MJ Umali, Site Acquisition Consultant
c/o Cellco Partnership d/b/a Verizon Wireless
Centerline Communications, LLC
750 West Center Street, Floor 3
West Bridgewater, MA 02379
Mobile: (978) 568-7906
MUmali@centerlinecommunications.com

August 26, 2021

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

RE: Notice of Exempt Modification // Site: TOPSTONE CT (ATC: 302522)
100 Old Redding Road, Redding, CT 06896
N 41.28708 // W 73.43819

Dear Ms. Bachman,

Cellco Partnership d/b/a Verizon Wireless currently maintains 12 antennas at the 172-ft level on the existing 180-foot monopole tower, located at 100 Old Redding Road, Redding, CT. The tower is owned by American Tower. The property is also owned by Robert J. Kaufman. The Council approved Verizon Wireless use of the existing tower in 2000. Verizon Wireless now intends to remove 6 antennas and install 9 new ones for the LTE (3700 MHz) replacements for its 5G upgrade. Additionally, Verizon Wireless will remove 6 Remote Radio Heads (RRHs) and install with 9 new RRHs, remove 6 diplexers and install 3 new ones; altogether updating leased equipment rights, as reflected by the final configuration outlined in the structural analysis and proposed hereby.

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 Julia Pemberton, First Selectwoman, its Zoning Enforcement Officer, Aimee Pardee, M.A, the tower owner, American Tower, and the property owner, Robert J. Kaufman.

The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2). Enclosed to accommodate this filing are construction drawings dated July 29, 2021, by Dewberry Engineers, Inc., a structural analysis dated June 15, 2021, by A.T. Engineering, PLLC., and a structural mount analysis by Maser Consulting Connecticut date July 8, 2021, and radio frequency (RF) analysis table showing worst-case RF emission calculation by Verizon Wireless RF Design Engineering.

1. The proposed modifications will not result in an increase in the height of the existing structure.

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

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

4. The operation of the new antennas will not increase radio frequency emissions at the facility to a level at or above the Federal Communications 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, as shown in the attached structural analysis by A.T. Engineering, PLLC, dated June 15, 2021, and a structural mount analysis by Maser Consulting Connecticut, dated July 8, 2021, pursuant to certain conditions defined therein. Design and engineering is fully illustrated within final construction drawings, signed and stamped dated July 29, 2021.

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

Sincerely,

MJ Umali

_____

MJ Umali, Site Acquisition Consultant
c/o Cellco Partnership d/b/a Verizon Wireless
Centerline Communications, LLC
750 West Center Street, Floor 3
West Bridgewater, MA 02379
Mobile: (978) 568-7906
MUmali@centerlinecommunications.com

Attachments

cc: Julia Pemberton, First Selectwoman of Redding– Chief Elected Official
Aimee Pardee, M.A – Zoning Enforcement Officer - as P&Z official
American Tower Corporation - as tower owner
Robert J Kaufman. - as ground owner

UPS CampusShip: View/Print Label

1. **Ensure there are no other shipping or tracking labels attached to your package.** Select the Print button on the print dialog box that appears. Note: If your browser does not support this function select Print from the File menu to print the label.

2. **Fold the printed label at the solid line below.** Place the label in a UPS Shipping Pouch. If you do not have a pouch, affix the folded label using clear plastic shipping tape over the entire label.

3. **GETTING YOUR SHIPMENT TO UPS**
   Customers with a Daily Pickup
   Your driver will pickup your shipment(s) as usual.

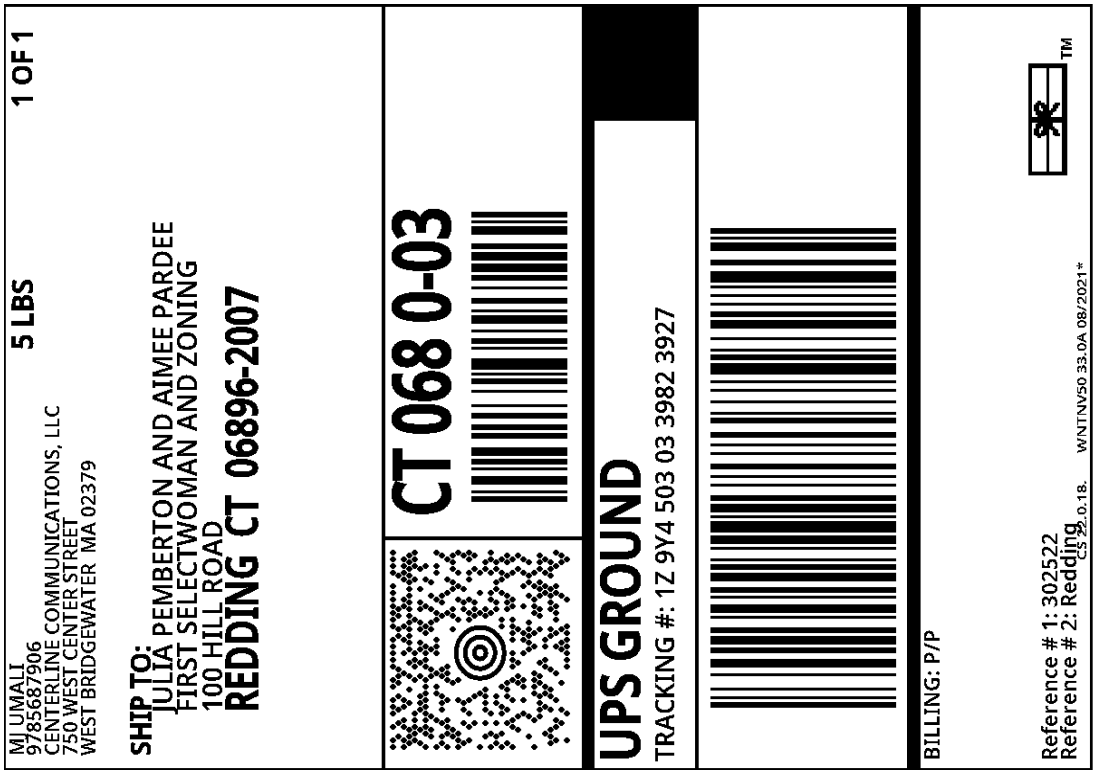
   Customers without a Daily Pickup
   Take your package to any location of The UPS Store®, UPS Access Point(TM) location, UPS Drop Box, UPS Customer Center, Staples® or Authorized Shipping Outlet near you. Items sent via UPS Return Services(SM) (including via Ground) are also accepted at Drop Boxes. To find the location nearest you, please visit the Resources area of CampusShip and select UPS Locations.
   Schedule a same day or future day Pickup to have a UPS driver pickup all your CampusShip packages.
   Hand the package to any UPS driver in your area.

UPS Access Point™
CVS STORE # 972
555 WASHINGTON ST
SOUTH EASTON ,MA 02375

UPS Access Point™
CVS STORE # 7232
689 DEPOT ST
NORTH EASTON ,MA 02356

UPS Access Point™
TOWN LINE GENERAL STORE
450 E CENTER ST
WEST BRIDGEWATER ,MA 02379

FOLD HERE



UPS CampusShip: View/Print Label

1. **Ensure there are no other shipping or tracking labels attached to your package.** Select the Print button on the print dialog box that appears. Note: If your browser does not support this function select Print from the File menu to print the label.

2. **Fold the printed label at the solid line below.** Place the label in a UPS Shipping Pouch. If you do not have a pouch, affix the folded label using clear plastic shipping tape over the entire label.

3. **GETTING YOUR SHIPMENT TO UPS**
   Customers with a Daily Pickup
   Your driver will pickup your shipment(s) as usual.

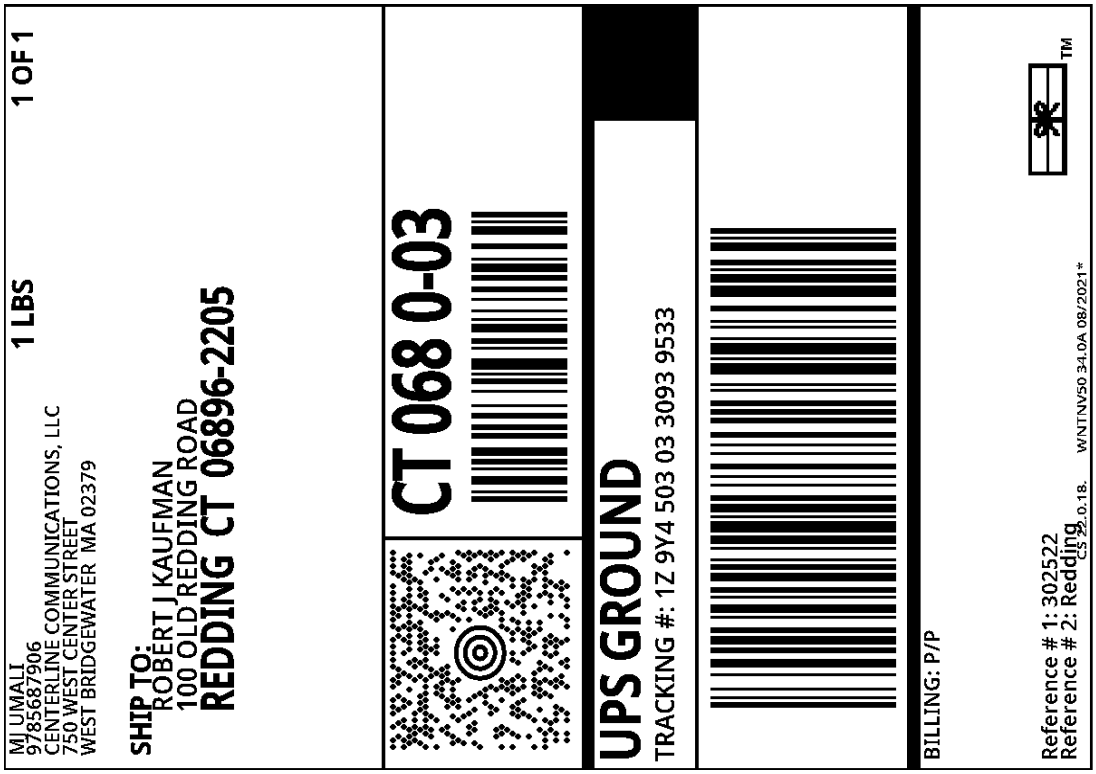
   Customers without a Daily Pickup
   Take your package to any location of The UPS Store®, UPS Access Point(TM) location, UPS Drop Box, UPS Customer Center, Staples® or Authorized Shipping Outlet near you. Items sent via UPS Return Services(SM) (including via Ground) are also accepted at Drop Boxes. To find the location nearest you, please visit the Resources area of CampusShip and select UPS Locations.
   Schedule a same day or future day Pickup to have a UPS driver pickup all your CampusShip packages.
   Hand the package to any UPS driver in your area.

UPS Access Point™
CVS STORE # 972
555 WASHINGTON ST
SOUTH EASTON ,MA 02375

UPS Access Point™
CVS STORE # 7232
689 DEPOT ST
NORTH EASTON ,MA 02356

UPS Access Point™
TOWN LINE GENERAL STORE
450 E CENTER ST
WEST BRIDGEWATER ,MA 02379

FOLD HERE



UPS CampusShip: View/Print Label

1. **Ensure there are no other shipping or tracking labels attached to your package.** Select the Print button on the print dialog box that appears. Note: If your browser does not support this function select Print from the File menu to print the label.

2. **Fold the printed label at the solid line below.** Place the label in a UPS Shipping Pouch. If you do not have a pouch, affix the folded label using clear plastic shipping tape over the entire label.

3. **GETTING YOUR SHIPMENT TO UPS**
   Customers with a Daily Pickup
   Your driver will pickup your shipment(s) as usual.

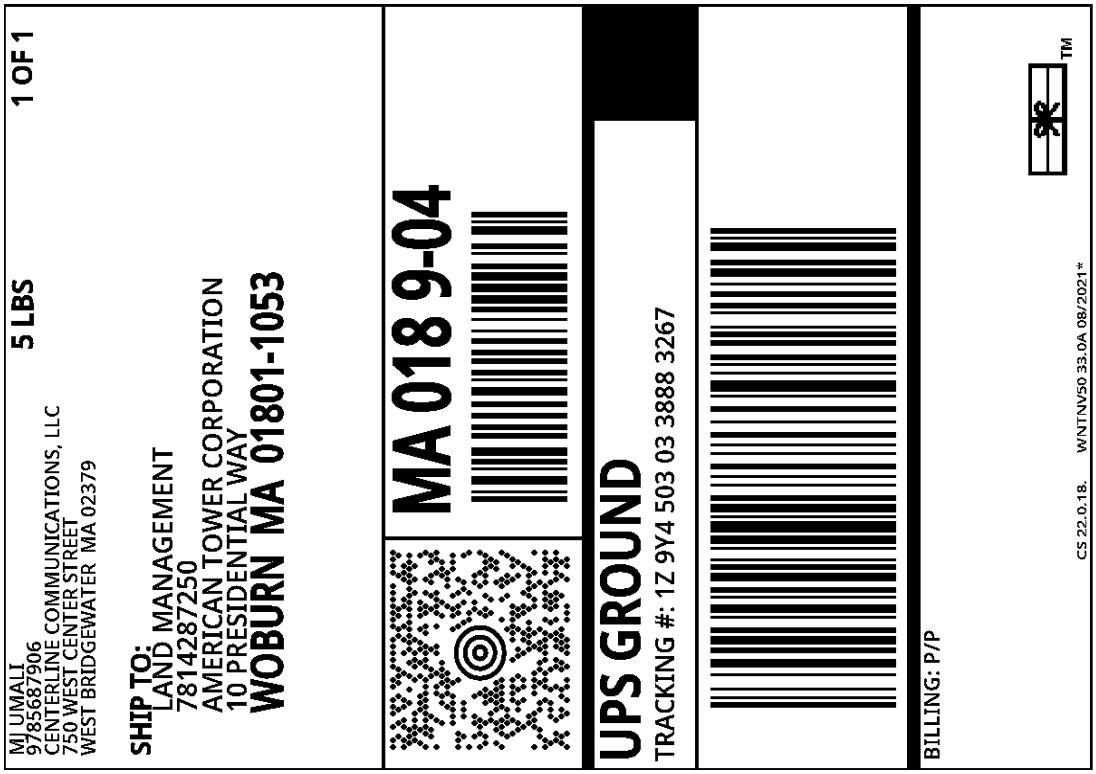
   Customers without a Daily Pickup
   Take your package to any location of The UPS Store®, UPS Access Point(TM) location, UPS Drop Box, UPS Customer Center, Staples® or Authorized Shipping Outlet near you. Items sent via UPS Return Services(SM) (including via Ground) are also accepted at Drop Boxes. To find the location nearest you, please visit the Resources area of CampusShip and select UPS Locations.
   Schedule a same day or future day Pickup to have a UPS driver pickup all your CampusShip packages.
   Hand the package to any UPS driver in your area.

UPS Access Point™
CVS STORE # 972
555 WASHINGTON ST
SOUTH EASTON ,MA 02375

UPS Access Point™
CVS STORE # 7232
689 DEPOT ST
NORTH EASTON ,MA 02356

UPS Access Point™
TOWN LINE GENERAL STORE
450 E CENTER ST
WEST BRIDGEWATER ,MA 02379

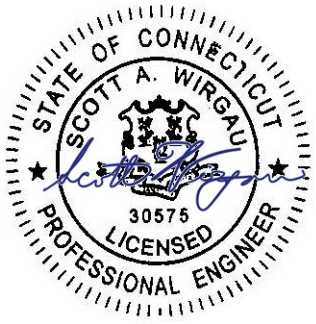
FOLD HERE



AMERICAN TOWER®
CORPORATION

Structural Analysis Report

Structure	:	**180 ft Self Supported Tower**
ATC Site Name	:	**Redding, CT**
ATC Asset Number	:	**302522**
Engineering Number	:	**13683575_C3_02**
Proposed Carrier	:	**VERIZON WIRELESS**
Carrier Site Name	:	**TOPSTONE CT**
Carrier Site Number	:	**467676**
Site Location	:	**100 Old Redding Road** **Redding, CT 06896-2721** **41.287100,-73.438200**
County	:	**Fairfield**
Date	:	**June 15, 2021**
Max Usage	:	**83%**
Result	:	**Pass**



Prepared By:
Steven Nedrud
Structural Engineer I

Reviewed By:

COA: PEC.0001553

AMERICAN TOWER®
CORPORATION

Table of Contents

Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 180 ft self supported tower to reflect the change in loading by VERIZON WIRELESS.

Supporting Documents

Tower Drawings	Rohn Drawing #C951762, dated December 26, 1995
Foundation Drawing	Rohn Drawing #A953313-1, dated January 12, 1996
Geotechnical Report	SoilTesting Job #591, dated December 26, 1995

Analysis

The tower was analyzed using American Tower Corporation's tower analysis software. This program considers an elastic three-dimensional model and second-order effects per ANSI/TIA-222.

Basic Wind Speed:	116 mph (3-Second Gust)
Basic Wind Speed w/ Ice:	50 mph (3-Second Gust) w/ 1" radial ice concurrent
Code:	ANSI/TIA-222-H / 2015 IBC / 2018 Connecticut State Building Code
Exposure Category:	B
Risk Category:	II
Topographic Factor Procedure:	Method 1
Topographic Category:	1
Spectral Response:	Ss = 0.23, S_1 = 0.06
Site Class:	D - Stiff Soil

Conclusion

Based on the analysis results, the structure meets the requirements per the applicable codes listed above. The tower and foundation can support the equipment as described in this report.

If you have any questions or require additional information, please contact American Tower via email at Engineering@americantower.com. Please include the American Tower site name, site number, and engineering number in the subject line for any questions.

Existing and Reserved Equipment

Elev.[1] (ft)	Qty	Equipment	Mount Type	Lines	Carrier
184.0	1	Raycap DC6-48-60-18-8F ("Squid")	Sector Frame	(3) 0.39" (10mm) Fiber Trunk (8) 0.78" (19.7mm) 8 AWG 6 (12) 1 1/4" Coax (2) 2" conduit	AT&T MOBILITY
	6	Kaelus DBC0061F1V51-2			
	1	CCI OPA65R-BU8D			
	1	CCI DMP65R-BU8D			
	1	CCI TPA-65R-LCUUUU-H8			
	2	CCI OPA65R-BU6D			
	2	CCI DMP65R-BU6DA			
	2	Quintel QS66512-2			
	3	Powerwave Allgon 7770.00			
	3	Ericsson RRUS 32 B30 (53 lbs)			
	6	Powerwave Allgon LGP21401			
	3	Ericsson RRUS 4478 B14			
	3	Ericsson RRUS 4449 B5, B12			
	2	Raycap DC6-48-60-18-8C			
	3	Ericsson RRUS 32 B2			
172.0	4	Andrew DB844G65ZAXY	Sector Frame	(6) 1 5/8" Coax (2) 1 5/8" Hybriflex	VERIZON WIRELESS
	2	RFS APL868013-42T0			
164.0	12	Decibel DB844H90E-XY	Sector Frame	(4) 1 1/4" Hybriflex Cable	SPRINT NEXTEL
157.0	3	Alcatel-Lucent 800 MHz RRH			
	3	Alcatel-Lucent RRH2x50-08			
	3	Alcatel-Lucent 1900 MHz 4X45 RRH			
	3	Commscope DT465B-2XR			
	3	RFS APXVSPP18-C-A20			
	3	Alcatel-Lucent TD-RRH8x20-25 w/ Solar Shield			
147.0	3	Ericsson Radio 4449 B12,B71	Perfect Vision PV-SFA12-B Sector Frames	(3) 1 1/4" Hybriflex Cable (12) 1 5/8" Coax (1) 1 5/8" Hybriflex	T-MOBILE
	6	Ericsson AIR 21, 1.3M, B4A B2P (90.4 lbs)			
	3	RFS APXVAARR24_43-U-NA20			
143.0	1	Andrew Microwaves DB810K-XT	Side Arm	(3) 1 5/8" Coax (1) 1/2" Coax	CONNECTICUT STATE POLICE DEPT OF PUBLIC
	1	Sinclair SC479-HF1LDF			
142.0	1	Bird 432E-83I-01-T			
135.0	1	Generic 24" x 24" Ice Shield	Side Arm	(8) 1 5/8" Coax (1) 3/8" Coax (1) 1/2" Coax (2) EW63	
134.0	1	Generic 24" x 24" Ice Shield			
	2	Sinclair SE419-SF3P4LDF			
132.0	1	Bird 432-83H-01-T			
	2	Generic 96" x 12" Panel			
131.0	1	Morad VHF 156-DELUXE			
130.0	1	Amphenol Antel WPA-700120-4CF-EDIN-X			
129.0	1	RFS PA6-65AC			
128.0	1	RFS PA6-65AC			
125.0	1	Sinclair SE419-SF3P4LDF			
122.0	3	Sinclair SC479-HF1LDF			
120.5	1	Decibel DB586	Stand-Off	(1) 7/8" Coax	EVERSOURCE ENERGY
115.5	1	Decibel DB586	Stand-Off	(1) 7/8" Coax	
90.0	1	PCTEL GPS-TMG-HR-26N	Stand-Off	(1) 1/2" Coax	SPRINT NEXTEL
88.0	1	Sinclair SD210D	Side Arm	(2) 7/8" Coax	EVERSOURCE ENERGY

Existing and Reserved Equipment

Elev.[1] (ft)	Qty	Equipment	Mount Type	Lines	Carrier
86.0	1	Generic 12' Omni	Side Arm	(1) 7/8" Coax	OTHER
66.0	1	Andrew DB264-A	Leg	(1) 7/8" Coax	CONNECTICUT STATE POLICE DEPT OF PUBLIC
30.0	1	Generic 2" x 4" GPS	Leg	(1) 1/2" Coax	VERIZON WIRELESS
18.0	1	PCTEL GPS-TMG-HR-26N	Leg	(1) 1/2" Coax (2) 2" Carflex Non-Metallic Conduit	AT&T MOBILITY
15.0	1	PCTEL GPS-TMG-HR-26N	Leg		

Equipment to be Removed

Elev.[1] (ft)	Qty	Equipment	Mount Type	Lines	Carrier
172.0	6	RFS FD9R6004/1C-3L	-	(6) 1 5/8" Coax	VERIZON WIRELESS
	3	Alcatel-Lucent RRH2X60-1900			
	6	Commscope SBNHH-1D65B			
	3	Alcatel-Lucent RRH2x60 700			
	2	RFS DB-T1-6Z-8AB-0Z			
	3	Alcatel-Lucent B25 RRH4x30			

Proposed Equipment

Elev.[1] (ft)	Qty	Equipment	Mount Type	Lines	Carrier
172.0	3	Commscope CBC78T-DS-43-2X	Sector Frame	-	VERIZON WIRELESS
	3	Samsung B5/B13 RRH-BR04C			
	3	Samsung B2/B66A RRH-BR049			
	1	RFS DB-C1-12C-24AB-0Z			
	3	Samsung MT6407-77A			
	6	Commscope JAHH-65B-R3B			

[1] Contracted elevations are shown for appurtenances within contracted installation tolerances. Appurtenances outside of contract limits are shown at installed elevations.

Structure Usages

Structural Component	Controlling Usage	Pass/Fail
Legs	83%	Pass
Diagonals	72%	Pass
Horizontals	22%	Pass
Anchor Bolts	53%	Pass
Leg Bolts	59%	Pass

Foundations

Reaction Component	Original Design Reactions	Factored Design Reactions*	Analysis Reactions	% of Design
Uplift (Kips)	287.6	388.3	282.5	73%
Axial (Kips)	321.3	433.8	328.8	76%
Shear (Kips)	56.4	76.1	56.7	74%
* The design reactions are factored by 1.35 per ANSI/TIA-222-H, Sec. 15.6.2				

The structure base reactions resulting from this analysis are acceptable when compared to those shown on the original structure drawings, therefore no modification or reinforcement of the foundation will be required.

Deflection, Twist and Sway*

Antenna Elevation (ft)	Antenna	Carrier	Deflection (ft)	Twist (°)	Sway (Rotation) (°)
172.0	Commscope CBC78T-DS-43-2X	VERIZON WIRELESS	0.371	0.049	0.253
	Samsung B5/B13 RRH-BR04C				
	Samsung B2/B66A RRH-BR049				
	RFS DB-C1-12C-24AB-0Z				
	Samsung MT6407-77A				
	Commscope JAHH-65B-R3B				
129.0	RFS PA6-65AC	CONNECTICUT STATE POLICE DEPT OF PUBLIC	0.198	0.012	0.182
128.0	RFS PA6-65AC				

***Deflection, Twist and Sway was evaluated considering a design wind speed of 60 mph (3-Second Gust) per ANSI/TIA-222-H**

Standard Conditions

All engineering services performed by A.T. Engineering Service, PLLC are prepared on the basis that the information used is current and correct. This information may consist of, but is not limited to the following:

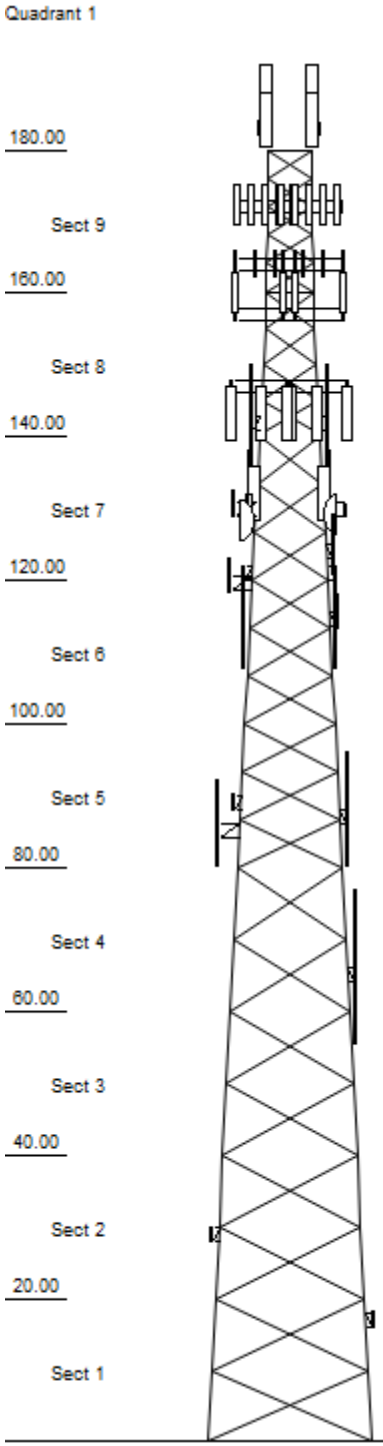
- Information supplied by the client regarding antenna, mounts and feed line loading
- Information from drawings, design and analysis documents, and field notes in the possession of A.T. Engineering Service, PLLC

It is the responsibility of the client to ensure that the information provided to A.T. Engineering Service, PLLC and used in the performance of our engineering services is correct and complete.

All assets of American Tower Corporation, its affiliates and subsidiaries (collectively "American Tower") are inspected at regular intervals. Based upon these inspections and in the absence of information to the contrary, American Tower assumes that all structures were constructed in accordance with the drawings and specifications.

Unless explicitly agreed by both the client and A.T. Engineering Service, PLLC, all services will be performed in accordance with the current revision of ANSI/TIA-222.

All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. A.T. Engineering Service, PLLC is not responsible for the conclusions, opinions and recommendations made by others based on the information supplied herein.



Loads: 116 mph no ice
50 mph w/ 1" radial ice
Site Class: D Ss: 0.23 S1: 0.06
60 mph Serviceability

Job Information

Client : VERIZON WIRELESS			
Tower : 302522	Location :	Redding, CT	Base Width : 23.00 ft
Code : ANSI/TIA-222-H	Topo Method:	Method 1	Top Width : 6.65 ft
Risk Cat : II	Topo:	1	Tower Ht : 180.00 ft
	Exposure :	B	Shape : Triangle

Sections Properties

Section	Leg Members	Diagonal Members	Horizontal Members
1	PSP 50 ksi ROHN 8 EHS	SAE 50 ksi 4X4X0.3125	
2	PSP 50 ksi ROHN 8 EHS	SAE 50 ksi 4X4X0.25	
3	PX 50 ksi 6" DIA PIPE	SAE 50 ksi 4X4X0.25	
4	PX 50 ksi 6" DIA PIPE	SAE 50 ksi 3.5X3.5X0.25	
5 - 6	PX 50 ksi 5" DIA PIPE	SAE 50 ksi 3X3X0.25	
7	PX 50 ksi 4" DIA PIPE	SAE 36 ksi 2.5X2.5X0.25	
8	PST 50 ksi 3" DIA PIPE	SAE 36 ksi 2X2X0.25	SAE 36 ksi 2X2X0.25
9	PST 50 ksi 2-1/2" DIA PIPE	SAE 36 ksi 1.75X1.75X0.1875	SAE 36 ksi 2X2X0.125

Discrete Appurtenance

Elev (ft)	Type	Qty	Description
184.00	Panel	1	CCI OPA65R-BU8D
184.00	Panel	1	CCI DMP65R-BU8D
184.00	Panel	1	CCI TPA-65R-LCUUUU-H8
184.00	Panel	2	CCI OPA65R-BU6D
184.00	Panel	2	CCI DMP65R-BU6DA
184.00	Panel	2	Quintel QS66512-2
184.00	Panel	3	Powerwave Allgon 7770.00
184.00		3	Ericsson RRUS 32 B30 (53 lbs)
184.00		3	Ericsson RRUS 32 B2
184.00		2	Raycap DC6-48-60-18-8C
184.00		3	Ericsson RRUS 4449 B5, B12
184.00		3	Ericsson RRUS 4478 B14
184.00		6	Powerwave Allgon LGP21401
184.00		6	Kaelus DBC0061F1V51-2
184.00		1	Raycap DC6-48-60-18-8F ("Squid
180.00	Mounting Frame	3	Round Sector Frames
172.00	Mounting Frame	3	Round Sector Frame
172.00	Panel	6	Commscope JAHH-65B-R3B
172.00	Panel	3	Samsung MT6407-77A
172.00	Panel	4	Andrew DB844G65ZAXY
172.00	Panel	2	RFS APL868013-42T0
172.00		1	RFS DB-C1-12C-24AB-0Z
172.00		3	Samsung B2/B66A RRH-BR049
172.00		3	Samsung B5/B13 RRH-BR04C
172.00		3	Commscope CBC78T-DS-43-2X
164.00	Mounting Frame	3	Round Sector Frame
164.00	Panel	12	Decibel DB844H90E-XY
157.00	Mounting Frame	3	Round Sector Frames
157.00	Panel	3	Commscope DT465B-2XR
157.00	Panel	3	RFS APXVSPP18-C-A20
157.00		3	Alcatel-Lucent TD-RRH8x20-25 w
157.00		3	Alcatel-Lucent 1900 MHz 4X45 R
157.00		3	Alcatel-Lucent 800 MHz RRH
157.00		3	Alcatel-Lucent RRH2x50-08
147.00	Mounting Frame	3	Perfect Vision PV-SFA12-B Sect
147.00	Panel	3	RFS APXVAARR24_43-U-NA20
147.00	Panel	6	Ericsson AIR 21, 1.3M, B4A B2P
147.00		3	Ericsson Radio 4449 B12,B71
143.00	Whip	1	Sinclair SC479-HF1LDF
143.00	Whip	1	Andrew Microwaves DB810K-XT
142.50	Straight Arm	2	Round Side Arm
142.00		1	Bird 432E-83I-01-T
136.00	Straight Arm	2	Round Side Arm
135.00	Other	1	Generic 24" x 24" Ice Shield
134.00	Whip	2	Sinclair SE419-SF3P4LDF

Job Information

Client :	VERIZON WIRELESS				
Tower :	302522	Location :	Redding, CT	Base Width :	23.00 ft
Code :	ANSI/TIA-222-H	Topo Method:	Method 1	Top Width :	6.65 ft
Risk Cat :	II	Topo:	1	Tower Ht :	180.00 ft
		Exposure :	B	Shape :	Triangle

134.00	Other	1	Generic 24" x 24" Ice Shield
132.00	Panel	2	Generic 96" x 12" Panel
132.00		1	Bird 432-83H-01-T
131.00	Straight Arm	2	Round Side Arm
131.00	Whip	1	Morad VHF 156-DELUXE
130.00	Panel	1	Amphenol Antel WPA-700120-4CF-
129.00	Dish	1	RFS PA6-65AC
128.00	Dish	1	RFS PA6-65AC
127.00	Straight Arm	1	Round Side Arms
125.00	Whip	1	Sinclair SE419-SF3P4LDF
122.00	Whip	3	Sinclair SC479-HF1LDF
121.00	Straight Arm	1	Round Side Arm
120.50	Straight Arm	1	Stand-Off
120.50	Whip	1	Decibel DB586
115.50	Whip	1	Decibel DB586
115.00	Straight Arm	2	Stand-Off
100.00	Straight Arm	1	Stand-Off
100.00	Straight Arm	1	Generic Flat Stand-Off
91.00	Straight Arm	1	Stand-Off
90.00	Whip	1	PCTEL GPS-TMG-HR-26N
88.00	Whip	1	Sinclair SD210D
86.00	Straight Arm	1	Side Arms
86.00	Whip	1	Generic 12' Omni
66.00	Whip	1	Andrew DB264-A
30.00	Whip	1	Generic 2" x 4" GPS
18.00	Whip	1	PCTEL GPS-TMG-HR-26N

Linear Appurtenance

Elev (ft) From	To	Qty	Description
0.00	184.00	2	2" conduit
0.00	184.00	12	1 1/4" Coax
0.00	184.00	4	0.78" (19.7mm) 8 AWG
0.00	184.00	4	0.78" (19.7mm) 8 AWG
0.00	184.00	3	0.39" (10mm) Fiber T
0.00	180.00	1	Wave Guide
0.00	172.00	1	Wave Guide
0.00	172.00	2	1 5/8" Hybriflex
0.00	172.00	6	1 5/8" Coax
0.00	164.00	1	Wave Guide
0.00	157.00	4	1 1/4" Hybriflex Cab
0.00	147.00	1	Wave Guide
0.00	147.00	1	1 5/8" Hybriflex
0.00	147.00	12	1 5/8" Coax
0.00	147.00	3	1 1/4" Hybriflex Cab
0.00	143.00	2	1 5/8" Coax
0.00	142.50	1	Wave Guide
0.00	142.00	1	1/2" Coax
0.00	142.00	1	1 5/8" Coax
0.00	134.00	2	1 5/8" Coax
0.00	132.00	1	3/8" Coax
0.00	132.00	2	1 5/8" Coax
0.00	131.00	1	1/2" Coax
0.00	129.00	1	EW63
0.00	128.00	1	EW63
0.00	125.00	1	1 5/8" Coax
0.00	122.00	3	1 5/8" Coax
0.00	120.50	1	7/8" Coax
0.00	115.50	1	7/8" Coax
0.00	90.00	1	1/2" Coax
0.00	88.00	2	7/8" Coax

Job Information

Client :	VERIZON WIRELESS				
Tower :	302522	Location :	Redding, CT	Base Width :	23.00 ft
Code :	ANSI/TIA-222-H	Topo Method:	Method 1	Top Width :	6.65 ft
Risk Cat :	II	Topo:	1	Tower Ht :	180.00 ft
		Exposure :	B	Shape :	Triangle

0.00	86.00	1	7/8" Coax
0.00	66.00	1	7/8" Coax
0.00	30.00	1	1/2" Coax
0.00	18.00	1	1/2" Coax
0.00	15.00	2	2" Carflex Non-Metal

Global Base Foundation Design Loads

Load Case	Moment (k-ft)	Vertical (kip)	Horizontal (kip)
DL + WL	6,139.50	61.59	56.71
DL + WL + IL	1,954.10	134.33	18.92

Individual Base Foundation Design Loads

Vertical (kip)	Uplift (kip)	Horizontal (kip)
0.00	0.00	0.00

Site Number:	302522	Code:	ANSI/TIA-222-H	
Site Name:	Redding, CT	Engineering Number:	13683575_C3_02	6/15/2021 5:41:17 AM
Customer:	VERIZON WIRELESS			

Analysis Parameters

Location:	Fairfield County, CT	Height (ft):	180
Code:	ANSI/TIA-222-H	Base Elevation (ft):	0.00
Shape:	Triangle	Bottom Face Width (ft):	23.00
Tower Manufacturer:	Rohn	Top Face Width (ft):	6.65
Tower Type:	Self Support	Anchor Bolt Detail Type	c
Kd:	0.85		
Ke:	0.98		

Ice & Wind Parameters

Exposure Category:	B	Design Windspeed Without Ice:	116 mph
Risk Category:	II	Design Windspeed With Ice:	50 mph
Topographic Factor Procedure:	Method 1	Operational Windspeed:	60 mph
Topographic Category:	1	Design Ice Thickness:	1.00 in
Crest Height:	0 ft	HMSL:	686.00 ft

Seismic Parameters

Analysis Method:	Equivalent Lateral Force Method				
Site Class:	D - Stiff Soil				
Period Based on Rayleigh Method (sec):	0.97				
T_L (sec):	6	p:	1.3	C_S:	0.031
S_S :	0.235	S_1 :	0.057	C_S, Max:	0.031
F_a :	1.600	F_V :	2.400	C_S, Min:	0.030
S_{ds} :	0.251	S_{d1} :	0.091		

Load Cases

1.2D + 1.0W Normal	116 mph Normal with No Ice
1.2D + 1.0W 60 deg	116 mph 60 degree with No Ice
1.2D + 1.0W 90 deg	116 mph 90 degree with No Ice
0.9D + 1.0W Normal	116 mph Normal with No Ice (Reduced DL)
0.9D + 1.0W 60 deg	116 mph 60 deg with No Ice (Reduced DL)
0.9D + 1.0W 90 deg	116 mph 90 deg with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi Normal	50 mph Normal with 1.00 in Radial Ice
1.2D + 1.0Di + 1.0Wi 60 deg	50 mph 60 deg with 1.00 in Radial Ice
1.2D + 1.0Di + 1.0Wi 90 deg	50 mph 90 deg with 1.00 in Radial Ice
1.2D + 1.0Ev + 1.0Eh Normal	Seismic Normal
1.2D + 1.0Ev + 1.0Eh 60 deg	Seismic 60 deg
1.2D + 1.0Ev + 1.0Eh 90 deg	Seismic 90 deg
0.9D - 1.0Ev + 1.0Eh Normal	Seismic (Reduced DL) Normal
0.9D - 1.0Ev + 1.0Eh 60 deg	Seismic (Reduced DL) 60 deg
0.9D - 1.0Ev + 1.0Eh 90 deg	Seismic (Reduced DL) 90 deg
1.0D + 1.0W Service Normal	Serviceability - 60 mph Wind Normal
1.0D + 1.0W Service 60 deg	Serviceability - 60 mph Wind 60 deg
1.0D + 1.0W Service 90 deg	Serviceability - 60 mph Wind 90 deg

Site Number: 302522 Code: ANSI/TIA-222-H

Site Name: Redding, CT Engineering Number: 13683575_C3_02 6/15/2021 5:41:17 AM

Customer: VERIZON WIRELESS

Tower Loading

Discrete Appurtenance Properties 1.2D + 1.0W

Elevation (ft)	Description	Qty	Wt. (lb)	EPA (sf)	Length (ft)	Width (in)	Depth (in)	K_a	Orient. Factor	Vert. Ecc.(ft)	M_u (lb-ft)	Q_z (psf)	F_a (WL) (lb)	P_a (DL) (lb)
184.0	Kaelus	6	26	0.4	0.7	6.5	6.2	0.80	0.50	1.0	29.7	33.65	30	184
184.0	Powerwave Allgon	6	14	1.1	1.2	9.2	2.6	0.80	0.50	1.0	75.8	33.65	76	102
184.0	Raycap DC6-48-60-	1	32	1.5	2.0	11.0	11.0	0.80	1.00	1.0	33.6	33.65	34	38
184.0	Ericsson RRUS 4478	3	60	1.8	1.4	13.4	7.7	0.80	0.50	0.0	0.0	33.60	63	216
184.0	Ericsson RRUS 4449	3	71	2.0	1.5	13.2	9.4	0.80	0.50	0.0	0.0	33.60	67	256
184.0	Raycap DC6-48-60-	2	16	2.0	1.7	18.2	6.4	0.80	1.00	1.0	92.9	33.65	93	38
184.0	Ericsson RRUS 32 B2	3	53	2.7	2.3	12.1	7.0	0.80	0.67	1.0	126.2	33.65	126	191
184.0	Ericsson RRUS 32	3	53	2.7	2.3	12.1	7.0	0.80	0.67	1.0	126.2	33.65	126	191
184.0	Powerwave Allgon	3	35	5.5	4.6	11.0	5.0	0.80	0.65	2.0	492.3	33.70	246	126
184.0	Quintel QS66512-2	2	111	8.1	6.0	12.0	9.6	0.80	0.80	1.0	297.8	33.65	298	266
184.0	CCI DMP65R-BU6DA	2	79	12.7	5.9	20.7	7.7	0.80	0.72	0.0	0.0	33.60	418	191
184.0	CCI OPA65R-BU6D	2	63	12.9	5.9	21.0	7.8	0.80	0.72	0.0	0.0	33.60	423	152
184.0	CCI TPA-65R-	1	82	13.3	8.0	14.4	8.6	0.80	1.00	1.0	304.3	33.65	304	98
184.0	CCI DMP65R-BU8D	1	96	17.9	8.0	20.7	7.7	0.80	1.00	0.0	0.0	33.60	408	115
184.0	CCI OPA65R-BU8D	1	77	18.1	8.0	21.0	7.8	0.80	1.00	0.0	0.0	33.60	413	92
180.0	Round Sector	3	300	14.4	0.0	0.0	0.0	0.75	0.75	0.0	0.0	33.39	690	1080
172.0	Commscope	3	21	0.6	0.8	6.9	6.4	0.80	0.50	0.0	0.0	32.96	19	75
172.0	Samsung B5/B13	3	70	1.9	1.3	15.0	8.1	0.80	0.50	0.0	0.0	32.96	63	253
172.0	Samsung B2/B66A	3	84	1.9	1.3	15.0	10.0	0.80	0.50	0.0	0.0	32.96	63	304
172.0	RFS APL868013-	2	6	3.6	4.0	6.0	8.0	0.80	0.79	0.0	0.0	32.96	128	15
172.0	RFS DB-C1-12C-	1	32	4.1	2.5	16.5	12.6	0.80	1.00	0.0	0.0	32.96	91	38
172.0	Andrew	4	12	4.3	4.0	10.0	8.5	0.80	0.75	0.0	0.0	32.96	292	58
172.0	Samsung MT6407-	3	82	4.7	2.9	16.1	5.5	0.80	0.61	0.0	0.0	32.96	193	294
172.0	Commscope JAHH-	6	61	9.1	6.0	13.8	8.2	0.80	0.69	0.0	0.0	32.96	845	436
172.0	Round Sector Frame	3	300	14.4	0.0	0.0	0.0	0.75	0.67	0.0	0.0	32.96	608	1080
164.0	Decibel DB844H90E-	12	14	3.6	4.0	6.5	8.0	0.80	0.73	0.0	0.0	32.51	700	202
164.0	Round Sector Frame	3	300	14.4	0.0	0.0	0.0	0.75	0.75	0.0	0.0	32.51	672	1080
157.0	Alcatel-Lucent	3	53	1.7	1.3	13.0	9.8	0.80	0.50	3.0	168.0	32.28	56	190
157.0	Alcatel-Lucent 800	3	53	2.1	1.6	13.0	10.8	0.80	0.67	3.0	282.5	32.28	94	191
157.0	Alcatel-Lucent 1900	3	60	2.3	2.1	11.1	10.7	0.80	0.67	3.0	307.4	32.28	102	216
157.0	Alcatel-Lucent TD-	3	70	4.0	2.2	18.6	6.7	0.80	0.61	3.0	487.6	32.28	163	252
157.0	RFS APXVSPP18-C-	3	57	8.0	6.0	11.8	7.0	0.80	0.69	3.0	1093.9	32.28	365	205
157.0	Commscope	3	58	9.1	6.0	13.8	8.2	0.80	0.69	3.0	1240.3	32.28	413	209
157.0	Round Sector	3	300	14.4	0.0	0.0	0.0	0.75	0.75	0.0	0.0	32.11	663	1080
147.0	Ericsson Radio 4449	3	74	1.6	1.2	13.2	9.3	0.80	0.50	-1.0	52.6	31.45	53	266
147.0	Ericsson AIR 21,	6	90	6.1	4.7	12.1	7.9	0.80	0.70	-1.0	547.2	31.45	547	651
147.0	Perfect Vision PV-	3	592	18.2	0.0	0.0	0.0	0.75	0.75	0.0	0.0	31.51	823	2131
147.0	RFS	3	128	20.2	8.0	24.0	8.7	0.80	0.63	-1.0	818.2	31.45	818	460
143.0	Andrew Microwaves	1	35	4.3	14.5	3.0	3.0	1.00	1.00	0.0	0.0	31.26	116	42
143.0	Sinclair SC479-	1	34	5.0	14.4	3.5	3.5	1.00	1.00	0.0	0.0	31.26	134	41
142.5	Round Side Arm	2	150	5.2	0.0	0.0	0.0	0.90	0.90	0.0	0.0	31.23	224	360
142.0	Bird 432E-83I-01-T	1	25	1.2	1.0	12.0	7.5	0.90	1.00	0.0	0.0	31.20	29	30
136.0	Round Side Arm	2	150	5.2	0.0	0.0	0.0	0.90	0.90	0.0	0.0	30.82	221	360
135.0	Generic 24" x 24"	1	50	0.8	0.3	24.0	24.0	1.00	1.00	-2.0	41.6	30.62	21	60
134.0	Generic 24" x 24"	1	50	0.8	0.3	24.0	24.0	1.00	1.00	-1.0	20.8	30.62	21	60
134.0	Sinclair SE419-	2	24	9.5	8.6	2.9	8.5	1.00	1.00	0.0	0.0	30.69	498	58
132.0	Bird 432-83H-01-T	1	25	1.4	1.2	12.0	7.0	1.00	1.00	0.0	0.0	30.56	36	30
132.0	Generic 96" x 12"	2	45	11.5	8.0	12.0	6.0	1.00	0.76	0.0	0.0	30.56	453	108
131.0	Morad VHF 156-	1	1	0.3	3.3	0.8	0.8	1.00	1.00	0.0	0.0	30.49	7	1
131.0	Round Side Arm	2	150	5.2	0.0	0.0	0.0	0.90	0.90	0.0	0.0	30.49	218	360
130.0	Amphenol Antel	1	7	2.7	4.0	5.6	5.6	0.90	1.00	0.0	0.0	30.42	62	8
129.0	RFS PA6-65AC	1	278	47.0	6.0	72.0	0.0	1.00	1.00	0.0	0.0	30.36	1214	334
128.0	RFS PA6-65AC	1	278	47.0	6.0	72.0	0.0	1.00	1.00	0.0	0.0	30.29	1211	334
127.0	Round Side Arms	1	100	5.0	0.0	0.0	0.0	0.90	0.90	0.0	0.0	30.22	104	120

Site Number: 302522 Code: ANSI/TIA-222-H

Site Name: Redding, CT Engineering Number: 13683575_C3_02 6/15/2021 5:41:17 AM

Customer: VERIZON WIRELESS

Tower Loading

125.0	Sinclair SE419-	1	24	9.5	8.6	2.9	8.5	1.00	1.00	0.0	0.0	30.08	244	29
122.0	Sinclair SC479-	3	34	5.0	14.4	3.5	3.5	1.00	1.00	-4.0	1518.3	29.59	380	122
121.0	Round Side Arm	1	100	5.0	0.0	0.0	0.0	0.90	0.90	0.0	0.0	29.81	103	120
120.5	Decibel DB586	1	8	0.7	4.9	1.5	1.5	1.00	1.00	0.0	0.0	29.77	19	10
120.5	Stand-Off	1	100	3.0	0.0	0.0	0.0	0.90	0.90	0.0	0.0	29.77	61	120
115.5	Decibel DB586	1	8	0.7	4.9	1.0	1.5	1.00	1.00	0.0	0.0	29.41	19	10
115.0	Stand-Off	2	100	3.0	0.0	0.0	0.0	0.90	0.90	0.0	0.0	29.38	121	240
100.0	Stand-Off	1	100	3.0	0.0	0.0	0.0	1.00	1.00	0.0	0.0	28.23	72	120
100.0	Generic Flat Stand-	1	188	6.3	0.0	0.0	0.0	1.00	1.00	0.0	0.0	28.23	151	225
91.00	Stand-Off	1	50	3.0	0.0	0.0	0.0	1.00	1.00	0.0	0.0	27.48	70	60
90.00	PCTEL GPS-TMG-HR-	1	1	0.1	0.4	3.2	3.2	1.00	1.00	2.0	4.2	27.56	2	1
88.00	Sinclair SD210D	1	40	4.4	16.0	41.0	4.0	1.00	1.00	0.0	0.0	27.21	103	48
86.00	Generic 12' Omni	1	40	3.6	12.0	3.0	3.0	1.00	1.00	0.0	0.0	27.04	83	48
86.00	Side Arms	1	150	6.3	0.0	0.0	0.0	1.00	1.00	0.0	0.0	27.04	145	180
66.00	Andrew DB264-A	1	36	5.9	21.5	0.0	0.0	1.00	1.00	0.0	0.0	25.07	126	43
30.00	Generic 2" x 4" GPS	1	5	0.0	0.2	4.0	2.0	1.00	1.00	0.0	0.0	20.01	1	6
18.00	PCTEL GPS-TMG-HR-	1	1	0.1	0.4	3.2	3.2	1.00	1.00	0.0	0.0	19.99	2	1
18.00	PCTEL GPS-TMG-HR-	1	1	0.1	0.4	3.2	3.2	1.00	1.00	0.0	0.0	19.99	2	1
	Totals	163	13924	1003.0									17856	16708

Discrete Appurtenance Properties 0.9D + 1.0W

Elevation (ft)	Description	Qty	Wt. (lb)	EPA (sf)	Length (ft)	Width (in)	Depth (in)	K_a	Orient. Factor	Vert. Ecc.(ft)	M_u (lb-ft)	Q_z (psf)	F_a (WL) (lb)	P_a (DL) (lb)
184.0	Kaelus	6	26	0.4	0.7	6.5	6.2	0.80	0.50	1.0	29.7	33.65	30	138
184.0	Powerwave Allgon	6	14	1.1	1.2	9.2	2.6	0.80	0.50	1.0	75.8	33.65	76	76
184.0	Raycap DC6-48-60-	1	32	1.5	2.0	11.0	11.0	0.80	1.00	1.0	33.6	33.65	34	29
184.0	Ericsson RRUS 4478	3	60	1.8	1.4	13.4	7.7	0.80	0.50	0.0	0.0	33.60	63	162
184.0	Ericsson RRUS 4449	3	71	2.0	1.5	13.2	9.4	0.80	0.50	0.0	0.0	33.60	67	192
184.0	Raycap DC6-48-60-	2	16	2.0	1.7	18.2	6.4	0.80	1.00	1.0	92.9	33.65	93	29
184.0	Ericsson RRUS 32 B2	3	53	2.7	2.3	12.1	7.0	0.80	0.67	1.0	126.2	33.65	126	143
184.0	Ericsson RRUS 32	3	53	2.7	2.3	12.1	7.0	0.80	0.67	1.0	126.2	33.65	126	143
184.0	Powerwave Allgon	3	35	5.5	4.6	11.0	5.0	0.80	0.65	2.0	492.3	33.70	246	95
184.0	Quintel QS66512-2	2	111	8.1	6.0	12.0	9.6	0.80	0.80	1.0	297.8	33.65	298	200
184.0	CCI DMP65R-BU6DA	2	79	12.7	5.9	20.7	7.7	0.80	0.72	0.0	0.0	33.60	418	143
184.0	CCI OPA65R-BU6D	2	63	12.9	5.9	21.0	7.8	0.80	0.72	0.0	0.0	33.60	423	114
184.0	CCI TPA-65R-	1	82	13.3	8.0	14.4	8.6	0.80	1.00	1.0	304.3	33.65	304	73
184.0	CCI DMP65R-BU8D	1	96	17.9	8.0	20.7	7.7	0.80	1.00	0.0	0.0	33.60	408	86
184.0	CCI OPA65R-BU8D	1	77	18.1	8.0	21.0	7.8	0.80	1.00	0.0	0.0	33.60	413	69
180.0	Round Sector	3	300	14.4	0.0	0.0	0.0	0.75	0.75	0.0	0.0	33.39	690	810
172.0	Commscope	3	21	0.6	0.8	6.9	6.4	0.80	0.50	0.0	0.0	32.96	19	56
172.0	Samsung B5/B13	3	70	1.9	1.3	15.0	8.1	0.80	0.50	0.0	0.0	32.96	63	190
172.0	Samsung B2/B66A	3	84	1.9	1.3	15.0	10.0	0.80	0.50	0.0	0.0	32.96	63	228
172.0	RFS APL868013-	2	6	3.6	4.0	6.0	8.0	0.80	0.79	0.0	0.0	32.96	128	11
172.0	RFS DB-C1-12C-	1	32	4.1	2.5	16.5	12.6	0.80	1.00	0.0	0.0	32.96	91	29
172.0	Andrew	4	12	4.3	4.0	10.0	8.5	0.80	0.75	0.0	0.0	32.96	292	43
172.0	Samsung MT6407-	3	82	4.7	2.9	16.1	5.5	0.80	0.61	0.0	0.0	32.96	193	220
172.0	Commscope JAHH-	6	61	9.1	6.0	13.8	8.2	0.80	0.69	0.0	0.0	32.96	845	327
172.0	Round Sector Frame	3	300	14.4	0.0	0.0	0.0	0.75	0.67	0.0	0.0	32.96	608	810
164.0	Decibel DB844H90E-	12	14	3.6	4.0	6.5	8.0	0.80	0.73	0.0	0.0	32.51	700	151
164.0	Round Sector Frame	3	300	14.4	0.0	0.0	0.0	0.75	0.75	0.0	0.0	32.51	672	810
157.0	Alcatel-Lucent	3	53	1.7	1.3	13.0	9.8	0.80	0.50	3.0	168.0	32.28	56	143
157.0	Alcatel-Lucent 800	3	53	2.1	1.6	13.0	10.8	0.80	0.67	3.0	282.5	32.28	94	143
157.0	Alcatel-Lucent 1900	3	60	2.3	2.1	11.1	10.7	0.80	0.67	3.0	307.4	32.28	102	162
157.0	Alcatel-Lucent TD-	3	70	4.0	2.2	18.6	6.7	0.80	0.61	3.0	487.6	32.28	163	189
157.0	RFS APXVSPP18-C-	3	57	8.0	6.0	11.8	7.0	0.80	0.69	3.0	1093.9	32.28	365	154

Tower Loading

157.0	Commscope	3	58	9.1	6.0	13.8	8.2	0.80	0.69	3.0	1240.3	32.28	413	157
157.0	Round Sector	3	300	14.4	0.0	0.0	0.0	0.75	0.75	0.0	0.0	32.11	663	810
147.0	Ericsson Radio 4449	3	74	1.6	1.2	13.2	9.3	0.80	0.50	-1.0	52.6	31.45	53	200
147.0	Ericsson AIR 21,	6	90	6.1	4.7	12.1	7.9	0.80	0.70	-1.0	547.2	31.45	547	488
147.0	Perfect Vision PV-	3	592	18.2	0.0	0.0	0.0	0.75	0.75	0.0	0.0	31.51	823	1598
147.0	RFS	3	128	20.2	8.0	24.0	8.7	0.80	0.63	-1.0	818.2	31.45	818	345
143.0	Andrew Microwaves	1	35	4.3	14.5	3.0	3.0	1.00	1.00	0.0	0.0	31.26	116	32
143.0	Sinclair SC479-	1	34	5.0	14.4	3.5	3.5	1.00	1.00	0.0	0.0	31.26	134	31
142.5	Round Side Arm	2	150	5.2	0.0	0.0	0.0	0.90	0.90	0.0	0.0	31.23	224	270
142.0	Bird 432E-83I-01-T	1	25	1.2	1.0	12.0	7.5	0.90	1.00	0.0	0.0	31.20	29	23
136.0	Round Side Arm	2	150	5.2	0.0	0.0	0.0	0.90	0.90	0.0	0.0	30.82	221	270
135.0	Generic 24" x 24"	1	50	0.8	0.3	24.0	24.0	1.00	1.00	-2.0	41.6	30.62	21	45
134.0	Generic 24" x 24"	1	50	0.8	0.3	24.0	24.0	1.00	1.00	-1.0	20.8	30.62	21	45
134.0	Sinclair SE419-	2	24	9.5	8.6	2.9	8.5	1.00	1.00	0.0	0.0	30.69	498	43
132.0	Bird 432-83H-01-T	1	25	1.4	1.2	12.0	7.0	1.00	1.00	0.0	0.0	30.56	36	23
132.0	Generic 96" x 12"	2	45	11.5	8.0	12.0	6.0	1.00	0.76	0.0	0.0	30.56	453	81
131.0	Morad VHF 156-	1	1	0.3	3.3	0.8	0.8	1.00	1.00	0.0	0.0	30.49	7	1
131.0	Round Side Arm	2	150	5.2	0.0	0.0	0.0	0.90	0.90	0.0	0.0	30.49	218	270
130.0	Amphenol Antel	1	7	2.7	4.0	5.6	5.6	0.90	1.00	0.0	0.0	30.42	62	6
129.0	RFS PA6-65AC	1	278	47.0	6.0	72.0	0.0	1.00	1.00	0.0	0.0	30.36	1214	250
128.0	RFS PA6-65AC	1	278	47.0	6.0	72.0	0.0	1.00	1.00	0.0	0.0	30.29	1211	250
127.0	Round Side Arms	1	100	5.0	0.0	0.0	0.0	0.90	0.90	0.0	0.0	30.22	104	90
125.0	Sinclair SE419-	1	24	9.5	8.6	2.9	8.5	1.00	1.00	0.0	0.0	30.08	244	22
122.0	Sinclair SC479-	3	34	5.0	14.4	3.5	3.5	1.00	1.00	-4.0	1518.3	29.59	380	92
121.0	Round Side Arm	1	100	5.0	0.0	0.0	0.0	0.90	0.90	0.0	0.0	29.81	103	90
120.5	Decibel DB586	1	8	0.7	4.9	1.5	1.5	1.00	1.00	0.0	0.0	29.77	19	7
120.5	Stand-Off	1	100	3.0	0.0	0.0	0.0	0.90	0.90	0.0	0.0	29.77	61	90
115.5	Decibel DB586	1	8	0.7	4.9	1.0	1.5	1.00	1.00	0.0	0.0	29.41	19	7
115.0	Stand-Off	2	100	3.0	0.0	0.0	0.0	0.90	0.90	0.0	0.0	29.38	121	180
100.0	Stand-Off	1	100	3.0	0.0	0.0	0.0	1.00	1.00	0.0	0.0	28.23	72	90
100.0	Generic Flat Stand-	1	188	6.3	0.0	0.0	0.0	1.00	1.00	0.0	0.0	28.23	151	169
91.00	Stand-Off	1	50	3.0	0.0	0.0	0.0	1.00	1.00	0.0	0.0	27.48	70	45
90.00	PCTEL GPS-TMG-HR-	1	1	0.1	0.4	3.2	3.2	1.00	1.00	2.0	4.2	27.56	2	1
88.00	Sinclair SD210D	1	40	4.4	16.0	41.0	4.0	1.00	1.00	0.0	0.0	27.21	103	36
86.00	Generic 12' Omni	1	40	3.6	12.0	3.0	3.0	1.00	1.00	0.0	0.0	27.04	83	36
86.00	Side Arms	1	150	6.3	0.0	0.0	0.0	1.00	1.00	0.0	0.0	27.04	145	135
66.00	Andrew DB264-A	1	36	5.9	21.5	0.0	0.0	1.00	1.00	0.0	0.0	25.07	126	32
30.00	Generic 2" x 4" GPS	1	5	0.0	0.2	4.0	2.0	1.00	1.00	0.0	0.0	20.01	1	5
18.00	PCTEL GPS-TMG-HR-	1	1	0.1	0.4	3.2	3.2	1.00	1.00	0.0	0.0	19.99	2	1
18.00	PCTEL GPS-TMG-HR-	1	1	0.1	0.4	3.2	3.2	1.00	1.00	0.0	0.0	19.99	2	1
	Totals	163	13924	1003.0									17856	12531

Discrete Appurtenance Properties 1.2D + 1.0Di + 1.0Wi

Elevation (ft)	Description	Qty	Ice Wt (lb)	Ice EPA (sf)	Length (ft)	Width (in)	Depth (in)	K_a	Orient. Factor	Vert. Ecc.(ft)	M_u (lb-ft)	Q_z (psf)	F_a (WL) (lb)	P_a (DL) (lb)
184.0	Kaelus	6	38	0.7	0.7	6.5	6.2	0.80	0.50	1.0	9.4	6.25	9	259
184.0	Powerwave Allgon	6	31	1.6	1.2	9.2	2.6	0.80	0.50	1.0	20.2	6.25	20	203
184.0	Raycap DC6-48-60-	1	74	1.9	2.0	11.0	11.0	0.80	1.00	1.0	8.3	6.25	8	80
184.0	Ericsson RRUS 4478	3	97	2.4	1.4	13.4	7.7	0.80	0.50	0.0	0.0	6.24	16	328
184.0	Ericsson RRUS 4449	3	115	2.6	1.5	13.2	9.4	0.80	0.50	0.0	0.0	6.24	17	386
184.0	Raycap DC6-48-60-	2	55	2.5	1.7	18.2	6.4	0.80	1.00	1.0	21.6	6.25	22	117
184.0	Ericsson RRUS 32 B2	3	103	3.5	2.3	12.1	7.0	0.80	0.67	1.0	30.2	6.25	30	340
184.0	Ericsson RRUS 32	3	103	3.5	2.3	12.1	7.0	0.80	0.67	1.0	30.2	6.25	30	340
184.0	Powerwave Allgon	3	120	6.2	4.6	11.0	5.0	0.80	0.65	2.0	103.0	6.26	52	380
184.0	Quintel QS66512-2	2	246	10.0	6.0	12.0	9.6	0.80	0.80	1.0	68.1	6.25	68	536

Tower Loading

184.0	CCI DMP65R-BU6DA	2	254	14.6	5.9	20.7	7.7	0.80	0.72	0.0	0.0	6.24	89	539
184.0	CCI OPA65R-BU6D	2	240	14.8	5.9	21.0	7.8	0.80	0.72	0.0	0.0	6.24	90	505
184.0	CCI TPA-65R-	1	269	15.8	8.0	14.4	8.6	0.80	1.00	1.0	67.3	6.25	67	285
184.0	CCI DMP65R-BU8D	1	326	20.4	8.0	20.7	7.7	0.80	1.00	0.0	0.0	6.24	86	345
184.0	CCI OPA65R-BU8D	1	310	20.6	8.0	21.0	7.8	0.80	1.00	0.0	0.0	6.24	87	325
180.0	Round Sector	3	549	25.6	0.0	0.0	0.0	0.75	0.75	0.0	0.0	6.20	228	1826
172.0	Commscope	3	36	0.9	0.8	6.9	6.4	0.80	0.50	0.0	0.0	6.12	6	119
172.0	Samsung B5/B13	3	109	2.5	1.3	15.0	8.1	0.80	0.50	0.0	0.0	6.12	16	369
172.0	Samsung B2/B66A	3	128	2.5	1.3	15.0	10.0	0.80	0.50	0.0	0.0	6.12	16	433
172.0	RFS APL868013-	2	66	4.9	4.0	6.0	8.0	0.80	0.79	0.0	0.0	6.12	32	134
172.0	RFS DB-C1-12C-	1	118	5.0	2.5	16.5	12.6	0.80	1.00	0.0	0.0	6.12	21	124
172.0	Andrew	4	99	5.0	4.0	10.0	8.5	0.80	0.75	0.0	0.0	6.12	62	404
172.0	Samsung MT6407-	3	151	5.7	2.9	16.1	5.5	0.80	0.61	0.0	0.0	6.12	44	501
172.0	Commscope JAHH-	6	197	11.0	6.0	13.8	8.2	0.80	0.69	0.0	0.0	6.12	189	1257
172.0	Round Sector Frame	3	549	25.6	0.0	0.0	0.0	0.75	0.67	0.0	0.0	6.12	201	1826
164.0	Decibel DB844H90E-	12	83	3.6	4.0	6.5	8.0	0.80	0.73	0.0	0.0	6.04	130	1027
164.0	Round Sector Frame	3	549	25.6	0.0	0.0	0.0	0.75	0.75	0.0	0.0	6.04	222	1826
157.0	Alcatel-Lucent	3	92	2.3	1.3	13.0	9.8	0.80	0.50	3.0	41.8	6.00	14	309
157.0	Alcatel-Lucent 800	3	102	2.8	1.6	13.0	10.8	0.80	0.67	3.0	68.6	6.00	23	339
157.0	Alcatel-Lucent 1900	3	114	3.0	2.1	11.1	10.7	0.80	0.67	3.0	74.9	6.00	25	378
157.0	Alcatel-Lucent TD-	3	133	4.9	2.2	18.6	6.7	0.80	0.61	3.0	110.5	6.00	37	441
157.0	RFS APXVSPP18-C-	3	172	9.9	6.0	11.8	7.0	0.80	0.69	3.0	250.4	6.00	83	551
157.0	Commscope	3	193	10.9	6.0	13.8	8.2	0.80	0.69	3.0	277.3	6.00	92	614
157.0	Round Sector	3	546	25.5	0.0	0.0	0.0	0.75	0.75	0.0	0.0	5.97	218	1817
147.0	Ericsson Radio 4449	3	111	2.2	1.2	13.2	9.3	0.80	0.50	-1.0	13.1	5.84	13	379
147.0	Ericsson AIR 21,	6	188	7.5	4.7	12.1	7.9	0.80	0.70	-1.0	125.8	5.84	126	1234
147.0	Perfect Vision PV-	3	868	26.7	0.0	0.0	0.0	0.75	0.75	0.0	0.0	5.85	224	2958
147.0	RFS	3	390	22.7	8.0	24.0	8.7	0.80	0.63	-1.0	170.6	5.84	171	1247
143.0	Andrew Microwaves	1	108	7.8	14.5	3.0	3.0	1.00	1.00	0.0	0.0	5.81	39	115
143.0	Sinclair SC479-	1	117	8.5	14.4	3.5	3.5	1.00	1.00	0.0	0.0	5.81	42	124
142.5	Round Side Arm	2	199	7.0	0.0	0.0	0.0	0.90	0.90	0.0	0.0	5.80	56	458
142.0	Bird 432E-83I-01-T	1	52	1.7	1.0	12.0	7.5	0.90	1.00	0.0	0.0	5.80	7	57
136.0	Round Side Arm	2	198	7.0	0.0	0.0	0.0	0.90	0.90	0.0	0.0	5.73	55	456
135.0	Generic 24" x 24"	1	111	1.4	0.3	24.0	24.0	1.00	1.00	-2.0	13.1	5.69	7	121
134.0	Generic 24" x 24"	1	111	1.4	0.3	24.0	24.0	1.00	1.00	-1.0	6.5	5.69	7	121
134.0	Sinclair SE419-	2	122	11.7	8.6	2.9	8.5	1.00	1.00	0.0	0.0	5.70	114	253
132.0	Bird 432-83H-01-T	1	54	1.9	1.2	12.0	7.0	1.00	1.00	0.0	0.0	5.68	9	59
132.0	Generic 96" x 12"	2	187	13.6	8.0	12.0	6.0	1.00	0.76	0.0	0.0	5.68	100	393
131.0	Morad VHF 156-	1	13	0.8	3.3	0.8	0.8	1.00	1.00	0.0	0.0	5.66	4	13
131.0	Round Side Arm	2	198	7.0	0.0	0.0	0.0	0.90	0.90	0.0	0.0	5.66	55	456
130.0	Amphenol Antel	1	53	3.7	4.0	5.6	5.6	0.90	1.00	0.0	0.0	5.65	16	54
129.0	RFS PA6-65AC	1	589	50.1	6.0	72.0	0.0	1.00	1.00	0.0	0.0	5.64	240	645
128.0	RFS PA6-65AC	1	589	50.1	6.0	72.0	0.0	1.00	1.00	0.0	0.0	5.63	240	645
127.0	Round Side Arms	1	132	6.7	0.0	0.0	0.0	0.90	0.90	0.0	0.0	5.61	26	152
125.0	Sinclair SE419-	1	122	11.7	8.6	2.9	8.5	1.00	1.00	0.0	0.0	5.59	56	126
122.0	Sinclair SC479-	3	114	8.4	14.4	3.5	3.5	1.00	1.00	-4.0	468.7	5.50	117	364
121.0	Round Side Arm	1	132	6.3	0.0	0.0	0.0	0.90	0.90	0.0	0.0	5.54	24	152
120.5	Decibel DB586	1	32	1.6	4.9	1.5	1.5	1.00	1.00	0.0	0.0	5.53	8	34
120.5	Stand-Off	1	132	4.0	0.0	0.0	0.0	0.90	0.90	0.0	0.0	5.53	15	152
115.5	Decibel DB586	1	30	1.5	4.9	1.0	1.5	1.00	1.00	0.0	0.0	5.46	7	31
115.0	Stand-Off	2	132	4.0	0.0	0.0	0.0	0.90	0.90	0.0	0.0	5.46	30	303
100.0	Stand-Off	1	131	4.0	0.0	0.0	0.0	1.00	1.00	0.0	0.0	5.24	18	151
100.0	Generic Flat Stand-	1	272	8.3	0.0	0.0	0.0	1.00	1.00	0.0	0.0	5.24	37	310
91.00	Stand-Off	1	87	4.3	0.0	0.0	0.0	1.00	1.00	0.0	0.0	5.10	19	97
90.00	PCTEL GPS-TMG-HR-	1	4	0.2	0.4	3.2	3.2	1.00	1.00	2.0	1.8	5.12	1	4
88.00	Sinclair SD210D	1	122	11.4	16.0	41.0	4.0	1.00	1.00	0.0	0.0	5.06	49	130
86.00	Generic 12' Omni	1	98	6.3	12.0	3.0	3.0	1.00	1.00	0.0	0.0	5.02	27	106
86.00	Side Arms	1	196	7.9	0.0	0.0	0.0	1.00	1.00	0.0	0.0	5.02	34	226
66.00	Andrew DB264-A	1	150	17.7	21.5	0.0	0.0	1.00	1.00	0.0	0.0	4.66	70	158

Tower Loading

30.00	Generic 2" x 4" GPS	1	6	0.1	0.2	4.0	2.0	1.00	1.00	0.0	0.0	3.72	0	7
18.00	PCTEL GPS-TMG-HR-	1	3	0.2	0.4	3.2	3.2	1.00	1.00	0.0	0.0	3.71	1	3
18.00	PCTEL GPS-TMG-HR-	1	3	0.2	0.4	3.2	3.2	1.00	1.00	0.0	0.0	3.71	1	3
	Totals	163	28777	1344.2									4411	31562

Discrete Appurtenance Properties 1.0D + 1.0W Service

Elevation (ft)	Description	Qty	Wt. (lb)	EPA (sf)	Length (ft)	Width (in)	Depth (in)	K_a	Orient. Factor	Vert. Ecc.(ft)	M_u (lb-ft)	Q_z (psf)	F_a (WL) (lb)	P_a (DL) (lb)
184.0	Kaelus	6	26	0.4	0.7	6.5	6.2	0.80	0.50	1.0	8.0	9.00	8	153
184.0	Powerwave Allgon	6	14	1.1	1.2	9.2	2.6	0.80	0.50	1.0	20.3	9.00	20	85
184.0	Raycap DC6-48-60-	1	32	1.5	2.0	11.0	11.0	0.80	1.00	1.0	9.0	9.00	9	32
184.0	Ericsson RRUS 4478	3	60	1.8	1.4	13.4	7.7	0.80	0.50	0.0	0.0	8.99	17	180
184.0	Ericsson RRUS 4449	3	71	2.0	1.5	13.2	9.4	0.80	0.50	0.0	0.0	8.99	18	213
184.0	Raycap DC6-48-60-	2	16	2.0	1.7	18.2	6.4	0.80	1.00	1.0	24.9	9.00	25	32
184.0	Ericsson RRUS 32 B2	3	53	2.7	2.3	12.1	7.0	0.80	0.67	1.0	33.8	9.00	34	159
184.0	Ericsson RRUS 32	3	53	2.7	2.3	12.1	7.0	0.80	0.67	1.0	33.8	9.00	34	159
184.0	Powerwave Allgon	3	35	5.5	4.6	11.0	5.0	0.80	0.65	2.0	131.7	9.02	66	105
184.0	Quintel QS66512-2	2	111	8.1	6.0	12.0	9.6	0.80	0.80	1.0	79.7	9.00	80	222
184.0	CCI DMP65R-BU6DA	2	79	12.7	5.9	20.7	7.7	0.80	0.72	0.0	0.0	8.99	112	159
184.0	CCI OPA65R-BU6D	2	63	12.9	5.9	21.0	7.8	0.80	0.72	0.0	0.0	8.99	113	126
184.0	CCI TPA-65R-	1	82	13.3	8.0	14.4	8.6	0.80	1.00	1.0	81.4	9.00	81	82
184.0	CCI DMP65R-BU8D	1	96	17.9	8.0	20.7	7.7	0.80	1.00	0.0	0.0	8.99	109	96
184.0	CCI OPA65R-BU8D	1	77	18.1	8.0	21.0	7.8	0.80	1.00	0.0	0.0	8.99	111	77
180.0	Round Sector	3	300	14.4	0.0	0.0	0.0	0.75	0.75	0.0	0.0	8.93	184	900
172.0	Commscope	3	21	0.6	0.8	6.9	6.4	0.80	0.50	0.0	0.0	8.82	5	62
172.0	Samsung B5/B13	3	70	1.9	1.3	15.0	8.1	0.80	0.50	0.0	0.0	8.82	17	211
172.0	Samsung B2/B66A	3	84	1.9	1.3	15.0	10.0	0.80	0.50	0.0	0.0	8.82	17	253
172.0	RFS APL868013-	2	6	3.6	4.0	6.0	8.0	0.80	0.79	0.0	0.0	8.82	34	13
172.0	RFS DB-C1-12C-	1	32	4.1	2.5	16.5	12.6	0.80	1.00	0.0	0.0	8.82	24	32
172.0	Andrew	4	12	4.3	4.0	10.0	8.5	0.80	0.75	0.0	0.0	8.82	78	48
172.0	Samsung MT6407-	3	82	4.7	2.9	16.1	5.5	0.80	0.61	0.0	0.0	8.82	52	245
172.0	Commscope JAHH-	6	61	9.1	6.0	13.8	8.2	0.80	0.69	0.0	0.0	8.82	226	364
172.0	Round Sector Frame	3	300	14.4	0.0	0.0	0.0	0.75	0.67	0.0	0.0	8.82	163	900
164.0	Decibel DB844H90E-	12	14	3.6	4.0	6.5	8.0	0.80	0.73	0.0	0.0	8.70	187	168
164.0	Round Sector Frame	3	300	14.4	0.0	0.0	0.0	0.75	0.75	0.0	0.0	8.70	180	900
157.0	Alcatel-Lucent	3	53	1.7	1.3	13.0	9.8	0.80	0.50	3.0	45.0	8.64	15	159
157.0	Alcatel-Lucent 800	3	53	2.1	1.6	13.0	10.8	0.80	0.67	3.0	75.6	8.64	25	159
157.0	Alcatel-Lucent 1900	3	60	2.3	2.1	11.1	10.7	0.80	0.67	3.0	82.2	8.64	27	180
157.0	Alcatel-Lucent TD-	3	70	4.0	2.2	18.6	6.7	0.80	0.61	3.0	130.5	8.64	43	210
157.0	RFS APXVSPP18-C-	3	57	8.0	6.0	11.8	7.0	0.80	0.69	3.0	292.6	8.64	98	171
157.0	Commscope	3	58	9.1	6.0	13.8	8.2	0.80	0.69	3.0	331.8	8.64	111	174
157.0	Round Sector	3	300	14.4	0.0	0.0	0.0	0.75	0.75	0.0	0.0	8.59	177	900
147.0	Ericsson Radio 4449	3	74	1.6	1.2	13.2	9.3	0.80	0.50	-1.0	14.1	8.41	14	222
147.0	Ericsson AIR 21,	6	90	6.1	4.7	12.1	7.9	0.80	0.70	-1.0	146.4	8.41	146	542
147.0	Perfect Vision PV-	3	592	18.2	0.0	0.0	0.0	0.75	0.75	0.0	0.0	8.43	220	1776
147.0	RFS	3	128	20.2	8.0	24.0	8.7	0.80	0.63	-1.0	218.9	8.41	219	384
143.0	Andrew Microwaves	1	35	4.3	14.5	3.0	3.0	1.00	1.00	0.0	0.0	8.36	31	35
143.0	Sinclair SC479-	1	34	5.0	14.4	3.5	3.5	1.00	1.00	0.0	0.0	8.36	36	34
142.5	Round Side Arm	2	150	5.2	0.0	0.0	0.0	0.90	0.90	0.0	0.0	8.36	60	300
142.0	Bird 432E-83I-01-T	1	25	1.2	1.0	12.0	7.5	0.90	1.00	0.0	0.0	8.35	8	25
136.0	Round Side Arm	2	150	5.2	0.0	0.0	0.0	0.90	0.90	0.0	0.0	8.24	59	300
135.0	Generic 24" x 24"	1	50	0.8	0.3	24.0	24.0	1.00	1.00	-2.0	11.1	8.19	6	50
134.0	Generic 24" x 24"	1	50	0.8	0.3	24.0	24.0	1.00	1.00	-1.0	5.6	8.19	6	50
134.0	Sinclair SE419-	2	24	9.5	8.6	2.9	8.5	1.00	1.00	0.0	0.0	8.21	133	48
132.0	Bird 432-83H-01-T	1	25	1.4	1.2	12.0	7.0	1.00	1.00	0.0	0.0	8.17	10	25

Site Number: 302522 Code: ANSI/TIA-222-H

Site Name: Redding, CT Engineering Number: 13683575_C3_02 6/15/2021 5:41:18 AM

Customer: VERIZON WIRELESS

Tower Loading

132.0	Generic 96" x 12"	2	45	11.5	8.0	12.0	6.0	1.00	0.76	0.0	0.0	8.17	121	90
131.0	Morad VHF 156-	1	1	0.3	3.3	0.8	0.8	1.00	1.00	0.0	0.0	8.16	2	1
131.0	Round Side Arm	2	150	5.2	0.0	0.0	0.0	0.90	0.90	0.0	0.0	8.16	58	300
130.0	Amphenol Antel	1	7	2.7	4.0	5.6	5.6	0.90	1.00	0.0	0.0	8.14	17	7
129.0	RFS PA6-65AC	1	278	47.0	6.0	72.0	0.0	1.00	1.00	0.0	0.0	8.12	325	278
128.0	RFS PA6-65AC	1	278	47.0	6.0	72.0	0.0	1.00	1.00	0.0	0.0	8.10	324	278
127.0	Round Side Arms	1	100	5.0	0.0	0.0	0.0	0.90	0.90	0.0	0.0	8.09	28	100
125.0	Sinclair SE419-	1	24	9.5	8.6	2.9	8.5	1.00	1.00	0.0	0.0	8.05	65	24
122.0	Sinclair SC479-	3	34	5.0	14.4	3.5	3.5	1.00	1.00	-4.0	406.2	7.92	102	102
121.0	Round Side Arm	1	100	5.0	0.0	0.0	0.0	0.90	0.90	0.0	0.0	7.97	27	100
120.5	Decibel DB586	1	8	0.7	4.9	1.5	1.5	1.00	1.00	0.0	0.0	7.96	5	8
120.5	Stand-Off	1	100	3.0	0.0	0.0	0.0	0.90	0.90	0.0	0.0	7.96	16	100
115.5	Decibel DB586	1	8	0.7	4.9	1.0	1.5	1.00	1.00	0.0	0.0	7.87	5	8
115.0	Stand-Off	2	100	3.0	0.0	0.0	0.0	0.90	0.90	0.0	0.0	7.86	32	200
100.0	Stand-Off	1	100	3.0	0.0	0.0	0.0	1.00	1.00	0.0	0.0	7.55	19	100
100.0	Generic Flat Stand-	1	188	6.3	0.0	0.0	0.0	1.00	1.00	0.0	0.0	7.55	40	188
91.00	Stand-Off	1	50	3.0	0.0	0.0	0.0	1.00	1.00	0.0	0.0	7.35	19	50
90.00	PCTEL GPS-TMG-HR-	1	1	0.1	0.4	3.2	3.2	1.00	1.00	2.0	1.1	7.37	1	1
88.00	Sinclair SD210D	1	40	4.4	16.0	41.0	4.0	1.00	1.00	0.0	0.0	7.28	28	40
86.00	Generic 12' Omni	1	40	3.6	12.0	3.0	3.0	1.00	1.00	0.0	0.0	7.23	22	40
86.00	Side Arms	1	150	6.3	0.0	0.0	0.0	1.00	1.00	0.0	0.0	7.23	39	150
66.00	Andrew DB264-A	1	36	5.9	21.5	0.0	0.0	1.00	1.00	0.0	0.0	6.71	34	36
30.00	Generic 2" x 4" GPS	1	5	0.0	0.2	4.0	2.0	1.00	1.00	0.0	0.0	5.35	0	5
18.00	PCTEL GPS-TMG-HR-	1	1	0.1	0.4	3.2	3.2	1.00	1.00	0.0	0.0	5.35	0	1
18.00	PCTEL GPS-TMG-HR-	1	1	0.1	0.4	3.2	3.2	1.00	1.00	0.0	0.0	5.35	0	1
	Totals	163	13924	1003.0									4777	13924

Tower Loading

Linear Appurtenance Properties

Elev From (ft)	Elev To (ft)	Description	Qty	Width (in)	Weight (lb/ft)	Pct In Block	Spread On Faces	Bundling Arrangement	Cluster Dia (in)	Out Of Zone	Spacing (in)	Orientation Factor	Ka Override
0.00	184.0	0.39" (10mm) Fiber	3	0.39	0.06	100	3	Individual	0.00	N	1.00	1.00	0.01
0.00	184.0	0.78" (19.7mm) 8	4	0.78	0.59	100	None	Individual	0.00	N	1.00	1.00	0.00
0.00	184.0	0.78" (19.7mm) 8	4	0.78	0.59	100	3	Individual	0.00	N	1.00	1.00	0.01
0.00	184.0	1 1/4" Coax	12	1.55	0.63	50	3	Block	0.00	N	1.00	1.00	0.00
0.00	184.0	2" conduit	2	2.38	3.65	100	None	Individual	0.00	N	1.00	1.00	0.00
0.00	180.0	Wave Guide	1	1.50	6.00	100	3	Individual	0.00	N	1.00	1.00	0.00
0.00	172.0	1 5/8" Coax	6	1.98	0.82	100	2	Individual	0.00	N	1.00	1.00	0.00
0.00	172.0	1 5/8" Hybriflex	2	1.98	1.30	100	2	Individual	0.00	N	1.00	1.00	0.01
0.00	172.0	Wave Guide	1	1.50	6.00	100	2	Individual	0.00	N	1.00	1.00	0.00
0.00	164.0	Wave Guide	1	1.50	6.00	100	1	Individual	0.00	N	1.00	1.00	0.00
0.00	157.0	1 1/4" Hybriflex	4	1.54	1.00	100	1	Individual	0.00	N	1.00	1.00	0.01
0.00	147.0	1 1/4" Hybriflex	3	1.54	1.00	100	None	Individual	0.00	N	1.00	1.00	0.00
0.00	147.0	1 5/8" Coax	12	1.98	0.82	100	None	Individual	0.00	N	1.00	1.00	0.00
0.00	147.0	1 5/8" Hybriflex	1	1.98	1.30	100	None	Individual	0.00	N	1.00	1.00	0.00
0.00	147.0	Wave Guide	1	1.50	6.00	100	3	Individual	0.00	N	1.00	1.00	0.00
0.00	143.0	1 5/8" Coax	2	1.98	0.82	100	3	Individual	0.00	N	1.00	1.00	0.00
0.00	142.5	Wave Guide	1	1.50	6.00	100	3	Individual	0.00	N	1.00	1.00	0.00
0.00	142.0	1 5/8" Coax	1	1.98	0.82	100	3	Individual	0.00	N	1.00	1.00	0.00
0.00	142.0	1/2" Coax	1	0.63	0.15	100	3	Individual	0.00	N	1.00	1.00	0.00
0.00	134.0	1 5/8" Coax	2	1.98	0.82	100	3	Individual	0.00	N	1.00	1.00	0.00
0.00	132.0	1 5/8" Coax	2	1.98	0.82	100	3	Individual	0.00	N	1.00	1.00	0.00
0.00	132.0	3/8" Coax	1	0.44	0.08	100	3	Individual	0.00	N	1.00	1.00	0.01
0.00	131.0	1/2" Coax	1	0.63	0.15	100	3	Individual	0.00	N	1.00	1.00	0.01
0.00	129.0	EW63	1	2.01	0.51	100	3	Individual	0.00	N	1.00	1.00	0.01
0.00	128.0	EW63	1	2.01	0.51	100	3	Individual	0.00	N	1.00	1.00	0.01
0.00	125.0	1 5/8" Coax	1	1.98	0.82	100	3	Individual	0.00	N	1.00	1.00	0.00
0.00	122.0	1 5/8" Coax	3	1.98	0.82	100	3	Individual	0.00	N	1.00	1.00	0.00
0.00	120.5	7/8" Coax	1	1.09	0.33	100	2	Individual	0.00	N	1.00	1.00	0.00
0.00	115.5	7/8" Coax	1	1.09	0.33	100	2	Individual	0.00	N	1.00	1.00	0.00
0.00	90.00	1/2" Coax	1	0.63	0.15	100	1	Individual	0.00	N	1.00	1.00	0.00
0.00	88.00	7/8" Coax	2	1.09	0.33	100	None	Individual	0.00	N	1.00	1.00	0.00
0.00	86.00	7/8" Coax	1	1.09	0.33	100	2	Individual	0.00	N	1.00	1.00	0.00
0.00	66.00	7/8" Coax	1	1.09	0.33	100	3	Individual	0.00	N	1.00	1.00	0.00
0.00	30.00	1/2" Coax	1	0.63	0.15	100	2	Individual	0.00	N	1.00	1.00	0.00
0.00	18.00	1/2" Coax	1	0.63	0.15	100	None	Individual	0.00	N	1.00	1.00	0.00
0.00	15.00	2" Carflex Non-	2	2.36	0.68	100	None	Individual	0.00	N	1.00	1.00	0.00

Equivalent Lateral Force Method

Spectral Response Acceleration for Short Period (S_s):	0.23
Spectral Response Acceleration at 1.0 Second Period (S_1):	0.06
Long-Period Transition Period (T_L - Seconds):	6
Importance Factor (I_e):	1.00
Site Coefficient F_a:	1.60
Site Coefficient F_v:	2.40
Response Modification Coefficient (R):	3.00
Design Spectral Response Acceleration at Short Period (S_{ds}):	0.25
Design Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.09
Seismic Response Coefficient (C_s):	0.03
Upper Limit C_s:	0.03
Lower Limit C_s:	0.03
Period based on Rayleigh Method (sec):	0.97
Redundancy Factor (p):	1.30
Seismic Force Distribution Exponent (k):	1.24
Total Unfactored Dead Load:	51.32 k
Seismic Base Shear (E):	2.09 k

LoadCase 1.2D + 1.0Ev + 1.0Eh Seismic

Section	Height Above Base (ft)	Weight (lb)	W_z (lb-ft)	C_{vx}	Horizontal Force (lb)	Vertical Force (lb)
9	170.00	1,575	900,861	0.060	124	1,968
8	150.00	2,358	1,155,44	0.076	159	2,947
7	130.00	3,399	1,395,75	0.092	192	4,249
6	110.00	4,176	1,394,70	0.092	192	5,220
5	90.00	4,343	1,131,92	0.075	156	5,430
4	70.00	4,777	912,443	0.060	126	5,972
3	50.00	5,103	643,048	0.043	89	6,379
2	30.00	5,520	369,878	0.024	51	6,900
1	10.00	6,151	105,986	0.007	15	7,690
Kaelus DBC0061F1V51-2	180.00	153	93,943	0.006	13	191
Powerwave Allgon LGP21401	180.00	85	51,945	0.003	7	106
Raycap DC6-48-60-18-8F ("Squid")	180.00	32	19,525	0.001	3	40
Ericsson RRUS 4478 B14	180.00	180	110,336	0.007	15	225
Ericsson RRUS 4449 B5, B12	180.00	213	130,783	0.009	18	266
Raycap DC6-48-60-18-8C	180.00	32	19,648	0.001	3	40
Ericsson RRUS 32 B2	180.00	159	97,627	0.006	13	199
Ericsson RRUS 32 B30 (53 lbs)	180.00	159	97,627	0.006	13	199
Powerwave Allgon 7770.00	180.00	105	64,470	0.004	9	131
Quintel QS66512-2	180.00	222	136,309	0.009	19	278
CCI DMP65R-BU6DA	180.00	159	97,504	0.006	13	199
CCI OPA65R-BU6D	180.00	126	77,610	0.005	11	158
CCI TPA-65R-LCUUUU-H8	180.00	82	50,103	0.003	7	102
CCI DMP65R-BU8D	180.00	96	58,760	0.004	8	120
CCI OPA65R-BU8D	180.00	76	46,971	0.003	6	96
Round Sector Frames	180.00	900	552,603	0.037	76	1,125

Equivalent Lateral Force Method

Commscope CBC78T-DS-43-2X	172.00	62	36,046	0.002	5	78
Samsung B5/B13 RRH-BR04C	172.00	211	122,416	0.008	17	264
Samsung B2/B66A RRH-BR049	172.00	253	146,969	0.010	20	317
RFS APL868013-42T0	172.00	13	7,314	0.000	1	16
RFS DB-C1-12C-24AB-0Z	172.00	32	18,574	0.001	3	40
Andrew DB844G65ZAXY	172.00	48	27,861	0.002	4	60
Samsung MT6407-77A	172.00	245	142,093	0.009	20	306
Commscope JAHH-65B-R3B	172.00	364	211,050	0.014	29	455
Round Sector Frame	172.00	900	522,401	0.035	72	1,125
Decibel DB844H90E-XY	164.00	168	91,939	0.006	13	210
Round Sector Frame	164.00	900	492,529	0.033	68	1,125
Alcatel-Lucent RRH2x50-08	157.00	159	82,290	0.005	11	198
Alcatel-Lucent 800 MHz RRH	157.00	159	82,445	0.005	11	199
Alcatel-Lucent 1900 MHz 4X45 RRH	157.00	180	93,334	0.006	13	225
Alcatel-Lucent TD-RRH8x20-25 w/ Solar	157.00	210	108,890	0.007	15	263
RFS APXVSPP18-C-A20	157.00	171	88,668	0.006	12	214
Commscope DT465B-2XR	157.00	174	90,223	0.006	12	218
Round Sector Frames	157.00	900	466,672	0.031	64	1,125
Ericsson Radio 4449 B12,B71	147.00	222	106,117	0.007	15	278
Ericsson AIR 21, 1.3M, B4A B2P (90.4 lbs	147.00	542	259,270	0.017	36	678
Perfect Vision PV-SFA12-B Sector	147.00	1,776	848,938	0.056	117	2,220
RFS APXVAARR24_43-U-NA20	147.00	384	183,411	0.012	25	480
Andrew Microwaves DB810K-XT	143.00	35	16,169	0.001	2	44
Sinclair SC479-HF1LDF	143.00	34	15,707	0.001	2	43
Round Side Arm	142.50	300	137,994	0.009	19	375
Bird 432E-83I-01-T	142.00	25	11,450	0.001	2	31
Round Side Arm	136.00	300	130,255	0.009	18	375
Generic 24" x 24" Ice Shield	135.00	50	21,512	0.001	3	63
Generic 24" x 24" Ice Shield	134.00	50	21,315	0.001	3	63
Sinclair SE419-SF3P4LDF	134.00	48	20,463	0.001	3	60
Bird 432-83H-01-T	132.00	25	10,461	0.001	1	31
Generic 96" x 12" Panel	132.00	90	37,661	0.002	5	113
Morad VHF 156-DELUXE	131.00	1	373	0.000	0	1
Round Side Arm	131.00	300	124,361	0.008	17	375
Amphenol Antel WPA-700120-4CF-EDIN-	130.00	7	2,792	0.000	0	9
RFS PA6-65AC	129.00	278	113,070	0.007	16	348
RFS PA6-65AC	128.00	278	111,987	0.007	15	348
Round Side Arms	127.00	100	39,894	0.003	6	125
Sinclair SE419-SF3P4LDF	125.00	24	9,389	0.001	1	30
Sinclair SC479-HF1LDF	122.00	102	38,721	0.003	5	128
Round Side Arm	121.00	100	37,577	0.002	5	125
Decibel DB586	120.50	8	3,103	0.000	0	10
Stand-Off	120.50	100	37,386	0.002	5	125
Decibel DB586	115.50	8	2,945	0.000	0	10
Stand-Off	115.00	200	70,575	0.005	10	250
Stand-Off	100.00	100	29,688	0.002	4	125
Generic Flat Stand-Off	100.00	188	55,665	0.004	8	234
Stand-Off	91.00	50	13,210	0.001	2	63
PCTEL GPS-TMG-HR-26N	90.00	1	156	0.000	0	1
Sinclair SD210D	88.00	40	10,139	0.001	1	50
Generic 12' Omni	86.00	40	9,855	0.001	1	50
Side Arms	86.00	150	36,957	0.002	5	188
Andrew DB264-A	66.00	36	6,394	0.000	1	45
Generic 2" x 4" GPS	30.00	5	335	0.000	0	6
PCTEL GPS-TMG-HR-26N	18.00	1	21	0.000	0	1

Equivalent Lateral Force Method

PCTEL GPS-TMG-HR-26N	18.00	1	21	0.000	0	1
		51,324	15,122,852	1.000	2,086	64,162

LoadCase 0.9D - 1.0Ev + 1.0Eh — Seismic (Reduced DL)

Section	Height Above Base (ft)	Weight (lb)	W_z (lb-ft)	C_{vx}	Horizontal Force (lb)	Vertical Force (lb)
9	170.00	1,575	900,861	0.060	124	1,338
8	150.00	2,358	1,155,44	0.076	159	2,004
7	130.00	3,399	1,395,75	0.092	192	2,889
6	110.00	4,176	1,394,70	0.092	192	3,549
5	90.00	4,343	1,131,92	0.075	156	3,691
4	70.00	4,777	912,443	0.060	126	4,060
3	50.00	5,103	643,048	0.043	89	4,337
2	30.00	5,520	369,878	0.024	51	4,691
1	10.00	6,151	105,986	0.007	15	5,228
Kaelus DBC0061F1V51-2	180.00	153	93,943	0.006	13	130
Powerwave Allgon LGP21401	180.00	85	51,945	0.003	7	72
Raycap DC6-48-60-18-8F ("Squid")	180.00	32	19,525	0.001	3	27
Ericsson RRUS 4478 B14	180.00	180	110,336	0.007	15	153
Ericsson RRUS 4449 B5, B12	180.00	213	130,783	0.009	18	181
Raycap DC6-48-60-18-8C	180.00	32	19,648	0.001	3	27
Ericsson RRUS 32 B2	180.00	159	97,627	0.006	13	135
Ericsson RRUS 32 B30 (53 lbs)	180.00	159	97,627	0.006	13	135
Powerwave Allgon 7770.00	180.00	105	64,470	0.004	9	89
Quintel QS66512-2	180.00	222	136,309	0.009	19	189
CCI DMP65R-BU6DA	180.00	159	97,504	0.006	13	135
CCI OPA65R-BU6D	180.00	126	77,610	0.005	11	107
CCI TPA-65R-LCUUUU-H8	180.00	82	50,103	0.003	7	69
CCI DMP65R-BU8D	180.00	96	58,760	0.004	8	81
CCI OPA65R-BU8D	180.00	76	46,971	0.003	6	65
Round Sector Frames	180.00	900	552,603	0.037	76	765
Commscope CBC78T-DS-43-2X	172.00	62	36,046	0.002	5	53
Samsung B5/B13 RRH-BR04C	172.00	211	122,416	0.008	17	179
Samsung B2/B66A RRH-BR049	172.00	253	146,969	0.010	20	215
RFS APL868013-42T0	172.00	13	7,314	0.000	1	11
RFS DB-C1-12C-24AB-0Z	172.00	32	18,574	0.001	3	27
Andrew DB844G65ZAXY	172.00	48	27,861	0.002	4	41
Samsung MT6407-77A	172.00	245	142,093	0.009	20	208
Commscope JAHH-65B-R3B	172.00	364	211,050	0.014	29	309
Round Sector Frame	172.00	900	522,401	0.035	72	765
Decibel DB844H90E-XY	164.00	168	91,939	0.006	13	143
Round Sector Frame	164.00	900	492,529	0.033	68	765
Alcatel-Lucent RRH2x50-08	157.00	159	82,290	0.005	11	135
Alcatel-Lucent 800 MHz RRH	157.00	159	82,445	0.005	11	135
Alcatel-Lucent 1900 MHz 4X45 RRH	157.00	180	93,334	0.006	13	153
Alcatel-Lucent TD-RRH8x20-25 w/ Solar	157.00	210	108,890	0.007	15	178
RFS APXVSPP18-C-A20	157.00	171	88,668	0.006	12	145
Commscope DT465B-2XR	157.00	174	90,223	0.006	12	148
Round Sector Frames	157.00	900	466,672	0.031	64	765
Ericsson Radio 4449 B12,B71	147.00	222	106,117	0.007	15	189
Ericsson AIR 21, 1.3M, B4A B2P (90.4 lbs	147.00	542	259,270	0.017	36	461
Perfect Vision PV-SFA12-B Sector	147.00	1,776	848,938	0.056	117	1,509
RFS APXVAARR24_43-U-NA20	147.00	384	183,411	0.012	25	326

Equivalent Lateral Force Method

Andrew Microwaves DB810K-XT	143.00	35	16,169	0.001	2	30
Sinclair SC479-HF1LDF	143.00	34	15,707	0.001	2	29
Round Side Arm	142.50	300	137,994	0.009	19	255
Bird 432E-83I-01-T	142.00	25	11,450	0.001	2	21
Round Side Arm	136.00	300	130,255	0.009	18	255
Generic 24" x 24" Ice Shield	135.00	50	21,512	0.001	3	42
Generic 24" x 24" Ice Shield	134.00	50	21,315	0.001	3	42
Sinclair SE419-SF3P4LDF	134.00	48	20,463	0.001	3	41
Bird 432-83H-01-T	132.00	25	10,461	0.001	1	21
Generic 96" x 12" Panel	132.00	90	37,661	0.002	5	76
Morad VHF 156-DELUXE	131.00	1	373	0.000	0	1
Round Side Arm	131.00	300	124,361	0.008	17	255
Amphenol Antel WPA-700120-4CF-EDIN-	130.00	7	2,792	0.000	0	6
RFS PA6-65AC	129.00	278	113,070	0.007	16	236
RFS PA6-65AC	128.00	278	111,987	0.007	15	236
Round Side Arms	127.00	100	39,894	0.003	6	85
Sinclair SE419-SF3P4LDF	125.00	24	9,389	0.001	1	20
Sinclair SC479-HF1LDF	122.00	102	38,721	0.003	5	87
Round Side Arm	121.00	100	37,577	0.002	5	85
Decibel DB586	120.50	8	3,103	0.000	0	7
Stand-Off	120.50	100	37,386	0.002	5	85
Decibel DB586	115.50	8	2,945	0.000	0	7
Stand-Off	115.00	200	70,575	0.005	10	170
Stand-Off	100.00	100	29,688	0.002	4	85
Generic Flat Stand-Off	100.00	188	55,665	0.004	8	159
Stand-Off	91.00	50	13,210	0.001	2	42
PCTEL GPS-TMG-HR-26N	90.00	1	156	0.000	0	1
Sinclair SD210D	88.00	40	10,139	0.001	1	34
Generic 12' Omni	86.00	40	9,855	0.001	1	34
Side Arms	86.00	150	36,957	0.002	5	127
Andrew DB264-A	66.00	36	6,394	0.000	1	31
Generic 2" x 4" GPS	30.00	5	335	0.000	0	4
PCTEL GPS-TMG-HR-26N	18.00	1	21	0.000	0	1
PCTEL GPS-TMG-HR-26N	18.00	1	21	0.000	0	1
		51,324	15,122,853	1.000	2,086	43,619

Force/Stress Summary

Section: 1 SSV Bot Elev (ft): 0.00 Height (ft): 20.000

Max Compression Member		Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'y (ksi)	Phic Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG	PSP - ROHN 8 EHS	-320.29	1.2D + 1.0W Normal	10.02	100	100	100	41.2	50.0	386.43	0	0	0.00	0.00	82	Member X
HORIZ		0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0	
DIAG	SAE - 4X4X0.3125	-10.42	1.2D + 1.0W 90 deg	24.62	50	50	50	189.2	50.0	19.20	1	1	19.88	29.25	54	Member Z

Max Tension Member		Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	Phit Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Blk Shear phit Pn (kip)	Use %	Controls
LEG	PSP - ROHN 8 EHS	276.11	0.9D + 1.0W 60 deg	50	65	437.40	0	0	0.00	0.00		63	Member
HORIZ		0.00		0	0	0.00	0	0	0.00	0.00	0.00	0	
DIAG	SAE - 4X4X0.3125	10.29	1.2D + 1.0W 90 deg	50	65	78.47	1	1	19.88	17.67	22.47	58	Bolt Bear

Max Splice Forces	Pu (kip)	Load Case	phiRnt (kip)	Use %	Num Bolts	Bolt Type
Top Tension	254.29	0.9D + 1.0W 60 deg	0.00	0	0	
Top Compression	296.28	1.2D + 1.0W Normal	0.00	0		
Bot Tension	284.46	0.9D + 1.0W 60 deg	567.89	25	10	1" A354-BC
Bot Compression	329.39	1.2D + 1.0W Normal	660.26	53		

Section: 2 SSV Bot Elev (ft): 20.00 Height (ft): 20.000

Max Compression Member		Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'y (ksi)	Phic Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG	PSP - ROHN 8 EHS	-287.67	1.2D + 1.0W Normal	10.02	100	100	100	41.2	50.0	386.43	0	0	0.00	0.00	74	Member X
HORIZ		0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0	
DIAG	SAE - 4X4X0.25	-10.59	1.2D + 1.0W 90 deg	22.81	50	50	50	172.2	43.5	18.73	1	1	19.88	23.40	56	Member Z

Max Tension Member		Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	Phit Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Blk Shear phit Pn (kip)	Use %	Controls
LEG	PSP - ROHN 8 EHS	247.71	0.9D + 1.0W 60 deg	50	65	437.40	0	0	0.00	0.00		56	Member
HORIZ		0.00		0	0	0.00	0	0	0.00	0.00	0.00	0	
DIAG	SAE - 4X4X0.25	10.27	1.2D + 1.0W 90 deg	50	65	63.50	1	1	19.88	14.14	17.98	72	Bolt Bear

Max Splice Forces	Pu (kip)	Load Case	phiRnt (kip)	Use %	Num Bolts	Bolt Type
Top Tension	224.10	0.9D + 1.0W 60 deg	0.00	0	0	
Top Compression	261.25	1.2D + 1.0W Normal	0.00	0		
Bot Tension	254.29	0.9D + 1.0W 60 deg	436.14	58	8	1 A325
Bot Compression	0.00		0.00	0		

Force/Stress Summary

Section: 3 SSV Bot Elev (ft): 40.00 Height (ft): 20.000

Max Compression Member	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'y (ksi)	Phic Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG PX - 6" DIA PIPE	-252.66	1.2D + 1.0W Normal	10.02	100	100	100	54.8	50.0	303.54	0	0	0.00	0.00	83	Member X
HORIZ	0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0	
DIAG SAE - 4X4X0.25	-9.73	1.2D + 1.0W 90 deg	21.00	50	50	50	158.5	43.5	22.11	1	1	19.88	23.40	48	Bolt Shear

Max Tension Member	Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	Phit Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Blk Shear phit Pn (kip)	Use %	Controls
LEG PX - 6" DIA PIPE	217.91	0.9D + 1.0W 60 deg	50	65	378.00	0	0	0.00	0.00		57	Member
HORIZ	0.00		0	0	0.00	0	0	0.00	0.00	0.00	0	
DIAG SAE - 4X4X0.25	9.54	1.2D + 1.0W 90 deg	50	65	63.50	1	1	19.88	14.14	17.98	67	Bolt Bear

Max Splice Forces	Pu (kip)	Load Case	phiRnt (kip)	Use %	Num Bolts	Bolt Type
Top Tension	193.80	0.9D + 1.0W 60 deg	0.00	0	0	
Top Compression	225.88	1.2D + 1.0W Normal	0.00	0		
Bot Tension	224.10	0.9D + 1.0W 60 deg	436.14	51	8	1 A325
Bot Compression	0.00		0.00	0		

Section: 4 SSV Bot Elev (ft): 60.00 Height (ft): 20.000

Max Compression Member	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'y (ksi)	Phic Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG PX - 6" DIA PIPE	-216.11	1.2D + 1.0W Normal	10.02	100	100	100	54.8	50.0	303.58	0	0	0.00	0.00	71	Member X
HORIZ	0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0	
DIAG SAE - 3.5X3.5X0.25	-10.00	1.2D + 1.0W 90 deg	19.17	50	50	50	167.2	50.0	17.30	1	1	19.88	23.40	57	Member Z

Max Tension Member	Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	Phit Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Blk Shear phit Pn (kip)	Use %	Controls
LEG PX - 6" DIA PIPE	186.35	0.9D + 1.0W 60 deg	50	65	378.00	0	0	0.00	0.00		49	Member
HORIZ	0.00		0	0	0.00	0	0	0.00	0.00	0.00	0	
DIAG SAE - 3.5X3.5X0.25	9.80	1.2D + 1.0W 90 deg	50	65	54.36	1	1	19.88	14.14	17.98	69	Bolt Bear

Max Splice Forces	Pu (kip)	Load Case	phiRnt (kip)	Use %	Num Bolts	Bolt Type
Top Tension	159.34	0.9D + 1.0W 60 deg	0.00	0	0	
Top Compression	186.56	1.2D + 1.0W Normal	0.00	0		
Bot Tension	193.80	0.9D + 1.0W 60 deg	327.10	59	6	1 A325
Bot Compression	0.00		0.00	0		

Force/Stress Summary

Section: 5 SSV Bot Elev (ft): 80.00 Height (ft): 20.000

Max Compression Member	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'y (ksi)	Phic Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG PX - 5" DIA PIPE	-179.89	1.2D + 1.0W Normal	6.68	100	100	100	43.6	50.0	238.95	0	0	0.00	0.00	75	Member X
HORIZ	0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0	
DIAG SAE - 3X3X0.25	-8.58	1.2D + 1.0W 90 deg	15.97	50	50	50	161.9	50.0	15.72	1	1	19.88	23.40	54	Member Z

Max Tension Member	Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	Phit Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Blk Shear phit Pn (kip)	Use %	Controls
LEG PX - 5" DIA PIPE	154.64	0.9D + 1.0W 60 deg	50	65	274.50	0	0	0.00	0.00		56	Member
HORIZ	0.00		0	0	0.00	0	0	0.00	0.00	0.00	0	
DIAG SAE - 3X3X0.25	8.46	1.2D + 1.0W 90 deg	50	65	45.22	1	1	19.88	14.14	14.93	59	Bolt Bear

Max Splice Forces	Pu (kip)	Load Case	phiRnt (kip)	Use %	Num Bolts	Bolt Type
Top Tension	123.73	0.9D + 1.0W 60 deg	0.00	0	0	
Top Compression	145.79	1.2D + 1.0W Normal	0.00	0		
Bot Tension	159.34	0.9D + 1.0W 60 deg	327.10	49	6	1 A325
Bot Compression	0.00		0.00	0		

Section: 6 SSV Bot Elev (ft): 100.0 Height (ft): 20.000

Max Compression Member	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'y (ksi)	Phic Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG PX - 5" DIA PIPE	-138.87	1.2D + 1.0W Normal	6.68	100	100	100	43.6	50.0	238.95	0	0	0.00	0.00	58	Member X
HORIZ	0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0	
DIAG SAE - 3X3X0.25	-8.12	1.2D + 1.0W 90 deg	14.16	50	50	50	143.6	50.0	19.99	1	1	19.88	23.40	40	Bolt Shear

Max Tension Member	Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	Phit Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Blk Shear phit Pn (kip)	Use %	Controls
LEG PX - 5" DIA PIPE	118.27	0.9D + 1.0W 60 deg	50	65	274.50	0	0	0.00	0.00		43	Member
HORIZ	0.00		0	0	0.00	0	0	0.00	0.00	0.00	0	
DIAG SAE - 3X3X0.25	8.03	1.2D + 1.0W 90 deg	50	65	45.22	1	1	19.88	14.14	14.93	56	Bolt Bear

Max Splice Forces	Pu (kip)	Load Case	phiRnt (kip)	Use %	Num Bolts	Bolt Type
Top Tension	84.75	0.9D + 1.0W 60 deg	0.00	0	0	
Top Compression	102.56	1.2D + 1.0W Normal	0.00	0		
Bot Tension	123.73	0.9D + 1.0W 60 deg	327.10	38	6	1 A325
Bot Compression	0.00		0.00	0		

Force/Stress Summary

Section: 7 SSV Bot Elev (ft): 120.0 Height (ft): 20.000

Max Compression Member	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'y (ksi)	Phic Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG PX - 4" DIA PIPE	-95.12	1.2D + 1.0W Normal	6.68	100	100	100	54.2	50.0	160.15	0	0	0.00	0.00	59	Member X
HORIZ	0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0	
DIAG SAE - 2.5X2.5X0.25	-7.58	1.2D + 1.0W 90 deg	12.42	50	50	50	151.9	36.0	14.77	1	1	19.88	20.88	51	Member Z

Max Tension Member	Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	Phit Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Blk Shear phit Pn (kip)	Use %	Controls
LEG PX - 4" DIA PIPE	78.65	0.9D + 1.0W 60 deg	50	65	198.45	0	0	0.00	0.00		39	Member
HORIZ	0.00		0	0	0.00	0	0	0.00	0.00	0.00	0	
DIAG SAE - 2.5X2.5X0.25	7.49	1.2D + 1.0W 90 deg	36	58	32.20	1	1	19.88	12.61	11.96	62	Blk Shear

Max Splice Forces	Pu (kip)	Load Case	phiRnt (kip)	Use %	Num Bolts	Bolt Type
Top Tension	48.22	0.9D + 1.0W 60 deg	0.00	0	0	
Top Compression	61.36	1.2D + 1.0W Normal	0.00	0		
Bot Tension	84.75	0.9D + 1.0W 60 deg	218.07	39	4	1 A325
Bot Compression	0.00		0.00	0		

Section: 8 SSV Bot Elev (ft): 140.0 Height (ft): 20.000

Max Compression Member	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'y (ksi)	Phic Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG PST - 3" DIA PIPE	-56.44	1.2D + 1.0W Normal	4.95	100	100	100	51.2	50.0	82.87	0	0	0.00	0.00	68	Member X
HORIZ SAE - 2X2X0.25	-0.37	1.2D + 1.0W Normal	6.689	100	100	100	205.3	36.0	6.38	1	1	13.81	17.40	5	Member Z
DIAG SAE - 2X2X0.25	-5.06	1.2D + 1.0W 90 deg	9.813	50	50	50	150.6	36.0	11.87	1	1	13.81	17.40	42	Member Z

Max Tension Member	Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	Phit Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Blk Shear phit Pn (kip)	Use %	Controls
LEG PST - 3" DIA PIPE	49.37	0.9D + 1.0W 60 deg	50	65	100.35	0	0	0.00	0.00		49	Member
HORIZ SAE - 2X2X0.25	0.38	1.2D + 1.0W 60 deg	36	58	25.06	1	1	13.81	10.44	9.11	4	Blk Shear
DIAG SAE - 2X2X0.25	4.98	1.2D + 1.0W 90 deg	36	58	25.06	1	1	13.81	10.44	9.11	54	Blk Shear

Max Splice Forces	Pu (kip)	Load Case	phiRnt (kip)	Use %	Num Bolts	Bolt Type
Top Tension	20.47	0.9D + 1.0W 60 deg	0.00	0	0	
Top Compression	26.72	1.2D + 1.0W Normal	0.00	0		
Bot Tension	48.22	0.9D + 1.0W 60 deg	166.22	29	4	0.875" A325
Bot Compression	0.00		0.00	0		

Force/Stress Summary

Section: 9 SSV Bot Elev (ft): 160.0 Height (ft): 20.000

Max Compression Member	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'y (ksi)	Phic Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG PST - 2-1/2" DIA PIP	-22.97	1.2D + 1.0W Normal	3.95	100	100	100	50.1	50.0	63.85	0	0	0.00	0.00	35	Member X
HORIZ SAE - 2X2X0.125	-0.74	1.2D + 1.0W 60 deg	6.647	100	100	100	200.4	36.0	3.42	1	1	13.81	8.70	21	Member Z
DIAG SAE - 1.75X1.75X0.18	-3.91	1.2D + 1.0W 90 deg	7.764	50	50	50	135.8	36.0	9.64	1	1	13.81	13.05	40	Member Z

Max Tension Member	Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	Phit Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Blk Shear phit Pn (kip)	Use %	Controls
LEG PST - 2-1/2" DIA PIP	20.83	0.9D + 1.0W 60 deg	50	65	76.68	0	0	0.00	0.00		27	Member
HORIZ SAE - 2X2X0.125	1.05	1.2D + 1.0W Normal	36	58	12.86	1	1	13.81	5.22	4.55	22	Blk Shear
DIAG SAE - 1.75X1.75X0.18	3.82	1.2D + 1.0W 90 deg	36	58	16.05	1	1	13.81	7.83	5.81	65	Blk Shear

Max Splice Forces	Pu (kip)	Load Case	phiRnt (kip)	Use %	Num Bolts	Bolt Type
Top Tension	0.00		0.00	0	0	
Top Compression	2.55	1.2D + 1.0Di + 1.0Wi	0.00	0		
Bot Tension	20.47	0.9D + 1.0W 60 deg	120.41	17	4	0.75" A325
Bot Compression	0.00		0.00	0		

Detailed Reactions

Load Case	Radius (ft)	Elevation (ft)	Azimuth (deg)	Node	FX (kip)	FY (kip)	FZ (kip)	(-) = Uplift (+) = Down
1.2D + 1.0W Normal	**13.28**	**00.00**	**0**	**1**	**0.00**	**328.76**	**-35.20**	
	13.28	**00.00**	**120**	**1a**	**11.85**	**-133.59**	**-10.76**	
	13.28	**00.00**	**240**	**1b**	**-11.85**	**-133.59**	**-10.76**	
1.2D + 1.0W 60 deg	**13.28**	**00.00**	**0**	**1**	**-3.17**	**169.78**	**-17.64**	
	13.28	**00.00**	**120**	**1a**	**-16.86**	**169.62**	**6.08**	
	13.28	**00.00**	**240**	**1b**	**-27.15**	**-277.81**	**-15.67**	
1.2D + 1.0W 90 deg	**13.28**	**00.00**	**0**	**1**	**-3.74**	**20.53**	**-1.34**	
	13.28	**00.00**	**120**	**1a**	**-26.76**	**280.96**	**13.32**	
	13.28	**00.00**	**240**	**1b**	**-24.54**	**-239.90**	**-11.98**	
0.9D + 1.0W Normal	**13.28**	**00.00**	**0**	**1**	**0.00**	**323.20**	**-34.86**	
	13.28	**00.00**	**120**	**1a**	**12.15**	**-138.51**	**-10.95**	
	13.28	**00.00**	**240**	**1b**	**-12.15**	**-138.51**	**-10.95**	
0.9D + 1.0W 60 deg	**13.28**	**00.00**	**0**	**1**	**-3.18**	**164.43**	**-17.29**	
	13.28	**00.00**	**120**	**1a**	**-16.55**	**164.27**	**5.89**	
	13.28	**00.00**	**240**	**1b**	**-27.45**	**-282.51**	**-15.84**	
0.9D + 1.0W 90 deg	**13.28**	**00.00**	**0**	**1**	**-3.75**	**15.40**	**-0.99**	
	13.28	**00.00**	**120**	**1a**	**-26.45**	**275.45**	**13.14**	
	13.28	**00.00**	**240**	**1b**	**-24.84**	**-244.66**	**-12.15**	
1.2D + 1.0Di + 1.0Wi Normal	**13.28**	**00.00**	**0**	**1**	**0.00**	**142.88**	**-10.98**	
	13.28	**00.00**	**120**	**1a**	**4.48**	**-4.28**	**-3.97**	
	13.28	**00.00**	**240**	**1b**	**-4.48**	**-4.28**	**-3.97**	
1.2D + 1.0Di + 1.0Wi 60 deg	**13.28**	**00.00**	**0**	**1**	**-1.16**	**93.03**	**-5.26**	
	13.28	**00.00**	**120**	**1a**	**-5.14**	**93.00**	**1.63**	
	13.28	**00.00**	**240**	**1b**	**-9.76**	**-51.69**	**-5.63**	
1.2D + 1.0Di + 1.0Wi 90 deg	**13.28**	**00.00**	**0**	**1**	**-1.35**	**44.78**	**0.24**	
	13.28	**00.00**	**120**	**1a**	**-8.42**	**128.66**	**4.08**	
	13.28	**00.00**	**240**	**1b**	**-8.86**	**-39.11**	**-4.33**	
1.2D + 1.0Ev + 1.0Eh Normal M1	**13.28**	**00.00**	**0**	**1**	**0.00**	**34.31**	**-2.76**	
	13.28	**00.00**	**120**	**1a**	**-0.75**	**13.65**	**0.35**	
	13.28	**00.00**	**240**	**1b**	**0.75**	**13.65**	**0.35**	
1.2D + 1.0Ev + 1.0Eh 60 deg M1	**13.28**	**00.00**	**0**	**1**	**-0.07**	**27.42**	**-2.11**	
	13.28	**00.00**	**120**	**1a**	**-1.87**	**27.42**	**0.99**	
	13.28	**00.00**	**240**	**1b**	**0.16**	**6.76**	**0.09**	
1.2D + 1.0Ev + 1.0Eh 90 deg M1	**13.28**	**00.00**	**0**	**1**	**-0.08**	**20.53**	**-1.47**	
	13.28	**00.00**	**120**	**1a**	**-2.26**	**32.46**	**1.26**	
	13.28	**00.00**	**240**	**1b**	**0.29**	**8.61**	**0.21**	
0.9D - 1.0Ev + 1.0Eh Normal M1	**13.28**	**00.00**	**0**	**1**	**0.00**	**27.70**	**-2.29**	
	13.28	**00.00**	**120**	**1a**	**-0.34**	**7.09**	**0.12**	
	13.28	**00.00**	**240**	**1b**	**0.34**	**7.09**	**0.12**	
0.9D - 1.0Ev + 1.0Eh 60 deg M1	**13.28**	**00.00**	**0**	**1**	**-0.07**	**20.83**	**-1.64**	
	13.28	**00.00**	**120**	**1a**	**-1.46**	**20.83**	**0.76**	
	13.28	**00.00**	**240**	**1b**	**-0.25**	**0.21**	**-0.14**	
0.9D - 1.0Ev + 1.0Eh 90 deg M1	**13.28**	**00.00**	**0**	**1**	**-0.08**	**13.96**	**-1.00**	
	13.28	**00.00**	**120**	**1a**	**-1.85**	**25.86**	**1.02**	

	13.28	**00.00**	**240**	**1b**	**-0.12**	**2.05**	**-0.02**
1.0D + 1.0W Service Normal	**13.28**	**00.00**	**0**	**1**	**0.00**	**99.96**	**-10.34**
	13.28	**00.00**	**120**	**1a**	**2.50**	**-24.32**	**-2.51**
	13.28	**00.00**	**240**	**1b**	**-2.50**	**-24.32**	**-2.51**
1.0D + 1.0W Service 60 deg	**13.28**	**00.00**	**0**	**1**	**-0.87**	**57.23**	**-5.58**
	13.28	**00.00**	**120**	**1a**	**-5.27**	**57.19**	**2.03**
	13.28	**00.00**	**240**	**1b**	**-6.63**	**-63.09**	**-3.83**
1.0D + 1.0W Service 90 deg	**13.28**	**00.00**	**0**	**1**	**-1.02**	**17.11**	**-1.17**
	13.28	**00.00**	**120**	**1a**	**-7.95**	**87.12**	**4.00**
	13.28	**00.00**	**240**	**1b**	**-5.93**	**-52.90**	**-2.83**

Max Uplift:	282.51 (kip)	Moment Ice:	1,954.10 (kip-ft)	Moment:	6,139.50 (kip-ft)	1.2D + 1.0W Normal
Max Down:	328.76 (kip)	Total Down Ice:	134.33 (kip)	Total Down:	61.59 (kip)	
Max Shear:	35.20 (kip)	Total Shear Ice:	18.92 (kip)	Total Shear:	56.71 (kip)	

Deflections and Rotations

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)	Resultant (deg)
116 mph Normal with No Ice	20.00	0.025	0.0036	0.1199	0.1199
116 mph Normal with No Ice	30.00	0.050	0.0043	0.1647	0.1647
116 mph Normal with No Ice	70.00	0.230	0.0049	0.3568	0.3568
116 mph Normal with No Ice	86.67	0.346	0.0035	0.4525	0.4525
116 mph Normal with No Ice	93.33	0.400	0.0019	0.4897	0.4897
116 mph Normal with No Ice	100.00	0.460	0.0004	0.5285	0.5285
116 mph Normal with No Ice	113.33	0.591	0.0029	0.6014	0.6014
116 mph Normal with No Ice	120.00	0.662	0.0057	0.6187	0.6187
116 mph Normal with No Ice	126.67	0.738	0.0164	0.6809	0.6811
116 mph Normal with No Ice	133.33	0.819	0.0296	0.6960	0.6966
116 mph Normal with No Ice	140.25	0.906	0.0420	0.8174	0.8174
116 mph Normal with No Ice	145.19	0.972	0.0769	0.7541	0.7581
116 mph Normal with No Ice	155.06	1.114	0.1658	0.9390	0.9535
116 mph Normal with No Ice	164.20	1.256	0.1808	0.9076	0.9254
116 mph Normal with No Ice	172.10	1.385	0.1816	0.9460	0.9632
116 mph Normal with No Ice	180.00	1.514	0.1821	1.0735	1.0888
116 mph 60 degree with No Ice	20.00	0.024	0.0057	0.1154	0.1155
116 mph 60 degree with No Ice	30.00	0.048	0.0075	0.1590	0.1591
116 mph 60 degree with No Ice	70.00	0.222	0.0160	0.3461	0.3463
116 mph 60 degree with No Ice	86.67	0.335	0.0201	0.4393	0.4396
116 mph 60 degree with No Ice	93.33	0.389	0.0215	0.4753	0.4756
116 mph 60 degree with No Ice	100.00	0.447	0.0238	0.5133	0.5135
116 mph 60 degree with No Ice	113.33	0.574	0.0299	0.5807	0.5810
116 mph 60 degree with No Ice	120.00	0.644	0.0337	0.6157	0.6166
116 mph 60 degree with No Ice	126.67	0.718	0.0473	0.6565	0.6582
116 mph 60 degree with No Ice	133.33	0.796	0.0621	0.6779	0.6784
116 mph 60 degree with No Ice	140.25	0.881	0.0780	0.7865	0.7904
116 mph 60 degree with No Ice	145.19	0.946	0.1149	0.7679	0.7690
116 mph 60 degree with No Ice	155.06	1.083	0.2146	0.7823	0.7950
116 mph 60 degree with No Ice	164.20	1.221	0.2369	0.8751	0.8959
116 mph 60 degree with No Ice	172.10	1.346	0.2518	0.9086	0.9394
116 mph 60 degree with No Ice	180.00	1.472	0.2650	0.8787	0.8978
116 mph 90 degree with No Ice	20.00	0.023	-0.0071	0.1196	0.1198
116 mph 90 degree with No Ice	30.00	0.048	-0.0094	0.1599	0.1600
116 mph 90 degree with No Ice	70.00	0.223	-0.0209	0.3483	0.3489
116 mph 90 degree with No Ice	86.67	0.337	-0.0265	0.4421	0.4429
116 mph 90 degree with No Ice	93.33	0.391	-0.0287	0.4782	0.4790
116 mph 90 degree with No Ice	100.00	0.449	-0.0311	0.5163	0.5172
116 mph 90 degree with No Ice	113.33	0.578	-0.0351	0.5825	0.5835
116 mph 90 degree with No Ice	120.00	0.648	-0.0375	0.6238	0.6241
116 mph 90 degree with No Ice	126.67	0.722	-0.0473	0.6584	0.6590
116 mph 90 degree with No Ice	133.33	0.801	-0.0565	0.6839	0.6862
116 mph 90 degree with No Ice	140.25	0.887	-0.0688	0.7775	0.7782
116 mph 90 degree with No Ice	145.19	0.951	-0.0904	0.7863	0.7914
116 mph 90 degree with No Ice	155.06	1.090	-0.1599	0.7383	0.7554
116 mph 90 degree with No Ice	164.20	1.228	-0.1642	0.8790	0.8942
116 mph 90 degree with No Ice	172.10	1.353	-0.1654	0.9079	0.9228
116 mph 90 degree with No Ice	180.00	1.479	-0.1665	0.8168	0.8336
116 mph Normal with No Ice (Reduced DL)	20.00	0.025	0.0036	0.1196	0.1197
116 mph Normal with No Ice (Reduced DL)	30.00	0.050	0.0043	0.1644	0.1644
116 mph Normal with No Ice (Reduced DL)	70.00	0.229	0.0049	0.3561	0.3561
116 mph Normal with No Ice (Reduced DL)	86.67	0.345	0.0035	0.4516	0.4516
116 mph Normal with No Ice (Reduced DL)	93.33	0.400	0.0019	0.4887	0.4887
116 mph Normal with No Ice (Reduced DL)	100.00	0.459	0.0004	0.5273	0.5273
116 mph Normal with No Ice (Reduced DL)	113.33	0.590	0.0029	0.6001	0.6001

116 mph Normal with No Ice (Reduced DL)	120.00	0.661	0.0057	0.6172	0.6172
116 mph Normal with No Ice (Reduced DL)	126.67	0.737	0.0164	0.6792	0.6794
116 mph Normal with No Ice (Reduced DL)	133.33	0.817	0.0296	0.6943	0.6949
116 mph Normal with No Ice (Reduced DL)	140.25	0.904	0.0420	0.8152	0.8152
116 mph Normal with No Ice (Reduced DL)	145.19	0.970	0.0768	0.7521	0.7560
116 mph Normal with No Ice (Reduced DL)	155.06	1.111	0.1657	0.9366	0.9512
116 mph Normal with No Ice (Reduced DL)	164.20	1.253	0.1807	0.9052	0.9231
116 mph Normal with No Ice (Reduced DL)	172.10	1.382	0.1815	0.9435	0.9608
116 mph Normal with No Ice (Reduced DL)	180.00	1.511	0.1820	1.0708	1.0862
116 mph 60 deg with No Ice (Reduced DL)	20.00	0.024	0.0057	0.1153	0.1154
116 mph 60 deg with No Ice (Reduced DL)	30.00	0.048	0.0075	0.1588	0.1589
116 mph 60 deg with No Ice (Reduced DL)	70.00	0.222	0.0160	0.3454	0.3457
116 mph 60 deg with No Ice (Reduced DL)	86.67	0.335	0.0200	0.4384	0.4387
116 mph 60 deg with No Ice (Reduced DL)	93.33	0.388	0.0215	0.4743	0.4746
116 mph 60 deg with No Ice (Reduced DL)	100.00	0.446	0.0237	0.5122	0.5125
116 mph 60 deg with No Ice (Reduced DL)	113.33	0.573	0.0299	0.5794	0.5797
116 mph 60 deg with No Ice (Reduced DL)	120.00	0.643	0.0337	0.6144	0.6153
116 mph 60 deg with No Ice (Reduced DL)	126.67	0.717	0.0472	0.6549	0.6566
116 mph 60 deg with No Ice (Reduced DL)	133.33	0.795	0.0620	0.6763	0.6768
116 mph 60 deg with No Ice (Reduced DL)	140.25	0.880	0.0779	0.7845	0.7884
116 mph 60 deg with No Ice (Reduced DL)	145.19	0.944	0.1148	0.7662	0.7673
116 mph 60 deg with No Ice (Reduced DL)	155.06	1.081	0.2144	0.7803	0.7926
116 mph 60 deg with No Ice (Reduced DL)	164.20	1.219	0.2367	0.8728	0.8937
116 mph 60 deg with No Ice (Reduced DL)	172.10	1.343	0.2515	0.9061	0.9370
116 mph 60 deg with No Ice (Reduced DL)	180.00	1.468	0.2648	0.8762	0.8953
116 mph 90 deg with No Ice (Reduced DL)	20.00	0.023	-0.0071	0.1194	0.1196
116 mph 90 deg with No Ice (Reduced DL)	30.00	0.048	-0.0094	0.1596	0.1597
116 mph 90 deg with No Ice (Reduced DL)	70.00	0.223	-0.0209	0.3476	0.3483
116 mph 90 deg with No Ice (Reduced DL)	86.67	0.337	-0.0265	0.4412	0.4420
116 mph 90 deg with No Ice (Reduced DL)	93.33	0.391	-0.0287	0.4772	0.4780
116 mph 90 deg with No Ice (Reduced DL)	100.00	0.448	-0.0311	0.5152	0.5161
116 mph 90 deg with No Ice (Reduced DL)	113.33	0.577	-0.0351	0.5811	0.5822
116 mph 90 deg with No Ice (Reduced DL)	120.00	0.647	-0.0375	0.6223	0.6226
116 mph 90 deg with No Ice (Reduced DL)	126.67	0.721	-0.0473	0.6568	0.6574
116 mph 90 deg with No Ice (Reduced DL)	133.33	0.799	-0.0565	0.6822	0.6846
116 mph 90 deg with No Ice (Reduced DL)	140.25	0.885	-0.0688	0.7755	0.7762
116 mph 90 deg with No Ice (Reduced DL)	145.19	0.949	-0.0904	0.7843	0.7895
116 mph 90 deg with No Ice (Reduced DL)	155.06	1.087	-0.1600	0.7361	0.7533
116 mph 90 deg with No Ice (Reduced DL)	164.20	1.226	-0.1644	0.8766	0.8919
116 mph 90 deg with No Ice (Reduced DL)	172.10	1.350	-0.1656	0.9054	0.9204
116 mph 90 deg with No Ice (Reduced DL)	180.00	1.476	-0.1667	0.8142	0.8311
50 mph Normal with 1.00 in Radial Ice	20.00	0.008	0.0015	0.0411	0.0411
50 mph Normal with 1.00 in Radial Ice	30.00	0.017	0.0019	0.0551	0.0551
50 mph Normal with 1.00 in Radial Ice	70.00	0.073	0.0032	0.1119	0.1119
50 mph Normal with 1.00 in Radial Ice	86.67	0.109	0.0035	0.1401	0.1402
50 mph Normal with 1.00 in Radial Ice	93.33	0.126	0.0033	0.1506	0.1506
50 mph Normal with 1.00 in Radial Ice	100.00	0.144	0.0032	0.1621	0.1621
50 mph Normal with 1.00 in Radial Ice	113.33	0.184	0.0030	0.1829	0.1829
50 mph Normal with 1.00 in Radial Ice	120.00	0.206	0.0025	0.1879	0.1879
50 mph Normal with 1.00 in Radial Ice	126.67	0.229	0.0000	0.2052	0.2052
50 mph Normal with 1.00 in Radial Ice	133.33	0.253	0.0032	0.2096	0.2096
50 mph Normal with 1.00 in Radial Ice	140.25	0.279	0.0061	0.2432	0.2432
50 mph Normal with 1.00 in Radial Ice	145.19	0.299	0.0147	0.2271	0.2276
50 mph Normal with 1.00 in Radial Ice	155.06	0.341	0.0359	0.2725	0.2748
50 mph Normal with 1.00 in Radial Ice	164.20	0.383	0.0394	0.2659	0.2688
50 mph Normal with 1.00 in Radial Ice	172.10	0.420	0.0395	0.2763	0.2785
50 mph Normal with 1.00 in Radial Ice	180.00	0.458	0.0397	0.3055	0.3080
50 mph 60 deg with 1.00 in Radial Ice	20.00	0.009	-0.0017	0.0409	0.0409
50 mph 60 deg with 1.00 in Radial Ice	30.00	0.018	-0.0022	0.0573	0.0574
50 mph 60 deg with 1.00 in Radial Ice	70.00	0.073	-0.0043	0.1103	0.1103
50 mph 60 deg with 1.00 in Radial Ice	86.67	0.109	-0.0051	0.1379	0.1379
50 mph 60 deg with 1.00 in Radial Ice	93.33	0.125	-0.0052	0.1481	0.1482

50 mph 60 deg with 1.00 in Radial Ice	100.00	0.143	-0.0054	0.1594	0.1595
50 mph 60 deg with 1.00 in Radial Ice	113.33	0.182	-0.0057	0.1790	0.1790
50 mph 60 deg with 1.00 in Radial Ice	120.00	0.204	-0.0059	0.1888	0.1889
50 mph 60 deg with 1.00 in Radial Ice	126.67	0.226	-0.0075	0.2010	0.2011
50 mph 60 deg with 1.00 in Radial Ice	133.33	0.250	-0.0091	0.2063	0.2064
50 mph 60 deg with 1.00 in Radial Ice	140.25	0.276	-0.0113	0.2377	0.2379
50 mph 60 deg with 1.00 in Radial Ice	145.19	0.295	0.0181	0.2292	0.2295
50 mph 60 deg with 1.00 in Radial Ice	155.06	0.336	0.0369	0.2359	0.2367
50 mph 60 deg with 1.00 in Radial Ice	164.20	0.377	0.0398	0.2602	0.2615
50 mph 60 deg with 1.00 in Radial Ice	172.10	0.414	0.0409	0.2692	0.2704
50 mph 60 deg with 1.00 in Radial Ice	180.00	0.451	0.0419	0.2617	0.2617
50 mph 90 deg with 1.00 in Radial Ice	20.00	0.009	-0.0021	0.0410	0.0410
50 mph 90 deg with 1.00 in Radial Ice	30.00	0.018	-0.0026	0.0567	0.0567
50 mph 90 deg with 1.00 in Radial Ice	70.00	0.073	-0.0052	0.1107	0.1107
50 mph 90 deg with 1.00 in Radial Ice	86.67	0.109	-0.0063	0.1384	0.1385
50 mph 90 deg with 1.00 in Radial Ice	93.33	0.125	-0.0066	0.1487	0.1489
50 mph 90 deg with 1.00 in Radial Ice	100.00	0.143	-0.0069	0.1600	0.1601
50 mph 90 deg with 1.00 in Radial Ice	113.33	0.183	-0.0073	0.1792	0.1793
50 mph 90 deg with 1.00 in Radial Ice	120.00	0.204	-0.0077	0.1913	0.1914
50 mph 90 deg with 1.00 in Radial Ice	126.67	0.227	-0.0098	0.2010	0.2010
50 mph 90 deg with 1.00 in Radial Ice	133.33	0.250	-0.0119	0.2082	0.2085
50 mph 90 deg with 1.00 in Radial Ice	140.25	0.276	-0.0148	0.2346	0.2347
50 mph 90 deg with 1.00 in Radial Ice	145.19	0.296	-0.0194	0.2343	0.2351
50 mph 90 deg with 1.00 in Radial Ice	155.06	0.337	-0.0346	0.2266	0.2292
50 mph 90 deg with 1.00 in Radial Ice	164.20	0.378	-0.0352	0.2607	0.2631
50 mph 90 deg with 1.00 in Radial Ice	172.10	0.415	-0.0354	0.2685	0.2708
50 mph 90 deg with 1.00 in Radial Ice	180.00	0.452	-0.0356	0.2482	0.2507
Seismic Normal M1	20.00	0.001	0.0002	0.0056	0.0056
Seismic Normal M1	30.00	0.002	0.0003	0.0075	0.0075
Seismic Normal M1	70.00	0.011	0.0006	0.0169	0.0169
Seismic Normal M1	86.67	0.016	0.0008	0.0219	0.0219
Seismic Normal M1	93.33	0.019	0.0008	0.0240	0.0240
Seismic Normal M1	100.00	0.022	0.0009	0.0260	0.0261
Seismic Normal M1	113.33	0.028	0.0010	0.0299	0.0300
Seismic Normal M1	120.00	0.032	0.0010	0.0319	0.0319
Seismic Normal M1	126.67	0.036	0.0010	0.0344	0.0344
Seismic Normal M1	133.33	0.040	0.0009	0.0360	0.0360
Seismic Normal M1	140.25	0.044	0.0010	0.0421	0.0421
Seismic Normal M1	145.19	0.048	0.0006	0.0405	0.0405
Seismic Normal M1	155.06	0.055	0.0000	0.0440	0.0440
Seismic Normal M1	164.20	0.062	0.0001	0.0461	0.0461
Seismic Normal M1	172.10	0.069	0.0000	0.0477	0.0477
Seismic Normal M1	180.00	0.075	0.0001	0.0474	0.0474
Seismic 60 deg M1	20.00	0.001	-0.0002	0.0055	0.0055
Seismic 60 deg M1	30.00	0.002	-0.0003	0.0073	0.0073
Seismic 60 deg M1	70.00	0.010	-0.0006	0.0169	0.0169
Seismic 60 deg M1	86.67	0.016	-0.0008	0.0218	0.0218
Seismic 60 deg M1	93.33	0.019	-0.0008	0.0241	0.0241
Seismic 60 deg M1	100.00	0.022	-0.0009	0.0260	0.0260
Seismic 60 deg M1	113.33	0.028	-0.0009	0.0300	0.0300
Seismic 60 deg M1	120.00	0.032	-0.0010	0.0317	0.0317
Seismic 60 deg M1	126.67	0.035	-0.0010	0.0346	0.0346
Seismic 60 deg M1	133.33	0.040	-0.0009	0.0357	0.0357
Seismic 60 deg M1	140.25	0.044	-0.0009	0.0432	0.0432
Seismic 60 deg M1	145.19	0.048	-0.0006	0.0400	0.0400
Seismic 60 deg M1	155.06	0.055	0.0000	0.0434	0.0434
Seismic 60 deg M1	164.20	0.062	0.0001	0.0463	0.0463
Seismic 60 deg M1	172.10	0.069	0.0000	0.0476	0.0476
Seismic 60 deg M1	180.00	0.075	0.0000	0.0472	0.0472
Seismic 90 deg M1	20.00	0.001	-0.0003	0.0056	0.0056
Seismic 90 deg M1	30.00	0.002	-0.0003	0.0074	0.0074
Seismic 90 deg M1	70.00	0.011	-0.0007	0.0169	0.0169

Seismic 90 deg M1	86.67	0.016	-0.0009	0.0219	0.0219
Seismic 90 deg M1	93.33	0.019	-0.0010	0.0240	0.0240
Seismic 90 deg M1	100.00	0.022	-0.0010	0.0260	0.0260
Seismic 90 deg M1	113.33	0.028	-0.0011	0.0300	0.0300
Seismic 90 deg M1	120.00	0.032	-0.0011	0.0319	0.0319
Seismic 90 deg M1	126.67	0.036	-0.0011	0.0346	0.0346
Seismic 90 deg M1	133.33	0.040	-0.0011	0.0361	0.0361
Seismic 90 deg M1	140.25	0.044	-0.0011	0.0425	0.0425
Seismic 90 deg M1	145.19	0.048	-0.0007	0.0404	0.0404
Seismic 90 deg M1	155.06	0.055	0.0000	0.0439	0.0439
Seismic 90 deg M1	164.20	0.062	0.0001	0.0464	0.0464
Seismic 90 deg M1	172.10	0.069	0.0000	0.0477	0.0477
Seismic 90 deg M1	180.00	0.075	0.0000	0.0473	0.0473
Seismic (Reduced DL) Normal M1	20.00	0.001	0.0002	0.0054	0.0054
Seismic (Reduced DL) Normal M1	30.00	0.002	0.0003	0.0074	0.0074
Seismic (Reduced DL) Normal M1	70.00	0.011	0.0006	0.0168	0.0168
Seismic (Reduced DL) Normal M1	86.67	0.016	0.0008	0.0218	0.0218
Seismic (Reduced DL) Normal M1	93.33	0.019	0.0008	0.0239	0.0239
Seismic (Reduced DL) Normal M1	100.00	0.022	0.0009	0.0259	0.0260
Seismic (Reduced DL) Normal M1	113.33	0.028	0.0010	0.0298	0.0298
Seismic (Reduced DL) Normal M1	120.00	0.032	0.0010	0.0317	0.0317
Seismic (Reduced DL) Normal M1	126.67	0.035	0.0010	0.0343	0.0343
Seismic (Reduced DL) Normal M1	133.33	0.040	0.0009	0.0358	0.0359
Seismic (Reduced DL) Normal M1	140.25	0.044	0.0010	0.0422	0.0422
Seismic (Reduced DL) Normal M1	145.19	0.048	0.0006	0.0403	0.0403
Seismic (Reduced DL) Normal M1	155.06	0.055	0.0000	0.0437	0.0437
Seismic (Reduced DL) Normal M1	164.20	0.062	0.0001	0.0460	0.0460
Seismic (Reduced DL) Normal M1	172.10	0.069	0.0000	0.0475	0.0475
Seismic (Reduced DL) Normal M1	180.00	0.075	0.0001	0.0471	0.0471
Seismic (Reduced DL) 60 deg M1	20.00	0.001	-0.0002	0.0053	0.0053
Seismic (Reduced DL) 60 deg M1	30.00	0.002	-0.0003	0.0072	0.0072
Seismic (Reduced DL) 60 deg M1	70.00	0.010	-0.0006	0.0169	0.0169
Seismic (Reduced DL) 60 deg M1	86.67	0.016	-0.0008	0.0218	0.0218
Seismic (Reduced DL) 60 deg M1	93.33	0.019	-0.0008	0.0239	0.0239
Seismic (Reduced DL) 60 deg M1	100.00	0.021	-0.0009	0.0259	0.0259
Seismic (Reduced DL) 60 deg M1	113.33	0.028	-0.0009	0.0299	0.0299
Seismic (Reduced DL) 60 deg M1	120.00	0.032	-0.0010	0.0315	0.0315
Seismic (Reduced DL) 60 deg M1	126.67	0.035	-0.0010	0.0345	0.0345
Seismic (Reduced DL) 60 deg M1	133.33	0.039	-0.0009	0.0356	0.0356
Seismic (Reduced DL) 60 deg M1	140.25	0.044	-0.0009	0.0429	0.0429
Seismic (Reduced DL) 60 deg M1	145.19	0.047	-0.0006	0.0398	0.0398
Seismic (Reduced DL) 60 deg M1	155.06	0.055	0.0000	0.0432	0.0432
Seismic (Reduced DL) 60 deg M1	164.20	0.062	0.0001	0.0461	0.0461
Seismic (Reduced DL) 60 deg M1	172.10	0.069	0.0000	0.0474	0.0474
Seismic (Reduced DL) 60 deg M1	180.00	0.075	0.0000	0.0470	0.0470
Seismic (Reduced DL) 90 deg M1	20.00	0.001	-0.0003	0.0053	0.0053
Seismic (Reduced DL) 90 deg M1	30.00	0.002	-0.0003	0.0073	0.0073
Seismic (Reduced DL) 90 deg M1	70.00	0.010	-0.0007	0.0168	0.0169
Seismic (Reduced DL) 90 deg M1	86.67	0.016	-0.0009	0.0218	0.0218
Seismic (Reduced DL) 90 deg M1	93.33	0.019	-0.0010	0.0239	0.0239
Seismic (Reduced DL) 90 deg M1	100.00	0.022	-0.0010	0.0259	0.0259
Seismic (Reduced DL) 90 deg M1	113.33	0.028	-0.0011	0.0299	0.0299
Seismic (Reduced DL) 90 deg M1	120.00	0.032	-0.0011	0.0317	0.0317
Seismic (Reduced DL) 90 deg M1	126.67	0.035	-0.0011	0.0344	0.0344
Seismic (Reduced DL) 90 deg M1	133.33	0.040	-0.0011	0.0360	0.0360
Seismic (Reduced DL) 90 deg M1	140.25	0.044	-0.0011	0.0422	0.0422
Seismic (Reduced DL) 90 deg M1	145.19	0.048	-0.0007	0.0403	0.0403
Seismic (Reduced DL) 90 deg M1	155.06	0.055	0.0000	0.0438	0.0438
Seismic (Reduced DL) 90 deg M1	164.20	0.062	0.0001	0.0463	0.0463
Seismic (Reduced DL) 90 deg M1	172.10	0.069	0.0000	0.0474	0.0474
Seismic (Reduced DL) 90 deg M1	180.00	0.075	0.0000	0.0471	0.0471
Serviceability - 60 mph Wind Normal	20.00	0.007	0.0010	0.0325	0.0325

Serviceability - 60 mph Wind Normal	30.00	0.013	0.0012	0.0444	0.0444
Serviceability - 60 mph Wind Normal	70.00	0.062	0.0013	0.0957	0.0957
Serviceability - 60 mph Wind Normal	86.67	0.093	0.0010	0.1214	0.1214
Serviceability - 60 mph Wind Normal	93.33	0.108	0.0006	0.1314	0.1314
Serviceability - 60 mph Wind Normal	100.00	0.123	0.0002	0.1417	0.1417
Serviceability - 60 mph Wind Normal	113.33	0.159	0.0007	0.1612	0.1612
Serviceability - 60 mph Wind Normal	120.00	0.178	0.0014	0.1660	0.1660
Serviceability - 60 mph Wind Normal	126.67	0.198	0.0043	0.1825	0.1825
Serviceability - 60 mph Wind Normal	133.33	0.220	0.0078	0.1864	0.1866
Serviceability - 60 mph Wind Normal	140.25	0.243	0.0111	0.2187	0.2187
Serviceability - 60 mph Wind Normal	145.19	0.261	0.0205	0.2022	0.2032
Serviceability - 60 mph Wind Normal	155.06	0.299	0.0443	0.2517	0.2556
Serviceability - 60 mph Wind Normal	164.20	0.337	0.0482	0.2428	0.2475
Serviceability - 60 mph Wind Normal	172.10	0.371	0.0483	0.2531	0.2576
Serviceability - 60 mph Wind Normal	180.00	0.406	0.0485	0.2873	0.2914
Serviceability - 60 mph Wind 60 deg	20.00	0.006	-0.0016	0.0308	0.0308
Serviceability - 60 mph Wind 60 deg	30.00	0.013	-0.0020	0.0426	0.0426
Serviceability - 60 mph Wind 60 deg	70.00	0.060	-0.0044	0.0928	0.0929
Serviceability - 60 mph Wind 60 deg	86.67	0.090	-0.0056	0.1177	0.1178
Serviceability - 60 mph Wind 60 deg	93.33	0.104	-0.0060	0.1273	0.1274
Serviceability - 60 mph Wind 60 deg	100.00	0.120	-0.0064	0.1374	0.1375
Serviceability - 60 mph Wind 60 deg	113.33	0.154	-0.0071	0.1556	0.1557
Serviceability - 60 mph Wind 60 deg	120.00	0.173	-0.0076	0.1647	0.1648
Serviceability - 60 mph Wind 60 deg	126.67	0.192	-0.0095	0.1760	0.1762
Serviceability - 60 mph Wind 60 deg	133.33	0.213	0.0120	0.1814	0.1815
Serviceability - 60 mph Wind 60 deg	140.25	0.236	0.0153	0.2105	0.2110
Serviceability - 60 mph Wind 60 deg	145.19	0.253	0.0232	0.2052	0.2056
Serviceability - 60 mph Wind 60 deg	155.06	0.290	0.0448	0.2097	0.2101
Serviceability - 60 mph Wind 60 deg	164.20	0.327	0.0481	0.2342	0.2365
Serviceability - 60 mph Wind 60 deg	172.10	0.361	0.0492	0.2431	0.2468
Serviceability - 60 mph Wind 60 deg	180.00	0.394	0.0503	0.2348	0.2349
Serviceability - 60 mph Wind 90 deg	20.00	0.006	-0.0019	0.0322	0.0322
Serviceability - 60 mph Wind 90 deg	30.00	0.013	-0.0025	0.0431	0.0431
Serviceability - 60 mph Wind 90 deg	70.00	0.060	-0.0055	0.0934	0.0936
Serviceability - 60 mph Wind 90 deg	86.67	0.091	-0.0070	0.1185	0.1187
Serviceability - 60 mph Wind 90 deg	93.33	0.105	-0.0076	0.1282	0.1284
Serviceability - 60 mph Wind 90 deg	100.00	0.121	-0.0082	0.1384	0.1386
Serviceability - 60 mph Wind 90 deg	113.33	0.155	-0.0093	0.1562	0.1563
Serviceability - 60 mph Wind 90 deg	120.00	0.174	-0.0099	0.1673	0.1673
Serviceability - 60 mph Wind 90 deg	126.67	0.194	-0.0125	0.1765	0.1766
Serviceability - 60 mph Wind 90 deg	133.33	0.215	-0.0149	0.1831	0.1837
Serviceability - 60 mph Wind 90 deg	140.25	0.238	-0.0182	0.2081	0.2083
Serviceability - 60 mph Wind 90 deg	145.19	0.255	-0.0239	0.2104	0.2118
Serviceability - 60 mph Wind 90 deg	155.06	0.292	-0.0424	0.1976	0.2021
Serviceability - 60 mph Wind 90 deg	164.20	0.329	-0.0434	0.2352	0.2391
Serviceability - 60 mph Wind 90 deg	172.10	0.363	-0.0437	0.2429	0.2468
Serviceability - 60 mph Wind 90 deg	180.00	0.396	-0.0439	0.2185	0.2229

Maximum Reactions Summary

	Vertical (kip)				Horizontal (kip)		Moment (kip-ft)	
Anchor Group	DL+WL	DL+WL+IL	UpLift	Shear	DL+WL	DL+WL+IL	DL+WL	DL+WL+IL
Base	61.59	134.33	328.76	35.20	56.71	18.92	6139.50	1954.10

Maser Consulting Connecticut
2000 Midlantic Drive, Suite 100
Mt. Laurel, NJ 08054
(856) 797-0412
peter.albano@colliersengineering.com

New/Replacement Antenna Mount Analysis Report and PMI Requirements

Mount Analysis-R

SMART Tool Project #: 10084369
Maser Consulting Connecticut Project #: 21777896A

July 8, 2021

Site Information	*Site ID:*	*467676-VZW / TOPSTONE CT*
	Site Name:	*TOPSTONE CT*
	Carrier Name:	*Verizon Wireless*
	Address:	*100 Old Redding Rd.* *Redding, Connecticut 06896* *Fairfield County*
	Latitude:	*41.287094°*
	Longitude:	*-73.438161°*
Structure Information	*Tower Type:*	*180-Ft Self Support*
	Mount Type:	*12.50-Ft Sector Frame*

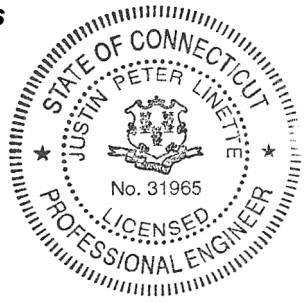
FUZE ID # 16045711

Analysis Results

Sector Frame: **31.2% Pass**

******Contractor PMI Requirements***:
Included at the end of this MA report
Available & Submitted via portal at https://pmi.vzwsmart.com
Contractor - Please Review Specific Site PMI Requirements Upon Award
Requirements also Noted on Mount Modification Drawings
Requirements may also be Noted on A & E drawings

Report Prepared By: Zachary Bandilla



Executive Summary:

The objective of this report is to determine the capacity of the proposed antenna support mount at the subject facility for the final wireless telecommunications configuration, per the applicable codes and standards. The proposed mount was assumed to be installed properly to the existing tower per the manufacturer's instructions. Maser Consulting cannot verify that the proposed mount will fit properly and is not liable for any fit-up issues during installation.

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: 675070, dated May 26, 2021*
Mount Mapping Report	*ELITE ICT Services, Site ID: 302522, dated April 16, 2021*
Previous Mount Analysis	*Maser Consulting Connecticut, Project #: 21777896A, Dated July 1, 2021*

Analysis Criteria:

Codes and Standards:	ANSI/TIA-222-H	
Wind Parameters:	Basic Wind Speed (Ultimate 3-sec. Gust), V_{ULT}:	116 mph
	Ice Wind Speed (3-sec. Gust):	50 mph
	Design Ice Thickness:	1.00 in
	Risk Category:	II
	Exposure Category:	B
	Topographic Category:	1
	Topographic Feature Considered:	N/A
	Topographic Method:	N/A
	Ground Elevation Factor, K_e:	0.975
Seismic Parameters:	S_S:	0.235
	S_1:	0.057
Maintenance Parameters:	Wind Speed (3-sec. Gust):	30 mph
	Maintenance Live Load, Lv:	250 lbs.
	Maintenance Live Load, Lm:	500 lbs.
Analysis Software:	RISA-3D (V17)	

Final Loading Configuration:

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

Mount Elevation (ft)	Equipment Elevation (ft)	Quantity	Manufacturer	Model	Status
174.00	174.00	6	Commscope	JAHH-65B-R3B	Added
		3	Samsung	MT6407-77A	
		3	Commscope	CBC78T-DS-43-2X	
		3	Samsung	B2/B66A RRH-BR049	
		3	Samsung	B5/B13 RRH-BR04C	
		2	Raycap	RCFDC-3315-PF-48*	Retained
		4	Andrew	DB844G65ZAXY	
		2	RFS	APL868013	

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

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

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

Standard Conditions:

1. All engineering services are performed on the basis that the information provided to Maser Consulting Connecticut 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 Maser Consulting Connecticut 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.

3. For mount analyses completed from other data sources (including new replacement mounts) and not specifically mapped by Maser Consulting Connecticut, 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. Maser Consulting Connecticut is not responsible for the conclusion, opinions, and recommendations made by others based on the information supplied.

7. Structural Steel Grades have been assumed as follows, if applicable, unless otherwise noted in this analysis:
   - Channel, Solid Round, Angle, Plate — ASTM A36 (Gr. 36)
   - HSS (Rectangular) — ASTM 500 (Gr. B-46)
   - Pipe — ASTM A53 (Gr. B-35)
   - Threaded Rod — F1554 (Gr. 36)
   - Bolts — ASTM A325

Discrepancies between in-field conditions and the assumptions listed above may render this analysis invalid unless explicitly approved by Maser Consulting Connecticut.

Analysis Results:

Component	Utilization %	Pass/Fail
Horizontal mount pipe	*22.9 %*	*Pass*
Standoff Plate	*31.2 %*	*Pass*
Standoff Horizontal	*20.3 %*	*Pass*
Standoff Diagonal	*5.9 %*	*Pass*
Antenna Pipe	*21.5 %*	*Pass*
PIPE_2.5	*11.9 %*	*Pass*
Standoff Vertical	*7.4 %*	*Pass*
Tieback	*11.3 %*	*Pass*
Connection Check	*11.8 %*	*Pass*

Structure Rating – *(Controlling Utilization of all Components)*	**31.2%**

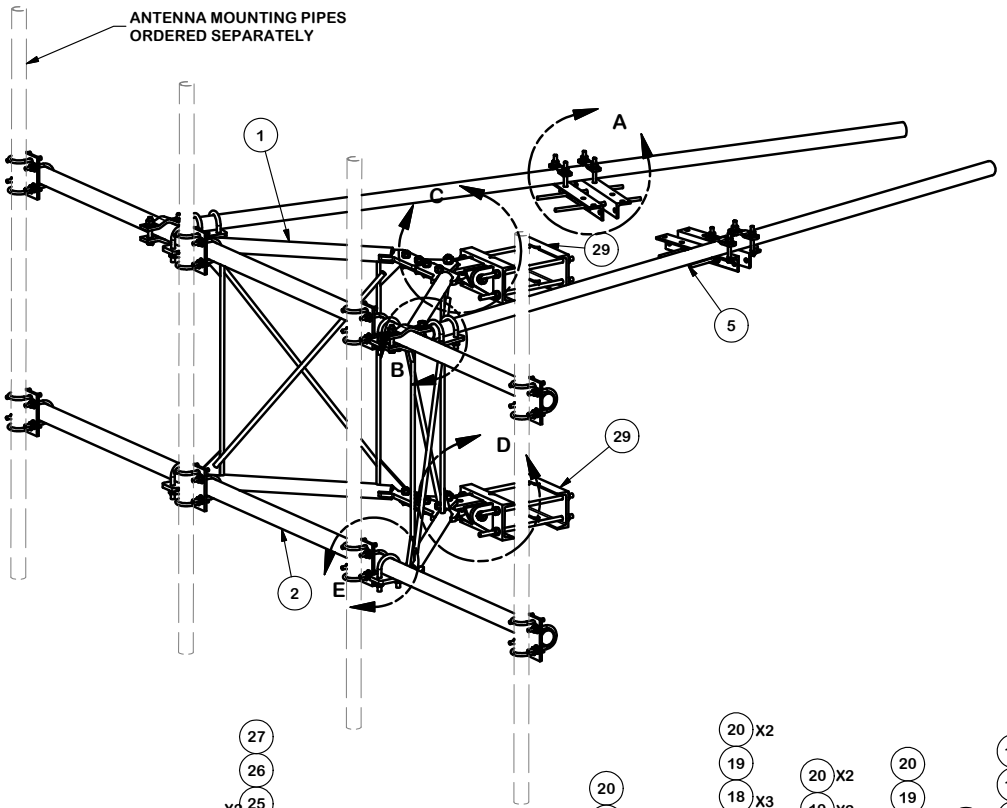
Recommendation:

The proposed antenna mounts are **SUFFICIENT** for the final loading configuration and do not require modifications.

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

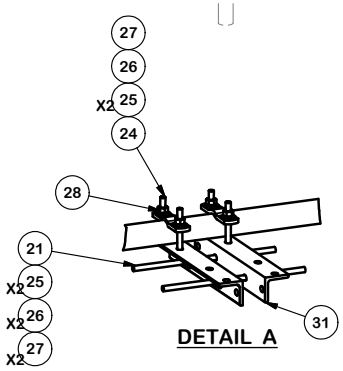
Attachments:

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

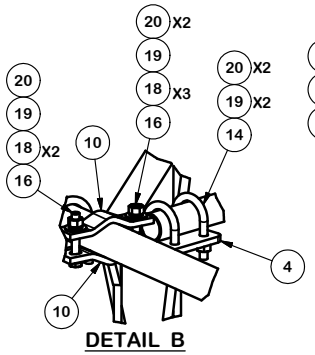


PARTS LIST

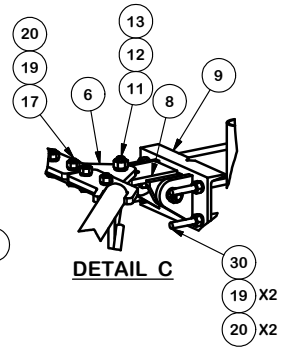
ITEM	QTY	PART NO.	PART DESCRIPTION	LENGTH	UNIT WT.	NET WT.
1	2	X-VFAW	SUPPORT ARM		66.80	133.59
2	2	P30150	2-7/8" X 150" (2-1/2" SCH. 40) GALVANIZED PIPE	150 in	76.94	153.87
3	8	SCX2	CROSSOVER PLATE	7 in	4.80	38.37
4	2	X-SPTB	SLIDING PIPE TIE BACK PLATE	5 1/2 in	5.87	11.74
5	2	P2126	2-3/8" OD X 126" SCH 40 GALVANIZED PIPE	126 in	40.75	81.50
6	2	X-VFAPL3	VFA-HD PIVOT PLATE	24 in	9.69	19.38
7	1	X-LPB	LOWER PIVOT BRACKET		8.84	8.84
8	1	X-UPB	UPPER PIVOT BRACKET		8.84	8.84
9	2	X-HDPMW	HEAVY DUTY PIPE MOUNT WELDMENT		18.61	37.21
10	4	DCP	1/2" THICK, 5-3/4" CNTER TO CENTER CLAMP HALF	8 1/8 in	2.42	9.68
11	6	A34212	3/4" x 2-1/2" UNC HEX BOLT (A325)	2 1/2 in	0.48	2.87
12	6	G34LW	3/4" HDG LOCKWASHER		0.04	0.26
13	6	G34NUT	3/4" HDG HEAVY 2H HEX NUT		0.21	1.27
14	4	X-UB5258	5/8" X 2-5/8" X 4-1/2" X 2" U-BOLT (HDG.)		1.00	4.00
15	4	X-UB5300	5/8" X 3" X 5-1/4" X 2-1/2" U-BOLT (HDG.)		1.15	4.60
16	4	G5804	5/8" x 4" HDG HEX BOLT GR5		0.44	1.78
17	8	A582114	5/8" x 2-1/4" HDG A325 HEX BOLT	2 1/4 in	0.31	2.50
18	10	G58FW	5/8" HDG USS FLATWASHER	1/8 in	0.07	0.70
19	44	G58LW	5/8" HDG LOCKWASHER		0.03	1.15
20	46	G58NUT	5/8" HDG HEAVY 2H HEX NUT		0.13	5.98
21	4	G12R-15	1/2" x 15" THREADED ROD (HDG.)		0.40	1.60
22	16	X-UB1212	1/2" X 2-1/2" X 4-1/2" X 2" U-BOLT (HDG.)		0.26	4.11
23	32	X-UB1300	1/2" X 3" X 5" X 2" GALV U-BOLT		0.74	23.64
24	8	G12045	1/2" x 4.5" HDG HEX BOLT GR5 FULL THREAD	4 1/2 in	0.30	2.38
25	88	G12FW	1/2" HDG USS FLATWASHER	3/32 in	0.03	3.00
26	80	G12LW	1/2" HDG LOCKWASHER	1/8 in	0.01	1.11
27	80	G12NUT	1/2" HDG HEAVY 2H HEX NUT		0.07	5.73
28	4	X-100064	CLAMP (4" V-CLAMP) GALVANIZED		0.91	3.65
29	2	X-HDPMBP	HEAVY DUTY PIPE MOUNT BACKING PLATE	12 in	13.44	26.89
30	8	G58R-18	5/8" x 18" THREADED ROD (HDG.)	18 in	0.40	3.19
31	4	X-LLTB	ANGLE BRACKET FOR LLTB	16 1/2 in	7.06	28.25
					TOTAL WT. #	648.71



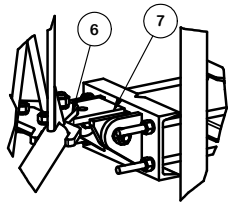
DETAIL A



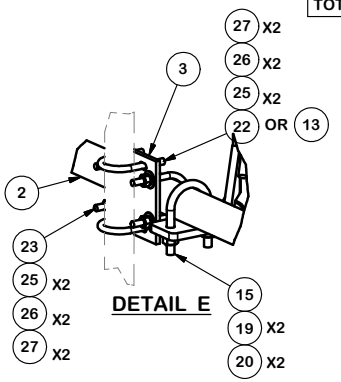
DETAIL B



DETAIL C



DETAIL D



DETAIL E

TOLERANCE NOTES

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

DESCRIPTION
12'-6" HEAVY DUTY
V-FRAME ASSEMBLY
WITH TWO STIFF ARMS

SITE PRO 1 — A valmont COMPANY

Engineering Support Team: 1-888-753-7446

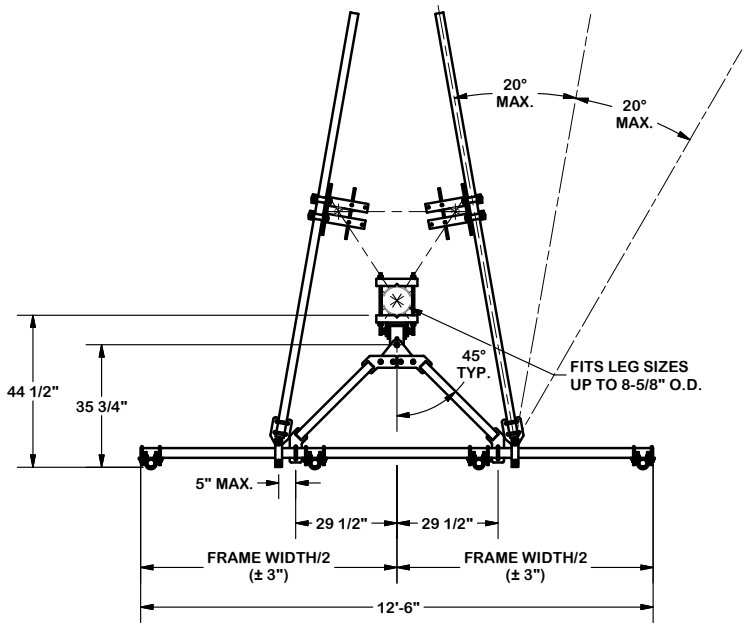
Locations:
New York, NY
Atlanta, GA
Los Angeles, CA
Plymouth, IN
Salem, OR
Dallas, TX

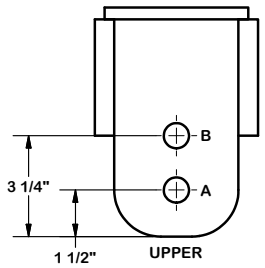
CPD NO.	DRAWN BY	ENG. APPROVAL	PART NO.
	CEK 6/1/2015		VFA12-HD

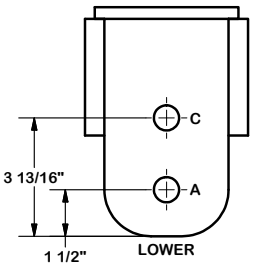
CLASS	SUB	DRAWING USAGE	CHECKED BY	DWG. NO.
81	02	CUSTOMER	BMC 2/2/2017	VFA12-HD

REVISION HISTORY

REV	DESCRIPTION OF REVISIONS	CPD	BY	DATE
A	CHANGED TIE-BACK FRONT CONNECTION		CEK	2/2/2017

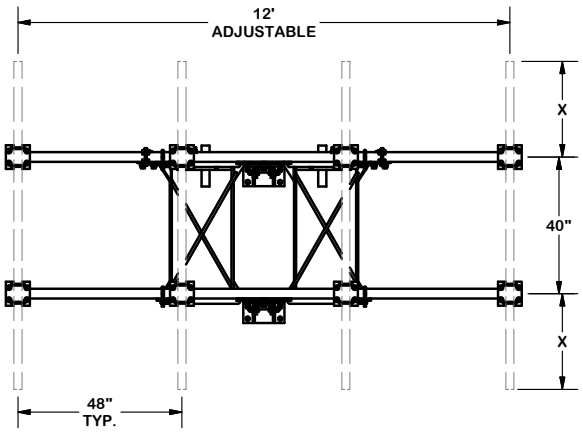




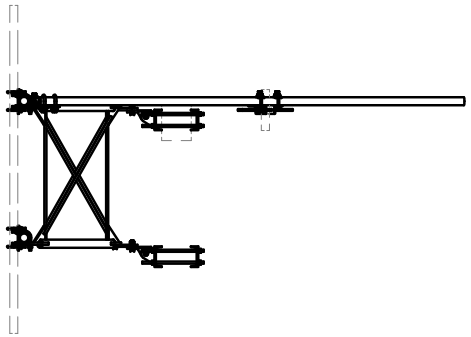


NOTES:

1. USE HOLE "A' IN UPPER AND LOWER BRACKETS FOR STRAIGHT LEGS.
2. USE HOLE "A" IN UPPER BRACKET AND HOLE "C" IN LOWER BRACKET FOR 2" IN 20' TAPER LEGS (3.309°)
3. USE HOLE "B" IN UPPER BRACKET AND HOLE "C" IN LOWER BRACKET FOR 6" IN 20' TAPER LEGS. (0.827°)



CENTER ANTENNA PIPE VERTICALLY ON V-FRAME FACE.



TOLERANCE NOTES

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

REV	DESCRIPTION OF REVISIONS	CPD	BY	DATE
A	CHANGED TIE-BACK FRONT CONNECTION		CEK	2/2/2017

REVISION HISTORY

DESCRIPTION
12'-6" HEAVY DUTY
V-FRAME ASSEMBLY
WITH TWO STIFF ARMS

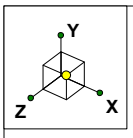
SITE PRO 1 — A valmont COMPANY

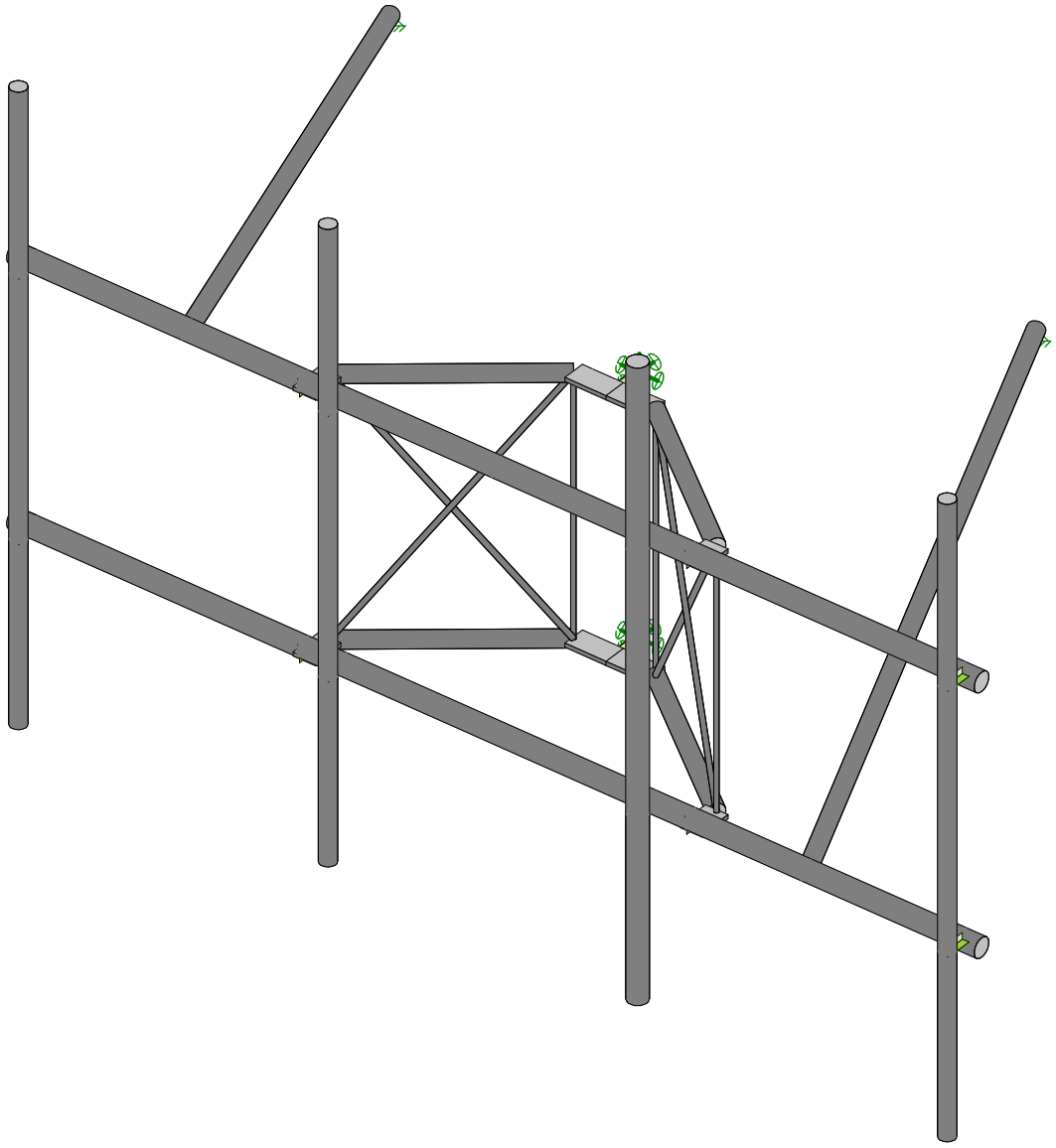
Engineering Support Team:
1-888-753-7446

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

CPD NO.	DRAWN BY	ENG. APPROVAL	PART NO.
	CEK 6/1/2015		VFA12-HD

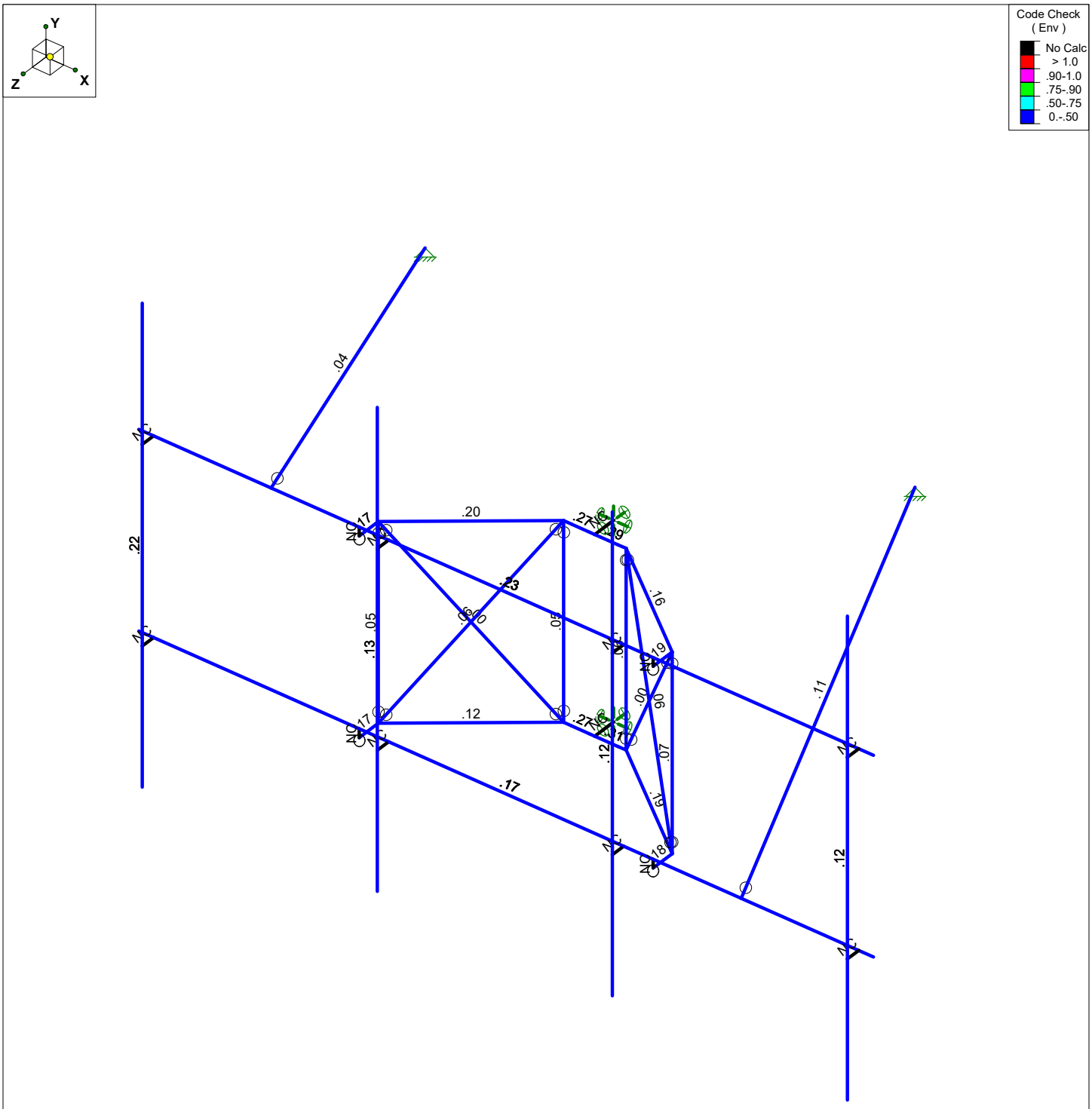
CLASS	SUB	DRAWING USAGE	CHECKED BY	DWG. NO.
81	02	CUSTOMER	BMC 2/2/2017	VFA12-HD





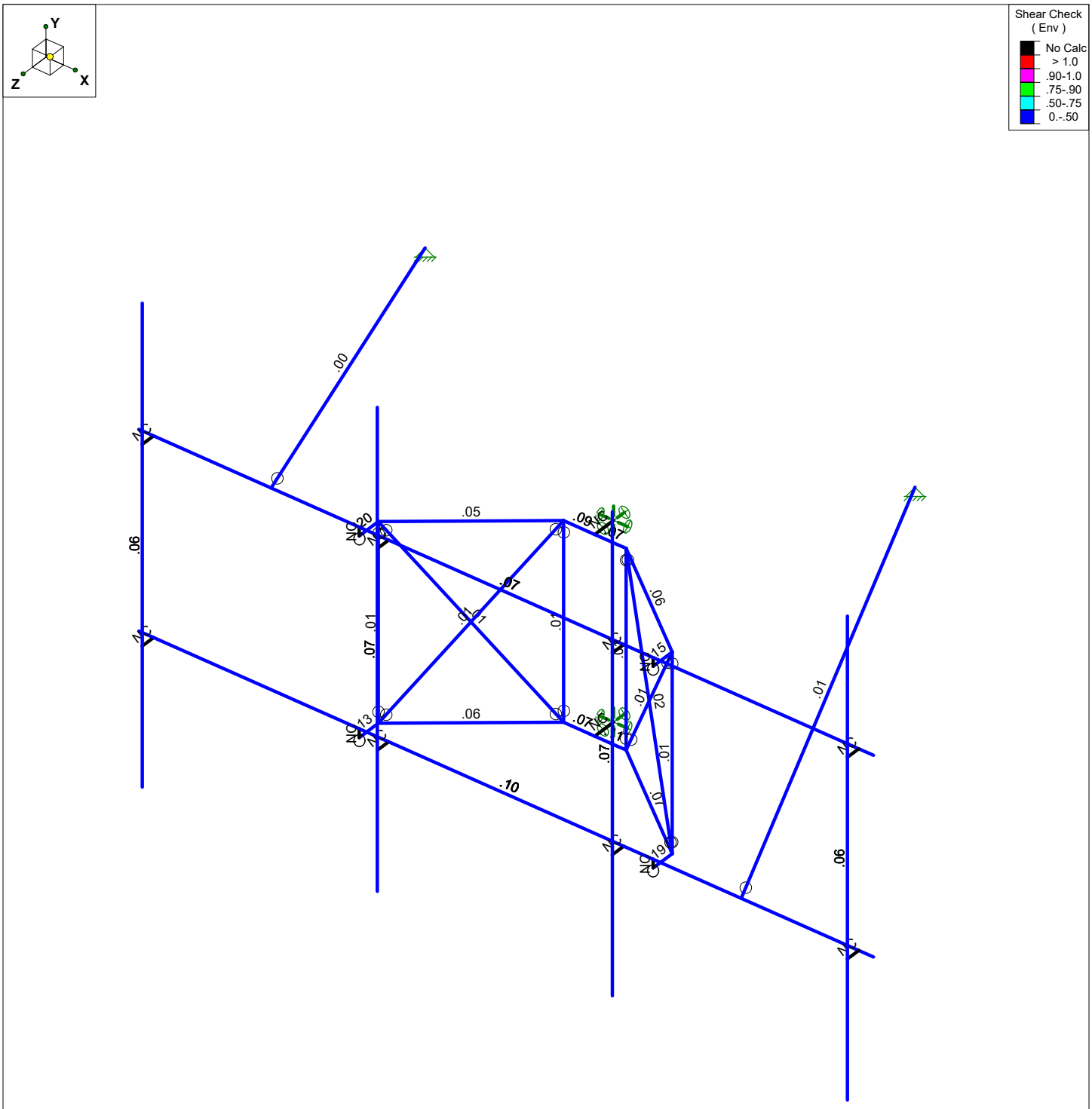
Envelope Only Solution

		SK - 1
		July 7, 2021 at 9:10 AM
		467676-VZW_MT_LOT_A_H.r3d



Member Code Checks Displayed (Enveloped)
Envelope Only Solution

		SK - 2
		July 7, 2021 at 9:11 AM
		467676-VZW_MT_LOT_A_H.r3d



Member Shear Checks Displayed (Enveloped)
Envelope Only Solution

		SK - 3
		July 7, 2021 at 9:11 AM
		467676-VZW_MT_LOT_A_H.r3d

Basic Load Cases

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

Basic Load Cases (Continued)

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(P...
57	Structure Wi (120 De...	None						56		
58	Structure Wi (150 De...	None						56		
59	Structure Wi (180 De...	None						56		
60	Structure Wi (210 De...	None						56		
61	Structure Wi (240 De...	None						56		
62	Structure Wi (270 De...	None						56		
63	Structure Wi (300 De...	None						56		
64	Structure Wi (330 De...	None						56		
65	Structure Wm (0 Deg)	None						56		
66	Structure Wm (30 De...	None						56		
67	Structure Wm (60 De...	None						56		
68	Structure Wm (90 De...	None						56		
69	Structure Wm (120 D...	None						56		
70	Structure Wm (150 D...	None						56		
71	Structure Wm (180 D...	None						56		
72	Structure Wm (210 D...	None						56		
73	Structure Wm (240 D...	None						56		
74	Structure Wm (270 D...	None						56		
75	Structure Wm (300 D...	None						56		
76	Structure Wm (330 D...	None						56		
77	Lm1	None					1			
78	Lm2	None					1			
79	Lv1	None					1			
80	Lv2	None					1			

Load Combinations

	Description	Solve	P...	SR...	BLC	Fact...	BLC	Fact...	BLC	Fact...	BLC	Fact...	BLC	Fact...	BLC	Fact...	BLC	Fact...	BLC	Fact...	BLC	Fact...	BLC	Fact...
1	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	3	1	41	1												
2	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	4	1	42	1												
3	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	5	1	43	1												
4	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	6	1	44	1												
5	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	7	1	45	1												
6	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	8	1	46	1												
7	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	9	1	47	1												
8	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	10	1	48	1												
9	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	11	1	49	1												
10	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	12	1	50	1												
11	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	13	1	51	1												
12	1.2D+1.0...	Yes	Y		1	1.2	39	1.2	14	1	52	1												
13	1.2D + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	15	1	53	1								
14	1.2D + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	16	1	54	1								
15	1.2D + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	17	1	55	1								
16	1.2D + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	18	1	56	1								
17	1.2D + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	19	1	57	1								
18	1.2D + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	20	1	58	1								
19	1.2D + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	21	1	59	1								
20	1.2D + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	22	1	60	1								
21	1.2D + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	23	1	61	1								
22	1.2D + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	24	1	62	1								
23	1.2D + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	25	1	63	1								
24	1.2D + 1.0...	Yes	Y		1	1.2	39	1.2	2	1	40	1	26	1	64	1								
25	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	77	1.5	27	1	65	1										
26	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	77	1.5	28	1	66	1										
27	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	77	1.5	29	1	67	1										
28	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	77	1.5	30	1	68	1										

Load Combinations (Continued)

	Description	Solve	P...	SR..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact..	BLC	Fact...
29	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	77	1.5	31	1	69	1										
30	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	77	1.5	32	1	70	1										
31	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	77	1.5	33	1	71	1										
32	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	77	1.5	34	1	72	1										
33	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	77	1.5	35	1	73	1										
34	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	77	1.5	36	1	74	1										
35	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	77	1.5	37	1	75	1										
36	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	77	1.5	38	1	76	1										
37	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	78	1.5	27	1	65	1										
38	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	78	1.5	28	1	66	1										
39	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	78	1.5	29	1	67	1										
40	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	78	1.5	30	1	68	1										
41	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	78	1.5	31	1	69	1										
42	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	78	1.5	32	1	70	1										
43	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	78	1.5	33	1	71	1										
44	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	78	1.5	34	1	72	1										
45	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	78	1.5	35	1	73	1										
46	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	78	1.5	36	1	74	1										
47	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	78	1.5	37	1	75	1										
48	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	78	1.5	38	1	76	1										
49	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	79	1.5														
50	1.2D + 1.5...	Yes	Y		1	1.2	39	1.2	80	1.5														
51	1.4D	Yes	Y		1	1.4	39	1.4																

Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	N1	3.416667	0.145833	8.083333	0	
2	N2	-9.083333	0.145833	8.083333	0	
3	N3	3.416667	3.479167	8.083333	0	
4	N4	-9.083333	3.479167	8.083333	0	
5	N5	-8.833333	0.145833	8.083333	0	
6	N6	-8.833333	3.479167	8.083333	0	
7	N7	-4.833333	0.145833	8.083333	0	
8	N8	-4.833333	3.479167	8.083333	0	
9	N9	-0.833333	0.145833	8.083333	0	
10	N10	-0.833333	3.479167	8.083333	0	
11	N11	3.166667	0.145833	8.083333	0	
12	N12	3.166667	3.479167	8.083333	0	
13	N13	-8.833333	0.145833	8.333333	0	
14	N14	-8.833333	3.479167	8.333333	0	
15	N15	-4.833333	0.145833	8.333333	0	
16	N16	-4.833333	3.479167	8.333333	0	
17	N17	-0.833333	0.145833	8.333333	0	
18	N18	-0.833333	3.479167	8.333333	0	
19	N19	3.166667	0.145833	8.333333	0	
20	N20	3.166667	3.479167	8.333333	0	
21	N21	-5.333333	0	8.083333	0	
22	N22	-5.333333	3.333333	8.083333	0	
23	N23	-0.333333	0	8.083333	0	
24	N24	-0.333333	3.333333	8.083333	0	
25	N25	-5.333333	0	7.661458	0	
26	N26	-5.333333	3.333333	7.661458	0	
27	N27	-0.333333	0	7.661458	0	
28	N28	-0.333333	3.333333	7.661458	0	
29	N29	-2.833333	0	6.119792	0	

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
30	N30	-2.833333	3.333333	6.119792	0	
31	N31	-3.364583	0	6.119792	0	
32	N32	-3.364583	3.333333	6.119792	0	
33	N33	-2.302083	0	6.119792	0	
34	N34	-2.302083	3.333333	6.119792	0	
35	N35	-2.833333	0	5.703125	0	
36	N36	-2.833333	3.333333	5.703125	0	
37	N39	-8.833333	5.8125	8.333333	0	
38	N40	-4.833333	5.8125	8.333333	0	
39	N41	-0.833333	5.8125	8.333333	0	
40	N42	3.166667	5.8125	8.333333	0	
41	N43	-8.833333	-2.1875	8.333333	0	
42	N44	-4.833333	-2.1875	8.333333	0	
43	N45	-0.833333	-2.1875	8.333333	0	
44	N46	3.166667	-2.1875	8.333333	0	
45	N58	-5.333333	3.333333	7.708333	0	
46	N76	-2.927083	0	6.119792	0	
47	N77	-3.229167	0	6.119792	0	
48	N78	-2.739583	0	6.119792	0	
49	N79	-2.4375	0	6.119792	0	
50	N80	-2.927083	3.333333	6.119792	0	
51	N81	-3.229167	3.333333	6.119792	0	
52	N82	-2.739583	3.333333	6.119792	0	
53	N83	-2.4375	3.333333	6.119792	0	
54	N58A	-2.833333	3.479167	8.083333	0	
55	N59	-5.333333	0.145833	8.083333	0	
56	N60	-5.333333	3.479167	8.083333	0	
57	N61	-0.333333	0.145833	8.083333	0	
58	N62	-0.333333	3.479167	8.083333	0	
59	N59A	-6.833333	3.479167	8.083333	0	
60	N60A	1.166667	0.145833	8.083333	0	
61	N61A	-5.833333	3.479167	2.083333	0	
62	N62A	0.166667	3.479167	2.083333	0	
63	N63	-8.606836	3.479166	2.369792	0	
64	N64	-2.833333	0.145833	-0.963542	0	

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design L...	Material	Design ...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Antenna Pipe	PIPE_2.0	Beam	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
2	Horizontal mount pipe	PIPE_2.5	Beam	Pipe	Q235	Typical	1.61	1.45	1.45	2.89
3	Standoff Horizontal	PIPE_2.0	Beam	Pipe	Q235	Typical	1.02	.627	.627	1.25
4	Standoff Diagonal	SR_0.75	Beam	BAR	Q235	Typical	.442	.016	.016	.031
5	Tieback	PIPE_2.0	Beam	Pipe	Q235	Typical	1.02	.627	.627	1.25
6	Standoff Vertical	SR_0.625_HRA_...	Beam	BAR	Q235	Typical	.307	.007	.007	.015
7	Standoff Plate	PL5/8X3.5	Beam	BAR	Q235	Typical	2.188	.071	2.233	.253
8	tower pipe	PIPE_3.0	Column	Pipe	A53 Gr. B	Typical	2.07	2.85	2.85	5.69

Hot Rolled Steel Design Parameters

	Label	Shape	Length[ft]	Lbyy[ft]	Lbzz[ft]	Lcomp top[ft]	Lcomp bot[ft]	L-torqu...	Kyy	Kzz	Cb	Function
1	M1	Horizontal ...	12.5			Lbyy						Lateral
2	M2	Horizontal ...	12.5			Lbyy						Lateral
3	M13	Standoff Pla...	.422									Lateral
4	M14	Standoff Pla...	.422									Lateral
5	M15	Standoff Pla...	.422									Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length[ft]	Lbyy[ft]	Lbzz[ft]	Lcomp top[ft]	Lcomp bot[ft]	L-torqu...	Kyy	Kzz	Cb	Function
6	M16	Standoff Pla...	.422									Lateral
7	M17	Standoff Ho...	2.501			Lbyy			.65	.65		Lateral
8	M18	Standoff Ho...	2.501			Lbyy			.65	.65		Lateral
9	M19	Standoff Ho...	2.501			Lbyy			.65	.65		Lateral
10	M20	Standoff Ho...	2.501			Lbyy			.65	.65		Lateral
11	M21	Standoff Pla...	.531	.292								Lateral
12	M22	Standoff Pla...	.531	.292								Lateral
13	M23	Standoff Pla...	.531	.292								Lateral
14	M24	Standoff Pla...	.531	.292								Lateral
15	M25	Standoff Di...	4.167			Lbyy			.7	.7		Lateral
16	M26	Standoff Di...	4.167			Lbyy			.7	.7		Lateral
17	M27	Standoff Di...	4.167			Lbyy			.7	.7		Lateral
18	M28	Standoff Di...	4.167			Lbyy			.7	.7		Lateral
19	MP4A	Antenna Pipe	8			Lbyy						Lateral
20	MP3A	Antenna Pipe	8			Lbyy						Lateral
21	MP2A	PIPE_2.5	8			Lbyy						Lateral
22	MP1A	Antenna Pipe	8			Lbyy						Lateral
23	M44	Standoff Ve...	3.333			Lbyy			.7	.7		Lateral
24	M45	Standoff Ve...	3.333			Lbyy			.7	.7		Lateral
25	M46	Standoff Ve...	3.333			Lbyy			.7	.7		Lateral
26	M47	Standoff Ve...	3.333			Lbyy			.7	.7		Lateral
27	M43	Tieback	5.982			Lbyy						Lateral
28	M44A	Tieback	9.892			Lbyy						Lateral

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	M1	N2	N1			Horizontal mou...	Beam	Pipe	Q235	Typical
2	M2	N4	N3			Horizontal mou...	Beam	Pipe	Q235	Typical
3	M3	N5	N13			RIGID	None	None	RIGID	Typical
4	M4	N6	N14			RIGID	None	None	RIGID	Typical
5	M5	N8	N16			RIGID	None	None	RIGID	Typical
6	M6	N7	N15			RIGID	None	None	RIGID	Typical
7	M9	N10	N18			RIGID	None	None	RIGID	Typical
8	M10	N9	N17			RIGID	None	None	RIGID	Typical
9	M11	N12	N20			RIGID	None	None	RIGID	Typical
10	M12	N11	N19			RIGID	None	None	RIGID	Typical
11	M13	N22	N26		90	Standoff Plate	Beam	BAR	Q235	Typical
12	M14	N21	N25		90	Standoff Plate	Beam	BAR	Q235	Typical
13	M15	N23	N27		90	Standoff Plate	Beam	BAR	Q235	Typical
14	M16	N24	N28		90	Standoff Plate	Beam	BAR	Q235	Typical
15	M17	N26	N32			Standoff Horiz...	Beam	Pipe	Q235	Typical
16	M18	N25	N31			Standoff Horiz...	Beam	Pipe	Q235	Typical
17	M19	N27	N33			Standoff Horiz...	Beam	Pipe	Q235	Typical
18	M20	N28	N34			Standoff Horiz...	Beam	Pipe	Q235	Typical
19	M21	N32	N30		90	Standoff Plate	Beam	BAR	Q235	Typical
20	M22	N34	N30		90	Standoff Plate	Beam	BAR	Q235	Typical
21	M23	N31	N29		90	Standoff Plate	Beam	BAR	Q235	Typical
22	M24	N33	N29		90	Standoff Plate	Beam	BAR	Q235	Typical
23	M25	N31	N26			Standoff Diago...	Beam	BAR	Q235	Typical
24	M26	N32	N25			Standoff Diago...	Beam	BAR	Q235	Typical
25	M27	N33	N28			Standoff Diago...	Beam	BAR	Q235	Typical
26	M28	N27	N34			Standoff Diago...	Beam	BAR	Q235	Typical
27	M29	N29	N35			RIGID	None	None	RIGID	Typical
28	M30	N30	N36			RIGID	None	None	RIGID	Typical
29	MP4A	N39	N43			Antenna Pipe	Beam	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
30	MP3A	N40	N44			Antenna Pipe	Beam	Pipe	A53 Gr. B	Typical
31	MP2A	N41	N45			PIPE 2.5	Beam	Pipe	A53 Gr. B	Typical
32	MP1A	N42	N46			Antenna Pipe	Beam	Pipe	A53 Gr. B	Typical
33	M44	N25	N26			Standoff Vertical	Beam	BAR	Q235	Typical
34	M45	N31	N32			Standoff Vertical	Beam	BAR	Q235	Typical
35	M46	N33	N34			Standoff Vertical	Beam	BAR	Q235	Typical
36	M47	N27	N28			Standoff Vertical	Beam	BAR	Q235	Typical
37	M47B	N22	N60			RIGID	None	None	RIGID	Typical
38	M48A	N21	N59			RIGID	None	None	RIGID	Typical
39	M49A	N24	N62			RIGID	None	None	RIGID	Typical
40	M50A	N23	N61			RIGID	None	None	RIGID	Typical
41	M51A	N30	N36			RIGID	None	None	RIGID	Typical
42	M52A	N29	N35			RIGID	None	None	RIGID	Typical
43	M43	N59A	N63			Tieback	Beam	Pipe	Q235	Typical
44	M44A	N60A	N64			Tieback	Beam	Pipe	Q235	Typical

Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
1	M1						Yes				None
2	M2						Yes				None
3	M3						Yes	** NA **			None
4	M4						Yes	** NA **			None
5	M5						Yes	** NA **			None
6	M6						Yes	** NA **			None
7	M9						Yes	** NA **			None
8	M10						Yes	** NA **			None
9	M11						Yes	** NA **			None
10	M12						Yes	** NA **			None
11	M13						Yes	Default			None
12	M14						Yes	Default			None
13	M15						Yes				None
14	M16						Yes				None
15	M17						Yes	Default			None
16	M18						Yes				None
17	M19						Yes				None
18	M20						Yes	Default			None
19	M21						Yes	Default			None
20	M22						Yes				None
21	M23						Yes				None
22	M24						Yes				None
23	M25	BenPIN	BenPIN			Euler Buc...	Yes	Default			None
24	M26	BenPIN	BenPIN			Euler Buc...	Yes	Default			None
25	M27	BenPIN	BenPIN			Euler Buc...	Yes				None
26	M28	BenPIN	BenPIN			Euler Buc...	Yes				None
27	M29						Yes	** NA **		Inactive	None
28	M30						Yes	** NA **		Inactive	None
29	MP4A						Yes				None
30	MP3A						Yes				None
31	MP2A						Yes				None
32	MP1A						Yes				None
33	M44	BenPIN	BenPIN				Yes				None
34	M45	BenPIN	BenPIN				Yes				None
35	M46	BenPIN	BenPIN				Yes				None
36	M47	BenPIN	BenPIN				Yes	Default			None
37	M47B		OOOXOO				Yes	** NA **			None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
38	M48A		OOOXOO				Yes	** NA **			None
39	M49A		OOOXOO				Yes	** NA **			None
40	M50A		OOOXOO				Yes	** NA **			None
41	M51A						Yes	** NA **			None
42	M52A						Yes	** NA **			None
43	M43	BenPIN					Yes	Default			None
44	M44A	BenPIN					Yes	Default			None

Member Point Loads (BLC 1 : Antenna D)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	Y	-31.65	1.5
2	MP2A	My	-.016	1.5
3	MP2A	Mz	.021	1.5
4	MP2A	Y	-31.65	6.5
5	MP2A	My	-.016	6.5
6	MP2A	Mz	.021	6.5
7	MP2A	Y	-31.65	1.5
8	MP2A	My	-.016	1.5
9	MP2A	Mz	-.021	1.5
10	MP2A	Y	-31.65	6.5
11	MP2A	My	-.016	6.5
12	MP2A	Mz	-.021	6.5
13	MP3A	Y	-43.55	3
14	MP3A	My	-.022	3
15	MP3A	Mz	0	3
16	MP3A	Y	-43.55	5
17	MP3A	My	-.022	5
18	MP3A	Mz	0	5
19	MP2A	Y	-10.4	1.5
20	MP2A	My	.005	1.5
21	MP2A	Mz	0	1.5
22	MP3A	Y	-84.4	4
23	MP3A	My	.042	4
24	MP3A	Mz	0	4
25	MP2A	Y	-70.3	4
26	MP2A	My	.035	4
27	MP2A	Mz	0	4
28	MP1A	Y	-6	3
29	MP1A	My	-.003	3
30	MP1A	Mz	0	3
31	MP1A	Y	-6	5
32	MP1A	My	-.003	5
33	MP1A	Mz	0	5
34	MP4A	Y	-6	3
35	MP4A	My	-.003	3
36	MP4A	Mz	0	3
37	MP4A	Y	-6	5
38	MP4A	My	-.003	5
39	MP4A	Mz	0	5

Member Point Loads (BLC 2 : Antenna Di)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	Y	-71.778	1.5
2	MP2A	My	-.036	1.5
3	MP2A	Mz	.048	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
4	MP2A	Y	-71.778	6.5
5	MP2A	My	-.036	6.5
6	MP2A	Mz	.048	6.5
7	MP2A	Y	-71.778	1.5
8	MP2A	My	-.036	1.5
9	MP2A	Mz	-.048	1.5
10	MP2A	Y	-71.778	6.5
11	MP2A	My	-.036	6.5
12	MP2A	Mz	-.048	6.5
13	MP3A	Y	-36.563	3
14	MP3A	My	-.018	3
15	MP3A	Mz	0	3
16	MP3A	Y	-36.563	5
17	MP3A	My	-.018	5
18	MP3A	Mz	0	5
19	MP2A	Y	-11.067	1.5
20	MP2A	My	.006	1.5
21	MP2A	Mz	0	1.5
22	MP3A	Y	-46.115	4
23	MP3A	My	.023	4
24	MP3A	Mz	0	4
25	MP2A	Y	-41.48	4
26	MP2A	My	.021	4
27	MP2A	Mz	0	4
28	MP1A	Y	-42.095	3
29	MP1A	My	-.021	3
30	MP1A	Mz	0	3
31	MP1A	Y	-42.095	5
32	MP1A	My	-.021	5
33	MP1A	Mz	0	5
34	MP4A	Y	-42.095	3
35	MP4A	My	-.021	3
36	MP4A	Mz	0	3
37	MP4A	Y	-42.095	5
38	MP4A	My	-.021	5
39	MP4A	Mz	0	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	1.5
2	MP2A	Z	-186.338	1.5
3	MP2A	Mx	-.124	1.5
4	MP2A	X	0	6.5
5	MP2A	Z	-186.338	6.5
6	MP2A	Mx	-.124	6.5
7	MP2A	X	0	1.5
8	MP2A	Z	-186.338	1.5
9	MP2A	Mx	.124	1.5
10	MP2A	X	0	6.5
11	MP2A	Z	-186.338	6.5
12	MP2A	Mx	.124	6.5
13	MP3A	X	0	3
14	MP3A	Z	-96.135	3
15	MP3A	Mx	0	3
16	MP3A	X	0	5
17	MP3A	Z	-96.135	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
18	MP3A	Mx	0	5
19	MP2A	X	0	1.5
20	MP2A	Z	-15.136	1.5
21	MP2A	Mx	0	1.5
22	MP3A	X	0	4
23	MP3A	Z	-76.499	4
24	MP3A	Mx	0	4
25	MP2A	X	0	4
26	MP2A	Z	-76.499	4
27	MP2A	Mx	0	4
28	MP1A	X	0	3
29	MP1A	Z	-88.567	3
30	MP1A	Mx	0	3
31	MP1A	X	0	5
32	MP1A	Z	-88.567	5
33	MP1A	Mx	0	5
34	MP4A	X	0	3
35	MP4A	Z	-88.567	3
36	MP4A	Mx	0	3
37	MP4A	X	0	5
38	MP4A	Z	-88.567	5
39	MP4A	Mx	0	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	85.175	1.5
2	MP2A	Z	-147.527	1.5
3	MP2A	Mx	-.141	1.5
4	MP2A	X	85.175	6.5
5	MP2A	Z	-147.527	6.5
6	MP2A	Mx	-.141	6.5
7	MP2A	X	85.175	1.5
8	MP2A	Z	-147.527	1.5
9	MP2A	Mx	.056	1.5
10	MP2A	X	85.175	6.5
11	MP2A	Z	-147.527	6.5
12	MP2A	Mx	.056	6.5
13	MP3A	X	40.755	3
14	MP3A	Z	-70.59	3
15	MP3A	Mx	-.02	3
16	MP3A	X	40.755	5
17	MP3A	Z	-70.59	5
18	MP3A	Mx	-.02	5
19	MP2A	X	6.985	1.5
20	MP2A	Z	-12.099	1.5
21	MP2A	Mx	.003	1.5
22	MP3A	X	35.079	4
23	MP3A	Z	-60.759	4
24	MP3A	Mx	.018	4
25	MP2A	X	33.865	4
26	MP2A	Z	-58.655	4
27	MP2A	Mx	.017	4
28	MP1A	X	42.919	3
29	MP1A	Z	-74.338	3
30	MP1A	Mx	-.021	3
31	MP1A	X	42.919	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
32	MP1A	Z	-74.338	5
33	MP1A	Mx	-.021	5
34	MP4A	X	42.919	3
35	MP4A	Z	-74.338	3
36	MP4A	Mx	-.021	3
37	MP4A	X	42.919	5
38	MP4A	Z	-74.338	5
39	MP4A	Mx	-.021	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	119.835	1.5
2	MP2A	Z	-69.187	1.5
3	MP2A	Mx	-.106	1.5
4	MP2A	X	119.835	6.5
5	MP2A	Z	-69.187	6.5
6	MP2A	Mx	-.106	6.5
7	MP2A	X	119.835	1.5
8	MP2A	Z	-69.187	1.5
9	MP2A	Mx	-.014	1.5
10	MP2A	X	119.835	6.5
11	MP2A	Z	-69.187	6.5
12	MP2A	Mx	-.014	6.5
13	MP3A	X	45.26	3
14	MP3A	Z	-26.131	3
15	MP3A	Mx	-.023	3
16	MP3A	X	45.26	5
17	MP3A	Z	-26.131	5
18	MP3A	Mx	-.023	5
19	MP2A	X	10.079	1.5
20	MP2A	Z	-5.819	1.5
21	MP2A	Mx	.005	1.5
22	MP3A	X	49.776	4
23	MP3A	Z	-28.738	4
24	MP3A	Mx	.025	4
25	MP2A	X	43.466	4
26	MP2A	Z	-25.095	4
27	MP2A	Mx	.022	4
28	MP1A	X	69.611	3
29	MP1A	Z	-40.19	3
30	MP1A	Mx	-.035	3
31	MP1A	X	69.611	5
32	MP1A	Z	-40.19	5
33	MP1A	Mx	-.035	5
34	MP4A	X	69.611	3
35	MP4A	Z	-40.19	3
36	MP4A	Mx	-.035	3
37	MP4A	X	69.611	5
38	MP4A	Z	-40.19	5
39	MP4A	Mx	-.035	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	122.385	1.5
2	MP2A	Z	0	1.5
3	MP2A	Mx	-.061	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
4	MP2A	X	122.385	6.5
5	MP2A	Z	0	6.5
6	MP2A	Mx	-.061	6.5
7	MP2A	X	122.385	1.5
8	MP2A	Z	0	1.5
9	MP2A	Mx	-.061	1.5
10	MP2A	X	122.385	6.5
11	MP2A	Z	0	6.5
12	MP2A	Mx	-.061	6.5
13	MP3A	X	37.637	3
14	MP3A	Z	0	3
15	MP3A	Mx	-.019	3
16	MP3A	X	37.637	5
17	MP3A	Z	0	5
18	MP3A	Mx	-.019	5
19	MP2A	X	10.473	1.5
20	MP2A	Z	0	1.5
21	MP2A	Mx	.005	1.5
22	MP3A	X	51.136	4
23	MP3A	Z	0	4
24	MP3A	Mx	.026	4
25	MP2A	X	41.42	4
26	MP2A	Z	0	4
27	MP2A	Mx	.021	4
28	MP1A	X	77.65	3
29	MP1A	Z	0	3
30	MP1A	Mx	-.039	3
31	MP1A	X	77.65	5
32	MP1A	Z	0	5
33	MP1A	Mx	-.039	5
34	MP4A	X	77.65	3
35	MP4A	Z	0	3
36	MP4A	Mx	-.039	3
37	MP4A	X	77.65	5
38	MP4A	Z	0	5
39	MP4A	Mx	-.039	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	119.835	1.5
2	MP2A	Z	69.187	1.5
3	MP2A	Mx	-.014	1.5
4	MP2A	X	119.835	6.5
5	MP2A	Z	69.187	6.5
6	MP2A	Mx	-.014	6.5
7	MP2A	X	119.835	1.5
8	MP2A	Z	69.187	1.5
9	MP2A	Mx	-.106	1.5
10	MP2A	X	119.835	6.5
11	MP2A	Z	69.187	6.5
12	MP2A	Mx	-.106	6.5
13	MP3A	X	45.26	3
14	MP3A	Z	26.131	3
15	MP3A	Mx	-.023	3
16	MP3A	X	45.26	5
17	MP3A	Z	26.131	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
18	MP3A	Mx	-.023	5
19	MP2A	X	10.079	1.5
20	MP2A	Z	5.819	1.5
21	MP2A	Mx	.005	1.5
22	MP3A	X	49.776	4
23	MP3A	Z	28.738	4
24	MP3A	Mx	.025	4
25	MP2A	X	43.466	4
26	MP2A	Z	25.095	4
27	MP2A	Mx	.022	4
28	MP1A	X	69.611	3
29	MP1A	Z	40.19	3
30	MP1A	Mx	-.035	3
31	MP1A	X	69.611	5
32	MP1A	Z	40.19	5
33	MP1A	Mx	-.035	5
34	MP4A	X	69.611	3
35	MP4A	Z	40.19	3
36	MP4A	Mx	-.035	3
37	MP4A	X	69.611	5
38	MP4A	Z	40.19	5
39	MP4A	Mx	-.035	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	85.175	1.5
2	MP2A	Z	147.527	1.5
3	MP2A	Mx	.056	1.5
4	MP2A	X	85.175	6.5
5	MP2A	Z	147.527	6.5
6	MP2A	Mx	.056	6.5
7	MP2A	X	85.175	1.5
8	MP2A	Z	147.527	1.5
9	MP2A	Mx	-.141	1.5
10	MP2A	X	85.175	6.5
11	MP2A	Z	147.527	6.5
12	MP2A	Mx	-.141	6.5
13	MP3A	X	40.755	3
14	MP3A	Z	70.59	3
15	MP3A	Mx	-.02	3
16	MP3A	X	40.755	5
17	MP3A	Z	70.59	5
18	MP3A	Mx	-.02	5
19	MP2A	X	6.985	1.5
20	MP2A	Z	12.099	1.5
21	MP2A	Mx	.003	1.5
22	MP3A	X	35.079	4
23	MP3A	Z	60.759	4
24	MP3A	Mx	.018	4
25	MP2A	X	33.865	4
26	MP2A	Z	58.655	4
27	MP2A	Mx	.017	4
28	MP1A	X	42.919	3
29	MP1A	Z	74.338	3
30	MP1A	Mx	-.021	3
31	MP1A	X	42.919	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
32	MP1A	Z	74.338	5
33	MP1A	Mx	-.021	5
34	MP4A	X	42.919	3
35	MP4A	Z	74.338	3
36	MP4A	Mx	-.021	3
37	MP4A	X	42.919	5
38	MP4A	Z	74.338	5
39	MP4A	Mx	-.021	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	1.5
2	MP2A	Z	186.338	1.5
3	MP2A	Mx	.124	1.5
4	MP2A	X	0	6.5
5	MP2A	Z	186.338	6.5
6	MP2A	Mx	.124	6.5
7	MP2A	X	0	1.5
8	MP2A	Z	186.338	1.5
9	MP2A	Mx	-.124	1.5
10	MP2A	X	0	6.5
11	MP2A	Z	186.338	6.5
12	MP2A	Mx	-.124	6.5
13	MP3A	X	0	3
14	MP3A	Z	96.135	3
15	MP3A	Mx	0	3
16	MP3A	X	0	5
17	MP3A	Z	96.135	5
18	MP3A	Mx	0	5
19	MP2A	X	0	1.5
20	MP2A	Z	15.136	1.5
21	MP2A	Mx	0	1.5
22	MP3A	X	0	4
23	MP3A	Z	76.499	4
24	MP3A	Mx	0	4
25	MP2A	X	0	4
26	MP2A	Z	76.499	4
27	MP2A	Mx	0	4
28	MP1A	X	0	3
29	MP1A	Z	88.567	3
30	MP1A	Mx	0	3
31	MP1A	X	0	5
32	MP1A	Z	88.567	5
33	MP1A	Mx	0	5
34	MP4A	X	0	3
35	MP4A	Z	88.567	3
36	MP4A	Mx	0	3
37	MP4A	X	0	5
38	MP4A	Z	88.567	5
39	MP4A	Mx	0	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-85.175	1.5
2	MP2A	Z	147.527	1.5
3	MP2A	Mx	.141	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
4	MP2A	X	-85.175	6.5
5	MP2A	Z	147.527	6.5
6	MP2A	Mx	.141	6.5
7	MP2A	X	-85.175	1.5
8	MP2A	Z	147.527	1.5
9	MP2A	Mx	-.056	1.5
10	MP2A	X	-85.175	6.5
11	MP2A	Z	147.527	6.5
12	MP2A	Mx	-.056	6.5
13	MP3A	X	-40.755	3
14	MP3A	Z	70.59	3
15	MP3A	Mx	.02	3
16	MP3A	X	-40.755	5
17	MP3A	Z	70.59	5
18	MP3A	Mx	.02	5
19	MP2A	X	-6.985	1.5
20	MP2A	Z	12.099	1.5
21	MP2A	Mx	-.003	1.5
22	MP3A	X	-35.079	4
23	MP3A	Z	60.759	4
24	MP3A	Mx	-.018	4
25	MP2A	X	-33.865	4
26	MP2A	Z	58.655	4
27	MP2A	Mx	-.017	4
28	MP1A	X	-42.919	3
29	MP1A	Z	74.338	3
30	MP1A	Mx	.021	3
31	MP1A	X	-42.919	5
32	MP1A	Z	74.338	5
33	MP1A	Mx	.021	5
34	MP4A	X	-42.919	3
35	MP4A	Z	74.338	3
36	MP4A	Mx	.021	3
37	MP4A	X	-42.919	5
38	MP4A	Z	74.338	5
39	MP4A	Mx	.021	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-119.835	1.5
2	MP2A	Z	69.187	1.5
3	MP2A	Mx	.106	1.5
4	MP2A	X	-119.835	6.5
5	MP2A	Z	69.187	6.5
6	MP2A	Mx	.106	6.5
7	MP2A	X	-119.835	1.5
8	MP2A	Z	69.187	1.5
9	MP2A	Mx	.014	1.5
10	MP2A	X	-119.835	6.5
11	MP2A	Z	69.187	6.5
12	MP2A	Mx	.014	6.5
13	MP3A	X	-45.26	3
14	MP3A	Z	26.131	3
15	MP3A	Mx	.023	3
16	MP3A	X	-45.26	5
17	MP3A	Z	26.131	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
18	MP3A	Mx	.023	5
19	MP2A	X	-10.079	1.5
20	MP2A	Z	5.819	1.5
21	MP2A	Mx	-.005	1.5
22	MP3A	X	-49.776	4
23	MP3A	Z	28.738	4
24	MP3A	Mx	-.025	4
25	MP2A	X	-43.466	4
26	MP2A	Z	25.095	4
27	MP2A	Mx	-.022	4
28	MP1A	X	-69.611	3
29	MP1A	Z	40.19	3
30	MP1A	Mx	.035	3
31	MP1A	X	-69.611	5
32	MP1A	Z	40.19	5
33	MP1A	Mx	.035	5
34	MP4A	X	-69.611	3
35	MP4A	Z	40.19	3
36	MP4A	Mx	.035	3
37	MP4A	X	-69.611	5
38	MP4A	Z	40.19	5
39	MP4A	Mx	.035	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-122.385	1.5
2	MP2A	Z	0	1.5
3	MP2A	Mx	.061	1.5
4	MP2A	X	-122.385	6.5
5	MP2A	Z	0	6.5
6	MP2A	Mx	.061	6.5
7	MP2A	X	-122.385	1.5
8	MP2A	Z	0	1.5
9	MP2A	Mx	.061	1.5
10	MP2A	X	-122.385	6.5
11	MP2A	Z	0	6.5
12	MP2A	Mx	.061	6.5
13	MP3A	X	-37.637	3
14	MP3A	Z	0	3
15	MP3A	Mx	.019	3
16	MP3A	X	-37.637	5
17	MP3A	Z	0	5
18	MP3A	Mx	.019	5
19	MP2A	X	-10.473	1.5
20	MP2A	Z	0	1.5
21	MP2A	Mx	-.005	1.5
22	MP3A	X	-51.136	4
23	MP3A	Z	0	4
24	MP3A	Mx	-.026	4
25	MP2A	X	-41.42	4
26	MP2A	Z	0	4
27	MP2A	Mx	-.021	4
28	MP1A	X	-77.65	3
29	MP1A	Z	0	3
30	MP1A	Mx	.039	3
31	MP1A	X	-77.65	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
32	MP1A	Z	0	5
33	MP1A	Mx	.039	5
34	MP4A	X	-77.65	3
35	MP4A	Z	0	3
36	MP4A	Mx	.039	3
37	MP4A	X	-77.65	5
38	MP4A	Z	0	5
39	MP4A	Mx	.039	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-119.835	1.5
2	MP2A	Z	-69.187	1.5
3	MP2A	Mx	.014	1.5
4	MP2A	X	-119.835	6.5
5	MP2A	Z	-69.187	6.5
6	MP2A	Mx	.014	6.5
7	MP2A	X	-119.835	1.5
8	MP2A	Z	-69.187	1.5
9	MP2A	Mx	.106	1.5
10	MP2A	X	-119.835	6.5
11	MP2A	Z	-69.187	6.5
12	MP2A	Mx	.106	6.5
13	MP3A	X	-45.26	3
14	MP3A	Z	-26.131	3
15	MP3A	Mx	.023	3
16	MP3A	X	-45.26	5
17	MP3A	Z	-26.131	5
18	MP3A	Mx	.023	5
19	MP2A	X	-10.079	1.5
20	MP2A	Z	-5.819	1.5
21	MP2A	Mx	-.005	1.5
22	MP3A	X	-49.776	4
23	MP3A	Z	-28.738	4
24	MP3A	Mx	-.025	4
25	MP2A	X	-43.466	4
26	MP2A	Z	-25.095	4
27	MP2A	Mx	-.022	4
28	MP1A	X	-69.611	3
29	MP1A	Z	-40.19	3
30	MP1A	Mx	.035	3
31	MP1A	X	-69.611	5
32	MP1A	Z	-40.19	5
33	MP1A	Mx	.035	5
34	MP4A	X	-69.611	3
35	MP4A	Z	-40.19	3
36	MP4A	Mx	.035	3
37	MP4A	X	-69.611	5
38	MP4A	Z	-40.19	5
39	MP4A	Mx	.035	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-85.175	1.5
2	MP2A	Z	-147.527	1.5
3	MP2A	Mx	-.056	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
4	MP2A	X	-85.175	6.5
5	MP2A	Z	-147.527	6.5
6	MP2A	Mx	-.056	6.5
7	MP2A	X	-85.175	1.5
8	MP2A	Z	-147.527	1.5
9	MP2A	Mx	.141	1.5
10	MP2A	X	-85.175	6.5
11	MP2A	Z	-147.527	6.5
12	MP2A	Mx	.141	6.5
13	MP3A	X	-40.755	3
14	MP3A	Z	-70.59	3
15	MP3A	Mx	.02	3
16	MP3A	X	-40.755	5
17	MP3A	Z	-70.59	5
18	MP3A	Mx	.02	5
19	MP2A	X	-6.985	1.5
20	MP2A	Z	-12.099	1.5
21	MP2A	Mx	-.003	1.5
22	MP3A	X	-35.079	4
23	MP3A	Z	-60.759	4
24	MP3A	Mx	-.018	4
25	MP2A	X	-33.865	4
26	MP2A	Z	-58.655	4
27	MP2A	Mx	-.017	4
28	MP1A	X	-42.919	3
29	MP1A	Z	-74.338	3
30	MP1A	Mx	.021	3
31	MP1A	X	-42.919	5
32	MP1A	Z	-74.338	5
33	MP1A	Mx	.021	5
34	MP4A	X	-42.919	3
35	MP4A	Z	-74.338	3
36	MP4A	Mx	.021	3
37	MP4A	X	-42.919	5
38	MP4A	Z	-74.338	5
39	MP4A	Mx	.021	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	1.5
2	MP2A	Z	-38.019	1.5
3	MP2A	Mx	-.025	1.5
4	MP2A	X	0	6.5
5	MP2A	Z	-38.019	6.5
6	MP2A	Mx	-.025	6.5
7	MP2A	X	0	1.5
8	MP2A	Z	-38.019	1.5
9	MP2A	Mx	.025	1.5
10	MP2A	X	0	6.5
11	MP2A	Z	-38.019	6.5
12	MP2A	Mx	.025	6.5
13	MP3A	X	0	3
14	MP3A	Z	-20.234	3
15	MP3A	Mx	0	3
16	MP3A	X	0	5
17	MP3A	Z	-20.234	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
18	MP3A	Mx	0	5
19	MP2A	X	0	1.5
20	MP2A	Z	-4.164	1.5
21	MP2A	Mx	0	1.5
22	MP3A	X	0	4
23	MP3A	Z	-17.076	4
24	MP3A	Mx	0	4
25	MP2A	X	0	4
26	MP2A	Z	-17.076	4
27	MP2A	Mx	0	4
28	MP1A	X	0	3
29	MP1A	Z	-18.854	3
30	MP1A	Mx	0	3
31	MP1A	X	0	5
32	MP1A	Z	-18.854	5
33	MP1A	Mx	0	5
34	MP4A	X	0	3
35	MP4A	Z	-18.854	3
36	MP4A	Mx	0	3
37	MP4A	X	0	5
38	MP4A	Z	-18.854	5
39	MP4A	Mx	0	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	17.502	1.5
2	MP2A	Z	-30.314	1.5
3	MP2A	Mx	-.029	1.5
4	MP2A	X	17.502	6.5
5	MP2A	Z	-30.314	6.5
6	MP2A	Mx	-.029	6.5
7	MP2A	X	17.502	1.5
8	MP2A	Z	-30.314	1.5
9	MP2A	Mx	.011	1.5
10	MP2A	X	17.502	6.5
11	MP2A	Z	-30.314	6.5
12	MP2A	Mx	.011	6.5
13	MP3A	X	8.667	3
14	MP3A	Z	-15.013	3
15	MP3A	Mx	-.004	3
16	MP3A	X	8.667	5
17	MP3A	Z	-15.013	5
18	MP3A	Mx	-.004	5
19	MP2A	X	1.953	1.5
20	MP2A	Z	-3.383	1.5
21	MP2A	Mx	.000976	1.5
22	MP3A	X	7.89	4
23	MP3A	Z	-13.666	4
24	MP3A	Mx	.004	4
25	MP2A	X	7.643	4
26	MP2A	Z	-13.239	4
27	MP2A	Mx	.004	4
28	MP1A	X	9.156	3
29	MP1A	Z	-15.859	3
30	MP1A	Mx	-.005	3
31	MP1A	X	9.156	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
32	MP1A	Z	-15.859	5
33	MP1A	Mx	-.005	5
34	MP4A	X	9.156	3
35	MP4A	Z	-15.859	3
36	MP4A	Mx	-.005	3
37	MP4A	X	9.156	5
38	MP4A	Z	-15.859	5
39	MP4A	Mx	-.005	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	25.091	1.5
2	MP2A	Z	-14.487	1.5
3	MP2A	Mx	-.022	1.5
4	MP2A	X	25.091	6.5
5	MP2A	Z	-14.487	6.5
6	MP2A	Mx	-.022	6.5
7	MP2A	X	25.091	1.5
8	MP2A	Z	-14.487	1.5
9	MP2A	Mx	-.003	1.5
10	MP2A	X	25.091	6.5
11	MP2A	Z	-14.487	6.5
12	MP2A	Mx	-.003	6.5
13	MP3A	X	9.991	3
14	MP3A	Z	-5.768	3
15	MP3A	Mx	-.005	3
16	MP3A	X	9.991	5
17	MP3A	Z	-5.768	5
18	MP3A	Mx	-.005	5
19	MP2A	X	2.935	1.5
20	MP2A	Z	-1.694	1.5
21	MP2A	Mx	.001	1.5
22	MP3A	X	11.42	4
23	MP3A	Z	-6.593	4
24	MP3A	Mx	.006	4
25	MP2A	X	10.139	4
26	MP2A	Z	-5.854	4
27	MP2A	Mx	.005	4
28	MP1A	X	14.92	3
29	MP1A	Z	-8.614	3
30	MP1A	Mx	-.007	3
31	MP1A	X	14.92	5
32	MP1A	Z	-8.614	5
33	MP1A	Mx	-.007	5
34	MP4A	X	14.92	3
35	MP4A	Z	-8.614	3
36	MP4A	Mx	-.007	3
37	MP4A	X	14.92	5
38	MP4A	Z	-8.614	5
39	MP4A	Mx	-.007	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	25.958	1.5
2	MP2A	Z	0	1.5
3	MP2A	Mx	-.013	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
4	MP2A	X	25.958	6.5
5	MP2A	Z	0	6.5
6	MP2A	Mx	-.013	6.5
7	MP2A	X	25.958	1.5
8	MP2A	Z	0	1.5
9	MP2A	Mx	-.013	1.5
10	MP2A	X	25.958	6.5
11	MP2A	Z	0	6.5
12	MP2A	Mx	-.013	6.5
13	MP3A	X	8.637	3
14	MP3A	Z	0	3
15	MP3A	Mx	-.004	3
16	MP3A	X	8.637	5
17	MP3A	Z	0	5
18	MP3A	Mx	-.004	5
19	MP2A	X	3.13	1.5
20	MP2A	Z	0	1.5
21	MP2A	Mx	.002	1.5
22	MP3A	X	11.89	4
23	MP3A	Z	0	4
24	MP3A	Mx	.006	4
25	MP2A	X	9.919	4
26	MP2A	Z	0	4
27	MP2A	Mx	.005	4
28	MP1A	X	16.687	3
29	MP1A	Z	0	3
30	MP1A	Mx	-.008	3
31	MP1A	X	16.687	5
32	MP1A	Z	0	5
33	MP1A	Mx	-.008	5
34	MP4A	X	16.687	3
35	MP4A	Z	0	3
36	MP4A	Mx	-.008	3
37	MP4A	X	16.687	5
38	MP4A	Z	0	5
39	MP4A	Mx	-.008	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	25.091	1.5
2	MP2A	Z	14.487	1.5
3	MP2A	Mx	-.003	1.5
4	MP2A	X	25.091	6.5
5	MP2A	Z	14.487	6.5
6	MP2A	Mx	-.003	6.5
7	MP2A	X	25.091	1.5
8	MP2A	Z	14.487	1.5
9	MP2A	Mx	-.022	1.5
10	MP2A	X	25.091	6.5
11	MP2A	Z	14.487	6.5
12	MP2A	Mx	-.022	6.5
13	MP3A	X	9.991	3
14	MP3A	Z	5.768	3
15	MP3A	Mx	-.005	3
16	MP3A	X	9.991	5
17	MP3A	Z	5.768	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
18	MP3A	Mx	-.005	5
19	MP2A	X	2.935	1.5
20	MP2A	Z	1.694	1.5
21	MP2A	Mx	.001	1.5
22	MP3A	X	11.42	4
23	MP3A	Z	6.593	4
24	MP3A	Mx	.006	4
25	MP2A	X	10.139	4
26	MP2A	Z	5.854	4
27	MP2A	Mx	.005	4
28	MP1A	X	14.92	3
29	MP1A	Z	8.614	3
30	MP1A	Mx	-.007	3
31	MP1A	X	14.92	5
32	MP1A	Z	8.614	5
33	MP1A	Mx	-.007	5
34	MP4A	X	14.92	3
35	MP4A	Z	8.614	3
36	MP4A	Mx	-.007	3
37	MP4A	X	14.92	5
38	MP4A	Z	8.614	5
39	MP4A	Mx	-.007	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	17.502	1.5
2	MP2A	Z	30.314	1.5
3	MP2A	Mx	.011	1.5
4	MP2A	X	17.502	6.5
5	MP2A	Z	30.314	6.5
6	MP2A	Mx	.011	6.5
7	MP2A	X	17.502	1.5
8	MP2A	Z	30.314	1.5
9	MP2A	Mx	-.029	1.5
10	MP2A	X	17.502	6.5
11	MP2A	Z	30.314	6.5
12	MP2A	Mx	-.029	6.5
13	MP3A	X	8.667	3
14	MP3A	Z	15.013	3
15	MP3A	Mx	-.004	3
16	MP3A	X	8.667	5
17	MP3A	Z	15.013	5
18	MP3A	Mx	-.004	5
19	MP2A	X	1.953	1.5
20	MP2A	Z	3.383	1.5
21	MP2A	Mx	.000976	1.5
22	MP3A	X	7.89	4
23	MP3A	Z	13.666	4
24	MP3A	Mx	.004	4
25	MP2A	X	7.643	4
26	MP2A	Z	13.239	4
27	MP2A	Mx	.004	4
28	MP1A	X	9.156	3
29	MP1A	Z	15.859	3
30	MP1A	Mx	-.005	3
31	MP1A	X	9.156	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
32	MP1A	Z	15.859	5
33	MP1A	Mx	-.005	5
34	MP4A	X	9.156	3
35	MP4A	Z	15.859	3
36	MP4A	Mx	-.005	3
37	MP4A	X	9.156	5
38	MP4A	Z	15.859	5
39	MP4A	Mx	-.005	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	1.5
2	MP2A	Z	38.019	1.5
3	MP2A	Mx	.025	1.5
4	MP2A	X	0	6.5
5	MP2A	Z	38.019	6.5
6	MP2A	Mx	.025	6.5
7	MP2A	X	0	1.5
8	MP2A	Z	38.019	1.5
9	MP2A	Mx	-.025	1.5
10	MP2A	X	0	6.5
11	MP2A	Z	38.019	6.5
12	MP2A	Mx	-.025	6.5
13	MP3A	X	0	3
14	MP3A	Z	20.234	3
15	MP3A	Mx	0	3
16	MP3A	X	0	5
17	MP3A	Z	20.234	5
18	MP3A	Mx	0	5
19	MP2A	X	0	1.5
20	MP2A	Z	4.164	1.5
21	MP2A	Mx	0	1.5
22	MP3A	X	0	4
23	MP3A	Z	17.076	4
24	MP3A	Mx	0	4
25	MP2A	X	0	4
26	MP2A	Z	17.076	4
27	MP2A	Mx	0	4
28	MP1A	X	0	3
29	MP1A	Z	18.854	3
30	MP1A	Mx	0	3
31	MP1A	X	0	5
32	MP1A	Z	18.854	5
33	MP1A	Mx	0	5
34	MP4A	X	0	3
35	MP4A	Z	18.854	3
36	MP4A	Mx	0	3
37	MP4A	X	0	5
38	MP4A	Z	18.854	5
39	MP4A	Mx	0	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-17.502	1.5
2	MP2A	Z	30.314	1.5
3	MP2A	Mx	.029	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
4	MP2A	X	-17.502	6.5
5	MP2A	Z	30.314	6.5
6	MP2A	Mx	.029	6.5
7	MP2A	X	-17.502	1.5
8	MP2A	Z	30.314	1.5
9	MP2A	Mx	-.011	1.5
10	MP2A	X	-17.502	6.5
11	MP2A	Z	30.314	6.5
12	MP2A	Mx	-.011	6.5
13	MP3A	X	-8.667	3
14	MP3A	Z	15.013	3
15	MP3A	Mx	.004	3
16	MP3A	X	-8.667	5
17	MP3A	Z	15.013	5
18	MP3A	Mx	.004	5
19	MP2A	X	-1.953	1.5
20	MP2A	Z	3.383	1.5
21	MP2A	Mx	-.000976	1.5
22	MP3A	X	-7.89	4
23	MP3A	Z	13.666	4
24	MP3A	Mx	-.004	4
25	MP2A	X	-7.643	4
26	MP2A	Z	13.239	4
27	MP2A	Mx	-.004	4
28	MP1A	X	-9.156	3
29	MP1A	Z	15.859	3
30	MP1A	Mx	.005	3
31	MP1A	X	-9.156	5
32	MP1A	Z	15.859	5
33	MP1A	Mx	.005	5
34	MP4A	X	-9.156	3
35	MP4A	Z	15.859	3
36	MP4A	Mx	.005	3
37	MP4A	X	-9.156	5
38	MP4A	Z	15.859	5
39	MP4A	Mx	.005	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-25.091	1.5
2	MP2A	Z	14.487	1.5
3	MP2A	Mx	.022	1.5
4	MP2A	X	-25.091	6.5
5	MP2A	Z	14.487	6.5
6	MP2A	Mx	.022	6.5
7	MP2A	X	-25.091	1.5
8	MP2A	Z	14.487	1.5
9	MP2A	Mx	.003	1.5
10	MP2A	X	-25.091	6.5
11	MP2A	Z	14.487	6.5
12	MP2A	Mx	.003	6.5
13	MP3A	X	-9.991	3
14	MP3A	Z	5.768	3
15	MP3A	Mx	.005	3
16	MP3A	X	-9.991	5
17	MP3A	Z	5.768	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
18	MP3A	Mx	.005	5
19	MP2A	X	-2.935	1.5
20	MP2A	Z	1.694	1.5
21	MP2A	Mx	-.001	1.5
22	MP3A	X	-11.42	4
23	MP3A	Z	6.593	4
24	MP3A	Mx	-.006	4
25	MP2A	X	-10.139	4
26	MP2A	Z	5.854	4
27	MP2A	Mx	-.005	4
28	MP1A	X	-14.92	3
29	MP1A	Z	8.614	3
30	MP1A	Mx	.007	3
31	MP1A	X	-14.92	5
32	MP1A	Z	8.614	5
33	MP1A	Mx	.007	5
34	MP4A	X	-14.92	3
35	MP4A	Z	8.614	3
36	MP4A	Mx	.007	3
37	MP4A	X	-14.92	5
38	MP4A	Z	8.614	5
39	MP4A	Mx	.007	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-25.958	1.5
2	MP2A	Z	0	1.5
3	MP2A	Mx	.013	1.5
4	MP2A	X	-25.958	6.5
5	MP2A	Z	0	6.5
6	MP2A	Mx	.013	6.5
7	MP2A	X	-25.958	1.5
8	MP2A	Z	0	1.5
9	MP2A	Mx	.013	1.5
10	MP2A	X	-25.958	6.5
11	MP2A	Z	0	6.5
12	MP2A	Mx	.013	6.5
13	MP3A	X	-8.637	3
14	MP3A	Z	0	3
15	MP3A	Mx	.004	3
16	MP3A	X	-8.637	5
17	MP3A	Z	0	5
18	MP3A	Mx	.004	5
19	MP2A	X	-3.13	1.5
20	MP2A	Z	0	1.5
21	MP2A	Mx	-.002	1.5
22	MP3A	X	-11.89	4
23	MP3A	Z	0	4
24	MP3A	Mx	-.006	4
25	MP2A	X	-9.919	4
26	MP2A	Z	0	4
27	MP2A	Mx	-.005	4
28	MP1A	X	-16.687	3
29	MP1A	Z	0	3
30	MP1A	Mx	.008	3
31	MP1A	X	-16.687	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
32	MP1A	Z	0	5
33	MP1A	Mx	.008	5
34	MP4A	X	-16.687	3
35	MP4A	Z	0	3
36	MP4A	Mx	.008	3
37	MP4A	X	-16.687	5
38	MP4A	Z	0	5
39	MP4A	Mx	.008	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-25.091	1.5
2	MP2A	Z	-14.487	1.5
3	MP2A	Mx	.003	1.5
4	MP2A	X	-25.091	6.5
5	MP2A	Z	-14.487	6.5
6	MP2A	Mx	.003	6.5
7	MP2A	X	-25.091	1.5
8	MP2A	Z	-14.487	1.5
9	MP2A	Mx	.022	1.5
10	MP2A	X	-25.091	6.5
11	MP2A	Z	-14.487	6.5
12	MP2A	Mx	.022	6.5
13	MP3A	X	-9.991	3
14	MP3A	Z	-5.768	3
15	MP3A	Mx	.005	3
16	MP3A	X	-9.991	5
17	MP3A	Z	-5.768	5
18	MP3A	Mx	.005	5
19	MP2A	X	-2.935	1.5
20	MP2A	Z	-1.694	1.5
21	MP2A	Mx	-.001	1.5
22	MP3A	X	-11.42	4
23	MP3A	Z	-6.593	4
24	MP3A	Mx	-.006	4
25	MP2A	X	-10.139	4
26	MP2A	Z	-5.854	4
27	MP2A	Mx	-.005	4
28	MP1A	X	-14.92	3
29	MP1A	Z	-8.614	3
30	MP1A	Mx	.007	3
31	MP1A	X	-14.92	5
32	MP1A	Z	-8.614	5
33	MP1A	Mx	.007	5
34	MP4A	X	-14.92	3
35	MP4A	Z	-8.614	3
36	MP4A	Mx	.007	3
37	MP4A	X	-14.92	5
38	MP4A	Z	-8.614	5
39	MP4A	Mx	.007	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-17.502	1.5
2	MP2A	Z	-30.314	1.5
3	MP2A	Mx	-.011	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
4	MP2A	X	-17.502	6.5
5	MP2A	Z	-30.314	6.5
6	MP2A	Mx	-.011	6.5
7	MP2A	X	-17.502	1.5
8	MP2A	Z	-30.314	1.5
9	MP2A	Mx	.029	1.5
10	MP2A	X	-17.502	6.5
11	MP2A	Z	-30.314	6.5
12	MP2A	Mx	.029	6.5
13	MP3A	X	-8.667	3
14	MP3A	Z	-15.013	3
15	MP3A	Mx	.004	3
16	MP3A	X	-8.667	5
17	MP3A	Z	-15.013	5
18	MP3A	Mx	.004	5
19	MP2A	X	-1.953	1.5
20	MP2A	Z	-3.383	1.5
21	MP2A	Mx	-.000976	1.5
22	MP3A	X	-7.89	4
23	MP3A	Z	-13.666	4
24	MP3A	Mx	-.004	4
25	MP2A	X	-7.643	4
26	MP2A	Z	-13.239	4
27	MP2A	Mx	-.004	4
28	MP1A	X	-9.156	3
29	MP1A	Z	-15.859	3
30	MP1A	Mx	.005	3
31	MP1A	X	-9.156	5
32	MP1A	Z	-15.859	5
33	MP1A	Mx	.005	5
34	MP4A	X	-9.156	3
35	MP4A	Z	-15.859	3
36	MP4A	Mx	.005	3
37	MP4A	X	-9.156	5
38	MP4A	Z	-15.859	5
39	MP4A	Mx	.005	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	1.5
2	MP2A	Z	-12.463	1.5
3	MP2A	Mx	-.008	1.5
4	MP2A	X	0	6.5
5	MP2A	Z	-12.463	6.5
6	MP2A	Mx	-.008	6.5
7	MP2A	X	0	1.5
8	MP2A	Z	-12.463	1.5
9	MP2A	Mx	.008	1.5
10	MP2A	X	0	6.5
11	MP2A	Z	-12.463	6.5
12	MP2A	Mx	.008	6.5
13	MP3A	X	0	3
14	MP3A	Z	-6.43	3
15	MP3A	Mx	0	3
16	MP3A	X	0	5
17	MP3A	Z	-6.43	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
18	MP3A	Mx	0	5
19	MP2A	X	0	1.5
20	MP2A	Z	-1.012	1.5
21	MP2A	Mx	0	1.5
22	MP3A	X	0	4
23	MP3A	Z	-5.117	4
24	MP3A	Mx	0	4
25	MP2A	X	0	4
26	MP2A	Z	-5.117	4
27	MP2A	Mx	0	4
28	MP1A	X	0	3
29	MP1A	Z	-5.924	3
30	MP1A	Mx	0	3
31	MP1A	X	0	5
32	MP1A	Z	-5.924	5
33	MP1A	Mx	0	5
34	MP4A	X	0	3
35	MP4A	Z	-5.924	3
36	MP4A	Mx	0	3
37	MP4A	X	0	5
38	MP4A	Z	-5.924	5
39	MP4A	Mx	0	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	5.697	1.5
2	MP2A	Z	-9.867	1.5
3	MP2A	Mx	-.009	1.5
4	MP2A	X	5.697	6.5
5	MP2A	Z	-9.867	6.5
6	MP2A	Mx	-.009	6.5
7	MP2A	X	5.697	1.5
8	MP2A	Z	-9.867	1.5
9	MP2A	Mx	.004	1.5
10	MP2A	X	5.697	6.5
11	MP2A	Z	-9.867	6.5
12	MP2A	Mx	.004	6.5
13	MP3A	X	2.726	3
14	MP3A	Z	-4.721	3
15	MP3A	Mx	-.001	3
16	MP3A	X	2.726	5
17	MP3A	Z	-4.721	5
18	MP3A	Mx	-.001	5
19	MP2A	X	.467	1.5
20	MP2A	Z	-.809	1.5
21	MP2A	Mx	.000234	1.5
22	MP3A	X	2.346	4
23	MP3A	Z	-4.064	4
24	MP3A	Mx	.001	4
25	MP2A	X	2.265	4
26	MP2A	Z	-3.923	4
27	MP2A	Mx	.001	4
28	MP1A	X	2.871	3
29	MP1A	Z	-4.972	3
30	MP1A	Mx	-.001	3
31	MP1A	X	2.871	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
32	MP1A	Z	-4.972	5
33	MP1A	Mx	-.001	5
34	MP4A	X	2.871	3
35	MP4A	Z	-4.972	3
36	MP4A	Mx	-.001	3
37	MP4A	X	2.871	5
38	MP4A	Z	-4.972	5
39	MP4A	Mx	-.001	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	8.015	1.5
2	MP2A	Z	-4.628	1.5
3	MP2A	Mx	-.007	1.5
4	MP2A	X	8.015	6.5
5	MP2A	Z	-4.628	6.5
6	MP2A	Mx	-.007	6.5
7	MP2A	X	8.015	1.5
8	MP2A	Z	-4.628	1.5
9	MP2A	Mx	-.000922	1.5
10	MP2A	X	8.015	6.5
11	MP2A	Z	-4.628	6.5
12	MP2A	Mx	-.000922	6.5
13	MP3A	X	3.027	3
14	MP3A	Z	-1.748	3
15	MP3A	Mx	-.002	3
16	MP3A	X	3.027	5
17	MP3A	Z	-1.748	5
18	MP3A	Mx	-.002	5
19	MP2A	X	.674	1.5
20	MP2A	Z	-.389	1.5
21	MP2A	Mx	.000337	1.5
22	MP3A	X	3.329	4
23	MP3A	Z	-1.922	4
24	MP3A	Mx	.002	4
25	MP2A	X	2.907	4
26	MP2A	Z	-1.678	4
27	MP2A	Mx	.001	4
28	MP1A	X	4.656	3
29	MP1A	Z	-2.688	3
30	MP1A	Mx	-.002	3
31	MP1A	X	4.656	5
32	MP1A	Z	-2.688	5
33	MP1A	Mx	-.002	5
34	MP4A	X	4.656	3
35	MP4A	Z	-2.688	3
36	MP4A	Mx	-.002	3
37	MP4A	X	4.656	5
38	MP4A	Z	-2.688	5
39	MP4A	Mx	-.002	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	8.186	1.5
2	MP2A	Z	0	1.5
3	MP2A	Mx	-.004	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
4	MP2A	X	8.186	6.5
5	MP2A	Z	0	6.5
6	MP2A	Mx	-.004	6.5
7	MP2A	X	8.186	1.5
8	MP2A	Z	0	1.5
9	MP2A	Mx	-.004	1.5
10	MP2A	X	8.186	6.5
11	MP2A	Z	0	6.5
12	MP2A	Mx	-.004	6.5
13	MP3A	X	2.517	3
14	MP3A	Z	0	3
15	MP3A	Mx	-.001	3
16	MP3A	X	2.517	5
17	MP3A	Z	0	5
18	MP3A	Mx	-.001	5
19	MP2A	X	.7	1.5
20	MP2A	Z	0	1.5
21	MP2A	Mx	.00035	1.5
22	MP3A	X	3.42	4
23	MP3A	Z	0	4
24	MP3A	Mx	.002	4
25	MP2A	X	2.77	4
26	MP2A	Z	0	4
27	MP2A	Mx	.001	4
28	MP1A	X	5.194	3
29	MP1A	Z	0	3
30	MP1A	Mx	-.003	3
31	MP1A	X	5.194	5
32	MP1A	Z	0	5
33	MP1A	Mx	-.003	5
34	MP4A	X	5.194	3
35	MP4A	Z	0	3
36	MP4A	Mx	-.003	3
37	MP4A	X	5.194	5
38	MP4A	Z	0	5
39	MP4A	Mx	-.003	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	8.015	1.5
2	MP2A	Z	4.628	1.5
3	MP2A	Mx	-.000922	1.5
4	MP2A	X	8.015	6.5
5	MP2A	Z	4.628	6.5
6	MP2A	Mx	-.000922	6.5
7	MP2A	X	8.015	1.5
8	MP2A	Z	4.628	1.5
9	MP2A	Mx	-.007	1.5
10	MP2A	X	8.015	6.5
11	MP2A	Z	4.628	6.5
12	MP2A	Mx	-.007	6.5
13	MP3A	X	3.027	3
14	MP3A	Z	1.748	3
15	MP3A	Mx	-.002	3
16	MP3A	X	3.027	5
17	MP3A	Z	1.748	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
18	MP3A	Mx	-.002	5
19	MP2A	X	.674	1.5
20	MP2A	Z	.389	1.5
21	MP2A	Mx	.000337	1.5
22	MP3A	X	3.329	4
23	MP3A	Z	1.922	4
24	MP3A	Mx	.002	4
25	MP2A	X	2.907	4
26	MP2A	Z	1.678	4
27	MP2A	Mx	.001	4
28	MP1A	X	4.656	3
29	MP1A	Z	2.688	3
30	MP1A	Mx	-.002	3
31	MP1A	X	4.656	5
32	MP1A	Z	2.688	5
33	MP1A	Mx	-.002	5
34	MP4A	X	4.656	3
35	MP4A	Z	2.688	3
36	MP4A	Mx	-.002	3
37	MP4A	X	4.656	5
38	MP4A	Z	2.688	5
39	MP4A	Mx	-.002	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	5.697	1.5
2	MP2A	Z	9.867	1.5
3	MP2A	Mx	.004	1.5
4	MP2A	X	5.697	6.5
5	MP2A	Z	9.867	6.5
6	MP2A	Mx	.004	6.5
7	MP2A	X	5.697	1.5
8	MP2A	Z	9.867	1.5
9	MP2A	Mx	-.009	1.5
10	MP2A	X	5.697	6.5
11	MP2A	Z	9.867	6.5
12	MP2A	Mx	-.009	6.5
13	MP3A	X	2.726	3
14	MP3A	Z	4.721	3
15	MP3A	Mx	-.001	3
16	MP3A	X	2.726	5
17	MP3A	Z	4.721	5
18	MP3A	Mx	-.001	5
19	MP2A	X	.467	1.5
20	MP2A	Z	.809	1.5
21	MP2A	Mx	.000234	1.5
22	MP3A	X	2.346	4
23	MP3A	Z	4.064	4
24	MP3A	Mx	.001	4
25	MP2A	X	2.265	4
26	MP2A	Z	3.923	4
27	MP2A	Mx	.001	4
28	MP1A	X	2.871	3
29	MP1A	Z	4.972	3
30	MP1A	Mx	-.001	3
31	MP1A	X	2.871	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
32	MP1A	Z	4.972	5
33	MP1A	Mx	-.001	5
34	MP4A	X	2.871	3
35	MP4A	Z	4.972	3
36	MP4A	Mx	-.001	3
37	MP4A	X	2.871	5
38	MP4A	Z	4.972	5
39	MP4A	Mx	-.001	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	1.5
2	MP2A	Z	12.463	1.5
3	MP2A	Mx	.008	1.5
4	MP2A	X	0	6.5
5	MP2A	Z	12.463	6.5
6	MP2A	Mx	.008	6.5
7	MP2A	X	0	1.5
8	MP2A	Z	12.463	1.5
9	MP2A	Mx	-.008	1.5
10	MP2A	X	0	6.5
11	MP2A	Z	12.463	6.5
12	MP2A	Mx	-.008	6.5
13	MP3A	X	0	3
14	MP3A	Z	6.43	3
15	MP3A	Mx	0	3
16	MP3A	X	0	5
17	MP3A	Z	6.43	5
18	MP3A	Mx	0	5
19	MP2A	X	0	1.5
20	MP2A	Z	1.012	1.5
21	MP2A	Mx	0	1.5
22	MP3A	X	0	4
23	MP3A	Z	5.117	4
24	MP3A	Mx	0	4
25	MP2A	X	0	4
26	MP2A	Z	5.117	4
27	MP2A	Mx	0	4
28	MP1A	X	0	3
29	MP1A	Z	5.924	3
30	MP1A	Mx	0	3
31	MP1A	X	0	5
32	MP1A	Z	5.924	5
33	MP1A	Mx	0	5
34	MP4A	X	0	3
35	MP4A	Z	5.924	3
36	MP4A	Mx	0	3
37	MP4A	X	0	5
38	MP4A	Z	5.924	5
39	MP4A	Mx	0	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-5.697	1.5
2	MP2A	Z	9.867	1.5
3	MP2A	Mx	.009	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
4	MP2A	X	-5.697	6.5
5	MP2A	Z	9.867	6.5
6	MP2A	Mx	.009	6.5
7	MP2A	X	-5.697	1.5
8	MP2A	Z	9.867	1.5
9	MP2A	Mx	-.004	1.5
10	MP2A	X	-5.697	6.5
11	MP2A	Z	9.867	6.5
12	MP2A	Mx	-.004	6.5
13	MP3A	X	-2.726	3
14	MP3A	Z	4.721	3
15	MP3A	Mx	.001	3
16	MP3A	X	-2.726	5
17	MP3A	Z	4.721	5
18	MP3A	Mx	.001	5
19	MP2A	X	-.467	1.5
20	MP2A	Z	.809	1.5
21	MP2A	Mx	-.000234	1.5
22	MP3A	X	-2.346	4
23	MP3A	Z	4.064	4
24	MP3A	Mx	-.001	4
25	MP2A	X	-2.265	4
26	MP2A	Z	3.923	4
27	MP2A	Mx	-.001	4
28	MP1A	X	-2.871	3
29	MP1A	Z	4.972	3
30	MP1A	Mx	.001	3
31	MP1A	X	-2.871	5
32	MP1A	Z	4.972	5
33	MP1A	Mx	.001	5
34	MP4A	X	-2.871	3
35	MP4A	Z	4.972	3
36	MP4A	Mx	.001	3
37	MP4A	X	-2.871	5
38	MP4A	Z	4.972	5
39	MP4A	Mx	.001	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-8.015	1.5
2	MP2A	Z	4.628	1.5
3	MP2A	Mx	.007	1.5
4	MP2A	X	-8.015	6.5
5	MP2A	Z	4.628	6.5
6	MP2A	Mx	.007	6.5
7	MP2A	X	-8.015	1.5
8	MP2A	Z	4.628	1.5
9	MP2A	Mx	.000922	1.5
10	MP2A	X	-8.015	6.5
11	MP2A	Z	4.628	6.5
12	MP2A	Mx	.000922	6.5
13	MP3A	X	-3.027	3
14	MP3A	Z	1.748	3
15	MP3A	Mx	.002	3
16	MP3A	X	-3.027	5
17	MP3A	Z	1.748	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
18	MP3A	Mx	.002	5
19	MP2A	X	-.674	1.5
20	MP2A	Z	.389	1.5
21	MP2A	Mx	-.000337	1.5
22	MP3A	X	-3.329	4
23	MP3A	Z	1.922	4
24	MP3A	Mx	-.002	4
25	MP2A	X	-2.907	4
26	MP2A	Z	1.678	4
27	MP2A	Mx	-.001	4
28	MP1A	X	-4.656	3
29	MP1A	Z	2.688	3
30	MP1A	Mx	.002	3
31	MP1A	X	-4.656	5
32	MP1A	Z	2.688	5
33	MP1A	Mx	.002	5
34	MP4A	X	-4.656	3
35	MP4A	Z	2.688	3
36	MP4A	Mx	.002	3
37	MP4A	X	-4.656	5
38	MP4A	Z	2.688	5
39	MP4A	Mx	.002	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-8.186	1.5
2	MP2A	Z	0	1.5
3	MP2A	Mx	.004	1.5
4	MP2A	X	-8.186	6.5
5	MP2A	Z	0	6.5
6	MP2A	Mx	.004	6.5
7	MP2A	X	-8.186	1.5
8	MP2A	Z	0	1.5
9	MP2A	Mx	.004	1.5
10	MP2A	X	-8.186	6.5
11	MP2A	Z	0	6.5
12	MP2A	Mx	.004	6.5
13	MP3A	X	-2.517	3
14	MP3A	Z	0	3
15	MP3A	Mx	.001	3
16	MP3A	X	-2.517	5
17	MP3A	Z	0	5
18	MP3A	Mx	.001	5
19	MP2A	X	-.7	1.5
20	MP2A	Z	0	1.5
21	MP2A	Mx	-.00035	1.5
22	MP3A	X	-3.42	4
23	MP3A	Z	0	4
24	MP3A	Mx	-.002	4
25	MP2A	X	-2.77	4
26	MP2A	Z	0	4
27	MP2A	Mx	-.001	4
28	MP1A	X	-5.194	3
29	MP1A	Z	0	3
30	MP1A	Mx	.003	3
31	MP1A	X	-5.194	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
32	MP1A	Z	0	5
33	MP1A	Mx	.003	5
34	MP4A	X	-5.194	3
35	MP4A	Z	0	3
36	MP4A	Mx	.003	3
37	MP4A	X	-5.194	5
38	MP4A	Z	0	5
39	MP4A	Mx	.003	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-8.015	1.5
2	MP2A	Z	-4.628	1.5
3	MP2A	Mx	.000922	1.5
4	MP2A	X	-8.015	6.5
5	MP2A	Z	-4.628	6.5
6	MP2A	Mx	.000922	6.5
7	MP2A	X	-8.015	1.5
8	MP2A	Z	-4.628	1.5
9	MP2A	Mx	.007	1.5
10	MP2A	X	-8.015	6.5
11	MP2A	Z	-4.628	6.5
12	MP2A	Mx	.007	6.5
13	MP3A	X	-3.027	3
14	MP3A	Z	-1.748	3
15	MP3A	Mx	.002	3
16	MP3A	X	-3.027	5
17	MP3A	Z	-1.748	5
18	MP3A	Mx	.002	5
19	MP2A	X	-.674	1.5
20	MP2A	Z	-.389	1.5
21	MP2A	Mx	-.000337	1.5
22	MP3A	X	-3.329	4
23	MP3A	Z	-1.922	4
24	MP3A	Mx	-.002	4
25	MP2A	X	-2.907	4
26	MP2A	Z	-1.678	4
27	MP2A	Mx	-.001	4
28	MP1A	X	-4.656	3
29	MP1A	Z	-2.688	3
30	MP1A	Mx	.002	3
31	MP1A	X	-4.656	5
32	MP1A	Z	-2.688	5
33	MP1A	Mx	.002	5
34	MP4A	X	-4.656	3
35	MP4A	Z	-2.688	3
36	MP4A	Mx	.002	3
37	MP4A	X	-4.656	5
38	MP4A	Z	-2.688	5
39	MP4A	Mx	.002	5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-5.697	1.5
2	MP2A	Z	-9.867	1.5
3	MP2A	Mx	-.004	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
4	MP2A	X	-5.697	6.5
5	MP2A	Z	-9.867	6.5
6	MP2A	Mx	-.004	6.5
7	MP2A	X	-5.697	1.5
8	MP2A	Z	-9.867	1.5
9	MP2A	Mx	.009	1.5
10	MP2A	X	-5.697	6.5
11	MP2A	Z	-9.867	6.5
12	MP2A	Mx	.009	6.5
13	MP3A	X	-2.726	3
14	MP3A	Z	-4.721	3
15	MP3A	Mx	.001	3
16	MP3A	X	-2.726	5
17	MP3A	Z	-4.721	5
18	MP3A	Mx	.001	5
19	MP2A	X	-.467	1.5
20	MP2A	Z	-.809	1.5
21	MP2A	Mx	-.000234	1.5
22	MP3A	X	-2.346	4
23	MP3A	Z	-4.064	4
24	MP3A	Mx	-.001	4
25	MP2A	X	-2.265	4
26	MP2A	Z	-3.923	4
27	MP2A	Mx	-.001	4
28	MP1A	X	-2.871	3
29	MP1A	Z	-4.972	3
30	MP1A	Mx	.001	3
31	MP1A	X	-2.871	5
32	MP1A	Z	-4.972	5
33	MP1A	Mx	.001	5
34	MP4A	X	-2.871	3
35	MP4A	Z	-4.972	3
36	MP4A	Mx	.001	3
37	MP4A	X	-2.871	5
38	MP4A	Z	-4.972	5
39	MP4A	Mx	.001	5

Member Point Loads (BLC 77 : Lm1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M10	Y	-500	0

Member Point Loads (BLC 78 : Lm2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M6	Y	-500	0

Member Point Loads (BLC 79 : Lv1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M1	Y	-250	0

Member Point Loads (BLC 80 : Lv2)

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

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	M1	Y	-5.856	-5.856	0	%100
2	M2	Y	-5.856	-5.856	0	%100
3	M13	Y	-6.838	-6.838	0	%100
4	M14	Y	-6.838	-6.838	0	%100
5	M15	Y	-6.838	-6.838	0	%100
6	M16	Y	-6.838	-6.838	0	%100
7	M17	Y	-5.134	-5.134	0	%100
8	M18	Y	-5.134	-5.134	0	%100
9	M19	Y	-5.134	-5.134	0	%100
10	M20	Y	-5.134	-5.134	0	%100
11	M21	Y	-6.838	-6.838	0	%100
12	M22	Y	-6.838	-6.838	0	%100
13	M23	Y	-6.838	-6.838	0	%100
14	M24	Y	-6.838	-6.838	0	%100
15	M25	Y	-2.788	-2.788	0	%100
16	M26	Y	-2.788	-2.788	0	%100
17	M27	Y	-2.788	-2.788	0	%100
18	M28	Y	-2.788	-2.788	0	%100
19	MP4A	Y	-5.134	-5.134	0	%100
20	MP3A	Y	-5.134	-5.134	0	%100
21	MP2A	Y	-5.856	-5.856	0	%100
22	MP1A	Y	-5.134	-5.134	0	%100
23	M44	Y	-2.608	-2.608	0	%100
24	M45	Y	-2.608	-2.608	0	%100
25	M46	Y	-2.608	-2.608	0	%100
26	M47	Y	-2.608	-2.608	0	%100
27	M43	Y	-5.134	-5.134	0	%100
28	M44A	Y	-5.134	-5.134	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	M1	X	0	0	0	%100
2	M1	Z	-11.761	-11.761	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-11.761	-11.761	0	%100
5	M13	X	0	0	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	0	0	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	0	0	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	0	0	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	0	0	0	%100
14	M17	Z	-4.644	-4.644	0	%100
15	M18	X	0	0	0	%100
16	M18	Z	-4.644	-4.644	0	%100
17	M19	X	0	0	0	%100
18	M19	Z	-4.644	-4.644	0	%100
19	M20	X	0	0	0	%100
20	M20	Z	-4.644	-4.644	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	-2.557	-2.557	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	-2.557	-2.557	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,%]
25	M23	X	0	0	0	%100
26	M23	Z	-2.557	-2.557	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	-2.557	-2.557	0	%100
29	M25	X	0	0	0	%100
30	M25	Z	-2.648	-2.648	0	%100
31	M26	X	0	0	0	%100
32	M26	Z	-2.648	-2.648	0	%100
33	M27	X	0	0	0	%100
34	M27	Z	-2.648	-2.648	0	%100
35	M28	X	0	0	0	%100
36	M28	Z	-2.648	-2.648	0	%100
37	MP4A	X	0	0	0	%100
38	MP4A	Z	-9.716	-9.716	0	%100
39	MP3A	X	0	0	0	%100
40	MP3A	Z	-9.716	-9.716	0	%100
41	MP2A	X	0	0	0	%100
42	MP2A	Z	-11.761	-11.761	0	%100
43	MP1A	X	0	0	0	%100
44	MP1A	Z	-9.716	-9.716	0	%100
45	M44	X	0	0	0	%100
46	M44	Z	-2.557	-2.557	0	%100
47	M45	X	0	0	0	%100
48	M45	Z	-2.557	-2.557	0	%100
49	M46	X	0	0	0	%100
50	M46	Z	-2.557	-2.557	0	%100
51	M47	X	0	0	0	%100
52	M47	Z	-2.557	-2.557	0	%100
53	M43	X	0	0	0	%100
54	M43	Z	-.859	-.859	0	%100
55	M44A	X	0	0	0	%100
56	M44A	Z	-1.591	-1.591	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	M1	X	4.41	4.41	0	%100
2	M1	Z	-7.639	-7.639	0	%100
3	M2	X	4.41	4.41	0	%100
4	M2	Z	-7.639	-7.639	0	%100
5	M13	X	.32	.32	0	%100
6	M13	Z	-.554	-.554	0	%100
7	M14	X	.32	.32	0	%100
8	M14	Z	-.554	-.554	0	%100
9	M15	X	.32	.32	0	%100
10	M15	Z	-.554	-.554	0	%100
11	M16	X	.32	.32	0	%100
12	M16	Z	-.554	-.554	0	%100
13	M17	X	.523	.523	0	%100
14	M17	Z	-.905	-.905	0	%100
15	M18	X	.523	.523	0	%100
16	M18	Z	-.905	-.905	0	%100
17	M19	X	3.672	3.672	0	%100
18	M19	Z	-6.36	-6.36	0	%100
19	M20	X	3.672	3.672	0	%100
20	M20	Z	-6.36	-6.36	0	%100
21	M21	X	.959	.959	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,%]
22	M21	Z	-1.661	-1.661	0	%100
23	M22	X	.959	.959	0	%100
24	M22	Z	-1.661	-1.661	0	%100
25	M23	X	.959	.959	0	%100
26	M23	Z	-1.661	-1.661	0	%100
27	M24	X	.959	.959	0	%100
28	M24	Z	-1.661	-1.661	0	%100
29	M25	X	1.059	1.059	0	%100
30	M25	Z	-1.834	-1.834	0	%100
31	M26	X	1.059	1.059	0	%100
32	M26	Z	-1.834	-1.834	0	%100
33	M27	X	1.523	1.523	0	%100
34	M27	Z	-2.638	-2.638	0	%100
35	M28	X	1.523	1.523	0	%100
36	M28	Z	-2.638	-2.638	0	%100
37	MP4A	X	4.858	4.858	0	%100
38	MP4A	Z	-8.414	-8.414	0	%100
39	MP3A	X	4.858	4.858	0	%100
40	MP3A	Z	-8.414	-8.414	0	%100
41	MP2A	X	5.881	5.881	0	%100
42	MP2A	Z	-10.185	-10.185	0	%100
43	MP1A	X	4.858	4.858	0	%100
44	MP1A	Z	-8.414	-8.414	0	%100
45	M44	X	1.278	1.278	0	%100
46	M44	Z	-2.214	-2.214	0	%100
47	M45	X	1.278	1.278	0	%100
48	M45	Z	-2.214	-2.214	0	%100
49	M46	X	1.278	1.278	0	%100
50	M46	Z	-2.214	-2.214	0	%100
51	M47	X	1.278	1.278	0	%100
52	M47	Z	-2.214	-2.214	0	%100
53	M43	X	2.62	2.62	0	%100
54	M43	Z	-4.539	-4.539	0	%100
55	M44A	X	3.168	3.168	0	%100
56	M44A	Z	-5.487	-5.487	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	M1	X	2.546	2.546	0	%100
2	M1	Z	-1.47	-1.47	0	%100
3	M2	X	2.546	2.546	0	%100
4	M2	Z	-1.47	-1.47	0	%100
5	M13	X	1.661	1.661	0	%100
6	M13	Z	-.959	-.959	0	%100
7	M14	X	1.661	1.661	0	%100
8	M14	Z	-.959	-.959	0	%100
9	M15	X	1.661	1.661	0	%100
10	M15	Z	-.959	-.959	0	%100
11	M16	X	1.661	1.661	0	%100
12	M16	Z	-.959	-.959	0	%100
13	M17	X	.128	.128	0	%100
14	M17	Z	-.074	-.074	0	%100
15	M18	X	.128	.128	0	%100
16	M18	Z	-.074	-.074	0	%100
17	M19	X	5.582	5.582	0	%100
18	M19	Z	-3.223	-3.223	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,%]
19	M20	X	5.582	5.582	0	%100
20	M20	Z	-3.223	-3.223	0	%100
21	M21	X	.554	.554	0	%100
22	M21	Z	-.32	-.32	0	%100
23	M22	X	.554	.554	0	%100
24	M22	Z	-.32	-.32	0	%100
25	M23	X	.554	.554	0	%100
26	M23	Z	-.32	-.32	0	%100
27	M24	X	.554	.554	0	%100
28	M24	Z	-.32	-.32	0	%100
29	M25	X	1.719	1.719	0	%100
30	M25	Z	-.993	-.993	0	%100
31	M26	X	1.719	1.719	0	%100
32	M26	Z	-.993	-.993	0	%100
33	M27	X	2.524	2.524	0	%100
34	M27	Z	-1.457	-1.457	0	%100
35	M28	X	2.524	2.524	0	%100
36	M28	Z	-1.457	-1.457	0	%100
37	MP4A	X	8.414	8.414	0	%100
38	MP4A	Z	-4.858	-4.858	0	%100
39	MP3A	X	8.414	8.414	0	%100
40	MP3A	Z	-4.858	-4.858	0	%100
41	MP2A	X	10.185	10.185	0	%100
42	MP2A	Z	-5.881	-5.881	0	%100
43	MP1A	X	8.414	8.414	0	%100
44	MP1A	Z	-4.858	-4.858	0	%100
45	M44	X	2.214	2.214	0	%100
46	M44	Z	-1.278	-1.278	0	%100
47	M45	X	2.214	2.214	0	%100
48	M45	Z	-1.278	-1.278	0	%100
49	M46	X	2.214	2.214	0	%100
50	M46	Z	-1.278	-1.278	0	%100
51	M47	X	2.214	2.214	0	%100
52	M47	Z	-1.278	-1.278	0	%100
53	M43	X	8.004	8.004	0	%100
54	M43	Z	-4.621	-4.621	0	%100
55	M44A	X	8.318	8.318	0	%100
56	M44A	Z	-4.802	-4.802	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	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M13	X	2.557	2.557	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	2.557	2.557	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	2.557	2.557	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	2.557	2.557	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	2.847	2.847	0	%100
14	M17	Z	0	0	0	%100
15	M18	X	2.847	2.847	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,%]
16	M18	Z	0	0	0	%100
17	M19	X	2.847	2.847	0	%100
18	M19	Z	0	0	0	%100
19	M20	X	2.847	2.847	0	%100
20	M20	Z	0	0	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	0	0	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	0	0	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	0	0	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	0	0	0	%100
29	M25	X	2.383	2.383	0	%100
30	M25	Z	0	0	0	%100
31	M26	X	2.383	2.383	0	%100
32	M26	Z	0	0	0	%100
33	M27	X	2.383	2.383	0	%100
34	M27	Z	0	0	0	%100
35	M28	X	2.383	2.383	0	%100
36	M28	Z	0	0	0	%100
37	MP4A	X	9.716	9.716	0	%100
38	MP4A	Z	0	0	0	%100
39	MP3A	X	9.716	9.716	0	%100
40	MP3A	Z	0	0	0	%100
41	MP2A	X	11.761	11.761	0	%100
42	MP2A	Z	0	0	0	%100
43	MP1A	X	9.716	9.716	0	%100
44	MP1A	Z	0	0	0	%100
45	M44	X	2.557	2.557	0	%100
46	M44	Z	0	0	0	%100
47	M45	X	2.557	2.557	0	%100
48	M45	Z	0	0	0	%100
49	M46	X	2.557	2.557	0	%100
50	M46	Z	0	0	0	%100
51	M47	X	2.557	2.557	0	%100
52	M47	Z	0	0	0	%100
53	M43	X	8.862	8.862	0	%100
54	M43	Z	0	0	0	%100
55	M44A	X	8.127	8.127	0	%100
56	M44A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	2.546	2.546	0	%100
2	M1	Z	1.47	1.47	0	%100
3	M2	X	2.546	2.546	0	%100
4	M2	Z	1.47	1.47	0	%100
5	M13	X	1.661	1.661	0	%100
6	M13	Z	.959	.959	0	%100
7	M14	X	1.661	1.661	0	%100
8	M14	Z	.959	.959	0	%100
9	M15	X	1.661	1.661	0	%100
10	M15	Z	.959	.959	0	%100
11	M16	X	1.661	1.661	0	%100
12	M16	Z	.959	.959	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,%]
13	M17	X	5.582	5.582	0	%100
14	M17	Z	3.223	3.223	0	%100
15	M18	X	5.582	5.582	0	%100
16	M18	Z	3.223	3.223	0	%100
17	M19	X	.128	.128	0	%100
18	M19	Z	.074	.074	0	%100
19	M20	X	.128	.128	0	%100
20	M20	Z	.074	.074	0	%100
21	M21	X	.554	.554	0	%100
22	M21	Z	.32	.32	0	%100
23	M22	X	.554	.554	0	%100
24	M22	Z	.32	.32	0	%100
25	M23	X	.554	.554	0	%100
26	M23	Z	.32	.32	0	%100
27	M24	X	.554	.554	0	%100
28	M24	Z	.32	.32	0	%100
29	M25	X	2.524	2.524	0	%100
30	M25	Z	1.457	1.457	0	%100
31	M26	X	2.524	2.524	0	%100
32	M26	Z	1.457	1.457	0	%100
33	M27	X	1.719	1.719	0	%100
34	M27	Z	.993	.993	0	%100
35	M28	X	1.719	1.719	0	%100
36	M28	Z	.993	.993	0	%100
37	MP4A	X	8.414	8.414	0	%100
38	MP4A	Z	4.858	4.858	0	%100
39	MP3A	X	8.414	8.414	0	%100
40	MP3A	Z	4.858	4.858	0	%100
41	MP2A	X	10.185	10.185	0	%100
42	MP2A	Z	5.881	5.881	0	%100
43	MP1A	X	8.414	8.414	0	%100
44	MP1A	Z	4.858	4.858	0	%100
45	M44	X	2.214	2.214	0	%100
46	M44	Z	1.278	1.278	0	%100
47	M45	X	2.214	2.214	0	%100
48	M45	Z	1.278	1.278	0	%100
49	M46	X	2.214	2.214	0	%100
50	M46	Z	1.278	1.278	0	%100
51	M47	X	2.214	2.214	0	%100
52	M47	Z	1.278	1.278	0	%100
53	M43	X	3.88	3.88	0	%100
54	M43	Z	2.24	2.24	0	%100
55	M44A	X	2.929	2.929	0	%100
56	M44A	Z	1.691	1.691	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	M1	X	4.41	4.41	0	%100
2	M1	Z	7.639	7.639	0	%100
3	M2	X	4.41	4.41	0	%100
4	M2	Z	7.639	7.639	0	%100
5	M13	X	.32	.32	0	%100
6	M13	Z	.554	.554	0	%100
7	M14	X	.32	.32	0	%100
8	M14	Z	.554	.554	0	%100
9	M15	X	.32	.32	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,%]
10	M15	Z	.554	.554	0	%100
11	M16	X	.32	.32	0	%100
12	M16	Z	.554	.554	0	%100
13	M17	X	3.672	3.672	0	%100
14	M17	Z	6.36	6.36	0	%100
15	M18	X	3.672	3.672	0	%100
16	M18	Z	6.36	6.36	0	%100
17	M19	X	.523	.523	0	%100
18	M19	Z	.905	.905	0	%100
19	M20	X	.523	.523	0	%100
20	M20	Z	.905	.905	0	%100
21	M21	X	.959	.959	0	%100
22	M21	Z	1.661	1.661	0	%100
23	M22	X	.959	.959	0	%100
24	M22	Z	1.661	1.661	0	%100
25	M23	X	.959	.959	0	%100
26	M23	Z	1.661	1.661	0	%100
27	M24	X	.959	.959	0	%100
28	M24	Z	1.661	1.661	0	%100
29	M25	X	1.523	1.523	0	%100
30	M25	Z	2.638	2.638	0	%100
31	M26	X	1.523	1.523	0	%100
32	M26	Z	2.638	2.638	0	%100
33	M27	X	1.059	1.059	0	%100
34	M27	Z	1.834	1.834	0	%100
35	M28	X	1.059	1.059	0	%100
36	M28	Z	1.834	1.834	0	%100
37	MP4A	X	4.858	4.858	0	%100
38	MP4A	Z	8.414	8.414	0	%100
39	MP3A	X	4.858	4.858	0	%100
40	MP3A	Z	8.414	8.414	0	%100
41	MP2A	X	5.881	5.881	0	%100
42	MP2A	Z	10.185	10.185	0	%100
43	MP1A	X	4.858	4.858	0	%100
44	MP1A	Z	8.414	8.414	0	%100
45	M44	X	1.278	1.278	0	%100
46	M44	Z	2.214	2.214	0	%100
47	M45	X	1.278	1.278	0	%100
48	M45	Z	2.214	2.214	0	%100
49	M46	X	1.278	1.278	0	%100
50	M46	Z	2.214	2.214	0	%100
51	M47	X	1.278	1.278	0	%100
52	M47	Z	2.214	2.214	0	%100
53	M43	X	.24	.24	0	%100
54	M43	Z	.415	.415	0	%100
55	M44A	X	.057	.057	0	%100
56	M44A	Z	.098	.098	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	M1	X	0	0	0	%100
2	M1	Z	11.761	11.761	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	11.761	11.761	0	%100
5	M13	X	0	0	0	%100
6	M13	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
7	M14	X	0	0	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	0	0	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	0	0	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	0	0	0	%100
14	M17	Z	4.644	4.644	0	%100
15	M18	X	0	0	0	%100
16	M18	Z	4.644	4.644	0	%100
17	M19	X	0	0	0	%100
18	M19	Z	4.644	4.644	0	%100
19	M20	X	0	0	0	%100
20	M20	Z	4.644	4.644	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	2.557	2.557	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	2.557	2.557	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	2.557	2.557	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	2.557	2.557	0	%100
29	M25	X	0	0	0	%100
30	M25	Z	2.648	2.648	0	%100
31	M26	X	0	0	0	%100
32	M26	Z	2.648	2.648	0	%100
33	M27	X	0	0	0	%100
34	M27	Z	2.648	2.648	0	%100
35	M28	X	0	0	0	%100
36	M28	Z	2.648	2.648	0	%100
37	MP4A	X	0	0	0	%100
38	MP4A	Z	9.716	9.716	0	%100
39	MP3A	X	0	0	0	%100
40	MP3A	Z	9.716	9.716	0	%100
41	MP2A	X	0	0	0	%100
42	MP2A	Z	11.761	11.761	0	%100
43	MP1A	X	0	0	0	%100
44	MP1A	Z	9.716	9.716	0	%100
45	M44	X	0	0	0	%100
46	M44	Z	2.557	2.557	0	%100
47	M45	X	0	0	0	%100
48	M45	Z	2.557	2.557	0	%100
49	M46	X	0	0	0	%100
50	M46	Z	2.557	2.557	0	%100
51	M47	X	0	0	0	%100
52	M47	Z	2.557	2.557	0	%100
53	M43	X	0	0	0	%100
54	M43	Z	.859	.859	0	%100
55	M44A	X	0	0	0	%100
56	M44A	Z	1.591	1.591	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	M1	X	-4.41	-4.41	0	%100
2	M1	Z	7.639	7.639	0	%100
3	M2	X	-4.41	-4.41	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
4	M2	Z	7.639	7.639	0	%100
5	M13	X	-.32	-.32	0	%100
6	M13	Z	.554	.554	0	%100
7	M14	X	-.32	-.32	0	%100
8	M14	Z	.554	.554	0	%100
9	M15	X	-.32	-.32	0	%100
10	M15	Z	.554	.554	0	%100
11	M16	X	-.32	-.32	0	%100
12	M16	Z	.554	.554	0	%100
13	M17	X	-.523	-.523	0	%100
14	M17	Z	.905	.905	0	%100
15	M18	X	-.523	-.523	0	%100
16	M18	Z	.905	.905	0	%100
17	M19	X	-3.672	-3.672	0	%100
18	M19	Z	6.36	6.36	0	%100
19	M20	X	-3.672	-3.672	0	%100
20	M20	Z	6.36	6.36	0	%100
21	M21	X	-.959	-.959	0	%100
22	M21	Z	1.661	1.661	0	%100
23	M22	X	-.959	-.959	0	%100
24	M22	Z	1.661	1.661	0	%100
25	M23	X	-.959	-.959	0	%100
26	M23	Z	1.661	1.661	0	%100
27	M24	X	-.959	-.959	0	%100
28	M24	Z	1.661	1.661	0	%100
29	M25	X	-1.059	-1.059	0	%100
30	M25	Z	1.834	1.834	0	%100
31	M26	X	-1.059	-1.059	0	%100
32	M26	Z	1.834	1.834	0	%100
33	M27	X	-1.523	-1.523	0	%100
34	M27	Z	2.638	2.638	0	%100
35	M28	X	-1.523	-1.523	0	%100
36	M28	Z	2.638	2.638	0	%100
37	MP4A	X	-4.858	-4.858	0	%100
38	MP4A	Z	8.414	8.414	0	%100
39	MP3A	X	-4.858	-4.858	0	%100
40	MP3A	Z	8.414	8.414	0	%100
41	MP2A	X	-5.881	-5.881	0	%100
42	MP2A	Z	10.185	10.185	0	%100
43	MP1A	X	-4.858	-4.858	0	%100
44	MP1A	Z	8.414	8.414	0	%100
45	M44	X	-1.278	-1.278	0	%100
46	M44	Z	2.214	2.214	0	%100
47	M45	X	-1.278	-1.278	0	%100
48	M45	Z	2.214	2.214	0	%100
49	M46	X	-1.278	-1.278	0	%100
50	M46	Z	2.214	2.214	0	%100
51	M47	X	-1.278	-1.278	0	%100
52	M47	Z	2.214	2.214	0	%100
53	M43	X	-2.62	-2.62	0	%100
54	M43	Z	4.539	4.539	0	%100
55	M44A	X	-3.168	-3.168	0	%100
56	M44A	Z	5.487	5.487	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,%]

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,%]
1	M1	X	-2.546	-2.546	0	%100
2	M1	Z	1.47	1.47	0	%100
3	M2	X	-2.546	-2.546	0	%100
4	M2	Z	1.47	1.47	0	%100
5	M13	X	-1.661	-1.661	0	%100
6	M13	Z	.959	.959	0	%100
7	M14	X	-1.661	-1.661	0	%100
8	M14	Z	.959	.959	0	%100
9	M15	X	-1.661	-1.661	0	%100
10	M15	Z	.959	.959	0	%100
11	M16	X	-1.661	-1.661	0	%100
12	M16	Z	.959	.959	0	%100
13	M17	X	-.128	-.128	0	%100
14	M17	Z	.074	.074	0	%100
15	M18	X	-.128	-.128	0	%100
16	M18	Z	.074	.074	0	%100
17	M19	X	-5.582	-5.582	0	%100
18	M19	Z	3.223	3.223	0	%100
19	M20	X	-5.582	-5.582	0	%100
20	M20	Z	3.223	3.223	0	%100
21	M21	X	-.554	-.554	0	%100
22	M21	Z	.32	.32	0	%100
23	M22	X	-.554	-.554	0	%100
24	M22	Z	.32	.32	0	%100
25	M23	X	-.554	-.554	0	%100
26	M23	Z	.32	.32	0	%100
27	M24	X	-.554	-.554	0	%100
28	M24	Z	.32	.32	0	%100
29	M25	X	-1.719	-1.719	0	%100
30	M25	Z	.993	.993	0	%100
31	M26	X	-1.719	-1.719	0	%100
32	M26	Z	.993	.993	0	%100
33	M27	X	-2.524	-2.524	0	%100
34	M27	Z	1.457	1.457	0	%100
35	M28	X	-2.524	-2.524	0	%100
36	M28	Z	1.457	1.457	0	%100
37	MP4A	X	-8.414	-8.414	0	%100
38	MP4A	Z	4.858	4.858	0	%100
39	MP3A	X	-8.414	-8.414	0	%100
40	MP3A	Z	4.858	4.858	0	%100
41	MP2A	X	-10.185	-10.185	0	%100
42	MP2A	Z	5.881	5.881	0	%100
43	MP1A	X	-8.414	-8.414	0	%100
44	MP1A	Z	4.858	4.858	0	%100
45	M44	X	-2.214	-2.214	0	%100
46	M44	Z	1.278	1.278	0	%100
47	M45	X	-2.214	-2.214	0	%100
48	M45	Z	1.278	1.278	0	%100
49	M46	X	-2.214	-2.214	0	%100
50	M46	Z	1.278	1.278	0	%100
51	M47	X	-2.214	-2.214	0	%100
52	M47	Z	1.278	1.278	0	%100
53	M43	X	-8.004	-8.004	0	%100
54	M43	Z	4.621	4.621	0	%100
55	M44A	X	-8.318	-8.318	0	%100
56	M44A	Z	4.802	4.802	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	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M13	X	-2.557	-2.557	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	-2.557	-2.557	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	-2.557	-2.557	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	-2.557	-2.557	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	-2.847	-2.847	0	%100
14	M17	Z	0	0	0	%100
15	M18	X	-2.847	-2.847	0	%100
16	M18	Z	0	0	0	%100
17	M19	X	-2.847	-2.847	0	%100
18	M19	Z	0	0	0	%100
19	M20	X	-2.847	-2.847	0	%100
20	M20	Z	0	0	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	0	0	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	0	0	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	0	0	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	0	0	0	%100
29	M25	X	-2.383	-2.383	0	%100
30	M25	Z	0	0	0	%100
31	M26	X	-2.383	-2.383	0	%100
32	M26	Z	0	0	0	%100
33	M27	X	-2.383	-2.383	0	%100
34	M27	Z	0	0	0	%100
35	M28	X	-2.383	-2.383	0	%100
36	M28	Z	0	0	0	%100
37	MP4A	X	-9.716	-9.716	0	%100
38	MP4A	Z	0	0	0	%100
39	MP3A	X	-9.716	-9.716	0	%100
40	MP3A	Z	0	0	0	%100
41	MP2A	X	-11.761	-11.761	0	%100
42	MP2A	Z	0	0	0	%100
43	MP1A	X	-9.716	-9.716	0	%100
44	MP1A	Z	0	0	0	%100
45	M44	X	-2.557	-2.557	0	%100
46	M44	Z	0	0	0	%100
47	M45	X	-2.557	-2.557	0	%100
48	M45	Z	0	0	0	%100
49	M46	X	-2.557	-2.557	0	%100
50	M46	Z	0	0	0	%100
51	M47	X	-2.557	-2.557	0	%100
52	M47	Z	0	0	0	%100
53	M43	X	-8.862	-8.862	0	%100
54	M43	Z	0	0	0	%100
55	M44A	X	-8.127	-8.127	0	%100
56	M44A	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	M1	X	-2.546	-2.546	0	%100
2	M1	Z	-1.47	-1.47	0	%100
3	M2	X	-2.546	-2.546	0	%100
4	M2	Z	-1.47	-1.47	0	%100
5	M13	X	-1.661	-1.661	0	%100
6	M13	Z	-.959	-.959	0	%100
7	M14	X	-1.661	-1.661	0	%100
8	M14	Z	-.959	-.959	0	%100
9	M15	X	-1.661	-1.661	0	%100
10	M15	Z	-.959	-.959	0	%100
11	M16	X	-1.661	-1.661	0	%100
12	M16	Z	-.959	-.959	0	%100
13	M17	X	-5.582	-5.582	0	%100
14	M17	Z	-3.223	-3.223	0	%100
15	M18	X	-5.582	-5.582	0	%100
16	M18	Z	-3.223	-3.223	0	%100
17	M19	X	-.128	-.128	0	%100
18	M19	Z	-.074	-.074	0	%100
19	M20	X	-.128	-.128	0	%100
20	M20	Z	-.074	-.074	0	%100
21	M21	X	-.554	-.554	0	%100
22	M21	Z	-.32	-.32	0	%100
23	M22	X	-.554	-.554	0	%100
24	M22	Z	-.32	-.32	0	%100
25	M23	X	-.554	-.554	0	%100
26	M23	Z	-.32	-.32	0	%100
27	M24	X	-.554	-.554	0	%100
28	M24	Z	-.32	-.32	0	%100
29	M25	X	-2.524	-2.524	0	%100
30	M25	Z	-1.457	-1.457	0	%100
31	M26	X	-2.524	-2.524	0	%100
32	M26	Z	-1.457	-1.457	0	%100
33	M27	X	-1.719	-1.719	0	%100
34	M27	Z	-.993	-.993	0	%100
35	M28	X	-1.719	-1.719	0	%100
36	M28	Z	-.993	-.993	0	%100
37	MP4A	X	-8.414	-8.414	0	%100
38	MP4A	Z	-4.858	-4.858	0	%100
39	MP3A	X	-8.414	-8.414	0	%100
40	MP3A	Z	-4.858	-4.858	0	%100
41	MP2A	X	-10.185	-10.185	0	%100
42	MP2A	Z	-5.881	-5.881	0	%100
43	MP1A	X	-8.414	-8.414	0	%100
44	MP1A	Z	-4.858	-4.858	0	%100
45	M44	X	-2.214	-2.214	0	%100
46	M44	Z	-1.278	-1.278	0	%100
47	M45	X	-2.214	-2.214	0	%100
48	M45	Z	-1.278	-1.278	0	%100
49	M46	X	-2.214	-2.214	0	%100
50	M46	Z	-1.278	-1.278	0	%100
51	M47	X	-2.214	-2.214	0	%100
52	M47	Z	-1.278	-1.278	0	%100
53	M43	X	-3.88	-3.88	0	%100
54	M43	Z	-2.24	-2.24	0	%100
55	M44A	X	-2.929	-2.929	0	%100
56	M44A	Z	-1.691	-1.691	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	M1	X	-4.41	-4.41	0	%100
2	M1	Z	-7.639	-7.639	0	%100
3	M2	X	-4.41	-4.41	0	%100
4	M2	Z	-7.639	-7.639	0	%100
5	M13	X	-.32	-.32	0	%100
6	M13	Z	-.554	-.554	0	%100
7	M14	X	-.32	-.32	0	%100
8	M14	Z	-.554	-.554	0	%100
9	M15	X	-.32	-.32	0	%100
10	M15	Z	-.554	-.554	0	%100
11	M16	X	-.32	-.32	0	%100
12	M16	Z	-.554	-.554	0	%100
13	M17	X	-3.672	-3.672	0	%100
14	M17	Z	-6.36	-6.36	0	%100
15	M18	X	-3.672	-3.672	0	%100
16	M18	Z	-6.36	-6.36	0	%100
17	M19	X	-.523	-.523	0	%100
18	M19	Z	-.905	-.905	0	%100
19	M20	X	-.523	-.523	0	%100
20	M20	Z	-.905	-.905	0	%100
21	M21	X	-.959	-.959	0	%100
22	M21	Z	-1.661	-1.661	0	%100
23	M22	X	-.959	-.959	0	%100
24	M22	Z	-1.661	-1.661	0	%100
25	M23	X	-.959	-.959	0	%100
26	M23	Z	-1.661	-1.661	0	%100
27	M24	X	-.959	-.959	0	%100
28	M24	Z	-1.661	-1.661	0	%100
29	M25	X	-1.523	-1.523	0	%100
30	M25	Z	-2.638	-2.638	0	%100
31	M26	X	-1.523	-1.523	0	%100
32	M26	Z	-2.638	-2.638	0	%100
33	M27	X	-1.059	-1.059	0	%100
34	M27	Z	-1.834	-1.834	0	%100
35	M28	X	-1.059	-1.059	0	%100
36	M28	Z	-1.834	-1.834	0	%100
37	MP4A	X	-4.858	-4.858	0	%100
38	MP4A	Z	-8.414	-8.414	0	%100
39	MP3A	X	-4.858	-4.858	0	%100
40	MP3A	Z	-8.414	-8.414	0	%100
41	MP2A	X	-5.881	-5.881	0	%100
42	MP2A	Z	-10.185	-10.185	0	%100
43	MP1A	X	-4.858	-4.858	0	%100
44	MP1A	Z	-8.414	-8.414	0	%100
45	M44	X	-1.278	-1.278	0	%100
46	M44	Z	-2.214	-2.214	0	%100
47	M45	X	-1.278	-1.278	0	%100
48	M45	Z	-2.214	-2.214	0	%100
49	M46	X	-1.278	-1.278	0	%100
50	M46	Z	-2.214	-2.214	0	%100
51	M47	X	-1.278	-1.278	0	%100
52	M47	Z	-2.214	-2.214	0	%100
53	M43	X	-.24	-.24	0	%100
54	M43	Z	-.415	-.415	0	%100
55	M44A	X	-.057	-.057	0	%100
56	M44A	Z	-.098	-.098	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	M1	X	0	0	0	%100
2	M1	Z	-3.981	-3.981	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-3.981	-3.981	0	%100
5	M13	X	0	0	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	0	0	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	0	0	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	0	0	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	0	0	0	%100
14	M17	Z	-1.722	-1.722	0	%100
15	M18	X	0	0	0	%100
16	M18	Z	-1.722	-1.722	0	%100
17	M19	X	0	0	0	%100
18	M19	Z	-1.722	-1.722	0	%100
19	M20	X	0	0	0	%100
20	M20	Z	-1.722	-1.722	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	-1.529	-1.529	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	-1.529	-1.529	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	-1.529	-1.529	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	-1.529	-1.529	0	%100
29	M25	X	0	0	0	%100
30	M25	Z	-1.932	-1.932	0	%100
31	M26	X	0	0	0	%100
32	M26	Z	-1.932	-1.932	0	%100
33	M27	X	0	0	0	%100
34	M27	Z	-1.932	-1.932	0	%100
35	M28	X	0	0	0	%100
36	M28	Z	-1.932	-1.932	0	%100
37	MP4A	X	0	0	0	%100
38	MP4A	Z	-3.601	-3.601	0	%100
39	MP3A	X	0	0	0	%100
40	MP3A	Z	-3.601	-3.601	0	%100
41	MP2A	X	0	0	0	%100
42	MP2A	Z	-3.981	-3.981	0	%100
43	MP1A	X	0	0	0	%100
44	MP1A	Z	-3.601	-3.601	0	%100
45	M44	X	0	0	0	%100
46	M44	Z	-2.003	-2.003	0	%100
47	M45	X	0	0	0	%100
48	M45	Z	-2.003	-2.003	0	%100
49	M46	X	0	0	0	%100
50	M46	Z	-2.003	-2.003	0	%100
51	M47	X	0	0	0	%100
52	M47	Z	-2.003	-2.003	0	%100
53	M43	X	0	0	0	%100
54	M43	Z	-.318	-.318	0	%100
55	M44A	X	0	0	0	%100
56	M44A	Z	-.59	-.59	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	1.493	1.493	0	%100
2	M1	Z	-2.586	-2.586	0	%100
3	M2	X	1.493	1.493	0	%100
4	M2	Z	-2.586	-2.586	0	%100
5	M13	X	.19	.19	0	%100
6	M13	Z	-.33	-.33	0	%100
7	M14	X	.19	.19	0	%100
8	M14	Z	-.33	-.33	0	%100
9	M15	X	.19	.19	0	%100
10	M15	Z	-.33	-.33	0	%100
11	M16	X	.19	.19	0	%100
12	M16	Z	-.33	-.33	0	%100
13	M17	X	.194	.194	0	%100
14	M17	Z	-.336	-.336	0	%100
15	M18	X	.194	.194	0	%100
16	M18	Z	-.336	-.336	0	%100
17	M19	X	1.362	1.362	0	%100
18	M19	Z	-2.359	-2.359	0	%100
19	M20	X	1.362	1.362	0	%100
20	M20	Z	-2.359	-2.359	0	%100
21	M21	X	.573	.573	0	%100
22	M21	Z	-.993	-.993	0	%100
23	M22	X	.573	.573	0	%100
24	M22	Z	-.993	-.993	0	%100
25	M23	X	.573	.573	0	%100
26	M23	Z	-.993	-.993	0	%100
27	M24	X	.573	.573	0	%100
28	M24	Z	-.993	-.993	0	%100
29	M25	X	.772	.772	0	%100
30	M25	Z	-1.338	-1.338	0	%100
31	M26	X	.772	.772	0	%100
32	M26	Z	-1.338	-1.338	0	%100
33	M27	X	1.111	1.111	0	%100
34	M27	Z	-1.925	-1.925	0	%100
35	M28	X	1.111	1.111	0	%100
36	M28	Z	-1.925	-1.925	0	%100
37	MP4A	X	1.801	1.801	0	%100
38	MP4A	Z	-3.119	-3.119	0	%100
39	MP3A	X	1.801	1.801	0	%100
40	MP3A	Z	-3.119	-3.119	0	%100
41	MP2A	X	1.991	1.991	0	%100
42	MP2A	Z	-3.448	-3.448	0	%100
43	MP1A	X	1.801	1.801	0	%100
44	MP1A	Z	-3.119	-3.119	0	%100
45	M44	X	1.001	1.001	0	%100
46	M44	Z	-1.734	-1.734	0	%100
47	M45	X	1.001	1.001	0	%100
48	M45	Z	-1.734	-1.734	0	%100
49	M46	X	1.001	1.001	0	%100
50	M46	Z	-1.734	-1.734	0	%100
51	M47	X	1.001	1.001	0	%100
52	M47	Z	-1.734	-1.734	0	%100
53	M43	X	.971	.971	0	%100
54	M43	Z	-1.682	-1.682	0	%100
55	M44A	X	1.174	1.174	0	%100
56	M44A	Z	-2.034	-2.034	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	M1	X	.862	.862	0	%100
2	M1	Z	-.498	-.498	0	%100
3	M2	X	.862	.862	0	%100
4	M2	Z	-.498	-.498	0	%100
5	M13	X	.989	.989	0	%100
6	M13	Z	-.571	-.571	0	%100
7	M14	X	.989	.989	0	%100
8	M14	Z	-.571	-.571	0	%100
9	M15	X	.989	.989	0	%100
10	M15	Z	-.571	-.571	0	%100
11	M16	X	.989	.989	0	%100
12	M16	Z	-.571	-.571	0	%100
13	M17	X	.047	.047	0	%100
14	M17	Z	-.027	-.027	0	%100
15	M18	X	.047	.047	0	%100
16	M18	Z	-.027	-.027	0	%100
17	M19	X	2.071	2.071	0	%100
18	M19	Z	-1.195	-1.195	0	%100
19	M20	X	2.071	2.071	0	%100
20	M20	Z	-1.195	-1.195	0	%100
21	M21	X	.331	.331	0	%100
22	M21	Z	-.191	-.191	0	%100
23	M22	X	.331	.331	0	%100
24	M22	Z	-.191	-.191	0	%100
25	M23	X	.331	.331	0	%100
26	M23	Z	-.191	-.191	0	%100
27	M24	X	.331	.331	0	%100
28	M24	Z	-.191	-.191	0	%100
29	M25	X	1.254	1.254	0	%100
30	M25	Z	-.724	-.724	0	%100
31	M26	X	1.254	1.254	0	%100
32	M26	Z	-.724	-.724	0	%100
33	M27	X	1.841	1.841	0	%100
34	M27	Z	-1.063	-1.063	0	%100
35	M28	X	1.841	1.841	0	%100
36	M28	Z	-1.063	-1.063	0	%100
37	MP4A	X	3.119	3.119	0	%100
38	MP4A	Z	-1.801	-1.801	0	%100
39	MP3A	X	3.119	3.119	0	%100
40	MP3A	Z	-1.801	-1.801	0	%100
41	MP2A	X	3.448	3.448	0	%100
42	MP2A	Z	-1.991	-1.991	0	%100
43	MP1A	X	3.119	3.119	0	%100
44	MP1A	Z	-1.801	-1.801	0	%100
45	M44	X	1.734	1.734	0	%100
46	M44	Z	-1.001	-1.001	0	%100
47	M45	X	1.734	1.734	0	%100
48	M45	Z	-1.001	-1.001	0	%100
49	M46	X	1.734	1.734	0	%100
50	M46	Z	-1.001	-1.001	0	%100
51	M47	X	1.734	1.734	0	%100
52	M47	Z	-1.001	-1.001	0	%100
53	M43	X	2.967	2.967	0	%100
54	M43	Z	-1.713	-1.713	0	%100
55	M44A	X	3.083	3.083	0	%100
56	M44A	Z	-1.78	-1.78	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	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M13	X	1.523	1.523	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	1.523	1.523	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	1.523	1.523	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	1.523	1.523	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	1.056	1.056	0	%100
14	M17	Z	0	0	0	%100
15	M18	X	1.056	1.056	0	%100
16	M18	Z	0	0	0	%100
17	M19	X	1.056	1.056	0	%100
18	M19	Z	0	0	0	%100
19	M20	X	1.056	1.056	0	%100
20	M20	Z	0	0	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	0	0	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	0	0	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	0	0	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	0	0	0	%100
29	M25	X	1.739	1.739	0	%100
30	M25	Z	0	0	0	%100
31	M26	X	1.739	1.739	0	%100
32	M26	Z	0	0	0	%100
33	M27	X	1.739	1.739	0	%100
34	M27	Z	0	0	0	%100
35	M28	X	1.739	1.739	0	%100
36	M28	Z	0	0	0	%100
37	MP4A	X	3.601	3.601	0	%100
38	MP4A	Z	0	0	0	%100
39	MP3A	X	3.601	3.601	0	%100
40	MP3A	Z	0	0	0	%100
41	MP2A	X	3.981	3.981	0	%100
42	MP2A	Z	0	0	0	%100
43	MP1A	X	3.601	3.601	0	%100
44	MP1A	Z	0	0	0	%100
45	M44	X	2.003	2.003	0	%100
46	M44	Z	0	0	0	%100
47	M45	X	2.003	2.003	0	%100
48	M45	Z	0	0	0	%100
49	M46	X	2.003	2.003	0	%100
50	M46	Z	0	0	0	%100
51	M47	X	2.003	2.003	0	%100
52	M47	Z	0	0	0	%100
53	M43	X	3.285	3.285	0	%100
54	M43	Z	0	0	0	%100
55	M44A	X	3.012	3.012	0	%100
56	M44A	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	M1	X	.862	.862	0	%100
2	M1	Z	.498	.498	0	%100
3	M2	X	.862	.862	0	%100
4	M2	Z	.498	.498	0	%100
5	M13	X	.989	.989	0	%100
6	M13	Z	.571	.571	0	%100
7	M14	X	.989	.989	0	%100
8	M14	Z	.571	.571	0	%100
9	M15	X	.989	.989	0	%100
10	M15	Z	.571	.571	0	%100
11	M16	X	.989	.989	0	%100
12	M16	Z	.571	.571	0	%100
13	M17	X	2.071	2.071	0	%100
14	M17	Z	1.195	1.195	0	%100
15	M18	X	2.071	2.071	0	%100
16	M18	Z	1.195	1.195	0	%100
17	M19	X	.047	.047	0	%100
18	M19	Z	.027	.027	0	%100
19	M20	X	.047	.047	0	%100
20	M20	Z	.027	.027	0	%100
21	M21	X	.331	.331	0	%100
22	M21	Z	.191	.191	0	%100
23	M22	X	.331	.331	0	%100
24	M22	Z	.191	.191	0	%100
25	M23	X	.331	.331	0	%100
26	M23	Z	.191	.191	0	%100
27	M24	X	.331	.331	0	%100
28	M24	Z	.191	.191	0	%100
29	M25	X	1.841	1.841	0	%100
30	M25	Z	1.063	1.063	0	%100
31	M26	X	1.841	1.841	0	%100
32	M26	Z	1.063	1.063	0	%100
33	M27	X	1.254	1.254	0	%100
34	M27	Z	.724	.724	0	%100
35	M28	X	1.254	1.254	0	%100
36	M28	Z	.724	.724	0	%100
37	MP4A	X	3.119	3.119	0	%100
38	MP4A	Z	1.801	1.801	0	%100
39	MP3A	X	3.119	3.119	0	%100
40	MP3A	Z	1.801	1.801	0	%100
41	MP2A	X	3.448	3.448	0	%100
42	MP2A	Z	1.991	1.991	0	%100
43	MP1A	X	3.119	3.119	0	%100
44	MP1A	Z	1.801	1.801	0	%100
45	M44	X	1.734	1.734	0	%100
46	M44	Z	1.001	1.001	0	%100
47	M45	X	1.734	1.734	0	%100
48	M45	Z	1.001	1.001	0	%100
49	M46	X	1.734	1.734	0	%100
50	M46	Z	1.001	1.001	0	%100
51	M47	X	1.734	1.734	0	%100
52	M47	Z	1.001	1.001	0	%100
53	M43	X	1.438	1.438	0	%100
54	M43	Z	.83	.83	0	%100
55	M44A	X	1.086	1.086	0	%100
56	M44A	Z	.627	.627	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	1.493	1.493	0	%100
2	M1	Z	2.586	2.586	0	%100
3	M2	X	1.493	1.493	0	%100
4	M2	Z	2.586	2.586	0	%100
5	M13	X	.19	.19	0	%100
6	M13	Z	.33	.33	0	%100
7	M14	X	.19	.19	0	%100
8	M14	Z	.33	.33	0	%100
9	M15	X	.19	.19	0	%100
10	M15	Z	.33	.33	0	%100
11	M16	X	.19	.19	0	%100
12	M16	Z	.33	.33	0	%100
13	M17	X	1.362	1.362	0	%100
14	M17	Z	2.359	2.359	0	%100
15	M18	X	1.362	1.362	0	%100
16	M18	Z	2.359	2.359	0	%100
17	M19	X	.194	.194	0	%100
18	M19	Z	.336	.336	0	%100
19	M20	X	.194	.194	0	%100
20	M20	Z	.336	.336	0	%100
21	M21	X	.573	.573	0	%100
22	M21	Z	.993	.993	0	%100
23	M22	X	.573	.573	0	%100
24	M22	Z	.993	.993	0	%100
25	M23	X	.573	.573	0	%100
26	M23	Z	.993	.993	0	%100
27	M24	X	.573	.573	0	%100
28	M24	Z	.993	.993	0	%100
29	M25	X	1.111	1.111	0	%100
30	M25	Z	1.925	1.925	0	%100
31	M26	X	1.111	1.111	0	%100
32	M26	Z	1.925	1.925	0	%100
33	M27	X	.772	.772	0	%100
34	M27	Z	1.338	1.338	0	%100
35	M28	X	.772	.772	0	%100
36	M28	Z	1.338	1.338	0	%100
37	MP4A	X	1.801	1.801	0	%100
38	MP4A	Z	3.119	3.119	0	%100
39	MP3A	X	1.801	1.801	0	%100
40	MP3A	Z	3.119	3.119	0	%100
41	MP2A	X	1.991	1.991	0	%100
42	MP2A	Z	3.448	3.448	0	%100
43	MP1A	X	1.801	1.801	0	%100
44	MP1A	Z	3.119	3.119	0	%100
45	M44	X	1.001	1.001	0	%100
46	M44	Z	1.734	1.734	0	%100
47	M45	X	1.001	1.001	0	%100
48	M45	Z	1.734	1.734	0	%100
49	M46	X	1.001	1.001	0	%100
50	M46	Z	1.734	1.734	0	%100
51	M47	X	1.001	1.001	0	%100
52	M47	Z	1.734	1.734	0	%100
53	M43	X	.089	.089	0	%100
54	M43	Z	.154	.154	0	%100
55	M44A	X	.021	.021	0	%100
56	M44A	Z	.036	.036	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	M1	X	0	0	0	%100
2	M1	Z	3.981	3.981	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	3.981	3.981	0	%100
5	M13	X	0	0	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	0	0	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	0	0	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	0	0	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	0	0	0	%100
14	M17	Z	1.722	1.722	0	%100
15	M18	X	0	0	0	%100
16	M18	Z	1.722	1.722	0	%100
17	M19	X	0	0	0	%100
18	M19	Z	1.722	1.722	0	%100
19	M20	X	0	0	0	%100
20	M20	Z	1.722	1.722	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	1.529	1.529	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	1.529	1.529	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	1.529	1.529	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	1.529	1.529	0	%100
29	M25	X	0	0	0	%100
30	M25	Z	1.932	1.932	0	%100
31	M26	X	0	0	0	%100
32	M26	Z	1.932	1.932	0	%100
33	M27	X	0	0	0	%100
34	M27	Z	1.932	1.932	0	%100
35	M28	X	0	0	0	%100
36	M28	Z	1.932	1.932	0	%100
37	MP4A	X	0	0	0	%100
38	MP4A	Z	3.601	3.601	0	%100
39	MP3A	X	0	0	0	%100
40	MP3A	Z	3.601	3.601	0	%100
41	MP2A	X	0	0	0	%100
42	MP2A	Z	3.981	3.981	0	%100
43	MP1A	X	0	0	0	%100
44	MP1A	Z	3.601	3.601	0	%100
45	M44	X	0	0	0	%100
46	M44	Z	2.003	2.003	0	%100
47	M45	X	0	0	0	%100
48	M45	Z	2.003	2.003	0	%100
49	M46	X	0	0	0	%100
50	M46	Z	2.003	2.003	0	%100
51	M47	X	0	0	0	%100
52	M47	Z	2.003	2.003	0	%100
53	M43	X	0	0	0	%100
54	M43	Z	.318	.318	0	%100
55	M44A	X	0	0	0	%100
56	M44A	Z	.59	.59	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	M1	X	-1.493	-1.493	0	%100
2	M1	Z	2.586	2.586	0	%100
3	M2	X	-1.493	-1.493	0	%100
4	M2	Z	2.586	2.586	0	%100
5	M13	X	-.19	-.19	0	%100
6	M13	Z	.33	.33	0	%100
7	M14	X	-.19	-.19	0	%100
8	M14	Z	.33	.33	0	%100
9	M15	X	-.19	-.19	0	%100
10	M15	Z	.33	.33	0	%100
11	M16	X	-.19	-.19	0	%100
12	M16	Z	.33	.33	0	%100
13	M17	X	-.194	-.194	0	%100
14	M17	Z	.336	.336	0	%100
15	M18	X	-.194	-.194	0	%100
16	M18	Z	.336	.336	0	%100
17	M19	X	-1.362	-1.362	0	%100
18	M19	Z	2.359	2.359	0	%100
19	M20	X	-1.362	-1.362	0	%100
20	M20	Z	2.359	2.359	0	%100
21	M21	X	-.573	-.573	0	%100
22	M21	Z	.993	.993	0	%100
23	M22	X	-.573	-.573	0	%100
24	M22	Z	.993	.993	0	%100
25	M23	X	-.573	-.573	0	%100
26	M23	Z	.993	.993	0	%100
27	M24	X	-.573	-.573	0	%100
28	M24	Z	.993	.993	0	%100
29	M25	X	-.772	-.772	0	%100
30	M25	Z	1.338	1.338	0	%100
31	M26	X	-.772	-.772	0	%100
32	M26	Z	1.338	1.338	0	%100
33	M27	X	-1.111	-1.111	0	%100
34	M27	Z	1.925	1.925	0	%100
35	M28	X	-1.111	-1.111	0	%100
36	M28	Z	1.925	1.925	0	%100
37	MP4A	X	-1.801	-1.801	0	%100
38	MP4A	Z	3.119	3.119	0	%100
39	MP3A	X	-1.801	-1.801	0	%100
40	MP3A	Z	3.119	3.119	0	%100
41	MP2A	X	-1.991	-1.991	0	%100
42	MP2A	Z	3.448	3.448	0	%100
43	MP1A	X	-1.801	-1.801	0	%100
44	MP1A	Z	3.119	3.119	0	%100
45	M44	X	-1.001	-1.001	0	%100
46	M44	Z	1.734	1.734	0	%100
47	M45	X	-1.001	-1.001	0	%100
48	M45	Z	1.734	1.734	0	%100
49	M46	X	-1.001	-1.001	0	%100
50	M46	Z	1.734	1.734	0	%100
51	M47	X	-1.001	-1.001	0	%100
52	M47	Z	1.734	1.734	0	%100
53	M43	X	-.971	-.971	0	%100
54	M43	Z	1.682	1.682	0	%100
55	M44A	X	-1.174	-1.174	0	%100
56	M44A	Z	2.034	2.034	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	M1	X	-.862	-.862	0	%100
2	M1	Z	.498	.498	0	%100
3	M2	X	-.862	-.862	0	%100
4	M2	Z	.498	.498	0	%100
5	M13	X	-.989	-.989	0	%100
6	M13	Z	.571	.571	0	%100
7	M14	X	-.989	-.989	0	%100
8	M14	Z	.571	.571	0	%100
9	M15	X	-.989	-.989	0	%100
10	M15	Z	.571	.571	0	%100
11	M16	X	-.989	-.989	0	%100
12	M16	Z	.571	.571	0	%100
13	M17	X	-.047	-.047	0	%100
14	M17	Z	.027	.027	0	%100
15	M18	X	-.047	-.047	0	%100
16	M18	Z	.027	.027	0	%100
17	M19	X	-2.071	-2.071	0	%100
18	M19	Z	1.195	1.195	0	%100
19	M20	X	-2.071	-2.071	0	%100
20	M20	Z	1.195	1.195	0	%100
21	M21	X	-.331	-.331	0	%100
22	M21	Z	.191	.191	0	%100
23	M22	X	-.331	-.331	0	%100
24	M22	Z	.191	.191	0	%100
25	M23	X	-.331	-.331	0	%100
26	M23	Z	.191	.191	0	%100
27	M24	X	-.331	-.331	0	%100
28	M24	Z	.191	.191	0	%100
29	M25	X	-1.254	-1.254	0	%100
30	M25	Z	.724	.724	0	%100
31	M26	X	-1.254	-1.254	0	%100
32	M26	Z	.724	.724	0	%100
33	M27	X	-1.841	-1.841	0	%100
34	M27	Z	1.063	1.063	0	%100
35	M28	X	-1.841	-1.841	0	%100
36	M28	Z	1.063	1.063	0	%100
37	MP4A	X	-3.119	-3.119	0	%100
38	MP4A	Z	1.801	1.801	0	%100
39	MP3A	X	-3.119	-3.119	0	%100
40	MP3A	Z	1.801	1.801	0	%100
41	MP2A	X	-3.448	-3.448	0	%100
42	MP2A	Z	1.991	1.991	0	%100
43	MP1A	X	-3.119	-3.119	0	%100
44	MP1A	Z	1.801	1.801	0	%100
45	M44	X	-1.734	-1.734	0	%100
46	M44	Z	1.001	1.001	0	%100
47	M45	X	-1.734	-1.734	0	%100
48	M45	Z	1.001	1.001	0	%100
49	M46	X	-1.734	-1.734	0	%100
50	M46	Z	1.001	1.001	0	%100
51	M47	X	-1.734	-1.734	0	%100
52	M47	Z	1.001	1.001	0	%100
53	M43	X	-2.967	-2.967	0	%100
54	M43	Z	1.713	1.713	0	%100
55	M44A	X	-3.083	-3.083	0	%100
56	M44A	Z	1.78	1.78	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	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M13	X	-1.523	-1.523	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	-1.523	-1.523	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	-1.523	-1.523	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	-1.523	-1.523	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	-1.056	-1.056	0	%100
14	M17	Z	0	0	0	%100
15	M18	X	-1.056	-1.056	0	%100
16	M18	Z	0	0	0	%100
17	M19	X	-1.056	-1.056	0	%100
18	M19	Z	0	0	0	%100
19	M20	X	-1.056	-1.056	0	%100
20	M20	Z	0	0	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	0	0	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	0	0	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	0	0	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	0	0	0	%100
29	M25	X	-1.739	-1.739	0	%100
30	M25	Z	0	0	0	%100
31	M26	X	-1.739	-1.739	0	%100
32	M26	Z	0	0	0	%100
33	M27	X	-1.739	-1.739	0	%100
34	M27	Z	0	0	0	%100
35	M28	X	-1.739	-1.739	0	%100
36	M28	Z	0	0	0	%100
37	MP4A	X	-3.601	-3.601	0	%100
38	MP4A	Z	0	0	0	%100
39	MP3A	X	-3.601	-3.601	0	%100
40	MP3A	Z	0	0	0	%100
41	MP2A	X	-3.981	-3.981	0	%100
42	MP2A	Z	0	0	0	%100
43	MP1A	X	-3.601	-3.601	0	%100
44	MP1A	Z	0	0	0	%100
45	M44	X	-2.003	-2.003	0	%100
46	M44	Z	0	0	0	%100
47	M45	X	-2.003	-2.003	0	%100
48	M45	Z	0	0	0	%100
49	M46	X	-2.003	-2.003	0	%100
50	M46	Z	0	0	0	%100
51	M47	X	-2.003	-2.003	0	%100
52	M47	Z	0	0	0	%100
53	M43	X	-3.285	-3.285	0	%100
54	M43	Z	0	0	0	%100
55	M44A	X	-3.012	-3.012	0	%100
56	M44A	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	M1	X	-.862	-.862	0	%100
2	M1	Z	-.498	-.498	0	%100
3	M2	X	-.862	-.862	0	%100
4	M2	Z	-.498	-.498	0	%100
5	M13	X	-.989	-.989	0	%100
6	M13	Z	-.571	-.571	0	%100
7	M14	X	-.989	-.989	0	%100
8	M14	Z	-.571	-.571	0	%100
9	M15	X	-.989	-.989	0	%100
10	M15	Z	-.571	-.571	0	%100
11	M16	X	-.989	-.989	0	%100
12	M16	Z	-.571	-.571	0	%100
13	M17	X	-2.071	-2.071	0	%100
14	M17	Z	-1.195	-1.195	0	%100
15	M18	X	-2.071	-2.071	0	%100
16	M18	Z	-1.195	-1.195	0	%100
17	M19	X	-.047	-.047	0	%100
18	M19	Z	-.027	-.027	0	%100
19	M20	X	-.047	-.047	0	%100
20	M20	Z	-.027	-.027	0	%100
21	M21	X	-.331	-.331	0	%100
22	M21	Z	-.191	-.191	0	%100
23	M22	X	-.331	-.331	0	%100
24	M22	Z	-.191	-.191	0	%100
25	M23	X	-.331	-.331	0	%100
26	M23	Z	-.191	-.191	0	%100
27	M24	X	-.331	-.331	0	%100
28	M24	Z	-.191	-.191	0	%100
29	M25	X	-1.841	-1.841	0	%100
30	M25	Z	-1.063	-1.063	0	%100
31	M26	X	-1.841	-1.841	0	%100
32	M26	Z	-1.063	-1.063	0	%100
33	M27	X	-1.254	-1.254	0	%100
34	M27	Z	-.724	-.724	0	%100
35	M28	X	-1.254	-1.254	0	%100
36	M28	Z	-.724	-.724	0	%100
37	MP4A	X	-3.119	-3.119	0	%100
38	MP4A	Z	-1.801	-1.801	0	%100
39	MP3A	X	-3.119	-3.119	0	%100
40	MP3A	Z	-1.801	-1.801	0	%100
41	MP2A	X	-3.448	-3.448	0	%100
42	MP2A	Z	-1.991	-1.991	0	%100
43	MP1A	X	-3.119	-3.119	0	%100
44	MP1A	Z	-1.801	-1.801	0	%100
45	M44	X	-1.734	-1.734	0	%100
46	M44	Z	-1.001	-1.001	0	%100
47	M45	X	-1.734	-1.734	0	%100
48	M45	Z	-1.001	-1.001	0	%100
49	M46	X	-1.734	-1.734	0	%100
50	M46	Z	-1.001	-1.001	0	%100
51	M47	X	-1.734	-1.734	0	%100
52	M47	Z	-1.001	-1.001	0	%100
53	M43	X	-1.438	-1.438	0	%100
54	M43	Z	-.83	-.83	0	%100
55	M44A	X	-1.086	-1.086	0	%100
56	M44A	Z	-.627	-.627	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	M1	X	-1.493	-1.493	0	%100
2	M1	Z	-2.586	-2.586	0	%100
3	M2	X	-1.493	-1.493	0	%100
4	M2	Z	-2.586	-2.586	0	%100
5	M13	X	-.19	-.19	0	%100
6	M13	Z	-.33	-.33	0	%100
7	M14	X	-.19	-.19	0	%100
8	M14	Z	-.33	-.33	0	%100
9	M15	X	-.19	-.19	0	%100
10	M15	Z	-.33	-.33	0	%100
11	M16	X	-.19	-.19	0	%100
12	M16	Z	-.33	-.33	0	%100
13	M17	X	-1.362	-1.362	0	%100
14	M17	Z	-2.359	-2.359	0	%100
15	M18	X	-1.362	-1.362	0	%100
16	M18	Z	-2.359	-2.359	0	%100
17	M19	X	-.194	-.194	0	%100
18	M19	Z	-.336	-.336	0	%100
19	M20	X	-.194	-.194	0	%100
20	M20	Z	-.336	-.336	0	%100
21	M21	X	-.573	-.573	0	%100
22	M21	Z	-.993	-.993	0	%100
23	M22	X	-.573	-.573	0	%100
24	M22	Z	-.993	-.993	0	%100
25	M23	X	-.573	-.573	0	%100
26	M23	Z	-.993	-.993	0	%100
27	M24	X	-.573	-.573	0	%100
28	M24	Z	-.993	-.993	0	%100
29	M25	X	-1.111	-1.111	0	%100
30	M25	Z	-1.925	-1.925	0	%100
31	M26	X	-1.111	-1.111	0	%100
32	M26	Z	-1.925	-1.925	0	%100
33	M27	X	-.772	-.772	0	%100
34	M27	Z	-1.338	-1.338	0	%100
35	M28	X	-.772	-.772	0	%100
36	M28	Z	-1.338	-1.338	0	%100
37	MP4A	X	-1.801	-1.801	0	%100
38	MP4A	Z	-3.119	-3.119	0	%100
39	MP3A	X	-1.801	-1.801	0	%100
40	MP3A	Z	-3.119	-3.119	0	%100
41	MP2A	X	-1.991	-1.991	0	%100
42	MP2A	Z	-3.448	-3.448	0	%100
43	MP1A	X	-1.801	-1.801	0	%100
44	MP1A	Z	-3.119	-3.119	0	%100
45	M44	X	-1.001	-1.001	0	%100
46	M44	Z	-1.734	-1.734	0	%100
47	M45	X	-1.001	-1.001	0	%100
48	M45	Z	-1.734	-1.734	0	%100
49	M46	X	-1.001	-1.001	0	%100
50	M46	Z	-1.734	-1.734	0	%100
51	M47	X	-1.001	-1.001	0	%100
52	M47	Z	-1.734	-1.734	0	%100
53	M43	X	-.089	-.089	0	%100
54	M43	Z	-.154	-.154	0	%100
55	M44A	X	-.021	-.021	0	%100
56	M44A	Z	-.036	-.036	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	M1	X	0	0	0	%100
2	M1	Z	-.787	-.787	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-.787	-.787	0	%100
5	M13	X	0	0	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	0	0	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	0	0	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	0	0	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	0	0	0	%100
14	M17	Z	-.311	-.311	0	%100
15	M18	X	0	0	0	%100
16	M18	Z	-.311	-.311	0	%100
17	M19	X	0	0	0	%100
18	M19	Z	-.311	-.311	0	%100
19	M20	X	0	0	0	%100
20	M20	Z	-.311	-.311	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	-.171	-.171	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	-.171	-.171	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	-.171	-.171	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	-.171	-.171	0	%100
29	M25	X	0	0	0	%100
30	M25	Z	-.177	-.177	0	%100
31	M26	X	0	0	0	%100
32	M26	Z	-.177	-.177	0	%100
33	M27	X	0	0	0	%100
34	M27	Z	-.177	-.177	0	%100
35	M28	X	0	0	0	%100
36	M28	Z	-.177	-.177	0	%100
37	MP4A	X	0	0	0	%100
38	MP4A	Z	-.65	-.65	0	%100
39	MP3A	X	0	0	0	%100
40	MP3A	Z	-.65	-.65	0	%100
41	MP2A	X	0	0	0	%100
42	MP2A	Z	-.787	-.787	0	%100
43	MP1A	X	0	0	0	%100
44	MP1A	Z	-.65	-.65	0	%100
45	M44	X	0	0	0	%100
46	M44	Z	-.171	-.171	0	%100
47	M45	X	0	0	0	%100
48	M45	Z	-.171	-.171	0	%100
49	M46	X	0	0	0	%100
50	M46	Z	-.171	-.171	0	%100
51	M47	X	0	0	0	%100
52	M47	Z	-.171	-.171	0	%100
53	M43	X	0	0	0	%100
54	M43	Z	-.057	-.057	0	%100
55	M44A	X	0	0	0	%100
56	M44A	Z	-.106	-.106	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	M1	X	.295	.295	0	%100
2	M1	Z	-.511	-.511	0	%100
3	M2	X	.295	.295	0	%100
4	M2	Z	-.511	-.511	0	%100
5	M13	X	.021	.021	0	%100
6	M13	Z	-.037	-.037	0	%100
7	M14	X	.021	.021	0	%100
8	M14	Z	-.037	-.037	0	%100
9	M15	X	.021	.021	0	%100
10	M15	Z	-.037	-.037	0	%100
11	M16	X	.021	.021	0	%100
12	M16	Z	-.037	-.037	0	%100
13	M17	X	.035	.035	0	%100
14	M17	Z	-.061	-.061	0	%100
15	M18	X	.035	.035	0	%100
16	M18	Z	-.061	-.061	0	%100
17	M19	X	.246	.246	0	%100
18	M19	Z	-.425	-.425	0	%100
19	M20	X	.246	.246	0	%100
20	M20	Z	-.425	-.425	0	%100
21	M21	X	.064	.064	0	%100
22	M21	Z	-.111	-.111	0	%100
23	M22	X	.064	.064	0	%100
24	M22	Z	-.111	-.111	0	%100
25	M23	X	.064	.064	0	%100
26	M23	Z	-.111	-.111	0	%100
27	M24	X	.064	.064	0	%100
28	M24	Z	-.111	-.111	0	%100
29	M25	X	.071	.071	0	%100
30	M25	Z	-.123	-.123	0	%100
31	M26	X	.071	.071	0	%100
32	M26	Z	-.123	-.123	0	%100
33	M27	X	.102	.102	0	%100
34	M27	Z	-.176	-.176	0	%100
35	M28	X	.102	.102	0	%100
36	M28	Z	-.176	-.176	0	%100
37	MP4A	X	.325	.325	0	%100
38	MP4A	Z	-.563	-.563	0	%100
39	MP3A	X	.325	.325	0	%100
40	MP3A	Z	-.563	-.563	0	%100
41	MP2A	X	.393	.393	0	%100
42	MP2A	Z	-.681	-.681	0	%100
43	MP1A	X	.325	.325	0	%100
44	MP1A	Z	-.563	-.563	0	%100
45	M44	X	.086	.086	0	%100
46	M44	Z	-.148	-.148	0	%100
47	M45	X	.086	.086	0	%100
48	M45	Z	-.148	-.148	0	%100
49	M46	X	.086	.086	0	%100
50	M46	Z	-.148	-.148	0	%100
51	M47	X	.086	.086	0	%100
52	M47	Z	-.148	-.148	0	%100
53	M43	X	.175	.175	0	%100
54	M43	Z	-.304	-.304	0	%100
55	M44A	X	.212	.212	0	%100
56	M44A	Z	-.367	-.367	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	M1	X	.17	.17	0	%100
2	M1	Z	-.098	-.098	0	%100
3	M2	X	.17	.17	0	%100
4	M2	Z	-.098	-.098	0	%100
5	M13	X	.111	.111	0	%100
6	M13	Z	-.064	-.064	0	%100
7	M14	X	.111	.111	0	%100
8	M14	Z	-.064	-.064	0	%100
9	M15	X	.111	.111	0	%100
10	M15	Z	-.064	-.064	0	%100
11	M16	X	.111	.111	0	%100
12	M16	Z	-.064	-.064	0	%100
13	M17	X	.009	.009	0	%100
14	M17	Z	-.005	-.005	0	%100
15	M18	X	.009	.009	0	%100
16	M18	Z	-.005	-.005	0	%100
17	M19	X	.373	.373	0	%100
18	M19	Z	-.216	-.216	0	%100
19	M20	X	.373	.373	0	%100
20	M20	Z	-.216	-.216	0	%100
21	M21	X	.037	.037	0	%100
22	M21	Z	-.021	-.021	0	%100
23	M22	X	.037	.037	0	%100
24	M22	Z	-.021	-.021	0	%100
25	M23	X	.037	.037	0	%100
26	M23	Z	-.021	-.021	0	%100
27	M24	X	.037	.037	0	%100
28	M24	Z	-.021	-.021	0	%100
29	M25	X	.115	.115	0	%100
30	M25	Z	-.066	-.066	0	%100
31	M26	X	.115	.115	0	%100
32	M26	Z	-.066	-.066	0	%100
33	M27	X	.169	.169	0	%100
34	M27	Z	-.097	-.097	0	%100
35	M28	X	.169	.169	0	%100
36	M28	Z	-.097	-.097	0	%100
37	MP4A	X	.563	.563	0	%100
38	MP4A	Z	-.325	-.325	0	%100
39	MP3A	X	.563	.563	0	%100
40	MP3A	Z	-.325	-.325	0	%100
41	MP2A	X	.681	.681	0	%100
42	MP2A	Z	-.393	-.393	0	%100
43	MP1A	X	.563	.563	0	%100
44	MP1A	Z	-.325	-.325	0	%100
45	M44	X	.148	.148	0	%100
46	M44	Z	-.086	-.086	0	%100
47	M45	X	.148	.148	0	%100
48	M45	Z	-.086	-.086	0	%100
49	M46	X	.148	.148	0	%100
50	M46	Z	-.086	-.086	0	%100
51	M47	X	.148	.148	0	%100
52	M47	Z	-.086	-.086	0	%100
53	M43	X	.535	.535	0	%100
54	M43	Z	-.309	-.309	0	%100
55	M44A	X	.556	.556	0	%100
56	M44A	Z	-.321	-.321	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	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M13	X	.171	.171	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	.171	.171	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	.171	.171	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	.171	.171	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	.19	.19	0	%100
14	M17	Z	0	0	0	%100
15	M18	X	.19	.19	0	%100
16	M18	Z	0	0	0	%100
17	M19	X	.19	.19	0	%100
18	M19	Z	0	0	0	%100
19	M20	X	.19	.19	0	%100
20	M20	Z	0	0	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	0	0	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	0	0	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	0	0	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	0	0	0	%100
29	M25	X	.159	.159	0	%100
30	M25	Z	0	0	0	%100
31	M26	X	.159	.159	0	%100
32	M26	Z	0	0	0	%100
33	M27	X	.159	.159	0	%100
34	M27	Z	0	0	0	%100
35	M28	X	.159	.159	0	%100
36	M28	Z	0	0	0	%100
37	MP4A	X	.65	.65	0	%100
38	MP4A	Z	0	0	0	%100
39	MP3A	X	.65	.65	0	%100
40	MP3A	Z	0	0	0	%100
41	MP2A	X	.787	.787	0	%100
42	MP2A	Z	0	0	0	%100
43	MP1A	X	.65	.65	0	%100
44	MP1A	Z	0	0	0	%100
45	M44	X	.171	.171	0	%100
46	M44	Z	0	0	0	%100
47	M45	X	.171	.171	0	%100
48	M45	Z	0	0	0	%100
49	M46	X	.171	.171	0	%100
50	M46	Z	0	0	0	%100
51	M47	X	.171	.171	0	%100
52	M47	Z	0	0	0	%100
53	M43	X	.593	.593	0	%100
54	M43	Z	0	0	0	%100
55	M44A	X	.544	.544	0	%100
56	M44A	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	M1	X	.17	.17	0	%100
2	M1	Z	.098	.098	0	%100
3	M2	X	.17	.17	0	%100
4	M2	Z	.098	.098	0	%100
5	M13	X	.111	.111	0	%100
6	M13	Z	.064	.064	0	%100
7	M14	X	.111	.111	0	%100
8	M14	Z	.064	.064	0	%100
9	M15	X	.111	.111	0	%100
10	M15	Z	.064	.064	0	%100
11	M16	X	.111	.111	0	%100
12	M16	Z	.064	.064	0	%100
13	M17	X	.373	.373	0	%100
14	M17	Z	.216	.216	0	%100
15	M18	X	.373	.373	0	%100
16	M18	Z	.216	.216	0	%100
17	M19	X	.009	.009	0	%100
18	M19	Z	.005	.005	0	%100
19	M20	X	.009	.009	0	%100
20	M20	Z	.005	.005	0	%100
21	M21	X	.037	.037	0	%100
22	M21	Z	.021	.021	0	%100
23	M22	X	.037	.037	0	%100
24	M22	Z	.021	.021	0	%100
25	M23	X	.037	.037	0	%100
26	M23	Z	.021	.021	0	%100
27	M24	X	.037	.037	0	%100
28	M24	Z	.021	.021	0	%100
29	M25	X	.169	.169	0	%100
30	M25	Z	.097	.097	0	%100
31	M26	X	.169	.169	0	%100
32	M26	Z	.097	.097	0	%100
33	M27	X	.115	.115	0	%100
34	M27	Z	.066	.066	0	%100
35	M28	X	.115	.115	0	%100
36	M28	Z	.066	.066	0	%100
37	MP4A	X	.563	.563	0	%100
38	MP4A	Z	.325	.325	0	%100
39	MP3A	X	.563	.563	0	%100
40	MP3A	Z	.325	.325	0	%100
41	MP2A	X	.681	.681	0	%100
42	MP2A	Z	.393	.393	0	%100
43	MP1A	X	.563	.563	0	%100
44	MP1A	Z	.325	.325	0	%100
45	M44	X	.148	.148	0	%100
46	M44	Z	.086	.086	0	%100
47	M45	X	.148	.148	0	%100
48	M45	Z	.086	.086	0	%100
49	M46	X	.148	.148	0	%100
50	M46	Z	.086	.086	0	%100
51	M47	X	.148	.148	0	%100
52	M47	Z	.086	.086	0	%100
53	M43	X	.26	.26	0	%100
54	M43	Z	.15	.15	0	%100
55	M44A	X	.196	.196	0	%100
56	M44A	Z	.113	.113	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	M1	X	.295	.295	0	%100
2	M1	Z	.511	.511	0	%100
3	M2	X	.295	.295	0	%100
4	M2	Z	.511	.511	0	%100
5	M13	X	.021	.021	0	%100
6	M13	Z	.037	.037	0	%100
7	M14	X	.021	.021	0	%100
8	M14	Z	.037	.037	0	%100
9	M15	X	.021	.021	0	%100
10	M15	Z	.037	.037	0	%100
11	M16	X	.021	.021	0	%100
12	M16	Z	.037	.037	0	%100
13	M17	X	.246	.246	0	%100
14	M17	Z	.425	.425	0	%100
15	M18	X	.246	.246	0	%100
16	M18	Z	.425	.425	0	%100
17	M19	X	.035	.035	0	%100
18	M19	Z	.061	.061	0	%100
19	M20	X	.035	.035	0	%100
20	M20	Z	.061	.061	0	%100
21	M21	X	.064	.064	0	%100
22	M21	Z	.111	.111	0	%100
23	M22	X	.064	.064	0	%100
24	M22	Z	.111	.111	0	%100
25	M23	X	.064	.064	0	%100
26	M23	Z	.111	.111	0	%100
27	M24	X	.064	.064	0	%100
28	M24	Z	.111	.111	0	%100
29	M25	X	.102	.102	0	%100
30	M25	Z	.176	.176	0	%100
31	M26	X	.102	.102	0	%100
32	M26	Z	.176	.176	0	%100
33	M27	X	.071	.071	0	%100
34	M27	Z	.123	.123	0	%100
35	M28	X	.071	.071	0	%100
36	M28	Z	.123	.123	0	%100
37	MP4A	X	.325	.325	0	%100
38	MP4A	Z	.563	.563	0	%100
39	MP3A	X	.325	.325	0	%100
40	MP3A	Z	.563	.563	0	%100
41	MP2A	X	.393	.393	0	%100
42	MP2A	Z	.681	.681	0	%100
43	MP1A	X	.325	.325	0	%100
44	MP1A	Z	.563	.563	0	%100
45	M44	X	.086	.086	0	%100
46	M44	Z	.148	.148	0	%100
47	M45	X	.086	.086	0	%100
48	M45	Z	.148	.148	0	%100
49	M46	X	.086	.086	0	%100
50	M46	Z	.148	.148	0	%100
51	M47	X	.086	.086	0	%100
52	M47	Z	.148	.148	0	%100
53	M43	X	.016	.016	0	%100
54	M43	Z	.028	.028	0	%100
55	M44A	X	.004	.004	0	%100
56	M44A	Z	.007	.007	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	M1	X	0	0	0	%100
2	M1	Z	.787	.787	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	.787	.787	0	%100
5	M13	X	0	0	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	0	0	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	0	0	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	0	0	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	0	0	0	%100
14	M17	Z	.311	.311	0	%100
15	M18	X	0	0	0	%100
16	M18	Z	.311	.311	0	%100
17	M19	X	0	0	0	%100
18	M19	Z	.311	.311	0	%100
19	M20	X	0	0	0	%100
20	M20	Z	.311	.311	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	.171	.171	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	.171	.171	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	.171	.171	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	.171	.171	0	%100
29	M25	X	0	0	0	%100
30	M25	Z	.177	.177	0	%100
31	M26	X	0	0	0	%100
32	M26	Z	.177	.177	0	%100
33	M27	X	0	0	0	%100
34	M27	Z	.177	.177	0	%100
35	M28	X	0	0	0	%100
36	M28	Z	.177	.177	0	%100
37	MP4A	X	0	0	0	%100
38	MP4A	Z	.65	.65	0	%100
39	MP3A	X	0	0	0	%100
40	MP3A	Z	.65	.65	0	%100
41	MP2A	X	0	0	0	%100
42	MP2A	Z	.787	.787	0	%100
43	MP1A	X	0	0	0	%100
44	MP1A	Z	.65	.65	0	%100
45	M44	X	0	0	0	%100
46	M44	Z	.171	.171	0	%100
47	M45	X	0	0	0	%100
48	M45	Z	.171	.171	0	%100
49	M46	X	0	0	0	%100
50	M46	Z	.171	.171	0	%100
51	M47	X	0	0	0	%100
52	M47	Z	.171	.171	0	%100
53	M43	X	0	0	0	%100
54	M43	Z	.057	.057	0	%100
55	M44A	X	0	0	0	%100
56	M44A	Z	.106	.106	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	M1	X	-.295	-.295	0	%100
2	M1	Z	.511	.511	0	%100
3	M2	X	-.295	-.295	0	%100
4	M2	Z	.511	.511	0	%100
5	M13	X	-.021	-.021	0	%100
6	M13	Z	.037	.037	0	%100
7	M14	X	-.021	-.021	0	%100
8	M14	Z	.037	.037	0	%100
9	M15	X	-.021	-.021	0	%100
10	M15	Z	.037	.037	0	%100
11	M16	X	-.021	-.021	0	%100
12	M16	Z	.037	.037	0	%100
13	M17	X	-.035	-.035	0	%100
14	M17	Z	.061	.061	0	%100
15	M18	X	-.035	-.035	0	%100
16	M18	Z	.061	.061	0	%100
17	M19	X	-.246	-.246	0	%100
18	M19	Z	.425	.425	0	%100
19	M20	X	-.246	-.246	0	%100
20	M20	Z	.425	.425	0	%100
21	M21	X	-.064	-.064	0	%100
22	M21	Z	.111	.111	0	%100
23	M22	X	-.064	-.064	0	%100
24	M22	Z	.111	.111	0	%100
25	M23	X	-.064	-.064	0	%100
26	M23	Z	.111	.111	0	%100
27	M24	X	-.064	-.064	0	%100
28	M24	Z	.111	.111	0	%100
29	M25	X	-.071	-.071	0	%100
30	M25	Z	.123	.123	0	%100
31	M26	X	-.071	-.071	0	%100
32	M26	Z	.123	.123	0	%100
33	M27	X	-.102	-.102	0	%100
34	M27	Z	.176	.176	0	%100
35	M28	X	-.102	-.102	0	%100
36	M28	Z	.176	.176	0	%100
37	MP4A	X	-.325	-.325	0	%100
38	MP4A	Z	.563	.563	0	%100
39	MP3A	X	-.325	-.325	0	%100
40	MP3A	Z	.563	.563	0	%100
41	MP2A	X	-.393	-.393	0	%100
42	MP2A	Z	.681	.681	0	%100
43	MP1A	X	-.325	-.325	0	%100
44	MP1A	Z	.563	.563	0	%100
45	M44	X	-.086	-.086	0	%100
46	M44	Z	.148	.148	0	%100
47	M45	X	-.086	-.086	0	%100
48	M45	Z	.148	.148	0	%100
49	M46	X	-.086	-.086	0	%100
50	M46	Z	.148	.148	0	%100
51	M47	X	-.086	-.086	0	%100
52	M47	Z	.148	.148	0	%100
53	M43	X	-.175	-.175	0	%100
54	M43	Z	.304	.304	0	%100
55	M44A	X	-.212	-.212	0	%100
56	M44A	Z	.367	.367	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	M1	X	-.17	-.17	0	%100
2	M1	Z	.098	.098	0	%100
3	M2	X	-.17	-.17	0	%100
4	M2	Z	.098	.098	0	%100
5	M13	X	-.111	-.111	0	%100
6	M13	Z	.064	.064	0	%100
7	M14	X	-.111	-.111	0	%100
8	M14	Z	.064	.064	0	%100
9	M15	X	-.111	-.111	0	%100
10	M15	Z	.064	.064	0	%100
11	M16	X	-.111	-.111	0	%100
12	M16	Z	.064	.064	0	%100
13	M17	X	-.009	-.009	0	%100
14	M17	Z	.005	.005	0	%100
15	M18	X	-.009	-.009	0	%100
16	M18	Z	.005	.005	0	%100
17	M19	X	-.373	-.373	0	%100
18	M19	Z	.216	.216	0	%100
19	M20	X	-.373	-.373	0	%100
20	M20	Z	.216	.216	0	%100
21	M21	X	-.037	-.037	0	%100
22	M21	Z	.021	.021	0	%100
23	M22	X	-.037	-.037	0	%100
24	M22	Z	.021	.021	0	%100
25	M23	X	-.037	-.037	0	%100
26	M23	Z	.021	.021	0	%100
27	M24	X	-.037	-.037	0	%100
28	M24	Z	.021	.021	0	%100
29	M25	X	-.115	-.115	0	%100
30	M25	Z	.066	.066	0	%100
31	M26	X	-.115	-.115	0	%100
32	M26	Z	.066	.066	0	%100
33	M27	X	-.169	-.169	0	%100
34	M27	Z	.097	.097	0	%100
35	M28	X	-.169	-.169	0	%100
36	M28	Z	.097	.097	0	%100
37	MP4A	X	-.563	-.563	0	%100
38	MP4A	Z	.325	.325	0	%100
39	MP3A	X	-.563	-.563	0	%100
40	MP3A	Z	.325	.325	0	%100
41	MP2A	X	-.681	-.681	0	%100
42	MP2A	Z	.393	.393	0	%100
43	MP1A	X	-.563	-.563	0	%100
44	MP1A	Z	.325	.325	0	%100
45	M44	X	-.148	-.148	0	%100
46	M44	Z	.086	.086	0	%100
47	M45	X	-.148	-.148	0	%100
48	M45	Z	.086	.086	0	%100
49	M46	X	-.148	-.148	0	%100
50	M46	Z	.086	.086	0	%100
51	M47	X	-.148	-.148	0	%100
52	M47	Z	.086	.086	0	%100
53	M43	X	-.535	-.535	0	%100
54	M43	Z	.309	.309	0	%100
55	M44A	X	-.556	-.556	0	%100
56	M44A	Z	.321	.321	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	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M13	X	-.171	-.171	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	-.171	-.171	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	-.171	-.171	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	-.171	-.171	0	%100
12	M16	Z	0	0	0	%100
13	M17	X	-.19	-.19	0	%100
14	M17	Z	0	0	0	%100
15	M18	X	-.19	-.19	0	%100
16	M18	Z	0	0	0	%100
17	M19	X	-.19	-.19	0	%100
18	M19	Z	0	0	0	%100
19	M20	X	-.19	-.19	0	%100
20	M20	Z	0	0	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	0	0	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	0	0	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	0	0	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	0	0	0	%100
29	M25	X	-.159	-.159	0	%100
30	M25	Z	0	0	0	%100
31	M26	X	-.159	-.159	0	%100
32	M26	Z	0	0	0	%100
33	M27	X	-.159	-.159	0	%100
34	M27	Z	0	0	0	%100
35	M28	X	-.159	-.159	0	%100
36	M28	Z	0	0	0	%100
37	MP4A	X	-.65	-.65	0	%100
38	MP4A	Z	0	0	0	%100
39	MP3A	X	-.65	-.65	0	%100
40	MP3A	Z	0	0	0	%100
41	MP2A	X	-.787	-.787	0	%100
42	MP2A	Z	0	0	0	%100
43	MP1A	X	-.65	-.65	0	%100
44	MP1A	Z	0	0	0	%100
45	M44	X	-.171	-.171	0	%100
46	M44	Z	0	0	0	%100
47	M45	X	-.171	-.171	0	%100
48	M45	Z	0	0	0	%100
49	M46	X	-.171	-.171	0	%100
50	M46	Z	0	0	0	%100
51	M47	X	-.171	-.171	0	%100
52	M47	Z	0	0	0	%100
53	M43	X	-.593	-.593	0	%100
54	M43	Z	0	0	0	%100
55	M44A	X	-.544	-.544	0	%100
56	M44A	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	M1	X	-.17	-.17	0	%100
2	M1	Z	-.098	-.098	0	%100
3	M2	X	-.17	-.17	0	%100
4	M2	Z	-.098	-.098	0	%100
5	M13	X	-.111	-.111	0	%100
6	M13	Z	-.064	-.064	0	%100
7	M14	X	-.111	-.111	0	%100
8	M14	Z	-.064	-.064	0	%100
9	M15	X	-.111	-.111	0	%100
10	M15	Z	-.064	-.064	0	%100
11	M16	X	-.111	-.111	0	%100
12	M16	Z	-.064	-.064	0	%100
13	M17	X	-.373	-.373	0	%100
14	M17	Z	-.216	-.216	0	%100
15	M18	X	-.373	-.373	0	%100
16	M18	Z	-.216	-.216	0	%100
17	M19	X	-.009	-.009	0	%100
18	M19	Z	-.005	-.005	0	%100
19	M20	X	-.009	-.009	0	%100
20	M20	Z	-.005	-.005	0	%100
21	M21	X	-.037	-.037	0	%100
22	M21	Z	-.021	-.021	0	%100
23	M22	X	-.037	-.037	0	%100
24	M22	Z	-.021	-.021	0	%100
25	M23	X	-.037	-.037	0	%100
26	M23	Z	-.021	-.021	0	%100
27	M24	X	-.037	-.037	0	%100
28	M24	Z	-.021	-.021	0	%100
29	M25	X	-.169	-.169	0	%100
30	M25	Z	-.097	-.097	0	%100
31	M26	X	-.169	-.169	0	%100
32	M26	Z	-.097	-.097	0	%100
33	M27	X	-.115	-.115	0	%100
34	M27	Z	-.066	-.066	0	%100
35	M28	X	-.115	-.115	0	%100
36	M28	Z	-.066	-.066	0	%100
37	MP4A	X	-.563	-.563	0	%100
38	MP4A	Z	-.325	-.325	0	%100
39	MP3A	X	-.563	-.563	0	%100
40	MP3A	Z	-.325	-.325	0	%100
41	MP2A	X	-.681	-.681	0	%100
42	MP2A	Z	-.393	-.393	0	%100
43	MP1A	X	-.563	-.563	0	%100
44	MP1A	Z	-.325	-.325	0	%100
45	M44	X	-.148	-.148	0	%100
46	M44	Z	-.086	-.086	0	%100
47	M45	X	-.148	-.148	0	%100
48	M45	Z	-.086	-.086	0	%100
49	M46	X	-.148	-.148	0	%100
50	M46	Z	-.086	-.086	0	%100
51	M47	X	-.148	-.148	0	%100
52	M47	Z	-.086	-.086	0	%100
53	M43	X	-.26	-.26	0	%100
54	M43	Z	-.15	-.15	0	%100
55	M44A	X	-.196	-.196	0	%100
56	M44A	Z	-.113	-.113	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	M1	X	-.295	-.295	0	%100
2	M1	Z	-.511	-.511	0	%100
3	M2	X	-.295	-.295	0	%100
4	M2	Z	-.511	-.511	0	%100
5	M13	X	-.021	-.021	0	%100
6	M13	Z	-.037	-.037	0	%100
7	M14	X	-.021	-.021	0	%100
8	M14	Z	-.037	-.037	0	%100
9	M15	X	-.021	-.021	0	%100
10	M15	Z	-.037	-.037	0	%100
11	M16	X	-.021	-.021	0	%100
12	M16	Z	-.037	-.037	0	%100
13	M17	X	-.246	-.246	0	%100
14	M17	Z	-.425	-.425	0	%100
15	M18	X	-.246	-.246	0	%100
16	M18	Z	-.425	-.425	0	%100
17	M19	X	-.035	-.035	0	%100
18	M19	Z	-.061	-.061	0	%100
19	M20	X	-.035	-.035	0	%100
20	M20	Z	-.061	-.061	0	%100
21	M21	X	-.064	-.064	0	%100
22	M21	Z	-.111	-.111	0	%100
23	M22	X	-.064	-.064	0	%100
24	M22	Z	-.111	-.111	0	%100
25	M23	X	-.064	-.064	0	%100
26	M23	Z	-.111	-.111	0	%100
27	M24	X	-.064	-.064	0	%100
28	M24	Z	-.111	-.111	0	%100
29	M25	X	-.102	-.102	0	%100
30	M25	Z	-.176	-.176	0	%100
31	M26	X	-.102	-.102	0	%100
32	M26	Z	-.176	-.176	0	%100
33	M27	X	-.071	-.071	0	%100
34	M27	Z	-.123	-.123	0	%100
35	M28	X	-.071	-.071	0	%100
36	M28	Z	-.123	-.123	0	%100
37	MP4A	X	-.325	-.325	0	%100
38	MP4A	Z	-.563	-.563	0	%100
39	MP3A	X	-.325	-.325	0	%100
40	MP3A	Z	-.563	-.563	0	%100
41	MP2A	X	-.393	-.393	0	%100
42	MP2A	Z	-.681	-.681	0	%100
43	MP1A	X	-.325	-.325	0	%100
44	MP1A	Z	-.563	-.563	0	%100
45	M44	X	-.086	-.086	0	%100
46	M44	Z	-.148	-.148	0	%100
47	M45	X	-.086	-.086	0	%100
48	M45	Z	-.148	-.148	0	%100
49	M46	X	-.086	-.086	0	%100
50	M46	Z	-.148	-.148	0	%100
51	M47	X	-.086	-.086	0	%100
52	M47	Z	-.148	-.148	0	%100
53	M43	X	-.016	-.016	0	%100
54	M43	Z	-.028	-.028	0	%100
55	M44A	X	-.004	-.004	0	%100
56	M44A	Z	-.007	-.007	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	Loc[ft]	LC	Shear Check	Loc.....		LC	phi*Pn...	phi*Pn...	phi*Mn...	phi*Mn.....	Eqn
1	M1	PIPE_2.5	.174	8.724	9	.102	10....		2	14558...	50715	3.596	3.596	2...H1-1b
2	M2	PIPE_2.5	.229	3.776	8	.070	3.776		9	14558...	50715	3.596	3.596	1...H1-1b
3	M13	PL5/8X3.5	.167	.422	8	.198	.422	y	8	66184...	68906....	.897	5.024	1...H1-1b
4	M14	PL5/8X3.5	.175	0	39	.129	.422	y	2	66184...	68906....	.897	5.024	1...H1-1b
5	M15	PL5/8X3.5	.181	0	33	.194	.422	y	9	66184...	68906....	.897	5.024	1...H1-1b
6	M16	PL5/8X3.5	.186	0	1	.151	0	y	7	66184...	68906....	.897	5.024	1...H1-1b
7	M17	PIPE_2.0	.203	0	8	.052	0		39	31128...	32130	1.872	1.872	2...H1-1b
8	M18	PIPE_2.0	.125	0	2	.062	0		37	31128...	32130	1.872	1.872	1...H1-1b
9	M19	PIPE_2.0	.187	0	9	.072	0		21	31128...	32130	1.872	1.872	1...H1-1b
10	M20	PIPE_2.0	.155	0	7	.057	0		13	31128...	32130	1.872	1.872	2...H1-1b
11	M21	PL5/8X3.5	.268	.531	44	.091	.531	y	8	67591...	68906....	.897	5.024	1...H1-1b
12	M22	PL5/8X3.5	.292	.531	19	.065	.531	y	7	67591...	68906....	.897	5.024	1...H1-1b
13	M23	PL5/8X3.5	.267	.531	38	.068	.531	y	1	67591...	68906....	.897	5.024	1...H1-1b
14	M24	PL5/8X3.5	.312	.531	23	.111	0	y	9	67591...	68906....	.897	5.024	1...H1-1b
15	M25	SR_0.75	.000	0	51	.010	0		8	2863.9...	13916....	.174	.174	1...H1-1a
16	M26	SR_0.75	.057	0	43	.013	0		3	2863.9...	13916....	.174	.174	1...H1-1b*
17	M27	SR_0.75	.000	0	51	.013	0		2	2863.9...	13916....	.174	.174	1...H1-1a
18	M28	SR_0.75	.059	4.167	31	.020	4.167		9	2863.9...	13916....	.174	.174	1...H1-1b*
19	MP4A	PIPE_2.0	.215	5.667	49	.061	2.333		10	14916...	32130	1.872	1.872	4...H1-1b
20	MP3A	PIPE_2.0	.133	2.333	7	.066	2.333		6	14916...	32130	1.872	1.872	4...H1-1b
21	MP2A	PIPE_2.5	.119	2.333	7	.072	2.333		8	30038...	50715	3.596	3.596	4...H1-1b
22	MP1A	PIPE_2.0	.116	5.667	2	.065	5.667		9	14916...	32130	1.872	1.872	3...H1-1b
23	M44	SR_0.625...	.055	1.667	8	.007	0		49	2017.0...	9670.5	.094	.094	1...H1-1b
24	M45	SR_0.625...	.050	1.667	8	.010	0		12	2017.0...	9670.5	.094	.094	1...H1-1b
25	M46	SR_0.625...	.057	1.667	7	.011	0		7	2017.0...	9670.5	.094	.094	1 H1-1b
26	M47	SR_0.625...	.074	1.667	2	.010	0		9	2017.0...	9670.5	.094	.094	1...H1-1b
27	M43	PIPE_2.0	.036	2.991	10	.003	5.982		9	20919...	32130	1.872	1.872	1...H1-1b
28	M44A	PIPE_2.0	.113	4.946	3	.005	9.892		9	10053...	32130	1.872	1.872	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	N35	max	1062.137	9	1082.388	21	1492.626	24	-.15	3	0	51	.102	36
2		min	-982.617	3	425.42	3	-115.616	6	-.48	21	0	1	-.109	49
3	N36	max	616.225	9	1046.052	15	629.008	2	-.127	8	0	51	.1	36
4		min	-701.984	3	410.538	9	-1790.776	8	-.44	14	0	1	-.105	49
5	N63	max	190.388	10	27.916	17	582.687	11	0	51	0	51	0	51
6		min	-189.059	4	12.351	9	-576.117	5	0	1	0	1	0	1
7	N64	max	383.69	2	46.094	20	929.049	2	0	51	0	51	0	51
8		min	-378.262	8	20.466	1	-919.497	8	0	1	0	1	0	1
9	Totals:	max	1545.725	10	2172.776	15	2232.277	1						
10		min	-1545.726	4	988.877	8	-2232.275	7						

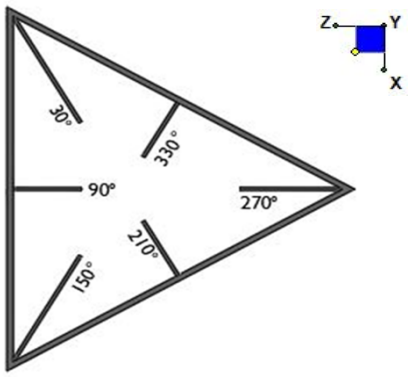
Client:	Verizon Wireless	Date:	7/7/2021
Site Name:	TOPSTONE CT		
Project No.	21777896A		
Title:	Mount Analysis	Page:	1

Version 3.1

I. Mount-to-Tower Connection Check

RISA Model Data

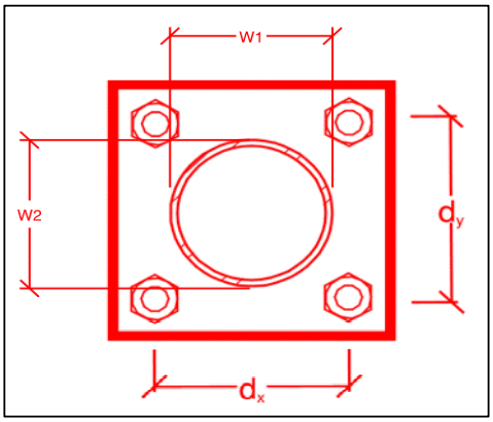
Nodes *(labeled per RISA)*	Orientation *(per graphic of typical platform)*
N36	90
N35	90



TYPICAL PLATFORM

Tower Connection Bolt Checks

Any moment resistance?:	yes
Bolt Quantity per Reaction:	4
d_x (in) *(Delta X of typ. bolt config. sketch)* :	9.5
d_y (in) *(Delta Y of typ. bolt config. sketch)* :	3.5
Bolt Type:	A307
Bolt Diameter (in):	0.625
Required Tensile Strength (kips):	4.7
Required Shear Strength (kips):	1.3
Tensile Strength / bolt (kips):	10.0
Shear Strength / bolt (kips):	6.0
Tensile Capacity Overall:	**11.8%***
Shear Capacity Overall:	**5.3%**



**Note: Tension reduction not required if tension or shear capacity < 30%*

Mount Desktop – Post Modification Inspection (PMI) Report Requirements

Documents & Photos Required from Contractor – New Mount Passing MA

Purpose – to provide Maser Consulting Connecticut 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 modification was completed in accordance with the modification drawings.
- Contractor shall relay any data that can impact the performance of the mount, this includes safety issues.

Base Requirements:

- Any special photos outside of the standard requirements will be indicated on the passing MA
- Verification that loading is as communicated in the Mount Analysis. NOTE If loading is different than what is conveyed in the modification drawing contact Maser Consulting Connecticut immediately.
- Verification that the New Mount Installed is as specified in the MA
- Each photo should be time and date stamped
- Photos should be high resolution and submitted in a Zip File and should be organized in the file structure as depicted in Schedule A attached.
- 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.
- The photos in the file structure should be uploaded **to** https://pmi.vzwsmart.com as depicted on the drawings

Photo Requirements:

- *Base and "During Installation Photos"*
  - Base pictures include
    - Photo of Gate Signs showing the tower owner, site name, and number
    - Photo of carrier shelter showing the carrier site name and number if available
    - Photos of the galvanizing compound and/or paint used (if applicable), clearly showing the label and name
  - "During Installation Photos if provided - must be placed only in this folder
- *Photos taken at ground level*
  - Overall tower structure before and after installation of the modifications
  - Photos of the appropriate mount before and after installation of the new mount;
- *Photos taken at Mount Elevation*
  - Photos showing each individual sector before and also after installation of equipment.
    - These photos should also certify that the placement and geometry of the equipment on the mount is as depicted on the sketch and table in the mount analysis
  - Photos showing the newly installed mount that is as specified in the Mount Analysis

- Photos showing the safety climb wire rope above and below the mount prior to modification.
- Photos showing the climbing facility and safety climb if present.
- Photos showing the climbing facility and safety climb if present.

Antenna & equipment placement and Geometry Confirmation:

- The contractor must certify that the antenna & equipment placement and geometry is in accordance with the antenna placement diagrams as included in this mount analysis.

☐ The contractor certifies that the photos support and the equipment on the mount is as depicted on the antenna placement diagrams as included in this mount analysis.

☐ The contractor notes that the equipment on the mount is not in accordance with the antenna placement diagrams and has accordingly marked up the diagrams or provided a diagram outlining the differences.

Certifying Individual: Company _____

Name _____

Signature _____

New Mount Certification:

- The contractor must certify that the New Mount installed is as specified

☐ The contractor certifies that the New Mount installed is as specified in the Passing Mount Analysis

☐ The contractor notes that the New Mount installed is not as specified and engineering approval was received for the New Mount Installed

☐ The contractor did not install the New Mount specified in the Passing Mount Analysis

Certifying Individual: Company _____

Name _____

Signature _____

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

Issue:

Contractor to install mount pipes evenly spaced along the mount face with a vertical projection of 68 inches. The mount pipe in position 2 of all sectors is to be replaced with an 8’ Long P2.5 STD pipe. The proposed 8’ P2.5 STD pipe is to be attached to face horizontals using crossover plates (Part #: VZWSMART-MSK1) (typ. Of 6, 2 per sector). Tie backs are to be connected to each the top and bottom face horizontals. The tie back connection to the top horizontal is to be located 1’-6” (±3”) from the upper right standoff arm (Looking from Tower-to-mount). The tie back connection to the bottom horizontal is to be 1’-6” (±3”) from the bottom left standoff arm (Looking from Tower-to-mount). The mount centerline is to be installed to be equivalent to the proposed antenna line centerline.

Response:

Schedule A – Photo & Document File Structure

- VzW Site Number / Name
  - Base & "During Installation" Photos
  - Pre-Installation Photos
    - Alpha
    - Beta
    - Gamma
    - Ground Level
    - Tape Drop
  - Post-Installation Photos
    - Alpha
    - Beta
    - Gamma
    - Ground Level
    - Tape Drop
    - Photos of climbing facility and safety climb – If Present
  - Certifications – Submission of this document including certifications
  - Specific Required Additional Photos

Structure: 467676-VZW - TOPSTONE CT

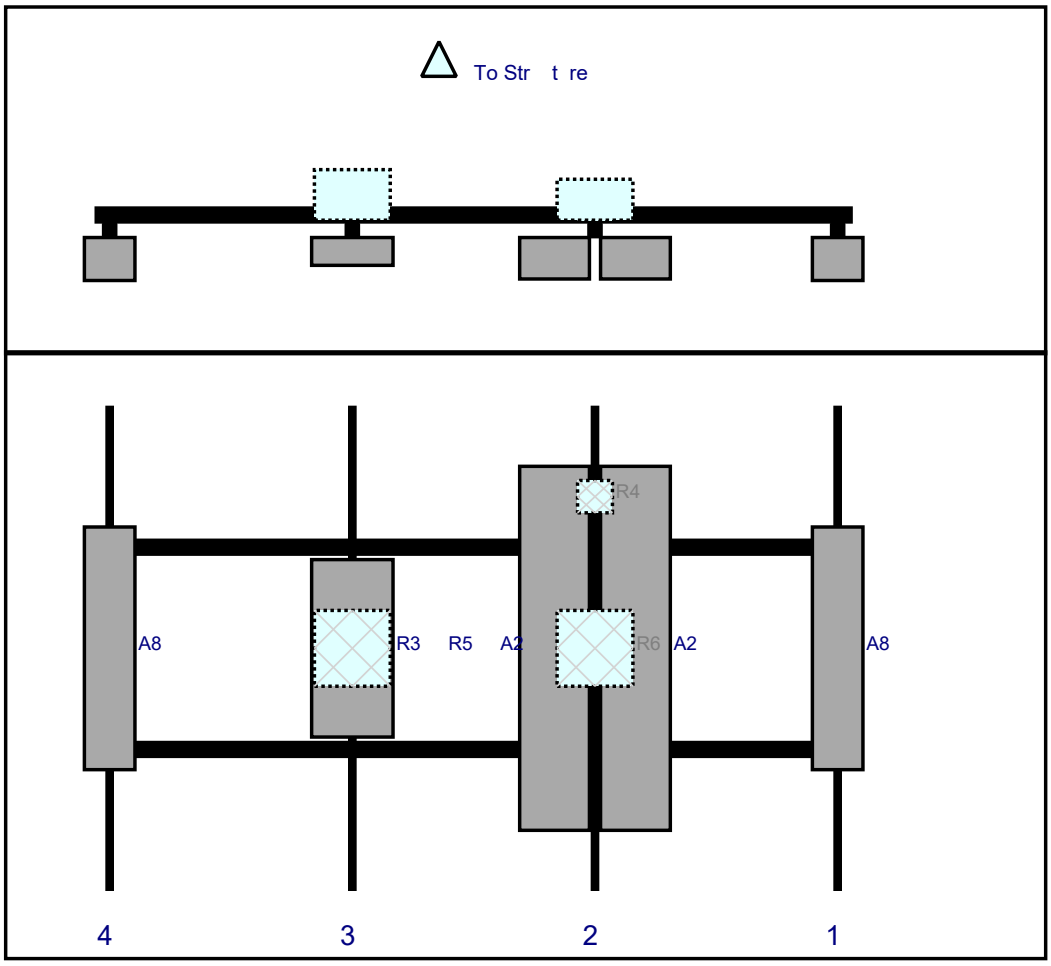
Se tor: **A** 7/7/2021

Str t re Type: Sel S pport 10062507

Mo t Elev: 175.00 P ge: 1

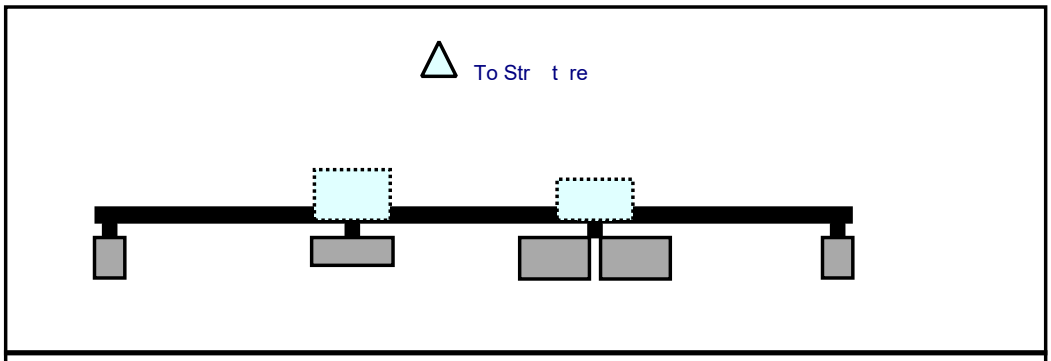
Plan View

Front View
Loo i g t Str t re

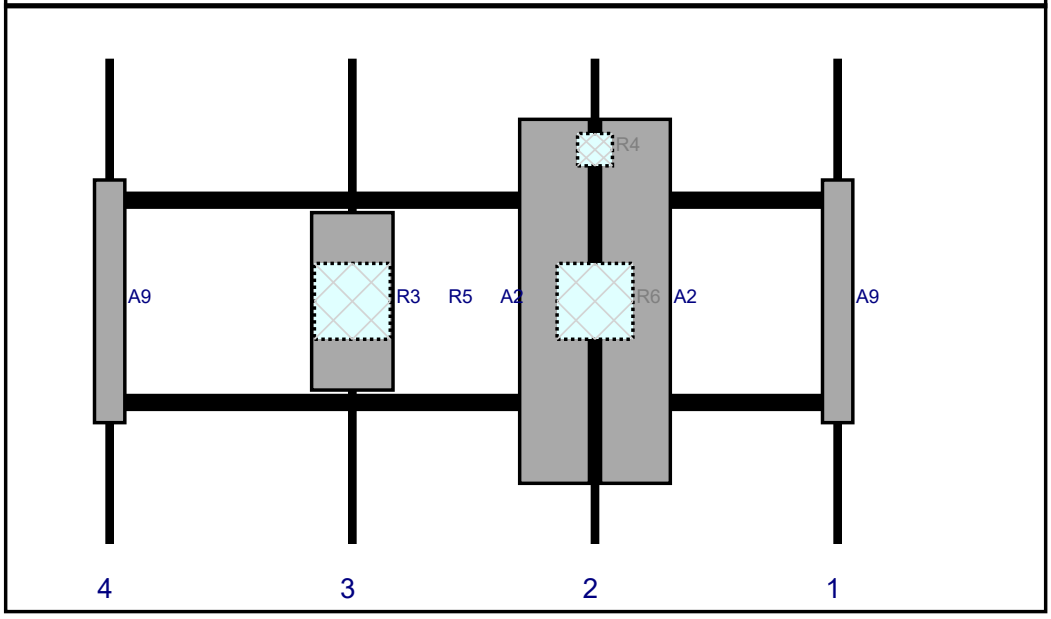


Re #	Model	Height (i)	Width (i)	H Dist Fr L.	Pipe #	Pipe Pos V	A t Pos	C. A t Fr T.	A t H O	St t s	V lid tio
A8	DB844G65ZAXY	48	10	147	1		Fro t	48	0	Ret i ed	04/16/2021
A2	JAHH-65B-R3B	72	13.8	99	2		Fro t	48	8	Added	
A2	JAHH-65B-R3B	72	13.8	99	2		Fro t	48	-8	Added	
R4	CBC78T-DS-43-2X	6.4	6.9	99	2		Behi d	18	0	Added	
R6	B5/B13 RRH-BRO4C	15	15	99	2		Behi d	48	0	Added	
R3	MT6407-77A	35.1	16.1	51	3		Fro t	48	0	Added	
R5	B2/B66A RRH-BRO49	15	15	51	3		Behi d	48	0	Added	
A8	DB844G65ZAXY	48	10	3	4		Fro t	48	0	Ret i ed	04/16/2021

Plan View

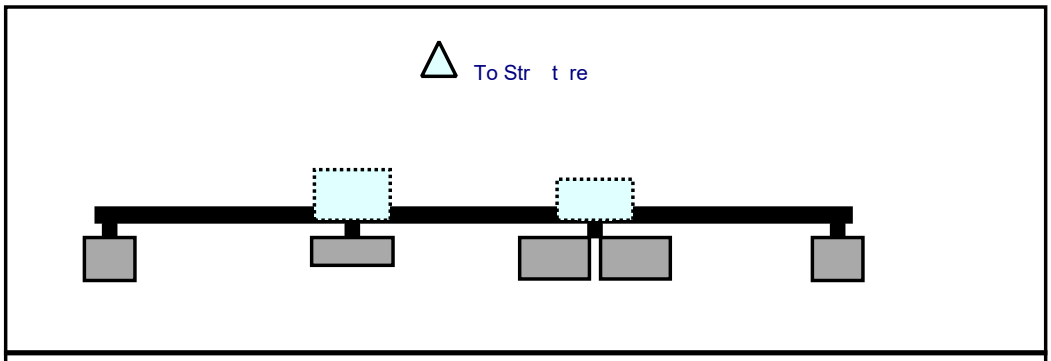


Front View
Loo i g t Str t re

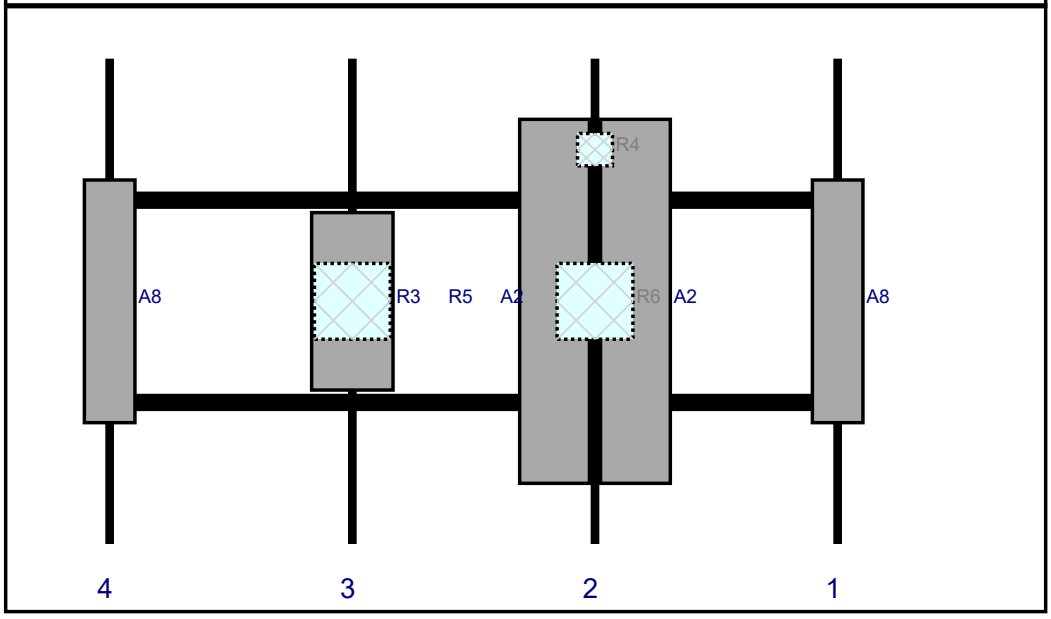


Re #	Model	Height (i)	Width (i)	H Dist Fr L.	Pipe #	Pipe Pos V	A t Pos	C. A t Fr T.	A t H O	St t s	V lid tio
A9	APL868013	48	6	147	1		Fro t	48	0	Ret i ed	04/16/2021
A2	JAHH-65B-R3B	72	13.8	99	2		Fro t	48	8	Added	
A2	JAHH-65B-R3B	72	13.8	99	2		Fro t	48	-8	Added	
R4	CBC78T-DS-43-2X	6.4	6.9	99	2		Behi d	18	0	Added	
R6	B5/B13 RRH-BRO4C	15	15	99	2		Behi d	48	0	Added	
R3	MT6407-77A	35.1	16.1	51	3		Fro t	48	0	Added	
R5	B2/B66A RRH-BRO49	15	15	51	3		Behi d	48	0	Added	
A9	APL868013	48	6	3	4		Fro t	48	0	Ret i ed	04/16/2021

Plan View



Front View
Loo i g t Str t re



Re #	Model	Height (i)	Width (i)	H Dist Fr L.	Pipe #	Pipe Pos V	A t Pos	C. A t Fr T.	A t H O	St t s	V lid tio
A2	JAHH-65B-R3B	72	13.8	99	2		Fro t	48	8	Added	
A2	JAHH-65B-R3B	72	13.8	99	2		Fro t	48	-8	Added	
R4	CBC78T-DS-43-2X	6.4	6.9	99	2		Behi d	18	0	Added	
R6	B5/B13 RRH-BRO4C	15	15	99	2		Behi d	48	0	Added	
R3	MT6407-77A	35.1	16.1	51	3		Fro t	48	0	Added	
R5	B2/B66A RRH-BRO49	15	15	51	3		Behi d	48	0	Added	
A8	DB844G65ZAXY	48	10	3	4		Fro t	48	0	Ret i ed	04/16/2021
A8	DB844G65ZAXY	48	10	147	1		Fro t	48	0	Ret i ed	04/16/2021

Maser Consulting Connecticut

Subject	TIA-222-H Usage
Site ID:	*467676-VZW / TOPSTONE CT*
Site Name:	*TOPSTONE CT*
Carrier Name:	*Verizon Wireless*
Address:	*100 Old Redding Rd.* *Redding, Connecticut 06896* *Fairfield County*
Latitude:	*41.287094°*
Longitude:	*-73.438161°*
Tower Type:	*180-Ft Self Support*
Mount Type:	*15.13-Ft Sector Frame*

To Whom It May Concern,

We respectfully submit the above referenced Antenna Mount Structural Analysis report in conformance with ANSI/TIA-222-H, Structural Standard for Antenna Supporting Structures and Antennas and Small Wind Turbine Support Structures.

The 2015 International Building Code states that, in Section 3108, telecommunication towers shall be designed and constructed in accordance with the provisions of TIA-222. TIA-222-H is the latest revision of the TIA-222 Standard, effective as of January 01, 2018.

As with all ANSI standards and engineering best practice is to apply the most current revision of the standard. This ensures the engineer is applying all updates. As an example, the TIA-222-H Standard includes updates to bring it in line with the latest AISC and ACI standards and it also incorporates the latest wind speed maps by ASCE 7 based on updated studies of the wind data.

The TIA-222-H standard clarifies these specific requirements for the antenna mount analysis such as modeling methods, seismic analysis, 30-degree increment wind directions and maintenance loading. Therefore, it is our opinion that TIA-222-H is the most appropriate standard for antenna mount structural analysis and is acceptable for use at this site to ensure the engineer is taking into account the most current engineering standard available.

Sincerely,

Justin Linette, PE
Sr. Technical Manager

Site Name: ***TOPSTONE CT***
Cumulative Power Density

Operator	Operating Frequency	Number of Trans.	ERP Per Trans.	Total ERP	Distance to Target	Calculated Power Density	Maximum Permissible Exposure*	Fraction of MPE
	(MHz)		(watts)	(watts)	(feet)	(mW/cm^2)	(mW/cm^2)	(%)
VZW 700	751	4	634	2534	174	0.0030	0.5007	0.60%
VZW CDMA	877.26	2	391	782	174	0.0009	0.5848	0.16%
VZW Cellular	874	4	713	2851	174	0.0034	0.5827	0.58%
VZW PCS	1980	4	1592	6369	174	0.0076	1.0000	0.76%
VZW AWS	2120	4	1633	6534	174	0.0078	1.0000	0.78%
VZW CBAND	3730.08	4	6531	26125	174	0.0310	1.0000	3.10%
Total Percentage of Maximum Permissible Exposure								5.98%

*Guidelines adopted by the FCC on August 1, 1996, 47 CFR Part 1 based on NCRP Report 86, 1986 and generally on ANSI/IEEE C95.1-1992
**Calculation includes a -10 dB Off Beam Antenna Pattern Adjustment pursuant to Attachments B and C of the Siting Council's November 10, 2015 Memorandum for Exempt Modification filings

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

Absolute worst case maximum values used.

100 OLD REDDING ROAD, REDDING, CT

100 OLD REDDING RD

Location	100 OLD REDDING RD	**Mblu**	35/ / 46/ C/
Acct#	3546C	**Owner**	KAUFMAN ROBERT J
Assessment	$268,400	**Appraisal**	$383,500
PID	100605	**Building Count**	1

Current Value

Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2020	$23,500	$360,000	$383,500
Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
2020	$16,400	$252,000	$268,400

Owner of Record

Owner	KAUFMAN ROBERT J	**Sale Price**	$0
Co-Owner		**Certificate**	
Address	100 OLD REDDING RD REDDING, CT 06896	**Book & Page**	0117/0510
		Sale Date	06/15/1983
		Instrument	XX

Ownership History

Ownership History					
Owner	**Sale Price**	**Certificate**	**Book & Page**	**Instrument**	**Sale Date**
KAUFMAN ROBERT J	$0		0117/0510	XX	06/15/1983

Building Information

Building 1 : Section 1

Year Built:	
Living Area:	0
Replacement Cost:	$0
Building Percent Good:	
Replacement Cost Less Depreciation:	$0

Building Attributes

Field	Description
Style	Colonial
Model	
Grade:	
Stories	
Occupancy	
Exterior Wall 1	
Exterior Wall 2	
Roof Structure	
Roof Cover	
Interior Wall 1	
Interior Wall 2	
Interior Flr 1	
Interior Flr 2	
Heat Fuel	
Heat Type:	
AC Type:	
Total Bedrooms	
Full Bathrooms	
Half Bathrooms	
Total Xtra Fixtrs	
Total Rooms	
Bath Style:	
Kitchen Style:	
Fireplaces 2	
Cndtn	
Whirlpool Tubs	
Fin Bsmt Area	
Fin Bsmt Qual	
Bsmt Garages	
Num Park	
Fireplaces	
Fndtn Cndtn	
Basement	

Building Photo

(http://images.vgsi.com/photos/ReddingCTPhotos//default.jpg)

Building Layout

Building Layout

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

Extra Features

Extra Features	Legend
No Data for Extra Features	

Land

Land Use

Use Code	435
Description	Cell Site Vac Lnd
Zone	R-2
Neighborhood	
Alt Land Appr	No
Category	

Land Line Valuation

Size (Acres)	0.00
Frontage	
Depth	
Assessed Value	$252,000
Appraised Value	$360,000

Outbuildings

Outbuildings						Legend
Code	**Description**	**Sub Code**	**Sub Description**	**Size**	**Value**	**Bldg #**
SHD1	Shed	BR	Brick/Frame	1080.00 S.F.	$15,700	1
SHD1	Shed	FR	Frame	600.00 S.F.	$4,900	1
SHD1	Shed	BR	Brick/Frame	200.00 S.F.	$2,900	1

Valuation History

Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2020	$23,500	$360,000	$383,500
2019	$23,500	$360,000	$383,500
2018	$23,500	$360,000	$383,500

Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
2020	$16,400	$252,000	$268,400
2019	$16,400	$252,000	$268,400
2018	$16,400	$252,000	$268,400

VICINITY MAP

AMERICAN TOWER®

ATC SITE NAME: REDDING
ATC SITE NUMBER: 302522
VERIZON SITE NAME: TOPSTONE CT
VERIZON SITE NUMBER: 467676
SITE ADDRESS: 100 OLD REDDING ROAD
REDDING, CT 06896

LOCATION MAP

VERIZON
TOPSTONE CT - 850 LTE, PCS, LSUB6 ADD ANTENNA AMENDMENT DRAWINGS

COMPLIANCE CODE

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

1. 2018 CONNECTICUT STATE BUILDING CODE-AMENDMENTS TO IBC 2015
2. INTERNATIONAL BUILDING CODE 2015, INTERNATIONAL CODE COUNCIL
3. TIA-222-G-4, STRUCTURAL STANDARD FOR ANTENNA SUPPORTING STRUCTURES AND ANTENNAS
4. ASCE 7-10 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES, AMERICAN SOCIETY OF CIVIL ENGINEERS
5. STEEL CONSTRUCTION MANUAL 14TH EDITION, AMERICAN INSTITUTE OF STEEL CONSTRUCTION
6. CITY/COUNTY ORDINANCES

UTILITY COMPANIES

POWER COMPANY: N/A
PHONE: N/A

TELEPHONE COMPANY: N/A
PHONE: N/A

811 Know what's below. Call before you dig.

PROJECT SUMMARY

SITE ADDRESS:

100 OLD REDDING ROAD

REDDING, CT 06896

COUNTY: FAIRFIELD

GEOGRAPHIC COORDINATES:

LATITUDE: 41.28708

LONGITUDE: -73.43819

GROUND ELEVATION: 686' AMSL

PROJECT TEAM

TOWER OWNER:

AMERICAN TOWER
10 PRESIDENTIAL WAY
WOBURN, MA 01801

APPLICANT:

VERIZON WIRELESS
118 FLANDERS ROAD
WESTBOROUGH, MA 01581

ENGINEER:

DEWBERRY ENGINEERS, INC.
99 SUMMER STREET
SUITE 700
BOSTON, MA 02110

PROPERTY OWNER:

ROBERT J AUFMAN
100 OLD REDDING ROAD
REDDING, CT 06896

PROJECT DESCRIPTION

THE PROPOSED PROJECT INCLUDES MODIFYING GROUND BASED AND TOWER MOUNTED EQUIPMENT AS INDICATED PER BELOW:

TOWER:

REMOVE (6) ANTENNA(s), (6) RRH(s) AND (6) DIPLEXER(s)

INSTALL (9) ANTENNA(s), (9) RRH(s) AND (3) DIPLEXER(s)

EXISTING (6) ANTENNA(s), (2) OVP(s), (1) GPS, (1) 1/2" COAX CABLE, (6) 1-5/8" COAX CABLE(s) AND (2) 1-5/8" 6X12 LI HYBRID CABLE(s) TO REMAIN

THE PROPOSED PROJECT DOES NOT INCLUDE ELECTRICAL SCOPE

PROJECT NOTES

1. THE FACILITY IS UNMANNED.
2. A TECHNICIAN WILL VISIT THE SITE APPROXIMATELY ONCE A MONTH FOR ROUTINE INSPECTION AND MAINTENANCE.
3. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT LAND DISTURBANCE OR EFFECT OF STORM WATER DRAINAGE.
4. NO SANITARY SEWER, POTABLE WATER OR TRASH DISPOSAL IS REQUIRED.
5. HANDICAP ACCESS IS NOT REQUIRED.
6. THE PROJECT DEPICTED IN THESE PLANS QUALIFIES AS AN ELIGIBLE FACILITIES REQUEST ENTITLED TO EXPEDITED REVIEW UNDER 47 U.S.C. 1455(A) AS A MODIFICATION OF AN EXISTING WIRELESS TOWER THAT INVOLVES THE COLLOCATION, REMOVAL, AND/OR REPLACEMENT OF TRANSMISSION EQUIPMENT THAT IS NOT A SUBSTANTIAL CHANGE UNDER CFR 1.61000 (B)(7).

PROJECT LOCATION DIRECTIONS

FROM HARTFORD TA E I-84 WEST TO EXIT 3 TO RT 7 SOUTH. FOLLOW TO REDDING AND TURN LEFT ON OLD REDDING RD. AFTER STOP SIGN STAY TO THE RIGHT ON MOUNTAIN RD. ACCESS ROAD IS AHEAD ACROSS FROM #139.

SHEET INDEX

SHEET NO:	DESCRIPTION:	REV:	DATE:	BY:
G-001	TITLE SHEET	0	07/06/21	WG
G-002	GENERAL NOTES	0	07/06/21	WG
C-101	DETAILED SITE PLAN	0	07/06/21	WG
C-201	TOWER ELEVATION	0	07/06/21	WG
C-401	ANTENNA INFORMATION & SCHEDULE	0	07/06/21	WG
C-501	CONSTRUCTION DETAILS	0	07/06/21	WG
E-501	GROUNDING DETAILS	0	07/06/21	WG
R-601	SUPPLEMENTAL			
R-602	SUPPLEMENTAL			

AMERICAN TOWER®

Dewberry®
Dewberry Engineers Inc.
99 SUMMER STREET
SUITE 700
BOSTON, MA 02110
PHONE: 617.531.0801
FAX: 617.695.3310

REV.	DESCRIPTION	BY	DATE
A	PRELIM	XH	06/25/21
0	FINAL	WG	07/29/21

ATC SITE NUMBER:
302522

ATC SITE NAME:
REDDING

VERIZON SITE NAME:
TOPSTONE CT

SITE ADDRESS:
100 OLD REDDING ROAD
REDDING, CT 06896

SEAL:

verizon

DATE DRAWN:	06/25/21
ATC JOB NO:	13683575
CUSTOMER ID:	TOPSTONE CT
CUSTOMER #:	467676

TITLE SHEET

SHEET NUMBER:	REVISION:
G-001	0

GENERAL CONSTRUCTION NOTES:

1. OWNER FURNISHED MATERIALS, VERIZON "THE COMPANY" WILL PROVIDE AND THE CONTRACTOR WILL INSTALL
   - A. BTS EQUIPMENT FRAME (PLATFORM) AND ICEBRIDGE SHELTER (GROUND BUILD/CO-LOCATE ONLY)
   - B. AC/TELCO INTERFACE BOX (PPC)
   - C. ICE BRIDGE (CABLE TRAY WITH COVER) (GROUND BUILD/CO-LOCATE ONLY, GC TO FURNISH AND INSTALL FOR ROOFTOP INSTALLATION)
   - D. TOWERS, MONOPOLES
   - E. TOWER LIGHTING
   - F. GENERATORS & LIQUID PROPANE TAN
   - G. ANTENNA STANDARD BRAC ETS, FRAMES AND PIPES FOR MOUNTING
   - H. ANTENNAS (INSTALLED BY OTHERS)
   - I. TRANSMISSION LINE
   - J. TRANSMISSION LINE JUMPERS
   - . TRANSMISSION LINE CONNECTORS WITH WEATHERPROOFING ITS
   - L. TRANSMISSION LINE GROUND ITS
   - M. HANGERS
   - N. HOISTING GRIPS
   - O. BTS EQUIPMENT
2. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL OTHER MATERIALS FOR THE COMPLETE INSTALLATION OF THE SITE INCLUDING, BUT NOT LIMITED TO, SUCH MATERIALS AS FENCING, STRUCTURAL STEEL SUPPORTING SUB-FRAME FOR PLATFORM, ROOFING LABOR AND MATERIALS, GROUNDING RINGS, GROUNDING WIRES, COPPER-CLAD OR XIT CHEMICAL GROUND ROD(S), BUSS BARS, TRANSFORMERS AND DISCONNECT SWITCHES WHERE APPLICABLE, TEMPORARY ELECTRICAL POWER, CONDUIT, LANDSCAPING COMPOUND STONE, CRANES, CORE DRILLING, SLEEPERS AND RUBBER MATTING, REBAR, CONCRETE CAISSONS, PADS AND/OR AUGER MOUNTS, MISCELLANEOUS FASTENERS, CABLE TRAYS, NON-STANDARD ANTENNA FRAMES AND ALL OTHER MATERIAL AND LABOR REQUIRED TO COMPLETE THE JOB ACCORDING TO THE DRAWINGS AND SPECIFICATIONS. IT IS THE POSITION OF VERIZON TO APPLY FOR PERMITTING AND CONTRACTOR RESPONSIBLE FOR PIC UP AND PAYMENT OF REQUIRED PERMITS.
3. ALL WOR SHALL CONFORM TO ALL CURRENT APPLICABLE FEDERAL, STATE, AND LOCAL CODES, INCLUDING ANSI/EIA/TIA-222, AND COMPLY WITH ATC CONSTRUCTION SPECIFICATIONS.
4. CONTRACTOR SHALL CONTACT LOCAL 811 FOR IDENTIFICATION OF UNDERGROUND UTILITIES PRIOR TO START OF CONSTRUCTION.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REQUIRED INSPECTIONS.
6. ALL DIMENSIONS TO, OF, AND ON EXISTING BUILDINGS, DRAINAGE STRUCTURES, AND SITE IMPROVEMENTS SHALL BE VERIFIED IN FIELD BY CONTRACTOR WITH ALL DISCREPANCIES REPORTED TO THE ENGINEER.
7. DO NOT CHANGE SIZE OR SPACING OF STRUCTURAL ELEMENTS.
8. DETAILS SHOWN ARE TYPICAL SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.
9. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
10. CONTRACTOR SHALL BRACE STRUCTURES UNTIL ALL STRUCTURAL ELEMENTS NEEDED FOR STABILITY ARE INSTALLED. THESE ELEMENTS ARE AS FOLLOWS: LATERAL BRACING, ANCHOR BOLTS, ETC.
11. CONTRACTOR SHALL DETERMINE EXACT LOCATION OF EXISTING UTILITIES, GROUNDS DRAINS, DRAIN PIPES, VENTS, ETC. BEFORE COMMENCING WOR .
12. INCORRECTLY FABRICATED, DAMAGED, OR OTHERWISE MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE VERIZON REP PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH REMEDIAL ACTION SHALL REQUIRE WRITTEN APPROVAL BY THE VERIZON REP PRIOR TO PROCEEDING.
13. EACH CONTRACTOR SHALL COOPERATE WITH THE VERIZON REP, AND COORDINATE HIS WOR WITH THE WOR OF OTHERS.
14. CONTRACTOR SHALL REPAIR ANY DAMAGE CAUSED BY CONSTRUCTION OF THIS PROJECT TO MATCH EXISTING PRE-CONSTRUCTION CONDITIONS TO THE SATISFACTION OF THE VERIZON CONSTRUCTION MANAGER.
15. ALL CABLE/CONDUIT ENTRY/EXIT PORTS SHALL BE WEATHERPROOFED DURING INSTALLATION USING A SILICONE SEALANT.
16. WHERE EXISTING CONDITIONS DO NOT MATCH THOSE SHOWN IN THIS PLAN SET, CONTRACTOR SHALL NOTIFY THE VERIZON REP AND ENGINEER OF RECORD IMMEDIATELY.
17. CONTRACTOR SHALL ENSURE ALL SUBCONTRACTORS ARE PROVIDED WITH A COMPLETE AND CURRENT SET OF DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.
18. CONTRACTOR SHALL REMOVE ALL RUBBISH AND DEBRIS FROM THE SITE AT THE END OF EACH DAY.
19. CONTRACTOR SHALL COORDINATE WOR SCHEDULE WITH AMERICAN TOWER CORPORATION (ATC) AND TA E PRECAUTIONS TO MINIMIZE IMPACT AND DISRUPTION OF OTHER OCCUPANTS OF THE FACILITY.
20. CONTRACTOR SHALL FURNISH VERIZON AND AMERICAN TOWER CORPORATION (ATC) WITH A PDF MAR ED UP AS-BUILT SET OF DRAWINGS UPON COMPLETION OF WOR .
21. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH VERIZON REP TO DETERMINE WHAT, IF ANY, ITEMS WILL BE PROVIDED. ALL ITEMS NOT PROVIDED SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR. CONTRACTOR WILL INSTALL ALL ITEMS PROVIDED.
22. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH VERIZON REP TO DETERMINE IF ANY PERMITS WILL BE OBTAINED BY CONTRACTOR. ALL REQUIRED PERMITS NOT OBTAINED BY VERIZON MUST BE OBTAINED, AND PAID FOR, BY THE CONTRACTOR.
23. CONTRACTOR SHALL INSTALL ALL SITE SIGNAGE IN ACCORDANCE WITH VERIZON SPECIFICATIONS AND REQUIREMENTS.
24. CONTRACTOR SHALL SUBMIT ALL SHOP DRAWINGS TO VERIZON FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
25. ALL EQUIPMENT SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND LOCATED ACCORDING TO VERIZON SPECIFICATIONS, AND AS SHOWN IN THESE PLANS.
26. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WOR UNDER THE CONTRACT.
27. CONTRACTOR SHALL NOTIFY VERIZON REP A MINIMUM OF 48 HOURS IN ADVANCE OF POURING CONCRETE OR BAC FILLING ANY UNDERGROUND UTILITIES, FOUNDATIONS OR SEALING ANY WALL, FLOOR OR ROOF PENETRATIONS FOR ENGINEERING REVIEW AND APPROVAL.
28. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SAFETY INCLUDING COMPLIANCE WITH ALL APPLICABLE OSHA STANDARDS AND RECOMMENDATIONS AND SHALL PROVIDE ALL NECESSARY SAFETY DEVICES INCLUDING PPE AND PPM AND CONSTRUCTION DEVICES SUCH AS WELDING AND FIRE PREVENTION, TEMPORARY SHORING, SCAFFOLDING, TRENCH BOXES/SLOPING, BARRIERS, ETC.
29. THE CONTRACTOR SHALL PROTECT AT HIS OWN EXPENSE, ALL EXISTING FACILITIES AND SUCH OF HIS NEW WOR LIABLE TO INJURY DURING THE CONSTRUCTION PERIOD. ANY DAMAGE CAUSED BY NEGLECT ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, OR BY THE ELEMENTS DUE TO NEGLECT ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, EITHER TO THE EXISTING WOR , OR TO HIS WOR OR THE WOR OF ANY OTHER CONTRACTOR, SHALL BE REPAIRED AT HIS EXPENSE TO THE OWNER'S SATISFACTION.
30. ALL WOR SHALL BE INSTALLED IN A FIRST CLASS, NEAT AND WOR MANLI E MANNER BY MECHANICS S ILLED IN THE TRADE INVOLVED. THE QUALITY OF WOR MANSHIP SHALL BE SUBJECT TO THE APPROVAL OF THE VERIZON REP. ANY WOR FOUND BY THE VERIZON REP TO BE OF INFERIOR QUALITY AND/OR WOR MANSHIP SHALL BE REPLACED AND/OR REWOR ED AT CONTRACTOR EXPENSE UNTIL APPROVAL IS OBTAINED.
31. IN ORDER TO ESTABLISH STANDARDS OF QUALITY AND PERFORMANCE, ALL TYPES OF MATERIALS LISTED HEREINAFTER BY MANUFACTURER S NAMES AND/OR MANUFACTURER S CATALOG NUMBER SHALL BE PROVIDED BY THESE MANUFACTURERS AS SPECIFIED.
32. VERIZON FURNISHED EQUIPMENT SHALL BE PIC ED-UP AT THE VERIZON WAREHOUSE, NO LATER THAN 48HR AFTER BEING NOTIFIED INSURED, STORED, UNCRATE, PROTECTED AND INSTALLED BY THE CONTRACTOR WITH ALL APPURTENANCES REQUIRED TO PLACE THE EQUIPMENT IN OPERATION, READY FOR USE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE EQUIPMENT AFTER PIC ING IT UP.
33. VERIZON OR HIS ARCHITECT/ENGINEER RESERVES THE RIGHT TO REJECT ANY EQUIPMENT OR MATERIALS WHICH, IN HIS OWN OPINION ARE NOT IN COMPLIANCE WITH THE CONTRACT DOCUMENTS, EITHER BEFORE OR AFTER INSTALLATION AND THE EQUIPMENT SHALL BE REPLACED WITH EQUIPMENT CONFORMING TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS BY THE CONTRACTOR AT NO COST TO VERIZON OR THEIR ARCHITECT/ENGINEER.

SPECIAL CONSTRUCTION ANTENNA INSTALLATION NOTES:

1. WOR INCLUDED:
   - A. ANTENNA AND COAXIAL CABLES ARE FURNISHED BY VERIZON UNDER A SEPARATE CONTRACT. THE CONTRACTOR SHALL ASSIST ANTENNA INSTALLATION CONTRACTOR IN TERMS OD COORDINATION AND SITE ACCESS. ERECTION SUBCONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF PERSONNEL AND
   - B. INSTALL ANTENNA AS INDICATE ON DRAWINGS AND VERIZON SPECIFICATIONS.
   - C. INSTALL GALVANIZED STEEL ANTENNA MOUNTS AS INDICATED ON DRAWINGS
   - D. INSTALL FURNISHED GALVANIZED STEEL OR ALUMINUM WAVEGUIDE.
   - E. CONTRACTOR SHALL PROVIDE FOUR (4) SETS OF SWEEP TESTS USING ANRITZU-PAC ARD 8713B RF SCALAR NETWOR ANALYZER. SUBMIT FREQUENCY DOMAIN REFLECTOMETER(FDR) TESTS RESULTS TO THE PROJECT MANAGER. SWEEP TESTS SHALL BE AS PER ATTACHED RFS "MINIMUM FIELD TESTING RECOMMENDED FOR ANTENNA AND HELIAX COAXIAL CABLE SYSTEMS" DATED 10/5/93. TESTING SHALL BE PERFORMED BY AN INDEPENDENT TESTING SERVICE AND BE BOUND AND SUBMITTED WITHIN ONE WEE OF WOR COMPLETION.
   - F. INSTALL COAXIAL CABLES AND TERMINATING BETWEEN ANTENNAS AND EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS. WEATHERPROOF ALL CONNECTIONS BETWEEN THE ANTENNA AND EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. TERMINATE ALL COAXIAL CABLE THREE (3) FEET IN EXCESS OF ENTRY PORT LOCATION UNLESS OTHERWISE STATED.
   - G. ANTENNA AND COAXIAL CABLE GROUNDING:
2. ALL EXTERIOR #6 GREED GROUND WIRE "DAISY CHAIN" CONNECTIONS ARE TO BE WEATHER SEALED WITH RFS CONNECTORS/SPLICE WEATHERPROOFING IT #221213 OR EQUAL.
3. ALL COAXIAL CABLE GROUNDING ITS ARE TO BE INSTALLED ON STRAIGHT RUNS OF COAXIAL CABLE (NOT WITHIN BENDS)

ALL DISCREPANCIES FROM WHAT IS SHOWN ON THESE CONSTRUCTION DRAWINGS SHALL BE COMMUNICATED TO ATC ENGINEERING IMMEDIATELY FOR CORRECTION OR RE-DESIGN. FAILURE TO COMMUNICATE DIRECTLY WITH ATC ENGINEERING OR ANY CHANGES FROM THE DESIGN CONDUCTED WITHOUT PRIOR APPROVAL FROM ATC ENGINEERING SHALL BE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

AMERICAN TOWER®

Dewberry®
Dewberry Engineers Inc.
99 SUMMER STREET
SUITE 700
BOSTON, MA 02110
PHONE: 617.531.0801
FAX: 617.695.3310

REV.	DESCRIPTION	BY	DATE
A	PRELIM	XH	06/25/21
0	FINAL	WG	07/29/21

ATC SITE NUMBER:
302522

ATC SITE NAME:
REDDING

VERIZON SITE NAME:
TOPSTONE CT

SITE ADDRESS:
100 OLD REDDING ROAD
REDDING, CT 06896

SEAL:

verizon

DATE DRAWN:	06/25/21
ATC JOB NO:	13683575
CUSTOMER ID:	TOPSTONE CT
CUSTOMER #:	467676

GENERAL NOTES

SHEET NUMBER:	REVISION:
G-002	0

SITE PLAN NOTES:

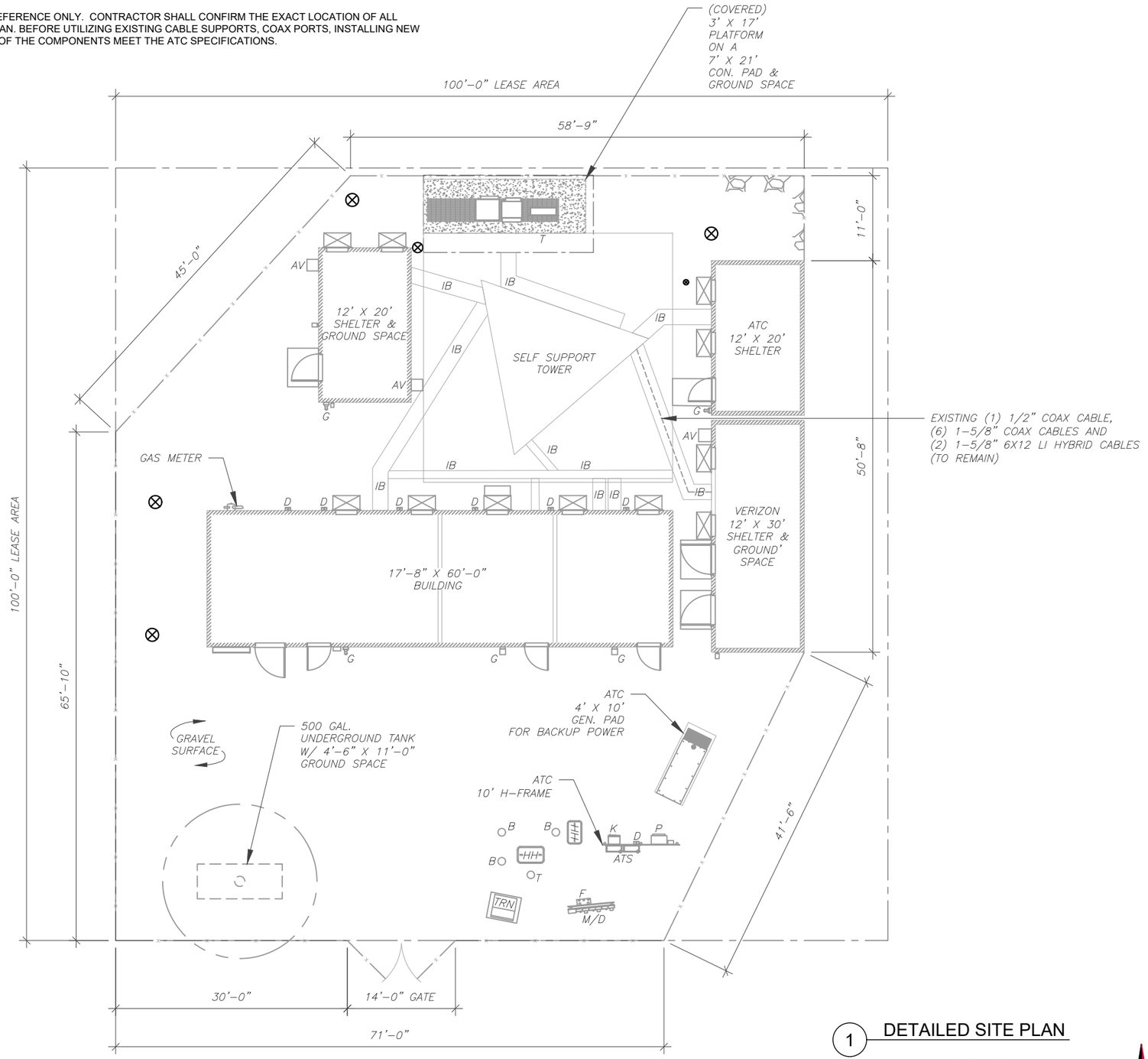
1. THIS SITE PLAN REPRESENTS THE BEST PRESENT NOWLEDGE AVAILABLE TO THE ENGINEER AT THE TIME OF THIS DESIGN. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO CONSTRUCTION AND VERIFY ALL EXISTING CONDITIONS RELATED TO THE SCOPE OF WOR FOR THIS PROJECT.

2. ICE BRIDGE, CABLE LADDER, COAX PORT, AND COAX CABLE ARE SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL CONFIRM THE EXACT LOCATION OF ALL PROPOSED AND EXISTING EQUIPMENT AND STRUCTURES DEPICTED ON THIS PLAN. BEFORE UTILIZING EXISTING CABLE SUPPORTS, COAX PORTS, INSTALLING NEW PORTS OR ANY OTHER EQUIPMENT, CONTRACTOR SHALL VERIFY ALL ASPECTS OF THE COMPONENTS MEET THE ATC SPECIFICATIONS.

3. NO ELECTRICAL SCOPE IS INCLUDED IN THIS PROJECT.

LEGEND

⊗	GROUNDING TEST WELL
ATS	AUTOMATIC TRANSFER SWITCH
B	BOLLARD
CSC	CELL SITE CABINET
D	DISCONNECT
E	ELECTRICAL
F	FIBER
GEN	GENERATOR
G	GENERATOR RECEPTACAL
HH, V	HAND HOLE, VAULT
IB	ICE BRIDGE
	ENTROX BOX
LC	LIGHTING CONTROL
M	METER
PB	PULL BOX
PP	POWER POLE
T	TELCO
TRN	TRANSFORMER
——x——	CHAINLIN FENCE



1 DETAILED SITE PLAN

GRAPHIC SCALE

15 0 8 15

(IN FEET)
1 UNIT = 15 FEET

AMERICAN TOWER®

Dewberry®

Dewberry Engineers Inc.
99 SUMMER STREET
SUITE 700
BOSTON, MA 02110
PHONE: 617.531.0801
FAX: 617.695.3310

REV.	DESCRIPTION	BY	DATE
A	PRELIM	XH	06/25/21
0	FINAL	WG	07/29/21

ATC SITE NUMBER:
302522

ATC SITE NAME:
REDDING

VERIZON SITE NAME:
TOPSTONE CT

SITE ADDRESS:
100 OLD REDDING ROAD
REDDING, CT 06896

SEAL:

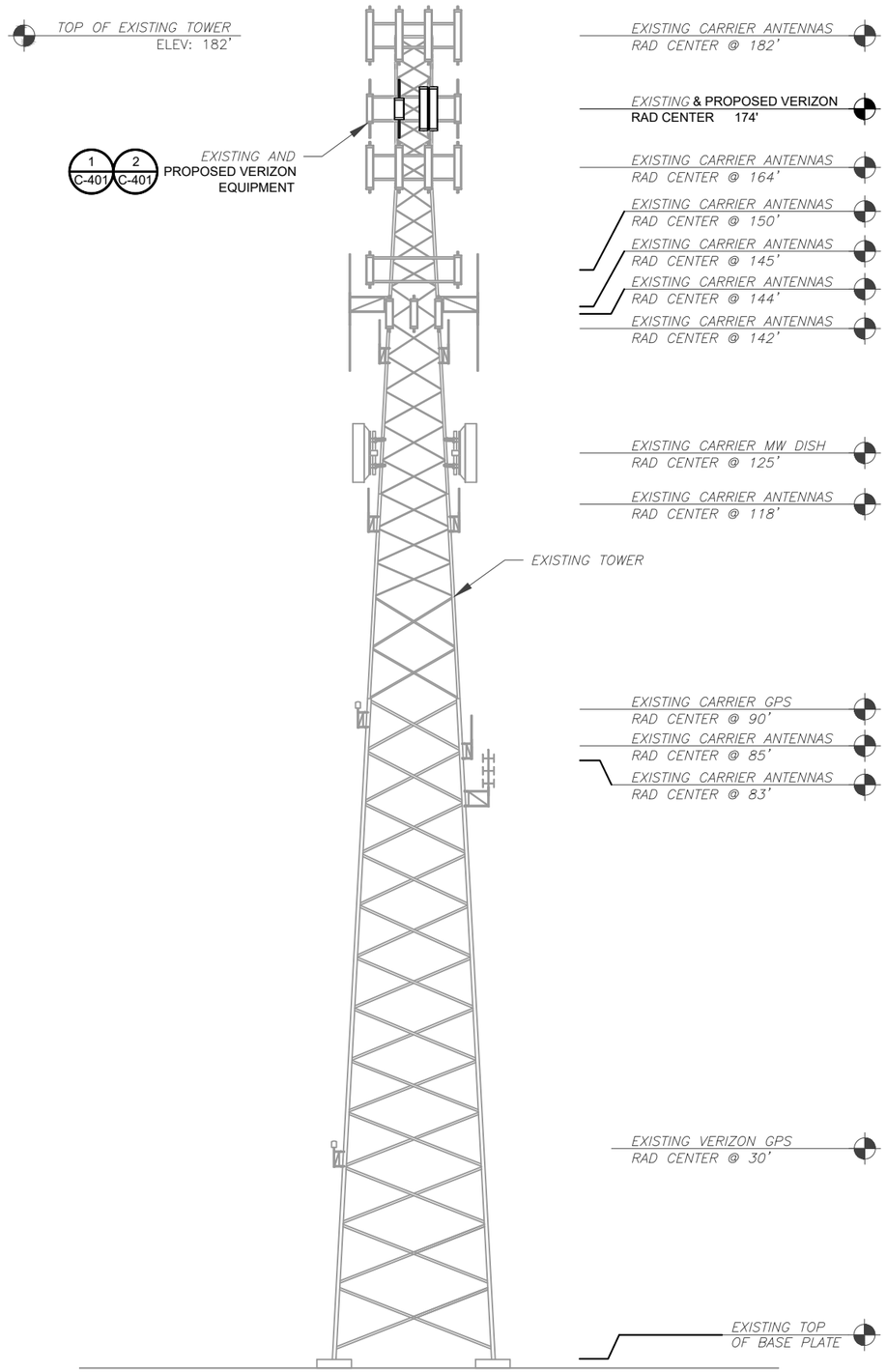
verizon

DATE DRAWN:	06/25/21
ATC JOB NO:	13683575
CUSTOMER ID:	TOPSTONE CT
CUSTOMER #:	467676

DETAILED SITE PLAN

SHEET NUMBER: C-101

REVISION: 0



1 TOWER ELEVATION
SCALE: N.T.S.

PER MOUNT ANALYSIS COMPLETED BY MASER CONSULTING CONNECTICUT, DATED 07/08/21, THE EXISTING MOUNT CAN ADEQUATELY SUPPORT THE PROPOSED LOADING.

TOWER NOTE:

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM WITH THE PROJECT MANAGER THAT THEY HAVE THE MOST RECENT VERSION OF THE STRUCTURAL ANALYSIS BEFORE COMMENCING WOR . EXISTING AND PROPOSED TOWER APPURTENANCES, MOUNTS, AND ANTENNAS ARE SHOWN BASED ON THE STRUCTURAL ANALYSIS.
2. WHERE APPLICABLE, ALL NEW ANTENNAS, EQUIPMENT, MOUNTS, CABLING, ETC. SHALL BE PAINTED/SOC ED TO MATCH EXISTING EQUIPMENT IN ACCORDANCE WITH FAA, JURISDICTION, AND/OR OTHER LOCAL REQUIREMENTS.
3. TOWER ELEVATIONS ARE MEASURED FROM TOP OF BASE PLATE TO MATCH STRUCTURAL ANALYSIS. ELEVATIONS DO NOT REFLECT TRUE ABOVE GROUND LEVEL (A.G.L.)

AMERICAN TOWER®

Dewberry®
Dewberry Engineers Inc.
99 SUMMER STREET
SUITE 700
BOSTON, MA 02110
PHONE: 617.531.0801
FAX: 617.695.3310

REV.	DESCRIPTION	BY	DATE
A	PRELIM	XH	06/25/21
0	FINAL	WG	07/29/21

ATC SITE NUMBER:
302522

ATC SITE NAME:
REDDING

VERIZON SITE NAME:
TOPSTONE CT

SITE ADDRESS:
100 OLD REDDING ROAD
REDDING, CT 06896

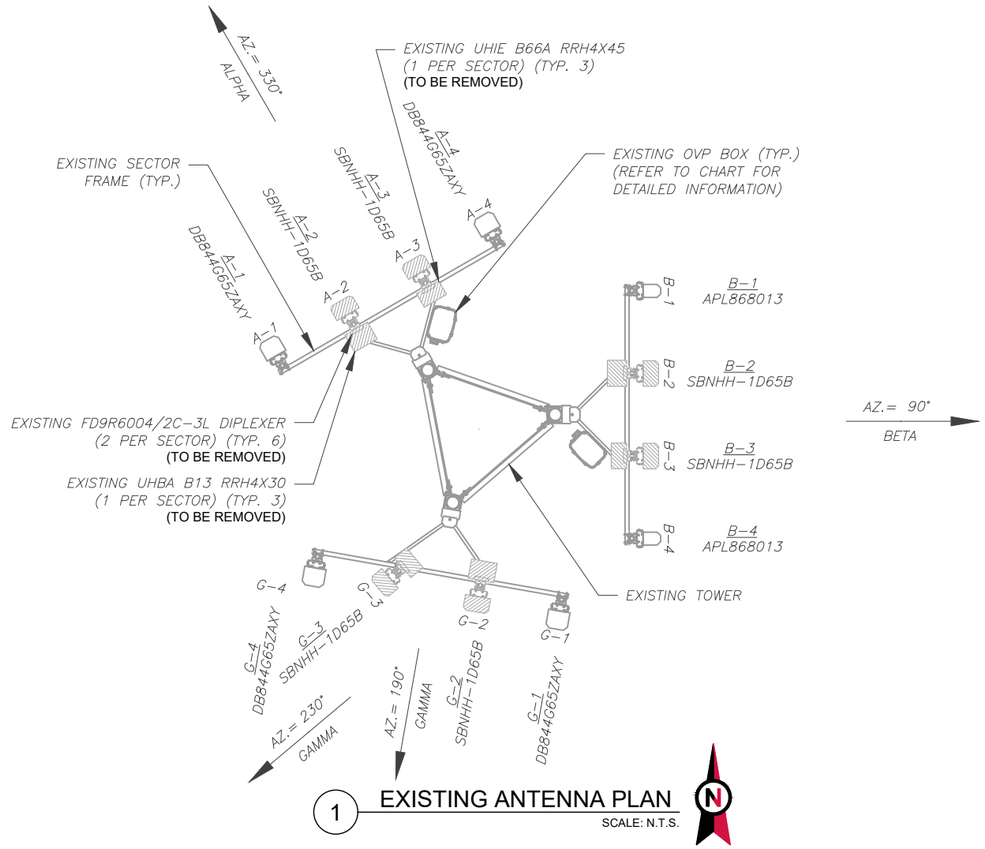
SEAL:

verizon

DATE DRAWN:	06/25/21
ATC JOB NO:	13683575
CUSTOMER ID:	TOPSTONE CT
CUSTOMER #:	467676

TOWER ELEVATION

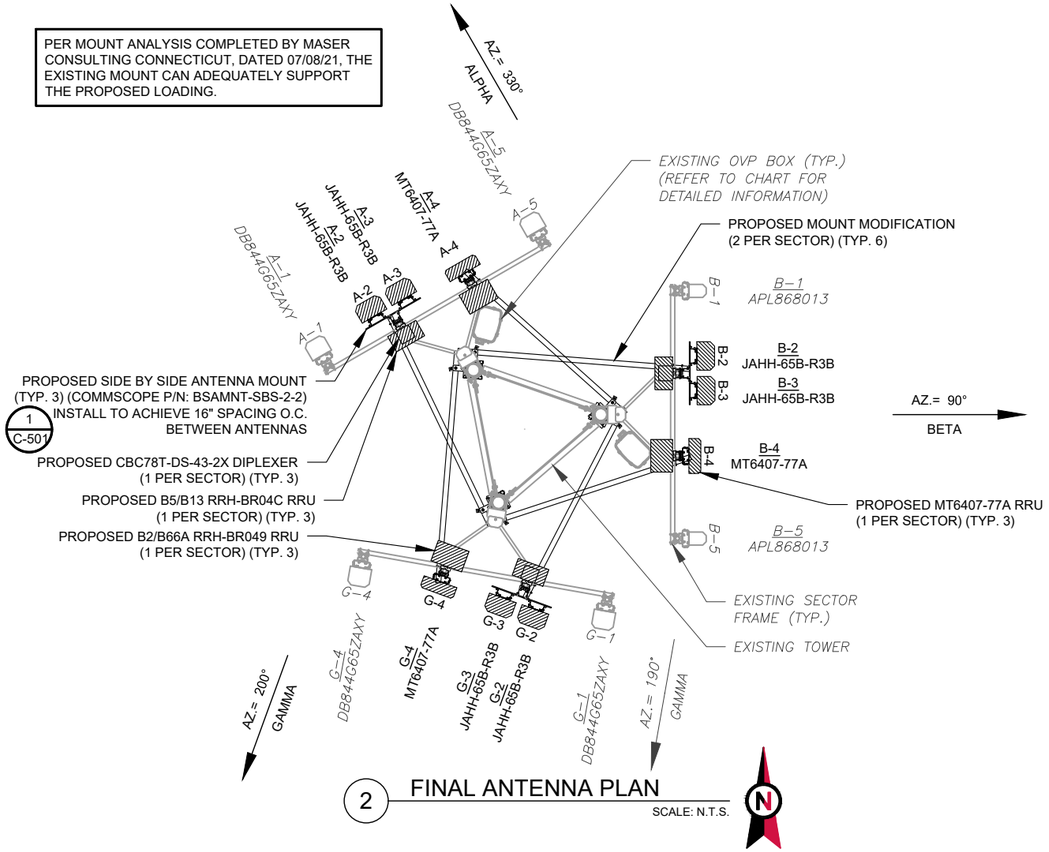
SHEET NUMBER:	REVISION:
C-201	0



1 EXISTING ANTENNA PLAN

SCALE: N.T.S.

PER MOUNT ANALYSIS COMPLETED BY MASER CONSULTING CONNECTICUT, DATED 07/08/21, THE EXISTING MOUNT CAN ADEQUATELY SUPPORT THE PROPOSED LOADING.



2 FINAL ANTENNA PLAN

SCALE: N.T.S.

EXISTING ANTENNA SCHEDULE

LOCATION			ANTENNA SUMMARY					NON ANTENNA SUMMARY	
SECTOR	RAD	AZ	POS	ANTENNA	BAND	MECH/ELEC D-TILT	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS
ALPHA	174'	330°	A1	DB844G65ZAXY	850 CDMA	0/0	RMN	–	–
			A2	SBNHH-1D65B	700	0/4	RMV	UHBA B13 RRH 4X30	RMV
								FD9R6004/2C-3L	RMV
			A3	SBNHH-1D65B	AWS	0/3	RMV	UHIE B66A RRH 4X45	RMV
								FD9R6004/2C-3L	RMV
			A4	DB844G65ZAXY	850 CDMA	0/0	RMN	–	–
BETA	174'	90°	B1	DB844G65ZAXY	850 CDMA	0/0	RMN	–	–
			B2	SBNHH-1D65B	700	0/6	RMV	UHBA B13 RRH 4X30	RMV
								FD9R6004/2C-3L	RMV
			B3	SBNHH-1D65B	AWS	0/2	RMV	UHIE B66A RRH 4X45	RMV
								FD9R6004/2C-3L	RMV
			B4	DB844G65ZAXY	850 CDMA	0/0	RMN	–	–
GAMMA	174'	190°	G1	DB844G65ZAXY	850 CDMA	2/0	RMN	–	–
			G2	SBNHH-1D65B	700	0/4	RMV	UHBA B13 RRH 4X30	RMV
								FD9R6004/2C-3L	RMV
		230°	G3	SBNHH-1D65B	AWS	0/3	RMV	UHIE B66A RRH 4X45	RMV
								FD9R6004/2C-3L	RMV
		190°	G4	DB844G65ZAXY	850 CDMA	2/0	RMN	–	–
–	30'	–	–	GPS	–	–	RMN	–	–

NOTES

1. CONFIRM WITH VERIZON REP FOR APPLICABLE UPDATES/REVISIONS AND MOST RECENT RFDS FOR NSN CONFIGURATION (CONFIG). GC TO CAP ALL UNUSED PORTS.
2. CONFIRM SPACING OF PROPOSED EQUIP DOES NOT CAUSE TOWER CONFLICTS NOR IMPEDE TOWER CLIMBING PEGS.

STATUS ABBREVIATIONS

RMV: TO BE REMOVED
RMN: TO REMAIN
REL: TO BE RELOCATED
ADD: TO BE ADDED

CABLE LENGTHS FOR JUMPERS

JUNCTION BOX TO RRU: 15'
RRU TO ANTENNA: 10'

FINAL ANTENNA SCHEDULE

LOCATION			ANTENNA SUMMARY					NON ANTENNA SUMMARY	
SECTOR	RAD	AZ	POS	ANTENNA	BAND	MECH/ELEC D-TILT	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS
ALPHA	174'	330°	A1	DB844G65ZAXY	850 CDMA	0/0	*RMN*	-	-
			A2	JAHH-65B-R3B	700/850/1900/AWS	0/4,9,3,3	ADD	B2/B66A RRH-BR049	ADD
			A3	JAHH-65B-R3B	700/850/1900/AWS	0/4,9,3,3	ADD	B5/B13 RRH-BR04C	ADD
							ADD	CBC78T-DS-43-2X	ADD
			A4	MT6407-77A	L-SUB6	0/6	ADD	MT6407-77A	ADD
			A5	DB844G65ZAXY	850 CDMA	0/0	*RMN*	-	-
BETA	174'	90°	B1	DB844G65ZAXY	850 CDMA	0/0	*RMN*	-	-
			B2	JAHH-65B-R3B	700/850/1900/AWS	0/6,6,2,2	ADD	B2/B66A RRH-BR049	ADD
			B3	JAHH-65B-R3B	700/850/1900/AWS	0/6,6,2,2	ADD	B5/B13 RRH-BR04C	ADD
							ADD	CBC78T-DS-43-2X	ADD
			B4	MT6407-77A	L-SUB6	0/6	ADD	MT6407-77A	ADD
			B5	DB844G65ZAXY	850 CDMA	0/0	*RMN*	-	-
GAMMA	174'	190°	G1	DB844G65ZAXY	850 CDMA	2/0	*RMN*	-	-
		200°	G2	JAHH-65B-R3B	700/850/1900/AWS	0/6,6,6,6	ADD	B2/B66A RRH-BR049	ADD
			G3	JAHH-65B-R3B	700/850/1900/AWS	0/6,6,6,6	ADD	B5/B13 RRH-BR04C	ADD
							ADD	CBC78T-DS-43-2X	ADD
			G4	MT6407-77A	L-SUB6	0/6	ADD	MT6407-77A	ADD
		190°	G5	DB844G65ZAXY	850 CDMA	2/0	*RMN*	-	-
-	30'	-	-	GPS	-	-	*RMN*	-	-

EXISTING FIBER DISTRIBUTION/OVP BOX		EXISTING CABLING SUMMARY		
MODEL NUMBER	STATUS	COAX	HYBRID	STATUS
(2) DB-C1-12C-24AB-0Z	*RMN*	(6) 1-5/8" (1) 1/2"	(2) 1-5/8" 6X12 LI	*RMN*

FINAL FIBER DISTRIBUTION / OVP BOX		FINAL CABLING SUMMARY		
MODEL NUMBER	STATUS	COAX	HYBRID	STATUS
(2) DB-C1-12C-24AB-0Z	*RMN*	(6) 1-5/8" (1) 1/2"	(2) 1-5/8" 6X12 LI	*RMN*

3 EQUIPMENT SCHEDULES

AMERICAN TOWER®

Dewberry®
Dewberry Engineers Inc.
99 SUMMER STREET
SUITE 700
BOSTON, MA 02110
PHONE: 617.531.0801
FAX: 617.695.3310

REV.	DESCRIPTION	BY	DATE
A	PRELIM	XH	06/25/21
0	FINAL	WG	07/29/21

ATC SITE NUMBER:
302522

ATC SITE NAME:
REDDING

VERIZON SITE NAME:
TOPSTONE CT

SITE ADDRESS:
100 OLD REDDING ROAD
REDDING, CT 06896

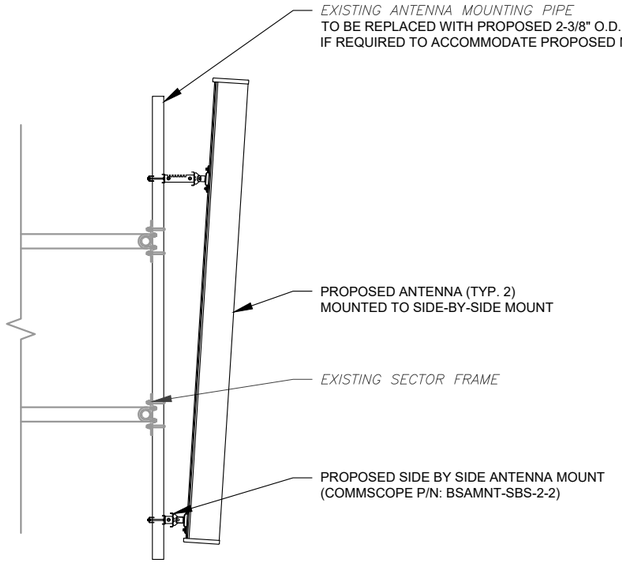
SEAL:

verizon

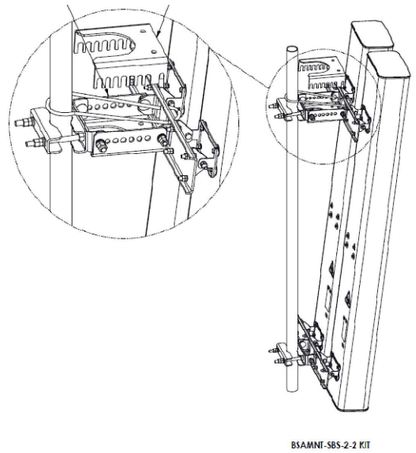
DATE DRAWN:	06/25/21
ATC JOB NO:	13683575
CUSTOMER ID:	TOPSTONE CT
CUSTOMER #:	467676

ANTENNA INFORMATION & SCHEDULE

SHEET NUMBER:	REVISION:
C-401	0



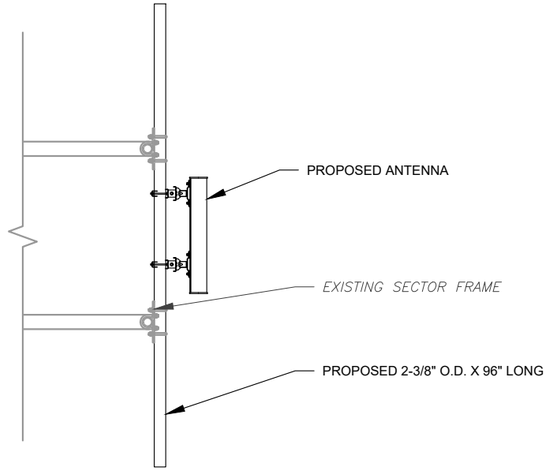
PROFILE VIEW



ISOMETRIC VIEW (BY MANUFACTURER)

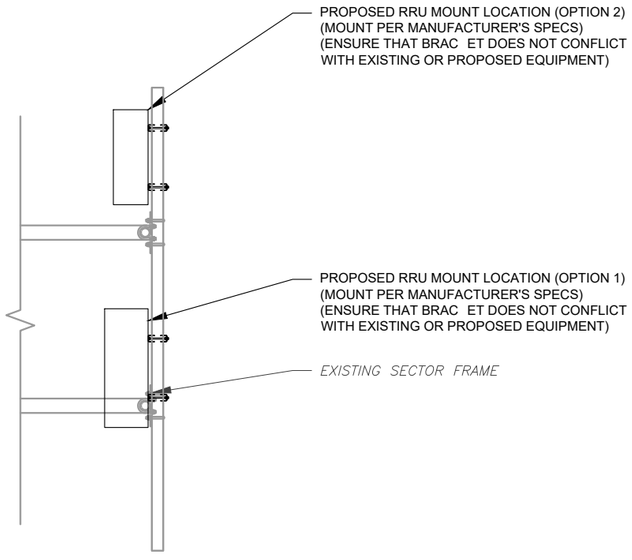
1 PROPOSED SIDE-BY-SIDE MOUNT

SCALE: NOT TO SCALE



2 PROPOSED 5G ANTENNA MOUNTING DETAIL - TYPICAL

SCALE: N.T.S.



3 PROPOSED RRU MOUNTING DETAIL - TYPICAL

SCALE: N.T.S.

AMERICAN TOWER®

Dewberry®
Dewberry Engineers Inc.
99 SUMMER STREET
SUITE 700
BOSTON, MA 02110
PHONE: 617.531.0801
FAX: 617.695.3310

REV.	DESCRIPTION	BY	DATE
A	PRELIM	XH	06/25/21
0	FINAL	WG	07/29/21

ATC SITE NUMBER:
302522

ATC SITE NAME:
REDDING

VERIZON SITE NAME:
TOPSTONE CT

SITE ADDRESS:
100 OLD REDDING ROAD
REDDING, CT 06896

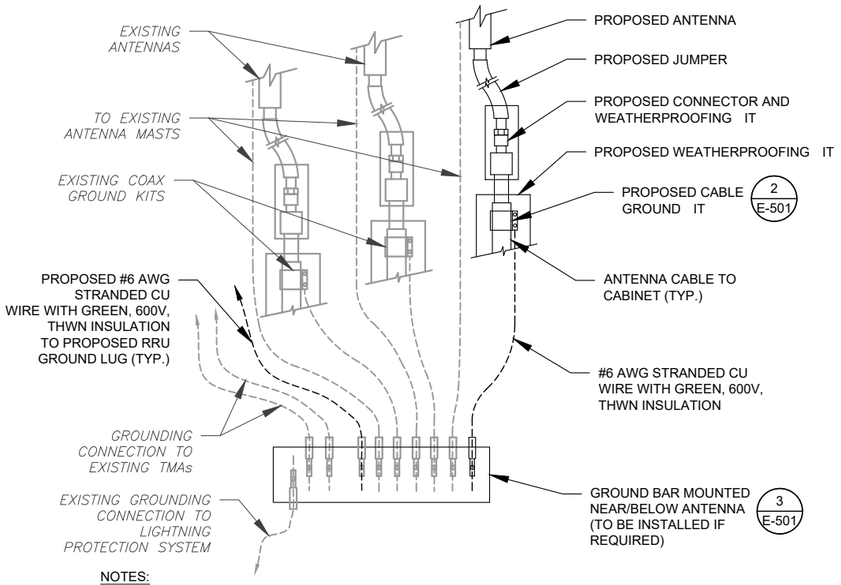
SEAL:

verizon

DATE DRAWN:	06/25/21
ATC JOB NO:	13683575
CUSTOMER ID:	TOPSTONE CT
CUSTOMER #:	467676

CONSTRUCTION DETAILS

SHEET NUMBER:	REVISION:
C-501	0

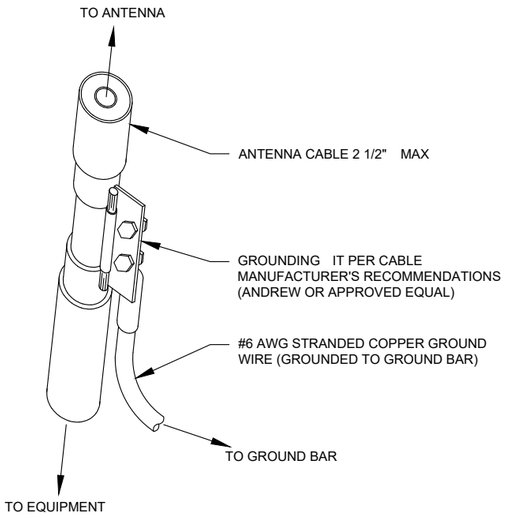


NOTES:

1. THIS DETAIL IS INTENDED TO SHOW THE GENERAL GROUNDING REQUIREMENTS. SLIGHT ADJUSTMENTS MAY BE REQUIRED BASED ON EXISTING SITE CONDITIONS. THE CONTRACTOR SHALL MA E FIELD ADJUSTMENTS AS NEEDED AND INFORM THE CONSTRUCTION MANAGER OF ANY CONFLICTS.
2. SITE GROUNDING SHALL COMPLY WITH VERIZON GROUNDING STANDARDS, LATEST EDITION, AND COMPLY WITH VERIZON GROUNDING CHEC LIST, LATEST VERSION. WHEN NATIONAL AND LOCAL GROUNDING CODES ARE MORE STRINGENT THEY SHALL GOVERN.

1 TYPICAL ANTENNA GROUNDING DIAGRAM

SCALE: N.T.S.

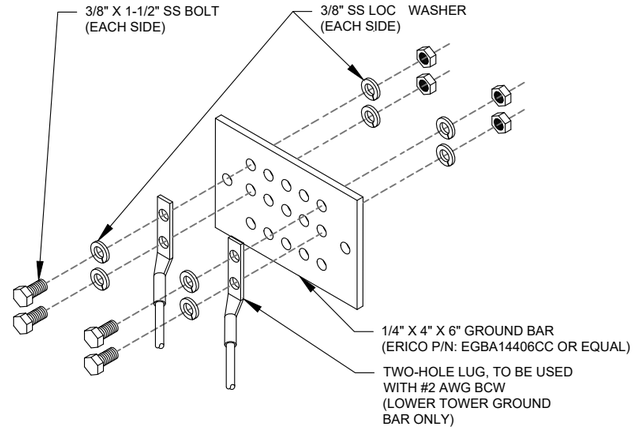


GROUND IT NOTES:

1. DO NOT INSTALL CABLE GROUND IT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
2. CONTRACTOR SHALL PROVIDE WEATHERPROOFING IT (ANDREW PART NUMBER 221213) AND INSTALL/TAPE PER MANUFACTURER'S SPECIFICATIONS.

2 CABLE GROUND IT CONNECTION DETAIL

SCALE: N.T.S.



GROUND BAR NOTES:

1. GROUND BAR ITS COME WITH ALL HARDWARE, NUTS, BOLTS, WASHERS, ETC. EXCEPT THE STRUCTURAL MOUNTING MEMBER(S).
2. GROUND BAR TO BE BONDED DIRECTLY TO TOWER.

3 TOWER GROUND BAR DETAIL

SCALE: N.T.S.

AMERICAN TOWER®

Dewberry®
Dewberry Engineers Inc.
99 SUMMER STREET
SUITE 700
BOSTON, MA 02110
PHONE: 617.531.0801
FAX: 617.695.3310

REV.	DESCRIPTION	BY	DATE
A	PRELIM	XH	06/25/21
0	FINAL	WG	07/29/21

ATC SITE NUMBER:
302522

ATC SITE NAME:
REDDING

VERIZON SITE NAME:
TOPSTONE CT

SITE ADDRESS:
100 OLD REDDING ROAD
REDDING, CT 06896

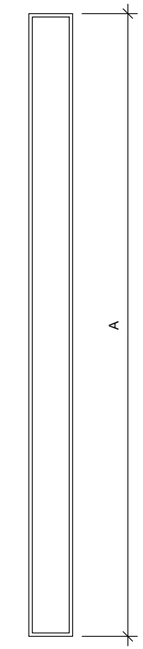
SEAL:

verizon

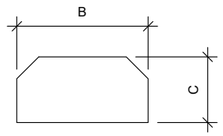
DATE DRAWN:	06/25/21
ATC JOB NO:	13683575
CUSTOMER ID:	TOPSTONE CT
CUSTOMER #:	467676

GROUNDING DETAILS

SHEET NUMBER:	REVISION:
E-501	0



FRONT VIEW

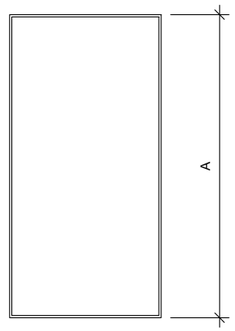


TOP VIEW

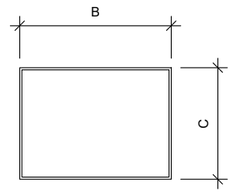
1 ANTENNA SPECIFICATIONS

FOR ILLUSTRATIVE PURPOSES ONLY - NOT TO SCALE

ANTENNA SPECIFICATIONS				
ANTENNA MODEL	A	B	C	WEIGHT (LBS)
JAHH-65B-R3B	72.0"	13.8"	8.2"	60.6
MT6407-77A	35.1"	16.1"	5.5"	81.6



FRONT VIEW



TOP VIEW

2 RRU AND DIPLEXER SPECIFICATIONS

FOR ILLUSTRATIVE PURPOSES ONLY - NOT TO SCALE

RRU SPECIFICATIONS				
RRU MODEL	A	B	C	WEIGHT (LBS)
B2/B66A RRH-BR049	15.0"	15.0"	10.0"	84.4
B5/B13 RRH-BR04C	15.0"	15.0"	8.1"	70.3
MT6407-77A	35.1"	16.1"	5.5"	81.6
CBC78T-DS-43-2X	9.6"	6.9"	6.4"	20.7

AMERICAN TOWER®

Dewberry®
Dewberry Engineers Inc.
99 SUMMER STREET
SUITE 700
BOSTON, MA 02110
PHONE: 617.531.0801
FAX: 617.695.3310

ATC SITE NUMBER:
302522

ATC SITE NAME:
REDDING

VERIZON SITE NAME:
TOPSTONE CT

SITE ADDRESS:
100 OLD REDDING ROAD
REDDING, CT 06896

verizon

DATE DRAWN:	06/25/21
ATC JOB NO:	13683575
CUSTOMER ID:	TOPSTONE CT
CUSTOMER #:	467676

SUPPLEMENTAL

SHEET NUMBER:
R-601

Maser Consulting Connecticut
2000 Midlantic Drive, Suite 100
Mt. Laurel, NJ 08054
(856) 797-0412
peter.albano@colliersengineering.com

New/Replacement Antenna Mount Analysis Report and PMI Requirements

Mount Analysis-R

SMART Tool Project #: 10084369
Maser Consulting Connecticut Project #: 21777896A

July 8, 2021

Site Information	*Site ID:*	*467676-VZW / TOPSTONE CT*
	Site Name:	*TOPSTONE CT*
	Carrier Name:	*Verizon Wireless*
	Address:	*100 Old Redding Rd.*
		Redding, Connecticut 06896
		Fairfield County
	Latitude:	*41.287094°*
	Longitude:	*-73.438161°*
Structure Information	*Tower Type:*	*180-Ft Self Support*
	Mount Type:	*12.50-Ft Sector Frame*

FUZE ID # 16045711

Analysis Results

Sector Frame: **31.2% Pass**

Contractor PMI Requirements:
Included at the end of this MA report
Available & Submitted via portal at https://pmi.vzwsmart.com
Contractor - Please Review Specific Site PMI Requirements Upon Award
Requirements also Noted on Mount Modification Drawings
Requirements may also be Noted on A & E drawings

Report Prepared By: Zachary Bandilla

STATE OF CONNECTICUT · JUSTIN PETER LINETTE · No. 31965 · LICENSED PROFESSIONAL ENGINEER

Digitally signed by Justin Linette
Date: 2021.07.08 14:54:51-04'00'

7. Structural Steel Grades have been assumed as follows, if applicable, unless otherwise noted in this analysis:
   - Channel, Solid Round, Angle, Plate — ASTM A36 (Gr. 36)
   - HSS (Rectangular) — ASTM 500 (Gr. B-46)
   - Pipe — ASTM A53 (Gr. B-35)
   - Threaded Rod — F1554 (Gr. 36)
   - Bolts — ASTM A325

Discrepancies between in-field conditions and the assumptions listed above may render this analysis invalid unless explicitly approved by Maser Consulting Connecticut.

Analysis Results:

Component	Utilization %	Pass/Fail
Horizontal mount pipe	*22.9 %*	*Pass*
Standoff Plate	*31.2 %*	*Pass*
Standoff Horizontal	*20.3 %*	*Pass*
Standoff Diagonal	*5.9 %*	*Pass*
Antenna Pipe	*21.5 %*	*Pass*
PIPE_2.5	*11.9 %*	*Pass*
Standoff Vertical	*7.4 %*	*Pass*
Tieback	*11.3 %*	*Pass*
Connection Check	*11.8 %*	*Pass*

Structure Rating – *(Controlling Utilization of all Components)*	**31.2%**

Recommendation:

The proposed antenna mounts are **SUFFICIENT** for the final loading configuration and do not require modifications.

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

Attachments:

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

1 MOUNT ANALYSIS

AMERICAN TOWER®

Dewberry®
Dewberry Engineers Inc.
99 SUMMER STREET
SUITE 700
BOSTON, MA 02110
PHONE: 617.531.0801
FAX: 617.695.3310

ATC SITE NUMBER:
302522

ATC SITE NAME:
REDDING

VERIZON SITE NAME:
TOPSTONE CT

SITE ADDRESS:
100 OLD REDDING ROAD
REDDING, CT 06896

DATE DRAWN:	06/25/21
ATC JOB NO:	13683575
CUSTOMER ID:	TOPSTONE CT
CUSTOMER #:	467676

SUPPLEMENTAL

SHEET NUMBER:
R-602