



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

May 13, 2024

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

**RE: Notice of Exempt Modification for Verizon Wireless: 5000382040
Crown Site ID# 806362
347 East Street, Wolcott, CT 06716
Latitude: 41° 33' 34.41" / Longitude: -72° 56' 49.1"**

Dear Ms. Bachman:

Verizon Wireless currently maintains fifteen (15) antennas at the 179-foot mount on the existing 185-foot monopole tower located at 347 East Street, Wolcott, CT. The property is owned by the Agostinho & Joanne Rodrigues and the tower is owned by Crown Castle. Verizon now intends to add four (4) interference mitigation filters at the 179ft level. This modification/proposal includes hardware that is both 4G (LTE) and 5G capable through remote software configuration and either or both services may be turned on or off at various times.

Planned Modification:

Tower:

Install New:

(4) Kaelus BSF0020F3V1-1 Interference Mitigation Filters

The facility was approved by the Connecticut Siting Council in Docket No. 56 on April 14, 1986.

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies §16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to Thomas G Dunn, Mayor, Town of Wolcott, David Kalinowski, Zoning Inspector, Town of Wolcott and Agostinho & Joanne Rodrigues are the Property Owners. Crown Castle is the tower owner.

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

Melanie A. Bachman

Page 2

4. The operation of the replacement antennas will not increase radio frequency emissions at the facility to a level at or above the Federal Communication Commission safety standard.
5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.
6. The existing structure and its foundation can support the proposed loading.

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

Sincerely,



Jeffrey Barbadora
Permitting Specialist
1800 W. Park Drive
Westborough, MA 01581
(781) 970-0053
Jeff.Barbadora@crowncastle.com

Attachments

cc:

Thomas G Dunn, Mayor
Town of Wolcott
10 Kenea Avenue
Wolcott, CT 06716
203-879-8100

David Kalinowski, Zoning Inspector
Town of Wolcott
10 Kenea Avenue
Wolcott, CT 06716
203-879-8100

Agostinho & Joanne Rodrigues
347 East Street
Wolcott, CT 06716

Crown Castle, Tower Owner

DOCKET NO. 56

AN APPLICATION OF METRO MOBILE CTS OF : CONNECTICUT SITING
NEW HAVEN, INC., FOR A CERTIFICATE OF :
ENVIRONMENTAL COMPATIBILITY AND PUBLIC : COUNCIL
NEED FOR THE CONSTRUCTION, MAINTENANCE, :
AND OPERATION OF FACILITIES TO PROVIDE : April 14, 1986
CELLULAR SERVICE IN NEW HAVEN COUNTY. :

D E C I S I O N A N D O R D E R

Pursuant to the foregoing opinion, the Council hereby directs that a certificate of environmental compatibility and public need as required by section 16-50k of the General Statutes of Connecticut (CGS) be issued to Metro Mobile CTS of New Haven, Inc., for the construction, maintenance, and operation of cellular mobile phone telecommunication towers and associated equipment in the towns of Wolcott, Naugatuck, West Haven (existing tower), Milford, Hamden (existing tower), Guilford, and North Branford subject to the conditions below.

1. The proposed and alternate Beacon Falls sites are rejected without prejudice.
2. The Wolcott tower shall be constructed to meet Zone C wind loading with 1" of radial ice and shall not exceed 180' in height excluding antennas.
3. The Naugatuck tower shall not exceed 160' in height, excluding antennas. The certificate holder shall offer to remove the existing privately owned, unused tower now on the site.
4. Any future actions requiring the removal of the existing West Haven or Hamden towers to be shared by the certificate holder shall also apply to the equipment mounted on those towers by the certificate holder, regardless of that equipment's status under Chapter 277a of the CGS.

certificate holder shall notify the Council of the addition of any equipment to any approved tower.

11. A fence not lower than 8' shall surround each tower and associated equipment.
12. Unless necessary to comply with order 13, below, no lights shall be installed on any of these towers.
13. The facilities' construction and any future tower sharing shall be in accordance with all applicable federal, state, and municipal laws and regulations. Shared uses by entities not subject to jurisdiction pursuant to sections 16-50i and 16-50k of the CGS shall be subject to all applicable federal, state, and municipal laws and regulations.
14. Construction activities shall take place during daylight working hours.
15. This decision and order shall be void and the towers and associated equipment shall be dismantled and removed, or reapplication for any new use shall be made to the CSC before any such new use is made, if the towers do not provide or permanently cease to provide cellular service following completion of construction.
16. This decision and order shall be void if all construction authorized herein is not completed within three years of the issuance of this decision, or within three years of the completion of any appeal if appeal of this decision is taken, unless otherwise approved by the Council.

Pursuant to CGS section 16-50p, we hereby direct that a copy of the decision and order shall be served on each person listed below. A notice

Guilford Planning and Zoning Commission

represented by:

Mr. David W. Fisher
Chairman
Town Hall
31 Park Street
Guilford, Connecticut 06437

Town of Hamden

represented by:

John DeNicola, Jr.
Mayor
Town of Hamden
Memorial Town Hall
2372 Whitney Avenue
New Haven, Connecticut 06518

Citizens Park Council of New Haven

represented by:

Mr. John J. Ciarleglio
President
Citizens Park Council
of New Haven
36 Elmwood Road
New Haven, Connecticut 06515

Mr. Thomas V. Keating
343 Rimmon Hill Road
Beacon Falls, Connecticut 06403

Ms. Evelyn M. Sirowich
245 Rimmon Hill Road
Beacon Falls, Connecticut 06403

Mr. Jack B. Levine
11 White Birch Lane
Beacon Falls, Connecticut 06403

Southern New England Telephone Company

represented by:

Mr. Peter J. Tyrrell, Esq.
227 Church Street
New Haven, Connecticut 06506

Mr. Dennis Bialecki
96 West Road
Beacon Falls, Connecticut 06403

Peter M. Lerner
State Representative
8 Merritt Avenue
Woodbridge, Connecticut 06525

Carleton J. Benson
State Representative
161 Scott Road
Prospect, Connecticut 06712

Dr. Stephen Collins (service waived)
Vice Chairman
West Rock State Park
Advisory Council
Bethany, Connecticut

Mr. Louis Melillo (service waived)
985 Wintergreen Avenue
Hamden, Connecticut

Mr. John McGeever (service waived)
339 Rimmon Hill
Beacon Falls, Connecticut 06403

Senator John Consoli (service waived)
51 Luke Hill Road
Bethany, Connecticut 06525

Representative George P. Bassing (service waived)
14 Oakwood Drive
Seymour, Connecticut 06483

Dr. George D. Whitney (service waived)
858 Oakwood Road
Orange, Connecticut

Mr. Steve Molnar (service waived)
205 West Road
Beacon Falls, Connecticut

Mr. James W. Grandy (service waived)
President
Hamden Land Conservation Trust
Hamden, Connecticut

Senator Richard S. Eaton (service waived)
269 Mulberry Point Road
Guilford, Connecticut 06437

Representative Robert M. Ward
719 Totoket Road
Northford, Connecticut 06472

Senator Thomas Scott
22 Meyers Court
Milford, Connecticut 06460

(service waived)

Helen Moore
385 Oronoque Road
Milford, Connecticut 06460

(service waived)

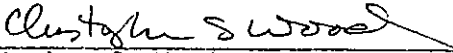
William Barberi
298 Oronoque Road
Milford, Connecticut 06460

(service waived)

STATE OF CONNECTICUT)
 :
COUNTY OF HARTFORD) ss. New Britain, April 14, 1986

I hereby certify that the foregoing is a true and correct copy of the decision and order issued by the Connecticut Siting Council, State of Connecticut.

ATTEST:



Christopher S. Wood, Executive Director
Connecticut Siting Council

347 EAST ST

Location 347 EAST ST

Mblu 131/ 1/ 19/ /

Acct# R0478100

Owner RODRIGUES AGOSTINHO V &

Assessment \$506,990

Appraisal \$724,280

PID 5352

Building Count 3

Current Value

Appraisal

Valuation Year	Improvements	Land	Total
2022	\$474,310	\$249,970	\$724,280

Assessment

Valuation Year	Improvements	Land	Total
2022	\$332,010	\$174,980	\$506,990

Owner of Record

Owner RODRIGUES AGOSTINHO V &
Co-Owner JOANNE
Address 347 EAST ST
WOLCOTT, CT 06716

Sale Price \$0
Certificate
Book & Page 0131/0023
Sale Date 06/27/1980
Instrument 25

Ownership History

Ownership History

Owner	Sale Price	Certificate	Book & Page	Instrument	Sale Date
RODRIGUES AGOSTINHO V &	\$0		0131/0023	25	06/27/1980

Building Information

Building 1 : Section 1

Year Built: 1930
Living Area: 3,139
Replacement Cost: \$380,909
Building Percent Good: 62
Replacement Cost
Less Depreciation: \$236,160

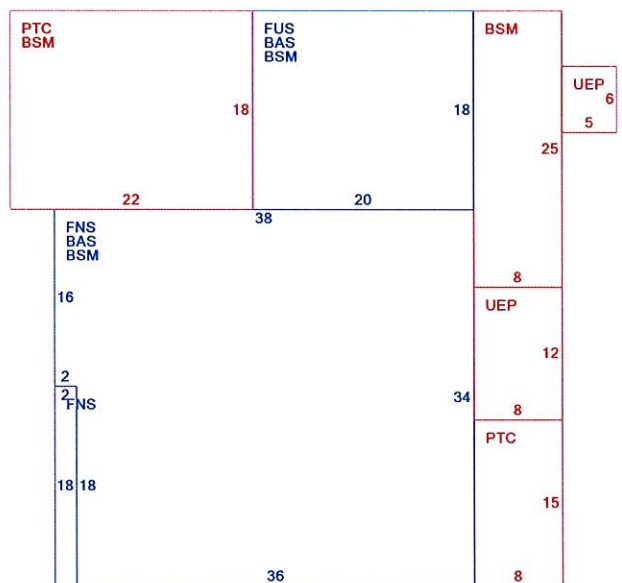
Building Attributes	
Field	Description
Style	Colonial
Model	Residential
Grade:	B
Stories	1.9
Occupancy	1
Exterior Wall 1	Vinyl Siding
Exterior Wall 2	
Roof Structure	Gambrel
Roof Cover	Arch Shingles
Interior Wall 1	Drywall
Interior Wall 2	
Interior Flr 1	Carpet
Interior Flr 2	
Heat Fuel	Oil
Heat Type:	Hot Water
AC Percent	35% CAC
Total Bedrooms:	5 Bedrooms
Full Bthrms:	3
Half Baths:	0
Extra Fixtures	0
Total Rooms:	9
Bath Style:	Average
Kitchen Style:	Average
Num Kitchens	1
Fireplace(s)	0
% Attic Fin	0
LF Dormer	12
Foundation	Poured Conc
Bsmt Gar(s)	0
Bsmt %	100
SF FBM	0.00
SF Rec Rm	182
Fin Bsmt Qual	LQ
Bsmt Access	Int & Ext
Fndtn Cndtn	
Basement	

Building Photo



(<https://images.vgsi.com/photos/WolcottCTPhotos/A00\01\17\56.jpg>)

Building Layout



(ParcelSketch.ashx?pid=5352&bid=5352)

Building Sub-Areas (sq ft)			Legend	
Code	Description	Gross Area	Living Area	
BAS	First Floor	1,616	1,616	
FNS	Finished 90% Story	1,292	1,163	
FUS	Finished Upper Story	360	360	
BSM	Basement	2,212	0	
PTC	Concrete Patio	516	0	
UEP	Unfin. Enclosed Porch	126	0	
		6,122	3,139	

Building 2 : Section 1

Year Built:

1910

Living Area: 1,308
Replacement Cost: \$172,881
Building Percent Good: 60
**Replacement Cost
Less Depreciation:** \$103,730

Building Attributes : Bldg 2 of 3

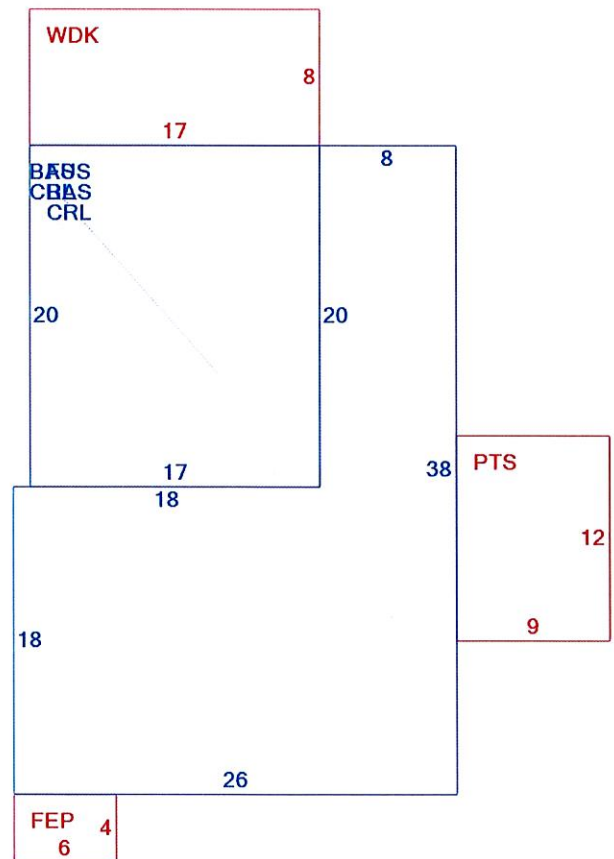
Field	Description
Style	Conventional
Model	Residential
Grade:	D
Stories	1
Occupancy	1
Exterior Wall 1	Vinyl Siding
Exterior Wall 2	
Roof Structure	Gable
Roof Cover	Arch Shingles
Interior Wall 1	Plaster
Interior Wall 2	
Interior Flr 1	Carpet
Interior Flr 2	
Heat Fuel	Oil
Heat Type:	Hot Water
AC Percent	None
Total Bedrooms:	2 Bedrooms
Full Bthrms:	1
Half Baths:	0
Extra Fixtures	0
Total Rooms:	5
Bath Style:	Average
Kitchen Style:	Average
Num Kitchens	1
Fireplace(s)	0
% Attic Fin	0
LF Dormer	0
Foundation	Poured Conc
Bsmt Gar(s)	0
Bsmt %	0
SF FBM	0.00
SF Rec Rm	0
Fin Bsmt Qual	
Bsmt Access	None
Fndtn Cndtn	

Building Photo



(<https://images.vgsi.com/photos/WolcottCTPhotos/\00\01\17\57.jpg>)

Building Layout



(ParcelSketch.ashx?pid=5352&bid=20142)

Building Sub-Areas (sq ft)		Legend	
Code	Description	Gross Area	Living Area
BAS	First Floor	968	968
FUS	Finished Upper Story	340	340
CRL	Crawl Space	968	0
FEP	Finished Enclosed Porch	24	0
PTS	Stone Patio	108	0
WDK	Deck	136	0

Basement	
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		2,544	1,308
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Building 3 : Section 1

Year Built: 1912
Living Area: 1,481
Replacement Cost: \$199,759
Building Percent Good: 60
Replacement Cost Less Depreciation: \$119,860

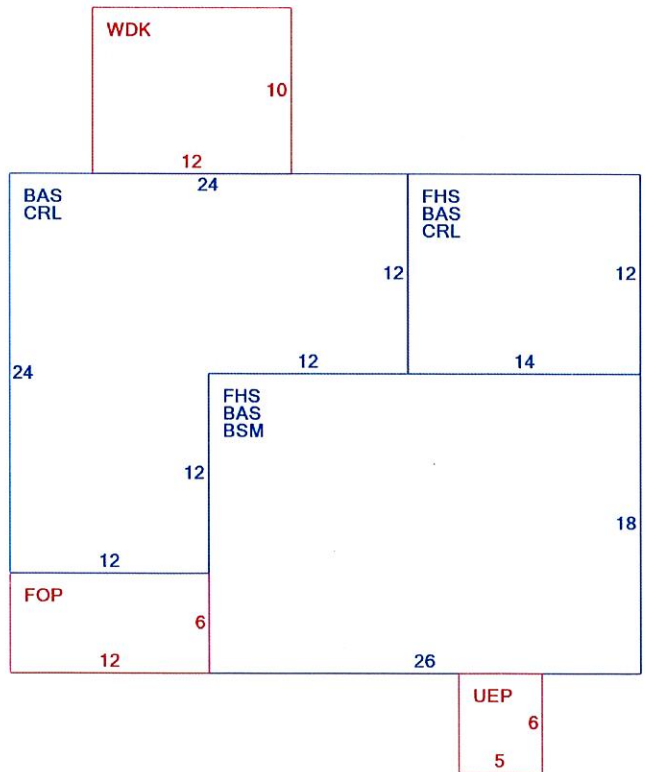
Building Attributes : Bldg 3 of 3	
Field	Description
Style	Conventional
Model	Residential
Grade:	D
Stories	1.65
Occupancy	2
Exterior Wall 1	Vinyl Siding
Exterior Wall 2	
Roof Structure	Gable
Roof Cover	Arch Shingles
Interior Wall 1	Plaster
Interior Wall 2	
Interior Flr 1	Hardwood
Interior Flr 2	Carpet
Heat Fuel	Oil
Heat Type:	Hot Water
AC Percent	None
Total Bedrooms:	3 Bedrooms
Full Bthrms:	2
Half Baths:	0
Extra Fixtures	0
Total Rooms:	7
Bath Style:	Average
Kitchen Style:	Average
Num Kitchens	2
Fireplace(s)	0
% Attic Fin	0
LF Dormer	0
Foundation	Poured Conc
Bsmt Gar(s)	0
Bsmt %	100
SF FBM	0.00

Building Photo



(<https://images.vgsi.com/photos/WolcottCTPhotos/A00/01/17/58.jpg>)

Building Layout



(ParcelSketch.ashx?pid=5352&bid=20143)

Building Sub-Areas (sq ft)			Legend	
Code	Description	Gross Area	Living Area	
BAS	First Floor	1,068	1,068	
FHS	Finished Half Story	636	413	
BSM	Basement	468	0	
CRL	Crawl Space	600	0	
FOP	Open Porch	72	0	

SF Rec Rm	0	UEP	Unfin. Enclosed Porch	30	0
Fin Bsmt Qual		WDK	Deck	120	0
Bsmt Access	Int & Ext			2,994	1,481
Fndtn Cndtn					
Basement					

Extra Features

Extra Features				Legend	
Code	Description	Size	Value	Bldg #	
SOL	Solar Array	39.00 UNITS	\$0	1	
GEN	Generator	0.00 UNITS	\$0	1	

Land

Land Use

Use Code	112
Description	Multiple Houses
Zone	R-30
Neighborhood	6C
Alt Land Appr Category	No

Land Line Valuation

Size (Acres)	2.20
Frontage	
Depth	
Assessed Value	\$174,980
Appraised Value	\$249,970

Outbuildings

Outbuildings				Legend		
Code	Description	Sub Code	Sub Description	Size	Value	Bldg #
FGR1	Garage	FR	Frame	672.00 S.F.	\$5,880	1
FGR1	Garage	FR	Frame	560.00 S.F.	\$4,900	1
FOP	Porch			480.00 S.F.	\$2,760	1
PTO	Patio	CN	Concrete	408.00 S.F.	\$1,020	1

Valuation History

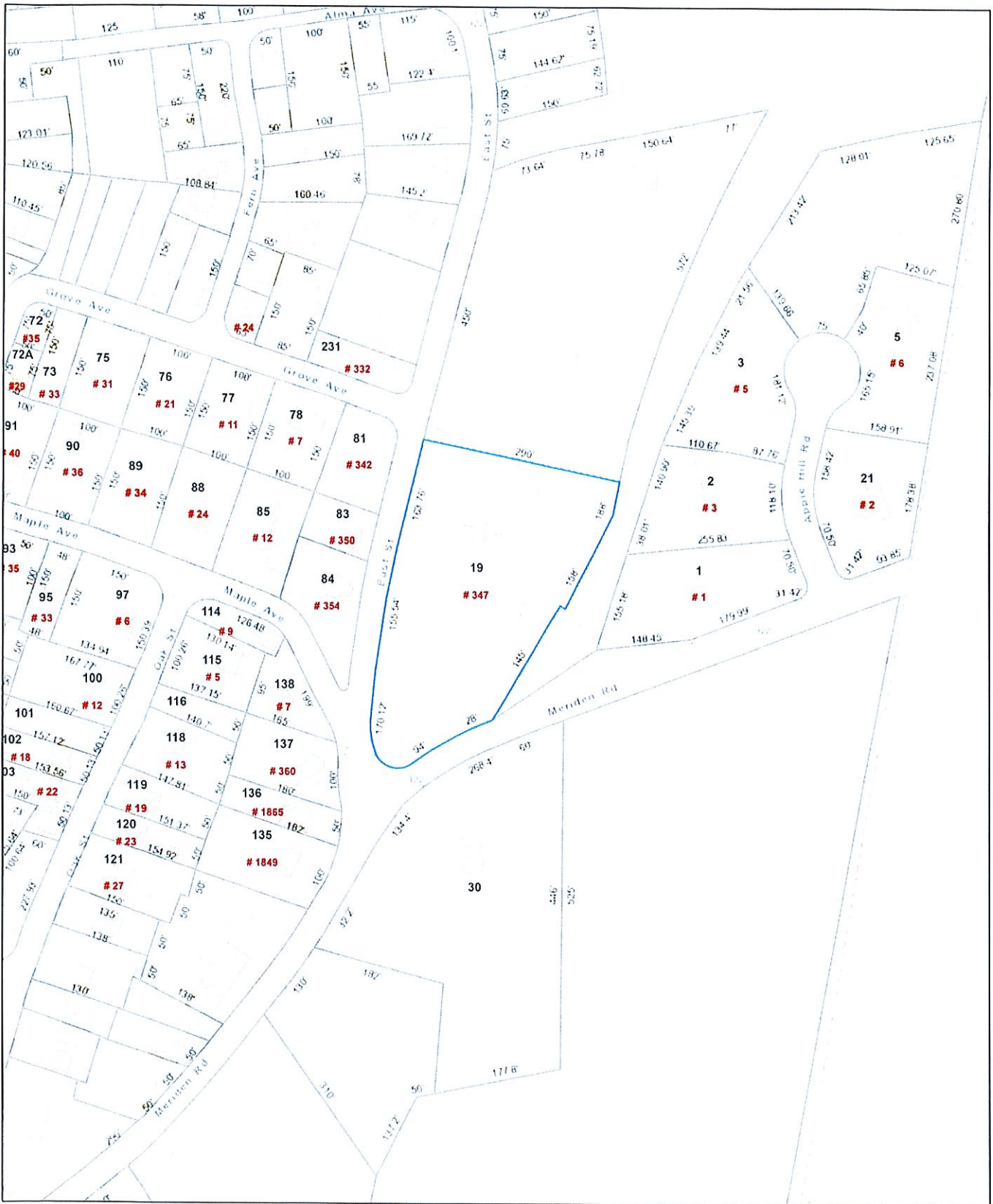
Appraisal

Valuation Year	Improvements	Land	Total
2023	\$474,310	\$249,970	\$724,280
2022	\$474,310	\$249,970	\$724,280
2021	\$474,310	\$249,970	\$724,280

Assessment

Valuation Year	Improvements	Land	Total
2023	\$332,010	\$174,980	\$506,990
2022	\$332,010	\$174,980	\$506,990
2021	\$332,010	\$174,980	\$506,990

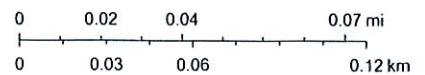
347 East Street



10/19/2022, 8:05:42 AM

- Parcels
- Other Impervious
- Buildings

1:2,257



UConn/CTDEEP, Esri, HERE, Garmin, GeoTechnologies, Inc., NGA, USGS

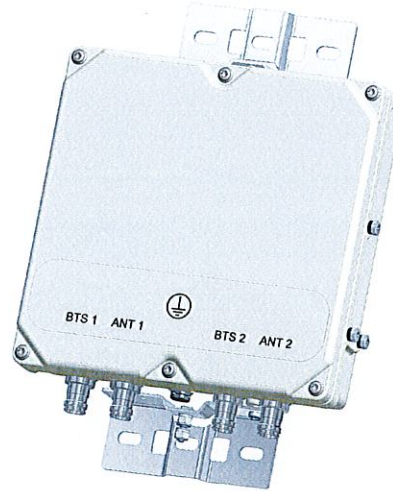
BSF0020F3V1-1

TWIN BANDSTOP 900MHZ INTERFERENCE MITIGATION FILTER

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

FEATURES

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



TECHNICAL SPECIFICATIONS

BAND NAME	700 PATH / 850 UPLINK PATH	850 DOWNLINK PATH
Passband	698 - 849MHz	869 - 891.5MHz
Insertion loss	0.1dB typical / 0.3dB maximum	0.5dB typical, 1.45dB maximum
Return loss	24dB typical, 18dB minimum	
Maximum input power (Per Port)	100W average	200W average and 66W per 5MHz
Rejection	53dB minimum @ 894.1 - 896.5MHz	

ELECTRICAL

Impedance	50Ohms
Intermodulation products	-160dBc maximum in UL Band (assuming 20MHz Signal), with 2 x 43dBm carriers -153dBc maximum with 2 x 43dBm

DC / AISG

Passband	0 - 13MHz
Insertion loss	0.3dB maximum
Return loss	15dB minimum
Input voltage range	± 33V
DC current rating	2A continuous, 4A peak
Compliance	3GPP TS 25.461

ENVIRONMENTAL

For further details of environmental compliance, please contact Kaelus.

Temperature range	-20°C to +60°C -4°F to +140°F
Ingress protection	IP67
Altitude	2600m 8530ft
Lightning protection	RF port: ±5kA maximum (8/20us), IEC 61000-4-5 – Unit must be terminated with some lightning protection circuits.
MTBF	>1,000,000 hours
Compliance	ETSI EN 300 019 class 4.1H, RoHS, NEBS GR-487-CORE

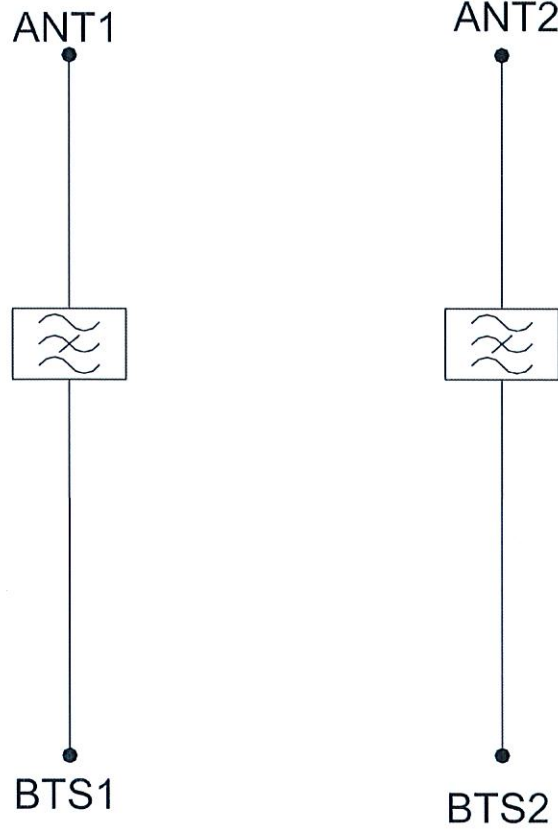
MECHANICAL

Dimensions H x D x W	269 x 277 x 80mm 10.60 x 10.90 x 3.15in (Excluding brackets and connectors)
Weight	8.0 kg 17.6 lbs (no bracket)
Finish	Powder coated, light grey (RAL7035)
Connectors	RF: 4, 3-10 (F) x 4
Mounting	Optional pole/wall bracket supplied with two metal clamps 45-178mm diameter poles or custom bracket. See ordering information.

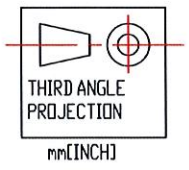
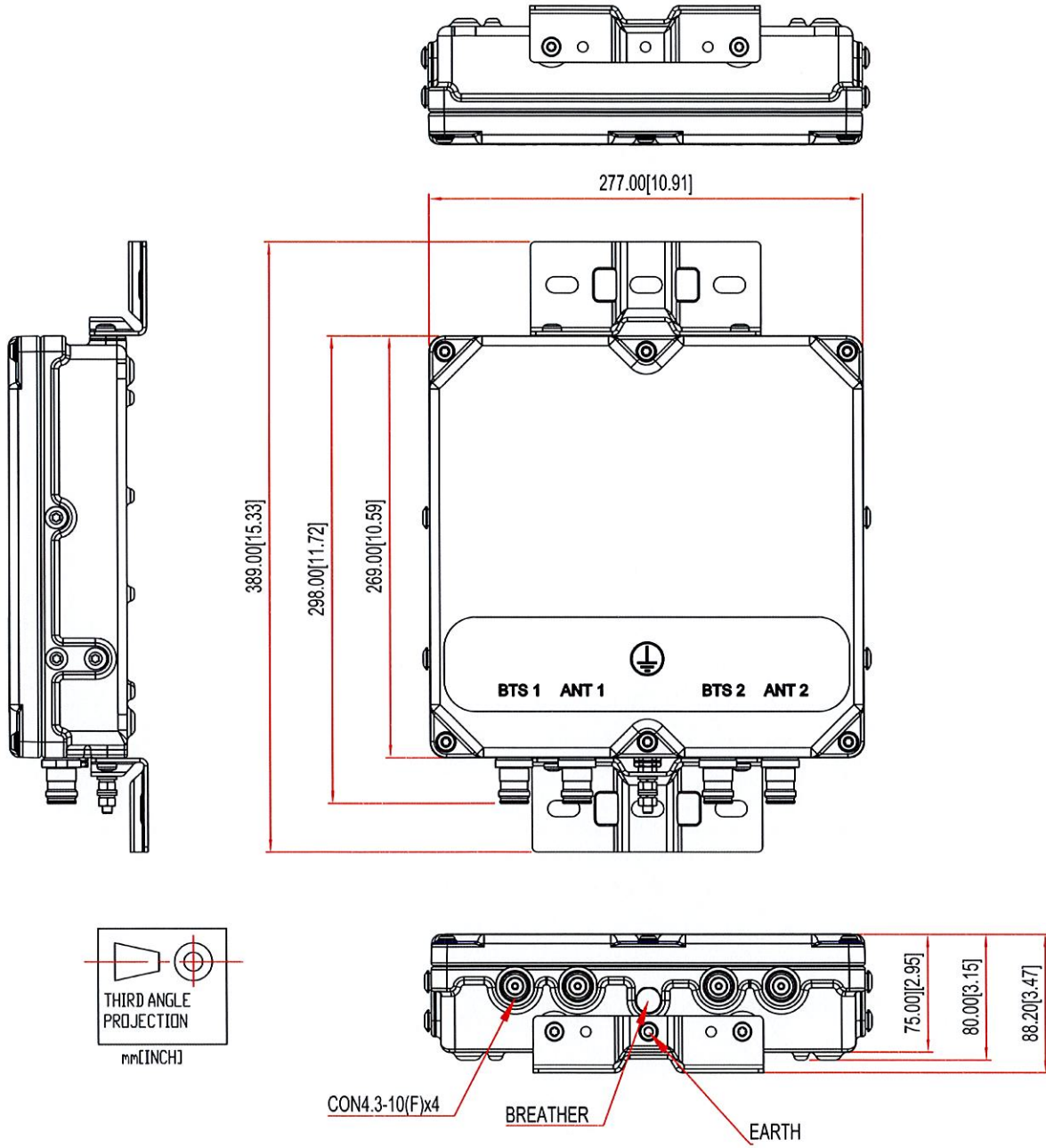
ORDERING INFORMATION

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

ELECTRICAL BLOCK DIAGRAM



MECHANICAL BLOCK DIAGRAM



Barbadora, Jeff

From: TrackingUpdates@fedex.com
Sent: Tuesday, May 14, 2024 11:52 AM
To: Barbadora, Jeff
Subject: FedEx Shipment 776356932120: Your package has been delivered

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



Hi. Your package was
delivered Tue, 05/14/2024 at
11:41am.



Delivered to 10 KENEA AVE, WOLCOTT, CT 06716
Received by D.KALINSJI

[OBTAIN PROOF OF DELIVERY](#)

How was your delivery ?



TRACKING NUMBER	776356932120
FROM	Crown Castle 1800 W. Park Drive WESTBOROUGH, MA, US, 01581
TO	Town f Wolcott Thomas G. Dunn, Mayor 10 Kenea Ave WOLCOTT, CT, US, 06716
REFERENCE	799001.7680
SHIPPER REFERENCE	799001.7680
SHIP DATE	Mon 5/13/2024 05:57 PM
DELIVERED TO	Receptionist/Front Desk
PACKAGING TYPE	FedEx Envelope
ORIGIN	WESTBOROUGH, MA, US, 01581
DESTINATION	WOLCOTT, CT, US, 06716
SPECIAL HANDLING	Deliver Weekday
NUMBER OF PIECES	1
TOTAL SHIPMENT WEIGHT	0.50 LB
SERVICE TYPE	FedEx Standard Overnight

Barbadora, Jeff

From: TrackingUpdates@fedex.com
Sent: Tuesday, May 14, 2024 11:52 AM
To: Barbadora, Jeff
Subject: FedEx Shipment 776356965316: Your package has been delivered

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



Hi. Your package was
delivered Tue, 05/14/2024 at
11:41am.



Delivered to 10 KENEA AVE, WOLCOTT, CT 06716
Received by D.KALINSJI

[OBTAIN PROOF OF DELIVERY](#)

How was your delivery ?



TRACKING NUMBER	776356965316
FROM	Crown Castle 1800 W. Park Drive WESTBOROUGH, MA, US, 01581
TO	Town f Wolcott David Kalinowski, Zoning Inspector 10 Kenea Ave WOLCOTT, CT, US, 06716
REFERENCE	799001.7680
SHIPPER REFERENCE	799001.7680
SHIP DATE	Mon 5/13/2024 05:57 PM
DELIVERED TO	Receptionist/Front Desk
PACKAGING TYPE	FedEx Envelope
ORIGIN	WESTBOROUGH, MA, US, 01581
DESTINATION	WOLCOTT, CT, US, 06716
SPECIAL HANDLING	Deliver Weekday
NUMBER OF PIECES	1
TOTAL SHIPMENT WEIGHT	0.50 LB
SERVICE TYPE	FedEx Standard Overnight

Barbadora, Jeff

From: TrackingUpdates@fedex.com
Sent: Tuesday, May 14, 2024 3:05 PM
To: Barbadora, Jeff
Subject: FedEx Shipment 776357066049: Your package has been delivered
Attachments: DeliveryPicture.jpeg

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



Hi. Your package was
delivered Tue, 05/14/2024 at
2:58pm.



Delivered to 347 EAST ST, WOLCOTT, CT 06716

[OBTAIN PROOF OF DELIVERY](#)



Delivery picture not showing? [View](#) in browser.

How was your delivery ?



TRACKING NUMBER	776357066049
FROM	Crown Castle 1800 W. Park Drive WESTBOROUGH, MA, US, 01581
TO	Joanne Rodrigues A. Rodrigues 347 East Street WOLCOTT, CT, US, 06716
REFERENCE	799001.7680
SHIPPER REFERENCE	799001.7680
SHIP DATE	Mon 5/13/2024 05:57 PM
DELIVERED TO	Residence
PACKAGING TYPE	FedEx Envelope
ORIGIN	WESTBOROUGH, MA, US, 01581
DESTINATION	WOLCOTT, CT, US, 06716



Colliers Engineering & Design CT, PC
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 #: 10206436
Colliers Engineering & Design CT, PC Project #: 23777088 (Rev. 1)

July 10, 2023

Site Information

Site ID: 5000382040-VZW / WOLCOTT CT
Site Name: WOLCOTT CT
Carrier Name: Verizon Wireless
Address: 347 East St
Wolcott, Connecticut 06716
New Haven County
Latitude: 41.559528°
Longitude: -72.947028°

Structure Information

Tower Type: 190-Ft Self Support
Mount Type: 14.00-Ft Sector Frame

FUZE ID # 17041985

Analysis Results

Sector Frame: 75.0% 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: Frank Centone



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: 325178, dated February 11, 2021 Filter Add Scope Provided by Verizon Wireless
Mount Mapping Report	Hudson Design Group LLC, Site #: 467897, Dated March 24, 2021
Previous Post Modification Inspection	Colliers Engineering & Design, Project #: 21777142 Dated June 26, 2023
Filter Add 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: 1.00 in Risk Category: II Exposure Category: C Topographic Category: 1 Topographic Feature Considered: N/A Topographic Method: N/A Ground Elevation Factor, K_e : 0.974
Seismic Parameters:	S_s : 0.195 g S_1 : 0.054 g
Maintenance Parameters:	Wind Speed (3-sec. Gust): 30 mph Maintenance Load, L_v : 250 lbs. Maintenance Load, L_m : 500 lbs.
Analysis Software:	RISA-3D (V17)

Final Loading Configuration:

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

Mount Elevation (ft)	Equipment Elevation (ft)	Quantity	Manufacturer	Model	Status
176.50	177.00	6	Commscope	JAHH-65B-R3B	Retained
		3	Samsung	MT6407-77A	
		3	Commscope	CBC78T-DS-43-2X	
		1	Raycap	RVZDC-6627-PF-48*	
		3	Samsung	B2/B66A RRH-BR049	
		3	Samsung	B5/B13 RRH-BR04C	
		1	Andrew	DB846F65ZAXY	
		2	Amphenol Antel	LPA80063/6CF 5	
		2	Swedcom	SC-E 6014 rev2	
		4	KAelus	BSF0020F3V1-1	Added

* Equipment is flush mounted directly to the Self Support. They are not mounted on sector frame mounts and are not included in this mount analysis.

The recent mount mapping did not report existing OVP units. However, 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.

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

Standard Conditions:

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

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

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

3. For mount analyses completed from other data sources (including new replacement mounts) and not specifically mapped in accordance with the NSTD-446 Standard, the mounts are assumed to have been properly fabricated, installed and maintained in good condition, twist free and plumb in accordance with its original design and manufacturer’s specifications.

4. All member connections are assumed to have been designed to meet or exceed the load carrying capacity of the connected member unless otherwise specified in this report.
5. The mount was checked up to, and including, the bolts that fasten it to the mount collar/attachment and threaded rod connections in collar members if applicable. Local deformation and interaction between the mount collar/attachment and the supporting tower structure are outside the scope of this analysis.
6. All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. Colliers Engineering & Design is not responsible for the conclusion, opinions, and recommendations made by others based on the information supplied.
7. Structural Steel Grades have been assumed as follows, if applicable, unless otherwise noted in this analysis:
 - o Channel, Solid Round, Angle, Plate ASTM A36 (Gr. 36)
 - o HSS (Rectangular) ASTM 500 (Gr. B-46)
 - o Pipe ASTM A53 (Gr. B-35)
 - o Threaded Rod F1554 (Gr. 36)
 - o Bolts ASTM A325

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

Analysis Results:

Component	Utilization %	Pass/Fail
Standoff Plate	68.4 %	Pass
Face Horizontal	75.0 %	Pass
Standoff Horizontal	59.9 %	Pass
Standoff Vertical	6.0 %	Pass
Standoff Diagonal	12.2 %	Pass
Antenna Pipe	70.8 %	Pass
Antenna Pipe (pos2)	12.3 %	Pass
Tie Back	8.3 %	Pass
Plate	10.9 %	Pass
Mount Connection	40.0 %	Pass

Structure Rating – (Controlling Utilization of all Components)	75.0%
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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	22.4	16.4	31.3	25.4
0.5	32.4	24.4	44.9	36.9
1	41.7	31.4	57.8	47.5

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

N/A

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

Attachments:

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

Mount Desktop – Post Modification Inspection (PMI) Report Requirements

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

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

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

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

MDG #: 5000382040

SMART Project #: 10206436

Fuze Project ID:

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:

Response:

Special Instruction Confirmation:

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

OR

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

Comments:

--

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

Yes No

Contractor certifies no new damage created during the current installation:

Yes No

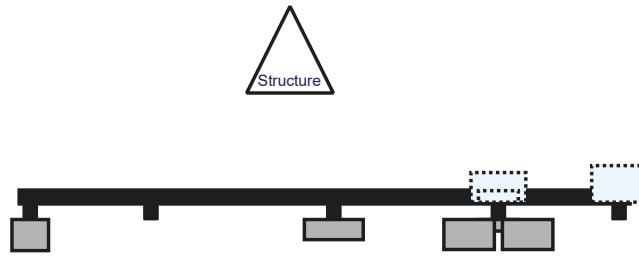
Contractor to certify the condition of the safety climb and verify no damage when leaving the site:

Safety Climb in Good Condition Safety Climb Damaged

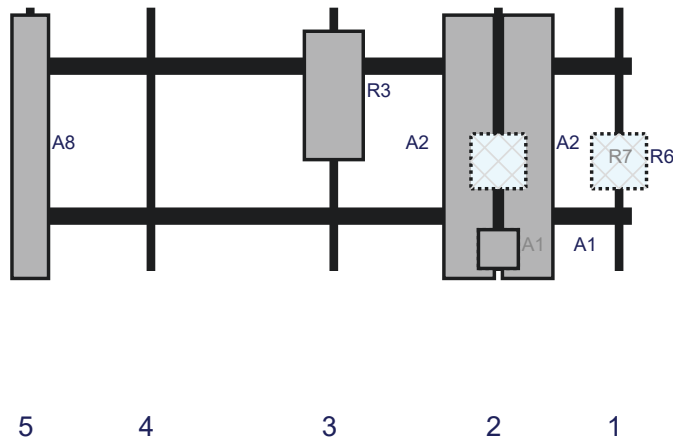
Certifying Individual:

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

Plan View

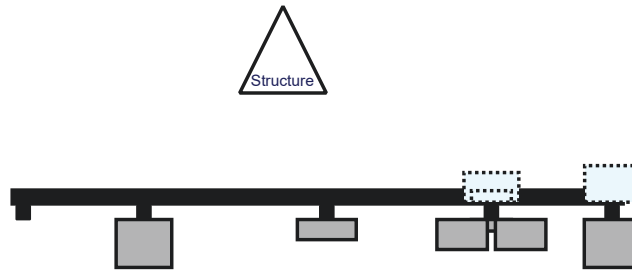


Front View - Looking at Structure

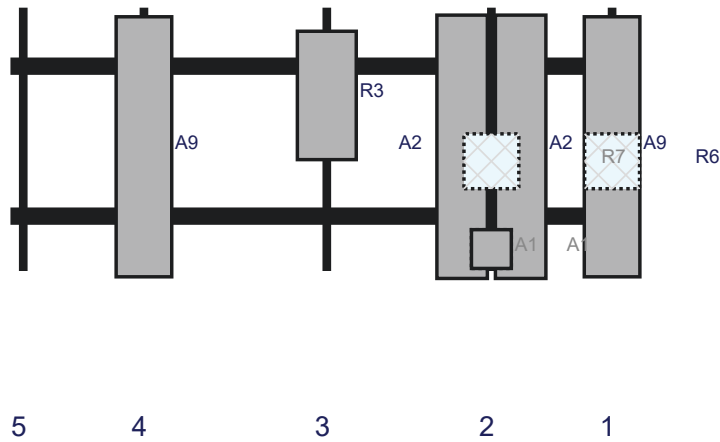


Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
R6	B2/B66A RRH-BR049 (RFV01U-D1A)	15	15	164.5	1	a	Behind	42	0	Retained	02/16/2023
A2	JAHH-65B-R3B	72	13.8	131.5	2	a	Front	38.04	8	Retained	02/16/2023
A2	JAHH-65B-R3B	72	13.8	131.5	2	b	Front	38.04	-8	Retained	02/16/2023
A1	BSF0020F3V1-1	10.6	10.9	131.5	2	a	Behind	66	0	Added	
A1	BSF0020F3V1-1	10.6	10.9	131.5	2	b	Front	66	0	Added	
R7	B5/B13 RRH-BR04C (RFV01U-D2A)	15	15	131.5	2	b	Behind	42	0	Retained	02/16/2023
R3	MT6407-77A	35.1	16.1	86.5	3	a	Front	24	0	Retained	02/16/2023
A8	DB846F65ZAXY	72	10	3.5	5	a	Front	38.04	0	Retained	02/16/2023
M55A	CBC78T-DS-43-2X	6.4	6.9			Member				Retained	02/16/2023

Plan View

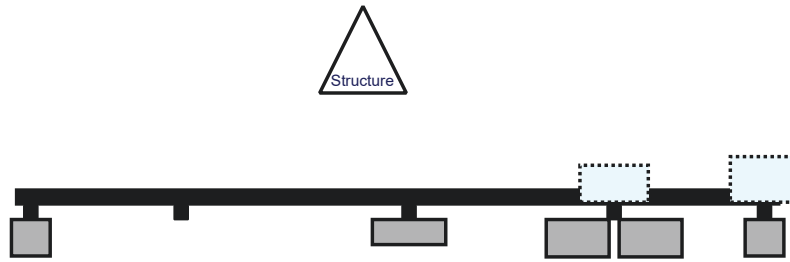


Front View - Looking at Structure

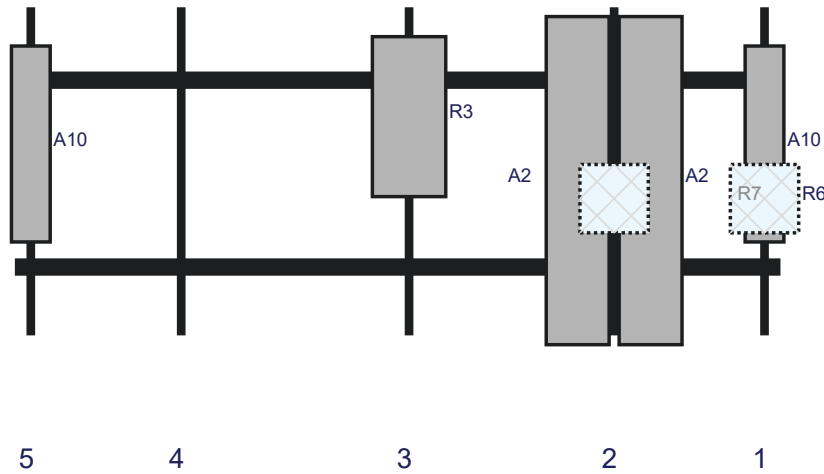


Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A9	LPA80063/6CF 5	71.1	15.2	164.5	1	a	Front	38.04	0	Retained	02/16/2023
R6	B2/B66A RRH-BR049 (RFV01U-D1A)	15	15	164.5	1	a	Behind	42	0	Retained	02/16/2023
A2	JAHH-65B-R3B	72	13.8	131.5	2	a	Front	38.04	8	Retained	02/16/2023
A2	JAHH-65B-R3B	72	13.8	131.5	2	b	Front	38.04	-8	Retained	02/16/2023
A1	BSF0020F3V1-1	10.6	10.9	131.5	2	a	Behind	66	0	Added	
A1	BSF0020F3V1-1	10.6	10.9	131.5	2	b	Front	66	0	Added	
R7	B5/B13 RRH-BR04C (RFV01U-D2A)	15	15	131.5	2	b	Behind	42	0	Retained	02/16/2023
R3	MT6407-77A	35.1	16.1	86.5	3	a	Front	24	0	Retained	02/16/2023
A9	LPA80063/6CF 5	71.1	15.2	36.5	4	a	Front	38.04	0	Retained	02/16/2023

Plan View



Front View - Looking at Structure



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A10	SC-E 6014 rev2	43	8.5	164.5	1	a	Front	30	0	Retained	02/16/2023
R6	B2/B66A RRH-BR049 (RFV01U-D1A)	15	15	164.5	1	a	Behind	42	0	Retained	02/16/2023
A2	JAHH-65B-R3B	72	13.8	131.5	2	a	Front	38.04	8	Retained	02/16/2023
A2	JAHH-65B-R3B	72	13.8	131.5	2	b	Front	38.04	-8	Retained	02/16/2023
R7	B5/B13 RRH-BR04C (RFV01U-D2A)	15	15	131.5	2	b	Behind	42	0	Retained	02/16/2023
R3	MT6407-77A	35.1	16.1	86.5	3	a	Front	24	0	Retained	02/16/2023
A10	SC-E 6014 rev2	43	8.5	3.5	5	a	Front	30	0	Retained	02/16/2023



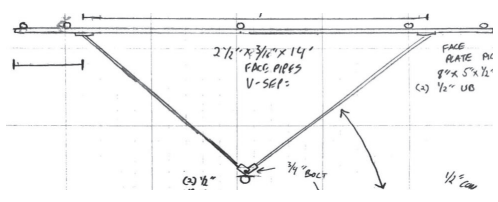
feb. 16, 2023, 4:39:33 p.m.
Wolcott



feb. 16, 2023, 3:34:03 p.m.
Wolcott

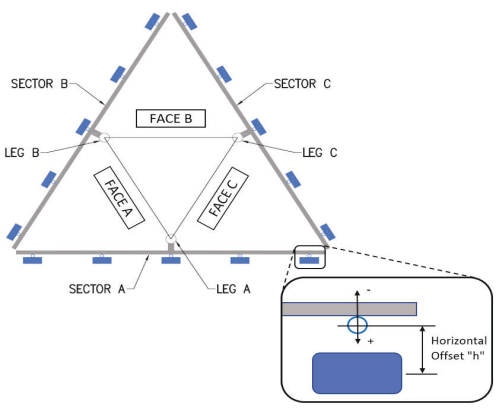
	Antenna Mount Mapping Form (PATENT PENDING)		FCC #
	Tower Owner:	CROWN CASTLE	Mapping Date:
Site Name:	WOLCOTT CT	Tower Type:	Self Support
Site Number or ID:	467897	Tower Height (Ft.):	190
Mapping Contractor:	HUDSON DESIGN GROUP, LLC.	Mount Elevation (Ft.):	179.75

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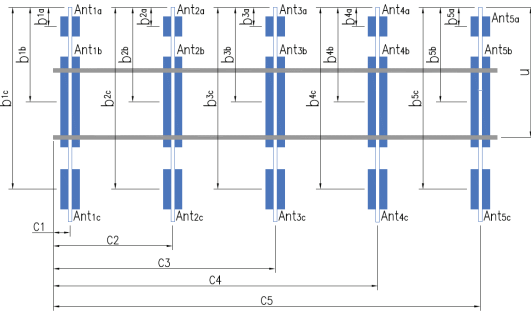


Mount Pipe Configuration and Geometries [Unit = Inches]							
Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "U"	Horizontal Offset "C1, C2, C3, etc."	Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "U"	Horizontal Offset "C1, C2, C3, etc."
A1	2" STD. PIPE X 72" LONG	57.00	3.50	C1	2" STD. PIPE X 72" LONG	57.00	3.50
A2	3-1/2" Ø X 3/16" PIPE X 66" LONG	59.00	21.50	C2	3-1/2" Ø X 3/16" PIPE X 66" LONG	59.00	21.50
A3	2" STD. PIPE X 72" LONG	57.00	81.50	C3	2" STD. PIPE X 72" LONG	57.00	81.50
A4	2" STD. PIPE X 72" LONG	57.00	131.50	C4	2" STD. PIPE X 72" LONG	57.00	131.50
A5	2" STD. PIPE X 72" LONG	57.00	164.50	C5	2" STD. PIPE X 72" LONG	57.00	164.50
A6				C6			
B1	2" STD. PIPE X 72" LONG	57.00	3.50	D1			
B2	3-1/2" Ø X 3/16" PIPE X 66" LONG	59.00	21.50	D2			
B3	2" STD. PIPE X 72" LONG	57.00	81.50	D3			
B4	2" STD. PIPE X 72" LONG	57.00	131.50	D4			
B5	2" STD. PIPE X 78" LONG	63.00	164.50	D5			
B6				D6			

Distance between bottom rail and mount CL elevation (dim d). Unit is inches. See 'Mount Elev Ref' tab for details. :	23.00
Distance from top of bottom support rail to lowest tip of ant./eqpt. of Carrier above. (N/A if > 10 ft.):	31
Distance from top of bottom support rail to highest tip of ant./eqpt. of Carrier below. (N/A if > 10 ft.):	46
Please enter additional information or comments below.	
Tower Face Width at Mount Elev. (ft.):	8.25
Tower Leg Size or Pole Shaft Diameter at Mount Elev. (in.):	2.875

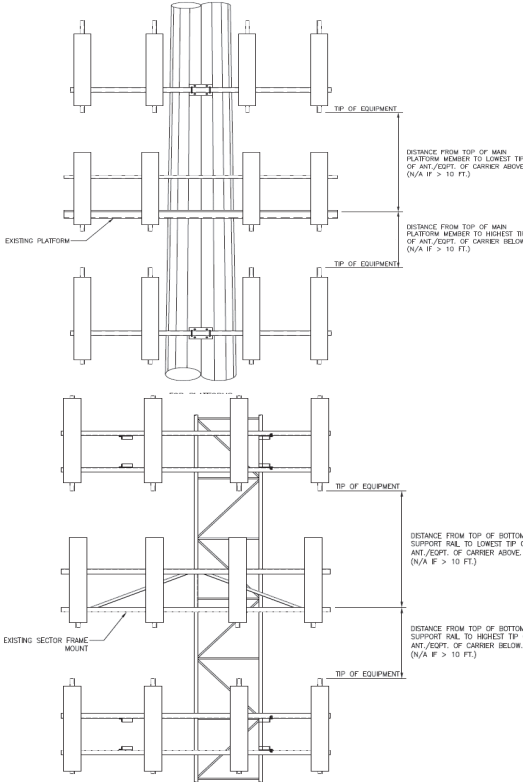


Ants. Items	Enter antenna model. If not labeled, enter "Unknown".					Mounting Locations [Units are inches and degrees]			Photos of antennas	
	Antenna Models if Known	Width (in.)	Depth (in.)	Height (in.)	Coax Size and Qty	Antenna Center-line (Ft.)	Vertical Distances "b _{1a} , b _{2a} , b _{3a} , b _{1b} ,..." (Inches)	Horiz. Offset "h" (Use "-" if Ant. is behind)		Antenna Azimuth (Degrees)
Sector A										
Ant _{1a}										
Ant _{1b}	UNKNOWN ANTENNA	8.00	8.00	72.00		179.417	38.00	12.50	330.00	97
Ant _{1c}										
Ant _{2a}	B4 RRH2X60	11.00	5.50	36.00		179.417	40.00	-6.00		77,97
Ant _{2b}	SBNHH-1D45B	18.50	8.00	72.00		180.25	30.00	10.50	30.00	73,97
Ant _{2c}	RFSM20118334	6.50	0.75	5.00		181	21.00			79,97
Ant _{3a}	B25 RRH4X30	12.00	7.00	20.50		179.458	37.50	-6.50		97
Ant _{3b}	SBNHH-1D45B	18.50	8.00	72.00		180.083	30.00	10.50	30.00	73,97
Ant _{3c}										
Ant _{4a}										
Ant _{4b}	SBNHH-1D65B	12.00	7.50	73.00		180.583	24.00	10.00	30.00	91
Ant _{4c}	RFSM20118334	6.50	0.75	5.00		180.833	21.00			79
Ant _{5a}										
Ant _{5b}	UNKNOWN ANTENNA	8.00	8.00	72.00		179.417	38.00	12.50	30.00	
Ant _{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										



Antenna Layout (Looking Out From Tower)

Mount Azimuth (Degree) for Each Sector			Tower Leg Azimuth (Degree) for Each Sector			Sector B														
Sector A:	40.00	Deg	Leg A:	60.00	Deg	Ant _{1a}														
Sector B:	165.00	Deg	Leg B:	180.00	Deg	Ant _{1b}	LPA-80063-6CF	15.00	13.00	71.00		179.417	38.00	12.50	165.00	88				
Sector C:	280.00	Deg	Leg C:	300.00	Deg	Ant _{1c}														
Sector D:		Deg	Leg D:		Deg	Ant _{2a}	B4 RRH2X60	11.00	5.50	36.00		179.417	40.00	-6.00		77				
Climbing Facility Information						Ant _{2b}	SBNHH-1D45B	18.50	8.00	72.00		180.25	30.00	10.50	190.00	73,75				
Location:	280.00	Deg	On Leg C			Ant _{2c}	RFSM20118334	6.50	0.75	5.00		181	21.00			79				
Climbing Facility	Corrosion Type:	Minor corrosion observed.				Ant _{3a}	B25 RRH4X30	12.00	7.00	20.50		179.458	37.50	-6.50		75,108				
	Access:	Climbing path was unobstructed.				Ant _{3b}	SBNHH-1D65B	12.00	7.50	73.00		180.083	30.00	10.50	190.00	91,108				
	Condition:	Good condition.				Ant _{3c}														
						Ant _{4a}														
						Ant _{4b}	LPA-80063-6CF	15.00	13.00	71.00		180.583	24.00	10.00	165.00	88,108				
						Ant _{4c}	RFSM20118334	6.50	0.75	5.00		180.833	21.00			79,108				
						Ant _{5a}														
						Ant _{5b}	SBNHH-1D45B	18.00	8.00	72.00		180.25	34.00	10.50	190.00	73,108				
						Ant _{5c}														
						Ant on Standoff														
						Ant on Standoff														
						Ant on Tower	RFDC-3315-PF-48	15.00	10.00	28.00						98				
						Ant on Tower														
						Sector C														
						Ant _{1a}														
						Ant _{1b}	SC-E-6014	8.50	8.00	43.00		180.083	30.00	13.00	280.00	6,71				
						Ant _{1c}														
						Ant _{2a}	B4 RRH2X60	11.00	5.50	36.00		179.417	40.00	-6.00		6,79				
						Ant _{2b}	SBNHH-1D45B	18.50	8.00	72.00		180.25	30.00	10.50	315.00	6,73				
						Ant _{2c}	RFSM20118334	6.50	0.75	5.00		181	21.00			6,79				
						Ant _{3a}	B25 RRH4X30	12.00	7.00	20.50		179.458	37.50	-6.50		6				
						Ant _{3b}	SBNHH-1D45B	18.50	8.00	72.00		180.083	30.00	10.50	315.00	6,73				
						Ant _{3c}														
						Ant _{4a}														
						Ant _{4b}	SBNHH-1D65B	12.00	7.50	73.00		180.583	24.00	10.00	315.00	9,91				
						Ant _{4c}	RFSM20118334	6.50	0.75	5.00		180.833	21.00			9,79				
						Ant _{5a}														
						Ant _{5b}	SC-E-6014	8.50	8.00	43.00		180.083	30.00	13.00	280.00	9,71				
						Ant _{5c}														
						Ant on Standoff														
						Ant on Standoff														
						Ant on Tower														
						Ant on Tower														
						Sector D														
						Ant _{1a}														
						Ant _{1b}														
						Ant _{1c}														
						Ant _{2a}														
						Ant _{2b}														
						Ant _{2c}														
						Ant _{3a}														
						Ant _{3b}														
						Ant _{3c}														
						Ant _{4a}														
						Ant _{4b}														
						Ant _{4c}														
						Ant _{5a}														
						Ant _{5b}														
						Ant _{5c}														
						Ant on Standoff														
						Ant on Standoff														
						Ant on Tower														
						Ant on Tower														



Observed Safety and Structural Issues During the Mount Mapping		
Issue #	Description of Issue	Photo #

1		
2	(12) 1-5/8"Ø COAX, (1) 1-1/4"Ø HYBRID	115-120
3		
4		
5		
6		
7		
8		

Mapping Notes

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

Standard Conditions

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



Antenna Mount Mapping Form (PATENT PENDING)

FCC #

Tower Owner:	CROWN CASTLE	Mapping Date:	3/24/2021
Site Name:	WOLCOTT CT	Tower Type:	Self Support
Site Number or ID:	467897	Tower Height (Ft.):	190
Mapping Contractor:	HUDSON DESIGN GROUP, LLC.	Mount Elevation (Ft.):	179.75

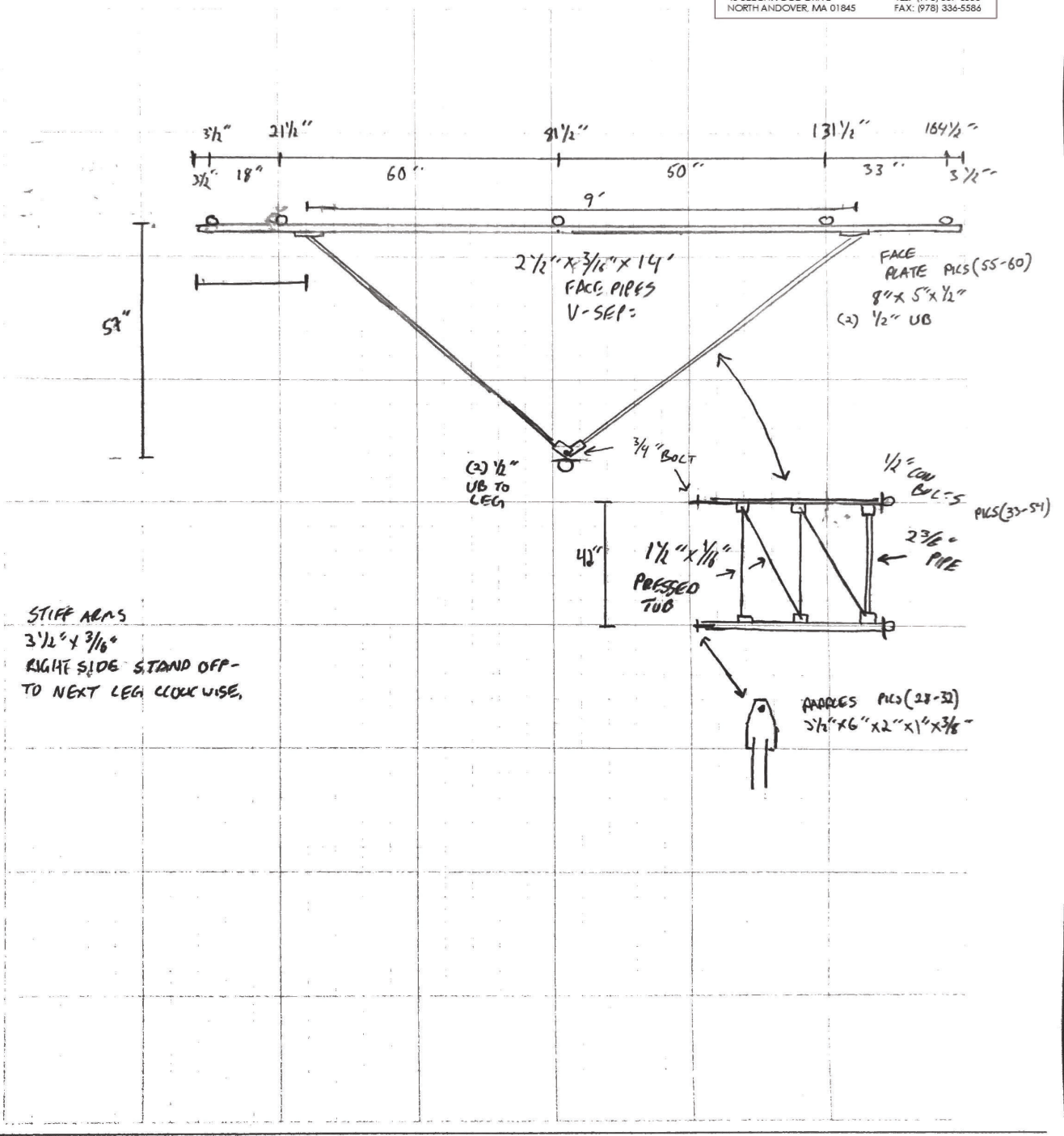
This antenna mapping form is the property of TES and under PATENT PENDING. The formation contained herein is considered confidential in nature and is to be used only for the specific customer it was intended for. Reproduction, transmission, publication, modification or disclosure by any method is prohibited except by express written permission of TES. All means and methods are the responsibility of the contractor and the work shall be compliant with ANSI/ASSE A 10.48, OSHA, FCC, FAA and other safety requirements that may apply. TES is not warranting the usability of the safety climb as it must be assessed prior to each use in compliance with OSHA requirements.

Please Insert Sketches of the Antenna Mount

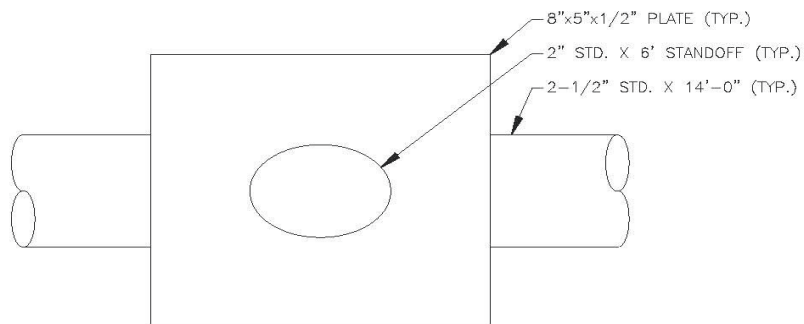
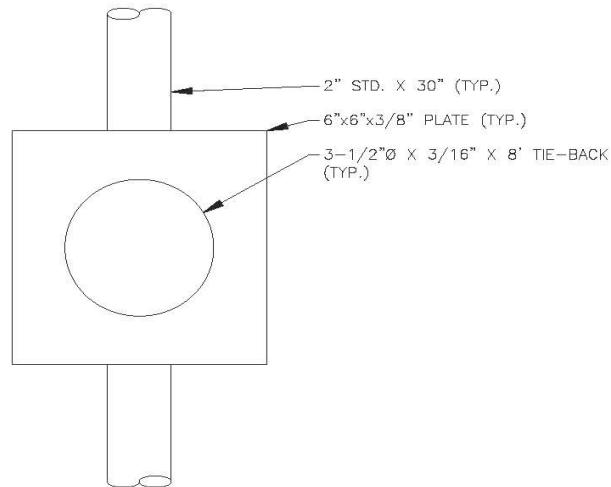
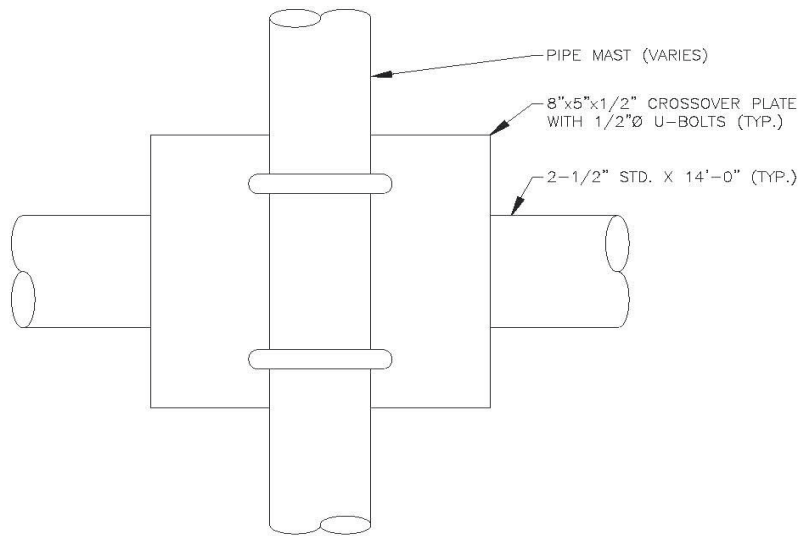
DATE: _____
 Project Name: _____
 Project No.: WOLCOTT CT
 Design By: _____ Chk'd By: _____ Page 3 of 3

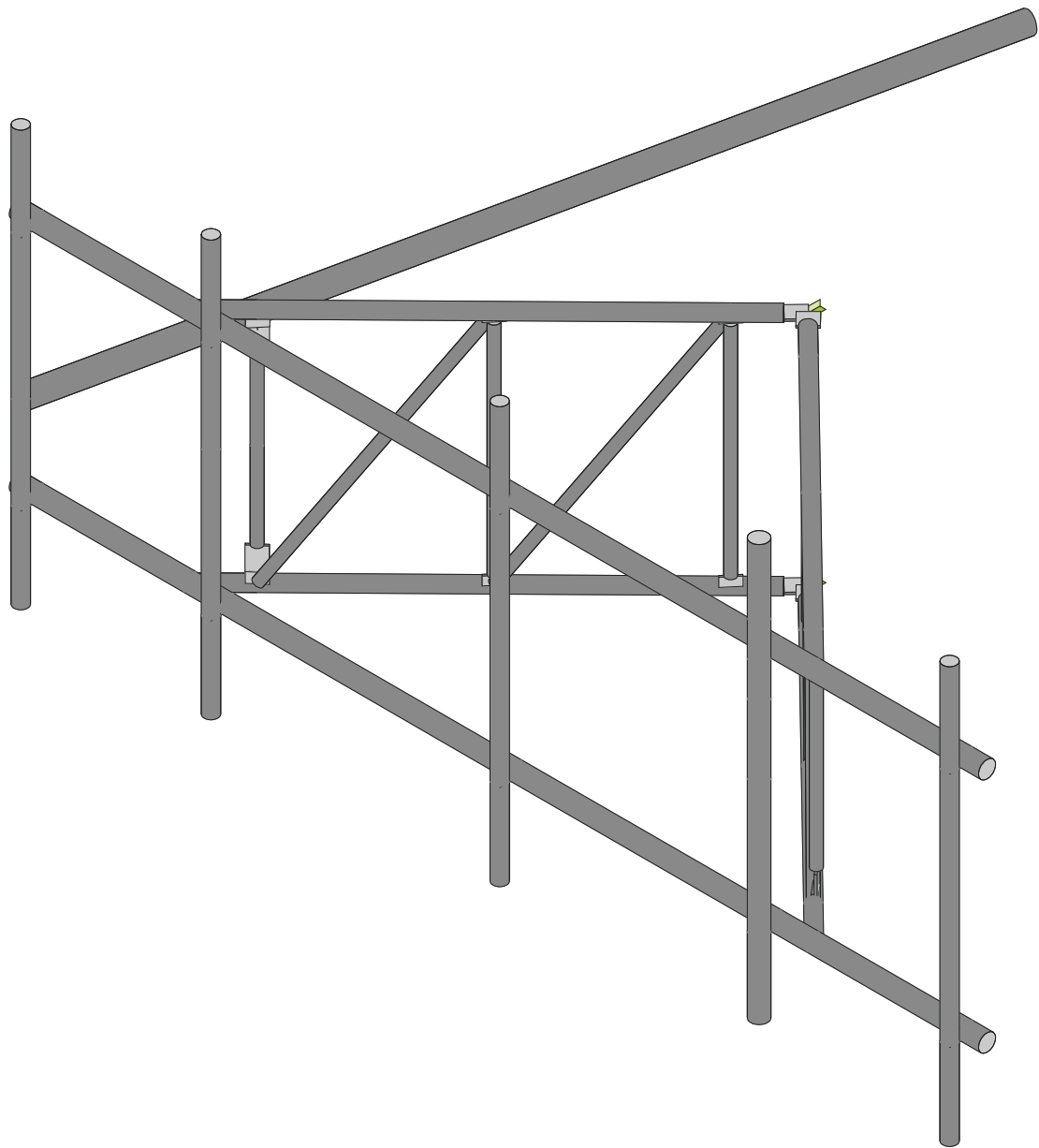
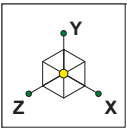
45 BEECHWOOD DRIVE
NORTH ANDOVER, MA 01845

TEL: (978) 557-5553
FAX: (978) 336-5586

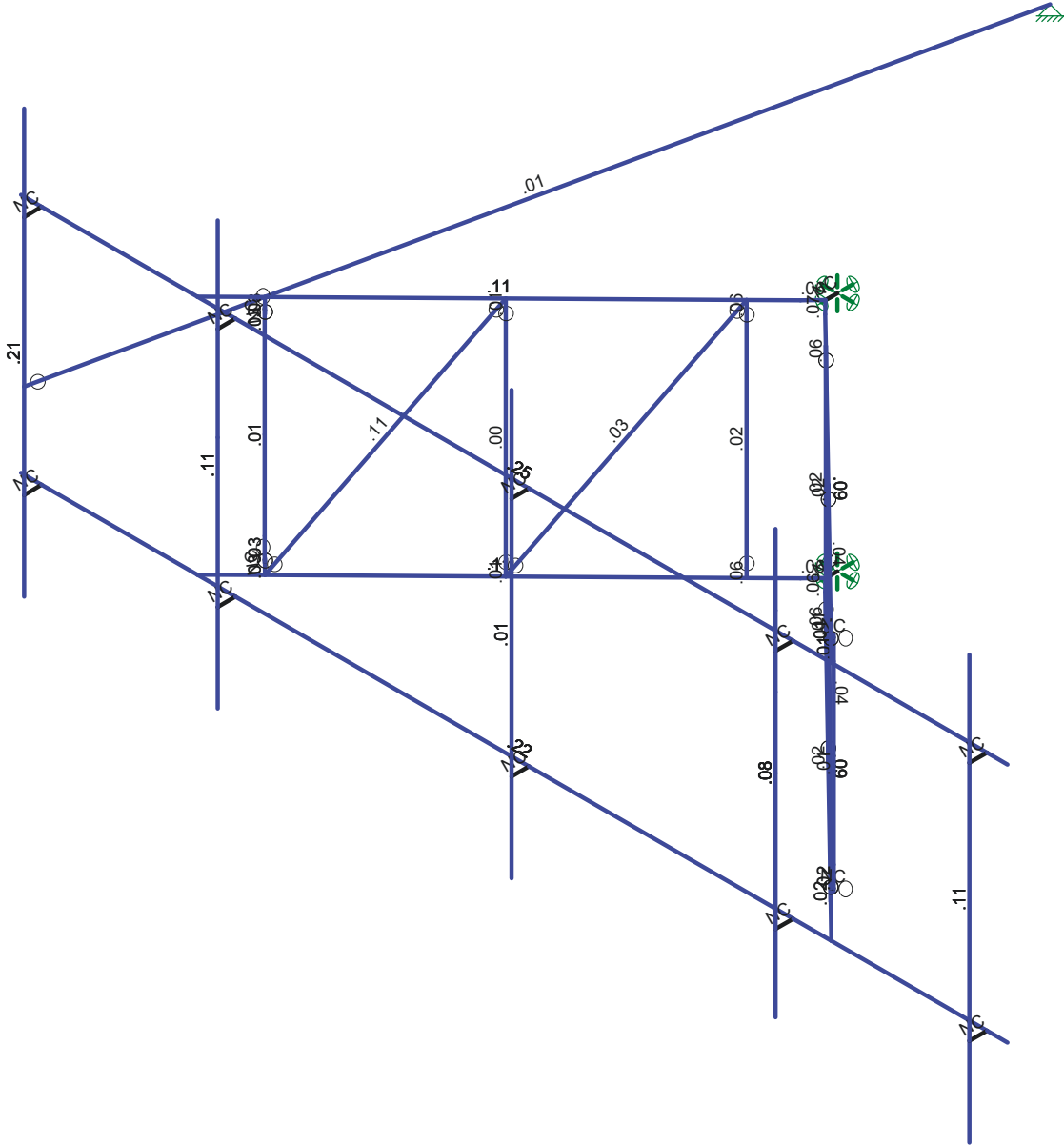
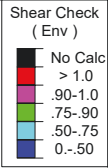
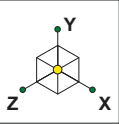


Please Insert Sketches of the Antenna Mount, cont'd





Colliers Engineering & De...		SK - 1
	5000382040-VZW_MT_LOT_SectorB_H	July 5, 2023 at 11:04 AM
		5000382040-VZW_MT_LOT_B_H....



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

Colliers Engineering & De...

5000382040-VZW_MT_LOT_SectorB_H

SK - 3

July 5, 2023 at 11:05 AM

5000382040-VZW_MT_LOT_B_H...



Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	DistributedArea(Me... Surface(...
1	Antenna D	None					42	
2	Antenna Di	None					42	
3	Antenna Wo (0 Deg)	None					42	
4	Antenna Wo (30 Deg)	None					42	
5	Antenna Wo (60 Deg)	None					42	
6	Antenna Wo (90 Deg)	None					42	
7	Antenna Wo (120 Deg)	None					42	
8	Antenna Wo (150 Deg)	None					42	
9	Antenna Wo (180 Deg)	None					42	
10	Antenna Wo (210 Deg)	None					42	
11	Antenna Wo (240 Deg)	None					42	
12	Antenna Wo (270 Deg)	None					42	
13	Antenna Wo (300 Deg)	None					42	
14	Antenna Wo (330 Deg)	None					42	
15	Antenna Wi (0 Deg)	None					42	
16	Antenna Wi (30 Deg)	None					42	
17	Antenna Wi (60 Deg)	None					42	
18	Antenna Wi (90 Deg)	None					42	
19	Antenna Wi (120 Deg)	None					42	
20	Antenna Wi (150 Deg)	None					42	
21	Antenna Wi (180 Deg)	None					42	
22	Antenna Wi (210 Deg)	None					42	
23	Antenna Wi (240 Deg)	None					42	
24	Antenna Wi (270 Deg)	None					42	
25	Antenna Wi (300 Deg)	None					42	
26	Antenna Wi (330 Deg)	None					42	
27	Antenna Wm (0 Deg)	None					42	
28	Antenna Wm (30 Deg)	None					42	
29	Antenna Wm (60 Deg)	None					42	
30	Antenna Wm (90 Deg)	None					42	
31	Antenna Wm (120 Deg)	None					42	
32	Antenna Wm (150 Deg)	None					42	
33	Antenna Wm (180 Deg)	None					42	
34	Antenna Wm (210 Deg)	None					42	
35	Antenna Wm (240 Deg)	None					42	
36	Antenna Wm (270 Deg)	None					42	
37	Antenna Wm (300 Deg)	None					42	
38	Antenna Wm (330 Deg)	None					42	
39	Structure D	None		-1				
40	Structure Di	None						42
41	Structure Wo (0 Deg)	None						84
42	Structure Wo (30 Deg)	None						84
43	Structure Wo (60 Deg)	None						84
44	Structure Wo (90 Deg)	None						84
45	Structure Wo (120 Deg)	None						84
46	Structure Wo (150 Deg)	None						84
47	Structure Wo (180 Deg)	None						84
48	Structure Wo (210 Deg)	None						84
49	Structure Wo (240 Deg)	None						84
50	Structure Wo (270 Deg)	None						84
51	Structure Wo (300 Deg)	None						84
52	Structure Wo (330 Deg)	None						84
53	Structure Wi (0 Deg)	None						84
54	Structure Wi (30 Deg)	None						84
55	Structure Wi (60 Deg)	None						84
56	Structure Wi (90 Deg)	None						84



Basic Load Cases (Continued)

BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	DistributedArea(Me... Surface(...
57 Structure Wi (120 Deg)	None						84
58 Structure Wi (150 Deg)	None						84
59 Structure Wi (180 Deg)	None						84
60 Structure Wi (210 Deg)	None						84
61 Structure Wi (240 Deg)	None						84
62 Structure Wi (270 Deg)	None						84
63 Structure Wi (300 Deg)	None						84
64 Structure Wi (330 Deg)	None						84
65 Structure Wm (0 Deg)	None						84
66 Structure Wm (30 Deg)	None						84
67 Structure Wm (60 Deg)	None						84
68 Structure Wm (90 Deg)	None						84
69 Structure Wm (120 Deg)	None						84
70 Structure Wm (150 Deg)	None						84
71 Structure Wm (180 Deg)	None						84
72 Structure Wm (210 Deg)	None						84
73 Structure Wm (240 Deg)	None						84
74 Structure Wm (270 Deg)	None						84
75 Structure Wm (300 Deg)	None						84
76 Structure Wm (330 Deg)	None						84
77 Lm1	None					1	
78 Lm2	None					1	
79 Lv1	None					1	
80 Lv2	None					1	
81 Antenna Ev	None					42	
82 Antenna Eh (0 Deg)	None					28	
83 Antenna Eh (90 Deg)	None					28	
84 Structure Ev	ELY						
85 Structure Eh (0 Deg)	ELZ			-03			
86 Structure Eh (90 Deg)	ELX	.03					

Load Combinations

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



Load Combinations (Continued)

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



Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
57	N65A	6.541667	1.333333	4.833333	0	
58	N66	-4.125	1.333333	4.833333	0	
59	N67	-6.875	1.333333	4.833333	0	
60	N68	0.041667	1.333333	4.833333	0	
61	N69	6.541667	-4.666667	4.833333	0	
62	N70	-4.125	-4.666667	4.833333	0	
63	N71	-6.875	-4.666667	4.833333	0	
64	N72	0.041667	-4.666667	4.833333	0	
65	N73	3.791667	1.5	4.833333	0	
66	N74	3.791667	-4.5	4.833333	0	
67	N76	-4.291667	-2.083333	-7.14471	0	
68	N77	3.791667	-.5	4.833333	0	
69	N79	3.791667	-1.5	4.833333	0	
70	N79A	3.791667	.5	4.833333	0	
71	N80	-4.204674	-.125	4.087056	0	
72	N81	-4.204674	-0.458333	4.087056	0	
73	N82	-4.204674	-0.166667	4.087056	0	
74	N83	-4.180736	-0.166667	4.107143	0	
75	N85	-4.180735	-3.208333	4.107144	0	
76	N86	-4.204674	-3.291667	4.087056	0	
77	N87	-4.204674	-2.958333	4.087056	0	
78	N88	-4.204674	-3.25	4.087056	0	
79	N89	-4.180736	-3.25	4.107143	0	
80	N88A	-4.125	-1.333333	4.833333	0	
81	N85A	3.847402	0	4.107143	0	
82	N86A	3.847402	-0.208333	4.107144	0	
83	N88B	3.871341	-.125	4.087056	0	
84	N89A	3.871341	-0.458333	4.087056	0	
85	N90	3.871341	-0.166667	4.087056	0	
86	N91	3.847402	-0.166667	4.107143	0	
87	N92	3.847402	-3.208333	4.107144	0	
88	N93	3.871341	-3.291667	4.087056	0	
89	N94	3.871341	-2.958333	4.087056	0	
90	N95	3.871341	-3.25	4.087056	0	
91	N96	3.847402	-3.25	4.107143	0	
92	N92A	-6.875	-2.083333	4.833333	0	
93	N108	-4.204674	-1.708333	4.087056	0	

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design ...	A [in ²]	Iyy [in ⁴]	Izz [in ⁴]	J [in ⁴]
1	Antenna Pipe	PIPE 2.0	Column	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
2	Standoff Horizontal	PIPE 2.0	Beam	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
3	Standoff Vertical	PIPE 1.25	Beam	Pipe	A53 Gr. B	Typical	.625	.184	.184	.368
4	Standoff Diagonal	PIPE 1.25	Beam	Pipe	A53 Gr. B	Typical	.625	.184	.184	.368
5	Face Horizontal	PIPE 2.5	Beam	Pipe	A53 Gr. B	Typical	1.61	1.45	1.45	2.89
6	Tie Back	PIPE 3.0	Beam	Pipe	A53 Gr. B	Typical	2.07	2.85	2.85	5.69
7	Standoff Plate	PL3/8X3	Beam	RECT	A36 Gr.36	Typical	1.125	.013	.844	.049
8	Mount Angle	L4X3X6	Beam	Single Angle	A36 Gr.36	Typical	2.49	1.89	3.94	.123
9	Antenna Pipe (pos2)	PIPE 2.5	Column	Pipe	A53 Gr. B	Typical	1.61	1.45	1.45	2.89
10	Plate	PL3/8X3	Beam	RECT	A36 Gr.36	Typical	1.125	.013	.844	.049
11	TES Plate	PL3/8x5	Beam	RECT	A36 Gr.36	Typical	1.875	.022	3.906	.084
12	TES Standoff Plate	PL3/8x5	Beam	RECT	A36 Gr.36	Typical	1.875	.022	3.906	.084
13	V-Brace	L2.5x2.5x4	Beam	Single Angle	A36 Gr.36	Typical	1.19	.692	.692	.026
14	Secondary Horizontal	PIPE 2.5	Beam	Pipe	A53 Gr. B	Typical	1.61	1.45	1.45	2.89



Hot Rolled Steel Properties

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

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	M2	N1	N4			RIGID	None	None	RIGID	Typical
2	M5	N1	N17A		90	Standoff Plate	Beam	RECT	A36 Gr.36	Typical
3	M6	N1	N18		90	Standoff Plate	Beam	RECT	A36 Gr.36	Typical
4	M7	N11A	N12			Face Horizontal	Beam	Pipe	A53 Gr. B	Typical
5	M8	N5	N19		90	Standoff Plate	Beam	RECT	A36 Gr.36	Typical
6	M9	N5	N20		90	Standoff Plate	Beam	RECT	A36 Gr.36	Typical
7	M10	N16	N17			Face Horizontal	Beam	Pipe	A53 Gr. B	Typical
8	M11	N17A	N57			Standoff Horizontal	Beam	Pipe	A53 Gr. B	Typical
9	OVP	N18	N59			Standoff Horizontal	Beam	Pipe	A53 Gr. B	Typical
10	M13	N19	N58			Standoff Horizontal	Beam	Pipe	A53 Gr. B	Typical
11	M14	N20	N60			Standoff Horizontal	Beam	Pipe	A53 Gr. B	Typical
12	M46A	N5	N65			RIGID	None	None	RIGID	Typical
13	M34A	N61	N63A		130	Standoff Plate	Beam	RECT	A36 Gr.36	Typical
14	M36	N81	N87			Standoff Vertical	Beam	Pipe	A53 Gr. B	Typical
15	M30	N62	N55A		130	Standoff Plate	Beam	RECT	A36 Gr.36	Typical
16	M31	N57A	N59A		130	Standoff Plate	Beam	RECT	A36 Gr.36	Typical
17	M32	N58A	N60A		130	Standoff Plate	Beam	RECT	A36 Gr.36	Typical
18	M33	N54A	N56A		130	Standoff Plate	Beam	RECT	A36 Gr.36	Typical
19	M34	N55A	N57A			Standoff Diagonal	Beam	Pipe	A53 Gr. B	Typical
20	M35A	N56A	N58A			Standoff Diagonal	Beam	Pipe	A53 Gr. B	Typical
21	M36A	N54A	N59A			Standoff Diagonal	Beam	Pipe	A53 Gr. B	Typical
22	M37	N62	N62A			Standoff Diagonal	Beam	Pipe	A53 Gr. B	Typical
23	M29	N56B	N48A		40	Standoff Plate	Beam	RECT	A36 Gr.36	Typical
24	M30A	N47A	N54B		40	Standoff Plate	Beam	RECT	A36 Gr.36	Typical
25	M31A	N45	N53A		40	Standoff Plate	Beam	RECT	A36 Gr.36	Typical
26	M32A	N55B	N46		40	Standoff Plate	Beam	RECT	A36 Gr.36	Typical
27	M34B	N54B	N56B			Standoff Diagonal	Beam	Pipe	A53 Gr. B	Typical
28	M35B	N53A	N55B			Standoff Diagonal	Beam	Pipe	A53 Gr. B	Typical
29	M36B	N45	N48A			Standoff Diagonal	Beam	Pipe	A53 Gr. B	Typical
30	M37A	N47A	N50A			Standoff Diagonal	Beam	Pipe	A53 Gr. B	Typical
31	M37B	N61B	N55			RIGID	None	None	RIGID	Typical
32	M38	N62B	N56			RIGID	None	None	RIGID	Typical
33	M39	N60B	N54			RIGID	None	None	RIGID	Typical
34	M40	N59B	N53			RIGID	None	None	RIGID	Typical
35	M41	N58B	N50			RIGID	None	None	RIGID	Typical
36	M42	N56C	N48			RIGID	None	None	RIGID	Typical
37	M43	N55C	N47			RIGID	None	None	RIGID	Typical
38	M44	N57B	N49			RIGID	None	None	RIGID	Typical
39	M45	N63	N51			RIGID	None	None	RIGID	Typical
40	M46	N64	N52			RIGID	None	None	RIGID	Typical
41	MP5A	N67	N71			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
42	MP4A	N66	N70			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
43	MP3A	N68	N72			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
44	MP1A	N65A	N69			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
45	MP2A	N73	N74			Antenna Pipe (pos2)	Column	Pipe	A53 Gr. B	Typical



Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
46	M52	N92A	N76			Tie Back	Beam	Pipe	A53 Gr. B	Typical
47	M53	N80	N81		130	Plate	Beam	RECT	A36 Gr.36	Typical
48	M54	N83	N82			RIGID	None	None	RIGID	Typical
49	M54A	N62A	N85		40	Standoff Plate	Beam	RECT	A36 Gr.36	Typical
50	M55	N86	N87		40	Plate	Beam	RECT	A36 Gr.36	Typical
51	M56	N89	N88			RIGID	None	None	RIGID	Typical
52	M54B	N85A	N86A		40	Standoff Plate	Beam	RECT	A36 Gr.36	Typical
53	M55A	N89A	N94			Standoff Vertical	Beam	Pipe	A53 Gr. B	Typical
54	M56A	N88B	N89A		40	Plate	Beam	RECT	A36 Gr.36	Typical
55	M57	N91	N90			RIGID	None	None	RIGID	Typical
56	M58	N50A	N92		130	Standoff Plate	Beam	RECT	A36 Gr.36	Typical
57	M59	N93	N94		130	Plate	Beam	RECT	A36 Gr.36	Typical
58	M60	N96	N95			RIGID	None	None	RIGID	Typical

Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rati...A...	Inactive	Seismic ...
1	M2						Yes	** NA **		None
2	M5						Yes	Default		None
3	M6						Yes	Default		None
4	M7						Yes			None
5	M8						Yes	Default		None
6	M9						Yes	Default		None
7	M10						Yes	Default		None
8	M11						Yes			None
9	OVP						Yes			None
10	M13						Yes			None
11	M14						Yes			None
12	M46A						Yes	** NA **		None
13	M34A	OOOOXO					Yes	Default		None
14	M36						Yes	Default		None
15	M30	OOOOOX					Yes	Default		None
16	M31		OOOOOO				Yes	Default		None
17	M32		OOOOOO				Yes	Default		None
18	M33	OOOOOX					Yes	Default		None
19	M34						Yes			None
20	M35A						Yes			None
21	M36A	BenPIN	BenPIN				Yes	Default		None
22	M37	BenPIN	BenPIN				Yes	Default		None
23	M29		OOOOOO				Yes			None
24	M30A	OOOOOX					Yes			None
25	M31A	OOOOOX					Yes			None
26	M32A		OOOOOO				Yes			None
27	M34B						Yes			None
28	M35B						Yes			None
29	M36B	BenPIN	BenPIN				Yes	Default		None
30	M37A	BenPIN	BenPIN				Yes	Default		None
31	M37B						Yes	** NA **		None
32	M38						Yes	** NA **		None
33	M39						Yes	** NA **		None
34	M40						Yes	** NA **		None
35	M41						Yes	** NA **		None
36	M42						Yes	** NA **		None
37	M43						Yes	** NA **		None
38	M44						Yes	** NA **		None
39	M45						Yes	** NA **		None



Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rati...A...	Inactive	Seismic ...
40	M46						Yes	** NA **		None
41	MP5A						Yes	** NA **		None
42	MP4A						Yes	** NA **		None
43	MP3A						Yes	** NA **		None
44	MP1A						Yes	** NA **		None
45	MP2A						Yes	** NA **		None
46	M52	OOOXO					Yes	Default		None
47	M53						Yes	Default		None
48	M54	OOOXOO					Yes	** NA **		None
49	M54A	OOOXO					Yes	Default		None
50	M55						Yes	Default		None
51	M56	OOOXOO					Yes	** NA **		None
52	M54B	OOOXO					Yes	Default		None
53	M55A						Yes	Default		None
54	M56A						Yes	Default		None
55	M57	OOOXOO					Yes	** NA **		None
56	M58	OOOXO					Yes	Default		None
57	M59						Yes	Default		None
58	M60	OOOXOO					Yes	** NA **		None

Member Point Loads (BLC 1 : Antenna D)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	Y	-31.65	1.17
2	MP2A	My	-.024	1.17
3	MP2A	Mz	.021	1.17
4	MP2A	Y	-31.65	5.17
5	MP2A	My	-.024	5.17
6	MP2A	Mz	.021	5.17
7	MP2A	Y	-31.65	1.17
8	MP2A	My	-.024	1.17
9	MP2A	Mz	-.021	1.17
10	MP2A	Y	-31.65	5.17
11	MP2A	My	-.024	5.17
12	MP2A	Mz	-.021	5.17
13	MP3A	Y	-43.55	1
14	MP3A	My	-.011	1
15	MP3A	Mz	0	1
16	MP3A	Y	-43.55	3
17	MP3A	My	-.011	3
18	MP3A	Mz	0	3
19	M55A	Y	-10.4	2
20	M55A	My	-.003	2
21	M55A	Mz	-.005	2
22	MP1A	Y	-84.4	3.5
23	MP1A	My	.042	3.5
24	MP1A	Mz	0	3.5
25	MP2A	Y	-70.3	3.5
26	MP2A	My	.035	3.5
27	MP2A	Mz	0	3.5
28	MP1A	Y	-13.5	1.17
29	MP1A	My	-.01	1.17
30	MP1A	Mz	0	1.17
31	MP1A	Y	-13.5	5.17
32	MP1A	My	-.01	5.17
33	MP1A	Mz	0	5.17



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
34	MP4A	Y	-13.5	1.17
35	MP4A	My	-.01	1.17
36	MP4A	Mz	0	1.17
37	MP4A	Y	-13.5	5.17
38	MP4A	My	-.01	5.17
39	MP4A	Mz	0	5.17
40	MP2A	Y	-17.6	5.5
41	MP2A	My	.015	5.5
42	MP2A	Mz	0	5.5

Member Point Loads (BLC 2 : Antenna Di)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	Y	-71.845	1.17
2	MP2A	My	-.054	1.17
3	MP2A	Mz	.048	1.17
4	MP2A	Y	-71.845	5.17
5	MP2A	My	-.054	5.17
6	MP2A	Mz	.048	5.17
7	MP2A	Y	-71.845	1.17
8	MP2A	My	-.054	1.17
9	MP2A	Mz	-.048	1.17
10	MP2A	Y	-71.845	5.17
11	MP2A	My	-.054	5.17
12	MP2A	Mz	-.048	5.17
13	MP3A	Y	-36.598	1
14	MP3A	My	-.009	1
15	MP3A	Mz	0	1
16	MP3A	Y	-36.598	3
17	MP3A	My	-.009	3
18	MP3A	Mz	0	3
19	M55A	Y	-11.079	2
20	M55A	My	-.003	2
21	M55A	Mz	-.005	2
22	MP1A	Y	-46.159	3.5
23	MP1A	My	.023	3.5
24	MP1A	Mz	0	3.5
25	MP2A	Y	-41.52	3.5
26	MP2A	My	.021	3.5
27	MP2A	Mz	0	3.5
28	MP1A	Y	-91.932	1.17
29	MP1A	My	-.069	1.17
30	MP1A	Mz	0	1.17
31	MP1A	Y	-91.932	5.17
32	MP1A	My	-.069	5.17
33	MP1A	Mz	0	5.17
34	MP4A	Y	-91.932	1.17
35	MP4A	My	-.069	1.17
36	MP4A	Mz	0	1.17
37	MP4A	Y	-91.932	5.17
38	MP4A	My	-.069	5.17
39	MP4A	Mz	0	5.17
40	MP2A	Y	-17.781	5.5
41	MP2A	My	.015	5.5
42	MP2A	Mz	0	5.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	X	0	1.17
2	MP2A	Z	-199.388	1.17
3	MP2A	Mx	-.133	1.17
4	MP2A	X	0	5.17
5	MP2A	Z	-199.388	5.17
6	MP2A	Mx	-.133	5.17
7	MP2A	X	0	1.17
8	MP2A	Z	-199.388	1.17
9	MP2A	Mx	.133	1.17
10	MP2A	X	0	5.17
11	MP2A	Z	-199.388	5.17
12	MP2A	Mx	.133	5.17
13	MP3A	X	0	1
14	MP3A	Z	-85.796	1
15	MP3A	Mx	0	1
16	MP3A	X	0	3
17	MP3A	Z	-85.796	3
18	MP3A	Mx	0	3
19	M55A	X	0	2
20	M55A	Z	-12.454	2
21	M55A	Mx	.005	2
22	MP1A	X	0	3.5
23	MP1A	Z	-67.849	3.5
24	MP1A	Mx	0	3.5
25	MP2A	X	0	3.5
26	MP2A	Z	-67.849	3.5
27	MP2A	Mx	0	3.5
28	MP1A	X	0	1.17
29	MP1A	Z	-213.614	1.17
30	MP1A	Mx	0	1.17
31	MP1A	X	0	5.17
32	MP1A	Z	-213.614	5.17
33	MP1A	Mx	0	5.17
34	MP4A	X	0	1.17
35	MP4A	Z	-213.614	1.17
36	MP4A	Mx	0	1.17
37	MP4A	X	0	5.17
38	MP4A	Z	-213.614	5.17
39	MP4A	Mx	0	5.17
40	MP2A	X	0	5.5
41	MP2A	Z	-14.445	5.5
42	MP2A	Mx	0	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	X	91.14	1.17
2	MP2A	Z	-157.859	1.17
3	MP2A	Mx	-.174	1.17
4	MP2A	X	91.14	5.17
5	MP2A	Z	-157.859	5.17
6	MP2A	Mx	-.174	5.17
7	MP2A	X	91.14	1.17
8	MP2A	Z	-157.859	1.17
9	MP2A	Mx	.037	1.17
10	MP2A	X	91.14	5.17
11	MP2A	Z	-157.859	5.17



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
12	MP2A	Mx	.037	5.17
13	MP3A	X	35.867	1
14	MP3A	Z	-62.123	1
15	MP3A	Mx	-.009	1
16	MP3A	X	35.867	3
17	MP3A	Z	-62.123	3
18	MP3A	Mx	-.009	3
19	M55A	X	7.474	2
20	M55A	Z	-12.946	2
21	M55A	Mx	.004	2
22	MP1A	X	31.134	3.5
23	MP1A	Z	-53.925	3.5
24	MP1A	Mx	.016	3.5
25	MP2A	X	30.094	3.5
26	MP2A	Z	-52.125	3.5
27	MP2A	Mx	.015	3.5
28	MP1A	X	103.643	1.17
29	MP1A	Z	-179.515	1.17
30	MP1A	Mx	-.078	1.17
31	MP1A	X	103.643	5.17
32	MP1A	Z	-179.515	5.17
33	MP1A	Mx	-.078	5.17
34	MP4A	X	103.643	1.17
35	MP4A	Z	-179.515	1.17
36	MP4A	Mx	-.078	1.17
37	MP4A	X	103.643	5.17
38	MP4A	Z	-179.515	5.17
39	MP4A	Mx	-.078	5.17
40	MP2A	X	6.988	5.5
41	MP2A	Z	-12.104	5.5
42	MP2A	Mx	.006	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	128.227	1.17
2	MP2A	Z	-74.032	1.17
3	MP2A	Mx	-.146	1.17
4	MP2A	X	128.227	5.17
5	MP2A	Z	-74.032	5.17
6	MP2A	Mx	-.146	5.17
7	MP2A	X	128.227	1.17
8	MP2A	Z	-74.032	1.17
9	MP2A	Mx	-.047	1.17
10	MP2A	X	128.227	5.17
11	MP2A	Z	-74.032	5.17
12	MP2A	Mx	-.047	5.17
13	MP3A	X	37.767	1
14	MP3A	Z	-21.805	1
15	MP3A	Mx	-.009	1
16	MP3A	X	37.767	3
17	MP3A	Z	-21.805	3
18	MP3A	Mx	-.009	3
19	M55A	X	14.026	2
20	M55A	Z	-8.098	2
21	M55A	Mx	0	2
22	MP1A	X	44.259	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
23	MP1A	Z	-25.553	3.5
24	MP1A	Mx	.022	3.5
25	MP2A	X	38.857	3.5
26	MP2A	Z	-22.434	3.5
27	MP2A	Mx	.019	3.5
28	MP1A	X	168.552	1.17
29	MP1A	Z	-97.314	1.17
30	MP1A	Mx	-.126	1.17
31	MP1A	X	168.552	5.17
32	MP1A	Z	-97.314	5.17
33	MP1A	Mx	-.126	5.17
34	MP4A	X	168.552	1.17
35	MP4A	Z	-97.314	1.17
36	MP4A	Mx	-.126	1.17
37	MP4A	X	168.552	5.17
38	MP4A	Z	-97.314	5.17
39	MP4A	Mx	-.126	5.17
40	MP2A	X	11.292	5.5
41	MP2A	Z	-6.519	5.5
42	MP2A	Mx	.009	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
1	MP2A	X	130.956	1.17
2	MP2A	Z	0	1.17
3	MP2A	Mx	-.098	1.17
4	MP2A	X	130.956	5.17
5	MP2A	Z	0	5.17
6	MP2A	Mx	-.098	5.17
7	MP2A	X	130.956	1.17
8	MP2A	Z	0	1.17
9	MP2A	Mx	-.098	1.17
10	MP2A	X	130.956	5.17
11	MP2A	Z	0	5.17
12	MP2A	Mx	-.098	5.17
13	MP3A	X	29.547	1
14	MP3A	Z	0	1
15	MP3A	Mx	-.007	1
16	MP3A	X	29.547	3
17	MP3A	Z	0	3
18	MP3A	Mx	-.007	3
19	M55A	X	14.949	2
20	M55A	Z	0	2
21	M55A	Mx	-.004	2
22	MP1A	X	45.524	3.5
23	MP1A	Z	0	3.5
24	MP1A	Mx	.023	3.5
25	MP2A	X	37.207	3.5
26	MP2A	Z	0	3.5
27	MP2A	Mx	.019	3.5
28	MP1A	X	188.299	1.17
29	MP1A	Z	0	1.17
30	MP1A	Mx	-.141	1.17
31	MP1A	X	188.299	5.17
32	MP1A	Z	0	5.17
33	MP1A	Mx	-.141	5.17



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
34	MP4A	X	188.299	1.17
35	MP4A	Z	0	1.17
36	MP4A	Mx	-.141	1.17
37	MP4A	X	188.299	5.17
38	MP4A	Z	0	5.17
39	MP4A	Mx	-.141	5.17
40	MP2A	X	12.57	5.5
41	MP2A	Z	0	5.5
42	MP2A	Mx	.01	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	128.227	1.17
2	MP2A	Z	74.032	1.17
3	MP2A	Mx	-.047	1.17
4	MP2A	X	128.227	5.17
5	MP2A	Z	74.032	5.17
6	MP2A	Mx	-.047	5.17
7	MP2A	X	128.227	1.17
8	MP2A	Z	74.032	1.17
9	MP2A	Mx	-.146	1.17
10	MP2A	X	128.227	5.17
11	MP2A	Z	74.032	5.17
12	MP2A	Mx	-.146	5.17
13	MP3A	X	37.767	1
14	MP3A	Z	21.805	1
15	MP3A	Mx	-.009	1
16	MP3A	X	37.767	3
17	MP3A	Z	21.805	3
18	MP3A	Mx	-.009	3
19	M55A	X	10.785	2
20	M55A	Z	6.227	2
21	M55A	Mx	-.005	2
22	MP1A	X	44.259	3.5
23	MP1A	Z	25.553	3.5
24	MP1A	Mx	.022	3.5
25	MP2A	X	38.857	3.5
26	MP2A	Z	22.434	3.5
27	MP2A	Mx	.019	3.5
28	MP1A	X	168.552	1.17
29	MP1A	Z	97.314	1.17
30	MP1A	Mx	-.126	1.17
31	MP1A	X	168.552	5.17
32	MP1A	Z	97.314	5.17
33	MP1A	Mx	-.126	5.17
34	MP4A	X	168.552	1.17
35	MP4A	Z	97.314	1.17
36	MP4A	Mx	-.126	1.17
37	MP4A	X	168.552	5.17
38	MP4A	Z	97.314	5.17
39	MP4A	Mx	-.126	5.17
40	MP2A	X	11.292	5.5
41	MP2A	Z	6.519	5.5
42	MP2A	Mx	.009	5.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	91.14	1.17
2	MP2A	Z	157.859	1.17
3	MP2A	Mx	.037	1.17
4	MP2A	X	91.14	5.17
5	MP2A	Z	157.859	5.17
6	MP2A	Mx	.037	5.17
7	MP2A	X	91.14	1.17
8	MP2A	Z	157.859	1.17
9	MP2A	Mx	-.174	1.17
10	MP2A	X	91.14	5.17
11	MP2A	Z	157.859	5.17
12	MP2A	Mx	-.174	5.17
13	MP3A	X	35.867	1
14	MP3A	Z	62.123	1
15	MP3A	Mx	-.009	1
16	MP3A	X	35.867	3
17	MP3A	Z	62.123	3
18	MP3A	Mx	-.009	3
19	M55A	X	5.603	2
20	M55A	Z	9.705	2
21	M55A	Mx	-.006	2
22	MP1A	X	31.134	3.5
23	MP1A	Z	53.925	3.5
24	MP1A	Mx	.016	3.5
25	MP2A	X	30.094	3.5
26	MP2A	Z	52.125	3.5
27	MP2A	Mx	.015	3.5
28	MP1A	X	103.643	1.17
29	MP1A	Z	179.515	1.17
30	MP1A	Mx	-.078	1.17
31	MP1A	X	103.643	5.17
32	MP1A	Z	179.515	5.17
33	MP1A	Mx	-.078	5.17
34	MP4A	X	103.643	1.17
35	MP4A	Z	179.515	1.17
36	MP4A	Mx	-.078	1.17
37	MP4A	X	103.643	5.17
38	MP4A	Z	179.515	5.17
39	MP4A	Mx	-.078	5.17
40	MP2A	X	6.988	5.5
41	MP2A	Z	12.104	5.5
42	MP2A	Mx	.006	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	0	1.17
2	MP2A	Z	199.388	1.17
3	MP2A	Mx	.133	1.17
4	MP2A	X	0	5.17
5	MP2A	Z	199.388	5.17
6	MP2A	Mx	.133	5.17
7	MP2A	X	0	1.17
8	MP2A	Z	199.388	1.17
9	MP2A	Mx	-.133	1.17
10	MP2A	X	0	5.17
11	MP2A	Z	199.388	5.17



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
12	MP2A	Mx	- .133	5.17
13	MP3A	X	0	1
14	MP3A	Z	85.796	1
15	MP3A	Mx	0	1
16	MP3A	X	0	3
17	MP3A	Z	85.796	3
18	MP3A	Mx	0	3
19	M55A	X	0	2
20	M55A	Z	12.454	2
21	M55A	Mx	-.005	2
22	MP1A	X	0	3.5
23	MP1A	Z	67.849	3.5
24	MP1A	Mx	0	3.5
25	MP2A	X	0	3.5
26	MP2A	Z	67.849	3.5
27	MP2A	Mx	0	3.5
28	MP1A	X	0	1.17
29	MP1A	Z	213.614	1.17
30	MP1A	Mx	0	1.17
31	MP1A	X	0	5.17
32	MP1A	Z	213.614	5.17
33	MP1A	Mx	0	5.17
34	MP4A	X	0	1.17
35	MP4A	Z	213.614	1.17
36	MP4A	Mx	0	1.17
37	MP4A	X	0	5.17
38	MP4A	Z	213.614	5.17
39	MP4A	Mx	0	5.17
40	MP2A	X	0	5.5
41	MP2A	Z	14.445	5.5
42	MP2A	Mx	0	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-91.14	1.17
2	MP2A	Z	157.859	1.17
3	MP2A	Mx	.174	1.17
4	MP2A	X	-91.14	5.17
5	MP2A	Z	157.859	5.17
6	MP2A	Mx	.174	5.17
7	MP2A	X	-91.14	1.17
8	MP2A	Z	157.859	1.17
9	MP2A	Mx	-.037	1.17
10	MP2A	X	-91.14	5.17
11	MP2A	Z	157.859	5.17
12	MP2A	Mx	-.037	5.17
13	MP3A	X	-35.867	1
14	MP3A	Z	62.123	1
15	MP3A	Mx	.009	1
16	MP3A	X	-35.867	3
17	MP3A	Z	62.123	3
18	MP3A	Mx	.009	3
19	M55A	X	-7.474	2
20	M55A	Z	12.946	2
21	M55A	Mx	-.004	2
22	MP1A	X	-31.134	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
23	MP1A	Z	53.925	3.5
24	MP1A	Mx	-.016	3.5
25	MP2A	X	-30.094	3.5
26	MP2A	Z	52.125	3.5
27	MP2A	Mx	-.015	3.5
28	MP1A	X	-103.643	1.17
29	MP1A	Z	179.515	1.17
30	MP1A	Mx	.078	1.17
31	MP1A	X	-103.643	5.17
32	MP1A	Z	179.515	5.17
33	MP1A	Mx	.078	5.17
34	MP4A	X	-103.643	1.17
35	MP4A	Z	179.515	1.17
36	MP4A	Mx	.078	1.17
37	MP4A	X	-103.643	5.17
38	MP4A	Z	179.515	5.17
39	MP4A	Mx	.078	5.17
40	MP2A	X	-6.988	5.5
41	MP2A	Z	12.104	5.5
42	MP2A	Mx	-.006	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
1	MP2A	X	-128.227	1.17
2	MP2A	Z	74.032	1.17
3	MP2A	Mx	.146	1.17
4	MP2A	X	-128.227	5.17
5	MP2A	Z	74.032	5.17
6	MP2A	Mx	.146	5.17
7	MP2A	X	-128.227	1.17
8	MP2A	Z	74.032	1.17
9	MP2A	Mx	.047	1.17
10	MP2A	X	-128.227	5.17
11	MP2A	Z	74.032	5.17
12	MP2A	Mx	.047	5.17
13	MP3A	X	-37.767	1
14	MP3A	Z	21.805	1
15	MP3A	Mx	.009	1
16	MP3A	X	-37.767	3
17	MP3A	Z	21.805	3
18	MP3A	Mx	.009	3
19	M55A	X	-14.026	2
20	M55A	Z	8.098	2
21	M55A	Mx	0	2
22	MP1A	X	-44.259	3.5
23	MP1A	Z	25.553	3.5
24	MP1A	Mx	-.022	3.5
25	MP2A	X	-38.857	3.5
26	MP2A	Z	22.434	3.5
27	MP2A	Mx	-.019	3.5
28	MP1A	X	-168.552	1.17
29	MP1A	Z	97.314	1.17
30	MP1A	Mx	.126	1.17
31	MP1A	X	-168.552	5.17
32	MP1A	Z	97.314	5.17
33	MP1A	Mx	.126	5.17



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
34	MP4A	X	-168.552	1.17
35	MP4A	Z	97.314	1.17
36	MP4A	Mx	.126	1.17
37	MP4A	X	-168.552	5.17
38	MP4A	Z	97.314	5.17
39	MP4A	Mx	.126	5.17
40	MP2A	X	-11.292	5.5
41	MP2A	Z	6.519	5.5
42	MP2A	Mx	-.009	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-130.956	1.17
2	MP2A	Z	0	1.17
3	MP2A	Mx	.098	1.17
4	MP2A	X	-130.956	5.17
5	MP2A	Z	0	5.17
6	MP2A	Mx	.098	5.17
7	MP2A	X	-130.956	1.17
8	MP2A	Z	0	1.17
9	MP2A	Mx	.098	1.17
10	MP2A	X	-130.956	5.17
11	MP2A	Z	0	5.17
12	MP2A	Mx	.098	5.17
13	MP3A	X	-29.547	1
14	MP3A	Z	0	1
15	MP3A	Mx	.007	1
16	MP3A	X	-29.547	3
17	MP3A	Z	0	3
18	MP3A	Mx	.007	3
19	M55A	X	-14.949	2
20	M55A	Z	0	2
21	M55A	Mx	.004	2
22	MP1A	X	-45.524	3.5
23	MP1A	Z	0	3.5
24	MP1A	Mx	-.023	3.5
25	MP2A	X	-37.207	3.5
26	MP2A	Z	0	3.5
27	MP2A	Mx	-.019	3.5
28	MP1A	X	-188.299	1.17
29	MP1A	Z	0	1.17
30	MP1A	Mx	.141	1.17
31	MP1A	X	-188.299	5.17
32	MP1A	Z	0	5.17
33	MP1A	Mx	.141	5.17
34	MP4A	X	-188.299	1.17
35	MP4A	Z	0	1.17
36	MP4A	Mx	.141	1.17
37	MP4A	X	-188.299	5.17
38	MP4A	Z	0	5.17
39	MP4A	Mx	.141	5.17
40	MP2A	X	-12.57	5.5
41	MP2A	Z	0	5.5
42	MP2A	Mx	-.01	5.5



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-128.227	1.17
2	MP2A	Z	-74.032	1.17
3	MP2A	Mx	.047	1.17
4	MP2A	X	-128.227	5.17
5	MP2A	Z	-74.032	5.17
6	MP2A	Mx	.047	5.17
7	MP2A	X	-128.227	1.17
8	MP2A	Z	-74.032	1.17
9	MP2A	Mx	.146	1.17
10	MP2A	X	-128.227	5.17
11	MP2A	Z	-74.032	5.17
12	MP2A	Mx	.146	5.17
13	MP3A	X	-37.767	1
14	MP3A	Z	-21.805	1
15	MP3A	Mx	.009	1
16	MP3A	X	-37.767	3
17	MP3A	Z	-21.805	3
18	MP3A	Mx	.009	3
19	M55A	X	-10.785	2
20	M55A	Z	-6.227	2
21	M55A	Mx	.005	2
22	MP1A	X	-44.259	3.5
23	MP1A	Z	-25.553	3.5
24	MP1A	Mx	-.022	3.5
25	MP2A	X	-38.857	3.5
26	MP2A	Z	-22.434	3.5
27	MP2A	Mx	-.019	3.5
28	MP1A	X	-168.552	1.17
29	MP1A	Z	-97.314	1.17
30	MP1A	Mx	.126	1.17
31	MP1A	X	-168.552	5.17
32	MP1A	Z	-97.314	5.17
33	MP1A	Mx	.126	5.17
34	MP4A	X	-168.552	1.17
35	MP4A	Z	-97.314	1.17
36	MP4A	Mx	.126	1.17
37	MP4A	X	-168.552	5.17
38	MP4A	Z	-97.314	5.17
39	MP4A	Mx	.126	5.17
40	MP2A	X	-11.292	5.5
41	MP2A	Z	-6.519	5.5
42	MP2A	Mx	-.009	5.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-91.14	1.17
2	MP2A	Z	-157.859	1.17
3	MP2A	Mx	-.037	1.17
4	MP2A	X	-91.14	5.17
5	MP2A	Z	-157.859	5.17
6	MP2A	Mx	-.037	5.17
7	MP2A	X	-91.14	1.17
8	MP2A	Z	-157.859	1.17
9	MP2A	Mx	.174	1.17
10	MP2A	X	-91.14	5.17
11	MP2A	Z	-157.859	5.17



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
12	MP2A	Mx	.174	5.17
13	MP3A	X	-35.867	1
14	MP3A	Z	-62.123	1
15	MP3A	Mx	.009	1
16	MP3A	X	-35.867	3
17	MP3A	Z	-62.123	3
18	MP3A	Mx	.009	3
19	M55A	X	-5.603	2
20	M55A	Z	-9.705	2
21	M55A	Mx	.006	2
22	MP1A	X	-31.134	3.5
23	MP1A	Z	-53.925	3.5
24	MP1A	Mx	-.016	3.5
25	MP2A	X	-30.094	3.5
26	MP2A	Z	-52.125	3.5
27	MP2A	Mx	-.015	3.5
28	MP1A	X	-103.643	1.17
29	MP1A	Z	-179.515	1.17
30	MP1A	Mx	.078	1.17
31	MP1A	X	-103.643	5.17
32	MP1A	Z	-179.515	5.17
33	MP1A	Mx	.078	5.17
34	MP4A	X	-103.643	1.17
35	MP4A	Z	-179.515	1.17
36	MP4A	Mx	.078	1.17
37	MP4A	X	-103.643	5.17
38	MP4A	Z	-179.515	5.17
39	MP4A	Mx	.078	5.17
40	MP2A	X	-6.988	5.5
41	MP2A	Z	-12.104	5.5
42	MP2A	Mx	-.006	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	0	1.17
2	MP2A	Z	-38.018	1.17
3	MP2A	Mx	-.025	1.17
4	MP2A	X	0	5.17
5	MP2A	Z	-38.018	5.17
6	MP2A	Mx	-.025	5.17
7	MP2A	X	0	1.17
8	MP2A	Z	-38.018	1.17
9	MP2A	Mx	.025	1.17
10	MP2A	X	0	5.17
11	MP2A	Z	-38.018	5.17
12	MP2A	Mx	.025	5.17
13	MP3A	X	0	1
14	MP3A	Z	-20.234	1
15	MP3A	Mx	0	1
16	MP3A	X	0	3
17	MP3A	Z	-20.234	3
18	MP3A	Mx	0	3
19	M55A	X	0	2
20	M55A	Z	-3.389	2
21	M55A	Mx	.001	2
22	MP1A	X	0	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
23	MP1A	Z	-17.077	3.5
24	MP1A	Mx	0	3.5
25	MP2A	X	0	3.5
26	MP2A	Z	-17.077	3.5
27	MP2A	Mx	0	3.5
28	MP1A	X	0	1.17
29	MP1A	Z	-40.434	1.17
30	MP1A	Mx	0	1.17
31	MP1A	X	0	5.17
32	MP1A	Z	-40.434	5.17
33	MP1A	Mx	0	5.17
34	MP4A	X	0	1.17
35	MP4A	Z	-40.434	1.17
36	MP4A	Mx	0	1.17
37	MP4A	X	0	5.17
38	MP4A	Z	-40.434	5.17
39	MP4A	Mx	0	5.17
40	MP2A	X	0	5.5
41	MP2A	Z	-9.402	5.5
42	MP2A	Mx	0	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
1	MP2A	X	17.501	1.17
2	MP2A	Z	-30.313	1.17
3	MP2A	Mx	-.033	1.17
4	MP2A	X	17.501	5.17
5	MP2A	Z	-30.313	5.17
6	MP2A	Mx	-.033	5.17
7	MP2A	X	17.501	1.17
8	MP2A	Z	-30.313	1.17
9	MP2A	Mx	.007	1.17
10	MP2A	X	17.501	5.17
11	MP2A	Z	-30.313	5.17
12	MP2A	Mx	.007	5.17
13	MP3A	X	8.667	1
14	MP3A	Z	-15.012	1
15	MP3A	Mx	-.002	1
16	MP3A	X	8.667	3
17	MP3A	Z	-15.012	3
18	MP3A	Mx	-.002	3
19	M55A	X	1.953	2
20	M55A	Z	-3.383	2
21	M55A	Mx	.000977	2
22	MP1A	X	7.89	3.5
23	MP1A	Z	-13.666	3.5
24	MP1A	Mx	.004	3.5
25	MP2A	X	7.644	3.5
26	MP2A	Z	-13.239	3.5
27	MP2A	Mx	.004	3.5
28	MP1A	X	19.663	1.17
29	MP1A	Z	-34.057	1.17
30	MP1A	Mx	-.015	1.17
31	MP1A	X	19.663	5.17
32	MP1A	Z	-34.057	5.17
33	MP1A	Mx	-.015	5.17



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
34	MP4A	X	19.663	1.17
35	MP4A	Z	-34.057	1.17
36	MP4A	Mx	-.015	1.17
37	MP4A	X	19.663	5.17
38	MP4A	Z	-34.057	5.17
39	MP4A	Mx	-.015	5.17
40	MP2A	X	3.966	5.5
41	MP2A	Z	-6.87	5.5
42	MP2A	Mx	.003	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	25.091	1.17
2	MP2A	Z	-14.486	1.17
3	MP2A	Mx	-.028	1.17
4	MP2A	X	25.091	5.17
5	MP2A	Z	-14.486	5.17
6	MP2A	Mx	-.028	5.17
7	MP2A	X	25.091	1.17
8	MP2A	Z	-14.486	1.17
9	MP2A	Mx	-.009	1.17
10	MP2A	X	25.091	5.17
11	MP2A	Z	-14.486	5.17
12	MP2A	Mx	-.009	5.17
13	MP3A	X	9.991	1
14	MP3A	Z	-5.768	1
15	MP3A	Mx	-.002	1
16	MP3A	X	9.991	3
17	MP3A	Z	-5.768	3
18	MP3A	Mx	-.002	3
19	M55A	X	3.607	2
20	M55A	Z	-2.083	2
21	M55A	Mx	0	2
22	MP1A	X	11.42	3.5
23	MP1A	Z	-6.594	3.5
24	MP1A	Mx	.006	3.5
25	MP2A	X	10.14	3.5
26	MP2A	Z	-5.854	3.5
27	MP2A	Mx	.005	3.5
28	MP1A	X	32.139	1.17
29	MP1A	Z	-18.555	1.17
30	MP1A	Mx	-.024	1.17
31	MP1A	X	32.139	5.17
32	MP1A	Z	-18.555	5.17
33	MP1A	Mx	-.024	5.17
34	MP4A	X	32.139	1.17
35	MP4A	Z	-18.555	1.17
36	MP4A	Mx	-.024	1.17
37	MP4A	X	32.139	5.17
38	MP4A	Z	-18.555	5.17
39	MP4A	Mx	-.024	5.17
40	MP2A	X	4.324	5.5
41	MP2A	Z	-2.496	5.5
42	MP2A	Mx	.004	5.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	25.958	1.17
2	MP2A	Z	0	1.17
3	MP2A	Mx	-.019	1.17
4	MP2A	X	25.958	5.17
5	MP2A	Z	0	5.17
6	MP2A	Mx	-.019	5.17
7	MP2A	X	25.958	1.17
8	MP2A	Z	0	1.17
9	MP2A	Mx	-.019	1.17
10	MP2A	X	25.958	5.17
11	MP2A	Z	0	5.17
12	MP2A	Mx	-.019	5.17
13	MP3A	X	8.637	1
14	MP3A	Z	0	1
15	MP3A	Mx	-.002	1
16	MP3A	X	8.637	3
17	MP3A	Z	0	3
18	MP3A	Mx	-.002	3
19	M55A	X	3.907	2
20	M55A	Z	0	2
21	M55A	Mx	-.000977	2
22	MP1A	X	11.89	3.5
23	MP1A	Z	0	3.5
24	MP1A	Mx	.006	3.5
25	MP2A	X	9.92	3.5
26	MP2A	Z	0	3.5
27	MP2A	Mx	.005	3.5
28	MP1A	X	36.003	1.17
29	MP1A	Z	0	1.17
30	MP1A	Mx	-.027	1.17
31	MP1A	X	36.003	5.17
32	MP1A	Z	0	5.17
33	MP1A	Mx	-.027	5.17
34	MP4A	X	36.003	1.17
35	MP4A	Z	0	1.17
36	MP4A	Mx	-.027	1.17
37	MP4A	X	36.003	5.17
38	MP4A	Z	0	5.17
39	MP4A	Mx	-.027	5.17
40	MP2A	X	3.523	5.5
41	MP2A	Z	0	5.5
42	MP2A	Mx	.003	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	25.091	1.17
2	MP2A	Z	14.486	1.17
3	MP2A	Mx	-.009	1.17
4	MP2A	X	25.091	5.17
5	MP2A	Z	14.486	5.17
6	MP2A	Mx	-.009	5.17
7	MP2A	X	25.091	1.17
8	MP2A	Z	14.486	1.17
9	MP2A	Mx	-.028	1.17
10	MP2A	X	25.091	5.17
11	MP2A	Z	14.486	5.17



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
12	MP2A	Mx	-.028	5.17
13	MP3A	X	9.991	1
14	MP3A	Z	5.768	1
15	MP3A	Mx	-.002	1
16	MP3A	X	9.991	3
17	MP3A	Z	5.768	3
18	MP3A	Mx	-.002	3
19	M55A	X	2.935	2
20	M55A	Z	1.695	2
21	M55A	Mx	-.001	2
22	MP1A	X	11.42	3.5
23	MP1A	Z	6.594	3.5
24	MP1A	Mx	.006	3.5
25	MP2A	X	10.14	3.5
26	MP2A	Z	5.854	3.5
27	MP2A	Mx	.005	3.5
28	MP1A	X	32.139	1.17
29	MP1A	Z	18.555	1.17
30	MP1A	Mx	-.024	1.17
31	MP1A	X	32.139	5.17
32	MP1A	Z	18.555	5.17
33	MP1A	Mx	-.024	5.17
34	MP4A	X	32.139	1.17
35	MP4A	Z	18.555	1.17
36	MP4A	Mx	-.024	1.17
37	MP4A	X	32.139	5.17
38	MP4A	Z	18.555	5.17
39	MP4A	Mx	-.024	5.17
40	MP2A	X	4.324	5.5
41	MP2A	Z	2.496	5.5
42	MP2A	Mx	.004	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	17.501	1.17
2	MP2A	Z	30.313	1.17
3	MP2A	Mx	.007	1.17
4	MP2A	X	17.501	5.17
5	MP2A	Z	30.313	5.17
6	MP2A	Mx	.007	5.17
7	MP2A	X	17.501	1.17
8	MP2A	Z	30.313	1.17
9	MP2A	Mx	-.033	1.17
10	MP2A	X	17.501	5.17
11	MP2A	Z	30.313	5.17
12	MP2A	Mx	-.033	5.17
13	MP3A	X	8.667	1
14	MP3A	Z	15.012	1
15	MP3A	Mx	-.002	1
16	MP3A	X	8.667	3
17	MP3A	Z	15.012	3
18	MP3A	Mx	-.002	3
19	M55A	X	1.565	2
20	M55A	Z	2.711	2
21	M55A	Mx	-.002	2
22	MP1A	X	7.89	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
23	MP1A	Z	13.666	3.5
24	MP1A	Mx	.004	3.5
25	MP2A	X	7.644	3.5
26	MP2A	Z	13.239	3.5
27	MP2A	Mx	.004	3.5
28	MP1A	X	19.663	1.17
29	MP1A	Z	34.057	1.17
30	MP1A	Mx	-.015	1.17
31	MP1A	X	19.663	5.17
32	MP1A	Z	34.057	5.17
33	MP1A	Mx	-.015	5.17
34	MP4A	X	19.663	1.17
35	MP4A	Z	34.057	1.17
36	MP4A	Mx	-.015	1.17
37	MP4A	X	19.663	5.17
38	MP4A	Z	34.057	5.17
39	MP4A	Mx	-.015	5.17
40	MP2A	X	3.966	5.5
41	MP2A	Z	6.87	5.5
42	MP2A	Mx	.003	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	0	1.17
2	MP2A	Z	38.018	1.17
3	MP2A	Mx	.025	1.17
4	MP2A	X	0	5.17
5	MP2A	Z	38.018	5.17
6	MP2A	Mx	.025	5.17
7	MP2A	X	0	1.17
8	MP2A	Z	38.018	1.17
9	MP2A	Mx	-.025	1.17
10	MP2A	X	0	5.17
11	MP2A	Z	38.018	5.17
12	MP2A	Mx	-.025	5.17
13	MP3A	X	0	1
14	MP3A	Z	20.234	1
15	MP3A	Mx	0	1
16	MP3A	X	0	3
17	MP3A	Z	20.234	3
18	MP3A	Mx	0	3
19	M55A	X	0	2
20	M55A	Z	3.389	2
21	M55A	Mx	-.001	2
22	MP1A	X	0	3.5
23	MP1A	Z	17.077	3.5
24	MP1A	Mx	0	3.5
25	MP2A	X	0	3.5
26	MP2A	Z	17.077	3.5
27	MP2A	Mx	0	3.5
28	MP1A	X	0	1.17
29	MP1A	Z	40.434	1.17
30	MP1A	Mx	0	1.17
31	MP1A	X	0	5.17
32	MP1A	Z	40.434	5.17
33	MP1A	Mx	0	5.17



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
34	MP4A	X	0	1.17
35	MP4A	Z	40.434	1.17
36	MP4A	Mx	0	1.17
37	MP4A	X	0	5.17
38	MP4A	Z	40.434	5.17
39	MP4A	Mx	0	5.17
40	MP2A	X	0	5.5
41	MP2A	Z	9.402	5.5
42	MP2A	Mx	0	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	X	-17.501	1.17
2	MP2A	Z	30.313	1.17
3	MP2A	Mx	.033	1.17
4	MP2A	X	-17.501	5.17
5	MP2A	Z	30.313	5.17
6	MP2A	Mx	.033	5.17
7	MP2A	X	-17.501	1.17
8	MP2A	Z	30.313	1.17
9	MP2A	Mx	-.007	1.17
10	MP2A	X	-17.501	5.17
11	MP2A	Z	30.313	5.17
12	MP2A	Mx	-.007	5.17
13	MP3A	X	-8.667	1
14	MP3A	Z	15.012	1
15	MP3A	Mx	.002	1
16	MP3A	X	-8.667	3
17	MP3A	Z	15.012	3
18	MP3A	Mx	.002	3
19	M55A	X	-1.953	2
20	M55A	Z	3.383	2
21	M55A	Mx	-.000977	2
22	MP1A	X	-7.89	3.5
23	MP1A	Z	13.666	3.5
24	MP1A	Mx	-.004	3.5
25	MP2A	X	-7.644	3.5
26	MP2A	Z	13.239	3.5
27	MP2A	Mx	-.004	3.5
28	MP1A	X	-19.663	1.17
29	MP1A	Z	34.057	1.17
30	MP1A	Mx	.015	1.17
31	MP1A	X	-19.663	5.17
32	MP1A	Z	34.057	5.17
33	MP1A	Mx	.015	5.17
34	MP4A	X	-19.663	1.17
35	MP4A	Z	34.057	1.17
36	MP4A	Mx	.015	1.17
37	MP4A	X	-19.663	5.17
38	MP4A	Z	34.057	5.17
39	MP4A	Mx	.015	5.17
40	MP2A	X	-3.966	5.5
41	MP2A	Z	6.87	5.5
42	MP2A	Mx	-.003	5.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	X	-25.091	1.17
2	MP2A	Z	14.486	1.17
3	MP2A	Mx	.028	1.17
4	MP2A	X	-25.091	5.17
5	MP2A	Z	14.486	5.17
6	MP2A	Mx	.028	5.17
7	MP2A	X	-25.091	1.17
8	MP2A	Z	14.486	1.17
9	MP2A	Mx	.009	1.17
10	MP2A	X	-25.091	5.17
11	MP2A	Z	14.486	5.17
12	MP2A	Mx	.009	5.17
13	MP3A	X	-9.991	1
14	MP3A	Z	5.768	1
15	MP3A	Mx	.002	1
16	MP3A	X	-9.991	3
17	MP3A	Z	5.768	3
18	MP3A	Mx	.002	3
19	M55A	X	-3.607	2
20	M55A	Z	2.083	2
21	M55A	Mx	0	2
22	MP1A	X	-11.42	3.5
23	MP1A	Z	6.594	3.5
24	MP1A	Mx	-.006	3.5
25	MP2A	X	-10.14	3.5
26	MP2A	Z	5.854	3.5
27	MP2A	Mx	-.005	3.5
28	MP1A	X	-32.139	1.17
29	MP1A	Z	18.555	1.17
30	MP1A	Mx	.024	1.17
31	MP1A	X	-32.139	5.17
32	MP1A	Z	18.555	5.17
33	MP1A	Mx	.024	5.17
34	MP4A	X	-32.139	1.17
35	MP4A	Z	18.555	1.17
36	MP4A	Mx	.024	1.17
37	MP4A	X	-32.139	5.17
38	MP4A	Z	18.555	5.17
39	MP4A	Mx	.024	5.17
40	MP2A	X	-4.324	5.5
41	MP2A	Z	2.496	5.5
42	MP2A	Mx	-.004	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	X	-25.958	1.17
2	MP2A	Z	0	1.17
3	MP2A	Mx	.019	1.17
4	MP2A	X	-25.958	5.17
5	MP2A	Z	0	5.17
6	MP2A	Mx	.019	5.17
7	MP2A	X	-25.958	1.17
8	MP2A	Z	0	1.17
9	MP2A	Mx	.019	1.17
10	MP2A	X	-25.958	5.17
11	MP2A	Z	0	5.17



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
12	MP2A	Mx	.019	5.17
13	MP3A	X	-8.637	1
14	MP3A	Z	0	1
15	MP3A	Mx	.002	1
16	MP3A	X	-8.637	3
17	MP3A	Z	0	3
18	MP3A	Mx	.002	3
19	M55A	X	-3.907	2
20	M55A	Z	0	2
21	M55A	Mx	.000977	2
22	MP1A	X	-11.89	3.5
23	MP1A	Z	0	3.5
24	MP1A	Mx	-.006	3.5
25	MP2A	X	-9.92	3.5
26	MP2A	Z	0	3.5
27	MP2A	Mx	-.005	3.5
28	MP1A	X	-36.003	1.17
29	MP1A	Z	0	1.17
30	MP1A	Mx	.027	1.17
31	MP1A	X	-36.003	5.17
32	MP1A	Z	0	5.17
33	MP1A	Mx	.027	5.17
34	MP4A	X	-36.003	1.17
35	MP4A	Z	0	1.17
36	MP4A	Mx	.027	1.17
37	MP4A	X	-36.003	5.17
38	MP4A	Z	0	5.17
39	MP4A	Mx	.027	5.17
40	MP2A	X	-3.523	5.5
41	MP2A	Z	0	5.5
42	MP2A	Mx	-.003	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-25.091	1.17
2	MP2A	Z	-14.486	1.17
3	MP2A	Mx	.009	1.17
4	MP2A	X	-25.091	5.17
5	MP2A	Z	-14.486	5.17
6	MP2A	Mx	.009	5.17
7	MP2A	X	-25.091	1.17
8	MP2A	Z	-14.486	1.17
9	MP2A	Mx	.028	1.17
10	MP2A	X	-25.091	5.17
11	MP2A	Z	-14.486	5.17
12	MP2A	Mx	.028	5.17
13	MP3A	X	-9.991	1
14	MP3A	Z	-5.768	1
15	MP3A	Mx	.002	1
16	MP3A	X	-9.991	3
17	MP3A	Z	-5.768	3
18	MP3A	Mx	.002	3
19	M55A	X	-2.935	2
20	M55A	Z	-1.695	2
21	M55A	Mx	.001	2
22	MP1A	X	-11.42	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
23	MP1A	Z	-6.594	3.5
24	MP1A	Mx	-.006	3.5
25	MP2A	X	-10.14	3.5
26	MP2A	Z	-5.854	3.5
27	MP2A	Mx	-.005	3.5
28	MP1A	X	-32.139	1.17
29	MP1A	Z	-18.555	1.17
30	MP1A	Mx	.024	1.17
31	MP1A	X	-32.139	5.17
32	MP1A	Z	-18.555	5.17
33	MP1A	Mx	.024	5.17
34	MP4A	X	-32.139	1.17
35	MP4A	Z	-18.555	1.17
36	MP4A	Mx	.024	1.17
37	MP4A	X	-32.139	5.17
38	MP4A	Z	-18.555	5.17
39	MP4A	Mx	.024	5.17
40	MP2A	X	-4.324	5.5
41	MP2A	Z	-2.496	5.5
42	MP2A	Mx	-.004	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
1	MP2A	X	-17.501	1.17
2	MP2A	Z	-30.313	1.17
3	MP2A	Mx	-.007	1.17
4	MP2A	X	-17.501	5.17
5	MP2A	Z	-30.313	5.17
6	MP2A	Mx	-.007	5.17
7	MP2A	X	-17.501	1.17
8	MP2A	Z	-30.313	1.17
9	MP2A	Mx	.033	1.17
10	MP2A	X	-17.501	5.17
11	MP2A	Z	-30.313	5.17
12	MP2A	Mx	.033	5.17
13	MP3A	X	-8.667	1
14	MP3A	Z	-15.012	1
15	MP3A	Mx	.002	1
16	MP3A	X	-8.667	3
17	MP3A	Z	-15.012	3
18	MP3A	Mx	.002	3
19	M55A	X	-1.565	2
20	M55A	Z	-2.711	2
21	M55A	Mx	.002	2
22	MP1A	X	-7.89	3.5
23	MP1A	Z	-13.666	3.5
24	MP1A	Mx	-.004	3.5
25	MP2A	X	-7.644	3.5
26	MP2A	Z	-13.239	3.5
27	MP2A	Mx	-.004	3.5
28	MP1A	X	-19.663	1.17
29	MP1A	Z	-34.057	1.17
30	MP1A	Mx	.015	1.17
31	MP1A	X	-19.663	5.17
32	MP1A	Z	-34.057	5.17
33	MP1A	Mx	.015	5.17



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
34	MP4A	X	-19.663	1.17
35	MP4A	Z	-34.057	1.17
36	MP4A	Mx	.015	1.17
37	MP4A	X	-19.663	5.17
38	MP4A	Z	-34.057	5.17
39	MP4A	Mx	.015	5.17
40	MP2A	X	-3.966	5.5
41	MP2A	Z	-6.87	5.5
42	MP2A	Mx	-.003	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	0	1.17
2	MP2A	Z	-12.462	1.17
3	MP2A	Mx	-.008	1.17
4	MP2A	X	0	5.17
5	MP2A	Z	-12.462	5.17
6	MP2A	Mx	-.008	5.17
7	MP2A	X	0	1.17
8	MP2A	Z	-12.462	1.17
9	MP2A	Mx	.008	1.17
10	MP2A	X	0	5.17
11	MP2A	Z	-12.462	5.17
12	MP2A	Mx	.008	5.17
13	MP3A	X	0	1
14	MP3A	Z	-5.362	1
15	MP3A	Mx	0	1
16	MP3A	X	0	3
17	MP3A	Z	-5.362	3
18	MP3A	Mx	0	3
19	M55A	X	0	2
20	M55A	Z	-.778	2
21	M55A	Mx	.000337	2
22	MP1A	X	0	3.5
23	MP1A	Z	-4.241	3.5
24	MP1A	Mx	0	3.5
25	MP2A	X	0	3.5
26	MP2A	Z	-4.241	3.5
27	MP2A	Mx	0	3.5
28	MP1A	X	0	1.17
29	MP1A	Z	-13.351	1.17
30	MP1A	Mx	0	1.17
31	MP1A	X	0	5.17
32	MP1A	Z	-13.351	5.17
33	MP1A	Mx	0	5.17
34	MP4A	X	0	1.17
35	MP4A	Z	-13.351	1.17
36	MP4A	Mx	0	1.17
37	MP4A	X	0	5.17
38	MP4A	Z	-13.351	5.17
39	MP4A	Mx	0	5.17
40	MP2A	X	0	5.5
41	MP2A	Z	-.903	5.5
42	MP2A	Mx	0	5.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	5.696	1.17
2	MP2A	Z	-9.866	1.17
3	MP2A	Mx	-.011	1.17
4	MP2A	X	5.696	5.17
5	MP2A	Z	-9.866	5.17
6	MP2A	Mx	-.011	5.17
7	MP2A	X	5.696	1.17
8	MP2A	Z	-9.866	1.17
9	MP2A	Mx	.002	1.17
10	MP2A	X	5.696	5.17
11	MP2A	Z	-9.866	5.17
12	MP2A	Mx	.002	5.17
13	MP3A	X	2.242	1
14	MP3A	Z	-3.883	1
15	MP3A	Mx	-.00056	1
16	MP3A	X	2.242	3
17	MP3A	Z	-3.883	3
18	MP3A	Mx	-.00056	3
19	M55A	X	.467	2
20	M55A	Z	-.809	2
21	M55A	Mx	.000234	2
22	MP1A	X	1.946	3.5
23	MP1A	Z	-3.37	3.5
24	MP1A	Mx	.000973	3.5
25	MP2A	X	1.881	3.5
26	MP2A	Z	-3.258	3.5
27	MP2A	Mx	.00094	3.5
28	MP1A	X	6.478	1.17
29	MP1A	Z	-11.22	1.17
30	MP1A	Mx	-.005	1.17
31	MP1A	X	6.478	5.17
32	MP1A	Z	-11.22	5.17
33	MP1A	Mx	-.005	5.17
34	MP4A	X	6.478	1.17
35	MP4A	Z	-11.22	1.17
36	MP4A	Mx	-.005	1.17
37	MP4A	X	6.478	5.17
38	MP4A	Z	-11.22	5.17
39	MP4A	Mx	-.005	5.17
40	MP2A	X	.437	5.5
41	MP2A	Z	-.756	5.5
42	MP2A	Mx	.000364	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	8.014	1.17
2	MP2A	Z	-4.627	1.17
3	MP2A	Mx	-.009	1.17
4	MP2A	X	8.014	5.17
5	MP2A	Z	-4.627	5.17
6	MP2A	Mx	-.009	5.17
7	MP2A	X	8.014	1.17
8	MP2A	Z	-4.627	1.17
9	MP2A	Mx	-.003	1.17
10	MP2A	X	8.014	5.17
11	MP2A	Z	-4.627	5.17



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
12	MP2A	Mx	-.003	5.17
13	MP3A	X	2.36	1
14	MP3A	Z	-1.363	1
15	MP3A	Mx	-.00059	1
16	MP3A	X	2.36	3
17	MP3A	Z	-1.363	3
18	MP3A	Mx	-.00059	3
19	M55A	X	.877	2
20	M55A	Z	-.506	2
21	M55A	Mx	0	2
22	MP1A	X	2.766	3.5
23	MP1A	Z	-1.597	3.5
24	MP1A	Mx	.001	3.5
25	MP2A	X	2.429	3.5
26	MP2A	Z	-1.402	3.5
27	MP2A	Mx	.001	3.5
28	MP1A	X	10.535	1.17
29	MP1A	Z	-6.082	1.17
30	MP1A	Mx	-.008	1.17
31	MP1A	X	10.535	5.17
32	MP1A	Z	-6.082	5.17
33	MP1A	Mx	-.008	5.17
34	MP4A	X	10.535	1.17
35	MP4A	Z	-6.082	1.17
36	MP4A	Mx	-.008	1.17
37	MP4A	X	10.535	5.17
38	MP4A	Z	-6.082	5.17
39	MP4A	Mx	-.008	5.17
40	MP2A	X	.706	5.5
41	MP2A	Z	-.407	5.5
42	MP2A	Mx	.000588	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	8.185	1.17
2	MP2A	Z	0	1.17
3	MP2A	Mx	-.006	1.17
4	MP2A	X	8.185	5.17
5	MP2A	Z	0	5.17
6	MP2A	Mx	-.006	5.17
7	MP2A	X	8.185	1.17
8	MP2A	Z	0	1.17
9	MP2A	Mx	-.006	1.17
10	MP2A	X	8.185	5.17
11	MP2A	Z	0	5.17
12	MP2A	Mx	-.006	5.17
13	MP3A	X	1.847	1
14	MP3A	Z	0	1
15	MP3A	Mx	-.000462	1
16	MP3A	X	1.847	3
17	MP3A	Z	0	3
18	MP3A	Mx	-.000462	3
19	M55A	X	.934	2
20	M55A	Z	0	2
21	M55A	Mx	-.000234	2
22	MP1A	X	2.845	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
23	MP1A	Z	0	3.5
24	MP1A	Mx	.001	3.5
25	MP2A	X	2.325	3.5
26	MP2A	Z	0	3.5
27	MP2A	Mx	.001	3.5
28	MP1A	X	11.769	1.17
29	MP1A	Z	0	1.17
30	MP1A	Mx	-.009	1.17
31	MP1A	X	11.769	5.17
32	MP1A	Z	0	5.17
33	MP1A	Mx	-.009	5.17
34	MP4A	X	11.769	1.17
35	MP4A	Z	0	1.17
36	MP4A	Mx	-.009	1.17
37	MP4A	X	11.769	5.17
38	MP4A	Z	0	5.17
39	MP4A	Mx	-.009	5.17
40	MP2A	X	.786	5.5
41	MP2A	Z	0	5.5
42	MP2A	Mx	.000655	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
1	MP2A	X	8.014	1.17
2	MP2A	Z	4.627	1.17
3	MP2A	Mx	-.003	1.17
4	MP2A	X	8.014	5.17
5	MP2A	Z	4.627	5.17
6	MP2A	Mx	-.003	5.17
7	MP2A	X	8.014	1.17
8	MP2A	Z	4.627	1.17
9	MP2A	Mx	-.009	1.17
10	MP2A	X	8.014	5.17
11	MP2A	Z	4.627	5.17
12	MP2A	Mx	-.009	5.17
13	MP3A	X	2.36	1
14	MP3A	Z	1.363	1
15	MP3A	Mx	-.00059	1
16	MP3A	X	2.36	3
17	MP3A	Z	1.363	3
18	MP3A	Mx	-.00059	3
19	M55A	X	.674	2
20	M55A	Z	.389	2
21	M55A	Mx	-.000337	2
22	MP1A	X	2.766	3.5
23	MP1A	Z	1.597	3.5
24	MP1A	Mx	.001	3.5
25	MP2A	X	2.429	3.5
26	MP2A	Z	1.402	3.5
27	MP2A	Mx	.001	3.5
28	MP1A	X	10.535	1.17
29	MP1A	Z	6.082	1.17
30	MP1A	Mx	-.008	1.17
31	MP1A	X	10.535	5.17
32	MP1A	Z	6.082	5.17
33	MP1A	Mx	-.008	5.17



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
34	MP4A	X	10.535	1.17
35	MP4A	Z	6.082	1.17
36	MP4A	Mx	-.008	1.17
37	MP4A	X	10.535	5.17
38	MP4A	Z	6.082	5.17
39	MP4A	Mx	-.008	5.17
40	MP2A	X	.706	5.5
41	MP2A	Z	.407	5.5
42	MP2A	Mx	.000588	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	5.696	1.17
2	MP2A	Z	9.866	1.17
3	MP2A	Mx	.002	1.17
4	MP2A	X	5.696	5.17
5	MP2A	Z	9.866	5.17
6	MP2A	Mx	.002	5.17
7	MP2A	X	5.696	1.17
8	MP2A	Z	9.866	1.17
9	MP2A	Mx	-.011	1.17
10	MP2A	X	5.696	5.17
11	MP2A	Z	9.866	5.17
12	MP2A	Mx	-.011	5.17
13	MP3A	X	2.242	1
14	MP3A	Z	3.883	1
15	MP3A	Mx	-.00056	1
16	MP3A	X	2.242	3
17	MP3A	Z	3.883	3
18	MP3A	Mx	-.00056	3
19	M55A	X	.35	2
20	M55A	Z	.607	2
21	M55A	Mx	-.00035	2
22	MP1A	X	1.946	3.5
23	MP1A	Z	3.37	3.5
24	MP1A	Mx	.000973	3.5
25	MP2A	X	1.881	3.5
26	MP2A	Z	3.258	3.5
27	MP2A	Mx	.00094	3.5
28	MP1A	X	6.478	1.17
29	MP1A	Z	11.22	1.17
30	MP1A	Mx	-.005	1.17
31	MP1A	X	6.478	5.17
32	MP1A	Z	11.22	5.17
33	MP1A	Mx	-.005	5.17
34	MP4A	X	6.478	1.17
35	MP4A	Z	11.22	1.17
36	MP4A	Mx	-.005	1.17
37	MP4A	X	6.478	5.17
38	MP4A	Z	11.22	5.17
39	MP4A	Mx	-.005	5.17
40	MP2A	X	.437	5.5
41	MP2A	Z	.756	5.5
42	MP2A	Mx	.000364	5.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	0	1.17
2	MP2A	Z	12.462	1.17
3	MP2A	Mx	.008	1.17
4	MP2A	X	0	5.17
5	MP2A	Z	12.462	5.17
6	MP2A	Mx	.008	5.17
7	MP2A	X	0	1.17
8	MP2A	Z	12.462	1.17
9	MP2A	Mx	-.008	1.17
10	MP2A	X	0	5.17
11	MP2A	Z	12.462	5.17
12	MP2A	Mx	-.008	5.17
13	MP3A	X	0	1
14	MP3A	Z	5.362	1
15	MP3A	Mx	0	1
16	MP3A	X	0	3
17	MP3A	Z	5.362	3
18	MP3A	Mx	0	3
19	M55A	X	0	2
20	M55A	Z	.778	2
21	M55A	Mx	-.000337	2
22	MP1A	X	0	3.5
23	MP1A	Z	4.241	3.5
24	MP1A	Mx	0	3.5
25	MP2A	X	0	3.5
26	MP2A	Z	4.241	3.5
27	MP2A	Mx	0	3.5
28	MP1A	X	0	1.17
29	MP1A	Z	13.351	1.17
30	MP1A	Mx	0	1.17
31	MP1A	X	0	5.17
32	MP1A	Z	13.351	5.17
33	MP1A	Mx	0	5.17
34	MP4A	X	0	1.17
35	MP4A	Z	13.351	1.17
36	MP4A	Mx	0	1.17
37	MP4A	X	0	5.17
38	MP4A	Z	13.351	5.17
39	MP4A	Mx	0	5.17
40	MP2A	X	0	5.5
41	MP2A	Z	.903	5.5
42	MP2A	Mx	0	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-5.696	1.17
2	MP2A	Z	9.866	1.17
3	MP2A	Mx	.011	1.17
4	MP2A	X	-5.696	5.17
5	MP2A	Z	9.866	5.17
6	MP2A	Mx	.011	5.17
7	MP2A	X	-5.696	1.17
8	MP2A	Z	9.866	1.17
9	MP2A	Mx	-.002	1.17
10	MP2A	X	-5.696	5.17
11	MP2A	Z	9.866	5.17



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
12	MP2A	Mx	-.002	5.17
13	MP3A	X	-2.242	1
14	MP3A	Z	3.883	1
15	MP3A	Mx	.00056	1
16	MP3A	X	-2.242	3
17	MP3A	Z	3.883	3
18	MP3A	Mx	.00056	3
19	M55A	X	-.467	2
20	M55A	Z	.809	2
21	M55A	Mx	-.000234	2
22	MP1A	X	-1.946	3.5
23	MP1A	Z	3.37	3.5
24	MP1A	Mx	-.000973	3.5
25	MP2A	X	-1.881	3.5
26	MP2A	Z	3.258	3.5
27	MP2A	Mx	-.00094	3.5
28	MP1A	X	-6.478	1.17
29	MP1A	Z	11.22	1.17
30	MP1A	Mx	.005	1.17
31	MP1A	X	-6.478	5.17
32	MP1A	Z	11.22	5.17
33	MP1A	Mx	.005	5.17
34	MP4A	X	-6.478	1.17
35	MP4A	Z	11.22	1.17
36	MP4A	Mx	.005	1.17
37	MP4A	X	-6.478	5.17
38	MP4A	Z	11.22	5.17
39	MP4A	Mx	.005	5.17
40	MP2A	X	-.437	5.5
41	MP2A	Z	.756	5.5
42	MP2A	Mx	-.000364	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-8.014	1.17
2	MP2A	Z	4.627	1.17
3	MP2A	Mx	.009	1.17
4	MP2A	X	-8.014	5.17
5	MP2A	Z	4.627	5.17
6	MP2A	Mx	.009	5.17
7	MP2A	X	-8.014	1.17
8	MP2A	Z	4.627	1.17
9	MP2A	Mx	.003	1.17
10	MP2A	X	-8.014	5.17
11	MP2A	Z	4.627	5.17
12	MP2A	Mx	.003	5.17
13	MP3A	X	-2.36	1
14	MP3A	Z	1.363	1
15	MP3A	Mx	.00059	1
16	MP3A	X	-2.36	3
17	MP3A	Z	1.363	3
18	MP3A	Mx	.00059	3
19	M55A	X	-.877	2
20	M55A	Z	.506	2
21	M55A	Mx	0	2
22	MP1A	X	-2.766	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
23	MP1A	Z	1.597	3.5
24	MP1A	Mx	-.001	3.5
25	MP2A	X	-2.429	3.5
26	MP2A	Z	1.402	3.5
27	MP2A	Mx	-.001	3.5
28	MP1A	X	-10.535	1.17
29	MP1A	Z	6.082	1.17
30	MP1A	Mx	.008	1.17
31	MP1A	X	-10.535	5.17
32	MP1A	Z	6.082	5.17
33	MP1A	Mx	.008	5.17
34	MP4A	X	-10.535	1.17
35	MP4A	Z	6.082	1.17
36	MP4A	Mx	.008	1.17
37	MP4A	X	-10.535	5.17
38	MP4A	Z	6.082	5.17
39	MP4A	Mx	.008	5.17
40	MP2A	X	-.706	5.5
41	MP2A	Z	.407	5.5
42	MP2A	Mx	-.000588	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
1	MP2A	X	-8.185	1.17
2	MP2A	Z	0	1.17
3	MP2A	Mx	.006	1.17
4	MP2A	X	-8.185	5.17
5	MP2A	Z	0	5.17
6	MP2A	Mx	.006	5.17
7	MP2A	X	-8.185	1.17
8	MP2A	Z	0	1.17
9	MP2A	Mx	.006	1.17
10	MP2A	X	-8.185	5.17
11	MP2A	Z	0	5.17
12	MP2A	Mx	.006	5.17
13	MP3A	X	-1.847	1
14	MP3A	Z	0	1
15	MP3A	Mx	.000462	1
16	MP3A	X	-1.847	3
17	MP3A	Z	0	3
18	MP3A	Mx	.000462	3
19	M55A	X	-.934	2
20	M55A	Z	0	2
21	M55A	Mx	.000234	2
22	MP1A	X	-2.845	3.5
23	MP1A	Z	0	3.5
24	MP1A	Mx	-.001	3.5
25	MP2A	X	-2.325	3.5
26	MP2A	Z	0	3.5
27	MP2A	Mx	-.001	3.5
28	MP1A	X	-11.769	1.17
29	MP1A	Z	0	1.17
30	MP1A	Mx	.009	1.17
31	MP1A	X	-11.769	5.17
32	MP1A	Z	0	5.17
33	MP1A	Mx	.009	5.17



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
34	MP4A	X	-11.769	1.17
35	MP4A	Z	0	1.17
36	MP4A	Mx	.009	1.17
37	MP4A	X	-11.769	5.17
38	MP4A	Z	0	5.17
39	MP4A	Mx	.009	5.17
40	MP2A	X	-.786	5.5
41	MP2A	Z	0	5.5
42	MP2A	Mx	-.000655	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-8.014	1.17
2	MP2A	Z	-4.627	1.17
3	MP2A	Mx	.003	1.17
4	MP2A	X	-8.014	5.17
5	MP2A	Z	-4.627	5.17
6	MP2A	Mx	.003	5.17
7	MP2A	X	-8.014	1.17
8	MP2A	Z	-4.627	1.17
9	MP2A	Mx	.009	1.17
10	MP2A	X	-8.014	5.17
11	MP2A	Z	-4.627	5.17
12	MP2A	Mx	.009	5.17
13	MP3A	X	-2.36	1
14	MP3A	Z	-1.363	1
15	MP3A	Mx	.00059	1
16	MP3A	X	-2.36	3
17	MP3A	Z	-1.363	3
18	MP3A	Mx	.00059	3
19	M55A	X	-.674	2
20	M55A	Z	-.389	2
21	M55A	Mx	.000337	2
22	MP1A	X	-2.766	3.5
23	MP1A	Z	-1.597	3.5
24	MP1A	Mx	-.001	3.5
25	MP2A	X	-2.429	3.5
26	MP2A	Z	-1.402	3.5
27	MP2A	Mx	-.001	3.5
28	MP1A	X	-10.535	1.17
29	MP1A	Z	-6.082	1.17
30	MP1A	Mx	.008	1.17
31	MP1A	X	-10.535	5.17
32	MP1A	Z	-6.082	5.17
33	MP1A	Mx	.008	5.17
34	MP4A	X	-10.535	1.17
35	MP4A	Z	-6.082	1.17
36	MP4A	Mx	.008	1.17
37	MP4A	X	-10.535	5.17
38	MP4A	Z	-6.082	5.17
39	MP4A	Mx	.008	5.17
40	MP2A	X	-.706	5.5
41	MP2A	Z	-.407	5.5
42	MP2A	Mx	-.000588	5.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-5.696	1.17
2	MP2A	Z	-9.866	1.17
3	MP2A	Mx	-.002	1.17
4	MP2A	X	-5.696	5.17
5	MP2A	Z	-9.866	5.17
6	MP2A	Mx	-.002	5.17
7	MP2A	X	-5.696	1.17
8	MP2A	Z	-9.866	1.17
9	MP2A	Mx	.011	1.17
10	MP2A	X	-5.696	5.17
11	MP2A	Z	-9.866	5.17
12	MP2A	Mx	.011	5.17
13	MP3A	X	-2.242	1
14	MP3A	Z	-3.883	1
15	MP3A	Mx	.00056	1
16	MP3A	X	-2.242	3
17	MP3A	Z	-3.883	3
18	MP3A	Mx	.00056	3
19	M55A	X	-.35	2
20	M55A	Z	-.607	2
21	M55A	Mx	.00035	2
22	MP1A	X	-1.946	3.5
23	MP1A	Z	-3.37	3.5
24	MP1A	Mx	-.000973	3.5
25	MP2A	X	-1.881	3.5
26	MP2A	Z	-3.258	3.5
27	MP2A	Mx	-.00094	3.5
28	MP1A	X	-6.478	1.17
29	MP1A	Z	-11.22	1.17
30	MP1A	Mx	.005	1.17
31	MP1A	X	-6.478	5.17
32	MP1A	Z	-11.22	5.17
33	MP1A	Mx	.005	5.17
34	MP4A	X	-6.478	1.17
35	MP4A	Z	-11.22	1.17
36	MP4A	Mx	.005	1.17
37	MP4A	X	-6.478	5.17
38	MP4A	Z	-11.22	5.17
39	MP4A	Mx	.005	5.17
40	MP2A	X	-.437	5.5
41	MP2A	Z	-7.56	5.5
42	MP2A	Mx	-.000364	5.5

Member Point Loads (BLC 77 : Lm1)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	OVP	Y	-500	%52

Member Point Loads (BLC 78 : Lm2)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	OVP	Y	-500	%98

Member Point Loads (BLC 79 : Lv1)

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



Member Point Loads (BLC 80 : Lv2)

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

Member Point Loads (BLC 81 : Antenna Ev)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	Y	0	1.17
2	MP2A	My	0	1.17
3	MP2A	Mz	0	1.17
4	MP2A	Y	0	5.17
5	MP2A	My	0	5.17
6	MP2A	Mz	0	5.17
7	MP2A	Y	0	1.17
8	MP2A	My	0	1.17
9	MP2A	Mz	0	1.17
10	MP2A	Y	0	5.17
11	MP2A	My	0	5.17
12	MP2A	Mz	0	5.17
13	MP3A	Y	0	1
14	MP3A	My	0	1
15	MP3A	Mz	0	1
16	MP3A	Y	0	3
17	MP3A	My	0	3
18	MP3A	Mz	0	3
19	M55A	Y	0	2
20	M55A	My	0	2
21	M55A	Mz	0	2
22	MP1A	Y	0	3.5
23	MP1A	My	0	3.5
24	MP1A	Mz	0	3.5
25	MP2A	Y	0	3.5
26	MP2A	My	0	3.5
27	MP2A	Mz	0	3.5
28	MP1A	Y	0	1.17
29	MP1A	My	0	1.17
30	MP1A	Mz	0	1.17
31	MP1A	Y	0	5.17
32	MP1A	My	0	5.17
33	MP1A	Mz	0	5.17
34	MP4A	Y	0	1.17
35	MP4A	My	0	1.17
36	MP4A	Mz	0	1.17
37	MP4A	Y	0	5.17
38	MP4A	My	0	5.17
39	MP4A	Mz	0	5.17
40	MP2A	Y	0	5.5
41	MP2A	My	0	5.5
42	MP2A	Mz	0	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	Z	-.95	1.17
2	MP2A	Mx	-.000633	1.17
3	MP2A	Z	-.95	5.17
4	MP2A	Mx	-.000633	5.17
5	MP2A	Z	-.95	1.17
6	MP2A	Mx	.000633	1.17
7	MP2A	Z	-.95	5.17



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
8	MP2A	Mx	.000633	5.17
9	MP3A	Z	-1.306	1
10	MP3A	Mx	0	1
11	MP3A	Z	-1.306	3
12	MP3A	Mx	0	3
13	M55A	Z	-.312	2
14	M55A	Mx	.000135	2
15	MP1A	Z	-2.532	3.5
16	MP1A	Mx	0	3.5
17	MP2A	Z	-2.109	3.5
18	MP2A	Mx	0	3.5
19	MP1A	Z	-.405	1.17
20	MP1A	Mx	0	1.17
21	MP1A	Z	-.405	5.17
22	MP1A	Mx	0	5.17
23	MP4A	Z	-.405	1.17
24	MP4A	Mx	0	1.17
25	MP4A	Z	-.405	5.17
26	MP4A	Mx	0	5.17
27	MP2A	Z	-.528	5.5
28	MP2A	Mx	0	5.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	.95	1.17
2	MP2A	Mx	-.000712	1.17
3	MP2A	X	.95	5.17
4	MP2A	Mx	-.000712	5.17
5	MP2A	X	.95	1.17
6	MP2A	Mx	-.000712	1.17
7	MP2A	X	.95	5.17
8	MP2A	Mx	-.000712	5.17
9	MP3A	X	1.306	1
10	MP3A	Mx	-.000327	1
11	MP3A	X	1.306	3
12	MP3A	Mx	-.000327	3
13	M55A	X	.312	2
14	M55A	Mx	-7.8e-5	2
15	MP1A	X	2.532	3.5
16	MP1A	Mx	.001	3.5
17	MP2A	X	2.109	3.5
18	MP2A	Mx	.001	3.5
19	MP1A	X	.405	1.17
20	MP1A	Mx	-.000304	1.17
21	MP1A	X	.405	5.17
22	MP1A	Mx	-.000304	5.17
23	MP4A	X	.405	1.17
24	MP4A	Mx	-.000304	1.17
25	MP4A	X	.405	5.17
26	MP4A	Mx	-.000304	5.17
27	MP2A	X	.528	5.5
28	MP2A	Mx	.00044	5.5



Member Distributed Loads (BLC 40 : Structure Di)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M5	Y	-6.077	-6.077	0	%100
2	M6	Y	-6.077	-6.077	0	%100
3	M7	Y	-5.862	-5.862	0	%100
4	M8	Y	-6.077	-6.077	0	%100
5	M9	Y	-6.077	-6.077	0	%100
6	M10	Y	-5.862	-5.862	0	%100
7	M11	Y	-5.14	-5.14	0	%100
8	OVP	Y	-5.14	-5.14	0	%100
9	M13	Y	-5.14	-5.14	0	%100
10	M14	Y	-5.14	-5.14	0	%100
11	M34A	Y	-6.077	-6.077	0	%100
12	M36	Y	-4.107	-4.107	0	%100
13	M30	Y	-6.077	-6.077	0	%100
14	M31	Y	-6.077	-6.077	0	%100
15	M32	Y	-6.077	-6.077	0	%100
16	M33	Y	-6.077	-6.077	0	%100
17	M34	Y	-4.107	-4.107	0	%100
18	M35A	Y	-4.107	-4.107	0	%100
19	M36A	Y	-4.107	-4.107	0	%100
20	M37	Y	-4.107	-4.107	0	%100
21	M29	Y	-6.077	-6.077	0	%100
22	M30A	Y	-6.077	-6.077	0	%100
23	M31A	Y	-6.077	-6.077	0	%100
24	M32A	Y	-6.077	-6.077	0	%100
25	M34B	Y	-4.107	-4.107	0	%100
26	M35B	Y	-4.107	-4.107	0	%100
27	M36B	Y	-4.107	-4.107	0	%100
28	M37A	Y	-4.107	-4.107	0	%100
29	MP5A	Y	-5.14	-5.14	0	%100
30	MP4A	Y	-5.14	-5.14	0	%100
31	MP3A	Y	-5.14	-5.14	0	%100
32	MP1A	Y	-5.14	-5.14	0	%100
33	MP2A	Y	-5.862	-5.862	0	%100
34	M52	Y	-6.765	-6.765	0	%100
35	M53	Y	-6.077	-6.077	0	%100
36	M54A	Y	-6.077	-6.077	0	%100
37	M55	Y	-6.077	-6.077	0	%100
38	M54B	Y	-6.077	-6.077	0	%100
39	M55A	Y	-4.107	-4.107	0	%100
40	M56A	Y	-6.077	-6.077	0	%100
41	M58	Y	-6.077	-6.077	0	%100
42	M59	Y	-6.077	-6.077	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M5	X	0	0	0	%100
2	M5	Z	-.805	-.805	0	%100
3	M6	X	0	0	0	%100
4	M6	Z	-.805	-.805	0	%100
5	M7	X	0	0	0	%100
6	M7	Z	-12.585	-12.585	0	%100
7	M8	X	0	0	0	%100
8	M8	Z	-.805	-.805	0	%100
9	M9	X	0	0	0	%100
10	M9	Z	-.805	-.805	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
11	M10	X	0	0	%100
12	M10	Z	-12.585	-12.585	%100
13	M11	X	0	0	%100
14	M11	Z	-5.303	-5.303	%100
15	OVP	X	0	0	%100
16	OVP	Z	-5.303	-5.303	%100
17	M13	X	0	0	%100
18	M13	Z	-5.303	-5.303	%100
19	M14	X	0	0	%100
20	M14	Z	-5.303	-5.303	%100
21	M34A	X	0	0	%100
22	M34A	Z	-6.721	-6.721	%100
23	M36	X	0	0	%100
24	M36	Z	-6.334	-6.334	%100
25	M30	X	0	0	%100
26	M30	Z	-8.422	-8.422	%100
27	M31	X	0	0	%100
28	M31	Z	-8.422	-8.422	%100
29	M32	X	0	0	%100
30	M32	Z	-8.422	-8.422	%100
31	M33	X	0	0	%100
32	M33	Z	-8.422	-8.422	%100
33	M34	X	0	0	%100
34	M34	Z	-6.983	-6.983	%100
35	M35A	X	0	0	%100
36	M35A	Z	-6.983	-6.983	%100
37	M36A	X	0	0	%100
38	M36A	Z	-6.079	-6.079	%100
39	M37	X	0	0	%100
40	M37	Z	-6.079	-6.079	%100
41	M29	X	0	0	%100
42	M29	Z	-6.443	-6.443	%100
43	M30A	X	0	0	%100
44	M30A	Z	-6.443	-6.443	%100
45	M31A	X	0	0	%100
46	M31A	Z	-6.443	-6.443	%100
47	M32A	X	0	0	%100
48	M32A	Z	-6.443	-6.443	%100
49	M34B	X	0	0	%100
50	M34B	Z	-6.983	-6.983	%100
51	M35B	X	0	0	%100
52	M35B	Z	-6.983	-6.983	%100
53	M36B	X	0	0	%100
54	M36B	Z	-6.079	-6.079	%100
55	M37A	X	0	0	%100
56	M37A	Z	-6.079	-6.079	%100
57	MP5A	X	0	0	%100
58	MP5A	Z	-10.396	-10.396	%100
59	MP4A	X	0	0	%100
60	MP4A	Z	-10.396	-10.396	%100
61	MP3A	X	0	0	%100
62	MP3A	Z	-10.396	-10.396	%100
63	MP1A	X	0	0	%100
64	MP1A	Z	-10.396	-10.396	%100
65	MP2A	X	0	0	%100
66	MP2A	Z	-12.585	-12.585	%100
67	M52	X	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
68	M52	Z	-.644	-.644	0	%100
69	M53	X	0	0	0	%100
70	M53	Z	-8.567	-8.567	0	%100
71	M54A	X	0	0	0	%100
72	M54A	Z	-6.721	-6.721	0	%100
73	M55	X	0	0	0	%100
74	M55	Z	-6.648	-6.648	0	%100
75	M54B	X	0	0	0	%100
76	M54B	Z	-6.721	-6.721	0	%100
77	M55A	X	0	0	0	%100
78	M55A	Z	-6.334	-6.334	0	%100
79	M56A	X	0	0	0	%100
80	M56A	Z	-6.648	-6.648	0	%100
81	M58	X	0	0	0	%100
82	M58	Z	-6.72	-6.72	0	%100
83	M59	X	0	0	0	%100
84	M59	Z	-8.567	-8.567	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M5	X	.051	.051	0	%100
2	M5	Z	-.089	-.089	0	%100
3	M6	X	.762	.762	0	%100
4	M6	Z	-1.319	-1.319	0	%100
5	M7	X	4.719	4.719	0	%100
6	M7	Z	-8.174	-8.174	0	%100
7	M8	X	.051	.051	0	%100
8	M8	Z	-.089	-.089	0	%100
9	M9	X	.762	.762	0	%100
10	M9	Z	-1.319	-1.319	0	%100
11	M10	X	4.719	4.719	0	%100
12	M10	Z	-8.174	-8.174	0	%100
13	M11	X	.375	.375	0	%100
14	M11	Z	-.649	-.649	0	%100
15	OVP	X	4.876	4.876	0	%100
16	OVP	Z	-8.445	-8.445	0	%100
17	M13	X	.375	.375	0	%100
18	M13	Z	-.649	-.649	0	%100
19	M14	X	4.876	4.876	0	%100
20	M14	Z	-8.445	-8.445	0	%100
21	M34A	X	5.967	5.967	0	%100
22	M34A	Z	-10.336	-10.336	0	%100
23	M36	X	3.167	3.167	0	%100
24	M36	Z	-5.486	-5.486	0	%100
25	M30	X	6.394	6.394	0	%100
26	M30	Z	-11.075	-11.075	0	%100
27	M31	X	6.394	6.394	0	%100
28	M31	Z	-11.075	-11.075	0	%100
29	M32	X	6.394	6.394	0	%100
30	M32	Z	-11.075	-11.075	0	%100
31	M33	X	6.394	6.394	0	%100
32	M33	Z	-11.075	-11.075	0	%100
33	M34	X	3.491	3.491	0	%100
34	M34	Z	-6.047	-6.047	0	%100
35	M35A	X	3.491	3.491	0	%100
36	M35A	Z	-6.047	-6.047	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
37	M36A	X	2.509	2.509	0	%100
38	M36A	Z	-4.346	-4.346	0	%100
39	M37	X	2.509	2.509	0	%100
40	M37	Z	-4.346	-4.346	0	%100
41	M29	X	1.038	1.038	0	%100
42	M29	Z	-1.798	-1.798	0	%100
43	M30A	X	1.038	1.038	0	%100
44	M30A	Z	-1.798	-1.798	0	%100
45	M31A	X	1.038	1.038	0	%100
46	M31A	Z	-1.798	-1.798	0	%100
47	M32A	X	1.038	1.038	0	%100
48	M32A	Z	-1.798	-1.798	0	%100
49	M34B	X	3.491	3.491	0	%100
50	M34B	Z	-6.047	-6.047	0	%100
51	M35B	X	3.491	3.491	0	%100
52	M35B	Z	-6.047	-6.047	0	%100
53	M36B	X	3.558	3.558	0	%100
54	M36B	Z	-6.163	-6.163	0	%100
55	M37A	X	3.558	3.558	0	%100
56	M37A	Z	-6.163	-6.163	0	%100
57	MP5A	X	5.198	5.198	0	%100
58	MP5A	Z	-9.003	-9.003	0	%100
59	MP4A	X	5.198	5.198	0	%100
60	MP4A	Z	-9.003	-9.003	0	%100
61	MP3A	X	5.198	5.198	0	%100
62	MP3A	Z	-9.003	-9.003	0	%100
63	MP1A	X	5.198	5.198	0	%100
64	MP1A	Z	-9.003	-9.003	0	%100
65	MP2A	X	6.292	6.292	0	%100
66	MP2A	Z	-10.899	-10.899	0	%100
67	M52	X	.679	.679	0	%100
68	M52	Z	-1.176	-1.176	0	%100
69	M53	X	6.399	6.399	0	%100
70	M53	Z	-11.084	-11.084	0	%100
71	M54A	X	5.967	5.967	0	%100
72	M54A	Z	-10.336	-10.336	0	%100
73	M55	X	5.92	5.92	0	%100
74	M55	Z	-10.253	-10.253	0	%100
75	M54B	X	1.15	1.15	0	%100
76	M54B	Z	-1.992	-1.992	0	%100
77	M55A	X	3.167	3.167	0	%100
78	M55A	Z	-5.486	-5.486	0	%100
79	M56A	X	1.208	1.208	0	%100
80	M56A	Z	-2.092	-2.092	0	%100
81	M58	X	1.15	1.15	0	%100
82	M58	Z	-1.991	-1.991	0	%100
83	M59	X	1.687	1.687	0	%100
84	M59	Z	-2.923	-2.923	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M5	X	.102	.102	0	%100
2	M5	Z	-.059	-.059	0	%100
3	M6	X	1.333	1.333	0	%100
4	M6	Z	-.77	-.77	0	%100
5	M7	X	2.725	2.725	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
6	M7	Z	-1.573	-1.573	0 %100
7	M8	X	.102	.102	0 %100
8	M8	Z	-.059	-.059	0 %100
9	M9	X	1.333	1.333	0 %100
10	M9	Z	-.77	-.77	0 %100
11	M10	X	2.725	2.725	0 %100
12	M10	Z	-1.573	-1.573	0 %100
13	M11	X	.558	.558	0 %100
14	M11	Z	-.322	-.322	0 %100
15	OVP	X	8.354	8.354	0 %100
16	OVP	Z	-4.823	-4.823	0 %100
17	M13	X	.558	.558	0 %100
18	M13	Z	-.322	-.322	0 %100
19	M14	X	8.354	8.354	0 %100
20	M14	Z	-4.823	-4.823	0 %100
21	M34A	X	11.022	11.022	0 %100
22	M34A	Z	-6.363	-6.363	0 %100
23	M36	X	5.486	5.486	0 %100
24	M36	Z	-3.167	-3.167	0 %100
25	M30	X	10.218	10.218	0 %100
26	M30	Z	-5.899	-5.899	0 %100
27	M31	X	10.218	10.218	0 %100
28	M31	Z	-5.899	-5.899	0 %100
29	M32	X	10.218	10.218	0 %100
30	M32	Z	-5.899	-5.899	0 %100
31	M33	X	10.218	10.218	0 %100
32	M33	Z	-5.899	-5.899	0 %100
33	M34	X	6.047	6.047	0 %100
34	M34	Z	-3.491	-3.491	0 %100
35	M35A	X	6.047	6.047	0 %100
36	M35A	Z	-3.491	-3.491	0 %100
37	M36A	X	4.325	4.325	0 %100
38	M36A	Z	-2.497	-2.497	0 %100
39	M37	X	4.325	4.325	0 %100
40	M37	Z	-2.497	-2.497	0 %100
41	M29	X	2.655	2.655	0 %100
42	M29	Z	-1.533	-1.533	0 %100
43	M30A	X	2.655	2.655	0 %100
44	M30A	Z	-1.533	-1.533	0 %100
45	M31A	X	2.655	2.655	0 %100
46	M31A	Z	-1.533	-1.533	0 %100
47	M32A	X	2.655	2.655	0 %100
48	M32A	Z	-1.533	-1.533	0 %100
49	M34B	X	6.047	6.047	0 %100
50	M34B	Z	-3.491	-3.491	0 %100
51	M35B	X	6.047	6.047	0 %100
52	M35B	Z	-3.491	-3.491	0 %100
53	M36B	X	6.142	6.142	0 %100
54	M36B	Z	-3.546	-3.546	0 %100
55	M37A	X	6.142	6.142	0 %100
56	M37A	Z	-3.546	-3.546	0 %100
57	MP5A	X	9.003	9.003	0 %100
58	MP5A	Z	-5.198	-5.198	0 %100
59	MP4A	X	9.003	9.003	0 %100
60	MP4A	Z	-5.198	-5.198	0 %100
61	MP3A	X	9.003	9.003	0 %100
62	MP3A	Z	-5.198	-5.198	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
63	MP1A	X	9.003	9.003	0	%100
64	MP1A	Z	-5.198	-5.198	0	%100
65	MP2A	X	10.899	10.899	0	%100
66	MP2A	Z	-6.292	-6.292	0	%100
67	M52	X	6.891	6.891	0	%100
68	M52	Z	-3.979	-3.979	0	%100
69	M53	X	10.253	10.253	0	%100
70	M53	Z	-5.92	-5.92	0	%100
71	M54A	X	11.022	11.022	0	%100
72	M54A	Z	-6.363	-6.363	0	%100
73	M55	X	11.084	11.084	0	%100
74	M55	Z	-6.399	-6.399	0	%100
75	M54B	X	2.678	2.678	0	%100
76	M54B	Z	-1.546	-1.546	0	%100
77	M55A	X	5.486	5.486	0	%100
78	M55A	Z	-3.167	-3.167	0	%100
79	M56A	X	2.923	2.923	0	%100
80	M56A	Z	-1.687	-1.687	0	%100
81	M58	X	2.679	2.679	0	%100
82	M58	Z	-1.547	-1.547	0	%100
83	M59	X	2.092	2.092	0	%100
84	M59	Z	-1.208	-1.208	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M5	X	.836	.836	0	%100
2	M5	Z	0	0	0	%100
3	M6	X	.836	.836	0	%100
4	M6	Z	0	0	0	%100
5	M7	X	0	0	0	%100
6	M7	Z	0	0	0	%100
7	M8	X	.836	.836	0	%100
8	M8	Z	0	0	0	%100
9	M9	X	.836	.836	0	%100
10	M9	Z	0	0	0	%100
11	M10	X	0	0	0	%100
12	M10	Z	0	0	0	%100
13	M11	X	5.093	5.093	0	%100
14	M11	Z	0	0	0	%100
15	OVP	X	5.093	5.093	0	%100
16	OVP	Z	0	0	0	%100
17	M13	X	5.093	5.093	0	%100
18	M13	Z	0	0	0	%100
19	M14	X	5.093	5.093	0	%100
20	M14	Z	0	0	0	%100
21	M34A	X	8.306	8.306	0	%100
22	M34A	Z	0	0	0	%100
23	M36	X	6.334	6.334	0	%100
24	M36	Z	0	0	0	%100
25	M30	X	6.443	6.443	0	%100
26	M30	Z	0	0	0	%100
27	M31	X	6.443	6.443	0	%100
28	M31	Z	0	0	0	%100
29	M32	X	6.443	6.443	0	%100
30	M32	Z	0	0	0	%100
31	M33	X	6.443	6.443	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]	
32	M33	Z	0	0	0	%100
33	M34	X	6.983	6.983	0	%100
34	M34	Z	0	0	0	%100
35	M35A	X	6.983	6.983	0	%100
36	M35A	Z	0	0	0	%100
37	M36A	X	6.03	6.03	0	%100
38	M36A	Z	0	0	0	%100
39	M37	X	6.03	6.03	0	%100
40	M37	Z	0	0	0	%100
41	M29	X	8.422	8.422	0	%100
42	M29	Z	0	0	0	%100
43	M30A	X	8.422	8.422	0	%100
44	M30A	Z	0	0	0	%100
45	M31A	X	8.422	8.422	0	%100
46	M31A	Z	0	0	0	%100
47	M32A	X	8.422	8.422	0	%100
48	M32A	Z	0	0	0	%100
49	M34B	X	6.983	6.983	0	%100
50	M34B	Z	0	0	0	%100
51	M35B	X	6.983	6.983	0	%100
52	M35B	Z	0	0	0	%100
53	M36B	X	6.03	6.03	0	%100
54	M36B	Z	0	0	0	%100
55	M37A	X	6.03	6.03	0	%100
56	M37A	Z	0	0	0	%100
57	MP5A	X	10.396	10.396	0	%100
58	MP5A	Z	0	0	0	%100
59	MP4A	X	10.396	10.396	0	%100
60	MP4A	Z	0	0	0	%100
61	MP3A	X	10.396	10.396	0	%100
62	MP3A	Z	0	0	0	%100
63	MP1A	X	10.396	10.396	0	%100
64	MP1A	Z	0	0	0	%100
65	MP2A	X	12.585	12.585	0	%100
66	MP2A	Z	0	0	0	%100
67	M52	X	13.842	13.842	0	%100
68	M52	Z	0	0	0	%100
69	M53	X	6.648	6.648	0	%100
70	M53	Z	0	0	0	%100
71	M54A	X	8.306	8.306	0	%100
72	M54A	Z	0	0	0	%100
73	M55	X	8.567	8.567	0	%100
74	M55	Z	0	0	0	%100
75	M54B	X	8.306	8.306	0	%100
76	M54B	Z	0	0	0	%100
77	M55A	X	6.334	6.334	0	%100
78	M55A	Z	0	0	0	%100
79	M56A	X	8.567	8.567	0	%100
80	M56A	Z	0	0	0	%100
81	M58	X	8.307	8.307	0	%100
82	M58	Z	0	0	0	%100
83	M59	X	6.648	6.648	0	%100
84	M59	Z	0	0	0	%100

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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
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Member Distributed Loads (BLC 45 : Structure Wo (120 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M5	X	1.333	1.333	0	%100
2	M5	Z	.77	.77	0	%100
3	M6	X	.102	.102	0	%100
4	M6	Z	.059	.059	0	%100
5	M7	X	2.725	2.725	0	%100
6	M7	Z	1.573	1.573	0	%100
7	M8	X	1.333	1.333	0	%100
8	M8	Z	.77	.77	0	%100
9	M9	X	.102	.102	0	%100
10	M9	Z	.059	.059	0	%100
11	M10	X	2.725	2.725	0	%100
12	M10	Z	1.573	1.573	0	%100
13	M11	X	8.354	8.354	0	%100
14	M11	Z	4.823	4.823	0	%100
15	OVP	X	.558	.558	0	%100
16	OVP	Z	.322	.322	0	%100
17	M13	X	8.354	8.354	0	%100
18	M13	Z	4.823	4.823	0	%100
19	M14	X	.558	.558	0	%100
20	M14	Z	.322	.322	0	%100
21	M34A	X	2.678	2.678	0	%100
22	M34A	Z	1.546	1.546	0	%100
23	M36	X	5.486	5.486	0	%100
24	M36	Z	3.167	3.167	0	%100
25	M30	X	1.798	1.798	0	%100
26	M30	Z	1.038	1.038	0	%100
27	M31	X	1.798	1.798	0	%100
28	M31	Z	1.038	1.038	0	%100
29	M32	X	1.798	1.798	0	%100
30	M32	Z	1.038	1.038	0	%100
31	M33	X	1.798	1.798	0	%100
32	M33	Z	1.038	1.038	0	%100
33	M34	X	6.047	6.047	0	%100
34	M34	Z	3.491	3.491	0	%100
35	M35A	X	6.047	6.047	0	%100
36	M35A	Z	3.491	3.491	0	%100
37	M36A	X	6.142	6.142	0	%100
38	M36A	Z	3.546	3.546	0	%100
39	M37	X	6.142	6.142	0	%100
40	M37	Z	3.546	3.546	0	%100
41	M29	X	11.075	11.075	0	%100
42	M29	Z	6.394	6.394	0	%100
43	M30A	X	11.075	11.075	0	%100
44	M30A	Z	6.394	6.394	0	%100
45	M31A	X	11.075	11.075	0	%100
46	M31A	Z	6.394	6.394	0	%100
47	M32A	X	11.075	11.075	0	%100
48	M32A	Z	6.394	6.394	0	%100
49	M34B	X	6.047	6.047	0	%100
50	M34B	Z	3.491	3.491	0	%100
51	M35B	X	6.047	6.047	0	%100
52	M35B	Z	3.491	3.491	0	%100
53	M36B	X	4.325	4.325	0	%100
54	M36B	Z	2.497	2.497	0	%100
55	M37A	X	4.325	4.325	0	%100
56	M37A	Z	2.497	2.497	0	%100
57	MP5A	X	9.003	9.003	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
58	MP5A	Z	5.198	5.198	0	%100
59	MP4A	X	9.003	9.003	0	%100
60	MP4A	Z	5.198	5.198	0	%100
61	MP3A	X	9.003	9.003	0	%100
62	MP3A	Z	5.198	5.198	0	%100
63	MP1A	X	9.003	9.003	0	%100
64	MP1A	Z	5.198	5.198	0	%100
65	MP2A	X	10.899	10.899	0	%100
66	MP2A	Z	6.292	6.292	0	%100
67	M52	X	11.369	11.369	0	%100
68	M52	Z	6.564	6.564	0	%100
69	M53	X	2.092	2.092	0	%100
70	M53	Z	1.208	1.208	0	%100
71	M54A	X	2.678	2.678	0	%100
72	M54A	Z	1.546	1.546	0	%100
73	M55	X	2.923	2.923	0	%100
74	M55	Z	1.687	1.687	0	%100
75	M54B	X	11.022	11.022	0	%100
76	M54B	Z	6.363	6.363	0	%100
77	M55A	X	5.486	5.486	0	%100
78	M55A	Z	3.167	3.167	0	%100
79	M56A	X	11.084	11.084	0	%100
80	M56A	Z	6.399	6.399	0	%100
81	M58	X	11.022	11.022	0	%100
82	M58	Z	6.364	6.364	0	%100
83	M59	X	10.253	10.253	0	%100
84	M59	Z	5.92	5.92	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M5	X	.762	.762	0	%100
2	M5	Z	1.319	1.319	0	%100
3	M6	X	.051	.051	0	%100
4	M6	Z	.089	.089	0	%100
5	M7	X	4.719	4.719	0	%100
6	M7	Z	8.174	8.174	0	%100
7	M8	X	.762	.762	0	%100
8	M8	Z	1.319	1.319	0	%100
9	M9	X	.051	.051	0	%100
10	M9	Z	.089	.089	0	%100
11	M10	X	4.719	4.719	0	%100
12	M10	Z	8.174	8.174	0	%100
13	M11	X	4.876	4.876	0	%100
14	M11	Z	8.445	8.445	0	%100
15	OVP	X	.375	.375	0	%100
16	OVP	Z	.649	.649	0	%100
17	M13	X	4.876	4.876	0	%100
18	M13	Z	8.445	8.445	0	%100
19	M14	X	.375	.375	0	%100
20	M14	Z	.649	.649	0	%100
21	M34A	X	1.15	1.15	0	%100
22	M34A	Z	1.992	1.992	0	%100
23	M36	X	3.167	3.167	0	%100
24	M36	Z	5.486	5.486	0	%100
25	M30	X	1.533	1.533	0	%100
26	M30	Z	2.655	2.655	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
27	M31	X	1.533	1.533	0	%100
28	M31	Z	2.655	2.655	0	%100
29	M32	X	1.533	1.533	0	%100
30	M32	Z	2.655	2.655	0	%100
31	M33	X	1.533	1.533	0	%100
32	M33	Z	2.655	2.655	0	%100
33	M34	X	3.491	3.491	0	%100
34	M34	Z	6.047	6.047	0	%100
35	M35A	X	3.491	3.491	0	%100
36	M35A	Z	6.047	6.047	0	%100
37	M36A	X	3.558	3.558	0	%100
38	M36A	Z	6.163	6.163	0	%100
39	M37	X	3.558	3.558	0	%100
40	M37	Z	6.163	6.163	0	%100
41	M29	X	5.899	5.899	0	%100
42	M29	Z	10.218	10.218	0	%100
43	M30A	X	5.899	5.899	0	%100
44	M30A	Z	10.218	10.218	0	%100
45	M31A	X	5.899	5.899	0	%100
46	M31A	Z	10.218	10.218	0	%100
47	M32A	X	5.899	5.899	0	%100
48	M32A	Z	10.218	10.218	0	%100
49	M34B	X	3.491	3.491	0	%100
50	M34B	Z	6.047	6.047	0	%100
51	M35B	X	3.491	3.491	0	%100
52	M35B	Z	6.047	6.047	0	%100
53	M36B	X	2.509	2.509	0	%100
54	M36B	Z	4.346	4.346	0	%100
55	M37A	X	2.509	2.509	0	%100
56	M37A	Z	4.346	4.346	0	%100
57	MP5A	X	5.198	5.198	0	%100
58	MP5A	Z	9.003	9.003	0	%100
59	MP4A	X	5.198	5.198	0	%100
60	MP4A	Z	9.003	9.003	0	%100
61	MP3A	X	5.198	5.198	0	%100
62	MP3A	Z	9.003	9.003	0	%100
63	MP1A	X	5.198	5.198	0	%100
64	MP1A	Z	9.003	9.003	0	%100
65	MP2A	X	6.292	6.292	0	%100
66	MP2A	Z	10.899	10.899	0	%100
67	M52	X	3.264	3.264	0	%100
68	M52	Z	5.654	5.654	0	%100
69	M53	X	1.687	1.687	0	%100
70	M53	Z	2.923	2.923	0	%100
71	M54A	X	1.15	1.15	0	%100
72	M54A	Z	1.992	1.992	0	%100
73	M55	X	1.208	1.208	0	%100
74	M55	Z	2.092	2.092	0	%100
75	M54B	X	5.967	5.967	0	%100
76	M54B	Z	10.336	10.336	0	%100
77	M55A	X	3.167	3.167	0	%100
78	M55A	Z	5.486	5.486	0	%100
79	M56A	X	5.92	5.92	0	%100
80	M56A	Z	10.253	10.253	0	%100
81	M58	X	5.967	5.967	0	%100
82	M58	Z	10.335	10.335	0	%100
83	M59	X	6.399	6.399	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
84	M59	Z	11.084	11.084	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M5	X	0	0	0	%100
2	M5	Z	.805	.805	0	%100
3	M6	X	0	0	0	%100
4	M6	Z	.805	.805	0	%100
5	M7	X	0	0	0	%100
6	M7	Z	12.585	12.585	0	%100
7	M8	X	0	0	0	%100
8	M8	Z	.805	.805	0	%100
9	M9	X	0	0	0	%100
10	M9	Z	.805	.805	0	%100
11	M10	X	0	0	0	%100
12	M10	Z	12.585	12.585	0	%100
13	M11	X	0	0	0	%100
14	M11	Z	5.303	5.303	0	%100
15	OVP	X	0	0	0	%100
16	OVP	Z	5.303	5.303	0	%100
17	M13	X	0	0	0	%100
18	M13	Z	5.303	5.303	0	%100
19	M14	X	0	0	0	%100
20	M14	Z	5.303	5.303	0	%100
21	M34A	X	0	0	0	%100
22	M34A	Z	6.721	6.721	0	%100
23	M36	X	0	0	0	%100
24	M36	Z	6.334	6.334	0	%100
25	M30	X	0	0	0	%100
26	M30	Z	8.422	8.422	0	%100
27	M31	X	0	0	0	%100
28	M31	Z	8.422	8.422	0	%100
29	M32	X	0	0	0	%100
30	M32	Z	8.422	8.422	0	%100
31	M33	X	0	0	0	%100
32	M33	Z	8.422	8.422	0	%100
33	M34	X	0	0	0	%100
34	M34	Z	6.983	6.983	0	%100
35	M35A	X	0	0	0	%100
36	M35A	Z	6.983	6.983	0	%100
37	M36A	X	0	0	0	%100
38	M36A	Z	6.079	6.079	0	%100
39	M37	X	0	0	0	%100
40	M37	Z	6.079	6.079	0	%100
41	M29	X	0	0	0	%100
42	M29	Z	6.443	6.443	0	%100
43	M30A	X	0	0	0	%100
44	M30A	Z	6.443	6.443	0	%100
45	M31A	X	0	0	0	%100
46	M31A	Z	6.443	6.443	0	%100
47	M32A	X	0	0	0	%100
48	M32A	Z	6.443	6.443	0	%100
49	M34B	X	0	0	0	%100
50	M34B	Z	6.983	6.983	0	%100
51	M35B	X	0	0	0	%100
52	M35B	Z	6.983	6.983	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
53	M36B	X	0	0	0	%100
54	M36B	Z	6.079	6.079	0	%100
55	M37A	X	0	0	0	%100
56	M37A	Z	6.079	6.079	0	%100
57	MP5A	X	0	0	0	%100
58	MP5A	Z	10.396	10.396	0	%100
59	MP4A	X	0	0	0	%100
60	MP4A	Z	10.396	10.396	0	%100
61	MP3A	X	0	0	0	%100
62	MP3A	Z	10.396	10.396	0	%100
63	MP1A	X	0	0	0	%100
64	MP1A	Z	10.396	10.396	0	%100
65	MP2A	X	0	0	0	%100
66	MP2A	Z	12.585	12.585	0	%100
67	M52	X	0	0	0	%100
68	M52	Z	.644	.644	0	%100
69	M53	X	0	0	0	%100
70	M53	Z	8.567	8.567	0	%100
71	M54A	X	0	0	0	%100
72	M54A	Z	6.721	6.721	0	%100
73	M55	X	0	0	0	%100
74	M55	Z	6.648	6.648	0	%100
75	M54B	X	0	0	0	%100
76	M54B	Z	6.721	6.721	0	%100
77	M55A	X	0	0	0	%100
78	M55A	Z	6.334	6.334	0	%100
79	M56A	X	0	0	0	%100
80	M56A	Z	6.648	6.648	0	%100
81	M58	X	0	0	0	%100
82	M58	Z	6.72	6.72	0	%100
83	M59	X	0	0	0	%100
84	M59	Z	8.567	8.567	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M5	X	-.051	-.051	0	%100
2	M5	Z	.089	.089	0	%100
3	M6	X	-.762	-.762	0	%100
4	M6	Z	1.319	1.319	0	%100
5	M7	X	-4.719	-4.719	0	%100
6	M7	Z	8.174	8.174	0	%100
7	M8	X	-.051	-.051	0	%100
8	M8	Z	.089	.089	0	%100
9	M9	X	-.762	-.762	0	%100
10	M9	Z	1.319	1.319	0	%100
11	M10	X	-4.719	-4.719	0	%100
12	M10	Z	8.174	8.174	0	%100
13	M11	X	-.375	-.375	0	%100
14	M11	Z	.649	.649	0	%100
15	OVP	X	-4.876	-4.876	0	%100
16	OVP	Z	8.445	8.445	0	%100
17	M13	X	-.375	-.375	0	%100
18	M13	Z	.649	.649	0	%100
19	M14	X	-4.876	-4.876	0	%100
20	M14	Z	8.445	8.445	0	%100
21	M34A	X	-5.967	-5.967	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
22	M34A	Z	10.336	10.336	0 %100
23	M36	X	-3.167	-3.167	0 %100
24	M36	Z	5.486	5.486	0 %100
25	M30	X	-6.394	-6.394	0 %100
26	M30	Z	11.075	11.075	0 %100
27	M31	X	-6.394	-6.394	0 %100
28	M31	Z	11.075	11.075	0 %100
29	M32	X	-6.394	-6.394	0 %100
30	M32	Z	11.075	11.075	0 %100
31	M33	X	-6.394	-6.394	0 %100
32	M33	Z	11.075	11.075	0 %100
33	M34	X	-3.491	-3.491	0 %100
34	M34	Z	6.047	6.047	0 %100
35	M35A	X	-3.491	-3.491	0 %100
36	M35A	Z	6.047	6.047	0 %100
37	M36A	X	-2.509	-2.509	0 %100
38	M36A	Z	4.346	4.346	0 %100
39	M37	X	-2.509	-2.509	0 %100
40	M37	Z	4.346	4.346	0 %100
41	M29	X	-1.038	-1.038	0 %100
42	M29	Z	1.798	1.798	0 %100
43	M30A	X	-1.038	-1.038	0 %100
44	M30A	Z	1.798	1.798	0 %100
45	M31A	X	-1.038	-1.038	0 %100
46	M31A	Z	1.798	1.798	0 %100
47	M32A	X	-1.038	-1.038	0 %100
48	M32A	Z	1.798	1.798	0 %100
49	M34B	X	-3.491	-3.491	0 %100
50	M34B	Z	6.047	6.047	0 %100
51	M35B	X	-3.491	-3.491	0 %100
52	M35B	Z	6.047	6.047	0 %100
53	M36B	X	-3.558	-3.558	0 %100
54	M36B	Z	6.163	6.163	0 %100
55	M37A	X	-3.558	-3.558	0 %100
56	M37A	Z	6.163	6.163	0 %100
57	MP5A	X	-5.198	-5.198	0 %100
58	MP5A	Z	9.003	9.003	0 %100
59	MP4A	X	-5.198	-5.198	0 %100
60	MP4A	Z	9.003	9.003	0 %100
61	MP3A	X	-5.198	-5.198	0 %100
62	MP3A	Z	9.003	9.003	0 %100
63	MP1A	X	-5.198	-5.198	0 %100
64	MP1A	Z	9.003	9.003	0 %100
65	MP2A	X	-6.292	-6.292	0 %100
66	MP2A	Z	10.899	10.899	0 %100
67	M52	X	-.679	-.679	0 %100
68	M52	Z	1.176	1.176	0 %100
69	M53	X	-6.399	-6.399	0 %100
70	M53	Z	11.084	11.084	0 %100
71	M54A	X	-5.967	-5.967	0 %100
72	M54A	Z	10.336	10.336	0 %100
73	M55	X	-5.92	-5.92	0 %100
74	M55	Z	10.253	10.253	0 %100
75	M54B	X	-1.15	-1.15	0 %100
76	M54B	Z	1.992	1.992	0 %100
77	M55A	X	-3.167	-3.167	0 %100
78	M55A	Z	5.486	5.486	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
79	M56A	X	-1.208	-1.208	0	%100
80	M56A	Z	2.092	2.092	0	%100
81	M58	X	-1.15	-1.15	0	%100
82	M58	Z	1.991	1.991	0	%100
83	M59	X	-1.687	-1.687	0	%100
84	M59	Z	2.923	2.923	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M5	X	-.102	-.102	0	%100
2	M5	Z	.059	.059	0	%100
3	M6	X	-1.333	-1.333	0	%100
4	M6	Z	.77	.77	0	%100
5	M7	X	-2.725	-2.725	0	%100
6	M7	Z	1.573	1.573	0	%100
7	M8	X	-.102	-.102	0	%100
8	M8	Z	.059	.059	0	%100
9	M9	X	-1.333	-1.333	0	%100
10	M9	Z	.77	.77	0	%100
11	M10	X	-2.725	-2.725	0	%100
12	M10	Z	1.573	1.573	0	%100
13	M11	X	-.558	-.558	0	%100
14	M11	Z	.322	.322	0	%100
15	OVP	X	-8.354	-8.354	0	%100
16	OVP	Z	4.823	4.823	0	%100
17	M13	X	-.558	-.558	0	%100
18	M13	Z	.322	.322	0	%100
19	M14	X	-8.354	-8.354	0	%100
20	M14	Z	4.823	4.823	0	%100
21	M34A	X	-11.022	-11.022	0	%100
22	M34A	Z	6.363	6.363	0	%100
23	M36	X	-5.486	-5.486	0	%100
24	M36	Z	3.167	3.167	0	%100
25	M30	X	-10.218	-10.218	0	%100
26	M30	Z	5.899	5.899	0	%100
27	M31	X	-10.218	-10.218	0	%100
28	M31	Z	5.899	5.899	0	%100
29	M32	X	-10.218	-10.218	0	%100
30	M32	Z	5.899	5.899	0	%100
31	M33	X	-10.218	-10.218	0	%100
32	M33	Z	5.899	5.899	0	%100
33	M34	X	-6.047	-6.047	0	%100
34	M34	Z	3.491	3.491	0	%100
35	M35A	X	-6.047	-6.047	0	%100
36	M35A	Z	3.491	3.491	0	%100
37	M36A	X	-4.325	-4.325	0	%100
38	M36A	Z	2.497	2.497	0	%100
39	M37	X	-4.325	-4.325	0	%100
40	M37	Z	2.497	2.497	0	%100
41	M29	X	-2.655	-2.655	0	%100
42	M29	Z	1.533	1.533	0	%100
43	M30A	X	-2.655	-2.655	0	%100
44	M30A	Z	1.533	1.533	0	%100
45	M31A	X	-2.655	-2.655	0	%100
46	M31A	Z	1.533	1.533	0	%100
47	M32A	X	-2.655	-2.655	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
48	M32A	Z	1.533	1.533	0	%100
49	M34B	X	-6.047	-6.047	0	%100
50	M34B	Z	3.491	3.491	0	%100
51	M35B	X	-6.047	-6.047	0	%100
52	M35B	Z	3.491	3.491	0	%100
53	M36B	X	-6.142	-6.142	0	%100
54	M36B	Z	3.546	3.546	0	%100
55	M37A	X	-6.142	-6.142	0	%100
56	M37A	Z	3.546	3.546	0	%100
57	MP5A	X	-9.003	-9.003	0	%100
58	MP5A	Z	5.198	5.198	0	%100
59	MP4A	X	-9.003	-9.003	0	%100
60	MP4A	Z	5.198	5.198	0	%100
61	MP3A	X	-9.003	-9.003	0	%100
62	MP3A	Z	5.198	5.198	0	%100
63	MP1A	X	-9.003	-9.003	0	%100
64	MP1A	Z	5.198	5.198	0	%100
65	MP2A	X	-10.899	-10.899	0	%100
66	MP2A	Z	6.292	6.292	0	%100
67	M52	X	-6.891	-6.891	0	%100
68	M52	Z	3.979	3.979	0	%100
69	M53	X	-10.253	-10.253	0	%100
70	M53	Z	5.92	5.92	0	%100
71	M54A	X	-11.022	-11.022	0	%100
72	M54A	Z	6.363	6.363	0	%100
73	M55	X	-11.084	-11.084	0	%100
74	M55	Z	6.399	6.399	0	%100
75	M54B	X	-2.678	-2.678	0	%100
76	M54B	Z	1.546	1.546	0	%100
77	M55A	X	-5.486	-5.486	0	%100
78	M55A	Z	3.167	3.167	0	%100
79	M56A	X	-2.923	-2.923	0	%100
80	M56A	Z	1.687	1.687	0	%100
81	M58	X	-2.679	-2.679	0	%100
82	M58	Z	1.547	1.547	0	%100
83	M59	X	-2.092	-2.092	0	%100
84	M59	Z	1.208	1.208	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M5	X	-.836	-.836	0	%100
2	M5	Z	0	0	0	%100
3	M6	X	-.836	-.836	0	%100
4	M6	Z	0	0	0	%100
5	M7	X	0	0	0	%100
6	M7	Z	0	0	0	%100
7	M8	X	-.836	-.836	0	%100
8	M8	Z	0	0	0	%100
9	M9	X	-.836	-.836	0	%100
10	M9	Z	0	0	0	%100
11	M10	X	0	0	0	%100
12	M10	Z	0	0	0	%100
13	M11	X	-5.093	-5.093	0	%100
14	M11	Z	0	0	0	%100
15	OVP	X	-5.093	-5.093	0	%100
16	OVP	Z	0	0	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
17	M13	X	-5.093	-5.093	0 %100
18	M13	Z	0	0	0 %100
19	M14	X	-5.093	-5.093	0 %100
20	M14	Z	0	0	0 %100
21	M34A	X	-8.306	-8.306	0 %100
22	M34A	Z	0	0	0 %100
23	M36	X	-6.334	-6.334	0 %100
24	M36	Z	0	0	0 %100
25	M30	X	-6.443	-6.443	0 %100
26	M30	Z	0	0	0 %100
27	M31	X	-6.443	-6.443	0 %100
28	M31	Z	0	0	0 %100
29	M32	X	-6.443	-6.443	0 %100
30	M32	Z	0	0	0 %100
31	M33	X	-6.443	-6.443	0 %100
32	M33	Z	0	0	0 %100
33	M34	X	-6.983	-6.983	0 %100
34	M34	Z	0	0	0 %100
35	M35A	X	-6.983	-6.983	0 %100
36	M35A	Z	0	0	0 %100
37	M36A	X	-6.03	-6.03	0 %100
38	M36A	Z	0	0	0 %100
39	M37	X	-6.03	-6.03	0 %100
40	M37	Z	0	0	0 %100
41	M29	X	-8.422	-8.422	0 %100
42	M29	Z	0	0	0 %100
43	M30A	X	-8.422	-8.422	0 %100
44	M30A	Z	0	0	0 %100
45	M31A	X	-8.422	-8.422	0 %100
46	M31A	Z	0	0	0 %100
47	M32A	X	-8.422	-8.422	0 %100
48	M32A	Z	0	0	0 %100
49	M34B	X	-6.983	-6.983	0 %100
50	M34B	Z	0	0	0 %100
51	M35B	X	-6.983	-6.983	0 %100
52	M35B	Z	0	0	0 %100
53	M36B	X	-6.03	-6.03	0 %100
54	M36B	Z	0	0	0 %100
55	M37A	X	-6.03	-6.03	0 %100
56	M37A	Z	0	0	0 %100
57	MP5A	X	-10.396	-10.396	0 %100
58	MP5A	Z	0	0	0 %100
59	MP4A	X	-10.396	-10.396	0 %100
60	MP4A	Z	0	0	0 %100
61	MP3A	X	-10.396	-10.396	0 %100
62	MP3A	Z	0	0	0 %100
63	MP1A	X	-10.396	-10.396	0 %100
64	MP1A	Z	0	0	0 %100
65	MP2A	X	-12.585	-12.585	0 %100
66	MP2A	Z	0	0	0 %100
67	M52	X	-13.842	-13.842	0 %100
68	M52	Z	0	0	0 %100
69	M53	X	-6.648	-6.648	0 %100
70	M53	Z	0	0	0 %100
71	M54A	X	-8.306	-8.306	0 %100
72	M54A	Z	0	0	0 %100
73	M55	X	-8.567	-8.567	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
74	M55	Z	0	0	0	%100
75	M54B	X	-8.306	-8.306	0	%100
76	M54B	Z	0	0	0	%100
77	M55A	X	-6.334	-6.334	0	%100
78	M55A	Z	0	0	0	%100
79	M56A	X	-8.567	-8.567	0	%100
80	M56A	Z	0	0	0	%100
81	M58	X	-8.307	-8.307	0	%100
82	M58	Z	0	0	0	%100
83	M59	X	-6.648	-6.648	0	%100
84	M59	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M5	X	-1.333	-1.333	0	%100
2	M5	Z	-.77	-.77	0	%100
3	M6	X	-.102	-.102	0	%100
4	M6	Z	-.059	-.059	0	%100
5	M7	X	-2.725	-2.725	0	%100
6	M7	Z	-1.573	-1.573	0	%100
7	M8	X	-1.333	-1.333	0	%100
8	M8	Z	-.77	-.77	0	%100
9	M9	X	-.102	-.102	0	%100
10	M9	Z	-.059	-.059	0	%100
11	M10	X	-2.725	-2.725	0	%100
12	M10	Z	-1.573	-1.573	0	%100
13	M11	X	-8.354	-8.354	0	%100
14	M11	Z	-4.823	-4.823	0	%100
15	OVP	X	-.558	-.558	0	%100
16	OVP	Z	-.322	-.322	0	%100
17	M13	X	-8.354	-8.354	0	%100
18	M13	Z	-4.823	-4.823	0	%100
19	M14	X	-.558	-.558	0	%100
20	M14	Z	-.322	-.322	0	%100
21	M34A	X	-2.678	-2.678	0	%100
22	M34A	Z	-1.546	-1.546	0	%100
23	M36	X	-5.486	-5.486	0	%100
24	M36	Z	-3.167	-3.167	0	%100
25	M30	X	-1.798	-1.798	0	%100
26	M30	Z	-1.038	-1.038	0	%100
27	M31	X	-1.798	-1.798	0	%100
28	M31	Z	-1.038	-1.038	0	%100
29	M32	X	-1.798	-1.798	0	%100
30	M32	Z	-1.038	-1.038	0	%100
31	M33	X	-1.798	-1.798	0	%100
32	M33	Z	-1.038	-1.038	0	%100
33	M34	X	-6.047	-6.047	0	%100
34	M34	Z	-3.491	-3.491	0	%100
35	M35A	X	-6.047	-6.047	0	%100
36	M35A	Z	-3.491	-3.491	0	%100
37	M36A	X	-6.142	-6.142	0	%100
38	M36A	Z	-3.546	-3.546	0	%100
39	M37	X	-6.142	-6.142	0	%100
40	M37	Z	-3.546	-3.546	0	%100
41	M29	X	-11.075	-11.075	0	%100
42	M29	Z	-6.394	-6.394	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
43	M30A	X	-11.075	-11.075	0	%100
44	M30A	Z	-6.394	-6.394	0	%100
45	M31A	X	-11.075	-11.075	0	%100
46	M31A	Z	-6.394	-6.394	0	%100
47	M32A	X	-11.075	-11.075	0	%100
48	M32A	Z	-6.394	-6.394	0	%100
49	M34B	X	-6.047	-6.047	0	%100
50	M34B	Z	-3.491	-3.491	0	%100
51	M35B	X	-6.047	-6.047	0	%100
52	M35B	Z	-3.491	-3.491	0	%100
53	M36B	X	-4.325	-4.325	0	%100
54	M36B	Z	-2.497	-2.497	0	%100
55	M37A	X	-4.325	-4.325	0	%100
56	M37A	Z	-2.497	-2.497	0	%100
57	MP5A	X	-9.003	-9.003	0	%100
58	MP5A	Z	-5.198	-5.198	0	%100
59	MP4A	X	-9.003	-9.003	0	%100
60	MP4A	Z	-5.198	-5.198	0	%100
61	MP3A	X	-9.003	-9.003	0	%100
62	MP3A	Z	-5.198	-5.198	0	%100
63	MP1A	X	-9.003	-9.003	0	%100
64	MP1A	Z	-5.198	-5.198	0	%100
65	MP2A	X	-10.899	-10.899	0	%100
66	MP2A	Z	-6.292	-6.292	0	%100
67	M52	X	-11.369	-11.369	0	%100
68	M52	Z	-6.564	-6.564	0	%100
69	M53	X	-2.092	-2.092	0	%100
70	M53	Z	-1.208	-1.208	0	%100
71	M54A	X	-2.678	-2.678	0	%100
72	M54A	Z	-1.546	-1.546	0	%100
73	M55	X	-2.923	-2.923	0	%100
74	M55	Z	-1.687	-1.687	0	%100
75	M54B	X	-11.022	-11.022	0	%100
76	M54B	Z	-6.363	-6.363	0	%100
77	M55A	X	-5.486	-5.486	0	%100
78	M55A	Z	-3.167	-3.167	0	%100
79	M56A	X	-11.084	-11.084	0	%100
80	M56A	Z	-6.399	-6.399	0	%100
81	M58	X	-11.022	-11.022	0	%100
82	M58	Z	-6.364	-6.364	0	%100
83	M59	X	-10.253	-10.253	0	%100
84	M59	Z	-5.92	-5.92	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M5	X	-0.762	-0.762	0	%100
2	M5	Z	-1.319	-1.319	0	%100
3	M6	X	-0.051	-0.051	0	%100
4	M6	Z	-0.089	-0.089	0	%100
5	M7	X	-4.719	-4.719	0	%100
6	M7	Z	-8.174	-8.174	0	%100
7	M8	X	-0.762	-0.762	0	%100
8	M8	Z	-1.319	-1.319	0	%100
9	M9	X	-0.051	-0.051	0	%100
10	M9	Z	-0.089	-0.089	0	%100
11	M10	X	-4.719	-4.719	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
12	M10	Z	-8.174	-8.174	0 %100
13	M11	X	-4.876	-4.876	0 %100
14	M11	Z	-8.445	-8.445	0 %100
15	OVP	X	-.375	-.375	0 %100
16	OVP	Z	-.649	-.649	0 %100
17	M13	X	-4.876	-4.876	0 %100
18	M13	Z	-8.445	-8.445	0 %100
19	M14	X	-.375	-.375	0 %100
20	M14	Z	-.649	-.649	0 %100
21	M34A	X	-1.15	-1.15	0 %100
22	M34A	Z	-1.992	-1.992	0 %100
23	M36	X	-3.167	-3.167	0 %100
24	M36	Z	-5.486	-5.486	0 %100
25	M30	X	-1.533	-1.533	0 %100
26	M30	Z	-2.655	-2.655	0 %100
27	M31	X	-1.533	-1.533	0 %100
28	M31	Z	-2.655	-2.655	0 %100
29	M32	X	-1.533	-1.533	0 %100
30	M32	Z	-2.655	-2.655	0 %100
31	M33	X	-1.533	-1.533	0 %100
32	M33	Z	-2.655	-2.655	0 %100
33	M34	X	-3.491	-3.491	0 %100
34	M34	Z	-6.047	-6.047	0 %100
35	M35A	X	-3.491	-3.491	0 %100
36	M35A	Z	-6.047	-6.047	0 %100
37	M36A	X	-3.558	-3.558	0 %100
38	M36A	Z	-6.163	-6.163	0 %100
39	M37	X	-3.558	-3.558	0 %100
40	M37	Z	-6.163	-6.163	0 %100
41	M29	X	-5.899	-5.899	0 %100
42	M29	Z	-10.218	-10.218	0 %100
43	M30A	X	-5.899	-5.899	0 %100
44	M30A	Z	-10.218	-10.218	0 %100
45	M31A	X	-5.899	-5.899	0 %100
46	M31A	Z	-10.218	-10.218	0 %100
47	M32A	X	-5.899	-5.899	0 %100
48	M32A	Z	-10.218	-10.218	0 %100
49	M34B	X	-3.491	-3.491	0 %100
50	M34B	Z	-6.047	-6.047	0 %100
51	M35B	X	-3.491	-3.491	0 %100
52	M35B	Z	-6.047	-6.047	0 %100
53	M36B	X	-2.509	-2.509	0 %100
54	M36B	Z	-4.346	-4.346	0 %100
55	M37A	X	-2.509	-2.509	0 %100
56	M37A	Z	-4.346	-4.346	0 %100
57	MP5A	X	-5.198	-5.198	0 %100
58	MP5A	Z	-9.003	-9.003	0 %100
59	MP4A	X	-5.198	-5.198	0 %100
60	MP4A	Z	-9.003	-9.003	0 %100
61	MP3A	X	-5.198	-5.198	0 %100
62	MP3A	Z	-9.003	-9.003	0 %100
63	MP1A	X	-5.198	-5.198	0 %100
64	MP1A	Z	-9.003	-9.003	0 %100
65	MP2A	X	-6.292	-6.292	0 %100
66	MP2A	Z	-10.899	-10.899	0 %100
67	M52	X	-3.264	-3.264	0 %100
68	M52	Z	-5.654	-5.654	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
69	M53	X	-1.687	-1.687	0	%100
70	M53	Z	-2.923	-2.923	0	%100
71	M54A	X	-1.15	-1.15	0	%100
72	M54A	Z	-1.992	-1.992	0	%100
73	M55	X	-1.208	-1.208	0	%100
74	M55	Z	-2.092	-2.092	0	%100
75	M54B	X	-5.967	-5.967	0	%100
76	M54B	Z	-10.336	-10.336	0	%100
77	M55A	X	-3.167	-3.167	0	%100
78	M55A	Z	-5.486	-5.486	0	%100
79	M56A	X	-5.92	-5.92	0	%100
80	M56A	Z	-10.253	-10.253	0	%100
81	M58	X	-5.967	-5.967	0	%100
82	M58	Z	-10.335	-10.335	0	%100
83	M59	X	-6.399	-6.399	0	%100
84	M59	Z	-11.084	-11.084	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M5	X	0	0	0	%100
2	M5	Z	-.654	-.654	0	%100
3	M6	X	0	0	0	%100
4	M6	Z	-.654	-.654	0	%100
5	M7	X	0	0	0	%100
6	M7	Z	-3.982	-3.982	0	%100
7	M8	X	0	0	0	%100
8	M8	Z	-.654	-.654	0	%100
9	M9	X	0	0	0	%100
10	M9	Z	-.654	-.654	0	%100
11	M10	X	0	0	0	%100
12	M10	Z	-3.982	-3.982	0	%100
13	M11	X	0	0	0	%100
14	M11	Z	-1.838	-1.838	0	%100
15	OVP	X	0	0	0	%100
16	OVP	Z	-1.838	-1.838	0	%100
17	M13	X	0	0	0	%100
18	M13	Z	-1.838	-1.838	0	%100
19	M14	X	0	0	0	%100
20	M14	Z	-1.838	-1.838	0	%100
21	M34A	X	0	0	0	%100
22	M34A	Z	-2.215	-2.215	0	%100
23	M36	X	0	0	0	%100
24	M36	Z	-2.487	-2.487	0	%100
25	M30	X	0	0	0	%100
26	M30	Z	-2.511	-2.511	0	%100
27	M31	X	0	0	0	%100
28	M31	Z	-2.511	-2.511	0	%100
29	M32	X	0	0	0	%100
30	M32	Z	-2.511	-2.511	0	%100
31	M33	X	0	0	0	%100
32	M33	Z	-2.511	-2.511	0	%100
33	M34	X	0	0	0	%100
34	M34	Z	-2.712	-2.712	0	%100
35	M35A	X	0	0	0	%100
36	M35A	Z	-2.712	-2.712	0	%100
37	M36A	X	0	0	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
7	M8	X	.042	.042	0 %100
8	M8	Z	-.072	-.072	0 %100
9	M9	X	.619	.619	0 %100
10	M9	Z	-1.072	-1.072	0 %100
11	M10	X	1.493	1.493	0 %100
12	M10	Z	-2.587	-2.587	0 %100
13	M11	X	.13	.13	0 %100
14	M11	Z	-.225	-.225	0 %100
15	OVP	X	1.689	1.689	0 %100
16	OVP	Z	-2.926	-2.926	0 %100
17	M13	X	.13	.13	0 %100
18	M13	Z	-.225	-.225	0 %100
19	M14	X	1.689	1.689	0 %100
20	M14	Z	-2.926	-2.926	0 %100
21	M34A	X	1.56	1.56	0 %100
22	M34A	Z	-2.702	-2.702	0 %100
23	M36	X	1.244	1.244	0 %100
24	M36	Z	-2.154	-2.154	0 %100
25	M30	X	1.634	1.634	0 %100
26	M30	Z	-2.831	-2.831	0 %100
27	M31	X	1.634	1.634	0 %100
28	M31	Z	-2.831	-2.831	0 %100
29	M32	X	1.634	1.634	0 %100
30	M32	Z	-2.831	-2.831	0 %100
31	M33	X	1.634	1.634	0 %100
32	M33	Z	-2.831	-2.831	0 %100
33	M34	X	1.356	1.356	0 %100
34	M34	Z	-2.349	-2.349	0 %100
35	M35A	X	1.356	1.356	0 %100
36	M35A	Z	-2.349	-2.349	0 %100
37	M36A	X	1.013	1.013	0 %100
38	M36A	Z	-1.754	-1.754	0 %100
39	M37	X	1.013	1.013	0 %100
40	M37	Z	-1.754	-1.754	0 %100
41	M29	X	.704	.704	0 %100
42	M29	Z	-1.22	-1.22	0 %100
43	M30A	X	.704	.704	0 %100
44	M30A	Z	-1.22	-1.22	0 %100
45	M31A	X	.704	.704	0 %100
46	M31A	Z	-1.22	-1.22	0 %100
47	M32A	X	.704	.704	0 %100
48	M32A	Z	-1.22	-1.22	0 %100
49	M34B	X	1.356	1.356	0 %100
50	M34B	Z	-2.349	-2.349	0 %100
51	M35B	X	1.356	1.356	0 %100
52	M35B	Z	-2.349	-2.349	0 %100
53	M36B	X	1.436	1.436	0 %100
54	M36B	Z	-2.488	-2.488	0 %100
55	M37A	X	1.436	1.436	0 %100
56	M37A	Z	-2.488	-2.488	0 %100
57	MP5A	X	1.801	1.801	0 %100
58	MP5A	Z	-3.12	-3.12	0 %100
59	MP4A	X	1.801	1.801	0 %100
60	MP4A	Z	-3.12	-3.12	0 %100
61	MP3A	X	1.801	1.801	0 %100
62	MP3A	Z	-3.12	-3.12	0 %100
63	MP1A	X	1.801	1.801	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
64	MP1A	Z	-3.12	-3.12	0	%100
65	MP2A	X	1.991	1.991	0	%100
66	MP2A	Z	-3.449	-3.449	0	%100
67	M52	X	.209	.209	0	%100
68	M52	Z	-.362	-.362	0	%100
69	M53	X	1.635	1.635	0	%100
70	M53	Z	-2.832	-2.832	0	%100
71	M54A	X	1.56	1.56	0	%100
72	M54A	Z	-2.702	-2.702	0	%100
73	M55	X	1.552	1.552	0	%100
74	M55	Z	-2.688	-2.688	0	%100
75	M54B	X	.724	.724	0	%100
76	M54B	Z	-1.254	-1.254	0	%100
77	M55A	X	1.244	1.244	0	%100
78	M55A	Z	-2.154	-2.154	0	%100
79	M56A	X	.734	.734	0	%100
80	M56A	Z	-1.271	-1.271	0	%100
81	M58	X	.724	.724	0	%100
82	M58	Z	-1.254	-1.254	0	%100
83	M59	X	.817	.817	0	%100
84	M59	Z	-1.415	-1.415	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M5	X	.083	.083	0	%100
2	M5	Z	-.048	-.048	0	%100
3	M6	X	1.083	1.083	0	%100
4	M6	Z	-.625	-.625	0	%100
5	M7	X	.862	.862	0	%100
6	M7	Z	-.498	-.498	0	%100
7	M8	X	.083	.083	0	%100
8	M8	Z	-.048	-.048	0	%100
9	M9	X	1.083	1.083	0	%100
10	M9	Z	-.625	-.625	0	%100
11	M10	X	.862	.862	0	%100
12	M10	Z	-.498	-.498	0	%100
13	M11	X	.193	.193	0	%100
14	M11	Z	-.112	-.112	0	%100
15	OVP	X	2.895	2.895	0	%100
16	OVP	Z	-1.671	-1.671	0	%100
17	M13	X	.193	.193	0	%100
18	M13	Z	-.112	-.112	0	%100
19	M14	X	2.895	2.895	0	%100
20	M14	Z	-1.671	-1.671	0	%100
21	M34A	X	2.822	2.822	0	%100
22	M34A	Z	-1.629	-1.629	0	%100
23	M36	X	2.154	2.154	0	%100
24	M36	Z	-1.244	-1.244	0	%100
25	M30	X	2.682	2.682	0	%100
26	M30	Z	-1.548	-1.548	0	%100
27	M31	X	2.682	2.682	0	%100
28	M31	Z	-1.548	-1.548	0	%100
29	M32	X	2.682	2.682	0	%100
30	M32	Z	-1.548	-1.548	0	%100
31	M33	X	2.682	2.682	0	%100
32	M33	Z	-1.548	-1.548	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
33	M34	X	2.349	2.349	0	%100
34	M34	Z	-1.356	-1.356	0	%100
35	M35A	X	2.349	2.349	0	%100
36	M35A	Z	-1.356	-1.356	0	%100
37	M36A	X	1.746	1.746	0	%100
38	M36A	Z	-1.008	-1.008	0	%100
39	M37	X	1.746	1.746	0	%100
40	M37	Z	-1.008	-1.008	0	%100
41	M29	X	1.369	1.369	0	%100
42	M29	Z	-.79	-.79	0	%100
43	M30A	X	1.369	1.369	0	%100
44	M30A	Z	-.79	-.79	0	%100
45	M31A	X	1.369	1.369	0	%100
46	M31A	Z	-.79	-.79	0	%100
47	M32A	X	1.369	1.369	0	%100
48	M32A	Z	-.79	-.79	0	%100
49	M34B	X	2.349	2.349	0	%100
50	M34B	Z	-1.356	-1.356	0	%100
51	M35B	X	2.349	2.349	0	%100
52	M35B	Z	-1.356	-1.356	0	%100
53	M36B	X	2.479	2.479	0	%100
54	M36B	Z	-1.431	-1.431	0	%100
55	M37A	X	2.479	2.479	0	%100
56	M37A	Z	-1.431	-1.431	0	%100
57	MP5A	X	3.12	3.12	0	%100
58	MP5A	Z	-1.801	-1.801	0	%100
59	MP4A	X	3.12	3.12	0	%100
60	MP4A	Z	-1.801	-1.801	0	%100
61	MP3A	X	3.12	3.12	0	%100
62	MP3A	Z	-1.801	-1.801	0	%100
63	MP1A	X	3.12	3.12	0	%100
64	MP1A	Z	-1.801	-1.801	0	%100
65	MP2A	X	3.449	3.449	0	%100
66	MP2A	Z	-1.991	-1.991	0	%100
67	M52	X	2.12	2.12	0	%100
68	M52	Z	-1.224	-1.224	0	%100
69	M53	X	2.688	2.688	0	%100
70	M53	Z	-1.552	-1.552	0	%100
71	M54A	X	2.822	2.822	0	%100
72	M54A	Z	-1.629	-1.629	0	%100
73	M55	X	2.832	2.832	0	%100
74	M55	Z	-1.635	-1.635	0	%100
75	M54B	X	1.373	1.373	0	%100
76	M54B	Z	-.793	-.793	0	%100
77	M55A	X	2.154	2.154	0	%100
78	M55A	Z	-1.244	-1.244	0	%100
79	M56A	X	1.415	1.415	0	%100
80	M56A	Z	-.817	-.817	0	%100
81	M58	X	1.373	1.373	0	%100
82	M58	Z	-.793	-.793	0	%100
83	M59	X	1.271	1.271	0	%100
84	M59	Z	-.734	-.734	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M5	X	.679	.679	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
2	M5	Z	0	0	0	%100
3	M6	X	.679	.679	0	%100
4	M6	Z	0	0	0	%100
5	M7	X	0	0	0	%100
6	M7	Z	0	0	0	%100
7	M8	X	.679	.679	0	%100
8	M8	Z	0	0	0	%100
9	M9	X	.679	.679	0	%100
10	M9	Z	0	0	0	%100
11	M10	X	0	0	0	%100
12	M10	Z	0	0	0	%100
13	M11	X	1.765	1.765	0	%100
14	M11	Z	0	0	0	%100
15	OVP	X	1.765	1.765	0	%100
16	OVP	Z	0	0	0	%100
17	M13	X	1.765	1.765	0	%100
18	M13	Z	0	0	0	%100
19	M14	X	1.765	1.765	0	%100
20	M14	Z	0	0	0	%100
21	M34A	X	2.49	2.49	0	%100
22	M34A	Z	0	0	0	%100
23	M36	X	2.487	2.487	0	%100
24	M36	Z	0	0	0	%100
25	M30	X	2.167	2.167	0	%100
26	M30	Z	0	0	0	%100
27	M31	X	2.167	2.167	0	%100
28	M31	Z	0	0	0	%100
29	M32	X	2.167	2.167	0	%100
30	M32	Z	0	0	0	%100
31	M33	X	2.167	2.167	0	%100
32	M33	Z	0	0	0	%100
33	M34	X	2.712	2.712	0	%100
34	M34	Z	0	0	0	%100
35	M35A	X	2.712	2.712	0	%100
36	M35A	Z	0	0	0	%100
37	M36A	X	2.435	2.435	0	%100
38	M36A	Z	0	0	0	%100
39	M37	X	2.435	2.435	0	%100
40	M37	Z	0	0	0	%100
41	M29	X	2.511	2.511	0	%100
42	M29	Z	0	0	0	%100
43	M30A	X	2.511	2.511	0	%100
44	M30A	Z	0	0	0	%100
45	M31A	X	2.511	2.511	0	%100
46	M31A	Z	0	0	0	%100
47	M32A	X	2.511	2.511	0	%100
48	M32A	Z	0	0	0	%100
49	M34B	X	2.712	2.712	0	%100
50	M34B	Z	0	0	0	%100
51	M35B	X	2.712	2.712	0	%100
52	M35B	Z	0	0	0	%100
53	M36B	X	2.435	2.435	0	%100
54	M36B	Z	0	0	0	%100
55	M37A	X	2.435	2.435	0	%100
56	M37A	Z	0	0	0	%100
57	MP5A	X	3.602	3.602	0	%100
58	MP5A	Z	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
59	MP4A	X	3.602	3.602	0	%100
60	MP4A	Z	0	0	0	%100
61	MP3A	X	3.602	3.602	0	%100
62	MP3A	Z	0	0	0	%100
63	MP1A	X	3.602	3.602	0	%100
64	MP1A	Z	0	0	0	%100
65	MP2A	X	3.982	3.982	0	%100
66	MP2A	Z	0	0	0	%100
67	M52	X	4.259	4.259	0	%100
68	M52	Z	0	0	0	%100
69	M53	X	2.203	2.203	0	%100
70	M53	Z	0	0	0	%100
71	M54A	X	2.49	2.49	0	%100
72	M54A	Z	0	0	0	%100
73	M55	X	2.536	2.536	0	%100
74	M55	Z	0	0	0	%100
75	M54B	X	2.49	2.49	0	%100
76	M54B	Z	0	0	0	%100
77	M55A	X	2.487	2.487	0	%100
78	M55A	Z	0	0	0	%100
79	M56A	X	2.536	2.536	0	%100
80	M56A	Z	0	0	0	%100
81	M58	X	2.491	2.491	0	%100
82	M58	Z	0	0	0	%100
83	M59	X	2.203	2.203	0	%100
84	M59	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M5	X	1.083	1.083	0	%100
2	M5	Z	.625	.625	0	%100
3	M6	X	.083	.083	0	%100
4	M6	Z	.048	.048	0	%100
5	M7	X	.862	.862	0	%100
6	M7	Z	.498	.498	0	%100
7	M8	X	1.083	1.083	0	%100
8	M8	Z	.625	.625	0	%100
9	M9	X	.083	.083	0	%100
10	M9	Z	.048	.048	0	%100
11	M10	X	.862	.862	0	%100
12	M10	Z	.498	.498	0	%100
13	M11	X	2.895	2.895	0	%100
14	M11	Z	1.671	1.671	0	%100
15	OVP	X	.193	.193	0	%100
16	OVP	Z	.112	.112	0	%100
17	M13	X	2.895	2.895	0	%100
18	M13	Z	1.671	1.671	0	%100
19	M14	X	.193	.193	0	%100
20	M14	Z	.112	.112	0	%100
21	M34A	X	1.373	1.373	0	%100
22	M34A	Z	.793	.793	0	%100
23	M36	X	2.154	2.154	0	%100
24	M36	Z	1.244	1.244	0	%100
25	M30	X	1.22	1.22	0	%100
26	M30	Z	.704	.704	0	%100
27	M31	X	1.22	1.22	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
28	M31	Z	.704	.704	0	%100
29	M32	X	1.22	1.22	0	%100
30	M32	Z	.704	.704	0	%100
31	M33	X	1.22	1.22	0	%100
32	M33	Z	.704	.704	0	%100
33	M34	X	2.349	2.349	0	%100
34	M34	Z	1.356	1.356	0	%100
35	M35A	X	2.349	2.349	0	%100
36	M35A	Z	1.356	1.356	0	%100
37	M36A	X	2.479	2.479	0	%100
38	M36A	Z	1.431	1.431	0	%100
39	M37	X	2.479	2.479	0	%100
40	M37	Z	1.431	1.431	0	%100
41	M29	X	2.831	2.831	0	%100
42	M29	Z	1.634	1.634	0	%100
43	M30A	X	2.831	2.831	0	%100
44	M30A	Z	1.634	1.634	0	%100
45	M31A	X	2.831	2.831	0	%100
46	M31A	Z	1.634	1.634	0	%100
47	M32A	X	2.831	2.831	0	%100
48	M32A	Z	1.634	1.634	0	%100
49	M34B	X	2.349	2.349	0	%100
50	M34B	Z	1.356	1.356	0	%100
51	M35B	X	2.349	2.349	0	%100
52	M35B	Z	1.356	1.356	0	%100
53	M36B	X	1.746	1.746	0	%100
54	M36B	Z	1.008	1.008	0	%100
55	M37A	X	1.746	1.746	0	%100
56	M37A	Z	1.008	1.008	0	%100
57	MP5A	X	3.12	3.12	0	%100
58	MP5A	Z	1.801	1.801	0	%100
59	MP4A	X	3.12	3.12	0	%100
60	MP4A	Z	1.801	1.801	0	%100
61	MP3A	X	3.12	3.12	0	%100
62	MP3A	Z	1.801	1.801	0	%100
63	MP1A	X	3.12	3.12	0	%100
64	MP1A	Z	1.801	1.801	0	%100
65	MP2A	X	3.449	3.449	0	%100
66	MP2A	Z	1.991	1.991	0	%100
67	M52	X	3.498	3.498	0	%100
68	M52	Z	2.02	2.02	0	%100
69	M53	X	1.271	1.271	0	%100
70	M53	Z	.734	.734	0	%100
71	M54A	X	1.373	1.373	0	%100
72	M54A	Z	.793	.793	0	%100
73	M55	X	1.415	1.415	0	%100
74	M55	Z	.817	.817	0	%100
75	M54B	X	2.822	2.822	0	%100
76	M54B	Z	1.629	1.629	0	%100
77	M55A	X	2.154	2.154	0	%100
78	M55A	Z	1.244	1.244	0	%100
79	M56A	X	2.832	2.832	0	%100
80	M56A	Z	1.635	1.635	0	%100
81	M58	X	2.822	2.822	0	%100
82	M58	Z	1.629	1.629	0	%100
83	M59	X	2.688	2.688	0	%100
84	M59	Z	1.552	1.552	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M5	X	.619	.619	0	%100
2	M5	Z	1.072	1.072	0	%100
3	M6	X	.042	.042	0	%100
4	M6	Z	.072	.072	0	%100
5	M7	X	1.493	1.493	0	%100
6	M7	Z	2.587	2.587	0	%100
7	M8	X	.619	.619	0	%100
8	M8	Z	1.072	1.072	0	%100
9	M9	X	.042	.042	0	%100
10	M9	Z	.072	.072	0	%100
11	M10	X	1.493	1.493	0	%100
12	M10	Z	2.587	2.587	0	%100
13	M11	X	1.689	1.689	0	%100
14	M11	Z	2.926	2.926	0	%100
15	OVP	X	.13	.13	0	%100
16	OVP	Z	.225	.225	0	%100
17	M13	X	1.689	1.689	0	%100
18	M13	Z	2.926	2.926	0	%100
19	M14	X	.13	.13	0	%100
20	M14	Z	.225	.225	0	%100
21	M34A	X	.724	.724	0	%100
22	M34A	Z	1.254	1.254	0	%100
23	M36	X	1.244	1.244	0	%100
24	M36	Z	2.154	2.154	0	%100
25	M30	X	.79	.79	0	%100
26	M30	Z	1.369	1.369	0	%100
27	M31	X	.79	.79	0	%100
28	M31	Z	1.369	1.369	0	%100
29	M32	X	.79	.79	0	%100
30	M32	Z	1.369	1.369	0	%100
31	M33	X	.79	.79	0	%100
32	M33	Z	1.369	1.369	0	%100
33	M34	X	1.356	1.356	0	%100
34	M34	Z	2.349	2.349	0	%100
35	M35A	X	1.356	1.356	0	%100
36	M35A	Z	2.349	2.349	0	%100
37	M36A	X	1.436	1.436	0	%100
38	M36A	Z	2.488	2.488	0	%100
39	M37	X	1.436	1.436	0	%100
40	M37	Z	2.488	2.488	0	%100
41	M29	X	1.548	1.548	0	%100
42	M29	Z	2.682	2.682	0	%100
43	M30A	X	1.548	1.548	0	%100
44	M30A	Z	2.682	2.682	0	%100
45	M31A	X	1.548	1.548	0	%100
46	M31A	Z	2.682	2.682	0	%100
47	M32A	X	1.548	1.548	0	%100
48	M32A	Z	2.682	2.682	0	%100
49	M34B	X	1.356	1.356	0	%100
50	M34B	Z	2.349	2.349	0	%100
51	M35B	X	1.356	1.356	0	%100
52	M35B	Z	2.349	2.349	0	%100
53	M36B	X	1.013	1.013	0	%100
54	M36B	Z	1.754	1.754	0	%100
55	M37A	X	1.013	1.013	0	%100
56	M37A	Z	1.754	1.754	0	%100
57	MP5A	X	1.801	1.801	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
58	MP5A	Z	3.12	3.12	0	%100
59	MP4A	X	1.801	1.801	0	%100
60	MP4A	Z	3.12	3.12	0	%100
61	MP3A	X	1.801	1.801	0	%100
62	MP3A	Z	3.12	3.12	0	%100
63	MP1A	X	1.801	1.801	0	%100
64	MP1A	Z	3.12	3.12	0	%100
65	MP2A	X	1.991	1.991	0	%100
66	MP2A	Z	3.449	3.449	0	%100
67	M52	X	1.004	1.004	0	%100
68	M52	Z	1.74	1.74	0	%100
69	M53	X	.817	.817	0	%100
70	M53	Z	1.415	1.415	0	%100
71	M54A	X	.724	.724	0	%100
72	M54A	Z	1.254	1.254	0	%100
73	M55	X	.734	.734	0	%100
74	M55	Z	1.271	1.271	0	%100
75	M54B	X	1.56	1.56	0	%100
76	M54B	Z	2.702	2.702	0	%100
77	M55A	X	1.244	1.244	0	%100
78	M55A	Z	2.154	2.154	0	%100
79	M56A	X	1.552	1.552	0	%100
80	M56A	Z	2.688	2.688	0	%100
81	M58	X	1.56	1.56	0	%100
82	M58	Z	2.702	2.702	0	%100
83	M59	X	1.635	1.635	0	%100
84	M59	Z	2.832	2.832	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M5	X	0	0	0	%100
2	M5	Z	.654	.654	0	%100
3	M6	X	0	0	0	%100
4	M6	Z	.654	.654	0	%100
5	M7	X	0	0	0	%100
6	M7	Z	3.982	3.982	0	%100
7	M8	X	0	0	0	%100
8	M8	Z	.654	.654	0	%100
9	M9	X	0	0	0	%100
10	M9	Z	.654	.654	0	%100
11	M10	X	0	0	0	%100
12	M10	Z	3.982	3.982	0	%100
13	M11	X	0	0	0	%100
14	M11	Z	1.838	1.838	0	%100
15	OVP	X	0	0	0	%100
16	OVP	Z	1.838	1.838	0	%100
17	M13	X	0	0	0	%100
18	M13	Z	1.838	1.838	0	%100
19	M14	X	0	0	0	%100
20	M14	Z	1.838	1.838	0	%100
21	M34A	X	0	0	0	%100
22	M34A	Z	2.215	2.215	0	%100
23	M36	X	0	0	0	%100
24	M36	Z	2.487	2.487	0	%100
25	M30	X	0	0	0	%100
26	M30	Z	2.511	2.511	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
27	M31	X	0	0	0	%100
28	M31	Z	2.511	2.511	0	%100
29	M32	X	0	0	0	%100
30	M32	Z	2.511	2.511	0	%100
31	M33	X	0	0	0	%100
32	M33	Z	2.511	2.511	0	%100
33	M34	X	0	0	0	%100
34	M34	Z	2.712	2.712	0	%100
35	M35A	X	0	0	0	%100
36	M35A	Z	2.712	2.712	0	%100
37	M36A	X	0	0	0	%100
38	M36A	Z	2.454	2.454	0	%100
39	M37	X	0	0	0	%100
40	M37	Z	2.454	2.454	0	%100
41	M29	X	0	0	0	%100
42	M29	Z	2.167	2.167	0	%100
43	M30A	X	0	0	0	%100
44	M30A	Z	2.167	2.167	0	%100
45	M31A	X	0	0	0	%100
46	M31A	Z	2.167	2.167	0	%100
47	M32A	X	0	0	0	%100
48	M32A	Z	2.167	2.167	0	%100
49	M34B	X	0	0	0	%100
50	M34B	Z	2.712	2.712	0	%100
51	M35B	X	0	0	0	%100
52	M35B	Z	2.712	2.712	0	%100
53	M36B	X	0	0	0	%100
54	M36B	Z	2.454	2.454	0	%100
55	M37A	X	0	0	0	%100
56	M37A	Z	2.454	2.454	0	%100
57	MP5A	X	0	0	0	%100
58	MP5A	Z	3.602	3.602	0	%100
59	MP4A	X	0	0	0	%100
60	MP4A	Z	3.602	3.602	0	%100
61	MP3A	X	0	0	0	%100
62	MP3A	Z	3.602	3.602	0	%100
63	MP1A	X	0	0	0	%100
64	MP1A	Z	3.602	3.602	0	%100
65	MP2A	X	0	0	0	%100
66	MP2A	Z	3.982	3.982	0	%100
67	M52	X	0	0	0	%100
68	M52	Z	.198	.198	0	%100
69	M53	X	0	0	0	%100
70	M53	Z	2.536	2.536	0	%100
71	M54A	X	0	0	0	%100
72	M54A	Z	2.215	2.215	0	%100
73	M55	X	0	0	0	%100
74	M55	Z	2.203	2.203	0	%100
75	M54B	X	0	0	0	%100
76	M54B	Z	2.215	2.215	0	%100
77	M55A	X	0	0	0	%100
78	M55A	Z	2.487	2.487	0	%100
79	M56A	X	0	0	0	%100
80	M56A	Z	2.203	2.203	0	%100
81	M58	X	0	0	0	%100
82	M58	Z	2.215	2.215	0	%100
83	M59	X	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
84	M59	Z	2.536	2.536	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M5	X	-0.042	-0.042	0	%100
2	M5	Z	.072	.072	0	%100
3	M6	X	-0.619	-0.619	0	%100
4	M6	Z	1.072	1.072	0	%100
5	M7	X	-1.493	-1.493	0	%100
6	M7	Z	2.587	2.587	0	%100
7	M8	X	-0.042	-0.042	0	%100
8	M8	Z	.072	.072	0	%100
9	M9	X	-0.619	-0.619	0	%100
10	M9	Z	1.072	1.072	0	%100
11	M10	X	-1.493	-1.493	0	%100
12	M10	Z	2.587	2.587	0	%100
13	M11	X	-.13	-.13	0	%100
14	M11	Z	.225	.225	0	%100
15	OVP	X	-1.689	-1.689	0	%100
16	OVP	Z	2.926	2.926	0	%100
17	M13	X	-.13	-.13	0	%100
18	M13	Z	.225	.225	0	%100
19	M14	X	-1.689	-1.689	0	%100
20	M14	Z	2.926	2.926	0	%100
21	M34A	X	-1.56	-1.56	0	%100
22	M34A	Z	2.702	2.702	0	%100
23	M36	X	-1.244	-1.244	0	%100
24	M36	Z	2.154	2.154	0	%100
25	M30	X	-1.634	-1.634	0	%100
26	M30	Z	2.831	2.831	0	%100
27	M31	X	-1.634	-1.634	0	%100
28	M31	Z	2.831	2.831	0	%100
29	M32	X	-1.634	-1.634	0	%100
30	M32	Z	2.831	2.831	0	%100
31	M33	X	-1.634	-1.634	0	%100
32	M33	Z	2.831	2.831	0	%100
33	M34	X	-1.356	-1.356	0	%100
34	M34	Z	2.349	2.349	0	%100
35	M35A	X	-1.356	-1.356	0	%100
36	M35A	Z	2.349	2.349	0	%100
37	M36A	X	-1.013	-1.013	0	%100
38	M36A	Z	1.754	1.754	0	%100
39	M37	X	-1.013	-1.013	0	%100
40	M37	Z	1.754	1.754	0	%100
41	M29	X	-.704	-.704	0	%100
42	M29	Z	1.22	1.22	0	%100
43	M30A	X	-.704	-.704	0	%100
44	M30A	Z	1.22	1.22	0	%100
45	M31A	X	-.704	-.704	0	%100
46	M31A	Z	1.22	1.22	0	%100
47	M32A	X	-.704	-.704	0	%100
48	M32A	Z	1.22	1.22	0	%100
49	M34B	X	-1.356	-1.356	0	%100
50	M34B	Z	2.349	2.349	0	%100
51	M35B	X	-1.356	-1.356	0	%100
52	M35B	Z	2.349	2.349	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
53	M36B	X	-1.436	-1.436	0	%100
54	M36B	Z	2.488	2.488	0	%100
55	M37A	X	-1.436	-1.436	0	%100
56	M37A	Z	2.488	2.488	0	%100
57	MP5A	X	-1.801	-1.801	0	%100
58	MP5A	Z	3.12	3.12	0	%100
59	MP4A	X	-1.801	-1.801	0	%100
60	MP4A	Z	3.12	3.12	0	%100
61	MP3A	X	-1.801	-1.801	0	%100
62	MP3A	Z	3.12	3.12	0	%100
63	MP1A	X	-1.801	-1.801	0	%100
64	MP1A	Z	3.12	3.12	0	%100
65	MP2A	X	-1.991	-1.991	0	%100
66	MP2A	Z	3.449	3.449	0	%100
67	M52	X	-.209	-.209	0	%100
68	M52	Z	.362	.362	0	%100
69	M53	X	-1.635	-1.635	0	%100
70	M53	Z	2.832	2.832	0	%100
71	M54A	X	-1.56	-1.56	0	%100
72	M54A	Z	2.702	2.702	0	%100
73	M55	X	-1.552	-1.552	0	%100
74	M55	Z	2.688	2.688	0	%100
75	M54B	X	-.724	-.724	0	%100
76	M54B	Z	1.254	1.254	0	%100
77	M55A	X	-1.244	-1.244	0	%100
78	M55A	Z	2.154	2.154	0	%100
79	M56A	X	-.734	-.734	0	%100
80	M56A	Z	1.271	1.271	0	%100
81	M58	X	-.724	-.724	0	%100
82	M58	Z	1.254	1.254	0	%100
83	M59	X	-.817	-.817	0	%100
84	M59	Z	1.415	1.415	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M5	X	-.083	-.083	0	%100
2	M5	Z	.048	.048	0	%100
3	M6	X	-1.083	-1.083	0	%100
4	M6	Z	.625	.625	0	%100
5	M7	X	-.862	-.862	0	%100
6	M7	Z	.498	.498	0	%100
7	M8	X	-.083	-.083	0	%100
8	M8	Z	.048	.048	0	%100
9	M9	X	-1.083	-1.083	0	%100
10	M9	Z	.625	.625	0	%100
11	M10	X	-.862	-.862	0	%100
12	M10	Z	.498	.498	0	%100
13	M11	X	-.193	-.193	0	%100
14	M11	Z	.112	.112	0	%100
15	OVP	X	-2.895	-2.895	0	%100
16	OVP	Z	1.671	1.671	0	%100
17	M13	X	-.193	-.193	0	%100
18	M13	Z	.112	.112	0	%100
19	M14	X	-2.895	-2.895	0	%100
20	M14	Z	1.671	1.671	0	%100
21	M34A	X	-2.822	-2.822	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
22	M34A	Z	1.629	1.629	0 %100
23	M36	X	-2.154	-2.154	0 %100
24	M36	Z	1.244	1.244	0 %100
25	M30	X	-2.682	-2.682	0 %100
26	M30	Z	1.548	1.548	0 %100
27	M31	X	-2.682	-2.682	0 %100
28	M31	Z	1.548	1.548	0 %100
29	M32	X	-2.682	-2.682	0 %100
30	M32	Z	1.548	1.548	0 %100
31	M33	X	-2.682	-2.682	0 %100
32	M33	Z	1.548	1.548	0 %100
33	M34	X	-2.349	-2.349	0 %100
34	M34	Z	1.356	1.356	0 %100
35	M35A	X	-2.349	-2.349	0 %100
36	M35A	Z	1.356	1.356	0 %100
37	M36A	X	-1.746	-1.746	0 %100
38	M36A	Z	1.008	1.008	0 %100
39	M37	X	-1.746	-1.746	0 %100
40	M37	Z	1.008	1.008	0 %100
41	M29	X	-1.369	-1.369	0 %100
42	M29	Z	.79	.79	0 %100
43	M30A	X	-1.369	-1.369	0 %100
44	M30A	Z	.79	.79	0 %100
45	M31A	X	-1.369	-1.369	0 %100
46	M31A	Z	.79	.79	0 %100
47	M32A	X	-1.369	-1.369	0 %100
48	M32A	Z	.79	.79	0 %100
49	M34B	X	-2.349	-2.349	0 %100
50	M34B	Z	1.356	1.356	0 %100
51	M35B	X	-2.349	-2.349	0 %100
52	M35B	Z	1.356	1.356	0 %100
53	M36B	X	-2.479	-2.479	0 %100
54	M36B	Z	1.431	1.431	0 %100
55	M37A	X	-2.479	-2.479	0 %100
56	M37A	Z	1.431	1.431	0 %100
57	MP5A	X	-3.12	-3.12	0 %100
58	MP5A	Z	1.801	1.801	0 %100
59	MP4A	X	-3.12	-3.12	0 %100
60	MP4A	Z	1.801	1.801	0 %100
61	MP3A	X	-3.12	-3.12	0 %100
62	MP3A	Z	1.801	1.801	0 %100
63	MP1A	X	-3.12	-3.12	0 %100
64	MP1A	Z	1.801	1.801	0 %100
65	MP2A	X	-3.449	-3.449	0 %100
66	MP2A	Z	1.991	1.991	0 %100
67	M52	X	-2.12	-2.12	0 %100
68	M52	Z	1.224	1.224	0 %100
69	M53	X	-2.688	-2.688	0 %100
70	M53	Z	1.552	1.552	0 %100
71	M54A	X	-2.822	-2.822	0 %100
72	M54A	Z	1.629	1.629	0 %100
73	M55	X	-2.832	-2.832	0 %100
74	M55	Z	1.635	1.635	0 %100
75	M54B	X	-1.373	-1.373	0 %100
76	M54B	Z	.793	.793	0 %100
77	M55A	X	-2.154	-2.154	0 %100
78	M55A	Z	1.244	1.244	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
79	M56A	X	-1.415	-1.415	0	%100
80	M56A	Z	.817	.817	0	%100
81	M58	X	-1.373	-1.373	0	%100
82	M58	Z	.793	.793	0	%100
83	M59	X	-1.271	-1.271	0	%100
84	M59	Z	.734	.734	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M5	X	-.679	-.679	0	%100
2	M5	Z	0	0	0	%100
3	M6	X	-.679	-.679	0	%100
4	M6	Z	0	0	0	%100
5	M7	X	0	0	0	%100
6	M7	Z	0	0	0	%100
7	M8	X	-.679	-.679	0	%100
8	M8	Z	0	0	0	%100
9	M9	X	-.679	-.679	0	%100
10	M9	Z	0	0	0	%100
11	M10	X	0	0	0	%100
12	M10	Z	0	0	0	%100
13	M11	X	-1.765	-1.765	0	%100
14	M11	Z	0	0	0	%100
15	OVP	X	-1.765	-1.765	0	%100
16	OVP	Z	0	0	0	%100
17	M13	X	-1.765	-1.765	0	%100
18	M13	Z	0	0	0	%100
19	M14	X	-1.765	-1.765	0	%100
20	M14	Z	0	0	0	%100
21	M34A	X	-2.49	-2.49	0	%100
22	M34A	Z	0	0	0	%100
23	M36	X	-2.487	-2.487	0	%100
24	M36	Z	0	0	0	%100
25	M30	X	-2.167	-2.167	0	%100
26	M30	Z	0	0	0	%100
27	M31	X	-2.167	-2.167	0	%100
28	M31	Z	0	0	0	%100
29	M32	X	-2.167	-2.167	0	%100
30	M32	Z	0	0	0	%100
31	M33	X	-2.167	-2.167	0	%100
32	M33	Z	0	0	0	%100
33	M34	X	-2.712	-2.712	0	%100
34	M34	Z	0	0	0	%100
35	M35A	X	-2.712	-2.712	0	%100
36	M35A	Z	0	0	0	%100
37	M36A	X	-2.435	-2.435	0	%100
38	M36A	Z	0	0	0	%100
39	M37	X	-2.435	-2.435	0	%100
40	M37	Z	0	0	0	%100
41	M29	X	-2.511	-2.511	0	%100
42	M29	Z	0	0	0	%100
43	M30A	X	-2.511	-2.511	0	%100
44	M30A	Z	0	0	0	%100
45	M31A	X	-2.511	-2.511	0	%100
46	M31A	Z	0	0	0	%100
47	M32A	X	-2.511	-2.511	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
48	M32A	Z	0	0	0	%100
49	M34B	X	-2.712	-2.712	0	%100
50	M34B	Z	0	0	0	%100
51	M35B	X	-2.712	-2.712	0	%100
52	M35B	Z	0	0	0	%100
53	M36B	X	-2.435	-2.435	0	%100
54	M36B	Z	0	0	0	%100
55	M37A	X	-2.435	-2.435	0	%100
56	M37A	Z	0	0	0	%100
57	MP5A	X	-3.602	-3.602	0	%100
58	MP5A	Z	0	0	0	%100
59	MP4A	X	-3.602	-3.602	0	%100
60	MP4A	Z	0	0	0	%100
61	MP3A	X	-3.602	-3.602	0	%100
62	MP3A	Z	0	0	0	%100
63	MP1A	X	-3.602	-3.602	0	%100
64	MP1A	Z	0	0	0	%100
65	MP2A	X	-3.982	-3.982	0	%100
66	MP2A	Z	0	0	0	%100
67	M52	X	-4.259	-4.259	0	%100
68	M52	Z	0	0	0	%100
69	M53	X	-2.203	-2.203	0	%100
70	M53	Z	0	0	0	%100
71	M54A	X	-2.49	-2.49	0	%100
72	M54A	Z	0	0	0	%100
73	M55	X	-2.536	-2.536	0	%100
74	M55	Z	0	0	0	%100
75	M54B	X	-2.49	-2.49	0	%100
76	M54B	Z	0	0	0	%100
77	M55A	X	-2.487	-2.487	0	%100
78	M55A	Z	0	0	0	%100
79	M56A	X	-2.536	-2.536	0	%100
80	M56A	Z	0	0	0	%100
81	M58	X	-2.491	-2.491	0	%100
82	M58	Z	0	0	0	%100
83	M59	X	-2.203	-2.203	0	%100
84	M59	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M5	X	-1.083	-1.083	0	%100
2	M5	Z	-.625	-.625	0	%100
3	M6	X	-.083	-.083	0	%100
4	M6	Z	-.048	-.048	0	%100
5	M7	X	-.862	-.862	0	%100
6	M7	Z	-.498	-.498	0	%100
7	M8	X	-1.083	-1.083	0	%100
8	M8	Z	-.625	-.625	0	%100
9	M9	X	-.083	-.083	0	%100
10	M9	Z	-.048	-.048	0	%100
11	M10	X	-.862	-.862	0	%100
12	M10	Z	-.498	-.498	0	%100
13	M11	X	-2.895	-2.895	0	%100
14	M11	Z	-1.671	-1.671	0	%100
15	OVP	X	-.193	-.193	0	%100
16	OVP	Z	-.112	-.112	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
17	M13	X	-2.895	-2.895	0	%100
18	M13	Z	-1.671	-1.671	0	%100
19	M14	X	-.193	-.193	0	%100
20	M14	Z	-.112	-.112	0	%100
21	M34A	X	-1.373	-1.373	0	%100
22	M34A	Z	-.793	-.793	0	%100
23	M36	X	-2.154	-2.154	0	%100
24	M36	Z	-1.244	-1.244	0	%100
25	M30	X	-1.22	-1.22	0	%100
26	M30	Z	-.704	-.704	0	%100
27	M31	X	-1.22	-1.22	0	%100
28	M31	Z	-.704	-.704	0	%100
29	M32	X	-1.22	-1.22	0	%100
30	M32	Z	-.704	-.704	0	%100
31	M33	X	-1.22	-1.22	0	%100
32	M33	Z	-.704	-.704	0	%100
33	M34	X	-2.349	-2.349	0	%100
34	M34	Z	-1.356	-1.356	0	%100
35	M35A	X	-2.349	-2.349	0	%100
36	M35A	Z	-1.356	-1.356	0	%100
37	M36A	X	-2.479	-2.479	0	%100
38	M36A	Z	-1.431	-1.431	0	%100
39	M37	X	-2.479	-2.479	0	%100
40	M37	Z	-1.431	-1.431	0	%100
41	M29	X	-2.831	-2.831	0	%100
42	M29	Z	-1.634	-1.634	0	%100
43	M30A	X	-2.831	-2.831	0	%100
44	M30A	Z	-1.634	-1.634	0	%100
45	M31A	X	-2.831	-2.831	0	%100
46	M31A	Z	-1.634	-1.634	0	%100
47	M32A	X	-2.831	-2.831	0	%100
48	M32A	Z	-1.634	-1.634	0	%100
49	M34B	X	-2.349	-2.349	0	%100
50	M34B	Z	-1.356	-1.356	0	%100
51	M35B	X	-2.349	-2.349	0	%100
52	M35B	Z	-1.356	-1.356	0	%100
53	M36B	X	-1.746	-1.746	0	%100
54	M36B	Z	-1.008	-1.008	0	%100
55	M37A	X	-1.746	-1.746	0	%100
56	M37A	Z	-1.008	-1.008	0	%100
57	MP5A	X	-3.12	-3.12	0	%100
58	MP5A	Z	-1.801	-1.801	0	%100
59	MP4A	X	-3.12	-3.12	0	%100
60	MP4A	Z	-1.801	-1.801	0	%100
61	MP3A	X	-3.12	-3.12	0	%100
62	MP3A	Z	-1.801	-1.801	0	%100
63	MP1A	X	-3.12	-3.12	0	%100
64	MP1A	Z	-1.801	-1.801	0	%100
65	MP2A	X	-3.449	-3.449	0	%100
66	MP2A	Z	-1.991	-1.991	0	%100
67	M52	X	-3.498	-3.498	0	%100
68	M52	Z	-2.02	-2.02	0	%100
69	M53	X	-1.271	-1.271	0	%100
70	M53	Z	-.734	-.734	0	%100
71	M54A	X	-1.373	-1.373	0	%100
72	M54A	Z	-.793	-.793	0	%100
73	M55	X	-1.415	-1.415	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
74	M55	Z	- .817	- .817	0	%100
75	M54B	X	-2.822	-2.822	0	%100
76	M54B	Z	-1.629	-1.629	0	%100
77	M55A	X	-2.154	-2.154	0	%100
78	M55A	Z	-1.244	-1.244	0	%100
79	M56A	X	-2.832	-2.832	0	%100
80	M56A	Z	-1.635	-1.635	0	%100
81	M58	X	-2.822	-2.822	0	%100
82	M58	Z	-1.629	-1.629	0	%100
83	M59	X	-2.688	-2.688	0	%100
84	M59	Z	-1.552	-1.552	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M5	X	- .619	- .619	0	%100
2	M5	Z	-1.072	-1.072	0	%100
3	M6	X	- .042	- .042	0	%100
4	M6	Z	- .072	- .072	0	%100
5	M7	X	-1.493	-1.493	0	%100
6	M7	Z	-2.587	-2.587	0	%100
7	M8	X	- .619	- .619	0	%100
8	M8	Z	-1.072	-1.072	0	%100
9	M9	X	- .042	- .042	0	%100
10	M9	Z	- .072	- .072	0	%100
11	M10	X	-1.493	-1.493	0	%100
12	M10	Z	-2.587	-2.587	0	%100
13	M11	X	-1.689	-1.689	0	%100
14	M11	Z	-2.926	-2.926	0	%100
15	OVP	X	- .13	- .13	0	%100
16	OVP	Z	- .225	- .225	0	%100
17	M13	X	-1.689	-1.689	0	%100
18	M13	Z	-2.926	-2.926	0	%100
19	M14	X	- .13	- .13	0	%100
20	M14	Z	- .225	- .225	0	%100
21	M34A	X	- .724	- .724	0	%100
22	M34A	Z	-1.254	-1.254	0	%100
23	M36	X	-1.244	-1.244	0	%100
24	M36	Z	-2.154	-2.154	0	%100
25	M30	X	- .79	- .79	0	%100
26	M30	Z	-1.369	-1.369	0	%100
27	M31	X	- .79	- .79	0	%100
28	M31	Z	-1.369	-1.369	0	%100
29	M32	X	- .79	- .79	0	%100
30	M32	Z	-1.369	-1.369	0	%100
31	M33	X	- .79	- .79	0	%100
32	M33	Z	-1.369	-1.369	0	%100
33	M34	X	-1.356	-1.356	0	%100
34	M34	Z	-2.349	-2.349	0	%100
35	M35A	X	-1.356	-1.356	0	%100
36	M35A	Z	-2.349	-2.349	0	%100
37	M36A	X	-1.436	-1.436	0	%100
38	M36A	Z	-2.488	-2.488	0	%100
39	M37	X	-1.436	-1.436	0	%100
40	M37	Z	-2.488	-2.488	0	%100
41	M29	X	-1.548	-1.548	0	%100
42	M29	Z	-2.682	-2.682	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
43	M30A	X	-1.548	-1.548	0	%100
44	M30A	Z	-2.682	-2.682	0	%100
45	M31A	X	-1.548	-1.548	0	%100
46	M31A	Z	-2.682	-2.682	0	%100
47	M32A	X	-1.548	-1.548	0	%100
48	M32A	Z	-2.682	-2.682	0	%100
49	M34B	X	-1.356	-1.356	0	%100
50	M34B	Z	-2.349	-2.349	0	%100
51	M35B	X	-1.356	-1.356	0	%100
52	M35B	Z	-2.349	-2.349	0	%100
53	M36B	X	-1.013	-1.013	0	%100
54	M36B	Z	-1.754	-1.754	0	%100
55	M37A	X	-1.013	-1.013	0	%100
56	M37A	Z	-1.754	-1.754	0	%100
57	MP5A	X	-1.801	-1.801	0	%100
58	MP5A	Z	-3.12	-3.12	0	%100
59	MP4A	X	-1.801	-1.801	0	%100
60	MP4A	Z	-3.12	-3.12	0	%100
61	MP3A	X	-1.801	-1.801	0	%100
62	MP3A	Z	-3.12	-3.12	0	%100
63	MP1A	X	-1.801	-1.801	0	%100
64	MP1A	Z	-3.12	-3.12	0	%100
65	MP2A	X	-1.991	-1.991	0	%100
66	MP2A	Z	-3.449	-3.449	0	%100
67	M52	X	-1.004	-1.004	0	%100
68	M52	Z	-1.74	-1.74	0	%100
69	M53	X	-.817	-.817	0	%100
70	M53	Z	-1.415	-1.415	0	%100
71	M54A	X	-.724	-.724	0	%100
72	M54A	Z	-1.254	-1.254	0	%100
73	M55	X	-.734	-.734	0	%100
74	M55	Z	-1.271	-1.271	0	%100
75	M54B	X	-1.56	-1.56	0	%100
76	M54B	Z	-2.702	-2.702	0	%100
77	M55A	X	-1.244	-1.244	0	%100
78	M55A	Z	-2.154	-2.154	0	%100
79	M56A	X	-1.552	-1.552	0	%100
80	M56A	Z	-2.688	-2.688	0	%100
81	M58	X	-1.56	-1.56	0	%100
82	M58	Z	-2.702	-2.702	0	%100
83	M59	X	-1.635	-1.635	0	%100
84	M59	Z	-2.832	-2.832	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M5	X	0	0	0	%100
2	M5	Z	-.05	-.05	0	%100
3	M6	X	0	0	0	%100
4	M6	Z	-.05	-.05	0	%100
5	M7	X	0	0	0	%100
6	M7	Z	-.787	-.787	0	%100
7	M8	X	0	0	0	%100
8	M8	Z	-.05	-.05	0	%100
9	M9	X	0	0	0	%100
10	M9	Z	-.05	-.05	0	%100
11	M10	X	0	0	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
12	M10	Z	-0.787	-0.787	0 %100
13	M11	X	0	0	0 %100
14	M11	Z	-0.331	-0.331	0 %100
15	OVP	X	0	0	0 %100
16	OVP	Z	-0.331	-0.331	0 %100
17	M13	X	0	0	0 %100
18	M13	Z	-0.331	-0.331	0 %100
19	M14	X	0	0	0 %100
20	M14	Z	-0.331	-0.331	0 %100
21	M34A	X	0	0	0 %100
22	M34A	Z	-0.42	-0.42	0 %100
23	M36	X	0	0	0 %100
24	M36	Z	-0.396	-0.396	0 %100
25	M30	X	0	0	0 %100
26	M30	Z	-0.526	-0.526	0 %100
27	M31	X	0	0	0 %100
28	M31	Z	-0.526	-0.526	0 %100
29	M32	X	0	0	0 %100
30	M32	Z	-0.526	-0.526	0 %100
31	M33	X	0	0	0 %100
32	M33	Z	-0.526	-0.526	0 %100
33	M34	X	0	0	0 %100
34	M34	Z	-0.436	-0.436	0 %100
35	M35A	X	0	0	0 %100
36	M35A	Z	-0.436	-0.436	0 %100
37	M36A	X	0	0	0 %100
38	M36A	Z	-0.38	-0.38	0 %100
39	M37	X	0	0	0 %100
40	M37	Z	-0.38	-0.38	0 %100
41	M29	X	0	0	0 %100
42	M29	Z	-0.403	-0.403	0 %100
43	M30A	X	0	0	0 %100
44	M30A	Z	-0.403	-0.403	0 %100
45	M31A	X	0	0	0 %100
46	M31A	Z	-0.403	-0.403	0 %100
47	M32A	X	0	0	0 %100
48	M32A	Z	-0.403	-0.403	0 %100
49	M34B	X	0	0	0 %100
50	M34B	Z	-0.436	-0.436	0 %100
51	M35B	X	0	0	0 %100
52	M35B	Z	-0.436	-0.436	0 %100
53	M36B	X	0	0	0 %100
54	M36B	Z	-0.38	-0.38	0 %100
55	M37A	X	0	0	0 %100
56	M37A	Z	-0.38	-0.38	0 %100
57	MP5A	X	0	0	0 %100
58	MP5A	Z	-0.65	-0.65	0 %100
59	MP4A	X	0	0	0 %100
60	MP4A	Z	-0.65	-0.65	0 %100
61	MP3A	X	0	0	0 %100
62	MP3A	Z	-0.65	-0.65	0 %100
63	MP1A	X	0	0	0 %100
64	MP1A	Z	-0.65	-0.65	0 %100
65	MP2A	X	0	0	0 %100
66	MP2A	Z	-0.787	-0.787	0 %100
67	M52	X	0	0	0 %100
68	M52	Z	-0.04	-0.04	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
69	M53	X	0	0	0	%100
70	M53	Z	-.535	-.535	0	%100
71	M54A	X	0	0	0	%100
72	M54A	Z	-.42	-.42	0	%100
73	M55	X	0	0	0	%100
74	M55	Z	-.415	-.415	0	%100
75	M54B	X	0	0	0	%100
76	M54B	Z	-.42	-.42	0	%100
77	M55A	X	0	0	0	%100
78	M55A	Z	-.396	-.396	0	%100
79	M56A	X	0	0	0	%100
80	M56A	Z	-.415	-.415	0	%100
81	M58	X	0	0	0	%100
82	M58	Z	-.42	-.42	0	%100
83	M59	X	0	0	0	%100
84	M59	Z	-.535	-.535	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M5	X	.003	.003	0	%100
2	M5	Z	-.006	-.006	0	%100
3	M6	X	.048	.048	0	%100
4	M6	Z	-.082	-.082	0	%100
5	M7	X	.295	.295	0	%100
6	M7	Z	-.511	-.511	0	%100
7	M8	X	.003	.003	0	%100
8	M8	Z	-.006	-.006	0	%100
9	M9	X	.048	.048	0	%100
10	M9	Z	-.082	-.082	0	%100
11	M10	X	.295	.295	0	%100
12	M10	Z	-.511	-.511	0	%100
13	M11	X	.023	.023	0	%100
14	M11	Z	-.041	-.041	0	%100
15	OVP	X	.305	.305	0	%100
16	OVP	Z	-.528	-.528	0	%100
17	M13	X	.023	.023	0	%100
18	M13	Z	-.041	-.041	0	%100
19	M14	X	.305	.305	0	%100
20	M14	Z	-.528	-.528	0	%100
21	M34A	X	.373	.373	0	%100
22	M34A	Z	-.646	-.646	0	%100
23	M36	X	.198	.198	0	%100
24	M36	Z	-.343	-.343	0	%100
25	M30	X	.4	.4	0	%100
26	M30	Z	-.692	-.692	0	%100
27	M31	X	.4	.4	0	%100
28	M31	Z	-.692	-.692	0	%100
29	M32	X	.4	.4	0	%100
30	M32	Z	-.692	-.692	0	%100
31	M33	X	.4	.4	0	%100
32	M33	Z	-.692	-.692	0	%100
33	M34	X	.218	.218	0	%100
34	M34	Z	-.378	-.378	0	%100
35	M35A	X	.218	.218	0	%100
36	M35A	Z	-.378	-.378	0	%100
37	M36A	X	.157	.157	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
38	M36A	Z	-.272	-.272	0	%100
39	M37	X	.157	.157	0	%100
40	M37	Z	-.272	-.272	0	%100
41	M29	X	.065	.065	0	%100
42	M29	Z	-.112	-.112	0	%100
43	M30A	X	.065	.065	0	%100
44	M30A	Z	-.112	-.112	0	%100
45	M31A	X	.065	.065	0	%100
46	M31A	Z	-.112	-.112	0	%100
47	M32A	X	.065	.065	0	%100
48	M32A	Z	-.112	-.112	0	%100
49	M34B	X	.218	.218	0	%100
50	M34B	Z	-.378	-.378	0	%100
51	M35B	X	.218	.218	0	%100
52	M35B	Z	-.378	-.378	0	%100
53	M36B	X	.222	.222	0	%100
54	M36B	Z	-.385	-.385	0	%100
55	M37A	X	.222	.222	0	%100
56	M37A	Z	-.385	-.385	0	%100
57	MP5A	X	.325	.325	0	%100
58	MP5A	Z	-.563	-.563	0	%100
59	MP4A	X	.325	.325	0	%100
60	MP4A	Z	-.563	-.563	0	%100
61	MP3A	X	.325	.325	0	%100
62	MP3A	Z	-.563	-.563	0	%100
63	MP1A	X	.325	.325	0	%100
64	MP1A	Z	-.563	-.563	0	%100
65	MP2A	X	.393	.393	0	%100
66	MP2A	Z	-.681	-.681	0	%100
67	M52	X	.042	.042	0	%100
68	M52	Z	-.074	-.074	0	%100
69	M53	X	.4	.4	0	%100
70	M53	Z	-.693	-.693	0	%100
71	M54A	X	.373	.373	0	%100
72	M54A	Z	-.646	-.646	0	%100
73	M55	X	.37	.37	0	%100
74	M55	Z	-.641	-.641	0	%100
75	M54B	X	.072	.072	0	%100
76	M54B	Z	-.124	-.124	0	%100
77	M55A	X	.198	.198	0	%100
78	M55A	Z	-.343	-.343	0	%100
79	M56A	X	.075	.075	0	%100
80	M56A	Z	-.131	-.131	0	%100
81	M58	X	.072	.072	0	%100
82	M58	Z	-.124	-.124	0	%100
83	M59	X	.105	.105	0	%100
84	M59	Z	-.183	-.183	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M5	X	.006	.006	0	%100
2	M5	Z	-.004	-.004	0	%100
3	M6	X	.083	.083	0	%100
4	M6	Z	-.048	-.048	0	%100
5	M7	X	.17	.17	0	%100
6	M7	Z	-.098	-.098	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
7	M8	X	.006	.006	0	%100
8	M8	Z	-.004	-.004	0	%100
9	M9	X	.083	.083	0	%100
10	M9	Z	-.048	-.048	0	%100
11	M10	X	.17	.17	0	%100
12	M10	Z	-.098	-.098	0	%100
13	M11	X	.035	.035	0	%100
14	M11	Z	-.02	-.02	0	%100
15	OVP	X	.522	.522	0	%100
16	OVP	Z	-.301	-.301	0	%100
17	M13	X	.035	.035	0	%100
18	M13	Z	-.02	-.02	0	%100
19	M14	X	.522	.522	0	%100
20	M14	Z	-.301	-.301	0	%100
21	M34A	X	.689	.689	0	%100
22	M34A	Z	-.398	-.398	0	%100
23	M36	X	.343	.343	0	%100
24	M36	Z	-.198	-.198	0	%100
25	M30	X	.639	.639	0	%100
26	M30	Z	-.369	-.369	0	%100
27	M31	X	.639	.639	0	%100
28	M31	Z	-.369	-.369	0	%100
29	M32	X	.639	.639	0	%100
30	M32	Z	-.369	-.369	0	%100
31	M33	X	.639	.639	0	%100
32	M33	Z	-.369	-.369	0	%100
33	M34	X	.378	.378	0	%100
34	M34	Z	-.218	-.218	0	%100
35	M35A	X	.378	.378	0	%100
36	M35A	Z	-.218	-.218	0	%100
37	M36A	X	.27	.27	0	%100
38	M36A	Z	-.156	-.156	0	%100
39	M37	X	.27	.27	0	%100
40	M37	Z	-.156	-.156	0	%100
41	M29	X	.166	.166	0	%100
42	M29	Z	-.096	-.096	0	%100
43	M30A	X	.166	.166	0	%100
44	M30A	Z	-.096	-.096	0	%100
45	M31A	X	.166	.166	0	%100
46	M31A	Z	-.096	-.096	0	%100
47	M32A	X	.166	.166	0	%100
48	M32A	Z	-.096	-.096	0	%100
49	M34B	X	.378	.378	0	%100
50	M34B	Z	-.218	-.218	0	%100
51	M35B	X	.378	.378	0	%100
52	M35B	Z	-.218	-.218	0	%100
53	M36B	X	.384	.384	0	%100
54	M36B	Z	-.222	-.222	0	%100
55	M37A	X	.384	.384	0	%100
56	M37A	Z	-.222	-.222	0	%100
57	MP5A	X	.563	.563	0	%100
58	MP5A	Z	-.325	-.325	0	%100
59	MP4A	X	.563	.563	0	%100
60	MP4A	Z	-.325	-.325	0	%100
61	MP3A	X	.563	.563	0	%100
62	MP3A	Z	-.325	-.325	0	%100
63	MP1A	X	.563	.563	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
64	MP1A	Z	-.325	-.325	0	%100
65	MP2A	X	.681	.681	0	%100
66	MP2A	Z	-.393	-.393	0	%100
67	M52	X	.431	.431	0	%100
68	M52	Z	-.249	-.249	0	%100
69	M53	X	.641	.641	0	%100
70	M53	Z	-.37	-.37	0	%100
71	M54A	X	.689	.689	0	%100
72	M54A	Z	-.398	-.398	0	%100
73	M55	X	.693	.693	0	%100
74	M55	Z	-.4	-.4	0	%100
75	M54B	X	.167	.167	0	%100
76	M54B	Z	-.097	-.097	0	%100
77	M55A	X	.343	.343	0	%100
78	M55A	Z	-.198	-.198	0	%100
79	M56A	X	.183	.183	0	%100
80	M56A	Z	-.105	-.105	0	%100
81	M58	X	.167	.167	0	%100
82	M58	Z	-.097	-.097	0	%100
83	M59	X	.131	.131	0	%100
84	M59	Z	-.075	-.075	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M5	X	.052	.052	0	%100
2	M5	Z	0	0	0	%100
3	M6	X	.052	.052	0	%100
4	M6	Z	0	0	0	%100
5	M7	X	0	0	0	%100
6	M7	Z	0	0	0	%100
7	M8	X	.052	.052	0	%100
8	M8	Z	0	0	0	%100
9	M9	X	.052	.052	0	%100
10	M9	Z	0	0	0	%100
11	M10	X	0	0	0	%100
12	M10	Z	0	0	0	%100
13	M11	X	.318	.318	0	%100
14	M11	Z	0	0	0	%100
15	OVP	X	.318	.318	0	%100
16	OVP	Z	0	0	0	%100
17	M13	X	.318	.318	0	%100
18	M13	Z	0	0	0	%100
19	M14	X	.318	.318	0	%100
20	M14	Z	0	0	0	%100
21	M34A	X	.519	.519	0	%100
22	M34A	Z	0	0	0	%100
23	M36	X	.396	.396	0	%100
24	M36	Z	0	0	0	%100
25	M30	X	.403	.403	0	%100
26	M30	Z	0	0	0	%100
27	M31	X	.403	.403	0	%100
28	M31	Z	0	0	0	%100
29	M32	X	.403	.403	0	%100
30	M32	Z	0	0	0	%100
31	M33	X	.403	.403	0	%100
32	M33	Z	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
33	M34	X	.436	.436	0	%100
34	M34	Z	0	0	0	%100
35	M35A	X	.436	.436	0	%100
36	M35A	Z	0	0	0	%100
37	M36A	X	.377	.377	0	%100
38	M36A	Z	0	0	0	%100
39	M37	X	.377	.377	0	%100
40	M37	Z	0	0	0	%100
41	M29	X	.526	.526	0	%100
42	M29	Z	0	0	0	%100
43	M30A	X	.526	.526	0	%100
44	M30A	Z	0	0	0	%100
45	M31A	X	.526	.526	0	%100
46	M31A	Z	0	0	0	%100
47	M32A	X	.526	.526	0	%100
48	M32A	Z	0	0	0	%100
49	M34B	X	.436	.436	0	%100
50	M34B	Z	0	0	0	%100
51	M35B	X	.436	.436	0	%100
52	M35B	Z	0	0	0	%100
53	M36B	X	.377	.377	0	%100
54	M36B	Z	0	0	0	%100
55	M37A	X	.377	.377	0	%100
56	M37A	Z	0	0	0	%100
57	MP5A	X	.65	.65	0	%100
58	MP5A	Z	0	0	0	%100
59	MP4A	X	.65	.65	0	%100
60	MP4A	Z	0	0	0	%100
61	MP3A	X	.65	.65	0	%100
62	MP3A	Z	0	0	0	%100
63	MP1A	X	.65	.65	0	%100
64	MP1A	Z	0	0	0	%100
65	MP2A	X	.787	.787	0	%100
66	MP2A	Z	0	0	0	%100
67	M52	X	.865	.865	0	%100
68	M52	Z	0	0	0	%100
69	M53	X	.415	.415	0	%100
70	M53	Z	0	0	0	%100
71	M54A	X	.519	.519	0	%100
72	M54A	Z	0	0	0	%100
73	M55	X	.535	.535	0	%100
74	M55	Z	0	0	0	%100
75	M54B	X	.519	.519	0	%100
76	M54B	Z	0	0	0	%100
77	M55A	X	.396	.396	0	%100
78	M55A	Z	0	0	0	%100
79	M56A	X	.535	.535	0	%100
80	M56A	Z	0	0	0	%100
81	M58	X	.519	.519	0	%100
82	M58	Z	0	0	0	%100
83	M59	X	.415	.415	0	%100
84	M59	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M5	X	.083	.083	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
2	M5	Z	.048	.048	0	%100
3	M6	X	.006	.006	0	%100
4	M6	Z	.004	.004	0	%100
5	M7	X	.17	.17	0	%100
6	M7	Z	.098	.098	0	%100
7	M8	X	.083	.083	0	%100
8	M8	Z	.048	.048	0	%100
9	M9	X	.006	.006	0	%100
10	M9	Z	.004	.004	0	%100
11	M10	X	.17	.17	0	%100
12	M10	Z	.098	.098	0	%100
13	M11	X	.522	.522	0	%100
14	M11	Z	.301	.301	0	%100
15	OVP	X	.035	.035	0	%100
16	OVP	Z	.02	.02	0	%100
17	M13	X	.522	.522	0	%100
18	M13	Z	.301	.301	0	%100
19	M14	X	.035	.035	0	%100
20	M14	Z	.02	.02	0	%100
21	M34A	X	.167	.167	0	%100
22	M34A	Z	.097	.097	0	%100
23	M36	X	.343	.343	0	%100
24	M36	Z	.198	.198	0	%100
25	M30	X	.112	.112	0	%100
26	M30	Z	.065	.065	0	%100
27	M31	X	.112	.112	0	%100
28	M31	Z	.065	.065	0	%100
29	M32	X	.112	.112	0	%100
30	M32	Z	.065	.065	0	%100
31	M33	X	.112	.112	0	%100
32	M33	Z	.065	.065	0	%100
33	M34	X	.378	.378	0	%100
34	M34	Z	.218	.218	0	%100
35	M35A	X	.378	.378	0	%100
36	M35A	Z	.218	.218	0	%100
37	M36A	X	.384	.384	0	%100
38	M36A	Z	.222	.222	0	%100
39	M37	X	.384	.384	0	%100
40	M37	Z	.222	.222	0	%100
41	M29	X	.692	.692	0	%100
42	M29	Z	.4	.4	0	%100
43	M30A	X	.692	.692	0	%100
44	M30A	Z	.4	.4	0	%100
45	M31A	X	.692	.692	0	%100
46	M31A	Z	.4	.4	0	%100
47	M32A	X	.692	.692	0	%100
48	M32A	Z	.4	.4	0	%100
49	M34B	X	.378	.378	0	%100
50	M34B	Z	.218	.218	0	%100
51	M35B	X	.378	.378	0	%100
52	M35B	Z	.218	.218	0	%100
53	M36B	X	.27	.27	0	%100
54	M36B	Z	.156	.156	0	%100
55	M37A	X	.27	.27	0	%100
56	M37A	Z	.156	.156	0	%100
57	MP5A	X	.563	.563	0	%100
58	MP5A	Z	.325	.325	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
59	MP4A	X	.563	.563	0	%100
60	MP4A	Z	.325	.325	0	%100
61	MP3A	X	.563	.563	0	%100
62	MP3A	Z	.325	.325	0	%100
63	MP1A	X	.563	.563	0	%100
64	MP1A	Z	.325	.325	0	%100
65	MP2A	X	.681	.681	0	%100
66	MP2A	Z	.393	.393	0	%100
67	M52	X	.711	.711	0	%100
68	M52	Z	.41	.41	0	%100
69	M53	X	.131	.131	0	%100
70	M53	Z	.075	.075	0	%100
71	M54A	X	.167	.167	0	%100
72	M54A	Z	.097	.097	0	%100
73	M55	X	.183	.183	0	%100
74	M55	Z	.105	.105	0	%100
75	M54B	X	.689	.689	0	%100
76	M54B	Z	.398	.398	0	%100
77	M55A	X	.343	.343	0	%100
78	M55A	Z	.198	.198	0	%100
79	M56A	X	.693	.693	0	%100
80	M56A	Z	.4	.4	0	%100
81	M58	X	.689	.689	0	%100
82	M58	Z	.398	.398	0	%100
83	M59	X	.641	.641	0	%100
84	M59	Z	.37	.37	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M5	X	.048	.048	0	%100
2	M5	Z	.082	.082	0	%100
3	M6	X	.003	.003	0	%100
4	M6	Z	.006	.006	0	%100
5	M7	X	.295	.295	0	%100
6	M7	Z	.511	.511	0	%100
7	M8	X	.048	.048	0	%100
8	M8	Z	.082	.082	0	%100
9	M9	X	.003	.003	0	%100
10	M9	Z	.006	.006	0	%100
11	M10	X	.295	.295	0	%100
12	M10	Z	.511	.511	0	%100
13	M11	X	.305	.305	0	%100
14	M11	Z	.528	.528	0	%100
15	OVP	X	.023	.023	0	%100
16	OVP	Z	.041	.041	0	%100
17	M13	X	.305	.305	0	%100
18	M13	Z	.528	.528	0	%100
19	M14	X	.023	.023	0	%100
20	M14	Z	.041	.041	0	%100
21	M34A	X	.072	.072	0	%100
22	M34A	Z	.124	.124	0	%100
23	M36	X	.198	.198	0	%100
24	M36	Z	.343	.343	0	%100
25	M30	X	.096	.096	0	%100
26	M30	Z	.166	.166	0	%100
27	M31	X	.096	.096	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
28	M31	Z	.166	.166	0	%100
29	M32	X	.096	.096	0	%100
30	M32	Z	.166	.166	0	%100
31	M33	X	.096	.096	0	%100
32	M33	Z	.166	.166	0	%100
33	M34	X	.218	.218	0	%100
34	M34	Z	.378	.378	0	%100
35	M35A	X	.218	.218	0	%100
36	M35A	Z	.378	.378	0	%100
37	M36A	X	.222	.222	0	%100
38	M36A	Z	.385	.385	0	%100
39	M37	X	.222	.222	0	%100
40	M37	Z	.385	.385	0	%100
41	M29	X	.369	.369	0	%100
42	M29	Z	.639	.639	0	%100
43	M30A	X	.369	.369	0	%100
44	M30A	Z	.639	.639	0	%100
45	M31A	X	.369	.369	0	%100
46	M31A	Z	.639	.639	0	%100
47	M32A	X	.369	.369	0	%100
48	M32A	Z	.639	.639	0	%100
49	M34B	X	.218	.218	0	%100
50	M34B	Z	.378	.378	0	%100
51	M35B	X	.218	.218	0	%100
52	M35B	Z	.378	.378	0	%100
53	M36B	X	.157	.157	0	%100
54	M36B	Z	.272	.272	0	%100
55	M37A	X	.157	.157	0	%100
56	M37A	Z	.272	.272	0	%100
57	MP5A	X	.325	.325	0	%100
58	MP5A	Z	.563	.563	0	%100
59	MP4A	X	.325	.325	0	%100
60	MP4A	Z	.563	.563	0	%100
61	MP3A	X	.325	.325	0	%100
62	MP3A	Z	.563	.563	0	%100
63	MP1A	X	.325	.325	0	%100
64	MP1A	Z	.563	.563	0	%100
65	MP2A	X	.393	.393	0	%100
66	MP2A	Z	.681	.681	0	%100
67	M52	X	.204	.204	0	%100
68	M52	Z	.353	.353	0	%100
69	M53	X	.105	.105	0	%100
70	M53	Z	.183	.183	0	%100
71	M54A	X	.072	.072	0	%100
72	M54A	Z	.124	.124	0	%100
73	M55	X	.075	.075	0	%100
74	M55	Z	.131	.131	0	%100
75	M54B	X	.373	.373	0	%100
76	M54B	Z	.646	.646	0	%100
77	M55A	X	.198	.198	0	%100
78	M55A	Z	.343	.343	0	%100
79	M56A	X	.37	.37	0	%100
80	M56A	Z	.641	.641	0	%100
81	M58	X	.373	.373	0	%100
82	M58	Z	.646	.646	0	%100
83	M59	X	.4	.4	0	%100
84	M59	Z	.693	.693	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M5	X	0	0	0	%100
2	M5	Z	.05	.05	0	%100
3	M6	X	0	0	0	%100
4	M6	Z	.05	.05	0	%100
5	M7	X	0	0	0	%100
6	M7	Z	.787	.787	0	%100
7	M8	X	0	0	0	%100
8	M8	Z	.05	.05	0	%100
9	M9	X	0	0	0	%100
10	M9	Z	.05	.05	0	%100
11	M10	X	0	0	0	%100
12	M10	Z	.787	.787	0	%100
13	M11	X	0	0	0	%100
14	M11	Z	.331	.331	0	%100
15	OVP	X	0	0	0	%100
16	OVP	Z	.331	.331	0	%100
17	M13	X	0	0	0	%100
18	M13	Z	.331	.331	0	%100
19	M14	X	0	0	0	%100
20	M14	Z	.331	.331	0	%100
21	M34A	X	0	0	0	%100
22	M34A	Z	.42	.42	0	%100
23	M36	X	0	0	0	%100
24	M36	Z	.396	.396	0	%100
25	M30	X	0	0	0	%100
26	M30	Z	.526	.526	0	%100
27	M31	X	0	0	0	%100
28	M31	Z	.526	.526	0	%100
29	M32	X	0	0	0	%100
30	M32	Z	.526	.526	0	%100
31	M33	X	0	0	0	%100
32	M33	Z	.526	.526	0	%100
33	M34	X	0	0	0	%100
34	M34	Z	.436	.436	0	%100
35	M35A	X	0	0	0	%100
36	M35A	Z	.436	.436	0	%100
37	M36A	X	0	0	0	%100
38	M36A	Z	.38	.38	0	%100
39	M37	X	0	0	0	%100
40	M37	Z	.38	.38	0	%100
41	M29	X	0	0	0	%100
42	M29	Z	.403	.403	0	%100
43	M30A	X	0	0	0	%100
44	M30A	Z	.403	.403	0	%100
45	M31A	X	0	0	0	%100
46	M31A	Z	.403	.403	0	%100
47	M32A	X	0	0	0	%100
48	M32A	Z	.403	.403	0	%100
49	M34B	X	0	0	0	%100
50	M34B	Z	.436	.436	0	%100
51	M35B	X	0	0	0	%100
52	M35B	Z	.436	.436	0	%100
53	M36B	X	0	0	0	%100
54	M36B	Z	.38	.38	0	%100
55	M37A	X	0	0	0	%100
56	M37A	Z	.38	.38	0	%100
57	MP5A	X	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
58	MP5A	Z	.65	.65	0	%100
59	MP4A	X	0	0	0	%100
60	MP4A	Z	.65	.65	0	%100
61	MP3A	X	0	0	0	%100
62	MP3A	Z	.65	.65	0	%100
63	MP1A	X	0	0	0	%100
64	MP1A	Z	.65	.65	0	%100
65	MP2A	X	0	0	0	%100
66	MP2A	Z	.787	.787	0	%100
67	M52	X	0	0	0	%100
68	M52	Z	.04	.04	0	%100
69	M53	X	0	0	0	%100
70	M53	Z	.535	.535	0	%100
71	M54A	X	0	0	0	%100
72	M54A	Z	.42	.42	0	%100
73	M55	X	0	0	0	%100
74	M55	Z	.415	.415	0	%100
75	M54B	X	0	0	0	%100
76	M54B	Z	.42	.42	0	%100
77	M55A	X	0	0	0	%100
78	M55A	Z	.396	.396	0	%100
79	M56A	X	0	0	0	%100
80	M56A	Z	.415	.415	0	%100
81	M58	X	0	0	0	%100
82	M58	Z	.42	.42	0	%100
83	M59	X	0	0	0	%100
84	M59	Z	.535	.535	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M5	X	-.003	-.003	0	%100
2	M5	Z	.006	.006	0	%100
3	M6	X	-.048	-.048	0	%100
4	M6	Z	.082	.082	0	%100
5	M7	X	-.295	-.295	0	%100
6	M7	Z	.511	.511	0	%100
7	M8	X	-.003	-.003	0	%100
8	M8	Z	.006	.006	0	%100
9	M9	X	-.048	-.048	0	%100
10	M9	Z	.082	.082	0	%100
11	M10	X	-.295	-.295	0	%100
12	M10	Z	.511	.511	0	%100
13	M11	X	-.023	-.023	0	%100
14	M11	Z	.041	.041	0	%100
15	OVP	X	-.305	-.305	0	%100
16	OVP	Z	.528	.528	0	%100
17	M13	X	-.023	-.023	0	%100
18	M13	Z	.041	.041	0	%100
19	M14	X	-.305	-.305	0	%100
20	M14	Z	.528	.528	0	%100
21	M34A	X	-.373	-.373	0	%100
22	M34A	Z	.646	.646	0	%100
23	M36	X	-.198	-.198	0	%100
24	M36	Z	.343	.343	0	%100
25	M30	X	-.4	-.4	0	%100
26	M30	Z	.692	.692	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
27	M31	X	-.4	-.4	0	%100
28	M31	Z	.692	.692	0	%100
29	M32	X	-.4	-.4	0	%100
30	M32	Z	.692	.692	0	%100
31	M33	X	-.4	-.4	0	%100
32	M33	Z	.692	.692	0	%100
33	M34	X	-.218	-.218	0	%100
34	M34	Z	.378	.378	0	%100
35	M35A	X	-.218	-.218	0	%100
36	M35A	Z	.378	.378	0	%100
37	M36A	X	-.157	-.157	0	%100
38	M36A	Z	.272	.272	0	%100
39	M37	X	-.157	-.157	0	%100
40	M37	Z	.272	.272	0	%100
41	M29	X	-.065	-.065	0	%100
42	M29	Z	.112	.112	0	%100
43	M30A	X	-.065	-.065	0	%100
44	M30A	Z	.112	.112	0	%100
45	M31A	X	-.065	-.065	0	%100
46	M31A	Z	.112	.112	0	%100
47	M32A	X	-.065	-.065	0	%100
48	M32A	Z	.112	.112	0	%100
49	M34B	X	-.218	-.218	0	%100
50	M34B	Z	.378	.378	0	%100
51	M35B	X	-.218	-.218	0	%100
52	M35B	Z	.378	.378	0	%100
53	M36B	X	-.222	-.222	0	%100
54	M36B	Z	.385	.385	0	%100
55	M37A	X	-.222	-.222	0	%100
56	M37A	Z	.385	.385	0	%100
57	MP5A	X	-.325	-.325	0	%100
58	MP5A	Z	.563	.563	0	%100
59	MP4A	X	-.325	-.325	0	%100
60	MP4A	Z	.563	.563	0	%100
61	MP3A	X	-.325	-.325	0	%100
62	MP3A	Z	.563	.563	0	%100
63	MP1A	X	-.325	-.325	0	%100
64	MP1A	Z	.563	.563	0	%100
65	MP2A	X	-.393	-.393	0	%100
66	MP2A	Z	.681	.681	0	%100
67	M52	X	-.042	-.042	0	%100
68	M52	Z	.074	.074	0	%100
69	M53	X	-.4	-.4	0	%100
70	M53	Z	.693	.693	0	%100
71	M54A	X	-.373	-.373	0	%100
72	M54A	Z	.646	.646	0	%100
73	M55	X	-.37	-.37	0	%100
74	M55	Z	.641	.641	0	%100
75	M54B	X	-.072	-.072	0	%100
76	M54B	Z	.124	.124	0	%100
77	M55A	X	-.198	-.198	0	%100
78	M55A	Z	.343	.343	0	%100
79	M56A	X	-.075	-.075	0	%100
80	M56A	Z	.131	.131	0	%100
81	M58	X	-.072	-.072	0	%100
82	M58	Z	.124	.124	0	%100
83	M59	X	-.105	-.105	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
84 M59	Z	.183	.183	0	%100

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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1 M5	X	-.006	-.006	0	%100
2 M5	Z	.004	.004	0	%100
3 M6	X	-.083	-.083	0	%100
4 M6	Z	.048	.048	0	%100
5 M7	X	-.17	-.17	0	%100
6 M7	Z	.098	.098	0	%100
7 M8	X	-.006	-.006	0	%100
8 M8	Z	.004	.004	0	%100
9 M9	X	-.083	-.083	0	%100
10 M9	Z	.048	.048	0	%100
11 M10	X	-.17	-.17	0	%100
12 M10	Z	.098	.098	0	%100
13 M11	X	-.035	-.035	0	%100
14 M11	Z	.02	.02	0	%100
15 OVP	X	-.522	-.522	0	%100
16 OVP	Z	.301	.301	0	%100
17 M13	X	-.035	-.035	0	%100
18 M13	Z	.02	.02	0	%100
19 M14	X	-.522	-.522	0	%100
20 M14	Z	.301	.301	0	%100
21 M34A	X	-.689	-.689	0	%100
22 M34A	Z	.398	.398	0	%100
23 M36	X	-.343	-.343	0	%100
24 M36	Z	.198	.198	0	%100
25 M30	X	-.639	-.639	0	%100
26 M30	Z	.369	.369	0	%100
27 M31	X	-.639	-.639	0	%100
28 M31	Z	.369	.369	0	%100
29 M32	X	-.639	-.639	0	%100
30 M32	Z	.369	.369	0	%100
31 M33	X	-.639	-.639	0	%100
32 M33	Z	.369	.369	0	%100
33 M34	X	-.378	-.378	0	%100
34 M34	Z	.218	.218	0	%100
35 M35A	X	-.378	-.378	0	%100
36 M35A	Z	.218	.218	0	%100
37 M36A	X	-.27	-.27	0	%100
38 M36A	Z	.156	.156	0	%100
39 M37	X	-.27	-.27	0	%100
40 M37	Z	.156	.156	0	%100
41 M29	X	-.166	-.166	0	%100
42 M29	Z	.096	.096	0	%100
43 M30A	X	-.166	-.166	0	%100
44 M30A	Z	.096	.096	0	%100
45 M31A	X	-.166	-.166	0	%100
46 M31A	Z	.096	.096	0	%100
47 M32A	X	-.166	-.166	0	%100
48 M32A	Z	.096	.096	0	%100
49 M34B	X	-.378	-.378	0	%100
50 M34B	Z	.218	.218	0	%100
51 M35B	X	-.378	-.378	0	%100
52 M35B	Z	.218	.218	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
53	M36B	X	-.384	-.384	0	%100
54	M36B	Z	.222	.222	0	%100
55	M37A	X	-.384	-.384	0	%100
56	M37A	Z	.222	.222	0	%100
57	MP5A	X	-.563	-.563	0	%100
58	MP5A	Z	.325	.325	0	%100
59	MP4A	X	-.563	-.563	0	%100
60	MP4A	Z	.325	.325	0	%100
61	MP3A	X	-.563	-.563	0	%100
62	MP3A	Z	.325	.325	0	%100
63	MP1A	X	-.563	-.563	0	%100
64	MP1A	Z	.325	.325	0	%100
65	MP2A	X	-.681	-.681	0	%100
66	MP2A	Z	.393	.393	0	%100
67	M52	X	-.431	-.431	0	%100
68	M52	Z	.249	.249	0	%100
69	M53	X	-.641	-.641	0	%100
70	M53	Z	.37	.37	0	%100
71	M54A	X	-.689	-.689	0	%100
72	M54A	Z	.398	.398	0	%100
73	M55	X	-.693	-.693	0	%100
74	M55	Z	.4	.4	0	%100
75	M54B	X	-.167	-.167	0	%100
76	M54B	Z	.097	.097	0	%100
77	M55A	X	-.343	-.343	0	%100
78	M55A	Z	.198	.198	0	%100
79	M56A	X	-.183	-.183	0	%100
80	M56A	Z	.105	.105	0	%100
81	M58	X	-.167	-.167	0	%100
82	M58	Z	.097	.097	0	%100
83	M59	X	-.131	-.131	0	%100
84	M59	Z	.075	.075	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M5	X	-.052	-.052	0	%100
2	M5	Z	0	0	0	%100
3	M6	X	-.052	-.052	0	%100
4	M6	Z	0	0	0	%100
5	M7	X	0	0	0	%100
6	M7	Z	0	0	0	%100
7	M8	X	-.052	-.052	0	%100
8	M8	Z	0	0	0	%100
9	M9	X	-.052	-.052	0	%100
10	M9	Z	0	0	0	%100
11	M10	X	0	0	0	%100
12	M10	Z	0	0	0	%100
13	M11	X	-.318	-.318	0	%100
14	M11	Z	0	0	0	%100
15	OVP	X	-.318	-.318	0	%100
16	OVP	Z	0	0	0	%100
17	M13	X	-.318	-.318	0	%100
18	M13	Z	0	0	0	%100
19	M14	X	-.318	-.318	0	%100
20	M14	Z	0	0	0	%100
21	M34A	X	-.519	-.519	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
79	M56A	X	- .535	- .535	0	%100
80	M56A	Z	0	0	0	%100
81	M58	X	- .519	- .519	0	%100
82	M58	Z	0	0	0	%100
83	M59	X	- .415	- .415	0	%100
84	M59	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M5	X	- .083	- .083	0	%100
2	M5	Z	- .048	- .048	0	%100
3	M6	X	- .006	- .006	0	%100
4	M6	Z	- .004	- .004	0	%100
5	M7	X	- .17	- .17	0	%100
6	M7	Z	- .098	- .098	0	%100
7	M8	X	- .083	- .083	0	%100
8	M8	Z	- .048	- .048	0	%100
9	M9	X	- .006	- .006	0	%100
10	M9	Z	- .004	- .004	0	%100
11	M10	X	- .17	- .17	0	%100
12	M10	Z	- .098	- .098	0	%100
13	M11	X	- .522	- .522	0	%100
14	M11	Z	- .301	- .301	0	%100
15	OVP	X	- .035	- .035	0	%100
16	OVP	Z	- .02	- .02	0	%100
17	M13	X	- .522	- .522	0	%100
18	M13	Z	- .301	- .301	0	%100
19	M14	X	- .035	- .035	0	%100
20	M14	Z	- .02	- .02	0	%100
21	M34A	X	- .167	- .167	0	%100
22	M34A	Z	- .097	- .097	0	%100
23	M36	X	- .343	- .343	0	%100
24	M36	Z	- .198	- .198	0	%100
25	M30	X	- .112	- .112	0	%100
26	M30	Z	- .065	- .065	0	%100
27	M31	X	- .112	- .112	0	%100
28	M31	Z	- .065	- .065	0	%100
29	M32	X	- .112	- .112	0	%100
30	M32	Z	- .065	- .065	0	%100
31	M33	X	- .112	- .112	0	%100
32	M33	Z	- .065	- .065	0	%100
33	M34	X	- .378	- .378	0	%100
34	M34	Z	- .218	- .218	0	%100
35	M35A	X	- .378	- .378	0	%100
36	M35A	Z	- .218	- .218	0	%100
37	M36A	X	- .384	- .384	0	%100
38	M36A	Z	- .222	- .222	0	%100
39	M37	X	- .384	- .384	0	%100
40	M37	Z	- .222	- .222	0	%100
41	M29	X	- .692	- .692	0	%100
42	M29	Z	- .4	- .4	0	%100
43	M30A	X	- .692	- .692	0	%100
44	M30A	Z	- .4	- .4	0	%100
45	M31A	X	- .692	- .692	0	%100
46	M31A	Z	- .4	- .4	0	%100
47	M32A	X	- .692	- .692	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
48	M32A	Z	-.4	-.4	0	%100
49	M34B	X	-.378	-.378	0	%100
50	M34B	Z	-.218	-.218	0	%100
51	M35B	X	-.378	-.378	0	%100
52	M35B	Z	-.218	-.218	0	%100
53	M36B	X	-.27	-.27	0	%100
54	M36B	Z	-.156	-.156	0	%100
55	M37A	X	-.27	-.27	0	%100
56	M37A	Z	-.156	-.156	0	%100
57	MP5A	X	-.563	-.563	0	%100
58	MP5A	Z	-.325	-.325	0	%100
59	MP4A	X	-.563	-.563	0	%100
60	MP4A	Z	-.325	-.325	0	%100
61	MP3A	X	-.563	-.563	0	%100
62	MP3A	Z	-.325	-.325	0	%100
63	MP1A	X	-.563	-.563	0	%100
64	MP1A	Z	-.325	-.325	0	%100
65	MP2A	X	-.681	-.681	0	%100
66	MP2A	Z	-.393	-.393	0	%100
67	M52	X	-.711	-.711	0	%100
68	M52	Z	-.41	-.41	0	%100
69	M53	X	-.131	-.131	0	%100
70	M53	Z	-.075	-.075	0	%100
71	M54A	X	-.167	-.167	0	%100
72	M54A	Z	-.097	-.097	0	%100
73	M55	X	-.183	-.183	0	%100
74	M55	Z	-.105	-.105	0	%100
75	M54B	X	-.689	-.689	0	%100
76	M54B	Z	-.398	-.398	0	%100
77	M55A	X	-.343	-.343	0	%100
78	M55A	Z	-.198	-.198	0	%100
79	M56A	X	-.693	-.693	0	%100
80	M56A	Z	-.4	-.4	0	%100
81	M58	X	-.689	-.689	0	%100
82	M58	Z	-.398	-.398	0	%100
83	M59	X	-.641	-.641	0	%100
84	M59	Z	-.37	-.37	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M5	X	-.048	-.048	0	%100
2	M5	Z	-.082	-.082	0	%100
3	M6	X	-.003	-.003	0	%100
4	M6	Z	-.006	-.006	0	%100
5	M7	X	-.295	-.295	0	%100
6	M7	Z	-.511	-.511	0	%100
7	M8	X	-.048	-.048	0	%100
8	M8	Z	-.082	-.082	0	%100
9	M9	X	-.003	-.003	0	%100
10	M9	Z	-.006	-.006	0	%100
11	M10	X	-.295	-.295	0	%100
12	M10	Z	-.511	-.511	0	%100
13	M11	X	-.305	-.305	0	%100
14	M11	Z	-.528	-.528	0	%100
15	OVP	X	-.023	-.023	0	%100
16	OVP	Z	-.041	-.041	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
17	M13	X	-.305	-.305	0	%100
18	M13	Z	-.528	-.528	0	%100
19	M14	X	-.023	-.023	0	%100
20	M14	Z	-.041	-.041	0	%100
21	M34A	X	-.072	-.072	0	%100
22	M34A	Z	-.124	-.124	0	%100
23	M36	X	-.198	-.198	0	%100
24	M36	Z	-.343	-.343	0	%100
25	M30	X	-.096	-.096	0	%100
26	M30	Z	-.166	-.166	0	%100
27	M31	X	-.096	-.096	0	%100
28	M31	Z	-.166	-.166	0	%100
29	M32	X	-.096	-.096	0	%100
30	M32	Z	-.166	-.166	0	%100
31	M33	X	-.096	-.096	0	%100
32	M33	Z	-.166	-.166	0	%100
33	M34	X	-.218	-.218	0	%100
34	M34	Z	-.378	-.378	0	%100
35	M35A	X	-.218	-.218	0	%100
36	M35A	Z	-.378	-.378	0	%100
37	M36A	X	-.222	-.222	0	%100
38	M36A	Z	-.385	-.385	0	%100
39	M37	X	-.222	-.222	0	%100
40	M37	Z	-.385	-.385	0	%100
41	M29	X	-.369	-.369	0	%100
42	M29	Z	-.639	-.639	0	%100
43	M30A	X	-.369	-.369	0	%100
44	M30A	Z	-.639	-.639	0	%100
45	M31A	X	-.369	-.369	0	%100
46	M31A	Z	-.639	-.639	0	%100
47	M32A	X	-.369	-.369	0	%100
48	M32A	Z	-.639	-.639	0	%100
49	M34B	X	-.218	-.218	0	%100
50	M34B	Z	-.378	-.378	0	%100
51	M35B	X	-.218	-.218	0	%100
52	M35B	Z	-.378	-.378	0	%100
53	M36B	X	-.157	-.157	0	%100
54	M36B	Z	-.272	-.272	0	%100
55	M37A	X	-.157	-.157	0	%100
56	M37A	Z	-.272	-.272	0	%100
57	MP5A	X	-.325	-.325	0	%100
58	MP5A	Z	-.563	-.563	0	%100
59	MP4A	X	-.325	-.325	0	%100
60	MP4A	Z	-.563	-.563	0	%100
61	MP3A	X	-.325	-.325	0	%100
62	MP3A	Z	-.563	-.563	0	%100
63	MP1A	X	-.325	-.325	0	%100
64	MP1A	Z	-.563	-.563	0	%100
65	MP2A	X	-.393	-.393	0	%100
66	MP2A	Z	-.681	-.681	0	%100
67	M52	X	-.204	-.204	0	%100
68	M52	Z	-.353	-.353	0	%100
69	M53	X	-.105	-.105	0	%100
70	M53	Z	-.183	-.183	0	%100
71	M54A	X	-.072	-.072	0	%100
72	M54A	Z	-.124	-.124	0	%100
73	M55	X	-.075	-.075	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
74	M55	Z	-.131	-.131	0 %100
75	M54B	X	-.373	-.373	0 %100
76	M54B	Z	-.646	-.646	0 %100
77	M55A	X	-.198	-.198	0 %100
78	M55A	Z	-.343	-.343	0 %100
79	M56A	X	-.37	-.37	0 %100
80	M56A	Z	-.641	-.641	0 %100
81	M58	X	-.373	-.373	0 %100
82	M58	Z	-.646	-.646	0 %100
83	M59	X	-.4	-.4	0 %100
84	M59	Z	-.693	-.693	0 %100

Member Area Loads

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

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

Member	Shape	Code Check	L...	LC	Shear C...	Loc.....	phi*P...	phi*P...	phi*M...	phi*M...	Eqn	
1	M5	PL3/8X3	.405	0	22	.056	0	y 23	34985..36450	.284	2.279	H1-1b
2	M6	PL3/8X3	.684	0	16	.066	0	z 46	34985..36450	.284	2.279	H1-1b
3	M7	PIPE_2.5	.599	2...	3	.250	2.4...	9	11606..50715	3.596	3.596	H1-1b
4	M8	PL3/8X3	.389	0	15	.056	0	y 17	34985..36450	.284	2.279	H1-1b
5	M9	PL3/8X3	.655	0	23	.058	0	z 39	34985..36450	.284	2.279	H1-1b
6	M10	PIPE_2.5	.750	2...	3	.225	2.4...	3	11606..50715	3.596	3.596	H1-1b
7	M11	PIPE_2.0	.515	6...	9	.112	5.4...	9	20700..32130	1.872	1.872	H1-1b
8	OVP	PIPE_2.0	.346	6...	3	.092	0	14	20700..32130	1.872	1.872	H1-1b
9	M13	PIPE_2.0	.599	6...	3	.109	5.4...	3	20700..32130	1.872	1.872	H1-1b
10	M14	PIPE_2.0	.375	6...	9	.091	5.4...	15	20700..32130	1.872	1.872	H1-1b
11	M34A	PL3/8X3	.021	.1...	9	.030	0	y 9	35426..36450	.284	2.279	H1-1...
12	M36	PIPE_1.25	.060	1...	10	.010	2.5	9	16835..19687..	.801	.801	H1-1b
13	M30	PL3/8X3	.033	0	10	.009	0	y 3	36078..36450	.284	2.279	H1-1b
14	M31	PL3/8X3	.029	.1...	21	.009	.125	y 3	36078..36450	.284	2.279	H1-1...
15	M32	PL3/8X3	.017	.1...	5	.063	.125	y 46	36078..36450	.284	2.279	H1-1b
16	M33	PL3/8X3	.017	0	23	.063	0	y 46	36078..36450	.284	2.279	H1-1b
17	M34	PIPE_1.25	.067	3...	21	.005	0	3	15316..19687..	.801	.801	H1-1...
18	M35A	PIPE_1.25	.039	3...	21	.019	0	46	15316..19687..	.801	.801	H1-1...
19	M36A	PIPE_1.25	.052	2...	13	.029	4.1...	3	12699..19687..	.801	.801	H1-1b
20	M37	PIPE_1.25	.041	2...	13	.111	4.1...	3	12699..19687..	.801	.801	H1-1b
21	M29	PL3/8X3	.054	.1...	24	.022	.125	y 9	36078..36450	.284	2.279	H1-1b
22	M30A	PL3/8X3	.052	0	21	.022	0	y 9	36078..36450	.284	2.279	H1-1b
23	M31A	PL3/8X3	.051	0	20	.057	0	y 47	36078..36450	.284	2.279	H1-1b
24	M32A	PL3/8X3	.051	.1...	24	.057	.125	y 47	36078..36450	.284	2.279	H1-1b
25	M34B	PIPE_1.25	.122	3...	15	.009	0	9	15316..19687..	.801	.801	H1-1...
26	M35B	PIPE_1.25	.066	3...	15	.018	3.1...	37	15316..19687..	.801	.801	H1-1...
27	M36B	PIPE_1.25	.080	2...	13	.037	0	3	12699..19687..	.801	.801	H1-1b
28	M37A	PIPE_1.25	.064	2...	13	.041	0	3	12699..19687..	.801	.801	H1-1b
29	MP5A	PIPE_2.0	.708	3...	3	.205	4.75	9	20866..32130	1.872	1.872	H1-1b
30	MP4A	PIPE_2.0	.092	4...	23	.106	1.3...	4	20866..32130	1.872	1.872	H1-1b
31	MP3A	PIPE_2.0	.060	4...	2	.014	1.3...	6	20866..32130	1.872	1.872	H1-1b
32	MP1A	PIPE_2.0	.160	4...	23	.106	1.3...	4	20866..32130	1.872	1.872	H1-1b
33	MP2A	PIPE_2.5	.123	4...	13	.081	1.5	9	37773..50715	3.596	3.596	H1-1b
34	M52	PIPE_3.0	.083	6...	10	.006	0	16	29188..65205	5.749	5.749	H1-1b
35	M53	PL3/8X3	.106	.3...	9	.028	.042	y 9	34471..36450	.284	2.271	1 H1-1b
36	M54A	PL3/8X3	.021	0	9	.027	0	y 9	35426..36450	.284	2.279	H1-1...



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

Member	Shape	Code Check	L...	LC	Shear C...	Loc.....	phi*P...	phi*P...	phi*M...	phi*M.....	Eqn			
37	M55	PL3/8X3	.104	.3...	9	.028	.042	y 9	34471...	36450	.284	2.279	...	H1-1b
38	M54B	PL3/8X3	.022	.1...	37	.011	0	y 8	35426...	36450	.284	2.279	...	H1-1...
39	M55A	PIPE 1.25	.060	2...	38	.009	2.5	11	16835...	19687...	.801	.801	...	H1-1b
40	M56A	PL3/8X3	.101	.3...	38	.012	.042	y 7	34471...	36450	.284	2.271	1	H1-1b
41	M58	PL3/8X3	.023	0	37	.020	0	y 11	35426...	36450	.284	2.279	...	H1-1...
42	M59	PL3/8X3	.109	.3...	38	.022	.042	y 11	34471...	36450	.284	2.271	1	H1-1b

Envelope Joint Reactions

Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC	
1	N4	max	816.275	10	1375.07	15	683.668	2	-.131	71	0	75	.086	38
2		min	-1683.806	4	437.077	72	-3711.51	20	-411	14	0	1	.019	74
3	N65	max	1827.294	10	1264.392	21	3812.365	14	-.124	65	0	75	.082	39
4		min	-946.842	4	410.801	66	-1080.184	8	-.384	20	0	1	.016	9
5	N76	max	423.917	2	80.96	21	2114.589	9	0	75	0	75	0	75
6		min	-428.255	8	33.527	66	-2144.41	3	0	1	0	1	0	1
7	Totals:	max	2311.323	10	2716.985	14	3045.666	1						
8		min	-2311.336	4	881.552	71	-3045.676	7						

Date: **October 17, 2023**



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

Subject: **Structural Analysis Report**

Carrier Designation: **Verizon Wireless Co-Locate**
Site Number: 5000382040
Site Name: Wolcott CT

Crown Castle Designation: **BU Number:** 806362
Site Name: NHV 108 943133
JDE Job Number: 2103456
Work Order Number: 2264874
Order Number: 658783 Rev. 0

Engineering Firm Designation: **Crown Castle Project Number:** 2264874

Site Data: **INTERSECTION OF RTE 322/MERIDIAN RD,
WOLCOTT, NEW HAVEN County, CT
Latitude 41° 33' 34.41", Longitude -72° 56' 49.1"
185 Foot - Self Support Tower**

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

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

LC7: Proposed Equipment Configuration

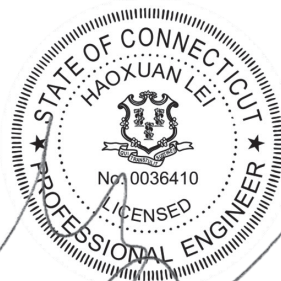
Sufficient Capacity - 74.2%

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

Structural analysis prepared by: Haoxuan Lei

Respectfully submitted by:

Haoxuan Lei, P.E.
Project Engineer



Digitally signed
by Haoxuan Lei

Date:

2023.10.17

18:11:42 -05'00'

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1) INTRODUCTION

This tower is a 180 ft Self Support tower designed by ROHN. A 5-ft tower extension has been considered in this analysis, bringing the total tower height to 185 ft.

The tower has been modified multiple times to accommodate additional loading.

2) ANALYSIS CRITERIA

TIA-222 Revision:	TIA-222-H
Risk Category:	II
Wind Speed:	118 mph
Exposure Category:	C
Topographic Factor:	1
Ice Thickness:	1 in
Wind Speed with Ice:	50 mph
Service Wind Speed:	60 mph

Table 1 - Proposed Equipment Configuration

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
178.0	179.0	2	andrew	DB846F65ZAXY w/ Mount Pipe	14	1-5/8
		2	antel	LPA-80063/6CFx5 w/ Mount Pipe		
		3	commscope	CBC78T-DS-43-2X		
		6	commscope	JAHH-65B-R3B w/ Mount Pipe		
		4	kaelus	BSF0020F3V1		
		1	raycap	RVZDC-6627-PF-48_CCIV2		
		3	samsung telecommunication s	RFV01U-D1A		
		3	samsung telecommunication s	RFV01U-D2A		
		2	swedcom	SC-E 6014 rev2 w/ Mount Pipe		
		3	vzw	Sub6 Antenna - VZS01 w/ Mount Pipe		
	178.0	1	tower mounts	Sector Mount [SM 504-3]		
57.0	60.0	1	gps	GPS_A	1	1/2
	57.0	1	tower mounts	Side Arm Mount [SO 306-1]		

Table 2 - Other Considered Equipment

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
183.0	186.0	3	commscope	SDX1926Q-43	2	1-3/8
		3	ericsson	KRY 112 144/1		
		3	ericsson	RADIO 4449 B71 B85A_T-MOBILE		

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
	185.0	3	rfs celwave_cfd	APXVAARR24_43-U-NA20 w/ Mount Pipe		
		3	ericsson	RRUS 4415 B25		
	3	ericsson_cfd	AIR 32 B2A/B66AA w/ Mount Pipe			
	184.0	3	ericsson_cfd	AIR6449 B41_T-MOBILE w/ Mount Pipe		
	183.0	1	tower mounts	Sector Mount [SM 504-3]		
168.0	168.0	3	alcatel lucent	PCS 1900MHZ 4X45W-65MHZ	4 1	1-1/4 7983A
		6	alcatel lucent	RRH2X50-800		
		1	andrew	VHLP2-18		
		3	commscope_cfd	NNVV-65B-R4 w/ Mount Pipe		
		1	dragonwave	A-ANT-18G-2-C		
		6	mounts	2.4" Dia x 6-ft Pipe		
		3	nokia_cfd	AAHC w/ Mount Pipe		
		1	tower mounts	Sitepro VFA12-HD Sector Mount (3)		
157.0	162.0	3	ericsson_cfd	AIR 6419 B77G_CCIV3 w/ Mount Pipe	6 6 3 1	1-1/4 3/4 3/8 7/8
	160.0	1	cci antennas_cfd	DMP65R-BU8D w/ Mount Pipe		
		2	cci antennas_cfd	OPA65R-BU6D w/ Mount Pipe		
		3	ericsson	RRUS 32 B2		
		3	ericsson	RRUS 32 B30		
		3	ericsson	RRUS 32 B66A		
		3	ericsson	RRUS 4449 B5/B12		
		3	ericsson	RRUS 4478 B14_CCIV2		
		2	quintel technology_cfd	QD6616-7 w/ Mount Pipe		
		1	quintel technology_cfd	QD8616-7 w/ Mount Pipe		
		1	raycap	DC6-48-60-18-8F		
	1	raycap	DC6-48-60-18-8F_CCIV2			
	1	raycap	DC9-48-60-24-8C-EV			
	158.0	3	ericsson_cfd	AIR 6449 B77D_CCIV3		
	1	raycap	DC6-48-60-18-8F			
157.0	1	tower mounts	Sector Mount [SM 503-3]			

3) ANALYSIS PROCEDURE

Table 3 - Documents Provided

Document	Reference	Source
4-GEOTECHNICAL REPORTS	2303630	CCISITES
4-TOWER FOUNDATION DRAWINGS/DESIGN/SPECS	217670	CCISITES
4-TOWER MANUFACTURER DRAWINGS	529684	CCISITES

Document	Reference	Source
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	7904718	CCISITES
4-POST-MODIFICATION INSPECTION	8288884	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	903539	CCISITES

3.1) Analysis Method

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

3.2) Assumptions

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

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

4) ANALYSIS RESULTS

Table 4 - Section Capacity (Summary)

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P (K)	SF*P_allow (K)	% Capacity	Pass / Fail
T1	185 - 180	Leg	ROHN 2.5 STD	2	-2.91	40.52	7.2	Pass
T2	180 - 160	Leg	ROHN 2.5 STD	15	-21.91	47.80	45.8	Pass
T3	160 - 140	Leg	ROHN 3 X-STR	54	-60.45	99.05	61.0	Pass
T4	140 - 120	Leg	ROHN 4 X-STR	93	-95.05	167.90	56.6	Pass
T5	120 - 100	Leg	ROHN 5 EH	132	-121.15	211.25	57.3	Pass
T6	100 - 80	Leg	ROHN 5 EH	159	-148.77	211.17	70.5	Pass
T7	80 - 60	Leg	ROHN 6 EHS	186	-173.95	256.16	67.9	Pass
T8	60 - 40	Leg	ROHN 6 X-STR	213	-198.96	318.80	62.4	Pass
T9	40 - 20	Leg	ROHN 6 X-STR	240	-222.85	318.76	69.9	Pass
T10	20 - 0	Leg	ROHN 8 EHS	267	-233.43	405.62	57.5	Pass
T1	185 - 180	Diagonal	L2x2x1/4	8	-0.87	13.74	6.3	Pass
T2	180 - 160	Diagonal	ROHN 2 STD	20	-7.74	18.52	41.8	Pass
T3	160 - 140	Diagonal	ROHN 2 STD	71	-9.23	16.79	55.0	Pass
T4	140 - 120	Diagonal	ROHN 2 STD	99	-8.53	13.72	62.2	Pass
T5	120 - 100	Diagonal	ROHN 2.5 STD	138	-10.34	17.20	60.1	Pass
T6	100 - 80	Diagonal	ROHN 2.5 STD	165	-9.36	15.01	62.3	Pass
T7	80 - 60	Diagonal	ROHN 2.5 STD	192	-9.86	13.29	74.2	Pass
T8	60 - 40	Diagonal	ROHN 2.5 X-STR	219	-10.23	14.66	69.8	Pass
T9	40 - 20	Diagonal	ROHN 3 STD	246	-10.07	20.09	50.1	Pass
T10	20 - 0	Diagonal	ROHN 3 STD	279	-15.78	33.58	47.0	Pass
T2	180 - 160	Horizontal	ROHN 1.5 STD	19	-4.14	23.69	17.5	Pass

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P (K)	SF*P_allow (K)	% Capacity	Pass / Fail
T3	160 - 140	Horizontal	ROHN 1.5 STD	58	-5.34	20.10	26.6	Pass
T4	140 - 120	Horizontal	ROHN 2 STD	97	-5.81	28.55	20.3	Pass
T5	120 - 100	Horizontal	ROHN 2 STD	136	-6.09	23.76	25.6	Pass
T6	100 - 80	Horizontal	ROHN 2 STD	163	-6.03	17.60	34.3	Pass
T7	80 - 60	Horizontal	ROHN 2.5 STD	190	-6.77	30.29	22.4	Pass
T8	60 - 40	Horizontal	ROHN 2.5 STD	217	-7.34	23.43	31.3	Pass
T9	40 - 20	Horizontal	ROHN 2.5 STD	244	-7.48	18.55	40.3	Pass
T10	20 - 0	Horizontal	ROHN 3 STD	275	-8.32	33.23	25.1	Pass
T1	185 - 180	Top Girt	L2x2x1/4	6	0.07	30.01	0.3	Pass
T10	20 - 0	Redund Horz 1 Bracing	ROHN 1.5 TUBE (11ga)	286	-4.05	5.84	69.4	Pass
T10	20 - 0	Redund Diag 1 Bracing	2L2x2x1/4x1/4	281	-3.70	12.80	28.9	Pass
T10	20 - 0	Redund Hip 1 Bracing	ROHN 1.5 TUBE (11ga)	282	-0.03	5.19	0.5	Pass
T10	20 - 0	Redund Hip Diagonal 1 Bracing	ROHN 2.5 STD	283	-0.07	11.09	0.6	Pass
T2	180 - 160	Inner Bracing	L2x2x1/8	25	-0.00	8.79	0.3	Pass
T3	160 - 140	Inner Bracing	L2x2x1/8	66	-0.01	6.48	0.3	Pass
T4	140 - 120	Inner Bracing	L2x2x1/8	104	-0.01	4.43	0.4	Pass
T5	120 - 100	Inner Bracing	L2x2x1/8	144	-0.01	3.34	0.4	Pass
T6	100 - 80	Inner Bracing	L2 1/2x2 1/2x3/16	171	-0.01	6.99	0.4	Pass
T7	80 - 60	Inner Bracing	L3x3x3/16	198	-0.01	9.15	0.4	Pass
T8	60 - 40	Inner Bracing	L3 1/2x3 1/2x1/4	225	-0.01	14.99	0.3	Pass
T9	40 - 20	Inner Bracing	L3 1/2x3 1/2x1/4	252	-0.01	11.94	0.3	Pass
T10	20 - 0	Inner Bracing	ROHN 3 STD	297	-0.01	31.36	0.3	Pass
							Summary	
						Leg (T6)	70.5	Pass
						Diagonal (T7)	74.2	Pass
						Horizontal (T9)	40.3	Pass
						Top Girt (T1)	0.3	Pass
						Redund Horz 1 Bracing (T10)	69.4	Pass
						Redund Diag 1 Bracing (T10)	28.9	Pass
						Redund Hip 1 Bracing (T10)	0.5	Pass
						Redund Hip Diagonal 1 Bracing (T10)	0.6	Pass
						Inner Bracing (T5)	0.4	Pass

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P (K)	SF*P_allow (K)	% Capacity	Pass / Fail
						Bolt Checks	50.2	Pass
						Rating =	74.2	Pass

Table 5 - Tower Component Stresses vs. Capacity - LC7

Notes	Component	Elevation (ft)	% Capacity	Pass / Fail
1	Anchor Rods	0	48.1	Pass
1	Base Foundation (Structure)	0	48.5	Pass
1	Base Foundation (Soil Interaction)	0	29.0	Pass

Structure Rating (max from all components) =	74.2%
---	--------------

Notes:

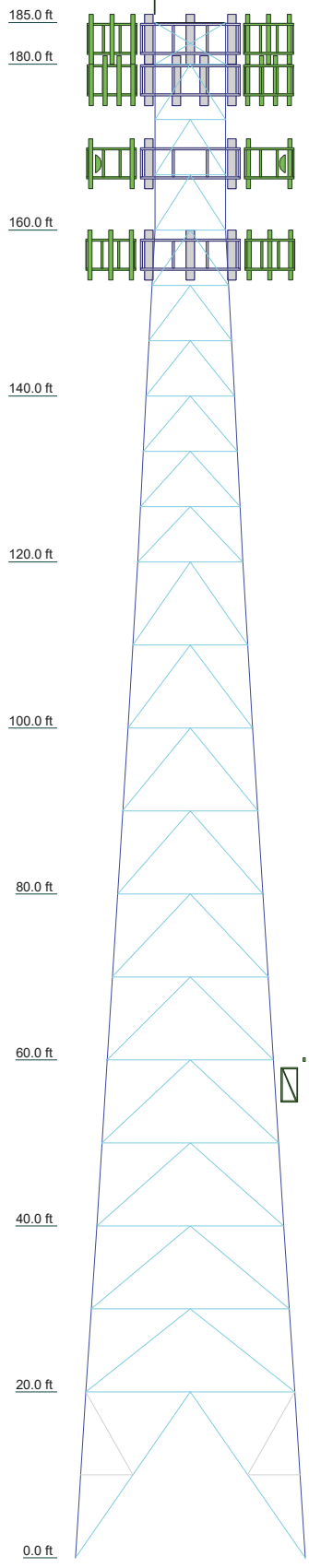
- 1) See additional documentation in "Appendix C – Additional Calculations" for calculations supporting the % capacity consumed.

4.1) Recommendations

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

APPENDIX A
TNXTOWER OUTPUT

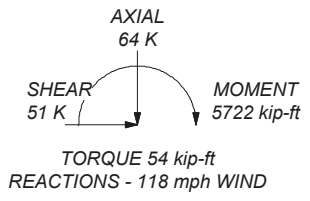
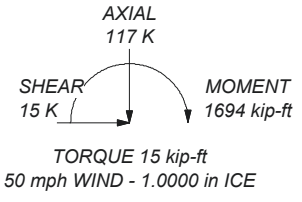
Section	T10	T9	T8	T7	T6	T5	T4	T3	T2	T1
Legs	ROHN 8 EHS	ROHN 6 X-STR	ROHN 2.5 X-STR	ROHN 6 EHS	ROHN 2.5 STD	ROHN 5 EH	ROHN 4 X-STR	ROHN 3 X-STR	ROHN 2.5 STD	ROHN 2.5 STD
Leg Grade					A572-50					A53-A
Diagonals	ROHN 3 STD	ROHN 2.5 X-STR	ROHN 2.5 STD	ROHN 6 EHS	ROHN 2.5 STD	ROHN 5 EH	ROHN 4 X-STR	ROHN 3 X-STR	ROHN 2.5 STD	A
Diagonal Grade					A572-50					B
Top Girts					N.A.					A
Horizontals	ROHN 3 STD	ROHN 2.5 STD	ROHN 2.5 STD	ROHN 6 EHS	ROHN 2.5 STD	ROHN 5 EH	ROHN 4 X-STR	ROHN 3 X-STR	ROHN 2.5 STD	N.A.
Red. Horizontals	ROHN 1.5 TUBE (1"ga)									
Red. Diagonals	2L2x2x1/4x1/4									
Red. Hips	ROHN 1.5 TUBE (1"ga)									
Inner Bracing	ROHN 3 STD	L3 1/2x3 1/2x1/4	L3x3x3/16	L2 1/2x2 1/2x3/16	L2 1/2x2 1/2x3/16	L2 1/2x2 1/2x3/16	L2x2x1/8			N.A.
Face Width (ft)	27.6771	25.1771	22.5417	17.5417	14.9583	12.7083	10.625	8.54167		8.5
# Panels @ (ft)	1 @ 20	1 @ 20	10 @ 10	10 @ 10	10 @ 10	9 @ 6.66667				1 @ 5
Weight (K)	27.8	4.6	4.4	3.3	2.8	2.6	2.0	1.5	1.2	0.4



ALL REACTIONS ARE FACTORED

MAX. CORNER REACTIONS AT BASE:
 DOWN: 256 K
 SHEAR: 31 K

UPLIFT: -220 K
 SHEAR: 28 K



SYMBOL LIST

MARK	SIZE	MARK	SIZE
A	L2x2x1/4	B	A529-50

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A53-A	30 ksi	48 ksi	A572-50	50 ksi	65 ksi
A529-50	50 ksi	65 ksi			

TOWER DESIGN NOTES

1. Tower is located in New Haven County, Connecticut.
2. Tower designed for Exposure C to the TIA-222-H Standard.
3. Tower designed for a 118 mph basic wind in accordance with the TIA-222-H Standard.
4. Tower is also designed for a 50 mph basic wind with 1.00 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60 mph wind.
6. Tower Risk Category II.
7. Topographic Category 1 with Crest Height of 0'
8. TOWER RATING: 74.2%

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

Job: BU 806362		
Project:	Client: Crown Castle	App'd:
Code: TIA-222-H	Drawn by: HLei	Scale: NTS
Path:	Date: 10/17/23	Dwg No. E-1

C:\Temporary Working Space - No One Drive\806362\WO 2264874 - SA\Prod\806362.dwg

Tower Input Data

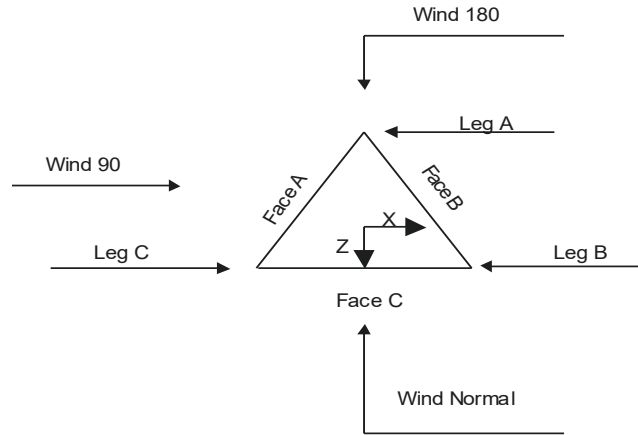
The main tower is a 3x free standing tower with an overall height of 185' above the ground line.
 The base of the tower is set at an elevation of 0' above the ground line.
 The face width of the tower is 8'6" at the top and 27'8-1/8" at the base.
 This tower is designed using the TIA-222-H standard.

The following design criteria apply:

- Tower is located in New Haven County, Connecticut.
- Tower base elevation above sea level: 749'.
- Basic wind speed of 118 mph.
- Risk Category II.
- Exposure Category C.
- Simplified Topographic Factor Procedure for wind speed-up calculations is used.
- Topographic Category: 1.
- Crest Height: 0'.
- Nominal ice thickness of 1.0000 in.
- Ice thickness is considered to increase with height.
- Ice density of 56 pcf.
- A wind speed of 50 mph is used in combination with ice.
- Deflections calculated using a wind speed of 60 mph.
- Pressures are calculated at each section.
- Stress ratio used in tower member design is 1.
- Tower analysis based on target reliabilities in accordance with Annex S.
- Load Modification Factors used: $K_{es}(F_w) = 0.95$, $K_{es}(t_i) = 0.85$.
- Maximum demand-capacity ratio is: 1.05.
- Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Options

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



Triangular Tower

Tower Section Geometry

Tower Section	Tower Elevation	Assembly Database	Description	Section Width	Number of Sections	Section Length
	ft			ft		ft
T1	185'-180'			8'6"	1	5'
T2	180'-160'			8'6"	1	20'
T3	160'-140'			8'6-15/32"	1	20'
T4	140'-120'			10'7-9/16"	1	20'
T5	120'-100'			12'8-17/32"	1	20'
T6	100'-80'			14'11-17/32"	1	20'
T7	80'-60'			17'6-15/32"	1	20'
T8	60'-40'			20'15/32"	1	20'
T9	40'-20'			22'6-15/32"	1	20'
T10	20'-0'			25'2-5/32"	1	20'

Tower Section Geometry (cont'd)

Tower Section	Tower Elevation	Diagonal Spacing	Bracing Type	Has K Brace End Panels	Has Horizontals	Top Girt Offset	Bottom Girt Offset
	ft	ft				in	in
T1	185'-180'	5'	X Brace	No	Yes	0.0000	0.0000
T2	180'-160'	6'8-1/32"	K Brace Down	No	Yes	0.0000	0.0000
T3	160'-140'	6'8-1/32"	K Brace Down	No	Yes	0.0000	0.0000
T4	140'-120'	6'8-1/32"	K Brace Down	No	Yes	0.0000	0.0000
T5	120'-100'	10'	K Brace Down	No	Yes	0.0000	0.0000
T6	100'-80'	10'	K Brace Down	No	Yes	0.0000	0.0000
T7	80'-60'	10'	K Brace Down	No	Yes	0.0000	0.0000
T8	60'-40'	10'	K Brace Down	No	Yes	0.0000	0.0000
T9	40'-20'	10'	K Brace Down	No	Yes	0.0000	0.0000
T10	20'-0'	20'	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 185'-180'	Pipe	ROHN 2.5 STD	A53-A (30 ksi)	Equal Angle	L2x2x1/4	A529-50 (50 ksi)
T2 180'-160'	Pipe	ROHN 2.5 STD	A572-50 (50 ksi)	Pipe	ROHN 2 STD	A572-50 (50 ksi)
T3 160'-140'	Pipe	ROHN 3 X-STR	A572-50 (50 ksi)	Pipe	ROHN 2 STD	A572-50 (50 ksi)
T4 140'-120'	Pipe	ROHN 4 X-STR	A572-50 (50 ksi)	Pipe	ROHN 2 STD	A572-50 (50 ksi)
T5 120'-100'	Pipe	ROHN 5 EH	A572-50 (50 ksi)	Pipe	ROHN 2.5 STD	A572-50 (50 ksi)
T6 100'-80'	Pipe	ROHN 5 EH	A572-50 (50 ksi)	Pipe	ROHN 2.5 STD	A572-50 (50 ksi)
T7 80'-60'	Pipe	ROHN 6 EHS	A572-50 (50 ksi)	Pipe	ROHN 2.5 STD	A572-50 (50 ksi)
T8 60'-40'	Pipe	ROHN 6 X-STR	A572-50 (50 ksi)	Pipe	ROHN 2.5 X-STR	A572-50 (50 ksi)
T9 40'-20'	Pipe	ROHN 6 X-STR	A572-50 (50 ksi)	Pipe	ROHN 3 STD	A572-50 (50 ksi)
T10 20'-0'	Pipe	ROHN 8 EHS	A572-50 (50 ksi)	Pipe	ROHN 3 STD	A572-50 (50 ksi)

Tower Section Geometry (cont'd)

Tower Elevation ft	Top Girt Type	Top Girt Size	Top Girt Grade	Bottom Girt Type	Bottom Girt Size	Bottom Girt Grade
T1 185'-180'	Equal Angle	L2x2x1/4	A529-50 (50 ksi)	Pipe		A572-50 (50 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
T2 180'-160'	None	Pipe		A618-50 (50 ksi)	Pipe	ROHN 1.5 STD	A572-50 (50 ksi)
T3 160'-140'	None	Pipe		A618-50 (50 ksi)	Pipe	ROHN 1.5 STD	A572-50 (50 ksi)
T4 140'-120'	None	Pipe		A618-50 (50 ksi)	Pipe	ROHN 2 STD	A572-50 (50 ksi)
T5 120'-100'	None	Pipe		A618-50 (50 ksi)	Pipe	ROHN 2 STD	A572-50 (50 ksi)
T6 100'-80'	None	Pipe		A618-50 (50 ksi)	Pipe	ROHN 2 STD	A572-50 (50 ksi)
T7 80'-60'	None	Pipe		A618-50 (50 ksi)	Pipe	ROHN 2.5 STD	A572-50 (50 ksi)
T8 60'-40'	None	Pipe		A618-50 (50 ksi)	Pipe	ROHN 2.5 STD	A572-50 (50 ksi)
T9 40'-20'	None	Pipe		A618-50 (50 ksi)	Pipe	ROHN 2.5 STD	A572-50 (50 ksi)
T10 20'-0'	None	Pipe		A618-50 (50 ksi)	Pipe	ROHN 3 STD	A572-50 (50 ksi)

Tower Section Geometry (cont'd)

Tower Elevation	Secondary Horizontal Type	Secondary Horizontal Size	Secondary Horizontal Grade	Inner Bracing Type	Inner Bracing Size	Inner Bracing Grade
ft						
T2 180'-160'	Pipe		A572-50 (50 ksi)	Equal Angle	L2x2x1/8	A36 (36 ksi)
T3 160'-140'	Pipe		A572-50 (50 ksi)	Equal Angle	L2x2x1/8	A36 (36 ksi)
T4 140'-120'	Pipe		A572-50 (50 ksi)	Equal Angle	L2x2x1/8	A36 (36 ksi)
T5 120'-100'	Pipe		A572-50 (50 ksi)	Equal Angle	L2x2x1/8	A36 (36 ksi)
T6 100'-80'	Pipe		A572-50 (50 ksi)	Equal Angle	L2 1/2x2 1/2x3/16	A36 (36 ksi)
T7 80'-60'	Pipe		A572-50 (50 ksi)	Equal Angle	L3x3x3/16	A36 (36 ksi)
T8 60'-40'	Pipe		A572-50 (50 ksi)	Equal Angle	L3 1/2x3 1/2x1/4	A572-50 (50 ksi)
T9 40'-20'	Pipe		A572-50 (50 ksi)	Equal Angle	L3 1/2x3 1/2x1/4	A572-50 (50 ksi)
T10 20'-0'	Pipe		A572-50 (50 ksi)	Pipe	ROHN 3 STD	A572-50 (50 ksi)

Tower Section Geometry (cont'd)

Tower Elevation	Redundant Bracing Grade	Redundant Type	Redundant Size	K Factor
ft				
T10 20'-0'	A572-50 (50 ksi)	Horizontal (1) Diagonal (1) Hip (1) Hip Diagonal (1)	Pipe Double Equal Angle Pipe Pipe	1 1 1 1
			ROHN 1.5 TUBE (11ga) 2L2x2x1/4x1/4 ROHN 1.5 TUBE (11ga) ROHN 2.5 STD	1 1 1 1

Tower Section Geometry (cont'd)

Tower Elevation	Gusset Area (per face)	Gusset Thickness	Gusset Grade	Adjust. Factor A _r	Adjust. Factor A _r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals	Double Angle Stitch Bolt Spacing Horizontals	Double Angle Stitch Bolt Spacing Redundants
ft	ft ²	in					in	in	in
T1 185'-180'	0.00	0.2500	A529-50 (50 ksi)	1.03	1	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T2 180'-160'	0.00	0.2500	A36 (36 ksi)	1	1.03	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T3 160'-140'	0.00	0.2500	A36 (36 ksi)	1	1.03	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T4 140'-120'	0.00	0.2500	A36 (36 ksi)	1	1.03	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T5 120'-100'	0.00	0.2500	A36 (36 ksi)	1	1.03	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T6 100'-80'	0.00	0.2500	A36 (36 ksi)	1	1.03	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T7 80'-60'	0.00	0.2500	A36 (36 ksi)	1	1.03	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T8 60'-40'	0.00	0.2500	A36 (36 ksi)	1	1.03	1.05	Mid-Pt	Mid-Pt	Mid-Pt
T9 40'-20'	0.00	0.2500	A36 (36 ksi)	1	1.03	1.05	Mid-Pt	Mid-Pt	Mid-Pt

Tower Elevation	Gusset Area (per face)	Gusset Thickness	Gusset Grade	Adjust. Factor A_r	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals	Double Angle Stitch Bolt Spacing Horizontals	Double Angle Stitch Bolt Spacing Redundants
ft	ft ²	in					in	in	in
T10 20'-0'	0.00	0.3750	A36 (36 ksi)	1	1.03	1.05	Mid-Pt	Mid-Pt	Mid-Pt

Tower Section Geometry (cont'd)

Tower Elevation	Calc K Single Angles	Calc K Solid Rounds	Legs	K Factors ¹							
				X Brace Diags	K Brace Diags	Single Diags	Girts	Horiz.	Sec. Horiz.	Inner Brace	
				X Y	X Y	X Y	X Y	X Y	X Y	X Y	
T1 185'-180'	Yes	Yes	1	1	1	1	1	1	1	1	1
T2 180'-160'	Yes	Yes	1	1	1	1	1	1	1	1	1
T3 160'-140'	Yes	Yes	1	1	1	1	1	1	1	1	1
T4 140'-120'	Yes	Yes	1	1	1	1	1	1	1	1	1
T5 120'-100'	Yes	Yes	1	1	1	1	1	1	1	1	1
T6 100'-80'	Yes	Yes	1	1	1	1	1	1	1	1	1
T7 80'-60'	Yes	Yes	1	1	1	1	1	1	1	1	1
T8 60'-40'	Yes	Yes	1	1	1	1	1	1	1	1	1
T9 40'-20'	Yes	Yes	1	1	1	1	1	1	1	1	1
T10 20'-0'	Yes	Yes	1	1	1	1	1	1	1	1	1

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

Tower Section Geometry (cont'd)

Tower Elevation ft	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U
T1 185'-180'	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	1	0.0000	0.75	0.0000	1	0.0000	0.75
T2 180'-160'	0.0000	1	0.0000	0.75	0.0000	1	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75
T3 160'-140'	0.0000	1	0.0000	0.75	0.0000	1	0.0000	1	0.0000	1	0.0000	0.75	0.0000	1
T4 140'-120'	0.0000	1	0.0000	0.75	0.0000	1	0.0000	1	0.0000	1	0.0000	0.75	0.0000	1
T5 120'-100'	0.0000	1	0.0000	0.75	0.0000	1	0.0000	1	0.0000	1	0.0000	0.75	0.0000	1
T6 100'-80'	0.0000	1	0.0000	0.75	0.0000	1	0.0000	1	0.0000	1	0.0000	0.75	0.0000	1
T7 80'-60'	0.0000	1	0.0000	0.75	0.0000	1	0.0000	1	0.0000	1	0.0000	0.75	0.0000	1
T8 60'-40'	0.0000	1	0.0000	0.75	0.0000	1	0.0000	1	0.0000	1	0.0000	0.75	0.0000	1
T9 40'-20'	0.0000	1	0.0000	0.75	0.0000	1	0.0000	1	0.0000	1	0.0000	0.75	0.0000	1
T10 20'-0'	0.0000	1	0.0000	0.75	0.0000	1	0.0000	1	0.0000	1	0.0000	0.75	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 185'-180'	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T2 180'-160'	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T3 160'-140'	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T4 140'-120'	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T5 120'-100'	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T6 100'-80'	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T7 80'-60'	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T8 60'-40'	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T9 40'-20'	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T10 20'-0'	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	1	0.0000	1

Tower Section Geometry (cont'd)

Tower Elevation ft	Leg Connection Type	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
		Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.
T1 185'-180'	Flange	0.7500	4	0.5000	1	0.5000	1	0.0000	0	0.6250	0	0.0000	0	0.6250	0
		A325X		A325X		A325X		A325N		A325N		A325N		A325N	
T2 180'-160'	Flange	0.7500	4	0.6250	3	0.0000	0	0.0000	0	0.6250	0	0.6250	2	0.6250	0
		A325X		A325X		A325N		A325N		A325N		A325X		A325N	
T3 160'-140'	Flange	0.8750	4	0.6250	3	0.0000	0	0.0000	0	0.0000	0	0.6250	2	0.0000	0
		A325X		A325X		A325N		A325N		A325N		A325X		A325N	
T4 140'-120'	Flange	1.0000	4	0.6250	3	0.0000	0	0.0000	0	0.0000	0	0.6250	2	0.0000	0
		A325X		A325X		A325N		A325N		A325N		A325X		A325N	
T5 120'-100'	Flange	1.0000	4	0.6250	3	0.0000	0	0.0000	0	0.0000	0	0.6250	2	0.0000	0
		A325X		A325X		A325N		A325N		A325N		A325X		A325N	
T6 100'-80'	Flange	1.0000	6	0.6250	3	0.0000	0	0.0000	0	0.0000	0	0.6250	2	0.0000	0
		A325X		A325X		A325N		A325N		A325N		A325X		A325N	
T7 80'-60'	Flange	1.0000	6	0.6250	3	0.0000	0	0.0000	0	0.6250	0	0.6250	2	0.6250	0
		A325X		A325X		A325N		A325N		A325N		A325X		A325N	
T8 60'-40'	Flange	1.0000	6	0.6250	3	0.0000	0	0.0000	0	0.6250	0	0.6250	2	0.6250	0
		A325X		A325X		A325N		A325N		A325N		A325X		A325N	
T9 40'-20'	Flange	1.0000	8	0.6250	3	0.0000	0	0.0000	0	0.6250	0	0.6250	2	0.6250	0
		A325X		A325X		A325N		A325N		A325N		A325X		A325N	
T10 20'-0'	Flange	1.0000	0	0.7500	3	0.0000	0	0.0000	0	0.6250	0	0.7500	2	0.6250	0
		A449		A325X		A325N		A325N		A325N		A325X		A325N	

Tower Section Geometry (cont'd)

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.
T1 185'-180'	0.0000	0	0.0000	0	0.0000	0	0.0000	0	0.0000	0	0.0000	0	0.0000	0
	A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T2 180'-160'	0.0000	0	0.0000	0	0.0000	0	0.0000	0	0.0000	0	0.0000	0	0.0000	0
	A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T3 160'-140'	0.0000	0	0.0000	0	0.0000	0	0.0000	0	0.0000	0	0.0000	0	0.0000	0
	A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T4 140'-120'	0.0000	0	0.0000	0	0.0000	0	0.0000	0	0.0000	0	0.0000	0	0.0000	0
	A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T5 120'-100'	0.0000	0	0.0000	0	0.0000	0	0.0000	0	0.0000	0	0.0000	0	0.0000	0
	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.
T6 100'-80'	0.0000	0	0.0000	0	0.0000	0	0.0000	0	0.0000	0	0.0000	0	0.0000	0
T7 80'-60'	A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T8 60'-40'	0.0000	0	0.0000	0	0.0000	0	0.0000	0	0.0000	0	0.0000	0	0.0000	0
T9 40'-20'	A325N		A325N		A325N		A325N		A325N		A325N		A325N	
T10 20'-0'	0.6250	1	0.6250	1	0.0000	0	0.0000	0	0.0000	0	0.6250	1	0.6250	1
	A325X		A325X		A325N		A325N		A325N		A325X		A325X	

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 klf
Safety Line 3/8	A	No	No	Ar (CaAa)	185' - 0'	0.0000	0.5	1	1	0.3750	0.3750		0.00
Step Pegs (5/8" SR) 7-in. w/30" step	A	No	No	Ar (CaAa)	185' - 0'	0.0000	0.5	1	1	0.3500	0.3500		0.00
Step Pegs (5/8" SR) 7-in. w/30" step	B	No	No	Ar (CaAa)	180' - 0'	0.0000	0.5	1	1	0.3500	0.3500		0.00
Step Pegs (5/8" SR) 7-in. w/30" step	C	No	No	Ar (CaAa)	180' - 0'	0.0000	0.5	1	1	0.3500	0.3500		0.00
Feed Line Ladder	A	No	No	Af (CaAa)	177' - 0'	0.0000	-0.35	1	1	3.0000	3.0000		0.00
Feed Line Ladder	A	No	No	Af (CaAa)	168' - 0'	0.0000	0.35	1	1	3.0000	3.0000		0.00
Feed Line Ladder	C	No	No	Af (CaAa)	185' - 158'	-1.0000	-0.35	1	1	3.0000	3.0000		0.00
Feed Line Ladder	C	No	No	Af (CaAa)	158' - 0'	0.0000	-0.35	2	1	3.0000	3.0000		0.00
561(1-5/8)	A	No	No	Ar (CaAa)	178' - 0'	0.0000	-0.35	10	2	0.5000	1.6250		0.00
561(1-5/8)	A	No	No	Ar (CaAa)	178' - 0'	0.0000	-0.365	4	1	0.5000	1.6250		0.00
LDF4-50A(1/2)	A	No	No	Ar (CaAa)	57' - 0'	0.0000	-0.38	1	1	0.5000	0.6300		0.00
HB114-1-0813U4-M5J(1-1/4)	A	No	No	Ar (CaAa)	168' - 0'	0.0000	0.35	4	4	0.5000	1.5400		0.00
7983A(ELLIP TICAL)	A	No	No	Ar (CaAa)	168' - 0'	0.0000	0.33	1	1	0.5000	0.5730		0.00
MLCH HYBRID 6X12(1-3/8)	C	No	No	Ar (CaAa)	183' - 0'	-4.2000	-0.35	2	2	0.5000	1.4300		0.00
LCF158-50JA(1-5/8)	C	No	No	Ar (CaAa)	183' - 0'	-1.5000	-0.35	9	9	0.5000	2.0100		0.00
LCF158-50JA(1-5/8)	C	No	No	Ar (CaAa)	183' - 0'	-4.2000	-0.37	1	1	0.5000	2.0100		0.00
UCF114-50JA(1-1/4)	C	No	No	Ar (CaAa)	157' - 0'	0.0000	-0.4	6	6	0.5000	1.5400		0.00
WR-VG86ST-BRD(3/4)	C	No	No	Ar (CaAa)	157' - 0'	0.0000	-0.33	2	2	0.5000	0.7950		0.00
FB-L98B-	C	No	No	Ar (CaAa)	157' - 0'	0.0000	-0.3	2	2	0.3937	0.3937		0.00

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 kif
034-XXX(3/8) WR-VG86ST-BRD(3/4) 2" Flexible Conduit FB-L98B-235-XXX(3/8) PWRT-606-S(7/8")	C	No	No	Ar (CaAa)	157' - 0'	0.0000	-0.3	4	4	0.5000	0.7950		0.00
	C	No	No	Ar (CaAa)	157' - 0'	0.0000	-0.3	2	2	0.5000	2.0000		0.00
	C	No	No	Ar (CaAa)	157' - 0'	0.0000	-0.365	1	1	0.3900	0.3900		0.00
	C	No	No	Ar (CaAa)	157' - 0'	0.0000	-0.35	1	1	0.5000	0.9200		0.00

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Feed Line/Linear Appurtenances - Entered As Area

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	CAAA ft ² /ft	Weight kif

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Feed Line/Linear Appurtenances Section Areas

Tower Section n	Tower Elevation ft	Face	A _R ft ²	A _F ft ²	CAAA In Face ft ²	CAAA Out Face ft ²	Weight K
T1	185'-180'	A	0.000	0.000	0.362	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	9.388	0.000	0.06
T2	180'-160'	A	0.000	0.000	60.286	0.000	0.49
		B	0.000	0.000	0.700	0.000	0.01
		C	0.000	0.000	56.620	0.000	0.34
T3	160'-140'	A	0.000	0.000	80.416	0.000	0.65
		B	0.000	0.000	0.700	0.000	0.01
		C	0.000	0.000	99.803	0.000	0.56
T4	140'-120'	A	0.000	0.000	80.416	0.000	0.65
		B	0.000	0.000	0.700	0.000	0.01
		C	0.000	0.000	106.835	0.000	0.59
T5	120'-100'	A	0.000	0.000	80.416	0.000	0.65
		B	0.000	0.000	0.700	0.000	0.01
		C	0.000	0.000	106.835	0.000	0.59
T6	100'-80'	A	0.000	0.000	80.416	0.000	0.65
		B	0.000	0.000	0.700	0.000	0.01
		C	0.000	0.000	106.835	0.000	0.59
T7	80'-60'	A	0.000	0.000	80.416	0.000	0.65
		B	0.000	0.000	0.700	0.000	0.01
		C	0.000	0.000	106.835	0.000	0.59
T8	60'-40'	A	0.000	0.000	81.487	0.000	0.65
		B	0.000	0.000	0.700	0.000	0.01
		C	0.000	0.000	106.835	0.000	0.59
T9	40'-20'	A	0.000	0.000	81.676	0.000	0.65

Tower Section <i>n</i>	Tower Elevation <i>ft</i>	Face	A_R <i>ft²</i>	A_F <i>ft²</i>	C_{AA} <i>In Face</i> <i>ft²</i>	C_{AA} <i>Out Face</i> <i>ft²</i>	Weight <i>K</i>
T10	20'-0'	B	0.000	0.000	0.700	0.000	0.01
		C	0.000	0.000	106.835	0.000	0.59
		A	0.000	0.000	81.676	0.000	0.65
		B	0.000	0.000	0.700	0.000	0.01
		C	0.000	0.000	106.835	0.000	0.59

Feed Line/Linear Appurtenances Section Areas - With Ice

Tower Section <i>n</i>	Tower Elevation <i>ft</i>	Face or Leg	Ice Thickness <i>in</i>	A_R <i>ft²</i>	A_F <i>ft²</i>	C_{AA} <i>In Face</i> <i>ft²</i>	C_{AA} <i>Out Face</i> <i>ft²</i>	Weight <i>K</i>
T1	185'-180'	A	1.009	0.000	0.000	2.380	0.000	0.02
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	16.277	0.000	0.19
T2	180'-160'	A	1.001	0.000	0.000	93.464	0.000	1.36
		B		0.000	0.000	4.706	0.000	0.04
		C		0.000	0.000	103.717	0.000	1.17
T3	160'-140'	A	0.989	0.000	0.000	128.021	0.000	1.79
		B		0.000	0.000	4.656	0.000	0.04
		C		0.000	0.000	205.352	0.000	2.09
T4	140'-120'	A	0.975	0.000	0.000	127.466	0.000	1.77
		B		0.000	0.000	4.600	0.000	0.04
		C		0.000	0.000	221.536	0.000	2.21
T5	120'-100'	A	0.959	0.000	0.000	126.829	0.000	1.75
		B		0.000	0.000	4.535	0.000	0.04
		C		0.000	0.000	220.404	0.000	2.18
T6	100'-80'	A	0.940	0.000	0.000	126.078	0.000	1.73
		B		0.000	0.000	4.459	0.000	0.04
		C		0.000	0.000	219.070	0.000	2.15
T7	80'-60'	A	0.916	0.000	0.000	125.159	0.000	1.70
		B		0.000	0.000	4.366	0.000	0.04
		C		0.000	0.000	217.437	0.000	2.11
T8	60'-40'	A	0.886	0.000	0.000	128.048	0.000	1.69
		B		0.000	0.000	4.244	0.000	0.04
		C		0.000	0.000	215.316	0.000	2.06
T9	40'-20'	A	0.842	0.000	0.000	126.855	0.000	1.64
		B		0.000	0.000	4.068	0.000	0.03
		C		0.000	0.000	212.232	0.000	1.98
T10	20'-0'	A	0.754	0.000	0.000	123.063	0.000	1.54
		B		0.000	0.000	3.717	0.000	0.03
		C		0.000	0.000	206.120	0.000	1.84

Feed Line Center of Pressure

Section	Elevation <i>ft</i>	CP_x <i>in</i>	CP_z <i>in</i>	CP_x <i>Ice</i> <i>in</i>	CP_z <i>Ice</i> <i>in</i>
T1	185'-180'	8.5544	2.7090	9.9115	1.0244
T2	180'-160'	0.6230	3.9234	2.7386	2.8431
T3	160'-140'	4.5644	4.9208	7.8072	4.3207
T4	140'-120'	6.2293	6.1820	10.1143	5.7092
T5	120'-100'	7.3565	7.1502	11.8996	6.6490
T6	100'-80'	8.5283	8.1348	13.7445	7.5905
T7	80'-60'	9.4671	8.8387	15.2183	8.2569
T8	60'-40'	9.9831	9.8441	15.7196	9.4999
T9	40'-20'	10.4923	10.2677	16.8479	10.1734
T10	20'-0'	11.4085	11.1820	18.1640	10.6474

Shielding Factor Ka

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
T1	1	Safety Line 3/8	180.00 - 185.00	0.6000	0.6000
T1	2	Step Pegs (5/8" SR) 7-in. w/30" step	180.00 - 185.00	0.6000	0.6000
T1	8	Feed Line Ladder	180.00 - 185.00	0.6000	0.6000
T1	22	MLCH HYBRID 6X12(1- 3/8)	180.00 - 183.00	0.6000	0.6000
T1	23	LCF158-50JA(1-5/8)	180.00 - 183.00	0.6000	0.6000
T1	24	LCF158-50JA(1-5/8)	180.00 - 183.00	0.6000	0.6000
T2	1	Safety Line 3/8	160.00 - 180.00	0.6000	0.6000
T2	2	Step Pegs (5/8" SR) 7-in. w/30" step	160.00 - 180.00	0.6000	0.6000
T2	3	Step Pegs (5/8" SR) 7-in. w/30" step	160.00 - 180.00	0.6000	0.6000
T2	4	Step Pegs (5/8" SR) 7-in. w/30" step	160.00 - 180.00	0.6000	0.6000
T2	6	Feed Line Ladder	160.00 - 177.00	0.6000	0.6000
T2	7	Feed Line Ladder	160.00 - 168.00	0.6000	0.6000
T2	8	Feed Line Ladder	160.00 - 180.00	0.6000	0.6000
T2	11	561(1-5/8)	160.00 - 178.00	0.6000	0.6000
T2	12	561(1-5/8)	160.00 - 178.00	0.6000	0.6000
T2	18	HB114-1-0813U4-M5J(1- 1/4)	160.00 - 168.00	0.6000	0.6000
T2	20	7983A(ELLIPTICAL)	160.00 - 168.00	0.6000	0.6000
T2	22	MLCH HYBRID 6X12(1- 3/8)	160.00 - 180.00	0.6000	0.6000
T2	23	LCF158-50JA(1-5/8)	160.00 - 180.00	0.6000	0.6000
T2	24	LCF158-50JA(1-5/8)	160.00 - 180.00	0.6000	0.6000
T3	1	Safety Line 3/8	140.00 - 160.00	0.6000	0.6000
T3	2	Step Pegs (5/8" SR) 7-in. w/30" step	140.00 - 160.00	0.6000	0.6000
T3	3	Step Pegs (5/8" SR) 7-in. w/30" step	140.00 - 160.00	0.6000	0.6000
T3	4	Step Pegs (5/8" SR) 7-in. w/30" step	140.00 - 160.00	0.6000	0.6000
T3	6	Feed Line Ladder	140.00 - 160.00	0.6000	0.6000
T3	7	Feed Line Ladder	140.00 - 160.00	0.6000	0.6000
T3	8	Feed Line Ladder	158.00 - 160.00	0.6000	0.6000
T3	9	Feed Line Ladder	140.00 - 158.00	0.6000	0.6000
T3	11	561(1-5/8)	140.00 - 160.00	0.6000	0.6000
T3	12	561(1-5/8)	140.00 - 160.00	0.6000	0.6000
T3	18	HB114-1-0813U4-M5J(1- 1/4)	140.00 - 160.00	0.6000	0.6000
T3	20	7983A(ELLIPTICAL)	140.00 - 160.00	0.6000	0.6000
T3	22	MLCH HYBRID 6X12(1- 3/8)	140.00 - 160.00	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
T3	23	LCF158-50JA(1-5/8)	140.00 - 160.00	0.6000	0.6000
T3	24	LCF158-50JA(1-5/8)	140.00 - 160.00	0.6000	0.6000
T3	26	UCF114-50JA(1-1/4)	140.00 - 157.00	0.6000	0.6000
T3	27	WR-VG86ST-BRD(3/4)	140.00 - 157.00	0.6000	0.6000
T3	28	FB-L98B-034-XXX(3/8)	140.00 - 157.00	0.0000	0.0000
T3	29	WR-VG86ST-BRD(3/4)	140.00 - 157.00	0.0000	0.0000
T3	30	2" Flexible Conduit	140.00 - 157.00	0.6000	0.6000
T3	31	FB-L98B-235-XXX(3/8)	140.00 - 157.00	0.6000	0.6000
T3	32	PWRT-606-S(7/8")	140.00 - 157.00	0.6000	0.6000
T4	1	Safety Line 3/8	120.00 - 140.00	0.6000	0.6000
T4	2	Step Pegs (5/8" SR) 7-in. w/30" step	120.00 - 140.00	0.6000	0.6000
T4	3	Step Pegs (5/8" SR) 7-in. w/30" step	120.00 - 140.00	0.6000	0.6000
T4	4	Step Pegs (5/8" SR) 7-in. w/30" step	120.00 - 140.00	0.6000	0.6000
T4	6	Feed Line Ladder	120.00 - 140.00	0.6000	0.6000
T4	7	Feed Line Ladder	120.00 - 140.00	0.6000	0.6000
T4	9	Feed Line Ladder	120.00 - 140.00	0.6000	0.6000
T4	11	561(1-5/8)	120.00 - 140.00	0.6000	0.6000
T4	12	561(1-5/8)	120.00 - 140.00	0.6000	0.6000
T4	18	HB114-1-0813U4-M5J(1- 1/4)	120.00 - 140.00	0.6000	0.6000
T4	20	7983A(ELLIPTICAL)	120.00 - 140.00	0.6000	0.6000
T4	22	MLCH HYBRID 6X12(1- 3/8)	120.00 - 140.00	0.6000	0.6000
T4	23	LCF158-50JA(1-5/8)	120.00 - 140.00	0.6000	0.6000
T4	24	LCF158-50JA(1-5/8)	120.00 - 140.00	0.6000	0.6000
T4	26	UCF114-50JA(1-1/4)	120.00 - 140.00	0.6000	0.6000
T4	27	WR-VG86ST-BRD(3/4)	120.00 - 140.00	0.6000	0.6000
T4	28	FB-L98B-034-XXX(3/8)	120.00 - 140.00	0.0000	0.0000
T4	29	WR-VG86ST-BRD(3/4)	120.00 - 140.00	0.0000	0.0000
T4	30	2" Flexible Conduit	120.00 - 140.00	0.6000	0.6000
T4	31	FB-L98B-235-XXX(3/8)	120.00 - 140.00	0.6000	0.6000
T4	32	PWRT-606-S(7/8")	120.00 - 140.00	0.6000	0.6000
T5	1	Safety Line 3/8	100.00 - 120.00	0.6000	0.6000
T5	2	Step Pegs (5/8" SR) 7-in. w/30" step	100.00 - 120.00	0.6000	0.6000
T5	3	Step Pegs (5/8" SR) 7-in. w/30" step	100.00 - 120.00	0.6000	0.6000
T5	4	Step Pegs (5/8" SR) 7-in. w/30" step	100.00 - 120.00	0.6000	0.6000
T5	6	Feed Line Ladder	100.00 -	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
T5	7	Feed Line Ladder	120.00 100.00 -	0.6000	0.6000
T5	9	Feed Line Ladder	120.00 100.00 -	0.6000	0.6000
T5	11	561(1-5/8)	120.00 100.00 -	0.6000	0.6000
T5	12	561(1-5/8)	120.00 100.00 -	0.6000	0.6000
T5	18	HB114-1-0813U4-M5J(1-1/4)	120.00 100.00 -	0.6000	0.6000
T5	20	7983A(ELLIPTICAL)	120.00 100.00 -	0.6000	0.6000
T5	22	MLCH HYBRID 6X12(1-3/8)	120.00 100.00 -	0.6000	0.6000
T5	23	LCF158-50JA(1-5/8)	120.00 100.00 -	0.6000	0.6000
T5	24	LCF158-50JA(1-5/8)	120.00 100.00 -	0.6000	0.6000
T5	26	UCF114-50JA(1-1/4)	120.00 100.00 -	0.6000	0.6000
T5	27	WR-VG86ST-BRD(3/4)	120.00 100.00 -	0.6000	0.6000
T5	28	FB-L98B-034-XXX(3/8)	120.00 100.00 -	0.0000	0.0000
T5	29	WR-VG86ST-BRD(3/4)	120.00 100.00 -	0.0000	0.0000
T5	30	2" Flexible Conduit	120.00 100.00 -	0.6000	0.6000
T5	31	FB-L98B-235-XXX(3/8)	120.00 100.00 -	0.6000	0.6000
T5	32	PWRT-606-S(7/8")	120.00 100.00 -	0.6000	0.6000
T6	1	Safety Line 3/8	100.00 80.00 -	0.6000	0.6000
T6	2	Step Pegs (5/8" SR) 7-in. w/30" step	100.00 80.00 -	0.6000	0.6000
T6	3	Step Pegs (5/8" SR) 7-in. w/30" step	100.00 80.00 -	0.6000	0.6000
T6	4	Step Pegs (5/8" SR) 7-in. w/30" step	100.00 80.00 -	0.6000	0.6000
T6	6	Feed Line Ladder	100.00 80.00 -	0.6000	0.6000
T6	7	Feed Line Ladder	100.00 80.00 -	0.6000	0.6000
T6	9	Feed Line Ladder	100.00 80.00 -	0.6000	0.6000
T6	11	561(1-5/8)	100.00 80.00 -	0.6000	0.6000
T6	12	561(1-5/8)	100.00 80.00 -	0.6000	0.6000
T6	18	HB114-1-0813U4-M5J(1-1/4)	100.00 80.00 -	0.6000	0.6000
T6	20	7983A(ELLIPTICAL)	100.00 80.00 -	0.6000	0.6000
T6	22	MLCH HYBRID 6X12(1-3/8)	100.00 80.00 -	0.6000	0.6000
T6	23	LCF158-50JA(1-5/8)	100.00 80.00 -	0.6000	0.6000
T6	24	LCF158-50JA(1-5/8)	100.00 80.00 -	0.6000	0.6000
T6	26	UCF114-50JA(1-1/4)	100.00 80.00 -	0.6000	0.6000
T6	27	WR-VG86ST-BRD(3/4)	100.00 80.00 -	0.6000	0.6000
T6	28	FB-L98B-034-XXX(3/8)	100.00 80.00 -	0.0000	0.0000
T6	29	WR-VG86ST-BRD(3/4)	100.00 80.00 -	0.0000	0.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
T6	30	2" Flexible Conduit	80.00 - 100.00	0.6000	0.6000
T6	31	FB-L98B-235-XXX(3/8)	80.00 - 100.00	0.6000	0.6000
T6	32	PWRT-606-S(7/8")	80.00 - 100.00	0.6000	0.6000
T7	1	Safety Line 3/8	60.00 - 80.00	0.6000	0.6000
T7	2	Step Pegs (5/8" SR) 7-in. w/30" step	60.00 - 80.00	0.6000	0.6000
T7	3	Step Pegs (5/8" SR) 7-in. w/30" step	60.00 - 80.00	0.6000	0.6000
T7	4	Step Pegs (5/8" SR) 7-in. w/30" step	60.00 - 80.00	0.6000	0.6000
T7	6	Feed Line Ladder	60.00 - 80.00	0.6000	0.6000
T7	7	Feed Line Ladder	60.00 - 80.00	0.6000	0.6000
T7	9	Feed Line Ladder	60.00 - 80.00	0.6000	0.6000
T7	11	561(1-5/8)	60.00 - 80.00	0.6000	0.6000
T7	12	561(1-5/8)	60.00 - 80.00	0.6000	0.6000
T7	18	HB114-1-0813U4-M5J(1- 1/4)	60.00 - 80.00	0.6000	0.6000
T7	20	7983A(ELLIPTICAL)	60.00 - 80.00	0.6000	0.6000
T7	22	MLCH HYBRID 6X12(1- 3/8)	60.00 - 80.00	0.6000	0.6000
T7	23	LCF158-50JA(1-5/8)	60.00 - 80.00	0.6000	0.6000
T7	24	LCF158-50JA(1-5/8)	60.00 - 80.00	0.6000	0.6000
T7	26	UCF114-50JA(1-1/4)	60.00 - 80.00	0.6000	0.6000
T7	27	WR-VG86ST-BRD(3/4)	60.00 - 80.00	0.6000	0.6000
T7	28	FB-L98B-034-XXX(3/8)	60.00 - 80.00	0.0000	0.0000
T7	29	WR-VG86ST-BRD(3/4)	60.00 - 80.00	0.0000	0.0000
T7	30	2" Flexible Conduit	60.00 - 80.00	0.6000	0.6000
T7	31	FB-L98B-235-XXX(3/8)	60.00 - 80.00	0.6000	0.6000
T7	32	PWRT-606-S(7/8")	60.00 - 80.00	0.6000	0.6000
T8	1	Safety Line 3/8	40.00 - 60.00	0.6000	0.6000
T8	2	Step Pegs (5/8" SR) 7-in. w/30" step	40.00 - 60.00	0.6000	0.6000
T8	3	Step Pegs (5/8" SR) 7-in. w/30" step	40.00 - 60.00	0.6000	0.6000
T8	4	Step Pegs (5/8" SR) 7-in. w/30" step	40.00 - 60.00	0.6000	0.6000
T8	6	Feed Line Ladder	40.00 - 60.00	0.6000	0.6000
T8	7	Feed Line Ladder	40.00 - 60.00	0.6000	0.6000
T8	9	Feed Line Ladder	40.00 - 60.00	0.6000	0.6000
T8	11	561(1-5/8)	40.00 - 60.00	0.6000	0.6000
T8	12	561(1-5/8)	40.00 - 60.00	0.6000	0.6000
T8	15	LDF4-50A(1/2)	40.00 - 57.00	0.6000	0.6000
T8	18	HB114-1-0813U4-M5J(1-	40.00 -	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
T8	20	7983A(ELLIPTICAL) ^{1/4}	60.00 40.00 -	0.6000	0.6000
T8	22	MLCH HYBRID 6X12(1-3/8)	60.00 40.00 -	0.6000	0.6000
T8	23	LCF158-50JA(1-5/8)	60.00 40.00 -	0.6000	0.6000
T8	24	LCF158-50JA(1-5/8)	60.00 40.00 -	0.6000	0.6000
T8	26	UCF114-50JA(1-1/4)	60.00 40.00 -	0.6000	0.6000
T8	27	WR-VG86ST-BRD(3/4)	60.00 40.00 -	0.6000	0.6000
T8	28	FB-L98B-034-XXX(3/8)	60.00 40.00 -	0.0000	0.0000
T8	29	WR-VG86ST-BRD(3/4)	60.00 40.00 -	0.0000	0.0000
T8	30	2" Flexible Conduit	60.00 40.00 -	0.6000	0.6000
T8	31	FB-L98B-235-XXX(3/8)	60.00 40.00 -	0.6000	0.6000
T8	32	PWRT-606-S(7/8")	60.00 40.00 -	0.6000	0.6000
T9	1	Safety Line 3/8	60.00 20.00 -	0.6000	0.6000
T9	2	Step Pegs (5/8" SR) 7-in. w/30" step	40.00 20.00 -	0.6000	0.6000
T9	3	Step Pegs (5/8" SR) 7-in. w/30" step	40.00 20.00 -	0.6000	0.6000
T9	4	Step Pegs (5/8" SR) 7-in. w/30" step	40.00 20.00 -	0.6000	0.6000
T9	6	Feed Line Ladder	40.00 20.00 -	0.6000	0.6000
T9	7	Feed Line Ladder	40.00 20.00 -	0.6000	0.6000
T9	9	Feed Line Ladder	40.00 20.00 -	0.6000	0.6000
T9	11	561(1-5/8)	40.00 20.00 -	0.6000	0.6000
T9	12	561(1-5/8)	40.00 20.00 -	0.6000	0.6000
T9	15	LDF4-50A(1/2)	40.00 20.00 -	0.6000	0.6000
T9	18	HB114-1-0813U4-M5J(1-1/4)	40.00 20.00 -	0.6000	0.6000
T9	20	7983A(ELLIPTICAL)	40.00 20.00 -	0.6000	0.6000
T9	22	MLCH HYBRID 6X12(1-3/8)	40.00 20.00 -	0.6000	0.6000
T9	23	LCF158-50JA(1-5/8)	40.00 20.00 -	0.6000	0.6000
T9	24	LCF158-50JA(1-5/8)	40.00 20.00 -	0.6000	0.6000
T9	26	UCF114-50JA(1-1/4)	40.00 20.00 -	0.6000	0.6000
T9	27	WR-VG86ST-BRD(3/4)	40.00 20.00 -	0.6000	0.6000
T9	28	FB-L98B-034-XXX(3/8)	40.00 20.00 -	0.0000	0.0000
T9	29	WR-VG86ST-BRD(3/4)	40.00 20.00 -	0.0000	0.0000
T9	30	2" Flexible Conduit	40.00 20.00 -	0.6000	0.6000
T9	31	FB-L98B-235-XXX(3/8)	40.00 20.00 -	0.6000	0.6000
T9	32	PWRT-606-S(7/8")	40.00 20.00 -	0.6000	0.6000
T10	1	Safety Line 3/8	40.00 0.00 - 20.00	0.6000	0.6000
T10	2	Step Pegs (5/8" SR) 7-in.	0.00 - 20.00	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
T10	3	w/30" step Step Pegs (5/8" SR) 7-in.	0.00 - 20.00	0.6000	0.6000
T10	4	w/30" step Step Pegs (5/8" SR) 7-in.	0.00 - 20.00	0.6000	0.6000
T10	6	w/30" step Feed Line Ladder	0.00 - 20.00	0.6000	0.6000
T10	7	Feed Line Ladder	0.00 - 20.00	0.6000	0.6000
T10	9	Feed Line Ladder	0.00 - 20.00	0.6000	0.6000
T10	11	561(1-5/8)	0.00 - 20.00	0.6000	0.6000
T10	12	561(1-5/8)	0.00 - 20.00	0.6000	0.6000
T10	15	LDF4-50A(1/2)	0.00 - 20.00	0.6000	0.6000
T10	18	HB114-1-0813U4-M5J(1-1/4)	0.00 - 20.00	0.6000	0.6000
T10	20	7983A(ELLIPTICAL)	0.00 - 20.00	0.6000	0.6000
T10	22	MLCH HYBRID 6X12(1-3/8)	0.00 - 20.00	0.6000	0.6000
T10	23	LCF158-50JA(1-5/8)	0.00 - 20.00	0.6000	0.6000
T10	24	LCF158-50JA(1-5/8)	0.00 - 20.00	0.6000	0.6000
T10	26	UCF114-50JA(1-1/4)	0.00 - 20.00	0.6000	0.6000
T10	27	WR-VG86ST-BRD(3/4)	0.00 - 20.00	0.6000	0.6000
T10	28	FB-L98B-034-XXX(3/8)	0.00 - 20.00	0.0000	0.0000
T10	29	WR-VG86ST-BRD(3/4)	0.00 - 20.00	0.0000	0.0000
T10	30	2" Flexible Conduit	0.00 - 20.00	0.6000	0.6000
T10	31	FB-L98B-235-XXX(3/8)	0.00 - 20.00	0.6000	0.6000
T10	32	PWRT-606-S(7/8")	0.00 - 20.00	0.6000	0.6000

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment	Placement ft
5/8"x6-ft LRod	C	From Leg	0.00 0' 3'	0.0000	185'
183					
AIR 32 B2A/B66AA w/ Mount Pipe	A	From Leg	4.00 0' 2'	0.0000	183'
AIR 32 B2A/B66AA w/ Mount Pipe	B	From Leg	4.00 0' 2'	0.0000	183'
AIR 32 B2A/B66AA w/ Mount Pipe	C	From Leg	4.00 0' 2'	0.0000	183'
APXVAARR24_43-U-NA20 w/ Mount Pipe	A	From Leg	4.00 0' 3'	0.0000	183'
APXVAARR24_43-U-NA20 w/ Mount Pipe	B	From Leg	4.00 0' 3'	0.0000	183'
APXVAARR24_43-U-NA20 w/ Mount Pipe	C	From Leg	4.00 0' 3'	0.0000	183'
AIR6449 B41_T-MOBILE w/ Mount Pipe	A	From Leg	4.00 0' 1'	0.0000	183'
AIR6449 B41_T-MOBILE w/ Mount Pipe	B	From Leg	4.00 0'	0.0000	183'

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft
AIR6449 B41_T-MOBILE w/ Mount Pipe	C	From Leg	1' 4.00	0.0000	183'
RRUS 4415 B25	A	From Leg	0' 1' 4.00	0.0000	183'
RRUS 4415 B25	B	From Leg	0' 2' 4.00	0.0000	183'
RRUS 4415 B25	C	From Leg	0' 2' 4.00	0.0000	183'
KRY 112 144/1	A	From Leg	0' 2' 4.00	0.0000	183'
KRY 112 144/1	B	From Leg	0' 3' 4.00	0.0000	183'
KRY 112 144/1	C	From Leg	0' 3' 4.00	0.0000	183'
SDX1926Q-43	A	From Leg	0' 3' 4.00	0.0000	183'
SDX1926Q-43	B	From Leg	0' 3' 4.00	0.0000	183'
SDX1926Q-43	C	From Leg	0' 3' 4.00	0.0000	183'
RADIO 4449 B71 B85A_T-MOBILE	A	From Leg	0' 3' 4.00	0.0000	183'
RADIO 4449 B71 B85A_T-MOBILE	B	From Leg	0' 3' 4.00	0.0000	183'
RADIO 4449 B71 B85A_T-MOBILE	C	From Leg	0' 3' 4.00	0.0000	183'
Sector Mount [SM 504-3] ***** **178**	C	None	3'	0.0000	183'
(2) DB846F65ZAXY w/ Mount Pipe	A	From Leg	4.00 0' 1'	0.0000	178'
(2) JAHH-65B-R3B w/ Mount Pipe	A	From Leg	4.00 0' 1'	0.0000	178'
(2) JAHH-65B-R3B w/ Mount Pipe	B	From Leg	4.00 0' 1'	0.0000	178'
(2) JAHH-65B-R3B w/ Mount Pipe	C	From Leg	4.00 0' 1'	0.0000	178'
Sub6 Antenna - VZS01 w/ Mount Pipe	A	From Leg	4.00 0' 1'	0.0000	178'
Sub6 Antenna - VZS01 w/ Mount Pipe	B	From Leg	4.00 0' 1'	0.0000	178'
Sub6 Antenna - VZS01 w/ Mount Pipe	C	From Leg	4.00 0' 1'	0.0000	178'
(2) LPA-80063/6CFx5 w/ Mount Pipe	B	From Leg	4.00 1'	0.0000	178'

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft
(2) SC-E 6014 rev2 w/ Mount Pipe	C	From Leg	0' 1' 4.00	0.0000	178'
RVZDC-6627-PF-48_CCIV2	A	From Leg	0' 1' 4.00	0.0000	178'
(2) BSF0020F3V1	A	From Leg	0' 1' 4.00	0.0000	178'
BSF0020F3V1	B	From Leg	0' 1' 4.00	0.0000	178'
BSF0020F3V1	C	From Leg	0' 1' 4.00	0.0000	178'
RFV01U-D2A	A	From Leg	0' 1' 4.00	0.0000	178'
RFV01U-D2A	B	From Leg	0' 1' 4.00	0.0000	178'
RFV01U-D2A	C	From Leg	0' 1' 4.00	0.0000	178'
CBC78T-DS-43-2X	A	From Leg	0' 1' 4.00	0.0000	178'
CBC78T-DS-43-2X	B	From Leg	0' 1' 4.00	0.0000	178'
CBC78T-DS-43-2X	C	From Leg	0' 1' 4.00	0.0000	178'
RFV01U-D1A	A	From Leg	0' 1' 4.00	0.0000	178'
RFV01U-D1A	B	From Leg	0' 1' 4.00	0.0000	178'
RFV01U-D1A	C	From Leg	0' 1' 4.00	0.0000	178'
Sector Mount [SM 504-3] **168**	C	None		0.0000	178'
NNVV-65B-R4 w/ Mount Pipe	A	From Leg	4.00 0'	0.0000	168'
NNVV-65B-R4 w/ Mount Pipe	B	From Leg	4.00 0'	0.0000	168'
NNVV-65B-R4 w/ Mount Pipe	C	From Leg	4.00 0'	0.0000	168'
AAHC w/ Mount Pipe	A	From Leg	4.00 0'	0.0000	168'
AAHC w/ Mount Pipe	B	From Leg	4.00 0'	0.0000	168'
AAHC w/ Mount Pipe	C	From Leg	4.00 0'	0.0000	168'
(3) RRH2X50-800	A	From Leg	4.00 0'	0.0000	168'

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft
(3) RRH2X50-800	B	From Leg	0' 0' 4.00	0.0000	168'
(3) PCS 1900MHZ 4X45W-65MHZ	C	From Leg	0' 0' 4.00	0.0000	168'
(2) 2.4" Dia x 6-ft Pipe	A	From Leg	0' 0' 4.00	0.0000	168'
(2) 2.4" Dia x 6-ft Pipe	B	From Leg	0' 0' 4.00	0.0000	168'
(2) 2.4" Dia x 6-ft Pipe	C	From Leg	0' 0' 4.00	0.0000	168'
Sitepro VFA12-HD Sector Mount (3) ***** **157**	C	None	0' 0'	0.0000	168'
OPA65R-BU6D w/ Mount Pipe	A	From Leg	4.00 0'	0.0000	157'
OPA65R-BU6D w/ Mount Pipe	C	From Leg	3' 4.00 0'	0.0000	157'
QD6616-7 w/ Mount Pipe	A	From Leg	3' 4.00 0'	0.0000	157'
QD8616-7 w/ Mount Pipe	B	From Leg	3' 4.00 0'	0.0000	157'
QD6616-7 w/ Mount Pipe	C	From Leg	3' 4.00 0'	0.0000	157'
AIR 6419 B77G_CCIV3 w/ Mount Pipe	A	From Leg	3' 4.00 0'	0.0000	157'
AIR 6419 B77G_CCIV3 w/ Mount Pipe	B	From Leg	5' 4.00 0'	0.0000	157'
AIR 6419 B77G_CCIV3 w/ Mount Pipe	C	From Leg	5' 4.00 0'	0.0000	157'
AIR 6449 B77D_CCIV3	A	From Leg	5' 4.00 0'	0.0000	157'
AIR 6449 B77D_CCIV3	B	From Leg	1' 4.00 0'	0.0000	157'
AIR 6449 B77D_CCIV3	C	From Leg	1' 4.00 0'	0.0000	157'
DMP65R-BU8D w/ Mount Pipe	B	From Leg	1' 4.00 0'	0.0000	157'
DC9-48-60-24-8C-EV	A	From Leg	3' 4.00 0'	0.0000	157'
DC6-48-60-18-8F	A	From Leg	3' 4.00 0'	0.0000	157'
DC6-48-60-18-8F	B	From Leg	3' 4.00 0'	0.0000	157'
			1'		

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement
			Horz	Lateral		
			ft	ft	°	ft
RRUS 32 B30	A	From Leg	4.00	0.0000		157'
			0'			
			3'			
RRUS 32 B30	B	From Leg	4.00	0.0000		157'
			0'			
			3'			
RRUS 32 B30	C	From Leg	4.00	0.0000		157'
			0'			
			3'			
RRUS 32 B2	A	From Leg	4.00	0.0000		157'
			0'			
			3'			
RRUS 32 B2	B	From Leg	4.00	0.0000		157'
			0'			
			3'			
RRUS 32 B2	C	From Leg	4.00	0.0000		157'
			0'			
			3'			
RRUS 4478 B14_CCIV2	A	From Leg	4.00	0.0000		157'
			0'			
			3'			
RRUS 4478 B14_CCIV2	B	From Leg	4.00	0.0000		157'
			0'			
			3'			
RRUS 4478 B14_CCIV2	C	From Leg	4.00	0.0000		157'
			0'			
			3'			
RRUS 32 B66A	A	From Leg	4.00	0.0000		157'
			0'			
			3'			
RRUS 32 B66A	B	From Leg	4.00	0.0000		157'
			0'			
			3'			
RRUS 32 B66A	C	From Leg	4.00	0.0000		157'
			0'			
			3'			
RRUS 4449 B5/B12	A	From Leg	4.00	0.0000		157'
			0'			
			3'			
RRUS 4449 B5/B12	B	From Leg	4.00	0.0000		157'
			0'			
			3'			
RRUS 4449 B5/B12	C	From Leg	4.00	0.0000		157'
			0'			
			3'			
DC6-48-60-18-8F_CCIV2	B	From Leg	4.00	0.0000		157'
			0'			
			3'			
2.4" Dia. x 7-ft	A	From Leg	2.00	0.0000		157'
			0'			
			0'			
2.4" Dia. x 7-ft	B	From Leg	2.00	0.0000		157'
			0'			
			0'			
2.4" Dia. x 7-ft	C	From Leg	2.00	0.0000		157'
			0'			
			0'			
2.4" Dia. x 5-ft	A	From Leg	2.00	0.0000		157'
			0'			
			0'			
2.4" Dia. x 5-ft	B	From Leg	2.00	0.0000		157'
			0'			
			0'			
(2) 2.4" Dia. x 5-ft	C	From Leg	2.00	0.0000		157'
			0'			

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft
Sector Mount [SM 503-3] *****	C	None	0'	0.0000	157'
57 GPS_A	B	From Leg	4.00 0' 3'	0.0000	57'
Side Arm Mount [SO 306-1] *** *** *** ** *	B	From Leg	2.00 0' 0'	0.0000	57'

Dishes

Description	Face or Leg	Dish Type	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	3 dB Beam Width °	Elevation ft	Outside Diameter ft
VHLP2-18	B	Paraboloid w/o Radome	From Leg	4.00 -6' 0'	-58.0000		168'	2.17
A-ANT-18G-2-C	C	Paraboloid w/o Radome	From Leg	4.00 6' 0'	9.0000		168'	2.17
***** *** ** *								

Load Combinations

Comb. No.	Description
1	Dead Only
2	1.2 Dead+1.0 Wind 0 deg - No Ice
3	0.9 Dead+1.0 Wind 0 deg - No Ice
4	1.2 Dead+1.0 Wind 30 deg - No Ice
5	0.9 Dead+1.0 Wind 30 deg - No Ice
6	1.2 Dead+1.0 Wind 60 deg - No Ice
7	0.9 Dead+1.0 Wind 60 deg - No Ice
8	1.2 Dead+1.0 Wind 90 deg - No Ice
9	0.9 Dead+1.0 Wind 90 deg - No Ice
10	1.2 Dead+1.0 Wind 120 deg - No Ice
11	0.9 Dead+1.0 Wind 120 deg - No Ice
12	1.2 Dead+1.0 Wind 150 deg - No Ice
13	0.9 Dead+1.0 Wind 150 deg - No Ice
14	1.2 Dead+1.0 Wind 180 deg - No Ice
15	0.9 Dead+1.0 Wind 180 deg - No Ice
16	1.2 Dead+1.0 Wind 210 deg - No Ice
17	0.9 Dead+1.0 Wind 210 deg - No Ice
18	1.2 Dead+1.0 Wind 240 deg - No Ice

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

Maximum Member Forces

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
T1	185 - 180	Leg	Max Tension	15	0.38	0.00	0.00
			Max. Compression	31	-2.91	-0.23	-0.15
			Max. Mx	21	-1.10	1.12	0.00
			Max. My	2	-0.97	-0.02	1.13
			Max. Vy	21	-0.69	1.12	0.00
		Diagonal	Max. Vx	2	-0.72	-0.02	1.13
			Max Tension	23	0.72	0.00	0.00
			Max. Compression	10	-0.87	0.00	0.00
			Max. Mx	32	-0.08	0.02	0.00
			Max. My	4	-0.73	0.01	-0.00
		Top Girt	Max. Vy	32	-0.02	0.02	0.00
			Max. Vx	4	0.00	0.01	-0.00
			Max Tension	27	0.08	0.00	0.00
			Max. Compression	1	0.00	0.00	0.00
			Max. Mx	26	0.07	-0.08	0.00
T2	180 - 160	Leg	Max. Vy	26	0.04	0.00	0.00
			Max Tension	15	13.19	-0.40	0.06
			Max. Compression	2	-21.91	0.26	0.07
			Max. Mx	3	-3.09	1.08	-0.07
			Max. My	21	-1.21	0.00	-1.12
		Diagonal	Max. Vy	14	-0.95	-1.08	0.07
			Max. Vx	21	-1.00	0.00	-1.12
			Max Tension	13	7.66	0.00	0.00
			Max. Compression	12	-7.74	0.00	0.00
			Max. Mx	26	-0.06	0.04	0.00
		Horizontal	Max. Vy	26	-0.02	0.00	0.00
			Max Tension	24	4.16	0.00	0.00
			Max. Compression	13	-4.14	-0.01	-0.00
			Max. Mx	33	-0.16	-0.03	-0.00

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
T3	160 - 140	Inner Bracing	Max. My	3	0.49	0.00	0.01
			Max. Vy	33	0.02	-0.03	-0.00
			Max. Vx	3	-0.00	0.00	0.01
			Max Tension	3	0.00	0.00	0.00
			Max. Compression	14	-0.00	0.00	0.00
			Max. Mx	26	-0.00	-0.02	0.00
		Leg	Max. Vy	26	0.01	0.00	0.00
			Max Tension	15	47.19	0.10	0.00
			Max. Compression	2	-60.45	0.19	-0.02
			Max. Mx	22	21.39	1.89	0.01
			Max. My	4	-7.16	-0.06	1.96
			Max. Vy	22	0.79	-0.96	0.01
		Diagonal	Max. Vx	5	0.85	-0.05	-1.01
			Max Tension	13	9.16	0.00	0.00
			Max. Compression	12	-9.23	0.00	0.00
			Max. Mx	26	-0.03	0.05	0.00
			Max. Vy	26	-0.02	0.00	0.00
			Horizontal	Max Tension	25	5.46	0.00
		Max. Compression		12	-5.51	-0.01	-0.00
		Max. Mx		33	0.09	-0.03	-0.00
Max. My	2	0.99		-0.00	0.01		
Max. Vy	33	-0.02		-0.03	-0.00		
Max. Vx	2	0.00		-0.00	0.01		
T4	140 - 120	Inner Bracing	Max Tension	3	0.00	0.00	0.00
			Max. Compression	14	-0.01	0.00	0.00
			Max. Mx	26	-0.00	-0.02	0.00
			Max. Vy	26	0.02	0.00	0.00
			Max Tension	15	79.73	-0.18	0.01
			Max. Compression	2	-95.05	0.40	-0.04
		Leg	Max. Mx	14	77.56	-0.41	0.04
			Max. My	16	-8.88	-0.01	0.47
			Max. Vy	6	0.08	-0.41	-0.06
			Max. Vx	16	-0.12	-0.01	0.47
			Max Tension	13	8.52	0.00	0.00
			Max. Compression	24	-8.62	0.00	0.00
		Diagonal	Max. Mx	26	-0.05	0.06	0.00
			Max. Vy	26	-0.03	0.00	0.00
			Max Tension	24	5.85	0.00	0.00
			Max. Compression	25	-5.81	0.00	0.00
			Max. Mx	33	0.11	-0.06	-0.00
			Max. My	3	0.04	0.01	0.01
		Horizontal	Max. Vy	33	-0.04	-0.06	-0.00
			Max. Vx	3	0.00	0.01	0.01
Max Tension	3		0.00	0.00	0.00		
Max. Compression	14		-0.01	0.00	0.00		
Max. Mx	26		-0.00	-0.03	0.00		
Max. Vy	26		0.02	0.00	0.00		
T5	120 - 100	Leg	Max Tension	15	103.74	-0.42	0.04
			Max. Compression	2	-121.15	0.49	-0.04
			Max. Mx	14	101.21	-0.50	0.04
			Max. My	16	-10.22	-0.01	0.56
			Max. Vy	6	0.09	-0.50	-0.08
			Max. Vx	16	-0.13	-0.02	0.53
		Diagonal	Max Tension	25	10.25	0.00	0.00
			Max. Compression	24	-10.41	0.00	0.00
			Max. Mx	26	-0.02	0.14	0.00
			Max. Vy	26	-0.04	0.00	0.00
			Max Tension	24	6.13	0.00	0.00
			Max. Compression	25	-6.09	0.00	0.00
		Horizontal	Max. Mx	33	0.08	-0.07	-0.00
			Max. My	2	0.77	-0.00	0.01
			Max. Vy	33	-0.04	-0.07	-0.00
			Max. Vx	2	-0.00	0.00	0.00
			Max Tension	3	0.00	0.00	0.00
			Max. Compression	14	-0.01	0.00	0.00
		Inner Bracing	Max. Mx	26	-0.01	-0.04	0.00
			Max. Vy	26	0.02	0.00	0.00
Max Tension	15		128.76	-0.42	0.04		
Max. Compression	2		-148.77	0.50	-0.05		

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
T7	80 - 60	Diagonal	Max. Mx	14	125.86	-0.52	0.05
			Max. My	16	-11.80	-0.02	0.63
			Max. Vy	6	0.09	-0.51	-0.08
			Max. Vx	4	0.14	-0.02	-0.62
			Max Tension	25	9.16	0.00	0.00
			Max. Compression	24	-9.37	0.00	0.00
			Max. Mx	26	-0.03	0.17	0.00
			Max. Vy	26	-0.05	0.00	0.00
			Max Tension	24	6.10	0.00	0.00
			Max. Compression	25	-6.03	0.00	0.00
			Max. Mx	33	0.14	-0.08	-0.00
			Max. My	2	1.11	-0.01	0.01
		Max. Vy	33	-0.04	-0.08	-0.00	
		Max. Vx	2	0.00	-0.01	0.01	
		Max Tension	3	0.00	0.00	0.00	
		Max. Compression	33	-0.01	0.00	0.00	
		Max. Mx	26	-0.01	-0.07	0.00	
		Max. Vy	26	0.04	0.00	0.00	
		Max Tension	15	151.03	-0.64	0.03	
		Max. Compression	2	-173.95	0.59	-0.06	
		Diagonal	Max. Mx	14	136.76	-0.64	0.03
			Max. My	16	-13.58	-0.03	0.76
			Max. Vy	6	0.10	-0.63	-0.06
			Max. Vx	4	0.14	-0.02	-0.75
			Max Tension	25	9.55	0.00	0.00
			Max. Compression	24	-9.86	0.00	0.00
			Max. Mx	26	-0.10	0.21	0.00
			Max. Vy	26	0.06	0.00	0.00
			Max Tension	24	6.90	0.00	0.00
			Max. Compression	25	-6.77	0.00	0.00
			Max. Mx	33	0.22	-0.15	-0.00
			Max. My	14	-0.72	-0.12	-0.01
		Max. Vy	33	0.07	-0.15	-0.00	
Max. Vx	14	0.00	0.00	0.00			
Max Tension	1	0.00	0.00	0.00			
Max. Compression	33	-0.01	0.00	0.00			
Max. Mx	26	-0.01	-0.12	0.00			
Max. Vy	26	0.05	0.00	0.00			
Max Tension	15	172.57	-0.62	0.03			
Max. Compression	2	-198.96	0.46	-0.03			
Diagonal	Max. Mx	14	158.34	-0.62	0.03		
	Max. My	16	-14.19	-0.03	0.76		
	Max. Vy	6	-0.10	-0.61	-0.10		
	Max. Vx	4	-0.17	-0.02	-0.75		
	Max Tension	25	9.79	0.00	0.00		
	Max. Compression	24	-10.23	0.00	0.00		
	Max. Mx	26	-0.17	0.29	0.00		
	Max. Vy	26	-0.08	0.00	0.00		
	Max Tension	24	7.56	0.00	0.00		
	Max. Compression	25	-7.34	0.00	0.00		
	Max. Mx	33	0.34	-0.18	-0.00		
	Max. My	14	0.19	-0.13	-0.01		
Max. Vy	33	-0.08	-0.18	-0.00			
Max. Vx	14	-0.00	-0.13	-0.01			
Max Tension	1	0.00	0.00	0.00			
Max. Compression	33	-0.01	0.00	0.00			
Max. Mx	26	-0.01	-0.19	0.00			
Max. Vy	26	0.07	0.00	0.00			
Diagonal	Max Tension	15	192.60	-1.02	0.01		
	Max. Compression	2	-222.85	-1.73	-0.09		
	Max. Mx	2	-222.85	-1.73	-0.09		
	Max. My	16	-18.11	-0.35	2.36		
	Max. Vy	2	0.34	1.12	-0.01		
	Max. Vx	16	-0.32	-0.35	2.36		
	Max Tension	25	9.56	0.00	0.00		
	Max. Compression	24	-10.07	0.00	0.00		
	Max. Mx	26	-0.22	0.35	0.00		
	Max. Vy	26	-0.09	0.00	0.00		
	Max Tension	24	7.81	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	
T10	20 - 0	Inner Bracing	Max. Compression	25	-7.48	0.00	0.00	
			Max. Mx	33	0.55	-0.21	-0.00	
			Max. My	14	-0.02	-0.15	-0.01	
			Max. Vy	33	-0.08	-0.21	-0.00	
			Max. Vx	14	0.00	0.00	0.00	
			Max Tension	1	0.00	0.00	0.00	
			Max. Compression	33	-0.01	0.00	0.00	
			Max. Mx	26	-0.01	-0.23	0.00	
			Max. Vy	26	0.08	0.00	0.00	
			Max Tension	15	200.48	1.15	0.10	
		Leg	Max. Compression	2	-233.43	0.00	0.00	
			Max. Mx	2	-233.21	6.45	0.15	
			Max. My	16	-19.16	-0.35	2.36	
			Max. Vy	2	-0.88	6.45	0.15	
			Max. Vx	16	0.52	-0.35	2.36	
			Diagonal	Max Tension	25	14.98	-0.17	0.10
				Max. Compression	24	-15.78	0.00	0.00
				Max. Mx	14	11.87	-0.23	0.08
				Max. My	12	-15.57	0.02	-0.11
				Max. Vy	33	-0.06	-0.16	0.01
		Horizontal	Max. Vx	12	0.01	0.02	-0.11	
			Max Tension	24	8.48	0.00	0.00	
			Max. Compression	25	-8.32	0.00	0.00	
			Max. Mx	33	-0.34	-0.32	-0.01	
			Max. My	14	0.18	-0.29	-0.02	
			Max. Vy	33	0.11	-0.32	-0.01	
			Max. Vx	14	-0.00	-0.29	-0.02	
			Redund Horz 1 Bracing	Max Tension	16	0.98	0.00	0.00
				Max. Compression	5	-0.84	0.00	0.00
				Max. Mx	26	0.16	0.02	0.00
		Redund Diag 1 Bracing	Max. Vy	26	-0.01	0.00	0.00	
			Max Tension	16	0.98	0.00	0.00	
			Max. Compression	17	-0.84	0.00	0.00	
		Redund Hip 1 Bracing	Max. Mx	26	0.17	0.10	0.00	
			Max. My	26	0.12	0.00	0.01	
			Max. Vy	26	-0.04	0.00	0.00	
			Max. Vx	26	-0.00	0.00	0.00	
			Max Tension	13	0.02	0.00	0.00	
		Redund Hip Diagonal 1 Bracing	Max. Compression	24	-0.03	0.00	0.00	
			Max. Mx	26	-0.01	0.02	0.00	
Max. Vy	26		-0.01	0.00	0.00			
Max Tension	2		0.06	0.00	0.00			
Inner Bracing	Max. Compression	14	-0.07	0.00	0.00			
	Max. Mx	26	0.05	0.23	0.00			
	Max. Vy	26	0.06	0.00	0.00			
	Max Tension	1	0.00	0.00	0.00			
	Max. Compression	28	-0.01	0.00	0.00			
	Max. Mx	26	-0.01	0.27	0.00			
	Max. Vy	26	-0.08	0.00	0.00			

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Leg C	Max. Vert	18	247.03	26.09	-14.02
	Max. H _x	18	247.03	26.09	-14.02
	Max. H _z	5	-189.77	-20.44	13.22
	Min. Vert	7	-207.98	-23.24	12.41
	Min. H _x	7	-207.98	-23.24	12.41
	Min. H _z	16	228.09	23.22	-14.80

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Leg B	Max. Vert	10	237.25	-24.53	-13.91
	Max. H _x	23	-198.27	21.70	12.26
	Max. H _z	25	-184.67	19.16	14.02
	Min. Vert	23	-198.27	21.70	12.26
	Min. H _x	10	237.25	-24.53	-13.91
	Min. H _z	12	223.07	-21.95	-15.61
Leg A	Max. Vert	2	256.28	0.54	31.16
	Max. H _x	21	14.87	3.42	1.32
	Max. H _z	2	256.28	0.54	31.16
	Min. Vert	15	-220.32	-0.56	-27.94
	Min. H _x	8	20.33	-3.46	1.82
	Min. H _z	15	-220.32	-0.56	-27.94

Tower Mast Reaction Summary

Load Combination	Vertical K	Shear _x K	Shear _z K	Overturing Moment, M _x kip-ft	Overturing Moment, M _z kip-ft	Torque kip-ft
Dead Only	53.32	0.00	0.00	22.91	0.96	0.00
1.2 Dead+1.0 Wind 0 deg - No Ice	63.99	0.12	-51.01	-5631.58	-16.97	26.35
0.9 Dead+1.0 Wind 0 deg - No Ice	47.99	0.12	-51.01	-5638.45	-17.26	26.35
1.2 Dead+1.0 Wind 30 deg - No Ice	63.99	25.83	-44.54	-4898.90	-2862.46	54.20
0.9 Dead+1.0 Wind 30 deg - No Ice	47.99	25.83	-44.54	-4905.78	-2862.75	54.20
1.2 Dead+1.0 Wind 60 deg - No Ice	63.99	41.65	-23.98	-2652.87	-4663.21	42.21
0.9 Dead+1.0 Wind 60 deg - No Ice	47.99	41.65	-23.98	-2659.74	-4663.49	42.21
1.2 Dead+1.0 Wind 90 deg - No Ice	63.99	43.66	-0.03	23.99	-4980.67	18.40
0.9 Dead+1.0 Wind 90 deg - No Ice	47.99	43.66	-0.03	17.12	-4980.96	18.40
1.2 Dead+1.0 Wind 120 deg - No Ice	63.99	39.61	22.71	2588.37	-4481.65	9.26
0.9 Dead+1.0 Wind 120 deg - No Ice	47.99	39.61	22.71	2581.49	-4481.94	9.26
1.2 Dead+1.0 Wind 150 deg - No Ice	63.99	25.12	43.30	4830.94	-2794.55	-13.47
0.9 Dead+1.0 Wind 150 deg - No Ice	47.99	25.12	43.30	4824.06	-2794.84	-13.47
1.2 Dead+1.0 Wind 180 deg - No Ice	63.99	-0.15	50.89	5671.11	23.72	-27.22
0.9 Dead+1.0 Wind 180 deg - No Ice	47.99	-0.15	50.89	5664.23	23.43	-27.22
1.2 Dead+1.0 Wind 210 deg - No Ice	63.99	-25.82	44.55	4955.23	2861.52	-54.07
0.9 Dead+1.0 Wind 210 deg - No Ice	47.99	-25.82	44.55	4948.36	2861.23	-54.07
1.2 Dead+1.0 Wind 240 deg - No Ice	63.99	-41.74	24.07	2719.33	4676.76	-42.55
0.9 Dead+1.0 Wind 240 deg - No Ice	47.99	-41.74	24.07	2712.46	4676.47	-42.55
1.2 Dead+1.0 Wind 270 deg - No Ice	63.99	-43.65	0.05	33.95	4982.19	-20.20
0.9 Dead+1.0 Wind 270 deg - No Ice	47.99	-43.65	0.05	27.07	4981.90	-20.20
1.2 Dead+1.0 Wind 300 deg - No Ice	63.99	-39.49	-22.64	-2525.01	4468.84	-11.46
0.9 Dead+1.0 Wind 300 deg - No Ice	47.99	-39.49	-22.64	-2531.89	4468.56	-11.46
1.2 Dead+1.0 Wind 330 deg - No Ice	63.99	-25.09	-43.31	-4777.90	2791.55	13.24

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 330 deg - No Ice	47.99	-25.09	-43.31	-4784.77	2791.27	13.24
1.2 Dead+1.0 Ice	116.92	0.00	0.00	80.54	-24.67	0.00
1.2 Dead+1.0 Wind 0 deg+1.0 Ice	116.92	0.03	-14.87	-1534.80	-28.60	12.36
1.2 Dead+1.0 Wind 30 deg+1.0 Ice	116.92	7.26	-12.53	-1285.87	-817.29	15.00
1.2 Dead+1.0 Wind 60 deg+1.0 Ice	116.92	11.57	-6.67	-656.54	-1305.01	10.68
1.2 Dead+1.0 Wind 90 deg+1.0 Ice	116.92	12.61	-0.01	79.64	-1434.05	5.31
1.2 Dead+1.0 Wind 120 deg+1.0 Ice	116.92	11.28	6.48	799.08	-1278.51	1.37
1.2 Dead+1.0 Wind 150 deg+1.0 Ice	116.92	7.06	12.20	1415.02	-799.29	-4.72
1.2 Dead+1.0 Wind 180 deg+1.0 Ice	116.92	-0.03	14.85	1693.59	-19.82	-12.54
1.2 Dead+1.0 Wind 210 deg+1.0 Ice	116.92	-7.25	12.53	1447.23	767.27	-14.97
1.2 Dead+1.0 Wind 240 deg+1.0 Ice	116.92	-11.58	6.69	819.55	1257.21	-10.75
1.2 Dead+1.0 Wind 270 deg+1.0 Ice	116.92	-12.61	0.01	82.05	1384.55	-5.68
1.2 Dead+1.0 Wind 300 deg+1.0 Ice	116.92	-11.26	-6.47	-636.72	1226.83	-1.83
1.2 Dead+1.0 Wind 330 deg+1.0 Ice	116.92	-7.06	-12.20	-1254.34	748.85	4.67
Dead+Wind 0 deg - Service	53.32	0.03	-14.23	-1536.56	-3.98	7.18
Dead+Wind 30 deg - Service	53.32	7.20	-12.42	-1334.57	-788.05	14.75
Dead+Wind 60 deg - Service	53.32	11.63	-6.70	-716.22	-1285.21	11.48
Dead+Wind 90 deg - Service	53.32	12.23	-0.01	21.96	-1374.20	4.99
Dead+Wind 120 deg - Service	53.32	11.08	6.35	729.53	-1235.80	2.51
Dead+Wind 150 deg - Service	53.32	7.01	12.08	1346.93	-769.57	-3.68
Dead+Wind 180 deg - Service	53.32	-0.04	14.20	1578.17	7.10	-7.41
Dead+Wind 210 deg - Service	53.32	-7.20	12.43	1380.75	789.08	-14.71
Dead+Wind 240 deg - Service	53.32	-11.66	6.72	765.17	1290.18	-11.57
Dead+Wind 270 deg - Service	53.32	-12.23	0.01	24.67	1375.90	-5.49
Dead+Wind 300 deg - Service	53.32	-11.05	-6.33	-681.43	1233.60	-3.10
Dead+Wind 330 deg - Service	53.32	-7.00	-12.09	-1301.64	770.04	3.61

Solution Summary

Load Comb.	Sum of Applied Forces			Sum of Reactions			% Error
	PX K	PY K	PZ K	PX K	PY K	PZ K	
1	0.00	-53.32	0.00	0.00	53.32	0.00	0.000%
2	0.12	-63.99	-51.01	-0.12	63.99	51.01	0.000%
3	0.12	-47.99	-51.01	-0.12	47.99	51.01	0.000%
4	25.83	-63.99	-44.54	-25.83	63.99	44.54	0.000%
5	25.83	-47.99	-44.54	-25.83	47.99	44.54	0.000%
6	41.65	-63.99	-23.98	-41.65	63.99	23.98	0.000%
7	41.65	-47.99	-23.98	-41.65	47.99	23.98	0.000%
8	43.66	-63.99	-0.03	-43.66	63.99	0.03	0.000%
9	43.66	-47.99	-0.03	-43.66	47.99	0.03	0.000%
10	39.61	-63.99	22.71	-39.61	63.99	-22.71	0.000%
11	39.61	-47.99	22.71	-39.61	47.99	-22.71	0.000%
12	25.12	-63.99	43.30	-25.12	63.99	-43.30	0.000%
13	25.12	-47.99	43.30	-25.12	47.99	-43.30	0.000%

Load Comb.	Sum of Applied Forces			Sum of Reactions			% Error
	PX K	PY K	PZ K	PX K	PY K	PZ K	
14	-0.15	-63.99	50.89	0.15	63.99	-50.89	0.000%
15	-0.15	-47.99	50.89	0.15	47.99	-50.89	0.000%
16	-25.82	-63.99	44.55	25.82	63.99	-44.55	0.000%
17	-25.82	-47.99	44.55	25.82	47.99	-44.55	0.000%
18	-41.74	-63.99	24.07	41.74	63.99	-24.07	0.000%
19	-41.74	-47.99	24.07	41.74	47.99	-24.07	0.000%
20	-43.65	-63.99	0.05	43.65	63.99	-0.05	0.000%
21	-43.65	-47.99	0.05	43.65	47.99	-0.05	0.000%
22	-39.49	-63.99	-22.64	39.49	63.99	22.64	0.000%
23	-39.49	-47.99	-22.64	39.49	47.99	22.64	0.000%
24	-25.09	-63.99	-43.31	25.09	63.99	43.31	0.000%
25	-25.09	-47.99	-43.31	25.09	47.99	43.31	0.000%
26	0.00	-116.92	0.00	0.00	116.92	-0.00	0.000%
27	0.03	-116.92	-14.87	-0.03	116.92	14.87	0.000%
28	7.26	-116.92	-12.53	-7.26	116.92	12.53	0.000%
29	11.57	-116.92	-6.67	-11.57	116.92	6.67	0.000%
30	12.61	-116.92	-0.01	-12.61	116.92	0.01	0.000%
31	11.28	-116.92	6.48	-11.28	116.92	-6.48	0.000%
32	7.06	-116.92	12.20	-7.06	116.92	-12.20	0.000%
33	-0.03	-116.92	14.85	0.03	116.92	-14.85	0.000%
34	-7.25	-116.92	12.53	7.25	116.92	-12.53	0.000%
35	-11.58	-116.92	6.69	11.58	116.92	-6.69	0.000%
36	-12.61	-116.92	0.01	12.61	116.92	-0.01	0.000%
37	-11.26	-116.92	-6.47	11.26	116.92	6.47	0.000%
38	-7.06	-116.92	-12.20	7.06	116.92	12.20	0.000%
39	0.03	-53.32	-14.23	-0.03	53.32	14.23	0.000%
40	7.20	-53.32	-12.42	-7.20	53.32	12.42	0.000%
41	11.63	-53.32	-6.70	-11.63	53.32	6.70	0.000%
42	12.23	-53.32	-0.01	-12.23	53.32	0.01	0.000%
43	11.08	-53.32	6.35	-11.08	53.32	-6.35	0.000%
44	7.01	-53.32	12.08	-7.01	53.32	-12.08	0.000%
45	-0.04	-53.32	14.20	0.04	53.32	-14.20	0.000%
46	-7.20	-53.32	12.43	7.20	53.32	-12.43	0.000%
47	-11.66	-53.32	6.72	11.66	53.32	-6.72	0.000%
48	-12.23	-53.32	0.01	12.23	53.32	-0.01	0.000%
49	-11.05	-53.32	-6.33	11.05	53.32	6.33	0.000%
50	-7.00	-53.32	-12.09	7.00	53.32	12.09	0.000%

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	185 - 180	3.833	46	0.1882	0.0368
T2	180 - 160	3.635	46	0.1879	0.0367
T3	160 - 140	2.839	46	0.1763	0.0346
T4	140 - 120	2.117	46	0.1515	0.0293
T5	120 - 100	1.509	46	0.1249	0.0235
T6	100 - 80	1.020	46	0.1020	0.0186
T7	80 - 60	0.637	46	0.0771	0.0138
T8	60 - 40	0.353	46	0.0538	0.0099
T9	40 - 20	0.157	46	0.0350	0.0066
T10	20 - 0	0.039	40	0.0160	0.0034

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
185'	5/8"x6-ft L Rod	46	3.833	0.1882	0.0368	125274
183'	AIR 32 B2A/B66AA w/ Mount	46	3.754	0.1881	0.0367	125274

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
178'	Pipe (2) DB846F65ZAXY w/ Mount	46	3.555	0.1875	0.0367	136367
168'	Pipe VHLP2-18	46	3.154	0.1830	0.0359	126849
157'	OPA65R-BU6D w/ Mount Pipe	46	2.724	0.1731	0.0339	48448
57'	GPS_A	46	0.319	0.0508	0.0094	56611

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	185 - 180	13.893	16	0.6834	0.1352
T2	180 - 160	13.175	16	0.6824	0.1351
T3	160 - 140	10.283	16	0.6396	0.1273
T4	140 - 120	7.662	16	0.5492	0.1077
T5	120 - 100	5.456	16	0.4525	0.0865
T6	100 - 80	3.686	16	0.3693	0.0683
T7	80 - 60	2.298	16	0.2787	0.0508
T8	60 - 40	1.274	16	0.1944	0.0362
T9	40 - 20	0.566	16	0.1262	0.0242
T10	20 - 0	0.139	4	0.0578	0.0125

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
185'	5/8"x6-ft L Rod	16	13.893	0.6834	0.1352	34696
183'	AIR 32 B2A/B66AA w/ Mount	16	13.606	0.6832	0.1352	34696
178'	Pipe (2) DB846F65ZAXY w/ Mount	16	12.886	0.6810	0.1349	37817
168'	Pipe VHLP2-18	16	11.428	0.6641	0.1320	35036
157'	OPA65R-BU6D w/ Mount Pipe	16	9.866	0.6282	0.1249	13313
57'	GPS_A	16	1.149	0.1835	0.0343	15607

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	185	Leg	A325X	0.7500	4	0.24	30.10	0.008	1.05	Bolt Tension
		Diagonal	A325X	0.5000	1	0.87	11.04	0.079	1.05	Bolt Shear
T2	180	Top Girt	A325X	0.5000	1	0.08	9.26	0.008	1.05	Gusset Bearing
		Leg	A325X	0.7500	4	3.30	30.10	0.110	1.05	Bolt Tension
		Diagonal	A325X	0.6250	3	2.55	15.08	0.169	1.05	Gusset Bearing
T3	160	Horizontal	A325X	0.6250	2	2.08	13.92	0.149	1.05	Gusset Bearing
		Leg	A325X	0.8750	4	11.80	41.56	0.284	1.05	Bolt Tension
		Diagonal	A325X	0.6250	3	3.05	15.08	0.202	1.05	Gusset Bearing
T4	140	Horizontal	A325X	0.6250	2	2.73	13.92	0.196	1.05	Gusset Bearing
		Leg	A325X	1.0000	4	19.93	54.52	0.366	1.05	Bolt Tension
		Diagonal	A325X	0.6250	3	2.84	15.08	0.188	1.05	Gusset Bearing
T5	120	Horizontal	A325X	0.6250	2	2.93	13.92	0.210	1.05	Gusset Bearing
		Leg	A325X	1.0000	4	25.94	54.52	0.476	1.05	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
T6	100	Diagonal	A325X	0.6250	3	3.42	15.08	0.227	1.05	Gusset Bearing
		Horizontal	A325X	0.6250	2	3.07	13.92	0.220	1.05	Gusset Bearing
		Leg	A325X	1.0000	6	21.46	54.52	0.394	1.05	Bolt Tension
T7	80	Diagonal	A325X	0.6250	3	3.05	15.08	0.203	1.05	Gusset Bearing
		Horizontal	A325X	0.6250	2	3.05	13.92	0.219	1.05	Gusset Bearing
		Leg	A325X	1.0000	6	25.17	54.52	0.462	1.05	Bolt Tension
T8	60	Diagonal	A325X	0.6250	3	3.18	15.08	0.211	1.05	Gusset Bearing
		Horizontal	A325X	0.6250	2	3.45	13.92	0.248	1.05	Gusset Bearing
		Leg	A325X	1.0000	6	28.76	54.52	0.528	1.05	Bolt Tension
T9	40	Diagonal	A325X	0.6250	3	3.26	15.08	0.216	1.05	Gusset Bearing
		Horizontal	A325X	0.6250	2	3.78	13.92	0.271	1.05	Gusset Bearing
		Leg	A325X	1.0000	8	24.08	54.52	0.442	1.05	Bolt Tension
T10	20	Diagonal	A325X	0.6250	3	3.19	15.08	0.211	1.05	Gusset Bearing
		Horizontal	A325X	0.6250	2	3.90	13.92	0.280	1.05	Gusset Bearing
		Diagonal	A325X	0.7500	3	5.26	24.85	0.212	1.05	Bolt Shear
		Horizontal	A325X	0.7500	2	4.24	24.85	0.171	1.05	Bolt Shear
		Redund Horiz 1 Bracing	A325X	0.6250	1	4.05	11.23	0.361	1.05	Member Bearing
		Redund Diag 1 Bracing	A325X	0.6250	1	3.70	15.66	0.236	1.05	Gusset Bearing
		Redund Hip 1 Bracing	A325X	0.6250	1	0.03	17.26	0.002	1.05	Bolt Shear
Redund Hip Diagonal 1 Bracing	A325X	0.6250	1	0.06	15.66	0.004	1.05	Gusset Bearing		

Compression Checks

Leg Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L _u ft	KI/r	A in ²	P _u K	φP _n K	Ratio P _u / φP _n
T1	185 - 180	ROHN 2.5 STD	5'	5'	63.3 K=1.00	1.7040	-2.91	38.59	0.075 ¹
T2	180 - 160	ROHN 2.5 STD	20'	6'8-1/32"	84.4 K=1.00	1.7040	-21.91	45.53	0.481 ¹
T3	160 - 140	ROHN 3 X-STR	20'15/32"	6'8-5/32"	70.5 K=1.00	3.0159	-60.45	94.34	0.641 ¹
T4	140 - 120	ROHN 4 X-STR	20'15/32"	6'8-5/32"	54.3 K=1.00	4.4074	-95.05	159.90	0.594 ¹
T5	120 - 100	ROHN 5 EH	20'15/32"	10'1/4"	65.4 K=1.00	6.1120	-121.15	201.19	0.602 ¹
T6	100 - 80	ROHN 5 EH	20'23/32"	10'3/8"	65.4 K=1.00	6.1120	-148.77	201.11	0.740 ¹
T7	80 - 60	ROHN 6 EHS	20'19/32"	10'3/8"	54.1 K=1.00	6.7133	-173.95	243.97	0.713 ¹
T8	60 - 40	ROHN 6 X-STR	20'19/32"	10'3/8"	54.8 K=1.00	8.4049	-198.96	303.62	0.655 ¹
T9	40 - 20	ROHN 6 X-STR	20'23/32"	10'3/8"	54.8 K=1.00	8.4049	-222.85	303.58	0.734 ¹
T10	20 - 0	ROHN 8 EHS	20'19/32"	10'3/8"	41.2 K=1.00	9.7193	-233.43	386.31	0.604 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	185 - 180	L2x2x1/4	9'10- 5/16"	4'8- 1/32"	143.2 K=1.00	0.9380	-0.87	13.09	0.067 ¹
T2	180 - 160	ROHN 2 STD	7'11- 1/32"	7'8- 13/32"	117.3 K=1.00	1.0745	-7.74	17.64	0.439 ¹
T3	160 - 140	ROHN 2 STD	8'3- 23/32"	8'31/32' '	123.2 K=1.00	1.0745	-9.23	15.99	0.577 ¹
T4	140 - 120	ROHN 2 STD	9'2- 17/32"	8'11- 9/32"	136.3 K=1.00	1.0745	-8.53	13.07	0.653 ¹
T5	120 - 100	ROHN 2.5 STD	12'5- 7/8"	12'1- 3/16"	153.3 K=1.00	1.7040	-10.34	16.38	0.631 ¹
T6	100 - 80	ROHN 2.5 STD	13'3- 23/32"	12'11- 17/32"	164.1 K=1.00	1.7040	-9.36	14.30	0.654 ¹
T7	80 - 60	ROHN 2.5 STD	14'1- 29/32"	13'9- 1/4"	174.4 K=1.00	1.7040	-9.86	12.65	0.779 ¹
T8	60 - 40	ROHN 2.5 X-STR	15'27/3 2"	14'8- 13/32"	190.9 K=1.00	2.2535	-10.23	13.96	0.733 ¹
T9	40 - 20	ROHN 3 STD	16'31/3 2"	15'8- 3/4"	162.2 K=1.00	2.2285	-10.07	19.13	0.527 ¹
T10	20 - 0	ROHN 3 STD	24'3- 31/32"	12'2- 1/32"	125.5 K=1.00	2.2285	-15.78	31.98	0.494 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 $\frac{P_u}{\phi P_n}$
T2	180 - 160	ROHN 1.5 STD	8'6-3/8"	4'1- 11/16"	79.9 K=1.00	0.7995	-4.14	22.56	0.183 ¹
T3	160 - 140	ROHN 1.5 STD	9'11- 5/32"	4'9- 27/32"	92.9 K=1.00	0.7995	-5.34	19.14	0.279 ¹
T4	140 - 120	ROHN 2 STD	12'1/8"	5'9- 27/32"	88.7 K=1.00	1.0745	-5.81	27.20	0.214 ¹
T5	120 - 100	ROHN 2 STD	13'9- 31/32"	6'8- 5/32"	101.9 K=1.00	1.0745	-6.09	22.63	0.269 ¹
T6	100 - 80	ROHN 2 STD	16'3"	7'10- 11/16"	120.3 K=1.00	1.0745	-6.03	16.76	0.360 ¹
T7	80 - 60	ROHN 2.5 STD	18'9- 15/32"	9'1- 7/16"	115.5 K=1.00	1.7040	-6.77	28.85	0.235 ¹
T8	60 - 40	ROHN 2.5 STD	21'3- 15/32"	10'4- 7/16"	131.3 K=1.00	1.7040	-7.34	22.32	0.329 ¹
T9	40 - 20	ROHN 2.5 STD	23'10- 5/16"	11'7- 13/16"	147.6 K=1.00	1.7040	-7.48	17.67	0.424 ¹
T10	20 - 0	ROHN 3 STD	25'2- 5/32"	12'2- 3/4"	126.1 K=1.00	2.2285	-8.32	31.65	0.263 ¹

¹ P_u / φP_n controls

Redundant Horizontal (1) Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T10	20 - 0	ROHN 1.5 TUBE (11ga)	6'3- 15/32"	5'11- 5/32"	145.4 K=1.00	0.5202	-4.05	5.56	0.729 ¹

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
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¹ P_u / φP_n controls

Redundant Diagonal (1) Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T10	20 - 0	2L2x2x1/4x1/4	11'6"	10'5-3/4"	209.1 K=1.00	1.8750	-3.70	12.19	0.304 ¹
2L 'a' > 60.5969 in - 287									

¹ P_u / φP_n controls

Redundant Hip (1) Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T10	20 - 0	ROHN 1.5 TUBE (11ga)	6'3-15/32"	6'3-15/32"	154.2 K=1.00	0.5202	-0.03	4.94	0.006 ¹

¹ P_u / φP_n controls

Redundant Hip Diagonal (1) Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T10	20 - 0	ROHN 2.5 STD	15'27/32"	15'27/32"	190.9 K=1.00	1.7040	-0.07	10.56	0.006 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 $\frac{P_u}{\phi P_n}$
T2	180 - 160	L2x2x1/8	4'3-1/8"	4'3-1/8"	128.7 K=1.00	0.4844	-0.00	8.37	0.001 ¹
T3	160 - 140	L2x2x1/8	4'7-7/16"	4'7-7/16"	139.4 K=1.00	0.4844	-0.01	7.13	0.001 ¹
T4	140 - 120	L2x2x1/8	6'1/8"	6'1/8"	181.3 K=1.00	0.4844	-0.01	4.22	0.001 ¹
T5	120 - 100	L2x2x1/8	6'11-1/32"	6'11-1/32"	208.8 K=1.00	0.4844	-0.01	3.18	0.002 ¹
T6	100 - 80	L2 1/2x2 1/2x3/16	8'1-9/16"	8'1-9/16"	197.0 K=1.00	0.9020	-0.01	6.65	0.001 ¹
T7	80 - 60	L3x3x3/16	9'4"	9'4"	189.2	1.0900	-0.01	8.72	0.001 ¹

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T8	60 - 40	L3 1/2x3 1/2x1/4	13/16" 10'7-	13/16" 10'7-	K=1.00 184.1	1.6900	-0.01	14.28	0.001 ¹
T9	40 - 20	L3 1/2x3 1/2x1/4	13/16" 11'11- 5/32"	13/16" 11'11- 5/32"	K=1.00 206.3 K=1.00	1.6900	-0.01	11.37	0.001 ¹
T10	20 - 0	ROHN 3 STD	12'7- 3/32"	12'7- 3/32"	129.8 K=1.00	2.2285	-0.01	29.87	0.000 ¹

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	185 - 180	ROHN 2.5 STD	5'	5'	63.3	1.7040	0.38	46.01	0.008 ¹
T2	180 - 160	ROHN 2.5 STD	20'	6'8- 1/32"	84.4	1.7040	13.19	76.68	0.172 ¹
T3	160 - 140	ROHN 3 X-STR	20'15/3 2"	6'8- 5/32"	70.5	3.0159	47.19	135.72	0.348 ¹
T4	140 - 120	ROHN 4 X-STR	20'15/3 2"	6'8- 5/32"	54.3	4.4074	79.73	198.34	0.402 ¹
T5	120 - 100	ROHN 5 EH	20'15/3 2"	10'1/4"	65.4	6.1120	103.74	275.04	0.377 ¹
T6	100 - 80	ROHN 5 EH	20'23/3 2"	10'3/8"	65.4	6.1120	128.76	275.04	0.468 ¹
T7	80 - 60	ROHN 6 EHS	20'19/3 2"	10'3/8"	54.1	6.7133	151.03	302.10	0.500 ¹
T8	60 - 40	ROHN 6 X-STR	20'19/3 2"	10'3/8"	54.8	8.4049	172.57	378.22	0.456 ¹
T9	40 - 20	ROHN 6 X-STR	20'23/3 2"	10'3/8"	54.8	8.4049	192.60	378.22	0.509 ¹
T10	20 - 0	ROHN 8 EHS	20'19/3 2"	10'3/8"	41.2	9.7193	200.48	437.37	0.458 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	185 - 180	L2x2x1/4	9'10- 5/16"	4'8- 1/32"	94.4	0.5863	0.72	28.58	0.025 ¹
T2	180 - 160	ROHN 2 STD	7'11- 1/32"	7'8- 13/32"	117.3	1.0745	7.66	48.35	0.159 ¹
T3	160 - 140	ROHN 2 STD	8'3- 23/32"	8'31/32"	123.2	1.0745	9.16	48.35	0.189 ¹
T4	140 - 120	ROHN 2 STD	8'9"	8'5-3/4"	129.2	1.0745	8.52	48.35	0.176 ¹
T5	120 - 100	ROHN 2.5 STD	12'1- 29/32"	11'9- 3/8"	149.2	1.7040	10.25	76.68	0.134 ¹
T6	100 - 80	ROHN 2.5 STD	12'10- 11/16"	12'6- 15/32"	158.8	1.7040	9.16	76.68	0.120 ¹
T7	80 - 60	ROHN 2.5 STD	14'1- 29/32"	13'9- 1/4"	174.4	1.7040	9.55	76.68	0.125 ¹

Section No.	Elevation ft	Size	L ft	L _u ft	KI/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T8	60 - 40	ROHN 2.5 X-STR	15'27/32"	14'8-13/32"	190.9	2.2535	9.79	101.41	0.097 ¹
T9	40 - 20	ROHN 3 STD	16'31/32"	15'8-3/4"	162.2	2.2285	9.56	100.28	0.095 ¹
T10	20 - 0	ROHN 3 STD	24'3-31/32"	12'2-1/32"	125.5	2.2285	14.98	100.28	0.149 ¹

¹ P_u / φP_n controls

Horizontal Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L _u ft	KI/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T2	180 - 160	ROHN 1.5 STD	8'6-3/8"	4'1-11/16"	79.9	0.7995	4.16	35.98	0.116 ¹
T3	160 - 140	ROHN 1.5 STD	9'2-7/8"	4'5-5/8"	86.2	0.7995	5.46	35.98	0.152 ¹
T4	140 - 120	ROHN 2 STD	12'1/8"	5'9-27/32"	88.7	1.0745	5.85	48.35	0.121 ¹
T5	120 - 100	ROHN 2 STD	13'9-31/32"	6'8-5/32"	101.9	1.0745	6.13	48.35	0.127 ¹
T6	100 - 80	ROHN 2 STD	16'3"	7'10-11/16"	120.3	1.0745	6.10	48.35	0.126 ¹
T7	80 - 60	ROHN 2.5 STD	18'9-15/32"	9'1-7/16"	115.5	1.7040	6.90	76.68	0.090 ¹
T8	60 - 40	ROHN 2.5 STD	21'3-15/32"	10'4-7/16"	131.3	1.7040	7.56	76.68	0.099 ¹
T9	40 - 20	ROHN 2.5 STD	23'10-5/16"	11'7-13/16"	147.6	1.7040	7.81	76.68	0.102 ¹
T10	20 - 0	ROHN 3 STD	25'2-5/32"	12'2-3/4"	126.1	2.2285	8.48	100.28	0.085 ¹

¹ P_u / φP_n controls

Top Girt Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L _u ft	KI/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T1	185 - 180	L2x2x1/4	8'6"	8'1/8"	162.8	0.5863	0.08	28.58	0.003 ¹

¹ P_u / φP_n controls

Redundant Horizontal (1) Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L _u ft	KI/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T10	20 - 0	ROHN 1.5 TUBE (11ga)	6'3-15/32"	5'11-5/32"	145.4	0.5202	4.05	23.41	0.173 ¹

¹ P_u / φP_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 $\frac{P_u}{\phi P_n}$
T10	20 - 0	2L2x2x1/4x1/4	11'6"	10'5-3/4"	212.3	1.1250	3.70	54.84	0.067 ¹

2L 'a' > 60.5969 in - 281

¹ P_u / φP_n controls

Redundant Hip (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 $\frac{P_u}{\phi P_n}$
T10	20 - 0	ROHN 1.5 TUBE (11ga)	6'3-15/32"	6'3-15/32"	154.2	0.5202	0.02	23.41	0.001 ¹

¹ P_u / φP_n controls

Redundant Hip 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 $\frac{P_u}{\phi P_n}$
T10	20 - 0	ROHN 2.5 STD	15'27/32" 2"	15'27/32" 2"	190.9	1.7040	0.06	76.68	0.001 ¹

¹ P_u / φP_n controls

Inner Bracing 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 $\frac{P_u}{\phi P_n}$
T2	180 - 160	L2x2x1/8	4'3-1/8"	4'3-1/8"	81.7	0.4844	0.00	15.69	0.000 ¹
T3	160 - 140	L2x2x1/8	4'3-1/4"	4'3-1/4"	81.8	0.4844	0.00	15.69	0.000 ¹
T4	140 - 120	L2x2x1/8	5'3-23/32"	5'3-23/32"	101.8	0.4844	0.00	15.69	0.000 ¹
T5	120 - 100	L2x2x1/8	6'4-3/16"	6'4-3/16"	121.8	0.4844	0.00	15.69	0.000 ¹
T6	100 - 80	L2 1/2x2 1/2x3/16	7'5-3/4"	7'5-3/4"	115.4	0.9020	0.00	29.22	0.000 ¹

¹ P_u / φP_n controls

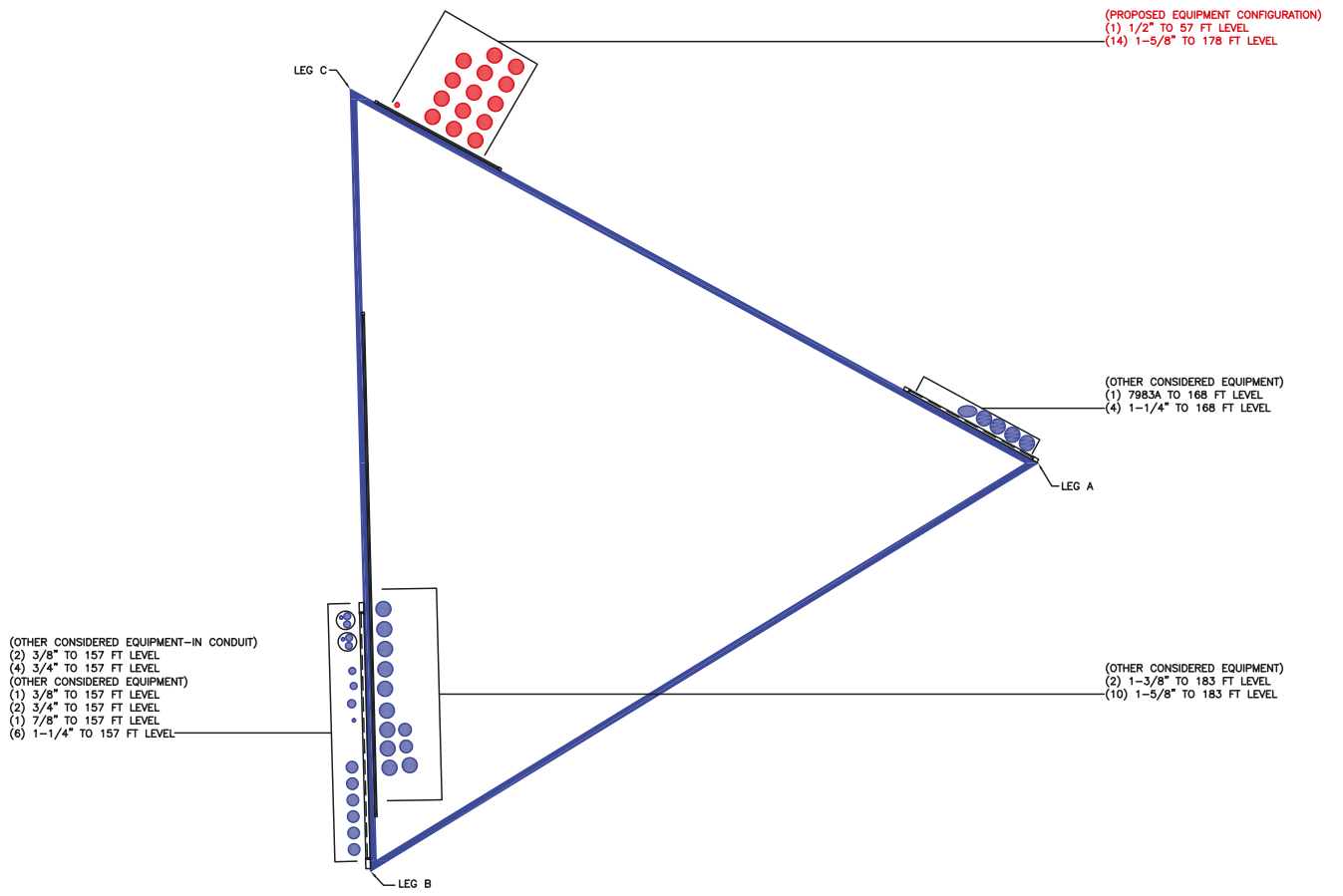
Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	φP _{allow} K	% Capacity	Pass Fail
T1	185 - 180	Leg	ROHN 2.5 STD	2	-2.91	40.52	7.2	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail	
T2	180 - 160	Leg	ROHN 2.5 STD	15	-21.91	47.80	45.8	Pass	
T3	160 - 140	Leg	ROHN 3 X-STR	54	-60.45	99.05	61.0	Pass	
T4	140 - 120	Leg	ROHN 4 X-STR	93	-95.05	167.90	56.6	Pass	
T5	120 - 100	Leg	ROHN 5 EH	132	-121.15	211.25	57.3	Pass	
T6	100 - 80	Leg	ROHN 5 EH	159	-148.77	211.17	70.5	Pass	
T7	80 - 60	Leg	ROHN 6 EHS	186	-173.95	256.16	67.9	Pass	
T8	60 - 40	Leg	ROHN 6 X-STR	213	-198.96	318.80	62.4	Pass	
T9	40 - 20	Leg	ROHN 6 X-STR	240	-222.85	318.76	69.9	Pass	
T10	20 - 0	Leg	ROHN 8 EHS	267	-233.43	405.62	57.5	Pass	
T1	185 - 180	Diagonal	L2x2x1/4	8	-0.87	13.74	6.3	Pass	
T2	180 - 160	Diagonal	ROHN 2 STD	20	-7.74	18.52	41.8	Pass	
T3	160 - 140	Diagonal	ROHN 2 STD	71	-9.23	16.79	55.0	Pass	
T4	140 - 120	Diagonal	ROHN 2 STD	99	-8.53	13.72	62.2	Pass	
T5	120 - 100	Diagonal	ROHN 2.5 STD	138	-10.34	17.20	60.1	Pass	
T6	100 - 80	Diagonal	ROHN 2.5 STD	165	-9.36	15.01	62.3	Pass	
T7	80 - 60	Diagonal	ROHN 2.5 STD	192	-9.86	13.29	74.2	Pass	
T8	60 - 40	Diagonal	ROHN 2.5 X-STR	219	-10.23	14.66	69.8	Pass	
T9	40 - 20	Diagonal	ROHN 3 STD	246	-10.07	20.09	50.1	Pass	
T10	20 - 0	Diagonal	ROHN 3 STD	279	-15.78	33.58	47.0	Pass	
T2	180 - 160	Horizontal	ROHN 1.5 STD	19	-4.14	23.69	17.5	Pass	
T3	160 - 140	Horizontal	ROHN 1.5 STD	58	-5.34	20.10	26.6	Pass	
T4	140 - 120	Horizontal	ROHN 2 STD	97	-5.81	28.55	20.3	Pass	
T5	120 - 100	Horizontal	ROHN 2 STD	136	-6.09	23.76	25.6	Pass	
T6	100 - 80	Horizontal	ROHN 2 STD	163	-6.03	17.60	34.3	Pass	
T7	80 - 60	Horizontal	ROHN 2.5 STD	190	-6.77	30.29	22.4	Pass	
T8	60 - 40	Horizontal	ROHN 2.5 STD	217	-7.34	23.43	31.3	Pass	
T9	40 - 20	Horizontal	ROHN 2.5 STD	244	-7.48	18.55	40.3	Pass	
T10	20 - 0	Horizontal	ROHN 3 STD	275	-8.32	33.23	25.1	Pass	
T1	185 - 180	Top Girt	L2x2x1/4	6	0.07	30.01	0.3	Pass	
T10	20 - 0	Redund Horz 1 Bracing	ROHN 1.5 TUBE (11ga)	286	-4.05	5.84	69.4	Pass	
T10	20 - 0	Redund Diag 1 Bracing	2L2x2x1/4x1/4	281	-3.70	12.80	28.9	Pass	
T10	20 - 0	Redund Hip 1 Bracing	ROHN 1.5 TUBE (11ga)	282	-0.03	5.19	0.5	Pass	
T10	20 - 0	Redund Hip Diagonal 1 Bracing	ROHN 2.5 STD	283	-0.07	11.09	0.6	Pass	
T2	180 - 160	Inner Bracing	L2x2x1/8	25	-0.00	8.79	0.3	Pass	
T3	160 - 140	Inner Bracing	L2x2x1/8	66	-0.01	6.48	0.3	Pass	
T4	140 - 120	Inner Bracing	L2x2x1/8	104	-0.01	4.43	0.4	Pass	
T5	120 - 100	Inner Bracing	L2x2x1/8	144	-0.01	3.34	0.4	Pass	
T6	100 - 80	Inner Bracing	L2 1/2x2 1/2x3/16	171	-0.01	6.99	0.4	Pass	
T7	80 - 60	Inner Bracing	L3x3x3/16	198	-0.01	9.15	0.4	Pass	
T8	60 - 40	Inner Bracing	L3 1/2x3 1/2x1/4	225	-0.01	14.99	0.3	Pass	
T9	40 - 20	Inner Bracing	L3 1/2x3 1/2x1/4	252	-0.01	11.94	0.3	Pass	
T10	20 - 0	Inner Bracing	ROHN 3 STD	297	-0.01	31.36	0.3	Pass	
							Summary		
							Leg (T6)	70.5	Pass
							Diagonal (T7)	74.2	Pass
							Horizontal (T9)	40.3	Pass
							Top Girt (T1)	0.3	Pass
							Redund Horz 1 Bracing (T10)	69.4	Pass
							Redund Diag 1 Bracing (T10)	28.9	Pass
							Redund Hip 1 Bracing (T10)	0.5	Pass
							Redund Hip Diagonal 1 Bracing	0.6	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
						(T10) Inner Bracing	0.4	Pass
						(T5) Bolt Checks	50.2	Pass
						RATING =	74.2	Pass

APPENDIX B
BASE LEVEL DRAWING



APPENDIX C
ADDITIONAL CALCULATIONS

Self Support Anchor Rod Capacity



Site Info	
BU #	806362
Site Name	NHV 108 943133
Order #	658783, Rev 0

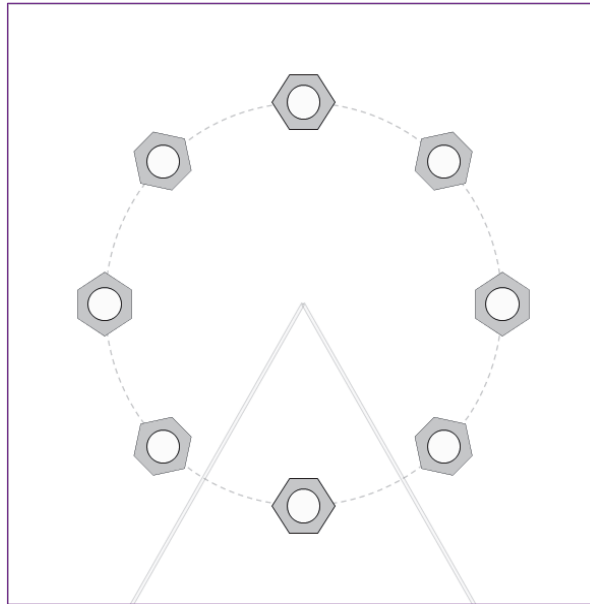
Analysis Considerations	
TIA-222 Revision	H
Grout Considered:	Yes
l_{ar} (in)	1.5

Applied Loads		
	Comp.	Uplift
Axial Force (kips)	256.28	220.32
Shear Force (kips)	31.16	27.95

*TIA-222-H Section 15.5 Applied

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

*Anchor Rod Eccentricity Applied



Connection Properties	Analysis Results
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Anchor Rod Data	
(8) 1" ϕ bolts (A449 N; $F_y=92$ ksi, $F_u=120$ ksi)	
l_{ar} (in): 1.5	

Anchor Rod Summary		(units of kips, kip-in)
$Pu_t = 27.54$	$\phi Pn_t = 54.54$	Stress Rating
$Vu = 3.49$	$\phi Vn = 35.34$	48.1%
$Mu = n/a$	$\phi Mn = n/a$	Pass

Pier and Pad Foundation



BU #: 806362
 Site Name: NHV 108 943133
 App. Number: 658783, Rev 0

TIA-222 Revision: H
 Tower Type: Self Support

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

Superstructure Analysis Reactions		
Compression, P_{comp} :	256.28	kips
Compression Shear, V_{u_comp} :	31.16	kips
Uplift, P_{uplift} :	220.32	kips
Uplift Shear, V_{u_uplift} :	27.95	kips
Tower Height, H :	185	ft
Base Face Width, BW :	8.5	ft
BP Dist. Above Fdn, bp_{dist} :	2.5	in

Foundation Analysis Checks				
	Capacity	Demand	Rating*	Check
<i>Uplift (kips)</i>	947.08	220.32	22.2%	Pass
<i>Lateral (Sliding) (kips)</i>	446.17	27.95	6.0%	Pass
<i>Bearing Pressure (ksf)</i>	18.00	5.49	29.0%	Pass
<i>Pier Flexure (Comp.) (kip*ft)</i>	1156.41	342.76	28.2%	Pass
<i>Pier Flexure (Tension) (kip*ft)</i>	919.25	307.45	31.9%	Pass
<i>Pier Compression (kip)</i>	2325.54	274.10	11.2%	Pass
<i>Pad Flexure (kip*ft)</i>	513.41	122.00	22.6%	Pass
<i>Pad Shear - 1-way (kips)</i>	169.84	36.44	20.4%	Pass
<i>Pad Shear - 2-way (Comp) (ksi)</i>	0.164	0.055	31.7%	Pass
<i>Flexural 2-way (Comp) (kip*ft)</i>	1026.82	205.66	19.1%	Pass
<i>Pad Shear - 2-way (Uplift) (ksi)</i>	0.164	0.084	48.5%	Pass
<i>Flexural 2-way (Tension) (kip*ft)</i>	1026.82	184.47	17.1%	Pass

*Rating per TIA-222-H Section 15.5

Structural Rating*:	48.5%
Soil Rating*:	29.0%

Pier Properties		
Pier Shape:	Square	
Pier Diameter, $dpier$:	3	ft
Ext. Above Grade, E :	0.5	ft
Pier Rebar Size, Sc :	10	
Pier Rebar Quantity, mc :	16	
Pier Tie/Spiral Size, St :	4	
Pier Tie/Spiral Quantity, mt :	13	
Pier Reinforcement Type:	Tie	
Pier Clear Cover, cc_{pier} :	3	in

Pad Properties		
Depth, D :	12.5	ft
Pad Width, W_1 :	8.75	ft
Pad Thickness, T :	2	ft
Pad Rebar Size (Bottom dir. 2), Sp_2 :	7	
Pad Rebar Quantity (Bottom dir. 2), mp_2 :	10	
Pad Clear Cover, cc_{pad} :	3	in

Material Properties		
Rebar Grade, F_y :	60	ksi
Concrete Compressive Strength, F'_c :	3	ksi
Dry Concrete Density, δ_c :	150	pcf

Soil Properties		
Total Soil Unit Weight, γ :	139	pcf
Ultimate Gross Bearing, Q_{ult} :	24.000	ksf
Cohesion, C_u :	7.000	ksf
Friction Angle, ϕ :		degrees
SPT Blow Count, N_{blows} :		
Base Friction, μ :	0.4	
Neglected Depth, N :	3.33	ft
Foundation Bearing on Rock?	Yes	
Groundwater Depth, gw :	N/A	ft

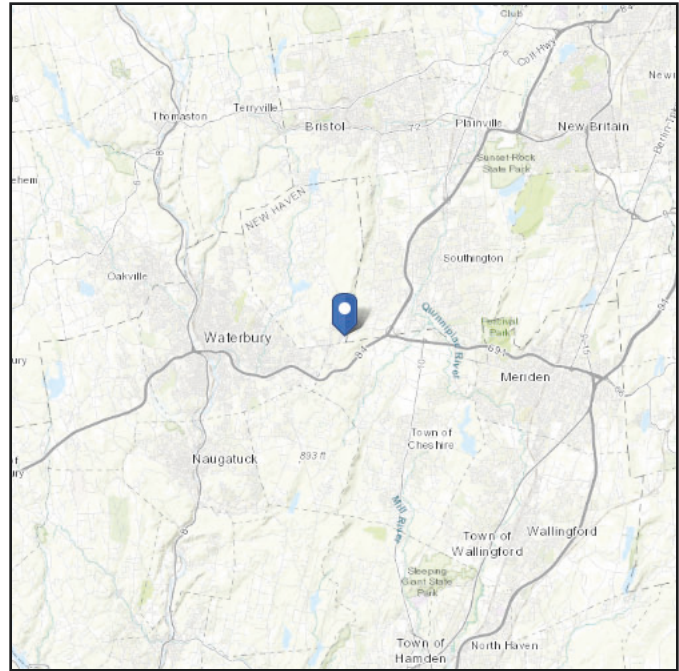
<-- Toggle between Gross and Net

ASCE 7 Hazards Report

Address:
No Address at This Location

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

Latitude: 41.559558
Longitude: -72.946972
Elevation: 748.7567129956471 ft (NAVD 88)



Wind

Results:

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

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

Date Accessed: Tue Oct 17 2023

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

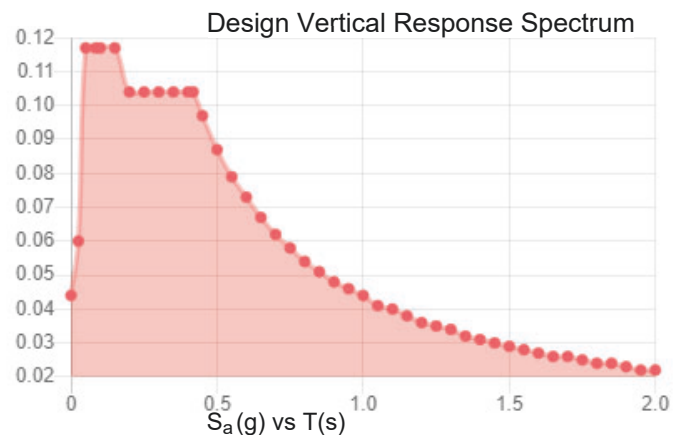
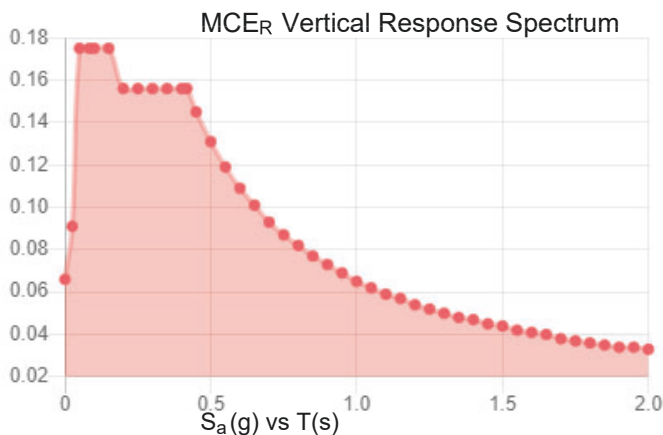
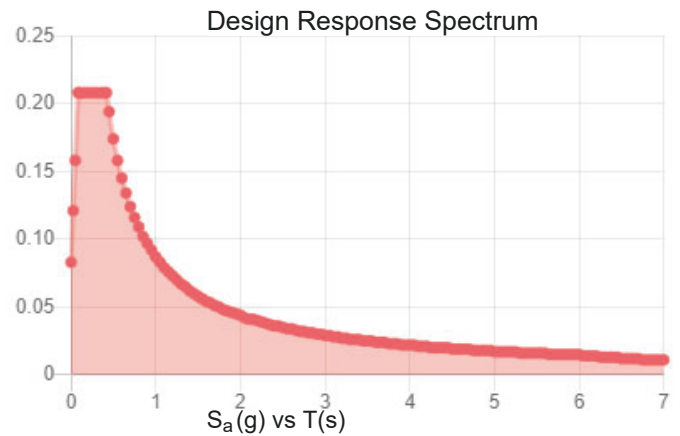
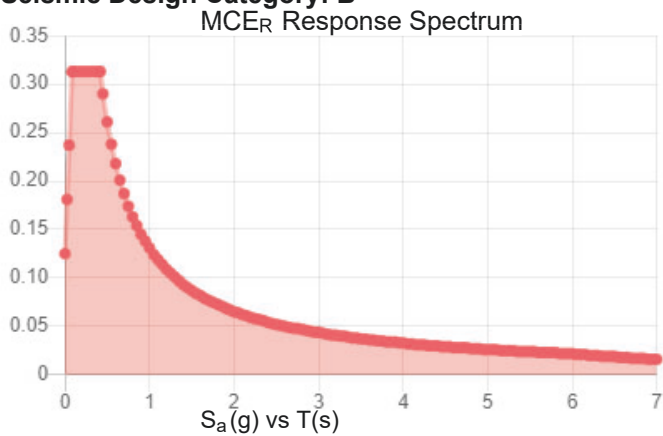
Site is in a hurricane-prone region as defined in ASCE/SEI 7-16 Section 26.2. Glazed openings need not be protected against wind-borne debris.

Site Soil Class:

Results:

S_s :	0.195	S_{D1} :	0.087
S_1 :	0.054	T_L :	6
F_a :	1.6	PGA :	0.108
F_v :	2.4	PGA _M :	0.171
S_{MS} :	0.313	F_{PGA} :	1.585
S_{M1} :	0.131	I_e :	1
S_{DS} :	0.208	C_v :	0.7

Seismic Design Category: B



Data Accessed:

Tue Oct 17 2023

Date Source:

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

Ice

Results:

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

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

Date Accessed: Tue Oct 17 2023

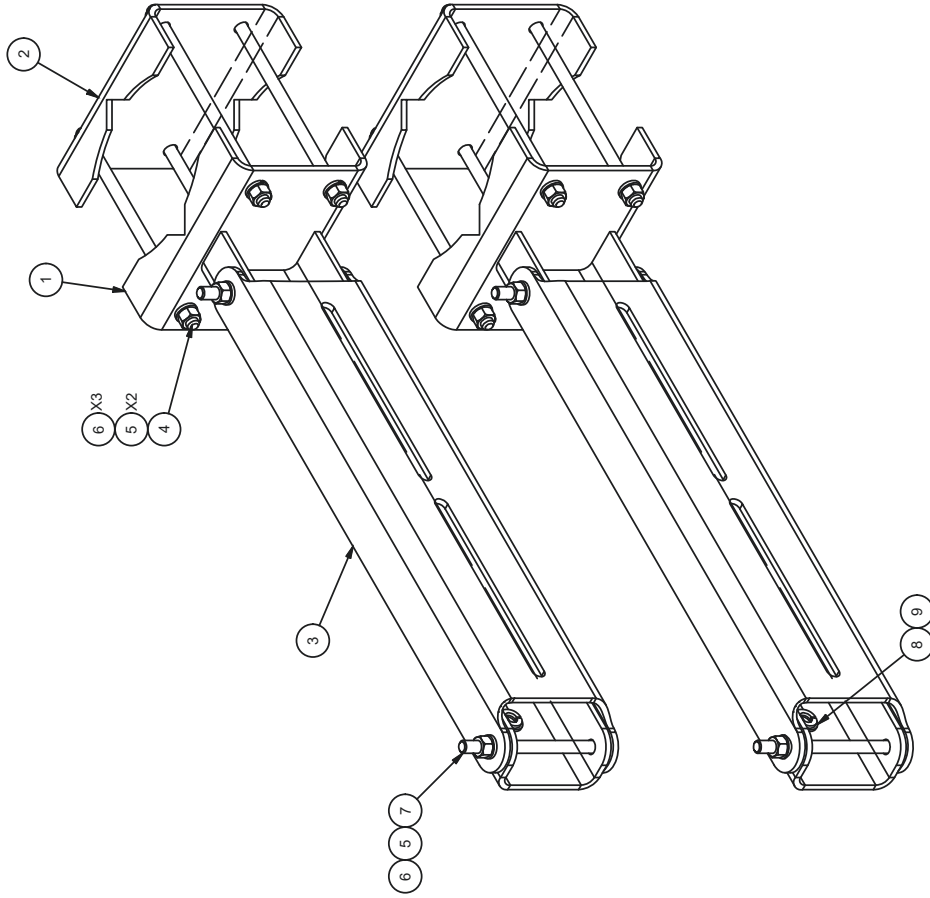
Ice thicknesses on structures in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.

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

The ASCE 7 Hazard Tool is provided for your convenience, for informational purposes only, and is provided “as is” and without warranties of any kind. The location data included herein has been obtained from information developed, produced, and maintained by third party providers; or has been extrapolated from maps incorporated in the ASCE 7 standard. While ASCE has made every effort to use data obtained from reliable sources or methodologies, ASCE does not make any representations or warranties as to the accuracy, completeness, reliability, currency, or quality of any data provided herein. Any third-party links provided by this Tool should not be construed as an endorsement, affiliation, relationship, or sponsorship of such third-party content by or from ASCE.

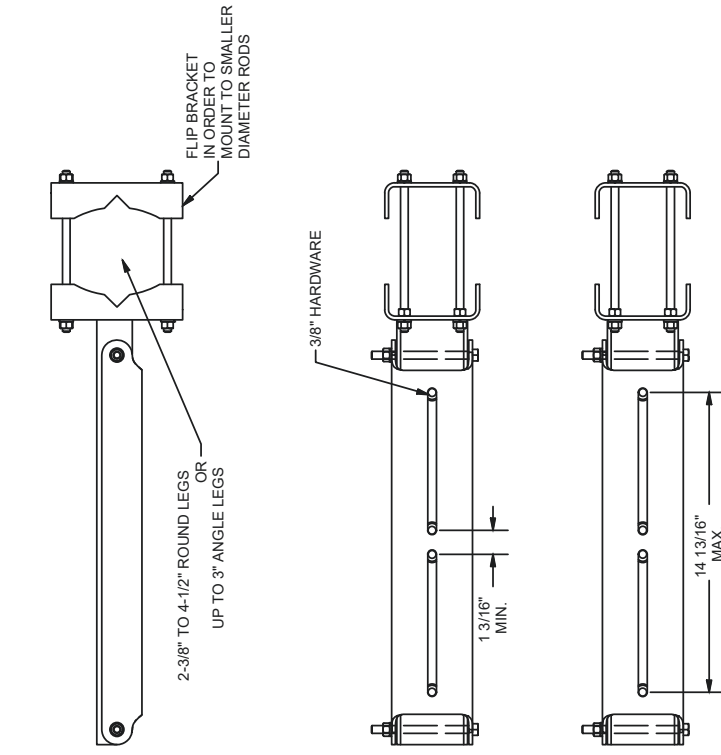
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PARTS LIST

ITEM QTY	PART DESCRIPTION	LENGTH	UNIT WT.	NET WT.
1 2	MOUNTING ARM		8.99	17.97
2 2	CLAMP PLATE		2.35	4.69
3 2	SWIVEL MOUNT		6.65	13.30
4 8	3/8"-16 UNC X 8" GALV. THREADED ROD		0.25	2.00
5 20	3/8" GALV LOCK WASHER		0.01	0.13
6 28	3/8"-16 UNC GALV HEX NUT		0.02	0.52
7 4	3/8" X 5" GALV BOLT		0.18	0.71
8 8	3/8" SS FLAT WASHER		0.01	0.08
9 8	3/8" SS LOCK WASHER		0.01	0.05
TOTAL WT. #				39.43



TOLERANCE NOTES

TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE:
 SAWED, SHEARED AND GAS CUT EDGES ($\pm 0.030"$)
 DRILLED AND GAS CUT HOLES ($\pm 0.030"$) - NO CONING OF HOLES
 LASER CUT EDGES AND HOLES ($\pm 0.010"$) - NO CONING OF HOLES
 BENDS ARE $\pm 1/2$ DEGREE
 ALL OTHER MACHINING ($\pm 0.030"$)
 ALL OTHER ASSEMBLY ($\pm 0.060"$)

PROPRIETARY NOTE: DIMENSIONS CONTAINED IN THIS DRAWING ARE PROPRIETARY INFORMATION OF VALMONT INDUSTRIES AND CONSIDERED A TRADE SECRET. ANY USE OR DISCLOSURE WITHOUT THE CONSENT OF VALMONT INDUSTRIES IS STRICTLY PROHIBITED.

DESCRIPTION
RRU DUAL SWIVEL MOUNT

DRAWN BY: CEK
 1/12/2015

ENG. APPROVAL

CHECKED BY: BMC
 2/3/2015

RRU
 DUAL SWIVEL MOUNT

RRU
 DUAL SWIVEL MOUNT

Locations:
 New York, NY
 Atlanta, GA
 Los Angeles, CA
 Plymouth, IN
 Salem, OR
 Dallas, TX

Engineering Support Team:
 1-888-753-7446

Valmont
 CHEMANT

CPD NO. 81
 SUB 01

CLASS 81
 SUB 01

DRAWING USAGE: SHOP

PART NO. RRUDSM
 DWG. NO. RRUDSM

RRU
 DUAL SWIVEL MOUNT

RRU
 DUAL SWIVEL MOUNT

CPD NO. 81
 SUB 01

CLASS 81
 SUB 01

DRAWING USAGE: SHOP

PART NO. RRUDSM
 DWG. NO. RRUDSM

Certificate Of Completion

Envelope ID: CF8A6D19766F48B7BD979DCA319EDD62 Status: Completed
 Subject: Complete with DocuSign: WOLCOTT_CT_LE_04.01.24.pdf
 Source Envelope:
 Document Pages: 2 Signatures: 1 Envelope Originator:
 Certificate Pages: 1 Initials: 0 Trista Bonomi
 AutoNav: Enabled 2000 Corporate Drive
 Envelopeld Stamping: Enabled Canonsburg, PA 15317
 Time Zone: (UTC-06:00) Central Time (US & Canada) Trista.Bonomi@crowncastle.com
 IP Address: 64.213.130.18

Record Tracking

Status: Original Holder: Trista Bonomi Location: DocuSign
 4/1/2024 8:39:06 AM Trista.Bonomi@crowncastle.com

Signer Events

Maham Barimani
 Maham.Barimani@crowncastle.com
 Security Level: Email, Account Authentication
 (None)

Signature

DocuSigned by:

 Maham Barimani
 e0b7f30923a4d81...

Timestamp

Sent: 4/1/2024 8:39:59 AM
 Viewed: 4/1/2024 8:46:58 AM
 Signed: 4/1/2024 8:47:07 AM

Signature Adoption: Pre-selected Style
 Using IP Address: 64.213.130.18

Electronic Record and Signature Disclosure:
 Not Offered via DocuSign

In Person Signer Events

Timestamp

Editor Delivery Events

Timestamp

Agent Delivery Events

Timestamp

Intermediary Delivery Events

Timestamp

Certified Delivery Events

Timestamp

Carbon Copy Events

Timestamp

Witness Events

Timestamp

Notary Events

Timestamp

Envelope Summary Events

Timestamps

Envelope Sent Hashed/Encrypted 4/1/2024 8:39:59 AM
 Certified Delivered Security Checked 4/1/2024 8:46:58 AM
 Signing Complete Security Checked 4/1/2024 8:47:07 AM
 Completed Security Checked 4/1/2024 8:47:07 AM

Payment Events

Timestamps