



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

March 18, 2024

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

**RE: Notice of Exempt Modification for Verizon Wireless: 5000242940**  
**Crown Site ID# 876352**  
**94 East High Street, East Hampton CT 0606424**  
**Latitude: 41° 35' 14.2" / Longitude: -72° 29' 19.6"**

Dear Ms. Bachman:

Verizon Wireless currently maintains twelve (12) antennas at the 104-foot mount on the existing 118-foot monopole tower located at 94 East High Street, East Hampton CT. The property is owned by Paul & Sandy Too Inc and tower is owned by Crown Castle. Verizon now intends to add four (4) interference mitigation filters at the 104ft level. This modification/proposal includes hardware that is both 4G (LTE) and 5G capable through remote software configuration and either or both services may be turned on or off at various times.

**Panned Modification:**

**Tower:**

Install New:

(4) Kaelus BSF0020F3V1- Interference Mitigation Filters

The facility was approved by the Town of East Hampton Planning & Zoning Commission on May 7, 1997 via Special Permit.

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 David Cox, Town Manager, Town of East Hampton, John Guskowski, Interim Planner, Town of East Hampton. Paul & Sandy Too Inc are the landowners and Crown Castle is the tower owner.

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

The Foundation for a Wireless World.  
CrownCastle.com

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

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

Sincerely,



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

Attachments

cc:

David Cox, Town Manager  
Town of East Hampton  
1 Community Drive  
East Hampton, CT 06424  
860-267-4468

John Guskowski, Interim Planner  
Town of East Hampton  
1 Community Drive  
East Hampton, CT 06424  
860-267-7450

Paul & Sandy Too Inc  
93 East High Street  
East Hampton, CT 06424

Crown Castle, Tower Owner

10.

-264-

SPECIAL PERMIT

Applicant: Sprint Spectrum, L.P.  
 Owner: Richard Wall, et al  
 Location: 94 East High Street  
 (Map 26, Block 85, Lot 16)  
 Date Granted: May 7, 1997  
 Nature of Permit: Section 7.6.J.E - Public Utility Structure  
 Section 7.9.I.G - Retail/Commercial Use  
 Section 7.11 - Lake Ecotone/ing Protection Area  
 Action: Subject to the provisions of the relevant regulations and written, oral and graphic statements, the permit is approved with the following:  
 Conditions:  
 1. IWA/IEA Approval  
 A. All EES controls shall be in place prior to start of any work  
 B. EAS controls will be monitored by Town Hall  
 C. Bonding will be determined by Town Engineer  
 D. The surface of the lower portion of the access drive shall be restored consistent with new construction as well as noted on the plans.  
 2. The tower shall be disassembled and removed upon cessation of use.

UNOFFICIAL

Carol Micek  
 Carol Micek, Clerk  
 East Hampton Planning & Zoning  
 Commission

May 13, 1997  
 Date

RECEIVED FOR RECORD AT E. HAMPTON, NY  
 ON 5/28/97 AT 11:30 A.M.  
 ALICE PAULINE L. MARSHALL, Town Clerk  
 Mary Ann Walsh, Clerk.

# 94 EAST HIGH ST #CELL

**Location** 94 EAST HIGH ST #CELL

**Mblu** 26/ 85/ 16/ 1

**Acct#** R07038

**Owner** PAULS + SANDYS TOO INC

**Assessment** \$301,530

**Appraisal** \$430,760

**PID** 5476

**Building Count** 1

## Current Value

Appraisal			
Valuation Year	Improvements	Land	Total
2021	\$230,760	\$200,000	\$430,760

Assessment			
Valuation Year	Improvements	Land	Total
2021	\$161,530	\$140,000	\$301,530

## Owner of Record

**Owner** PAULS + SANDYS TOO INC  
**Co-Owner**  
**Address** 93 EAST HIGH ST  
 EAST HAMPTON, CT 06424

**Sale Price** \$0  
**Certificate**  
**Book & Page** 0344/0096  
**Sale Date** 01/28/2002  
**Instrument** 29

## Ownership History

Ownership History					
Owner	Sale Price	Certificate	Book & Page	Instrument	Sale Date
PAULS + SANDYS TOO INC	\$0		0344/0096	29	01/28/2002

## Building Information

### Building 1 : Section 1

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



**Land**

**Land Use**

**Use Code** 202  
**Description** Commercial Land & OB  
**Zone** C  
**Neighborhood** COM  
**Alt Land Appr** No  
**Category**

**Land Line Valuation**

**Size (Acres)** 1  
**Frontage**  
**Depth**  
**Assessed Value** \$140,000  
**Appraised Value** \$200,000

**Outbuildings**

Outbuildings						Legend	
Code	Description	Sub Code	Sub Description	Size	Value	Bldg #	
BLD	Building			360.00 SF	\$48,600	1	
SHD1	Shed	FR	Frame	120.00 S.F.	\$2,160	1	
CEL	Cell Tower			1.00 UNITS	\$90,000	1	
CEL	Cell Tower			1.00 UNITS	\$90,000	1	

**Valuation History**

Appraisal			
Valuation Year	Improvements	Land	Total
2021	\$140,760	\$200,000	\$340,760
2019	\$156,400	\$200,000	\$356,400
2018	\$156,400	\$200,000	\$356,400
2016	\$156,400	\$200,000	\$356,400

Assessment			
Valuation Year	Improvements	Land	Total
2021	\$98,530	\$140,000	\$238,530
2019	\$109,480	\$140,000	\$249,480
2018	\$109,480	\$140,000	\$249,480
2016	\$109,480	\$140,000	\$249,480

14 east high st

Search Results

Parcel Details

### 14 EAST HIGH ST



## PAULS + SANDYS TOO INC

93 EAST HIGH ST  
EAST HAMPTON, CT 06424

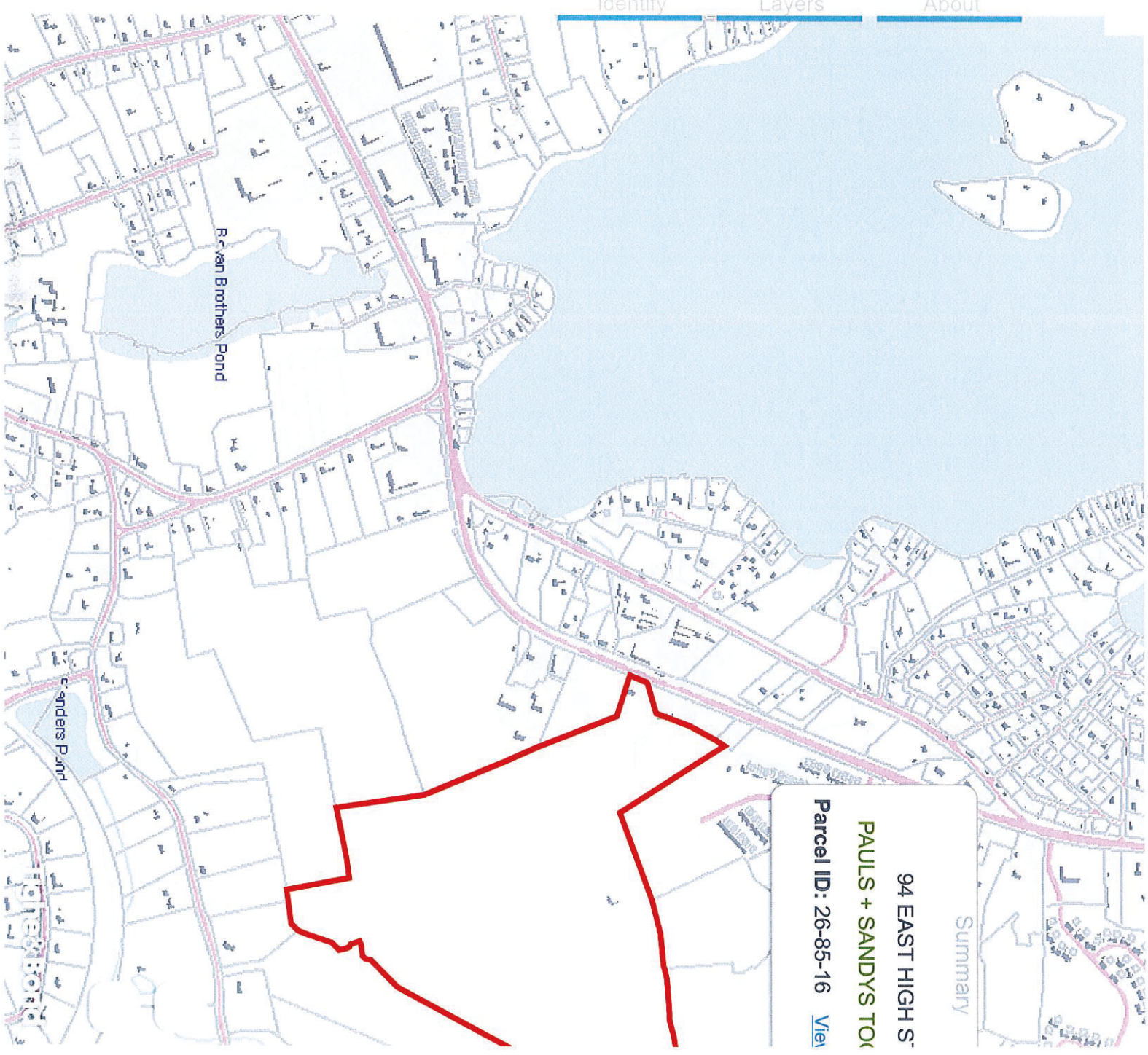
Parcel ID: 26-85-16  
Lot Size: 62.44 Ac  
Sale Price: \$325000

[Links](#) [Abutters](#)  
[Parcel Details](#) [Bing Bird's Eye](#)  
[Photo](#) [Property Map](#)  
[Google Map](#) [Sketch](#)  
 Abutter Distance:  [Add Parcel](#)  
 Adjacent  [Remove Parcel](#)  
 Adjacent  
 50 ft [Parcel Details](#)  
 100 ft [Export List](#)  
 300 ft [AV PID](#) 4364  
 400 ft  
 500 ft  
 1 ST  
 Find Abutters   
 Clear Abutters

About

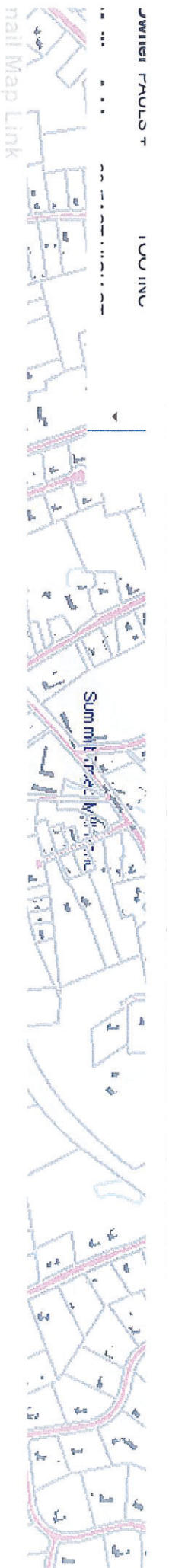
Layers

Identify



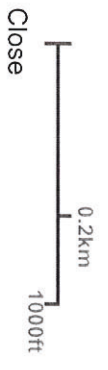
Summary  
 94 EAST HIGH ST  
 PAULS + SANDYS TOO  
 Parcel ID: 26-85-16 [View](#)





Copy and paste the following string into an email to link to the current map view:

100100



Print Map

Size:

Scale: 1" =

ft. Title:

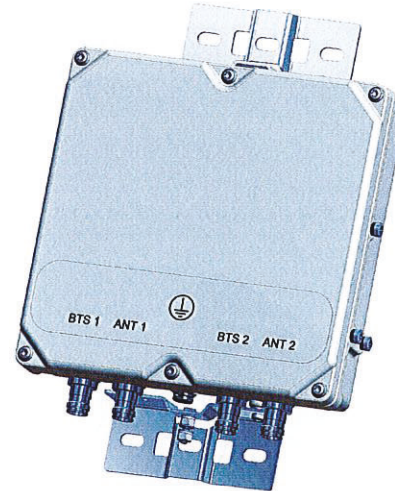
# BSF0020F3V1-1

## TWIN BANDSTOP 900MHZ INTERFERENCE MITIGATION FILTER

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

### FEATURES

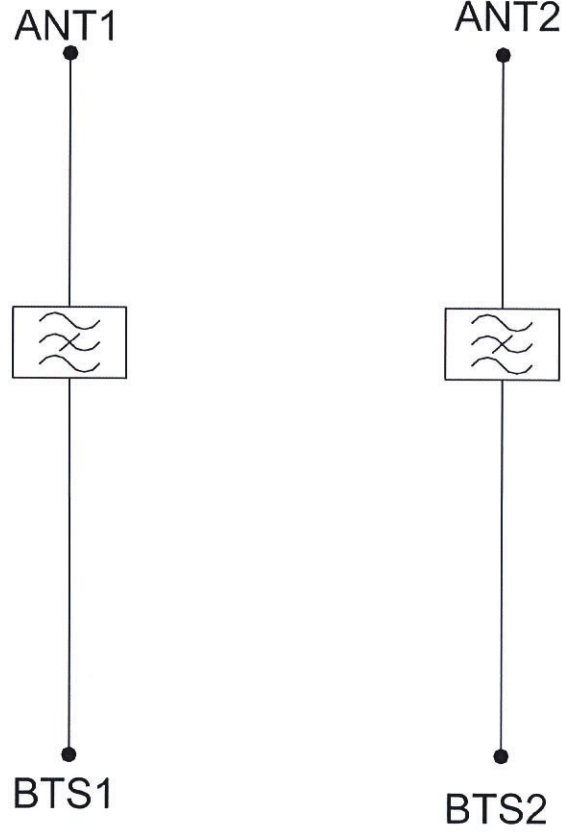
- Passes full 700 and 850 bands
- Low insertion loss
- Rejection of 900MHz uplink
- DC/AISG pass
- Twin unit
- Dual twin mounting available



### TECHNICAL SPECIFICATIONS

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

ELECTRICAL BLOCK DIAGRAM



**Barbadora, Jeff**

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**From:** TrackingUpdates@fedex.com  
**Sent:** Tuesday, March 19, 2024 10:53 AM  
**To:** Barbadora, Jeff  
**Subject:** FedEx Shipment 775587939225: Your package has been delivered

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



Hi. Your package was  
delivered Tue, 03/19/2024 at  
10:42am.



Delivered to 1 COMMUNITY RD, EAST HAMPTON, CT 06424  
Received by R.BAFUMI

[OBTAIN PROOF OF DELIVERY](#)



# How was your delivery ?



TRACKING NUMBER	<a href="#">775587939225</a>
FROM	Crown Castle 1800 W. Park Drive WESTBOROUGH, MA, US, 01581
TO	Town of East Hampton David Cox, Town Manager 1 Community Drive EAST HAMPTON, CT, US, 06424
REFERENCE	799001.7680
SHIPPER REFERENCE	799001.7680
SHIP DATE	Mon 3/18/2024 06:35 PM
DELIVERED TO	Receptionist/Front Desk
PACKAGING TYPE	FedEx Envelope
ORIGIN	WESTBOROUGH, MA, US, 01581
DESTINATION	EAST HAMPTON, CT, US, 06424
SPECIAL HANDLING	Deliver Weekday
NUMBER OF PIECES	1
TOTAL SHIPMENT WEIGHT	2.00 LB
SERVICE TYPE	FedEx Standard Overnight

**Barbadora, Jeff**

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**From:** TrackingUpdates@fedex.com  
**Sent:** Tuesday, March 19, 2024 10:53 AM  
**To:** Barbadora, Jeff  
**Subject:** FedEx Shipment 775587975120: Your package has been delivered

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10:42am.



Delivered to 1 COMMUNITY RD, EAST HAMPTON, CT 06424  
Received by R.BAFUMI

[OBTAIN PROOF OF DELIVERY](#)

# How was your delivery ?



TRACKING NUMBER	<a href="#">775587975120</a>
FROM	Crown Castle 1800 W. Park Drive WESTBOROUGH, MA, US, 01581
TO	Town of East Hampton John Guskowski, Interim Planner 1 Community Drive EAST HAMPTON, CT, US, 06424
REFERENCE	799001.7680
SHIPPER REFERENCE	799001.7680
SHIP DATE	Mon 3/18/2024 06:35 PM
DELIVERED TO	Receptionist/Front Desk
PACKAGING TYPE	FedEx Envelope
ORIGIN	WESTBOROUGH, MA, US, 01581
DESTINATION	EAST HAMPTON, CT, US, 06424
SPECIAL HANDLING	Deliver Weekday
NUMBER OF PIECES	1
TOTAL SHIPMENT WEIGHT	0.50 LB
SERVICE TYPE	FedEx Standard Overnight

**Barbadora, Jeff**

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**From:** TrackingUpdates@fedex.com  
**Sent:** Tuesday, March 19, 2024 10:58 AM  
**To:** Barbadora, Jeff  
**Subject:** FedEx Shipment 775588035622: Your package has been delivered

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Hi. Your package was  
delivered Tue, 03/19/2024 at  
10:52am.



Delivered to 93 E HIGH ST, EAST HAMPTON, CT 06424  
Received by M.PRYZINSKI

[OBTAIN PROOF OF DELIVERY](#)

# How was your delivery ?



TRACKING NUMBER	<a href="#">775588035622</a>
FROM	Crown Castle 1800 W. Park Drive WESTBOROUGH, MA, US, 01581
TO	Paul & Sandy Too Inc Paul & Sandy Too Inc 93 East High Street EAST HAMPTON, CT, US, 06424
REFERENCE	799001.7680
SHIPPER REFERENCE	799001.7680
SHIP DATE	Mon 3/18/2024 06:35 PM
DELIVERED TO	Receptionist/Front Desk
PACKAGING TYPE	FedEx Envelope
ORIGIN	WESTBOROUGH, MA, US, 01581
DESTINATION	EAST HAMPTON, CT, US, 06424
SPECIAL HANDLING	Deliver Weekday Residential Delivery
NUMBER OF PIECES	1
TOTAL SHIPMENT WEIGHT	0.50 LB
SERVICE TYPE	FedEx Standard Overnight



Date: **January 16, 2024**



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

**Subject:** **Structural Analysis Report**

**Carrier Designation:** **Verizon Wireless Co-Locate**  
**Site Number:** 5000242940  
**Site Name:** EAST HAMPTON CT

**Crown Castle Designation:** **BU Number:** 876352  
**Site Name:** RICHARD WALL  
**JDE Job Number:** 751365  
**Work Order Number:** 2278558  
**Order Number:** 654587 Rev. 0

**Engineering Firm Designation:** **Crown Castle Project Number** 2278558

**Site Data:** **94 East Hight Street, East Hampton, Middlesex County, CT**  
**Latitude: 41° 35' 14.2" Longitude: -72° 29' 19.6"**  
**117.5 ft - Monopole Tower**

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

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

LC7: Proposed Equipment Configuration

**Sufficient Capacity**

This analysis utilizes an ultimate 3-second gust wind speed of 120 mph as required by the 2022 Connecticut State Building Code. Applicable Standard references and design criteria are listed in Section 2 - Analysis Criteria.

Structural analysis prepared by: Matthew Schmitt

Respectfully submitted by:

*Sudarshan Kasera*

Digitally signed by Sudarshan C Kasera  
Date: 2024.01.18 17:22:07 -05'00'

Sudarshan C Kasera  
Senior Project Engineer





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tnxTower Output

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**1) INTRODUCTION**

This tower is a 117.5 ft Monopole Tower designed by Engineered Endeavors, Inc.. The tower has been modified in the past to accommodate additional loading.

**2) ANALYSIS CRITERIA**

**TIA-222 Revision:** TIA-222-H  
**Risk Category:** II  
**Wind Speed:** 120 mph  
**Exposure Category:** C  
**Topographic Factor:** 1  
**Ice Thickness:** 1.00 in  
**Wind Speed with Ice:** 50 mph  
**Service Wind Speed:** 60 mph

**Table 1 - Proposed Equipment Configuration**

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
102	106	3	commscope	CBC78T-DS-43-2X	2 12	1-5/8 1-1/4
	104	3	andrew	LNx-6514DS-A1M w/ Mount Pipe		
		6	commscope	JAHH-65B-R3B w/ Mount Pipe		
		4	kaelus	KA-6030		
		2	rfs celwave	DB-B1-6C-12AB-0Z		
		3	samsung telecommunications	MT6407-77A_CCIV2 w/ Mount Pipe		
	102	3	samsung telecommunications	RFV01U-D1A		
		3	samsung telecommunications	RFV01U-D2A		
		1	tower mounts	Platform Mount [LP 1201-1_HR-1]		

**Table 2 - Other Considered Equipment**

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
118	130	1	decibel	DB224-A	3 2 1 5 2	1-5/8 7/8 1/2 3/8 Elliptical
	129	1	decibel	DB264-A		
	126	1	decibel	DB809K-YP w/ Mount Pipe		
	124	1	decibel	DB408-A		
	122	1	andrew	VHLP3-11W		
		2	ceragon	FIBEAIR IP-20A_RFU-D		
	119	1	andrew	VHLP3-11W		
		2	ceragon	FIBEAIR IP-20A_RFU-D		
		3	ericsson	AIR6449 B41_T-MOBILE w/ Mount Pipe		
		3	ericsson	RADIO 4460 B2/B25 B66_TMO		
	3	ericsson	Radio 4480_TMOV2			

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
	118	3	rfs celwave	APXVAALL24_43-U-NA20_TMO w/ Mount Pipe		
		1	radiowaves	HP2-11_CCIV2		
		1	tower mounts	Platform Mount [LP 602-1]		
94	96	3	ericsson	RADIO 4449 B5/B12	6 2 4 1 2	1-5/8 3/8 3/4 7/8 Conduit
		3	ericsson	RRUS 8843 B2/B66A		
	94	1		Site Pro 1 RMQLP-4120-H10		
		3	cci antennas	DMP65R-BU6D w/ Mount Pipe		
		3	cci antennas	HPA65R-BU6A w/ Mount Pipe		
		3	cci antennas	OPA65R-BU6BA-K w/ Mount Pipe		
		3	powerwave technologies	7770.00 w/ Mount Pipe		
	93	3	ericsson	RADIO 4415 B30		
		3	ericsson	RRUS 4478 B14		
		6	powerwave technologies	LGP 17201		
		2	raycap	DC6-48-60-18-8F		
72	1	commscope	DB224-A			
73	74	1	lucent	KS24019-L112A	1	1/2
	73	1	tower mounts	Side Arm Mount [SO 701-1]		

### 3) ANALYSIS PROCEDURE

**Table 3 - Documents Provided**

Document	Reference	Source
4-GEOTECHNICAL REPORTS	1532964	CCISITES
4-POST-MODIFICATION INSPECTION	1956331	CCISITES
4-POST-MODIFICATION INSPECTION	3404046	CCISITES
4-POST-MODIFICATION INSPECTION	8406841	CCISITES
4-TOWER FOUNDATION DRAWINGS/DESIGN/SPECS	2122776	CCISITES
4-TOWER MANUFACTURER DRAWINGS	2122777	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	2055770	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	3250765	CCISITES
4-TOWER REINFORCEMENT DESIGN/DRAWINGS/DATA	8034413	CCISITES

#### 3.1) Analysis Method

tnxTower (version 8.2.2.0), a commercially available analysis software package, was used to create a three-dimensional model of the tower and calculate member stresses for various loading cases. Selected output from the analysis is included in Appendix A. When applicable, Crown Castle has calculated and provided the effective area for panel antennas using approved methods following the intent of the TIA-222 standard.

tnxTower was used to determine the loads on the modified structure. Additional calculations were performed to determine the stresses in the reinforcing elements. These calculations are included in Appendix C.

#### 3.2) Assumptions

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

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

#### 4) ANALYSIS RESULTS

**Table 4 - Section Capacity (Summary)**

Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
117.5 - 112.5	Pole	TP16.266x15x0.1875	Pole	22.2	Pass
112.5 - 107.5	Pole	TP17.531x16.266x0.1875	Pole	33.1	Pass
107.5 - 102.5	Pole	TP18.797x17.531x0.1875	Pole	41.8	Pass
102.5 - 97.5	Pole	TP20.062x18.797x0.1875	Pole	56.5	Pass
97.5 - 92.5	Pole	TP21.328x20.062x0.1875	Pole	69.5	Pass
92.5 - 89.71	Pole	TP22.9x21.328x0.1875	Pole	78.4	Pass
89.71 - 84.71	Pole	TP22.913x21.659x0.3125	Pole	53.9	Pass
84.71 - 79.71	Pole	TP24.166x22.913x0.3125	Pole	59.6	Pass
79.71 - 74.71	Pole	TP25.419x24.166x0.3125	Pole	64.0	Pass
74.71 - 69.71	Pole	TP26.672x25.419x0.3125	Pole	67.4	Pass
69.71 - 64.71	Pole	TP27.926x26.672x0.3125	Pole	70.1	Pass
64.71 - 62.83	Pole	TP28.397x27.926x0.3125	Pole	70.9	Pass
62.83 - 62.58	Pole + Reinf.	TP28.459x28.397x0.7375	Reinf. 2 Tension Rupture	48.4	Pass
62.58 - 57.58	Pole + Reinf.	TP29.713x28.459x0.7125	Reinf. 2 Tension Rupture	50.9	Pass
57.58 - 52.58	Pole + Reinf.	TP30.966x29.713x0.7	Reinf. 2 Tension Rupture	53.2	Pass
52.58 - 47.58	Pole + Reinf.	TP32.219x30.966x0.675	Reinf. 2 Tension Rupture	55.2	Pass
47.58 - 47.38	Pole + Reinf.	TP33.46x32.219x0.675	Reinf. 2 Tension Rupture	55.3	Pass
47.38 - 42.38	Pole + Reinf.	TP32.896x31.644x0.675	Reinf. 2 Tension Rupture	58.8	Pass
42.38 - 37.38	Pole + Reinf.	TP34.147x32.896x0.65	Reinf. 2 Tension Rupture	60.4	Pass
37.38 - 32.38	Pole + Reinf.	TP35.398x34.147x0.6375	Reinf. 2 Tension Rupture	61.8	Pass
32.38 - 31.75	Pole + Reinf.	TP35.555x35.398x0.6375	Reinf. 2 Tension Rupture	62.0	Pass
31.75 - 31.5	Pole + Reinf.	TP35.618x35.555x0.7375	Reinf. 1 Bolt Shear	52.9	Pass
31.5 - 26.5	Pole + Reinf.	TP36.869x35.618x0.725	Reinf. 1 Compression	52.0	Pass
26.5 - 21.5	Pole + Reinf.	TP38.12x36.869x0.7125	Reinf. 1 Compression	53.1	Pass
21.5 - 16.5	Pole + Reinf.	TP39.371x38.12x0.6875	Reinf. 1 Compression	54.1	Pass
16.5 - 11.5	Pole + Reinf.	TP40.622x39.371x0.675	Reinf. 1 Compression	54.9	Pass
11.5 - 6.5	Pole + Reinf.	TP41.874x40.622x0.6625	Reinf. 1 Compression	55.7	Pass
6.5 - 1.5	Pole + Reinf.	TP43.125x41.874x0.65	Reinf. 1 Compression	56.4	Pass

Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
1.5 - 0	Pole + Reinf.	TP43.5x43.125x0.65	Reinf. 1 Compression	56.6	Pass
				Summary	
			Pole	78.4	Pass
			Reinforcement	62.0	Pass
			Overall	78.4	Pass

**Table 5 - Tower Component Stresses vs. Capacity - LC7**

Notes	Component	Elevation (ft)	% Capacity	Pass / Fail
1	Anchor Rods	0	56.7	Pass
1	Base Plate	0	53.6	Pass
1	Base Foundation (Structural)	0	58.8	Pass
1	Base Foundation (Soil)	0	49.5	Pass

<b>Structure Rating (max from all components) =</b>	<b>78.4%</b>
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Notes:

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

#### 4.1) Recommendations

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

**APPENDIX A**  
**TNXTOWER OUTPUT**



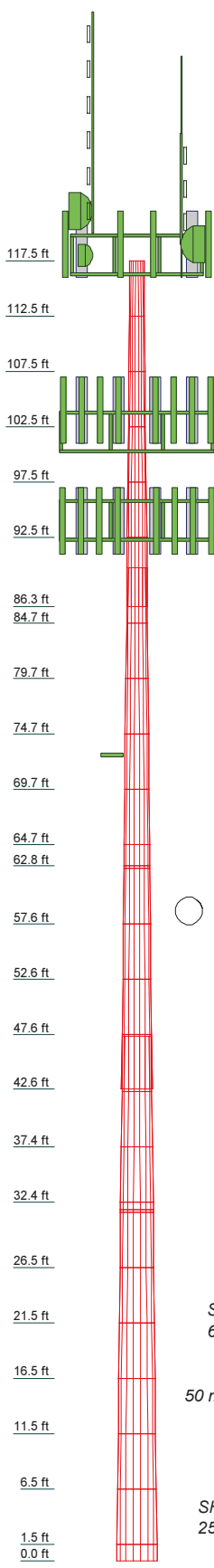
**MATERIAL STRENGTH**

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-65	65 ksi	80 ksi			

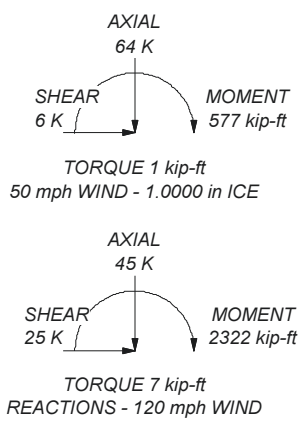
**TOWER DESIGN NOTES**

1. Tower is located in Middlesex County, Connecticut.
2. Tower designed for Exposure C to the TIA-222-H Standard.
3. Tower designed for a 120 mph basic wind in accordance with the TIA-222-H Standard.
4. Tower is also designed for a 50 mph basic wind with 1.00 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60 mph wind.
6. Tower Risk Category II.
7. Topographic Category 1 with Crest Height of 0.00 ft

Section	Length (ft)	Number of Sides	Thickness (in)	Socket Length (ft)	Top Dia (in)	Bot Dia (in)	Grade	Weight (K)
1	5.00	18	0.1875	3.42	15.0000	16.2656		0.2
2	5.00	18	0.1875	3.42	16.2656	17.5312		0.2
3	5.00	18	0.1875	3.42	17.5312	18.7969		0.2
4	5.00	18	0.1875	3.42	18.7969	20.0625		0.2
5	5.00	18	0.1875	3.42	20.0625	21.3281		0.2
6	5.00	18	0.1875	3.42	21.3281	22.5938		0.3
7	5.00	18	0.1875	3.42	22.5938	23.8594		0.4
8	5.00	18	0.1875	3.42	23.8594	25.1250		0.4
9	5.00	18	0.1875	3.42	25.1250	26.3906		0.4
10	5.00	18	0.1875	3.42	26.3906	27.6562		0.4
11	5.00	18	0.1875	3.42	27.6562	28.9219		0.4
12	5.00	18	0.1875	3.42	28.9219	30.1875		0.5
13	5.00	18	0.1875	3.42	30.1875	31.4531		0.5
14	5.00	18	0.1875	3.42	31.4531	32.7188		0.2
15	5.00	18	0.1875	3.42	32.7188	33.9844		1.0
16	5.00	18	0.1875	3.42	33.9844	35.2500		1.1
17	5.00	18	0.1875	3.42	35.2500	36.5156		1.1
18	5.00	18	0.1875	3.42	36.5156	37.7813		1.1
19	5.00	18	0.1875	3.42	37.7813	39.0469		1.1
20	5.00	18	0.1875	3.42	39.0469	40.3125		1.1
21	5.00	18	0.1875	3.42	40.3125	41.5781		1.3
22	5.00	18	0.1875	3.42	41.5781	42.8438		1.3
23	5.00	18	0.1875	3.42	42.8438	44.1094		1.3
24	5.00	18	0.1875	3.42	44.1094	45.3750		1.4
25	5.00	18	0.1875	3.42	45.3750	46.6406		1.4
26	5.00	18	0.1875	3.42	46.6406	47.9062		1.4
27	5.00	18	0.1875	3.42	47.9062	49.1719		1.4
28	5.00	18	0.1875	3.42	49.1719	50.4375		1.4
29	5.00	18	0.1875	3.42	50.4375	51.7031		1.4



ALL REACTIONS ARE FACTORED



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

Job: <b>BU# 876352</b>			
Project:			
Client: Crown Castle	Drawn by: Matthew Schmitt	App'd:	
Code: TIA-222-H	Date: 01/12/24	Scale: NTS	
Path: C:\SAPI Work Area\876352\WO 2278558 - SAIProd\876352.dwg		Dwg No. E-1	

## Tower Input Data

The tower is a monopole.

This tower is designed using the TIA-222-H standard.

The following design criteria apply:

Tower is located in Middlesex County, Connecticut.

Tower base elevation above sea level: 665.00 ft.

Basic wind speed of 120 mph.

Risk Category II.

Exposure Category C.

Simplified Topographic Factor Procedure for wind speed-up calculations is used.

Topographic Category: 1.

Crest Height: 0.00 ft.

Nominal ice thickness of 1.0000 in.

Ice thickness is considered to increase with height.

Ice density of 56 pcf.

A wind speed of 50 mph is used in combination with ice.

Temperature drop of 50 °F.

Deflections calculated using a wind speed of 60 mph.

A non-linear (P-delta) analysis was used.

Pressures are calculated at each section.

Stress ratio used in pole design is 1.

Tower analysis based on target reliabilities in accordance with Annex S.

Load Modification Factors used:  $K_{es}(F_w) = 0.95$ ,  $K_{es}(t_i) = 0.85$ .

Maximum demand-capacity ratio is: 1.05.

Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

## Options

Consider Moments - Legs Consider Moments - Horizontals Consider Moments - Diagonals Use Moment Magnification ✓ Use Code Stress Ratios ✓ Use Code Safety Factors - Guys Escalate Ice Always Use Max Kz Use Special Wind Profile Include Bolts In Member Capacity Leg Bolts Are At Top Of Section Secondary Horizontal Braces Leg Use Diamond Inner Bracing (4 Sided) SR Members Have Cut Ends SR Members Are Concentric Distribute Leg Loads As Uniform	Assume Legs Pinned ✓ Assume Rigid Index Plate ✓ Use Clear Spans For Wind Area Use Clear Spans For KL/r Retension Guys To Initial Tension ✓ Bypass Mast Stability Checks ✓ Use Azimuth Dish Coefficients ✓ Project Wind Area of Appurtenances Alternative Appurt. EPA Calculation Autocalc Torque Arm Areas Add IBC .6D+W Combination ✓ Sort Capacity Reports By Component Triangulate Diamond Inner Bracing Treat Feed Line Bundles As Cylinder Ignore KL/ry For 60 Deg. Angle Legs Use ASCE 10 X-Brace Ly Rules	Calculate Redundant Bracing Forces Ignore Redundant Members in FEA SR Leg Bolts Resist Compression All Leg Panels Have Same Allowable Offset Girt At Foundation ✓ Consider Feed Line Torque Include Angle Block Shear Check Use TIA-222-H Bracing Resist. Exemption Use TIA-222-H Tension Splice Exemption <div style="background-color: #e0e0e0; text-align: center; padding: 2px;">Poles</div> ✓ Include Shear-Torsion Interaction Always Use Sub-Critical Flow Use Top Mounted Sockets Pole Without Linear Attachments Pole With Shroud Or No Appurtenances Outside and Inside Corner Radii Are Known
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## Tapered Pole Section Geometry

Section	Elevation ft	Section Length ft	Splice Length ft	Number of Sides	Top Diameter in	Bottom Diameter in	Wall Thickness in	Bend Radius in	Pole Grade
L1	117.50-112.50	5.00	0.00	18	15.0000	16.2656	0.1875	0.7500	A572-65 (65 ksi)
L2	112.50-107.50	5.00	0.00	18	16.2656	17.5312	0.1875	0.7500	A572-65 (65 ksi)
L3	107.50-102.50	5.00	0.00	18	17.5312	18.7969	0.1875	0.7500	A572-65 (65 ksi)
L4	102.50-97.50	5.00	0.00	18	18.7969	20.0625	0.1875	0.7500	A572-65 (65 ksi)
L5	97.50-92.50	5.00	0.00	18	20.0625	21.3281	0.1875	0.7500	A572-65 (65 ksi)
L6	92.50-86.29	6.21	3.42	18	21.3281	22.9000	0.1875	0.7500	A572-65 (65 ksi)
L7	86.29-84.71	5.00	0.00	18	21.6593	22.9126	0.3125	1.2500	A572-65 (65 ksi)
L8	84.71-79.71	5.00	0.00	18	22.9126	24.1658	0.3125	1.2500	A572-65 (65 ksi)
L9	79.71-74.71	5.00	0.00	18	24.1658	25.4191	0.3125	1.2500	A572-65 (65 ksi)
L10	74.71-69.71	5.00	0.00	18	25.4191	26.6724	0.3125	1.2500	A572-65 (65 ksi)
L11	69.71-64.71	5.00	0.00	18	26.6724	27.9256	0.3125	1.2500	A572-65 (65 ksi)
L12	64.71-62.83	1.88	0.00	18	27.9256	28.3968	0.3125	1.2500	A572-65 (65 ksi)
L13	62.83-62.58	0.25	0.00	18	28.3968	28.4595	0.7375	2.9500	A572-65 (65 ksi)
L14	62.58-57.58	5.00	0.00	18	28.4595	29.7128	0.7125	2.8500	A572-65 (65 ksi)
L15	57.58-52.58	5.00	0.00	18	29.7128	30.9660	0.7000	2.8000	A572-65 (65 ksi)
L16	52.58-47.58	5.00	0.00	18	30.9660	32.2193	0.6750	2.7000	A572-65 (65 ksi)
L17	47.58-42.63	4.95	4.75	18	32.2193	33.4600	0.6750	2.7000	A572-65 (65 ksi)
L18	42.63-42.38	5.00	0.00	18	31.6444	32.8955	0.6750	2.7000	A572-65 (65 ksi)
L19	42.38-37.38	5.00	0.00	18	32.8955	34.1466	0.6500	2.6000	A572-65 (65 ksi)
L20	37.38-32.38	5.00	0.00	18	34.1466	35.3978	0.6375	2.5500	A572-65 (65 ksi)
L21	32.38-31.75	0.63	0.00	18	35.3978	35.5554	0.6375	2.5500	A572-65 (65 ksi)
L22	31.75-31.50	0.25	0.00	18	35.5554	35.6180	0.7375	2.9500	A572-65 (65 ksi)
L23	31.50-26.50	5.00	0.00	18	35.6180	36.8691	0.7250	2.9000	A572-65 (65 ksi)
L24	26.50-21.50	5.00	0.00	18	36.8691	38.1202	0.7125	2.8500	A572-65 (65 ksi)
L25	21.50-16.50	5.00	0.00	18	38.1202	39.3713	0.6875	2.7500	A572-65 (65 ksi)
L26	16.50-11.50	5.00	0.00	18	39.3713	40.6224	0.6750	2.7000	A572-65 (65 ksi)
L27	11.50-6.50	5.00	0.00	18	40.6224	41.8735	0.6625	2.6500	A572-65 (65 ksi)
L28	6.50-1.50	5.00	0.00	18	41.8735	43.1247	0.6500	2.6000	A572-65 (65 ksi)
L29	1.50-0.00	1.50		18	43.1247	43.5000	0.6500	2.6000	A572-65 (65 ksi)

### Tapered Pole Properties

Section	Tip Dia. in	Area in <sup>2</sup>	I in <sup>4</sup>	r in	C in	I/C in <sup>3</sup>	J in <sup>4</sup>	It/Q in <sup>2</sup>	w in	w/t
L1	15.2025	8.8153	244.3603	5.2584	7.6200	32.0683	489.0422	4.4085	2.3100	12.32
	16.4876	9.5685	312.5010	5.7077	8.2629	37.8196	625.4132	4.7852	2.5327	13.508
L2	16.4876	9.5685	312.5010	5.7077	8.2629	37.8196	625.4132	4.7852	2.5327	13.508
	17.7728	10.3217	392.2599	6.1570	8.9059	44.0451	785.0359	5.1618	2.7555	14.696
L3	17.7728	10.3217	392.2599	6.1570	8.9059	44.0451	785.0359	5.1618	2.7555	14.696
	19.0579	11.0749	484.5515	6.6063	9.5488	50.7447	969.7406	5.5385	2.9782	15.884
L4	19.0579	11.0749	484.5515	6.6063	9.5488	50.7447	969.7406	5.5385	2.9782	15.884
	20.3431	11.8281	590.2904	7.0556	10.1917	57.9185	1181.3576	5.9152	3.2010	17.072
L5	20.3431	11.8281	590.2904	7.0556	10.1917	57.9185	1181.3576	5.9152	3.2010	17.072
	21.6282	12.5813	710.3912	7.5049	10.8347	65.5665	1421.7171	6.2918	3.4237	18.26
L6	21.6282	12.5813	710.3912	7.5049	10.8347	65.5665	1421.7171	6.2918	3.4237	18.26
	23.2243	13.5168	880.9281	8.0629	11.6332	75.7253	1763.0154	6.7597	3.7004	19.735
L7	22.8157	21.1734	1218.9719	7.5781	11.0029	110.7861	2439.5478	10.5887	3.2620	10.439
	23.2178	22.4164	1446.5186	8.0230	11.6396	124.2758	2894.9405	11.2104	3.4826	11.144
L8	23.2178	22.4164	1446.5186	8.0230	11.6396	124.2758	2894.9405	11.2104	3.4826	11.144
	24.4904	23.6595	1700.7545	8.4679	12.2762	138.5403	3403.7469	11.8320	3.7032	11.85
L9	24.4904	23.6595	1700.7545	8.4679	12.2762	138.5403	3403.7469	11.8320	3.7032	11.85
	25.7630	24.9026	1983.1597	8.9128	12.9129	153.5797	3968.9289	12.4537	3.9238	12.556
L10	25.7630	24.9026	1983.1597	8.9128	12.9129	153.5797	3968.9289	12.4537	3.9238	12.556
	27.0356	26.1457	2295.2143	9.3577	13.5496	169.3941	4593.4487	13.0753	4.1443	13.262
L11	27.0356	26.1457	2295.2143	9.3577	13.5496	169.3941	4593.4487	13.0753	4.1443	13.262
	28.3082	27.3888	2638.3982	9.8027	14.1862	185.9833	5280.2680	13.6970	4.3649	13.968
L12	28.3082	27.3888	2638.3982	9.8027	14.1862	185.9833	5280.2680	13.6970	4.3649	13.968
	28.7867	27.8561	2775.7914	9.9699	14.4256	192.4213	5555.2352	13.9307	4.4478	14.233
L13	28.7211	64.7457	6257.9428	9.8191	14.4256	433.8084	12524.1200	32.3790	3.6998	5.017
	28.7848	64.8923	6300.5718	9.8413	14.4574	435.8018	12609.4341	32.4523	3.7109	5.032
L14	28.7886	62.7491	6103.4759	9.8502	14.4574	422.1690	12214.9830	31.3805	3.7549	5.27
	30.0612	65.5834	6968.4270	10.2951	15.0941	461.6662	13946.0233	32.7979	3.9754	5.58
L15	30.0631	64.4605	6855.0305	10.2995	15.0941	454.1536	13719.0809	32.2364	3.9974	5.711
	31.3357	67.2450	7782.3032	10.7444	15.7307	494.7196	15574.8466	33.6289	4.2180	6.026
L16	31.3396	64.8970	7522.9752	10.7533	15.7307	478.2342	15055.8493	32.4547	4.2620	6.314
	32.6122	67.5820	8495.9070	11.1982	16.3674	519.0752	17002.9931	33.7974	4.4826	6.641
L17	32.6122	67.5820	8495.9070	11.1982	16.3674	519.0752	17002.9931	33.7974	4.4826	6.641
	33.8720	70.2402	9538.3600	11.6387	16.9977	561.1566	19089.2708	35.1268	4.7010	6.964
L18	33.2353	66.3504	8039.8269	10.9941	16.0754	500.1336	16090.2328	33.1815	4.3814	6.491
	33.2989	69.0309	9054.1123	11.4383	16.7109	541.8080	18120.1383	34.5220	4.6016	6.817
L19	33.3027	66.5257	8739.0853	11.4472	16.7109	522.9564	17489.6698	33.2692	4.6456	7.147
	34.5731	69.1069	9796.2867	11.8913	17.3465	564.7416	19605.4637	34.5600	4.8658	7.486
L20	34.5751	67.8032	9618.6568	11.8957	17.3465	554.5015	19249.9701	33.9081	4.8878	7.667
	35.8455	70.3348	10736.7678	12.3399	17.9821	597.0821	21487.6634	35.1741	5.1080	8.013
L21	35.8455	70.3348	10736.7678	12.3399	17.9821	597.0821	21487.6634	35.1741	5.1080	8.013
	36.0056	70.6538	10883.5079	12.3959	18.0621	602.5591	21781.3367	35.3336	5.1358	8.056
L22	35.9901	81.5026	12482.8601	12.3604	18.0621	691.1063	24982.1455	40.7590	4.9598	6.725
	36.0536	81.6490	12550.2634	12.3826	18.0939	693.6177	25117.0408	40.8323	4.9708	6.74
L23	36.0556	80.2939	12350.8159	12.3870	18.0939	682.5948	24717.8834	40.1546	4.9928	6.887
	37.3260	83.1729	13727.5703	12.8311	18.7295	732.9388	27473.2037	41.5944	5.2130	7.19
L24	37.3279	81.7672	13504.8899	12.8356	18.7295	721.0495	27027.5499	40.8914	5.2350	7.347
	38.5983	84.5966	14955.8802	13.2797	19.3651	772.3127	29931.4397	42.3063	5.4552	7.656
L25	38.6022	81.6828	14460.0653	13.2886	19.3651	746.7091	28939.1575	40.8492	5.4992	7.999
	39.8726	84.4129	15958.9679	13.7328	20.0006	797.9234	31938.9350	42.2145	5.7194	8.319
L26	39.8745	82.9049	15683.9991	13.7372	20.0006	784.1754	31388.6355	41.4603	5.7414	8.506
	41.1450	85.5854	17254.9864	14.1813	20.6362	836.1516	34532.6773	42.8008	5.9615	8.832
L27	41.1469	84.0267	16951.3524	14.1858	20.6362	821.4379	33925.0099	42.0214	5.9835	9.032
	42.4173	86.6576	18593.9295	14.6299	21.2718	874.1133	37212.3254	43.3370	6.2037	9.364
L28	42.4192	85.0483	18259.7060	14.6344	21.2718	858.4012	36543.4386	42.5322	6.2257	9.578
	43.6897	87.6295	19973.1978	15.0785	21.9073	911.7130	39972.6768	43.8231	6.4459	9.917
L29	43.6897	87.6295	19973.1978	15.0785	21.9073	911.7130	39972.6768	43.8231	6.4459	9.917
	44.0708	88.4038	20507.3814	15.2118	22.0980	928.0198	41041.7469	44.2103	6.5120	10.018

Tower Elevation	Gusset Area (per face)	Gusset Thickness	Gusset Grade	Adjust. Factor $A_f$	Adjust. Factor $A_r$	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals	Double Angle Stitch Bolt Spacing Horizontals	Double Angle Stitch Bolt Spacing Redundants
ft	ft <sup>2</sup>	in					in	in	in
L1 117.50-112.50				1	1	1			
L2 112.50-107.50				1	1	1			
L3 107.50-102.50				1	1	1			
L4 102.50-97.50				1	1	1			
L5 97.50-92.50				1	1	1			
L6 92.50-86.29				1	1	1			
L7 86.29-84.71				1	1	1			
L8 84.71-79.71				1	1	1			
L9 79.71-74.71				1	1	1			
L10 74.71-69.71				1	1	1			
L11 69.71-64.71				1	1	1			
L12 64.71-62.83				1	1	1			
L13 62.83-62.58				1	1	0.931072			
L14 62.58-57.58				1	1	0.940216			
L15 57.58-52.58				1	1	0.935469			
L16 52.58-47.58				1	1	0.949198			
L17 47.58-42.63				1	1	0.948426			
L18 42.63-42.38				1	1	0.938992			
L19 42.38-37.38				1	1	0.955916			
L20 37.38-32.38				1	1	0.956872			
L21 32.38-31.75				1	1	0.954765			
L22 31.75-31.50				1	1	0.949431			
L23 31.50-26.50				1	1	0.946956			
L24 26.50-21.50				1	1	0.945689			
L25 21.50-16.50				1	1	0.962447			
L26 16.50-11.50				1	1	0.963762			
L27 11.50-6.50				1	1	0.966158			
L28 6.50-1.50				1	1	0.969603			
L29 1.50-0.00				1	1	0.965322			

**Feed Line/Linear Appurtenances - Entered As Round Or Flat**

Description	Sector	Exclude From Torque Calculation	Component Type	Placement	Total Number	Number Per Row	Start/End Position	Width or Diameter	Perimeter	Weight
				ft				in	in	plf

Description	Sector	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	Number Per Row	Start/End Position	Width or Diameter in	Perimeter in	Weight plf
(Area) CCI-65FP-085125 (H)	A	No	Surface Af (CaAa)	35.50 - 0.00	1	1	0.500 0.500	8.5000	19.5000	0.00
(Area) CCI-65FP-085125 (H)	B	No	Surface Af (CaAa)	35.50 - 0.00	1	1	0.250 0.250	8.5000	19.5000	0.00
(Area) CCI-65FP-085125 (H)	C	No	Surface Af (CaAa)	35.50 - 0.00	1	1	0.000 0.000	8.5000	19.5000	0.00
(Area) CCI-65FP-085125 (H) ****	A	No	Surface Af (CaAa)	35.50 - 0.00	1	1	-0.250 -0.250	8.5000	19.5000	0.00
(Area) CCI-65FP-065125 (H)	A	No	Surface Af (CaAa)	65.58 - 35.50	1	1	0.500 0.500	6.5000	15.5000	0.00
(Area) CCI-65FP-065125 (H)	B	No	Surface Af (CaAa)	65.58 - 35.50	1	1	0.250 0.250	6.5000	15.5000	0.00
(Area) CCI-65FP-065125 (H)	C	No	Surface Af (CaAa)	65.58 - 35.50	1	1	0.000 0.000	6.5000	15.5000	0.00
(Area) CCI-65FP-065125 (H) *****	A	No	Surface Af (CaAa)	65.58 - 35.50	1	1	-0.250 -0.250	6.5000	15.5000	0.00
Aero MP3-04	A	No	Surface Af (CaAa)	30.50 - 0.00	1	1	0.000 0.000	4.7800	12.7800	14.10
Aero MP3-04	B	No	Surface Af (CaAa)	7.50 - 0.00	1	1	0.000 0.000	4.7800	12.7800	14.10
Aero MP3-04	B	No	Surface Af (CaAa)	30.50 - 11.50	1	1	0.000 0.000	4.7800	12.7800	14.10
Aero MP3-03	A	No	Surface Af (CaAa)	47.00 - 27.00	1	1	0.000 0.000	4.0600	11.2600	9.90
Aero MP3-03	B	No	Surface Af (CaAa)	47.00 - 27.00	1	1	0.000 0.000	4.0600	11.2600	9.90
***										
HB158-21U6S24-xxM_TMO(1-5/8)	A	No	Surface Ar (CaAa)	117.50 - 0.00	3	3	0.100 0.250	1.9960		2.50
LDF4-50A(1/2)	A	No	Surface Ar (CaAa)	73.00 - 0.00	1	1	0.080 0.100	0.6300		0.15
HB158-1-08U8-S8F18(1-5/8)	A	No	Surface Ar (CaAa)	102.00 - 0.00	2	2	0.400 0.500	1.9800		1.70
FB-L98B-002-75000(3/8)	C	No	Surface Ar (CaAa)	94.00 - 0.00	1	1	-0.460 -0.450	0.3937		0.06
WR-VG86ST-BRD(3/4)	C	No	Surface Ar (CaAa)	94.00 - 0.00	2	2	-0.500 -0.460	0.7950		0.58
*****										

### Feed Line/Linear Appurtenances - Entered As Area

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number		C <sub>A</sub> A <sub>A</sub> ft <sup>2</sup> /ft	Weight plf
***									
LDF2-50A(3/8)	A	No	No	Inside Pole	117.50 - 0.00	1	No Ice 1/2" Ice 1" Ice	0.00 0.00 0.00	0.08 0.08 0.08
LDF4-50A(1/2)	A	No	No	Inside Pole	117.50 - 0.00	1	No Ice 1/2" Ice 1" Ice	0.00 0.00 0.00	0.15 0.15 0.15
LDF5-50A(7/8)	A	No	No	Inside Pole	117.50 - 0.00	2	No Ice 1/2" Ice 1" Ice	0.00 0.00 0.00	0.33 0.33 0.33
EW90(ELLIPTICAL)	A	No	No	Inside Pole	117.50 - 0.00	2	No Ice 1/2" Ice	0.00 0.00	0.32 0.32



Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement  ft	Total Number		C <sub>A</sub> A <sub>A</sub>  ft <sup>2</sup> /ft	Weight  plf
LMR-400(3/8)	A	No	No	Inside Pole	117.50 - 0.00	4	1" Ice	0.00	0.32
							No Ice	0.00	0.07
							1/2" Ice	0.00	0.07
							1" Ice	0.00	0.07
***									
LDF6-50A(1-1/4)	A	No	No	Inside Pole	102.00 - 0.00	12	No Ice	0.00	0.60
							1/2" Ice	0.00	0.60
							1" Ice	0.00	0.60
***									
LCF158-50A(1-5/8)	C	No	No	Inside Pole	94.00 - 0.00	6	No Ice	0.00	0.80
							1/2" Ice	0.00	0.80
							1" Ice	0.00	0.80
							No Ice	0.00	0.06
FB-L98B-002-75000(3/8)	C	No	No	Inside Pole	94.00 - 0.00	1	1/2" Ice	0.00	0.06
							1" Ice	0.00	0.06
WR-VG86ST-BRD(3/4)	C	No	No	Inside Pole	94.00 - 0.00	2	No Ice	0.00	0.58
							1/2" Ice	0.00	0.58
							1" Ice	0.00	0.58
2" Flex Conduit	C	No	No	Inside Pole	94.00 - 0.00	1	No Ice	0.00	0.36
							1/2" Ice	0.00	0.36
							1" Ice	0.00	0.36
LDF5-50A(7/8)	C	No	No	Inside Pole	94.00 - 0.00	1	No Ice	0.00	0.33
							1/2" Ice	0.00	0.33
							1" Ice	0.00	0.33
*****									

### Feed Line/Linear Appurtenances Section Areas

Tower Section	Tower Elevation ft	Face	A <sub>R</sub>  ft <sup>2</sup>	A <sub>F</sub>  ft <sup>2</sup>	C <sub>A</sub> A <sub>A</sub> In Face ft <sup>2</sup>	C <sub>A</sub> A <sub>A</sub> Out Face ft <sup>2</sup>	Weight  K
L1	117.50-112.50	A	0.000	0.000	2.994	0.000	0.05
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	0.00
L2	112.50-107.50	A	0.000	0.000	2.994	0.000	0.05
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	0.00
L3	107.50-102.50	A	0.000	0.000	2.994	0.000	0.05
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	0.00
L4	102.50-97.50	A	0.000	0.000	4.776	0.000	0.09
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	0.00
L5	97.50-92.50	A	0.000	0.000	4.974	0.000	0.10
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.298	0.000	0.01
L6	92.50-86.29	A	0.000	0.000	6.178	0.000	0.12
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	1.232	0.000	0.05
L7	86.29-84.71	A	0.000	0.000	1.572	0.000	0.03
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.313	0.000	0.01
L8	84.71-79.71	A	0.000	0.000	4.974	0.000	0.10
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.992	0.000	0.04
L9	79.71-74.71	A	0.000	0.000	4.974	0.000	0.10

Tower Section	Tower Elevation ft	Face	$A_R$	$A_F$	$C_{AA}$	$C_{AA}$	Weight K
			ft <sup>2</sup>	ft <sup>2</sup>	In Face ft <sup>2</sup>	Out Face ft <sup>2</sup>	
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.992	0.000	0.04
L10	74.71-69.71	A	0.000	0.000	5.181	0.000	0.10
		B	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.992	0.000	0.04
L11	69.71-64.71	A	0.000	0.000	7.174	0.000	0.10
		B	0.000	0.000	0.943	0.000	0.00
		C	0.000	0.000	1.934	0.000	0.04
L12	64.71-62.83	A	0.000	0.000	6.062	0.000	0.04
		B	0.000	0.000	2.037	0.000	0.00
		C	0.000	0.000	2.410	0.000	0.01
L13	62.83-62.58	A	0.000	0.000	0.806	0.000	0.01
		B	0.000	0.000	0.271	0.000	0.00
		C	0.000	0.000	0.320	0.000	0.00
L14	62.58-57.58	A	0.000	0.000	16.122	0.000	0.10
		B	0.000	0.000	5.417	0.000	0.00
		C	0.000	0.000	6.409	0.000	0.04
L15	57.58-52.58	A	0.000	0.000	16.122	0.000	0.10
		B	0.000	0.000	5.417	0.000	0.00
		C	0.000	0.000	6.409	0.000	0.04
L16	52.58-47.58	A	0.000	0.000	16.122	0.000	0.10
		B	0.000	0.000	5.417	0.000	0.00
		C	0.000	0.000	6.409	0.000	0.04
L17	47.58-42.63	A	0.000	0.000	18.918	0.000	0.14
		B	0.000	0.000	8.320	0.000	0.04
		C	0.000	0.000	6.344	0.000	0.04
L18	42.63-42.38	A	0.000	0.000	0.975	0.000	0.01
		B	0.000	0.000	0.440	0.000	0.00
		C	0.000	0.000	0.320	0.000	0.00
L19	42.38-37.38	A	0.000	0.000	19.506	0.000	0.15
		B	0.000	0.000	8.800	0.000	0.05
		C	0.000	0.000	6.409	0.000	0.04
L20	37.38-32.38	A	0.000	0.000	21.586	0.000	0.15
		B	0.000	0.000	9.840	0.000	0.05
		C	0.000	0.000	7.449	0.000	0.04
L21	32.38-31.75	A	0.000	0.000	2.878	0.000	0.02
		B	0.000	0.000	1.319	0.000	0.01
		C	0.000	0.000	1.017	0.000	0.01
L22	31.75-31.50	A	0.000	0.000	1.142	0.000	0.01
		B	0.000	0.000	0.523	0.000	0.00
		C	0.000	0.000	0.404	0.000	0.00
L23	31.50-26.50	A	0.000	0.000	25.687	0.000	0.20
		B	0.000	0.000	13.315	0.000	0.10
		C	0.000	0.000	8.075	0.000	0.04
L24	26.50-21.50	A	0.000	0.000	23.439	0.000	0.17
		B	0.000	0.000	11.067	0.000	0.07
		C	0.000	0.000	8.075	0.000	0.04
L25	21.50-16.50	A	0.000	0.000	23.439	0.000	0.17
		B	0.000	0.000	11.067	0.000	0.07
		C	0.000	0.000	8.075	0.000	0.04
L26	16.50-11.50	A	0.000	0.000	23.439	0.000	0.17
		B	0.000	0.000	11.067	0.000	0.07
		C	0.000	0.000	8.075	0.000	0.04
L27	11.50-6.50	A	0.000	0.000	23.439	0.000	0.17
		B	0.000	0.000	7.785	0.000	0.01
		C	0.000	0.000	8.075	0.000	0.04
L28	6.50-1.50	A	0.000	0.000	23.439	0.000	0.17
		B	0.000	0.000	10.592	0.000	0.07
		C	0.000	0.000	8.075	0.000	0.04
L29	1.50-0.00	A	0.000	0.000	7.032	0.000	0.05
		B	0.000	0.000	3.177	0.000	0.02
		C	0.000	0.000	2.423	0.000	0.01

### Feed Line/Linear Appurtenances Section Areas - With Ice

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	$A_R$ ft <sup>2</sup>	$A_F$ ft <sup>2</sup>	$C_A A_A$ In Face ft <sup>2</sup>	$C_A A_A$ Out Face ft <sup>2</sup>	Weight K
L1	117.50-112.50	A	0.963	0.000	0.000	4.946	0.000	0.08
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	0.00
L2	112.50-107.50	A	0.959	0.000	0.000	4.941	0.000	0.08
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	0.00
L3	107.50-102.50	A	0.954	0.000	0.000	4.935	0.000	0.08
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	0.00
L4	102.50-97.50	A	0.950	0.000	0.000	8.225	0.000	0.15
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	0.00
L5	97.50-92.50	A	0.945	0.000	0.000	8.579	0.000	0.16
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.995	0.000	0.02
L6	92.50-86.29	A	0.939	0.000	0.000	10.638	0.000	0.20
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	4.103	0.000	0.08
L7	86.29-84.71	A	0.935	0.000	0.000	2.707	0.000	0.05
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	1.044	0.000	0.02
L8	84.71-79.71	A	0.931	0.000	0.000	8.546	0.000	0.16
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	3.286	0.000	0.06
L9	79.71-74.71	A	0.925	0.000	0.000	8.531	0.000	0.16
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	3.273	0.000	0.06
L10	74.71-69.71	A	0.919	0.000	0.000	9.328	0.000	0.16
		B		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	3.259	0.000	0.06
L11	69.71-64.71	A	0.913	0.000	0.000	11.929	0.000	0.18
		B		0.000	0.000	1.101	0.000	0.01
		C		0.000	0.000	4.345	0.000	0.07
L12	64.71-62.83	A	0.908	0.000	0.000	8.407	0.000	0.09
		B		0.000	0.000	2.378	0.000	0.01
		C		0.000	0.000	3.594	0.000	0.03
L13	62.83-62.58	A	0.906	0.000	0.000	1.118	0.000	0.01
		B		0.000	0.000	0.316	0.000	0.00
		C		0.000	0.000	0.478	0.000	0.00
L14	62.58-57.58	A	0.902	0.000	0.000	22.329	0.000	0.23
		B		0.000	0.000	6.319	0.000	0.03
		C		0.000	0.000	9.540	0.000	0.09
L15	57.58-52.58	A	0.895	0.000	0.000	22.286	0.000	0.23
		B		0.000	0.000	6.311	0.000	0.03
		C		0.000	0.000	9.515	0.000	0.09
L16	52.58-47.58	A	0.886	0.000	0.000	22.240	0.000	0.23
		B		0.000	0.000	6.303	0.000	0.03
		C		0.000	0.000	9.487	0.000	0.09
L17	47.58-42.63	A	0.877	0.000	0.000	25.691	0.000	0.29
		B		0.000	0.000	9.954	0.000	0.10
		C		0.000	0.000	9.363	0.000	0.09
L18	42.63-42.38	A	0.872	0.000	0.000	1.322	0.000	0.02
		B		0.000	0.000	0.528	0.000	0.01
		C		0.000	0.000	0.473	0.000	0.00
L19	42.38-37.38	A	0.866	0.000	0.000	26.380	0.000	0.30
		B		0.000	0.000	10.532	0.000	0.11
		C		0.000	0.000	9.422	0.000	0.09

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	$A_R$ ft <sup>2</sup>	$A_F$ ft <sup>2</sup>	$C_A A_A$ In Face ft <sup>2</sup>	$C_A A_A$ Out Face ft <sup>2</sup>	Weight K
L20	37.38-32.38	A	0.855	0.000	0.000	28.385	0.000	0.31
		B		0.000	0.000	11.549	0.000	0.11
		C		0.000	0.000	10.425	0.000	0.09
L21	32.38-31.75	A	0.848	0.000	0.000	3.729	0.000	0.04
		B		0.000	0.000	1.532	0.000	0.01
		C		0.000	0.000	1.390	0.000	0.01
L22	31.75-31.50	A	0.846	0.000	0.000	1.479	0.000	0.02
		B		0.000	0.000	0.608	0.000	0.01
		C		0.000	0.000	0.551	0.000	0.00
L23	31.50-26.50	A	0.839	0.000	0.000	32.972	0.000	0.38
		B		0.000	0.000	15.580	0.000	0.18
		C		0.000	0.000	11.001	0.000	0.09
L24	26.50-21.50	A	0.823	0.000	0.000	30.034	0.000	0.33
		B		0.000	0.000	12.713	0.000	0.13
		C		0.000	0.000	10.950	0.000	0.09
L25	21.50-16.50	A	0.804	0.000	0.000	29.910	0.000	0.32
		B		0.000	0.000	12.675	0.000	0.13
		C		0.000	0.000	10.888	0.000	0.09
L26	16.50-11.50	A	0.780	0.000	0.000	29.753	0.000	0.32
		B		0.000	0.000	12.627	0.000	0.13
		C		0.000	0.000	10.809	0.000	0.09
L27	11.50-6.50	A	0.746	0.000	0.000	29.534	0.000	0.31
		B		0.000	0.000	8.613	0.000	0.05
		C		0.000	0.000	10.700	0.000	0.09
L28	6.50-1.50	A	0.688	0.000	0.000	29.155	0.000	0.30
		B		0.000	0.000	11.658	0.000	0.12
		C		0.000	0.000	10.510	0.000	0.08
L29	1.50-0.00	A	0.582	0.000	0.000	8.540	0.000	0.08
		B		0.000	0.000	3.449	0.000	0.03
		C		0.000	0.000	3.050	0.000	0.02

### Feed Line Center of Pressure

Section	Elevation ft	$CP_x$ in	$CP_z$ in	$CP_x$ Ice in	$CP_z$ Ice in
L1	117.50-112.50	-2.1255	-2.6248	-1.6850	-2.0808
L2	112.50-107.50	-2.1696	-2.6792	-1.7371	-2.1451
L3	107.50-102.50	-2.2096	-2.7287	-1.7852	-2.2045
L4	102.50-97.50	-2.0602	-4.0818	-1.5622	-3.2245
L5	97.50-92.50	-1.8016	-4.0288	-1.1547	-2.9840
L6	92.50-86.29	-1.2288	-3.5668	-0.3443	-2.2627
L7	86.29-84.71	-1.2409	-3.6043	-0.3480	-2.2962
L8	84.71-79.71	-1.2563	-3.6520	-0.3564	-2.3417
L9	79.71-74.71	-1.2786	-3.7211	-0.3663	-2.4073
L10	74.71-69.71	-1.4292	-3.8593	-0.6165	-2.6252
L11	69.71-64.71	-0.4981	-2.4427	-0.2691	-2.0543
L12	64.71-62.83	1.4555	0.4461	1.0472	-0.1347
L13	62.83-62.58	1.4673	0.4506	1.0558	-0.1344
L14	62.58-57.58	1.4941	0.4611	1.0752	-0.1335
L15	57.58-52.58	1.5444	0.4808	1.1116	-0.1316
L16	52.58-47.58	1.5937	0.5000	1.1471	-0.1296
L17	47.58-42.63	1.4190	-0.7211	1.0533	-1.0501
L18	42.63-42.38	1.3948	-0.8585	1.0391	-1.1562
L19	42.38-37.38	1.4170	-0.8687	1.0552	-1.1691
L20	37.38-32.38	1.7037	-0.4462	1.2683	-0.8857
L21	32.38-31.75	1.8585	-0.2188	1.3885	-0.7248
L22	31.75-31.50	1.8633	-0.2189	1.3921	-0.7259

Section	Elevation	CP <sub>x</sub>	CP <sub>z</sub>	CP <sub>x</sub>	CP <sub>z</sub>
	ft	in	in	Ice in	Ice in
L23	31.50-26.50	1.7060	-1.1258	1.2982	-1.4403
L24	26.50-21.50	1.9001	-0.4343	1.4293	-0.8796
L25	21.50-16.50	1.9507	-0.4411	1.4668	-0.8926
L26	16.50-11.50	2.0006	-0.4478	1.5038	-0.9038
L27	11.50-6.50	1.0110	0.1913	0.6619	-0.4059
L28	6.50-1.50	1.9520	-0.3700	1.4025	-0.8118
L29	1.50-0.00	1.9811	-0.3729	1.4316	-0.7940

Note: For pole sections, center of pressure calculations do not consider feed line shielding.

### Shielding Factor Ka

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
L1	17	HB158-21U6S24-xxM_TMO(1-5/8)	112.50 - 117.50	1.0000	1.0000
L2	17	HB158-21U6S24-xxM_TMO(1-5/8)	107.50 - 112.50	1.0000	1.0000
L3	17	HB158-21U6S24-xxM_TMO(1-5/8)	102.50 - 107.50	1.0000	1.0000
L4	17	HB158-21U6S24-xxM_TMO(1-5/8)	97.50 - 102.50	1.0000	1.0000
L4	27	HB158-1-08U8-S8F18(1-5/8)	97.50 - 102.00	1.0000	1.0000
L5	17	HB158-21U6S24-xxM_TMO(1-5/8)	92.50 - 97.50	1.0000	1.0000
L5	27	HB158-1-08U8-S8F18(1-5/8)	92.50 - 97.50	1.0000	1.0000
L5	32	FB-L98B-002-75000(3/8)	92.50 - 94.00	1.0000	1.0000
L5	33	WR-VG86ST-BRD(3/4)	92.50 - 94.00	1.0000	1.0000
L6	17	HB158-21U6S24-xxM_TMO(1-5/8)	86.29 - 92.50	1.0000	1.0000
L6	27	HB158-1-08U8-S8F18(1-5/8)	86.29 - 92.50	1.0000	1.0000
L6	32	FB-L98B-002-75000(3/8)	86.29 - 92.50	1.0000	1.0000
L6	33	WR-VG86ST-BRD(3/4)	86.29 - 92.50	1.0000	1.0000
L7	17	HB158-21U6S24-xxM_TMO(1-5/8)	84.71 - 86.29	1.0000	1.0000
L7	27	HB158-1-08U8-S8F18(1-5/8)	84.71 - 86.29	1.0000	1.0000
L7	32	FB-L98B-002-75000(3/8)	84.71 - 86.29	1.0000	1.0000
L7	33	WR-VG86ST-BRD(3/4)	84.71 - 86.29	1.0000	1.0000
L8	17	HB158-21U6S24-xxM_TMO(1-5/8)	79.71 - 84.71	1.0000	1.0000
L8	27	HB158-1-08U8-S8F18(1-5/8)	79.71 - 84.71	1.0000	1.0000
L8	32	FB-L98B-002-75000(3/8)	79.71 - 84.71	1.0000	1.0000
L8	33	WR-VG86ST-BRD(3/4)	79.71 - 84.71	1.0000	1.0000
L9	17	HB158-21U6S24-xxM_TMO(1-5/8)	74.71 - 79.71	1.0000	1.0000
L9	27	HB158-1-08U8-S8F18(1-5/8)	74.71 - 79.71	1.0000	1.0000
L9	32	FB-L98B-002-75000(3/8)	74.71 - 79.71	1.0000	1.0000
L9	33	WR-VG86ST-BRD(3/4)	74.71 - 79.71	1.0000	1.0000
L10	17	HB158-21U6S24-xxM_TMO(1-5/8)	69.71 - 74.71	1.0000	1.0000
L10	18	LDF4-50A(1/2)	69.71 - 73.00	1.0000	1.0000
L10	27	HB158-1-08U8-S8F18(1-5/8)	69.71 - 74.71	1.0000	1.0000
L10	32	FB-L98B-002-75000(3/8)	69.71 - 74.71	1.0000	1.0000
L10	33	WR-VG86ST-BRD(3/4)	69.71 - 74.71	1.0000	1.0000
L11	6	(Area) CCI-65FP-065125 (H)	64.71 - 65.58	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>g</sub> No Ice	K <sub>g</sub> Ice
L11	7	(Area) CCI-65FP-065125 (H)	64.71 - 65.58	1.0000	1.0000
L11	8	(Area) CCI-65FP-065125 (H)	64.71 - 65.58	1.0000	1.0000
L11	9	(Area) CCI-65FP-065125 (H)	64.71 - 65.58	1.0000	1.0000
L11	17	HB158-21U6S24-xxM_TMO(1-5/8)	64.71 - 69.71	1.0000	1.0000
L11	18	LDF4-50A(1/2)	64.71 - 69.71	1.0000	1.0000
L11	27	HB158-1-08U8-S8F18(1-5/8)	64.71 - 69.71	1.0000	1.0000
L11	32	FB-L98B-002-75000(3/8)	64.71 - 69.71	1.0000	1.0000
L11	33	WR-VG86ST-BRD(3/4)	64.71 - 69.71	1.0000	1.0000
L12	6	(Area) CCI-65FP-065125 (H)	62.83 - 64.71	1.0000	1.0000
L12	7	(Area) CCI-65FP-065125 (H)	62.83 - 64.71	1.0000	1.0000
L12	8	(Area) CCI-65FP-065125 (H)	62.83 - 64.71	1.0000	1.0000
L12	9	(Area) CCI-65FP-065125 (H)	62.83 - 64.71	1.0000	1.0000
L12	17	HB158-21U6S24-xxM_TMO(1-5/8)	62.83 - 64.71	1.0000	1.0000
L12	18	LDF4-50A(1/2)	62.83 - 64.71	1.0000	1.0000
L12	27	HB158-1-08U8-S8F18(1-5/8)	62.83 - 64.71	1.0000	1.0000
L12	32	FB-L98B-002-75000(3/8)	62.83 - 64.71	1.0000	1.0000
L12	33	WR-VG86ST-BRD(3/4)	62.83 - 64.71	1.0000	1.0000
L13	6	(Area) CCI-65FP-065125 (H)	62.58 - 62.83	1.0000	1.0000
L13	7	(Area) CCI-65FP-065125 (H)	62.58 - 62.83	1.0000	1.0000
L13	8	(Area) CCI-65FP-065125 (H)	62.58 - 62.83	1.0000	1.0000
L13	9	(Area) CCI-65FP-065125 (H)	62.58 - 62.83	1.0000	1.0000
L13	17	HB158-21U6S24-xxM_TMO(1-5/8)	62.58 - 62.83	1.0000	1.0000
L13	18	LDF4-50A(1/2)	62.58 - 62.83	1.0000	1.0000
L13	27	HB158-1-08U8-S8F18(1-5/8)	62.58 - 62.83	1.0000	1.0000
L13	32	FB-L98B-002-75000(3/8)	62.58 - 62.83	1.0000	1.0000
L13	33	WR-VG86ST-BRD(3/4)	62.58 - 62.83	1.0000	1.0000
L14	6	(Area) CCI-65FP-065125 (H)	57.58 - 62.58	1.0000	1.0000
L14	7	(Area) CCI-65FP-065125 (H)	57.58 - 62.58	1.0000	1.0000
L14	8	(Area) CCI-65FP-065125 (H)	57.58 - 62.58	1.0000	1.0000
L14	9	(Area) CCI-65FP-065125 (H)	57.58 - 62.58	1.0000	1.0000
L14	17	HB158-21U6S24-xxM_TMO(1-5/8)	57.58 - 62.58	1.0000	1.0000
L14	18	LDF4-50A(1/2)	57.58 - 62.58	1.0000	1.0000
L14	27	HB158-1-08U8-S8F18(1-5/8)	57.58 - 62.58	1.0000	1.0000
L14	32	FB-L98B-002-75000(3/8)	57.58 - 62.58	1.0000	1.0000
L14	33	WR-VG86ST-BRD(3/4)	57.58 - 62.58	1.0000	1.0000
L15	6	(Area) CCI-65FP-065125 (H)	52.58 - 57.58	1.0000	1.0000
L15	7	(Area) CCI-65FP-065125 (H)	52.58 - 57.58	1.0000	1.0000
L15	8	(Area) CCI-65FP-065125 (H)	52.58 - 57.58	1.0000	1.0000
L15	9	(Area) CCI-65FP-065125 (H)	52.58 - 57.58	1.0000	1.0000
L15	17	HB158-21U6S24-xxM_TMO(1-5/8)	52.58 - 57.58	1.0000	1.0000
L15	18	LDF4-50A(1/2)	52.58 - 57.58	1.0000	1.0000
L15	27	HB158-1-08U8-S8F18(1-5/8)	52.58 - 57.58	1.0000	1.0000
L15	32	FB-L98B-002-75000(3/8)	52.58 - 57.58	1.0000	1.0000
L15	33	WR-VG86ST-BRD(3/4)	52.58 - 57.58	1.0000	1.0000
L16	6	(Area) CCI-65FP-065125 (H)	47.58 - 52.58	1.0000	1.0000
L16	7	(Area) CCI-65FP-065125 (H)	47.58 - 52.58	1.0000	1.0000
L16	8	(Area) CCI-65FP-065125 (H)	47.58 - 52.58	1.0000	1.0000
L16	9	(Area) CCI-65FP-065125 (H)	47.58 - 52.58	1.0000	1.0000
L16	17	HB158-21U6S24-xxM_TMO(1-5/8)	47.58 - 52.58	1.0000	1.0000
L16	18	LDF4-50A(1/2)	47.58 - 52.58	1.0000	1.0000
L16	27	HB158-1-08U8-S8F18(1-5/8)	47.58 - 52.58	1.0000	1.0000
L16	32	FB-L98B-002-75000(3/8)	47.58 - 52.58	1.0000	1.0000
L16	33	WR-VG86ST-BRD(3/4)	47.58 - 52.58	1.0000	1.0000
L17	6	(Area) CCI-65FP-065125 (H)	42.63 - 47.58	1.0000	1.0000
L17	7	(Area) CCI-65FP-065125 (H)	42.63 - 47.58	1.0000	1.0000
L17	8	(Area) CCI-65FP-065125 (H)	42.63 - 47.58	1.0000	1.0000
L17	9	(Area) CCI-65FP-065125 (H)	42.63 - 47.58	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>g</sub> No Ice	K <sub>g</sub> Ice
L17	14	Aero MP3-03	42.63 - 47.00	1.0000	1.0000
L17	15	Aero MP3-03	42.63 - 47.00	1.0000	1.0000
L17	17	HB158-21U6S24- xxM_TMO(1-5/8)	42.63 - 47.58	1.0000	1.0000
L17	18	LDF4-50A(1/2)	42.63 - 47.58	1.0000	1.0000
L17	27	HB158-1-08U8-S8F18(1-5/8)	42.63 - 47.58	1.0000	1.0000
L17	32	FB-L98B-002-75000(3/8)	42.63 - 47.58	1.0000	1.0000
L17	33	WR-VG86ST-BRD(3/4)	42.63 - 47.58	1.0000	1.0000
L18	6	(Area) CCI-65FP-065125 (H)	42.38 - 42.63	1.0000	1.0000
L18	7	(Area) CCI-65FP-065125 (H)	42.38 - 42.63	1.0000	1.0000
L18	8	(Area) CCI-65FP-065125 (H)	42.38 - 42.63	1.0000	1.0000
L18	9	(Area) CCI-65FP-065125 (H)	42.38 - 42.63	1.0000	1.0000
L18	14	Aero MP3-03	42.38 - 42.63	1.0000	1.0000
L18	15	Aero MP3-03	42.38 - 42.63	1.0000	1.0000
L18	17	HB158-21U6S24- xxM_TMO(1-5/8)	42.38 - 42.63	1.0000	1.0000
L18	18	LDF4-50A(1/2)	42.38 - 42.63	1.0000	1.0000
L18	27	HB158-1-08U8-S8F18(1-5/8)	42.38 - 42.63	1.0000	1.0000
L18	32	FB-L98B-002-75000(3/8)	42.38 - 42.63	1.0000	1.0000
L18	33	WR-VG86ST-BRD(3/4)	42.38 - 42.63	1.0000	1.0000
L19	6	(Area) CCI-65FP-065125 (H)	37.38 - 42.38	1.0000	1.0000
L19	7	(Area) CCI-65FP-065125 (H)	37.38 - 42.38	1.0000	1.0000
L19	8	(Area) CCI-65FP-065125 (H)	37.38 - 42.38	1.0000	1.0000
L19	9	(Area) CCI-65FP-065125 (H)	37.38 - 42.38	1.0000	1.0000
L19	14	Aero MP3-03	37.38 - 42.38	1.0000	1.0000
L19	15	Aero MP3-03	37.38 - 42.38	1.0000	1.0000
L19	17	HB158-21U6S24- xxM_TMO(1-5/8)	37.38 - 42.38	1.0000	1.0000
L19	18	LDF4-50A(1/2)	37.38 - 42.38	1.0000	1.0000
L19	27	HB158-1-08U8-S8F18(1-5/8)	37.38 - 42.38	1.0000	1.0000
L19	32	FB-L98B-002-75000(3/8)	37.38 - 42.38	1.0000	1.0000
L19	33	WR-VG86ST-BRD(3/4)	37.38 - 42.38	1.0000	1.0000
L20	1	(Area) CCI-65FP-085125 (H)	32.38 - 35.50	1.0000	1.0000
L20	2	(Area) CCI-65FP-085125 (H)	32.38 - 35.50	1.0000	1.0000
L20	3	(Area) CCI-65FP-085125 (H)	32.38 - 35.50	1.0000	1.0000
L20	4	(Area) CCI-65FP-085125 (H)	32.38 - 35.50	1.0000	1.0000
L20	6	(Area) CCI-65FP-065125 (H)	35.50 - 37.38	1.0000	1.0000
L20	7	(Area) CCI-65FP-065125 (H)	35.50 - 37.38	1.0000	1.0000
L20	8	(Area) CCI-65FP-065125 (H)	35.50 - 37.38	1.0000	1.0000
L20	9	(Area) CCI-65FP-065125 (H)	35.50 - 37.38	1.0000	1.0000
L20	14	Aero MP3-03	32.38 - 37.38	1.0000	1.0000
L20	15	Aero MP3-03	32.38 - 37.38	1.0000	1.0000
L20	17	HB158-21U6S24- xxM_TMO(1-5/8)	32.38 - 37.38	1.0000	1.0000
L20	18	LDF4-50A(1/2)	32.38 - 37.38	1.0000	1.0000
L20	27	HB158-1-08U8-S8F18(1-5/8)	32.38 - 37.38	1.0000	1.0000
L20	32	FB-L98B-002-75000(3/8)	32.38 - 37.38	1.0000	1.0000
L20	33	WR-VG86ST-BRD(3/4)	32.38 - 37.38	1.0000	1.0000
L21	1	(Area) CCI-65FP-085125 (H)	31.75 - 32.38	1.0000	1.0000
L21	2	(Area) CCI-65FP-085125 (H)	31.75 - 32.38	1.0000	1.0000
L21	3	(Area) CCI-65FP-085125 (H)	31.75 - 32.38	1.0000	1.0000
L21	4	(Area) CCI-65FP-085125 (H)	31.75 - 32.38	1.0000	1.0000
L21	14	Aero MP3-03	31.75 - 32.38	1.0000	1.0000
L21	15	Aero MP3-03	31.75 - 32.38	1.0000	1.0000
L21	17	HB158-21U6S24- xxM_TMO(1-5/8)	31.75 - 32.38	1.0000	1.0000
L21	18	LDF4-50A(1/2)	31.75 - 32.38	1.0000	1.0000
L21	27	HB158-1-08U8-S8F18(1-5/8)	31.75 - 32.38	1.0000	1.0000
L21	32	FB-L98B-002-75000(3/8)	31.75 - 32.38	1.0000	1.0000
L21	33	WR-VG86ST-BRD(3/4)	31.75 - 32.38	1.0000	1.0000
L22	1	(Area) CCI-65FP-085125 (H)	31.50 - 31.75	1.0000	1.0000
L22	2	(Area) CCI-65FP-085125 (H)	31.50 - 31.75	1.0000	1.0000
L22	3	(Area) CCI-65FP-085125 (H)	31.50 - 31.75	1.0000	1.0000



Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>g</sub> No Ice	K <sub>g</sub> Ice
L22	4	(Area) CCI-65FP-085125 (H)	31.50 - 31.75	1.0000	1.0000
L22	14	Aero MP3-03	31.50 - 31.75	1.0000	1.0000
L22	15	Aero MP3-03	31.50 - 31.75	1.0000	1.0000
L22	17	HB158-21U6S24-xxM_TMO(1-5/8)	31.50 - 31.75	1.0000	1.0000
L22	18	LDF4-50A(1/2)	31.50 - 31.75	1.0000	1.0000
L22	27	HB158-1-08U8-S8F18(1-5/8)	31.50 - 31.75	1.0000	1.0000
L22	32	FB-L98B-002-75000(3/8)	31.50 - 31.75	1.0000	1.0000
L22	33	WR-VG86ST-BRD(3/4)	31.50 - 31.75	1.0000	1.0000
L23	1	(Area) CCI-65FP-085125 (H)	26.50 - 31.50	1.0000	1.0000
L23	2	(Area) CCI-65FP-085125 (H)	26.50 - 31.50	1.0000	1.0000
L23	3	(Area) CCI-65FP-085125 (H)	26.50 - 31.50	1.0000	1.0000
L23	4	(Area) CCI-65FP-085125 (H)	26.50 - 31.50	1.0000	1.0000
L23	11	Aero MP3-04	26.50 - 30.50	1.0000	1.0000
L23	13	Aero MP3-04	26.50 - 30.50	1.0000	1.0000
L23	14	Aero MP3-03	27.00 - 31.50	1.0000	1.0000
L23	15	Aero MP3-03	27.00 - 31.50	1.0000	1.0000
L23	17	HB158-21U6S24-xxM_TMO(1-5/8)	26.50 - 31.50	1.0000	1.0000
L23	18	LDF4-50A(1/2)	26.50 - 31.50	1.0000	1.0000
L23	27	HB158-1-08U8-S8F18(1-5/8)	26.50 - 31.50	1.0000	1.0000
L23	32	FB-L98B-002-75000(3/8)	26.50 - 31.50	1.0000	1.0000
L23	33	WR-VG86ST-BRD(3/4)	26.50 - 31.50	1.0000	1.0000
L24	1	(Area) CCI-65FP-085125 (H)	21.50 - 26.50	1.0000	1.0000
L24	2	(Area) CCI-65FP-085125 (H)	21.50 - 26.50	1.0000	1.0000
L24	3	(Area) CCI-65FP-085125 (H)	21.50 - 26.50	1.0000	1.0000
L24	4	(Area) CCI-65FP-085125 (H)	21.50 - 26.50	1.0000	1.0000
L24	11	Aero MP3-04	21.50 - 26.50	1.0000	1.0000
L24	13	Aero MP3-04	21.50 - 26.50	1.0000	1.0000
L24	17	HB158-21U6S24-xxM_TMO(1-5/8)	21.50 - 26.50	1.0000	1.0000
L24	18	LDF4-50A(1/2)	21.50 - 26.50	1.0000	1.0000
L24	27	HB158-1-08U8-S8F18(1-5/8)	21.50 - 26.50	1.0000	1.0000
L24	32	FB-L98B-002-75000(3/8)	21.50 - 26.50	1.0000	1.0000
L24	33	WR-VG86ST-BRD(3/4)	21.50 - 26.50	1.0000	1.0000
L25	1	(Area) CCI-65FP-085125 (H)	16.50 - 21.50	1.0000	1.0000
L25	2	(Area) CCI-65FP-085125 (H)	16.50 - 21.50	1.0000	1.0000
L25	3	(Area) CCI-65FP-085125 (H)	16.50 - 21.50	1.0000	1.0000
L25	4	(Area) CCI-65FP-085125 (H)	16.50 - 21.50	1.0000	1.0000
L25	11	Aero MP3-04	16.50 - 21.50	1.0000	1.0000
L25	13	Aero MP3-04	16.50 - 21.50	1.0000	1.0000
L25	17	HB158-21U6S24-xxM_TMO(1-5/8)	16.50 - 21.50	1.0000	1.0000
L25	18	LDF4-50A(1/2)	16.50 - 21.50	1.0000	1.0000
L25	27	HB158-1-08U8-S8F18(1-5/8)	16.50 - 21.50	1.0000	1.0000
L25	32	FB-L98B-002-75000(3/8)	16.50 - 21.50	1.0000	1.0000
L25	33	WR-VG86ST-BRD(3/4)	16.50 - 21.50	1.0000	1.0000
L26	1	(Area) CCI-65FP-085125 (H)	11.50 - 16.50	1.0000	1.0000
L26	2	(Area) CCI-65FP-085125 (H)	11.50 - 16.50	1.0000	1.0000
L26	3	(Area) CCI-65FP-085125 (H)	11.50 - 16.50	1.0000	1.0000
L26	4	(Area) CCI-65FP-085125 (H)	11.50 - 16.50	1.0000	1.0000
L26	11	Aero MP3-04	11.50 - 16.50	1.0000	1.0000
L26	13	Aero MP3-04	11.50 - 16.50	1.0000	1.0000
L26	17	HB158-21U6S24-xxM_TMO(1-5/8)	11.50 - 16.50	1.0000	1.0000
L26	18	LDF4-50A(1/2)	11.50 - 16.50	1.0000	1.0000
L26	27	HB158-1-08U8-S8F18(1-5/8)	11.50 - 16.50	1.0000	1.0000
L26	32	FB-L98B-002-75000(3/8)	11.50 - 16.50	1.0000	1.0000
L26	33	WR-VG86ST-BRD(3/4)	11.50 - 16.50	1.0000	1.0000
L27	1	(Area) CCI-65FP-085125 (H)	6.50 - 11.50	1.0000	1.0000
L27	2	(Area) CCI-65FP-085125 (H)	6.50 - 11.50	1.0000	1.0000
L27	3	(Area) CCI-65FP-085125 (H)	6.50 - 11.50	1.0000	1.0000
L27	4	(Area) CCI-65FP-085125 (H)	6.50 - 11.50	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>g</sub> No Ice	K <sub>g</sub> Ice
L27	11	Aero MP3-04	6.50 - 11.50	1.0000	1.0000
L27	12	Aero MP3-04	6.50 - 7.50	1.0000	1.0000
L27	17	HB158-21U6S24-xxM_TMO(1-5/8)	6.50 - 11.50	1.0000	1.0000
L27	18	LDF4-50A(1/2)	6.50 - 11.50	1.0000	1.0000
L27	27	HB158-1-08U8-S8F18(1-5/8)	6.50 - 11.50	1.0000	1.0000
L27	32	FB-L98B-002-75000(3/8)	6.50 - 11.50	1.0000	1.0000
L27	33	WR-VG86ST-BRD(3/4)	6.50 - 11.50	1.0000	1.0000
L28	1	(Area) CCI-65FP-085125 (H)	1.50 - 6.50	1.0000	1.0000
L28	2	(Area) CCI-65FP-085125 (H)	1.50 - 6.50	1.0000	1.0000
L28	3	(Area) CCI-65FP-085125 (H)	1.50 - 6.50	1.0000	1.0000
L28	4	(Area) CCI-65FP-085125 (H)	1.50 - 6.50	1.0000	1.0000
L28	11	Aero MP3-04	1.50 - 6.50	1.0000	1.0000
L28	12	Aero MP3-04	1.50 - 6.50	1.0000	1.0000
L28	17	HB158-21U6S24-xxM_TMO(1-5/8)	1.50 - 6.50	1.0000	1.0000
L28	18	LDF4-50A(1/2)	1.50 - 6.50	1.0000	1.0000
L28	27	HB158-1-08U8-S8F18(1-5/8)	1.50 - 6.50	1.0000	1.0000
L28	32	FB-L98B-002-75000(3/8)	1.50 - 6.50	1.0000	1.0000
L28	33	WR-VG86ST-BRD(3/4)	1.50 - 6.50	1.0000	1.0000
L29	1	(Area) CCI-65FP-085125 (H)	0.00 - 1.50	1.0000	1.0000
L29	2	(Area) CCI-65FP-085125 (H)	0.00 - 1.50	1.0000	1.0000
L29	3	(Area) CCI-65FP-085125 (H)	0.00 - 1.50	1.0000	1.0000
L29	4	(Area) CCI-65FP-085125 (H)	0.00 - 1.50	1.0000	1.0000
L29	11	Aero MP3-04	0.00 - 1.50	1.0000	1.0000
L29	12	Aero MP3-04	0.00 - 1.50	1.0000	1.0000
L29	17	HB158-21U6S24-xxM_TMO(1-5/8)	0.00 - 1.50	1.0000	1.0000
L29	18	LDF4-50A(1/2)	0.00 - 1.50	1.0000	1.0000
L29	27	HB158-1-08U8-S8F18(1-5/8)	0.00 - 1.50	1.0000	1.0000
L29	32	FB-L98B-002-75000(3/8)	0.00 - 1.50	1.0000	1.0000
L29	33	WR-VG86ST-BRD(3/4)	0.00 - 1.50	1.0000	1.0000

**Effective Width of Flat Linear Attachments / Feed Lines**

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L11	6	(Area) CCI-65FP-065125 (H)	64.71 - 65.58	Auto	0.3314
L11	7	(Area) CCI-65FP-065125 (H)	64.71 - 65.58	Auto	0.3314
L11	8	(Area) CCI-65FP-065125 (H)	64.71 - 65.58	Auto	0.3314
L11	9	(Area) CCI-65FP-065125 (H)	64.71 - 65.58	Auto	0.3314
L12	6	(Area) CCI-65FP-065125 (H)	62.83 - 64.71	Auto	0.3221
L12	7	(Area) CCI-65FP-065125 (H)	62.83 - 64.71	Auto	0.3221
L12	8	(Area) CCI-65FP-065125 (H)	62.83 - 64.71	Auto	0.3221
L12	9	(Area) CCI-65FP-065125 (H)	62.83 - 64.71	Auto	0.3221
L13	6	(Area) CCI-65FP-065125 (H)	62.58 - 62.83	Auto	0.4299
L13	7	(Area) CCI-65FP-065125 (H)	62.58 - 62.83	Auto	0.4299
L13	8	(Area) CCI-65FP-065125 (H)	62.58 - 62.83	Auto	0.4299
L13	9	(Area) CCI-65FP-065125 (H)	62.58 - 62.83	Auto	0.4299
L14	6	(Area) CCI-65FP-065125 (H)	57.58 - 62.58	Auto	0.4054
L14	7	(Area) CCI-65FP-065125 (H)	57.58 - 62.58	Auto	0.4054
L14	8	(Area) CCI-65FP-065125 (H)	57.58 - 62.58	Auto	0.4054
L14	9	(Area) CCI-65FP-065125 (H)	57.58 - 62.58	Auto	0.4054
L15	6	(Area) CCI-65FP-065125 (H)	52.58 - 57.58	Auto	0.3680

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L15	7	(Area) CCI-65FP-065125 (H)	52.58 - 57.58	Auto	0.3680
L15	8	(Area) CCI-65FP-065125 (H)	52.58 - 57.58	Auto	0.3680
L15	9	(Area) CCI-65FP-065125 (H)	52.58 - 57.58	Auto	0.3680
L16	6	(Area) CCI-65FP-065125 (H)	47.58 - 52.58	Auto	0.3273
L16	7	(Area) CCI-65FP-065125 (H)	47.58 - 52.58	Auto	0.3273
L16	8	(Area) CCI-65FP-065125 (H)	47.58 - 52.58	Auto	0.3273
L16	9	(Area) CCI-65FP-065125 (H)	47.58 - 52.58	Auto	0.3273
L17	6	(Area) CCI-65FP-065125 (H)	42.63 - 47.58	Auto	0.2936
L17	7	(Area) CCI-65FP-065125 (H)	42.63 - 47.58	Auto	0.2936
L17	8	(Area) CCI-65FP-065125 (H)	42.63 - 47.58	Auto	0.2936
L17	9	(Area) CCI-65FP-065125 (H)	42.63 - 47.58	Auto	0.2936
L17	14	Aero MP3-03	42.63 - 47.00	Auto	0.0000
L17	15	Aero MP3-03	42.63 - 47.00	Auto	0.0000
L18	6	(Area) CCI-65FP-065125 (H)	42.38 - 42.63	Auto	0.2929
L18	7	(Area) CCI-65FP-065125 (H)	42.38 - 42.63	Auto	0.2929
L18	8	(Area) CCI-65FP-065125 (H)	42.38 - 42.63	Auto	0.2929
L18	9	(Area) CCI-65FP-065125 (H)	42.38 - 42.63	Auto	0.2929
L18	14	Aero MP3-03	42.38 - 42.63	Auto	0.0000
L18	15	Aero MP3-03	42.38 - 42.63	Auto	0.0000
L19	6	(Area) CCI-65FP-065125 (H)	37.38 - 42.38	Auto	0.2684
L19	7	(Area) CCI-65FP-065125 (H)	37.38 - 42.38	Auto	0.2684
L19	8	(Area) CCI-65FP-065125 (H)	37.38 - 42.38	Auto	0.2684
L19	9	(Area) CCI-65FP-065125 (H)	37.38 - 42.38	Auto	0.2684
L19	14	Aero MP3-03	37.38 - 42.38	Auto	0.0000
L19	15	Aero MP3-03	37.38 - 42.38	Auto	0.0000
L20	1	(Area) CCI-65FP-085125 (H)	32.38 - 35.50	Auto	0.4071
L20	2	(Area) CCI-65FP-085125 (H)	32.38 - 35.50	Auto	0.4071
L20	3	(Area) CCI-65FP-085125 (H)	32.38 - 35.50	Auto	0.4071
L20	4	(Area) CCI-65FP-085125 (H)	32.38 - 35.50	Auto	0.4071
L20	6	(Area) CCI-65FP-065125 (H)	35.50 - 37.38	Auto	0.2417
L20	7	(Area) CCI-65FP-065125 (H)	35.50 - 37.38	Auto	0.2417
L20	8	(Area) CCI-65FP-065125 (H)	35.50 - 37.38	Auto	0.2417
L20	9	(Area) CCI-65FP-065125 (H)	35.50 - 37.38	Auto	0.2417
L20	14	Aero MP3-03	32.38 - 37.38	Auto	0.0000
L20	15	Aero MP3-03	32.38 - 37.38	Auto	0.0000
L21	1	(Area) CCI-65FP-085125 (H)	31.75 - 32.38	Auto	0.3974
L21	2	(Area) CCI-65FP-085125 (H)	31.75 - 32.38	Auto	0.3974
L21	3	(Area) CCI-65FP-085125 (H)	31.75 - 32.38	Auto	0.3974
L21	4	(Area) CCI-65FP-085125 (H)	31.75 - 32.38	Auto	0.3974
L21	14	Aero MP3-03	31.75 - 32.38	Auto	0.0000
L21	15	Aero MP3-03	31.75 - 32.38	Auto	0.0000
L22	1	(Area) CCI-65FP-085125 (H)	31.50 - 31.75	Auto	0.4159
L22	2	(Area) CCI-65FP-085125 (H)	31.50 - 31.75	Auto	0.4159
L22	3	(Area) CCI-65FP-085125 (H)	31.50 - 31.75	Auto	0.4159
L22	4	(Area) CCI-65FP-085125 (H)	31.50 - 31.75	Auto	0.4159
L22	14	Aero MP3-03	31.50 - 31.75	Auto	0.0000
L22	15	Aero MP3-03	31.50 - 31.75	Auto	0.0000
L23	1	(Area) CCI-65FP-085125 (H)	26.50 - 31.50	Auto	0.3997
L23	2	(Area) CCI-65FP-085125 (H)	26.50 - 31.50	Auto	0.3997
L23	3	(Area) CCI-65FP-085125 (H)	26.50 - 31.50	Auto	0.3997
L23	4	(Area) CCI-65FP-085125 (H)	26.50 - 31.50	Auto	0.3997
L23	11	Aero MP3-04	26.50 - 30.50	Auto	0.0000
L23	13	Aero MP3-04	26.50 - 30.50	Auto	0.0000
L23	14	Aero MP3-03	27.00 - 31.50	Auto	0.0000
L23	15	Aero MP3-03	27.00 - 31.50	Auto	0.0000
L24	1	(Area) CCI-65FP-085125 (H)	21.50 - 26.50	Auto	0.3712
L24	2	(Area) CCI-65FP-085125 (H)	21.50 - 26.50	Auto	0.3712
L24	3	(Area) CCI-65FP-085125 (H)	21.50 - 26.50	Auto	0.3712
L24	4	(Area) CCI-65FP-085125 (H)	21.50 - 26.50	Auto	0.3712
L24	11	Aero MP3-04	21.50 - 26.50	Auto	0.0000
L24	13	Aero MP3-04	21.50 - 26.50	Auto	0.0000
L25	1	(Area) CCI-65FP-085125 (H)	16.50 - 21.50	Auto	0.3401

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L25	2	(Area) CCI-65FP-085125 (H)	16.50 - 21.50	Auto	0.3401
L25	3	(Area) CCI-65FP-085125 (H)	16.50 - 21.50	Auto	0.3401
L25	4	(Area) CCI-65FP-085125 (H)	16.50 - 21.50	Auto	0.3401
L25	11	Aero MP3-04	16.50 - 21.50	Auto	0.0000
L25	13	Aero MP3-04	16.50 - 21.50	Auto	0.0000
L26	1	(Area) CCI-65FP-085125 (H)	11.50 - 16.50	Auto	0.3116
L26	2	(Area) CCI-65FP-085125 (H)	11.50 - 16.50	Auto	0.3116
L26	3	(Area) CCI-65FP-085125 (H)	11.50 - 16.50	Auto	0.3116
L26	4	(Area) CCI-65FP-085125 (H)	11.50 - 16.50	Auto	0.3116
L26	11	Aero MP3-04	11.50 - 16.50	Auto	0.0000
L26	13	Aero MP3-04	11.50 - 16.50	Auto	0.0000
L27	1	(Area) CCI-65FP-085125 (H)	6.50 - 11.50	Auto	0.2831
L27	2	(Area) CCI-65FP-085125 (H)	6.50 - 11.50	Auto	0.2831
L27	3	(Area) CCI-65FP-085125 (H)	6.50 - 11.50	Auto	0.2831
L27	4	(Area) CCI-65FP-085125 (H)	6.50 - 11.50	Auto	0.2831
L27	11	Aero MP3-04	6.50 - 11.50	Auto	0.0000
L27	12	Aero MP3-04	6.50 - 7.50	Auto	0.0000
L28	1	(Area) CCI-65FP-085125 (H)	1.50 - 6.50	Auto	0.2546
L28	2	(Area) CCI-65FP-085125 (H)	1.50 - 6.50	Auto	0.2546
L28	3	(Area) CCI-65FP-085125 (H)	1.50 - 6.50	Auto	0.2546
L28	4	(Area) CCI-65FP-085125 (H)	1.50 - 6.50	Auto	0.2546
L28	11	Aero MP3-04	1.50 - 6.50	Auto	0.0000
L28	12	Aero MP3-04	1.50 - 6.50	Auto	0.0000
L29	1	(Area) CCI-65FP-085125 (H)	0.00 - 1.50	Auto	0.2378
L29	2	(Area) CCI-65FP-085125 (H)	0.00 - 1.50	Auto	0.2378
L29	3	(Area) CCI-65FP-085125 (H)	0.00 - 1.50	Auto	0.2378
L29	4	(Area) CCI-65FP-085125 (H)	0.00 - 1.50	Auto	0.2378
L29	11	Aero MP3-04	0.00 - 1.50	Auto	0.0000
L29	12	Aero MP3-04	0.00 - 1.50	Auto	0.0000

### Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment	Placement ft
DB264-A	A	From Leg	4.00 0.00 11.00	0.0000	118.00
DB809K-YP w/ Mount Pipe	B	From Leg	4.00 0.00 8.00	0.0000	118.00
DB408-A	B	From Leg	4.00 0.00 6.00	0.0000	118.00
DB224-A	C	From Leg	4.00 0.00 12.00	0.0000	118.00
(2) FIBEAIR IP-20A_RFU-D	B	From Leg	4.00 0.00 1.00	76.0000	118.00
(2) FIBEAIR IP-20A_RFU-D	C	From Leg	4.00	-1.0000	118.00

Description	Face or Leg	Offset Type	Offsets:			Azimuth Adjustment	Placement
			Horz Lateral	Vert			
			ft	ft	°	ft	
			0.00				
APXVAALL24_43-U- NA20_TMO w/ Mount Pipe	A	From Leg	4.00		0.0000	118.00	
			0.00				
APXVAALL24_43-U- NA20_TMO w/ Mount Pipe	B	From Leg	4.00		0.0000	118.00	
			0.00				
APXVAALL24_43-U- NA20_TMO w/ Mount Pipe	C	From Leg	4.00		0.0000	118.00	
			0.00				
AIR6449 B41_T-MOBILE w/ Mount Pipe	A	From Leg	4.00		0.0000	118.00	
			0.00				
AIR6449 B41_T-MOBILE w/ Mount Pipe	B	From Leg	4.00		0.0000	118.00	
			0.00				
AIR6449 B41_T-MOBILE w/ Mount Pipe	C	From Leg	4.00		0.0000	118.00	
			0.00				
Radio 4480_TMOV2	A	From Leg	4.00		0.0000	118.00	
			0.00				
Radio 4480_TMOV2	B	From Leg	4.00		0.0000	118.00	
			0.00				
Radio 4480_TMOV2	C	From Leg	4.00		0.0000	118.00	
			0.00				
RADIO 4460 B2/B25 B66_TMO	A	From Leg	4.00		0.0000	118.00	
			0.00				
RADIO 4460 B2/B25 B66_TMO	B	From Leg	4.00		0.0000	118.00	
			0.00				
RADIO 4460 B2/B25 B66_TMO	C	From Leg	4.00		0.0000	118.00	
			0.00				
Platform Mount [LP 602-1]	C	None			0.0000	118.00	
Pipe Mount (PM 701-1)	C	None			0.0000	118.00	
(2) 8' x 2" Mount Pipe	A	From Leg	4.00		0.0000	118.00	
			0.00				
(2) 8' x 2" Mount Pipe	B	From Leg	4.00		0.0000	118.00	
			0.00				
(2) 8' x 2" Mount Pipe	C	From Leg	4.00		0.0000	118.00	
			0.00				
8' Ladder	C	From Leg	2.00		0.0000	118.00	
			0.00				
			-4.00				
***							
(2) KA-6030	B	From Leg	4.00		0.0000	102.00	
			0.00				
			2.00				
(2) KA-6030	C	From Leg	4.00		0.0000	102.00	
			0.00				

Description	Face or Leg	Offset Type	Offsets:			Azimuth Adjustment	Placement
			Horz Lateral	Vert			
			ft	ft	ft	°	ft
LNX-6514DS-A1M w/ Mount Pipe	A	From Leg	2.00	4.00	0.0000		102.00
			0.00	2.00			
LNX-6514DS-A1M w/ Mount Pipe	B	From Leg	4.00	0.00	0.0000		102.00
			2.00	2.00			
LNX-6514DS-A1M w/ Mount Pipe	C	From Leg	4.00	0.00	0.0000		102.00
			2.00	2.00			
(2) JAHH-65B-R3B w/ Mount Pipe	A	From Leg	4.00	0.00	0.0000		102.00
			2.00	2.00			
(2) JAHH-65B-R3B w/ Mount Pipe	B	From Leg	4.00	0.00	0.0000		102.00
			2.00	2.00			
(2) JAHH-65B-R3B w/ Mount Pipe	C	From Leg	4.00	0.00	0.0000		102.00
			2.00	2.00			
MT6407-77A_CCIV2 w/ Mount Pipe	A	From Leg	4.00	0.00	0.0000		102.00
			2.00	2.00			
MT6407-77A_CCIV2 w/ Mount Pipe	B	From Leg	4.00	0.00	0.0000		102.00
			2.00	2.00			
MT6407-77A_CCIV2 w/ Mount Pipe	C	From Leg	4.00	0.00	0.0000		102.00
			2.00	2.00			
CBC78T-DS-43-2X	A	From Leg	4.00	0.00	0.0000		102.00
			4.00	4.00			
CBC78T-DS-43-2X	B	From Leg	4.00	0.00	0.0000		102.00
			4.00	4.00			
CBC78T-DS-43-2X	C	From Leg	4.00	0.00	0.0000		102.00
			4.00	4.00			
DB-B1-6C-12AB-0Z	B	From Leg	4.00	0.00	0.0000		102.00
			2.00	2.00			
DB-B1-6C-12AB-0Z	C	From Leg	4.00	0.00	0.0000		102.00
			2.00	2.00			
RFV01U-D1A	A	From Leg	4.00	0.00	0.0000		102.00
			0.00	0.00			
RFV01U-D1A	B	From Leg	4.00	0.00	0.0000		102.00
			0.00	0.00			
RFV01U-D1A	C	From Leg	4.00	0.00	0.0000		102.00
			0.00	0.00			
RFV01U-D2A	A	From Leg	4.00	0.00	0.0000		102.00
			0.00	0.00			
RFV01U-D2A	B	From Leg	4.00	0.00	0.0000		102.00
			0.00	0.00			

Description	Face or Leg	Offset Type	Offsets:			Azimuth Adjustment	Placement
			Horz Lateral	Vert			
			ft	ft	ft	°	ft
RFV01U-D2A	C	From Leg	4.00	0.00	0.00	0.0000	102.00
Platform Mount [LP 1201- 1_HR-1]	C	None				0.0000	102.00
8' x 2" Mount Pipe	A	From Leg	4.00	0.00	0.00	0.0000	102.00
8' x 2" Mount Pipe	B	From Leg	4.00	0.00	0.00	0.0000	102.00
8' x 2" Mount Pipe	C	From Leg	4.00	0.00	0.00	0.0000	102.00
*** DB224-A	A	From Leg	4.00	0.00	-22.00	0.0000	94.00
7770.00 w/ Mount Pipe	A	From Leg	4.00	0.00	0.00	0.0000	94.00
7770.00 w/ Mount Pipe	B	From Leg	4.00	0.00	0.00	0.0000	94.00
7770.00 w/ Mount Pipe	C	From Leg	4.00	0.00	0.00	0.0000	94.00
HPA65R-BU6A w/ Mount Pipe	A	From Leg	4.00	0.00	0.00	0.0000	94.00
HPA65R-BU6A w/ Mount Pipe	B	From Leg	4.00	0.00	0.00	0.0000	94.00
HPA65R-BU6A w/ Mount Pipe	C	From Leg	4.00	0.00	0.00	0.0000	94.00
OPA65R-BU6BA-K w/ Mount Pipe	A	From Leg	4.00	0.00	0.00	0.0000	94.00
OPA65R-BU6BA-K w/ Mount Pipe	B	From Leg	4.00	0.00	0.00	0.0000	94.00
OPA65R-BU6BA-K w/ Mount Pipe	C	From Leg	4.00	0.00	0.00	0.0000	94.00
DMP65R-BU6D w/ Mount Pipe	A	From Leg	4.00	0.00	0.00	0.0000	94.00
DMP65R-BU6D w/ Mount Pipe	B	From Leg	4.00	0.00	0.00	0.0000	94.00
DMP65R-BU6D w/ Mount Pipe	C	From Leg	4.00	0.00	0.00	0.0000	94.00
(2) LGP 17201	A	From Leg	4.00	0.00	-1.00	0.0000	94.00
(2) LGP 17201	B	From Leg	4.00	0.00	0.00	0.0000	94.00



Description	Face or Leg	Offset Type	Offsets:			Azimuth Adjustment	Placement
			Horz Lateral	Vert ft	ft		
			ft	ft	ft	°	ft
			0.00				
(2) LGP 17201	C	From Leg	-1.00			0.0000	94.00
			4.00				
			0.00				
RRUS 8843 B2/B66A	A	From Leg	-1.00			0.0000	94.00
			4.00				
			0.00				
RRUS 8843 B2/B66A	B	From Leg	2.00			0.0000	94.00
			4.00				
			0.00				
RRUS 8843 B2/B66A	C	From Leg	2.00			0.0000	94.00
			4.00				
			0.00				
(2) DC6-48-60-18-8F	A	From Leg	2.00			0.0000	94.00
			4.00				
			0.00				
RADIO 4415 B30	A	From Leg	-1.00			0.0000	94.00
			4.00				
			0.00				
RADIO 4415 B30	B	From Leg	-1.00			0.0000	94.00
			4.00				
			0.00				
RADIO 4415 B30	C	From Leg	-1.00			0.0000	94.00
			4.00				
			0.00				
RRUS 4478 B14	A	From Leg	-1.00			0.0000	94.00
			4.00				
			0.00				
RRUS 4478 B14	B	From Leg	-1.00			0.0000	94.00
			4.00				
			0.00				
RRUS 4478 B14	C	From Leg	-1.00			0.0000	94.00
			4.00				
			0.00				
RADIO 4449 B5/B12	A	From Leg	-1.00			0.0000	94.00
			4.00				
			0.00				
RADIO 4449 B5/B12	B	From Leg	2.00			0.0000	94.00
			4.00				
			0.00				
RADIO 4449 B5/B12	C	From Leg	2.00			0.0000	94.00
			4.00				
			0.00				
Site Pro 1 RMQLP-4120-H10 ***	C	None	2.00			0.0000	94.00
KS24019-L112A	C	From Leg	3.00			0.0000	73.00
			0.00				
			1.00				
Side Arm Mount [SO 701-1]	C	From Leg	1.50			0.0000	73.00
			0.00				
			0.00				
			0.00				

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## Dishes

Description	Face or Leg	Dish Type	Offset Type	Offsets: Horz Lateral Vert ft	Azimuth Adjustment °	3 dB Beam Width °	Elevation ft	Outside Diameter ft	Aperture Area ft <sup>2</sup>	Weight K	
VHLP3-11W	B	Paraboloid w/Shroud (HP)	From Leg	4.00	76.0000		118.00	3.28	No Ice	8.47	0.05
				0.00					1/2" Ice	8.90	0.06
				1.00					1" Ice	9.35	0.65
VHLP3-11W	C	Paraboloid w/Shroud (HP)	From Leg	4.00	-1.0000		118.00	3.28	No Ice	8.47	0.05
				0.00					1/2" Ice	8.90	0.06
				4.00					1" Ice	9.35	0.65
HP2-11_CCIV2	C	Paraboloid w/Shroud (HP)	From Leg	4.00	0.0000		118.00	2.04	No Ice	3.27	0.03
				0.00					1/2" Ice	3.55	0.05
				0.00					1" Ice	3.82	0.06
*****											
****											
**											

## Load Combinations

Comb. No.	Description
1	Dead Only
2	1.2 Dead+1.0 Wind 0 deg - No Ice
3	0.9 Dead+1.0 Wind 0 deg - No Ice
4	1.2 Dead+1.0 Wind 30 deg - No Ice
5	0.9 Dead+1.0 Wind 30 deg - No Ice
6	1.2 Dead+1.0 Wind 60 deg - No Ice
7	0.9 Dead+1.0 Wind 60 deg - No Ice
8	1.2 Dead+1.0 Wind 90 deg - No Ice
9	0.9 Dead+1.0 Wind 90 deg - No Ice
10	1.2 Dead+1.0 Wind 120 deg - No Ice
11	0.9 Dead+1.0 Wind 120 deg - No Ice
12	1.2 Dead+1.0 Wind 150 deg - No Ice
13	0.9 Dead+1.0 Wind 150 deg - No Ice
14	1.2 Dead+1.0 Wind 180 deg - No Ice
15	0.9 Dead+1.0 Wind 180 deg - No Ice
16	1.2 Dead+1.0 Wind 210 deg - No Ice
17	0.9 Dead+1.0 Wind 210 deg - No Ice
18	1.2 Dead+1.0 Wind 240 deg - No Ice
19	0.9 Dead+1.0 Wind 240 deg - No Ice
20	1.2 Dead+1.0 Wind 270 deg - No Ice
21	0.9 Dead+1.0 Wind 270 deg - No Ice
22	1.2 Dead+1.0 Wind 300 deg - No Ice
23	0.9 Dead+1.0 Wind 300 deg - No Ice
24	1.2 Dead+1.0 Wind 330 deg - No Ice
25	0.9 Dead+1.0 Wind 330 deg - No Ice
26	1.2 Dead+1.0 Ice+1.0 Temp
27	1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp
28	1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp
29	1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp
30	1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp
31	1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp
32	1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp
33	1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp
34	1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp
35	1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp
36	1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp
37	1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp
38	1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp

Comb. No.	Description
39	Dead+Wind 0 deg - Service
40	Dead+Wind 30 deg - Service
41	Dead+Wind 60 deg - Service
42	Dead+Wind 90 deg - Service
43	Dead+Wind 120 deg - Service
44	Dead+Wind 150 deg - Service
45	Dead+Wind 180 deg - Service
46	Dead+Wind 210 deg - Service
47	Dead+Wind 240 deg - Service
48	Dead+Wind 270 deg - Service
49	Dead+Wind 300 deg - Service
50	Dead+Wind 330 deg - Service

### Maximum Member Forces

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L1	117.5 - 112.5	Pole	Max Tension	26	0.00	-0.00	0.00
			Max. Compression	26	-9.25	-0.00	-3.88
			Max. Mx	8	-3.91	-51.10	2.53
			Max. My	14	-3.91	2.55	-51.11
			Max. Vy	8	7.57	-51.10	2.53
			Max. Vx	2	-7.72	-3.24	50.64
			Max. Torque	20			4.65
L2	112.5 - 107.5	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-9.65	0.06	-3.90
			Max. Mx	8	-4.17	-89.54	4.38
			Max. My	2	-4.16	-5.48	89.84
			Max. Vy	8	7.82	-89.54	4.38
			Max. Vx	2	-7.96	-5.48	89.84
			Max. Torque	20			4.65
L3	107.5 - 102.5	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-10.08	0.13	-3.90
			Max. Mx	8	-4.47	-129.23	6.24
			Max. My	2	-4.45	-7.72	130.31
			Max. Vy	8	8.08	-129.23	6.24
			Max. Vx	2	-8.22	-7.72	130.31
			Max. Torque	20			4.65
L4	102.5 - 97.5	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-19.04	0.23	-4.65
			Max. Mx	8	-9.41	-195.49	7.97
			Max. My	2	-9.40	-10.00	196.45
			Max. Vy	8	12.88	-195.49	7.97
			Max. Vx	2	-12.94	-10.00	196.45
			Max. Torque	20			6.38
L5	97.5 - 92.5	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-29.14	0.35	-3.14
			Max. Mx	8	-15.74	-265.05	10.40
			Max. My	2	-15.73	-12.29	266.81
			Max. Vy	8	19.13	-265.05	10.40
			Max. Vx	2	-19.19	-12.29	266.81
			Max. Torque	20			6.85
L6	92.5 - 86.29	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-29.50	0.42	-3.15
			Max. Mx	8	-16.06	-318.49	11.50
			Max. My	2	-16.05	-13.59	320.46
			Max. Vy	8	19.24	-318.49	11.50
			Max. Vx	2	-19.29	-13.59	320.46
			Max. Torque	20			6.84
L7	86.29 - 84.71	Pole	Max Tension	1	0.00	0.00	0.00

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L8	84.71 - 79.71	Pole	Max. Compression	26	-30.60	0.55	-3.15
			Max. Mx	8	-16.94	-415.25	13.46
			Max. My	2	-16.93	-15.91	417.58
			Max. Vy	8	19.51	-415.25	13.46
			Max. Vx	2	-19.57	-15.91	417.58
			Max. Torque	20			6.84
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-31.46	0.68	-3.14
			Max. Mx	8	-17.70	-513.24	15.43
			Max. My	2	-17.69	-18.21	515.94
L9	79.71 - 74.71	Pole	Max. Vy	8	19.74	-513.24	15.43
			Max. Vx	2	-19.79	-18.21	515.94
			Max. Torque	20			6.84
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-32.35	0.82	-3.13
			Max. Mx	8	-18.49	-612.38	17.40
			Max. My	2	-18.49	-20.48	615.45
			Max. Vy	8	19.97	-612.38	17.40
			Max. Vx	2	-20.02	-20.48	615.45
			Max. Torque	20			6.83
L10	74.71 - 69.71	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-33.39	1.23	-3.26
			Max. Mx	8	-19.40	-712.64	19.26
			Max. My	2	-19.39	-22.54	716.22
			Max. Vy	8	20.25	-712.64	19.26
			Max. Vx	2	-20.32	-22.54	716.22
			Max. Torque	20			6.89
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-34.37	1.39	-3.22
			Max. Mx	8	-20.25	-814.33	21.22
L11	69.71 - 64.71	Pole	Max. My	2	-20.25	-24.76	818.37
			Max. Vy	8	20.48	-814.33	21.22
			Max. Vx	2	-20.55	-24.76	818.37
			Max. Torque	20			6.89
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-34.79	1.45	-3.19
			Max. Mx	8	-20.57	-852.89	21.95
			Max. My	2	-20.56	-25.59	857.08
			Max. Vy	8	20.61	-852.89	21.95
			Max. Vx	2	-20.66	-25.59	857.08
L12	64.71 - 62.83	Pole	Max. Torque	20			6.88
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-34.88	1.46	-3.19
			Max. Mx	8	-20.67	-858.03	22.05
			Max. My	2	-20.66	-25.70	862.24
			Max. Vy	8	20.60	-858.03	22.05
			Max. Vx	2	-20.65	-25.70	862.24
			Max. Torque	20			6.88
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-36.67	1.62	-3.12
L13	62.83 - 62.58	Pole	Max. Mx	8	-22.12	-961.94	23.99
			Max. My	2	-22.12	-27.90	966.34
			Max. Vy	8	21.00	-961.94	23.99
			Max. Vx	2	-20.99	-27.90	966.34
			Max. Torque	20			6.88
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-38.48	1.79	-3.04
			Max. Mx	8	-23.60	-1067.82	25.93
			Max. My	2	-23.60	-30.10	1072.14
			Max. Vy	8	21.40	-1067.82	25.93
L14	62.58 - 57.58	Pole	Max. Vx	2	-21.33	-30.10	1072.14
			Max. Torque	20			6.88
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-38.48	1.79	-3.04
			Max. Mx	8	-23.60	-1067.82	25.93
			Max. My	2	-23.60	-30.10	1072.14
L15	57.58 - 52.58	Pole	Max. Vy	8	21.40	-1067.82	25.93
			Max. Vx	2	-21.33	-30.10	1072.14
			Max. Torque	20			6.88
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-38.48	1.79	-3.04
			Max. Mx	8	-23.60	-1067.82	25.93

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L16	52.58 - 47.58	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-40.32	1.97	-2.96
			Max. Mx	8	-25.11	-1175.63	27.87
			Max. My	2	-25.12	-32.28	1179.65
			Max. Vy	8	21.78	-1175.63	27.87
			Max. Vx	2	-21.67	-32.28	1179.65
L17	47.58 - 42.63	Pole	Max. Torque	20			6.88
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-40.41	1.97	-2.95
			Max. Mx	8	-25.18	-1179.99	27.96
			Max. My	2	-25.19	-32.37	1183.98
			Max. Vy	8	21.79	-1179.99	27.96
L18	42.63 - 42.38	Pole	Max. Vx	2	-21.68	-32.37	1183.98
			Max. Torque	20			6.88
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-43.86	2.15	-2.77
			Max. Mx	8	-28.05	-1289.99	29.97
			Max. My	2	-28.06	-34.55	1293.53
L19	42.38 - 37.38	Pole	Max. Vy	8	22.25	-1289.99	29.97
			Max. Vx	2	-22.09	-34.55	1293.53
			Max. Torque	20			6.88
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-45.91	2.34	-2.56
			Max. Mx	8	-29.73	-1402.01	32.00
L20	37.38 - 32.38	Pole	Max. My	2	-29.73	-36.72	1404.91
			Max. Vy	8	22.61	-1402.01	32.00
			Max. Vx	2	-22.42	-36.72	1404.91
			Max. Torque	20			6.88
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-48.00	2.53	-2.35
L21	32.38 - 31.75	Pole	Max. Mx	8	-31.43	-1515.78	34.03
			Max. My	2	-31.44	-38.88	1517.87
			Max. Vy	8	22.96	-1515.78	34.03
			Max. Vx	2	-22.73	-38.88	1517.87
			Max. Torque	20			6.88
			Max Tension	1	0.00	0.00	0.00
L22	31.75 - 31.5	Pole	Max. Compression	26	-48.27	2.55	-2.32
			Max. Mx	8	-31.66	-1530.23	34.29
			Max. My	2	-31.66	-39.15	1532.22
			Max. Vy	8	22.99	-1530.23	34.29
			Max. Vx	2	-22.77	-39.15	1532.22
			Max. Torque	20			6.87
L23	31.5 - 26.5	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-48.38	2.56	-2.31
			Max. Mx	8	-31.76	-1535.98	34.39
			Max. My	2	-31.76	-39.26	1537.92
			Max. Vy	8	23.01	-1535.98	34.39
			Max. Vx	2	-22.78	-39.26	1537.92
L24	26.5 - 21.5	Pole	Max. Torque	20			6.87
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-50.88	2.76	-1.96
			Max. Mx	8	-33.80	-1651.78	36.51
			Max. My	2	-33.81	-41.40	1652.85
			Max. Vy	8	23.36	-1651.78	36.51
L24	26.5 - 21.5	Pole	Max. Vx	2	-23.11	-41.40	1652.85
			Max. Torque	20			6.87
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-53.29	2.96	-1.69
			Max. Mx	8	-35.81	-1769.28	38.58
L24	26.5 - 21.5	Pole	Max. My	2	-35.82	-43.53	1769.31
			Max. Vy	8	23.69	-1769.28	38.58
			Max. Vx	2	-23.42	-43.53	1769.31

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L25	21.5 - 16.5	Pole	Max. Torque	20			6.87
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-55.72	3.16	-1.41
			Max. Mx	8	-37.85	-1888.37	40.64
			Max. My	2	-37.85	-45.65	1887.28
			Max. Vy	8	24.00	-1888.37	40.64
			Max. Vx	2	-23.71	-45.65	1887.28
L26	16.5 - 11.5	Pole	Max. Torque	20			6.87
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-58.17	3.37	-1.12
			Max. Mx	8	-39.91	-2008.95	42.70
			Max. My	2	-39.91	-47.75	2006.68
			Max. Vy	8	24.29	-2008.95	42.70
			Max. Vx	2	-23.99	-47.75	2006.68
L27	11.5 - 6.5	Pole	Max. Torque	20			6.87
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-60.54	3.71	-0.91
			Max. Mx	8	-41.93	-2130.85	44.69
			Max. My	2	-41.93	-49.74	2127.41
			Max. Vy	8	24.58	-2130.85	44.69
			Max. Vx	2	-24.27	-49.74	2127.41
L28	6.5 - 1.5	Pole	Max. Torque	20			6.87
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-62.99	3.92	-0.62
			Max. Mx	8	-44.05	-2254.28	46.75
			Max. My	2	-44.05	-51.81	2249.60
			Max. Vy	8	24.86	-2254.28	46.75
			Max. Vx	2	-24.55	-51.81	2249.60
L29	1.5 - 0	Pole	Max. Torque	20			6.87
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-63.71	3.98	-0.53
			Max. Mx	8	-44.69	-2291.59	47.36
			Max. My	2	-44.69	-52.43	2286.53
			Max. Vy	8	24.95	-2291.59	47.36
			Max. Vx	2	-24.64	-52.43	2286.53
			Max. Torque	20			6.87

### Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Pole	Max. Vert	34	63.71	3.13	-5.38
	Max. H <sub>x</sub>	21	33.52	24.81	-0.30
	Max. H <sub>z</sub>	2	44.70	-0.43	24.62
	Max. M <sub>x</sub>	2	2286.53	-0.43	24.62
	Max. M <sub>z</sub>	8	2291.59	-24.94	0.37
	Max. Torsion	20	6.87	24.81	-0.30
	Min. Vert	23	33.52	21.16	12.10
	Min. H <sub>x</sub>	8	44.70	-24.94	0.37
	Min. H <sub>z</sub>	15	33.52	0.28	-24.48
	Min. M <sub>x</sub>	14	-2266.65	0.28	-24.48
	Min. M <sub>z</sub>	20	-2280.15	24.81	-0.30
	Min. Torsion	8	-6.69	-24.94	0.37



## Tower Mast Reaction Summary

Load Combination	Vertical  K	Shear <sub>x</sub>  K	Shear <sub>z</sub>  K	Overturning Moment, M <sub>x</sub> kip-ft	Overturning Moment, M <sub>z</sub> kip-ft	Torque  kip-ft
Dead Only	37.25	0.00	0.00	-0.99	1.80	0.00
1.2 Dead+1.0 Wind 0 deg - No Ice	44.70	0.43	-24.62	-2286.53	-52.43	1.61
0.9 Dead+1.0 Wind 0 deg - No Ice	33.52	0.43	-24.62	-2263.92	-52.36	1.62
1.2 Dead+1.0 Wind 30 deg - No Ice	44.70	12.71	-21.73	-2002.62	-1174.80	-2.58
0.9 Dead+1.0 Wind 30 deg - No Ice	33.52	12.71	-21.73	-1982.83	-1163.85	-2.59
1.2 Dead+1.0 Wind 60 deg - No Ice	44.70	21.51	-12.69	-1187.46	-1994.34	2.45
0.9 Dead+1.0 Wind 60 deg - No Ice	33.52	21.51	-12.69	-1175.53	-1975.45	2.44
1.2 Dead+1.0 Wind 90 deg - No Ice	44.70	24.94	-0.37	-47.36	-2291.59	6.69
0.9 Dead+1.0 Wind 90 deg - No Ice	33.52	24.94	-0.37	-46.50	-2269.88	6.68
1.2 Dead+1.0 Wind 120 deg - No Ice	44.70	21.26	12.00	1101.77	-1968.58	0.72
0.9 Dead+1.0 Wind 120 deg - No Ice	33.52	21.26	12.00	1091.38	-1949.92	0.70
1.2 Dead+1.0 Wind 150 deg - No Ice	44.70	11.99	21.26	1968.73	-1100.05	-4.30
0.9 Dead+1.0 Wind 150 deg - No Ice	33.52	11.99	21.26	1949.80	-1089.96	-4.31
1.2 Dead+1.0 Wind 180 deg - No Ice	44.70	-0.28	24.48	2266.65	37.61	-0.56
0.9 Dead+1.0 Wind 180 deg - No Ice	33.52	-0.28	24.48	2244.82	36.61	-0.56
1.2 Dead+1.0 Wind 210 deg - No Ice	44.70	-12.57	21.53	1975.16	1161.72	3.09
0.9 Dead+1.0 Wind 210 deg - No Ice	33.52	-12.57	21.53	1956.24	1149.85	3.10
1.2 Dead+1.0 Wind 240 deg - No Ice	44.70	-21.36	12.54	1165.97	1979.69	-2.24
0.9 Dead+1.0 Wind 240 deg - No Ice	33.52	-21.36	12.54	1154.85	1959.86	-2.23
1.2 Dead+1.0 Wind 270 deg - No Ice	44.70	-24.81	0.30	36.35	2280.15	-6.87
0.9 Dead+1.0 Wind 270 deg - No Ice	33.52	-24.81	0.30	36.21	2257.47	-6.85
1.2 Dead+1.0 Wind 300 deg - No Ice	44.70	-21.16	-12.10	-1116.47	1960.14	-1.09
0.9 Dead+1.0 Wind 300 deg - No Ice	33.52	-21.16	-12.10	-1105.35	1940.49	-1.07
1.2 Dead+1.0 Wind 330 deg - No Ice	44.70	-12.07	-21.29	-1974.41	1114.72	4.89
0.9 Dead+1.0 Wind 330 deg - No Ice	33.52	-12.07	-21.29	-1954.88	1103.33	4.90
1.2 Dead+1.0 Ice+1.0 Temp	63.71	-0.00	0.00	0.53	3.98	-0.00
1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp	63.71	0.08	-6.24	-574.61	-6.88	0.26
1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp	63.71	3.16	-5.41	-499.15	-288.81	-0.48
1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp	63.71	5.40	-3.17	-293.31	-493.50	0.47
1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp	63.71	6.23	-0.07	-8.62	-569.61	1.27
1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp	63.71	5.39	3.06	280.18	-492.42	0.18

Load Combination	Vertical	Shear <sub>x</sub>	Shear <sub>z</sub>	Overturning Moment, M <sub>x</sub>	Overturning Moment, M <sub>z</sub>	Torque
	K	K	K	kip-ft	kip-ft	kip-ft
1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp	63.71	3.06	5.39	496.79	-275.45	-0.75
1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp	63.71	-0.05	6.21	572.31	11.15	-0.08
1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp	63.71	-3.13	5.38	495.31	293.43	0.57
1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp	63.71	-5.37	3.14	290.69	497.79	-0.43
1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp	63.71	-6.20	0.06	8.10	574.54	-1.29
1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp	63.71	-5.37	-3.08	-281.47	497.98	-0.24
1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp	63.71	-3.07	-5.40	-496.24	285.65	0.86
Dead+Wind 0 deg - Service	37.25	0.10	-5.80	-536.34	-10.94	0.37
Dead+Wind 30 deg - Service	37.25	2.99	-5.12	-469.86	-273.87	-0.63
Dead+Wind 60 deg - Service	37.25	5.07	-2.99	-278.87	-465.87	0.58
Dead+Wind 90 deg - Service	37.25	5.87	-0.09	-11.78	-535.50	1.60
Dead+Wind 120 deg - Service	37.25	5.01	2.83	257.39	-459.80	0.17
Dead+Wind 150 deg - Service	37.25	2.82	5.01	460.46	-256.37	-1.03
Dead+Wind 180 deg - Service	37.25	-0.07	5.77	530.26	10.13	-0.14
Dead+Wind 210 deg - Service	37.25	-2.96	5.07	461.99	273.48	0.73
Dead+Wind 240 deg - Service	37.25	-5.03	2.95	272.43	465.09	-0.52
Dead+Wind 270 deg - Service	37.25	-5.84	0.07	7.81	535.47	-1.62
Dead+Wind 300 deg - Service	37.25	-4.98	-2.85	-262.24	460.49	-0.24
Dead+Wind 330 deg - Service	37.25	-2.84	-5.01	-463.22	262.45	1.17

## Solution Summary

Load Comb.	Sum of Applied Forces			Sum of Reactions			% Error
	PX K	PY K	PZ K	PX K	PY K	PZ K	
1	0.00	-37.25	0.00	0.00	37.25	0.00	0.000%
2	0.43	-44.70	-24.62	-0.43	44.70	24.62	0.000%
3	0.43	-33.52	-24.62	-0.43	33.52	24.62	0.000%
4	12.71	-44.70	-21.73	-12.71	44.70	21.73	0.000%
5	12.71	-33.52	-21.73	-12.71	33.52	21.73	0.000%
6	21.51	-44.70	-12.69	-21.51	44.70	12.69	0.000%
7	21.51	-33.52	-12.69	-21.51	33.52	12.69	0.000%
8	24.94	-44.70	-0.37	-24.94	44.70	0.37	0.000%
9	24.94	-33.52	-0.37	-24.94	33.52	0.37	0.000%
10	21.26	-44.70	12.00	-21.26	44.70	-12.00	0.000%
11	21.26	-33.52	12.00	-21.26	33.52	-12.00	0.000%
12	11.99	-44.70	21.26	-11.99	44.70	-21.26	0.000%
13	11.99	-33.52	21.26	-11.99	33.52	-21.26	0.000%
14	-0.28	-44.70	24.48	0.28	44.70	-24.48	0.000%
15	-0.28	-33.52	24.48	0.28	33.52	-24.48	0.000%
16	-12.57	-44.70	21.53	12.57	44.70	-21.53	0.000%
17	-12.57	-33.52	21.53	12.57	33.52	-21.53	0.000%
18	-21.36	-44.70	12.54	21.36	44.70	-12.54	0.000%
19	-21.36	-33.52	12.54	21.36	33.52	-12.54	0.000%
20	-24.81	-44.70	0.30	24.81	44.70	-0.30	0.000%
21	-24.81	-33.52	0.30	24.81	33.52	-0.30	0.000%
22	-21.16	-44.70	-12.10	21.16	44.70	12.10	0.000%
23	-21.16	-33.52	-12.10	21.16	33.52	12.10	0.000%
24	-12.07	-44.70	-21.29	12.07	44.70	21.29	0.000%
25	-12.07	-33.52	-21.29	12.07	33.52	21.29	0.000%
26	0.00	-63.71	0.00	0.00	63.71	-0.00	0.000%
27	0.08	-63.71	-6.24	-0.08	63.71	6.24	0.000%
28	3.16	-63.71	-5.41	-3.16	63.71	5.41	0.000%

Load Comb.	Sum of Applied Forces			Sum of Reactions			% Error
	PX K	PY K	PZ K	PX K	PY K	PZ K	
29	5.40	-63.71	-3.17	-5.40	63.71	3.17	0.000%
30	6.23	-63.71	-0.07	-6.23	63.71	0.07	0.000%
31	5.39	-63.71	3.06	-5.39	63.71	-3.06	0.000%
32	3.06	-63.71	5.39	-3.06	63.71	-5.39	0.000%
33	-0.05	-63.71	6.21	0.05	63.71	-6.21	0.000%
34	-3.13	-63.71	5.38	3.13	63.71	-5.38	0.000%
35	-5.37	-63.71	3.14	5.37	63.71	-3.14	0.000%
36	-6.20	-63.71	0.06	6.20	63.71	-0.06	0.000%
37	-5.37	-63.71	-3.08	5.37	63.71	3.08	0.000%
38	-3.07	-63.71	-5.40	3.07	63.71	5.40	0.000%
39	0.10	-37.25	-5.80	-0.10	37.25	5.80	0.000%
40	2.99	-37.25	-5.12	-2.99	37.25	5.12	0.000%
41	5.07	-37.25	-2.99	-5.07	37.25	2.99	0.000%
42	5.87	-37.25	-0.09	-5.87	37.25	0.09	0.000%
43	5.01	-37.25	2.83	-5.01	37.25	-2.83	0.000%
44	2.82	-37.25	5.01	-2.82	37.25	-5.01	0.000%
45	-0.07	-37.25	5.77	0.07	37.25	-5.77	0.000%
46	-2.96	-37.25	5.07	2.96	37.25	-5.07	0.000%
47	-5.03	-37.25	2.95	5.03	37.25	-2.95	0.000%
48	-5.84	-37.25	0.07	5.84	37.25	-0.07	0.000%
49	-4.98	-37.25	-2.85	4.98	37.25	2.85	0.000%
50	-2.84	-37.25	-5.01	2.84	37.25	5.01	0.000%

### Non-Linear Convergence Results

Load Combination	Converged?	Number of Cycles	Displacement Tolerance	Force Tolerance
1	Yes	4	0.00000001	0.00000001
2	Yes	5	0.00000001	0.00045188
3	Yes	5	0.00000001	0.00021263
4	Yes	6	0.00000001	0.00012904
5	Yes	6	0.00000001	0.00004148
6	Yes	6	0.00000001	0.00013079
7	Yes	6	0.00000001	0.00004205
8	Yes	5	0.00000001	0.00098810
9	Yes	5	0.00000001	0.00047191
10	Yes	6	0.00000001	0.00013278
11	Yes	6	0.00000001	0.00004379
12	Yes	6	0.00000001	0.00015312
13	Yes	6	0.00000001	0.00005130
14	Yes	5	0.00000001	0.00009031
15	Yes	4	0.00000001	0.00089313
16	Yes	6	0.00000001	0.00015042
17	Yes	6	0.00000001	0.00004965
18	Yes	6	0.00000001	0.00014829
19	Yes	6	0.00000001	0.00004872
20	Yes	6	0.00000001	0.00006445
21	Yes	5	0.00000001	0.00060526
22	Yes	6	0.00000001	0.00012482
23	Yes	6	0.00000001	0.00004089
24	Yes	6	0.00000001	0.00011442
25	Yes	6	0.00000001	0.00003706
26	Yes	4	0.00000001	0.00044208
27	Yes	6	0.00000001	0.00023193
28	Yes	6	0.00000001	0.00024815
29	Yes	6	0.00000001	0.00024840
30	Yes	6	0.00000001	0.00023532
31	Yes	6	0.00000001	0.00024820

32	Yes	6	0.00000001	0.00025050
33	Yes	6	0.00000001	0.00023931
34	Yes	6	0.00000001	0.00025549
35	Yes	6	0.00000001	0.00025420
36	Yes	6	0.00000001	0.00023690
37	Yes	6	0.00000001	0.00024473
38	Yes	6	0.00000001	0.00024430
39	Yes	4	0.00000001	0.00051927
40	Yes	5	0.00000001	0.00004905
41	Yes	5	0.00000001	0.00004983
42	Yes	5	0.00000001	0.00006358
43	Yes	5	0.00000001	0.00005071
44	Yes	5	0.00000001	0.00007304
45	Yes	4	0.00000001	0.00037354
46	Yes	5	0.00000001	0.00006643
47	Yes	5	0.00000001	0.00006255
48	Yes	5	0.00000001	0.00006755
49	Yes	4	0.00000001	0.00099271
50	Yes	5	0.00000001	0.00005294

**Maximum Tower Deflections - Service Wind**

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	117.5 - 112.5	15.686	41	1.5302	0.0398
L2	112.5 - 107.5	14.101	41	1.4926	0.0328
L3	107.5 - 102.5	12.571	41	1.4259	0.0272
L4	102.5 - 97.5	11.121	41	1.3417	0.0227
L5	97.5 - 92.5	9.767	41	1.2394	0.0177
L6	92.5 - 86.29	8.531	41	1.1210	0.0134
L7	89.71 - 84.71	7.897	41	1.0473	0.0113
L8	84.71 - 79.71	6.831	41	0.9788	0.0097
L9	79.71 - 74.71	5.858	41	0.8790	0.0078
L10	74.71 - 69.71	4.991	41	0.7756	0.0062
L11	69.71 - 64.71	4.234	41	0.6708	0.0048
L12	64.71 - 62.83	3.586	41	0.5661	0.0036
L13	62.83 - 62.58	3.371	41	0.5279	0.0033
L14	62.58 - 57.58	3.343	41	0.5256	0.0032
L15	57.58 - 52.58	2.818	41	0.4785	0.0028
L16	52.58 - 47.58	2.341	41	0.4315	0.0024
L17	47.58 - 42.63	1.914	41	0.3841	0.0020
L18	47.38 - 42.38	1.898	41	0.3822	0.0020
L19	42.38 - 37.38	1.510	41	0.3573	0.0018
L20	37.38 - 32.38	1.162	40	0.3081	0.0015
L21	32.38 - 31.75	0.865	40	0.2597	0.0012
L22	31.75 - 31.5	0.831	40	0.2537	0.0012
L23	31.5 - 26.5	0.818	40	0.2517	0.0012
L24	26.5 - 21.5	0.576	40	0.2104	0.0009
L25	21.5 - 16.5	0.377	40	0.1698	0.0007
L26	16.5 - 11.5	0.221	40	0.1292	0.0005
L27	11.5 - 6.5	0.107	40	0.0893	0.0004
L28	6.5 - 1.5	0.034	40	0.0500	0.0002
L29	1.5 - 0	0.002	40	0.0112	0.0000

**Critical Deflections and Radius of Curvature - Service Wind**

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
122.00	VHLP3-11W	41	15.686	1.5302	0.0400	5089
119.00	VHLP3-11W	41	15.686	1.5302	0.0400	5089
118.00	HP2-11_CCIV2	41	15.686	1.5302	0.0400	5089
102.00	(2) KA-6030	41	10.981	1.3322	0.0223	3004
94.00	DB224-A	41	8.888	1.1600	0.0148	2369
73.00	KS24019-L112A	41	4.720	0.7396	0.0058	2745

### Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	117.5 - 112.5	67.179	6	6.5844	0.1703
L2	112.5 - 107.5	60.384	6	6.4173	0.1404
L3	107.5 - 102.5	53.831	6	6.1271	0.1164
L4	102.5 - 97.5	47.620	6	5.7628	0.0970
L5	97.5 - 92.5	41.825	6	5.3207	0.0758
L6	92.5 - 86.29	36.528	6	4.8103	0.0573
L7	89.71 - 84.71	33.813	6	4.4933	0.0479
L8	84.71 - 79.71	29.248	6	4.1987	0.0411
L9	79.71 - 74.71	25.080	6	3.7698	0.0331
L10	74.71 - 69.71	21.368	6	3.3257	0.0263
L11	69.71 - 64.71	18.124	6	2.8755	0.0205
L12	64.71 - 62.83	15.350	6	2.4256	0.0154
L13	62.83 - 62.58	14.427	6	2.2616	0.0137
L14	62.58 - 57.58	14.309	6	2.2518	0.0136
L15	57.58 - 52.58	12.058	6	2.0494	0.0117
L16	52.58 - 47.58	10.019	6	1.8479	0.0100
L17	47.58 - 42.63	8.191	6	1.6446	0.0084
L18	47.38 - 42.38	8.122	6	1.6365	0.0084
L19	42.38 - 37.38	6.462	6	1.5296	0.0076
L20	37.38 - 32.38	4.971	6	1.3190	0.0063
L21	32.38 - 31.75	3.699	6	1.1113	0.0051
L22	31.75 - 31.5	3.554	6	1.0858	0.0049
L23	31.5 - 26.5	3.498	6	1.0769	0.0049
L24	26.5 - 21.5	2.463	6	0.9000	0.0039
L25	21.5 - 16.5	1.612	6	0.7261	0.0031
L26	16.5 - 11.5	0.943	6	0.5523	0.0023
L27	11.5 - 6.5	0.455	6	0.3814	0.0015
L28	6.5 - 1.5	0.144	4	0.2133	0.0008
L29	1.5 - 0	0.008	4	0.0479	0.0002

### Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
122.00	VHLP3-11W	6	67.179	6.5844	0.1703	1262
119.00	VHLP3-11W	6	67.179	6.5844	0.1703	1262
118.00	HP2-11_CCIV2	6	67.179	6.5844	0.1703	1262
102.00	(2) KA-6030	6	47.021	5.7218	0.0949	717
94.00	DB224-A	6	38.058	4.9780	0.0628	558
73.00	KS24019-L112A	6	20.206	3.1711	0.0244	643

## Compression Checks

### Pole Design Data

Section No.	Elevation ft	Size	L ft	L <sub>u</sub> ft	Kl/r	A in <sup>2</sup>	P <sub>u</sub> K	φP <sub>n</sub> K	Ratio P <sub>u</sub> / φP <sub>n</sub>
L1	117.5 - 112.5 (1)	TP16.2656x15x0.1875	5.00	0.00	0.0	9.5685	-3.87	559.76	0.007
L2	112.5 - 107.5 (2)	TP17.5312x16.2656x0.1875	5.00	0.00	0.0	10.3217	-4.13	603.82	0.007
L3	107.5 - 102.5 (3)	TP18.7969x17.5312x0.1875	5.00	0.00	0.0	11.0749	-4.43	647.88	0.007
L4	102.5 - 97.5 (4)	TP20.0625x18.7969x0.1875	5.00	0.00	0.0	11.8281	-9.37	691.94	0.014
L5	97.5 - 92.5 (5)	TP21.3281x20.0625x0.1875	5.00	0.00	0.0	12.5813	-15.70	736.01	0.021
L6	92.5 - 86.29 (6)	TP22.9x21.3281x0.1875	6.21	0.00	0.0	13.0016	-16.02	760.59	0.021
L7	86.29 - 84.71 (7)	TP22.9126x21.6593x0.3125	5.00	0.00	0.0	22.4164	-16.88	1311.36	0.013
L8	84.71 - 79.71 (8)	TP24.1658x22.9126x0.3125	5.00	0.00	0.0	23.6595	-17.65	1384.08	0.013
L9	79.71 - 74.71 (9)	TP25.4191x24.1658x0.3125	5.00	0.00	0.0	24.9026	-18.45	1456.80	0.013
L10	74.71 - 69.71 (10)	TP26.6724x25.4191x0.3125	5.00	0.00	0.0	26.1457	-19.36	1529.52	0.013
L11	69.71 - 64.71 (11)	TP27.9256x26.6724x0.3125	5.00	0.00	0.0	27.3888	-20.22	1602.24	0.013
L12	64.71 - 62.83 (12)	TP28.3968x27.9256x0.3125	1.88	0.00	0.0	27.8561	-20.54	1629.58	0.013
L13	62.83 - 62.58 (13)	TP28.4595x28.3968x0.7375	0.25	0.00	0.0	64.8923	-20.64	3796.20	0.005
L14	62.58 - 57.58 (14)	TP29.7128x28.4595x0.7125	5.00	0.00	0.0	65.5834	-22.09	3836.63	0.006
L15	57.58 - 52.58 (15)	TP30.966x29.7128x0.7	5.00	0.00	0.0	67.2450	-23.58	3933.83	0.006
L16	52.58 - 47.58 (16)	TP32.2193x30.966x0.675	5.00	0.00	0.0	67.5820	-25.10	3953.55	0.006
L17	47.58 - 42.63 (17)	TP33.46x32.2193x0.675	4.95	0.00	0.0	67.6894	-25.17	3959.83	0.006
L18	42.63 - 42.38 (18)	TP32.8955x31.6444x0.675	5.00	0.00	0.0	69.0309	-28.04	4038.31	0.007
L19	42.38 - 37.38 (19)	TP34.1466x32.8955x0.65	5.00	0.00	0.0	69.1069	-29.71	4042.75	0.007
L20	37.38 - 32.38 (20)	TP35.3978x34.1466x0.6375	5.00	0.00	0.0	70.3348	-31.43	4114.58	0.008
L21	32.38 - 31.75 (21)	TP35.5554x35.3978x0.6375	0.63	0.00	0.0	70.6537	-31.65	4133.24	0.008
L22	31.75 - 31.5 (22)	TP35.618x35.5554x0.7375	0.25	0.00	0.0	81.6490	-31.75	4776.47	0.007
L23	31.5 - 26.5 (23)	TP36.8691x35.618x0.725	5.00	0.00	0.0	83.1729	-33.80	4865.62	0.007
L24	26.5 - 21.5 (24)	TP38.1202x36.8691x0.7125	5.00	0.00	0.0	82.3331	-34.21	4816.48	0.007
L25	21.5 - 16.5 (25)	TP39.3713x38.1202x0.6875	5.00	0.00	0.0	81.6828	-35.82	4778.44	0.007
L26	16.5 - 11.5 (26)	TP40.6224x39.3713x0.675	5.00	0.00	0.0	82.9049	-37.86	4849.94	0.008
L27	11.5 - 6.5 (27)	TP41.8735x40.6224x0.6625	5.00	0.00	0.0	84.0267	-39.92	4915.56	0.008
L28	6.5 - 1.5 (28)	TP43.1247x41.8735x0.65	5.00	0.00	0.0	85.0483	-41.94	4975.33	0.008
L29	1.5 - 0 (29)	TP43.5x43.1247x0.65	1.50	0.00	0.0	87.6295	-44.06	5126.32	0.009



### Pole Bending Design Data

Section No.	Elevation ft	Size	$M_{ux}$ kip-ft	$\phi M_{rx}$ kip-ft	Ratio $\frac{M_{ux}}{\phi M_{rx}}$	$M_{uy}$ kip-ft	$\phi M_{ry}$ kip-ft	Ratio $\frac{M_{uy}}{\phi M_{ry}}$
L1	117.5 - 112.5 (1)	TP16.2656x15x0.1875	52.44	234.15	0.224	0.00	234.15	0.000
L2	112.5 - 107.5 (2)	TP17.5312x16.2656x0.1875	92.42	272.69	0.339	0.00	272.69	0.000
L3	107.5 - 102.5 (3)	TP18.7969x17.5312x0.1875	133.60	310.87	0.430	0.00	310.87	0.000
L4	102.5 - 97.5 (4)	TP20.0625x18.7969x0.1875	200.67	348.75	0.575	0.00	348.75	0.000
L5	97.5 - 92.5 (5)	TP21.3281x20.0625x0.1875	271.83	387.93	0.701	0.00	387.93	0.000
L6	92.5 - 86.29 (6)	TP22.9x21.3281x0.1875	325.98	410.31	0.794	0.00	410.31	0.000
L7	86.29 - 84.71 (7)	TP22.9126x21.6593x0.3125	424.19	769.42	0.551	0.00	769.42	0.000
L8	84.71 - 79.71 (8)	TP24.1658x22.9126x0.3125	524.08	857.74	0.611	0.00	857.74	0.000
L9	79.71 - 74.71 (9)	TP25.4191x24.1658x0.3125	625.23	950.85	0.658	0.00	950.85	0.000
L10	74.71 - 69.71 (10)	TP26.6724x25.4191x0.3125	727.55	1048.76	0.694	0.00	1048.76	0.000
L11	69.71 - 64.71 (11)	TP27.9256x26.6724x0.3125	831.38	1151.47	0.722	0.00	1151.47	0.000
L12	64.71 - 62.83 (12)	TP28.3968x27.9256x0.3125	870.73	1191.33	0.731	0.00	1191.33	0.000
L13	62.83 - 62.58 (13)	TP28.4595x28.3968x0.7375	875.98	2698.16	0.325	0.00	2698.16	0.000
L14	62.58 - 57.58 (14)	TP29.7128x28.4595x0.7125	981.82	2858.29	0.343	0.00	2858.29	0.000
L15	57.58 - 52.58 (15)	TP30.966x29.7128x0.7	1089.37	3062.93	0.356	0.00	3062.93	0.000
L16	52.58 - 47.58 (16)	TP32.2193x30.966x0.675	1198.62	3213.72	0.373	0.00	3213.72	0.000
L17	47.58 - 42.63 (17)	TP33.46x32.2193x0.675	1203.03	3224.06	0.373	0.00	3224.06	0.000
L18	42.63 - 42.38 (18)	TP32.8955x31.6444x0.675	1314.28	3354.47	0.392	0.00	3354.47	0.000
L19	42.38 - 37.38 (19)	TP34.1466x32.8955x0.65	1427.35	3496.46	0.408	0.00	3496.46	0.000
L20	37.38 - 32.38 (20)	TP35.3978x34.1466x0.6375	1542.00	3696.68	0.417	0.00	3696.68	0.000
L21	32.38 - 31.75 (21)	TP35.5554x35.3978x0.6375	1556.56	3730.59	0.417	0.00	3730.59	0.000
L22	31.75 - 31.5 (22)	TP35.618x35.5554x0.7375	1562.34	4294.36	0.364	0.00	4294.36	0.000
L23	31.5 - 26.5 (23)	TP36.8691x35.618x0.725	1678.90	4537.81	0.370	0.00	4537.81	0.000
L24	26.5 - 21.5 (24)	TP38.1202x36.8691x0.7125	1702.40	4526.80	0.376	0.00	4526.80	0.000
L25	21.5 - 16.5 (25)	TP39.3713x38.1202x0.6875	1797.01	4623.07	0.389	0.00	4623.07	0.000
L26	16.5 - 11.5 (26)	TP40.6224x39.3713x0.675	1916.61	4855.02	0.395	0.00	4855.02	0.000
L27	11.5 - 6.5 (27)	TP41.8735x40.6224x0.6625	2037.62	5085.73	0.401	0.00	5085.73	0.000
L28	6.5 - 1.5 (28)	TP43.1247x41.8735x0.65	2159.90	5314.57	0.406	0.00	5314.57	0.000
L29	1.5 - 0 (29)	TP43.5x43.1247x0.65	2284.03	5644.64	0.405	0.00	5644.64	0.000

### Pole Shear Design Data

Section No.	Elevation ft	Size	Actual $V_u$ K	$\phi V_n$ K	Ratio $\frac{V_u}{\phi V_n}$	Actual $T_u$ kip-ft	$\phi T_n$ kip-ft	Ratio $\frac{T_u}{\phi T_n}$
L1	117.5 - 112.5	TP16.2656x15x0.1875	7.79	167.93	0.046	3.07	236.45	0.013

Section No.	Elevation ft	Size	Actual $V_u$ K	$\phi V_n$ K	Ratio $V_u$ $\phi V_n$	Actual $T_u$ kip-ft	$\phi T_n$ kip-ft	Ratio $T_u$ $\phi T_n$
L2	112.5 - 107.5 (1)	TP17.5312x16.2656x0.1875	8.11	181.15	0.045	0.71	275.14	0.003
L3	107.5 - 102.5 (2)	TP18.7969x17.5312x0.1875	8.37	194.36	0.043	0.71	316.76	0.002
L4	102.5 - 97.5 (4)	TP20.0625x18.7969x0.1875	13.12	207.58	0.063	0.16	361.31	0.000
L5	97.5 - 92.5 (5)	TP21.3281x20.0625x0.1875	19.37	220.80	0.088	2.53	408.79	0.006
L6	92.5 - 86.29 (6)	TP22.9x21.3281x0.1875	19.49	228.18	0.085	2.53	436.56	0.006
L7	86.29 - 84.71 (7)	TP22.9126x21.6593x0.3125	19.88	393.41	0.051	2.46	778.63	0.003
L8	84.71 - 79.71 (8)	TP24.1658x22.9126x0.3125	20.13	415.23	0.048	2.46	867.38	0.003
L9	79.71 - 74.71 (9)	TP25.4191x24.1658x0.3125	20.38	437.04	0.047	2.46	960.92	0.003
L10	74.71 - 69.71 (10)	TP26.6724x25.4191x0.3125	20.67	458.86	0.045	2.46	1059.25	0.002
L11	69.71 - 64.71 (11)	TP27.9256x26.6724x0.3125	20.91	480.67	0.044	2.46	1162.37	0.002
L12	64.71 - 62.83 (12)	TP28.3968x27.9256x0.3125	21.02	488.88	0.043	2.46	1202.38	0.002
L13	62.83 - 62.58 (13)	TP28.4595x28.3968x0.7375	21.01	1138.86	0.018	2.46	2764.88	0.001
L14	62.58 - 57.58 (14)	TP29.7128x28.4595x0.7125	21.36	1150.99	0.019	2.45	2923.16	0.001
L15	57.58 - 52.58 (15)	TP30.966x29.7128x0.7	21.70	1180.15	0.018	2.45	3128.04	0.001
L16	52.58 - 47.58 (16)	TP32.2193x30.966x0.675	22.04	1186.06	0.019	2.45	3276.49	0.001
L17	47.58 - 42.63 (17)	TP33.46x32.2193x0.675	22.05	1187.95	0.019	2.45	3286.92	0.001
L18	42.63 - 42.38 (18)	TP32.8955x31.6444x0.675	22.46	1211.49	0.019	2.45	3418.48	0.001
L19	42.38 - 37.38 (19)	TP34.1466x32.8955x0.65	22.79	1212.83	0.019	2.45	3557.78	0.001
L20	37.38 - 32.38 (20)	TP35.3978x34.1466x0.6375	23.10	1234.38	0.019	2.45	3757.60	0.001
L21	32.38 - 31.75 (21)	TP35.5554x35.3978x0.6375	23.13	1239.97	0.019	2.45	3791.76	0.001
L22	31.75 - 31.5 (22)	TP35.618x35.5554x0.7375	23.15	1432.94	0.016	2.45	4377.14	0.001
L23	31.5 - 26.5 (23)	TP36.8691x35.618x0.725	23.48	1459.68	0.016	2.45	4620.37	0.001
L24	26.5 - 21.5 (24)	TP38.1202x36.8691x0.7125	23.60	1454.88	0.016	2.45	4606.95	0.001
L25	21.5 - 16.5 (25)	TP39.3713x38.1202x0.6875	23.84	1443.12	0.017	2.45	4699.36	0.001
L26	16.5 - 11.5 (26)	TP40.6224x39.3713x0.675	24.13	1464.39	0.016	2.45	4930.68	0.000
L27	11.5 - 6.5 (27)	TP41.8735x40.6224x0.6625	24.41	1483.90	0.016	2.45	5160.59	0.000
L28	6.5 - 1.5 (28)	TP43.1247x41.8735x0.65	24.68	1501.66	0.016	2.45	5388.50	0.000
L29	1.5 - 0 (29)	TP43.5x43.1247x0.65	25.19	1551.49	0.016	2.58	5720.54	0.000

### Pole Interaction Design Data

Section No.	Elevation ft	Ratio $P_u$ $\phi P_n$	Ratio $M_{ux}$ $\phi M_{nx}$	Ratio $M_{uy}$ $\phi M_{ny}$	Ratio $V_u$ $\phi V_n$	Ratio $T_u$ $\phi T_n$	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
L1	117.5 - 112.5 (1)	0.007	0.224	0.000	0.046	0.013	0.234	1.050	
L2	112.5 - 107.5 (2)	0.007	0.339	0.000	0.045	0.003	0.348	1.050	

Section No.	Elevation ft	Ratio	Ratio	Ratio	Ratio	Ratio	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
		$P_u$	$M_{ux}$	$M_{uy}$	$V_u$	$T_u$			
		$\phi P_n$	$\phi M_{nx}$	$\phi M_{ny}$	$\phi V_n$	$\phi T_n$			
L3	107.5 - 102.5 (3)	0.007	0.430	0.000	0.043	0.002	0.439	1.050	
L4	102.5 - 97.5 (4)	0.014	0.575	0.000	0.063	0.000	0.593	1.050	
L5	97.5 - 92.5 (5)	0.021	0.701	0.000	0.088	0.006	0.731	1.050	
L6	92.5 - 86.29 (6)	0.021	0.794	0.000	0.085	0.006	0.824	1.050	
L7	86.29 - 84.71 (7)	0.013	0.551	0.000	0.051	0.003	0.567	1.050	
L8	84.71 - 79.71 (8)	0.013	0.611	0.000	0.048	0.003	0.626	1.050	
L9	79.71 - 74.71 (9)	0.013	0.658	0.000	0.047	0.003	0.673	1.050	
L10	74.71 - 69.71 (10)	0.013	0.694	0.000	0.045	0.002	0.709	1.050	
L11	69.71 - 64.71 (11)	0.013	0.722	0.000	0.044	0.002	0.737	1.050	
L12	64.71 - 62.83 (12)	0.013	0.731	0.000	0.043	0.002	0.746	1.050	
L13	62.83 - 62.58 (13)	0.005	0.325	0.000	0.018	0.001	0.330	1.050	
L14	62.58 - 57.58 (14)	0.006	0.343	0.000	0.019	0.001	0.350	1.050	
L15	57.58 - 52.58 (15)	0.006	0.356	0.000	0.018	0.001	0.362	1.050	
L16	52.58 - 47.58 (16)	0.006	0.373	0.000	0.019	0.001	0.380	1.050	
L17	47.58 - 42.63 (17)	0.006	0.373	0.000	0.019	0.001	0.380	1.050	
L18	42.63 - 42.38 (18)	0.007	0.392	0.000	0.019	0.001	0.399	1.050	
L19	42.38 - 37.38 (19)	0.007	0.408	0.000	0.019	0.001	0.416	1.050	
L20	37.38 - 32.38 (20)	0.008	0.417	0.000	0.019	0.001	0.425	1.050	
L21	32.38 - 31.75 (21)	0.008	0.417	0.000	0.019	0.001	0.425	1.050	
L22	31.75 - 31.5 (22)	0.007	0.364	0.000	0.016	0.001	0.371	1.050	
L23	31.5 - 26.5 (23)	0.007	0.370	0.000	0.016	0.001	0.377	1.050	
L24	26.5 - 21.5 (24)	0.007	0.376	0.000	0.016	0.001	0.383	1.050	
L25	21.5 - 16.5 (25)	0.007	0.389	0.000	0.017	0.001	0.396	1.050	
L26	16.5 - 11.5 (26)	0.008	0.395	0.000	0.016	0.000	0.403	1.050	
L27	11.5 - 6.5 (27)	0.008	0.401	0.000	0.016	0.000	0.409	1.050	
L28	6.5 - 1.5 (28)	0.008	0.406	0.000	0.016	0.000	0.415	1.050	
L29	1.5 - 0 (29)	0.009	0.405	0.000	0.016	0.000	0.414	1.050	

### Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	$\phi P_{allow}$ K	% Capacity	Pass Fail
L1	117.5 - 112.5	Pole	TP16.2656x15x0.1875	1	-3.87	587.74	22.3	Pass
L2	112.5 - 107.5	Pole	TP17.5312x16.2656x0.1875	2	-4.13	634.01	33.1	Pass
L3	107.5 - 102.5	Pole	TP18.7969x17.5312x0.1875	3	-4.43	680.27	41.8	Pass
L4	102.5 - 97.5	Pole	TP20.0625x18.7969x0.1875	4	-9.37	726.54	56.5	Pass
L5	97.5 - 92.5	Pole	TP21.3281x20.0625x0.1875	5	-15.70	772.81	69.6	Pass
L6	92.5 - 86.29	Pole	TP22.9x21.3281x0.1875	6	-16.02	798.62	78.5	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	$\sigma P_{allow}$ K	% Capacity	Pass Fail	
L7	86.29 - 84.71	Pole	TP22.9126x21.6593x0.3125	7	-16.88	1376.93	54.0	Pass	
L8	84.71 - 79.71	Pole	TP24.1658x22.9126x0.3125	8	-17.65	1453.28	59.7	Pass	
L9	79.71 - 74.71	Pole	TP25.4191x24.1658x0.3125	9	-18.45	1529.64	64.1	Pass	
L10	74.71 - 69.71	Pole	TP26.6724x25.4191x0.3125	10	-19.36	1606.00	67.5	Pass	
L11	69.71 - 64.71	Pole	TP27.9256x26.6724x0.3125	11	-20.22	1682.35	70.2	Pass	
L12	64.71 - 62.83	Pole	TP28.3968x27.9256x0.3125	12	-20.54	1711.06	71.0	Pass	
L13	62.83 - 62.58	Pole	TP28.4595x28.3968x0.7375	13	-20.64	3986.01	31.5	Pass	
L14	62.58 - 57.58	Pole	TP29.7128x28.4595x0.7125	14	-22.09	4028.46	33.3	Pass	
L15	57.58 - 52.58	Pole	TP30.966x29.7128x0.7	15	-23.58	4130.52	34.5	Pass	
L16	52.58 - 47.58	Pole	TP32.2193x30.966x0.675	16	-25.10	4151.23	36.2	Pass	
L17	47.58 - 42.63	Pole	TP33.46x32.2193x0.675	17	-25.17	4157.82	36.2	Pass	
L18	42.63 - 42.38	Pole	TP32.8955x31.6444x0.675	18	-28.04	4240.23	38.0	Pass	
L19	42.38 - 37.38	Pole	TP34.1466x32.8955x0.65	19	-29.71	4244.89	39.6	Pass	
L20	37.38 - 32.38	Pole	TP35.3978x34.1466x0.6375	20	-31.43	4320.31	40.5	Pass	
L21	32.38 - 31.75	Pole	TP35.5554x35.3978x0.6375	21	-31.65	4339.90	40.5	Pass	
L22	31.75 - 31.5	Pole	TP35.618x35.5554x0.7375	22	-31.75	5015.29	35.3	Pass	
L23	31.5 - 26.5	Pole	TP36.8691x35.618x0.725	23	-33.80	5108.90	35.9	Pass	
L24	26.5 - 21.5	Pole	TP38.1202x36.8691x0.7125	24	-34.21	5057.30	36.5	Pass	
L25	21.5 - 16.5	Pole	TP39.3713x38.1202x0.6875	25	-35.82	5017.36	37.8	Pass	
L26	16.5 - 11.5	Pole	TP40.6224x39.3713x0.675	26	-37.86	5092.44	38.4	Pass	
L27	11.5 - 6.5	Pole	TP41.8735x40.6224x0.6625	27	-39.92	5161.34	39.0	Pass	
L28	6.5 - 1.5	Pole	TP43.1247x41.8735x0.65	28	-41.94	5224.10	39.5	Pass	
L29	1.5 - 0	Pole	TP43.5x43.1247x0.65	29	-44.06	5382.64	39.4	Pass	
							Summary		
							Pole (L6)	78.5	Pass
							<b>RATING =</b>	<b>78.5</b>	<b>Pass</b>

**\*NOTE: Above stress ratios for reinforced sections are approximate. More exact calculations are presented in Appendix C.**

**APPENDIX B**  
**BASE LEVEL DRAWING**

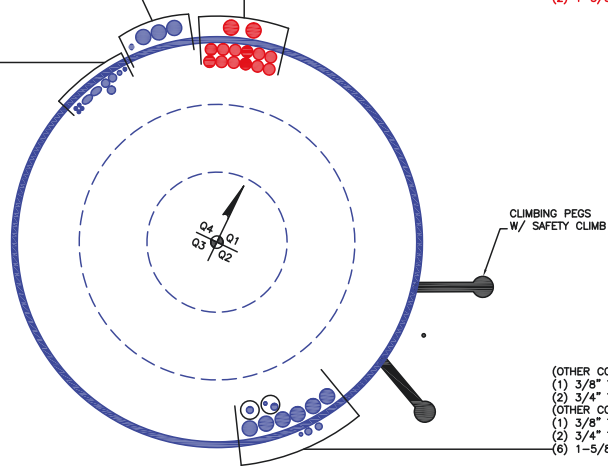


(OTHER CONSIDERED EQUIPMENT)  
(3) 1-5/8" TO 118 FT LEVEL  
(1) 1/2" TO 73 FT LEVEL

(OTHER CONSIDERED EQUIPMENT)  
(2) ELLIPTICAL TO 118 FT LEVEL  
(5) 3/8" TO 118 FT LEVEL  
(1) 1/2" TO 118 FT LEVEL  
(2) 7/8" TO 118 FT LEVEL

(OTHER CONSIDERED EQUIPMENT)  
(1) 7/8" TO 94 FT LEVEL

(PROPOSED EQUIPMENT CONFIGURATION)  
(12) 1-1/4" TO 102 FT LEVEL  
(2) 1-5/8" TO 102 FT LEVEL



(OTHER CONSIDERED EQUIPMENT)  
(1) 3/8" TO 94 FT LEVEL  
(2) 3/4" TO 94 FT LEVEL  
(OTHER CONSIDERED EQUIPMENT)  
(1) 3/8" TO 94 FT LEVEL  
(2) 3/4" TO 94 FT LEVEL  
(6) 1-5/8" TO 94 FT LEVEL

**APPENDIX C**  
**ADDITIONAL CALCULATIONS**



Site BU: 876352  
Work Order: 2278558



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**Pole Geometry**

	Pole Height Above Base (ft)	Section Length (ft)	Lap Splice Length (ft)	Number of Sides	Top Diameter (in)	Bottom Diameter (in)	Wall Thickness (in)	Bend Radius (in)	Pole Material
1	117.5	31.21	3.42	18	15	22.9	0.1875	Auto	A572-65
2	89.71	47.08	4.75	18	21.66	33.46	0.3125	Auto	A572-65
3	47.38	47.38	0	18	31.64	43.5	0.3125	Auto	A572-65

**Reinforcement Configuration**

	Bottom Effective Elevation (ft)	Top Effective Elevation (ft)	Type	Model	Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	0	31.75	plate	CCI-SFP-085125	4		x				x					x				x			
2	31.75	62.83	plate	CCI-SFP-065125	4		x				x					x				x			
3																							
4																							
5																							
6																							
7																							
8																							
9																							
10																							

**Reinforcement Details**

	B (in)	H (in)	Gross Area (in <sup>2</sup> )	Pole Face to Centroid (in)	Bottom Termination Type	Bottom Termination Length (in)	Top Termination Type	Top Termination Length (in)	Lu (in)	Net Area (in <sup>2</sup> )	Bolt Hole Size (in)	Reinforcement Material
1	8.5	1.25	10.625	0.625	PC 8.8 - M20 (100)	45	PC 8.8 - M20 (100)	45.000	17.000	9.063	1.1875	A572-65
2	6.5	1.25	8.125	0.625	PC 8.8 - M20 (100)	33	PC 8.8 - M20 (100)	33.000	19.000	6.563	1.1875	A572-65

**Connection Details for Custom Reinforcements**

Reinforcement	End	# Bolts	N or X	Bolt Spacing (in)	Edge Dist (in)	Weld Grade (ksi)	Transverse (Horiz.) Weld Type	Horiz. Weld Length (in)	Horiz. Groove Depth (in)	Horiz. Groove Angle (deg)	Horiz. Fillet Size (in)	Vertical Weld Length (in)	Vertical Fillet Size (in)	Rev H Connection Capacity (kip)

# TNX Geometry Input

Increment (ft):  [Export to TNX](#)

	Section Height (ft)	Section Length (ft)	Lap Splice Length (ft)	Number of Sides	Top Diameter (in)	Bottom Diameter (in)	Wall Thickness (in)	Tapered Pole Grade	Weight Multiplier
1	117.5 - 112.5	5		18	15.000	16.266	0.1875	A572-65	1.000
2	112.5 - 107.5	5		18	16.266	17.531	0.1875	A572-65	1.000
3	107.5 - 102.5	5		18	17.531	18.797	0.1875	A572-65	1.000
4	102.5 - 97.5	5		18	18.797	20.062	0.1875	A572-65	1.000
5	97.5 - 92.5	5		18	20.062	21.328	0.1875	A572-65	1.000
6	92.5 - 89.71	6.21	3.42	18	21.328	22.900	0.1875	A572-65	1.000
7	89.71 - 84.71	5		18	21.659	22.913	0.3125	A572-65	1.000
8	84.71 - 79.71	5		18	22.913	24.166	0.3125	A572-65	1.000
9	79.71 - 74.71	5		18	24.166	25.419	0.3125	A572-65	1.000
10	74.71 - 69.71	5		18	25.419	26.672	0.3125	A572-65	1.000
11	69.71 - 64.71	5		18	26.672	27.926	0.3125	A572-65	1.000
12	64.71 - 62.83	1.88		18	27.926	28.397	0.3125	A572-65	1.000
13	62.83 - 62.58	0.25		18	28.397	28.459	0.7375	A572-65	0.931
14	62.58 - 57.58	5		18	28.459	29.713	0.7125	A572-65	0.940
15	57.58 - 52.58	5		18	29.713	30.966	0.7	A572-65	0.935
16	52.58 - 47.58	5		18	30.966	32.219	0.675	A572-65	0.949
17	47.58 - 47.38	4.95	4.75	18	32.219	33.460	0.675	A572-65	0.948
18	47.38 - 42.38	5		18	31.644	32.896	0.675	A572-65	0.939
19	42.38 - 37.38	5		18	32.896	34.147	0.65	A572-65	0.956
20	37.38 - 32.38	5		18	34.147	35.398	0.6375	A572-65	0.957
21	32.38 - 31.75	0.63		18	35.398	35.555	0.6375	A572-65	0.955
22	31.75 - 31.5	0.25		18	35.555	35.618	0.7375	A572-65	0.949
23	31.5 - 26.5	5		18	35.618	36.869	0.725	A572-65	0.947
24	26.5 - 21.5	5		18	36.869	38.120	0.7125	A572-65	0.946
25	21.5 - 16.5	5		18	38.120	39.371	0.6875	A572-65	0.962
26	16.5 - 11.5	5		18	39.371	40.622	0.675	A572-65	0.964
27	11.5 - 6.5	5		18	40.622	41.874	0.6625	A572-65	0.966
28	6.5 - 1.5	5		18	41.874	43.125	0.65	A572-65	0.970
29	1.5 - 0	1.5		18	43.125	43.500	0.65	A572-65	0.965

## TNX Section Forces

Increment (ft):		TNX Output				
	5	Section Height (ft)		$P_u$ (K)	$M_{ux}$ (kip-ft)	$V_u$ (K)
1		117.5 - 112.5	3.86	52.49	7.87	
2		112.5 - 107.5	4.13	92.42	8.11	
3		107.5 - 102.5	4.43	133.60	8.37	
4		102.5 - 97.5	9.37	200.67	13.12	
5		97.5 - 92.5	15.70	271.83	19.37	
6		92.5 - 89.71	16.02	325.98	19.49	
7		89.71 - 84.71	16.88	424.19	19.88	
8		84.71 - 79.71	17.65	524.08	20.13	
9		79.71 - 74.71	18.45	625.23	20.38	
10		74.71 - 69.71	19.36	727.55	20.67	
11		69.71 - 64.71	20.22	831.38	20.91	
12		64.71 - 62.83	20.54	870.73	21.02	
13		62.83 - 62.58	20.64	875.98	21.01	
14		62.58 - 57.58	22.09	981.81	21.36	
15		57.58 - 52.58	23.58	1089.37	21.70	
16		52.58 - 47.58	25.10	1198.61	22.04	
17		47.58 - 47.38	25.17	1203.02	22.05	
18		47.38 - 42.38	28.04	1314.27	22.46	
19		42.38 - 37.38	29.71	1427.35	22.79	
20		37.38 - 32.38	31.42	1542.00	23.10	
21		32.38 - 31.75	31.65	1556.55	23.13	
22		31.75 - 31.5	31.75	1562.34	23.15	
23		31.5 - 26.5	33.80	1678.90	23.48	
24		26.5 - 21.5	35.81	1797.01	23.78	
25		21.5 - 16.5	37.84	1916.61	24.08	
26		16.5 - 11.5	39.91	2037.63	24.35	
27		11.5 - 6.5	41.93	2159.90	24.63	
28		6.5 - 1.5	44.05	2284.04	25.10	
29		1.5 - 0	44.69	2321.77	25.19	

# Analysis Results

Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
117.5 - 112.5	Pole	TP16.266x15x0.1875	Pole	22.2%	Pass
112.5 - 107.5	Pole	TP17.531x16.266x0.1875	Pole	33.1%	Pass
107.5 - 102.5	Pole	TP18.797x17.531x0.1875	Pole	41.8%	Pass
102.5 - 97.5	Pole	TP20.062x18.797x0.1875	Pole	56.5%	Pass
97.5 - 92.5	Pole	TP21.328x20.062x0.1875	Pole	69.5%	Pass
92.5 - 89.71	Pole	TP22.9x21.328x0.1875	Pole	78.4%	Pass
89.71 - 84.71	Pole	TP22.913x21.659x0.3125	Pole	53.9%	Pass
84.71 - 79.71	Pole	TP24.166x22.913x0.3125	Pole	59.6%	Pass
79.71 - 74.71	Pole	TP25.419x24.166x0.3125	Pole	64.0%	Pass
74.71 - 69.71	Pole	TP26.672x25.419x0.3125	Pole	67.4%	Pass
69.71 - 64.71	Pole	TP27.926x26.672x0.3125	Pole	70.1%	Pass
64.71 - 62.83	Pole	TP28.397x27.926x0.3125	Pole	70.9%	Pass
62.83 - 62.58	Pole + Reinf.	TP28.459x28.397x0.7375	Reinf. 2 Tension Rupture	48.4%	Pass
62.58 - 57.58	Pole + Reinf.	TP29.713x28.459x0.7125	Reinf. 2 Tension Rupture	50.9%	Pass
57.58 - 52.58	Pole + Reinf.	TP30.966x29.713x0.7	Reinf. 2 Tension Rupture	53.2%	Pass
52.58 - 47.58	Pole + Reinf.	TP32.219x30.966x0.675	Reinf. 2 Tension Rupture	55.2%	Pass
47.58 - 47.38	Pole + Reinf.	TP33.46x32.219x0.675	Reinf. 2 Tension Rupture	55.3%	Pass
47.38 - 42.38	Pole + Reinf.	TP32.896x31.644x0.675	Reinf. 2 Tension Rupture	58.8%	Pass
42.38 - 37.38	Pole + Reinf.	TP34.147x32.896x0.65	Reinf. 2 Tension Rupture	60.4%	Pass
37.38 - 32.38	Pole + Reinf.	TP35.398x34.147x0.6375	Reinf. 2 Tension Rupture	61.8%	Pass
32.38 - 31.75	Pole + Reinf.	TP35.555x35.398x0.6375	Reinf. 2 Tension Rupture	62.0%	Pass
31.75 - 31.5	Pole + Reinf.	TP35.618x35.555x0.7375	Reinf. 1 Bolt Shear	52.9%	Pass
31.5 - 26.5	Pole + Reinf.	TP36.869x35.618x0.725	Reinf. 1 Compression	52.0%	Pass
26.5 - 21.5	Pole + Reinf.	TP38.12x36.869x0.7125	Reinf. 1 Compression	53.1%	Pass
21.5 - 16.5	Pole + Reinf.	TP39.371x38.12x0.6875	Reinf. 1 Compression	54.1%	Pass
16.5 - 11.5	Pole + Reinf.	TP40.622x39.371x0.675	Reinf. 1 Compression	54.9%	Pass
11.5 - 6.5	Pole + Reinf.	TP41.874x40.622x0.6625	Reinf. 1 Compression	55.7%	Pass
6.5 - 1.5	Pole + Reinf.	TP43.125x41.874x0.65	Reinf. 1 Compression	56.4%	Pass
1.5 - 0	Pole + Reinf.	TP43.5x43.125x0.65	Reinf. 1 Compression	56.6%	Pass
				Summary	
			Pole	78.4%	Pass
			Reinforcement	62.0%	Pass
			Overall	78.4%	Pass

## Additional Calculations

Section Elevation (ft)	Moment of Inertia (in <sup>4</sup> )			Area (in <sup>2</sup> )			% Capacity*		
	Pole	Reinf.	Total	Pole	Reinf.	Total	Pole	R1	R2
117.5 - 112.5	312	n/a	312	9.57	n/a	9.57	22.2%		
112.5 - 107.5	392	n/a	392	10.32	n/a	10.32	33.1%		
107.5 - 102.5	484	n/a	484	11.07	n/a	11.07	41.8%		
102.5 - 97.5	590	n/a	590	11.83	n/a	11.83	56.5%		
97.5 - 92.5	710	n/a	710	12.58	n/a	12.58	69.5%		
92.5 - 89.71	784	n/a	784	13.00	n/a	13.00	78.4%		
89.71 - 84.71	1446	n/a	1446	22.42	n/a	22.42	53.9%		
84.71 - 79.71	1700	n/a	1700	23.66	n/a	23.66	59.6%		
79.71 - 74.71	1983	n/a	1983	24.90	n/a	24.90	64.0%		
74.71 - 69.71	2294	n/a	2294	26.14	n/a	26.14	67.4%		
69.71 - 64.71	2638	n/a	2638	27.39	n/a	27.39	70.1%		
64.71 - 62.83	2775	n/a	2775	27.86	n/a	27.86	70.9%		
62.83 - 62.58	2793	3539	6332	27.92	32.50	60.42	31.4%		48.4%
62.58 - 57.58	3183	3838	7022	29.16	32.50	61.66	33.1%		50.9%
57.58 - 52.58	3608	4150	7758	30.40	32.50	62.90	34.9%		53.2%
52.58 - 47.58	4069	4475	8544	31.65	32.50	64.15	36.7%		55.2%
47.58 - 47.38	4088	4488	8576	31.70	32.50	64.20	36.7%		55.3%
47.38 - 42.38	4333	4655	8988	32.32	32.50	64.82	39.2%		58.8%
42.38 - 37.38	4852	4998	9849	33.56	32.50	66.06	40.8%		60.4%
37.38 - 32.38	5410	5353	10763	34.80	32.50	67.30	42.2%		61.8%
32.38 - 31.75	5483	5398	10882	34.96	32.50	67.46	42.4%		62.0%
31.75 - 31.5	5513	7138	12650	35.02	42.50	77.52	36.7%	52.9%	
31.5 - 26.5	6120	7621	13741	36.26	42.50	78.76	38.0%	52.0%	
26.5 - 21.5	6770	8121	14890	37.50	42.50	80.00	39.2%	53.1%	
21.5 - 16.5	7464	8636	16101	38.74	42.50	81.24	40.4%	54.1%	
16.5 - 11.5	8205	9168	17373	39.98	42.50	82.48	41.5%	54.9%	
11.5 - 6.5	8993	9716	18709	41.22	42.50	83.72	42.6%	55.7%	
6.5 - 1.5	9830	10280	20110	42.46	42.50	84.96	43.7%	56.4%	
1.5 - 0	10090	10452	20543	42.84	42.50	85.34	44.0%	56.6%	

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

# Monopole Base Plate Connection

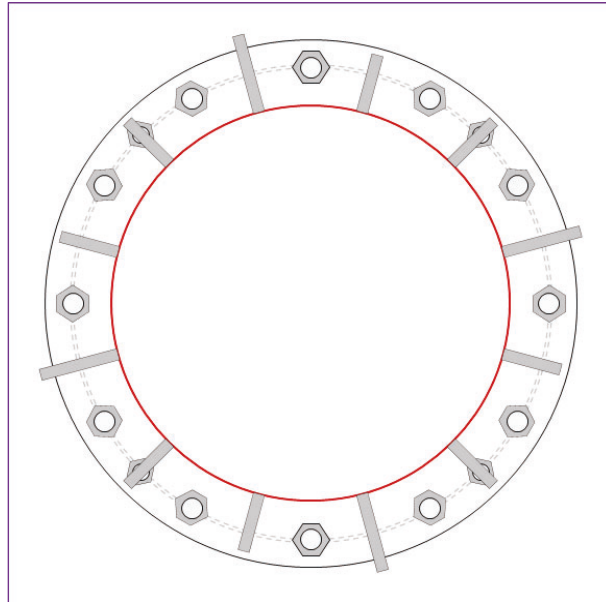


Site Info	
BU #	876352
Site Name	RICHARD WALL
Order #	654587 REV. 0

Analysis Considerations	
TIA-222 Revision	H
Grout Considered:	See Custom Sheet
$I_{ar}$ (in)	See Custom Sheet

Applied Loads	
Moment (kip-ft)	2321.77
Axial Force (kips)	44.69
Shear Force (kips)	25.19

\*TIA-222-H Section 15.5 Applied



## Connection Properties Analysis Results

### Anchor Rod Data

GROUP 1: (12) 2-1/4"  $\phi$  bolts (A615-75 N;  $F_y=75$  ksi,  $F_u=100$  ksi) on 52" BC  
 GROUP 2: (4) 1-3/4"  $\phi$  bolts (A193 Gr. B7 N;  $F_y=105$  ksi,  $F_u=125$  ksi) on 52.5" BC

### Base Plate Data

58" OD x 1.75" Plate (A871 GR60;  $F_y=60$  ksi,  $F_u=75$  ksi)

### Stiffener Data

Group 1: (8) 20"H x 6.5"W x 1.25"T, Notch: 0.75"  
 plate:  $F_y=65$  ksi ; weld:  $F_y=80$  ksi  
 horiz. weld: 0.625" groove, 45° dbl bevel, 0.625" fillet  
 vert. weld: 0.375" fillet

Group 2: (4) 30"H x 8.75"W x 1.25"T, Notch: 0.75"  
 plate:  $F_y=65$  ksi ; weld:  $F_y=80$  ksi  
 horiz. weld: 0.625" groove, 45° dbl bevel, 0.625" fillet  
 vert. weld: 0.375" fillet

### Pole Data

43.5" x 0.3125" 18-sided pole (A572-65;  $F_y=65$  ksi,  $F_u=80$  ksi)

### Anchor Rod Summary

(units of kips, kip-in)

#### GROUP 1:

$Pu\_t = 145.17$	$\phi Pn\_t = 243.75$	<b>Stress Rating</b>
$Vu = 2.1$	$\phi Vn = 149.1$	<b>56.7%</b>
$Mu = n/a$	$\phi Mn = n/a$	<b>Pass</b>

#### GROUP 2:

$Pu\_t = 87.88$	$\phi Pn\_t = 178.13$	<b>Stress Rating</b>
$Vu = 0$	$\phi Vn = 112.75$	<b>47.0%</b>
$Mu = n/a$	$\phi Mn = n/a$	<b>Pass</b>

### Base Plate Summary

Max Stress (ksi):	30.36	(Roark's Flexural)
Allowable Stress (ksi):	54	
Stress Rating:	<b>53.6%</b>	<b>Pass</b>

### Stiffener Summary

Horizontal Weld:	<b>26.1%</b>	<b>Pass</b>
Vertical Weld:	<b>32.1%</b>	<b>Pass</b>
Plate Flexure+Shear:	<b>5.2%</b>	<b>Pass</b>
Plate Tension+Shear:	<b>25.9%</b>	<b>Pass</b>
Plate Compression:	<b>27.5%</b>	<b>Pass</b>

### Pole Summary

Punching Shear:	<b>11.7%</b>	<b>Pass</b>
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# CCIplate

Elevation (ft) 0 (Base)

note: Bending interaction not considered when Grout Considered = "Yes"

Bolt Group	Resist Axial	Resist Shear	Induce Plate Bending	Grout Considered	Apply at BARB Elevation	BARB CL Elevation (ft)
1	Yes	Yes	Yes	No	No	
2	No	No	No	No	No	

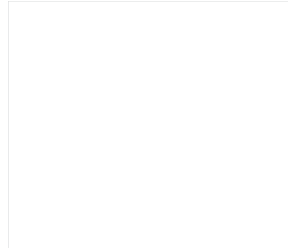
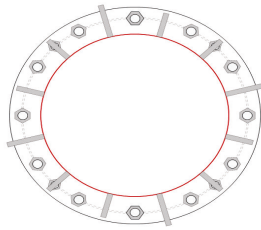
## Custom Bolt Connection

Bolt	Bolt Group ID	Location (deg.)	Diameter (in)	Material	Bolt Circle (in)	Eta Factor, n:	$l_u$ (in):	Thread Type	Area Override, in <sup>2</sup>	Tension Only
1	1	0	2.25	A615-75	52	0.5	1.25	N-Included		No
2	1	30	2.25	A615-75	52	0.5	1.25	N-Included		No
3	1	60	2.25	A615-75	52	0.5	1.25	N-Included		No
4	1	90	2.25	A615-75	52	0.5	1.25	N-Included		No
5	1	120	2.25	A615-75	52	0.5	1.25	N-Included		No
6	1	150	2.25	A615-75	52	0.5	1.25	N-Included		No
7	1	180	2.25	A615-75	52	0.5	1.25	N-Included		No
8	1	210	2.25	A615-75	52	0.5	1.25	N-Included		No
9	1	240	2.25	A615-75	52	0.5	1.25	N-Included		No
10	1	270	2.25	A615-75	52	0.5	1.25	N-Included		No
11	1	300	2.25	A615-75	52	0.5	1.25	N-Included		No
12	1	330	2.25	A615-75	52	0.5	1.25	N-Included		No
13	2	45	1.75	A193 Gr. B7	52.5	0.5	1.75	N-Included		No
14	2	135	1.75	A193 Gr. B7	52.5	0.5	1.75	N-Included		No
15	2	225	1.75	A193 Gr. B7	52.5	0.5	1.75	N-Included		No
16	2	315	1.75	A193 Gr. B7	52.5	0.5	1.75	N-Included		No

## Custom Stiffener Connection

Stiffener	Stiffener Group ID	Location (deg.)	Width (in)	Height (in)	Thickness (in)	H. Notch (in)	V. Notch (in)	Grade (ksi)	Weld Type	Groove Depth (in)	Groove Angle (deg.)	H. Fillet Weld Size (in)	V. Fillet Weld Size (in)	Weld Strength (ksi)
1	2	15	8.75	30	1.25	0.75	0.75	65	Both	0.625	45	0.625	0.375	80
2	1	75	6.5	20	1.25	0.75	0.75	65	Both	0.625	45	0.625	0.375	80
3	2	105	8.75	30	1.25	0.75	0.75	65	Both	0.625	45	0.625	0.375	80
4	1	165	6.5	20	1.25	0.75	0.75	65	Both	0.625	45	0.625	0.375	80
5	2	195	8.75	30	1.25	0.75	0.75	65	Both	0.625	45	0.625	0.375	80
6	1	255	6.5	20	1.25	0.75	0.75	65	Both	0.625	45	0.625	0.375	80
7	2	285	8.75	30	1.25	0.75	0.75	65	Both	0.625	45	0.625	0.375	80
8	1	345	6.5	20	1.25	0.75	0.75	65	Both	0.625	45	0.625	0.375	80
9	1	45	6.5	20	1.25	0.75	0.75	65	Both	0.625	45	0.625	0.375	80
10	1	135	6.5	20	1.25	0.75	0.75	65	Both	0.625	45	0.625	0.375	80
11	1	225	6.5	20	1.25	0.75	0.75	65	Both	0.625	45	0.625	0.375	80
12	1	315	6.5	20	1.25	0.75	0.75	65	Both	0.625	45	0.625	0.375	80

## Plot Graphic





**Drilled Pier Foundation**

BU # :	876352
Site Name:	RICHARD WALL
Order Number:	654587 Rev 0
TIA-222 Revison:	H
Tower Type:	Monopole



Applied Loads		
	Comp.	Uplift
Moment (kip-ft)	2321.78	
Axial Force (kips)	44.7	
Shear Force (kips)	25.17	

Material Properties		Rebar 2, Fy Override (ksi)
Concrete Strength, f <sub>c</sub> :	3 ksi	60
Rebar Strength, F <sub>y</sub> :	60 ksi	
Tie Yield Strength, F <sub>y</sub> :	40 ksi	

Pier Design Data	
Depth	22 ft
Ext. Above Grade	1 ft
Pier Section 1	
From 1' above grade to 22' below grade	
Pier Diameter	6 ft
Rebar Quantity	14
Rebar Size	11
Clear Cover to Ties	3 in
Tie Size	5
Tie Spacing	in
Rebar Quantity	4
Rebar Size	1.75"
Rebar Cage Diameter	52.5 in
Pier Section 2	
From 1' below grade to 1' below grade	
Pier Diameter	6 ft
Rebar Quantity	14
Rebar Size	11
Clear Cover to Ties	3 in
Tie Size	5
Tie Spacing	in

Rebar & Pier Options

Embedded Pole Inputs

Belled Pier Inputs

**Analysis Results**

Soil Lateral Check	Compression	Uplift
D <sub>req</sub> (ft from TOC)	6.35	-
Soil Safety Factor	2.56	-
Max Moment (kip-ft)	2479.76	-
Rating*	49.5%	-

Soil Vertical Check	Compression	Uplift
Skin Friction (kips)	398.27	-
End Bearing (kips)	254.47	-
Weight of Concrete (kips)	117.06	-
Total Capacity (kips)	652.74	-
Axial (kips)	161.76	-
Rating*	23.6%	-

Reinforced Concrete Flexure	Compression	Uplift
Critical Depth (ft from TOC)	6.26	-
Critical Moment (kip-ft)	2479.70	-
Critical Moment Capacity	4015.49	-
Rating*	58.8%	-

Reinforced Concrete Shear	Compression	Uplift
Critical Depth (ft from TOC)	18.58	-
Critical Shear (kip)	250.55	-
Critical Shear Capacity	426.38	-
Rating*	56.0%	-

Shear-Friction Methodology is Applied

Structural Foundation Rating*	58.8%
Soil Interaction Rating*	49.5%

\*Rating per TIA-222-H Section 15.5

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

[Go to Soil Calculations](#)

Soil Profile			
Groundwater Depth	N/A	# of Layers	4

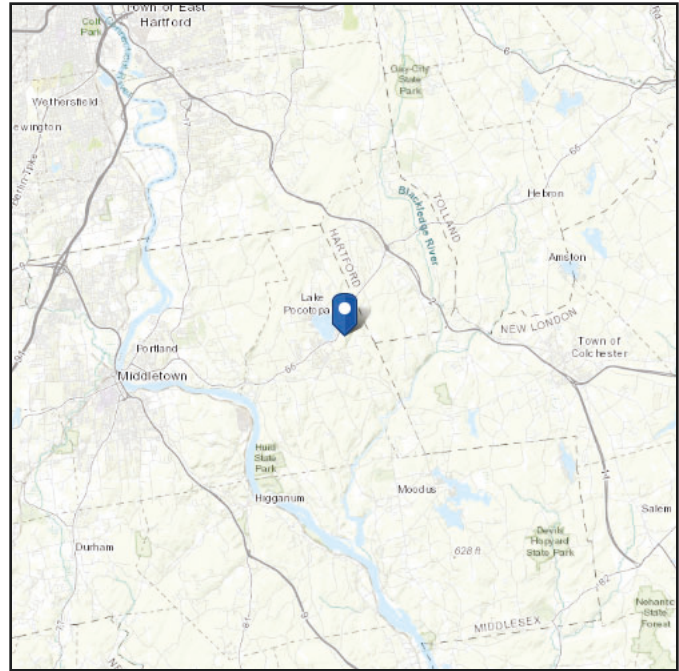
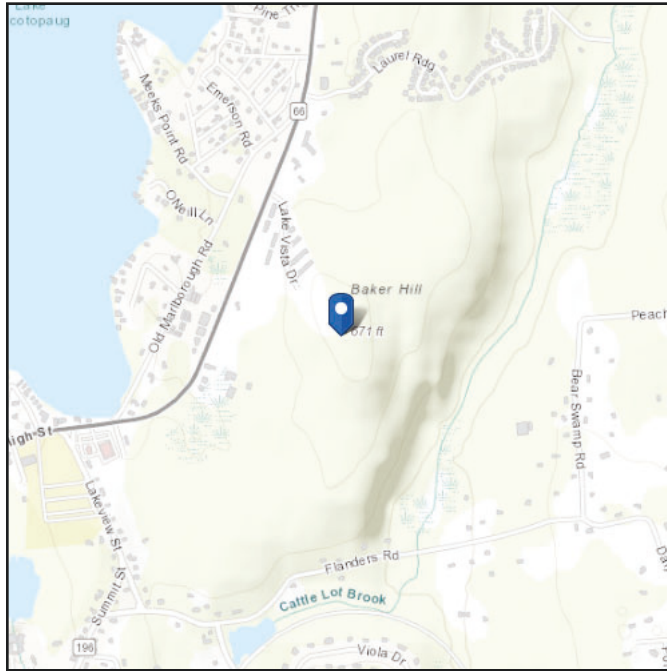
Layer	Top (ft)	Bottom (ft)	Thickness (ft)	γ <sub>soil</sub> (pcf)	γ <sub>concrete</sub> (pcf)	Cohesion (ksf)	Angle of Friction (degrees)	Calculated Ultimate Skin Friction Comp (ksf)	Calculated Ultimate Skin Friction Uplift (ksf)	Ultimate Skin Friction Comp Override (ksf)	Ultimate Skin Friction Uplift Override (ksf)	Ult. Gross Bearing Capacity (ksf)	SPT Blow Count	Soil Type
1	0	3.33	3.33	120	150	0	0	0.000	0.000					Cohesionless
2	3.33	6.5	3.17	120	150	0	33	0.708	0.708				30	Cohesionless
3	6.5	11	4.5	120	150	0	33	1.156	1.156				58	Cohesionless
4	11	22	11	120	150	0	33	1.884	1.884				42	Cohesionless

# ASCE Hazards Report

**Address:**  
No Address at This Location

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

**Latitude:** 41.587278  
**Longitude:** -72.488778  
**Elevation:** 665.7284226287682 ft (NAVD 88)



## Wind

### Results:

Wind Speed	120 Vmph
10-year MRI	75 Vmph
25-year MRI	84 Vmph
50-year MRI	92 Vmph
100-year MRI	99 Vmph

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

Date Accessed: Fri Jan 12 2024

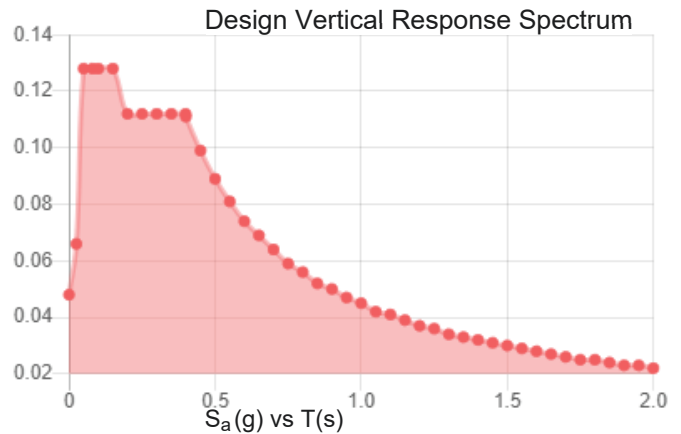
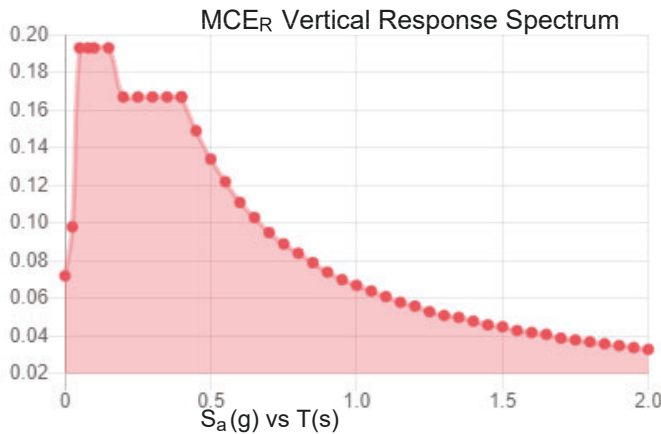
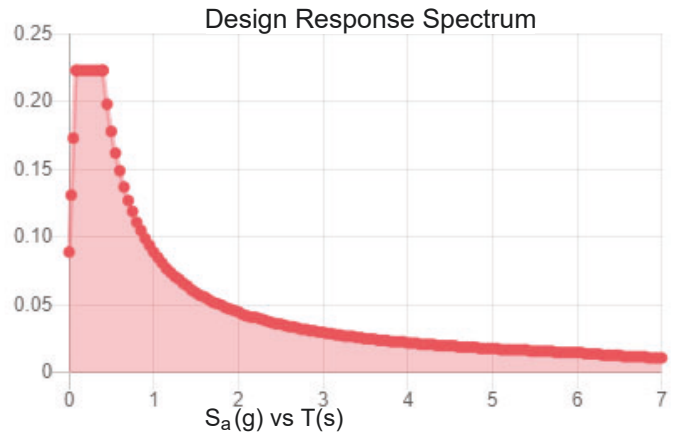
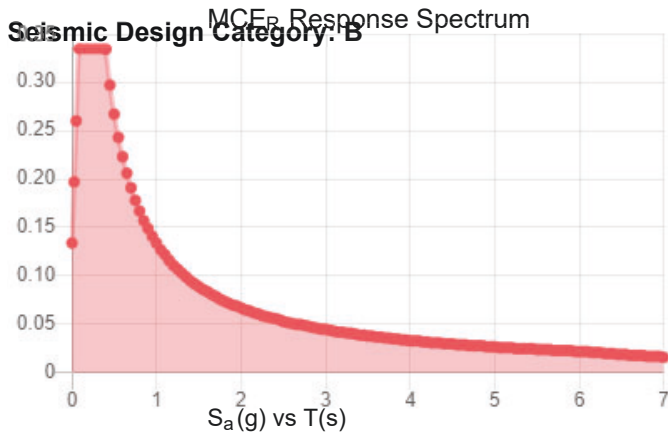
Value provided is 3-second gust wind speeds at 33 ft above ground for Exposure C Category, based on linear interpolation between contours. Wind speeds are interpolated in accordance with the 7-16 Standard. Wind speeds correspond to approximately a 7% probability of exceedance in 50 years (annual exceedance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

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

**Site Soil Class:** D - Default (see Section 11.4.3)

**Results:**

$S_s$ :	0.209	$S_{D1}$ :	0.089
$S_1$ :	0.056	$T_L$ :	6
$F_a$ :	1.6	PGA :	0.116
$F_v$ :	2.4	PGA <sub>M</sub> :	0.182
$S_{MS}$ :	0.335	$F_{PGA}$ :	1.567
$S_{M1}$ :	0.134	$I_e$ :	1
$S_{DS}$ :	0.223	$C_v$ :	0.719



**Data Accessed:** Fri Jan 12 2024

**Date Source:**

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

## Ice

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**Results:**

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

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

**Date Accessed:** Fri Jan 12 2024

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

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

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

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In using this Tool, you expressly assume all risks associated with your use. Under no circumstances shall ASCE or its officers, directors, employees, members, affiliates, or agents be liable to you or any other person for any direct, indirect, special, incidental, or consequential damages arising from or related to your use of, or reliance on, the Tool or any information obtained therein. To the fullest extent permitted by law, you agree to release and hold harmless ASCE from any and all liability of any nature arising out of or resulting from any use of data provided by the ASCE Hazard Tool.

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

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## Antenna Mount Analysis Report and PMI Requirements

Mount ReAnalysis

SMART Tool Project #: 10206802  
Colliers Engineering & Design CT, P.C. Project #: 23777104

July 21, 2023

### Site Information

Site ID: 5000242940-VZW / EAST HAMPTON CT  
Site Name: EAST HAMPTON CT  
Carrier Name: Verizon Wireless  
Address: 94 East High Street  
East Hampton, Connecticut 06424  
Middlesex County  
Latitude: 41.587278°  
Longitude: -72.488778°

### Structure Information

Tower Type: Monopole  
Mount Type: 14.08-Ft Platform

FUZE ID # 17123754

### Analysis Results

Platform: 47.1% Pass\*

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

### \*\*\*Contractor PMI Requirements:

Included at the end of this MA report  
Available & Submitted via portal at <https://pmi.vzwsmart.com>

For additional questions and support, please reach out to:  
[pmisupport@colliersengineering.com](mailto:pmisupport@colliersengineering.com)

Report Prepared By: Prasanna Dhakal



**Executive Summary:**

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

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

**Sources of Information:**

Document Type	Remarks
Radio Frequency Data Sheet (RFDS)	Verizon RFDS, Site ID: 674884, dated February 16, 2021
Mount Mapping Report	Roaming Networks Inc., Site ID: PSLC:469377, dated April 4, 2021
Previous Post-Mod Antenna Mount Analysis Report	Maser Consulting Connecticut, Project #: 21777315, dated June 24, 2021
Previous Mount Modification Drawing	Maser Consulting Connecticut, Project #: 21777315, dated June 24, 2021
Confirmation of fitment of Mod Kit	Email Correspondence with Gregory Drake dated July 7, 2023
Final Loading Configuration	Filter Add Scope Provided by Verizon Wireless

**Analysis Criteria:**

Codes and Standards:	ANSI/TIA-222-H 2022 Connecticut State Building Code (CSBC), Effective October 1, 2022
Wind Parameters:	Basic Wind Speed (Ultimate 3-sec. Gust), $V_{ULT}$ : 125 mph Ice Wind Speed (3-sec. Gust): 50 mph Design Ice Thickness: 1.00 in Risk Category: II Exposure Category: C Topographic Category: 1 Topographic Feature Considered: N/A Topographic Method: N/A Ground Elevation Factor, $K_e$ : 0.976
Seismic Parameters:	$S_s$ : 0.210 g $S_1$ : 0.056 g
Maintenance Parameters:	Wind Speed (3-sec. Gust): 30 mph Maintenance Load, $L_v$ : 250 lbs. Maintenance Load, $L_m$ : 500 lbs.
Analysis Software:	RISA-3D (V17)

**Final Loading Configuration:**

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

Mount Elevation (ft)	Equipment Elevation (ft)	Quantity	Manufacturer	Model	Status
106.0	108.0	6	Andrew	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	
		4	KAelus	KA-6030	
		3	Andrew	LNx-6514DS-A1M	Retained
		2	Raycap	RHSDC-3315-PF-48	

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

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

**Standard Conditions:**

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

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

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

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



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

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

**Analysis Results:**

Component	Utilization %	Pass/Fail
<i>Inner Standoff</i>	29.6%	<i>Pass</i>
<i>Outer Standoff</i>	13.4%	<i>Pass</i>
<i>Grating Angle</i>	5.3%	<i>Pass</i>
<i>Cross Member</i>	26.3%	<i>Pass</i>
<i>Face Horizontal</i>	47.1%	<i>Pass</i>
<i>Mount Pipe</i>	46.4%	<i>Pass</i>
<i>Support Rail</i>	29.7%	<i>Pass</i>
<i>Support Rail Corner Angle</i>	37.2%	<i>Pass</i>
<i>V-Bracing Kit</i>	10.5%	<i>Pass</i>
<i>Mount Connection</i>	17.2%	<i>Pass</i>

<b>Structure Rating – (Controlling Utilization of all Components)</b>	<b>47.1%</b>
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**Mount Steel (EPA)a per ANSI/TIA-222-H Section 2.6.11.2:**

Ice Thickness (In)	Mount Pipes Excluded		Mount Pipes Included	
	Front (EPA)a (Sq. Ft.)	Side (EPA)a (Sq. Ft.)	Front (EPA)a (Sq. Ft.)	Side (EPA)a (Sq. Ft.)
0	34.3	34.3	47.1	47.1
0.5	42.9	42.9	61.1	61.1
1	51.1	51.1	74.7	74.7

Notes:

- (EPA)a values listed above may be used in the absence of more precise information
- (EPA)a values in the table above include 3 sectors.
- Ka factors included in (EPA)a calculations

## **Requirements:**

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

1. Contractor shall verify modifications detailed in Mount Modification Drawings by Maser Consulting Connecticut, Project #: 21777315A, dated June 24, 2021, have been installed prior to installation of equipment. **Escalate any discrepancies to EOR immediately as it may render the results of this analysis invalid and require additional modifications.**

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

## **Attachments:**

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

# Mount Desktop – Post Modification Inspection (PMI) Report Requirements

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

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

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

For additional questions and support, please reach out to [pmisupport@colliersengineering.com](mailto:pmisupport@colliersengineering.com)

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MDG #: 5000242940

SMART Project #: 10206802

Fuze Project ID: 17123754

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

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

### **Base Requirements:**

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

### **Photo Requirements:**

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

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

**Antenna & equipment placement and Geometry Confirmation:**

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

OR

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

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

**Issue:**

1. Contractor shall verify modifications detailed in Mount Modification Drawings by Maser Consulting Connecticut, Project #: 21777315A, dated June 24, 2021, have been installed prior to installation of equipment. **Escalate any discrepancies to EOR immediately as it may render the results of this analysis invalid and require additional modifications.**

**Response:**

**Special Instruction Confirmation:**

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

OR

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

**Comments:**

--

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

Yes       No

**Contractor certifies no new damage created during the current installation:**

Yes       No

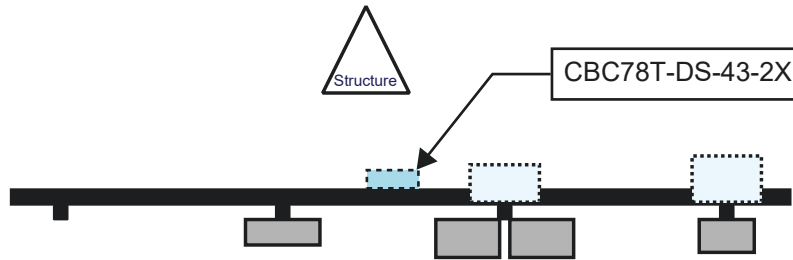
**Contractor to certify the condition of the safety climb and verify no damage when leaving the site:**

Safety Climb in Good Condition       Safety Climb Damaged

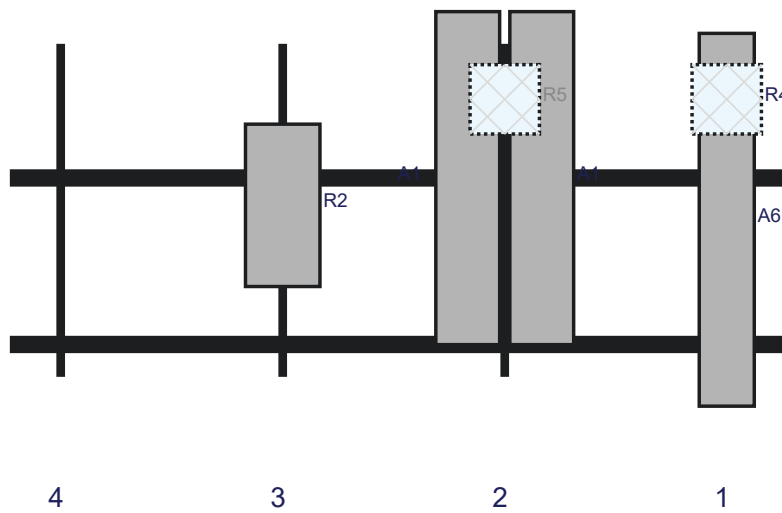
**Certifying Individual:**

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

Plan View

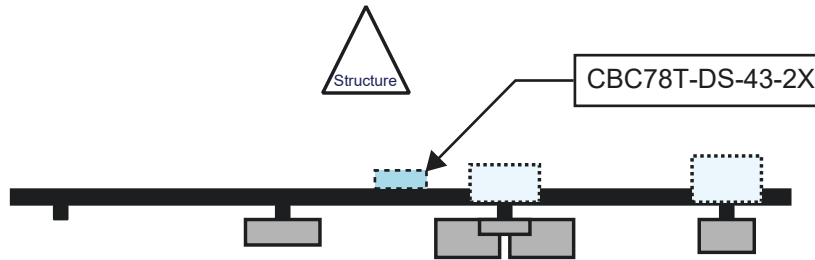


Front View - Looking at Structure

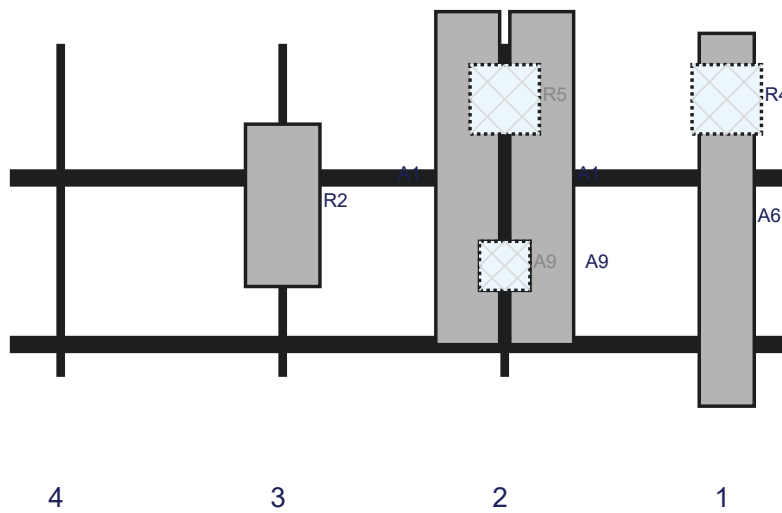


Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A6	LNx-6514DS-A1M	80.6	11.9	155	1	a	Front	38.04	0	Retained	04/04/2021
R4	B2/B66A RRR-BR049	15	15	155	1	a	Behind	12	0	Added	
A1	JAHH-65B-R3B	72	13.8	107	2	a	Front	29.04	8	Added	
A1	JAHH-65B-R3B	72	13.8	107	2	b	Front	29.04	-8	Added	
R5	B5/B13 RRR-BR04C	15	15	107	2	a	Behind	12	0	Added	
R2	MT6407-77A	35.1	16.1	59	3	a	Front	34.92	0	Added	
M46	CBC78T-DS-43-2X	6.4	6.9		Member					Added	
OVP	RHSDC-3315-PF-48	25.7	17.3		Member					Retained	04/04/2021

Plan View

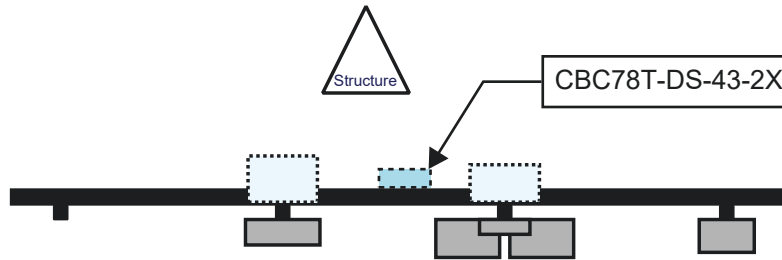


Front View - Looking at Structure

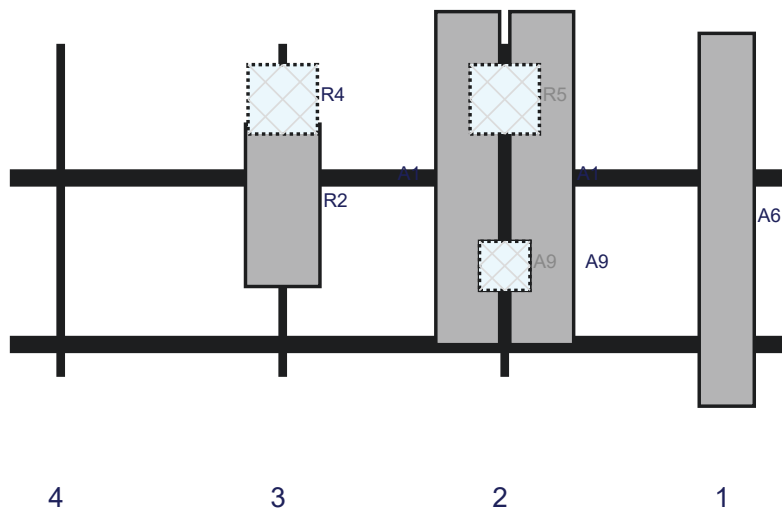


Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A6	LNx-6514DS-A1M	80.6	11.9	155	1	a	Front	38.04	0	Retained	04/04/2021
R4	B2/B66A RRR-BR049	15	15	155	1	a	Behind	12	0	Added	
A1	JAHH-65B-R3B	72	13.8	107	2	a	Front	29.04	8	Added	
A1	JAHH-65B-R3B	72	13.8	107	2	b	Front	29.04	-8	Added	
R5	B5/B13 RRR-BR04C	15	15	107	2	a	Behind	12	0	Added	
A9	KA-6030	10.6	10.9	107	2	a	Front	48	0	Added	
A9	KA-6030	10.6	10.9	107	2	b	Behind	48	0	Added	
R2	MT6407-77A	35.1	16.1	59	3	a	Front	34.92	0	Added	
M56A	CBC78T-DS-43-2X	6.4	6.9			Member				Added	

Plan View

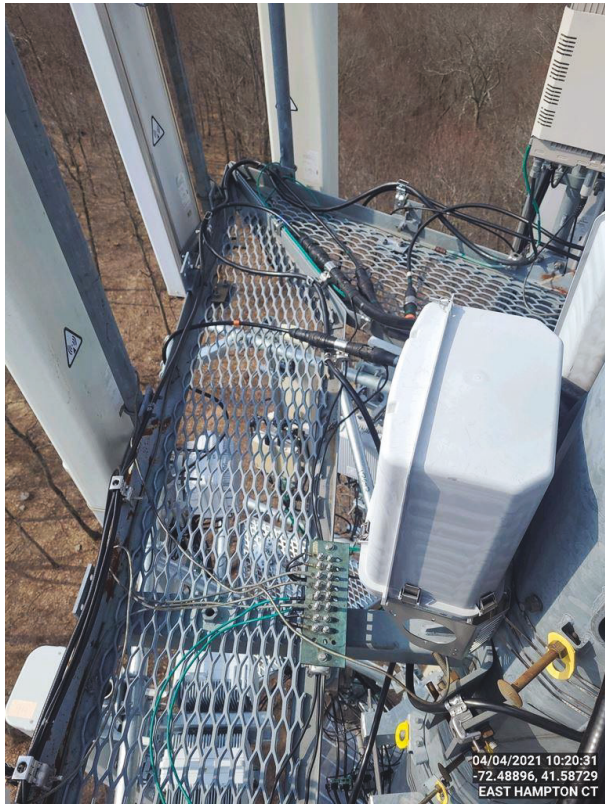
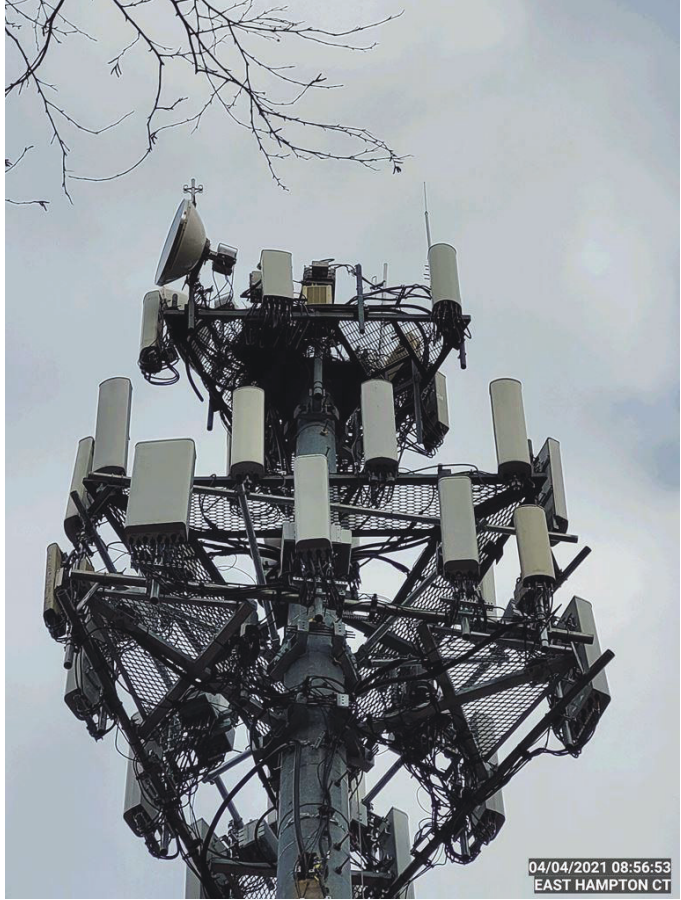


Front View - Looking at Structure



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A6	LNx-6514DS-A1M	80.6	11.9	155	1	a	Front	38.04	0	Retained	04/04/2021
A1	JAHH-65B-R3B	72	13.8	107	2	a	Front	29.04	8	Added	
A1	JAHH-65B-R3B	72	13.8	107	2	b	Front	29.04	-8	Added	
R5	B5/B13 RRH-BR04C	15	15	107	2	a	Behind	12	0	Added	
A9	KA-6030	10.6	10.9	107	2	a	Front	48	0	Added	
A9	KA-6030	10.6	10.9	107	2	b	Behind	48	0	Added	
R2	MT6407-77A	35.1	16.1	59	3	a	Front	34.92	0	Added	
R4	B2/B66A RRH-BR049	15	15	59	3	a	Behind	12	0	Added	
M51	CBC78T-DS-43-2X	6.4	6.9			Member				Added	







Mount Azimuth (Degree) for Each Sector				Tower Leg Azimuth (Degree) for Each Sector				Sector B											
Sector A:	10.00	Deg	Leg A:		Deg	Ant <sub>1a</sub>													
Sector B:	132.00	Deg	Leg B:		Deg	Ant <sub>1b</sub>	LNX-6514DS-A1M	11.85	7.11	80.63		104.955	39.50	6.00	132.00	6			
Sector C:	240.00	Deg	Leg C:		Deg	Ant <sub>1c</sub>													
Sector D:		Deg	Leg D:		Deg	Ant <sub>2a</sub>	HBXX-6517DS-A2M	12.00	6.50	75.04		104.955	39.50	8.00	132.00	8			
Climbing Facility Information							Ant <sub>2b</sub>	B4 RRH2x60-4R	10.63	5.74	36.60		106.08	26.00	5.50		7		
Location:	10.00	Deg	Sector A				Ant <sub>2c</sub>												
Climbing Facility	Corrosion Type:		Minor corrosion observed.				Ant <sub>3a</sub>												
	Access:		Climbing path was unobstructed.				Ant <sub>3b</sub>	LNX-6514DS-A1M	11.85	7.11	80.63		104.58	39.00	8.00	132.00	4		
	Condition:		Good condition.				Ant <sub>3c</sub>												
EXISTING PLATFORM							Ant <sub>4a</sub>	HBXX-6517DS-A2M	12.00	6.50	75.04		104.913	36.00	8.00	132.00	5		
DISTANCE FROM TOP OF MAIN PLATFORM MEMBER TO LOWEST TIP OF ANT./EQUIP. OF CARRIER ABOVE. (N/A IF > 10 FT.)							Ant <sub>4b</sub>												
DISTANCE FROM TOP OF MAIN PLATFORM MEMBER TO HIGHEST TIP OF ANT./EQUIP. OF CARRIER BELOW. (N/A IF > 10 FT.)							Ant <sub>4c</sub>												
DISTANCE FROM TOP OF MAIN PLATFORM MEMBER TO LOWEST TIP OF ANT./EQUIP. OF CARRIER ABOVE. (N/A IF > 10 FT.)							Ant <sub>5a</sub>												
DISTANCE FROM TOP OF MAIN PLATFORM MEMBER TO HIGHEST TIP OF ANT./EQUIP. OF CARRIER BELOW. (N/A IF > 10 FT.)							Ant <sub>5b</sub>												
DISTANCE FROM TOP OF MAIN PLATFORM MEMBER TO LOWEST TIP OF ANT./EQUIP. OF CARRIER ABOVE. (N/A IF > 10 FT.)							Ant <sub>5c</sub>												
DISTANCE FROM TOP OF MAIN PLATFORM MEMBER TO HIGHEST TIP OF ANT./EQUIP. OF CARRIER BELOW. (N/A IF > 10 FT.)							Ant on Standoff												
DISTANCE FROM TOP OF MAIN PLATFORM MEMBER TO LOWEST TIP OF ANT./EQUIP. OF CARRIER ABOVE. (N/A IF > 10 FT.)							Ant on Standoff												
DISTANCE FROM TOP OF MAIN PLATFORM MEMBER TO HIGHEST TIP OF ANT./EQUIP. OF CARRIER BELOW. (N/A IF > 10 FT.)							Ant on Tower	RHSDS-3315-PF-48	15.73	10.30	28.93							192,193	
DISTANCE FROM TOP OF MAIN PLATFORM MEMBER TO LOWEST TIP OF ANT./EQUIP. OF CARRIER ABOVE. (N/A IF > 10 FT.)							Ant on Tower												
EXISTING SECTOR FRAME MOUNT							Sector C												
DISTANCE FROM TOP OF BOTTOM SUPPORT RAIL TO LOWEST TIP OF ANT./EQUIP. OF CARRIER ABOVE. (N/A IF > 10 FT.)							Ant <sub>1a</sub>												
DISTANCE FROM TOP OF BOTTOM SUPPORT RAIL TO HIGHEST TIP OF ANT./EQUIP. OF CARRIER BELOW. (N/A IF > 10 FT.)							Ant <sub>1b</sub>	LNX-6514DS-A1M	11.85	7.11	80.63		104.955	39.50	6.00	240.00	6		
DISTANCE FROM TOP OF BOTTOM SUPPORT RAIL TO LOWEST TIP OF ANT./EQUIP. OF CARRIER ABOVE. (N/A IF > 10 FT.)							Ant <sub>1c</sub>												
DISTANCE FROM TOP OF BOTTOM SUPPORT RAIL TO HIGHEST TIP OF ANT./EQUIP. OF CARRIER BELOW. (N/A IF > 10 FT.)							Ant <sub>2a</sub>	HBXX-6517DS-A2M	12.00	6.50	75.04		104.955	39.50	8.00	240.00	8		
DISTANCE FROM TOP OF BOTTOM SUPPORT RAIL TO LOWEST TIP OF ANT./EQUIP. OF CARRIER ABOVE. (N/A IF > 10 FT.)							Ant <sub>2b</sub>	B4 RRH2x60-4R	10.63	5.74	36.60		106.08	26.00	5.50		7		
DISTANCE FROM TOP OF BOTTOM SUPPORT RAIL TO HIGHEST TIP OF ANT./EQUIP. OF CARRIER BELOW. (N/A IF > 10 FT.)							Ant <sub>2c</sub>												
DISTANCE FROM TOP OF BOTTOM SUPPORT RAIL TO LOWEST TIP OF ANT./EQUIP. OF CARRIER ABOVE. (N/A IF > 10 FT.)							Ant <sub>3a</sub>												
DISTANCE FROM TOP OF BOTTOM SUPPORT RAIL TO HIGHEST TIP OF ANT./EQUIP. OF CARRIER BELOW. (N/A IF > 10 FT.)							Ant <sub>3b</sub>	LNX-6514DS-A1M	11.85	7.11	80.63		104.58	39.00	8.00	240.00	4		
DISTANCE FROM TOP OF BOTTOM SUPPORT RAIL TO LOWEST TIP OF ANT./EQUIP. OF CARRIER ABOVE. (N/A IF > 10 FT.)							Ant <sub>3c</sub>												
DISTANCE FROM TOP OF BOTTOM SUPPORT RAIL TO HIGHEST TIP OF ANT./EQUIP. OF CARRIER BELOW. (N/A IF > 10 FT.)							Ant <sub>4a</sub>	HBXX-6517DS-A2M	12.00	6.50	75.04		104.913	36.00	8.00	240.00	5		
DISTANCE FROM TOP OF BOTTOM SUPPORT RAIL TO LOWEST TIP OF ANT./EQUIP. OF CARRIER ABOVE. (N/A IF > 10 FT.)							Ant <sub>4b</sub>												
DISTANCE FROM TOP OF BOTTOM SUPPORT RAIL TO HIGHEST TIP OF ANT./EQUIP. OF CARRIER BELOW. (N/A IF > 10 FT.)							Ant <sub>4c</sub>												
DISTANCE FROM TOP OF BOTTOM SUPPORT RAIL TO LOWEST TIP OF ANT./EQUIP. OF CARRIER ABOVE. (N/A IF > 10 FT.)							Ant <sub>5a</sub>												
DISTANCE FROM TOP OF BOTTOM SUPPORT RAIL TO HIGHEST TIP OF ANT./EQUIP. OF CARRIER BELOW. (N/A IF > 10 FT.)							Ant <sub>5b</sub>												
DISTANCE FROM TOP OF BOTTOM SUPPORT RAIL TO LOWEST TIP OF ANT./EQUIP. OF CARRIER ABOVE. (N/A IF > 10 FT.)							Ant <sub>5c</sub>												
DISTANCE FROM TOP OF BOTTOM SUPPORT RAIL TO HIGHEST TIP OF ANT./EQUIP. OF CARRIER BELOW. (N/A IF > 10 FT.)							Ant on Standoff												
DISTANCE FROM TOP OF BOTTOM SUPPORT RAIL TO LOWEST TIP OF ANT./EQUIP. OF CARRIER ABOVE. (N/A IF > 10 FT.)							Ant on Standoff												
DISTANCE FROM TOP OF BOTTOM SUPPORT RAIL TO HIGHEST TIP OF ANT./EQUIP. OF CARRIER BELOW. (N/A IF > 10 FT.)							Ant on Tower	RHSDS-3315-PF-48	15.73	10.30	28.93							195,196	
DISTANCE FROM TOP OF BOTTOM SUPPORT RAIL TO LOWEST TIP OF ANT./EQUIP. OF CARRIER ABOVE. (N/A IF > 10 FT.)							Ant on Tower												
Sector D							Ant <sub>1a</sub>												
Sector D							Ant <sub>1b</sub>												
Sector D							Ant <sub>1c</sub>												
Sector D							Ant <sub>2a</sub>												
Sector D							Ant <sub>2b</sub>												
Sector D							Ant <sub>2c</sub>												
Sector D							Ant <sub>3a</sub>												
Sector D							Ant <sub>3b</sub>												
Sector D							Ant <sub>3c</sub>												
Sector D							Ant <sub>4a</sub>												
Sector D							Ant <sub>4b</sub>												
Sector D							Ant <sub>4c</sub>												
Sector D							Ant <sub>5a</sub>												
Sector D							Ant <sub>5b</sub>												
Sector D							Ant <sub>5c</sub>												
Sector D							Ant on Standoff												
Sector D							Ant on Standoff												
Sector D							Ant on Tower												
Sector D							Ant on Tower												

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

1	Corrosion of steel member	130
2	Cracking of bolt element	134
3	Cracking of bolt element	133
4		
5		
6		
7		
8		

**Mapping Notes**

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

**Standard Conditions**

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

**Antenna Mount Mapping Form (PATENT PENDING)**

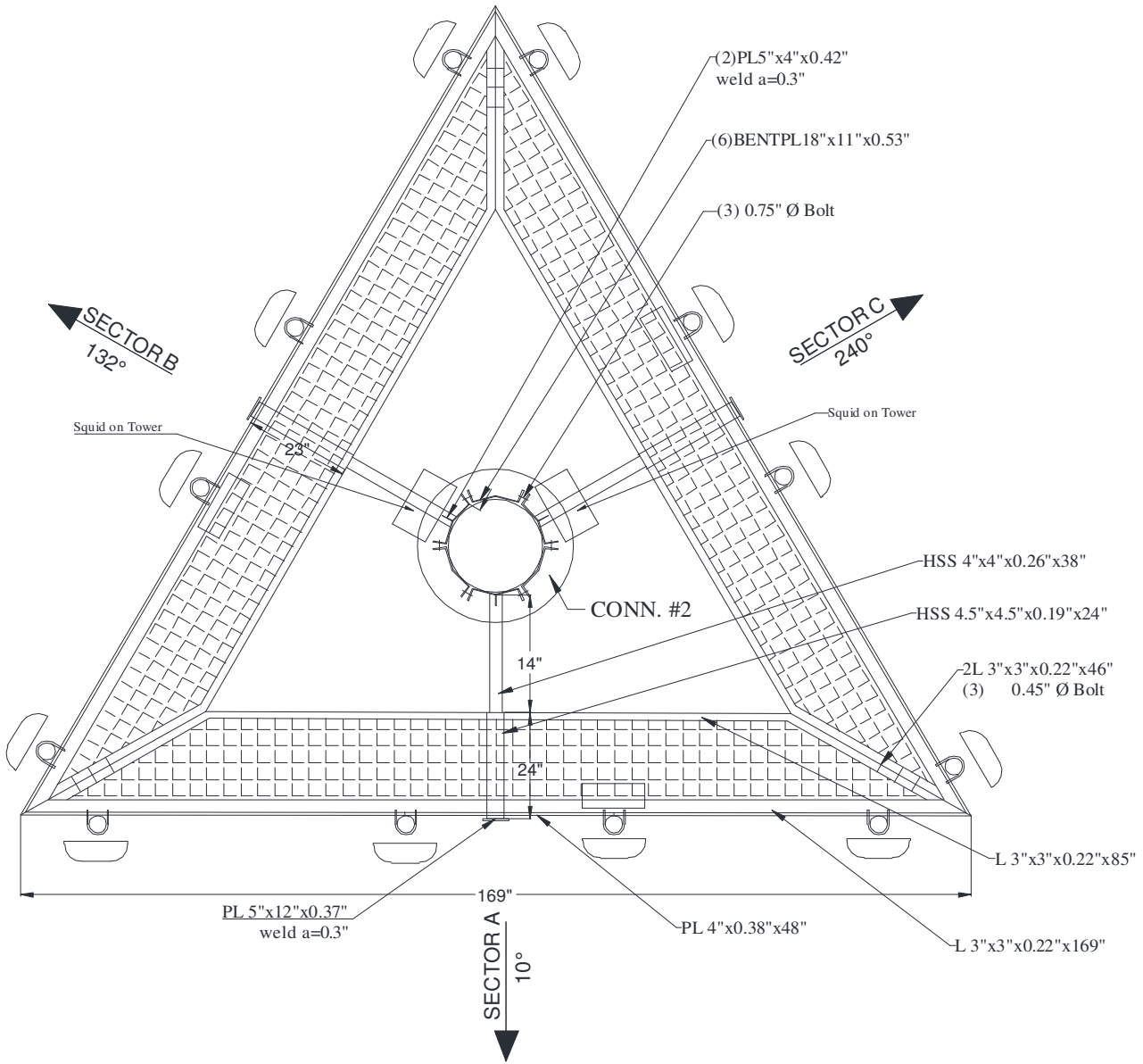
FCC #  
N/A



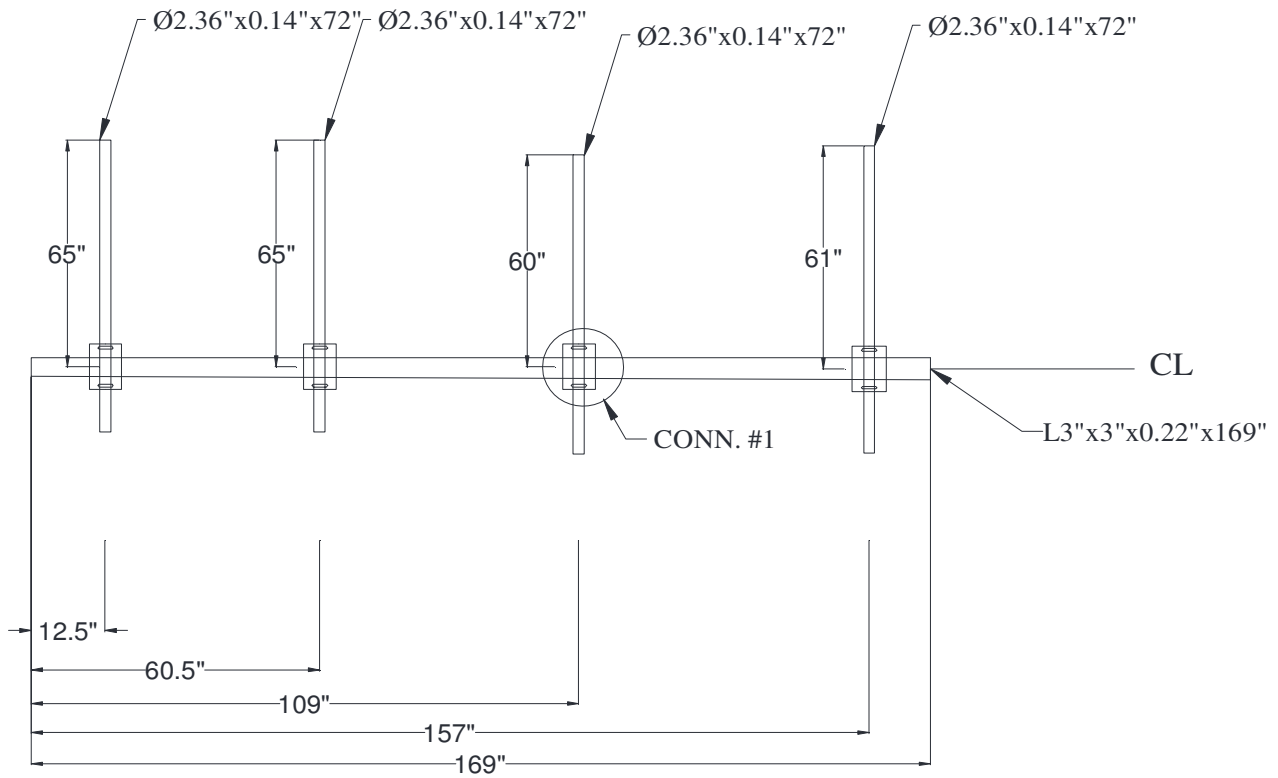
<b>Tower Owner:</b>	CCI	<b>Mapping Date:</b>	04/04/21
<b>Site Name:</b>	CCI: Richard Wall, VZW: EAST HAMPTON CT	<b>Tower Type:</b>	Monopole
<b>Site Number or ID:</b>	PSLC: 469377	<b>Tower Height (FL):</b>	N/A
<b>Mapping Contractor:</b>	Roaming Networks Inc.	<b>Mount Elevation (Ft.):</b>	102.83

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

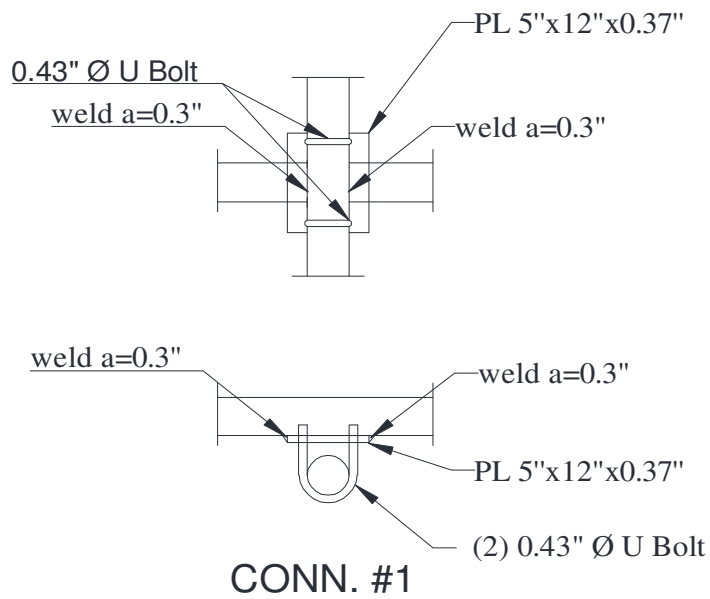
Please Insert Sketches of the Antenna Mount

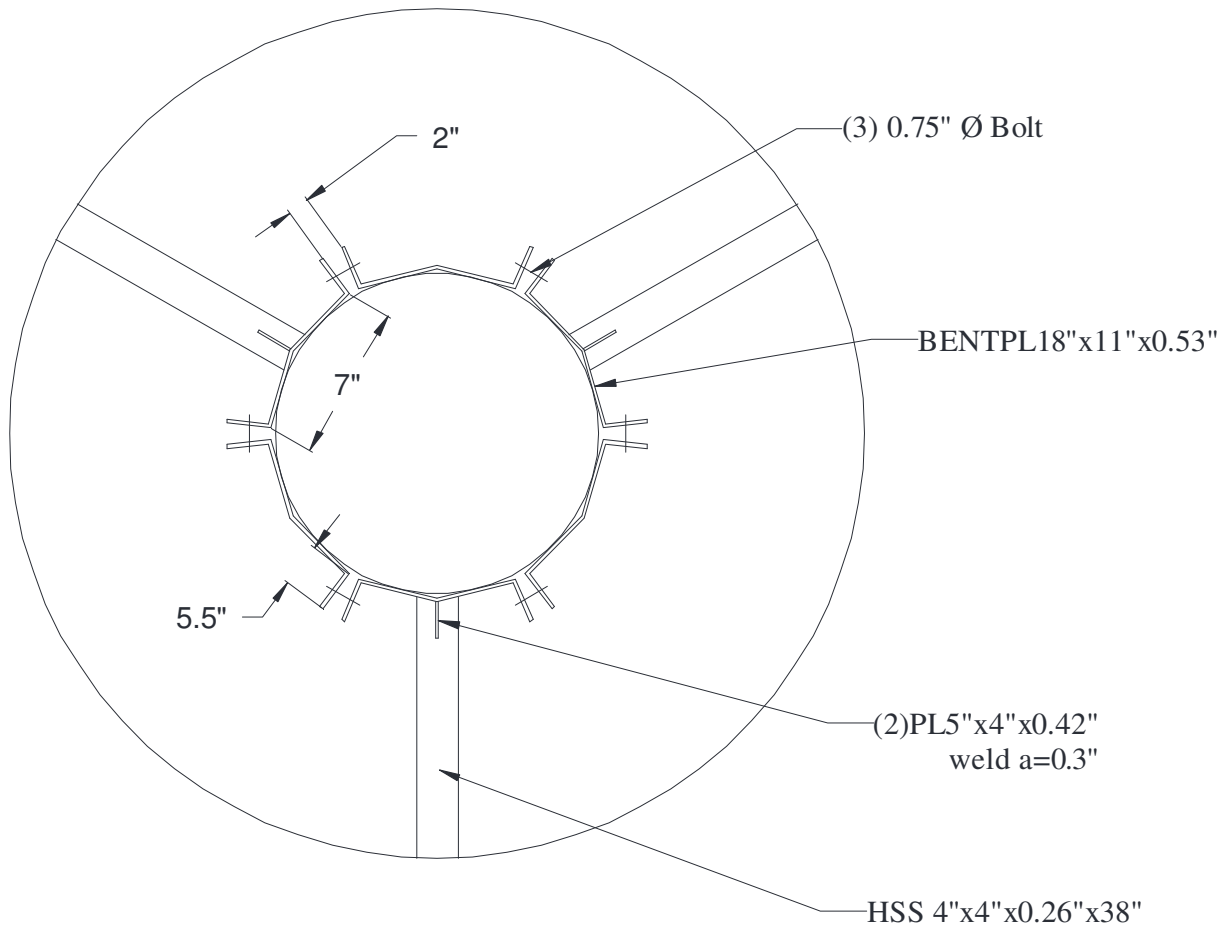


OVERALL MOUNT SCHEMATIC

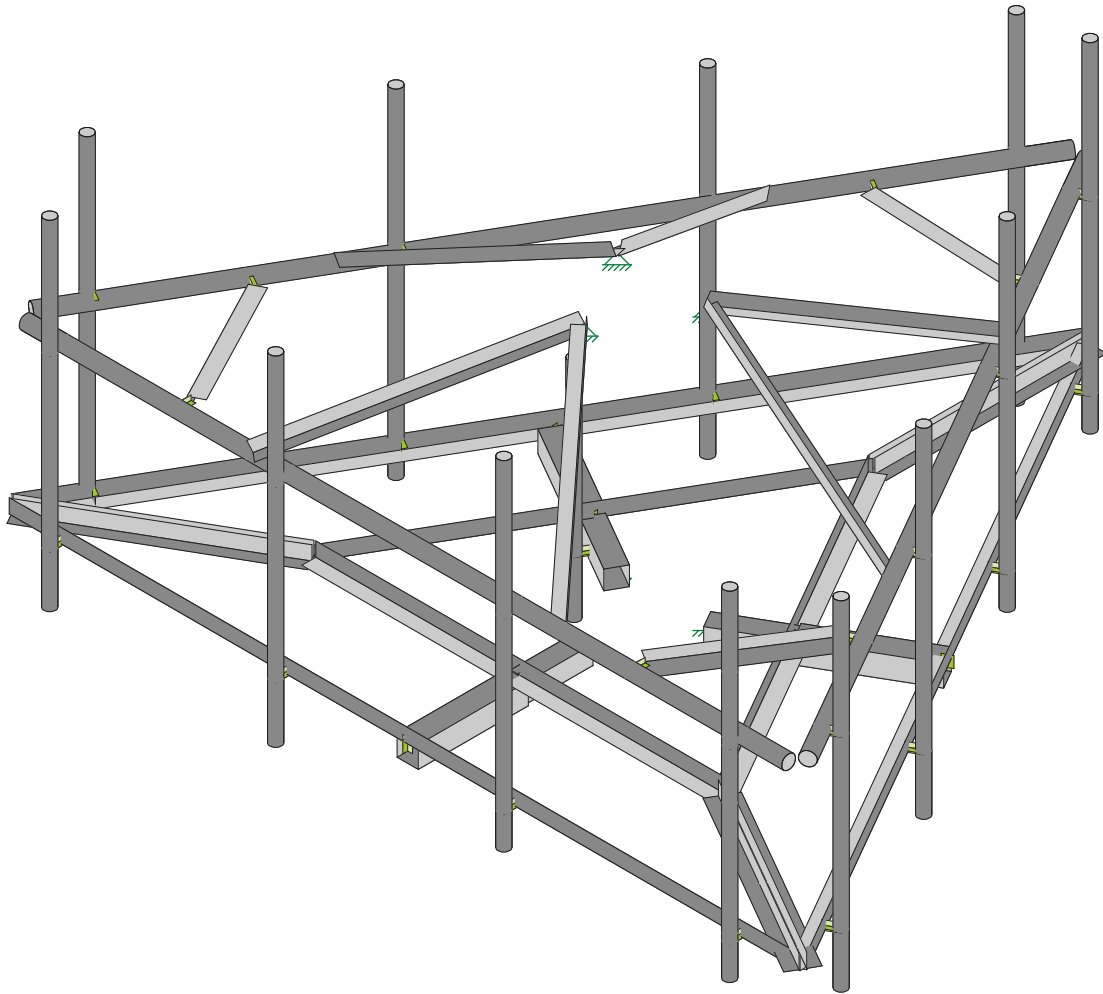
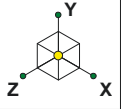


SECTOR A, B, C





CONN. #2



Envelope Only Solution

Colliers Engineering & De...

Project # 23777104

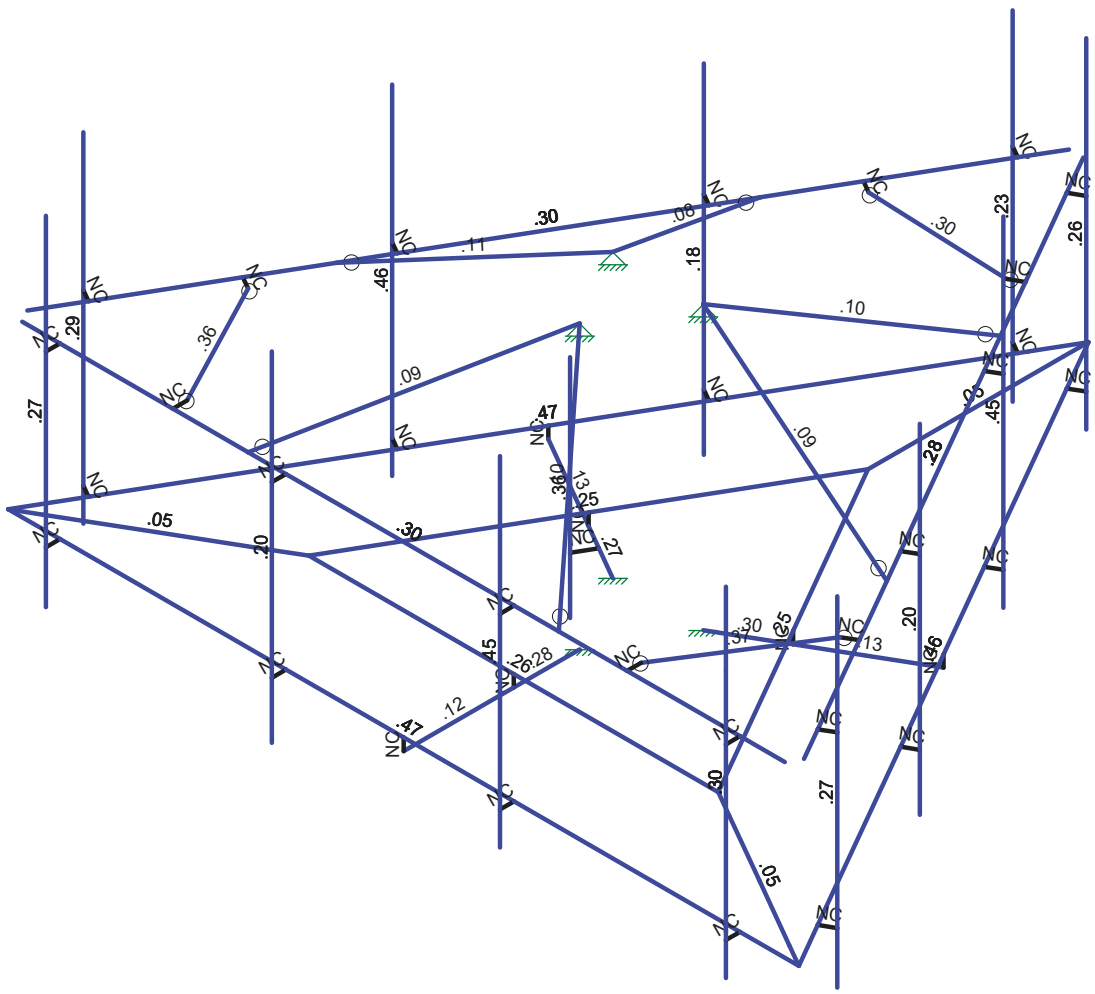
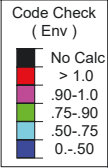
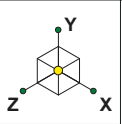
Antenna Mount Analysis

SK - 1

July 20, 2023 at 9:24 AM

5000242940-VZW\_MT\_LO\_H.r3d





Member Code Checks Displayed (Enveloped)  
Envelope Only Solution

Colliers Engineering & De...	Antenna Mount Analysis	SK - 2
Project # 23777104		July 20, 2023 at 9:25 AM
		5000242940-VZW_MT_LO_H.r3d





Company : Colliers Engineering & Design  
 Designer :  
 Job Number : Project # 23777104  
 Model Name : Antenna Mount Analysis

July 20, 2023  
 9:25 AM  
 Checked By: \_\_\_\_\_

**Basic Load Cases**

	BLC Description	Category	X Gr...	Y Gr...	Z Gr...	Joint	Point	Distributed	Area(Member)	Surfa...
1	Antenna D	None					117			
2	Antenna Di	None					117			
3	Antenna Wo (0 Deg)	None					117			
4	Antenna Wo (30 Deg)	None					117			
5	Antenna Wo (60 Deg)	None					117			
6	Antenna Wo (90 Deg)	None					117			
7	Antenna Wo (120 Deg)	None					117			
8	Antenna Wo (150 Deg)	None					117			
9	Antenna Wo (180 Deg)	None					117			
10	Antenna Wo (210 Deg)	None					117			
11	Antenna Wo (240 Deg)	None					117			
12	Antenna Wo (270 Deg)	None					117			
13	Antenna Wo (300 Deg)	None					117			
14	Antenna Wo (330 Deg)	None					117			
15	Antenna Wi (0 Deg)	None					117			
16	Antenna Wi (30 Deg)	None					117			
17	Antenna Wi (60 Deg)	None					117			
18	Antenna Wi (90 Deg)	None					117			
19	Antenna Wi (120 Deg)	None					117			
20	Antenna Wi (150 Deg)	None					117			
21	Antenna Wi (180 Deg)	None					117			
22	Antenna Wi (210 Deg)	None					117			
23	Antenna Wi (240 Deg)	None					117			
24	Antenna Wi (270 Deg)	None					117			
25	Antenna Wi (300 Deg)	None					117			
26	Antenna Wi (330 Deg)	None					117			
27	Antenna Wm (0 Deg)	None					117			
28	Antenna Wm (30 Deg)	None					117			
29	Antenna Wm (60 Deg)	None					117			
30	Antenna Wm (90 Deg)	None					117			
31	Antenna Wm (120 Deg)	None					117			
32	Antenna Wm (150 Deg)	None					117			
33	Antenna Wm (180 Deg)	None					117			
34	Antenna Wm (210 Deg)	None					117			
35	Antenna Wm (240 Deg)	None					117			
36	Antenna Wm (270 Deg)	None					117			
37	Antenna Wm (300 Deg)	None					117			
38	Antenna Wm (330 Deg)	None					117			
39	Structure D	None		-1					3	
40	Structure Di	None						40	3	
41	Structure Wo (0 Deg)	None						80		
42	Structure Wo (30 Deg)	None						80		
43	Structure Wo (60 Deg)	None						80		
44	Structure Wo (90 Deg)	None						80		
45	Structure Wo (120 Deg)	None						80		
46	Structure Wo (150 Deg)	None						80		
47	Structure Wo (180 Deg)	None						80		
48	Structure Wo (210 Deg)	None						80		
49	Structure Wo (240 Deg)	None						80		
50	Structure Wo (270 Deg)	None						80		
51	Structure Wo (300 Deg)	None						80		
52	Structure Wo (330 Deg)	None						80		
53	Structure Wi (0 Deg)	None						80		
54	Structure Wi (30 Deg)	None						80		
55	Structure Wi (60 Deg)	None						80		
56	Structure Wi (90 Deg)	None						80		



**Basic Load Cases (Continued)**

BLC Description	Category	X Gr...	Y Gr...	Z Gr...	Joint	Point	Distributed	Area(Member)	Surfa...
57 Structure Wi (120 Deg)	None						80		
58 Structure Wi (150 Deg)	None						80		
59 Structure Wi (180 Deg)	None						80		
60 Structure Wi (210 Deg)	None						80		
61 Structure Wi (240 Deg)	None						80		
62 Structure Wi (270 Deg)	None						80		
63 Structure Wi (300 Deg)	None						80		
64 Structure Wi (330 Deg)	None						80		
65 Structure Wm (0 Deg)	None						80		
66 Structure Wm (30 Deg)	None						80		
67 Structure Wm (60 Deg)	None						80		
68 Structure Wm (90 Deg)	None						80		
69 Structure Wm (120 Deg)	None						80		
70 Structure Wm (150 Deg)	None						80		
71 Structure Wm (180 Deg)	None						80		
72 Structure Wm (210 Deg)	None						80		
73 Structure Wm (240 Deg)	None						80		
74 Structure Wm (270 Deg)	None						80		
75 Structure Wm (300 Deg)	None						80		
76 Structure Wm (330 Deg)	None						80		
77 Lm1	None					1			
78 Lm2	None					1			
79 Lv1	None					1			
80 Lv2	None					1			
81 Antenna Ev	None					117			
82 Antenna Eh (0 Deg)	None					78			
83 Antenna Eh (90 Deg)	None					78			
84 Structure Ev	ELY		-0.0448					3	
85 Structure Eh (0 Deg)	ELZ			-0.112				3	
86 Structure Eh (90 Deg)	ELX	.112						3	
87 BLC 39 Transient Area Loads	None						27		
88 BLC 40 Transient Area Loads	None						27		
89 BLC 84 Transient Area Loads	None						27		
90 BLC 85 Transient Area Loads	None						27		
91 BLC 86 Transient Area Loads	None						27		

**Load Combinations**

Description	S...	PDel...	SR...	BLC Fa...	BLC Fa...	BLC Fa...	B...Fa...	B...Fa...	B...Fa...	BLC Fa...	B...Fa...	B...Fa...	B...Fa...
1 1.2D+1.0Wo (0 Deg)	Yes	Y		1	1.2	39	1.2	3	1	41	1		
2 1.2D+1.0Wo (30 Deg)	Yes	Y		1	1.2	39	1.2	4	1	42	1		
3 1.2D+1.0Wo (60 Deg)	Yes	Y		1	1.2	39	1.2	5	1	43	1		
4 1.2D+1.0Wo (90 Deg)	Yes	Y		1	1.2	39	1.2	6	1	44	1		
5 1.2D+1.0Wo (120 De...	Yes	Y		1	1.2	39	1.2	7	1	45	1		
6 1.2D+1.0Wo (150 De...	Yes	Y		1	1.2	39	1.2	8	1	46	1		
7 1.2D+1.0Wo (180 De...	Yes	Y		1	1.2	39	1.2	9	1	47	1		
8 1.2D+1.0Wo (210 De...	Yes	Y		1	1.2	39	1.2	10	1	48	1		
9 1.2D+1.0Wo (240 De...	Yes	Y		1	1.2	39	1.2	11	1	49	1		
10 1.2D+1.0Wo (270 De...	Yes	Y		1	1.2	39	1.2	12	1	50	1		
11 1.2D+1.0Wo (300 De...	Yes	Y		1	1.2	39	1.2	13	1	51	1		
12 1.2D+1.0Wo (330 De...	Yes	Y		1	1.2	39	1.2	14	1	52	1		
13 1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	15	1
14 1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	16	1
15 1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	17	1
16 1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	18	1
17 1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	19	1



**Load Combinations (Continued)**

	Description	S...	PDel...	SR...	BLC	Fa...	BLC	Fa...	BLC	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	BLC	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
18	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	20	1	58	1								
19	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	21	1	59	1								
20	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	22	1	60	1								
21	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	23	1	61	1								
22	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	24	1	62	1								
23	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	25	1	63	1								
24	1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	26	1	64	1								
25	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	27	1	65	1										
26	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	28	1	66	1										
27	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	29	1	67	1										
28	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	30	1	68	1										
29	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	31	1	69	1										
30	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	32	1	70	1										
31	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	33	1	71	1										
32	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	34	1	72	1										
33	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	35	1	73	1										
34	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	36	1	74	1										
35	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	37	1	75	1										
36	1.2D + 1.5Lm1 + 1.0...	Yes	Y		1	1.2	39	1.2	77	1.5	38	1	76	1										
37	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	27	1	65	1										
38	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	28	1	66	1										
39	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	29	1	67	1										
40	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	30	1	68	1										
41	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	31	1	69	1										
42	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	32	1	70	1										
43	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	33	1	71	1										
44	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	34	1	72	1										
45	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	35	1	73	1										
46	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	36	1	74	1										
47	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	37	1	75	1										
48	1.2D + 1.5Lm2 + 1.0...	Yes	Y		1	1.2	39	1.2	78	1.5	38	1	76	1										
49	1.2D + 1.5Lv1	Yes	Y		1	1.2	39	1.2	79	1.5														
50	1.2D + 1.5Lv2	Yes	Y		1	1.2	39	1.2	80	1.5														
51	1.4D	Yes	Y		1	1.4	39	1.4																
52	1.2D + 1.0Ev + 1.0E...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	1	83		ELZ	1	E...					
53	1.2D + 1.0Ev + 1.0E...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	.866	83	.5	ELZ	.866	E...	.5				
54	1.2D + 1.0Ev + 1.0E...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	.5	83	.866	ELZ	.5	E...	.866				
55	1.2D + 1.0Ev + 1.0E...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82		83	1	ELZ		E...	1				
56	1.2D + 1.0Ev + 1.0E...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-.5	83	.866	ELZ	-.5	E...	.866				
57	1.2D + 1.0Ev + 1.0E...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-.8...	83	.5	ELZ	-.8...	E...	.5				
58	1.2D + 1.0Ev + 1.0E...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-1	83		ELZ	-1	E...					
59	1.2D + 1.0Ev + 1.0E...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-.8...	83	-.5	ELZ	-.8...	E...	-.5				
60	1.2D + 1.0Ev + 1.0E...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-.5	83	-.8...	ELZ	-.5	E...	-.8...				
61	1.2D + 1.0Ev + 1.0E...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82		83	-1	ELZ		E...	-1				
62	1.2D + 1.0Ev + 1.0E...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	.5	83	-.8...	ELZ	.5	E...	-.8...				
63	1.2D + 1.0Ev + 1.0E...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	.866	83	-.5	ELZ	.866	E...	-.5				
64	0.9D - 1.0Ev + 1.0Eh...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	1	83		ELZ	1	E...					
65	0.9D - 1.0Ev + 1.0Eh...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	.866	83	.5	ELZ	.866	E...	.5				
66	0.9D - 1.0Ev + 1.0Eh...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	.5	83	.866	ELZ	.5	E...	.866				
67	0.9D - 1.0Ev + 1.0Eh...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82		83	1	ELZ		E...	1				
68	0.9D - 1.0Ev + 1.0Eh...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-.5	83	.866	ELZ	-.5	E...	.866				
69	0.9D - 1.0Ev + 1.0Eh...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-.8...	83	.5	ELZ	-.8...	E...	.5				
70	0.9D - 1.0Ev + 1.0Eh...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-1	83		ELZ	-1	E...					
71	0.9D - 1.0Ev + 1.0Eh...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-.8...	83	-.5	ELZ	-.8...	E...	-.5				
72	0.9D - 1.0Ev + 1.0Eh...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-.5	83	-.8...	ELZ	-.5	E...	-.8...				
73	0.9D - 1.0Ev + 1.0Eh...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82		83	-1	ELZ		E...	-1				
74	0.9D - 1.0Ev + 1.0Eh...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	.5	83	-.8...	ELZ	.5	E...	-.8...				



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### Load Combinations (Continued)

Description	S...	PDel...	SR...	BLC	Fa...	BLC	Fa...	BLC	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	BLC	Fa...	B...	Fa...	B...	Fa...	
75	0.9D - 1.0Ev + 1.0Eh...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	.866	83	-5	ELZ	.866	E...	-5		

### Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	CP	0.	0	-0.	0	
2	N2	0.	-0.208333	0.924651	0	
3	N10	-0.	0	-4.183474	0	
4	N11	-0.	0	-4.711485	0	
5	N13	-0.	0	-7.635855	0	
6	N14	-0.	0	-8.082634	0	
7	N15	-3.622995	0	2.091737	0	
8	N16	-6.999766	0	4.041317	0	
9	N17	3.622995	0	2.091737	0	
10	N18	6.999766	0	4.041317	0	
11	N15A	0.	-0.208333	2.091737	0	
12	N16A	0.	-0.208333	4.041317	0	
13	N15B	-4.080266	0	2.355743	0	
14	N16B	-5.346555	0	3.086835	0	
15	N17A	-6.612845	0	3.817928	0	
16	N18A	4.080266	0	2.355743	0	
17	N19	5.346555	0	3.086835	0	
18	N20	6.612845	0	3.817928	0	
19	N67	3.506769	-0.208333	-2.008732	0	
20	N78	1.811497	-0.208333	-1.045868	0	
21	N91	-3.492997	-0.208333	-2.032585	0	
22	N110	-1.811497	-0.208333	-1.045868	0	
23	N108A	3.499883	-0.208333	-2.020658	0	
24	N110A	-3.499883	-0.208333	-2.020658	0	
25	N123C	0.800772	-0.208333	-0.462326	0	
26	N126A	-0.800771	-0.208333	-0.462326	0	
27	N27	5.9581	0	4.041317	0	
28	N28	1.9581	0	4.041317	0	
29	N29	-2.083567	0	4.041317	0	
30	N30	-6.083567	0	4.041317	0	
31	N31	5.9581	0	4.291317	0	
32	N32	1.9581	0	4.291317	0	
33	N33	-2.083567	0	4.291317	0	
34	N34	-6.083567	0	4.291317	0	
35	N35	5.9581	5.416667	4.291317	0	
36	N36	1.9581	5.416667	4.291317	0	
37	N37	5.9581	-0.583333	4.291317	0	
38	N38	1.9581	-0.583333	4.291317	0	
39	N39	-2.083567	5	4.291317	0	
40	N40	-2.083567	-1	4.291317	0	
41	N41	-6.083567	5.083333	4.291317	0	
42	N42	-6.083567	-0.916667	4.291317	0	
43	N44	0.520834	0	-7.180524	0	
44	N45	2.520834	0	-3.716422	0	
45	N46	4.541667	0	-0.216236	0	
46	N47	6.541667	0	3.247865	0	
47	N48	0.73734	0	-7.305524	0	
48	N49	2.73734	0	-3.841422	0	
49	N50	4.758174	0	-0.341236	0	
50	N51	6.758174	0	3.122865	0	
51	N52	0.73734	5.416667	-7.305524	0	



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**Joint Coordinates and Temperatures (Continued)**

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
52	N53	2.73734	5.416667	-3.841422	0	
53	N54	0.73734	-0.583333	-7.305524	0	
54	N55	2.73734	-0.583333	-3.841422	0	
55	N56	4.758174	5	-0.341236	0	
56	N57	4.758174	-1	-0.341236	0	
57	N58	6.758174	5.083333	3.122865	0	
58	N59	6.758174	-0.916667	3.122865	0	
59	N61	-6.478933	0	3.139207	0	
60	N62	-4.478933	0	-0.324895	0	
61	N63	-2.458099	0	-3.825081	0	
62	N64	-0.458099	0	-7.289183	0	
63	N65	-6.695439	0	3.014207	0	
64	N66	-4.695439	0	-0.449895	0	
65	N67A	-2.674606	0	-3.950081	0	
66	N68	-0.674606	0	-7.414183	0	
67	N69	-6.695439	5.416667	3.014207	0	
68	N70	-4.695439	5.416667	-0.449895	0	
69	N71	-6.695439	-0.583333	3.014207	0	
70	N72	-4.695439	-0.583333	-0.449895	0	
71	N73	-2.674606	5	-3.950081	0	
72	N74	-2.674606	-1	-3.950081	0	
73	N75	-0.674606	5.083333	-7.414183	0	
74	N76	-0.674606	-0.916667	-7.414183	0	
75	N75A	5.9581	2.125	4.291317	0	
76	N76A	5.9581	4.125	4.291317	0	
77	N77	5.9581	.125	4.291317	0	
78	N78A	0.	0	2.091737	0	
79	N79	0.	0	4.041317	0	
80	N80	3.506769	0	-2.008732	0	
81	N81	1.811497	0	-1.045868	0	
82	N82	-1.811497	0	-1.045868	0	
83	N83	-3.499883	0	-2.020658	0	
84	N84	-6.749766	3	4.041317	0	
85	N85	6.749766	3	4.041317	0	
86	N86	5.9581	3	4.041317	0	
87	N87	1.9581	3	4.041317	0	
88	N88	-2.083567	3	4.041317	0	
89	N89	-6.083567	3	4.041317	0	
90	N90	5.9581	3	4.291317	0	
91	N91A	1.9581	3	4.291317	0	
92	N92	-2.083567	3	4.291317	0	
93	N93	-6.083567	3	4.291317	0	
94	N94	5.9581	3.125	4.291317	0	
95	N95	6.874766	3	3.824811	0	
96	N96	0.125	3	-7.866128	0	
97	N97	0.520833	3	-7.180524	0	
98	N98	2.520833	3	-3.716423	0	
99	N99	4.541667	3	-0.216236	0	
100	N100	6.541667	3	3.247865	0	
101	N101	0.73734	3	-7.305524	0	
102	N102	2.73734	3	-3.841422	0	
103	N103	4.758174	3	-0.341236	0	
104	N104	6.758174	3	3.122865	0	
105	N105	-0.125	3	-7.866128	0	
106	N106	-6.874766	3	3.824811	0	
107	N107	-6.478933	3	3.139207	0	
108	N108	-4.478933	3	-0.324894	0	



### Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
109	N109	-2.4581	3	-3.82508	0	
110	N110B	-0.4581	3	-7.289182	0	
111	N111	-6.695439	3	3.014207	0	
112	N112	-4.695439	3	-0.449895	0	
113	N113	-2.674606	3	-3.950081	0	
114	N114	-0.674606	3	-7.414183	0	
115	N115	3.9581	3	3.791317	0	
116	N116	3.9581	3	4.041317	0	
117	N117	-4.083567	3	3.791317	0	
118	N118	-4.083567	3	4.041317	0	
119	N119	1.304327	3	-5.323473	0	
120	N120	1.520833	3	-5.448473	0	
121	N121	5.32516	3	1.640814	0	
122	N122	5.541667	3	1.515814	0	
123	N123	-5.262427	3	1.532156	0	
124	N124	-5.478933	3	1.407156	0	
125	N125	-1.241593	3	-5.432131	0	
126	N126	-1.4581	3	-5.557131	0	
127	N127	0.	4.791667	0.924651	0	
128	N128	0.800772	4.791667	-0.462326	0	
129	N129	-0.800771	4.791667	-0.462326	0	
130	N133	2.75	3	4.041317	0	
131	N134	-2.75	3	4.041317	0	
132	N136	2.124883	3	-4.402228	0	
133	N137	4.874883	3	0.360911	0	
134	N139	-4.874883	3	0.360911	0	
135	N140	-2.124883	3	-4.402228	0	
136	N136A	-1.378485	-0.208333	-0.795869	0	
137	N137A	-1.565985	-0.208333	-0.471109	0	
138	N138	-1.565985	2.791667	-0.471109	0	
139	N139A	-1.565985	-1.208333	-0.471109	0	

### Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Desig... A [in2]	Iyy [i... lzz [i... J [in4]
1	Mount Pipe	PIPE 2.0	Column	Pipe	A53 Gr.B	Typical 1.02	.627 .627 1.25
2	Outer Standoff	HSS4.5X4.5X3	Beam	Tube	A500 Gr.B Rect	Typical 2.93	9.02 9.02 14.4
3	Cross Member	L3X3X4	Beam	Channel	A36 Gr.36	Typical 1.44	1.23 1.23 .0313
4	Face Horizontal	L3X3X4	Beam	Single Angle	A36 Gr.36	Typical 1.44	1.23 1.23 .0313
5	Inner Standoff	HSS4X4X4	Beam	Tube	A500 Gr.B Rect	Typical 3.37	7.8 7.8 12.8
6	Grating Angle	LL3x3x4x0	Beam	Double Angle ...	A36 Gr.36	Typical 2.88	4.5 2.46 .0626
7	Mount Plate	PL3/8x5	Column	BAR	A36 Gr.36	Typical 1.875	.022 3.9063 .0837
8	Support Rail	PIPE 2.5	Column	Pipe	A53 Gr.B	Typical 1.61	1.45 1.45 2.89
9	Support Rail Corner Angle	L3X3X4	Column	Pipe	A36 Gr.36	Typical 1.44	1.23 1.23 .0313
10	V-Bracing Kit	L2.5x2.5x3	Column	Pipe	A36 Gr.36	Typical .901	.535 .535 .0114

### Hot Rolled Steel Properties

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





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**Member Primary Data**

	Label	I Joint	J Joint	K Joint	Rotate(d...	Section/Shape	Type	Design List	Material	Design Ru...
1	M1	N2	N15A			Inner Standoff	Beam	Tube	A500 Gr...	Typical
2	M2	N15A	N16A			Outer Standoff	Beam	Tube	A500 Gr...	Typical
3	M5	N14	N10		180	Grating Angle	Beam	Double Angl..	A36 Gr.36	Typical
4	M6	N16	N15		180	Grating Angle	Beam	Double Angl..	A36 Gr.36	Typical
5	M7	N18	N17		180	Grating Angle	Beam	Double Angl..	A36 Gr.36	Typical
6	M6A	N17	N15		270	Cross Member	Beam	Channel	A36 Gr.36	Typical
7	M7A	N16	N18		270	Face Horizontal	Beam	Single Angle	A36 Gr.36	Typical
8	M23A	N10	N17		270	Cross Member	Beam	Channel	A36 Gr.36	Typical
9	M24	N18	N14		270	Face Horizontal	Beam	Single Angle	A36 Gr.36	Typical
10	M39A	N15	N10		270	Cross Member	Beam	Channel	A36 Gr.36	Typical
11	M40	N14	N16		270	Face Horizontal	Beam	Single Angle	A36 Gr.36	Typical
12	M55	N78	N108A			Outer Standoff	Beam	Tube	A500 Gr...	Typical
13	M56	N110	N110A			Outer Standoff	Beam	Tube	A500 Gr...	Typical
14	M74A	N123C	N78			Inner Standoff	Beam	Tube	A500 Gr...	Typical
15	M75A	N126A	N110			Inner Standoff	Beam	Tube	A500 Gr...	Typical
16	M16	N34	N30			RIGID	None	None	RIGID	Typical
17	M17	N33	N29			RIGID	None	None	RIGID	Typical
18	M18	N32	N28			RIGID	None	None	RIGID	Typical
19	M19	N31	N27			RIGID	None	None	RIGID	Typical
20	MP4A	N41	N42			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
21	MP3A	N39	N40			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
22	MP2A	N36	N38			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
23	MP1A	N35	N37			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
24	M24A	N51	N47			RIGID	None	None	RIGID	Typical
25	M25	N50	N46			RIGID	None	None	RIGID	Typical
26	M26	N49	N45			RIGID	None	None	RIGID	Typical
27	M27	N48	N44			RIGID	None	None	RIGID	Typical
28	MP4C	N58	N59			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
29	MP3C	N56	N57			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
30	MP2C	N53	N55			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
31	MP1C	N52	N54			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
32	M32	N68	N64			RIGID	None	None	RIGID	Typical
33	M33	N67A	N63			RIGID	None	None	RIGID	Typical
34	M34	N66	N62			RIGID	None	None	RIGID	Typical
35	M35	N65	N61			RIGID	None	None	RIGID	Typical
36	MP4B	N75	N76			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
37	MP3B	N73	N74			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
38	MP2B	N70	N72			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
39	MP1B	N69	N71			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
40	M40A	N79	N16A			RIGID	None	None	RIGID	Typical
41	M41	N78A	N15A			RIGID	None	None	RIGID	Typical
42	M42	N83	N110A			RIGID	None	None	RIGID	Typical
43	M43	N82	N110			RIGID	None	None	RIGID	Typical
44	M44	N81	N78			RIGID	None	None	RIGID	Typical
45	M45	N80	N108A			RIGID	None	None	RIGID	Typical
46	M46	N84	N85		270	Support Rail	Column	Pipe	A53 Gr.B	Typical
47	M47	N93	N89			RIGID	None	None	RIGID	Typical
48	M48	N92	N88			RIGID	None	None	RIGID	Typical
49	M49	N91A	N87			RIGID	None	None	RIGID	Typical
50	M50	N90	N86			RIGID	None	None	RIGID	Typical
51	M51	N95	N96		270	Support Rail	Column	Pipe	A53 Gr.B	Typical
52	M52	N104	N100			RIGID	None	None	RIGID	Typical
53	M53	N103	N99			RIGID	None	None	RIGID	Typical
54	M54	N102	N98			RIGID	None	None	RIGID	Typical
55	M55A	N101	N97			RIGID	None	None	RIGID	Typical
56	M56A	N105	N106		270	Support Rail	Column	Pipe	A53 Gr.B	Typical



**Member Primary Data (Continued)**

	Label	I Joint	J Joint	K Joint	Rotate(d...	Section/Shape	Type	Design List	Material	Design Ru...
57	M57	N114	N110B			RIGID	None	None	RIGID	Typical
58	M58	N113	N109			RIGID	None	None	RIGID	Typical
59	M59	N112	N108			RIGID	None	None	RIGID	Typical
60	M60	N111	N107			RIGID	None	None	RIGID	Typical
61	M61	N116	N115			RIGID	None	None	RIGID	Typical
62	M62	N118	N117			RIGID	None	None	RIGID	Typical
63	M63	N120	N119			RIGID	None	None	RIGID	Typical
64	M64	N122	N121			RIGID	None	None	RIGID	Typical
65	M65	N124	N123			RIGID	None	None	RIGID	Typical
66	M66	N126	N125			RIGID	None	None	RIGID	Typical
67	M67	N117	N123		90	Support Rail Corn...	Column	Pipe	A36 Gr.36	Typical
68	M68	N121	N115		90	Support Rail Corn...	Column	Pipe	A36 Gr.36	Typical
69	M69	N125	N119		90	Support Rail Corn...	Column	Pipe	A36 Gr.36	Typical
70	M70	N134	N127			V-Bracing Kit	Column	Pipe	A36 Gr.36	Typical
71	M71	N133	N127		270	V-Bracing Kit	Column	Pipe	A36 Gr.36	Typical
72	M72	N137	N128			V-Bracing Kit	Column	Pipe	A36 Gr.36	Typical
73	M73	N136	N128		270	V-Bracing Kit	Column	Pipe	A36 Gr.36	Typical
74	M74	N140	N129			V-Bracing Kit	Column	Pipe	A36 Gr.36	Typical
75	M75	N139	N129		270	V-Bracing Kit	Column	Pipe	A36 Gr.36	Typical
76	OVP	N138	N139A			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
77	M77	N137A	N136A			RIGID	None	None	RIGID	Typical

**Member Advanced Data**

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical Defl Ratio Opti...	Analysis ...	Inactive	Seismi...
1	M1						Yes			None
2	M2						Yes			None
3	M5						Yes			None
4	M6						Yes			None
5	M7						Yes	Default		None
6	M6A						Yes			None
7	M7A						Yes	Default		None
8	M23A						Yes			None
9	M24						Yes			None
10	M39A						Yes			None
11	M40						Yes			None
12	M55						Yes			None
13	M56						Yes			None
14	M74A						Yes			None
15	M75A						Yes			None
16	M16						Yes	** NA **		None
17	M17						Yes	** NA **		None
18	M18						Yes	** NA **		None
19	M19						Yes	** NA **		None
20	MP4A						Yes	** NA **		None
21	MP3A						Yes	** NA **		None
22	MP2A						Yes	** NA **		None
23	MP1A						Yes	** NA **		None
24	M24A						Yes	** NA **		None
25	M25						Yes	** NA **		None
26	M26						Yes	** NA **		None
27	M27						Yes	** NA **		None
28	MP4C						Yes	** NA **		None
29	MP3C						Yes	** NA **		None
30	MP2C						Yes	** NA **		None
31	MP1C						Yes	** NA **		None



**Member Advanced Data (Continued)**

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Ratio	Opti...	Analysis ...	Inactive	Seismi...
32	M32						Yes	** NA **				None
33	M33						Yes	** NA **				None
34	M34						Yes	** NA **				None
35	M35						Yes	** NA **				None
36	MP4B						Yes	** NA **				None
37	MP3B						Yes	** NA **				None
38	MP2B						Yes	** NA **				None
39	MP1B						Yes	** NA **				None
40	M40A						Yes	** NA **				None
41	M41						Yes	** NA **				None
42	M42						Yes	** NA **				None
43	M43						Yes	** NA **				None
44	M44						Yes	** NA **				None
45	M45						Yes	** NA **				None
46	M46						Yes	** NA **				None
47	M47						Yes	** NA **				None
48	M48						Yes	** NA **				None
49	M49						Yes	** NA **				None
50	M50						Yes	** NA **				None
51	M51						Yes	** NA **				None
52	M52						Yes	** NA **				None
53	M53						Yes	** NA **				None
54	M54						Yes	** NA **				None
55	M55A						Yes	** NA **				None
56	M56A						Yes	** NA **				None
57	M57						Yes	** NA **				None
58	M58						Yes	** NA **				None
59	M59						Yes	** NA **				None
60	M60						Yes	** NA **				None
61	M61	00000X					Yes	** NA **				None
62	M62	00000X					Yes	** NA **				None
63	M63	00000X					Yes	** NA **				None
64	M64	00000X					Yes	** NA **				None
65	M65	00000X					Yes	** NA **				None
66	M66	00000X					Yes	** NA **				None
67	M67						Yes	** NA **				None
68	M68						Yes	** NA **				None
69	M69						Yes	** NA **				None
70	M70	BenPIN					Yes	** NA **				None
71	M71	BenPIN					Yes	** NA **				None
72	M72	BenPIN					Yes	** NA **				None
73	M73	BenPIN					Yes	** NA **				None
74	M74	BenPIN					Yes	** NA **				None
75	M75	BenPIN					Yes	** NA **				None
76	OVP						Yes	** NA **				None
77	M77						Yes	** NA **				None

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	Y	-31.65	.67
2	MP2A	My	-.0237	.67
3	MP2A	Mz	.0211	.67
4	MP2A	Y	-31.65	4.17
5	MP2A	My	-.0237	4.17
6	MP2A	Mz	.0211	4.17



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
7	MP2B	Y	-31.65	.67
8	MP2B	My	-.0064	.67
9	MP2B	Mz	-.0311	.67
10	MP2B	Y	-31.65	4.17
11	MP2B	My	-.0064	4.17
12	MP2B	Mz	-.0311	4.17
13	MP2C	Y	-31.65	.67
14	MP2C	My	.0301	.67
15	MP2C	Mz	.01	.67
16	MP2C	Y	-31.65	4.17
17	MP2C	My	.0301	4.17
18	MP2C	Mz	.01	4.17
19	MP2A	Y	-31.65	.67
20	MP2A	My	-.0237	.67
21	MP2A	Mz	-.0211	.67
22	MP2A	Y	-31.65	4.17
23	MP2A	My	-.0237	4.17
24	MP2A	Mz	-.0211	4.17
25	MP2B	Y	-31.65	.67
26	MP2B	My	.0301	.67
27	MP2B	Mz	-.01	.67
28	MP2B	Y	-31.65	4.17
29	MP2B	My	.0301	4.17
30	MP2B	Mz	-.01	4.17
31	MP2C	Y	-31.65	.67
32	MP2C	My	-.0064	.67
33	MP2C	Mz	.0311	.67
34	MP2C	Y	-31.65	4.17
35	MP2C	My	-.0064	4.17
36	MP2C	Mz	.0311	4.17
37	MP3A	Y	-43.55	2.41
38	MP3A	My	-.0327	2.41
39	MP3A	Mz	0	2.41
40	MP3A	Y	-43.55	3.41
41	MP3A	My	-.0327	3.41
42	MP3A	Mz	0	3.41
43	MP3B	Y	-43.55	2.41
44	MP3B	My	.0163	2.41
45	MP3B	Mz	-.0283	2.41
46	MP3B	Y	-43.55	3.41
47	MP3B	My	.0163	3.41
48	MP3B	Mz	-.0283	3.41
49	MP3C	Y	-43.55	2.41
50	MP3C	My	.0163	2.41
51	MP3C	Mz	.0283	2.41
52	MP3C	Y	-43.55	3.41
53	MP3C	My	.0163	3.41
54	MP3C	Mz	.0283	3.41
55	M46	Y	-10.4	7.5
56	M46	My	.0052	7.5
57	M46	Mz	0	7.5
58	MP1A	Y	-84.4	1
59	MP1A	My	.0422	1
60	MP1A	Mz	0	1
61	MP1B	Y	-84.4	1
62	MP1B	My	-.0211	1
63	MP1B	Mz	.0365	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
64	MP3C	Y	-84.4	1
65	MP3C	My	-.0211	1
66	MP3C	Mz	-.0365	1
67	MP2A	Y	-70.3	1
68	MP2A	My	.0352	1
69	MP2A	Mz	0	1
70	MP2B	Y	-70.3	1
71	MP2B	My	-.0176	1
72	MP2B	Mz	.0304	1
73	MP2C	Y	-70.3	1
74	MP2C	My	-.0176	1
75	MP2C	Mz	-.0304	1
76	MP1A	Y	-22.95	.67
77	MP1A	My	-.0172	.67
78	MP1A	Mz	0	.67
79	MP1A	Y	-22.95	5.67
80	MP1A	My	-.0172	5.67
81	MP1A	Mz	0	5.67
82	MP1B	Y	-22.95	.67
83	MP1B	My	.0086	.67
84	MP1B	Mz	-.0149	.67
85	MP1B	Y	-22.95	5.67
86	MP1B	My	.0086	5.67
87	MP1B	Mz	-.0149	5.67
88	MP1C	Y	-22.95	.67
89	MP1C	My	.0086	.67
90	MP1C	Mz	.0149	.67
91	MP1C	Y	-22.95	5.67
92	MP1C	My	.0086	5.67
93	MP1C	Mz	.0149	5.67
94	OVP	Y	-44	1
95	OVP	My	0	1
96	OVP	Mz	0	1
97	OVP	Y	-44	1
98	OVP	My	0	1
99	OVP	Mz	0	1
100	MP2B	Y	-17.6	4
101	MP2B	My	.0037	4
102	MP2B	Mz	-.0064	4
103	MP2C	Y	-17.6	4
104	MP2C	My	.0037	4
105	MP2C	Mz	.0064	4
106	MP2B	Y	-17.6	4
107	MP2B	My	-.0037	4
108	MP2B	Mz	.0064	4
109	MP2C	Y	-17.6	4
110	MP2C	My	-.0037	4
111	MP2C	Mz	-.0064	4
112	M56A	Y	-10.4	7.5
113	M56A	My	-.0026	7.5
114	M56A	Mz	.0045	7.5
115	M51	Y	-10.4	7.5
116	M51	My	-.0026	7.5
117	M51	Mz	-.0045	7.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
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**Member Point Loads (BLC 2 : Antenna Di) (Continued)**

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	Y	-68.0863	.67
2	MP2A	My	-.0511	.67
3	MP2A	Mz	.0454	.67
4	MP2A	Y	-68.0863	4.17
5	MP2A	My	-.0511	4.17
6	MP2A	Mz	.0454	4.17
7	MP2B	Y	-68.0863	.67
8	MP2B	My	-.0138	.67
9	MP2B	Mz	-.0669	.67
10	MP2B	Y	-68.0863	4.17
11	MP2B	My	-.0138	4.17
12	MP2B	Mz	-.0669	4.17
13	MP2C	Y	-68.0863	.67
14	MP2C	My	.0648	.67
15	MP2C	Mz	.0215	.67
16	MP2C	Y	-68.0863	4.17
17	MP2C	My	.0648	4.17
18	MP2C	Mz	.0215	4.17
19	MP2A	Y	-68.0863	.67
20	MP2A	My	-.0511	.67
21	MP2A	Mz	-.0454	.67
22	MP2A	Y	-68.0863	4.17
23	MP2A	My	-.0511	4.17
24	MP2A	Mz	-.0454	4.17
25	MP2B	Y	-68.0863	.67
26	MP2B	My	.0648	.67
27	MP2B	Mz	-.0215	.67
28	MP2B	Y	-68.0863	4.17
29	MP2B	My	.0648	4.17
30	MP2B	Mz	-.0215	4.17
31	MP2C	Y	-68.0863	.67
32	MP2C	My	-.0138	.67
33	MP2C	Mz	.0669	.67
34	MP2C	Y	-68.0863	4.17
35	MP2C	My	-.0138	4.17
36	MP2C	Mz	.0669	4.17
37	MP3A	Y	-34.6493	2.41
38	MP3A	My	-.026	2.41
39	MP3A	Mz	0	2.41
40	MP3A	Y	-34.6493	3.41
41	MP3A	My	-.026	3.41
42	MP3A	Mz	0	3.41
43	MP3B	Y	-34.6493	2.41
44	MP3B	My	.013	2.41
45	MP3B	Mz	-.0225	2.41
46	MP3B	Y	-34.6493	3.41
47	MP3B	My	.013	3.41
48	MP3B	Mz	-.0225	3.41
49	MP3C	Y	-34.6493	2.41
50	MP3C	My	.013	2.41
51	MP3C	Mz	.0225	2.41
52	MP3C	Y	-34.6493	3.41
53	MP3C	My	.013	3.41
54	MP3C	Mz	.0225	3.41
55	M46	Y	-10.3863	7.5
56	M46	My	.0052	7.5
57	M46	Mz	0	7.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
58	MP1A	Y	-43.5752	1
59	MP1A	My	.0218	1
60	MP1A	Mz	0	1
61	MP1B	Y	-43.5752	1
62	MP1B	My	-.0109	1
63	MP1B	Mz	.0189	1
64	MP3C	Y	-43.5752	1
65	MP3C	My	-.0109	1
66	MP3C	Mz	-.0189	1
67	MP2A	Y	-39.1791	1
68	MP2A	My	.0196	1
69	MP2A	Mz	0	1
70	MP2B	Y	-39.1791	1
71	MP2B	My	-.0098	1
72	MP2B	Mz	.017	1
73	MP2C	Y	-39.1791	1
74	MP2C	My	-.0098	1
75	MP2C	Mz	-.017	1
76	MP1A	Y	-65.3478	.67
77	MP1A	My	-.049	.67
78	MP1A	Mz	0	.67
79	MP1A	Y	-65.3478	5.67
80	MP1A	My	-.049	5.67
81	MP1A	Mz	0	5.67
82	MP1B	Y	-65.3478	.67
83	MP1B	My	.0245	.67
84	MP1B	Mz	-.0424	.67
85	MP1B	Y	-65.3478	5.67
86	MP1B	My	.0245	5.67
87	MP1B	Mz	-.0424	5.67
88	MP1C	Y	-65.3478	.67
89	MP1C	My	.0245	.67
90	MP1C	Mz	.0424	.67
91	MP1C	Y	-65.3478	5.67
92	MP1C	My	.0245	5.67
93	MP1C	Mz	.0424	5.67
94	OVP	Y	-71.6894	1
95	OVP	My	0	1
96	OVP	Mz	0	1
97	OVP	Y	-71.6894	1
98	OVP	My	0	1
99	OVP	Mz	0	1
100	MP2B	Y	6.6	4
101	MP2B	My	-.0014	4
102	MP2B	Mz	.0024	4
103	MP2C	Y	6.6	4
104	MP2C	My	-.0014	4
105	MP2C	Mz	-.0024	4
106	MP2B	Y	6.6	4
107	MP2B	My	.0014	4
108	MP2B	Mz	-.0024	4
109	MP2C	Y	6.6	4
110	MP2C	My	.0014	4
111	MP2C	Mz	.0024	4
112	M56A	Y	-10.3863	7.5
113	M56A	My	-.0026	7.5
114	M56A	Mz	.0045	7.5





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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
115	M51	Y	-10.3863	7.5
116	M51	My	-.0026	7.5
117	M51	Mz	-.0045	7.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	0	.67
2	MP2A	Z	-195.617	.67
3	MP2A	Mx	-.1304	.67
4	MP2A	X	0	4.17
5	MP2A	Z	-195.617	4.17
6	MP2A	Mx	-.1304	4.17
7	MP2B	X	0	.67
8	MP2B	Z	-145.263	.67
9	MP2B	Mx	.1428	.67
10	MP2B	X	0	4.17
11	MP2B	Z	-145.263	4.17
12	MP2B	Mx	.1428	4.17
13	MP2C	X	0	.67
14	MP2C	Z	-145.263	.67
15	MP2C	Mx	-.0459	.67
16	MP2C	X	0	4.17
17	MP2C	Z	-145.263	4.17
18	MP2C	Mx	-.0459	4.17
19	MP2A	X	0	.67
20	MP2A	Z	-195.617	.67
21	MP2A	Mx	.1304	.67
22	MP2A	X	0	4.17
23	MP2A	Z	-195.617	4.17
24	MP2A	Mx	.1304	4.17
25	MP2B	X	0	.67
26	MP2B	Z	-145.263	.67
27	MP2B	Mx	.0459	.67
28	MP2B	X	0	4.17
29	MP2B	Z	-145.263	4.17
30	MP2B	Mx	.0459	4.17
31	MP2C	X	0	.67
32	MP2C	Z	-145.263	.67
33	MP2C	Mx	-.1428	.67
34	MP2C	X	0	4.17
35	MP2C	Z	-145.263	4.17
36	MP2C	Mx	-.1428	4.17
37	MP3A	X	0	2.41
38	MP3A	Z	-84.173	2.41
39	MP3A	Mx	0	2.41
40	MP3A	X	0	3.41
41	MP3A	Z	-84.173	3.41
42	MP3A	Mx	0	3.41
43	MP3B	X	0	2.41
44	MP3B	Z	-42.784	2.41
45	MP3B	Mx	.0278	2.41
46	MP3B	X	0	3.41
47	MP3B	Z	-42.784	3.41
48	MP3B	Mx	.0278	3.41
49	MP3C	X	0	2.41
50	MP3C	Z	-42.784	2.41





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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
51	MP3C	Mx	-.0278	2.41
52	MP3C	X	0	3.41
53	MP3C	Z	-42.784	3.41
54	MP3C	Mx	-.0278	3.41
55	M46	X	0	7.5
56	M46	Z	-15.827	7.5
57	M46	Mx	0	7.5
58	MP1A	X	0	1
59	MP1A	Z	-66.304	1
60	MP1A	Mx	0	1
61	MP1B	X	0	1
62	MP1B	Z	-49.942	1
63	MP1B	Mx	-.0216	1
64	MP3C	X	0	1
65	MP3C	Z	-49.942	1
66	MP3C	Mx	.0216	1
67	MP2A	X	0	1
68	MP2A	Z	-66.304	1
69	MP2A	Mx	0	1
70	MP2B	X	0	1
71	MP2B	Z	-43.846	1
72	MP2B	Mx	-.019	1
73	MP2C	X	0	1
74	MP2C	Z	-43.846	1
75	MP2C	Mx	.019	1
76	MP1A	X	0	.67
77	MP1A	Z	-197.415	.67
78	MP1A	Mx	0	.67
79	MP1A	X	0	5.67
80	MP1A	Z	-197.415	5.67
81	MP1A	Mx	0	5.67
82	MP1B	X	0	.67
83	MP1B	Z	-147.85	.67
84	MP1B	Mx	.096	.67
85	MP1B	X	0	5.67
86	MP1B	Z	-147.85	5.67
87	MP1B	Mx	.096	5.67
88	MP1C	X	0	.67
89	MP1C	Z	-147.85	.67
90	MP1C	Mx	-.096	.67
91	MP1C	X	0	5.67
92	MP1C	Z	-147.85	5.67
93	MP1C	Mx	-.096	5.67
94	OVP	X	0	1
95	OVP	Z	-158.702	1
96	OVP	Mx	0	1
97	OVP	X	0	1
98	OVP	Z	-158.702	1
99	OVP	Mx	0	1
100	MP2B	X	0	4
101	MP2B	Z	-19.608	4
102	MP2B	Mx	.0071	4
103	MP2C	X	0	4
104	MP2C	Z	-19.608	4
105	MP2C	Mx	-.0071	4
106	MP2B	X	0	4
107	MP2B	Z	-19.608	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
108	MP2B	Mx	-.0071	4
109	MP2C	X	0	4
110	MP2C	Z	-19.608	4
111	MP2C	Mx	.0071	4
112	M56A	X	0	7.5
113	M56A	Z	-12.17	7.5
114	M56A	Mx	-.0053	7.5
115	M51	X	0	7.5
116	M51	Z	-12.17	7.5
117	M51	Mx	.0053	7.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	89.416	.67
2	MP2A	Z	-154.873	.67
3	MP2A	Mx	-.1703	.67
4	MP2A	X	89.416	4.17
5	MP2A	Z	-154.873	4.17
6	MP2A	Mx	-.1703	4.17
7	MP2B	X	64.239	.67
8	MP2B	Z	-111.266	.67
9	MP2B	Mx	.0964	.67
10	MP2B	X	64.239	4.17
11	MP2B	Z	-111.266	4.17
12	MP2B	Mx	.0964	4.17
13	MP2C	X	89.416	.67
14	MP2C	Z	-154.873	.67
15	MP2C	Mx	.0362	.67
16	MP2C	X	89.416	4.17
17	MP2C	Z	-154.873	4.17
18	MP2C	Mx	.0362	4.17
19	MP2A	X	89.416	.67
20	MP2A	Z	-154.873	.67
21	MP2A	Mx	.0362	.67
22	MP2A	X	89.416	4.17
23	MP2A	Z	-154.873	4.17
24	MP2A	Mx	.0362	4.17
25	MP2B	X	64.239	.67
26	MP2B	Z	-111.266	.67
27	MP2B	Mx	.0964	.67
28	MP2B	X	64.239	4.17
29	MP2B	Z	-111.266	4.17
30	MP2B	Mx	.0964	4.17
31	MP2C	X	89.416	.67
32	MP2C	Z	-154.873	.67
33	MP2C	Mx	-.1703	.67
34	MP2C	X	89.416	4.17
35	MP2C	Z	-154.873	4.17
36	MP2C	Mx	-.1703	4.17
37	MP3A	X	35.188	2.41
38	MP3A	Z	-60.948	2.41
39	MP3A	Mx	-.0264	2.41
40	MP3A	X	35.188	3.41
41	MP3A	Z	-60.948	3.41
42	MP3A	Mx	-.0264	3.41
43	MP3B	X	14.494	2.41



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
44	MP3B	Z	-25.105	2.41
45	MP3B	Mx	.0217	2.41
46	MP3B	X	14.494	3.41
47	MP3B	Z	-25.105	3.41
48	MP3B	Mx	.0217	3.41
49	MP3C	X	35.188	2.41
50	MP3C	Z	-60.948	2.41
51	MP3C	Mx	-.0264	2.41
52	MP3C	X	35.188	3.41
53	MP3C	Z	-60.948	3.41
54	MP3C	Mx	-.0264	3.41
55	M46	X	7.304	7.5
56	M46	Z	-12.651	7.5
57	M46	Mx	.0037	7.5
58	MP1A	X	30.425	1
59	MP1A	Z	-52.698	1
60	MP1A	Mx	.0152	1
61	MP1B	X	22.244	1
62	MP1B	Z	-38.528	1
63	MP1B	Mx	-.0222	1
64	MP3C	X	30.425	1
65	MP3C	Z	-52.698	1
66	MP3C	Mx	.0152	1
67	MP2A	X	29.409	1
68	MP2A	Z	-50.938	1
69	MP2A	Mx	.0147	1
70	MP2B	X	18.18	1
71	MP2B	Z	-31.489	1
72	MP2B	Mx	-.0182	1
73	MP2C	X	29.409	1
74	MP2C	Z	-50.938	1
75	MP2C	Mx	.0147	1
76	MP1A	X	90.447	.67
77	MP1A	Z	-156.658	.67
78	MP1A	Mx	-.0678	.67
79	MP1A	X	90.447	5.67
80	MP1A	Z	-156.658	5.67
81	MP1A	Mx	-.0678	5.67
82	MP1B	X	65.664	.67
83	MP1B	Z	-113.733	.67
84	MP1B	Mx	.0985	.67
85	MP1B	X	65.664	5.67
86	MP1B	Z	-113.733	5.67
87	MP1B	Mx	.0985	5.67
88	MP1C	X	90.447	.67
89	MP1C	Z	-156.658	.67
90	MP1C	Mx	-.0678	.67
91	MP1C	X	90.447	5.67
92	MP1C	Z	-156.658	5.67
93	MP1C	Mx	-.0678	5.67
94	OVP	X	71.308	1
95	OVP	Z	-123.51	1
96	OVP	Mx	0	1
97	OVP	X	71.308	1
98	OVP	Z	-123.51	1
99	OVP	Mx	0	1
100	MP2B	X	6.228	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
101	MP2B	Z	-10.787	4
102	MP2B	Mx	.0052	4
103	MP2C	X	16.957	4
104	MP2C	Z	-29.37	4
105	MP2C	Mx	-.0071	4
106	MP2B	X	6.228	4
107	MP2B	Z	-10.787	4
108	MP2B	Mx	-.0052	4
109	MP2C	X	16.957	4
110	MP2C	Z	-29.37	4
111	MP2C	Mx	.0071	4
112	M56A	X	5.475	7.5
113	M56A	Z	-9.484	7.5
114	M56A	Mx	-.0055	7.5
115	M51	X	7.304	7.5
116	M51	Z	-12.651	7.5
117	M51	Mx	.0037	7.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	X	125.802	.67
2	MP2A	Z	-72.632	.67
3	MP2A	Mx	-.1428	.67
4	MP2A	X	125.802	4.17
5	MP2A	Z	-72.632	4.17
6	MP2A	Mx	-.1428	4.17
7	MP2B	X	125.802	.67
8	MP2B	Z	-72.632	.67
9	MP2B	Mx	.0459	.67
10	MP2B	X	125.802	4.17
11	MP2B	Z	-72.632	4.17
12	MP2B	Mx	.0459	4.17
13	MP2C	X	169.409	.67
14	MP2C	Z	-97.808	.67
15	MP2C	Mx	.1304	.67
16	MP2C	X	169.409	4.17
17	MP2C	Z	-97.808	4.17
18	MP2C	Mx	.1304	4.17
19	MP2A	X	125.802	.67
20	MP2A	Z	-72.632	.67
21	MP2A	Mx	-.0459	.67
22	MP2A	X	125.802	4.17
23	MP2A	Z	-72.632	4.17
24	MP2A	Mx	-.0459	4.17
25	MP2B	X	125.802	.67
26	MP2B	Z	-72.632	.67
27	MP2B	Mx	.1428	.67
28	MP2B	X	125.802	4.17
29	MP2B	Z	-72.632	4.17
30	MP2B	Mx	.1428	4.17
31	MP2C	X	169.409	.67
32	MP2C	Z	-97.808	.67
33	MP2C	Mx	-.1304	.67
34	MP2C	X	169.409	4.17
35	MP2C	Z	-97.808	4.17
36	MP2C	Mx	-.1304	4.17



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
37	MP3A	X	37.052	2.41
38	MP3A	Z	-21.392	2.41
39	MP3A	Mx	-.0278	2.41
40	MP3A	X	37.052	3.41
41	MP3A	Z	-21.392	3.41
42	MP3A	Mx	-.0278	3.41
43	MP3B	X	37.052	2.41
44	MP3B	Z	-21.392	2.41
45	MP3B	Mx	.0278	2.41
46	MP3B	X	37.052	3.41
47	MP3B	Z	-21.392	3.41
48	MP3B	Mx	.0278	3.41
49	MP3C	X	72.896	2.41
50	MP3C	Z	-42.087	2.41
51	MP3C	Mx	0	2.41
52	MP3C	X	72.896	3.41
53	MP3C	Z	-42.087	3.41
54	MP3C	Mx	0	3.41
55	M46	X	10.54	7.5
56	M46	Z	-6.085	7.5
57	M46	Mx	.0053	7.5
58	MP1A	X	43.251	1
59	MP1A	Z	-24.971	1
60	MP1A	Mx	.0216	1
61	MP1B	X	43.251	1
62	MP1B	Z	-24.971	1
63	MP1B	Mx	-.0216	1
64	MP3C	X	57.421	1
65	MP3C	Z	-33.152	1
66	MP3C	Mx	0	1
67	MP2A	X	37.972	1
68	MP2A	Z	-21.923	1
69	MP2A	Mx	.019	1
70	MP2B	X	37.972	1
71	MP2B	Z	-21.923	1
72	MP2B	Mx	-.019	1
73	MP2C	X	57.421	1
74	MP2C	Z	-33.152	1
75	MP2C	Mx	0	1
76	MP1A	X	128.042	.67
77	MP1A	Z	-73.925	.67
78	MP1A	Mx	-.096	.67
79	MP1A	X	128.042	5.67
80	MP1A	Z	-73.925	5.67
81	MP1A	Mx	-.096	5.67
82	MP1B	X	128.042	.67
83	MP1B	Z	-73.925	.67
84	MP1B	Mx	.096	.67
85	MP1B	X	128.042	5.67
86	MP1B	Z	-73.925	5.67
87	MP1B	Mx	.096	5.67
88	MP1C	X	170.966	.67
89	MP1C	Z	-98.707	.67
90	MP1C	Mx	0	.67
91	MP1C	X	170.966	5.67
92	MP1C	Z	-98.707	5.67
93	MP1C	Mx	0	5.67



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
94	OVP	X	95.65	1
95	OVP	Z	-55.224	1
96	OVP	Mx	0	1
97	OVP	X	95.65	1
98	OVP	Z	-55.224	1
99	OVP	Mx	0	1
100	MP2B	X	16.981	4
101	MP2B	Z	-9.804	4
102	MP2B	Mx	.0071	4
103	MP2C	X	35.564	4
104	MP2C	Z	-20.533	4
105	MP2C	Mx	0	4
106	MP2B	X	16.981	4
107	MP2B	Z	-9.804	4
108	MP2B	Mx	-.0071	4
109	MP2C	X	35.564	4
110	MP2C	Z	-20.533	4
111	MP2C	Mx	0	4
112	M56A	X	10.54	7.5
113	M56A	Z	-6.085	7.5
114	M56A	Mx	-.0053	7.5
115	M51	X	13.707	7.5
116	M51	Z	-7.914	7.5
117	M51	Mx	0	7.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	128.479	.67
2	MP2A	Z	0	.67
3	MP2A	Mx	-.0964	.67
4	MP2A	X	128.479	4.17
5	MP2A	Z	0	4.17
6	MP2A	Mx	-.0964	4.17
7	MP2B	X	178.832	.67
8	MP2B	Z	0	.67
9	MP2B	Mx	-.0362	.67
10	MP2B	X	178.832	4.17
11	MP2B	Z	0	4.17
12	MP2B	Mx	-.0362	4.17
13	MP2C	X	178.832	.67
14	MP2C	Z	0	.67
15	MP2C	Mx	.1703	.67
16	MP2C	X	178.832	4.17
17	MP2C	Z	0	4.17
18	MP2C	Mx	.1703	4.17
19	MP2A	X	128.479	.67
20	MP2A	Z	0	.67
21	MP2A	Mx	-.0964	.67
22	MP2A	X	128.479	4.17
23	MP2A	Z	0	4.17
24	MP2A	Mx	-.0964	4.17
25	MP2B	X	178.832	.67
26	MP2B	Z	0	.67
27	MP2B	Mx	.1703	.67
28	MP2B	X	178.832	4.17
29	MP2B	Z	0	4.17



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
30	MP2B	Mx	.1703	4.17
31	MP2C	X	178.832	.67
32	MP2C	Z	0	.67
33	MP2C	Mx	-.0362	.67
34	MP2C	X	178.832	4.17
35	MP2C	Z	0	4.17
36	MP2C	Mx	-.0362	4.17
37	MP3A	X	28.988	2.41
38	MP3A	Z	0	2.41
39	MP3A	Mx	-.0217	2.41
40	MP3A	X	28.988	3.41
41	MP3A	Z	0	3.41
42	MP3A	Mx	-.0217	3.41
43	MP3B	X	70.377	2.41
44	MP3B	Z	0	2.41
45	MP3B	Mx	.0264	2.41
46	MP3B	X	70.377	3.41
47	MP3B	Z	0	3.41
48	MP3B	Mx	.0264	3.41
49	MP3C	X	70.377	2.41
50	MP3C	Z	0	2.41
51	MP3C	Mx	.0264	2.41
52	MP3C	X	70.377	3.41
53	MP3C	Z	0	3.41
54	MP3C	Mx	.0264	3.41
55	M46	X	10.951	7.5
56	M46	Z	0	7.5
57	M46	Mx	.0055	7.5
58	MP1A	X	44.488	1
59	MP1A	Z	0	1
60	MP1A	Mx	.0222	1
61	MP1B	X	60.85	1
62	MP1B	Z	0	1
63	MP1B	Mx	-.0152	1
64	MP3C	X	60.85	1
65	MP3C	Z	0	1
66	MP3C	Mx	-.0152	1
67	MP2A	X	36.36	1
68	MP2A	Z	0	1
69	MP2A	Mx	.0182	1
70	MP2B	X	58.818	1
71	MP2B	Z	0	1
72	MP2B	Mx	-.0147	1
73	MP2C	X	58.818	1
74	MP2C	Z	0	1
75	MP2C	Mx	-.0147	1
76	MP1A	X	131.328	.67
77	MP1A	Z	0	.67
78	MP1A	Mx	-.0985	.67
79	MP1A	X	131.328	5.67
80	MP1A	Z	0	5.67
81	MP1A	Mx	-.0985	5.67
82	MP1B	X	180.893	.67
83	MP1B	Z	0	.67
84	MP1B	Mx	.0678	.67
85	MP1B	X	180.893	5.67
86	MP1B	Z	0	5.67



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
87	MP1B	Mx	.0678	5.67
88	MP1C	X	180.893	.67
89	MP1C	Z	0	.67
90	MP1C	Mx	.0678	.67
91	MP1C	X	180.893	5.67
92	MP1C	Z	0	5.67
93	MP1C	Mx	.0678	5.67
94	OVP	X	94.362	1
95	OVP	Z	0	1
96	OVP	Mx	0	1
97	OVP	X	94.362	1
98	OVP	Z	0	1
99	OVP	Mx	0	1
100	MP2B	X	33.913	4
101	MP2B	Z	0	4
102	MP2B	Mx	.0071	4
103	MP2C	X	33.913	4
104	MP2C	Z	0	4
105	MP2C	Mx	.0071	4
106	MP2B	X	33.913	4
107	MP2B	Z	0	4
108	MP2B	Mx	-.0071	4
109	MP2C	X	33.913	4
110	MP2C	Z	0	4
111	MP2C	Mx	-.0071	4
112	M56A	X	14.608	7.5
113	M56A	Z	0	7.5
114	M56A	Mx	-.0037	7.5
115	M51	X	14.608	7.5
116	M51	Z	0	7.5
117	M51	Mx	-.0037	7.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	125.802	.67
2	MP2A	Z	72.632	.67
3	MP2A	Mx	-.0459	.67
4	MP2A	X	125.802	4.17
5	MP2A	Z	72.632	4.17
6	MP2A	Mx	-.0459	4.17
7	MP2B	X	169.409	.67
8	MP2B	Z	97.808	.67
9	MP2B	Mx	-.1304	.67
10	MP2B	X	169.409	4.17
11	MP2B	Z	97.808	4.17
12	MP2B	Mx	-.1304	4.17
13	MP2C	X	125.802	.67
14	MP2C	Z	72.632	.67
15	MP2C	Mx	.1428	.67
16	MP2C	X	125.802	4.17
17	MP2C	Z	72.632	4.17
18	MP2C	Mx	.1428	4.17
19	MP2A	X	125.802	.67
20	MP2A	Z	72.632	.67
21	MP2A	Mx	-.1428	.67
22	MP2A	X	125.802	4.17





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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
23	MP2A	Z	72.632	4.17
24	MP2A	Mx	-.1428	4.17
25	MP2B	X	169.409	.67
26	MP2B	Z	97.808	.67
27	MP2B	Mx	.1304	.67
28	MP2B	X	169.409	4.17
29	MP2B	Z	97.808	4.17
30	MP2B	Mx	.1304	4.17
31	MP2C	X	125.802	.67
32	MP2C	Z	72.632	.67
33	MP2C	Mx	.0459	.67
34	MP2C	X	125.802	4.17
35	MP2C	Z	72.632	4.17
36	MP2C	Mx	.0459	4.17
37	MP3A	X	37.052	2.41
38	MP3A	Z	21.392	2.41
39	MP3A	Mx	-.0278	2.41
40	MP3A	X	37.052	3.41
41	MP3A	Z	21.392	3.41
42	MP3A	Mx	-.0278	3.41
43	MP3B	X	72.896	2.41
44	MP3B	Z	42.087	2.41
45	MP3B	Mx	0	2.41
46	MP3B	X	72.896	3.41
47	MP3B	Z	42.087	3.41
48	MP3B	Mx	0	3.41
49	MP3C	X	37.052	2.41
50	MP3C	Z	21.392	2.41
51	MP3C	Mx	.0278	2.41
52	MP3C	X	37.052	3.41
53	MP3C	Z	21.392	3.41
54	MP3C	Mx	.0278	3.41
55	M46	X	10.54	7.5
56	M46	Z	6.085	7.5
57	M46	Mx	.0053	7.5
58	MP1A	X	43.251	1
59	MP1A	Z	24.971	1
60	MP1A	Mx	.0216	1
61	MP1B	X	57.421	1
62	MP1B	Z	33.152	1
63	MP1B	Mx	0	1
64	MP3C	X	43.251	1
65	MP3C	Z	24.971	1
66	MP3C	Mx	-.0216	1
67	MP2A	X	37.972	1
68	MP2A	Z	21.923	1
69	MP2A	Mx	.019	1
70	MP2B	X	57.421	1
71	MP2B	Z	33.152	1
72	MP2B	Mx	0	1
73	MP2C	X	37.972	1
74	MP2C	Z	21.923	1
75	MP2C	Mx	-.019	1
76	MP1A	X	128.042	.67
77	MP1A	Z	73.925	.67
78	MP1A	Mx	-.096	.67
79	MP1A	X	128.042	5.67



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
80	MP1A	Z	73.925	5.67
81	MP1A	Mx	-.096	5.67
82	MP1B	X	170.966	.67
83	MP1B	Z	98.707	.67
84	MP1B	Mx	0	.67
85	MP1B	X	170.966	5.67
86	MP1B	Z	98.707	5.67
87	MP1B	Mx	0	5.67
88	MP1C	X	128.042	.67
89	MP1C	Z	73.925	.67
90	MP1C	Mx	.096	.67
91	MP1C	X	128.042	5.67
92	MP1C	Z	73.925	5.67
93	MP1C	Mx	.096	5.67
94	OVP	X	95.65	1
95	OVP	Z	55.224	1
96	OVP	Mx	0	1
97	OVP	X	95.65	1
98	OVP	Z	55.224	1
99	OVP	Mx	0	1
100	MP2B	X	35.564	4
101	MP2B	Z	20.533	4
102	MP2B	Mx	0	4
103	MP2C	X	16.981	4
104	MP2C	Z	9.804	4
105	MP2C	Mx	.0071	4
106	MP2B	X	35.564	4
107	MP2B	Z	20.533	4
108	MP2B	Mx	0	4
109	MP2C	X	16.981	4
110	MP2C	Z	9.804	4
111	MP2C	Mx	-.0071	4
112	M56A	X	13.707	7.5
113	M56A	Z	7.914	7.5
114	M56A	Mx	0	7.5
115	M51	X	10.54	7.5
116	M51	Z	6.085	7.5
117	M51	Mx	-.0053	7.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	89.416	.67
2	MP2A	Z	154.873	.67
3	MP2A	Mx	.0362	.67
4	MP2A	X	89.416	4.17
5	MP2A	Z	154.873	4.17
6	MP2A	Mx	.0362	4.17
7	MP2B	X	89.416	.67
8	MP2B	Z	154.873	.67
9	MP2B	Mx	-.1703	.67
10	MP2B	X	89.416	4.17
11	MP2B	Z	154.873	4.17
12	MP2B	Mx	-.1703	4.17
13	MP2C	X	64.239	.67
14	MP2C	Z	111.266	.67
15	MP2C	Mx	.0964	.67



Company : Colliers Engineering & Design  
 Designer :  
 Job Number : Project # 23777104  
 Model Name : Antenna Mount Analysis

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
16	MP2C	X	64.239	4.17
17	MP2C	Z	111.266	4.17
18	MP2C	Mx	.0964	4.17
19	MP2A	X	89.416	.67
20	MP2A	Z	154.873	.67
21	MP2A	Mx	-.1703	.67
22	MP2A	X	89.416	4.17
23	MP2A	Z	154.873	4.17
24	MP2A	Mx	-.1703	4.17
25	MP2B	X	89.416	.67
26	MP2B	Z	154.873	.67
27	MP2B	Mx	.0362	.67
28	MP2B	X	89.416	4.17
29	MP2B	Z	154.873	4.17
30	MP2B	Mx	.0362	4.17
31	MP2C	X	64.239	.67
32	MP2C	Z	111.266	.67
33	MP2C	Mx	.0964	.67
34	MP2C	X	64.239	4.17
35	MP2C	Z	111.266	4.17
36	MP2C	Mx	.0964	4.17
37	MP3A	X	35.188	2.41
38	MP3A	Z	60.948	2.41
39	MP3A	Mx	-.0264	2.41
40	MP3A	X	35.188	3.41
41	MP3A	Z	60.948	3.41
42	MP3A	Mx	-.0264	3.41
43	MP3B	X	35.188	2.41
44	MP3B	Z	60.948	2.41
45	MP3B	Mx	-.0264	2.41
46	MP3B	X	35.188	3.41
47	MP3B	Z	60.948	3.41
48	MP3B	Mx	-.0264	3.41
49	MP3C	X	14.494	2.41
50	MP3C	Z	25.105	2.41
51	MP3C	Mx	.0217	2.41
52	MP3C	X	14.494	3.41
53	MP3C	Z	25.105	3.41
54	MP3C	Mx	.0217	3.41
55	M46	X	7.304	7.5
56	M46	Z	12.651	7.5
57	M46	Mx	.0037	7.5
58	MP1A	X	30.425	1
59	MP1A	Z	52.698	1
60	MP1A	Mx	.0152	1
61	MP1B	X	30.425	1
62	MP1B	Z	52.698	1
63	MP1B	Mx	.0152	1
64	MP3C	X	22.244	1
65	MP3C	Z	38.528	1
66	MP3C	Mx	-.0222	1
67	MP2A	X	29.409	1
68	MP2A	Z	50.938	1
69	MP2A	Mx	.0147	1
70	MP2B	X	29.409	1
71	MP2B	Z	50.938	1
72	MP2B	Mx	.0147	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
73	MP2C	X	18.18	1
74	MP2C	Z	31.489	1
75	MP2C	Mx	-.0182	1
76	MP1A	X	90.447	.67
77	MP1A	Z	156.658	.67
78	MP1A	Mx	-.0678	.67
79	MP1A	X	90.447	5.67
80	MP1A	Z	156.658	5.67
81	MP1A	Mx	-.0678	5.67
82	MP1B	X	90.447	.67
83	MP1B	Z	156.658	.67
84	MP1B	Mx	-.0678	.67
85	MP1B	X	90.447	5.67
86	MP1B	Z	156.658	5.67
87	MP1B	Mx	-.0678	5.67
88	MP1C	X	65.664	.67
89	MP1C	Z	113.733	.67
90	MP1C	Mx	.0985	.67
91	MP1C	X	65.664	5.67
92	MP1C	Z	113.733	5.67
93	MP1C	Mx	.0985	5.67
94	OVP	X	71.308	1
95	OVP	Z	123.51	1
96	OVP	Mx	0	1
97	OVP	X	71.308	1
98	OVP	Z	123.51	1
99	OVP	Mx	0	1
100	MP2B	X	16.957	4
101	MP2B	Z	29.37	4
102	MP2B	Mx	-.0071	4
103	MP2C	X	6.228	4
104	MP2C	Z	10.787	4
105	MP2C	Mx	.0052	4
106	MP2B	X	16.957	4
107	MP2B	Z	29.37	4
108	MP2B	Mx	.0071	4
109	MP2C	X	6.228	4
110	MP2C	Z	10.787	4
111	MP2C	Mx	-.0052	4
112	M56A	X	7.304	7.5
113	M56A	Z	12.651	7.5
114	M56A	Mx	.0037	7.5
115	M51	X	5.475	7.5
116	M51	Z	9.484	7.5
117	M51	Mx	-.0055	7.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	0	.67
2	MP2A	Z	195.617	.67
3	MP2A	Mx	.1304	.67
4	MP2A	X	0	4.17
5	MP2A	Z	195.617	4.17
6	MP2A	Mx	.1304	4.17
7	MP2B	X	0	.67
8	MP2B	Z	145.263	.67



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
9	MP2B	Mx	-.1428	.67
10	MP2B	X	0	4.17
11	MP2B	Z	145.263	4.17
12	MP2B	Mx	-.1428	4.17
13	MP2C	X	0	.67
14	MP2C	Z	145.263	.67
15	MP2C	Mx	.0459	.67
16	MP2C	X	0	4.17
17	MP2C	Z	145.263	4.17
18	MP2C	Mx	.0459	4.17
19	MP2A	X	0	.67
20	MP2A	Z	195.617	.67
21	MP2A	Mx	-.1304	.67
22	MP2A	X	0	4.17
23	MP2A	Z	195.617	4.17
24	MP2A	Mx	-.1304	4.17
25	MP2B	X	0	.67
26	MP2B	Z	145.263	.67
27	MP2B	Mx	-.0459	.67
28	MP2B	X	0	4.17
29	MP2B	Z	145.263	4.17
30	MP2B	Mx	-.0459	4.17
31	MP2C	X	0	.67
32	MP2C	Z	145.263	.67
33	MP2C	Mx	.1428	.67
34	MP2C	X	0	4.17
35	MP2C	Z	145.263	4.17
36	MP2C	Mx	.1428	4.17
37	MP3A	X	0	2.41
38	MP3A	Z	84.173	2.41
39	MP3A	Mx	0	2.41
40	MP3A	X	0	3.41
41	MP3A	Z	84.173	3.41
42	MP3A	Mx	0	3.41
43	MP3B	X	0	2.41
44	MP3B	Z	42.784	2.41
45	MP3B	Mx	-.0278	2.41
46	MP3B	X	0	3.41
47	MP3B	Z	42.784	3.41
48	MP3B	Mx	-.0278	3.41
49	MP3C	X	0	2.41
50	MP3C	Z	42.784	2.41
51	MP3C	Mx	.0278	2.41
52	MP3C	X	0	3.41
53	MP3C	Z	42.784	3.41
54	MP3C	Mx	.0278	3.41
55	M46	X	0	7.5
56	M46	Z	15.827	7.5
57	M46	Mx	0	7.5
58	MP1A	X	0	1
59	MP1A	Z	66.304	1
60	MP1A	Mx	0	1
61	MP1B	X	0	1
62	MP1B	Z	49.942	1
63	MP1B	Mx	.0216	1
64	MP3C	X	0	1
65	MP3C	Z	49.942	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
66	MP3C	Mx	-.0216	1
67	MP2A	X	0	1
68	MP2A	Z	66.304	1
69	MP2A	Mx	0	1
70	MP2B	X	0	1
71	MP2B	Z	43.846	1
72	MP2B	Mx	.019	1
73	MP2C	X	0	1
74	MP2C	Z	43.846	1
75	MP2C	Mx	-.019	1
76	MP1A	X	0	.67
77	MP1A	Z	197.415	.67
78	MP1A	Mx	0	.67
79	MP1A	X	0	5.67
80	MP1A	Z	197.415	5.67
81	MP1A	Mx	0	5.67
82	MP1B	X	0	.67
83	MP1B	Z	147.85	.67
84	MP1B	Mx	-.096	.67
85	MP1B	X	0	5.67
86	MP1B	Z	147.85	5.67
87	MP1B	Mx	-.096	5.67
88	MP1C	X	0	.67
89	MP1C	Z	147.85	.67
90	MP1C	Mx	.096	.67
91	MP1C	X	0	5.67
92	MP1C	Z	147.85	5.67
93	MP1C	Mx	.096	5.67
94	OVP	X	0	1
95	OVP	Z	158.702	1
96	OVP	Mx	0	1
97	OVP	X	0	1
98	OVP	Z	158.702	1
99	OVP	Mx	0	1
100	MP2B	X	0	4
101	MP2B	Z	19.608	4
102	MP2B	Mx	-.0071	4
103	MP2C	X	0	4
104	MP2C	Z	19.608	4
105	MP2C	Mx	.0071	4
106	MP2B	X	0	4
107	MP2B	Z	19.608	4
108	MP2B	Mx	.0071	4
109	MP2C	X	0	4
110	MP2C	Z	19.608	4
111	MP2C	Mx	-.0071	4
112	M56A	X	0	7.5
113	M56A	Z	12.17	7.5
114	M56A	Mx	.0053	7.5
115	M51	X	0	7.5
116	M51	Z	12.17	7.5
117	M51	Mx	-.0053	7.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-89.416	.67



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
2	MP2A	Z	154.873	.67
3	MP2A	Mx	.1703	.67
4	MP2A	X	-89.416	4.17
5	MP2A	Z	154.873	4.17
6	MP2A	Mx	.1703	4.17
7	MP2B	X	-64.239	.67
8	MP2B	Z	111.266	.67
9	MP2B	Mx	-.0964	.67
10	MP2B	X	-64.239	4.17
11	MP2B	Z	111.266	4.17
12	MP2B	Mx	-.0964	4.17
13	MP2C	X	-89.416	.67
14	MP2C	Z	154.873	.67
15	MP2C	Mx	-.0362	.67
16	MP2C	X	-89.416	4.17
17	MP2C	Z	154.873	4.17
18	MP2C	Mx	-.0362	4.17
19	MP2A	X	-89.416	.67
20	MP2A	Z	154.873	.67
21	MP2A	Mx	-.0362	.67
22	MP2A	X	-89.416	4.17
23	MP2A	Z	154.873	4.17
24	MP2A	Mx	-.0362	4.17
25	MP2B	X	-64.239	.67
26	MP2B	Z	111.266	.67
27	MP2B	Mx	-.0964	.67
28	MP2B	X	-64.239	4.17
29	MP2B	Z	111.266	4.17
30	MP2B	Mx	-.0964	4.17
31	MP2C	X	-89.416	.67
32	MP2C	Z	154.873	.67
33	MP2C	Mx	.1703	.67
34	MP2C	X	-89.416	4.17
35	MP2C	Z	154.873	4.17
36	MP2C	Mx	.1703	4.17
37	MP3A	X	-35.188	2.41
38	MP3A	Z	60.948	2.41
39	MP3A	Mx	.0264	2.41
40	MP3A	X	-35.188	3.41
41	MP3A	Z	60.948	3.41
42	MP3A	Mx	.0264	3.41
43	MP3B	X	-14.494	2.41
44	MP3B	Z	25.105	2.41
45	MP3B	Mx	-.0217	2.41
46	MP3B	X	-14.494	3.41
47	MP3B	Z	25.105	3.41
48	MP3B	Mx	-.0217	3.41
49	MP3C	X	-35.188	2.41
50	MP3C	Z	60.948	2.41
51	MP3C	Mx	.0264	2.41
52	MP3C	X	-35.188	3.41
53	MP3C	Z	60.948	3.41
54	MP3C	Mx	.0264	3.41
55	M46	X	-7.304	7.5
56	M46	Z	12.651	7.5
57	M46	Mx	-.0037	7.5
58	MP1A	X	-30.425	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
59	MP1A	Z	52.698	1
60	MP1A	Mx	-.0152	1
61	MP1B	X	-22.244	1
62	MP1B	Z	38.528	1
63	MP1B	Mx	.0222	1
64	MP3C	X	-30.425	1
65	MP3C	Z	52.698	1
66	MP3C	Mx	-.0152	1
67	MP2A	X	-29.409	1
68	MP2A	Z	50.938	1
69	MP2A	Mx	-.0147	1
70	MP2B	X	-18.18	1
71	MP2B	Z	31.489	1
72	MP2B	Mx	.0182	1
73	MP2C	X	-29.409	1
74	MP2C	Z	50.938	1
75	MP2C	Mx	-.0147	1
76	MP1A	X	-90.447	.67
77	MP1A	Z	156.658	.67
78	MP1A	Mx	.0678	.67
79	MP1A	X	-90.447	5.67
80	MP1A	Z	156.658	5.67
81	MP1A	Mx	.0678	5.67
82	MP1B	X	-65.664	.67
83	MP1B	Z	113.733	.67
84	MP1B	Mx	-.0985	.67
85	MP1B	X	-65.664	5.67
86	MP1B	Z	113.733	5.67
87	MP1B	Mx	-.0985	5.67
88	MP1C	X	-90.447	.67
89	MP1C	Z	156.658	.67
90	MP1C	Mx	.0678	.67
91	MP1C	X	-90.447	5.67
92	MP1C	Z	156.658	5.67
93	MP1C	Mx	.0678	5.67
94	OVP	X	-71.308	1
95	OVP	Z	123.51	1
96	OVP	Mx	0	1
97	OVP	X	-71.308	1
98	OVP	Z	123.51	1
99	OVP	Mx	0	1
100	MP2B	X	-6.228	4
101	MP2B	Z	10.787	4
102	MP2B	Mx	-.0052	4
103	MP2C	X	-16.957	4
104	MP2C	Z	29.37	4
105	MP2C	Mx	.0071	4
106	MP2B	X	-6.228	4
107	MP2B	Z	10.787	4
108	MP2B	Mx	.0052	4
109	MP2C	X	-16.957	4
110	MP2C	Z	29.37	4
111	MP2C	Mx	-.0071	4
112	M56A	X	-5.475	7.5
113	M56A	Z	9.484	7.5
114	M56A	Mx	.0055	7.5
115	M51	X	-7.304	7.5





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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
116	M51	Z	12.651	7.5
117	M51	Mx	-0.037	7.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-125.802	.67
2	MP2A	Z	72.632	.67
3	MP2A	Mx	.1428	.67
4	MP2A	X	-125.802	4.17
5	MP2A	Z	72.632	4.17
6	MP2A	Mx	.1428	4.17
7	MP2B	X	-125.802	.67
8	MP2B	Z	72.632	.67
9	MP2B	Mx	-.0459	.67
10	MP2B	X	-125.802	4.17
11	MP2B	Z	72.632	4.17
12	MP2B	Mx	-.0459	4.17
13	MP2C	X	-169.409	.67
14	MP2C	Z	97.808	.67
15	MP2C	Mx	-.1304	.67
16	MP2C	X	-169.409	4.17
17	MP2C	Z	97.808	4.17
18	MP2C	Mx	-.1304	4.17
19	MP2A	X	-125.802	.67
20	MP2A	Z	72.632	.67
21	MP2A	Mx	.0459	.67
22	MP2A	X	-125.802	4.17
23	MP2A	Z	72.632	4.17
24	MP2A	Mx	.0459	4.17
25	MP2B	X	-125.802	.67
26	MP2B	Z	72.632	.67
27	MP2B	Mx	-.1428	.67
28	MP2B	X	-125.802	4.17
29	MP2B	Z	72.632	4.17
30	MP2B	Mx	-.1428	4.17
31	MP2C	X	-169.409	.67
32	MP2C	Z	97.808	.67
33	MP2C	Mx	.1304	.67
34	MP2C	X	-169.409	4.17
35	MP2C	Z	97.808	4.17
36	MP2C	Mx	.1304	4.17
37	MP3A	X	-37.052	2.41
38	MP3A	Z	21.392	2.41
39	MP3A	Mx	.0278	2.41
40	MP3A	X	-37.052	3.41
41	MP3A	Z	21.392	3.41
42	MP3A	Mx	.0278	3.41
43	MP3B	X	-37.052	2.41
44	MP3B	Z	21.392	2.41
45	MP3B	Mx	-.0278	2.41
46	MP3B	X	-37.052	3.41
47	MP3B	Z	21.392	3.41
48	MP3B	Mx	-.0278	3.41
49	MP3C	X	-72.896	2.41
50	MP3C	Z	42.087	2.41
51	MP3C	Mx	0	2.41



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
52	MP3C	X	-72.896	3.41
53	MP3C	Z	42.087	3.41
54	MP3C	Mx	0	3.41
55	M46	X	-10.54	7.5
56	M46	Z	6.085	7.5
57	M46	Mx	-.0053	7.5
58	MP1A	X	-43.251	1
59	MP1A	Z	24.971	1
60	MP1A	Mx	-.0216	1
61	MP1B	X	-43.251	1
62	MP1B	Z	24.971	1
63	MP1B	Mx	.0216	1
64	MP3C	X	-57.421	1
65	MP3C	Z	33.152	1
66	MP3C	Mx	0	1
67	MP2A	X	-37.972	1
68	MP2A	Z	21.923	1
69	MP2A	Mx	-.019	1
70	MP2B	X	-37.972	1
71	MP2B	Z	21.923	1
72	MP2B	Mx	.019	1
73	MP2C	X	-57.421	1
74	MP2C	Z	33.152	1
75	MP2C	Mx	0	1
76	MP1A	X	-128.042	.67
77	MP1A	Z	73.925	.67
78	MP1A	Mx	.096	.67
79	MP1A	X	-128.042	5.67
80	MP1A	Z	73.925	5.67
81	MP1A	Mx	.096	5.67
82	MP1B	X	-128.042	.67
83	MP1B	Z	73.925	.67
84	MP1B	Mx	-.096	.67
85	MP1B	X	-128.042	5.67
86	MP1B	Z	73.925	5.67
87	MP1B	Mx	-.096	5.67
88	MP1C	X	-170.966	.67
89	MP1C	Z	98.707	.67
90	MP1C	Mx	0	.67
91	MP1C	X	-170.966	5.67
92	MP1C	Z	98.707	5.67
93	MP1C	Mx	0	5.67
94	OVP	X	-95.65	1
95	OVP	Z	55.224	1
96	OVP	Mx	0	1
97	OVP	X	-95.65	1
98	OVP	Z	55.224	1
99	OVP	Mx	0	1
100	MP2B	X	-16.981	4
101	MP2B	Z	9.804	4
102	MP2B	Mx	-.0071	4
103	MP2C	X	-35.564	4
104	MP2C	Z	20.533	4
105	MP2C	Mx	0	4
106	MP2B	X	-16.981	4
107	MP2B	Z	9.804	4
108	MP2B	Mx	.0071	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
109	MP2C	X	-35.564	4
110	MP2C	Z	20.533	4
111	MP2C	Mx	0	4
112	M56A	X	-10.54	7.5
113	M56A	Z	6.085	7.5
114	M56A	Mx	.0053	7.5
115	M51	X	-13.707	7.5
116	M51	Z	7.914	7.5
117	M51	Mx	0	7.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	X	-128.479	.67
2	MP2A	Z	0	.67
3	MP2A	Mx	.0964	.67
4	MP2A	X	-128.479	4.17
5	MP2A	Z	0	4.17
6	MP2A	Mx	.0964	4.17
7	MP2B	X	-178.832	.67
8	MP2B	Z	0	.67
9	MP2B	Mx	.0362	.67
10	MP2B	X	-178.832	4.17
11	MP2B	Z	0	4.17
12	MP2B	Mx	.0362	4.17
13	MP2C	X	-178.832	.67
14	MP2C	Z	0	.67
15	MP2C	Mx	-.1703	.67
16	MP2C	X	-178.832	4.17
17	MP2C	Z	0	4.17
18	MP2C	Mx	-.1703	4.17
19	MP2A	X	-128.479	.67
20	MP2A	Z	0	.67
21	MP2A	Mx	.0964	.67
22	MP2A	X	-128.479	4.17
23	MP2A	Z	0	4.17
24	MP2A	Mx	.0964	4.17
25	MP2B	X	-178.832	.67
26	MP2B	Z	0	.67
27	MP2B	Mx	-.1703	.67
28	MP2B	X	-178.832	4.17
29	MP2B	Z	0	4.17
30	MP2B	Mx	-.1703	4.17
31	MP2C	X	-178.832	.67
32	MP2C	Z	0	.67
33	MP2C	Mx	.0362	.67
34	MP2C	X	-178.832	4.17
35	MP2C	Z	0	4.17
36	MP2C	Mx	.0362	4.17
37	MP3A	X	-28.988	2.41
38	MP3A	Z	0	2.41
39	MP3A	Mx	.0217	2.41
40	MP3A	X	-28.988	3.41
41	MP3A	Z	0	3.41
42	MP3A	Mx	.0217	3.41
43	MP3B	X	-70.377	2.41
44	MP3B	Z	0	2.41



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
45	MP3B	Mx	-.0264	2.41
46	MP3B	X	-70.377	3.41
47	MP3B	Z	0	3.41
48	MP3B	Mx	-.0264	3.41
49	MP3C	X	-70.377	2.41
50	MP3C	Z	0	2.41
51	MP3C	Mx	-.0264	2.41
52	MP3C	X	-70.377	3.41
53	MP3C	Z	0	3.41
54	MP3C	Mx	-.0264	3.41
55	M46	X	-10.951	7.5
56	M46	Z	0	7.5
57	M46	Mx	-.0055	7.5
58	MP1A	X	-44.488	1
59	MP1A	Z	0	1
60	MP1A	Mx	-.0222	1
61	MP1B	X	-60.85	1
62	MP1B	Z	0	1
63	MP1B	Mx	.0152	1
64	MP3C	X	-60.85	1
65	MP3C	Z	0	1
66	MP3C	Mx	.0152	1
67	MP2A	X	-36.36	1
68	MP2A	Z	0	1
69	MP2A	Mx	-.0182	1
70	MP2B	X	-58.818	1
71	MP2B	Z	0	1
72	MP2B	Mx	.0147	1
73	MP2C	X	-58.818	1
74	MP2C	Z	0	1
75	MP2C	Mx	.0147	1
76	MP1A	X	-131.328	.67
77	MP1A	Z	0	.67
78	MP1A	Mx	.0985	.67
79	MP1A	X	-131.328	5.67
80	MP1A	Z	0	5.67
81	MP1A	Mx	.0985	5.67
82	MP1B	X	-180.893	.67
83	MP1B	Z	0	.67
84	MP1B	Mx	-.0678	.67
85	MP1B	X	-180.893	5.67
86	MP1B	Z	0	5.67
87	MP1B	Mx	-.0678	5.67
88	MP1C	X	-180.893	.67
89	MP1C	Z	0	.67
90	MP1C	Mx	-.0678	.67
91	MP1C	X	-180.893	5.67
92	MP1C	Z	0	5.67
93	MP1C	Mx	-.0678	5.67
94	OVP	X	-94.362	1
95	OVP	Z	0	1
96	OVP	Mx	0	1
97	OVP	X	-94.362	1
98	OVP	Z	0	1
99	OVP	Mx	0	1
100	MP2B	X	-33.913	4
101	MP2B	Z	0	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
102	MP2B	Mx	-.0071	4
103	MP2C	X	-33.913	4
104	MP2C	Z	0	4
105	MP2C	Mx	-.0071	4
106	MP2B	X	-33.913	4
107	MP2B	Z	0	4
108	MP2B	Mx	.0071	4
109	MP2C	X	-33.913	4
110	MP2C	Z	0	4
111	MP2C	Mx	.0071	4
112	M56A	X	-14.608	7.5
113	M56A	Z	0	7.5
114	M56A	Mx	.0037	7.5
115	M51	X	-14.608	7.5
116	M51	Z	0	7.5
117	M51	Mx	.0037	7.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	X	-125.802	.67
2	MP2A	Z	-72.632	.67
3	MP2A	Mx	.0459	.67
4	MP2A	X	-125.802	4.17
5	MP2A	Z	-72.632	4.17
6	MP2A	Mx	.0459	4.17
7	MP2B	X	-169.409	.67
8	MP2B	Z	-97.808	.67
9	MP2B	Mx	.1304	.67
10	MP2B	X	-169.409	4.17
11	MP2B	Z	-97.808	4.17
12	MP2B	Mx	.1304	4.17
13	MP2C	X	-125.802	.67
14	MP2C	Z	-72.632	.67
15	MP2C	Mx	-.1428	.67
16	MP2C	X	-125.802	4.17
17	MP2C	Z	-72.632	4.17
18	MP2C	Mx	-.1428	4.17
19	MP2A	X	-125.802	.67
20	MP2A	Z	-72.632	.67
21	MP2A	Mx	.1428	.67
22	MP2A	X	-125.802	4.17
23	MP2A	Z	-72.632	4.17
24	MP2A	Mx	.1428	4.17
25	MP2B	X	-169.409	.67
26	MP2B	Z	-97.808	.67
27	MP2B	Mx	-.1304	.67
28	MP2B	X	-169.409	4.17
29	MP2B	Z	-97.808	4.17
30	MP2B	Mx	-.1304	4.17
31	MP2C	X	-125.802	.67
32	MP2C	Z	-72.632	.67
33	MP2C	Mx	-.0459	.67
34	MP2C	X	-125.802	4.17
35	MP2C	Z	-72.632	4.17
36	MP2C	Mx	-.0459	4.17
37	MP3A	X	-37.052	2.41



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
38	MP3A	Z	-21.392	2.41
39	MP3A	Mx	.0278	2.41
40	MP3A	X	-37.052	3.41
41	MP3A	Z	-21.392	3.41
42	MP3A	Mx	.0278	3.41
43	MP3B	X	-72.896	2.41
44	MP3B	Z	-42.087	2.41
45	MP3B	Mx	0	2.41
46	MP3B	X	-72.896	3.41
47	MP3B	Z	-42.087	3.41
48	MP3B	Mx	0	3.41
49	MP3C	X	-37.052	2.41
50	MP3C	Z	-21.392	2.41
51	MP3C	Mx	-.0278	2.41
52	MP3C	X	-37.052	3.41
53	MP3C	Z	-21.392	3.41
54	MP3C	Mx	-.0278	3.41
55	M46	X	-10.54	7.5
56	M46	Z	-6.085	7.5
57	M46	Mx	-.0053	7.5
58	MP1A	X	-43.251	1
59	MP1A	Z	-24.971	1
60	MP1A	Mx	-.0216	1
61	MP1B	X	-57.421	1
62	MP1B	Z	-33.152	1
63	MP1B	Mx	0	1
64	MP3C	X	-43.251	1
65	MP3C	Z	-24.971	1
66	MP3C	Mx	.0216	1
67	MP2A	X	-37.972	1
68	MP2A	Z	-21.923	1
69	MP2A	Mx	-.019	1
70	MP2B	X	-57.421	1
71	MP2B	Z	-33.152	1
72	MP2B	Mx	0	1
73	MP2C	X	-37.972	1
74	MP2C	Z	-21.923	1
75	MP2C	Mx	.019	1
76	MP1A	X	-128.042	.67
77	MP1A	Z	-73.925	.67
78	MP1A	Mx	.096	.67
79	MP1A	X	-128.042	5.67
80	MP1A	Z	-73.925	5.67
81	MP1A	Mx	.096	5.67
82	MP1B	X	-170.966	.67
83	MP1B	Z	-98.707	.67
84	MP1B	Mx	0	.67
85	MP1B	X	-170.966	5.67
86	MP1B	Z	-98.707	5.67
87	MP1B	Mx	0	5.67
88	MP1C	X	-128.042	.67
89	MP1C	Z	-73.925	.67
90	MP1C	Mx	-.096	.67
91	MP1C	X	-128.042	5.67
92	MP1C	Z	-73.925	5.67
93	MP1C	Mx	-.096	5.67
94	OVP	X	-95.65	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
95	OVP	Z	-55.224	1
96	OVP	Mx	0	1
97	OVP	X	-95.65	1
98	OVP	Z	-55.224	1
99	OVP	Mx	0	1
100	MP2B	X	-35.564	4
101	MP2B	Z	-20.533	4
102	MP2B	Mx	0	4
103	MP2C	X	-16.981	4
104	MP2C	Z	-9.804	4
105	MP2C	Mx	-.0071	4
106	MP2B	X	-35.564	4
107	MP2B	Z	-20.533	4
108	MP2B	Mx	0	4
109	MP2C	X	-16.981	4
110	MP2C	Z	-9.804	4
111	MP2C	Mx	.0071	4
112	M56A	X	-13.707	7.5
113	M56A	Z	-7.914	7.5
114	M56A	Mx	0	7.5
115	M51	X	-10.54	7.5
116	M51	Z	-6.085	7.5
117	M51	Mx	.0053	7.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-89.416	.67
2	MP2A	Z	-154.873	.67
3	MP2A	Mx	-.0362	.67
4	MP2A	X	-89.416	4.17
5	MP2A	Z	-154.873	4.17
6	MP2A	Mx	-.0362	4.17
7	MP2B	X	-89.416	.67
8	MP2B	Z	-154.873	.67
9	MP2B	Mx	.1703	.67
10	MP2B	X	-89.416	4.17
11	MP2B	Z	-154.873	4.17
12	MP2B	Mx	.1703	4.17
13	MP2C	X	-64.239	.67
14	MP2C	Z	-111.266	.67
15	MP2C	Mx	-.0964	.67
16	MP2C	X	-64.239	4.17
17	MP2C	Z	-111.266	4.17
18	MP2C	Mx	-.0964	4.17
19	MP2A	X	-89.416	.67
20	MP2A	Z	-154.873	.67
21	MP2A	Mx	.1703	.67
22	MP2A	X	-89.416	4.17
23	MP2A	Z	-154.873	4.17
24	MP2A	Mx	.1703	4.17
25	MP2B	X	-89.416	.67
26	MP2B	Z	-154.873	.67
27	MP2B	Mx	-.0362	.67
28	MP2B	X	-89.416	4.17
29	MP2B	Z	-154.873	4.17
30	MP2B	Mx	-.0362	4.17



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
31	MP2C	X	-64.239	.67
32	MP2C	Z	-111.266	.67
33	MP2C	Mx	-.0964	.67
34	MP2C	X	-64.239	4.17
35	MP2C	Z	-111.266	4.17
36	MP2C	Mx	-.0964	4.17
37	MP3A	X	-35.188	2.41
38	MP3A	Z	-60.948	2.41
39	MP3A	Mx	.0264	2.41
40	MP3A	X	-35.188	3.41
41	MP3A	Z	-60.948	3.41
42	MP3A	Mx	.0264	3.41
43	MP3B	X	-35.188	2.41
44	MP3B	Z	-60.948	2.41
45	MP3B	Mx	.0264	2.41
46	MP3B	X	-35.188	3.41
47	MP3B	Z	-60.948	3.41
48	MP3B	Mx	.0264	3.41
49	MP3C	X	-14.494	2.41
50	MP3C	Z	-25.105	2.41
51	MP3C	Mx	-.0217	2.41
52	MP3C	X	-14.494	3.41
53	MP3C	Z	-25.105	3.41
54	MP3C	Mx	-.0217	3.41
55	M46	X	-7.304	7.5
56	M46	Z	-12.651	7.5
57	M46	Mx	-.0037	7.5
58	MP1A	X	-30.425	1
59	MP1A	Z	-52.698	1
60	MP1A	Mx	-.0152	1
61	MP1B	X	-30.425	1
62	MP1B	Z	-52.698	1
63	MP1B	Mx	-.0152	1
64	MP3C	X	-22.244	1
65	MP3C	Z	-38.528	1
66	MP3C	Mx	.0222	1
67	MP2A	X	-29.409	1
68	MP2A	Z	-50.938	1
69	MP2A	Mx	-.0147	1
70	MP2B	X	-29.409	1
71	MP2B	Z	-50.938	1
72	MP2B	Mx	-.0147	1
73	MP2C	X	-18.18	1
74	MP2C	Z	-31.489	1
75	MP2C	Mx	.0182	1
76	MP1A	X	-90.447	.67
77	MP1A	Z	-156.658	.67
78	MP1A	Mx	.0678	.67
79	MP1A	X	-90.447	5.67
80	MP1A	Z	-156.658	5.67
81	MP1A	Mx	.0678	5.67
82	MP1B	X	-90.447	.67
83	MP1B	Z	-156.658	.67
84	MP1B	Mx	.0678	.67
85	MP1B	X	-90.447	5.67
86	MP1B	Z	-156.658	5.67
87	MP1B	Mx	.0678	5.67





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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
88	MP1C	X	-65.664	.67
89	MP1C	Z	-113.733	.67
90	MP1C	Mx	-.0985	.67
91	MP1C	X	-65.664	5.67
92	MP1C	Z	-113.733	5.67
93	MP1C	Mx	-.0985	5.67
94	OVP	X	-71.308	1
95	OVP	Z	-123.51	1
96	OVP	Mx	0	1
97	OVP	X	-71.308	1
98	OVP	Z	-123.51	1
99	OVP	Mx	0	1
100	MP2B	X	-16.957	4
101	MP2B	Z	-29.37	4
102	MP2B	Mx	.0071	4
103	MP2C	X	-6.228	4
104	MP2C	Z	-10.787	4
105	MP2C	Mx	-.0052	4
106	MP2B	X	-16.957	4
107	MP2B	Z	-29.37	4
108	MP2B	Mx	-.0071	4
109	MP2C	X	-6.228	4
110	MP2C	Z	-10.787	4
111	MP2C	Mx	.0052	4
112	M56A	X	-7.304	7.5
113	M56A	Z	-12.651	7.5
114	M56A	Mx	-.0037	7.5
115	M51	X	-5.475	7.5
116	M51	Z	-9.484	7.5
117	M51	Mx	.0055	7.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	0	.67
2	MP2A	Z	-34.222	.67
3	MP2A	Mx	-.0228	.67
4	MP2A	X	0	4.17
5	MP2A	Z	-34.222	4.17
6	MP2A	Mx	-.0228	4.17
7	MP2B	X	0	.67
8	MP2B	Z	-26.048	.67
9	MP2B	Mx	.0256	.67
10	MP2B	X	0	4.17
11	MP2B	Z	-26.048	4.17
12	MP2B	Mx	.0256	4.17
13	MP2C	X	0	.67
14	MP2C	Z	-26.048	.67
15	MP2C	Mx	-.0082	.67
16	MP2C	X	0	4.17
17	MP2C	Z	-26.048	4.17
18	MP2C	Mx	-.0082	4.17
19	MP2A	X	0	.67
20	MP2A	Z	-34.222	.67
21	MP2A	Mx	.0228	.67
22	MP2A	X	0	4.17
23	MP2A	Z	-34.222	4.17



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
24	MP2A	Mx	.0228	4.17
25	MP2B	X	0	.67
26	MP2B	Z	-26.048	.67
27	MP2B	Mx	.0082	.67
28	MP2B	X	0	4.17
29	MP2B	Z	-26.048	4.17
30	MP2B	Mx	.0082	4.17
31	MP2C	X	0	.67
32	MP2C	Z	-26.048	.67
33	MP2C	Mx	-.0256	.67
34	MP2C	X	0	4.17
35	MP2C	Z	-26.048	4.17
36	MP2C	Mx	-.0256	4.17
37	MP3A	X	0	2.41
38	MP3A	Z	-18.189	2.41
39	MP3A	Mx	0	2.41
40	MP3A	X	0	3.41
41	MP3A	Z	-18.189	3.41
42	MP3A	Mx	0	3.41
43	MP3B	X	0	2.41
44	MP3B	Z	-10.346	2.41
45	MP3B	Mx	.0067	2.41
46	MP3B	X	0	3.41
47	MP3B	Z	-10.346	3.41
48	MP3B	Mx	.0067	3.41
49	MP3C	X	0	2.41
50	MP3C	Z	-10.346	2.41
51	MP3C	Mx	-.0067	2.41
52	MP3C	X	0	3.41
53	MP3C	Z	-10.346	3.41
54	MP3C	Mx	-.0067	3.41
55	M46	X	0	7.5
56	M46	Z	-3.681	7.5
57	M46	Mx	0	7.5
58	MP1A	X	0	1
59	MP1A	Z	-15.244	1
60	MP1A	Mx	0	1
61	MP1B	X	0	1
62	MP1B	Z	-11.756	1
63	MP1B	Mx	-.0051	1
64	MP3C	X	0	1
65	MP3C	Z	-11.756	1
66	MP3C	Mx	.0051	1
67	MP2A	X	0	1
68	MP2A	Z	-15.244	1
69	MP2A	Mx	0	1
70	MP2B	X	0	1
71	MP2B	Z	-10.43	1
72	MP2B	Mx	-.0045	1
73	MP2C	X	0	1
74	MP2C	Z	-10.43	1
75	MP2C	Mx	.0045	1
76	MP1A	X	0	.67
77	MP1A	Z	-34.672	.67
78	MP1A	Mx	0	.67
79	MP1A	X	0	5.67
80	MP1A	Z	-34.672	5.67



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
81	MP1A	Mx	0	5.67
82	MP1B	X	0	.67
83	MP1B	Z	-26.613	.67
84	MP1B	Mx	.0173	.67
85	MP1B	X	0	5.67
86	MP1B	Z	-26.613	5.67
87	MP1B	Mx	.0173	5.67
88	MP1C	X	0	.67
89	MP1C	Z	-26.613	.67
90	MP1C	Mx	-.0173	.67
91	MP1C	X	0	5.67
92	MP1C	Z	-26.613	5.67
93	MP1C	Mx	-.0173	5.67
94	OVP	X	0	1
95	OVP	Z	-28.742	1
96	OVP	Mx	0	1
97	OVP	X	0	1
98	OVP	Z	-28.742	1
99	OVP	Mx	0	1
100	MP2B	X	0	4
101	MP2B	Z	-4.442	4
102	MP2B	Mx	.0016	4
103	MP2C	X	0	4
104	MP2C	Z	-4.442	4
105	MP2C	Mx	-.0016	4
106	MP2B	X	0	4
107	MP2B	Z	-4.442	4
108	MP2B	Mx	-.0016	4
109	MP2C	X	0	4
110	MP2C	Z	-4.442	4
111	MP2C	Mx	.0016	4
112	M56A	X	0	7.5
113	M56A	Z	-2.989	7.5
114	M56A	Mx	-.0013	7.5
115	M51	X	0	7.5
116	M51	Z	-2.989	7.5
117	M51	Mx	.0013	7.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	15.749	.67
2	MP2A	Z	-27.277	.67
3	MP2A	Mx	-.03	.67
4	MP2A	X	15.749	4.17
5	MP2A	Z	-27.277	4.17
6	MP2A	Mx	-.03	4.17
7	MP2B	X	11.662	.67
8	MP2B	Z	-20.199	.67
9	MP2B	Mx	.0175	.67
10	MP2B	X	11.662	4.17
11	MP2B	Z	-20.199	4.17
12	MP2B	Mx	.0175	4.17
13	MP2C	X	15.749	.67
14	MP2C	Z	-27.277	.67
15	MP2C	Mx	.0064	.67
16	MP2C	X	15.749	4.17



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
17	MP2C	Z	-27.277	4.17
18	MP2C	Mx	.0064	4.17
19	MP2A	X	15.749	.67
20	MP2A	Z	-27.277	.67
21	MP2A	Mx	.0064	.67
22	MP2A	X	15.749	4.17
23	MP2A	Z	-27.277	4.17
24	MP2A	Mx	.0064	4.17
25	MP2B	X	11.662	.67
26	MP2B	Z	-20.199	.67
27	MP2B	Mx	.0175	.67
28	MP2B	X	11.662	4.17
29	MP2B	Z	-20.199	4.17
30	MP2B	Mx	.0175	4.17
31	MP2C	X	15.749	.67
32	MP2C	Z	-27.277	.67
33	MP2C	Mx	-.03	.67
34	MP2C	X	15.749	4.17
35	MP2C	Z	-27.277	4.17
36	MP2C	Mx	-.03	4.17
37	MP3A	X	7.788	2.41
38	MP3A	Z	-13.488	2.41
39	MP3A	Mx	-.0058	2.41
40	MP3A	X	7.788	3.41
41	MP3A	Z	-13.488	3.41
42	MP3A	Mx	-.0058	3.41
43	MP3B	X	3.866	2.41
44	MP3B	Z	-6.696	2.41
45	MP3B	Mx	.0058	2.41
46	MP3B	X	3.866	3.41
47	MP3B	Z	-6.696	3.41
48	MP3B	Mx	.0058	3.41
49	MP3C	X	7.788	2.41
50	MP3C	Z	-13.488	2.41
51	MP3C	Mx	-.0058	2.41
52	MP3C	X	7.788	3.41
53	MP3C	Z	-13.488	3.41
54	MP3C	Mx	-.0058	3.41
55	M46	X	1.725	7.5
56	M46	Z	-2.988	7.5
57	M46	Mx	.000863	7.5
58	MP1A	X	7.041	1
59	MP1A	Z	-12.195	1
60	MP1A	Mx	.0035	1
61	MP1B	X	5.296	1
62	MP1B	Z	-9.174	1
63	MP1B	Mx	-.0053	1
64	MP3C	X	7.041	1
65	MP3C	Z	-12.195	1
66	MP3C	Mx	.0035	1
67	MP2A	X	6.82	1
68	MP2A	Z	-11.812	1
69	MP2A	Mx	.0034	1
70	MP2B	X	4.413	1
71	MP2B	Z	-7.643	1
72	MP2B	Mx	-.0044	1
73	MP2C	X	6.82	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
74	MP2C	Z	-11.812	1
75	MP2C	Mx	.0034	1
76	MP1A	X	15.993	.67
77	MP1A	Z	-27.701	.67
78	MP1A	Mx	-.012	.67
79	MP1A	X	15.993	5.67
80	MP1A	Z	-27.701	5.67
81	MP1A	Mx	-.012	5.67
82	MP1B	X	11.963	.67
83	MP1B	Z	-20.721	.67
84	MP1B	Mx	.0179	.67
85	MP1B	X	11.963	5.67
86	MP1B	Z	-20.721	5.67
87	MP1B	Mx	.0179	5.67
88	MP1C	X	15.993	.67
89	MP1C	Z	-27.701	.67
90	MP1C	Mx	-.012	.67
91	MP1C	X	15.993	5.67
92	MP1C	Z	-27.701	5.67
93	MP1C	Mx	-.012	5.67
94	OVP	X	13.023	1
95	OVP	Z	-22.557	1
96	OVP	Mx	0	1
97	OVP	X	13.023	1
98	OVP	Z	-22.557	1
99	OVP	Mx	0	1
100	MP2B	X	1.567	4
101	MP2B	Z	-2.715	4
102	MP2B	Mx	.0013	4
103	MP2C	X	3.529	4
104	MP2C	Z	-6.112	4
105	MP2C	Mx	-.0015	4
106	MP2B	X	1.567	4
107	MP2B	Z	-2.715	4
108	MP2B	Mx	-.0013	4
109	MP2C	X	3.529	4
110	MP2C	Z	-6.112	4
111	MP2C	Mx	.0015	4
112	M56A	X	1.379	7.5
113	M56A	Z	-2.388	7.5
114	M56A	Mx	-.0014	7.5
115	M51	X	1.725	7.5
116	M51	Z	-2.988	7.5
117	M51	Mx	.000863	7.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	22.558	.67
2	MP2A	Z	-13.024	.67
3	MP2A	Mx	-.0256	.67
4	MP2A	X	22.558	4.17
5	MP2A	Z	-13.024	4.17
6	MP2A	Mx	-.0256	4.17
7	MP2B	X	22.558	.67
8	MP2B	Z	-13.024	.67
9	MP2B	Mx	.0082	.67



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
10	MP2B	X	22.558	4.17
11	MP2B	Z	-13.024	4.17
12	MP2B	Mx	.0082	4.17
13	MP2C	X	29.637	.67
14	MP2C	Z	-17.111	.67
15	MP2C	Mx	.0228	.67
16	MP2C	X	29.637	4.17
17	MP2C	Z	-17.111	4.17
18	MP2C	Mx	.0228	4.17
19	MP2A	X	22.558	.67
20	MP2A	Z	-13.024	.67
21	MP2A	Mx	-.0082	.67
22	MP2A	X	22.558	4.17
23	MP2A	Z	-13.024	4.17
24	MP2A	Mx	-.0082	4.17
25	MP2B	X	22.558	.67
26	MP2B	Z	-13.024	.67
27	MP2B	Mx	.0256	.67
28	MP2B	X	22.558	4.17
29	MP2B	Z	-13.024	4.17
30	MP2B	Mx	.0256	4.17
31	MP2C	X	29.637	.67
32	MP2C	Z	-17.111	.67
33	MP2C	Mx	-.0228	.67
34	MP2C	X	29.637	4.17
35	MP2C	Z	-17.111	4.17
36	MP2C	Mx	-.0228	4.17
37	MP3A	X	8.96	2.41
38	MP3A	Z	-5.173	2.41
39	MP3A	Mx	-.0067	2.41
40	MP3A	X	8.96	3.41
41	MP3A	Z	-5.173	3.41
42	MP3A	Mx	-.0067	3.41
43	MP3B	X	8.96	2.41
44	MP3B	Z	-5.173	2.41
45	MP3B	Mx	.0067	2.41
46	MP3B	X	8.96	3.41
47	MP3B	Z	-5.173	3.41
48	MP3B	Mx	.0067	3.41
49	MP3C	X	15.752	2.41
50	MP3C	Z	-9.095	2.41
51	MP3C	Mx	0	2.41
52	MP3C	X	15.752	3.41
53	MP3C	Z	-9.095	3.41
54	MP3C	Mx	0	3.41
55	M46	X	2.588	7.5
56	M46	Z	-1.494	7.5
57	M46	Mx	.0013	7.5
58	MP1A	X	10.181	1
59	MP1A	Z	-5.878	1
60	MP1A	Mx	.0051	1
61	MP1B	X	10.181	1
62	MP1B	Z	-5.878	1
63	MP1B	Mx	-.0051	1
64	MP3C	X	13.202	1
65	MP3C	Z	-7.622	1
66	MP3C	Mx	0	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
67	MP2A	X	9.033	1
68	MP2A	Z	-5.215	1
69	MP2A	Mx	.0045	1
70	MP2B	X	9.033	1
71	MP2B	Z	-5.215	1
72	MP2B	Mx	-.0045	1
73	MP2C	X	13.202	1
74	MP2C	Z	-7.622	1
75	MP2C	Mx	0	1
76	MP1A	X	23.048	.67
77	MP1A	Z	-13.306	.67
78	MP1A	Mx	-.0173	.67
79	MP1A	X	23.048	5.67
80	MP1A	Z	-13.306	5.67
81	MP1A	Mx	-.0173	5.67
82	MP1B	X	23.048	.67
83	MP1B	Z	-13.306	.67
84	MP1B	Mx	.0173	.67
85	MP1B	X	23.048	5.67
86	MP1B	Z	-13.306	5.67
87	MP1B	Mx	.0173	5.67
88	MP1C	X	30.027	.67
89	MP1C	Z	-17.336	.67
90	MP1C	Mx	0	.67
91	MP1C	X	30.027	5.67
92	MP1C	Z	-17.336	5.67
93	MP1C	Mx	0	5.67
94	OVP	X	17.887	1
95	OVP	Z	-10.327	1
96	OVP	Mx	0	1
97	OVP	X	17.887	1
98	OVP	Z	-10.327	1
99	OVP	Mx	0	1
100	MP2B	X	3.847	4
101	MP2B	Z	-2.221	4
102	MP2B	Mx	.0016	4
103	MP2C	X	7.245	4
104	MP2C	Z	-4.183	4
105	MP2C	Mx	0	4
106	MP2B	X	3.847	4
107	MP2B	Z	-2.221	4
108	MP2B	Mx	-.0016	4
109	MP2C	X	7.245	4
110	MP2C	Z	-4.183	4
111	MP2C	Mx	0	4
112	M56A	X	2.588	7.5
113	M56A	Z	-1.494	7.5
114	M56A	Mx	-.0013	7.5
115	M51	X	3.188	7.5
116	M51	Z	-1.841	7.5
117	M51	Mx	0	7.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	X	23.323	.67
2	MP2A	Z	0	.67



Company : Colliers Engineering & Design  
 Designer :  
 Job Number : Project # 23777104  
 Model Name : Antenna Mount Analysis

July 20, 2023  
 9:25 AM  
 Checked By: \_\_\_\_\_

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
3	MP2A	Mx	-.0175	.67
4	MP2A	X	23.323	4.17
5	MP2A	Z	0	4.17
6	MP2A	Mx	-.0175	4.17
7	MP2B	X	31.497	.67
8	MP2B	Z	0	.67
9	MP2B	Mx	-.0064	.67
10	MP2B	X	31.497	4.17
11	MP2B	Z	0	4.17
12	MP2B	Mx	-.0064	4.17
13	MP2C	X	31.497	.67
14	MP2C	Z	0	.67
15	MP2C	Mx	.03	.67
16	MP2C	X	31.497	4.17
17	MP2C	Z	0	4.17
18	MP2C	Mx	.03	4.17
19	MP2A	X	23.323	.67
20	MP2A	Z	0	.67
21	MP2A	Mx	-.0175	.67
22	MP2A	X	23.323	4.17
23	MP2A	Z	0	4.17
24	MP2A	Mx	-.0175	4.17
25	MP2B	X	31.497	.67
26	MP2B	Z	0	.67
27	MP2B	Mx	.03	.67
28	MP2B	X	31.497	4.17
29	MP2B	Z	0	4.17
30	MP2B	Mx	.03	4.17
31	MP2C	X	31.497	.67
32	MP2C	Z	0	.67
33	MP2C	Mx	-.0064	.67
34	MP2C	X	31.497	4.17
35	MP2C	Z	0	4.17
36	MP2C	Mx	-.0064	4.17
37	MP3A	X	7.732	2.41
38	MP3A	Z	0	2.41
39	MP3A	Mx	-.0058	2.41
40	MP3A	X	7.732	3.41
41	MP3A	Z	0	3.41
42	MP3A	Mx	-.0058	3.41
43	MP3B	X	15.575	2.41
44	MP3B	Z	0	2.41
45	MP3B	Mx	.0058	2.41
46	MP3B	X	15.575	3.41
47	MP3B	Z	0	3.41
48	MP3B	Mx	.0058	3.41
49	MP3C	X	15.575	2.41
50	MP3C	Z	0	2.41
51	MP3C	Mx	.0058	2.41
52	MP3C	X	15.575	3.41
53	MP3C	Z	0	3.41
54	MP3C	Mx	.0058	3.41
55	M46	X	2.758	7.5
56	M46	Z	0	7.5
57	M46	Mx	.0014	7.5
58	MP1A	X	10.593	1
59	MP1A	Z	0	1





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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]	
60	MP1A	Mx	.0053	1
61	MP1B	X	14.082	1
62	MP1B	Z	0	1
63	MP1B	Mx	-.0035	1
64	MP3C	X	14.082	1
65	MP3C	Z	0	1
66	MP3C	Mx	-.0035	1
67	MP2A	X	8.825	1
68	MP2A	Z	0	1
69	MP2A	Mx	.0044	1
70	MP2B	X	13.64	1
71	MP2B	Z	0	1
72	MP2B	Mx	-.0034	1
73	MP2C	X	13.64	1
74	MP2C	Z	0	1
75	MP2C	Mx	-.0034	1
76	MP1A	X	23.927	.67
77	MP1A	Z	0	.67
78	MP1A	Mx	-.0179	.67
79	MP1A	X	23.927	5.67
80	MP1A	Z	0	5.67
81	MP1A	Mx	-.0179	5.67
82	MP1B	X	31.986	.67
83	MP1B	Z	0	.67
84	MP1B	Mx	.012	.67
85	MP1B	X	31.986	5.67
86	MP1B	Z	0	5.67
87	MP1B	Mx	.012	5.67
88	MP1C	X	31.986	.67
89	MP1C	Z	0	.67
90	MP1C	Mx	.012	.67
91	MP1C	X	31.986	5.67
92	MP1C	Z	0	5.67
93	MP1C	Mx	.012	5.67
94	OVP	X	17.958	1
95	OVP	Z	0	1
96	OVP	Mx	0	1
97	OVP	X	17.958	1
98	OVP	Z	0	1
99	OVP	Mx	0	1
100	MP2B	X	7.058	4
101	MP2B	Z	0	4
102	MP2B	Mx	.0015	4
103	MP2C	X	7.058	4
104	MP2C	Z	0	4
105	MP2C	Mx	.0015	4
106	MP2B	X	7.058	4
107	MP2B	Z	0	4
108	MP2B	Mx	-.0015	4
109	MP2C	X	7.058	4
110	MP2C	Z	0	4
111	MP2C	Mx	-.0015	4
112	M56A	X	3.45	7.5
113	M56A	Z	0	7.5
114	M56A	Mx	-.000863	7.5
115	M51	X	3.45	7.5
116	M51	Z	0	7.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
117	M51	Mx	-.000863	7.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	22.558	.67
2	MP2A	Z	13.024	.67
3	MP2A	Mx	-.0082	.67
4	MP2A	X	22.558	4.17
5	MP2A	Z	13.024	4.17
6	MP2A	Mx	-.0082	4.17
7	MP2B	X	29.637	.67
8	MP2B	Z	17.111	.67
9	MP2B	Mx	-.0228	.67
10	MP2B	X	29.637	4.17
11	MP2B	Z	17.111	4.17
12	MP2B	Mx	-.0228	4.17
13	MP2C	X	22.558	.67
14	MP2C	Z	13.024	.67
15	MP2C	Mx	.0256	.67
16	MP2C	X	22.558	4.17
17	MP2C	Z	13.024	4.17
18	MP2C	Mx	.0256	4.17
19	MP2A	X	22.558	.67
20	MP2A	Z	13.024	.67
21	MP2A	Mx	-.0256	.67
22	MP2A	X	22.558	4.17
23	MP2A	Z	13.024	4.17
24	MP2A	Mx	-.0256	4.17
25	MP2B	X	29.637	.67
26	MP2B	Z	17.111	.67
27	MP2B	Mx	.0228	.67
28	MP2B	X	29.637	4.17
29	MP2B	Z	17.111	4.17
30	MP2B	Mx	.0228	4.17
31	MP2C	X	22.558	.67
32	MP2C	Z	13.024	.67
33	MP2C	Mx	.0082	.67
34	MP2C	X	22.558	4.17
35	MP2C	Z	13.024	4.17
36	MP2C	Mx	.0082	4.17
37	MP3A	X	8.96	2.41
38	MP3A	Z	5.173	2.41
39	MP3A	Mx	-.0067	2.41
40	MP3A	X	8.96	3.41
41	MP3A	Z	5.173	3.41
42	MP3A	Mx	-.0067	3.41
43	MP3B	X	15.752	2.41
44	MP3B	Z	9.095	2.41
45	MP3B	Mx	0	2.41
46	MP3B	X	15.752	3.41
47	MP3B	Z	9.095	3.41
48	MP3B	Mx	0	3.41
49	MP3C	X	8.96	2.41
50	MP3C	Z	5.173	2.41
51	MP3C	Mx	.0067	2.41
52	MP3C	X	8.96	3.41



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]	
53	MP3C	Z	5.173	3.41
54	MP3C	Mx	.0067	3.41
55	M46	X	2.588	7.5
56	M46	Z	1.494	7.5
57	M46	Mx	.0013	7.5
58	MP1A	X	10.181	1
59	MP1A	Z	5.878	1
60	MP1A	Mx	.0051	1
61	MP1B	X	13.202	1
62	MP1B	Z	7.622	1
63	MP1B	Mx	0	1
64	MP3C	X	10.181	1
65	MP3C	Z	5.878	1
66	MP3C	Mx	-.0051	1
67	MP2A	X	9.033	1
68	MP2A	Z	5.215	1
69	MP2A	Mx	.0045	1
70	MP2B	X	13.202	1
71	MP2B	Z	7.622	1
72	MP2B	Mx	0	1
73	MP2C	X	9.033	1
74	MP2C	Z	5.215	1
75	MP2C	Mx	-.0045	1
76	MP1A	X	23.048	.67
77	MP1A	Z	13.306	.67
78	MP1A	Mx	-.0173	.67
79	MP1A	X	23.048	5.67
80	MP1A	Z	13.306	5.67
81	MP1A	Mx	-.0173	5.67
82	MP1B	X	30.027	.67
83	MP1B	Z	17.336	.67
84	MP1B	Mx	0	.67
85	MP1B	X	30.027	5.67
86	MP1B	Z	17.336	5.67
87	MP1B	Mx	0	5.67
88	MP1C	X	23.048	.67
89	MP1C	Z	13.306	.67
90	MP1C	Mx	.0173	.67
91	MP1C	X	23.048	5.67
92	MP1C	Z	13.306	5.67
93	MP1C	Mx	.0173	5.67
94	OVP	X	17.887	1
95	OVP	Z	10.327	1
96	OVP	Mx	0	1
97	OVP	X	17.887	1
98	OVP	Z	10.327	1
99	OVP	Mx	0	1
100	MP2B	X	7.245	4
101	MP2B	Z	4.183	4
102	MP2B	Mx	0	4
103	MP2C	X	3.847	4
104	MP2C	Z	2.221	4
105	MP2C	Mx	.0016	4
106	MP2B	X	7.245	4
107	MP2B	Z	4.183	4
108	MP2B	Mx	0	4
109	MP2C	X	3.847	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
110	MP2C	Z	2.221	4
111	MP2C	Mx	-.0016	4
112	M56A	X	3.188	7.5
113	M56A	Z	1.841	7.5
114	M56A	Mx	0	7.5
115	M51	X	2.588	7.5
116	M51	Z	1.494	7.5
117	M51	Mx	-.0013	7.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	15.749	.67
2	MP2A	Z	27.277	.67
3	MP2A	Mx	.0064	.67
4	MP2A	X	15.749	4.17
5	MP2A	Z	27.277	4.17
6	MP2A	Mx	.0064	4.17
7	MP2B	X	15.749	.67
8	MP2B	Z	27.277	.67
9	MP2B	Mx	-.03	.67
10	MP2B	X	15.749	4.17
11	MP2B	Z	27.277	4.17
12	MP2B	Mx	-.03	4.17
13	MP2C	X	11.662	.67
14	MP2C	Z	20.199	.67
15	MP2C	Mx	.0175	.67
16	MP2C	X	11.662	4.17
17	MP2C	Z	20.199	4.17
18	MP2C	Mx	.0175	4.17
19	MP2A	X	15.749	.67
20	MP2A	Z	27.277	.67
21	MP2A	Mx	-.03	.67
22	MP2A	X	15.749	4.17
23	MP2A	Z	27.277	4.17
24	MP2A	Mx	-.03	4.17
25	MP2B	X	15.749	.67
26	MP2B	Z	27.277	.67
27	MP2B	Mx	.0064	.67
28	MP2B	X	15.749	4.17
29	MP2B	Z	27.277	4.17
30	MP2B	Mx	.0064	4.17
31	MP2C	X	11.662	.67
32	MP2C	Z	20.199	.67
33	MP2C	Mx	.0175	.67
34	MP2C	X	11.662	4.17
35	MP2C	Z	20.199	4.17
36	MP2C	Mx	.0175	4.17
37	MP3A	X	7.788	2.41
38	MP3A	Z	13.488	2.41
39	MP3A	Mx	-.0058	2.41
40	MP3A	X	7.788	3.41
41	MP3A	Z	13.488	3.41
42	MP3A	Mx	-.0058	3.41
43	MP3B	X	7.788	2.41
44	MP3B	Z	13.488	2.41
45	MP3B	Mx	-.0058	2.41



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
46	MP3B	X	7.788	3.41
47	MP3B	Z	13.488	3.41
48	MP3B	Mx	-.0058	3.41
49	MP3C	X	3.866	2.41
50	MP3C	Z	6.696	2.41
51	MP3C	Mx	.0058	2.41
52	MP3C	X	3.866	3.41
53	MP3C	Z	6.696	3.41
54	MP3C	Mx	.0058	3.41
55	M46	X	1.725	7.5
56	M46	Z	2.988	7.5
57	M46	Mx	.000863	7.5
58	MP1A	X	7.041	1
59	MP1A	Z	12.195	1
60	MP1A	Mx	.0035	1
61	MP1B	X	7.041	1
62	MP1B	Z	12.195	1
63	MP1B	Mx	.0035	1
64	MP3C	X	5.296	1
65	MP3C	Z	9.174	1
66	MP3C	Mx	-.0053	1
67	MP2A	X	6.82	1
68	MP2A	Z	11.812	1
69	MP2A	Mx	.0034	1
70	MP2B	X	6.82	1
71	MP2B	Z	11.812	1
72	MP2B	Mx	.0034	1
73	MP2C	X	4.413	1
74	MP2C	Z	7.643	1
75	MP2C	Mx	-.0044	1
76	MP1A	X	15.993	.67
77	MP1A	Z	27.701	.67
78	MP1A	Mx	-.012	.67
79	MP1A	X	15.993	5.67
80	MP1A	Z	27.701	5.67
81	MP1A	Mx	-.012	5.67
82	MP1B	X	15.993	.67
83	MP1B	Z	27.701	.67
84	MP1B	Mx	-.012	.67
85	MP1B	X	15.993	5.67
86	MP1B	Z	27.701	5.67
87	MP1B	Mx	-.012	5.67
88	MP1C	X	11.963	.67
89	MP1C	Z	20.721	.67
90	MP1C	Mx	.0179	.67
91	MP1C	X	11.963	5.67
92	MP1C	Z	20.721	5.67
93	MP1C	Mx	.0179	5.67
94	OVP	X	13.023	1
95	OVP	Z	22.557	1
96	OVP	Mx	0	1
97	OVP	X	13.023	1
98	OVP	Z	22.557	1
99	OVP	Mx	0	1
100	MP2B	X	3.529	4
101	MP2B	Z	6.112	4
102	MP2B	Mx	-.0015	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
103	MP2C	X	1.567	4
104	MP2C	Z	2.715	4
105	MP2C	Mx	.0013	4
106	MP2B	X	3.529	4
107	MP2B	Z	6.112	4
108	MP2B	Mx	.0015	4
109	MP2C	X	1.567	4
110	MP2C	Z	2.715	4
111	MP2C	Mx	-.0013	4
112	M56A	X	1.725	7.5
113	M56A	Z	2.988	7.5
114	M56A	Mx	.000863	7.5
115	M51	X	1.379	7.5
116	M51	Z	2.388	7.5
117	M51	Mx	-.0014	7.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	X	0	.67
2	MP2A	Z	34.222	.67
3	MP2A	Mx	.0228	.67
4	MP2A	X	0	4.17
5	MP2A	Z	34.222	4.17
6	MP2A	Mx	.0228	4.17
7	MP2B	X	0	.67
8	MP2B	Z	26.048	.67
9	MP2B	Mx	-.0256	.67
10	MP2B	X	0	4.17
11	MP2B	Z	26.048	4.17
12	MP2B	Mx	-.0256	4.17
13	MP2C	X	0	.67
14	MP2C	Z	26.048	.67
15	MP2C	Mx	.0082	.67
16	MP2C	X	0	4.17
17	MP2C	Z	26.048	4.17
18	MP2C	Mx	.0082	4.17
19	MP2A	X	0	.67
20	MP2A	Z	34.222	.67
21	MP2A	Mx	-.0228	.67
22	MP2A	X	0	4.17
23	MP2A	Z	34.222	4.17
24	MP2A	Mx	-.0228	4.17
25	MP2B	X	0	.67
26	MP2B	Z	26.048	.67
27	MP2B	Mx	-.0082	.67
28	MP2B	X	0	4.17
29	MP2B	Z	26.048	4.17
30	MP2B	Mx	-.0082	4.17
31	MP2C	X	0	.67
32	MP2C	Z	26.048	.67
33	MP2C	Mx	.0256	.67
34	MP2C	X	0	4.17
35	MP2C	Z	26.048	4.17
36	MP2C	Mx	.0256	4.17
37	MP3A	X	0	2.41
38	MP3A	Z	18.189	2.41



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
39	MP3A	Mx	0	2.41
40	MP3A	X	0	3.41
41	MP3A	Z	18.189	3.41
42	MP3A	Mx	0	3.41
43	MP3B	X	0	2.41
44	MP3B	Z	10.346	2.41
45	MP3B	Mx	-.0067	2.41
46	MP3B	X	0	3.41
47	MP3B	Z	10.346	3.41
48	MP3B	Mx	-.0067	3.41
49	MP3C	X	0	2.41
50	MP3C	Z	10.346	2.41
51	MP3C	Mx	.0067	2.41
52	MP3C	X	0	3.41
53	MP3C	Z	10.346	3.41
54	MP3C	Mx	.0067	3.41
55	M46	X	0	7.5
56	M46	Z	3.681	7.5
57	M46	Mx	0	7.5
58	MP1A	X	0	1
59	MP1A	Z	15.244	1
60	MP1A	Mx	0	1
61	MP1B	X	0	1
62	MP1B	Z	11.756	1
63	MP1B	Mx	.0051	1
64	MP3C	X	0	1
65	MP3C	Z	11.756	1
66	MP3C	Mx	-.0051	1
67	MP2A	X	0	1
68	MP2A	Z	15.244	1
69	MP2A	Mx	0	1
70	MP2B	X	0	1
71	MP2B	Z	10.43	1
72	MP2B	Mx	.0045	1
73	MP2C	X	0	1
74	MP2C	Z	10.43	1
75	MP2C	Mx	-.0045	1
76	MP1A	X	0	.67
77	MP1A	Z	34.672	.67
78	MP1A	Mx	0	.67
79	MP1A	X	0	5.67
80	MP1A	Z	34.672	5.67
81	MP1A	Mx	0	5.67
82	MP1B	X	0	.67
83	MP1B	Z	26.613	.67
84	MP1B	Mx	-.0173	.67
85	MP1B	X	0	5.67
86	MP1B	Z	26.613	5.67
87	MP1B	Mx	-.0173	5.67
88	MP1C	X	0	.67
89	MP1C	Z	26.613	.67
90	MP1C	Mx	.0173	.67
91	MP1C	X	0	5.67
92	MP1C	Z	26.613	5.67
93	MP1C	Mx	.0173	5.67
94	OVP	X	0	1
95	OVP	Z	28.742	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
96	OVP	Mx	0	1
97	OVP	X	0	1
98	OVP	Z	28.742	1
99	OVP	Mx	0	1
100	MP2B	X	0	4
101	MP2B	Z	4.442	4
102	MP2B	Mx	-.0016	4
103	MP2C	X	0	4
104	MP2C	Z	4.442	4
105	MP2C	Mx	.0016	4
106	MP2B	X	0	4
107	MP2B	Z	4.442	4
108	MP2B	Mx	.0016	4
109	MP2C	X	0	4
110	MP2C	Z	4.442	4
111	MP2C	Mx	-.0016	4
112	M56A	X	0	7.5
113	M56A	Z	2.989	7.5
114	M56A	Mx	.0013	7.5
115	M51	X	0	7.5
116	M51	Z	2.989	7.5
117	M51	Mx	-.0013	7.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	X	-15.749	.67
2	MP2A	Z	27.277	.67
3	MP2A	Mx	.03	.67
4	MP2A	X	-15.749	4.17
5	MP2A	Z	27.277	4.17
6	MP2A	Mx	.03	4.17
7	MP2B	X	-11.662	.67
8	MP2B	Z	20.199	.67
9	MP2B	Mx	-.0175	.67
10	MP2B	X	-11.662	4.17
11	MP2B	Z	20.199	4.17
12	MP2B	Mx	-.0175	4.17
13	MP2C	X	-15.749	.67
14	MP2C	Z	27.277	.67
15	MP2C	Mx	-.0064	.67
16	MP2C	X	-15.749	4.17
17	MP2C	Z	27.277	4.17
18	MP2C	Mx	-.0064	4.17
19	MP2A	X	-15.749	.67
20	MP2A	Z	27.277	.67
21	MP2A	Mx	-.0064	.67
22	MP2A	X	-15.749	4.17
23	MP2A	Z	27.277	4.17
24	MP2A	Mx	-.0064	4.17
25	MP2B	X	-11.662	.67
26	MP2B	Z	20.199	.67
27	MP2B	Mx	-.0175	.67
28	MP2B	X	-11.662	4.17
29	MP2B	Z	20.199	4.17
30	MP2B	Mx	-.0175	4.17
31	MP2C	X	-15.749	.67





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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
32	MP2C	Z	27.277	.67
33	MP2C	Mx	.03	.67
34	MP2C	X	-15.749	4.17
35	MP2C	Z	27.277	4.17
36	MP2C	Mx	.03	4.17
37	MP3A	X	-7.788	2.41
38	MP3A	Z	13.488	2.41
39	MP3A	Mx	.0058	2.41
40	MP3A	X	-7.788	3.41
41	MP3A	Z	13.488	3.41
42	MP3A	Mx	.0058	3.41
43	MP3B	X	-3.866	2.41
44	MP3B	Z	6.696	2.41
45	MP3B	Mx	-.0058	2.41
46	MP3B	X	-3.866	3.41
47	MP3B	Z	6.696	3.41
48	MP3B	Mx	-.0058	3.41
49	MP3C	X	-7.788	2.41
50	MP3C	Z	13.488	2.41
51	MP3C	Mx	.0058	2.41
52	MP3C	X	-7.788	3.41
53	MP3C	Z	13.488	3.41
54	MP3C	Mx	.0058	3.41
55	M46	X	-1.725	7.5
56	M46	Z	2.988	7.5
57	M46	Mx	-.000863	7.5
58	MP1A	X	-7.041	1
59	MP1A	Z	12.195	1
60	MP1A	Mx	-.0035	1
61	MP1B	X	-5.296	1
62	MP1B	Z	9.174	1
63	MP1B	Mx	.0053	1
64	MP3C	X	-7.041	1
65	MP3C	Z	12.195	1
66	MP3C	Mx	-.0035	1
67	MP2A	X	-6.82	1
68	MP2A	Z	11.812	1
69	MP2A	Mx	-.0034	1
70	MP2B	X	-4.413	1
71	MP2B	Z	7.643	1
72	MP2B	Mx	.0044	1
73	MP2C	X	-6.82	1
74	MP2C	Z	11.812	1
75	MP2C	Mx	-.0034	1
76	MP1A	X	-15.993	.67
77	MP1A	Z	27.701	.67
78	MP1A	Mx	.012	.67
79	MP1A	X	-15.993	5.67
80	MP1A	Z	27.701	5.67
81	MP1A	Mx	.012	5.67
82	MP1B	X	-11.963	.67
83	MP1B	Z	20.721	.67
84	MP1B	Mx	-.0179	.67
85	MP1B	X	-11.963	5.67
86	MP1B	Z	20.721	5.67
87	MP1B	Mx	-.0179	5.67
88	MP1C	X	-15.993	.67



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
89	MP1C	Z	27.701	.67
90	MP1C	Mx	.012	.67
91	MP1C	X	-15.993	5.67
92	MP1C	Z	27.701	5.67
93	MP1C	Mx	.012	5.67
94	OVP	X	-13.023	1
95	OVP	Z	22.557	1
96	OVP	Mx	0	1
97	OVP	X	-13.023	1
98	OVP	Z	22.557	1
99	OVP	Mx	0	1
100	MP2B	X	-1.567	4
101	MP2B	Z	2.715	4
102	MP2B	Mx	-.0013	4
103	MP2C	X	-3.529	4
104	MP2C	Z	6.112	4
105	MP2C	Mx	.0015	4
106	MP2B	X	-1.567	4
107	MP2B	Z	2.715	4
108	MP2B	Mx	.0013	4
109	MP2C	X	-3.529	4
110	MP2C	Z	6.112	4
111	MP2C	Mx	-.0015	4
112	M56A	X	-1.379	7.5
113	M56A	Z	2.388	7.5
114	M56A	Mx	.0014	7.5
115	M51	X	-1.725	7.5
116	M51	Z	2.988	7.5
117	M51	Mx	-.000863	7.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-22.558	.67
2	MP2A	Z	13.024	.67
3	MP2A	Mx	.0256	.67
4	MP2A	X	-22.558	4.17
5	MP2A	Z	13.024	4.17
6	MP2A	Mx	.0256	4.17
7	MP2B	X	-22.558	.67
8	MP2B	Z	13.024	.67
9	MP2B	Mx	-.0082	.67
10	MP2B	X	-22.558	4.17
11	MP2B	Z	13.024	4.17
12	MP2B	Mx	-.0082	4.17
13	MP2C	X	-29.637	.67
14	MP2C	Z	17.111	.67
15	MP2C	Mx	-.0228	.67
16	MP2C	X	-29.637	4.17
17	MP2C	Z	17.111	4.17
18	MP2C	Mx	-.0228	4.17
19	MP2A	X	-22.558	.67
20	MP2A	Z	13.024	.67
21	MP2A	Mx	.0082	.67
22	MP2A	X	-22.558	4.17
23	MP2A	Z	13.024	4.17
24	MP2A	Mx	.0082	4.17



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
25	MP2B	X	-22.558	.67
26	MP2B	Z	13.024	.67
27	MP2B	Mx	-.0256	.67
28	MP2B	X	-22.558	4.17
29	MP2B	Z	13.024	4.17
30	MP2B	Mx	-.0256	4.17
31	MP2C	X	-29.637	.67
32	MP2C	Z	17.111	.67
33	MP2C	Mx	.0228	.67
34	MP2C	X	-29.637	4.17
35	MP2C	Z	17.111	4.17
36	MP2C	Mx	.0228	4.17
37	MP3A	X	-8.96	2.41
38	MP3A	Z	5.173	2.41
39	MP3A	Mx	.0067	2.41
40	MP3A	X	-8.96	3.41
41	MP3A	Z	5.173	3.41
42	MP3A	Mx	.0067	3.41
43	MP3B	X	-8.96	2.41
44	MP3B	Z	5.173	2.41
45	MP3B	Mx	-.0067	2.41
46	MP3B	X	-8.96	3.41
47	MP3B	Z	5.173	3.41
48	MP3B	Mx	-.0067	3.41
49	MP3C	X	-15.752	2.41
50	MP3C	Z	9.095	2.41
51	MP3C	Mx	0	2.41
52	MP3C	X	-15.752	3.41
53	MP3C	Z	9.095	3.41
54	MP3C	Mx	0	3.41
55	M46	X	-2.588	7.5
56	M46	Z	1.494	7.5
57	M46	Mx	-.0013	7.5
58	MP1A	X	-10.181	1
59	MP1A	Z	5.878	1
60	MP1A	Mx	-.0051	1
61	MP1B	X	-10.181	1
62	MP1B	Z	5.878	1
63	MP1B	Mx	.0051	1
64	MP3C	X	-13.202	1
65	MP3C	Z	7.622	1
66	MP3C	Mx	0	1
67	MP2A	X	-9.033	1
68	MP2A	Z	5.215	1
69	MP2A	Mx	-.0045	1
70	MP2B	X	-9.033	1
71	MP2B	Z	5.215	1
72	MP2B	Mx	.0045	1
73	MP2C	X	-13.202	1
74	MP2C	Z	7.622	1
75	MP2C	Mx	0	1
76	MP1A	X	-23.048	.67
77	MP1A	Z	13.306	.67
78	MP1A	Mx	.0173	.67
79	MP1A	X	-23.048	5.67
80	MP1A	Z	13.306	5.67
81	MP1A	Mx	.0173	5.67



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
82	MP1B	X	-23.048	.67
83	MP1B	Z	13.306	.67
84	MP1B	Mx	-.0173	.67
85	MP1B	X	-23.048	5.67
86	MP1B	Z	13.306	5.67
87	MP1B	Mx	-.0173	5.67
88	MP1C	X	-30.027	.67
89	MP1C	Z	17.336	.67
90	MP1C	Mx	0	.67
91	MP1C	X	-30.027	5.67
92	MP1C	Z	17.336	5.67
93	MP1C	Mx	0	5.67
94	OVP	X	-17.887	1
95	OVP	Z	10.327	1
96	OVP	Mx	0	1
97	OVP	X	-17.887	1
98	OVP	Z	10.327	1
99	OVP	Mx	0	1
100	MP2B	X	-3.847	4
101	MP2B	Z	2.221	4
102	MP2B	Mx	-.0016	4
103	MP2C	X	-7.245	4
104	MP2C	Z	4.183	4
105	MP2C	Mx	0	4
106	MP2B	X	-3.847	4
107	MP2B	Z	2.221	4
108	MP2B	Mx	.0016	4
109	MP2C	X	-7.245	4
110	MP2C	Z	4.183	4
111	MP2C	Mx	0	4
112	M56A	X	-2.588	7.5
113	M56A	Z	1.494	7.5
114	M56A	Mx	.0013	7.5
115	M51	X	-3.188	7.5
116	M51	Z	1.841	7.5
117	M51	Mx	0	7.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-23.323	.67
2	MP2A	Z	0	.67
3	MP2A	Mx	.0175	.67
4	MP2A	X	-23.323	4.17
5	MP2A	Z	0	4.17
6	MP2A	Mx	.0175	4.17
7	MP2B	X	-31.497	.67
8	MP2B	Z	0	.67
9	MP2B	Mx	.0064	.67
10	MP2B	X	-31.497	4.17
11	MP2B	Z	0	4.17
12	MP2B	Mx	.0064	4.17
13	MP2C	X	-31.497	.67
14	MP2C	Z	0	.67
15	MP2C	Mx	-.03	.67
16	MP2C	X	-31.497	4.17
17	MP2C	Z	0	4.17



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
18	MP2C	Mx	-.03	4.17
19	MP2A	X	-23.323	.67
20	MP2A	Z	0	.67
21	MP2A	Mx	.0175	.67
22	MP2A	X	-23.323	4.17
23	MP2A	Z	0	4.17
24	MP2A	Mx	.0175	4.17
25	MP2B	X	-31.497	.67
26	MP2B	Z	0	.67
27	MP2B	Mx	-.03	.67
28	MP2B	X	-31.497	4.17
29	MP2B	Z	0	4.17
30	MP2B	Mx	-.03	4.17
31	MP2C	X	-31.497	.67
32	MP2C	Z	0	.67
33	MP2C	Mx	.0064	.67
34	MP2C	X	-31.497	4.17
35	MP2C	Z	0	4.17
36	MP2C	Mx	.0064	4.17
37	MP3A	X	-7.732	2.41
38	MP3A	Z	0	2.41
39	MP3A	Mx	.0058	2.41
40	MP3A	X	-7.732	3.41
41	MP3A	Z	0	3.41
42	MP3A	Mx	.0058	3.41
43	MP3B	X	-15.575	2.41
44	MP3B	Z	0	2.41
45	MP3B	Mx	-.0058	2.41
46	MP3B	X	-15.575	3.41
47	MP3B	Z	0	3.41
48	MP3B	Mx	-.0058	3.41
49	MP3C	X	-15.575	2.41
50	MP3C	Z	0	2.41
51	MP3C	Mx	-.0058	2.41
52	MP3C	X	-15.575	3.41
53	MP3C	Z	0	3.41
54	MP3C	Mx	-.0058	3.41
55	M46	X	-2.758	7.5
56	M46	Z	0	7.5
57	M46	Mx	-.0014	7.5
58	MP1A	X	-10.593	1
59	MP1A	Z	0	1
60	MP1A	Mx	-.0053	1
61	MP1B	X	-14.082	1
62	MP1B	Z	0	1
63	MP1B	Mx	.0035	1
64	MP3C	X	-14.082	1
65	MP3C	Z	0	1
66	MP3C	Mx	.0035	1
67	MP2A	X	-8.825	1
68	MP2A	Z	0	1
69	MP2A	Mx	-.0044	1
70	MP2B	X	-13.64	1
71	MP2B	Z	0	1
72	MP2B	Mx	.0034	1
73	MP2C	X	-13.64	1
74	MP2C	Z	0	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
75	MP2C	Mx	.0034	1
76	MP1A	X	-23.927	.67
77	MP1A	Z	0	.67
78	MP1A	Mx	.0179	.67
79	MP1A	X	-23.927	5.67
80	MP1A	Z	0	5.67
81	MP1A	Mx	.0179	5.67
82	MP1B	X	-31.986	.67
83	MP1B	Z	0	.67
84	MP1B	Mx	-.012	.67
85	MP1B	X	-31.986	5.67
86	MP1B	Z	0	5.67
87	MP1B	Mx	-.012	5.67
88	MP1C	X	-31.986	.67
89	MP1C	Z	0	.67
90	MP1C	Mx	-.012	.67
91	MP1C	X	-31.986	5.67
92	MP1C	Z	0	5.67
93	MP1C	Mx	-.012	5.67
94	OVP	X	-17.958	1
95	OVP	Z	0	1
96	OVP	Mx	0	1
97	OVP	X	-17.958	1
98	OVP	Z	0	1
99	OVP	Mx	0	1
100	MP2B	X	-7.058	4
101	MP2B	Z	0	4
102	MP2B	Mx	-.0015	4
103	MP2C	X	-7.058	4
104	MP2C	Z	0	4
105	MP2C	Mx	-.0015	4
106	MP2B	X	-7.058	4
107	MP2B	Z	0	4
108	MP2B	Mx	.0015	4
109	MP2C	X	-7.058	4
110	MP2C	Z	0	4
111	MP2C	Mx	.0015	4
112	M56A	X	-3.45	7.5
113	M56A	Z	0	7.5
114	M56A	Mx	.000863	7.5
115	M51	X	-3.45	7.5
116	M51	Z	0	7.5
117	M51	Mx	.000863	7.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-22.558	.67
2	MP2A	Z	-13.024	.67
3	MP2A	Mx	.0082	.67
4	MP2A	X	-22.558	4.17
5	MP2A	Z	-13.024	4.17
6	MP2A	Mx	.0082	4.17
7	MP2B	X	-29.637	.67
8	MP2B	Z	-17.111	.67
9	MP2B	Mx	.0228	.67
10	MP2B	X	-29.637	4.17



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
11	MP2B	Z	-17.111	4.17
12	MP2B	Mx	.0228	4.17
13	MP2C	X	-22.558	.67
14	MP2C	Z	-13.024	.67
15	MP2C	Mx	-.0256	.67
16	MP2C	X	-22.558	4.17
17	MP2C	Z	-13.024	4.17
18	MP2C	Mx	-.0256	4.17
19	MP2A	X	-22.558	.67
20	MP2A	Z	-13.024	.67
21	MP2A	Mx	.0256	.67
22	MP2A	X	-22.558	4.17
23	MP2A	Z	-13.024	4.17
24	MP2A	Mx	.0256	4.17
25	MP2B	X	-29.637	.67
26	MP2B	Z	-17.111	.67
27	MP2B	Mx	-.0228	.67
28	MP2B	X	-29.637	4.17
29	MP2B	Z	-17.111	4.17
30	MP2B	Mx	-.0228	4.17
31	MP2C	X	-22.558	.67
32	MP2C	Z	-13.024	.67
33	MP2C	Mx	-.0082	.67
34	MP2C	X	-22.558	4.17
35	MP2C	Z	-13.024	4.17
36	MP2C	Mx	-.0082	4.17
37	MP3A	X	-8.96	2.41
38	MP3A	Z	-5.173	2.41
39	MP3A	Mx	.0067	2.41
40	MP3A	X	-8.96	3.41
41	MP3A	Z	-5.173	3.41
42	MP3A	Mx	.0067	3.41
43	MP3B	X	-15.752	2.41
44	MP3B	Z	-9.095	2.41
45	MP3B	Mx	0	2.41
46	MP3B	X	-15.752	3.41
47	MP3B	Z	-9.095	3.41
48	MP3B	Mx	0	3.41
49	MP3C	X	-8.96	2.41
50	MP3C	Z	-5.173	2.41
51	MP3C	Mx	-.0067	2.41
52	MP3C	X	-8.96	3.41
53	MP3C	Z	-5.173	3.41
54	MP3C	Mx	-.0067	3.41
55	M46	X	-2.588	7.5
56	M46	Z	-1.494	7.5
57	M46	Mx	-.0013	7.5
58	MP1A	X	-10.181	1
59	MP1A	Z	-5.878	1
60	MP1A	Mx	-.0051	1
61	MP1B	X	-13.202	1
62	MP1B	Z	-7.622	1
63	MP1B	Mx	0	1
64	MP3C	X	-10.181	1
65	MP3C	Z	-5.878	1
66	MP3C	Mx	.0051	1
67	MP2A	X	-9.033	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
68	MP2A	Z	-5.215	1
69	MP2A	Mx	-0.045	1
70	MP2B	X	-13.202	1
71	MP2B	Z	-7.622	1
72	MP2B	Mx	0	1
73	MP2C	X	-9.033	1
74	MP2C	Z	-5.215	1
75	MP2C	Mx	.0045	1
76	MP1A	X	-23.048	.67
77	MP1A	Z	-13.306	.67
78	MP1A	Mx	.0173	.67
79	MP1A	X	-23.048	5.67
80	MP1A	Z	-13.306	5.67
81	MP1A	Mx	.0173	5.67
82	MP1B	X	-30.027	.67
83	MP1B	Z	-17.336	.67
84	MP1B	Mx	0	.67
85	MP1B	X	-30.027	5.67
86	MP1B	Z	-17.336	5.67
87	MP1B	Mx	0	5.67
88	MP1C	X	-23.048	.67
89	MP1C	Z	-13.306	.67
90	MP1C	Mx	-.0173	.67
91	MP1C	X	-23.048	5.67
92	MP1C	Z	-13.306	5.67
93	MP1C	Mx	-.0173	5.67
94	OVP	X	-17.887	1
95	OVP	Z	-10.327	1
96	OVP	Mx	0	1
97	OVP	X	-17.887	1
98	OVP	Z	-10.327	1
99	OVP	Mx	0	1
100	MP2B	X	-7.245	4
101	MP2B	Z	-4.183	4
102	MP2B	Mx	0	4
103	MP2C	X	-3.847	4
104	MP2C	Z	-2.221	4
105	MP2C	Mx	-.0016	4
106	MP2B	X	-7.245	4
107	MP2B	Z	-4.183	4
108	MP2B	Mx	0	4
109	MP2C	X	-3.847	4
110	MP2C	Z	-2.221	4
111	MP2C	Mx	.0016	4
112	M56A	X	-3.188	7.5
113	M56A	Z	-1.841	7.5
114	M56A	Mx	0	7.5
115	M51	X	-2.588	7.5
116	M51	Z	-1.494	7.5
117	M51	Mx	.0013	7.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-15.749	.67
2	MP2A	Z	-27.277	.67
3	MP2A	Mx	-.0064	.67





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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]	
4	MP2A	X	-15.749	4.17
5	MP2A	Z	-27.277	4.17
6	MP2A	Mx	-.0064	4.17
7	MP2B	X	-15.749	.67
8	MP2B	Z	-27.277	.67
9	MP2B	Mx	.03	.67
10	MP2B	X	-15.749	4.17
11	MP2B	Z	-27.277	4.17
12	MP2B	Mx	.03	4.17
13	MP2C	X	-11.662	.67
14	MP2C	Z	-20.199	.67
15	MP2C	Mx	-.0175	.67
16	MP2C	X	-11.662	4.17
17	MP2C	Z	-20.199	4.17
18	MP2C	Mx	-.0175	4.17
19	MP2A	X	-15.749	.67
20	MP2A	Z	-27.277	.67
21	MP2A	Mx	.03	.67
22	MP2A	X	-15.749	4.17
23	MP2A	Z	-27.277	4.17
24	MP2A	Mx	.03	4.17
25	MP2B	X	-15.749	.67
26	MP2B	Z	-27.277	.67
27	MP2B	Mx	-.0064	.67
28	MP2B	X	-15.749	4.17
29	MP2B	Z	-27.277	4.17
30	MP2B	Mx	-.0064	4.17
31	MP2C	X	-11.662	.67
32	MP2C	Z	-20.199	.67
33	MP2C	Mx	-.0175	.67
34	MP2C	X	-11.662	4.17
35	MP2C	Z	-20.199	4.17
36	MP2C	Mx	-.0175	4.17
37	MP3A	X	-7.788	2.41
38	MP3A	Z	-13.488	2.41
39	MP3A	Mx	.0058	2.41
40	MP3A	X	-7.788	3.41
41	MP3A	Z	-13.488	3.41
42	MP3A	Mx	.0058	3.41
43	MP3B	X	-7.788	2.41
44	MP3B	Z	-13.488	2.41
45	MP3B	Mx	.0058	2.41
46	MP3B	X	-7.788	3.41
47	MP3B	Z	-13.488	3.41
48	MP3B	Mx	.0058	3.41
49	MP3C	X	-3.866	2.41
50	MP3C	Z	-6.696	2.41
51	MP3C	Mx	-.0058	2.41
52	MP3C	X	-3.866	3.41
53	MP3C	Z	-6.696	3.41
54	MP3C	Mx	-.0058	3.41
55	M46	X	-1.725	7.5
56	M46	Z	-2.988	7.5
57	M46	Mx	-.000863	7.5
58	MP1A	X	-7.041	1
59	MP1A	Z	-12.195	1
60	MP1A	Mx	-.0035	1



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]	
61	MP1B	X	-7.041	1
62	MP1B	Z	-12.195	1
63	MP1B	Mx	-.0035	1
64	MP3C	X	-5.296	1
65	MP3C	Z	-9.174	1
66	MP3C	Mx	.0053	1
67	MP2A	X	-6.82	1
68	MP2A	Z	-11.812	1
69	MP2A	Mx	-.0034	1
70	MP2B	X	-6.82	1
71	MP2B	Z	-11.812	1
72	MP2B	Mx	-.0034	1
73	MP2C	X	-4.413	1
74	MP2C	Z	-7.643	1
75	MP2C	Mx	.0044	1
76	MP1A	X	-15.993	.67
77	MP1A	Z	-27.701	.67
78	MP1A	Mx	.012	.67
79	MP1A	X	-15.993	5.67
80	MP1A	Z	-27.701	5.67
81	MP1A	Mx	.012	5.67
82	MP1B	X	-15.993	.67
83	MP1B	Z	-27.701	.67
84	MP1B	Mx	.012	.67
85	MP1B	X	-15.993	5.67
86	MP1B	Z	-27.701	5.67
87	MP1B	Mx	.012	5.67
88	MP1C	X	-11.963	.67
89	MP1C	Z	-20.721	.67
90	MP1C	Mx	-.0179	.67
91	MP1C	X	-11.963	5.67
92	MP1C	Z	-20.721	5.67
93	MP1C	Mx	-.0179	5.67
94	OVP	X	-13.023	1
95	OVP	Z	-22.557	1
96	OVP	Mx	0	1
97	OVP	X	-13.023	1
98	OVP	Z	-22.557	1
99	OVP	Mx	0	1
100	MP2B	X	-3.529	4
101	MP2B	Z	-6.112	4
102	MP2B	Mx	.0015	4
103	MP2C	X	-1.567	4
104	MP2C	Z	-2.715	4
105	MP2C	Mx	-.0013	4
106	MP2B	X	-3.529	4
107	MP2B	Z	-6.112	4
108	MP2B	Mx	-.0015	4
109	MP2C	X	-1.567	4
110	MP2C	Z	-2.715	4
111	MP2C	Mx	.0013	4
112	M56A	X	-1.725	7.5
113	M56A	Z	-2.988	7.5
114	M56A	Mx	-.000863	7.5
115	M51	X	-1.379	7.5
116	M51	Z	-2.388	7.5
117	M51	Mx	.0014	7.5



Company : Colliers Engineering & Design  
 Designer :  
 Job Number : Project # 23777104  
 Model Name : Antenna Mount Analysis

July 20, 2023  
 9:25 AM  
 Checked By: \_\_\_\_\_

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	X	0	.67
2	MP2A	Z	-11.268	.67
3	MP2A	Mx	-.0075	.67
4	MP2A	X	0	4.17
5	MP2A	Z	-11.268	4.17
6	MP2A	Mx	-.0075	4.17
7	MP2B	X	0	.67
8	MP2B	Z	-8.367	.67
9	MP2B	Mx	.0082	.67
10	MP2B	X	0	4.17
11	MP2B	Z	-8.367	4.17
12	MP2B	Mx	.0082	4.17
13	MP2C	X	0	.67
14	MP2C	Z	-8.367	.67
15	MP2C	Mx	-.0026	.67
16	MP2C	X	0	4.17
17	MP2C	Z	-8.367	4.17
18	MP2C	Mx	-.0026	4.17
19	MP2A	X	0	.67
20	MP2A	Z	-11.268	.67
21	MP2A	Mx	.0075	.67
22	MP2A	X	0	4.17
23	MP2A	Z	-11.268	4.17
24	MP2A	Mx	.0075	4.17
25	MP2B	X	0	.67
26	MP2B	Z	-8.367	.67
27	MP2B	Mx	.0026	.67
28	MP2B	X	0	4.17
29	MP2B	Z	-8.367	4.17
30	MP2B	Mx	.0026	4.17
31	MP2C	X	0	.67
32	MP2C	Z	-8.367	.67
33	MP2C	Mx	-.0082	.67
34	MP2C	X	0	4.17
35	MP2C	Z	-8.367	4.17
36	MP2C	Mx	-.0082	4.17
37	MP3A	X	0	2.41
38	MP3A	Z	-4.848	2.41
39	MP3A	Mx	0	2.41
40	MP3A	X	0	3.41
41	MP3A	Z	-4.848	3.41
42	MP3A	Mx	0	3.41
43	MP3B	X	0	2.41
44	MP3B	Z	-2.464	2.41
45	MP3B	Mx	.0016	2.41
46	MP3B	X	0	3.41
47	MP3B	Z	-2.464	3.41
48	MP3B	Mx	.0016	3.41
49	MP3C	X	0	2.41
50	MP3C	Z	-2.464	2.41
51	MP3C	Mx	-.0016	2.41
52	MP3C	X	0	3.41
53	MP3C	Z	-2.464	3.41
54	MP3C	Mx	-.0016	3.41
55	M46	X	0	7.5
56	M46	Z	-.912	7.5
57	M46	Mx	0	7.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
58	MP1A	X	0	1
59	MP1A	Z	-3.819	1
60	MP1A	Mx	0	1
61	MP1B	X	0	1
62	MP1B	Z	-2.877	1
63	MP1B	Mx	-.0012	1
64	MP3C	X	0	1
65	MP3C	Z	-2.877	1
66	MP3C	Mx	.0012	1
67	MP2A	X	0	1
68	MP2A	Z	-3.819	1
69	MP2A	Mx	0	1
70	MP2B	X	0	1
71	MP2B	Z	-2.526	1
72	MP2B	Mx	-.0011	1
73	MP2C	X	0	1
74	MP2C	Z	-2.526	1
75	MP2C	Mx	.0011	1
76	MP1A	X	0	.67
77	MP1A	Z	-11.371	.67
78	MP1A	Mx	0	.67
79	MP1A	X	0	5.67
80	MP1A	Z	-11.371	5.67
81	MP1A	Mx	0	5.67
82	MP1B	X	0	.67
83	MP1B	Z	-8.516	.67
84	MP1B	Mx	.0055	.67
85	MP1B	X	0	5.67
86	MP1B	Z	-8.516	5.67
87	MP1B	Mx	.0055	5.67
88	MP1C	X	0	.67
89	MP1C	Z	-8.516	.67
90	MP1C	Mx	-.0055	.67
91	MP1C	X	0	5.67
92	MP1C	Z	-8.516	5.67
93	MP1C	Mx	-.0055	5.67
94	OVP	X	0	1
95	OVP	Z	-9.141	1
96	OVP	Mx	0	1
97	OVP	X	0	1
98	OVP	Z	-9.141	1
99	OVP	Mx	0	1
100	MP2B	X	0	4
101	MP2B	Z	-1.129	4
102	MP2B	Mx	.000407	4
103	MP2C	X	0	4
104	MP2C	Z	-1.129	4
105	MP2C	Mx	-.000407	4
106	MP2B	X	0	4
107	MP2B	Z	-1.129	4
108	MP2B	Mx	-.000407	4
109	MP2C	X	0	4
110	MP2C	Z	-1.129	4
111	MP2C	Mx	.000407	4
112	M56A	X	0	7.5
113	M56A	Z	-.701	7.5
114	M56A	Mx	-.000304	7.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
115	M51	X	0	7.5
116	M51	Z	-.701	7.5
117	M51	Mx	.000304	7.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	5.15	.67
2	MP2A	Z	-8.921	.67
3	MP2A	Mx	-.0098	.67
4	MP2A	X	5.15	4.17
5	MP2A	Z	-8.921	4.17
6	MP2A	Mx	-.0098	4.17
7	MP2B	X	3.7	.67
8	MP2B	Z	-6.409	.67
9	MP2B	Mx	.0056	.67
10	MP2B	X	3.7	4.17
11	MP2B	Z	-6.409	4.17
12	MP2B	Mx	.0056	4.17
13	MP2C	X	5.15	.67
14	MP2C	Z	-8.921	.67
15	MP2C	Mx	.0021	.67
16	MP2C	X	5.15	4.17
17	MP2C	Z	-8.921	4.17
18	MP2C	Mx	.0021	4.17
19	MP2A	X	5.15	.67
20	MP2A	Z	-8.921	.67
21	MP2A	Mx	.0021	.67
22	MP2A	X	5.15	4.17
23	MP2A	Z	-8.921	4.17
24	MP2A	Mx	.0021	4.17
25	MP2B	X	3.7	.67
26	MP2B	Z	-6.409	.67
27	MP2B	Mx	.0056	.67
28	MP2B	X	3.7	4.17
29	MP2B	Z	-6.409	4.17
30	MP2B	Mx	.0056	4.17
31	MP2C	X	5.15	.67
32	MP2C	Z	-8.921	.67
33	MP2C	Mx	-.0098	.67
34	MP2C	X	5.15	4.17
35	MP2C	Z	-8.921	4.17
36	MP2C	Mx	-.0098	4.17
37	MP3A	X	2.027	2.41
38	MP3A	Z	-3.511	2.41
39	MP3A	Mx	-.0015	2.41
40	MP3A	X	2.027	3.41
41	MP3A	Z	-3.511	3.41
42	MP3A	Mx	-.0015	3.41
43	MP3B	X	.835	2.41
44	MP3B	Z	-1.446	2.41
45	MP3B	Mx	.0013	2.41
46	MP3B	X	.835	3.41
47	MP3B	Z	-1.446	3.41
48	MP3B	Mx	.0013	3.41
49	MP3C	X	2.027	2.41
50	MP3C	Z	-3.511	2.41



Company : Colliers Engineering & Design  
 Designer :  
 Job Number : Project # 23777104  
 Model Name : Antenna Mount Analysis

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]	
51	MP3C	Mx	-0.015	2.41
52	MP3C	X	2.027	3.41
53	MP3C	Z	-3.511	3.41
54	MP3C	Mx	-0.015	3.41
55	M46	X	.421	7.5
56	M46	Z	-.729	7.5
57	M46	Mx	.00021	7.5
58	MP1A	X	1.752	1
59	MP1A	Z	-3.035	1
60	MP1A	Mx	.000876	1
61	MP1B	X	1.281	1
62	MP1B	Z	-2.219	1
63	MP1B	Mx	-.0013	1
64	MP3C	X	1.752	1
65	MP3C	Z	-3.035	1
66	MP3C	Mx	.000876	1
67	MP2A	X	1.694	1
68	MP2A	Z	-2.934	1
69	MP2A	Mx	.000847	1
70	MP2B	X	1.047	1
71	MP2B	Z	-1.814	1
72	MP2B	Mx	-.001	1
73	MP2C	X	1.694	1
74	MP2C	Z	-2.934	1
75	MP2C	Mx	.000847	1
76	MP1A	X	5.21	.67
77	MP1A	Z	-9.024	.67
78	MP1A	Mx	-.0039	.67
79	MP1A	X	5.21	5.67
80	MP1A	Z	-9.024	5.67
81	MP1A	Mx	-.0039	5.67
82	MP1B	X	3.782	.67
83	MP1B	Z	-6.551	.67
84	MP1B	Mx	.0057	.67
85	MP1B	X	3.782	5.67
86	MP1B	Z	-6.551	5.67
87	MP1B	Mx	.0057	5.67
88	MP1C	X	5.21	.67
89	MP1C	Z	-9.024	.67
90	MP1C	Mx	-.0039	.67
91	MP1C	X	5.21	5.67
92	MP1C	Z	-9.024	5.67
93	MP1C	Mx	-.0039	5.67
94	OVP	X	4.107	1
95	OVP	Z	-7.114	1
96	OVP	Mx	0	1
97	OVP	X	4.107	1
98	OVP	Z	-7.114	1
99	OVP	Mx	0	1
100	MP2B	X	.359	4
101	MP2B	Z	-.621	4
102	MP2B	Mx	.000299	4
103	MP2C	X	.977	4
104	MP2C	Z	-1.692	4
105	MP2C	Mx	-.000407	4
106	MP2B	X	.359	4
107	MP2B	Z	-.621	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
108	MP2B	Mx	-.000299	4
109	MP2C	X	.977	4
110	MP2C	Z	-1.692	4
111	MP2C	Mx	.000407	4
112	M56A	X	.315	7.5
113	M56A	Z	-.546	7.5
114	M56A	Mx	-.000315	7.5
115	M51	X	.421	7.5
116	M51	Z	-.729	7.5
117	M51	Mx	.00021	7.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	7.246	.67
2	MP2A	Z	-4.184	.67
3	MP2A	Mx	-.0082	.67
4	MP2A	X	7.246	4.17
5	MP2A	Z	-4.184	4.17
6	MP2A	Mx	-.0082	4.17
7	MP2B	X	7.246	.67
8	MP2B	Z	-4.184	.67
9	MP2B	Mx	.0026	.67
10	MP2B	X	7.246	4.17
11	MP2B	Z	-4.184	4.17
12	MP2B	Mx	.0026	4.17
13	MP2C	X	9.758	.67
14	MP2C	Z	-5.634	.67
15	MP2C	Mx	.0075	.67
16	MP2C	X	9.758	4.17
17	MP2C	Z	-5.634	4.17
18	MP2C	Mx	.0075	4.17
19	MP2A	X	7.246	.67
20	MP2A	Z	-4.184	.67
21	MP2A	Mx	-.0026	.67
22	MP2A	X	7.246	4.17
23	MP2A	Z	-4.184	4.17
24	MP2A	Mx	-.0026	4.17
25	MP2B	X	7.246	.67
26	MP2B	Z	-4.184	.67
27	MP2B	Mx	.0082	.67
28	MP2B	X	7.246	4.17
29	MP2B	Z	-4.184	4.17
30	MP2B	Mx	.0082	4.17
31	MP2C	X	9.758	.67
32	MP2C	Z	-5.634	.67
33	MP2C	Mx	-.0075	.67
34	MP2C	X	9.758	4.17
35	MP2C	Z	-5.634	4.17
36	MP2C	Mx	-.0075	4.17
37	MP3A	X	2.134	2.41
38	MP3A	Z	-1.232	2.41
39	MP3A	Mx	-.0016	2.41
40	MP3A	X	2.134	3.41
41	MP3A	Z	-1.232	3.41
42	MP3A	Mx	-.0016	3.41
43	MP3B	X	2.134	2.41



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
44	MP3B	Z	-1.232	2.41
45	MP3B	Mx	.0016	2.41
46	MP3B	X	2.134	3.41
47	MP3B	Z	-1.232	3.41
48	MP3B	Mx	.0016	3.41
49	MP3C	X	4.199	2.41
50	MP3C	Z	-2.424	2.41
51	MP3C	Mx	0	2.41
52	MP3C	X	4.199	3.41
53	MP3C	Z	-2.424	3.41
54	MP3C	Mx	0	3.41
55	M46	X	.607	7.5
56	M46	Z	-.35	7.5
57	M46	Mx	.000304	7.5
58	MP1A	X	2.491	1
59	MP1A	Z	-1.438	1
60	MP1A	Mx	.0012	1
61	MP1B	X	2.491	1
62	MP1B	Z	-1.438	1
63	MP1B	Mx	-.0012	1
64	MP3C	X	3.307	1
65	MP3C	Z	-1.91	1
66	MP3C	Mx	0	1
67	MP2A	X	2.187	1
68	MP2A	Z	-1.263	1
69	MP2A	Mx	.0011	1
70	MP2B	X	2.187	1
71	MP2B	Z	-1.263	1
72	MP2B	Mx	-.0011	1
73	MP2C	X	3.307	1
74	MP2C	Z	-1.91	1
75	MP2C	Mx	0	1
76	MP1A	X	7.375	.67
77	MP1A	Z	-4.258	.67
78	MP1A	Mx	-.0055	.67
79	MP1A	X	7.375	5.67
80	MP1A	Z	-4.258	5.67
81	MP1A	Mx	-.0055	5.67
82	MP1B	X	7.375	.67
83	MP1B	Z	-4.258	.67
84	MP1B	Mx	.0055	.67
85	MP1B	X	7.375	5.67
86	MP1B	Z	-4.258	5.67
87	MP1B	Mx	.0055	5.67
88	MP1C	X	9.848	.67
89	MP1C	Z	-5.686	.67
90	MP1C	Mx	0	.67
91	MP1C	X	9.848	5.67
92	MP1C	Z	-5.686	5.67
93	MP1C	Mx	0	5.67
94	OVP	X	5.509	1
95	OVP	Z	-3.181	1
96	OVP	Mx	0	1
97	OVP	X	5.509	1
98	OVP	Z	-3.181	1
99	OVP	Mx	0	1
100	MP2B	X	.978	4





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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
101	MP2B	Z	-.565	4
102	MP2B	Mx	.000408	4
103	MP2C	X	2.048	4
104	MP2C	Z	-1.183	4
105	MP2C	Mx	0	4
106	MP2B	X	.978	4
107	MP2B	Z	-.565	4
108	MP2B	Mx	-.000408	4
109	MP2C	X	2.048	4
110	MP2C	Z	-1.183	4
111	MP2C	Mx	0	4
112	M56A	X	.607	7.5
113	M56A	Z	-.35	7.5
114	M56A	Mx	-.000303	7.5
115	M51	X	.79	7.5
116	M51	Z	-.456	7.5
117	M51	Mx	0	7.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	X	7.4	.67
2	MP2A	Z	0	.67
3	MP2A	Mx	-.0056	.67
4	MP2A	X	7.4	4.17
5	MP2A	Z	0	4.17
6	MP2A	Mx	-.0056	4.17
7	MP2B	X	10.301	.67
8	MP2B	Z	0	.67
9	MP2B	Mx	-.0021	.67
10	MP2B	X	10.301	4.17
11	MP2B	Z	0	4.17
12	MP2B	Mx	-.0021	4.17
13	MP2C	X	10.301	.67
14	MP2C	Z	0	.67
15	MP2C	Mx	.0098	.67
16	MP2C	X	10.301	4.17
17	MP2C	Z	0	4.17
18	MP2C	Mx	.0098	4.17
19	MP2A	X	7.4	.67
20	MP2A	Z	0	.67
21	MP2A	Mx	-.0056	.67
22	MP2A	X	7.4	4.17
23	MP2A	Z	0	4.17
24	MP2A	Mx	-.0056	4.17
25	MP2B	X	10.301	.67
26	MP2B	Z	0	.67
27	MP2B	Mx	.0098	.67
28	MP2B	X	10.301	4.17
29	MP2B	Z	0	4.17
30	MP2B	Mx	.0098	4.17
31	MP2C	X	10.301	.67
32	MP2C	Z	0	.67
33	MP2C	Mx	-.0021	.67
34	MP2C	X	10.301	4.17
35	MP2C	Z	0	4.17
36	MP2C	Mx	-.0021	4.17



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
37	MP3A	X	1.67	2.41
38	MP3A	Z	0	2.41
39	MP3A	Mx	-.0013	2.41
40	MP3A	X	1.67	3.41
41	MP3A	Z	0	3.41
42	MP3A	Mx	-.0013	3.41
43	MP3B	X	4.054	2.41
44	MP3B	Z	0	2.41
45	MP3B	Mx	.0015	2.41
46	MP3B	X	4.054	3.41
47	MP3B	Z	0	3.41
48	MP3B	Mx	.0015	3.41
49	MP3C	X	4.054	2.41
50	MP3C	Z	0	2.41
51	MP3C	Mx	.0015	2.41
52	MP3C	X	4.054	3.41
53	MP3C	Z	0	3.41
54	MP3C	Mx	.0015	3.41
55	M46	X	.631	7.5
56	M46	Z	0	7.5
57	M46	Mx	.000316	7.5
58	MP1A	X	2.563	1
59	MP1A	Z	0	1
60	MP1A	Mx	.0013	1
61	MP1B	X	3.505	1
62	MP1B	Z	0	1
63	MP1B	Mx	-.000876	1
64	MP3C	X	3.505	1
65	MP3C	Z	0	1
66	MP3C	Mx	-.000876	1
67	MP2A	X	2.094	1
68	MP2A	Z	0	1
69	MP2A	Mx	.001	1
70	MP2B	X	3.388	1
71	MP2B	Z	0	1
72	MP2B	Mx	-.000847	1
73	MP2C	X	3.388	1
74	MP2C	Z	0	1
75	MP2C	Mx	-.000847	1
76	MP1A	X	7.564	.67
77	MP1A	Z	0	.67
78	MP1A	Mx	-.0057	.67
79	MP1A	X	7.564	5.67
80	MP1A	Z	0	5.67
81	MP1A	Mx	-.0057	5.67
82	MP1B	X	10.419	.67
83	MP1B	Z	0	.67
84	MP1B	Mx	.0039	.67
85	MP1B	X	10.419	5.67
86	MP1B	Z	0	5.67
87	MP1B	Mx	.0039	5.67
88	MP1C	X	10.419	.67
89	MP1C	Z	0	.67
90	MP1C	Mx	.0039	.67
91	MP1C	X	10.419	5.67
92	MP1C	Z	0	5.67
93	MP1C	Mx	.0039	5.67



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
94	OVP	X	5.435	1
95	OVP	Z	0	1
96	OVP	Mx	0	1
97	OVP	X	5.435	1
98	OVP	Z	0	1
99	OVP	Mx	0	1
100	MP2B	X	1.953	4
101	MP2B	Z	0	4
102	MP2B	Mx	.000407	4
103	MP2C	X	1.953	4
104	MP2C	Z	0	4
105	MP2C	Mx	.000407	4
106	MP2B	X	1.953	4
107	MP2B	Z	0	4
108	MP2B	Mx	-.000407	4
109	MP2C	X	1.953	4
110	MP2C	Z	0	4
111	MP2C	Mx	-.000407	4
112	M56A	X	.841	7.5
113	M56A	Z	0	7.5
114	M56A	Mx	-.00021	7.5
115	M51	X	.841	7.5
116	M51	Z	0	7.5
117	M51	Mx	-.00021	7.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	7.246	.67
2	MP2A	Z	4.184	.67
3	MP2A	Mx	-.0026	.67
4	MP2A	X	7.246	4.17
5	MP2A	Z	4.184	4.17
6	MP2A	Mx	-.0026	4.17
7	MP2B	X	9.758	.67
8	MP2B	Z	5.634	.67
9	MP2B	Mx	-.0075	.67
10	MP2B	X	9.758	4.17
11	MP2B	Z	5.634	4.17
12	MP2B	Mx	-.0075	4.17
13	MP2C	X	7.246	.67
14	MP2C	Z	4.184	.67
15	MP2C	Mx	.0082	.67
16	MP2C	X	7.246	4.17
17	MP2C	Z	4.184	4.17
18	MP2C	Mx	.0082	4.17
19	MP2A	X	7.246	.67
20	MP2A	Z	4.184	.67
21	MP2A	Mx	-.0082	.67
22	MP2A	X	7.246	4.17
23	MP2A	Z	4.184	4.17
24	MP2A	Mx	-.0082	4.17
25	MP2B	X	9.758	.67
26	MP2B	Z	5.634	.67
27	MP2B	Mx	.0075	.67
28	MP2B	X	9.758	4.17
29	MP2B	Z	5.634	4.17



Company : Colliers Engineering & Design  
 Designer :  
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**Member Point Loads (BLC 31 : Antenna Wm (120 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
30	MP2B	Mx	.0075	4.17
31	MP2C	X	7.246	.67
32	MP2C	Z	4.184	.67
33	MP2C	Mx	.0026	.67
34	MP2C	X	7.246	4.17
35	MP2C	Z	4.184	4.17
36	MP2C	Mx	.0026	4.17
37	MP3A	X	2.134	2.41
38	MP3A	Z	1.232	2.41
39	MP3A	Mx	-.0016	2.41
40	MP3A	X	2.134	3.41
41	MP3A	Z	1.232	3.41
42	MP3A	Mx	-.0016	3.41
43	MP3B	X	4.199	2.41
44	MP3B	Z	2.424	2.41
45	MP3B	Mx	0	2.41
46	MP3B	X	4.199	3.41
47	MP3B	Z	2.424	3.41
48	MP3B	Mx	0	3.41
49	MP3C	X	2.134	2.41
50	MP3C	Z	1.232	2.41
51	MP3C	Mx	.0016	2.41
52	MP3C	X	2.134	3.41
53	MP3C	Z	1.232	3.41
54	MP3C	Mx	.0016	3.41
55	M46	X	.607	7.5
56	M46	Z	.35	7.5
57	M46	Mx	.000304	7.5
58	MP1A	X	2.491	1
59	MP1A	Z	1.438	1
60	MP1A	Mx	.0012	1
61	MP1B	X	3.307	1
62	MP1B	Z	1.91	1
63	MP1B	Mx	0	1
64	MP3C	X	2.491	1
65	MP3C	Z	1.438	1
66	MP3C	Mx	-.0012	1
67	MP2A	X	2.187	1
68	MP2A	Z	1.263	1
69	MP2A	Mx	.0011	1
70	MP2B	X	3.307	1
71	MP2B	Z	1.91	1
72	MP2B	Mx	0	1
73	MP2C	X	2.187	1
74	MP2C	Z	1.263	1
75	MP2C	Mx	-.0011	1
76	MP1A	X	7.375	.67
77	MP1A	Z	4.258	.67
78	MP1A	Mx	-.0055	.67
79	MP1A	X	7.375	5.67
80	MP1A	Z	4.258	5.67
81	MP1A	Mx	-.0055	5.67
82	MP1B	X	9.848	.67
83	MP1B	Z	5.686	.67
84	MP1B	Mx	0	.67
85	MP1B	X	9.848	5.67
86	MP1B	Z	5.686	5.67



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
87	MP1B	Mx	0	5.67
88	MP1C	X	7.375	.67
89	MP1C	Z	4.258	.67
90	MP1C	Mx	.0055	.67
91	MP1C	X	7.375	5.67
92	MP1C	Z	4.258	5.67
93	MP1C	Mx	.0055	5.67
94	OVP	X	5.509	1
95	OVP	Z	3.181	1
96	OVP	Mx	0	1
97	OVP	X	5.509	1
98	OVP	Z	3.181	1
99	OVP	Mx	0	1
100	MP2B	X	2.048	4
101	MP2B	Z	1.183	4
102	MP2B	Mx	0	4
103	MP2C	X	.978	4
104	MP2C	Z	.565	4
105	MP2C	Mx	.000408	4
106	MP2B	X	2.048	4
107	MP2B	Z	1.183	4
108	MP2B	Mx	0	4
109	MP2C	X	.978	4
110	MP2C	Z	.565	4
111	MP2C	Mx	-.000408	4
112	M56A	X	.79	7.5
113	M56A	Z	.456	7.5
114	M56A	Mx	0	7.5
115	M51	X	.607	7.5
116	M51	Z	.35	7.5
117	M51	Mx	-.000303	7.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	5.15	.67
2	MP2A	Z	8.921	.67
3	MP2A	Mx	.0021	.67
4	MP2A	X	5.15	4.17
5	MP2A	Z	8.921	4.17
6	MP2A	Mx	.0021	4.17
7	MP2B	X	5.15	.67
8	MP2B	Z	8.921	.67
9	MP2B	Mx	-.0098	.67
10	MP2B	X	5.15	4.17
11	MP2B	Z	8.921	4.17
12	MP2B	Mx	-.0098	4.17
13	MP2C	X	3.7	.67
14	MP2C	Z	6.409	.67
15	MP2C	Mx	.0056	.67
16	MP2C	X	3.7	4.17
17	MP2C	Z	6.409	4.17
18	MP2C	Mx	.0056	4.17
19	MP2A	X	5.15	.67
20	MP2A	Z	8.921	.67
21	MP2A	Mx	-.0098	.67
22	MP2A	X	5.15	4.17



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
23	MP2A	Z	8.921	4.17
24	MP2A	Mx	-.0098	4.17
25	MP2B	X	5.15	.67
26	MP2B	Z	8.921	.67
27	MP2B	Mx	.0021	.67
28	MP2B	X	5.15	4.17
29	MP2B	Z	8.921	4.17
30	MP2B	Mx	.0021	4.17
31	MP2C	X	3.7	.67
32	MP2C	Z	6.409	.67
33	MP2C	Mx	.0056	.67
34	MP2C	X	3.7	4.17
35	MP2C	Z	6.409	4.17
36	MP2C	Mx	.0056	4.17
37	MP3A	X	2.027	2.41
38	MP3A	Z	3.511	2.41
39	MP3A	Mx	-.0015	2.41
40	MP3A	X	2.027	3.41
41	MP3A	Z	3.511	3.41
42	MP3A	Mx	-.0015	3.41
43	MP3B	X	2.027	2.41
44	MP3B	Z	3.511	2.41
45	MP3B	Mx	-.0015	2.41
46	MP3B	X	2.027	3.41
47	MP3B	Z	3.511	3.41
48	MP3B	Mx	-.0015	3.41
49	MP3C	X	.835	2.41
50	MP3C	Z	1.446	2.41
51	MP3C	Mx	.0013	2.41
52	MP3C	X	.835	3.41
53	MP3C	Z	1.446	3.41
54	MP3C	Mx	.0013	3.41
55	M46	X	.421	7.5
56	M46	Z	.729	7.5
57	M46	Mx	.00021	7.5
58	MP1A	X	1.752	1
59	MP1A	Z	3.035	1
60	MP1A	Mx	.000876	1
61	MP1B	X	1.752	1
62	MP1B	Z	3.035	1
63	MP1B	Mx	.000876	1
64	MP3C	X	1.281	1
65	MP3C	Z	2.219	1
66	MP3C	Mx	-.0013	1
67	MP2A	X	1.694	1
68	MP2A	Z	2.934	1
69	MP2A	Mx	.000847	1
70	MP2B	X	1.694	1
71	MP2B	Z	2.934	1
72	MP2B	Mx	.000847	1
73	MP2C	X	1.047	1
74	MP2C	Z	1.814	1
75	MP2C	Mx	-.001	1
76	MP1A	X	5.21	.67
77	MP1A	Z	9.024	.67
78	MP1A	Mx	-.0039	.67
79	MP1A	X	5.21	5.67



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
80	MP1A	Z	9.024	5.67
81	MP1A	Mx	-.0039	5.67
82	MP1B	X	5.21	.67
83	MP1B	Z	9.024	.67
84	MP1B	Mx	-.0039	.67
85	MP1B	X	5.21	5.67
86	MP1B	Z	9.024	5.67
87	MP1B	Mx	-.0039	5.67
88	MP1C	X	3.782	.67
89	MP1C	Z	6.551	.67
90	MP1C	Mx	.0057	.67
91	MP1C	X	3.782	5.67
92	MP1C	Z	6.551	5.67
93	MP1C	Mx	.0057	5.67
94	OVP	X	4.107	1
95	OVP	Z	7.114	1
96	OVP	Mx	0	1
97	OVP	X	4.107	1
98	OVP	Z	7.114	1
99	OVP	Mx	0	1
100	MP2B	X	.977	4
101	MP2B	Z	1.692	4
102	MP2B	Mx	-.000407	4
103	MP2C	X	.359	4
104	MP2C	Z	.621	4
105	MP2C	Mx	.000299	4
106	MP2B	X	.977	4
107	MP2B	Z	1.692	4
108	MP2B	Mx	.000407	4
109	MP2C	X	.359	4
110	MP2C	Z	.621	4
111	MP2C	Mx	-.000299	4
112	M56A	X	.421	7.5
113	M56A	Z	.729	7.5
114	M56A	Mx	.00021	7.5
115	M51	X	.315	7.5
116	M51	Z	.546	7.5
117	M51	Mx	-.000315	7.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	0	.67
2	MP2A	Z	11.268	.67
3	MP2A	Mx	.0075	.67
4	MP2A	X	0	4.17
5	MP2A	Z	11.268	4.17
6	MP2A	Mx	.0075	4.17
7	MP2B	X	0	.67
8	MP2B	Z	8.367	.67
9	MP2B	Mx	-.0082	.67
10	MP2B	X	0	4.17
11	MP2B	Z	8.367	4.17
12	MP2B	Mx	-.0082	4.17
13	MP2C	X	0	.67
14	MP2C	Z	8.367	.67
15	MP2C	Mx	.0026	.67



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
16	MP2C	X	0	4.17
17	MP2C	Z	8.367	4.17
18	MP2C	Mx	.0026	4.17
19	MP2A	X	0	.67
20	MP2A	Z	11.268	.67
21	MP2A	Mx	-.0075	.67
22	MP2A	X	0	4.17
23	MP2A	Z	11.268	4.17
24	MP2A	Mx	-.0075	4.17
25	MP2B	X	0	.67
26	MP2B	Z	8.367	.67
27	MP2B	Mx	-.0026	.67
28	MP2B	X	0	4.17
29	MP2B	Z	8.367	4.17
30	MP2B	Mx	-.0026	4.17
31	MP2C	X	0	.67
32	MP2C	Z	8.367	.67
33	MP2C	Mx	.0082	.67
34	MP2C	X	0	4.17
35	MP2C	Z	8.367	4.17
36	MP2C	Mx	.0082	4.17
37	MP3A	X	0	2.41
38	MP3A	Z	4.848	2.41
39	MP3A	Mx	0	2.41
40	MP3A	X	0	3.41
41	MP3A	Z	4.848	3.41
42	MP3A	Mx	0	3.41
43	MP3B	X	0	2.41
44	MP3B	Z	2.464	2.41
45	MP3B	Mx	-.0016	2.41
46	MP3B	X	0	3.41
47	MP3B	Z	2.464	3.41
48	MP3B	Mx	-.0016	3.41
49	MP3C	X	0	2.41
50	MP3C	Z	2.464	2.41
51	MP3C	Mx	.0016	2.41
52	MP3C	X	0	3.41
53	MP3C	Z	2.464	3.41
54	MP3C	Mx	.0016	3.41
55	M46	X	0	7.5
56	M46	Z	.912	7.5
57	M46	Mx	0	7.5
58	MP1A	X	0	1
59	MP1A	Z	3.819	1
60	MP1A	Mx	0	1
61	MP1B	X	0	1
62	MP1B	Z	2.877	1
63	MP1B	Mx	.0012	1
64	MP3C	X	0	1
65	MP3C	Z	2.877	1
66	MP3C	Mx	-.0012	1
67	MP2A	X	0	1
68	MP2A	Z	3.819	1
69	MP2A	Mx	0	1
70	MP2B	X	0	1
71	MP2B	Z	2.526	1
72	MP2B	Mx	.0011	1





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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
73	MP2C	X	0	1
74	MP2C	Z	2.526	1
75	MP2C	Mx	-.0011	1
76	MP1A	X	0	.67
77	MP1A	Z	11.371	.67
78	MP1A	Mx	0	.67
79	MP1A	X	0	5.67
80	MP1A	Z	11.371	5.67
81	MP1A	Mx	0	5.67
82	MP1B	X	0	.67
83	MP1B	Z	8.516	.67
84	MP1B	Mx	-.0055	.67
85	MP1B	X	0	5.67
86	MP1B	Z	8.516	5.67
87	MP1B	Mx	-.0055	5.67
88	MP1C	X	0	.67
89	MP1C	Z	8.516	.67
90	MP1C	Mx	.0055	.67
91	MP1C	X	0	5.67
92	MP1C	Z	8.516	5.67
93	MP1C	Mx	.0055	5.67
94	OVP	X	0	1
95	OVP	Z	9.141	1
96	OVP	Mx	0	1
97	OVP	X	0	1
98	OVP	Z	9.141	1
99	OVP	Mx	0	1
100	MP2B	X	0	4
101	MP2B	Z	1.129	4
102	MP2B	Mx	-.000407	4
103	MP2C	X	0	4
104	MP2C	Z	1.129	4
105	MP2C	Mx	.000407	4
106	MP2B	X	0	4
107	MP2B	Z	1.129	4
108	MP2B	Mx	.000407	4
109	MP2C	X	0	4
110	MP2C	Z	1.129	4
111	MP2C	Mx	-.000407	4
112	M56A	X	0	7.5
113	M56A	Z	.701	7.5
114	M56A	Mx	.000304	7.5
115	M51	X	0	7.5
116	M51	Z	.701	7.5
117	M51	Mx	-.000304	7.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	X	-5.15	.67
2	MP2A	Z	8.921	.67
3	MP2A	Mx	.0098	.67
4	MP2A	X	-5.15	4.17
5	MP2A	Z	8.921	4.17
6	MP2A	Mx	.0098	4.17
7	MP2B	X	-3.7	.67
8	MP2B	Z	6.409	.67



Company : Colliers Engineering & Design  
 Designer :  
 Job Number : Project # 23777104  
 Model Name : Antenna Mount Analysis

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
9	MP2B	Mx	-0.056	.67
10	MP2B	X	-3.7	4.17
11	MP2B	Z	6.409	4.17
12	MP2B	Mx	-0.056	4.17
13	MP2C	X	-5.15	.67
14	MP2C	Z	8.921	.67
15	MP2C	Mx	-0.021	.67
16	MP2C	X	-5.15	4.17
17	MP2C	Z	8.921	4.17
18	MP2C	Mx	-0.021	4.17
19	MP2A	X	-5.15	.67
20	MP2A	Z	8.921	.67
21	MP2A	Mx	-0.021	.67
22	MP2A	X	-5.15	4.17
23	MP2A	Z	8.921	4.17
24	MP2A	Mx	-0.021	4.17
25	MP2B	X	-3.7	.67
26	MP2B	Z	6.409	.67
27	MP2B	Mx	-0.056	.67
28	MP2B	X	-3.7	4.17
29	MP2B	Z	6.409	4.17
30	MP2B	Mx	-0.056	4.17
31	MP2C	X	-5.15	.67
32	MP2C	Z	8.921	.67
33	MP2C	Mx	.0098	.67
34	MP2C	X	-5.15	4.17
35	MP2C	Z	8.921	4.17
36	MP2C	Mx	.0098	4.17
37	MP3A	X	-2.027	2.41
38	MP3A	Z	3.511	2.41
39	MP3A	Mx	.0015	2.41
40	MP3A	X	-2.027	3.41
41	MP3A	Z	3.511	3.41
42	MP3A	Mx	.0015	3.41
43	MP3B	X	-.835	2.41
44	MP3B	Z	1.446	2.41
45	MP3B	Mx	-.0013	2.41
46	MP3B	X	-.835	3.41
47	MP3B	Z	1.446	3.41
48	MP3B	Mx	-.0013	3.41
49	MP3C	X	-2.027	2.41
50	MP3C	Z	3.511	2.41
51	MP3C	Mx	.0015	2.41
52	MP3C	X	-2.027	3.41
53	MP3C	Z	3.511	3.41
54	MP3C	Mx	.0015	3.41
55	M46	X	-.421	7.5
56	M46	Z	.729	7.5
57	M46	Mx	-0.0021	7.5
58	MP1A	X	-1.752	1
59	MP1A	Z	3.035	1
60	MP1A	Mx	-0.00876	1
61	MP1B	X	-1.281	1
62	MP1B	Z	2.219	1
63	MP1B	Mx	.0013	1
64	MP3C	X	-1.752	1
65	MP3C	Z	3.035	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
66	MP3C	Mx	-.000876	1
67	MP2A	X	-1.694	1
68	MP2A	Z	2.934	1
69	MP2A	Mx	-.000847	1
70	MP2B	X	-1.047	1
71	MP2B	Z	1.814	1
72	MP2B	Mx	.001	1
73	MP2C	X	-1.694	1
74	MP2C	Z	2.934	1
75	MP2C	Mx	-.000847	1
76	MP1A	X	-5.21	.67
77	MP1A	Z	9.024	.67
78	MP1A	Mx	.0039	.67
79	MP1A	X	-5.21	5.67
80	MP1A	Z	9.024	5.67
81	MP1A	Mx	.0039	5.67
82	MP1B	X	-3.782	.67
83	MP1B	Z	6.551	.67
84	MP1B	Mx	-.0057	.67
85	MP1B	X	-3.782	5.67
86	MP1B	Z	6.551	5.67
87	MP1B	Mx	-.0057	5.67
88	MP1C	X	-5.21	.67
89	MP1C	Z	9.024	.67
90	MP1C	Mx	.0039	.67
91	MP1C	X	-5.21	5.67
92	MP1C	Z	9.024	5.67
93	MP1C	Mx	.0039	5.67
94	OVP	X	-4.107	1
95	OVP	Z	7.114	1
96	OVP	Mx	0	1
97	OVP	X	-4.107	1
98	OVP	Z	7.114	1
99	OVP	Mx	0	1
100	MP2B	X	-.359	4
101	MP2B	Z	.621	4
102	MP2B	Mx	-.000299	4
103	MP2C	X	-.977	4
104	MP2C	Z	1.692	4
105	MP2C	Mx	.000407	4
106	MP2B	X	-.359	4
107	MP2B	Z	.621	4
108	MP2B	Mx	.000299	4
109	MP2C	X	-.977	4
110	MP2C	Z	1.692	4
111	MP2C	Mx	-.000407	4
112	M56A	X	-.315	7.5
113	M56A	Z	.546	7.5
114	M56A	Mx	.000315	7.5
115	M51	X	-.421	7.5
116	M51	Z	.729	7.5
117	M51	Mx	-.00021	7.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-7.246	.67



Company : Colliers Engineering & Design  
 Designer :  
 Job Number : Project # 23777104  
 Model Name : Antenna Mount Analysis

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
2	MP2A	Z	4.184	.67
3	MP2A	Mx	.0082	.67
4	MP2A	X	-7.246	4.17
5	MP2A	Z	4.184	4.17
6	MP2A	Mx	.0082	4.17
7	MP2B	X	-7.246	.67
8	MP2B	Z	4.184	.67
9	MP2B	Mx	-.0026	.67
10	MP2B	X	-7.246	4.17
11	MP2B	Z	4.184	4.17
12	MP2B	Mx	-.0026	4.17
13	MP2C	X	-9.758	.67
14	MP2C	Z	5.634	.67
15	MP2C	Mx	-.0075	.67
16	MP2C	X	-9.758	4.17
17	MP2C	Z	5.634	4.17
18	MP2C	Mx	-.0075	4.17
19	MP2A	X	-7.246	.67
20	MP2A	Z	4.184	.67
21	MP2A	Mx	.0026	.67
22	MP2A	X	-7.246	4.17
23	MP2A	Z	4.184	4.17
24	MP2A	Mx	.0026	4.17
25	MP2B	X	-7.246	.67
26	MP2B	Z	4.184	.67
27	MP2B	Mx	-.0082	.67
28	MP2B	X	-7.246	4.17
29	MP2B	Z	4.184	4.17
30	MP2B	Mx	-.0082	4.17
31	MP2C	X	-9.758	.67
32	MP2C	Z	5.634	.67
33	MP2C	Mx	.0075	.67
34	MP2C	X	-9.758	4.17
35	MP2C	Z	5.634	4.17
36	MP2C	Mx	.0075	4.17
37	MP3A	X	-2.134	2.41
38	MP3A	Z	1.232	2.41
39	MP3A	Mx	.0016	2.41
40	MP3A	X	-2.134	3.41
41	MP3A	Z	1.232	3.41
42	MP3A	Mx	.0016	3.41
43	MP3B	X	-2.134	2.41
44	MP3B	Z	1.232	2.41
45	MP3B	Mx	-.0016	2.41
46	MP3B	X	-2.134	3.41
47	MP3B	Z	1.232	3.41
48	MP3B	Mx	-.0016	3.41
49	MP3C	X	-4.199	2.41
50	MP3C	Z	2.424	2.41
51	MP3C	Mx	0	2.41
52	MP3C	X	-4.199	3.41
53	MP3C	Z	2.424	3.41
54	MP3C	Mx	0	3.41
55	M46	X	-.607	7.5
56	M46	Z	.35	7.5
57	M46	Mx	-.000304	7.5
58	MP1A	X	-2.491	1



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]	
59	MP1A	Z	1.438	1
60	MP1A	Mx	-.0012	1
61	MP1B	X	-2.491	1
62	MP1B	Z	1.438	1
63	MP1B	Mx	.0012	1
64	MP3C	X	-3.307	1
65	MP3C	Z	1.91	1
66	MP3C	Mx	0	1
67	MP2A	X	-2.187	1
68	MP2A	Z	1.263	1
69	MP2A	Mx	-.0011	1
70	MP2B	X	-2.187	1
71	MP2B	Z	1.263	1
72	MP2B	Mx	.0011	1
73	MP2C	X	-3.307	1
74	MP2C	Z	1.91	1
75	MP2C	Mx	0	1
76	MP1A	X	-7.375	.67
77	MP1A	Z	4.258	.67
78	MP1A	Mx	.0055	.67
79	MP1A	X	-7.375	5.67
80	MP1A	Z	4.258	5.67
81	MP1A	Mx	.0055	5.67
82	MP1B	X	-7.375	.67
83	MP1B	Z	4.258	.67
84	MP1B	Mx	-.0055	.67
85	MP1B	X	-7.375	5.67
86	MP1B	Z	4.258	5.67
87	MP1B	Mx	-.0055	5.67
88	MP1C	X	-9.848	.67
89	MP1C	Z	5.686	.67
90	MP1C	Mx	0	.67
91	MP1C	X	-9.848	5.67
92	MP1C	Z	5.686	5.67
93	MP1C	Mx	0	5.67
94	OVP	X	-5.509	1
95	OVP	Z	3.181	1
96	OVP	Mx	0	1
97	OVP	X	-5.509	1
98	OVP	Z	3.181	1
99	OVP	Mx	0	1
100	MP2B	X	-.978	4
101	MP2B	Z	.565	4
102	MP2B	Mx	-.000408	4
103	MP2C	X	-2.048	4
104	MP2C	Z	1.183	4
105	MP2C	Mx	0	4
106	MP2B	X	-.978	4
107	MP2B	Z	.565	4
108	MP2B	Mx	.000408	4
109	MP2C	X	-2.048	4
110	MP2C	Z	1.183	4
111	MP2C	Mx	0	4
112	M56A	X	-.607	7.5
113	M56A	Z	.35	7.5
114	M56A	Mx	.000303	7.5
115	M51	X	-.79	7.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
116	M51	Z	.456	7.5
117	M51	Mx	0	7.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-7.4	.67
2	MP2A	Z	0	.67
3	MP2A	Mx	.0056	.67
4	MP2A	X	-7.4	4.17
5	MP2A	Z	0	4.17
6	MP2A	Mx	.0056	4.17
7	MP2B	X	-10.301	.67
8	MP2B	Z	0	.67
9	MP2B	Mx	.0021	.67
10	MP2B	X	-10.301	4.17
11	MP2B	Z	0	4.17
12	MP2B	Mx	.0021	4.17
13	MP2C	X	-10.301	.67
14	MP2C	Z	0	.67
15	MP2C	Mx	-.0098	.67
16	MP2C	X	-10.301	4.17
17	MP2C	Z	0	4.17
18	MP2C	Mx	-.0098	4.17
19	MP2A	X	-7.4	.67
20	MP2A	Z	0	.67
21	MP2A	Mx	.0056	.67
22	MP2A	X	-7.4	4.17
23	MP2A	Z	0	4.17
24	MP2A	Mx	.0056	4.17
25	MP2B	X	-10.301	.67
26	MP2B	Z	0	.67
27	MP2B	Mx	-.0098	.67
28	MP2B	X	-10.301	4.17
29	MP2B	Z	0	4.17
30	MP2B	Mx	-.0098	4.17
31	MP2C	X	-10.301	.67
32	MP2C	Z	0	.67
33	MP2C	Mx	.0021	.67
34	MP2C	X	-10.301	4.17
35	MP2C	Z	0	4.17
36	MP2C	Mx	.0021	4.17
37	MP3A	X	-1.67	2.41
38	MP3A	Z	0	2.41
39	MP3A	Mx	.0013	2.41
40	MP3A	X	-1.67	3.41
41	MP3A	Z	0	3.41
42	MP3A	Mx	.0013	3.41
43	MP3B	X	-4.054	2.41
44	MP3B	Z	0	2.41
45	MP3B	Mx	-.0015	2.41
46	MP3B	X	-4.054	3.41
47	MP3B	Z	0	3.41
48	MP3B	Mx	-.0015	3.41
49	MP3C	X	-4.054	2.41
50	MP3C	Z	0	2.41
51	MP3C	Mx	-.0015	2.41



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
52	MP3C	X	-4.054	3.41
53	MP3C	Z	0	3.41
54	MP3C	Mx	-.0015	3.41
55	M46	X	-.631	7.5
56	M46	Z	0	7.5
57	M46	Mx	-.000316	7.5
58	MP1A	X	-2.563	1
59	MP1A	Z	0	1
60	MP1A	Mx	-.0013	1
61	MP1B	X	-3.505	1
62	MP1B	Z	0	1
63	MP1B	Mx	.000876	1
64	MP3C	X	-3.505	1
65	MP3C	Z	0	1
66	MP3C	Mx	.000876	1
67	MP2A	X	-2.094	1
68	MP2A	Z	0	1
69	MP2A	Mx	-.001	1
70	MP2B	X	-3.388	1
71	MP2B	Z	0	1
72	MP2B	Mx	.000847	1
73	MP2C	X	-3.388	1
74	MP2C	Z	0	1
75	MP2C	Mx	.000847	1
76	MP1A	X	-7.564	.67
77	MP1A	Z	0	.67
78	MP1A	Mx	.0057	.67
79	MP1A	X	-7.564	5.67
80	MP1A	Z	0	5.67
81	MP1A	Mx	.0057	5.67
82	MP1B	X	-10.419	.67
83	MP1B	Z	0	.67
84	MP1B	Mx	-.0039	.67
85	MP1B	X	-10.419	5.67
86	MP1B	Z	0	5.67
87	MP1B	Mx	-.0039	5.67
88	MP1C	X	-10.419	.67
89	MP1C	Z	0	.67
90	MP1C	Mx	-.0039	.67
91	MP1C	X	-10.419	5.67
92	MP1C	Z	0	5.67
93	MP1C	Mx	-.0039	5.67
94	OVP	X	-5.435	1
95	OVP	Z	0	1
96	OVP	Mx	0	1
97	OVP	X	-5.435	1
98	OVP	Z	0	1
99	OVP	Mx	0	1
100	MP2B	X	-1.953	4
101	MP2B	Z	0	4
102	MP2B	Mx	-.000407	4
103	MP2C	X	-1.953	4
104	MP2C	Z	0	4
105	MP2C	Mx	-.000407	4
106	MP2B	X	-1.953	4
107	MP2B	Z	0	4
108	MP2B	Mx	.000407	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
109	MP2C	X	-1.953	4
110	MP2C	Z	0	4
111	MP2C	Mx	.000407	4
112	M56A	X	-.841	7.5
113	M56A	Z	0	7.5
114	M56A	Mx	.00021	7.5
115	M51	X	-.841	7.5
116	M51	Z	0	7.5
117	M51	Mx	.00021	7.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-7.246	.67
2	MP2A	Z	-4.184	.67
3	MP2A	Mx	.0026	.67
4	MP2A	X	-7.246	4.17
5	MP2A	Z	-4.184	4.17
6	MP2A	Mx	.0026	4.17
7	MP2B	X	-9.758	.67
8	MP2B	Z	-5.634	.67
9	MP2B	Mx	.0075	.67
10	MP2B	X	-9.758	4.17
11	MP2B	Z	-5.634	4.17
12	MP2B	Mx	.0075	4.17
13	MP2C	X	-7.246	.67
14	MP2C	Z	-4.184	.67
15	MP2C	Mx	-.0082	.67
16	MP2C	X	-7.246	4.17
17	MP2C	Z	-4.184	4.17
18	MP2C	Mx	-.0082	4.17
19	MP2A	X	-7.246	.67
20	MP2A	Z	-4.184	.67
21	MP2A	Mx	.0082	.67
22	MP2A	X	-7.246	4.17
23	MP2A	Z	-4.184	4.17
24	MP2A	Mx	.0082	4.17
25	MP2B	X	-9.758	.67
26	MP2B	Z	-5.634	.67
27	MP2B	Mx	-.0075	.67
28	MP2B	X	-9.758	4.17
29	MP2B	Z	-5.634	4.17
30	MP2B	Mx	-.0075	4.17
31	MP2C	X	-7.246	.67
32	MP2C	Z	-4.184	.67
33	MP2C	Mx	-.0026	.67
34	MP2C	X	-7.246	4.17
35	MP2C	Z	-4.184	4.17
36	MP2C	Mx	-.0026	4.17
37	MP3A	X	-2.134	2.41
38	MP3A	Z	-1.232	2.41
39	MP3A	Mx	.0016	2.41
40	MP3A	X	-2.134	3.41
41	MP3A	Z	-1.232	3.41
42	MP3A	Mx	.0016	3.41
43	MP3B	X	-4.199	2.41
44	MP3B	Z	-2.424	2.41





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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
45	MP3B	Mx	0	2.41
46	MP3B	X	-4.199	3.41
47	MP3B	Z	-2.424	3.41
48	MP3B	Mx	0	3.41
49	MP3C	X	-2.134	2.41
50	MP3C	Z	-1.232	2.41
51	MP3C	Mx	-.0016	2.41
52	MP3C	X	-2.134	3.41
53	MP3C	Z	-1.232	3.41
54	MP3C	Mx	-.0016	3.41
55	M46	X	-.607	7.5
56	M46	Z	-.35	7.5
57	M46	Mx	-.000304	7.5
58	MP1A	X	-2.491	1
59	MP1A	Z	-1.438	1
60	MP1A	Mx	-.0012	1
61	MP1B	X	-3.307	1
62	MP1B	Z	-1.91	1
63	MP1B	Mx	0	1
64	MP3C	X	-2.491	1
65	MP3C	Z	-1.438	1
66	MP3C	Mx	.0012	1
67	MP2A	X	-2.187	1
68	MP2A	Z	-1.263	1
69	MP2A	Mx	-.0011	1
70	MP2B	X	-3.307	1
71	MP2B	Z	-1.91	1
72	MP2B	Mx	0	1
73	MP2C	X	-2.187	1
74	MP2C	Z	-1.263	1
75	MP2C	Mx	.0011	1
76	MP1A	X	-7.375	.67
77	MP1A	Z	-4.258	.67
78	MP1A	Mx	.0055	.67
79	MP1A	X	-7.375	5.67
80	MP1A	Z	-4.258	5.67
81	MP1A	Mx	.0055	5.67
82	MP1B	X	-9.848	.67
83	MP1B	Z	-5.686	.67
84	MP1B	Mx	0	.67
85	MP1B	X	-9.848	5.67
86	MP1B	Z	-5.686	5.67
87	MP1B	Mx	0	5.67
88	MP1C	X	-7.375	.67
89	MP1C	Z	-4.258	.67
90	MP1C	Mx	-.0055	.67
91	MP1C	X	-7.375	5.67
92	MP1C	Z	-4.258	5.67
93	MP1C	Mx	-.0055	5.67
94	OVP	X	-5.509	1
95	OVP	Z	-3.181	1
96	OVP	Mx	0	1
97	OVP	X	-5.509	1
98	OVP	Z	-3.181	1
99	OVP	Mx	0	1
100	MP2B	X	-2.048	4
101	MP2B	Z	-1.183	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
102	MP2B	Mx	0	4
103	MP2C	X	-.978	4
104	MP2C	Z	-.565	4
105	MP2C	Mx	-.000408	4
106	MP2B	X	-2.048	4
107	MP2B	Z	-1.183	4
108	MP2B	Mx	0	4
109	MP2C	X	-.978	4
110	MP2C	Z	-.565	4
111	MP2C	Mx	.000408	4
112	M56A	X	-.79	7.5
113	M56A	Z	-.456	7.5
114	M56A	Mx	0	7.5
115	M51	X	-.607	7.5
116	M51	Z	-.35	7.5
117	M51	Mx	.000303	7.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	X	-5.15	.67
2	MP2A	Z	-8.921	.67
3	MP2A	Mx	-.0021	.67
4	MP2A	X	-5.15	4.17
5	MP2A	Z	-8.921	4.17
6	MP2A	Mx	-.0021	4.17
7	MP2B	X	-5.15	.67
8	MP2B	Z	-8.921	.67
9	MP2B	Mx	.0098	.67
10	MP2B	X	-5.15	4.17
11	MP2B	Z	-8.921	4.17
12	MP2B	Mx	.0098	4.17
13	MP2C	X	-3.7	.67
14	MP2C	Z	-6.409	.67
15	MP2C	Mx	-.0056	.67
16	MP2C	X	-3.7	4.17
17	MP2C	Z	-6.409	4.17
18	MP2C	Mx	-.0056	4.17
19	MP2A	X	-5.15	.67
20	MP2A	Z	-8.921	.67
21	MP2A	Mx	.0098	.67
22	MP2A	X	-5.15	4.17
23	MP2A	Z	-8.921	4.17
24	MP2A	Mx	.0098	4.17
25	MP2B	X	-5.15	.67
26	MP2B	Z	-8.921	.67
27	MP2B	Mx	-.0021	.67
28	MP2B	X	-5.15	4.17
29	MP2B	Z	-8.921	4.17
30	MP2B	Mx	-.0021	4.17
31	MP2C	X	-3.7	.67
32	MP2C	Z	-6.409	.67
33	MP2C	Mx	-.0056	.67
34	MP2C	X	-3.7	4.17
35	MP2C	Z	-6.409	4.17
36	MP2C	Mx	-.0056	4.17
37	MP3A	X	-2.027	2.41



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
38	MP3A	Z	-3.511	2.41
39	MP3A	Mx	.0015	2.41
40	MP3A	X	-2.027	3.41
41	MP3A	Z	-3.511	3.41
42	MP3A	Mx	.0015	3.41
43	MP3B	X	-2.027	2.41
44	MP3B	Z	-3.511	2.41
45	MP3B	Mx	.0015	2.41
46	MP3B	X	-2.027	3.41
47	MP3B	Z	-3.511	3.41
48	MP3B	Mx	.0015	3.41
49	MP3C	X	-.835	2.41
50	MP3C	Z	-1.446	2.41
51	MP3C	Mx	-.0013	2.41
52	MP3C	X	-.835	3.41
53	MP3C	Z	-1.446	3.41
54	MP3C	Mx	-.0013	3.41
55	M46	X	-.421	7.5
56	M46	Z	-.729	7.5
57	M46	Mx	-.00021	7.5
58	MP1A	X	-1.752	1
59	MP1A	Z	-3.035	1
60	MP1A	Mx	-.000876	1
61	MP1B	X	-1.752	1
62	MP1B	Z	-3.035	1
63	MP1B	Mx	-.000876	1
64	MP3C	X	-1.281	1
65	MP3C	Z	-2.219	1
66	MP3C	Mx	.0013	1
67	MP2A	X	-1.694	1
68	MP2A	Z	-2.934	1
69	MP2A	Mx	-.000847	1
70	MP2B	X	-1.694	1
71	MP2B	Z	-2.934	1
72	MP2B	Mx	-.000847	1
73	MP2C	X	-1.047	1
74	MP2C	Z	-1.814	1
75	MP2C	Mx	.001	1
76	MP1A	X	-5.21	.67
77	MP1A	Z	-9.024	.67
78	MP1A	Mx	.0039	.67
79	MP1A	X	-5.21	5.67
80	MP1A	Z	-9.024	5.67
81	MP1A	Mx	.0039	5.67
82	MP1B	X	-5.21	.67
83	MP1B	Z	-9.024	.67
84	MP1B	Mx	.0039	.67
85	MP1B	X	-5.21	5.67
86	MP1B	Z	-9.024	5.67
87	MP1B	Mx	.0039	5.67
88	MP1C	X	-3.782	.67
89	MP1C	Z	-6.551	.67
90	MP1C	Mx	-.0057	.67
91	MP1C	X	-3.782	5.67
92	MP1C	Z	-6.551	5.67
93	MP1C	Mx	-.0057	5.67
94	OVP	X	-4.107	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
95	OVP	Z	-7.114	1
96	OVP	Mx	0	1
97	OVP	X	-4.107	1
98	OVP	Z	-7.114	1
99	OVP	Mx	0	1
100	MP2B	X	-.977	4
101	MP2B	Z	-1.692	4
102	MP2B	Mx	.000407	4
103	MP2C	X	-.359	4
104	MP2C	Z	-.621	4
105	MP2C	Mx	-.000299	4
106	MP2B	X	-.977	4
107	MP2B	Z	-1.692	4
108	MP2B	Mx	-.000407	4
109	MP2C	X	-.359	4
110	MP2C	Z	-.621	4
111	MP2C	Mx	.000299	4
112	M56A	X	-.421	7.5
113	M56A	Z	-.729	7.5
114	M56A	Mx	-.00021	7.5
115	M51	X	-.315	7.5
116	M51	Z	-.546	7.5
117	M51	Mx	.000315	7.5

**Member Point Loads (BLC 77 : Lm1)**

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	M40	Y	-500	%35

**Member Point Loads (BLC 78 : Lm2)**

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	M40	Y	-500	%64

**Member Point Loads (BLC 79 : Lv1)**

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	M40	Y	-250	%100

**Member Point Loads (BLC 80 : Lv2)**

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	M40	Y	-250	%50

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	Y	-1.4179	.67
2	MP2A	My	-.0011	.67
3	MP2A	Mz	.000945	.67
4	MP2A	Y	-1.4179	4.17
5	MP2A	My	-.0011	4.17
6	MP2A	Mz	.000945	4.17
7	MP2B	Y	-1.4179	.67
8	MP2B	My	-.000287	.67
9	MP2B	Mz	-.0014	.67
10	MP2B	Y	-1.4179	4.17
11	MP2B	My	-.000287	4.17
12	MP2B	Mz	-.0014	4.17



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
13	MP2C	Y	-1.4179	.67
14	MP2C	My	.0014	.67
15	MP2C	Mz	.000448	.67
16	MP2C	Y	-1.4179	4.17
17	MP2C	My	.0014	4.17
18	MP2C	Mz	.000448	4.17
19	MP2A	Y	-1.4179	.67
20	MP2A	My	-.0011	.67
21	MP2A	Mz	-.000945	.67
22	MP2A	Y	-1.4179	4.17
23	MP2A	My	-.0011	4.17
24	MP2A	Mz	-.000945	4.17
25	MP2B	Y	-1.4179	.67
26	MP2B	My	.0014	.67
27	MP2B	Mz	-.000448	.67
28	MP2B	Y	-1.4179	4.17
29	MP2B	My	.0014	4.17
30	MP2B	Mz	-.000448	4.17
31	MP2C	Y	-1.4179	.67
32	MP2C	My	-.000287	.67
33	MP2C	Mz	.0014	.67
34	MP2C	Y	-1.4179	4.17
35	MP2C	My	-.000287	4.17
36	MP2C	Mz	.0014	4.17
37	MP3A	Y	-1.951	2.41
38	MP3A	My	-.0015	2.41
39	MP3A	Mz	0	2.41
40	MP3A	Y	-1.951	3.41
41	MP3A	My	-.0015	3.41
42	MP3A	Mz	0	3.41
43	MP3B	Y	-1.951	2.41
44	MP3B	My	.000732	2.41
45	MP3B	Mz	-.0013	2.41
46	MP3B	Y	-1.951	3.41
47	MP3B	My	.000732	3.41
48	MP3B	Mz	-.0013	3.41
49	MP3C	Y	-1.951	2.41
50	MP3C	My	.000732	2.41
51	MP3C	Mz	.0013	2.41
52	MP3C	Y	-1.951	3.41
53	MP3C	My	.000732	3.41
54	MP3C	Mz	.0013	3.41
55	M46	Y	-.4659	7.5
56	M46	My	.000233	7.5
57	M46	Mz	0	7.5
58	MP1A	Y	-3.7811	1
59	MP1A	My	.0019	1
60	MP1A	Mz	0	1
61	MP1B	Y	-3.7811	1
62	MP1B	My	-.000945	1
63	MP1B	Mz	.0016	1
64	MP3C	Y	-3.7811	1
65	MP3C	My	-.000945	1
66	MP3C	Mz	-.0016	1
67	MP2A	Y	-3.1494	1
68	MP2A	My	.0016	1
69	MP2A	Mz	0	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
70	MP2B	Y	-3.1494	1
71	MP2B	My	-.000787	1
72	MP2B	Mz	.0014	1
73	MP2C	Y	-3.1494	1
74	MP2C	My	-.000787	1
75	MP2C	Mz	-.0014	1
76	MP1A	Y	-1.0282	.67
77	MP1A	My	-.000771	.67
78	MP1A	Mz	0	.67
79	MP1A	Y	-1.0282	5.67
80	MP1A	My	-.000771	5.67
81	MP1A	Mz	0	5.67
82	MP1B	Y	-1.0282	.67
83	MP1B	My	.000386	.67
84	MP1B	Mz	-.000668	.67
85	MP1B	Y	-1.0282	5.67
86	MP1B	My	.000386	5.67
87	MP1B	Mz	-.000668	5.67
88	MP1C	Y	-1.0282	.67
89	MP1C	My	.000386	.67
90	MP1C	Mz	.000668	.67
91	MP1C	Y	-1.0282	5.67
92	MP1C	My	.000386	5.67
93	MP1C	Mz	.000668	5.67
94	OVP	Y	-1.9712	1
95	OVP	My	0	1
96	OVP	Mz	0	1
97	OVP	Y	-1.9712	1
98	OVP	My	0	1
99	OVP	Mz	0	1
100	MP2B	Y	-.7885	4
101	MP2B	My	.000164	4
102	MP2B	Mz	-.000285	4
103	MP2C	Y	-.7885	4
104	MP2C	My	.000164	4
105	MP2C	Mz	.000285	4
106	MP2B	Y	-.7885	4
107	MP2B	My	-.000164	4
108	MP2B	Mz	.000285	4
109	MP2C	Y	-.7885	4
110	MP2C	My	-.000164	4
111	MP2C	Mz	-.000285	4
112	M56A	Y	-.4659	7.5
113	M56A	My	-.000116	7.5
114	M56A	Mz	.000202	7.5
115	M51	Y	-.4659	7.5
116	M51	My	-.000116	7.5
117	M51	Mz	-.000202	7.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	Z	-3.5448	.67
2	MP2A	Mx	-.0024	.67
3	MP2A	Z	-3.5448	4.17
4	MP2A	Mx	-.0024	4.17
5	MP2B	Z	-3.5448	.67



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
6	MP2B	Mx	.0035	.67
7	MP2B	Z	-3.5448	4.17
8	MP2B	Mx	.0035	4.17
9	MP2C	Z	-3.5448	.67
10	MP2C	Mx	-.0011	.67
11	MP2C	Z	-3.5448	4.17
12	MP2C	Mx	-.0011	4.17
13	MP2A	Z	-3.5448	.67
14	MP2A	Mx	.0024	.67
15	MP2A	Z	-3.5448	4.17
16	MP2A	Mx	.0024	4.17
17	MP2B	Z	-3.5448	.67
18	MP2B	Mx	.0011	.67
19	MP2B	Z	-3.5448	4.17
20	MP2B	Mx	.0011	4.17
21	MP2C	Z	-3.5448	.67
22	MP2C	Mx	-.0035	.67
23	MP2C	Z	-3.5448	4.17
24	MP2C	Mx	-.0035	4.17
25	MP3A	Z	-4.8776	2.41
26	MP3A	Mx	0	2.41
27	MP3A	Z	-4.8776	3.41
28	MP3A	Mx	0	3.41
29	MP3B	Z	-4.8776	2.41
30	MP3B	Mx	.0032	2.41
31	MP3B	Z	-4.8776	3.41
32	MP3B	Mx	.0032	3.41
33	MP3C	Z	-4.8776	2.41
34	MP3C	Mx	-.0032	2.41
35	MP3C	Z	-4.8776	3.41
36	MP3C	Mx	-.0032	3.41
37	M46	Z	-1.1648	7.5
38	M46	Mx	0	7.5
39	MP1A	Z	-9.4528	1
40	MP1A	Mx	0	1
41	MP1B	Z	-9.4528	1
42	MP1B	Mx	-.0041	1
43	MP3C	Z	-9.4528	1
44	MP3C	Mx	.0041	1
45	MP2A	Z	-7.8736	1
46	MP2A	Mx	0	1
47	MP2B	Z	-7.8736	1
48	MP2B	Mx	-.0034	1
49	MP2C	Z	-7.8736	1
50	MP2C	Mx	.0034	1
51	MP1A	Z	-2.5704	.67
52	MP1A	Mx	0	.67
53	MP1A	Z	-2.5704	5.67
54	MP1A	Mx	0	5.67
55	MP1B	Z	-2.5704	.67
56	MP1B	Mx	.0017	.67
57	MP1B	Z	-2.5704	5.67
58	MP1B	Mx	.0017	5.67
59	MP1C	Z	-2.5704	.67
60	MP1C	Mx	-.0017	.67
61	MP1C	Z	-2.5704	5.67
62	MP1C	Mx	-.0017	5.67



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
63	OVP	Z	-4.928	1
64	OVP	Mx	0	1
65	OVP	Z	-4.928	1
66	OVP	Mx	0	1
67	MP2B	Z	-1.9712	4
68	MP2B	Mx	.000711	4
69	MP2C	Z	-1.9712	4
70	MP2C	Mx	-.000711	4
71	MP2B	Z	-1.9712	4
72	MP2B	Mx	-.000711	4
73	MP2C	Z	-1.9712	4
74	MP2C	Mx	.000711	4
75	M56A	Z	-1.1648	7.5
76	M56A	Mx	-.000504	7.5
77	M51	Z	-1.1648	7.5
78	M51	Mx	.000504	7.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	X	3.5448	.67
2	MP2A	Mx	-.0027	.67
3	MP2A	X	3.5448	4.17
4	MP2A	Mx	-.0027	4.17
5	MP2B	X	3.5448	.67
6	MP2B	Mx	-.000717	.67
7	MP2B	X	3.5448	4.17
8	MP2B	Mx	-.000717	4.17
9	MP2C	X	3.5448	.67
10	MP2C	Mx	.0034	.67
11	MP2C	X	3.5448	4.17
12	MP2C	Mx	.0034	4.17
13	MP2A	X	3.5448	.67
14	MP2A	Mx	-.0027	.67
15	MP2A	X	3.5448	4.17
16	MP2A	Mx	-.0027	4.17
17	MP2B	X	3.5448	.67
18	MP2B	Mx	.0034	.67
19	MP2B	X	3.5448	4.17
20	MP2B	Mx	.0034	4.17
21	MP2C	X	3.5448	.67
22	MP2C	Mx	-.000717	.67
23	MP2C	X	3.5448	4.17
24	MP2C	Mx	-.000717	4.17
25	MP3A	X	4.8776	2.41
26	MP3A	Mx	-.0037	2.41
27	MP3A	X	4.8776	3.41
28	MP3A	Mx	-.0037	3.41
29	MP3B	X	4.8776	2.41
30	MP3B	Mx	.0018	2.41
31	MP3B	X	4.8776	3.41
32	MP3B	Mx	.0018	3.41
33	MP3C	X	4.8776	2.41
34	MP3C	Mx	.0018	2.41
35	MP3C	X	4.8776	3.41
36	MP3C	Mx	.0018	3.41
37	M46	X	1.1648	7.5





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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
38	M46	Mx	.000582	7.5
39	MP1A	X	9.4528	1
40	MP1A	Mx	.0047	1
41	MP1B	X	9.4528	1
42	MP1B	Mx	-.0024	1
43	MP3C	X	9.4528	1
44	MP3C	Mx	-.0024	1
45	MP2A	X	7.8736	1
46	MP2A	Mx	.0039	1
47	MP2B	X	7.8736	1
48	MP2B	Mx	-.002	1
49	MP2C	X	7.8736	1
50	MP2C	Mx	-.002	1
51	MP1A	X	2.5704	.67
52	MP1A	Mx	-.0019	.67
53	MP1A	X	2.5704	5.67
54	MP1A	Mx	-.0019	5.67
55	MP1B	X	2.5704	.67
56	MP1B	Mx	.000964	.67
57	MP1B	X	2.5704	5.67
58	MP1B	Mx	.000964	5.67
59	MP1C	X	2.5704	.67
60	MP1C	Mx	.000964	.67
61	MP1C	X	2.5704	5.67
62	MP1C	Mx	.000964	5.67
63	OVP	X	4.928	1
64	OVP	Mx	0	1
65	OVP	X	4.928	1
66	OVP	Mx	0	1
67	MP2B	X	1.9712	4
68	MP2B	Mx	.000411	4
69	MP2C	X	1.9712	4
70	MP2C	Mx	.000411	4
71	MP2B	X	1.9712	4
72	MP2B	Mx	-.000411	4
73	MP2C	X	1.9712	4
74	MP2C	Mx	-.000411	4
75	M56A	X	1.1648	7.5
76	M56A	Mx	-.000291	7.5
77	M51	X	1.1648	7.5
78	M51	Mx	-.000291	7.5

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft.]	End Location[ft.]
1	M1	Y	-9.3095	-9.3095	0	%100
2	M2	Y	-10.2803	-10.2803	0	%100
3	M5	Y	-9.7806	-9.7806	0	%100
4	M6	Y	-9.7806	-9.7806	0	%100
5	M7	Y	-9.7806	-9.7806	0	%100
6	M6A	Y	-7.3678	-7.3678	0	%100
7	M7A	Y	-7.3678	-7.3678	0	%100
8	M23A	Y	-7.3678	-7.3678	0	%100
9	M24	Y	-7.3678	-7.3678	0	%100
10	M39A	Y	-7.3678	-7.3678	0	%100
11	M40	Y	-7.3678	-7.3678	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
12	M55	Y	-10.2803	-10.2803	0	%100
13	M56	Y	-10.2803	-10.2803	0	%100
14	M74A	Y	-9.3095	-9.3095	0	%100
15	M75A	Y	-9.3095	-9.3095	0	%100
16	MP4A	Y	-4.8036	-4.8036	0	%100
17	MP3A	Y	-4.8036	-4.8036	0	%100
18	MP2A	Y	-4.8036	-4.8036	0	%100
19	MP1A	Y	-4.8036	-4.8036	0	%100
20	MP4C	Y	-4.8036	-4.8036	0	%100
21	MP3C	Y	-4.8036	-4.8036	0	%100
22	MP2C	Y	-4.8036	-4.8036	0	%100
23	MP1C	Y	-4.8036	-4.8036	0	%100
24	MP4B	Y	-4.8036	-4.8036	0	%100
25	MP3B	Y	-4.8036	-4.8036	0	%100
26	MP2B	Y	-4.8036	-4.8036	0	%100
27	MP1B	Y	-4.8036	-4.8036	0	%100
28	M46	Y	-5.4901	-5.4901	0	%100
29	M51	Y	-5.4901	-5.4901	0	%100
30	M56A	Y	-5.4901	-5.4901	0	%100
31	M67	Y	-7.3678	-7.3678	0	%100
32	M68	Y	-7.3678	-7.3678	0	%100
33	M69	Y	-7.3678	-7.3678	0	%100
34	M70	Y	-6.397	-6.397	0	%100
35	M71	Y	-6.397	-6.397	0	%100
36	M72	Y	-6.397	-6.397	0	%100
37	M73	Y	-6.397	-6.397	0	%100
38	M74	Y	-6.397	-6.397	0	%100
39	M75	Y	-6.397	-6.397	0	%100
40	OVP	Y	-4.8036	-4.8036	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	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	M5	X	0	0	0	%100
6	M5	Z	0	0	0	%100
7	M6	X	0	0	0	%100
8	M6	Z	-13.5273	-13.5273	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	-13.5273	-13.5273	0	%100
11	M6A	X	0	0	0	%100
12	M6A	Z	-21.3884	-21.3884	0	%100
13	M7A	X	0	0	0	%100
14	M7A	Z	-21.3884	-21.3884	0	%100
15	M23A	X	0	0	0	%100
16	M23A	Z	-5.3471	-5.3471	0	%100
17	M24	X	0	0	0	%100
18	M24	Z	-5.3471	-5.3471	0	%100
19	M39A	X	0	0	0	%100
20	M39A	Z	-5.3471	-5.3471	0	%100
21	M40	X	0	0	0	%100
22	M40	Z	-5.3471	-5.3471	0	%100
23	M55	X	0	0	0	%100
24	M55	Z	-11.9104	-11.9104	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
25	M56	X	0	0	0	%100
26	M56	Z	-11.9104	-11.9104	0	%100
27	M74A	X	0	0	0	%100
28	M74A	Z	-9.209	-9.209	0	%100
29	M75A	X	0	0	0	%100
30	M75A	Z	-9.209	-9.209	0	%100
31	MP4A	X	0	0	0	%100
32	MP4A	Z	-10.1595	-10.1595	0	%100
33	MP3A	X	0	0	0	%100
34	MP3A	Z	-10.1595	-10.1595	0	%100
35	MP2A	X	0	0	0	%100
36	MP2A	Z	-10.1595	-10.1595	0	%100
37	MP1A	X	0	0	0	%100
38	MP1A	Z	-10.1595	-10.1595	0	%100
39	MP4C	X	0	0	0	%100
40	MP4C	Z	-10.1595	-10.1595	0	%100
41	MP3C	X	0	0	0	%100
42	MP3C	Z	-10.1595	-10.1595	0	%100
43	MP2C	X	0	0	0	%100
44	MP2C	Z	-10.1595	-10.1595	0	%100
45	MP1C	X	0	0	0	%100
46	MP1C	Z	-10.1595	-10.1595	0	%100
47	MP4B	X	0	0	0	%100
48	MP4B	Z	-10.1595	-10.1595	0	%100
49	MP3B	X	0	0	0	%100
50	MP3B	Z	-10.1595	-10.1595	0	%100
51	MP2B	X	0	0	0	%100
52	MP2B	Z	-10.1595	-10.1595	0	%100
53	MP1B	X	0	0	0	%100
54	MP1B	Z	-10.1595	-10.1595	0	%100
55	M46	X	0	0	0	%100
56	M46	Z	-12.2983	-12.2983	0	%100
57	M51	X	0	0	0	%100
58	M51	Z	-3.0746	-3.0746	0	%100
59	M56A	X	0	0	0	%100
60	M56A	Z	-3.0746	-3.0746	0	%100
61	M67	X	0	0	0	%100
62	M67	Z	-3.4478	-3.4478	0	%100
63	M68	X	0	0	0	%100
64	M68	Z	-4.6365	-4.6365	0	%100
65	M69	X	0	0	0	%100
66	M69	Z	-16.0808	-16.0808	0	%100
67	M70	X	0	0	0	%100
68	M70	Z	-8.861	-8.861	0	%100
69	M71	X	0	0	0	%100
70	M71	Z	-8.861	-8.861	0	%100
71	M72	X	0	0	0	%100
72	M72	Z	-16.2935	-16.2935	0	%100
73	M73	X	0	0	0	%100
74	M73	Z	-4.0826	-4.0826	0	%100
75	M74	X	0	0	0	%100
76	M74	Z	-4.0826	-4.0826	0	%100
77	M75	X	0	0	0	%100
78	M75	Z	-16.2935	-16.2935	0	%100
79	OVP	X	0	0	0	%100
80	OVP	Z	-9.2584	-9.2584	0	%100



Company : Colliers Engineering & Design  
 Designer :  
 Job Number : Project # 23777104  
 Model Name : Antenna Mount Analysis

July 20, 2023  
 9:25 AM  
 Checked By: \_\_\_\_\_

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M1	X	1.5348	1.5348	0	%100
2	M1	Z	-2.6584	-2.6584	0	%100
3	M2	X	1.9851	1.9851	0	%100
4	M2	Z	-3.4382	-3.4382	0	%100
5	M5	X	2.2545	2.2545	0	%100
6	M5	Z	-3.905	-3.905	0	%100
7	M6	X	2.2545	2.2545	0	%100
8	M6	Z	-3.905	-3.905	0	%100
9	M7	X	9.0182	9.0182	0	%100
10	M7	Z	-15.6199	-15.6199	0	%100
11	M6A	X	8.0207	8.0207	0	%100
12	M6A	Z	-13.8922	-13.8922	0	%100
13	M7A	X	8.0207	8.0207	0	%100
14	M7A	Z	-13.8922	-13.8922	0	%100
15	M23A	X	8.0207	8.0207	0	%100
16	M23A	Z	-13.8922	-13.8922	0	%100
17	M24	X	8.0207	8.0207	0	%100
18	M24	Z	-13.8922	-13.8922	0	%100
19	M39A	X	0	0	0	%100
20	M39A	Z	0	0	0	%100
21	M40	X	0	0	0	%100
22	M40	Z	0	0	0	%100
23	M55	X	1.9851	1.9851	0	%100
24	M55	Z	-3.4382	-3.4382	0	%100
25	M56	X	7.9403	7.9403	0	%100
26	M56	Z	-13.753	-13.753	0	%100
27	M74A	X	1.5348	1.5348	0	%100
28	M74A	Z	-2.6584	-2.6584	0	%100
29	M75A	X	6.1394	6.1394	0	%100
30	M75A	Z	-10.6337	-10.6337	0	%100
31	MP4A	X	5.0797	5.0797	0	%100
32	MP4A	Z	-8.7984	-8.7984	0	%100
33	MP3A	X	5.0797	5.0797	0	%100
34	MP3A	Z	-8.7984	-8.7984	0	%100
35	MP2A	X	5.0797	5.0797	0	%100
36	MP2A	Z	-8.7984	-8.7984	0	%100
37	MP1A	X	5.0797	5.0797	0	%100
38	MP1A	Z	-8.7984	-8.7984	0	%100
39	MP4C	X	5.0797	5.0797	0	%100
40	MP4C	Z	-8.7984	-8.7984	0	%100
41	MP3C	X	5.0797	5.0797	0	%100
42	MP3C	Z	-8.7984	-8.7984	0	%100
43	MP2C	X	5.0797	5.0797	0	%100
44	MP2C	Z	-8.7984	-8.7984	0	%100
45	MP1C	X	5.0797	5.0797	0	%100
46	MP1C	Z	-8.7984	-8.7984	0	%100
47	MP4B	X	5.0797	5.0797	0	%100
48	MP4B	Z	-8.7984	-8.7984	0	%100
49	MP3B	X	5.0797	5.0797	0	%100
50	MP3B	Z	-8.7984	-8.7984	0	%100
51	MP2B	X	5.0797	5.0797	0	%100
52	MP2B	Z	-8.7984	-8.7984	0	%100
53	MP1B	X	5.0797	5.0797	0	%100
54	MP1B	Z	-8.7984	-8.7984	0	%100
55	M46	X	4.6119	4.6119	0	%100
56	M46	Z	-7.988	-7.988	0	%100
57	M51	X	4.6119	4.6119	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location	End Location
58	M51	Z	-7.988	-7.988	0	%100
59	M56A	X	0	0	0	%100
60	M56A	Z	0	0	0	%100
61	M67	X	5.7368	5.7368	0	%100
62	M67	Z	-9.9364	-9.9364	0	%100
63	M68	X	.0146	.0146	0	%100
64	M68	Z	-.0254	-.0254	0	%100
65	M69	X	6.3311	6.3311	0	%100
66	M69	Z	-10.9659	-10.9659	0	%100
67	M70	X	1.599	1.599	0	%100
68	M70	Z	-2.7695	-2.7695	0	%100
69	M71	X	7.7044	7.7044	0	%100
70	M71	Z	-13.3444	-13.3444	0	%100
71	M72	X	7.7044	7.7044	0	%100
72	M72	Z	-13.3444	-13.3444	0	%100
73	M73	X	1.599	1.599	0	%100
74	M73	Z	-2.7695	-2.7695	0	%100
75	M74	X	5.3152	5.3152	0	%100
76	M74	Z	-9.2062	-9.2062	0	%100
77	M75	X	5.3152	5.3152	0	%100
78	M75	Z	-9.2062	-9.2062	0	%100
79	OVP	X	4.6292	4.6292	0	%100
80	OVP	Z	-8.018	-8.018	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location	End Location
1	M1	X	7.9753	7.9753	0	%100
2	M1	Z	-4.6045	-4.6045	0	%100
3	M2	X	10.3147	10.3147	0	%100
4	M2	Z	-5.9552	-5.9552	0	%100
5	M5	X	11.715	11.715	0	%100
6	M5	Z	-6.7636	-6.7636	0	%100
7	M6	X	0	0	0	%100
8	M6	Z	0	0	0	%100
9	M7	X	11.715	11.715	0	%100
10	M7	Z	-6.7636	-6.7636	0	%100
11	M6A	X	4.6307	4.6307	0	%100
12	M6A	Z	-2.6736	-2.6736	0	%100
13	M7A	X	4.6307	4.6307	0	%100
14	M7A	Z	-2.6736	-2.6736	0	%100
15	M23A	X	18.5229	18.5229	0	%100
16	M23A	Z	-10.6942	-10.6942	0	%100
17	M24	X	18.5229	18.5229	0	%100
18	M24	Z	-10.6942	-10.6942	0	%100
19	M39A	X	4.6307	4.6307	0	%100
20	M39A	Z	-2.6736	-2.6736	0	%100
21	M40	X	4.6307	4.6307	0	%100
22	M40	Z	-2.6736	-2.6736	0	%100
23	M55	X	0	0	0	%100
24	M55	Z	0	0	0	%100
25	M56	X	10.3147	10.3147	0	%100
26	M56	Z	-5.9552	-5.9552	0	%100
27	M74A	X	0	0	0	%100
28	M74A	Z	0	0	0	%100
29	M75A	X	7.9753	7.9753	0	%100
30	M75A	Z	-4.6045	-4.6045	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
31	MP4A	X	8.7984	8.7984	0	%100
32	MP4A	Z	-5.0797	-5.0797	0	%100
33	MP3A	X	8.7984	8.7984	0	%100
34	MP3A	Z	-5.0797	-5.0797	0	%100
35	MP2A	X	8.7984	8.7984	0	%100
36	MP2A	Z	-5.0797	-5.0797	0	%100
37	MP1A	X	8.7984	8.7984	0	%100
38	MP1A	Z	-5.0797	-5.0797	0	%100
39	MP4C	X	8.7984	8.7984	0	%100
40	MP4C	Z	-5.0797	-5.0797	0	%100
41	MP3C	X	8.7984	8.7984	0	%100
42	MP3C	Z	-5.0797	-5.0797	0	%100
43	MP2C	X	8.7984	8.7984	0	%100
44	MP2C	Z	-5.0797	-5.0797	0	%100
45	MP1C	X	8.7984	8.7984	0	%100
46	MP1C	Z	-5.0797	-5.0797	0	%100
47	MP4B	X	8.7984	8.7984	0	%100
48	MP4B	Z	-5.0797	-5.0797	0	%100
49	MP3B	X	8.7984	8.7984	0	%100
50	MP3B	Z	-5.0797	-5.0797	0	%100
51	MP2B	X	8.7984	8.7984	0	%100
52	MP2B	Z	-5.0797	-5.0797	0	%100
53	MP1B	X	8.7984	8.7984	0	%100
54	MP1B	Z	-5.0797	-5.0797	0	%100
55	M46	X	2.6627	2.6627	0	%100
56	M46	Z	-1.5373	-1.5373	0	%100
57	M51	X	10.6507	10.6507	0	%100
58	M51	Z	-6.1492	-6.1492	0	%100
59	M56A	X	2.6627	2.6627	0	%100
60	M56A	Z	-1.5373	-1.5373	0	%100
61	M67	X	13.9264	13.9264	0	%100
62	M67	Z	-8.0404	-8.0404	0	%100
63	M68	X	2.9859	2.9859	0	%100
64	M68	Z	-1.7239	-1.7239	0	%100
65	M69	X	4.0154	4.0154	0	%100
66	M69	Z	-2.3183	-2.3183	0	%100
67	M70	X	3.5356	3.5356	0	%100
68	M70	Z	-2.0413	-2.0413	0	%100
69	M71	X	14.1106	14.1106	0	%100
70	M71	Z	-8.1468	-8.1468	0	%100
71	M72	X	7.6739	7.6739	0	%100
72	M72	Z	-4.4305	-4.4305	0	%100
73	M73	X	7.6739	7.6739	0	%100
74	M73	Z	-4.4305	-4.4305	0	%100
75	M74	X	14.1106	14.1106	0	%100
76	M74	Z	-8.1468	-8.1468	0	%100
77	M75	X	3.5356	3.5356	0	%100
78	M75	Z	-2.0413	-2.0413	0	%100
79	OVP	X	8.018	8.018	0	%100
80	OVP	Z	-4.6292	-4.6292	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M1	X	12.2787	12.2787	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	15.8805	15.8805	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location	End Location
4	M2	Z	0	0	0	%100
5	M5	X	18.0364	18.0364	0	%100
6	M5	Z	0	0	0	%100
7	M6	X	4.5091	4.5091	0	%100
8	M6	Z	0	0	0	%100
9	M7	X	4.5091	4.5091	0	%100
10	M7	Z	0	0	0	%100
11	M6A	X	0	0	0	%100
12	M6A	Z	0	0	0	%100
13	M7A	X	0	0	0	%100
14	M7A	Z	0	0	0	%100
15	M23A	X	16.0413	16.0413	0	%100
16	M23A	Z	0	0	0	%100
17	M24	X	16.0413	16.0413	0	%100
18	M24	Z	0	0	0	%100
19	M39A	X	16.0413	16.0413	0	%100
20	M39A	Z	0	0	0	%100
21	M40	X	16.0413	16.0413	0	%100
22	M40	Z	0	0	0	%100
23	M55	X	3.9701	3.9701	0	%100
24	M55	Z	0	0	0	%100
25	M56	X	3.9701	3.9701	0	%100
26	M56	Z	0	0	0	%100
27	M74A	X	3.0697	3.0697	0	%100
28	M74A	Z	0	0	0	%100
29	M75A	X	3.0697	3.0697	0	%100
30	M75A	Z	0	0	0	%100
31	MP4A	X	10.1595	10.1595	0	%100
32	MP4A	Z	0	0	0	%100
33	MP3A	X	10.1595	10.1595	0	%100
34	MP3A	Z	0	0	0	%100
35	MP2A	X	10.1595	10.1595	0	%100
36	MP2A	Z	0	0	0	%100
37	MP1A	X	10.1595	10.1595	0	%100
38	MP1A	Z	0	0	0	%100
39	MP4C	X	10.1595	10.1595	0	%100
40	MP4C	Z	0	0	0	%100
41	MP3C	X	10.1595	10.1595	0	%100
42	MP3C	Z	0	0	0	%100
43	MP2C	X	10.1595	10.1595	0	%100
44	MP2C	Z	0	0	0	%100
45	MP1C	X	10.1595	10.1595	0	%100
46	MP1C	Z	0	0	0	%100
47	MP4B	X	10.1595	10.1595	0	%100
48	MP4B	Z	0	0	0	%100
49	MP3B	X	10.1595	10.1595	0	%100
50	MP3B	Z	0	0	0	%100
51	MP2B	X	10.1595	10.1595	0	%100
52	MP2B	Z	0	0	0	%100
53	MP1B	X	10.1595	10.1595	0	%100
54	MP1B	Z	0	0	0	%100
55	M46	X	0	0	0	%100
56	M46	Z	0	0	0	%100
57	M51	X	9.2237	9.2237	0	%100
58	M51	Z	0	0	0	%100
59	M56A	X	9.2237	9.2237	0	%100
60	M56A	Z	0	0	0	%100





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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
61	M67	X	12.6623	12.6623	0	%100
62	M67	Z	0	0	0	%100
63	M68	X	11.4736	11.4736	0	%100
64	M68	Z	0	0	0	%100
65	M69	X	.0293	.0293	0	%100
66	M69	Z	0	0	0	%100
67	M70	X	10.6304	10.6304	0	%100
68	M70	Z	0	0	0	%100
69	M71	X	10.6304	10.6304	0	%100
70	M71	Z	0	0	0	%100
71	M72	X	3.1979	3.1979	0	%100
72	M72	Z	0	0	0	%100
73	M73	X	15.4088	15.4088	0	%100
74	M73	Z	0	0	0	%100
75	M74	X	15.4088	15.4088	0	%100
76	M74	Z	0	0	0	%100
77	M75	X	3.1979	3.1979	0	%100
78	M75	Z	0	0	0	%100
79	OVP	X	9.2584	9.2584	0	%100
80	OVP	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M1	X	7.9753	7.9753	0	%100
2	M1	Z	4.6045	4.6045	0	%100
3	M2	X	10.3147	10.3147	0	%100
4	M2	Z	5.9552	5.9552	0	%100
5	M5	X	11.715	11.715	0	%100
6	M5	Z	6.7636	6.7636	0	%100
7	M6	X	11.715	11.715	0	%100
8	M6	Z	6.7636	6.7636	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	0	0	0	%100
11	M6A	X	4.6307	4.6307	0	%100
12	M6A	Z	2.6736	2.6736	0	%100
13	M7A	X	4.6307	4.6307	0	%100
14	M7A	Z	2.6736	2.6736	0	%100
15	M23A	X	4.6307	4.6307	0	%100
16	M23A	Z	2.6736	2.6736	0	%100
17	M24	X	4.6307	4.6307	0	%100
18	M24	Z	2.6736	2.6736	0	%100
19	M39A	X	18.5229	18.5229	0	%100
20	M39A	Z	10.6942	10.6942	0	%100
21	M40	X	18.5229	18.5229	0	%100
22	M40	Z	10.6942	10.6942	0	%100
23	M55	X	10.3147	10.3147	0	%100
24	M55	Z	5.9552	5.9552	0	%100
25	M56	X	0	0	0	%100
26	M56	Z	0	0	0	%100
27	M74A	X	7.9753	7.9753	0	%100
28	M74A	Z	4.6045	4.6045	0	%100
29	M75A	X	0	0	0	%100
30	M75A	Z	0	0	0	%100
31	MP4A	X	8.7984	8.7984	0	%100
32	MP4A	Z	5.0797	5.0797	0	%100
33	MP3A	X	8.7984	8.7984	0	%100





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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
34	MP3A	Z	5.0797	5.0797	0	%100
35	MP2A	X	8.7984	8.7984	0	%100
36	MP2A	Z	5.0797	5.0797	0	%100
37	MP1A	X	8.7984	8.7984	0	%100
38	MP1A	Z	5.0797	5.0797	0	%100
39	MP4C	X	8.7984	8.7984	0	%100
40	MP4C	Z	5.0797	5.0797	0	%100
41	MP3C	X	8.7984	8.7984	0	%100
42	MP3C	Z	5.0797	5.0797	0	%100
43	MP2C	X	8.7984	8.7984	0	%100
44	MP2C	Z	5.0797	5.0797	0	%100
45	MP1C	X	8.7984	8.7984	0	%100
46	MP1C	Z	5.0797	5.0797	0	%100
47	MP4B	X	8.7984	8.7984	0	%100
48	MP4B	Z	5.0797	5.0797	0	%100
49	MP3B	X	8.7984	8.7984	0	%100
50	MP3B	Z	5.0797	5.0797	0	%100
51	MP2B	X	8.7984	8.7984	0	%100
52	MP2B	Z	5.0797	5.0797	0	%100
53	MP1B	X	8.7984	8.7984	0	%100
54	MP1B	Z	5.0797	5.0797	0	%100
55	M46	X	2.6627	2.6627	0	%100
56	M46	Z	1.5373	1.5373	0	%100
57	M51	X	2.6627	2.6627	0	%100
58	M51	Z	1.5373	1.5373	0	%100
59	M56A	X	10.6507	10.6507	0	%100
60	M56A	Z	6.1492	6.1492	0	%100
61	M67	X	4.0154	4.0154	0	%100
62	M67	Z	2.3183	2.3183	0	%100
63	M68	X	13.9264	13.9264	0	%100
64	M68	Z	8.0404	8.0404	0	%100
65	M69	X	2.9859	2.9859	0	%100
66	M69	Z	1.7239	1.7239	0	%100
67	M70	X	14.1106	14.1106	0	%100
68	M70	Z	8.1468	8.1468	0	%100
69	M71	X	3.5356	3.5356	0	%100
70	M71	Z	2.0413	2.0413	0	%100
71	M72	X	3.5356	3.5356	0	%100
72	M72	Z	2.0413	2.0413	0	%100
73	M73	X	14.1106	14.1106	0	%100
74	M73	Z	8.1468	8.1468	0	%100
75	M74	X	7.6739	7.6739	0	%100
76	M74	Z	4.4305	4.4305	0	%100
77	M75	X	7.6739	7.6739	0	%100
78	M75	Z	4.4305	4.4305	0	%100
79	OVP	X	8.018	8.018	0	%100
80	OVP	Z	4.6292	4.6292	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M1	X	1.5348	1.5348	0	%100
2	M1	Z	2.6584	2.6584	0	%100
3	M2	X	1.9851	1.9851	0	%100
4	M2	Z	3.4382	3.4382	0	%100
5	M5	X	2.2545	2.2545	0	%100
6	M5	Z	3.905	3.905	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
7	M6	X	9.0182	9.0182	0	%100
8	M6	Z	15.6199	15.6199	0	%100
9	M7	X	2.2545	2.2545	0	%100
10	M7	Z	3.905	3.905	0	%100
11	M6A	X	8.0207	8.0207	0	%100
12	M6A	Z	13.8922	13.8922	0	%100
13	M7A	X	8.0207	8.0207	0	%100
14	M7A	Z	13.8922	13.8922	0	%100
15	M23A	X	0	0	0	%100
16	M23A	Z	0	0	0	%100
17	M24	X	0	0	0	%100
18	M24	Z	0	0	0	%100
19	M39A	X	8.0207	8.0207	0	%100
20	M39A	Z	13.8922	13.8922	0	%100
21	M40	X	8.0207	8.0207	0	%100
22	M40	Z	13.8922	13.8922	0	%100
23	M55	X	7.9403	7.9403	0	%100
24	M55	Z	13.753	13.753	0	%100
25	M56	X	1.9851	1.9851	0	%100
26	M56	Z	3.4382	3.4382	0	%100
27	M74A	X	6.1394	6.1394	0	%100
28	M74A	Z	10.6337	10.6337	0	%100
29	M75A	X	1.5348	1.5348	0	%100
30	M75A	Z	2.6584	2.6584	0	%100
31	MP4A	X	5.0797	5.0797	0	%100
32	MP4A	Z	8.7984	8.7984	0	%100
33	MP3A	X	5.0797	5.0797	0	%100
34	MP3A	Z	8.7984	8.7984	0	%100
35	MP2A	X	5.0797	5.0797	0	%100
36	MP2A	Z	8.7984	8.7984	0	%100
37	MP1A	X	5.0797	5.0797	0	%100
38	MP1A	Z	8.7984	8.7984	0	%100
39	MP4C	X	5.0797	5.0797	0	%100
40	MP4C	Z	8.7984	8.7984	0	%100
41	MP3C	X	5.0797	5.0797	0	%100
42	MP3C	Z	8.7984	8.7984	0	%100
43	MP2C	X	5.0797	5.0797	0	%100
44	MP2C	Z	8.7984	8.7984	0	%100
45	MP1C	X	5.0797	5.0797	0	%100
46	MP1C	Z	8.7984	8.7984	0	%100
47	MP4B	X	5.0797	5.0797	0	%100
48	MP4B	Z	8.7984	8.7984	0	%100
49	MP3B	X	5.0797	5.0797	0	%100
50	MP3B	Z	8.7984	8.7984	0	%100
51	MP2B	X	5.0797	5.0797	0	%100
52	MP2B	Z	8.7984	8.7984	0	%100
53	MP1B	X	5.0797	5.0797	0	%100
54	MP1B	Z	8.7984	8.7984	0	%100
55	M46	X	4.6119	4.6119	0	%100
56	M46	Z	7.988	7.988	0	%100
57	M51	X	0	0	0	%100
58	M51	Z	0	0	0	%100
59	M56A	X	4.6119	4.6119	0	%100
60	M56A	Z	7.988	7.988	0	%100
61	M67	X	.0146	.0146	0	%100
62	M67	Z	.0254	.0254	0	%100
63	M68	X	6.3311	6.3311	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
64	M68	Z	10.9659	10.9659	0	%100
65	M69	X	5.7368	5.7368	0	%100
66	M69	Z	9.9364	9.9364	0	%100
67	M70	X	7.7044	7.7044	0	%100
68	M70	Z	13.3444	13.3444	0	%100
69	M71	X	1.599	1.599	0	%100
70	M71	Z	2.7695	2.7695	0	%100
71	M72	X	5.3152	5.3152	0	%100
72	M72	Z	9.2062	9.2062	0	%100
73	M73	X	5.3152	5.3152	0	%100
74	M73	Z	9.2062	9.2062	0	%100
75	M74	X	1.599	1.599	0	%100
76	M74	Z	2.7695	2.7695	0	%100
77	M75	X	7.7044	7.7044	0	%100
78	M75	Z	13.3444	13.3444	0	%100
79	OVP	X	4.6292	4.6292	0	%100
80	OVP	Z	8.018	8.018	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	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	M5	X	0	0	0	%100
6	M5	Z	0	0	0	%100
7	M6	X	0	0	0	%100
8	M6	Z	13.5273	13.5273	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	13.5273	13.5273	0	%100
11	M6A	X	0	0	0	%100
12	M6A	Z	21.3884	21.3884	0	%100
13	M7A	X	0	0	0	%100
14	M7A	Z	21.3884	21.3884	0	%100
15	M23A	X	0	0	0	%100
16	M23A	Z	5.3471	5.3471	0	%100
17	M24	X	0	0	0	%100
18	M24	Z	5.3471	5.3471	0	%100
19	M39A	X	0	0	0	%100
20	M39A	Z	5.3471	5.3471	0	%100
21	M40	X	0	0	0	%100
22	M40	Z	5.3471	5.3471	0	%100
23	M55	X	0	0	0	%100
24	M55	Z	11.9104	11.9104	0	%100
25	M56	X	0	0	0	%100
26	M56	Z	11.9104	11.9104	0	%100
27	M74A	X	0	0	0	%100
28	M74A	Z	9.209	9.209	0	%100
29	M75A	X	0	0	0	%100
30	M75A	Z	9.209	9.209	0	%100
31	MP4A	X	0	0	0	%100
32	MP4A	Z	10.1595	10.1595	0	%100
33	MP3A	X	0	0	0	%100
34	MP3A	Z	10.1595	10.1595	0	%100
35	MP2A	X	0	0	0	%100
36	MP2A	Z	10.1595	10.1595	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
37	MP1A	X	0	0	0	%100
38	MP1A	Z	10.1595	10.1595	0	%100
39	MP4C	X	0	0	0	%100
40	MP4C	Z	10.1595	10.1595	0	%100
41	MP3C	X	0	0	0	%100
42	MP3C	Z	10.1595	10.1595	0	%100
43	MP2C	X	0	0	0	%100
44	MP2C	Z	10.1595	10.1595	0	%100
45	MP1C	X	0	0	0	%100
46	MP1C	Z	10.1595	10.1595	0	%100
47	MP4B	X	0	0	0	%100
48	MP4B	Z	10.1595	10.1595	0	%100
49	MP3B	X	0	0	0	%100
50	MP3B	Z	10.1595	10.1595	0	%100
51	MP2B	X	0	0	0	%100
52	MP2B	Z	10.1595	10.1595	0	%100
53	MP1B	X	0	0	0	%100
54	MP1B	Z	10.1595	10.1595	0	%100
55	M46	X	0	0	0	%100
56	M46	Z	12.2983	12.2983	0	%100
57	M51	X	0	0	0	%100
58	M51	Z	3.0746	3.0746	0	%100
59	M56A	X	0	0	0	%100
60	M56A	Z	3.0746	3.0746	0	%100
61	M67	X	0	0	0	%100
62	M67	Z	3.4478	3.4478	0	%100
63	M68	X	0	0	0	%100
64	M68	Z	4.6365	4.6365	0	%100
65	M69	X	0	0	0	%100
66	M69	Z	16.0808	16.0808	0	%100
67	M70	X	0	0	0	%100
68	M70	Z	8.861	8.861	0	%100
69	M71	X	0	0	0	%100
70	M71	Z	8.861	8.861	0	%100
71	M72	X	0	0	0	%100
72	M72	Z	16.2935	16.2935	0	%100
73	M73	X	0	0	0	%100
74	M73	Z	4.0826	4.0826	0	%100
75	M74	X	0	0	0	%100
76	M74	Z	4.0826	4.0826	0	%100
77	M75	X	0	0	0	%100
78	M75	Z	16.2935	16.2935	0	%100
79	OVP	X	0	0	0	%100
80	OVP	Z	9.2584	9.2584	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M1	X	-1.5348	-1.5348	0	%100
2	M1	Z	2.6584	2.6584	0	%100
3	M2	X	-1.9851	-1.9851	0	%100
4	M2	Z	3.4382	3.4382	0	%100
5	M5	X	-2.2545	-2.2545	0	%100
6	M5	Z	3.905	3.905	0	%100
7	M6	X	-2.2545	-2.2545	0	%100
8	M6	Z	3.905	3.905	0	%100
9	M7	X	-9.0182	-9.0182	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Locationft	End Locationft
10	M7	Z	15.6199	15.6199	0	%100
11	M6A	X	-8.0207	-8.0207	0	%100
12	M6A	Z	13.8922	13.8922	0	%100
13	M7A	X	-8.0207	-8.0207	0	%100
14	M7A	Z	13.8922	13.8922	0	%100
15	M23A	X	-8.0207	-8.0207	0	%100
16	M23A	Z	13.8922	13.8922	0	%100
17	M24	X	-8.0207	-8.0207	0	%100
18	M24	Z	13.8922	13.8922	0	%100
19	M39A	X	0	0	0	%100
20	M39A	Z	0	0	0	%100
21	M40	X	0	0	0	%100
22	M40	Z	0	0	0	%100
23	M55	X	-1.9851	-1.9851	0	%100
24	M55	Z	3.4382	3.4382	0	%100
25	M56	X	-7.9403	-7.9403	0	%100
26	M56	Z	13.753	13.753	0	%100
27	M74A	X	-1.5348	-1.5348	0	%100
28	M74A	Z	2.6584	2.6584	0	%100
29	M75A	X	-6.1394	-6.1394	0	%100
30	M75A	Z	10.6337	10.6337	0	%100
31	MP4A	X	-5.0797	-5.0797	0	%100
32	MP4A	Z	8.7984	8.7984	0	%100
33	MP3A	X	-5.0797	-5.0797	0	%100
34	MP3A	Z	8.7984	8.7984	0	%100
35	MP2A	X	-5.0797	-5.0797	0	%100
36	MP2A	Z	8.7984	8.7984	0	%100
37	MP1A	X	-5.0797	-5.0797	0	%100
38	MP1A	Z	8.7984	8.7984	0	%100
39	MP4C	X	-5.0797	-5.0797	0	%100
40	MP4C	Z	8.7984	8.7984	0	%100
41	MP3C	X	-5.0797	-5.0797	0	%100
42	MP3C	Z	8.7984	8.7984	0	%100
43	MP2C	X	-5.0797	-5.0797	0	%100
44	MP2C	Z	8.7984	8.7984	0	%100
45	MP1C	X	-5.0797	-5.0797	0	%100
46	MP1C	Z	8.7984	8.7984	0	%100
47	MP4B	X	-5.0797	-5.0797	0	%100
48	MP4B	Z	8.7984	8.7984	0	%100
49	MP3B	X	-5.0797	-5.0797	0	%100
50	MP3B	Z	8.7984	8.7984	0	%100
51	MP2B	X	-5.0797	-5.0797	0	%100
52	MP2B	Z	8.7984	8.7984	0	%100
53	MP1B	X	-5.0797	-5.0797	0	%100
54	MP1B	Z	8.7984	8.7984	0	%100
55	M46	X	-4.6119	-4.6119	0	%100
56	M46	Z	7.988	7.988	0	%100
57	M51	X	-4.6119	-4.6119	0	%100
58	M51	Z	7.988	7.988	0	%100
59	M56A	X	0	0	0	%100
60	M56A	Z	0	0	0	%100
61	M67	X	-5.7368	-5.7368	0	%100
62	M67	Z	9.9364	9.9364	0	%100
63	M68	X	-.0146	-.0146	0	%100
64	M68	Z	.0254	.0254	0	%100
65	M69	X	-6.3311	-6.3311	0	%100
66	M69	Z	10.9659	10.9659	0	%100



Company : Colliers Engineering & Design  
 Designer :  
 Job Number : Project # 23777104  
 Model Name : Antenna Mount Analysis

July 20, 2023  
 9:25 AM  
 Checked By: \_\_\_\_\_

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
67	M70	X	-1.599	-1.599	0	%100
68	M70	Z	2.7695	2.7695	0	%100
69	M71	X	-7.7044	-7.7044	0	%100
70	M71	Z	13.3444	13.3444	0	%100
71	M72	X	-7.7044	-7.7044	0	%100
72	M72	Z	13.3444	13.3444	0	%100
73	M73	X	-1.599	-1.599	0	%100
74	M73	Z	2.7695	2.7695	0	%100
75	M74	X	-5.3152	-5.3152	0	%100
76	M74	Z	9.2062	9.2062	0	%100
77	M75	X	-5.3152	-5.3152	0	%100
78	M75	Z	9.2062	9.2062	0	%100
79	OVP	X	-4.6292	-4.6292	0	%100
80	OVP	Z	8.018	8.018	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M1	X	-7.9753	-7.9753	0	%100
2	M1	Z	4.6045	4.6045	0	%100
3	M2	X	-10.3147	-10.3147	0	%100
4	M2	Z	5.9552	5.9552	0	%100
5	M5	X	-11.715	-11.715	0	%100
6	M5	Z	6.7636	6.7636	0	%100
7	M6	X	0	0	0	%100
8	M6	Z	0	0	0	%100
9	M7	X	-11.715	-11.715	0	%100
10	M7	Z	6.7636	6.7636	0	%100
11	M6A	X	-4.6307	-4.6307	0	%100
12	M6A	Z	2.6736	2.6736	0	%100
13	M7A	X	-4.6307	-4.6307	0	%100
14	M7A	Z	2.6736	2.6736	0	%100
15	M23A	X	-18.5229	-18.5229	0	%100
16	M23A	Z	10.6942	10.6942	0	%100
17	M24	X	-18.5229	-18.5229	0	%100
18	M24	Z	10.6942	10.6942	0	%100
19	M39A	X	-4.6307	-4.6307	0	%100
20	M39A	Z	2.6736	2.6736	0	%100
21	M40	X	-4.6307	-4.6307	0	%100
22	M40	Z	2.6736	2.6736	0	%100
23	M55	X	0	0	0	%100
24	M55	Z	0	0	0	%100
25	M56	X	-10.3147	-10.3147	0	%100
26	M56	Z	5.9552	5.9552	0	%100
27	M74A	X	0	0	0	%100
28	M74A	Z	0	0	0	%100
29	M75A	X	-7.9753	-7.9753	0	%100
30	M75A	Z	4.6045	4.6045	0	%100
31	MP4A	X	-8.7984	-8.7984	0	%100
32	MP4A	Z	5.0797	5.0797	0	%100
33	MP3A	X	-8.7984	-8.7984	0	%100
34	MP3A	Z	5.0797	5.0797	0	%100
35	MP2A	X	-8.7984	-8.7984	0	%100
36	MP2A	Z	5.0797	5.0797	0	%100
37	MP1A	X	-8.7984	-8.7984	0	%100
38	MP1A	Z	5.0797	5.0797	0	%100
39	MP4C	X	-8.7984	-8.7984	0	%100





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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
40	MP4C	Z	5.0797	5.0797	0	%100
41	MP3C	X	-8.7984	-8.7984	0	%100
42	MP3C	Z	5.0797	5.0797	0	%100
43	MP2C	X	-8.7984	-8.7984	0	%100
44	MP2C	Z	5.0797	5.0797	0	%100
45	MP1C	X	-8.7984	-8.7984	0	%100
46	MP1C	Z	5.0797	5.0797	0	%100
47	MP4B	X	-8.7984	-8.7984	0	%100
48	MP4B	Z	5.0797	5.0797	0	%100
49	MP3B	X	-8.7984	-8.7984	0	%100
50	MP3B	Z	5.0797	5.0797	0	%100
51	MP2B	X	-8.7984	-8.7984	0	%100
52	MP2B	Z	5.0797	5.0797	0	%100
53	MP1B	X	-8.7984	-8.7984	0	%100
54	MP1B	Z	5.0797	5.0797	0	%100
55	M46	X	-2.6627	-2.6627	0	%100
56	M46	Z	1.5373	1.5373	0	%100
57	M51	X	-10.6507	-10.6507	0	%100
58	M51	Z	6.1492	6.1492	0	%100
59	M56A	X	-2.6627	-2.6627	0	%100
60	M56A	Z	1.5373	1.5373	0	%100
61	M67	X	-13.9264	-13.9264	0	%100
62	M67	Z	8.0404	8.0404	0	%100
63	M68	X	-2.9859	-2.9859	0	%100
64	M68	Z	1.7239	1.7239	0	%100
65	M69	X	-4.0154	-4.0154	0	%100
66	M69	Z	2.3183	2.3183	0	%100
67	M70	X	-3.5356	-3.5356	0	%100
68	M70	Z	2.0413	2.0413	0	%100
69	M71	X	-14.1106	-14.1106	0	%100
70	M71	Z	8.1468	8.1468	0	%100
71	M72	X	-7.6739	-7.6739	0	%100
72	M72	Z	4.4305	4.4305	0	%100
73	M73	X	-7.6739	-7.6739	0	%100
74	M73	Z	4.4305	4.4305	0	%100
75	M74	X	-14.1106	-14.1106	0	%100
76	M74	Z	8.1468	8.1468	0	%100
77	M75	X	-3.5356	-3.5356	0	%100
78	M75	Z	2.0413	2.0413	0	%100
79	OVP	X	-8.018	-8.018	0	%100
80	OVP	Z	4.6292	4.6292	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M1	X	-12.2787	-12.2787	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	-15.8805	-15.8805	0	%100
4	M2	Z	0	0	0	%100
5	M5	X	-18.0364	-18.0364	0	%100
6	M5	Z	0	0	0	%100
7	M6	X	-4.5091	-4.5091	0	%100
8	M6	Z	0	0	0	%100
9	M7	X	-4.5091	-4.5091	0	%100
10	M7	Z	0	0	0	%100
11	M6A	X	0	0	0	%100
12	M6A	Z	0	0	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
13	M7A	X	0	0	0	%100
14	M7A	Z	0	0	0	%100
15	M23A	X	-16.0413	-16.0413	0	%100
16	M23A	Z	0	0	0	%100
17	M24	X	-16.0413	-16.0413	0	%100
18	M24	Z	0	0	0	%100
19	M39A	X	-16.0413	-16.0413	0	%100
20	M39A	Z	0	0	0	%100
21	M40	X	-16.0413	-16.0413	0	%100
22	M40	Z	0	0	0	%100
23	M55	X	-3.9701	-3.9701	0	%100
24	M55	Z	0	0	0	%100
25	M56	X	-3.9701	-3.9701	0	%100
26	M56	Z	0	0	0	%100
27	M74A	X	-3.0697	-3.0697	0	%100
28	M74A	Z	0	0	0	%100
29	M75A	X	-3.0697	-3.0697	0	%100
30	M75A	Z	0	0	0	%100
31	MP4A	X	-10.1595	-10.1595	0	%100
32	MP4A	Z	0	0	0	%100
33	MP3A	X	-10.1595	-10.1595	0	%100
34	MP3A	Z	0	0	0	%100
35	MP2A	X	-10.1595	-10.1595	0	%100
36	MP2A	Z	0	0	0	%100
37	MP1A	X	-10.1595	-10.1595	0	%100
38	MP1A	Z	0	0	0	%100
39	MP4C	X	-10.1595	-10.1595	0	%100
40	MP4C	Z	0	0	0	%100
41	MP3C	X	-10.1595	-10.1595	0	%100
42	MP3C	Z	0	0	0	%100
43	MP2C	X	-10.1595	-10.1595	0	%100
44	MP2C	Z	0	0	0	%100
45	MP1C	X	-10.1595	-10.1595	0	%100
46	MP1C	Z	0	0	0	%100
47	MP4B	X	-10.1595	-10.1595	0	%100
48	MP4B	Z	0	0	0	%100
49	MP3B	X	-10.1595	-10.1595	0	%100
50	MP3B	Z	0	0	0	%100
51	MP2B	X	-10.1595	-10.1595	0	%100
52	MP2B	Z	0	0	0	%100
53	MP1B	X	-10.1595	-10.1595	0	%100
54	MP1B	Z	0	0	0	%100
55	M46	X	0	0	0	%100
56	M46	Z	0	0	0	%100
57	M51	X	-9.2237	-9.2237	0	%100
58	M51	Z	0	0	0	%100
59	M56A	X	-9.2237	-9.2237	0	%100
60	M56A	Z	0	0	0	%100
61	M67	X	-12.6623	-12.6623	0	%100
62	M67	Z	0	0	0	%100
63	M68	X	-11.4736	-11.4736	0	%100
64	M68	Z	0	0	0	%100
65	M69	X	-.0293	-.0293	0	%100
66	M69	Z	0	0	0	%100
67	M70	X	-10.6304	-10.6304	0	%100
68	M70	Z	0	0	0	%100
69	M71	X	-10.6304	-10.6304	0	%100





Company : Colliers Engineering & Design  
 Designer :  
 Job Number : Project # 23777104  
 Model Name : Antenna Mount Analysis

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
70	M71	Z	0	0	0	%100
71	M72	X	-3.1979	-3.1979	0	%100
72	M72	Z	0	0	0	%100
73	M73	X	-15.4088	-15.4088	0	%100
74	M73	Z	0	0	0	%100
75	M74	X	-15.4088	-15.4088	0	%100
76	M74	Z	0	0	0	%100
77	M75	X	-3.1979	-3.1979	0	%100
78	M75	Z	0	0	0	%100
79	OVP	X	-9.2584	-9.2584	0	%100
80	OVP	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M1	X	-7.9753	-7.9753	0	%100
2	M1	Z	-4.6045	-4.6045	0	%100
3	M2	X	-10.3147	-10.3147	0	%100
4	M2	Z	-5.9552	-5.9552	0	%100
5	M5	X	-11.715	-11.715	0	%100
6	M5	Z	-6.7636	-6.7636	0	%100
7	M6	X	-11.715	-11.715	0	%100
8	M6	Z	-6.7636	-6.7636	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	0	0	0	%100
11	M6A	X	-4.6307	-4.6307	0	%100
12	M6A	Z	-2.6736	-2.6736	0	%100
13	M7A	X	-4.6307	-4.6307	0	%100
14	M7A	Z	-2.6736	-2.6736	0	%100
15	M23A	X	-4.6307	-4.6307	0	%100
16	M23A	Z	-2.6736	-2.6736	0	%100
17	M24	X	-4.6307	-4.6307	0	%100
18	M24	Z	-2.6736	-2.6736	0	%100
19	M39A	X	-18.5229	-18.5229	0	%100
20	M39A	Z	-10.6942	-10.6942	0	%100
21	M40	X	-18.5229	-18.5229	0	%100
22	M40	Z	-10.6942	-10.6942	0	%100
23	M55	X	-10.3147	-10.3147	0	%100
24	M55	Z	-5.9552	-5.9552	0	%100
25	M56	X	0	0	0	%100
26	M56	Z	0	0	0	%100
27	M74A	X	-7.9753	-7.9753	0	%100
28	M74A	Z	-4.6045	-4.6045	0	%100
29	M75A	X	0	0	0	%100
30	M75A	Z	0	0	0	%100
31	MP4A	X	-8.7984	-8.7984	0	%100
32	MP4A	Z	-5.0797	-5.0797	0	%100
33	MP3A	X	-8.7984	-8.7984	0	%100
34	MP3A	Z	-5.0797	-5.0797	0	%100
35	MP2A	X	-8.7984	-8.7984	0	%100
36	MP2A	Z	-5.0797	-5.0797	0	%100
37	MP1A	X	-8.7984	-8.7984	0	%100
38	MP1A	Z	-5.0797	-5.0797	0	%100
39	MP4C	X	-8.7984	-8.7984	0	%100
40	MP4C	Z	-5.0797	-5.0797	0	%100
41	MP3C	X	-8.7984	-8.7984	0	%100
42	MP3C	Z	-5.0797	-5.0797	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
43	MP2C	X	-8.7984	-8.7984	0	%100
44	MP2C	Z	-5.0797	-5.0797	0	%100
45	MP1C	X	-8.7984	-8.7984	0	%100
46	MP1C	Z	-5.0797	-5.0797	0	%100
47	MP4B	X	-8.7984	-8.7984	0	%100
48	MP4B	Z	-5.0797	-5.0797	0	%100
49	MP3B	X	-8.7984	-8.7984	0	%100
50	MP3B	Z	-5.0797	-5.0797	0	%100
51	MP2B	X	-8.7984	-8.7984	0	%100
52	MP2B	Z	-5.0797	-5.0797	0	%100
53	MP1B	X	-8.7984	-8.7984	0	%100
54	MP1B	Z	-5.0797	-5.0797	0	%100
55	M46	X	-2.6627	-2.6627	0	%100
56	M46	Z	-1.5373	-1.5373	0	%100
57	M51	X	-2.6627	-2.6627	0	%100
58	M51	Z	-1.5373	-1.5373	0	%100
59	M56A	X	-10.6507	-10.6507	0	%100
60	M56A	Z	-6.1492	-6.1492	0	%100
61	M67	X	-4.0154	-4.0154	0	%100
62	M67	Z	-2.3183	-2.3183	0	%100
63	M68	X	-13.9264	-13.9264	0	%100
64	M68	Z	-8.0404	-8.0404	0	%100
65	M69	X	-2.9859	-2.9859	0	%100
66	M69	Z	-1.7239	-1.7239	0	%100
67	M70	X	-14.1106	-14.1106	0	%100
68	M70	Z	-8.1468	-8.1468	0	%100
69	M71	X	-3.5356	-3.5356	0	%100
70	M71	Z	-2.0413	-2.0413	0	%100
71	M72	X	-3.5356	-3.5356	0	%100
72	M72	Z	-2.0413	-2.0413	0	%100
73	M73	X	-14.1106	-14.1106	0	%100
74	M73	Z	-8.1468	-8.1468	0	%100
75	M74	X	-7.6739	-7.6739	0	%100
76	M74	Z	-4.4305	-4.4305	0	%100
77	M75	X	-7.6739	-7.6739	0	%100
78	M75	Z	-4.4305	-4.4305	0	%100
79	OVP	X	-8.018	-8.018	0	%100
80	OVP	Z	-4.6292	-4.6292	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M1	X	-1.5348	-1.5348	0	%100
2	M1	Z	-2.6584	-2.6584	0	%100
3	M2	X	-1.9851	-1.9851	0	%100
4	M2	Z	-3.4382	-3.4382	0	%100
5	M5	X	-2.2545	-2.2545	0	%100
6	M5	Z	-3.905	-3.905	0	%100
7	M6	X	-9.0182	-9.0182	0	%100
8	M6	Z	-15.6199	-15.6199	0	%100
9	M7	X	-2.2545	-2.2545	0	%100
10	M7	Z	-3.905	-3.905	0	%100
11	M6A	X	-8.0207	-8.0207	0	%100
12	M6A	Z	-13.8922	-13.8922	0	%100
13	M7A	X	-8.0207	-8.0207	0	%100
14	M7A	Z	-13.8922	-13.8922	0	%100
15	M23A	X	0	0	0	%100



Company : Colliers Engineering & Design  
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**Member Distributed Loads (BLC 52 : Structure Wo (330 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude	End Magnitude	Start Locationft	End Locationft
16	M23A	Z	0	0	0	%100
17	M24	X	0	0	0	%100
18	M24	Z	0	0	0	%100
19	M39A	X	-8.0207	-8.0207	0	%100
20	M39A	Z	-13.8922	-13.8922	0	%100
21	M40	X	-8.0207	-8.0207	0	%100
22	M40	Z	-13.8922	-13.8922	0	%100
23	M55	X	-7.9403	-7.9403	0	%100
24	M55	Z	-13.753	-13.753	0	%100
25	M56	X	-1.9851	-1.9851	0	%100
26	M56	Z	-3.4382	-3.4382	0	%100
27	M74A	X	-6.1394	-6.1394	0	%100
28	M74A	Z	-10.6337	-10.6337	0	%100
29	M75A	X	-1.5348	-1.5348	0	%100
30	M75A	Z	-2.6584	-2.6584	0	%100
31	MP4A	X	-5.0797	-5.0797	0	%100
32	MP4A	Z	-8.7984	-8.7984	0	%100
33	MP3A	X	-5.0797	-5.0797	0	%100
34	MP3A	Z	-8.7984	-8.7984	0	%100
35	MP2A	X	-5.0797	-5.0797	0	%100
36	MP2A	Z	-8.7984	-8.7984	0	%100
37	MP1A	X	-5.0797	-5.0797	0	%100
38	MP1A	Z	-8.7984	-8.7984	0	%100
39	MP4C	X	-5.0797	-5.0797	0	%100
40	MP4C	Z	-8.7984	-8.7984	0	%100
41	MP3C	X	-5.0797	-5.0797	0	%100
42	MP3C	Z	-8.7984	-8.7984	0	%100
43	MP2C	X	-5.0797	-5.0797	0	%100
44	MP2C	Z	-8.7984	-8.7984	0	%100
45	MP1C	X	-5.0797	-5.0797	0	%100
46	MP1C	Z	-8.7984	-8.7984	0	%100
47	MP4B	X	-5.0797	-5.0797	0	%100
48	MP4B	Z	-8.7984	-8.7984	0	%100
49	MP3B	X	-5.0797	-5.0797	0	%100
50	MP3B	Z	-8.7984	-8.7984	0	%100
51	MP2B	X	-5.0797	-5.0797	0	%100
52	MP2B	Z	-8.7984	-8.7984	0	%100
53	MP1B	X	-5.0797	-5.0797	0	%100
54	MP1B	Z	-8.7984	-8.7984	0	%100
55	M46	X	-4.6119	-4.6119	0	%100
56	M46	Z	-7.988	-7.988	0	%100
57	M51	X	0	0	0	%100
58	M51	Z	0	0	0	%100
59	M56A	X	-4.6119	-4.6119	0	%100
60	M56A	Z	-7.988	-7.988	0	%100
61	M67	X	-.0146	-.0146	0	%100
62	M67	Z	-.0254	-.0254	0	%100
63	M68	X	-6.3311	-6.3311	0	%100
64	M68	Z	-10.9659	-10.9659	0	%100
65	M69	X	-5.7368	-5.7368	0	%100
66	M69	Z	-9.9364	-9.9364	0	%100
67	M70	X	-7.7044	-7.7044	0	%100
68	M70	Z	-13.3444	-13.3444	0	%100
69	M71	X	-1.599	-1.599	0	%100
70	M71	Z	-2.7695	-2.7695	0	%100
71	M72	X	-5.3152	-5.3152	0	%100
72	M72	Z	-9.2062	-9.2062	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
73	M73	X	-5.3152	-5.3152	0	%100
74	M73	Z	-9.2062	-9.2062	0	%100
75	M74	X	-1.599	-1.599	0	%100
76	M74	Z	-2.7695	-2.7695	0	%100
77	M75	X	-7.7044	-7.7044	0	%100
78	M75	Z	-13.3444	-13.3444	0	%100
79	OVP	X	-4.6292	-4.6292	0	%100
80	OVP	Z	-8.018	-8.018	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	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	M5	X	0	0	0	%100
6	M5	Z	0	0	0	%100
7	M6	X	0	0	0	%100
8	M6	Z	-3.2287	-3.2287	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	-3.2287	-3.2287	0	%100
11	M6A	X	0	0	0	%100
12	M6A	Z	-4.9604	-4.9604	0	%100
13	M7A	X	0	0	0	%100
14	M7A	Z	-4.9604	-4.9604	0	%100
15	M23A	X	0	0	0	%100
16	M23A	Z	-1.2401	-1.2401	0	%100
17	M24	X	0	0	0	%100
18	M24	Z	-1.2401	-1.2401	0	%100
19	M39A	X	0	0	0	%100
20	M39A	Z	-1.2401	-1.2401	0	%100
21	M40	X	0	0	0	%100
22	M40	Z	-1.2401	-1.2401	0	%100
23	M55	X	0	0	0	%100
24	M55	Z	-2.7476	-2.7476	0	%100
25	M56	X	0	0	0	%100
26	M56	Z	-2.7476	-2.7476	0	%100
27	M74A	X	0	0	0	%100
28	M74A	Z	-2.2262	-2.2262	0	%100
29	M75A	X	0	0	0	%100
30	M75A	Z	-2.2262	-2.2262	0	%100
31	MP4A	X	0	0	0	%100
32	MP4A	Z	-3.1638	-3.1638	0	%100
33	MP3A	X	0	0	0	%100
34	MP3A	Z	-3.1638	-3.1638	0	%100
35	MP2A	X	0	0	0	%100
36	MP2A	Z	-3.1638	-3.1638	0	%100
37	MP1A	X	0	0	0	%100
38	MP1A	Z	-3.1638	-3.1638	0	%100
39	MP4C	X	0	0	0	%100
40	MP4C	Z	-3.1638	-3.1638	0	%100
41	MP3C	X	0	0	0	%100
42	MP3C	Z	-3.1638	-3.1638	0	%100
43	MP2C	X	0	0	0	%100
44	MP2C	Z	-3.1638	-3.1638	0	%100
45	MP1C	X	0	0	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location	End Location
46	MP1C	Z	-3.1638	-3.1638	0	%100
47	MP4B	X	0	0	0	%100
48	MP4B	Z	-3.1638	-3.1638	0	%100
49	MP3B	X	0	0	0	%100
50	MP3B	Z	-3.1638	-3.1638	0	%100
51	MP2B	X	0	0	0	%100
52	MP2B	Z	-3.1638	-3.1638	0	%100
53	MP1B	X	0	0	0	%100
54	MP1B	Z	-3.1638	-3.1638	0	%100
55	M46	X	0	0	0	%100
56	M46	Z	-3.506	-3.506	0	%100
57	M51	X	0	0	0	%100
58	M51	Z	-.8765	-.8765	0	%100
59	M56A	X	0	0	0	%100
60	M56A	Z	-.8765	-.8765	0	%100
61	M67	X	0	0	0	%100
62	M67	Z	-.8114	-.8114	0	%100
63	M68	X	0	0	0	%100
64	M68	Z	-1.0912	-1.0912	0	%100
65	M69	X	0	0	0	%100
66	M69	Z	-3.7844	-3.7844	0	%100
67	M70	X	0	0	0	%100
68	M70	Z	-2.2142	-2.2142	0	%100
69	M71	X	0	0	0	%100
70	M71	Z	-2.2142	-2.2142	0	%100
71	M72	X	0	0	0	%100
72	M72	Z	-4.0714	-4.0714	0	%100
73	M73	X	0	0	0	%100
74	M73	Z	-1.0202	-1.0202	0	%100
75	M74	X	0	0	0	%100
76	M74	Z	-1.0202	-1.0202	0	%100
77	M75	X	0	0	0	%100
78	M75	Z	-4.0714	-4.0714	0	%100
79	OVP	X	0	0	0	%100
80	OVP	Z	-2.9158	-2.9158	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location	End Location
1	M1	X	.371	.371	0	%100
2	M1	Z	-.6426	-.6426	0	%100
3	M2	X	.4579	.4579	0	%100
4	M2	Z	-.7932	-.7932	0	%100
5	M5	X	.5381	.5381	0	%100
6	M5	Z	-.9321	-.9321	0	%100
7	M6	X	.5381	.5381	0	%100
8	M6	Z	-.9321	-.9321	0	%100
9	M7	X	2.1525	2.1525	0	%100
10	M7	Z	-3.7282	-3.7282	0	%100
11	M6A	X	1.8602	1.8602	0	%100
12	M6A	Z	-3.2219	-3.2219	0	%100
13	M7A	X	1.8602	1.8602	0	%100
14	M7A	Z	-3.2219	-3.2219	0	%100
15	M23A	X	1.8602	1.8602	0	%100
16	M23A	Z	-3.2219	-3.2219	0	%100
17	M24	X	1.8602	1.8602	0	%100
18	M24	Z	-3.2219	-3.2219	0	%100



Company : Colliers Engineering & Design  
 Designer :  
 Job Number : Project # 23777104  
 Model Name : Antenna Mount Analysis

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
19	M39A	X	0	0	0	%100
20	M39A	Z	0	0	0	%100
21	M40	X	0	0	0	%100
22	M40	Z	0	0	0	%100
23	M55	X	.4579	.4579	0	%100
24	M55	Z	-.7932	-.7932	0	%100
25	M56	X	1.8318	1.8318	0	%100
26	M56	Z	-3.1727	-3.1727	0	%100
27	M74A	X	.371	.371	0	%100
28	M74A	Z	-.6426	-.6426	0	%100
29	M75A	X	1.4841	1.4841	0	%100
30	M75A	Z	-2.5706	-2.5706	0	%100
31	MP4A	X	1.5819	1.5819	0	%100
32	MP4A	Z	-2.7399	-2.7399	0	%100
33	MP3A	X	1.5819	1.5819	0	%100
34	MP3A	Z	-2.7399	-2.7399	0	%100
35	MP2A	X	1.5819	1.5819	0	%100
36	MP2A	Z	-2.7399	-2.7399	0	%100
37	MP1A	X	1.5819	1.5819	0	%100
38	MP1A	Z	-2.7399	-2.7399	0	%100
39	MP4C	X	1.5819	1.5819	0	%100
40	MP4C	Z	-2.7399	-2.7399	0	%100
41	MP3C	X	1.5819	1.5819	0	%100
42	MP3C	Z	-2.7399	-2.7399	0	%100
43	MP2C	X	1.5819	1.5819	0	%100
44	MP2C	Z	-2.7399	-2.7399	0	%100
45	MP1C	X	1.5819	1.5819	0	%100
46	MP1C	Z	-2.7399	-2.7399	0	%100
47	MP4B	X	1.5819	1.5819	0	%100
48	MP4B	Z	-2.7399	-2.7399	0	%100
49	MP3B	X	1.5819	1.5819	0	%100
50	MP3B	Z	-2.7399	-2.7399	0	%100
51	MP2B	X	1.5819	1.5819	0	%100
52	MP2B	Z	-2.7399	-2.7399	0	%100
53	MP1B	X	1.5819	1.5819	0	%100
54	MP1B	Z	-2.7399	-2.7399	0	%100
55	M46	X	1.3148	1.3148	0	%100
56	M46	Z	-2.2772	-2.2772	0	%100
57	M51	X	1.3148	1.3148	0	%100
58	M51	Z	-2.2772	-2.2772	0	%100
59	M56A	X	0	0	0	%100
60	M56A	Z	0	0	0	%100
61	M67	X	1.3501	1.3501	0	%100
62	M67	Z	-2.3384	-2.3384	0	%100
63	M68	X	.0034	.0034	0	%100
64	M68	Z	-.006	-.006	0	%100
65	M69	X	1.49	1.49	0	%100
66	M69	Z	-2.5807	-2.5807	0	%100
67	M70	X	.3995	.3995	0	%100
68	M70	Z	-.692	-.692	0	%100
69	M71	X	1.9252	1.9252	0	%100
70	M71	Z	-3.3345	-3.3345	0	%100
71	M72	X	1.9252	1.9252	0	%100
72	M72	Z	-3.3345	-3.3345	0	%100
73	M73	X	.3995	.3995	0	%100
74	M73	Z	-.692	-.692	0	%100
75	M74	X	1.3282	1.3282	0	%100



Company : Colliers Engineering & Design  
 Designer :  
 Job Number : Project # 23777104  
 Model Name : Antenna Mount Analysis

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
76	M74	Z	-2.3004	-2.3004	0	%100
77	M75	X	1.3282	1.3282	0	%100
78	M75	Z	-2.3004	-2.3004	0	%100
79	OVP	X	1.4579	1.4579	0	%100
80	OVP	Z	-2.5252	-2.5252	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M1	X	1.9279	1.9279	0	%100
2	M1	Z	-1.1131	-1.1131	0	%100
3	M2	X	2.3795	2.3795	0	%100
4	M2	Z	-1.3738	-1.3738	0	%100
5	M5	X	2.7962	2.7962	0	%100
6	M5	Z	-1.6144	-1.6144	0	%100
7	M6	X	0	0	0	%100
8	M6	Z	0	0	0	%100
9	M7	X	2.7962	2.7962	0	%100
10	M7	Z	-1.6144	-1.6144	0	%100
11	M6A	X	1.074	1.074	0	%100
12	M6A	Z	-0.6201	-0.6201	0	%100
13	M7A	X	1.074	1.074	0	%100
14	M7A	Z	-0.6201	-0.6201	0	%100
15	M23A	X	4.2959	4.2959	0	%100
16	M23A	Z	-2.4802	-2.4802	0	%100
17	M24	X	4.2959	4.2959	0	%100
18	M24	Z	-2.4802	-2.4802	0	%100
19	M39A	X	1.074	1.074	0	%100
20	M39A	Z	-0.6201	-0.6201	0	%100
21	M40	X	1.074	1.074	0	%100
22	M40	Z	-0.6201	-0.6201	0	%100
23	M55	X	0	0	0	%100
24	M55	Z	0	0	0	%100
25	M56	X	2.3795	2.3795	0	%100
26	M56	Z	-1.3738	-1.3738	0	%100
27	M74A	X	0	0	0	%100
28	M74A	Z	0	0	0	%100
29	M75A	X	1.9279	1.9279	0	%100
30	M75A	Z	-1.1131	-1.1131	0	%100
31	MP4A	X	2.7399	2.7399	0	%100
32	MP4A	Z	-1.5819	-1.5819	0	%100
33	MP3A	X	2.7399	2.7399	0	%100
34	MP3A	Z	-1.5819	-1.5819	0	%100
35	MP2A	X	2.7399	2.7399	0	%100
36	MP2A	Z	-1.5819	-1.5819	0	%100
37	MP1A	X	2.7399	2.7399	0	%100
38	MP1A	Z	-1.5819	-1.5819	0	%100
39	MP4C	X	2.7399	2.7399	0	%100
40	MP4C	Z	-1.5819	-1.5819	0	%100
41	MP3C	X	2.7399	2.7399	0	%100
42	MP3C	Z	-1.5819	-1.5819	0	%100
43	MP2C	X	2.7399	2.7399	0	%100
44	MP2C	Z	-1.5819	-1.5819	0	%100
45	MP1C	X	2.7399	2.7399	0	%100
46	MP1C	Z	-1.5819	-1.5819	0	%100
47	MP4B	X	2.7399	2.7399	0	%100
48	MP4B	Z	-1.5819	-1.5819	0	%100





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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
49	MP3B	X	2.7399	2.7399	0	%100
50	MP3B	Z	-1.5819	-1.5819	0	%100
51	MP2B	X	2.7399	2.7399	0	%100
52	MP2B	Z	-1.5819	-1.5819	0	%100
53	MP1B	X	2.7399	2.7399	0	%100
54	MP1B	Z	-1.5819	-1.5819	0	%100
55	M46	X	.7591	.7591	0	%100
56	M46	Z	-.4383	-.4383	0	%100
57	M51	X	3.0363	3.0363	0	%100
58	M51	Z	-1.753	-1.753	0	%100
59	M56A	X	.7591	.7591	0	%100
60	M56A	Z	-.4383	-.4383	0	%100
61	M67	X	3.2774	3.2774	0	%100
62	M67	Z	-1.8922	-1.8922	0	%100
63	M68	X	.7027	.7027	0	%100
64	M68	Z	-.4057	-.4057	0	%100
65	M69	X	.945	.945	0	%100
66	M69	Z	-.5456	-.5456	0	%100
67	M70	X	.8835	.8835	0	%100
68	M70	Z	-.5101	-.5101	0	%100
69	M71	X	3.5259	3.5259	0	%100
70	M71	Z	-2.0357	-2.0357	0	%100
71	M72	X	1.9175	1.9175	0	%100
72	M72	Z	-1.1071	-1.1071	0	%100
73	M73	X	1.9175	1.9175	0	%100
74	M73	Z	-1.1071	-1.1071	0	%100
75	M74	X	3.5259	3.5259	0	%100
76	M74	Z	-2.0357	-2.0357	0	%100
77	M75	X	.8835	.8835	0	%100
78	M75	Z	-.5101	-.5101	0	%100
79	OVP	X	2.5252	2.5252	0	%100
80	OVP	Z	-1.4579	-1.4579	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M1	X	2.9682	2.9682	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	3.6635	3.6635	0	%100
4	M2	Z	0	0	0	%100
5	M5	X	4.305	4.305	0	%100
6	M5	Z	0	0	0	%100
7	M6	X	1.0762	1.0762	0	%100
8	M6	Z	0	0	0	%100
9	M7	X	1.0762	1.0762	0	%100
10	M7	Z	0	0	0	%100
11	M6A	X	0	0	0	%100
12	M6A	Z	0	0	0	%100
13	M7A	X	0	0	0	%100
14	M7A	Z	0	0	0	%100
15	M23A	X	3.7203	3.7203	0	%100
16	M23A	Z	0	0	0	%100
17	M24	X	3.7203	3.7203	0	%100
18	M24	Z	0	0	0	%100
19	M39A	X	3.7203	3.7203	0	%100
20	M39A	Z	0	0	0	%100
21	M40	X	3.7203	3.7203	0	%100





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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location	End Location
22	M40	Z	0	0	0	%100
23	M55	X	.9159	.9159	0	%100
24	M55	Z	0	0	0	%100
25	M56	X	.9159	.9159	0	%100
26	M56	Z	0	0	0	%100
27	M74A	X	.7421	.7421	0	%100
28	M74A	Z	0	0	0	%100
29	M75A	X	.7421	.7421	0	%100
30	M75A	Z	0	0	0	%100
31	MP4A	X	3.1638	3.1638	0	%100
32	MP4A	Z	0	0	0	%100
33	MP3A	X	3.1638	3.1638	0	%100
34	MP3A	Z	0	0	0	%100
35	MP2A	X	3.1638	3.1638	0	%100
36	MP2A	Z	0	0	0	%100
37	MP1A	X	3.1638	3.1638	0	%100
38	MP1A	Z	0	0	0	%100
39	MP4C	X	3.1638	3.1638	0	%100
40	MP4C	Z	0	0	0	%100
41	MP3C	X	3.1638	3.1638	0	%100
42	MP3C	Z	0	0	0	%100
43	MP2C	X	3.1638	3.1638	0	%100
44	MP2C	Z	0	0	0	%100
45	MP1C	X	3.1638	3.1638	0	%100
46	MP1C	Z	0	0	0	%100
47	MP4B	X	3.1638	3.1638	0	%100
48	MP4B	Z	0	0	0	%100
49	MP3B	X	3.1638	3.1638	0	%100
50	MP3B	Z	0	0	0	%100
51	MP2B	X	3.1638	3.1638	0	%100
52	MP2B	Z	0	0	0	%100
53	MP1B	X	3.1638	3.1638	0	%100
54	MP1B	Z	0	0	0	%100
55	M46	X	0	0	0	%100
56	M46	Z	0	0	0	%100
57	M51	X	2.6295	2.6295	0	%100
58	M51	Z	0	0	0	%100
59	M56A	X	2.6295	2.6295	0	%100
60	M56A	Z	0	0	0	%100
61	M67	X	2.9799	2.9799	0	%100
62	M67	Z	0	0	0	%100
63	M68	X	2.7002	2.7002	0	%100
64	M68	Z	0	0	0	%100
65	M69	X	.0069	.0069	0	%100
66	M69	Z	0	0	0	%100
67	M70	X	2.6563	2.6563	0	%100
68	M70	Z	0	0	0	%100
69	M71	X	2.6563	2.6563	0	%100
70	M71	Z	0	0	0	%100
71	M72	X	.7991	.7991	0	%100
72	M72	Z	0	0	0	%100
73	M73	X	3.8503	3.8503	0	%100
74	M73	Z	0	0	0	%100
75	M74	X	3.8503	3.8503	0	%100
76	M74	Z	0	0	0	%100
77	M75	X	.7991	.7991	0	%100
78	M75	Z	0	0	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
79	OVP	X	2.9158	2.9158	0	%100
80	OVP	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M1	X	1.9279	1.9279	0	%100
2	M1	Z	1.1131	1.1131	0	%100
3	M2	X	2.3795	2.3795	0	%100
4	M2	Z	1.3738	1.3738	0	%100
5	M5	X	2.7962	2.7962	0	%100
6	M5	Z	1.6144	1.6144	0	%100
7	M6	X	2.7962	2.7962	0	%100
8	M6	Z	1.6144	1.6144	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	0	0	0	%100
11	M6A	X	1.074	1.074	0	%100
12	M6A	Z	.6201	.6201	0	%100
13	M7A	X	1.074	1.074	0	%100
14	M7A	Z	.6201	.6201	0	%100
15	M23A	X	1.074	1.074	0	%100
16	M23A	Z	.6201	.6201	0	%100
17	M24	X	1.074	1.074	0	%100
18	M24	Z	.6201	.6201	0	%100
19	M39A	X	4.2959	4.2959	0	%100
20	M39A	Z	2.4802	2.4802	0	%100
21	M40	X	4.2959	4.2959	0	%100
22	M40	Z	2.4802	2.4802	0	%100
23	M55	X	2.3795	2.3795	0	%100
24	M55	Z	1.3738	1.3738	0	%100
25	M56	X	0	0	0	%100
26	M56	Z	0	0	0	%100
27	M74A	X	1.9279	1.9279	0	%100
28	M74A	Z	1.1131	1.1131	0	%100
29	M75A	X	0	0	0	%100
30	M75A	Z	0	0	0	%100
31	MP4A	X	2.7399	2.7399	0	%100
32	MP4A	Z	1.5819	1.5819	0	%100
33	MP3A	X	2.7399	2.7399	0	%100
34	MP3A	Z	1.5819	1.5819	0	%100
35	MP2A	X	2.7399	2.7399	0	%100
36	MP2A	Z	1.5819	1.5819	0	%100
37	MP1A	X	2.7399	2.7399	0	%100
38	MP1A	Z	1.5819	1.5819	0	%100
39	MP4C	X	2.7399	2.7399	0	%100
40	MP4C	Z	1.5819	1.5819	0	%100
41	MP3C	X	2.7399	2.7399	0	%100
42	MP3C	Z	1.5819	1.5819	0	%100
43	MP2C	X	2.7399	2.7399	0	%100
44	MP2C	Z	1.5819	1.5819	0	%100
45	MP1C	X	2.7399	2.7399	0	%100
46	MP1C	Z	1.5819	1.5819	0	%100
47	MP4B	X	2.7399	2.7399	0	%100
48	MP4B	Z	1.5819	1.5819	0	%100
49	MP3B	X	2.7399	2.7399	0	%100
50	MP3B	Z	1.5819	1.5819	0	%100
51	MP2B	X	2.7399	2.7399	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
52	MP2B	Z	1.5819	1.5819	0	%100
53	MP1B	X	2.7399	2.7399	0	%100
54	MP1B	Z	1.5819	1.5819	0	%100
55	M46	X	.7591	.7591	0	%100
56	M46	Z	.4383	.4383	0	%100
57	M51	X	.7591	.7591	0	%100
58	M51	Z	.4383	.4383	0	%100
59	M56A	X	3.0363	3.0363	0	%100
60	M56A	Z	1.753	1.753	0	%100
61	M67	X	.945	.945	0	%100
62	M67	Z	.5456	.5456	0	%100
63	M68	X	3.2774	3.2774	0	%100
64	M68	Z	1.8922	1.8922	0	%100
65	M69	X	.7027	.7027	0	%100
66	M69	Z	.4057	.4057	0	%100
67	M70	X	3.5259	3.5259	0	%100
68	M70	Z	2.0357	2.0357	0	%100
69	M71	X	.8835	.8835	0	%100
70	M71	Z	.5101	.5101	0	%100
71	M72	X	.8835	.8835	0	%100
72	M72	Z	.5101	.5101	0	%100
73	M73	X	3.5259	3.5259	0	%100
74	M73	Z	2.0357	2.0357	0	%100
75	M74	X	1.9175	1.9175	0	%100
76	M74	Z	1.1071	1.1071	0	%100
77	M75	X	1.9175	1.9175	0	%100
78	M75	Z	1.1071	1.1071	0	%100
79	OVP	X	2.5252	2.5252	0	%100
80	OVP	Z	1.4579	1.4579	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M1	X	.371	.371	0	%100
2	M1	Z	.6426	.6426	0	%100
3	M2	X	.4579	.4579	0	%100
4	M2	Z	.7932	.7932	0	%100
5	M5	X	.5381	.5381	0	%100
6	M5	Z	.9321	.9321	0	%100
7	M6	X	2.1525	2.1525	0	%100
8	M6	Z	3.7282	3.7282	0	%100
9	M7	X	.5381	.5381	0	%100
10	M7	Z	.9321	.9321	0	%100
11	M6A	X	1.8602	1.8602	0	%100
12	M6A	Z	3.2219	3.2219	0	%100
13	M7A	X	1.8602	1.8602	0	%100
14	M7A	Z	3.2219	3.2219	0	%100
15	M23A	X	0	0	0	%100
16	M23A	Z	0	0	0	%100
17	M24	X	0	0	0	%100
18	M24	Z	0	0	0	%100
19	M39A	X	1.8602	1.8602	0	%100
20	M39A	Z	3.2219	3.2219	0	%100
21	M40	X	1.8602	1.8602	0	%100
22	M40	Z	3.2219	3.2219	0	%100
23	M55	X	1.8318	1.8318	0	%100
24	M55	Z	3.1727	3.1727	0	%100



Company : Colliers Engineering & Design  
 Designer :  
 Job Number : Project # 23777104  
 Model Name : Antenna Mount Analysis

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
25	M56	X	.4579	.4579	0	%100
26	M56	Z	.7932	.7932	0	%100
27	M74A	X	1.4841	1.4841	0	%100
28	M74A	Z	2.5706	2.5706	0	%100
29	M75A	X	.371	.371	0	%100
30	M75A	Z	.6426	.6426	0	%100
31	MP4A	X	1.5819	1.5819	0	%100
32	MP4A	Z	2.7399	2.7399	0	%100
33	MP3A	X	1.5819	1.5819	0	%100
34	MP3A	Z	2.7399	2.7399	0	%100
35	MP2A	X	1.5819	1.5819	0	%100
36	MP2A	Z	2.7399	2.7399	0	%100
37	MP1A	X	1.5819	1.5819	0	%100
38	MP1A	Z	2.7399	2.7399	0	%100
39	MP4C	X	1.5819	1.5819	0	%100
40	MP4C	Z	2.7399	2.7399	0	%100
41	MP3C	X	1.5819	1.5819	0	%100
42	MP3C	Z	2.7399	2.7399	0	%100
43	MP2C	X	1.5819	1.5819	0	%100
44	MP2C	Z	2.7399	2.7399	0	%100
45	MP1C	X	1.5819	1.5819	0	%100
46	MP1C	Z	2.7399	2.7399	0	%100
47	MP4B	X	1.5819	1.5819	0	%100
48	MP4B	Z	2.7399	2.7399	0	%100
49	MP3B	X	1.5819	1.5819	0	%100
50	MP3B	Z	2.7399	2.7399	0	%100
51	MP2B	X	1.5819	1.5819	0	%100
52	MP2B	Z	2.7399	2.7399	0	%100
53	MP1B	X	1.5819	1.5819	0	%100
54	MP1B	Z	2.7399	2.7399	0	%100
55	M46	X	1.3148	1.3148	0	%100
56	M46	Z	2.2772	2.2772	0	%100
57	M51	X	0	0	0	%100
58	M51	Z	0	0	0	%100
59	M56A	X	1.3148	1.3148	0	%100
60	M56A	Z	2.2772	2.2772	0	%100
61	M67	X	.0034	.0034	0	%100
62	M67	Z	.006	.006	0	%100
63	M68	X	1.49	1.49	0	%100
64	M68	Z	2.5807	2.5807	0	%100
65	M69	X	1.3501	1.3501	0	%100
66	M69	Z	2.3384	2.3384	0	%100
67	M70	X	1.9252	1.9252	0	%100
68	M70	Z	3.3345	3.3345	0	%100
69	M71	X	.3995	.3995	0	%100
70	M71	Z	.692	.692	0	%100
71	M72	X	1.3282	1.3282	0	%100
72	M72	Z	2.3004	2.3004	0	%100
73	M73	X	1.3282	1.3282	0	%100
74	M73	Z	2.3004	2.3004	0	%100
75	M74	X	.3995	.3995	0	%100
76	M74	Z	.692	.692	0	%100
77	M75	X	1.9252	1.9252	0	%100
78	M75	Z	3.3345	3.3345	0	%100
79	OVP	X	1.4579	1.4579	0	%100
80	OVP	Z	2.5252	2.5252	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	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	M5	X	0	0	0	%100
6	M5	Z	0	0	0	%100
7	M6	X	0	0	0	%100
8	M6	Z	3.2287	3.2287	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	3.2287	3.2287	0	%100
11	M6A	X	0	0	0	%100
12	M6A	Z	4.9604	4.9604	0	%100
13	M7A	X	0	0	0	%100
14	M7A	Z	4.9604	4.9604	0	%100
15	M23A	X	0	0	0	%100
16	M23A	Z	1.2401	1.2401	0	%100
17	M24	X	0	0	0	%100
18	M24	Z	1.2401	1.2401	0	%100
19	M39A	X	0	0	0	%100
20	M39A	Z	1.2401	1.2401	0	%100
21	M40	X	0	0	0	%100
22	M40	Z	1.2401	1.2401	0	%100
23	M55	X	0	0	0	%100
24	M55	Z	2.7476	2.7476	0	%100
25	M56	X	0	0	0	%100
26	M56	Z	2.7476	2.7476	0	%100
27	M74A	X	0	0	0	%100
28	M74A	Z	2.2262	2.2262	0	%100
29	M75A	X	0	0	0	%100
30	M75A	Z	2.2262	2.2262	0	%100
31	MP4A	X	0	0	0	%100
32	MP4A	Z	3.1638	3.1638	0	%100
33	MP3A	X	0	0	0	%100
34	MP3A	Z	3.1638	3.1638	0	%100
35	MP2A	X	0	0	0	%100
36	MP2A	Z	3.1638	3.1638	0	%100
37	MP1A	X	0	0	0	%100
38	MP1A	Z	3.1638	3.1638	0	%100
39	MP4C	X	0	0	0	%100
40	MP4C	Z	3.1638	3.1638	0	%100
41	MP3C	X	0	0	0	%100
42	MP3C	Z	3.1638	3.1638	0	%100
43	MP2C	X	0	0	0	%100
44	MP2C	Z	3.1638	3.1638	0	%100
45	MP1C	X	0	0	0	%100
46	MP1C	Z	3.1638	3.1638	0	%100
47	MP4B	X	0	0	0	%100
48	MP4B	Z	3.1638	3.1638	0	%100
49	MP3B	X	0	0	0	%100
50	MP3B	Z	3.1638	3.1638	0	%100
51	MP2B	X	0	0	0	%100
52	MP2B	Z	3.1638	3.1638	0	%100
53	MP1B	X	0	0	0	%100
54	MP1B	Z	3.1638	3.1638	0	%100
55	M46	X	0	0	0	%100
56	M46	Z	3.506	3.506	0	%100
57	M51	X	0	0	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location	End Location
58	M51	Z	.8765	.8765	0	%100
59	M56A	X	0	0	0	%100
60	M56A	Z	.8765	.8765	0	%100
61	M67	X	0	0	0	%100
62	M67	Z	.8114	.8114	0	%100
63	M68	X	0	0	0	%100
64	M68	Z	1.0912	1.0912	0	%100
65	M69	X	0	0	0	%100
66	M69	Z	3.7844	3.7844	0	%100
67	M70	X	0	0	0	%100
68	M70	Z	2.2142	2.2142	0	%100
69	M71	X	0	0	0	%100
70	M71	Z	2.2142	2.2142	0	%100
71	M72	X	0	0	0	%100
72	M72	Z	4.0714	4.0714	0	%100
73	M73	X	0	0	0	%100
74	M73	Z	1.0202	1.0202	0	%100
75	M74	X	0	0	0	%100
76	M74	Z	1.0202	1.0202	0	%100
77	M75	X	0	0	0	%100
78	M75	Z	4.0714	4.0714	0	%100
79	OVP	X	0	0	0	%100
80	OVP	Z	2.9158	2.9158	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location	End Location
1	M1	X	-.371	-.371	0	%100
2	M1	Z	.6426	.6426	0	%100
3	M2	X	-.4579	-.4579	0	%100
4	M2	Z	.7932	.7932	0	%100
5	M5	X	-.5381	-.5381	0	%100
6	M5	Z	.9321	.9321	0	%100
7	M6	X	-.5381	-.5381	0	%100
8	M6	Z	.9321	.9321	0	%100
9	M7	X	-2.1525	-2.1525	0	%100
10	M7	Z	3.7282	3.7282	0	%100
11	M6A	X	-1.8602	-1.8602	0	%100
12	M6A	Z	3.2219	3.2219	0	%100
13	M7A	X	-1.8602	-1.8602	0	%100
14	M7A	Z	3.2219	3.2219	0	%100
15	M23A	X	-1.8602	-1.8602	0	%100
16	M23A	Z	3.2219	3.2219	0	%100
17	M24	X	-1.8602	-1.8602	0	%100
18	M24	Z	3.2219	3.2219	0	%100
19	M39A	X	0	0	0	%100
20	M39A	Z	0	0	0	%100
21	M40	X	0	0	0	%100
22	M40	Z	0	0	0	%100
23	M55	X	-.4579	-.4579	0	%100
24	M55	Z	.7932	.7932	0	%100
25	M56	X	-1.8318	-1.8318	0	%100
26	M56	Z	3.1727	3.1727	0	%100
27	M74A	X	-.371	-.371	0	%100
28	M74A	Z	.6426	.6426	0	%100
29	M75A	X	-1.4841	-1.4841	0	%100
30	M75A	Z	2.5706	2.5706	0	%100





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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
31	MP4A	X	-1.5819	-1.5819	0	%100
32	MP4A	Z	2.7399	2.7399	0	%100
33	MP3A	X	-1.5819	-1.5819	0	%100
34	MP3A	Z	2.7399	2.7399	0	%100
35	MP2A	X	-1.5819	-1.5819	0	%100
36	MP2A	Z	2.7399	2.7399	0	%100
37	MP1A	X	-1.5819	-1.5819	0	%100
38	MP1A	Z	2.7399	2.7399	0	%100
39	MP4C	X	-1.5819	-1.5819	0	%100
40	MP4C	Z	2.7399	2.7399	0	%100
41	MP3C	X	-1.5819	-1.5819	0	%100
42	MP3C	Z	2.7399	2.7399	0	%100
43	MP2C	X	-1.5819	-1.5819	0	%100
44	MP2C	Z	2.7399	2.7399	0	%100
45	MP1C	X	-1.5819	-1.5819	0	%100
46	MP1C	Z	2.7399	2.7399	0	%100
47	MP4B	X	-1.5819	-1.5819	0	%100
48	MP4B	Z	2.7399	2.7399	0	%100
49	MP3B	X	-1.5819	-1.5819	0	%100
50	MP3B	Z	2.7399	2.7399	0	%100
51	MP2B	X	-1.5819	-1.5819	0	%100
52	MP2B	Z	2.7399	2.7399	0	%100
53	MP1B	X	-1.5819	-1.5819	0	%100
54	MP1B	Z	2.7399	2.7399	0	%100
55	M46	X	-1.3148	-1.3148	0	%100
56	M46	Z	2.2772	2.2772	0	%100
57	M51	X	-1.3148	-1.3148	0	%100
58	M51	Z	2.2772	2.2772	0	%100
59	M56A	X	0	0	0	%100
60	M56A	Z	0	0	0	%100
61	M67	X	-1.3501	-1.3501	0	%100
62	M67	Z	2.3384	2.3384	0	%100
63	M68	X	-.0034	-.0034	0	%100
64	M68	Z	.006	.006	0	%100
65	M69	X	-1.49	-1.49	0	%100
66	M69	Z	2.5807	2.5807	0	%100
67	M70	X	-.3995	-.3995	0	%100
68	M70	Z	.692	.692	0	%100
69	M71	X	-1.9252	-1.9252	0	%100
70	M71	Z	3.3345	3.3345	0	%100
71	M72	X	-1.9252	-1.9252	0	%100
72	M72	Z	3.3345	3.3345	0	%100
73	M73	X	-.3995	-.3995	0	%100
74	M73	Z	.692	.692	0	%100
75	M74	X	-1.3282	-1.3282	0	%100
76	M74	Z	2.3004	2.3004	0	%100
77	M75	X	-1.3282	-1.3282	0	%100
78	M75	Z	2.3004	2.3004	0	%100
79	OVP	X	-1.4579	-1.4579	0	%100
80	OVP	Z	2.5252	2.5252	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M1	X	-1.9279	-1.9279	0	%100
2	M1	Z	1.1131	1.1131	0	%100
3	M2	X	-2.3795	-2.3795	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Locationft	End Locationft
4	M2	Z	1.3738	1.3738	0	%100
5	M5	X	-2.7962	-2.7962	0	%100
6	M5	Z	1.6144	1.6144	0	%100
7	M6	X	0	0	0	%100
8	M6	Z	0	0	0	%100
9	M7	X	-2.7962	-2.7962	0	%100
10	M7	Z	1.6144	1.6144	0	%100
11	M6A	X	-1.074	-1.074	0	%100
12	M6A	Z	.6201	.6201	0	%100
13	M7A	X	-1.074	-1.074	0	%100
14	M7A	Z	.6201	.6201	0	%100
15	M23A	X	-4.2959	-4.2959	0	%100
16	M23A	Z	2.4802	2.4802	0	%100
17	M24	X	-4.2959	-4.2959	0	%100
18	M24	Z	2.4802	2.4802	0	%100
19	M39A	X	-1.074	-1.074	0	%100
20	M39A	Z	.6201	.6201	0	%100
21	M40	X	-1.074	-1.074	0	%100
22	M40	Z	.6201	.6201	0	%100
23	M55	X	0	0	0	%100
24	M55	Z	0	0	0	%100
25	M56	X	-2.3795	-2.3795	0	%100
26	M56	Z	1.3738	1.3738	0	%100
27	M74A	X	0	0	0	%100
28	M74A	Z	0	0	0	%100
29	M75A	X	-1.9279	-1.9279	0	%100
30	M75A	Z	1.1131	1.1131	0	%100
31	MP4A	X	-2.7399	-2.7399	0	%100
32	MP4A	Z	1.5819	1.5819	0	%100
33	MP3A	X	-2.7399	-2.7399	0	%100
34	MP3A	Z	1.5819	1.5819	0	%100
35	MP2A	X	-2.7399	-2.7399	0	%100
36	MP2A	Z	1.5819	1.5819	0	%100
37	MP1A	X	-2.7399	-2.7399	0	%100
38	MP1A	Z	1.5819	1.5819	0	%100
39	MP4C	X	-2.7399	-2.7399	0	%100
40	MP4C	Z	1.5819	1.5819	0	%100
41	MP3C	X	-2.7399	-2.7399	0	%100
42	MP3C	Z	1.5819	1.5819	0	%100
43	MP2C	X	-2.7399	-2.7399	0	%100
44	MP2C	Z	1.5819	1.5819	0	%100
45	MP1C	X	-2.7399	-2.7399	0	%100
46	MP1C	Z	1.5819	1.5819	0	%100
47	MP4B	X	-2.7399	-2.7399	0	%100
48	MP4B	Z	1.5819	1.5819	0	%100
49	MP3B	X	-2.7399	-2.7399	0	%100
50	MP3B	Z	1.5819	1.5819	0	%100
51	MP2B	X	-2.7399	-2.7399	0	%100
52	MP2B	Z	1.5819	1.5819	0	%100
53	MP1B	X	-2.7399	-2.7399	0	%100
54	MP1B	Z	1.5819	1.5819	0	%100
55	M46	X	-.7591	-.7591	0	%100
56	M46	Z	.4383	.4383	0	%100
57	M51	X	-3.0363	-3.0363	0	%100
58	M51	Z	1.753	1.753	0	%100
59	M56A	X	-.7591	-.7591	0	%100
60	M56A	Z	.4383	.4383	0	%100





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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
61	M67	X	-3.2774	-3.2774	0	%100
62	M67	Z	1.8922	1.8922	0	%100
63	M68	X	-.7027	-.7027	0	%100
64	M68	Z	.4057	.4057	0	%100
65	M69	X	-.945	-.945	0	%100
66	M69	Z	.5456	.5456	0	%100
67	M70	X	-.8835	-.8835	0	%100
68	M70	Z	.5101	.5101	0	%100
69	M71	X	-3.5259	-3.5259	0	%100
70	M71	Z	2.0357	2.0357	0	%100
71	M72	X	-1.9175	-1.9175	0	%100
72	M72	Z	1.1071	1.1071	0	%100
73	M73	X	-1.9175	-1.9175	0	%100
74	M73	Z	1.1071	1.1071	0	%100
75	M74	X	-3.5259	-3.5259	0	%100
76	M74	Z	2.0357	2.0357	0	%100
77	M75	X	-.8835	-.8835	0	%100
78	M75	Z	.5101	.5101	0	%100
79	OVP	X	-2.5252	-2.5252	0	%100
80	OVP	Z	1.4579	1.4579	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M1	X	-2.9682	-2.9682	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	-3.6635	-3.6635	0	%100
4	M2	Z	0	0	0	%100
5	M5	X	-4.305	-4.305	0	%100
6	M5	Z	0	0	0	%100
7	M6	X	-1.0762	-1.0762	0	%100
8	M6	Z	0	0	0	%100
9	M7	X	-1.0762	-1.0762	0	%100
10	M7	Z	0	0	0	%100
11	M6A	X	0	0	0	%100
12	M6A	Z	0	0	0	%100
13	M7A	X	0	0	0	%100
14	M7A	Z	0	0	0	%100
15	M23A	X	-3.7203	-3.7203	0	%100
16	M23A	Z	0	0	0	%100
17	M24	X	-3.7203	-3.7203	0	%100
18	M24	Z	0	0	0	%100
19	M39A	X	-3.7203	-3.7203	0	%100
20	M39A	Z	0	0	0	%100
21	M40	X	-3.7203	-3.7203	0	%100
22	M40	Z	0	0	0	%100
23	M55	X	-.9159	-.9159	0	%100
24	M55	Z	0	0	0	%100
25	M56	X	-.9159	-.9159	0	%100
26	M56	Z	0	0	0	%100
27	M74A	X	-.7421	-.7421	0	%100
28	M74A	Z	0	0	0	%100
29	M75A	X	-.7421	-.7421	0	%100
30	M75A	Z	0	0	0	%100
31	MP4A	X	-3.1638	-3.1638	0	%100
32	MP4A	Z	0	0	0	%100
33	MP3A	X	-3.1638	-3.1638	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
34	MP3A	Z	0	0	0	%100
35	MP2A	X	-3.1638	-3.1638	0	%100
36	MP2A	Z	0	0	0	%100
37	MP1A	X	-3.1638	-3.1638	0	%100
38	MP1A	Z	0	0	0	%100
39	MP4C	X	-3.1638	-3.1638	0	%100
40	MP4C	Z	0	0	0	%100
41	MP3C	X	-3.1638	-3.1638	0	%100
42	MP3C	Z	0	0	0	%100
43	MP2C	X	-3.1638	-3.1638	0	%100
44	MP2C	Z	0	0	0	%100
45	MP1C	X	-3.1638	-3.1638	0	%100
46	MP1C	Z	0	0	0	%100
47	MP4B	X	-3.1638	-3.1638	0	%100
48	MP4B	Z	0	0	0	%100
49	MP3B	X	-3.1638	-3.1638	0	%100
50	MP3B	Z	0	0	0	%100
51	MP2B	X	-3.1638	-3.1638	0	%100
52	MP2B	Z	0	0	0	%100
53	MP1B	X	-3.1638	-3.1638	0	%100
54	MP1B	Z	0	0	0	%100
55	M46	X	0	0	0	%100
56	M46	Z	0	0	0	%100
57	M51	X	-2.6295	-2.6295	0	%100
58	M51	Z	0	0	0	%100
59	M56A	X	-2.6295	-2.6295	0	%100
60	M56A	Z	0	0	0	%100
61	M67	X	-2.9799	-2.9799	0	%100
62	M67	Z	0	0	0	%100
63	M68	X	-2.7002	-2.7002	0	%100
64	M68	Z	0	0	0	%100
65	M69	X	-0.0069	-0.0069	0	%100
66	M69	Z	0	0	0	%100
67	M70	X	-2.6563	-2.6563	0	%100
68	M70	Z	0	0	0	%100
69	M71	X	-2.6563	-2.6563	0	%100
70	M71	Z	0	0	0	%100
71	M72	X	-0.7991	-0.7991	0	%100
72	M72	Z	0	0	0	%100
73	M73	X	-3.8503	-3.8503	0	%100
74	M73	Z	0	0	0	%100
75	M74	X	-3.8503	-3.8503	0	%100
76	M74	Z	0	0	0	%100
77	M75	X	-0.7991	-0.7991	0	%100
78	M75	Z	0	0	0	%100
79	OVP	X	-2.9158	-2.9158	0	%100
80	OVP	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M1	X	-1.9279	-1.9279	0	%100
2	M1	Z	-1.1131	-1.1131	0	%100
3	M2	X	-2.3795	-2.3795	0	%100
4	M2	Z	-1.3738	-1.3738	0	%100
5	M5	X	-2.7962	-2.7962	0	%100
6	M5	Z	-1.6144	-1.6144	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
7	M6	X	-2.7962	-2.7962	0	%100
8	M6	Z	-1.6144	-1.6144	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	0	0	0	%100
11	M6A	X	-1.074	-1.074	0	%100
12	M6A	Z	-.6201	-.6201	0	%100
13	M7A	X	-1.074	-1.074	0	%100
14	M7A	Z	-.6201	-.6201	0	%100
15	M23A	X	-1.074	-1.074	0	%100
16	M23A	Z	-.6201	-.6201	0	%100
17	M24	X	-1.074	-1.074	0	%100
18	M24	Z	-.6201	-.6201	0	%100
19	M39A	X	-4.2959	-4.2959	0	%100
20	M39A	Z	-2.4802	-2.4802	0	%100
21	M40	X	-4.2959	-4.2959	0	%100
22	M40	Z	-2.4802	-2.4802	0	%100
23	M55	X	-2.3795	-2.3795	0	%100
24	M55	Z	-1.3738	-1.3738	0	%100
25	M56	X	0	0	0	%100
26	M56	Z	0	0	0	%100
27	M74A	X	-1.9279	-1.9279	0	%100
28	M74A	Z	-1.1131	-1.1131	0	%100
29	M75A	X	0	0	0	%100
30	M75A	Z	0	0	0	%100
31	MP4A	X	-2.7399	-2.7399	0	%100
32	MP4A	Z	-1.5819	-1.5819	0	%100
33	MP3A	X	-2.7399	-2.7399	0	%100
34	MP3A	Z	-1.5819	-1.5819	0	%100
35	MP2A	X	-2.7399	-2.7399	0	%100
36	MP2A	Z	-1.5819	-1.5819	0	%100
37	MP1A	X	-2.7399	-2.7399	0	%100
38	MP1A	Z	-1.5819	-1.5819	0	%100
39	MP4C	X	-2.7399	-2.7399	0	%100
40	MP4C	Z	-1.5819	-1.5819	0	%100
41	MP3C	X	-2.7399	-2.7399	0	%100
42	MP3C	Z	-1.5819	-1.5819	0	%100
43	MP2C	X	-2.7399	-2.7399	0	%100
44	MP2C	Z	-1.5819	-1.5819	0	%100
45	MP1C	X	-2.7399	-2.7399	0	%100
46	MP1C	Z	-1.5819	-1.5819	0	%100
47	MP4B	X	-2.7399	-2.7399	0	%100
48	MP4B	Z	-1.5819	-1.5819	0	%100
49	MP3B	X	-2.7399	-2.7399	0	%100
50	MP3B	Z	-1.5819	-1.5819	0	%100
51	MP2B	X	-2.7399	-2.7399	0	%100
52	MP2B	Z	-1.5819	-1.5819	0	%100
53	MP1B	X	-2.7399	-2.7399	0	%100
54	MP1B	Z	-1.5819	-1.5819	0	%100
55	M46	X	-.7591	-.7591	0	%100
56	M46	Z	-.4383	-.4383	0	%100
57	M51	X	-.7591	-.7591	0	%100
58	M51	Z	-.4383	-.4383	0	%100
59	M56A	X	-3.0363	-3.0363	0	%100
60	M56A	Z	-1.753	-1.753	0	%100
61	M67	X	-.945	-.945	0	%100
62	M67	Z	-.5456	-.5456	0	%100
63	M68	X	-3.2774	-3.2774	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
64	M68	Z	-1.8922	-1.8922	0	%100
65	M69	X	-7.027	-7.027	0	%100
66	M69	Z	-4.057	-4.057	0	%100
67	M70	X	-3.5259	-3.5259	0	%100
68	M70	Z	-2.0357	-2.0357	0	%100
69	M71	X	-8.835	-8.835	0	%100
70	M71	Z	-5.101	-5.101	0	%100
71	M72	X	-8.835	-8.835	0	%100
72	M72	Z	-5.101	-5.101	0	%100
73	M73	X	-3.5259	-3.5259	0	%100
74	M73	Z	-2.0357	-2.0357	0	%100
75	M74	X	-1.9175	-1.9175	0	%100
76	M74	Z	-1.1071	-1.1071	0	%100
77	M75	X	-1.9175	-1.9175	0	%100
78	M75	Z	-1.1071	-1.1071	0	%100
79	OVP	X	-2.5252	-2.5252	0	%100
80	OVP	Z	-1.4579	-1.4579	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M1	X	-.371	-.371	0	%100
2	M1	Z	-.6426	-.6426	0	%100
3	M2	X	-.4579	-.4579	0	%100
4	M2	Z	-.7932	-.7932	0	%100
5	M5	X	-.5381	-.5381	0	%100
6	M5	Z	-.9321	-.9321	0	%100
7	M6	X	-2.1525	-2.1525	0	%100
8	M6	Z	-3.7282	-3.7282	0	%100
9	M7	X	-.5381	-.5381	0	%100
10	M7	Z	-.9321	-.9321	0	%100
11	M6A	X	-1.8602	-1.8602	0	%100
12	M6A	Z	-3.2219	-3.2219	0	%100
13	M7A	X	-1.8602	-1.8602	0	%100
14	M7A	Z	-3.2219	-3.2219	0	%100
15	M23A	X	0	0	0	%100
16	M23A	Z	0	0	0	%100
17	M24	X	0	0	0	%100
18	M24	Z	0	0	0	%100
19	M39A	X	-1.8602	-1.8602	0	%100
20	M39A	Z	-3.2219	-3.2219	0	%100
21	M40	X	-1.8602	-1.8602	0	%100
22	M40	Z	-3.2219	-3.2219	0	%100
23	M55	X	-1.8318	-1.8318	0	%100
24	M55	Z	-3.1727	-3.1727	0	%100
25	M56	X	-.4579	-.4579	0	%100
26	M56	Z	-.7932	-.7932	0	%100
27	M74A	X	-1.4841	-1.4841	0	%100
28	M74A	Z	-2.5706	-2.5706	0	%100
29	M75A	X	-.371	-.371	0	%100
30	M75A	Z	-.6426	-.6426	0	%100
31	MP4A	X	-1.5819	-1.5819	0	%100
32	MP4A	Z	-2.7399	-2.7399	0	%100
33	MP3A	X	-1.5819	-1.5819	0	%100
34	MP3A	Z	-2.7399	-2.7399	0	%100
35	MP2A	X	-1.5819	-1.5819	0	%100
36	MP2A	Z	-2.7399	-2.7399	0	%100



Company : Colliers Engineering & Design  
 Designer :  
 Job Number : Project # 23777104  
 Model Name : Antenna Mount Analysis

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
37	MP1A	X	-1.5819	-1.5819	0	%100
38	MP1A	Z	-2.7399	-2.7399	0	%100
39	MP4C	X	-1.5819	-1.5819	0	%100
40	MP4C	Z	-2.7399	-2.7399	0	%100
41	MP3C	X	-1.5819	-1.5819	0	%100
42	MP3C	Z	-2.7399	-2.7399	0	%100
43	MP2C	X	-1.5819	-1.5819	0	%100
44	MP2C	Z	-2.7399	-2.7399	0	%100
45	MP1C	X	-1.5819	-1.5819	0	%100
46	MP1C	Z	-2.7399	-2.7399	0	%100
47	MP4B	X	-1.5819	-1.5819	0	%100
48	MP4B	Z	-2.7399	-2.7399	0	%100
49	MP3B	X	-1.5819	-1.5819	0	%100
50	MP3B	Z	-2.7399	-2.7399	0	%100
51	MP2B	X	-1.5819	-1.5819	0	%100
52	MP2B	Z	-2.7399	-2.7399	0	%100
53	MP1B	X	-1.5819	-1.5819	0	%100
54	MP1B	Z	-2.7399	-2.7399	0	%100
55	M46	X	-1.3148	-1.3148	0	%100
56	M46	Z	-2.2772	-2.2772	0	%100
57	M51	X	0	0	0	%100
58	M51	Z	0	0	0	%100
59	M56A	X	-1.3148	-1.3148	0	%100
60	M56A	Z	-2.2772	-2.2772	0	%100
61	M67	X	-0.0034	-0.0034	0	%100
62	M67	Z	-0.006	-0.006	0	%100
63	M68	X	-1.49	-1.49	0	%100
64	M68	Z	-2.5807	-2.5807	0	%100
65	M69	X	-1.3501	-1.3501	0	%100
66	M69	Z	-2.3384	-2.3384	0	%100
67	M70	X	-1.9252	-1.9252	0	%100
68	M70	Z	-3.3345	-3.3345	0	%100
69	M71	X	-0.3995	-0.3995	0	%100
70	M71	Z	-0.692	-0.692	0	%100
71	M72	X	-1.3282	-1.3282	0	%100
72	M72	Z	-2.3004	-2.3004	0	%100
73	M73	X	-1.3282	-1.3282	0	%100
74	M73	Z	-2.3004	-2.3004	0	%100
75	M74	X	-0.3995	-0.3995	0	%100
76	M74	Z	-0.692	-0.692	0	%100
77	M75	X	-1.9252	-1.9252	0	%100
78	M75	Z	-3.3345	-3.3345	0	%100
79	OVP	X	-1.4579	-1.4579	0	%100
80	OVP	Z	-2.5252	-2.5252	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	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	M5	X	0	0	0	%100
6	M5	Z	0	0	0	%100
7	M6	X	0	0	0	%100
8	M6	Z	-0.7792	-0.7792	0	%100
9	M7	X	0	0	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Locationft	End Locationft
10	M7	Z	-0.7792	-0.7792	0	%100
11	M6A	X	0	0	0	%100
12	M6A	Z	-1.232	-1.232	0	%100
13	M7A	X	0	0	0	%100
14	M7A	Z	-1.232	-1.232	0	%100
15	M23A	X	0	0	0	%100
16	M23A	Z	-0.308	-0.308	0	%100
17	M24	X	0	0	0	%100
18	M24	Z	-0.308	-0.308	0	%100
19	M39A	X	0	0	0	%100
20	M39A	Z	-0.308	-0.308	0	%100
21	M40	X	0	0	0	%100
22	M40	Z	-0.308	-0.308	0	%100
23	M55	X	0	0	0	%100
24	M55	Z	-0.686	-0.686	0	%100
25	M56	X	0	0	0	%100
26	M56	Z	-0.686	-0.686	0	%100
27	M74A	X	0	0	0	%100
28	M74A	Z	-0.5304	-0.5304	0	%100
29	M75A	X	0	0	0	%100
30	M75A	Z	-0.5304	-0.5304	0	%100
31	MP4A	X	0	0	0	%100
32	MP4A	Z	-0.5852	-0.5852	0	%100
33	MP3A	X	0	0	0	%100
34	MP3A	Z	-0.5852	-0.5852	0	%100
35	MP2A	X	0	0	0	%100
36	MP2A	Z	-0.5852	-0.5852	0	%100
37	MP1A	X	0	0	0	%100
38	MP1A	Z	-0.5852	-0.5852	0	%100
39	MP4C	X	0	0	0	%100
40	MP4C	Z	-0.5852	-0.5852	0	%100
41	MP3C	X	0	0	0	%100
42	MP3C	Z	-0.5852	-0.5852	0	%100
43	MP2C	X	0	0	0	%100
44	MP2C	Z	-0.5852	-0.5852	0	%100
45	MP1C	X	0	0	0	%100
46	MP1C	Z	-0.5852	-0.5852	0	%100
47	MP4B	X	0	0	0	%100
48	MP4B	Z	-0.5852	-0.5852	0	%100
49	MP3B	X	0	0	0	%100
50	MP3B	Z	-0.5852	-0.5852	0	%100
51	MP2B	X	0	0	0	%100
52	MP2B	Z	-0.5852	-0.5852	0	%100
53	MP1B	X	0	0	0	%100
54	MP1B	Z	-0.5852	-0.5852	0	%100
55	M46	X	0	0	0	%100
56	M46	Z	-0.7084	-0.7084	0	%100
57	M51	X	0	0	0	%100
58	M51	Z	-0.1771	-0.1771	0	%100
59	M56A	X	0	0	0	%100
60	M56A	Z	-0.1771	-0.1771	0	%100
61	M67	X	0	0	0	%100
62	M67	Z	-0.1986	-0.1986	0	%100
63	M68	X	0	0	0	%100
64	M68	Z	-0.2671	-0.2671	0	%100
65	M69	X	0	0	0	%100
66	M69	Z	-0.9263	-0.9263	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
67	M70	X	0	0	0	%100
68	M70	Z	-.5104	-.5104	0	%100
69	M71	X	0	0	0	%100
70	M71	Z	-.5104	-.5104	0	%100
71	M72	X	0	0	0	%100
72	M72	Z	-.9385	-.9385	0	%100
73	M73	X	0	0	0	%100
74	M73	Z	-.2352	-.2352	0	%100
75	M74	X	0	0	0	%100
76	M74	Z	-.2352	-.2352	0	%100
77	M75	X	0	0	0	%100
78	M75	Z	-.9385	-.9385	0	%100
79	OVP	X	0	0	0	%100
80	OVP	Z	-.5333	-.5333	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M1	X	.0884	.0884	0	%100
2	M1	Z	-.1531	-.1531	0	%100
3	M2	X	.1143	.1143	0	%100
4	M2	Z	-.198	-.198	0	%100
5	M5	X	.1299	.1299	0	%100
6	M5	Z	-.2249	-.2249	0	%100
7	M6	X	.1299	.1299	0	%100
8	M6	Z	-.2249	-.2249	0	%100
9	M7	X	.5194	.5194	0	%100
10	M7	Z	-.8997	-.8997	0	%100
11	M6A	X	.462	.462	0	%100
12	M6A	Z	-.8002	-.8002	0	%100
13	M7A	X	.462	.462	0	%100
14	M7A	Z	-.8002	-.8002	0	%100
15	M23A	X	.462	.462	0	%100
16	M23A	Z	-.8002	-.8002	0	%100
17	M24	X	.462	.462	0	%100
18	M24	Z	-.8002	-.8002	0	%100
19	M39A	X	0	0	0	%100
20	M39A	Z	0	0	0	%100
21	M40	X	0	0	0	%100
22	M40	Z	0	0	0	%100
23	M55	X	.1143	.1143	0	%100
24	M55	Z	-.198	-.198	0	%100
25	M56	X	.4574	.4574	0	%100
26	M56	Z	-.7922	-.7922	0	%100
27	M74A	X	.0884	.0884	0	%100
28	M74A	Z	-.1531	-.1531	0	%100
29	M75A	X	.3536	.3536	0	%100
30	M75A	Z	-.6125	-.6125	0	%100
31	MP4A	X	.2926	.2926	0	%100
32	MP4A	Z	-.5068	-.5068	0	%100
33	MP3A	X	.2926	.2926	0	%100
34	MP3A	Z	-.5068	-.5068	0	%100
35	MP2A	X	.2926	.2926	0	%100
36	MP2A	Z	-.5068	-.5068	0	%100
37	MP1A	X	.2926	.2926	0	%100
38	MP1A	Z	-.5068	-.5068	0	%100
39	MP4C	X	.2926	.2926	0	%100





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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
40	MP4C	Z	-.5068	-.5068	0	%100
41	MP3C	X	.2926	.2926	0	%100
42	MP3C	Z	-.5068	-.5068	0	%100
43	MP2C	X	.2926	.2926	0	%100
44	MP2C	Z	-.5068	-.5068	0	%100
45	MP1C	X	.2926	.2926	0	%100
46	MP1C	Z	-.5068	-.5068	0	%100
47	MP4B	X	.2926	.2926	0	%100
48	MP4B	Z	-.5068	-.5068	0	%100
49	MP3B	X	.2926	.2926	0	%100
50	MP3B	Z	-.5068	-.5068	0	%100
51	MP2B	X	.2926	.2926	0	%100
52	MP2B	Z	-.5068	-.5068	0	%100
53	MP1B	X	.2926	.2926	0	%100
54	MP1B	Z	-.5068	-.5068	0	%100
55	M46	X	.2656	.2656	0	%100
56	M46	Z	-.4601	-.4601	0	%100
57	M51	X	.2656	.2656	0	%100
58	M51	Z	-.4601	-.4601	0	%100
59	M56A	X	0	0	0	%100
60	M56A	Z	0	0	0	%100
61	M67	X	.3304	.3304	0	%100
62	M67	Z	-.5723	-.5723	0	%100
63	M68	X	.000844	.000844	0	%100
64	M68	Z	-.0015	-.0015	0	%100
65	M69	X	.3647	.3647	0	%100
66	M69	Z	-.6316	-.6316	0	%100
67	M70	X	.0921	.0921	0	%100
68	M70	Z	-.1595	-.1595	0	%100
69	M71	X	.4438	.4438	0	%100
70	M71	Z	-.7686	-.7686	0	%100
71	M72	X	.4438	.4438	0	%100
72	M72	Z	-.7686	-.7686	0	%100
73	M73	X	.0921	.0921	0	%100
74	M73	Z	-.1595	-.1595	0	%100
75	M74	X	.3062	.3062	0	%100
76	M74	Z	-.5303	-.5303	0	%100
77	M75	X	.3062	.3062	0	%100
78	M75	Z	-.5303	-.5303	0	%100
79	OVP	X	.2666	.2666	0	%100
80	OVP	Z	-.4618	-.4618	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M1	X	.4594	.4594	0	%100
2	M1	Z	-.2652	-.2652	0	%100
3	M2	X	.5941	.5941	0	%100
4	M2	Z	-.343	-.343	0	%100
5	M5	X	.6748	.6748	0	%100
6	M5	Z	-.3896	-.3896	0	%100
7	M6	X	0	0	0	%100
8	M6	Z	0	0	0	%100
9	M7	X	.6748	.6748	0	%100
10	M7	Z	-.3896	-.3896	0	%100
11	M6A	X	.2667	.2667	0	%100
12	M6A	Z	-.154	-.154	0	%100





Company : Colliers Engineering & Design  
 Designer :  
 Job Number : Project # 23777104  
 Model Name : Antenna Mount Analysis

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
13	M7A	X	.2667	.2667	0	%100
14	M7A	Z	-.154	-.154	0	%100
15	M23A	X	1.0669	1.0669	0	%100
16	M23A	Z	-.616	-.616	0	%100
17	M24	X	1.0669	1.0669	0	%100
18	M24	Z	-.616	-.616	0	%100
19	M39A	X	.2667	.2667	0	%100
20	M39A	Z	-.154	-.154	0	%100
21	M40	X	.2667	.2667	0	%100
22	M40	Z	-.154	-.154	0	%100
23	M55	X	0	0	0	%100
24	M55	Z	0	0	0	%100
25	M56	X	.5941	.5941	0	%100
26	M56	Z	-.343	-.343	0	%100
27	M74A	X	0	0	0	%100
28	M74A	Z	0	0	0	%100
29	M75A	X	.4594	.4594	0	%100
30	M75A	Z	-.2652	-.2652	0	%100
31	MP4A	X	.5068	.5068	0	%100
32	MP4A	Z	-.2926	-.2926	0	%100
33	MP3A	X	.5068	.5068	0	%100
34	MP3A	Z	-.2926	-.2926	0	%100
35	MP2A	X	.5068	.5068	0	%100
36	MP2A	Z	-.2926	-.2926	0	%100
37	MP1A	X	.5068	.5068	0	%100
38	MP1A	Z	-.2926	-.2926	0	%100
39	MP4C	X	.5068	.5068	0	%100
40	MP4C	Z	-.2926	-.2926	0	%100
41	MP3C	X	.5068	.5068	0	%100
42	MP3C	Z	-.2926	-.2926	0	%100
43	MP2C	X	.5068	.5068	0	%100
44	MP2C	Z	-.2926	-.2926	0	%100
45	MP1C	X	.5068	.5068	0	%100
46	MP1C	Z	-.2926	-.2926	0	%100
47	MP4B	X	.5068	.5068	0	%100
48	MP4B	Z	-.2926	-.2926	0	%100
49	MP3B	X	.5068	.5068	0	%100
50	MP3B	Z	-.2926	-.2926	0	%100
51	MP2B	X	.5068	.5068	0	%100
52	MP2B	Z	-.2926	-.2926	0	%100
53	MP1B	X	.5068	.5068	0	%100
54	MP1B	Z	-.2926	-.2926	0	%100
55	M46	X	.1534	.1534	0	%100
56	M46	Z	-.0885	-.0885	0	%100
57	M51	X	.6135	.6135	0	%100
58	M51	Z	-.3542	-.3542	0	%100
59	M56A	X	.1534	.1534	0	%100
60	M56A	Z	-.0885	-.0885	0	%100
61	M67	X	.8022	.8022	0	%100
62	M67	Z	-.4631	-.4631	0	%100
63	M68	X	.172	.172	0	%100
64	M68	Z	-.0993	-.0993	0	%100
65	M69	X	.2313	.2313	0	%100
66	M69	Z	-.1335	-.1335	0	%100
67	M70	X	.2037	.2037	0	%100
68	M70	Z	-.1176	-.1176	0	%100
69	M71	X	.8128	.8128	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
70	M71	Z	-.4693	-.4693	0	%100
71	M72	X	.442	.442	0	%100
72	M72	Z	-.2552	-.2552	0	%100
73	M73	X	.442	.442	0	%100
74	M73	Z	-.2552	-.2552	0	%100
75	M74	X	.8128	.8128	0	%100
76	M74	Z	-.4693	-.4693	0	%100
77	M75	X	.2037	.2037	0	%100
78	M75	Z	-.1176	-.1176	0	%100
79	OVP	X	.4618	.4618	0	%100
80	OVP	Z	-.2666	-.2666	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M1	X	.7073	.7073	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	.9147	.9147	0	%100
4	M2	Z	0	0	0	%100
5	M5	X	1.0389	1.0389	0	%100
6	M5	Z	0	0	0	%100
7	M6	X	.2597	.2597	0	%100
8	M6	Z	0	0	0	%100
9	M7	X	.2597	.2597	0	%100
10	M7	Z	0	0	0	%100
11	M6A	X	0	0	0	%100
12	M6A	Z	0	0	0	%100
13	M7A	X	0	0	0	%100
14	M7A	Z	0	0	0	%100
15	M23A	X	.924	.924	0	%100
16	M23A	Z	0	0	0	%100
17	M24	X	.924	.924	0	%100
18	M24	Z	0	0	0	%100
19	M39A	X	.924	.924	0	%100
20	M39A	Z	0	0	0	%100
21	M40	X	.924	.924	0	%100
22	M40	Z	0	0	0	%100
23	M55	X	.2287	.2287	0	%100
24	M55	Z	0	0	0	%100
25	M56	X	.2287	.2287	0	%100
26	M56	Z	0	0	0	%100
27	M74A	X	.1768	.1768	0	%100
28	M74A	Z	0	0	0	%100
29	M75A	X	.1768	.1768	0	%100
30	M75A	Z	0	0	0	%100
31	MP4A	X	.5852	.5852	0	%100
32	MP4A	Z	0	0	0	%100
33	MP3A	X	.5852	.5852	0	%100
34	MP3A	Z	0	0	0	%100
35	MP2A	X	.5852	.5852	0	%100
36	MP2A	Z	0	0	0	%100
37	MP1A	X	.5852	.5852	0	%100
38	MP1A	Z	0	0	0	%100
39	MP4C	X	.5852	.5852	0	%100
40	MP4C	Z	0	0	0	%100
41	MP3C	X	.5852	.5852	0	%100
42	MP3C	Z	0	0	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
43	MP2C	X	.5852	.5852	0	%100
44	MP2C	Z	0	0	0	%100
45	MP1C	X	.5852	.5852	0	%100
46	MP1C	Z	0	0	0	%100
47	MP4B	X	.5852	.5852	0	%100
48	MP4B	Z	0	0	0	%100
49	MP3B	X	.5852	.5852	0	%100
50	MP3B	Z	0	0	0	%100
51	MP2B	X	.5852	.5852	0	%100
52	MP2B	Z	0	0	0	%100
53	MP1B	X	.5852	.5852	0	%100
54	MP1B	Z	0	0	0	%100
55	M46	X	0	0	0	%100
56	M46	Z	0	0	0	%100
57	M51	X	.5313	.5313	0	%100
58	M51	Z	0	0	0	%100
59	M56A	X	.5313	.5313	0	%100
60	M56A	Z	0	0	0	%100
61	M67	X	.7293	.7293	0	%100
62	M67	Z	0	0	0	%100
63	M68	X	.6609	.6609	0	%100
64	M68	Z	0	0	0	%100
65	M69	X	.0017	.0017	0	%100
66	M69	Z	0	0	0	%100
67	M70	X	.6123	.6123	0	%100
68	M70	Z	0	0	0	%100
69	M71	X	.6123	.6123	0	%100
70	M71	Z	0	0	0	%100
71	M72	X	.1842	.1842	0	%100
72	M72	Z	0	0	0	%100
73	M73	X	.8875	.8875	0	%100
74	M73	Z	0	0	0	%100
75	M74	X	.8875	.8875	0	%100
76	M74	Z	0	0	0	%100
77	M75	X	.1842	.1842	0	%100
78	M75	Z	0	0	0	%100
79	OVP	X	.5333	.5333	0	%100
80	OVP	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M1	X	.4594	.4594	0	%100
2	M1	Z	.2652	.2652	0	%100
3	M2	X	.5941	.5941	0	%100
4	M2	Z	.343	.343	0	%100
5	M5	X	.6748	.6748	0	%100
6	M5	Z	.3896	.3896	0	%100
7	M6	X	.6748	.6748	0	%100
8	M6	Z	.3896	.3896	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	0	0	0	%100
11	M6A	X	.2667	.2667	0	%100
12	M6A	Z	.154	.154	0	%100
13	M7A	X	.2667	.2667	0	%100
14	M7A	Z	.154	.154	0	%100
15	M23A	X	.2667	.2667	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Locationft	End Locationft
16	M23A	Z	.154	.154	0	%100
17	M24	X	.2667	.2667	0	%100
18	M24	Z	.154	.154	0	%100
19	M39A	X	1.0669	1.0669	0	%100
20	M39A	Z	.616	.616	0	%100
21	M40	X	1.0669	1.0669	0	%100
22	M40	Z	.616	.616	0	%100
23	M55	X	.5941	.5941	0	%100
24	M55	Z	.343	.343	0	%100
25	M56	X	0	0	0	%100
26	M56	Z	0	0	0	%100
27	M74A	X	.4594	.4594	0	%100
28	M74A	Z	.2652	.2652	0	%100
29	M75A	X	0	0	0	%100
30	M75A	Z	0	0	0	%100
31	MP4A	X	.5068	.5068	0	%100
32	MP4A	Z	.2926	.2926	0	%100
33	MP3A	X	.5068	.5068	0	%100
34	MP3A	Z	.2926	.2926	0	%100
35	MP2A	X	.5068	.5068	0	%100
36	MP2A	Z	.2926	.2926	0	%100
37	MP1A	X	.5068	.5068	0	%100
38	MP1A	Z	.2926	.2926	0	%100
39	MP4C	X	.5068	.5068	0	%100
40	MP4C	Z	.2926	.2926	0	%100
41	MP3C	X	.5068	.5068	0	%100
42	MP3C	Z	.2926	.2926	0	%100
43	MP2C	X	.5068	.5068	0	%100
44	MP2C	Z	.2926	.2926	0	%100
45	MP1C	X	.5068	.5068	0	%100
46	MP1C	Z	.2926	.2926	0	%100
47	MP4B	X	.5068	.5068	0	%100
48	MP4B	Z	.2926	.2926	0	%100
49	MP3B	X	.5068	.5068	0	%100
50	MP3B	Z	.2926	.2926	0	%100
51	MP2B	X	.5068	.5068	0	%100
52	MP2B	Z	.2926	.2926	0	%100
53	MP1B	X	.5068	.5068	0	%100
54	MP1B	Z	.2926	.2926	0	%100
55	M46	X	.1534	.1534	0	%100
56	M46	Z	.0885	.0885	0	%100
57	M51	X	.1534	.1534	0	%100
58	M51	Z	.0885	.0885	0	%100
59	M56A	X	.6135	.6135	0	%100
60	M56A	Z	.3542	.3542	0	%100
61	M67	X	.2313	.2313	0	%100
62	M67	Z	.1335	.1335	0	%100
63	M68	X	.8022	.8022	0	%100
64	M68	Z	.4631	.4631	0	%100
65	M69	X	.172	.172	0	%100
66	M69	Z	.0993	.0993	0	%100
67	M70	X	.8128	.8128	0	%100
68	M70	Z	.4693	.4693	0	%100
69	M71	X	.2037	.2037	0	%100
70	M71	Z	.1176	.1176	0	%100
71	M72	X	.2037	.2037	0	%100
72	M72	Z	.1176	.1176	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location	End Location
73	M73	X	.8128	.8128	0	%100
74	M73	Z	.4693	.4693	0	%100
75	M74	X	.442	.442	0	%100
76	M74	Z	.2552	.2552	0	%100
77	M75	X	.442	.442	0	%100
78	M75	Z	.2552	.2552	0	%100
79	OVP	X	.4618	.4618	0	%100
80	OVP	Z	.2666	.2666	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location	End Location
1	M1	X	.0884	.0884	0	%100
2	M1	Z	.1531	.1531	0	%100
3	M2	X	.1143	.1143	0	%100
4	M2	Z	.198	.198	0	%100
5	M5	X	.1299	.1299	0	%100
6	M5	Z	.2249	.2249	0	%100
7	M6	X	.5194	.5194	0	%100
8	M6	Z	.8997	.8997	0	%100
9	M7	X	.1299	.1299	0	%100
10	M7	Z	.2249	.2249	0	%100
11	M6A	X	.462	.462	0	%100
12	M6A	Z	.8002	.8002	0	%100
13	M7A	X	.462	.462	0	%100
14	M7A	Z	.8002	.8002	0	%100
15	M23A	X	0	0	0	%100
16	M23A	Z	0	0	0	%100
17	M24	X	0	0	0	%100
18	M24	Z	0	0	0	%100
19	M39A	X	.462	.462	0	%100
20	M39A	Z	.8002	.8002	0	%100
21	M40	X	.462	.462	0	%100
22	M40	Z	.8002	.8002	0	%100
23	M55	X	.4574	.4574	0	%100
24	M55	Z	.7922	.7922	0	%100
25	M56	X	.1143	.1143	0	%100
26	M56	Z	.198	.198	0	%100
27	M74A	X	.3536	.3536	0	%100
28	M74A	Z	.6125	.6125	0	%100
29	M75A	X	.0884	.0884	0	%100
30	M75A	Z	.1531	.1531	0	%100
31	MP4A	X	.2926	.2926	0	%100
32	MP4A	Z	.5068	.5068	0	%100
33	MP3A	X	.2926	.2926	0	%100
34	MP3A	Z	.5068	.5068	0	%100
35	MP2A	X	.2926	.2926	0	%100
36	MP2A	Z	.5068	.5068	0	%100
37	MP1A	X	.2926	.2926	0	%100
38	MP1A	Z	.5068	.5068	0	%100
39	MP4C	X	.2926	.2926	0	%100
40	MP4C	Z	.5068	.5068	0	%100
41	MP3C	X	.2926	.2926	0	%100
42	MP3C	Z	.5068	.5068	0	%100
43	MP2C	X	.2926	.2926	0	%100
44	MP2C	Z	.5068	.5068	0	%100
45	MP1C	X	.2926	.2926	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location	End Location
46	MP1C	Z	.5068	.5068	0	%100
47	MP4B	X	.2926	.2926	0	%100
48	MP4B	Z	.5068	.5068	0	%100
49	MP3B	X	.2926	.2926	0	%100
50	MP3B	Z	.5068	.5068	0	%100
51	MP2B	X	.2926	.2926	0	%100
52	MP2B	Z	.5068	.5068	0	%100
53	MP1B	X	.2926	.2926	0	%100
54	MP1B	Z	.5068	.5068	0	%100
55	M46	X	.2656	.2656	0	%100
56	M46	Z	.4601	.4601	0	%100
57	M51	X	0	0	0	%100
58	M51	Z	0	0	0	%100
59	M56A	X	.2656	.2656	0	%100
60	M56A	Z	.4601	.4601	0	%100
61	M67	X	.000844	.000844	0	%100
62	M67	Z	.0015	.0015	0	%100
63	M68	X	.3647	.3647	0	%100
64	M68	Z	.6316	.6316	0	%100
65	M69	X	.3304	.3304	0	%100
66	M69	Z	.5723	.5723	0	%100
67	M70	X	.4438	.4438	0	%100
68	M70	Z	.7686	.7686	0	%100
69	M71	X	.0921	.0921	0	%100
70	M71	Z	.1595	.1595	0	%100
71	M72	X	.3062	.3062	0	%100
72	M72	Z	.5303	.5303	0	%100
73	M73	X	.3062	.3062	0	%100
74	M73	Z	.5303	.5303	0	%100
75	M74	X	.0921	.0921	0	%100
76	M74	Z	.1595	.1595	0	%100
77	M75	X	.4438	.4438	0	%100
78	M75	Z	.7686	.7686	0	%100
79	OVP	X	.2666	.2666	0	%100
80	OVP	Z	.4618	.4618	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location	End Location
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	M5	X	0	0	0	%100
6	M5	Z	0	0	0	%100
7	M6	X	0	0	0	%100
8	M6	Z	.7792	.7792	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	.7792	.7792	0	%100
11	M6A	X	0	0	0	%100
12	M6A	Z	1.232	1.232	0	%100
13	M7A	X	0	0	0	%100
14	M7A	Z	1.232	1.232	0	%100
15	M23A	X	0	0	0	%100
16	M23A	Z	.308	.308	0	%100
17	M24	X	0	0	0	%100
18	M24	Z	.308	.308	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
19	M39A	X	0	0	0	%100
20	M39A	Z	.308	.308	0	%100
21	M40	X	0	0	0	%100
22	M40	Z	.308	.308	0	%100
23	M55	X	0	0	0	%100
24	M55	Z	.686	.686	0	%100
25	M56	X	0	0	0	%100
26	M56	Z	.686	.686	0	%100
27	M74A	X	0	0	0	%100
28	M74A	Z	.5304	.5304	0	%100
29	M75A	X	0	0	0	%100
30	M75A	Z	.5304	.5304	0	%100
31	MP4A	X	0	0	0	%100
32	MP4A	Z	.5852	.5852	0	%100
33	MP3A	X	0	0	0	%100
34	MP3A	Z	.5852	.5852	0	%100
35	MP2A	X	0	0	0	%100
36	MP2A	Z	.5852	.5852	0	%100
37	MP1A	X	0	0	0	%100
38	MP1A	Z	.5852	.5852	0	%100
39	MP4C	X	0	0	0	%100
40	MP4C	Z	.5852	.5852	0	%100
41	MP3C	X	0	0	0	%100
42	MP3C	Z	.5852	.5852	0	%100
43	MP2C	X	0	0	0	%100
44	MP2C	Z	.5852	.5852	0	%100
45	MP1C	X	0	0	0	%100
46	MP1C	Z	.5852	.5852	0	%100
47	MP4B	X	0	0	0	%100
48	MP4B	Z	.5852	.5852	0	%100
49	MP3B	X	0	0	0	%100
50	MP3B	Z	.5852	.5852	0	%100
51	MP2B	X	0	0	0	%100
52	MP2B	Z	.5852	.5852	0	%100
53	MP1B	X	0	0	0	%100
54	MP1B	Z	.5852	.5852	0	%100
55	M46	X	0	0	0	%100
56	M46	Z	.7084	.7084	0	%100
57	M51	X	0	0	0	%100
58	M51	Z	.1771	.1771	0	%100
59	M56A	X	0	0	0	%100
60	M56A	Z	.1771	.1771	0	%100
61	M67	X	0	0	0	%100
62	M67	Z	.1986	.1986	0	%100
63	M68	X	0	0	0	%100
64	M68	Z	.2671	.2671	0	%100
65	M69	X	0	0	0	%100
66	M69	Z	.9263	.9263	0	%100
67	M70	X	0	0	0	%100
68	M70	Z	.5104	.5104	0	%100
69	M71	X	0	0	0	%100
70	M71	Z	.5104	.5104	0	%100
71	M72	X	0	0	0	%100
72	M72	Z	.9385	.9385	0	%100
73	M73	X	0	0	0	%100
74	M73	Z	.2352	.2352	0	%100
75	M74	X	0	0	0	%100





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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
76	M74	Z	.2352	.2352	0	%100
77	M75	X	0	0	0	%100
78	M75	Z	.9385	.9385	0	%100
79	OVP	X	0	0	0	%100
80	OVP	Z	.5333	.5333	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M1	X	-.0884	-.0884	0	%100
2	M1	Z	.1531	.1531	0	%100
3	M2	X	-.1143	-.1143	0	%100
4	M2	Z	.198	.198	0	%100
5	M5	X	-.1299	-.1299	0	%100
6	M5	Z	.2249	.2249	0	%100
7	M6	X	-.1299	-.1299	0	%100
8	M6	Z	.2249	.2249	0	%100
9	M7	X	-.5194	-.5194	0	%100
10	M7	Z	.8997	.8997	0	%100
11	M6A	X	-.462	-.462	0	%100
12	M6A	Z	.8002	.8002	0	%100
13	M7A	X	-.462	-.462	0	%100
14	M7A	Z	.8002	.8002	0	%100
15	M23A	X	-.462	-.462	0	%100
16	M23A	Z	.8002	.8002	0	%100
17	M24	X	-.462	-.462	0	%100
18	M24	Z	.8002	.8002	0	%100
19	M39A	X	0	0	0	%100
20	M39A	Z	0	0	0	%100
21	M40	X	0	0	0	%100
22	M40	Z	0	0	0	%100
23	M55	X	-.1143	-.1143	0	%100
24	M55	Z	.198	.198	0	%100
25	M56	X	-.4574	-.4574	0	%100
26	M56	Z	.7922	.7922	0	%100
27	M74A	X	-.0884	-.0884	0	%100
28	M74A	Z	.1531	.1531	0	%100
29	M75A	X	-.3536	-.3536	0	%100
30	M75A	Z	.6125	.6125	0	%100
31	MP4A	X	-.2926	-.2926	0	%100
32	MP4A	Z	.5068	.5068	0	%100
33	MP3A	X	-.2926	-.2926	0	%100
34	MP3A	Z	.5068	.5068	0	%100
35	MP2A	X	-.2926	-.2926	0	%100
36	MP2A	Z	.5068	.5068	0	%100
37	MP1A	X	-.2926	-.2926	0	%100
38	MP1A	Z	.5068	.5068	0	%100
39	MP4C	X	-.2926	-.2926	0	%100
40	MP4C	Z	.5068	.5068	0	%100
41	MP3C	X	-.2926	-.2926	0	%100
42	MP3C	Z	.5068	.5068	0	%100
43	MP2C	X	-.2926	-.2926	0	%100
44	MP2C	Z	.5068	.5068	0	%100
45	MP1C	X	-.2926	-.2926	0	%100
46	MP1C	Z	.5068	.5068	0	%100
47	MP4B	X	-.2926	-.2926	0	%100
48	MP4B	Z	.5068	.5068	0	%100





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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
49	MP3B	X	-.2926	-.2926	0	%100
50	MP3B	Z	.5068	.5068	0	%100
51	MP2B	X	-.2926	-.2926	0	%100
52	MP2B	Z	.5068	.5068	0	%100
53	MP1B	X	-.2926	-.2926	0	%100
54	MP1B	Z	.5068	.5068	0	%100
55	M46	X	-.2656	-.2656	0	%100
56	M46	Z	.4601	.4601	0	%100
57	M51	X	-.2656	-.2656	0	%100
58	M51	Z	.4601	.4601	0	%100
59	M56A	X	0	0	0	%100
60	M56A	Z	0	0	0	%100
61	M67	X	-.3304	-.3304	0	%100
62	M67	Z	.5723	.5723	0	%100
63	M68	X	-.000844	-.000844	0	%100
64	M68	Z	.0015	.0015	0	%100
65	M69	X	-.3647	-.3647	0	%100
66	M69	Z	.6316	.6316	0	%100
67	M70	X	-.0921	-.0921	0	%100
68	M70	Z	.1595	.1595	0	%100
69	M71	X	-.4438	-.4438	0	%100
70	M71	Z	.7686	.7686	0	%100
71	M72	X	-.4438	-.4438	0	%100
72	M72	Z	.7686	.7686	0	%100
73	M73	X	-.0921	-.0921	0	%100
74	M73	Z	.1595	.1595	0	%100
75	M74	X	-.3062	-.3062	0	%100
76	M74	Z	.5303	.5303	0	%100
77	M75	X	-.3062	-.3062	0	%100
78	M75	Z	.5303	.5303	0	%100
79	OVP	X	-.2666	-.2666	0	%100
80	OVP	Z	.4618	.4618	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M1	X	-.4594	-.4594	0	%100
2	M1	Z	.2652	.2652	0	%100
3	M2	X	-.5941	-.5941	0	%100
4	M2	Z	.343	.343	0	%100
5	M5	X	-.6748	-.6748	0	%100
6	M5	Z	.3896	.3896	0	%100
7	M6	X	0	0	0	%100
8	M6	Z	0	0	0	%100
9	M7	X	-.6748	-.6748	0	%100
10	M7	Z	.3896	.3896	0	%100
11	M6A	X	-.2667	-.2667	0	%100
12	M6A	Z	.154	.154	0	%100
13	M7A	X	-.2667	-.2667	0	%100
14	M7A	Z	.154	.154	0	%100
15	M23A	X	-1.0669	-1.0669	0	%100
16	M23A	Z	.616	.616	0	%100
17	M24	X	-1.0669	-1.0669	0	%100
18	M24	Z	.616	.616	0	%100
19	M39A	X	-.2667	-.2667	0	%100
20	M39A	Z	.154	.154	0	%100
21	M40	X	-.2667	-.2667	0	%100



Company : Colliers Engineering & Design  
 Designer :  
 Job Number : Project # 23777104  
 Model Name : Antenna Mount Analysis

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Locationft	End Locationft
22	M40	Z	.154	.154	0	%100
23	M55	X	0	0	0	%100
24	M55	Z	0	0	0	%100
25	M56	X	-.5941	-.5941	0	%100
26	M56	Z	.343	.343	0	%100
27	M74A	X	0	0	0	%100
28	M74A	Z	0	0	0	%100
29	M75A	X	-.4594	-.4594	0	%100
30	M75A	Z	.2652	.2652	0	%100
31	MP4A	X	-.5068	-.5068	0	%100
32	MP4A	Z	.2926	.2926	0	%100
33	MP3A	X	-.5068	-.5068	0	%100
34	MP3A	Z	.2926	.2926	0	%100
35	MP2A	X	-.5068	-.5068	0	%100
36	MP2A	Z	.2926	.2926	0	%100
37	MP1A	X	-.5068	-.5068	0	%100
38	MP1A	Z	.2926	.2926	0	%100
39	MP4C	X	-.5068	-.5068	0	%100
40	MP4C	Z	.2926	.2926	0	%100
41	MP3C	X	-.5068	-.5068	0	%100
42	MP3C	Z	.2926	.2926	0	%100
43	MP2C	X	-.5068	-.5068	0	%100
44	MP2C	Z	.2926	.2926	0	%100
45	MP1C	X	-.5068	-.5068	0	%100
46	MP1C	Z	.2926	.2926	0	%100
47	MP4B	X	-.5068	-.5068	0	%100
48	MP4B	Z	.2926	.2926	0	%100
49	MP3B	X	-.5068	-.5068	0	%100
50	MP3B	Z	.2926	.2926	0	%100
51	MP2B	X	-.5068	-.5068	0	%100
52	MP2B	Z	.2926	.2926	0	%100
53	MP1B	X	-.5068	-.5068	0	%100
54	MP1B	Z	.2926	.2926	0	%100
55	M46	X	-.1534	-.1534	0	%100
56	M46	Z	.0885	.0885	0	%100
57	M51	X	-.6135	-.6135	0	%100
58	M51	Z	.3542	.3542	0	%100
59	M56A	X	-.1534	-.1534	0	%100
60	M56A	Z	.0885	.0885	0	%100
61	M67	X	-.8022	-.8022	0	%100
62	M67	Z	.4631	.4631	0	%100
63	M68	X	-.172	-.172	0	%100
64	M68	Z	.0993	.0993	0	%100
65	M69	X	-.2313	-.2313	0	%100
66	M69	Z	.1335	.1335	0	%100
67	M70	X	-.2037	-.2037	0	%100
68	M70	Z	.1176	.1176	0	%100
69	M71	X	-.8128	-.8128	0	%100
70	M71	Z	.4693	.4693	0	%100
71	M72	X	-.442	-.442	0	%100
72	M72	Z	.2552	.2552	0	%100
73	M73	X	-.442	-.442	0	%100
74	M73	Z	.2552	.2552	0	%100
75	M74	X	-.8128	-.8128	0	%100
76	M74	Z	.4693	.4693	0	%100
77	M75	X	-.2037	-.2037	0	%100
78	M75	Z	.1176	.1176	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
79	OVP	X	-.4618	-.4618	0	%100
80	OVP	Z	.2666	.2666	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M1	X	-.7073	-.7073	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	-.9147	-.9147	0	%100
4	M2	Z	0	0	0	%100
5	M5	X	-1.0389	-1.0389	0	%100
6	M5	Z	0	0	0	%100
7	M6	X	-.2597	-.2597	0	%100
8	M6	Z	0	0	0	%100
9	M7	X	-.2597	-.2597	0	%100
10	M7	Z	0	0	0	%100
11	M6A	X	0	0	0	%100
12	M6A	Z	0	0	0	%100
13	M7A	X	0	0	0	%100
14	M7A	Z	0	0	0	%100
15	M23A	X	-.924	-.924	0	%100
16	M23A	Z	0	0	0	%100
17	M24	X	-.924	-.924	0	%100
18	M24	Z	0	0	0	%100
19	M39A	X	-.924	-.924	0	%100
20	M39A	Z	0	0	0	%100
21	M40	X	-.924	-.924	0	%100
22	M40	Z	0	0	0	%100
23	M55	X	-.2287	-.2287	0	%100
24	M55	Z	0	0	0	%100
25	M56	X	-.2287	-.2287	0	%100
26	M56	Z	0	0	0	%100
27	M74A	X	-.1768	-.1768	0	%100
28	M74A	Z	0	0	0	%100
29	M75A	X	-.1768	-.1768	0	%100
30	M75A	Z	0	0	0	%100
31	MP4A	X	-.5852	-.5852	0	%100
32	MP4A	Z	0	0	0	%100
33	MP3A	X	-.5852	-.5852	0	%100
34	MP3A	Z	0	0	0	%100
35	MP2A	X	-.5852	-.5852	0	%100
36	MP2A	Z	0	0	0	%100
37	MP1A	X	-.5852	-.5852	0	%100
38	MP1A	Z	0	0	0	%100
39	MP4C	X	-.5852	-.5852	0	%100
40	MP4C	Z	0	0	0	%100
41	MP3C	X	-.5852	-.5852	0	%100
42	MP3C	Z	0	0	0	%100
43	MP2C	X	-.5852	-.5852	0	%100
44	MP2C	Z	0	0	0	%100
45	MP1C	X	-.5852	-.5852	0	%100
46	MP1C	Z	0	0	0	%100
47	MP4B	X	-.5852	-.5852	0	%100
48	MP4B	Z	0	0	0	%100
49	MP3B	X	-.5852	-.5852	0	%100
50	MP3B	Z	0	0	0	%100
51	MP2B	X	-.5852	-.5852	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location	End Location
52	MP2B	Z	0	0	0	%100
53	MP1B	X	-5852	-5852	0	%100
54	MP1B	Z	0	0	0	%100
55	M46	X	0	0	0	%100
56	M46	Z	0	0	0	%100
57	M51	X	-5313	-5313	0	%100
58	M51	Z	0	0	0	%100
59	M56A	X	-5313	-5313	0	%100
60	M56A	Z	0	0	0	%100
61	M67	X	-7293	-7293	0	%100
62	M67	Z	0	0	0	%100
63	M68	X	-6609	-6609	0	%100
64	M68	Z	0	0	0	%100
65	M69	X	-0017	-0017	0	%100
66	M69	Z	0	0	0	%100
67	M70	X	-6123	-6123	0	%100
68	M70	Z	0	0	0	%100
69	M71	X	-6123	-6123	0	%100
70	M71	Z	0	0	0	%100
71	M72	X	-1842	-1842	0	%100
72	M72	Z	0	0	0	%100
73	M73	X	-8875	-8875	0	%100
74	M73	Z	0	0	0	%100
75	M74	X	-8875	-8875	0	%100
76	M74	Z	0	0	0	%100
77	M75	X	-1842	-1842	0	%100
78	M75	Z	0	0	0	%100
79	OVP	X	-5333	-5333	0	%100
80	OVP	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location	End Location
1	M1	X	-4594	-4594	0	%100
2	M1	Z	-2652	-2652	0	%100
3	M2	X	-5941	-5941	0	%100
4	M2	Z	-343	-343	0	%100
5	M5	X	-6748	-6748	0	%100
6	M5	Z	-3896	-3896	0	%100
7	M6	X	-6748	-6748	0	%100
8	M6	Z	-3896	-3896	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	0	0	0	%100
11	M6A	X	-2667	-2667	0	%100
12	M6A	Z	-154	-154	0	%100
13	M7A	X	-2667	-2667	0	%100
14	M7A	Z	-154	-154	0	%100
15	M23A	X	-2667	-2667	0	%100
16	M23A	Z	-154	-154	0	%100
17	M24	X	-2667	-2667	0	%100
18	M24	Z	-154	-154	0	%100
19	M39A	X	-10669	-10669	0	%100
20	M39A	Z	-616	-616	0	%100
21	M40	X	-10669	-10669	0	%100
22	M40	Z	-616	-616	0	%100
23	M55	X	-5941	-5941	0	%100
24	M55	Z	-343	-343	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
25	M56	X	0	0	0	%100
26	M56	Z	0	0	0	%100
27	M74A	X	-4594	-4594	0	%100
28	M74A	Z	-2652	-2652	0	%100
29	M75A	X	0	0	0	%100
30	M75A	Z	0	0	0	%100
31	MP4A	X	-5068	-5068	0	%100
32	MP4A	Z	-2926	-2926	0	%100
33	MP3A	X	-5068	-5068	0	%100
34	MP3A	Z	-2926	-2926	0	%100
35	MP2A	X	-5068	-5068	0	%100
36	MP2A	Z	-2926	-2926	0	%100
37	MP1A	X	-5068	-5068	0	%100
38	MP1A	Z	-2926	-2926	0	%100
39	MP4C	X	-5068	-5068	0	%100
40	MP4C	Z	-2926	-2926	0	%100
41	MP3C	X	-5068	-5068	0	%100
42	MP3C	Z	-2926	-2926	0	%100
43	MP2C	X	-5068	-5068	0	%100
44	MP2C	Z	-2926	-2926	0	%100
45	MP1C	X	-5068	-5068	0	%100
46	MP1C	Z	-2926	-2926	0	%100
47	MP4B	X	-5068	-5068	0	%100
48	MP4B	Z	-2926	-2926	0	%100
49	MP3B	X	-5068	-5068	0	%100
50	MP3B	Z	-2926	-2926	0	%100
51	MP2B	X	-5068	-5068	0	%100
52	MP2B	Z	-2926	-2926	0	%100
53	MP1B	X	-5068	-5068	0	%100
54	MP1B	Z	-2926	-2926	0	%100
55	M46	X	-1534	-1534	0	%100
56	M46	Z	-0885	-0885	0	%100
57	M51	X	-1534	-1534	0	%100
58	M51	Z	-0885	-0885	0	%100
59	M56A	X	-6135	-6135	0	%100
60	M56A	Z	-3542	-3542	0	%100
61	M67	X	-2313	-2313	0	%100
62	M67	Z	-1335	-1335	0	%100
63	M68	X	-8022	-8022	0	%100
64	M68	Z	-4631	-4631	0	%100
65	M69	X	-172	-172	0	%100
66	M69	Z	-0993	-0993	0	%100
67	M70	X	-8128	-8128	0	%100
68	M70	Z	-4693	-4693	0	%100
69	M71	X	-2037	-2037	0	%100
70	M71	Z	-1176	-1176	0	%100
71	M72	X	-2037	-2037	0	%100
72	M72	Z	-1176	-1176	0	%100
73	M73	X	-8128	-8128	0	%100
74	M73	Z	-4693	-4693	0	%100
75	M74	X	-442	-442	0	%100
76	M74	Z	-2552	-2552	0	%100
77	M75	X	-442	-442	0	%100
78	M75	Z	-2552	-2552	0	%100
79	OVP	X	-4618	-4618	0	%100
80	OVP	Z	-2666	-2666	0	%100



Company : Colliers Engineering & Design  
 Designer :  
 Job Number : Project # 23777104  
 Model Name : Antenna Mount Analysis

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M1	X	-0.884	-0.884	0	%100
2	M1	Z	-1.531	-1.531	0	%100
3	M2	X	-1.143	-1.143	0	%100
4	M2	Z	-.198	-.198	0	%100
5	M5	X	-1.299	-1.299	0	%100
6	M5	Z	-.2249	-.2249	0	%100
7	M6	X	-.5194	-.5194	0	%100
8	M6	Z	-.8997	-.8997	0	%100
9	M7	X	-1.299	-1.299	0	%100
10	M7	Z	-.2249	-.2249	0	%100
11	M6A	X	-.462	-.462	0	%100
12	M6A	Z	-.8002	-.8002	0	%100
13	M7A	X	-.462	-.462	0	%100
14	M7A	Z	-.8002	-.8002	0	%100
15	M23A	X	0	0	0	%100
16	M23A	Z	0	0	0	%100
17	M24	X	0	0	0	%100
18	M24	Z	0	0	0	%100
19	M39A	X	-.462	-.462	0	%100
20	M39A	Z	-.8002	-.8002	0	%100
21	M40	X	-.462	-.462	0	%100
22	M40	Z	-.8002	-.8002	0	%100
23	M55	X	-.4574	-.4574	0	%100
24	M55	Z	-.7922	-.7922	0	%100
25	M56	X	-1.143	-1.143	0	%100
26	M56	Z	-.198	-.198	0	%100
27	M74A	X	-.3536	-.3536	0	%100
28	M74A	Z	-.6125	-.6125	0	%100
29	M75A	X	-0.884	-0.884	0	%100
30	M75A	Z	-1.531	-1.531	0	%100
31	MP4A	X	-.2926	-.2926	0	%100
32	MP4A	Z	-.5068	-.5068	0	%100
33	MP3A	X	-.2926	-.2926	0	%100
34	MP3A	Z	-.5068	-.5068	0	%100
35	MP2A	X	-.2926	-.2926	0	%100
36	MP2A	Z	-.5068	-.5068	0	%100
37	MP1A	X	-.2926	-.2926	0	%100
38	MP1A	Z	-.5068	-.5068	0	%100
39	MP4C	X	-.2926	-.2926	0	%100
40	MP4C	Z	-.5068	-.5068	0	%100
41	MP3C	X	-.2926	-.2926	0	%100
42	MP3C	Z	-.5068	-.5068	0	%100
43	MP2C	X	-.2926	-.2926	0	%100
44	MP2C	Z	-.5068	-.5068	0	%100
45	MP1C	X	-.2926	-.2926	0	%100
46	MP1C	Z	-.5068	-.5068	0	%100
47	MP4B	X	-.2926	-.2926	0	%100
48	MP4B	Z	-.5068	-.5068	0	%100
49	MP3B	X	-.2926	-.2926	0	%100
50	MP3B	Z	-.5068	-.5068	0	%100
51	MP2B	X	-.2926	-.2926	0	%100
52	MP2B	Z	-.5068	-.5068	0	%100
53	MP1B	X	-.2926	-.2926	0	%100
54	MP1B	Z	-.5068	-.5068	0	%100
55	M46	X	-.2656	-.2656	0	%100
56	M46	Z	-.4601	-.4601	0	%100
57	M51	X	0	0	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location	End Location
58	M51	Z	0	0	0	%100
59	M56A	X	-.2656	-.2656	0	%100
60	M56A	Z	-.4601	-.4601	0	%100
61	M67	X	-.000844	-.000844	0	%100
62	M67	Z	-.0015	-.0015	0	%100
63	M68	X	-.3647	-.3647	0	%100
64	M68	Z	-.6316	-.6316	0	%100
65	M69	X	-.3304	-.3304	0	%100
66	M69	Z	-.5723	-.5723	0	%100
67	M70	X	-.4438	-.4438	0	%100
68	M70	Z	-.7686	-.7686	0	%100
69	M71	X	-.0921	-.0921	0	%100
70	M71	Z	-.1595	-.1595	0	%100
71	M72	X	-.3062	-.3062	0	%100
72	M72	Z	-.5303	-.5303	0	%100
73	M73	X	-.3062	-.3062	0	%100
74	M73	Z	-.5303	-.5303	0	%100
75	M74	X	-.0921	-.0921	0	%100
76	M74	Z	-.1595	-.1595	0	%100
77	M75	X	-.4438	-.4438	0	%100
78	M75	Z	-.7686	-.7686	0	%100
79	OVP	X	-.2666	-.2666	0	%100
80	OVP	Z	-.4618	-.4618	0	%100

**Member Distributed Loads (BLC 87 : BLC 39 Transient Area Loads)**

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location	End Location
1	M6	Y	-1.0287	-4.9323	0	1.9496
2	M6	Y	-4.9323	-8.836	1.9496	3.8992
3	M7	Y	-1.0287	-4.9323	0	1.9496
4	M7	Y	-4.9323	-8.836	1.9496	3.8992
5	M6A	Y	-5.1437	-5.1437	.0098	7.2362
6	M7A	Y	-1.0783	-2.6868	0	2.3333
7	M7A	Y	-2.6868	-4.7553	2.3333	4.6665
8	M7A	Y	-4.7553	-6.0196	4.6665	6.9998
9	M7A	Y	-6.0196	-4.7553	6.9998	9.333
10	M7A	Y	-4.7553	-2.6868	9.333	11.6663
11	M7A	Y	-2.6868	-1.0783	11.6663	13.9995
12	M5	Y	-1.0287	-4.9323	0	1.9496
13	M5	Y	-4.9323	-8.836	1.9496	3.8992
14	M23A	Y	-5.1437	-5.1437	.0098	7.2362
15	M24	Y	-1.0783	-2.6868	0	2.3333
16	M24	Y	-2.6868	-4.7553	2.3333	4.6665
17	M24	Y	-4.7553	-6.0196	4.6665	6.9998
18	M24	Y	-6.0196	-4.7553	6.9998	9.333
19	M24	Y	-4.7553	-2.6868	9.333	11.6663
20	M24	Y	-2.6868	-1.0783	11.6663	13.9995
21	M39A	Y	-5.1437	-5.1437	.0098	7.2362
22	M40	Y	-1.0783	-2.6868	0	2.3333
23	M40	Y	-2.6868	-4.7553	2.3333	4.6665
24	M40	Y	-4.7553	-6.0196	4.6665	6.9998
25	M40	Y	-6.0196	-4.7553	6.9998	9.333
26	M40	Y	-4.7553	-2.6868	9.333	11.6663
27	M40	Y	-2.6868	-1.0783	11.6663	13.9995

**Member Distributed Loads (BLC 88 : BLC 40 Transient Area Loads)**

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location	End Location
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**Member Distributed Loads (BLC 88 : BLC 40 Transient Area Loads) (Continued)**

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M6	Y	-2.5716	-12.3308	0	1.9496
2	M6	Y	-12.3308	-22.0899	1.9496	3.8992
3	M7	Y	-2.5716	-12.3308	0	1.9496
4	M7	Y	-12.3308	-22.0899	1.9496	3.8992
5	M6A	Y	-12.8591	-12.8591	.0098	7.2362
6	M7A	Y	-2.6956	-6.7169	0	2.3333
7	M7A	Y	-6.7169	-11.8883	2.3333	4.6665
8	M7A	Y	-11.8883	-15.049	4.6665	6.9998
9	M7A	Y	-15.049	-11.8883	6.9998	9.333
10	M7A	Y	-11.8883	-6.7169	9.333	11.6663
11	M7A	Y	-6.7169	-2.6956	11.6663	13.9995
12	M5	Y	-2.5716	-12.3308	0	1.9496
13	M5	Y	-12.3308	-22.0899	1.9496	3.8992
14	M23A	Y	-12.8591	-12.8591	.0098	7.2362
15	M24	Y	-2.6956	-6.7169	0	2.3333
16	M24	Y	-6.7169	-11.8883	2.3333	4.6665
17	M24	Y	-11.8883	-15.049	4.6665	6.9998
18	M24	Y	-15.049	-11.8883	6.9998	9.333
19	M24	Y	-11.8883	-6.7169	9.333	11.6663
20	M24	Y	-6.7169	-2.6956	11.6663	13.9995
21	M39A	Y	-12.8591	-12.8591	.0098	7.2362
22	M40	Y	-2.6956	-6.7169	0	2.3333
23	M40	Y	-6.7169	-11.8883	2.3333	4.6665
24	M40	Y	-11.8883	-15.049	4.6665	6.9998
25	M40	Y	-15.049	-11.8883	6.9998	9.333
26	M40	Y	-11.8883	-6.7169	9.333	11.6663
27	M40	Y	-6.7169	-2.6956	11.6663	13.9995

**Member Distributed Loads (BLC 89 : BLC 84 Transient Area Loads)**

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M6	Y	-.0461	-.221	0	1.9496
2	M6	Y	-.221	-.3959	1.9496	3.8992
3	M7	Y	-.0461	-.221	0	1.9496
4	M7	Y	-.221	-.3959	1.9496	3.8992
5	M6A	Y	-.2305	-.2305	.0098	7.2362
6	M7A	Y	-.0483	-.1204	0	2.3333
7	M7A	Y	-.1204	-.2131	2.3333	4.6665
8	M7A	Y	-.2131	-.2697	4.6665	6.9998
9	M7A	Y	-.2697	-.2131	6.9998	9.333
10	M7A	Y	-.2131	-.1204	9.333	11.6663
11	M7A	Y	-.1204	-.0483	11.6663	13.9995
12	M5	Y	-.0461	-.221	0	1.9496
13	M5	Y	-.221	-.3959	1.9496	3.8992
14	M23A	Y	-.2305	-.2305	.0098	7.2362
15	M24	Y	-.0483	-.1204	0	2.3333
16	M24	Y	-.1204	-.2131	2.3333	4.6665
17	M24	Y	-.2131	-.2697	4.6665	6.9998
18	M24	Y	-.2697	-.2131	6.9998	9.333
19	M24	Y	-.2131	-.1204	9.333	11.6663
20	M24	Y	-.1204	-.0483	11.6663	13.9995
21	M39A	Y	-.2305	-.2305	.0098	7.2362
22	M40	Y	-.0483	-.1204	0	2.3333
23	M40	Y	-.1204	-.2131	2.3333	4.6665
24	M40	Y	-.2131	-.2697	4.6665	6.9998
25	M40	Y	-.2697	-.2131	6.9998	9.333
26	M40	Y	-.2131	-.1204	9.333	11.6663





**Member Distributed Loads (BLC 89 : BLC 84 Transient Area Loads) (Continued)**

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
27	M40	Y	-.1204	-.0483	11.6663	13.9995

**Member Distributed Loads (BLC 90 : BLC 85 Transient Area Loads)**

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M6	Z	-.1151	-.552	0	1.9496
2	M6	Z	-.552	-.9889	1.9496	3.8992
3	M7	Z	-.1151	-.552	0	1.9496
4	M7	Z	-.552	-.9889	1.9496	3.8992
5	M6A	Z	-.5757	-.5757	.0098	7.2362
6	M7A	Z	-.1207	-.3007	0	2.3333
7	M7A	Z	-.3007	-.5322	2.3333	4.6665
8	M7A	Z	-.5322	-.6737	4.6665	6.9998
9	M7A	Z	-.6737	-.5322	6.9998	9.333
10	M7A	Z	-.5322	-.3007	9.333	11.6663
11	M7A	Z	-.3007	-.1207	11.6663	13.9995
12	M5	Z	-.1151	-.552	0	1.9496
13	M5	Z	-.552	-.9889	1.9496	3.8992
14	M23A	Z	-.5757	-.5757	.0098	7.2362
15	M24	Z	-.1207	-.3007	0	2.3333
16	M24	Z	-.3007	-.5322	2.3333	4.6665
17	M24	Z	-.5322	-.6737	4.6665	6.9998
18	M24	Z	-.6737	-.5322	6.9998	9.333
19	M24	Z	-.5322	-.3007	9.333	11.6663
20	M24	Z	-.3007	-.1207	11.6663	13.9995
21	M39A	Z	-.5757	-.5757	.0098	7.2362
22	M40	Z	-.1207	-.3007	0	2.3333
23	M40	Z	-.3007	-.5322	2.3333	4.6665
24	M40	Z	-.5322	-.6737	4.6665	6.9998
25	M40	Z	-.6737	-.5322	6.9998	9.333
26	M40	Z	-.5322	-.3007	9.333	11.6663
27	M40	Z	-.3007	-.1207	11.6663	13.9995

**Member Distributed Loads (BLC 91 : BLC 86 Transient Area Loads)**

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M6	X	.1151	.552	0	1.9496
2	M6	X	.552	.9889	1.9496	3.8992
3	M7	X	.1151	.552	0	1.9496
4	M7	X	.552	.9889	1.9496	3.8992
5	M6A	X	.5757	.5757	.0098	7.2362
6	M7A	X	.1207	.3007	0	2.3333
7	M7A	X	.3007	.5322	2.3333	4.6665
8	M7A	X	.5322	.6737	4.6665	6.9998
9	M7A	X	.6737	.5322	6.9998	9.333
10	M7A	X	.5322	.3007	9.333	11.6663
11	M7A	X	.3007	.1207	11.6663	13.9995
12	M5	X	.1151	.552	0	1.9496
13	M5	X	.552	.9889	1.9496	3.8992
14	M23A	X	.5757	.5757	.0098	7.2362
15	M24	X	.1207	.3007	0	2.3333
16	M24	X	.3007	.5322	2.3333	4.6665
17	M24	X	.5322	.6737	4.6665	6.9998
18	M24	X	.6737	.5322	6.9998	9.333
19	M24	X	.5322	.3007	9.333	11.6663
20	M24	X	.3007	.1207	11.6663	13.9995
21	M39A	X	.5757	.5757	.0098	7.2362
22	M40	X	.1207	.3007	0	2.3333

**Member Distributed Loads (BLC 91 : BLC 86 Transient Area Loads) (Continued)**

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
23	M40	X	.3007	.5322	2.3333	4.6665
24	M40	X	.5322	.6737	4.6665	6.9998
25	M40	X	.6737	.5322	6.9998	9.333
26	M40	X	.5322	.3007	9.333	11.6663
27	M40	X	.3007	.1207	11.6663	13.9995

**Member Area Loads (BLC 39 : Structure D)**

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N16	N15	N17	N18	Y	Two Way	-.0052
2	N18	N17	N10	N14	Y	Two Way	-.0052
3	N14	N10	N15	N16	Y	Two Way	-.0052

**Member Area Loads (BLC 40 : Structure Di)**

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N16	N15	N17	N18	Y	Two Way	-.013
2	N18	N17	N10	N14	Y	Two Way	-.013
3	N14	N10	N15	N16	Y	Two Way	-.013

**Member Area Loads (BLC 84 : Structure Ev)**

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N16	N15	N17	N18	Y	Two Way	-.000233
2	N18	N17	N10	N14	Y	Two Way	-.000233
3	N14	N10	N15	N16	Y	Two Way	-.000233

**Member Area Loads (BLC 85 : Structure Eh (0 Deg))**

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N16	N15	N17	N18	Z	Two Way	-.000582
2	N18	N17	N10	N14	Z	Two Way	-.000582
3	N14	N10	N15	N16	Z	Two Way	-.000582

**Member Area Loads (BLC 86 : Structure Eh (90 Deg))**

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N16	N15	N17	N18	X	Two Way	.000582
2	N18	N17	N10	N14	X	Two Way	.000582
3	N14	N10	N15	N16	X	Two Way	.000582

**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	N2	1403.44	11	1303.936	13	443.539	1	.53	7	1.575	12	.16	14
2		-1333.144	5	-67.71	7	-227.782	7	-3.18	13	-1.53	6	-.046	8
3	N123C	842.173	10	1367.659	21	1305.397	2	1.749	21	1.508	8	2.915	21
4		-588.607	4	-66.387	3	-1314.598	8	-.297	3	-1.643	2	-.398	3
5	N126A	967.234	10	1579.011	17	1323.641	12	1.503	28	1.56	12	.042	11
6		-1236.482	4	9.657	11	-1306.173	6	-.295	10	-1.443	6	-2.965	17
7	N127	531.173	11	1572.417	7	764.809	1	0	75	0	75	0	75
8		-592.683	5	-403.491	1	-2754.606	7	0	1	0	1	0	1
9	N128	640.945	9	1608.352	3	1725.193	2	0	75	0	75	0	75
10		-2354.733	3	-467.286	9	-805.756	8	0	1	0	1	0	1
11	N129	2546.241	11	1578.913	11	1236.262	12	0	75	0	75	0	75
12		-827.51	5	-454.839	5	-388.699	6	0	1	0	1	0	1
13	Totals:	6153.814	10	7589.038	17	6225.293	1						
14		-6153.802	4	2475.617	74	-6225.302	7						



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

Member	Shape	Code Check	Lo...	LC	Shear Check	Lo.....	LC	phi*Pnc	phi*Pnt [	phi*Mn y...	phi*Mn...	Cb	Eqn	
1	MP2A	PIPE_2.0	.449	2....	7	.150	5....	11	20866.7...	32130	1.872	1.872	2.308	H1-...
2	MP2C	PIPE_2.0	.450	2....	3	.150	5....	7	20866.7...	32130	1.872	1.872	1.835	H1-...
3	MP2B	PIPE_2.0	.464	2....	11	.146	5....	3	20866.7...	32130	1.872	1.872	1.889	H1-...
4	MP1B	PIPE_2.0	.289	2....	11	.127	2....	11	20866.7...	32130	1.872	1.872	1.831	H1-...
5	MP1A	PIPE_2.0	.303	2....	7	.127	2....	7	20866.7...	32130	1.872	1.872	2.062	H1-...
6	M51	PIPE_2.5	.283	9....	2	.109	3....	17	12482.6...	50715	3.596	3.596	2.95	H1-...
7	M56A	PIPE_2.5	.297	9....	10	.107	9....	11	12482.6...	50715	3.596	3.596	2.9	H1-...
8	M46	PIPE_2.5	.296	9....	6	.105	9....	19	12482.6...	50715	3.596	3.596	2.836	H1-...
9	MP1C	PIPE_2.0	.259	2....	3	.104	2....	3	20866.7...	32130	1.872	1.872	1.599	H1-...
10	M40	L3X3X4	.471	7	16	.083	7 z	40	3944.796	46656	1.688	2.851	1.83	H2-1
11	M7A	L3X3X4	.470	7	24	.077	.875 z	6	3944.796	46656	1.688	2.849	1.827	H2-1
12	M24	L3X3X4	.456	7	8	.074	.875 z	2	3944.796	46656	1.688	2.771	1.689	H2-1
13	MP3C	PIPE_2.0	.203	2	2	.072	5	22	20866.7...	32130	1.872	1.872	2.494	H1-...
14	MP3A	PIPE_2.0	.202	2	6	.072	5	14	20866.7...	32130	1.872	1.872	2.057	H1-...
15	M75A	HSS4X4X4	.270	0	4	.071	0 z	7	138724...	139518	16.181	16.181	1.209	H1-...
16	MP4C	PIPE_2.0	.267	5....	2	.070	5....	15	20866.7...	32130	1.872	1.872	2.25	H1-...
17	MP3B	PIPE_2.0	.181	2	11	.069	2	13	20866.7...	32130	1.872	1.872	2.173	H1-...
18	MP4A	PIPE_2.0	.271	5....	6	.068	5....	19	20866.7...	32130	1.872	1.872	2.161	H1-...
19	MP4B	PIPE_2.0	.232	5....	10	.064	5....	23	20866.7...	32130	1.872	1.872	2.475	H1-...
20	M56	HSS4.5X...	.125	0	5	.057	0 y	40	119859...	121302	16.25	16.25	1.733	H1-...
21	M2	HSS4.5X...	.122	0	12	.049	0 y	12	119859...	121302	16.25	16.25	1.727	H1-...
22	M55	HSS4.5X...	.134	0	8	.047	0 y	8	119859...	121302	16.25	16.25	1.727	H1-...
23	M1	HSS4X4X4	.283	0	12	.045	0 y	13	138724...	139518	16.181	16.181	1.205	H1-...
24	M74A	HSS4X4X4	.296	0	8	.040	0 y	21	138724...	139518	16.181	16.181	1.202	H1-...
25	OVP	PIPE_2.0	.364	3	1	.036	3	1	26521.4...	32130	1.872	1.872	1.364	H1-...
26	M67	L3X3X4	.356	2....	11	.021	0 y	5	40405.2...	46656	1.688	3.756	1.672	H2-1
27	M68	L3X3X4	.372	2....	7	.020	0 y	1	40405.2...	46656	1.688	3.756	1.689	H2-1
28	M69	L3X3X4	.297	2....	3	.016	0 y	9	40405.2...	46656	1.688	3.756	1.628	H2-1
29	M39A	L3X3X4	.246	3....	16	.015	3....	z 20	14725.03	46656	1.688	3.231	1.46	H2-1
30	M6A	L3X3X4	.263	3....	24	.015	3....	z 24	14725.03	46656	1.688	3.224	1.447	H2-1
31	M23A	L3X3X4	.254	3....	23	.014	3....	z 20	14725.03	46656	1.688	3.231	1.46	H2-1
32	M71	L2.5x2.5x3	.104	4....	6	.014	4....	y 1	14960.8...	29192.4	.873	1.902	2.187	H2-1
33	M6	LL3x3x4x0	.051	0	40	.013	3....	z 6	76391.4...	93312	6.48	4.361	2.012	H1-...
34	M75	L2.5x2.5x3	.105	4....	10	.013	4....	y 5	14960.8...	29192.4	.873	1.902	2.188	H2-1
35	M73	L2.5x2.5x3	.104	4....	2	.013	4....	y 9	14960.8...	29192.4	.873	1.902	2.183	H2-1
36	M7	LL3x3x4x0	.053	0	10	.013	3....	z 2	76391.4...	93312	6.48	4.361	2.165	H1-...
37	M5	LL3x3x4x0	.050	0	6	.012	3....	z 10	76391.4...	93312	6.48	4.361	2.176	H1-...
38	M72	L2.5x2.5x3	.089	4....	4	.011	4....	z 8	14960.8...	29192.4	.873	1.904	2.199	H2-1
39	M70	L2.5x2.5x3	.085	2....	20	.010	4....	z 12	14960.8...	29192.4	.873	1.666	1.148	H2-1
40	M74	L2.5x2.5x3	.085	4....	12	.010	4....	z 4	14960.8...	29192.4	.873	1.904	2.2	H2-1



Client:	Verizon Wireless	Date:	7/20/2023
Site Name:	EAST HAMPTON CT		
MDG #:	5000242940		
Fuze ID #:	17123754	Page:	1

Version 1.01

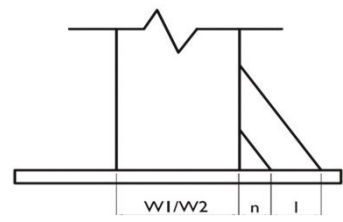
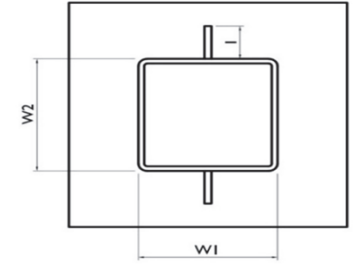
### I. Mount-to-Tower Connection Check

<u>Custom Orientation Required</u>	<input type="text" value="No"/>
<u>Tower Connection Bolt Checks</u>	<input type="text" value="No"/>
<u>Tower Connection Baseplate Checks</u>	<input type="text" value="No"/>

Tower Connection Weld Checks

Weld Shape:  
 Weld Stiffener Configuration:  
 Stiffener Notch Present?  
 Stiffener Length, l (in):  
 Stiffener Spacing/Width, s (in):  
 Stiffener Notch Length, n (in):  
 Weld Size (1/16 in):  
 W1 (in):  
 W2 (in):  
 Weld Total Length (in):  
 Z<sub>x</sub> (in<sup>3</sup>/in):  
 Z<sub>y</sub> (in<sup>3</sup>/in):  
 J<sub>p</sub> (in<sup>4</sup>/in):  
 c<sub>x</sub> (in)  
 c<sub>y</sub> (in)  
 Required combined strength (kip/in):  
 Weld Capacity (kip/in):  
 Weld Utilization:

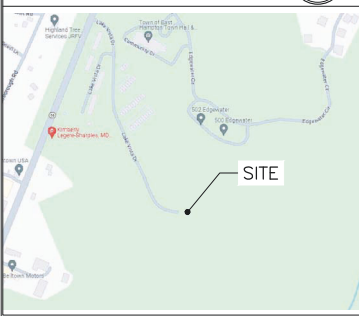
Yes
Rectangle
(1) Stiffener on top/bottom
Yes
2.5
1
4
4
4
26.00
72.39
21.33
366.17
5.5
5.5
0.95
5.57
<b>17.2%</b>



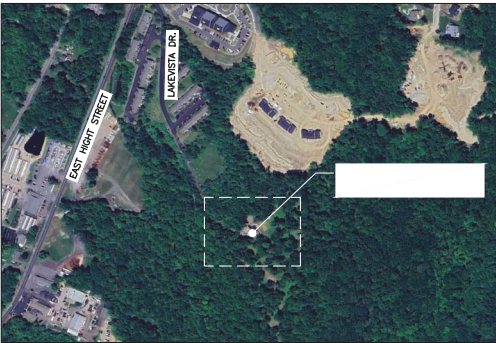
**NOTE:**  
AN ANALYSIS OF THE CAPACITY OF THE STRUCTURE TO SUPPORT THE PROPOSED LOADING HAS BEEN COMPLETED BY CROWN CASTLE DATED JANUARY 18, 2024.

**LEASE EXHIBIT:**  
THIS LEASE EXHIBIT IS DIAGRAMMATIC IN NATURE AND IS INTENDED TO PROVIDE GENERAL INFORMATION REGARDING THE LOCATION AND SIZE OF THE PROPOSED WIRELESS COMMUNICATION FACILITY. THE SITE LAYOUT WILL BE FINALIZED UPON COMPLETION OF THE SITE SURVEY AND FACILITY DESIGN.

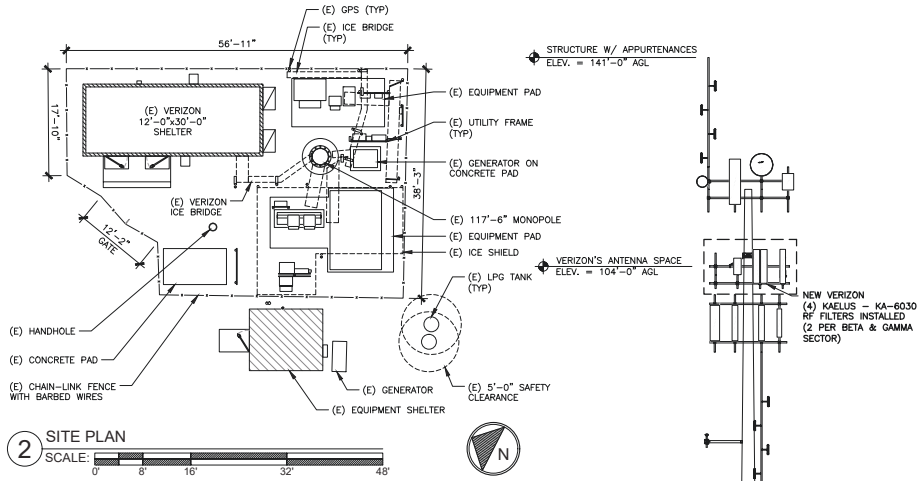
**LOCATION MAP N.T.S**



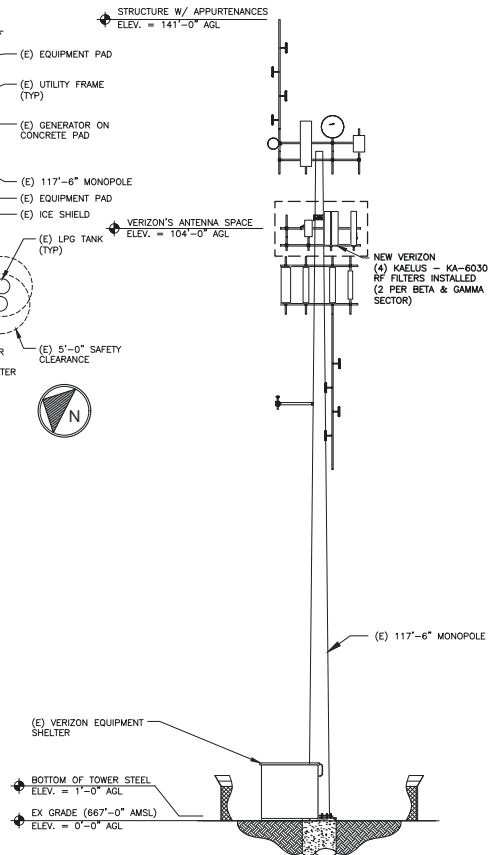
APPROXIMATE COORDINATES: LATITUDE: 41° 35' 14.20" N 41.587278° N  
LONGITUDE: 72° 29' 19.60" W 72.488778° W



**1 PARTIAL SITE / KEY PLAN**  
SCALE: N.T.S.



**2 SITE PLAN**  
SCALE: 1" = 48'



**3 TOWER ELEVATION**  
SCALE: N.T.S.

**verizon**  
20 ALEXANDER DRIVE  
WALLINGFORD, CT 06492

**B+T GRP**  
MTS ENGINEERING, P.L.L.C.  
1717 S. BOULDER  
SUITE 200  
TULSA, OK 74119  
PH: (918) 581-4638  
btm@btgrp.com

**EAST HAMPTON CT**  
94 EAST HIGHT STREET  
EAST HAMPTON, CT 06424  
EXISTING MONOPOLE

PROJECT NO: 92595.007.01  
CHECKED BY: LR

ISSUED FOR:			
REV	DATE	BY	DESCRIPTION
0	02/21/24	LR	CONSTRUCTION

MTS ENGINEERING P.L.L.C.  
BER-2386985  
Expires 3/31/24



IF IT IS A VIOLATION OF LAW FOR ANY REASON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SHEET NUMBER: **LE-1** REVISION: **0**

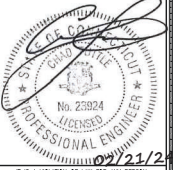
82595.007.01.001 - 871332 - RICHARD WALLING - Sheet LE-1 - User: Richard - Feb 21, 2024 - 4:23pm

**EAST HAMPTON CT**  
 94 EAST HIGHT STREET  
 EAST HAMPTON, CT 06424  
 EXISTING MONOPOLE

PROJECT NO: 92595.007.01  
 CHECKED BY: LR

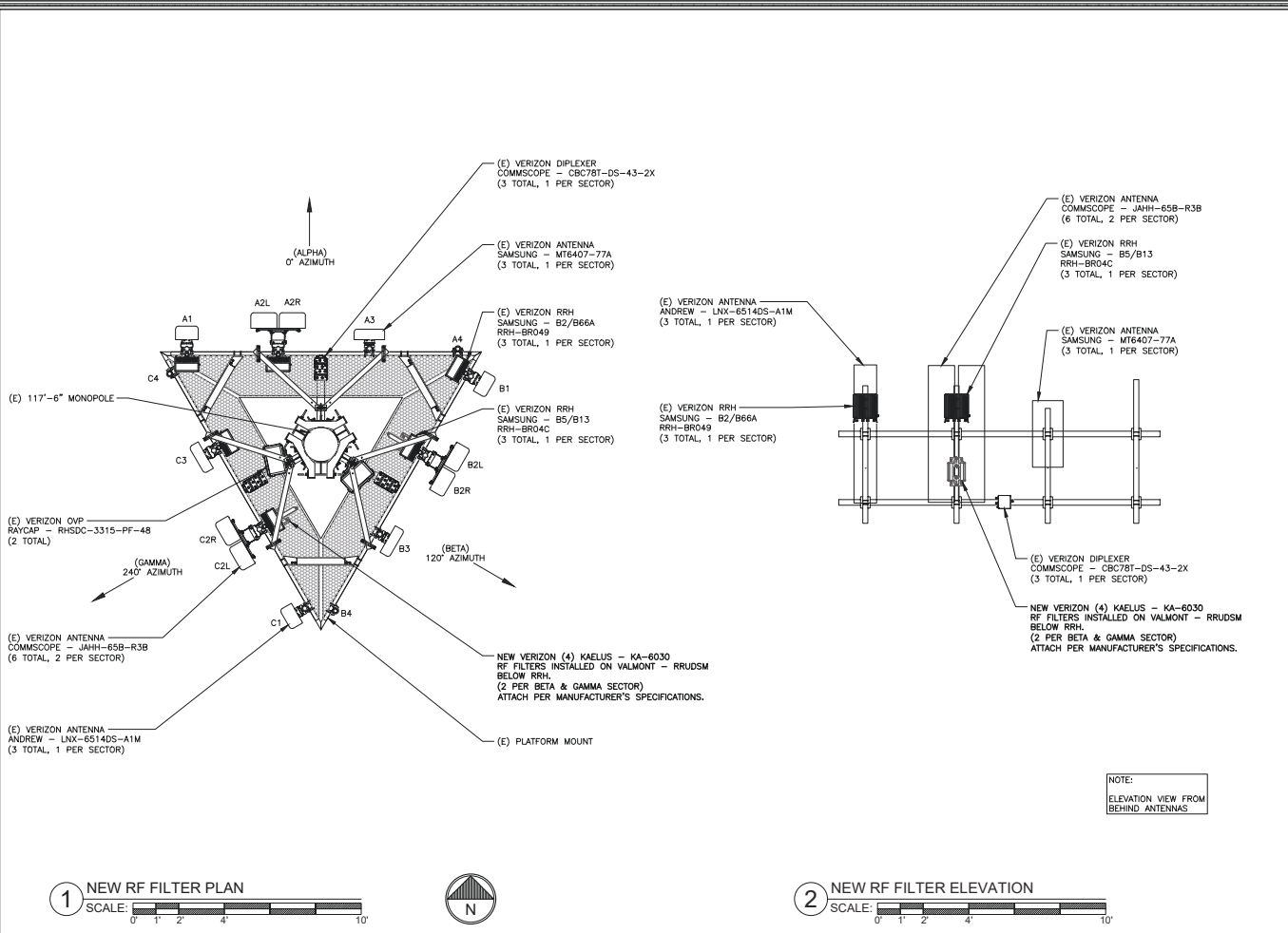
ISSUED FOR:		
REV	DATE	DESCRIPTION
0	02/21/24	YR CONSTRUCTION

MTS ENGINEERING P.L.L.C.  
 BER-2386885  
 Expires 3/31/24



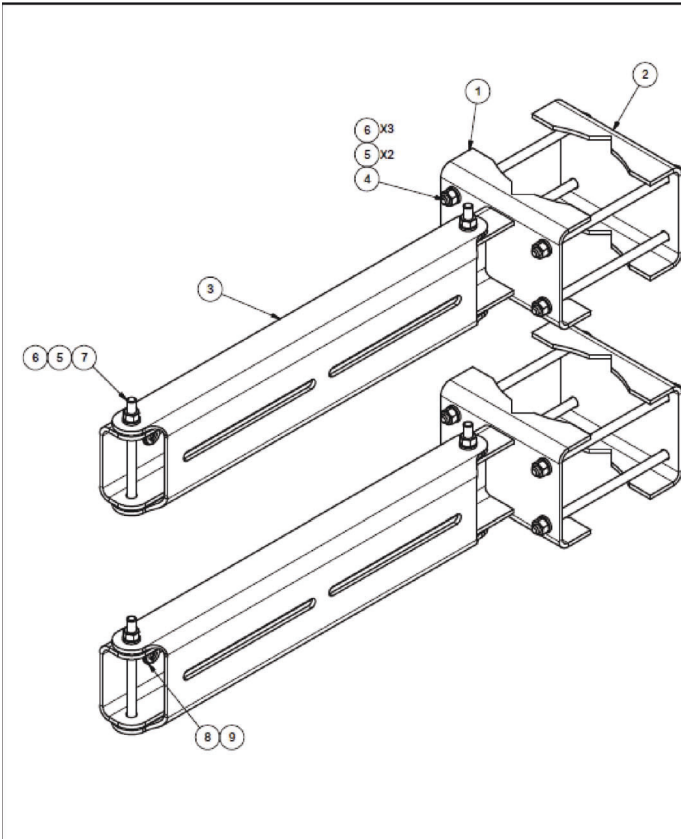
IF IT IS A VIOLATION OF LAW FOR ANY REASON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SHEET NUMBER: **LE-2** REVISION: **0**

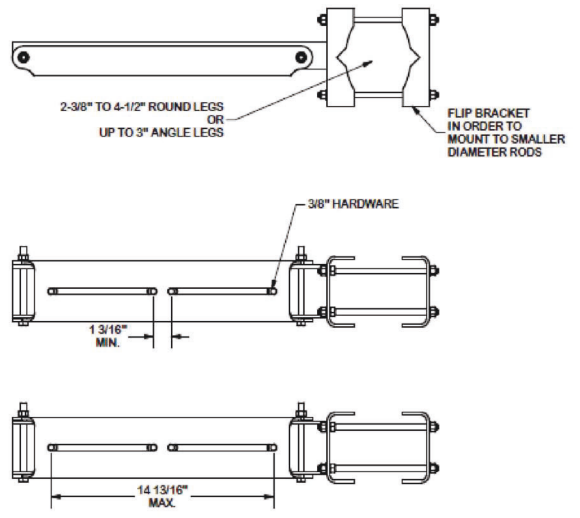


92595.007.01.0001\_0171332\_RICHARD WALLING - SheetsLE-2 - User: Richard - Feb 21, 2024 - 4:20pm





PARTS LIST					
ITEM	QTY	PART DESCRIPTION	LENGTH	UNIT WT.	NET WT.
1	2	MOUNTING ARM		8.99	17.97
2	2	CLAMP PLATE		2.35	4.69
3	2	SWIVEL MOUNT		6.65	13.30
4	8	3/8"-16 UNC X 8" GALV. THREADED ROD		0.25	2.00
5	20	3/8" GALV LOCK WASHER		0.01	0.13
6	28	3/8"-16 UNC GALV HEX NUT		0.02	0.52
7	4	3/8" X 5" GALV BOLT		0.18	0.71
8	8	3/8" SS FLAT WASHER		0.01	0.06
9	8	3/8" SS LOCK WASHER		0.01	0.05
				TOTAL WT. #	39.43



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

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

DESCRIPTION			
RRU DUAL SWIVEL MOUNT			
CRD NO.	DRAWN BY	ENG. APPROVAL	
	CEK	1/12/2015	
CLASS	SUB	DRAWING USAGE	CHECKED BY
81	01	SHOP	BMC 2/3/2015

	Engineering Support Team: 1-866-753-7446	Locations: New York, NY Atlanta, GA Los Angeles, CA Plymouth, IN Salem, OR Dallas, TX
	A valmont  COMPANY	
PART NO.	RRUDSM	
DWG. NO.	RRUDSM	