Robinson+Cole

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October 10, 2023

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

Re: **Notice of Exempt Modification – Facility Modification**
7 Hoskins Road, Bloomfield, Connecticut

Dear Attorney Bachman:

Cellco Partnership d/b/a Verizon Wireless ("Cellco") currently maintains a wireless telecommunications facility at the above-referenced address (the "Property"). Cellco's facility consists of antennas and remote radio heads attached to a tower. Equipment associated with the facility is located on the ground adjacent to the tower. The tower was approved by the Siting Council ("Council") in May of 1993 (Docket No. 158). Cellco's shared use of the tower was approved by the Council in October of 1993. A copy of the Council's Docket No. 158 Decision and Order and Cellco's shared use approval letter are included in Attachment 1.

Cellco's proposed modification involves the installation of six (6) interference mitigation filters ("Filters") on its existing antenna mounting assembly. The specification sheet for the Filter is included in Attachment 2.

Please accept this letter as notification pursuant to R.C.S.A. § 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to Bloomfield's Acting Town Manager and Land Use Officer. A copy of this letter is being sent to the owner of the Property.

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

1. The proposed modifications will not result in an increase in the height of the existing tower. The Filters will be installed on Cellco's existing antenna mounting assembly.

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

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

4. The installation of the Filters will not result in a change to radio frequency (RF) emissions from the facility. Therefore, no new RF emissions information is included in this filing.

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

6. According to the attached Structural Analysis Report ("SA") and Antenna Mount Analysis Report ("MA"), the existing tower, foundation, antenna mounting assembly can support Cellco's proposed modifications. A copy of the SA and MA are included in Attachment 3.

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

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

Sincerely,

Kenneth C. Baldwin

Enclosures
Copy to:
Philip Schenk, Acting Town Manger
Justin LaFountain, Director of Building and Land Use
Connecticut Light and Power, Property Owner
Alex Tyurin, Verizon Wireless

ATTACHMENT 1

ORIGINAL

DOCKET NO. 158 - An application of Springwich Cellular Limited Partnership for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a cellular telecommunications tower and associated equipment for a proposed site located approximately 0.3 miles west of Hoskins Road, near the intersection of Andrews Road, Bloomfield, Connecticut. : Connecticut : Siting : Council : May 6, 1993

Decision and Order

Pursuant to the foregoing Findings of Fact and Opinion, the Connecticut Siting Council (Council) finds that the effects associated with the construction, operation, and maintenance of a cellular telecommunications tower at the proposed site in Bloomfield, Connecticut, 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 disproportionate either alone or cumulatively with other effects when compared to need, 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 Connecticut General Statutes (CGS), be issued to Springwich Cellular Limited Partnership (Springwich), for the construction, operation, and maintenance of a cellular telecommunications tower at the proposed site off Hoskins Road in Bloomfield, 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. The self-supporting lattice tower shall be no taller than necessary to provide the proposed communications service and in no event shall the tower exceed a total height of 183 feet above ground level with antennas and appurtenances.

2. Prior to the commencement of construction, 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 the tower, tower foundation, and tower lighting; locations of all antennas to be attached to this tower; location of the security fence; detailed plans for site clearing; and detailed plans for erosion and sediment control. The D&M Plan shall be submitted to the Council for approval prior to the commencement of tower construction.

3. The Certificate holder shall request the tower owner for an engineering analysis of the existing 100-foot repeater tower on Talcott Mountain ridge to determine if the antennas on the repeater tower can be satisfactorily transferred to the new tower and the repeater tower removed. Any such engineering analysis shall be provided to the Council for its review and acceptance prior to the commencement of tower construction.

4. The Certificate holder shall comply with any existing and future radio frequency (RF) standard promulgated by State or federal regulatory agencies. Upon the establishment of any new governmental RF standards, the facility granted herein shall be brought into compliance with such standards.

5. The Certificate holder shall provide the Council a recalculated report of electromagnetic radio frequency power density if and when circumstances in operation cause a change in power density above the levels originally calculated and provided in the application.

6. The Certificate holder shall permit public or private entities to share space on the proposed tower for fair consideration, or shall provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing.

7. If the facility does not initially provide, or permanently ceases to provide cellular or other services following completion of construction, this Decision and Order shall be void, and the tower and all associated equipment shall be dismantled and removed or re-application for any continued or new use shall be made to the Council before any such 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 effective date of this Decision and Order or within three years after all appeals to this Decision and Order have been resolved.

Pursuant to CGS 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, and notice of issuance shall be published in the Hartford Courant.

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 party to this proceeding is:

PARTY

Springwich Cellular
Limited Partnership

ITS REPRESENTATIVE

Peter J. Tyrrell
Senior Attorney
Springwich Cellular
Limited Partnership
227 Church Street-Room 1021
New Haven, CT 06506

6930E

CERTIFICATION

The undersigned members of the Connecticut Siting Council (Council) hereby certify that they have heard this case, or read the record thereof, in Docket No. 158, and voted as follows to approve the application of Springwich Cellular Limited Partnership for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a cellular telecommunications tower and associated equipment for a proposed site located approximately 0.3 miles west of Hoskins Road, near the intersection of Andrews Road, Bloomfield, Connecticut:

Council Members	Vote Cast
Mortimer A. Gelston Chairman	YES
Commissioner Clifton A. Leonhardt Designee: Gerald J. Heffernan	YES
Commissioner Timothy R.E. Keeney Designee: Brian Emerick	YES
Harry E. Covey	ABSENT
Daniel P. Lynch, Jr.	YES
Gloria Dibble Pond	YES
Paulann H. Sheets	ABSENT
Colin C. Tait	YES
Dana J. Wright	YES

Dated at New Britain, Connecticut, May 6, 1993.

6902E-2

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

136 Main Street, Suite 401
New Britain, Connecticut 06051-4225
Phone: 827-7682

FILE COPY

October 26, 1993

David S. Malko
General Manager - Engineering
Bell Atlantic Metro Mobile
20 Alexander Drive
Wallingford, CT 06492

RE: Metro Mobile CTS of Hartford, Inc., notice of intent to modify an existing telecommunications tower and associated equipment at 8 Hoskins Road in Bloomfield, Connecticut.

Dear Mr. Malko:

At a meeting held October 15, 1993, the Connecticut Siting Council (Council) acknowledged your notice of an exempt modification at an existing tower site at 8 Hoskins Road in Bloomfield, Connecticut, pursuant to section 16-50j-73 of the Regulations of State Agencies (RSA).

The proposed modification is to be implemented as specified in your notice dated October 6, 1993. The modification is in compliance with the exception criteria in RSA section 16-50j-72(b) as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by 6 decibels, and increase radio frequency electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to Section 22a-162 of the Connecticut General Statutes.

The Council is pleased to note that the shared use of an existing tower serves the Council's long-term goal of protecting the public interest and avoiding proliferation of additional unnecessary tower structures.

Please notify the Council when all work is complete.

Very truly yours,

Mortimer A. Gelston
Chariman

MAG:RKE:mmb

cc: Honorable Faith McMahon, Mayor, Town of Bloomfield
Louie Chapman, Town Manager, Town of Bloomfield
7425E

ATTACHMENT 2

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

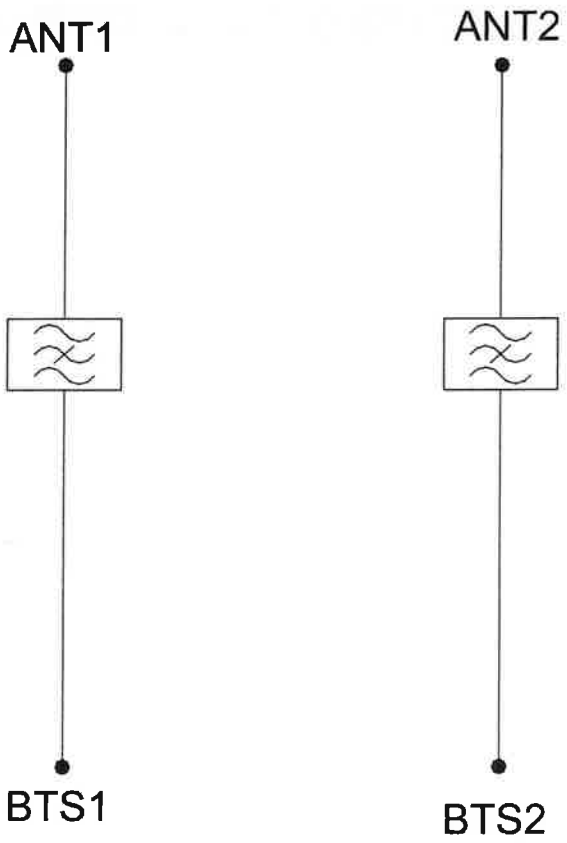
MECHANICAL	
Dimensions H x D x W	269 x 277 x 80mm | 10.60 x 10.90 x 3.15in (Excluding brackets and connectors)
Weight	8.0 kg | 17.6 lbs (no bracket)
Finish	Powder coated, light grey (RAL7035)
Connectors	RF: 4.3-10 (F) x 4
Mounting	Optional pole/wall bracket supplied with two metal clamps 45-178mm diameter poles or custom bracket. See ordering information.

Contact Us: +1 303 768 8080 | +61 (0) 7 3907 1200 | www.kaelus.com

ORDERING INFORMATION

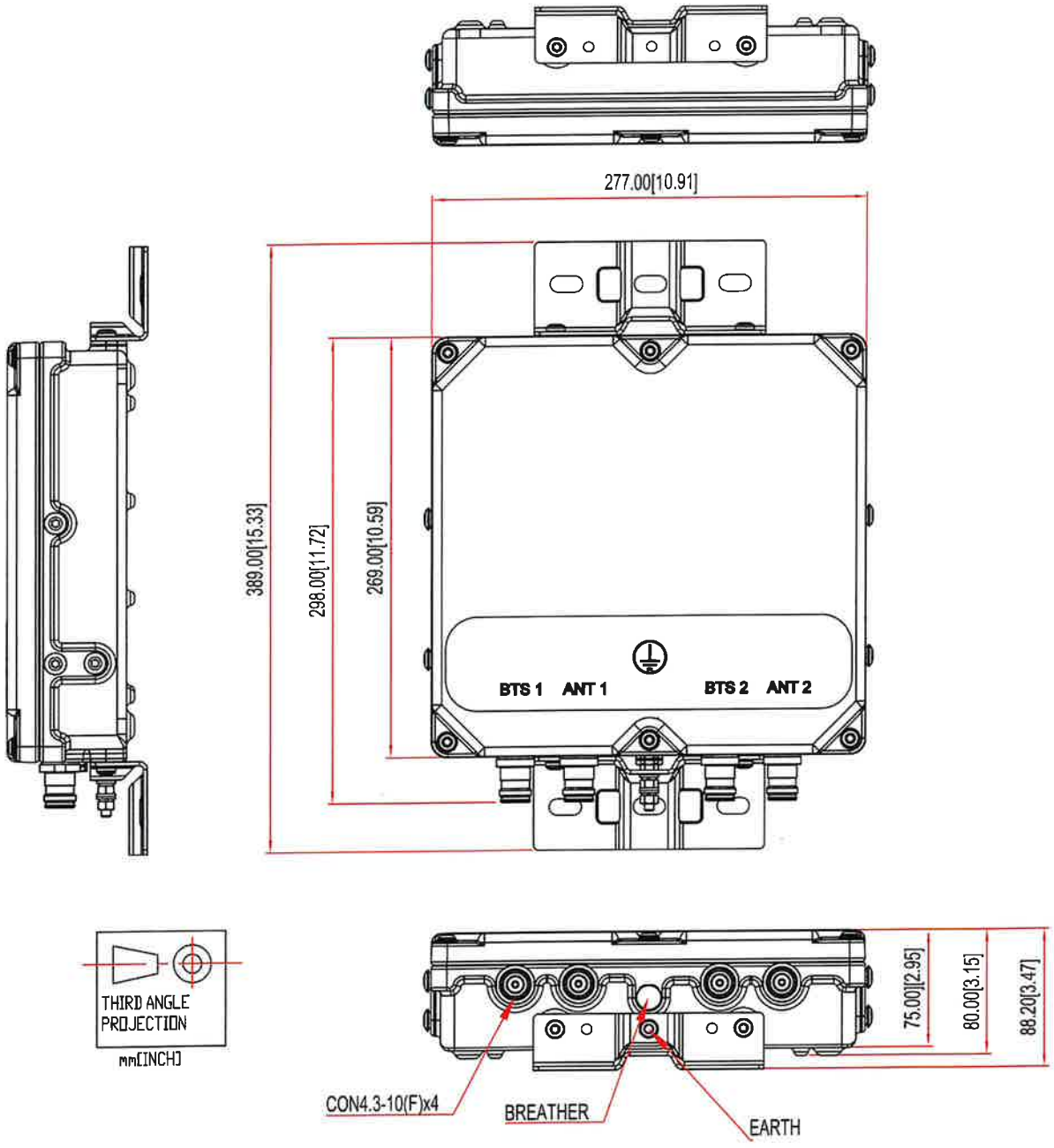
PART NUMBER	CONFIGURATION	OPTIONAL FEATURES	CONNECTORS
BSF0020F3V1	TWIN, 2 in / 2 out	DC/AISG PASS NO BRACKET	4.3-10 (F)
BSF0020F3V1-1	TWIN, 2 in / 2 out	DC/AISG PASS	4.3-10 (F)
BSF0020F3V1-2	QUAD, 4 in / 4 out	DC/AISG PASS	4.3-10 (F)

ELECTRICAL BLOCK DIAGRAM



Contact Us: +1 303 768 8080 | +61 (0) 7 3907 1200 | www.kaelus.com

MECHANICAL BLOCK DIAGRAM



Contact Us: +1 303 768 8080 | +61 (0) 7 3907 1200 | www.kaelus.com

ATTACHMENT 3

CENTEK engineering

Centered on Solutions℠

Structural Analysis Report

185' Existing Lattice Tower

Proposed Verizon Wireless
Antenna Upgrade

Site Ref: Tariffville Relo

7 Hoskins Road
Bloomfield, CT

CENTEK Project No. 23032.06

Date: August 2, 2023

Max Stress Ratio = 92.5%

Prepared for:

Verizon Wireless
20 Alexander Drive
Wallingford, CT 06492

63-2 North Branford Road, Branford, CT 06405 203.488.0580 Fax 203.488.8587 www.CentekEng.com

Table of Contents

Introduction

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

The host tower is a 185-ft, three legged, lattice tower originally designed and manufactured by Sabre Industries project no. 127272 dated 9/26/15. The tower geometry, structure member sizes and foundation information were taken from the aforementioned design documents.

Antenna and appurtenance inventory was taken from a previous structural analysis report prepared by Centek job no. 21007.01 dated July 13, 2021 and a Verizon RFDS.

The tower consists of ten (10) vertical sections consisting of pipe legs conforming to ASTM A572 Gr. 50 and steel angle lateral bracing conforming to ASTM A36. The vertical tower sections are connected by bolted flange plates with the diagonal and horizontal bracing to pipe legs consisting of bolted connections. The width of the tower face is 18-ft 6-in at the top and 37-ft 0-in at the bottom.

Antenna and Appurtenance Summary

The existing and proposed loads considered in the analysis consist of the following:

- Unknown (Existing):
  Antenna: One (1) dBSpectra DS2C03F36D-D antenna, one (1) dBSpectra DS9A09F36D-N antenna, one (1) RFS BA8080-67 dipole antenna, one (1) Kreco CO-41A antenna, one (1) Telewave ANT450F-6 antenna and one (1) TTA pipe mounted to the top of the tower.
  Coax Cable: Two (2) 1-5/8"∅, five (5) 7/8"∅ and one (1) 1/2"∅ cables running on a leg/face of the existing tower as specified in Section 3 of this report.
- Unknown (Existing):
  Antenna: Three (3) dBSpectra DS7C09P36D-D antennas mounted on (1) 10-ft V-frame with an elevation of 183-ft above tower base.
  Coax Cable: Three (3) 1-5/8"∅ and one (1) 1/2"∅ cables running on a leg/face of the existing tower as specified in Section 3 of this report.
- Unknown (Existing):
  Antenna: Two (2) 8-ft microwave dishes pipe mounted with an elevation of 183-ft above tower base.
  Coax Cable: Four (4) EW63 cables running on a leg/face of the existing tower as specified in Section 3 of this report.
- Unknown (Existing):
  Antenna: One (1) Decibel DB411-B antenna leg mounted with an elevation of 176-ft above tower base.
  Coax Cable: One (1) 7/8"∅ cable running on a leg/face of the existing tower as specified in Section 3 of this report.
- Unknown (Existing):
  Antenna: One (1) 4-ft microwave dish pipe mounted with an elevation of 177-ft above tower base.
  Coax Cable: One (1) EW90 cable running on a leg/face of the existing tower as specified in Section 3 of this report.

- Unknown (Existing):
  Antenna: One (1) 8-ft microwave dish pipe mounted with an elevation of 172-ft above tower base.
  Coax Cable: Two (2) EW63 cables running on a leg/face of the existing tower as specified in Section 3 of this report.
- Unknown (Existing):
  Antenna: One (1) 8-ft microwave dish pipe mounted with an elevation of 171-ft above tower base.
  Coax Cable: Two (2) EW63 cables running on a leg/face of the existing tower as specified in Section 3 of this report.
- Unknown (Existing):
  Antenna: One (1) Kathrein PR-900 grid dish pipe mounted with an elevation of 168-ft above tower base.
  Coax Cable: One (1) 7/8"∅ cable running on a leg/face of the existing tower as specified in Section 3 of this report.
- Unknown (Existing):
  Antenna: One (1) Telewave ANT150F6 antenna mounted one a sidearm with an elevation of 165-ft above tower base.
  Coax Cable: One (1) 7/8"∅ cable running on a leg/face of the existing tower as specified in Section 3 of this report.
- AT&T (Existing):
  Antenna: Three (3) Powerwave 7770 panel antennas, four (4) Kathrein 800-10966 panel antennas, two (2) Kathrein 800-10965 panel antennas, two (2) CCI OPA-65R-LCUU-H8 panel antennas, one (1) CCI OPA-65R-LCUU-H6 panel antenna, three (3) Powerwave TT08-19DB111-001 TMAs, three (3) Ericsson 4478 B14 remote radio heads, three (3) Ericsson 4449 B5/B12 remote radio heads, three (3) Ericsson 8843 B2/B66A remote radio heads, three (3) Ericsson RRUS32 remote radio heads, three (3) Ericsson E2 remote radio heads and three (3) Raycap DC6-48-60-18-8F surge arrestors mounted on three (3) 12-ft Sector Frames with a RAD center elevation of ±163.3-ft above grade level.
  Coax Cable: Six (6) 2-1/4" ∅ cables, three (3) 5/16" ∅ cables and twelve (12) 5/8" ∅ cables running on a leg/face of the existing tower as specified in Section 3 of this report.
- T-MOBILE (Existing):
  Antennas: Three (3) RFS APXVAALL24_43 panel antennas, three (3) Ericsson AIR6449 panel antennas, three (3) RFS APX16DWV-16DWVS panel antennas, three (3) Ericsson 4460 remote radio heads and three (3) Ericsson 4449 remote radio heads mounted on three (3) 10-ft V-Frames with a RAD center elevation of ±140-ft above grade level.
  Coax Cables: Six (6) 6x12 fiber cables and three (3) 6x24 fiber cables running on a face of the existing tower as specified in Section 3 of this report.
- Unknown (Existing):
  Antenna: Two (2) 6-ft microwave dishes pipe mounted with an elevation of 135-ft above tower base.
  Coax Cable: Four (4) EW63 cables running on a leg/face of the existing tower as specified in Section 3 of this report.

- Unknown (Existing):
  Antenna: One (1) Telewave ANT150F6 antenna mounted one a sidearm with an elevation of 125-ft above tower base.
  Coax Cable: One (1) 7/8"∅ cable running on a leg/face of the existing tower as specified in Section 3 of this report.
- Unknown (Existing):
  Antenna: One (1) Comprod 531-70HD antenna mounted one a sidearm with an elevation of 125-ft above tower base.
  Coax Cable: One (1) 7/8"∅ cable running on a leg/face of the existing tower as specified in Section 3 of this report.
- Unknown (Existing):
  Antenna: One (1) 8-ft microwave dish pipe mounted with an elevation of 125-ft above tower base.
  Coax Cable: Two (2) EW63 cables running on a leg/face of the existing tower as specified in Section 3 of this report.
- Unknown (Existing):
  Antenna: One (1) Comprod 531-70HD antenna mounted one a sidearm with an elevation of 109-ft above tower base.
  Coax Cable: One (1) 7/8"∅ cable running on a leg/face of the existing tower as specified in Section 3 of this report.
- Unknown (Existing):
  Antenna: One (1) Kreco CO-41A antenna mounted one a sidearm with an elevation of 108-ft above tower base.
  Coax Cable: One (1) 7/8"∅ cable running on a leg/face of the existing tower as specified in Section 3 of this report.
- Unknown (Existing):
  Antenna: One (1) 8-ft microwave dish pipe mounted with an elevation of 100-ft above tower base.
  Coax Cable: Two (2) EW63 cables running on a leg/face of the existing tower as specified in Section 3 of this report.
- Unknown (Existing):
  Antenna: One (1) 3-ft microwave dish pipe mounted with an elevation of 98-ft above tower base.
  Coax Cable: One (1) 3/8"∅ cable running on a leg/face of the existing tower as specified in Section 3 of this report.
- Unknown (Existing):
  Antenna: One (1) 3-ft microwave dish pipe mounted with an elevation of 91-ft above tower base.
  Coax Cable: One (1) 3/8"∅ cable running on a leg/face of the existing tower as specified in Section 3 of this report.

- Unknown (Existing):
  Antenna: One (1) Telewave ANT150F2 antenna mounted one a sidearm with an elevation of 87-ft above tower base.
  Coax Cable: One (1) 7/8"∅ cable running on a leg/face of the existing tower as specified in Section 3 of this report.
- Unknown (Existing):
  Antenna: One (1) Comprod 531-70HD antenna mounted one a sidearm with an elevation of 85-ft above tower base.
  Coax Cable: One (1) 7/8"∅ cable running on a leg/face of the existing tower as specified in Section 3 of this report.
- Unknown (Existing):
  Antenna: One (1) 2'x2' panel antenna mounted one a sidearm with an elevation of 66-ft above tower base.
  Coax Cable: One (1) 1/4"∅ cable running on a leg/face of the existing tower as specified in Section 3 of this report.
- Verizon (Existing to Remain):
  Antennas: Three (3) Andrew LNX-6514DS panel antennas, six (6) Commscope NHH-65B-R2B panel antennas, three (3) Samsung MT6407-77A panel antennas, three (3) B2/B66A remote radio heads, three (3) B5/B13 remote radio heads and one (1) 12-OVP box mounted on (3) Sector Frames with a RAD center elevation of ±155-ft above grade level.
  Coax Cable: Six (6) 1-5/8" ∅ coax cables and one (1) 12x24 hybrid cable running on a leg/face of the existing tower as specified in Section 3 of this report.
- **VERIZON (PROPOSED):**
  Antennas: Six (6) Kaelus BSF0020F3V1-1 filters on a low profile platform with a RAD center elevation of 80-ft above grade.

Primary Assumptions Used in the Analysis

- The tower structure's theoretical capacity not including any assessment of the condition of the tower.
- The tower carries the horizontal and vertical loads due to the weight of antennas, ice load and wind.
- Tower is properly installed and maintained.
- Tower is in plumb condition.
- Tower loading for antennas and mounts as listed in this report.
- All bolts are appropriately tightened providing the necessary connection continuity.
- All welds are fabricated with ER-70S-6 electrodes.
- All members are assumed to be as specified in the original tower design documents.
- All members are "hot dipped" galvanized in accordance with ASTM A123 and ASTM A153 Standards.
- All member protective coatings are in good condition.
- All tower members were properly designed, detailed, fabricated, installed and have been properly maintained since erection.
- Any deviation from the analyzed antenna loading will require a new analysis for verification of structural adequacy.
- All coax cables should be routed as specified in section 3 of this report.

Analysis

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

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

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

Tower Loading

Tower loading was determined by the basic wind speed as applied to projected surface areas with modification factors per TIA-222-H, gravity loads of the tower structure and its components, and the application of 1.50" radial ice on the tower structure and its components.

Load Cases:	Load Case 1; 130 mph (Ultimate) wind speed w/ no ice plus gravity load – used in calculation of tower stresses and rotation.	*[Appendix P of the 2022 CT Building Code]*
	Load Case 2; 50 mph wind speed w/ 1.50" radial ice plus gravity load – used in calculation of tower stresses.	*[Annex B of TIA-222-H]*
	Load Case 3; 101 mph (Nominal) wind speed used for deflection calculation.	

[1] The 2021 International Building Code as amended by the 2022 Connecticut State Building Code (CSBC).

Tower Capacity

Tower stresses were calculated utilizing the structural analysis software tnxTower.

- Calculated stresses **were found to be within allowable limits**.

Tower Section	Elevation (AGL)	Stress Ratio (percentage of capacity)	Result
Diagonal (T3)	142'-4"-162'-4"	92.5%	**PASS**
Leg (T10)	55'-8"-62'-4"	64.4%	**PASS**

- The tower combined deflection is **0.2136 degrees**.

Deflection Criteria	Proposed (degrees)	Allowable (degrees)	Result
Sway (Tilt)	0.2124	0.5	**n/a**
Twist	0.0227	0.5	**n/a**
Combined	0.2136	0.5	**PASS**

Note 1: Tower deflection calculated utilizing the service wind load combination and nominal wind speed of 101 mph.

Foundation and Anchors

The existing foundation consists of a three (3) 6-ft ∅ x 5.5-ft long reinforced concrete piers concentrically bearing on a 45.5-ft square x 1-ft 6-in thick reinforced concrete mat. The sub grade conditions used in the foundation analysis were derived from a geotechnical report prepared by Design Earth Technology job no. 2014.15 dated October 14, 2014. The base of the tower is connected to the foundation by means of (6) 1.75"∅, ASTM F1554 Grade 105 anchor bolts per leg embedded 6-ft 6-in into the concrete foundation structure.

- The tower reactions developed from the governing Load Case were used in the verification of the foundation and anchor bolts:

Load Effect	Proposed Tower Reactions
Leg Shear	82 kips
Leg Compression	511 kips
Leg Tension	434 kips
Base Moment	15370 ft-kips
Base Shear	142 kips

- The anchor bolts were found to be within allowable limits.

Tower Section	Component	Stress Ratio (percentage of capacity)	Result
Anchor Bolts	Tension	39.3%	**PASS**

- The foundation was found to be within allowable limits.

Foundation	Design Limit	TIA-222-H Section 9.4 FS[1]	Proposed Loading (FS)[1]	Result
Reinforced Concrete Pad and Piers	Overturning	1.0	1.8	**PASS**

Note 1: FS denotes Factor of Safety

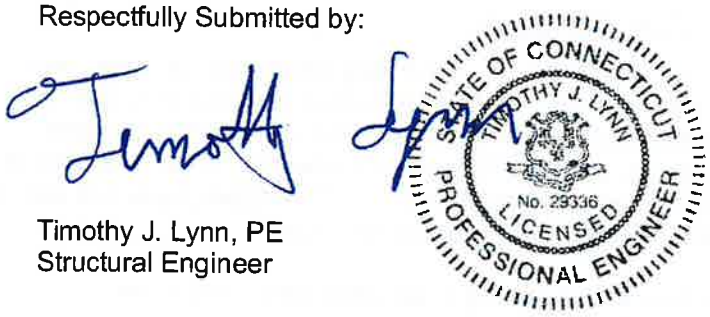
Conclusion

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

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

Please feel free to call with any questions or comments.

Respectfully Submitted by:



Timothy J. Lynn, PE
Structural Engineer

Standard Conditions for Furnishing of Professional Engineering Services on Existing Structures

All engineering services are performed on the basis that the information used is current and correct. This information may consist of, but is not necessarily limited to:

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

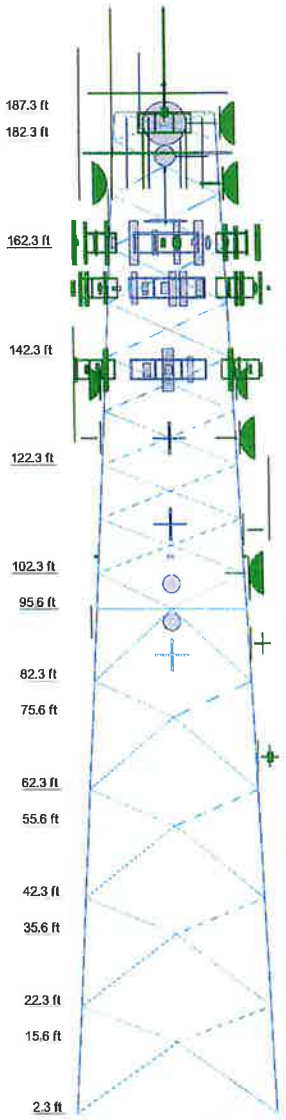
GENERAL DESCRIPTION OF STRUCTURAL ANALYSIS PROGRAM

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

TnxTower Features:

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

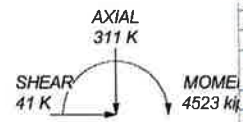
Section	T15	T14	T13	T12	T11	T10	T9	T8	T7	T6	T5	T4	T3	T2	T1
Legs	P12x.5		P10x.5		P10x.365		P8x.5		P8x.322				P8x.28		
Leg Grade	A572-50														
Diagonals	L6x6x1/2		L6x6x3/8				L6x4x1/2	B	L5x5x3/8		L5x5x5/16		L4x4x1/4		A
Diagonal Grade	A36														C
Top Girts	N.A.														
Horizontals	L5x5x5/16	N.A.	L5x5x5/16	N.A.	L5x5x5/16	N.A.	L4x4x5/16	N.A.	L4x4x5/16		N.A.				
Red. Horizontals	D	N.A.	L3x3x5/16	N.A.	L3x3x5/16	N.A.	L3x3x1/4	N.A.	L3x3x1/4		N.A.				
Red. Diagonals	D	N.A.	L3x3x5/16	N.A.	L3x3x5/16	N.A.	L3x3x1/4	N.A.	L3x3x1/4		N.A.				
Inner Bracing	A	N.A.	A	N.A.	A	N.A.	L3x3x1/4	N.A.	L3x3x1/4		N.A.				
Face Width (ft)	37	35	33.6667	33	31.6667	31	29.6667	29	27.6667	27	25	23	21	19	18.5
# Panels @ (ft)	1 @ 13.33	F	1 @ 13.33	F	1 @ 13.33	F	1 @ 13.33	F	1 @ 13.33	F	8 @ 10				E
Weight (K)	60.7	7.6	3.5	6.8	2.7	3.4	2.3	5.0	2.2	4.4	1.9	5.8	4.1	2.9	1.5



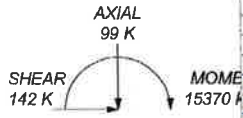
△ *ALL REACTIONS ARE FACTORED*

MAX. CORNER REACTIO
DOWN: 511 K
SHEAR: 82 K

UPLIFT: -434 K
SHEAR: 72 K



TORQUE 64 kip-ft
50 mph WIND - 1.5000 in ICE



TORQUE 156 kip-ft
REACTIONS - 130 mph WIND

DESIGNED APPURTENANCE LOADING

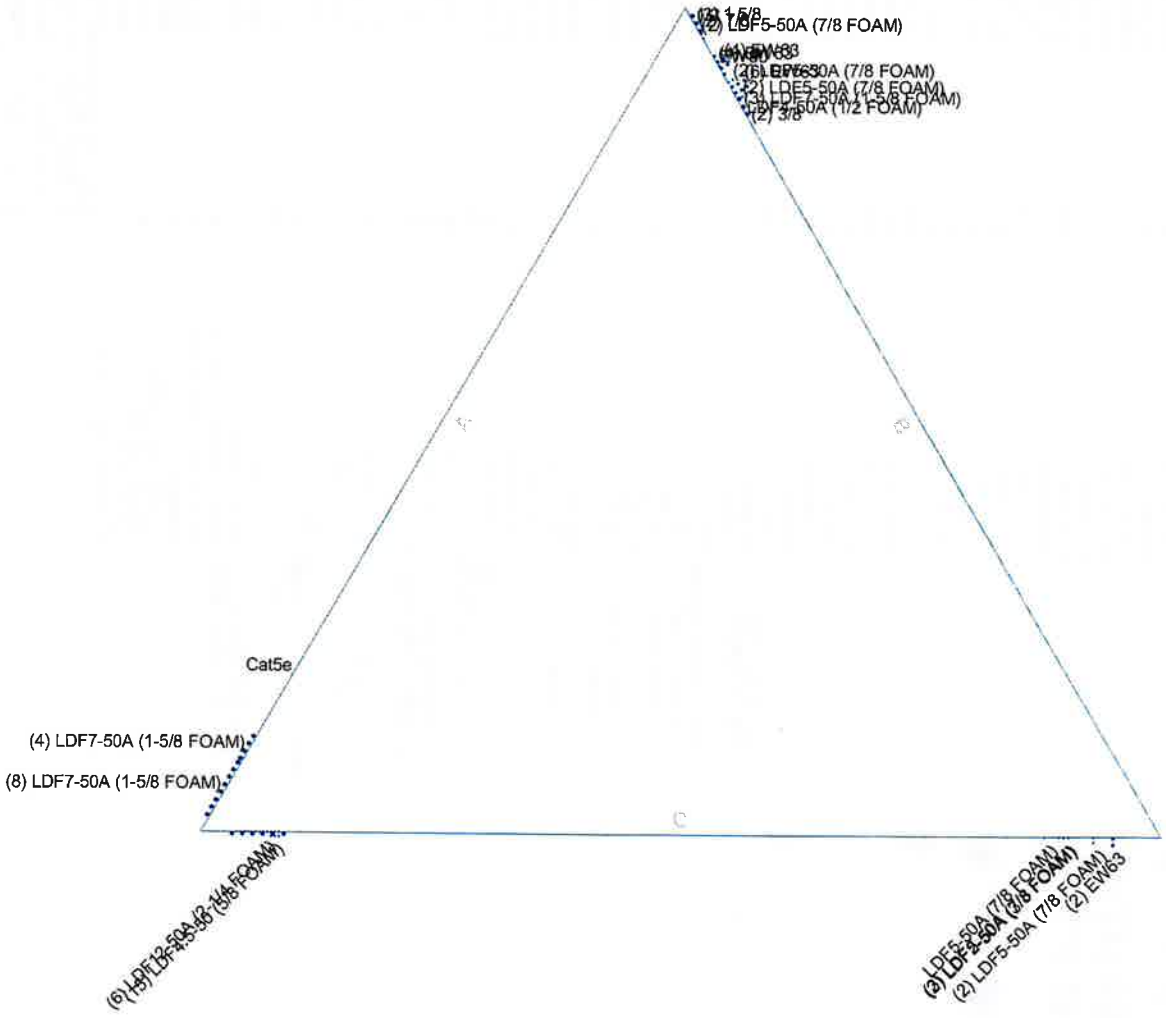
TYPE	ELEVATION	TYPE	ELEVATION
6'x4" Pipe Mount	187.3	DC6-48-60-18-8F Surge Arrestor (ATI)	163.3
Light Beacon	187.3	80010966 (ATI)	163.3
CO-41A	187.3	80010966 (ATI)	163.3
DS9A09F36D-N	187.3	7770.00 (ATI)	163.3
Tower Top Amplifier	187.3	OPA-65R-LCUU-H8 (ATI)	163.3
ANT450F6	187.3	DC6-48-60-18-8F Surge Arrestor (ATI)	163.3
20' 8 Bay Di-Pole	187.3	4478 B14 (ATI)	163.3
6'x4" Pipe Mount	185.3	4478 B14 (ATI)	163.3
8' x 2" Horz. Pipe	185.3	80010965 (ATI)	163.3
6'x4" Pipe Mount	185.3	80010966 (ATI)	163.3
8' x 2" Horz. Pipe	185.3	80010965 (ATI)	163.3
DS2C03F36D-D	185.3	7770.00 (ATI)	163.3
DS7C09P36U-D	185.3	4449 B5/B12 (ATI)	163.3
DS7C09P36U-D	185.3	4449 B5/B12 (ATI)	163.3
DS7C09P36U-D	185.3	8843 B2/B66A (ATI)	163.3
SitePro VFA10-HD	185.3	4478 B14 (ATI)	163.3
8' Dish	185.3	4449 B5/B12 (ATT)	163.3
8' Dish	185.3	7770.00 (ATI)	163.3
20' Horz. 4x4x1/4"	184.3	OPA-65R-LCUU-H8 (ATI)	163.3
20' Horz. 4x4x1/4"	184.3	OPA-65R-LCUU-H6 (ATI)	163.3
20' Horz. 4x4x1/4"	184.3	Andrew TFL-M2-20 (Verizon)	155
DB411-B	183.3	Andrew TFL-M2-20 (Verizon)	155
6'x4" Pipe Mount	179.3	Andrew TFL-M2-20 (Verizon)	155
8' x 2" Horz. Pipe	179.3	13'x2" Pipe (Verizon)	155
4' Dish	179.3	13'x2" Pipe (Verizon)	155
6'x4" Pipe Mount	174.3	13'x2" Pipe (Verizon)	155
8' x 2" Horz. Pipe	174.3	LNX-6514DS (Verizon)	155
8' Dish	174.3	NHH-65B-R2B (Verizon)	155
8' Dish	174.3	NHH-65B-R2B (Verizon)	155
13'x2" Pipe	173.3	MT6407-77A (Verizon)	155
13'x2" Pipe	173.3	LNX-6514DS (Verizon)	155
13'x2" Pipe	173.3	NHH-65B-R2B (Verizon)	155
13'x2" Pipe	173.3	NHH-65B-R2B (Verizon)	155
13'x2" Pipe	173.3	MT6407-77A (Verizon)	155
13'x2" Pipe	173.3	LNX-6514DS (Verizon)	155
22' Horz. 4x4x1/4	173.3	NHH-65B-R2B (Verizon)	155
22' Horz. 4x4x1/4	173.3	NHH-65B-R2B (Verizon)	155
22' Horz. 4x4x1/4	173.3	MT6407-77A (Verizon)	155
6'x2" Pipe Mount	170.3	B2/B66A RRH (Verizon)	155
PR-900	170.3	B2/B66A RRH (Verizon)	155
8' x 2" Horz. Pipe	167.3	B2/B66A RRH (Verizon)	155
6' Standoff Arm	167.3	B5/B13 RRH (Verizon)	155
ANT150F6	167.3	B5/B13 RRH (Verizon)	155
8843 B2/B66A (ATI)	163.3	B5/B13 RRH (Verizon)	155
8843 B2/B66A (ATI)	163.3	DB-T1-6Z-8AB-0Z (Verizon)	155
RRUS-32 (ATI)	163.3	(2) BSF0020F3V1-1 (Verizon - Proposed)	155
RRUS-32 (ATI)	163.3	(2) BSF0020F3V1-1 (Verizon - Proposed)	155
RRUS-32 (ATI)	163.3	(2) BSF0020F3V1-1 (Verizon - Proposed)	155
RRUS-E2 (ATI)	163.3	Pirod 12' T-Frame Sector Mount (1) (Verizon)	155
RRUS-E2 (ATI)	163.3	Pirod 12' T-Frame Sector Mount (1) (Verizon)	155
RRUS-E2 (ATI)	163.3	Pirod 12' T-Frame Sector Mount (1) (Verizon)	155
Pirod 12' T-Frame Sector Mount (1) (ATI)	163.3	AIR6449 (T-Mobile)	140
Pirod 12' T-Frame Sector Mount (1) (ATI)	163.3	APXVAALL24-43 (T-Mobile)	140
Pirod 12' T-Frame Sector Mount (1) (ATI)	163.3	APX16DWV-16DWVS-E-A20 (T-Mobile)	140
80010966 (ATI)	163.3	AIR6449 (T-Mobile)	140
TT08-19DB111-001 TMA (ATI)	163.3	APX16DWV-16DWVS-E-A20 (T-Mobile)	140
TT08-19DB111-001 TMA (ATI)	163.3	AIR6449 (T-Mobile)	140
TT08-19DB111-001 TMA (ATI)	163.3	APXVAALL24-43 (T-Mobile)	140
DC6-48-60-18-8F Surge Arrestor (ATI)	163.3	4449 B12,B71 (T-Mobile)	140

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

Job: 23032.06 - Tariffville Relo		
Project: 185' Lattice Tower - Bloomfield, CT		
Client: Verizon	Drawn by: TJL	App'd:
Code: TIA-222-H	Date: 08/02/23	Scale: NTS
Path:		Dwg No. E-1

Feed Line Plan

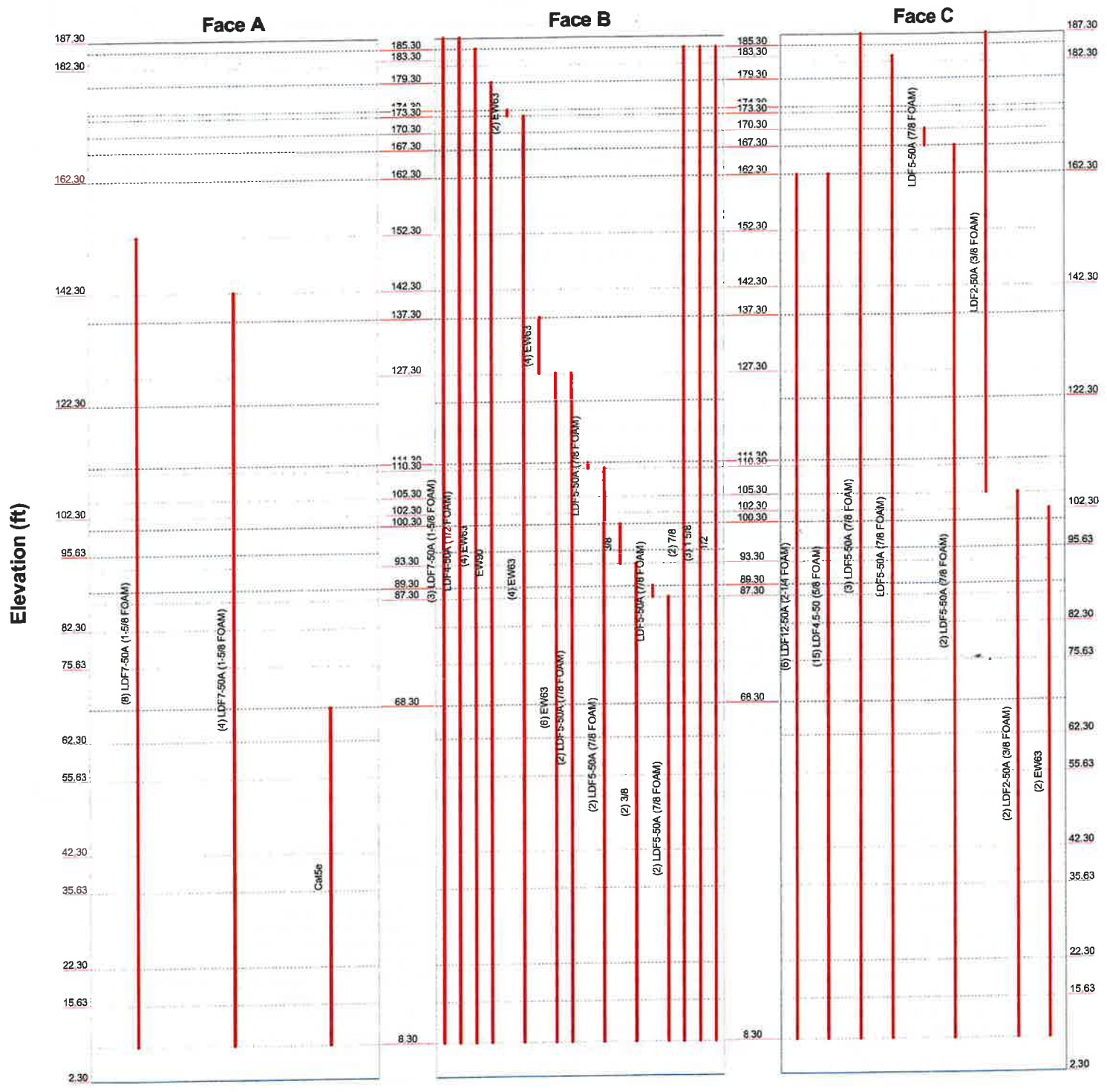
Round Flat App In Face App Out Face



Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587	Job: **23032.06 - Tariffville Relo**		
	Project: ***185' Lattice Tower - Bloomfield, CT***		
	Client: Verizon	Drawn by: TJL	App'd:
	Code: TIA-222-H	Date: 08/02/23	Scale: NTS
	Path:		Dwg No. E-7

Feed Line Distribution Chart
2'3-19/32" - 187'3-19/32"

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



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Path:		Dwg No. E-7	

tnxTower	Job	Page
	23032.06 - Tariffville Relo	1 of 70
Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587	**Project** 185' Lattice Tower - Bloomfield, CT	**Date** 08:33:03 08/02/23
	Client Verizon	**Designed by** TJL

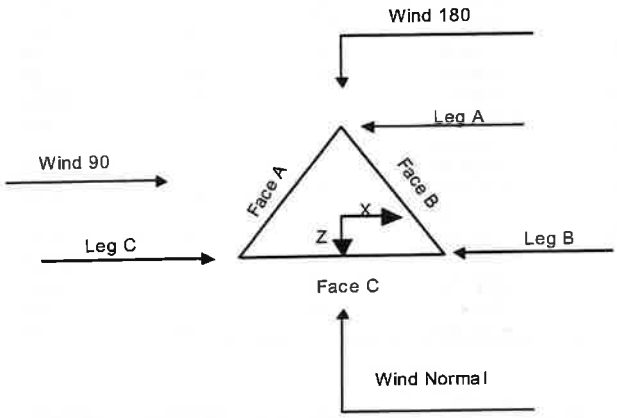
Tower Input Data

The main tower is a 3x free standing tower with an overall height of 187.30 ft above the ground line.
The base of the tower is set at an elevation of 2.30 ft above the ground line.
The face width of the tower is 18.50 ft at the top and 37.00 ft at the base.
This tower is designed using the TIA-222-H standard.
The following design criteria apply:

Tower base elevation above sea level: 407.30 ft.
Basic wind speed of 130 mph.
Risk Category III.
Exposure Category B.
Crest Height: 200.00 ft.
Rigorous Topographic Factor Procedure for wind speed-up calculations is used.
Topographic Feature: Continuous Ridge.
Slope Distance L: 1698.00 ft.
Distance from Crest x: 397.00 ft.
Horizontal Distance Downwind: No.
Nominal ice thickness of 1.5000 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 101 mph.
A non-linear (P-delta) analysis was used.
Pressures are calculated at each section.
Stress ratio used in tower member design is 1.
Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Options

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



Triangular Tower

Tower Section Geometry

Tower Section	Tower Elevation	Assembly Database	Description	Section Width	Number of Sections	Section Length
	ft			ft		ft
T1	187.30-182.30			18.50	1	5.00
T2	182.30-162.30			19.00	1	20.00
T3	162.30-142.30			21.00	1	20.00
T4	142.30-122.30			23.00	1	20.00
T5	122.30-102.30			25.00	1	20.00
T6	102.30-95.63			27.00	1	6.67
T7	95.63-82.30			27.67	1	13.33
T8	82.30-75.63			29.00	1	6.67
T9	75.63-62.30			29.67	1	13.33
T10	62.30-55.63			31.00	1	6.67
T11	55.63-42.30			31.67	1	13.33
T12	42.30-35.63			33.00	1	6.67
T13	35.63-22.30			33.67	1	13.33
T14	22.30-15.63			35.00	1	6.67
T15	15.63-2.30			35.67	1	13.33

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

Tower Section	Tower Elevation ft	Diagonal Spacing ft	Bracing Type	Has K Brace End Panels	Has Horizontals	Top Girt Offset in	Bottom Girt Offset in
T1	187.30-182.30	5.00	X Brace	No	No	0.0000	0.0000
T2	182.30-162.30	10.00	X Brace	No	No	0.0000	0.0000
T3	162.30-142.30	10.00	X Brace	No	No	0.0000	0.0000
T4	142.30-122.30	10.00	X Brace	No	No	0.0000	0.0000
T5	122.30-102.30	10.00	X Brace	No	No	0.0000	0.0000
T6	102.30-95.63	6.67	K Brace Up	No	Yes	0.0000	0.0000
T7	95.63-82.30	13.33	K1 Down	No	Yes	0.0000	0.0000
T8	82.30-75.63	6.67	K Brace Up	No	Yes	0.0000	0.0000
T9	75.63-62.30	13.33	K1 Down	No	Yes	0.0000	0.0000
T10	62.30-55.63	6.67	K Brace Up	No	Yes	0.0000	0.0000
T11	55.63-42.30	13.33	K1 Down	No	Yes	0.0000	0.0000
T12	42.30-35.63	6.67	K Brace Up	No	Yes	0.0000	0.0000
T13	35.63-22.30	13.33	K1 Down	No	Yes	0.0000	0.0000
T14	22.30-15.63	6.67	K Brace Up	No	Yes	0.0000	0.0000
T15	15.63-2.30	13.33	K1 Down	No	Yes	0.0000	0.0000

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Leg Type	Leg Size	Leg Grade	Diagonal Type	Diagonal Size	Diagonal Grade
T1 187.30-182.30	Pipe	P6x.28	A572-50 (50 ksi)	Single Angle	L3 1/2x3 1/2x1/4	A36 (36 ksi)
T2 182.30-162.30	Pipe	P6x.28	A572-50 (50 ksi)	Single Angle	L4x4x1/4	A36 (36 ksi)
T3 162.30-142.30	Pipe	P6x.28	A572-50 (50 ksi)	Single Angle	L5x5x5/16	A36 (36 ksi)
T4 142.30-122.30	Pipe	P6x.28	A572-50 (50 ksi)	Single Angle	L5x5x5/16	A36 (36 ksi)
T5 122.30-102.30	Pipe	P8x.322	A572-50 (50 ksi)	Single Angle	L5x5x3/8	A36 (36 ksi)
T6 102.30-95.63	Pipe	P8x.322	A572-50 (50 ksi)	Single Angle	L6x6x3/8	A36 (36 ksi)
T7 95.63-82.30	Pipe	P8x.322	A572-50 (50 ksi)	Single Angle	L6x4x1/2	A36 (36 ksi)
T8 82.30-75.63	Pipe	P8x.5	A572-50 (50 ksi)	Single Angle	L6x6x3/8	A36 (36 ksi)
T9 75.63-62.30	Pipe	P8x.5	A572-50 (50 ksi)	Single Angle	L6x6x3/8	A36 (36 ksi)
T10 62.30-55.63	Pipe	P10x.365	A572-50 (50 ksi)	Single Angle	L6x6x3/8	A36 (36 ksi)
T11 55.63-42.30	Pipe	P10x.365	A572-50 (50 ksi)	Single Angle	L6x6x3/8	A36 (36 ksi)
T12 42.30-35.63	Pipe	P10x.5	A572-50 (50 ksi)	Single Angle	L6x6x3/8	A36 (36 ksi)
T13 35.63-22.30	Pipe	P10x.5	A572-50 (50 ksi)	Single Angle	L6x6x1/2	A36 (36 ksi)
T14 22.30-15.63	Pipe	P12x.5	A572-50 (50 ksi)	Single Angle	L6x6x1/2	A36 (36 ksi)
T15 15.63-2.30	Pipe	P12x.5	A572-50 (50 ksi)	Single Angle	L6x6x1/2	A36 (36 ksi)

Tower Section Geometry (cont'd)

Tower Elevation ft	Top Girt Type	Top Girt Size	Top Girt Grade	Bottom Girt Type	Bottom Girt Size	Bottom Girt Grade
T1 187.30-182.30	Single Angle	L5x5x5/16	A36 (36 ksi)	Single 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
T6 102.30-95.63	None	Single Angle		A36 (36 ksi)	Single Angle	L1x1x1/8	A36 (36 ksi)
T7 95.63-82.30	None	Single Angle		A36 (36 ksi)	Single Angle	L4x4x5/16	A36 (36 ksi)
T8 82.30-75.63	None	Single Angle		A36 (36 ksi)	Single Angle	L1x1x1/8	A36 (36 ksi)
T9 75.63-62.30	None	Single Angle		A36 (36 ksi)	Single Angle	L4x4x5/16	A36 (36 ksi)
T10 62.30-55.63	None	Single Angle		A36 (36 ksi)	Single Angle	L1x1x1/8	A36 (36 ksi)
T11 55.63-42.30	None	Single Angle		A36 (36 ksi)	Single Angle	L5x5x5/16	A36 (36 ksi)
T12 42.30-35.63	None	Single Angle		A36 (36 ksi)	Single Angle	L1x1x1/8	A36 (36 ksi)
T13 35.63-22.30	None	Single Angle		A36 (36 ksi)	Single Angle	L5x5x5/16	A36 (36 ksi)
T14 22.30-15.63	None	Single Angle		A36 (36 ksi)	Single Angle	L1x1x1/8	A36 (36 ksi)
T15 15.63-2.30	None	Single Angle		A36 (36 ksi)	Single Angle	L5x5x5/16	A36 (36 ksi)

Tower Section Geometry (cont'd)

Tower Elevation ft	Secondary Horizontal Type	Secondary Horizontal Size	Secondary Horizontal Grade	Inner Bracing Type	Inner Bracing Size	Inner Bracing Grade
T7 95.63-82.30	Single Angle		A36 (36 ksi)	Single Angle	L3x3x1/4	A36 (36 ksi)
T9 75.63-62.30	Single Angle		A36 (36 ksi)	Single Angle	L3x3x1/4	A36 (36 ksi)
T11 55.63-42.30	Single Angle		A36 (36 ksi)	Single Angle	L3 1/2x3 1/2x1/4	A36 (36 ksi)
T13 35.63-22.30	Single Angle		A36 (36 ksi)	Single Angle	L3 1/2x3 1/2x1/4	A36 (36 ksi)
T15 15.63-2.30	Single Angle		A36 (36 ksi)	Single Angle	L3 1/2x3 1/2x1/4	A36 (36 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Redundant Bracing Grade		Redundant Type	Redundant Size	K Factor
T7	A36	Horizontal (1)	Single Angle	L3x3x1/4	1
95.63-82.30	(36 ksi)	Diagonal (1)	Single Angle	L3x3x1/4	1
T9	A36	Horizontal (1)	Single Angle	L3x3x1/4	1
75.63-62.30	(36 ksi)	Diagonal (1)	Single Angle	L3x3x1/4	1
T11	A36	Horizontal (1)	Single Angle	L3x3x5/16	1
55.63-42.30	(36 ksi)	Diagonal (1)	Single Angle	L3x3x5/16	1
T13	A36	Horizontal (1)	Single Angle	L3x3x5/16	1
35.63-22.30	(36 ksi)	Diagonal (1)	Single Angle	L3x3x5/16	1
T15	A36	Horizontal (1)	Single Angle	L4x3 1/2x5/16	1
15.63-2.30	(36 ksi)	Diagonal (1)	Single Angle	L4x3 1/2x5/16	1

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Gusset Area (per face) ft^2	Gusset Thickness in	Gusset Grade	Adjust. Factor A_f	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in	Double Angle Stitch Bolt Spacing Redundants in
T1	0.00	0.0000	A36	1	1	1	30.0000	30.0000	36.0000
187.30-182.30			(36 ksi)						
T2	0.00	0.0000	A36	1	1	1	36.0000	36.0000	36.0000
182.30-162.30			(36 ksi)						
T3	0.00	0.0000	A36	1	1	1	36.0000	36.0000	36.0000
162.30-142.30			(36 ksi)						
T4	0.00	0.0000	A36	1	1	1	36.0000	36.0000	36.0000
142.30-122.30			(36 ksi)						
T5	0.00	0.0000	A36	1	1	1	36.0000	36.0000	36.0000
122.30-102.30			(36 ksi)						
T6	0.00	0.0000	A36	1	1	1	36.0000	36.0000	36.0000
102.30-95.63			(36 ksi)						
T7 95.63-82.30	0.00	0.0000	A36	1	1	1	36.0000	36.0000	36.0000
			(36 ksi)						
T8 82.30-75.63	0.00	0.0000	A36	1	1	1	36.0000	36.0000	36.0000
			(36 ksi)						
T9 75.63-62.30	0.00	0.0000	A36	1	1	1	36.0000	36.0000	36.0000
			(36 ksi)						
T10	0.00	0.0000	A36	1	1	1	36.0000	36.0000	36.0000
62.30-55.63			(36 ksi)						
T11	0.00	0.0000	A36	1	1	1	36.0000	36.0000	36.0000
55.63-42.30			(36 ksi)						
T12	0.00	0.0000	A36	1	1	1	36.0000	36.0000	36.0000
42.30-35.63			(36 ksi)						
T13	0.00	0.0000	A36	1	1	1	36.0000	36.0000	36.0000
35.63-22.30			(36 ksi)						
T14	0.00	0.0000	A36	1	1	1	36.0000	36.0000	36.0000
22.30-15.63			(36 ksi)						
T15 15.63-2.30	0.00	0.0000	A36	1	1	1	36.0000	36.0000	36.0000
			(36 ksi)						

Tower Section Geometry (cont'd)

Tower Elevation ft	Calc K Single Angles	Calc K Solid Rounds	K Factors[1] Legs	X Brace Diags X	X Brace Diags Y	K Brace Diags X	K Brace Diags Y	Single Diags X	Single Diags Y	Girts X	Girts Y	Horiz. X	Horiz. Y	Sec. Horiz. X	Sec. Horiz. Y	Inner Brace X	Inner Brace Y
T1	Yes	Yes	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
187.30-182.30				1	1	1	1	1	1	1	1	1	1	1	1	1	1
T2	Yes	Yes	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
182.30-162.30				1	1	1	1	1	1	1	1	1	1	1	1	1	1
T3	Yes	Yes	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
162.30-142.30				1	1	1	1	1	1	1	1	1	1	1	1	1	1
T4	Yes	Yes	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
142.30-122.30				1	1	1	1	1	1	1	1	1	1	1	1	1	1
T5	Yes	Yes	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
122.30-102.30				1	1	1	1	1	1	1	1	1	1	1	1	1	1
T6	Yes	Yes	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
102.30-95.63				1	1	1	1	1	1	1	1	1	1	1	1	1	1
T7	Yes	Yes	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
95.63-82.30				1	1	1	1	1	1	1	1	1	1	1	1	1	1
T8	Yes	Yes	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
82.30-75.63				1	1	1	1	1	1	1	1	1	1	1	1	1	1
T9	Yes	Yes	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
75.63-62.30				1	1	1	1	1	1	1	1	1	1	1	1	1	1
T10	Yes	Yes	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
62.30-55.63				1	1	1	1	1	1	1	1	1	1	1	1	1	1
T11	Yes	Yes	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
55.63-42.30				1	1	1	1	1	1	1	1	1	1	1	1	1	1
T12	Yes	Yes	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
42.30-35.63				1	1	1	1	1	1	1	1	1	1	1	1	1	1
T13	Yes	Yes	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
35.63-22.30				1	1	1	1	1	1	1	1	1	1	1	1	1	1
T14	Yes	Yes	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
22.30-15.63				1	1	1	1	1	1	1	1	1	1	1	1	1	1
T15	Yes	Yes	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
15.63-2.30				1	1	1	1	1	1	1	1	1	1	1	1	1	1

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

Tower Section Geometry (cont'd)

Tower Elevation ft	Leg Net Width Deduct in	Leg U	Diagonal Net Width Deduct in	Diagonal U	Top Girt Net Width Deduct in	Top Girt U	Bottom Girt Net Width Deduct in	Bottom Girt U	Mid Girt Net Width Deduct in	Mid Girt U	Long Horizontal Net Width Deduct in	Long Horizontal U	Short Horizontal Net Width Deduct in	Short Horizontal U
T1	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	0.75	0.0000	1	0.0000	0.75
187.30-182.30														
T2	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1
182.30-162.30														
T3	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1
162.30-142.30														
T4	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1
142.30-122.30														

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
T5 122.30-102.30	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1
T6 102.30-95.63	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1
T7 95.63-82.30	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1
T8 82.30-75.63	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1
T9 75.63-62.30	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1
T10 62.30-55.63	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1
T11 55.63-42.30	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1
T12 42.30-35.63	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1
T13 35.63-22.30	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1
T14 22.30-15.63	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1	0.0000	1
T15 15.63-2.30	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 187.30-182.30	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 182.30-162.30	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 162.30-142.30	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 142.30-122.30	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 122.30-102.30	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 102.30-95.63	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
T7 95.63-82.30	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 82.30-75.63	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
T9 75.63-62.30	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 62.30-55.63	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
T11 55.63-42.30	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 42.30-35.63	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
T13 35.63-22.30	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
T14 22.30-15.63	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
T15 15.63-2.30	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 Bolt Size in	Leg No.	Diagonal Bolt Size in	Diagonal No.	Top Girt Bolt Size in	Top Girt No.	Bottom Girt Bolt Size in	Bottom Girt No.	Mid Girt Bolt Size in	Mid Girt No.	Long Horizontal Bolt Size in	Long Horizontal No.	Short Horizontal Bolt Size in	Short Horizontal No.
T1	Flange	1.2500	6	0.7500	1	0.7500	1	0.6250	0	0.6250	0	0.6250	0	0.6250	0
187.30-182.30		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T2	Flange	1.2500	6	0.7500	1	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0
182.30-162.30		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T3	Flange	1.2500	6	0.7500	1	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0
162.30-142.30		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T4	Flange	1.2500	8	0.6250	2	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0
142.30-122.30		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T5	Flange	1.5000	8	0.7500	2	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0
122.30-102.30		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T6	Flange	0.0000	0	1.0000	2	0.6250	0	0.0000	0	0.6250	0	0.6250	0	0.6250	0
102.30-95.63		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T7 95.63-82.30	Flange	1.5000	8	1.0000	2	0.6250	0	0.0000	0	0.6250	0	1.0000	2	0.6250	0
		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T8 82.30-75.63	Flange	0.0000	0	0.8750	2	0.6250	0	0.0000	0	0.6250	0	0.6250	0	0.6250	0
		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T9 75.63-62.30	Flange	1.5000	8	0.8750	2	0.6250	0	0.0000	0	0.6250	0	0.8750	2	0.6250	0
		A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T10	Flange	0.0000	0	0.8750	2	0.6250	0	0.0000	0	0.6250	0	0.6250	0	0.6250	0
62.30-55.63		A325N		A325N		A325N		A325N		A325X		A325N		A325X	
T11	Flange	1.5000	8	0.8750	2	0.6250	0	0.0000	0	0.6250	0	0.8750	2	0.6250	0
55.63-42.30		A325N		A325N		A325N		A325N		A325X		A325N		A325X	
T12	Flange	0.0000	0	1.0000	2	0.6250	0	0.0000	0	0.6250	0	0.6250	0	0.6250	0
42.30-35.63		A325N		A325N		A325N		A325N		A325X		A325N		A325X	
T13	Flange	1.5000	8	1.0000	2	0.6250	0	0.0000	0	0.6250	0	1.0000	2	0.6250	0
35.63-22.30		A325N		A325N		A325N		A325N		A325X		A325N		A325X	
T14	Flange	0.0000	0	1.0000	2	0.6250	0	0.0000	0	0.6250	0	0.6250	0	0.6250	0
22.30-15.63		A325N		A325N		A325N		A325N		A325X		A325N		A325X	
T15 15.63-2.30	Flange	1.7500	6	1.0000	2	0.6250	0	0.0000	0	0.6250	0	1.0000	2	0.6250	0
		F1554-105		A325N		A325N		A325N		A325X		A325N		A325X	

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Redundant Horizontal Bolt Size in	Redundant Horizontal No.	Redundant Diagonal Bolt Size in	Redundant Diagonal No.	Redundant Sub-Diagonal Bolt Size in	Redundant Sub-Diagonal No.	Redundant Sub-Horizontal Bolt Size in	Redundant Sub-Horizontal No.	Redundant Vertical Bolt Size in	Redundant Vertical No.	Redundant Hip Bolt Size in	Redundant Hip No.	Redundant Hip Diagonal Bolt Size in	Redundant Hip Diagonal No.
T1	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0
187.30-182.30	A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T2	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0
182.30-162.30	A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T3	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0
162.30-142.30	A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T4	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0
142.30-122.30	A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T5	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0
122.30-102.30	A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T6	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0	0.6250	0
102.30-95.63	A325N		A325N		A325N		A325N		A325N		A325N		A325N	

Tower Elevation ft	Redundant Horizontal		Redundant Diagonal		Redundant Sub-Diagonal		Redundant Sub-Horizontal		Redundant Vertical		Redundant Hip		Redundant Hip Diagonal	
	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.
T7 95.63-82.30	1.0000 A325N	1	1.0000 A325N	1	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0
T8 82.30-75.63	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0
T9 75.63-62.30	0.8750 A325N	1	0.8750 A325N	1	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0
T10 62.30-55.63	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0
T11 55.63-42.30	0.8750 A325N	1	0.8750 A325N	1	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0
T12 42.30-35.63	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0
T13 35.63-22.30	1.0000 A325N	1	1.0000 A325N	1	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0
T14 22.30-15.63	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0
T15 15.63-2.30	1.0000 A325N	1	1.0000 A325N	1	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0

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
LDF12-50A (2-1/4 FOAM)	C	No	No	Ar (CaAa)	162.30 - 8.30	0.0000	0.44	6	6	2.3500	2.3500		1.22
LDF4.5-50 (5/8 FOAM)	C	No	No	Ar (CaAa)	162.30 - 8.30	0.0000	0.44	15	12	0.8700	0.8700		0.15
LDF7-50A (1-5/8 FOAM)	A	No	No	Ar (CaAa)	152.30 - 8.30	0.0000	-0.45	8	8	1.9800	1.9800		0.82
LDF7-50A (1-5/8 FOAM)	A	No	No	Ar (CaAa)	142.30 - 8.30	0.0000	-0.4	4	4	1.9800	1.9800		0.82
LDF7-50A (1-5/8 FOAM)	B	No	No	Ar (CaAa)	187.30 - 8.30	0.0000	-0.38	3	3	1.9800	1.9800		0.82
LDF5-50A (7/8 FOAM)	C	No	No	Ar (CaAa)	187.30 - 8.30	0.0000	-0.4	3	3	1.0900	1.0900		0.33
LDF5-50A (7/8 FOAM)	C	No	No	Ar (CaAa)	183.30 - 8.30	0.0000	-0.38	1	1	1.0900	1.0900		0.33
LDF4-50A (1/2 FOAM)	B	No	No	Ar (CaAa)	187.30 - 8.30	0.0000	-0.37	1	1	0.6300	0.6300		0.15
EW63	B	No	No	Ar (CaAa)	185.30 - 8.30	0.0000	-0.43	4	4	1.5742	1.5742		0.51
EW90	B	No	No	Ar (CaAa)	179.30 - 8.30	0.0000	-0.43	1	1	0.9869	0.9869		0.32
EW63	B	No	No	Ar (CaAa)	174.30 - 173.30	0.0000	-0.43	2	2	1.5742	1.5742		0.51
EW63	B	No	No	Ar (CaAa)	173.30 - 8.30	0.0000	-0.43	4	2	1.5742	1.5742		0.51
LDF5-50A (7/8 FOAM)	C	No	No	Ar (CaAa)	170.30 - 167.30	0.0000	-0.43	1	1	1.0900	1.0900		0.33
LDF5-50A (7/8 FOAM)	C	No	No	Ar (CaAa)	167.30 - 8.30	0.0000	-0.43	2	1	1.0900	1.0900		0.33
EW63	B	No	No	Ar (CaAa)	137.30 -	0.0000	-0.4	4	2	1.5742	1.5742		0.51

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
EW63	B	No	No	Ar (CaAa)	127.30 - 8.30	0.0000	-0.4	6	2	1.5742	1.5742		0.51
LDF5-50A (7/8 FOAM)	B	No	No	Ar (CaAa)	127.30 - 8.30	0.0000	-0.465	2	2	1.0900	1.0900		0.33
LDF5-50A (7/8 FOAM)	B	No	No	Ar (CaAa)	111.30 - 110.30	0.0000	-0.41	1	1	1.0900	1.0900		0.33
LDF5-50A (7/8 FOAM)	B	No	No	Ar (CaAa)	110.30 - 8.30	0.0000	-0.41	2	1	1.0900	1.0900		0.33
LDF2-50A (3/8 FOAM)	C	No	No	Ar (CaAa)	187.30 - 105.30	0.0000	-0.4	1	1	0.4400	0.4400		0.08
LDF2-50A (3/8 FOAM)	C	No	No	Ar (CaAa)	105.30 - 8.30	0.0000	-0.4	2	1	0.4400	0.4400		0.08
EW63	C	No	No	Ar (CaAa)	102.30 - 8.30	0.0000	-0.45	2	1	1.5742	1.5742		0.51
3/8	B	No	No	Ar (CaAa)	100.30 - 93.30	0.0000	-0.36	1	1	0.5000	0.5000		0.40
3/8	B	No	No	Ar (CaAa)	93.30 - 8.30	0.0000	-0.36	2	2	0.5000	0.5000		0.40
LDF5-50A (7/8 FOAM)	B	No	No	Ar (CaAa)	89.30 - 87.30	0.0000	-0.39	1	1	1.0900	1.0900		0.33
LDF5-50A (7/8 FOAM)	B	No	No	Ar (CaAa)	87.30 - 8.30	0.0000	-0.39	2	1	1.0900	1.0900		0.33
Cat5e	A	No	No	Ar (CaAa)	68.30 - 8.30	0.0000	-0.31	1	1	0.3600	0.3600		0.06
7/8	B	No	No	Ar (CaAa)	185.30 - 8.30	0.0000	-0.47	2	2	1.1100	1.1100		0.54
1 5/8	B	No	No	Ar (CaAa)	185.30 - 8.30	0.0000	-0.48	3	3	1.9800	1.9800		1.04
1/2	B	No	No	Ar (CaAa)	185.30 - 8.30	0.0000	-0.48	1	1	0.5800	0.5800		0.25

Feed Line/Linear Appurtenances Section Areas

Tower Section	Tower Elevation ft	Face	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
T1	187.30-182.30	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	7.796	0.000	0.03
		C	0.000	0.000	1.964	0.000	0.01
T2	182.30-162.30	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	52.133	0.000	0.21
		C	0.000	0.000	11.017	0.000	0.03
T3	162.30-142.30	A	0.000	0.000	15.840	0.000	0.07
		B	0.000	0.000	57.781	0.000	0.23
		C	0.000	0.000	68.260	0.000	0.23
T4	142.30-122.30	A	0.000	0.000	47.520	0.000	0.20
		B	0.000	0.000	69.891	0.000	0.27
		C	0.000	0.000	68.260	0.000	0.23
T5	122.30-102.30	A	0.000	0.000	47.520	0.000	0.20
		B	0.000	0.000	82.857	0.000	0.31
		C	0.000	0.000	68.392	0.000	0.23
T6	102.30-95.63	A	0.000	0.000	15.848	0.000	0.07
		B	0.000	0.000	28.712	0.000	0.11
		C	0.000	0.000	25.158	0.000	0.08
T7	95.63-82.30	A	0.000	0.000	31.672	0.000	0.13
		B	0.000	0.000	59.426	0.000	0.22
		C	0.000	0.000	50.279	0.000	0.17

Tower Section	Tower Elevation ft	Face	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
T8	82.30-75.63	A	0.000	0.000	15.848	0.000	0.07
		B	0.000	0.000	30.599	0.000	0.12
		C	0.000	0.000	25.158	0.000	0.08
T9	75.63-62.30	A	0.000	0.000	31.888	0.000	0.13
		B	0.000	0.000	61.153	0.000	0.23
		C	0.000	0.000	50.279	0.000	0.17
T10	62.30-55.63	A	0.000	0.000	16.088	0.000	0.07
		B	0.000	0.000	30.599	0.000	0.12
		C	0.000	0.000	25.158	0.000	0.08
T11	55.63-42.30	A	0.000	0.000	32.152	0.000	0.13
		B	0.000	0.000	61.153	0.000	0.23
		C	0.000	0.000	50.279	0.000	0.17
T12	42.30-35.63	A	0.000	0.000	16.088	0.000	0.07
		B	0.000	0.000	30.599	0.000	0.12
		C	0.000	0.000	25.158	0.000	0.08
T13	35.63-22.30	A	0.000	0.000	32.152	0.000	0.13
		B	0.000	0.000	61.153	0.000	0.23
		C	0.000	0.000	50.279	0.000	0.17
T14	22.30-15.63	A	0.000	0.000	16.088	0.000	0.07
		B	0.000	0.000	30.599	0.000	0.12
		C	0.000	0.000	25.158	0.000	0.08
T15	15.63-2.30	A	0.000	0.000	17.680	0.000	0.07
		B	0.000	0.000	33.627	0.000	0.13
		C	0.000	0.000	27.648	0.000	0.09

Feed Line/Linear Appurtenances Section Areas - With Ice

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
T1	187.30-182.30	A	2.204	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	29.455	0.000	0.45
		C		0.000	0.000	10.029	0.000	0.14
T2	182.30-162.30	A	2.196	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	191.463	0.000	2.96
		C		0.000	0.000	55.783	0.000	0.81
T3	162.30-142.30	A	2.180	0.000	0.000	43.307	0.000	0.78
		B		0.000	0.000	205.507	0.000	3.20
		C		0.000	0.000	212.736	0.000	3.52
T4	142.30-122.30	A	2.162	0.000	0.000	134.619	0.000	2.34
		B		0.000	0.000	235.974	0.000	3.71
		C		0.000	0.000	212.111	0.000	3.49
T5	122.30-102.30	A	2.139	0.000	0.000	134.345	0.000	2.32
		B		0.000	0.000	274.180	0.000	4.31
		C		0.000	0.000	212.680	0.000	3.47
T6	102.30-95.63	A	2.121	0.000	0.000	44.731	0.000	0.77
		B		0.000	0.000	97.519	0.000	1.52
		C		0.000	0.000	82.131	0.000	1.32
T7	95.63-82.30	A	2.106	0.000	0.000	89.268	0.000	1.52
		B		0.000	0.000	207.850	0.000	3.18
		C		0.000	0.000	163.681	0.000	2.62
T8	82.30-75.63	A	2.088	0.000	0.000	44.595	0.000	0.76
		B		0.000	0.000	108.553	0.000	1.64
		C		0.000	0.000	81.639	0.000	1.30
T9	75.63-62.30	A	2.067	0.000	0.000	91.649	0.000	1.54
		B		0.000	0.000	215.818	0.000	3.24
		C		0.000	0.000	162.544	0.000	2.56
T10	62.30-55.63	A	2.042	0.000	0.000	47.373	0.000	0.78

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft²	A_F ft²	C_AA_A In Face ft²	C_AA_A Out Face ft²	Weight K
		B		0.000	0.000	107.322	0.000	1.60
		C		0.000	0.000	80.970	0.000	1.27
T11	55.63-42.30	A	2.012	0.000	0.000	94.350	0.000	1.54
		B		0.000	0.000	212.861	0.000	3.14
		C		0.000	0.000	160.936	0.000	2.49
T12	42.30-35.63	A	1.974	0.000	0.000	47.006	0.000	0.76
		B		0.000	0.000	105.490	0.000	1.54
		C		0.000	0.000	79.974	0.000	1.22
T13	35.63-22.30	A	1.923	0.000	0.000	93.403	0.000	1.48
		B		0.000	0.000	208.130	0.000	2.99
		C		0.000	0.000	158.365	0.000	2.37
T14	22.30-15.63	A	1.851	0.000	0.000	46.348	0.000	0.72
		B		0.000	0.000	102.203	0.000	1.43
		C		0.000	0.000	78.188	0.000	1.14
T15	15.63-2.30	A	1.725	0.000	0.000	50.191	0.000	0.74
		B		0.000	0.000	108.593	0.000	1.46
		C		0.000	0.000	83.903	0.000	1.16

Feed Line Center of Pressure

Section	Elevation ft	CP_X in	CP_Z in	CP_X Ice in	CP_Z Ice in
T1	187.30-182.30	2.5999	-9.1993	6.3436	-15.9182
T2	182.30-162.30	6.2491	-25.7820	13.2144	-39.1374
T3	162.30-142.30	-17.0062	-4.7676	-15.4345	-11.7549
T4	142.30-122.30	-25.3127	-3.8934	-26.7425	-9.5553
T5	122.30-102.30	-24.7660	-8.5584	-26.2939	-15.9154
T6	102.30-95.63	-23.3627	-8.4635	-21.5772	-15.7438
T7	95.63-82.30	-21.9623	-9.0923	-20.2469	-17.9794
T8	82.30-75.63	-23.8282	-10.8017	-21.4675	-21.4893
T9	75.63-62.30	-22.7372	-10.3066	-21.3800	-20.5500
T10	62.30-55.63	-24.4882	-10.9245	-23.5965	-21.5415
T11	55.63-42.30	-22.7079	-10.2198	-22.7852	-20.5858
T12	42.30-35.63	-25.3575	-11.3331	-25.0653	-22.1954
T13	35.63-22.30	-23.4664	-10.5788	-24.2281	-21.0284
T14	22.30-15.63	-25.7659	-11.5085	-26.5881	-22.2165
T15	15.63-2.30	-14.9185	-6.8427	-18.6127	-14.8720

Shielding Factor Ka

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T1	5	LDF7-50A (1-5/8 FOAM)	182.30 - 187.30	0.6000	0.5109
T1	6	LDF5-50A (7/8 FOAM)	182.30 - 187.30	0.6000	0.5109
T1	7	LDF5-50A (7/8 FOAM)	182.30 - 183.30	0.6000	0.5109
T1	8	LDF4-50A (1/2 FOAM)	182.30 - 187.30	0.6000	0.5109

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T1	9	EW63	182.30 - 185.30	0.6000	0.5109
T1	20	LDF2-50A (3/8 FOAM)	182.30 - 187.30	0.6000	0.5109
T1	28	7/8	182.30 - 185.30	0.6000	0.5109
T1	29	1 5/8	182.30 - 185.30	0.6000	0.5109
T1	30	1/2	182.30 - 185.30	0.6000	0.5109
T2	5	LDF7-50A (1-5/8 FOAM)	162.30 - 182.30	0.6000	0.6000
T2	6	LDF5-50A (7/8 FOAM)	162.30 - 182.30	0.6000	0.6000
T2	7	LDF5-50A (7/8 FOAM)	162.30 - 182.30	0.6000	0.6000
T2	8	LDF4-50A (1/2 FOAM)	162.30 - 182.30	0.6000	0.6000
T2	9	EW63	162.30 - 182.30	0.6000	0.6000
T2	10	EW90	162.30 - 179.30	0.6000	0.6000
T2	11	EW63	173.30 - 174.30	0.6000	0.6000
T2	12	EW63	162.30 - 173.30	0.6000	0.6000
T2	13	LDF5-50A (7/8 FOAM)	167.30 - 170.30	0.6000	0.6000
T2	14	LDF5-50A (7/8 FOAM)	162.30 - 167.30	0.6000	0.6000
T2	20	LDF2-50A (3/8 FOAM)	162.30 - 182.30	0.6000	0.6000
T2	28	7/8	162.30 - 182.30	0.6000	0.6000
T2	29	1 5/8	162.30 - 182.30	0.6000	0.6000
T2	30	1/2	162.30 - 182.30	0.6000	0.6000
T3	1	LDF12-50A (2-1/4 FOAM)	142.30 - 162.30	0.6000	0.6000
T3	2	LDF4.5-50 (5/8 FOAM)	142.30 - 162.30	0.6000	0.6000
T3	3	LDF7-50A (1-5/8 FOAM)	142.30 - 152.30	0.6000	0.6000
T3	5	LDF7-50A (1-5/8 FOAM)	142.30 - 162.30	0.6000	0.6000
T3	6	LDF5-50A (7/8 FOAM)	142.30 - 162.30	0.6000	0.6000
T3	7	LDF5-50A (7/8 FOAM)	142.30 - 162.30	0.6000	0.6000
T3	8	LDF4-50A (1/2 FOAM)	142.30 - 162.30	0.6000	0.6000
T3	9	EW63	142.30 - 162.30	0.6000	0.6000
T3	10	EW90	142.30 - 162.30	0.6000	0.6000
T3	12	EW63	142.30 - 162.30	0.6000	0.6000
T3	14	LDF5-50A (7/8 FOAM)	142.30 - 162.30	0.6000	0.6000
T3	20	LDF2-50A (3/8 FOAM)	142.30 - 162.30	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T3	28	7/8	142.30 - 162.30	0.6000	0.6000
T3	29	1 5/8	142.30 - 162.30	0.6000	0.6000
T3	30	1/2	142.30 - 162.30	0.6000	0.6000
T4	1	LDF12-50A (2-1/4 FOAM)	122.30 - 142.30	0.6000	0.6000
T4	2	LDF4.5-50 (5/8 FOAM)	122.30 - 142.30	0.6000	0.6000
T4	3	LDF7-50A (1-5/8 FOAM)	122.30 - 142.30	0.6000	0.6000
T4	4	LDF7-50A (1-5/8 FOAM)	122.30 - 142.30	0.6000	0.6000
T4	5	LDF7-50A (1-5/8 FOAM)	122.30 - 142.30	0.6000	0.6000
T4	6	LDF5-50A (7/8 FOAM)	122.30 - 142.30	0.6000	0.6000
T4	7	LDF5-50A (7/8 FOAM)	122.30 - 142.30	0.6000	0.6000
T4	8	LDF4-50A (1/2 FOAM)	122.30 - 142.30	0.6000	0.6000
T4	9	EW63	122.30 - 142.30	0.6000	0.6000
T4	10	EW90	122.30 - 142.30	0.6000	0.6000
T4	12	EW63	122.30 - 142.30	0.6000	0.6000
T4	14	LDF5-50A (7/8 FOAM)	122.30 - 142.30	0.6000	0.6000
T4	15	EW63	127.30 - 137.30	0.6000	0.6000
T4	16	EW63	122.30 - 127.30	0.6000	0.6000
T4	17	LDF5-50A (7/8 FOAM)	122.30 - 127.30	0.6000	0.6000
T4	20	LDF2-50A (3/8 FOAM)	122.30 - 142.30	0.6000	0.6000
T4	28	7/8	122.30 - 142.30	0.6000	0.6000
T4	29	1 5/8	122.30 - 142.30	0.6000	0.6000
T4	30	1/2	122.30 - 142.30	0.6000	0.6000
T5	1	LDF12-50A (2-1/4 FOAM)	102.30 - 122.30	0.6000	0.6000
T5	2	LDF4.5-50 (5/8 FOAM)	102.30 - 122.30	0.6000	0.6000
T5	3	LDF7-50A (1-5/8 FOAM)	102.30 - 122.30	0.6000	0.6000
T5	4	LDF7-50A (1-5/8 FOAM)	102.30 - 122.30	0.6000	0.6000
T5	5	LDF7-50A (1-5/8 FOAM)	102.30 - 122.30	0.6000	0.6000
T5	6	LDF5-50A (7/8 FOAM)	102.30 - 122.30	0.6000	0.6000
T5	7	LDF5-50A (7/8 FOAM)	102.30 - 122.30	0.6000	0.6000
T5	8	LDF4-50A (1/2 FOAM)	102.30 - 122.30	0.6000	0.6000
T5	9	EW63	102.30 - 122.30	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T5	10	EW90	102.30 - 122.30	0.6000	0.6000
T5	12	EW63	102.30 - 122.30	0.6000	0.6000
T5	14	LDF5-50A (7/8 FOAM)	102.30 - 122.30	0.6000	0.6000
T5	16	EW63	102.30 - 122.30	0.6000	0.6000
T5	17	LDF5-50A (7/8 FOAM)	102.30 - 122.30	0.6000	0.6000
T5	18	LDF5-50A (7/8 FOAM)	110.30 - 111.30	0.6000	0.6000
T5	19	LDF5-50A (7/8 FOAM)	102.30 - 110.30	0.6000	0.6000
T5	20	LDF2-50A (3/8 FOAM)	105.30 - 122.30	0.6000	0.6000
T5	21	LDF2-50A (3/8 FOAM)	102.30 - 105.30	0.6000	0.6000
T5	28	7/8	102.30 - 122.30	0.6000	0.6000
T5	29	1 5/8	102.30 - 122.30	0.6000	0.6000
T5	30	1/2	102.30 - 122.30	0.6000	0.6000
T6	1	LDF12-50A (2-1/4 FOAM)	95.63 - 102.30	0.6000	0.6000
T6	2	LDF4.5-50 (5/8 FOAM)	95.63 - 102.30	0.6000	0.6000
T6	3	LDF7-50A (1-5/8 FOAM)	95.63 - 102.30	0.6000	0.6000
T6	4	LDF7-50A (1-5/8 FOAM)	95.63 - 102.30	0.6000	0.6000
T6	5	LDF7-50A (1-5/8 FOAM)	95.63 - 102.30	0.6000	0.6000
T6	6	LDF5-50A (7/8 FOAM)	95.63 - 102.30	0.6000	0.6000
T6	7	LDF5-50A (7/8 FOAM)	95.63 - 102.30	0.6000	0.6000
T6	8	LDF4-50A (1/2 FOAM)	95.63 - 102.30	0.6000	0.6000
T6	9	EW63	95.63 - 102.30	0.6000	0.6000
T6	10	EW90	95.63 - 102.30	0.6000	0.6000
T6	12	EW63	95.63 - 102.30	0.6000	0.6000
T6	14	LDF5-50A (7/8 FOAM)	95.63 - 102.30	0.6000	0.6000
T6	16	EW63	95.63 - 102.30	0.6000	0.6000
T6	17	LDF5-50A (7/8 FOAM)	95.63 - 102.30	0.6000	0.6000
T6	19	LDF5-50A (7/8 FOAM)	95.63 - 102.30	0.6000	0.6000
T6	21	LDF2-50A (3/8 FOAM)	95.63 - 102.30	0.6000	0.6000
T6	22	EW63	95.63 - 102.30	0.6000	0.6000
T6	23	3/8	95.63 - 100.30	0.6000	0.6000
T6	28	7/8	95.63 - 102.30	0.6000	0.6000
T6	29	1 5/8	95.63 - 102.30	0.6000	0.6000
T6	30	1/2	95.63 - 102.30	0.6000	0.6000
T7	1	LDF12-50A (2-1/4 FOAM)	82.30 - 95.63	0.6000	0.6000
T7	2	LDF4.5-50 (5/8 FOAM)	82.30 - 95.63	0.6000	0.6000
T7	3	LDF7-50A (1-5/8 FOAM)	82.30 - 95.63	0.6000	0.6000
T7	4	LDF7-50A (1-5/8 FOAM)	82.30 - 95.63	0.6000	0.6000
T7	5	LDF7-50A (1-5/8 FOAM)	82.30 - 95.63	0.6000	0.6000
T7	6	LDF5-50A (7/8 FOAM)	82.30 - 95.63	0.6000	0.6000
T7	7	LDF5-50A (7/8 FOAM)	82.30 - 95.63	0.6000	0.6000
T7	8	LDF4-50A (1/2 FOAM)	82.30 - 95.63	0.6000	0.6000
T7	9	EW63	82.30 - 95.63	0.6000	0.6000
T7	10	EW90	82.30 - 95.63	0.6000	0.6000
T7	12	EW63	82.30 - 95.63	0.6000	0.6000
T7	14	LDF5-50A (7/8 FOAM)	82.30 - 95.63	0.6000	0.6000
T7	16	EW63	82.30 - 95.63	0.6000	0.6000
T7	17	LDF5-50A (7/8 FOAM)	82.30 - 95.63	0.6000	0.6000
T7	19	LDF5-50A (7/8 FOAM)	82.30 - 95.63	0.6000	0.6000
T7	21	LDF2-50A (3/8 FOAM)	82.30 - 95.63	0.6000	0.6000
T7	22	EW63	82.30 - 95.63	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T7	23	3/8	93.30 - 95.63	0.6000	0.6000
T7	24	3/8	82.30 - 93.30	0.6000	0.6000
T7	25	LDF5-50A (7/8 FOAM)	87.30 - 89.30	0.6000	0.6000
T7	26	LDF5-50A (7/8 FOAM)	82.30 - 87.30	0.6000	0.6000
T7	28	7/8	82.30 - 95.63	0.6000	0.6000
T7	29	1 5/8	82.30 - 95.63	0.6000	0.6000
T7	30	1/2	82.30 - 95.63	0.6000	0.6000
T8	1	LDF12-50A (2-1/4 FOAM)	75.63 - 82.30	0.6000	0.6000
T8	2	LDF4.5-50 (5/8 FOAM)	75.63 - 82.30	0.6000	0.6000
T8	3	LDF7-50A (1-5/8 FOAM)	75.63 - 82.30	0.6000	0.6000
T8	4	LDF7-50A (1-5/8 FOAM)	75.63 - 82.30	0.6000	0.6000
T8	5	LDF7-50A (1-5/8 FOAM)	75.63 - 82.30	0.6000	0.6000
T8	6	LDF5-50A (7/8 FOAM)	75.63 - 82.30	0.6000	0.6000
T8	7	LDF5-50A (7/8 FOAM)	75.63 - 82.30	0.6000	0.6000
T8	8	LDF4-50A (1/2 FOAM)	75.63 - 82.30	0.6000	0.6000
T8	9	EW63	75.63 - 82.30	0.6000	0.6000
T8	10	EW90	75.63 - 82.30	0.6000	0.6000
T8	12	EW63	75.63 - 82.30	0.6000	0.6000
T8	14	LDF5-50A (7/8 FOAM)	75.63 - 82.30	0.6000	0.6000
T8	16	EW63	75.63 - 82.30	0.6000	0.6000
T8	17	LDF5-50A (7/8 FOAM)	75.63 - 82.30	0.6000	0.6000
T8	19	LDF5-50A (7/8 FOAM)	75.63 - 82.30	0.6000	0.6000
T8	21	LDF2-50A (3/8 FOAM)	75.63 - 82.30	0.6000	0.6000
T8	22	EW63	75.63 - 82.30	0.6000	0.6000
T8	24	3/8	75.63 - 82.30	0.6000	0.6000
T8	26	LDF5-50A (7/8 FOAM)	75.63 - 82.30	0.6000	0.6000
T8	28	7/8	75.63 - 82.30	0.6000	0.6000
T8	29	1 5/8	75.63 - 82.30	0.6000	0.6000
T8	30	1/2	75.63 - 82.30	0.6000	0.6000
T9	1	LDF12-50A (2-1/4 FOAM)	62.30 - 75.63	0.6000	0.6000
T9	2	LDF4.5-50 (5/8 FOAM)	62.30 - 75.63	0.6000	0.6000
T9	3	LDF7-50A (1-5/8 FOAM)	62.30 - 75.63	0.6000	0.6000
T9	4	LDF7-50A (1-5/8 FOAM)	62.30 - 75.63	0.6000	0.6000
T9	5	LDF7-50A (1-5/8 FOAM)	62.30 - 75.63	0.6000	0.6000
T9	6	LDF5-50A (7/8 FOAM)	62.30 - 75.63	0.6000	0.6000
T9	7	LDF5-50A (7/8 FOAM)	62.30 - 75.63	0.6000	0.6000
T9	8	LDF4-50A (1/2 FOAM)	62.30 - 75.63	0.6000	0.6000
T9	9	EW63	62.30 - 75.63	0.6000	0.6000
T9	10	EW90	62.30 - 75.63	0.6000	0.6000
T9	12	EW63	62.30 - 75.63	0.6000	0.6000
T9	14	LDF5-50A (7/8 FOAM)	62.30 - 75.63	0.6000	0.6000
T9	16	EW63	62.30 - 75.63	0.6000	0.6000
T9	17	LDF5-50A (7/8 FOAM)	62.30 - 75.63	0.6000	0.6000
T9	19	LDF5-50A (7/8 FOAM)	62.30 - 75.63	0.6000	0.6000
T9	21	LDF2-50A (3/8 FOAM)	62.30 - 75.63	0.6000	0.6000
T9	22	EW63	62.30 - 75.63	0.6000	0.6000
T9	24	3/8	62.30 - 75.63	0.6000	0.6000
T9	26	LDF5-50A (7/8 FOAM)	62.30 - 75.63	0.6000	0.6000
T9	27	Cat5e	62.30 - 68.30	0.6000	0.6000
T9	28	7/8	62.30 - 75.63	0.6000	0.6000
T9	29	1 5/8	62.30 - 75.63	0.6000	0.6000
T9	30	1/2	62.30 - 75.63	0.6000	0.6000
T10	1	LDF12-50A (2-1/4 FOAM)	55.63 - 62.30	0.6000	0.6000
T10	2	LDF4.5-50 (5/8 FOAM)	55.63 - 62.30	0.6000	0.6000
T10	3	LDF7-50A (1-5/8 FOAM)	55.63 - 62.30	0.6000	0.6000
T10	4	LDF7-50A (1-5/8 FOAM)	55.63 - 62.30	0.6000	0.6000
T10	5	LDF7-50A (1-5/8 FOAM)	55.63 - 62.30	0.6000	0.6000
T10	6	LDF5-50A (7/8 FOAM)	55.63 - 62.30	0.6000	0.6000
T10	7	LDF5-50A (7/8 FOAM)	55.63 - 62.30	0.6000	0.6000
T10	8	LDF4-50A (1/2 FOAM)	55.63 - 62.30	0.6000	0.6000
T10	9	EW63	55.63 - 62.30	0.6000	0.6000
T10	10	EW90	55.63 - 62.30	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T10	12	EW63	55.63 - 62.30	0.6000	0.6000
T10	14	LDF5-50A (7/8 FOAM)	55.63 - 62.30	0.6000	0.6000
T10	16	EW63	55.63 - 62.30	0.6000	0.6000
T10	17	LDF5-50A (7/8 FOAM)	55.63 - 62.30	0.6000	0.6000
T10	19	LDF5-50A (7/8 FOAM)	55.63 - 62.30	0.6000	0.6000
T10	21	LDF2-50A (3/8 FOAM)	55.63 - 62.30	0.6000	0.6000
T10	22	EW63	55.63 - 62.30	0.6000	0.6000
T10	24	3/8	55.63 - 62.30	0.6000	0.6000
T10	26	LDF5-50A (7/8 FOAM)	55.63 - 62.30	0.6000	0.6000
T10	27	Cat5e	55.63 - 62.30	0.6000	0.6000
T10	28	7/8	55.63 - 62.30	0.6000	0.6000
T10	29	1 5/8	55.63 - 62.30	0.6000	0.6000
T10	30	1/2	55.63 - 62.30	0.6000	0.6000
T11	1	LDF12-50A (2-1/4 FOAM)	42.30 - 55.63	0.6000	0.6000
T11	2	LDF4.5-50 (5/8 FOAM)	42.30 - 55.63	0.6000	0.6000
T11	3	LDF7-50A (1-5/8 FOAM)	42.30 - 55.63	0.6000	0.6000
T11	4	LDF7-50A (1-5/8 FOAM)	42.30 - 55.63	0.6000	0.6000
T11	5	LDF7-50A (1-5/8 FOAM)	42.30 - 55.63	0.6000	0.6000
T11	6	LDF5-50A (7/8 FOAM)	42.30 - 55.63	0.6000	0.6000
T11	7	LDF5-50A (7/8 FOAM)	42.30 - 55.63	0.6000	0.6000
T11	8	LDF4-50A (1/2 FOAM)	42.30 - 55.63	0.6000	0.6000
T11	9	EW63	42.30 - 55.63	0.6000	0.6000
T11	10	EW90	42.30 - 55.63	0.6000	0.6000
T11	12	EW63	42.30 - 55.63	0.6000	0.6000
T11	14	LDF5-50A (7/8 FOAM)	42.30 - 55.63	0.6000	0.6000
T11	16	EW63	42.30 - 55.63	0.6000	0.6000
T11	17	LDF5-50A (7/8 FOAM)	42.30 - 55.63	0.6000	0.6000
T11	19	LDF5-50A (7/8 FOAM)	42.30 - 55.63	0.6000	0.6000
T11	21	LDF2-50A (3/8 FOAM)	42.30 - 55.63	0.6000	0.6000
T11	22	EW63	42.30 - 55.63	0.6000	0.6000
T11	24	3/8	42.30 - 55.63	0.6000	0.6000
T11	26	LDF5-50A (7/8 FOAM)	42.30 - 55.63	0.6000	0.6000
T11	27	Cat5e	42.30 - 55.63	0.6000	0.6000
T11	28	7/8	42.30 - 55.63	0.6000	0.6000
T11	29	1 5/8	42.30 - 55.63	0.6000	0.6000
T11	30	1/2	42.30 - 55.63	0.6000	0.6000
T12	1	LDF12-50A (2-1/4 FOAM)	35.63 - 42.30	0.6000	0.6000
T12	2	LDF4.5-50 (5/8 FOAM)	35.63 - 42.30	0.6000	0.6000
T12	3	LDF7-50A (1-5/8 FOAM)	35.63 - 42.30	0.6000	0.6000
T12	4	LDF7-50A (1-5/8 FOAM)	35.63 - 42.30	0.6000	0.6000
T12	5	LDF7-50A (1-5/8 FOAM)	35.63 - 42.30	0.6000	0.6000
T12	6	LDF5-50A (7/8 FOAM)	35.63 - 42.30	0.6000	0.6000
T12	7	LDF5-50A (7/8 FOAM)	35.63 - 42.30	0.6000	0.6000
T12	8	LDF4-50A (1/2 FOAM)	35.63 - 42.30	0.6000	0.6000
T12	9	EW63	35.63 - 42.30	0.6000	0.6000
T12	10	EW90	35.63 - 42.30	0.6000	0.6000
T12	12	EW63	35.63 - 42.30	0.6000	0.6000
T12	14	LDF5-50A (7/8 FOAM)	35.63 - 42.30	0.6000	0.6000
T12	16	EW63	35.63 - 42.30	0.6000	0.6000
T12	17	LDF5-50A (7/8 FOAM)	35.63 - 42.30	0.6000	0.6000
T12	19	LDF5-50A (7/8 FOAM)	35.63 - 42.30	0.6000	0.6000
T12	21	LDF2-50A (3/8 FOAM)	35.63 - 42.30	0.6000	0.6000
T12	22	EW63	35.63 - 42.30	0.6000	0.6000
T12	24	3/8	35.63 - 42.30	0.6000	0.6000
T12	26	LDF5-50A (7/8 FOAM)	35.63 - 42.30	0.6000	0.6000
T12	27	Cat5e	35.63 - 42.30	0.6000	0.6000
T12	28	7/8	35.63 - 42.30	0.6000	0.6000
T12	29	1 5/8	35.63 - 42.30	0.6000	0.6000
T12	30	1/2	35.63 - 42.30	0.6000	0.6000
T13	1	LDF12-50A (2-1/4 FOAM)	22.30 - 35.63	0.6000	0.6000
T13	2	LDF4.5-50 (5/8 FOAM)	22.30 - 35.63	0.6000	0.6000
T13	3	LDF7-50A (1-5/8 FOAM)	22.30 - 35.63	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T13	4	LDF7-50A (1-5/8 FOAM)	22.30 - 35.63	0.6000	0.6000
T13	5	LDF7-50A (1-5/8 FOAM)	22.30 - 35.63	0.6000	0.6000
T13	6	LDF5-50A (7/8 FOAM)	22.30 - 35.63	0.6000	0.6000
T13	7	LDF5-50A (7/8 FOAM)	22.30 - 35.63	0.6000	0.6000
T13	8	LDF4-50A (1/2 FOAM)	22.30 - 35.63	0.6000	0.6000
T13	9	EW63	22.30 - 35.63	0.6000	0.6000
T13	10	EW90	22.30 - 35.63	0.6000	0.6000
T13	12	EW63	22.30 - 35.63	0.6000	0.6000
T13	14	LDF5-50A (7/8 FOAM)	22.30 - 35.63	0.6000	0.6000
T13	16	EW63	22.30 - 35.63	0.6000	0.6000
T13	17	LDF5-50A (7/8 FOAM)	22.30 - 35.63	0.6000	0.6000
T13	19	LDF5-50A (7/8 FOAM)	22.30 - 35.63	0.6000	0.6000
T13	21	LDF2-50A (3/8 FOAM)	22.30 - 35.63	0.6000	0.6000
T13	22	EW63	22.30 - 35.63	0.6000	0.6000
T13	24	3/8	22.30 - 35.63	0.6000	0.6000
T13	26	LDF5-50A (7/8 FOAM)	22.30 - 35.63	0.6000	0.6000
T13	27	Cat5e	22.30 - 35.63	0.6000	0.6000
T13	28	7/8	22.30 - 35.63	0.6000	0.6000
T13	29	1 5/8	22.30 - 35.63	0.6000	0.6000
T13	30	1/2	22.30 - 35.63	0.6000	0.6000
T14	1	LDF12-50A (2-1/4 FOAM)	15.63 - 22.30	0.6000	0.6000
T14	2	LDF4.5-50 (5/8 FOAM)	15.63 - 22.30	0.6000	0.6000
T14	3	LDF7-50A (1-5/8 FOAM)	15.63 - 22.30	0.6000	0.6000
T14	4	LDF7-50A (1-5/8 FOAM)	15.63 - 22.30	0.6000	0.6000
T14	5	LDF7-50A (1-5/8 FOAM)	15.63 - 22.30	0.6000	0.6000
T14	6	LDF5-50A (7/8 FOAM)	15.63 - 22.30	0.6000	0.6000
T14	7	LDF5-50A (7/8 FOAM)	15.63 - 22.30	0.6000	0.6000
T14	8	LDF4-50A (1/2 FOAM)	15.63 - 22.30	0.6000	0.6000
T14	9	EW63	15.63 - 22.30	0.6000	0.6000
T14	10	EW90	15.63 - 22.30	0.6000	0.6000
T14	12	EW63	15.63 - 22.30	0.6000	0.6000
T14	14	LDF5-50A (7/8 FOAM)	15.63 - 22.30	0.6000	0.6000
T14	16	EW63	15.63 - 22.30	0.6000	0.6000
T14	17	LDF5-50A (7/8 FOAM)	15.63 - 22.30	0.6000	0.6000
T14	19	LDF5-50A (7/8 FOAM)	15.63 - 22.30	0.6000	0.6000
T14	21	LDF2-50A (3/8 FOAM)	15.63 - 22.30	0.6000	0.6000
T14	22	EW63	15.63 - 22.30	0.6000	0.6000
T14	24	3/8	15.63 - 22.30	0.6000	0.6000
T14	26	LDF5-50A (7/8 FOAM)	15.63 - 22.30	0.6000	0.6000
T14	27	Cat5e	15.63 - 22.30	0.6000	0.6000
T14	28	7/8	15.63 - 22.30	0.6000	0.6000
T14	29	1 5/8	15.63 - 22.30	0.6000	0.6000
T14	30	1/2	15.63 - 22.30	0.6000	0.6000
T15	1	LDF12-50A (2-1/4 FOAM)	8.30 - 15.63	0.6000	0.6000
T15	2	LDF4.5-50 (5/8 FOAM)	8.30 - 15.63	0.6000	0.6000
T15	3	LDF7-50A (1-5/8 FOAM)	8.30 - 15.63	0.6000	0.6000
T15	4	LDF7-50A (1-5/8 FOAM)	8.30 - 15.63	0.6000	0.6000
T15	5	LDF7-50A (1-5/8 FOAM)	8.30 - 15.63	0.6000	0.6000
T15	6	LDF5-50A (7/8 FOAM)	8.30 - 15.63	0.6000	0.6000
T15	7	LDF5-50A (7/8 FOAM)	8.30 - 15.63	0.6000	0.6000
T15	8	LDF4-50A (1/2 FOAM)	8.30 - 15.63	0.6000	0.6000
T15	9	EW63	8.30 - 15.63	0.6000	0.6000
T15	10	EW90	8.30 - 15.63	0.6000	0.6000
T15	12	EW63	8.30 - 15.63	0.6000	0.6000
T15	14	LDF5-50A (7/8 FOAM)	8.30 - 15.63	0.6000	0.6000
T15	16	EW63	8.30 - 15.63	0.6000	0.6000
T15	17	LDF5-50A (7/8 FOAM)	8.30 - 15.63	0.6000	0.6000
T15	19	LDF5-50A (7/8 FOAM)	8.30 - 15.63	0.6000	0.6000
T15	21	LDF2-50A (3/8 FOAM)	8.30 - 15.63	0.6000	0.6000
T15	22	EW63	8.30 - 15.63	0.6000	0.6000
T15	24	3/8	8.30 - 15.63	0.6000	0.6000
T15	26	LDF5-50A (7/8 FOAM)	8.30 - 15.63	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T15	27	Cat5e	8.30 - 15.63	0.6000	0.6000
T15	28	7/8	8.30 - 15.63	0.6000	0.6000
T15	29	1 5/8	8.30 - 15.63	0.6000	0.6000
T15	30	1/2	8.30 - 15.63	0.6000	0.6000

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
AIR6449 (T-Mobile)	A	From Leg	4.00 -4.00 0.00	0.0000	140.00	No Ice 1/2" Ice 1" Ice 2" Ice	4.05 4.32 4.59 5.15	2.74 2.97 3.20 3.68	0.10 0.13 0.17 0.25
APXVAALL24-43 (T-Mobile)	A	From Leg	0.00 0.00 0.00	0.0000	140.00	No Ice 1/2" Ice 1" Ice 2" Ice	20.24 20.89 21.54 22.87	8.89 9.49 10.09 11.33	0.15 0.27 0.39 0.66
APX16DWV-16DWVS-E-A20 (T-Mobile)	A	From Leg	4.00 4.00 0.00	0.0000	140.00	No Ice 1/2" Ice 1" Ice 2" Ice	6.46 6.83 7.21 8.00	2.15 2.49 2.84 3.55	0.05 0.08 0.12 0.21
AIR6449 (T-Mobile)	B	From Leg	4.00 -4.00 0.00	0.0000	140.00	No Ice 1/2" Ice 1" Ice 2" Ice	4.05 4.32 4.59 5.15	2.74 2.97 3.20 3.68	0.10 0.13 0.17 0.25
APXVAALL24-43 (T-Mobile)	B	From Leg	0.00 0.00 0.00	0.0000	140.00	No Ice 1/2" Ice 1" Ice 2" Ice	20.24 20.89 21.54 22.87	8.89 9.49 10.09 11.33	0.15 0.27 0.39 0.66
APX16DWV-16DWVS-E-A20 (T-Mobile)	B	From Leg	4.00 4.00 0.00	0.0000	140.00	No Ice 1/2" Ice 1" Ice 2" Ice	6.46 6.83 7.21 8.00	2.15 2.49 2.84 3.55	0.05 0.08 0.12 0.21
AIR6449 (T-Mobile)	C	From Leg	4.00 -4.00 0.00	0.0000	140.00	No Ice 1/2" Ice 1" Ice 2" Ice	4.05 4.32 4.59 5.15	2.74 2.97 3.20 3.68	0.10 0.13 0.17 0.25
APXVAALL24-43 (T-Mobile)	C	From Leg	0.00 0.00 0.00	0.0000	140.00	No Ice 1/2" Ice 1" Ice 2" Ice	20.24 20.89 21.54 22.87	8.89 9.49 10.09 11.33	0.15 0.27 0.39 0.66
APX16DWV-16DWVS-E-A20 (T-Mobile)	C	From Leg	4.00 4.00 0.00	0.0000	140.00	No Ice 1/2" Ice 1" Ice 2" Ice	6.46 6.83 7.21 8.00	2.15 2.49 2.84 3.55	0.05 0.08 0.12 0.21
4449 B12,B71 (T-Mobile)	A	From Leg	4.00 0.00 0.00	0.0000	140.00	No Ice 1/2" Ice 1" Ice 2" Ice	1.65 1.81 1.98 2.34	1.16 1.29 1.44 1.75	0.08 0.10 0.11 0.16
4449 B12,B71	B	From Leg	4.00	0.0000	140.00	No Ice	1.65	1.16	0.08

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
(T-Mobile)			0.00 0.00			1/2" Ice	1.81	1.29	0.10
						1" Ice	1.98	1.44	0.11
						2" Ice	2.34	1.75	0.16
4449 B12,B71 (T-Mobile)	C	From Leg	4.00 0.00 0.00	0.0000	140.00	No Ice	1.65	1.16	0.08
						1/2" Ice	1.81	1.29	0.10
						1" Ice	1.98	1.44	0.11
						2" Ice	2.34	1.75	0.16
4460 B25+B66 (T-Mobile)	A	From Leg	4.00 0.00 0.00	0.0000	140.00	No Ice	2.56	1.98	0.11
						1/2" Ice	2.76	2.16	0.13
						1" Ice	2.97	2.34	0.16
						2" Ice	3.41	2.74	0.23
4460 B25+B66 (T-Mobile)	B	From Leg	4.00 0.00 0.00	0.0000	140.00	No Ice	2.56	1.98	0.11
						1/2" Ice	2.76	2.16	0.13
						1" Ice	2.97	2.34	0.16
						2" Ice	3.41	2.74	0.23
4460 B25+B66 (T-Mobile)	C	From Leg	4.00 0.00 0.00	0.0000	140.00	No Ice	2.56	1.98	0.11
						1/2" Ice	2.76	2.16	0.13
						1" Ice	2.97	2.34	0.16
						2" Ice	3.41	2.74	0.23
SitePro VFA10-HD (T-Mobile)	A	From Leg	2.00 0.00 0.00	0.0000	140.00	No Ice	17.00	17.00	0.60
						1/2" Ice	21.00	21.00	0.75
						1" Ice	25.00	25.00	0.90
						2" Ice	33.00	33.00	1.20
SitePro VFA10-HD (T-Mobile)	B	From Leg	2.00 0.00 0.00	0.0000	140.00	No Ice	17.00	17.00	0.60
						1/2" Ice	21.00	21.00	0.75
						1" Ice	25.00	25.00	0.90
						2" Ice	33.00	33.00	1.20
SitePro VFA10-HD (T-Mobile)	C	From Leg	2.00 0.00 0.00	0.0000	140.00	No Ice	17.00	17.00	0.60
						1/2" Ice	21.00	21.00	0.75
						1" Ice	25.00	25.00	0.90
						2" Ice	33.00	33.00	1.20
80010966 (AT&T)	A	From Leg	4.00 -6.00 0.00	0.0000	163.30	No Ice	17.36	7.50	0.13
						1/2" Ice	17.99	8.09	0.22
						1" Ice	18.63	8.69	0.32
						2" Ice	19.92	9.90	0.54
7770.00 (AT&T)	A	From Leg	4.00 -2.00 0.00	0.0000	163.30	No Ice	5.51	2.93	0.04
						1/2" Ice	5.87	3.27	0.07
						1" Ice	6.23	3.63	0.11
						2" Ice	6.99	4.35	0.20
OPA-65R-LCUU-H8 (AT&T)	A	From Leg	4.00 2.00 0.00	0.0000	163.30	No Ice	12.98	7.52	0.09
						1/2" Ice	13.56	8.09	0.16
						1" Ice	14.15	8.67	0.24
						2" Ice	15.35	9.85	0.43
80010966 (AT&T)	A	From Leg	4.00 6.00 0.00	0.0000	163.30	No Ice	17.36	7.50	0.13
						1/2" Ice	17.99	8.09	0.22
						1" Ice	18.63	8.69	0.32
						2" Ice	19.92	9.90	0.54
80010965 (AT&T)	B	From Leg	4.00 -6.00 0.00	0.0000	163.30	No Ice	13.81	5.83	0.11
						1/2" Ice	14.35	6.32	0.19
						1" Ice	14.89	6.82	0.27
						2" Ice	15.99	7.84	0.46
7770.00 (AT&T)	B	From Leg	4.00 -2.00 0.00	0.0000	163.30	No Ice	5.51	2.93	0.04
						1/2" Ice	5.87	3.27	0.07
						1" Ice	6.23	3.63	0.11
						2" Ice	6.99	4.35	0.20
OPA-65R-LCUU-H6 (AT&T)	B	From Leg	4.00 2.00	0.0000	163.30	No Ice	9.66	5.52	0.07
						1/2" Ice	10.13	5.97	0.13

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
			0.00			1" Ice	10.61	6.43	0.20
						2" Ice	11.58	7.38	0.35
80010965	B	From Leg	4.00	0.0000	163.30	No Ice	13.81	5.83	0.11
(AT&T)			6.00			1/2" Ice	14.35	6.32	0.19
			0.00			1" Ice	14.89	6.82	0.27
						2" Ice	15.99	7.84	0.46
80010966	C	From Leg	4.00	0.0000	163.30	No Ice	17.36	7.50	0.13
(AT&T)			-6.00			1/2" Ice	17.99	8.09	0.22
			0.00			1" Ice	18.63	8.69	0.32
						2" Ice	19.92	9.90	0.54
7770.00	C	From Leg	4.00	0.0000	163.30	No Ice	5.51	2.93	0.04
(AT&T)			-2.00			1/2" Ice	5.87	3.27	0.07
			0.00			1" Ice	6.23	3.63	0.11
						2" Ice	6.99	4.35	0.20
OPA-65R-LCUU-H8	C	From Leg	4.00	0.0000	163.30	No Ice	12.98	7.52	0.09
(AT&T)			2.00			1/2" Ice	13.56	8.09	0.16
			0.00			1" Ice	14.15	8.67	0.24
						2" Ice	15.35	9.85	0.43
80010966	C	From Leg	4.00	0.0000	163.30	No Ice	17.36	7.50	0.13
(AT&T)			6.00			1/2" Ice	17.99	8.09	0.22
			0.00			1" Ice	18.63	8.69	0.32
						2" Ice	19.92	9.90	0.54
TT08-19DB111-001 TMA	A	From Leg	4.00	0.0000	163.30	No Ice	0.79	0.64	0.02
(AT&T)			5.00			1/2" Ice	0.91	0.75	0.03
			0.00			1" Ice	1.04	0.87	0.04
						2" Ice	1.32	1.13	0.06
TT08-19DB111-001 TMA	B	From Leg	4.00	0.0000	163.30	No Ice	0.79	0.64	0.02
(AT&T)			5.00			1/2" Ice	0.91	0.75	0.03
			0.00			1" Ice	1.04	0.87	0.04
						2" Ice	1.32	1.13	0.06
TT08-19DB111-001 TMA	C	From Leg	4.00	0.0000	163.30	No Ice	0.79	0.64	0.02
(AT&T)			5.00			1/2" Ice	0.91	0.75	0.03
			0.00			1" Ice	1.04	0.87	0.04
						2" Ice	1.32	1.13	0.06
DC6-48-60-18-8F Surge	A	From Face	0.50	0.0000	163.30	No Ice	1.91	1.91	0.03
Arrestor			0.50			1/2" Ice	2.10	2.10	0.05
(AT&T)			0.00			1" Ice	2.29	2.29	0.07
						2" Ice	2.71	2.71	0.12
DC6-48-60-18-8F Surge	B	From Face	0.50	0.0000	163.30	No Ice	1.91	1.91	0.03
Arrestor			0.50			1/2" Ice	2.10	2.10	0.05
(AT&T)			0.00			1" Ice	2.29	2.29	0.07
						2" Ice	2.71	2.71	0.12
DC6-48-60-18-8F Surge	C	From Face	0.50	0.0000	163.30	No Ice	1.91	1.91	0.03
Arrestor			0.50			1/2" Ice	2.10	2.10	0.05
(AT&T)			0.00			1" Ice	2.29	2.29	0.07
						2" Ice	2.71	2.71	0.12
4478 B14	A	From Face	4.00	0.0000	163.30	No Ice	1.84	1.06	0.06
(AT&T)			-2.00			1/2" Ice	2.01	1.20	0.08
			0.00			1" Ice	2.19	1.34	0.09
						2" Ice	2.57	1.66	0.14
4478 B14	B	From Face	4.00	0.0000	163.30	No Ice	1.84	1.06	0.06
(AT&T)			-2.00			1/2" Ice	2.01	1.20	0.08
			0.00			1" Ice	2.19	1.34	0.09
						2" Ice	2.57	1.66	0.14
4478 B14	C	From Face	4.00	0.0000	163.30	No Ice	1.84	1.06	0.06
(AT&T)			-2.00			1/2" Ice	2.01	1.20	0.08
			0.00			1" Ice	2.19	1.34	0.09

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
4449 B5/B12 (AT&T)	A	From Face	4.00 -2.00 0.00	0.0000	163.30	2" Ice	2.57	1.66	0.14
						No Ice	1.97	1.41	0.07
						1/2" Ice	2.14	1.56	0.09
						1" Ice	2.33	1.73	0.11
						2" Ice	2.72	2.07	0.16
4449 B5/B12 (AT&T)	B	From Face	4.00 -2.00 0.00	0.0000	163.30	No Ice	1.97	1.41	0.07
						1/2" Ice	2.14	1.56	0.09
						1" Ice	2.33	1.73	0.11
						2" Ice	2.72	2.07	0.16
4449 B5/B12 (AT&T)	C	From Face	4.00 -2.00 0.00	0.0000	163.30	No Ice	1.97	1.41	0.07
						1/2" Ice	2.14	1.56	0.09
						1" Ice	2.33	1.73	0.11
						2" Ice	2.72	2.07	0.16
8843 B2/B66A (AT&T)	A	From Face	4.00 -2.00 0.00	0.0000	163.30	No Ice	1.64	1.35	0.07
						1/2" Ice	1.80	1.50	0.09
						1" Ice	1.97	1.65	0.11
						2" Ice	2.32	1.99	0.16
8843 B2/B66A (AT&T)	B	From Face	4.00 -2.00 0.00	0.0000	163.30	No Ice	1.64	1.35	0.07
						1/2" Ice	1.80	1.50	0.09
						1" Ice	1.97	1.65	0.11
						2" Ice	2.32	1.99	0.16
8843 B2/B66A (AT&T)	C	From Face	4.00 -2.00 0.00	0.0000	163.30	No Ice	1.64	1.35	0.07
						1/2" Ice	1.80	1.50	0.09
						1" Ice	1.97	1.65	0.11
						2" Ice	2.32	1.99	0.16
RRUS-32 (AT&T)	A	From Face	4.00 -2.00 0.00	0.0000	163.30	No Ice	3.31	2.42	0.08
						1/2" Ice	3.56	2.64	0.10
						1" Ice	3.81	2.86	0.14
						2" Ice	4.33	3.32	0.21
RRUS-32 (AT&T)	B	From Face	4.00 -2.00 0.00	0.0000	163.30	No Ice	3.31	2.42	0.08
						1/2" Ice	3.56	2.64	0.10
						1" Ice	3.81	2.86	0.14
						2" Ice	4.33	3.32	0.21
RRUS-32 (AT&T)	C	From Face	4.00 -2.00 0.00	0.0000	163.30	No Ice	3.31	2.42	0.08
						1/2" Ice	3.56	2.64	0.10
						1" Ice	3.81	2.86	0.14
						2" Ice	4.33	3.32	0.21
RRUS-E2 (AT&T)	A	From Face	4.00 -2.00 0.00	0.0000	163.30	No Ice	3.15	1.29	0.06
						1/2" Ice	3.36	1.44	0.08
						1" Ice	3.59	1.60	0.11
						2" Ice	4.07	1.95	0.17
RRUS-E2 (AT&T)	B	From Face	4.00 -2.00 0.00	0.0000	163.30	No Ice	3.15	1.29	0.06
						1/2" Ice	3.36	1.44	0.08
						1" Ice	3.59	1.60	0.11
						2" Ice	4.07	1.95	0.17
RRUS-E2 (AT&T)	C	From Face	4.00 -2.00 0.00	0.0000	163.30	No Ice	3.15	1.29	0.06
						1/2" Ice	3.36	1.44	0.08
						1" Ice	3.59	1.60	0.11
						2" Ice	4.07	1.95	0.17
Pirod 12' T-Frame Sector Mount (1) (AT&T)	A	From Leg	2.00 0.00 0.00	0.0000	163.30	No Ice	13.60	13.60	0.47
						1/2" Ice	18.40	18.40	0.60
						1" Ice	23.20	23.20	0.73
						2" Ice	32.80	32.80	1.00
Pirod 12' T-Frame Sector Mount (1) (AT&T)	B	From Leg	2.00 0.00 0.00	0.0000	163.30	No Ice	13.60	13.60	0.47
						1/2" Ice	18.40	18.40	0.60
						1" Ice	23.20	23.20	0.73
						2" Ice	32.80	32.80	1.00

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
Pirod 12' T-Frame Sector Mount (1) (AT&T)	C	From Leg	2.00 0.00 0.00	0.0000	163.30	No Ice 1/2" Ice 1" Ice 2" Ice	13.60 18.40 23.20 32.80	13.60 18.40 23.20 32.80	0.47 0.60 0.73 1.00
LNX-6514DS (Verizon)	A	From Leg	4.00 -6.00 0.00	0.0000	155.00	No Ice 1/2" Ice 1" Ice 2" Ice	8.17 8.63 9.10 10.05	5.41 5.86 6.33 7.28	0.04 0.09 0.15 0.28
NHH-65B-R2B (Verizon)	A	From Leg	4.00 1.00 0.00	0.0000	155.00	No Ice 1/2" Ice 1" Ice 2" Ice	11.19 11.69 12.20 13.25	8.69 9.17 9.66 10.66	0.07 0.15 0.24 0.43
NHH-65B-R2B (Verizon)	A	From Leg	4.00 3.00 0.00	0.0000	155.00	No Ice 1/2" Ice 1" Ice 2" Ice	11.19 11.69 12.20 13.25	8.69 9.17 9.66 10.66	0.07 0.15 0.24 0.43
MT6407-77A (Verizon)	A	From Leg	4.00 6.00 0.00	0.0000	155.00	No Ice 1/2" Ice 1" Ice 2" Ice	4.71 5.00 5.29 5.91	1.84 2.06 2.29 2.77	0.09 0.12 0.15 0.23
LNX-6514DS (Verizon)	B	From Leg	4.00 -6.00 0.00	0.0000	155.00	No Ice 1/2" Ice 1" Ice 2" Ice	8.17 8.63 9.10 10.05	5.41 5.86 6.33 7.28	0.04 0.09 0.15 0.28
NHH-65B-R2B (Verizon)	B	From Leg	4.00 1.00 0.00	0.0000	155.00	No Ice 1/2" Ice 1" Ice 2" Ice	11.19 11.69 12.20 13.25	8.69 9.17 9.66 10.66	0.07 0.15 0.24 0.43
NHH-65B-R2B (Verizon)	B	From Leg	4.00 3.00 0.00	0.0000	155.00	No Ice 1/2" Ice 1" Ice 2" Ice	11.19 11.69 12.20 13.25	8.69 9.17 9.66 10.66	0.07 0.15 0.24 0.43
MT6407-77A (Verizon)	B	From Leg	4.00 6.00 0.00	0.0000	155.00	No Ice 1/2" Ice 1" Ice 2" Ice	4.71 5.00 5.29 5.91	1.84 2.06 2.29 2.77	0.09 0.12 0.15 0.23
LNX-6514DS (Verizon)	C	From Leg	4.00 -6.00 0.00	0.0000	155.00	No Ice 1/2" Ice 1" Ice 2" Ice	8.17 8.63 9.10 10.05	5.41 5.86 6.33 7.28	0.04 0.09 0.15 0.28
NHH-65B-R2B (Verizon)	C	From Leg	4.00 1.00 0.00	0.0000	155.00	No Ice 1/2" Ice 1" Ice 2" Ice	11.19 11.69 12.20 13.25	8.69 9.17 9.66 10.66	0.07 0.15 0.24 0.43
NHH-65B-R2B (Verizon)	C	From Leg	4.00 3.00 0.00	0.0000	155.00	No Ice 1/2" Ice 1" Ice 2" Ice	11.19 11.69 12.20 13.25	8.69 9.17 9.66 10.66	0.07 0.15 0.24 0.43
MT6407-77A (Verizon)	C	From Leg	4.00 6.00 0.00	0.0000	155.00	No Ice 1/2" Ice 1" Ice 2" Ice	4.71 5.00 5.29 5.91	1.84 2.06 2.29 2.77	0.09 0.12 0.15 0.23
B2/B66A RRH (Verizon)	A	From Leg	4.00 -4.00 0.00	0.0000	155.00	No Ice 1/2" Ice 1" Ice 2" Ice	2.54 2.75 2.97 3.43	1.61 1.79 1.98 2.37	0.06 0.08 0.10 0.16
B2/B66A RRH	B	From Leg	4.00	0.0000	155.00	No Ice	2.54	1.61	0.06

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft	Offsets: Vert ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
(Verizon)			-4.00				1/2" Ice	2.75	1.79	0.08
			0.00				1" Ice	2.97	1.98	0.10
							2" Ice	3.43	2.37	0.16
B2/B66A RRH (Verizon)	C	From Leg	4.00		0.0000	155.00	No Ice	2.54	1.61	0.06
			-4.00				1/2" Ice	2.75	1.79	0.08
			0.00				1" Ice	2.97	1.98	0.10
							2" Ice	3.43	2.37	0.16
B5/B13 RRH (Verizon)	A	From Leg	4.00		0.0000	155.00	No Ice	1.87	1.02	0.07
			-4.00				1/2" Ice	2.03	1.15	0.09
			0.00				1" Ice	2.21	1.29	0.11
							2" Ice	2.59	1.59	0.15
B5/B13 RRH (Verizon)	B	From Leg	4.00		0.0000	155.00	No Ice	1.87	1.02	0.07
			-4.00				1/2" Ice	2.03	1.15	0.09
			0.00				1" Ice	2.21	1.29	0.11
							2" Ice	2.59	1.59	0.15
B5/B13 RRH (Verizon)	C	From Leg	4.00		0.0000	155.00	No Ice	1.87	1.02	0.07
			-4.00				1/2" Ice	2.03	1.15	0.09
			0.00				1" Ice	2.21	1.29	0.11
							2" Ice	2.59	1.59	0.15
DB-T1-6Z-8AB-0Z (Verizon)	A	From Leg	4.00		0.0000	155.00	No Ice	4.80	2.00	0.04
			0.00				1/2" Ice	5.07	2.19	0.08
			0.00				1" Ice	5.35	2.39	0.12
							2" Ice	5.93	2.81	0.21
(2) BSF0020F3V1-1 (Verizon - Proposed)	A	From Leg	4.00		0.0000	155.00	No Ice	0.96	0.29	0.02
			-4.00				1/2" Ice	1.09	0.36	0.03
			0.00				1" Ice	1.22	0.45	0.04
							2" Ice	1.50	0.64	0.06
(2) BSF0020F3V1-1 (Verizon - Proposed)	B	From Leg	4.00		0.0000	155.00	No Ice	0.96	0.29	0.02
			-4.00				1/2" Ice	1.09	0.36	0.03
			0.00				1" Ice	1.22	0.45	0.04
							2" Ice	1.50	0.64	0.06
(2) BSF0020F3V1-1 (Verizon - Proposed)	C	From Leg	4.00		0.0000	155.00	No Ice	0.96	0.29	0.02
			-4.00				1/2" Ice	1.09	0.36	0.03
			0.00				1" Ice	1.22	0.45	0.04
							2" Ice	1.50	0.64	0.06
Pirod 12' T-Frame Sector Mount (1) (Verizon)	A	From Leg	2.00		0.0000	155.00	No Ice	13.60	13.60	0.47
			0.00				1/2" Ice	18.40	18.40	0.60
			0.00				1" Ice	23.20	23.20	0.73
							2" Ice	32.80	32.80	1.00
Pirod 12' T-Frame Sector Mount (1) (Verizon)	B	From Leg	2.00		0.0000	155.00	No Ice	13.60	13.60	0.47
			0.00				1/2" Ice	18.40	18.40	0.60
			0.00				1" Ice	23.20	23.20	0.73
							2" Ice	32.80	32.80	1.00
Pirod 12' T-Frame Sector Mount (1) (Verizon)	C	From Leg	2.00		0.0000	155.00	No Ice	13.60	13.60	0.47
			0.00				1/2" Ice	18.40	18.40	0.60
			0.00				1" Ice	23.20	23.20	0.73
							2" Ice	32.80	32.80	1.00
Andrew TFL-M2-20 (Verizon)	A	From Leg	2.00		0.0000	155.00	No Ice	9.00	9.00	0.06
			0.00				1/2" Ice	11.50	11.50	0.10
			0.00				1" Ice	14.00	14.00	0.14
							2" Ice	19.00	19.00	0.22
Andrew TFL-M2-20 (Verizon)	B	From Leg	2.00		0.0000	155.00	No Ice	9.00	9.00	0.06
			0.00				1/2" Ice	11.50	11.50	0.10
			0.00				1" Ice	14.00	14.00	0.14
							2" Ice	19.00	19.00	0.22
Andrew TFL-M2-20 (Verizon)	C	From Leg	2.00		0.0000	155.00	No Ice	9.00	9.00	0.06
			0.00				1/2" Ice	11.50	11.50	0.10

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
			0.00			1" Ice	14.00	14.00	0.14
						2" Ice	19.00	19.00	0.22
13'x2" Pipe (Verizon)	A	From Leg	2.00	0.0000	155.00	No Ice	3.09	3.09	0.05
			0.00			1/2" Ice	4.42	4.42	0.07
			0.00			1" Ice	5.76	5.76	0.10
						2" Ice	8.50	8.50	0.19
13'x2" Pipe (Verizon)	B	From Leg	2.00	0.0000	155.00	No Ice	3.09	3.09	0.05
			0.00			1/2" Ice	4.42	4.42	0.07
			0.00			1" Ice	5.76	5.76	0.10
						2" Ice	8.50	8.50	0.19
13'x2" Pipe (Verizon)	C	From Leg	2.00	0.0000	155.00	No Ice	3.09	3.09	0.05
			0.00			1/2" Ice	4.42	4.42	0.07
			0.00			1" Ice	5.76	5.76	0.10
						2" Ice	8.50	8.50	0.19
6'x4" Pipe Mount	A	From Leg	1.00	0.0000	187.30	No Ice	1.66	1.66	0.05
			0.00			1/2" Ice	2.46	2.46	0.07
			2.00			1" Ice	2.83	2.83	0.09
						2" Ice	3.61	3.61	0.15
Light Beacon	A	From Leg	0.00	0.0000	187.30	No Ice	0.60	0.25	0.05
			0.00			1/2" Ice	0.70	0.31	0.06
			5.00			1" Ice	0.81	0.39	0.06
						2" Ice	1.06	0.55	0.09
13'x2" Pipe	A	From Face	0.00	0.0000	173.30	No Ice	3.09	3.09	0.05
			4.00			1/2" Ice	4.42	4.42	0.07
			6.50			1" Ice	5.76	5.76	0.10
						2" Ice	8.50	8.50	0.19
13'x2" Pipe	A	From Face	0.00	0.0000	173.30	No Ice	3.09	3.09	0.05
			-4.00			1/2" Ice	4.42	4.42	0.07
			6.50			1" Ice	5.76	5.76	0.10
						2" Ice	8.50	8.50	0.19
CO-41A	A	From Face	0.00	0.0000	187.30	No Ice	2.27	2.27	0.01
			0.00			1/2" Ice	3.71	3.71	0.03
			4.00			1" Ice	5.16	5.16	0.06
						2" Ice	8.12	8.12	0.14
13'x2" Pipe	B	From Face	0.00	0.0000	173.30	No Ice	3.09	3.09	0.05
			4.00			1/2" Ice	4.42	4.42	0.07
			6.50			1" Ice	5.76	5.76	0.10
						2" Ice	8.50	8.50	0.19
13'x2" Pipe	B	From Face	0.00	0.0000	173.30	No Ice	3.09	3.09	0.05
			-4.00			1/2" Ice	4.42	4.42	0.07
			6.50			1" Ice	5.76	5.76	0.10
						2" Ice	8.50	8.50	0.19
DS9A09F36D-N	C	From Face	0.00	0.0000	187.30	No Ice	5.76	5.76	0.05
			0.00			1/2" Ice	7.72	7.72	0.09
			10.00			1" Ice	9.69	9.69	0.15
						2" Ice	13.68	13.68	0.29
Tower Top Amplifier	C	From Face	0.00	0.0000	187.30	No Ice	2.67	1.03	0.04
			0.00			1/2" Ice	2.87	1.17	0.06
			0.00			1" Ice	3.08	1.32	0.08
						2" Ice	3.53	1.64	0.13
13'x2" Pipe	C	From Face	0.00	0.0000	173.30	No Ice	3.09	3.09	0.05
			4.00			1/2" Ice	4.42	4.42	0.07
			6.50			1" Ice	5.76	5.76	0.10
						2" Ice	8.50	8.50	0.19
13'x2" Pipe	C	From Face	0.00	0.0000	173.30	No Ice	3.09	3.09	0.05
			-4.00			1/2" Ice	4.42	4.42	0.07
			6.50			1" Ice	5.76	5.76	0.10

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
						2" Ice	8.50	8.50	0.19
ANT450F6	C	From Face	0.00 0.00 2.00	0.0000	187.30	No Ice 1/2" Ice 1" Ice 2" Ice	1.86 2.67 3.30 4.28	1.86 2.67 3.30 4.28	0.02 0.04 0.05 0.11
20' 8 Bay Di-Pole	A	From Face	0.00 0.00 8.00	0.0000	187.30	No Ice 1/2" Ice 1" Ice 2" Ice	4.00 6.00 8.00 12.00	4.00 6.00 8.00 12.00	0.06 0.10 0.14 0.23
DB411-B	C	From Leg	0.00 0.00 -5.00	0.0000	183.30	No Ice 1/2" Ice 1" Ice 2" Ice	1.50 2.70 3.90 6.30	1.50 2.70 3.90 6.30	0.03 0.03 0.04 0.06
20' Horz. 4x4x1/4"	A	From Face	0.00 4.00 6.50	0.0000	184.30	No Ice 1/2" Ice 1" Ice 2" Ice	8.00 9.36 10.73 13.48	0.13 0.18 0.24 0.37	0.24 0.31 0.40 0.63
20' Horz. 4x4x1/4"	B	From Face	0.00 4.00 6.50	0.0000	184.30	No Ice 1/2" Ice 1" Ice 2" Ice	8.00 9.36 10.73 13.48	0.13 0.18 0.24 0.37	0.24 0.31 0.40 0.63
20' Horz. 4x4x1/4"	C	From Face	0.00 4.00 6.50	0.0000	184.30	No Ice 1/2" Ice 1" Ice 2" Ice	8.00 9.36 10.73 13.48	0.13 0.18 0.24 0.37	0.24 0.31 0.40 0.63
22' Horz. 4x4x1/4	A	From Face	0.00 4.00 6.50	0.0000	173.30	No Ice 1/2" Ice 1" Ice 2" Ice	8.80 10.29 11.79 14.81	0.13 0.18 0.24 0.37	0.27 0.35 0.44 0.69
22' Horz. 4x4x1/4	B	From Face	0.00 4.00 6.50	0.0000	173.30	No Ice 1/2" Ice 1" Ice 2" Ice	8.80 10.29 11.79 14.81	0.13 0.18 0.24 0.37	0.27 0.35 0.44 0.69
22' Horz. 4x4x1/4	C	From Face	0.00 4.00 6.50	0.0000	173.30	No Ice 1/2" Ice 1" Ice 2" Ice	8.80 10.29 11.79 14.81	0.13 0.18 0.24 0.37	0.27 0.35 0.44 0.69
6'x4" Pipe Mount	A	From Leg	1.00 0.00 0.00	0.0000	185.30	No Ice 1/2" Ice 1" Ice 2" Ice	1.66 2.46 2.83 3.61	1.66 2.46 2.83 3.61	0.05 0.07 0.09 0.15
8' x 2" Horz. Pipe	A	From Leg	0.50 4.00 0.00	0.0000	185.30	No Ice 1/2" Ice 1" Ice 2" Ice	1.90 2.45 3.01 4.15	0.05 0.08 0.11 0.21	0.03 0.05 0.07 0.14
6'x4" Pipe Mount	B	From Leg	1.00 0.00 0.00	0.0000	185.30	No Ice 1/2" Ice 1" Ice 2" Ice	1.66 2.46 2.83 3.61	1.66 2.46 2.83 3.61	0.05 0.07 0.09 0.15
8' x 2" Horz. Pipe	B	From Leg	0.50 4.00 0.00	0.0000	185.30	No Ice 1/2" Ice 1" Ice 2" Ice	1.90 2.45 3.01 4.15	0.05 0.08 0.11 0.21	0.03 0.05 0.07 0.14
6'x4" Pipe Mount	B	From Leg	1.00 0.00 0.00	0.0000	174.30	No Ice 1/2" Ice 1" Ice 2" Ice	1.66 2.46 2.83 3.61	1.66 2.46 2.83 3.61	0.05 0.07 0.09 0.15

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
8' x 2" Horz. Pipe	B	From Leg	0.50 4.00 0.00	0.0000	174.30	No Ice 1/2" Ice 1" Ice 2" Ice	1.90 2.45 3.01 4.15	0.05 0.08 0.11 0.21	0.03 0.05 0.07 0.14
6'x4" Pipe Mount	A	From Leg	1.00 0.00 0.00	0.0000	179.30	No Ice 1/2" Ice 1" Ice 2" Ice	1.66 2.46 2.83 3.61	1.66 2.46 2.83 3.61	0.05 0.07 0.09 0.15
8' x 2" Horz. Pipe	A	From Leg	0.50 4.00 0.00	0.0000	179.30	No Ice 1/2" Ice 1" Ice 2" Ice	1.90 2.45 3.01 4.15	0.05 0.08 0.11 0.21	0.03 0.05 0.07 0.14
8' x 2" Horz. Pipe	A	From Leg	0.50 0.00 0.00	0.0000	167.30	No Ice 1/2" Ice 1" Ice 2" Ice	1.90 2.45 3.01 4.15	0.05 0.08 0.11 0.21	0.03 0.05 0.07 0.14
6' Standoff Arm	A	From Leg	3.00 0.00 0.00	0.0000	167.30	No Ice 1/2" Ice 1" Ice 2" Ice	2.40 2.83 3.26 4.15	0.13 0.18 0.24 0.37	0.05 0.07 0.10 0.17
ANT150F6	A	From Leg	6.00 0.00 10.00	0.0000	167.30	No Ice 1/2" Ice 1" Ice 2" Ice	5.87 8.03 10.21 14.63	5.87 8.03 10.21 14.63	0.05 0.09 0.14 0.30
6'x2" Pipe Mount	C	From Leg	0.50 0.00 0.00	0.0000	170.30	No Ice 1/2" Ice 1" Ice 2" Ice	1.20 1.80 2.17 2.93	1.20 1.80 2.17 2.93	0.02 0.03 0.04 0.08
DS2C03F36D-D	C	From Leg	4.00 -6.00 9.30	0.0000	185.30	No Ice 1/2" Ice 1" Ice 2" Ice	7.30 9.77 12.25 17.27	7.30 9.77 12.25 17.27	0.08 0.13 0.20 0.38
DS7C09P36U-D	C	From Leg	4.00 6.00 7.00	0.0000	185.30	No Ice 1/2" Ice 1" Ice 2" Ice	4.28 5.73 7.21 10.21	4.28 5.73 7.21 10.21	0.08 0.11 0.15 0.25
DS7C09P36U-D	C	From Leg	4.00 6.00 -7.00	0.0000	185.30	No Ice 1/2" Ice 1" Ice 2" Ice	4.28 5.73 7.21 10.21	4.28 5.73 7.21 10.21	0.08 0.11 0.15 0.25
DS7C09P36U-D	C	From Leg	4.00 -6.00 -7.00	0.0000	185.30	No Ice 1/2" Ice 1" Ice 2" Ice	4.28 5.73 7.21 10.21	4.28 5.73 7.21 10.21	0.08 0.11 0.15 0.25
SitePro VFA10-HD	C	None		0.0000	185.30	No Ice 1/2" Ice 1" Ice 2" Ice	17.00 21.00 25.00 33.00	17.00 21.00 25.00 33.00	0.60 0.75 0.90 1.20
6'x4" Pipe Mount	B	From Leg	1.00 0.00 0.00	0.0000	137.30	No Ice 1/2" Ice 1" Ice 2" Ice	1.69 2.46 2.83 3.61	1.69 2.46 2.83 3.61	0.05 0.07 0.09 0.15
6'x4" Pipe Mount	C	From Leg	1.00 0.00 0.00	0.0000	137.30	No Ice 1/2" Ice 1" Ice 2" Ice	1.69 2.46 2.83 3.61	1.69 2.46 2.83 3.61	0.05 0.07 0.09 0.15
6'x3" Pipe Mount	A	From Leg	0.50	0.0000	127.30	No Ice	1.77	1.77	0.03

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
			0.00			1/2" Ice	2.13	2.13	0.05
			0.00			1" Ice	2.50	2.50	0.07
						2" Ice	3.27	3.27	0.11
4' x 2.875" Pipe Mount	A	From Leg	0.50	0.0000	127.30	No Ice	0.97	0.97	0.02
			0.00			1/2" Ice	1.22	1.22	0.03
			0.00			1" Ice	1.48	1.48	0.04
						2" Ice	2.02	2.02	0.08
6' Standoff Arm	A	From Leg	3.00	0.0000	127.30	No Ice	2.40	0.13	0.05
			0.00			1/2" Ice	2.83	0.18	0.07
			0.00			1" Ice	3.26	0.24	0.10
						2" Ice	4.15	0.37	0.17
531-70HD	A	From Leg	6.00	0.0000	127.30	No Ice	6.00	6.00	0.04
			0.00			1/2" Ice	6.90	6.90	0.05
			0.00			1" Ice	7.80	7.80	0.06
						2" Ice	9.60	9.60	0.08
6'x4" Pipe Mount	B	From Leg	1.00	0.0000	127.30	No Ice	1.70	1.70	0.05
			0.00			1/2" Ice	2.46	2.46	0.07
			0.00			1" Ice	2.83	2.83	0.09
						2" Ice	3.61	3.61	0.15
8' x 2" Horz. Pipe	B	From Leg	0.50	0.0000	127.30	No Ice	1.90	0.05	0.03
			4.00			1/2" Ice	2.45	0.08	0.05
			0.00			1" Ice	3.01	0.11	0.07
						2" Ice	4.15	0.21	0.14
6'x3" Pipe Mount	C	From Leg	0.50	0.0000	127.30	No Ice	1.77	1.77	0.03
			0.00			1/2" Ice	2.13	2.13	0.05
			0.00			1" Ice	2.50	2.50	0.07
						2" Ice	3.27	3.27	0.11
6' Standoff Arm	C	From Leg	3.00	0.0000	127.30	No Ice	2.40	0.13	0.05
			0.00			1/2" Ice	2.83	0.18	0.07
			0.00			1" Ice	3.26	0.24	0.10
						2" Ice	4.15	0.37	0.17
ANT150F6	C	From Leg	6.00	0.0000	127.30	No Ice	5.87	5.87	0.05
			0.00			1/2" Ice	8.03	8.03	0.09
			10.00			1" Ice	10.21	10.21	0.14
						2" Ice	14.63	14.63	0.30
6'x3" Pipe Mount	A	From Leg	0.50	0.0000	111.30	No Ice	1.77	1.77	0.03
			0.00			1/2" Ice	2.13	2.13	0.05
			0.00			1" Ice	2.50	2.50	0.07
						2" Ice	3.27	3.27	0.11
4' x 2.875" Pipe Mount	A	From Leg	6.00	0.0000	111.30	No Ice	0.97	0.97	0.02
			0.00			1/2" Ice	1.22	1.22	0.03
			0.00			1" Ice	1.48	1.48	0.04
						2" Ice	2.02	2.02	0.08
6' Standoff Arm	A	From Leg	3.00	0.0000	111.30	No Ice	2.40	0.13	0.05
			0.00			1/2" Ice	2.83	0.18	0.07
			0.00			1" Ice	3.26	0.24	0.10
						2" Ice	4.15	0.37	0.17
531-70HD	A	From Leg	6.00	0.0000	111.30	No Ice	6.00	6.00	0.04
			0.00			1/2" Ice	6.90	6.90	0.05
			2.00			1" Ice	7.80	7.80	0.06
						2" Ice	9.60	9.60	0.08
6'x3" Pipe Mount	B	From Leg	0.50	0.0000	110.30	No Ice	1.77	1.77	0.03
			0.00			1/2" Ice	2.13	2.13	0.05
			0.00			1" Ice	2.50	2.50	0.07
						2" Ice	3.27	3.27	0.11
4' x 2.875" Pipe Mount	B	From Leg	6.00	0.0000	110.30	No Ice	0.97	0.97	0.02
			0.00			1/2" Ice	1.22	1.22	0.03

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
			0.00			1" Ice	1.48	1.48	0.04
						2" Ice	2.02	2.02	0.08
6' Standoff Arm	B	From Leg	3.00	0.0000	110.30	No Ice	2.40	0.13	0.05
			0.00			1/2" Ice	2.83	0.18	0.07
			0.00			1" Ice	3.26	0.24	0.10
						2" Ice	4.15	0.37	0.17
CO-41A	B	From Leg	6.00	0.0000	110.30	No Ice	2.27	2.27	0.01
			0.00			1/2" Ice	3.71	3.71	0.03
			6.50			1" Ice	5.16	5.16	0.06
						2" Ice	8.12	8.12	0.14
Light Beacon	A	From Leg	0.50	0.0000	105.30	No Ice	0.60	0.25	0.05
			0.00			1/2" Ice	0.70	0.31	0.06
			0.00			1" Ice	0.81	0.39	0.06
						2" Ice	1.06	0.55	0.09
Light Beacon	B	From Leg	0.50	0.0000	105.30	No Ice	0.60	0.25	0.05
			0.00			1/2" Ice	0.70	0.31	0.06
			0.00			1" Ice	0.81	0.39	0.06
						2" Ice	1.06	0.55	0.09
Light Beacon	C	From Leg	0.50	0.0000	105.30	No Ice	0.60	0.25	0.05
			0.00			1/2" Ice	0.70	0.31	0.06
			0.00			1" Ice	0.81	0.39	0.06
						2" Ice	1.06	0.55	0.09
6'x4" Pipe Mount	B	From Leg	1.00	0.0000	102.30	No Ice	1.73	1.73	0.05
			0.00			1/2" Ice	2.46	2.46	0.07
			0.00			1" Ice	2.83	2.83	0.09
						2" Ice	3.61	3.61	0.15
8' x 2" Horz. Pipe	B	From Leg	0.50	0.0000	102.30	No Ice	1.90	0.05	0.03
			4.00			1/2" Ice	2.45	0.08	0.05
			0.00			1" Ice	3.01	0.11	0.07
						2" Ice	4.15	0.21	0.14
6'x4" Pipe Mount	B	From Leg	1.00	0.0000	100.30	No Ice	1.73	1.73	0.05
			0.00			1/2" Ice	2.46	2.46	0.07
			0.00			1" Ice	2.83	2.83	0.09
						2" Ice	3.61	3.61	0.15
6'x4" Pipe Mount	C	From Leg	1.00	0.0000	93.30	No Ice	1.74	1.74	0.05
			0.00			1/2" Ice	2.46	2.46	0.07
			0.00			1" Ice	2.83	2.83	0.09
						2" Ice	3.61	3.61	0.15
6'x3" Pipe Mount	A	From Leg	0.50	0.0000	87.30	No Ice	1.77	1.77	0.03
			0.00			1/2" Ice	2.13	2.13	0.05
			0.00			1" Ice	2.50	2.50	0.07
						2" Ice	3.27	3.27	0.11
4' x 2.875" Pipe Mount	A	From Leg	6.00	0.0000	87.30	No Ice	0.97	0.97	0.02
			0.00			1/2" Ice	1.22	1.22	0.03
			0.00			1" Ice	1.48	1.48	0.04
						2" Ice	2.02	2.02	0.08
6' Standoff Arm	A	From Leg	3.00	0.0000	87.30	No Ice	2.40	0.13	0.05
			0.00			1/2" Ice	2.83	0.18	0.07
			0.00			1" Ice	3.26	0.24	0.10
						2" Ice	4.15	0.37	0.17
531-70HD	A	From Leg	6.00	0.0000	87.30	No Ice	6.00	6.00	0.04
			0.00			1/2" Ice	6.90	6.90	0.05
			2.00			1" Ice	7.80	7.80	0.06
						2" Ice	9.60	9.60	0.08
6'x3" Pipe Mount	B	From Leg	0.50	0.0000	89.30	No Ice	1.77	1.77	0.03
			0.00			1/2" Ice	2.13	2.13	0.05
			0.00			1" Ice	2.50	2.50	0.07

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
4' x 2.875" Pipe Mount	B	From Leg	3.00 0.00 0.00	0.0000	89.30	2" Ice No Ice 1/2" Ice 1" Ice 2" Ice	3.27 0.97 1.22 1.48 2.02	3.27 0.97 1.22 1.48 2.02	0.11 0.02 0.03 0.04 0.08
6' Standoff Arm	B	From Leg	3.00 0.00 0.00	0.0000	89.30	No Ice 1/2" Ice 1" Ice 2" Ice	2.40 2.83 3.26 4.15	0.13 0.18 0.24 0.37	0.05 0.07 0.10 0.17
ANT150F2	B	From Leg	3.00 0.00 3.50	0.0000	89.30	No Ice 1/2" Ice 1" Ice 2" Ice	1.30 1.60 1.90 2.50	1.30 1.60 1.90 2.50	0.02 0.02 0.03 0.04
6'x3" Pipe Mount	B	From Leg	0.50 0.00 0.00	0.0000	68.30	No Ice 1/2" Ice 1" Ice 2" Ice	1.77 2.13 2.50 3.27	1.77 2.13 2.50 3.27	0.03 0.05 0.07 0.11
4' x 2.875" Pipe Mount	B	From Leg	3.00 0.00 0.00	0.0000	68.30	No Ice 1/2" Ice 1" Ice 2" Ice	0.97 1.22 1.48 2.02	0.97 1.22 1.48 2.02	0.02 0.03 0.04 0.08
6' Standoff Arm	B	From Leg	3.00 0.00 0.00	0.0000	68.30	No Ice 1/2" Ice 1" Ice 2" Ice	2.40 2.83 3.26 4.15	0.13 0.18 0.24 0.37	0.05 0.07 0.10 0.17
2'x2' Panel	B	From Leg	3.00 0.00 0.00	0.0000	68.30	No Ice 1/2" Ice 1" Ice 2" Ice	4.80 5.07 5.35 5.93	0.72 0.87 1.03 1.36	0.02 0.05 0.07 0.14
PR-900	C	From Leg	1.00 0.00 0.00	0.0000	170.30	No Ice 1/2" Ice 1" Ice 2" Ice	6.35 11.43 16.51 26.67	6.35 11.43 16.51 26.67	0.04 0.05 0.06 0.08

Dishes

Description	Face or Leg	Dish Type	Offset Type	Offsets: Horz Lateral ft / Vert ft	Azimuth Adjustment °	3 dB Beam Width °	Elevation ft	Outside Diameter ft		Aperture Area ft^2	Weight K
8' Dish	A	Paraboloid w/o Radome	From Leg	1.00 0.00 0.00	0.0000		185.30	8.00	No Ice 1/2" Ice 1" Ice 2" Ice	50.27 51.32 52.37 54.48	0.10 0.26 0.49 0.95
8' Dish	B	Paraboloid w/o Radome	From Leg	1.00 0.00 0.00	0.0000		185.30	8.00	No Ice 1/2" Ice 1" Ice 2" Ice	50.27 51.32 52.37 54.48	0.10 0.26 0.49 0.95
8' Dish	B	Paraboloid w/o Radome	From Leg	1.00 0.00	0.0000		174.30	8.00	No Ice 1/2" Ice	50.27 51.32	0.10 0.26

Description	Face or Leg	Dish Type	Offset Type	Offsets: Horz Lateral Vert	Azimuth Adjustment	3 dB Beam Width	Elevation	Outside Diameter		Aperture Area	Weight
				ft	°	°	ft	ft		ft²	K
				0.00					1" Ice	52.37	0.49
									2" Ice	54.48	0.95
8' Dish	C	Paraboloid w/o Radome	From Leg	1.00	0.0000		174.30	8.00	No Ice	50.27	0.10
				0.00					1/2" Ice	51.32	0.26
				0.00					1" Ice	52.37	0.49
									2" Ice	54.48	0.95
4' Dish	A	Paraboloid w/Radome	From Leg	1.00	0.0000		179.30	4.00	No Ice	12.57	0.08
				0.00					1/2" Ice	13.10	0.14
				0.00					1" Ice	13.62	0.21
									2" Ice	14.68	0.34
6' Dish	B	Paraboloid w/o Radome	From Leg	1.00	0.0000		137.30	6.00	No Ice	28.27	0.08
				0.00					1/2" Ice	29.07	0.10
				0.00					1" Ice	29.87	0.12
									2" Ice	31.47	0.16
6' Dish	C	Paraboloid w/o Radome	From Leg	1.00	0.0000		137.30	6.00	No Ice	28.27	0.08
				0.00					1/2" Ice	29.07	0.10
				0.00					1" Ice	29.87	0.12
									2" Ice	31.47	0.16
8' Dish	B	Paraboloid w/o Radome	From Leg	1.00	0.0000		127.30	8.00	No Ice	50.27	0.10
				0.00					1/2" Ice	51.32	0.26
				0.00					1" Ice	52.37	0.49
									2" Ice	54.48	0.95
8' Dish	B	Paraboloid w/o Radome	From Leg	1.00	0.0000		102.30	8.00	No Ice	50.27	0.10
				0.00					1/2" Ice	51.32	0.26
				0.00					1" Ice	52.37	0.49
									2" Ice	54.48	0.95
SC3-W100AB	A	Paraboloid w/o Radome	From Leg	1.00	0.0000		100.30	3.27	No Ice	8.40	0.04
				0.00					1/2" Ice	8.83	0.09
				0.00					1" Ice	9.27	0.13
									2" Ice	10.13	0.22
SC3-W100AB	A	Paraboloid w/o Radome	From Leg	1.00	0.0000		93.30	3.27	No Ice	8.40	0.04
				0.00					1/2" Ice	8.83	0.09
				0.00					1" Ice	9.27	0.13
									2" Ice	10.13	0.22

Tower Pressures - No Ice

$G_H = 0.850$

Section Elevation	z	K_Z	q_z	A_G	Face	A_F	A_R	A_{leg}	Leg %	C_AA_A In Face	C_AA_A Out Face
ft	ft		psf	ft²		ft²	ft²	ft²		ft²	ft²
T1	184.80	1.178	53	96.514	A	18.465	5.530	5.530	23.05	0.000	0.000
187.30-182.30					B	18.465	5.530		23.05	7.796	0.000
					C	18.465	5.530		23.05	1.964	0.000
T2	172.30	1.154	52	411.055	A	28.995	22.120	22.120	43.28	0.000	0.000
182.30-162.30					B	28.995	22.120		43.28	52.133	0.000
					C	28.995	22.120		43.28	11.017	0.000
T3	152.30	1.114	51	451.055	A	39.270	22.120	22.120	36.03	15.840	0.000
162.30-142.30					B	39.270	22.120		36.03	57.781	0.000
					C	39.270	22.120		36.03	68.260	0.000
T4	132.30	1.071	50	491.055	A	42.340	22.120	22.120	34.32	47.520	0.000
142.30-122.30					B	42.340	22.120		34.32	69.891	0.000
					C	42.340	22.120		34.32	68.260	0.000

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
T5 122.30-102.30	112.30	1.022	48	534.393	A	45.148	28.798	28.798	38.94	47.520	0.000
					B	45.148	28.798		38.94	82.857	0.000
					C	45.148	28.798		38.94	68.392	0.000
T6 102.30-95.63	98.97	0.985	47	187.113	A	14.658	9.604	9.604	39.58	15.848	0.000
					B	14.658	9.604		39.58	28.712	0.000
					C	14.658	9.604		39.58	25.158	0.000
T7 95.63-82.30	88.97	0.956	46	387.276	A	35.903	19.194	19.194	34.84	31.672	0.000
					B	35.903	19.194		34.84	59.426	0.000
					C	35.903	19.194		34.84	50.279	0.000
T8 82.30-75.63	78.97	0.924	45	200.453	A	15.566	9.604	9.604	38.16	15.848	0.000
					B	15.566	9.604		38.16	30.599	0.000
					C	15.566	9.604		38.16	25.158	0.000
T9 75.63-62.30	68.97	0.889	44	413.936	A	37.768	19.194	19.194	33.70	31.888	0.000
					B	37.768	19.194		33.70	61.153	0.000
					C	37.768	19.194		33.70	50.279	0.000
T10 62.30-55.63	58.97	0.85	42	214.976	A	16.388	11.970	11.970	42.21	16.088	0.000
					B	16.388	11.970		42.21	30.599	0.000
					C	16.388	11.970		42.21	25.158	0.000
T11 55.63-42.30	48.97	0.806	40	442.960	A	41.946	23.923	23.923	36.32	32.152	0.000
					B	41.946	23.923		36.32	61.153	0.000
					C	41.946	23.923		36.32	50.279	0.000
T12 42.30-35.63	38.97	0.755	38	228.316	A	17.315	11.970	11.970	40.87	16.088	0.000
					B	17.315	11.970		40.87	30.599	0.000
					C	17.315	11.970		40.87	25.158	0.000
T13 35.63-22.30	28.97	0.7	36	469.620	A	44.027	23.923	23.923	35.21	32.152	0.000
					B	44.027	23.923		35.21	61.153	0.000
					C	44.027	23.923		35.21	50.279	0.000
T14 22.30-15.63	18.97	0.7	36	242.769	A	18.160	14.197	14.197	43.88	16.088	0.000
					B	18.160	14.197		43.88	30.599	0.000
					C	18.160	14.197		43.88	25.158	0.000
T15 15.63-2.30	8.97	0.7	37	498.504	A	48.957	28.373	28.373	36.69	17.680	0.000
					B	48.957	28.373		36.69	33.627	0.000
					C	48.957	28.373		36.69	27.648	0.000

Tower Pressure - With Ice

$G_H = 0.850$

Section Elevation ft	z ft	K_Z	q_z psf	t_Z in	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
T1 187.30-182.30	184.80	1.178	8	2.2042	98.353	A	18.465	29.642	9.210	19.14	0.000	0.000
						B	18.465	29.642		19.14	29.455	0.000
						C	18.465	29.642		19.14	10.029	0.000
T2 182.30-162.30	172.30	1.154	8	2.1957	418.383	A	28.995	68.614	36.782	37.68	0.000	0.000
						B	28.995	68.614		37.68	191.463	0.000
						C	28.995	68.614		37.68	55.783	0.000
T3 162.30-142.30	152.30	1.114	8	2.1802	458.332	A	39.270	70.925	36.679	33.29	43.307	0.000
						B	39.270	70.925		33.29	205.507	0.000
						C	39.270	70.925		33.29	212.736	0.000
T4 142.30-122.30	132.30	1.071	7	2.1617	498.270	A	42.340	73.167	36.556	31.65	134.619	0.000
						B	42.340	73.167		31.65	235.974	0.000
						C	42.340	73.167		31.65	212.111	0.000
T5 122.30-102.30	112.30	1.022	7	2.1393	541.533	A	45.148	81.718	43.084	33.96	134.345	0.000
						B	45.148	81.718		33.96	274.180	0.000

Section Elevation ft	z ft	K_Z	q_z psf	t_Z in	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
						C	45.148	81.718		33.96	212.680	0.000
T6 102.30-95.63	98.97	0.985	7	2.1213	189.474	A	14.658	24.693	14.328	36.41	44.731	0.000
						B	14.658	24.693		36.41	97.519	0.000
						C	14.658	24.693		36.41	82.131	0.000
T7 95.63-82.30	88.97	0.956	7	2.1056	391.960	A	35.903	62.327	28.565	29.08	89.268	0.000
						B	35.903	62.327		29.08	207.850	0.000
						C	35.903	62.327		29.08	163.681	0.000
T8 82.30-75.63	78.97	0.924	7	2.0877	202.777	A	15.566	25.086	14.253	35.06	44.595	0.000
						B	15.566	25.086		35.06	108.553	0.000
						C	15.566	25.086		35.06	81.639	0.000
T9 75.63-62.30	68.97	0.889	6	2.0667	418.534	A	37.768	63.346	28.392	28.08	91.649	0.000
						B	37.768	63.346		28.08	215.818	0.000
						C	37.768	63.346		28.08	162.544	0.000
T10 62.30-55.63	58.97	0.85	6	2.0418	217.249	A	16.388	27.671	16.518	37.49	47.373	0.000
						B	16.388	27.671		37.49	107.322	0.000
						C	16.388	27.671		37.49	80.970	0.000
T11 55.63-42.30	48.97	0.806	6	2.0116	447.434	A	41.946	68.411	32.876	29.79	94.350	0.000
						B	41.946	68.411		29.79	212.861	0.000
						C	41.946	68.411		29.79	160.936	0.000
T12 42.30-35.63	38.97	0.755	6	1.9736	230.513	A	17.315	27.757	16.366	36.31	47.006	0.000
						B	17.315	27.757		36.31	105.490	0.000
						C	17.315	27.757		36.31	79.974	0.000
T13 35.63-22.30	28.97	0.7	5	1.9234	473.898	A	44.027	68.189	32.483	28.95	93.403	0.000
						B	44.027	68.189		28.95	208.130	0.000
						C	44.027	68.189		28.95	158.365	0.000
T14 22.30-15.63	18.97	0.7	5	1.8511	244.829	A	18.160	29.525	18.320	38.42	46.348	0.000
						B	18.160	29.525		38.42	102.203	0.000
						C	18.160	29.525		38.42	78.188	0.000
T15 15.63-2.30	8.97	0.7	5	1.7246	502.340	A	48.957	69.411	36.049	30.46	50.191	0.000
						B	48.957	69.411		30.46	108.593	0.000
						C	48.957	69.411		30.46	83.903	0.000

Tower Pressure - Service

$G_H = 0.850$

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
T1	184.80	1.178	32	96.514	A	18.465	5.530	5.530	23.05	0.000	0.000
187.30-182.30					B	18.465	5.530		23.05	7.796	0.000
					C	18.465	5.530		23.05	1.964	0.000
T2	172.30	1.154	31	411.055	A	28.995	22.120	22.120	43.28	0.000	0.000
182.30-162.30					B	28.995	22.120		43.28	52.133	0.000
					C	28.995	22.120		43.28	11.017	0.000
T3	152.30	1.114	31	451.055	A	39.270	22.120	22.120	36.03	15.840	0.000
162.30-142.30					B	39.270	22.120		36.03	57.781	0.000
					C	39.270	22.120		36.03	68.260	0.000
T4	132.30	1.071	30	491.055	A	42.340	22.120	22.120	34.32	47.520	0.000
142.30-122.30					B	42.340	22.120		34.32	69.891	0.000
					C	42.340	22.120		34.32	68.260	0.000
T5	112.30	1.022	29	534.393	A	45.148	28.798	28.798	38.94	47.520	0.000
122.30-102.30					B	45.148	28.798		38.94	82.857	0.000
					C	45.148	28.798		38.94	68.392	0.000

Section Elevation ft	z ft	K_Z	q_z psf	A_G ft²	Face	A_F ft²	A_R ft²	A_{leg} ft²	Leg %	C_AA_A In Face ft²	C_AA_A Out Face ft²
T6	98.97	0.985	28	187.113	A	14.658	9.604	9.604	39.58	15.848	0.000
102.30-95.63					B	14.658	9.604		39.58	28.712	0.000
					C	14.658	9.604		39.58	25.158	0.000
T7 95.63-82.30	88.97	0.956	28	387.276	A	35.903	19.194	19.194	34.84	31.672	0.000
					B	35.903	19.194		34.84	59.426	0.000
					C	35.903	19.194		34.84	50.279	0.000
T8 82.30-75.63	78.97	0.924	27	200.453	A	15.566	9.604	9.604	38.16	15.848	0.000
					B	15.566	9.604		38.16	30.599	0.000
					C	15.566	9.604		38.16	25.158	0.000
T9 75.63-62.30	68.97	0.889	26	413.936	A	37.768	19.194	19.194	33.70	31.888	0.000
					B	37.768	19.194		33.70	61.153	0.000
					C	37.768	19.194		33.70	50.279	0.000
T10	58.97	0.85	25	214.976	A	16.388	11.970	11.970	42.21	16.088	0.000
62.30-55.63					B	16.388	11.970		42.21	30.599	0.000
					C	16.388	11.970		42.21	25.158	0.000
T11	48.97	0.806	24	442.960	A	41.946	23.923	23.923	36.32	32.152	0.000
55.63-42.30					B	41.946	23.923		36.32	61.153	0.000
					C	41.946	23.923		36.32	50.279	0.000
T12	38.97	0.755	23	228.316	A	17.315	11.970	11.970	40.87	16.088	0.000
42.30-35.63					B	17.315	11.970		40.87	30.599	0.000
					C	17.315	11.970		40.87	25.158	0.000
T13	28.97	0.7	22	469.620	A	44.027	23.923	23.923	35.21	32.152	0.000
35.63-22.30					B	44.027	23.923		35.21	61.153	0.000
					C	44.027	23.923		35.21	50.279	0.000
T14	18.97	0.7	22	242.769	A	18.160	14.197	14.197	43.88	16.088	0.000
22.30-15.63					B	18.160	14.197		43.88	30.599	0.000
					C	18.160	14.197		43.88	25.158	0.000
T15 15.63-2.30	8.97	0.7	22	498.504	A	48.957	28.373	28.373	36.69	17.680	0.000
					B	48.957	28.373		36.69	33.627	0.000
					C	48.957	28.373		36.69	27.648	0.000

Tower Forces - No Ice - Wind Normal To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
T1	0.04	1.53	A	0.249	2.442	53	1	1	21.091	2.56	512.46	C
187.30-182.30			B	0.249	2.442		1	1	21.091			
			C	0.249	2.442		1	1	21.091			
T2	0.24	2.91	A	0.124	2.868	52	1	1	37.978	6.49	324.34	C
182.30-162.30			B	0.124	2.868		1	1	37.978			
			C	0.124	2.868		1	1	37.978			
T3	0.53	4.13	A	0.136	2.823	51	1	1	48.379	9.60	479.98	C
162.30-142.30			B	0.136	2.823		1	1	48.379			
			C	0.136	2.823		1	1	48.379			
T4	0.70	4.36	A	0.131	2.842	50	1	1	51.397	10.88	544.00	C
142.30-122.30			B	0.131	2.842		1	1	51.397			
			C	0.131	2.842		1	1	51.397			
T5	0.74	5.82	A	0.138	2.815	48	1	1	57.038	11.48	573.87	C
122.30-102.30			B	0.138	2.815		1	1	57.038			
			C	0.138	2.815		1	1	57.038			
T6	0.26	1.91	A	0.13	2.848	47	1	1	18.583	3.79	568.77	C
102.30-95.63			B	0.13	2.848		1	1	18.583			
			C	0.13	2.848		1	1	18.583			
T7	0.53	4.42	A	0.142	2.8	46	1	1	43.864	8.14	610.67	C
95.63-82.30			B	0.142	2.8		1	1	43.864			

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
			C	0.142	2.8		1	1	43.864			
T8	0.27	2.29	A	0.126	2.863	45	1	1	19.472	3.78	566.16	C
82.30-75.63			B	0.126	2.863		1	1	19.472			
			C	0.126	2.863		1	1	19.472			
T9	0.53	5.01	A	0.138	2.818	44	1	1	45.686	7.98	598.66	C
75.63-62.30			B	0.138	2.818		1	1	45.686			
			C	0.138	2.818		1	1	45.686			
T10	0.27	2.31	A	0.132	2.839	42	1	1	21.292	3.72	557.43	C
62.30-55.63			B	0.132	2.839		1	1	21.292			
			C	0.132	2.839		1	1	21.292			
T11	0.53	5.42	A	0.149	2.776	40	1	1	51.946	7.93	594.58	C
55.63-42.30			B	0.149	2.776		1	1	51.946			
			C	0.149	2.776		1	1	51.946			
T12	0.27	2.68	A	0.128	2.853	38	1	1	22.199	3.47	519.94	C
42.30-35.63			B	0.128	2.853		1	1	22.199			
			C	0.128	2.853		1	1	22.199			
T13	0.53	6.80	A	0.145	2.791	36	1	1	53.979	7.23	542.70	C
35.63-22.30			B	0.145	2.791		1	1	53.979			
			C	0.145	2.791		1	1	53.979			
T14	0.27	3.51	A	0.133	2.834	36	1	1	23.987	3.43	514.63	C
22.30-15.63			B	0.133	2.834		1	1	23.987			
			C	0.133	2.834		1	1	23.987			
T15	0.29	7.62	A	0.155	2.753	37	1	1	60.911	6.72	504.42	C
15.63-2.30			B	0.155	2.753		1	1	60.911			
			C	0.155	2.753		1	1	60.911			
Sum Weight:	5.98	60.73						OTM	8583.52 kip-ft	97.20		

Tower Forces - No Ice - Wind 45 To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
T1	0.04	1.53	A	0.249	2.442	53	0.825	1	17.860	2.21	441.97	C
187.30-182.30			B	0.249	2.442		0.825	1	17.860			
			C	0.249	2.442		0.825	1	17.860			
T2	0.24	2.91	A	0.124	2.868	52	0.825	1	32.904	5.84	292.19	C
182.30-162.30			B	0.124	2.868		0.825	1	32.904			
			C	0.124	2.868		0.825	1	32.904			
T3	0.53	4.13	A	0.136	2.823	51	0.825	1	41.506	8.76	437.98	C
162.30-142.30			B	0.136	2.823		0.825	1	41.506			
			C	0.136	2.823		0.825	1	41.506			
T4	0.70	4.36	A	0.131	2.842	50	0.825	1	43.987	9.99	499.51	C
142.30-122.30			B	0.131	2.842		0.825	1	43.987			
			C	0.131	2.842		0.825	1	43.987			
T5	0.74	5.82	A	0.138	2.815	48	0.825	1	49.137	10.57	528.26	C
122.30-102.30			B	0.138	2.815		0.825	1	49.137			
			C	0.138	2.815		0.825	1	49.137			
T6	0.26	1.91	A	0.13	2.848	47	0.825	1	16.018	3.50	524.92	C
102.30-95.63			B	0.13	2.848		0.825	1	16.018			
			C	0.13	2.848		0.825	1	16.018			
T7	0.53	4.42	A	0.142	2.8	46	0.825	1	37.581	7.45	558.93	C
95.63-82.30			B	0.142	2.8		0.825	1	37.581			

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
			C	0.142	2.8		0.825	1	37.581			
T8	0.27	2.29	A	0.126	2.863	45	0.825	1	16.748	3.48	521.43	C
82.30-75.63			B	0.126	2.863		0.825	1	16.748			
			C	0.126	2.863		0.825	1	16.748			
T9	0.53	5.01	A	0.138	2.818	44	0.825	1	39.077	7.29	546.74	C
75.63-62.30			B	0.138	2.818		0.825	1	39.077			
			C	0.138	2.818		0.825	1	39.077			
T10	0.27	2.31	A	0.132	2.839	42	0.825	1	18.424	3.43	513.60	C
62.30-55.63			B	0.132	2.839		0.825	1	18.424			
			C	0.132	2.839		0.825	1	18.424			
T11	0.53	5.42	A	0.149	2.776	40	0.825	1	44.606	7.22	541.98	C
55.63-42.30			B	0.149	2.776		0.825	1	44.606			
			C	0.149	2.776		0.825	1	44.606			
T12	0.27	2.68	A	0.128	2.853	38	0.825	1	19.169	3.19	477.71	C
42.30-35.63			B	0.128	2.853		0.825	1	19.169			
			C	0.128	2.853		0.825	1	19.169			
T13	0.53	6.80	A	0.145	2.791	36	0.825	1	46.274	6.58	493.42	C
35.63-22.30			B	0.145	2.791		0.825	1	46.274			
			C	0.145	2.791		0.825	1	46.274			
T14	0.27	3.51	A	0.133	2.834	36	0.825	1	20.809	3.15	472.91	C
22.30-15.63			B	0.133	2.834		0.825	1	20.809			
			C	0.133	2.834		0.825	1	20.809			
T15	0.29	7.62	A	0.155	2.753	37	0.825	1	52.344	5.99	449.10	C
15.63-2.30			B	0.155	2.753		0.825	1	52.344			
			C	0.155	2.753		0.825	1	52.344			
Sum Weight:	5.98	60.73						OTM	7824.12 kip-ft	88.64		

Tower Forces - No Ice - Wind 60 To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
T1	0.04	1.53	A	0.249	2.442	53	0.8	1	17.398	2.16	431.89	C
187.30-182.30			B	0.249	2.442		0.8	1	17.398			
			C	0.249	2.442		0.8	1	17.398			
T2	0.24	2.91	A	0.124	2.868	52	0.8	1	32.179	5.75	287.59	C
182.30-162.30			B	0.124	2.868		0.8	1	32.179			
			C	0.124	2.868		0.8	1	32.179			
T3	0.53	4.13	A	0.136	2.823	51	0.8	1	40.525	8.64	431.98	C
162.30-142.30			B	0.136	2.823		0.8	1	40.525			
			C	0.136	2.823		0.8	1	40.525			
T4	0.70	4.36	A	0.131	2.842	50	0.8	1	42.929	9.86	493.15	C
142.30-122.30			B	0.131	2.842		0.8	1	42.929			
			C	0.131	2.842		0.8	1	42.929			
T5	0.74	5.82	A	0.138	2.815	48	0.8	1	48.008	10.43	521.74	C
122.30-102.30			B	0.138	2.815		0.8	1	48.008			
			C	0.138	2.815		0.8	1	48.008			
T6	0.26	1.91	A	0.13	2.848	47	0.8	1	15.651	3.46	518.65	C
102.30-95.63			B	0.13	2.848		0.8	1	15.651			
			C	0.13	2.848		0.8	1	15.651			
T7	0.53	4.42	A	0.142	2.8	46	0.8	1	36.684	7.35	551.54	C
95.63-82.30			B	0.142	2.8		0.8	1	36.684			

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
			C	0.142	2.8		0.8	1	36.684			
T8	0.27	2.29	A	0.126	2.863	45	0.8	1	16.359	3.44	515.04	C
82.30-75.63			B	0.126	2.863		0.8	1	16.359			
			C	0.126	2.863		0.8	1	16.359			
T9	0.53	5.01	A	0.138	2.818	44	0.8	1	38.132	7.19	539.32	C
75.63-62.30			B	0.138	2.818		0.8	1	38.132			
			C	0.138	2.818		0.8	1	38.132			
T10	0.27	2.31	A	0.132	2.839	42	0.8	1	18.015	3.38	507.34	C
62.30-55.63			B	0.132	2.839		0.8	1	18.015			
			C	0.132	2.839		0.8	1	18.015			
T11	0.53	5.42	A	0.149	2.776	40	0.8	1	43.557	7.12	534.46	C
55.63-42.30			B	0.149	2.776		0.8	1	43.557			
			C	0.149	2.776		0.8	1	43.557			
T12	0.27	2.68	A	0.128	2.853	38	0.8	1	18.736	3.15	471.67	C
42.30-35.63			B	0.128	2.853		0.8	1	18.736			
			C	0.128	2.853		0.8	1	18.736			
T13	0.53	6.80	A	0.145	2.791	36	0.8	1	45.174	6.48	486.38	C
35.63-22.30			B	0.145	2.791		0.8	1	45.174			
			C	0.145	2.791		0.8	1	45.174			
T14	0.27	3.51	A	0.133	2.834	36	0.8	1	20.355	3.11	466.95	C
22.30-15.63			B	0.133	2.834		0.8	1	20.355			
			C	0.133	2.834		0.8	1	20.355			
T15	0.29	7.62	A	0.155	2.753	37	0.8	1	51.120	5.88	441.20	C
15.63-2.30			B	0.155	2.753		0.8	1	51.120			
			C	0.155	2.753		0.8	1	51.120			
Sum Weight:	5.98	60.73						OTM	7715.63 kip-ft	87.42		

Tower Forces - No Ice - Wind 90 To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
T1	0.04	1.53	A	0.249	2.442	53	0.85	1	18.322	2.26	452.04	C
187.30-182.30			B	0.249	2.442		0.85	1	18.322			
			C	0.249	2.442		0.85	1	18.322			
T2	0.24	2.91	A	0.124	2.868	52	0.85	1	33.629	5.94	296.78	C
182.30-162.30			B	0.124	2.868		0.85	1	33.629			
			C	0.124	2.868		0.85	1	33.629			
T3	0.53	4.13	A	0.136	2.823	51	0.85	1	42.488	8.88	443.98	C
162.30-142.30			B	0.136	2.823		0.85	1	42.488			
			C	0.136	2.823		0.85	1	42.488			
T4	0.70	4.36	A	0.131	2.842	50	0.85	1	45.046	10.12	505.86	C
142.30-122.30			B	0.131	2.842		0.85	1	45.046			
			C	0.131	2.842		0.85	1	45.046			
T5	0.74	5.82	A	0.138	2.815	48	0.85	1	50.266	10.70	534.77	C
122.30-102.30			B	0.138	2.815		0.85	1	50.266			
			C	0.138	2.815		0.85	1	50.266			
T6	0.26	1.91	A	0.13	2.848	47	0.85	1	16.384	3.54	531.18	C
102.30-95.63			B	0.13	2.848		0.85	1	16.384			
			C	0.13	2.848		0.85	1	16.384			
T7	0.53	4.42	A	0.142	2.8	46	0.85	1	38.479	7.55	566.32	C
95.63-82.30			B	0.142	2.8		0.85	1	38.479			

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
			C	0.142	2.8		0.85	1	38.479			
T8	0.27	2.29	A	0.126	2.863	45	0.85	1	17.137	3.52	527.82	C
82.30-75.63			B	0.126	2.863		0.85	1	17.137			
			C	0.126	2.863		0.85	1	17.137			
T9	0.53	5.01	A	0.138	2.818	44	0.85	1	40.021	7.39	554.15	C
75.63-62.30			B	0.138	2.818		0.85	1	40.021			
			C	0.138	2.818		0.85	1	40.021			
T10	0.27	2.31	A	0.132	2.839	42	0.85	1	18.834	3.47	519.86	C
62.30-55.63			B	0.132	2.839		0.85	1	18.834			
			C	0.132	2.839		0.85	1	18.834			
T11	0.53	5.42	A	0.149	2.776	40	0.85	1	45.655	7.32	549.49	C
55.63-42.30			B	0.149	2.776		0.85	1	45.655			
			C	0.149	2.776		0.85	1	45.655			
T12	0.27	2.68	A	0.128	2.853	38	0.85	1	19.601	3.23	483.74	C
42.30-35.63			B	0.128	2.853		0.85	1	19.601			
			C	0.128	2.853		0.85	1	19.601			
T13	0.53	6.80	A	0.145	2.791	36	0.85	1	47.375	6.67	500.46	C
35.63-22.30			B	0.145	2.791		0.85	1	47.375			
			C	0.145	2.791		0.85	1	47.375			
T14	0.27	3.51	A	0.133	2.834	36	0.85	1	21.263	3.19	478.87	C
22.30-15.63			B	0.133	2.834		0.85	1	21.263			
			C	0.133	2.834		0.85	1	21.263			
T15	0.29	7.62	A	0.155	2.753	37	0.85	1	53.568	6.09	457.00	C
15.63-2.30			B	0.155	2.753		0.85	1	53.568			
			C	0.155	2.753		0.85	1	53.568			
Sum Weight:	5.98	60.73						OTM	7932.60 kip-ft	89.86		

Tower Forces - With Ice - Wind Normal To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
T1	0.59	5.51	A	0.489	1.915	8	1	1	38.597	0.62	124.34	C
187.30-182.30			B	0.489	1.915		1	1	38.597			
			C	0.489	1.915		1	1	38.597			
T2	3.77	9.99	A	0.233	2.489	8	1	1	68.867	2.09	104.48	C
182.30-162.30			B	0.233	2.489		1	1	68.867			
			C	0.233	2.489		1	1	68.867			
T3	7.50	12.69	A	0.24	2.467	8	1	1	80.600	3.05	152.35	C
162.30-142.30			B	0.24	2.467		1	1	80.600			
			C	0.24	2.467		1	1	80.600			
T4	9.53	13.36	A	0.232	2.493	7	1	1	84.834	3.51	175.39	C
142.30-122.30			B	0.232	2.493		1	1	84.834			
			C	0.232	2.493		1	1	84.834			
T5	10.10	15.56	A	0.234	2.486	7	1	1	92.652	3.66	182.95	C
122.30-102.30			B	0.234	2.486		1	1	92.652			
			C	0.234	2.486		1	1	92.652			
T6	3.61	4.96	A	0.208	2.571	7	1	1	28.878	1.24	185.47	C
102.30-95.63			B	0.208	2.571		1	1	28.878			
			C	0.208	2.571		1	1	28.878			
T7	7.32	12.29	A	0.251	2.436	7	1	1	72.373	2.63	196.96	C
95.63-82.30			B	0.251	2.436		1	1	72.373			

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
			C	0.251	2.436		1	1	72.373			
T8	3.69	5.42	A	0.2	2.594	7	1	1	29.979	1.24	185.50	C
82.30-75.63			B	0.2	2.594		1	1	29.979			
			C	0.2	2.594		1	1	29.979			
T9	7.34	13.44	A	0.242	2.463	6	1	1	74.699	2.56	192.19	C
75.63-62.30			B	0.242	2.463		1	1	74.699			
			C	0.242	2.463		1	1	74.699			
T10	3.65	5.61	A	0.203	2.587	6	1	1	32.298	1.19	179.11	C
62.30-55.63			B	0.203	2.587		1	1	32.298			
			C	0.203	2.587		1	1	32.298			
T11	7.17	14.55	A	0.247	2.448	6	1	1	81.911	2.45	183.79	C
55.63-42.30			B	0.247	2.448		1	1	81.911			
			C	0.247	2.448		1	1	81.911			
T12	3.52	5.99	A	0.196	2.611	6	1	1	33.239	1.09	163.50	C
42.30-35.63			B	0.196	2.611		1	1	33.239			
			C	0.196	2.611		1	1	33.239			
T13	6.84	15.81	A	0.237	2.478	5	1	1	83.705	2.18	163.85	C
35.63-22.30			B	0.237	2.478		1	1	83.705			
			C	0.237	2.478		1	1	83.705			
T14	3.29	6.80	A	0.195	2.614	5	1	1	35.096	1.04	156.09	C
22.30-15.63			B	0.195	2.614		1	1	35.096			
			C	0.195	2.614		1	1	35.096			
T15	3.37	16.28	A	0.236	2.481	5	1	1	89.328	1.70	127.44	C
15.63-2.30			B	0.236	2.481		1	1	89.328			
			C	0.236	2.481		1	1	89.328			
Sum Weight:	81.29	158.27						OTM	2705.95 kip-ft	30.25		

Tower Forces - With Ice - Wind 45 To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
T1	0.59	5.51	A	0.489	1.915	8	0.825	1	35.366	0.58	116.16	C
187.30-182.30			B	0.489	1.915		0.825	1	35.366			
			C	0.489	1.915		0.825	1	35.366			
T2	3.77	9.99	A	0.233	2.489	8	0.825	1	63.792	2.01	100.36	C
182.30-162.30			B	0.233	2.489		0.825	1	63.792			
			C	0.233	2.489		0.825	1	63.792			
T3	7.50	12.69	A	0.24	2.467	8	0.825	1	73.727	2.94	146.92	C
162.30-142.30			B	0.24	2.467		0.825	1	73.727			
			C	0.24	2.467		0.825	1	73.727			
T4	9.53	13.36	A	0.232	2.493	7	0.825	1	77.424	3.39	169.62	C
142.30-122.30			B	0.232	2.493		0.825	1	77.424			
			C	0.232	2.493		0.825	1	77.424			
T5	10.10	15.56	A	0.234	2.486	7	0.825	1	84.751	3.54	176.99	C
122.30-102.30			B	0.234	2.486		0.825	1	84.751			
			C	0.234	2.486		0.825	1	84.751			
T6	3.61	4.96	A	0.208	2.571	7	0.825	1	26.313	1.20	179.61	C
102.30-95.63			B	0.208	2.571		0.825	1	26.313			
			C	0.208	2.571		0.825	1	26.313			
T7	7.32	12.29	A	0.251	2.436	7	0.825	1	66.090	2.54	190.31	C
95.63-82.30			B	0.251	2.436		0.825	1	66.090			

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
			C	0.251	2.436		0.825	1	66.090			
T8	3.69	5.42	A	0.2	2.594	7	0.825	1	27.255	1.20	179.50	C
82.30-75.63			B	0.2	2.594		0.825	1	27.255			
			C	0.2	2.594		0.825	1	27.255			
T9	7.34	13.44	A	0.242	2.463	6	0.825	1	68.089	2.47	185.48	C
75.63-62.30			B	0.242	2.463		0.825	1	68.089			
			C	0.242	2.463		0.825	1	68.089			
T10	3.65	5.61	A	0.203	2.587	6	0.825	1	29.430	1.16	173.20	C
62.30-55.63			B	0.203	2.587		0.825	1	29.430			
			C	0.203	2.587		0.825	1	29.430			
T11	7.17	14.55	A	0.247	2.448	6	0.825	1	74.570	2.36	176.93	C
55.63-42.30			B	0.247	2.448		0.825	1	74.570			
			C	0.247	2.448		0.825	1	74.570			
T12	3.52	5.99	A	0.196	2.611	6	0.825	1	30.209	1.05	157.78	C
42.30-35.63			B	0.196	2.611		0.825	1	30.209			
			C	0.196	2.611		0.825	1	30.209			
T13	6.84	15.81	A	0.237	2.478	5	0.825	1	76.001	2.10	157.38	C
35.63-22.30			B	0.237	2.478		0.825	1	76.001			
			C	0.237	2.478		0.825	1	76.001			
T14	3.29	6.80	A	0.195	2.614	5	0.825	1	31.918	1.00	150.40	C
22.30-15.63			B	0.195	2.614		0.825	1	31.918			
			C	0.195	2.614		0.825	1	31.918			
T15	3.37	16.28	A	0.236	2.481	5	0.825	1	80.760	1.60	120.06	C
15.63-2.30			B	0.236	2.481		0.825	1	80.760			
			C	0.236	2.481		0.825	1	80.760			
Sum Weight:	81.29	158.27						OTM	2608.07 kip-ft	29.13		

Tower Forces - With Ice - Wind 60 To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
T1	0.59	5.51	A	0.489	1.915	8	0.8	1	34.904	0.57	114.99	C
187.30-182.30			B	0.489	1.915		0.8	1	34.904			
			C	0.489	1.915		0.8	1	34.904			
T2	3.77	9.99	A	0.233	2.489	8	0.8	1	63.068	2.00	99.77	C
182.30-162.30			B	0.233	2.489		0.8	1	63.068			
			C	0.233	2.489		0.8	1	63.068			
T3	7.50	12.69	A	0.24	2.467	8	0.8	1	72.745	2.92	146.15	C
162.30-142.30			B	0.24	2.467		0.8	1	72.745			
			C	0.24	2.467		0.8	1	72.745			
T4	9.53	13.36	A	0.232	2.493	7	0.8	1	76.366	3.38	168.80	C
142.30-122.30			B	0.232	2.493		0.8	1	76.366			
			C	0.232	2.493		0.8	1	76.366			
T5	10.10	15.56	A	0.234	2.486	7	0.8	1	83.622	3.52	176.14	C
122.30-102.30			B	0.234	2.486		0.8	1	83.622			
			C	0.234	2.486		0.8	1	83.622			
T6	3.61	4.96	A	0.208	2.571	7	0.8	1	25.947	1.19	178.78	C
102.30-95.63			B	0.208	2.571		0.8	1	25.947			
			C	0.208	2.571		0.8	1	25.947			
T7	7.32	12.29	A	0.251	2.436	7	0.8	1	65.193	2.52	189.35	C
95.63-82.30			B	0.251	2.436		0.8	1	65.193			

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
			C	0.251	2.436		0.8	1	65.193			
T8	3.69	5.42	A	0.2	2.594	7	0.8	1	26.866	1.19	178.65	C
82.30-75.63			B	0.2	2.594		0.8	1	26.866			
			C	0.2	2.594		0.8	1	26.866			
T9	7.34	13.44	A	0.242	2.463	6	0.8	1	67.145	2.46	184.52	C
75.63-62.30			B	0.242	2.463		0.8	1	67.145			
			C	0.242	2.463		0.8	1	67.145			
T10	3.65	5.61	A	0.203	2.587	6	0.8	1	29.020	1.15	172.36	C
62.30-55.63			B	0.203	2.587		0.8	1	29.020			
			C	0.203	2.587		0.8	1	29.020			
T11	7.17	14.55	A	0.247	2.448	6	0.8	1	73.521	2.35	175.95	C
55.63-42.30			B	0.247	2.448		0.8	1	73.521			
			C	0.247	2.448		0.8	1	73.521			
T12	3.52	5.99	A	0.196	2.611	6	0.8	1	29.776	1.05	156.97	C
42.30-35.63			B	0.196	2.611		0.8	1	29.776			
			C	0.196	2.611		0.8	1	29.776			
T13	6.84	15.81	A	0.237	2.478	5	0.8	1	74.900	2.09	156.46	C
35.63-22.30			B	0.237	2.478		0.8	1	74.900			
			C	0.237	2.478		0.8	1	74.900			
T14	3.29	6.80	A	0.195	2.614	5	0.8	1	31.464	1.00	149.59	C
22.30-15.63			B	0.195	2.614		0.8	1	31.464			
			C	0.195	2.614		0.8	1	31.464			
T15	3.37	16.28	A	0.236	2.481	5	0.8	1	79.536	1.59	119.01	C
15.63-2.30			B	0.236	2.481		0.8	1	79.536			
			C	0.236	2.481		0.8	1	79.536			
Sum Weight:	81.29	158.27						OTM	2594.09 kip-ft	28.97		

Tower Forces - With Ice - Wind 90 To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
T1	0.59	5.51	A	0.489	1.915	8	0.85	1	35.827	0.59	117.33	C
187.30-182.30			B	0.489	1.915		0.85	1	35.827			
			C	0.489	1.915		0.85	1	35.827			
T2	3.77	9.99	A	0.233	2.489	8	0.85	1	64.517	2.02	100.95	C
182.30-162.30			B	0.233	2.489		0.85	1	64.517			
			C	0.233	2.489		0.85	1	64.517			
T3	7.50	12.69	A	0.24	2.467	8	0.85	1	74.709	2.95	147.70	C
162.30-142.30			B	0.24	2.467		0.85	1	74.709			
			C	0.24	2.467		0.85	1	74.709			
T4	9.53	13.36	A	0.232	2.493	7	0.85	1	78.483	3.41	170.44	C
142.30-122.30			B	0.232	2.493		0.85	1	78.483			
			C	0.232	2.493		0.85	1	78.483			
T5	10.10	15.56	A	0.234	2.486	7	0.85	1	85.879	3.56	177.84	C
122.30-102.30			B	0.234	2.486		0.85	1	85.879			
			C	0.234	2.486		0.85	1	85.879			
T6	3.61	4.96	A	0.208	2.571	7	0.85	1	26.679	1.20	180.45	C
102.30-95.63			B	0.208	2.571		0.85	1	26.679			
			C	0.208	2.571		0.85	1	26.679			
T7	7.32	12.29	A	0.251	2.436	7	0.85	1	66.988	2.55	191.26	C
95.63-82.30			B	0.251	2.436		0.85	1	66.988			

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
			C	0.251	2.436		0.85	1	66.988			
T8	3.69	5.42	A	0.2	2.594	7	0.85	1	27.644	1.20	180.36	C
82.30-75.63			B	0.2	2.594		0.85	1	27.644			
			C	0.2	2.594		0.85	1	27.644			
T9	7.34	13.44	A	0.242	2.463	6	0.85	1	69.033	2.49	186.44	C
75.63-62.30			B	0.242	2.463		0.85	1	69.033			
			C	0.242	2.463		0.85	1	69.033			
T10	3.65	5.61	A	0.203	2.587	6	0.85	1	29.840	1.16	174.05	C
62.30-55.63			B	0.203	2.587		0.85	1	29.840			
			C	0.203	2.587		0.85	1	29.840			
T11	7.17	14.55	A	0.247	2.448	6	0.85	1	75.619	2.37	177.91	C
55.63-42.30			B	0.247	2.448		0.85	1	75.619			
			C	0.247	2.448		0.85	1	75.619			
T12	3.52	5.99	A	0.196	2.611	6	0.85	1	30.642	1.06	158.60	C
42.30-35.63			B	0.196	2.611		0.85	1	30.642			
			C	0.196	2.611		0.85	1	30.642			
T13	6.84	15.81	A	0.237	2.478	5	0.85	1	77.101	2.11	158.31	C
35.63-22.30			B	0.237	2.478		0.85	1	77.101			
			C	0.237	2.478		0.85	1	77.101			
T14	3.29	6.80	A	0.195	2.614	5	0.85	1	32.372	1.01	151.22	C
22.30-15.63			B	0.195	2.614		0.85	1	32.372			
			C	0.195	2.614		0.85	1	32.372			
T15	3.37	16.28	A	0.236	2.481	5	0.85	1	81.984	1.61	121.11	C
15.63-2.30			B	0.236	2.481		0.85	1	81.984			
			C	0.236	2.481		0.85	1	81.984			
Sum Weight:	81.29	158.27						OTM	2622.06 kip-ft	29.29		

Tower Forces - Service - Wind Normal To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
T1	0.04	1.53	A	0.249	2.442	32	1	1	21.268	1.56	311.65	C
187.30-182.30			B	0.249	2.442		1	1	21.268			
			C	0.249	2.442		1	1	21.268			
T2	0.24	2.91	A	0.124	2.868	31	1	1	39.036	4.00	199.82	C
182.30-162.30			B	0.124	2.868		1	1	39.036			
			C	0.124	2.868		1	1	39.036			
T3	0.53	4.13	A	0.136	2.823	31	1	1	49.463	5.87	293.72	C
162.30-142.30			B	0.136	2.823		1	1	49.463			
			C	0.136	2.823		1	1	49.463			
T4	0.70	4.36	A	0.131	2.842	30	1	1	52.565	6.65	332.60	C
142.30-122.30			B	0.131	2.842		1	1	52.565			
			C	0.131	2.842		1	1	52.565			
T5	0.74	5.82	A	0.138	2.815	29	1	1	57.038	6.93	346.39	C
122.30-102.30			B	0.138	2.815		1	1	57.038			
			C	0.138	2.815		1	1	57.038			
T6	0.26	1.91	A	0.13	2.848	28	1	1	18.583	2.29	343.31	C
102.30-95.63			B	0.13	2.848		1	1	18.583			
			C	0.13	2.848		1	1	18.583			
T7	0.53	4.42	A	0.142	2.8	28	1	1	43.864	4.91	368.61	C
95.63-82.30			B	0.142	2.8		1	1	43.864			

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
			C	0.142	2.8		1	1	43.864			
T8	0.27	2.29	A	0.126	2.863	27	1	1	19.472	2.28	341.74	C
82.30-75.63			B	0.126	2.863		1	1	19.472			
			C	0.126	2.863		1	1	19.472			
T9	0.53	5.01	A	0.138	2.818	26	1	1	45.686	4.82	361.36	C
75.63-62.30			B	0.138	2.818		1	1	45.686			
			C	0.138	2.818		1	1	45.686			
T10	0.27	2.31	A	0.132	2.839	25	1	1	21.292	2.24	336.47	C
62.30-55.63			B	0.132	2.839		1	1	21.292			
			C	0.132	2.839		1	1	21.292			
T11	0.53	5.42	A	0.149	2.776	24	1	1	51.946	4.78	358.89	C
55.63-42.30			B	0.149	2.776		1	1	51.946			
			C	0.149	2.776		1	1	51.946			
T12	0.27	2.68	A	0.128	2.853	23	1	1	22.199	2.09	313.84	C
42.30-35.63			B	0.128	2.853		1	1	22.199			
			C	0.128	2.853		1	1	22.199			
T13	0.53	6.80	A	0.145	2.791	22	1	1	53.979	4.37	327.58	C
35.63-22.30			B	0.145	2.791		1	1	53.979			
			C	0.145	2.791		1	1	53.979			
T14	0.27	3.51	A	0.133	2.834	22	1	1	23.987	2.07	310.64	C
22.30-15.63			B	0.133	2.834		1	1	23.987			
			C	0.133	2.834		1	1	23.987			
T15	0.29	7.62	A	0.155	2.753	22	1	1	60.911	4.06	304.47	C
15.63-2.30			B	0.155	2.753		1	1	60.911			
			C	0.155	2.753		1	1	60.911			
Sum Weight:	5.98	60.73						OTM	5219.98 kip-ft	58.93		

Tower Forces - Service - Wind 45 To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
T1	0.04	1.53	A	0.249	2.442	32	0.825	1	18.036	1.35	269.10	C
187.30-182.30			B	0.249	2.442		0.825	1	18.036			
			C	0.249	2.442		0.825	1	18.036			
T2	0.24	2.91	A	0.124	2.868	31	0.825	1	33.962	3.61	180.41	C
182.30-162.30			B	0.124	2.868		0.825	1	33.962			
			C	0.124	2.868		0.825	1	33.962			
T3	0.53	4.13	A	0.136	2.823	31	0.825	1	42.591	5.37	268.37	C
162.30-142.30			B	0.136	2.823		0.825	1	42.591			
			C	0.136	2.823		0.825	1	42.591			
T4	0.70	4.36	A	0.131	2.842	30	0.825	1	45.156	6.11	305.74	C
142.30-122.30			B	0.131	2.842		0.825	1	45.156			
			C	0.131	2.842		0.825	1	45.156			
T5	0.74	5.82	A	0.138	2.815	29	0.825	1	49.137	6.38	318.86	C
122.30-102.30			B	0.138	2.815		0.825	1	49.137			
			C	0.138	2.815		0.825	1	49.137			
T6	0.26	1.91	A	0.13	2.848	28	0.825	1	16.018	2.11	316.85	C
102.30-95.63			B	0.13	2.848		0.825	1	16.018			
			C	0.13	2.848		0.825	1	16.018			
T7	0.53	4.42	A	0.142	2.8	28	0.825	1	37.581	4.50	337.38	C
95.63-82.30			B	0.142	2.8		0.825	1	37.581			

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
			C	0.142	2.8		0.825	1	37.581			
T8	0.27	2.29	A	0.126	2.863	27	0.825	1	16.748	2.10	314.74	C
82.30-75.63			B	0.126	2.863		0.825	1	16.748			
			C	0.126	2.863		0.825	1	16.748			
T9	0.53	5.01	A	0.138	2.818	26	0.825	1	39.077	4.40	330.02	C
75.63-62.30			B	0.138	2.818		0.825	1	39.077			
			C	0.138	2.818		0.825	1	39.077			
T10	0.27	2.31	A	0.132	2.839	25	0.825	1	18.424	2.07	310.01	C
62.30-55.63			B	0.132	2.839		0.825	1	18.424			
			C	0.132	2.839		0.825	1	18.424			
T11	0.53	5.42	A	0.149	2.776	24	0.825	1	44.606	4.36	327.14	C
55.63-42.30			B	0.149	2.776		0.825	1	44.606			
			C	0.149	2.776		0.825	1	44.606			
T12	0.27	2.68	A	0.128	2.853	23	0.825	1	19.169	1.92	288.35	C
42.30-35.63			B	0.128	2.853		0.825	1	19.169			
			C	0.128	2.853		0.825	1	19.169			
T13	0.53	6.80	A	0.145	2.791	22	0.825	1	46.274	3.97	297.83	C
35.63-22.30			B	0.145	2.791		0.825	1	46.274			
			C	0.145	2.791		0.825	1	46.274			
T14	0.27	3.51	A	0.133	2.834	22	0.825	1	20.809	1.90	285.45	C
22.30-15.63			B	0.133	2.834		0.825	1	20.809			
			C	0.133	2.834		0.825	1	20.809			
T15	0.29	7.62	A	0.155	2.753	22	0.825	1	52.344	3.61	271.08	C
15.63-2.30			B	0.155	2.753		0.825	1	52.344			
			C	0.155	2.753		0.825	1	52.344			
Sum Weight:	5.98	60.73						OTM	4761.60 kip-ft	53.76		

Tower Forces - Service - Wind 60 To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
T1	0.04	1.53	A	0.249	2.442	32	0.8	1	17.575	1.32	263.02	C
187.30-182.30			B	0.249	2.442		0.8	1	17.575			
			C	0.249	2.442		0.8	1	17.575			
T2	0.24	2.91	A	0.124	2.868	31	0.8	1	33.237	3.55	177.64	C
182.30-162.30			B	0.124	2.868		0.8	1	33.237			
			C	0.124	2.868		0.8	1	33.237			
T3	0.53	4.13	A	0.136	2.823	31	0.8	1	41.609	5.29	264.75	C
162.30-142.30			B	0.136	2.823		0.8	1	41.609			
			C	0.136	2.823		0.8	1	41.609			
T4	0.70	4.36	A	0.131	2.842	30	0.8	1	44.097	6.04	301.91	C
142.30-122.30			B	0.131	2.842		0.8	1	44.097			
			C	0.131	2.842		0.8	1	44.097			
T5	0.74	5.82	A	0.138	2.815	29	0.8	1	48.008	6.30	314.93	C
122.30-102.30			B	0.138	2.815		0.8	1	48.008			
			C	0.138	2.815		0.8	1	48.008			
T6	0.26	1.91	A	0.13	2.848	28	0.8	1	15.651	2.09	313.06	C
102.30-95.63			B	0.13	2.848		0.8	1	15.651			
			C	0.13	2.848		0.8	1	15.651			
T7	0.53	4.42	A	0.142	2.8	28	0.8	1	36.684	4.44	332.91	C
95.63-82.30			B	0.142	2.8		0.8	1	36.684			

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
			C	0.142	2.8		0.8	1	36.684			
T8	0.27	2.29	A	0.126	2.863	27	0.8	1	16.359	2.07	310.88	C
82.30-75.63			B	0.126	2.863		0.8	1	16.359			
			C	0.126	2.863		0.8	1	16.359			
T9	0.53	5.01	A	0.138	2.818	26	0.8	1	38.132	4.34	325.54	C
75.63-62.30			B	0.138	2.818		0.8	1	38.132			
			C	0.138	2.818		0.8	1	38.132			
T10	0.27	2.31	A	0.132	2.839	25	0.8	1	18.015	2.04	306.23	C
62.30-55.63			B	0.132	2.839		0.8	1	18.015			
			C	0.132	2.839		0.8	1	18.015			
T11	0.53	5.42	A	0.149	2.776	24	0.8	1	43.557	4.30	322.61	C
55.63-42.30			B	0.149	2.776		0.8	1	43.557			
			C	0.149	2.776		0.8	1	43.557			
T12	0.27	2.68	A	0.128	2.853	23	0.8	1	18.736	1.90	284.71	C
42.30-35.63			B	0.128	2.853		0.8	1	18.736			
			C	0.128	2.853		0.8	1	18.736			
T13	0.53	6.80	A	0.145	2.791	22	0.8	1	45.174	3.91	293.58	C
35.63-22.30			B	0.145	2.791		0.8	1	45.174			
			C	0.145	2.791		0.8	1	45.174			
T14	0.27	3.51	A	0.133	2.834	22	0.8	1	20.355	1.88	281.85	C
22.30-15.63			B	0.133	2.834		0.8	1	20.355			
			C	0.133	2.834		0.8	1	20.355			
T15	0.29	7.62	A	0.155	2.753	22	0.8	1	51.120	3.55	266.31	C
15.63-2.30			B	0.155	2.753		0.8	1	51.120			
			C	0.155	2.753		0.8	1	51.120			
Sum Weight:	5.98	60.73						OTM	4696.11 kip-ft	53.02		

Tower Forces - Service - Wind 90 To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
T1	0.04	1.53	A	0.249	2.442	32	0.85	1	18.498	1.38	275.18	C
187.30-182.30			B	0.249	2.442		0.85	1	18.498			
			C	0.249	2.442		0.85	1	18.498			
T2	0.24	2.91	A	0.124	2.868	31	0.85	1	34.687	3.66	183.18	C
182.30-162.30			B	0.124	2.868		0.85	1	34.687			
			C	0.124	2.868		0.85	1	34.687			
T3	0.53	4.13	A	0.136	2.823	31	0.85	1	43.573	5.44	271.99	C
162.30-142.30			B	0.136	2.823		0.85	1	43.573			
			C	0.136	2.823		0.85	1	43.573			
T4	0.70	4.36	A	0.131	2.842	30	0.85	1	46.214	6.19	309.58	C
142.30-122.30			B	0.131	2.842		0.85	1	46.214			
			C	0.131	2.842		0.85	1	46.214			
T5	0.74	5.82	A	0.138	2.815	29	0.85	1	50.266	6.46	322.79	C
122.30-102.30			B	0.138	2.815		0.85	1	50.266			
			C	0.138	2.815		0.85	1	50.266			
T6	0.26	1.91	A	0.13	2.848	28	0.85	1	16.384	2.14	320.63	C
102.30-95.63			B	0.13	2.848		0.85	1	16.384			
			C	0.13	2.848		0.85	1	16.384			
T7	0.53	4.42	A	0.142	2.8	28	0.85	1	38.479	4.56	341.84	C
95.63-82.30			B	0.142	2.8		0.85	1	38.479			

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C_F	q_z psf	D_F	D_R	A_E ft²	F K	w plf	Ctrl. Face
			C	0.142	2.8		0.85	1	38.479			
T8	0.27	2.29	A	0.126	2.863	27	0.85	1	17.137	2.13	318.60	C
82.30-75.63			B	0.126	2.863		0.85	1	17.137			
			C	0.126	2.863		0.85	1	17.137			
T9	0.53	5.01	A	0.138	2.818	26	0.85	1	40.021	4.46	334.49	C
75.63-62.30			B	0.138	2.818		0.85	1	40.021			
			C	0.138	2.818		0.85	1	40.021			
T10	0.27	2.31	A	0.132	2.839	25	0.85	1	18.834	2.09	313.79	C
62.30-55.63			B	0.132	2.839		0.85	1	18.834			
			C	0.132	2.839		0.85	1	18.834			
T11	0.53	5.42	A	0.149	2.776	24	0.85	1	45.655	4.42	331.68	C
55.63-42.30			B	0.149	2.776		0.85	1	45.655			
			C	0.149	2.776		0.85	1	45.655			
T12	0.27	2.68	A	0.128	2.853	23	0.85	1	19.601	1.95	291.99	C
42.30-35.63			B	0.128	2.853		0.85	1	19.601			
			C	0.128	2.853		0.85	1	19.601			
T13	0.53	6.80	A	0.145	2.791	22	0.85	1	47.375	4.03	302.08	C
35.63-22.30			B	0.145	2.791		0.85	1	47.375			
			C	0.145	2.791		0.85	1	47.375			
T14	0.27	3.51	A	0.133	2.834	22	0.85	1	21.263	1.93	289.05	C
22.30-15.63			B	0.133	2.834		0.85	1	21.263			
			C	0.133	2.834		0.85	1	21.263			
T15	0.29	7.62	A	0.155	2.753	22	0.85	1	53.568	3.68	275.85	C
15.63-2.30			B	0.155	2.753		0.85	1	53.568			
			C	0.155	2.753		0.85	1	53.568			
Sum Weight:	5.98	60.73						OTM	4827.08 kip-ft	54.50		

Force Totals

Load Case	Vertical Forces K	Sum of Forces X K	Sum of Forces Z K	Sum of Overturning Moments, M_x kip-ft	Sum of Overturning Moments, M_z kip-ft	Sum of Torques kip-ft
Leg Weight	19.42					
Bracing Weight	41.31					
Total Member Self-Weight	60.73			-14.56	24.07	
Total Weight	82.62			-14.56	24.07	
Wind 0 deg - No Ice		-8.54	-141.98	-15445.32	1187.46	-155.78
Wind 30 deg - No Ice		66.08	-109.63	-11793.79	-7218.71	-149.16
Wind 45 deg - No Ice		93.53	-87.56	-9399.52	-10238.96	-133.28
Wind 60 deg - No Ice		111.37	-63.07	-6873.37	-12119.03	-104.48
Wind 90 deg - No Ice		131.29	-2.04	-359.58	-14222.77	-38.31
Wind 120 deg - No Ice		123.04	70.70	7652.60	-13324.06	16.40
Wind 135 deg - No Ice		96.40	96.62	10491.76	-10416.06	47.91
Wind 150 deg - No Ice		64.02	114.96	12548.98	-6823.28	67.32
Wind 180 deg - No Ice		1.27	128.32	13994.66	-139.67	124.26
Wind 210 deg - No Ice		-61.68	112.07	12162.20	6567.59	153.56
Wind 225 deg - No Ice		-95.57	87.70	9447.69	10532.96	133.24
Wind 240 deg - No Ice		-126.90	63.06	6621.30	13912.70	139.39
Wind 270 deg - No Ice		-134.26	-7.88	-1141.85	14679.52	84.84
Wind 300 deg - No Ice		-116.16	-67.30	-7436.34	12814.78	-19.77
Wind 315 deg - No Ice		-98.83	-91.67	-9949.96	11002.23	-74.91
Wind 330 deg - No Ice		-73.96	-112.76	-12213.03	8331.66	-118.27

Load Case	Vertical Forces K	Sum of Forces X K	Sum of Forces Z K	Sum of Overturning Moments, M_x kip-ft	Sum of Overturning Moments, M_z kip-ft	Sum of Torques kip-ft
Member Ice	97.54					
Total Weight Ice	294.25			-173.81	240.94	
Wind 0 deg - Ice		-1.39	-40.74	-4498.95	430.69	-52.08
Wind 30 deg - Ice		19.65	-33.32	-3681.13	-1849.63	-63.60
Wind 45 deg - Ice		27.84	-26.91	-3001.32	-2722.87	-63.44
Wind 60 deg - Ice		33.63	-19.22	-2209.12	-3324.82	-58.35
Wind 90 deg - Ice		39.21	-0.30	-225.24	-3907.80	-38.50
Wind 120 deg - Ice		35.28	20.36	1985.09	-3498.42	-11.82
Wind 135 deg - Ice		28.24	28.31	2830.24	-2747.13	4.02
Wind 150 deg - Ice		19.37	34.22	3463.89	-1792.56	18.14
Wind 180 deg - Ice		0.23	38.85	3951.25	210.75	47.05
Wind 210 deg - Ice		-18.94	33.72	3398.10	2218.93	64.26
Wind 225 deg - Ice		-28.16	26.94	2667.28	3243.68	63.39
Wind 240 deg - Ice		-35.86	19.09	1813.46	4062.52	63.90
Wind 270 deg - Ice		-39.68	-1.29	-358.21	4454.90	45.92
Wind 300 deg - Ice		-34.43	-19.95	-2306.00	3914.12	11.29
Wind 315 deg - Ice		-28.73	-27.61	-3094.91	3324.62	-8.28
Wind 330 deg - Ice		-20.96	-33.85	-3752.10	2508.49	-26.23
Total Weight	82.62			-14.56	24.07	
Wind 0 deg - Service		-5.15	-86.06	-9369.66	697.04	-93.56
Wind 30 deg - Service		40.07	-66.49	-7158.27	-4404.24	-89.53
Wind 45 deg - Service		56.71	-53.11	-5704.41	-6238.56	-79.98
Wind 60 deg - Service		67.54	-38.25	-4168.32	-7382.05	-62.66
Wind 90 deg - Service		79.61	-1.23	-209.31	-8659.18	-22.93
Wind 120 deg - Service		74.58	42.85	4654.15	-8109.41	9.83
Wind 135 deg - Service		58.45	58.58	6379.17	-6345.47	28.73
Wind 150 deg - Service		38.83	69.71	7629.58	-4165.55	40.33
Wind 180 deg - Service		0.76	77.82	8509.51	-104.03	74.53
Wind 210 deg - Service		-37.41	67.96	7396.12	3971.77	92.19
Wind 225 deg - Service		-57.94	53.19	5748.96	6376.58	79.95
Wind 240 deg - Service		-76.91	38.25	4031.65	8425.28	83.73
Wind 270 deg - Service		-81.40	-4.76	-681.49	8895.43	51.02
Wind 300 deg - Service		-70.43	-40.81	-4508.14	7762.56	-11.87
Wind 315 deg - Service		-59.91	-55.59	-6036.66	6659.83	-45.02
Wind 330 deg - Service		-44.82	-68.38	-7411.32	5036.58	-71.08

Load Combinations

Comb. No.	Description
1	Dead Only
2	1.2 Dead+1.0 Wind 0 deg - No Ice
3	0.9 Dead+1.0 Wind 0 deg - No Ice
4	1.2 Dead+1.0 Wind 30 deg - No Ice
5	0.9 Dead+1.0 Wind 30 deg - No Ice
6	1.2 Dead+1.0 Wind 45 deg - No Ice
7	0.9 Dead+1.0 Wind 45 deg - No Ice
8	1.2 Dead+1.0 Wind 60 deg - No Ice
9	0.9 Dead+1.0 Wind 60 deg - No Ice
10	1.2 Dead+1.0 Wind 90 deg - No Ice
11	0.9 Dead+1.0 Wind 90 deg - No Ice
12	1.2 Dead+1.0 Wind 120 deg - No Ice
13	0.9 Dead+1.0 Wind 120 deg - No Ice
14	1.2 Dead+1.0 Wind 135 deg - No Ice
15	0.9 Dead+1.0 Wind 135 deg - No Ice
16	1.2 Dead+1.0 Wind 150 deg - No Ice

Comb. No.	Description
17	0.9 Dead+1.0 Wind 150 deg - No Ice
18	1.2 Dead+1.0 Wind 180 deg - No Ice
19	0.9 Dead+1.0 Wind 180 deg - No Ice
20	1.2 Dead+1.0 Wind 210 deg - No Ice
21	0.9 Dead+1.0 Wind 210 deg - No Ice
22	1.2 Dead+1.0 Wind 225 deg - No Ice
23	0.9 Dead+1.0 Wind 225 deg - No Ice
24	1.2 Dead+1.0 Wind 240 deg - No Ice
25	0.9 Dead+1.0 Wind 240 deg - No Ice
26	1.2 Dead+1.0 Wind 270 deg - No Ice
27	0.9 Dead+1.0 Wind 270 deg - No Ice
28	1.2 Dead+1.0 Wind 300 deg - No Ice
29	0.9 Dead+1.0 Wind 300 deg - No Ice
30	1.2 Dead+1.0 Wind 315 deg - No Ice
31	0.9 Dead+1.0 Wind 315 deg - No Ice
32	1.2 Dead+1.0 Wind 330 deg - No Ice
33	0.9 Dead+1.0 Wind 330 deg - No Ice
34	1.2 Dead+1.0 Ice+1.0 Temp
35	1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp
36	1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp
37	1.2 Dead+1.0 Wind 45 deg+1.0 Ice+1.0 Temp
38	1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp
39	1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp
40	1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp
41	1.2 Dead+1.0 Wind 135 deg+1.0 Ice+1.0 Temp
42	1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp
43	1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp
44	1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp
45	1.2 Dead+1.0 Wind 225 deg+1.0 Ice+1.0 Temp
46	1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp
47	1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp
48	1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp
49	1.2 Dead+1.0 Wind 315 deg+1.0 Ice+1.0 Temp
50	1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp
51	Dead+Wind 0 deg - Service
52	Dead+Wind 30 deg - Service
53	Dead+Wind 45 deg - Service
54	Dead+Wind 60 deg - Service
55	Dead+Wind 90 deg - Service
56	Dead+Wind 120 deg - Service
57	Dead+Wind 135 deg - Service
58	Dead+Wind 150 deg - Service
59	Dead+Wind 180 deg - Service
60	Dead+Wind 210 deg - Service
61	Dead+Wind 225 deg - Service
62	Dead+Wind 240 deg - Service
63	Dead+Wind 270 deg - Service
64	Dead+Wind 300 deg - Service
65	Dead+Wind 315 deg - Service
66	Dead+Wind 330 deg - Service

Maximum Member Forces

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
T1	187.3 - 182.3	Leg	Max Tension	29	0.51	0.00	0.00
			Max. Compression	46	-5.20	0.19	0.05
			Max. Mx	16	-0.15	2.34	0.70

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. My	12	-1.13	-0.98	2.86
			Max. Vy	28	1.49	-1.86	0.01
			Max. Vx	2	-1.52	-0.69	1.51
		Diagonal	Max Tension	18	2.20	0.00	0.00
			Max. Compression	12	-2.17	0.00	0.00
			Max. Mx	43	-0.73	0.30	-0.03
			Max. My	35	0.67	0.28	0.04
			Max. Vy	44	0.15	0.29	-0.03
			Max. Vx	35	0.01	0.00	0.00
		Top Girt	Max Tension	3	0.17	0.00	0.00
			Max. Compression	48	-0.87	0.00	0.00
			Max. Mx	34	-0.76	-1.60	0.00
			Max. My	46	-0.81	0.00	0.05
			Max. Vy	34	0.35	0.00	0.00
			Max. Vx	46	-0.01	0.00	0.00
T2	182.3 - 162.3	Leg	Max Tension	29	13.55	-1.44	0.06
			Max. Compression	35	-21.69	0.32	0.04
			Max. Mx	18	10.61	-2.63	-0.12
			Max. My	26	-7.37	-0.16	-2.42
			Max. Vy	18	2.59	-2.63	-0.12
			Max. Vx	26	2.56	-0.16	-2.42
		Diagonal	Max Tension	16	7.48	0.00	0.00
			Max. Compression	2	-8.15	0.00	0.00
			Max. Mx	36	1.38	0.44	-0.05
			Max. My	46	0.25	0.40	-0.06
			Max. Vy	50	0.19	0.44	0.06
			Max. Vx	46	-0.01	0.00	0.00
T3	162.3 - 142.3	Leg	Max Tension	29	44.11	-1.49	-0.01
			Max. Compression	2	-59.45	1.53	0.31
			Max. Mx	8	21.74	3.37	0.31
			Max. My	10	-6.71	-0.16	-3.28
			Max. Vy	18	1.83	-1.49	-0.13
			Max. Vx	16	1.90	-0.04	-1.76
		Diagonal	Max Tension	4	14.59	0.00	0.00
			Max. Compression	14	-14.58	0.00	0.00
			Max. Mx	48	3.10	0.64	0.08
			Max. My	46	0.49	0.62	-0.09
			Max. Vy	48	0.26	0.64	0.08
			Max. Vx	46	-0.01	0.00	0.00
T4	142.3 - 122.3	Leg	Max Tension	29	88.05	-2.95	0.32
			Max. Compression	2	-111.67	0.82	-0.84
			Max. Mx	29	88.05	-2.95	0.32
			Max. My	32	-20.30	0.38	2.67
			Max. Vy	8	-1.85	-1.72	-0.05
			Max. Vx	32	1.89	0.05	1.81
		Diagonal	Max Tension	26	19.84	0.00	0.00
			Max. Compression	10	-19.63	0.00	0.00
			Max. Mx	49	3.62	0.75	-0.09
			Max. My	50	-2.18	0.70	0.10
			Max. Vy	49	0.28	0.75	-0.09
			Max. Vx	50	0.01	0.00	0.00
T5	122.3 - 102.3	Leg	Max Tension	29	140.97	-1.16	0.02
			Max. Compression	2	-171.11	-0.58	0.14
			Max. Mx	2	-170.41	2.00	0.29
			Max. My	32	-27.63	-0.50	4.14
			Max. Vy	12	0.66	1.99	0.04
			Max. Vx	32	-0.89	-0.50	4.14
		Diagonal	Max Tension	20	22.53	0.00	0.00
			Max. Compression	20	-22.20	0.00	0.00
			Max. Mx	35	3.29	0.91	0.11
			Max. My	37	-4.95	0.82	0.13

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Vy	50	0.32	0.90	-0.11
			Max. Vx	38	0.02	0.00	0.00
T6	102.3 - 95.63	Leg	Max Tension	29	171.43	-0.32	-0.03
			Max. Compression	2	-204.48	1.49	-0.04
			Max. Mx	35	-104.91	-1.62	-0.02
			Max. My	32	-30.93	-0.50	4.14
			Max. Vy	2	-0.48	1.49	-0.04
			Max. Vx	16	-0.76	-0.50	-4.11
		Diagonal	Max Tension	26	25.38	0.00	0.00
			Max. Compression	2	-26.07	0.00	0.00
			Max. Mx	50	6.99	-1.15	0.00
			Max. My	46	2.13	0.00	0.04
			Max. Vy	50	-0.31	0.00	0.00
			Max. Vx	46	-0.01	0.00	0.00
T7	95.63 - 82.3	Leg	Max Tension	29	169.55	-1.26	-0.01
			Max. Compression	2	-204.19	-5.61	-0.11
			Max. Mx	2	-204.19	-5.61	-0.11
			Max. My	26	-32.69	-1.21	-3.20
			Max. Vy	2	1.86	5.27	0.02
			Max. Vx	24	0.97	1.20	-3.16
		Diagonal	Max Tension	21	31.47	0.42	0.01
			Max. Compression	2	-32.99	0.00	0.00
			Max. Mx	30	27.53	0.60	-0.02
			Max. My	44	-11.22	0.08	-0.13
			Max. Vy	48	0.19	0.33	-0.07
			Max. Vx	44	-0.02	0.00	0.00
		Horizontal	Max Tension	25	1.02	0.20	-0.01
			Max. Compression	6	-1.17	0.23	-0.01
			Max. Mx	48	0.04	0.74	-0.02
			Max. My	40	-0.24	0.72	-0.02
			Max. Vy	48	-0.26	0.74	-0.02
			Max. Vx	35	0.01	0.72	-0.02
		Redund Horz 1 Bracing	Max Tension	24	1.65	0.00	0.00
			Max. Compression	11	-1.45	0.00	0.00
			Max. Mx	46	0.22	-0.13	0.00
			Max. My	47	0.68	0.00	0.00
			Max. Vy	46	-0.08	0.00	0.00
			Max. Vx	47	-0.00	0.00	0.00
		Redund Diag 1 Bracing	Max Tension	10	1.28	0.00	0.00
			Max. Compression	25	-1.03	0.00	0.00
			Max. Mx	50	0.04	-0.17	0.00
			Max. My	46	0.42	0.00	0.01
			Max. Vy	50	0.07	0.00	0.00
			Max. Vx	46	-0.00	0.00	0.00
		Inner Bracing	Max Tension	1	0.00	0.00	0.00
			Max. Compression	48	-0.05	0.00	0.00
			Max. Mx	34	-0.04	-0.53	0.00
			Max. My	35	-0.04	0.00	-0.00
			Max. Vy	34	-0.15	0.00	0.00
			Max. Vx	35	0.00	0.00	0.00
T8	82.3 - 75.63	Leg	Max Tension	29	228.66	3.95	-0.06
			Max. Compression	2	-269.67	3.48	0.17
			Max. Mx	2	-269.28	-5.61	-0.11
			Max. My	26	-40.21	-1.21	-3.20
			Max. Vy	2	-1.49	3.48	0.17
			Max. Vx	2	0.48	1.23	3.17
		Diagonal	Max Tension	20	27.54	0.00	0.00
			Max. Compression	21	-26.87	0.00	0.00
			Max. Mx	50	8.43	-1.30	0.00

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. My	46	2.35	0.00	0.04
			Max. Vy	50	0.32	0.00	0.00
			Max. Vx	46	-0.01	0.00	0.00
T9	75.63 - 62.3	Leg	Max Tension	29	227.06	-2.97	0.03
			Max. Compression	2	-269.65	-6.83	-0.16
			Max. Mx	2	-269.65	-6.83	-0.16
			Max. My	32	-40.73	-1.55	5.86
			Max. Vy	12	1.95	4.73	0.04
			Max. Vx	32	-1.50	-1.55	5.86
		Diagonal	Max Tension	21	33.74	0.00	0.00
			Max. Compression	20	-34.62	0.00	0.00
			Max. Mx	20	15.82	0.41	-0.03
			Max. My	44	-11.73	0.26	-0.11
			Max. Vy	49	0.21	0.39	-0.09
			Max. Vx	37	0.02	0.00	0.00
		Horizontal	Max Tension	3	1.43	0.21	-0.01
			Max. Compression	18	-1.52	0.26	-0.01
			Max. Mx	48	0.22	0.82	-0.02
			Max. My	40	-0.25	0.82	-0.02
			Max. Vy	48	-0.27	0.82	-0.02
			Max. Vx	35	0.01	0.81	-0.02
		Redund Horz 1 Bracing	Max Tension	28	1.97	0.00	0.00
			Max. Compression	3	-1.86	0.00	0.00
			Max. Mx	34	0.47	-0.15	0.00
			Max. My	46	0.72	0.00	0.00
			Max. Vy	34	0.08	0.00	0.00
			Max. Vx	46	0.00	0.00	0.00
		Redund Diag 1 Bracing	Max Tension	2	1.46	0.00	0.00
			Max. Compression	29	-1.17	0.00	0.00
			Max. Mx	50	0.31	-0.19	0.00
			Max. My	46	0.69	0.00	0.01
			Max. Vy	50	0.08	0.00	0.00
			Max. Vx	46	0.00	0.00	0.00
		Inner Bracing	Max Tension	1	0.00	0.00	0.00
			Max. Compression	48	-0.05	0.00	0.00
			Max. Mx	34	-0.04	-0.60	0.00
			Max. My	35	-0.04	0.00	-0.00
			Max. Vy	34	0.16	0.00	0.00
			Max. Vx	35	0.00	0.00	0.00
T10	62.3 - 55.63	Leg	Max Tension	29	284.49	4.52	0.03
			Max. Compression	2	-333.38	5.20	0.13
			Max. Mx	2	-333.01	-6.83	-0.16
			Max. My	32	-46.72	-1.55	5.86
			Max. Vy	2	-1.94	5.20	0.13
			Max. Vx	32	0.69	-1.55	5.86
		Diagonal	Max Tension	20	29.57	0.00	0.00
			Max. Compression	21	-29.21	0.00	0.00
			Max. Mx	50	8.87	-1.44	0.00
			Max. My	46	2.62	0.00	0.05
			Max. Vy	50	0.34	0.00	0.00
			Max. Vx	46	-0.01	0.00	0.00
T11	55.63 - 42.3	Leg	Max Tension	29	282.25	-4.46	0.03
			Max. Compression	2	-332.69	-10.62	-0.09
			Max. Mx	2	-332.69	-10.62	-0.09
			Max. My	32	-47.99	-2.09	5.43
			Max. Vy	2	3.08	9.05	-0.30
			Max. Vx	32	-1.57	-2.09	5.43
		Diagonal	Max Tension	21	36.21	0.34	0.02
			Max. Compression	20	-37.69	0.00	0.00

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Mx	30	29.99	0.51	-0.03
			Max. My	35	-12.01	0.23	0.13
			Max. Vy	49	0.22	0.45	-0.09
			Max. Vx	35	0.02	0.00	0.00
		Horizontal	Max Tension	3	1.85	0.33	-0.01
			Max. Compression	19	-1.99	0.27	-0.01
			Max. Mx	48	0.44	1.10	-0.03
			Max. My	48	0.41	1.10	-0.03
			Max. Vy	48	-0.34	1.10	-0.03
			Max. Vx	35	0.01	1.07	-0.03
		Redund Horz 1 Bracing	Max Tension	28	2.74	0.00	0.00
			Max. Compression	3	-2.56	0.00	0.00
			Max. Mx	39	1.76	-0.18	0.00
			Max. My	47	1.33	0.00	0.01
			Max. Vy	39	0.09	0.00	0.00
			Max. Vx	47	-0.00	0.00	0.00
		Redund Diag 1 Bracing	Max Tension	2	1.89	0.00	0.00
			Max. Compression	29	-1.60	0.00	0.00
			Max. Mx	50	-0.20	-0.22	0.00
			Max. My	46	0.39	0.00	0.01
			Max. Vy	50	0.09	0.00	0.00
			Max. Vx	46	-0.00	0.00	0.00
		Inner Bracing	Max Tension	1	0.00	0.00	0.00
			Max. Compression	36	-0.05	0.00	0.00
			Max. Mx	34	-0.05	-0.75	0.00
			Max. My	35	-0.05	0.00	-0.00
			Max. Vy	34	0.19	0.00	0.00
			Max. Vx	35	-0.00	0.00	0.00
T12	42.3 - 35.63	Leg	Max Tension	29	341.60	7.59	0.04
			Max. Compression	2	-399.69	8.02	0.32
			Max. Mx	2	-399.21	-10.62	-0.09
			Max. My	32	-54.22	-2.09	5.43
			Max. Vy	2	-2.92	8.02	0.32
			Max. Vx	2	0.46	2.49	5.32
		Diagonal	Max Tension	20	31.29	0.00	0.00
			Max. Compression	21	-30.65	0.00	0.00
			Max. Mx	50	8.88	-1.58	0.00
			Max. My	46	2.03	0.00	0.05
			Max. Vy	50	0.35	0.00	0.00
			Max. Vx	46	0.01	0.00	0.00
T13	35.63 - 22.3	Leg	Max Tension	29	339.18	-6.85	0.05
			Max. Compression	2	-399.18	-14.41	-0.39
			Max. Mx	2	-399.18	-14.41	-0.39
			Max. My	32	-55.87	-3.09	9.80
			Max. Vy	2	3.75	9.84	-0.35
			Max. Vx	32	-2.18	-3.09	9.80
		Diagonal	Max Tension	21	38.12	0.00	0.00
			Max. Compression	20	-39.59	0.00	0.00
			Max. Mx	28	32.23	0.60	0.04
			Max. My	46	-13.79	0.32	-0.14
			Max. Vy	49	0.26	0.54	-0.11
			Max. Vx	46	-0.02	0.00	0.00
		Horizontal	Max Tension	3	2.60	0.35	-0.01
			Max. Compression	30	-2.70	0.42	-0.01
			Max. Mx	48	0.64	1.26	-0.04
			Max. My	48	0.62	1.26	-0.04
			Max. Vy	48	-0.36	1.26	-0.04
			Max. Vx	46	0.01	1.24	-0.04
		Redund Horz 1	Max Tension	28	3.59	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
		Bracing					
			Max. Compression	3	-3.30	0.00	0.00
			Max. Mx	44	-0.80	-0.19	0.00
			Max. My	38	-0.39	0.00	0.01
			Max. Vy	44	0.09	0.00	0.00
			Max. Vx	38	-0.00	0.00	0.00
		Redund Diag 1 Bracing	Max Tension	2	2.38	0.00	0.00
			Max. Compression	29	-2.01	0.00	0.00
			Max. Mx	50	0.68	-0.23	0.00
			Max. My	46	1.35	0.00	0.01
			Max. Vy	50	0.09	0.00	0.00
			Max. Vx	46	0.00	0.00	0.00
		Inner Bracing	Max Tension	1	0.00	0.00	0.00
			Max. Compression	46	-0.05	0.00	0.00
			Max. Mx	34	-0.05	-0.82	0.00
			Max. My	35	-0.05	0.00	-0.00
			Max. Vy	34	0.19	0.00	0.00
			Max. Vx	35	-0.00	0.00	0.00
T14	22.3 - 15.63	Leg	Max Tension	29	397.17	9.79	0.03
			Max. Compression	2	-465.89	10.05	0.21
			Max. Mx	2	-465.32	-14.41	-0.39
			Max. My	32	-61.85	-3.09	9.80
			Max. Vy	2	-3.80	10.05	0.21
			Max. Vx	32	0.94	-3.09	9.80
		Diagonal	Max Tension	20	32.92	0.00	0.00
			Max. Compression	21	-32.44	0.00	0.00
			Max. Mx	35	9.02	-1.92	0.00
			Max. My	45	1.44	0.00	0.06
			Max. Vy	35	0.41	0.00	0.00
			Max. Vx	45	-0.01	0.00	0.00
T15	15.63 - 2.3	Leg	Max Tension	29	395.27	-8.34	0.05
			Max. Compression	2	-466.71	-0.00	0.00
			Max. Mx	2	-466.17	10.97	-0.59
			Max. My	32	-63.50	2.10	-5.22
			Max. Vy	2	1.79	10.97	-0.59
			Max. Vx	32	1.65	1.19	4.72
		Diagonal	Max Tension	21	39.63	0.00	0.00
			Max. Compression	20	-41.13	0.00	0.00
			Max. Mx	6	24.95	0.58	0.04
			Max. My	44	-13.79	0.40	-0.15
			Max. Vy	49	0.26	0.55	-0.11
			Max. Vx	44	-0.02	0.00	0.00
		Horizontal	Max Tension	3	2.52	0.41	-0.01
			Max. Compression	28	-2.67	0.47	-0.01
			Max. Mx	48	-0.31	1.16	-0.03
			Max. My	39	-1.29	1.13	-0.03
			Max. Vy	48	-0.34	1.16	-0.03
			Max. Vx	39	0.01	1.13	-0.03
		Redund Horz 1 Bracing	Max Tension	30	2.21	0.00	0.00
			Max. Compression	3	-2.24	0.00	0.00
			Max. Mx	44	0.37	-0.24	0.00
			Max. My	36	0.39	0.00	0.01
			Max. Vy	44	0.11	0.00	0.00
			Max. Vx	36	-0.00	0.00	0.00
		Redund Diag 1 Bracing	Max Tension	2	1.77	0.00	0.00
			Max. Compression	31	-1.13	0.00	0.00
			Max. Mx	35	0.33	-0.28	0.00
			Max. My	46	0.85	0.00	0.01

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	35	0.10	0.00	0.00
			Max. Vx	46	-0.00	0.00	0.00
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	47	-0.05	0.00	0.00
			Max. Mx	34	-0.05	-0.83	0.00
			Max. My	48	-0.05	0.00	0.00
			Max. Vy	34	0.19	0.00	0.00
			Max. Vx	48	-0.00	0.00	0.00

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Leg C	Max. Vert	24	508.59	69.67	-41.76
	Max. H_x	24	508.59	69.67	-41.76
	Max. H_z	7	-395.03	-54.94	38.12
	Min. Vert	9	-406.35	-58.50	35.54
	Min. H_x	9	-406.35	-58.50	35.54
	Min. H_z	24	508.59	69.67	-41.76
Leg B	Max. Vert	12	508.51	-70.68	-40.48
	Max. H_x	29	-433.84	62.54	35.77
	Max. H_z	31	-424.16	59.85	37.27
	Min. Vert	29	-433.84	62.54	35.77
	Min. H_x	12	508.51	-70.68	-40.48
	Min. H_z	14	474.48	-64.10	-40.78
Leg A	Max. Vert	2	511.28	-1.62	81.54
	Max. H_x	25	-179.81	16.65	-32.32
	Max. H_z	2	511.28	-1.62	81.54
	Min. Vert	19	-408.31	1.82	-68.63
	Min. H_x	10	44.39	-15.60	4.43
	Min. H_z	19	-408.31	1.82	-68.63

Tower Mast Reaction Summary

Load Combination	Vertical K	$Shear_x$ K	$Shear_z$ K	Overturning Moment, M_x kip-ft	Overturning Moment, M_z kip-ft	Torque kip-ft
Dead Only	82.62	0.00	0.00	-14.56	24.08	-0.00
1.2 Dead+1.0 Wind 0 deg - No Ice	99.15	-8.54	-141.98	-15323.86	1194.56	-155.84
0.9 Dead+1.0 Wind 0 deg - No Ice	74.36	-8.54	-141.98	-15313.15	1186.81	-155.82
1.2 Dead+1.0 Wind 30 deg - No Ice	99.15	66.08	-109.63	-11695.49	-7156.00	-149.29
0.9 Dead+1.0 Wind 30 deg - No Ice	74.36	66.08	-109.63	-11686.29	-7160.26	-149.25
1.2 Dead+1.0 Wind 45 deg - No Ice	99.15	93.53	-87.56	-9320.65	-10153.65	-133.38
0.9 Dead+1.0 Wind 45 deg - No Ice	74.36	93.53	-87.56	-9312.44	-10156.67	-133.36
1.2 Dead+1.0 Wind 60 deg - No Ice	99.15	111.37	-63.07	-6819.78	-12016.44	-104.57

Load Combination	Vertical	$Shear_x$	$Shear_z$	Overturning Moment, M_x	Overturning Moment, M_z	Torque
	K	K	K	kip-ft	kip-ft	kip-ft
0.9 Dead+1.0 Wind 60 deg - No Ice	74.36	111.37	-63.07	-6812.58	-12018.70	-104.55
1.2 Dead+1.0 Wind 90 deg - No Ice	99.15	131.29	-2.04	-363.25	-14101.97	-38.35
0.9 Dead+1.0 Wind 90 deg - No Ice	74.36	131.29	-2.04	-358.69	-14103.38	-38.34
1.2 Dead+1.0 Wind 120 deg - No Ice	99.15	123.04	70.70	7587.41	-13211.40	16.37
0.9 Dead+1.0 Wind 120 deg - No Ice	74.36	123.04	70.70	7588.65	-13213.18	16.37
1.2 Dead+1.0 Wind 135 deg - No Ice	99.15	96.40	96.62	10403.95	-10326.07	47.92
0.9 Dead+1.0 Wind 135 deg - No Ice	74.36	96.40	96.62	10404.02	-10329.04	47.91
1.2 Dead+1.0 Wind 150 deg - No Ice	99.15	64.03	114.96	12446.12	-6759.83	67.36
0.9 Dead+1.0 Wind 150 deg - No Ice	74.36	64.03	114.96	12445.36	-6764.33	67.33
1.2 Dead+1.0 Wind 180 deg - No Ice	99.15	1.27	128.32	13878.97	-134.94	124.34
0.9 Dead+1.0 Wind 180 deg - No Ice	74.36	1.27	128.32	13877.59	-142.11	124.32
1.2 Dead+1.0 Wind 210 deg - No Ice	99.15	-61.68	112.07	12058.60	6513.61	153.69
0.9 Dead+1.0 Wind 210 deg - No Ice	74.36	-61.68	112.07	12057.98	6503.72	153.66
1.2 Dead+1.0 Wind 225 deg - No Ice	99.15	-95.57	87.70	9362.90	10457.96	133.34
0.9 Dead+1.0 Wind 225 deg - No Ice	74.36	-95.57	87.70	9363.40	10446.40	133.31
1.2 Dead+1.0 Wind 240 deg - No Ice	99.15	-126.90	63.06	6554.13	13810.82	139.48
0.9 Dead+1.0 Wind 240 deg - No Ice	74.36	-126.90	63.06	6555.81	13797.88	139.45
1.2 Dead+1.0 Wind 270 deg - No Ice	99.15	-134.26	-7.88	-1146.93	14569.12	84.88
0.9 Dead+1.0 Wind 270 deg - No Ice	74.36	-134.26	-7.88	-1142.03	14555.91	84.84
1.2 Dead+1.0 Wind 300 deg - No Ice	99.15	-116.16	-67.30	-7383.58	12723.09	-19.77
0.9 Dead+1.0 Wind 300 deg - No Ice	74.36	-116.16	-67.30	-7376.14	12710.59	-19.77
1.2 Dead+1.0 Wind 315 deg - No Ice	99.15	-98.83	-91.67	-9871.81	10928.04	-74.92
0.9 Dead+1.0 Wind 315 deg - No Ice	74.36	-98.83	-91.67	-9863.37	10916.26	-74.91
1.2 Dead+1.0 Wind 330 deg - No Ice	99.15	-73.96	-112.76	-12115.18	8280.82	-118.27
0.9 Dead+1.0 Wind 330 deg - No Ice	74.36	-73.96	-112.76	-12105.81	8270.13	-118.26
1.2 Dead+1.0 Ice+1.0 Temp	310.77	-0.00	0.00	-177.67	246.88	-0.01
1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp	310.77	-1.39	-40.74	-4474.65	437.73	-52.24
1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp	310.77	19.65	-33.32	-3660.60	-1829.91	-63.82
1.2 Dead+1.0 Wind 45 deg+1.0 Ice+1.0 Temp	310.77	27.84	-26.91	-2985.27	-2697.68	-63.66
1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp	310.77	33.63	-19.22	-2199.27	-3295.15	-58.55
1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp	310.77	39.21	-0.30	-229.50	-3874.09	-38.64

Load Combination	Vertical K	Shear$_x$ K	Shear$_z$ K	Overturning Moment, M_x kip-ft	Overturning Moment, M_z kip-ft	Torque kip-ft
1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp	310.77	35.28	20.36	1967.01	-3467.83	-11.86
1.2 Dead+1.0 Wind 135 deg+1.0 Ice+1.0 Temp	310.77	28.24	28.31	2806.65	-2721.28	4.04
1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp	310.77	19.37	34.22	3436.31	-1772.41	18.22
1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp	310.77	0.23	38.85	3920.13	216.63	47.22
1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp	310.77	-18.94	33.72	3370.18	2210.57	64.49
1.2 Dead+1.0 Wind 225 deg+1.0 Ice+1.0 Temp	310.77	-28.16	26.94	2643.54	3230.72	63.62
1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp	310.77	-35.86	19.09	1794.51	4044.52	64.11
1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp	310.77	-39.68	-1.29	-363.15	4433.59	46.05
1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp	310.77	-34.43	-19.95	-2296.64	3897.06	11.33
1.2 Dead+1.0 Wind 315 deg+1.0 Ice+1.0 Temp	310.77	-28.73	-27.61	-3079.31	3312.09	-8.29
1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp	310.77	-20.96	-33.85	-3731.92	2501.75	-26.29
Dead+Wind 0 deg - Service	82.62	-5.15	-86.06	-9305.59	727.52	-93.61
Dead+Wind 30 deg - Service	82.62	40.07	-66.49	-7108.82	-4338.90	-89.60
Dead+Wind 45 deg - Service	82.62	56.71	-53.11	-5667.07	-6159.11	-80.03
Dead+Wind 60 deg - Service	82.62	67.54	-38.25	-4146.63	-7291.86	-62.71
Dead+Wind 90 deg - Service	82.62	79.61	-1.23	-223.20	-8557.67	-22.95
Dead+Wind 120 deg - Service	82.62	74.58	42.85	4601.79	-8012.85	9.82
Dead+Wind 135 deg - Service	82.62	58.45	58.58	6312.58	-6263.14	28.72
Dead+Wind 150 deg - Service	82.62	38.83	69.71	7553.76	-4099.86	40.34
Dead+Wind 180 deg - Service	82.62	0.76	77.82	8425.71	-74.82	74.58
Dead+Wind 210 deg - Service	82.62	-37.41	67.96	7319.93	3964.50	92.27
Dead+Wind 225 deg - Service	82.62	-57.94	53.19	5684.59	6356.00	80.00
Dead+Wind 240 deg - Service	82.62	-76.91	38.25	3978.25	8387.88	83.78
Dead+Wind 270 deg - Service	82.62	-81.40	-4.76	-696.07	8852.87	51.01
Dead+Wind 300 deg - Service	82.62	-70.43	-40.81	-4486.88	7731.56	-11.87
Dead+Wind 315 deg - Service	82.62	-59.91	-55.59	-5999.71	6639.65	-44.98
Dead+Wind 330 deg - Service	82.62	-44.82	-68.38	-7362.14	5030.89	-71.08

Solution Summary

Load Comb.	Sum of Applied Forces PX K	PY K	PZ K	Sum of Reactions PX K	PY K	PZ K	% Error
1	0.00	-82.62	0.00	0.00	82.62	0.00	0.000%
2	-8.54	-99.15	-141.98	8.54	99.15	141.98	0.000%
3	-8.54	-74.36	-141.98	8.54	74.36	141.98	0.000%
4	66.08	-99.15	-109.63	-66.08	99.15	109.63	0.000%
5	66.08	-74.36	-109.63	-66.08	74.36	109.63	0.000%
6	93.53	-99.15	-87.56	-93.53	99.15	87.56	0.000%
7	93.53	-74.36	-87.56	-93.53	74.36	87.56	0.000%
8	111.37	-99.15	-63.07	-111.37	99.15	63.07	0.000%
9	111.37	-74.36	-63.07	-111.37	74.36	63.07	0.000%
10	131.29	-99.15	-2.04	-131.29	99.15	2.04	0.000%
11	131.29	-74.36	-2.04	-131.29	74.36	2.04	0.000%
12	123.04	-99.15	70.70	-123.04	99.15	-70.70	0.000%
13	123.04	-74.36	70.70	-123.04	74.36	-70.70	0.000%
14	96.40	-99.15	96.62	-96.40	99.15	-96.62	0.000%

Load Comb.	Sum of Applied Forces PX K	PY K	PZ K	Sum of Reactions PX K	PY K	PZ K	% Error
15	96.40	-74.36	96.62	-96.40	74.36	-96.62	0.000%
16	64.02	-99.15	114.96	-64.03	99.15	-114.96	0.000%
17	64.02	-74.36	114.96	-64.03	74.36	-114.96	0.000%
18	1.27	-99.15	128.32	-1.27	99.15	-128.32	0.000%
19	1.27	-74.36	128.32	-1.27	74.36	-128.32	0.000%
20	-61.68	-99.15	112.07	61.68	99.15	-112.07	0.000%
21	-61.68	-74.36	112.07	61.68	74.36	-112.07	0.000%
22	-95.57	-99.15	87.70	95.57	99.15	-87.70	0.000%
23	-95.57	-74.36	87.70	95.57	74.36	-87.70	0.000%
24	-126.90	-99.15	63.06	126.90	99.15	-63.06	0.000%
25	-126.90	-74.36	63.06	126.90	74.36	-63.06	0.000%
26	-134.26	-99.15	-7.88	134.26	99.15	7.88	0.000%
27	-134.26	-74.36	-7.88	134.26	74.36	7.88	0.000%
28	-116.16	-99.15	-67.30	116.16	99.15	67.30	0.000%
29	-116.16	-74.36	-67.30	116.16	74.36	67.30	0.000%
30	-98.83	-99.15	-91.67	98.83	99.15	91.67	0.000%
31	-98.83	-74.36	-91.67	98.83	74.36	91.67	0.000%
32	-73.96	-99.15	-112.76	73.96	99.15	112.76	0.000%
33	-73.96	-74.36	-112.76	73.96	74.36	112.76	0.000%
34	0.00	-310.77	0.00	0.00	310.77	0.00	0.000%
35	-1.39	-310.77	-40.74	1.39	310.77	40.74	0.000%
36	19.65	-310.77	-33.32	-19.65	310.77	33.32	0.000%
37	27.84	-310.77	-26.91	-27.84	310.77	26.91	0.000%
38	33.63	-310.77	-19.22	-33.63	310.77	19.22	0.000%
39	39.21	-310.77	-0.30	-39.21	310.77	0.30	0.000%
40	35.28	-310.77	20.36	-35.28	310.77	-20.36	0.000%
41	28.24	-310.77	28.31	-28.24	310.77	-28.31	0.000%
42	19.37	-310.77	34.22	-19.37	310.77	-34.22	0.000%
43	0.23	-310.77	38.85	-0.23	310.77	-38.85	0.000%
44	-18.94	-310.77	33.72	18.94	310.77	-33.72	0.000%
45	-28.16	-310.77	26.94	28.16	310.77	-26.94	0.000%
46	-35.86	-310.77	19.09	35.86	310.77	-19.09	0.000%
47	-39.68	-310.77	-1.29	39.68	310.77	1.29	0.000%
48	-34.43	-310.77	-19.95	34.43	310.77	19.95	0.000%
49	-28.73	-310.77	-27.61	28.73	310.77	27.61	0.000%
50	-20.96	-310.77	-33.85	20.96	310.77	33.85	0.000%
51	-5.15	-82.62	-86.06	5.15	82.62	86.06	0.000%
52	40.07	-82.62	-66.49	-40.07	82.62	66.49	0.000%
53	56.71	-82.62	-53.11	-56.71	82.62	53.11	0.000%
54	67.54	-82.62	-38.25	-67.54	82.62	38.25	0.000%
55	79.61	-82.62	-1.23	-79.61	82.62	1.23	0.000%
56	74.58	-82.62	42.85	-74.58	82.62	-42.85	0.000%
57	58.45	-82.62	58.58	-58.45	82.62	-58.58	0.000%
58	38.83	-82.62	69.71	-38.83	82.62	-69.71	0.000%
59	0.76	-82.62	77.82	-0.76	82.62	-77.82	0.000%
60	-37.41	-82.62	67.96	37.41	82.62	-67.96	0.000%
61	-57.94	-82.62	53.19	57.94	82.62	-53.19	0.000%
62	-76.91	-82.62	38.25	76.91	82.62	-38.25	0.000%
63	-81.40	-82.62	-4.76	81.40	82.62	4.76	0.001%
64	-70.43	-82.62	-40.81	70.43	82.62	40.81	0.000%
65	-59.91	-82.62	-55.59	59.91	82.62	55.59	0.002%
66	-44.82	-82.62	-68.38	44.82	82.62	68.38	0.000%

Non-Linear Convergence Results

Load Combination	Converged?	Number of Cycles	Displacement Tolerance	Force Tolerance
1	Yes	4	0.00000001	0.00000001
2	Yes	4	0.00000001	0.00000342
3	Yes	4	0.00000001	0.00000260
4	Yes	4	0.00000001	0.00000322
5	Yes	4	0.00000001	0.00000242
6	Yes	4	0.00000001	0.00000287
7	Yes	4	0.00000001	0.00000214
8	Yes	4	0.00000001	0.00000256
9	Yes	4	0.00000001	0.00000192
10	Yes	4	0.00000001	0.00000307
11	Yes	4	0.00000001	0.00000231
12	Yes	4	0.00000001	0.00000342
13	Yes	4	0.00000001	0.00000260
14	Yes	4	0.00000001	0.00000319
15	Yes	4	0.00000001	0.00000241
16	Yes	4	0.00000001	0.00000298
17	Yes	4	0.00000001	0.00000222
18	Yes	4	0.00000001	0.00000258
19	Yes	4	0.00000001	0.00000192
20	Yes	4	0.00000001	0.00000326
21	Yes	4	0.00000001	0.00000245
22	Yes	4	0.00000001	0.00000314
23	Yes	4	0.00000001	0.00000238
24	Yes	4	0.00000001	0.00000337
25	Yes	4	0.00000001	0.00000257
26	Yes	4	0.00000001	0.00000295
27	Yes	4	0.00000001	0.00000220
28	Yes	4	0.00000001	0.00000294
29	Yes	4	0.00000001	0.00000219
30	Yes	4	0.00000001	0.00000291
31	Yes	4	0.00000001	0.00000217
32	Yes	4	0.00000001	0.00000284
33	Yes	4	0.00000001	0.00000213
34	Yes	4	0.00000001	0.00000001
35	Yes	4	0.00000001	0.00000001
36	Yes	4	0.00000001	0.00000001
37	Yes	4	0.00000001	0.00000001
38	Yes	4	0.00000001	0.00000001
39	Yes	4	0.00000001	0.00000001
40	Yes	4	0.00000001	0.00000001
41	Yes	4	0.00000001	0.00000001
42	Yes	4	0.00000001	0.00000001
43	Yes	4	0.00000001	0.00000001
44	Yes	4	0.00000001	0.00000001
45	Yes	4	0.00000001	0.00000001
46	Yes	4	0.00000001	0.00000001
47	Yes	4	0.00000001	0.00000001
48	Yes	4	0.00000001	0.00000001
49	Yes	4	0.00000001	0.00000001
50	Yes	4	0.00000001	0.00000001
51	Yes	4	0.00000001	0.00000103
52	Yes	4	0.00000001	0.00000098
53	Yes	4	0.00000001	0.00000088
54	Yes	4	0.00000001	0.00000001
55	Yes	4	0.00000001	0.00000094
56	Yes	4	0.00000001	0.00000104
57	Yes	4	0.00000001	0.00000098
58	Yes	4	0.00000001	0.00000091
59	Yes	4	0.00000001	0.00000001
60	Yes	4	0.00000001	0.00000100
61	Yes	4	0.00000001	0.00000095
62	Yes	4	0.00000001	0.00000102

63	Yes	4	0.00000001	0.00000174
64	Yes	4	0.00000001	0.00000091
65	Yes	4	0.00000001	0.00000291
66	Yes	4	0.00000001	0.00000087

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	187.3 - 182.3	5.469	51	0.2124	0.0227
T2	182.3 - 162.3	5.242	51	0.2125	0.0223
T3	162.3 - 142.3	4.314	51	0.2093	0.0214
T4	142.3 - 122.3	3.399	51	0.1963	0.0200
T5	122.3 - 102.3	2.534	51	0.1708	0.0173
T6	102.3 - 95.63	1.770	51	0.1452	0.0140
T7	95.63 - 82.3	1.551	51	0.1343	0.0134
T8	82.3 - 75.63	1.181	51	0.1125	0.0116
T9	75.63 - 62.3	1.002	51	0.1037	0.0108
T10	62.3 - 55.63	0.696	51	0.0861	0.0087
T11	55.63 - 42.3	0.553	51	0.0751	0.0077
T12	42.3 - 35.63	0.337	51	0.0530	0.0055
T13	35.63 - 22.3	0.236	51	0.0439	0.0045
T14	22.3 - 15.63	0.106	51	0.0254	0.0027
T15	15.63 - 2.3	0.053	56	0.0170	0.0018

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
187.30	6'x4" Pipe Mount	51	5.469	0.2124	0.0227	105744
185.30	8' Dish	51	5.378	0.2125	0.0225	105744
184.30	20' Horz. 4x4x1/4"	51	5.333	0.2125	0.0225	105744
183.30	DB411-B	51	5.287	0.2125	0.0224	105744
179.30	4' Dish	51	5.104	0.2124	0.0221	105129
174.30	8' Dish	51	4.873	0.2120	0.0219	180771
173.30	13'x2" Pipe	51	4.827	0.2119	0.0219	210970
170.30	6'x2" Pipe Mount	51	4.687	0.2114	0.0217	366998
167.30	8' x 2" Horz. Pipe	51	4.547	0.2108	0.0216	Inf
163.30	80010966	51	4.361	0.2096	0.0214	278331
155.00	LNX-6514DS	51	3.976	0.2061	0.0210	158253
140.00	AIR6449	51	3.296	0.1938	0.0198	94311
137.30	6' Dish	51	3.176	0.1906	0.0195	81952
127.30	8' Dish	51	2.743	0.1774	0.0181	54605
111.30	6'x3" Pipe Mount	51	2.098	0.1573	0.0153	36204
110.30	6'x3" Pipe Mount	51	2.060	0.1560	0.0151	35474
105.30	Light Beacon	51	1.876	0.1495	0.0143	31985
102.30	8' Dish	51	1.770	0.1452	0.0140	27486
100.30	SC3-W100AB	51	1.702	0.1421	0.0138	23038
93.30	SC3-W100AB	51	1.481	0.1304	0.0131	20204
89.30	6'x3" Pipe Mount	51	1.369	0.1235	0.0126	39122
87.30	6'x3" Pipe Mount	51	1.315	0.1202	0.0123	77652
68.30	6'x3" Pipe Mount	51	0.828	0.0945	0.0097	53048

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	187.3 - 182.3	8.997	2	0.3493	0.0381
T2	182.3 - 162.3	8.624	2	0.3493	0.0374
T3	162.3 - 142.3	7.098	2	0.3441	0.0358
T4	142.3 - 122.3	5.593	2	0.3228	0.0335
T5	122.3 - 102.3	4.170	2	0.2809	0.0289
T6	102.3 - 95.63	2.915	2	0.2388	0.0234
T7	95.63 - 82.3	2.553	2	0.2210	0.0223
T8	82.3 - 75.63	1.945	2	0.1851	0.0193
T9	75.63 - 62.3	1.651	2	0.1707	0.0180
T10	62.3 - 55.63	1.146	2	0.1417	0.0145
T11	55.63 - 42.3	0.911	2	0.1236	0.0129
T12	42.3 - 35.63	0.556	2	0.0873	0.0093
T13	35.63 - 22.3	0.389	2	0.0723	0.0074
T14	22.3 - 15.63	0.174	2	0.0418	0.0045
T15	15.63 - 2.3	0.087	3	0.0279	0.0030

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
187.30	6'x4" Pipe Mount	2	8.997	0.3493	0.0381	64731
185.30	8' Dish	2	8.848	0.3493	0.0378	64731
184.30	20' Horz. 4x4x1/4"	2	8.773	0.3493	0.0377	64731
183.30	DB411-B	2	8.698	0.3493	0.0376	64731
179.30	4' Dish	2	8.398	0.3492	0.0371	64360
174.30	8' Dish	2	8.017	0.3486	0.0367	110712
173.30	13'x2" Pipe	2	7.941	0.3483	0.0366	129084
170.30	6'x2" Pipe Mount	2	7.711	0.3476	0.0364	223787
167.30	8' x 2" Horz. Pipe	2	7.481	0.3465	0.0362	678733
163.30	80010966	2	7.174	0.3447	0.0359	172445
155.00	LNX-6514DS	2	6.543	0.3389	0.0351	97053
140.00	AIR6449	2	5.424	0.3187	0.0331	57411
137.30	6' Dish	2	5.227	0.3135	0.0326	49873
127.30	8' Dish	2	4.514	0.2918	0.0303	33213
111.30	6'x3" Pipe Mount	2	3.453	0.2587	0.0256	22079
110.30	6'x3" Pipe Mount	2	3.391	0.2567	0.0253	21638
105.30	Light Beacon	2	3.089	0.2459	0.0240	19524
102.30	8' Dish	2	2.915	0.2388	0.0234	16758
100.30	SC3-W100AB	2	2.802	0.2337	0.0230	14019
93.30	SC3-W100AB	2	2.439	0.2144	0.0219	12257
89.30	6'x3" Pipe Mount	2	2.254	0.2032	0.0210	23792
87.30	6'x3" Pipe Mount	2	2.165	0.1978	0.0205	47426
68.30	6'x3" Pipe Mount	2	1.364	0.1555	0.0161	32394

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	187.3	Leg	A325N	1.2500	6	0.29	87.22	0.003 ✓	1	Bolt Tension
		Diagonal	A325N	0.7500	1	2.20	12.62	0.174 ✓	1	Member Bearing
		Top Girt	A325N	0.7500	1	0.87	19.88	0.044 ✓	1	Bolt Shear
T2	182.3	Leg	A325N	1.2500	6	2.26	87.22	0.026 ✓	1	Bolt Tension
		Diagonal	A325N	0.7500	1	7.48	12.62	0.593 ✓	1	Member Bearing
T3	162.3	Leg	A325N	1.2500	6	7.35	87.22	0.084 ✓	1	Bolt Tension
		Diagonal	A325N	0.7500	1	14.59	15.77	0.925 ✓	1	Member Bearing
T4	142.3	Leg	A325N	1.2500	8	11.01	87.22	0.126 ✓	1	Bolt Tension
		Diagonal	A325N	0.6250	2	9.92	13.81	0.718 ✓	1	Bolt Shear
T5	122.3	Leg	A325N	1.5000	8	17.62	126.47	0.139 ✓	1	Bolt Tension
		Diagonal	A325N	0.7500	2	11.27	19.88	0.567 ✓	1	Bolt Shear
T6	102.3	Diagonal	A325N	1.0000	2	12.69	33.60	0.378 ✓	1	Member Bearing
T7	95.63	Leg	A325N	1.5000	8	21.15	126.47	0.167 ✓	1	Bolt Tension
		Diagonal	A325N	1.0000	2	16.50	35.34	0.467 ✓	1	Bolt Shear
		Horizontal	A325N	1.0000	2	1.77	28.00	0.063 ✓	1	Member Bearing
		Redund Horz 1 Bracing	A325N	1.0000	1	3.54	16.97	0.209 ✓	1	Member Bearing
		Redund Diag 1 Bracing	A325N	1.0000	1	2.40	16.97	0.141 ✓	1	Member Bearing
T8	82.3	Diagonal	A325N	0.8750	2	13.77	27.06	0.509 ✓	1	Bolt Shear
T9	75.63	Leg	A325N	1.5000	8	28.34	126.47	0.224 ✓	1	Bolt Tension
		Diagonal	A325N	0.8750	2	17.31	27.06	0.640 ✓	1	Bolt Shear
		Horizontal	A325N	0.8750	2	2.34	24.47	0.096 ✓	1	Member Bearing
		Redund Horz 1 Bracing	A325N	0.8750	1	4.68	14.79	0.316 ✓	1	Member Bearing
		Redund Diag 1 Bracing	A325N	0.8750	1	3.07	14.79	0.207 ✓	1	Member Bearing
T10	62.3	Diagonal	A325N	0.8750	2	14.78	27.06	0.546 ✓	1	Bolt Shear
T11	55.63	Leg	A325N	1.5000	8	35.23	126.47	0.279 ✓	1	Bolt Tension
		Diagonal	A325N	0.8750	2	18.84	27.06	0.696 ✓	1	Bolt Shear
		Horizontal	A325N	0.8750	2	2.88	24.47	0.118 ✓	1	Member Bearing
		Redund Horz 1 Bracing	A325N	0.8750	1	5.77	18.49	0.312 ✓	1	Member Bearing
		Redund Diag 1 Bracing	A325N	0.8750	1	3.68	18.49	0.199 ✓	1	Member Bearing
T12	42.3	Diagonal	A325N	1.0000	2	15.64	33.60	0.466 ✓	1	Member Bearing
T13	35.63	Leg	A325N	1.5000	8	42.34	126.47	0.335 ✓	1	Bolt Tension
		Diagonal	A325N	1.0000	2	19.79	35.34	0.560 ✓	1	Bolt Shear
		Horizontal	A325N	1.0000	2	3.46	28.00	0.124 ✓	1	Member Bearing
		Redund Horz 1 Bracing	A325N	1.0000	1	6.92	21.21	0.326 ✓	1	Member Bearing
		Redund Diag 1 Bracing	A325N	1.0000	1	4.31	21.21	0.203 ✓	1	Member Bearing
T14	22.3	Diagonal	A325N	1.0000	2	16.46	35.34	0.466 ✓	1	Bolt Shear
T15	15.63	Leg	F1554-105	1.7500	6	65.79	178.07	0.369 ✓	1	Bolt Tension

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
		Diagonal	A325N	1.0000	2	20.57	35.34	0.582 ✔	1	Bolt Shear
		Horizontal	A325N	1.0000	2	4.05	28.00	0.145 ✔	1	Member Bearing
		Redund Horz 1 Bracing	A325N	1.0000	1	8.09	21.21	0.382 ✔	1	Member Bearing
		Redund Diag 1 Bracing	A325N	1.0000	1	4.93	21.21	0.233 ✔	1	Member Bearing

Compression Checks

Leg Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	187.3 - 182.3	P6x.28	5.01	5.01	26.8 K=1.00	5.5813	-5.20	238.34	0.022 [1] ✔
T2	182.3 - 162.3	P6x.28	20.03	10.02	53.5 K=1.00	5.5813	-21.69	203.69	0.107 [1] ✔
T3	162.3 - 142.3	P6x.28	20.03	10.02	53.5 K=1.00	5.5813	-59.45	203.69	0.292 [1] ✔
T4	142.3 - 122.3	P6x.28	20.03	10.02	53.5 K=1.00	5.5813	-111.67	203.69	0.548 [1] ✔
T5	122.3 - 102.3	P8x.322	20.03	10.02	40.9 K=1.00	8.3993	-171.11	334.42	0.512 [1] ✔
T6	102.3 - 95.63	P8x.322	6.68	6.68	27.3 K=1.00	8.3993	-204.49	357.93	0.571 [1] ✔
T7	95.63 - 82.3	P8x.322	13.35	6.68	27.3 K=1.00	8.3993	-204.19	357.96	0.570 [1] ✔
T8	82.3 - 75.63	P8x.5	6.68	6.68	27.9 K=1.00	12.7627	-269.67	542.64	0.497 [1] ✔
T9	75.63 - 62.3	P8x.5	13.35	6.68	27.8 K=1.00	12.7627	-269.65	542.69	0.497 [1] ✔
T10	62.3 - 55.63	P10x.365	6.68	6.68	21.8 K=1.00	11.9083	-333.38	517.53	0.644 [1] ✔
T11	55.63 - 42.3	P10x.365	13.35	6.68	21.8 K=1.00	11.9083	-332.69	517.56	0.643 [1] ✔
T12	42.3 - 35.63	P10x.5	6.68	6.68	22.1 K=1.00	16.1007	-399.69	699.12	0.572 [1] ✔
T13	35.63 - 22.3	P10x.5	13.35	6.68	22.1 K=1.00	16.1007	-399.18	699.16	0.571 [1] ✔
T14	22.3 - 15.63	P12x.5	6.68	6.68	18.5 K=1.00	19.2423	-465.89	844.51	0.552 [1] ✔
T15	15.63 - 2.3	P12x.5	13.35	6.68	18.5 K=1.00	19.2423	-466.71	844.54	0.553 [1] ✔

[1] P_u / ϕP_n controls

Diagonal Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	187.3 - 182.3	L3 1/2x3 1/2x1/4	19.41	9.41	162.7 K=1.00	1.6900	-2.17	18.27	0.119 [1] ✓
T2	182.3 - 162.3	L4x4x1/4	22.81	11.24	169.7 K=1.00	1.9400	-8.15	19.29	0.423 [1] ✓
T3	162.3 - 142.3	L5x5x5/16	24.62	12.15	146.7 K=1.00	3.0300	-14.58	40.32	0.362 [1] ✓
T4	142.3 - 122.3	L5x5x5/16	26.46	13.01	148.2 K=0.94	3.0300	-19.63	39.46	0.497 [1] ✓
T5	122.3 - 102.3	L5x5x3/8	28.33	13.82	156.2 K=0.93	3.6100	-22.20	42.34	0.524 [1] ✓
T6	102.3 - 95.63	L6x6x3/8	15.06	14.07	133.5 K=0.94	4.3600	-26.07	70.03	0.372 [1] ✓
T7	95.63 - 82.3	L6x4x1/2	19.70	18.63	194.4 K=1.00	4.7500	-32.99	35.98	0.917 [1] ✓
T8	82.3 - 75.63	L6x6x3/8	15.96	15.05	139.5 K=0.92	4.3600	-26.87	64.12	0.419 [1] ✓
T9	75.63 - 62.3	L6x6x3/8	20.45	19.45	124.2 K=1.00	4.3600	-34.62	80.62	0.429 [1] ✓
T10	62.3 - 55.63	L6x6x3/8	16.88	15.87	144.6 K=0.90	4.3600	-29.21	59.68	0.489 [1] ✓
T11	55.63 - 42.3	L6x6x3/8	21.22	20.12	128.4 K=1.00	4.3600	-37.69	75.67	0.498 [1] ✓
T12	42.3 - 35.63	L6x6x3/8	17.80	16.73	150.0 K=0.89	4.3600	-30.65	55.49	0.552 [1] ✓
T13	35.63 - 22.3	L6x6x1/2	22.00	20.86	134.6 K=1.00	5.7500	-39.59	90.90	0.435 [1] ✓
T14	22.3 - 15.63	L6x6x1/2	18.73	17.58	156.1 K=0.87	5.7500	-32.44	67.51	0.481 [1] ✓
T15	15.63 - 2.3	L6x6x1/2	22.81	21.57	139.1 K=1.00	5.7500	-41.13	85.00	0.484 [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 $\frac{P_u}{\phi P_n}$
T7	95.63 - 82.3	L4x4x5/16	27.67	13.18	181.0 K=0.91	2.4000	-3.54	20.97	0.169 [1] ✓
T9	75.63 - 62.3	L4x4x5/16	29.67	14.21	192.9 K=0.89	2.4000	-4.68	18.46	0.253 [1] ✓
T11	55.63 - 42.3	L5x5x5/16	31.67	15.13	167.7 K=0.92	3.0300	-5.77	30.82	0.187 [1] ✓

Section No.	Elevation	Size	L	L_u	Kl/r	A	P_u	ϕP_n	Ratio $\frac{P_u}{\phi P_n}$
	ft		ft	ft		in^2	K	K	
T13	35.63 - 22.3	L5x5x5/16	33.67	16.09	176.6 K=0.91	3.0300	-6.92	27.79	0.249 [1] ✔
T15	15.63 - 2.3	L5x5x5/16	35.67	17.01	185.1 K=0.90	3.0300	-8.09	25.32	0.320 [1] ✔

[1] P_u / ϕP_n controls

Top Girt Design Data (Compression)

Section No.	Elevation	Size	L	L_u	Kl/r	A	P_u	ϕP_n	Ratio $\frac{P_u}{\phi P_n}$
	ft		ft	ft		in^2	K	K	
T1	187.3 - 182.3	L5x5x5/16	18.50	17.68	213.4 K=1.00	3.0300	-0.87	19.04	0.046 [1] ✔
		KL/R > 200 (C) - 6							

[1] P_u / ϕP_n controls

Redundant Horizontal (1) Design Data (Compression)

Section No.	Elevation	Size	L	L_u	Kl/r	A	P_u	ϕP_n	Ratio $\frac{P_u}{\phi P_n}$
	ft		ft	ft		in^2	K	K	
T7	95.63 - 82.3	L3x3x1/4	6.92	6.22	126.2 K=1.00	1.4400	-3.54	25.89	0.137 [1] ✔
T9	75.63 - 62.3	L3x3x1/4	7.42	6.76	136.9 K=1.00	1.4400	-4.68	21.98	0.213 [1] ✔
T11	55.63 - 42.3	L3x3x5/16	7.92	7.17	146.0 K=1.00	1.7800	-5.77	23.90	0.241 [1] ✔
T13	35.63 - 22.3	L3x3x5/16	8.42	7.64	155.6 K=1.00	1.7800	-6.92	21.05	0.329 [1] ✔
T15	15.63 - 2.3	L4x3 1/2x5/16	8.92	8.05	132.4 K=1.00	2.2500	-8.09	36.76	0.220 [1] ✔

[1] P_u / ϕP_n controls

Redundant Diagonal (1) Design Data (Compression)

Section No.	Elevation	Size	L	L_u	Kl/r	A	P_u	ϕP_n	Ratio $\frac{P_u}{\phi P_n}$
	ft		ft	ft		in^2	K	K	
T7	95.63 - 82.3	L3x3x1/4	9.37	8.53	172.8 K=1.00	1.4400	-2.40	13.80	0.174 [1] ✔
T9	75.63 - 62.3	L3x3x1/4	9.73	8.93	181.1	1.4400	-3.07	12.57	0.244 [1]

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T11	55.63 - 42.3	L3x3x5/16	10.10	9.20	187.4 K=1.00	1.7800	-3.68	14.50	0.254 [1]
T13	35.63 - 22.3	L3x3x5/16	10.48	9.56	194.9 K=1.00	1.7800	-4.31	13.42	0.321 [1]
T15	15.63 - 2.3	L4x3 1/2x5/16	10.87	9.86	162.1 K=1.00	2.2500	-4.93	24.50	0.201 [1]

[1] P_u / ϕP_n controls

Inner Bracing 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 $\frac{P_u}{\phi P_n}$
T7	95.63 - 82.3	L3x3x1/4	13.83	13.83	280.4 K=1.00	1.4400	-0.05	5.24	0.009 [1]
T9	75.63 - 62.3	KL/R > 250 (C) - 106 L3x3x1/4	14.83	14.83	300.7 K=1.00	1.4400	-0.05	4.56	0.010 [1]
T11	55.63 - 42.3	KL/R > 250 (C) - 142 L3 1/2x3 1/2x1/4	15.83	15.83	273.8 K=1.00	1.6900	-0.05	6.45	0.008 [1]
T13	35.63 - 22.3	KL/R > 250 (C) - 180 L3 1/2x3 1/2x1/4	16.83	16.83	291.1 K=1.00	1.6900	-0.05	5.71	0.009 [1]
T15	15.63 - 2.3	KL/R > 250 (C) - 215 L3 1/2x3 1/2x1/4	17.83	17.83	308.4 K=1.00	1.6900	-0.05	5.09	0.011 [1]
		KL/R > 250 (C) - 251							

[1] P_u / ϕP_n controls

Tension Checks

Leg Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	187.3 - 182.3	P6x.28	5.01	5.01	26.8	5.5813	0.51	251.16	0.002 [1]
T2	182.3 - 162.3	P6x.28	20.03	10.02	53.5	5.5813	13.55	251.16	0.054 [1]
T3	162.3 - 142.3	P6x.28	20.03	10.02	53.5	5.5813	44.11	251.16	0.176 [1]

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T4	142.3 - 122.3	P6x.28	20.03	10.02	53.5	5.5813	88.05	251.16	0.351 [1]
T5	122.3 - 102.3	P8x.322	20.03	10.02	40.9	8.3993	140.97	377.97	0.373 [1]
T6	102.3 - 95.63	P8x.322	6.68	6.68	27.3	8.3993	171.44	377.97	0.454 [1]
T7	95.63 - 82.3	P8x.322	13.35	6.68	27.3	8.3993	169.55	377.97	0.449 [1]
T8	82.3 - 75.63	P8x.5	6.68	6.68	27.9	12.7627	228.66	574.32	0.398 [1]
T9	75.63 - 62.3	P8x.5	13.35	6.68	27.8	12.7627	227.06	574.32	0.395 [1]
T10	62.3 - 55.63	P10x.365	6.68	6.68	21.8	11.9083	284.49	535.87	0.531 [1]
T11	55.63 - 42.3	P10x.365	13.35	6.68	21.8	11.9083	282.25	535.87	0.527 [1]
T12	42.3 - 35.63	P10x.5	6.68	6.68	22.1	16.1007	341.60	724.53	0.471 [1]
T13	35.63 - 22.3	P10x.5	13.35	6.68	22.1	16.1007	339.18	724.53	0.468 [1]
T14	22.3 - 15.63	P12x.5	6.68	6.68	18.5	19.2423	397.17	865.90	0.459 [1]
T15	15.63 - 2.3	P12x.5	13.35	6.68	18.5	19.2423	395.27	865.90	0.456 [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	187.3 - 182.3	L3 1/2x3 1/2x1/4	19.41	9.41	105.1	1.6900	2.20	54.76	0.040 [1]
T2	182.3 - 162.3	L4x4x1/4	22.81	11.24	109.2	1.9400	7.48	62.86	0.119 [1]
T3	162.3 - 142.3	L5x5x5/16	24.62	12.15	93.9	3.0300	14.59	98.17	0.149 [1]
T4	142.3 - 122.3	L5x5x5/16	26.46	13.01	100.9	3.0300	19.84	98.17	0.202 [1]
T5	122.3 - 102.3	L5x5x3/8	28.33	13.82	108.0	3.6100	22.53	116.96	0.193 [1]
T6	102.3 - 95.63	L6x6x3/8	15.06	14.07	93.6	4.3600	25.38	141.26	0.180 [1]
T7	95.63 - 82.3	L6x4x1/2	19.70	18.63	200.5	4.7500	31.47	153.90	0.205 [1]
T8	82.3 - 75.63	L6x6x3/8	15.96	15.05	99.4	4.3600	27.54	141.26	0.195 [1]

Section No.	Elevation	Size	L	L_u	Kl/r	A	P_u	ϕP_n	Ratio $\frac{P_u}{\phi P_n}$
	ft		ft	ft		in^2	K	K	
T9	75.63 - 62.3	L6x6x3/8	20.45	19.45	127.5	4.3600	33.74	141.26	0.239 [1]
T10	62.3 - 55.63	L6x6x3/8	16.88	15.87	104.6	4.3600	29.57	141.26	0.209 [1]
T11	55.63 - 42.3	L6x6x3/8	21.22	20.12	131.7	4.3600	36.21	141.26	0.256 [1]
T12	42.3 - 35.63	L6x6x3/8	17.80	16.73	110.5	4.3600	31.29	141.26	0.221 [1]
T13	35.63 - 22.3	L6x6x1/2	22.00	20.86	138.3	5.7500	38.12	186.30	0.205 [1]
T14	22.3 - 15.63	L6x6x1/2	18.73	17.58	117.2	5.7500	32.92	186.30	0.177 [1]
T15	15.63 - 2.3	L6x6x1/2	22.81	21.57	142.9	5.7500	39.63	186.30	0.213 [1]

[1] P_u / ϕP_n controls

Horizontal Design Data (Tension)

Section No.	Elevation	Size	L	L_u	Kl/r	A	P_u	ϕP_n	Ratio $\frac{P_u}{\phi P_n}$
	ft		ft	ft		in^2	K	K	
T7	95.63 - 82.3	L4x4x5/16	27.67	13.18	130.4	2.4000	3.54	77.76	0.046 [1]
T9	75.63 - 62.3	L4x4x5/16	29.67	14.21	140.1	2.4000	4.68	77.76	0.060 [1]
T11	55.63 - 42.3	L5x5x5/16	31.67	15.13	117.6	3.0300	5.77	98.17	0.059 [1]
T13	35.63 - 22.3	L5x5x5/16	33.67	16.09	125.2	3.0300	6.92	98.17	0.071 [1]
T15	15.63 - 2.3	L5x5x5/16	35.67	17.01	132.2	3.0300	8.09	98.17	0.082 [1]

[1] P_u / ϕP_n controls

Top Girt Design Data (Tension)

Section No.	Elevation	Size	L	L_u	Kl/r	A	P_u	ϕP_n	Ratio $\frac{P_u}{\phi P_n}$
	ft		ft	ft		in^2	K	K	
T1	187.3 - 182.3	L5x5x5/16	18.50	17.68	137.2	3.0300	0.17	98.17	0.002 [1]

[1] P_u / ϕP_n controls

Redundant Horizontal (1) 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 $\frac{P_u}{\phi P_n}$
T7	95.63 - 82.3	L3x3x1/4	6.92	6.22	84.6	0.8691	3.54	37.80	0.094 [1] ✔
T9	75.63 - 62.3	L3x3x1/4	7.42	6.76	91.1	0.8925	4.68	38.82	0.120 [1] ✔
T11	55.63 - 42.3	L3x3x5/16	7.92	7.17	97.2	1.1006	5.77	47.88	0.121 [1] ✔
T13	35.63 - 22.3	L3x3x5/16	8.42	7.64	103.7	1.0713	6.92	46.60	0.149 [1] ✔
T15	15.63 - 2.3	L4x3 1/2x5/16	8.92	8.05	94.5	1.4238	8.09	61.94	0.131 [1] ✔

[1] $P_u / \phi P_n$ controls

Redundant Diagonal (1) 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 $\frac{P_u}{\phi P_n}$
T7	95.63 - 82.3	L3x3x1/4	9.37	8.53	114.3	0.8691	2.40	37.80	0.063 [1] ✔
T9	75.63 - 62.3	L3x3x1/4	9.73	8.93	119.2	0.8925	3.07	38.82	0.079 [1] ✔
T11	55.63 - 42.3	L3x3x5/16	10.10	9.20	123.7	1.1006	3.68	47.88	0.077 [1] ✔
T13	35.63 - 22.3	L3x3x5/16	10.48	9.56	128.8	1.0713	4.31	46.60	0.092 [1] ✔
T15	15.63 - 2.3	L4x3 1/2x5/16	10.87	9.86	114.9	1.4238	4.93	61.94	0.080 [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	187.3 - 182.3	Leg	P6x.28	1	-5.20	238.34	2.2	Pass
T2	182.3 - 162.3	Leg	P6x.28	15	-21.69	203.69	10.7	Pass
T3	162.3 - 142.3	Leg	P6x.28	30	-59.45	203.69	29.2	Pass
T4	142.3 - 122.3	Leg	P6x.28	45	-111.67	203.69	54.8	Pass
T5	122.3 - 102.3	Leg	P8x.322	60	-171.11	334.42	51.2	Pass
T6	102.3 - 95.63	Leg	P8x.322	75	-204.49	357.93	57.1	Pass
T7	95.63 - 82.3	Leg	P8x.322	87	-204.19	357.96	57.0	Pass
T8	82.3 - 75.63	Leg	P8x.5	111	-269.67	542.64	49.7	Pass
T9	75.63 - 62.3	Leg	P8x.5	123	-269.65	542.69	49.7	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
T10	62.3 - 55.63	Leg	P10x.365	147	-333.38	517.53	64.4	Pass
T11	55.63 - 42.3	Leg	P10x.365	159	-332.69	517.56	64.3	Pass
T12	42.3 - 35.63	Leg	P10x.5	183	-399.69	699.12	57.2	Pass
T13	35.63 - 22.3	Leg	P10x.5	195	-399.18	699.16	57.1	Pass
T14	22.3 - 15.63	Leg	P12x.5	219	-465.89	844.51	55.2	Pass
T15	15.63 - 2.3	Leg	P12x.5	231	-466.71	844.54	55.3	Pass
T1	187.3 - 182.3	Diagonal	L3 1/2x3 1/2x1/4	8	-2.17	18.27	11.9	Pass
T2	182.3 - 162.3	Diagonal	L4x4x1/4	19	-8.15	19.29	17.4 (b) 42.3	Pass
T3	162.3 - 142.3	Diagonal	L5x5x5/16	33	-14.58	40.32	59.3 (b) 36.2	Pass
T4	142.3 - 122.3	Diagonal	L5x5x5/16	47	-19.63	39.46	92.5 (b) 49.7	Pass
T5	122.3 - 102.3	Diagonal	L5x5x3/8	66	-22.20	42.34	71.8 (b) 52.4	Pass
T6	102.3 - 95.63	Diagonal	L6x6x3/8	84	-26.07	70.03	56.7 (b) 37.2	Pass
T7	95.63 - 82.3	Diagonal	L6x4x1/2	100	-32.99	35.98	37.8 (b) 91.7	Pass
T8	82.3 - 75.63	Diagonal	L6x6x3/8	119	-26.87	64.12	41.9	Pass
T9	75.63 - 62.3	Diagonal	L6x6x3/8	139	-34.62	80.62	50.9 (b) 42.9	Pass
T10	62.3 - 55.63	Diagonal	L6x6x3/8	155	-29.21	59.68	64.0 (b) 48.9	Pass
T11	55.63 - 42.3	Diagonal	L6x6x3/8	175	-37.69	75.67	54.6 (b) 49.8	Pass
T12	42.3 - 35.63	Diagonal	L6x6x3/8	191	-30.65	55.49	69.6 (b) 55.2	Pass
T13	35.63 - 22.3	Diagonal	L6x6x1/2	211	-39.59	90.90	43.5	Pass
T14	22.3 - 15.63	Diagonal	L6x6x1/2	227	-32.44	67.51	56.0 (b) 48.1	Pass
T15	15.63 - 2.3	Diagonal	L6x6x1/2	247	-41.13	85.00	48.4	Pass
T7	95.63 - 82.3	Horizontal	L4x4x5/16	79	-3.54	20.97	58.2 (b) 16.9	Pass
T9	75.63 - 62.3	Horizontal	L4x4x5/16	115	-4.68	18.46	25.3	Pass
T11	55.63 - 42.3	Horizontal	L5x5x5/16	151	-5.77	30.82	18.7	Pass
T13	35.63 - 22.3	Horizontal	L5x5x5/16	187	-6.92	27.79	24.9	Pass
T15	15.63 - 2.3	Horizontal	L5x5x5/16	223	-8.09	25.32	32.0	Pass
T1	187.3 - 182.3	Top Girt	L5x5x5/16	6	-0.87	19.04	4.6	Pass
T7	95.63 - 82.3	Redund Horz 1 Bracing	L3x3x1/4	101	-3.54	25.89	13.7	Pass
T9	75.63 - 62.3	Redund Horz 1 Bracing	L3x3x1/4	137	-4.68	21.98	20.9 (b) 21.3	Pass
T11	55.63 - 42.3	Redund Horz 1 Bracing	L3x3x5/16	170	-5.77	23.90	31.6 (b) 24.1	Pass
T13	35.63 - 22.3	Redund Horz 1 Bracing	L3x3x5/16	209	-6.92	21.05	31.2 (b) 32.9	Pass
T15	15.63 - 2.3	Redund Horz 1 Bracing	L4x3 1/2x5/16	245	-8.09	36.76	22.0	Pass
T7	95.63 - 82.3	Redund Diag 1 Bracing	L3x3x1/4	99	-2.40	13.80	38.2 (b) 17.4	Pass
T9	75.63 - 62.3	Redund Diag 1 Bracing	L3x3x1/4	135	-3.07	12.57	24.4	Pass
T11	55.63 - 42.3	Redund Diag 1 Bracing	L3x3x5/16	171	-3.68	14.50	25.4	Pass
T13	35.63 - 22.3	Redund Diag 1 Bracing	L3x3x5/16	207	-4.31	13.42	32.1	Pass
T15	15.63 - 2.3	Redund Diag 1 Bracing	L4x3 1/2x5/16	243	-4.93	24.50	20.1	Pass
T7	95.63 - 82.3	Inner Bracing	L3x3x1/4	107	-0.04	5.24	23.3 (b) 1.1	Pass
T9	75.63 - 62.3	Inner Bracing	L3x3x1/4	143	-0.05	4.56	1.1	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
T11	55.63 - 42.3	Inner Bracing	L3 1/2x3 1/2x1/4	180	-0.05	6.45	1.1	Pass
T13	35.63 - 22.3	Inner Bracing	L3 1/2x3 1/2x1/4	216	-0.05	5.71	1.1	Pass
T15	15.63 - 2.3	Inner Bracing	L3 1/2x3 1/2x1/4	251	-0.05	5.09	1.1	Pass
							Summary	
						Leg (T10)	64.4	Pass
						Diagonal (T3)	92.5	Pass
						Horizontal (T15)	32.0	Pass
						Top Girt (T1)	4.6	Pass
						Redund Horz 1 Bracing (T15)	38.2	Pass
						Redund Diag 1 Bracing (T13)	32.1	Pass
						Inner Bracing (T13)	1.1	Pass
						Bolt Checks	92.5	Pass
						RATING =	**92.5**	**Pass**

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Subject:	Anchor Bolt Analysis
Location:	185-ft Lattice Tower Bloomfield, CT
Rev. 0: 8/2/23	Prepared by: T.J.L. Checked by: C.F.C. Job No. 23032.06

Anchor Bolt Analysis:

Input Data:

Tower Reactions:

Tension Force =	Tension := 434·kips	(Input From tnxTower)
Compression Force =	Compression := 511·kips	(Input From tnxTower)
Shear Force =	Shear := 82·kips	(Input From tnxTower)

Anchor Bolt Data:

ASTM F1554 Grade 105

Number of Anchor Bolts =	N := 6	(User Input)
Bolt Ultimate Strength =	F_u := 125·ksi	(User Input)
Bolt Yield Strength =	F_y := 105·ksi	(User Input)
Bolt Modulus =	E := 29000·ksi	(User Input)
Diameter of Anchor Bolts =	D := 1.75·in	(User Input)
Threads per Inch =	n := 5	(User Input)
Length from Top of Pier to Bottom of Leveling Nut =	L_{ar} := 0·in	(User Input)

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Subject: Anchor Bolt Analysis

Location: 185-ft Lattice Tower
Bloomfield, CT

Rev. 0: 8/2/23

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Job No. 23032.06

Anchor Bolt Analysis:

Calculated Anchor Bolt Properties:

Gross Area of Bolt = $A_g := \frac{\pi}{4} \cdot D^2 = 2.405 \cdot in^2$

Net Area of Bolt = $A_n := \frac{\pi}{4} \cdot \left(D - \frac{0.9743 \cdot in}{n} \right)^2 = 1.899 \cdot in^2$

Net Diameter = $D_n := \frac{2 \cdot \sqrt{A_n}}{\sqrt{\pi}} = 1.555 \cdot in$

Radius of Gyration of Bolt = $r := \frac{D_n}{4} = 0.389 \cdot in$

Elastic Section Modulus of Bolt = $S_x := \frac{\pi \cdot D_n^3}{32} = 0.369 \cdot in^3$

Plastic Section Modulus of Bolt = $Z_x := \frac{D_n^3}{6} = 0.627 \cdot in^3$

Anchor Bolt Design Strength:

Resistance Factor for Flexure = $\phi_f := 0.9$

Resistance Factor for Compression = $\phi_c := 0.9$

Resistance Factor for Tension = $\phi_t := 0.75$

Resistance Factor for Shear = $\phi_v := 0.75$

Design Tensile Strength = $\Phi R_{nt} := \phi_t \cdot F_u \cdot A_n = 178.1 \cdot k$

Design Compression Strength = $\Phi R_{nc} := \phi_c \cdot F_y \cdot A_g = 227.3 \cdot k$

Design Shear Strength (Tension) = $\Phi R_{nv} := \phi_v \cdot 0.5 F_u \cdot A_g = 112.7 \cdot k$

Design Shear Strength (Compression) = $\Phi R_{nvc} := \phi_c \cdot 0.6 F_y \cdot A_g \cdot 0.75 = 102.3 \cdot k$

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Location:	185-ft Lattice Tower Bloomfield, CT
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Check Anchor Bolt Tension Force:

Maximum Tensile Force =

$$P_{ut} := \frac{\text{Tension}}{N} = 72.3 \cdot \text{kips}$$

Maximum Compressive Force =

$$P_{uc} := \frac{\text{Compression}}{N} = 85.2 \cdot \text{kips}$$

Maximum Shear Force =

$$V_u := \frac{\text{Shear}}{N} = 13.7 \cdot \text{kips}$$

Condition1 =

$$\text{Condition1} := \text{if}\left[\left[\left(\frac{P_{ut}}{\Phi R_{nt}}\right)^2 + \left(\frac{V_u}{\Phi R_{nv}}\right)^2\right] \le 1.00, \text{"OK"}, \text{"Overstressed"}\right]$$

Condition1 = "OK"

Condition2 =

$$\text{Condition2} := \text{if}\left[\left[\left(\frac{P_{uc}}{\Phi R_{nc}}\right) + \left(\frac{V_u}{\Phi R_{nvc}}\right)^2\right] \le 1.00, \text{"OK"}, \text{"Overstressed"}\right]$$

Condition2 = "OK"

Bolt % of Capacity =

$$\max\left[\left(\frac{P_{ut}}{\Phi R_{nt}}\right)^2 + \left(\frac{V_u}{\Phi R_{nv}}\right)^2, \left(\frac{P_{uc}}{\Phi R_{nc}}\right) + \left(\frac{V_u}{\Phi R_{nvc}}\right)^2\right] = 39.3 \cdot \%$$

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Subject: FOUNDATION ANALYSIS

Location: Bloomfield, CT

Rev. 0: 8/2/23

Prepared by: T.J.L. Checked by: C.F.C.
Job No. 23032.06

Pier and Mat Foundation Analysis:

Input Data:

Tower Data

Overturning Moment =	$OM := 15370 \cdot ft \cdot kips$	(User Input from tnxTower)	
Shear Force =	$S_t := 142 \cdot kip$	(User Input from tnxTower)	
Axial Force =	$WT_t := 99 \cdot kip$	(User Input from tnxTower)	
Max Compression Force =	$C_t := 511 \cdot kip$	(User Input from tnxTower)	
Max Uplift Force =	$U_t := 434 \cdot kip$	(User Input from tnxTower)	
Tower Height =	$H_t := 185 \cdot ft$	(User Input)	
Tower Width =	$W_t := 37 \cdot ft$	(User Input)	
Tower Position on Foundation (1=offset, 2=centered) =	$Pos_t := 1$	(User Input)	

Footing Data:

Overall Depth of Footing =	$D_f := 6.5 \cdot ft$	(User Input)	
Length of Pier =	$L_p := 5.5 \cdot ft$	(User Input)	
Extension of Pier Above Grade =	$L_{pag} := 0.5 \cdot ft$	(User Input)	
Diameter of Pier =	$d_p := 6.0 \cdot ft$	(User Input)	
Thickness of Footing =	$T_f := 1.5 \cdot ft$	(User Input)	
Width of Footing =	$W_f := 45.5 \cdot ft$	(User Input)	

Material Properties:

Concrete Compressive Strength =	$f_c := 4500 \cdot psi$	(User Input)	
Steel Reinforcment Yield Strength =	$f_y := 60000 \cdot psi$	(User Input)	
Internal Friction Angle of Soil =	$\Phi_s := 30 \cdot deg$	(User Input)	
Allowable Soil Bearing Capacity =	$q_s := 20000 \cdot psf$	(User Input)	
Unit Weight of Soil =	$\gamma_{soil} := 100 \cdot pcf$	(User Input)	
Unit Weight of Concrete =	$\gamma_{conc} := 150 \cdot pcf$	(User Input)	
Foundation Bouyancy =	$Bouyancy := 0$	(User Input)	(Yes=1 / No=0)
Depth to Neglect =	$n := 0 \cdot ft$	(User Input)	
Cohesion of Clay Type Soil =	$c := 0 \cdot ksf$	(User Input)	(Use 0 for Sandy Soil)
Seismic Zone Factor =	$Z := 2$	(User Input)	(UBC-1997 Fig 23-2)
Coefficient of Friction Between Concrete =	$\mu := 0.45$	(User Input)	

Pier Reinforcement:

Bar Size =	$BS_{pier} := 7$	(User Input)	
Bar Diameter =	$d_{bpier} := 0.875 \cdot in$	(User Input)	
Number of Bars =	$NB_{pier} := 34$	(User Input)	
Clear Cover of Reinforcement =	$Cvr_{pier} := 3 \cdot in$	(User Input)	
Reinforcement Location Factor =	$\alpha_{pier} := 1.0$	(User Input)	(ACI-2008 12.2.4)
Coating Factor =	$\beta_{pier} := 1.0$	(User Input)	(ACI-2008 12.2.4)
Concrete Strength Factor =	$\lambda_{pier} := 1.0$	(User Input)	(ACI-2008 12.2.4)
Reinforcement Size Factor =	$\gamma_{pier} := 1.0$	(User Input)	(ACI-2008 12.2.4)
Diameter of Tie =	$d_{Tie} := 0.5 \cdot in$	(User Input)	

Pad Reinforcement:

Bar Size =	$BS_{top} := 10$	(User Input)	(Top of Pad)
Bar Diameter =	$d_{btop} := 1.27 \cdot in$	(User Input)	(Top of Pad)
Number of Bars =	$NB_{top} := 75$	(User Input)	(Top of Pad)
Bar Size =	$BS_{bot} := 10$	(User Input)	(Bottom of Pad)
Bar Diameter =	$d_{bbot} := 1.27 \cdot in$	(User Input)	(Bottom of Pad)
Number of Bars =	$NB_{bot} := 75$	(User Input)	(Bottom of Pad)
Clear Cover of Reinforcement =	$Cvr_{pad} := 3.0 \cdot in$	(User Input)	
Reinforcement Location Factor =	$\alpha_{pad} := 1.0$	(User Input)	(ACI-2008 12.2.4)
Coating Factor =	$\beta_{pad} := 1.0$	(User Input)	(ACI-2008 12.2.4)
Concrete Strength Factor =	$\lambda_{pad} := 1.0$	(User Input)	(ACI-2008 12.2.4)
Reinforcement Size Factor =	$\gamma_{pad} := 1.0$	(User Input)	(ACI-2008 12.2.4)

Calculated Factors:

Pier Reinforcement Bar Area =
$$A_{bpier} := \frac{\pi \cdot d_{bpier}^{2}}{4} = 0.601 \cdot in^2$$

Pad Top Reinforcement Bar Area =
$$A_{btop} := \frac{\pi \cdot d_{btop}^{2}}{4} = 1.267 \cdot in^2$$

Pad Bottom Reinforcement Bar Area =
$$A_{bbot} := \frac{\pi \cdot d_{bbot}^{2}}{4} = 1.267 \cdot in^2$$

Coefficient of Lateral Soil Pressure =
$$K_p := \frac{1 + \sin(\Phi_s)}{1 - \sin(\Phi_s)} = 3$$

Load Factor = $LF := 1$

Stability of Footing:

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

Adjusted Soil Unit Weight = $\gamma_s := if(Bouyancy = 1, \gamma_{soil} - 62.4pcf, \gamma_{soil}) = 100 \cdot pcf$

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

$P_{pt} := K_p \cdot \gamma_s \cdot (D_f - T_f) + c \cdot 2 \cdot \sqrt{K_p} = 1.5 \cdot ksf$

$P_{top} := if[n < (D_f - T_f), P_{pt}, P_{pn}] = 1.5 \cdot ksf$

$P_{bot} := K_p \cdot \gamma_s \cdot D_f + c \cdot 2 \cdot \sqrt{K_p} = 1.95 \cdot ksf$

$P_{ave} := \frac{P_{top} + P_{bot}}{2} = 1.725 \cdot ksf$

$T_p := if[n < (D_f - T_f), T_f, (D_f - n)] = 1.5 \cdot ft$

$A_p := W_f \cdot T_p = 68.25 \cdot ft^2$

Ultimate Shear = $S_u := P_{ave} \cdot A_p = 117.731 \cdot kip$

Weight of Concrete = $WT_c := \left[\left(W_f^2 \cdot T_f\right) + (3) \cdot \left(\frac{d_p^2 \cdot \pi}{4} L_p\right)\right] \cdot \gamma_c = 535.785 \cdot kip$

Weight of Soil Above Footing = $WT_{s1} := \left[\left[W_f^2 - (3) \cdot \left(\frac{d_p^2 \cdot \pi}{4}\right)\right] \cdot \left(|L_p - L_{pag} - n|\right)\right] \cdot \gamma_s = 992.71 \cdot kip$

Tower Offset = $X_{t1} := \left[\frac{W_f}{2} - \frac{(W_t \cdot \cos(30 \cdot deg))}{2}\right]$ $X_{t2} := \frac{W_f}{2} - \frac{(W_t \cdot \cos(30 \cdot deg))}{3}$

$X_t := if(Pos_t = 1, X_{t1}, X_{t2}) = 6.729$

$X_{off1} := \frac{W_f}{2} - \left[\frac{(W_t \cdot \cos(30 \cdot deg))}{3} + X_t\right] = 5.34$ $X_{off2} := 0$

$X_{off} := if(Pos_t = 1, X_{off1}, X_{off2})$ $X_{off} = 5.34 \cdot ft$

Total Weight = $WT_{tot} := 0.9WT_c + 0.75WT_{s1} = 1226.7 \cdot kip$

Resisting Moment = $M_r := \left(WT_{tot}\right) \cdot \frac{W_f}{2} + 0.9WT_t \cdot \left(\frac{W_f}{2} - X_{off}\right) + 0.75\left(S_u \cdot \frac{T_p}{3}\right) = 29504 \cdot kip \cdot ft$

Overturning Moment = $M_{ot} := OM + S_t \cdot (L_p + T_f) = 16364 \cdot kip \cdot ft$

Factor of Safety Actual = $FS := \frac{M_r}{M_{ot}} = 1.8$

Factor of Safety Required = $FS_{req} := 1$ $OverTurning\_Moment\_Check := if(FS \geq FS_{req}, "Okay", "No Good")$

$OverTurning\_Moment\_Check = "Okay"$

Shear Capacity in Pier:

Shear Resistance of Pier =

$$S_p := \frac{P_{ave} \cdot A_p + \mu \cdot WT_{tot}}{FS_{req}} = 669.765 \cdot kips$$

$$Shear\_Check := if\left(S_p > S_t, "Okay", "No Good"\right)$$

Shear_Check = "Okay"

Bearing Pressure Caused by Footing:

Total Load =

$$Load_{tot} := WT_c + WT_{s1} + WT_t = 1627 \cdot kip$$

Area of the Mat =

$$A_{mat} := W_f^{\,2} = 2.07 \times 10^3$$

Section Modulus of Mat =

$$S := \frac{W_f^{\,3}}{6} = 1.57 \times 10^4 \cdot ft^3$$

Maximum Pressure in Mat =

$$P_{max} := \frac{Load_{tot}}{A_{mat}} + \frac{M_{ot}}{S} = 1.828 \cdot ksf$$

$$Max\_Pressure\_Check := if\left(P_{max} < 0.75 q_s, "Okay", "No Good"\right)$$

Max_Pressure_Check = "Okay"

Minimum Pressure in Mat =

$$P_{min} := \frac{Load_{tot}}{A_{mat}} - \frac{M_{ot}}{S} = -0.256 \cdot ksf$$

$$Min\_Pressure\_Check := if\left[\left(P_{min} \geq 0\right) \cdot \left(P_{min} < 0.75 q_s\right), "Okay", "No Good"\right]$$

Min_Pressure_Check = "No Good"

Distance to Resultant of Pressure Distribution =

$$X_p := \frac{P_{max}}{\frac{P_{max} - P_{min}}{W_f}} \cdot \frac{1}{3} = 13.303$$

Distance to Kern =

$$X_k := \frac{W_f}{6} = 7.583$$

Since Resultant Force is Not in Kern, Area to which Pressure is Applied Must be Reduced.

Eccentricity =

$$e := \frac{M_{ot}}{Load_{tot}} = 10.055$$

Adjusted Soil Pressure =

$$P_a := \frac{2 \cdot Load_{tot}}{3 \cdot W_f \left(\frac{W_f}{2} - e\right)} = 1.878 \cdot ksf$$

$$q_{adj} := if\left(P_{min} < 0, P_a, P_{max}\right) = 1.878 \cdot ksf$$

$$Pressure\_Check := if\left(q_{adj} < 0.75 q_s, "Okay", "No Good"\right)$$

Pressure_Check = "Okay"

Concrete Bearing Capacity:

Strength Reduction Factor = $\Phi_c := 0.65$ (ACI-2008 9.3.2.2)

Bearing Strength Between Pier and Pad = $P_b := \Phi_c \cdot 0.85 \cdot f_c \cdot \frac{\pi \cdot d_p^2}{4} = 1.012 \times 10^4 \cdot kips$ (ACI-2008 10.14)

$Bearing\_Check := if(P_b > LF \cdot C_t, "Okay", "No Good")$

Bearing_Check = "Okay"

Shear Strength of Concrete:

Beam Shear: (Critical section located at a distance d from the face of Pier) (ACI 11.3.1.1)

$\phi_c := 0.85$ (ACI 9.3.2.5)

$d := T_f - Cvr_{pad} - d_{bbot} = 13.73 \cdot in$

$FL := LF \cdot \frac{C_t}{W_f^2} = 0.247 \cdot ksf$

$V_{req} := FL \cdot (X_t - .5 \cdot d_p - d) \cdot W_f = 29.024 \cdot kips$

$V_{Avail} := \phi_c \cdot 2 \cdot \sqrt{f_c \cdot psi} \cdot W_f \cdot d = 855 \cdot kip$ (ACI-2008 11.2.1.1)

$Beam\_Shear\_Check := if(V_{req} < V_{Avail}, "Okay", "No Good")$

Beam_Shear_Check = "Okay"

Punching Shear: (Critical Section Located at a distance of d/2 from the face of pier) (ACI 11.11.1.2)

Critical Perimeter of Punching Shear = $b_o := (d_p + d) \cdot \pi = 22.4$

Area Included Inside Perimeter = $A_{bo} := \frac{\pi \cdot (d_p + d)^2}{4} = 40.1$

Required Shear Strength = $V_{req} := FL \cdot (W_f^2 - A_{bo}) = 501 \cdot kips$

Available Shear Strength = $V_{Avail} := \phi_c \cdot 4 \cdot \sqrt{f_c \cdot psi} \cdot b_o \cdot d = 843.4 \cdot kip$ (ACI-2008 11.11.2.1)

$Punching\_Shear\_Check := if(V_{req} < V_{Avail}, "Okay", "No Good")$

Punching_Shear_Check = "Okay"

Steel Reinforcement in Pad:

Required Reinforcement for Bending:

Strength Reduction Factor = $\phi_m := .90$ (ACI-2008 9.3.2.1)

Maximum Moment in Pad = $M_{max} := 1500 \cdot kip \cdot ft$ (User Input)

Design Moment = $M_n := \frac{LF \cdot M_{max}}{\phi_m} = 1.667 \times 10^3 \cdot kips \cdot ft$

$$\beta := \begin{cases} 0.85 \text{ if } 2500 \cdot psi \le f_c \le 4000 \cdot psi \\ 0.65 \text{ if } f_c > 8000 \cdot psi \\ \left[0.85 - \left[\frac{\left(\frac{f_c}{psi} - 4000\right)}{1000}\right] \cdot 0.5\right] \text{ otherwise} \end{cases} = 0.6$$

(ACI-200810.2.7.3)

$b_{eff} := W_t \cdot \cos(30 \cdot deg) + d_p = 456.515 \cdot in$

$A_s := \frac{M_n}{(f_y \cdot d)} = 24.278 \cdot in^2$

$a := \frac{A_s \cdot f_y}{\beta \cdot f_c \cdot b_{eff}} = 1.182 \cdot in$

$A_s := \frac{M_n}{f_y \cdot \left(d - \frac{a}{2}\right)} = 25.37 \cdot in^2$

$\rho := \frac{A_s}{b_{eff} d} = 0.04857 \cdot in$

Required Reinforcement for Temperature and Shrinkage:

$$\rho_{sh} := \begin{cases} .0018 & \text{if } f_y \geq 60000 \cdot psi \\ .0020 & \text{otherwise} \end{cases} = 0.0018$$ (ACI-2008 7.12.2.1)

Check Bottom Bars:

$$As := if\left(\rho \geq \rho_{sh}, A_s, \rho_{sh} \cdot \frac{b_{eff}}{2} \cdot d\right) = 25.4 \cdot in^2$$

$$As_{prov} := A_{bbot} \cdot NB_{bot} = 95 \cdot in^2$$

$$Pad\_Reinforcement\_Bot := if\left(As_{prov} > As, "Okay", "No\ Good"\right)$$

Pad_Reinforcement_Bot = "Okay"

Check top Bars:

$$As := if\left(\rho \geq \rho_{sh}, A_s, \rho_{sh} \cdot \frac{b_{eff}}{2} \cdot d\right) = 25.4 \cdot in^2$$

$$As_{prov} := A_{btop} \cdot NB_{top} = 95 \cdot in^2$$

$$Pad\_Reinforcement\_Top := if\left(As_{prov} > As, "Okay", "No\ Good"\right)$$

Pad_Reinforcement_Top = "Okay"

Developement Length Pad Reinforcement:

Bar Spacing =

$$B_{sPad} := \frac{W_f - 2 \cdot Cvr_{pad} - NB_{bot} \cdot d_{bbot}}{NB_{bot} - 1} = 6.01 \cdot in$$

Spacing or Cover Dimension =

$$c := if\left(Cvr_{pad} < \frac{B_{sPad}}{2}, Cvr_{pad}, \frac{B_{sPad}}{2}\right) = 3 \cdot in$$

Transverse Reinforcement Index =

$$k_{tr} := 0$$ (ACI-2008 12.2.3)

$$L_{dbt} := \frac{3 \cdot f_y \alpha_{pad} \cdot \beta_{pad} \cdot \gamma_{pad} \cdot \lambda_{pad}}{40 \cdot \sqrt{f_c \cdot psi} \cdot \frac{c + k_{tr}}{d_{bbot}}} \cdot d_{bbot} = 36.1 \cdot in$$

Minimum Development Length =

$$L_{dbmin} := 12 \cdot in$$ (ACI-2008 12.2.1)

$$L_{dbtCheck} := if\left(L_{dbt} \geq L_{dbmin}, "Use\ L.dbt", "Use\ L.dbmin"\right) = "Use\ L.dbt"$$

Available Length in Pad =

$$L_{Pad} := \frac{W_f}{2} - \frac{W_t}{2} - Cvr_{pad} = 48 \cdot in$$

$$Lpad\_Check := if\left(L_{Pad} > L_{dbt}, "Okay", "No\ Good"\right)$$

Lpad_Check = "Okay"

Steel Reinforcement in Pier:

Area of Pier =

$$A_p := \frac{\pi \cdot d_p^2}{4} = 4071.5 \cdot in^2$$

$$A_{smin} := 0.01 \cdot 0.5 \cdot A_p = 20.36 \cdot in^2$$ (ACI-2008 10.8.4 & 10.9.1)

$$A_{sprov} := NB_{pier} \cdot A_{bpier} = 20.44 \cdot in^2$$

$$Steel\_Area\_Check := if(A_{sprov} > A_{smin}, "Okay", "No Good")$$

Steel_Area_Check = "Okay"

Bar Spacing In Pier =

$$B_{sPier} := \frac{d_p \cdot \pi}{NB_{pier}} - d_{bpier} = 5.778 \cdot in$$

Diameter of Reinforcement Cage =

$$Diam_{cage} := d_p - 2 \cdot Cvr_{pier} = 66 \cdot in$$

Maximum Moment in Pier =

$$M_p := S_t(L_p) \cdot LF = 9372 \cdot in \cdot kips$$

Pier Check evaluated from outside program and results are listed below;

$$(D\ N\ n\ P_u\ M_{xu}) := \left(d_p \cdot 12\ \ NB_{pier}\ \ BS_{pier}\ \ \frac{C_t \cdot 1.333}{kips}\ \ \frac{M_p}{in \cdot kips}\right)$$

$$(D\ N\ n\ P_u\ M_{xu}) = (72\ \ 34\ \ 7\ \ 681.163\ \ 9.372 \times 10^3)$$

$$(\phi P_n\ \ \phi M_{xn}\ \ f_{sp}\ \ \rho) := (0\ \ 0\ \ 0\ \ 0)$$

$$(\phi P_n\ \ \phi M_{xn}\ \ f_{sp}\ \ \rho) := \phi P'_n(D, N, n, P_u, M_{xu})^T$$

$$(\phi P_n\ \ \phi M_{xn}\ \ f_{sp}\ \ \rho) = (4.739 \times 10^3\ \ 6.521 \times 10^4\ \ -49.799\ \ 5.01 \times 10^{-3})$$

$$Axial\_Load\_Check := if(\phi P_n \geq P_u, "Okay", "No Good")$$

Axial_Load_Check = "Okay"

$$Bending\_Check := if(\phi M_{xn} \geq M_{xu}, "Okay", "No Good")$$

Bending_Check = "Okay"

Development Length Pier Reinforcement:

Available Length in Foundation:

$L_{pier} := L_p - Cvr_{pier} = 63 \cdot in$

$L_{pad} := T_f - Cvr_{pad} = 15 \cdot in$

Tension: (ACI-2008 12.2.3)

Spacing or Cover Dimension =

$c := if\left(Cvr_{pier} < \frac{B_{sPier}}{2}, Cvr_{pier}, \frac{B_{sPier}}{2}\right) = 2.889 \cdot in$

Transverse Reinforcement = (ACI-2008 12.2.3)

$k_{tr} := 0$

$L_{dbt} := \frac{3 \cdot f_y \cdot \alpha_{pier} \cdot \beta_{pier} \cdot \gamma_{pier} \cdot \lambda_{pier}}{40 \cdot \sqrt{f_c \cdot psi} \cdot \left(\frac{c + k_{tr}}{d_{bpier}}\right)} \cdot d_{bpier} = 17.78 \cdot in$

Minimum Development Length = (ACI 12.2.1)

$L_{dh} := \frac{1200 \cdot d_{bpier}}{\sqrt{\frac{f_c}{psi}}} \cdot .7 = 10.957 \cdot in$

Pier reinforcement bars are standard 90 degree hooks and therefore developement in the pad is computed as follows:

$L_{db} := \max\left(L_{dbt}, L_{dbmin}\right) = 17.778 \cdot in$

$L_{tension\_Check} := if\left(L_{pier} + L_{pad} > L_{dbt}, "Okay", "No Good"\right)$

$L_{tension\_Check} = "Okay"$

Compression: (ACI-2008 12.3.2)

$L_{dbc1} := \frac{.02 \cdot d_{bpier} \cdot f_y}{\sqrt{f_c \cdot psi}} = 15.652 \cdot in$

$L_{dbmin} := 0.0003 \cdot \frac{in^2}{lb} \cdot \left(d_{bpier} \cdot f_y\right) = 15.75 \cdot in$

$L_{dbc} := if\left(L_{dbc1} \geq L_{dbmin}, L_{dbc1}, L_{dbmin}\right) = 15.75 \cdot in$

$L_{compression\_Check} := if\left(L_{pier} + L_{pad} > L_{dbc}, "Okay", "No Good"\right)$

$L_{compression\_Check} = "Okay"$

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

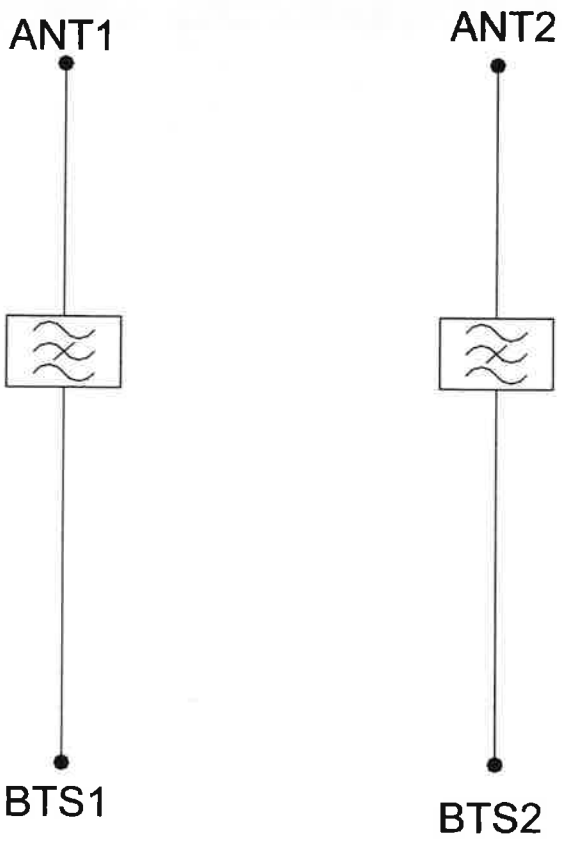
BAND NAME	700 PATH / 850 UPLINK PATH	850 DOWNLINK PATH
Passband	698 - 849MHz	869 - 891.5MHz
Insertion loss	0.1dB typical / 0.3dB maximum	0.5dB typical, 1.45dB maximum
Return loss	24dB typical, 18dB minimum	
Maximum input power (Per Port)	100W average	200W average and 66W per 5MHz
Rejection	53dB minimum @ 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

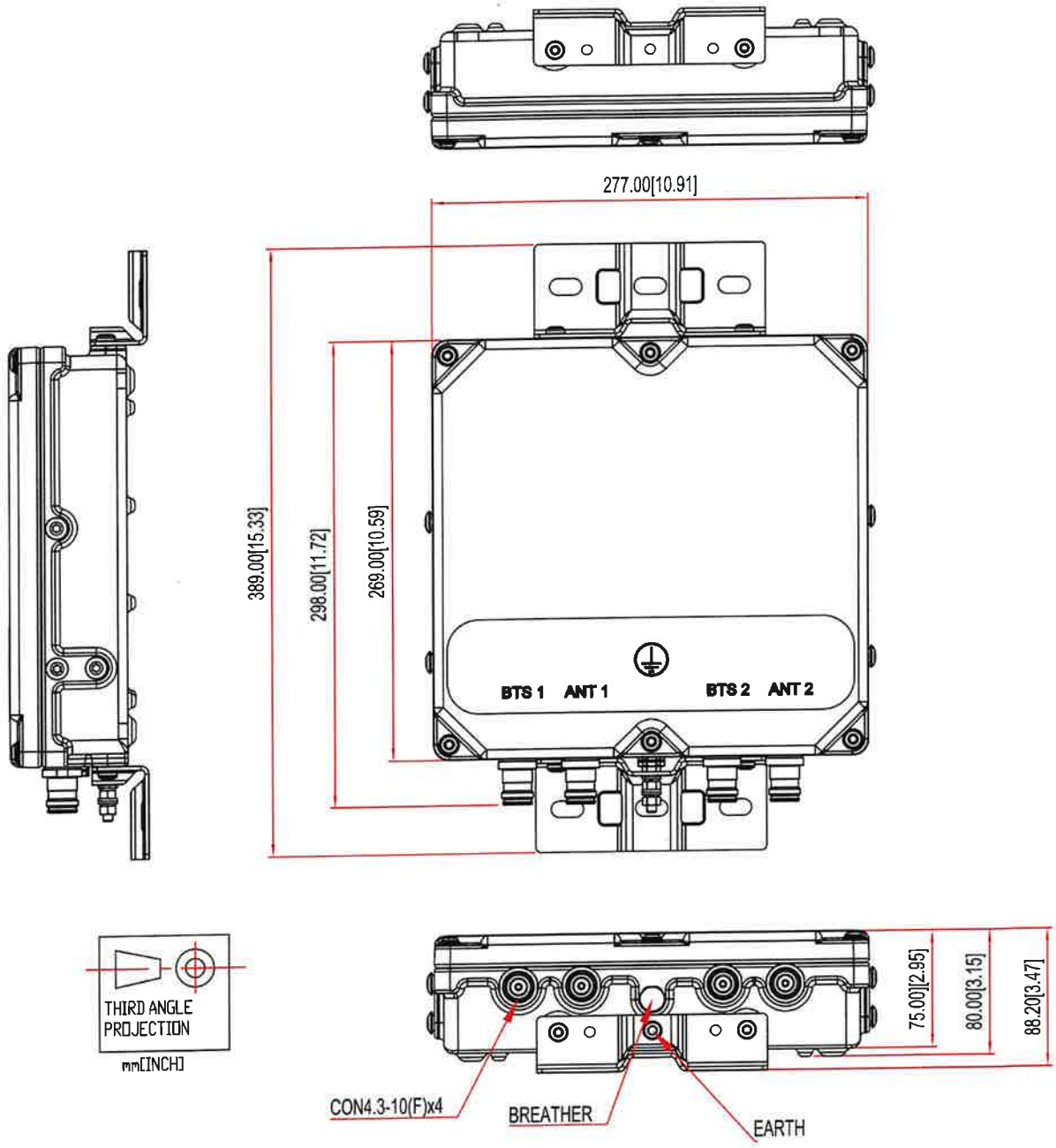
PART NUMBER	CONFIGURATION	OPTIONAL FEATURES	CONNECTORS
BSF0020F3V1	TWIN, 2 in / 2 out	DC/AISG PASS NO BRACKET	4.3-10 (F)
BSF0020F3V1-1	TWIN, 2 in / 2 out	DC/AISG PASS	4.3-10 (F)
BSF0020F3V1-2	QUAD, 4 in / 4 out	DC/AISG PASS	4.3-10 (F)

Contact Us: +1 303 768 8080 | +61 (0) 7 3907 1200 | www.kaelus.com

ELECTRICAL BLOCK DIAGRAM



MECHANICAL BLOCK DIAGRAM



Contact Us: +1 303 768 8080 | +61 (0) 7 3907 1200 | www.kaelus.com

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 ReAnalysis

SMART Tool Project #: 10207612
Colliers Engineering & Design CT. P.C. Project #: 23777186

July 24, 2023

Site Information	*Site ID:*	*5000104103-VZW / TARIFFVILLE CT RELO - Talcott Mtn*
	Site Name:	*TARIFFVILLE CT RELO - Talcott Mtn*
	Carrier Name:	*Verizon Wireless*
	Address:	*Talcott Mtn* *Bloomfield, Connecticut 06002* *Hartford County*
	Latitude:	*41.892840°*
	Longitude:	*-72.765505°*
Structure Information	*Tower Type:*	*Self Support*
	Mount Type:	*13.00-Ft Sector Frame*

FUZE ID # 17123895

Analysis Results

Platform: **72.8% 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: Selene Chen

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
Radio Frequency Data Sheet (RFDS)	*Verizon RFDS, Site ID: 1702601, dated January 15, 2021*
Mount Mapping Report	*RKS Design & Engineering, LLC, Site ID: VZW: 470975, dated April 14, 2021*
Previous Mount Analysis Report	*Maser Consulting Connecticut, Project #: 21777054, dated May 28, 2021*
Previous Mount Modification Drawings	*Maser Consulting Connecticut, Project #: 21777054, dated May 28, 2021*
Approved Modification Change	*Email correspondence with Nova Crevier dated October 11, 2022*
Filter Added Scope	*Provided by Verizon Wireless*

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:	1.50 in
	Risk Category:	II
	Exposure Category:	B
	Topographic Category:	1
	Topographic Feature Considered:	N/A
	Topographic Method:	N/A
	Ground Elevation Factor, K_e:	0.985
Seismic Parameters:	S_S:	0.182 g
	S_1:	0.055 g
Maintenance Parameters:	Wind Speed (3-sec. Gust):	30 mph
	Maintenance Load, Lv:	250 lbs.
	Maintenance Load, Lm:	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
154.50	155.00	6	Commscope	NHH-65B-R2B	Retained
		3	Samsung	MT6407-77A	
		3	Samsung	B2/B66A RRH-BR049	
		3	Samsung	B5/B13 RRH-BR04C	
		1	Raycap	RVZDC-6627-PF-48	
		3	Commscope	LNX-6514DS-A1M	
		6	KAelus	KA-6030	Added

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 CT. P.C. 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 CT. P.C. 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 CT. P.C. 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:
   - Channel, Solid Round, Angle, Plate — ASTM A36 (Gr. 36)
   - HSS (Rectangular) — ASTM 500 (Gr. B-46)
   - Pipe — ASTM A53 (Gr. B-35)
   - Threaded Rod — F1554 (Gr. 36)
   - 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 CT. P.C..

Analysis Results:

Component	Utilization %	Pass/Fail
Face Horizontal	*41.7 %*	*Pass*
Antenna Pipe	*46.6 %*	*Pass*
Tower Connection Plate	*48.0 %*	*Pass*
Standoff Plate 1	*26.5 %*	*Pass*
Standoff Horizontal	*28.4 %*	*Pass*
Standoff Plate 2	*47.0 %*	*Pass*
Inner Bracing	*18.4 %*	*Pass*
Mast Pipe	*20.9 %*	*Pass*
New Mount Pipe	*11.2 %*	*Pass*
Tie Back Support	*72.8 %*	*Pass*
Tie Back Vertical Support	*39.4 %*	*Pass*
Connection Check	*27.3 %*	*Pass*

Structure Rating – *(Controlling Utilization of all Components)*	**72.8%**

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	27.3	18.0	35.7	26.4
0.5	33.1	35.4	52.5	39.5
1	43.3	46.1	68.2	51.5

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

Contractor shall verify modifications detailed in Construction Drawings by Maser Consulting Connecticut dated June 30, 2021 with approved modifications changed via email dated October 11, 2022 have been installed prior to installation of equipment. **Escalate any discrepancies to EOR immediately as it may render the results of this analysis invalid and require additional modifications.**

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

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MDG #: 5000104103 SMART Project #: 10207612 Fuze Project ID: 17123895

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 verify modifications detailed in Construction Drawings by Maser Consulting Connecticut dated June 30, 2021 with approved modifications changed via email dated October 11, 2022 have been installed prior to installation of equipment. **Escalate any discrepancies to EOR immediately as it may render the results of this analysis invalid and require additional modifications**.

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:	

Structure: 5000104103-VZW - TARIFFVILLE CT RELO - Talcott Mtn

Sector: A

Structure Type: Self Support

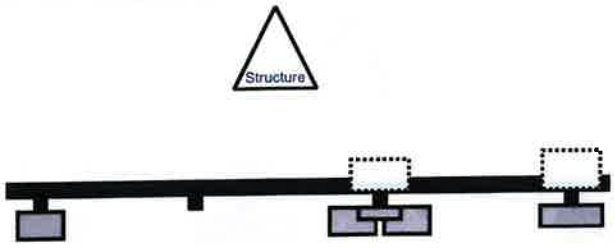
Mount Elev: 154.50

10207612

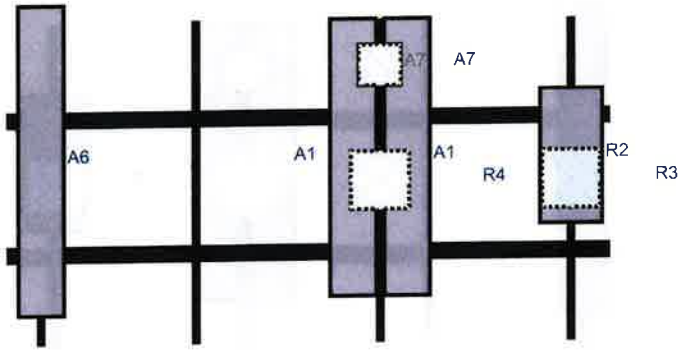
7/24/2023

Colliers Engineering & Design

Plan View



Front View - Looking at Structure

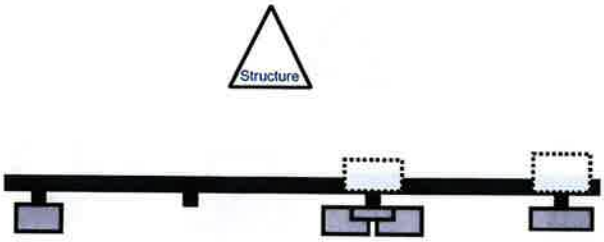


4 3 2 1

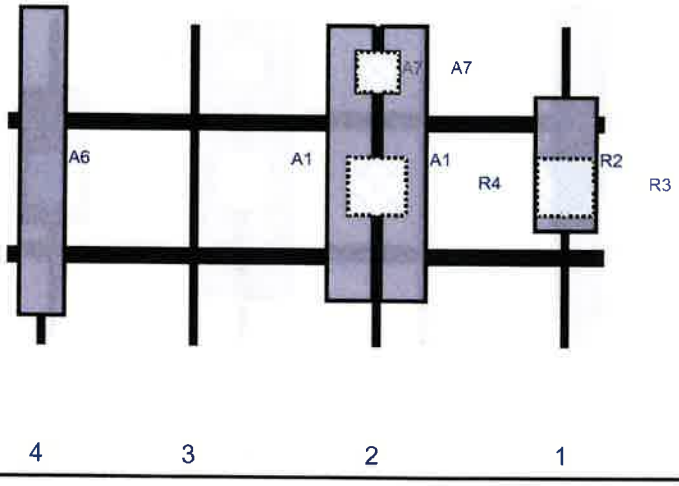
Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
R2	MT6407-77A	35.1	16.1	146	1	a	Front	36	0	Retained	
R3	B2/B66A RRH-BR049	15	15	146	1	a	Behind	42	0	Retained	
A1	NHH-65B-R2B	72	11.9	96.5	2	a	Front	36	7	Retained	
A1	NHH-65B-R2B	72	11.9	96.5	2	b	Front	36	-7	Retained	
R4	B5/B13 RRH-BR04C	15	15	96.5	2	a	Behind	42	0	Retained	
A7	KA-6030	10.6	10.9	96.5	2	a	Front	12	0	Added	
A7	KA-6030	10.6	10.9	96.5	2	b	Behind	12	0	Added	
A6	LNX-6514DS-A1M	80.6	11.9	9	4	a	Front	36	0	Retained	04/14/2021
M29	RVZDC-6627-PF-48	28.9	15.7		Member					Retained	

Colliers Engineering & Design

Plan View



Front View - Looking at Structure



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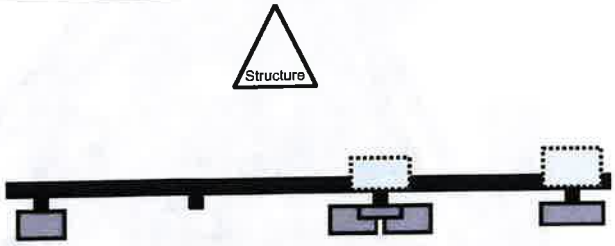
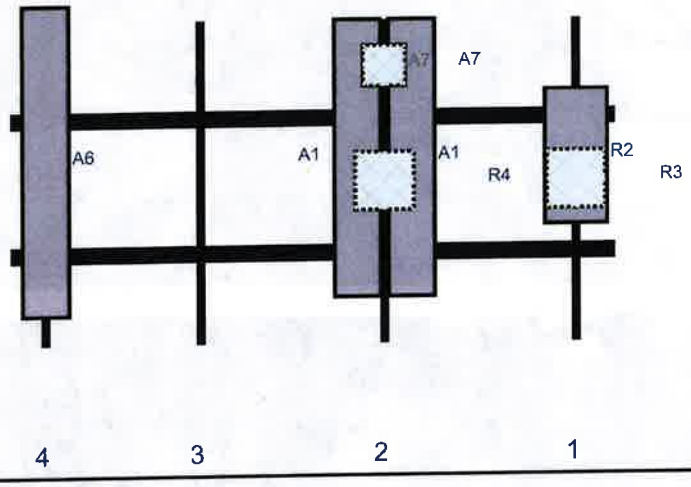
R4	B5/B13 RRH-BR04C	15	15	96.5	2	a	Behind	42	0	Retained	
A7	KA-6030	10.6	10.9	96.5	2	a	Front	12	0	Added	
A7	KA-6030	10.6	10.9	96.5	2	b	Behind	12	0	Added	
A6	LNX-6514DS-A1M	80.6	11.9	9	4	a	Front	36	0	Retained	04/14/2021

Colliers Engineering & Design

Plan View



Front View - Looking at Structure



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A7	KA-6030	10.6	10.9	96.5	2	b	Behind	12	0	Added	
A6	LNX-6514DS-A1M	80.6	11.9	9	4	a	Front	36	0	Retained	04/14/2021


04/14/2021 14:20


04/14/2021 14:58

v4.0 Updated on 2-11-2021

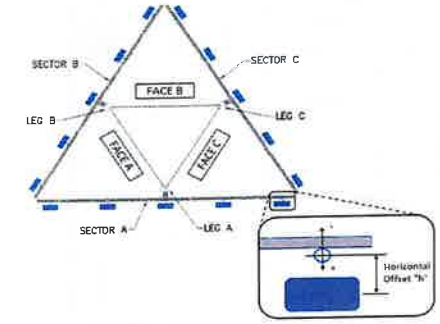
PAUL J. FORD & COMPANY

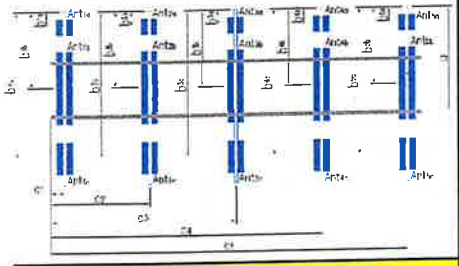
Antenna Mount Mapping Form (PATENT PENDING)

FCC # 1295813

Tower Owner:	UNKNOWN	Mapping Date:	4/14/2021
Site Name:	VZW:TARIFFVILLE CT RELO - Talcott Mtn	Tower Type:	Self Support
Site Number or ID:	VZW:470975	Tower Height (Ft.):	UNKNOWN
Mapping Contractor:	RKS Design & Engineering, LLC	Mount Elevation (Ft.):	149.5

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





Antenna Layout (Looking Out From Tower)

Mount Pipe Configuration and Geometries [Unit = Inches]

Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "d"	Horizontal Offset "C1, C2, C3, etc."	Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "d"	Horizontal Offset "C1, C2, C3, etc."
A1	Pipe 2.375"Ø X 0.15" X 84" Long	60.50	10.00	C1	Pipe 2.375"Ø X 0.15" X 84" Long	60.50	10.00
A2	Pipe 2.375"Ø X 0.15" X 84" Long	59.50	59.50	C2	Pipe 2.375"Ø X 0.15" X 84" Long	59.50	59.50
A3	Pipe 2.375"Ø X 0.15" X 84" Long	59.50	107.00	C3	Pipe 2.375"Ø X 0.15" X 84" Long	59.50	107.00
A4	Pipe 2.375"Ø X 0.15" X 84" Long	60.50	147.00	C4	Pipe 2.375"Ø X 0.15" X 84" Long	60.50	147.00
A5				C5			
A6				C6			
B1	Pipe 2.375"Ø X 0.15" X 84" Long	60.50	10.00	D1			
B2	Pipe 2.375"Ø X 0.15" X 84" Long	59.50	59.50	D2			
B3	Pipe 2.375"Ø X 0.15" X 84" Long	59.50	107.00	D3			
B4	Pipe 2.375"Ø X 0.15" X 84" Long	60.50	147.00	D4			
B5				D5			
B6				D6			

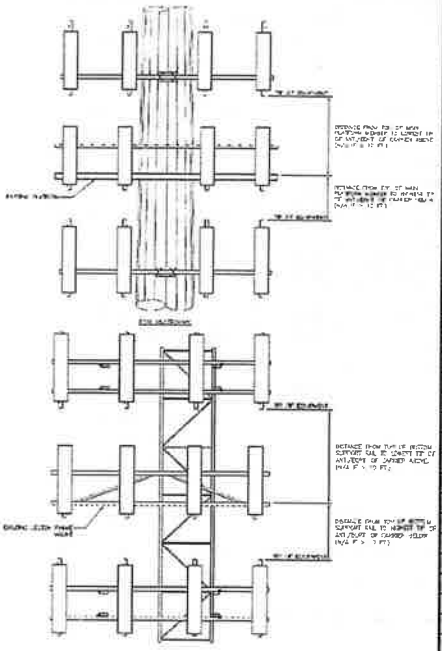
Distance between bottom rail and mount CL elevation (dim d). Unit is inches. See 'Mount Elev Ref' tab for details. :	17.50
Distance from top of bottom support rail to lowest tip of ant./eqpt. of Carrier above. (N/A if > 10 ft.) :	8
Distance from top of bottom support rail to highest tip of ant./eqpt. of Carrier below. (N/A if > 10 ft.) :	7
Please enter additional infomation or comments below.	
Tower Face Width at Mount Elev. (ft.):	
Tower Leg Size or Pole Shaft Diameter at Mount Elev. (in.):	6.625
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". Antenna Models if Known	Width (in.)	Depth (in.)	Height (in.)	Coax Size and Qty	Antenna Center-line (Ft.)	Mounting Locations [Units are inches and degrees] Vertical Distances"b_{1a}, b_{2a}, b_{3a}, b_{1b}..." (Inches)	Horiz. Offset "h" (Use "-" if Ant. Is behind)	Antenna Azimuth (Degrees)	Photos of antennas Photo Numbers
Sector A										
Ant_{1a}	9442 RRH2x40-AWS	10.60	6.70	24.40		149.333	45.00	-7.25		13,97
Ant_{1b}	HBXX-6517DS-A2M	12.00	6.50	75.00		150.333	33.00	8.25	40.00	13,97
Ant_{1c}										
Ant_{2a}	UNKNOWN RRU	17.00	10.00	16.50		149.521	41.75	-9.00		13,101
Ant_{2b}	LNX-6514DS-A1M	11.90	7.10	72.70		150.188	33.75	7.50	40.00	13,101
Ant_{2c}										
Ant_{3a}	B25 RRH 4x30	12.00	7.20	21.20		149.833	38.00	-7.50		13,103
Ant_{3b}	HBXX-6517DS-A2M	12.00	6.50	75.00		150.25	33.00	8.25	40.00	13,103
Ant_{3c}										
Ant_{4a}										
Ant_{4b}	LNX-6514DS-A1M	11.90	7.10	72.70		150.271	33.75	7.50	40.00	13,103
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										

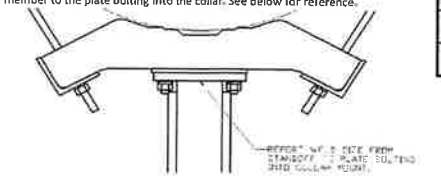
Mount Azimuth (Degree) for Each Sector				Tower Leg Azimuth (Degree) for Each Sector	
Sector A:	30.00	Deg	Leg A:	70.00	Deg
Sector B:	190.00	Deg	Leg B:	190.00	Deg
Sector C:	270.00	Deg	Leg C:	310.00	Deg
Sector D:		Deg	Leg D:		Deg

Climbing Facility Information			
Location:	190.00	Deg	On Leg B
Climbing Facility	Corrosion Type:		N/A
	Access:		Climbing path was unobstructed.
	Condition:		Good condition.

Please insert a photo of the mount centerline measurement here.



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.



Sector B										
Ant_{1a}	9442 RRH2x40-AWS	10.60	6.70	24.40		149.333	45.00	-7.25		20,109
Ant_{1b}	HBXX-6517DS-A2M	12.00	6.50	75.00		150.333	33.00	8.25	190.00	20,109
Ant_{1c}										
Ant_{2a}	UNKNOWN RRU	17.00	10.00	16.50		149.521	41.75	-9.00		20,109
Ant_{2b}	LNX-6514DS-A1M	11.90	7.10	72.70		150.188	33.75	7.50	190.00	20,109
Ant_{2c}										
Ant_{3a}	B25 RRH 4x30	12.00	7.20	21.20		149.833	38.00	-7.50		20,112
Ant_{3b}	HBXX-6517DS-A2M	12.00	6.50	75.00		150.25	33.00	8.25	190.00	20,112
Ant_{3c}										
Ant_{4a}										
Ant_{4b}	LNX-6514DS-A1M	11.90	7.10	72.70		150.271	33.75	7.50	190.00	20,113
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										
Sector C										
Ant_{1a}	9442 RRH2x40-AWS	10.60	6.70	24.40		149.333	45.00	-7.25		27,133
Ant_{1b}	HBXX-6517DS-A2M	12.00	6.50	75.00		150.333	33.00	8.25	280.00	27,133
Ant_{1c}										
Ant_{2a}	UNKNOWN RRU	17.00	10.00	16.50		149.521	41.75	-9.00		27,135
Ant_{2b}	LNX-6514DS-A1M	11.90	7.10	72.70		150.188	33.75	7.50	280.00	27,136
Ant_{2c}										
Ant_{3a}	B25 RRH 4x30	12.00	7.20	21.20		149.833	38.00	-7.50		27,138
Ant_{3b}	HBXX-6517DS-A2M	12.00	6.50	75.00		150.25	33.00	8.25	280.00	27,138
Ant_{3c}										
Ant_{4a}										
Ant_{4b}	LNX-6514DS-A1M	11.90	7.10	72.70		150.271	33.75	7.50	280.00	27,138
Ant_{4c}										
Ant_{5a}										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower	(2)UNKNOWN COVP	15.70	10.20	25.60						137
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										

Observed Safety and Structural Issues During the Mount Mapping		
Issue #	Description of Issue	Photo #
1	COAX TOTAL(8): (2)1.5"Ø HYBRID,(6)FH 1-5/8	51
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.

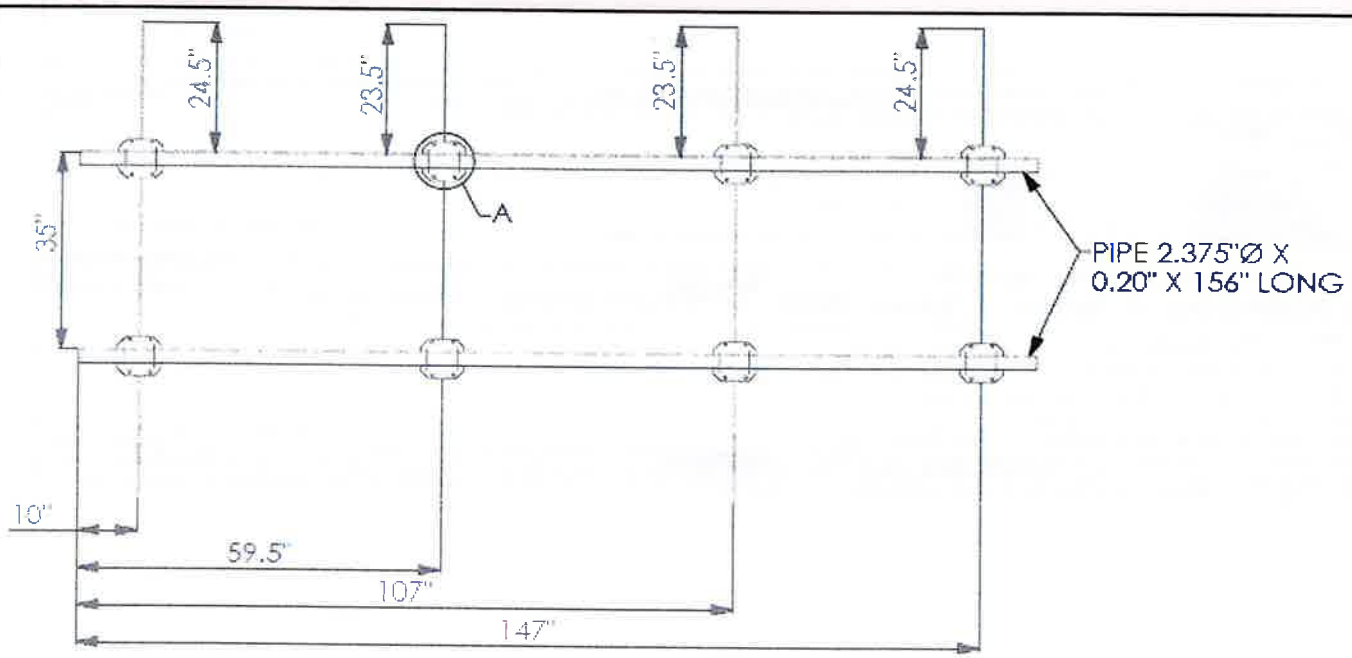
V4.0 Updated on 3-31-2021

PAUL J. FORD & COMPANY

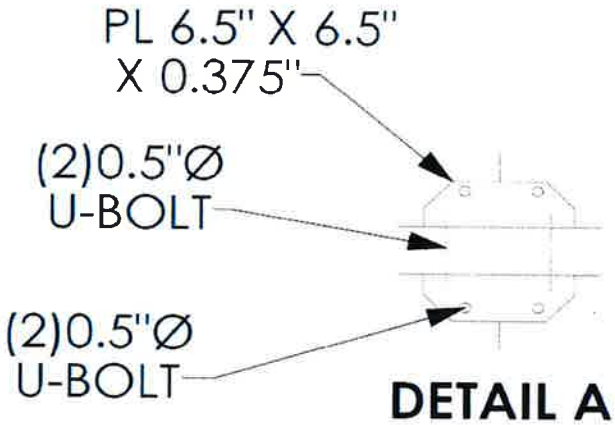
Antenna Mount Mapping Form (PATENT PENDING)

			FCC # 1295813
Tower Owner:	UNKNOWN	Mapping Date:	4/14/2021
Site Name:	VZW:TARIFFVILLE CT RELO - Talcott Mtn	Tower Type:	Self Support
Site Number or ID:	VZW:470975	Tower Height (Ft.):	UNKNOWN
Mapping Contractor:	RKS Design & Engineering, LLC	Mount Elevation (Ft.):	149.5

Please Insert Sketches of the Antenna Mount

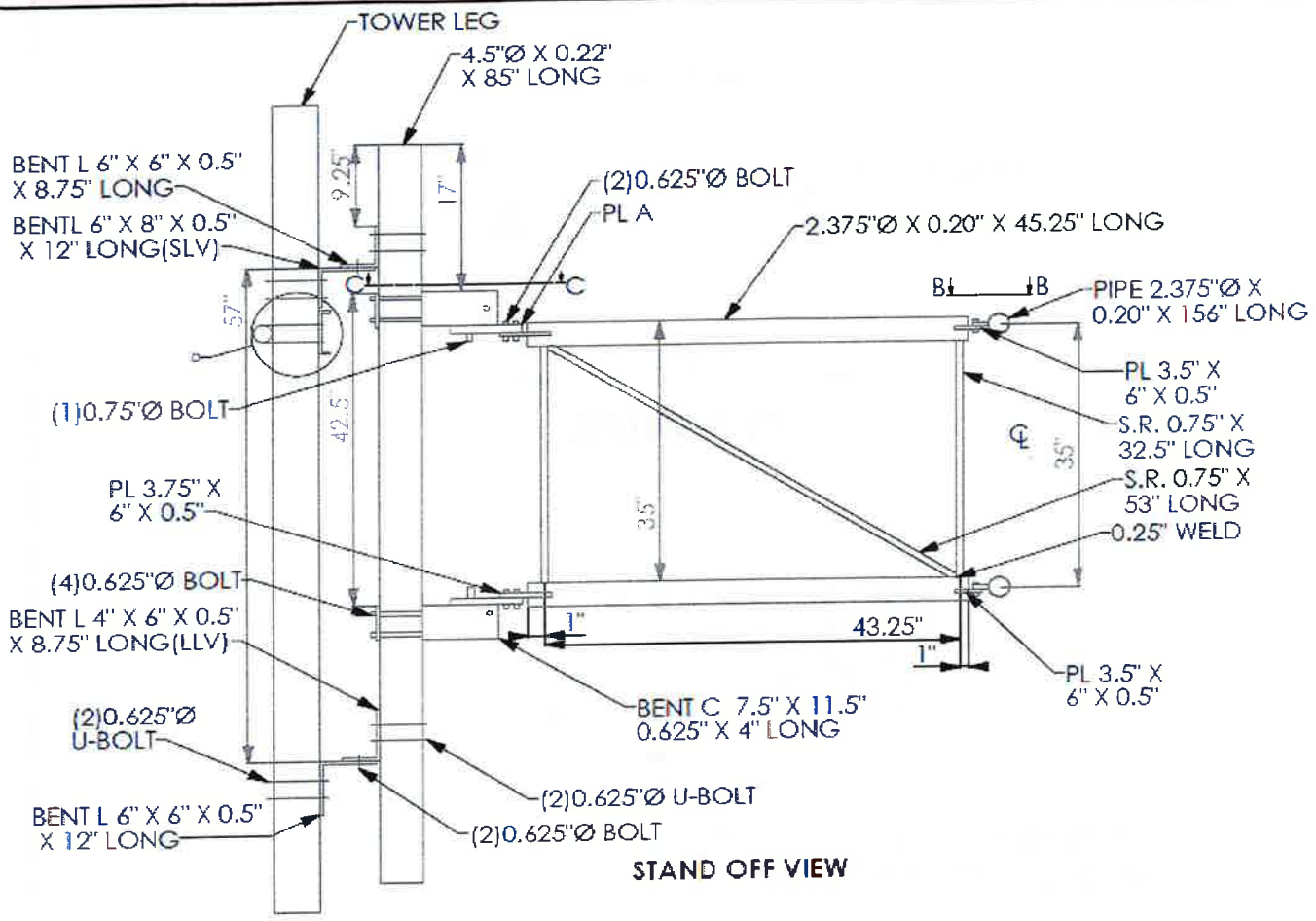


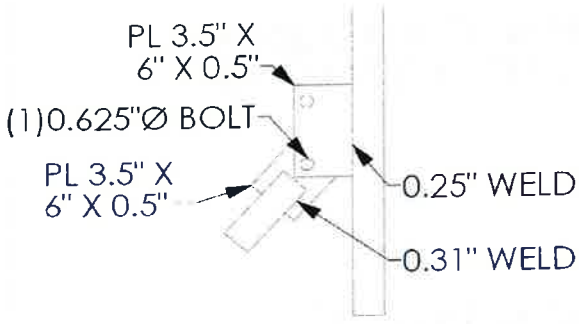
SECTOR A,B & C



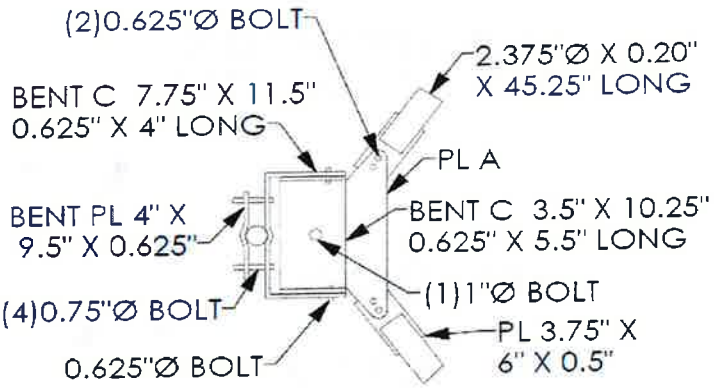
DETAIL A

Please Insert Sketches of the Antenna Mount, cont'd



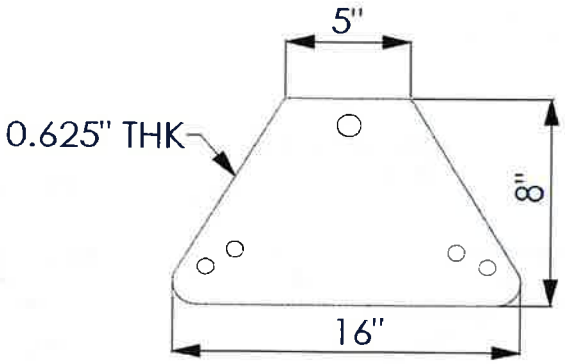


SECTION B-B

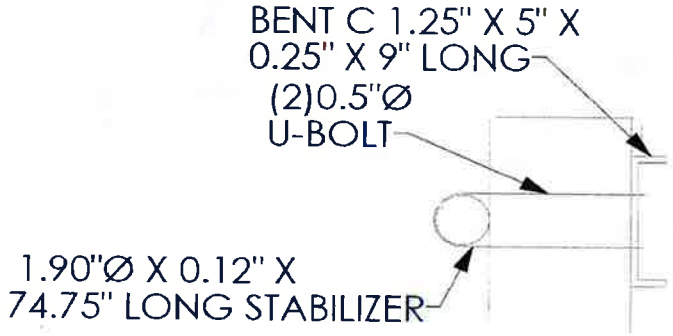


SECTION C-C

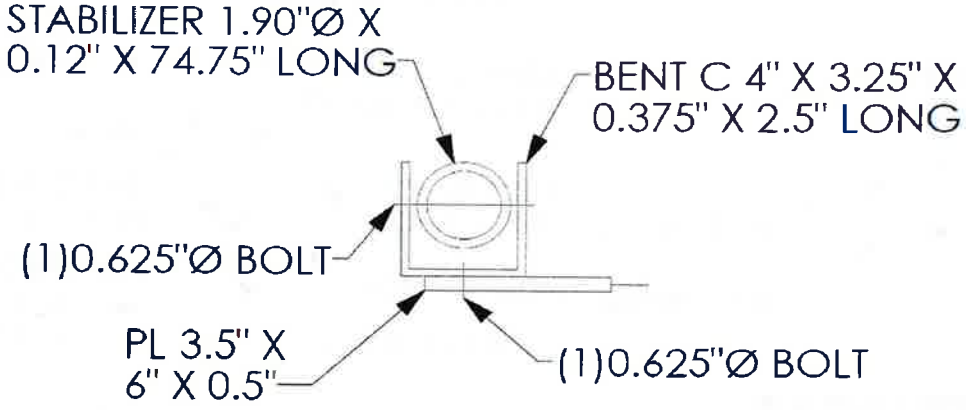
Please Insert Sketches of the Antenna Mount, cont'd



PL A DETAIL

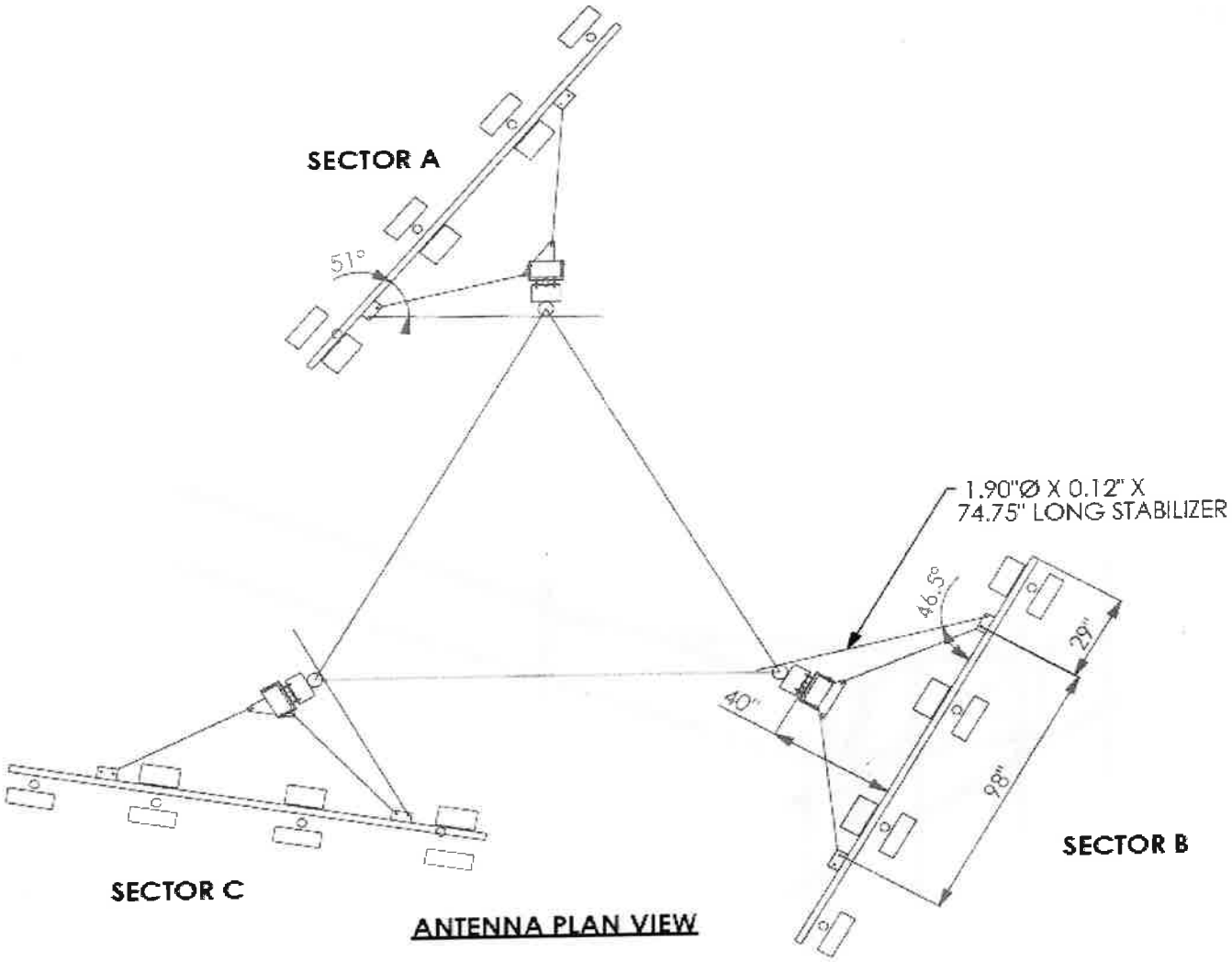


DETAIL D
STABILIZER CONNECTION
ON TOWER LEG

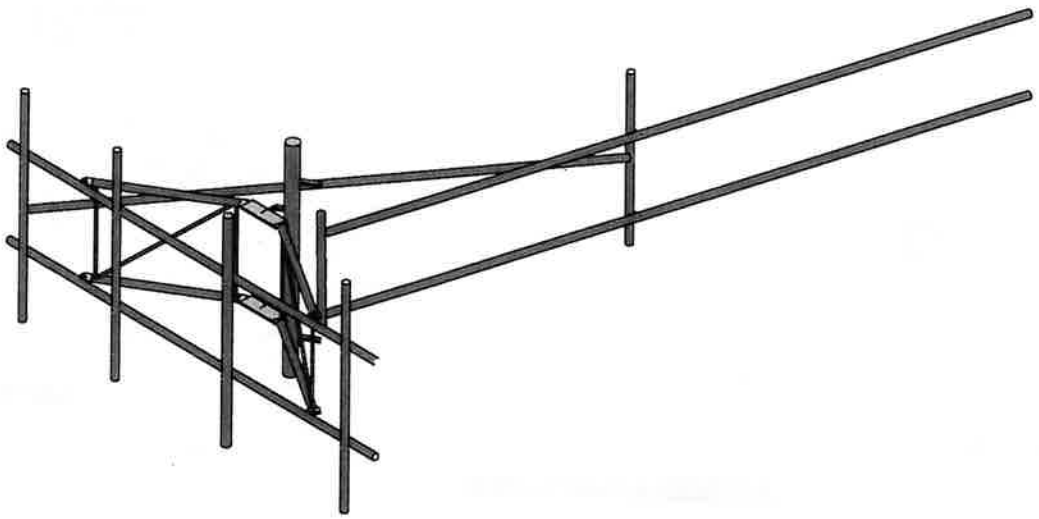


CONNECTION DETAIL
FROM STABILIZER TO MOUNT

Please Insert Sketches of the Antenna Mount, cont'd

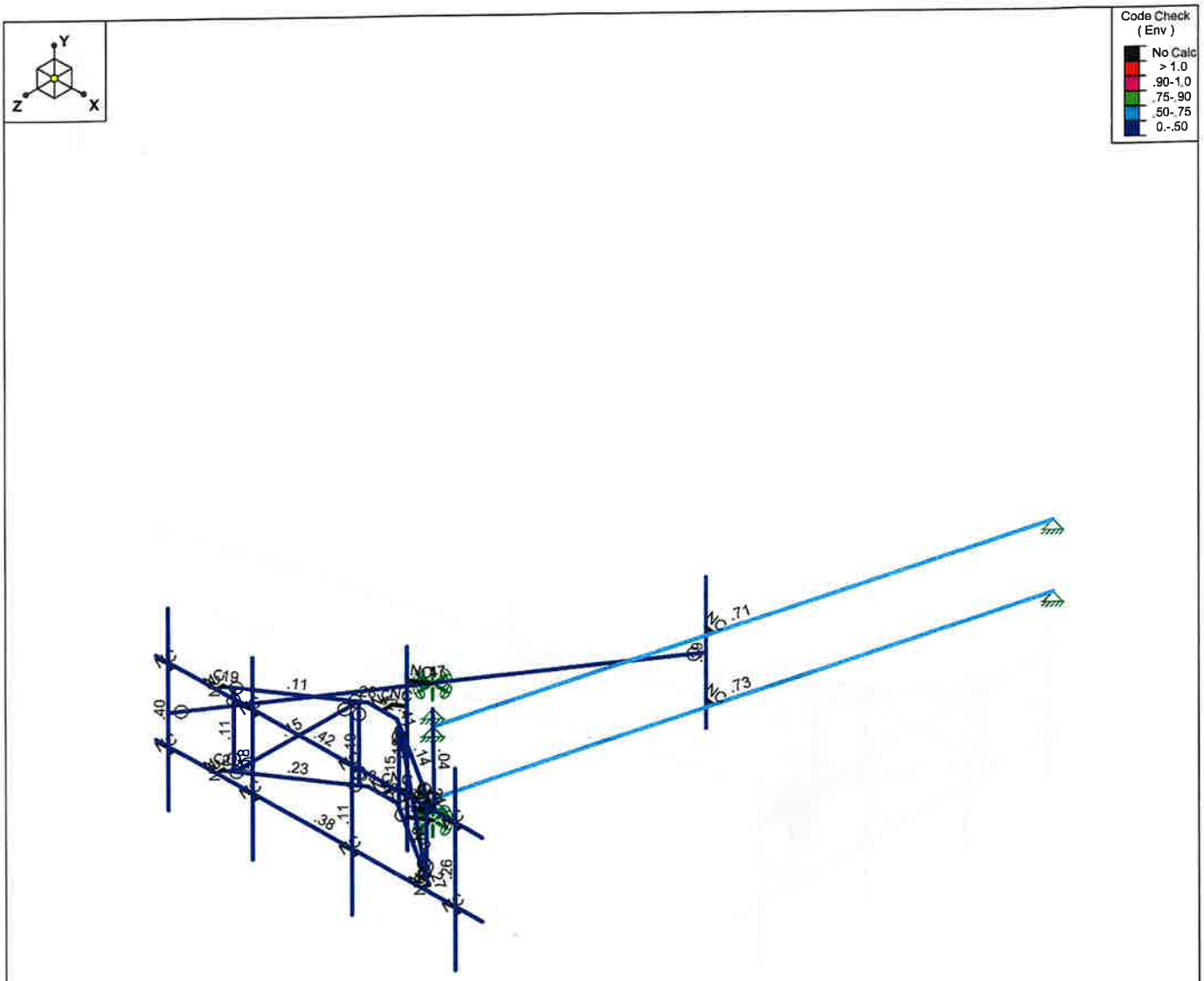


ANTENNA PLAN VIEW



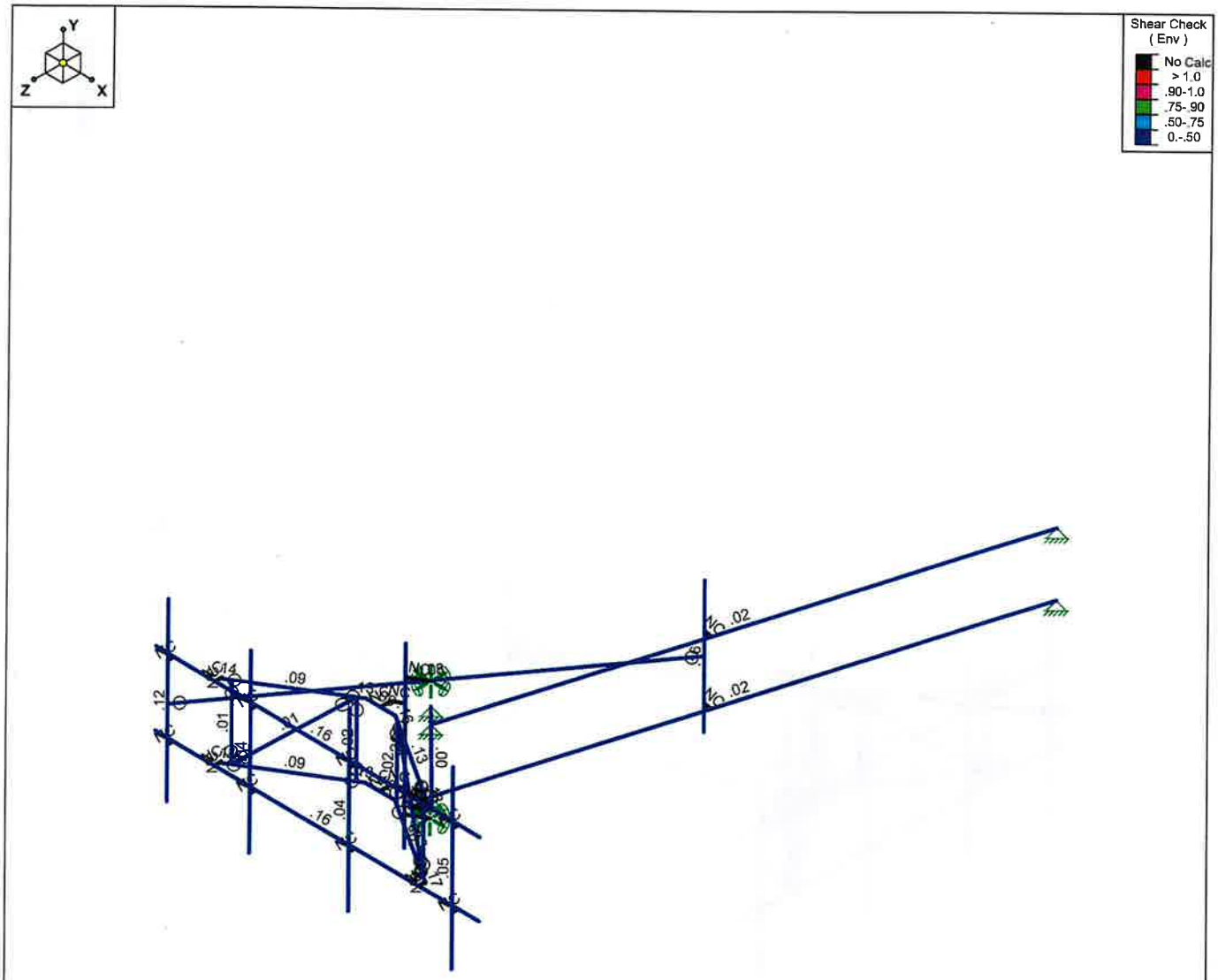
Envelope Only Solution

		SK - 1
		July 21, 2023 at 4:10 PM
		5000104103-VZW_MT_LOT_A_H....



Member Code Checks Displayed (Enveloped)
Envelope Only Solution

		SK - 2
		July 21, 2023 at 4:10 PM
		5000104103-VZW_MT_LOT_A_H....



Member Shear Checks Displayed (Enveloped)
Envelope Only Solution

		SK - 3
		July 21, 2023 at 4:10 PM
		5000104103-VZW_MT_LOT_A_H....

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(...
1	Antenna D	None					39			
2	Antenna Di	None					39			
3	Antenna Wo (0 Deg)	None					39			
4	Antenna Wo (30 Deg)	None					39			
5	Antenna Wo (60 Deg)	None					39			
6	Antenna Wo (90 Deg)	None					39			
7	Antenna Wo (120 Deg)	None					39			
8	Antenna Wo (150 Deg)	None					39			
9	Antenna Wo (180 Deg)	None					39			
10	Antenna Wo (210 Deg)	None					39			
11	Antenna Wo (240 Deg)	None					39			
12	Antenna Wo (270 Deg)	None					39			
13	Antenna Wo (300 Deg)	None					39			
14	Antenna Wo (330 Deg)	None					39			
15	Antenna Wi (0 Deg)	None					39			
16	Antenna Wi (30 Deg)	None					39			
17	Antenna Wi (60 Deg)	None					39			
18	Antenna Wi (90 Deg)	None					39			
19	Antenna Wi (120 Deg)	None					39			
20	Antenna Wi (150 Deg)	None					39			
21	Antenna Wi (180 Deg)	None					39			
22	Antenna Wi (210 Deg)	None					39			
23	Antenna Wi (240 Deg)	None					39			
24	Antenna Wi (270 Deg)	None					39			
25	Antenna Wi (300 Deg)	None					39			
26	Antenna Wi (330 Deg)	None					39			
27	Antenna Wm (0 Deg)	None					39			
28	Antenna Wm (30 Deg)	None					39			
29	Antenna Wm (60 Deg)	None					39			
30	Antenna Wm (90 Deg)	None					39			
31	Antenna Wm (120 Deg)	None					39			
32	Antenna Wm (150 Deg)	None					39			
33	Antenna Wm (180 Deg)	None					39			
34	Antenna Wm (210 Deg)	None					39			
35	Antenna Wm (240 Deg)	None					39			
36	Antenna Wm (270 Deg)	None					39			
37	Antenna Wm (300 Deg)	None					39			
38	Antenna Wm (330 Deg)	None					39			
39	Structure D	None		-1						
40	Structure Di	None						32		
41	Structure Wo (0 Deg)	None						64		
42	Structure Wo (30 Deg)	None						64		
43	Structure Wo (60 Deg)	None						64		
44	Structure Wo (90 Deg)	None						64		
45	Structure Wo (120 Deg)	None						64		
46	Structure Wo (150 Deg)	None						64		
47	Structure Wo (180 Deg)	None						64		
48	Structure Wo (210 Deg)	None						64		
49	Structure Wo (240 Deg)	None						64		
50	Structure Wo (270 Deg)	None						64		
51	Structure Wo (300 Deg)	None						64		
52	Structure Wo (330 Deg)	None						64		
53	Structure Wi (0 Deg)	None						64		
54	Structure Wi (30 Deg)	None						64		
55	Structure Wi (60 Deg)	None						64		
56	Structure Wi (90 Deg)	None						64		
57	Structure Wi (120 Deg)	None						64		
58	Structure Wi (150 Deg)	None						64		

Basic Load Cases (Continued)

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(...
59	Structure Wi (180 Deg)	None						64		
60	Structure Wi (210 Deg)	None						64		
61	Structure Wi (240 Deg)	None						64		
62	Structure Wi (270 Deg)	None						64		
63	Structure Wi (300 Deg)	None						64		
64	Structure Wi (330 Deg)	None						64		
65	Structure Wm (0 Deg)	None						64		
66	Structure Wm (30 Deg)	None						64		
67	Structure Wm (60 Deg)	None						64		
68	Structure Wm (90 Deg)	None						64		
69	Structure Wm (120 Deg)	None						64		
70	Structure Wm (150 Deg)	None						64		
71	Structure Wm (180 Deg)	None						64		
72	Structure Wm (210 Deg)	None						64		
73	Structure Wm (240 Deg)	None						64		
74	Structure Wm (270 Deg)	None						64		
75	Structure Wm (300 Deg)	None						64		
76	Structure Wm (330 Deg)	None						64		
77	Lm1	None					1			
78	Lm2	None					1			
79	Lv1	None					1			
80	Lv2	None					1			
81	Antenna Ev	None					39			
82	Antenna Eh (0 Deg)	None					26			
83	Antenna Eh (90 Deg)	None					26			
84	Structure Ev	ELY		-.039						
85	Structure Eh (0 Deg)	ELZ			-.097					
86	Structure Eh (90 Deg)	ELX	.097							

Load Combinations

	Description	So...	P...	S...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...
1	1.2D+1.0Wo (0 Deg)	Yes	Y		1	1.2	39	1.2	3	1	41	1												
2	1.2D+1.0Wo (30 Deg)	Yes	Y		1	1.2	39	1.2	4	1	42	1												
3	1.2D+1.0Wo (60 Deg)	Yes	Y		1	1.2	39	1.2	5	1	43	1												
4	1.2D+1.0Wo (90 Deg)	Yes	Y		1	1.2	39	1.2	6	1	44	1												
5	1.2D+1.0Wo (120 Deg)	Yes	Y		1	1.2	39	1.2	7	1	45	1												
6	1.2D+1.0Wo (150 Deg)	Yes	Y		1	1.2	39	1.2	8	1	46	1												
7	1.2D+1.0Wo (180 Deg)	Yes	Y		1	1.2	39	1.2	9	1	47	1												
8	1.2D+1.0Wo (210 Deg)	Yes	Y		1	1.2	39	1.2	10	1	48	1												
9	1.2D+1.0Wo (240 Deg)	Yes	Y		1	1.2	39	1.2	11	1	49	1												
10	1.2D+1.0Wo (270 Deg)	Yes	Y		1	1.2	39	1.2	12	1	50	1												
11	1.2D+1.0Wo (300 Deg)	Yes	Y		1	1.2	39	1.2	13	1	51	1												
12	1.2D+1.0Wo (330 Deg)	Yes	Y		1	1.2	39	1.2	14	1	52	1												
13	1.2D + 1.0Di + 1.0Wi (...	Yes	Y		1	1.2	39	1.2	2	1	40	1	15	1	53	1								
14	1.2D + 1.0Di + 1.0Wi (...	Yes	Y		1	1.2	39	1.2	2	1	40	1	16	1	54	1								
15	1.2D + 1.0Di + 1.0Wi (...	Yes	Y		1	1.2	39	1.2	2	1	40	1	17	1	55	1								
16	1.2D + 1.0Di + 1.0Wi (...	Yes	Y		1	1.2	39	1.2	2	1	40	1	18	1	56	1								
17	1.2D + 1.0Di + 1.0Wi (...	Yes	Y		1	1.2	39	1.2	2	1	40	1	19	1	57	1								
18	1.2D + 1.0Di + 1.0Wi (...	Yes	Y		1	1.2	39	1.2	2	1	40	1	20	1	58	1								
19	1.2D + 1.0Di + 1.0Wi (...	Yes	Y		1	1.2	39	1.2	2	1	40	1	21	1	59	1								
20	1.2D + 1.0Di + 1.0Wi (...	Yes	Y		1	1.2	39	1.2	2	1	40	1	22	1	60	1								
21	1.2D + 1.0Di + 1.0Wi (...	Yes	Y		1	1.2	39	1.2	2	1	40	1	23	1	61	1								
22	1.2D + 1.0Di + 1.0Wi (...	Yes	Y		1	1.2	39	1.2	2	1	40	1	24	1	62	1								
23	1.2D + 1.0Di + 1.0Wi (...	Yes	Y		1	1.2	39	1.2	2	1	40	1	25	1	63	1								
24	1.2D + 1.0Di + 1.0Wi (...	Yes	Y		1	1.2	39	1.2	2	1	40	1	26	1	64	1								
25	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	27	1	65	1										
26	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	28	1	66	1										

Load Combinations (Continued)

	Description	So..	P...	S...	BLCFac..		BLCFac..		BLCFac..		BLCFac..		BLCFac..		BLCFac..		BLCFac..		BLCFac..		BLCFac..		BLCFac..	
27	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	29	1	67	1										
28	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	30	1	68	1										
29	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	31	1	69	1										
30	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	32	1	70	1										
31	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	33	1	71	1										
32	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	34	1	72	1										
33	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	35	1	73	1										
34	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	36	1	74	1										
35	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	37	1	75	1										
36	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	38	1	76	1										
37	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	27	1	65	1										
38	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	28	1	66	1										
39	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	29	1	67	1										
40	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	30	1	68	1										
41	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	31	1	69	1										
42	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	32	1	70	1										
43	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	33	1	71	1										
44	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	34	1	72	1										
45	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	35	1	73	1										
46	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	36	1	74	1										
47	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	37	1	75	1										
48	1.2D + 1.5Lm2 + 1.0...	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 + 1.0Eh ...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	1	83		ELZ	1	ELX					
53	1.2D + 1.0Ev + 1.0Eh ...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	.866	83	.5	ELZ	.866	ELX	.5				
54	1.2D + 1.0Ev + 1.0Eh ...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	.5	83	.866	ELZ	.5	ELX	.866				
55	1.2D + 1.0Ev + 1.0Eh ...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82		83	1	ELZ		ELX	1				
56	1.2D + 1.0Ev + 1.0Eh ...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-.5	83	.866	ELZ	-.5	ELX	.866				
57	1.2D + 1.0Ev + 1.0Eh ...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-.866	83	.5	ELZ	-.866	ELX	.5				
58	1.2D + 1.0Ev + 1.0Eh ...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-1	83		ELZ	-1	ELX					
59	1.2D + 1.0Ev + 1.0Eh ...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-.866	83	-.5	ELZ	-.866	ELX	-.5				
60	1.2D + 1.0Ev + 1.0Eh ...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	-.5	83	-.866	ELZ	-.5	ELX	-.866				
61	1.2D + 1.0Ev + 1.0Eh ...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82		83	-1	ELZ		ELX	-1				
62	1.2D + 1.0Ev + 1.0Eh ...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	.5	83	-.866	ELZ	.5	ELX	-.866				
63	1.2D + 1.0Ev + 1.0Eh ...	Yes	Y		1	1.2	39	1.2	81	1	ELY	1	82	.866	83	-.5	ELZ	.866	ELX	-.5				
64	0.9D - 1.0Ev + 1.0Eh (...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	1	83		ELZ	1	ELX					
65	0.9D - 1.0Ev + 1.0Eh (...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	.866	83	.5	ELZ	.866	ELX	.5				
66	0.9D - 1.0Ev + 1.0Eh (...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	.5	83	.866	ELZ	.5	ELX	.866				
67	0.9D - 1.0Ev + 1.0Eh (...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82		83	1	ELZ		ELX	1				
68	0.9D - 1.0Ev + 1.0Eh (...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-.5	83	.866	ELZ	-.5	ELX	.866				
69	0.9D - 1.0Ev + 1.0Eh (...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-.866	83	.5	ELZ	-.866	ELX	.5				
70	0.9D - 1.0Ev + 1.0Eh (...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-1	83		ELZ	-1	ELX					
71	0.9D - 1.0Ev + 1.0Eh (...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-.866	83	-.5	ELZ	-.866	ELX	-.5				
72	0.9D - 1.0Ev + 1.0Eh (...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	-.5	83	-.866	ELZ	-.5	ELX	-.866				
73	0.9D - 1.0Ev + 1.0Eh (...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82		83	-1	ELZ		ELX	-1				
74	0.9D - 1.0Ev + 1.0Eh (...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	.5	83	-.866	ELZ	.5	ELX	-.866				
75	0.9D - 1.0Ev + 1.0Eh (...	Yes	Y		1	.9	39	.9	81	-1	ELY	-1	82	.866	83	-.5	ELZ	.866	ELX	-.5				

Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	N2	-6.5	0.104167	3.395833	0	
2	N3	6.5	0.104167	3.395833	0	
3	N5	-6.5	3.020833	3.395833	0	
4	N6	6.5	3.020833	3.395833	0	
5	N11	5.666667	0.104167	3.395833	0	

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
6	N12	5.666667	3.020833	3.395833	0	
7	N19	5.666667	0.104167	3.645833	0	
8	N20	5.666667	3.020833	3.645833	0	
9	N25	5.666667	5.145833	3.645833	0	
10	N29	5.666667	-1.854167	3.645833	0	
11	N31	-4.083333	0.104167	3.395833	0	
12	N32	-4.083333	3.020833	3.395833	0	
13	N33	4.083333	0.104167	3.395833	0	
14	N34	4.083333	3.020833	3.395833	0	
15	N43	-4.083333	2.979167	3.11875	0	
16	N44	4.083333	2.979167	3.11875	0	
17	N45	-4.083333	0.0625	3.11875	0	
18	N46	4.083333	0.0625	3.11875	0	
19	N70A	-4.083333	0.104167	3.11875	0	
20	N71A	4.083333	0.104167	3.11875	0	
21	N72A	-4.083333	3.020833	3.11875	0	
22	N73	4.083333	3.020833	3.11875	0	
23	N51	-3.907938	2.979167	3.006326	0	
24	N53B	-3.907938	0.0625	3.006326	0	
25	N55A	3.907938	0.0625	3.006326	0	
26	N57A	3.907938	2.979167	3.006326	0	
27	N61	-3.83778	0.0625	2.961356	0	
28	N63	3.83778	2.979167	2.961356	0	
29	N65A	3.83778	0.0625	2.961356	0	
30	N75	-0.803441	2.979167	1.016412	0	
31	N77	-0.803441	0.0625	1.016412	0	
32	N79	0.803441	0.0625	1.016412	0	
33	N81	0.803441	2.979167	1.016412	0	
34	N80A	-3.83778	2.979167	2.961356	0	
35	N51A	-0.733283	2.979167	0.971442	0	
36	N53A	-0.733283	0.0625	0.971442	0	
37	N55	0.733283	0.0625	0.971442	0	
38	N57	0.733283	2.979167	0.971442	0	
39	N59	-0.592967	2.979167	0.881503	0	
40	N63A	0.592967	2.979167	0.881503	0	
41	N65	0.592967	0.0625	0.881503	0	
42	N57B	-0.592967	0.0625	0.881503	0	
43	N51B	0	2.979167	0.881503	0	
44	N52	0	0.0625	0.881503	0	
45	N47	0.360844	2.979167	0.256503	0	
46	N48	0.360844	0.0625	0.256503	0	
47	N49	0.360844	5.0625	0.256503	0	
48	N50	0.360844	-2.020833	0.256503	0	
49	N51C	0.360844	3.895833	0.256503	0	
50	N52A	0.360844	-0.854167	0.256503	0	
51	N53	1.010363	3.895833	-0.118497	0	
52	N54	1.010363	-0.854167	-0.118497	0	
53	N53C	1.541667	0.104167	3.395833	0	
54	N54A	1.541667	3.020833	3.395833	0	
55	N55B	1.541667	0.104167	3.645833	0	
56	N56	1.541667	3.020833	3.645833	0	
57	N57C	1.541667	5.0625	3.645833	0	
58	N58	1.541667	-1.9375	3.645833	0	
59	N59A	-2.416667	0.104167	3.395833	0	
60	N60	-2.416667	3.020833	3.395833	0	
61	N61A	-2.416667	0.104167	3.645833	0	
62	N62	-2.416667	3.020833	3.645833	0	
63	N63B	-2.416667	5.0625	3.645833	0	
64	N64	-2.416667	-1.9375	3.645833	0	

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
65	N65B	-5.75	0.104167	3.395833	0	
66	N66	-5.75	3.020833	3.395833	0	
67	N67	-5.75	0.104167	3.645833	0	
68	N68	-5.75	3.020833	3.645833	0	
69	N69	-5.75	5.145833	3.645833	0	
70	N70	-5.75	-1.854167	3.645833	0	
71	N71	4.583333	3.020833	3.395833	0	
72	N73A	0	2.979167	0.464836	0	
73	N74	0	0.0625	0.464836	0	
74	N77A	3.25	3.020833	3.395833	0	
75	N102	-5.75	2.020833	3.645833	0	
76	N103	-5.750033	1.520833	3.645833	0	
77	N79A	1.010363	3.020833	-0.118497	0	
78	N80	1.010363	2.395833	-0.118497	0	
79	N81B	1.010363	-0.104167	-0.118497	0	
80	N83	3.459524	2.395833	-8.825484	0	
81	N84	3.459524	-0.104167	-8.825484	0	
82	N85	3.114841	2.395833	-8.88626	0	
83	N86	3.114841	-0.104167	-8.88626	0	
84	N87	3.114841	-1.104167	-8.88626	0	
85	N88	3.114841	4.145833	-8.88626	0	
86	N89	3.114841	1.520833	-8.88626	0	
87	N90	6.452942	2.395833	-19.467356	0	
88	N91	6.452942	-0.104167	-19.467356	0	
89	TOWERLEG	20.488255	2.395833	-5.079515	0	

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design R...	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	Face Horizontals	PIPE 2.0	Beam	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
3	Standoff Horizontals	PIPE 2.0	Beam	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
4	Tie-back	PIPE 1.5	Beam	Pipe	A53 Gr. B	Typical	.749	.293	.293	.586
5	Inner Bracing	SR 0.75	Column	BAR	A36 Gr.36	Typical	.442	.016	.016	.031
6	Standoff Plate 1	PL1/2X3.5	Beam	RECT	A36 Gr.36	Typical	1.75	.036	1.786	.133
7	Standoff Plate 2	PL1/2x3.75	Beam	RECT	A36 Gr.36	Typical	1.781	.021	3.349	.079
8	Tower Connection ...	PL5/8X5	Beam	RECT	A36 Gr.36	Typical	3.125	.102	6.51	.375
9	Mast Pipe	PIPE 4.0	Column	Pipe	A53 Gr. B	Typical	2.96	6.82	6.82	13.6
10	V bracing	L2.5x2.5x4	Column	Single Angle	A36 Gr.36	Typical	1.19	.692	.692	.026
11	New Mount Pipe	PIPE 2.5	Column	Pipe	A53 Gr. B	Typical	1.61	1.45	1.45	2.89
12	Tie Back Support	PIPE 2.0	Column	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
13	Tie Back Vertical S...	PIPE 2.0	Column	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (/1...	Density[k/f...	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 50ksi	29000	11154	.3	.65	.49	50	1.5	60	1.2
3	A53 Gr. B	29000	11154	.3	.65	.49	35	1.5	60	1.2
4	A572 Gr.50	29000	11154	.3	.65	.49	50	1.1	65	1.1
5	A992	29000	11154	.3	.65	.49	50	1.1	65	1.1
6	A500 Gr. B 42	29000	11154	.3	.65	.49	42	1.4	58	1.3
7	A500 Gr. B 46	29000	11154	.3	.65	.49	46	1.4	58	1.3
8	A500 Gr.42	29000	11154	.3	.65	.49	42	1.4	58	1.3
9	A500 Gr.46	29000	11154	.3	.65	.49	46	1.4	58	1.3
10	A500 Gr. C	29000	11154	.3	.65	.49	50	1.5	62	1.2

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	M1	N2	N3			Face Horizont...	Beam	Pipe	A53 Gr. B	Typical
2	M2	N5	N6			Face Horizont...	Beam	Pipe	A53 Gr. B	Typical
3	M8	N12	N20			RIGID	None	None	RIGID	Typical
4	M9	N11	N19			RIGID	None	None	RIGID	Typical
5	MP1A	N25	N29			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
6	M18	N34	N73			RIGID	None	None	RIGID	Typical
7	M19	N33	N71A			RIGID	None	None	RIGID	Typical
8	M20	N32	N72A			RIGID	None	None	RIGID	Typical
9	M21	N31	N70A			RIGID	None	None	RIGID	Typical
10	M26	N63A	N59		90	Tower Connec..	Beam	RECT	A36 Gr.36	Typical
11	M27	N65	N57B		90	Tower Connec..	Beam	RECT	A36 Gr.36	Typical
12	M28	N44	N57A		90	Standoff Plate 1	Beam	RECT	A36 Gr.36	Typical
13	M29	N57A	N57			Standoff Horiz...	Beam	Pipe	A53 Gr. B	Typical
14	M30	N57	N63A		90	Standoff Plate 2	Beam	RECT	A36 Gr.36	Typical
15	M31	N55A	N55			Standoff Horiz...	Beam	Pipe	A53 Gr. B	Typical
16	M32	N46	N55A		90	Standoff Plate 1	Beam	RECT	A36 Gr.36	Typical
17	M33	N55	N65		90	Standoff Plate 2	Beam	RECT	A36 Gr.36	Typical
18	M34	N63	N65A			Inner Bracing	Column	BAR	A36 Gr.36	Typical
19	M35	N81	N79			Inner Bracing	Column	BAR	A36 Gr.36	Typical
20	M36	N81	N65A			Inner Bracing	Column	BAR	A36 Gr.36	Typical
21	M37	N43	N51		90	Standoff Plate 1	Beam	RECT	A36 Gr.36	Typical
22	M38	N51	N51A			Standoff Horiz..	Beam	Pipe	A53 Gr. B	Typical
23	M39	N51A	N59		90	Standoff Plate 2	Beam	RECT	A36 Gr.36	Typical
24	M41	N45	N53B		90	Standoff Plate 1	Beam	RECT	A36 Gr.36	Typical
25	M42	N53A	N57B		90	Standoff Plate 2	Beam	RECT	A36 Gr.36	Typical
26	M43	N80A	N61			Inner Bracing	Column	BAR	A36 Gr.36	Typical
27	M44	N75	N77			Inner Bracing	Column	BAR	A36 Gr.36	Typical
28	M45	N75	N61			Inner Bracing	Column	BAR	A36 Gr.36	Typical
29	M46	N72A	N43			RIGID	None	None	RIGID	Typical
30	M47	N73	N44			RIGID	None	None	RIGID	Typical
31	M48	N46	N71A			RIGID	None	None	RIGID	Typical
32	M49	N45	N70A			RIGID	None	None	RIGID	Typical
33	M39B	N53B	N53A			Standoff Horiz...	Beam	Pipe	A53 Gr. B	Typical
34	M35A	N51B	N73A			RIGID	None	None	RIGID	Typical
35	M36A	N52	N74			RIGID	None	None	RIGID	Typical
36	M37A	N49	N50			Mast Pipe	Column	Pipe	A53 Gr. B	Typical
37	M38A	N51C	N53			RIGID	None	None	RIGID	Typical
38	M39A	N52A	N54			RIGID	None	None	RIGID	Typical
39	M39C	N54A	N56			RIGID	None	None	RIGID	Typical
40	M40	N53C	N55B			RIGID	None	None	RIGID	Typical
41	MP2A	N57C	N58			New Mount Pipe	Column	Pipe	A53 Gr. B	Typical
42	M42A	N60	N62			RIGID	None	None	RIGID	Typical
43	M43A	N59A	N61A			RIGID	None	None	RIGID	Typical
44	MP3A	N63B	N64			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
45	M45A	N66	N68			RIGID	None	None	RIGID	Typical
46	M46A	N65B	N67			RIGID	None	None	RIGID	Typical
47	MP4A	N69	N70			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
48	M49A	N73A	N47			RIGID	None	None	RIGID	Typical
49	M50	N74	N48			RIGID	None	None	RIGID	Typical
50	M65	N103	N89			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
51	M51	N71	N79A			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
52	M52	N80	N90			Tie Back Supp..	Column	Pipe	A53 Gr. B	Typical
53	M53	N81B	N91			Tie Back Supp..	Column	Pipe	A53 Gr. B	Typical
54	M54	N84	N86			RIGID	None	None	RIGID	Typical
55	M55	N83	N85			RIGID	None	None	RIGID	Typical
56	M56	N88	N87			Tie Back Verti...	Column	Pipe	A53 Gr. B	Typical

Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
1	M1						Yes				None
2	M2						Yes	Default			None
3	M8						Yes	** NA **			None
4	M9						Yes	** NA **			None
5	MP1A						Yes	** NA **			None
6	M18						Yes	** NA **			None
7	M19						Yes	** NA **			None
8	M20						Yes	** NA **			None
9	M21						Yes	** NA **			None
10	M26						Yes	Default			None
11	M27						Yes				None
12	M28	BenPIN					Yes				None
13	M29						Yes				None
14	M30		OOOOOO				Yes	Default			None
15	M31						Yes				None
16	M32	BenPIN					Yes				None
17	M33		OOOOOO				Yes	Default			None
18	M34	BenPIN	BenPIN				Yes	** NA **			None
19	M35	BenPIN	BenPIN				Yes	** NA **			None
20	M36	BenPIN	BenPIN	1.3	1.3		Yes	** NA **			None
21	M37	BenPIN					Yes				None
22	M38						Yes				None
23	M39		OOOOOO				Yes	Default			None
24	M41	BenPIN					Yes				None
25	M42		OOOOOO				Yes	Default			None
26	M43	BenPIN	BenPIN				Yes	** NA **			None
27	M44	BenPIN	BenPIN				Yes	** NA **			None
28	M45	BenPIN	BenPIN	1.3	1.3		Yes	** NA **			None
29	M46						Yes	** NA **			None
30	M47						Yes	** NA **			None
31	M48						Yes	** NA **			None
32	M49						Yes	** NA **			None
33	M39B						Yes				None
34	M35A						Yes	** NA **			None
35	M36A						Yes	** NA **			None
36	M37A						Yes	** NA **			None
37	M38A						Yes	** NA **			None
38	M39A						Yes	** NA **			None
39	M39C						Yes	** NA **			None
40	M40						Yes	** NA **			None
41	MP2A						Yes	** NA **			None
42	M42A						Yes	** NA **			None
43	M43A						Yes	** NA **			None
44	MP3A						Yes	** NA **			None
45	M45A						Yes	** NA **			None
46	M46A						Yes	** NA **			None
47	MP4A						Yes	** NA **			None
48	M49A						Yes	** NA **			None
49	M50						Yes	** NA **			None
50	M65	BenPIN	BenPIN				Yes	** NA **			None
51	M51	BenPIN					Yes	** NA **			None
52	M52						Yes	** NA **			None
53	M53						Yes	** NA **			None
54	M54						Yes	** NA **			None
55	M55						Yes	** NA **			None
56	M56						Yes	** NA **			None

Member Point Loads (BLC 1 : Antenna D)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	Y	-17.6	1
2	MP2A	My	-.006	1
3	MP2A	Mz	0	1
4	MP2A	Y	-17.6	1
5	MP2A	My	.006	1
6	MP2A	Mz	0	1
7	MP2A	Y	-21.85	1
8	MP2A	My	-.011	1
9	MP2A	Mz	.013	1
10	MP2A	Y	-21.85	5
11	MP2A	My	-.011	5
12	MP2A	Mz	.013	5
13	MP2A	Y	-21.85	1
14	MP2A	My	-.011	1
15	MP2A	Mz	-.013	1
16	MP2A	Y	-21.85	5
17	MP2A	My	-.011	5
18	MP2A	Mz	-.013	5
19	MP1A	Y	-43.55	2
20	MP1A	My	-.022	2
21	MP1A	Mz	0	2
22	MP1A	Y	-43.55	4
23	MP1A	My	-.022	4
24	MP1A	Mz	0	4
25	MP1A	Y	-84.4	3.5
26	MP1A	My	.042	3.5
27	MP1A	Mz	0	3.5
28	MP2A	Y	-70.3	3.5
29	MP2A	My	.035	3.5
30	MP2A	Mz	0	3.5
31	M29	Y	-32	.5
32	M29	My	0	.5
33	M29	Mz	0	.5
34	MP4A	Y	-22.95	1
35	MP4A	My	-.011	1
36	MP4A	Mz	0	1
37	MP4A	Y	-22.95	5
38	MP4A	My	-.011	5
39	MP4A	Mz	0	5

Member Point Loads (BLC 2 : Antenna Di)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	Y	6.6	1
2	MP2A	My	.002	1
3	MP2A	Mz	0	1
4	MP2A	Y	6.6	1
5	MP2A	My	-.002	1
6	MP2A	Mz	0	1
7	MP2A	Y	-96.986	1
8	MP2A	My	-.048	1
9	MP2A	Mz	.057	1
10	MP2A	Y	-96.986	5
11	MP2A	My	-.048	5
12	MP2A	Mz	.057	5
13	MP2A	Y	-96.986	1
14	MP2A	My	-.048	1
15	MP2A	Mz	-.057	1

Member Point Loads (BLC 2 : Antenna Di) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
16	MP2A	Y	-96.986	5
17	MP2A	My	-.048	5
18	MP2A	Mz	-.057	5
19	MP1A	Y	-57.259	2
20	MP1A	My	-.029	2
21	MP1A	Mz	0	2
22	MP1A	Y	-57.259	4
23	MP1A	My	-.029	4
24	MP1A	Mz	0	4
25	MP1A	Y	-72.795	3.5
26	MP1A	My	.036	3.5
27	MP1A	Mz	0	3.5
28	MP2A	Y	-65.733	3.5
29	MP2A	My	.033	3.5
30	MP2A	Mz	0	3.5
31	M29	Y	-121.491	.5
32	M29	My	0	.5
33	M29	Mz	0	.5
34	MP4A	Y	-107.6	1
35	MP4A	My	-.054	1
36	MP4A	Mz	0	1
37	MP4A	Y	-107.6	5
38	MP4A	My	-.054	5
39	MP4A	Mz	0	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	1
2	MP2A	Z	-33.38	1
3	MP2A	Mx	0	1
4	MP2A	X	0	1
5	MP2A	Z	-33.38	1
6	MP2A	Mx	0	1
7	MP2A	X	0	1
8	MP2A	Z	-94.402	1
9	MP2A	Mx	-.055	1
10	MP2A	X	0	5
11	MP2A	Z	-94.402	5
12	MP2A	Mx	-.055	5
13	MP2A	X	0	1
14	MP2A	Z	-94.402	1
15	MP2A	Mx	.055	1
16	MP2A	X	0	5
17	MP2A	Z	-94.402	5
18	MP2A	Mx	.055	5
19	MP1A	X	0	2
20	MP1A	Z	-68.151	2
21	MP1A	Mx	0	2
22	MP1A	X	0	4
23	MP1A	Z	-68.151	4
24	MP1A	Mx	0	4
25	MP1A	X	0	3.5
26	MP1A	Z	-53.895	3.5
27	MP1A	Mx	0	3.5
28	MP2A	X	0	3.5
29	MP2A	Z	-53.895	3.5
30	MP2A	Mx	0	3.5
31	M29	X	0	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
32	M29	Z	-107.132	.5
33	M29	Mx	0	.5
34	MP4A	X	0	1
35	MP4A	Z	-160.467	1
36	MP4A	Mx	0	1
37	MP4A	X	0	5
38	MP4A	Z	-160.467	5
39	MP4A	Mx	0	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	13.783	1
2	MP2A	Z	-23.873	1
3	MP2A	Mx	-.005	1
4	MP2A	X	13.783	1
5	MP2A	Z	-23.873	1
6	MP2A	Mx	.005	1
7	MP2A	X	40.464	1
8	MP2A	Z	-70.086	1
9	MP2A	Mx	-.061	1
10	MP2A	X	40.464	5
11	MP2A	Z	-70.086	5
12	MP2A	Mx	-.061	5
13	MP2A	X	40.464	1
14	MP2A	Z	-70.086	1
15	MP2A	Mx	.021	1
16	MP2A	X	40.464	5
17	MP2A	Z	-70.086	5
18	MP2A	Mx	.021	5
19	MP1A	X	28.49	2
20	MP1A	Z	-49.347	2
21	MP1A	Mx	-.014	2
22	MP1A	X	28.49	4
23	MP1A	Z	-49.347	4
24	MP1A	Mx	-.014	4
25	MP1A	X	24.731	3.5
26	MP1A	Z	-42.835	3.5
27	MP1A	Mx	.012	3.5
28	MP2A	X	23.905	3.5
29	MP2A	Z	-41.404	3.5
30	MP2A	Mx	.012	3.5
31	M29	X	47.358	.5
32	M29	Z	-82.026	.5
33	M29	Mx	0	.5
34	MP4A	X	73.519	1
35	MP4A	Z	-127.338	1
36	MP4A	Mx	-.037	1
37	MP4A	X	73.519	5
38	MP4A	Z	-127.338	5
39	MP4A	Mx	-.037	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	13.803	1
2	MP2A	Z	-7.969	1
3	MP2A	Mx	-.005	1
4	MP2A	X	13.803	1
5	MP2A	Z	-7.969	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
6	MP2A	Mx	.005	1
7	MP2A	X	46.749	1
8	MP2A	Z	-26.991	1
9	MP2A	Mx	-.039	1
10	MP2A	X	46.749	5
11	MP2A	Z	-26.991	5
12	MP2A	Mx	-.039	5
13	MP2A	X	46.749	1
14	MP2A	Z	-26.991	1
15	MP2A	Mx	-.008	1
16	MP2A	X	46.749	5
17	MP2A	Z	-26.991	5
18	MP2A	Mx	-.008	5
19	MP1A	X	29.999	2
20	MP1A	Z	-17.32	2
21	MP1A	Mx	-.015	2
22	MP1A	X	29.999	4
23	MP1A	Z	-17.32	4
24	MP1A	Mx	-.015	4
25	MP1A	X	35.156	3.5
26	MP1A	Z	-20.297	3.5
27	MP1A	Mx	.018	3.5
28	MP2A	X	30.865	3.5
29	MP2A	Z	-17.82	3.5
30	MP2A	Mx	.015	3.5
31	M29	X	73.261	.5
32	M29	Z	-42.297	.5
33	M29	Mx	0	.5
34	MP4A	X	104.077	1
35	MP4A	Z	-60.089	1
36	MP4A	Mx	-.052	1
37	MP4A	X	104.077	5
38	MP4A	Z	-60.089	5
39	MP4A	Mx	-.052	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	10.124	1
2	MP2A	Z	0	1
3	MP2A	Mx	-.003	1
4	MP2A	X	10.124	1
5	MP2A	Z	0	1
6	MP2A	Mx	.003	1
7	MP2A	X	40.508	1
8	MP2A	Z	0	1
9	MP2A	Mx	-.02	1
10	MP2A	X	40.508	5
11	MP2A	Z	0	5
12	MP2A	Mx	-.02	5
13	MP2A	X	40.508	1
14	MP2A	Z	0	1
15	MP2A	Mx	-.02	1
16	MP2A	X	40.508	5
17	MP2A	Z	0	5
18	MP2A	Mx	-.02	5
19	MP1A	X	23.47	2
20	MP1A	Z	0	2
21	MP1A	Mx	-.012	2

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
22	MP1A	X	23.47	4
23	MP1A	Z	0	4
24	MP1A	Mx	-.012	4
25	MP1A	X	36.162	3.5
26	MP1A	Z	0	3.5
27	MP1A	Mx	.018	3.5
28	MP2A	X	29.555	3.5
29	MP2A	Z	0	3.5
30	MP2A	Mx	.015	3.5
31	M29	X	86.889	.5
32	M29	Z	0	.5
33	M29	Mx	0	.5
34	MP4A	X	106.749	1
35	MP4A	Z	0	1
36	MP4A	Mx	-.053	1
37	MP4A	X	106.749	5
38	MP4A	Z	0	5
39	MP4A	Mx	-.053	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	13.803	1
2	MP2A	Z	7.969	1
3	MP2A	Mx	-.005	1
4	MP2A	X	13.803	1
5	MP2A	Z	7.969	1
6	MP2A	Mx	.005	1
7	MP2A	X	46.749	1
8	MP2A	Z	26.991	1
9	MP2A	Mx	-.008	1
10	MP2A	X	46.749	5
11	MP2A	Z	26.991	5
12	MP2A	Mx	-.008	5
13	MP2A	X	46.749	1
14	MP2A	Z	26.991	1
15	MP2A	Mx	-.039	1
16	MP2A	X	46.749	5
17	MP2A	Z	26.991	5
18	MP2A	Mx	-.039	5
19	MP1A	X	29.999	2
20	MP1A	Z	17.32	2
21	MP1A	Mx	-.015	2
22	MP1A	X	29.999	4
23	MP1A	Z	17.32	4
24	MP1A	Mx	-.015	4
25	MP1A	X	35.156	3.5
26	MP1A	Z	20.297	3.5
27	MP1A	Mx	.018	3.5
28	MP2A	X	30.865	3.5
29	MP2A	Z	17.82	3.5
30	MP2A	Mx	.015	3.5
31	M29	X	86	.5
32	M29	Z	49.652	.5
33	M29	Mx	0	.5
34	MP4A	X	104.077	1
35	MP4A	Z	60.089	1
36	MP4A	Mx	-.052	1
37	MP4A	X	104.077	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
38	MP4A	Z	60.089	5
39	MP4A	Mx	-.052	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	13.783	1
2	MP2A	Z	23.873	1
3	MP2A	Mx	-.005	1
4	MP2A	X	13.783	1
5	MP2A	Z	23.873	1
6	MP2A	Mx	.005	1
7	MP2A	X	40.464	1
8	MP2A	Z	70.086	1
9	MP2A	Mx	.021	1
10	MP2A	X	40.464	5
11	MP2A	Z	70.086	5
12	MP2A	Mx	.021	5
13	MP2A	X	40.464	1
14	MP2A	Z	70.086	1
15	MP2A	Mx	-.061	1
16	MP2A	X	40.464	5
17	MP2A	Z	70.086	5
18	MP2A	Mx	-.061	5
19	MP1A	X	28.49	2
20	MP1A	Z	49.347	2
21	MP1A	Mx	-.014	2
22	MP1A	X	28.49	4
23	MP1A	Z	49.347	4
24	MP1A	Mx	-.014	4
25	MP1A	X	24.731	3.5
26	MP1A	Z	42.835	3.5
27	MP1A	Mx	.012	3.5
28	MP2A	X	23.905	3.5
29	MP2A	Z	41.404	3.5
30	MP2A	Mx	.012	3.5
31	M29	X	54.713	.5
32	M29	Z	94.766	.5
33	M29	Mx	0	.5
34	MP4A	X	73.519	1
35	MP4A	Z	127.338	1
36	MP4A	Mx	-.037	1
37	MP4A	X	73.519	5
38	MP4A	Z	127.338	5
39	MP4A	Mx	-.037	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	1
2	MP2A	Z	33.38	1
3	MP2A	Mx	0	1
4	MP2A	X	0	1
5	MP2A	Z	33.38	1
6	MP2A	Mx	0	1
7	MP2A	X	0	1
8	MP2A	Z	94.402	1
9	MP2A	Mx	.055	1
10	MP2A	X	0	5
11	MP2A	Z	94.402	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
12	MP2A	Mx	.055	5
13	MP2A	X	0	1
14	MP2A	Z	94.402	1
15	MP2A	Mx	-.055	1
16	MP2A	X	0	5
17	MP2A	Z	94.402	5
18	MP2A	Mx	-.055	5
19	MP1A	X	0	2
20	MP1A	Z	68.151	2
21	MP1A	Mx	0	2
22	MP1A	X	0	4
23	MP1A	Z	68.151	4
24	MP1A	Mx	0	4
25	MP1A	X	0	3.5
26	MP1A	Z	53.895	3.5
27	MP1A	Mx	0	3.5
28	MP2A	X	0	3.5
29	MP2A	Z	53.895	3.5
30	MP2A	Mx	0	3.5
31	M29	X	0	.5
32	M29	Z	107.132	.5
33	M29	Mx	0	.5
34	MP4A	X	0	1
35	MP4A	Z	160.467	1
36	MP4A	Mx	0	1
37	MP4A	X	0	5
38	MP4A	Z	160.467	5
39	MP4A	Mx	0	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-13.783	1
2	MP2A	Z	23.873	1
3	MP2A	Mx	.005	1
4	MP2A	X	-13.783	1
5	MP2A	Z	23.873	1
6	MP2A	Mx	-.005	1
7	MP2A	X	-40.464	1
8	MP2A	Z	70.086	1
9	MP2A	Mx	.061	1
10	MP2A	X	-40.464	5
11	MP2A	Z	70.086	5
12	MP2A	Mx	.061	5
13	MP2A	X	-40.464	1
14	MP2A	Z	70.086	1
15	MP2A	Mx	-.021	1
16	MP2A	X	-40.464	5
17	MP2A	Z	70.086	5
18	MP2A	Mx	-.021	5
19	MP1A	X	-28.49	2
20	MP1A	Z	49.347	2
21	MP1A	Mx	.014	2
22	MP1A	X	-28.49	4
23	MP1A	Z	49.347	4
24	MP1A	Mx	.014	4
25	MP1A	X	-24.731	3.5
26	MP1A	Z	42.835	3.5
27	MP1A	Mx	-.012	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
28	MP2A	X	-23.905	3.5
29	MP2A	Z	41.404	3.5
30	MP2A	Mx	-.012	3.5
31	M29	X	-47.358	.5
32	M29	Z	82.026	.5
33	M29	Mx	0	.5
34	MP4A	X	-73.519	1
35	MP4A	Z	127.338	1
36	MP4A	Mx	.037	1
37	MP4A	X	-73.519	5
38	MP4A	Z	127.338	5
39	MP4A	Mx	.037	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-13.803	1
2	MP2A	Z	7.969	1
3	MP2A	Mx	.005	1
4	MP2A	X	-13.803	1
5	MP2A	Z	7.969	1
6	MP2A	Mx	-.005	1
7	MP2A	X	-46.749	1
8	MP2A	Z	26.991	1
9	MP2A	Mx	.039	1
10	MP2A	X	-46.749	5
11	MP2A	Z	26.991	5
12	MP2A	Mx	.039	5
13	MP2A	X	-46.749	1
14	MP2A	Z	26.991	1
15	MP2A	Mx	.008	1
16	MP2A	X	-46.749	5
17	MP2A	Z	26.991	5
18	MP2A	Mx	.008	5
19	MP1A	X	-29.999	2
20	MP1A	Z	17.32	2
21	MP1A	Mx	.015	2
22	MP1A	X	-29.999	4
23	MP1A	Z	17.32	4
24	MP1A	Mx	.015	4
25	MP1A	X	-35.156	3.5
26	MP1A	Z	20.297	3.5
27	MP1A	Mx	-.018	3.5
28	MP2A	X	-30.865	3.5
29	MP2A	Z	17.82	3.5
30	MP2A	Mx	-.015	3.5
31	M29	X	-73.261	.5
32	M29	Z	42.297	.5
33	M29	Mx	0	.5
34	MP4A	X	-104.077	1
35	MP4A	Z	60.089	1
36	MP4A	Mx	.052	1
37	MP4A	X	-104.077	5
38	MP4A	Z	60.089	5
39	MP4A	Mx	.052	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-10.124	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
2	MP2A	Z	0	1
3	MP2A	Mx	.003	1
4	MP2A	X	-10.124	1
5	MP2A	Z	0	1
6	MP2A	Mx	-.003	1
7	MP2A	X	-40.508	1
8	MP2A	Z	0	1
9	MP2A	Mx	.02	1
10	MP2A	X	-40.508	5
11	MP2A	Z	0	5
12	MP2A	Mx	.02	5
13	MP2A	X	-40.508	1
14	MP2A	Z	0	1
15	MP2A	Mx	.02	1
16	MP2A	X	-40.508	5
17	MP2A	Z	0	5
18	MP2A	Mx	.02	5
19	MP1A	X	-23.47	2
20	MP1A	Z	0	2
21	MP1A	Mx	.012	2
22	MP1A	X	-23.47	4
23	MP1A	Z	0	4
24	MP1A	Mx	.012	4
25	MP1A	X	-36.162	3.5
26	MP1A	Z	0	3.5
27	MP1A	Mx	-.018	3.5
28	MP2A	X	-29.555	3.5
29	MP2A	Z	0	3.5
30	MP2A	Mx	-.015	3.5
31	M29	X	-86.889	.5
32	M29	Z	0	.5
33	M29	Mx	0	.5
34	MP4A	X	-106.749	1
35	MP4A	Z	0	1
36	MP4A	Mx	.053	1
37	MP4A	X	-106.749	5
38	MP4A	Z	0	5
39	MP4A	Mx	.053	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-13.803	1
2	MP2A	Z	-7.969	1
3	MP2A	Mx	.005	1
4	MP2A	X	-13.803	1
5	MP2A	Z	-7.969	1
6	MP2A	Mx	-.005	1
7	MP2A	X	-46.749	1
8	MP2A	Z	-26.991	1
9	MP2A	Mx	.008	1
10	MP2A	X	-46.749	5
11	MP2A	Z	-26.991	5
12	MP2A	Mx	.008	5
13	MP2A	X	-46.749	1
14	MP2A	Z	-26.991	1
15	MP2A	Mx	.039	1
16	MP2A	X	-46.749	5
17	MP2A	Z	-26.991	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
18	MP2A	Mx	.039	5
19	MP1A	X	-29.999	2
20	MP1A	Z	-17.32	2
21	MP1A	Mx	.015	2
22	MP1A	X	-29.999	4
23	MP1A	Z	-17.32	4
24	MP1A	Mx	.015	4
25	MP1A	X	-35.156	3.5
26	MP1A	Z	-20.297	3.5
27	MP1A	Mx	-.018	3.5
28	MP2A	X	-30.865	3.5
29	MP2A	Z	-17.82	3.5
30	MP2A	Mx	-.015	3.5
31	M29	X	-86	.5
32	M29	Z	-49.652	.5
33	M29	Mx	0	.5
34	MP4A	X	-104.077	1
35	MP4A	Z	-60.089	1
36	MP4A	Mx	.052	1
37	MP4A	X	-104.077	5
38	MP4A	Z	-60.089	5
39	MP4A	Mx	.052	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-13.783	1
2	MP2A	Z	-23.873	1
3	MP2A	Mx	.005	1
4	MP2A	X	-13.783	1
5	MP2A	Z	-23.873	1
6	MP2A	Mx	-.005	1
7	MP2A	X	-40.464	1
8	MP2A	Z	-70.086	1
9	MP2A	Mx	-.021	1
10	MP2A	X	-40.464	5
11	MP2A	Z	-70.086	5
12	MP2A	Mx	-.021	5
13	MP2A	X	-40.464	1
14	MP2A	Z	-70.086	1
15	MP2A	Mx	.061	1
16	MP2A	X	-40.464	5
17	MP2A	Z	-70.086	5
18	MP2A	Mx	.061	5
19	MP1A	X	-28.49	2
20	MP1A	Z	-49.347	2
21	MP1A	Mx	.014	2
22	MP1A	X	-28.49	4
23	MP1A	Z	-49.347	4
24	MP1A	Mx	.014	4
25	MP1A	X	-24.731	3.5
26	MP1A	Z	-42.835	3.5
27	MP1A	Mx	-.012	3.5
28	MP2A	X	-23.905	3.5
29	MP2A	Z	-41.404	3.5
30	MP2A	Mx	-.012	3.5
31	M29	X	-54.713	.5
32	M29	Z	-94.766	.5
33	M29	Mx	0	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
34	MP4A	X	-73.519	1
35	MP4A	Z	-127.338	1
36	MP4A	Mx	.037	1
37	MP4A	X	-73.519	5
38	MP4A	Z	-127.338	5
39	MP4A	Mx	.037	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	1
2	MP2A	Z	-8.381	1
3	MP2A	Mx	0	1
4	MP2A	X	0	1
5	MP2A	Z	-8.381	1
6	MP2A	Mx	0	1
7	MP2A	X	0	1
8	MP2A	Z	-28.301	1
9	MP2A	Mx	-.017	1
10	MP2A	X	0	5
11	MP2A	Z	-28.301	5
12	MP2A	Mx	-.017	5
13	MP2A	X	0	1
14	MP2A	Z	-28.301	1
15	MP2A	Mx	.017	1
16	MP2A	X	0	5
17	MP2A	Z	-28.301	5
18	MP2A	Mx	.017	5
19	MP1A	X	0	2
20	MP1A	Z	-17.025	2
21	MP1A	Mx	0	2
22	MP1A	X	0	4
23	MP1A	Z	-17.025	4
24	MP1A	Mx	0	4
25	MP1A	X	0	3.5
26	MP1A	Z	-14.761	3.5
27	MP1A	Mx	0	3.5
28	MP2A	X	0	3.5
29	MP2A	Z	-14.761	3.5
30	MP2A	Mx	0	3.5
31	M29	X	0	.5
32	M29	Z	-26.785	.5
33	M29	Mx	0	.5
34	MP4A	X	0	1
35	MP4A	Z	-32.166	1
36	MP4A	Mx	0	1
37	MP4A	X	0	5
38	MP4A	Z	-32.166	5
39	MP4A	Mx	0	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	3.579	1
2	MP2A	Z	-6.198	1
3	MP2A	Mx	-.001	1
4	MP2A	X	3.579	1
5	MP2A	Z	-6.198	1
6	MP2A	Mx	.001	1
7	MP2A	X	13.102	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
8	MP2A	Z	-22.693	1
9	MP2A	Mx	-.02	1
10	MP2A	X	13.102	5
11	MP2A	Z	-22.693	5
12	MP2A	Mx	-.02	5
13	MP2A	X	13.102	1
14	MP2A	Z	-22.693	1
15	MP2A	Mx	.007	1
16	MP2A	X	13.102	5
17	MP2A	Z	-22.693	5
18	MP2A	Mx	.007	5
19	MP1A	X	7.331	2
20	MP1A	Z	-12.697	2
21	MP1A	Mx	-.004	2
22	MP1A	X	7.331	4
23	MP1A	Z	-12.697	4
24	MP1A	Mx	-.004	4
25	MP1A	X	6.845	3.5
26	MP1A	Z	-11.856	3.5
27	MP1A	Mx	.003	3.5
28	MP2A	X	6.641	3.5
29	MP2A	Z	-11.503	3.5
30	MP2A	Mx	.003	3.5
31	M29	X	11.418	.5
32	M29	Z	-19.776	.5
33	M29	Mx	0	.5
34	MP4A	X	14.895	1
35	MP4A	Z	-25.799	1
36	MP4A	Mx	-.007	1
37	MP4A	X	14.895	5
38	MP4A	Z	-25.799	5
39	MP4A	Mx	-.007	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	4.078	1
2	MP2A	Z	-2.354	1
3	MP2A	Mx	-.001	1
4	MP2A	X	4.078	1
5	MP2A	Z	-2.354	1
6	MP2A	Mx	.001	1
7	MP2A	X	19.06	1
8	MP2A	Z	-11.004	1
9	MP2A	Mx	-.016	1
10	MP2A	X	19.06	5
11	MP2A	Z	-11.004	5
12	MP2A	Mx	-.016	5
13	MP2A	X	19.06	1
14	MP2A	Z	-11.004	1
15	MP2A	Mx	-.003	1
16	MP2A	X	19.06	5
17	MP2A	Z	-11.004	5
18	MP2A	Mx	-.003	5
19	MP1A	X	8.604	2
20	MP1A	Z	-4.968	2
21	MP1A	Mx	-.004	2
22	MP1A	X	8.604	4
23	MP1A	Z	-4.968	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
24	MP1A	Mx	-.004	4
25	MP1A	X	9.999	3.5
26	MP1A	Z	-5.773	3.5
27	MP1A	Mx	.005	3.5
28	MP2A	X	8.941	3.5
29	MP2A	Z	-5.162	3.5
30	MP2A	Mx	.004	3.5
31	M29	X	16.988	.5
32	M29	Z	-9.808	.5
33	M29	Mx	0	.5
34	MP4A	X	21.682	1
35	MP4A	Z	-12.518	1
36	MP4A	Mx	-.011	1
37	MP4A	X	21.682	5
38	MP4A	Z	-12.518	5
39	MP4A	Mx	-.011	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	3.484	1
2	MP2A	Z	0	1
3	MP2A	Mx	-.001	1
4	MP2A	X	3.484	1
5	MP2A	Z	0	1
6	MP2A	Mx	.001	1
7	MP2A	X	19.911	1
8	MP2A	Z	0	1
9	MP2A	Mx	-.01	1
10	MP2A	X	19.911	5
11	MP2A	Z	0	5
12	MP2A	Mx	-.01	5
13	MP2A	X	19.911	1
14	MP2A	Z	0	1
15	MP2A	Mx	-.01	1
16	MP2A	X	19.911	5
17	MP2A	Z	0	5
18	MP2A	Mx	-.01	5
19	MP1A	X	7.572	2
20	MP1A	Z	0	2
21	MP1A	Mx	-.004	2
22	MP1A	X	7.572	4
23	MP1A	Z	0	4
24	MP1A	Mx	-.004	4
25	MP1A	X	10.475	3.5
26	MP1A	Z	0	3.5
27	MP1A	Mx	.005	3.5
28	MP2A	X	8.846	3.5
29	MP2A	Z	0	3.5
30	MP2A	Mx	.004	3.5
31	M29	X	20.346	.5
32	M29	Z	0	.5
33	M29	Mx	0	.5
34	MP4A	X	22.66	1
35	MP4A	Z	0	1
36	MP4A	Mx	-.011	1
37	MP4A	X	22.66	5
38	MP4A	Z	0	5
39	MP4A	Mx	-.011	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	4.078	1
2	MP2A	Z	2.354	1
3	MP2A	Mx	-.001	1
4	MP2A	X	4.078	1
5	MP2A	Z	2.354	1
6	MP2A	Mx	.001	1
7	MP2A	X	19.06	1
8	MP2A	Z	11.004	1
9	MP2A	Mx	-.003	1
10	MP2A	X	19.06	5
11	MP2A	Z	11.004	5
12	MP2A	Mx	-.003	5
13	MP2A	X	19.06	1
14	MP2A	Z	11.004	1
15	MP2A	Mx	-.016	1
16	MP2A	X	19.06	5
17	MP2A	Z	11.004	5
18	MP2A	Mx	-.016	5
19	MP1A	X	8.604	2
20	MP1A	Z	4.968	2
21	MP1A	Mx	-.004	2
22	MP1A	X	8.604	4
23	MP1A	Z	4.968	4
24	MP1A	Mx	-.004	4
25	MP1A	X	9.999	3.5
26	MP1A	Z	5.773	3.5
27	MP1A	Mx	.005	3.5
28	MP2A	X	8.941	3.5
29	MP2A	Z	5.162	3.5
30	MP2A	Mx	.004	3.5
31	M29	X	21.04	.5
32	M29	Z	12.147	.5
33	M29	Mx	0	.5
34	MP4A	X	21.682	1
35	MP4A	Z	12.518	1
36	MP4A	Mx	-.011	1
37	MP4A	X	21.682	5
38	MP4A	Z	12.518	5
39	MP4A	Mx	-.011	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	3.579	1
2	MP2A	Z	6.198	1
3	MP2A	Mx	-.001	1
4	MP2A	X	3.579	1
5	MP2A	Z	6.198	1
6	MP2A	Mx	.001	1
7	MP2A	X	13.102	1
8	MP2A	Z	22.693	1
9	MP2A	Mx	.007	1
10	MP2A	X	13.102	5
11	MP2A	Z	22.693	5
12	MP2A	Mx	.007	5
13	MP2A	X	13.102	1
14	MP2A	Z	22.693	1
15	MP2A	Mx	-.02	1
16	MP2A	X	13.102	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
17	MP2A	Z	22.693	5
18	MP2A	Mx	-.02	5
19	MP1A	X	7.331	2
20	MP1A	Z	12.697	2
21	MP1A	Mx	-.004	2
22	MP1A	X	7.331	4
23	MP1A	Z	12.697	4
24	MP1A	Mx	-.004	4
25	MP1A	X	6.845	3.5
26	MP1A	Z	11.856	3.5
27	MP1A	Mx	.003	3.5
28	MP2A	X	6.641	3.5
29	MP2A	Z	11.503	3.5
30	MP2A	Mx	.003	3.5
31	M29	X	13.757	.5
32	M29	Z	23.828	.5
33	M29	Mx	0	.5
34	MP4A	X	14.895	1
35	MP4A	Z	25.799	1
36	MP4A	Mx	-.007	1
37	MP4A	X	14.895	5
38	MP4A	Z	25.799	5
39	MP4A	Mx	-.007	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	1
2	MP2A	Z	8.381	1
3	MP2A	Mx	0	1
4	MP2A	X	0	1
5	MP2A	Z	8.381	1
6	MP2A	Mx	0	1
7	MP2A	X	0	1
8	MP2A	Z	28.301	1
9	MP2A	Mx	.017	1
10	MP2A	X	0	5
11	MP2A	Z	28.301	5
12	MP2A	Mx	.017	5
13	MP2A	X	0	1
14	MP2A	Z	28.301	1
15	MP2A	Mx	-.017	1
16	MP2A	X	0	5
17	MP2A	Z	28.301	5
18	MP2A	Mx	-.017	5
19	MP1A	X	0	2
20	MP1A	Z	17.025	2
21	MP1A	Mx	0	2
22	MP1A	X	0	4
23	MP1A	Z	17.025	4
24	MP1A	Mx	0	4
25	MP1A	X	0	3.5
26	MP1A	Z	14.761	3.5
27	MP1A	Mx	0	3.5
28	MP2A	X	0	3.5
29	MP2A	Z	14.761	3.5
30	MP2A	Mx	0	3.5
31	M29	X	0	.5
32	M29	Z	26.785	.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
33	M29	Mx	0	.5
34	MP4A	X	0	1
35	MP4A	Z	32.166	1
36	MP4A	Mx	0	1
37	MP4A	X	0	5
38	MP4A	Z	32.166	5
39	MP4A	Mx	0	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-3.579	1
2	MP2A	Z	6.198	1
3	MP2A	Mx	.001	1
4	MP2A	X	-3.579	1
5	MP2A	Z	6.198	1
6	MP2A	Mx	-.001	1
7	MP2A	X	-13.102	1
8	MP2A	Z	22.693	1
9	MP2A	Mx	.02	1
10	MP2A	X	-13.102	5
11	MP2A	Z	22.693	5
12	MP2A	Mx	.02	5
13	MP2A	X	-13.102	1
14	MP2A	Z	22.693	1
15	MP2A	Mx	-.007	1
16	MP2A	X	-13.102	5
17	MP2A	Z	22.693	5
18	MP2A	Mx	-.007	5
19	MP1A	X	-7.331	2
20	MP1A	Z	12.697	2
21	MP1A	Mx	.004	2
22	MP1A	X	-7.331	4
23	MP1A	Z	12.697	4
24	MP1A	Mx	.004	4
25	MP1A	X	-6.845	3.5
26	MP1A	Z	11.856	3.5
27	MP1A	Mx	-.003	3.5
28	MP2A	X	-6.641	3.5
29	MP2A	Z	11.503	3.5
30	MP2A	Mx	-.003	3.5
31	M29	X	-11.418	.5
32	M29	Z	19.776	.5
33	M29	Mx	0	.5
34	MP4A	X	-14.895	1
35	MP4A	Z	25.799	1
36	MP4A	Mx	.007	1
37	MP4A	X	-14.895	5
38	MP4A	Z	25.799	5
39	MP4A	Mx	.007	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-4.078	1
2	MP2A	Z	2.354	1
3	MP2A	Mx	.001	1
4	MP2A	X	-4.078	1
5	MP2A	Z	2.354	1
6	MP2A	Mx	-.001	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
7	MP2A	X	-19.06	1
8	MP2A	Z	11.004	1
9	MP2A	Mx	.016	1
10	MP2A	X	-19.06	5
11	MP2A	Z	11.004	5
12	MP2A	Mx	.016	5
13	MP2A	X	-19.06	1
14	MP2A	Z	11.004	1
15	MP2A	Mx	.003	1
16	MP2A	X	-19.06	5
17	MP2A	Z	11.004	5
18	MP2A	Mx	.003	5
19	MP1A	X	-8.604	2
20	MP1A	Z	4.968	2
21	MP1A	Mx	.004	2
22	MP1A	X	-8.604	4
23	MP1A	Z	4.968	4
24	MP1A	Mx	.004	4
25	MP1A	X	-9.999	3.5
26	MP1A	Z	5.773	3.5
27	MP1A	Mx	-.005	3.5
28	MP2A	X	-8.941	3.5
29	MP2A	Z	5.162	3.5
30	MP2A	Mx	-.004	3.5
31	M29	X	-16.988	.5
32	M29	Z	9.808	.5
33	M29	Mx	0	.5
34	MP4A	X	-21.682	1
35	MP4A	Z	12.518	1
36	MP4A	Mx	.011	1
37	MP4A	X	-21.682	5
38	MP4A	Z	12.518	5
39	MP4A	Mx	.011	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-3.484	1
2	MP2A	Z	0	1
3	MP2A	Mx	.001	1
4	MP2A	X	-3.484	1
5	MP2A	Z	0	1
6	MP2A	Mx	-.001	1
7	MP2A	X	-19.911	1
8	MP2A	Z	0	1
9	MP2A	Mx	.01	1
10	MP2A	X	-19.911	5
11	MP2A	Z	0	5
12	MP2A	Mx	.01	5
13	MP2A	X	-19.911	1
14	MP2A	Z	0	1
15	MP2A	Mx	.01	1
16	MP2A	X	-19.911	5
17	MP2A	Z	0	5
18	MP2A	Mx	.01	5
19	MP1A	X	-7.572	2
20	MP1A	Z	0	2
21	MP1A	Mx	.004	2
22	MP1A	X	-7.572	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
23	MP1A	Z	0	4
24	MP1A	Mx	.004	4
25	MP1A	X	-10.475	3.5
26	MP1A	Z	0	3.5
27	MP1A	Mx	-.005	3.5
28	MP2A	X	-8.846	3.5
29	MP2A	Z	0	3.5
30	MP2A	Mx	-.004	3.5
31	M29	X	-20.346	.5
32	M29	Z	0	.5
33	M29	Mx	0	.5
34	MP4A	X	-22.66	1
35	MP4A	Z	0	1
36	MP4A	Mx	.011	1
37	MP4A	X	-22.66	5
38	MP4A	Z	0	5
39	MP4A	Mx	.011	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-4.078	1
2	MP2A	Z	-2.354	1
3	MP2A	Mx	.001	1
4	MP2A	X	-4.078	1
5	MP2A	Z	-2.354	1
6	MP2A	Mx	-.001	1
7	MP2A	X	-19.06	1
8	MP2A	Z	-11.004	1
9	MP2A	Mx	.003	1
10	MP2A	X	-19.06	5
11	MP2A	Z	-11.004	5
12	MP2A	Mx	.003	5
13	MP2A	X	-19.06	1
14	MP2A	Z	-11.004	1
15	MP2A	Mx	.016	1
16	MP2A	X	-19.06	5
17	MP2A	Z	-11.004	5
18	MP2A	Mx	.016	5
19	MP1A	X	-8.604	2
20	MP1A	Z	-4.968	2
21	MP1A	Mx	.004	2
22	MP1A	X	-8.604	4
23	MP1A	Z	-4.968	4
24	MP1A	Mx	.004	4
25	MP1A	X	-9.999	3.5
26	MP1A	Z	-5.773	3.5
27	MP1A	Mx	-.005	3.5
28	MP2A	X	-8.941	3.5
29	MP2A	Z	-5.162	3.5
30	MP2A	Mx	-.004	3.5
31	M29	X	-21.04	.5
32	M29	Z	-12.147	.5
33	M29	Mx	0	.5
34	MP4A	X	-21.682	1
35	MP4A	Z	-12.518	1
36	MP4A	Mx	.011	1
37	MP4A	X	-21.682	5
38	MP4A	Z	-12.518	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
39	MP4A	Mx	.011	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-3.579	1
2	MP2A	Z	-6.198	1
3	MP2A	Mx	.001	1
4	MP2A	X	-3.579	1
5	MP2A	Z	-6.198	1
6	MP2A	Mx	-.001	1
7	MP2A	X	-13.102	1
8	MP2A	Z	-22.693	1
9	MP2A	Mx	-.007	1
10	MP2A	X	-13.102	5
11	MP2A	Z	-22.693	5
12	MP2A	Mx	-.007	5
13	MP2A	X	-13.102	1
14	MP2A	Z	-22.693	1
15	MP2A	Mx	.02	1
16	MP2A	X	-13.102	5
17	MP2A	Z	-22.693	5
18	MP2A	Mx	.02	5
19	MP1A	X	-7.331	2
20	MP1A	Z	-12.697	2
21	MP1A	Mx	.004	2
22	MP1A	X	-7.331	4
23	MP1A	Z	-12.697	4
24	MP1A	Mx	.004	4
25	MP1A	X	-6.845	3.5
26	MP1A	Z	-11.856	3.5
27	MP1A	Mx	-.003	3.5
28	MP2A	X	-6.641	3.5
29	MP2A	Z	-11.503	3.5
30	MP2A	Mx	-.003	3.5
31	M29	X	-13.757	.5
32	M29	Z	-23.828	.5
33	M29	Mx	0	.5
34	MP4A	X	-14.895	1
35	MP4A	Z	-25.799	1
36	MP4A	Mx	.007	1
37	MP4A	X	-14.895	5
38	MP4A	Z	-25.799	5
39	MP4A	Mx	.007	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	1
2	MP2A	Z	-2.086	1
3	MP2A	Mx	0	1
4	MP2A	X	0	1
5	MP2A	Z	-2.086	1
6	MP2A	Mx	0	1
7	MP2A	X	0	1
8	MP2A	Z	-5.9	1
9	MP2A	Mx	-.003	1
10	MP2A	X	0	5
11	MP2A	Z	-5.9	5
12	MP2A	Mx	-.003	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
13	MP2A	X	0	1
14	MP2A	Z	-5.9	1
15	MP2A	Mx	.003	1
16	MP2A	X	0	5
17	MP2A	Z	-5.9	5
18	MP2A	Mx	.003	5
19	MP1A	X	0	2
20	MP1A	Z	-4.259	2
21	MP1A	Mx	0	2
22	MP1A	X	0	4
23	MP1A	Z	-4.259	4
24	MP1A	Mx	0	4
25	MP1A	X	0	3.5
26	MP1A	Z	-3.368	3.5
27	MP1A	Mx	0	3.5
28	MP2A	X	0	3.5
29	MP2A	Z	-3.368	3.5
30	MP2A	Mx	0	3.5
31	M29	X	0	.5
32	M29	Z	-6.696	.5
33	M29	Mx	0	.5
34	MP4A	X	0	1
35	MP4A	Z	-10.029	1
36	MP4A	Mx	0	1
37	MP4A	X	0	5
38	MP4A	Z	-10.029	5
39	MP4A	Mx	0	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	.861	1
2	MP2A	Z	-1.492	1
3	MP2A	Mx	-.000287	1
4	MP2A	X	.861	1
5	MP2A	Z	-1.492	1
6	MP2A	Mx	.000287	1
7	MP2A	X	2.529	1
8	MP2A	Z	-4.38	1
9	MP2A	Mx	-.004	1
10	MP2A	X	2.529	5
11	MP2A	Z	-4.38	5
12	MP2A	Mx	-.004	5
13	MP2A	X	2.529	1
14	MP2A	Z	-4.38	1
15	MP2A	Mx	.001	1
16	MP2A	X	2.529	5
17	MP2A	Z	-4.38	5
18	MP2A	Mx	.001	5
19	MP1A	X	1.781	2
20	MP1A	Z	-3.084	2
21	MP1A	Mx	-.00089	2
22	MP1A	X	1.781	4
23	MP1A	Z	-3.084	4
24	MP1A	Mx	-.00089	4
25	MP1A	X	1.546	3.5
26	MP1A	Z	-2.677	3.5
27	MP1A	Mx	.000773	3.5
28	MP2A	X	1.494	3.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
29	MP2A	Z	-2.588	3.5
30	MP2A	Mx	.000747	3.5
31	M29	X	2.96	.5
32	M29	Z	-5.127	.5
33	M29	Mx	0	.5
34	MP4A	X	4.595	1
35	MP4A	Z	-7.959	1
36	MP4A	Mx	-.002	1
37	MP4A	X	4.595	5
38	MP4A	Z	-7.959	5
39	MP4A	Mx	-.002	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	.863	1
2	MP2A	Z	-.498	1
3	MP2A	Mx	-.000288	1
4	MP2A	X	.863	1
5	MP2A	Z	-.498	1
6	MP2A	Mx	.000288	1
7	MP2A	X	2.922	1
8	MP2A	Z	-1.687	1
9	MP2A	Mx	-.002	1
10	MP2A	X	2.922	5
11	MP2A	Z	-1.687	5
12	MP2A	Mx	-.002	5
13	MP2A	X	2.922	1
14	MP2A	Z	-1.687	1
15	MP2A	Mx	-.000477	1
16	MP2A	X	2.922	5
17	MP2A	Z	-1.687	5
18	MP2A	Mx	-.000477	5
19	MP1A	X	1.875	2
20	MP1A	Z	-1.083	2
21	MP1A	Mx	-.000938	2
22	MP1A	X	1.875	4
23	MP1A	Z	-1.083	4
24	MP1A	Mx	-.000938	4
25	MP1A	X	2.197	3.5
26	MP1A	Z	-1.269	3.5
27	MP1A	Mx	.001	3.5
28	MP2A	X	1.929	3.5
29	MP2A	Z	-1.114	3.5
30	MP2A	Mx	.000964	3.5
31	M29	X	4.579	.5
32	M29	Z	-2.644	.5
33	M29	Mx	0	.5
34	MP4A	X	6.505	1
35	MP4A	Z	-3.756	1
36	MP4A	Mx	-.003	1
37	MP4A	X	6.505	5
38	MP4A	Z	-3.756	5
39	MP4A	Mx	-.003	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	.633	1
2	MP2A	Z	0	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
3	MP2A	Mx	-.000211	1
4	MP2A	X	.633	1
5	MP2A	Z	0	1
6	MP2A	Mx	.000211	1
7	MP2A	X	2.532	1
8	MP2A	Z	0	1
9	MP2A	Mx	-.001	1
10	MP2A	X	2.532	5
11	MP2A	Z	0	5
12	MP2A	Mx	-.001	5
13	MP2A	X	2.532	1
14	MP2A	Z	0	1
15	MP2A	Mx	-.001	1
16	MP2A	X	2.532	5
17	MP2A	Z	0	5
18	MP2A	Mx	-.001	5
19	MP1A	X	1.467	2
20	MP1A	Z	0	2
21	MP1A	Mx	-.000734	2
22	MP1A	X	1.467	4
23	MP1A	Z	0	4
24	MP1A	Mx	-.000734	4
25	MP1A	X	2.26	3.5
26	MP1A	Z	0	3.5
27	MP1A	Mx	.001	3.5
28	MP2A	X	1.847	3.5
29	MP2A	Z	0	3.5
30	MP2A	Mx	.000924	3.5
31	M29	X	5.431	.5
32	M29	Z	0	.5
33	M29	Mx	0	.5
34	MP4A	X	6.672	1
35	MP4A	Z	0	1
36	MP4A	Mx	-.003	1
37	MP4A	X	6.672	5
38	MP4A	Z	0	5
39	MP4A	Mx	-.003	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	.863	1
2	MP2A	Z	.498	1
3	MP2A	Mx	-.000288	1
4	MP2A	X	.863	1
5	MP2A	Z	.498	1
6	MP2A	Mx	.000288	1
7	MP2A	X	2.922	1
8	MP2A	Z	1.687	1
9	MP2A	Mx	-.000477	1
10	MP2A	X	2.922	5
11	MP2A	Z	1.687	5
12	MP2A	Mx	-.000477	5
13	MP2A	X	2.922	1
14	MP2A	Z	1.687	1
15	MP2A	Mx	-.002	1
16	MP2A	X	2.922	5
17	MP2A	Z	1.687	5
18	MP2A	Mx	-.002	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
19	MP1A	X	1.875	2
20	MP1A	Z	1.083	2
21	MP1A	Mx	-.000938	2
22	MP1A	X	1.875	4
23	MP1A	Z	1.083	4
24	MP1A	Mx	-.000938	4
25	MP1A	X	2.197	3.5
26	MP1A	Z	1.269	3.5
27	MP1A	Mx	.001	3.5
28	MP2A	X	1.929	3.5
29	MP2A	Z	1.114	3.5
30	MP2A	Mx	.000964	3.5
31	M29	X	5.375	.5
32	M29	Z	3.103	.5
33	M29	Mx	0	.5
34	MP4A	X	6.505	1
35	MP4A	Z	3.756	1
36	MP4A	Mx	-.003	1
37	MP4A	X	6.505	5
38	MP4A	Z	3.756	5
39	MP4A	Mx	-.003	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	.861	1
2	MP2A	Z	1.492	1
3	MP2A	Mx	-.000287	1
4	MP2A	X	.861	1
5	MP2A	Z	1.492	1
6	MP2A	Mx	.000287	1
7	MP2A	X	2.529	1
8	MP2A	Z	4.38	1
9	MP2A	Mx	.001	1
10	MP2A	X	2.529	5
11	MP2A	Z	4.38	5
12	MP2A	Mx	.001	5
13	MP2A	X	2.529	1
14	MP2A	Z	4.38	1
15	MP2A	Mx	-.004	1
16	MP2A	X	2.529	5
17	MP2A	Z	4.38	5
18	MP2A	Mx	-.004	5
19	MP1A	X	1.781	2
20	MP1A	Z	3.084	2
21	MP1A	Mx	-.00089	2
22	MP1A	X	1.781	4
23	MP1A	Z	3.084	4
24	MP1A	Mx	-.00089	4
25	MP1A	X	1.546	3.5
26	MP1A	Z	2.677	3.5
27	MP1A	Mx	.000773	3.5
28	MP2A	X	1.494	3.5
29	MP2A	Z	2.588	3.5
30	MP2A	Mx	.000747	3.5
31	M29	X	3.42	.5
32	M29	Z	5.923	.5
33	M29	Mx	0	.5
34	MP4A	X	4.595	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
35	MP4A	Z	7.959	1
36	MP4A	Mx	-.002	1
37	MP4A	X	4.595	5
38	MP4A	Z	7.959	5
39	MP4A	Mx	-.002	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	1
2	MP2A	Z	2.086	1
3	MP2A	Mx	0	1
4	MP2A	X	0	1
5	MP2A	Z	2.086	1
6	MP2A	Mx	0	1
7	MP2A	X	0	1
8	MP2A	Z	5.9	1
9	MP2A	Mx	.003	1
10	MP2A	X	0	5
11	MP2A	Z	5.9	5
12	MP2A	Mx	.003	5
13	MP2A	X	0	1
14	MP2A	Z	5.9	1
15	MP2A	Mx	-.003	1
16	MP2A	X	0	5
17	MP2A	Z	5.9	5
18	MP2A	Mx	-.003	5
19	MP1A	X	0	2
20	MP1A	Z	4.259	2
21	MP1A	Mx	0	2
22	MP1A	X	0	4
23	MP1A	Z	4.259	4
24	MP1A	Mx	0	4
25	MP1A	X	0	3.5
26	MP1A	Z	3.368	3.5
27	MP1A	Mx	0	3.5
28	MP2A	X	0	3.5
29	MP2A	Z	3.368	3.5
30	MP2A	Mx	0	3.5
31	M29	X	0	.5
32	M29	Z	6.696	.5
33	M29	Mx	0	.5
34	MP4A	X	0	1
35	MP4A	Z	10.029	1
36	MP4A	Mx	0	1
37	MP4A	X	0	5
38	MP4A	Z	10.029	5
39	MP4A	Mx	0	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-.861	1
2	MP2A	Z	1.492	1
3	MP2A	Mx	.000287	1
4	MP2A	X	-.861	1
5	MP2A	Z	1.492	1
6	MP2A	Mx	-.000287	1
7	MP2A	X	-2.529	1
8	MP2A	Z	4.38	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
9	MP2A	Mx	.004	1
10	MP2A	X	-2.529	5
11	MP2A	Z	4.38	5
12	MP2A	Mx	.004	5
13	MP2A	X	-2.529	1
14	MP2A	Z	4.38	1
15	MP2A	Mx	-.001	1
16	MP2A	X	-2.529	5
17	MP2A	Z	4.38	5
18	MP2A	Mx	-.001	5
19	MP1A	X	-1.781	2
20	MP1A	Z	3.084	2
21	MP1A	Mx	.00089	2
22	MP1A	X	-1.781	4
23	MP1A	Z	3.084	4
24	MP1A	Mx	.00089	4
25	MP1A	X	-1.546	3.5
26	MP1A	Z	2.677	3.5
27	MP1A	Mx	-.000773	3.5
28	MP2A	X	-1.494	3.5
29	MP2A	Z	2.588	3.5
30	MP2A	Mx	-.000747	3.5
31	M29	X	-2.96	.5
32	M29	Z	5.127	.5
33	M29	Mx	0	.5
34	MP4A	X	-4.595	1
35	MP4A	Z	7.959	1
36	MP4A	Mx	.002	1
37	MP4A	X	-4.595	5
38	MP4A	Z	7.959	5
39	MP4A	Mx	.002	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-.863	1
2	MP2A	Z	.498	1
3	MP2A	Mx	.000288	1
4	MP2A	X	-.863	1
5	MP2A	Z	.498	1
6	MP2A	Mx	-.000288	1
7	MP2A	X	-2.922	1
8	MP2A	Z	1.687	1
9	MP2A	Mx	.002	1
10	MP2A	X	-2.922	5
11	MP2A	Z	1.687	5
12	MP2A	Mx	.002	5
13	MP2A	X	-2.922	1
14	MP2A	Z	1.687	1
15	MP2A	Mx	.000477	1
16	MP2A	X	-2.922	5
17	MP2A	Z	1.687	5
18	MP2A	Mx	.000477	5
19	MP1A	X	-1.875	2
20	MP1A	Z	1.083	2
21	MP1A	Mx	.000938	2
22	MP1A	X	-1.875	4
23	MP1A	Z	1.083	4
24	MP1A	Mx	.000938	4

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
25	MP1A	X	-2.197	3.5
26	MP1A	Z	1.269	3.5
27	MP1A	Mx	-.001	3.5
28	MP2A	X	-1.929	3.5
29	MP2A	Z	1.114	3.5
30	MP2A	Mx	-.000964	3.5
31	M29	X	-4.579	.5
32	M29	Z	2.644	.5
33	M29	Mx	0	.5
34	MP4A	X	-6.505	1
35	MP4A	Z	3.756	1
36	MP4A	Mx	.003	1
37	MP4A	X	-6.505	5
38	MP4A	Z	3.756	5
39	MP4A	Mx	.003	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-.633	1
2	MP2A	Z	0	1
3	MP2A	Mx	.000211	1
4	MP2A	X	-.633	1
5	MP2A	Z	0	1
6	MP2A	Mx	-.000211	1
7	MP2A	X	-2.532	1
8	MP2A	Z	0	1
9	MP2A	Mx	.001	1
10	MP2A	X	-2.532	5
11	MP2A	Z	0	5
12	MP2A	Mx	.001	5
13	MP2A	X	-2.532	1
14	MP2A	Z	0	1
15	MP2A	Mx	.001	1
16	MP2A	X	-2.532	5
17	MP2A	Z	0	5
18	MP2A	Mx	.001	5
19	MP1A	X	-1.467	2
20	MP1A	Z	0	2
21	MP1A	Mx	.000734	2
22	MP1A	X	-1.467	4
23	MP1A	Z	0	4
24	MP1A	Mx	.000734	4
25	MP1A	X	-2.26	3.5
26	MP1A	Z	0	3.5
27	MP1A	Mx	-.001	3.5
28	MP2A	X	-1.847	3.5
29	MP2A	Z	0	3.5
30	MP2A	Mx	-.000924	3.5
31	M29	X	-5.431	.5
32	M29	Z	0	.5
33	M29	Mx	0	.5
34	MP4A	X	-6.672	1
35	MP4A	Z	0	1
36	MP4A	Mx	.003	1
37	MP4A	X	-6.672	5
38	MP4A	Z	0	5
39	MP4A	Mx	.003	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-.863	1
2	MP2A	Z	-.498	1
3	MP2A	Mx	.000288	1
4	MP2A	X	-.863	1
5	MP2A	Z	-.498	1
6	MP2A	Mx	-.000288	1
7	MP2A	X	-2.922	1
8	MP2A	Z	-1.687	1
9	MP2A	Mx	.000477	1
10	MP2A	X	-2.922	5
11	MP2A	Z	-1.687	5
12	MP2A	Mx	.000477	5
13	MP2A	X	-2.922	1
14	MP2A	Z	-1.687	1
15	MP2A	Mx	.002	1
16	MP2A	X	-2.922	5
17	MP2A	Z	-1.687	5
18	MP2A	Mx	.002	5
19	MP1A	X	-1.875	2
20	MP1A	Z	-1.083	2
21	MP1A	Mx	.000938	2
22	MP1A	X	-1.875	4
23	MP1A	Z	-1.083	4
24	MP1A	Mx	.000938	4
25	MP1A	X	-2.197	3.5
26	MP1A	Z	-1.269	3.5
27	MP1A	Mx	-.001	3.5
28	MP2A	X	-1.929	3.5
29	MP2A	Z	-1.114	3.5
30	MP2A	Mx	-.000964	3.5
31	M29	X	-5.375	.5
32	M29	Z	-3.103	.5
33	M29	Mx	0	.5
34	MP4A	X	-6.505	1
35	MP4A	Z	-3.756	1
36	MP4A	Mx	.003	1
37	MP4A	X	-6.505	5
38	MP4A	Z	-3.756	5
39	MP4A	Mx	.003	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-.861	1
2	MP2A	Z	-1.492	1
3	MP2A	Mx	.000287	1
4	MP2A	X	-.861	1
5	MP2A	Z	-1.492	1
6	MP2A	Mx	-.000287	1
7	MP2A	X	-2.529	1
8	MP2A	Z	-4.38	1
9	MP2A	Mx	-.001	1
10	MP2A	X	-2.529	5
11	MP2A	Z	-4.38	5
12	MP2A	Mx	-.001	5
13	MP2A	X	-2.529	1
14	MP2A	Z	-4.38	1
15	MP2A	Mx	.004	1
16	MP2A	X	-2.529	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
17	MP2A	Z	-4.38	5
18	MP2A	Mx	.004	5
19	MP1A	X	-1.781	2
20	MP1A	Z	-3.084	2
21	MP1A	Mx	.00089	2
22	MP1A	X	-1.781	4
23	MP1A	Z	-3.084	4
24	MP1A	Mx	.00089	4
25	MP1A	X	-1.546	3.5
26	MP1A	Z	-2.677	3.5
27	MP1A	Mx	-.000773	3.5
28	MP2A	X	-1.494	3.5
29	MP2A	Z	-2.588	3.5
30	MP2A	Mx	-.000747	3.5
31	M29	X	-3.42	.5
32	M29	Z	-5.923	.5
33	M29	Mx	0	.5
34	MP4A	X	-4.595	1
35	MP4A	Z	-7.959	1
36	MP4A	Mx	.002	1
37	MP4A	X	-4.595	5
38	MP4A	Z	-7.959	5
39	MP4A	Mx	.002	5

Member Point Loads (BLC 77 : Lm1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M9	Y	-500	0

Member Point Loads (BLC 78 : Lm2)

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

Member Point Loads (BLC 79 : Lv1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M1	Y	-250	%50

Member Point Loads (BLC 80 : Lv2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M1	Y	-250	%100

Member Point Loads (BLC 81 : Antenna Ev)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	Y	-.683	1
2	MP2A	My	-.000228	1
3	MP2A	Mz	0	1
4	MP2A	Y	-.683	1
5	MP2A	My	.000228	1
6	MP2A	Mz	0	1
7	MP2A	Y	-.848	1
8	MP2A	My	-.000424	1
9	MP2A	Mz	.000495	1
10	MP2A	Y	-.848	5
11	MP2A	My	-.000424	5
12	MP2A	Mz	.000495	5
13	MP2A	Y	-.848	1
14	MP2A	My	-.000424	1

Member Point Loads (BLC 81 : Antenna Ev) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
15	MP2A	Mz	-.000495	1
16	MP2A	Y	-.848	5
17	MP2A	My	-.000424	5
18	MP2A	Mz	-.000495	5
19	MP1A	Y	-1.691	2
20	MP1A	My	-.000845	2
21	MP1A	Mz	0	2
22	MP1A	Y	-1.691	4
23	MP1A	My	-.000845	4
24	MP1A	Mz	0	4
25	MP1A	Y	-3.277	3.5
26	MP1A	My	.002	3.5
27	MP1A	Mz	0	3.5
28	MP2A	Y	-2.73	3.5
29	MP2A	My	.001	3.5
30	MP2A	Mz	0	3.5
31	M29	Y	-1.242	.5
32	M29	My	0	.5
33	M29	Mz	0	.5
34	MP4A	Y	-.891	1
35	MP4A	My	-.000446	1
36	MP4A	Mz	0	1
37	MP4A	Y	-.891	5
38	MP4A	My	-.000446	5
39	MP4A	Mz	0	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	Z	-1.708	1
2	MP2A	Mx	0	1
3	MP2A	Z	-1.708	1
4	MP2A	Mx	0	1
5	MP2A	Z	-2.121	1
6	MP2A	Mx	-.001	1
7	MP2A	Z	-2.121	5
8	MP2A	Mx	-.001	5
9	MP2A	Z	-2.121	1
10	MP2A	Mx	.001	1
11	MP2A	Z	-2.121	5
12	MP2A	Mx	.001	5
13	MP1A	Z	-4.227	2
14	MP1A	Mx	0	2
15	MP1A	Z	-4.227	4
16	MP1A	Mx	0	4
17	MP1A	Z	-8.192	3.5
18	MP1A	Mx	0	3.5
19	MP2A	Z	-6.824	3.5
20	MP2A	Mx	0	3.5
21	M29	Z	-3.106	.5
22	M29	Mx	0	.5
23	MP4A	Z	-2.228	1
24	MP4A	Mx	0	1
25	MP4A	Z	-2.228	5
26	MP4A	Mx	0	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	1.708	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
2	MP2A	Mx	-.000569	1
3	MP2A	X	1.708	1
4	MP2A	Mx	.000569	1
5	MP2A	X	2.121	1
6	MP2A	Mx	-.001	1
7	MP2A	X	2.121	5
8	MP2A	Mx	-.001	5
9	MP2A	X	2.121	1
10	MP2A	Mx	-.001	1
11	MP2A	X	2.121	5
12	MP2A	Mx	-.001	5
13	MP1A	X	4.227	2
14	MP1A	Mx	-.002	2
15	MP1A	X	4.227	4
16	MP1A	Mx	-.002	4
17	MP1A	X	8.192	3.5
18	MP1A	Mx	.004	3.5
19	MP2A	X	6.824	3.5
20	MP2A	Mx	.003	3.5
21	M29	X	3.106	.5
22	M29	Mx	0	.5
23	MP4A	X	2.228	1
24	MP4A	Mx	-.001	1
25	MP4A	X	2.228	5
26	MP4A	Mx	-.001	5

Member Distributed Loads (BLC 40 : Structure Di)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	Y	-8.826	-8.826	0	%100
2	M2	Y	-8.826	-8.826	0	%100
3	MP1A	Y	-8.826	-8.826	0	%100
4	M26	Y	-14.472	-14.472	0	%100
5	M27	Y	-14.472	-14.472	0	%100
6	M28	Y	-11.309	-11.309	0	%100
7	M29	Y	-8.826	-8.826	0	%100
8	M30	Y	-12.369	-12.369	0	%100
9	M31	Y	-8.826	-8.826	0	%100
10	M32	Y	-11.309	-11.309	0	%100
11	M33	Y	-12.369	-12.369	0	%100
12	M34	Y	-5.35	-5.35	0	%100
13	M35	Y	-5.35	-5.35	0	%100
14	M36	Y	-5.35	-5.35	0	%100
15	M37	Y	-11.309	-11.309	0	%100
16	M38	Y	-8.826	-8.826	0	%100
17	M39	Y	-12.369	-12.369	0	%100
18	M41	Y	-11.309	-11.309	0	%100
19	M42	Y	-12.369	-12.369	0	%100
20	M43	Y	-5.35	-5.35	0	%100
21	M44	Y	-5.35	-5.35	0	%100
22	M45	Y	-5.35	-5.35	0	%100
23	M39B	Y	-8.826	-8.826	0	%100
24	M37A	Y	-13.372	-13.372	0	%100
25	MP2A	Y	-9.896	-9.896	0	%100
26	MP3A	Y	-8.826	-8.826	0	%100
27	MP4A	Y	-8.826	-8.826	0	%100
28	M65	Y	-8.826	-8.826	0	%100
29	M51	Y	-8.826	-8.826	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
30	M52	Y	-8.826	-8.826	0	%100
31	M53	Y	-8.826	-8.826	0	%100
32	M56	Y	-8.826	-8.826	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	-8.258	-8.258	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-8.258	-8.258	0	%100
5	MP1A	X	0	0	0	%100
6	MP1A	Z	-8.258	-8.258	0	%100
7	M26	X	0	0	0	%100
8	M26	Z	-1.321	-1.321	0	%100
9	M27	X	0	0	0	%100
10	M27	Z	-1.321	-1.321	0	%100
11	M28	X	0	0	0	%100
12	M28	Z	-1.232	-1.232	0	%100
13	M29	X	0	0	0	%100
14	M29	Z	-5.209	-5.209	0	%100
15	M30	X	0	0	0	%100
16	M30	Z	-1.232	-1.232	0	%100
17	M31	X	0	0	0	%100
18	M31	Z	-5.209	-5.209	0	%100
19	M32	X	0	0	0	%100
20	M32	Z	-1.232	-1.232	0	%100
21	M33	X	0	0	0	%100
22	M33	Z	-1.232	-1.232	0	%100
23	M34	X	0	0	0	%100
24	M34	Z	-2.608	-2.608	0	%100
25	M35	X	0	0	0	%100
26	M35	Z	-2.608	-2.608	0	%100
27	M36	X	0	0	0	%100
28	M36	Z	-2.149	-2.149	0	%100
29	M37	X	0	0	0	%100
30	M37	Z	-1.232	-1.232	0	%100
31	M38	X	0	0	0	%100
32	M38	Z	-5.209	-5.209	0	%100
33	M39	X	0	0	0	%100
34	M39	Z	-1.232	-1.232	0	%100
35	M41	X	0	0	0	%100
36	M41	Z	-1.232	-1.232	0	%100
37	M42	X	0	0	0	%100
38	M42	Z	-1.232	-1.232	0	%100
39	M43	X	0	0	0	%100
40	M43	Z	-2.608	-2.608	0	%100
41	M44	X	0	0	0	%100
42	M44	Z	-2.608	-2.608	0	%100
43	M45	X	0	0	0	%100
44	M45	Z	-2.149	-2.149	0	%100
45	M39B	X	0	0	0	%100
46	M39B	Z	-5.209	-5.209	0	%100
47	M37A	X	0	0	0	%100
48	M37A	Z	-11.798	-11.798	0	%100
49	MP2A	X	0	0	0	%100
50	MP2A	Z	-9.997	-9.997	0	%100
51	MP3A	X	0	0	0	%100
52	MP3A	Z	-8.258	-8.258	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
53	MP4A	X	0	0	0	%100
54	MP4A	Z	-8.258	-8.258	0	%100
55	M65	X	0	0	0	%100
56	M65	Z	-2.754	-2.754	0	%100
57	M51	X	0	0	0	%100
58	M51	Z	-4.197	-4.197	0	%100
59	M52	X	0	0	0	%100
60	M52	Z	-.605	-.605	0	%100
61	M53	X	0	0	0	%100
62	M53	Z	-.605	-.605	0	%100
63	M56	X	0	0	0	%100
64	M56	Z	-8.258	-8.258	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	3.097	3.097	0	%100
2	M1	Z	-5.364	-5.364	0	%100
3	M2	X	3.097	3.097	0	%100
4	M2	Z	-5.364	-5.364	0	%100
5	MP1A	X	4.129	4.129	0	%100
6	MP1A	Z	-7.152	-7.152	0	%100
7	M26	X	.495	.495	0	%100
8	M26	Z	-.858	-.858	0	%100
9	M27	X	.495	.495	0	%100
10	M27	Z	-.858	-.858	0	%100
11	M28	X	.867	.867	0	%100
12	M28	Z	-1.502	-1.502	0	%100
13	M29	X	3.666	3.666	0	%100
14	M29	Z	-6.35	-6.35	0	%100
15	M30	X	.867	.867	0	%100
16	M30	Z	-1.502	-1.502	0	%100
17	M31	X	3.666	3.666	0	%100
18	M31	Z	-6.35	-6.35	0	%100
19	M32	X	.867	.867	0	%100
20	M32	Z	-1.502	-1.502	0	%100
21	M33	X	.867	.867	0	%100
22	M33	Z	-1.502	-1.502	0	%100
23	M34	X	1.304	1.304	0	%100
24	M34	Z	-2.258	-2.258	0	%100
25	M35	X	1.304	1.304	0	%100
26	M35	Z	-2.258	-2.258	0	%100
27	M36	X	1.302	1.302	0	%100
28	M36	Z	-2.255	-2.255	0	%100
29	M37	X	.183	.183	0	%100
30	M37	Z	-.318	-.318	0	%100
31	M38	X	.775	.775	0	%100
32	M38	Z	-1.342.	-1.342	0	%100
33	M39	X	.183	.183	0	%100
34	M39	Z	-.318	-.318	0	%100
35	M41	X	.183	.183	0	%100
36	M41	Z	-.318	-.318	0	%100
37	M42	X	.183	.183	0	%100
38	M42	Z	-.318	-.318	0	%100
39	M43	X	1.304	1.304	0	%100
40	M43	Z	-2.258	-2.258	0	%100
41	M44	X	1.304	1.304	0	%100
42	M44	Z	-2.258	-2.258	0	%100
43	M45	X	.682	.682	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
44	M45	Z	-1.182	-1.182	0	%100
45	M39B	X	.775	.775	0	%100
46	M39B	Z	-1.342	-1.342	0	%100
47	M37A	X	5.899	5.899	0	%100
48	M37A	Z	-10.218	-10.218	0	%100
49	MP2A	X	4.998	4.998	0	%100
50	MP2A	Z	-8.657	-8.657	0	%100
51	MP3A	X	4.129	4.129	0	%100
52	MP3A	Z	-7.152	-7.152	0	%100
53	MP4A	X	4.129	4.129	0	%100
54	MP4A	Z	-7.152	-7.152	0	%100
55	M65	X	.035	.035	0	%100
56	M65	Z	-.06	-.06	0	%100
57	M51	X	3.869	3.869	0	%100
58	M51	Z	-6.702	-6.702	0	%100
59	M52	X	.252	.252	0	%100
60	M52	Z	-.436	-.436	0	%100
61	M53	X	.252	.252	0	%100
62	M53	Z	-.436	-.436	0	%100
63	M56	X	4.129	4.129	0	%100
64	M56	Z	-7.152	-7.152	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	1.788	1.788	0	%100
2	M1	Z	-1.032	-1.032	0	%100
3	M2	X	1.788	1.788	0	%100
4	M2	Z	-1.032	-1.032	0	%100
5	MP1A	X	7.152	7.152	0	%100
6	MP1A	Z	-4.129	-4.129	0	%100
7	M26	X	.286	.286	0	%100
8	M26	Z	-.165	-.165	0	%100
9	M27	X	.286	.286	0	%100
10	M27	Z	-.165	-.165	0	%100
11	M28	X	1.188	1.188	0	%100
12	M28	Z	-.686	-.686	0	%100
13	M29	X	5.022	5.022	0	%100
14	M29	Z	-2.899	-2.899	0	%100
15	M30	X	1.188	1.188	0	%100
16	M30	Z	-.686	-.686	0	%100
17	M31	X	5.022	5.022	0	%100
18	M31	Z	-2.899	-2.899	0	%100
19	M32	X	1.188	1.188	0	%100
20	M32	Z	-.686	-.686	0	%100
21	M33	X	1.188	1.188	0	%100
22	M33	Z	-.686	-.686	0	%100
23	M34	X	2.258	2.258	0	%100
24	M34	Z	-1.304	-1.304	0	%100
25	M35	X	2.258	2.258	0	%100
26	M35	Z	-1.304	-1.304	0	%100
27	M36	X	1.971	1.971	0	%100
28	M36	Z	-1.138	-1.138	0	%100
29	M37	X	.003	.003	0	%100
30	M37	Z	-.002	-.002	0	%100
31	M38	X	.014	.014	0	%100
32	M38	Z	-.008	-.008	0	%100
33	M39	X	.003	.003	0	%100
34	M39	Z	-.002	-.002	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
35	M41	X	.003	.003	0	%100
36	M41	Z	-.002	-.002	0	%100
37	M42	X	.003	.003	0	%100
38	M42	Z	-.002	-.002	0	%100
39	M43	X	2.258	2.258	0	%100
40	M43	Z	-1.304	-1.304	0	%100
41	M44	X	2.258	2.258	0	%100
42	M44	Z	-1.304	-1.304	0	%100
43	M45	X	.897	.897	0	%100
44	M45	Z	-.518	-.518	0	%100
45	M39B	X	.014	.014	0	%100
46	M39B	Z	-.008	-.008	0	%100
47	M37A	X	10.218	10.218	0	%100
48	M37A	Z	-5.899	-5.899	0	%100
49	MP2A	X	8.657	8.657	0	%100
50	MP2A	Z	-4.998	-4.998	0	%100
51	MP3A	X	7.152	7.152	0	%100
52	MP3A	Z	-4.129	-4.129	0	%100
53	MP4A	X	7.152	7.152	0	%100
54	MP4A	Z	-4.129	-4.129	0	%100
55	M65	X	1.251	1.251	0	%100
56	M65	Z	-.722	-.722	0	%100
57	M51	X	6.643	6.643	0	%100
58	M51	Z	-3.835	-3.835	0	%100
59	M52	X	3.487	3.487	0	%100
60	M52	Z	-2.013	-2.013	0	%100
61	M53	X	3.487	3.487	0	%100
62	M53	Z	-2.013	-2.013	0	%100
63	M56	X	7.152	7.152	0	%100
64	M56	Z	-4.129	-4.129	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	MP1A	X	8.258	8.258	0	%100
6	MP1A	Z	0	0	0	%100
7	M26	X	0	0	0	%100
8	M26	Z	0	0	0	%100
9	M27	X	0	0	0	%100
10	M27	Z	0	0	0	%100
11	M28	X	.506	.506	0	%100
12	M28	Z	0	0	0	%100
13	M29	X	2.14	2.14	0	%100
14	M29	Z	0	0	0	%100
15	M30	X	.506	.506	0	%100
16	M30	Z	0	0	0	%100
17	M31	X	2.14	2.14	0	%100
18	M31	Z	0	0	0	%100
19	M32	X	.506	.506	0	%100
20	M32	Z	0	0	0	%100
21	M33	X	.506	.506	0	%100
22	M33	Z	0	0	0	%100
23	M34	X	2.608	2.608	0	%100
24	M34	Z	0	0	0	%100
25	M35	X	2.608	2.608	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
26	M35	Z	0	0	0	%100
27	M36	X	1.491	1.491	0	%100
28	M36	Z	0	0	0	%100
29	M37	X	.506	.506	0	%100
30	M37	Z	0	0	0	%100
31	M38	X	2.14	2.14	0	%100
32	M38	Z	0	0	0	%100
33	M39	X	.506	.506	0	%100
34	M39	Z	0	0	0	%100
35	M41	X	.506	.506	0	%100
36	M41	Z	0	0	0	%100
37	M42	X	.506	.506	0	%100
38	M42	Z	0	0	0	%100
39	M43	X	2.608	2.608	0	%100
40	M43	Z	0	0	0	%100
41	M44	X	2.608	2.608	0	%100
42	M44	Z	0	0	0	%100
43	M45	X	1.491	1.491	0	%100
44	M45	Z	0	0	0	%100
45	M39B	X	2.14	2.14	0	%100
46	M39B	Z	0	0	0	%100
47	M37A	X	11.798	11.798	0	%100
48	M37A	Z	0	0	0	%100
49	MP2A	X	9.997	9.997	0	%100
50	MP2A	Z	0	0	0	%100
51	MP3A	X	8.258	8.258	0	%100
52	MP3A	Z	0	0	0	%100
53	MP4A	X	8.258	8.258	0	%100
54	MP4A	Z	0	0	0	%100
55	M65	X	5.504	5.504	0	%100
56	M65	Z	0	0	0	%100
57	M51	X	4.061	4.061	0	%100
58	M51	Z	0	0	0	%100
59	M52	X	7.653	7.653	0	%100
60	M52	Z	0	0	0	%100
61	M53	X	7.653	7.653	0	%100
62	M53	Z	0	0	0	%100
63	M56	X	8.258	8.258	0	%100
64	M56	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,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	1.788	1.788	0	%100
2	M1	Z	1.032	1.032	0	%100
3	M2	X	1.788	1.788	0	%100
4	M2	Z	1.032	1.032	0	%100
5	MP1A	X	7.152	7.152	0	%100
6	MP1A	Z	4.129	4.129	0	%100
7	M26	X	.286	.286	0	%100
8	M26	Z	.165	.165	0	%100
9	M27	X	.286	.286	0	%100
10	M27	Z	.165	.165	0	%100
11	M28	X	.003	.003	0	%100
12	M28	Z	.002	.002	0	%100
13	M29	X	.014	.014	0	%100
14	M29	Z	.008	.008	0	%100
15	M30	X	.003	.003	0	%100
16	M30	Z	.002	.002	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
17	M31	X	.014	.014	0	%100
18	M31	Z	.008	.008	0	%100
19	M32	X	.003	.003	0	%100
20	M32	Z	.002	.002	0	%100
21	M33	X	.003	.003	0	%100
22	M33	Z	.002	.002	0	%100
23	M34	X	2.258	2.258	0	%100
24	M34	Z	1.304	1.304	0	%100
25	M35	X	2.258	2.258	0	%100
26	M35	Z	1.304	1.304	0	%100
27	M36	X	.897	.897	0	%100
28	M36	Z	.518	.518	0	%100
29	M37	X	1.188	1.188	0	%100
30	M37	Z	.686	.686	0	%100
31	M38	X	5.022	5.022	0	%100
32	M38	Z	2.899	2.899	0	%100
33	M39	X	1.188	1.188	0	%100
34	M39	Z	.686	.686	0	%100
35	M41	X	1.188	1.188	0	%100
36	M41	Z	.686	.686	0	%100
37	M42	X	1.188	1.188	0	%100
38	M42	Z	.686	.686	0	%100
39	M43	X	2.258	2.258	0	%100
40	M43	Z	1.304	1.304	0	%100
41	M44	X	2.258	2.258	0	%100
42	M44	Z	1.304	1.304	0	%100
43	M45	X	1.971	1.971	0	%100
44	M45	Z	1.138	1.138	0	%100
45	M39B	X	5.022	5.022	0	%100
46	M39B	Z	2.899	2.899	0	%100
47	M37A	X	10.218	10.218	0	%100
48	M37A	Z	5.899	5.899	0	%100
49	MP2A	X	8.657	8.657	0	%100
50	MP2A	Z	4.998	4.998	0	%100
51	MP3A	X	7.152	7.152	0	%100
52	MP3A	Z	4.129	4.129	0	%100
53	MP4A	X	7.152	7.152	0	%100
54	MP4A	Z	4.129	4.129	0	%100
55	M65	X	7.091	7.091	0	%100
56	M65	Z	4.094	4.094	0	%100
57	M51	X	.45	.45	0	%100
58	M51	Z	.26	.26	0	%100
59	M52	X	6.716	6.716	0	%100
60	M52	Z	3.877	3.877	0	%100
61	M53	X	6.716	6.716	0	%100
62	M53	Z	3.877	3.877	0	%100
63	M56	X	7.152	7.152	0	%100
64	M56	Z	4.129	4.129	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	3.097	3.097	0	%100
2	M1	Z	5.364	5.364	0	%100
3	M2	X	3.097	3.097	0	%100
4	M2	Z	5.364	5.364	0	%100
5	MP1A	X	4.129	4.129	0	%100
6	MP1A	Z	7.152	7.152	0	%100
7	M26	X	.495	.495	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
8	M26	Z	.858	.858	0	%100
9	M27	X	.495	.495	0	%100
10	M27	Z	.858	.858	0	%100
11	M28	X	.183	.183	0	%100
12	M28	Z	.318	.318	0	%100
13	M29	X	.775	.775	0	%100
14	M29	Z	1.342	1.342	0	%100
15	M30	X	.183	.183	0	%100
16	M30	Z	.318	.318	0	%100
17	M31	X	.775	.775	0	%100
18	M31	Z	1.342	1.342	0	%100
19	M32	X	.183	.183	0	%100
20	M32	Z	.318	.318	0	%100
21	M33	X	.183	.183	0	%100
22	M33	Z	.318	.318	0	%100
23	M34	X	1.304	1.304	0	%100
24	M34	Z	2.258	2.258	0	%100
25	M35	X	1.304	1.304	0	%100
26	M35	Z	2.258	2.258	0	%100
27	M36	X	.682	.682	0	%100
28	M36	Z	1.182	1.182	0	%100
29	M37	X	.867	.867	0	%100
30	M37	Z	1.502	1.502	0	%100
31	M38	X	3.666	3.666	0	%100
32	M38	Z	6.35	6.35	0	%100
33	M39	X	.867	.867	0	%100
34	M39	Z	1.502	1.502	0	%100
35	M41	X	.867	.867	0	%100
36	M41	Z	1.502	1.502	0	%100
37	M42	X	.867	.867	0	%100
38	M42	Z	1.502	1.502	0	%100
39	M43	X	1.304	1.304	0	%100
40	M43	Z	2.258	2.258	0	%100
41	M44	X	1.304	1.304	0	%100
42	M44	Z	2.258	2.258	0	%100
43	M45	X	1.302	1.302	0	%100
44	M45	Z	2.255	2.255	0	%100
45	M39B	X	3.666	3.666	0	%100
46	M39B	Z	6.35	6.35	0	%100
47	M37A	X	5.899	5.899	0	%100
48	M37A	Z	10.218	10.218	0	%100
49	MP2A	X	4.998	4.998	0	%100
50	MP2A	Z	8.657	8.657	0	%100
51	MP3A	X	4.129	4.129	0	%100
52	MP3A	Z	7.152	7.152	0	%100
53	MP4A	X	4.129	4.129	0	%100
54	MP4A	Z	7.152	7.152	0	%100
55	M65	X	3.407	3.407	0	%100
56	M65	Z	5.9	5.9	0	%100
57	M51	X	.294	.294	0	%100
58	M51	Z	.509	.509	0	%100
59	M52	X	2.116	2.116	0	%100
60	M52	Z	3.665	3.665	0	%100
61	M53	X	2.116	2.116	0	%100
62	M53	Z	3.665	3.665	0	%100
63	M56	X	4.129	4.129	0	%100
64	M56	Z	7.152	7.152	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	8.258	8.258	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	8.258	8.258	0	%100
5	MP1A	X	0	0	0	%100
6	MP1A	Z	8.258	8.258	0	%100
7	M26	X	0	0	0	%100
8	M26	Z	1.321	1.321	0	%100
9	M27	X	0	0	0	%100
10	M27	Z	1.321	1.321	0	%100
11	M28	X	0	0	0	%100
12	M28	Z	1.232	1.232	0	%100
13	M29	X	0	0	0	%100
14	M29	Z	5.209	5.209	0	%100
15	M30	X	0	0	0	%100
16	M30	Z	1.232	1.232	0	%100
17	M31	X	0	0	0	%100
18	M31	Z	5.209	5.209	0	%100
19	M32	X	0	0	0	%100
20	M32	Z	1.232	1.232	0	%100
21	M33	X	0	0	0	%100
22	M33	Z	1.232	1.232	0	%100
23	M34	X	0	0	0	%100
24	M34	Z	2.608	2.608	0	%100
25	M35	X	0	0	0	%100
26	M35	Z	2.608	2.608	0	%100
27	M36	X	0	0	0	%100
28	M36	Z	2.149	2.149	0	%100
29	M37	X	0	0	0	%100
30	M37	Z	1.232	1.232	0	%100
31	M38	X	0	0	0	%100
32	M38	Z	5.209	5.209	0	%100
33	M39	X	0	0	0	%100
34	M39	Z	1.232	1.232	0	%100
35	M41	X	0	0	0	%100
36	M41	Z	1.232	1.232	0	%100
37	M42	X	0	0	0	%100
38	M42	Z	1.232	1.232	0	%100
39	M43	X	0	0	0	%100
40	M43	Z	2.608	2.608	0	%100
41	M44	X	0	0	0	%100
42	M44	Z	2.608	2.608	0	%100
43	M45	X	0	0	0	%100
44	M45	Z	2.149	2.149	0	%100
45	M39B	X	0	0	0	%100
46	M39B	Z	5.209	5.209	0	%100
47	M37A	X	0	0	0	%100
48	M37A	Z	11.798	11.798	0	%100
49	MP2A	X	0	0	0	%100
50	MP2A	Z	9.997	9.997	0	%100
51	MP3A	X	0	0	0	%100
52	MP3A	Z	8.258	8.258	0	%100
53	MP4A	X	0	0	0	%100
54	MP4A	Z	8.258	8.258	0	%100
55	M65	X	0	0	0	%100
56	M65	Z	2.754	2.754	0	%100
57	M51	X	0	0	0	%100
58	M51	Z	4.197	4.197	0	%100
59	M52	X	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
60	M52	Z	.605	.605	0	%100
61	M53	X	0	0	0	%100
62	M53	Z	.605	.605	0	%100
63	M56	X	0	0	0	%100
64	M56	Z	8.258	8.258	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-3.097	-3.097	0	%100
2	M1	Z	5.364	5.364	0	%100
3	M2	X	-3.097	-3.097	0	%100
4	M2	Z	5.364	5.364	0	%100
5	MP1A	X	-4.129	-4.129	0	%100
6	MP1A	Z	7.152	7.152	0	%100
7	M26	X	-.495	-.495	0	%100
8	M26	Z	.858	.858	0	%100
9	M27	X	-.495	-.495	0	%100
10	M27	Z	.858	.858	0	%100
11	M28	X	-.867	-.867	0	%100
12	M28	Z	1.502	1.502	0	%100
13	M29	X	-3.666	-3.666	0	%100
14	M29	Z	6.35	6.35	0	%100
15	M30	X	-.867	-.867	0	%100
16	M30	Z	1.502	1.502	0	%100
17	M31	X	-3.666	-3.666	0	%100
18	M31	Z	6.35	6.35	0	%100
19	M32	X	-.867	-.867	0	%100
20	M32	Z	1.502	1.502	0	%100
21	M33	X	-.867	-.867	0	%100
22	M33	Z	1.502	1.502	0	%100
23	M34	X	-1.304	-1.304	0	%100
24	M34	Z	2.258	2.258	0	%100
25	M35	X	-1.304	-1.304	0	%100
26	M35	Z	2.258	2.258	0	%100
27	M36	X	-1.302	-1.302	0	%100
28	M36	Z	2.255	2.255	0	%100
29	M37	X	-.183	-.183	0	%100
30	M37	Z	.318	.318	0	%100
31	M38	X	-.775	-.775	0	%100
32	M38	Z	1.342	1.342	0	%100
33	M39	X	-.183	-.183	0	%100
34	M39	Z	.318	.318	0	%100
35	M41	X	-.183	-.183	0	%100
36	M41	Z	.318	.318	0	%100
37	M42	X	-.183	-.183	0	%100
38	M42	Z	.318	.318	0	%100
39	M43	X	-1.304	-1.304	0	%100
40	M43	Z	2.258	2.258	0	%100
41	M44	X	-1.304	-1.304	0	%100
42	M44	Z	2.258	2.258	0	%100
43	M45	X	-.682	-.682	0	%100
44	M45	Z	1.182	1.182	0	%100
45	M39B	X	-.775	-.775	0	%100
46	M39B	Z	1.342	1.342	0	%100
47	M37A	X	-5.899	-5.899	0	%100
48	M37A	Z	10.218	10.218	0	%100
49	MP2A	X	-4.998	-4.998	0	%100
50	MP2A	Z	8.657	8.657	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
51	MP3A	X	-4.129	-4.129	0	%100
52	MP3A	Z	7.152	7.152	0	%100
53	MP4A	X	-4.129	-4.129	0	%100
54	MP4A	Z	7.152	7.152	0	%100
55	M65	X	-.035	-.035	0	%100
56	M65	Z	.06	.06	0	%100
57	M51	X	-3.869	-3.869	0	%100
58	M51	Z	6.702	6.702	0	%100
59	M52	X	-.252	-.252	0	%100
60	M52	Z	.436	.436	0	%100
61	M53	X	-.252	-.252	0	%100
62	M53	Z	.436	.436	0	%100
63	M56	X	-4.129	-4.129	0	%100
64	M56	Z	7.152	7.152	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-1.788	-1.788	0	%100
2	M1	Z	1.032	1.032	0	%100
3	M2	X	-1.788	-1.788	0	%100
4	M2	Z	1.032	1.032	0	%100
5	MP1A	X	-7.152	-7.152	0	%100
6	MP1A	Z	4.129	4.129	0	%100
7	M26	X	-.286	-.286	0	%100
8	M26	Z	.165	.165	0	%100
9	M27	X	-.286	-.286	0	%100
10	M27	Z	.165	.165	0	%100
11	M28	X	-1.188	-1.188	0	%100
12	M28	Z	.686	.686	0	%100
13	M29	X	-5.022	-5.022	0	%100
14	M29	Z	2.899	2.899	0	%100
15	M30	X	-1.188	-1.188	0	%100
16	M30	Z	.686	.686	0	%100
17	M31	X	-5.022	-5.022	0	%100
18	M31	Z	2.899	2.899	0	%100
19	M32	X	-1.188	-1.188	0	%100
20	M32	Z	.686	.686	0	%100
21	M33	X	-1.188	-1.188	0	%100
22	M33	Z	.686	.686	0	%100
23	M34	X	-2.258	-2.258	0	%100
24	M34	Z	1.304	1.304	0	%100
25	M35	X	-2.258	-2.258	0	%100
26	M35	Z	1.304	1.304	0	%100
27	M36	X	-1.971	-1.971	0	%100
28	M36	Z	1.138	1.138	0	%100
29	M37	X	-.003	-.003	0	%100
30	M37	Z	.002	.002	0	%100
31	M38	X	-.014	-.014	0	%100
32	M38	Z	.008	.008	0	%100
33	M39	X	-.003	-.003	0	%100
34	M39	Z	.002	.002	0	%100
35	M41	X	-.003	-.003	0	%100
36	M41	Z	.002	.002	0	%100
37	M42	X	-.003	-.003	0	%100
38	M42	Z	.002	.002	0	%100
39	M43	X	-2.258	-2.258	0	%100
40	M43	Z	1.304	1.304	0	%100
41	M44	X	-2.258	-2.258	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
42	M44	Z	1.304	1.304	0	%100
43	M45	X	-.897	-.897	0	%100
44	M45	Z	.518	.518	0	%100
45	M39B	X	-.014	-.014	0	%100
46	M39B	Z	.008	.008	0	%100
47	M37A	X	-10.218	-10.218	0	%100
48	M37A	Z	5.899	5.899	0	%100
49	MP2A	X	-8.657	-8.657	0	%100
50	MP2A	Z	4.998	4.998	0	%100
51	MP3A	X	-7.152	-7.152	0	%100
52	MP3A	Z	4.129	4.129	0	%100
53	MP4A	X	-7.152	-7.152	0	%100
54	MP4A	Z	4.129	4.129	0	%100
55	M65	X	-1.251	-1.251	0	%100
56	M65	Z	.722	.722	0	%100
57	M51	X	-6.643	-6.643	0	%100
58	M51	Z	3.835	3.835	0	%100
59	M52	X	-3.487	-3.487	0	%100
60	M52	Z	2.013	2.013	0	%100
61	M53	X	-3.487	-3.487	0	%100
62	M53	Z	2.013	2.013	0	%100
63	M56	X	-7.152	-7.152	0	%100
64	M56	Z	4.129	4.129	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	MP1A	X	-8.258	-8.258	0	%100
6	MP1A	Z	0	0	0	%100
7	M26	X	0	0	0	%100
8	M26	Z	0	0	0	%100
9	M27	X	0	0	0	%100
10	M27	Z	0	0	0	%100
11	M28	X	-.506	-.506	0	%100
12	M28	Z	0	0	0	%100
13	M29	X	-2.14	-2.14	0	%100
14	M29	Z	0	0	0	%100
15	M30	X	-.506	-.506	0	%100
16	M30	Z	0	0	0	%100
17	M31	X	-2.14	-2.14	0	%100
18	M31	Z	0	0	0	%100
19	M32	X	-.506	-.506	0	%100
20	M32	Z	0	0	0	%100
21	M33	X	-.506	-.506	0	%100
22	M33	Z	0	0	0	%100
23	M34	X	-2.608	-2.608	0	%100
24	M34	Z	0	0	0	%100
25	M35	X	-2.608	-2.608	0	%100
26	M35	Z	0	0	0	%100
27	M36	X	-1.491	-1.491	0	%100
28	M36	Z	0	0	0	%100
29	M37	X	-.506	-.506	0	%100
30	M37	Z	0	0	0	%100
31	M38	X	-2.14	-2.14	0	%100
32	M38	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,...	Start Location[ft,%]	End Location[ft,%]
33	M39	X	-.506	-.506	0	%100
34	M39	Z	0	0	0	%100
35	M41	X	-.506	-.506	0	%100
36	M41	Z	0	0	0	%100
37	M42	X	-.506	-.506	0	%100
38	M42	Z	0	0	0	%100
39	M43	X	-2.608	-2.608	0	%100
40	M43	Z	0	0	0	%100
41	M44	X	-2.608	-2.608	0	%100
42	M44	Z	0	0	0	%100
43	M45	X	-1.491	-1.491	0	%100
44	M45	Z	0	0	0	%100
45	M39B	X	-2.14	-2.14	0	%100
46	M39B	Z	0	0	0	%100
47	M37A	X	-11.798	-11.798	0	%100
48	M37A	Z	0	0	0	%100
49	MP2A	X	-9.997	-9.997	0	%100
50	MP2A	Z	0	0	0	%100
51	MP3A	X	-8.258	-8.258	0	%100
52	MP3A	Z	0	0	0	%100
53	MP4A	X	-8.258	-8.258	0	%100
54	MP4A	Z	0	0	0	%100
55	M65	X	-5.504	-5.504	0	%100
56	M65	Z	0	0	0	%100
57	M51	X	-4.061	-4.061	0	%100
58	M51	Z	0	0	0	%100
59	M52	X	-7.653	-7.653	0	%100
60	M52	Z	0	0	0	%100
61	M53	X	-7.653	-7.653	0	%100
62	M53	Z	0	0	0	%100
63	M56	X	-8.258	-8.258	0	%100
64	M56	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,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-1.788	-1.788	0	%100
2	M1	Z	-1.032	-1.032	0	%100
3	M2	X	-1.788	-1.788	0	%100
4	M2	Z	-1.032	-1.032	0	%100
5	MP1A	X	-7.152	-7.152	0	%100
6	MP1A	Z	-4.129	-4.129	0	%100
7	M26	X	-.286	-.286	0	%100
8	M26	Z	-.165	-.165	0	%100
9	M27	X	-.286	-.286	0	%100
10	M27	Z	-.165	-.165	0	%100
11	M28	X	-.003	-.003	0	%100
12	M28	Z	-.002	-.002	0	%100
13	M29	X	-.014	-.014	0	%100
14	M29	Z	-.008	-.008	0	%100
15	M30	X	-.003	-.003	0	%100
16	M30	Z	-.002	-.002	0	%100
17	M31	X	-.014	-.014	0	%100
18	M31	Z	-.008	-.008	0	%100
19	M32	X	-.003	-.003	0	%100
20	M32	Z	-.002	-.002	0	%100
21	M33	X	-.003	-.003	0	%100
22	M33	Z	-.002	-.002	0	%100
23	M34	X	-2.258	-2.258	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
24	M34	Z	-1.304	-1.304	0	%100
25	M35	X	-2.258	-2.258	0	%100
26	M35	Z	-1.304	-1.304	0	%100
27	M36	X	-.897	-.897	0	%100
28	M36	Z	-.518	-.518	0	%100
29	M37	X	-1.188	-1.188	0	%100
30	M37	Z	-.686	-.686	0	%100
31	M38	X	-5.022	-5.022	0	%100
32	M38	Z	-2.899	-2.899	0	%100
33	M39	X	-1.188	-1.188	0	%100
34	M39	Z	-.686	-.686	0	%100
35	M41	X	-1.188	-1.188	0	%100
36	M41	Z	-.686	-.686	0	%100
37	M42	X	-1.188	-1.188	0	%100
38	M42	Z	-.686	-.686	0	%100
39	M43	X	-2.258	-2.258	0	%100
40	M43	Z	-1.304	-1.304	0	%100
41	M44	X	-2.258	-2.258	0	%100
42	M44	Z	-1.304	-1.304	0	%100
43	M45	X	-1.971	-1.971	0	%100
44	M45	Z	-1.138	-1.138	0	%100
45	M39B	X	-5.022	-5.022	0	%100
46	M39B	Z	-2.899	-2.899	0	%100
47	M37A	X	-10.218	-10.218	0	%100
48	M37A	Z	-5.899	-5.899	0	%100
49	MP2A	X	-8.657	-8.657	0	%100
50	MP2A	Z	-4.998	-4.998	0	%100
51	MP3A	X	-7.152	-7.152	0	%100
52	MP3A	Z	-4.129	-4.129	0	%100
53	MP4A	X	-7.152	-7.152	0	%100
54	MP4A	Z	-4.129	-4.129	0	%100
55	M65	X	-7.091	-7.091	0	%100
56	M65	Z	-4.094	-4.094	0	%100
57	M51	X	-.45	-.45	0	%100
58	M51	Z	-.26	-.26	0	%100
59	M52	X	-6.716	-6.716	0	%100
60	M52	Z	-3.877	-3.877	0	%100
61	M53	X	-6.716	-6.716	0	%100
62	M53	Z	-3.877	-3.877	0	%100
63	M56	X	-7.152	-7.152	0	%100
64	M56	Z	-4.129	-4.129	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-3.097	-3.097	0	%100
2	M1	Z	-5.364	-5.364	0	%100
3	M2	X	-3.097	-3.097	0	%100
4	M2	Z	-5.364	-5.364	0	%100
5	MP1A	X	-4.129	-4.129	0	%100
6	MP1A	Z	-7.152	-7.152	0	%100
7	M26	X	-.495	-.495	0	%100
8	M26	Z	-.858	-.858	0	%100
9	M27	X	-.495	-.495	0	%100
10	M27	Z	-.858	-.858	0	%100
11	M28	X	-.183	-.183	0	%100
12	M28	Z	-.318	-.318	0	%100
13	M29	X	-.775	-.775	0	%100
14	M29	Z	-1.342	-1.342	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
15	M30	X	-.183	-.183	0	%100
16	M30	Z	-.318	-.318	0	%100
17	M31	X	-.775	-.775	0	%100
18	M31	Z	-1.342	-1.342	0	%100
19	M32	X	-.183	-.183	0	%100
20	M32	Z	-.318	-.318	0	%100
21	M33	X	-.183	-.183	0	%100
22	M33	Z	-.318	-.318	0	%100
23	M34	X	-1.304	-1.304	0	%100
24	M34	Z	-2.258	-2.258	0	%100
25	M35	X	-1.304	-1.304	0	%100
26	M35	Z	-2.258	-2.258	0	%100
27	M36	X	-.682	-.682	0	%100
28	M36	Z	-1.182	-1.182	0	%100
29	M37	X	-.867	-.867	0	%100
30	M37	Z	-1.502	-1.502	0	%100
31	M38	X	-3.666	-3.666	0	%100
32	M38	Z	-6.35	-6.35	0	%100
33	M39	X	-.867	-.867	0	%100
34	M39	Z	-1.502	-1.502	0	%100
35	M41	X	-.867	-.867	0	%100
36	M41	Z	-1.502	-1.502	0	%100
37	M42	X	-.867	-.867	0	%100
38	M42	Z	-1.502	-1.502	0	%100
39	M43	X	-1.304	-1.304	0	%100
40	M43	Z	-2.258	-2.258	0	%100
41	M44	X	-1.304	-1.304	0	%100
42	M44	Z	-2.258	-2.258	0	%100
43	M45	X	-1.302	-1.302	0	%100
44	M45	Z	-2.255	-2.255	0	%100
45	M39B	X	-3.666	-3.666	0	%100
46	M39B	Z	-6.35	-6.35	0	%100
47	M37A	X	-5.899	-5.899	0	%100
48	M37A	Z	-10.218	-10.218	0	%100
49	MP2A	X	-4.998	-4.998	0	%100
50	MP2A	Z	-8.657	-8.657	0	%100
51	MP3A	X	-4.129	-4.129	0	%100
52	MP3A	Z	-7.152	-7.152	0	%100
53	MP4A	X	-4.129	-4.129	0	%100
54	MP4A	Z	-7.152	-7.152	0	%100
55	M65	X	-3.407	-3.407	0	%100
56	M65	Z	-5.9	-5.9	0	%100
57	M51	X	-.294	-.294	0	%100
58	M51	Z	-.509	-.509	0	%100
59	M52	X	-2.116	-2.116	0	%100
60	M52	Z	-3.665	-3.665	0	%100
61	M53	X	-2.116	-2.116	0	%100
62	M53	Z	-3.665	-3.665	0	%100
63	M56	X	-4.129	-4.129	0	%100
64	M56	Z	-7.152	-7.152	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	-3.548	-3.548	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-3.548	-3.548	0	%100
5	MP1A	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,...	Start Location[ft,%]	End Location[ft,%]
6	MP1A	Z	-3.508	-3.508	0	%100
7	M26	X	0	0	0	%100
8	M26	Z	-1.524	-1.524	0	%100
9	M27	X	0	0	0	%100
10	M27	Z	-1.524	-1.524	0	%100
11	M28	X	0	0	0	%100
12	M28	Z	-1.088	-1.088	0	%100
13	M29	X	0	0	0	%100
14	M29	Z	-2.067	-2.067	0	%100
15	M30	X	0	0	0	%100
16	M30	Z	-1.088	-1.088	0	%100
17	M31	X	0	0	0	%100
18	M31	Z	-2.067	-2.067	0	%100
19	M32	X	0	0	0	%100
20	M32	Z	-1.088	-1.088	0	%100
21	M33	X	0	0	0	%100
22	M33	Z	-1.088	-1.088	0	%100
23	M34	X	0	0	0	%100
24	M34	Z	-1.979	-1.979	0	%100
25	M35	X	0	0	0	%100
26	M35	Z	-1.979	-1.979	0	%100
27	M36	X	0	0	0	%100
28	M36	Z	-1.821	-1.821	0	%100
29	M37	X	0	0	0	%100
30	M37	Z	-1.088	-1.088	0	%100
31	M38	X	0	0	0	%100
32	M38	Z	-2.067	-2.067	0	%100
33	M39	X	0	0	0	%100
34	M39	Z	-1.088	-1.088	0	%100
35	M41	X	0	0	0	%100
36	M41	Z	-1.088	-1.088	0	%100
37	M42	X	0	0	0	%100
38	M42	Z	-1.088	-1.088	0	%100
39	M43	X	0	0	0	%100
40	M43	Z	-1.979	-1.979	0	%100
41	M44	X	0	0	0	%100
42	M44	Z	-1.979	-1.979	0	%100
43	M45	X	0	0	0	%100
44	M45	Z	-1.821	-1.821	0	%100
45	M39B	X	0	0	0	%100
46	M39B	Z	-2.067	-2.067	0	%100
47	M37A	X	0	0	0	%100
48	M37A	Z	-4.495	-4.495	0	%100
49	MP2A	X	0	0	0	%100
50	MP2A	Z	-3.81	-3.81	0	%100
51	MP3A	X	0	0	0	%100
52	MP3A	Z	-3.508	-3.508	0	%100
53	MP4A	X	0	0	0	%100
54	MP4A	Z	-3.508	-3.508	0	%100
55	M65	X	0	0	0	%100
56	M65	Z	-1.183	-1.183	0	%100
57	M51	X	0	0	0	%100
58	M51	Z	-1.647	-1.647	0	%100
59	M52	X	0	0	0	%100
60	M52	Z	-.26	-.26	0	%100
61	M53	X	0	0	0	%100
62	M53	Z	-.26	-.26	0	%100
63	M56	X	0	0	0	%100
64	M56	Z	-3.273	-3.273	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	1.33	1.33	0	%100
2	M1	Z	-2.304	-2.304	0	%100
3	M2	X	1.33	1.33	0	%100
4	M2	Z	-2.304	-2.304	0	%100
5	MP1A	X	1.754	1.754	0	%100
6	MP1A	Z	-3.038	-3.038	0	%100
7	M26	X	.571	.571	0	%100
8	M26	Z	-.99	-.99	0	%100
9	M27	X	.571	.571	0	%100
10	M27	Z	-.99	-.99	0	%100
11	M28	X	.766	.766	0	%100
12	M28	Z	-1.326	-1.326	0	%100
13	M29	X	1.455	1.455	0	%100
14	M29	Z	-2.521	-2.521	0	%100
15	M30	X	.766	.766	0	%100
16	M30	Z	-1.326	-1.326	0	%100
17	M31	X	1.455	1.455	0	%100
18	M31	Z	-2.521	-2.521	0	%100
19	M32	X	.766	.766	0	%100
20	M32	Z	-1.326	-1.326	0	%100
21	M33	X	.766	.766	0	%100
22	M33	Z	-1.326	-1.326	0	%100
23	M34	X	.99	.99	0	%100
24	M34	Z	-1.714	-1.714	0	%100
25	M35	X	.99	.99	0	%100
26	M35	Z	-1.714	-1.714	0	%100
27	M36	X	1.104	1.104	0	%100
28	M36	Z	-1.911	-1.911	0	%100
29	M37	X	.162	.162	0	%100
30	M37	Z	-.28	-.28	0	%100
31	M38	X	.308	.308	0	%100
32	M38	Z	-.533	-.533	0	%100
33	M39	X	.162	.162	0	%100
34	M39	Z	-.28	-.28	0	%100
35	M41	X	.162	.162	0	%100
36	M41	Z	-.28	-.28	0	%100
37	M42	X	.162	.162	0	%100
38	M42	Z	-.28	-.28	0	%100
39	M43	X	.99	.99	0	%100
40	M43	Z	-1.714	-1.714	0	%100
41	M44	X	.99	.99	0	%100
42	M44	Z	-1.714	-1.714	0	%100
43	M45	X	.578	.578	0	%100
44	M45	Z	-1.001	-1.001	0	%100
45	M39B	X	.308	.308	0	%100
46	M39B	Z	-.533	-.533	0	%100
47	M37A	X	2.247	2.247	0	%100
48	M37A	Z	-3.892	-3.892	0	%100
49	MP2A	X	1.905	1.905	0	%100
50	MP2A	Z	-3.299	-3.299	0	%100
51	MP3A	X	1.754	1.754	0	%100
52	MP3A	Z	-3.038	-3.038	0	%100
53	MP4A	X	1.754	1.754	0	%100
54	MP4A	Z	-3.038	-3.038	0	%100
55	M65	X	.015	.015	0	%100
56	M65	Z	-.026	-.026	0	%100
57	M51	X	1.519	1.519	0	%100
58	M51	Z	-2.63	-2.63	0	%100
59	M52	X	.108	.108	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
60	M52	Z	-.187	-.187	0	%100
61	M53	X	.108	.108	0	%100
62	M53	Z	-.187	-.187	0	%100
63	M56	X	1.637	1.637	0	%100
64	M56	Z	-2.835	-2.835	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.768	.768	0	%100
2	M1	Z	-.443	-.443	0	%100
3	M2	X	.768	.768	0	%100
4	M2	Z	-.443	-.443	0	%100
5	MP1A	X	3.038	3.038	0	%100
6	MP1A	Z	-1.754	-1.754	0	%100
7	M26	X	.33	.33	0	%100
8	M26	Z	-.19	-.19	0	%100
9	M27	X	.33	.33	0	%100
10	M27	Z	-.19	-.19	0	%100
11	M28	X	1.049	1.049	0	%100
12	M28	Z	-.606	-.606	0	%100
13	M29	X	1.993	1.993	0	%100
14	M29	Z	-1.151	-1.151	0	%100
15	M30	X	1.049	1.049	0	%100
16	M30	Z	-.606	-.606	0	%100
17	M31	X	1.993	1.993	0	%100
18	M31	Z	-1.151	-1.151	0	%100
19	M32	X	1.049	1.049	0	%100
20	M32	Z	-.606	-.606	0	%100
21	M33	X	1.049	1.049	0	%100
22	M33	Z	-.606	-.606	0	%100
23	M34	X	1.714	1.714	0	%100
24	M34	Z	-.99	-.99	0	%100
25	M35	X	1.714	1.714	0	%100
26	M35	Z	-.99	-.99	0	%100
27	M36	X	1.67	1.67	0	%100
28	M36	Z	-.964	-.964	0	%100
29	M37	X	.003	.003	0	%100
30	M37	Z	-.002	-.002	0	%100
31	M38	X	.005	.005	0	%100
32	M38	Z	-.003	-.003	0	%100
33	M39	X	.003	.003	0	%100
34	M39	Z	-.002	-.002	0	%100
35	M41	X	.003	.003	0	%100
36	M41	Z	-.002	-.002	0	%100
37	M42	X	.003	.003	0	%100
38	M42	Z	-.002	-.002	0	%100
39	M43	X	1.714	1.714	0	%100
40	M43	Z	-.99	-.99	0	%100
41	M44	X	1.714	1.714	0	%100
42	M44	Z	-.99	-.99	0	%100
43	M45	X	.76	.76	0	%100
44	M45	Z	-.439	-.439	0	%100
45	M39B	X	.005	.005	0	%100
46	M39B	Z	-.003	-.003	0	%100
47	M37A	X	3.892	3.892	0	%100
48	M37A	Z	-2.247	-2.247	0	%100
49	MP2A	X	3.299	3.299	0	%100
50	MP2A	Z	-1.905	-1.905	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
51	MP3A	X	3.038	3.038	0	%100
52	MP3A	Z	-1.754	-1.754	0	%100
53	MP4A	X	3.038	3.038	0	%100
54	MP4A	Z	-1.754	-1.754	0	%100
55	M65	X	.538	.538	0	%100
56	M65	Z	-.31	-.31	0	%100
57	M51	X	2.607	2.607	0	%100
58	M51	Z	-1.505	-1.505	0	%100
59	M52	X	1.498	1.498	0	%100
60	M52	Z	-.865	-.865	0	%100
61	M53	X	1.498	1.498	0	%100
62	M53	Z	-.865	-.865	0	%100
63	M56	X	2.835	2.835	0	%100
64	M56	Z	-1.637	-1.637	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	MP1A	X	3.508	3.508	0	%100
6	MP1A	Z	0	0	0	%100
7	M26	X	0	0	0	%100
8	M26	Z	0	0	0	%100
9	M27	X	0	0	0	%100
10	M27	Z	0	0	0	%100
11	M28	X	.447	.447	0	%100
12	M28	Z	0	0	0	%100
13	M29	X	.849	.849	0	%100
14	M29	Z	0	0	0	%100
15	M30	X	.447	.447	0	%100
16	M30	Z	0	0	0	%100
17	M31	X	.849	.849	0	%100
18	M31	Z	0	0	0	%100
19	M32	X	.447	.447	0	%100
20	M32	Z	0	0	0	%100
21	M33	X	.447	.447	0	%100
22	M33	Z	0	0	0	%100
23	M34	X	1.979	1.979	0	%100
24	M34	Z	0	0	0	%100
25	M35	X	1.979	1.979	0	%100
26	M35	Z	0	0	0	%100
27	M36	X	1.263	1.263	0	%100
28	M36	Z	0	0	0	%100
29	M37	X	.447	.447	0	%100
30	M37	Z	0	0	0	%100
31	M38	X	.849	.849	0	%100
32	M38	Z	0	0	0	%100
33	M39	X	.447	.447	0	%100
34	M39	Z	0	0	0	%100
35	M41	X	.447	.447	0	%100
36	M41	Z	0	0	0	%100
37	M42	X	.447	.447	0	%100
38	M42	Z	0	0	0	%100
39	M43	X	1.979	1.979	0	%100
40	M43	Z	0	0	0	%100
41	M44	X	1.979	1.979	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
42	M44	Z	0	0	0	%100
43	M45	X	1.263	1.263	0	%100
44	M45	Z	0	0	0	%100
45	M39B	X	.849	.849	0	%100
46	M39B	Z	0	0	0	%100
47	M37A	X	4.495	4.495	0	%100
48	M37A	Z	0	0	0	%100
49	MP2A	X	3.81	3.81	0	%100
50	MP2A	Z	0	0	0	%100
51	MP3A	X	3.508	3.508	0	%100
52	MP3A	Z	0	0	0	%100
53	MP4A	X	3.508	3.508	0	%100
54	MP4A	Z	0	0	0	%100
55	M65	X	2.364	2.364	0	%100
56	M65	Z	0	0	0	%100
57	M51	X	1.594	1.594	0	%100
58	M51	Z	0	0	0	%100
59	M52	X	3.288	3.288	0	%100
60	M52	Z	0	0	0	%100
61	M53	X	3.288	3.288	0	%100
62	M53	Z	0	0	0	%100
63	M56	X	3.273	3.273	0	%100
64	M56	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,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.768	.768	0	%100
2	M1	Z	.443	.443	0	%100
3	M2	X	.768	.768	0	%100
4	M2	Z	.443	.443	0	%100
5	MP1A	X	3.038	3.038	0	%100
6	MP1A	Z	1.754	1.754	0	%100
7	M26	X	.33	.33	0	%100
8	M26	Z	.19	.19	0	%100
9	M27	X	.33	.33	0	%100
10	M27	Z	.19	.19	0	%100
11	M28	X	.003	.003	0	%100
12	M28	Z	.002	.002	0	%100
13	M29	X	.005	.005	0	%100
14	M29	Z	.003	.003	0	%100
15	M30	X	.003	.003	0	%100
16	M30	Z	.002	.002	0	%100
17	M31	X	.005	.005	0	%100
18	M31	Z	.003	.003	0	%100
19	M32	X	.003	.003	0	%100
20	M32	Z	.002	.002	0	%100
21	M33	X	.003	.003	0	%100
22	M33	Z	.002	.002	0	%100
23	M34	X	1.714	1.714	0	%100
24	M34	Z	.99	.99	0	%100
25	M35	X	1.714	1.714	0	%100
26	M35	Z	.99	.99	0	%100
27	M36	X	.76	.76	0	%100
28	M36	Z	.439	.439	0	%100
29	M37	X	1.049	1.049	0	%100
30	M37	Z	.606	.606	0	%100
31	M38	X	1.993	1.993	0	%100
32	M38	Z	1.151	1.151	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
33	M39	X	1.049	1.049	0	%100
34	M39	Z	.606	.606	0	%100
35	M41	X	1.049	1.049	0	%100
36	M41	Z	.606	.606	0	%100
37	M42	X	1.049	1.049	0	%100
38	M42	Z	.606	.606	0	%100
39	M43	X	1.714	1.714	0	%100
40	M43	Z	.99	.99	0	%100
41	M44	X	1.714	1.714	0	%100
42	M44	Z	.99	.99	0	%100
43	M45	X	1.67	1.67	0	%100
44	M45	Z	.964	.964	0	%100
45	M39B	X	1.993	1.993	0	%100
46	M39B	Z	1.151	1.151	0	%100
47	M37A	X	3.892	3.892	0	%100
48	M37A	Z	2.247	2.247	0	%100
49	MP2A	X	3.299	3.299	0	%100
50	MP2A	Z	1.905	1.905	0	%100
51	MP3A	X	3.038	3.038	0	%100
52	MP3A	Z	1.754	1.754	0	%100
53	MP4A	X	3.038	3.038	0	%100
54	MP4A	Z	1.754	1.754	0	%100
55	M65	X	3.046	3.046	0	%100
56	M65	Z	1.759	1.759	0	%100
57	M51	X	.177	.177	0	%100
58	M51	Z	.102	.102	0	%100
59	M52	X	2.885	2.885	0	%100
60	M52	Z	1.666	1.666	0	%100
61	M53	X	2.885	2.885	0	%100
62	M53	Z	1.666	1.666	0	%100
63	M56	X	2.835	2.835	0	%100
64	M56	Z	1.637	1.637	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	1.33	1.33	0	%100
2	M1	Z	2.304	2.304	0	%100
3	M2	X	1.33	1.33	0	%100
4	M2	Z	2.304	2.304	0	%100
5	MP1A	X	1.754	1.754	0	%100
6	MP1A	Z	3.038	3.038	0	%100
7	M26	X	.571	.571	0	%100
8	M26	Z	.99	.99	0	%100
9	M27	X	.571	.571	0	%100
10	M27	Z	.99	.99	0	%100
11	M28	X	.162	.162	0	%100
12	M28	Z	.28	.28	0	%100
13	M29	X	.308	.308	0	%100
14	M29	Z	.533	.533	0	%100
15	M30	X	.162	.162	0	%100
16	M30	Z	.28	.28	0	%100
17	M31	X	.308	.308	0	%100
18	M31	Z	.533	.533	0	%100
19	M32	X	.162	.162	0	%100
20	M32	Z	.28	.28	0	%100
21	M33	X	.162	.162	0	%100
22	M33	Z	.28	.28	0	%100
23	M34	X	.99	.99	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
24	M34	Z	1.714	1.714	0	%100
25	M35	X	.99	.99	0	%100
26	M35	Z	1.714	1.714	0	%100
27	M36	X	.578	.578	0	%100
28	M36	Z	1.001	1.001	0	%100
29	M37	X	.766	.766	0	%100
30	M37	Z	1.326	1.326	0	%100
31	M38	X	1.455	1.455	0	%100
32	M38	Z	2.521	2.521	0	%100
33	M39	X	.766	.766	0	%100
34	M39	Z	1.326	1.326	0	%100
35	M41	X	.766	.766	0	%100
36	M41	Z	1.326	1.326	0	%100
37	M42	X	.766	.766	0	%100
38	M42	Z	1.326	1.326	0	%100
39	M43	X	.99	.99	0	%100
40	M43	Z	1.714	1.714	0	%100
41	M44	X	.99	.99	0	%100
42	M44	Z	1.714	1.714	0	%100
43	M45	X	1.104	1.104	0	%100
44	M45	Z	1.911	1.911	0	%100
45	M39B	X	1.455	1.455	0	%100
46	M39B	Z	2.521	2.521	0	%100
47	M37A	X	2.247	2.247	0	%100
48	M37A	Z	3.892	3.892	0	%100
49	MP2A	X	1.905	1.905	0	%100
50	MP2A	Z	3.299	3.299	0	%100
51	MP3A	X	1.754	1.754	0	%100
52	MP3A	Z	3.038	3.038	0	%100
53	MP4A	X	1.754	1.754	0	%100
54	MP4A	Z	3.038	3.038	0	%100
55	M65	X	1.463	1.463	0	%100
56	M65	Z	2.535	2.535	0	%100
57	M51	X	.115	.115	0	%100
58	M51	Z	.2	.2	0	%100
59	M52	X	.909	.909	0	%100
60	M52	Z	1.574	1.574	0	%100
61	M53	X	.909	.909	0	%100
62	M53	Z	1.574	1.574	0	%100
63	M56	X	1.637	1.637	0	%100
64	M56	Z	2.835	2.835	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	3.548	3.548	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	3.548	3.548	0	%100
5	MP1A	X	0	0	0	%100
6	MP1A	Z	3.508	3.508	0	%100
7	M26	X	0	0	0	%100
8	M26	Z	1.524	1.524	0	%100
9	M27	X	0	0	0	%100
10	M27	Z	1.524	1.524	0	%100
11	M28	X	0	0	0	%100
12	M28	Z	1.088	1.088	0	%100
13	M29	X	0	0	0	%100
14	M29	Z	2.067	2.067	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
15	M30	X	0	0	0	%100
16	M30	Z	1.088	1.088	0	%100
17	M31	X	0	0	0	%100
18	M31	Z	2.067	2.067	0	%100
19	M32	X	0	0	0	%100
20	M32	Z	1.088	1.088	0	%100
21	M33	X	0	0	0	%100
22	M33	Z	1.088	1.088	0	%100
23	M34	X	0	0	0	%100
24	M34	Z	1.979	1.979	0	%100
25	M35	X	0	0	0	%100
26	M35	Z	1.979	1.979	0	%100
27	M36	X	0	0	0	%100
28	M36	Z	1.821	1.821	0	%100
29	M37	X	0	0	0	%100
30	M37	Z	1.088	1.088	0	%100
31	M38	X	0	0	0	%100
32	M38	Z	2.067	2.067	0	%100
33	M39	X	0	0	0	%100
34	M39	Z	1.088	1.088	0	%100
35	M41	X	0	0	0	%100
36	M41	Z	1.088	1.088	0	%100
37	M42	X	0	0	0	%100
38	M42	Z	1.088	1.088	0	%100
39	M43	X	0	0	0	%100
40	M43	Z	1.979	1.979	0	%100
41	M44	X	0	0	0	%100
42	M44	Z	1.979	1.979	0	%100
43	M45	X	0	0	0	%100
44	M45	Z	1.821	1.821	0	%100
45	M39B	X	0	0	0	%100
46	M39B	Z	2.067	2.067	0	%100
47	M37A	X	0	0	0	%100
48	M37A	Z	4.495	4.495	0	%100
49	MP2A	X	0	0	0	%100
50	MP2A	Z	3.81	3.81	0	%100
51	MP3A	X	0	0	0	%100
52	MP3A	Z	3.508	3.508	0	%100
53	MP4A	X	0	0	0	%100
54	MP4A	Z	3.508	3.508	0	%100
55	M65	X	0	0	0	%100
56	M65	Z	1.183	1.183	0	%100
57	M51	X	0	0	0	%100
58	M51	Z	1.647	1.647	0	%100
59	M52	X	0	0	0	%100
60	M52	Z	.26	.26	0	%100
61	M53	X	0	0	0	%100
62	M53	Z	.26	.26	0	%100
63	M56	X	0	0	0	%100
64	M56	Z	3.273	3.273	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-1.33	-1.33	0	%100
2	M1	Z	2.304	2.304	0	%100
3	M2	X	-1.33	-1.33	0	%100
4	M2	Z	2.304	2.304	0	%100
5	MP1A	X	-1.754	-1.754	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
6	MP1A	Z	3.038	3.038	0	%100
7	M26	X	-.571	-.571	0	%100
8	M26	Z	.99	.99	0	%100
9	M27	X	-.571	-.571	0	%100
10	M27	Z	.99	.99	0	%100
11	M28	X	-.766	-.766	0	%100
12	M28	Z	1.326	1.326	0	%100
13	M29	X	-1.455	-1.455	0	%100
14	M29	Z	2.521	2.521	0	%100
15	M30	X	-.766	-.766	0	%100
16	M30	Z	1.326	1.326	0	%100
17	M31	X	-1.455	-1.455	0	%100
18	M31	Z	2.521	2.521	0	%100
19	M32	X	-.766	-.766	0	%100
20	M32	Z	1.326	1.326	0	%100
21	M33	X	-.766	-.766	0	%100
22	M33	Z	1.326	1.326	0	%100
23	M34	X	-.99	-.99	0	%100
24	M34	Z	1.714	1.714	0	%100
25	M35	X	-.99	-.99	0	%100
26	M35	Z	1.714	1.714	0	%100
27	M36	X	-1.104	-1.104	0	%100
28	M36	Z	1.911	1.911	0	%100
29	M37	X	-.162	-.162	0	%100
30	M37	Z	.28	.28	0	%100
31	M38	X	-.308	-.308	0	%100
32	M38	Z	.533	.533	0	%100
33	M39	X	-.162	-.162	0	%100
34	M39	Z	.28	.28	0	%100
35	M41	X	-.162	-.162	0	%100
36	M41	Z	.28	.28	0	%100
37	M42	X	-.162	-.162	0	%100
38	M42	Z	.28	.28	0	%100
39	M43	X	-.99	-.99	0	%100
40	M43	Z	1.714	1.714	0	%100
41	M44	X	-.99	-.99	0	%100
42	M44	Z	1.714	1.714	0	%100
43	M45	X	-.578	-.578	0	%100
44	M45	Z	1.001	1.001	0	%100
45	M39B	X	-.308	-.308	0	%100
46	M39B	Z	.533	.533	0	%100
47	M37A	X	-2.247	-2.247	0	%100
48	M37A	Z	3.892	3.892	0	%100
49	MP2A	X	-1.905	-1.905	0	%100
50	MP2A	Z	3.299	3.299	0	%100
51	MP3A	X	-1.754	-1.754	0	%100
52	MP3A	Z	3.038	3.038	0	%100
53	MP4A	X	-1.754	-1.754	0	%100
54	MP4A	Z	3.038	3.038	0	%100
55	M65	X	-.015	-.015	0	%100
56	M65	Z	.026	.026	0	%100
57	M51	X	-1.519	-1.519	0	%100
58	M51	Z	2.63	2.63	0	%100
59	M52	X	-.108	-.108	0	%100
60	M52	Z	.187	.187	0	%100
61	M53	X	-.108	-.108	0	%100
62	M53	Z	.187	.187	0	%100
63	M56	X	-1.637	-1.637	0	%100
64	M56	Z	2.835	2.835	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.768	-.768	0	%100
2	M1	Z	.443	.443	0	%100
3	M2	X	-.768	-.768	0	%100
4	M2	Z	.443	.443	0	%100
5	MP1A	X	-3.038	-3.038	0	%100
6	MP1A	Z	1.754	1.754	0	%100
7	M26	X	-.33	-.33	0	%100
8	M26	Z	.19	.19	0	%100
9	M27	X	-.33	-.33	0	%100
10	M27	Z	.19	.19	0	%100
11	M28	X	-1.049	-1.049	0	%100
12	M28	Z	.606	.606	0	%100
13	M29	X	-1.993	-1.993	0	%100
14	M29	Z	1.151	1.151	0	%100
15	M30	X	-1.049	-1.049	0	%100
16	M30	Z	.606	.606	0	%100
17	M31	X	-1.993	-1.993	0	%100
18	M31	Z	1.151	1.151	0	%100
19	M32	X	-1.049	-1.049	0	%100
20	M32	Z	.606	.606	0	%100
21	M33	X	-1.049	-1.049	0	%100
22	M33	Z	.606	.606	0	%100
23	M34	X	-1.714	-1.714	0	%100
24	M34	Z	.99	.99	0	%100
25	M35	X	-1.714	-1.714	0	%100
26	M35	Z	.99	.99	0	%100
27	M36	X	-1.67	-1.67	0	%100
28	M36	Z	.964	.964	0	%100
29	M37	X	-.003	-.003	0	%100
30	M37	Z	.002	.002	0	%100
31	M38	X	-.005	-.005	0	%100
32	M38	Z	.003	.003	0	%100
33	M39	X	-.003	-.003	0	%100
34	M39	Z	.002	.002	0	%100
35	M41	X	-.003	-.003	0	%100
36	M41	Z	.002	.002	0	%100
37	M42	X	-.003	-.003	0	%100
38	M42	Z	.002	.002	0	%100
39	M43	X	-1.714	-1.714	0	%100
40	M43	Z	.99	.99	0	%100
41	M44	X	-1.714	-1.714	0	%100
42	M44	Z	.99	.99	0	%100
43	M45	X	-.76	-.76	0	%100
44	M45	Z	.439	.439	0	%100
45	M39B	X	-.005	-.005	0	%100
46	M39B	Z	.003	.003	0	%100
47	M37A	X	-3.892	-3.892	0	%100
48	M37A	Z	2.247	2.247	0	%100
49	MP2A	X	-3.299	-3.299	0	%100
50	MP2A	Z	1.905	1.905	0	%100
51	MP3A	X	-3.038	-3.038	0	%100
52	MP3A	Z	1.754	1.754	0	%100
53	MP4A	X	-3.038	-3.038	0	%100
54	MP4A	Z	1.754	1.754	0	%100
55	M65	X	-.538	-.538	0	%100
56	M65	Z	.31	.31	0	%100
57	M51	X	-2.607	-2.607	0	%100
58	M51	Z	1.505	1.505	0	%100
59	M52	X	-1.498	-1.498	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
60	M52	Z	.865	.865	0	%100
61	M53	X	-1.498	-1.498	0	%100
62	M53	Z	.865	.865	0	%100
63	M56	X	-2.835	-2.835	0	%100
64	M56	Z	1.637	1.637	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	MP1A	X	-3.508	-3.508	0	%100
6	MP1A	Z	0	0	0	%100
7	M26	X	0	0	0	%100
8	M26	Z	0	0	0	%100
9	M27	X	0	0	0	%100
10	M27	Z	0	0	0	%100
11	M28	X	-.447	-.447	0	%100
12	M28	Z	0	0	0	%100
13	M29	X	-.849	-.849	0	%100
14	M29	Z	0	0	0	%100
15	M30	X	-.447	-.447	0	%100
16	M30	Z	0	0	0	%100
17	M31	X	-.849	-.849	0	%100
18	M31	Z	0	0	0	%100
19	M32	X	-.447	-.447	0	%100
20	M32	Z	0	0	0	%100
21	M33	X	-.447	-.447	0	%100
22	M33	Z	0	0	0	%100
23	M34	X	-1.979	-1.979	0	%100
24	M34	Z	0	0	0	%100
25	M35	X	-1.979	-1.979	0	%100
26	M35	Z	0	0	0	%100
27	M36	X	-1.263	-1.263	0	%100
28	M36	Z	0	0	0	%100
29	M37	X	-.447	-.447	0	%100
30	M37	Z	0	0	0	%100
31	M38	X	-.849	-.849	0	%100
32	M38	Z	0	0	0	%100
33	M39	X	-.447	-.447	0	%100
34	M39	Z	0	0	0	%100
35	M41	X	-.447	-.447	0	%100
36	M41	Z	0	0	0	%100
37	M42	X	-.447	-.447	0	%100
38	M42	Z	0	0	0	%100
39	M43	X	-1.979	-1.979	0	%100
40	M43	Z	0	0	0	%100
41	M44	X	-1.979	-1.979	0	%100
42	M44	Z	0	0	0	%100
43	M45	X	-1.263	-1.263	0	%100
44	M45	Z	0	0	0	%100
45	M39B	X	-.849	-.849	0	%100
46	M39B	Z	0	0	0	%100
47	M37A	X	-4.495	-4.495	0	%100
48	M37A	Z	0	0	0	%100
49	MP2A	X	-3.81	-3.81	0	%100
50	MP2A	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,...	Start Location[ft,%]	End Location[ft,%]
51	MP3A	X	-3.508	-3.508	0	%100
52	MP3A	Z	0	0	0	%100
53	MP4A	X	-3.508	-3.508	0	%100
54	MP4A	Z	0	0	0	%100
55	M65	X	-2.364	-2.364	0	%100
56	M65	Z	0	0	0	%100
57	M51	X	-1.594	-1.594	0	%100
58	M51	Z	0	0	0	%100
59	M52	X	-3.288	-3.288	0	%100
60	M52	Z	0	0	0	%100
61	M53	X	-3.288	-3.288	0	%100
62	M53	Z	0	0	0	%100
63	M56	X	-3.273	-3.273	0	%100
64	M56	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,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.768	-.768	0	%100
2	M1	Z	-.443	-.443	0	%100
3	M2	X	-.768	-.768	0	%100
4	M2	Z	-.443	-.443	0	%100
5	MP1A	X	-3.038	-3.038	0	%100
6	MP1A	Z	-1.754	-1.754	0	%100
7	M26	X	-.33	-.33	0	%100
8	M26	Z	-.19	-.19	0	%100
9	M27	X	-.33	-.33	0	%100
10	M27	Z	-.19	-.19	0	%100
11	M28	X	-.003	-.003	0	%100
12	M28	Z	-.002	-.002	0	%100
13	M29	X	-.005	-.005	0	%100
14	M29	Z	-.003	-.003	0	%100
15	M30	X	-.003	-.003	0	%100
16	M30	Z	-.002	-.002	0	%100
17	M31	X	-.005	-.005	0	%100
18	M31	Z	-.003	-.003	0	%100
19	M32	X	-.003	-.003	0	%100
20	M32	Z	-.002	-.002	0	%100
21	M33	X	-.003	-.003	0	%100
22	M33	Z	-.002	-.002	0	%100
23	M34	X	-1.714	-1.714	0	%100
24	M34	Z	-.99	-.99	0	%100
25	M35	X	-1.714	-1.714	0	%100
26	M35	Z	-.99	-.99	0	%100
27	M36	X	-.76	-.76	0	%100
28	M36	Z	-.439	-.439	0	%100
29	M37	X	-1.049	-1.049	0	%100
30	M37	Z	-.606	-.606	0	%100
31	M38	X	-1.993	-1.993	0	%100
32	M38	Z	-1.151	-1.151	0	%100
33	M39	X	-1.049	-1.049	0	%100
34	M39	Z	-.606	-.606	0	%100
35	M41	X	-1.049	-1.049	0	%100
36	M41	Z	-.606	-.606	0	%100
37	M42	X	-1.049	-1.049	0	%100
38	M42	Z	-.606	-.606	0	%100
39	M43	X	-1.714	-1.714	0	%100
40	M43	Z	-.99	-.99	0	%100
41	M44	X	-1.714	-1.714	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
42	M44	Z	-.99	-.99	0	%100
43	M45	X	-1.67	-1.67	0	%100
44	M45	Z	-.964	-.964	0	%100
45	M39B	X	-1.993	-1.993	0	%100
46	M39B	Z	-1.151	-1.151	0	%100
47	M37A	X	-3.892	-3.892	0	%100
48	M37A	Z	-2.247	-2.247	0	%100
49	MP2A	X	-3.299	-3.299	0	%100
50	MP2A	Z	-1.905	-1.905	0	%100
51	MP3A	X	-3.038	-3.038	0	%100
52	MP3A	Z	-1.754	-1.754	0	%100
53	MP4A	X	-3.038	-3.038	0	%100
54	MP4A	Z	-1.754	-1.754	0	%100
55	M65	X	-3.046	-3.046	0	%100
56	M65	Z	-1.759	-1.759	0	%100
57	M51	X	-.177	-.177	0	%100
58	M51	Z	-.102	-.102	0	%100
59	M52	X	-2.885	-2.885	0	%100
60	M52	Z	-1.666	-1.666	0	%100
61	M53	X	-2.885	-2.885	0	%100
62	M53	Z	-1.666	-1.666	0	%100
63	M56	X	-2.835	-2.835	0	%100
64	M56	Z	-1.637	-1.637	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-1.33	-1.33	0	%100
2	M1	Z	-2.304	-2.304	0	%100
3	M2	X	-1.33	-1.33	0	%100
4	M2	Z	-2.304	-2.304	0	%100
5	MP1A	X	-1.754	-1.754	0	%100
6	MP1A	Z	-3.038	-3.038	0	%100
7	M26	X	-.571	-.571	0	%100
8	M26	Z	-.99	-.99	0	%100
9	M27	X	-.571	-.571	0	%100
10	M27	Z	-.99	-.99	0	%100
11	M28	X	-.162	-.162	0	%100
12	M28	Z	-.28	-.28	0	%100
13	M29	X	-.308	-.308	0	%100
14	M29	Z	-.533	-.533	0	%100
15	M30	X	-.162	-.162	0	%100
16	M30	Z	-.28	-.28	0	%100
17	M31	X	-.308	-.308	0	%100
18	M31	Z	-.533	-.533	0	%100
19	M32	X	-.162	-.162	0	%100
20	M32	Z	-.28	-.28	0	%100
21	M33	X	-.162	-.162	0	%100
22	M33	Z	-.28	-.28	0	%100
23	M34	X	-.99	-.99	0	%100
24	M34	Z	-1.714	-1.714	0	%100
25	M35	X	-.99	-.99	0	%100
26	M35	Z	-1.714	-1.714	0	%100
27	M36	X	-.578	-.578	0	%100
28	M36	Z	-1.001	-1.001	0	%100
29	M37	X	-.766	-.766	0	%100
30	M37	Z	-1.326	-1.326	0	%100
31	M38	X	-1.455	-1.455	0	%100
32	M38	Z	-2.521	-2.521	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
33	M39	X	-.766	-.766	0	%100
34	M39	Z	-1.326	-1.326	0	%100
35	M41	X	-.766	-.766	0	%100
36	M41	Z	-1.326	-1.326	0	%100
37	M42	X	-.766	-.766	0	%100
38	M42	Z	-1.326	-1.326	0	%100
39	M43	X	-.99	-.99	0	%100
40	M43	Z	-1.714	-1.714	0	%100
41	M44	X	-.99	-.99	0	%100
42	M44	Z	-1.714	-1.714	0	%100
43	M45	X	-1.104	-1.104	0	%100
44	M45	Z	-1.911	-1.911	0	%100
45	M39B	X	-1.455	-1.455	0	%100
46	M39B	Z	-2.521	-2.521	0	%100
47	M37A	X	-2.247	-2.247	0	%100
48	M37A	Z	-3.892	-3.892	0	%100
49	MP2A	X	-1.905	-1.905	0	%100
50	MP2A	Z	-3.299	-3.299	0	%100
51	MP3A	X	-1.754	-1.754	0	%100
52	MP3A	Z	-3.038	-3.038	0	%100
53	MP4A	X	-1.754	-1.754	0	%100
54	MP4A	Z	-3.038	-3.038	0	%100
55	M65	X	-1.463	-1.463	0	%100
56	M65	Z	-2.535	-2.535	0	%100
57	M51	X	-.115	-.115	0	%100
58	M51	Z	-.2	-.2	0	%100
59	M52	X	-.909	-.909	0	%100
60	M52	Z	-1.574	-1.574	0	%100
61	M53	X	-.909	-.909	0	%100
62	M53	Z	-1.574	-1.574	0	%100
63	M56	X	-1.637	-1.637	0	%100
64	M56	Z	-2.835	-2.835	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	-.516	-.516	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-.516	-.516	0	%100
5	MP1A	X	0	0	0	%100
6	MP1A	Z	-.516	-.516	0	%100
7	M26	X	0	0	0	%100
8	M26	Z	-.083	-.083	0	%100
9	M27	X	0	0	0	%100
10	M27	Z	-.083	-.083	0	%100
11	M28	X	0	0	0	%100
12	M28	Z	-.077	-.077	0	%100
13	M29	X	0	0	0	%100
14	M29	Z	-.326	-.326	0	%100
15	M30	X	0	0	0	%100
16	M30	Z	-.077	-.077	0	%100
17	M31	X	0	0	0	%100
18	M31	Z	-.326	-.326	0	%100
19	M32	X	0	0	0	%100
20	M32	Z	-.077	-.077	0	%100
21	M33	X	0	0	0	%100
22	M33	Z	-.077	-.077	0	%100
23	M34	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,...	Start Location[ft,%]	End Location[ft,%]
24	M34	Z	-.163	-.163	0	%100
25	M35	X	0	0	0	%100
26	M35	Z	-.163	-.163	0	%100
27	M36	X	0	0	0	%100
28	M36	Z	-.134	-.134	0	%100
29	M37	X	0	0	0	%100
30	M37	Z	-.077	-.077	0	%100
31	M38	X	0	0	0	%100
32	M38	Z	-.326	-.326	0	%100
33	M39	X	0	0	0	%100
34	M39	Z	-.077	-.077	0	%100
35	M41	X	0	0	0	%100
36	M41	Z	-.077	-.077	0	%100
37	M42	X	0	0	0	%100
38	M42	Z	-.077	-.077	0	%100
39	M43	X	0	0	0	%100
40	M43	Z	-.163	-.163	0	%100
41	M44	X	0	0	0	%100
42	M44	Z	-.163	-.163	0	%100
43	M45	X	0	0	0	%100
44	M45	Z	-.134	-.134	0	%100
45	M39B	X	0	0	0	%100
46	M39B	Z	-.326	-.326	0	%100
47	M37A	X	0	0	0	%100
48	M37A	Z	-.737	-.737	0	%100
49	MP2A	X	0	0	0	%100
50	MP2A	Z	-.625	-.625	0	%100
51	MP3A	X	0	0	0	%100
52	MP3A	Z	-.516	-.516	0	%100
53	MP4A	X	0	0	0	%100
54	MP4A	Z	-.516	-.516	0	%100
55	M65	X	0	0	0	%100
56	M65	Z	-.172	-.172	0	%100
57	M51	X	0	0	0	%100
58	M51	Z	-.262	-.262	0	%100
59	M52	X	0	0	0	%100
60	M52	Z	-.038	-.038	0	%100
61	M53	X	0	0	0	%100
62	M53	Z	-.038	-.038	0	%100
63	M56	X	0	0	0	%100
64	M56	Z	-.516	-.516	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.194	.194	0	%100
2	M1	Z	-.335	-.335	0	%100
3	M2	X	.194	.194	0	%100
4	M2	Z	-.335	-.335	0	%100
5	MP1A	X	.258	.258	0	%100
6	MP1A	Z	-.447	-.447	0	%100
7	M26	X	.031	.031	0	%100
8	M26	Z	-.054	-.054	0	%100
9	M27	X	.031	.031	0	%100
10	M27	Z	-.054	-.054	0	%100
11	M28	X	.054	.054	0	%100
12	M28	Z	-.094	-.094	0	%100
13	M29	X	.229	.229	0	%100
14	M29	Z	-.397	-.397	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
15	M30	X	.054	.054	0	%100
16	M30	Z	-.094	-.094	0	%100
17	M31	X	.229	.229	0	%100
18	M31	Z	-.397	-.397	0	%100
19	M32	X	.054	.054	0	%100
20	M32	Z	-.094	-.094	0	%100
21	M33	X	.054	.054	0	%100
22	M33	Z	-.094	-.094	0	%100
23	M34	X	.081	.081	0	%100
24	M34	Z	-.141	-.141	0	%100
25	M35	X	.081	.081	0	%100
26	M35	Z	-.141	-.141	0	%100
27	M36	X	.081	.081	0	%100
28	M36	Z	-.141	-.141	0	%100
29	M37	X	.011	.011	0	%100
30	M37	Z	-.02	-.02	0	%100
31	M38	X	.048	.048	0	%100
32	M38	Z	-.084	-.084	0	%100
33	M39	X	.011	.011	0	%100
34	M39	Z	-.02	-.02	0	%100
35	M41	X	.011	.011	0	%100
36	M41	Z	-.02	-.02	0	%100
37	M42	X	.011	.011	0	%100
38	M42	Z	-.02	-.02	0	%100
39	M43	X	.081	.081	0	%100
40	M43	Z	-.141	-.141	0	%100
41	M44	X	.081	.081	0	%100
42	M44	Z	-.141	-.141	0	%100
43	M45	X	.043	.043	0	%100
44	M45	Z	-.074	-.074	0	%100
45	M39B	X	.048	.048	0	%100
46	M39B	Z	-.084	-.084	0	%100
47	M37A	X	.369	.369	0	%100
48	M37A	Z	-.639	-.639	0	%100
49	MP2A	X	.312	.312	0	%100
50	MP2A	Z	-.541	-.541	0	%100
51	MP3A	X	.258	.258	0	%100
52	MP3A	Z	-.447	-.447	0	%100
53	MP4A	X	.258	.258	0	%100
54	MP4A	Z	-.447	-.447	0	%100
55	M65	X	.002	.002	0	%100
56	M65	Z	-.004	-.004	0	%100
57	M51	X	.242	.242	0	%100
58	M51	Z	-.419	-.419	0	%100
59	M52	X	.016	.016	0	%100
60	M52	Z	-.027	-.027	0	%100
61	M53	X	.016	.016	0	%100
62	M53	Z	-.027	-.027	0	%100
63	M56	X	.258	.258	0	%100
64	M56	Z	-.447	-.447	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.112	.112	0	%100
2	M1	Z	-.065	-.065	0	%100
3	M2	X	.112	.112	0	%100
4	M2	Z	-.065	-.065	0	%100
5	MP1A	X	.447	.447	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
6	MP1A	Z	-.258	-.258	0	%100
7	M26	X	.018	.018	0	%100
8	M26	Z	-.01	-.01	0	%100
9	M27	X	.018	.018	0	%100
10	M27	Z	-.01	-.01	0	%100
11	M28	X	.074	.074	0	%100
12	M28	Z	-.043	-.043	0	%100
13	M29	X	.314	.314	0	%100
14	M29	Z	-.181	-.181	0	%100
15	M30	X	.074	.074	0	%100
16	M30	Z	-.043	-.043	0	%100
17	M31	X	.314	.314	0	%100
18	M31	Z	-.181	-.181	0	%100
19	M32	X	.074	.074	0	%100
20	M32	Z	-.043	-.043	0	%100
21	M33	X	.074	.074	0	%100
22	M33	Z	-.043	-.043	0	%100
23	M34	X	.141	.141	0	%100
24	M34	Z	-.081	-.081	0	%100
25	M35	X	.141	.141	0	%100
26	M35	Z	-.081	-.081	0	%100
27	M36	X	.123	.123	0	%100
28	M36	Z	-.071	-.071	0	%100
29	M37	X	.000203	.000203	0	%100
30	M37	Z	-.000117	-.000117	0	%100
31	M38	X	.000856	.000856	0	%100
32	M38	Z	-.000494	-.000494	0	%100
33	M39	X	.000203	.000203	0	%100
34	M39	Z	-.000117	-.000117	0	%100
35	M41	X	.000203	.000203	0	%100
36	M41	Z	-.000117	-.000117	0	%100
37	M42	X	.000203	.000203	0	%100
38	M42	Z	-.000117	-.000117	0	%100
39	M43	X	.141	.141	0	%100
40	M43	Z	-.081	-.081	0	%100
41	M44	X	.141	.141	0	%100
42	M44	Z	-.081	-.081	0	%100
43	M45	X	.056	.056	0	%100
44	M45	Z	-.032	-.032	0	%100
45	M39B	X	.000856	.000856	0	%100
46	M39B	Z	-.000494	-.000494	0	%100
47	M37A	X	.639	.639	0	%100
48	M37A	Z	-.369	-.369	0	%100
49	MP2A	X	.541	.541	0	%100
50	MP2A	Z	-.312	-.312	0	%100
51	MP3A	X	.447	.447	0	%100
52	MP3A	Z	-.258	-.258	0	%100
53	MP4A	X	.447	.447	0	%100
54	MP4A	Z	-.258	-.258	0	%100
55	M65	X	.078	.078	0	%100
56	M65	Z	-.045	-.045	0	%100
57	M51	X	.415	.415	0	%100
58	M51	Z	-.24	-.24	0	%100
59	M52	X	.218	.218	0	%100
60	M52	Z	-.126	-.126	0	%100
61	M53	X	.218	.218	0	%100
62	M53	Z	-.126	-.126	0	%100
63	M56	X	.447	.447	0	%100
64	M56	Z	-.258	-.258	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	MP1A	X	.516	.516	0	%100
6	MP1A	Z	0	0	0	%100
7	M26	X	0	0	0	%100
8	M26	Z	0	0	0	%100
9	M27	X	0	0	0	%100
10	M27	Z	0	0	0	%100
11	M28	X	.032	.032	0	%100
12	M28	Z	0	0	0	%100
13	M29	X	.134	.134	0	%100
14	M29	Z	0	0	0	%100
15	M30	X	.032	.032	0	%100
16	M30	Z	0	0	0	%100
17	M31	X	.134	.134	0	%100
18	M31	Z	0	0	0	%100
19	M32	X	.032	.032	0	%100
20	M32	Z	0	0	0	%100
21	M33	X	.032	.032	0	%100
22	M33	Z	0	0	0	%100
23	M34	X	.163	.163	0	%100
24	M34	Z	0	0	0	%100
25	M35	X	.163	.163	0	%100
26	M35	Z	0	0	0	%100
27	M36	X	.093	.093	0	%100
28	M36	Z	0	0	0	%100
29	M37	X	.032	.032	0	%100
30	M37	Z	0	0	0	%100
31	M38	X	.134	.134	0	%100
32	M38	Z	0	0	0	%100
33	M39	X	.032	.032	0	%100
34	M39	Z	0	0	0	%100
35	M41	X	.032	.032	0	%100
36	M41	Z	0	0	0	%100
37	M42	X	.032	.032	0	%100
38	M42	Z	0	0	0	%100
39	M43	X	.163	.163	0	%100
40	M43	Z	0	0	0	%100
41	M44	X	.163	.163	0	%100
42	M44	Z	0	0	0	%100
43	M45	X	.093	.093	0	%100
44	M45	Z	0	0	0	%100
45	M39B	X	.134	.134	0	%100
46	M39B	Z	0	0	0	%100
47	M37A	X	.737	.737	0	%100
48	M37A	Z	0	0	0	%100
49	MP2A	X	.625	.625	0	%100
50	MP2A	Z	0	0	0	%100
51	MP3A	X	.516	.516	0	%100
52	MP3A	Z	0	0	0	%100
53	MP4A	X	.516	.516	0	%100
54	MP4A	Z	0	0	0	%100
55	M65	X	.344	.344	0	%100
56	M65	Z	0	0	0	%100
57	M51	X	.254	.254	0	%100
58	M51	Z	0	0	0	%100
59	M52	X	.478	.478	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
60	M52	Z	0	0	0	%100
61	M53	X	.478	.478	0	%100
62	M53	Z	0	0	0	%100
63	M56	X	.516	.516	0	%100
64	M56	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,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.112	.112	0	%100
2	M1	Z	.065	.065	0	%100
3	M2	X	.112	.112	0	%100
4	M2	Z	.065	.065	0	%100
5	MP1A	X	.447	.447	0	%100
6	MP1A	Z	.258	.258	0	%100
7	M26	X	.018	.018	0	%100
8	M26	Z	.01	.01	0	%100
9	M27	X	.018	.018	0	%100
10	M27	Z	.01	.01	0	%100
11	M28	X	.000203	.000203	0	%100
12	M28	Z	.000117	.000117	0	%100
13	M29	X	.000856	.000856	0	%100
14	M29	Z	.000494	.000494	0	%100
15	M30	X	.000203	.000203	0	%100
16	M30	Z	.000117	.000117	0	%100
17	M31	X	.000856	.000856	0	%100
18	M31	Z	.000494	.000494	0	%100
19	M32	X	.000203	.000203	0	%100
20	M32	Z	.000117	.000117	0	%100
21	M33	X	.000203	.000203	0	%100
22	M33	Z	.000117	.000117	0	%100
23	M34	X	.141	.141	0	%100
24	M34	Z	.081	.081	0	%100
25	M35	X	.141	.141	0	%100
26	M35	Z	.081	.081	0	%100
27	M36	X	.056	.056	0	%100
28	M36	Z	.032	.032	0	%100
29	M37	X	.074	.074	0	%100
30	M37	Z	.043	.043	0	%100
31	M38	X	.314	.314	0	%100
32	M38	Z	.181	.181	0	%100
33	M39	X	.074	.074	0	%100
34	M39	Z	.043	.043	0	%100
35	M41	X	.074	.074	0	%100
36	M41	Z	.043	.043	0	%100
37	M42	X	.074	.074	0	%100
38	M42	Z	.043	.043	0	%100
39	M43	X	.141	.141	0	%100
40	M43	Z	.081	.081	0	%100
41	M44	X	.141	.141	0	%100
42	M44	Z	.081	.081	0	%100
43	M45	X	.123	.123	0	%100
44	M45	Z	.071	.071	0	%100
45	M39B	X	.314	.314	0	%100
46	M39B	Z	.181	.181	0	%100
47	M37A	X	.639	.639	0	%100
48	M37A	Z	.369	.369	0	%100
49	MP2A	X	.541	.541	0	%100
50	MP2A	Z	.312	.312	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
51	MP3A	X	.447	.447	0	%100
52	MP3A	Z	.258	.258	0	%100
53	MP4A	X	.447	.447	0	%100
54	MP4A	Z	.258	.258	0	%100
55	M65	X	.443	.443	0	%100
56	M65	Z	.256	.256	0	%100
57	M51	X	.028	.028	0	%100
58	M51	Z	.016	.016	0	%100
59	M52	X	.42	.42	0	%100
60	M52	Z	.242	.242	0	%100
61	M53	X	.42	.42	0	%100
62	M53	Z	.242	.242	0	%100
63	M56	X	.447	.447	0	%100
64	M56	Z	.258	.258	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.194	.194	0	%100
2	M1	Z	.335	.335	0	%100
3	M2	X	.194	.194	0	%100
4	M2	Z	.335	.335	0	%100
5	MP1A	X	.258	.258	0	%100
6	MP1A	Z	.447	.447	0	%100
7	M26	X	.031	.031	0	%100
8	M26	Z	.054	.054	0	%100
9	M27	X	.031	.031	0	%100
10	M27	Z	.054	.054	0	%100
11	M28	X	.011	.011	0	%100
12	M28	Z	.02	.02	0	%100
13	M29	X	.048	.048	0	%100
14	M29	Z	.084	.084	0	%100
15	M30	X	.011	.011	0	%100
16	M30	Z	.02	.02	0	%100
17	M31	X	.048	.048	0	%100
18	M31	Z	.084	.084	0	%100
19	M32	X	.011	.011	0	%100
20	M32	Z	.02	.02	0	%100
21	M33	X	.011	.011	0	%100
22	M33	Z	.02	.02	0	%100
23	M34	X	.081	.081	0	%100
24	M34	Z	.141	.141	0	%100
25	M35	X	.081	.081	0	%100
26	M35	Z	.141	.141	0	%100
27	M36	X	.043	.043	0	%100
28	M36	Z	.074	.074	0	%100
29	M37	X	.054	.054	0	%100
30	M37	Z	.094	.094	0	%100
31	M38	X	.229	.229	0	%100
32	M38	Z	.397	.397	0	%100
33	M39	X	.054	.054	0	%100
34	M39	Z	.094	.094	0	%100
35	M41	X	.054	.054	0	%100
36	M41	Z	.094	.094	0	%100
37	M42	X	.054	.054	0	%100
38	M42	Z	.094	.094	0	%100
39	M43	X	.081	.081	0	%100
40	M43	Z	.141	.141	0	%100
41	M44	X	.081	.081	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
42	M44	Z	.141	.141	0	%100
43	M45	X	.081	.081	0	%100
44	M45	Z	.141	.141	0	%100
45	M39B	X	.229	.229	0	%100
46	M39B	Z	.397	.397	0	%100
47	M37A	X	.369	.369	0	%100
48	M37A	Z	.639	.639	0	%100
49	MP2A	X	.312	.312	0	%100
50	MP2A	Z	.541	.541	0	%100
51	MP3A	X	.258	.258	0	%100
52	MP3A	Z	.447	.447	0	%100
53	MP4A	X	.258	.258	0	%100
54	MP4A	Z	.447	.447	0	%100
55	M65	X	.213	.213	0	%100
56	M65	Z	.369	.369	0	%100
57	M51	X	.018	.018	0	%100
58	M51	Z	.032	.032	0	%100
59	M52	X	.132	.132	0	%100
60	M52	Z	.229	.229	0	%100
61	M53	X	.132	.132	0	%100
62	M53	Z	.229	.229	0	%100
63	M56	X	.258	.258	0	%100
64	M56	Z	.447	.447	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	.516	.516	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	.516	.516	0	%100
5	MP1A	X	0	0	0	%100
6	MP1A	Z	.516	.516	0	%100
7	M26	X	0	0	0	%100
8	M26	Z	.083	.083	0	%100
9	M27	X	0	0	0	%100
10	M27	Z	.083	.083	0	%100
11	M28	X	0	0	0	%100
12	M28	Z	.077	.077	0	%100
13	M29	X	0	0	0	%100
14	M29	Z	.326	.326	0	%100
15	M30	X	0	0	0	%100
16	M30	Z	.077	.077	0	%100
17	M31	X	0	0	0	%100
18	M31	Z	.326	.326	0	%100
19	M32	X	0	0	0	%100
20	M32	Z	.077	.077	0	%100
21	M33	X	0	0	0	%100
22	M33	Z	.077	.077	0	%100
23	M34	X	0	0	0	%100
24	M34	Z	.163	.163	0	%100
25	M35	X	0	0	0	%100
26	M35	Z	.163	.163	0	%100
27	M36	X	0	0	0	%100
28	M36	Z	.134	.134	0	%100
29	M37	X	0	0	0	%100
30	M37	Z	.077	.077	0	%100
31	M38	X	0	0	0	%100
32	M38	Z	.326	.326	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
33	M39	X	0	0	0	%100
34	M39	Z	.077	.077	0	%100
35	M41	X	0	0	0	%100
36	M41	Z	.077	.077	0	%100
37	M42	X	0	0	0	%100
38	M42	Z	.077	.077	0	%100
39	M43	X	0	0	0	%100
40	M43	Z	.163	.163	0	%100
41	M44	X	0	0	0	%100
42	M44	Z	.163	.163	0	%100
43	M45	X	0	0	0	%100
44	M45	Z	.134	.134	0	%100
45	M39B	X	0	0	0	%100
46	M39B	Z	.326	.326	0	%100
47	M37A	X	0	0	0	%100
48	M37A	Z	.737	.737	0	%100
49	MP2A	X	0	0	0	%100
50	MP2A	Z	.625	.625	0	%100
51	MP3A	X	0	0	0	%100
52	MP3A	Z	.516	.516	0	%100
53	MP4A	X	0	0	0	%100
54	MP4A	Z	.516	.516	0	%100
55	M65	X	0	0	0	%100
56	M65	Z	.172	.172	0	%100
57	M51	X	0	0	0	%100
58	M51	Z	.262	.262	0	%100
59	M52	X	0	0	0	%100
60	M52	Z	.038	.038	0	%100
61	M53	X	0	0	0	%100
62	M53	Z	.038	.038	0	%100
63	M56	X	0	0	0	%100
64	M56	Z	.516	.516	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.194	-.194	0	%100
2	M1	Z	.335	.335	0	%100
3	M2	X	-.194	-.194	0	%100
4	M2	Z	.335	.335	0	%100
5	MP1A	X	-.258	-.258	0	%100
6	MP1A	Z	.447	.447	0	%100
7	M26	X	-.031	-.031	0	%100
8	M26	Z	.054	.054	0	%100
9	M27	X	-.031	-.031	0	%100
10	M27	Z	.054	.054	0	%100
11	M28	X	-.054	-.054	0	%100
12	M28	Z	.094	.094	0	%100
13	M29	X	-.229	-.229	0	%100
14	M29	Z	.397	.397	0	%100
15	M30	X	-.054	-.054	0	%100
16	M30	Z	.094	.094	0	%100
17	M31	X	-.229	-.229	0	%100
18	M31	Z	.397	.397	0	%100
19	M32	X	-.054	-.054	0	%100
20	M32	Z	.094	.094	0	%100
21	M33	X	-.054	-.054	0	%100
22	M33	Z	.094	.094	0	%100
23	M34	X	-.081	-.081	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
24	M34	Z	.141	.141	0	%100
25	M35	X	-.081	-.081	0	%100
26	M35	Z	.141	.141	0	%100
27	M36	X	-.081	-.081	0	%100
28	M36	Z	.141	.141	0	%100
29	M37	X	-.011	-.011	0	%100
30	M37	Z	.02	.02	0	%100
31	M38	X	-.048	-.048	0	%100
32	M38	Z	.084	.084	0	%100
33	M39	X	-.011	-.011	0	%100
34	M39	Z	.02	.02	0	%100
35	M41	X	-.011	-.011	0	%100
36	M41	Z	.02	.02	0	%100
37	M42	X	-.011	-.011	0	%100
38	M42	Z	.02	.02	0	%100
39	M43	X	-.081	-.081	0	%100
40	M43	Z	.141	.141	0	%100
41	M44	X	-.081	-.081	0	%100
42	M44	Z	.141	.141	0	%100
43	M45	X	-.043	-.043	0	%100
44	M45	Z	.074	.074	0	%100
45	M39B	X	-.048	-.048	0	%100
46	M39B	Z	.084	.084	0	%100
47	M37A	X	-.369	-.369	0	%100
48	M37A	Z	.639	.639	0	%100
49	MP2A	X	-.312	-.312	0	%100
50	MP2A	Z	.541	.541	0	%100
51	MP3A	X	-.258	-.258	0	%100
52	MP3A	Z	.447	.447	0	%100
53	MP4A	X	-.258	-.258	0	%100
54	MP4A	Z	.447	.447	0	%100
55	M65	X	-.002	-.002	0	%100
56	M65	Z	.004	.004	0	%100
57	M51	X	-.242	-.242	0	%100
58	M51	Z	.419	.419	0	%100
59	M52	X	-.016	-.016	0	%100
60	M52	Z	.027	.027	0	%100
61	M53	X	-.016	-.016	0	%100
62	M53	Z	.027	.027	0	%100
63	M56	X	-.258	-.258	0	%100
64	M56	Z	.447	.447	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.112	-.112	0	%100
2	M1	Z	.065	.065	0	%100
3	M2	X	-.112	-.112	0	%100
4	M2	Z	.065	.065	0	%100
5	MP1A	X	-.447	-.447	0	%100
6	MP1A	Z	.258	.258	0	%100
7	M26	X	-.018	-.018	0	%100
8	M26	Z	.01	.01	0	%100
9	M27	X	-.018	-.018	0	%100
10	M27	Z	.01	.01	0	%100
11	M28	X	-.074	-.074	0	%100
12	M28	Z	.043	.043	0	%100
13	M29	X	-.314	-.314	0	%100
14	M29	Z	.181	.181	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
15	M30	X	-.074	-.074	0	%100
16	M30	Z	.043	.043	0	%100
17	M31	X	-.314	-.314	0	%100
18	M31	Z	.181	.181	0	%100
19	M32	X	-.074	-.074	0	%100
20	M32	Z	.043	.043	0	%100
21	M33	X	-.074	-.074	0	%100
22	M33	Z	.043	.043	0	%100
23	M34	X	-.141	-.141	0	%100
24	M34	Z	.081	.081	0	%100
25	M35	X	-.141	-.141	0	%100
26	M35	Z	.081	.081	0	%100
27	M36	X	-.123	-.123	0	%100
28	M36	Z	.071	.071	0	%100
29	M37	X	-.000203	-.000203	0	%100
30	M37	Z	.000117	.000117	0	%100
31	M38	X	-.000856	-.000856	0	%100
32	M38	Z	.000494	.000494	0	%100
33	M39	X	-.000203	-.000203	0	%100
34	M39	Z	.000117	.000117	0	%100
35	M41	X	-.000203	-.000203	0	%100
36	M41	Z	.000117	.000117	0	%100
37	M42	X	-.000203	-.000203	0	%100
38	M42	Z	.000117	.000117	0	%100
39	M43	X	-.141	-.141	0	%100
40	M43	Z	.081	.081	0	%100
41	M44	X	-.141	-.141	0	%100
42	M44	Z	.081	.081	0	%100
43	M45	X	-.056	-.056	0	%100
44	M45	Z	.032	.032	0	%100
45	M39B	X	-.000856	-.000856	0	%100
46	M39B	Z	.000494	.000494	0	%100
47	M37A	X	-.639	-.639	0	%100
48	M37A	Z	.369	.369	0	%100
49	MP2A	X	-.541	-.541	0	%100
50	MP2A	Z	.312	.312	0	%100
51	MP3A	X	-.447	-.447	0	%100
52	MP3A	Z	.258	.258	0	%100
53	MP4A	X	-.447	-.447	0	%100
54	MP4A	Z	.258	.258	0	%100
55	M65	X	-.078	-.078	0	%100
56	M65	Z	.045	.045	0	%100
57	M51	X	-.415	-.415	0	%100
58	M51	Z	.24	.24	0	%100
59	M52	X	-.218	-.218	0	%100
60	M52	Z	.126	.126	0	%100
61	M53	X	-.218	-.218	0	%100
62	M53	Z	.126	.126	0	%100
63	M56	X	-.447	-.447	0	%100
64	M56	Z	.258	.258	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	MP1A	X	-.516	-.516	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
6	MP1A	Z	0	0	0	%100
7	M26	X	0	0	0	%100
8	M26	Z	0	0	0	%100
9	M27	X	0	0	0	%100
10	M27	Z	0	0	0	%100
11	M28	X	-.032	-.032	0	%100
12	M28	Z	0	0	0	%100
13	M29	X	-.134	-.134	0	%100
14	M29	Z	0	0	0	%100
15	M30	X	-.032	-.032	0	%100
16	M30	Z	0	0	0	%100
17	M31	X	-.134	-.134	0	%100
18	M31	Z	0	0	0	%100
19	M32	X	-.032	-.032	0	%100
20	M32	Z	0	0	0	%100
21	M33	X	-.032	-.032	0	%100
22	M33	Z	0	0	0	%100
23	M34	X	-.163	-.163	0	%100
24	M34	Z	0	0	0	%100
25	M35	X	-.163	-.163	0	%100
26	M35	Z	0	0	0	%100
27	M36	X	-.093	-.093	0	%100
28	M36	Z	0	0	0	%100
29	M37	X	-.032	-.032	0	%100
30	M37	Z	0	0	0	%100
31	M38	X	-.134	-.134	0	%100
32	M38	Z	0	0	0	%100
33	M39	X	-.032	-.032	0	%100
34	M39	Z	0	0	0	%100
35	M41	X	-.032	-.032	0	%100
36	M41	Z	0	0	0	%100
37	M42	X	-.032	-.032	0	%100
38	M42	Z	0	0	0	%100
39	M43	X	-.163	-.163	0	%100
40	M43	Z	0	0	0	%100
41	M44	X	-.163	-.163	0	%100
42	M44	Z	0	0	0	%100
43	M45	X	-.093	-.093	0	%100
44	M45	Z	0	0	0	%100
45	M39B	X	-.134	-.134	0	%100
46	M39B	Z	0	0	0	%100
47	M37A	X	-.737	-.737	0	%100
48	M37A	Z	0	0	0	%100
49	MP2A	X	-.625	-.625	0	%100
50	MP2A	Z	0	0	0	%100
51	MP3A	X	-.516	-.516	0	%100
52	MP3A	Z	0	0	0	%100
53	MP4A	X	-.516	-.516	0	%100
54	MP4A	Z	0	0	0	%100
55	M65	X	-.344	-.344	0	%100
56	M65	Z	0	0	0	%100
57	M51	X	-.254	-.254	0	%100
58	M51	Z	0	0	0	%100
59	M52	X	-.478	-.478	0	%100
60	M52	Z	0	0	0	%100
61	M53	X	-.478	-.478	0	%100
62	M53	Z	0	0	0	%100
63	M56	X	-.516	-.516	0	%100
64	M56	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,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.112	-.112	0	%100
2	M1	Z	-.065	-.065	0	%100
3	M2	X	-.112	-.112	0	%100
4	M2	Z	-.065	-.065	0	%100
5	MP1A	X	-.447	-.447	0	%100
6	MP1A	Z	-.258	-.258	0	%100
7	M26	X	-.018	-.018	0	%100
8	M26	Z	-.01	-.01	0	%100
9	M27	X	-.018	-.018	0	%100
10	M27	Z	-.01	-.01	0	%100
11	M28	X	-.000203	-.000203	0	%100
12	M28	Z	-.000117	-.000117	0	%100
13	M29	X	-.000856	-.000856	0	%100
14	M29	Z	-.000494	-.000494	0	%100
15	M30	X	-.000203	-.000203	0	%100
16	M30	Z	-.000117	-.000117	0	%100
17	M31	X	-.000856	-.000856	0	%100
18	M31	Z	-.000494	-.000494	0	%100
19	M32	X	-.000203	-.000203	0	%100
20	M32	Z	-.000117	-.000117	0	%100
21	M33	X	-.000203	-.000203	0	%100
22	M33	Z	-.000117	-.000117	0	%100
23	M34	X	-.141	-.141	0	%100
24	M34	Z	-.081	-.081	0	%100
25	M35	X	-.141	-.141	0	%100
26	M35	Z	-.081	-.081	0	%100
27	M36	X	-.056	-.056	0	%100
28	M36	Z	-.032	-.032	0	%100
29	M37	X	-.074	-.074	0	%100
30	M37	Z	-.043	-.043	0	%100
31	M38	X	-.314	-.314	0	%100
32	M38	Z	-.181	-.181	0	%100
33	M39	X	-.074	-.074	0	%100
34	M39	Z	-.043	-.043	0	%100
35	M41	X	-.074	-.074	0	%100
36	M41	Z	-.043	-.043	0	%100
37	M42	X	-.074	-.074	0	%100
38	M42	Z	-.043	-.043	0	%100
39	M43	X	-.141	-.141	0	%100
40	M43	Z	-.081	-.081	0	%100
41	M44	X	-.141	-.141	0	%100
42	M44	Z	-.081	-.081	0	%100
43	M45	X	-.123	-.123	0	%100
44	M45	Z	-.071	-.071	0	%100
45	M39B	X	-.314	-.314	0	%100
46	M39B	Z	-.181	-.181	0	%100
47	M37A	X	-.639	-.639	0	%100
48	M37A	Z	-.369	-.369	0	%100
49	MP2A	X	-.541	-.541	0	%100
50	MP2A	Z	-.312	-.312	0	%100
51	MP3A	X	-.447	-.447	0	%100
52	MP3A	Z	-.258	-.258	0	%100
53	MP4A	X	-.447	-.447	0	%100
54	MP4A	Z	-.258	-.258	0	%100
55	M65	X	-.443	-.443	0	%100
56	M65	Z	-.256	-.256	0	%100
57	M51	X	-.028	-.028	0	%100
58	M51	Z	-.016	-.016	0	%100
59	M52	X	-.42	-.42	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
60	M52	Z	-.242	-.242	0	%100
61	M53	X	-.42	-.42	0	%100
62	M53	Z	-.242	-.242	0	%100
63	M56	X	-.447	-.447	0	%100
64	M56	Z	-.258	-.258	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.194	-.194	0	%100
2	M1	Z	-.335	-.335	0	%100
3	M2	X	-.194	-.194	0	%100
4	M2	Z	-.335	-.335	0	%100
5	MP1A	X	-.258	-.258	0	%100
6	MP1A	Z	-.447	-.447	0	%100
7	M26	X	-.031	-.031	0	%100
8	M26	Z	-.054	-.054	0	%100
9	M27	X	-.031	-.031	0	%100
10	M27	Z	-.054	-.054	0	%100
11	M28	X	-.011	-.011	0	%100
12	M28	Z	-.02	-.02	0	%100
13	M29	X	-.048	-.048	0	%100
14	M29	Z	-.084	-.084	0	%100
15	M30	X	-.011	-.011	0	%100
16	M30	Z	-.02	-.02	0	%100
17	M31	X	-.048	-.048	0	%100
18	M31	Z	-.084	-.084	0	%100
19	M32	X	-.011	-.011	0	%100
20	M32	Z	-.02	-.02	0	%100
21	M33	X	-.011	-.011	0	%100
22	M33	Z	-.02	-.02	0	%100
23	M34	X	-.081	-.081	0	%100
24	M34	Z	-.141	-.141	0	%100
25	M35	X	-.081	-.081	0	%100
26	M35	Z	-.141	-.141	0	%100
27	M36	X	-.043	-.043	0	%100
28	M36	Z	-.074	-.074	0	%100
29	M37	X	-.054	-.054	0	%100
30	M37	Z	-.094	-.094	0	%100
31	M38	X	-.229	-.229	0	%100
32	M38	Z	-.397	-.397	0	%100
33	M39	X	-.054	-.054	0	%100
34	M39	Z	-.094	-.094	0	%100
35	M41	X	-.054	-.054	0	%100
36	M41	Z	-.094	-.094	0	%100
37	M42	X	-.054	-.054	0	%100
38	M42	Z	-.094	-.094	0	%100
39	M43	X	-.081	-.081	0	%100
40	M43	Z	-.141	-.141	0	%100
41	M44	X	-.081	-.081	0	%100
42	M44	Z	-.141	-.141	0	%100
43	M45	X	-.081	-.081	0	%100
44	M45	Z	-.141	-.141	0	%100
45	M39B	X	-.229	-.229	0	%100
46	M39B	Z	-.397	-.397	0	%100
47	M37A	X	-.369	-.369	0	%100
48	M37A	Z	-.639	-.639	0	%100
49	MP2A	X	-.312	-.312	0	%100
50	MP2A	Z	-.541	-.541	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,...	Start Location[ft,%]	End Location[ft,%]
51	MP3A	X	-.258	-.258	0	%100
52	MP3A	Z	-.447	-.447	0	%100
53	MP4A	X	-.258	-.258	0	%100
54	MP4A	Z	-.447	-.447	0	%100
55	M65	X	-.213	-.213	0	%100
56	M65	Z	-.369	-.369	0	%100
57	M51	X	-.018	-.018	0	%100
58	M51	Z	-.032	-.032	0	%100
59	M52	X	-.132	-.132	0	%100
60	M52	Z	-.229	-.229	0	%100
61	M53	X	-.132	-.132	0	%100
62	M53	Z	-.229	-.229	0	%100
63	M56	X	-.258	-.258	0	%100
64	M56	Z	-.447	-.447	0	%100

Member Area Loads

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

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	N53	max	1053.335	8	1513.943	20	322.223	2	.155	8	0	75	.47	9
2		min	-1055.696	2	375.289	66	-1619.878	20	-1.143	14	0	1	-.813	3
3	N54	max	1159.673	35	1479.134	15	2066.088	14	.121	2	0	75	.228	5
4		min	-644.633	5	366.804	72	-33.41	8	-.716	21	0	1	-.837	22
5	N79A	max	518.469	1	35.644	19	537.547	1	0	75	0	75	0	75
6		min	-869.138	7	7.601	64	-841	7	0	1	0	1	0	1
7	N80	max	171.381	6	219.698	23	541.739	11	0	75	0	75	0	75
8		min	-261.087	12	44.483	5	-446.157	5	0	1	0	1	0	1
9	N81B	max	126.315	6	193.069	23	191.578	11	0	75	0	75	0	75
10		min	-133.322	12	44.797	73	-314.316	5	0	1	0	1	0	1
11	N90	max	173.825	6	148.13	17	450.359	12	0	75	0	75	0	75
12		min	-202.912	12	33.087	73	-363.034	5	0	1	0	1	0	1
13	N91	max	129.054	6	154.074	22	160.434	11	0	75	0	75	0	75
14		min	-113.395	12	33.869	67	-257.004	5	0	1	0	1	0	1
15	Totals:	max	1461.379	11	3692.203	19	1922.227	1						
16		min	-1461.398	5	913.674	73	-1922.23	7						

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

	Member	Shape	Code C...	Loc[ft]	LC	Shear ...	Loc[ft]	Dir	LC	phi*Pnc [l...	phi*Pnt [lb]	phi*Mn y-...	phi*Mn z-...	Cb	Eqn
1	M1	PIPE 2.0	.382	2.302	5	.157	10.698		31	5820.472	32130	1.872	1.872	3...	H1-1b
2	M2	PIPE 2.0	.417	8.125	7	.156	2.302		11	5820.472	32130	1.872	1.872	3...	H1-1b
3	MP1A	PIPE 2.0	.259	2.188	31	.052	3.938		32	17855.085	32130	1.872	1.872	4...	H1-1b
4	M26	PL5/8X5	.418	.593	20	.089	.593	y	20	72970.667	101250	1.318	10.547	1...	H1-1b
5	M27	PL5/8X5	.480	.593	13	.100	.593	y	13	72970.667	101250	1.318	10.547	1...	H1-1b
6	M28	PL1/2X3.5	.238	.208	17	.176	0	y	20	55811.544	56700	.591	4.134	1...	H1-1b
7	M29	PIPE 2.0	.144	3.692	24	.131	3.771		19	27093.79	32130	1.872	1.872	1...	H1-1b
8	M30	PL1/2x3.75	.409	0	18	.164	.167	y	19	56683.005	57704.4	.363	5.711	1...	H1-1b
9	M31	PIPE 2.0	.284	3.692	24	.129	3.771		14	27093.79	32130	1.872	1.872	2...	H1-1b
10	M32	PL1/2X3.5	.265	.208	36	.172	.208	y	15	55811.544	56700	.591	4.134	1...	H1-1b
11	M33	PL1/2x3.75	.470	0	13	.160	.167	y	14	56683.005	57704.4	.363	5.711	1...	H1-1b
12	M34	SR 0.75	.165	2.917	15	.018	0		13	5826.497	14313.866	.179	.179	1...	H1-1b*
13	M35	SR 0.75	.154	2.917	15	.020	0		13	5826.497	14313.866	.179	.179	1...	H1-1b*
14	M36	SR 0.75	.184	2.21	13	.012	0		6	2545.66	14313.866	.179	.179	1...	H1-1b

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

	Member	Shape	Code C...	Loc[ft]	LC	Shear ...	Loc[ft]	Dir	LC	phi*Pnc [l...	phi*Pnt [lb]	phi*Mn y-...	phi*Mn z-...	Cb	Eqn
15	M37	PL1/2X3.5	.191	.208	23	.143	.208	y	18	55811.544	56700	.591	4.134	1...	H1-1b
16	M38	PIPE 2.0	.108	3.692	23	.094	3.771		19	27093.79	32130	1.872	1.872	2...	H1-1b
17	M39	PL1/2x3.75	.284	0	23	.135	.167	y	18	56683.005	57704.4	.363	5.711	1...	H1-1b
18	M41	PL1/2X3.5	.208	.208	17	.145	0	y	24	55811.544	56700	.591	4.134	1...	H1-1b
19	M42	PL1/2x3.75	.327	0	15	.130	0	y	23	56683.005	57704.4	.363	5.711	1...	H1-1b
20	M43	SR 0.75	.113	2.917	23	.014	0		13	5826.497	14313.866	.179	.179	1...	H1-1b*
21	M44	SR 0.75	.102	2.917	17	.024	0		13	5826.497	14313.866	.179	.179	1...	H1-1b*
22	M45	SR 0.75	.150	2.21	17	.014	0		24	2545.66	14313.866	.179	.179	1...	H1-1b
23	M39B	PIPE 2.0	.228	3.692	17	.092	.079		17	27093.79	32130	1.872	1.872	2...	H1-1b
24	M37A	PIPE 4.0	.177	5.017	13	.209	5.903		14	79414.517	93240	10.631	10.631	2...	H1-1b
25	MP2A	PIPE 2.5	.112	2.042	20	.038	2.042		19	33961.614	50715	3.596	3.596	4...	H1-1b
26	MP3A	PIPE 2.0	.177	4.958	47	.036	2.042		19	17855.085	32130	1.872	1.872	4...	H1-1b
27	MP4A	PIPE 2.0	.400	3.646	5	.117	5.031		5	17855.085	32130	1.872	1.872	2...	H1-1b
28	M65	PIPE 2.0	.466	7.675	11	.077	15.351		5	4174.429	32130	1.872	1.872	1...	H1-1a
29	M51	PIPE 2.0	.037	2.506	19	.003	5.012		20	23775.269	32130	1.872	1.872	1...	H1-1b
30	M52	PIPE 2.0	.708	9.212	12	.021	0		23	2434.801	32130	1.872	1.872	1.8	H1-1b
31	M53	PIPE 2.0	.728	9.003	18	.021	0		20	2434.801	32130	1.872	1.872	1...	H1-1b
32	M56	PIPE 2.0	.394	2.625	5	.158	1.75		12	23088.171	32130	1.872	1.872	1...	H1-1b

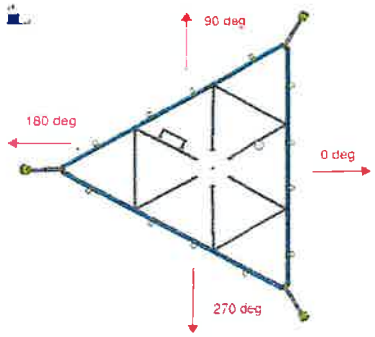
VzW SMART Tool© Vendor

Client:	Verizon Wireless	Date:	7/24/2023
Site Name:	TARIFFVILLE CT RELO - Talcott Mtn		
MDG #:	5000104103		
Fuze ID #:	17123895	Page:	1
			Version 1.01

I. Mount-to-Tower Connection Check

Custom Orientation Required — Yes

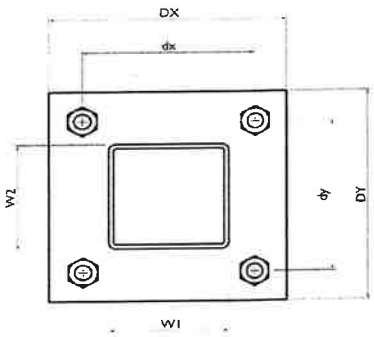
Nodes (labeled per Risa)	Orientation (per graphic of typical platform)
N53	300
N54	300



Tower Connection Bolt Checks — Yes

Bolt Orientation — Parallel

Bolt Quantity per Reaction:	4
d_x (in) *(Delta X of typ. bolt config. sketch)* :	7.25
d_y (in) *(Delta Y of typ. bolt config. sketch)* :	2.5
Bolt Type:	A36
Bolt Diameter (in):	0.625
Required Tensile Strength / bolt (kips):	2.7
Required Shear Strength / bolt (kips):	0.9
Tensile Capacity / bolt (kips):	10.0
Shear Capacity / bolt (kips):	6.0
Bolt Overall Utilization:	27.3%

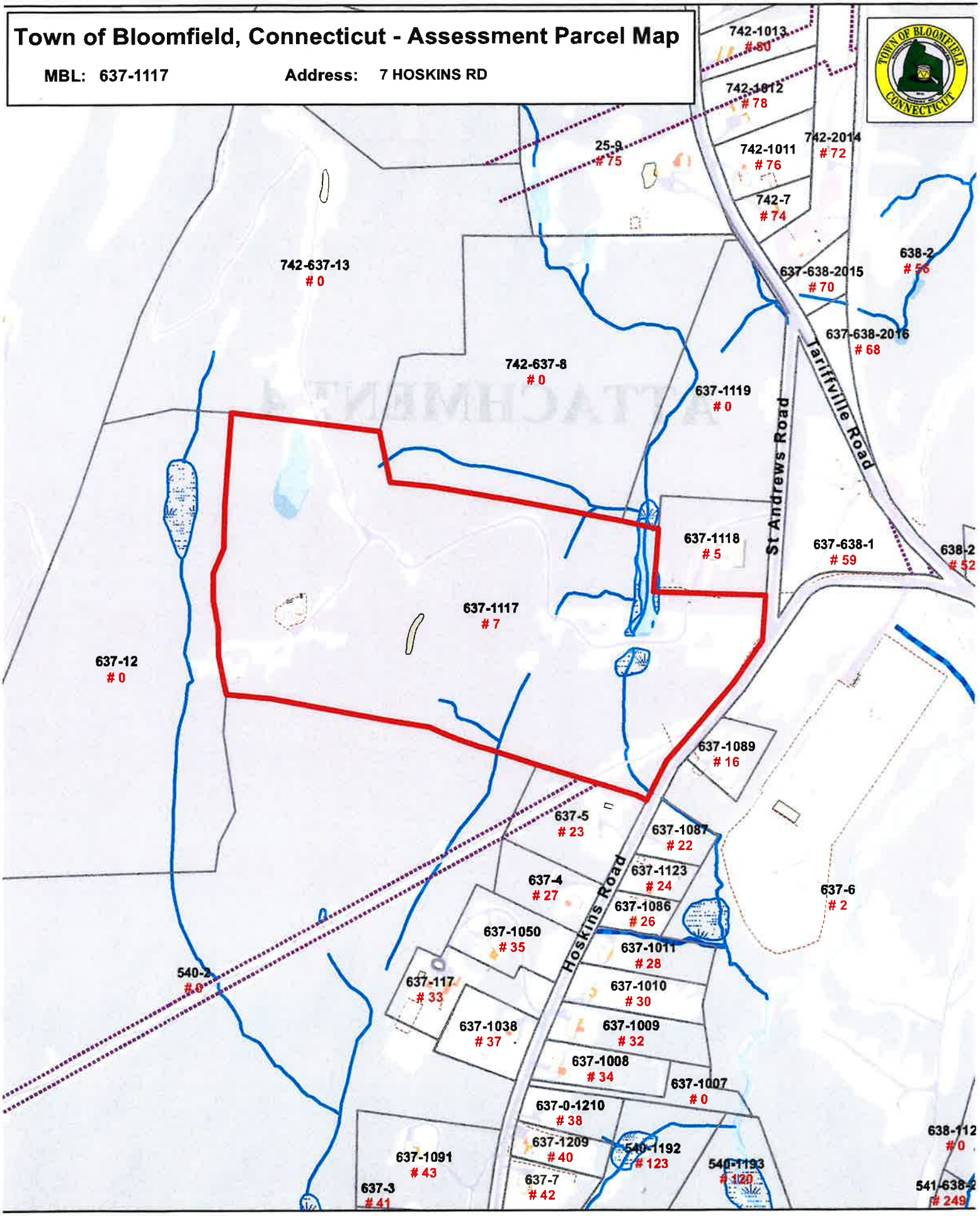


Tower Connection Baseplate Checks — No

ATTACHMENT 4

Town of Bloomfield, Connecticut - Assessment Parcel Map

MBL: 637-1117 **Address:** 7 HOSKINS RD



Approximate Scale:

1 inch = 450 feet

Disclaimer:
This map is for informational purposes only.
All information is subject to verification by any user.
The Town of Bloomfield and its mapping contractors
assume no legal responsibility for the information contained herein.

Map Produced October 2019

Parcels labeled by Unique ID

Town of Bloomfield, CT

Property Listing Report

Map Block Lot	637-1117	Building #	1	PID	8110	Account	R93240

Property Information

Property Location	7 HOSKINS RD
Owner	CONN LIGHT & POWER CO
Co-Owner	ATTN: PROPERTY TAX DEPT
Mailing Address	P O BOX 270 HARTFORD CT 06141
Land Use	201 Comm Land
Land Class	C
Zoning Code	R-80
Census Tract	0000

Site Index	4
Acreage	38.33
Utilities	
Lot Setting/Desc	
Fire District	C
Book / Page	0292/0097

Photo

Sketch

Primary Construction Details

Year Built	1962
Building Desc.	Vacant with OutBldg
Building Style	UNKNOWN
Building Grade	
Stories	
Occupancy	
Exterior Walls	
Exterior Walls 2	NA
Roof Style	
Roof Cover	
Interior Walls	
Interior Walls 2	NA
Interior Floors 1	
Interior Floors 2	

Heating Fuel	
Heating Type	
AC Type	
Bedrooms	0
Full Bathrooms	0
Half Bathrooms	0
Extra Fixtures	0
Total Rooms	0
Bath Style	NA
Kitchen Style	NA
Bsmt Fin Area	0
Rec Rm Area	0
Bsmt Gar	0
Fireplaces	0

(*Industrial / Commercial Details)

Building Use	Vacant
Building Condition	A
Sprinkler %	NA
Heat / AC	NA
Frame Type	NA
Baths / Plumbing	NA
Ceiling / Wall	NA
Rooms / Prtns	NA
Wall Height	NA
First Floor Use	NA
Foundation	POURED CONC.

Report Created On 10/26/2021

Town of Bloomfield, CT

Property Listing Report | Map Block Lot 637-1117 | Building # 1 | PID 8110 | Account R93240

Valuation Summary (Assessed value = 70% of Appraised Value)

Item	Appraised	Assessed
Buildings	0	0
Extras	0	0
Improvements		
Outbuildings	883200	618240
Land	540800	300830
Total	1424000	919070

Outbuilding and Extra Features

Type	Description
Cell Shed	480 S.F.
Cell Shed	120 S.F.
Cell Tower	4 UNITS

Sub Areas

Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
Total Area		0

Sales History

Owner of Record	Book/ Page	Sale Date	Sale Price
CONN LIGHT & POWER CO	0292/0097	1900-01-01	0

Report Created On 10/26/2021

ATTACHMENT 5

Verizon/Tariffville Relo

UNITED STATES POSTAL SERVICE®

Certificate of Mailing — Firm

Name and Address of Sender	TOTAL NO. of Pieces Listed by Sender	TOTAL NO. of Pieces Received at Post Office™	Affix Stamp Here *Postmark with Date of Receipt.*
Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103	3	3	neopost 10/10/2023 US POSTAGE $003.19 ZIP 06103 041L12203937
	Postmaster, per *(name of receiving employee)*		

USPS® Tracking Number / Firm-specific Identifier	Address (Name, Street, City, State, and ZIP Code™)	Postage	Fee	Special Handling	Parcel Airlift
1.	Philip Schenk, Acting Town Manager Town of Bloomfield 800 Bloomfield Avenue Bloomfield, CT 06002				
2.	Justin LaFountain, Director Building and Land Use Town of Bloomfield 800 Bloomfield Avenue Bloomfield, CT 06002				
3.	Connecticut Light and Power PO Box 270 Hartford, CT 06141				
4.					
5.					
6.					

STATE HOUSE STATION 06106 CT OCT 10 2023 PM

PS Form **3665**, January 2017 (Page 1 of 1) PSN 7530-17-000-5549

See Reverse for Instructions