485	.485	...	H1-1b
38	MP4A	PIPE_2.0	.139	4...	9	.027	4.6...		9	21614...	32130	1.872	1.872	...	H1-1b
39	MP2A	PIPE_2.5	.139	2...	7	.081	5.9...		3	33961...	50715	3.596	3.596	...	H1-1b
40	M65	PIPE_2.0	.125	0	9	.006	0		22	11653...	32130	1.872	1.872	...	H1-1...

Envelope Joint Reactions

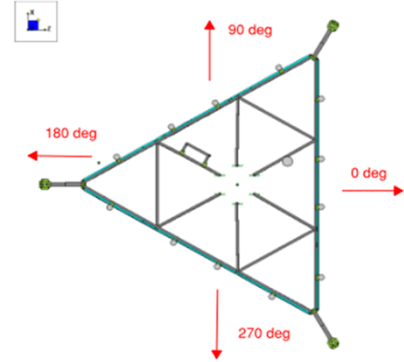
Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC	
1	N4	max	763.968	10	1403.983	20	261.013	1	-149	64	0	75	.099	39
2		min	-1265.5	4	433.376	66	-3272.304	19	-.48	14	0	1	-.052	33
3	N65	max	1115.276	45	1150.823	24	3201.958	14	-.124	66	0	75	.083	39
4		min	-585.905	27	360.778	67	21.474	8	-.402	21	0	1	-.046	50
5	N91	max	84.193	2	48.925	15	276.664	3	0	75	0	75	0	75
6		min	-80.062	8	15.141	72	-267.826	9	0	1	0	1	0	1
7	N92	max	194.618	10	36.699	15	1420.895	11	0	75	0	75	0	75
8		min	-195.672	4	9.863	11	-1413.979	3	0	1	0	1	0	1
9	Totals:	max	1729.029	10	2634.891	15	2469.928	1						
10		min	-1729.028	4	820.616	73	-2469.928	7						

I. Mount-to-Tower Connection Check

Custom Orientation Required

Yes

Nodes (labeled per Risa)	Orientation (per graphic of typical platform)
N4	0
N65	0



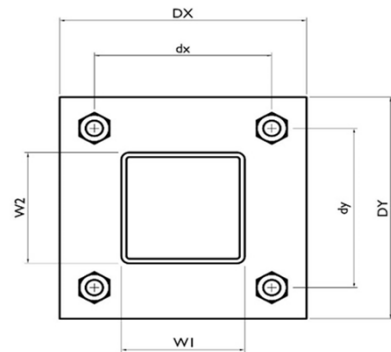
Tower Connection Bolt Checks

Yes

Bolt Orientation

Parallel

Bolt Quantity per Reaction:	4
d_x (in) (Delta X of typ. bolt config. sketch):	4
d_y (in) (Delta Y of typ. bolt config. sketch):	1.5
Bolt Type:	A36
Bolt Diameter (in):	0.5
Required Tensile Strength / bolt (kips):	2.7
Required Shear Strength / bolt (kips):	0.4
Tensile Capacity / bolt (kips):	6.4
Shear Capacity / bolt (kips):	3.8
Bolt Overall Utilization:	42.7%



Tower Connection Baseplate Checks

No

Date: **July 27, 2023**



Crown Castle
2000 Corporate Drive
Canonsburg, PA
(724) 416-2000

Subject: **Structural Analysis Report**

Carrier Designation: **Verizon Wireless Co-Locate**
Site Number: 5000384436
Site Name: MONROE CT

Crown Castle Designation: **BU Number:** 841294
Site Name: MONROE-GUINEA ROAD
JDE Job Number: 751345
Work Order Number: 2247270
Order Number: 654622 Rev. 0

Engineering Firm Designation: **Crown Castle Project Number:** 2247270

Site Data: **230 GUINEA ROAD, MONROE, FAIRFIELD County, CT**
Latitude 41° 20' 30.68", Longitude -73° 16' 28.28"
242.917 Foot - Self Support Tower

Crown Castle is pleased to submit this “**Structural Analysis Report**” to determine the structural integrity of the above-mentioned tower.

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

LC7: Proposed Equipment Configuration

Sufficient Capacity - 84.4%

This analysis utilizes an ultimate 3-second gust wind speed of 117 mph as required by the 2022 Connecticut State Building Code. Applicable Standard references and design criteria are listed in Section 2 - Analysis Criteria.

Structural analysis prepared by: Nicholas Palladino

Respectfully submitted by:

Maham Barimani, P.E.
Senior Project Engineer

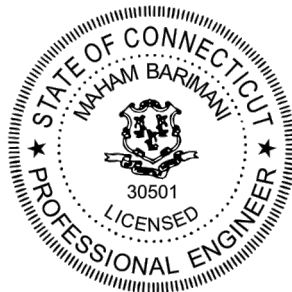


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1) INTRODUCTION

This tower is a 242.917 ft Self Support tower designed by ROHN. The tower has been modified to accommodate additional loading.

2) ANALYSIS CRITERIA

TIA-222 Revision:	TIA-222-H
Risk Category:	II
Wind Speed:	117 mph
Exposure Category:	B
Topographic Factor:	1
Ice Thickness:	1 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)
215.0	215.0	1	-	Mount Modifications	8	1-5/8
		1	tower mounts	Sector Mount [SM 505-3]		
	212.0	3	andrew	LNx-8514DS-A1M w/ Mount Pipe		
		6	jma wireless	MX06FRO660-03 w/ Mount Pipe		
		2	kaelus	BSF0020F3V1		
		2	raycap	RRFDC-3315-PF-48		
		3	samsung telecommunications	MT6407-77A w/ Mount Pipe		
		3	samsung telecommunications	RFV01U-D1A		
		3	samsung telecommunications	RFV01U-D2A		

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)
240.0	240.0	1	tower mounts	Side Arm Mount [SO 303-3]	1	1/2
	238.0	1	decibel	DB806-XC		
		1	kathrein	FMO		
236.0	236.0	3	cci antennas	DMP65R-BU6D w/ Mount Pipe	12 4 1	1-5/8 3/4 3/8
		3	cci antennas	HPA-65R-BUU-H6 w/ Mount Pipe		
		3	cci antennas	OPA65R-BU6D w/ Mount Pipe		
		3	ericsson	RADIO 4449 B5/B12		
		3	ericsson	RRUS 32 B2		
		3	ericsson	RRUS 4478 B14		
		3	powerwave technologies	7770.00 w/ Mount Pipe		

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
		6	powerwave technologies	LGP13519		
		2	raycap	DC6-48-60-18-8F		
		1	tower mounts	Sector Mount [SM 201-3]		
201.0	207.0	2	kathrein	OG-4	2	1-1/4
	201.0	2	tower mounts	Side Arm Mount [SO 306-1]		
186.0	188.0	1	andrew	DB589-A	1 2	1/2 7/8
	186.0	1	tower mounts	Side Arm Mount [SO 301-1]		
	184.0	1	andrew	DB589-A		
165.0	165.0	1	fujitsu	TA08025-B604	1	1-3/4
		1	fujitsu	TA08025-B605		
		3	jma wireless	MX08FRO665-21 w/ Mount Pipe		
		1	mounts	Commscope_MTC3975083_Sector_(3)		
		1	raycap	RDIDC-9181-PF-48		
12.0	12.0	1	scala	TY-840	1	1/2

3) ANALYSIS PROCEDURE

Table 3 - Documents Provided

Document	Reference	Source
4-TOWER MANUFACTURER DRAWINGS	4841385	CCISITES
4-TOWER FOUNDATION DRAWINGS/DESIGN/SPECS	4468667	CCISITES
4-GEOTECHNICAL REPORTS	4468666	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	4601540	CCISITES
4-POST-MODIFICATION INSPECTION	4601541	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	5306639	CCISITES
4-POST-MODIFICATION INSPECTION	5750961	CCISITES

3.1) Analysis Method

tnxTower (version 8.1.4.0), a commercially available analysis software package, was used to create a three-dimensional model of the tower and calculate member stresses for various loading cases. Selected output from the analysis is included in Appendix A. When applicable, Crown Castle has calculated and provided the effective area for panel antennas using approved methods following the intent of the TIA-222 standard.

3.2) Assumptions

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

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

4) ANALYSIS RESULTS

Table 4 - Section Capacity (Summary)

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P (K)	SF*P_allow (K)	% Capacity	Pass / Fail
T1	244.917 - 224.792	Leg	Pipe 2.875" x 0.203" (2.5 STD)	1	-12.45	66.58	18.7	Pass
T2	224.792 - 204.625	Leg	Pipe 3.5" x 0.300" (3 EH)	37	-35.17	115.74	30.4	Pass
T3	204.625 - 184.438	Leg	Pipe 4" x 0.318" (3.5 EH)	67	-58.38	131.32	44.5	Pass
T4	184.438 - 164.229	Leg	Pipe 4.5" x 0.337" (4 EH)	88	-81.83	167.14	49.0	Pass
T5	164.229 - 144.021	Leg	Pipe 5.563" x 0.375" (5 EH)	109	-105.85	250.61	42.2	Pass
T6	144.021 - 123.813	Leg	Pipe 5.563" x 0.375" (5 EH)	131	-127.21	209.91	60.6	Pass
T7	123.813 - 103.604	Leg	Pipe 6.625" x 0.432" (6 EH)	146	-150.36	317.44	47.4	Pass
T8	103.604 - 83.3333	Leg	Pipe 6.625" x 0.432" (6 EH)	161	-173.51	317.01	54.7	Pass
T9	83.3333 - 63	Leg	Pipe 6.625" x 0.432" (6 EH)	176	-196.96	316.57	62.2	Pass
T10	63 - 42.6667	Leg	Pipe 8.625" x 0.375" (8 EHS)	191	-224.18	404.12	55.5	Pass
T11	42.6667 - 22.3334	Leg	Pipe 8.625" x 0.375" (8 EHS)	206	-231.15	406.05	56.9	Pass
T12	22.3334 - 2	Leg	Pipe 8.75" x 0.500" (8 EH)	239	-251.91	541.51	46.5	Pass
T1	244.917 - 224.792	Diagonal	L 1.75 x 1.75 x 3/16	11	-2.43	11.77	20.7	Pass
T2	224.792 - 204.625	Diagonal	L 1.75 x 1.75 x 3/16	44	-3.47	6.64	52.2	Pass
T3	204.625 - 184.438	Diagonal	L 2.5 x 2.5 x 3/16	71	-4.35	12.21	35.6	Pass
T4	184.438 - 164.229	Diagonal	L 2.5 x 2.5 x 1/4	92	-5.02	12.04	41.7	Pass
T5	164.229 - 144.021	Diagonal	L 2.5 x 2.5 x 5/16	113	-5.58	11.51	48.5	Pass
T6	144.021 - 123.813	Diagonal	L 3 x 3 x 5/16	134	-6.61	13.72	48.2	Pass
T7	123.813 - 103.604	Diagonal	L 3.5 x 3.5 x 1/4	149	-7.21	15.14	47.6	Pass
T8	103.604 - 83.3333	Diagonal	L 3.5 x 3.5 x 1/4	164	-7.76	12.76	60.9	Pass
T9	83.3333 - 63	Diagonal	L 4 x 4 x 5/16	179	-8.45	19.99	42.3	Pass
T10	63 - 42.6667	Diagonal	L 4 x 4 x 5/16	194	-11.79	18.32	64.3	Pass
T11	42.6667 - 22.3334	Diagonal	Pipe 3.5" x 0.216" (3 STD)	212	-14.87	33.77	44.0	Pass
T12	22.3334 - 2	Diagonal	Pipe 3.5" x 0.216" (3 STD)	245	-13.80	31.82	43.4	Pass
T11	42.6667 - 22.3334	Horizontal	Pipe 2.875" x 0.203" (2.5 STD)	208	-8.19	16.78	48.8	Pass
T12	22.3334 - 2	Horizontal	Pipe 3.5" x 0.216" (3 STD)	241	-7.98	27.27	29.2	Pass
T1	244.917 - 224.792	Top Girt	L 2 x 2 x 1/8	4	-0.03	4.27	0.6	Pass
T2	224.792 - 204.625	Top Girt	L 2 x 2 x 1/8	42	-0.61	4.35	14.0	Pass
T11	42.6667 - 22.3334	Redund Horz 1 Bracing	Rohn 1.5" x 11 ga	213	-4.05	5.81	69.7	Pass

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P (K)	SF*P_allow (K)	% Capacity	Pass / Fail	
T12	22.3334 - 2	Redund Horz 1 Bracing	Pipe 1.9" x 0.145" (1.5 STD)	246	-4.39	11.84	37.1	Pass	
T11	42.6667 - 22.3334	Redund Diag 1 Bracing	Pipe 1.9" x 0.145" (1.5 STD)	218	-3.68	4.41	83.4	Pass	
T12	22.3334 - 2	Redund Diag 1 Bracing	Rohn 2.25" x 14 ga	251	-3.73	4.42	84.4	Pass	
T11	42.6667 - 22.3334	Redund Hip 1 Bracing	Rohn 1.5" x 11 ga	233	-0.03	5.17	0.5	Pass	
T12	22.3334 - 2	Redund Hip 1 Bracing	Pipe 1.9" x 0.145" (1.5 STD)	266	-0.02	10.62	0.2	Pass	
T11	42.6667 - 22.3334	Redund Hip Diagonal 1 Bracing	Pipe 2.875" x 0.203" (2.5 STD)	232	-0.07	11.11	0.6	Pass	
T12	22.3334 - 2	Redund Hip Diagonal 1 Bracing	Pipe 2.875" x 0.203" (2.5 STD)	265	-0.07	9.99	0.7	Pass	
T11	42.6667 - 22.3334	Inner Bracing	Pipe 2.375" x 0.154" (2 STD)	235	-0.01	6.89	0.4	Pass	
T12	22.3334 - 2	Inner Bracing	Pipe 3.5" x 0.216" (3 STD)	269	-0.01	25.86	0.3	Pass	
							Summary		
							Leg (T9)	62.2	Pass
							Diagonal (T10)	64.3	Pass
							Horizontal (T11)	48.8	Pass
							Top Girt (T2)	14.0	Pass
							Redund Horz 1 Bracing (T11)	69.7	Pass
							Redund Diag 1 Bracing (T12)	84.4	Pass
							Redund Hip 1 Bracing (T11)	0.5	Pass
							Redund Hip Diagonal 1 Bracing (T12)	0.7	Pass
							Inner Bracing (T11)	0.4	Pass
							Bolt Checks	66.2	Pass
							Rating =	84.4	Pass

Table 5 - Tower Component Stresses vs. Capacity - LC7

Notes	Component	Elevation (ft)	% Capacity	Pass / Fail
1	Anchor Rods	0	36.8	Pass
1	Base Foundation (Structure)	0	44.0	Pass
1	Base Foundation (Soil Interaction)	0	44.0	Pass

Structure Rating (max from all components) =	84.4%
---	--------------

Notes:

- 1) See additional documentation in "Appendix C – Additional Calculations" for calculations supporting the % capacity consumed.

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

244.9 ft

224.8 ft

204.6 ft

184.4 ft

164.2 ft

144.0 ft

123.8 ft

103.6 ft

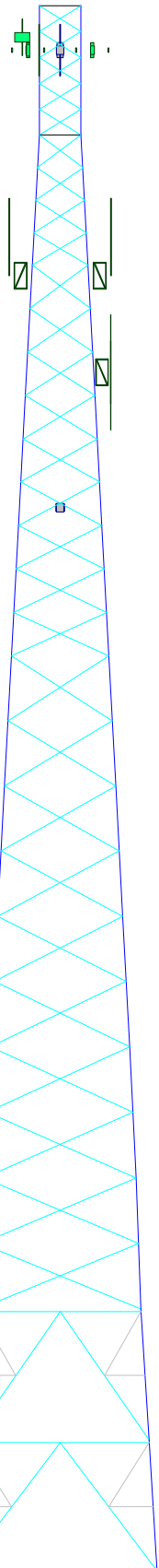
83.3 ft

63.0 ft

42.7 ft

22.3 ft

2.0 ft



SYMBOL LIST

MARK	SIZE	MARK	SIZE
A	Pipe 2.875" x 0.203" (2.5 STD)	E	Pipe 8.75" x 0.500" (8 EH)
B	Pipe 3.5" x 0.300" (3 EH)	F	Pipe 3.5" x 0.216" (3 STD)
C	Pipe 4" x 0.318" (3.5 EH)	G	Pipe 1.9" x 0.145" (1.5 STD)
D	Pipe 4.5" x 0.337" (4 EH)	H	Pipe 2.375" x 0.154" (2 STD)

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-50	50 ksi	65 ksi	A500-50	50 ksi	62 ksi
A36	36 ksi	58 ksi	A618-50	50 ksi	70 ksi

TOWER DESIGN NOTES

1. Tower is located in Fairfield County, Connecticut.
2. Tower designed for Exposure B to the TIA-222-H Standard.
3. Tower designed for a 117 mph basic wind in accordance with the TIA-222-H Standard.
4. Tower is also designed for a 50 mph basic wind with 1.00 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60 mph wind.
6. Tower Risk Category II.
7. Topographic Category 1 with Crest Height of 0.00 ft
8. TOWER RATING: 84.4%

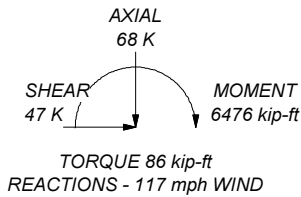
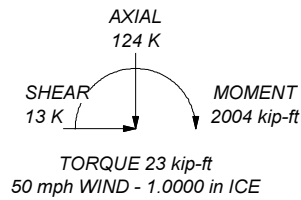
Section	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11	T12	
Legs		B	C	D		Pipe 5.563" x 0.375" (5 EH)		Pipe 6.625" x 0.432" (6 EH)		Pipe 8.625" x 0.375" (8 EHS)	Pipe 8.625" x 0.375" (8 EHS)	Pipe 8.625" x 0.375" (8 EHS)	
Leg Grade						A572-50						A500-50	
Diagonals						L 2.5 x 2.5 x 3/16	L 2.5 x 2.5 x 1/4	L 2.5 x 2.5 x 5/16	L 3.5 x 3.5 x 1/4	L 4 x 4 x 5/16	L 4 x 4 x 5/16	Pipe 3.5" x 0.216" (3 STD)	A618-50
Diagonal Grade						A36							
Top Girts						L 2 x 2 x 1/8							
Horizontals													
Red. Horizontals						N.A.							
Red. Diagonals						N.A.							
Red. Hips						N.A.							
Inner Bracing						N.A.							
Face Width (ft)	30.1771							19.4432	17.2864	23.7367	25.1771	27.6771	
# Panels @ (ft)	36.5							2 @ 10.1354	4 @ 10.1042	4 @ 10.1667	1 @ 19.9167	1 @ 19.9167	
Weight (K)								21.59	17.2864	23.7367	25.1771	27.6771	
								4.2	3.2	4.6	4.7	5.9	
								8.70928	10.8561	13.0028	15.1496	17.2864	
								3 @ 5.72917	6 @ 6.73611	6 @ 6.73611	6 @ 6.73611	6 @ 6.73611	
								1.4	1.9	2.7	2.7	3.3	
								1.1	1.1	2.7	3.2	4.2	
								5 @ 5.04167	4 @ 5.04167	4 @ 5.04167	4 @ 5.04167	4 @ 5.04167	
								0.9	0.9	0.9	0.9	0.9	
								6.5625	6.5625	6.5625	6.5625	6.5625	
								5 @ 4.025	5 @ 4.025	5 @ 4.025	5 @ 4.025	5 @ 4.025	

ALL REACTIONS ARE FACTORED

MAX. CORNER REACTIONS AT BASE:

DOWN: 270 K
SHEAR: 30 K

UPLIFT: -219 K
SHEAR: 25 K



Crown Castle			
2000 Corporate Drive			
Canonsburg, PA			
Phone: (724) 416-2000			
FAX:			
Job:	BU841294		
Project:			
Client:	Crown Castle, Inc	Drawn by:	NPalladino
Code:	TIA-222-H	Date:	07/27/23
Path:	C:\Users\inpalladino\SAPI Work Area\841294\WO 2247270 - SAIProd\841294_1s7.er		
App'd:		Scale:	NTS
Dwg No.:	E-1		

Tower Input Data

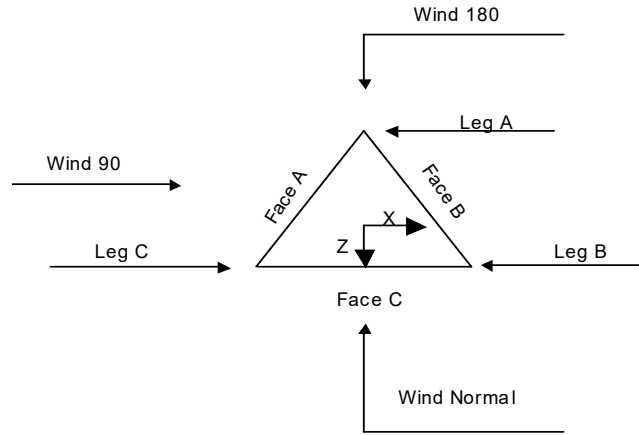
The main tower is a 3x free standing tower with an overall height of 244.92 ft above the ground line.
 The base of the tower is set at an elevation of 2.00 ft above the ground line.
 The face width of the tower is 6.56 ft at the top and 30.18 ft at the base.
 This tower is designed using the TIA-222-H standard.

The following design criteria apply:

- Tower is located in Fairfield County, Connecticut.
- Tower base elevation above sea level: 585.00 ft.
- Basic wind speed of 117 mph.
- Risk Category II.
- Exposure Category B.
- Simplified Topographic Factor Procedure for wind speed-up calculations is used.
- Topographic Category: 1.
- Crest Height: 0.00 ft.
- Nominal ice thickness of 1.0000 in.
- Ice thickness is considered to increase with height.
- Ice density of 56 pcf.
- A wind speed of 50 mph is used in combination with ice.
- Temperature drop of 50 °F.
- Deflections calculated using a wind speed of 60 mph.
- Pressures are calculated at each section.
- Stress ratio used in tower member design is 1.
- Tower analysis based on target reliabilities in accordance with Annex S.
- Load Modification Factors used: $K_{es}(F_w) = 0.95$, $K_{es}(t_i) = 0.85$.
- Maximum demand-capacity ratio is: 1.05.
- Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Options

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

Tower Section Geometry

Tower Section	Tower Elevation	Assembly Database	Description	Section Width	Number of Sections	Section Length
	ft			ft		ft
T1	244.92-224.79			6.56	1	20.13
T2	224.79-204.63			6.56	1	20.17
T3	204.63-184.44			8.71	1	20.19
T4	184.44-164.23			10.86	1	20.21
T5	164.23-144.02			13.00	1	20.21
T6	144.02-123.81			15.15	1	20.21
T7	123.81-103.60			17.30	1	20.21
T8	103.60-83.33			19.44	1	20.27
T9	83.33-63.00			21.59	1	20.33
T10	63.00-42.67			23.74	1	20.33
T11	42.67-22.33		K034	25.18	1	20.33
T12	22.33-2.00		L075	27.68	1	20.33

Tower Section Geometry (cont'd)

Tower Section	Tower Elevation	Diagonal Spacing	Bracing Type	Has K Brace End Panels	Has Horizontals	Top Girt Offset	Bottom Girt Offset
	ft	ft				in	in
T1	244.92-224.79	4.03	X Brace	No	No	0.0000	0.0000
T2	224.79-204.63	5.04	X Brace	No	No	0.0000	0.0000
T3	204.63-184.44	6.73	X Brace	No	No	0.0000	0.0000
T4	184.44-164.23	6.74	X Brace	No	No	0.0000	0.0000
T5	164.23-144.02	6.74	X Brace	No	No	0.0000	0.0000
T6	144.02-123.81	10.10	X Brace	No	No	0.0000	0.0000
T7	123.81-103.60	10.10	X Brace	No	No	0.0000	0.0000
T8	103.60-83.33	10.14	X Brace	No	No	0.0000	0.0000
T9	83.33-63.00	10.17	X Brace	No	No	0.0000	0.0000
T10	63.00-42.67	10.17	X Brace	No	No	0.0000	0.0000
T11	42.67-22.33	19.92	K1 Down	No	Yes	5.0000	0.0000

Tower Section	Tower Elevation	Diagonal Spacing	Bracing Type	Has K Brace End Panels	Has Horizontals	Top Girt Offset	Bottom Girt Offset
	ft	ft				in	in
T12	22.33-2.00	19.92	K1 Down	No	Yes	5.0000	0.0000

Tower Section Geometry (cont'd)

Tower Elevation ft	Leg Type	Leg Size	Leg Grade	Diagonal Type	Diagonal Size	Diagonal Grade
T1 244.92-224.79	Pipe	Pipe 2.875" x 0.203" (2.5 STD)	A572-50 (50 ksi)	Equal Angle	L 1.75 x 1.75 x 3/16	A36 (36 ksi)
T2 224.79-204.63	Pipe	Pipe 3.5" x 0.300" (3 EH)	A572-50 (50 ksi)	Equal Angle	L 1.75 x 1.75 x 3/16	A36 (36 ksi)
T3 204.63-184.44	Pipe	Pipe 4" x 0.318" (3.5 EH)	A572-50 (50 ksi)	Equal Angle	L 2.5 x 2.5 x 3/16	A36 (36 ksi)
T4 184.44-164.23	Pipe	Pipe 4.5" x 0.337" (4 EH)	A572-50 (50 ksi)	Equal Angle	L 2.5 x 2.5 x 1/4	A36 (36 ksi)
T5 164.23-144.02	Pipe	Pipe 5.563" x 0.375" (5 EH)	A572-50 (50 ksi)	Equal Angle	L 2.5 x 2.5 x 5/16	A36 (36 ksi)
T6 144.02-123.81	Pipe	Pipe 5.563" x 0.375" (5 EH)	A572-50 (50 ksi)	Equal Angle	L 3 x 3 x 5/16	A36 (36 ksi)
T7 123.81-103.60	Pipe	Pipe 6.625" x 0.432" (6 EH)	A572-50 (50 ksi)	Equal Angle	L 3.5 x 3.5 x 1/4	A572-50 (50 ksi)
T8 103.60-83.33	Pipe	Pipe 6.625" x 0.432" (6 EH)	A572-50 (50 ksi)	Equal Angle	L 3.5 x 3.5 x 1/4	A572-50 (50 ksi)
T9 83.33-63.00	Pipe	Pipe 6.625" x 0.432" (6 EH)	A572-50 (50 ksi)	Equal Angle	L 4 x 4 x 5/16	A572-50 (50 ksi)
T10 63.00-42.67	Pipe	Pipe 8.625" x 0.375" (8 EHS)	A572-50 (50 ksi)	Equal Angle	L 4 x 4 x 5/16	A572-50 (50 ksi)
T11 42.67-22.33	Pipe	Pipe 8.625" x 0.375" (8 EHS)	A500-50 (50 ksi)	Pipe	Pipe 3.5" x 0.216" (3 STD)	A618-50 (50 ksi)
T12 22.33-2.00	Pipe	Pipe 8.75" x 0.500" (8 EH)	A500-50 (50 ksi)	Pipe	Pipe 3.5" x 0.216" (3 STD)	A618-50 (50 ksi)

Tower Section Geometry (cont'd)

Tower Elevation ft	Top Girt Type	Top Girt Size	Top Girt Grade	Bottom Girt Type	Bottom Girt Size	Bottom Girt Grade
T1 244.92-224.79	Equal Angle	L 2 x 2 x 1/8	A36 (36 ksi)	Flat Bar		A36 (36 ksi)
T2 224.79-204.63	Equal Angle	L 2 x 2 x 1/8	A36 (36 ksi)	Equal Angle		A36 (36 ksi)

Tower Section Geometry (cont'd)

Tower Elevation ft	No. of Mid Girts	Mid Girt Type	Mid Girt Size	Mid Girt Grade	Horizontal Type	Horizontal Size	Horizontal Grade
T11 42.67-22.33	None	Pipe		A618-50 (50 ksi)	Pipe	Pipe 2.875" x 0.203" (2.5 STD)	A618-50 (50 ksi)
T12 22.33-2.00	None	Pipe		A618-50 (50 ksi)	Pipe	Pipe 3.5" x 0.216" (3 STD)	A618-50 (50 ksi)

Tower Section Geometry (cont'd)

Tower Elevation ft	Secondary Horizontal Type	Secondary Horizontal Size	Secondary Horizontal Grade	Inner Bracing Type	Inner Bracing Size	Inner Bracing Grade
T11 42.67-22.33	Pipe		A618-50 (50 ksi)	Pipe	Pipe 2.375" x 0.154" (2 STD)	A618-50 (50 ksi)
T12 22.33-2.00	Pipe		A618-50 (50 ksi)	Pipe	Pipe 3.5" x 0.216" (3 STD)	A618-50 (50 ksi)

Tower Section Geometry (cont'd)

Tower Elevation ft	Redundant Bracing Grade	Redundant Type	Redundant Size	K Factor
T11 42.67-22.33	A618-50 (50 ksi)	Horizontal (1)	Pipe Rohn 1.5" x 11 ga	1
		Diagonal (1)	Pipe 1.9" x 0.145" (1.5 STD)	1
		Hip (1)	Pipe 1.9" x 0.145" (1.5 STD)	1
		Hip Diagonal (1)	Pipe Rohn 1.5" x 11 ga Pipe 2.875" x 0.203" (2.5 STD)	1
T12 22.33-2.00	A618-50 (50 ksi)	Horizontal (1)	Pipe 1.9" x 0.145" (1.5 STD)	1
		Diagonal (1)	Pipe 1.9" x 0.145" (1.5 STD)	1
		Hip (1)	Pipe Rohn 2.25" x 14 ga	1
		Hip Diagonal (1)	Pipe 1.9" x 0.145" (1.5 STD) Pipe 2.875" x 0.203" (2.5 STD)	1

Tower Section Geometry (cont'd)

Tower Elevation ft	Gusset Area (per face) ft ²	Gusset Thickness in	Gusset Grade	Grade Adjust. Factor A _r	Adjust. Factor A _r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontal in	Double Angle Stitch Bolt Spacing Redundants in
T1 244.92-224.79	0.00	0.1875	A36 (36 ksi)	1.03	1	1	36.0000	36.0000	36.0000
T2 224.79-204.63	0.00	0.1875	A36 (36 ksi)	1.03	1	1	36.0000	36.0000	36.0000
T3 204.63-184.44	0.00	0.1875	A36 (36 ksi)	1.03	1	1	36.0000	36.0000	36.0000
T4 184.44-164.23	0.00	0.2500	A36 (36 ksi)	1.03	1	1	36.0000	36.0000	36.0000
T5 164.23-144.02	0.00	0.3125	A36 (36 ksi)	1.03	1	1	36.0000	36.0000	36.0000
T6 144.02-123.81	0.00	0.3125	A36 (36 ksi)	1.03	1	1	36.0000	36.0000	36.0000
T7 123.81-103.60	0.00	0.2500	A36 (36 ksi)	1.03	1	1	36.0000	36.0000	36.0000
T8 103.60-83.33	0.00	0.3125	A36 (36 ksi)	1.03	1	1	36.0000	36.0000	36.0000
T9 83.33-63.00	0.00	0.3125	A36 (36 ksi)	1.03	1	1	36.0000	36.0000	36.0000
T10 63.00-42.67	0.00	0.3125	A36 (36 ksi)	1.03	1	1	36.0000	36.0000	36.0000
T11 42.67-22.33	0.00	0.3750	A36 (36 ksi)	1	1.03	1.1	36.0000	36.0000	36.0000
T12 22.33-2.00	0.00	0.3750	A36 (36 ksi)	1	1.03	1.1	36.0000	36.0000	36.0000

Tower Section Geometry (cont'd)

Tower Elevation ft	Calc K Single Angles	Calc K Solid Rounds	Legs	K Factors ¹								
				X Brace Diags X Y	K Brace Diags X Y	Single Diags X Y	Girts X Y	Horiz. X Y	Sec. Horiz. X Y	Inner Brace X Y		
T1 244.92-224.79	Yes	Yes	1	1	1	1	1	1	1	1	1	1
T2 224.79-204.63	Yes	Yes	1	1	1	1	1	1	1	1	1	1
T3 204.63-184.44	Yes	Yes	1	1	1	1	1	1	1	1	1	1
T4 184.44-164.23	Yes	Yes	1	1	1	1	1	1	1	1	1	1
T5 164.23-144.02	Yes	Yes	1	1	1	1	1	1	1	1	1	1
T6 144.02-123.81	Yes	Yes	1	1	1	1	1	1	1	1	1	1
T7 123.81-103.60	Yes	Yes	1	1	1	1	1	1	1	1	1	1
T8 103.60-83.33	Yes	Yes	1	1	1	1	1	1	1	1	1	1
T9 83.33-63.00	Yes	Yes	1	1	1	1	1	1	1	1	1	1
T10 63.00-42.67	Yes	Yes	1	1	1	1	1	1	1	1	1	1
T11 42.67-22.33	No	No	1	1	1	1	1	1	1	1	1	1
T12 22.33-2.00	No	No	1	1	1	1	1	1	1	1	1	1

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

Tower Section Geometry (cont'd)

Tower Elevation ft	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U
T1 244.92-224.79	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T2 224.79-204.63	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T3 204.63-184.44	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T4 184.44-164.23	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T5 164.23-144.02	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T6 144.02-123.81	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T7 123.81-103.60	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T8 103.60-83.33	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T9 83.33-63.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T10 63.00-42.67	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75

Tower Elevation ft	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U
T11 42.67-22.33	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1
T12 22.33-2.00	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1

Tower Elevation ft	Redundant Horizontal		Redundant Diagonal		Redundant Sub-Diagonal		Redundant Sub-Horizontal		Redundant Vertical		Redundant Hip		Redundant Hip Diagonal	
	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U
T1 244.92-224.79	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T2 224.79-204.63	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T3 204.63-184.44	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T4 184.44-164.23	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T5 164.23-144.02	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T6 144.02-123.81	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T7 123.81-103.60	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T8 103.60-83.33	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T9 83.33-63.00	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T10 63.00-42.67	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T11 42.67-22.33	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T12 22.33-2.00	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75

Tower Section Geometry (cont'd)

Tower Elevation ft	Leg Connection Type	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
		Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.
T1 244.92-224.79	Flange	0.7500	4	0.5000	1	0.5000	1	0.6250	0	0.6250	0	0.6250	0	0.6250	0
		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T2 224.79-204.63	Flange	0.8750	4	0.5000	1	0.5000	1	0.6250	0	0.6250	0	0.6250	0	0.6250	0
		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T3 204.63-184.44	Flange	0.8750	4	0.5000	1	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0
		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T4 184.44-164.23	Flange	1.0000	4	0.5000	1	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0
		A325N		A325X		A325N		A325N		A325N		A325N		A325N	
T5 164.23-144.02	Flange	1.0000	4	0.5000	1	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0
		A325N		A325X		A325N		A325N		A325N		A325N		A325N	
T6 144.02-123.81	Flange	1.0000	6	0.6250	1	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0
		A325N		A325X		A325N		A325N		A325N		A325N		A325N	
T7 123.81-103.60	Flange	1.0000	6	0.6250	1	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0
		A325N		A325X		A325N		A325N		A325N		A325N		A325N	

Tower Elevation ft	Leg Connection Type	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
		Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.
T8 103.60-83.33	Flange	1.0000 A325N	6	0.7500 A325N	1	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0
T9 83.33-63.00	Flange	1.0000 A325N	8	0.7500 A325N	1	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0
T10 63.00-42.67	Flange	1.0000 A325N	8	0.7500 A325N	1	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0
T11 42.67-22.33	Flange	1.0000 A325X	8	0.7500 A325X	3	0.0000 A325X	0	0.0000 A325X	0	0.0000 A325X	0	0.7500 A325X	2	0.6250 A325X	1
T12 22.33-2.00	Flange	1.0000 A325X	0	0.7500 A325X	3	0.0000 A325X	0	0.0000 A325X	0	0.0000 A325X	0	0.7500 A325X	2	0.6250 A325X	1

Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	#	# Per Row	Clear Spacing in	Width or Diameter in	Perimeter in	Weight plf
1/4" x 2" Climb Ladder Rail	A	No	No	Af (CaAa)	202.00 - 10.00	9.0000	0.5	2	1	0.2500 12.000 0	0.2500		4.00
Safety Line 3/8	A	No	No	Ar (CaAa)	202.00 - 10.00	9.0000	0.5	1	1	0.3750	0.3750		0.22
5/8" ladder rung (18" long 12" oc)	A	No	No	Ar (CaAa)	202.00 - 10.00	9.0000	0.5	1	1	0.6250	0.6250		1.56
3/4" lighting conduit (1/2" EMT) ***	A	No	No	Ar (CaAa)	242.00 - 10.00	0.0000	0.48	1	1	0.7060	0.7060		0.30
1.5" flat Cable Ladder Rail	A	No	No	Af (CaAa)	238.00 - 10.00	0.0000	-0.4	2	2	24.000 0 1.5000	1.5000		1.80
LDF7-50A(1-5/8)	A	No	No	Ar (CaAa)	238.00 - 10.00	0.0000	-0.4	12	4	0.2700 0.5000	1.9800		0.82
FB-L98B-034-XXX(3/8)	A	No	No	Ar (CaAa)	238.00 - 10.00	0.0000	-0.35	1	1	0.3937	0.3937		0.06
WR-VG86ST-BRD (3/4")	A	No	No	Ar (CaAa)	238.00 - 10.00	0.0000	-0.35	4	1	0.7950	0.7740		0.88
AVA5-50(7/8)	A	No	No	Ar (CaAa)	188.00 - 10.00	0.0000	-0.44	2	1	1.0000	1.1020		0.30
LDF4-50A(1/2")	A	No	No	Ar (CaAa)	188.00 - 10.00	0.0000	-0.44	2	2	0.6300	0.6300		0.15
LDF4-50A(1/2") *	A	No	No	Ar (CaAa)	242.00 - 188.00	0.0000	-0.44	1	1	0.6300	0.6300		0.15
LDF6-50A(1-1/4) **	B	No	No	Ar (CaAa)	203.00 - 10.00	0.0000	0.49	2	2	1.0000	1.5500		0.60
1.5" flat Cable Ladder Rail	C	No	No	Af (CaAa)	217.00 - 10.00	0.0000	-0.4	2	2	30.000 0 1.5000	1.5000		1.80
HB158-1-08U8-S8F18 (1-5/8") **	A	No	No	Ar (CaAa)	217.00 - 10.00	0.0000	-0.45	8	8	1.0000	1.9800		1.70
LDF4-50A(1/2") ***	B	No	No	Ar (CaAa)	14.00 - 10.00	0.0000	0.45	1	1	0.6300	0.6300		0.15
CU12PSM6P 4XXX(1-3/4)	B	No	No	Ar (CaAa)	167.00 - 10.00	0.0000	-0.45	1	1	1.7500	1.7500		2.72

Feed Line/Linear Appurtenances Section Areas

Tower Sectio n	Tower Elevation ft	Face	A_R ft ²	A_F ft ²	C_{AA} In Face ft ²	C_{AA} Out Face ft ²	Weight K
T1	244.92-224.79	A	0.000	0.000	44.896	0.000	0.23
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	0.00
T2	224.79-204.63	A	0.000	0.000	87.333	0.000	0.52
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	6.188	0.000	0.04
T3	204.63-184.44	A	0.000	0.000	104.008	0.000	0.80
		B	0.000	0.000	5.754	0.000	0.02
		C	0.000	0.000	10.094	0.000	0.07
T4	184.44-164.23	A	0.000	0.000	109.313	0.000	0.84
		B	0.000	0.000	6.749	0.000	0.03
		C	0.000	0.000	10.104	0.000	0.07
T5	164.23-144.02	A	0.000	0.000	109.313	0.000	0.84
		B	0.000	0.000	9.801	0.000	0.08
		C	0.000	0.000	10.104	0.000	0.07
T6	144.02-123.81	A	0.000	0.000	109.313	0.000	0.84
		B	0.000	0.000	9.801	0.000	0.08
		C	0.000	0.000	10.104	0.000	0.07
T7	123.81-103.60	A	0.000	0.000	109.313	0.000	0.84
		B	0.000	0.000	9.801	0.000	0.08
		C	0.000	0.000	10.104	0.000	0.07
T8	103.60-83.33	A	0.000	0.000	109.651	0.000	0.84
		B	0.000	0.000	9.831	0.000	0.08
		C	0.000	0.000	10.135	0.000	0.07
T9	83.33-63.00	A	0.000	0.000	109.989	0.000	0.85
		B	0.000	0.000	9.862	0.000	0.08
		C	0.000	0.000	10.167	0.000	0.07
T10	63.00-42.67	A	0.000	0.000	109.989	0.000	0.85
		B	0.000	0.000	9.862	0.000	0.08
		C	0.000	0.000	10.167	0.000	0.07
T11	42.67-22.33	A	0.000	0.000	109.989	0.000	0.85
		B	0.000	0.000	9.862	0.000	0.08
		C	0.000	0.000	10.167	0.000	0.07
T12	22.33-2.00	A	0.000	0.000	66.715	0.000	0.51
		B	0.000	0.000	6.234	0.000	0.05
		C	0.000	0.000	6.167	0.000	0.04

Feed Line/Linear Appurtenances Section Areas - With Ice

Tower Sectio n	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft ²	A_F ft ²	C_{AA} In Face ft ²	C_{AA} Out Face ft ²	Weight K
T1	244.92-224.79	A	1.034	0.000	0.000	61.277	0.000	0.85
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	0.00
T2	224.79-204.63	A	1.025	0.000	0.000	128.907	0.000	1.77
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	11.262	0.000	0.14
T3	204.63-184.44	A	1.015	0.000	0.000	205.887	0.000	2.46
		B		0.000	0.000	16.471	0.000	0.13
		C		0.000	0.000	18.290	0.000	0.23
T4	184.44-164.23	A	1.004	0.000	0.000	230.815	0.000	2.62
		B		0.000	0.000	18.897	0.000	0.16
		C		0.000	0.000	18.219	0.000	0.23
T5	164.23-144.02	A	0.992	0.000	0.000	230.038	0.000	2.60
		B		0.000	0.000	25.315	0.000	0.26
		C		0.000	0.000	18.120	0.000	0.22
T6	144.02-123.81	A	0.978	0.000	0.000	229.163	0.000	2.57
		B		0.000	0.000	25.163	0.000	0.26

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A _R ft ²	A _F ft ²	C _A A _A In Face ft ²	C _A A _A Out Face ft ²	Weight K
T7	123.81-103.60	C		0.000	0.000	18.008	0.000	0.22
		A	0.962	0.000	0.000	228.161	0.000	2.54
		B		0.000	0.000	24.990	0.000	0.26
T8	103.60-83.33	C		0.000	0.000	17.880	0.000	0.22
		A	0.943	0.000	0.000	227.684	0.000	2.51
		B		0.000	0.000	24.862	0.000	0.25
T9	83.33-63.00	C		0.000	0.000	17.784	0.000	0.22
		A	0.920	0.000	0.000	226.936	0.000	2.48
		B		0.000	0.000	24.688	0.000	0.25
T10	63.00-42.67	C		0.000	0.000	17.653	0.000	0.21
		A	0.891	0.000	0.000	225.065	0.000	2.43
		B		0.000	0.000	24.363	0.000	0.24
T11	42.67-22.33	C		0.000	0.000	17.413	0.000	0.21
		A	0.849	0.000	0.000	222.385	0.000	2.35
		B		0.000	0.000	23.899	0.000	0.24
T12	22.33-2.00	C		0.000	0.000	17.069	0.000	0.20
		A	0.769	0.000	0.000	131.840	0.000	1.34
		B		0.000	0.000	14.800	0.000	0.14
		C		0.000	0.000	9.962	0.000	0.11

Feed Line Center of Pressure

Section	Elevation ft	CP _x in	CP _z in	CP _x Ice in	CP _z Ice in
T1	244.92-224.79	-8.5758	3.0903	-10.1792	2.6541
T2	224.79-204.63	-13.2969	7.8459	-14.2740	7.5678
T3	204.63-184.44	-13.1329	9.7592	-13.8389	5.1930
T4	184.44-164.23	-15.5953	11.2545	-16.7791	5.9199
T5	164.23-144.02	-16.5892	10.9903	-17.7198	4.9572
T6	144.02-123.81	-18.8707	12.6309	-20.1558	5.8908
T7	123.81-103.60	-18.8875	12.8966	-20.6395	6.2768
T8	103.60-83.33	-19.9972	13.8101	-21.9682	6.9033
T9	83.33-63.00	-19.7117	13.8418	-22.3571	7.2719
T10	63.00-42.67	-20.2397	14.2831	-22.6057	7.5418
T11	42.67-22.33	-31.0034	19.9874	-29.4690	9.6447
T12	22.33-2.00	-22.1911	14.7780	-21.9574	7.8801

Shielding Factor Ka

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
T1	4	3/4" lighting conduit (1/2" EMT)	224.79 - 242.00	0.6000	0.6000
T1	6	1.5" flat Cable Ladder Rail	224.79 - 238.00	0.6000	0.6000
T1	7	LDF7-50A(1-5/8)	224.79 - 238.00	0.6000	0.6000
T1	8	FB-L98B-034-XXX(3/8)	224.79 - 238.00	0.6000	0.6000
T1	9	WR-VG86ST-BRD (3/4")	224.79 - 238.00	0.6000	0.6000
T1	12	LDF4-50A(1/2")	224.79 - 242.00	0.6000	0.6000
T2	4	3/4" lighting conduit (1/2" EMT)	204.63 - 224.79	0.6000	0.6000
T2	6	1.5" flat Cable Ladder Rail	204.63 - 224.79	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
T2	7	LDF7-50A(1-5/8)	204.63 - 224.79	0.6000	0.6000
T2	8	FB-L98B-034-XXX(3/8)	204.63 - 224.79	0.6000	0.6000
T2	9	WR-VG86ST-BRD (3/4")	204.63 - 224.79	0.6000	0.6000
T2	12	LDF4-50A(1/2")	204.63 - 224.79	0.6000	0.6000
T2	16	1.5" flat Cable Ladder Rail	204.63 - 217.00	0.6000	0.6000
T2	19	HB158-1-08U8-S8F18 (1-5/8")	204.63 - 217.00	0.6000	0.6000
T3	1	1/4" x 2" Climb Ladder Rail	184.44 - 202.00	0.6000	0.6000
T3	2	Safety Line 3/8	184.44 - 202.00	0.6000	0.6000
T3	3	5/8" ladder rung (18" long 12" oc)	184.44 - 202.00	0.6000	0.6000
T3	4	3/4" lighting conduit (1/2" EMT)	184.44 - 204.63	0.6000	0.6000
T3	6	1.5" flat Cable Ladder Rail	184.44 - 204.63	0.6000	0.6000
T3	7	LDF7-50A(1-5/8)	184.44 - 204.63	0.6000	0.6000
T3	8	FB-L98B-034-XXX(3/8)	184.44 - 204.63	0.6000	0.6000
T3	9	WR-VG86ST-BRD (3/4")	184.44 - 204.63	0.6000	0.6000
T3	10	AVA5-50(7/8)	184.44 - 188.00	0.6000	0.6000
T3	11	LDF4-50A(1/2")	184.44 - 188.00	0.6000	0.6000
T3	12	LDF4-50A(1/2")	188.00 - 204.63	0.6000	0.6000
T3	14	LDF6-50A(1-1/4)	184.44 - 203.00	0.6000	0.6000
T3	16	1.5" flat Cable Ladder Rail	184.44 - 204.63	0.6000	0.6000
T3	19	HB158-1-08U8-S8F18 (1-5/8")	184.44 - 204.63	0.6000	0.6000
T4	1	1/4" x 2" Climb Ladder Rail	164.23 - 184.44	0.6000	0.6000
T4	2	Safety Line 3/8	164.23 - 184.44	0.6000	0.6000
T4	3	5/8" ladder rung (18" long 12" oc)	164.23 - 184.44	0.6000	0.6000
T4	4	3/4" lighting conduit (1/2" EMT)	164.23 - 184.44	0.6000	0.6000
T4	6	1.5" flat Cable Ladder Rail	164.23 - 184.44	0.6000	0.6000
T4	7	LDF7-50A(1-5/8)	164.23 - 184.44	0.6000	0.6000
T4	8	FB-L98B-034-XXX(3/8)	164.23 - 184.44	0.6000	0.6000
T4	9	WR-VG86ST-BRD (3/4")	164.23 - 184.44	0.6000	0.6000
T4	10	AVA5-50(7/8)	164.23 - 184.44	0.6000	0.6000
T4	11	LDF4-50A(1/2")	164.23 - 184.44	0.6000	0.6000
T4	14	LDF6-50A(1-1/4)	164.23 - 184.44	0.6000	0.6000
T4	16	1.5" flat Cable Ladder Rail	164.23 - 184.44	0.6000	0.6000
T4	19	HB158-1-08U8-S8F18 (1-5/8")	164.23 - 184.44	0.6000	0.6000
T4	23	CU12PSM6P4XXX(1-3/4)	164.23 - 167.00	0.6000	0.6000
T5	1	1/4" x 2" Climb Ladder Rail	144.02 -	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
T5	2	Safety Line 3/8	164.23 144.02 - 164.23	0.6000	0.6000
T5	3	5/8" ladder rung (18" long 12" oc)	144.02 - 164.23	0.6000	0.6000
T5	4	3/4" lighting conduit (1/2" EMT)	144.02 - 164.23	0.6000	0.6000
T5	6	1.5" flat Cable Ladder Rail	144.02 - 164.23	0.6000	0.6000
T5	7	LDF7-50A(1-5/8)	144.02 - 164.23	0.6000	0.6000
T5	8	FB-L98B-034-XXX(3/8)	144.02 - 164.23	0.6000	0.6000
T5	9	WR-VG86ST-BRD (3/4")	144.02 - 164.23	0.6000	0.6000
T5	10	AVA5-50(7/8)	144.02 - 164.23	0.6000	0.6000
T5	11	LDF4-50A(1/2")	144.02 - 164.23	0.6000	0.6000
T5	14	LDF6-50A(1-1/4)	144.02 - 164.23	0.6000	0.6000
T5	16	1.5" flat Cable Ladder Rail	144.02 - 164.23	0.6000	0.6000
T5	19	HB158-1-08U8-S8F18 (1- 5/8")	144.02 - 164.23	0.6000	0.6000
T5	23	CU12PSM6P4XXX(1-3/4)	144.02 - 164.23	0.6000	0.6000
T6	1	1/4" x 2" Climb Ladder Rail	123.81 - 144.02	0.6000	0.6000
T6	2	Safety Line 3/8	123.81 - 144.02	0.6000	0.6000
T6	3	5/8" ladder rung (18" long 12" oc)	123.81 - 144.02	0.6000	0.6000
T6	4	3/4" lighting conduit (1/2" EMT)	123.81 - 144.02	0.6000	0.6000
T6	6	1.5" flat Cable Ladder Rail	123.81 - 144.02	0.6000	0.6000
T6	7	LDF7-50A(1-5/8)	123.81 - 144.02	0.6000	0.6000
T6	8	FB-L98B-034-XXX(3/8)	123.81 - 144.02	0.6000	0.6000
T6	9	WR-VG86ST-BRD (3/4")	123.81 - 144.02	0.6000	0.6000
T6	10	AVA5-50(7/8)	123.81 - 144.02	0.6000	0.6000
T6	11	LDF4-50A(1/2")	123.81 - 144.02	0.6000	0.6000
T6	14	LDF6-50A(1-1/4)	123.81 - 144.02	0.6000	0.6000
T6	16	1.5" flat Cable Ladder Rail	123.81 - 144.02	0.6000	0.6000
T6	19	HB158-1-08U8-S8F18 (1- 5/8")	123.81 - 144.02	0.6000	0.6000
T6	23	CU12PSM6P4XXX(1-3/4)	123.81 - 144.02	0.6000	0.6000
T7	1	1/4" x 2" Climb Ladder Rail	103.60 - 123.81	0.6000	0.6000
T7	2	Safety Line 3/8	103.60 - 123.81	0.6000	0.6000
T7	3	5/8" ladder rung (18" long 12" oc)	103.60 - 123.81	0.6000	0.6000
T7	4	3/4" lighting conduit (1/2" EMT)	103.60 - 123.81	0.6000	0.6000
T7	6	1.5" flat Cable Ladder Rail	103.60 - 123.81	0.6000	0.6000
T7	7	LDF7-50A(1-5/8)	103.60 - 123.81	0.6000	0.6000
T7	8	FB-L98B-034-XXX(3/8)	103.60 - 123.81	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
T7	9	WR-VG86ST-BRD (3/4")	103.60 - 123.81	0.6000	0.6000
T7	10	AVA5-50(7/8)	103.60 - 123.81	0.6000	0.6000
T7	11	LDF4-50A(1/2")	103.60 - 123.81	0.6000	0.6000
T7	14	LDF6-50A(1-1/4)	103.60 - 123.81	0.6000	0.6000
T7	16	1.5" flat Cable Ladder Rail	103.60 - 123.81	0.6000	0.6000
T7	19	HB158-1-08U8-S8F18 (1-5/8")	103.60 - 123.81	0.6000	0.6000
T7	23	CU12PSM6P4XXX(1-3/4)	103.60 - 123.81	0.6000	0.6000
T8	1	1/4" x 2" Climb Ladder Rail	83.33 - 103.60	0.6000	0.6000
T8	2	Safety Line 3/8	83.33 - 103.60	0.6000	0.6000
T8	3	5/8" ladder rung (18" long 12" oc)	83.33 - 103.60	0.6000	0.6000
T8	4	3/4" lighting conduit (1/2" EMT)	83.33 - 103.60	0.6000	0.6000
T8	6	1.5" flat Cable Ladder Rail	83.33 - 103.60	0.6000	0.6000
T8	7	LDF7-50A(1-5/8)	83.33 - 103.60	0.6000	0.6000
T8	8	FB-L98B-034-XXX(3/8)	83.33 - 103.60	0.6000	0.6000
T8	9	WR-VG86ST-BRD (3/4")	83.33 - 103.60	0.6000	0.6000
T8	10	AVA5-50(7/8)	83.33 - 103.60	0.6000	0.6000
T8	11	LDF4-50A(1/2")	83.33 - 103.60	0.6000	0.6000
T8	14	LDF6-50A(1-1/4)	83.33 - 103.60	0.6000	0.6000
T8	16	1.5" flat Cable Ladder Rail	83.33 - 103.60	0.6000	0.6000
T8	19	HB158-1-08U8-S8F18 (1-5/8")	83.33 - 103.60	0.6000	0.6000
T8	23	CU12PSM6P4XXX(1-3/4)	83.33 - 103.60	0.6000	0.6000
T9	1	1/4" x 2" Climb Ladder Rail	63.00 - 83.33	0.6000	0.6000
T9	2	Safety Line 3/8	63.00 - 83.33	0.6000	0.6000
T9	3	5/8" ladder rung (18" long 12" oc)	63.00 - 83.33	0.6000	0.6000
T9	4	3/4" lighting conduit (1/2" EMT)	63.00 - 83.33	0.6000	0.6000
T9	6	1.5" flat Cable Ladder Rail	63.00 - 83.33	0.6000	0.6000
T9	7	LDF7-50A(1-5/8)	63.00 - 83.33	0.6000	0.6000
T9	8	FB-L98B-034-XXX(3/8)	63.00 - 83.33	0.6000	0.6000
T9	9	WR-VG86ST-BRD (3/4")	63.00 - 83.33	0.6000	0.6000
T9	10	AVA5-50(7/8)	63.00 - 83.33	0.6000	0.6000
T9	11	LDF4-50A(1/2")	63.00 - 83.33	0.6000	0.6000
T9	14	LDF6-50A(1-1/4)	63.00 - 83.33	0.6000	0.6000
T9	16	1.5" flat Cable Ladder Rail	63.00 - 83.33	0.6000	0.6000
T9	19	HB158-1-08U8-S8F18 (1-5/8")	63.00 - 83.33	0.6000	0.6000
T9	23	CU12PSM6P4XXX(1-3/4)	63.00 - 83.33	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
			83.33		
T10	1	1/4" x 2" Climb Ladder Rail	42.67 - 63.00	0.6000	0.6000
T10	2	Safety Line 3/8	42.67 - 63.00	0.6000	0.6000
T10	3	5/8" ladder rung (18" long 12" oc)	42.67 - 63.00	0.6000	0.6000
T10	4	3/4" lighting conduit (1/2" EMT)	42.67 - 63.00	0.6000	0.6000
T10	6	1.5" flat Cable Ladder Rail	42.67 - 63.00	0.6000	0.6000
T10	7	LDF7-50A(1-5/8)	42.67 - 63.00	0.6000	0.6000
T10	8	FB-L98B-034-XXX(3/8)	42.67 - 63.00	0.6000	0.6000
T10	9	WR-VG86ST-BRD (3/4")	42.67 - 63.00	0.6000	0.6000
T10	10	AVA5-50(7/8)	42.67 - 63.00	0.6000	0.6000
T10	11	LDF4-50A(1/2")	42.67 - 63.00	0.6000	0.6000
T10	14	LDF6-50A(1-1/4)	42.67 - 63.00	0.6000	0.6000
T10	16	1.5" flat Cable Ladder Rail	42.67 - 63.00	0.6000	0.6000
T10	19	HB158-1-08U8-S8F18 (1-5/8")	42.67 - 63.00	0.6000	0.6000
T10	23	CU12PSM6P4XXX(1-3/4)	42.67 - 63.00	0.6000	0.6000
T11	1	1/4" x 2" Climb Ladder Rail	22.33 - 42.67	0.6000	0.6000
T11	2	Safety Line 3/8	22.33 - 42.67	0.6000	0.6000
T11	3	5/8" ladder rung (18" long 12" oc)	22.33 - 42.67	0.6000	0.6000
T11	4	3/4" lighting conduit (1/2" EMT)	22.33 - 42.67	0.6000	0.6000
T11	6	1.5" flat Cable Ladder Rail	22.33 - 42.67	0.6000	0.6000
T11	7	LDF7-50A(1-5/8)	22.33 - 42.67	0.6000	0.6000
T11	8	FB-L98B-034-XXX(3/8)	22.33 - 42.67	0.6000	0.6000
T11	9	WR-VG86ST-BRD (3/4")	22.33 - 42.67	0.6000	0.6000
T11	10	AVA5-50(7/8)	22.33 - 42.67	0.6000	0.6000
T11	11	LDF4-50A(1/2")	22.33 - 42.67	0.6000	0.6000
T11	14	LDF6-50A(1-1/4)	22.33 - 42.67	0.6000	0.6000
T11	16	1.5" flat Cable Ladder Rail	22.33 - 42.67	0.6000	0.6000
T11	19	HB158-1-08U8-S8F18 (1-5/8")	22.33 - 42.67	0.6000	0.6000
T11	23	CU12PSM6P4XXX(1-3/4)	22.33 - 42.67	0.6000	0.6000
T12	1	1/4" x 2" Climb Ladder Rail	10.00 - 22.33	0.6000	0.6000
T12	2	Safety Line 3/8	10.00 - 22.33	0.6000	0.6000
T12	3	5/8" ladder rung (18" long 12" oc)	10.00 - 22.33	0.6000	0.6000
T12	4	3/4" lighting conduit (1/2" EMT)	10.00 - 22.33	0.6000	0.6000
T12	6	1.5" flat Cable Ladder Rail	10.00 - 22.33	0.6000	0.6000
T12	7	LDF7-50A(1-5/8)	10.00 - 22.33	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
T12	8	FB-L98B-034-XXX(3/8)	10.00 - 22.33	0.6000	0.6000
T12	9	WR-VG86ST-BRD (3/4")	10.00 - 22.33	0.6000	0.6000
T12	10	AVA5-50(7/8)	10.00 - 22.33	0.6000	0.6000
T12	11	LDF4-50A(1/2")	10.00 - 22.33	0.6000	0.6000
T12	14	LDF6-50A(1-1/4)	10.00 - 22.33	0.6000	0.6000
T12	16	1.5" flat Cable Ladder Rail	10.00 - 22.33	0.6000	0.6000
T12	19	HB158-1-08U8-S8F18 (1-5/8")	10.00 - 22.33	0.6000	0.6000
T12	21	LDF4-50A(1/2")	10.00 - 14.00	0.6000	0.6000
T12	23	CU12PSM6P4XXX(1-3/4)	10.00 - 22.33	0.6000	0.6000

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft
Strobe Light	A	From Leg	0.00 0.00 0.00	0.0000	245.00
5/8" x 4' Lightning Rod	C	From Leg	0.00 0.00 2.00	0.0000	245.00
Obstruction light	C	From Leg	0.50 0.00 0.00	0.0000	122.00
Obstruction light	C	From Leg	0.50 0.00 0.00	0.0000	122.00
Obstruction light	C	From Leg	0.50 0.00 0.00	0.0000	122.00
*					
Side Arm Mount [SO 303-3] DB806-XC	B C	None From Leg	3.00 0.00 -2.00	0.0000 0.0000	242.00 242.00
FMO	C	From Leg	3.00 0.00 -2.00	0.0000	242.00
*					
OPA65R-BU6D w/ Mount Pipe	A	From Leg	2.00 0.00 0.00	0.0000	238.00
OPA65R-BU6D w/ Mount Pipe	B	From Leg	2.00 0.00 0.00	0.0000	238.00
OPA65R-BU6D w/ Mount Pipe	C	From Leg	2.00 0.00 0.00	0.0000	238.00
7770.00 w/ Mount Pipe	A	From Leg	2.00	0.0000	238.00

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement
			Horz	Lateral		
			Vert	ft	°	ft
			0.00			
			0.00			
7770.00 w/ Mount Pipe	B	From Leg	2.00		0.0000	238.00
			0.00			
			0.00			
7770.00 w/ Mount Pipe	C	From Leg	2.00		0.0000	238.00
			0.00			
			0.00			
DMP65R-BU6D w/ Mount Pipe	A	From Leg	2.00		0.0000	238.00
			0.00			
			0.00			
DMP65R-BU6D w/ Mount Pipe	B	From Leg	2.00		0.0000	238.00
			0.00			
			0.00			
DMP65R-BU6D w/ Mount Pipe	C	From Leg	2.00		0.0000	238.00
			0.00			
			0.00			
HPA-65R-BUU-H6 w/ Mount Pipe	A	From Leg	2.00		0.0000	238.00
			0.00			
			0.00			
HPA-65R-BUU-H6 w/ Mount Pipe	C	From Leg	2.00		0.0000	238.00
			0.00			
			0.00			
HPA-65R-BUU-H6 w/ Mount Pipe	B	From Leg	2.00		0.0000	238.00
			0.00			
			0.00			
(2) LGP13519	A	From Leg	2.00		0.0000	238.00
			0.00			
			0.00			
(2) LGP13519	B	From Leg	2.00		0.0000	238.00
			0.00			
			0.00			
(2) LGP13519	C	From Leg	2.00		0.0000	238.00
			0.00			
			0.00			
RRUS 32 B2	A	From Leg	2.00		0.0000	238.00
			0.00			
			0.00			
RRUS 32 B2	B	From Leg	2.00		0.0000	238.00
			0.00			
			0.00			
RRUS 32 B2	C	From Leg	2.00		0.0000	238.00
			0.00			
			0.00			
RRUS 4478 B14	A	From Leg	2.00		0.0000	238.00
			0.00			
			0.00			
RRUS 4478 B14	B	From Leg	2.00		0.0000	238.00
			0.00			
			0.00			
RRUS 4478 B14	C	From Leg	2.00		0.0000	238.00
			0.00			
			0.00			
RADIO 4449 B5/B12	A	From Leg	2.00		0.0000	238.00
			0.00			
			0.00			
RADIO 4449 B5/B12	B	From Leg	2.00		0.0000	238.00
			0.00			
			0.00			
RADIO 4449 B5/B12	C	From Leg	2.00		0.0000	238.00
			0.00			
			0.00			
DC6-48-60-18-8F	A	From Leg	2.00		0.0000	238.00
			0.00			
			0.00			

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement
			Horz Lateral ft	Vert ft		
DC6-48-60-18-8F	C	From Leg	2.00	0.00	0.0000	238.00
			0.00	0.00		
Sector Mount [SM 201-3] 8' x 2" Mount Pipe	B	None			0.0000	238.00
	A	From Leg	0.00	0.00	0.0000	238.00
			0.00	0.00		
8' x 2" Mount Pipe	C	From Leg	0.00	0.00	0.0000	238.00
			0.00	0.00		
*						
Sector Mount [SM 505-3] LNX-8514DS-A1M w/ Mount Pipe	B	None			0.0000	217.00
	A	From Leg	4.00	0.00	0.0000	217.00
			0.00	-3.00		
LNX-8514DS-A1M w/ Mount Pipe	B	From Leg	4.00	0.00	0.0000	217.00
			0.00	-3.00		
LNX-8514DS-A1M w/ Mount Pipe	C	From Leg	4.00	0.00	0.0000	217.00
			0.00	-3.00		
(2) MX06FRO660-03 w/ Mount Pipe	A	From Leg	4.00	0.00	0.0000	217.00
			0.00	-3.00		
(2) MX06FRO660-03 w/ Mount Pipe	B	From Leg	4.00	0.00	0.0000	217.00
			0.00	-3.00		
(2) MX06FRO660-03 w/ Mount Pipe	C	From Leg	4.00	0.00	0.0000	217.00
			0.00	-3.00		
MT6407-77A w/ Mount Pipe	A	From Leg	4.00	0.00	0.0000	217.00
			0.00	-3.00		
MT6407-77A w/ Mount Pipe	B	From Leg	4.00	0.00	0.0000	217.00
			0.00	-3.00		
MT6407-77A w/ Mount Pipe	C	From Leg	4.00	0.00	0.0000	217.00
			0.00	-3.00		
RFV01U-D1A	A	From Leg	4.00	0.00	0.0000	217.00
			0.00	-3.00		
RFV01U-D1A	B	From Leg	4.00	0.00	0.0000	217.00
			0.00	-3.00		
RFV01U-D1A	C	From Leg	4.00	0.00	0.0000	217.00
			0.00	-3.00		
RFV01U-D2A	A	From Leg	4.00	0.00	0.0000	217.00
			0.00	-3.00		
RFV01U-D2A	B	From Leg	4.00	0.00	0.0000	217.00
			0.00	-3.00		
RFV01U-D2A	C	From Leg	4.00	0.00	0.0000	217.00
			0.00	-3.00		
*						
Side Arm Mount [SO 306-1]	B	From Leg	2.00	0.00	0.0000	203.00
			0.00	0.00		
Side Arm Mount [SO 306-1]	C	From Leg	2.00	0.00	0.0000	203.00
			0.00	0.00		
OG-4	B	From Leg	4.00	0.00	0.0000	203.00

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft
			0.00		
OG-4	C	From Leg	6.00 4.00	0.0000	203.00
*			0.00 6.00		
Side Arm Mount [SO 301-1]	B	From Leg	1.50	0.0000	188.00
			0.00 0.00		
DB589-A	B	From Leg	3.00	0.0000	188.00
			0.00 2.00		
DB589-A	B	From Leg	3.00	0.0000	188.00
			0.00 -2.00		
* MX08FRO665-21 w/ Mount Pipe	A	From Leg	4.00	0.0000	167.00
			0.00 0.00		
MX08FRO665-21 w/ Mount Pipe	B	From Leg	4.00	0.0000	167.00
			0.00 0.00		
MX08FRO665-21 w/ Mount Pipe	C	From Leg	4.00	0.0000	167.00
			0.00 0.00		
TA08025-B604	A	From Leg	4.00	0.0000	167.00
			0.00 0.00		
TA08025-B605	A	From Leg	4.00	0.0000	167.00
			0.00 0.00		
RDIDC-9181-PF-48	A	From Leg	4.00	0.0000	167.00
			0.00 0.00		
Commscope_MTC3975083_Sector_(3) ***	A	None		0.0000	167.00
TY-840	B	From Face	1.00	0.0000	14.00
			0.00 0.00		

Miscellaneous [NA 510-2]	C	None		0.0000	217.00
Miscellaneous [NA 507-3]	C	None		0.0000	217.00
BSF0020F3V1	A	From Leg	4.00	0.0000	217.00
			0.00 -3.00		
BSF0020F3V1	B	From Leg	4.00	0.0000	217.00
			0.00 -3.00		
RRFDC-3315-PF-48	A	From Leg	4.00	0.0000	217.00
			0.00 -3.00		
RRFDC-3315-PF-48	B	From Leg	4.00	0.0000	217.00
			0.00 -3.00		

Load Combinations

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

Sectio n No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
T1	244.917 - 224.792	Leg	Max Tension	23	9.20	0.06	0.04
			Max. Compression	18	-12.45	-0.01	0.01
			Max. Mx	8	-1.46	0.64	-0.00
			Max. My	14	-0.61	-0.04	0.63
			Max. Vy	20	-0.84	0.31	-0.00
			Max. Vx	14	0.85	0.00	-0.37
		Diagonal	Max Tension	17	2.34	0.00	0.00
			Max. Compression	2	-2.43	0.00	0.00
			Max. Mx	35	0.44	0.01	0.00
			Max. My	15	2.06	0.01	-0.00

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
T2	224.792 - 204.625	Top Girt	Max. Vy	35	-0.02	0.01	0.00
			Max. Vx	15	0.00	0.00	0.00
			Max Tension	10	0.03	0.00	0.00
			Max. Compression	15	-0.03	0.00	0.00
			Max. Mx	26	-0.00	-0.04	0.00
			Max. Vy	26	0.02	0.00	0.00
		Leg	Max Tension	23	26.94	0.12	0.01
			Max. Compression	18	-35.17	0.24	0.03
			Max. Mx	22	14.01	1.16	0.01
			Max. My	4	-1.70	-0.05	1.06
			Max. Vy	14	0.80	-0.64	-0.01
			Max. Vx	12	0.70	-0.04	-0.48
		Diagonal	Max Tension	9	3.69	0.00	0.00
			Max. Compression	8	-3.75	0.00	0.00
			Max. Mx	35	0.78	0.02	-0.00
			Max. My	32	0.84	0.02	-0.00
			Max. Vy	37	0.02	0.02	0.00
			Max. Vx	32	0.00	0.00	0.00
Top Girt	Max Tension	23	0.17	0.00	0.00		
	Max. Compression	2	-0.18	0.00	0.00		
	Max. Mx	26	-0.01	-0.04	0.00		
	Max. My	26	-0.01	0.00	0.00		
	Max. Vy	26	0.02	0.00	0.00		
	Max. Vx	26	-0.00	0.00	0.00		
T3	204.625 - 184.438	Leg	Max Tension	23	48.10	-0.15	0.04
			Max. Compression	18	-58.38	0.21	0.04
			Max. Mx	2	-41.43	0.26	0.03
			Max. My	24	-5.66	-0.02	0.31
			Max. Vy	2	0.14	0.26	0.03
			Max. Vx	11	-0.21	-0.12	-0.20
		Diagonal	Max Tension	8	4.30	0.00	0.00
			Max. Compression	8	-4.35	0.00	0.00
			Max. Mx	35	0.86	0.04	0.01
			Max. My	37	-1.15	0.03	0.01
			Max. Vy	37	0.03	0.04	0.01
			Max. Vx	37	-0.00	0.00	0.00
		Top Girt	Max Tension	23	68.50	-0.32	0.03
			Max. Compression	18	-81.83	0.57	-0.03
			Max. Mx	14	64.88	-0.60	-0.05
			Max. My	24	-7.54	-0.02	0.50
			Max. Vy	14	0.35	-0.60	-0.05
			Max. Vx	12	0.32	-0.01	-0.50
Diagonal	Max Tension	8	4.88	0.00	0.00		
	Max. Compression	10	-5.02	0.00	0.00		
	Max. Mx	35	1.03	0.07	0.01		
	Max. My	38	1.02	0.06	0.01		
	Max. Vy	37	0.04	0.07	-0.01		
	Max. Vx	38	-0.00	0.00	0.00		
T4	184.438 - 164.229	Leg	Max Tension	23	89.02	-0.31	0.03
			Max. Compression	18	-105.85	0.45	0.00
			Max. Mx	14	71.70	-0.60	-0.05
			Max. My	24	-7.79	-0.02	0.50
			Max. Vy	10	0.11	0.57	-0.03
			Max. Vx	24	-0.15	-0.02	0.50
		Diagonal	Max Tension	8	5.59	0.00	0.00
			Max. Compression	8	-5.58	0.00	0.00
			Max. Mx	37	0.86	0.09	0.01
			Max. My	37	-1.30	0.08	0.01
			Max. Vy	37	0.05	0.09	0.01
			Max. Vx	37	-0.00	0.00	0.00
		Top Girt	Max Tension	23	107.31	-0.33	0.10
			Max. Compression	10	-127.21	0.50	-0.09
			Max. Mx	10	-127.21	0.50	-0.09
			Max. My	24	-10.23	-0.04	0.67
			Max. Vy	37	0.05	0.09	0.01
			Max. Vx	37	-0.00	0.00	0.00
T5	164.229 - 144.021	Leg	Max Tension	23	89.02	-0.31	0.03
			Max. Compression	18	-105.85	0.45	0.00
			Max. Mx	14	71.70	-0.60	-0.05
			Max. My	24	-7.79	-0.02	0.50
			Max. Vy	10	0.11	0.57	-0.03
			Max. Vx	24	-0.15	-0.02	0.50
		Diagonal	Max Tension	8	5.59	0.00	0.00
			Max. Compression	8	-5.58	0.00	0.00
			Max. Mx	37	0.86	0.09	0.01
			Max. My	37	-1.30	0.08	0.01
			Max. Vy	37	0.05	0.09	0.01
			Max. Vx	37	-0.00	0.00	0.00
		Top Girt	Max Tension	23	107.31	-0.33	0.10
			Max. Compression	10	-127.21	0.50	-0.09
			Max. Mx	10	-127.21	0.50	-0.09
			Max. My	24	-10.23	-0.04	0.67
			Max. Vy	37	0.05	0.09	0.01
			Max. Vx	37	-0.00	0.00	0.00
T6	144.021 - 123.813	Leg	Max Tension	23	89.02	-0.31	0.03
			Max. Compression	18	-105.85	0.45	0.00
			Max. Mx	14	71.70	-0.60	-0.05
			Max. My	24	-7.79	-0.02	0.50
			Max. Vy	10	0.11	0.57	-0.03
			Max. Vx	24	-0.15	-0.02	0.50
		Diagonal	Max Tension	8	5.59	0.00	0.00
			Max. Compression	8	-5.58	0.00	0.00
			Max. Mx	37	0.86	0.09	0.01
			Max. My	37	-1.30	0.08	0.01
			Max. Vy	37	0.05	0.09	0.01
			Max. Vx	37	-0.00	0.00	0.00
		Top Girt	Max Tension	23	107.31	-0.33	0.10
			Max. Compression	10	-127.21	0.50	-0.09
			Max. Mx	10	-127.21	0.50	-0.09
			Max. My	24	-10.23	-0.04	0.67
			Max. Vy	37	0.05	0.09	0.01
			Max. Vx	37	-0.00	0.00	0.00

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft		
T7	123.813 - 103.604	Diagonal	Max. Vy	10	-0.10	0.50	-0.09		
			Max. Vx	24	0.18	-0.04	0.67		
			Max Tension	8	6.54	0.00	0.00		
			Max. Compression	10	-6.61	0.00	0.00		
			Max. Mx	37	1.56	0.15	-0.02		
			Max. My	38	1.43	0.15	0.02		
			Max. Vy	37	0.07	0.15	-0.02		
		Leg	Max. Vx	38	-0.00	0.00	0.00		
			Max Tension	23	126.60	-0.56	0.09		
			Max. Compression	10	-150.36	0.56	-0.08		
			Max. Mx	22	124.15	-0.56	0.09		
			Max. My	24	-11.58	-0.03	0.68		
			Max. Vy	6	0.11	-0.56	0.00		
			Max. Vx	24	-0.19	-0.03	0.68		
T8	103.604 - 83.3333	Diagonal	Max Tension	8	7.04	0.00	0.00		
			Max. Compression	10	-7.21	0.00	0.00		
			Max. Mx	37	1.04	0.19	0.03		
			Max. My	37	-1.98	0.17	0.03		
			Max. Vy	37	0.08	0.19	0.03		
			Max. Vx	37	-0.00	0.00	0.00		
			Max Tension	23	145.60	-0.52	0.07		
		T9	83.3333 - 63	Diagonal	Max. Compression	10	-173.51	0.72	-0.13
					Max. Mx	10	-173.51	0.72	-0.13
					Max. My	24	-14.33	-0.01	0.85
					Max. Vy	11	-0.11	0.72	-0.13
					Max. Vx	12	0.18	-0.01	-0.85
					Max Tension	8	7.55	0.00	0.00
					Max. Compression	10	-7.76	0.00	0.00
Leg	Max. Mx			37	1.07	0.23	0.03		
	Max. My			38	-1.05	0.20	0.03		
	Max. Vy			37	0.09	0.23	0.03		
	Max. Vx			38	-0.01	0.00	0.00		
	Max Tension			23	164.24	-0.57	0.07		
	Max. Compression			10	-196.96	0.40	-0.04		
	Max. Mx			10	-184.90	0.72	-0.13		
T10	63 - 42.6667	Diagonal	Max. My	24	-14.83	-0.01	0.85		
			Max. Vy	6	-0.11	-0.58	0.00		
			Max. Vx	12	-0.16	-0.01	-0.85		
			Max Tension	8	8.29	0.00	0.00		
			Max. Compression	10	-8.45	0.00	0.00		
			Max. Mx	37	1.11	0.34	0.04		
			Max. My	37	-2.34	0.31	0.04		
		Leg	Max. Vy	37	0.13	0.34	0.04		
			Max. Vx	37	-0.01	0.00	0.00		
			Max Tension	23	186.28	-1.73	0.11		
			Max. Compression	10	-224.18	-3.49	0.16		
			Max. Mx	10	-224.18	-3.49	0.16		
			Max. My	20	-17.18	-0.41	-1.84		
			Max. Vy	10	0.62	1.91	-0.10		
T11	42.6667 - 22.3334	Diagonal	Max. Vx	24	-0.24	0.03	1.50		
			Max Tension	8	10.97	0.00	0.00		
			Max. Compression	10	-11.79	0.00	0.00		
			Max. Mx	35	2.52	0.37	0.03		
			Max. My	38	1.81	0.37	0.04		
			Max. Vy	36	0.13	0.37	-0.03		
			Max. Vx	38	-0.00	0.00	0.00		
		Leg	Max Tension	23	193.57	2.55	-0.12		
			Max. Compression	10	-233.23	0.26	-0.42		
			Max. Mx	10	-231.15	-8.16	-0.38		
			Max. My	24	-19.38	-0.46	4.00		
			Max. Vy	10	-8.98	0.26	-0.42		
			Max. Vx	12	5.72	-0.46	-3.97		
			Max Tension	9	13.08	-0.17	0.09		
Diagonal	Max. Compression	10	-14.87	0.00	0.00				
	Max. Mx	22	7.91	-0.23	0.06				
	Max. My	2	-13.76	0.04	-0.10				

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
T12	22.3334 - 2	Horizontal	Max. Vy	37	-0.06	-0.17	0.01
			Max. Vx	2	0.01	0.04	-0.10
			Max Tension	23	7.38	-0.10	0.01
			Max. Compression	10	-8.19	0.00	0.00
			Max. Mx	37	-1.13	-0.26	-0.00
			Max. My	10	-0.41	-0.12	0.01
			Max. Vy	37	0.09	-0.26	-0.00
			Max. Vx	10	-0.00	0.00	0.00
			Max Tension	20	1.67	0.00	0.00
			Max. Compression	21	-1.40	0.00	0.00
		Redund Horz 1 Bracing	Max. Mx	26	0.23	0.02	0.00
			Max. Vy	26	0.02	0.00	0.00
			Max Tension	8	1.41	0.00	0.00
		Redund Diag 1 Bracing	Max. Compression	8	-1.42	0.00	0.00
			Max. Mx	26	0.06	0.05	0.00
			Max. Vy	26	-0.02	0.00	0.00
		Redund Hip 1 Bracing	Max Tension	3	0.01	0.00	0.00
			Max. Compression	8	-0.03	0.00	0.00
		Redund Hip Diagonal 1 Bracing	Max. Mx	26	-0.01	0.02	0.00
			Max. Vy	26	-0.02	0.00	0.00
			Max Tension	10	0.06	0.00	0.00
		Inner Bracing	Max. Compression	28	-0.07	0.00	0.00
			Max. Mx	26	0.05	0.24	0.00
			Max. Vy	26	-0.07	0.00	0.00
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	33	-0.01	0.00	0.00
		Leg	Max. Mx	26	-0.01	0.16	0.00
			Max. Vy	26	-0.05	0.00	0.00
			Max Tension	23	207.89	6.24	0.41
			Max. Compression	10	-252.78	-3.98	-0.98
			Max. Mx	10	-252.76	-8.16	-0.38
			Max. My	24	-21.69	-0.98	5.33
			Max. Vy	10	-10.01	-3.98	-0.98
			Max. Vx	12	5.32	-1.00	-5.31
			Max Tension	11	12.28	0.00	0.00
			Max. Compression	10	-13.80	0.00	0.00
		Diagonal	Max. Mx	22	7.12	-0.20	0.04
			Max. My	20	-12.28	-0.04	-0.08
			Max. Vy	37	0.07	-0.17	0.00
			Max. Vx	20	-0.01	0.00	0.00
			Max Tension	8	7.33	0.00	0.00
		Horizontal	Max. Compression	10	-7.98	0.00	0.00
			Max. Mx	37	-0.90	-0.34	-0.00
			Max. My	10	2.16	-0.19	0.02
			Max. Vy	37	0.12	-0.34	-0.00
			Max. Vx	10	-0.00	-0.19	0.02
		Redund Horz 1 Bracing	Max Tension	20	1.27	0.00	0.00
			Max. Compression	21	-1.08	0.00	0.00
			Max. Mx	26	0.16	0.04	0.00
		Redund Diag 1 Bracing	Max. Vy	26	-0.02	0.00	0.00
Max Tension	8		1.06	0.00	0.00		
Max. Compression	9		-0.97	0.00	0.00		
Redund Hip 1 Bracing	Max. Mx	26	0.14	0.05	0.00		
	Max. Vy	26	-0.02	0.00	0.00		
	Max Tension	21	0.01	0.00	0.00		
Redund Hip Diagonal 1 Bracing	Max. Compression	8	-0.02	0.00	0.00		
	Max. Mx	26	-0.01	0.04	0.00		
	Max. Vy	26	-0.02	0.00	0.00		
	Max Tension	31	0.06	0.00	0.00		
	Max. Compression	28	-0.07	0.00	0.00		
	Max. Mx	26	0.05	0.27	0.00		

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
		Inner Bracing	Max. Vy	26	-0.07	0.00	0.00
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	32	-0.01	0.00	0.00
			Max. Mx	26	-0.01	0.34	0.00
			Max. Vy	26	-0.10	0.00	0.00

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Leg C	Max. Vert	18	266.94	25.21	-14.53
	Max. H _x	18	266.94	25.21	-14.53
	Max. H _z	7	-209.47	-20.66	11.87
	Min. Vert	7	-209.47	-20.66	11.87
	Min. H _x	7	-209.47	-20.66	11.87
	Min. H _z	18	266.94	25.21	-14.53
Leg B	Max. Vert	10	269.79	-26.57	-13.72
	Max. H _x	23	-219.40	22.09	11.18
	Max. H _z	23	-219.40	22.09	11.18
	Min. Vert	23	-219.40	22.09	11.18
	Min. H _x	10	269.79	-26.57	-13.72
	Min. H _z	10	269.79	-26.57	-13.72
Leg A	Max. Vert	2	265.19	-1.11	29.08
	Max. H _x	19	-104.70	2.86	-12.09
	Max. H _z	2	265.19	-1.11	29.08
	Min. Vert	15	-211.52	1.04	-23.87
	Min. H _x	6	136.67	-2.73	14.67
	Min. H _z	15	-211.52	1.04	-23.87

Tower Mast Reaction Summary

Load Combination	Vertical K	Shear _x K	Shear _z K	Overtuning Moment, M _x kip-ft	Overtuning Moment, M _z kip-ft	Torque kip-ft
Dead Only	56.25	-0.00	0.00	2.18	50.86	0.00
1.2 Dead+1.0 Wind 0 deg - No Ice	67.51	-0.01	-45.72	-6342.40	63.95	-56.03
0.9 Dead+1.0 Wind 0 deg - No Ice	50.63	-0.01	-45.72	-6343.05	48.69	-56.03
1.2 Dead+1.0 Wind 30 deg - No Ice	67.51	20.12	-34.98	-4910.12	-2760.78	-14.77
0.9 Dead+1.0 Wind 30 deg - No Ice	50.63	20.12	-34.98	-4910.77	-2776.04	-14.77
1.2 Dead+1.0 Wind 60 deg - No Ice	67.51	36.99	-21.42	-2983.80	-5092.21	2.16
0.9 Dead+1.0 Wind 60 deg - No Ice	50.63	36.99	-21.42	-2984.46	-5107.47	2.16
1.2 Dead+1.0 Wind 90 deg - No Ice	67.51	44.67	0.01	5.54	-6133.67	38.62
0.9 Dead+1.0 Wind 90 deg - No Ice	50.63	44.67	0.01	4.88	-6148.93	38.62
1.2 Dead+1.0 Wind 120 deg - No Ice	67.51	40.80	23.63	3270.70	-5574.22	72.14
0.9 Dead+1.0 Wind 120 deg - No Ice	50.63	40.80	23.63	3270.04	-5589.48	72.14
1.2 Dead+1.0 Wind 150 deg - No Ice	67.51	22.65	39.33	5455.81	-3076.17	86.13
0.9 Dead+1.0 Wind 150 deg - No Ice	50.63	22.65	39.33	5455.15	-3091.43	86.13
1.2 Dead+1.0 Wind 180 deg	67.51	0.01	42.76	5969.57	58.12	56.03

Load Combination	Vertical K	Shear _x K	Shear _z K	Overturning Moment, M _x kip-ft	Overturning Moment, M _z kip-ft	Torque kip-ft
- No Ice						
0.9 Dead+1.0 Wind 180 deg	50.63	0.01	42.76	5968.92	42.86	56.03
- No Ice						
1.2 Dead+1.0 Wind 210 deg	67.51	-20.12	34.98	4915.36	2882.85	14.77
- No Ice						
0.9 Dead+1.0 Wind 210 deg	50.63	-20.12	34.98	4914.71	2867.59	14.77
- No Ice						
1.2 Dead+1.0 Wind 240 deg	67.51	-39.55	22.90	3178.08	5541.69	-2.16
- No Ice						
0.9 Dead+1.0 Wind 240 deg	50.63	-39.55	22.90	3177.42	5526.43	-2.16
- No Ice						
1.2 Dead+1.0 Wind 270 deg	67.51	-44.67	-0.01	-0.29	6255.74	-38.62
- No Ice						
0.9 Dead+1.0 Wind 270 deg	50.63	-44.67	-0.01	-0.95	6240.48	-38.62
- No Ice						
1.2 Dead+1.0 Wind 300 deg	67.51	-38.24	-22.15	-3076.42	5368.87	-72.14
- No Ice						
0.9 Dead+1.0 Wind 300 deg	50.63	-38.24	-22.15	-3077.07	5353.61	-72.14
- No Ice						
1.2 Dead+1.0 Wind 330 deg	67.51	-22.65	-39.33	-5450.57	3198.24	-86.13
- No Ice						
0.9 Dead+1.0 Wind 330 deg	50.63	-22.65	-39.33	-5451.22	3182.98	-86.13
- No Ice						
1.2 Dead+1.0 Ice+1.0 Temp	124.35	-0.00	0.00	44.69	169.21	0.00
1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp	124.35	-0.00	-13.30	-1782.88	169.64	-17.68
1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp	124.35	6.33	-10.99	-1467.36	-699.68	-13.75
1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp	124.35	11.16	-6.46	-844.03	-1363.88	-8.42
1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp	124.35	12.81	0.00	45.12	-1596.45	6.37
1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp	124.35	11.60	6.72	968.85	-1424.39	21.63
1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp	124.35	6.47	11.24	1594.85	-722.18	22.74
1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp	124.35	0.00	12.81	1809.82	168.78	17.68
1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp	124.35	-6.33	10.99	1556.74	1038.10	13.75
1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp	124.35	-11.59	6.71	964.63	1756.38	8.42
1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp	124.35	-12.81	-0.00	44.26	1934.87	-6.37
1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp	124.35	-11.17	-6.47	-848.25	1708.74	-21.63
1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp	124.35	-6.47	-11.24	-1505.47	1060.60	-22.74
Dead+Wind 0 deg - Service	56.25	-0.00	-13.05	-1785.99	51.67	-15.51
Dead+Wind 30 deg - Service	56.25	5.77	-10.03	-1385.25	-746.14	-4.04
Dead+Wind 60 deg - Service	56.25	10.58	-6.13	-840.39	-1403.15	0.68
Dead+Wind 90 deg - Service	56.25	12.76	0.00	2.99	-1695.70	10.79
Dead+Wind 120 deg - Service	56.25	11.64	6.74	922.73	-1536.58	20.06
Dead+Wind 150 deg - Service	56.25	6.47	11.23	1539.23	-833.45	23.90
Dead+Wind 180 deg - Service	56.25	0.00	12.23	1685.70	50.05	15.51
Dead+Wind 210 deg - Service	56.25	-5.77	10.03	1389.62	847.87	4.04
Dead+Wind 240 deg - Service	56.25	-11.29	6.54	897.09	1595.51	-0.68
Dead+Wind 270 deg - Service	56.25	-12.76	-0.00	1.38	1797.42	-10.79
Dead+Wind 300 deg - Service	56.25	-10.93	-6.33	-866.03	1547.67	-20.06
Dead+Wind 330 deg - Service	56.25	-6.47	-11.23	-1534.86	935.17	-23.90

Solution Summary

Load Comb.	Sum of Applied Forces			Sum of Reactions			% Error
	PX K	PY K	PZ K	PX K	PY K	PZ K	
1	0.00	-56.25	0.00	0.00	56.25	0.00	0.000%
2	-0.01	-67.51	-45.72	0.01	67.51	45.72	0.000%
3	-0.01	-50.63	-45.72	0.01	50.63	45.72	0.000%
4	20.12	-67.51	-34.98	-20.12	67.51	34.98	0.000%
5	20.12	-50.63	-34.98	-20.12	50.63	34.98	0.000%
6	36.99	-67.51	-21.42	-36.99	67.51	21.42	0.000%
7	36.99	-50.63	-21.42	-36.99	50.63	21.42	0.000%
8	44.67	-67.51	0.01	-44.67	67.51	-0.01	0.000%
9	44.67	-50.63	0.01	-44.67	50.63	-0.01	0.000%
10	40.80	-67.51	23.63	-40.80	67.51	-23.63	0.000%
11	40.80	-50.63	23.63	-40.80	50.63	-23.63	0.000%
12	22.65	-67.51	39.33	-22.65	67.51	-39.33	0.000%
13	22.65	-50.63	39.33	-22.65	50.63	-39.33	0.000%
14	0.01	-67.51	42.76	-0.01	67.51	-42.76	0.000%
15	0.01	-50.63	42.76	-0.01	50.63	-42.76	0.000%
16	-20.12	-67.51	34.98	20.12	67.51	-34.98	0.000%
17	-20.12	-50.63	34.98	20.12	50.63	-34.98	0.000%
18	-39.55	-67.51	22.90	39.55	67.51	-22.90	0.000%
19	-39.55	-50.63	22.90	39.55	50.63	-22.90	0.000%
20	-44.67	-67.51	-0.01	44.67	67.51	0.01	0.000%
21	-44.67	-50.63	-0.01	44.67	50.63	0.01	0.000%
22	-38.24	-67.51	-22.15	38.24	67.51	22.15	0.000%
23	-38.24	-50.63	-22.15	38.24	50.63	22.15	0.000%
24	-22.65	-67.51	-39.33	22.65	67.51	39.33	0.000%
25	-22.65	-50.63	-39.33	22.65	50.63	39.33	0.000%
26	0.00	-124.35	0.00	0.00	124.35	-0.00	0.000%
27	-0.00	-124.35	-13.30	0.00	124.35	13.30	0.000%
28	6.33	-124.35	-10.99	-6.33	124.35	10.99	0.000%
29	11.16	-124.35	-6.46	-11.16	124.35	6.46	0.000%
30	12.81	-124.35	0.00	-12.81	124.35	-0.00	0.000%
31	11.60	-124.35	6.72	-11.60	124.35	-6.72	0.000%
32	6.47	-124.35	11.24	-6.47	124.35	-11.24	0.000%
33	0.00	-124.35	12.81	-0.00	124.35	-12.81	0.000%
34	-6.33	-124.35	10.99	6.33	124.35	-10.99	0.000%
35	-11.59	-124.35	6.71	11.59	124.35	-6.71	0.000%
36	-12.81	-124.35	-0.00	12.81	124.35	0.00	0.000%
37	-11.17	-124.35	-6.47	11.17	124.35	6.47	0.000%
38	-6.47	-124.35	-11.24	6.47	124.35	11.24	0.000%
39	-0.00	-56.25	-13.05	0.00	56.25	13.05	0.000%
40	5.77	-56.25	-10.03	-5.77	56.25	10.03	0.000%
41	10.58	-56.25	-6.13	-10.58	56.25	6.13	0.000%
42	12.76	-56.25	0.00	-12.76	56.25	-0.00	0.000%
43	11.64	-56.25	6.74	-11.64	56.25	-6.74	0.000%
44	6.47	-56.25	11.23	-6.47	56.25	-11.23	0.000%
45	0.00	-56.25	12.23	-0.00	56.25	-12.23	0.000%
46	-5.77	-56.25	10.03	5.77	56.25	-10.03	0.000%
47	-11.29	-56.25	6.54	11.29	56.25	-6.54	0.000%
48	-12.76	-56.25	-0.00	12.76	56.25	0.00	0.000%
49	-10.93	-56.25	-6.33	10.93	56.25	6.33	0.000%
50	-6.47	-56.25	-11.23	6.47	56.25	11.23	0.000%

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	244.917 - 224.792	5.466	47	0.2117	0.0584
T2	224.792 - 204.625	4.570	47	0.2039	0.0531

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T3	204.625 - 184.438	3.719	47	0.1866	0.0452
T4	184.438 - 164.229	2.957	47	0.1627	0.0385
T5	164.229 - 144.021	2.301	47	0.1380	0.0331
T6	144.021 - 123.813	1.738	47	0.1181	0.0283
T7	123.813 - 103.604	1.267	47	0.0964	0.0245
T8	103.604 - 83.3333	0.874	47	0.0799	0.0205
T9	83.3333 - 63	0.548	47	0.0627	0.0163
T10	63 - 42.6667	0.301	43	0.0448	0.0132
T11	42.6667 - 22.3334	0.122	43	0.0286	0.0100
T12	22.3334 - 2	0.034	43	0.0121	0.0046

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
245.00	Strobe Light	47	5.466	0.2117	0.0584	429784
242.00	Side Arm Mount [SO 303-3]	47	5.335	0.2109	0.0577	429784
238.00	OPA65R-BU6D w/ Mount Pipe	47	5.156	0.2097	0.0568	310687
217.00	Sector Mount [SM 505-3]	47	4.233	0.1983	0.0502	75043
203.00	Side Arm Mount [SO 306-1]	47	3.653	0.1848	0.0446	50384
188.00	Side Arm Mount [SO 301-1]	47	3.083	0.1671	0.0396	43848
167.00	MX08FRO665-21 w/ Mount Pipe	47	2.385	0.1411	0.0338	54541
122.00	Obstruction light	47	1.229	0.0947	0.0242	64981
14.00	TY-840	43	0.016	0.0067	0.0026	156065

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	244.917 - 224.792	19.296	11	0.7419	0.2093
T2	224.792 - 204.625	16.156	11	0.7152	0.1904
T3	204.625 - 184.438	13.161	11	0.6560	0.1619
T4	184.438 - 164.229	10.475	11	0.5730	0.1381
T5	164.229 - 144.021	8.159	11	0.4869	0.1188
T6	144.021 - 123.813	6.168	11	0.4169	0.1015
T7	123.813 - 103.604	4.502	11	0.3402	0.0881
T8	103.604 - 83.3333	3.109	11	0.2820	0.0735
T9	83.3333 - 63	1.953	11	0.2213	0.0584
T10	63 - 42.6667	1.074	11	0.1580	0.0474
T11	42.6667 - 22.3334	0.426	10	0.1006	0.0359
T12	22.3334 - 2	0.115	10	0.0427	0.0165

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
245.00	Strobe Light	11	19.296	0.7419	0.2093	127595
242.00	Side Arm Mount [SO 303-3]	11	18.838	0.7390	0.2070	127595
238.00	OPA65R-BU6D w/ Mount Pipe	11	18.210	0.7349	0.2037	92237
217.00	Sector Mount [SM 505-3]	11	14.971	0.6964	0.1799	21661
203.00	Side Arm Mount [SO 306-1]	11	12.931	0.6499	0.1597	14262
188.00	Side Arm Mount [SO 301-1]	11	10.922	0.5886	0.1418	12495
167.00	MX08FRO665-21 w/ Mount Pipe	11	8.457	0.4976	0.1213	15518
122.00	Obstruction light	11	4.367	0.3341	0.0869	18489
14.00	TY-840	10	0.055	0.0236	0.0092	43747

Bolt Design Data

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt K	Allowable Load per Bolt K	Ratio Load Allowable	Allowable Ratio	Criteria
T1	244.917	Leg	A325N	0.7500	4	2.30	30.10	0.076	1.05	Bolt Tension Member Bearing Member Bearing
		Diagonal	A325N	0.5000	1	2.34	6.20	0.377	1.05	
		Top Girt	A325N	0.5000	1	0.03	4.13	0.007	1.05	
T2	224.792	Leg	A325N	0.8750	4	6.73	41.56	0.162	1.05	Bolt Tension Gusset Bearing Member Bearing
		Diagonal	A325N	0.5000	1	3.69	6.20	0.596	1.05	
		Top Girt	A325N	0.5000	1	0.61	4.13	0.148	1.05	
T3	204.625	Leg	A325N	0.8750	4	12.02	41.56	0.289	1.05	Bolt Tension Member Bearing
		Diagonal	A325N	0.5000	1	4.30	6.20	0.693	1.05	
T4	184.438	Leg	A325N	1.0000	4	17.12	54.52	0.314	1.05	Bolt Tension
T5	164.229	Diagonal	A325X	0.5000	1	4.88	8.27	0.590	1.05	Gusset Bearing
		Leg	A325N	1.0000	4	22.26	54.52	0.408	1.05	Bolt Tension
T6	144.021	Diagonal	A325X	0.5000	1	5.59	10.33	0.541	1.05	Gusset Bearing
		Leg	A325N	1.0000	6	17.88	54.52	0.328	1.05	Bolt Tension
T7	123.813	Diagonal	A325X	0.6250	1	6.54	13.05	0.501	1.05	Gusset Bearing
		Leg	A325N	1.0000	6	21.10	54.52	0.387	1.05	Bolt Tension
T8	103.604	Diagonal	A325X	0.6250	1	7.04	10.44	0.674	1.05	Gusset Bearing
		Leg	A325N	1.0000	6	24.27	54.52	0.445	1.05	Bolt Tension
T9	83.3333	Diagonal	A325N	0.7500	1	7.55	14.14	0.534	1.05	Member Bearing
		Leg	A325N	1.0000	8	20.53	54.52	0.377	1.05	Bolt Tension
T10	63	Diagonal	A325N	0.7500	1	8.29	15.77	0.526	1.05	Gusset Bearing
		Leg	A325N	1.0000	8	23.28	54.52	0.427	1.05	Bolt Tension
T11	42.6667	Diagonal	A325N	0.7500	1	10.97	15.77	0.695	1.05	Gusset Bearing
		Leg	A325X	1.0000	8	23.83	54.52	0.437	1.05	Bolt Tension
T12	22.3334	Diagonal	A325X	0.7500	3	4.96	24.85	0.199	1.05	Bolt Shear
		Horizontal	A325X	0.7500	2	4.10	24.85	0.165	1.05	Bolt Shear
		Diagonal	A325X	0.7500	3	4.60	24.85	0.185	1.05	Bolt Shear
		Horizontal	A325X	0.7500	2	3.99	24.85	0.160	1.05	Bolt Shear

Compression Checks

Leg Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L _u ft	KI/r	A in ²	P _u K	φP _n K	Ratio P _u / φP _n
T1	244.917 - 224.792	Pipe 2.875" x 0.203" (2.5 STD)	20.13	4.02	51.0 K=1.00	1.7040	-12.45	63.41	0.196 ¹
T2	224.792 - 204.625	Pipe 3.5" x 0.300" (3 EH)	20.20	5.05	53.3 K=1.00	3.0159	-35.17	110.22	0.319 ¹
T3	204.625 - 184.438	Pipe 4" x 0.318" (3.5 EH)	20.23	6.74	61.9 K=1.00	3.6784	-58.38	125.07	0.467 ¹
T4	184.438 - 164.229	Pipe 4.5" x 0.337" (4 EH)	20.25	6.75	54.8 K=1.00	4.4074	-81.83	159.18	0.514 ¹
T5	164.229 - 144.021	Pipe 5.563" x 0.375" (5 EH)	20.25	6.75	44.0 K=1.00	6.1120	-105.85	238.68	0.443 ¹
T6	144.021 - 123.813	Pipe 5.563" x 0.375" (5 EH)	20.25	10.12	66.1 K=1.00	6.1120	-127.21	199.91	0.636 ¹
T7	123.813 - 103.604	Pipe 6.625" x 0.432" (6 EH)	20.25	10.12	55.3 K=1.00	8.4049	-150.36	302.33	0.497 ¹
T8	103.604 - 83.3333	Pipe 6.625" x 0.432" (6 EH)	20.31	10.15	55.5 K=1.00	8.4049	-173.51	301.91	0.575 ¹
T9	83.3333 - 63	Pipe 6.625" x 0.432" (6 EH)	20.37	10.19	55.7 K=1.00	8.4049	-196.96	301.49	0.653 ¹
T10	63 - 42.6667	Pipe 8.625" x 0.375" (8 EHS)	20.35	10.18	41.8 K=1.00	9.7193	-224.18	384.87	0.582 ¹
T11	42.6667 - 22.3334	Pipe 8.625" x 0.375" (8 EHS)	20.38	9.98	41.0 K=1.00	9.7193	-231.15	386.71	0.598 ¹
T12	22.3334 - 2	Pipe 8.75" x 0.500" (8 EH)	20.38	9.98	41.0 K=1.00	12.959 1	-251.91	515.72	0.488 ¹

¹ P_u / φP_n controls

Diagonal Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L _u ft	KI/r	A in ²	P _u K	φP _n K	Ratio P _u / φP _n
T1	244.917 - 224.792	L 1.75 x 1.75 x 3/16	7.70	3.60	125.9 K=1.00	0.6211	-2.43	11.21	0.217 ¹
T2	224.792 - 204.625	L 1.75 x 1.75 x 3/16	9.83	4.80	167.7 K=1.00	0.6211	-3.47	6.32	0.548 ¹
T3	204.625 - 184.438	L 2.5 x 2.5 x 3/16	12.47	6.15	149.0 K=1.00	0.9020	-4.35	11.63	0.374 ¹
T4	184.438 - 164.229	L 2.5 x 2.5 x 1/4	14.33	7.05	172.3 K=1.00	1.1900	-5.02	11.47	0.437 ¹
T5	164.229 - 144.021	L 2.5 x 2.5 x 5/16	16.25	7.95	195.2 K=1.00	1.4600	-5.58	10.97	0.509 ¹
T6	144.021 - 123.813	L 3 x 3 x 5/16	19.57	9.69	197.5 K=1.00	1.7800	-6.61	13.06	0.506 ¹
T7	123.813 - 103.604	L 3.5 x 3.5 x 1/4	21.44	10.59	183.1 K=1.00	1.6900	-7.21	14.42	0.500 ¹
T8	103.604 - 83.3333	L 3.5 x 3.5 x 1/4	23.37	11.54	199.5 K=1.00	1.6900	-7.76	12.15	0.639 ¹
T9	83.3333 - 63	L 4 x 4 x 5/16	25.33	12.52	190.0 K=1.00	2.4000	-8.45	19.03	0.444 ¹
T10	63 - 42.6667	L 4 x 4 x 5/16	26.82	13.08	198.4 K=1.00	2.4000	-11.79	17.44	0.676 ¹
T11	42.6667 - 22.3334	Pipe 3.5" x 0.216" (3 STD)	24.26	12.13	125.1 K=1.00	2.2285	-14.87	32.16	0.462 ¹
T12	22.3334 - 2	Pipe 3.5" x 0.216" (3 STD)	25.00	12.50	128.9 K=1.00	2.2285	-13.80	30.30	0.455 ¹

¹ P_u / φP_n controls

Horizontal Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T11	42.6667 - 22.3334	Pipe 2.875" x 0.203" (2.5 STD)	25.23	12.25	155.2 K=1.00	1.7040	-8.19	15.98	0.513 ¹
T12	22.3334 - 2	Pipe 3.5" x 0.216" (3 STD)	27.73	13.50	139.2 K=1.00	2.2285	-7.98	25.97	0.307 ¹

¹ P_u / φP_n controls

Top Girt Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T1	244.917 - 224.792	L 2 x 2 x 1/8	6.56	6.11	184.6 K=1.00	0.4844	-0.03	4.07	0.007 ¹
T2	224.792 - 204.625	L 2 x 2 x 1/8	6.56	6.06	183.0 K=1.00	0.4844	-0.61	4.14	0.147 ¹

¹ P_u / φP_n controls

Redundant Horizontal (1) Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T11	42.6667 - 22.3334	Rohn 1.5" x 11 ga	6.31	5.95	145.7 K=1.00	0.5202	-4.05	5.53	0.731 ¹
T12	22.3334 - 2	Pipe 1.9" x 0.145" (1.5 STD)	6.93	6.57	126.6 K=1.00	0.7995	-4.39	11.27	0.389 ¹

¹ P_u / φP_n controls

Redundant Diagonal (1) Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T11	42.6667 - 22.3334	Pipe 1.9" x 0.145" (1.5 STD)	11.48	10.75	207.3 K=1.00	0.7995	-3.68	4.20	0.876 ¹
T12	22.3334 - 2	Rohn 2.25" x 14 ga	11.80	11.12	174.0 K=1.00	0.5651	-3.73	4.21	0.886 ¹

¹ P_u / φP_n controls

Redundant Hip (1) Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L _u ft	KI/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T11	42.6667 - 22.3334	Rohn 1.5" x 11 ga	6.31	6.31	154.5 K=1.00	0.5202	-0.03	4.92	0.005 ¹
T12	22.3334 - 2	Pipe 1.9" x 0.145" (1.5 STD)	6.93	6.93	133.6 K=1.00	0.7995	-0.02	10.12	0.002 ¹

¹ P_u / φP_n controls

Redundant Hip Diagonal (1) Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L _u ft	KI/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T11	42.6667 - 22.3334	Pipe 2.875" x 0.203" (2.5 STD)	15.06	15.06	190.7 K=1.00	1.7040	-0.07	10.58	0.006 ¹
T12	22.3334 - 2	Pipe 2.875" x 0.203" (2.5 STD)	15.88	15.88	201.2 K=1.00	1.7040	-0.07	9.51	0.007 ¹

¹ P_u / φP_n controls

Inner Bracing Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L _u ft	KI/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T11	42.6667 - 22.3334	Pipe 2.375" x 0.154" (2 STD)	12.61	12.61	192.3 K=1.00	1.0745	-0.01	6.56	0.002 ¹
T12	22.3334 - 2	Pipe 3.5" x 0.216" (3 STD)	13.86	13.86	143.0 K=1.00	2.2285	-0.01	24.63	0.001 ¹

¹ P_u / φP_n controls

Tension Checks

Leg Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L _u ft	KI/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T1	244.917 - 224.792	Pipe 2.875" x 0.203" (2.5 STD)	20.13	4.02	51.0	1.7040	9.20	76.68	0.120 ¹
T2	224.792 - 204.625	Pipe 3.5" x 0.300" (3 EH)	20.20	5.05	53.3	3.0159	26.94	135.72	0.198 ¹
T3	204.625 - 184.438	Pipe 4" x 0.318" (3.5 EH)	20.23	6.74	61.9	3.6784	48.10	165.53	0.291 ¹
T4	184.438 - 164.229	Pipe 4.5" x 0.337" (4 EH)	20.25	6.75	54.8	4.4074	68.50	198.34	0.345 ¹
T5	164.229 - 144.021	Pipe 5.563" x 0.375" (5 EH)	20.25	6.75	44.0	6.1120	89.02	275.04	0.324 ¹
T6	144.021 - 123.813	Pipe 5.563" x 0.375" (5 EH)	20.25	10.12	66.1	6.1120	107.31	275.04	0.390 ¹
T7	123.813 - 103.604	Pipe 6.625" x 0.432" (6 EH)	20.25	10.12	55.3	8.4049	126.61	378.22	0.335 ¹
T8	103.604 -	Pipe 6.625" x 0.432" (6)	20.31	10.15	55.5	8.4049	145.60	378.22	0.385 ¹

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T9	83.3333 - 63	EH) Pipe 6.625" x 0.432" (6	20.37	10.19	55.7	8.4049	164.24	378.22	0.434 ¹
T10	63 - 42.6667	EH) Pipe 8.625" x 0.375" (8	20.35	10.18	41.8	9.7193	186.28	437.37	0.426 ¹
T11	42.6667 - 22.3334	EHS) Pipe 8.625" x 0.375" (8	20.38	0.42	1.7	9.7193	193.57	437.37	0.443 ¹
T12	22.3334 - 2	EHS) Pipe 8.75" x 0.500" (8	20.38	0.42	1.7	12.959 1	207.89	583.16	0.356 ¹

¹ P_u / φP_n controls

Diagonal Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T1	244.917 - 224.792	L 1.75 x 1.75 x 3/16	7.70	3.60	82.9	0.3779	2.34	16.44	0.142 ¹
T2	224.792 - 204.625	L 1.75 x 1.75 x 3/16	9.38	4.57	104.5	0.3779	3.69	16.44	0.225 ¹
T3	204.625 - 184.438	L 2.5 x 2.5 x 3/16	12.47	6.15	96.4	0.5886	4.30	25.60	0.168 ¹
T4	184.438 - 164.229	L 2.5 x 2.5 x 1/4	14.33	7.05	111.6	0.7753	4.88	33.73	0.145 ¹
T5	164.229 - 144.021	L 2.5 x 2.5 x 5/16	16.25	7.95	127.2	0.9485	5.59	41.26	0.135 ¹
T6	144.021 - 123.813	L 3 x 3 x 5/16	19.57	9.69	127.9	1.1592	6.54	50.43	0.130 ¹
T7	123.813 - 103.604	L 3.5 x 3.5 x 1/4	21.44	10.59	117.9	1.1269	7.04	54.94	0.128 ¹
T8	103.604 - 83.3333	L 3.5 x 3.5 x 1/4	23.37	11.54	128.5	1.1034	7.55	53.79	0.140 ¹
T9	83.3333 - 63	L 4 x 4 x 5/16	25.33	12.52	122.5	1.5949	8.29	77.75	0.107 ¹
T10	63 - 42.6667	L 4 x 4 x 5/16	26.82	13.08	127.9	1.5949	10.97	77.75	0.141 ¹
T11	42.6667 - 22.3334	Pipe 3.5" x 0.216" (3 STD)	24.26	12.13	125.1	2.2285	13.08	100.28	0.130 ¹
T12	22.3334 - 2	Pipe 3.5" x 0.216" (3 STD)	25.00	12.50	128.9	2.2285	12.28	100.28	0.122 ¹

¹ P_u / φP_n controls

Horizontal Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T11	42.6667 - 22.3334	Pipe 2.875" x 0.203" (2.5 STD)	25.23	12.25	155.2	1.7040	7.38	76.68	0.096 ¹
T12	22.3334 - 2	Pipe 3.5" x 0.216" (3 STD)	27.73	13.50	139.2	2.2285	7.33	100.28	0.073 ¹

¹ P_u / φP_n controls

Top Girt Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L _u ft	KI/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T1	244.917 - 224.792	L 2 x 2 x 1/8	6.56	6.11	121.2	0.3047	0.03	13.25	0.002 ¹
T2	224.792 - 204.625	L 2 x 2 x 1/8	6.56	6.06	120.2	0.3047	0.61	13.25	0.046 ¹

¹ P_u / φP_n controls

Redundant Horizontal (1) Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L _u ft	KI/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T11	42.6667 - 22.3334	Rohn 1.5" x 11 ga	6.31	5.95	145.7	0.5202	4.05	23.41	0.173 ¹
T12	22.3334 - 2	Pipe 1.9" x 0.145" (1.5 STD)	6.93	6.57	126.6	0.7995	4.39	35.98	0.122 ¹

¹ P_u / φP_n controls

Redundant Diagonal (1) Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L _u ft	KI/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T11	42.6667 - 22.3334	Pipe 1.9" x 0.145" (1.5 STD)	11.48	10.75	207.3	0.7995	3.68	35.98	0.102 ¹
T12	22.3334 - 2	Rohn 2.25" x 14 ga	11.80	11.12	174.0	0.5651	3.73	25.43	0.147 ¹

¹ P_u / φP_n controls

Redundant Hip (1) Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L _u ft	KI/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T11	42.6667 - 22.3334	Rohn 1.5" x 11 ga	6.31	6.31	154.5	0.5202	0.01	23.41	0.001 ¹
T12	22.3334 - 2	Pipe 1.9" x 0.145" (1.5 STD)	6.93	6.93	133.6	0.7995	0.01	35.98	0.000 ¹

¹ P_u / φP_n controls

Redundant Hip Diagonal (1) Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L _u ft	KI/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T11	42.6667 - 22.3334	Pipe 2.875" x 0.203" (2.5 STD)	15.06	15.06	190.7	1.7040	0.06	76.68	0.001 ¹

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in ²	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T12	22.3334 - 2	Pipe 2.875" x 0.203" (2.5 STD)	15.88	15.88	201.2	1.7040	0.06	76.68	0.001 ¹

¹ $P_u / \phi P_n$ controls

Section Capacity Table

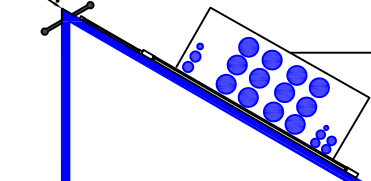
Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
T1	244.917 - 224.792	Leg	Pipe 2.875" x 0.203" (2.5 STD)	1	-12.45	66.58	18.7	Pass
T2	224.792 - 204.625	Leg	Pipe 3.5" x 0.300" (3 EH)	37	-35.17	115.74	30.4	Pass
T3	204.625 - 184.438	Leg	Pipe 4" x 0.318" (3.5 EH)	67	-58.38	131.32	44.5	Pass
T4	184.438 - 164.229	Leg	Pipe 4.5" x 0.337" (4 EH)	88	-81.83	167.14	49.0	Pass
T5	164.229 - 144.021	Leg	Pipe 5.563" x 0.375" (5 EH)	109	-105.85	250.61	42.2	Pass
T6	144.021 - 123.813	Leg	Pipe 5.563" x 0.375" (5 EH)	131	-127.21	209.91	60.6	Pass
T7	123.813 - 103.604	Leg	Pipe 6.625" x 0.432" (6 EH)	146	-150.36	317.44	47.4	Pass
T8	103.604 - 83.3333	Leg	Pipe 6.625" x 0.432" (6 EH)	161	-173.51	317.01	54.7	Pass
T9	83.3333 - 63	Leg	Pipe 6.625" x 0.432" (6 EH)	176	-196.96	316.57	62.2	Pass
T10	63 - 42.6667	Leg	Pipe 8.625" x 0.375" (8 EHS)	191	-224.18	404.12	55.5	Pass
T11	42.6667 - 22.3334	Leg	Pipe 8.625" x 0.375" (8 EHS)	206	-231.15	406.05	56.9	Pass
T12	22.3334 - 2	Leg	Pipe 8.75" x 0.500" (8 EH)	239	-251.91	541.51	46.5	Pass
T1	244.917 - 224.792	Diagonal	L 1.75 x 1.75 x 3/16	11	-2.43	11.77	20.7	Pass
T2	224.792 - 204.625	Diagonal	L 1.75 x 1.75 x 3/16	44	-3.47	6.64	52.2	Pass
T3	204.625 - 184.438	Diagonal	L 2.5 x 2.5 x 3/16	71	-4.35	12.21	35.6	Pass
T4	184.438 - 164.229	Diagonal	L 2.5 x 2.5 x 1/4	92	-5.02	12.04	41.7	Pass
T5	164.229 - 144.021	Diagonal	L 2.5 x 2.5 x 5/16	113	-5.58	11.51	48.5	Pass
T6	144.021 - 123.813	Diagonal	L 3 x 3 x 5/16	134	-6.61	13.72	48.2	Pass
T7	123.813 - 103.604	Diagonal	L 3.5 x 3.5 x 1/4	149	-7.21	15.14	47.6	Pass
T8	103.604 - 83.3333	Diagonal	L 3.5 x 3.5 x 1/4	164	-7.76	12.76	60.9	Pass
T9	83.3333 - 63	Diagonal	L 4 x 4 x 5/16	179	-8.45	19.99	42.3	Pass
T10	63 - 42.6667	Diagonal	L 4 x 4 x 5/16	194	-11.79	18.32	64.3	Pass
T11	42.6667 - 22.3334	Diagonal	Pipe 3.5" x 0.216" (3 STD)	212	-14.87	33.77	44.0	Pass
T12	22.3334 - 2	Diagonal	Pipe 3.5" x 0.216" (3 STD)	245	-13.80	31.82	43.4	Pass
T11	42.6667 - 22.3334	Horizontal	Pipe 2.875" x 0.203" (2.5 STD)	208	-8.19	16.78	48.8	Pass
T12	22.3334 - 2	Horizontal	Pipe 3.5" x 0.216" (3 STD)	241	-7.98	27.27	29.2	Pass
T1	244.917 - 224.792	Top Girt	L 2 x 2 x 1/8	4	-0.03	4.27	0.6	Pass
T2	224.792 - 204.625	Top Girt	L 2 x 2 x 1/8	42	-0.61	4.35	14.0	Pass
T11	42.6667 - 22.3334	Redund Horz 1 Bracing	Rohn 1.5" x 11 ga	213	-4.05	5.81	69.7	Pass
T12	22.3334 - 2	Redund Horz 1 Bracing	Pipe 1.9" x 0.145" (1.5 STD)	246	-4.39	11.84	37.1	Pass
T11	42.6667 - 22.3334	Redund Diag 1 Bracing	Pipe 1.9" x 0.145" (1.5 STD)	218	-3.68	4.41	83.4	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	$\phi P_{allow} / K$	% Capacity	Pass Fail	
T12	22.3334 - 2	Redund Diag 1 Bracing	Rohn 2.25" x 14 ga	251	-3.73	4.42	84.4	Pass	
T11	42.6667 - 22.3334	Redund Hip 1 Bracing	Rohn 1.5" x 11 ga	233	-0.03	5.17	0.5	Pass	
T12	22.3334 - 2	Redund Hip 1 Bracing	Pipe 1.9" x 0.145" (1.5 STD)	266	-0.02	10.62	0.2	Pass	
T11	42.6667 - 22.3334	Redund Hip Diagonal 1 Bracing	Pipe 2.875" x 0.203" (2.5 STD)	232	-0.07	11.11	0.6	Pass	
T12	22.3334 - 2	Redund Hip Diagonal 1 Bracing	Pipe 2.875" x 0.203" (2.5 STD)	265	-0.07	9.99	0.7	Pass	
T11	42.6667 - 22.3334	Inner Bracing	Pipe 2.375" x 0.154" (2 STD)	235	-0.01	6.89	0.4	Pass	
T12	22.3334 - 2	Inner Bracing	Pipe 3.5" x 0.216" (3 STD)	269	-0.01	25.86	0.3	Pass	
							Summary		
							Leg (T9)	62.2	Pass
							Diagonal (T10)	64.3	Pass
							Horizontal (T11)	48.8	Pass
							Top Girt (T2)	14.0	Pass
							Redund Horz 1 Bracing (T11)	69.7	Pass
							Redund Diag 1 Bracing (T12)	84.4	Pass
							Redund Hip 1 Bracing (T11)	0.5	Pass
							Redund Hip Diagonal 1 Bracing (T12)	0.7	Pass
							Inner Bracing (T11)	0.4	Pass
							Bolt Checks	66.2	Pass
							RATING =	84.4	Pass

APPENDIX B
BASE LEVEL DRAWING



LEG C

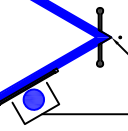


(OTHER CONSIDERED EQUIPMENT)
(1) 1/2" TO 186 FT LEVEL
(2) 7/8" TO 186 FT LEVEL

(OTHER CONSIDERED EQUIPMENT)
(1) 3/8" TO 236 FT LEVEL
(4) 3/4" TO 236 FT LEVEL
(12) 1-5/8" TO 236 FT LEVEL

(OTHER CONSIDERED EQUIPMENT)
(1) 1/2" TO 240 FT LEVEL

LEG A

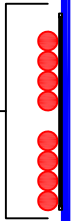


(OTHER CONSIDERED EQUIPMENT)
(1) 1-3/4" TO 165 FT LEVEL

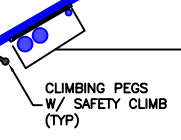
(OTHER CONSIDERED EQUIPMENT)
(2) 1-1/4" TO 201 FT LEVEL

(OTHER CONSIDERED EQUIPMENT)
(1) 1/2" TO 12 FT LEVEL

(PROPOSED EQUIPMENT CONFIGURATION)
(8) 1-5/8" TO 215 FT LEVEL



LEG B



CLIMBING PEGS
W/ SAFETY CLIMB
(TYP)

APPENDIX C
ADDITIONAL CALCULATIONS

Self Support Anchor Rod Capacity



Site Info	
BU #	841294
Site Name	
Order #	654622 Rev. 0

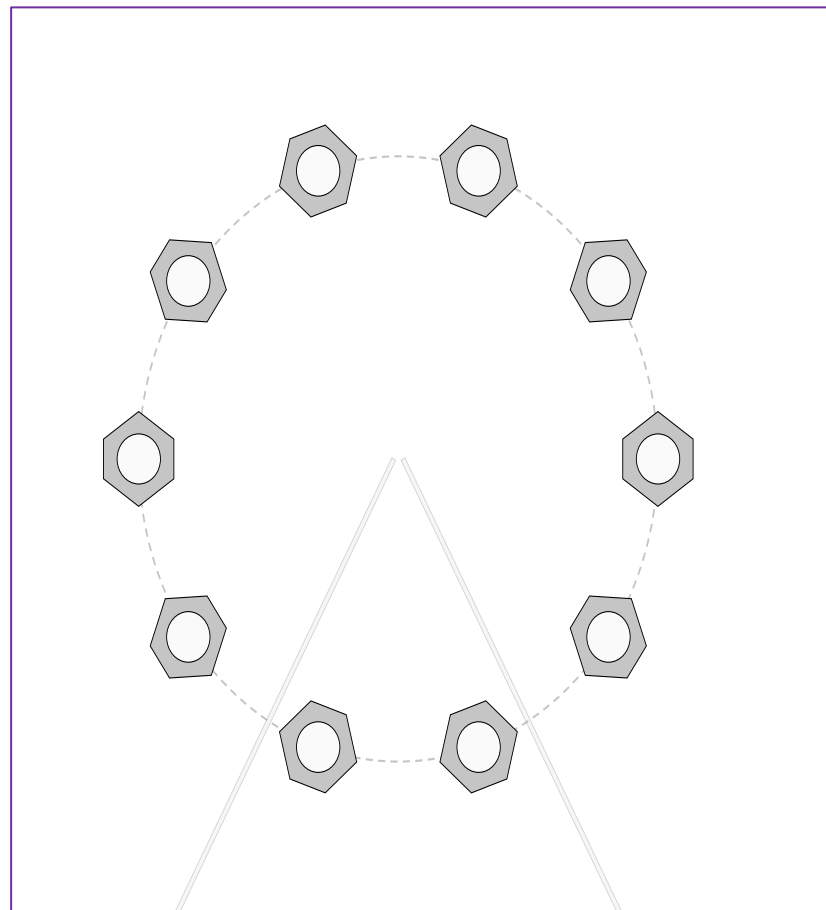
Analysis Considerations	
TIA-222 Revision	H
Grout Considered:	Yes
l_{ar} (in)	0.75

Applied Loads		
	Comp.	Uplift
Axial Force (kips)	269.79	219.40
Shear Force (kips)	29.90	24.76

*TIA-222-H Section 15.5 Applied

Considered Eccentricity	
Leg Mod Eccentricity (in)	0.000
Anchor Rod N.A Shift (in)	0.000
Total Eccentricity (in)	0.000

*Anchor Rod Eccentricity Applied



Connection Properties	Analysis Results
-----------------------	------------------

Anchor Rod Data
(10) 1" ϕ bolts (A354-BC N; $F_y=109$ ksi, $F_u=125$ ksi)
l_{ar} (in): 0.75

Anchor Rod Summary		(units of kips, kip-in)
$P_{u,t} = 21.94$	$\phi P_{n,t} = 56.81$	Stress Rating
$V_u = 2.48$	$\phi V_n = 36.82$	36.8%
$M_u = n/a$	$\phi M_n = n/a$	Pass

Drilled Pier Foundation

BU # :	841294
Site Name:	
Order Number:	654622 Rev. 0
TIA-222 Revision:	H
Tower Type:	Self Support



Applied Loads		
	Comp.	Uplift
Moment (kip-ft)	0	0
Axial Force (kips)	269.79	219.4
Shear Force (kips)	29.9	24.76

Material Properties		
Concrete Strength, f _c :	3	ksi
Rebar Strength, F _y :	60	ksi
Tie Yield Strength, F _{yt} :	40	ksi

Pier Design Data		
Depth	20	ft
Ext. Above Grade	2	ft
Pier Section 1		
<i>From 2' above grade to 20' below grade</i>		
Pier Diameter	3.5	ft
Rebar Quantity	12	
Rebar Size	9	
Clear Cover to Ties	5.5	in
Tie Size	3	
Tie Spacing	18	in

Rebar & Pier Options
 Embedded Pole Inputs
 Belled Pier Inputs

Analysis Results		
Soil Lateral Check		
	Compression	Uplift
D _{v=0} (ft from TOC)	11.46	11.46
Soil Safety Factor	26.50	32.00
Max Moment (kip-ft)	293.33	242.90
Rating*	4.8%	4.0%
Soil Vertical Check		
	Compression	Uplift
Skin Friction (kips)	669.22	446.15
End Bearing (kips)	453.08	-
Weight of Concrete (kips)	38.10	28.57
Total Capacity (kips)	1122.30	474.72
Axial (kips)	307.89	219.40
Rating*	26.1%	44.0%
Reinforced Concrete Flexure		
	Compression	Uplift
Critical Depth (ft from TOC)	11.74	10.79
Critical Moment (kip-ft)	292.93	240.93
Critical Moment Capacity	1006.95	643.57
Rating*	27.7%	35.7%
Reinforced Concrete Shear		
	Compression	Uplift
Critical Depth (ft from TOC)	16.73	16.73
Critical Shear (kip)	55.67	46.10
Critical Shear Capacity	204.02	99.80
Rating*	26.0%	44.0%

Structural Foundation Rating*	44.0%
Soil Interaction Rating*	44.0%

*Rating per TIA-222-H Section 15.5

Check Limitation	
Apply TIA-222-H Section 15.5:	<input checked="" type="checkbox"/>
N/A	<input type="checkbox"/>
Additional Longitudinal Rebar	
Input Effective Depths (else Actual):	<input type="checkbox"/>
Shear Design Options	
Check Shear along Depth of Pier:	<input checked="" type="checkbox"/>
Utilize Shear-Friction Methodology:	<input type="checkbox"/>
Override Critical Depth:	<input type="checkbox"/>

[Go to Soil Calculations](#)

Soil Profile			
Groundwater Depth	N/A	# of Layers	4

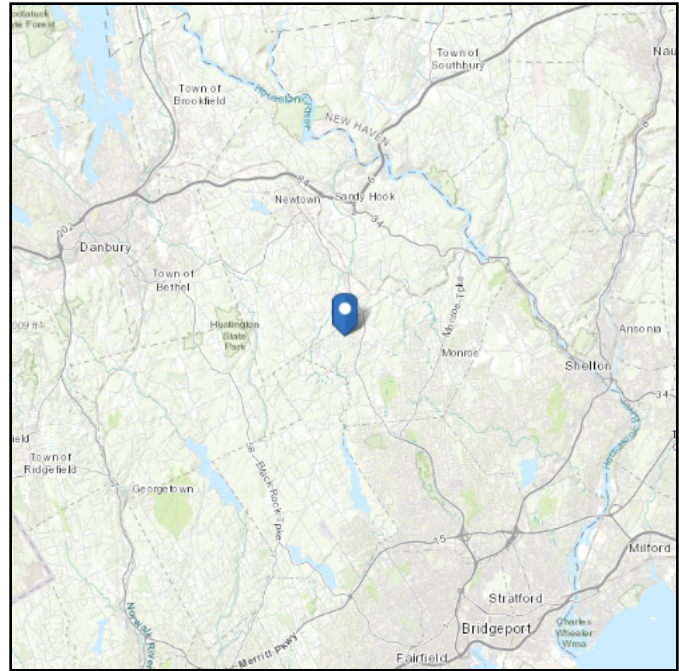
Layer	Top (ft)	Bottom (ft)	Thickness (ft)	γ _{soil} (pcf)	γ _{concrete} (pcf)	Cohesion (ksf)	Angle of Friction (degrees)	Calculated Ultimate Skin Friction Comp (ksf)	Calculated Ultimate Skin Friction Uplift (ksf)	Ultimate Skin Friction Comp Override (ksf)	Ultimate Skin Friction Uplift Override (ksf)	Ult. Net Bearing Capacity (ksf)	SPT Blow Count	Soil Type
1	0	1.75	1.75	120	150	0	0	0.000	0.000	0.00	0.00			Cohesionless
2	1.75	3.5	1.75	120	150	0	34	0.000	0.000	0.60	0.40			Cohesionless
3	3.5	7	3.5	120	150	0	34	0.000	0.000	0.60	0.40			Cohesionless
4	7	20	13	150	150	10	0	4.500	4.500	6.00	4.00	60		Cohesive

ASCE 7 Hazards Report

Address:
No Address at This Location

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

Latitude: 41.341856
Longitude: -73.274522
Elevation: 582.2926805264099 ft (NAVD 88)



Wind

Results:

Wind Speed	117 Vmph
10-year MRI	75 Vmph
25-year MRI	84 Vmph
50-year MRI	90 Vmph
100-year MRI	97 Vmph

Data Source: ASCE/SEI 7-16, Fig. 26.5-1B and Figs. CC.2-1–CC.2-4, and Section 26.5.2

Date Accessed: Sun Jul 23 2023

Value provided is 3-second gust wind speeds at 33 ft above ground for Exposure C Category, based on linear interpolation between contours. Wind speeds are interpolated in accordance with the 7-16 Standard. Wind speeds correspond to approximately a 7% probability of exceedance in 50 years (annual exceedance probability = 0.00143, MRI = 700 years).

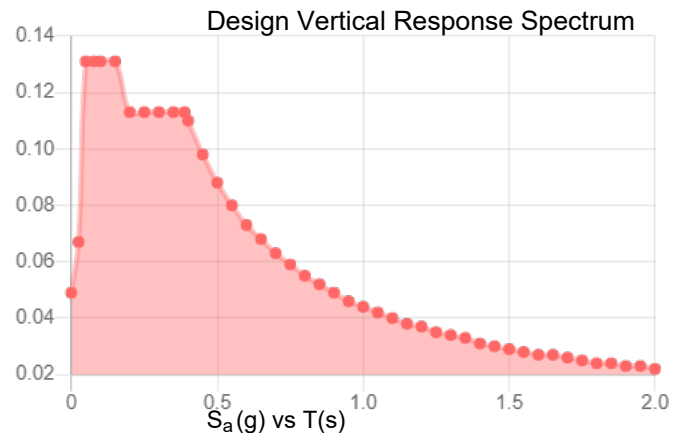
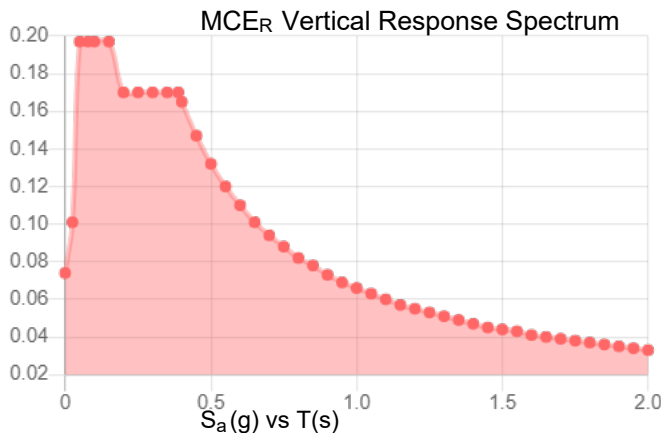
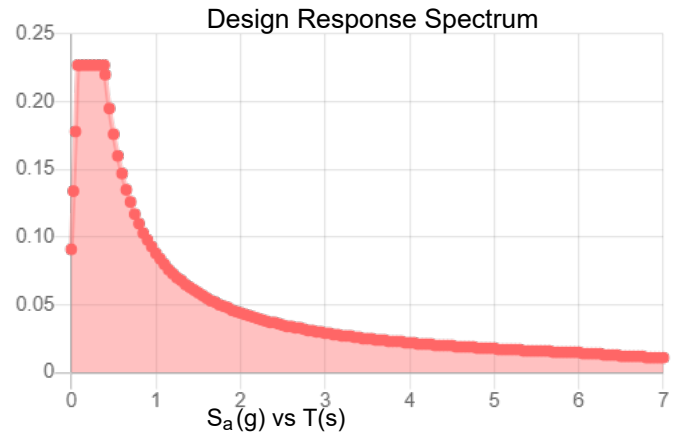
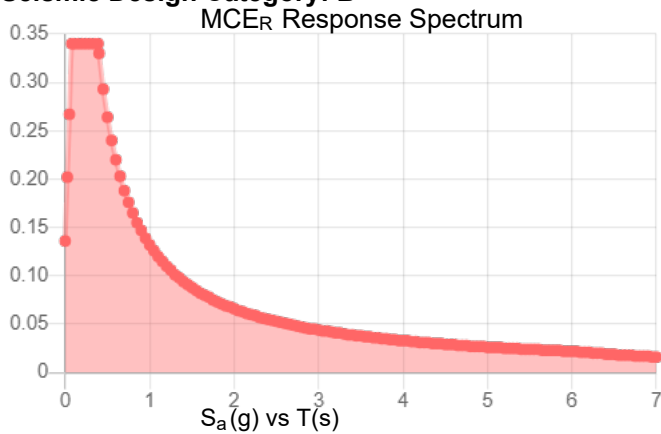
Site is in a hurricane-prone region as defined in ASCE/SEI 7-16 Section 26.2. Glazed openings need not be protected against wind-borne debris.

Site Soil Class:

Results:

S_s :	0.212	S_{D1} :	0.088
S_1 :	0.055	T_L :	6
F_a :	1.6	PGA :	0.121
F_v :	2.4	PGA _M :	0.188
S_{MS} :	0.34	F_{PGA} :	1.558
S_{M1} :	0.132	I_e :	1
S_{DS} :	0.227	C_v :	0.725

Seismic Design Category: B



Data Accessed:

Sun Jul 23 2023

Date Source:

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

Ice

Results:

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

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

Date Accessed: Sun Jul 23 2023

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

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

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