

August 2, 2023

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

Re: **Notice of Exempt Modification – Facility Modification
1021 Blue Hills Avenue, Bloomfield, Connecticut**

Dear Attorney Bachman:

Cellco Partnership d/b/a Verizon Wireless (“Cellco”) currently maintains a wireless telecommunications facility at the above-referenced address (the “Property”). Cellco’s facility consists of antennas and remote radio heads attached to a tower. Equipment associated with the facility is located on the ground adjacent to the tower. Cellco’s facility was approved by the Siting Council (“Council”) in October of 2008 (EM-VER-011-080916). A copy of the Council’s exempt modification approval is included in Attachment 1.

Cellco’s proposed modification involves the installation of two (2) interference mitigation filters (“filters”) on Cellco’s existing antenna platform and mounting assembly. The filter specification sheet is included in Attachment 2.

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

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

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

Robinson+Cole

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

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

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

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

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

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

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

Sincerely,



Kenneth C. Baldwin

Enclosures

Copy to:

Philip Schenck, Acting Town Manager
Justin LaFountain, Director of Land Use
Blue Hills Fire District, Property Owner
Alex Tyurin, Verizon Wireless

ATTACHMENT 1



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@ct.gov

Internet: ct.gov/csc

Daniel F. Caruso
Chairman

October 27, 2008

Kenneth C. Baldwin, Esq.
Robinson & Cole LLP
280 Trumbull Street
Hartford, CT 06103-3597

RE: **EM-VER-011-080916** - Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at 1021 Blue Hills Avenue, Bloomfield, Connecticut.

Dear Attorney Baldwin:

The Connecticut Siting Council (Council) hereby acknowledges your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies, with following conditions:

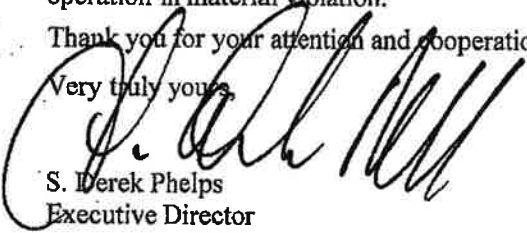
- The proposed coax lines shall be installed per Figure 1 of the structural analysis report dated April 29, 2008 and sealed by Christopher Michael Murphy, P.E.; and
- The Council shall be notified in writing that the coax lines were installed as specified.

The proposed modifications are to be implemented as specified here and in your notice dated September 16, 2008, including the placement of all necessary equipment and shelters within the tower compound. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Please be advised that the validity of this action shall expire one year from the date of this letter. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

Thank you for your attention and cooperation.

Very truly yours,


S. Derek Phelps
Executive Director

SDP/MP/cm

c: Honorable Sydney Schulman, Mayor, Town of Bloomfield
Louie Chapman, Jr., Town Manager, Town of Bloomfield
Thomas B. Hooper, Director of Planning, Town of Bloomfield
SBA

ATTACHMENT 2

BSF0020F3V1-1

TWIN BANDSTOP 900MHZ INTERFERENCE MITIGATION FILTER

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

FEATURES

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



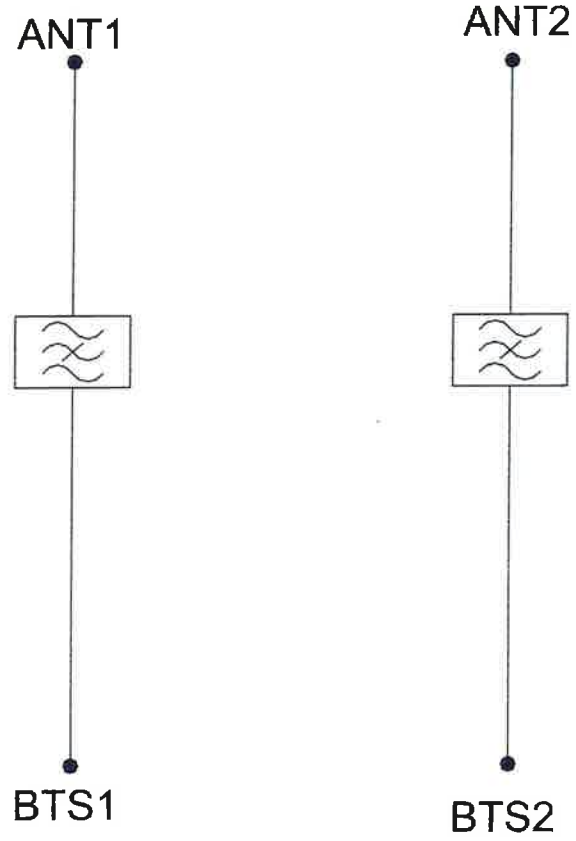
TECHNICAL SPECIFICATIONS

BAND NAME	700 PATH / 850 UPLINK PATH	850 DOWNLINK PATH
Passband	698 - 849MHz	869 - 891.5MHz
Insertion loss	0.1dB typical / 0.3dB maximum	0.5dB typical, 1.45dB maximum
Return loss	24dB typical, 18dB minimum	
Maximum input power (Per Port)	100W average	200W average and 66W per 5MHz
Rejection	53dB minimum @ 894.1 - 896.5MHz	
ELECTRICAL		
Impedance	50ohms	
Intermodulation products	-160dBc maximum in UL Band (assuming 20MHz Signal), with 2 x 43dBm carriers -153dBc maximum with 2 x 43dBm	
DC / AISG		
Passband	0 - 13MHz	
Insertion loss	0.3dB maximum	
Return loss	15dB minimum	
Input voltage range	± 33V	
DC current rating	2A continuous, 4A peak	
Compliance	3GPP TS 25.461	
ENVIRONMENTAL		
For further details of environmental compliance, please contact Kaelus.		
Temperature range	-20°C to +60°C -4°F to +140°F	
Ingress protection	IP67	
Altitude	2600m 8530ft	
Lightning protection	RF port: ±5kA maximum (9/20us), IEC 61000-4-5 – Unit must be terminated with some lightning protection circuits.	
MTBF	>1,000,000 hours	
Compliance	ETSI EN 300 019 class 4.1H, RoHS, NEBS GR-487-CORE	
MECHANICAL		
Dimensions H x D x W	269 x 277 x 80mm 10.60 x 10.90 x 3.15in (Excluding brackets and connectors)	
Weight	8.0 kg 17.6 lbs (no bracket)	
Finish	Powder coated, light grey (RAL7035)	
Connectors	RF: 4,3-10 (F) x 4	
Mounting	Optional pole/wall bracket supplied with two metal clamps 45-178mm diameter poles or custom bracket. See ordering information.	

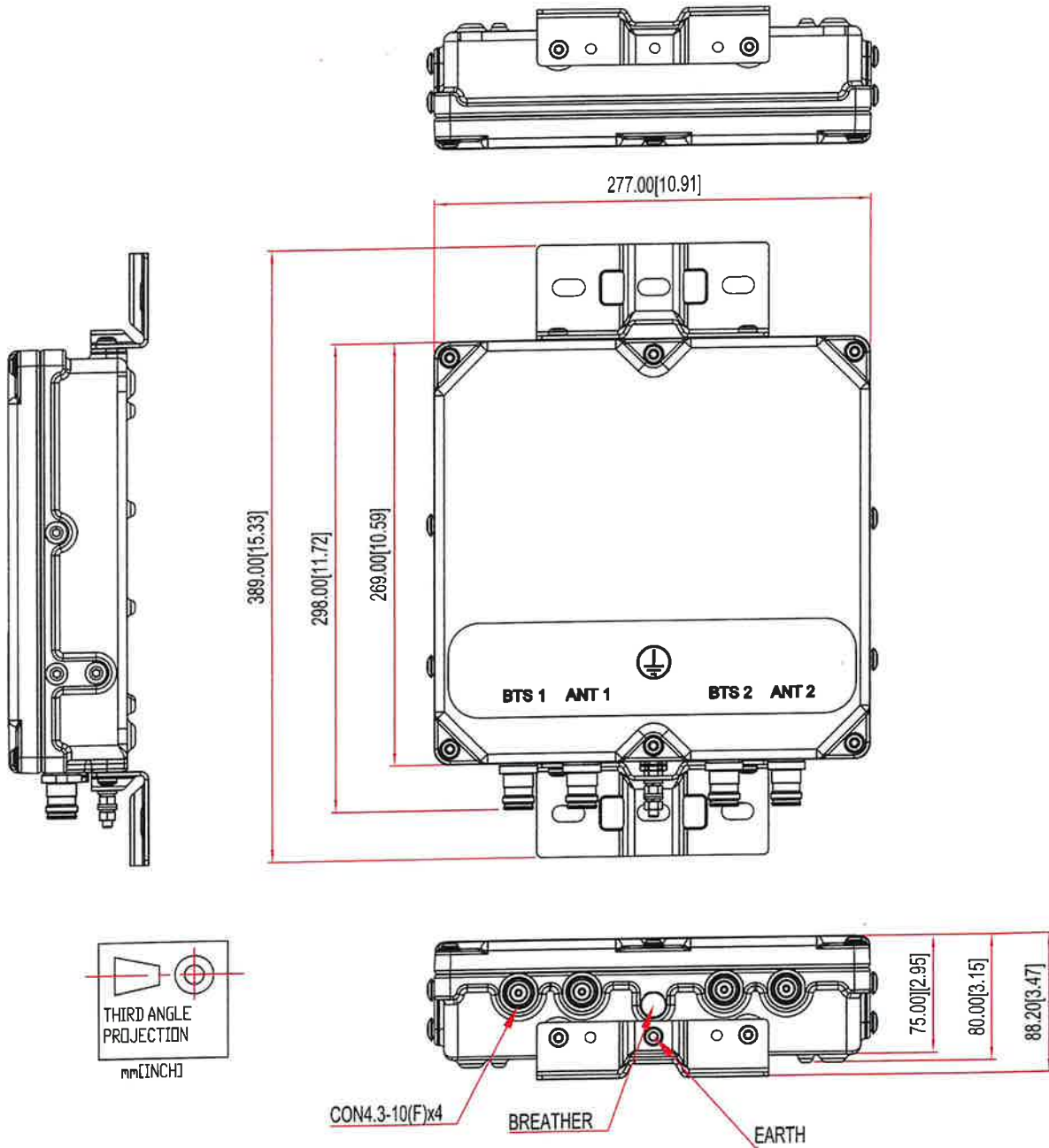
ORDERING INFORMATION

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

ELECTRICAL BLOCK DIAGRAM



MECHANICAL BLOCK DIAGRAM



ATTACHMENT 3



Tower Engineering Solutions

Phone (972) 483-0607, Fax (972) 975-9615
1320 Greenway Drive, Suite 600, Irving, Texas 75038

Structural Analysis Report

Existing 125 ft Nudd Corporation Self Supporting Tower

Customer Name: SBA Communications Corp

Customer Site Number: CT01725-A

Customer Site Name: Bloomfield

Carrier Name: Verizon (App#: 232636-2)

Carrier Site ID / Name: 5000383956 / COTTAGE GROVE CT

Site Location: 1021 Blue Hills Avenue

Bloomfield, Connecticut

Hartford County

Latitude: 41.820119

Longitude: -72.696514

Analysis Result:

Max Structural Usage: 93.5% [Pass]

Max Foundation Usage: 42.0% [Pass]

Additional Usage Caused by New Mount/Mount Modification: N/A

Report Prepared By: Changzhi Zang





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Additional Usage Caused by New Mount/Mount Modification: N/A

Report Prepared By: Changzhi Zang

Introduction

The purpose of this report is to summarize the analysis results on the 125 ft Nudd Corporation Self Supporting Tower to support the proposed antennas and transmission lines in addition to those currently installed. Any modification listed under Sources of Information was assumed completed and was included in this analysis.

Sources of Information

Tower Drawings	Fred A. Nudd Corporation, Project# 97-5566A-1 dated March 11, 1998
Foundation Drawing	Fred A. Nudd Corporation, Drawing #97-5566-2 dated 12/18/1997 commissioned by CDT
Geotechnical Report	FDH Engineering Project #1206690EG1 dated 08/10/2012
Modification Drawings	TES Job #70654 dated June 6, 2019; PCI by TES Job #83013 dated December 16, 2019

Analysis Criteria

The comprehensive analysis was performed in accordance with the requirements and stipulations of the TIA-222-H. In accordance with this standard, the structure was analyzed using **TESTowers**, a proprietary analysis software. The program considers the structure as an elastic 3-D model with second-order effects and temperature effects incorporated in the analysis. The analysis was performed using multiple wind directions.

Wind Speed Used in the Analysis:	120.0 mph (3-Sec. Gust) (Ultimate wind speed)
Wind Speed with Ice:	50 mph (3-Sec. Gust) with 1"1/2 radial ice concurrent
Service Load Wind Speed:	60 mph + 0" Radial ice
Standard/Codes:	TIA-222-H / 2021 IBC / 2022 Connecticut State Building Code
Exposure Category:	B
Risk Category:	II
Topographic Category:	1
Crest Height:	0 ft
Seismic Parameters:	$S_S = 0.183$, $S_1 = 0.055$

This structural analysis is based upon the tower being classified as a Risk Category II; however, if a different classification is required subsequent to the date hereof, the tower classification will be changed to meet such requirement and a new structural analysis will be run.

Existing Antennas, Mounts and Transmission Lines

The table below summarizes the antennas, mounts and transmission lines that were considered in the analysis as existing on the tower.

Items	Elevation (ft)	Qty.	Antenna Descriptions	Mount Type & Qty.	Transmission Lines	Owner	
1	135.0	1	Cellwave PD455	Platform w/ Handrails w/ (3) PRK-FMA Reinforcement Kit	(1) 7/8" (1) 1/2"	Blue Hills Fire	
2		1	Cellwave AS MONR 31				
3		3	Cellwave PD455				
4	133.0	1	Cellwave AS MONR 31		(4) 7/8"	Bloomfield Police Dept.	
5	125.0	2	Cellwave PD455		(1) 1 1/4"	Blue Hills Fire	
6		1	Cellwave PD1655		(1) 1/2"		
7	125.0	3	Ericsson AIR6449 B41 - Panel		(3) Sector Frames w/ Mods [(3) VZWSMART-SFK3 V-bracing kit, (15) VZWSMART - MSK1 Crossover plate, (12) VZWSMART-MSK7 Crossover & (3) 12.5' pipes]	(1) 1 5/8" (2) 1-1/4" Hybrid (2) 1 5/8" Hybrid	T-Mobile
8		3	RFS APXVAARR24_43-U-NA20 - Panel				
9		3	AIR32 KRD901146-1_B66A (Octa) - Panel				
10		3	Ericsson KRY 112 144/2				
11		3	Commscope SDX1926Q-43				
12		3	Ericsson Radio 4449 B71+B85 RRU				
13		3	Ericsson 4415 B25				
-	110.0	3	Commscope - NHH-65B-R2B - Panel	(3) Sector Frames w/ Mods [(3) VZWSMART-SFK3 V-bracing kit, (15) VZWSMART - MSK1 Crossover plate, (12) VZWSMART-MSK7 Crossover & (3) 12.5' pipes]	(1) 1 5/8" Fiber (2) 1/2" (18) 1 5/8"	Verizon	
-		3	Commscope - NHHSS-65B-R2B - Panel				
-		3	Samsung - MT6407-77A - Panel				
-		3	Antel - BXA-70063-4CF - Panel				
-		3	Samsung - RF4440d-13A RRU				
-		3	Samsung - RF4439d-25A RRU				
-		3	Samsung - RT4401-48A RRU				
-		1	RFS - DB-C1-12C-24AB-0Z - OVP				
-	2	Andrew GPS					
24	100.0	3	Ericsson Air 6449 N77D - Panel	(3) Sector Frame w/ (3) Site Pro SFR-K-L (3) Site Pro SFS-H-L	(4) 3/4" DC (12) 7/8" (1) 1/2" Fiber (1) 1/2" Coax (1) 3" Conduit (Housing) (2) 3/4" DC & (1) 1/2" Fiber)	AT&T	
25	98.0	2	Cci HPA-65R-BUU-H8 - Panel				
26		1	Cci HPA-65R-BUU-H6 - Panel				
27		2	Cci DMP65R-BU8EA-K - Panel				
28		1	Cci DMP65R-BU6EA-K - Panel				
29		6	Powerwave LGP21401 TMA				
30		6	Powerwave LGP21901 Diplexer				
31		12	Powerwave 7020.00 RET				
32		3	Ericsson RRUS 8843 B2 B66A				
33		3	Ericsson RRUS 4449, B5, B12				
34		3	Ericsson RRUS 4415 B30				
35		1	Raycap DC6-48-60-18-8F - OVP				
36	1	Raycap DC6-48-60-0-18-8C-EV - OVP					
37	1	Raycap DC6-48-60-18-8C - OVP					
38	3	Kathrein 782 10253 - BIAS-T					
39	96.0	3	Ericsson Air 6419 N77G - Panel				

Items	Elevation (ft)	Qty.	Antenna Descriptions	Mount Type & Qty.	Transmission Lines	Owner
40	87.0	3	Alcatel Lucent 1900MHz RRH	(3) Sector Frame	(1) 0.7" (3) 1 1/4"	Sprint
41		3	Alcatel Lucent 800MHZ RRH			
42		3	Alcatel Lucent TD-RRH8x20-25			
43		4	RFS ACU-A20-N			
44		3	RFS APXVSPP18-C-A20 - Panel			
45		3	RFS APXVTM14-C-120 - Panel			
46	77.0	3	JMA Wireless MX08FRO665-21-Panel	(3) Commscope MTC3975083	(1) 1.411" Hybrid	Dish Wireless
47		3	Fujitsu TA08025-B605-RRH			
48		3	Fujitsu TA08025-B604-RRH			
49		1	Raycap RDIDC-9181-PF-48-OVP			
50	65.0	1	Nokia CS72188.01 LMU	(1) Standoff Mount	(1) 1/2"	AT&T

Proposed Carrier's Final Configuration of Antennas, Mounts and Transmission Lines

Information pertaining to the proposed carrier's final configuration of antennas and transmission lines was provided by SBA Communications Corp. The proposed antennas and lines are listed below.

Items	Elevation (ft)	Qty.	Antenna Descriptions	Mount Type & Qty.	Transmission Lines	Owner
14	110.0	3	Commscope - NHH-65B-R2B - Panel	(3) Sector Frames w/ Mods [(3) VZSMART- SFK3 V-bracing kit, (15) VZSMART - MSK1 Crossover plate, (12) VZSMART-MSK7 Crossover & (3) 12.5' pipes]	(1) 1 5/8" Fiber (2) 1/2" (18) 1 5/8"	Verizon
15		3	Commscope - NHHSS-65B-R2B - Panel			
16		3	Samsung - MT6407-77A - Panel			
17		3	Antel - BXA-70063-4CF - Panel			
18		3	Samsung - RF4440d-13A RRU			
19		3	Samsung - RF4439d-25A RRU			
20		3	Samsung - RT4401-48A RRU			
21		1	RFS - DB-C1-12C-24AB-0Z - OVP			
22		2	Andrew GPS			
23		2	Kaelus BSF0020F3V1-1 - Filter			

See the attached coax layout for the line placement considered in the analysis.

Analysis Results

The results of the structural analysis, performed for the wind and ice loading and antenna equipment as defined above, are summarized as the following:

Tower Component	Legs	Diagonals	Horizontals
Max. Usage:	93.5%	86.2%	30.3%
Pass/Fail	Pass	Pass	Pass

Foundations

	Compression (Kips)	Uplift (Kips)	Shear (Kips)
Analysis Reactions	296.2	264.1	25.1

The foundation has been investigated using the supplied documents and soils report and was found adequate. Therefore, no modification to the foundation will be required.

Service Load Condition (Rigidity):

Operational characteristics of the tower are found to be within the limits prescribed by TIA-222 for the installed antennas. The maximum twist/sway at the elevation of the proposed equipment is 0.3665 degrees under the operational wind speed as specified in the Analysis Criteria.

Conclusions

Based on the analysis results, the existing structure and its foundation were found to be adequate to safely support the existing and proposed equipment and meet the minimum requirements per the TIA-222 Standard under the design basic wind speed as specified in the Analysis Criteria.

Standard Conditions

1. This analysis was performed based on the information supplied to **(TES) Tower Engineering Solutions, LLC**. Verification of the information provided was not included in the Scope of Work for **TES**. The accuracy of the analysis is dependent on the accuracy of the information provided.
2. The structural analysis was performance based upon the evidence available at the time of this report. All information provided by the client is considered to be accurate.
3. The analyses will be performed based on the codes as specified by the client or based on the best knowledge of the engineering staff of **TES**. In the absence of information to the contrary, all work will be performed in accordance with the latest relevant revision of ANSI/TIA-222. If wind speed and/or ice loads are different from the minimum values recommended by the ANSI/TIA-222 standard or other codes, **TES** should be notified in writing and the applicable minimum values provided by the client.
4. The configuration of the existing mounts, antennas, coax and other appurtenances were supplied by the customer for the current structural analysis. **TES** has not visited the tower site to verify the adequacy of the information provided. If there is any discrepancy found in the report regarding the existing conditions, **TES** should be notified immediately to evaluate the effect of the discrepancy on the analysis results.
5. The client will assume responsibility for rework associated with the differences in initially provided information, including tower and foundation information, existing and/or proposed equipment and transmission lines.
6. If a feasibility analysis was performed, final acceptance of changed conditions shall be based upon a rigorous structural analysis.

Structure: CT01725-A-SBA

Site Name: Bloomfield	Code: TIA-222-H	7/11/2023
Type: Self Support	Base Shape: Triangle	Basic WS: 120.00
Height: 125.00 (ft)	Base Width: 12.50	Basic Ice WS: 50.00
Base Elev: 0.00 (ft)	Top Width: 3.50	Operational WS: 60.00

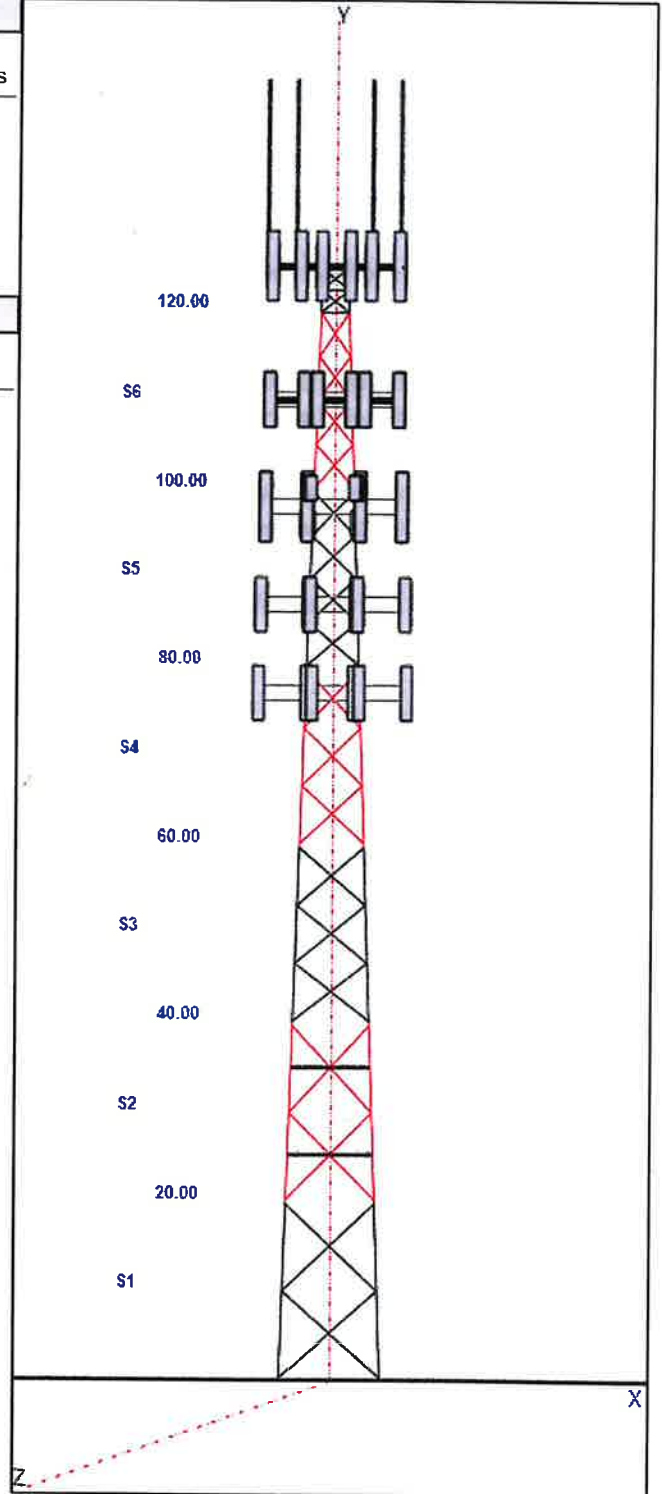


Section Properties

Sect	Leg Members	Diagonal Members	Horizontal Members
1	PST 8" DIA PIPE	SAE 3.5X3.5X0.25	
2	PST 6" DIA PIPE	SAE 3X3X0.25	
3	PST 6" DIA PIPE	SAE 2.5X2.5X0.1875	
4	PST 5" DIA PIPE	SAE 2.5X2.5X0.1875	
5	PST 3-1/2" DIA PIPE	SAE 2X2X0.1875	
6	PST 2-1/2" DIA PIPE	SAE 1.5X1.5X0.1875	
7	PST 2-1/2" DIA PIPE	SOL 5/8" SOLID	SAE 1.5X1.5X0.1875

Discrete Appurtenances

Attach Elev (ft)	Force Elev (ft)	Qty	Description
125.00	125.00	3	AIR6449 B41
125.00	125.00	3	SDX1926Q-43
125.00	125.00	3	4415 B25
125.00	125.00	3	APXVAARR24_43-U-NA20
125.00	125.00	3	AIR32 KRD901146-1_B66A
125.00	125.00	3	KRY 112 144/1
125.00	125.00	3	Radio 4449 B71+B85 RRU
125.00	125.00	1	Lightning Rod
125.00	125.00	1	Beacon
125.00	125.00	1	PD165S
125.00	135.00	1	Cellwave AS MONR 31
125.00	135.00	3	PD455
125.00	135.00	3	PD455
125.00	125.00	1	Platform w/ HR
125.00	125.00	1	PRK-FMA
125.00	133.00	1	Cellwave AS MONR 31
125.00	125.00	1	(3) HR w/ V-Brace Kits
110.00	110.00	3	Sector Frame
110.00	110.00	3	NHH-65B-R2B
110.00	110.00	3	NHHSS-65B-R2B
110.00	110.00	3	MT6407-77A
110.00	110.00	3	BXA-70063-4CF
110.00	110.00	3	RF4440d-13A
110.00	110.00	3	RF4439d-25A
110.00	110.00	1	DB-C1-12C-24AB-0Z
110.00	110.00	1	(3) 12.5' - 2.5" Horizontal Pi
110.00	110.00	1	(3) SFS-H-L (V-Braces)
110.00	110.00	3	RT4401-48A
110.00	110.00	2	GPS
110.00	110.00	2	Kaelus BSF0020F3V1-1
100.00	100.00	3	Air 6449 N77D
98.00	98.00	2	HPA-65R-BUU-H8
98.00	98.00	1	HPA-65R-BUU-H6
98.00	98.00	6	LGP-21401
98.00	98.00	6	LGP-21903 Diplexer
98.00	98.00	12	7020.00 RET
98.00	98.00	3	8843 B2 B66A
98.00	98.00	3	4449 B5/B12
98.00	98.00	3	4415 B30
98.00	98.00	1	DC6-48-60-18-8F
98.00	98.00	1	DC6-48-60-0-18-8C-EV
98.00	98.00	1	DC6-48-60-18-8C



Structure: CT01725-A-SBA

Site Name: Bloomfield	Code: TIA-222-H	7/11/2023
Type: Self Support	Base Shape: Triangle	Basic WS: 120.00
Height: 125.00 (ft)	Base Width: 12.50	Basic Ice WS: 50.00
Base Elev: 0.00 (ft)	Top Width: 3.50	Operational WS: 60.00



98.00	98.00	3	782 10253
98.00	98.00	1	(3) SFR-K-L
98.00	98.00	1	(3) SFS-H-L
98.00	98.00	3	Sector Frame
98.00	98.00	1	(3) Stiff Arm Kit
98.00	98.00	2	DMP65R-BU8EA-K
98.00	98.00	1	DMP65R-BU6EA-K
96.00	96.00	3	Air 6419 N77G
87.00	87.00	3	1900MHz RRH
87.00	87.00	3	800MHZ RRH
87.00	87.00	3	TD-RRH8x20-25
87.00	87.00	4	ACU-A20-N
87.00	87.00	3	APXVSP18-C-A20
87.00	87.00	3	APXVTM14-C-120
87.00	87.00	3	800MHz Filter
87.00	87.00	3	Sector Frame
77.00	77.00	3	MX08FRO665-21
77.00	77.00	3	TA08025-B604
77.00	77.00	3	TA08025-B605
77.00	77.00	1	RDIDC-9181-OF-48
77.00	77.00	3	MTC3975083
65.00	65.00	1	CS72188.01 LMU
65.00	65.00	1	Standoff Mount

Linear Appurtenances

Elev From (ft)	Elev To (ft)	Qty	Description
0.00	125.00	1	1 1/4" Coax
0.00	125.00	9	1 5/8" Coax
0.00	125.00	2	1 5/8" Hybrid
0.00	125.00	2	1-1/4" Hybrid
0.00	125.00	2	1/2" Coax
0.00	125.00	1	7/8" Coax
0.00	125.00	4	7/8" Coax
0.00	125.00	1	Climbing Ladder
0.00	125.00	1	W/G Ladder
0.00	125.00	1	W/G Ladder
0.00	110.00	18	1 5/8" Coax
0.00	110.00	1	1 5/8" Fiber
0.00	110.00	2	1/2" Coax
0.00	110.00	1	W/G Ladder
0.00	98.00	1	1/2" Coax
0.00	98.00	1	1/2" Fiber
0.00	98.00	1	3" Conduit
0.00	98.00	4	3/4" DC
0.00	98.00	12	7/8" Coax
0.00	98.00	1	W/G Ladder
0.00	87.00	4	1 1/4" Coax
0.00	87.00	1	W/G Ladder
0.00	77.00	1	1.411" Hybrid
0.00	77.00	1	W/G Ladder
0.00	65.00	1	1/2" Coax

Base Reactions

Structure: CT01725-A-SBA

Site Name: Bloomfield	Code: TIA-222-H	7/11/2023
Type: Self Support	Base Shape: Triangle	Basic WS: 120.00
Height: 125.00 (ft)	Base Width: 12.50	Basic Ice WS: 50.00
Base Elev: 0.00 (ft)	Top Width: 3.50	Operational WS: 60.00

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Leg	Overtuming
Max Uplift: -264.11 (kips)	Moment: 3050.10 (ft-kips)
Max Down: 296.19 (kips)	Total Down: 43.30 (kips)
Max Shear: 25.07 (kips)	Total Shear: 38.92 (kips)

Structure: CT01725-A-SBA

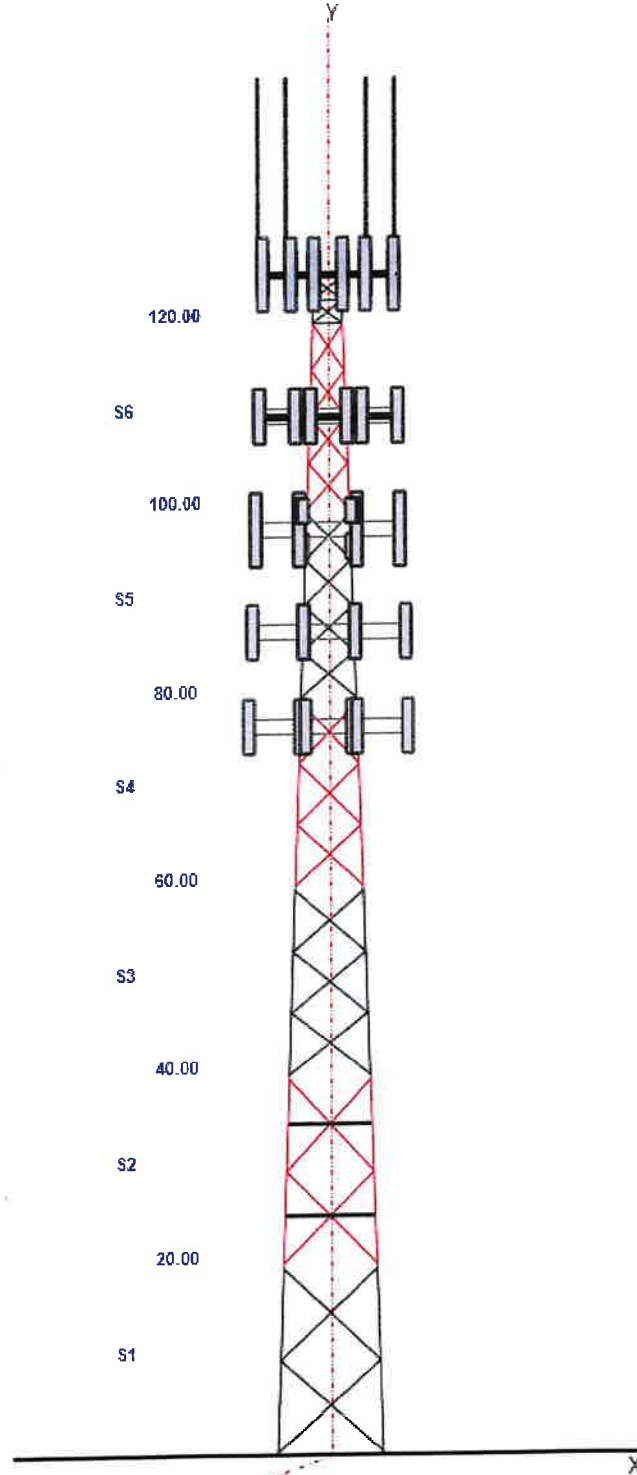
Site Name: Bloomfield
Type: Self Support
Height: 125.00 (ft)
Base Elev: 0.00 (ft)

Base Shape: Triangle
Base Width: 12.50
Top Width: 3.50

Code: TIA-222-H
Basic WS: 120.00
Basic Ice WS: 50.00
Operational WS: 60.00

7/11/2023

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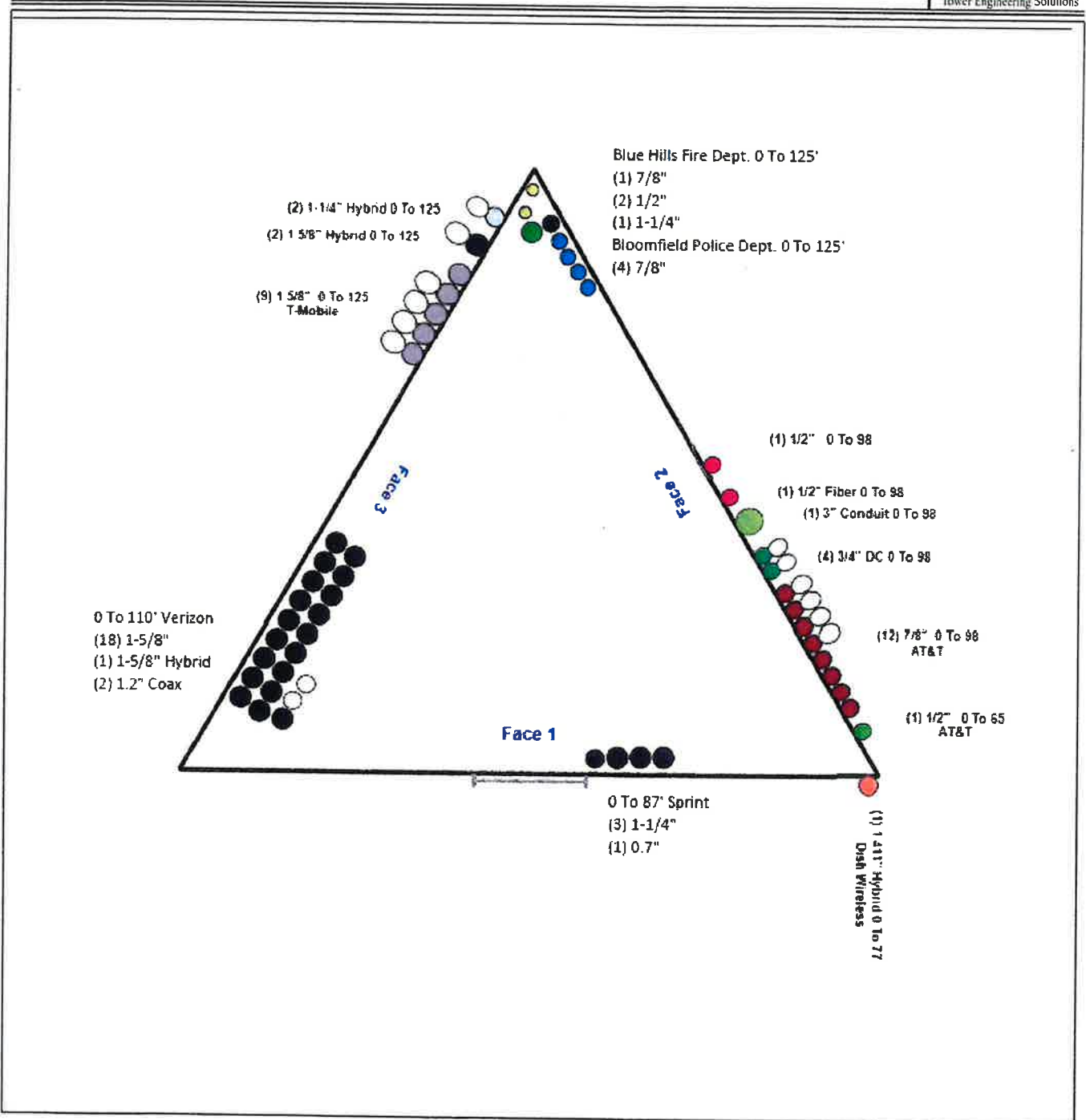
Structure: CT01725-A-SBA - Coax Line Placement

Type: Self Support
 Site Name: Bloomfield
 Height: 125.00 (ft)

7/15/2023



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Loading Summary

Structure: CT01725-A-SBA	Code: TIA-222-H	7/11/2023
Site Name: Bloomfield	Exposure: B	
Height: 125.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Default	
Gh: 0.85	Topography: 1	Struct Class: II



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Discrete Appurtenances Properties

Attach Elev (ft)	Description	Qty	No Ice		Ice		Len (in)	Width (in)	Depth (in)	Ka	Orientation Factor	Vert Ecc (ft)
			Weight (lb)	CaAa (sf)	Weight (lb)	CaAa (sf)						
125.00	AIR6449 B41	3	103.00	5.650	237.37	6.582	33.100	20.500	8.300	0.75	0.71	0.000
125.00	SDX1926Q-43	3	6.10	0.300	30.69	0.579	6.900	5.500	8.200	0.75	0.67	0.000
125.00	4415 B25	3	46.00	1.640	86.28	2.145	15.000	13.200	5.400	0.75	0.67	0.000
125.00	APXVAARR24_43-U-NA20	3	128.00	20.240	536.51	22.101	95.900	24.000	7.800	0.75	0.70	0.000
125.00	AIR32 KRD901146-1_B66A	3	132.20	6.510	311.11	7.608	56.600	12.900	8.700	0.75	0.87	0.000
125.00	KRY 112 144/1	3	11.00	0.410	21.57	0.876	6.900	6.100	2.700	0.75	0.67	0.000
125.00	Radio 4449 B71+B85 RRU	3	70.00	1.650	136.53	2.176	15.000	13.200	9.300	0.75	0.67	0.000
125.00	Lightning Rod	1	5.00	0.500	25.52	2.210	72.000	1.000	1.000	1.00	1.00	0.000
125.00	Beacon	1	36.00	2.720	166.52	3.650	28.000	17.500	17.500	1.00	1.00	0.000
125.00	PD165S	1	5.00	1.810	91.58	17.569	0.700	39.000	50.000	1.00	1.00	10.00
125.00	Cellwave AS MONR 31	1	22.00	0.940	402.95	9.124	0.700	39.000	50.000	1.00	1.00	10.00
125.00	PD455	3	24.00	6.020	173.50	13.482	258.000	2.800	2.800	1.00	1.00	10.00
125.00	PD455	3	24.00	6.020	173.50	13.482	258.000	2.800	2.800	1.00	1.00	10.00
125.00	Platform w/ HR	1	1800.0	56.000	3647.04	84.732	0.000	0.000	0.000	1.00	1.00	0.000
125.00	PRK-FMA	1	337.91	5.330	800.23	10.799	0.000	0.000	0.000	1.00	1.00	0.000
125.00	Cellwave AS MONR 31	1	22.00	0.940	402.95	9.124	0.700	39.000	50.000	1.00	1.00	8.000
125.00	(3) HR w/ V-Brace Kits	1	650.00	15.500	1450.39	31.405	0.000	0.000	0.000	0.75	1.00	0.000
110.00	Sector Frame	3	500.00	18.450	1176.77	32.684	0.000	0.000	0.000	0.75	0.75	0.000
110.00	NHH-65B-R2B	3	43.70	8.080	238.01	9.330	72.000	11.900	7.100	0.80	0.83	0.000
110.00	NHHSS-65B-R2B	3	43.70	8.080	238.01	9.330	72.000	11.900	7.100	0.80	0.83	0.000
110.00	MT6407-77A	3	79.40	4.690	194.55	5.607	35.100	16.100	5.500	0.80	0.70	0.000
110.00	BXA-70063-4CF	3	9.90	4.720	108.64	6.512	47.400	11.200	5.200	0.80	0.73	0.000
110.00	RF4440d-13A	3	84.40	1.880	134.09	2.414	15.000	15.000	10.000	0.80	0.67	0.000
110.00	RF4439d-25A	3	70.30	1.880	117.45	2.414	15.000	15.000	8.100	0.80	0.67	0.000
110.00	DB-C1-12C-24AB-OZ	1	32.00	4.060	142.45	4.857	29.500	16.500	12.500	1.00	1.00	0.000
110.00	(3) 12.5' - 2.5" Horizontal Pi	1	217.50	7.188	423.58	15.943	0.000	0.000	0.000	0.75	1.00	0.000
110.00	(3) SFS-H-L (V-Braces)	1	230.00	6.700	541.31	13.502	0.000	0.000	0.000	0.75	1.00	0.000
110.00	RT4401-48A	3	18.60	0.990	45.45	1.399	13.900	8.600	4.200	0.80	1.00	0.000
110.00	GPS	2	1.00	0.010	1.07	0.017	4.300	3.900	0.000	1.00	1.00	0.000
110.00	Kaelus BSF0020F3V1-1	2	17.60	1.180	64.60	1.936	11.000	10.600	3.150	0.80	1.00	0.000
100.00	Air 6449 N77D	3	88.00	4.130	217.49	4.942	30.800	16.100	10.800	0.80	0.85	0.000
98.00	HPA-65R-BUU-H8	2	68.00	12.980	342.28	14.510	92.400	14.800	7.400	0.80	0.79	0.000
98.00	HPA-65R-BUU-H6	1	51.00	9.660	284.83	10.954	72.000	14.800	9.000	0.80	0.85	0.000
98.00	LGP-21401	6	14.10	1.290	37.86	2.084	14.400	9.200	2.600	0.80	0.67	0.000
98.00	LGP-21903 Diplexer	6	5.50	0.230	12.81	0.580	4.000	6.000	3.000	0.80	0.67	0.000
98.00	7020.00 RET	12	2.20	0.400	11.92	0.860	4.900	8.300	2.400	0.80	0.67	0.000
98.00	8843 B2 B66A	3	72.00	1.640	116.51	2.112	14.900	13.200	10.900	0.80	0.67	0.000
98.00	4449 B5/B12	3	71.00	1.970	121.72	2.490	17.900	13.200	9.400	0.80	0.67	0.000
98.00	4415 B30	3	44.10	1.860	89.18	2.404	13.500	16.500	4.800	0.80	0.67	0.000
98.00	DC6-48-60-18-8F	1	31.80	2.200	90.55	3.195	24.000	11.000	18.500	0.80	0.67	0.000
98.00	DC6-48-60-0-18-8C-EV	1	20.00	1.900	81.37	2.492	23.500	9.700	9.700	0.80	0.67	0.000
98.00	DC6-48-60-18-8C	1	20.00	1.900	81.37	2.492	23.500	9.700	9.700	0.80	0.67	0.000
98.00	782 10253	3	2.90	0.120	6.81	0.377	2.900	4.200	1.800	0.80	0.67	0.000
98.00	(3) SFR-K-L	1	394.00	16.600	1081.87	28.162	0.000	0.000	0.000	0.75	1.00	0.000
98.00	(3) SFS-H-L	1	230.00	6.700	535.13	13.366	0.000	0.000	0.000	0.75	1.00	0.000
98.00	Sector Frame	3	500.00	17.500	1163.32	30.733	0.000	0.000	0.000	0.75	0.75	0.000
98.00	(3) Stiff Arm Kit	1	180.00	6.100	394.92	12.169	0.000	0.000	0.000	0.75	1.00	0.000
98.00	DMP65R-BU8EA-K	2	82.50	17.870	459.33	19.577	96.000	20.700	7.700	0.80	0.72	0.000

Loading Summary

Structure: CT01725-A-SBA

Code: TIA-222-H

7/11/2023

Site Name: Bloomfield

Exposure: B



Height: 125.00 (ft)

Crest Height: 0.00

Base Elev: 0.000 (ft)

Site Class: D - Default

Gh: 0.85

Topography: 1

Struct Class: II

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98.00	DMP65R-BU6EA-K	1	79.40	12.710	359.28	14.101	71.200	20.700	7.700	0.80	0.72	0.000
96.00	Air 6419 N77G	3	88.00	4.130	217.49	4.942	30.800	16.100	10.800	0.80	0.85	0.000
87.00	1900MHz RRH	3	60.00	2.770	139.28	3.975	25.000	11.100	11.400	0.80	0.67	0.000
87.00	800MHz RRH	3	59.50	2.640	133.62	3.740	18.000	15.100	11.300	0.80	0.67	0.000
87.00	TD-RRH8x20-25	3	70.00	4.050	173.87	4.820	26.100	18.600	6.700	0.80	0.67	0.000
87.00	ACU-A20-N	4	1.00	0.140	5.08	0.422	4.000	2.000	3.500	0.80	0.67	0.000
87.00	APXVSP18-C-A20	3	57.00	8.020	221.24	10.675	72.000	11.800	7.000	0.80	0.83	0.000
87.00	APXVTM14-C-120	3	56.00	6.340	206.89	7.395	56.300	12.600	6.300	0.80	0.79	0.000
87.00	800MHz Filter	3	10.00	0.490	25.25	1.023	4.600	11.000	4.500	0.80	0.67	0.000
87.00	Sector Frame	3	450.00	18.000	784.31	26.597	0.000	0.000	0.000	0.75	0.75	0.000
77.00	MX08FRO665-21	3	64.50	12.490	334.03	13.847	72.000	20.000	8.000	0.80	0.74	0.000
77.00	TA08025-B604	3	63.90	1.960	110.81	2.480	15.800	15.000	7.900	0.80	0.67	0.000
77.00	TA08025-B605	3	75.00	1.960	123.47	2.480	15.800	15.000	9.100	0.80	0.67	0.000
77.00	RDIDC-9181-OF-48	1	21.90	2.010	71.24	2.537	16.600	14.600	8.500	0.80	1.00	0.000
77.00	MTC3975083	3	414.00	10.600	788.92	22.942	0.000	0.000	0.000	0.75	0.75	0.000
65.00	CS72188.01 LMU	1	0.31	0.170	0.93	0.345	4.500	4.500	4.500	1.00	1.00	0.000
65.00	Standoff Mount	1	40.00	1.500	65.87	2.470	0.000	0.000	0.000	1.00	1.00	0.000
Totals:		163	15,832.62		40,146.49					Number of Appurtenances :	65	

Loading Summary

Structure: CT01725-A-SBA
Site Name: Bloomfield
Height: 125.00 (ft)
Base Elev: 0.000 (ft)
Gh: 0.85

Topography: 1

Code: TIA-222-H
Exposure: B
Crest Height: 0.00
Site Class: D - Default
Struct Class: II

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Linear Appurtenances Properties

Elev. From (ft)	Elev. To (ft)	Description	Qty	Width (in)	Weight (lb/ft)	Pct In Block	Spread On Faces	Bundling Arrangement	Cluster Dia (in)	Out of Zone	Spacing (in)	Orientation Factor	Ka Override
0.00	125.00	1 1/4" Coax	1	1.55	0.66	100.00	2	Individual NR		N	1.00	1.00	
0.00	125.00	1 5/8" Coax	9	1.98	1.04	50.00	3	Block		N	0.50	1.00	
0.00	125.00	1 5/8" Hybrid	2	2.00	1.10	50.00	3	Block		N	0.50	1.00	
0.00	125.00	1-1/4" Hybrid	2	1.25	0.95	50.00	3	Block		N	0.50	1.00	
0.00	125.00	1/2" Coax	2	0.65	0.16	100.00	2	Individual NR		N	1.00	1.00	
0.00	125.00	7/8" Coax	1	1.11	0.52	100.00	2	Individual NR		N	1.00	1.00	
0.00	125.00	7/8" Coax	4	1.11	0.52	100.00	2	Individual IR		N	1.00	1.00	
0.00	125.00	Climbing Ladder	1	3.00	6.90	100.00	1	Individual NR		N	1.00	1.00	
0.00	125.00	W/G Ladder	1	3.00	6.00	100.00	3	Individual NR		N	1.00	1.00	
0.00	125.00	W/G Ladder	1	2.00	6.00	100.00	2	Individual NR		N	1.00	1.00	
0.00	110.00	1 5/8" Coax	18	1.98	1.04	50.00	3	Block		N	0.50	1.00	
0.00	110.00	1 5/8" Fiber	1	2.00	1.10	100.00	3	Individual NR		N	1.00	1.00	
0.00	110.00	1/2" Coax	2	0.65	0.16	100.00	3	Individual NR		N	1.00	1.00	
0.00	110.00	W/G Ladder	1	2.00	6.00	100.00	3	Individual NR		N	1.00	1.00	
0.00	98.00	1/2" Coax	1	0.65	0.16	100.00	2	Individual IR		Y	1.00	1.00	0
0.00	98.00	1/2" Fiber	1	0.65	0.16	100.00	2	Individual IR		Y	1.00	1.00	0
0.00	98.00	3" Conduit	1	3.00	1.61	100.00	2	Individual NR		N	1.00	1.00	
0.00	98.00	3/4" DC	4	0.75	0.40	50.00	2	Block		N	0.50	1.00	
0.00	98.00	7/8" Coax	12	1.11	0.52	66.60	2	Block		N	0.50	1.00	
0.00	98.00	W/G Ladder	1	2.00	6.00	100.00	2	Individual NR		N	1.00	1.00	
0.00	98.00	W/G Ladder	4	1.55	0.66	100.00	1	Individual IR		N	1.00	1.00	
0.00	87.00	1 1/4" Coax	4	1.55	0.66	100.00	1	Individual IR		N	1.00	1.00	
0.00	87.00	W/G Ladder	1	2.00	6.00	100.00	1	Individual NR		N	1.00	1.00	
0.00	87.00	W/G Ladder	1	1.40	1.14	100.00	1	Individual NR		N	1.00	1.00	
0.00	77.00	1.411" Hybrid	1	1.40	1.14	100.00	1	Individual NR		N	1.00	1.00	
0.00	77.00	W/G Ladder	1	3.00	6.00	100.00	1	Individual NR		N	1.00	1.00	
0.00	65.00	1/2" Coax	1	0.65	0.16	100.00	2	Individual NR		N	1.00	1.00	

Section Forces

Structure: CT01725-A-SBA
Site Name: Bloomfield
Height: 125.00 (ft)
Base Elev: 0.000 (ft)
Gh: 0.85

Code: TIA-222-H
Exposure: B
Crest Height: 0.00
Site Class: D - Default
Struct Class: II

7/11/2023



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Topography: 1

Load Case: 1.2D + 1.0W Normal Wind		1.2D + 1.0W 120 mph Wind at Normal To Face	
Wind Load Factor:	1.00	Wind Importance Factor:	1.00
Dead Load Factor:	1.20	Ice Importance Factor:	1.00
Ice Dead Load Factor:	0.00		

Sect Seq	Wind Height (ft)	qz (psf)	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Ice Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)	
1	10.0	21.84	16.978	28.78	0.00	0.18	2.65	1.00	1.00	0.00	30.14	155.90	0.00	5,584.2	0.0	1483.60	2572.26	4,055.86	
2	30.0	21.86	18.717	22.10	0.00	0.19	2.63	1.00	1.00	0.00	30.14	155.90	0.00	4,977.9	0.0	1474.57	2574.43	4,049.00	
3	50.0	25.29	12.939	22.10	0.00	0.19	2.64	1.00	1.00	0.00	24.04	155.90	0.00	4,341.3	0.0	1362.11	2978.97	4,341.08	
4	70.0	27.84	11.598	18.56	0.00	0.20	2.61	1.00	1.00	0.00	21.41	153.99	0.00	3,922.2	0.0	1323.12	3238.47	4,561.58	
5	90.0	29.91	9.614	13.35	0.00	0.19	2.63	1.00	1.00	0.00	17.25	135.00	0.00	3,090.0	0.0	1155.54	3045.34	4,200.88	
6	110.0	31.68	6.277	9.59	0.00	0.18	2.68	1.00	1.00	0.00	11.75	75.18	0.00	1,931.5	0.0	846.75	1862.09	2,708.84	
7	122.5	32.67	1.223	3.24	0.00	0.24	2.47	1.00	1.00	0.00	3.14	13.15	0.00	452.6	0.0	215.49	338.82	554.31	
														24,299.7	0.0				24,471.54

Load Case: 1.2D + 1.0W 60° Wind		1.2D + 1.0W 120 mph Wind at 60° From Face	
Wind Load Factor:	1.00	Wind Importance Factor:	1.00
Dead Load Factor:	1.20	Ice Importance Factor:	1.00
Ice Dead Load Factor:	0.00		

Sect Seq	Wind Height (ft)	qz (psf)	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Ice Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)	
1	10.0	21.84	16.978	28.78	0.00	0.18	2.65	0.80	1.00	0.00	26.74	155.90	0.00	5,584.2	0.0	1316.44	2572.26	3,888.70	
2	30.0	21.86	18.717	22.10	0.00	0.19	2.63	0.80	1.00	0.00	26.40	155.90	0.00	4,977.9	0.0	1291.44	2574.43	3,865.87	
3	50.0	25.29	12.939	22.10	0.00	0.19	2.64	0.80	1.00	0.00	21.46	155.90	0.00	4,341.3	0.0	1215.51	2978.97	4,194.48	
4	70.0	27.84	11.598	18.56	0.00	0.20	2.61	0.80	1.00	0.00	19.09	153.99	0.00	3,922.2	0.0	1179.78	3238.47	4,418.25	
5	90.0	29.91	9.614	13.35	0.00	0.19	2.63	0.80	1.00	0.00	15.33	135.00	0.00	3,090.0	0.0	1026.75	3045.34	4,072.09	
6	110.0	31.68	6.277	9.59	0.00	0.18	2.68	0.80	1.00	0.00	10.50	75.18	0.00	1,931.5	0.0	756.30	1862.09	2,618.38	
7	122.5	32.67	1.223	3.24	0.00	0.24	2.47	0.80	1.00	0.00	2.90	13.15	0.00	452.6	0.0	198.70	338.82	537.52	
														24,299.7	0.0				23,595.28

Section Forces

Structure: CT01725-A-SBA
Site Name: Bloomfield
Height: 125.00 (ft)
Base Elev: 0.000 (ft)
Gh: 0.85

Topography: 1

Code: TIA-222-H
Exposure: B
Crest Height: 0.00
Site Class: D - Default
Struct Class: II

7/11/2023



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Load Case: 1.2D + 1.0W 90° Wind 1.2D + 1.0W 120 mph Wind at 90° From Face
Wind Load Factor: 1.00 **Wind Importance Factor:** 1.00
Dead Load Factor: 1.20 **Ice Importance Factor:** 1.00
Ice Dead Load Factor: 0.00

Sect Seq	Wind Height (ft)	qz (psf)	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Ice Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
1	10.0	21.84	16.978	28.78	0.00	0.18	2.65	0.85	1.00	0.00	27.59	155.90	0.00	5,584.2	0.0	1358.23	2572.26	3,930.49
2	30.0	21.86	18.717	22.10	0.00	0.19	2.63	0.85	1.00	0.00	27.33	155.90	0.00	4,977.9	0.0	1337.23	2574.43	3,911.65
3	50.0	25.29	12.939	22.10	0.00	0.19	2.64	0.85	1.00	0.00	22.10	155.90	0.00	4,341.3	0.0	1252.16	2978.97	4,231.13
4	70.0	27.84	11.598	18.56	0.00	0.20	2.61	0.85	1.00	0.00	19.67	153.99	0.00	3,922.2	0.0	1215.61	3238.47	4,454.08
5	90.0	29.91	9.614	13.35	0.00	0.19	2.63	0.85	1.00	0.00	15.81	135.00	0.00	3,090.0	0.0	1058.94	3045.34	4,104.29
6	110.0	31.68	6.277	9.59	0.00	0.18	2.68	0.85	1.00	0.00	10.81	75.18	0.00	1,931.5	0.0	778.91	1862.09	2,641.00
7	122.5	32.67	1.223	3.24	0.00	0.24	2.47	0.85	1.00	0.00	2.96	13.15	0.00	452.6	0.0	202.90	338.82	541.72
														24,299.7	0.0			23,814.35

Load Case: 0.9D + 1.0W Normal Wind 0.9D + 1.0W 120 mph Wind at Normal To Face
Wind Load Factor: 1.00 **Wind Importance Factor:** 1.00
Dead Load Factor: 0.90 **Ice Importance Factor:** 1.00
Ice Dead Load Factor: 0.00

Sect Seq	Wind Height (ft)	qz (psf)	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Ice Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
1	10.0	21.84	16.978	28.78	0.00	0.18	2.65	1.00	1.00	0.00	30.14	155.90	0.00	4,188.1	0.0	1483.60	2572.26	4,055.86
2	30.0	21.86	18.717	22.10	0.00	0.19	2.63	1.00	1.00	0.00	30.14	155.90	0.00	3,733.4	0.0	1474.57	2574.43	4,049.00
3	50.0	25.29	12.939	22.10	0.00	0.19	2.64	1.00	1.00	0.00	24.04	155.90	0.00	3,256.0	0.0	1362.11	2978.97	4,341.08
4	70.0	27.84	11.598	18.56	0.00	0.20	2.61	1.00	1.00	0.00	21.41	153.99	0.00	2,941.6	0.0	1323.12	3238.47	4,561.58
5	90.0	29.91	9.614	13.35	0.00	0.19	2.63	1.00	1.00	0.00	17.25	135.00	0.00	2,317.5	0.0	1155.54	3045.34	4,200.88
6	110.0	31.68	6.277	9.59	0.00	0.18	2.68	1.00	1.00	0.00	11.75	75.18	0.00	1,448.7	0.0	846.75	1862.09	2,708.84
7	122.5	32.67	1.223	3.24	0.00	0.24	2.47	1.00	1.00	0.00	3.14	13.15	0.00	339.5	0.0	215.49	338.82	554.31
														18,224.8	0.0			24,471.54

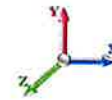
Section Forces

Structure: CT01725-A-SBA
Site Name: Bloomfield
Height: 125.00 (ft)
Base Elev: 0.000 (ft)
Gh: 0.85

Topography: 1

Code: TIA-222-H
Exposure: B
Crest Height: 0.00
Site Class: D - Default
Struct Class: II

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Load Case: 0.9D + 1.0W 60° Wind

0.9D + 1.0W 120 mph Wind at 60° From Face

Wind Load Factor: 1.00
Dead Load Factor: 0.90
Ice Dead Load Factor: 0.00

Wind Importance Factor: 1.00

Ice Importance Factor: 1.00

Sect Seq	Wind Height (ft)	qz (psf)	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
1	10.0	21.84	16.978	28.78	0.00	0.18	2.65	0.80	1.00	0.00	26.74	155.90	0.00	4,188.1	0.0	1316.44	2572.26	3,888.70
2	30.0	21.86	18.717	22.10	0.00	0.19	2.63	0.80	1.00	0.00	26.40	155.90	0.00	3,733.4	0.0	1291.44	2574.43	3,865.87
3	50.0	25.29	12.939	22.10	0.00	0.19	2.64	0.80	1.00	0.00	21.46	155.90	0.00	3,256.0	0.0	1215.51	2978.97	4,194.48
4	70.0	27.84	11.598	18.56	0.00	0.20	2.61	0.80	1.00	0.00	19.09	153.99	0.00	2,941.6	0.0	1179.78	3238.47	4,418.25
5	90.0	29.91	9.614	13.35	0.00	0.19	2.63	0.80	1.00	0.00	15.33	135.00	0.00	2,317.5	0.0	1026.75	3045.34	4,072.09
6	110.0	31.68	6.277	9.59	0.00	0.18	2.68	0.80	1.00	0.00	10.50	75.18	0.00	1,448.7	0.0	756.30	1862.09	2,618.38
7	122.5	32.67	1.223	3.24	0.00	0.24	2.47	0.80	1.00	0.00	2.90	13.15	0.00	339.5	0.0	198.70	338.82	537.52
														18,224.8	0.0			

Load Case: 0.9D + 1.0W 90° Wind

0.9D + 1.0W 120 mph Wind at 90° From Face

Wind Load Factor: 1.00
Dead Load Factor: 0.90
Ice Dead Load Factor: 0.00

Wind Importance Factor: 1.00

Ice Importance Factor: 1.00

Sect Seq	Wind Height (ft)	qz (psf)	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
1	10.0	21.84	16.978	28.78	0.00	0.18	2.65	0.85	1.00	0.00	27.59	155.90	0.00	4,188.1	0.0	1358.23	2572.26	3,930.49
2	30.0	21.86	18.717	22.10	0.00	0.19	2.63	0.85	1.00	0.00	27.33	155.90	0.00	3,733.4	0.0	1337.23	2574.43	3,911.65
3	50.0	25.29	12.939	22.10	0.00	0.19	2.64	0.85	1.00	0.00	22.10	155.90	0.00	3,256.0	0.0	1252.16	2978.97	4,231.13
4	70.0	27.84	11.598	18.56	0.00	0.20	2.61	0.85	1.00	0.00	19.67	153.99	0.00	2,941.6	0.0	1215.61	3238.47	4,454.08
5	90.0	29.91	9.614	13.35	0.00	0.19	2.63	0.85	1.00	0.00	15.81	135.00	0.00	2,317.5	0.0	1058.94	3045.34	4,104.29
6	110.0	31.68	6.277	9.59	0.00	0.18	2.68	0.85	1.00	0.00	10.81	75.18	0.00	1,448.7	0.0	778.91	1862.09	2,641.00
7	122.5	32.67	1.223	3.24	0.00	0.24	2.47	0.85	1.00	0.00	2.96	13.15	0.00	339.5	0.0	202.90	338.82	541.72
														18,224.8	0.0			

Section Forces

Structure: CT01725-A-SBA
Site Name: Bloomfield
Height: 125.00 (ft)
Base Elev: 0.000 (ft)
Gh: 0.85

Topography: 1

Code: TIA-222-H
Exposure: B
Crest Height: 0.00
Site Class: D - Default
Struct Class: II

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Load Case: 1.2D + 1.0Di + 1.0Wi Normal Wind	1.2D + 1.0Di + 1.0Wi 50 mph Wind at Normal From Face
Wind Load Factor: 1.00	Wind Importance Factor: 1.00
Dead Load Factor: 1.20	
Ice Dead Load Factor: 1.00	Ice Importance Factor: 1.00

Sect Seq	Wind Height (ft)	Total		Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Ice Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
		Flat Area (sqft)	Round Area (sqft)														
1	10.0	3.79	16.978	51.21	0.27	2.38	1.00	1.00	1.33	47.18	230.89	53.25	12,839.	7254.8	362.29	887.49	1,249.79
2	30.0	3.79	18.717	46.03	0.29	2.31	1.00	1.00	1.49	46.19	238.62	59.43	13,316.	8338.3	344.84	926.15	1,270.98
3	50.0	4.39	12.939	49.59	0.33	2.23	1.00	1.00	1.56	43.08	242.51	62.55	12,577.	8236.3	358.00	1086.30	1,444.29
4	70.0	4.83	11.598	45.11	0.36	2.16	1.00	1.00	1.62	39.47	242.47	59.83	12,067.	8145.1	350.26	1177.86	1,377.60
5	90.0	5.19	9.614	41.09	0.40	2.07	1.00	1.00	1.66	35.73	208.88	53.62	10,335.	7245.1	326.02	1077.25	1,403.27
6	110.0	5.50	6.277	35.58	0.44	1.99	1.00	1.00	1.69	29.54	125.30	31.02	6,692.7	4761.2	275.20	629.15	904.34
7	122.5	5.67	1.223	13.99	0.76	1.79	1.00	1.00	1.71	13.18	24.37	5.70	1,660.5	1207.9	113.77	54.96	168.72
													69,488.4	45188.7			7,819.00

Load Case: 1.2D + 1.0Di + 1.0Wi 60° Wind	1.2D + 1.0Di + 1.0Wi 50 mph Wind at 60° From Face
Wind Load Factor: 1.00	Wind Importance Factor: 1.00
Dead Load Factor: 1.20	
Ice Dead Load Factor: 1.00	Ice Importance Factor: 1.00

Sect Seq	Wind Height (ft)	Total		Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Ice Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
		Flat Area (sqft)	Round Area (sqft)														
1	10.0	3.79	16.978	51.21	0.27	2.38	0.80	1.00	1.33	43.79	230.89	53.25	12,839.	7254.8	336.22	887.49	1,223.71
2	30.0	3.79	18.717	46.03	0.29	2.31	0.80	1.00	1.49	42.45	238.62	59.43	13,316.	8338.3	316.89	926.15	1,243.04
3	50.0	4.39	12.939	49.59	0.33	2.23	0.80	1.00	1.56	40.49	242.51	62.55	12,577.	8236.3	336.49	1086.30	1,422.79
4	70.0	4.83	11.598	45.11	0.36	2.16	0.80	1.00	1.62	37.15	242.47	59.83	12,067.	8145.1	329.67	1177.86	1,507.54
5	90.0	5.19	9.614	41.09	0.40	2.07	0.80	1.00	1.66	33.81	208.88	53.62	10,335.	7245.1	308.48	1077.25	1,385.73
6	110.0	5.50	6.277	35.58	0.44	1.99	0.80	1.00	1.69	28.29	125.30	31.02	6,692.7	4761.2	263.50	629.15	892.65
7	122.5	5.67	1.223	13.99	0.76	1.79	0.80	1.00	1.71	12.94	24.37	5.70	1,660.5	1207.9	111.66	54.96	166.61
													69,488.4	45188.7			7,842.06

Section Forces

Structure: CT01725-A-SBA
Site Name: Bloomfield
Height: 125.00 (ft)
Base Elev: 0.000 (ft)
Gh: 0.85

Topography: 1

Code: TIA-222-H
Exposure: B
Crest Height: 0.00
Site Class: D - Default
Struct Class: II

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Load Case: 1.2D + 1.0Di + 1.0Wi 90° Wind

1.2D + 1.0Di + 1.0Wi 50 mph Wind at 90° From Face

Wind Load Factor: 1.00	Wind Importance Factor: 1.00
Dead Load Factor: 1.20	Ice Importance Factor: 1.00
Ice Dead Load Factor: 1.00	

Sect Seq	Wind Height (ft)	Total Flat Area (psf) (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Ice		Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)	
											Linear Area (sqft)	Linear Area (sqft)						
1	10.0	3.79 16.978	51.21	22.44	0.27	2.38	0.85	1.00	1.33	44.64	230.89	53.25	12,839.	7254.8	342.74	887.49	1,230.23	
2	30.0	3.79 18.717	46.03	23.93	0.29	2.31	0.85	1.00	1.49	43.38	238.62	59.43	13,316.	8338.3	323.88	926.15	1,250.02	
3	50.0	4.39 12.939	49.59	27.48	0.33	2.23	0.85	1.00	1.56	41.14	242.51	62.55	12,577.	8236.3	341.87	1086.30	1,428.16	
4	70.0	4.83 11.598	45.11	26.55	0.36	2.16	0.85	1.00	1.62	37.73	242.47	59.83	12,067.	8145.1	334.82	1177.86	1,512.68	
5	90.0	5.19 9.614	41.09	27.75	0.40	2.07	0.85	1.00	1.66	34.29	208.88	53.62	10,335.	7245.1	312.86	1077.25	1,390.11	
6	110.0	5.50 6.277	35.58	25.99	0.44	1.99	0.85	1.00	1.69	28.60	125.30	31.02	6,692.7	4761.2	266.43	629.15	895.57	
7	122.5	5.67 1.223	13.99	10.75	0.76	1.79	0.85	1.00	1.71	13.00	24.37	5.70	1,660.5	1207.9	112.18	54.96	167.14	
													69,488.4	45188.7				7,873.93

Load Case: 1.0D + 1.0W Normal Wind

1.0D + 1.0W 60 mph Wind at Normal To Face

Wind Load Factor: 1.00	Wind Importance Factor: 1.00
Dead Load Factor: 1.00	Ice Importance Factor: 1.00
Ice Dead Load Factor: 0.00	

Sect Seq	Wind Height (ft)	Total Flat Area (psf) (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Ice		Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)	
											Linear Area (sqft)	Linear Area (sqft)						
1	10.0	5.46 16.978	28.78	0.00	0.18	2.65	1.00	1.00	0.00	33.43	155.90	0.00	4,653.5	0.0	411.45	643.06	1,054.52	
2	30.0	5.46 18.717	22.10	0.00	0.19	2.63	1.00	1.00	0.00	31.37	155.90	0.00	4,148.2	0.0	383.71	643.61	1,027.32	
3	50.0	6.32 12.939	22.10	0.00	0.19	2.64	1.00	1.00	0.00	25.59	155.90	0.00	3,617.8	0.0	362.49	744.74	1,107.23	
4	70.0	6.96 11.598	18.56	0.00	0.20	2.61	1.00	1.00	0.00	22.25	153.99	0.00	3,268.5	0.0	343.67	809.62	1,153.29	
5	90.0	7.48 9.614	13.35	0.00	0.19	2.63	1.00	1.00	0.00	17.26	135.00	0.00	2,575.0	0.0	288.95	761.34	1,050.28	
6	110.0	7.92 6.277	9.59	0.00	0.18	2.68	1.00	1.00	0.00	11.75	75.18	0.00	1,609.6	0.0	211.69	465.52	677.21	
7	122.5	8.17 1.223	3.24	0.00	0.24	2.47	1.00	1.00	0.00	3.14	13.15	0.00	377.2	0.0	53.87	84.70	138.58	
													20,249.7	0.0				6,208.43

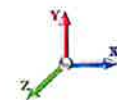
Section Forces

Structure: CT01725-A-SBA
Site Name: Bloomfield
Height: 125.00 (ft)
Base Elev: 0.000 (ft)
Gh: 0.85

Topography: 1

Code: TIA-222-H
Exposure: B
Crest Height: 0.00
Site Class: D - Default
Struct Class: II

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Load Case: 1.0D + 1.0W 60° Wind

1.0D + 1.0W 60 mph Wind at 60° From Face

Wind Load Factor: 1.00
Dead Load Factor: 1.00
Ice Dead Load Factor: 0.00

Wind Importance Factor: 1.00

Ice Importance Factor: 1.00

Sect Seq	Wind Height (ft)	qz (psf)	Total		Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Ice		Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
			Flat Area (sqft)	Round Area (sqft)								Linear Area (sqft)	Linear Area (sqft)					
1	10.0	5.46	16.978	28.78	0.00	0.18	2.65	0.80	1.00	0.00	30.04	155.90	0.00	4,653.5	0.0	369.66	643.06	1,012.73
2	30.0	5.46	18.717	22.10	0.00	0.19	2.63	0.80	1.00	0.00	27.63	155.90	0.00	4,148.2	0.0	337.93	643.61	981.54
3	50.0	6.32	12.939	22.10	0.00	0.19	2.64	0.80	1.00	0.00	23.01	155.90	0.00	3,617.8	0.0	325.84	744.74	1,070.58
4	70.0	6.96	11.598	18.56	0.00	0.20	2.61	0.80	1.00	0.00	19.93	153.99	0.00	3,268.5	0.0	307.84	809.62	1,117.46
5	90.0	7.48	9.614	13.35	0.00	0.19	2.63	0.80	1.00	0.00	15.33	135.00	0.00	2,575.0	0.0	256.75	761.34	1,018.09
6	110.0	7.92	6.277	9.59	0.00	0.18	2.68	0.80	1.00	0.00	10.50	75.18	0.00	1,609.6	0.0	189.07	465.52	654.60
7	122.5	8.17	1.223	3.24	0.00	0.24	2.47	0.80	1.00	0.00	2.90	13.15	0.00	377.2	0.0	49.68	84.70	134.38
														20,249.7	0.0			5,989.37

Load Case: 1.0D + 1.0W 90° Wind

1.0D + 1.0W 60 mph Wind at 90° From Face

Wind Load Factor: 1.00
Dead Load Factor: 1.00
Ice Dead Load Factor: 0.00

Wind Importance Factor: 1.00

Ice Importance Factor: 1.00

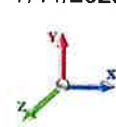
Sect Seq	Wind Height (ft)	qz (psf)	Total		Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Ice		Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
			Flat Area (sqft)	Round Area (sqft)								Linear Area (sqft)	Linear Area (sqft)					
1	10.0	5.46	16.978	28.78	0.00	0.18	2.65	0.85	1.00	0.00	30.89	155.90	0.00	4,653.5	0.0	380.11	643.06	1,023.17
2	30.0	5.46	18.717	22.10	0.00	0.19	2.63	0.85	1.00	0.00	28.57	155.90	0.00	4,148.2	0.0	349.38	643.61	992.98
3	50.0	6.32	12.939	22.10	0.00	0.19	2.64	0.85	1.00	0.00	23.65	155.90	0.00	3,617.8	0.0	335.00	744.74	1,079.75
4	70.0	6.96	11.598	18.56	0.00	0.20	2.61	0.85	1.00	0.00	20.51	153.99	0.00	3,268.5	0.0	316.80	809.62	1,126.42
5	90.0	7.48	9.614	13.35	0.00	0.19	2.63	0.85	1.00	0.00	15.81	135.00	0.00	2,575.0	0.0	264.80	761.34	1,026.14
6	110.0	7.92	6.277	9.59	0.00	0.18	2.68	0.85	1.00	0.00	10.81	75.18	0.00	1,609.6	0.0	194.73	465.52	660.25
7	122.5	8.17	1.223	3.24	0.00	0.24	2.47	0.85	1.00	0.00	2.96	13.15	0.00	377.2	0.0	50.73	84.70	135.43
														20,249.7	0.0			6,044.13

Force/Stress Compression Summary

Structure: CT01725-A-SBA
Site Name: Bloomfield
Height: 125.00 (ft)
Base Elev: 0.000 (ft)
Gh: 0.85

Code: EIA/TIA-222-H
Exposure: B
Crest Height: 0.00
Site Class: D - Default
Struct Class: II

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LEG MEMBERS

Sect	Top Elev	Member	Force (kips)	Load Case	Len (ft)	Bracing %			Fy (ksi)	Mem Cap (kips)	Leg Use %	Controls
						X	Y	Z				
1	20	PST - 8" DIA PIPE	-284.67	1.2D + 1.0W Normal Wind	9.76	100	100	100	39.83	55.00	365.98	77.8 Member X
2	40	PST - 6" DIA PIPE	-244.69	1.2D + 1.0W Normal Wind	9.76	50	50	50	26.02	55.00	261.57	93.5 Member X
3	60	PST - 6" DIA PIPE	-203.53	1.2D + 1.0W Normal Wind	6.51	100	100	100	34.70	55.00	250.72	81.2 Member X
4	80	PST - 5" DIA PIPE	-153.60	1.2D + 1.0W Normal Wind	6.51	100	100	100	41.53	55.00	185.28	82.9 Member X
5	100	PST - 3-1/2" DIA PIPE	-100.19	1.2D + 1.0W Normal Wind	4.88	100	100	100	43.70	55.00	113.77	88.1 Member X
6	120	PST - 2-1/2" DIA PIPE	-46.48	1.2D + 1.0W Normal Wind	4.94	100	100	100	62.62	55.00	61.53	75.5 Member X
7	125	PST - 2-1/2" DIA PIPE	-11.73	1.2D + 1.0W Normal Wind	2.50	100	100	100	31.68	55.00	77.81	15.1 Member X

Splices

Sect	Top Elev	Load Case	Top Splice			Bolt Type	Num Bolts	Bottom Splice					
			Force (kips)	Cap (kips)	Use %			Force (kips)	Cap (kips)	Use %	Bolt Type	Num Bolts	
1	20	1.2D + 1.0W Normal Wind	256.84	0.00	0.0			1.2D + 1.0W Normal Wind	296.61	0.00			
2	40	1.2D + 1.0W Normal Wind	212.32	0.00	0.0			1.2D + 1.0W Normal Wind	256.84	0.00		1/4 A325	8
3	60	1.2D + 1.0W Normal Wind	163.30	0.00	0.0			1.2D + 1.0W Normal Wind	212.32	0.00		1 A325	8
4	80	1.2D + 1.0W Normal Wind	107.78	0.00	0.0			1.2D + 1.0W Normal Wind	163.30	0.00		1 A325	8
5	100	1.2D + 1.0W Normal Wind	52.07	0.00	0.0			1.2D + 1.0W Normal Wind	107.78	0.00		1 A325	6
6	120	1.2D + 1.0W Normal Wind	14.47	0.00	0.0			1.2D + 1.0W Normal Wind	52.07	0.00		3/4 A325	6
7	125	1.2D + 1.0Di + 1.0Wi 90° Wind	4.17	0.00	0.0			1.2D + 1.0W Normal Wind	14.47	0.00		3/4 A325	4

HORIZONTAL MEMBERS

Sect	Top Elev	Member	Force (kips)	Load Case	Len (ft)	Bracing %			Fy (ksi)	Mem Cap (kips)	Num Bolts	Num Holes	Shear Bear		Use %	Controls
						X	Y	Z					Cap (kips)	Cap (kips)		
1	20								0.00	0	0					
2	40								0.00	0	0					
3	60								0.00	0	0					
4	80								0.00	0	0					
5	100								0.00	0	0					
6	120								0.00	0	0					
7	125	SAE - 1.5X1.5X0.1875	-3.96	1.2D + 1.0W Normal Wind	3.50	100	100	100	100.34	36.00	13.04	2	1	39.74	31.32	30.3 Member Z

DIAGONAL MEMBERS

Sect	Top Elev	Member	Force (kips)	Load Case	Len (ft)	Bracing %			Fy (ksi)	Mem Cap (kips)	Num Bolts	Num Holes	Shear Bear		Use %	Controls
						X	Y	Z					Cap (kips)	Cap (kips)		
1	20	SAE - 3.5X3.5X0.25	-9.05	0.9D + 1.0W 90° Wind	14.99	50	50	50	129.60	36.00	28.80	1	1	13.81	17.4	65.5 Bolt Shear
2	40	SAE - 3X3X0.25	-9.46	1.2D + 1.0W 90° Wind	13.89	50	50	50	140.73	36.00	20.81	1	1	13.81	17.4	68.5 Bolt Shear
3	60	SAE - 2.5X2.5X0.1875	-8.12	1.2D + 1.0W 90° Wind	10.51	50	50	50	127.44	36.00	15.90	1	1	13.81	13.0	62.2 Bolt Bear
4	80	SAE - 2.5X2.5X0.1875	-8.42	1.2D + 1.0W 90° Wind	9.38	50	50	50	115.28	36.00	18.90	2	1	17.66	20.8	47.7 Bolt Shear
5	100	SAE - 2X2X0.1875	-6.37	1.2D + 1.0W 90° Wind	7.97	50	50	50	121.30	36.00	13.73	1	1	8.83	10.4	72.2 Bolt Shear
6	120	SAE - 1.5X1.5X0.1875	-4.10	1.2D + 1.0W 90° Wind	6.88	50	50	50	140.97	36.00	7.63	1	1	8.83	10.4	53.7 Member Z
7	125	SOL - 5/8" SOLID	-2.32	1.2D + 1.0W Normal Wind	4.30	50	50	50	148.89	36.00	3.13	0	0			T-Only

Force/Stress Tension Summary

Structure: CT01725-A-SBA

Code: EIA/TIA-222-H

7/11/2023

Site Name: Bloomfield

Exposure: B



Height: 125.00 (ft)

Crest Height: 0.00

Base Elev: 0.000 (ft)

Site Class: D - Default

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Gh: 0.85

Topography: 1

Struct Class: II

LEG MEMBERS

Sect	Top Elev	Member	Force (kips)	Load Case	Fy (ksi)	Mem	Leg Use %	Controls
						Cap (kips)		
1	20	PST - 8" DIA PIPE	265.14	0.9D + 1.0W 60° Wind	55	415.80	63.8	Member
2	40	PST - 6" DIA PIPE	228.58	0.9D + 1.0W 60° Wind	55	276.21	82.8	Member
3	60	PST - 6" DIA PIPE	187.73	0.9D + 1.0W 60° Wind	55	276.21	68.0	Member
4	80	PST - 5" DIA PIPE	141.97	0.9D + 1.0W 60° Wind	55	212.85	66.7	Member
5	100	PST - 3-1/2" DIA PIPE	90.52	0.9D + 1.0W 60° Wind	55	132.66	68.2	Member
6	120	PST - 2-1/2" DIA PIPE	40.90	0.9D + 1.0W 60° Wind	55	84.35	48.5	Member
7	125	PST - 2-1/2" DIA PIPE	4.09	0.9D + 1.0W Normal Wind	55	84.35	4.8	Member

Splices

Sect	Top Elev	Load Case	Top Splice					Bottom Splice					
			Force (kips)	Cap (kips)	Use %	Bolt Type	Num Bolts	Load Case	Force (kips)	Cap (kips)	Use %	Bolt Type	Num Bolts
1	20	0.9D + 1.0W 60° Wind	228.32	0.00	0.0			0.9D + 1.0W 60° Wind	265.1	0.00			
2	40	0.9D + 1.0W 60° Wind	187.43	0.00	0.0			0.9D + 1.0W 60° Wind	228.3	610.56	37.4	1 1/4 A325	8
3	60	0.9D + 1.0W 60° Wind	141.76	0.00	0.0			0.9D + 1.0W 60° Wind	187.4	424.08	44.2	1 A325	8
4	80	0.9D + 1.0W 60° Wind	90.34	0.00	0.0			0.9D + 1.0W 60° Wind	141.7	424.08	33.4	1 A325	8
5	100	0.9D + 1.0W 60° Wind	40.71	0.00	0.0			0.9D + 1.0W 60° Wind	90.34	318.06	28.4	1 A325	6
6	120	0.9D + 1.0W 60° Wind	5.62	0.00	0.0			0.9D + 1.0W 60° Wind	40.71	180.60	22.5	3/4 A325	6
7	125		0.00	0.00	0.0			0.9D + 1.0W 60° Wind	5.62	120.40	4.7	3/4 A325	4

HORIZONTAL MEMBERS

Sect	Top Elev	Member	Force (kips)	Load Case	Fy (ksi)	Mem	Num Bolts	Num Holes	Shear Cap (kips)	Bear Cap (kips)	B.S. Cap (kips)	Use %	Controls
						Cap (kips)							
1	20	-			36	0.00	0	0					
2	40	-			36	0.00	0	0					
3	60	-			36	0.00	0	0					
4	80	-			36	0.00	0	0					
5	100	-			36	0.00	0	0					
6	120	-			36	0.00	0	0					
7	125	SAE - 1.5X1.5X0.1875	1.92	1.2D + 1.0W Normal Wi	36	15.92	2	1	39.74	27.73	13.18	14.5	Blck Shear

DIAGONAL MEMBERS

Sect	Top Elev	Member	Force (kips)	Load Case	Fy (ksi)	Mem	Num Bolts	Num Holes	Shear Cap (kips)	Bear Cap (kips)	B.S. Cap (kips)	Use %	Controls
						Cap (kips)							
1	20	SAE - 3.5X3.5X0.25	8.65	0.9D + 1.0W 90° Wind	36	54.76	1	1	13.81	13.05	16.79	66.3	Bolt Bear
2	40	SAE - 3X3X0.25	8.73	0.9D + 1.0W 90° Wind	36	46.66	1	1	13.81	13.05	14.07	66.9	Bolt Bear
3	60	SAE - 2.5X2.5X0.1875	7.87	1.2D + 1.0W 90° Wind	36	29.22	1	1	13.81	9.79	9.53	82.6	Blck Shear
4	80	SAE - 2.5X2.5X0.1875	8.14	1.2D + 1.0W 90° Wind	36	29.22	2	1	17.66	18.60	13.66	59.6	Blck Shear
5	100	SAE - 2X2X0.1875	6.25	1.2D + 1.0W 90° Wind	36	23.00	1	1	8.83	7.50	7.25	86.2	Blck Shear
6	120	SAE - 1.5X1.5X0.1875	4.11	1.2D + 1.0W 90° Wind	36	17.17	1	1	8.83	7.50	5.21	78.9	Blck Shear
7	125	SOL - 5/8" SOLID	7.31	1.2D + 1.0W Normal Wi	36	9.94	0	0				73.5	Member

Seismic Section Forces

Structure: CT01725-A-SBA

Code: TIA-222-H

7/11/2023

Site Name: Bloomfield

Exposure: B

Height: 125.00 (ft)

Crest Height: 0.00

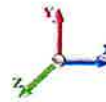
Base Elev: 0.000 (ft)

Site Class: D - Default

Gh: 0.85

Topography: 1

Struct Class: II



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Load Case: 1.2D + 1.0Ev + 1.0Eh

Dead Load Factor	1.20	Sds 0.195	Ss 0.1830	Fa 1.6000	Ke 1.0000	TL 6.0000
Seismic Load Factor	1.00	Sd1 0.088	S1 0.0550	Fv 2.4000	Kg 0.0000	Cs 0.0596
Seismic Importance Factor	1.00	W1 19.53	R 3.0000	Vs 2.1501	T 0.4925	f1 2.0304

Sect #	Elev (ft)	Wz (lb)	Lateral Fsz (lbs)	Vertical Ev (lbs)
1	10.00	4653.4	38.04	181.76
2	30.00	4148.2	101.73	162.03
3	50.00	3617.7	147.87	141.31
4	70.00	5182.9	296.57	202.44
5	90.00	8915.6	655.93	348.24
6	110.00	4676.3	420.49	182.65
7	122.50	4887.9	489.47	190.92

Load Case: 0.9D + 1.0Ev + 1.0Eh

Dead Load Factor	0.90	Sds 0.195	Ss 0.1830	Fa 1.6000	Ke 1.0000	TL 6.0000
Seismic Load Factor	1.00	Sd1 0.088	S1 0.0550	Fv 2.4000	Kg 0.0000	Cs 0.0596
Seismic Importance Factor	1.00	W1 19.53	R 3.0000	Vs 2.1501	T 0.4925	f1 2.0304

Sect #	Elev (ft)	Wz (lb)	Lateral Fsz (lbs)	Vertical Ev (lbs)
1	10.00	4653.4	38.04	181.76
2	30.00	4148.2	101.73	162.03
3	50.00	3617.7	147.87	141.31
4	70.00	5182.9	296.57	202.44
5	90.00	8915.6	655.93	348.24
6	110.00	4676.3	420.49	182.65
7	122.50	4887.9	489.47	190.92

Support Forces Summary

Structure: CT01725-A-SBA
Site Name: Bloomfield
Height: 125.00 (ft)
Base Elev: 0.000 (ft)
Gh: 0.85

Topography: 1

Code: TIA-222-H
Exposure: B
Crest Height: 0.00
Site Class: D - Default
Struct Class: II

7/11/2023



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Load Case	Node	FX (kips)	FY (kips)	FZ (kips)	(-) = Uplift (+) = Down
1.2D + 1.0W Normal Wind	1	0.00	296.19	-25.07	
	1a	9.30	-126.45	-6.92	
	1b	-9.30	-126.45	-6.92	
1.2D + 1.0W 60° Wind	1	-1.34	153.04	-12.61	
	1a	-11.55	151.50	5.14	
	1b	-20.05	-261.25	-11.55	
1.2D + 1.0W 90° Wind	1	-1.56	14.45	-0.67	
	1a	-18.95	253.70	10.03	
	1b	-17.75	-224.85	-9.37	
0.9D + 1.0W Normal Wind	1	0.00	291.82	-24.85	
	1a	9.47	-129.67	-7.03	
	1b	-9.47	-129.67	-7.03	
0.9D + 1.0W 60° Wind	1	-1.35	149.06	-12.39	
	1a	-11.37	147.53	5.03	
	1b	-20.22	-264.11	-11.65	
0.9D + 1.0W 90° Wind	1	-1.57	10.84	-0.46	
	1a	-18.77	249.45	9.92	
	1b	-17.92	-227.82	-9.46	
1.2D + 1.0Di + 1.0Wi Normal Wind	1	0.00	121.21	-8.07	
	1a	2.35	-6.67	-1.82	
	1b	-2.35	-6.67	-1.82	
1.2D + 1.0Di + 1.0Wi 60° Wind	1	-0.41	78.85	-4.41	
	1a	-4.01	78.14	1.85	
	1b	-5.75	-49.11	-3.31	
1.2D + 1.0Di + 1.0Wi 90° Wind	1	-0.48	35.96	-0.72	
	1a	-6.28	109.56	3.35	
	1b	-5.02	-37.64	-2.62	
1.2D + 1.0Ev + 1.0Eh	1	0.00	33.34	0.62	
	1a	2.37	5.68	-1.37	
	1b	-2.37	5.68	-1.37	
0.9D + 1.0Ev + 1.0Eh	1	0.00	29.68	0.83	
	1a	2.55	2.10	-1.48	
	1b	-2.55	2.10	-1.48	
1.0D + 1.0W Normal Wind	1	0.00	82.36	-6.81	
	1a	1.88	-23.14	-1.49	
	1b	-1.88	-23.14	-1.49	
1.0D + 1.0W 60° Wind	1	-0.35	46.75	-3.69	
	1a	-3.36	46.37	1.55	
	1b	-4.61	-57.04	-2.66	
1.0D + 1.0W 90° Wind	1	-0.40	12.03	-0.68	
	1a	-5.22	71.97	2.78	
	1b	-4.03	-47.92	-2.10	

Max Reactions

Leg**Overturning**

Max Uplift:	-264.11 (kips)	Moment:	3050.10 (ft-kips)
Max Down:	296.19 (kips)	Total Down:	43.30 (kips)
Max Shear:	25.07 (kips)	Total Shear:	38.92 (kips)

Analysis Summary

Structure: CT01725-A-SBA	Code: TIA-222-H	7/11/2023
Site Name: Bloomfield	Exposure: B	
Height: 125.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Default	
Gh: 0.85	Topography: 1	Struct Class: II
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Max Reactions

Leg	Overturning	
Max Uplift: -264.11 (kips)	Moment: 3050.10 (ft-kips)	
Max Down: 296.19 (kips)	Total Down: 43.30 (kips)	
Max Shear: 25.07 (kips)	Total Shear: 38.92 (kips)	

Anchor Bolts

Bolt Size (in.): 1.50	Number Bolts: 8	Type: UnGrouted
Yield Strength (Ksi): 36.00	Tensile Strength (Ksi): 58.00	
	Length: 1.00	

Interaction Ratios:

Tensile: **0.55** Compression: **0.66**

Max Usages

Max Leg: 93.5% (1.2D + 1.0W Normal Wind - Sect 2)
 Max Diag: 86.2% (1.2D + 1.0W 90° Wind - Sect 5)
 Max Horiz: 30.3% (1.2D + 1.0W Normal Wind - Sect 7)

Max Deflection, Twist and Sway

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)
0.9D + 1.0Ev + 1.0Eh - Normal To Face	66.75	0.0315	0.0021	0.0569
	79.75	0.0459	0.0026	0.0750
	85.13	0.0528	0.0028	0.0762
	94.88	0.0668	0.0031	0.0875
	99.75	0.0746	-0.0035	0.1030
	100.00	0.0750	0.0035	0.1045
	110.13	0.0927	-0.0036	0.1066
	125.00	0.1215	-0.0036	0.1127
0.9D + 1.0W 120 mph Wind at 60° From Face	66.75	0.4464	0.0939	0.7883
	79.75	0.6460	0.1279	1.0410
	85.13	0.7415	0.1620	1.0457
	94.88	0.9335	0.2287	1.1957
	99.75	1.0377	0.2649	1.3808
	100.00	1.0438	0.2668	1.3983
	110.13	1.2801	0.4697	1.4209
	125.00	1.6561	0.7556	1.3442
0.9D + 1.0W 120 mph Wind at 90° From Face	66.75	0.4454	-0.0388	0.7853
	79.75	0.6450	-0.0497	1.0293
	85.13	0.7402	-0.0544	1.0446
	94.88	0.9314	-0.0656	1.1934
	99.75	1.0358	-0.0729	1.3612
	100.00	1.0418	-0.0732	1.3760
	110.13	1.2765	-0.0919	1.3946
	125.00	1.6469	-0.1083	0.9263

0.9D + 1.0W 120 mph Wind at Normal To Face	66.75	0.4546	0.0299	0.8024
	79.75	0.6583	0.0373	1.0646
	85.13	0.7558	0.0398	1.0676
	94.88	0.9528	0.0454	1.2238
	99.75	1.0608	0.0485	1.4181
	100.00	1.0668	0.0484	1.4365
	110.13	1.3117	0.0511	1.4645
	125.00	1.7128	0.0548	2.2203
1.0D + 1.0W 60 mph Wind at 60° From Face	66.75	0.1117	0.0116	0.1971
	79.75	0.1617	0.0152	0.2615
	85.13	0.1856	0.0178	0.2608
	94.88	0.2337	0.0233	0.2982
	99.75	0.2600	0.0264	0.3479
	100.00	0.2615	0.0266	0.3522
	110.13	0.3207	0.0406	0.3527
	125.00	0.4149	0.0598	0.3323
1.0D + 1.0W 60 mph Wind at 90° From Face	66.75	0.1119	-0.0096	0.1970
	79.75	0.1619	-0.0123	0.2583
	85.13	0.1857	-0.0134	0.2619
	94.88	0.2337	-0.0161	0.2992
	99.75	0.2598	-0.0179	0.3426
	100.00	0.2612	-0.0180	0.3461
	110.13	0.3201	-0.0225	0.3496
	125.00	0.4129	-0.0265	0.2329
1.0D + 1.0W 60 mph Wind at Normal To Face	66.75	0.1140	0.0072	0.2006
	79.75	0.1649	0.0090	0.2654
	85.13	0.1893	0.0094	0.2672
	94.88	0.2386	0.0105	0.3060
	99.75	0.2652	0.0113	0.3521
	100.00	0.2668	0.0113	0.3567
	110.13	0.3279	0.0111	0.3665
	125.00	0.4272	0.0111	0.5307
1.2D + 1.0Di + 1.0Wi 50 mph Wind at 60° From Face	66.75	0.1380	0.0182	0.2429
	79.75	0.1995	0.0243	0.3222
	85.13	0.2289	0.0295	0.3207
	94.88	0.2879	0.0400	0.3671
	99.75	0.3204	0.0458	0.4328
	100.00	0.3223	0.0461	0.4379
	110.13	0.3954	0.0757	0.4362
	125.00	0.5118	0.1167	0.4143
1.2D + 1.0Di + 1.0Wi 50 mph Wind at 90° From Face	66.75	0.1374	-0.0123	0.2417
	79.75	0.1987	-0.0158	0.3171
	85.13	0.2279	-0.0175	0.3208
	94.88	0.2865	-0.0213	0.3663
	99.75	0.3188	-0.0237	0.4240
	100.00	0.3207	-0.0238	0.4281
	110.13	0.3929	-0.0309	0.4291
	125.00	0.5066	-0.0370	0.2102
1.2D + 1.0Di + 1.0Wi 50 mph Wind at Normal From Face	66.75	0.1381	0.0085	0.2448
	79.75	0.2003	-0.0106	0.3226
	85.13	0.2301	0.0110	0.3278
	94.88	0.2907	0.0121	0.3765
	99.75	0.3239	0.0130	0.4313
	100.00	0.3258	0.0130	0.4374
	110.13	0.4015	0.0119	0.4563
	125.00	0.5257	0.0114	0.7382
1.2D + 1.0Ev + 1.0Eh - Normal To Face	66.75	0.0316	0.0021	0.0572
	79.75	0.0460	0.0027	0.0750
	85.13	0.0529	0.0028	0.0766
	94.88	0.0670	0.0031	0.0879
	99.75	0.0748	0.0035	0.1031
	100.00	0.0753	0.0035	0.1047
	110.13	0.0930	0.0036	0.1071
	125.00	0.1219	0.0037	0.1132

1.2D + 1.0W 120 mph Wind at 60° From Face	66.75	0.4478	0.0944	0.7915
	79.75	0.6483	0.1285	1.0457
	85.13	0.7442	0.1629	1.0503
	94.88	0.9371	0.2299	1.2013
	99.75	1.0418	0.2663	1.3881
	100.00	1.0480	0.2682	1.4056
	110.13	1.2854	0.4722	1.4279
	125.00	1.6633	0.7596	1.3515

1.2D + 1.0W 120 mph Wind at 90° From Face	66.75	0.4469	-0.0390	0.7884
	79.75	0.6473	-0.0499	1.0335
	85.13	0.7429	-0.0547	1.0492
	94.88	0.9350	-0.0659	1.1990
	99.75	1.0399	-0.0733	1.3673
	100.00	1.0459	-0.0735	1.3823
	110.13	1.2818	-0.0924	1.4016
	125.00	1.6541	-0.1088	0.9340

1.2D + 1.0W 120 mph Wind at Normal To Face	66.75	0.4562	0.0301	0.8056
	79.75	0.6607	0.0375	1.0690
	85.13	0.7587	0.0400	1.0725
	94.88	0.9566	0.0457	1.2296
	99.75	1.0650	0.0487	1.4244
	100.00	1.0711	0.0487	1.4430
	110.13	1.3172	0.0515	1.4719
	125.00	1.7202	0.0553	2.2292



Mat Foundation Design for Self Supporting Tower			Date
			7/11/2023
Customer Name:	SBA Communications Corp	TIA Standard:	TIA-222-H
Site Name:		Structure Height (Ft.):	125
Site Number:	CT01725-A-SBA	Engineer Name:	C. Zang
Engr. Number:	141665	Engineer Login ID:	

Foundation Info Obtained from:

Drawings/Calculations

Analysis or Design?

Analysis

Number of Tower Legs:

3 Legs

Base Reactions (Factored):

(1). Individual Leg:

Axial Load (Kips): 296.2 Uplift Force (Kips): 264.1
 Shear Force (Kips): 25.1

(2). Tower Base:

Total Vertical Load (Kips): 43.3 Total Shear Force (Kips): 38.9
 Moment (Kips-ft): 3050.1

Foundation Geometries:

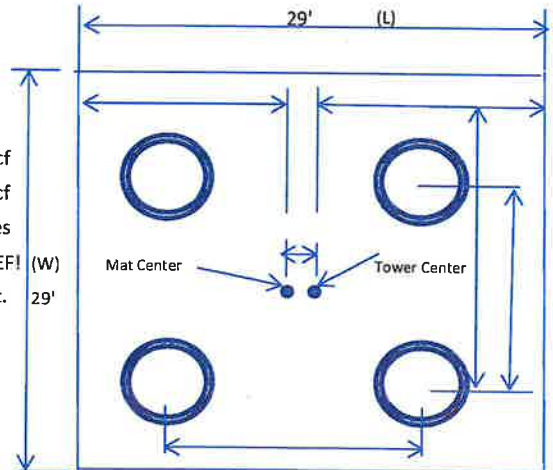
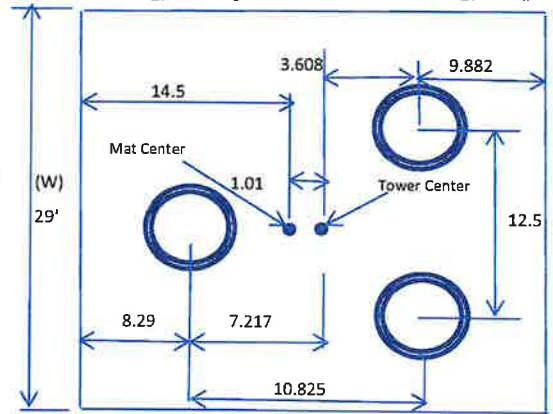
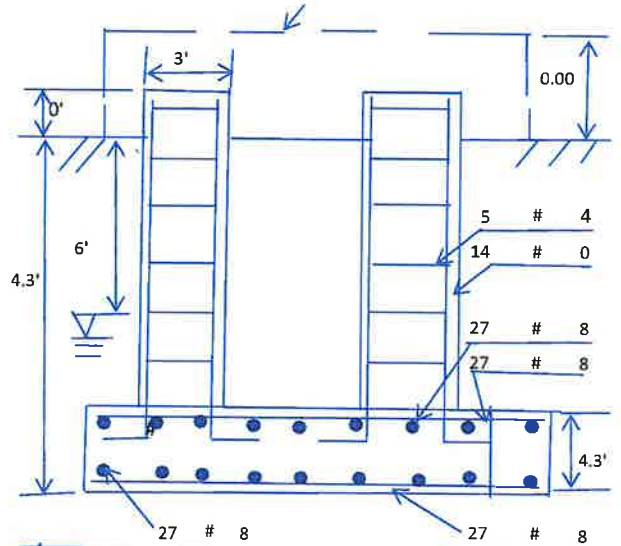
Leg distance (Center-to-Center ft.): 12.5 Mods required -Yes/No?: No
 Diameter of Pier (ft.): Round 3.0 Pier Height A. G. (ft.): 0.00
 Tower center to mat center (ft): 1.01 Depth of Base BG (ft.): 4.3
 Length of Pad (ft.): 29 Width of Pad (ft.): 29
 Thickness of Pad (ft): 4.30

Material Properties and Reabr Info:

Concrete Strength (psi): 3000 Steel Elastic Modulus: 29000 ksi
 Vertical bar yield (ksi) 60 Tie steel yield (ksi): 60
 Vertical Rebar Size #: Tie / Stirrup Size #: 4
 Qty. of Vertical Rebars: Tie Spacing (in): 12.0
 Pad Rebar Yield (Ksi): 60 Pad Steel Rebar Size (#): 8
 Concrete Cover (in.): 3 Unit Weight of Concrete: 150.0 pcf
 Rebar at the bottom of the concrete pad:
 Qty. of Rebar in Pad (L): 27 Qty. of Rebar in Pad (W): 27
 Rebar at the top of the concrete pad:
 Qty. of Rebar in Pad (L): 27 Qty. of Rebar in Pad (W): 27

Soil Design Parameters:

Soil Unit Weight (pcf): 100.0 Soil Buoyant Weight: 50.0 Pcf
 Water Table B.G.S. (ft): 6.0 Unit Weight of Water: 62.4 pcf
 Ultimate Bearing Pressure (psf): 6000 Consider ties in concrete shear strength: Yes #REF!
 Consider Soil Lateral Resistance? Yes Enter soil C (psf) or Phi (deg.): 30.0 Ft.
 Depth to ignor lateral resistance:



Foundation Analysis and Design:	Uplift Strength Reduction Factor:	0.75	Compression Strength Reduction Factor:	0.75		
Total Dry Soil Volume (cu. Ft.):		0.00	Total Dry Soil Weight (Kips):		0.00	
Total Buoyant Soil Volume (cu. Ft.):		0.00	Total Buoyant Soil Weight (Kips):		0.00	
Total Effective Soil Weight (Kips):		0.00	Weight from the Concrete Block at Top (K):		0.00	
Total Dry Concrete Volume (cu. Ft.):		3616.41	Total Dry Concrete Weight (Kips):		542.46	
Total Buoyant Concrete Volume (cu. Ft.):		0.00	Total Buoyant Concrete Weight (Kips):		0.00	
Total Effective Concrete Weight (Kips):		542.46	Total Vertical Load on Base (Kips):		585.76	
						Load/ Capacity Ratio
Check Soil Capacities:						
Calculated Maxium Net Soil Pressure under the base (psf):	1648.02	<	Allowable Factored Soil Bearing (psf):	4500	0.37	OK!
Allowable Foundation Overturning Resistance (kips-ft.):	7706.9	>	Design Factored Momont (kips-ft):	3261	0.42	OK!
Factor of Safety Against Overturning (O. R. Moment/Design Moment):	2.36		OK!			
Check the capacities of Reinforcing Concrete:						
Strength reduction factor (Flexure and axial tension):	0.90		Strength reduction factor (Shear):	0.75		
Strength reduction factor (Axial compression):	0.65		Wind Load Factor on Concrete Design:	1.00		
						Load/ Capacity Ratio
(1) Concrete Pier:						
Vertical Steel Rebar Area (sq. in./each):	#N/A		Tie / Stirrup Area (sq. in./each):	0.20		
Calculated Moment Capacity (Mn,Kips-Ft):	#N/A	#N/A	Design Factored Moment (Mu, Kips-Ft)	0.1		
Calculated Shear Capacity (Kips):	79.8	>	Design Factored Shear (Kips):	25.1		
Calculated Tension Capacity (Tn, Kips):	#N/A	#N/A	Design Factored Tension (Tu Kips):	264.1		
Calculated Compression Capacity (Pn, Kips):	#N/A	#N/A	Design Factored Axial Load (Pu Kips):	296.2		
Moment & Tension Strength Combination:	#N/A	#N/A	Check Tie Spacing (Design/Req'd):	#DIV/0!		
Pier Reinforcement Ratio:	#N/A		#N/A			
(2).Concrete Pad:						
One-Way Design Shear Capacity (L or W Direction, Kips):	1375.2	>	One-Way Factored Shear (L/W-Dir Kips	261.3	0.19	OK!
One-Way Design Shear Capacity (Diagonal Dir., Kips):	1226.1	>	One-Way Factored Shear (Dia. Dir, Kips	280.0	0.23	OK!
Lower Steel Pad Reinforcement Ratio (L or W-Direct.):	0.0013		Lower Steel Reinf. Ratio (Dia. Dir.):	0.0011		
Lower Steel Pad Moment Capacity (L or W-Dir. Kips-ft):	4547.7	>	Moment at Bottom (L-Direct. K-Ft):	1624.1	0.36	OK!
Lower Steel Pad Moment Capacity (Dia. Direction,K-ft):	4556.9	>	Moment at Bottom (Dia. Dir. K-Ft):	1644.1	0.36	OK!
Upper Steel Pad Reinforcement Ratio (L or W -Direction):	0.0013		Upper Steel Reinf. Ratio (Dia. Dir.):	0.0011		
Upper Steel Pad Moment Capacity (L or W-Dir., Kips-ft):	4547.7	>	Moment at the top (L-Dir Kips-Ft):	711.5	0.16	OK!
Upper Steel Pad Moment Capacity (Dia. Direction, K-ft):	4556.9	>	Moment at the top (Dia. Dir., K-Ft):	532.1	0.12	OK!
Punching Failure Capacity From Down Load (Kips):	2088.2	>	Punch. Failure Factored Shear (K):	296.2	0.14	OK!
Punching Failure Capacity From Uplift (Kips):	1939.2	>	Punch. Failure Factored Shear (K):	264.1	0.14	OK!
(3). Check Max. eccentricity of Loading:						
The maximum eccentricity of Loading:	5.57	ft.	Allowable eccentricity (0.45 W, ft.):	13.05		OK!
Reinforce Concrete Pad by enlarging the size of pier (Yes/No):			No			



Colliers Engineering & Design CT, P.C.
1055 Washington Boulevard
Stamford, CT 06901
203.324.0800
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Antenna Mount Analysis Report and PMI Requirements

Mount ReAnalysis

SMART Tool Project #: 10207056
Colliers Engineering & Design CT, P.C. Project #: 23777128

July 21, 2023

Site Information

Site ID: 5000383956-VZW / COTTAGE GROVE CT
Site Name: COTTAGE GROVE CT
Carrier Name: Verizon Wireless
Address: 1021 Blue Hill Ave
Bloomfield, Connecticut 06002
Hartford County
Latitude: 41.820119°
Longitude: -72.696514°

Structure Information

Tower Type: Self-Support
Mount Type: 12.00-Ft Sector Frame

FUZE ID # 17123881

Analysis Results

Sector Frame: **85.3% Pass***

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

***Contractor PMI Requirements:

Included at the end of this MA report
Available & Submitted via portal at <https://pmi.vzwsmart.com>
For additional questions and support, please reach out to:
pmisupport@colliersengineering.com

Report Prepared By: Prasanna Dhakal

Digitally signed by Derek Hartzell
Date: 2023.07.21 14:49:34-07'00'

STATE OF CONNECTICUT
Derek Hartzell
32710
PROFESSIONAL ENGINEER

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: 674866, dated July 30, 2021
Mount Mapping Report	Hudson Design Group, LLC., Site ID: 467830, dated June 10, 2021
Previous Post-Mod Antenna Mount Analysis	Maser Consulting Connecticut, Project #: 217181042A, dated September 10, 2021
Antenna Mount Post-Modification Inspection Report	Colliers Engineering & Design, Project #: 21781042, dated June 27, 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} : 120 mph Ice Wind Speed (3-sec. Gust): 50 mph Design Ice Thickness: 1.50 in Risk Category: II Exposure Category: B Topographic Category: 1 Topographic Feature Considered: N/A Topographic Method: N/A Ground Elevation Factor, K_e : 0.996
Seismic Parameters:	S_s : 0.182 g S_1 : 0.055 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
108.75	110.00	2	KAelus	KA-6030	Added
		3	Commscope	NHH-65B-R2B	Retained
		3	Commscope	NHHSS-65B-R2BT0	
		3	Samsung	MT6407-77A	
		3	Samsung	RF4439d-25A	
		3	Samsung	RF4440d-13A	
		3	Samsung	CBRS RRH - RT4401-48A	
		3	Antel	BXA-70063-4CF	
		1	Raycap	OVP12*	

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

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

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>Face Horizontal</i>	85.3%	<i>Pass</i>
<i>Face Vertical</i>	30.9%	<i>Pass</i>
<i>Mount Pipe</i>	33.1%	<i>Pass</i>
<i>Standoff Horizontal</i>	71.2%	<i>Pass</i>
<i>Mast Pipe</i>	48.5%	<i>Pass</i>
<i>Standoff Vertical</i>	73.4%	<i>Pass</i>
<i>Tieback</i>	13.5%	<i>Pass</i>
<i>End Plate</i>	51.0%	<i>Pass</i>
<i>Secondary Face Horizontal</i>	27.8%	<i>Pass</i>
<i>V-Bracing Kit</i>	13.0%	<i>Pass</i>
<i>Mount Connection</i>	14.9%	<i>Pass</i>
Structure Rating – (Controlling Utilization of all Components)		85.3%

BASELINE mount weight per SBA agreement: 2224.80 lbs

Increase in mount weight due to Verizon loading change per SBA agreement: No Change

The weights listed above include 3 sectors.

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	36.6	16.4	42.9	22.7
0.5	47.5	22.5	56.6	31.6
1	57.9	28.2	69.7	39.9

Notes:

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

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

Attachments:

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

Mount Desktop – Post Modification Inspection (PMI) Report Requirements

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

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

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

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

MDG #: 5000383956

SMART Project #: 10207056

Fuze Project ID: 17123881

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

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

Base Requirements:

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

Photo Requirements:

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

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

Antenna & equipment placement and Geometry Confirmation:

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

OR

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

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

Issue:

Response:

Special Instruction Confirmation:

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

OR

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

Comments:

--

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

- Yes No

Contractor certifies no new damage created during the current installation:

- Yes No

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

- Safety Climb in Good Condition Safety Climb Damaged

Certifying Individual:

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

Structure: 5000383956-VZW - COTTAGE GROVE CT

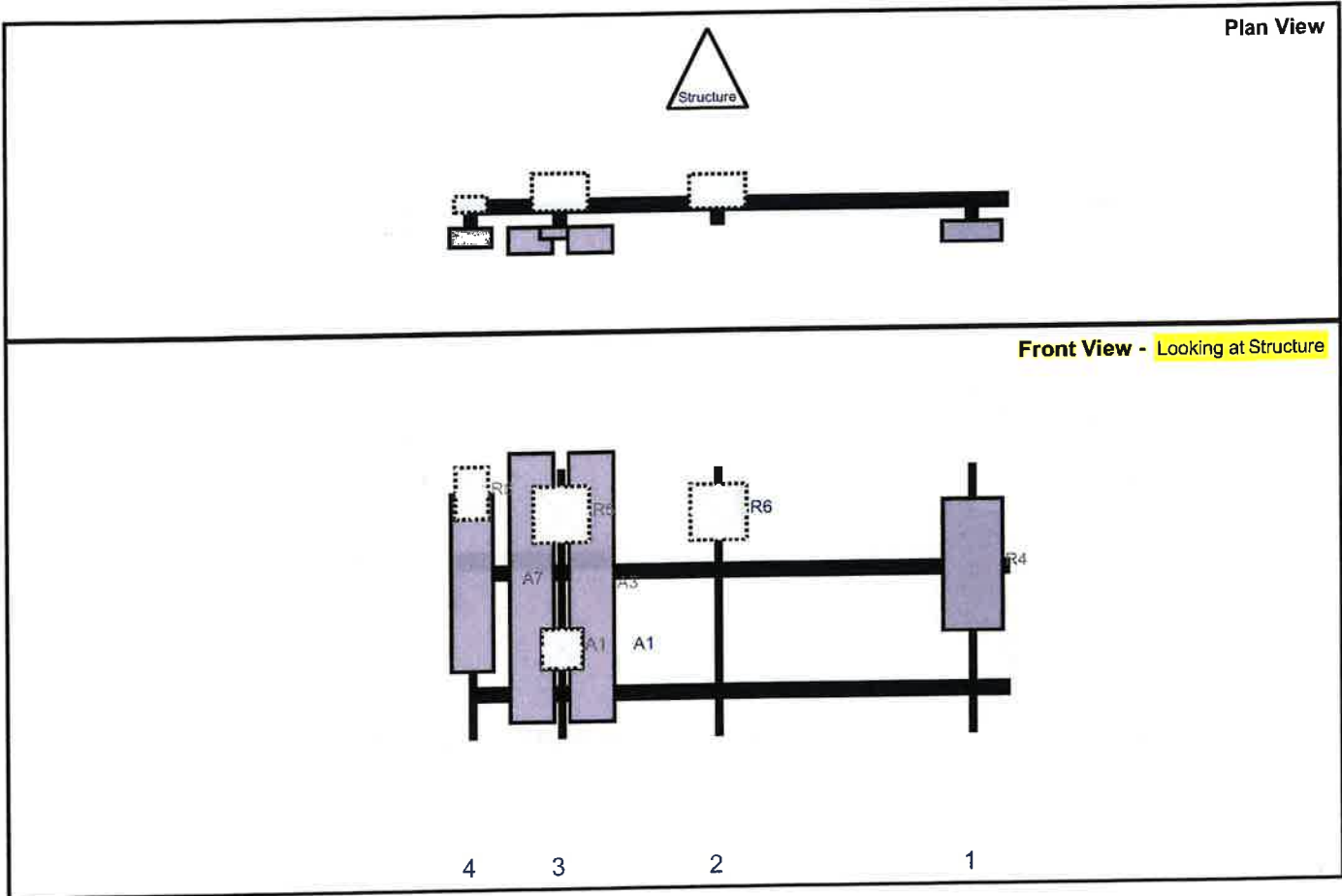
Sector: **A**
 Structure Type: Self Support
 Mount Elev: 108.75

10207056

7/21/2023



Page: 1



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
R4	MT6407-77A	35.1	16.1	134	1	a	Front	27	0	Retained	04/10/2023
R6	RF4440d-13A	15	15	66	2	a	Behind	12	0	Retained	04/10/2023
A2	NHH-65B-R2B	72	11.9	24	3	b	Front	31.5	-8	Retained	04/10/2023
A3	NHHSS-65B-R2BT0	72	11.9	24	3	a	Front	31.5	8	Retained	04/10/2023
A1	KA-6030	10.6	10.9	24	3	a	Front	48	0	Added	
A1	KA-6030	10.6	10.9	24	3	b	Behind	48	0	Added	
R5	RF4439d-25A	15	15	24	3	a	Behind	12	0	Retained	04/10/2023
A7	BXA-70063-4CF	47.4	11.2		4	a	Front	30	0	Retained	04/10/2023
R8	CBRS RRH - RT4401-48A	13.9	8.6		4	a	Behind	6	0	Retained	04/10/2023

Structure: 5000383956-VZW - COTTAGE GROVE CT

Sector: B

7/21/2023

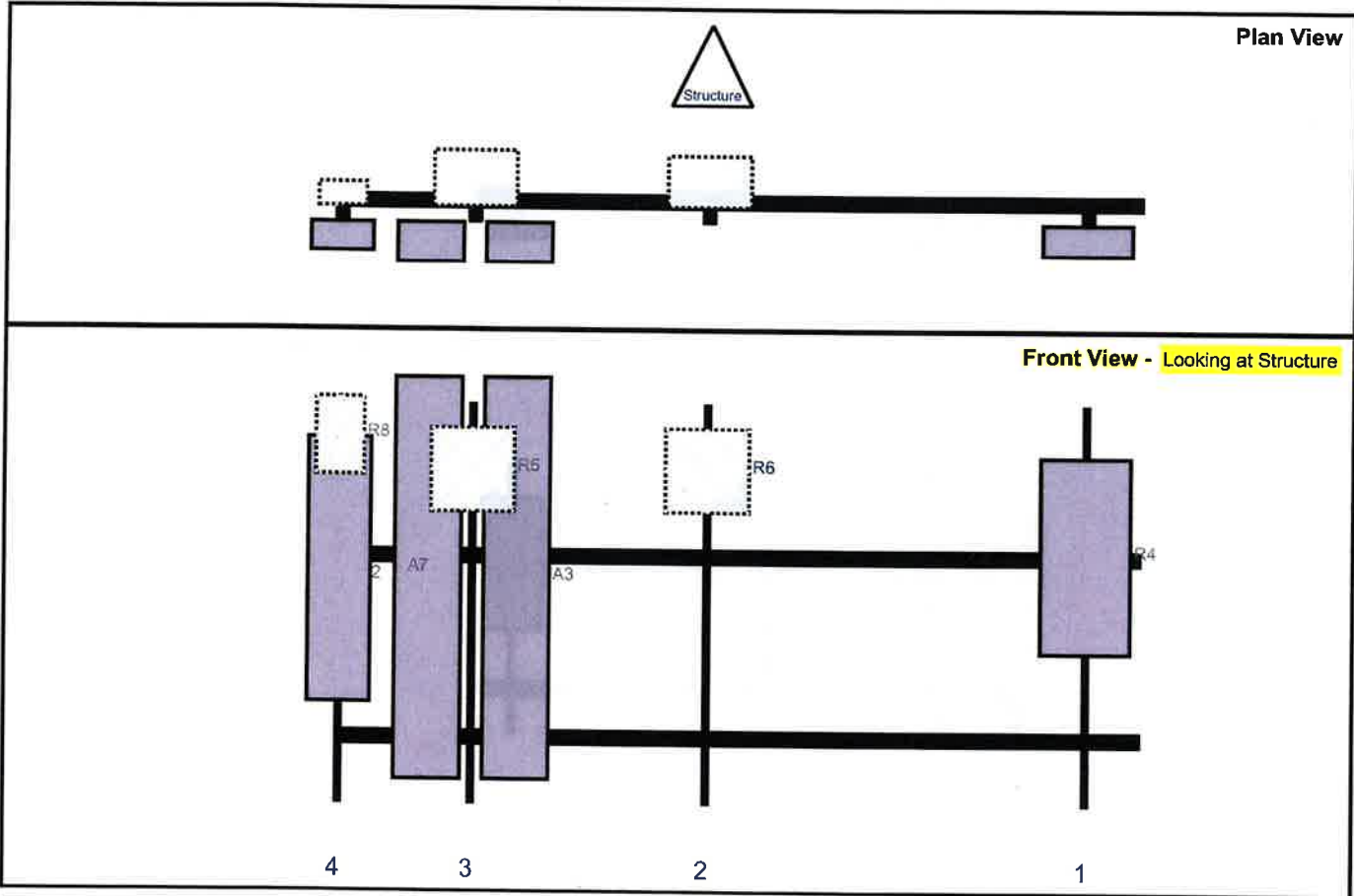
Structure Type: Self Support

10207056



Mount Elev: 108.75

Page: 2



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
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R6	RF4440d-13A	15	15	66	2	a	Behind	12	0	Retained	04/10/2023
A2	NHH-65B-R2B	72	11.9	24	3	b	Front	31.5	-8	Retained	04/10/2023
A3	NHHSS-65B-R2BT0	72	11.9	24	3	a	Front	31.5	8	Retained	04/10/2023
R5	RF4439d-25A	15	15	24	3	a	Behind	12	0	Retained	04/10/2023
A7	BXA-70063-4CF	47.4	11.2		4	a	Front	30	0	Retained	04/10/2023
R8	CBRS RRH - RT4401-48A	13.9	8.6		4	a	Behind	6	0	Retained	04/10/2023

Structure: 5000383956-VZW - COTTAGE GROVE CT

7/21/2023

Sector: C

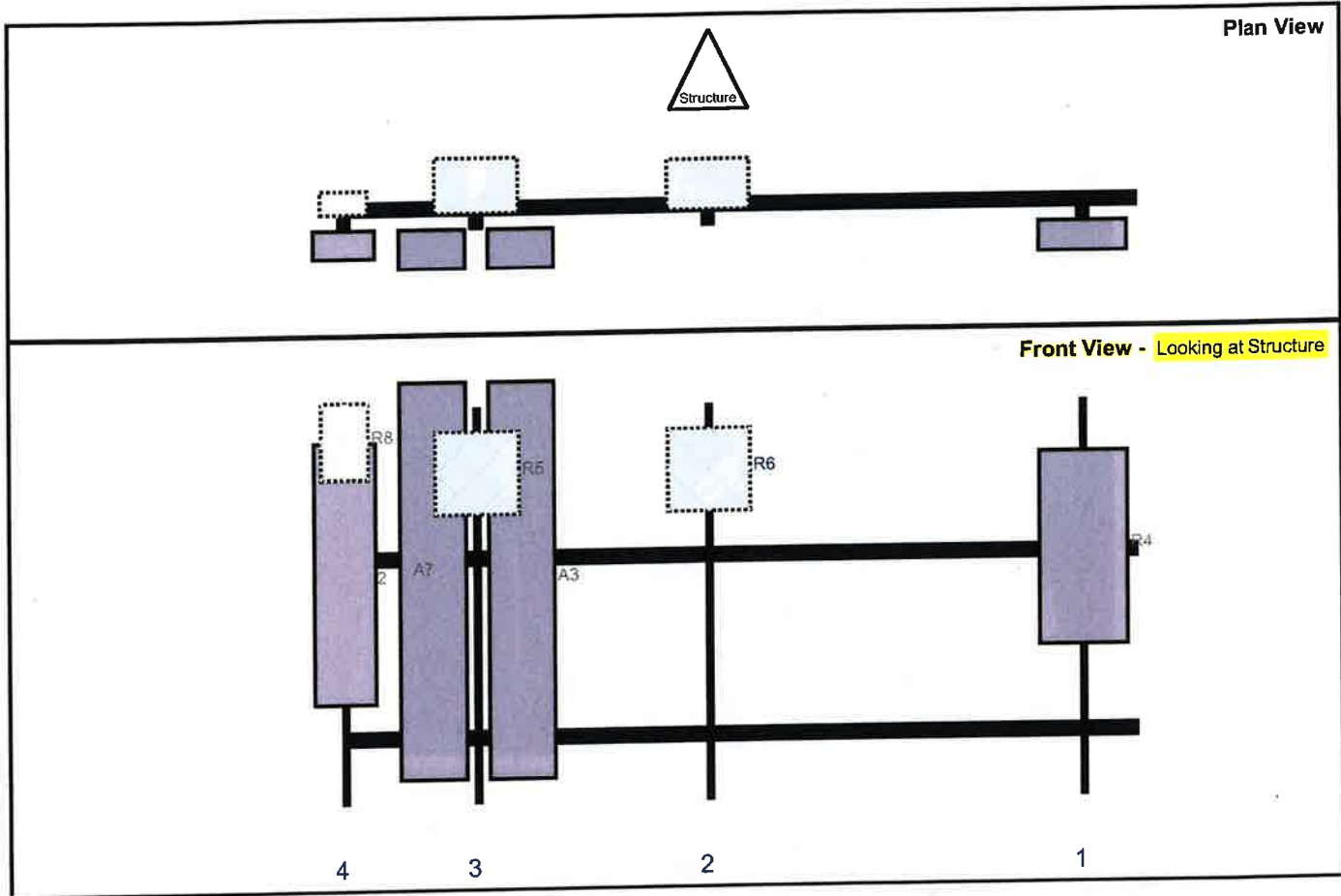
Structure Type: Self Support

10207056



Mount Elev: 108.75

Page: 3



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
R4	MT6407-77A	35.1	16.1	134	1	a	Front	27	0	Retained	04/10/2023
R6	RF4440d-13A	15	15	66	2	a	Behind	12	0	Retained	04/10/2023
A2	NHH-65B-R2B	72	11.9	24	3	b	Front	31.5	-8	Retained	04/10/2023
A3	NHHSS-65B-R2BT0	72	11.9	24	3	a	Front	31.5	8	Retained	04/10/2023
R5	RF4439d-25A	15	15	24	3	a	Behind	12	0	Retained	04/10/2023
A7	BXA-70063-4CF	47.4	11.2		4	a	Front	30	0	Retained	04/10/2023
R8	CBRS RRH - RT4401-48A	13.9	8.8		4	a	Behind	6	0	Retained	04/10/2023



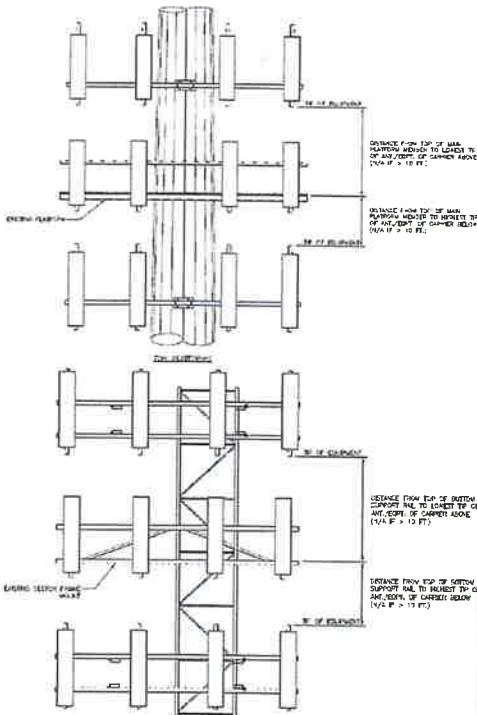
abr. 10, 2023, 5:37:04 p.m.
1023 Blue Hills Ave
Bloomfield CT 06002



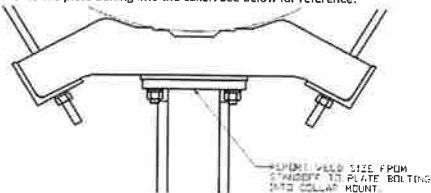
abr. 10, 2023, 4:59:39 p.m.
1021 Blue Hills Ave
Bloomfield CT 06002

Mount Azimuth (Degree) for Each Sector				Tower Leg Azimuth (Degree) for Each Sector				Sector B												
Sector A:	30.00	Deg	Leg A:	20.00	Deg	Ant _{1a}														
Sector B:	150.00	Deg	Leg B:	140.00	Deg	Ant _{1b}	BXA-171D63-12CF-EDI	6.00	4.00	72.00		108.75	35.00	12.50	140.00	178,9				
Sector C:	270.00	Deg	Leg C:	250.00	Deg	Ant _{1c}														
Sector D:		Deg	Leg D:		Deg	Ant _{2a}														
Climbing Facility Information						Ant _{2b}	SCCP-2X6014	14.00	11.00	53.00		109.5	26.00	13.00	140.00	179,10				
Location:	Deg					Ant _{2c}														
Climbing Facility	Corrosion Type:	Good condition.				Ant _{2d}	BXA-171063-8BF-EDIH	6.00	4.00	48.00		109.542	25.50	11.50	140.00	180,11				
	Access:	Climbing path was unobstructed.				Ant _{3a}														
	Condition:	Good condition.				Ant _{3b}	BXA-70063-4CF-EDIN	11.00	5.00	48.00		109.333	26.00	12.00	140.00	180,11				
						Ant _{3c}														
						Ant _{3d}														
						Ant _{3e}														
						Ant on Standoff														
						Ant on Standoff														
						Ant on Tower														
						Ant on Tower														
						Sector C														
						Ant _{1a}														
						Ant _{1b}	BXA-171D63-12CF-EDI	6.00	4.00	72.00		108.75	35.00	12.50	250.00	190,12				
						Ant _{1c}														
						Ant _{2a}														
						Ant _{2b}	SCCP-2X6014	14.00	11.00	53.00		109.5	26.00	13.00	250.00	191,13				
						Ant _{2c}														
						Ant _{3a}	BXA-171063-8BF-EDIH	6.00	4.00	48.00		109.542	25.50	11.50	250.00	191,13				
						Ant _{3c}														
						Ant _{3d}	BXA-70063-4CF-EDIN	11.00	5.00	48.00		109.333	26.00	12.00	250.00	191,13				
						Ant _{3e}														
						Ant _{3f}														
						Ant on Standoff														
						Ant on Standoff														
						Ant on Tower														
						Ant on Tower														
						Sector D														
						Ant _{1a}														
						Ant _{1b}														
						Ant _{1c}														
						Ant _{2a}														
						Ant _{2b}														
						Ant _{2c}														
						Ant _{3a}														
						Ant _{3b}														
						Ant _{3c}														
						Ant _{3d}														
						Ant _{3e}														
						Ant _{3f}														
						Ant on Standoff														
						Ant on Standoff														
						Ant on Tower														
						Ant on Tower														

Please insert a photo of the mount centerline measurement here.



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



Observed Safety and Structural Issues During the Mount Mapping		
Issue #	Description of Issue	Photo #
1		
2		
3		
4		
5		
6		
7		
8		

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

Mapping Notes
<ol style="list-style-type: none"> 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
<ol style="list-style-type: none"> 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 #
1209807

Tower Owner:	SBA	Mapping Date:	8/10/2021
Site Name:	COTTAGE GROVE CT	Tower Type:	Self Support
Site Number or ID:	467830	Tower Height (FL):	
Mapping Contractor:	HUDSON DESIGN GROUP, LLC.	Mount Elevation (FL):	106.5

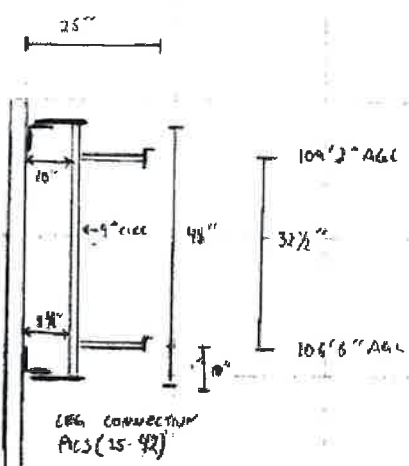
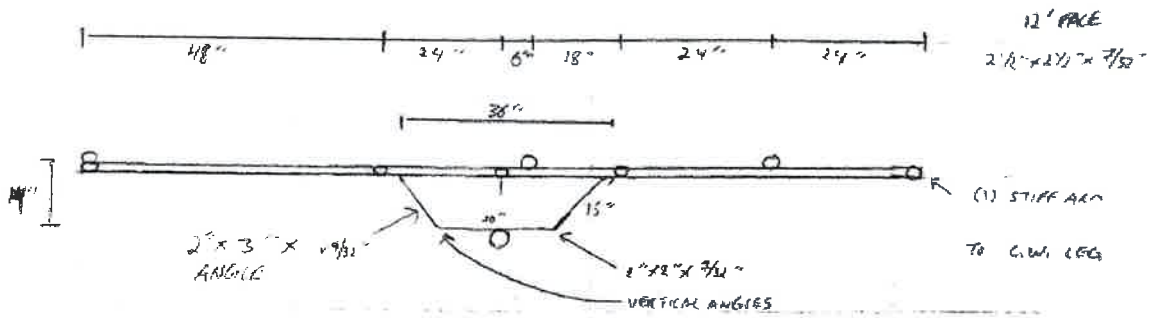
This antenna mapping form is the property of TES and under PATENT PENDING. The information contained herein is considered confidential in nature and is to be used only for the specific customer it was intended for. Reproduction, transmission, publication, modification or disclosure by any method is prohibited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

Please Insert Sketches of the Antenna Mount

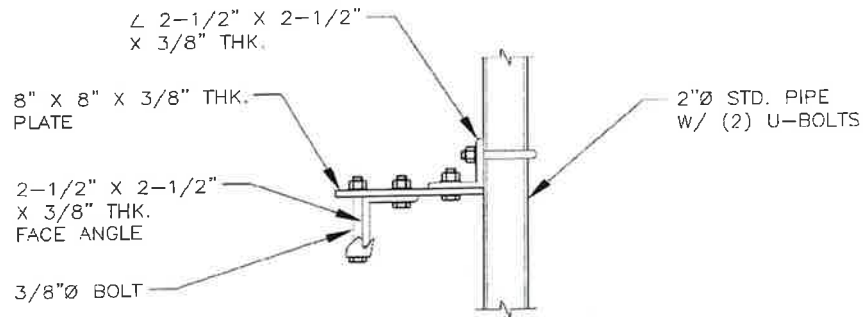
DATE: 08/10/2021
 Project Name: COTTAGE GROVE
 Project No.: COTTAGE GROVE CT
 Design By: 12 Chk'd By: _____ Page 2 of 2



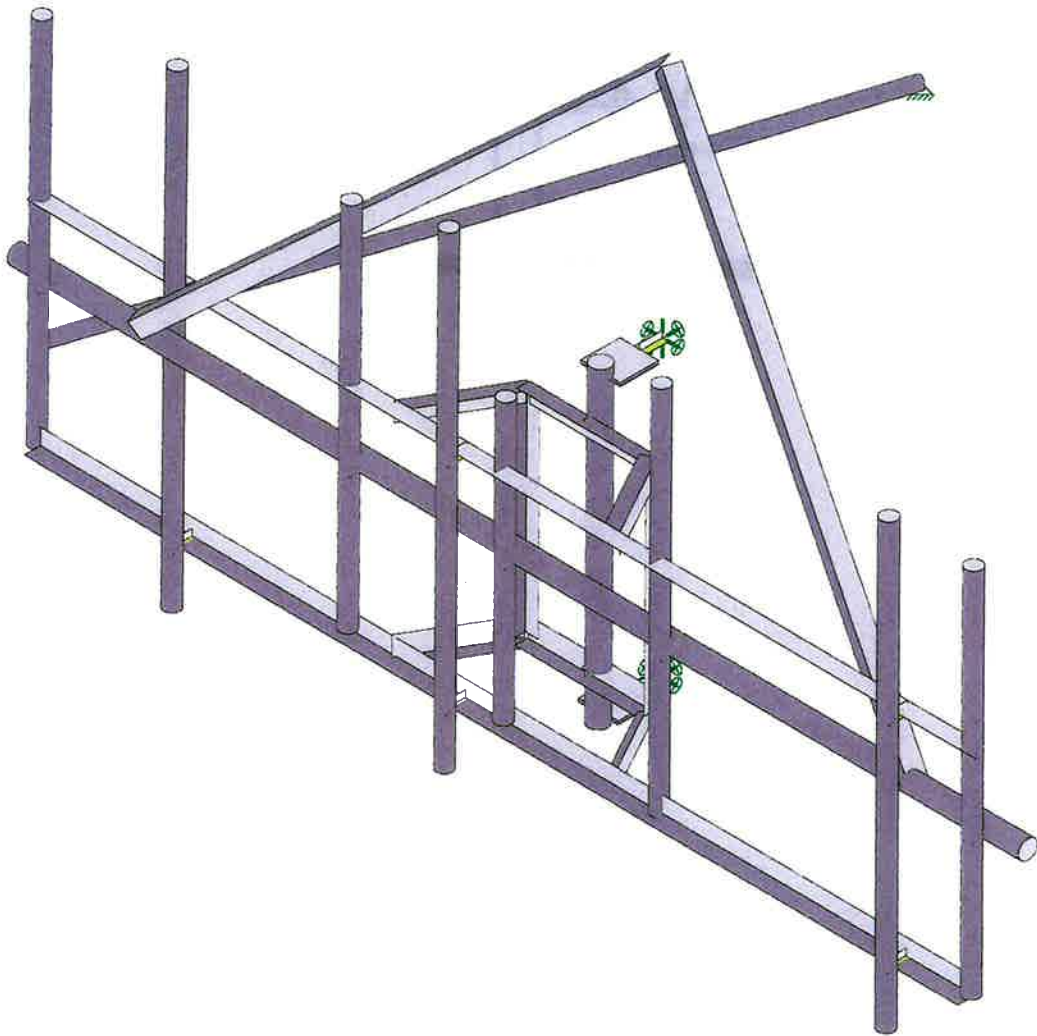
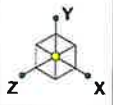
48-261-5-18-24-24-24-24-24



15712



ANTENNA PIPE MOUNT CONNECTION



Envelope Only Solution

Colliers Engineering & De...

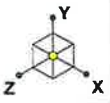
Project # 23777128

Antenna Mount Analysis

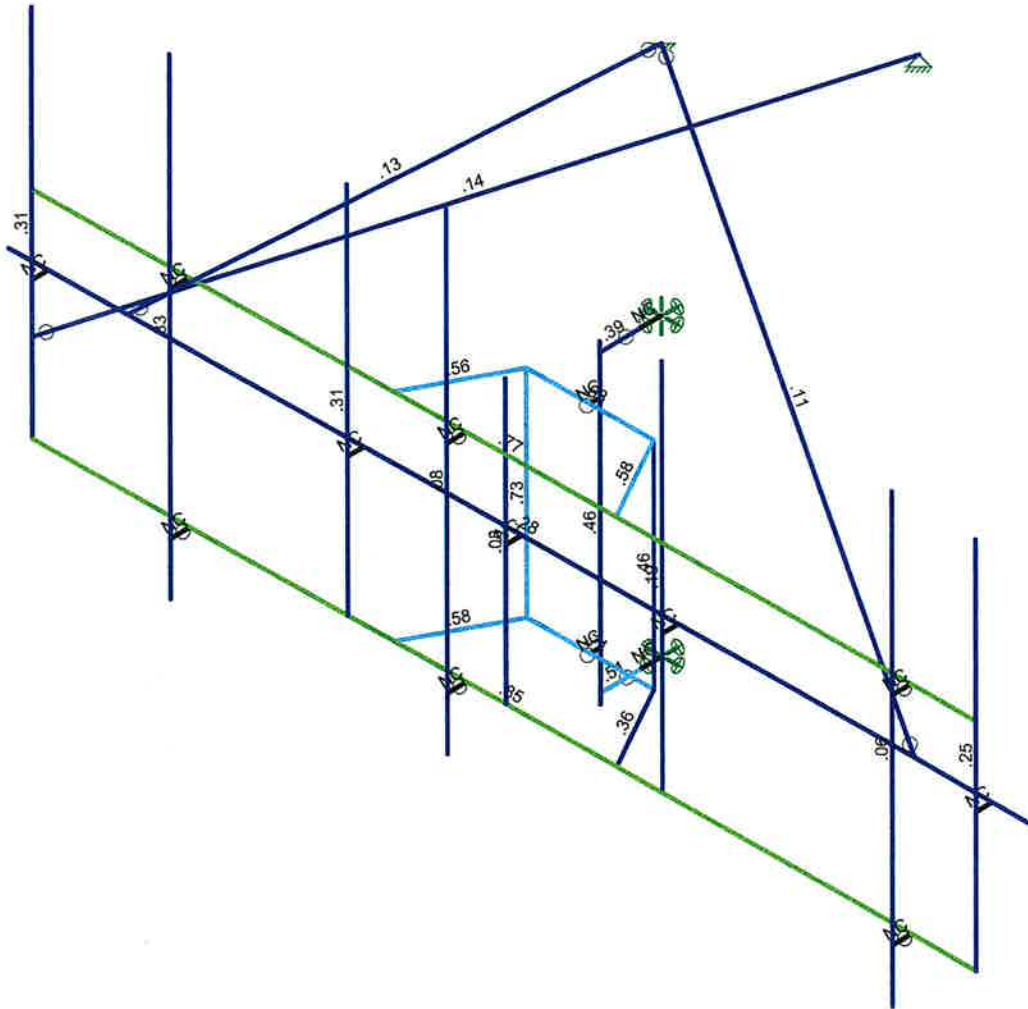
SK - 1

July 21, 2023 at 9:54 AM

5000383956-VZW_MT_LOT_A_H...



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



Member Code Checks Displayed (Enveloped)
Envelope Only Solution

Colliers Engineering & De...

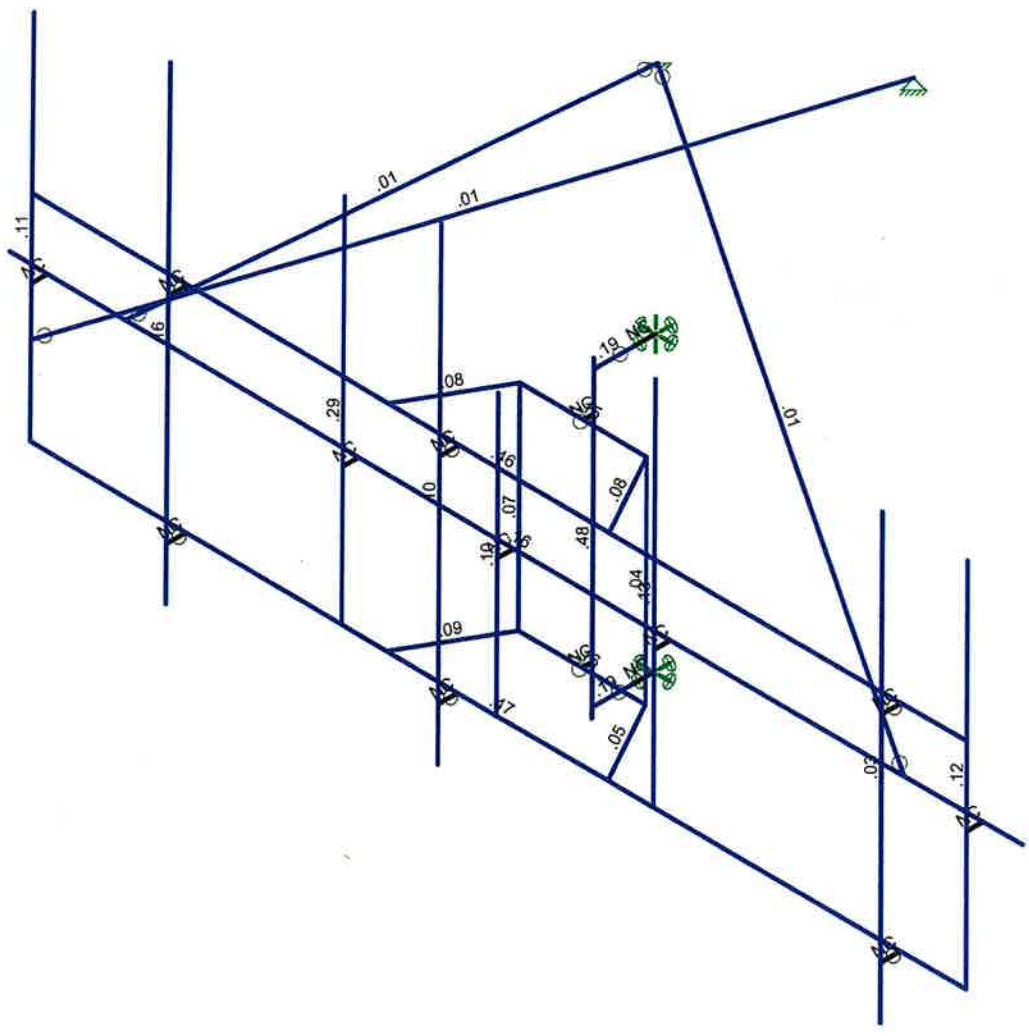
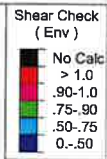
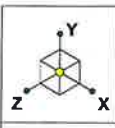
Project # 23777128

Antenna Mount Analysis

SK - 2

July 21, 2023 at 9:55 AM

5000383956-VZW_MT_LOT_A_H....



Member Shear Checks Displayed (Enveloped)
Envelope Only Solution

Colliers Engineering & De...

Project # 23777128

Antenna Mount Analysis

SK - 3

July 21, 2023 at 9:55 AM

5000383956-VZW_MT_LOT_A_H....



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project # 23777128
 Model Name : Antenna Mount Analysis

July 21, 2023
 9:55 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					39			
2	Antenna Di	None					39			
3	Antenna Wo (0 Deg)	None					39			
4	Antenna Wo (30 Deg)	None					39			
5	Antenna Wo (60 Deg)	None					39			
6	Antenna Wo (90 Deg)	None					39			
7	Antenna Wo (120 Deg)	None					39			
8	Antenna Wo (150 Deg)	None					39			
9	Antenna Wo (180 Deg)	None					39			
10	Antenna Wo (210 Deg)	None					39			
11	Antenna Wo (240 Deg)	None					39			
12	Antenna Wo (270 Deg)	None					39			
13	Antenna Wo (300 Deg)	None					39			
14	Antenna Wo (330 Deg)	None					39			
15	Antenna Wi (0 Deg)	None					39			
16	Antenna Wi (30 Deg)	None					39			
17	Antenna Wi (60 Deg)	None					39			
18	Antenna Wi (90 Deg)	None					39			
19	Antenna Wi (120 Deg)	None					39			
20	Antenna Wi (150 Deg)	None					39			
21	Antenna Wi (180 Deg)	None					39			
22	Antenna Wi (210 Deg)	None					39			
23	Antenna Wi (240 Deg)	None					39			
24	Antenna Wi (270 Deg)	None					39			
25	Antenna Wi (300 Deg)	None					39			
26	Antenna Wi (330 Deg)	None					39			
27	Antenna Wm (0 Deg)	None					39			
28	Antenna Wm (30 Deg)	None					39			
29	Antenna Wm (60 Deg)	None					39			
30	Antenna Wm (90 Deg)	None					39			
31	Antenna Wm (120 Deg)	None					39			
32	Antenna Wm (150 Deg)	None					39			
33	Antenna Wm (180 Deg)	None					39			
34	Antenna Wm (210 Deg)	None					39			
35	Antenna Wm (240 Deg)	None					39			
36	Antenna Wm (270 Deg)	None					39			
37	Antenna Wm (300 Deg)	None					39			
38	Antenna Wm (330 Deg)	None					39			
39	Structure D	None		-1						
40	Structure Di	None						25		
41	Structure Wo (0 Deg)	None						50		
42	Structure Wo (30 Deg)	None						50		
43	Structure Wo (60 Deg)	None						50		
44	Structure Wo (90 Deg)	None						50		
45	Structure Wo (120 Deg)	None						50		
46	Structure Wo (150 Deg)	None						50		
47	Structure Wo (180 Deg)	None						50		
48	Structure Wo (210 Deg)	None						50		
49	Structure Wo (240 Deg)	None						50		
50	Structure Wo (270 Deg)	None						50		
51	Structure Wo (300 Deg)	None						50		
52	Structure Wo (330 Deg)	None						50		
53	Structure Wi (0 Deg)	None						50		
54	Structure Wi (30 Deg)	None						50		
55	Structure Wi (60 Deg)	None						50		
56	Structure Wi (90 Deg)	None						50		



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project # 23777128
 Model Name : Antenna Mount Analysis

July 21, 2023
 9:55 AM
 Checked By: _____

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						50		
58 Structure Wi (150 Deg)	None						50		
59 Structure Wi (180 Deg)	None						50		
60 Structure Wi (210 Deg)	None						50		
61 Structure Wi (240 Deg)	None						50		
62 Structure Wi (270 Deg)	None						50		
63 Structure Wi (300 Deg)	None						50		
64 Structure Wi (330 Deg)	None						50		
65 Structure Wm (0 Deg)	None						50		
66 Structure Wm (30 Deg)	None						50		
67 Structure Wm (60 Deg)	None						50		
68 Structure Wm (90 Deg)	None						50		
69 Structure Wm (120 Deg)	None						50		
70 Structure Wm (150 Deg)	None						50		
71 Structure Wm (180 Deg)	None						50		
72 Structure Wm (210 Deg)	None						50		
73 Structure Wm (240 Deg)	None						50		
74 Structure Wm (270 Deg)	None						50		
75 Structure Wm (300 Deg)	None						50		
76 Structure Wm (330 Deg)	None						50		
77 Lm1	None					1			
78 Lm2	None					1			
79 Lv1	None					1			
80 Lv2	None					1			
81 Antenna Ev	None					39			
82 Antenna Eh (0 Deg)	None					26			
83 Antenna Eh (90 Deg)	None					26			
84 Structure Ev	ELY			-0388					
85 Structure Eh (0 Deg)	ELZ								
86 Structure Eh (90 Deg)	ELX	.0971							

Load Combinations

Description	S...	PDel...	SR...	BLC	Fa...	BLC	Fa...	BLC	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	BLC	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	53	1							
14 1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	16	1	54	1							
15 1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	17	1	55	1							
16 1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	18	1	56	1							
17 1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	19	1	57	1							
18 1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	20	1	58	1							
19 1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	21	1	59	1							
20 1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	22	1	60	1							
21 1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	23	1	61	1							
22 1.2D + 1.0Di + 1.0Wi...	Yes	Y		1	1.2	39	1.2	2	1	40	1	24	1	62	1							



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project # 23777128
 Model Name : Antenna Mount Analysis

July 21, 2023
 9:55 AM
 Checked By: _____

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...
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				
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				



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Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	N1	-6	0	0	0	
2	N2	6	0	0	0	
3	N3	-6	2.75	0	0	
4	N4	6	2.75	0	0	
5	N7	-2.	0	0	0	
6	N8	-2.	4.75	0	0	
7	N9	0	0	0	0	
8	N10	0	3.583333	0	0	
9	N11	2.000003	0	0	0	
10	N12	2.000003	4.75	0	0	
11	N43	5.166667	4.999997	.25	0	
12	N45	5.166667	-0.666667	.25	0	
13	N55	0	0	-1.083333	0	
14	N56	0	2.75	-1.083333	0	
15	N57	1.416667	0	0	0	
16	N58	1.416667	2.75	0	0	
17	N59	-1.416667	0	0	0	
18	N60	-1.416667	2.75	0	0	
19	N61	.8125	0	-1.083333	0	
20	N62	.8125	2.75	-1.083333	0	
21	N63	-.8125	0	-1.083333	0	
22	N64	-.8125	2.75	-1.083333	0	
23	N65	0	0	-1.208333	0	
24	N66	0	2.75	-1.208333	0	
25	N67	0	3.375	-1.208333	0	
26	N68	0	-.625	-1.208333	0	
27	N69	0	3.25	-1.708333	0	
28	N70	0	-.5	-1.708333	0	
29	N71	0	3.25	-2	0	
30	N72	0	-.5	-2	0	
31	N73	-3.333333	1.125	-8.609142	0	
32	N74	-6	1.125	0	0	
33	N76	6	4.75	0	0	
34	N46	-6	4.75	0	0	
35	N47	-.5	5.333333	.25	0	
36	N48	-.5	-0.666667	.25	0	
37	N49	-.5	2.749997	.25	0	
38	N50	-.5	-0.000003	.25	0	
39	N51	-.5	2.749997	0.	0	
40	N52	-.5	-0.000003	0.	0	
41	N53	-4	5.333333	.25	0	
42	N54	-4	-0.666667	.25	0	
43	N55A	-4	2.749997	.25	0	
44	N56A	-4	-0.000003	.25	0	
45	N57A	-4	2.749997	0.	0	
46	N58A	-4	-0.000003	0.	0	
47	N59A	0	3.25	-1.208333	0	
48	N60A	0	-.5	-1.208333	0	
49	N61A	0	2.75	0	0	
50	N62A	-2.	2.75	0	0	
51	N63A	2.000003	2.75	0	0	
52	N64A	-6	1.75	0	0	
53	N65A	6	1.75	0	0	
54	N66A	0	1.75	0	0	
55	N67A	-2.	1.75	0	0	
56	N68A	2.000003	1.75	0	0	



Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
57	N69A	-6	1.75	-0.208333	0	
58	N70A	6	1.75	-0.208333	0	
59	N71A	0	1.75	-0.208333	0	
60	N72A	-2.	1.75	-0.208333	0	
61	N73A	2.000003	1.75	-0.208333	0	
62	N74A	-6.5	1.75	-0.208333	0	
63	N75	6.5	1.75	-0.208333	0	
64	N76A	0	6.25	-2	0	
65	N77	-5	1.75	-0.208333	0	
66	N78	5	1.75	-0.208333	0	
67	N67B	5.166667	2.749997	.25	0	
68	N68B	5.166667	-0.000003	.25	0	
69	N69B	5.166667	2.749997	0.	0	
70	N70B	5.166667	-0.000003	0.	0	

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Desig... A [in ²]	Iy [i...]	Izz [i...]	J [in ⁴]
1	Face Horizontal	L2.5x2.5x3	Beam	Single Angle	A36 Gr.36	Typical .901	.535	.535	.0114
2	Face Vertical	PIPE 2.0	Beam	Pipe	A53 Gr. B	Typical 1.02	.627	.627	1.25
3	Mount Pipe	PIPE 2.0	Beam	Pipe	A53 Gr. B	Typical 1.02	.627	.627	1.25
4	Standoff Horizontal	L3X2X4	Beam	Single Angle	A36 Gr.36	Typical 1.2	.39	1.09	.027
5	Mast Pipe	PIPE 2.5	Beam	Pipe	A53 Gr. B	Typical 1.61	1.45	1.45	2.89
6	Standoff Vertical	L2x2x4	Beam	Single Angle	A36 Gr.36	Typical .944	.346	.346	.0209
7	End Plate	PL1/2x6	Beam	BAR	A36 Gr.36	Typical 3	.0625	9	.2369
8	Tieback	PIPE 1.5	Beam	Pipe	A53 Gr. B	Typical .749	.293	.293	.586
9	Secondary Face Horizontal	PIPE 2.5	Beam	Pipe	A53 Gr. B	Typical 1.61	1.45	1.45	2.89
10	V-Bracing Kit	L2.5x2.5x4	Column	Single Angle	A36 Gr.36	Typical 1.19	.692	.692	.0261

Hot Rolled Steel Properties

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

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(d...)	Section/Shape	Type	Design List	Material	Design Ru...
1	M1	N1	N2			Face Horizontal	Beam	Single Angle	A36 Gr.36	Typical
2	M2	N3	N4		90	Face Horizontal	Beam	Single Angle	A36 Gr.36	Typical
3	MP4A	N46	N1			Face Vertical	Beam	Pipe	A53 Gr. B	Typical
4	M5	N7	N8			Face Vertical	Beam	Pipe	A53 Gr. B	Typical
5	M6	N9	N10			Face Vertical	Beam	Pipe	A53 Gr. B	Typical
6	M7	N11	N12			Face Vertical	Beam	Pipe	A53 Gr. B	Typical
7	M9	N2	N76			Face Vertical	Beam	Pipe	A53 Gr. B	Typical
8	MP1A	N43	N45			Mount Pipe	Beam	Pipe	A53 Gr. B	Typical
9	RCP	N64	N60		180	Standoff Horizontal	Beam	Single Angle	A36 Gr.36	Typical
10	M43	N62	N64		180	Standoff Horizontal	Beam	Single Angle	A36 Gr.36	Typical
11	M44	N58	N62		180	Standoff Horizontal	Beam	Single Angle	A36 Gr.36	Typical
12	M45	N59	N63			Standoff Horizontal	Beam	Single Angle	A36 Gr.36	Typical
13	M46	N63	N61			Standoff Horizontal	Beam	Single Angle	A36 Gr.36	Typical



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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...
26	MP3A						Yes					None
27	M39		000X00				Yes	** NA **				None
28	M40		000X00				Yes	** NA **				None
29	M41		000000				Yes					None
30	M42		000000				Yes					None
31	M43A						Yes	** NA **				None
32	M44A						Yes	** NA **				None
33	M45A						Yes	** NA **				None
34	M46A						Yes	** NA **				None
35	M47A						Yes	** NA **				None
36	M48A						Yes					None
37	M49A	BenPIN	BenPIN				Yes	** NA **				None
38	M50A	BenPIN	BenPIN				Yes	** NA **				None
39	M39A		000X00				Yes	** NA **				None
40	M40A		000X00				Yes	** NA **				None

Member Point Loads (BLC 1 : Antenna D)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	Y	-21.85	.25
2	MP3A	My	-.0109	.25
3	MP3A	Mz	-.0146	.25
4	MP3A	Y	-21.85	5
5	MP3A	My	-.0109	5
6	MP3A	Mz	-.0146	5
7	MP3A	Y	-32.3	.25
8	MP3A	My	-.0162	.25
9	MP3A	Mz	.0215	.25
10	MP3A	Y	-32.3	5
11	MP3A	My	-.0162	5
12	MP3A	Mz	.0215	5
13	MP1A	Y	-43.55	1.25
14	MP1A	My	-.0218	1.25
15	MP1A	Mz	0	1.25
16	MP1A	Y	-43.55	3.25
17	MP1A	My	-.0218	3.25
18	MP1A	Mz	0	3.25
19	MP3A	Y	-74.7	1
20	MP3A	My	.0374	1
21	MP3A	Mz	0	1
22	MP2A	Y	-70.3	1
23	MP2A	My	.0352	1
24	MP2A	Mz	0	1
25	MP4A	Y	-4.95	.5
26	MP4A	My	-.0025	.5
27	MP4A	Mz	0	.5
28	MP4A	Y	-4.95	4.5
29	MP4A	My	-.0025	4.5
30	MP4A	Mz	0	4.5
31	MP4A	Y	-18.7	.5
32	MP4A	My	.0062	.5
33	MP4A	Mz	0	.5
34	MP3A	Y	-17.6	4
35	MP3A	My	-.0073	4
36	MP3A	Mz	0	4
37	MP3A	Y	-17.6	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
38	MP3A	My	.0073	4
39	MP3A	Mz	0	4

Member Point Loads (BLC 2 : Antenna Di)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	Y	-93.108	.25
2	MP3A	My	-.0466	.25
3	MP3A	Mz	-.0621	.25
4	MP3A	Y	-93.108	5
5	MP3A	My	-.0466	5
6	MP3A	Mz	-.0621	5
7	MP3A	Y	-93.108	.25
8	MP3A	My	-.0466	.25
9	MP3A	Mz	.0621	.25
10	MP3A	Y	-93.108	5
11	MP3A	My	-.0466	5
12	MP3A	Mz	.0621	5
13	MP1A	Y	-54.9438	1.25
14	MP1A	My	-.0275	1.25
15	MP1A	Mz	0	1.25
16	MP1A	Y	-54.9438	3.25
17	MP1A	My	-.0275	3.25
18	MP1A	Mz	0	3.25
19	MP3A	Y	-69.7927	1
20	MP3A	My	.0349	1
21	MP3A	Mz	0	1
22	MP2A	Y	-66.5735	1
23	MP2A	My	.0333	1
24	MP2A	Mz	0	1
25	MP4A	Y	-55.3675	.5
26	MP4A	My	-.0277	.5
27	MP4A	Mz	0	.5
28	MP4A	Y	-55.3675	4.5
29	MP4A	My	-.0277	4.5
30	MP4A	Mz	0	4.5
31	MP4A	Y	-31.864	.5
32	MP4A	My	.0106	.5
33	MP4A	Mz	0	.5
34	MP3A	Y	6.6	4
35	MP3A	My	.0027	4
36	MP3A	Mz	0	4
37	MP3A	Y	6.6	4
38	MP3A	My	-.0027	4
39	MP3A	Mz	0	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	0	.25
2	MP3A	Z	-86.242	.25
3	MP3A	Mx	.0575	.25
4	MP3A	X	0	5
5	MP3A	Z	-86.242	5
6	MP3A	Mx	.0575	5
7	MP3A	X	0	.25
8	MP3A	Z	-127.854	.25
9	MP3A	Mx	-.0852	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
10	MP3A	X	0	5
11	MP3A	Z	-127.854	5
12	MP3A	Mx	-.0852	5
13	MP1A	X	0	1.25
14	MP1A	Z	-62.259	1.25
15	MP1A	Mx	0	1.25
16	MP1A	X	0	3.25
17	MP1A	Z	-62.259	3.25
18	MP1A	Mx	0	3.25
19	MP3A	X	0	1
20	MP3A	Z	-49.236	1
21	MP3A	Mx	0	1
22	MP2A	X	0	1
23	MP2A	Z	-49.236	1
24	MP2A	Mx	0	1
25	MP4A	X	0	.5
26	MP4A	Z	-74.965	.5
27	MP4A	Mx	0	.5
28	MP4A	X	0	4.5
29	MP4A	Z	-74.965	4.5
30	MP4A	Mx	0	4.5
31	MP4A	X	0	.5
32	MP4A	Z	-22.871	.5
33	MP4A	Mx	0	.5
34	MP3A	X	0	4
35	MP3A	Z	-30.494	4
36	MP3A	Mx	0	4
37	MP3A	X	0	4
38	MP3A	Z	-30.494	4
39	MP3A	Mx	0	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	36.966	.25
2	MP3A	Z	-64.028	.25
3	MP3A	Mx	.0242	.25
4	MP3A	X	36.966	5
5	MP3A	Z	-64.028	5
6	MP3A	Mx	.0242	5
7	MP3A	X	58.55	.25
8	MP3A	Z	-101.412	.25
9	MP3A	Mx	-.0969	.25
10	MP3A	X	58.55	5
11	MP3A	Z	-101.412	5
12	MP3A	Mx	-.0969	5
13	MP1A	X	26.027	1.25
14	MP1A	Z	-45.081	1.25
15	MP1A	Mx	-.013	1.25
16	MP1A	X	26.027	3.25
17	MP1A	Z	-45.081	3.25
18	MP1A	Mx	-.013	3.25
19	MP3A	X	22.593	1
20	MP3A	Z	-39.132	1
21	MP3A	Mx	.0113	1
22	MP2A	X	22.196	1
23	MP2A	Z	-38.444	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
24	MP2A	Mx	.0111	1
25	MP4A	X	33.109	.5
26	MP4A	Z	-57.347	.5
27	MP4A	Mx	-.0166	.5
28	MP4A	X	33.109	4.5
29	MP4A	Z	-57.347	4.5
30	MP4A	Mx	-.0166	4.5
31	MP4A	X	9.927	.5
32	MP4A	Z	-17.193	.5
33	MP4A	Mx	.0033	.5
34	MP3A	X	12.592	4
35	MP3A	Z	-21.809	4
36	MP3A	Mx	-.0052	4
37	MP3A	X	12.592	4
38	MP3A	Z	-21.809	4
39	MP3A	Mx	.0052	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	42.708	.25
2	MP3A	Z	-24.658	.25
3	MP3A	Mx	-.0049	.25
4	MP3A	X	42.708	5
5	MP3A	Z	-24.658	5
6	MP3A	Mx	-.0049	5
7	MP3A	X	82.786	.25
8	MP3A	Z	-47.796	.25
9	MP3A	Mx	-.0733	.25
10	MP3A	X	82.786	5
11	MP3A	Z	-47.796	5
12	MP3A	Mx	-.0733	5
13	MP1A	X	27.406	1.25
14	MP1A	Z	-15.823	1.25
15	MP1A	Mx	-.0137	1.25
16	MP1A	X	27.406	3.25
17	MP1A	Z	-15.823	3.25
18	MP1A	Mx	-.0137	3.25
19	MP3A	X	32.117	1
20	MP3A	Z	-18.543	1
21	MP3A	Mx	.0161	1
22	MP2A	X	30.054	1
23	MP2A	Z	-17.352	1
24	MP2A	Mx	.015	1
25	MP4A	X	42.196	.5
26	MP4A	Z	-24.362	.5
27	MP4A	Mx	-.0211	.5
28	MP4A	X	42.196	4.5
29	MP4A	Z	-24.362	4.5
30	MP4A	Mx	-.0211	4.5
31	MP4A	X	11.967	.5
32	MP4A	Z	-6.909	.5
33	MP4A	Mx	.004	.5
34	MP3A	X	12.61	4
35	MP3A	Z	-7.28	4
36	MP3A	Mx	-.0053	4
37	MP3A	X	12.61	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
38	MP3A	Z	-7.28	4
39	MP3A	Mx	.0053	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP3A	X	37.006	.25
2	MP3A	Z	0	.25
3	MP3A	Mx	-.0185	.25
4	MP3A	X	37.006	5
5	MP3A	Z	0	5
6	MP3A	Mx	-.0185	5
7	MP3A	X	84.839	.25
8	MP3A	Z	0	.25
9	MP3A	Mx	-.0424	.25
10	MP3A	X	84.839	5
11	MP3A	Z	0	5
12	MP3A	Mx	-.0424	5
13	MP1A	X	21.441	1.25
14	MP1A	Z	0	1.25
15	MP1A	Mx	-.0107	1.25
16	MP1A	X	21.441	3.25
17	MP1A	Z	0	3.25
18	MP1A	Mx	-.0107	3.25
19	MP3A	X	33.036	1
20	MP3A	Z	0	1
21	MP3A	Mx	.0165	1
22	MP2A	X	29.859	1
23	MP2A	Z	0	1
24	MP2A	Mx	.0149	1
25	MP4A	X	39.977	.5
26	MP4A	Z	0	.5
27	MP4A	Mx	-.02	.5
28	MP4A	X	39.977	4.5
29	MP4A	Z	0	4.5
30	MP4A	Mx	-.02	4.5
31	MP4A	X	10.8	.5
32	MP4A	Z	0	.5
33	MP4A	Mx	.0036	.5
34	MP3A	X	9.249	4
35	MP3A	Z	0	4
36	MP3A	Mx	-.0039	4
37	MP3A	X	9.249	4
38	MP3A	Z	0	4
39	MP3A	Mx	.0039	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP3A	X	42.708	.25
2	MP3A	Z	24.658	.25
3	MP3A	Mx	-.0378	.25
4	MP3A	X	42.708	5
5	MP3A	Z	24.658	5
6	MP3A	Mx	-.0378	5
7	MP3A	X	82.786	.25
8	MP3A	Z	47.796	.25
9	MP3A	Mx	-.0095	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
10	MP3A	X	82.786	5
11	MP3A	Z	47.796	5
12	MP3A	Mx	-.0095	5
13	MP1A	X	27.406	1.25
14	MP1A	Z	15.823	1.25
15	MP1A	Mx	-.0137	1.25
16	MP1A	X	27.406	3.25
17	MP1A	Z	15.823	3.25
18	MP1A	Mx	-.0137	3.25
19	MP3A	X	32.117	1
20	MP3A	Z	18.543	1
21	MP3A	Mx	.0161	1
22	MP2A	X	30.054	1
23	MP2A	Z	17.352	1
24	MP2A	Mx	.015	1
25	MP4A	X	42.196	.5
26	MP4A	Z	24.362	.5
27	MP4A	Mx	-.0211	.5
28	MP4A	X	42.196	4.5
29	MP4A	Z	24.362	4.5
30	MP4A	Mx	-.0211	4.5
31	MP4A	X	11.967	.5
32	MP4A	Z	6.909	.5
33	MP4A	Mx	.004	.5
34	MP3A	X	12.61	4
35	MP3A	Z	7.28	4
36	MP3A	Mx	-.0053	4
37	MP3A	X	12.61	4
38	MP3A	Z	7.28	4
39	MP3A	Mx	.0053	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	36.966	.25
2	MP3A	Z	64.028	.25
3	MP3A	Mx	-.0612	.25
4	MP3A	X	36.966	5
5	MP3A	Z	64.028	5
6	MP3A	Mx	-.0612	5
7	MP3A	X	58.55	.25
8	MP3A	Z	101.412	.25
9	MP3A	Mx	.0383	.25
10	MP3A	X	58.55	5
11	MP3A	Z	101.412	5
12	MP3A	Mx	.0383	5
13	MP1A	X	26.027	1.25
14	MP1A	Z	45.081	1.25
15	MP1A	Mx	-.013	1.25
16	MP1A	X	26.027	3.25
17	MP1A	Z	45.081	3.25
18	MP1A	Mx	-.013	3.25
19	MP3A	X	22.593	1
20	MP3A	Z	39.132	1
21	MP3A	Mx	.0113	1
22	MP2A	X	22.196	1
23	MP2A	Z	38.444	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
24	MP2A	Mx	.0111	1
25	MP4A	X	33.109	.5
26	MP4A	Z	57.347	.5
27	MP4A	Mx	-.0166	.5
28	MP4A	X	33.109	4.5
29	MP4A	Z	57.347	4.5
30	MP4A	Mx	-.0166	4.5
31	MP4A	X	9.927	.5
32	MP4A	Z	17.193	.5
33	MP4A	Mx	.0033	.5
34	MP3A	X	12.592	4
35	MP3A	Z	21.809	4
36	MP3A	Mx	-.0052	4
37	MP3A	X	12.592	4
38	MP3A	Z	21.809	4
39	MP3A	Mx	.0052	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	0	.25
2	MP3A	Z	86.242	.25
3	MP3A	Mx	-.0575	.25
4	MP3A	X	0	5
5	MP3A	Z	86.242	5
6	MP3A	Mx	-.0575	5
7	MP3A	X	0	.25
8	MP3A	Z	127.854	.25
9	MP3A	Mx	.0852	.25
10	MP3A	X	0	5
11	MP3A	Z	127.854	5
12	MP3A	Mx	.0852	5
13	MP1A	X	0	1.25
14	MP1A	Z	62.259	1.25
15	MP1A	Mx	0	1.25
16	MP1A	X	0	3.25
17	MP1A	Z	62.259	3.25
18	MP1A	Mx	0	3.25
19	MP3A	X	0	1
20	MP3A	Z	49.236	1
21	MP3A	Mx	0	1
22	MP2A	X	0	1
23	MP2A	Z	49.236	1
24	MP2A	Mx	0	1
25	MP4A	X	0	.5
26	MP4A	Z	74.965	.5
27	MP4A	Mx	0	.5
28	MP4A	X	0	4.5
29	MP4A	Z	74.965	4.5
30	MP4A	Mx	0	4.5
31	MP4A	X	0	.5
32	MP4A	Z	22.871	.5
33	MP4A	Mx	0	.5
34	MP3A	X	0	4
35	MP3A	Z	30.494	4
36	MP3A	Mx	0	4
37	MP3A	X	0	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
38	MP3A	Z	30.494	4
39	MP3A	Mx	0	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	-36.966	.25
2	MP3A	Z	64.028	.25
3	MP3A	Mx	-.0242	.25
4	MP3A	X	-36.966	5
5	MP3A	Z	64.028	5
6	MP3A	Mx	-.0242	5
7	MP3A	X	-58.55	.25
8	MP3A	Z	101.412	.25
9	MP3A	Mx	.0969	.25
10	MP3A	X	-58.55	5
11	MP3A	Z	101.412	5
12	MP3A	Mx	.0969	5
13	MP1A	X	-26.027	1.25
14	MP1A	Z	45.081	1.25
15	MP1A	Mx	.013	1.25
16	MP1A	X	-26.027	3.25
17	MP1A	Z	45.081	3.25
18	MP1A	Mx	.013	3.25
19	MP3A	X	-22.593	1
20	MP3A	Z	39.132	1
21	MP3A	Mx	-.0113	1
22	MP2A	X	-22.196	1
23	MP2A	Z	38.444	1
24	MP2A	Mx	-.0111	1
25	MP4A	X	-33.109	.5
26	MP4A	Z	57.347	.5
27	MP4A	Mx	.0166	.5
28	MP4A	X	-33.109	4.5
29	MP4A	Z	57.347	4.5
30	MP4A	Mx	.0166	4.5
31	MP4A	X	-9.927	.5
32	MP4A	Z	17.193	.5
33	MP4A	Mx	-.0033	.5
34	MP3A	X	-12.592	4
35	MP3A	Z	21.809	4
36	MP3A	Mx	.0052	4
37	MP3A	X	-12.592	4
38	MP3A	Z	21.809	4
39	MP3A	Mx	-.0052	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	-42.708	.25
2	MP3A	Z	24.658	.25
3	MP3A	Mx	.0049	.25
4	MP3A	X	-42.708	5
5	MP3A	Z	24.658	5
6	MP3A	Mx	.0049	5
7	MP3A	X	-82.786	.25
8	MP3A	Z	47.796	.25
9	MP3A	Mx	.0733	.25



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

	Member Label	Direction	Magnitude[lb. k-ft]	Location[ft. %]
10	MP3A	X	-82.786	5
11	MP3A	Z	47.796	5
12	MP3A	Mx	.0733	5
13	MP1A	X	-27.406	1.25
14	MP1A	Z	15.823	1.25
15	MP1A	Mx	.0137	1.25
16	MP1A	X	-27.406	3.25
17	MP1A	Z	15.823	3.25
18	MP1A	Mx	.0137	3.25
19	MP3A	X	-32.117	1
20	MP3A	Z	18.543	1
21	MP3A	Mx	-.0161	1
22	MP2A	X	-30.054	1
23	MP2A	Z	17.352	1
24	MP2A	Mx	-.015	1
25	MP4A	X	-42.196	.5
26	MP4A	Z	24.362	.5
27	MP4A	Mx	.0211	.5
28	MP4A	X	-42.196	4.5
29	MP4A	Z	24.362	4.5
30	MP4A	Mx	.0211	4.5
31	MP4A	X	-11.967	.5
32	MP4A	Z	6.909	.5
33	MP4A	Mx	-.004	.5
34	MP3A	X	-12.61	4
35	MP3A	Z	7.28	4
36	MP3A	Mx	.0053	4
37	MP3A	X	-12.61	4
38	MP3A	Z	7.28	4
39	MP3A	Mx	-.0053	4

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

	Member Label	Direction	Magnitude[lb. k-ft]	Location[ft. %]
1	MP3A	X	-37.006	.25
2	MP3A	Z	0	.25
3	MP3A	Mx	.0185	.25
4	MP3A	X	-37.006	5
5	MP3A	Z	0	5
6	MP3A	Mx	.0185	5
7	MP3A	X	-84.839	.25
8	MP3A	Z	0	.25
9	MP3A	Mx	.0424	.25
10	MP3A	X	-84.839	5
11	MP3A	Z	0	5
12	MP3A	Mx	.0424	5
13	MP1A	X	-21.441	1.25
14	MP1A	Z	0	1.25
15	MP1A	Mx	.0107	1.25
16	MP1A	X	-21.441	3.25
17	MP1A	Z	0	3.25
18	MP1A	Mx	.0107	3.25
19	MP3A	X	-33.036	1
20	MP3A	Z	0	1
21	MP3A	Mx	-.0165	1
22	MP2A	X	-29.859	1
23	MP2A	Z	0	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
24	MP2A	Mx	-.0149	1
25	MP4A	X	-39.977	.5
26	MP4A	Z	0	.5
27	MP4A	Mx	.02	.5
28	MP4A	X	-39.977	4.5
29	MP4A	Z	0	4.5
30	MP4A	Mx	.02	4.5
31	MP4A	X	-10.8	.5
32	MP4A	Z	0	.5
33	MP4A	Mx	-.0036	.5
34	MP3A	X	-9.249	4
35	MP3A	Z	0	4
36	MP3A	Mx	.0039	4
37	MP3A	X	-9.249	4
38	MP3A	Z	0	4
39	MP3A	Mx	-.0039	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP3A	X	-42.708	.25
2	MP3A	Z	-24.658	.25
3	MP3A	Mx	.0378	.25
4	MP3A	X	-42.708	5
5	MP3A	Z	-24.658	5
6	MP3A	Mx	.0378	5
7	MP3A	X	-82.786	.25
8	MP3A	Z	-47.796	.25
9	MP3A	Mx	.0095	.25
10	MP3A	X	-82.786	5
11	MP3A	Z	-47.796	5
12	MP3A	Mx	.0095	5
13	MP1A	X	-27.406	1.25
14	MP1A	Z	-15.823	1.25
15	MP1A	Mx	.0137	1.25
16	MP1A	X	-27.406	3.25
17	MP1A	Z	-15.823	3.25
18	MP1A	Mx	.0137	3.25
19	MP3A	X	-32.117	1
20	MP3A	Z	-18.543	1
21	MP3A	Mx	-.0161	1
22	MP2A	X	-30.054	1
23	MP2A	Z	-17.352	1
24	MP2A	Mx	-.015	1
25	MP4A	X	-42.196	.5
26	MP4A	Z	-24.362	.5
27	MP4A	Mx	.0211	.5
28	MP4A	X	-42.196	4.5
29	MP4A	Z	-24.362	4.5
30	MP4A	Mx	.0211	4.5
31	MP4A	X	-11.967	.5
32	MP4A	Z	-6.909	.5
33	MP4A	Mx	-.004	.5
34	MP3A	X	-12.61	4
35	MP3A	Z	-7.28	4
36	MP3A	Mx	.0053	4
37	MP3A	X	-12.61	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
38	MP3A	Z	-7.28	4
39	MP3A	Mx	-.0053	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	-36.966	.25
2	MP3A	Z	-64.028	.25
3	MP3A	Mx	.0612	.25
4	MP3A	X	-36.966	5
5	MP3A	Z	-64.028	5
6	MP3A	Mx	.0612	5
7	MP3A	X	-58.55	.25
8	MP3A	Z	-101.412	.25
9	MP3A	Mx	-.0383	.25
10	MP3A	X	-58.55	5
11	MP3A	Z	-101.412	5
12	MP3A	Mx	-.0383	5
13	MP1A	X	-26.027	1.25
14	MP1A	Z	-45.081	1.25
15	MP1A	Mx	.013	1.25
16	MP1A	X	-26.027	3.25
17	MP1A	Z	-45.081	3.25
18	MP1A	Mx	.013	3.25
19	MP3A	X	-22.593	1
20	MP3A	Z	-39.132	1
21	MP3A	Mx	-.0113	1
22	MP2A	X	-22.196	1
23	MP2A	Z	-38.444	1
24	MP2A	Mx	-.0111	1
25	MP4A	X	-33.109	.5
26	MP4A	Z	-57.347	.5
27	MP4A	Mx	.0166	.5
28	MP4A	X	-33.109	4.5
29	MP4A	Z	-57.347	4.5
30	MP4A	Mx	.0166	4.5
31	MP4A	X	-9.927	.5
32	MP4A	Z	-17.193	.5
33	MP4A	Mx	-.0033	.5
34	MP3A	X	-12.592	4
35	MP3A	Z	-21.809	4
36	MP3A	Mx	.0052	4
37	MP3A	X	-12.592	4
38	MP3A	Z	-21.809	4
39	MP3A	Mx	-.0052	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	0	.25
2	MP3A	Z	-25.722	.25
3	MP3A	Mx	.0171	.25
4	MP3A	X	0	5
5	MP3A	Z	-25.722	5
6	MP3A	Mx	.0171	5
7	MP3A	X	0	.25
8	MP3A	Z	-25.722	.25
9	MP3A	Mx	-.0171	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
10	MP3A	X	0	5
11	MP3A	Z	-25.722	5
12	MP3A	Mx	-.0171	5
13	MP1A	X	0	1.25
14	MP1A	Z	-15.458	1.25
15	MP1A	Mx	0	1.25
16	MP1A	X	0	3.25
17	MP1A	Z	-15.458	3.25
18	MP1A	Mx	0	3.25
19	MP3A	X	0	1
20	MP3A	Z	-13.365	1
21	MP3A	Mx	0	1
22	MP2A	X	0	1
23	MP2A	Z	-13.365	1
24	MP2A	Mx	0	1
25	MP4A	X	0	.5
26	MP4A	Z	-15.538	.5
27	MP4A	Mx	0	.5
28	MP4A	X	0	4.5
29	MP4A	Z	-15.538	4.5
30	MP4A	Mx	0	4.5
31	MP4A	X	0	.5
32	MP4A	Z	-7.839	.5
33	MP4A	Mx	0	.5
34	MP3A	X	0	4
35	MP3A	Z	-7.564	4
36	MP3A	Mx	0	4
37	MP3A	X	0	4
38	MP3A	Z	-7.564	4
39	MP3A	Mx	0	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	11.903	.25
2	MP3A	Z	-20.617	.25
3	MP3A	Mx	.0078	.25
4	MP3A	X	11.903	5
5	MP3A	Z	-20.617	5
6	MP3A	Mx	.0078	5
7	MP3A	X	11.903	.25
8	MP3A	Z	-20.617	.25
9	MP3A	Mx	-.0197	.25
10	MP3A	X	11.903	5
11	MP3A	Z	-20.617	5
12	MP3A	Mx	-.0197	5
13	MP1A	X	6.652	1.25
14	MP1A	Z	-11.522	1.25
15	MP1A	Mx	-.0033	1.25
16	MP1A	X	6.652	3.25
17	MP1A	Z	-11.522	3.25
18	MP1A	Mx	-.0033	3.25
19	MP3A	X	6.195	1
20	MP3A	Z	-10.73	1
21	MP3A	Mx	.0031	1
22	MP2A	X	6.107	1
23	MP2A	Z	-10.578	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
24	MP2A	Mx	.0031	1
25	MP4A	X	6.976	.5
26	MP4A	Z	-12.083	.5
27	MP4A	Mx	-.0035	.5
28	MP4A	X	6.976	4.5
29	MP4A	Z	-12.083	4.5
30	MP4A	Mx	-.0035	4.5
31	MP4A	X	3.518	.5
32	MP4A	Z	-6.094	.5
33	MP4A	Mx	.0012	.5
34	MP3A	X	3.226	4
35	MP3A	Z	-5.588	4
36	MP3A	Mx	-.0013	4
37	MP3A	X	3.226	4
38	MP3A	Z	-5.588	4
39	MP3A	Mx	.0013	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	17.299	.25
2	MP3A	Z	-9.988	.25
3	MP3A	Mx	-.002	.25
4	MP3A	X	17.299	5
5	MP3A	Z	-9.988	5
6	MP3A	Mx	-.002	5
7	MP3A	X	17.299	.25
8	MP3A	Z	-9.988	.25
9	MP3A	Mx	-.0153	.25
10	MP3A	X	17.299	5
11	MP3A	Z	-9.988	5
12	MP3A	Mx	-.0153	5
13	MP1A	X	7.793	1.25
14	MP1A	Z	-4.499	1.25
15	MP1A	Mx	-.0039	1.25
16	MP1A	X	7.793	3.25
17	MP1A	Z	-4.499	3.25
18	MP1A	Mx	-.0039	3.25
19	MP3A	X	9.041	1
20	MP3A	Z	-5.22	1
21	MP3A	Mx	.0045	1
22	MP2A	X	8.585	1
23	MP2A	Z	-4.957	1
24	MP2A	Mx	.0043	1
25	MP4A	X	9.335	.5
26	MP4A	Z	-5.389	.5
27	MP4A	Mx	-.0047	.5
28	MP4A	X	9.335	4.5
29	MP4A	Z	-5.389	4.5
30	MP4A	Mx	-.0047	4.5
31	MP4A	X	4.704	.5
32	MP4A	Z	-2.716	.5
33	MP4A	Mx	.0016	.5
34	MP3A	X	3.661	4
35	MP3A	Z	-2.114	4
36	MP3A	Mx	-.0015	4
37	MP3A	X	3.661	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
38	MP3A	Z	-2.114	4
39	MP3A	Mx	.0015	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	18.06	.25
2	MP3A	Z	0	.25
3	MP3A	Mx	-.009	.25
4	MP3A	X	18.06	5
5	MP3A	Z	0	5
6	MP3A	Mx	-.009	5
7	MP3A	X	18.06	.25
8	MP3A	Z	0	.25
9	MP3A	Mx	-.009	.25
10	MP3A	X	18.06	5
11	MP3A	Z	0	5
12	MP3A	Mx	-.009	5
13	MP1A	X	6.846	1.25
14	MP1A	Z	0	1.25
15	MP1A	Mx	-.0034	1.25
16	MP1A	X	6.846	3.25
17	MP1A	Z	0	3.25
18	MP1A	Mx	-.0034	3.25
19	MP3A	X	9.465	1
20	MP3A	Z	0	1
21	MP3A	Mx	.0047	1
22	MP2A	X	8.763	1
23	MP2A	Z	0	1
24	MP2A	Mx	.0044	1
25	MP4A	X	9.192	.5
26	MP4A	Z	0	.5
27	MP4A	Mx	-.0046	.5
28	MP4A	X	9.192	4.5
29	MP4A	Z	0	4.5
30	MP4A	Mx	-.0046	4.5
31	MP4A	X	4.629	.5
32	MP4A	Z	0	.5
33	MP4A	Mx	.0015	.5
34	MP3A	X	3.116	4
35	MP3A	Z	0	4
36	MP3A	Mx	-.0013	4
37	MP3A	X	3.116	4
38	MP3A	Z	0	4
39	MP3A	Mx	.0013	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	17.299	.25
2	MP3A	Z	9.988	.25
3	MP3A	Mx	-.0153	.25
4	MP3A	X	17.299	5
5	MP3A	Z	9.988	5
6	MP3A	Mx	-.0153	5
7	MP3A	X	17.299	.25
8	MP3A	Z	9.988	.25
9	MP3A	Mx	-.002	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
10	MP3A	X	17.299	5
11	MP3A	Z	9.988	5
12	MP3A	Mx	-.002	5
13	MP1A	X	7.793	1.25
14	MP1A	Z	4.499	1.25
15	MP1A	Mx	-.0039	1.25
16	MP1A	X	7.793	3.25
17	MP1A	Z	4.499	3.25
18	MP1A	Mx	-.0039	3.25
19	MP3A	X	9.041	1
20	MP3A	Z	5.22	1
21	MP3A	Mx	.0045	1
22	MP2A	X	8.585	1
23	MP2A	Z	4.957	1
24	MP2A	Mx	.0043	1
25	MP4A	X	9.335	.5
26	MP4A	Z	5.389	.5
27	MP4A	Mx	-.0047	.5
28	MP4A	X	9.335	4.5
29	MP4A	Z	5.389	4.5
30	MP4A	Mx	-.0047	4.5
31	MP4A	X	4.704	.5
32	MP4A	Z	2.716	.5
33	MP4A	Mx	.0016	.5
34	MP3A	X	3.661	4
35	MP3A	Z	2.114	4
36	MP3A	Mx	-.0015	4
37	MP3A	X	3.661	4
38	MP3A	Z	2.114	4
39	MP3A	Mx	.0015	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	11.903	.25
2	MP3A	Z	20.617	.25
3	MP3A	Mx	-.0197	.25
4	MP3A	X	11.903	5
5	MP3A	Z	20.617	5
6	MP3A	Mx	-.0197	5
7	MP3A	X	11.903	.25
8	MP3A	Z	20.617	.25
9	MP3A	Mx	.0078	.25
10	MP3A	X	11.903	5
11	MP3A	Z	20.617	5
12	MP3A	Mx	.0078	5
13	MP1A	X	6.652	1.25
14	MP1A	Z	11.522	1.25
15	MP1A	Mx	-.0033	1.25
16	MP1A	X	6.652	3.25
17	MP1A	Z	11.522	3.25
18	MP1A	Mx	-.0033	3.25
19	MP3A	X	6.195	1
20	MP3A	Z	10.73	1
21	MP3A	Mx	.0031	1
22	MP2A	X	6.107	1
23	MP2A	Z	10.578	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
24	MP2A	Mx	.0031	1
25	MP4A	X	6.976	.5
26	MP4A	Z	12.083	.5
27	MP4A	Mx	-.0035	.5
28	MP4A	X	6.976	4.5
29	MP4A	Z	12.083	4.5
30	MP4A	Mx	-.0035	4.5
31	MP4A	X	3.518	.5
32	MP4A	Z	6.094	.5
33	MP4A	Mx	.0012	.5
34	MP3A	X	3.226	4
35	MP3A	Z	5.588	4
36	MP3A	Mx	-.0013	4
37	MP3A	X	3.226	4
38	MP3A	Z	5.588	4
39	MP3A	Mx	.0013	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	0	.25
2	MP3A	Z	25.722	.25
3	MP3A	Mx	-.0171	.25
4	MP3A	X	0	5
5	MP3A	Z	25.722	5
6	MP3A	Mx	-.0171	5
7	MP3A	X	0	.25
8	MP3A	Z	25.722	.25
9	MP3A	Mx	.0171	.25
10	MP3A	X	0	5
11	MP3A	Z	25.722	5
12	MP3A	Mx	.0171	5
13	MP1A	X	0	1.25
14	MP1A	Z	15.458	1.25
15	MP1A	Mx	0	1.25
16	MP1A	X	0	3.25
17	MP1A	Z	15.458	3.25
18	MP1A	Mx	0	3.25
19	MP3A	X	0	1
20	MP3A	Z	13.365	1
21	MP3A	Mx	0	1
22	MP2A	X	0	1
23	MP2A	Z	13.365	1
24	MP2A	Mx	0	1
25	MP4A	X	0	.5
26	MP4A	Z	15.538	.5
27	MP4A	Mx	0	.5
28	MP4A	X	0	4.5
29	MP4A	Z	15.538	4.5
30	MP4A	Mx	0	4.5
31	MP4A	X	0	.5
32	MP4A	Z	7.839	.5
33	MP4A	Mx	0	.5
34	MP3A	X	0	4
35	MP3A	Z	7.564	4
36	MP3A	Mx	0	4
37	MP3A	X	0	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
38	MP3A	Z	7.564	4
39	MP3A	Mx	0	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	-11.903	.25
2	MP3A	Z	20.617	.25
3	MP3A	Mx	-.0078	.25
4	MP3A	X	-11.903	5
5	MP3A	Z	20.617	5
6	MP3A	Mx	-.0078	5
7	MP3A	X	-11.903	.25
8	MP3A	Z	20.617	.25
9	MP3A	Mx	.0197	.25
10	MP3A	X	-11.903	5
11	MP3A	Z	20.617	5
12	MP3A	Mx	.0197	5
13	MP1A	X	-6.652	1.25
14	MP1A	Z	11.522	1.25
15	MP1A	Mx	.0033	1.25
16	MP1A	X	-6.652	3.25
17	MP1A	Z	11.522	3.25
18	MP1A	Mx	.0033	3.25
19	MP3A	X	-6.195	1
20	MP3A	Z	10.73	1
21	MP3A	Mx	-.0031	1
22	MP2A	X	-6.107	1
23	MP2A	Z	10.578	1
24	MP2A	Mx	-.0031	1
25	MP4A	X	-6.976	.5
26	MP4A	Z	12.083	.5
27	MP4A	Mx	.0035	.5
28	MP4A	X	-6.976	4.5
29	MP4A	Z	12.083	4.5
30	MP4A	Mx	.0035	4.5
31	MP4A	X	-3.518	.5
32	MP4A	Z	6.094	.5
33	MP4A	Mx	-.0012	.5
34	MP3A	X	-3.226	4
35	MP3A	Z	5.588	4
36	MP3A	Mx	.0013	4
37	MP3A	X	-3.226	4
38	MP3A	Z	5.588	4
39	MP3A	Mx	-.0013	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	-17.299	.25
2	MP3A	Z	9.988	.25
3	MP3A	Mx	.002	.25
4	MP3A	X	-17.299	5
5	MP3A	Z	9.988	5
6	MP3A	Mx	.002	5
7	MP3A	X	-17.299	.25
8	MP3A	Z	9.988	.25
9	MP3A	Mx	.0153	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
10	MP3A	X	-17.299	5
11	MP3A	Z	9.988	5
12	MP3A	Mx	.0153	5
13	MP1A	X	-7.793	1.25
14	MP1A	Z	4.499	1.25
15	MP1A	Mx	.0039	1.25
16	MP1A	X	-7.793	3.25
17	MP1A	Z	4.499	3.25
18	MP1A	Mx	.0039	3.25
19	MP3A	X	-9.041	1
20	MP3A	Z	5.22	1
21	MP3A	Mx	-.0045	1
22	MP2A	X	-8.585	1
23	MP2A	Z	4.957	1
24	MP2A	Mx	-.0043	1
25	MP4A	X	-9.335	.5
26	MP4A	Z	5.389	.5
27	MP4A	Mx	.0047	.5
28	MP4A	X	-9.335	4.5
29	MP4A	Z	5.389	4.5
30	MP4A	Mx	.0047	4.5
31	MP4A	X	-4.704	.5
32	MP4A	Z	2.716	.5
33	MP4A	Mx	-.0016	.5
34	MP3A	X	-3.661	4
35	MP3A	Z	2.114	4
36	MP3A	Mx	.0015	4
37	MP3A	X	-3.661	4
38	MP3A	Z	2.114	4
39	MP3A	Mx	-.0015	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	-18.06	.25
2	MP3A	Z	0	.25
3	MP3A	Mx	.009	.25
4	MP3A	X	-18.06	5
5	MP3A	Z	0	5
6	MP3A	Mx	.009	5
7	MP3A	X	-18.06	.25
8	MP3A	Z	0	.25
9	MP3A	Mx	.009	.25
10	MP3A	X	-18.06	5
11	MP3A	Z	0	5
12	MP3A	Mx	.009	5
13	MP1A	X	-6.846	1.25
14	MP1A	Z	0	1.25
15	MP1A	Mx	.0034	1.25
16	MP1A	X	-6.846	3.25
17	MP1A	Z	0	3.25
18	MP1A	Mx	.0034	3.25
19	MP3A	X	-9.465	1
20	MP3A	Z	0	1
21	MP3A	Mx	-.0047	1
22	MP2A	X	-8.763	1
23	MP2A	Z	0	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
24	MP2A	Mx	-.0044	1
25	MP4A	X	-9.192	.5
26	MP4A	Z	0	.5
27	MP4A	Mx	.0046	.5
28	MP4A	X	-9.192	4.5
29	MP4A	Z	0	4.5
30	MP4A	Mx	.0046	4.5
31	MP4A	X	-4.629	.5
32	MP4A	Z	0	.5
33	MP4A	Mx	-.0015	.5
34	MP3A	X	-3.116	4
35	MP3A	Z	0	4
36	MP3A	Mx	.0013	4
37	MP3A	X	-3.116	4
38	MP3A	Z	0	4
39	MP3A	Mx	-.0013	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	-17.299	.25
2	MP3A	Z	-9.988	.25
3	MP3A	Mx	.0153	.25
4	MP3A	X	-17.299	5
5	MP3A	Z	-9.988	5
6	MP3A	Mx	.0153	5
7	MP3A	X	-17.299	.25
8	MP3A	Z	-9.988	.25
9	MP3A	Mx	.002	.25
10	MP3A	X	-17.299	5
11	MP3A	Z	-9.988	5
12	MP3A	Mx	.002	5
13	MP1A	X	-7.793	1.25
14	MP1A	Z	-4.499	1.25
15	MP1A	Mx	.0039	1.25
16	MP1A	X	-7.793	3.25
17	MP1A	Z	-4.499	3.25
18	MP1A	Mx	.0039	3.25
19	MP3A	X	-9.041	1
20	MP3A	Z	-5.22	1
21	MP3A	Mx	-.0045	1
22	MP2A	X	-8.585	1
23	MP2A	Z	-4.957	1
24	MP2A	Mx	-.0043	1
25	MP4A	X	-9.335	.5
26	MP4A	Z	-5.389	.5
27	MP4A	Mx	.0047	.5
28	MP4A	X	-9.335	4.5
29	MP4A	Z	-5.389	4.5
30	MP4A	Mx	.0047	4.5
31	MP4A	X	-4.704	.5
32	MP4A	Z	-2.716	.5
33	MP4A	Mx	-.0016	.5
34	MP3A	X	-3.661	4
35	MP3A	Z	-2.114	4
36	MP3A	Mx	.0015	4
37	MP3A	X	-3.661	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
38	MP3A	Z	-2.114	4
39	MP3A	Mx	-.0015	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	-11.903	.25
2	MP3A	Z	-20.617	.25
3	MP3A	Mx	.0197	.25
4	MP3A	X	-11.903	5
5	MP3A	Z	-20.617	5
6	MP3A	Mx	.0197	5
7	MP3A	X	-11.903	.25
8	MP3A	Z	-20.617	.25
9	MP3A	Mx	-.0078	.25
10	MP3A	X	-11.903	5
11	MP3A	Z	-20.617	5
12	MP3A	Mx	-.0078	5
13	MP1A	X	-6.652	1.25
14	MP1A	Z	-11.522	1.25
15	MP1A	Mx	.0033	1.25
16	MP1A	X	-6.652	3.25
17	MP1A	Z	-11.522	3.25
18	MP1A	Mx	.0033	3.25
19	MP3A	X	-6.195	1
20	MP3A	Z	-10.73	1
21	MP3A	Mx	-.0031	1
22	MP2A	X	-6.107	1
23	MP2A	Z	-10.578	1
24	MP2A	Mx	-.0031	1
25	MP4A	X	-6.976	.5
26	MP4A	Z	-12.083	.5
27	MP4A	Mx	.0035	.5
28	MP4A	X	-6.976	4.5
29	MP4A	Z	-12.083	4.5
30	MP4A	Mx	.0035	4.5
31	MP4A	X	-3.518	.5
32	MP4A	Z	-6.094	.5
33	MP4A	Mx	-.0012	.5
34	MP3A	X	-3.226	4
35	MP3A	Z	-5.588	4
36	MP3A	Mx	.0013	4
37	MP3A	X	-3.226	4
38	MP3A	Z	-5.588	4
39	MP3A	Mx	-.0013	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	0	.25
2	MP3A	Z	-5.39	.25
3	MP3A	Mx	.0036	.25
4	MP3A	X	0	5
5	MP3A	Z	-5.39	5
6	MP3A	Mx	.0036	5
7	MP3A	X	0	.25
8	MP3A	Z	-7.991	.25
9	MP3A	Mx	-.0053	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
10	MP3A	X	0	5
11	MP3A	Z	-7.991	5
12	MP3A	Mx	-0.053	5
13	MP1A	X	0	1.25
14	MP1A	Z	-3.891	1.25
15	MP1A	Mx	0	1.25
16	MP1A	X	0	3.25
17	MP1A	Z	-3.891	3.25
18	MP1A	Mx	0	3.25
19	MP3A	X	0	1
20	MP3A	Z	-3.077	1
21	MP3A	Mx	0	1
22	MP2A	X	0	1
23	MP2A	Z	-3.077	1
24	MP2A	Mx	0	1
25	MP4A	X	0	.5
26	MP4A	Z	-4.685	.5
27	MP4A	Mx	0	.5
28	MP4A	X	0	4.5
29	MP4A	Z	-4.685	4.5
30	MP4A	Mx	0	4.5
31	MP4A	X	0	.5
32	MP4A	Z	-1.429	.5
33	MP4A	Mx	0	.5
34	MP3A	X	0	4
35	MP3A	Z	-1.906	4
36	MP3A	Mx	0	4
37	MP3A	X	0	4
38	MP3A	Z	-1.906	4
39	MP3A	Mx	0	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	2.31	.25
2	MP3A	Z	-4.002	.25
3	MP3A	Mx	.0015	.25
4	MP3A	X	2.31	5
5	MP3A	Z	-4.002	5
6	MP3A	Mx	.0015	5
7	MP3A	X	3.659	.25
8	MP3A	Z	-6.338	.25
9	MP3A	Mx	-.0061	.25
10	MP3A	X	3.659	5
11	MP3A	Z	-6.338	5
12	MP3A	Mx	-.0061	5
13	MP1A	X	1.627	1.25
14	MP1A	Z	-2.818	1.25
15	MP1A	Mx	-.000814	1.25
16	MP1A	X	1.627	3.25
17	MP1A	Z	-2.818	3.25
18	MP1A	Mx	-.000814	3.25
19	MP3A	X	1.412	1
20	MP3A	Z	-2.446	1
21	MP3A	Mx	.000706	1
22	MP2A	X	1.387	1
23	MP2A	Z	-2.403	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
24	MP2A	Mx	.000693	1
25	MP4A	X	2.069	.5
26	MP4A	Z	-3.584	.5
27	MP4A	Mx	-.001	.5
28	MP4A	X	2.069	4.5
29	MP4A	Z	-3.584	4.5
30	MP4A	Mx	-.001	4.5
31	MP4A	X	.62	.5
32	MP4A	Z	-1.075	.5
33	MP4A	Mx	.000207	.5
34	MP3A	X	.787	4
35	MP3A	Z	-1.363	4
36	MP3A	Mx	-.000328	4
37	MP3A	X	.787	4
38	MP3A	Z	-1.363	4
39	MP3A	Mx	.000328	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	2.669	.25
2	MP3A	Z	-1.541	.25
3	MP3A	Mx	-.000307	.25
4	MP3A	X	2.669	5
5	MP3A	Z	-1.541	5
6	MP3A	Mx	-.000307	5
7	MP3A	X	5.174	.25
8	MP3A	Z	-2.987	.25
9	MP3A	Mx	-.0046	.25
10	MP3A	X	5.174	5
11	MP3A	Z	-2.987	5
12	MP3A	Mx	-.0046	5
13	MP1A	X	1.713	1.25
14	MP1A	Z	-.989	1.25
15	MP1A	Mx	-.000856	1.25
16	MP1A	X	1.713	3.25
17	MP1A	Z	-.989	3.25
18	MP1A	Mx	-.000856	3.25
19	MP3A	X	2.007	1
20	MP3A	Z	-1.159	1
21	MP3A	Mx	.001	1
22	MP2A	X	1.878	1
23	MP2A	Z	-1.084	1
24	MP2A	Mx	.000939	1
25	MP4A	X	2.637	.5
26	MP4A	Z	-1.523	.5
27	MP4A	Mx	-.0013	.5
28	MP4A	X	2.637	4.5
29	MP4A	Z	-1.523	4.5
30	MP4A	Mx	-.0013	4.5
31	MP4A	X	.748	.5
32	MP4A	Z	-.432	.5
33	MP4A	Mx	.000249	.5
34	MP3A	X	.788	4
35	MP3A	Z	-.455	4
36	MP3A	Mx	-.000328	4
37	MP3A	X	.788	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
38	MP3A	Z	-455	4
39	MP3A	Mx	.000328	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	2.313	.25
2	MP3A	Z	0	.25
3	MP3A	Mx	-.0012	.25
4	MP3A	X	2.313	5
5	MP3A	Z	0	5
6	MP3A	Mx	-.0012	5
7	MP3A	X	5.302	.25
8	MP3A	Z	0	.25
9	MP3A	Mx	-.0027	.25
10	MP3A	X	5.302	5
11	MP3A	Z	0	5
12	MP3A	Mx	-.0027	5
13	MP1A	X	1.34	1.25
14	MP1A	Z	0	1.25
15	MP1A	Mx	-.00067	1.25
16	MP1A	X	1.34	3.25
17	MP1A	Z	0	3.25
18	MP1A	Mx	-.00067	3.25
19	MP3A	X	2.065	1
20	MP3A	Z	0	1
21	MP3A	Mx	.001	1
22	MP2A	X	1.866	1
23	MP2A	Z	0	1
24	MP2A	Mx	.000933	1
25	MP4A	X	2.499	.5
26	MP4A	Z	0	.5
27	MP4A	Mx	-.0013	.5
28	MP4A	X	2.499	4.5
29	MP4A	Z	0	4.5
30	MP4A	Mx	-.0013	4.5
31	MP4A	X	.675	.5
32	MP4A	Z	0	.5
33	MP4A	Mx	.000225	.5
34	MP3A	X	.578	4
35	MP3A	Z	0	4
36	MP3A	Mx	-.000241	4
37	MP3A	X	.578	4
38	MP3A	Z	0	4
39	MP3A	Mx	.000241	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	2.669	.25
2	MP3A	Z	1.541	.25
3	MP3A	Mx	-.0024	.25
4	MP3A	X	2.669	5
5	MP3A	Z	1.541	5
6	MP3A	Mx	-.0024	5
7	MP3A	X	5.174	.25
8	MP3A	Z	2.987	.25
9	MP3A	Mx	-.000596	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
10	MP3A	X	5.174	5
11	MP3A	Z	2.987	5
12	MP3A	Mx	-.000596	5
13	MP1A	X	1.713	1.25
14	MP1A	Z	.989	1.25
15	MP1A	Mx	-.000856	1.25
16	MP1A	X	1.713	3.25
17	MP1A	Z	.989	3.25
18	MP1A	Mx	-.000856	3.25
19	MP3A	X	2.007	1
20	MP3A	Z	1.159	1
21	MP3A	Mx	.001	1
22	MP2A	X	1.878	1
23	MP2A	Z	1.084	1
24	MP2A	Mx	.000939	1
25	MP4A	X	2.637	.5
26	MP4A	Z	1.523	.5
27	MP4A	Mx	-.0013	.5
28	MP4A	X	2.637	4.5
29	MP4A	Z	1.523	4.5
30	MP4A	Mx	-.0013	4.5
31	MP4A	X	.748	.5
32	MP4A	Z	.432	.5
33	MP4A	Mx	.000249	.5
34	MP3A	X	.788	4
35	MP3A	Z	.455	4
36	MP3A	Mx	-.000328	4
37	MP3A	X	.788	4
38	MP3A	Z	.455	4
39	MP3A	Mx	.000328	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	2.31	.25
2	MP3A	Z	4.002	.25
3	MP3A	Mx	-.0038	.25
4	MP3A	X	2.31	5
5	MP3A	Z	4.002	5
6	MP3A	Mx	-.0038	5
7	MP3A	X	3.659	.25
8	MP3A	Z	6.338	.25
9	MP3A	Mx	.0024	.25
10	MP3A	X	3.659	5
11	MP3A	Z	6.338	5
12	MP3A	Mx	.0024	5
13	MP1A	X	1.627	1.25
14	MP1A	Z	2.818	1.25
15	MP1A	Mx	-.000814	1.25
16	MP1A	X	1.627	3.25
17	MP1A	Z	2.818	3.25
18	MP1A	Mx	-.000814	3.25
19	MP3A	X	1.412	1
20	MP3A	Z	2.446	1
21	MP3A	Mx	.000706	1
22	MP2A	X	1.387	1
23	MP2A	Z	2.403	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
24	MP2A	Mx	.000693	1
25	MP4A	X	2.069	.5
26	MP4A	Z	3.584	.5
27	MP4A	Mx	-.001	.5
28	MP4A	X	2.069	4.5
29	MP4A	Z	3.584	4.5
30	MP4A	Mx	-.001	4.5
31	MP4A	X	.62	.5
32	MP4A	Z	1.075	.5
33	MP4A	Mx	.000207	.5
34	MP3A	X	.787	4
35	MP3A	Z	1.363	4
36	MP3A	Mx	-.000328	4
37	MP3A	X	.787	4
38	MP3A	Z	1.363	4
39	MP3A	Mx	.000328	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	0	.25
2	MP3A	Z	5.39	.25
3	MP3A	Mx	-.0036	.25
4	MP3A	X	0	5
5	MP3A	Z	5.39	5
6	MP3A	Mx	-.0036	5
7	MP3A	X	0	.25
8	MP3A	Z	7.991	.25
9	MP3A	Mx	.0053	.25
10	MP3A	X	0	5
11	MP3A	Z	7.991	5
12	MP3A	Mx	.0053	5
13	MP1A	X	0	1.25
14	MP1A	Z	3.891	1.25
15	MP1A	Mx	0	1.25
16	MP1A	X	0	3.25
17	MP1A	Z	3.891	3.25
18	MP1A	Mx	0	3.25
19	MP3A	X	0	1
20	MP3A	Z	3.077	1
21	MP3A	Mx	0	1
22	MP2A	X	0	1
23	MP2A	Z	3.077	1
24	MP2A	Mx	0	1
25	MP4A	X	0	.5
26	MP4A	Z	4.685	.5
27	MP4A	Mx	0	.5
28	MP4A	X	0	4.5
29	MP4A	Z	4.685	4.5
30	MP4A	Mx	0	4.5
31	MP4A	X	0	.5
32	MP4A	Z	1.429	.5
33	MP4A	Mx	0	.5
34	MP3A	X	0	4
35	MP3A	Z	1.906	4
36	MP3A	Mx	0	4
37	MP3A	X	0	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
38	MP3A	Z	1.906	4
39	MP3A	Mx	0	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	-2.31	.25
2	MP3A	Z	4.002	.25
3	MP3A	Mx	-.0015	.25
4	MP3A	X	-2.31	5
5	MP3A	Z	4.002	5
6	MP3A	Mx	-.0015	5
7	MP3A	X	-3.659	.25
8	MP3A	Z	6.338	.25
9	MP3A	Mx	.0061	.25
10	MP3A	X	-3.659	5
11	MP3A	Z	6.338	5
12	MP3A	Mx	.0061	5
13	MP1A	X	-1.627	1.25
14	MP1A	Z	2.818	1.25
15	MP1A	Mx	.000814	1.25
16	MP1A	X	-1.627	3.25
17	MP1A	Z	2.818	3.25
18	MP1A	Mx	.000814	3.25
19	MP3A	X	-1.412	1
20	MP3A	Z	2.446	1
21	MP3A	Mx	-.000706	1
22	MP2A	X	-1.387	1
23	MP2A	Z	2.403	1
24	MP2A	Mx	-.000693	1
25	MP4A	X	-2.069	.5
26	MP4A	Z	3.584	.5
27	MP4A	Mx	.001	.5
28	MP4A	X	-2.069	4.5
29	MP4A	Z	3.584	4.5
30	MP4A	Mx	.001	4.5
31	MP4A	X	-.62	.5
32	MP4A	Z	1.075	.5
33	MP4A	Mx	-.000207	.5
34	MP3A	X	-.787	4
35	MP3A	Z	1.363	4
36	MP3A	Mx	.000328	4
37	MP3A	X	-.787	4
38	MP3A	Z	1.363	4
39	MP3A	Mx	-.000328	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	-2.669	.25
2	MP3A	Z	1.541	.25
3	MP3A	Mx	.000307	.25
4	MP3A	X	-2.669	5
5	MP3A	Z	1.541	5
6	MP3A	Mx	.000307	5
7	MP3A	X	-5.174	.25
8	MP3A	Z	2.987	.25
9	MP3A	Mx	.0046	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
10	MP3A	X	-5.174	5
11	MP3A	Z	2.987	5
12	MP3A	Mx	.0046	5
13	MP1A	X	-1.713	1.25
14	MP1A	Z	.989	1.25
15	MP1A	Mx	.000856	1.25
16	MP1A	X	-1.713	3.25
17	MP1A	Z	.989	3.25
18	MP1A	Mx	.000856	3.25
19	MP3A	X	-2.007	1
20	MP3A	Z	1.159	1
21	MP3A	Mx	-.001	1
22	MP2A	X	-1.878	1
23	MP2A	Z	1.084	1
24	MP2A	Mx	-.000939	1
25	MP4A	X	-2.637	.5
26	MP4A	Z	1.523	.5
27	MP4A	Mx	.0013	.5
28	MP4A	X	-2.637	4.5
29	MP4A	Z	1.523	4.5
30	MP4A	Mx	.0013	4.5
31	MP4A	X	-.748	.5
32	MP4A	Z	.432	.5
33	MP4A	Mx	-.000249	.5
34	MP3A	X	-.788	4
35	MP3A	Z	.455	4
36	MP3A	Mx	.000328	4
37	MP3A	X	-.788	4
38	MP3A	Z	.455	4
39	MP3A	Mx	-.000328	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	-2.313	.25
2	MP3A	Z	0	.25
3	MP3A	Mx	.0012	.25
4	MP3A	X	-2.313	5
5	MP3A	Z	0	5
6	MP3A	Mx	.0012	5
7	MP3A	X	-5.302	.25
8	MP3A	Z	0	.25
9	MP3A	Mx	.0027	.25
10	MP3A	X	-5.302	5
11	MP3A	Z	0	5
12	MP3A	Mx	.0027	5
13	MP1A	X	-1.34	1.25
14	MP1A	Z	0	1.25
15	MP1A	Mx	.00067	1.25
16	MP1A	X	-1.34	3.25
17	MP1A	Z	0	3.25
18	MP1A	Mx	.00067	3.25
19	MP3A	X	-2.065	1
20	MP3A	Z	0	1
21	MP3A	Mx	-.001	1
22	MP2A	X	-1.866	1
23	MP2A	Z	0	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
24	MP2A	Mx	-.000933	1
25	MP4A	X	-2.499	.5
26	MP4A	Z	0	.5
27	MP4A	Mx	.0013	.5
28	MP4A	X	-2.499	4.5
29	MP4A	Z	0	4.5
30	MP4A	Mx	.0013	4.5
31	MP4A	X	-.675	.5
32	MP4A	Z	0	.5
33	MP4A	Mx	-.000225	.5
34	MP3A	X	-.578	4
35	MP3A	Z	0	4
36	MP3A	Mx	.000241	4
37	MP3A	X	-.578	4
38	MP3A	Z	0	4
39	MP3A	Mx	-.000241	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	-2.669	.25
2	MP3A	Z	-1.541	.25
3	MP3A	Mx	.0024	.25
4	MP3A	X	-2.669	5
5	MP3A	Z	-1.541	5
6	MP3A	Mx	.0024	5
7	MP3A	X	-5.174	.25
8	MP3A	Z	-2.987	.25
9	MP3A	Mx	.000596	.25
10	MP3A	X	-5.174	5
11	MP3A	Z	-2.987	5
12	MP3A	Mx	.000596	5
13	MP1A	X	-1.713	1.25
14	MP1A	Z	-.989	1.25
15	MP1A	Mx	.000856	1.25
16	MP1A	X	-1.713	3.25
17	MP1A	Z	-.989	3.25
18	MP1A	Mx	.000856	3.25
19	MP3A	X	-2.007	1
20	MP3A	Z	-1.159	1
21	MP3A	Mx	-.001	1
22	MP2A	X	-1.878	1
23	MP2A	Z	-1.084	1
24	MP2A	Mx	-.000939	1
25	MP4A	X	-2.637	.5
26	MP4A	Z	-1.523	.5
27	MP4A	Mx	.0013	.5
28	MP4A	X	-2.637	4.5
29	MP4A	Z	-1.523	4.5
30	MP4A	Mx	.0013	4.5
31	MP4A	X	-.748	.5
32	MP4A	Z	-.432	.5
33	MP4A	Mx	-.000249	.5
34	MP3A	X	-.788	4
35	MP3A	Z	-.455	4
36	MP3A	Mx	.000328	4
37	MP3A	X	-.788	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
38	MP3A	Z	- .455	4
39	MP3A	Mx	-.000328	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	-2.31	.25
2	MP3A	Z	-4.002	.25
3	MP3A	Mx	.0038	.25
4	MP3A	X	-2.31	5
5	MP3A	Z	-4.002	5
6	MP3A	Mx	.0038	5
7	MP3A	X	-3.659	.25
8	MP3A	Z	-6.338	.25
9	MP3A	Mx	-.0024	.25
10	MP3A	X	-3.659	5
11	MP3A	Z	-6.338	5
12	MP3A	Mx	-.0024	5
13	MP1A	X	-1.627	1.25
14	MP1A	Z	-2.818	1.25
15	MP1A	Mx	.000814	1.25
16	MP1A	X	-1.627	3.25
17	MP1A	Z	-2.818	3.25
18	MP1A	Mx	.000814	3.25
19	MP3A	X	-1.412	1
20	MP3A	Z	-2.446	1
21	MP3A	Mx	-.000706	1
22	MP2A	X	-1.387	1
23	MP2A	Z	-2.403	1
24	MP2A	Mx	-.000693	1
25	MP4A	X	-2.069	.5
26	MP4A	Z	-3.584	.5
27	MP4A	Mx	.001	.5
28	MP4A	X	-2.069	4.5
29	MP4A	Z	-3.584	4.5
30	MP4A	Mx	.001	4.5
31	MP4A	X	-.62	.5
32	MP4A	Z	-1.075	.5
33	MP4A	Mx	-.000207	.5
34	MP3A	X	-.787	4
35	MP3A	Z	-1.363	4
36	MP3A	Mx	.000328	4
37	MP3A	X	-.787	4
38	MP3A	Z	-1.363	4
39	MP3A	Mx	-.000328	4

Member Point Loads (BLC 77 : Lm1)

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

Member Point Loads (BLC 78 : Lm2)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	M40A	Y	-500	0

Member Point Loads (BLC 79 : Lv1)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
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Member Point Loads (BLC 79 : Lv1) (Continued)

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

Member Point Loads (BLC 80 : Lv2)

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

Member Point Loads (BLC 81 : Antenna Ev)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	Y	-.8484	.25
2	MP3A	My	-.000424	.25
3	MP3A	Mz	-.000566	.25
4	MP3A	Y	-.8484	5
5	MP3A	Mv	-.000424	5
6	MP3A	Mz	-.000566	5
7	MP3A	Y	-1.2541	.25
8	MP3A	My	-.000627	.25
9	MP3A	Mz	.000836	.25
10	MP3A	Y	-1.2541	5
11	MP3A	Mv	-.000627	5
12	MP3A	Mz	.000836	5
13	MP1A	Y	-1.6909	1.25
14	MP1A	Mv	-.000845	1.25
15	MP1A	Mz	0	1.25
16	MP1A	Y	-1.6909	3.25
17	MP1A	Mv	-.000845	3.25
18	MP1A	Mz	0	3.25
19	MP3A	Y	-2.9004	1
20	MP3A	My	.0014	1
21	MP3A	Mz	0	1
22	MP2A	Y	-2.7295	1
23	MP2A	Mv	.0014	1
24	MP2A	Mz	0	1
25	MP4A	Y	-.1922	.5
26	MP4A	My	-9.6e-5	.5
27	MP4A	Mz	0	.5
28	MP4A	Y	-.1922	4.5
29	MP4A	My	-9.6e-5	4.5
30	MP4A	Mz	0	4.5
31	MP4A	Y	-.7261	.5
32	MP4A	My	.000242	.5
33	MP4A	Mz	0	.5
34	MP3A	Y	-.6833	4
35	MP3A	Mv	-.000285	4
36	MP3A	Mz	0	4
37	MP3A	Y	-.6833	4
38	MP3A	My	.000285	4
39	MP3A	Mz	0	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	Z	-2.1209	.25
2	MP3A	Mx	.0014	.25
3	MP3A	Z	-2.1209	5
4	MP3A	Mx	.0014	5
5	MP3A	Z	-3.1353	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
6	MP3A	Mx	-0.021	.25
7	MP3A	Z	-3.1353	5
8	MP3A	Mx	-0.021	5
9	MP1A	Z	-4.2273	1.25
10	MP1A	Mx	0	1.25
11	MP1A	Z	-4.2273	3.25
12	MP1A	Mx	0	3.25
13	MP3A	Z	-7.2509	1
14	MP3A	Mx	0	1
15	MP2A	Z	-6.8238	1
16	MP2A	Mx	0	1
17	MP4A	Z	-4.805	.5
18	MP4A	Mx	0	.5
19	MP4A	Z	-4.805	4.5
20	MP4A	Mx	0	4.5
21	MP4A	Z	-1.8151	.5
22	MP4A	Mx	0	.5
23	MP3A	Z	-1.7084	4
24	MP3A	Mx	0	4
25	MP3A	Z	-1.7084	4
26	MP3A	Mx	0	4

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	2.1209	.25
2	MP3A	Mx	-.0011	.25
3	MP3A	X	2.1209	5
4	MP3A	Mx	-.0011	5
5	MP3A	X	3.1353	.25
6	MP3A	Mx	-.0016	.25
7	MP3A	X	3.1353	5
8	MP3A	Mx	-.0016	5
9	MP1A	X	4.2273	1.25
10	MP1A	Mx	-.0021	1.25
11	MP1A	X	4.2273	3.25
12	MP1A	Mx	-.0021	3.25
13	MP3A	X	7.2509	1
14	MP3A	Mx	.0036	1
15	MP2A	X	6.8238	1
16	MP2A	Mx	.0034	1
17	MP4A	X	.4805	.5
18	MP4A	Mx	-.00024	.5
19	MP4A	X	.4805	4.5
20	MP4A	Mx	-.00024	4.5
21	MP4A	X	1.8151	.5
22	MP4A	Mx	.000605	.5
23	MP3A	X	1.7084	4
24	MP3A	Mx	-.000712	4
25	MP3A	X	1.7084	4
26	MP3A	Mx	.000712	4

Member Distributed Loads (BLC 40 : Structure Di)

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location	End Location
1	M1	Y	-10.7892	-10.7892	0	%100
2	M2	Y	-10.7892	-10.7892	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
3	MP4A	Y	-8.393	-8.393	0	%100
4	M5	Y	-8.393	-8.393	0	%100
5	M6	Y	-8.393	-8.393	0	%100
6	M7	Y	-8.393	-8.393	0	%100
7	M9	Y	-8.393	-8.393	0	%100
8	MP1A	Y	-8.393	-8.393	0	%100
9	RCP	Y	-10.9337	-10.9337	0	%100
10	M43	Y	-10.9337	-10.9337	0	%100
11	M44	Y	-10.9337	-10.9337	0	%100
12	M45	Y	-10.9337	-10.9337	0	%100
13	M46	Y	-10.9337	-10.9337	0	%100
14	M47	Y	-10.9337	-10.9337	0	%100
15	M50	Y	-9.4254	-9.4254	0	%100
16	M53	Y	-9.3292	-9.3292	0	%100
17	M54	Y	-9.3292	-9.3292	0	%100
18	M55	Y	-7.4123	-7.4123	0	%100
19	MP2A	Y	-8.393	-8.393	0	%100
20	MP3A	Y	-8.393	-8.393	0	%100
21	M41	Y	-15.9205	-15.9205	0	%100
22	M42	Y	-15.9205	-15.9205	0	%100
23	M48A	Y	-9.4254	-9.4254	0	%100
24	M49A	Y	-10.7892	-10.7892	0	%100
25	M50A	Y	-10.7892	-10.7892	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	-13.2354	-13.2354	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-13.2354	-13.2354	0	%100
5	MP4A	X	0	0	0	%100
6	MP4A	Z	-7.4045	-7.4045	0	%100
7	M5	X	0	0	0	%100
8	M5	Z	-7.4045	-7.4045	0	%100
9	M6	X	0	0	0	%100
10	M6	Z	-6.5809	-6.5809	0	%100
11	M7	X	0	0	0	%100
12	M7	Z	-7.4045	-7.4045	0	%100
13	M9	X	0	0	0	%100
14	M9	Z	-7.4045	-7.4045	0	%100
15	MP1A	X	0	0	0	%100
16	MP1A	Z	-7.5442	-7.5442	0	%100
17	RCP	X	0	0	0	%100
18	RCP	Z	-2.4668	-2.4668	0	%100
19	M43	X	0	0	0	%100
20	M43	Z	-10.9413	-10.9413	0	%100
21	M44	X	0	0	0	%100
22	M44	Z	-2.4668	-2.4668	0	%100
23	M45	X	0	0	0	%100
24	M45	Z	-2.4668	-2.4668	0	%100
25	M46	X	0	0	0	%100
26	M46	Z	-10.9413	-10.9413	0	%100
27	M47	X	0	0	0	%100
28	M47	Z	-2.4668	-2.4668	0	%100
29	M50	X	0	0	0	%100
30	M50	Z	-7.728	-7.728	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location	End Location
31	M53	X	0	0	0	%100
32	M53	Z	-9.0883	-9.0883	0	%100
33	M54	X	0	0	0	%100
34	M54	Z	-9.0883	-9.0883	0	%100
35	M55	X	0	0	0	%100
36	M55	Z	-.5284	-.5284	0	%100
37	MP2A	X	0	0	0	%100
38	MP2A	Z	-7.5442	-7.5442	0	%100
39	MP3A	X	0	0	0	%100
40	MP3A	Z	-7.5442	-7.5442	0	%100
41	M41	X	0	0	0	%100
42	M41	Z	0	0	0	%100
43	M42	X	0	0	0	%100
44	M42	Z	0	0	0	%100
45	M48A	X	0	0	0	%100
46	M48A	Z	-9.1324	-9.1324	0	%100
47	M49A	X	0	0	0	%100
48	M49A	Z	-12.3587	-12.3587	0	%100
49	M50A	X	0	0	0	%100
50	M50A	Z	-12.3587	-12.3587	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location	End Location
1	M1	X	4.9633	4.9633	0	%100
2	M1	Z	-8.5966	-8.5966	0	%100
3	M2	X	4.9633	4.9633	0	%100
4	M2	Z	-8.5966	-8.5966	0	%100
5	MP4A	X	3.7022	3.7022	0	%100
6	MP4A	Z	-6.4125	-6.4125	0	%100
7	M5	X	3.7022	3.7022	0	%100
8	M5	Z	-6.4125	-6.4125	0	%100
9	M6	X	3.2905	3.2905	0	%100
10	M6	Z	-5.6993	-5.6993	0	%100
11	M7	X	3.7022	3.7022	0	%100
12	M7	Z	-6.4125	-6.4125	0	%100
13	M9	X	3.7022	3.7022	0	%100
14	M9	Z	-6.4125	-6.4125	0	%100
15	MP1A	X	3.7721	3.7721	0	%100
16	MP1A	Z	-6.5334	-6.5334	0	%100
17	RCP	X	.0011	.0011	0	%100
18	RCP	Z	-.002	-.002	0	%100
19	M43	X	4.103	4.103	0	%100
20	M43	Z	-7.1066	-7.1066	0	%100
21	M44	X	3.8319	3.8319	0	%100
22	M44	Z	-6.637	-6.637	0	%100
23	M45	X	.0011	.0011	0	%100
24	M45	Z	-.002	-.002	0	%100
25	M46	X	4.103	4.103	0	%100
26	M46	Z	-7.1066	-7.1066	0	%100
27	M47	X	3.8319	3.8319	0	%100
28	M47	Z	-6.637	-6.637	0	%100
29	M50	X	3.864	3.864	0	%100
30	M50	Z	-6.6926	-6.6926	0	%100
31	M53	X	4.5441	4.5441	0	%100
32	M53	Z	-7.8707	-7.8707	0	%100
33	M54	X	4.5441	4.5441	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
34	M54	Z	-7.8707	-7.8707	0	%100
35	M55	X	.1479	.1479	0	%100
36	M55	Z	-2.561	-2.561	0	%100
37	MP2A	X	3.7721	3.7721	0	%100
38	MP2A	Z	-6.5334	-6.5334	0	%100
39	MP3A	X	3.7721	3.7721	0	%100
40	MP3A	Z	-6.5334	-6.5334	0	%100
41	M41	X	.1985	.1985	0	%100
42	M41	Z	-.3439	-.3439	0	%100
43	M42	X	.1985	.1985	0	%100
44	M42	Z	-.3439	-.3439	0	%100
45	M48A	X	3.4247	3.4247	0	%100
46	M48A	Z	-5.9317	-5.9317	0	%100
47	M49A	X	4.376	4.376	0	%100
48	M49A	Z	-7.5794	-7.5794	0	%100
49	M50A	X	6.4949	6.4949	0	%100
50	M50A	Z	-11.2494	-11.2494	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M1	X	2.8655	2.8655	0	%100
2	M1	Z	-1.6544	-1.6544	0	%100
3	M2	X	2.8655	2.8655	0	%100
4	M2	Z	-1.6544	-1.6544	0	%100
5	MP4A	X	6.4125	6.4125	0	%100
6	MP4A	Z	-3.7022	-3.7022	0	%100
7	M5	X	6.4125	6.4125	0	%100
8	M5	Z	-3.7022	-3.7022	0	%100
9	M6	X	5.6993	5.6993	0	%100
10	M6	Z	-3.2905	-3.2905	0	%100
11	M7	X	6.4125	6.4125	0	%100
12	M7	Z	-3.7022	-3.7022	0	%100
13	M9	X	6.4125	6.4125	0	%100
14	M9	Z	-3.7022	-3.7022	0	%100
15	MP1A	X	6.5334	6.5334	0	%100
16	MP1A	Z	-3.7721	-3.7721	0	%100
17	RCP	X	2.3682	2.3682	0	%100
18	RCP	Z	-1.3673	-1.3673	0	%100
19	M43	X	2.3689	2.3689	0	%100
20	M43	Z	-1.3677	-1.3677	0	%100
21	M44	X	9.0032	9.0032	0	%100
22	M44	Z	-5.198	-5.198	0	%100
23	M45	X	2.3682	2.3682	0	%100
24	M45	Z	-1.3673	-1.3673	0	%100
25	M46	X	2.3689	2.3689	0	%100
26	M46	Z	-1.3677	-1.3677	0	%100
27	M47	X	9.0032	9.0032	0	%100
28	M47	Z	-5.198	-5.198	0	%100
29	M50	X	6.6926	6.6926	0	%100
30	M50	Z	-3.864	-3.864	0	%100
31	M53	X	7.8707	7.8707	0	%100
32	M53	Z	-4.5441	-4.5441	0	%100
33	M54	X	7.8707	7.8707	0	%100
34	M54	Z	-4.5441	-4.5441	0	%100
35	M55	X	2.4119	2.4119	0	%100
36	M55	Z	-1.3925	-1.3925	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	End Location
37	MP2A	X	6.5334	6.5334	0	%100
38	MP2A	Z	-3.7721	-3.7721	0	%100
39	MP3A	X	6.5334	6.5334	0	%100
40	MP3A	Z	-3.7721	-3.7721	0	%100
41	M41	X	1.0316	1.0316	0	%100
42	M41	Z	-.5956	-.5956	0	%100
43	M42	X	1.0316	1.0316	0	%100
44	M42	Z	-.5956	-.5956	0	%100
45	M48A	X	1.9772	1.9772	0	%100
46	M48A	Z	-1.1416	-1.1416	0	%100
47	M49A	X	5.0024	5.0024	0	%100
48	M49A	Z	-2.8882	-2.8882	0	%100
49	M50A	X	8.6725	8.6725	0	%100
50	M50A	Z	-5.0071	-5.0071	0	%100

Member Distributed Loads (BLC 44 : Structure Wo (90 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	MP4A	X	7.4045	7.4045	0	%100
6	MP4A	Z	0	0	0	%100
7	M5	X	7.4045	7.4045	0	%100
8	M5	Z	0	0	0	%100
9	M6	X	6.5809	6.5809	0	%100
10	M6	Z	0	0	0	%100
11	M7	X	7.4045	7.4045	0	%100
12	M7	Z	0	0	0	%100
13	M9	X	7.4045	7.4045	0	%100
14	M9	Z	0	0	0	%100
15	MP1A	X	7.5442	7.5442	0	%100
16	MP1A	Z	0	0	0	%100
17	RCP	X	7.9315	7.9315	0	%100
18	RCP	Z	0	0	0	%100
19	M43	X	0	0	0	%100
20	M43	Z	0	0	0	%100
21	M44	X	7.9315	7.9315	0	%100
22	M44	Z	0	0	0	%100
23	M45	X	7.9315	7.9315	0	%100
24	M45	Z	0	0	0	%100
25	M46	X	0	0	0	%100
26	M46	Z	0	0	0	%100
27	M47	X	7.9315	7.9315	0	%100
28	M47	Z	0	0	0	%100
29	M50	X	7.728	7.728	0	%100
30	M50	Z	0	0	0	%100
31	M53	X	9.0883	9.0883	0	%100
32	M53	Z	0	0	0	%100
33	M54	X	9.0883	9.0883	0	%100
34	M54	Z	0	0	0	%100
35	M55	X	5.507	5.507	0	%100
36	M55	Z	0	0	0	%100
37	MP2A	X	7.5442	7.5442	0	%100
38	MP2A	Z	0	0	0	%100
39	MP3A	X	7.5442	7.5442	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Locationft	End Locationft
40	MP3A	Z	0	0	0	%100
41	M41	X	1.5882	1.5882	0	%100
42	M41	Z	0	0	0	%100
43	M42	X	1.5882	1.5882	0	%100
44	M42	Z	0	0	0	%100
45	M48A	X	0	0	0	%100
46	M48A	Z	0	0	0	%100
47	M49A	X	6.4074	6.4074	0	%100
48	M49A	Z	0	0	0	%100
49	M50A	X	6.4074	6.4074	0	%100
50	M50A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Locationft	End Locationft
1	M1	X	2.8655	2.8655	0	%100
2	M1	Z	1.6544	1.6544	0	%100
3	M2	X	2.8655	2.8655	0	%100
4	M2	Z	1.6544	1.6544	0	%100
5	MP4A	X	6.4125	6.4125	0	%100
6	MP4A	Z	3.7022	3.7022	0	%100
7	M5	X	6.4125	6.4125	0	%100
8	M5	Z	3.7022	3.7022	0	%100
9	M6	X	5.6993	5.6993	0	%100
10	M6	Z	3.2905	3.2905	0	%100
11	M7	X	6.4125	6.4125	0	%100
12	M7	Z	3.7022	3.7022	0	%100
13	M9	X	6.4125	6.4125	0	%100
14	M9	Z	3.7022	3.7022	0	%100
15	MP1A	X	6.5334	6.5334	0	%100
16	MP1A	Z	3.7721	3.7721	0	%100
17	RCP	X	9.0032	9.0032	0	%100
18	RCP	Z	5.198	5.198	0	%100
19	M43	X	2.3689	2.3689	0	%100
20	M43	Z	1.3677	1.3677	0	%100
21	M44	X	2.3682	2.3682	0	%100
22	M44	Z	1.3673	1.3673	0	%100
23	M45	X	9.0032	9.0032	0	%100
24	M45	Z	5.198	5.198	0	%100
25	M46	X	2.3689	2.3689	0	%100
26	M46	Z	1.3677	1.3677	0	%100
27	M47	X	2.3682	2.3682	0	%100
28	M47	Z	1.3673	1.3673	0	%100
29	M50	X	6.6926	6.6926	0	%100
30	M50	Z	3.864	3.864	0	%100
31	M53	X	7.8707	7.8707	0	%100
32	M53	Z	4.5441	4.5441	0	%100
33	M54	X	7.8707	7.8707	0	%100
34	M54	Z	4.5441	4.5441	0	%100
35	M55	X	4.9706	4.9706	0	%100
36	M55	Z	2.8698	2.8698	0	%100
37	MP2A	X	6.5334	6.5334	0	%100
38	MP2A	Z	3.7721	3.7721	0	%100
39	MP3A	X	6.5334	6.5334	0	%100
40	MP3A	Z	3.7721	3.7721	0	%100
41	M41	X	1.0316	1.0316	0	%100
42	M41	Z	.5956	.5956	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	End Location
43	M42	X	1.0316	1.0316	0	%100
44	M42	Z	.5956	.5956	0	%100
45	M48A	X	1.9772	1.9772	0	%100
46	M48A	Z	1.1416	1.1416	0	%100
47	M49A	X	8.6725	8.6725	0	%100
48	M49A	Z	5.0071	5.0071	0	%100
49	M50A	X	5.0024	5.0024	0	%100
50	M50A	Z	2.8882	2.8882	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location	End Location
1	M1	X	4.9633	4.9633	0	%100
2	M1	Z	8.5966	8.5966	0	%100
3	M2	X	4.9633	4.9633	0	%100
4	M2	Z	8.5966	8.5966	0	%100
5	MP4A	X	3.7022	3.7022	0	%100
6	MP4A	Z	6.4125	6.4125	0	%100
7	M5	X	3.7022	3.7022	0	%100
8	M5	Z	6.4125	6.4125	0	%100
9	M6	X	3.2905	3.2905	0	%100
10	M6	Z	5.6993	5.6993	0	%100
11	M7	X	3.7022	3.7022	0	%100
12	M7	Z	6.4125	6.4125	0	%100
13	M9	X	3.7022	3.7022	0	%100
14	M9	Z	6.4125	6.4125	0	%100
15	MP1A	X	3.7721	3.7721	0	%100
16	MP1A	Z	6.5334	6.5334	0	%100
17	RCP	X	3.8319	3.8319	0	%100
18	RCP	Z	6.637	6.637	0	%100
19	M43	X	4.103	4.103	0	%100
20	M43	Z	7.1066	7.1066	0	%100
21	M44	X	.0011	.0011	0	%100
22	M44	Z	.002	.002	0	%100
23	M45	X	3.8319	3.8319	0	%100
24	M45	Z	6.637	6.637	0	%100
25	M46	X	4.103	4.103	0	%100
26	M46	Z	7.1066	7.1066	0	%100
27	M47	X	.0011	.0011	0	%100
28	M47	Z	.002	.002	0	%100
29	M50	X	3.864	3.864	0	%100
30	M50	Z	6.6926	6.6926	0	%100
31	M53	X	4.5441	4.5441	0	%100
32	M53	Z	7.8707	7.8707	0	%100
33	M54	X	4.5441	4.5441	0	%100
34	M54	Z	7.8707	7.8707	0	%100
35	M55	X	1.6251	1.6251	0	%100
36	M55	Z	2.8148	2.8148	0	%100
37	MP2A	X	3.7721	3.7721	0	%100
38	MP2A	Z	6.5334	6.5334	0	%100
39	MP3A	X	3.7721	3.7721	0	%100
40	MP3A	Z	6.5334	6.5334	0	%100
41	M41	X	.1985	.1985	0	%100
42	M41	Z	.3439	.3439	0	%100
43	M42	X	.1985	.1985	0	%100
44	M42	Z	.3439	.3439	0	%100
45	M48A	X	3.4247	3.4247	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Locationft...	End Locationft...
46	M48A	Z	5.9317	5.9317	0	%100
47	M49A	X	6.4949	6.4949	0	%100
48	M49A	Z	11.2494	11.2494	0	%100
49	M50A	X	4.376	4.376	0	%100
50	M50A	Z	7.5794	7.5794	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Locationft...	End Locationft...
1	M1	X	0	0	0	%100
2	M1	Z	13.2354	13.2354	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	13.2354	13.2354	0	%100
5	MP4A	X	0	0	0	%100
6	MP4A	Z	7.4045	7.4045	0	%100
7	M5	X	0	0	0	%100
8	M5	Z	7.4045	7.4045	0	%100
9	M6	X	0	0	0	%100
10	M6	Z	6.5809	6.5809	0	%100
11	M7	X	0	0	0	%100
12	M7	Z	7.4045	7.4045	0	%100
13	M9	X	0	0	0	%100
14	M9	Z	7.4045	7.4045	0	%100
15	MP1A	X	0	0	0	%100
16	MP1A	Z	7.5442	7.5442	0	%100
17	RCP	X	0	0	0	%100
18	RCP	Z	2.4668	2.4668	0	%100
19	M43	X	0	0	0	%100
20	M43	Z	10.9413	10.9413	0	%100
21	M44	X	0	0	0	%100
22	M44	Z	2.4668	2.4668	0	%100
23	M45	X	0	0	0	%100
24	M45	Z	2.4668	2.4668	0	%100
25	M46	X	0	0	0	%100
26	M46	Z	10.9413	10.9413	0	%100
27	M47	X	0	0	0	%100
28	M47	Z	2.4668	2.4668	0	%100
29	M50	X	0	0	0	%100
30	M50	Z	7.728	7.728	0	%100
31	M53	X	0	0	0	%100
32	M53	Z	9.0883	9.0883	0	%100
33	M54	X	0	0	0	%100
34	M54	Z	9.0883	9.0883	0	%100
35	M55	X	0	0	0	%100
36	M55	Z	.5284	.5284	0	%100
37	MP2A	X	0	0	0	%100
38	MP2A	Z	7.5442	7.5442	0	%100
39	MP3A	X	0	0	0	%100
40	MP3A	Z	7.5442	7.5442	0	%100
41	M41	X	0	0	0	%100
42	M41	Z	0	0	0	%100
43	M42	X	0	0	0	%100
44	M42	Z	0	0	0	%100
45	M48A	X	0	0	0	%100
46	M48A	Z	9.1324	9.1324	0	%100
47	M49A	X	0	0	0	%100
48	M49A	Z	12.3587	12.3587	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
49	M50A	X	0	0	0	%100
50	M50A	Z	12.3587	12.3587	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	-4.9633	-4.9633	0	%100
2	M1	Z	8.5966	8.5966	0	%100
3	M2	X	-4.9633	-4.9633	0	%100
4	M2	Z	8.5966	8.5966	0	%100
5	MP4A	X	-3.7022	-3.7022	0	%100
6	MP4A	Z	6.4125	6.4125	0	%100
7	M5	X	-3.7022	-3.7022	0	%100
8	M5	Z	6.4125	6.4125	0	%100
9	M6	X	-3.2905	-3.2905	0	%100
10	M6	Z	5.6993	5.6993	0	%100
11	M7	X	-3.7022	-3.7022	0	%100
12	M7	Z	6.4125	6.4125	0	%100
13	M9	X	-3.7022	-3.7022	0	%100
14	M9	Z	6.4125	6.4125	0	%100
15	MP1A	X	-3.7721	-3.7721	0	%100
16	MP1A	Z	6.5334	6.5334	0	%100
17	RCP	X	-.0011	-.0011	0	%100
18	RCP	Z	.002	.002	0	%100
19	M43	X	-4.103	-4.103	0	%100
20	M43	Z	7.1066	7.1066	0	%100
21	M44	X	-3.8319	-3.8319	0	%100
22	M44	Z	6.637	6.637	0	%100
23	M45	X	-.0011	-.0011	0	%100
24	M45	Z	.002	.002	0	%100
25	M46	X	-4.103	-4.103	0	%100
26	M46	Z	7.1066	7.1066	0	%100
27	M47	X	-3.8319	-3.8319	0	%100
28	M47	Z	6.637	6.637	0	%100
29	M50	X	-3.864	-3.864	0	%100
30	M50	Z	6.6926	6.6926	0	%100
31	M53	X	-4.5441	-4.5441	0	%100
32	M53	Z	7.8707	7.8707	0	%100
33	M54	X	-4.5441	-4.5441	0	%100
34	M54	Z	7.8707	7.8707	0	%100
35	M55	X	-.1479	-.1479	0	%100
36	M55	Z	.2561	.2561	0	%100
37	MP2A	X	-3.7721	-3.7721	0	%100
38	MP2A	Z	6.5334	6.5334	0	%100
39	MP3A	X	-3.7721	-3.7721	0	%100
40	MP3A	Z	6.5334	6.5334	0	%100
41	M41	X	-.1985	-.1985	0	%100
42	M41	Z	.3439	.3439	0	%100
43	M42	X	-.1985	-.1985	0	%100
44	M42	Z	.3439	.3439	0	%100
45	M48A	X	-3.4247	-3.4247	0	%100
46	M48A	Z	5.9317	5.9317	0	%100
47	M49A	X	-4.376	-4.376	0	%100
48	M49A	Z	7.5794	7.5794	0	%100
49	M50A	X	-6.4949	-6.4949	0	%100
50	M50A	Z	11.2494	11.2494	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location	End Location
1	M1	X	-2.8655	-2.8655	0	%100
2	M1	Z	1.6544	1.6544	0	%100
3	M2	X	-2.8655	-2.8655	0	%100
4	M2	Z	1.6544	1.6544	0	%100
5	MP4A	X	-6.4125	-6.4125	0	%100
6	MP4A	Z	3.7022	3.7022	0	%100
7	M5	X	-6.4125	-6.4125	0	%100
8	M5	Z	3.7022	3.7022	0	%100
9	M6	X	-5.6993	-5.6993	0	%100
10	M6	Z	3.2905	3.2905	0	%100
11	M7	X	-6.4125	-6.4125	0	%100
12	M7	Z	3.7022	3.7022	0	%100
13	M9	X	-6.4125	-6.4125	0	%100
14	M9	Z	3.7022	3.7022	0	%100
15	MP1A	X	-6.5334	-6.5334	0	%100
16	MP1A	Z	3.7721	3.7721	0	%100
17	RCP	X	-2.3682	-2.3682	0	%100
18	RCP	Z	1.3673	1.3673	0	%100
19	M43	X	-2.3689	-2.3689	0	%100
20	M43	Z	1.3677	1.3677	0	%100
21	M44	X	-9.0032	-9.0032	0	%100
22	M44	Z	5.198	5.198	0	%100
23	M45	X	-2.3682	-2.3682	0	%100
24	M45	Z	1.3673	1.3673	0	%100
25	M46	X	-2.3689	-2.3689	0	%100
26	M46	Z	1.3677	1.3677	0	%100
27	M47	X	-9.0032	-9.0032	0	%100
28	M47	Z	5.198	5.198	0	%100
29	M50	X	-6.6926	-6.6926	0	%100
30	M50	Z	3.864	3.864	0	%100
31	M53	X	-7.8707	-7.8707	0	%100
32	M53	Z	4.5441	4.5441	0	%100
33	M54	X	-7.8707	-7.8707	0	%100
34	M54	Z	4.5441	4.5441	0	%100
35	M55	X	-2.4119	-2.4119	0	%100
36	M55	Z	1.3925	1.3925	0	%100
37	MP2A	X	-6.5334	-6.5334	0	%100
38	MP2A	Z	3.7721	3.7721	0	%100
39	MP3A	X	-6.5334	-6.5334	0	%100
40	MP3A	Z	3.7721	3.7721	0	%100
41	M41	X	-1.0316	-1.0316	0	%100
42	M41	Z	.5956	.5956	0	%100
43	M42	X	-1.0316	-1.0316	0	%100
44	M42	Z	.5956	.5956	0	%100
45	M48A	X	-1.9772	-1.9772	0	%100
46	M48A	Z	1.1416	1.1416	0	%100
47	M49A	X	-5.0024	-5.0024	0	%100
48	M49A	Z	2.8882	2.8882	0	%100
49	M50A	X	-8.6725	-8.6725	0	%100
50	M50A	Z	5.0071	5.0071	0	%100

Member Distributed Loads (BLC 50 : Structure Wo (270 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



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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)	
4	M2	Z	0	0	0		%100
5	MP4A	X	-7.4045	-7.4045	0		%100
6	MP4A	Z	0	0	0		%100
7	M5	X	-7.4045	-7.4045	0		%100
8	M5	Z	0	0	0		%100
9	M6	X	-6.5809	-6.5809	0		%100
10	M6	Z	0	0	0		%100
11	M7	X	-7.4045	-7.4045	0		%100
12	M7	Z	0	0	0		%100
13	M9	X	-7.4045	-7.4045	0		%100
14	M9	Z	0	0	0		%100
15	MP1A	X	-7.5442	-7.5442	0		%100
16	MP1A	Z	0	0	0		%100
17	RCP	X	-7.9315	-7.9315	0		%100
18	RCP	Z	0	0	0		%100
19	M43	X	0	0	0		%100
20	M43	Z	0	0	0		%100
21	M44	X	-7.9315	-7.9315	0		%100
22	M44	Z	0	0	0		%100
23	M45	X	-7.9315	-7.9315	0		%100
24	M45	Z	0	0	0		%100
25	M46	X	0	0	0		%100
26	M46	Z	0	0	0		%100
27	M47	X	-7.9315	-7.9315	0		%100
28	M47	Z	0	0	0		%100
29	M50	X	-7.728	-7.728	0		%100
30	M50	Z	0	0	0		%100
31	M53	X	-9.0883	-9.0883	0		%100
32	M53	Z	0	0	0		%100
33	M54	X	-9.0883	-9.0883	0		%100
34	M54	Z	0	0	0		%100
35	M55	X	-5.507	-5.507	0		%100
36	M55	Z	0	0	0		%100
37	MP2A	X	-7.5442	-7.5442	0		%100
38	MP2A	Z	0	0	0		%100
39	MP3A	X	-7.5442	-7.5442	0		%100
40	MP3A	Z	0	0	0		%100
41	M41	X	-1.5882	-1.5882	0		%100
42	M41	Z	0	0	0		%100
43	M42	X	-1.5882	-1.5882	0		%100
44	M42	Z	0	0	0		%100
45	M48A	X	0	0	0		%100
46	M48A	Z	0	0	0		%100
47	M49A	X	-6.4074	-6.4074	0		%100
48	M49A	Z	0	0	0		%100
49	M50A	X	-6.4074	-6.4074	0		%100
50	M50A	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	-2.8655	-2.8655	0		%100
2	M1	Z	-1.6544	-1.6544	0		%100
3	M2	X	-2.8655	-2.8655	0		%100
4	M2	Z	-1.6544	-1.6544	0		%100
5	MP4A	X	-6.4125	-6.4125	0		%100
6	MP4A	Z	-3.7022	-3.7022	0		%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location	End Location
7	M5	X	-6.4125	-6.4125	0	%100
8	M5	Z	-3.7022	-3.7022	0	%100
9	M6	X	-5.6993	-5.6993	0	%100
10	M6	Z	-3.2905	-3.2905	0	%100
11	M7	X	-6.4125	-6.4125	0	%100
12	M7	Z	-3.7022	-3.7022	0	%100
13	M9	X	-6.4125	-6.4125	0	%100
14	M9	Z	-3.7022	-3.7022	0	%100
15	MP1A	X	-6.5334	-6.5334	0	%100
16	MP1A	Z	-3.7721	-3.7721	0	%100
17	RCP	X	-9.0032	-9.0032	0	%100
18	RCP	Z	-5.198	-5.198	0	%100
19	M43	X	-2.3689	-2.3689	0	%100
20	M43	Z	-1.3677	-1.3677	0	%100
21	M44	X	-2.3682	-2.3682	0	%100
22	M44	Z	-1.3673	-1.3673	0	%100
23	M45	X	-9.0032	-9.0032	0	%100
24	M45	Z	-5.198	-5.198	0	%100
25	M46	X	-2.3689	-2.3689	0	%100
26	M46	Z	-1.3677	-1.3677	0	%100
27	M47	X	-2.3682	-2.3682	0	%100
28	M47	Z	-1.3673	-1.3673	0	%100
29	M50	X	-6.6926	-6.6926	0	%100
30	M50	Z	-3.864	-3.864	0	%100
31	M53	X	-7.8707	-7.8707	0	%100
32	M53	Z	-4.5441	-4.5441	0	%100
33	M54	X	-7.8707	-7.8707	0	%100
34	M54	Z	-4.5441	-4.5441	0	%100
35	M55	X	-4.9706	-4.9706	0	%100
36	M55	Z	-2.8698	-2.8698	0	%100
37	MP2A	X	-6.5334	-6.5334	0	%100
38	MP2A	Z	-3.7721	-3.7721	0	%100
39	MP3A	X	-6.5334	-6.5334	0	%100
40	MP3A	Z	-3.7721	-3.7721	0	%100
41	M41	X	-1.0316	-1.0316	0	%100
42	M41	Z	-5.956	-5.956	0	%100
43	M42	X	-1.0316	-1.0316	0	%100
44	M42	Z	-5.956	-5.956	0	%100
45	M48A	X	-1.9772	-1.9772	0	%100
46	M48A	Z	-1.1416	-1.1416	0	%100
47	M49A	X	-8.6725	-8.6725	0	%100
48	M49A	Z	-5.0071	-5.0071	0	%100
49	M50A	X	-5.0024	-5.0024	0	%100
50	M50A	Z	-2.8882	-2.8882	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location	End Location
1	M1	X	-4.9633	-4.9633	0	%100
2	M1	Z	-8.5966	-8.5966	0	%100
3	M2	X	-4.9633	-4.9633	0	%100
4	M2	Z	-8.5966	-8.5966	0	%100
5	MP4A	X	-3.7022	-3.7022	0	%100
6	MP4A	Z	-6.4125	-6.4125	0	%100
7	M5	X	-3.7022	-3.7022	0	%100
8	M5	Z	-6.4125	-6.4125	0	%100
9	M6	X	-3.2905	-3.2905	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location	End Location
10	M6	Z	-5.6993	-5.6993	0	%100
11	M7	X	-3.7022	-3.7022	0	%100
12	M7	Z	-6.4125	-6.4125	0	%100
13	M9	X	-3.7022	-3.7022	0	%100
14	M9	Z	-6.4125	-6.4125	0	%100
15	MP1A	X	-3.7721	-3.7721	0	%100
16	MP1A	Z	-6.5334	-6.5334	0	%100
17	RCP	X	-3.8319	-3.8319	0	%100
18	RCP	Z	-6.637	-6.637	0	%100
19	M43	X	-4.103	-4.103	0	%100
20	M43	Z	-7.1066	-7.1066	0	%100
21	M44	X	-0.011	-0.011	0	%100
22	M44	Z	-0.002	-0.002	0	%100
23	M45	X	-3.8319	-3.8319	0	%100
24	M45	Z	-6.637	-6.637	0	%100
25	M46	X	-4.103	-4.103	0	%100
26	M46	Z	-7.1066	-7.1066	0	%100
27	M47	X	-0.011	-0.011	0	%100
28	M47	Z	-0.002	-0.002	0	%100
29	M50	X	-3.864	-3.864	0	%100
30	M50	Z	-6.6926	-6.6926	0	%100
31	M53	X	-4.5441	-4.5441	0	%100
32	M53	Z	-7.8707	-7.8707	0	%100
33	M54	X	-4.5441	-4.5441	0	%100
34	M54	Z	-7.8707	-7.8707	0	%100
35	M55	X	-1.6251	-1.6251	0	%100
36	M55	Z	-2.8148	-2.8148	0	%100
37	MP2A	X	-3.7721	-3.7721	0	%100
38	MP2A	Z	-6.5334	-6.5334	0	%100
39	MP3A	X	-3.7721	-3.7721	0	%100
40	MP3A	Z	-6.5334	-6.5334	0	%100
41	M41	X	-1.985	-1.985	0	%100
42	M41	Z	-3.439	-3.439	0	%100
43	M42	X	-1.985	-1.985	0	%100
44	M42	Z	-3.439	-3.439	0	%100
45	M48A	X	-3.4247	-3.4247	0	%100
46	M48A	Z	-5.9317	-5.9317	0	%100
47	M49A	X	-6.4949	-6.4949	0	%100
48	M49A	Z	-11.2494	-11.2494	0	%100
49	M50A	X	-4.376	-4.376	0	%100
50	M50A	Z	-7.5794	-7.5794	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location	End Location
1	M1	X	0	0	0	%100
2	M1	Z	-4.1618	-4.1618	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-4.1618	-4.1618	0	%100
5	MP4A	X	0	0	0	%100
6	MP4A	Z	-2.8686	-2.8686	0	%100
7	M5	X	0	0	0	%100
8	M5	Z	-2.8686	-2.8686	0	%100
9	M6	X	0	0	0	%100
10	M6	Z	-2.5827	-2.5827	0	%100
11	M7	X	0	0	0	%100
12	M7	Z	-2.8686	-2.8686	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
13	M9	X	0	0	0	%100
14	M9	Z	-2.8686	-2.8686	0	%100
15	MP1A	X	0	0	0	%100
16	MP1A	Z	-3.0052	-3.0052	0	%100
17	RCP	X	0	0	0	%100
18	RCP	Z	-7018	-7018	0	%100
19	M43	X	0	0	0	%100
20	M43	Z	-3.0997	-3.0997	0	%100
21	M44	X	0	0	0	%100
22	M44	Z	-7018	-7018	0	%100
23	M45	X	0	0	0	%100
24	M45	Z	-7018	-7018	0	%100
25	M46	X	0	0	0	%100
26	M46	Z	-3.0997	-3.0997	0	%100
27	M47	X	0	0	0	%100
28	M47	Z	-7018	-7018	0	%100
29	M50	X	0	0	0	%100
30	M50	Z	-2.8329	-2.8329	0	%100
31	M53	X	0	0	0	%100
32	M53	Z	-2.9159	-2.9159	0	%100
33	M54	X	0	0	0	%100
34	M54	Z	-2.9159	-2.9159	0	%100
35	M55	X	0	0	0	%100
36	M55	Z	-2549	-2549	0	%100
37	MP2A	X	0	0	0	%100
38	MP2A	Z	-3.0461	-3.0461	0	%100
39	MP3A	X	0	0	0	%100
40	MP3A	Z	-3.0461	-3.0461	0	%100
41	M41	X	0	0	0	%100
42	M41	Z	0	0	0	%100
43	M42	X	0	0	0	%100
44	M42	Z	0	0	0	%100
45	M48A	X	0	0	0	%100
46	M48A	Z	-3.4495	-3.4495	0	%100
47	M49A	X	0	0	0	%100
48	M49A	Z	-3.8769	-3.8769	0	%100
49	M50A	X	0	0	0	%100
50	M50A	Z	-3.8769	-3.8769	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M1	X	1.5607	1.5607	0	%100
2	M1	Z	-2.7032	-2.7032	0	%100
3	M2	X	1.5607	1.5607	0	%100
4	M2	Z	-2.7032	-2.7032	0	%100
5	MP4A	X	1.4343	1.4343	0	%100
6	MP4A	Z	-2.4843	-2.4843	0	%100
7	M5	X	1.4343	1.4343	0	%100
8	M5	Z	-2.4843	-2.4843	0	%100
9	M6	X	1.2913	1.2913	0	%100
10	M6	Z	-2.2367	-2.2367	0	%100
11	M7	X	1.4343	1.4343	0	%100
12	M7	Z	-2.4843	-2.4843	0	%100
13	M9	X	1.4343	1.4343	0	%100
14	M9	Z	-2.4843	-2.4843	0	%100
15	MP1A	X	1.5026	1.5026	0	%100



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

	Member Label	Direction	Start Magnitude...	End Magnitude ...	Start Locationft...	End Locationft...
16	MP1A	Z	-2.6026	-2.6026	0	%100
17	RCP	X	.000327	.000327	0	%100
18	RCP	Z	-.000566	-.000566	0	%100
19	M43	X	1.1624	1.1624	0	%100
20	M43	Z	-2.0133	-2.0133	0	%100
21	M44	X	1.0902	1.0902	0	%100
22	M44	Z	-1.8882	-1.8882	0	%100
23	M45	X	.000327	.000327	0	%100
24	M45	Z	-.000566	-.000566	0	%100
25	M46	X	1.1624	1.1624	0	%100
26	M46	Z	-2.0133	-2.0133	0	%100
27	M47	X	1.0902	1.0902	0	%100
28	M47	Z	-1.8882	-1.8882	0	%100
29	M50	X	1.4164	1.4164	0	%100
30	M50	Z	-2.4533	-2.4533	0	%100
31	M53	X	1.4579	1.4579	0	%100
32	M53	Z	-2.5252	-2.5252	0	%100
33	M54	X	1.4579	1.4579	0	%100
34	M54	Z	-2.5252	-2.5252	0	%100
35	M55	X	.0713	.0713	0	%100
36	M55	Z	-.1236	-.1236	0	%100
37	MP2A	X	1.523	1.523	0	%100
38	MP2A	Z	-2.638	-2.638	0	%100
39	MP3A	X	1.523	1.523	0	%100
40	MP3A	Z	-2.638	-2.638	0	%100
41	M41	X	.1704	.1704	0	%100
42	M41	Z	-.2951	-.2951	0	%100
43	M42	X	.1704	.1704	0	%100
44	M42	Z	-.2951	-.2951	0	%100
45	M48A	X	1.2935	1.2935	0	%100
46	M48A	Z	-2.2405	-2.2405	0	%100
47	M49A	X	1.3727	1.3727	0	%100
48	M49A	Z	-2.3777	-2.3777	0	%100
49	M50A	X	2.0374	2.0374	0	%100
50	M50A	Z	-3.5289	-3.5289	0	%100

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

	Member Label	Direction	Start Magnitude...	End Magnitude ...	Start Locationft...	End Locationft...
1	M1	X	.9011	.9011	0	%100
2	M1	Z	-.5202	-.5202	0	%100
3	M2	X	.9011	.9011	0	%100
4	M2	Z	-.5202	-.5202	0	%100
5	MP4A	X	2.4843	2.4843	0	%100
6	MP4A	Z	-1.4343	-1.4343	0	%100
7	M5	X	2.4843	2.4843	0	%100
8	M5	Z	-1.4343	-1.4343	0	%100
9	M6	X	2.2367	2.2367	0	%100
10	M6	Z	-1.2913	-1.2913	0	%100
11	M7	X	2.4843	2.4843	0	%100
12	M7	Z	-1.4343	-1.4343	0	%100
13	M9	X	2.4843	2.4843	0	%100
14	M9	Z	-1.4343	-1.4343	0	%100
15	MP1A	X	2.6026	2.6026	0	%100
16	MP1A	Z	-1.5026	-1.5026	0	%100
17	RCP	X	.6738	.6738	0	%100
18	RCP	Z	-.389	-.389	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location(ft)	End Location(ft)
19	M43	X	.6711	.6711	0	%100
20	M43	Z	-.3875	-.3875	0	%100
21	M44	X	2.5614	2.5614	0	%100
22	M44	Z	-1.4788	-1.4788	0	%100
23	M45	X	.6738	.6738	0	%100
24	M45	Z	-.389	-.389	0	%100
25	M46	X	.6711	.6711	0	%100
26	M46	Z	-.3875	-.3875	0	%100
27	M47	X	2.5614	2.5614	0	%100
28	M47	Z	-1.4788	-1.4788	0	%100
29	M50	X	2.4533	2.4533	0	%100
30	M50	Z	-1.4164	-1.4164	0	%100
31	M53	X	2.5252	2.5252	0	%100
32	M53	Z	-1.4579	-1.4579	0	%100
33	M54	X	2.5252	2.5252	0	%100
34	M54	Z	-1.4579	-1.4579	0	%100
35	M55	X	1.1637	1.1637	0	%100
36	M55	Z	-.6718	-.6718	0	%100
37	MP2A	X	2.638	2.638	0	%100
38	MP2A	Z	-1.523	-1.523	0	%100
39	MP3A	X	2.638	2.638	0	%100
40	MP3A	Z	-1.523	-1.523	0	%100
41	M41	X	.8853	.8853	0	%100
42	M41	Z	-.5111	-.5111	0	%100
43	M42	X	.8853	.8853	0	%100
44	M42	Z	-.5111	-.5111	0	%100
45	M48A	X	.7468	.7468	0	%100
46	M48A	Z	-.4312	-.4312	0	%100
47	M49A	X	1.5693	1.5693	0	%100
48	M49A	Z	-.906	-.906	0	%100
49	M50A	X	2.7206	2.7206	0	%100
50	M50A	Z	-1.5707	-1.5707	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	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	MP4A	X	2.8686	2.8686	0	%100
6	MP4A	Z	0	0	0	%100
7	M5	X	2.8686	2.8686	0	%100
8	M5	Z	0	0	0	%100
9	M6	X	2.5827	2.5827	0	%100
10	M6	Z	0	0	0	%100
11	M7	X	2.8686	2.8686	0	%100
12	M7	Z	0	0	0	%100
13	M9	X	2.8686	2.8686	0	%100
14	M9	Z	0	0	0	%100
15	MP1A	X	3.0052	3.0052	0	%100
16	MP1A	Z	0	0	0	%100
17	RCP	X	2.2565	2.2565	0	%100
18	RCP	Z	0	0	0	%100
19	M43	X	0	0	0	%100
20	M43	Z	0	0	0	%100
21	M44	X	2.2565	2.2565	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	M44	Z	0	0	0	%100
23	M45	X	2.2565	2.2565	0	%100
24	M45	Z	0	0	0	%100
25	M46	X	0	0	0	%100
26	M46	Z	0	0	0	%100
27	M47	X	2.2565	2.2565	0	%100
28	M47	Z	0	0	0	%100
29	M50	X	2.8329	2.8329	0	%100
30	M50	Z	0	0	0	%100
31	M53	X	2.9159	2.9159	0	%100
32	M53	Z	0	0	0	%100
33	M54	X	2.9159	2.9159	0	%100
34	M54	Z	0	0	0	%100
35	M55	X	2.6569	2.6569	0	%100
36	M55	Z	0	0	0	%100
37	MP2A	X	3.0461	3.0461	0	%100
38	MP2A	Z	0	0	0	%100
39	MP3A	X	3.0461	3.0461	0	%100
40	MP3A	Z	0	0	0	%100
41	M41	X	1.3631	1.3631	0	%100
42	M41	Z	0	0	0	%100
43	M42	X	1.3631	1.3631	0	%100
44	M42	Z	0	0	0	%100
45	M48A	X	0	0	0	%100
46	M48A	Z	0	0	0	%100
47	M49A	X	2.01	2.01	0	%100
48	M49A	Z	0	0	0	%100
49	M50A	X	2.01	2.01	0	%100
50	M50A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location	End Location
1	M1	X	.9011	.9011	0	%100
2	M1	Z	.5202	.5202	0	%100
3	M2	X	.9011	.9011	0	%100
4	M2	Z	.5202	.5202	0	%100
5	MP4A	X	2.4843	2.4843	0	%100
6	MP4A	Z	1.4343	1.4343	0	%100
7	M5	X	2.4843	2.4843	0	%100
8	M5	Z	1.4343	1.4343	0	%100
9	M6	X	2.2367	2.2367	0	%100
10	M6	Z	1.2913	1.2913	0	%100
11	M7	X	2.4843	2.4843	0	%100
12	M7	Z	1.4343	1.4343	0	%100
13	M9	X	2.4843	2.4843	0	%100
14	M9	Z	1.4343	1.4343	0	%100
15	MP1A	X	2.6026	2.6026	0	%100
16	MP1A	Z	1.5026	1.5026	0	%100
17	RCP	X	2.5614	2.5614	0	%100
18	RCP	Z	1.4788	1.4788	0	%100
19	M43	X	.6711	.6711	0	%100
20	M43	Z	.3875	.3875	0	%100
21	M44	X	.6738	.6738	0	%100
22	M44	Z	.389	.389	0	%100
23	M45	X	2.5614	2.5614	0	%100
24	M45	Z	1.4788	1.4788	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude]	Start Location[ft...	End Location[ft...
25	M46	X	.6711	.6711	0	%100
26	M46	Z	.3875	.3875	0	%100
27	M47	X	.6738	.6738	0	%100
28	M47	Z	.389	.389	0	%100
29	M50	X	2.4533	2.4533	0	%100
30	M50	Z	1.4164	1.4164	0	%100
31	M53	X	2.5252	2.5252	0	%100
32	M53	Z	1.4579	1.4579	0	%100
33	M54	X	2.5252	2.5252	0	%100
34	M54	Z	1.4579	1.4579	0	%100
35	M55	X	2.3981	2.3981	0	%100
36	M55	Z	1.3845	1.3845	0	%100
37	MP2A	X	2.638	2.638	0	%100
38	MP2A	Z	1.523	1.523	0	%100
39	MP3A	X	2.638	2.638	0	%100
40	MP3A	Z	1.523	1.523	0	%100
41	M41	X	.8853	.8853	0	%100
42	M41	Z	.5111	.5111	0	%100
43	M42	X	.8853	.8853	0	%100
44	M42	Z	.5111	.5111	0	%100
45	M48A	X	.7468	.7468	0	%100
46	M48A	Z	.4312	.4312	0	%100
47	M49A	X	2.7206	2.7206	0	%100
48	M49A	Z	1.5707	1.5707	0	%100
49	M50A	X	1.5693	1.5693	0	%100
50	M50A	Z	.906	.906	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	1.5607	1.5607	0	%100
2	M1	Z	2.7032	2.7032	0	%100
3	M2	X	1.5607	1.5607	0	%100
4	M2	Z	2.7032	2.7032	0	%100
5	MP4A	X	1.4343	1.4343	0	%100
6	MP4A	Z	2.4843	2.4843	0	%100
7	M5	X	1.4343	1.4343	0	%100
8	M5	Z	2.4843	2.4843	0	%100
9	M6	X	1.2913	1.2913	0	%100
10	M6	Z	2.2367	2.2367	0	%100
11	M7	X	1.4343	1.4343	0	%100
12	M7	Z	2.4843	2.4843	0	%100
13	M9	X	1.4343	1.4343	0	%100
14	M9	Z	2.4843	2.4843	0	%100
15	MP1A	X	1.5026	1.5026	0	%100
16	MP1A	Z	2.6026	2.6026	0	%100
17	RCP	X	1.0902	1.0902	0	%100
18	RCP	Z	1.8882	1.8882	0	%100
19	M43	X	1.1624	1.1624	0	%100
20	M43	Z	2.0133	2.0133	0	%100
21	M44	X	.000327	.000327	0	%100
22	M44	Z	.000566	.000566	0	%100
23	M45	X	1.0902	1.0902	0	%100
24	M45	Z	1.8882	1.8882	0	%100
25	M46	X	1.1624	1.1624	0	%100
26	M46	Z	2.0133	2.0133	0	%100
27	M47	X	.000327	.000327	0	%100



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 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)
28	M47	Z	.000566	.000566	0	%100
29	M50	X	1.4164	1.4164	0	%100
30	M50	Z	2.4533	2.4533	0	%100
31	M53	X	1.4579	1.4579	0	%100
32	M53	Z	2.5252	2.5252	0	%100
33	M54	X	1.4579	1.4579	0	%100
34	M54	Z	2.5252	2.5252	0	%100
35	M55	X	.784	.784	0	%100
36	M55	Z	1.358	1.358	0	%100
37	MP2A	X	1.523	1.523	0	%100
38	MP2A	Z	2.638	2.638	0	%100
39	MP3A	X	1.523	1.523	0	%100
40	MP3A	Z	2.638	2.638	0	%100
41	M41	X	.1704	.1704	0	%100
42	M41	Z	.2951	.2951	0	%100
43	M42	X	.1704	.1704	0	%100
44	M42	Z	.2951	.2951	0	%100
45	M48A	X	1.2935	1.2935	0	%100
46	M48A	Z	2.2405	2.2405	0	%100
47	M49A	X	2.0374	2.0374	0	%100
48	M49A	Z	3.5289	3.5289	0	%100
49	M50A	X	1.3727	1.3727	0	%100
50	M50A	Z	2.3777	2.3777	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	4.1618	4.1618	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	4.1618	4.1618	0	%100
5	MP4A	X	0	0	0	%100
6	MP4A	Z	2.8686	2.8686	0	%100
7	M5	X	0	0	0	%100
8	M5	Z	2.8686	2.8686	0	%100
9	M6	X	0	0	0	%100
10	M6	Z	2.5827	2.5827	0	%100
11	M7	X	0	0	0	%100
12	M7	Z	2.8686	2.8686	0	%100
13	M9	X	0	0	0	%100
14	M9	Z	2.8686	2.8686	0	%100
15	MP1A	X	0	0	0	%100
16	MP1A	Z	3.0052	3.0052	0	%100
17	RCP	X	0	0	0	%100
18	RCP	Z	.7018	.7018	0	%100
19	M43	X	0	0	0	%100
20	M43	Z	3.0997	3.0997	0	%100
21	M44	X	0	0	0	%100
22	M44	Z	.7018	.7018	0	%100
23	M45	X	0	0	0	%100
24	M45	Z	.7018	.7018	0	%100
25	M46	X	0	0	0	%100
26	M46	Z	3.0997	3.0997	0	%100
27	M47	X	0	0	0	%100
28	M47	Z	.7018	.7018	0	%100
29	M50	X	0	0	0	%100
30	M50	Z	2.8329	2.8329	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location(ft)	End Location(ft)
31	M53	X	0	0	0	%100
32	M53	Z	2.9159	2.9159	0	%100
33	M54	X	0	0	0	%100
34	M54	Z	2.9159	2.9159	0	%100
35	M55	X	0	0	0	%100
36	M55	Z	.2549	.2549	0	%100
37	MP2A	X	0	0	0	%100
38	MP2A	Z	3.0461	3.0461	0	%100
39	MP3A	X	0	0	0	%100
40	MP3A	Z	3.0461	3.0461	0	%100
41	M41	X	0	0	0	%100
42	M41	Z	0	0	0	%100
43	M42	X	0	0	0	%100
44	M42	Z	0	0	0	%100
45	M48A	X	0	0	0	%100
46	M48A	Z	3.4495	3.4495	0	%100
47	M49A	X	0	0	0	%100
48	M49A	Z	3.8769	3.8769	0	%100
49	M50A	X	0	0	0	%100
50	M50A	Z	3.8769	3.8769	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location(ft)	End Location(ft)
1	M1	X	-1.5607	-1.5607	0	%100
2	M1	Z	2.7032	2.7032	0	%100
3	M2	X	-1.5607	-1.5607	0	%100
4	M2	Z	2.7032	2.7032	0	%100
5	MP4A	X	-1.4343	-1.4343	0	%100
6	MP4A	Z	2.4843	2.4843	0	%100
7	M5	X	-1.4343	-1.4343	0	%100
8	M5	Z	2.4843	2.4843	0	%100
9	M6	X	-1.2913	-1.2913	0	%100
10	M6	Z	2.2367	2.2367	0	%100
11	M7	X	-1.4343	-1.4343	0	%100
12	M7	Z	2.4843	2.4843	0	%100
13	M9	X	-1.4343	-1.4343	0	%100
14	M9	Z	2.4843	2.4843	0	%100
15	MP1A	X	-1.5026	-1.5026	0	%100
16	MP1A	Z	2.6026	2.6026	0	%100
17	RCP	X	-.000327	-.000327	0	%100
18	RCP	Z	.000566	.000566	0	%100
19	M43	X	-1.1624	-1.1624	0	%100
20	M43	Z	2.0133	2.0133	0	%100
21	M44	X	-1.0902	-1.0902	0	%100
22	M44	Z	1.8882	1.8882	0	%100
23	M45	X	-.000327	-.000327	0	%100
24	M45	Z	.000566	.000566	0	%100
25	M46	X	-1.1624	-1.1624	0	%100
26	M46	Z	2.0133	2.0133	0	%100
27	M47	X	-1.0902	-1.0902	0	%100
28	M47	Z	1.8882	1.8882	0	%100
29	M50	X	-1.4164	-1.4164	0	%100
30	M50	Z	2.4533	2.4533	0	%100
31	M53	X	-1.4579	-1.4579	0	%100
32	M53	Z	2.5252	2.5252	0	%100
33	M54	X	-1.4579	-1.4579	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
34	M54	Z	2.5252	2.5252	0	%100
35	M55	X	-.0713	-.0713	0	%100
36	M55	Z	.1236	.1236	0	%100
37	MP2A	X	-1.523	-1.523	0	%100
38	MP2A	Z	2.638	2.638	0	%100
39	MP3A	X	-1.523	-1.523	0	%100
40	MP3A	Z	2.638	2.638	0	%100
41	M41	X	-.1704	-.1704	0	%100
42	M41	Z	.2951	.2951	0	%100
43	M42	X	-.1704	-.1704	0	%100
44	M42	Z	.2951	.2951	0	%100
45	M48A	X	-1.2935	-1.2935	0	%100
46	M48A	Z	2.2405	2.2405	0	%100
47	M49A	X	-1.3727	-1.3727	0	%100
48	M49A	Z	2.3777	2.3777	0	%100
49	M50A	X	-2.0374	-2.0374	0	%100
50	M50A	Z	3.5289	3.5289	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	-.9011	-.9011	0	%100
2	M1	Z	.5202	.5202	0	%100
3	M2	X	-.9011	-.9011	0	%100
4	M2	Z	.5202	.5202	0	%100
5	MP4A	X	-2.4843	-2.4843	0	%100
6	MP4A	Z	1.4343	1.4343	0	%100
7	M5	X	-2.4843	-2.4843	0	%100
8	M5	Z	1.4343	1.4343	0	%100
9	M6	X	-2.2367	-2.2367	0	%100
10	M6	Z	1.2913	1.2913	0	%100
11	M7	X	-2.4843	-2.4843	0	%100
12	M7	Z	1.4343	1.4343	0	%100
13	M9	X	-2.4843	-2.4843	0	%100
14	M9	Z	1.4343	1.4343	0	%100
15	MP1A	X	-2.6026	-2.6026	0	%100
16	MP1A	Z	1.5026	1.5026	0	%100
17	RCP	X	-.6738	-.6738	0	%100
18	RCP	Z	.389	.389	0	%100
19	M43	X	-.6711	-.6711	0	%100
20	M43	Z	.3875	.3875	0	%100
21	M44	X	-2.5614	-2.5614	0	%100
22	M44	Z	1.4788	1.4788	0	%100
23	M45	X	-.6738	-.6738	0	%100
24	M45	Z	.389	.389	0	%100
25	M46	X	-.6711	-.6711	0	%100
26	M46	Z	.3875	.3875	0	%100
27	M47	X	-2.5614	-2.5614	0	%100
28	M47	Z	1.4788	1.4788	0	%100
29	M50	X	-2.4533	-2.4533	0	%100
30	M50	Z	1.4164	1.4164	0	%100
31	M53	X	-2.5252	-2.5252	0	%100
32	M53	Z	1.4579	1.4579	0	%100
33	M54	X	-2.5252	-2.5252	0	%100
34	M54	Z	1.4579	1.4579	0	%100
35	M55	X	-1.1637	-1.1637	0	%100
36	M55	Z	.6718	.6718	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location	End Location
37	MP2A	X	-2.638	-2.638	0	%100
38	MP2A	Z	1.523	1.523	0	%100
39	MP3A	X	-2.638	-2.638	0	%100
40	MP3A	Z	1.523	1.523	0	%100
41	M41	X	-8853	-8853	0	%100
42	M41	Z	5111	5111	0	%100
43	M42	X	-8853	-8853	0	%100
44	M42	Z	5111	5111	0	%100
45	M48A	X	-7468	-7468	0	%100
46	M48A	Z	4312	4312	0	%100
47	M49A	X	-1.5693	-1.5693	0	%100
48	M49A	Z	.906	.906	0	%100
49	M50A	X	-2.7206	-2.7206	0	%100
50	M50A	Z	1.5707	1.5707	0	%100

Member Distributed Loads (BLC 62 : Structure Wi (270 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	MP4A	X	-2.8686	-2.8686	0	%100
6	MP4A	Z	0	0	0	%100
7	M5	X	-2.8686	-2.8686	0	%100
8	M5	Z	0	0	0	%100
9	M6	X	-2.5827	-2.5827	0	%100
10	M6	Z	0	0	0	%100
11	M7	X	-2.8686	-2.8686	0	%100
12	M7	Z	0	0	0	%100
13	M9	X	-2.8686	-2.8686	0	%100
14	M9	Z	0	0	0	%100
15	MP1A	X	-3.0052	-3.0052	0	%100
16	MP1A	Z	0	0	0	%100
17	RCP	X	-2.2565	-2.2565	0	%100
18	RCP	Z	0	0	0	%100
19	M43	X	0	0	0	%100
20	M43	Z	0	0	0	%100
21	M44	X	-2.2565	-2.2565	0	%100
22	M44	Z	0	0	0	%100
23	M45	X	-2.2565	-2.2565	0	%100
24	M45	Z	0	0	0	%100
25	M46	X	0	0	0	%100
26	M46	Z	0	0	0	%100
27	M47	X	-2.2565	-2.2565	0	%100
28	M47	Z	0	0	0	%100
29	M50	X	-2.8329	-2.8329	0	%100
30	M50	Z	0	0	0	%100
31	M53	X	-2.9159	-2.9159	0	%100
32	M53	Z	0	0	0	%100
33	M54	X	-2.9159	-2.9159	0	%100
34	M54	Z	0	0	0	%100
35	M55	X	-2.6569	-2.6569	0	%100
36	M55	Z	0	0	0	%100
37	MP2A	X	-3.0461	-3.0461	0	%100
38	MP2A	Z	0	0	0	%100
39	MP3A	X	-3.0461	-3.0461	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location(ft)	End Location(ft)	
40	MP3A	Z	0	0	0	0	%100
41	M41	X	-1.3631	-1.3631	0	0	%100
42	M41	Z	0	0	0	0	%100
43	M42	X	-1.3631	-1.3631	0	0	%100
44	M42	Z	0	0	0	0	%100
45	M48A	X	0	0	0	0	%100
46	M48A	Z	0	0	0	0	%100
47	M49A	X	-2.01	-2.01	0	0	%100
48	M49A	Z	0	0	0	0	%100
49	M50A	X	-2.01	-2.01	0	0	%100
50	M50A	Z	0	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	-9011	-9011	0	0	%100
2	M1	Z	-5202	-5202	0	0	%100
3	M2	X	-9011	-9011	0	0	%100
4	M2	Z	-5202	-5202	0	0	%100
5	MP4A	X	-2.4843	-2.4843	0	0	%100
6	MP4A	Z	-1.4343	-1.4343	0	0	%100
7	M5	X	-2.4843	-2.4843	0	0	%100
8	M5	Z	-1.4343	-1.4343	0	0	%100
9	M6	X	-2.2367	-2.2367	0	0	%100
10	M6	Z	-1.2913	-1.2913	0	0	%100
11	M7	X	-2.4843	-2.4843	0	0	%100
12	M7	Z	-1.4343	-1.4343	0	0	%100
13	M9	X	-2.4843	-2.4843	0	0	%100
14	M9	Z	-1.4343	-1.4343	0	0	%100
15	MP1A	X	-2.6026	-2.6026	0	0	%100
16	MP1A	Z	-1.5026	-1.5026	0	0	%100
17	RCP	X	-2.5614	-2.5614	0	0	%100
18	RCP	Z	-1.4788	-1.4788	0	0	%100
19	M43	X	-6711	-6711	0	0	%100
20	M43	Z	-3875	-3875	0	0	%100
21	M44	X	-6738	-6738	0	0	%100
22	M44	Z	-389	-389	0	0	%100
23	M45	X	-2.5614	-2.5614	0	0	%100
24	M45	Z	-1.4788	-1.4788	0	0	%100
25	M46	X	-6711	-6711	0	0	%100
26	M46	Z	-3875	-3875	0	0	%100
27	M47	X	-6738	-6738	0	0	%100
28	M47	Z	-389	-389	0	0	%100
29	M50	X	-2.4533	-2.4533	0	0	%100
30	M50	Z	-1.4164	-1.4164	0	0	%100
31	M53	X	-2.5252	-2.5252	0	0	%100
32	M53	Z	-1.4579	-1.4579	0	0	%100
33	M54	X	-2.5252	-2.5252	0	0	%100
34	M54	Z	-1.4579	-1.4579	0	0	%100
35	M55	X	-2.3981	-2.3981	0	0	%100
36	M55	Z	-1.3845	-1.3845	0	0	%100
37	MP2A	X	-2.638	-2.638	0	0	%100
38	MP2A	Z	-1.523	-1.523	0	0	%100
39	MP3A	X	-2.638	-2.638	0	0	%100
40	MP3A	Z	-1.523	-1.523	0	0	%100
41	M41	X	-8853	-8853	0	0	%100
42	M41	Z	-5111	-5111	0	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
43	M42	X	-8853	-8853	0	%100
44	M42	Z	-5111	-5111	0	%100
45	M48A	X	-7468	-7468	0	%100
46	M48A	Z	-4312	-4312	0	%100
47	M49A	X	-2.7206	-2.7206	0	%100
48	M49A	Z	-1.5707	-1.5707	0	%100
49	M50A	X	-1.5693	-1.5693	0	%100
50	M50A	Z	-.906	-.906	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	-1.5607	-1.5607	0	%100
2	M1	Z	-2.7032	-2.7032	0	%100
3	M2	X	-1.5607	-1.5607	0	%100
4	M2	Z	-2.7032	-2.7032	0	%100
5	MP4A	X	-1.4343	-1.4343	0	%100
6	MP4A	Z	-2.4843	-2.4843	0	%100
7	M5	X	-1.4343	-1.4343	0	%100
8	M5	Z	-2.4843	-2.4843	0	%100
9	M6	X	-1.2913	-1.2913	0	%100
10	M6	Z	-2.2367	-2.2367	0	%100
11	M7	X	-1.4343	-1.4343	0	%100
12	M7	Z	-2.4843	-2.4843	0	%100
13	M9	X	-1.4343	-1.4343	0	%100
14	M9	Z	-2.4843	-2.4843	0	%100
15	MP1A	X	-1.5026	-1.5026	0	%100
16	MP1A	Z	-2.6026	-2.6026	0	%100
17	RCP	X	-1.0902	-1.0902	0	%100
18	RCP	Z	-1.8882	-1.8882	0	%100
19	M43	X	-1.1624	-1.1624	0	%100
20	M43	Z	-2.0133	-2.0133	0	%100
21	M44	X	-0.00327	-0.00327	0	%100
22	M44	Z	-0.00566	-0.00566	0	%100
23	M45	X	-1.0902	-1.0902	0	%100
24	M45	Z	-1.8882	-1.8882	0	%100
25	M46	X	-1.1624	-1.1624	0	%100
26	M46	Z	-2.0133	-2.0133	0	%100
27	M47	X	-0.00327	-0.00327	0	%100
28	M47	Z	-0.00566	-0.00566	0	%100
29	M50	X	-1.4164	-1.4164	0	%100
30	M50	Z	-2.4533	-2.4533	0	%100
31	M53	X	-1.4579	-1.4579	0	%100
32	M53	Z	-2.5252	-2.5252	0	%100
33	M54	X	-1.4579	-1.4579	0	%100
34	M54	Z	-2.5252	-2.5252	0	%100
35	M55	X	-.784	-.784	0	%100
36	M55	Z	-1.358	-1.358	0	%100
37	MP2A	X	-1.523	-1.523	0	%100
38	MP2A	Z	-2.638	-2.638	0	%100
39	MP3A	X	-1.523	-1.523	0	%100
40	MP3A	Z	-2.638	-2.638	0	%100
41	M41	X	-.1704	-.1704	0	%100
42	M41	Z	-.2951	-.2951	0	%100
43	M42	X	-.1704	-.1704	0	%100
44	M42	Z	-.2951	-.2951	0	%100
45	M48A	X	-1.2935	-1.2935	0	%100



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 Designer :
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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)
46	M48A	Z	-2.2405	-2.2405	0	%100
47	M49A	X	-2.0374	-2.0374	0	%100
48	M49A	Z	-3.5289	-3.5289	0	%100
49	M50A	X	-1.3727	-1.3727	0	%100
50	M50A	Z	-2.3777	-2.3777	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	-8272	-8272	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-8272	-8272	0	%100
5	MP4A	X	0	0	0	%100
6	MP4A	Z	-4628	-4628	0	%100
7	M5	X	0	0	0	%100
8	M5	Z	-4628	-4628	0	%100
9	M6	X	0	0	0	%100
10	M6	Z	-4113	-4113	0	%100
11	M7	X	0	0	0	%100
12	M7	Z	-4628	-4628	0	%100
13	M9	X	0	0	0	%100
14	M9	Z	-4628	-4628	0	%100
15	MP1A	X	0	0	0	%100
16	MP1A	Z	-4715	-4715	0	%100
17	RCP	X	0	0	0	%100
18	RCP	Z	-1542	-1542	0	%100
19	M43	X	0	0	0	%100
20	M43	Z	-6838	-6838	0	%100
21	M44	X	0	0	0	%100
22	M44	Z	-1542	-1542	0	%100
23	M45	X	0	0	0	%100
24	M45	Z	-1542	-1542	0	%100
25	M46	X	0	0	0	%100
26	M46	Z	-6838	-6838	0	%100
27	M47	X	0	0	0	%100
28	M47	Z	-1542	-1542	0	%100
29	M50	X	0	0	0	%100
30	M50	Z	-483	-483	0	%100
31	M53	X	0	0	0	%100
32	M53	Z	-568	-568	0	%100
33	M54	X	0	0	0	%100
34	M54	Z	-568	-568	0	%100
35	M55	X	0	0	0	%100
36	M55	Z	-033	-033	0	%100
37	MP2A	X	0	0	0	%100
38	MP2A	Z	-4715	-4715	0	%100
39	MP3A	X	0	0	0	%100
40	MP3A	Z	-4715	-4715	0	%100
41	M41	X	0	0	0	%100
42	M41	Z	0	0	0	%100
43	M42	X	0	0	0	%100
44	M42	Z	0	0	0	%100
45	M48A	X	0	0	0	%100
46	M48A	Z	-5708	-5708	0	%100
47	M49A	X	0	0	0	%100
48	M49A	Z	-7724	-7724	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
49	M50A	X	0	0	0	%100
50	M50A	Z	-7724	-7724	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	.3102	.3102	0	%100
2	M1	Z	-.5373	-.5373	0	%100
3	M2	X	.3102	.3102	0	%100
4	M2	Z	-.5373	-.5373	0	%100
5	MP4A	X	.2314	.2314	0	%100
6	MP4A	Z	-.4008	-.4008	0	%100
7	M5	X	.2314	.2314	0	%100
8	M5	Z	-.4008	-.4008	0	%100
9	M6	X	.2057	.2057	0	%100
10	M6	Z	-.3562	-.3562	0	%100
11	M7	X	.2314	.2314	0	%100
12	M7	Z	-.4008	-.4008	0	%100
13	M9	X	.2314	.2314	0	%100
14	M9	Z	-.4008	-.4008	0	%100
15	MP1A	X	.2358	.2358	0	%100
16	MP1A	Z	-.4083	-.4083	0	%100
17	RCP	X	7.2e-5	7.2e-5	0	%100
18	RCP	Z	-.000124	-.000124	0	%100
19	M43	X	.2564	.2564	0	%100
20	M43	Z	-.4442	-.4442	0	%100
21	M44	X	.2395	.2395	0	%100
22	M44	Z	-.4148	-.4148	0	%100
23	M45	X	7.2e-5	7.2e-5	0	%100
24	M45	Z	-.000124	-.000124	0	%100
25	M46	X	.2564	.2564	0	%100
26	M46	Z	-.4442	-.4442	0	%100
27	M47	X	.2395	.2395	0	%100
28	M47	Z	-.4148	-.4148	0	%100
29	M50	X	.2415	.2415	0	%100
30	M50	Z	-.4183	-.4183	0	%100
31	M53	X	.284	.284	0	%100
32	M53	Z	-.4919	-.4919	0	%100
33	M54	X	.284	.284	0	%100
34	M54	Z	-.4919	-.4919	0	%100
35	M55	X	.0092	.0092	0	%100
36	M55	Z	-.016	-.016	0	%100
37	MP2A	X	.2358	.2358	0	%100
38	MP2A	Z	-.4083	-.4083	0	%100
39	MP3A	X	.2358	.2358	0	%100
40	MP3A	Z	-.4083	-.4083	0	%100
41	M41	X	.0124	.0124	0	%100
42	M41	Z	-.0215	-.0215	0	%100
43	M42	X	.0124	.0124	0	%100
44	M42	Z	-.0215	-.0215	0	%100
45	M48A	X	.214	.214	0	%100
46	M48A	Z	-.3707	-.3707	0	%100
47	M49A	X	.2735	.2735	0	%100
48	M49A	Z	-.4737	-.4737	0	%100
49	M50A	X	.4059	.4059	0	%100
50	M50A	Z	-.7031	-.7031	0	%100



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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	.1791	.1791	0	%100
2	M1	Z	-.1034	-.1034	0	%100
3	M2	X	.1791	.1791	0	%100
4	M2	Z	-.1034	-.1034	0	%100
5	MP4A	X	.4008	.4008	0	%100
6	MP4A	Z	-.2314	-.2314	0	%100
7	M5	X	.4008	.4008	0	%100
8	M5	Z	-.2314	-.2314	0	%100
9	M6	X	.3562	.3562	0	%100
10	M6	Z	-.2057	-.2057	0	%100
11	M7	X	.4008	.4008	0	%100
12	M7	Z	-.2314	-.2314	0	%100
13	M9	X	.4008	.4008	0	%100
14	M9	Z	-.2314	-.2314	0	%100
15	MP1A	X	.4083	.4083	0	%100
16	MP1A	Z	-.2358	-.2358	0	%100
17	RCP	X	.148	.148	0	%100
18	RCP	Z	-.0855	-.0855	0	%100
19	M43	X	.1481	.1481	0	%100
20	M43	Z	-.0855	-.0855	0	%100
21	M44	X	.5627	.5627	0	%100
22	M44	Z	-.3249	-.3249	0	%100
23	M45	X	.148	.148	0	%100
24	M45	Z	-.0855	-.0855	0	%100
25	M46	X	.1481	.1481	0	%100
26	M46	Z	-.0855	-.0855	0	%100
27	M47	X	.5627	.5627	0	%100
28	M47	Z	-.3249	-.3249	0	%100
29	M50	X	.4183	.4183	0	%100
30	M50	Z	-.2415	-.2415	0	%100
31	M53	X	.4919	.4919	0	%100
32	M53	Z	-.284	-.284	0	%100
33	M54	X	.4919	.4919	0	%100
34	M54	Z	-.284	-.284	0	%100
35	M55	X	.1507	.1507	0	%100
36	M55	Z	-.087	-.087	0	%100
37	MP2A	X	.4083	.4083	0	%100
38	MP2A	Z	-.2358	-.2358	0	%100
39	MP3A	X	.4083	.4083	0	%100
40	MP3A	Z	-.2358	-.2358	0	%100
41	M41	X	.0645	.0645	0	%100
42	M41	Z	-.0372	-.0372	0	%100
43	M42	X	.0645	.0645	0	%100
44	M42	Z	-.0372	-.0372	0	%100
45	M48A	X	.1236	.1236	0	%100
46	M48A	Z	-.0713	-.0713	0	%100
47	M49A	X	.3127	.3127	0	%100
48	M49A	Z	-.1805	-.1805	0	%100
49	M50A	X	.542	.542	0	%100
50	M50A	Z	-.3129	-.3129	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	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location	End Location
4	M2	Z	0	0	0	%100
5	MP4A	X	.4628	.4628	0	%100
6	MP4A	Z	0	0	0	%100
7	M5	X	.4628	.4628	0	%100
8	M5	Z	0	0	0	%100
9	M6	X	.4113	.4113	0	%100
10	M6	Z	0	0	0	%100
11	M7	X	.4628	.4628	0	%100
12	M7	Z	0	0	0	%100
13	M9	X	.4628	.4628	0	%100
14	M9	Z	0	0	0	%100
15	MP1A	X	.4715	.4715	0	%100
16	MP1A	Z	0	0	0	%100
17	RCP	X	.4957	.4957	0	%100
18	RCP	Z	0	0	0	%100
19	M43	X	0	0	0	%100
20	M43	Z	0	0	0	%100
21	M44	X	.4957	.4957	0	%100
22	M44	Z	0	0	0	%100
23	M45	X	.4957	.4957	0	%100
24	M45	Z	0	0	0	%100
25	M46	X	0	0	0	%100
26	M46	Z	0	0	0	%100
27	M47	X	.4957	.4957	0	%100
28	M47	Z	0	0	0	%100
29	M50	X	.483	.483	0	%100
30	M50	Z	0	0	0	%100
31	M53	X	.568	.568	0	%100
32	M53	Z	0	0	0	%100
33	M54	X	.568	.568	0	%100
34	M54	Z	0	0	0	%100
35	M55	X	.3442	.3442	0	%100
36	M55	Z	0	0	0	%100
37	MP2A	X	.4715	.4715	0	%100
38	MP2A	Z	0	0	0	%100
39	MP3A	X	.4715	.4715	0	%100
40	MP3A	Z	0	0	0	%100
41	M41	X	.0993	.0993	0	%100
42	M41	Z	0	0	0	%100
43	M42	X	.0993	.0993	0	%100
44	M42	Z	0	0	0	%100
45	M48A	X	0	0	0	%100
46	M48A	Z	0	0	0	%100
47	M49A	X	.4005	.4005	0	%100
48	M49A	Z	0	0	0	%100
49	M50A	X	.4005	.4005	0	%100
50	M50A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location	End Location
1	M1	X	.1791	.1791	0	%100
2	M1	Z	.1034	.1034	0	%100
3	M2	X	.1791	.1791	0	%100
4	M2	Z	.1034	.1034	0	%100
5	MP4A	X	.4008	.4008	0	%100
6	MP4A	Z	.2314	.2314	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[ft]	End Location[ft]
7	M5	X	.4008	.4008	0	%100
8	M5	Z	.2314	.2314	0	%100
9	M6	X	.3562	.3562	0	%100
10	M6	Z	.2057	.2057	0	%100
11	M7	X	.4008	.4008	0	%100
12	M7	Z	.2314	.2314	0	%100
13	M9	X	.4008	.4008	0	%100
14	M9	Z	.2314	.2314	0	%100
15	MP1A	X	.4083	.4083	0	%100
16	MP1A	Z	.2358	.2358	0	%100
17	RCP	X	.5627	.5627	0	%100
18	RCP	Z	.3249	.3249	0	%100
19	M43	X	.1481	.1481	0	%100
20	M43	Z	.0855	.0855	0	%100
21	M44	X	.148	.148	0	%100
22	M44	Z	.0855	.0855	0	%100
23	M45	X	.5627	.5627	0	%100
24	M45	Z	.3249	.3249	0	%100
25	M46	X	.1481	.1481	0	%100
26	M46	Z	.0855	.0855	0	%100
27	M47	X	.148	.148	0	%100
28	M47	Z	.0855	.0855	0	%100
29	M50	X	.4183	.4183	0	%100
30	M50	Z	.2415	.2415	0	%100
31	M53	X	.4919	.4919	0	%100
32	M53	Z	.284	.284	0	%100
33	M54	X	.4919	.4919	0	%100
34	M54	Z	.284	.284	0	%100
35	M55	X	.3107	.3107	0	%100
36	M55	Z	.1794	.1794	0	%100
37	MP2A	X	.4083	.4083	0	%100
38	MP2A	Z	.2358	.2358	0	%100
39	MP3A	X	.4083	.4083	0	%100
40	MP3A	Z	.2358	.2358	0	%100
41	M41	X	.0645	.0645	0	%100
42	M41	Z	.0372	.0372	0	%100
43	M42	X	.0645	.0645	0	%100
44	M42	Z	.0372	.0372	0	%100
45	M48A	X	.1236	.1236	0	%100
46	M48A	Z	.0713	.0713	0	%100
47	M49A	X	.542	.542	0	%100
48	M49A	Z	.3129	.3129	0	%100
49	M50A	X	.3127	.3127	0	%100
50	M50A	Z	.1805	.1805	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M1	X	.3102	.3102	0	%100
2	M1	Z	.5373	.5373	0	%100
3	M2	X	.3102	.3102	0	%100
4	M2	Z	.5373	.5373	0	%100
5	MP4A	X	.2314	.2314	0	%100
6	MP4A	Z	.4008	.4008	0	%100
7	M5	X	.2314	.2314	0	%100
8	M5	Z	.4008	.4008	0	%100
9	M6	X	.2057	.2057	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
10	M6	Z	.3562	.3562	0	%100
11	M7	X	.2314	.2314	0	%100
12	M7	Z	.4008	.4008	0	%100
13	M9	X	.2314	.2314	0	%100
14	M9	Z	.4008	.4008	0	%100
15	MP1A	X	.2358	.2358	0	%100
16	MP1A	Z	.4083	.4083	0	%100
17	RCP	X	.2395	.2395	0	%100
18	RCP	Z	.4148	.4148	0	%100
19	M43	X	.2564	.2564	0	%100
20	M43	Z	.4442	.4442	0	%100
21	M44	X	7.2e-5	7.2e-5	0	%100
22	M44	Z	.000124	.000124	0	%100
23	M45	X	.2395	.2395	0	%100
24	M45	Z	.4148	.4148	0	%100
25	M46	X	.2564	.2564	0	%100
26	M46	Z	.4442	.4442	0	%100
27	M47	X	7.2e-5	7.2e-5	0	%100
28	M47	Z	.000124	.000124	0	%100
29	M50	X	.2415	.2415	0	%100
30	M50	Z	.4183	.4183	0	%100
31	M53	X	.284	.284	0	%100
32	M53	Z	.4919	.4919	0	%100
33	M54	X	.284	.284	0	%100
34	M54	Z	.4919	.4919	0	%100
35	M55	X	.1016	.1016	0	%100
36	M55	Z	.1759	.1759	0	%100
37	MP2A	X	.2358	.2358	0	%100
38	MP2A	Z	.4083	.4083	0	%100
39	MP3A	X	.2358	.2358	0	%100
40	MP3A	Z	.4083	.4083	0	%100
41	M41	X	.0124	.0124	0	%100
42	M41	Z	.0215	.0215	0	%100
43	M42	X	.0124	.0124	0	%100
44	M42	Z	.0215	.0215	0	%100
45	M48A	X	.214	.214	0	%100
46	M48A	Z	.3707	.3707	0	%100
47	M49A	X	.4059	.4059	0	%100
48	M49A	Z	.7031	.7031	0	%100
49	M50A	X	.2735	.2735	0	%100
50	M50A	Z	.4737	.4737	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	.8272	.8272	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	.8272	.8272	0	%100
5	MP4A	X	0	0	0	%100
6	MP4A	Z	.4628	.4628	0	%100
7	M5	X	0	0	0	%100
8	M5	Z	.4628	.4628	0	%100
9	M6	X	0	0	0	%100
10	M6	Z	.4113	.4113	0	%100
11	M7	X	0	0	0	%100
12	M7	Z	.4628	.4628	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]
13	M9	X	0	0	0	%100
14	M9	Z	.4628	.4628	0	%100
15	MP1A	X	0	0	0	%100
16	MP1A	Z	.4715	.4715	0	%100
17	RCP	X	0	0	0	%100
18	RCP	Z	.1542	.1542	0	%100
19	M43	X	0	0	0	%100
20	M43	Z	.6838	.6838	0	%100
21	M44	X	0	0	0	%100
22	M44	Z	.1542	.1542	0	%100
23	M45	X	0	0	0	%100
24	M45	Z	.1542	.1542	0	%100
25	M46	X	0	0	0	%100
26	M46	Z	.6838	.6838	0	%100
27	M47	X	0	0	0	%100
28	M47	Z	.1542	.1542	0	%100
29	M50	X	0	0	0	%100
30	M50	Z	.483	.483	0	%100
31	M53	X	0	0	0	%100
32	M53	Z	.568	.568	0	%100
33	M54	X	0	0	0	%100
34	M54	Z	.568	.568	0	%100
35	M55	X	0	0	0	%100
36	M55	Z	.033	.033	0	%100
37	MP2A	X	0	0	0	%100
38	MP2A	Z	.4715	.4715	0	%100
39	MP3A	X	0	0	0	%100
40	MP3A	Z	.4715	.4715	0	%100
41	M41	X	0	0	0	%100
42	M41	Z	0	0	0	%100
43	M42	X	0	0	0	%100
44	M42	Z	0	0	0	%100
45	M48A	X	0	0	0	%100
46	M48A	Z	.5708	.5708	0	%100
47	M49A	X	0	0	0	%100
48	M49A	Z	.7724	.7724	0	%100
49	M50A	X	0	0	0	%100
50	M50A	Z	.7724	.7724	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	-.3102	-.3102	0	%100
2	M1	Z	.5373	.5373	0	%100
3	M2	X	-.3102	-.3102	0	%100
4	M2	Z	.5373	.5373	0	%100
5	MP4A	X	-.2314	-.2314	0	%100
6	MP4A	Z	.4008	.4008	0	%100
7	M5	X	-.2314	-.2314	0	%100
8	M5	Z	.4008	.4008	0	%100
9	M6	X	-.2057	-.2057	0	%100
10	M6	Z	.3562	.3562	0	%100
11	M7	X	-.2314	-.2314	0	%100
12	M7	Z	.4008	.4008	0	%100
13	M9	X	-.2314	-.2314	0	%100
14	M9	Z	.4008	.4008	0	%100
15	MP1A	X	-.2358	-.2358	0	%100



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project # 23777128
 Model Name : Antenna Mount Analysis

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location	End Location
16	MP1A	Z	.4083	.4083	0	%100
17	RCP	X	-7.2e-5	-7.2e-5	0	%100
18	RCP	Z	.000124	.000124	0	%100
19	M43	X	-.2564	-.2564	0	%100
20	M43	Z	.4442	.4442	0	%100
21	M44	X	-.2395	-.2395	0	%100
22	M44	Z	.4148	.4148	0	%100
23	M45	X	-7.2e-5	-7.2e-5	0	%100
24	M45	Z	.000124	.000124	0	%100
25	M46	X	-.2564	-.2564	0	%100
26	M46	Z	.4442	.4442	0	%100
27	M47	X	-.2395	-.2395	0	%100
28	M47	Z	.4148	.4148	0	%100
29	M50	X	-.2415	-.2415	0	%100
30	M50	Z	.4183	.4183	0	%100
31	M53	X	-.284	-.284	0	%100
32	M53	Z	.4919	.4919	0	%100
33	M54	X	-.284	-.284	0	%100
34	M54	Z	.4919	.4919	0	%100
35	M55	X	-.0092	-.0092	0	%100
36	M55	Z	.016	.016	0	%100
37	MP2A	X	-.2358	-.2358	0	%100
38	MP2A	Z	.4083	.4083	0	%100
39	MP3A	X	-.2358	-.2358	0	%100
40	MP3A	Z	.4083	.4083	0	%100
41	M41	X	-.0124	-.0124	0	%100
42	M41	Z	.0215	.0215	0	%100
43	M42	X	-.0124	-.0124	0	%100
44	M42	Z	.0215	.0215	0	%100
45	M48A	X	-.214	-.214	0	%100
46	M48A	Z	.3707	.3707	0	%100
47	M49A	X	-.2735	-.2735	0	%100
48	M49A	Z	.4737	.4737	0	%100
49	M50A	X	-.4059	-.4059	0	%100
50	M50A	Z	.7031	.7031	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location	End Location
1	M1	X	-.1791	-.1791	0	%100
2	M1	Z	.1034	.1034	0	%100
3	M2	X	-.1791	-.1791	0	%100
4	M2	Z	.1034	.1034	0	%100
5	MP4A	X	-.4008	-.4008	0	%100
6	MP4A	Z	.2314	.2314	0	%100
7	M5	X	-.4008	-.4008	0	%100
8	M5	Z	.2314	.2314	0	%100
9	M6	X	-.3562	-.3562	0	%100
10	M6	Z	.2057	.2057	0	%100
11	M7	X	-.4008	-.4008	0	%100
12	M7	Z	.2314	.2314	0	%100
13	M9	X	-.4008	-.4008	0	%100
14	M9	Z	.2314	.2314	0	%100
15	MP1A	X	-.4083	-.4083	0	%100
16	MP1A	Z	.2358	.2358	0	%100
17	RCP	X	-.148	-.148	0	%100
18	RCP	Z	.0855	.0855	0	%100



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project # 23777128
 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 Location(ft)	End Location(ft)
19	M43	X	-.1481	-.1481	0	%100
20	M43	Z	.0855	.0855	0	%100
21	M44	X	-.5627	-.5627	0	%100
22	M44	Z	.3249	.3249	0	%100
23	M45	X	-.148	-.148	0	%100
24	M45	Z	.0855	.0855	0	%100
25	M46	X	-.1481	-.1481	0	%100
26	M46	Z	.0855	.0855	0	%100
27	M47	X	-.5627	-.5627	0	%100
28	M47	Z	.3249	.3249	0	%100
29	M50	X	-.4183	-.4183	0	%100
30	M50	Z	.2415	.2415	0	%100
31	M53	X	-.4919	-.4919	0	%100
32	M53	Z	.284	.284	0	%100
33	M54	X	-.4919	-.4919	0	%100
34	M54	Z	.284	.284	0	%100
35	M55	X	-.1507	-.1507	0	%100
36	M55	Z	.087	.087	0	%100
37	MP2A	X	-.4083	-.4083	0	%100
38	MP2A	Z	.2358	.2358	0	%100
39	MP3A	X	-.4083	-.4083	0	%100
40	MP3A	Z	.2358	.2358	0	%100
41	M41	X	-.0645	-.0645	0	%100
42	M41	Z	.0372	.0372	0	%100
43	M42	X	-.0645	-.0645	0	%100
44	M42	Z	.0372	.0372	0	%100
45	M48A	X	-.1236	-.1236	0	%100
46	M48A	Z	.0713	.0713	0	%100
47	M49A	X	-.3127	-.3127	0	%100
48	M49A	Z	.1805	.1805	0	%100
49	M50A	X	-.542	-.542	0	%100
50	M50A	Z	.3129	.3129	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	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	MP4A	X	-.4628	-.4628	0	%100
6	MP4A	Z	0	0	0	%100
7	M5	X	-.4628	-.4628	0	%100
8	M5	Z	0	0	0	%100
9	M6	X	-.4113	-.4113	0	%100
10	M6	Z	0	0	0	%100
11	M7	X	-.4628	-.4628	0	%100
12	M7	Z	0	0	0	%100
13	M9	X	-.4628	-.4628	0	%100
14	M9	Z	0	0	0	%100
15	MP1A	X	-.4715	-.4715	0	%100
16	MP1A	Z	0	0	0	%100
17	RCP	X	-.4957	-.4957	0	%100
18	RCP	Z	0	0	0	%100
19	M43	X	0	0	0	%100
20	M43	Z	0	0	0	%100
21	M44	X	-.4957	-.4957	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
22	M44	Z	0	0	0	%100
23	M45	X	-4957	-4957	0	%100
24	M45	Z	0	0	0	%100
25	M46	X	0	0	0	%100
26	M46	Z	0	0	0	%100
27	M47	X	-4957	-4957	0	%100
28	M47	Z	0	0	0	%100
29	M50	X	-483	-483	0	%100
30	M50	Z	0	0	0	%100
31	M53	X	-568	-568	0	%100
32	M53	Z	0	0	0	%100
33	M54	X	-568	-568	0	%100
34	M54	Z	0	0	0	%100
35	M55	X	-3442	-3442	0	%100
36	M55	Z	0	0	0	%100
37	MP2A	X	-4715	-4715	0	%100
38	MP2A	Z	0	0	0	%100
39	MP3A	X	-4715	-4715	0	%100
40	MP3A	Z	0	0	0	%100
41	M41	X	-0993	-0993	0	%100
42	M41	Z	0	0	0	%100
43	M42	X	-0993	-0993	0	%100
44	M42	Z	0	0	0	%100
45	M48A	X	0	0	0	%100
46	M48A	Z	0	0	0	%100
47	M49A	X	-4005	-4005	0	%100
48	M49A	Z	0	0	0	%100
49	M50A	X	-4005	-4005	0	%100
50	M50A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M1	X	-1791	-1791	0	%100
2	M1	Z	-1034	-1034	0	%100
3	M2	X	-1791	-1791	0	%100
4	M2	Z	-1034	-1034	0	%100
5	MP4A	X	-4008	-4008	0	%100
6	MP4A	Z	-2314	-2314	0	%100
7	M5	X	-4008	-4008	0	%100
8	M5	Z	-2314	-2314	0	%100
9	M6	X	-3562	-3562	0	%100
10	M6	Z	-2057	-2057	0	%100
11	M7	X	-4008	-4008	0	%100
12	M7	Z	-2314	-2314	0	%100
13	M9	X	-4008	-4008	0	%100
14	M9	Z	-2314	-2314	0	%100
15	MP1A	X	-4083	-4083	0	%100
16	MP1A	Z	-2358	-2358	0	%100
17	RCP	X	-5627	-5627	0	%100
18	RCP	Z	-3249	-3249	0	%100
19	M43	X	-1481	-1481	0	%100
20	M43	Z	-0855	-0855	0	%100
21	M44	X	-148	-148	0	%100
22	M44	Z	-0855	-0855	0	%100
23	M45	X	-5627	-5627	0	%100
24	M45	Z	-3249	-3249	0	%100



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project # 23777128
 Model Name : Antenna Mount Analysis

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
25	M46	X	-1481	-1481	0	%100
26	M46	Z	-0855	-0855	0	%100
27	M47	X	-148	-148	0	%100
28	M47	Z	-0855	-0855	0	%100
29	M50	X	-4183	-4183	0	%100
30	M50	Z	-2415	-2415	0	%100
31	M53	X	-4919	-4919	0	%100
32	M53	Z	-284	-284	0	%100
33	M54	X	-4919	-4919	0	%100
34	M54	Z	-284	-284	0	%100
35	M55	X	-3107	-3107	0	%100
36	M55	Z	-1794	-1794	0	%100
37	MP2A	X	-4083	-4083	0	%100
38	MP2A	Z	-2358	-2358	0	%100
39	MP3A	X	-4083	-4083	0	%100
40	MP3A	Z	-2358	-2358	0	%100
41	M41	X	-0645	-0645	0	%100
42	M41	Z	-0372	-0372	0	%100
43	M42	X	-0645	-0645	0	%100
44	M42	Z	-0372	-0372	0	%100
45	M48A	X	-1236	-1236	0	%100
46	M48A	Z	-0713	-0713	0	%100
47	M49A	X	-542	-542	0	%100
48	M49A	Z	-3129	-3129	0	%100
49	M50A	X	-3127	-3127	0	%100
50	M50A	Z	-1805	-1805	0	%100

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	-3102	-3102	0	%100
2	M1	Z	-5373	-5373	0	%100
3	M2	X	-3102	-3102	0	%100
4	M2	Z	-5373	-5373	0	%100
5	MP4A	X	-2314	-2314	0	%100
6	MP4A	Z	-4008	-4008	0	%100
7	M5	X	-2314	-2314	0	%100
8	M5	Z	-4008	-4008	0	%100
9	M6	X	-2057	-2057	0	%100
10	M6	Z	-3562	-3562	0	%100
11	M7	X	-2314	-2314	0	%100
12	M7	Z	-4008	-4008	0	%100
13	M9	X	-2314	-2314	0	%100
14	M9	Z	-4008	-4008	0	%100
15	MP1A	X	-2358	-2358	0	%100
16	MP1A	Z	-4083	-4083	0	%100
17	RCP	X	-2395	-2395	0	%100
18	RCP	Z	-4148	-4148	0	%100
19	M43	X	-2564	-2564	0	%100
20	M43	Z	-4442	-4442	0	%100
21	M44	X	-7.2e-5	-7.2e-5	0	%100
22	M44	Z	-000124	-000124	0	%100
23	M45	X	-2395	-2395	0	%100
24	M45	Z	-4148	-4148	0	%100
25	M46	X	-2564	-2564	0	%100
26	M46	Z	-4442	-4442	0	%100
27	M47	X	-7.2e-5	-7.2e-5	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Locationft	End Locationft
28	M47	Z	-0.00124	-0.00124	0	%100
29	M50	X	-2415	-2415	0	%100
30	M50	Z	-4183	-4183	0	%100
31	M53	X	-284	-284	0	%100
32	M53	Z	-4919	-4919	0	%100
33	M54	X	-284	-284	0	%100
34	M54	Z	-4919	-4919	0	%100
35	M55	X	-1016	-1016	0	%100
36	M55	Z	-1759	-1759	0	%100
37	MP2A	X	-2358	-2358	0	%100
38	MP2A	Z	-4083	-4083	0	%100
39	MP3A	X	-2358	-2358	0	%100
40	MP3A	Z	-4083	-4083	0	%100
41	M41	X	-0.124	-0.124	0	%100
42	M41	Z	-0.215	-0.215	0	%100
43	M42	X	-0.124	-0.124	0	%100
44	M42	Z	-0.215	-0.215	0	%100
45	M48A	X	-214	-214	0	%100
46	M48A	Z	-3707	-3707	0	%100
47	M49A	X	-4059	-4059	0	%100
48	M49A	Z	-7031	-7031	0	%100
49	M50A	X	-2735	-2735	0	%100
50	M50A	Z	-4737	-4737	0	%100

Member Area Loads

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

Envelope Joint Reactions

Joint	X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC		
1	N72	11	1065.771	11	870.353	14	1129.422	14	.046	8	0	75	.082	11
2		5	-1479.366	5	-159.012	8	-147.253	8	-.254	14	0	1	-.118	5
3	N71	5	1496.789	5	630.603	15	759.262	1	-.027	11	0	75	.082	11
4		11	-1077.412	11	91.247	11	-1028.594	7	-.184	15	0	1	-.118	5
5	N73	6	208.151	6	48.378	17	732.831	12	0	75	0	75	0	75
6		12	-218.79	12	9.873	75	-723.167	6	0	1	0	1	0	1
7	N76A	11	1264.187	11	1706.222	20	88.957	2	.003	2	0	2	0	44
8		5	-1262.411	5	-17.392	2	-652.7	20	-.002	8	-.001	44	0	2
9	Totals:	11	1088.684	11	2900.763	17	1924.376	1						
10		5	-1088.672	5	733.176	73	-1924.375	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	M1	L2.5x2.5x3	.853	4	.468	4	y	17	2280.519	29192.4	.873	1.449	1.941	H2-1
2	M2	L2.5x2.5x3	.767	4	.462	4	z	14	2280.519	29192.4	.873	1.554	2.383	H2-1
3	M53	L2x2x4	.734	0	.075	2.75	z	2	20858.0	30585.6	.691	1.577	2.264	H2-1
4	M46	L3X2X4	.712	.813	.161	.813	z	15	34908.0	38880	.826	2.489	1.371	H2-1
5	M43	L3X2X4	.635	.813	.155	.813	z	6	34908.0	38880	.826	2.489	1.17	H2-1
6	M45	L3X2X4	.584	1.24	.086	1.24	z	5	36513.77	38880	.826	2.489	1.939	H2-1
7	M44	L3X2X4	.579	0	.084	0	z	3	36513.77	38880	.826	2.489	2.189	H2-1
8	RCP	L3X2X4	.557	0	.076	1.24	z	6	36513.77	38880	.826	2.489	1.883	H2-1
9	M42	PL1/2x6	.510	0	.193	.5	y	5	88748.0	97200	1.012	12.15	1.338	H1-...



Company : Colliers Engineering & Design
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 Model Name : Antenna Mount Analysis

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

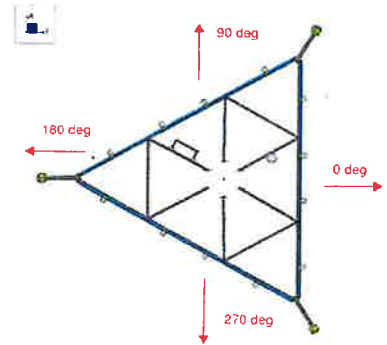
Member	Shape	Code Check	Lo...	LC	Shear Check	Lo.....	LC	phi*Pnc	phi*Pnt [phi*Mn y...	phi*Mn...	Cb	Eqn
10	M50	PIPE 2.5	.461	.625	5	.485	3....	5	44490.9..	50715	3.596	3.512	H3-6
11	M54	L2x2x4	.458	0	47	.045	2.75 y	47	20858.0..	30585.6	.691	1.577	H2-1
12	M41	PL1/2x6	.390	0	17	.193	0 y	5	88748.0..	97200	1.012	12.15	H1-...
13	M47	L3X2X4	.357	0	48	.054	0 z	48	36513.77	38880	826	2.489	H2-1
14	MP3A	PIPE 2.0	.331	2....	1	.162	2....	6	20866.7..	32130	1.872	1.872	H1-...
15	MP4A	PIPE 2.0	.309	2....	17	.115	2....	3	24514.6..	32130	1.872	1.872	H1-...
16	M5	PIPE 2.0	.306	1....	3	.287	1....	2	24514.6..	32130	1.872	1.872	H1-...
17	M48A	PIPE 2.5	.278	4....	3	.163	4....	6	13460.4..	50715	3.596	3.596	H1-...
18	M9	PIPE 2.0	.255	1....	37	.116	2....	37	24514.6..	32130	1.872	1.872	H1-...
19	M7	PIPE 2.0	.186	1....	2	.129	1....	6	24514.6..	32130	1.872	1.872	H1-...
20	M55	PIPE 1.5	.135	9....	12	.007	9....	23	5658.964	23593.5	1.105	1.105	H1-...
21	M49A	L2.5x2.5x4	.130	3....	2	.012	6.... z	7	8950.233	38556	1.114	2.07	H2-1
22	M50A	L2.5x2.5x4	.108	3....	13	.012	6.... y	2	8950.233	38556	1.114	2.07	H1-...
23	M6	PIPE 2.0	.085	1....	7	.100	1....	3	27545.4..	32130	1.872	1.872	H1-...
24	MP2A	PIPE 2.0	.079	2....	1	.100	2....	2	20866.7..	32130	1.872	1.872	H1-...
25	MP1A	PIPE 2.0	.059	2....	7	.029	3....	8	21862.7..	32130	1.872	1.872	H1-...

I. Mount-to-Tower Connection Check

Custom Orientation Required

 Yes

Nodes (labeled per Risa)	Orientation (per graphic of typical platform)
N71	0
N72	0



Tower Connection Bolt Checks

 Yes

Bolt Orientation

 Parallel

Bolt Quantity per Reaction:

 4

d_x (in) (Delta X of typ. bolt config. sketch):

 3

d_y (in) (Delta Y of typ. bolt config. sketch):

 2

Bolt Type:

 A36

Bolt Diameter (in):

 0.5

Required Tensile Strength / bolt (kips):

 0.7

Required Shear Strength / bolt (kips):

 0.5

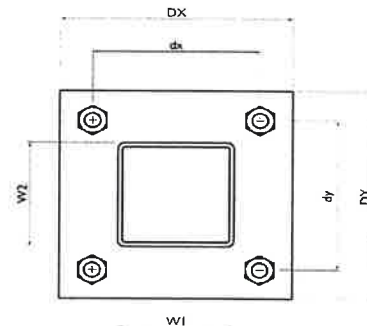
Tensile Capacity / bolt (kips):

 6.4

Shear Capacity / bolt (kips):

 3.8

Bolt Overall Utilization:

 14.9%


Tower Connection Baseplate Checks

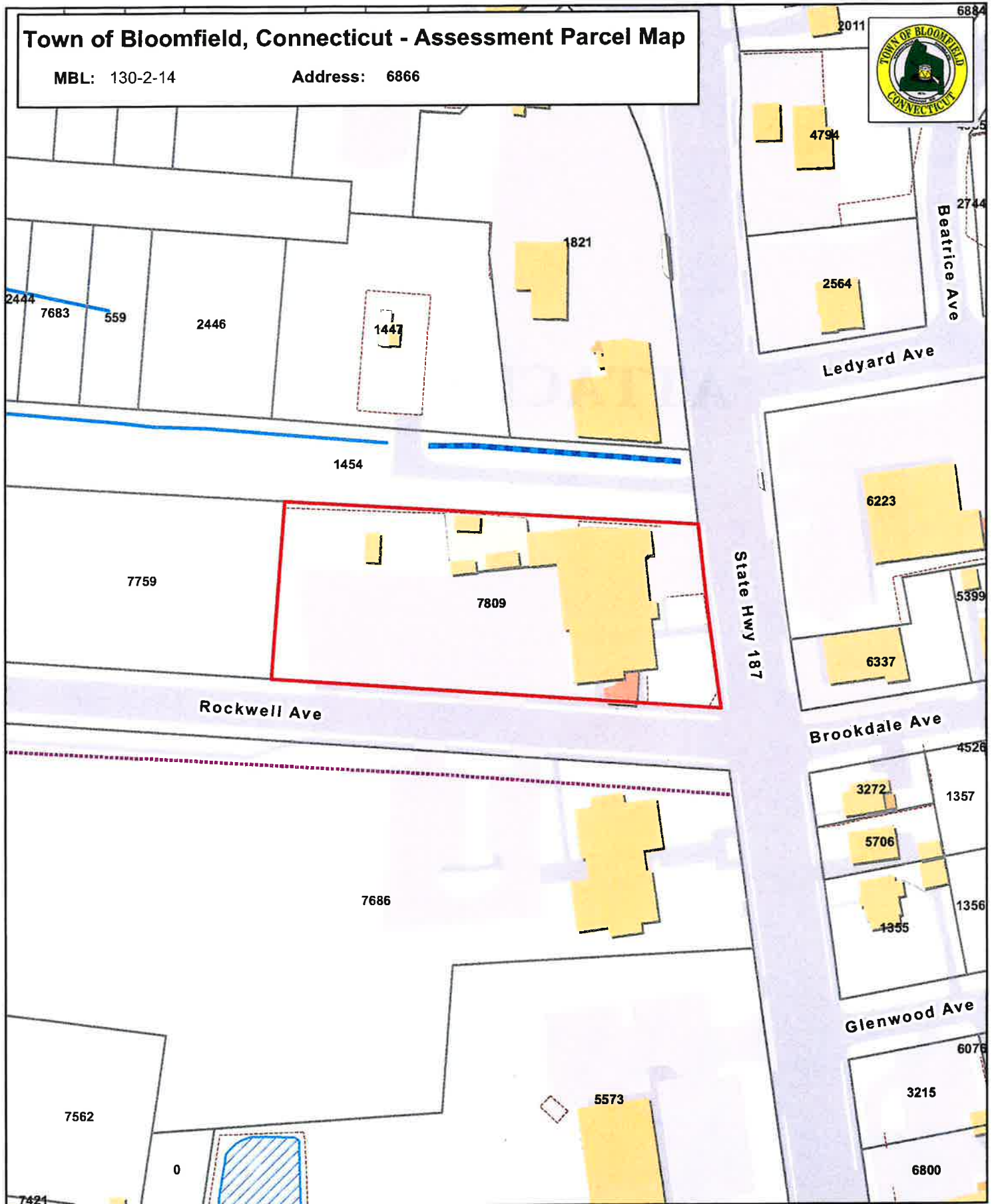
 No

ATTACHMENT 4

Town of Bloomfield, Connecticut - Assessment Parcel Map

MBL: 130-2-14

Address: 6866



Approximate Scale:
1 inch = 100 feet

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

Map Produced November 2021

Parcels labeled by Unique ID



Property Information

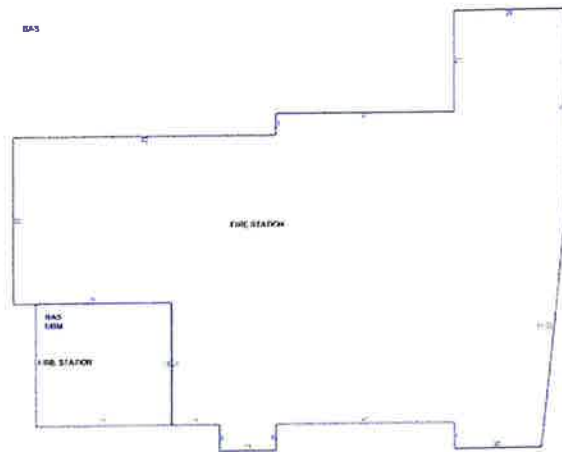
Property Location	1021 BLUE HILLS AVE
Owner	BLUE HILLS FIRE DIST
Co-Owner	BLUE HILLS AVE COR
Mailing Address	ROCKWELL AVENUE BLOOMFIELD CT 06002
Land Use	922 Mun Bldg Com
Land Class	E
Zoning Code	GWB
Census Tract	4712

Site Index	C
Acreage	1.23
Utilities	
Lot Setting/Desc	
Fire District	B
Book / Page	0091/0376

Photo



Sketch



Primary Construction Details

Year Built	1962
Building Desc.	Commercial
Building Style	Fire Station
Building Grade	C
Stories	1
Occupancy	1.00
Exterior Walls	Brick Veneer
Exterior Walls 2	NA
Roof Style	Gable
Roof Cover	Arch Shingles
Interior Walls	Drywall
Interior Walls 2	Minimum
Interior Floors 1	Vinyl/Asphalt
Interior Floors 2	Concrete

Heating Fuel	Gas
Heating Type	Hot Water
AC Type	42
Bedrooms	0
Full Bathrooms	0
Half Bathrooms	0
Extra Fixtures	0
Total Rooms	0
Bath Style	NA
Kitchen Style	NA
Bsmt Fin Area	0
Rec Rm Area	0
Bsmt Gar	0
Fireplaces	0

(*Industrial / Commercial Details)

Building Use	Commercial
Building Condition	G
Sprinkler %	100
Heat / AC	HEAT/AC SPLIT
Frame Type	Masonry
Baths / Plumbing	Average
Ceiling / Wall	Sus Ceil & Wal
Rooms / Prtns	Average
Wall Height	12.00
First Floor Use	
Foundation	NA



Town of Bloomfield, CT

Property Listing Report

Map Block Lot **39-29**

Building # **1**

PID **7809**

Account

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

Item	Appraised	Assessed
Buildings	617000	431900
Extras	0	0
Improvements		
Outbuildings	85700	59990
Land	377100	263970
Total	1079800	755860

Sub Areas

Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
Office Area	3898	3898
First Floor	5346	5346
Canopy	75	0
Basement	868	0
Total Area	10187	9244

Outbuilding and Extra Features

Type	Description
Cell Shed	260 S.F.
Cell Shed	200 S.F.
Cell Shed	200 S.F.
Paving	23120 S.F.
Shed	288 S.F.



Sales History

Owner of Record	Book/ Page	Sale Date	Sale Price
BLUE HILLS FIRE DIST	0091/0376	1900-01-01	0

ATTACHMENT 5

Certificate of Mailing — Firm



Name and Address of Sender Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103	TOTAL NO. of Pieces Listed by Sender <p style="text-align: center; font-size: 2em;">3</p>	TOTAL NO. of Pieces Received at Post Office™ <p style="text-align: center; font-size: 2em;">3</p>	Affix Stamp Here Postmark with Date of Receipt. <div style="text-align: right;"> neopost[®] 08/02/2023 US POSTAGE \$003.19⁰⁰  ZIP 06103 041L12203937 </div>			
	Postmaster, per (name of receiving employee) 					

USPS® Tracking Number Firm-specific Identifier	Address (Name, Street, City, State, and ZIP Code™)	Postage	Fee	Special Handling	Parcel Airlift
1.	Philip Schenck, Acting Town Manager Town of Bloomfield 800 Bloomfield Avenue Bloomfield, CT 06002				
2.	Justin LaFountain, Director of Land Use Town of Bloomfield 800 Bloomfield Avenue Bloomfield, CT 06002				
3.	Blue Hills Fire District 1021 Blue Hills Avenue Bloomfield, CT 06002				
4.					
5.					
6.					

