

August 17, 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
48 Westchester Road, Colchester, Connecticut**

Dear Attorney Bachman:

Cellco Partnership d/b/a Verizon Wireless (“Cellco”) currently maintains a wireless telecommunications facility at the above-referenced address (the “Property”). Cellco’s facility consists of antennas and remote radio heads attached to a tower. Equipment associated with the facility is located on the ground adjacent to the tower. The tower was approved by the Town of Colchester (“Town”) in November of 1999. Cellco’s use of the tower was approved by the Siting Council (“Council”) in March of 2000 (TS-VER-025-000309). A copy of the Town’s approval and Council’s tower share approval are included in Attachment 1.

Cellco’s proposed modification involves the installation of two (2) interference mitigation filters (“Filters”) on its 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 Colchester’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 modification 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.

Melanie A. Bachman, Esq.

August 17, 2023

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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,



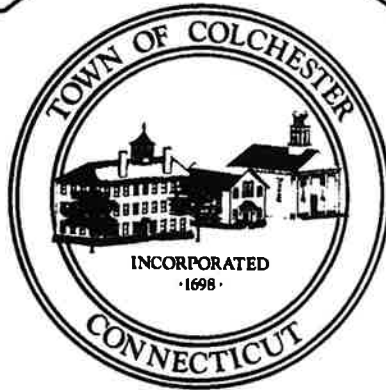
Kenneth C. Baldwin

Enclosures

Copy to:

Andreas Bisbikos, First Selectman
Demian Sorrentino, Planning Director
Margus Properties LLC, Property Owner
Alex Tyurin, Verizon Wireless

ATTACHMENT 1



Planning and Zoning

Planning Director
Town Engineer
Code Administration
Health Director
Building Official
Fire Marshal
Registered Sanitarian
Zoning Enforcement
Wetlands Enforcement

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

November 4, 1999

Ms. Esther McNany
SBA Inc.
125 Shaw Street
New London, CT 06320

RE: SDP#99-235, SBA/Omnipoint Communications, 48 Westchester Road,
Communications Tower, Site Development Plan prepared by Goodkind & O'Dea
Inc (Job#CT10125-018) dated 8/25/99 revised through 9/28/99

Dear Ms. McNany:

The above referenced site development plan was approved by the Zoning & Planning Commission at their regular meeting held November 3, 1999.

Per Section 12.10.1 of the Zoning Regulations, a bond in the amount of 25% of the total cost of site improvements must be posted prior to the endorsement of this plan and/or commencement of work. A bond estimate must be submitted to the Town Engineer for his review and approval.

If you have any questions, please call me at 537-7283.

Very truly yours,

Alicia Lathrop
Zoning Enforcement Officer



STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

10 Franklin Square
New Britain, Connecticut 06051
Phone: (860) 827-2935
Fax: (860) 827-2950

March 28, 2000

Sandy M. Carter
Bell Atlantic Mobile
20 Alexander Drive, P.O. Box 5029
Wallingford, CT 06492

RE: TS-BAM-028-000309 - Cellco Partnership d/b/a Bell Atlantic Mobile request for an order to approve tower sharing at an existing telecommunications facility located at 48 Westchester Road in Colchester, Connecticut.

Dear Ms. Carter:

At a public meeting held March 22, 2000, the Connecticut Siting Council (Council) ruled that the shared use of this existing tower site is technically, legally, environmentally, and economically feasible and meets public safety concerns, and therefore, in compliance with General Statutes § 16-50aa, the Council has ordered the shared use of this facility to avoid the unnecessary proliferation of tower structures. 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. Any additional change to this facility may require an explicit request to this agency pursuant to General Statutes § 16-50aa or notice pursuant to Regulations of Connecticut State Agencies Section 16-50j-73, as applicable. Such request or notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point 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.

This decision applies only to this request for tower sharing and is not applicable to any other request or construction.

The proposed shared use is to be implemented as specified in your letter dated March 9, 2000.

Thank you for your attention and cooperation.

Very truly yours,

Mortimer A. Gelston
Chairman

MAG/RKE/grg

c: Honorable Jenny Contois, First Selectman, Town of Colchester
J. Brendan Sharkey, VoiceStream Wireless

ATTACHMENT 2

BSF0020F3V1-1

TWIN BANDSTOP 900MHZ INTERFERENCE MITIGATION FILTER

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



FEATURES

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

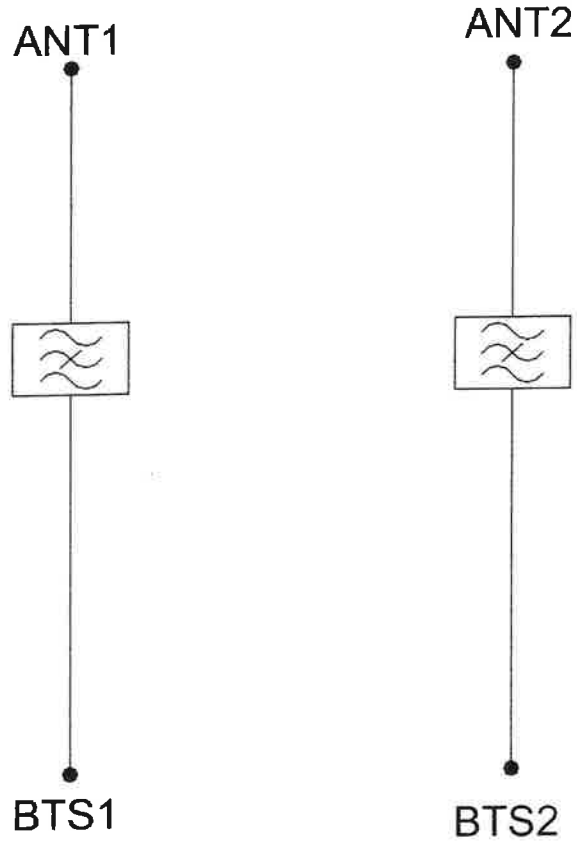
TECHNICAL SPECIFICATIONS

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

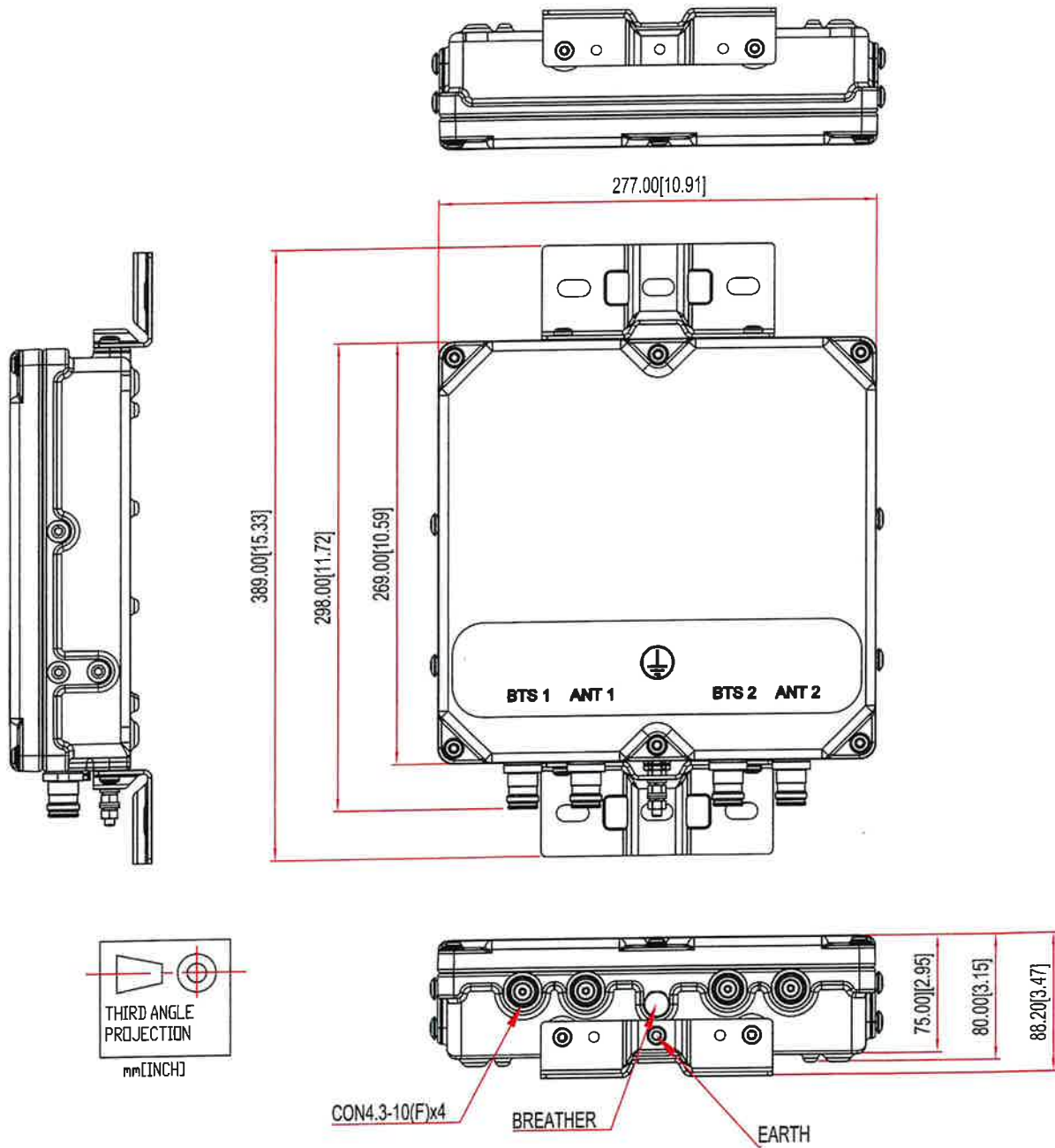
ORDERING INFORMATION

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



SBA Communications Corporation
8051 Congress Avenue
Boca Raton, FL 33487-1307

T + 561 995 7670
F + 561 995 7626

sbsite.com

Structural Analysis Report

Client: Verizon

Client Site ID / Name: 5000243366 / COLCHESTER 2 CT
Application #: 232615, v2

SBA Site ID / Name: CT02218-S / Colchester2

180 ft Monopole

48 Westchester Road
Colchester, Connecticut 06415
Lat: 41.590161, Long: -72.401467

Project number: CT02218-VZW-072723

Analysis Results

Tower	67.5%	Pass
Foundation	58.0%	Pass

Change in tower stress due to mount modification / replacement	N/A
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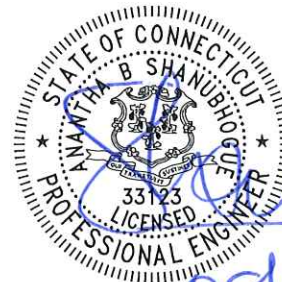
Prepared by:

Liliana Noda Vazquez
Structural Engineer I
561-981-9964
LVazquez@sbsite.com

Reviewed by:

Anantha (Shan) Shanubhogue, P.E.
Senior Manager, Structural Engineering
561-984-7390
SShanubhogue@sbsite.com

August 3, 2023



08/03/23

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Introduction

The purpose of this report is to summarize the analysis results on the 180 ft Monopole to support the proposed antennas and transmissions lines in addition to those currently installed.

Table 1 List of Documents Used

Item	Document
Tower design/drawings	Valmont Microflect, Order # 19487-99. Dated 11/03/1999
Foundation drawings	Towerkraftt, Project Number: 2985. Dated 11/04/1999
Geotechnical report	JGI Project Number #99539G. Dated 11/12/1999
Modification drawings	N/A
Mount Analysis	Colliers Engineering & Design CT. P.C. Project #: 23777133, dated 07-21-2023
Latest SA	TES Project Number: 138177. Dated 01/26/2023

Analysis Criteria

Table 2 Code Related Data

Jurisdiction (State/County/City)	Connecticut/New London/Colchester
Governing Codes	ANSI/TIA/EIA 222-H, 2021 IBC, 2022 CSBC
Ultimate Wind Speed (3-Sec gust)	121.0 mph
Wind Speed with Ice (3-Sec gust)	50 mph
Service Wind Speed (3-Sec gust)	60 mph
Ice Thickness	1.00"
Risk Category	II
Exposure Category	BC
Topographic Category	1
Crest Height	0 ft
Ground Elevation	380.06 ft.
Seismic Parameter S_s	0.207
Seismic Parameter S_1	0.056

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.

Appurtenance Loading

Existing Loading:

Table 3 Existing Appurtenances

Items	Elevation (ft)	Qty.	Antenna Descriptions	Mount Type & Qty.	Transmission Lines	Owner
1	177.0	3	RFS APXVAALL24_43-U-NA20 - Panel	Platform w/ Handrails [(1) RMQP-4096-HK Plat. + HR/Kicker]	(5) 1 5/8" (5) 1.9" Fiber	T-Mobile
2		3	Ericsson AIR6419 B41 - Panel			
3		3	Commscope VV-65B-R1 - Panel			
4		3	Ericsson 4460 B25 + B66			
5		3	Ericsson KRY 112 489/2 TMA			
6		3	Ericsson 4449 B71 + B85 RRU			
7		3	Kathrein 782 11056-Bias Ts			
8	167.0	6	Commscope SBNHH-1D65B - Panel	SitePro1 RMQP-4096-HK [Low profile Platform w/ Handrails]	(12) 1 5/8" (1) 1 5/8" Hybrid (1) 1-1/4" Hybrid	Verizon
9		2	Raycap RC2DC-3315-PF-48			
10		6	Antel LPA-80080-4CF-EDIN-0 - Panel			
11		3	Samsung VZS01 - Panel			
12		3	Samsung B5/B13 RRH-BR04C			
13		3	Samsung B2/B66A RRH-BR049			
14	157.0	3	Powerwave- 7770 - Panel	(1) Low profile Platform w/ Handrails	(12) 1 5/8" (2) 3/4" DC (1) 1/2" Fiber	AT&T
15		2	CCI - DMP65R-BU4DA - Panel			
16		1	CCI - DMP65R-BU8DA - Panel			
17		2	CCI - HPA65R-BU4A - Panel			
18		1	CCI - HPA65R-BU8A - Panel			
19		3	4449 B5/B12			
20		3	8843 B2/B66A			
21		1	Raycap DC6-48-60-18-8F			
22	147.0	3	JMA Wireless MX08FRO665-21 - Panel	(1) Commscope MC-PK8- DSH Platform w/HRK	(1) 1.6" Hybrid	Dish Wireless
23		3	Fujitsu TA08025-B605 RRU			
24		3	Fujitsu TA08025-B604 RRU			
25		1	Raycap RDIDC-9181-PF-48-OVP			
26	72.0	1	Lucent KS-24019-GPS	(1) Standoff mount	(1) 1/2"	Verizon

Proposed Loading:

Information pertaining to proposed antennas and transmission lines were based upon the Application #:232615, v2 from Verizon and is listed in Table 4.

Table 4 Proposed Appurtenances

Items	Elevation (ft)	Qty.	Antenna Descriptions	Mount Type & Qty.	Transmission Lines	Owner
1	167.0	6	Commscope SBNHH-1D65B - Panel	(1) SitePro1 RMQP-4096-HK [Low profile Platform w/ Handrails]	(12) 1 5/8" (1) 1 5/8" Hybrid (1) 1-1/4" Hybrid	Verizon
2		2	Raycap RC2DC-3315-PF-48			
3		2	Kaelus BSF0020F3V1-1			
4		3	Samsung VZS01 - Panel			
5		3	Samsung B5/B13 RRH-BR04C			
6		3	Samsung B2/B66A RRH-BR049			
7		6	Antel LPA-80080-4CF-EDIN-0 - Panel			
8	72.0	1	Lucent KS-24019-GPS	(1) Standoff mount	(1) 1/2"	

Analysis Results

Tower

The results of the structural analysis are shown below in table 5. Additional information for the tower analysis is provided within the Appendix.

Table 5 Tower Analysis Summary

	Pole shafts	Anchor Bolts	Base Plate
Max. Usage:	67.5%	61.5%	47.9%
Pass/Fail	Pass	Pass	Pass

Foundation

The results of the foundation analysis are shown below in table 6. Additional information for the foundation analysis is provided within the Appendix.

Table 6 Foundation Analysis Summary

Structural Component	Max Usage (%)	Analysis Result
Foundation	58.0%	Pass

Conclusions

Based on the analysis results, the existing tower and foundation were found to be **sufficient** to safely support the equipment listed in this analysis. No modification to the tower and foundation is needed at this time.

Installation Requirements

This analysis was performed under the assumption that the carrier will place the proposed equipment and feed lines at the installation height listed in Table 4 and in accordance with the coax layout shown. TMAs and RRUs are to be installed on existing mounts behind tenant's antennas unless otherwise noted. No equipment is to be installed directly in the climbing path. All equipment is to be installed per mount manufacturer specifications. In case site conditions do not allow for the required installation parameters to be met the carrier must notify SBA Communications Corporation engineers for approval of an alternative placement.

Assumptions and Limitations

Assumptions

This analysis was completed based on the following assumptions:

- Tower and foundation were built in accordance to manufacturer specifications.
- Tower and foundation has been properly maintained in accordance with the manufacturer's specifications
- All existing structural members were assumed to be in good condition with no physical damage or deterioration associated with corrosion
- Welds and bolts are assumed able to carry their intended original design loads.
- The configuration of antennas, transmission cables, mounts and other appurtenances are as specified in Table 3 and 4.
- This analysis may be affected if any assumptions are not valid or have been made in error. SBA should be notified to determine the effect on the structural integrity of the tower.

Limitations

The computer generated analysis performed by the tower software is limited to theoretical capacities of the towers structural members and does not account for any missing or damaged members or connections. The tower and foundation are assumed to have been properly designed, fabricated, installed and maintained, barring any conflicting findings from the most recent inspection.

SBA Communications Corporation has used its due diligence to verify the information provided to perform this analysis. It is unreasonable to perform a more detailed inspection of a tower and its components. This report is not a condition assessment of the tower or foundation.

Appendix

Usage Diagram - Max Ratio 67.49% at 53.0ft

Structure: CT02218-S
Site Name: Colchester2
Height: 180.00 (ft)
Base Elev: 0.000 (ft)

Code: EIA/TIA-222-H
Exposure:
Gh: 1.1

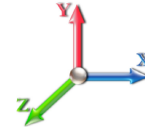
8/3/2023



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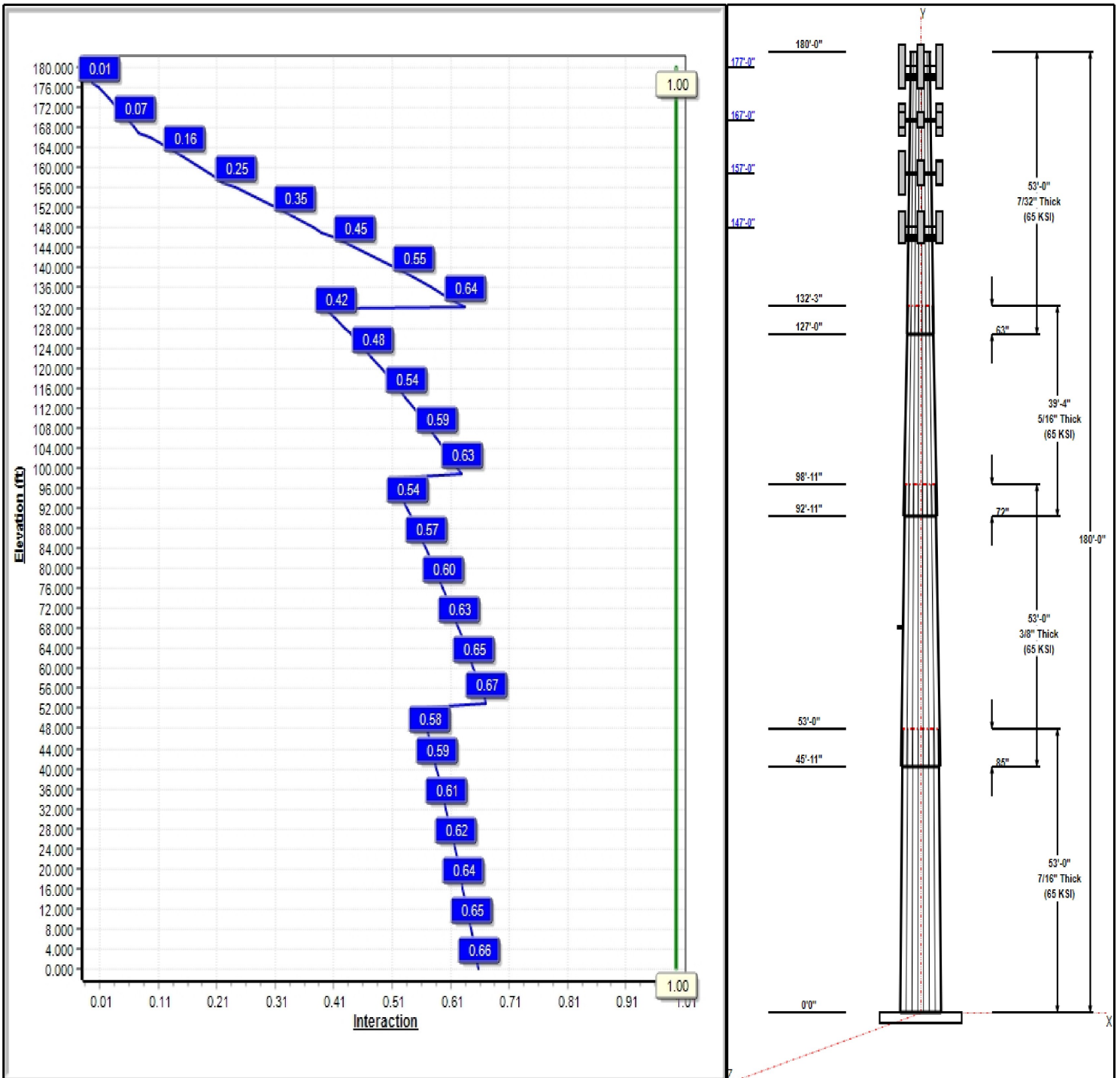
Dead Load Factor: 1.20
Wind Load Factor: 1.00

Load Case : 1.2D + 1.0W 121 mph Wind



Iterations: 30

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Structure: CT02218-S

Type: Tapered
Site Name: Colchester2
Height: 180.00 (ft)
Base Elev: 0.00 (ft)

Base Shape: 16 Sided
Taper: 0.20484

8/3/2023

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Shaft Properties

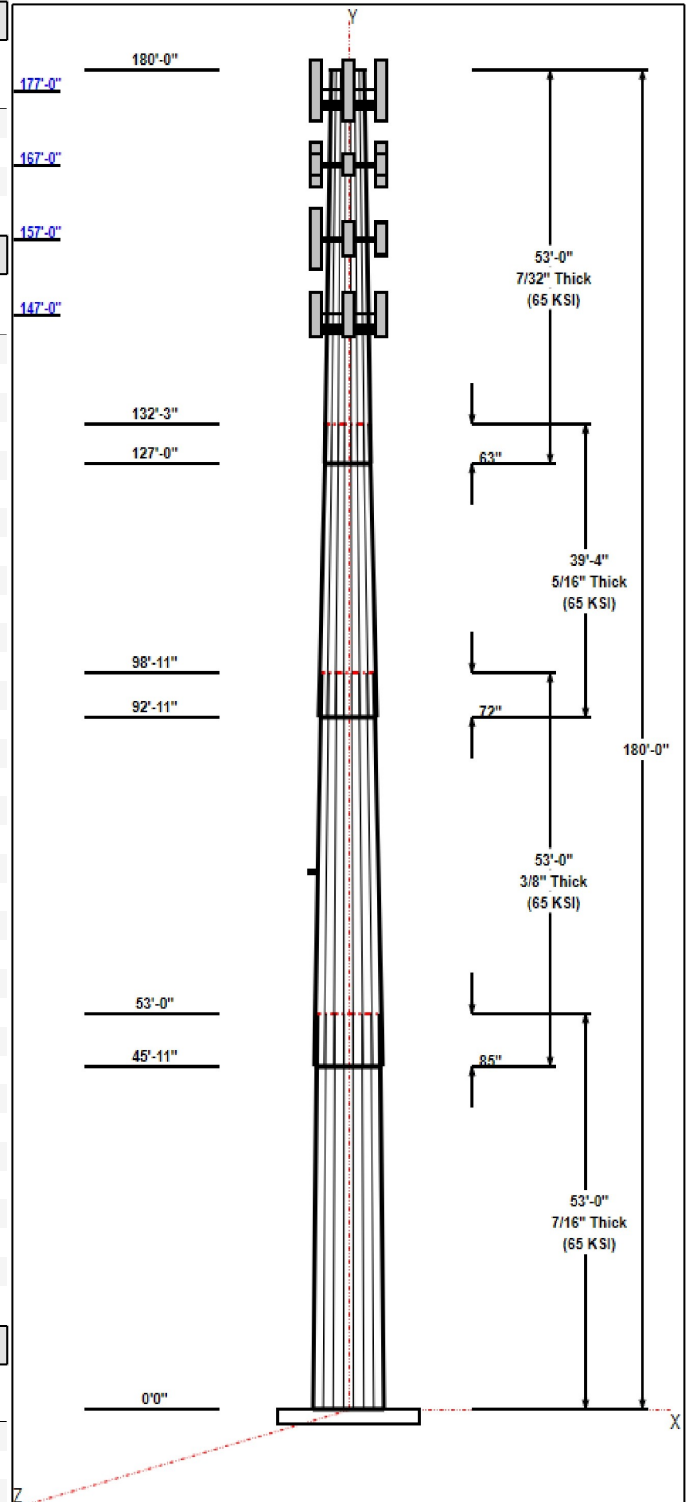
Seq	Length (ft)	Top (in)	Bottom (in)	Thick (in)	Joint Type	Taper	Grade (ksi)
1	53.00	49.14	60.00	0.438		0.20484	65
2	53.00	40.49	51.34	0.375	Slip	0.20484	65
3	39.33	34.29	42.34	0.313	Slip	0.20484	65
4	53.00	24.94	35.80	0.219	Slip	0.20484	65

Discrete Appurtenances

Attach Elev (ft)	Force Elev (ft)	Qty	Description	Carrier
177.00	177.00	3	782 11056	T-Mobile
177.00	177.00	3	RFS	T-Mobile
177.00	177.00	3	Ericsson KRY 112 489/2	T-Mobile
177.00	177.00	3	Ericsson 4449 B71 + B85	T-Mobile
177.00	177.00	3	Ericsson AIR6419 B41	T-Mobile
177.00	177.00	3	Commscope VV-65B-R1	T-Mobile
177.00	177.00	3	Ericsson 4460 B25 + B66	T-Mobile
177.00	177.00	1	RMQP-4096-HK Plat. +	T-Mobile
177.00	177.00	1	Mount pipes	T-Mobile
167.00	167.00	6	Commscope	Verizon
167.00	167.00	2	Raycap	Verizon
167.00	167.00	2	Kaelus BSF0020F3V1-1	Verizon
167.00	167.00	3	Samsung VZS01	Verizon
167.00	167.00	3	Samsung B5/B13	Verizon
167.00	167.00	3	Samsung B2/B66A	Verizon
167.00	167.00	6	Antel	Verizon
167.00	167.00	1	Platform w/ Hand Rails	Verizon
157.00	157.00	1	Platform w/ Handrail	AT&T
157.00	157.00	3	7770	AT&T
157.00	157.00	2	DMP65R-BU4DA	AT&T
157.00	157.00	1	DMP65R-BU8DA	AT&T
157.00	157.00	2	HPA65R-BU4A	AT&T
157.00	157.00	1	HPA65R-BU8A	AT&T
157.00	157.00	3	4449 B5/B12	AT&T
157.00	157.00	3	8843 B2/B66A	AT&T
157.00	157.00	1	Raycap DC6-48-60-18-8F	AT&T
157.00	157.00	1	Mount Pipes	AT&T
147.00	147.00	3	JMA Wireless	Dish Wireless
147.00	147.00	1	MC-PK8-DSH	Dish Wireless
147.00	147.00	3	Fujitsu TA08025-B605	Dish Wireless
147.00	147.00	3	Fujitsu TA08025-B604	Dish Wireless
147.00	147.00	1	Raycap	Dish Wireless
72.00	72.00	1	Standoff	Verizon
72.00	72.00	1	1 Lucent KS-24019	Verizon

Linear Appurtenances

Elev From (ft)	Elev To (ft)	Placement	Description	Carrier
0.00	180.00	Outside	Safety Cable	SBA
0.00	180.00	Outside	Step bolts (ladder)	SBA
0.00	177.00	Inside	1 5/8" Coax	T-Mobile
0.00	177.00	Inside	1.9" Fiber	T-Mobile
0.00	167.00	Inside	1 5/8" Coax	Verizon
0.00	167.00	Inside	1 5/8" Hybrid	Verizon
0.00	167.00	Inside	1-1/4" Hybrid	Verizon
0.00	157.00	Inside	1 5/8" Coax	AT&T



Structure: CT02218-S

Type: Tapered
Site Name: Colchester2
Height: 180.00 (ft)
Base Elev: 0.00 (ft)

Base Shape: 16 Sided
Taper: 0.20484

8/3/2023

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0.00	157.00	Inside	1/2" Fiber	AT&T
0.00	157.00	Inside	3/4" DC	AT&T
0.00	147.00	Inside	1.6" Hybrid	Dish Wireless
0.00	72.00	Inside	1/2" Coax	Verizon

Anchor Bolts

Qty	Specifications	Grade (ksi)	Arrangement
20	2.25" 18J	75.0	Radial

Base Plate

Thickness (in)	Specifications (in)	Grade (ksi)	Geometry
2.7500	74.6	60.0	Polygon

Reactions

Load Case	Moment (FT-Kips)	Shear (Kips)	Axial (Kips)
1.2D + 1.0W 121 mph Wind	4373.6	34.2	63.2
0.9D + 1.0W 121 mph Wind	4306.4	34.2	47.4
1.2D + 1.0Di + 1.0Wi 50 mph Wind	1042.5	8.5	71.8
1.2D + 1.0Ev + 1.0Eh	131.9	0.8	65.6
0.9D + 1.0Ev + 1.0Eh	129.9	0.8	49.7
1.0D + 1.0W 60 mph Wind	953.7	7.5	52.7

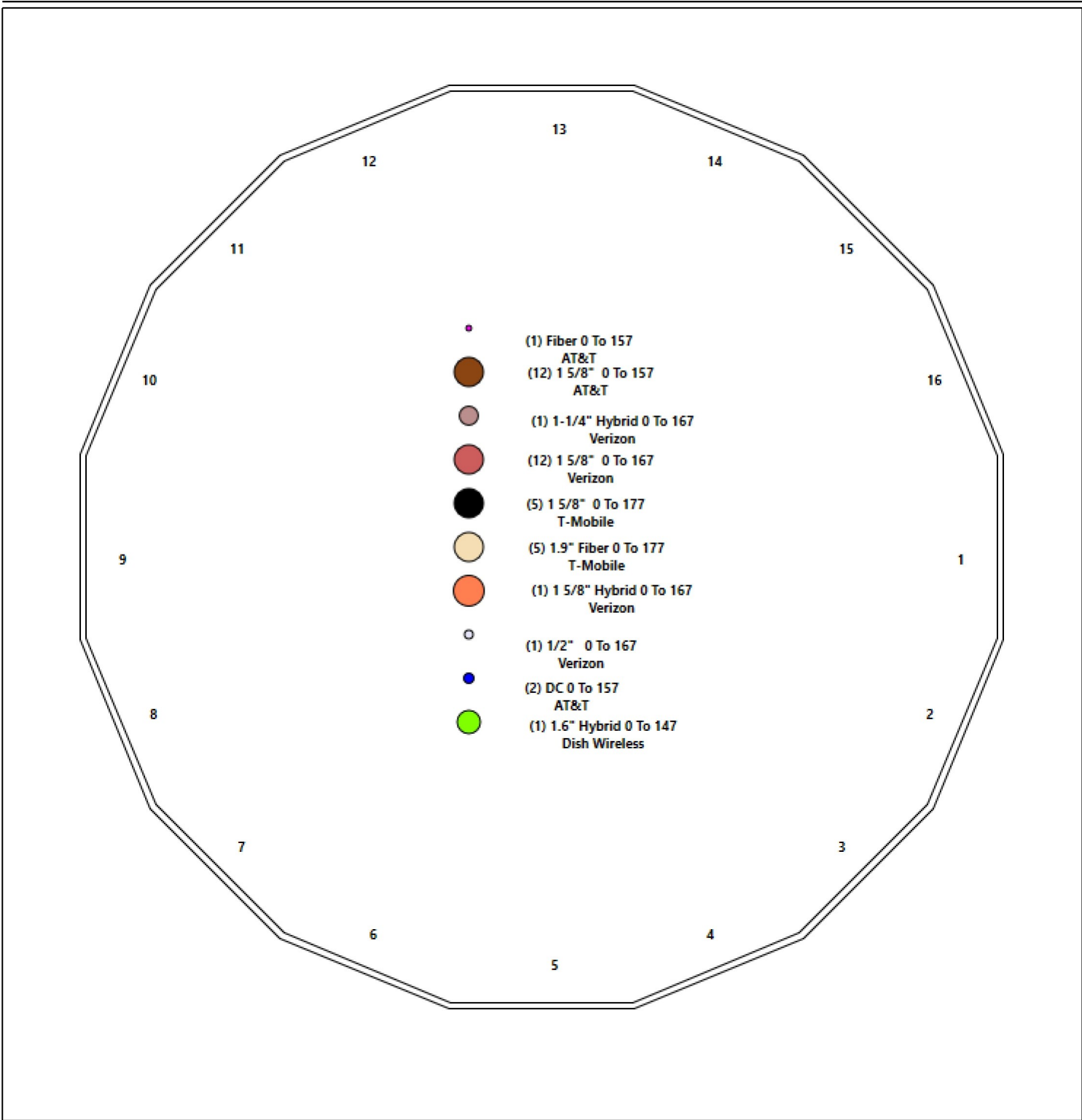
Structure: CT02218-S - Coax Line Placement

Type: Monopole
Site Name: Colchester2
Height: 180.00 (ft)

8/3/2023



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Shaft Properties

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 5



Sec. No.	Shape	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Overlap (in)	Weight (lb)
1	16	53.000	0.4380	65		0.00	13,641
2	16	53.000	0.3750	65	Slip	85.00	9,825
3	16	39.333	0.3130	65	Slip	72.00	5,078
4	16	53.000	0.2190	65	Slip	63.00	3,799
Total Shaft Weight:							32,344

Bottom

Top

Sec. No.	Dia (in)	Elev (ft)	Area (sqin)	Ix (in^4)	W/t Ratio	D/t Ratio	Dia (in)	Elev (ft)	Area (sqin)	Ix (in^4)	W/t Ratio	D/t Ratio	Taper
1	60.00	0.00	83.22	37298.12	25.66	136.99	49.14	53.00	68.05	20394.7	20.73	112.2	0.204836
2	51.34	45.92	60.97	20011.08	25.64	136.92	40.49	98.92	47.99	9754.43	19.89	107.9	0.204836
3	42.34	92.92	41.97	9365.65	25.32	135.28	34.29	132.25	33.92	4946.16	20.20	109.5	0.204836
4	35.80	127.0	24.86	3975.56	30.92	163.47	24.94	180.00	17.27	1333.93	21.06	113.9	0.204836

Load Summary

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Discrete Appurtenances

No.	Elev (ft)	Description	Qty	No Ice			Ice			Hor. Ecc. (ft)	Vert Ecc (ft)
				Weight (lb)	CaAa (sf)	CaAa Factor	Weight (lb)	CaAa (sf)	CaAa Factor		
1	177.00	782 11056	3	1.80	0.28	0.67	4.10	0.484	0.67	0.00	0.00
2	177.00	RFS APXVAALL24_43-U-NA20	3	128.00	20.24	0.70	327.33	21.189	0.70	0.00	0.00
3	177.00	Ericsson KRY 112 489/2 TMA	3	15.40	0.65	0.67	24.36	0.961	0.67	0.00	0.00
4	177.00	Ericsson 4449 B71 + B85 RRU	3	73.20	1.97	0.67	102.55	2.259	0.67	0.00	0.00
5	177.00	Ericsson AIR6419 B41	3	83.30	6.32	0.73	163.73	6.845	0.75	0.00	0.00
6	177.00	Commscope VV-65B-R1	3	29.50	7.90	0.74	108.82	8.530	0.74	0.00	0.00
7	177.00	Ericsson 4460 B25 + B66	3	104.00	2.14	0.67	136.26	2.448	0.75	0.00	0.00
8	177.00	RMQP-4096-HK Plat. + HR/Kicker	1	1945.00	34.54	1.00	2980.33	46.797	1.00	0.00	0.00
9	177.00	Mount pipes	1	590.88	14.65	1.00	905.41	19.849	1.00	0.00	0.00
10	167.00	Commscope SBNHH-1D65B	6	50.71	8.05	0.83	146.50	8.683	0.84	0.00	0.00
11	167.00	Raycap RC2DC-3315-PF-48	2	42.00	2.52	0.85	77.24	2.856	0.86	0.00	0.00
12	167.00	Kaelus BSF0020F3V1-1	2	17.60	0.96	0.82	29.35	1.161	0.84	0.00	0.00
13	167.00	Samsung VZS01	3	87.10	4.70	0.70	143.80	5.156	0.71	0.00	0.00
14	167.00	Samsung B5/B13 RRH-BR04C	3	84.40	1.88	0.67	110.04	2.155	0.67	0.00	0.00
15	167.00	Samsung B2/B66A RRH-BR049	3	70.30	1.88	0.67	94.61	2.155	0.67	0.00	0.00
16	167.00	Antel LPA-80080-4CF-EDIN-0	6	12.00	5.40	0.74	76.85	5.890	0.76	0.00	0.00
17	167.00	Platform w/ Hand Rails (flat)	1	2545.14	54.20	1.00	3892.07	73.322	1.00	0.00	0.00
18	157.00	Platform w/ Handrail	1	1945.00	34.54	1.00	2797.49	48.468	1.00	0.00	0.00
19	157.00	7770	3	35.00	5.50	0.73	95.37	6.019	0.73	0.00	0.00
20	157.00	DMP65R-BU4DA	2	67.90	8.00	0.71	194.42	8.463	0.73	0.00	0.00
21	157.00	DMP65R-BU8DA	1	95.70	17.87	0.73	274.02	18.904	0.75	0.00	0.00
22	157.00	HPA65R-BU4A	2	28.70	4.96	0.85	82.18	5.247	0.87	0.00	0.00
23	157.00	HPA65R-BU8A	1	54.00	11.23	0.86	154.62	11.880	0.88	0.00	0.00
24	157.00	4449 B5/B12	3	71.00	1.97	0.67	97.81	2.245	0.67	0.00	0.00
25	157.00	8843 B2/B66A	3	72.00	1.64	0.67	95.53	1.890	0.67	0.00	0.00
26	157.00	Raycap DC6-48-60-18-8F	1	31.80	0.92	0.90	62.85	1.140	0.90	0.00	0.00
27	157.00	Mount Pipes	1	590.88	18.71	1.00	901.66	25.270	1.00	0.00	0.00
28	147.00	JMA Wireless MX08FRO665-21	3	64.50	12.49	0.74	209.64	13.221	0.74	0.00	0.00
29	147.00	MC-PK8-DSH	1	1736.00	34.23	1.00	2643.07	48.538	1.00	0.00	0.00
30	147.00	Fujitsu TA08025-B605 RRU	3	75.00	1.96	0.67	101.10	2.240	0.67	0.00	0.00
31	147.00	Fujitsu TA08025-B604 RRU	3	63.90	1.96	0.67	89.16	2.240	0.67	0.00	0.00
32	147.00	Raycap RDIDC-9181-PF-48-OVP	1	21.90	2.01	1.00	48.47	2.294	1.00	0.00	0.00
33	72.00	Standoff	1	27.00	2.10	1.00	40.14	2.781	1.00	0.00	0.00
34	72.00	1 Lucent KS-24019	1	4.00	1.13	1.00	32.23	1.797	1.00	0.00	0.00
Totals:			80	13,451.16			22,551.45				

Linear Appurtenances

Bottom Elev. (ft)	Top Elev. (ft)	Description	Exposed Width	Exposed
0.00	180.00	(1) Safety Cable	0.38	Outside
0.00	180.00	(1) Step bolts (ladder)	0.63	Outside
0.00	177.00	(5) 1 5/8" Coax	0.00	Inside
0.00	177.00	(5) 1.9" Fiber	0.00	Inside
0.00	167.00	(12) 1 5/8" Coax	0.00	Inside
0.00	167.00	(1) 1 5/8" Hybrid	0.00	Inside
0.00	167.00	(1) 1-1/4" Hybrid	0.00	Inside

Discrete Appurtenances

No.	Elev (ft)	Description	Qty	No Ice			Ice			Hor. Ecc. (ft)	Vert Ecc (ft)
				Weight (lb)	CaAa (sf)	CaAa Factor	Weight (lb)	CaAa (sf)	CaAa Factor		
0.00	157.00	(12) 1 5/8" Coax		0.00		Inside					
0.00	157.00	(1) 1/2" Fiber		0.00		Inside					
0.00	157.00	(2) 3/4" DC		0.00		Inside					
0.00	147.00	(1) 1.6" Hybrid		1.60		Inside					
0.00	72.00	(1) 1/2" Coax		0.00		Inside					

Shaft Section Properties

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Increment Length: 2 (ft)

Elev (ft)	Description	Thick (in)	Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fpy (ksi)	S (in^3)	Weight (lb)
0.00		0.4380	60.000	83.221	37298.1	25.66	136.99	73.5	1219.	0.0
2.00		0.4380	59.590	82.649	36533.8	25.47	136.05	73.8	1202.	564.4
4.00		0.4380	59.181	82.076	35780.0	25.28	135.12	74.0	1185.	560.5
6.00		0.4380	58.771	81.504	35036.6	25.10	134.18	74.2	1169.	556.6
8.00		0.4380	58.361	80.932	34303.6	24.91	133.25	74.4	1153.	552.7
10.00		0.4380	57.952	80.359	33580.9	24.73	132.31	74.6	1136.	548.8
12.00		0.4380	57.542	79.787	32868.4	24.54	131.37	74.8	1120.	544.9
14.00		0.4380	57.132	79.214	32166.0	24.35	130.44	75.0	1104.	541.0
16.00		0.4380	56.723	78.642	31473.8	24.17	129.50	75.2	1088.	537.2
18.00		0.4380	56.313	78.070	30791.5	23.98	128.57	75.4	1072.	533.3
20.00		0.4380	55.903	77.497	30119.2	23.80	127.63	75.6	1056.	529.4
22.00		0.4380	55.494	76.925	29456.7	23.61	126.70	75.9	1041.	525.5
24.00		0.4380	55.084	76.352	28804.0	23.42	125.76	76.1	1025.	521.6
26.00		0.4380	54.674	75.780	28161.0	23.24	124.83	76.3	1010.	517.7
28.00		0.4380	54.265	75.208	27527.7	23.05	123.89	76.5	995.1	513.8
30.00		0.4380	53.855	74.635	26903.9	22.87	122.96	76.7	979.9	509.9
32.00		0.4380	53.445	74.063	26289.7	22.68	122.02	76.9	964.9	506.0
34.00		0.4380	53.036	73.490	25684.8	22.49	121.09	77.1	950.0	502.1
36.00		0.4380	52.626	72.918	25089.3	22.31	120.15	77.3	935.2	498.2
38.00		0.4380	52.216	72.346	24503.1	22.12	119.22	77.5	920.5	494.3
40.00		0.4380	51.807	71.773	23926.1	21.94	118.28	77.8	905.9	490.4
42.00		0.4380	51.397	71.201	23358.2	21.75	117.34	78.0	891.5	486.5
44.00		0.4380	50.987	70.628	22799.4	21.56	116.41	78.2	877.1	482.6
45.92	Bot - Section 2	0.4380	50.595	70.080	22272.2	21.39	115.51	78.4	863.5	458.8
46.00		0.4380	50.578	70.056	22249.5	21.38	115.47	78.4	862.9	37.2
48.00		0.4380	50.168	69.484	21708.6	21.19	114.54	78.6	848.8	888.0
50.00		0.4380	49.758	68.911	21176.5	21.01	113.60	78.8	834.8	880.7
52.00		0.4380	49.349	68.339	20653.2	20.82	112.67	79.0	820.9	873.5
53.00	Top - Section 1	0.3750	49.894	59.237	18350.3	24.87	133.05	0.0	0.0	434.0
54.00		0.3750	49.689	58.992	18123.6	24.77	132.50	74.5	715.5	201.2
56.00		0.3750	49.279	58.502	17675.6	24.55	131.41	74.8	703.6	399.8
58.00		0.3750	48.870	58.012	17235.1	24.33	130.32	75.0	691.8	396.5
60.00		0.3750	48.460	57.521	16802.0	24.11	129.23	75.3	680.1	393.1
62.00		0.3750	48.050	57.031	16376.2	23.90	128.13	75.5	668.5	389.8
64.00		0.3750	47.641	56.541	15957.7	23.68	127.04	75.8	657.0	386.5
66.00		0.3750	47.231	56.051	15546.3	23.46	125.95	76.0	645.7	383.1
68.00		0.3750	46.821	55.561	15142.1	23.24	124.86	76.3	634.4	379.8
70.00		0.3750	46.411	55.071	14744.9	23.03	123.76	76.5	623.2	376.5
72.00		0.3750	46.002	54.581	14354.8	22.81	122.67	76.8	612.1	373.1
74.00		0.3750	45.592	54.091	13971.6	22.59	121.58	77.0	601.1	369.8
76.00		0.3750	45.182	53.601	13595.3	22.37	120.49	77.3	590.2	366.5
78.00		0.3750	44.773	53.111	13225.8	22.16	119.39	77.5	579.4	363.1
80.00		0.3750	44.363	52.621	12863.0	21.94	118.30	77.7	568.8	359.8
82.00		0.3750	43.953	52.131	12507.0	21.72	117.21	78.0	558.2	356.4
84.00		0.3750	43.544	51.641	12157.5	21.51	116.12	78.2	547.7	353.1
86.00		0.3750	43.134	51.151	11814.7	21.29	115.02	78.5	537.3	349.8
88.00		0.3750	42.724	50.661	11478.3	21.07	113.93	78.7	527.0	346.4
90.00		0.3750	42.315	50.170	11148.5	20.85	112.84	79.0	516.8	343.1
92.00		0.3750	41.905	49.680	10824.9	20.64	111.75	79.2	506.7	339.8
92.92	Bot - Section 3	0.3750	41.717	49.456	10678.8	20.54	111.25	79.3	502.1	154.6

Increment Length: 2 (ft)

Elev (ft)	Description	Thick (in)	Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fpy (ksi)	S (in^3)	Weight (lb)
94.00		0.3750	41.495	49.190	10507.7	20.42	110.65	79.5	496.7	336.1
96.00		0.3750	41.086	48.700	10196.8	20.20	109.56	79.7	486.8	615.8
98.00		0.3750	40.676	48.210	9892.1	19.98	108.47	80.0	477.0	609.7
98.92	Top - Section 2	0.3130	41.114	40.739	8567.9	24.54	131.36	0.0	0.0	277.4
100.00		0.3130	40.892	40.517	8428.8	24.40	130.65	75.0	404.3	149.8
102.00		0.3130	40.483	40.108	8176.1	24.14	129.34	75.3	396.2	274.4
104.00		0.3130	40.073	39.699	7928.5	23.88	128.03	75.6	388.1	271.6
106.00		0.3130	39.663	39.290	7685.9	23.61	126.72	75.9	380.1	268.8
108.00		0.3130	39.254	38.881	7448.4	23.35	125.41	76.1	372.2	266.0
110.00		0.3130	38.844	38.472	7215.8	23.09	124.10	76.4	364.4	263.2
112.00		0.3130	38.434	38.063	6988.0	22.83	122.79	76.7	356.6	260.4
114.00		0.3130	38.025	37.654	6765.2	22.57	121.48	77.0	349.0	257.6
116.00		0.3130	37.615	37.245	6547.1	22.31	120.18	77.3	341.4	254.9
118.00		0.3130	37.205	36.836	6333.7	22.05	118.87	77.6	333.9	252.1
120.00		0.3130	36.796	36.427	6125.1	21.79	117.56	77.9	326.5	249.3
122.00		0.3130	36.386	36.018	5921.0	21.53	116.25	78.2	319.2	246.5
124.00		0.3130	35.976	35.609	5721.6	21.27	114.94	78.5	312.0	243.7
126.00		0.3130	35.567	35.200	5526.7	21.01	113.63	78.8	304.8	240.9
127.00	Bot - Section 4	0.3130	35.362	34.995	5430.9	20.88	112.98	78.9	301.3	119.4
128.00		0.3130	35.157	34.791	5336.2	20.75	112.32	79.1	297.7	203.1
130.00		0.3130	34.747	34.382	5150.2	20.49	111.01	79.4	290.7	402.6
132.00		0.3130	34.338	33.973	4968.6	20.23	109.71	79.7	283.8	397.9
132.25	Top - Section 3	0.2190	34.724	24.106	3625.9	29.95	158.56	0.0	0.0	49.4
134.00		0.2190	34.366	23.855	3514.0	29.62	156.92	69.1	200.6	142.8
136.00		0.2190	33.956	23.569	3389.1	29.25	155.05	69.5	195.8	161.4
138.00		0.2190	33.547	23.283	3267.1	28.88	153.18	69.9	191.0	159.4
140.00		0.2190	33.137	22.997	3148.1	28.51	151.31	70.3	186.4	157.5
142.00		0.2190	32.727	22.711	3032.0	28.13	149.44	70.7	181.7	155.5
144.00		0.2190	32.318	22.424	2918.8	27.76	147.57	71.2	177.2	153.6
146.00		0.2190	31.908	22.138	2808.5	27.39	145.70	71.6	172.7	151.6
147.00		0.2190	31.703	21.995	2754.4	27.20	144.76	71.8	170.4	75.1
148.00		0.2190	31.498	21.852	2701.0	27.02	143.83	72.0	168.2	74.6
150.00		0.2190	31.089	21.566	2596.2	26.65	141.96	72.4	163.8	147.7
152.00		0.2190	30.679	21.280	2494.2	26.27	140.09	72.8	159.5	145.8
154.00		0.2190	30.269	20.993	2394.9	25.90	138.22	73.3	155.2	143.8
156.00		0.2190	29.860	20.707	2298.3	25.53	136.35	73.7	151.0	141.9
157.00		0.2190	29.655	20.564	2251.0	25.34	135.41	73.9	148.9	70.2
158.00		0.2190	29.450	20.421	2204.3	25.16	134.47	74.1	146.8	69.7
160.00		0.2190	29.040	20.135	2112.9	24.79	132.60	74.5	142.7	138.0
162.00		0.2190	28.631	19.849	2024.1	24.41	130.73	74.9	138.7	136.1
164.00		0.2190	28.221	19.562	1937.8	24.04	128.86	75.4	134.7	134.1
166.00		0.2190	27.811	19.276	1854.0	23.67	126.99	75.8	130.8	132.2
167.00		0.2190	27.606	19.133	1813.0	23.48	126.06	76.0	128.8	65.3
168.00		0.2190	27.402	18.990	1772.6	23.30	125.12	76.2	126.9	64.9
170.00		0.2190	26.992	18.704	1693.7	22.92	123.25	76.6	123.1	128.3
172.00		0.2190	26.582	18.418	1617.1	22.55	121.38	77.1	119.3	126.3
174.00		0.2190	26.173	18.131	1542.9	22.18	119.51	77.5	115.6	124.4
176.00		0.2190	25.763	17.845	1471.0	21.81	117.64	77.9	112.0	122.4
177.00		0.2190	25.558	17.702	1435.9	21.62	116.70	78.1	110.2	60.5
178.00		0.2190	25.353	17.559	1401.3	21.44	115.77	78.3	108.4	60.0
180.00		0.2190	24.944	17.273	1333.9	21.06	113.90	78.7	104.9	118.5

32343.5

Wind Loading - Shaft

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Load Case: 1.2D + 1.0W 121 mph Wind	Iterations 30
Dead Load Factor 1.20	
Wind Load Factor 1.00	

Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.77	27.224	29.95	539.37	0.750	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.77	27.224	29.95	535.69	0.750	0.000	2.00	10.161	7.62	228.2	0.0	677.3
4.00		1.00	0.77	27.224	29.95	532.01	0.750	0.000	2.00	10.091	7.57	226.7	0.0	672.6
6.00		1.00	0.77	27.224	29.95	528.33	0.750	0.000	2.00	10.022	7.52	225.1	0.0	668.0
8.00		1.00	0.77	27.224	29.95	524.64	0.750	0.000	2.00	9.952	7.46	223.5	0.0	663.3
10.00		1.00	0.77	27.224	29.95	520.96	0.750	0.000	2.00	9.883	7.41	222.0	0.0	658.6
12.00		1.00	0.77	27.224	29.95	517.28	0.750	0.000	2.00	9.813	7.36	220.4	0.0	653.9
14.00		1.00	0.77	27.224	29.95	513.59	0.750	0.000	2.00	9.743	7.31	218.8	0.0	649.3
16.00		1.00	0.78	27.408	30.15	511.64	0.750	0.000	2.00	9.674	7.26	218.7	0.0	644.6
18.00		1.00	0.79	27.788	30.57	511.44	0.750	0.000	2.00	9.604	7.20	220.2	0.0	639.9
20.00		1.00	0.80	28.135	30.95	510.89	0.750	0.000	2.00	9.535	7.15	221.3	0.0	635.2
22.00		1.00	0.81	28.456	31.30	510.03	0.750	0.000	2.00	9.465	7.10	222.2	0.0	630.6
24.00		1.00	0.82	28.755	31.63	508.92	0.750	0.000	2.00	9.395	7.05	222.9	0.0	625.9
26.00		1.00	0.83	29.035	31.94	507.58	0.750	0.000	2.00	9.326	6.99	223.4	0.0	621.2
28.00		1.00	0.83	29.298	32.23	506.06	0.750	0.000	2.00	9.256	6.94	223.7	0.0	616.5
30.00		1.00	0.84	29.557	32.51	504.45	0.750	0.000	2.00	9.186	6.89	224.0	0.0	611.9
32.00		1.00	0.85	30.022	33.02	504.54	0.750	0.000	2.00	9.117	6.84	225.8	0.0	607.2
34.00		1.00	0.87	30.466	33.51	504.36	0.750	0.000	2.00	9.047	6.79	227.4	0.0	602.5
36.00		1.00	0.88	30.890	33.98	503.93	0.750	0.000	2.00	8.978	6.73	228.8	0.0	597.8
38.00		1.00	0.89	31.297	34.43	503.29	0.750	0.000	2.00	8.908	6.68	230.0	0.0	593.2
40.00		1.00	0.90	31.689	34.86	502.46	0.750	0.000	2.00	8.838	6.63	231.1	0.0	588.5
42.00		1.00	0.91	32.065	35.27	501.44	0.750	0.000	2.00	8.769	6.58	232.0	0.0	583.8
44.00		1.00	0.92	32.429	35.67	500.25	0.750	0.000	2.00	8.699	6.52	232.7	0.0	579.1
45.92	Bot - Section 2	1.00	0.93	32.766	36.04	498.97	0.750	0.000	1.92	8.271	6.20	223.6	0.0	550.6
46.00		1.00	0.93	32.780	36.06	498.91	0.750	0.000	0.08	0.363	0.27	9.8	0.0	44.6
48.00		1.00	0.94	33.120	36.43	497.43	0.750	0.000	2.00	8.687	6.52	237.4	0.0	1065.6
50.00		1.00	0.95	33.450	36.79	495.82	0.750	0.000	2.00	8.618	6.46	237.8	0.0	1056.9
52.00		1.00	0.96	33.769	37.15	494.08	0.750	0.000	2.00	8.548	6.41	238.1	0.0	1048.2
53.00	Top - Section 1	1.00	0.97	33.926	37.32	493.17	0.750	0.000	1.00	4.248	3.19	118.9	0.0	520.8
54.00		1.00	0.97	34.080	37.49	499.77	0.750	0.000	1.00	4.231	3.17	118.9	0.0	241.4
56.00		1.00	0.98	34.382	37.82	497.84	0.750	0.000	2.00	8.409	6.31	238.5	0.0	479.8
58.00		1.00	0.99	34.676	38.14	495.81	0.750	0.000	2.00	8.339	6.25	238.6	0.0	475.8
60.00		1.00	1.00	34.963	38.46	493.68	0.750	0.000	2.00	8.270	6.20	238.5	0.0	471.8
62.00		1.00	1.00	35.242	38.77	491.46	0.750	0.000	2.00	8.200	6.15	238.4	0.0	467.8
64.00		1.00	1.01	35.515	39.07	489.15	0.750	0.000	2.00	8.130	6.10	238.2	0.0	463.8
66.00		1.00	1.02	35.781	39.36	486.76	0.750	0.000	2.00	8.061	6.05	238.0	0.0	459.8
68.00		1.00	1.03	36.042	39.65	484.29	0.750	0.000	2.00	7.991	5.99	237.6	0.0	455.8
70.00		1.00	1.03	36.297	39.93	481.75	0.750	0.000	2.00	7.922	5.94	237.2	0.0	451.7
72.00	Appurtenance(s)	1.00	1.04	36.546	40.20	479.13	0.750	0.000	2.00	7.852	5.89	236.7	0.0	447.7
74.00		1.00	1.05	36.790	40.47	476.45	0.750	0.000	2.00	7.782	5.84	236.2	0.0	443.7
76.00		1.00	1.05	37.029	40.73	473.70	0.750	0.000	2.00	7.713	5.78	235.6	0.0	439.7
78.00		1.00	1.06	37.264	40.99	470.89	0.750	0.000	2.00	7.643	5.73	235.0	0.0	435.7
80.00		1.00	1.07	37.494	41.24	468.02	0.750	0.000	2.00	7.574	5.68	234.3	0.0	431.7
82.00		1.00	1.07	37.720	41.49	465.10	0.750	0.000	2.00	7.504	5.63	233.5	0.0	427.7
84.00		1.00	1.08	37.942	41.74	462.11	0.750	0.000	2.00	7.434	5.58	232.7	0.0	423.7
86.00		1.00	1.09	38.160	41.98	459.08	0.750	0.000	2.00	7.365	5.52	231.9	0.0	419.7
88.00		1.00	1.09	38.374	42.21	455.99	0.750	0.000	2.00	7.295	5.47	230.9	0.0	415.7

Wind Loading - Shaft

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 11



90.00	1.00	1.10	38.584	42.44	452.85	0.750	0.000	2.00	7.225	5.42	230.0	0.0	411.7
92.00	1.00	1.10	38.791	42.67	449.67	0.750	0.000	2.00	7.156	5.37	229.0	0.0	407.7
92.92 Bot - Section 3	1.00	1.11	38.885	42.77	448.20	0.750	0.000	0.92	3.256	2.44	104.5	0.0	185.5
94.00	1.00	1.11	38.994	42.89	446.44	0.750	0.000	1.08	3.887	2.92	125.1	0.0	403.3
96.00	1.00	1.12	39.195	43.11	443.17	0.750	0.000	2.00	7.123	5.34	230.3	0.0	739.0
98.00	1.00	1.12	39.392	43.33	439.85	0.750	0.000	2.00	7.053	5.29	229.2	0.0	731.6
98.92 Top - Section 2	1.00	1.12	39.481	43.43	438.32	0.750	0.000	0.92	3.210	2.41	104.5	0.0	332.9
100.00	1.00	1.13	39.586	43.54	443.28	0.750	0.000	1.08	3.774	2.83	123.3	0.0	179.7
102.00	1.00	0.99	34.911	38.40	412.11	0.750	0.000	2.00	6.914	5.19	199.1	0.0	329.2
104.00	1.00	1.00	35.106	38.62	409.08	0.750	0.000	2.00	6.844	5.13	198.2	0.0	325.9
106.00	1.00	1.00	35.297	38.83	406.00	0.750	0.000	2.00	6.775	5.08	197.3	0.0	322.5
108.00	1.00	1.01	35.486	39.03	402.88	0.750	0.000	2.00	6.705	5.03	196.3	0.0	319.2
110.00	1.00	1.02	35.673	39.24	399.72	0.750	0.000	2.00	6.636	4.98	195.3	0.0	315.9
112.00	1.00	1.02	35.857	39.44	396.52	0.750	0.000	2.00	6.566	4.92	194.2	0.0	312.5
114.00	1.00	1.03	36.039	39.64	393.29	0.750	0.000	2.00	6.496	4.87	193.2	0.0	309.2
116.00	1.00	1.03	36.218	39.84	390.02	0.750	0.000	2.00	6.427	4.82	192.0	0.0	305.8
118.00	1.00	1.04	36.395	40.03	386.72	0.750	0.000	2.00	6.357	4.77	190.9	0.0	302.5
120.00	1.00	1.04	36.571	40.23	383.38	0.750	0.000	2.00	6.288	4.72	189.7	0.0	299.2
122.00	1.00	1.05	36.744	40.42	380.00	0.750	0.000	2.00	6.218	4.66	188.5	0.0	295.8
124.00	1.00	1.05	36.915	40.61	376.60	0.750	0.000	2.00	6.148	4.61	187.2	0.0	292.5
126.00	1.00	1.06	37.084	40.79	373.16	0.750	0.000	2.00	6.079	4.56	186.0	0.0	289.1
127.00 Bot - Section 4	1.00	1.06	37.168	40.88	371.43	0.750	0.000	1.00	3.013	2.26	92.4	0.0	143.3
128.00	1.00	1.06	37.251	40.98	369.70	0.750	0.000	1.00	3.033	2.27	93.2	0.0	243.7
130.00	1.00	1.07	37.417	41.16	366.20	0.750	0.000	2.00	6.014	4.51	185.6	0.0	483.1
132.00	1.00	1.07	37.580	41.34	362.67	0.750	0.000	2.00	5.944	4.46	184.3	0.0	477.4
132.25 Top - Section 3	1.00	1.07	37.600	41.36	362.23	0.750	0.000	0.25	0.738	0.55	22.9	0.0	59.3
134.00	1.00	1.07	37.742	41.52	363.75	0.750	0.000	1.75	5.137	3.85	159.9	0.0	171.4
136.00	1.00	1.08	37.902	41.69	360.18	0.750	0.000	2.00	5.805	4.35	181.5	0.0	193.7
138.00	1.00	1.08	38.060	41.87	356.57	0.750	0.000	2.00	5.735	4.30	180.1	0.0	191.3
140.00	1.00	1.09	38.217	42.04	352.94	0.750	0.000	2.00	5.666	4.25	178.6	0.0	189.0
142.00	1.00	1.09	38.372	42.21	349.29	0.750	0.000	2.00	5.596	4.20	177.2	0.0	186.6
144.00	1.00	1.10	38.526	42.38	345.61	0.750	0.000	2.00	5.527	4.14	175.7	0.0	184.3
146.00	1.00	1.10	38.678	42.55	341.90	0.750	0.000	2.00	5.457	4.09	174.1	0.0	182.0
147.00 Appurtenance(s)	1.00	1.10	38.754	42.63	340.03	0.750	0.000	1.00	2.702	2.03	86.4	0.0	90.1
148.00	1.00	1.11	38.829	42.71	338.16	0.750	0.000	1.00	2.685	2.01	86.0	0.0	89.5
150.00	1.00	1.11	38.978	42.88	334.41	0.750	0.000	2.00	5.318	3.99	171.0	0.0	177.3
152.00	1.00	1.11	39.126	43.04	330.62	0.750	0.000	2.00	5.248	3.94	169.4	0.0	175.0
154.00	1.00	1.12	39.272	43.20	326.82	0.750	0.000	2.00	5.179	3.88	167.8	0.0	172.6
156.00	1.00	1.12	39.417	43.36	322.99	0.750	0.000	2.00	5.109	3.83	166.1	0.0	170.3
157.00 Appurtenance(s)	1.00	1.12	39.489	43.44	321.07	0.750	0.000	1.00	2.528	1.90	82.4	0.0	84.3
158.00	1.00	1.13	39.561	43.52	319.14	0.750	0.000	1.00	2.511	1.88	82.0	0.0	83.7
160.00	1.00	1.13	39.704	43.67	315.27	0.750	0.000	2.00	4.970	3.73	162.8	0.0	165.6
162.00	1.00	1.13	39.845	43.83	311.37	0.750	0.000	2.00	4.900	3.68	161.1	0.0	163.3
164.00	1.00	1.14	39.985	43.98	307.45	0.750	0.000	2.00	4.830	3.62	159.3	0.0	160.9
166.00	1.00	1.14	40.123	44.14	303.52	0.750	0.000	2.00	4.761	3.57	157.6	0.0	158.6
167.00 Appurtenance(s)	1.00	1.14	40.192	44.21	301.54	0.750	0.000	1.00	2.354	1.77	78.1	0.0	78.4
168.00	1.00	1.15	40.261	44.29	299.56	0.750	0.000	1.00	2.337	1.75	77.6	0.0	77.8
170.00	1.00	1.15	40.397	44.44	295.58	0.750	0.000	2.00	4.622	3.47	154.0	0.0	153.9
172.00	1.00	1.15	40.532	44.59	291.58	0.750	0.000	2.00	4.552	3.41	152.2	0.0	151.6
174.00	1.00	1.16	40.667	44.73	287.56	0.750	0.000	2.00	4.482	3.36	150.4	0.0	149.2
176.00	1.00	1.16	40.800	44.88	283.52	0.750	0.000	2.00	4.413	3.31	148.5	0.0	146.9
177.00 Appurtenance(s)	1.00	1.16	40.866	44.95	281.49	0.750	0.000	1.00	2.180	1.64	73.5	0.0	72.6
178.00	1.00	1.17	40.931	45.02	279.46	0.750	0.000	1.00	2.163	1.62	73.0	0.0	72.0
180.00	1.00	1.17	41.062	45.17	275.39	0.750	0.000	2.00	4.274	3.21	144.8	0.0	142.2

Totals: 180.00 18,538.8 38,812.2

Discrete Appurtenance Forces

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



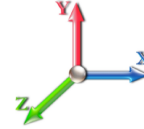
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Load Case: 1.2D + 1.0W 121 mph Wind

Iterations 30

Dead Load Factor 1.20

Wind Load Factor 1.00



No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orient Factor x Ka	Ka	Total CaAa (sf)	Dead Load (lb)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)
1	177.00	Ericsson 4449 B71 + B85	3	40.866	44.952	0.50	0.75	2.97	263.52	0.000	0.000	133.50	0.00	0.00
2	177.00	782 11056	3	40.866	44.952	0.50	0.75	0.42	6.48	0.000	0.000	18.97	0.00	0.00
3	177.00	RFS	3	40.866	44.952	0.52	0.75	31.88	460.80	0.000	0.000	1432.99	0.00	0.00
4	177.00	Ericsson KRY 112 489/2	3	40.866	44.952	0.50	0.75	0.98	55.44	0.000	0.000	44.05	0.00	0.00
5	177.00	Mount pipes	1	40.866	44.952	0.75	0.75	10.99	709.06	0.000	0.000	493.91	0.00	0.00
6	177.00	Commscope VV-65B-R1	3	40.866	44.952	0.55	0.75	13.15	106.20	0.000	0.000	591.28	0.00	0.00
7	177.00	Ericsson 4460 B25 + B66	3	40.866	44.952	0.50	0.75	3.23	374.40	0.000	0.000	145.02	0.00	0.00
8	177.00	RMQP-4096-HK Plat. +	1	40.866	44.952	0.67	0.67	23.14	2334.00	0.000	0.000	1040.28	0.00	0.00
9	177.00	Ericsson AIR6419 B41	3	40.866	44.952	0.55	0.75	10.35	299.88	0.000	0.000	465.35	0.00	0.00
10	167.00	Samsung VZS01	3	40.192	44.211	0.52	0.75	7.40	313.56	0.000	0.000	327.28	0.00	0.00
11	167.00	Commscope	6	40.192	44.211	0.62	0.75	30.07	365.11	0.000	0.000	1329.30	0.00	0.00
12	167.00	Raycap	2	40.192	44.211	0.64	0.75	3.21	100.80	0.000	0.000	142.05	0.00	0.00
13	167.00	Kaelus BSF0020F3V1-1	2	40.192	44.211	0.61	0.75	1.18	42.24	0.000	0.000	52.20	0.00	0.00
14	167.00	Antel	6	40.192	44.211	0.55	0.75	17.98	86.40	0.000	0.000	795.01	0.00	0.00
15	167.00	Samsung B5/B13	3	40.192	44.211	0.50	0.75	2.83	303.84	0.000	0.000	125.30	0.00	0.00
16	167.00	Samsung B2/B66A	3	40.192	44.211	0.50	0.75	2.83	253.08	0.000	0.000	125.30	0.00	0.00
17	167.00	Platform w/ Hand Rails	1	40.192	44.211	1.00	1.00	54.20	3054.17	0.000	0.000	2396.26	0.00	0.00
18	157.00	Mount Pipes	1	39.489	43.438	0.75	0.75	14.03	709.06	0.000	0.000	609.55	0.00	0.00
19	157.00	DMP65R-BU8DA	1	39.489	43.438	0.55	0.75	9.74	114.84	0.000	0.000	423.25	0.00	0.00
20	157.00	Platform w/ Handrail	1	39.489	43.438	0.67	0.67	23.14	2334.00	0.000	0.000	1005.24	0.00	0.00
21	157.00	7770	3	39.489	43.438	0.55	0.75	9.03	126.00	0.000	0.000	392.41	0.00	0.00
22	157.00	DMP65R-BU4DA	2	39.489	43.438	0.53	0.75	8.54	162.96	0.000	0.000	371.14	0.00	0.00
23	157.00	Raycap DC6-48-60-18-8F	1	39.489	43.438	0.68	0.75	0.62	38.16	0.000	0.000	26.98	0.00	0.00
24	157.00	HPA65R-BU8A	1	39.489	43.438	0.65	0.75	7.26	64.80	0.000	0.000	315.37	0.00	0.00
25	157.00	4449 B5/B12	3	39.489	43.438	0.50	0.75	2.97	255.60	0.000	0.000	129.00	0.00	0.00
26	157.00	8843 B2/B66A	3	39.489	43.438	0.50	0.75	2.47	259.20	0.000	0.000	107.39	0.00	0.00
27	157.00	HPA65R-BU4A	2	39.489	43.438	0.64	0.75	6.35	68.88	0.000	0.000	276.00	0.00	0.00
28	147.00	MC-PK8-DSH	1	38.754	42.629	0.67	0.67	22.93	2083.20	0.000	0.000	977.66	0.00	0.00
29	147.00	JMA Wireless	3	38.754	42.629	0.55	0.75	20.80	232.20	0.000	0.000	886.51	0.00	0.00
30	147.00	Fujitsu TA08025-B604	3	38.754	42.629	0.50	0.75	2.95	230.04	0.000	0.000	125.96	0.00	0.00
31	147.00	Fujitsu TA08025-B605	3	38.754	42.629	0.50	0.75	2.95	270.00	0.000	0.000	125.96	0.00	0.00
32	147.00	Raycap	1	38.754	42.629	0.75	0.75	1.51	26.28	0.000	0.000	64.26	0.00	0.00
33	72.00	1 Lucent KS-24019	1	36.546	40.201	1.00	1.00	1.13	4.80	0.000	0.000	45.43	0.00	0.00
34	72.00	Standoff	1	36.546	40.201	1.00	1.00	2.10	32.40	0.000	0.000	84.42	0.00	0.00

Totals: 16,141.39

15,624.56

Total Applied Force Summary

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

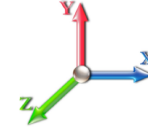


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Load Case: 1.2D + 1.0W 121 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 30

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
2.00		228.22	777.06	0.00	0.00
4.00		226.65	772.39	0.00	0.00
6.00		225.09	767.71	0.00	0.00
8.00		223.53	763.04	0.00	0.00
10.00		221.96	758.36	0.00	0.00
12.00		220.40	753.69	0.00	0.00
14.00		218.84	749.02	0.00	0.00
16.00		218.74	744.34	0.00	0.00
18.00		220.18	739.67	0.00	0.00
20.00		221.31	734.99	0.00	0.00
22.00		222.20	730.32	0.00	0.00
24.00		222.89	725.64	0.00	0.00
26.00		223.39	720.97	0.00	0.00
28.00		223.73	716.29	0.00	0.00
30.00		224.01	711.62	0.00	0.00
32.00		225.81	706.94	0.00	0.00
34.00		227.40	702.27	0.00	0.00
36.00		228.79	697.60	0.00	0.00
38.00		230.01	692.92	0.00	0.00
40.00		231.06	688.25	0.00	0.00
42.00		231.97	683.57	0.00	0.00
44.00		232.74	678.90	0.00	0.00
45.92		223.59	646.22	0.00	0.00
46.00		9.83	48.74	0.00	0.00
48.00		237.37	1165.32	0.00	0.00
50.00		237.82	1156.64	0.00	0.00
52.00		238.15	1147.97	0.00	0.00
53.00		118.90	570.73	0.00	0.00
54.00		118.95	291.26	0.00	0.00
56.00		238.52	579.53	0.00	0.00
58.00		238.57	575.52	0.00	0.00
60.00		238.53	571.52	0.00	0.00
62.00		238.42	567.52	0.00	0.00
64.00		238.22	563.52	0.00	0.00
66.00		237.95	559.51	0.00	0.00
68.00		237.62	555.51	0.00	0.00
70.00		237.21	551.51	0.00	0.00
72.00	(2) attachments	366.59	584.71	0.00	0.00
74.00		236.21	543.12	0.00	0.00
76.00		235.62	539.12	0.00	0.00
78.00		234.97	535.12	0.00	0.00
80.00		234.27	531.11	0.00	0.00
82.00		233.51	527.11	0.00	0.00
84.00		232.71	523.11	0.00	0.00
86.00		231.85	519.11	0.00	0.00
88.00		230.95	515.11	0.00	0.00

Total Applied Force Summary

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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90.00	230.00	511.10	0.00	0.00
92.00	229.00	507.10	0.00	0.00
92.92	104.47	231.08	0.00	0.00
94.00	125.06	457.17	0.00	0.00
96.00	230.33	838.34	0.00	0.00
98.00	229.22	831.00	0.00	0.00
98.92	104.54	378.42	0.00	0.00
100.00	123.26	233.55	0.00	0.00
102.00	199.14	428.60	0.00	0.00
104.00	198.23	425.26	0.00	0.00
106.00	197.29	421.92	0.00	0.00
108.00	196.30	418.58	0.00	0.00
110.00	195.29	415.24	0.00	0.00
112.00	194.24	411.90	0.00	0.00
114.00	193.15	408.55	0.00	0.00
116.00	192.03	405.21	0.00	0.00
118.00	190.88	401.87	0.00	0.00
120.00	189.70	398.53	0.00	0.00
122.00	188.49	395.19	0.00	0.00
124.00	187.25	391.85	0.00	0.00
126.00	185.97	388.51	0.00	0.00
127.00	92.40	193.00	0.00	0.00
128.00	93.21	293.38	0.00	0.00
130.00	185.64	582.49	0.00	0.00
132.00	184.29	576.82	0.00	0.00
132.25	22.90	71.70	0.00	0.00
134.00	159.94	258.32	0.00	0.00
136.00	181.52	293.03	0.00	0.00
138.00	180.09	290.69	0.00	0.00
140.00	178.64	288.35	0.00	0.00
142.00	177.16	286.02	0.00	0.00
144.00	175.66	283.68	0.00	0.00
146.00	174.13	281.34	0.00	0.00
147.00	(11) attachments	2266.75	2981.51	0.00
148.00		86.01	137.03	0.00
150.00		171.00	272.30	0.00
152.00		169.40	269.96	0.00
154.00		167.78	267.62	0.00
156.00		166.14	265.29	0.00
157.00	(18) attachments	3738.69	4265.26	0.00
158.00		81.95	115.17	0.00
160.00		162.78	228.60	0.00
162.00		161.07	226.26	0.00
164.00		159.34	223.92	0.00
166.00		157.59	221.58	0.00
167.00	(26) attachments	5370.76	4629.12	0.00
168.00		77.62	91.89	0.00
170.00		154.03	182.03	0.00
172.00		152.21	179.69	0.00
174.00		150.38	177.35	0.00
176.00		148.53	175.02	0.00
177.00	(23) attachments	4438.85	4696.41	0.00
178.00		73.04	73.57	0.00
180.00		144.77	145.38	0.00
Totals:		34,163.35	63,206.95	0.00

Linear Appurtenance Segment Forces (Factored)

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.2D + 1.0W 121 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 30

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
2.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.017	0.000	27.224	0.00	0.66
2.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.017	0.000	27.224	0.00	2.50
4.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.017	0.000	27.224	0.00	0.66
4.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.017	0.000	27.224	0.00	2.50
6.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.017	0.000	27.224	0.00	0.66
6.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.017	0.000	27.224	0.00	2.50
8.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.017	0.000	27.224	0.00	0.66
8.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.017	0.000	27.224	0.00	2.50
10.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.017	0.000	27.224	0.00	0.66
10.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.017	0.000	27.224	0.00	2.50
12.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.017	0.000	27.224	0.00	0.66
12.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.017	0.000	27.224	0.00	2.50
14.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.017	0.000	27.224	0.00	0.66
14.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.017	0.000	27.224	0.00	2.50
16.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.017	0.000	27.408	0.00	0.66
16.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.017	0.000	27.408	0.00	2.50
18.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.018	0.000	27.788	0.00	0.66
18.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.018	0.000	27.788	0.00	2.50
20.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.018	0.000	28.135	0.00	0.66
20.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.018	0.000	28.135	0.00	2.50
22.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.018	0.000	28.456	0.00	0.66
22.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.018	0.000	28.456	0.00	2.50
24.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.018	0.000	28.755	0.00	0.66
24.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.018	0.000	28.755	0.00	2.50
26.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.018	0.000	29.035	0.00	0.66
26.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.018	0.000	29.035	0.00	2.50
28.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.018	0.000	29.298	0.00	0.66
28.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.018	0.000	29.298	0.00	2.50
30.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.018	0.000	29.557	0.00	0.66
30.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.018	0.000	29.557	0.00	2.50
32.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.018	0.000	30.022	0.00	0.66
32.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.018	0.000	30.022	0.00	2.50
34.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.019	0.000	30.466	0.00	0.66
34.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.019	0.000	30.466	0.00	2.50
36.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.019	0.000	30.890	0.00	0.66
36.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.019	0.000	30.890	0.00	2.50
38.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.019	0.000	31.297	0.00	0.66
38.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.019	0.000	31.297	0.00	2.50
40.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.019	0.000	31.689	0.00	0.66
40.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.019	0.000	31.689	0.00	2.50
42.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.019	0.000	32.065	0.00	0.66
42.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.019	0.000	32.065	0.00	2.50
44.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.019	0.000	32.429	0.00	0.66
44.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.019	0.000	32.429	0.00	2.50
45.92	Safety Cable	Yes	1.92	0.000	0.38	0.06	0.00	0.020	0.000	32.766	0.00	0.63
45.92	Step bolts (ladder)	Yes	1.92	0.000	0.63	0.10	0.00	0.020	0.000	32.766	0.00	2.39
46.00	Safety Cable	Yes	0.08	0.000	0.38	0.00	0.00	0.020	0.000	32.780	0.00	0.03

Linear Appurtenance Segment Forces (Factored)

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



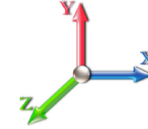
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Load Case: 1.2D + 1.0W 121 mph Wind

Iterations 30

Dead Load Factor 1.20

Wind Load Factor 1.00



Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
46.00	Step bolts (ladder)	Yes	0.08	0.000	0.63	0.00	0.00	0.020	0.000	32.780	0.00	0.10
48.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.020	0.000	33.120	0.00	0.66
48.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.020	0.000	33.120	0.00	2.50
50.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.020	0.000	33.450	0.00	0.66
50.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.020	0.000	33.450	0.00	2.50
52.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.020	0.000	33.769	0.00	0.66
52.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.020	0.000	33.769	0.00	2.50
53.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.020	0.000	33.926	0.00	0.33
53.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.020	0.000	33.926	0.00	1.25
54.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.020	0.000	34.080	0.00	0.33
54.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.020	0.000	34.080	0.00	1.25
56.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.020	0.000	34.382	0.00	0.66
56.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.020	0.000	34.382	0.00	2.50
58.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.020	0.000	34.676	0.00	0.66
58.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.020	0.000	34.676	0.00	2.50
60.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.020	0.000	34.963	0.00	0.66
60.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.020	0.000	34.963	0.00	2.50
62.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.021	0.000	35.242	0.00	0.66
62.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.021	0.000	35.242	0.00	2.50
64.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.021	0.000	35.515	0.00	0.66
64.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.021	0.000	35.515	0.00	2.50
66.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.021	0.000	35.781	0.00	0.66
66.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.021	0.000	35.781	0.00	2.50
68.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.021	0.000	36.042	0.00	0.66
68.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.021	0.000	36.042	0.00	2.50
70.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.021	0.000	36.297	0.00	0.66
70.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.021	0.000	36.297	0.00	2.50
72.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.021	0.000	36.546	0.00	0.66
72.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.021	0.000	36.546	0.00	2.50
74.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.022	0.000	36.790	0.00	0.66
74.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.022	0.000	36.790	0.00	2.50
76.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.022	0.000	37.029	0.00	0.66
76.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.022	0.000	37.029	0.00	2.50
78.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.022	0.000	37.264	0.00	0.66
78.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.022	0.000	37.264	0.00	2.50
80.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.022	0.000	37.494	0.00	0.66
80.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.022	0.000	37.494	0.00	2.50
82.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.022	0.000	37.720	0.00	0.66
82.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.022	0.000	37.720	0.00	2.50
84.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.023	0.000	37.942	0.00	0.66
84.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.023	0.000	37.942	0.00	2.50
86.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.023	0.000	38.160	0.00	0.66
86.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.023	0.000	38.160	0.00	2.50
88.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.023	0.000	38.374	0.00	0.66
88.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.023	0.000	38.374	0.00	2.50
90.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.023	0.000	38.584	0.00	0.66
90.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.023	0.000	38.584	0.00	2.50

Linear Appurtenance Segment Forces (Factored)

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

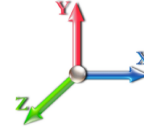


Load Case: 1.2D + 1.0W 121 mph Wind

Iterations 30

Dead Load Factor 1.20

Wind Load Factor 1.00



Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
92.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.024	0.000	38.791	0.00	0.66
92.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.024	0.000	38.791	0.00	2.50
92.92	Safety Cable	Yes	0.92	0.000	0.38	0.03	0.00	0.024	0.000	38.885	0.00	0.30
92.92	Step bolts (ladder)	Yes	0.92	0.000	0.63	0.05	0.00	0.024	0.000	38.885	0.00	1.14
94.00	Safety Cable	Yes	1.08	0.000	0.38	0.03	0.00	0.024	0.000	38.994	0.00	0.35
94.00	Step bolts (ladder)	Yes	1.08	0.000	0.63	0.06	0.00	0.024	0.000	38.994	0.00	1.35
96.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.024	0.000	39.195	0.00	0.66
96.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.024	0.000	39.195	0.00	2.50
98.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.024	0.000	39.392	0.00	0.66
98.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.024	0.000	39.392	0.00	2.50
98.92	Safety Cable	Yes	0.92	0.000	0.38	0.03	0.00	0.024	0.000	39.481	0.00	0.30
98.92	Step bolts (ladder)	Yes	0.92	0.000	0.63	0.05	0.00	0.024	0.000	39.481	0.00	1.14
100.00	Safety Cable	Yes	1.08	0.000	0.38	0.03	0.00	0.024	0.000	39.586	0.00	0.35
100.00	Step bolts (ladder)	Yes	1.08	0.000	0.63	0.06	0.00	0.024	0.000	39.586	0.00	1.35
102.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.024	0.000	34.911	0.00	0.66
102.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.024	0.000	34.911	0.00	2.50
104.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.025	0.000	35.106	0.00	0.66
104.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.025	0.000	35.106	0.00	2.50
106.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.025	0.000	35.297	0.00	0.66
106.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.025	0.000	35.297	0.00	2.50
108.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.025	0.000	35.486	0.00	0.66
108.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.025	0.000	35.486	0.00	2.50
110.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.025	0.000	35.673	0.00	0.66
110.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.025	0.000	35.673	0.00	2.50
112.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.026	0.000	35.857	0.00	0.66
112.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.026	0.000	35.857	0.00	2.50
114.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.026	0.000	36.039	0.00	0.66
114.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.026	0.000	36.039	0.00	2.50
116.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.026	0.000	36.218	0.00	0.66
116.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.026	0.000	36.218	0.00	2.50
118.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.026	0.000	36.395	0.00	0.66
118.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.026	0.000	36.395	0.00	2.50
120.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.027	0.000	36.571	0.00	0.66
120.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.027	0.000	36.571	0.00	2.50
122.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.027	0.000	36.744	0.00	0.66
122.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.027	0.000	36.744	0.00	2.50
124.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.027	0.000	36.915	0.00	0.66
124.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.027	0.000	36.915	0.00	2.50
126.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.028	0.000	37.084	0.00	0.66
126.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.028	0.000	37.084	0.00	2.50
127.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.028	0.000	37.168	0.00	0.33
127.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.028	0.000	37.168	0.00	1.25
128.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.028	0.000	37.251	0.00	0.33
128.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.028	0.000	37.251	0.00	1.25
130.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.028	0.000	37.417	0.00	0.66
130.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.028	0.000	37.417	0.00	2.50
132.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.029	0.000	37.580	0.00	0.66

Linear Appurtenance Segment Forces (Factored)

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Load Case: 1.2D + 1.0W 121 mph Wind	Iterations 30
Dead Load Factor 1.20	
Wind Load Factor 1.00	

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
132.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.029	0.000	37.580	0.00	2.50
132.25	Safety Cable	Yes	0.25	0.000	0.38	0.01	0.00	0.029	0.000	37.600	0.00	0.08
132.25	Step bolts (ladder)	Yes	0.25	0.000	0.63	0.01	0.00	0.029	0.000	37.600	0.00	0.31
134.00	Safety Cable	Yes	1.75	0.000	0.38	0.06	0.00	0.029	0.000	37.742	0.00	0.57
134.00	Step bolts (ladder)	Yes	1.75	0.000	0.63	0.09	0.00	0.029	0.000	37.742	0.00	2.18
136.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.029	0.000	37.902	0.00	0.66
136.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.029	0.000	37.902	0.00	2.50
138.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.029	0.000	38.060	0.00	0.66
138.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.029	0.000	38.060	0.00	2.50
140.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.030	0.000	38.217	0.00	0.66
140.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.030	0.000	38.217	0.00	2.50
142.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.030	0.000	38.372	0.00	0.66
142.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.030	0.000	38.372	0.00	2.50
144.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.030	0.000	38.526	0.00	0.66
144.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.030	0.000	38.526	0.00	2.50
146.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.031	0.000	38.678	0.00	0.66
146.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.031	0.000	38.678	0.00	2.50
147.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.031	0.000	38.754	0.00	0.33
147.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.031	0.000	38.754	0.00	1.25
148.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.031	0.000	38.829	0.00	0.33
148.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.031	0.000	38.829	0.00	1.25
150.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.032	0.000	38.978	0.00	0.66
150.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.032	0.000	38.978	0.00	2.50
152.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.032	0.000	39.126	0.00	0.66
152.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.032	0.000	39.126	0.00	2.50
154.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.033	0.000	39.272	0.00	0.66
154.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.033	0.000	39.272	0.00	2.50
156.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.033	0.000	39.417	0.00	0.66
156.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.033	0.000	39.417	0.00	2.50
157.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.033	0.000	39.489	0.00	0.33
157.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.033	0.000	39.489	0.00	1.25
158.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.034	0.000	39.561	0.00	0.33
158.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.034	0.000	39.561	0.00	1.25
160.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.034	0.000	39.704	0.00	0.66
160.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.034	0.000	39.704	0.00	2.50
162.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.034	0.000	39.845	0.00	0.66
162.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.034	0.000	39.845	0.00	2.50
164.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.035	0.000	39.985	0.00	0.66
164.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.035	0.000	39.985	0.00	2.50
166.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.035	0.000	40.123	0.00	0.66
166.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.035	0.000	40.123	0.00	2.50
167.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.036	0.000	40.192	0.00	0.33
167.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.036	0.000	40.192	0.00	1.25
168.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.036	0.000	40.261	0.00	0.33
168.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.036	0.000	40.261	0.00	1.25
170.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.036	0.000	40.397	0.00	0.66
170.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.036	0.000	40.397	0.00	2.50

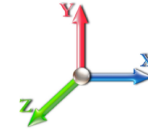
Linear Appurtenance Segment Forces (Factored)

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 19



Load Case: 1.2D + 1.0W 121 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 30

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
172.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.037	0.000	40.532	0.00	0.66
172.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.037	0.000	40.532	0.00	2.50
174.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.038	0.000	40.667	0.00	0.66
174.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.038	0.000	40.667	0.00	2.50
176.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.038	0.000	40.800	0.00	0.66
176.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.038	0.000	40.800	0.00	2.50
177.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.039	0.000	40.866	0.00	0.33
177.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.039	0.000	40.866	0.00	1.25
178.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.039	0.000	40.931	0.00	0.33
178.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.039	0.000	40.931	0.00	1.25
180.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.039	0.000	41.062	0.00	0.66
180.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.039	0.000	41.062	0.00	2.50
Totals:											0.0	283.6

Calculated Forces

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 20



Load Case: 1.2D + 1.0W 121 mph Wind

Iterations 30

Dead Load Factor 1.20

Wind Load Factor 1.00



Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-63.19	-34.20	0.00	-4373.5	0.00	4373.58	5508.12	1460.53	7226.63	6725.55	0.00	0.000	0.000	0.662
2.00	-62.37	-34.04	0.00	-4305.1	0.00	4305.18	5485.89	1450.49	7127.56	6652.00	0.01	-0.066	0.000	0.659
4.00	-61.56	-33.89	0.00	-4237.1	0.00	4237.10	5463.45	1440.44	7029.17	6578.56	0.06	-0.133	0.000	0.656
6.00	-60.75	-33.73	0.00	-4169.3	0.00	4169.32	5440.79	1430.40	6931.47	6505.25	0.13	-0.200	0.000	0.653
8.00	-59.95	-33.58	0.00	-4101.8	0.00	4101.86	5417.91	1420.35	6834.46	6432.06	0.23	-0.267	0.000	0.649
10.00	-59.15	-33.42	0.00	-4034.7	0.00	4034.71	5394.81	1410.30	6738.12	6359.01	0.35	-0.334	0.000	0.646
12.00	-58.36	-33.26	0.00	-3967.8	0.00	3967.88	5371.50	1400.26	6642.47	6286.09	0.51	-0.402	0.000	0.643
14.00	-57.58	-33.11	0.00	-3901.3	0.00	3901.35	5347.97	1390.21	6547.51	6213.31	0.69	-0.470	0.000	0.639
16.00	-56.79	-32.95	0.00	-3835.1	0.00	3835.14	5324.23	1380.17	6453.22	6140.69	0.90	-0.539	0.000	0.636
18.00	-56.02	-32.79	0.00	-3769.2	0.00	3769.24	5300.27	1370.12	6359.62	6068.21	1.14	-0.607	0.000	0.632
20.00	-55.25	-32.63	0.00	-3703.6	0.00	3703.66	5276.09	1360.08	6266.71	5995.90	1.41	-0.676	0.000	0.629
22.00	-54.48	-32.46	0.00	-3638.4	0.00	3638.41	5251.69	1350.03	6174.48	5923.74	1.71	-0.746	0.000	0.625
24.00	-53.72	-32.29	0.00	-3573.4	0.00	3573.49	5227.08	1339.98	6082.93	5851.76	2.04	-0.815	0.000	0.622
26.00	-52.96	-32.13	0.00	-3508.9	0.00	3508.90	5202.25	1329.94	5992.07	5779.96	2.40	-0.885	0.000	0.618
28.00	-52.21	-31.95	0.00	-3444.6	0.00	3444.65	5177.20	1319.89	5901.89	5708.33	2.78	-0.956	0.000	0.614
30.00	-51.46	-31.78	0.00	-3380.7	0.00	3380.74	5151.94	1309.85	5812.39	5636.89	3.20	-1.026	0.000	0.610
32.00	-50.72	-31.61	0.00	-3317.1	0.00	3317.18	5126.46	1299.80	5723.58	5565.65	3.64	-1.097	0.000	0.606
34.00	-49.98	-31.43	0.00	-3253.9	0.00	3253.97	5100.76	1289.76	5635.45	5494.60	4.12	-1.168	0.000	0.603
36.00	-49.25	-31.24	0.00	-3191.1	0.00	3191.12	5074.84	1279.71	5548.01	5423.75	4.62	-1.239	0.000	0.599
38.00	-48.52	-31.06	0.00	-3128.6	0.00	3128.63	5048.71	1269.67	5461.24	5353.12	5.16	-1.311	0.000	0.595
40.00	-47.80	-30.87	0.00	-3066.5	0.00	3066.52	5022.37	1259.62	5375.17	5282.69	5.72	-1.383	0.000	0.591
42.00	-47.09	-30.68	0.00	-3004.7	0.00	3004.77	4995.80	1249.57	5289.77	5212.49	6.32	-1.455	0.000	0.586
44.00	-46.38	-30.49	0.00	-2943.4	0.00	2943.41	4969.02	1239.53	5205.06	5142.51	6.94	-1.528	0.000	0.582
45.92	-45.72	-30.28	0.00	-2884.9	0.00	2884.97	4943.15	1229.90	5124.53	5075.67	7.57	-1.597	0.000	0.578
46.00	-45.65	-30.30	0.00	-2882.4	0.00	2882.44	4942.02	1229.48	5121.04	5072.76	7.60	-1.600	0.000	0.578
48.00	-44.45	-30.08	0.00	-2821.8	0.00	2821.85	4914.80	1219.44	5037.70	5003.25	8.29	-1.673	0.000	0.574
50.00	-43.27	-29.87	0.00	-2761.6	0.00	2761.68	4887.37	1209.39	4955.04	4933.98	9.00	-1.747	0.000	0.569
52.00	-42.10	-29.63	0.00	-2701.9	0.00	2701.95	4859.72	1199.35	4873.06	4864.96	9.75	-1.820	0.000	0.565
53.00	-41.51	-29.52	0.00	-2672.3	0.00	2672.32	4859.72	1199.35	4873.06	4864.96	9.75	-1.820	0.000	0.565
54.00	-41.19	-29.44	0.00	-2642.8	0.00	2642.80	4837.90	1189.60	4787.54	4797.08	10.14	-1.857	0.000	0.675
56.00	-40.58	-29.24	0.00	-2583.9	0.00	2583.92	4816.02	1179.90	4702.54	4729.22	10.53	-1.894	0.000	0.672
58.00	-39.97	-29.04	0.00	-2525.4	0.00	2525.45	4794.08	1170.20	4617.54	4661.36	10.92	-1.931	0.000	0.668
60.00	-39.37	-28.83	0.00	-2467.3	0.00	2467.37	4772.08	1160.50	4532.54	4593.50	11.31	-1.968	0.000	0.664
62.00	-38.77	-28.63	0.00	-2409.7	0.00	2409.71	4750.00	1150.80	4447.54	4525.64	11.70	-2.005	0.000	0.660
64.00	-38.17	-28.43	0.00	-2352.4	0.00	2352.45	4727.92	1141.10	4362.54	4457.78	12.09	-2.042	0.000	0.656
66.00	-37.58	-28.22	0.00	-2295.6	0.00	2295.60	4705.80	1131.40	4277.54	4389.92	12.48	-2.079	0.000	0.652
68.00	-37.00	-28.01	0.00	-2239.1	0.00	2239.16	4683.68	1121.70	4192.54	4322.06	12.87	-2.116	0.000	0.648
70.00	-36.42	-27.80	0.00	-2183.1	0.00	2183.14	4661.52	1112.00	4107.54	4254.20	13.26	-2.153	0.000	0.644
72.00	-35.81	-27.46	0.00	-2127.5	0.00	2127.53	4639.32	1102.30	4022.54	4186.34	13.65	-2.190	0.000	0.640
74.00	-35.24	-27.25	0.00	-2072.6	0.00	2072.61	4617.08	1092.60	3937.54	4116.48	14.04	-2.227	0.000	0.636
76.00	-34.67	-27.04	0.00	-2018.1	0.00	2018.10	4594.80	1082.90	3852.54	4046.62	14.43	-2.264	0.000	0.632
78.00	-34.11	-26.83	0.00	-1964.0	0.00	1964.02	4572.48	1073.20	3767.54	3976.76	14.82	-2.301	0.000	0.628
80.00	-33.55	-26.62	0.00	-1910.3	0.00	1910.36	4550.00	1063.50	3682.54	3906.90	15.21	-2.338	0.000	0.624
82.00	-33.00	-26.41	0.00	-1857.1	0.00	1857.13	4527.48	1053.80	3597.54	3837.04	15.60	-2.375	0.000	0.620
84.00	-32.45	-26.19	0.00	-1804.3	0.00	1804.32	4504.80	1044.10	3512.54	3767.18	15.99	-2.412	0.000	0.616
86.00	-31.91	-25.98	0.00	-1751.9	0.00	1751.94	4482.08	1034.40	3427.54	3697.32	16.38	-2.449	0.000	0.612
88.00	-31.37	-25.76	0.00	-1699.9	0.00	1699.98	4459.32	1024.70	3342.54	3627.46	16.77	-2.486	0.000	0.608
90.00	-30.84	-25.55	0.00	-1648.4	0.00	1648.46	4436.48	1015.00	3257.54	3557.60	17.16	-2.523	0.000	0.604

Calculated Forces

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 21



92.00	-30.32	-25.32	0.00	-1597.3	0.00	1597.36	3542.15	871.89	3008.02	3010.67	31.87	-3.470	0.000	0.540
92.92	-30.08	-25.22	0.00	-1574.1	0.00	1574.15	3531.15	867.95	2980.88	2987.63	32.54	-3.508	0.000	0.536
94.00	-29.60	-25.11	0.00	-1546.8	0.00	1546.83	3518.09	863.29	2948.96	2960.46	33.34	-3.553	0.000	0.532
96.00	-28.74	-24.86	0.00	-1496.6	0.00	1496.62	3493.82	854.69	2890.50	2910.48	34.85	-3.636	0.000	0.523
98.00	-27.90	-24.61	0.00	-1446.8	0.00	1446.89	3469.33	846.09	2832.62	2860.73	36.39	-3.718	0.000	0.515
98.92	-27.51	-24.50	0.00	-1424.3	0.00	1424.33	2742.83	714.97	2423.35	2293.46	37.11	-3.756	0.000	0.632
100.00	-27.26	-24.40	0.00	-1397.7	0.00	1397.79	2733.73	711.08	2397.06	2273.32	37.96	-3.800	0.000	0.626
102.00	-26.81	-24.21	0.00	-1349.0	0.00	1349.00	2716.76	703.90	2348.90	2236.23	39.57	-3.893	0.000	0.614
104.00	-26.36	-24.03	0.00	-1300.5	0.00	1300.57	2699.58	696.72	2301.24	2199.25	41.22	-3.985	0.000	0.602
106.00	-25.91	-23.84	0.00	-1252.5	0.00	1252.52	2682.18	689.54	2254.06	2162.39	42.91	-4.077	0.000	0.590
108.00	-25.47	-23.66	0.00	-1204.8	0.00	1204.84	2664.56	682.36	2207.37	2125.64	44.64	-4.168	0.000	0.578
110.00	-25.03	-23.47	0.00	-1157.5	0.00	1157.52	2646.73	675.19	2161.17	2089.03	46.40	-4.258	0.000	0.565
112.00	-24.60	-23.28	0.00	-1110.5	0.00	1110.58	2628.68	668.01	2115.46	2052.54	48.20	-4.348	0.000	0.552
114.00	-24.17	-23.10	0.00	-1064.0	0.00	1064.02	2610.42	660.83	2070.24	2016.20	50.04	-4.436	0.000	0.538
116.00	-23.75	-22.91	0.00	-1017.8	0.00	1017.82	2591.93	653.65	2025.50	1980.00	51.92	-4.524	0.000	0.524
118.00	-23.33	-22.72	0.00	-972.00	0.00	972.00	2573.23	646.47	1981.26	1943.94	53.83	-4.610	0.000	0.510
120.00	-22.92	-22.54	0.00	-926.56	0.00	926.56	2554.31	639.29	1937.50	1908.04	55.78	-4.695	0.000	0.496
122.00	-22.50	-22.35	0.00	-881.48	0.00	881.48	2535.18	632.11	1894.23	1872.30	57.76	-4.779	0.000	0.481
124.00	-22.10	-22.16	0.00	-836.79	0.00	836.79	2515.83	624.93	1851.45	1836.73	59.78	-4.862	0.000	0.466
126.00	-21.70	-21.96	0.00	-792.47	0.00	792.47	2496.26	617.76	1809.16	1801.33	61.83	-4.943	0.000	0.450
127.00	-21.50	-21.87	0.00	-770.51	0.00	770.51	2486.40	614.17	1788.19	1783.69	62.87	-4.983	0.000	0.442
128.00	-21.20	-21.77	0.00	-748.64	0.00	748.64	2476.48	610.58	1767.35	1766.10	63.92	-5.023	0.000	0.434
130.00	-20.61	-21.57	0.00	-705.09	0.00	705.09	2456.47	603.40	1726.04	1731.06	66.04	-5.100	0.000	0.417
132.00	-20.03	-21.34	0.00	-661.96	0.00	661.96	2436.26	596.22	1685.21	1696.20	68.19	-5.176	0.000	0.400
132.25	-19.95	-21.33	0.00	-656.62	0.00	656.62	1490.15	423.06	1212.67	1055.13	68.46	-5.185	0.000	0.638
134.00	-19.68	-21.17	0.00	-619.30	0.00	619.30	1482.58	418.66	1187.61	1038.80	70.37	-5.250	0.000	0.612
136.00	-19.37	-21.00	0.00	-576.95	0.00	576.95	1473.72	413.64	1159.28	1020.12	72.59	-5.346	0.000	0.581
138.00	-19.06	-20.82	0.00	-534.96	0.00	534.96	1464.65	408.62	1131.30	1001.45	74.84	-5.440	0.000	0.550
140.00	-18.76	-20.65	0.00	-493.31	0.00	493.31	1455.36	403.59	1103.66	982.79	77.14	-5.529	0.000	0.517
142.00	-18.46	-20.47	0.00	-452.02	0.00	452.02	1445.85	398.57	1076.36	964.14	79.47	-5.615	0.000	0.484
144.00	-18.17	-20.29	0.00	-411.09	0.00	411.09	1436.13	393.55	1049.40	945.50	81.84	-5.696	0.000	0.450
146.00	-17.89	-20.11	0.00	-370.51	0.00	370.51	1426.18	388.53	1022.78	926.89	84.24	-5.772	0.000	0.415
147.00	-15.14	-17.56	0.00	-350.40	0.00	350.40	1421.13	386.01	1009.60	917.60	85.45	-5.808	0.000	0.395
148.00	-15.00	-17.47	0.00	-332.84	0.00	332.84	1416.03	383.50	996.51	908.31	86.67	-5.844	0.000	0.379
150.00	-14.72	-17.29	0.00	-297.90	0.00	297.90	1405.65	378.48	970.58	889.77	89.13	-5.910	0.000	0.347
152.00	-14.45	-17.11	0.00	-263.31	0.00	263.31	1395.06	373.46	944.99	871.26	91.61	-5.972	0.000	0.315
154.00	-14.19	-16.93	0.00	-229.09	0.00	229.09	1384.25	368.43	919.74	852.80	94.12	-6.028	0.000	0.281
156.00	-13.93	-16.74	0.00	-195.24	0.00	195.24	1373.23	363.41	894.83	834.39	96.65	-6.078	0.000	0.246
157.00	-10.08	-12.58	0.00	-178.49	0.00	178.49	1367.63	360.90	882.51	825.21	97.93	-6.101	0.000	0.225
158.00	-9.97	-12.49	0.00	-165.91	0.00	165.91	1361.98	358.39	870.27	816.04	99.21	-6.123	0.000	0.212
160.00	-9.75	-12.31	0.00	-140.93	0.00	140.93	1350.53	353.37	846.04	797.75	101.78	-6.163	0.000	0.185
162.00	-9.54	-12.13	0.00	-116.31	0.00	116.31	1338.85	348.34	822.16	779.52	104.36	-6.197	0.000	0.158
164.00	-9.33	-11.95	0.00	-92.05	0.00	92.05	1326.96	343.32	798.62	761.37	106.96	-6.227	0.000	0.129
166.00	-9.12	-11.77	0.00	-68.15	0.00	68.15	1314.85	338.30	775.43	743.30	109.57	-6.250	0.000	0.100
167.00	-5.10	-5.93	0.00	-56.37	0.00	56.37	1308.71	335.79	763.96	734.30	110.88	-6.260	0.000	0.081
168.00	-5.02	-5.85	0.00	-50.44	0.00	50.44	1302.52	333.27	752.57	725.32	112.19	-6.268	0.000	0.074
170.00	-4.86	-5.67	0.00	-38.75	0.00	38.75	1289.98	328.25	730.06	707.42	114.81	-6.282	0.000	0.059
172.00	-4.69	-5.50	0.00	-27.41	0.00	27.41	1277.22	323.23	707.89	689.62	117.44	-6.294	0.000	0.044
174.00	-4.53	-5.34	0.00	-16.40	0.00	16.40	1264.24	318.21	686.06	671.91	120.07	-6.301	0.000	0.028
176.00	-4.37	-5.17	0.00	-5.73	0.00	5.73	1251.05	313.18	664.57	654.32	122.71	-6.305	0.000	0.013
177.00	-0.19	-0.24	0.00	-0.56	0.00	0.56	1244.37	310.67	653.95	645.56	124.03	-6.306	0.000	0.001
178.00	-0.13	-0.16	0.00	-0.32	0.00	0.32	1237.63	308.16	643.42	636.84	125.34	-6.306	0.000	0.001
180.00	0.00	-0.14	0.00	0.00	0.00	0.00	1224.01	303.14	622.62	619.47	127.98	-6.306	0.000	0.000

Wind Loading - Shaft

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Load Case: 0.9D + 1.0W 121 mph Wind	Iterations 29
Dead Load Factor 0.90	
Wind Load Factor 1.00	

Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.77	27.224	29.95	539.37	0.750	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.77	27.224	29.95	535.69	0.750	0.000	2.00	10.161	7.62	228.2	0.0	508.0
4.00		1.00	0.77	27.224	29.95	532.01	0.750	0.000	2.00	10.091	7.57	226.7	0.0	504.5
6.00		1.00	0.77	27.224	29.95	528.33	0.750	0.000	2.00	10.022	7.52	225.1	0.0	501.0
8.00		1.00	0.77	27.224	29.95	524.64	0.750	0.000	2.00	9.952	7.46	223.5	0.0	497.5
10.00		1.00	0.77	27.224	29.95	520.96	0.750	0.000	2.00	9.883	7.41	222.0	0.0	494.0
12.00		1.00	0.77	27.224	29.95	517.28	0.750	0.000	2.00	9.813	7.36	220.4	0.0	490.4
14.00		1.00	0.77	27.224	29.95	513.59	0.750	0.000	2.00	9.743	7.31	218.8	0.0	486.9
16.00		1.00	0.78	27.408	30.15	511.64	0.750	0.000	2.00	9.674	7.26	218.7	0.0	483.4
18.00		1.00	0.79	27.788	30.57	511.44	0.750	0.000	2.00	9.604	7.20	220.2	0.0	479.9
20.00		1.00	0.80	28.135	30.95	510.89	0.750	0.000	2.00	9.535	7.15	221.3	0.0	476.4
22.00		1.00	0.81	28.456	31.30	510.03	0.750	0.000	2.00	9.465	7.10	222.2	0.0	472.9
24.00		1.00	0.82	28.755	31.63	508.92	0.750	0.000	2.00	9.395	7.05	222.9	0.0	469.4
26.00		1.00	0.83	29.035	31.94	507.58	0.750	0.000	2.00	9.326	6.99	223.4	0.0	465.9
28.00		1.00	0.83	29.298	32.23	506.06	0.750	0.000	2.00	9.256	6.94	223.7	0.0	462.4
30.00		1.00	0.84	29.557	32.51	504.45	0.750	0.000	2.00	9.186	6.89	224.0	0.0	458.9
32.00		1.00	0.85	30.022	33.02	504.54	0.750	0.000	2.00	9.117	6.84	225.8	0.0	455.4
34.00		1.00	0.87	30.466	33.51	504.36	0.750	0.000	2.00	9.047	6.79	227.4	0.0	451.9
36.00		1.00	0.88	30.890	33.98	503.93	0.750	0.000	2.00	8.978	6.73	228.8	0.0	448.4
38.00		1.00	0.89	31.297	34.43	503.29	0.750	0.000	2.00	8.908	6.68	230.0	0.0	444.9
40.00		1.00	0.90	31.689	34.86	502.46	0.750	0.000	2.00	8.838	6.63	231.1	0.0	441.4
42.00		1.00	0.91	32.065	35.27	501.44	0.750	0.000	2.00	8.769	6.58	232.0	0.0	437.9
44.00		1.00	0.92	32.429	35.67	500.25	0.750	0.000	2.00	8.699	6.52	232.7	0.0	434.4
45.92	Bot - Section 2	1.00	0.93	32.766	36.04	498.97	0.750	0.000	1.92	8.271	6.20	223.6	0.0	413.0
46.00		1.00	0.93	32.780	36.06	498.91	0.750	0.000	0.08	0.363	0.27	9.8	0.0	33.4
48.00		1.00	0.94	33.120	36.43	497.43	0.750	0.000	2.00	8.687	6.52	237.4	0.0	799.2
50.00		1.00	0.95	33.450	36.79	495.82	0.750	0.000	2.00	8.618	6.46	237.8	0.0	792.7
52.00		1.00	0.96	33.769	37.15	494.08	0.750	0.000	2.00	8.548	6.41	238.1	0.0	786.2
53.00	Top - Section 1	1.00	0.97	33.926	37.32	493.17	0.750	0.000	1.00	4.248	3.19	118.9	0.0	390.6
54.00		1.00	0.97	34.080	37.49	499.77	0.750	0.000	1.00	4.231	3.17	118.9	0.0	181.0
56.00		1.00	0.98	34.382	37.82	497.84	0.750	0.000	2.00	8.409	6.31	238.5	0.0	359.8
58.00		1.00	0.99	34.676	38.14	495.81	0.750	0.000	2.00	8.339	6.25	238.6	0.0	356.8
60.00		1.00	1.00	34.963	38.46	493.68	0.750	0.000	2.00	8.270	6.20	238.5	0.0	353.8
62.00		1.00	1.00	35.242	38.77	491.46	0.750	0.000	2.00	8.200	6.15	238.4	0.0	350.8
64.00		1.00	1.01	35.515	39.07	489.15	0.750	0.000	2.00	8.130	6.10	238.2	0.0	347.8
66.00		1.00	1.02	35.781	39.36	486.76	0.750	0.000	2.00	8.061	6.05	238.0	0.0	344.8
68.00		1.00	1.03	36.042	39.65	484.29	0.750	0.000	2.00	7.991	5.99	237.6	0.0	341.8
70.00		1.00	1.03	36.297	39.93	481.75	0.750	0.000	2.00	7.922	5.94	237.2	0.0	338.8
72.00	Appurtenance(s)	1.00	1.04	36.546	40.20	479.13	0.750	0.000	2.00	7.852	5.89	236.7	0.0	335.8
74.00		1.00	1.05	36.790	40.47	476.45	0.750	0.000	2.00	7.782	5.84	236.2	0.0	332.8
76.00		1.00	1.05	37.029	40.73	473.70	0.750	0.000	2.00	7.713	5.78	235.6	0.0	329.8
78.00		1.00	1.06	37.264	40.99	470.89	0.750	0.000	2.00	7.643	5.73	235.0	0.0	326.8
80.00		1.00	1.07	37.494	41.24	468.02	0.750	0.000	2.00	7.574	5.68	234.3	0.0	323.8
82.00		1.00	1.07	37.720	41.49	465.10	0.750	0.000	2.00	7.504	5.63	233.5	0.0	320.8
84.00		1.00	1.08	37.942	41.74	462.11	0.750	0.000	2.00	7.434	5.58	232.7	0.0	317.8
86.00		1.00	1.09	38.160	41.98	459.08	0.750	0.000	2.00	7.365	5.52	231.9	0.0	314.8
88.00		1.00	1.09	38.374	42.21	455.99	0.750	0.000	2.00	7.295	5.47	230.9	0.0	311.8

Wind Loading - Shaft

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 23



90.00	1.00	1.10	38.584	42.44	452.85	0.750	0.000	2.00	7.225	5.42	230.0	0.0	308.8
92.00	1.00	1.10	38.791	42.67	449.67	0.750	0.000	2.00	7.156	5.37	229.0	0.0	305.8
92.92 Bot - Section 3	1.00	1.11	38.885	42.77	448.20	0.750	0.000	0.92	3.256	2.44	104.5	0.0	139.2
94.00	1.00	1.11	38.994	42.89	446.44	0.750	0.000	1.08	3.887	2.92	125.1	0.0	302.5
96.00	1.00	1.12	39.195	43.11	443.17	0.750	0.000	2.00	7.123	5.34	230.3	0.0	554.2
98.00	1.00	1.12	39.392	43.33	439.85	0.750	0.000	2.00	7.053	5.29	229.2	0.0	548.7
98.92 Top - Section 2	1.00	1.12	39.481	43.43	438.32	0.750	0.000	0.92	3.210	2.41	104.5	0.0	249.7
100.00	1.00	1.13	39.586	43.54	443.28	0.750	0.000	1.08	3.774	2.83	123.3	0.0	134.8
102.00	1.00	0.99	34.911	38.40	412.11	0.750	0.000	2.00	6.914	5.19	199.1	0.0	246.9
104.00	1.00	1.00	35.106	38.62	409.08	0.750	0.000	2.00	6.844	5.13	198.2	0.0	244.4
106.00	1.00	1.00	35.297	38.83	406.00	0.750	0.000	2.00	6.775	5.08	197.3	0.0	241.9
108.00	1.00	1.01	35.486	39.03	402.88	0.750	0.000	2.00	6.705	5.03	196.3	0.0	239.4
110.00	1.00	1.02	35.673	39.24	399.72	0.750	0.000	2.00	6.636	4.98	195.3	0.0	236.9
112.00	1.00	1.02	35.857	39.44	396.52	0.750	0.000	2.00	6.566	4.92	194.2	0.0	234.4
114.00	1.00	1.03	36.039	39.64	393.29	0.750	0.000	2.00	6.496	4.87	193.2	0.0	231.9
116.00	1.00	1.03	36.218	39.84	390.02	0.750	0.000	2.00	6.427	4.82	192.0	0.0	229.4
118.00	1.00	1.04	36.395	40.03	386.72	0.750	0.000	2.00	6.357	4.77	190.9	0.0	226.9
120.00	1.00	1.04	36.571	40.23	383.38	0.750	0.000	2.00	6.288	4.72	189.7	0.0	224.4
122.00	1.00	1.05	36.744	40.42	380.00	0.750	0.000	2.00	6.218	4.66	188.5	0.0	221.9
124.00	1.00	1.05	36.915	40.61	376.60	0.750	0.000	2.00	6.148	4.61	187.2	0.0	219.4
126.00	1.00	1.06	37.084	40.79	373.16	0.750	0.000	2.00	6.079	4.56	186.0	0.0	216.9
127.00 Bot - Section 4	1.00	1.06	37.168	40.88	371.43	0.750	0.000	1.00	3.013	2.26	92.4	0.0	107.5
128.00	1.00	1.06	37.251	40.98	369.70	0.750	0.000	1.00	3.033	2.27	93.2	0.0	182.8
130.00	1.00	1.07	37.417	41.16	366.20	0.750	0.000	2.00	6.014	4.51	185.6	0.0	362.3
132.00	1.00	1.07	37.580	41.34	362.67	0.750	0.000	2.00	5.944	4.46	184.3	0.0	358.1
132.25 Top - Section 3	1.00	1.07	37.600	41.36	362.23	0.750	0.000	0.25	0.738	0.55	22.9	0.0	44.5
134.00	1.00	1.07	37.742	41.52	363.75	0.750	0.000	1.75	5.137	3.85	159.9	0.0	128.5
136.00	1.00	1.08	37.902	41.69	360.18	0.750	0.000	2.00	5.805	4.35	181.5	0.0	145.2
138.00	1.00	1.08	38.060	41.87	356.57	0.750	0.000	2.00	5.735	4.30	180.1	0.0	143.5
140.00	1.00	1.09	38.217	42.04	352.94	0.750	0.000	2.00	5.666	4.25	178.6	0.0	141.7
142.00	1.00	1.09	38.372	42.21	349.29	0.750	0.000	2.00	5.596	4.20	177.2	0.0	140.0
144.00	1.00	1.10	38.526	42.38	345.61	0.750	0.000	2.00	5.527	4.14	175.7	0.0	138.2
146.00	1.00	1.10	38.678	42.55	341.90	0.750	0.000	2.00	5.457	4.09	174.1	0.0	136.5
147.00 Appurtenance(s)	1.00	1.10	38.754	42.63	340.03	0.750	0.000	1.00	2.702	2.03	86.4	0.0	67.6
148.00	1.00	1.11	38.829	42.71	338.16	0.750	0.000	1.00	2.685	2.01	86.0	0.0	67.1
150.00	1.00	1.11	38.978	42.88	334.41	0.750	0.000	2.00	5.318	3.99	171.0	0.0	133.0
152.00	1.00	1.11	39.126	43.04	330.62	0.750	0.000	2.00	5.248	3.94	169.4	0.0	131.2
154.00	1.00	1.12	39.272	43.20	326.82	0.750	0.000	2.00	5.179	3.88	167.8	0.0	129.5
156.00	1.00	1.12	39.417	43.36	322.99	0.750	0.000	2.00	5.109	3.83	166.1	0.0	127.7
157.00 Appurtenance(s)	1.00	1.12	39.489	43.44	321.07	0.750	0.000	1.00	2.528	1.90	82.4	0.0	63.2
158.00	1.00	1.13	39.561	43.52	319.14	0.750	0.000	1.00	2.511	1.88	82.0	0.0	62.8
160.00	1.00	1.13	39.704	43.67	315.27	0.750	0.000	2.00	4.970	3.73	162.8	0.0	124.2
162.00	1.00	1.13	39.845	43.83	311.37	0.750	0.000	2.00	4.900	3.68	161.1	0.0	122.4
164.00	1.00	1.14	39.985	43.98	307.45	0.750	0.000	2.00	4.830	3.62	159.3	0.0	120.7
166.00	1.00	1.14	40.123	44.14	303.52	0.750	0.000	2.00	4.761	3.57	157.6	0.0	118.9
167.00 Appurtenance(s)	1.00	1.14	40.192	44.21	301.54	0.750	0.000	1.00	2.354	1.77	78.1	0.0	58.8
168.00	1.00	1.15	40.261	44.29	299.56	0.750	0.000	1.00	2.337	1.75	77.6	0.0	58.4
170.00	1.00	1.15	40.397	44.44	295.58	0.750	0.000	2.00	4.622	3.47	154.0	0.0	115.4
172.00	1.00	1.15	40.532	44.59	291.58	0.750	0.000	2.00	4.552	3.41	152.2	0.0	113.7
174.00	1.00	1.16	40.667	44.73	287.56	0.750	0.000	2.00	4.482	3.36	150.4	0.0	111.9
176.00	1.00	1.16	40.800	44.88	283.52	0.750	0.000	2.00	4.413	3.31	148.5	0.0	110.2
177.00 Appurtenance(s)	1.00	1.16	40.866	44.95	281.49	0.750	0.000	1.00	2.180	1.64	73.5	0.0	54.4
178.00	1.00	1.17	40.931	45.02	279.46	0.750	0.000	1.00	2.163	1.62	73.0	0.0	54.0
180.00	1.00	1.17	41.062	45.17	275.39	0.750	0.000	2.00	4.274	3.21	144.8	0.0	106.7

Totals: 180.00 18,538.8 29,109.2

Discrete Appurtenance Forces

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



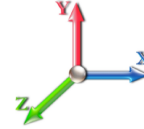
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Load Case: 0.9D + 1.0W 121 mph Wind

Iterations 29

Dead Load Factor 0.90

Wind Load Factor 1.00



No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orient Factor x Ka	Ka	Total CaAa (sf)	Dead Load (lb)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)
1	177.00	Ericsson 4449 B71 + B85	3	40.866	44.952	0.50	0.75	2.97	197.64	0.000	0.000	133.50	0.00	0.00
2	177.00	782 11056	3	40.866	44.952	0.50	0.75	0.42	4.86	0.000	0.000	18.97	0.00	0.00
3	177.00	RFS	3	40.866	44.952	0.52	0.75	31.88	345.60	0.000	0.000	1432.99	0.00	0.00
4	177.00	Ericsson KRY 112 489/2	3	40.866	44.952	0.50	0.75	0.98	41.58	0.000	0.000	44.05	0.00	0.00
5	177.00	Mount pipes	1	40.866	44.952	0.75	0.75	10.99	531.79	0.000	0.000	493.91	0.00	0.00
6	177.00	Commscope VV-65B-R1	3	40.866	44.952	0.55	0.75	13.15	79.65	0.000	0.000	591.28	0.00	0.00
7	177.00	Ericsson 4460 B25 + B66	3	40.866	44.952	0.50	0.75	3.23	280.80	0.000	0.000	145.02	0.00	0.00
8	177.00	RMQP-4096-HK Plat. +	1	40.866	44.952	0.67	0.67	23.14	1750.50	0.000	0.000	1040.28	0.00	0.00
9	177.00	Ericsson AIR6419 B41	3	40.866	44.952	0.55	0.75	10.35	224.91	0.000	0.000	465.35	0.00	0.00
10	167.00	Samsung VZS01	3	40.192	44.211	0.52	0.75	7.40	235.17	0.000	0.000	327.28	0.00	0.00
11	167.00	Commscope	6	40.192	44.211	0.62	0.75	30.07	273.83	0.000	0.000	1329.30	0.00	0.00
12	167.00	Raycap	2	40.192	44.211	0.64	0.75	3.21	75.60	0.000	0.000	142.05	0.00	0.00
13	167.00	Kaelus BSF0020F3V1-1	2	40.192	44.211	0.61	0.75	1.18	31.68	0.000	0.000	52.20	0.00	0.00
14	167.00	Antel	6	40.192	44.211	0.55	0.75	17.98	64.80	0.000	0.000	795.01	0.00	0.00
15	167.00	Samsung B5/B13	3	40.192	44.211	0.50	0.75	2.83	227.88	0.000	0.000	125.30	0.00	0.00
16	167.00	Samsung B2/B66A	3	40.192	44.211	0.50	0.75	2.83	189.81	0.000	0.000	125.30	0.00	0.00
17	167.00	Platform w/ Hand Rails	1	40.192	44.211	1.00	1.00	54.20	2290.63	0.000	0.000	2396.26	0.00	0.00
18	157.00	Mount Pipes	1	39.489	43.438	0.75	0.75	14.03	531.79	0.000	0.000	609.55	0.00	0.00
19	157.00	DMP65R-BU8DA	1	39.489	43.438	0.55	0.75	9.74	86.13	0.000	0.000	423.25	0.00	0.00
20	157.00	Platform w/ Handrail	1	39.489	43.438	0.67	0.67	23.14	1750.50	0.000	0.000	1005.24	0.00	0.00
21	157.00	7770	3	39.489	43.438	0.55	0.75	9.03	94.50	0.000	0.000	392.41	0.00	0.00
22	157.00	DMP65R-BU4DA	2	39.489	43.438	0.53	0.75	8.54	122.22	0.000	0.000	371.14	0.00	0.00
23	157.00	Raycap DC6-48-60-18-8F	1	39.489	43.438	0.68	0.75	0.62	28.62	0.000	0.000	26.98	0.00	0.00
24	157.00	HPA65R-BU8A	1	39.489	43.438	0.65	0.75	7.26	48.60	0.000	0.000	315.37	0.00	0.00
25	157.00	4449 B5/B12	3	39.489	43.438	0.50	0.75	2.97	191.70	0.000	0.000	129.00	0.00	0.00
26	157.00	8843 B2/B66A	3	39.489	43.438	0.50	0.75	2.47	194.40	0.000	0.000	107.39	0.00	0.00
27	157.00	HPA65R-BU4A	2	39.489	43.438	0.64	0.75	6.35	51.66	0.000	0.000	276.00	0.00	0.00
28	147.00	MC-PK8-DSH	1	38.754	42.629	0.67	0.67	22.93	1562.40	0.000	0.000	977.66	0.00	0.00
29	147.00	JMA Wireless	3	38.754	42.629	0.55	0.75	20.80	174.15	0.000	0.000	886.51	0.00	0.00
30	147.00	Fujitsu TA08025-B604	3	38.754	42.629	0.50	0.75	2.95	172.53	0.000	0.000	125.96	0.00	0.00
31	147.00	Fujitsu TA08025-B605	3	38.754	42.629	0.50	0.75	2.95	202.50	0.000	0.000	125.96	0.00	0.00
32	147.00	Raycap	1	38.754	42.629	0.75	0.75	1.51	19.71	0.000	0.000	64.26	0.00	0.00
33	72.00	1 Lucent KS-24019	1	36.546	40.201	1.00	1.00	1.13	3.60	0.000	0.000	45.43	0.00	0.00
34	72.00	Standoff	1	36.546	40.201	1.00	1.00	2.10	24.30	0.000	0.000	84.42	0.00	0.00

Totals: 12,106.04

15,624.56

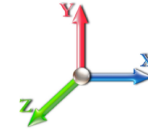
Total Applied Force Summary

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 25



Load Case: 0.9D + 1.0W 121 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.00



Iterations 29

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
2.00		228.22	582.80	0.00	0.00
4.00		226.65	579.29	0.00	0.00
6.00		225.09	575.79	0.00	0.00
8.00		223.53	572.28	0.00	0.00
10.00		221.96	568.77	0.00	0.00
12.00		220.40	565.27	0.00	0.00
14.00		218.84	561.76	0.00	0.00
16.00		218.74	558.26	0.00	0.00
18.00		220.18	554.75	0.00	0.00
20.00		221.31	551.24	0.00	0.00
22.00		222.20	547.74	0.00	0.00
24.00		222.89	544.23	0.00	0.00
26.00		223.39	540.73	0.00	0.00
28.00		223.73	537.22	0.00	0.00
30.00		224.01	533.71	0.00	0.00
32.00		225.81	530.21	0.00	0.00
34.00		227.40	526.70	0.00	0.00
36.00		228.79	523.20	0.00	0.00
38.00		230.01	519.69	0.00	0.00
40.00		231.06	516.18	0.00	0.00
42.00		231.97	512.68	0.00	0.00
44.00		232.74	509.17	0.00	0.00
45.92		223.59	484.67	0.00	0.00
46.00		9.83	36.56	0.00	0.00
48.00		237.37	873.99	0.00	0.00
50.00		237.82	867.48	0.00	0.00
52.00		238.15	860.98	0.00	0.00
53.00		118.90	428.05	0.00	0.00
54.00		118.95	218.45	0.00	0.00
56.00		238.52	434.64	0.00	0.00
58.00		238.57	431.64	0.00	0.00
60.00		238.53	428.64	0.00	0.00
62.00		238.42	425.64	0.00	0.00
64.00		238.22	422.64	0.00	0.00
66.00		237.95	419.64	0.00	0.00
68.00		237.62	416.63	0.00	0.00
70.00		237.21	413.63	0.00	0.00
72.00	(2) attachments	366.59	438.53	0.00	0.00
74.00		236.21	407.34	0.00	0.00
76.00		235.62	404.34	0.00	0.00
78.00		234.97	401.34	0.00	0.00
80.00		234.27	398.34	0.00	0.00
82.00		233.51	395.33	0.00	0.00
84.00		232.71	392.33	0.00	0.00
86.00		231.85	389.33	0.00	0.00
88.00		230.95	386.33	0.00	0.00

Total Applied Force Summary

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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90.00	230.00	383.33	0.00	0.00
92.00	229.00	380.33	0.00	0.00
92.92	104.47	173.31	0.00	0.00
94.00	125.06	342.87	0.00	0.00
96.00	230.33	628.75	0.00	0.00
98.00	229.22	623.25	0.00	0.00
98.92	104.54	283.81	0.00	0.00
100.00	123.26	175.16	0.00	0.00
102.00	199.14	321.45	0.00	0.00
104.00	198.23	318.94	0.00	0.00
106.00	197.29	316.44	0.00	0.00
108.00	196.30	313.93	0.00	0.00
110.00	195.29	311.43	0.00	0.00
112.00	194.24	308.92	0.00	0.00
114.00	193.15	306.42	0.00	0.00
116.00	192.03	303.91	0.00	0.00
118.00	190.88	301.41	0.00	0.00
120.00	189.70	298.90	0.00	0.00
122.00	188.49	296.39	0.00	0.00
124.00	187.25	293.89	0.00	0.00
126.00	185.97	291.38	0.00	0.00
127.00	92.40	144.75	0.00	0.00
128.00	93.21	220.03	0.00	0.00
130.00	185.64	436.87	0.00	0.00
132.00	184.29	432.61	0.00	0.00
132.25	22.90	53.78	0.00	0.00
134.00	159.94	193.74	0.00	0.00
136.00	181.52	219.77	0.00	0.00
138.00	180.09	218.02	0.00	0.00
140.00	178.64	216.26	0.00	0.00
142.00	177.16	214.51	0.00	0.00
144.00	175.66	212.76	0.00	0.00
146.00	174.13	211.01	0.00	0.00
147.00	(11) attachments	2266.75	2236.14	0.00
148.00		86.01	102.77	0.00
150.00		171.00	204.22	0.00
152.00		169.40	202.47	0.00
154.00		167.78	200.72	0.00
156.00		166.14	198.96	0.00
157.00	(18) attachments	3738.69	3198.95	0.00
158.00		81.95	86.38	0.00
160.00		162.78	171.45	0.00
162.00		161.07	169.69	0.00
164.00		159.34	167.94	0.00
166.00		157.59	166.19	0.00
167.00	(26) attachments	5370.76	3471.84	0.00
168.00		77.62	68.92	0.00
170.00		154.03	136.52	0.00
172.00		152.21	134.77	0.00
174.00		150.38	133.01	0.00
176.00		148.53	131.26	0.00
177.00	(23) attachments	4438.85	3522.31	0.00
178.00		73.04	55.18	0.00
180.00		144.77	109.04	0.00
Totals:		34,163.35	47,405.21	0.00

Linear Appurtenance Segment Forces (Factored)

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Load Case: 0.9D + 1.0W 121 mph Wind	Iterations 29
Dead Load Factor 0.90	
Wind Load Factor 1.00	

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
2.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.017	0.000	27.224	0.00	0.49
2.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.017	0.000	27.224	0.00	1.87
4.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.017	0.000	27.224	0.00	0.49
4.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.017	0.000	27.224	0.00	1.87
6.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.017	0.000	27.224	0.00	0.49
6.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.017	0.000	27.224	0.00	1.87
8.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.017	0.000	27.224	0.00	0.49
8.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.017	0.000	27.224	0.00	1.87
10.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.017	0.000	27.224	0.00	0.49
10.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.017	0.000	27.224	0.00	1.87
12.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.017	0.000	27.224	0.00	0.49
12.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.017	0.000	27.224	0.00	1.87
14.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.017	0.000	27.224	0.00	0.49
14.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.017	0.000	27.224	0.00	1.87
16.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.017	0.000	27.408	0.00	0.49
16.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.017	0.000	27.408	0.00	1.87
18.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.018	0.000	27.788	0.00	0.49
18.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.018	0.000	27.788	0.00	1.87
20.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.018	0.000	28.135	0.00	0.49
20.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.018	0.000	28.135	0.00	1.87
22.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.018	0.000	28.456	0.00	0.49
22.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.018	0.000	28.456	0.00	1.87
24.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.018	0.000	28.755	0.00	0.49
24.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.018	0.000	28.755	0.00	1.87
26.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.018	0.000	29.035	0.00	0.49
26.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.018	0.000	29.035	0.00	1.87
28.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.018	0.000	29.298	0.00	0.49
28.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.018	0.000	29.298	0.00	1.87
30.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.018	0.000	29.557	0.00	0.49
30.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.018	0.000	29.557	0.00	1.87
32.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.018	0.000	30.022	0.00	0.49
32.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.018	0.000	30.022	0.00	1.87
34.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.019	0.000	30.466	0.00	0.49
34.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.019	0.000	30.466	0.00	1.87
36.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.019	0.000	30.890	0.00	0.49
36.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.019	0.000	30.890	0.00	1.87
38.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.019	0.000	31.297	0.00	0.49
38.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.019	0.000	31.297	0.00	1.87
40.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.019	0.000	31.689	0.00	0.49
40.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.019	0.000	31.689	0.00	1.87
42.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.019	0.000	32.065	0.00	0.49
42.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.019	0.000	32.065	0.00	1.87
44.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.019	0.000	32.429	0.00	0.49
44.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.019	0.000	32.429	0.00	1.87
45.92	Safety Cable	Yes	1.92	0.000	0.38	0.06	0.00	0.020	0.000	32.766	0.00	0.47
45.92	Step bolts (ladder)	Yes	1.92	0.000	0.63	0.10	0.00	0.020	0.000	32.766	0.00	1.79
46.00	Safety Cable	Yes	0.08	0.000	0.38	0.00	0.00	0.020	0.000	32.780	0.00	0.02

Linear Appurtenance Segment Forces (Factored)

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Load Case: 0.9D + 1.0W 121 mph Wind	Iterations 29
Dead Load Factor 0.90	
Wind Load Factor 1.00	

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
46.00	Step bolts (ladder)	Yes	0.08	0.000	0.63	0.00	0.00	0.020	0.000	32.780	0.00	0.08
48.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.020	0.000	33.120	0.00	0.49
48.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.020	0.000	33.120	0.00	1.87
50.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.020	0.000	33.450	0.00	0.49
50.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.020	0.000	33.450	0.00	1.87
52.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.020	0.000	33.769	0.00	0.49
52.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.020	0.000	33.769	0.00	1.87
53.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.020	0.000	33.926	0.00	0.25
53.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.020	0.000	33.926	0.00	0.94
54.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.020	0.000	34.080	0.00	0.25
54.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.020	0.000	34.080	0.00	0.94
56.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.020	0.000	34.382	0.00	0.49
56.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.020	0.000	34.382	0.00	1.87
58.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.020	0.000	34.676	0.00	0.49
58.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.020	0.000	34.676	0.00	1.87
60.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.020	0.000	34.963	0.00	0.49
60.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.020	0.000	34.963	0.00	1.87
62.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.021	0.000	35.242	0.00	0.49
62.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.021	0.000	35.242	0.00	1.87
64.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.021	0.000	35.515	0.00	0.49
64.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.021	0.000	35.515	0.00	1.87
66.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.021	0.000	35.781	0.00	0.49
66.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.021	0.000	35.781	0.00	1.87
68.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.021	0.000	36.042	0.00	0.49
68.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.021	0.000	36.042	0.00	1.87
70.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.021	0.000	36.297	0.00	0.49
70.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.021	0.000	36.297	0.00	1.87
72.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.021	0.000	36.546	0.00	0.49
72.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.021	0.000	36.546	0.00	1.87
74.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.022	0.000	36.790	0.00	0.49
74.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.022	0.000	36.790	0.00	1.87
76.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.022	0.000	37.029	0.00	0.49
76.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.022	0.000	37.029	0.00	1.87
78.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.022	0.000	37.264	0.00	0.49
78.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.022	0.000	37.264	0.00	1.87
80.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.022	0.000	37.494	0.00	0.49
80.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.022	0.000	37.494	0.00	1.87
82.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.022	0.000	37.720	0.00	0.49
82.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.022	0.000	37.720	0.00	1.87
84.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.023	0.000	37.942	0.00	0.49
84.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.023	0.000	37.942	0.00	1.87
86.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.023	0.000	38.160	0.00	0.49
86.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.023	0.000	38.160	0.00	1.87
88.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.023	0.000	38.374	0.00	0.49
88.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.023	0.000	38.374	0.00	1.87
90.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.023	0.000	38.584	0.00	0.49
90.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.023	0.000	38.584	0.00	1.87

Linear Appurtenance Segment Forces (Factored)

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

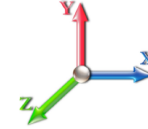


Load Case: 0.9D + 1.0W 121 mph Wind

Iterations 29

Dead Load Factor 0.90

Wind Load Factor 1.00



Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
92.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.024	0.000	38.791	0.00	0.49
92.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.024	0.000	38.791	0.00	1.87
92.92	Safety Cable	Yes	0.92	0.000	0.38	0.03	0.00	0.024	0.000	38.885	0.00	0.23
92.92	Step bolts (ladder)	Yes	0.92	0.000	0.63	0.05	0.00	0.024	0.000	38.885	0.00	0.86
94.00	Safety Cable	Yes	1.08	0.000	0.38	0.03	0.00	0.024	0.000	38.994	0.00	0.27
94.00	Step bolts (ladder)	Yes	1.08	0.000	0.63	0.06	0.00	0.024	0.000	38.994	0.00	1.01
96.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.024	0.000	39.195	0.00	0.49
96.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.024	0.000	39.195	0.00	1.87
98.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.024	0.000	39.392	0.00	0.49
98.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.024	0.000	39.392	0.00	1.87
98.92	Safety Cable	Yes	0.92	0.000	0.38	0.03	0.00	0.024	0.000	39.481	0.00	0.23
98.92	Step bolts (ladder)	Yes	0.92	0.000	0.63	0.05	0.00	0.024	0.000	39.481	0.00	0.86
100.00	Safety Cable	Yes	1.08	0.000	0.38	0.03	0.00	0.024	0.000	39.586	0.00	0.27
100.00	Step bolts (ladder)	Yes	1.08	0.000	0.63	0.06	0.00	0.024	0.000	39.586	0.00	1.01
102.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.024	0.000	34.911	0.00	0.49
102.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.024	0.000	34.911	0.00	1.87
104.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.025	0.000	35.106	0.00	0.49
104.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.025	0.000	35.106	0.00	1.87
106.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.025	0.000	35.297	0.00	0.49
106.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.025	0.000	35.297	0.00	1.87
108.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.025	0.000	35.486	0.00	0.49
108.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.025	0.000	35.486	0.00	1.87
110.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.025	0.000	35.673	0.00	0.49
110.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.025	0.000	35.673	0.00	1.87
112.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.026	0.000	35.857	0.00	0.49
112.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.026	0.000	35.857	0.00	1.87
114.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.026	0.000	36.039	0.00	0.49
114.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.026	0.000	36.039	0.00	1.87
116.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.026	0.000	36.218	0.00	0.49
116.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.026	0.000	36.218	0.00	1.87
118.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.026	0.000	36.395	0.00	0.49
118.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.026	0.000	36.395	0.00	1.87
120.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.027	0.000	36.571	0.00	0.49
120.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.027	0.000	36.571	0.00	1.87
122.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.027	0.000	36.744	0.00	0.49
122.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.027	0.000	36.744	0.00	1.87
124.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.027	0.000	36.915	0.00	0.49
124.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.027	0.000	36.915	0.00	1.87
126.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.028	0.000	37.084	0.00	0.49
126.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.028	0.000	37.084	0.00	1.87
127.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.028	0.000	37.168	0.00	0.25
127.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.028	0.000	37.168	0.00	0.94
128.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.028	0.000	37.251	0.00	0.25
128.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.028	0.000	37.251	0.00	0.94
130.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.028	0.000	37.417	0.00	0.49
130.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.028	0.000	37.417	0.00	1.87
132.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.029	0.000	37.580	0.00	0.49

Linear Appurtenance Segment Forces (Factored)

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Load Case: 0.9D + 1.0W 121 mph Wind	Iterations 29
Dead Load Factor 0.90	
Wind Load Factor 1.00	

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
132.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.029	0.000	37.580	0.00	1.87
132.25	Safety Cable	Yes	0.25	0.000	0.38	0.01	0.00	0.029	0.000	37.600	0.00	0.06
132.25	Step bolts (ladder)	Yes	0.25	0.000	0.63	0.01	0.00	0.029	0.000	37.600	0.00	0.23
134.00	Safety Cable	Yes	1.75	0.000	0.38	0.06	0.00	0.029	0.000	37.742	0.00	0.43
134.00	Step bolts (ladder)	Yes	1.75	0.000	0.63	0.09	0.00	0.029	0.000	37.742	0.00	1.64
136.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.029	0.000	37.902	0.00	0.49
136.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.029	0.000	37.902	0.00	1.87
138.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.029	0.000	38.060	0.00	0.49
138.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.029	0.000	38.060	0.00	1.87
140.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.030	0.000	38.217	0.00	0.49
140.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.030	0.000	38.217	0.00	1.87
142.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.030	0.000	38.372	0.00	0.49
142.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.030	0.000	38.372	0.00	1.87
144.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.030	0.000	38.526	0.00	0.49
144.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.030	0.000	38.526	0.00	1.87
146.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.031	0.000	38.678	0.00	0.49
146.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.031	0.000	38.678	0.00	1.87
147.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.031	0.000	38.754	0.00	0.25
147.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.031	0.000	38.754	0.00	0.94
148.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.031	0.000	38.829	0.00	0.25
148.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.031	0.000	38.829	0.00	0.94
150.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.032	0.000	38.978	0.00	0.49
150.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.032	0.000	38.978	0.00	1.87
152.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.032	0.000	39.126	0.00	0.49
152.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.032	0.000	39.126	0.00	1.87
154.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.033	0.000	39.272	0.00	0.49
154.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.033	0.000	39.272	0.00	1.87
156.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.033	0.000	39.417	0.00	0.49
156.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.033	0.000	39.417	0.00	1.87
157.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.033	0.000	39.489	0.00	0.25
157.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.033	0.000	39.489	0.00	0.94
158.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.034	0.000	39.561	0.00	0.25
158.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.034	0.000	39.561	0.00	0.94
160.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.034	0.000	39.704	0.00	0.49
160.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.034	0.000	39.704	0.00	1.87
162.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.034	0.000	39.845	0.00	0.49
162.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.034	0.000	39.845	0.00	1.87
164.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.035	0.000	39.985	0.00	0.49
164.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.035	0.000	39.985	0.00	1.87
166.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.035	0.000	40.123	0.00	0.49
166.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.035	0.000	40.123	0.00	1.87
167.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.036	0.000	40.192	0.00	0.25
167.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.036	0.000	40.192	0.00	0.94
168.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.036	0.000	40.261	0.00	0.25
168.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.036	0.000	40.261	0.00	0.94
170.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.036	0.000	40.397	0.00	0.49
170.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.036	0.000	40.397	0.00	1.87

Linear Appurtenance Segment Forces (Factored)

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 0.9D + 1.0W 121 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.00



Iterations 29

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
172.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.037	0.000	40.532	0.00	0.49
172.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.037	0.000	40.532	0.00	1.87
174.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.038	0.000	40.667	0.00	0.49
174.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.038	0.000	40.667	0.00	1.87
176.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.038	0.000	40.800	0.00	0.49
176.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.038	0.000	40.800	0.00	1.87
177.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.039	0.000	40.866	0.00	0.25
177.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.039	0.000	40.866	0.00	0.94
178.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.039	0.000	40.931	0.00	0.25
178.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.039	0.000	40.931	0.00	0.94
180.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.039	0.000	41.062	0.00	0.49
180.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.039	0.000	41.062	0.00	1.87
Totals:											0.0	212.7

Calculated Forces

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
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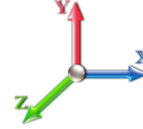


Load Case: 0.9D + 1.0W 121 mph Wind

Iterations 29

Dead Load Factor 0.90

Wind Load Factor 1.00



Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-47.38	-34.19	0.00	-4306.4	0.00	4306.40	5508.12	1460.53	7226.63	6725.55	0.00	0.000	0.000	0.649
2.00	-46.76	-34.01	0.00	-4238.0	0.00	4238.03	5485.89	1450.49	7127.56	6652.00	0.01	-0.065	0.000	0.646
4.00	-46.15	-33.84	0.00	-4170.0	0.00	4170.00	5463.45	1440.44	7029.17	6578.56	0.06	-0.131	0.000	0.643
6.00	-45.53	-33.66	0.00	-4102.3	0.00	4102.33	5440.79	1430.40	6931.47	6505.25	0.13	-0.196	0.000	0.640
8.00	-44.92	-33.49	0.00	-4035.0	0.00	4035.00	5417.91	1420.35	6834.46	6432.06	0.22	-0.263	0.000	0.636
10.00	-44.32	-33.32	0.00	-3968.0	0.00	3968.02	5394.81	1410.30	6738.12	6359.01	0.35	-0.329	0.000	0.633
12.00	-43.71	-33.14	0.00	-3901.3	0.00	3901.39	5371.50	1400.26	6642.47	6286.09	0.50	-0.396	0.000	0.629
14.00	-43.11	-32.97	0.00	-3835.1	0.00	3835.10	5347.97	1390.21	6547.51	6213.31	0.68	-0.463	0.000	0.626
16.00	-42.52	-32.80	0.00	-3769.1	0.00	3769.16	5324.23	1380.17	6453.22	6140.69	0.89	-0.530	0.000	0.622
18.00	-41.93	-32.62	0.00	-3703.5	0.00	3703.56	5300.27	1370.12	6359.62	6068.21	1.12	-0.597	0.000	0.619
20.00	-41.34	-32.44	0.00	-3638.3	0.00	3638.32	5276.09	1360.08	6266.71	5995.90	1.39	-0.665	0.000	0.615
22.00	-40.76	-32.26	0.00	-3573.4	0.00	3573.43	5251.69	1350.03	6174.48	5923.74	1.68	-0.733	0.000	0.612
24.00	-40.18	-32.08	0.00	-3508.9	0.00	3508.91	5227.08	1339.98	6082.93	5851.76	2.01	-0.802	0.000	0.608
26.00	-39.60	-31.90	0.00	-3444.7	0.00	3444.75	5202.25	1329.94	5992.07	5779.96	2.36	-0.870	0.000	0.604
28.00	-39.03	-31.71	0.00	-3380.9	0.00	3380.95	5177.20	1319.89	5901.89	5708.33	2.74	-0.939	0.000	0.600
30.00	-38.46	-31.53	0.00	-3317.5	0.00	3317.53	5151.94	1309.85	5812.39	5636.89	3.15	-1.009	0.000	0.597
32.00	-37.90	-31.34	0.00	-3254.4	0.00	3254.48	5126.46	1299.80	5723.58	5565.65	3.58	-1.078	0.000	0.593
34.00	-37.34	-31.14	0.00	-3191.8	0.00	3191.81	5100.76	1289.76	5635.45	5494.60	4.05	-1.148	0.000	0.589
36.00	-36.78	-30.95	0.00	-3129.5	0.00	3129.52	5074.84	1279.71	5548.01	5423.75	4.55	-1.218	0.000	0.585
38.00	-36.23	-30.75	0.00	-3067.6	0.00	3067.62	5048.71	1269.67	5461.24	5353.12	5.07	-1.288	0.000	0.581
40.00	-35.68	-30.55	0.00	-3006.1	0.00	3006.11	5022.37	1259.62	5375.17	5282.69	5.63	-1.359	0.000	0.577
42.00	-35.14	-30.35	0.00	-2945.0	0.00	2945.01	4995.80	1249.57	5289.77	5212.49	6.21	-1.429	0.000	0.573
44.00	-34.60	-30.15	0.00	-2884.3	0.00	2884.30	4969.02	1239.53	5205.06	5142.51	6.83	-1.500	0.000	0.568
45.92	-34.10	-29.93	0.00	-2826.5	0.00	2826.51	4943.15	1229.90	5124.53	5075.67	7.44	-1.569	0.000	0.564
46.00	-34.04	-29.95	0.00	-2824.0	0.00	2824.02	4942.02	1229.48	5121.04	5072.76	7.47	-1.572	0.000	0.564
48.00	-33.14	-29.73	0.00	-2764.1	0.00	2764.13	4914.80	1219.44	5037.70	5003.25	8.14	-1.643	0.000	0.560
50.00	-32.24	-29.50	0.00	-2704.6	0.00	2704.68	4887.37	1209.39	4955.04	4933.98	8.85	-1.715	0.000	0.555
52.00	-31.36	-29.27	0.00	-2645.6	0.00	2645.67	4859.72	1199.35	4873.06	4864.96	9.58	-1.787	0.000	0.551
53.00	-30.92	-29.16	0.00	-2616.4	0.00	2616.41	4967.90	1039.60	4276.54	4027.08	9.96	-1.823	0.000	0.658
54.00	-30.68	-29.06	0.00	-2587.2	0.00	2587.25	3958.02	1035.30	4241.23	4000.31	10.35	-1.859	0.000	0.655
56.00	-30.21	-28.85	0.00	-2529.1	0.00	2529.13	3938.08	1026.70	4171.06	3946.85	11.14	-1.940	0.000	0.649
58.00	-29.75	-28.64	0.00	-2471.4	0.00	2471.43	3917.93	1018.10	4101.47	3893.50	11.97	-2.020	0.000	0.643
60.00	-29.29	-28.43	0.00	-2414.1	0.00	2414.15	3897.56	1009.50	4032.47	3840.29	12.84	-2.101	0.000	0.637
62.00	-28.83	-28.21	0.00	-2357.3	0.00	2357.30	3876.97	1000.90	3964.05	3787.21	13.73	-2.181	0.000	0.631
64.00	-28.38	-28.00	0.00	-2300.8	0.00	2300.88	3856.17	992.30	3896.21	3734.27	14.66	-2.262	0.000	0.624
66.00	-27.93	-27.78	0.00	-2244.8	0.00	2244.88	3835.15	983.70	3828.97	3681.47	15.63	-2.343	0.000	0.618
68.00	-27.48	-27.57	0.00	-2189.3	0.00	2189.31	3813.91	975.10	3762.30	3628.82	16.63	-2.425	0.000	0.611
70.00	-27.04	-27.35	0.00	-2134.1	0.00	2134.18	3792.46	966.50	3696.23	3576.32	17.66	-2.506	0.000	0.605
72.00	-26.58	-27.00	0.00	-2079.4	0.00	2079.48	3770.79	957.90	3630.74	3523.99	18.73	-2.587	0.000	0.598
74.00	-26.15	-26.79	0.00	-2025.4	0.00	2025.47	3748.90	949.30	3565.83	3471.82	19.83	-2.669	0.000	0.591
76.00	-25.72	-26.57	0.00	-1971.9	0.00	1971.90	3726.79	940.70	3501.51	3419.82	20.97	-2.750	0.000	0.584
78.00	-25.29	-26.35	0.00	-1918.7	0.00	1918.77	3704.47	932.10	3437.77	3368.00	22.14	-2.831	0.000	0.577
80.00	-24.87	-26.13	0.00	-1866.0	0.00	1866.07	3681.93	923.50	3374.62	3316.36	23.34	-2.913	0.000	0.570
82.00	-24.45	-25.91	0.00	-1813.8	0.00	1813.81	3659.18	914.89	3312.06	3264.91	24.58	-2.994	0.000	0.563
84.00	-24.03	-25.69	0.00	-1761.9	0.00	1761.98	3636.21	906.29	3250.08	3213.65	25.85	-3.075	0.000	0.556
86.00	-23.62	-25.47	0.00	-1710.6	0.00	1710.60	3613.02	897.69	3188.69	3162.60	27.15	-3.157	0.000	0.548
88.00	-23.21	-25.26	0.00	-1659.6	0.00	1659.65	3589.61	889.09	3127.88	3111.74	28.49	-3.238	0.000	0.541
90.00	-22.80	-25.04	0.00	-1609.1	0.00	1609.14	3565.99	880.49	3067.65	3061.10	29.87	-3.319	0.000	0.533

Calculated Forces

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
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92.00	-22.41	-24.81	0.00	-1559.0	0.00	1559.07	3542.15	871.89	3008.02	3010.67	31.27	-3.400	0.000	0.525
92.92	-22.23	-24.71	0.00	-1536.3	0.00	1536.33	3531.15	867.95	2980.88	2987.63	31.93	-3.437	0.000	0.521
94.00	-21.87	-24.59	0.00	-1509.5	0.00	1509.56	3518.09	863.29	2948.96	2960.46	32.71	-3.481	0.000	0.517
96.00	-21.22	-24.35	0.00	-1460.3	0.00	1460.39	3493.82	854.69	2890.50	2910.48	34.19	-3.561	0.000	0.509
98.00	-20.59	-24.10	0.00	-1411.6	0.00	1411.69	3469.33	846.09	2832.62	2860.73	35.70	-3.642	0.000	0.500
98.92	-20.29	-23.99	0.00	-1389.6	0.00	1389.60	2742.83	714.97	2423.35	2293.46	36.40	-3.678	0.000	0.614
100.00	-20.10	-23.88	0.00	-1363.6	0.00	1363.60	2733.73	711.08	2397.06	2273.32	37.24	-3.722	0.000	0.608
102.00	-19.75	-23.69	0.00	-1315.8	0.00	1315.84	2716.76	703.90	2348.90	2236.23	38.82	-3.812	0.000	0.597
104.00	-19.41	-23.51	0.00	-1268.4	0.00	1268.45	2699.58	696.72	2301.24	2199.25	40.43	-3.902	0.000	0.585
106.00	-19.07	-23.32	0.00	-1221.4	0.00	1221.44	2682.18	689.54	2254.06	2162.39	42.09	-3.992	0.000	0.573
108.00	-18.74	-23.13	0.00	-1174.8	0.00	1174.81	2664.56	682.36	2207.37	2125.64	43.78	-4.080	0.000	0.561
110.00	-18.41	-22.94	0.00	-1128.5	0.00	1128.56	2646.73	675.19	2161.17	2089.03	45.50	-4.168	0.000	0.548
112.00	-18.08	-22.75	0.00	-1082.6	0.00	1082.68	2628.68	668.01	2115.46	2052.54	47.27	-4.256	0.000	0.536
114.00	-17.75	-22.56	0.00	-1037.1	0.00	1037.18	2610.42	660.83	2070.24	2016.20	49.07	-4.342	0.000	0.522
116.00	-17.43	-22.37	0.00	-992.06	0.00	992.06	2591.93	653.65	2025.50	1980.00	50.90	-4.427	0.000	0.509
118.00	-17.12	-22.18	0.00	-947.32	0.00	947.32	2573.23	646.47	1981.26	1943.94	52.77	-4.511	0.000	0.495
120.00	-16.80	-21.99	0.00	-902.95	0.00	902.95	2554.31	639.29	1937.50	1908.04	54.68	-4.595	0.000	0.481
122.00	-16.49	-21.81	0.00	-858.97	0.00	858.97	2535.18	632.11	1894.23	1872.30	56.62	-4.676	0.000	0.466
124.00	-16.18	-21.62	0.00	-815.35	0.00	815.35	2515.83	624.93	1851.45	1836.73	58.60	-4.757	0.000	0.452
126.00	-15.89	-21.42	0.00	-772.12	0.00	772.12	2496.26	617.76	1809.16	1801.33	60.60	-4.836	0.000	0.436
127.00	-15.73	-21.33	0.00	-750.70	0.00	750.70	2486.40	614.17	1788.19	1783.69	61.62	-4.875	0.000	0.428
128.00	-15.50	-21.23	0.00	-729.36	0.00	729.36	2476.48	610.58	1767.35	1766.10	62.64	-4.914	0.000	0.420
130.00	-15.06	-21.03	0.00	-686.90	0.00	686.90	2456.47	603.40	1726.04	1731.06	64.72	-4.989	0.000	0.404
132.00	-14.63	-20.82	0.00	-644.83	0.00	644.83	2436.26	596.22	1685.21	1696.20	66.82	-5.063	0.000	0.387
132.25	-14.56	-20.80	0.00	-639.63	0.00	639.63	1490.15	423.06	1212.67	1055.13	67.09	-5.072	0.000	0.618
134.00	-14.35	-20.65	0.00	-603.22	0.00	603.22	1482.58	418.66	1187.61	1038.80	68.96	-5.135	0.000	0.593
136.00	-14.12	-20.47	0.00	-561.93	0.00	561.93	1473.72	413.64	1159.28	1020.12	71.12	-5.229	0.000	0.563
138.00	-13.89	-20.29	0.00	-521.00	0.00	521.00	1464.65	408.62	1131.30	1001.45	73.33	-5.320	0.000	0.532
140.00	-13.66	-20.11	0.00	-480.42	0.00	480.42	1455.36	403.59	1103.66	982.79	75.58	-5.407	0.000	0.501
142.00	-13.43	-19.94	0.00	-440.19	0.00	440.19	1445.85	398.57	1076.36	964.14	77.86	-5.490	0.000	0.468
144.00	-13.21	-19.76	0.00	-400.32	0.00	400.32	1436.13	393.55	1049.40	945.50	80.17	-5.569	0.000	0.435
146.00	-13.00	-19.58	0.00	-360.81	0.00	360.81	1426.18	388.53	1022.78	926.89	82.52	-5.643	0.000	0.401
147.00	-10.99	-17.11	0.00	-341.23	0.00	341.23	1421.13	386.01	1009.60	917.60	83.70	-5.679	0.000	0.382
148.00	-10.88	-17.02	0.00	-324.13	0.00	324.13	1416.03	383.50	996.51	908.31	84.89	-5.713	0.000	0.366
150.00	-10.68	-16.84	0.00	-290.09	0.00	290.09	1405.65	378.48	970.58	889.77	87.30	-5.778	0.000	0.336
152.00	-10.47	-16.66	0.00	-256.41	0.00	256.41	1395.06	373.46	944.99	871.26	89.73	-5.838	0.000	0.304
154.00	-10.28	-16.48	0.00	-223.08	0.00	223.08	1384.25	368.43	919.74	852.80	92.18	-5.892	0.000	0.271
156.00	-10.09	-16.31	0.00	-190.11	0.00	190.11	1373.23	363.41	894.83	834.39	94.66	-5.942	0.000	0.237
157.00	-7.29	-12.26	0.00	-173.81	0.00	173.81	1367.63	360.90	882.51	825.21	95.90	-5.964	0.000	0.217
158.00	-7.20	-12.17	0.00	-161.55	0.00	161.55	1361.98	358.39	870.27	816.04	97.15	-5.985	0.000	0.204
160.00	-7.04	-12.00	0.00	-137.21	0.00	137.21	1350.53	353.37	846.04	797.75	99.67	-6.024	0.000	0.178
162.00	-6.88	-11.82	0.00	-113.22	0.00	113.22	1338.85	348.34	822.16	779.52	102.19	-6.058	0.000	0.152
164.00	-6.73	-11.65	0.00	-89.58	0.00	89.58	1326.96	343.32	798.62	761.37	104.73	-6.086	0.000	0.124
166.00	-6.58	-11.48	0.00	-66.28	0.00	66.28	1314.85	338.30	775.43	743.30	107.28	-6.109	0.000	0.095
167.00	-3.70	-5.77	0.00	-54.81	0.00	54.81	1308.71	335.79	763.96	734.30	108.56	-6.118	0.000	0.078
168.00	-3.64	-5.68	0.00	-49.04	0.00	49.04	1302.52	333.27	752.57	725.32	109.84	-6.126	0.000	0.071
170.00	-3.52	-5.52	0.00	-37.68	0.00	37.68	1289.98	328.25	730.06	707.42	112.41	-6.140	0.000	0.056
172.00	-3.40	-5.35	0.00	-26.64	0.00	26.64	1277.22	323.23	707.89	689.62	114.98	-6.151	0.000	0.042
174.00	-3.28	-5.19	0.00	-15.94	0.00	15.94	1264.24	318.21	686.06	671.91	117.55	-6.159	0.000	0.027
176.00	-3.17	-5.03	0.00	-5.57	0.00	5.57	1251.05	313.18	664.57	654.32	120.13	-6.163	0.000	0.011
177.00	-0.14	-0.23	0.00	-0.55	0.00	0.55	1244.37	310.67	653.95	645.56	121.41	-6.163	0.000	0.001
178.00	-0.09	-0.16	0.00	-0.31	0.00	0.31	1237.63	308.16	643.42	636.84	122.70	-6.163	0.000	0.001
180.00	0.00	-0.14	0.00	0.00	0.00	0.00	1224.01	303.14	622.62	619.47	125.28	-6.163	0.000	0.000

Wind Loading - Shaft

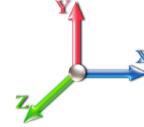
Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
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Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Iterations 28

Dead Load Factor 1.20
Wind Load Factor 1.00



Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.77	4.649	5.11	0.00	1.200	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.77	4.649	5.11	0.00	1.200	0.567	2.00	10.350	12.42	63.5	86.2	763.5
4.00		1.00	0.77	4.649	5.11	0.00	1.200	0.607	2.00	10.294	12.35	63.2	91.8	764.5
6.00		1.00	0.77	4.649	5.11	0.00	1.200	0.632	2.00	10.233	12.28	62.8	95.0	763.0
8.00		1.00	0.77	4.649	5.11	0.00	1.200	0.651	2.00	10.169	12.20	62.4	97.1	760.4
10.00		1.00	0.77	4.649	5.11	0.00	1.200	0.666	2.00	10.105	12.13	62.0	98.7	757.3
12.00		1.00	0.77	4.649	5.11	0.00	1.200	0.678	2.00	10.039	12.05	61.6	99.8	753.7
14.00		1.00	0.77	4.649	5.11	0.00	1.200	0.688	2.00	9.973	11.97	61.2	100.7	749.9
16.00		1.00	0.78	4.680	5.15	0.00	1.200	0.698	2.00	9.906	11.89	61.2	101.3	745.9
18.00		1.00	0.79	4.745	5.22	0.00	1.200	0.706	2.00	9.839	11.81	61.6	101.8	741.7
20.00		1.00	0.80	4.804	5.28	0.00	1.200	0.713	2.00	9.772	11.73	62.0	102.1	737.4
22.00		1.00	0.81	4.859	5.34	0.00	1.200	0.720	2.00	9.705	11.65	62.2	102.4	732.9
24.00		1.00	0.82	4.910	5.40	0.00	1.200	0.726	2.00	9.637	11.56	62.5	102.5	728.4
26.00		1.00	0.83	4.958	5.45	0.00	1.200	0.732	2.00	9.570	11.48	62.6	102.6	723.8
28.00		1.00	0.83	5.003	5.50	0.00	1.200	0.738	2.00	9.502	11.40	62.7	102.6	719.2
30.00		1.00	0.84	5.047	5.55	0.00	1.200	0.743	2.00	9.434	11.32	62.9	102.6	714.4
32.00		1.00	0.85	5.126	5.64	0.00	1.200	0.748	2.00	9.366	11.24	63.4	102.5	709.7
34.00		1.00	0.87	5.202	5.72	0.00	1.200	0.752	2.00	9.298	11.16	63.8	102.3	704.8
36.00		1.00	0.88	5.275	5.80	0.00	1.200	0.757	2.00	9.230	11.08	64.3	102.1	700.0
38.00		1.00	0.89	5.344	5.88	0.00	1.200	0.761	2.00	9.162	10.99	64.6	101.9	695.1
40.00		1.00	0.90	5.411	5.95	0.00	1.200	0.765	2.00	9.093	10.91	64.9	101.7	690.1
42.00		1.00	0.91	5.475	6.02	0.00	1.200	0.768	2.00	9.025	10.83	65.2	101.4	685.2
44.00		1.00	0.92	5.537	6.09	0.00	1.200	0.772	2.00	8.956	10.75	65.5	101.0	680.2
45.92	Bot - Section 2	1.00	0.93	5.595	6.15	0.00	1.200	0.775	1.92	8.519	10.22	62.9	96.5	647.1
46.00		1.00	0.93	5.597	6.16	0.00	1.200	0.775	0.08	0.374	0.45	2.8	4.3	48.8
48.00		1.00	0.94	5.655	6.22	0.00	1.200	0.779	2.00	8.947	10.74	66.8	101.8	1167.4
50.00		1.00	0.95	5.712	6.28	0.00	1.200	0.782	2.00	8.878	10.65	66.9	101.4	1158.3
52.00		1.00	0.96	5.766	6.34	0.00	1.200	0.785	2.00	8.810	10.57	67.1	101.0	1149.2
53.00	Top - Section 1	1.00	0.97	5.793	6.37	0.00	1.200	0.786	1.00	4.379	5.25	33.5	50.4	571.2
54.00		1.00	0.97	5.819	6.40	0.00	1.200	0.788	1.00	4.362	5.23	33.5	50.3	291.7
56.00		1.00	0.98	5.871	6.46	0.00	1.200	0.791	2.00	8.672	10.41	67.2	100.1	579.9
58.00		1.00	0.99	5.921	6.51	0.00	1.200	0.794	2.00	8.604	10.32	67.2	99.7	575.4
60.00		1.00	1.00	5.970	6.57	0.00	1.200	0.796	2.00	8.535	10.24	67.3	99.2	570.9
62.00		1.00	1.00	6.018	6.62	0.00	1.200	0.799	2.00	8.466	10.16	67.3	98.7	566.4
64.00		1.00	1.01	6.064	6.67	0.00	1.200	0.801	2.00	8.398	10.08	67.2	98.2	561.9
66.00		1.00	1.02	6.110	6.72	0.00	1.200	0.804	2.00	8.329	9.99	67.2	97.6	557.4
68.00		1.00	1.03	6.154	6.77	0.00	1.200	0.806	2.00	8.260	9.91	67.1	97.1	552.9
70.00		1.00	1.03	6.198	6.82	0.00	1.200	0.809	2.00	8.191	9.83	67.0	96.6	548.3
72.00	Appurtenance(s)	1.00	1.04	6.240	6.86	0.00	1.200	0.811	2.00	8.122	9.75	66.9	96.0	543.7
74.00		1.00	1.05	6.282	6.91	0.00	1.200	0.813	2.00	8.053	9.66	66.8	95.4	539.2
76.00		1.00	1.05	6.323	6.96	0.00	1.200	0.815	2.00	7.985	9.58	66.6	94.8	534.6
78.00		1.00	1.06	6.363	7.00	0.00	1.200	0.817	2.00	7.916	9.50	66.5	94.2	530.0
80.00		1.00	1.07	6.402	7.04	0.00	1.200	0.819	2.00	7.847	9.42	66.3	93.6	525.4
82.00		1.00	1.07	6.441	7.08	0.00	1.200	0.821	2.00	7.778	9.33	66.1	93.0	520.7
84.00		1.00	1.08	6.479	7.13	0.00	1.200	0.823	2.00	7.709	9.25	65.9	92.4	516.1
86.00		1.00	1.09	6.516	7.17	0.00	1.200	0.825	2.00	7.640	9.17	65.7	91.8	511.5
88.00		1.00	1.09	6.552	7.21	0.00	1.200	0.827	2.00	7.571	9.08	65.5	91.1	506.8

Wind Loading - Shaft

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 35



90.00	1.00	1.10	6.588	7.25	0.00	1.200	0.829	2.00	7.502	9.00	65.2	90.5	502.2
92.00	1.00	1.10	6.624	7.29	0.00	1.200	0.831	2.00	7.433	8.92	65.0	89.8	497.5
92.92 Bot - Section 3	1.00	1.11	6.640	7.30	0.00	1.200	0.832	0.92	3.384	4.06	29.7	41.0	226.6
94.00	1.00	1.11	6.658	7.32	0.00	1.200	0.833	1.08	4.038	4.85	35.5	49.0	452.3
96.00	1.00	1.12	6.693	7.36	0.00	1.200	0.835	2.00	7.401	8.88	65.4	89.8	828.7
98.00	1.00	1.12	6.726	7.40	0.00	1.200	0.836	2.00	7.332	8.80	65.1	89.1	820.7
98.92 Top - Section 2	1.00	1.12	6.742	7.42	0.00	1.200	0.837	0.92	3.337	4.00	29.7	40.7	373.6
100.00	1.00	1.13	6.760	7.44	0.00	1.200	0.838	1.08	3.926	4.71	35.0	47.9	227.6
102.00	1.00	0.99	5.961	6.56	0.00	1.200	0.840	2.00	7.194	8.63	56.6	87.7	417.0
104.00	1.00	1.00	5.994	6.59	0.00	1.200	0.841	2.00	7.125	8.55	56.4	87.0	412.9
106.00	1.00	1.00	6.027	6.63	0.00	1.200	0.843	2.00	7.056	8.47	56.1	86.3	408.9
108.00	1.00	1.01	6.059	6.67	0.00	1.200	0.844	2.00	6.987	8.38	55.9	85.6	404.8
110.00	1.00	1.02	6.091	6.70	0.00	1.200	0.846	2.00	6.918	8.30	55.6	84.9	400.8
112.00	1.00	1.02	6.123	6.73	0.00	1.200	0.847	2.00	6.849	8.22	55.3	84.2	396.7
114.00	1.00	1.03	6.154	6.77	0.00	1.200	0.849	2.00	6.779	8.14	55.1	83.5	392.6
116.00	1.00	1.03	6.184	6.80	0.00	1.200	0.850	2.00	6.710	8.05	54.8	82.7	388.6
118.00	1.00	1.04	6.215	6.84	0.00	1.200	0.852	2.00	6.641	7.97	54.5	82.0	384.5
120.00	1.00	1.04	6.245	6.87	0.00	1.200	0.853	2.00	6.572	7.89	54.2	81.2	380.4
122.00	1.00	1.05	6.274	6.90	0.00	1.200	0.855	2.00	6.503	7.80	53.9	80.5	376.3
124.00	1.00	1.05	6.303	6.93	0.00	1.200	0.856	2.00	6.434	7.72	53.5	79.7	372.2
126.00	1.00	1.06	6.332	6.97	0.00	1.200	0.858	2.00	6.365	7.64	53.2	79.0	368.1
127.00 Bot - Section 4	1.00	1.06	6.347	6.98	0.00	1.200	0.858	1.00	3.156	3.79	26.4	39.3	182.6
128.00	1.00	1.06	6.361	7.00	0.00	1.200	0.859	1.00	3.176	3.81	26.7	39.6	283.3
130.00	1.00	1.07	6.389	7.03	0.00	1.200	0.860	2.00	6.301	7.56	53.1	78.4	561.5
132.00	1.00	1.07	6.417	7.06	0.00	1.200	0.862	2.00	6.231	7.48	52.8	77.6	555.1
132.25 Top - Section 3	1.00	1.07	6.420	7.06	0.00	1.200	0.862	0.25	0.774	0.93	6.6	9.7	69.0
134.00	1.00	1.07	6.445	7.09	0.00	1.200	0.863	1.75	5.388	6.47	45.8	67.3	238.6
136.00	1.00	1.08	6.472	7.12	0.00	1.200	0.864	2.00	6.093	7.31	52.1	76.1	269.7
138.00	1.00	1.08	6.499	7.15	0.00	1.200	0.865	2.00	6.024	7.23	51.7	75.3	266.6
140.00	1.00	1.09	6.526	7.18	0.00	1.200	0.867	2.00	5.955	7.15	51.3	74.5	263.5
142.00	1.00	1.09	6.552	7.21	0.00	1.200	0.868	2.00	5.885	7.06	50.9	73.7	260.4
144.00	1.00	1.10	6.578	7.24	0.00	1.200	0.869	2.00	5.816	6.98	50.5	72.9	257.2
146.00	1.00	1.10	6.604	7.26	0.00	1.200	0.870	2.00	5.747	6.90	50.1	72.1	254.1
147.00 Appurtenance(s)	1.00	1.10	6.617	7.28	0.00	1.200	0.871	1.00	2.848	3.42	24.9	35.9	126.0
148.00	1.00	1.11	6.630	7.29	0.00	1.200	0.871	1.00	2.830	3.40	24.8	35.7	125.2
150.00	1.00	1.11	6.656	7.32	0.00	1.200	0.873	2.00	5.609	6.73	49.3	70.5	247.8
152.00	1.00	1.11	6.681	7.35	0.00	1.200	0.874	2.00	5.539	6.65	48.9	69.7	244.7
154.00	1.00	1.12	6.706	7.38	0.00	1.200	0.875	2.00	5.470	6.56	48.4	68.9	241.5
156.00	1.00	1.12	6.731	7.40	0.00	1.200	0.876	2.00	5.401	6.48	48.0	68.1	238.4
157.00 Appurtenance(s)	1.00	1.12	6.743	7.42	0.00	1.200	0.877	1.00	2.674	3.21	23.8	33.8	118.1
158.00	1.00	1.13	6.755	7.43	0.00	1.200	0.877	1.00	2.657	3.19	23.7	33.6	117.3
160.00	1.00	1.13	6.780	7.46	0.00	1.200	0.878	2.00	5.262	6.31	47.1	66.4	232.0
162.00	1.00	1.13	6.804	7.48	0.00	1.200	0.879	2.00	5.193	6.23	46.6	65.6	228.9
164.00	1.00	1.14	6.828	7.51	0.00	1.200	0.880	2.00	5.124	6.15	46.2	64.8	225.7
166.00	1.00	1.14	6.851	7.54	0.00	1.200	0.881	2.00	5.055	6.07	45.7	63.9	222.5
167.00 Appurtenance(s)	1.00	1.14	6.863	7.55	0.00	1.200	0.882	1.00	2.501	3.00	22.7	31.8	110.2
168.00	1.00	1.15	6.875	7.56	0.00	1.200	0.883	1.00	2.484	2.98	22.5	31.6	109.4
170.00	1.00	1.15	6.898	7.59	0.00	1.200	0.884	2.00	4.916	5.90	44.8	62.3	216.2
172.00	1.00	1.15	6.921	7.61	0.00	1.200	0.885	2.00	4.847	5.82	44.3	61.4	213.0
174.00	1.00	1.16	6.944	7.64	0.00	1.200	0.886	2.00	4.778	5.73	43.8	60.6	209.8
176.00	1.00	1.16	6.967	7.66	0.00	1.200	0.887	2.00	4.708	5.65	43.3	59.7	206.6
177.00 Appurtenance(s)	1.00	1.16	6.978	7.68	0.00	1.200	0.887	1.00	2.328	2.79	21.4	29.7	102.2
178.00	1.00	1.17	6.989	7.69	0.00	1.200	0.888	1.00	2.311	2.77	21.3	29.4	101.4
180.00	1.00	1.17	7.012	7.71	0.00	1.200	0.889	2.00	4.570	5.48	42.3	58.0	200.3

Totals: 180.00 5,260.7 46,627.8

Discrete Appurtenance Forces

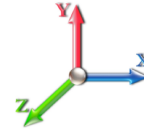
Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 36



Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Iterations 28

Dead Load Factor 1.20
Wind Load Factor 1.00



No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orient Factor x Ka	Ka	Total CaAa (sf)	Dead Load (lb)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)			
1	177.00	Ericsson 4449 B71 + B85	3	6.978	7.676	0.50	0.75	3.41	176.38	0.000	0.000	26.14	0.00	0.00			
2	177.00	782 11056	3	6.978	7.676	0.50	0.75	0.73	5.28	0.000	0.000	5.60	0.00	0.00			
3	177.00	RFS	3	6.978	7.676	0.52	0.75	33.37	1058.80	0.000	0.000	256.15	0.00	0.00			
4	177.00	Ericsson KRY 112 489/2	3	6.978	7.676	0.50	0.75	1.45	67.31	0.000	0.000	11.12	0.00	0.00			
5	177.00	Mount pipes	1	6.978	7.676	0.75	0.75	14.89	-1785.54	0.000	0.000	114.27	0.00	0.00			
6	177.00	Commscope VV-65B-R1	3	6.978	7.676	0.55	0.75	14.20	344.17	0.000	0.000	109.01	0.00	0.00			
7	177.00	Ericsson 4460 B25 + B66	3	6.978	7.676	0.56	0.75	4.13	405.17	0.000	0.000	31.70	0.00	0.00			
8	177.00	RMQP-4096-HK Plat. +	1	6.978	7.676	0.67	0.67	31.35	1914.33	0.000	0.000	240.67	0.00	0.00			
9	177.00	Ericsson AIR6419 B41	3	6.978	7.676	0.56	0.75	11.52	524.68	0.000	0.000	88.42	0.00	0.00			
10	167.00	Samsung VZS01	3	6.863	7.549	0.53	0.75	8.24	413.75	0.000	0.000	62.18	0.00	0.00			
11	167.00	Commscope	6	6.863	7.549	0.63	0.75	32.82	724.50	0.000	0.000	247.79	0.00	0.00			
12	167.00	Raycap	2	6.863	7.549	0.65	0.75	3.68	141.27	0.000	0.000	27.81	0.00	0.00			
13	167.00	Kaelus BSF0020F3V1-1	2	6.863	7.549	0.63	0.75	1.46	-197.50	0.000	0.000	11.04	0.00	0.00			
14	167.00	Antel	6	6.863	7.549	0.57	0.75	20.14	-347.87	0.000	0.000	152.06	0.00	0.00			
15	167.00	Samsung B5/B13	3	6.863	7.549	0.50	0.75	3.25	275.15	0.000	0.000	24.53	0.00	0.00			
16	167.00	Samsung B2/B66A	3	6.863	7.549	0.50	0.75	3.25	291.20	0.000	0.000	24.53	0.00	0.00			
17	167.00	Platform w/ Hand Rails	1	6.863	7.549	1.00	1.00	73.32	4346.24	0.000	0.000	553.53	0.00	0.00			
18	157.00	Mount Pipes	1	6.743	7.417	0.75	0.75	18.95	-189.29	0.000	0.000	140.58	0.00	0.00			
19	157.00	DMP65R-BU8DA	1	6.743	7.417	0.56	0.75	10.58	242.16	0.000	0.000	78.45	0.00	0.00			
20	157.00	Platform w/ Handrail	1	6.743	7.417	0.67	0.67	32.47	3331.49	0.000	0.000	240.86	0.00	0.00			
21	157.00	7770	3	6.743	7.417	0.55	0.75	9.89	307.11	0.000	0.000	73.33	0.00	0.00			
22	157.00	DMP65R-BU4DA	2	6.743	7.417	0.55	0.75	9.28	258.40	0.000	0.000	68.83	0.00	0.00			
23	157.00	Raycap DC6-48-60-18-8F	1	6.743	7.417	0.68	0.75	0.77	51.51	0.000	0.000	5.71	0.00	0.00			
24	157.00	HPA65R-BU8A	1	6.743	7.417	0.66	0.75	7.80	72.72	0.000	0.000	57.89	0.00	0.00			
25	157.00	4449 B5/B12	3	6.743	7.417	0.50	0.75	3.38	295.24	0.000	0.000	25.10	0.00	0.00			
26	157.00	8843 B2/B66A	3	6.743	7.417	0.50	0.75	2.85	293.79	0.000	0.000	21.13	0.00	0.00			
27	157.00	HPA65R-BU4A	2	6.743	7.417	0.65	0.75	6.85	-60.17	0.000	0.000	50.79	0.00	0.00			
28	147.00	MC-PK8-DSH	1	6.617	7.279	0.67	0.67	32.52	2626.27	0.000	0.000	236.72	0.00	0.00			
29	147.00	JMA Wireless	3	6.617	7.279	0.55	0.75	22.01	466.03	0.000	0.000	160.23	0.00	0.00			
30	147.00	Fujitsu TA08025-B604	3	6.617	7.279	0.50	0.75	3.38	269.53	0.000	0.000	24.58	0.00	0.00			
31	147.00	Fujitsu TA08025-B605	3	6.617	7.279	0.50	0.75	3.38	310.50	0.000	0.000	24.58	0.00	0.00			
32	147.00	Raycap	1	6.617	7.279	0.75	0.75	1.72	40.15	0.000	0.000	12.52	0.00	0.00			
33	72.00	1 Lucent KS-24019	1	6.240	6.864	1.00	1.00	1.80	-112.19	0.000	0.000	12.34	0.00	0.00			
34	72.00	Standoff	1	6.240	6.864	1.00	1.00	2.78	-76.69	0.000	0.000	19.09	0.00	0.00			
Totals:									16,483.89						3,239.29		

Total Applied Force Summary

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



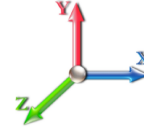
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Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Iterations 28

Dead Load Factor 1.20

Wind Load Factor 1.00



Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
2.00		63.51	865.82	0.00	0.00
4.00		63.16	867.06	0.00	0.00
6.00		62.79	865.76	0.00	0.00
8.00		62.40	863.36	0.00	0.00
10.00		62.00	860.33	0.00	0.00
12.00		61.60	856.89	0.00	0.00
14.00		61.19	853.16	0.00	0.00
16.00		61.20	849.20	0.00	0.00
18.00		61.63	845.08	0.00	0.00
20.00		61.97	840.82	0.00	0.00
22.00		62.25	836.45	0.00	0.00
24.00		62.46	831.98	0.00	0.00
26.00		62.63	827.44	0.00	0.00
28.00		62.75	822.82	0.00	0.00
30.00		62.85	818.14	0.00	0.00
32.00		63.38	813.40	0.00	0.00
34.00		63.85	808.62	0.00	0.00
36.00		64.26	803.80	0.00	0.00
38.00		64.63	798.93	0.00	0.00
40.00		64.95	794.03	0.00	0.00
42.00		65.23	789.10	0.00	0.00
44.00		65.47	784.14	0.00	0.00
45.92		62.91	746.79	0.00	0.00
46.00		2.77	53.18	0.00	0.00
48.00		66.79	1271.38	0.00	0.00
50.00		66.94	1262.35	0.00	0.00
52.00		67.05	1253.29	0.00	0.00
53.00		33.49	623.29	0.00	0.00
54.00		33.51	343.72	0.00	0.00
56.00		67.21	684.03	0.00	0.00
58.00		67.25	679.58	0.00	0.00
60.00		67.26	675.13	0.00	0.00
62.00		67.25	670.65	0.00	0.00
64.00		67.22	666.16	0.00	0.00
66.00		67.17	661.66	0.00	0.00
68.00		67.10	657.14	0.00	0.00
70.00		67.01	652.61	0.00	0.00
72.00	(2) attachments	98.33	459.18	0.00	0.00
74.00		66.78	643.12	0.00	0.00
76.00		66.64	638.56	0.00	0.00
78.00		66.48	633.98	0.00	0.00
80.00		66.31	629.39	0.00	0.00
82.00		66.13	624.79	0.00	0.00
84.00		65.92	620.18	0.00	0.00
86.00		65.71	615.56	0.00	0.00
88.00		65.48	610.94	0.00	0.00

Total Applied Force Summary

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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90.00	65.24	606.30	0.00	0.00
92.00	64.99	601.66	0.00	0.00
92.92	29.65	274.29	0.00	0.00
94.00	35.49	508.75	0.00	0.00
96.00	65.38	932.92	0.00	0.00
98.00	65.10	924.91	0.00	0.00
98.92	29.70	421.32	0.00	0.00
100.00	35.03	284.06	0.00	0.00
102.00	56.61	521.17	0.00	0.00
104.00	56.38	517.15	0.00	0.00
106.00	56.13	513.12	0.00	0.00
108.00	55.88	509.08	0.00	0.00
110.00	55.62	505.04	0.00	0.00
112.00	55.35	500.99	0.00	0.00
114.00	55.07	496.94	0.00	0.00
116.00	54.78	492.88	0.00	0.00
118.00	54.48	488.82	0.00	0.00
120.00	54.17	484.75	0.00	0.00
122.00	53.86	480.67	0.00	0.00
124.00	53.53	476.59	0.00	0.00
126.00	53.20	472.51	0.00	0.00
127.00	26.44	234.81	0.00	0.00
128.00	26.67	335.47	0.00	0.00
130.00	53.14	665.94	0.00	0.00
132.00	52.78	659.50	0.00	0.00
132.25	6.56	82.03	0.00	0.00
134.00	45.84	330.00	0.00	0.00
136.00	52.05	374.19	0.00	0.00
138.00	51.68	371.08	0.00	0.00
140.00	51.29	367.97	0.00	0.00
142.00	50.90	364.85	0.00	0.00
144.00	50.51	361.73	0.00	0.00
146.00	50.10	358.61	0.00	0.00
147.00	(11) attachments	483.51	3890.71	0.00
148.00		24.77	175.26	0.00
150.00		49.27	347.98	0.00
152.00		48.85	344.85	0.00
154.00		48.42	341.71	0.00
156.00		47.98	338.57	0.00
157.00	(18) attachments	786.47	4771.16	0.00
158.00		23.69	151.41	0.00
160.00		47.09	300.25	0.00
162.00		46.64	297.10	0.00
164.00		46.18	293.95	0.00
166.00		45.71	290.79	0.00
167.00	(26) attachments	1126.13	5791.06	0.00
168.00		22.54	126.08	0.00
170.00		44.76	249.58	0.00
172.00		44.28	246.41	0.00
174.00		43.79	243.24	0.00
176.00		43.30	240.06	0.00
177.00	(23) attachments	904.53	2829.53	0.00
178.00		21.32	105.67	0.00
180.00		42.29	208.75	0.00
Totals:		8,500.00	71,777.20	0.00

Linear Appurtenance Segment Forces (Factored)

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

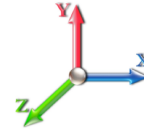


Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Iterations 28

Dead Load Factor 1.20

Wind Load Factor 1.00



Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
2.00	Safety Cable	Yes	2.00	0.000	0.38	0.25	0.00	0.017	0.000	4.649	0.00	1.79
2.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.29	0.00	0.017	0.000	4.649	0.00	3.90
4.00	Safety Cable	Yes	2.00	0.000	0.38	0.27	0.00	0.017	0.000	4.649	0.00	1.93
4.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.31	0.00	0.017	0.000	4.649	0.00	4.05
6.00	Safety Cable	Yes	2.00	0.000	0.38	0.27	0.00	0.017	0.000	4.649	0.00	2.02
6.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.32	0.00	0.017	0.000	4.649	0.00	4.15
8.00	Safety Cable	Yes	2.00	0.000	0.38	0.28	0.00	0.017	0.000	4.649	0.00	2.09
8.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.32	0.00	0.017	0.000	4.649	0.00	4.23
10.00	Safety Cable	Yes	2.00	0.000	0.38	0.29	0.00	0.017	0.000	4.649	0.00	2.15
10.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.33	0.00	0.017	0.000	4.649	0.00	4.29
12.00	Safety Cable	Yes	2.00	0.000	0.38	0.29	0.00	0.017	0.000	4.649	0.00	2.20
12.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.33	0.00	0.017	0.000	4.649	0.00	4.34
14.00	Safety Cable	Yes	2.00	0.000	0.38	0.29	0.00	0.017	0.000	4.649	0.00	2.24
14.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.33	0.00	0.017	0.000	4.649	0.00	4.39
16.00	Safety Cable	Yes	2.00	0.000	0.38	0.30	0.00	0.017	0.000	4.680	0.00	2.27
16.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.34	0.00	0.017	0.000	4.680	0.00	4.43
18.00	Safety Cable	Yes	2.00	0.000	0.38	0.30	0.00	0.018	0.000	4.745	0.00	2.31
18.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.34	0.00	0.018	0.000	4.745	0.00	4.47
20.00	Safety Cable	Yes	2.00	0.000	0.38	0.30	0.00	0.018	0.000	4.804	0.00	2.34
20.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.34	0.00	0.018	0.000	4.804	0.00	4.50
22.00	Safety Cable	Yes	2.00	0.000	0.38	0.30	0.00	0.018	0.000	4.859	0.00	2.37
22.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.35	0.00	0.018	0.000	4.859	0.00	4.53
24.00	Safety Cable	Yes	2.00	0.000	0.38	0.31	0.00	0.018	0.000	4.910	0.00	2.39
24.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.35	0.00	0.018	0.000	4.910	0.00	4.56
26.00	Safety Cable	Yes	2.00	0.000	0.38	0.31	0.00	0.018	0.000	4.958	0.00	2.42
26.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.35	0.00	0.018	0.000	4.958	0.00	4.58
28.00	Safety Cable	Yes	2.00	0.000	0.38	0.31	0.00	0.018	0.000	5.003	0.00	2.44
28.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.35	0.00	0.018	0.000	5.003	0.00	4.61
30.00	Safety Cable	Yes	2.00	0.000	0.38	0.31	0.00	0.018	0.000	5.047	0.00	2.46
30.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.35	0.00	0.018	0.000	5.047	0.00	4.63
32.00	Safety Cable	Yes	2.00	0.000	0.38	0.31	0.00	0.018	0.000	5.126	0.00	2.48
32.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.35	0.00	0.018	0.000	5.126	0.00	4.65
34.00	Safety Cable	Yes	2.00	0.000	0.38	0.31	0.00	0.019	0.000	5.202	0.00	2.50
34.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.36	0.00	0.019	0.000	5.202	0.00	4.68
36.00	Safety Cable	Yes	2.00	0.000	0.38	0.32	0.00	0.019	0.000	5.275	0.00	2.52
36.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.36	0.00	0.019	0.000	5.275	0.00	4.70
38.00	Safety Cable	Yes	2.00	0.000	0.38	0.32	0.00	0.019	0.000	5.344	0.00	2.54
38.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.36	0.00	0.019	0.000	5.344	0.00	4.71
40.00	Safety Cable	Yes	2.00	0.000	0.38	0.32	0.00	0.019	0.000	5.411	0.00	2.55
40.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.36	0.00	0.019	0.000	5.411	0.00	4.73
42.00	Safety Cable	Yes	2.00	0.000	0.38	0.32	0.00	0.019	0.000	5.475	0.00	2.57
42.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.36	0.00	0.019	0.000	5.475	0.00	4.75
44.00	Safety Cable	Yes	2.00	0.000	0.38	0.32	0.00	0.019	0.000	5.537	0.00	2.58
44.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.36	0.00	0.019	0.000	5.537	0.00	4.77
45.92	Safety Cable	Yes	1.92	0.000	0.38	0.31	0.00	0.020	0.000	5.595	0.00	2.49
45.92	Step bolts (ladder)	Yes	1.92	0.000	0.63	0.35	0.00	0.020	0.000	5.595	0.00	4.58
46.00	Safety Cable	Yes	0.08	0.000	0.38	0.01	0.00	0.020	0.000	5.597	0.00	0.11

Linear Appurtenance Segment Forces (Factored)

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

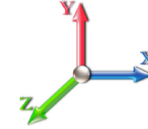


Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Iterations 28

Dead Load Factor 1.20

Wind Load Factor 1.00



Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
46.00	Step bolts (ladder)	Yes	0.08	0.000	0.63	0.02	0.00	0.020	0.000	5.597	0.00	0.20
48.00	Safety Cable	Yes	2.00	0.000	0.38	0.32	0.00	0.020	0.000	5.655	0.00	2.61
48.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.36	0.00	0.020	0.000	5.655	0.00	4.80
50.00	Safety Cable	Yes	2.00	0.000	0.38	0.32	0.00	0.020	0.000	5.712	0.00	2.63
50.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.37	0.00	0.020	0.000	5.712	0.00	4.81
52.00	Safety Cable	Yes	2.00	0.000	0.38	0.32	0.00	0.020	0.000	5.766	0.00	2.64
52.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.37	0.00	0.020	0.000	5.766	0.00	4.83
53.00	Safety Cable	Yes	1.00	0.000	0.38	0.16	0.00	0.020	0.000	5.793	0.00	1.32
53.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.18	0.00	0.020	0.000	5.793	0.00	2.42
54.00	Safety Cable	Yes	1.00	0.000	0.38	0.16	0.00	0.020	0.000	5.819	0.00	1.33
54.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.18	0.00	0.020	0.000	5.819	0.00	2.42
56.00	Safety Cable	Yes	2.00	0.000	0.38	0.33	0.00	0.020	0.000	5.871	0.00	2.67
56.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.37	0.00	0.020	0.000	5.871	0.00	4.86
58.00	Safety Cable	Yes	2.00	0.000	0.38	0.33	0.00	0.020	0.000	5.921	0.00	2.68
58.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.37	0.00	0.020	0.000	5.921	0.00	4.87
60.00	Safety Cable	Yes	2.00	0.000	0.38	0.33	0.00	0.020	0.000	5.970	0.00	2.69
60.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.37	0.00	0.020	0.000	5.970	0.00	4.88
62.00	Safety Cable	Yes	2.00	0.000	0.38	0.33	0.00	0.021	0.000	6.018	0.00	2.70
62.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.37	0.00	0.021	0.000	6.018	0.00	4.90
64.00	Safety Cable	Yes	2.00	0.000	0.38	0.33	0.00	0.021	0.000	6.064	0.00	2.72
64.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.37	0.00	0.021	0.000	6.064	0.00	4.91
66.00	Safety Cable	Yes	2.00	0.000	0.38	0.33	0.00	0.021	0.000	6.110	0.00	2.73
66.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.37	0.00	0.021	0.000	6.110	0.00	4.92
68.00	Safety Cable	Yes	2.00	0.000	0.38	0.33	0.00	0.021	0.000	6.154	0.00	2.74
68.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.37	0.00	0.021	0.000	6.154	0.00	4.93
70.00	Safety Cable	Yes	2.00	0.000	0.38	0.33	0.00	0.021	0.000	6.198	0.00	2.75
70.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.37	0.00	0.021	0.000	6.198	0.00	4.94
72.00	Safety Cable	Yes	2.00	0.000	0.38	0.33	0.00	0.021	0.000	6.240	0.00	2.76
72.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.38	0.00	0.021	0.000	6.240	0.00	4.96
74.00	Safety Cable	Yes	2.00	0.000	0.38	0.33	0.00	0.022	0.000	6.282	0.00	2.77
74.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.38	0.00	0.022	0.000	6.282	0.00	4.97
76.00	Safety Cable	Yes	2.00	0.000	0.38	0.34	0.00	0.022	0.000	6.323	0.00	2.78
76.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.38	0.00	0.022	0.000	6.323	0.00	4.98
78.00	Safety Cable	Yes	2.00	0.000	0.38	0.34	0.00	0.022	0.000	6.363	0.00	2.79
78.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.38	0.00	0.022	0.000	6.363	0.00	4.99
80.00	Safety Cable	Yes	2.00	0.000	0.38	0.34	0.00	0.022	0.000	6.402	0.00	2.80
80.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.38	0.00	0.022	0.000	6.402	0.00	5.00
82.00	Safety Cable	Yes	2.00	0.000	0.38	0.34	0.00	0.022	0.000	6.441	0.00	2.81
82.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.38	0.00	0.022	0.000	6.441	0.00	5.01
84.00	Safety Cable	Yes	2.00	0.000	0.38	0.34	0.00	0.023	0.000	6.479	0.00	2.82
84.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.38	0.00	0.023	0.000	6.479	0.00	5.02
86.00	Safety Cable	Yes	2.00	0.000	0.38	0.34	0.00	0.023	0.000	6.516	0.00	2.82
86.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.38	0.00	0.023	0.000	6.516	0.00	5.03
88.00	Safety Cable	Yes	2.00	0.000	0.38	0.34	0.00	0.023	0.000	6.552	0.00	2.83
88.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.38	0.00	0.023	0.000	6.552	0.00	5.04
90.00	Safety Cable	Yes	2.00	0.000	0.38	0.34	0.00	0.023	0.000	6.588	0.00	2.84
90.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.38	0.00	0.023	0.000	6.588	0.00	5.05

Linear Appurtenance Segment Forces (Factored)

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

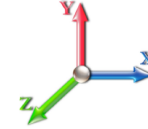


Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Iterations 28

Dead Load Factor 1.20

Wind Load Factor 1.00



Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
92.00	Safety Cable	Yes	2.00	0.000	0.38	0.34	0.00	0.024	0.000	6.624	0.00	2.85
92.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.38	0.00	0.024	0.000	6.624	0.00	5.06
92.92	Safety Cable	Yes	0.92	0.000	0.38	0.16	0.00	0.024	0.000	6.640	0.00	1.31
92.92	Step bolts (ladder)	Yes	0.92	0.000	0.63	0.18	0.00	0.024	0.000	6.640	0.00	2.32
94.00	Safety Cable	Yes	1.08	0.000	0.38	0.18	0.00	0.024	0.000	6.658	0.00	1.55
94.00	Step bolts (ladder)	Yes	1.08	0.000	0.63	0.21	0.00	0.024	0.000	6.658	0.00	2.74
96.00	Safety Cable	Yes	2.00	0.000	0.38	0.34	0.00	0.024	0.000	6.693	0.00	2.87
96.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.38	0.00	0.024	0.000	6.693	0.00	5.07
98.00	Safety Cable	Yes	2.00	0.000	0.38	0.34	0.00	0.024	0.000	6.726	0.00	2.88
98.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.38	0.00	0.024	0.000	6.726	0.00	5.08
98.92	Safety Cable	Yes	0.92	0.000	0.38	0.16	0.00	0.024	0.000	6.742	0.00	1.32
98.92	Step bolts (ladder)	Yes	0.92	0.000	0.63	0.18	0.00	0.024	0.000	6.742	0.00	2.33
100.00	Safety Cable	Yes	1.08	0.000	0.38	0.19	0.00	0.024	0.000	6.760	0.00	1.56
100.00	Step bolts (ladder)	Yes	1.08	0.000	0.63	0.21	0.00	0.024	0.000	6.760	0.00	2.76
102.00	Safety Cable	Yes	2.00	0.000	0.38	0.34	0.00	0.024	0.000	5.961	0.00	2.89
102.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.38	0.00	0.024	0.000	5.961	0.00	5.10
104.00	Safety Cable	Yes	2.00	0.000	0.38	0.34	0.00	0.025	0.000	5.994	0.00	2.90
104.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.39	0.00	0.025	0.000	5.994	0.00	5.11
106.00	Safety Cable	Yes	2.00	0.000	0.38	0.34	0.00	0.025	0.000	6.027	0.00	2.91
106.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.39	0.00	0.025	0.000	6.027	0.00	5.12
108.00	Safety Cable	Yes	2.00	0.000	0.38	0.34	0.00	0.025	0.000	6.059	0.00	2.91
108.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.39	0.00	0.025	0.000	6.059	0.00	5.12
110.00	Safety Cable	Yes	2.00	0.000	0.38	0.35	0.00	0.025	0.000	6.091	0.00	2.92
110.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.39	0.00	0.025	0.000	6.091	0.00	5.13
112.00	Safety Cable	Yes	2.00	0.000	0.38	0.35	0.00	0.026	0.000	6.123	0.00	2.93
112.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.39	0.00	0.026	0.000	6.123	0.00	5.14
114.00	Safety Cable	Yes	2.00	0.000	0.38	0.35	0.00	0.026	0.000	6.154	0.00	2.94
114.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.39	0.00	0.026	0.000	6.154	0.00	5.15
116.00	Safety Cable	Yes	2.00	0.000	0.38	0.35	0.00	0.026	0.000	6.184	0.00	2.94
116.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.39	0.00	0.026	0.000	6.184	0.00	5.16
118.00	Safety Cable	Yes	2.00	0.000	0.38	0.35	0.00	0.026	0.000	6.215	0.00	2.95
118.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.39	0.00	0.026	0.000	6.215	0.00	5.16
120.00	Safety Cable	Yes	2.00	0.000	0.38	0.35	0.00	0.027	0.000	6.245	0.00	2.96
120.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.39	0.00	0.027	0.000	6.245	0.00	5.17
122.00	Safety Cable	Yes	2.00	0.000	0.38	0.35	0.00	0.027	0.000	6.274	0.00	2.96
122.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.39	0.00	0.027	0.000	6.274	0.00	5.18
124.00	Safety Cable	Yes	2.00	0.000	0.38	0.35	0.00	0.027	0.000	6.303	0.00	2.97
124.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.39	0.00	0.027	0.000	6.303	0.00	5.18
126.00	Safety Cable	Yes	2.00	0.000	0.38	0.35	0.00	0.028	0.000	6.332	0.00	2.98
126.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.39	0.00	0.028	0.000	6.332	0.00	5.19
127.00	Safety Cable	Yes	1.00	0.000	0.38	0.17	0.00	0.028	0.000	6.347	0.00	1.49
127.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.20	0.00	0.028	0.000	6.347	0.00	2.60
128.00	Safety Cable	Yes	1.00	0.000	0.38	0.17	0.00	0.028	0.000	6.361	0.00	1.49
128.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.20	0.00	0.028	0.000	6.361	0.00	2.60
130.00	Safety Cable	Yes	2.00	0.000	0.38	0.35	0.00	0.028	0.000	6.389	0.00	2.99
130.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.39	0.00	0.028	0.000	6.389	0.00	5.21
132.00	Safety Cable	Yes	2.00	0.000	0.38	0.35	0.00	0.029	0.000	6.417	0.00	2.99

Linear Appurtenance Segment Forces (Factored)

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind	Iterations 28
Dead Load Factor 1.20	
Wind Load Factor 1.00	

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
132.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.39	0.00	0.029	0.000	6.417	0.00	5.21
132.25	Safety Cable	Yes	0.25	0.000	0.38	0.04	0.00	0.029	0.000	6.420	0.00	0.37
132.25	Step bolts (ladder)	Yes	0.25	0.000	0.63	0.05	0.00	0.029	0.000	6.420	0.00	0.65
134.00	Safety Cable	Yes	1.75	0.000	0.38	0.31	0.00	0.029	0.000	6.445	0.00	2.63
134.00	Step bolts (ladder)	Yes	1.75	0.000	0.63	0.34	0.00	0.029	0.000	6.445	0.00	4.57
136.00	Safety Cable	Yes	2.00	0.000	0.38	0.35	0.00	0.029	0.000	6.472	0.00	3.01
136.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.39	0.00	0.029	0.000	6.472	0.00	5.23
138.00	Safety Cable	Yes	2.00	0.000	0.38	0.35	0.00	0.029	0.000	6.499	0.00	3.01
138.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.39	0.00	0.029	0.000	6.499	0.00	5.23
140.00	Safety Cable	Yes	2.00	0.000	0.38	0.35	0.00	0.030	0.000	6.526	0.00	3.02
140.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.39	0.00	0.030	0.000	6.526	0.00	5.24
142.00	Safety Cable	Yes	2.00	0.000	0.38	0.35	0.00	0.030	0.000	6.552	0.00	3.03
142.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.39	0.00	0.030	0.000	6.552	0.00	5.25
144.00	Safety Cable	Yes	2.00	0.000	0.38	0.35	0.00	0.030	0.000	6.578	0.00	3.03
144.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.39	0.00	0.030	0.000	6.578	0.00	5.25
146.00	Safety Cable	Yes	2.00	0.000	0.38	0.35	0.00	0.031	0.000	6.604	0.00	3.04
146.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.40	0.00	0.031	0.000	6.604	0.00	5.26
147.00	Safety Cable	Yes	1.00	0.000	0.38	0.18	0.00	0.031	0.000	6.617	0.00	1.52
147.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.20	0.00	0.031	0.000	6.617	0.00	2.63
148.00	Safety Cable	Yes	1.00	0.000	0.38	0.18	0.00	0.031	0.000	6.630	0.00	1.52
148.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.20	0.00	0.031	0.000	6.630	0.00	2.63
150.00	Safety Cable	Yes	2.00	0.000	0.38	0.35	0.00	0.032	0.000	6.656	0.00	3.05
150.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.40	0.00	0.032	0.000	6.656	0.00	5.27
152.00	Safety Cable	Yes	2.00	0.000	0.38	0.35	0.00	0.032	0.000	6.681	0.00	3.05
152.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.40	0.00	0.032	0.000	6.681	0.00	5.28
154.00	Safety Cable	Yes	2.00	0.000	0.38	0.35	0.00	0.033	0.000	6.706	0.00	3.06
154.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.40	0.00	0.033	0.000	6.706	0.00	5.28
156.00	Safety Cable	Yes	2.00	0.000	0.38	0.36	0.00	0.033	0.000	6.731	0.00	3.06
156.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.40	0.00	0.033	0.000	6.731	0.00	5.29
157.00	Safety Cable	Yes	1.00	0.000	0.38	0.18	0.00	0.033	0.000	6.743	0.00	1.53
157.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.20	0.00	0.033	0.000	6.743	0.00	2.65
158.00	Safety Cable	Yes	1.00	0.000	0.38	0.18	0.00	0.034	0.000	6.755	0.00	1.54
158.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.20	0.00	0.034	0.000	6.755	0.00	2.65
160.00	Safety Cable	Yes	2.00	0.000	0.38	0.36	0.00	0.034	0.000	6.780	0.00	3.08
160.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.40	0.00	0.034	0.000	6.780	0.00	5.30
162.00	Safety Cable	Yes	2.00	0.000	0.38	0.36	0.00	0.034	0.000	6.804	0.00	3.08
162.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.40	0.00	0.034	0.000	6.804	0.00	5.31
164.00	Safety Cable	Yes	2.00	0.000	0.38	0.36	0.00	0.035	0.000	6.828	0.00	3.09
164.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.40	0.00	0.035	0.000	6.828	0.00	5.31
166.00	Safety Cable	Yes	2.00	0.000	0.38	0.36	0.00	0.035	0.000	6.851	0.00	3.09
166.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.40	0.00	0.035	0.000	6.851	0.00	5.32
167.00	Safety Cable	Yes	1.00	0.000	0.38	0.18	0.00	0.036	0.000	6.863	0.00	1.55
167.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.20	0.00	0.036	0.000	6.863	0.00	2.66
168.00	Safety Cable	Yes	1.00	0.000	0.38	0.18	0.00	0.036	0.000	6.875	0.00	1.55
168.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.20	0.00	0.036	0.000	6.875	0.00	2.66
170.00	Safety Cable	Yes	2.00	0.000	0.38	0.36	0.00	0.036	0.000	6.898	0.00	3.10
170.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.40	0.00	0.036	0.000	6.898	0.00	5.33

Linear Appurtenance Segment Forces (Factored)

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 43

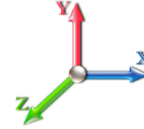


Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Iterations 28

Dead Load Factor 1.20

Wind Load Factor 1.00



Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
172.00	Safety Cable	Yes	2.00	0.000	0.38	0.36	0.00	0.037	0.000	6.921	0.00	3.11
172.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.40	0.00	0.037	0.000	6.921	0.00	5.33
174.00	Safety Cable	Yes	2.00	0.000	0.38	0.36	0.00	0.038	0.000	6.944	0.00	3.11
174.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.40	0.00	0.038	0.000	6.944	0.00	5.34
176.00	Safety Cable	Yes	2.00	0.000	0.38	0.36	0.00	0.038	0.000	6.967	0.00	3.12
176.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.40	0.00	0.038	0.000	6.967	0.00	5.34
177.00	Safety Cable	Yes	1.00	0.000	0.38	0.18	0.00	0.039	0.000	6.978	0.00	1.56
177.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.20	0.00	0.039	0.000	6.978	0.00	2.67
178.00	Safety Cable	Yes	1.00	0.000	0.38	0.18	0.00	0.039	0.000	6.989	0.00	1.56
178.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.20	0.00	0.039	0.000	6.989	0.00	2.67
180.00	Safety Cable	Yes	2.00	0.000	0.38	0.36	0.00	0.039	0.000	7.012	0.00	3.13
180.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.40	0.00	0.039	0.000	7.012	0.00	5.35
Totals:											0.0	695.8

Calculated Forces

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 44



Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Iterations 28

Dead Load Factor 1.20

Wind Load Factor 1.00



Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-71.78	-8.51	0.00	-1042.4	0.00	1042.45	5508.12	1460.53	7226.63	6725.55	0.00	0.000	0.000	0.168
2.00	-70.91	-8.46	0.00	-1025.4	0.00	1025.44	5485.89	1450.49	7127.56	6652.00	0.00	-0.016	0.000	0.167
4.00	-70.04	-8.42	0.00	-1008.5	0.00	1008.51	5463.45	1440.44	7029.17	6578.56	0.01	-0.032	0.000	0.166
6.00	-69.17	-8.38	0.00	-991.67	0.00	991.67	5440.79	1430.40	6931.47	6505.25	0.03	-0.048	0.000	0.165
8.00	-68.30	-8.33	0.00	-974.92	0.00	974.92	5417.91	1420.35	6834.46	6432.06	0.05	-0.063	0.000	0.164
10.00	-67.44	-8.29	0.00	-958.26	0.00	958.26	5394.81	1410.30	6738.12	6359.01	0.08	-0.080	0.000	0.163
12.00	-66.58	-8.24	0.00	-941.68	0.00	941.68	5371.50	1400.26	6642.47	6286.09	0.12	-0.096	0.000	0.162
14.00	-65.73	-8.20	0.00	-925.20	0.00	925.20	5347.97	1390.21	6547.51	6213.31	0.16	-0.112	0.000	0.161
16.00	-64.88	-8.15	0.00	-908.80	0.00	908.80	5324.23	1380.17	6453.22	6140.69	0.21	-0.128	0.000	0.160
18.00	-64.03	-8.11	0.00	-892.49	0.00	892.49	5300.27	1370.12	6359.62	6068.21	0.27	-0.144	0.000	0.159
20.00	-63.19	-8.06	0.00	-876.27	0.00	876.27	5276.09	1360.08	6266.71	5995.90	0.34	-0.161	0.000	0.158
22.00	-62.35	-8.02	0.00	-860.15	0.00	860.15	5251.69	1350.03	6174.48	5923.74	0.41	-0.177	0.000	0.157
24.00	-61.51	-7.97	0.00	-844.11	0.00	844.11	5227.08	1339.98	6082.93	5851.76	0.48	-0.193	0.000	0.156
26.00	-60.68	-7.92	0.00	-828.18	0.00	828.18	5202.25	1329.94	5992.07	5779.96	0.57	-0.210	0.000	0.155
28.00	-59.86	-7.87	0.00	-812.34	0.00	812.34	5177.20	1319.89	5901.89	5708.33	0.66	-0.227	0.000	0.154
30.00	-59.04	-7.82	0.00	-796.59	0.00	796.59	5151.94	1309.85	5812.39	5636.89	0.76	-0.243	0.000	0.153
32.00	-58.22	-7.77	0.00	-780.95	0.00	780.95	5126.46	1299.80	5723.58	5565.65	0.87	-0.260	0.000	0.152
34.00	-57.41	-7.72	0.00	-765.40	0.00	765.40	5100.76	1289.76	5635.45	5494.60	0.98	-0.277	0.000	0.151
36.00	-56.61	-7.67	0.00	-749.96	0.00	749.96	5074.84	1279.71	5548.01	5423.75	1.10	-0.293	0.000	0.149
38.00	-55.81	-7.62	0.00	-734.61	0.00	734.61	5048.71	1269.67	5461.24	5353.12	1.22	-0.310	0.000	0.148
40.00	-55.01	-7.57	0.00	-719.38	0.00	719.38	5022.37	1259.62	5375.17	5282.69	1.36	-0.327	0.000	0.147
42.00	-54.22	-7.51	0.00	-704.25	0.00	704.25	4995.80	1249.57	5289.77	5212.49	1.50	-0.344	0.000	0.146
44.00	-53.43	-7.46	0.00	-689.23	0.00	689.23	4969.02	1239.53	5205.06	5142.51	1.65	-0.361	0.000	0.145
45.92	-52.69	-7.40	0.00	-674.94	0.00	674.94	4943.15	1229.90	5124.53	5075.67	1.79	-0.377	0.000	0.144
46.00	-52.63	-7.40	0.00	-674.32	0.00	674.32	4942.02	1229.48	5121.04	5072.76	1.80	-0.378	0.000	0.144
48.00	-51.36	-7.34	0.00	-659.52	0.00	659.52	4914.80	1219.44	5037.70	5003.25	1.96	-0.395	0.000	0.142
50.00	-50.09	-7.28	0.00	-644.83	0.00	644.83	4887.37	1209.39	4955.04	4933.98	2.13	-0.412	0.000	0.141
52.00	-48.84	-7.22	0.00	-630.27	0.00	630.27	4859.72	1199.35	4873.06	4864.96	2.31	-0.429	0.000	0.140
53.00	-48.22	-7.18	0.00	-623.06	0.00	623.06	4967.90	1039.60	4276.54	4027.08	2.40	-0.438	0.000	0.167
54.00	-47.87	-7.16	0.00	-615.87	0.00	615.87	3958.02	1035.30	4241.23	4000.31	2.49	-0.447	0.000	0.166
56.00	-47.19	-7.10	0.00	-601.55	0.00	601.55	3938.08	1026.70	4171.06	3946.85	2.68	-0.466	0.000	0.164
58.00	-46.50	-7.05	0.00	-587.35	0.00	587.35	3917.93	1018.10	4101.47	3893.50	2.88	-0.485	0.000	0.163
60.00	-45.83	-6.99	0.00	-573.26	0.00	573.26	3897.56	1009.50	4032.47	3840.29	3.09	-0.504	0.000	0.161
62.00	-45.15	-6.93	0.00	-559.28	0.00	559.28	3876.97	1000.90	3964.05	3787.21	3.31	-0.523	0.000	0.159
64.00	-44.49	-6.87	0.00	-545.42	0.00	545.42	3856.17	992.30	3896.21	3734.27	3.53	-0.542	0.000	0.158
66.00	-43.82	-6.81	0.00	-531.68	0.00	531.68	3835.15	983.70	3828.97	3681.47	3.76	-0.562	0.000	0.156
68.00	-43.17	-6.75	0.00	-518.05	0.00	518.05	3813.91	975.10	3762.30	3628.82	4.00	-0.581	0.000	0.154
70.00	-42.51	-6.69	0.00	-504.55	0.00	504.55	3792.46	966.50	3696.23	3576.32	4.25	-0.600	0.000	0.152
72.00	-42.05	-6.60	0.00	-491.16	0.00	491.16	3770.79	957.90	3630.74	3523.99	4.50	-0.619	0.000	0.151
74.00	-41.41	-6.54	0.00	-477.95	0.00	477.95	3748.90	949.30	3565.83	3471.82	4.77	-0.638	0.000	0.149
76.00	-40.77	-6.48	0.00	-464.86	0.00	464.86	3726.79	940.70	3501.51	3419.82	5.04	-0.658	0.000	0.147
78.00	-40.13	-6.42	0.00	-451.89	0.00	451.89	3704.47	932.10	3437.77	3368.00	5.32	-0.677	0.000	0.145
80.00	-39.50	-6.36	0.00	-439.04	0.00	439.04	3681.93	923.50	3374.62	3316.36	5.61	-0.696	0.000	0.143
82.00	-38.87	-6.30	0.00	-426.32	0.00	426.32	3659.18	914.89	3312.06	3264.91	5.90	-0.715	0.000	0.141
84.00	-38.25	-6.24	0.00	-413.71	0.00	413.71	3636.21	906.29	3250.08	3213.65	6.21	-0.734	0.000	0.139
86.00	-37.64	-6.18	0.00	-401.23	0.00	401.23	3613.02	897.69	3188.69	3162.60	6.52	-0.753	0.000	0.137
88.00	-37.02	-6.12	0.00	-388.87	0.00	388.87	3589.61	889.09	3127.88	3111.74	6.84	-0.772	0.000	0.135
90.00	-36.42	-6.06	0.00	-376.63	0.00	376.63	3565.99	880.49	3067.65	3061.10	7.16	-0.791	0.000	0.133

Calculated Forces

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 45



92.00	-35.81	-5.99	0.00	-364.52	0.00	364.52	3542.15	871.89	3008.02	3010.67	7.50	-0.810	0.000	0.131
92.92	-35.54	-5.97	0.00	-359.02	0.00	359.02	3531.15	867.95	2980.88	2987.63	7.66	-0.819	0.000	0.130
94.00	-35.03	-5.93	0.00	-352.56	0.00	352.56	3518.09	863.29	2948.96	2960.46	7.84	-0.829	0.000	0.129
96.00	-34.10	-5.86	0.00	-340.70	0.00	340.70	3493.82	854.69	2890.50	2910.48	8.20	-0.848	0.000	0.127
98.00	-33.17	-5.79	0.00	-328.97	0.00	328.97	3469.33	846.09	2832.62	2860.73	8.55	-0.867	0.000	0.125
98.92	-32.75	-5.76	0.00	-323.66	0.00	323.66	2742.83	714.97	2423.35	2293.46	8.72	-0.875	0.000	0.153
100.00	-32.46	-5.73	0.00	-317.42	0.00	317.42	2733.73	711.08	2397.06	2273.32	8.92	-0.885	0.000	0.152
102.00	-31.94	-5.68	0.00	-305.96	0.00	305.96	2716.76	703.90	2348.90	2236.23	9.30	-0.906	0.000	0.149
104.00	-31.42	-5.63	0.00	-294.60	0.00	294.60	2699.58	696.72	2301.24	2199.25	9.68	-0.927	0.000	0.146
106.00	-30.91	-5.57	0.00	-283.35	0.00	283.35	2682.18	689.54	2254.06	2162.39	10.07	-0.948	0.000	0.143
108.00	-30.40	-5.52	0.00	-272.21	0.00	272.21	2664.56	682.36	2207.37	2125.64	10.48	-0.969	0.000	0.140
110.00	-29.89	-5.46	0.00	-261.17	0.00	261.17	2646.73	675.19	2161.17	2089.03	10.89	-0.989	0.000	0.136
112.00	-29.39	-5.41	0.00	-250.24	0.00	250.24	2628.68	668.01	2115.46	2052.54	11.30	-1.009	0.000	0.133
114.00	-28.89	-5.36	0.00	-239.42	0.00	239.42	2610.42	660.83	2070.24	2016.20	11.73	-1.029	0.000	0.130
116.00	-28.40	-5.30	0.00	-228.71	0.00	228.71	2591.93	653.65	2025.50	1980.00	12.17	-1.049	0.000	0.127
118.00	-27.91	-5.25	0.00	-218.10	0.00	218.10	2573.23	646.47	1981.26	1943.94	12.61	-1.068	0.000	0.123
120.00	-27.43	-5.19	0.00	-207.60	0.00	207.60	2554.31	639.29	1937.50	1908.04	13.06	-1.087	0.000	0.120
122.00	-26.94	-5.14	0.00	-197.21	0.00	197.21	2535.18	632.11	1894.23	1872.30	13.52	-1.106	0.000	0.116
124.00	-26.47	-5.09	0.00	-186.93	0.00	186.93	2515.83	624.93	1851.45	1836.73	13.99	-1.125	0.000	0.112
126.00	-25.99	-5.03	0.00	-176.76	0.00	176.76	2496.26	617.76	1809.16	1801.33	14.46	-1.143	0.000	0.109
127.00	-25.76	-5.00	0.00	-171.73	0.00	171.73	2486.40	614.17	1788.19	1783.69	14.71	-1.152	0.000	0.107
128.00	-25.42	-4.98	0.00	-166.73	0.00	166.73	2476.48	610.58	1767.35	1766.10	14.95	-1.161	0.000	0.105
130.00	-24.76	-4.92	0.00	-156.78	0.00	156.78	2456.47	603.40	1726.04	1731.06	15.44	-1.178	0.000	0.101
132.00	-24.10	-4.85	0.00	-146.95	0.00	146.95	2436.26	596.22	1685.21	1696.20	15.93	-1.195	0.000	0.097
132.25	-24.02	-4.85	0.00	-145.74	0.00	145.74	1490.15	423.06	1212.67	1055.13	16.00	-1.197	0.000	0.154
134.00	-23.69	-4.80	0.00	-137.25	0.00	137.25	1482.58	418.66	1187.61	1038.80	16.44	-1.211	0.000	0.148
136.00	-23.31	-4.75	0.00	-127.65	0.00	127.65	1473.72	413.64	1159.28	1020.12	16.95	-1.232	0.000	0.141
138.00	-22.94	-4.70	0.00	-118.14	0.00	118.14	1464.65	408.62	1131.30	1001.45	17.47	-1.253	0.000	0.134
140.00	-22.57	-4.65	0.00	-108.74	0.00	108.74	1455.36	403.59	1103.66	982.79	18.00	-1.273	0.000	0.126
142.00	-22.21	-4.60	0.00	-99.45	0.00	99.45	1445.85	398.57	1076.36	964.14	18.54	-1.292	0.000	0.119
144.00	-21.84	-4.54	0.00	-90.25	0.00	90.25	1436.13	393.55	1049.40	945.50	19.08	-1.309	0.000	0.111
146.00	-21.49	-4.49	0.00	-81.17	0.00	81.17	1426.18	388.53	1022.78	926.89	19.64	-1.326	0.000	0.103
147.00	-17.61	-3.92	0.00	-76.67	0.00	76.67	1421.13	386.01	1009.60	917.60	19.91	-1.334	0.000	0.096
148.00	-17.43	-3.89	0.00	-72.76	0.00	72.76	1416.03	383.50	996.51	908.31	20.19	-1.342	0.000	0.093
150.00	-17.08	-3.84	0.00	-64.97	0.00	64.97	1405.65	378.48	970.58	889.77	20.76	-1.356	0.000	0.085
152.00	-16.74	-3.79	0.00	-57.29	0.00	57.29	1395.06	373.46	944.99	871.26	21.33	-1.370	0.000	0.078
154.00	-16.40	-3.73	0.00	-49.71	0.00	49.71	1384.25	368.43	919.74	852.80	21.91	-1.382	0.000	0.070
156.00	-16.06	-3.68	0.00	-42.24	0.00	42.24	1373.23	363.41	894.83	834.39	22.49	-1.393	0.000	0.062
157.00	-11.31	-2.78	0.00	-38.56	0.00	38.56	1367.63	360.90	882.51	825.21	22.78	-1.398	0.000	0.055
158.00	-11.16	-2.75	0.00	-35.79	0.00	35.79	1361.98	358.39	870.27	816.04	23.07	-1.402	0.000	0.052
160.00	-10.86	-2.70	0.00	-30.28	0.00	30.28	1350.53	353.37	846.04	797.75	23.66	-1.411	0.000	0.046
162.00	-10.56	-2.65	0.00	-24.88	0.00	24.88	1338.85	348.34	822.16	779.52	24.26	-1.418	0.000	0.040
164.00	-10.27	-2.59	0.00	-19.59	0.00	19.59	1326.96	343.32	798.62	761.37	24.85	-1.425	0.000	0.034
166.00	-9.98	-2.54	0.00	-14.40	0.00	14.40	1314.85	338.30	775.43	743.30	25.45	-1.430	0.000	0.027
167.00	-4.22	-1.27	0.00	-11.85	0.00	11.85	1308.71	335.79	763.96	734.30	25.75	-1.432	0.000	0.019
168.00	-4.09	-1.25	0.00	-10.58	0.00	10.58	1302.52	333.27	752.57	725.32	26.05	-1.433	0.000	0.018
170.00	-3.84	-1.20	0.00	-8.09	0.00	8.09	1289.98	328.25	730.06	707.42	26.65	-1.436	0.000	0.014
172.00	-3.60	-1.15	0.00	-5.70	0.00	5.70	1277.22	323.23	707.89	689.62	27.25	-1.439	0.000	0.011
174.00	-3.36	-1.10	0.00	-3.40	0.00	3.40	1264.24	318.21	686.06	671.91	27.86	-1.440	0.000	0.008
176.00	-3.12	-1.05	0.00	-1.21	0.00	1.21	1251.05	313.18	664.57	654.32	28.46	-1.441	0.000	0.004
177.00	-0.31	-0.07	0.00	-0.17	0.00	0.17	1244.37	310.67	653.95	645.56	28.76	-1.441	0.000	0.001
178.00	-0.21	-0.05	0.00	-0.09	0.00	0.09	1237.63	308.16	643.42	636.84	29.06	-1.441	0.000	0.000
180.00	0.00	-0.04	0.00	0.00	0.00	0.00	1224.01	303.14	622.62	619.47	29.67	-1.441	0.000	0.000

Seismic Segment Forces (Factored)

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 46



Load Case: 1.2D + 1.0Ev + 1.0Eh

Iterations 26

Gust Response Factor 1.10	Sds 0.22	Ss 0.21	
Dead Load Factor 1.20	Seismic Load Factor 1.00	Sd1 0.09	
Wind Load Factor 0.00	Structure Frequency (f1) 0.28	SA 0.02	
			Seismic Importance Factor 1.00

Top Elev (ft)	Description	Wz (lb)	Hz (lb)	Vertical Ev (lb)	Lateral Fs (lb)	
0.00		0.00	0.00	0.00	0.00	
2.00		664.18	1.00	29.33	0.00	
4.00		660.28	3.00	29.16	0.00	
6.00		656.39	5.00	28.99	0.01	
8.00		652.49	7.00	28.81	0.01	
10.00		648.60	9.00	28.64	0.02	
12.00		644.70	11.00	28.47	0.03	
14.00		640.81	13.00	28.30	0.04	
16.00		636.91	15.00	28.13	0.05	
18.00		633.02	17.00	27.95	0.06	
20.00		629.12	19.00	27.78	0.08	
22.00		625.22	21.00	27.61	0.09	
24.00		621.33	23.00	27.44	0.11	
26.00		617.43	25.00	27.27	0.13	
28.00		613.54	27.00	27.09	0.15	
30.00		609.64	29.00	26.92	0.17	
32.00		605.75	31.00	26.75	0.19	
34.00		601.85	33.00	26.58	0.21	
36.00		597.96	35.00	26.41	0.23	
38.00		594.06	37.00	26.23	0.26	
40.00		590.16	39.00	26.06	0.28	
42.00		586.27	41.00	25.89	0.31	
44.00		582.37	43.00	25.72	0.33	
45.92	Bot - Section 2	554.45	44.96	24.48	0.33	
46.00		41.31	45.96	1.82	0.00	
48.00		987.73	47.00	43.62	1.14	
50.00		980.50	49.00	43.30	1.22	
52.00		973.27	51.00	42.98	1.30	
53.00	Top - Section 1	483.92	52.50	21.37	0.34	
54.00		251.03	53.50	11.09	0.10	
56.00		499.56	55.00	22.06	0.40	
58.00		496.23	57.00	21.91	0.42	
60.00		492.89	59.00	21.77	0.45	
62.00		489.56	61.00	21.62	0.47	
64.00		486.22	63.00	21.47	0.50	
66.00		482.89	65.00	21.32	0.52	
68.00		479.55	67.00	21.18	0.55	
70.00		476.22	69.00	21.03	0.57	
72.00	Appurtenance(s)	503.88	71.00	22.25	0.68	
74.00		469.16	73.00	20.72	0.62	
76.00		465.83	75.00	20.57	0.65	
78.00		462.49	77.00	20.42	0.67	
80.00		459.16	79.00	20.28	0.70	
82.00		455.82	81.00	20.13	0.72	
84.00		452.49	83.00	19.98	0.75	
86.00		449.15	85.00	19.83	0.77	

R: 1.50

Seismic Segment Forces (Factored)

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 47



88.00		445.82	87.00	19.69	0.80
90.00		442.48	89.00	19.54	0.82
92.00		439.15	91.00	19.39	0.85
92.92	Bot - Section 3	200.16	92.46	8.84	0.18
94.00		389.94	93.46	17.22	0.70
96.00		715.18	95.00	31.58	2.44
98.00		709.06	97.00	31.31	2.51
98.92	Top - Section 2	322.94	98.46	14.26	0.54
100.00		203.60	99.46	8.99	0.22
102.00		373.73	101.00	16.50	0.75
104.00		370.94	103.00	16.38	0.77
106.00		368.16	105.00	16.26	0.79
108.00		365.38	107.00	16.14	0.81
110.00		362.59	109.00	16.01	0.83
112.00		359.81	111.00	15.89	0.84
114.00		357.03	113.00	15.77	0.86
116.00		354.24	115.00	15.64	0.88
118.00		351.46	117.00	15.52	0.90
120.00		348.67	119.00	15.40	0.91
122.00		345.89	121.00	15.27	0.93
124.00		343.11	123.00	15.15	0.94
126.00		340.32	125.00	15.03	0.96
127.00	Bot - Section 4	169.12	126.50	7.47	0.24
128.00		252.76	127.50	11.16	0.55
130.00		501.97	129.00	22.17	2.22
132.00		497.24	131.00	21.96	2.25
132.25	Top - Section 3	61.82	132.13	2.73	0.04
134.00		229.76	133.13	10.15	0.50
136.00		260.75	135.00	11.51	0.66
138.00		258.80	137.00	11.43	0.67
140.00		256.86	139.00	11.34	0.68
142.00		254.91	141.00	11.26	0.68
144.00		252.96	143.00	11.17	0.69
146.00		251.01	145.00	11.08	0.70
147.00	Appurtenance(s)	2492.8	146.50	110.09	70.64
148.00		122.11	147.50	5.39	0.17
150.00		242.75	149.00	10.72	0.69
152.00		240.80	151.00	10.63	0.70
154.00		238.85	153.00	10.55	0.71
156.00		236.91	155.00	10.46	0.71
157.00	Appurtenance(s)	3562.3	156.50	157.31	164.60
158.00		101.23	157.50	4.47	0.13
160.00		201.00	159.00	8.88	0.54
162.00		199.05	161.00	8.79	0.54
164.00		197.10	163.00	8.70	0.55
166.00		195.15	165.00	8.62	0.55
167.00	Appurtenance(s)	3862.8	166.50	170.58	219.08
168.00		78.92	167.50	3.49	0.09
170.00		156.37	169.00	6.91	0.37
172.00		154.43	171.00	6.82	0.37
174.00		152.48	173.00	6.73	0.37
176.00		150.53	175.00	6.65	0.37
177.00	Appurtenance(s)	3916.0	176.50	172.93	253.01
178.00		61.57	177.50	2.72	0.06
180.00		121.68	179.00	5.37	0.25
Totals:		54,048.0	2,386.8	761.2	Total Wind: 34,163.3

Seismic Segment Forces (Factored)

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 48

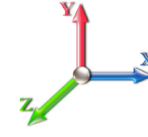


Calculated Forces

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Load Case: 1.2D + 1.0Ev + 1.0Eh										Iterations 26
Gust Response Factor 1.10					Sds 0.22					Ss 0.21
Dead Load Factor 1.20			Seismic Load Factor 1.00			Sd1 0.09			S1 0.06	
Wind Load Factor 0.00		Structure Frequency (f1) 0.28		SA 0.02		Seismic Importance Factor 1.00				



Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-65.59	-0.76	0.00	-131.87	0.00	131.87	5508.12	1460.53	7226.63	6725.55	0.00	0.00	0.00	0.032
2.00	-64.79	-0.76	0.00	-130.35	0.00	130.35	5485.89	1450.49	7127.56	6652.00	0.00	0.00	0.00	0.031
4.00	-63.99	-0.77	0.00	-128.83	0.00	128.83	5463.45	1440.44	7029.17	6578.56	0.00	0.00	0.00	0.031
6.00	-63.19	-0.77	0.00	-127.30	0.00	127.30	5440.79	1430.40	6931.47	6505.25	0.00	-0.01	0.00	0.031
8.00	-62.40	-0.77	0.00	-125.76	0.00	125.76	5417.91	1420.35	6834.46	6432.06	0.01	-0.01	0.00	0.031
10.00	-61.61	-0.77	0.00	-124.22	0.00	124.22	5394.81	1410.30	6738.12	6359.01	0.01	-0.01	0.00	0.031
12.00	-60.83	-0.77	0.00	-122.68	0.00	122.68	5371.50	1400.26	6642.47	6286.09	0.02	-0.01	0.00	0.031
14.00	-60.05	-0.78	0.00	-121.13	0.00	121.13	5347.97	1390.21	6547.51	6213.31	0.02	-0.01	0.00	0.031
16.00	-59.28	-0.78	0.00	-119.58	0.00	119.58	5324.23	1380.17	6453.22	6140.69	0.03	-0.02	0.00	0.031
18.00	-58.51	-0.78	0.00	-118.03	0.00	118.03	5300.27	1370.12	6359.62	6068.21	0.03	-0.02	0.00	0.030
20.00	-57.75	-0.78	0.00	-116.47	0.00	116.47	5276.09	1360.08	6266.71	5995.90	0.04	-0.02	0.00	0.030
22.00	-56.99	-0.78	0.00	-114.91	0.00	114.91	5251.69	1350.03	6174.48	5923.74	0.05	-0.02	0.00	0.030
24.00	-56.24	-0.78	0.00	-113.34	0.00	113.34	5227.08	1339.98	6082.93	5851.76	0.06	-0.03	0.00	0.030
26.00	-55.49	-0.79	0.00	-111.77	0.00	111.77	5202.25	1329.94	5992.07	5779.96	0.07	-0.03	0.00	0.030
28.00	-54.74	-0.79	0.00	-110.20	0.00	110.20	5177.20	1319.89	5901.89	5708.33	0.09	-0.03	0.00	0.030
30.00	-54.01	-0.79	0.00	-108.62	0.00	108.62	5151.94	1309.85	5812.39	5636.89	0.10	-0.03	0.00	0.030
32.00	-53.27	-0.79	0.00	-107.04	0.00	107.04	5126.46	1299.80	5723.58	5565.65	0.11	-0.03	0.00	0.030
34.00	-52.54	-0.79	0.00	-105.46	0.00	105.46	5100.76	1289.76	5635.45	5494.60	0.13	-0.04	0.00	0.029
36.00	-51.82	-0.79	0.00	-103.88	0.00	103.88	5074.84	1279.71	5548.01	5423.75	0.14	-0.04	0.00	0.029
38.00	-51.10	-0.80	0.00	-102.29	0.00	102.29	5048.71	1269.67	5461.24	5353.12	0.16	-0.04	0.00	0.029
40.00	-50.39	-0.80	0.00	-100.70	0.00	100.70	5022.37	1259.62	5375.17	5282.69	0.18	-0.04	0.00	0.029
42.00	-49.68	-0.80	0.00	-99.10	0.00	99.10	4995.80	1249.57	5289.77	5212.49	0.20	-0.05	0.00	0.029
44.00	-48.97	-0.80	0.00	-97.51	0.00	97.51	4969.02	1239.53	5205.06	5142.51	0.22	-0.05	0.00	0.029
45.92	-48.30	-0.80	0.00	-95.98	0.00	95.98	4943.15	1229.90	5124.53	5075.67	0.24	-0.05	0.00	0.029
46.00	-48.25	-0.80	0.00	-95.91	0.00	95.91	4942.02	1229.48	5121.04	5072.76	0.24	-0.05	0.00	0.029
48.00	-47.04	-0.80	0.00	-94.31	0.00	94.31	4914.80	1219.44	5037.70	5003.25	0.26	-0.05	0.00	0.028
50.00	-45.84	-0.80	0.00	-92.71	0.00	92.71	4887.37	1209.39	4955.04	4933.98	0.28	-0.06	0.00	0.028
52.00	-44.65	-0.80	0.00	-91.11	0.00	91.11	4859.72	1199.35	4873.06	4864.96	0.31	-0.06	0.00	0.028
53.00	-44.06	-0.80	0.00	-90.31	0.00	90.31	3967.90	1039.60	4276.54	4027.08	0.32	-0.06	0.00	0.034
54.00	-43.76	-0.80	0.00	-89.52	0.00	89.52	3958.02	1035.30	4241.23	4000.31	0.33	-0.06	0.00	0.033
56.00	-43.15	-0.80	0.00	-87.92	0.00	87.92	3938.08	1026.70	4171.06	3946.85	0.36	-0.06	0.00	0.033
58.00	-42.56	-0.80	0.00	-86.32	0.00	86.32	3917.93	1018.10	4101.47	3893.50	0.38	-0.07	0.00	0.033
60.00	-41.96	-0.80	0.00	-84.71	0.00	84.71	3897.56	1009.50	4032.47	3840.29	0.41	-0.07	0.00	0.033
62.00	-41.37	-0.80	0.00	-83.11	0.00	83.11	3876.97	1000.90	3964.05	3787.21	0.44	-0.07	0.00	0.033
64.00	-40.79	-0.80	0.00	-81.50	0.00	81.50	3856.17	992.30	3896.21	3734.27	0.47	-0.07	0.00	0.032
66.00	-40.21	-0.81	0.00	-79.89	0.00	79.89	3835.15	983.70	3828.97	3681.47	0.50	-0.08	0.00	0.032
68.00	-39.63	-0.81	0.00	-78.28	0.00	78.28	3813.91	975.10	3762.30	3628.82	0.54	-0.08	0.00	0.032
70.00	-39.06	-0.81	0.00	-76.67	0.00	76.67	3792.46	966.50	3696.23	3576.32	0.57	-0.08	0.00	0.032
72.00	-38.45	-0.81	0.00	-75.06	0.00	75.06	3770.79	957.90	3630.74	3523.99	0.61	-0.09	0.00	0.031
74.00	-37.89	-0.81	0.00	-73.44	0.00	73.44	3748.90	949.30	3565.83	3471.82	0.64	-0.09	0.00	0.031
76.00	-37.33	-0.81	0.00	-71.83	0.00	71.83	3726.79	940.70	3501.51	3419.82	0.68	-0.09	0.00	0.031
78.00	-36.77	-0.81	0.00	-70.22	0.00	70.22	3704.47	932.10	3437.77	3368.00	0.72	-0.10	0.00	0.031
80.00	-36.22	-0.81	0.00	-68.60	0.00	68.60	3681.93	923.50	3374.62	3316.36	0.76	-0.10	0.00	0.031
82.00	-35.67	-0.81	0.00	-66.98	0.00	66.98	3659.18	914.89	3312.06	3264.91	0.80	-0.10	0.00	0.030
84.00	-35.13	-0.81	0.00	-65.37	0.00	65.37	3636.21	906.29	3250.08	3213.65	0.85	-0.10	0.00	0.030
86.00	-34.59	-0.81	0.00	-63.75	0.00	63.75	3613.02	897.69	3188.69	3162.60	0.89	-0.11	0.00	0.030
88.00	-34.06	-0.81	0.00	-62.13	0.00	62.13	3589.61	889.09	3127.88	3111.74	0.94	-0.11	0.00	0.029

Calculated Forces

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 50



90.00	-33.53	-0.81	0.00	-60.52	0.00	60.52	3565.99	880.49	3067.65	3061.10	0.98	-0.11	0.029
92.00	-33.00	-0.81	0.00	-58.90	0.00	58.90	3542.15	871.89	3008.02	3010.67	1.03	-0.12	0.029
92.92	-32.76	-0.81	0.00	-58.16	0.00	58.16	3531.15	867.95	2980.88	2987.63	1.05	-0.12	0.029
94.00	-32.29	-0.81	0.00	-57.28	0.00	57.28	3518.09	863.29	2948.96	2960.46	1.08	-0.12	0.029
96.00	-31.42	-0.81	0.00	-55.67	0.00	55.67	3493.82	854.69	2890.50	2910.48	1.13	-0.12	0.028
98.00	-30.55	-0.80	0.00	-54.06	0.00	54.06	3469.33	846.09	2832.62	2860.73	1.18	-0.13	0.028
98.92	-30.16	-0.80	0.00	-53.32	0.00	53.32	2742.83	714.97	2423.35	2293.46	1.21	-0.13	0.034
100.00	-29.92	-0.80	0.00	-52.45	0.00	52.45	2733.73	711.08	2397.06	2273.32	1.24	-0.13	0.034
102.00	-29.47	-0.80	0.00	-50.85	0.00	50.85	2716.76	703.90	2348.90	2236.23	1.29	-0.13	0.034
104.00	-29.03	-0.80	0.00	-49.24	0.00	49.24	2699.58	696.72	2301.24	2199.25	1.35	-0.14	0.033
106.00	-28.59	-0.80	0.00	-47.64	0.00	47.64	2682.18	689.54	2254.06	2162.39	1.40	-0.14	0.033
108.00	-28.16	-0.80	0.00	-46.04	0.00	46.04	2664.56	682.36	2207.37	2125.64	1.46	-0.14	0.032
110.00	-27.73	-0.80	0.00	-44.43	0.00	44.43	2646.73	675.19	2161.17	2089.03	1.52	-0.15	0.032
112.00	-27.30	-0.80	0.00	-42.83	0.00	42.83	2628.68	668.01	2115.46	2052.54	1.59	-0.15	0.031
114.00	-26.88	-0.80	0.00	-41.23	0.00	41.23	2610.42	660.83	2070.24	2016.20	1.65	-0.15	0.031
116.00	-26.45	-0.80	0.00	-39.62	0.00	39.62	2591.93	653.65	2025.50	1980.00	1.71	-0.16	0.030
118.00	-26.04	-0.80	0.00	-38.02	0.00	38.02	2573.23	646.47	1981.26	1943.94	1.78	-0.16	0.030
120.00	-25.62	-0.80	0.00	-36.42	0.00	36.42	2554.31	639.29	1937.50	1908.04	1.85	-0.16	0.029
122.00	-25.21	-0.80	0.00	-34.82	0.00	34.82	2535.18	632.11	1894.23	1872.30	1.92	-0.17	0.029
124.00	-24.81	-0.80	0.00	-33.23	0.00	33.23	2515.83	624.93	1851.45	1836.73	1.99	-0.17	0.028
126.00	-24.40	-0.80	0.00	-31.63	0.00	31.63	2496.26	617.76	1809.16	1801.33	2.06	-0.17	0.027
127.00	-24.20	-0.80	0.00	-30.83	0.00	30.83	2486.40	614.17	1788.19	1783.69	2.10	-0.17	0.027
128.00	-23.90	-0.80	0.00	-30.04	0.00	30.04	2476.48	610.58	1767.35	1766.10	2.13	-0.18	0.027
130.00	-23.29	-0.79	0.00	-28.44	0.00	28.44	2456.47	603.40	1726.04	1731.06	2.21	-0.18	0.026
132.00	-22.69	-0.79	0.00	-26.86	0.00	26.86	2436.26	596.22	1685.21	1696.20	2.28	-0.18	0.025
132.25	-22.62	-0.79	0.00	-26.66	0.00	26.66	1490.15	423.06	1212.67	1055.13	2.29	-0.18	0.040
134.00	-22.35	-0.79	0.00	-25.28	0.00	25.28	1482.58	418.66	1187.61	1038.80	2.36	-0.19	0.039
136.00	-22.05	-0.79	0.00	-23.69	0.00	23.69	1473.72	413.64	1159.28	1020.12	2.44	-0.19	0.038
138.00	-21.74	-0.79	0.00	-22.11	0.00	22.11	1464.65	408.62	1131.30	1001.45	2.52	-0.19	0.037
140.00	-21.44	-0.79	0.00	-20.53	0.00	20.53	1455.36	403.59	1103.66	982.79	2.60	-0.20	0.036
142.00	-21.15	-0.79	0.00	-18.95	0.00	18.95	1445.85	398.57	1076.36	964.14	2.68	-0.20	0.034
144.00	-20.85	-0.79	0.00	-17.37	0.00	17.37	1436.13	393.55	1049.40	945.50	2.77	-0.20	0.033
146.00	-20.56	-0.79	0.00	-15.80	0.00	15.80	1426.18	388.53	1022.78	926.89	2.85	-0.21	0.031
147.00	-17.47	-0.71	0.00	-15.01	0.00	15.01	1421.13	386.01	1009.60	917.60	2.90	-0.21	0.029
148.00	-17.33	-0.71	0.00	-14.30	0.00	14.30	1416.03	383.50	996.51	908.31	2.94	-0.21	0.028
150.00	-17.04	-0.71	0.00	-12.89	0.00	12.89	1405.65	378.48	970.58	889.77	3.03	-0.21	0.027
152.00	-16.76	-0.71	0.00	-11.48	0.00	11.48	1395.06	373.46	944.99	871.26	3.12	-0.22	0.025
154.00	-16.48	-0.70	0.00	-10.07	0.00	10.07	1384.25	368.43	919.74	852.80	3.21	-0.22	0.024
156.00	-16.21	-0.70	0.00	-8.66	0.00	8.66	1373.23	363.41	894.83	834.39	3.30	-0.22	0.022
157.00	-11.79	-0.52	0.00	-7.96	0.00	7.96	1367.63	360.90	882.51	825.21	3.35	-0.22	0.018
158.00	-11.67	-0.52	0.00	-7.44	0.00	7.44	1361.98	358.39	870.27	816.04	3.39	-0.22	0.018
160.00	-11.43	-0.52	0.00	-6.39	0.00	6.39	1350.53	353.37	846.04	797.75	3.49	-0.22	0.016
162.00	-11.19	-0.52	0.00	-5.35	0.00	5.35	1338.85	348.34	822.16	779.52	3.58	-0.23	0.015
164.00	-10.96	-0.52	0.00	-4.32	0.00	4.32	1326.96	343.32	798.62	761.37	3.68	-0.23	0.014
166.00	-10.73	-0.52	0.00	-3.28	0.00	3.28	1314.85	338.30	775.43	743.30	3.77	-0.23	0.013
167.00	-5.93	-0.28	0.00	-2.76	0.00	2.76	1308.71	335.79	763.96	734.30	3.82	-0.23	0.008
168.00	-5.84	-0.28	0.00	-2.49	0.00	2.49	1302.52	333.27	752.57	725.32	3.87	-0.23	0.008
170.00	-5.65	-0.28	0.00	-1.93	0.00	1.93	1289.98	328.25	730.06	707.42	3.96	-0.23	0.007
172.00	-5.46	-0.28	0.00	-1.38	0.00	1.38	1277.22	323.23	707.89	689.62	4.06	-0.23	0.006
174.00	-5.28	-0.27	0.00	-0.83	0.00	0.83	1264.24	318.21	686.06	671.91	4.16	-0.23	0.005
176.00	-5.10	-0.27	0.00	-0.28	0.00	0.28	1251.05	313.18	664.57	654.32	4.25	-0.23	0.004
177.00	-0.23	0.00	0.00	0.00	0.00	0.00	1244.37	310.67	653.95	645.56	4.30	-0.23	0.000
178.00	-0.15	0.00	0.00	0.00	0.00	0.00	1237.63	308.16	643.42	636.84	4.35	-0.23	0.000
180.00	0.00	0.00	0.00	0.00	0.00	0.00	1224.01	303.14	622.62	619.47	4.45	-0.23	0.000

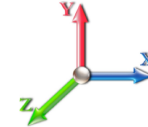
Seismic Segment Forces (Factored)

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 0.9D + 1.0Ev + 1.0Eh				Iterations 26
Gust Response Factor	1.10	Sds	0.22	Ss 0.21
Dead Load Factor	0.90	Seismic Load Factor	1.00	S1 0.06
Wind Load Factor	0.00	Structure Frequency (f1)	0.28	SA 0.02
				Seismic Importance Factor 1.00



Top Elev (ft)	Description	Wz (lb)	Hz (lb)	Vertical Ev (lb)	Lateral Fs (lb)	R: 1.50
0.00		0.00	0.00	0.00	0.00	
2.00		639.24	1.00	28.23	0.00	
4.00		635.34	3.00	28.06	0.00	
6.00		631.45	5.00	27.88	0.01	
8.00		627.55	7.00	27.71	0.01	
10.00		623.66	9.00	27.54	0.02	
12.00		619.76	11.00	27.37	0.02	
14.00		615.87	13.00	27.20	0.03	
16.00		611.97	15.00	27.02	0.05	
18.00		608.08	17.00	26.85	0.06	
20.00		604.18	19.00	26.68	0.07	
22.00		600.28	21.00	26.51	0.09	
24.00		596.39	23.00	26.34	0.10	
26.00		592.49	25.00	26.16	0.12	
28.00		588.60	27.00	25.99	0.14	
30.00		584.70	29.00	25.82	0.15	
32.00		580.81	31.00	25.65	0.17	
34.00		576.91	33.00	25.48	0.19	
36.00		573.02	35.00	25.30	0.22	
38.00		569.12	37.00	25.13	0.24	
40.00		565.22	39.00	24.96	0.26	
42.00		561.33	41.00	24.79	0.28	
44.00		557.43	43.00	24.62	0.31	
45.92	Bot - Section 2	530.55	44.96	23.43	0.31	
46.00		40.27	45.96	1.78	0.00	
48.00		962.79	47.00	42.52	1.10	
50.00		955.56	49.00	42.20	1.18	
52.00		948.33	51.00	41.88	1.25	
53.00	Top - Section 1	471.45	52.50	20.82	0.33	
54.00		238.56	53.50	10.53	0.09	
56.00		474.62	55.00	20.96	0.37	
58.00		471.29	57.00	20.81	0.39	
60.00		467.95	59.00	20.66	0.41	
62.00		464.62	61.00	20.52	0.43	
64.00		461.28	63.00	20.37	0.45	
66.00		457.95	65.00	20.22	0.48	
68.00		454.61	67.00	20.08	0.50	
70.00		451.28	69.00	19.93	0.52	
72.00	Appurtenance(s)	478.94	71.00	21.15	0.62	
74.00		444.32	73.00	19.62	0.56	
76.00		440.98	75.00	19.47	0.59	
78.00		437.65	77.00	19.33	0.61	
80.00		434.31	79.00	19.18	0.63	
82.00		430.98	81.00	19.03	0.65	
84.00		427.64	83.00	18.88	0.68	
86.00		424.31	85.00	18.74	0.70	

Seismic Segment Forces (Factored)

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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88.00		420.97	87.00	18.59	0.72
90.00		417.64	89.00	18.44	0.74
92.00		414.30	91.00	18.30	0.76
92.92	Bot - Section 3	188.77	92.46	8.34	0.16
94.00		376.49	93.46	16.63	0.66
96.00		690.33	95.00	30.49	2.31
98.00		684.22	97.00	30.21	2.36
98.92	Top - Section 2	311.55	98.46	13.76	0.50
100.00		190.14	99.46	8.40	0.19
102.00		348.88	101.00	15.41	0.67
104.00		346.10	103.00	15.28	0.68
106.00		343.32	105.00	15.16	0.70
108.00		340.53	107.00	15.04	0.71
110.00		337.75	109.00	14.91	0.73
112.00		334.96	111.00	14.79	0.74
114.00		332.18	113.00	14.67	0.76
116.00		329.40	115.00	14.55	0.77
118.00		326.61	117.00	14.42	0.78
120.00		323.83	119.00	14.30	0.80
122.00		321.05	121.00	14.18	0.81
124.00		318.26	123.00	14.05	0.82
126.00		315.48	125.00	13.93	0.83
127.00	Bot - Section 4	156.70	126.50	6.92	0.21
128.00		240.34	127.50	10.61	0.50
130.00		477.13	129.00	21.07	2.03
132.00		472.40	131.00	20.86	2.05
132.25	Top - Section 3	58.72	132.13	2.59	0.03
134.00		208.02	133.13	9.19	0.41
136.00		235.91	135.00	10.42	0.54
138.00		233.96	137.00	10.33	0.55
140.00		232.01	139.00	10.25	0.56
142.00		230.06	141.00	10.16	0.56
144.00		228.12	143.00	10.07	0.57
146.00		226.17	145.00	9.99	0.58
147.00	Appurtenance(s)	2480.4	146.50	109.54	70.79
148.00		110.23	147.50	4.87	0.14
150.00		219.00	149.00	9.67	0.57
152.00		217.05	151.00	9.58	0.58
154.00		215.10	153.00	9.50	0.58
156.00		213.15	155.00	9.41	0.59
157.00	Appurtenance(s)	3550.4	156.50	156.79	165.52
158.00		93.35	157.50	4.12	0.12
160.00		185.25	159.00	8.18	0.47
162.00		183.30	161.00	8.09	0.47
164.00		181.35	163.00	8.01	0.47
166.00		179.40	165.00	7.92	0.47
167.00	Appurtenance(s)	3854.9	166.50	170.24	220.87
168.00		75.40	167.50	3.33	0.09
170.00		149.35	169.00	6.60	0.34
172.00		147.40	171.00	6.51	0.34
174.00		145.45	173.00	6.42	0.34
176.00		143.50	175.00	6.34	0.34
177.00	Appurtenance(s)	3912.5	176.50	172.78	255.66
178.00		61.17	177.50	2.70	0.06
180.00		120.89	179.00	5.34	0.25

Totals:	51,984.7	2,295.6	761.2	Total Wind:	34,163.3
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Seismic Segment Forces (Factored)

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 53

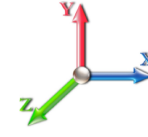


Calculated Forces

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Load Case: 0.9D + 1.0Ev + 1.0Eh										Iterations 26
Gust Response Factor 1.10					Sds 0.22					Ss 0.21
Dead Load Factor 0.90			Seismic Load Factor 1.00			Sd1 0.09			S1 0.06	
Wind Load Factor 0.00		Structure Frequency (f1) 0.28		SA 0.02		Seismic Importance Factor 1.00				



Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-49.70	-0.76	0.00	-129.94	0.00	129.94	5508.12	1460.53	7226.63	6725.55	0.00	0.00	0.00	0.028
2.00	-49.09	-0.76	0.00	-128.42	0.00	128.42	5485.89	1450.49	7127.56	6652.00	0.00	0.00	0.00	0.028
4.00	-48.48	-0.76	0.00	-126.90	0.00	126.90	5463.45	1440.44	7029.17	6578.56	0.00	0.00	0.00	0.028
6.00	-47.88	-0.77	0.00	-125.37	0.00	125.37	5440.79	1430.40	6931.47	6505.25	0.00	-0.01	0.00	0.028
8.00	-47.28	-0.77	0.00	-123.84	0.00	123.84	5417.91	1420.35	6834.46	6432.06	0.01	-0.01	0.00	0.028
10.00	-46.68	-0.77	0.00	-122.30	0.00	122.30	5394.81	1410.30	6738.12	6359.01	0.01	-0.01	0.00	0.028
12.00	-46.09	-0.77	0.00	-120.77	0.00	120.77	5371.50	1400.26	6642.47	6286.09	0.02	-0.01	0.00	0.028
14.00	-45.50	-0.77	0.00	-119.23	0.00	119.23	5347.97	1390.21	6547.51	6213.31	0.02	-0.01	0.00	0.028
16.00	-44.92	-0.77	0.00	-117.68	0.00	117.68	5324.23	1380.17	6453.22	6140.69	0.03	-0.02	0.00	0.028
18.00	-44.33	-0.77	0.00	-116.14	0.00	116.14	5300.27	1370.12	6359.62	6068.21	0.03	-0.02	0.00	0.028
20.00	-43.76	-0.78	0.00	-114.59	0.00	114.59	5276.09	1360.08	6266.71	5995.90	0.04	-0.02	0.00	0.027
22.00	-43.18	-0.78	0.00	-113.04	0.00	113.04	5251.69	1350.03	6174.48	5923.74	0.05	-0.02	0.00	0.027
24.00	-42.61	-0.78	0.00	-111.48	0.00	111.48	5227.08	1339.98	6082.93	5851.76	0.06	-0.02	0.00	0.027
26.00	-42.04	-0.78	0.00	-109.93	0.00	109.93	5202.25	1329.94	5992.07	5779.96	0.07	-0.03	0.00	0.027
28.00	-41.48	-0.78	0.00	-108.37	0.00	108.37	5177.20	1319.89	5901.89	5708.33	0.08	-0.03	0.00	0.027
30.00	-40.92	-0.78	0.00	-106.80	0.00	106.80	5151.94	1309.85	5812.39	5636.89	0.10	-0.03	0.00	0.027
32.00	-40.37	-0.78	0.00	-105.24	0.00	105.24	5126.46	1299.80	5723.58	5565.65	0.11	-0.03	0.00	0.027
34.00	-39.81	-0.78	0.00	-103.67	0.00	103.67	5100.76	1289.76	5635.45	5494.60	0.13	-0.04	0.00	0.027
36.00	-39.26	-0.79	0.00	-102.11	0.00	102.11	5074.84	1279.71	5548.01	5423.75	0.14	-0.04	0.00	0.027
38.00	-38.72	-0.79	0.00	-100.54	0.00	100.54	5048.71	1269.67	5461.24	5353.12	0.16	-0.04	0.00	0.026
40.00	-38.18	-0.79	0.00	-98.96	0.00	98.96	5022.37	1259.62	5375.17	5282.69	0.17	-0.04	0.00	0.026
42.00	-37.64	-0.79	0.00	-97.39	0.00	97.39	4995.80	1249.57	5289.77	5212.49	0.19	-0.05	0.00	0.026
44.00	-37.11	-0.79	0.00	-95.81	0.00	95.81	4969.02	1239.53	5205.06	5142.51	0.21	-0.05	0.00	0.026
45.92	-36.60	-0.79	0.00	-94.30	0.00	94.30	4943.15	1229.90	5124.53	5075.67	0.23	-0.05	0.00	0.026
46.00	-36.56	-0.79	0.00	-94.24	0.00	94.24	4942.02	1229.48	5121.04	5072.76	0.23	-0.05	0.00	0.026
48.00	-35.64	-0.79	0.00	-92.66	0.00	92.66	4914.80	1219.44	5037.70	5003.25	0.25	-0.05	0.00	0.026
50.00	-34.73	-0.79	0.00	-91.08	0.00	91.08	4887.37	1209.39	4955.04	4933.98	0.28	-0.05	0.00	0.026
52.00	-33.83	-0.79	0.00	-89.50	0.00	89.50	4859.72	1199.35	4873.06	4864.96	0.30	-0.06	0.00	0.025
53.00	-33.38	-0.79	0.00	-88.72	0.00	88.72	3967.90	1039.60	4276.54	4027.08	0.31	-0.06	0.00	0.030
54.00	-33.15	-0.79	0.00	-87.93	0.00	87.93	3958.02	1035.30	4241.23	4000.31	0.32	-0.06	0.00	0.030
56.00	-32.70	-0.79	0.00	-86.35	0.00	86.35	3938.08	1026.70	4171.06	3946.85	0.35	-0.06	0.00	0.030
58.00	-32.25	-0.79	0.00	-84.78	0.00	84.78	3917.93	1018.10	4101.47	3893.50	0.38	-0.07	0.00	0.030
60.00	-31.80	-0.79	0.00	-83.20	0.00	83.20	3897.56	1009.50	4032.47	3840.29	0.40	-0.07	0.00	0.030
62.00	-31.35	-0.79	0.00	-81.62	0.00	81.62	3876.97	1000.90	3964.05	3787.21	0.43	-0.07	0.00	0.030
64.00	-30.91	-0.79	0.00	-80.04	0.00	80.04	3856.17	992.30	3896.21	3734.27	0.46	-0.07	0.00	0.029
66.00	-30.47	-0.79	0.00	-78.45	0.00	78.45	3835.15	983.70	3828.97	3681.47	0.50	-0.08	0.00	0.029
68.00	-30.03	-0.79	0.00	-76.87	0.00	76.87	3813.91	975.10	3762.30	3628.82	0.53	-0.08	0.00	0.029
70.00	-29.60	-0.79	0.00	-75.29	0.00	75.29	3792.46	966.50	3696.23	3576.32	0.56	-0.08	0.00	0.029
72.00	-29.14	-0.79	0.00	-73.70	0.00	73.70	3770.79	957.90	3630.74	3523.99	0.60	-0.08	0.00	0.029
74.00	-28.71	-0.79	0.00	-72.12	0.00	72.12	3748.90	949.30	3565.83	3471.82	0.63	-0.09	0.00	0.028
76.00	-28.29	-0.79	0.00	-70.53	0.00	70.53	3726.79	940.70	3501.51	3419.82	0.67	-0.09	0.00	0.028
78.00	-27.87	-0.79	0.00	-68.94	0.00	68.94	3704.47	932.10	3437.77	3368.00	0.71	-0.09	0.00	0.028
80.00	-27.45	-0.79	0.00	-67.36	0.00	67.36	3681.93	923.50	3374.62	3316.36	0.75	-0.10	0.00	0.028
82.00	-27.03	-0.79	0.00	-65.77	0.00	65.77	3659.18	914.89	3312.06	3264.91	0.79	-0.10	0.00	0.028
84.00	-26.62	-0.79	0.00	-64.18	0.00	64.18	3636.21	906.29	3250.08	3213.65	0.83	-0.10	0.00	0.027
86.00	-26.21	-0.79	0.00	-62.60	0.00	62.60	3613.02	897.69	3188.69	3162.60	0.88	-0.11	0.00	0.027
88.00	-25.81	-0.79	0.00	-61.01	0.00	61.01	3589.61	889.09	3127.88	3111.74	0.92	-0.11	0.00	0.027

Calculated Forces

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
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90.00	-25.41	-0.79	0.00	-59.43	0.00	59.43	3565.99	880.49	3067.65	3061.10	0.97	-0.11	0.027
92.00	-25.01	-0.79	0.00	-57.84	0.00	57.84	3542.15	871.89	3008.02	3010.67	1.01	-0.11	0.026
92.92	-24.83	-0.79	0.00	-57.11	0.00	57.11	3531.15	867.95	2980.88	2987.63	1.04	-0.12	0.026
94.00	-24.47	-0.79	0.00	-56.25	0.00	56.25	3518.09	863.29	2948.96	2960.46	1.06	-0.12	0.026
96.00	-23.81	-0.79	0.00	-54.67	0.00	54.67	3493.82	854.69	2890.50	2910.48	1.11	-0.12	0.026
98.00	-23.15	-0.79	0.00	-53.09	0.00	53.09	3469.33	846.09	2832.62	2860.73	1.16	-0.12	0.025
98.92	-22.86	-0.79	0.00	-52.37	0.00	52.37	2742.83	714.97	2423.35	2293.46	1.19	-0.12	0.031
100.00	-22.67	-0.79	0.00	-51.52	0.00	51.52	2733.73	711.08	2397.06	2273.32	1.22	-0.13	0.031
102.00	-22.34	-0.79	0.00	-49.94	0.00	49.94	2716.76	703.90	2348.90	2236.23	1.27	-0.13	0.031
104.00	-22.00	-0.79	0.00	-48.37	0.00	48.37	2699.58	696.72	2301.24	2199.25	1.32	-0.13	0.030
106.00	-21.67	-0.79	0.00	-46.80	0.00	46.80	2682.18	689.54	2254.06	2162.39	1.38	-0.14	0.030
108.00	-21.34	-0.79	0.00	-45.23	0.00	45.23	2664.56	682.36	2207.37	2125.64	1.44	-0.14	0.029
110.00	-21.02	-0.79	0.00	-43.65	0.00	43.65	2646.73	675.19	2161.17	2089.03	1.50	-0.14	0.029
112.00	-20.69	-0.79	0.00	-42.08	0.00	42.08	2628.68	668.01	2115.46	2052.54	1.56	-0.15	0.028
114.00	-20.37	-0.79	0.00	-40.51	0.00	40.51	2610.42	660.83	2070.24	2016.20	1.62	-0.15	0.028
116.00	-20.05	-0.78	0.00	-38.94	0.00	38.94	2591.93	653.65	2025.50	1980.00	1.69	-0.15	0.027
118.00	-19.74	-0.78	0.00	-37.37	0.00	37.37	2573.23	646.47	1981.26	1943.94	1.75	-0.16	0.027
120.00	-19.42	-0.78	0.00	-35.80	0.00	35.80	2554.31	639.29	1937.50	1908.04	1.82	-0.16	0.026
122.00	-19.11	-0.78	0.00	-34.23	0.00	34.23	2535.18	632.11	1894.23	1872.30	1.88	-0.16	0.026
124.00	-18.80	-0.78	0.00	-32.67	0.00	32.67	2515.83	624.93	1851.45	1836.73	1.95	-0.17	0.025
126.00	-18.50	-0.78	0.00	-31.10	0.00	31.10	2496.26	617.76	1809.16	1801.33	2.02	-0.17	0.025
127.00	-18.35	-0.78	0.00	-30.32	0.00	30.32	2486.40	614.17	1788.19	1783.69	2.06	-0.17	0.024
128.00	-18.12	-0.78	0.00	-29.54	0.00	29.54	2476.48	610.58	1767.35	1766.10	2.10	-0.17	0.024
130.00	-17.66	-0.78	0.00	-27.98	0.00	27.98	2456.47	603.40	1726.04	1731.06	2.17	-0.18	0.023
132.00	-17.21	-0.78	0.00	-26.42	0.00	26.42	2436.26	596.22	1685.21	1696.20	2.24	-0.18	0.023
132.25	-17.15	-0.78	0.00	-26.23	0.00	26.23	1490.15	423.06	1212.67	1055.13	2.25	-0.18	0.036
134.00	-16.95	-0.78	0.00	-24.87	0.00	24.87	1482.58	418.66	1187.61	1038.80	2.32	-0.18	0.035
136.00	-16.72	-0.78	0.00	-23.32	0.00	23.32	1473.72	413.64	1159.28	1020.12	2.40	-0.19	0.034
138.00	-16.49	-0.78	0.00	-21.77	0.00	21.77	1464.65	408.62	1131.30	1001.45	2.47	-0.19	0.033
140.00	-16.26	-0.78	0.00	-20.22	0.00	20.22	1455.36	403.59	1103.66	982.79	2.55	-0.19	0.032
142.00	-16.04	-0.77	0.00	-18.67	0.00	18.67	1445.85	398.57	1076.36	964.14	2.64	-0.20	0.030
144.00	-15.81	-0.77	0.00	-17.12	0.00	17.12	1436.13	393.55	1049.40	945.50	2.72	-0.20	0.029
146.00	-15.59	-0.77	0.00	-15.57	0.00	15.57	1426.18	388.53	1022.78	926.89	2.80	-0.20	0.028
147.00	-13.25	-0.70	0.00	-14.79	0.00	14.79	1421.13	386.01	1009.60	917.60	2.85	-0.20	0.025
148.00	-13.14	-0.70	0.00	-14.10	0.00	14.10	1416.03	383.50	996.51	908.31	2.89	-0.21	0.025
150.00	-12.92	-0.69	0.00	-12.71	0.00	12.71	1405.65	378.48	970.58	889.77	2.98	-0.21	0.023
152.00	-12.71	-0.69	0.00	-11.32	0.00	11.32	1395.06	373.46	944.99	871.26	3.07	-0.21	0.022
154.00	-12.50	-0.69	0.00	-9.93	0.00	9.93	1384.25	368.43	919.74	852.80	3.15	-0.21	0.021
156.00	-12.29	-0.69	0.00	-8.55	0.00	8.55	1373.23	363.41	894.83	834.39	3.25	-0.22	0.019
157.00	-8.94	-0.51	0.00	-7.85	0.00	7.85	1367.63	360.90	882.51	825.21	3.29	-0.22	0.016
158.00	-8.85	-0.51	0.00	-7.34	0.00	7.34	1361.98	358.39	870.27	816.04	3.34	-0.22	0.015
160.00	-8.67	-0.51	0.00	-6.31	0.00	6.31	1350.53	353.37	846.04	797.75	3.43	-0.22	0.014
162.00	-8.49	-0.51	0.00	-5.29	0.00	5.29	1338.85	348.34	822.16	779.52	3.52	-0.22	0.013
164.00	-8.32	-0.51	0.00	-4.27	0.00	4.27	1326.96	343.32	798.62	761.37	3.61	-0.22	0.012
166.00	-8.14	-0.51	0.00	-3.24	0.00	3.24	1314.85	338.30	775.43	743.30	3.71	-0.22	0.011
167.00	-4.50	-0.27	0.00	-2.73	0.00	2.73	1308.71	335.79	763.96	734.30	3.75	-0.22	0.007
168.00	-4.43	-0.27	0.00	-2.46	0.00	2.46	1302.52	333.27	752.57	725.32	3.80	-0.23	0.007
170.00	-4.28	-0.27	0.00	-1.91	0.00	1.91	1289.98	328.25	730.06	707.42	3.90	-0.23	0.006
172.00	-4.14	-0.27	0.00	-1.36	0.00	1.36	1277.22	323.23	707.89	689.62	3.99	-0.23	0.005
174.00	-4.00	-0.27	0.00	-0.82	0.00	0.82	1264.24	318.21	686.06	671.91	4.09	-0.23	0.004
176.00	-3.87	-0.27	0.00	-0.27	0.00	0.27	1251.05	313.18	664.57	654.32	4.18	-0.23	0.004
177.00	-0.17	0.00	0.00	0.00	0.00	0.00	1244.37	310.67	653.95	645.56	4.23	-0.23	0.000
178.00	-0.11	0.00	0.00	0.00	0.00	0.00	1237.63	308.16	643.42	636.84	4.28	-0.23	0.000
180.00	0.00	0.00	0.00	0.00	0.00	0.00	1224.01	303.14	622.62	619.47	4.37	-0.23	0.000

Wind Loading - Shaft

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Load Case: 1.0D + 1.0W 60 mph Wind	Iterations 28
Dead Load Factor 1.00	
Wind Load Factor 1.00	

Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.77	5.989	6.59	267.46	0.750	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.77	5.989	6.59	265.63	0.750	0.000	2.00	10.161	7.62	50.2	0.0	564.4
4.00		1.00	0.77	5.989	6.59	263.81	0.750	0.000	2.00	10.091	7.57	49.9	0.0	560.5
6.00		1.00	0.77	5.989	6.59	261.98	0.750	0.000	2.00	10.022	7.52	49.5	0.0	556.6
8.00		1.00	0.77	5.989	6.59	260.15	0.750	0.000	2.00	9.952	7.46	49.2	0.0	552.7
10.00		1.00	0.77	5.989	6.59	258.33	0.750	0.000	2.00	9.883	7.41	48.8	0.0	548.8
12.00		1.00	0.77	5.989	6.59	256.50	0.750	0.000	2.00	9.813	7.36	48.5	0.0	544.9
14.00		1.00	0.77	5.989	6.59	254.68	0.750	0.000	2.00	9.743	7.31	48.1	0.0	541.0
16.00		1.00	0.78	6.030	6.63	253.70	0.750	0.000	2.00	9.674	7.26	48.1	0.0	537.2
18.00		1.00	0.79	6.113	6.72	253.61	0.750	0.000	2.00	9.604	7.20	48.4	0.0	533.3
20.00		1.00	0.80	6.190	6.81	253.33	0.750	0.000	2.00	9.535	7.15	48.7	0.0	529.4
22.00		1.00	0.81	6.260	6.89	252.91	0.750	0.000	2.00	9.465	7.10	48.9	0.0	525.5
24.00		1.00	0.82	6.326	6.96	252.35	0.750	0.000	2.00	9.395	7.05	49.0	0.0	521.6
26.00		1.00	0.83	6.388	7.03	251.69	0.750	0.000	2.00	9.326	6.99	49.1	0.0	517.7
28.00		1.00	0.83	6.446	7.09	250.94	0.750	0.000	2.00	9.256	6.94	49.2	0.0	513.8
30.00		1.00	0.84	6.503	7.15	250.14	0.750	0.000	2.00	9.186	6.89	49.3	0.0	509.9
32.00		1.00	0.85	6.605	7.27	250.18	0.750	0.000	2.00	9.117	6.84	49.7	0.0	506.0
34.00		1.00	0.87	6.703	7.37	250.09	0.750	0.000	2.00	9.047	6.79	50.0	0.0	502.1
36.00		1.00	0.88	6.796	7.48	249.88	0.750	0.000	2.00	8.978	6.73	50.3	0.0	498.2
38.00		1.00	0.89	6.885	7.57	249.57	0.750	0.000	2.00	8.908	6.68	50.6	0.0	494.3
40.00		1.00	0.90	6.972	7.67	249.15	0.750	0.000	2.00	8.838	6.63	50.8	0.0	490.4
42.00		1.00	0.91	7.054	7.76	248.65	0.750	0.000	2.00	8.769	6.58	51.0	0.0	486.5
44.00		1.00	0.92	7.134	7.85	248.06	0.750	0.000	2.00	8.699	6.52	51.2	0.0	482.6
45.92	Bot - Section 2	1.00	0.93	7.209	7.93	247.42	0.750	0.000	1.92	8.271	6.20	49.2	0.0	458.8
46.00		1.00	0.93	7.212	7.93	247.40	0.750	0.000	0.08	0.363	0.27	2.2	0.0	37.2
48.00		1.00	0.94	7.287	8.02	246.66	0.750	0.000	2.00	8.687	6.52	52.2	0.0	888.0
50.00		1.00	0.95	7.359	8.09	245.86	0.750	0.000	2.00	8.618	6.46	52.3	0.0	880.7
52.00		1.00	0.96	7.429	8.17	245.00	0.750	0.000	2.00	8.548	6.41	52.4	0.0	873.5
53.00	Top - Section 1	1.00	0.97	7.464	8.21	244.55	0.750	0.000	1.00	4.248	3.19	26.2	0.0	434.0
54.00		1.00	0.97	7.498	8.25	247.82	0.750	0.000	1.00	4.231	3.17	26.2	0.0	201.2
56.00		1.00	0.98	7.564	8.32	246.86	0.750	0.000	2.00	8.409	6.31	52.5	0.0	399.8
58.00		1.00	0.99	7.629	8.39	245.86	0.750	0.000	2.00	8.339	6.25	52.5	0.0	396.5
60.00		1.00	1.00	7.692	8.46	244.80	0.750	0.000	2.00	8.270	6.20	52.5	0.0	393.1
62.00		1.00	1.00	7.753	8.53	243.70	0.750	0.000	2.00	8.200	6.15	52.5	0.0	389.8
64.00		1.00	1.01	7.813	8.59	242.56	0.750	0.000	2.00	8.130	6.10	52.4	0.0	386.5
66.00		1.00	1.02	7.872	8.66	241.37	0.750	0.000	2.00	8.061	6.05	52.4	0.0	383.1
68.00		1.00	1.03	7.929	8.72	240.15	0.750	0.000	2.00	7.991	5.99	52.3	0.0	379.8
70.00		1.00	1.03	7.985	8.78	238.88	0.750	0.000	2.00	7.922	5.94	52.2	0.0	376.5
72.00	Appurtenance(s)	1.00	1.04	8.040	8.84	237.59	0.750	0.000	2.00	7.852	5.89	52.1	0.0	373.1
74.00		1.00	1.05	8.094	8.90	236.26	0.750	0.000	2.00	7.782	5.84	52.0	0.0	369.8
76.00		1.00	1.05	8.147	8.96	234.89	0.750	0.000	2.00	7.713	5.78	51.8	0.0	366.5
78.00		1.00	1.06	8.198	9.02	233.50	0.750	0.000	2.00	7.643	5.73	51.7	0.0	363.1
80.00		1.00	1.07	8.249	9.07	232.08	0.750	0.000	2.00	7.574	5.68	51.5	0.0	359.8
82.00		1.00	1.07	8.298	9.13	230.63	0.750	0.000	2.00	7.504	5.63	51.4	0.0	356.4
84.00		1.00	1.08	8.347	9.18	229.15	0.750	0.000	2.00	7.434	5.58	51.2	0.0	353.1
86.00		1.00	1.09	8.395	9.23	227.64	0.750	0.000	2.00	7.365	5.52	51.0	0.0	349.8
88.00		1.00	1.09	8.442	9.29	226.11	0.750	0.000	2.00	7.295	5.47	50.8	0.0	346.4

Wind Loading - Shaft

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 57



90.00	1.00	1.10	8.489	9.34	224.56	0.750	0.000	2.00	7.225	5.42	50.6	0.0	343.1
92.00	1.00	1.10	8.534	9.39	222.98	0.750	0.000	2.00	7.156	5.37	50.4	0.0	339.8
92.92 Bot - Section 3	1.00	1.11	8.555	9.41	222.25	0.750	0.000	0.92	3.256	2.44	23.0	0.0	154.6
94.00	1.00	1.11	8.579	9.44	221.38	0.750	0.000	1.08	3.887	2.92	27.5	0.0	336.1
96.00	1.00	1.12	8.623	9.49	219.75	0.750	0.000	2.00	7.123	5.34	50.7	0.0	615.8
98.00	1.00	1.12	8.666	9.53	218.11	0.750	0.000	2.00	7.053	5.29	50.4	0.0	609.7
98.92 Top - Section 2	1.00	1.12	8.686	9.55	217.35	0.750	0.000	0.92	3.210	2.41	23.0	0.0	277.4
100.00	1.00	1.13	8.709	9.58	219.81	0.750	0.000	1.08	3.774	2.83	27.1	0.0	149.8
102.00	1.00	0.99	7.681	8.45	204.35	0.750	0.000	2.00	6.914	5.19	43.8	0.0	274.4
104.00	1.00	1.00	7.723	8.50	202.85	0.750	0.000	2.00	6.844	5.13	43.6	0.0	271.6
106.00	1.00	1.00	7.765	8.54	201.32	0.750	0.000	2.00	6.775	5.08	43.4	0.0	268.8
108.00	1.00	1.01	7.807	8.59	199.77	0.750	0.000	2.00	6.705	5.03	43.2	0.0	266.0
110.00	1.00	1.02	7.848	8.63	198.21	0.750	0.000	2.00	6.636	4.98	43.0	0.0	263.2
112.00	1.00	1.02	7.889	8.68	196.62	0.750	0.000	2.00	6.566	4.92	42.7	0.0	260.4
114.00	1.00	1.03	7.929	8.72	195.02	0.750	0.000	2.00	6.496	4.87	42.5	0.0	257.6
116.00	1.00	1.03	7.968	8.76	193.40	0.750	0.000	2.00	6.427	4.82	42.2	0.0	254.9
118.00	1.00	1.04	8.007	8.81	191.76	0.750	0.000	2.00	6.357	4.77	42.0	0.0	252.1
120.00	1.00	1.04	8.046	8.85	190.10	0.750	0.000	2.00	6.288	4.72	41.7	0.0	249.3
122.00	1.00	1.05	8.084	8.89	188.43	0.750	0.000	2.00	6.218	4.66	41.5	0.0	246.5
124.00	1.00	1.05	8.121	8.93	186.74	0.750	0.000	2.00	6.148	4.61	41.2	0.0	243.7
126.00	1.00	1.06	8.159	8.97	185.04	0.750	0.000	2.00	6.079	4.56	40.9	0.0	240.9
127.00 Bot - Section 4	1.00	1.06	8.177	8.99	184.18	0.750	0.000	1.00	3.013	2.26	20.3	0.0	119.4
128.00	1.00	1.06	8.195	9.01	183.32	0.750	0.000	1.00	3.033	2.27	20.5	0.0	203.1
130.00	1.00	1.07	8.232	9.05	181.59	0.750	0.000	2.00	6.014	4.51	40.8	0.0	402.6
132.00	1.00	1.07	8.268	9.09	179.84	0.750	0.000	2.00	5.944	4.46	40.5	0.0	397.9
132.25 Top - Section 3	1.00	1.07	8.272	9.10	179.62	0.750	0.000	0.25	0.738	0.55	5.0	0.0	49.4
134.00	1.00	1.07	8.303	9.13	180.37	0.750	0.000	1.75	5.137	3.85	35.2	0.0	142.8
136.00	1.00	1.08	8.339	9.17	178.60	0.750	0.000	2.00	5.805	4.35	39.9	0.0	161.4
138.00	1.00	1.08	8.373	9.21	176.81	0.750	0.000	2.00	5.735	4.30	39.6	0.0	159.4
140.00	1.00	1.09	8.408	9.25	175.01	0.750	0.000	2.00	5.666	4.25	39.3	0.0	157.5
142.00	1.00	1.09	8.442	9.29	173.20	0.750	0.000	2.00	5.596	4.20	39.0	0.0	155.5
144.00	1.00	1.10	8.476	9.32	171.37	0.750	0.000	2.00	5.527	4.14	38.6	0.0	153.6
146.00	1.00	1.10	8.509	9.36	169.54	0.750	0.000	2.00	5.457	4.09	38.3	0.0	151.6
147.00 Appurtenance(s)	1.00	1.10	8.526	9.38	168.61	0.750	0.000	1.00	2.702	2.03	19.0	0.0	75.1
148.00	1.00	1.11	8.542	9.40	167.68	0.750	0.000	1.00	2.685	2.01	18.9	0.0	74.6
150.00	1.00	1.11	8.575	9.43	165.82	0.750	0.000	2.00	5.318	3.99	37.6	0.0	147.7
152.00	1.00	1.11	8.608	9.47	163.95	0.750	0.000	2.00	5.248	3.94	37.3	0.0	145.8
154.00	1.00	1.12	8.640	9.50	162.06	0.750	0.000	2.00	5.179	3.88	36.9	0.0	143.8
156.00	1.00	1.12	8.672	9.54	160.16	0.750	0.000	2.00	5.109	3.83	36.6	0.0	141.9
157.00 Appurtenance(s)	1.00	1.12	8.688	9.56	159.21	0.750	0.000	1.00	2.528	1.90	18.1	0.0	70.2
158.00	1.00	1.13	8.704	9.57	158.25	0.750	0.000	1.00	2.511	1.88	18.0	0.0	69.7
160.00	1.00	1.13	8.735	9.61	156.33	0.750	0.000	2.00	4.970	3.73	35.8	0.0	138.0
162.00	1.00	1.13	8.766	9.64	154.40	0.750	0.000	2.00	4.900	3.68	35.4	0.0	136.1
164.00	1.00	1.14	8.797	9.68	152.46	0.750	0.000	2.00	4.830	3.62	35.1	0.0	134.1
166.00	1.00	1.14	8.827	9.71	150.50	0.750	0.000	2.00	4.761	3.57	34.7	0.0	132.2
167.00 Appurtenance(s)	1.00	1.14	8.842	9.73	149.52	0.750	0.000	1.00	2.354	1.77	17.2	0.0	65.3
168.00	1.00	1.15	8.857	9.74	148.54	0.750	0.000	1.00	2.337	1.75	17.1	0.0	64.9
170.00	1.00	1.15	8.887	9.78	146.57	0.750	0.000	2.00	4.622	3.47	33.9	0.0	128.3
172.00	1.00	1.15	8.917	9.81	144.58	0.750	0.000	2.00	4.552	3.41	33.5	0.0	126.3
174.00	1.00	1.16	8.947	9.84	142.59	0.750	0.000	2.00	4.482	3.36	33.1	0.0	124.4
176.00	1.00	1.16	8.976	9.87	140.59	0.750	0.000	2.00	4.413	3.31	32.7	0.0	122.4
177.00 Appurtenance(s)	1.00	1.16	8.991	9.89	139.58	0.750	0.000	1.00	2.180	1.64	16.2	0.0	60.5
178.00	1.00	1.17	9.005	9.91	138.58	0.750	0.000	1.00	2.163	1.62	16.1	0.0	60.0
180.00	1.00	1.17	9.034	9.94	136.56	0.750	0.000	2.00	4.274	3.21	31.9	0.0	118.5

Totals: 180.00 4,078.6 32,343.5

Discrete Appurtenance Forces

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 58

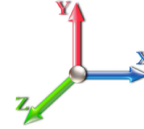


Load Case: 1.0D + 1.0W 60 mph Wind

Iterations 28

Dead Load Factor 1.00

Wind Load Factor 1.00



No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orient Factor x Ka	Ka	Total CaAa (sf)	Dead Load (lb)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)
1	177.00	Ericsson 4449 B71 + B85	3	8.991	9.890	0.50	0.75	2.97	219.60	0.000	0.000	29.37	0.00	0.00
2	177.00	782 11056	3	8.991	9.890	0.50	0.75	0.42	5.40	0.000	0.000	4.17	0.00	0.00
3	177.00	RFS	3	8.991	9.890	0.52	0.75	31.88	384.00	0.000	0.000	315.26	0.00	0.00
4	177.00	Ericsson KRY 112 489/2	3	8.991	9.890	0.50	0.75	0.98	46.20	0.000	0.000	9.69	0.00	0.00
5	177.00	Mount pipes	1	8.991	9.890	0.75	0.75	10.99	590.88	0.000	0.000	108.66	0.00	0.00
6	177.00	Commscope VV-65B-R1	3	8.991	9.890	0.55	0.75	13.15	88.50	0.000	0.000	130.08	0.00	0.00
7	177.00	Ericsson 4460 B25 + B66	3	8.991	9.890	0.50	0.75	3.23	312.00	0.000	0.000	31.90	0.00	0.00
8	177.00	RMQP-4096-HK Plat. +	1	8.991	9.890	0.67	0.67	23.14	1945.00	0.000	0.000	228.86	0.00	0.00
9	177.00	Ericsson AIR6419 B41	3	8.991	9.890	0.55	0.75	10.35	249.90	0.000	0.000	102.38	0.00	0.00
10	167.00	Samsung VZS01	3	8.842	9.727	0.52	0.75	7.40	261.30	0.000	0.000	72.00	0.00	0.00
11	167.00	Commscope	6	8.842	9.727	0.62	0.75	30.07	304.26	0.000	0.000	292.45	0.00	0.00
12	167.00	Raycap	2	8.842	9.727	0.64	0.75	3.21	84.00	0.000	0.000	31.25	0.00	0.00
13	167.00	Kaelus BSF0020F3V1-1	2	8.842	9.727	0.61	0.75	1.18	35.20	0.000	0.000	11.49	0.00	0.00
14	167.00	Antel	6	8.842	9.727	0.55	0.75	17.98	72.00	0.000	0.000	174.90	0.00	0.00
15	167.00	Samsung B5/B13	3	8.842	9.727	0.50	0.75	2.83	253.20	0.000	0.000	27.57	0.00	0.00
16	167.00	Samsung B2/B66A	3	8.842	9.727	0.50	0.75	2.83	210.90	0.000	0.000	27.57	0.00	0.00
17	167.00	Platform w/ Hand Rails	1	8.842	9.727	1.00	1.00	54.20	2545.14	0.000	0.000	527.18	0.00	0.00
18	157.00	Mount Pipes	1	8.688	9.557	0.75	0.75	14.03	590.88	0.000	0.000	134.10	0.00	0.00
19	157.00	DMP65R-BU8DA	1	8.688	9.557	0.55	0.75	9.74	95.70	0.000	0.000	93.12	0.00	0.00
20	157.00	Platform w/ Handrail	1	8.688	9.557	0.67	0.67	23.14	1945.00	0.000	0.000	221.16	0.00	0.00
21	157.00	7770	3	8.688	9.557	0.55	0.75	9.03	105.00	0.000	0.000	86.33	0.00	0.00
22	157.00	DMP65R-BU4DA	2	8.688	9.557	0.53	0.75	8.54	135.80	0.000	0.000	81.65	0.00	0.00
23	157.00	Raycap DC6-48-60-18-8F	1	8.688	9.557	0.68	0.75	0.62	31.80	0.000	0.000	5.93	0.00	0.00
24	157.00	HPA65R-BU8A	1	8.688	9.557	0.65	0.75	7.26	54.00	0.000	0.000	69.38	0.00	0.00
25	157.00	4449 B5/B12	3	8.688	9.557	0.50	0.75	2.97	213.00	0.000	0.000	28.38	0.00	0.00
26	157.00	8843 B2/B66A	3	8.688	9.557	0.50	0.75	2.47	216.00	0.000	0.000	23.63	0.00	0.00
27	157.00	HPA65R-BU4A	2	8.688	9.557	0.64	0.75	6.35	57.40	0.000	0.000	60.72	0.00	0.00
28	147.00	MC-PK8-DSH	1	8.526	9.379	0.67	0.67	22.93	1736.00	0.000	0.000	215.09	0.00	0.00
29	147.00	JMA Wireless	3	8.526	9.379	0.55	0.75	20.80	193.50	0.000	0.000	195.03	0.00	0.00
30	147.00	Fujitsu TA08025-B604	3	8.526	9.379	0.50	0.75	2.95	191.70	0.000	0.000	27.71	0.00	0.00
31	147.00	Fujitsu TA08025-B605	3	8.526	9.379	0.50	0.75	2.95	225.00	0.000	0.000	27.71	0.00	0.00
32	147.00	Raycap	1	8.526	9.379	0.75	0.75	1.51	21.90	0.000	0.000	14.14	0.00	0.00
33	72.00	1 Lucent KS-24019	1	8.040	8.844	1.00	1.00	1.13	4.00	0.000	0.000	9.99	0.00	0.00
34	72.00	Standoff	1	8.040	8.844	1.00	1.00	2.10	27.00	0.000	0.000	18.57	0.00	0.00
Totals:									13,451.16			3,437.44		

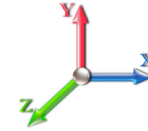
Total Applied Force Summary

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 59



Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 28

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
2.00		50.21	647.55	0.00	0.00
4.00		49.86	643.66	0.00	0.00
6.00		49.52	639.76	0.00	0.00
8.00		49.18	635.87	0.00	0.00
10.00		48.83	631.97	0.00	0.00
12.00		48.49	628.08	0.00	0.00
14.00		48.14	624.18	0.00	0.00
16.00		48.12	620.28	0.00	0.00
18.00		48.44	616.39	0.00	0.00
20.00		48.69	612.49	0.00	0.00
22.00		48.89	608.60	0.00	0.00
24.00		49.04	604.70	0.00	0.00
26.00		49.15	600.81	0.00	0.00
28.00		49.22	596.91	0.00	0.00
30.00		49.28	593.02	0.00	0.00
32.00		49.68	589.12	0.00	0.00
34.00		50.03	585.22	0.00	0.00
36.00		50.33	581.33	0.00	0.00
38.00		50.60	577.43	0.00	0.00
40.00		50.83	573.54	0.00	0.00
42.00		51.03	569.64	0.00	0.00
44.00		51.20	565.75	0.00	0.00
45.92		49.19	538.52	0.00	0.00
46.00		2.16	40.62	0.00	0.00
48.00		52.22	971.10	0.00	0.00
50.00		52.32	963.87	0.00	0.00
52.00		52.39	956.64	0.00	0.00
53.00		26.16	475.61	0.00	0.00
54.00		26.17	242.72	0.00	0.00
56.00		52.48	482.94	0.00	0.00
58.00		52.49	479.60	0.00	0.00
60.00		52.48	476.27	0.00	0.00
62.00		52.45	472.93	0.00	0.00
64.00		52.41	469.60	0.00	0.00
66.00		52.35	466.26	0.00	0.00
68.00		52.28	462.93	0.00	0.00
70.00		52.19	459.59	0.00	0.00
72.00	(2) attachments	80.65	487.26	0.00	0.00
74.00		51.97	452.60	0.00	0.00
76.00		51.84	449.27	0.00	0.00
78.00		51.69	445.93	0.00	0.00
80.00		51.54	442.60	0.00	0.00
82.00		51.37	439.26	0.00	0.00
84.00		51.20	435.92	0.00	0.00
86.00		51.01	432.59	0.00	0.00
88.00		50.81	429.25	0.00	0.00

Total Applied Force Summary

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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90.00	50.60	425.92	0.00	0.00
92.00	50.38	422.58	0.00	0.00
92.92	22.98	192.57	0.00	0.00
94.00	27.51	380.97	0.00	0.00
96.00	50.67	698.62	0.00	0.00
98.00	50.43	692.50	0.00	0.00
98.92	23.00	315.35	0.00	0.00
100.00	27.12	194.63	0.00	0.00
102.00	43.81	357.17	0.00	0.00
104.00	43.61	354.38	0.00	0.00
106.00	43.40	351.60	0.00	0.00
108.00	43.19	348.81	0.00	0.00
110.00	42.96	346.03	0.00	0.00
112.00	42.73	343.25	0.00	0.00
114.00	42.49	340.46	0.00	0.00
116.00	42.25	337.68	0.00	0.00
118.00	41.99	334.89	0.00	0.00
120.00	41.73	332.11	0.00	0.00
122.00	41.47	329.33	0.00	0.00
124.00	41.19	326.54	0.00	0.00
126.00	40.91	323.76	0.00	0.00
127.00	20.33	160.84	0.00	0.00
128.00	20.51	244.48	0.00	0.00
130.00	40.84	485.41	0.00	0.00
132.00	40.55	480.68	0.00	0.00
132.25	5.04	59.75	0.00	0.00
134.00	35.19	215.26	0.00	0.00
136.00	39.93	244.19	0.00	0.00
138.00	39.62	242.24	0.00	0.00
140.00	39.30	240.29	0.00	0.00
142.00	38.98	238.35	0.00	0.00
144.00	38.65	236.40	0.00	0.00
146.00	38.31	234.45	0.00	0.00
147.00	(11) attachments	498.69	2484.59	0.00
148.00		18.92	114.19	0.00
150.00		37.62	226.92	0.00
152.00		37.27	224.97	0.00
154.00		36.91	223.02	0.00
156.00		36.55	221.07	0.00
157.00	(18) attachments	822.52	3554.39	0.00
158.00		18.03	95.98	0.00
160.00		35.81	190.50	0.00
162.00		35.44	188.55	0.00
164.00		35.06	186.60	0.00
166.00		34.67	184.65	0.00
167.00	(26) attachments	1181.58	3857.60	0.00
168.00		17.08	76.58	0.00
170.00		33.89	151.69	0.00
172.00		33.49	149.74	0.00
174.00		33.08	147.79	0.00
176.00		32.68	145.85	0.00
177.00	(23) attachments	976.56	3913.67	0.00
178.00		16.07	61.31	0.00
180.00		31.85	121.15	0.00
Totals:	7,516.01	52,672.46	0.00	0.00

Linear Appurtenance Segment Forces (Factored)

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



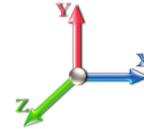
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Load Case: 1.0D + 1.0W 60 mph Wind

Iterations 28

Dead Load Factor 1.00

Wind Load Factor 1.00



Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
2.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.017	0.000	5.989	0.00	0.55
2.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.017	0.000	5.989	0.00	2.08
4.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.017	0.000	5.989	0.00	0.55
4.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.017	0.000	5.989	0.00	2.08
6.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.017	0.000	5.989	0.00	0.55
6.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.017	0.000	5.989	0.00	2.08
8.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.017	0.000	5.989	0.00	0.55
8.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.017	0.000	5.989	0.00	2.08
10.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.017	0.000	5.989	0.00	0.55
10.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.017	0.000	5.989	0.00	2.08
12.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.017	0.000	5.989	0.00	0.55
12.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.017	0.000	5.989	0.00	2.08
14.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.017	0.000	5.989	0.00	0.55
14.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.017	0.000	5.989	0.00	2.08
16.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.017	0.000	6.030	0.00	0.55
16.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.017	0.000	6.030	0.00	2.08
18.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.018	0.000	6.113	0.00	0.55
18.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.018	0.000	6.113	0.00	2.08
20.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.018	0.000	6.190	0.00	0.55
20.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.018	0.000	6.190	0.00	2.08
22.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.018	0.000	6.260	0.00	0.55
22.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.018	0.000	6.260	0.00	2.08
24.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.018	0.000	6.326	0.00	0.55
24.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.018	0.000	6.326	0.00	2.08
26.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.018	0.000	6.388	0.00	0.55
26.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.018	0.000	6.388	0.00	2.08
28.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.018	0.000	6.446	0.00	0.55
28.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.018	0.000	6.446	0.00	2.08
30.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.018	0.000	6.503	0.00	0.55
30.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.018	0.000	6.503	0.00	2.08
32.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.018	0.000	6.605	0.00	0.55
32.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.018	0.000	6.605	0.00	2.08
34.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.019	0.000	6.703	0.00	0.55
34.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.019	0.000	6.703	0.00	2.08
36.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.019	0.000	6.796	0.00	0.55
36.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.019	0.000	6.796	0.00	2.08
38.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.019	0.000	6.885	0.00	0.55
38.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.019	0.000	6.885	0.00	2.08
40.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.019	0.000	6.972	0.00	0.55
40.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.019	0.000	6.972	0.00	2.08
42.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.019	0.000	7.054	0.00	0.55
42.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.019	0.000	7.054	0.00	2.08
44.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.019	0.000	7.134	0.00	0.55
44.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.019	0.000	7.134	0.00	2.08
45.92	Safety Cable	Yes	1.92	0.000	0.38	0.06	0.00	0.020	0.000	7.209	0.00	0.52
45.92	Step bolts (ladder)	Yes	1.92	0.000	0.63	0.10	0.00	0.020	0.000	7.209	0.00	1.99
46.00	Safety Cable	Yes	0.08	0.000	0.38	0.00	0.00	0.020	0.000	7.212	0.00	0.02

Linear Appurtenance Segment Forces (Factored)

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

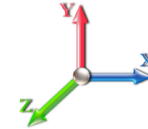


Load Case: 1.0D + 1.0W 60 mph Wind

Iterations 28

Dead Load Factor 1.00

Wind Load Factor 1.00



Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
46.00	Step bolts (ladder)	Yes	0.08	0.000	0.63	0.00	0.00	0.020	0.000	7.212	0.00	0.09
48.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.020	0.000	7.287	0.00	0.55
48.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.020	0.000	7.287	0.00	2.08
50.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.020	0.000	7.359	0.00	0.55
50.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.020	0.000	7.359	0.00	2.08
52.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.020	0.000	7.429	0.00	0.55
52.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.020	0.000	7.429	0.00	2.08
53.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.020	0.000	7.464	0.00	0.27
53.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.020	0.000	7.464	0.00	1.04
54.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.020	0.000	7.498	0.00	0.27
54.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.020	0.000	7.498	0.00	1.04
56.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.020	0.000	7.564	0.00	0.55
56.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.020	0.000	7.564	0.00	2.08
58.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.020	0.000	7.629	0.00	0.55
58.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.020	0.000	7.629	0.00	2.08
60.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.020	0.000	7.692	0.00	0.55
60.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.020	0.000	7.692	0.00	2.08
62.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.021	0.000	7.753	0.00	0.55
62.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.021	0.000	7.753	0.00	2.08
64.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.021	0.000	7.813	0.00	0.55
64.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.021	0.000	7.813	0.00	2.08
66.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.021	0.000	7.872	0.00	0.55
66.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.021	0.000	7.872	0.00	2.08
68.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.021	0.000	7.929	0.00	0.55
68.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.021	0.000	7.929	0.00	2.08
70.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.021	0.000	7.985	0.00	0.55
70.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.021	0.000	7.985	0.00	2.08
72.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.021	0.000	8.040	0.00	0.55
72.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.021	0.000	8.040	0.00	2.08
74.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.022	0.000	8.094	0.00	0.55
74.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.022	0.000	8.094	0.00	2.08
76.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.022	0.000	8.147	0.00	0.55
76.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.022	0.000	8.147	0.00	2.08
78.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.022	0.000	8.198	0.00	0.55
78.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.022	0.000	8.198	0.00	2.08
80.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.022	0.000	8.249	0.00	0.55
80.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.022	0.000	8.249	0.00	2.08
82.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.022	0.000	8.298	0.00	0.55
82.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.022	0.000	8.298	0.00	2.08
84.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.023	0.000	8.347	0.00	0.55
84.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.023	0.000	8.347	0.00	2.08
86.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.023	0.000	8.395	0.00	0.55
86.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.023	0.000	8.395	0.00	2.08
88.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.023	0.000	8.442	0.00	0.55
88.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.023	0.000	8.442	0.00	2.08
90.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.023	0.000	8.489	0.00	0.55
90.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.023	0.000	8.489	0.00	2.08

Linear Appurtenance Segment Forces (Factored)

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Load Case: 1.0D + 1.0W 60 mph Wind	Iterations 28
Dead Load Factor 1.00	
Wind Load Factor 1.00	

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
92.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.024	0.000	8.534	0.00	0.55
92.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.024	0.000	8.534	0.00	2.08
92.92	Safety Cable	Yes	0.92	0.000	0.38	0.03	0.00	0.024	0.000	8.555	0.00	0.25
92.92	Step bolts (ladder)	Yes	0.92	0.000	0.63	0.05	0.00	0.024	0.000	8.555	0.00	0.95
94.00	Safety Cable	Yes	1.08	0.000	0.38	0.03	0.00	0.024	0.000	8.579	0.00	0.30
94.00	Step bolts (ladder)	Yes	1.08	0.000	0.63	0.06	0.00	0.024	0.000	8.579	0.00	1.13
96.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.024	0.000	8.623	0.00	0.55
96.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.024	0.000	8.623	0.00	2.08
98.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.024	0.000	8.666	0.00	0.55
98.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.024	0.000	8.666	0.00	2.08
98.92	Safety Cable	Yes	0.92	0.000	0.38	0.03	0.00	0.024	0.000	8.686	0.00	0.25
98.92	Step bolts (ladder)	Yes	0.92	0.000	0.63	0.05	0.00	0.024	0.000	8.686	0.00	0.95
100.00	Safety Cable	Yes	1.08	0.000	0.38	0.03	0.00	0.024	0.000	8.709	0.00	0.30
100.00	Step bolts (ladder)	Yes	1.08	0.000	0.63	0.06	0.00	0.024	0.000	8.709	0.00	1.13
102.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.024	0.000	7.681	0.00	0.55
102.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.024	0.000	7.681	0.00	2.08
104.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.025	0.000	7.723	0.00	0.55
104.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.025	0.000	7.723	0.00	2.08
106.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.025	0.000	7.765	0.00	0.55
106.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.025	0.000	7.765	0.00	2.08
108.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.025	0.000	7.807	0.00	0.55
108.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.025	0.000	7.807	0.00	2.08
110.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.025	0.000	7.848	0.00	0.55
110.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.025	0.000	7.848	0.00	2.08
112.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.026	0.000	7.889	0.00	0.55
112.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.026	0.000	7.889	0.00	2.08
114.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.026	0.000	7.929	0.00	0.55
114.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.026	0.000	7.929	0.00	2.08
116.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.026	0.000	7.968	0.00	0.55
116.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.026	0.000	7.968	0.00	2.08
118.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.026	0.000	8.007	0.00	0.55
118.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.026	0.000	8.007	0.00	2.08
120.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.027	0.000	8.046	0.00	0.55
120.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.027	0.000	8.046	0.00	2.08
122.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.027	0.000	8.084	0.00	0.55
122.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.027	0.000	8.084	0.00	2.08
124.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.027	0.000	8.121	0.00	0.55
124.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.027	0.000	8.121	0.00	2.08
126.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.028	0.000	8.159	0.00	0.55
126.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.028	0.000	8.159	0.00	2.08
127.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.028	0.000	8.177	0.00	0.27
127.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.028	0.000	8.177	0.00	1.04
128.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.028	0.000	8.195	0.00	0.27
128.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.028	0.000	8.195	0.00	1.04
130.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.028	0.000	8.232	0.00	0.55
130.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.028	0.000	8.232	0.00	2.08
132.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.029	0.000	8.268	0.00	0.55

Linear Appurtenance Segment Forces (Factored)

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

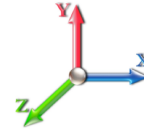


Load Case: 1.0D + 1.0W 60 mph Wind

Iterations 28

Dead Load Factor 1.00

Wind Load Factor 1.00



Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
132.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.029	0.000	8.268	0.00	2.08
132.25	Safety Cable	Yes	0.25	0.000	0.38	0.01	0.00	0.029	0.000	8.272	0.00	0.07
132.25	Step bolts (ladder)	Yes	0.25	0.000	0.63	0.01	0.00	0.029	0.000	8.272	0.00	0.26
134.00	Safety Cable	Yes	1.75	0.000	0.38	0.06	0.00	0.029	0.000	8.303	0.00	0.48
134.00	Step bolts (ladder)	Yes	1.75	0.000	0.63	0.09	0.00	0.029	0.000	8.303	0.00	1.82
136.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.029	0.000	8.339	0.00	0.55
136.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.029	0.000	8.339	0.00	2.08
138.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.029	0.000	8.373	0.00	0.55
138.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.029	0.000	8.373	0.00	2.08
140.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.030	0.000	8.408	0.00	0.55
140.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.030	0.000	8.408	0.00	2.08
142.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.030	0.000	8.442	0.00	0.55
142.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.030	0.000	8.442	0.00	2.08
144.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.030	0.000	8.476	0.00	0.55
144.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.030	0.000	8.476	0.00	2.08
146.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.031	0.000	8.509	0.00	0.55
146.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.031	0.000	8.509	0.00	2.08
147.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.031	0.000	8.526	0.00	0.27
147.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.031	0.000	8.526	0.00	1.04
148.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.031	0.000	8.542	0.00	0.27
148.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.031	0.000	8.542	0.00	1.04
150.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.032	0.000	8.575	0.00	0.55
150.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.032	0.000	8.575	0.00	2.08
152.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.032	0.000	8.608	0.00	0.55
152.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.032	0.000	8.608	0.00	2.08
154.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.033	0.000	8.640	0.00	0.55
154.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.033	0.000	8.640	0.00	2.08
156.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.033	0.000	8.672	0.00	0.55
156.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.033	0.000	8.672	0.00	2.08
157.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.033	0.000	8.688	0.00	0.27
157.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.033	0.000	8.688	0.00	1.04
158.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.034	0.000	8.704	0.00	0.27
158.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.034	0.000	8.704	0.00	1.04
160.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.034	0.000	8.735	0.00	0.55
160.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.034	0.000	8.735	0.00	2.08
162.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.034	0.000	8.766	0.00	0.55
162.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.034	0.000	8.766	0.00	2.08
164.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.035	0.000	8.797	0.00	0.55
164.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.035	0.000	8.797	0.00	2.08
166.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.035	0.000	8.827	0.00	0.55
166.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.035	0.000	8.827	0.00	2.08
167.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.036	0.000	8.842	0.00	0.27
167.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.036	0.000	8.842	0.00	1.04
168.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.036	0.000	8.857	0.00	0.27
168.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.036	0.000	8.857	0.00	1.04
170.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.036	0.000	8.887	0.00	0.55
170.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.036	0.000	8.887	0.00	2.08

Linear Appurtenance Segment Forces (Factored)

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 65

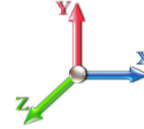


Load Case: 1.0D + 1.0W 60 mph Wind

Iterations 28

Dead Load Factor 1.00

Wind Load Factor 1.00



Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
172.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.037	0.000	8.917	0.00	0.55
172.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.037	0.000	8.917	0.00	2.08
174.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.038	0.000	8.947	0.00	0.55
174.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.038	0.000	8.947	0.00	2.08
176.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.038	0.000	8.976	0.00	0.55
176.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.038	0.000	8.976	0.00	2.08
177.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.039	0.000	8.991	0.00	0.27
177.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.039	0.000	8.991	0.00	1.04
178.00	Safety Cable	Yes	1.00	0.000	0.38	0.03	0.00	0.039	0.000	9.005	0.00	0.27
178.00	Step bolts (ladder)	Yes	1.00	0.000	0.63	0.05	0.00	0.039	0.000	9.005	0.00	1.04
180.00	Safety Cable	Yes	2.00	0.000	0.38	0.06	0.00	0.039	0.000	9.034	0.00	0.55
180.00	Step bolts (ladder)	Yes	2.00	0.000	0.63	0.10	0.00	0.039	0.000	9.034	0.00	2.08
Totals:											0.0	236.3

Calculated Forces

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 66

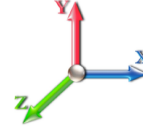


Load Case: 1.0D + 1.0W 60 mph Wind

Iterations 28

Dead Load Factor 1.00

Wind Load Factor 1.00



Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-52.67	-7.52	0.00	-953.66	0.00	953.66	5508.12	1460.53	7226.63	6725.55	0.00	0.000	0.000	0.151
2.00	-52.02	-7.48	0.00	-938.62	0.00	938.62	5485.89	1450.49	7127.56	6652.00	0.00	-0.014	0.000	0.151
4.00	-51.38	-7.45	0.00	-923.65	0.00	923.65	5463.45	1440.44	7029.17	6578.56	0.01	-0.029	0.000	0.150
6.00	-50.73	-7.41	0.00	-908.75	0.00	908.75	5440.79	1430.40	6931.47	6505.25	0.03	-0.044	0.000	0.149
8.00	-50.10	-7.37	0.00	-893.94	0.00	893.94	5417.91	1420.35	6834.46	6432.06	0.05	-0.058	0.000	0.148
10.00	-49.46	-7.34	0.00	-879.19	0.00	879.19	5394.81	1410.30	6738.12	6359.01	0.08	-0.073	0.000	0.147
12.00	-48.83	-7.30	0.00	-864.52	0.00	864.52	5371.50	1400.26	6642.47	6286.09	0.11	-0.088	0.000	0.147
14.00	-48.21	-7.26	0.00	-849.92	0.00	849.92	5347.97	1390.21	6547.51	6213.31	0.15	-0.102	0.000	0.146
16.00	-47.59	-7.23	0.00	-835.39	0.00	835.39	5324.23	1380.17	6453.22	6140.69	0.20	-0.117	0.000	0.145
18.00	-46.97	-7.19	0.00	-820.94	0.00	820.94	5300.27	1370.12	6359.62	6068.21	0.25	-0.132	0.000	0.144
20.00	-46.35	-7.15	0.00	-806.57	0.00	806.57	5276.09	1360.08	6266.71	5995.90	0.31	-0.147	0.000	0.143
22.00	-45.74	-7.11	0.00	-792.27	0.00	792.27	5251.69	1350.03	6174.48	5923.74	0.37	-0.162	0.000	0.142
24.00	-45.14	-7.07	0.00	-778.04	0.00	778.04	5227.08	1339.98	6082.93	5851.76	0.44	-0.178	0.000	0.142
26.00	-44.53	-7.03	0.00	-763.90	0.00	763.90	5202.25	1329.94	5992.07	5779.96	0.52	-0.193	0.000	0.141
28.00	-43.94	-6.99	0.00	-749.83	0.00	749.83	5177.20	1319.89	5901.89	5708.33	0.61	-0.208	0.000	0.140
30.00	-43.34	-6.95	0.00	-735.84	0.00	735.84	5151.94	1309.85	5812.39	5636.89	0.70	-0.224	0.000	0.139
32.00	-42.75	-6.91	0.00	-721.93	0.00	721.93	5126.46	1299.80	5723.58	5565.65	0.79	-0.239	0.000	0.138
34.00	-42.16	-6.87	0.00	-708.10	0.00	708.10	5100.76	1289.76	5635.45	5494.60	0.90	-0.254	0.000	0.137
36.00	-41.58	-6.83	0.00	-694.36	0.00	694.36	5074.84	1279.71	5548.01	5423.75	1.01	-0.270	0.000	0.136
38.00	-41.00	-6.79	0.00	-680.70	0.00	680.70	5048.71	1269.67	5461.24	5353.12	1.12	-0.286	0.000	0.135
40.00	-40.43	-6.75	0.00	-667.12	0.00	667.12	5022.37	1259.62	5375.17	5282.69	1.25	-0.301	0.000	0.134
42.00	-39.85	-6.70	0.00	-653.63	0.00	653.63	4995.80	1249.57	5289.77	5212.49	1.38	-0.317	0.000	0.133
44.00	-39.29	-6.66	0.00	-640.22	0.00	640.22	4969.02	1239.53	5205.06	5142.51	1.51	-0.333	0.000	0.132
45.92	-38.75	-6.61	0.00	-627.46	0.00	627.46	4943.15	1229.90	5124.53	5075.67	1.65	-0.348	0.000	0.131
46.00	-38.71	-6.62	0.00	-626.91	0.00	626.91	4942.02	1229.48	5121.04	5072.76	1.66	-0.348	0.000	0.131
48.00	-37.73	-6.57	0.00	-613.68	0.00	613.68	4914.80	1219.44	5037.70	5003.25	1.81	-0.364	0.000	0.130
50.00	-36.77	-6.52	0.00	-600.54	0.00	600.54	4887.37	1209.39	4955.04	4933.98	1.96	-0.380	0.000	0.129
52.00	-35.81	-6.47	0.00	-587.51	0.00	587.51	4859.72	1199.35	4873.06	4864.96	2.12	-0.396	0.000	0.128
53.00	-35.33	-6.44	0.00	-581.04	0.00	581.04	4967.90	1039.60	4276.54	4027.08	2.21	-0.404	0.000	0.153
54.00	-35.09	-6.42	0.00	-574.60	0.00	574.60	3958.02	1035.30	4241.23	4000.31	2.29	-0.412	0.000	0.153
56.00	-34.61	-6.38	0.00	-561.75	0.00	561.75	3938.08	1026.70	4171.06	3946.85	2.47	-0.430	0.000	0.151
58.00	-34.13	-6.33	0.00	-548.99	0.00	548.99	3917.93	1018.10	4101.47	3893.50	2.65	-0.448	0.000	0.150
60.00	-33.65	-6.29	0.00	-536.33	0.00	536.33	3897.56	1009.50	4032.47	3840.29	2.85	-0.466	0.000	0.148
62.00	-33.17	-6.24	0.00	-523.75	0.00	523.75	3876.97	1000.90	3964.05	3787.21	3.04	-0.484	0.000	0.147
64.00	-32.70	-6.19	0.00	-511.27	0.00	511.27	3856.17	992.30	3896.21	3734.27	3.25	-0.502	0.000	0.145
66.00	-32.23	-6.15	0.00	-498.88	0.00	498.88	3835.15	983.70	3828.97	3681.47	3.47	-0.520	0.000	0.144
68.00	-31.77	-6.10	0.00	-486.59	0.00	486.59	3813.91	975.10	3762.30	3628.82	3.69	-0.538	0.000	0.142
70.00	-31.31	-6.06	0.00	-474.38	0.00	474.38	3792.46	966.50	3696.23	3576.32	3.92	-0.556	0.000	0.141
72.00	-30.82	-5.98	0.00	-462.27	0.00	462.27	3770.79	957.90	3630.74	3523.99	4.15	-0.574	0.000	0.139
74.00	-30.37	-5.93	0.00	-450.32	0.00	450.32	3748.90	949.30	3565.83	3471.82	4.40	-0.592	0.000	0.138
76.00	-29.92	-5.89	0.00	-438.45	0.00	438.45	3726.79	940.70	3501.51	3419.82	4.65	-0.610	0.000	0.136
78.00	-29.47	-5.84	0.00	-426.68	0.00	426.68	3704.47	932.10	3437.77	3368.00	4.91	-0.628	0.000	0.135
80.00	-29.02	-5.79	0.00	-415.01	0.00	415.01	3681.93	923.50	3374.62	3316.36	5.18	-0.646	0.000	0.133
82.00	-28.58	-5.74	0.00	-403.42	0.00	403.42	3659.18	914.89	3312.06	3264.91	5.45	-0.665	0.000	0.131
84.00	-28.15	-5.70	0.00	-391.94	0.00	391.94	3636.21	906.29	3250.08	3213.65	5.73	-0.683	0.000	0.130
86.00	-27.71	-5.65	0.00	-380.55	0.00	380.55	3613.02	897.69	3188.69	3162.60	6.02	-0.701	0.000	0.128
88.00	-27.28	-5.60	0.00	-369.25	0.00	369.25	3589.61	889.09	3127.88	3111.74	6.32	-0.719	0.000	0.126
90.00	-26.86	-5.55	0.00	-358.05	0.00	358.05	3565.99	880.49	3067.65	3061.10	6.63	-0.737	0.000	0.125

Calculated Forces

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
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92.00	-26.43	-5.50	0.00	-346.94	0.00	346.94	3542.15	871.89	3008.02	3010.67	6.94	-0.755	0.000	0.123
92.92	-26.24	-5.48	0.00	-341.89	0.00	341.89	3531.15	867.95	2980.88	2987.63	7.08	-0.763	0.000	0.122
94.00	-25.86	-5.46	0.00	-335.96	0.00	335.96	3518.09	863.29	2948.96	2960.46	7.26	-0.773	0.000	0.121
96.00	-25.16	-5.40	0.00	-325.04	0.00	325.04	3493.82	854.69	2890.50	2910.48	7.59	-0.791	0.000	0.119
98.00	-24.47	-5.35	0.00	-314.24	0.00	314.24	3469.33	846.09	2832.62	2860.73	7.92	-0.809	0.000	0.117
98.92	-24.15	-5.33	0.00	-309.33	0.00	309.33	2742.83	714.97	2423.35	2293.46	8.08	-0.817	0.000	0.144
100.00	-23.95	-5.30	0.00	-303.57	0.00	303.57	2733.73	711.08	2397.06	2273.32	8.26	-0.827	0.000	0.142
102.00	-23.60	-5.26	0.00	-292.96	0.00	292.96	2716.76	703.90	2348.90	2236.23	8.62	-0.847	0.000	0.140
104.00	-23.24	-5.22	0.00	-282.44	0.00	282.44	2699.58	696.72	2301.24	2199.25	8.97	-0.867	0.000	0.137
106.00	-22.89	-5.18	0.00	-272.00	0.00	272.00	2682.18	689.54	2254.06	2162.39	9.34	-0.887	0.000	0.134
108.00	-22.54	-5.14	0.00	-261.64	0.00	261.64	2664.56	682.36	2207.37	2125.64	9.72	-0.906	0.000	0.132
110.00	-22.19	-5.10	0.00	-251.36	0.00	251.36	2646.73	675.19	2161.17	2089.03	10.10	-0.926	0.000	0.129
112.00	-21.85	-5.06	0.00	-241.17	0.00	241.17	2628.68	668.01	2115.46	2052.54	10.49	-0.945	0.000	0.126
114.00	-21.51	-5.02	0.00	-231.06	0.00	231.06	2610.42	660.83	2070.24	2016.20	10.89	-0.965	0.000	0.123
116.00	-21.17	-4.97	0.00	-221.03	0.00	221.03	2591.93	653.65	2025.50	1980.00	11.30	-0.984	0.000	0.120
118.00	-20.83	-4.93	0.00	-211.08	0.00	211.08	2573.23	646.47	1981.26	1943.94	11.72	-1.002	0.000	0.117
120.00	-20.50	-4.89	0.00	-201.21	0.00	201.21	2554.31	639.29	1937.50	1908.04	12.14	-1.021	0.000	0.114
122.00	-20.17	-4.85	0.00	-191.42	0.00	191.42	2535.18	632.11	1894.23	1872.30	12.57	-1.039	0.000	0.110
124.00	-19.84	-4.81	0.00	-181.72	0.00	181.72	2515.83	624.93	1851.45	1836.73	13.01	-1.057	0.000	0.107
126.00	-19.52	-4.77	0.00	-172.10	0.00	172.10	2496.26	617.76	1809.16	1801.33	13.46	-1.075	0.000	0.103
127.00	-19.36	-4.75	0.00	-167.33	0.00	167.33	2486.40	614.17	1788.19	1783.69	13.69	-1.083	0.000	0.102
128.00	-19.11	-4.73	0.00	-162.58	0.00	162.58	2476.48	610.58	1767.35	1766.10	13.91	-1.092	0.000	0.100
130.00	-18.62	-4.68	0.00	-153.13	0.00	153.13	2456.47	603.40	1726.04	1731.06	14.38	-1.109	0.000	0.096
132.00	-18.14	-4.64	0.00	-143.76	0.00	143.76	2436.26	596.22	1685.21	1696.20	14.84	-1.125	0.000	0.092
132.25	-18.08	-4.63	0.00	-142.61	0.00	142.61	1490.15	423.06	1212.67	1055.13	14.90	-1.127	0.000	0.147
134.00	-17.87	-4.60	0.00	-134.50	0.00	134.50	1482.58	418.66	1187.61	1038.80	15.32	-1.141	0.000	0.142
136.00	-17.62	-4.56	0.00	-125.30	0.00	125.30	1473.72	413.64	1159.28	1020.12	15.80	-1.162	0.000	0.135
138.00	-17.38	-4.52	0.00	-116.19	0.00	116.19	1464.65	408.62	1131.30	1001.45	16.29	-1.183	0.000	0.128
140.00	-17.14	-4.48	0.00	-107.14	0.00	107.14	1455.36	403.59	1103.66	982.79	16.79	-1.202	0.000	0.121
142.00	-16.90	-4.44	0.00	-98.18	0.00	98.18	1445.85	398.57	1076.36	964.14	17.30	-1.221	0.000	0.114
144.00	-16.66	-4.40	0.00	-89.29	0.00	89.29	1436.13	393.55	1049.40	945.50	17.82	-1.238	0.000	0.106
146.00	-16.43	-4.37	0.00	-80.48	0.00	80.48	1426.18	388.53	1022.78	926.89	18.34	-1.255	0.000	0.098
147.00	-13.96	-3.81	0.00	-76.12	0.00	76.12	1421.13	386.01	1009.60	917.60	18.60	-1.263	0.000	0.093
148.00	-13.84	-3.80	0.00	-72.31	0.00	72.31	1416.03	383.50	996.51	908.31	18.87	-1.270	0.000	0.089
150.00	-13.61	-3.76	0.00	-64.72	0.00	64.72	1405.65	378.48	970.58	889.77	19.40	-1.285	0.000	0.083
152.00	-13.39	-3.72	0.00	-57.20	0.00	57.20	1395.06	373.46	944.99	871.26	19.94	-1.298	0.000	0.075
154.00	-13.17	-3.68	0.00	-49.77	0.00	49.77	1384.25	368.43	919.74	852.80	20.49	-1.310	0.000	0.068
156.00	-12.95	-3.64	0.00	-42.42	0.00	42.42	1373.23	363.41	894.83	834.39	21.04	-1.321	0.000	0.060
157.00	-9.41	-2.73	0.00	-38.78	0.00	38.78	1367.63	360.90	882.51	825.21	21.32	-1.326	0.000	0.054
158.00	-9.31	-2.71	0.00	-36.05	0.00	36.05	1361.98	358.39	870.27	816.04	21.60	-1.331	0.000	0.051
160.00	-9.12	-2.68	0.00	-30.62	0.00	30.62	1350.53	353.37	846.04	797.75	22.16	-1.340	0.000	0.045
162.00	-8.94	-2.64	0.00	-25.27	0.00	25.27	1338.85	348.34	822.16	779.52	22.72	-1.347	0.000	0.039
164.00	-8.75	-2.60	0.00	-19.99	0.00	19.99	1326.96	343.32	798.62	761.37	23.29	-1.353	0.000	0.033
166.00	-8.57	-2.56	0.00	-14.80	0.00	14.80	1314.85	338.30	775.43	743.30	23.85	-1.359	0.000	0.026
167.00	-4.74	-1.29	0.00	-12.24	0.00	12.24	1308.71	335.79	763.96	734.30	24.14	-1.361	0.000	0.020
168.00	-4.66	-1.27	0.00	-10.95	0.00	10.95	1302.52	333.27	752.57	725.32	24.42	-1.362	0.000	0.019
170.00	-4.51	-1.23	0.00	-8.41	0.00	8.41	1289.98	328.25	730.06	707.42	25.00	-1.366	0.000	0.015
172.00	-4.36	-1.19	0.00	-5.95	0.00	5.95	1277.22	323.23	707.89	689.62	25.57	-1.368	0.000	0.012
174.00	-4.22	-1.16	0.00	-3.56	0.00	3.56	1264.24	318.21	686.06	671.91	26.14	-1.370	0.000	0.009
176.00	-4.07	-1.12	0.00	-1.24	0.00	1.24	1251.05	313.18	664.57	654.32	26.72	-1.371	0.000	0.005
177.00	-0.18	-0.05	0.00	-0.12	0.00	0.12	1244.37	310.67	653.95	645.56	27.00	-1.371	0.000	0.000
178.00	-0.12	-0.03	0.00	-0.07	0.00	0.07	1237.63	308.16	643.42	636.84	27.29	-1.371	0.000	0.000
180.00	0.00	-0.03	0.00	0.00	0.00	0.00	1224.01	303.14	622.62	619.47	27.86	-1.371	0.000	0.000

Final Analysis Summary

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
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Reactions

Load Case	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)
1.2D + 1.0W 121 mph Wind	34.2	0.00	63.19	0.00	0.00	4373.58
0.9D + 1.0W 121 mph Wind	34.2	0.00	47.38	0.00	0.00	4306.40
1.2D + 1.0Di + 1.0Wi 50 mph Wind	8.5	0.00	71.78	0.00	0.00	1042.45
1.2D + 1.0Ev + 1.0Eh	0.8	0.00	65.59	0.00	0.00	131.87
0.9D + 1.0Ev + 1.0Eh	0.8	0.00	49.70	0.00	0.00	129.94
1.0D + 1.0W 60 mph Wind	7.5	0.00	52.67	0.00	0.00	953.66

Max Stresses


Load Case	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Elev (ft)	Stress Ratio
1.2D + 1.0W 121 mph Wind	-41.51	-29.52	0.00	-2672.3	0.00	-2672.3	3967.90	1039.6	4276.54	4027.08	53.00	0.675
0.9D + 1.0W 121 mph Wind	-30.92	-29.16	0.00	-2616.4	0.00	-2616.4	3967.90	1039.6	4276.54	4027.08	53.00	0.658
1.2D + 1.0Di + 1.0Wi 50 mph Wind	-71.78	-8.51	0.00	-1042.4	0.00	-1042.4	5508.12	1460.5	7226.63	6725.55	0.00	0.168
1.2D + 1.0Ev + 1.0Eh	-22.62	-0.79	0.00	-26.66	0.00	-26.66	1490.15	423.06	1212.67	1055.13	132.25	0.040
0.9D + 1.0Ev + 1.0Eh	-17.15	-0.78	0.00	-26.23	0.00	-26.23	1490.15	423.06	1212.67	1055.13	132.25	0.036
1.0D + 1.0W 60 mph Wind	-35.33	-6.44	0.00	-581.04	0.00	-581.04	3967.90	1039.6	4276.54	4027.08	53.00	0.153

Base Plate Summary

Structure: CT02218-S	Code: TIA-222-H	8/3/2023
Site Name: Colchester2	Exposure: Transition BC	
Height: 180.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 69



Reactions	Base Plate	Anchor Bolts
Original Design	Yield (ksi): 60.00	Bolt Circle: 68.62
Moment (kip-ft): 5045.00	Width (in): 74.62	Number Bolts: 20.00
Axial (kip): 56.10	Style: Polygon	Bolt Type: 2.25" 18J
Shear (kip): 39.50	Polygon Sides: 16.00	Bolt Diameter (in): 2.25
Analysis (1.2D + 1.0W)	Clip Length (in): 0.00	Yield (ksi): 75.00
Moment (kip-ft): 4373.58	Effective Len (in): 13.76	Ultimate (ksi): 100.00
Axial (kip): 63.19	Moment (kip-in): 672.90	Arrangement: Radial
Shear (kip): 34.20	Allow Stress (ksi): 81.00	Cluster Dist (in): 0.00
	Applied Stress (ksi): 38.88	Start Angle (deg): 0.00
	Stress Ratio: 0.48	Compression
		Force (kip): 156.13
		Allowable (kip): 268.39
		Ratio: 0.58
		Tension
		Force (kip): 149.81
		Allowable (kip): 243.75
		Ratio: 0.62

	Monopole Mat Foundation Design			Date
				8/2/2023
	Customer Name:	Verizon	TIA Standard:	TIA-222-H
	Site Name:	Colchester 2	Structure Height (Ft.):	180
	Site Number:	CT02218-S	Engineer Name:	SBA Engineer
Engr. Number:		Engineer Login ID:		

Foundation Info Obtained from:

Drawings/Calculations
Monopole
Analysis

Structure Type:

Analysis or Design?

Base Reactions (Factored):

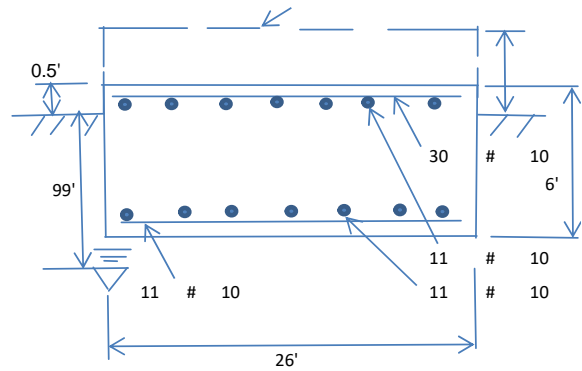
Axial Load (Kips): 63.2 Shear Force (Kips): 34.2
Uplift Force (Kips): 0.0 Moment (Kips-ft): 4373.6

Allowable overstress %: 5.0%

Foundation Geometries:

Anchor Bolt Circle (ft.): 5.72 Mods required -Yes/No?: No
Thickness of Pad (ft): 6.00 Depth of Base BG (ft.): 5.50
Length of Pad (ft.): 26 Width of Pad (ft.): 26

Final Length of pad (ft) 26.0 Final width of pad (ft): 26.0



Material Properties and Rebar Info:

Concrete Strength (psi): 3000 Steel Elastic Modulus: 29000 ksi
Pad Rebar Yield (Ksi): 60 Tie Spacing (in): 12.0
Pad Steel Rebar Size (#): 10
Concrete Cover (in.): 3 Unit Weight of Concrete: 150.0 pcf

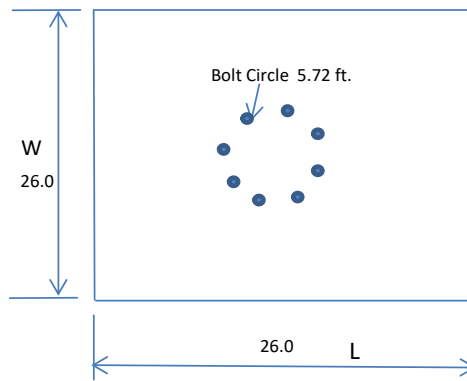
Rebar at the bottom of the concrete pad:

Qty. of Rebar in Pad (L): 30 Qty. of Rebar in Pad (W): 30

Rebar at the top of the concrete pad:

Qty. of Rebar in Pad (L): 11 Qty. of Rebar in Pad (W): 11

Apply 1.35 factor for e/w Per G: 1.35



Soil Design Parameters:

Water Table B.G.S. (ft): 99.0 Unit Weight of Water: 62.4 pcf Angle from Top of Pad: 30
Ultimate Bearing Pressure (psf): 12000 Ultimate Skin Friction: 0 Psf Angle from Bottm of Pad: 25
Consider Friction for O.T.M. (Y/N): No Consider Friction for bearing (Y/N): No Angle from Bottm of Pad: 25
Consider soil hor. resist. for OTM.: No Reduction factor on the maximum soil bearing pressure: 1.00

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.): 4056.00 Total Dry Concrete Weight (Kips): 608.40
Total Buoyant Concrete Volume (cu. Ft.): 0.00 Total Buoyant Concrete Weight (Kips): 0.00
Total Effective Concrete Weight (Kips): 608.40 Total Vertical Load on Base (Kips): 671.60

Check Soil Capacities:

Calculated Maxium Net Soil Pressure under the base (psf):	3341	<	Allowable Factored Soil Bearing (psf):	9000	0.37	OK!
Allowable Foundation Overturning Resistance (kips-ft.):	7939.9	>	Design Factored Momnt (kips-ft):	4581	0.58	OK!
Factor of Safety Against Overturning (O. R. Moment/Design Moment):	1.73					OK!

Load/
Capacity
Ratio

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

Concrete Pad:

One-Way Design Shear Capacity (L-Direction, Kips):	1752.7	>	One-Way Factored Shear (L-D. Kips):	245.2	0.14	OK!
One-Way Design Shear Capacity (W-Direction, Kips):	1752.7	>	One-Way Factored Shear (W-D., Kips)	245.2	0.14	OK!
One-Way Design Shear Capacity (Corner-Corner. Kips):	2059.4	>	One-Way Factored Shear (C-C, Kips):	662.7	0.32	OK!
Lower Steel Pad Reinforcement Ratio (L-Direct.):	0.0018	OK!	Lower Steel Pad Reinf. Ratio (W-Direc	0.0018		
Lower Steel Pad Moment Capacity (L-Direction. Kips-ft):	11476.6	>	Moment at Bottom (L-Direct. K-Ft):	514.0	0.04	OK!
Lower Steel Pad Moment Capacity (W-Direction. Kips-ft):	11476.6	>	Moment at Bottom (W-Direct. K-Ft):	514.0	0.04	OK!
Lower Steel Pad Moment Capacity (Corner-Corner,K-ft):	16159.4	>	Moment at Bottom (C-C Dir. K-Ft):	726.9	0.04	OK!
Upper Steel Pad Reinforcement Ratio (L-Direct.):	0.0007	OK!	Upper Steel Reinf. Ratio (W-Direct.):	0.0007		
Upper Steel Pad Moment Capacity (L-Direction. Kips-ft):	4265.3	>	Moment at the top (L-Dir Kips-Ft):	425.0	0.10	OK!
Upper Steel Pad Moment Capacity (W-Direction. Kips-ft):	4265.3	>	Moment at the top (W-Dir Kips-Ft):	425.0	0.10	OK!
Upper Steel Pad Moment Capacity (Corner-Corner. K-ft):	6022.5	>	Moment at the top (C-C Direc. K-Ft):	616.9	0.10	OK!



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Antenna Mount Analysis Report and PMI Requirements

Mount ReAnalysis

SMART Tool Project #: 10207051
Colliers Engineering & Design CT, P.C. Project #: 23777133

July 21, 2023

Site Information

Site ID: 5000243366-VZW / COLCHESTER 2 CT
Site Name: COLCHESTER 2 CT
Carrier Name: Verizon Wireless
Address: 48 Westchester Rd.
Colchester, Connecticut 06415
New London County
Latitude: 41.590161°
Longitude: -72.401467°

Structure Information

Tower Type: Monopole
Mount Type: 13.33-Ft Platform

FUZE ID # 17123861

Analysis Results

Platform: 72.6% 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

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: 323604, dated February 15, 2021
Mount Mapping Report	Roaming Networks Inc., Site ID: PSLC469405, dated February 18, 2021
Previous Mount Analysis	Maser Consulting Connecticut, Project #: 21777292, dated May 13, 2021
Antenna Mount Post-Modification Inspection Report	Maser Consulting Connecticut, Project #: 21777292, dated September 28, 2021
Final Loading Configuration	Filter Add Scope Provided by Verizon Wireless

Analysis Criteria:

Codes and Standards: ANSI/TIA-222-H
 2022 Connecticut State Building Code (CSBC), Effective October 1, 2022

Wind Parameters: Basic Wind Speed (Ultimate 3-sec. Gust), V_{ULT} : 125 mph
 Ice Wind Speed (3-sec. Gust): 50 mph
 Design Ice Thickness: 1.00 in
 Risk Category: II
 Exposure Category: B
 Topographic Category: 1
 Topographic Feature Considered: N/A
 Topographic Method: N/A
 Ground Elevation Factor, K_e : 0.987

Seismic Parameters: S_s : 0.205 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 mount:

Mount Elevation (ft)	Equipment Elevation (ft)	Quantity	Manufacturer	Model	Status
166.25	167.5	2	KAelus	KA-6030	Added
		3	Samsung	MT6407-77A	Retained
		3	Samsung	B2/B66A RRH-BR049	
		3	Samsung	B5/B13 RRH-BR04C	
		6	Andrew	SBNHH-1D65B	
		6	Antel	LPA-80080-4CF	
		1	Raycap	RRFDC-6627-PF-48*	

* Equipment is flush mounted directly to the Monopole. They are not mounted on platform mount 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>Standoff Horizontal</i>	<i>53.9%</i>	<i>Pass</i>
<i>Corner Plate</i>	<i>38.9%</i>	<i>Pass</i>
<i>Face Horizontal</i>	<i>32.9%</i>	<i>Pass</i>
<i>Support Rail</i>	<i>72.6%</i>	<i>Pass</i>
<i>Support Rail Corner Plate</i>	<i>54.5%</i>	<i>Pass</i>
<i>Mount Pipe</i>	<i>60.5%</i>	<i>Pass</i>
<i>Cross Arm</i>	<i>68.9%</i>	<i>Pass</i>
<i>Standoff Tab</i>	<i>41.1%</i>	<i>Pass</i>
<i>Mount Connection (Bolt)</i>	<i>31.1%</i>	<i>Pass</i>
<i>Mount Connection (Weld)</i>	<i>43.8%</i>	<i>Pass</i>
Structure Rating – (Controlling Utilization of all Components)		72.6%

BASELINE mount weight per SBA agreement: 2545.14 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	36.8	36.8	54.2	54.2
0.5	42.8	42.8	67.6	67.6
1	48.6	48.7	80.8	80.8

Notes:

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

Requirements:

The existing mount is **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 #: 5000243366

SMART Project #: 10207051

Fuze Project ID: 17123861

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:

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

Yes No

Contractor certifies no new damage created during the current installation:

Yes No

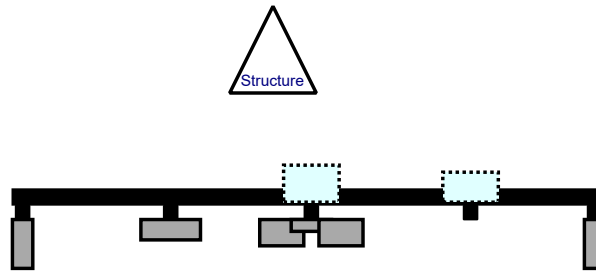
Contractor to certify the condition of the safety climb and verify no damage when leaving the site:

Safety Climb in Good Condition Safety Climb Damaged

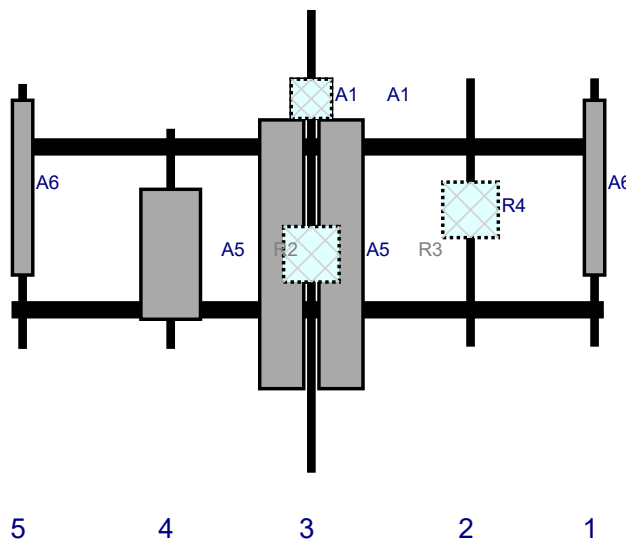
Certifying Individual:

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

Plan View

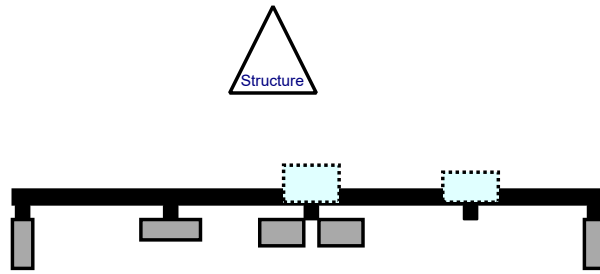


Front View - Looking at Structure

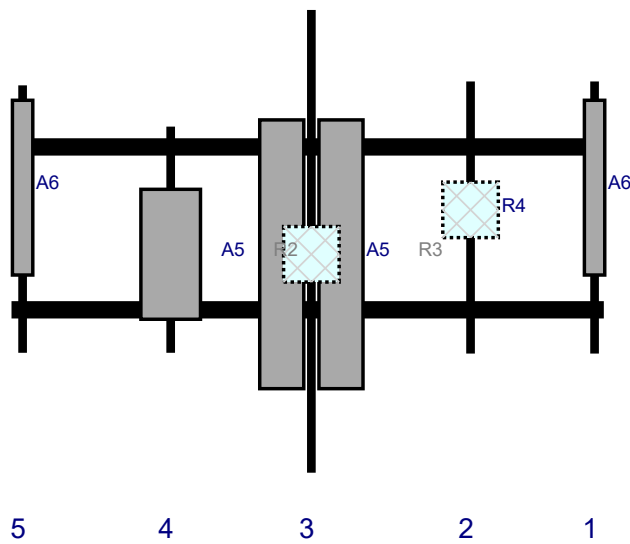


Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A6	LPA-80080-4CF	47.2	5.5	157.5	1	a	Front	427	0	Retained	08/30/2021
R4	B5/B13 RRH-BR04C	15	15	124	2	a	Behind	42	0	Retained	08/30/2021
A5	SBNHH-1D65B	72.6	11.9	81	3	a	Front	66	8	Retained	08/30/2021
A5	SBNHH-1D65B	72.6	11.9	81	3	b	Front	66	-8	Retained	08/30/2021
A1	KA-6030	10.6	10.9	81	3	a	Front	24	0	Added	
A1	KA-6030	10.6	10.9	81	3	b	Behind	24	0	Added	
R3	B2/B66A RRH-BR049	15	15	81	3	a	Behind	66	0	Retained	08/30/2021
R2	MT6407-77A	35.1	16.1	43	4	a	Front	36	0	Retained	08/30/2021
A6	LPA-80080-4CF	47.2	5.5	3	5	a	Front	27	0	Retained	08/30/2021

Plan View

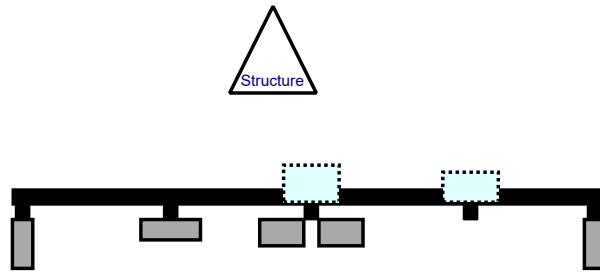


Front View - Looking at Structure

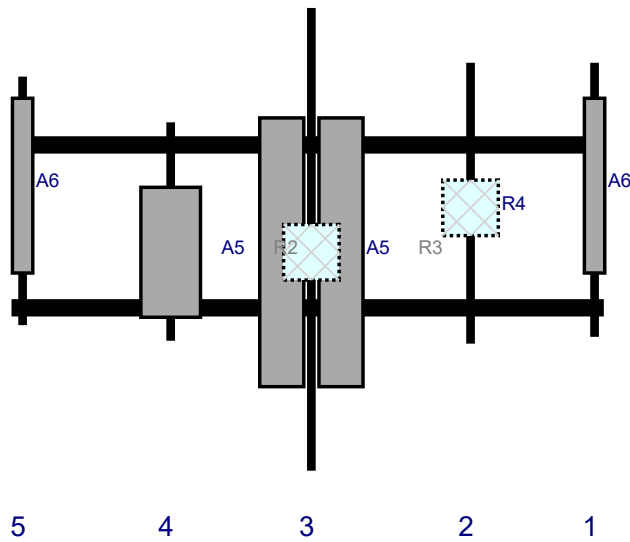


Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A6	LPA-80080-4CF	47.2	5.5	157.5	1	a	Front	27	0	Retained	08/30/2021
R4	B5/B13 RRH-BR04C	15	15	124	2	a	Behind	42	0	Retained	08/30/2021
A5	SBNHH-1D65B	72.6	11.9	81	3	a	Front	66	8	Retained	08/30/2021
A5	SBNHH-1D65B	72.6	11.9	81	3	b	Front	66	-8	Retained	08/30/2021
R3	B2/B66A RRH-BR049	15	15	81	3	a	Behind	66	0	Retained	08/30/2021
R2	MT6407-77A	35.1	16.1	43	4	a	Front	36	0	Retained	08/30/2021
A6	LPA-80080-4CF	47.2	5.5	3	5	a	Front	27	0	Retained	08/30/2021

Plan View



Front View - Looking at Structure



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
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R4	B5/B13 RRH-BR04C	15	15	124	2	a	Behind	42	0	Retained	08/30/2021
A5	SBNHH-1D65B	72.6	11.9	81	3	a	Front	66	8	Retained	08/30/2021
A5	SBNHH-1D65B	72.6	11.9	81	3	b	Front	66	-8	Retained	08/30/2021
R3	B2/B66A RRH-BR049	15	15	81	3	a	Behind	66	0	Retained	08/30/2021
R2	MT6407-77A	35.1	16.1	43	4	a	Front	36	0	Retained	08/30/2021
A6	LPA-80080-4CF	47.2	5.5	3	5	a	Front	27	0	Retained	08/30/2021

August 30, 2021 at 1:27:33 PM

13° N

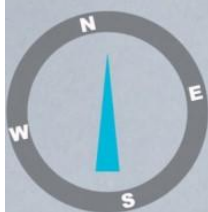
48 Westchester Rd

Colchester CT 06415

United States


Altitude:124.2meter

Speed:4.9km/h



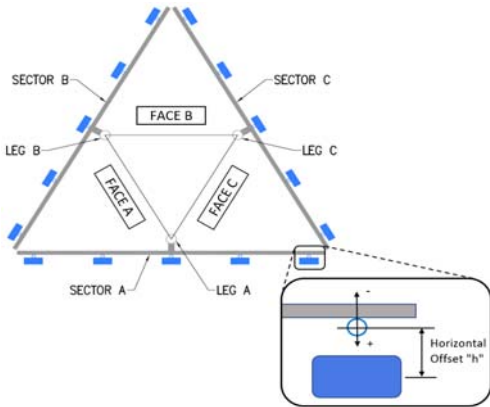
Colchester, CT 06415
Aug 30, 2021 at 12:56:46 PM



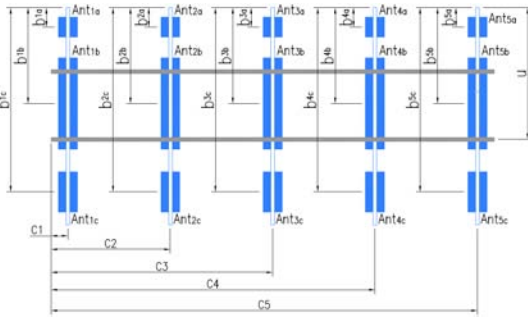
	Antenna Mount Mapping Form (PATENT PENDING)			FCC # 1227127
	Tower Owner:	Other	Mapping Date:	2/18/2021
Site Name:	COLCHESTER 2 CT	Tower Type:	Monopole	
Site Number or ID:	PSLC469405	Tower Height (Ft.):	N/A	
Mapping Contractor:	Roaming Networks Inc.	Mount Elevation (Ft.):	167.5	

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

Mount Pipe Configuration and Geometries [Unit = Inches]							
Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."	Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."
A1	PIPE 2.4"Ø X 0.17" X 65" LONG	60.00	2.00	C1	PIPE 2.4"Ø X 0.17" X 65" LONG	60.00	2.00
A2	PIPE 2.4"Ø X 0.17" X 72" LONG	68.00	36.00	C2	PIPE 2.4"Ø X 0.17" X 72" LONG	68.00	36.00
A3	PIPE 2.4"Ø X 0.17" X 125" LONG	72.00	79.00	C3	PIPE 2.4"Ø X 0.17" X 125" LONG	72.00	79.00
A4	PIPE 2.4"Ø X 0.17" X 65" LONG	61.00	117.00	C4	PIPE 2.4"Ø X 0.17" X 65" LONG	61.00	117.00
A5	PIPE 2.4"Ø X 0.17" X 65" LONG	62.00	157.00	C5	PIPE 2.4"Ø X 0.17" X 65" LONG	62.00	157.00
A6				C6			
B1	PIPE 2.4"Ø X 0.17" X 65" LONG	60.00	2.00	D1			
B2	PIPE 2.4"Ø X 0.17" X 72" LONG	68.00	36.00	D2			
B3	PIPE 2.4"Ø X 0.17" X 125" LONG	72.00	79.00	D3			
B4	PIPE 2.4"Ø X 0.17" X 65" LONG	61.00	117.00	D4			
B5	PIPE 2.4"Ø X 0.17" X 65" LONG	62.00	157.00	D5			
B6				D6			
Distance between bottom rail and mount CL elevation (dim d). Unit is inches. See 'Mount Elev Ref' tab for details. :							0.00
Distance from top of bottom support rail to lowest tip of ant./eqpt. of Carrier above. (N/A if > 10 ft.) :							6.7
Distance from top of bottom support rail to highest tip of ant./eqpt. of Carrier below. (N/A if > 10 ft.) :							4.5
Please enter additional information or comments below.							
Tower Face Width at Mount Elev. (ft.):			Tower Leg Size or Pole Shaft Diameter at Mount Elev. (in.):			28	



Ants: Items	Enter antenna model. If not labeled, enter "Unknown".					Mounting Locations [Units are inches and degrees]				Photos of antennas Photo Numbers
	Antenna Models if Known	Width (in.)	Depth (in.)	Height (in.)	Coax Size and Qty	Antenna Center-line (Ft.)	Vertical Distances "b _{1a} , b _{2a} , b _{3a} , b _{1b} ,..." (Inches)	Horiz. Offset "h" (Use "-" if Ant. is behind)	Antenna Azimuth (Degrees)	
Sector A										
Ant _{1a}	LPA 80080/4CFEDIN	5.50	13.20	47.20		170.25	27.00	14.00	48.00	12,13
Ant _{1b}										
Ant _{1c}										
Ant _{2a}	B66A RRH4x45	11.80	7.20	25.80		169.75	41.00	-6.00	48.00	14,15
Ant _{2b}										
Ant _{2c}										
Ant _{3a}	SBNHH-1D65B	11.85	7.09	72.87		168.333	62.00	7.00	48.00	7,8
Ant _{3b}	SBNHH-1D65B	11.85	7.09	72.87		168.333	62.00	7.00	48.00	9
Ant _{3c}										
Ant _{4a}	B13 RRH 4x30	12.00	9.00	21.60		169.417	38.00	-7.00	48.00	10,11
Ant _{4b}										
Ant _{4c}										
Ant _{5a}	LPA 80080/4CFEDIN	5.50	13.20	47.20		170.333	28.00	13.00	48.00	16,17
Ant _{5b}										
Ant _{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower	RRFDC-6267-PF-48	18.90	5.80	20.60						
Ant on Tower										



Antenna Layout (Looking Out From Tower)

Mount Azimuth (Degree) for Each Sector				Tower Leg Azimuth (Degree) for Each Sector				Sector B																
Sector A:	48.00	Deg	Leg A:		Deg			Ant _{1a}	LPA 80080/4CFEDIN	5.50	13.20	47.20		170.25	27.00	14.00	209.00	12,13						
Sector B:	209.00	Deg	Leg B:		Deg			Ant _{1b}																
Sector C:	324.00	Deg	Leg C:		Deg			Ant _{1c}																
Sector D:		Deg	Leg D:		Deg			Ant _{2a}	B66A RRH4x45	11.80	7.20	25.80		169.75	41.00	-6.00		14,15						
Climbing Facility Information								Ant _{2b}																
Location:	144.00	Deg	Sector C				Ant _{2c}																	
Climbing Facility	Corrosion Type:	Good condition.				Ant _{3a}	SBNHH-1D65B	11.85	7.09	72.87		168.333	62.00	7.00	209.00		7,8							
	Access:	Climbing path was obstructed.				Ant _{3b}	SBNHH-1D65B	11.85	7.09	72.87		168.333	62.00	7.00	209.00		9							
	Condition:	Loose hardware.				Ant _{3c}																		
								Ant _{4a}	B13 RRH 4x30	12.00	9.00	21.60		169.417	38.00	-7.00		10,11						
								Ant _{4b}																
								Ant _{4c}																
								Ant _{5a}	LPA 80080/4CFEDIN	5.50	13.20	47.20		170.333	28.00	13.00	209.00	16,17						
								Ant _{5b}																
								Ant _{5c}																
								Ant on Standoff																
								Ant on Standoff																
								Ant on Tower																
								Ant on Tower																
Sector C								Ant _{1a}	LPA 80080/4CFEDIN	5.50	13.20	47.20		170.25	27.00	14.00	324.00	12,13						
								Ant _{1b}																
								Ant _{1c}																
								Ant _{2a}	B66A RRH4x45	11.80	7.20	25.80		169.75	41.00	-6.00		14,15						
								Ant _{2b}																
								Ant _{2c}																
								Ant _{3a}	SBNHH-1D65B	11.85	7.09	72.87		168.333	62.00	7.00	324.00	7,8						
								Ant _{3b}	SBNHH-1D65B	11.85	7.09	72.87		168.333	62.00	7.00	324.00	9						
								Ant _{3c}																
								Ant _{4a}	B13 RRH 4x30	12.00	9.00	21.60		169.417	38.00	-7.00		10,11						
								Ant _{4b}																
Ant _{4c}																								
Ant _{5a}	LPA 80080/4CFEDIN	5.50	13.20	47.20		170.333	28.00	13.00	324.00	16,17														
Ant _{5b}																								
Ant _{5c}																								
Ant on Standoff																								
Ant on Standoff																								
Ant on Tower																								
Ant on Tower																								
Sector D								Ant _{1a}																
								Ant _{1b}																
								Ant _{1c}																
								Ant _{2a}																
								Ant _{2b}																
								Ant _{2c}																
								Ant _{3a}																
								Ant _{3b}																
								Ant _{3c}																
								Ant _{4a}																
								Ant _{4b}																
Ant _{4c}																								
Ant _{5a}																								
Ant _{5b}																								
Ant _{5c}																								
Ant on Standoff																								
Ant on Standoff																								
Ant on Tower																								
Ant on Tower																								

Observed Safety and Structural Issues During the Mount Mapping

Issue #	Description of Issue	Photo #
---------	----------------------	---------

1		
2		
3		
4		
5		
6		
7		
8		

Mapping Notes

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

Standard Conditions

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

Antenna Mount Mapping Form (PATENT PENDING)



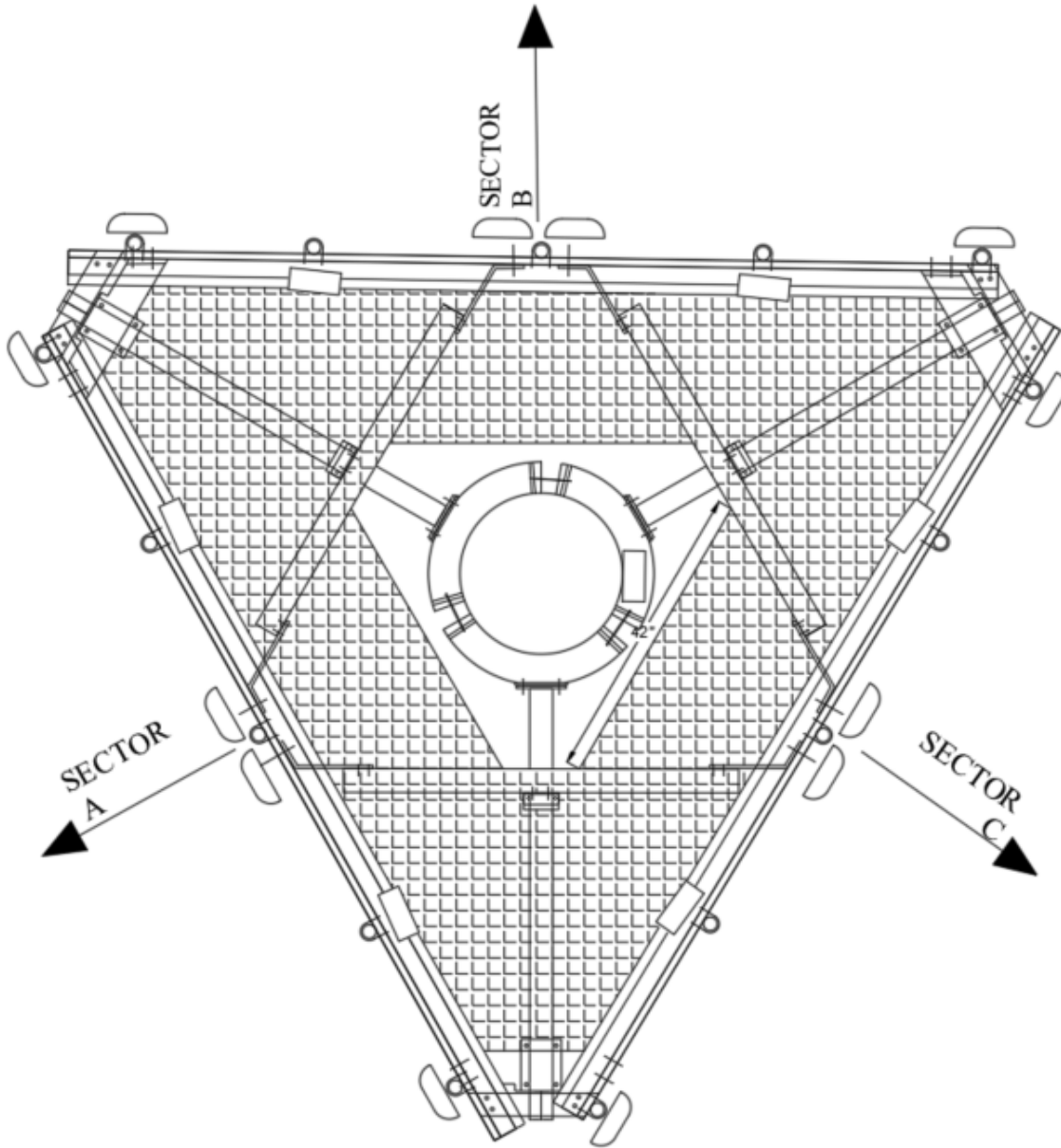
Tower Owner:	Other	Mapping Date:	2/18/2021
Site Name:	COLCHESTER 2 CT	Tower Type:	Monopole
Site Number or ID:	PSLC469405	Tower Height (FT):	N/A
Mapping Contractor:	Roaming Networks Inc.	Mount Elevation (FT):	167.5

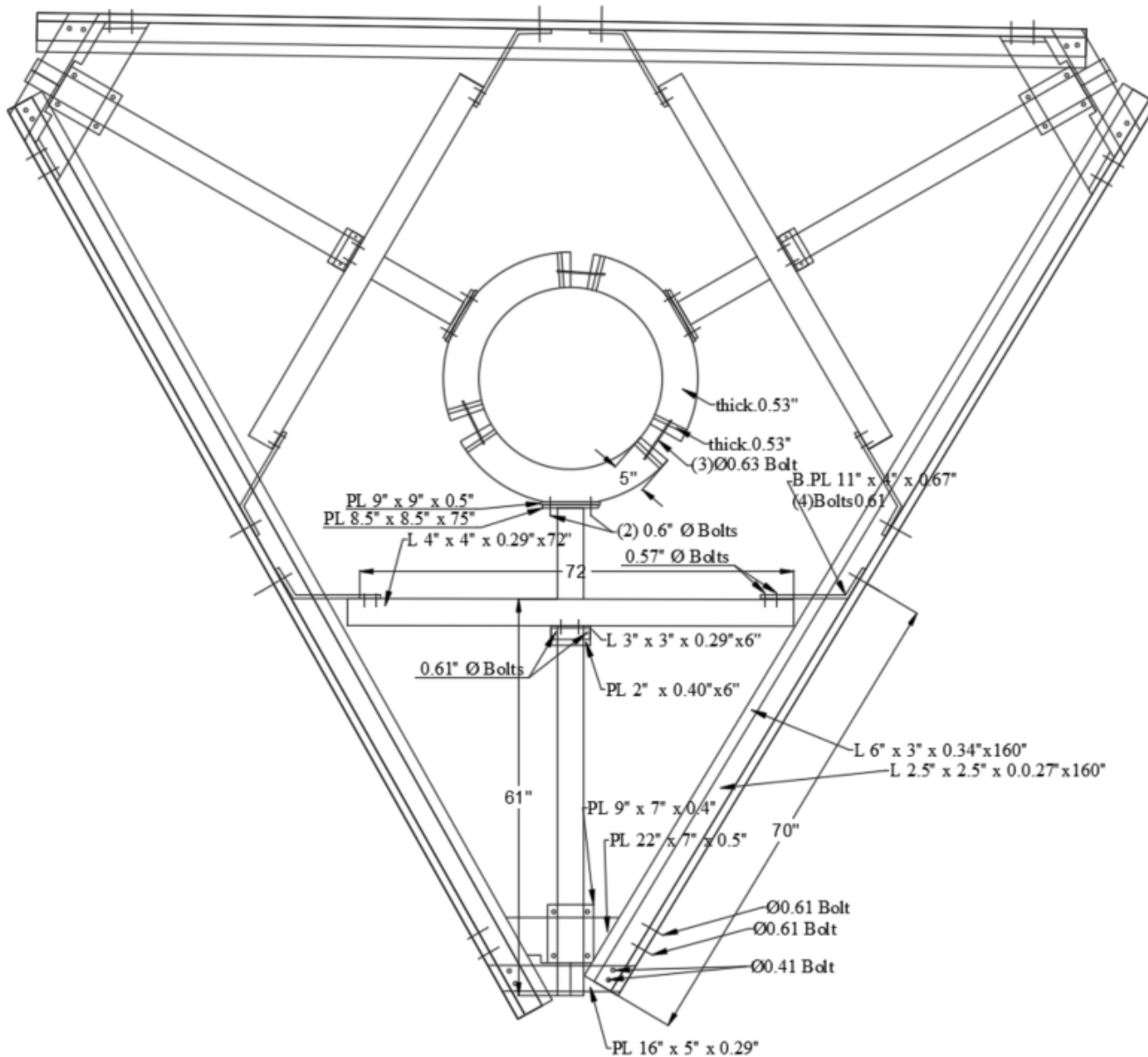
FCC #

1227127

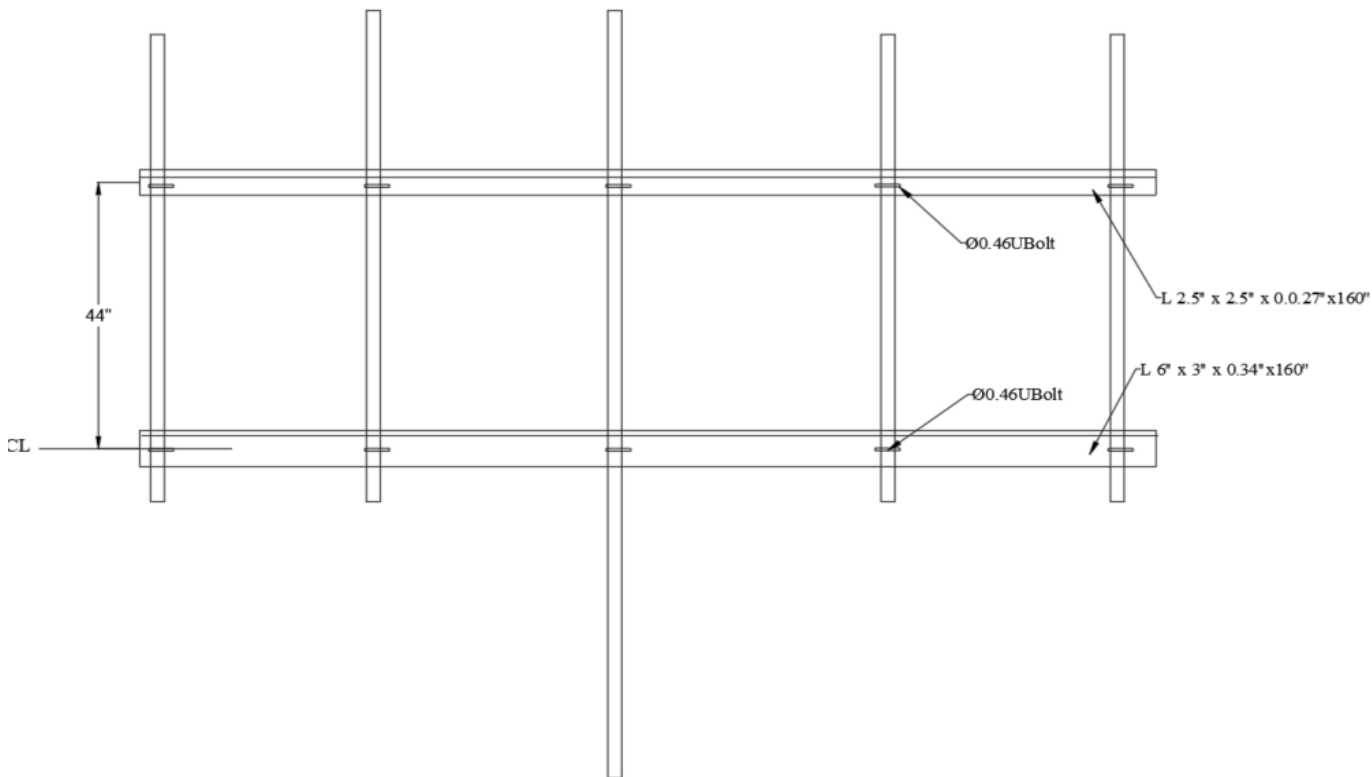
This antenna mapping form is the property of TES and under **PATENT PENDING**. The formation contained herein is considered confidential in nature and is to be used only for the specific customer it was intended for. Reproduction, transmission, publication, modification or disclosure by any method is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

Please Insert Sketches of the Antenna Mount





Please Insert Sketches of the Antenna Mount, cont'd





PL 22" x 7" x 0.5"

Ø0.61 Bolt

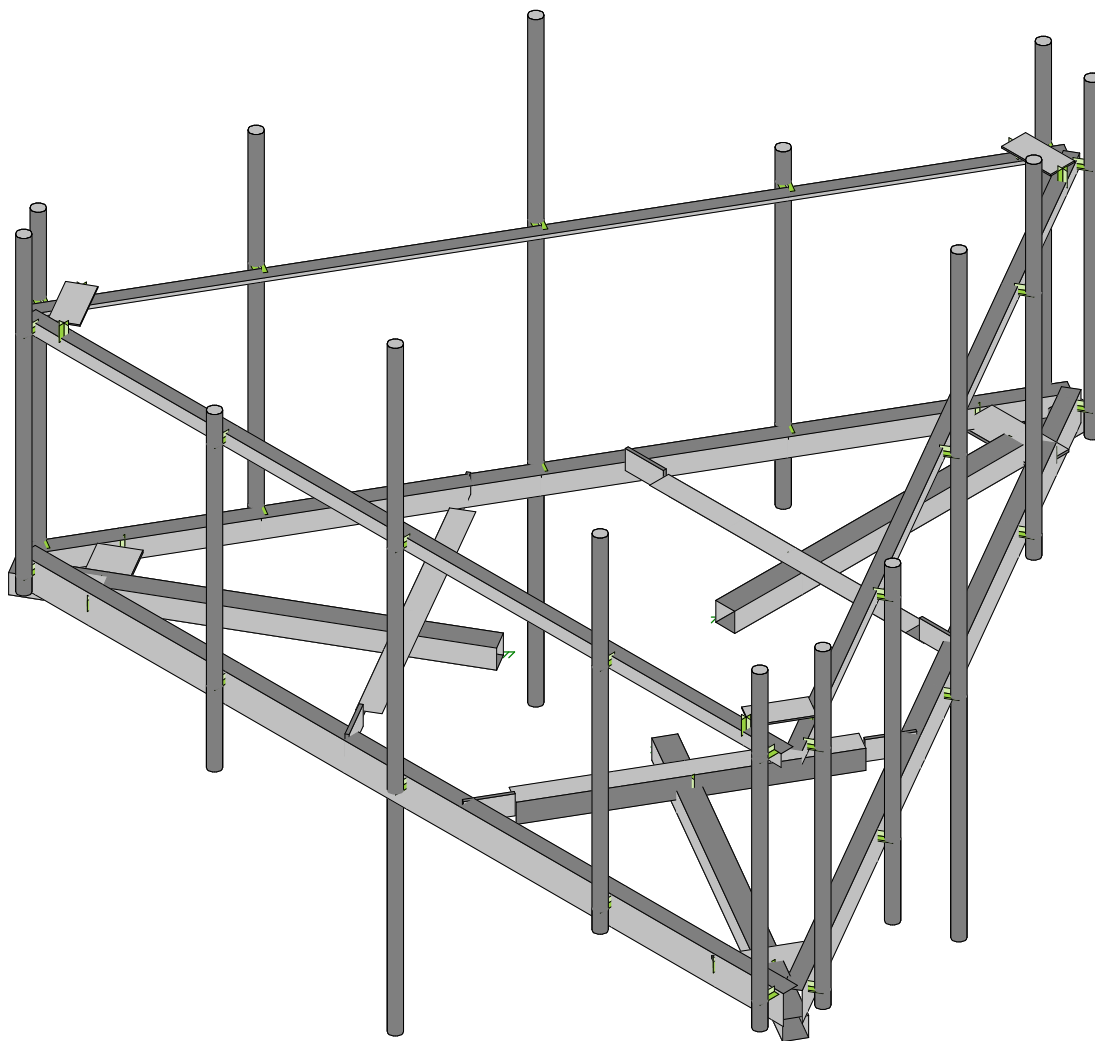
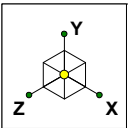


PL 22" x 7" x 0.5"

PL 9" x 7" x 0.4"

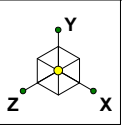


conn. to tower

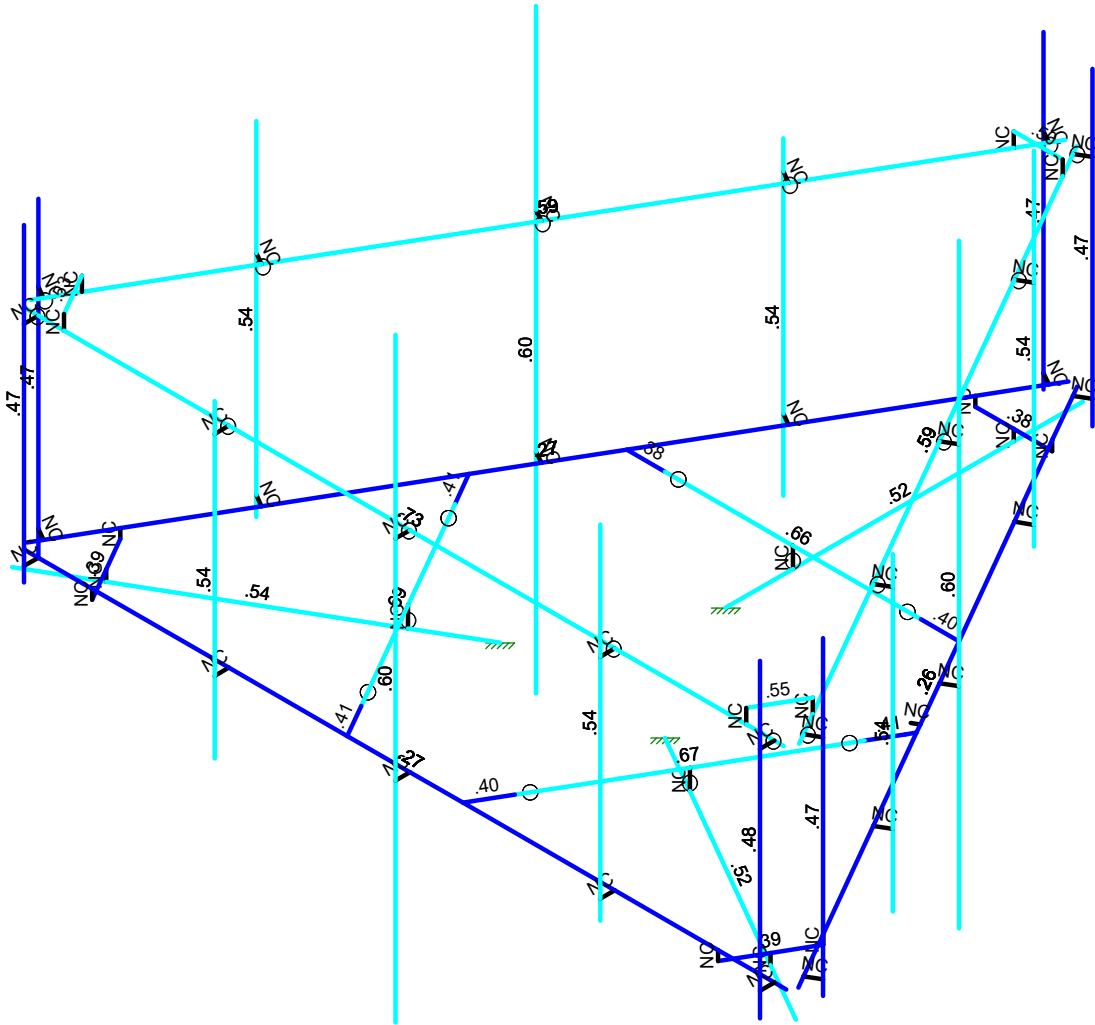


Envelope Only Solution

Colliers Engineering & De...	Antenna Mount Analysis	SK - 1
		July 21, 2023 at 12:46 PM
Project # 23777133		5000243366-VZW_MT_LO_H.r3d

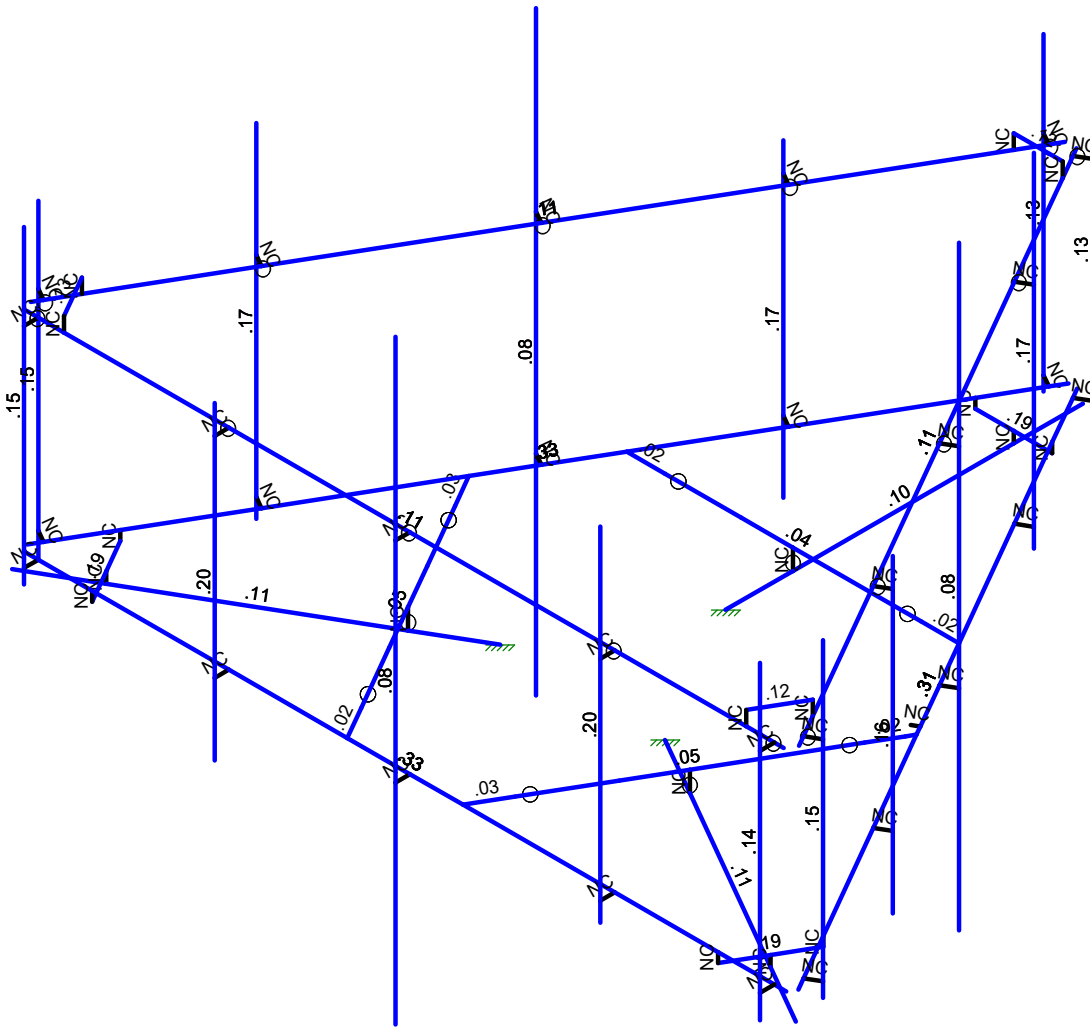
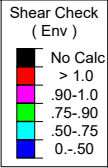
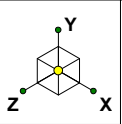


Code Check (Env)	
Black	No Calc
Red	> 1.0
Pink	.90-1.0
Green	.75-.90
Cyan	.50-.75
Blue	0-.50



Member Code Checks Displayed (Enveloped)
Envelope Only Solution

Colliers Engineering & De...	Antenna Mount Analysis	SK - 2
		July 21, 2023 at 12:46 PM
Project # 23777133		5000243366-VZW_MT_LO_H.r3d



Member Shear Checks Displayed (Enveloped)
Envelope Only Solution

Colliers Engineering & De...

Antenna Mount Analysis

SK - 3

July 21, 2023 at 12:46 PM

Project # 23777133

5000243366-VZW_MT_LO_H.r3d



Basic Load Cases

	BLC Description	Category	X Gr...	Y Gr...	Z Gr...	Joint	Point	Distributed	Area(Member)	Surfa...
1	Antenna D	None					114			
2	Antenna Di	None					114			
3	Antenna Wo (0 Deg)	None					114			
4	Antenna Wo (30 Deg)	None					114			
5	Antenna Wo (60 Deg)	None					114			
6	Antenna Wo (90 Deg)	None					114			
7	Antenna Wo (120 Deg)	None					114			
8	Antenna Wo (150 Deg)	None					114			
9	Antenna Wo (180 Deg)	None					114			
10	Antenna Wo (210 Deg)	None					114			
11	Antenna Wo (240 Deg)	None					114			
12	Antenna Wo (270 Deg)	None					114			
13	Antenna Wo (300 Deg)	None					114			
14	Antenna Wo (330 Deg)	None					114			
15	Antenna Wi (0 Deg)	None					114			
16	Antenna Wi (30 Deg)	None					114			
17	Antenna Wi (60 Deg)	None					114			
18	Antenna Wi (90 Deg)	None					114			
19	Antenna Wi (120 Deg)	None					114			
20	Antenna Wi (150 Deg)	None					114			
21	Antenna Wi (180 Deg)	None					114			
22	Antenna Wi (210 Deg)	None					114			
23	Antenna Wi (240 Deg)	None					114			
24	Antenna Wi (270 Deg)	None					114			
25	Antenna Wi (300 Deg)	None					114			
26	Antenna Wi (330 Deg)	None					114			
27	Antenna Wm (0 Deg)	None					114			
28	Antenna Wm (30 Deg)	None					114			
29	Antenna Wm (60 Deg)	None					114			
30	Antenna Wm (90 Deg)	None					114			
31	Antenna Wm (120 Deg)	None					114			
32	Antenna Wm (150 Deg)	None					114			
33	Antenna Wm (180 Deg)	None					114			
34	Antenna Wm (210 Deg)	None					114			
35	Antenna Wm (240 Deg)	None					114			
36	Antenna Wm (270 Deg)	None					114			
37	Antenna Wm (300 Deg)	None					114			
38	Antenna Wm (330 Deg)	None					114			
39	Structure D	None		-1					5	
40	Structure Di	None						39	5	
41	Structure Wo (0 Deg)	None						78		
42	Structure Wo (30 Deg)	None						78		
43	Structure Wo (60 Deg)	None						78		
44	Structure Wo (90 Deg)	None						78		
45	Structure Wo (120 Deg)	None						78		
46	Structure Wo (150 Deg)	None						78		
47	Structure Wo (180 Deg)	None						78		
48	Structure Wo (210 Deg)	None						78		
49	Structure Wo (240 Deg)	None						78		
50	Structure Wo (270 Deg)	None						78		
51	Structure Wo (300 Deg)	None						78		
52	Structure Wo (330 Deg)	None						78		
53	Structure Wi (0 Deg)	None						78		
54	Structure Wi (30 Deg)	None						78		
55	Structure Wi (60 Deg)	None						78		
56	Structure Wi (90 Deg)	None						78		



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						78		
58 Structure Wi (150 Deg)	None						78		
59 Structure Wi (180 Deg)	None						78		
60 Structure Wi (210 Deg)	None						78		
61 Structure Wi (240 Deg)	None						78		
62 Structure Wi (270 Deg)	None						78		
63 Structure Wi (300 Deg)	None						78		
64 Structure Wi (330 Deg)	None						78		
65 Structure Wm (0 Deg)	None						78		
66 Structure Wm (30 Deg)	None						78		
67 Structure Wm (60 Deg)	None						78		
68 Structure Wm (90 Deg)	None						78		
69 Structure Wm (120 Deg)	None						78		
70 Structure Wm (150 Deg)	None						78		
71 Structure Wm (180 Deg)	None						78		
72 Structure Wm (210 Deg)	None						78		
73 Structure Wm (240 Deg)	None						78		
74 Structure Wm (270 Deg)	None						78		
75 Structure Wm (300 Deg)	None						78		
76 Structure Wm (330 Deg)	None						78		
77 Lm1	None					1			
78 Lm2	None					1			
79 Lv1	None					1			
80 Lv2	None					1			
81 Antenna Ev	None					114			
82 Antenna Eh (0 Deg)	None					76			
83 Antenna Eh (90 Deg)	None					76			
84 Structure Ev	ELY		-0437					3	
85 Structure Eh (0 Deg)	ELZ			-1093				3	
86 Structure Eh (90 Deg)	ELX	.1093						3	
87 BLC 39 Transient Area Loads	None						76		
88 BLC 40 Transient Area Loads	None						76		
89 BLC 84 Transient Area Loads	None						37		
90 BLC 85 Transient Area Loads	None						37		
91 BLC 86 Transient Area Loads	None						37		

Load Combinations

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



Load Combinations (Continued)

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



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project # 23777133
 Model Name : Antenna Mount Analysis

July 21, 2023
 12:46 PM
 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...	
75	0.9D - 1.0Ev + 1.0Eh...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	.866	83	-5	ELZ	.866	E...	-5		

Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	CP	0.	-0.416667	-0.	0	
2	N153A	0.	-0.416667	-1.666667	0	
3	N154A	0.	-0.416667	-7.916667	0	
4	N163	0.	-.0625	-2.844998	0	
5	N164	0.	-0.416667	-2.844998	0	
6	N168A	0.	-0.229167	-6.710895	0	
7	N170A	0.	-0.416667	-6.710895	0	
8	N19A	0.673576	-.0625	-6.710895	0	
9	N20A	0.673576	-0.229167	-6.710895	0	
10	N21A	-0.673575	-0.229167	-6.710895	0	
11	N22	-0.673575	-.0625	-6.710895	0	
12	N37	-6.666667	-.0625	3.938781	0	
13	N50	6.666668	-.0625	3.938781	0	
14	N25	-1.443375	-0.416667	0.833333	0	
15	N26	-6.856034	-0.416667	3.958333	0	
16	N33	-5.811806	-0.229167	3.355447	0	
17	N34	-5.811806	-0.416667	3.355447	0	
18	N35	-6.148593	-.0625	2.772114	0	
19	N36	-6.148593	-0.229167	2.772114	0	
20	N37A	-5.475018	-0.229167	3.938781	0	
21	N38	-5.475018	-.0625	3.938781	0	
22	N44	1.443376	-0.416667	0.833333	0	
23	N45	6.856035	-0.416667	3.958333	0	
24	N52	5.811806	-0.229167	3.355447	0	
25	N53	5.811806	-0.416667	3.355447	0	
26	N54	5.475019	-.0625	3.938781	0	
27	N55	5.475019	-0.229167	3.938781	0	
28	N56	6.148594	-0.229167	2.772114	0	
29	N57	6.148594	-.0625	2.772114	0	
30	N61A	6.744419	-.0625	3.804112	0	
31	N62	0.077751	-.0625	-7.742894	0	
32	N66	-0.077751	-.0625	-7.742894	0	
33	N67	-6.744418	-.0625	3.804113	0	
34	N68A	-6.625	3.604167	3.938781	0	
35	N69A	6.625001	3.604167	3.938781	0	
36	N78	5.968386	3.604167	3.938781	0	
37	N79	6.395278	3.604167	3.199383	0	
38	N80	5.968386	3.854167	3.938781	0	
39	N81	6.395278	3.854167	3.199383	0	
40	N60	0.426892	3.604167	-7.138164	0	
41	N61	-0.426892	3.604167	-7.138165	0	
42	N62A	0.426892	3.854167	-7.138164	0	
43	N63	-0.426891	3.854167	-7.138165	0	
44	N67A	-6.395277	3.604167	3.199383	0	
45	N68	-5.968386	3.604167	3.938781	0	
46	N69	-6.395277	3.854167	3.199383	0	
47	N70	-5.968386	3.854167	3.938781	0	
48	N68B	6.458335	3.604167	3.938781	0	
49	N67B	6.723586	3.604167	3.768028	0	
50	N68C	0.098584	3.604167	-7.70681	0	
51	N70A	-0.098584	3.604167	-7.70681	0	



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project # 23777133
 Model Name : Antenna Mount Analysis

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Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
52	N71	-6.723585	3.604167	3.768029	0	
53	N70B	6.458335	-.0625	3.938781	0	
54	N70C	3.666668	-.0625	3.938781	0	
55	N72	0.083335	-.0625	3.938781	0	
56	N74	-3.083332	-.0625	3.938781	0	
57	N76	-6.416665	-.0625	3.938781	0	
58	N78A	6.458335	3.604167	4.188781	0	
59	N79A	6.458335	-0.0625	4.188781	0	
60	N80A	3.666668	-.0625	4.188781	0	
61	N82	0.083335	-.0625	4.188781	0	
62	N84	-3.083332	-.0625	4.188781	0	
63	N86	-6.416665	-.0625	4.188781	0	
64	N88	6.458335	4.9375	4.188781	0	
65	N89	6.458335	-0.479167	4.188781	0	
66	N90	3.666668	5.604167	4.188781	0	
67	N91	3.666668	-0.395833	4.188781	0	
68	N92	0.083335	6.6875	4.188781	0	
69	N93	0.083335	-3.729167	4.188781	0	
70	N94	-3.083332	4.104167	4.188781	0	
71	N95	-3.083332	-1.3125	4.188781	0	
72	N96	-6.416665	5.104167	4.188781	0	
73	N97	-6.416665	-.3125	4.188781	0	
74	N99	0.181918	3.604167	-7.562472	0	
75	N100	0.181918	-.0625	-7.562472	0	
76	N101	1.577751	-.0625	-5.144818	0	
77	N103	3.369418	-.0625	-2.04156	0	
78	N105	4.952751	-.0625	0.700853	0	
79	N107	6.619418	-.0625	3.587604	0	
80	N109	0.398424	3.604167	-7.687472	0	
81	N110	0.398424	-0.0625	-7.687472	0	
82	N111	1.794257	-.0625	-5.269818	0	
83	N113	3.585924	-.0625	-2.16656	0	
84	N115	5.169257	-.0625	0.575853	0	
85	N117	6.835924	-.0625	3.462605	0	
86	N119	0.398424	4.9375	-7.687472	0	
87	N120	0.398424	-0.479167	-7.687472	0	
88	N121	1.794257	5.604167	-5.269818	0	
89	N122	1.794257	-0.395833	-5.269818	0	
90	N123	3.585924	6.6875	-2.16656	0	
91	N124	3.585924	-3.729167	-2.16656	0	
92	N125	5.169257	4.104167	0.575853	0	
93	N126	5.169257	-1.3125	0.575853	0	
94	N127	6.835924	5.104167	3.462605	0	
95	N128	6.835924	-.3125	3.462605	0	
96	N130	-6.640251	3.604167	3.623691	0	
97	N131	-6.640251	-.0625	3.623691	0	
98	N132	-5.244418	-.0625	1.206037	0	
99	N134	-3.452752	-.0625	-1.897221	0	
100	N136	-1.869418	-.0625	-4.639635	0	
101	N138	-0.202752	-.0625	-7.526386	0	
102	N140	-6.856758	3.604167	3.498691	0	
103	N141	-6.856758	-0.0625	3.498691	0	
104	N142	-5.460924	-.0625	1.081037	0	
105	N144	-3.669258	-.0625	-2.022221	0	
106	N146	-2.085924	-.0625	-4.764635	0	
107	N148	-0.419258	-.0625	-7.651386	0	
108	N150	-6.856758	4.9375	3.498691	0	



Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
109	N151	-6.856758	-0.479167	3.498691	0	
110	N152	-5.460924	5.604167	1.081037	0	
111	N153	-5.460924	-0.395833	1.081037	0	
112	N154	-3.669258	6.6875	-2.022221	0	
113	N155	-3.669258	-3.729167	-2.022221	0	
114	N156	-2.085924	4.104167	-4.764635	0	
115	N157	-2.085924	-1.3125	-4.764635	0	
116	N158A	-0.419258	5.104167	-7.651386	0	
117	N159	-0.419258	-.3125	-7.651386	0	
118	N158B	-3.083332	3.604167	3.938781	0	
119	N159A	-3.083332	3.604167	4.188781	0	
120	N136A	-6.416665	3.604167	3.938781	0	
121	N137	-6.416665	3.604167	4.188781	0	
122	N138A	0.083335	3.604167	3.938781	0	
123	N139	0.083335	3.604167	4.188781	0	
124	N140A	3.666668	3.604167	3.938781	0	
125	N141A	3.666668	3.604167	4.188781	0	
126	N143	4.952751	3.604167	0.700853	0	
127	N144A	5.169257	3.604167	0.575853	0	
128	N145	6.619418	3.604167	3.587604	0	
129	N146A	6.835924	3.604167	3.462605	0	
130	N147	3.369418	3.604167	-2.04156	0	
131	N148A	3.585924	3.604167	-2.16656	0	
132	N149	1.577751	3.604167	-5.144818	0	
133	N150A	1.794257	3.604167	-5.269818	0	
134	N152A	-1.869418	3.604167	-4.639635	0	
135	N153B	-2.085924	3.604167	-4.764635	0	
136	N154B	-0.202752	3.604167	-7.526386	0	
137	N155A	-0.419258	3.604167	-7.651386	0	
138	N156A	-3.452752	3.604167	-1.897221	0	
139	N157A	-3.669258	3.604167	-2.022221	0	
140	N158C	-5.244418	3.604167	1.206037	0	
141	N159B	-5.460924	3.604167	1.081037	0	
142	N160	6.458335	3.6875	4.188781	0	
143	N169	3.827752	-.0625	-1.247702	0	
144	N170	3.719499	-.0625	-1.185203	0	
145	N171	3.844499	-.0625	-0.968696	0	
146	N174A	-2.905552	-.0625	-2.844998	0	
147	N175A	2.905553	-.0625	-2.844998	0	
148	N170B	-2.238886	-.0625	-2.844998	0	
149	N170C	2.238614	-.0625	-2.844998	0	
150	N157B	-2.46384	-.0625	1.422499	0	
151	N158	-2.46384	-0.416667	1.422499	0	
152	N159D	-1.011063	-.0625	3.938781	0	
153	N160A	-3.916616	-.0625	-1.093784	0	
154	N161A	-1.344397	-.0625	3.361431	0	
155	N162	-3.583147	-.0625	-0.516198	0	
156	N164B	2.463841	-.0625	1.422499	0	
157	N165A	2.463841	-0.416667	1.422499	0	
158	N166	3.916617	-.0625	-1.093784	0	
159	N167	1.011064	-.0625	3.938781	0	
160	N168	3.583284	-.0625	-0.516434	0	
161	N169A	1.344534	-.0625	3.361195	0	
162	N162A	-0.905552	-.0625	-2.844998	0	
163	N164A	-2.011064	-.0625	2.20673	0	
164	N165	-2.916617	-.0625	0.638267	0	
165	N167A	2.011064	-.0625	2.20673	0	



Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Desig... A [in2]	Iyy [i...	Izz [i...	J [in4]	
1	Mount Pipe	PIPE 2.0	Beam	Pipe	A53 Gr.B	Typical	1.02	.627	.627	1.25
2	Support Rail	L2.5x2.5x4	Beam	Single Angle	A36 Gr.36	Typical	1.19	.692	.692	.0261
3	Support Rail Corner Plate	PL1/4x5	Beam	RECT	A36 Gr.36	Typical	1.25	.0065	2.6042	.0252
4	Standoff Tab	PL5/8x4	Beam	RECT	A36 Gr.36	Typical	2.5	.0814	3.3333	.2935
5	Standoff Horizontal	HSS4X4X3	Beam	SquareTube	A500 Gr.B Rect	Typical	2.58	6.21	6.21	10
6	Cross Arm	L4X4X4	Beam	Single Angle	A36 Gr.36	Typical	1.93	3	3	.0438
7	Face Horizontal	L6x3x5	Beam	Single Angle	A36 Gr.36	Typical	2.7148	1.8258	10.3...	.0844
8	TES Face Horizontal	L6x3x6	Beam	Single Angle	A36 Gr.36	Typical	3.2344	2.1324	12.1...	.1433
9	Corner Plate	PL1/2X7	Beam	RECT	A36 Gr.36	Typical	3.5	.073	14.292	.279

Hot Rolled Steel Properties

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

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(d...	Section/Shape	Type	Design List	Material	Design Ru...
1	M76	N153A	N154A			Standoff Horizontal	Beam	SquareTube	A500 Gr...	Typical
2	M80	N164	N163			RIGID	None	None	RIGID	Typical
3	M83	N170A	N168A			RIGID	None	None	RIGID	Typical
4	M84	N21A	N20A	90		Corner Plate	Beam	RECT	A36 Gr.36	Typical
5	M12	N21A	N22			RIGID	None	None	RIGID	Typical
6	M12A	N20A	N19A			RIGID	None	None	RIGID	Typical
7	M28A	N37	N50	180		Face Horizontal	Beam	Single Angle	A36 Gr.36	Typical
8	M15	N25	N26			Standoff Horizontal	Beam	SquareTube	A500 Gr...	Typical
9	M20	N34	N33			RIGID	None	None	RIGID	Typical
10	M21	N37A	N36	90		Corner Plate	Beam	RECT	A36 Gr.36	Typical
11	M22	N37A	N38			RIGID	None	None	RIGID	Typical
12	M23	N36	N35			RIGID	None	None	RIGID	Typical
13	M27	N44	N45			Standoff Horizontal	Beam	SquareTube	A500 Gr...	Typical
14	M32	N53	N52			RIGID	None	None	RIGID	Typical
15	M33	N56	N55	90		Corner Plate	Beam	RECT	A36 Gr.36	Typical
16	M34	N56	N57			RIGID	None	None	RIGID	Typical
17	M35	N55	N54			RIGID	None	None	RIGID	Typical
18	M39	N61A	N62	180		Face Horizontal	Beam	Single Angle	A36 Gr.36	Typical
19	M41	N66	N67	180		Face Horizontal	Beam	Single Angle	A36 Gr.36	Typical
20	M43	N68A	N69A	180		Support Rail	Beam	Single Angle	A36 Gr.36	Typical
21	M50	N80	N81	90		Support Rail Corn...	Beam	RECT	A36 Gr.36	Typical
22	M51	N78	N80			RIGID	None	None	RIGID	Typical
23	M52	N79	N81			RIGID	None	None	RIGID	Typical
24	M36	N62A	N63	90		Support Rail Corn...	Beam	RECT	A36 Gr.36	Typical
25	M37	N60	N62A			RIGID	None	None	RIGID	Typical
26	M38	N61	N63			RIGID	None	None	RIGID	Typical
27	M40	N69	N70	90		Support Rail Corn...	Beam	RECT	A36 Gr.36	Typical
28	M41A	N67A	N69			RIGID	None	None	RIGID	Typical
29	M42	N68	N70			RIGID	None	None	RIGID	Typical
30	M41B	N67B	N68C	180		Support Rail	Beam	Single Angle	A36 Gr.36	Typical
31	M42A	N70A	N71	180		Support Rail	Beam	Single Angle	A36 Gr.36	Typical



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project # 23777133
 Model Name : Antenna Mount Analysis

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Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(d...	Section/Shape	Type	Design List	Material	Design Ru...
32	M44	N86	N76			RIGID	None	None	RIGID	Typical
33	M45	N84	N74			RIGID	None	None	RIGID	Typical
34	M48	N82	N72			RIGID	None	None	RIGID	Typical
35	M49	N80A	N70C			RIGID	None	None	RIGID	Typical
36	M51A	N79A	N70B			RIGID	None	None	RIGID	Typical
37	M52A	N78A	N68B			RIGID	None	None	RIGID	Typical
38	MP5A	N96	N97			Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
39	MP4A	N94	N95			Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
40	MP3A	N92	N93			Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
41	MP2A	N90	N91			Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
42	MP1A	N88	N89			Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
43	M59	N117	N107			RIGID	None	None	RIGID	Typical
44	M60	N115	N105			RIGID	None	None	RIGID	Typical
45	M63	N113	N103			RIGID	None	None	RIGID	Typical
46	M64	N111	N101			RIGID	None	None	RIGID	Typical
47	M66	N110	N100			RIGID	None	None	RIGID	Typical
48	M67	N109	N99			RIGID	None	None	RIGID	Typical
49	MP5C	N127	N128			Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
50	MP4C	N125	N126			Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
51	MP3C	N123	N124			Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
52	MP2C	N121	N122			Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
53	MP1C	N119	N120			Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
54	M74	N148	N138			RIGID	None	None	RIGID	Typical
55	M75	N146	N136			RIGID	None	None	RIGID	Typical
56	M78A	N144	N134			RIGID	None	None	RIGID	Typical
57	M79A	N142	N132			RIGID	None	None	RIGID	Typical
58	M81	N141	N131			RIGID	None	None	RIGID	Typical
59	M82	N140	N130			RIGID	None	None	RIGID	Typical
60	MP5B	N158A	N159			Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
61	MP4B	N156	N157			Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
62	MP3B	N154	N155			Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
63	MP2B	N152	N153			Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
64	MP1B	N150	N151			Mount Pipe	Beam	Pipe	A53 Gr.B	Typical
65	M88	N159A	N158B			RIGID	None	None	RIGID	Typical
66	M77A	N137	N136A			RIGID	None	None	RIGID	Typical
67	M78B	N139	N138A			RIGID	None	None	RIGID	Typical
68	M79B	N141A	N140A			RIGID	None	None	RIGID	Typical
69	M80A	N144A	N143			RIGID	None	None	RIGID	Typical
70	M81A	N146A	N145			RIGID	None	None	RIGID	Typical
71	M82A	N148A	N147			RIGID	None	None	RIGID	Typical
72	M83B	N150A	N149			RIGID	None	None	RIGID	Typical
73	M84B	N153B	N152A			RIGID	None	None	RIGID	Typical
74	M85A	N155A	N154B			RIGID	None	None	RIGID	Typical
75	M86A	N157A	N156A			RIGID	None	None	RIGID	Typical
76	M87A	N159B	N158C			RIGID	None	None	RIGID	Typical
77	M89	N169	N170			RIGID	None	None	RIGID	Typical
78	M91	N170B	N170C		90	Cross Arm	Beam	Single Angle	A36 Gr.36	Typical
79	M88B	N174A	N170B			Standoff Tab	Beam	RECT	A36 Gr.36	Typical
80	M89A	N170C	N175A			Standoff Tab	Beam	RECT	A36 Gr.36	Typical
81	M81B	N158	N157B			RIGID	None	None	RIGID	Typical
82	M82B	N161A	N162		90	Cross Arm	Beam	Single Angle	A36 Gr.36	Typical
83	M83A	N159D	N161A			Standoff Tab	Beam	RECT	A36 Gr.36	Typical
84	M84A	N162	N160A			Standoff Tab	Beam	RECT	A36 Gr.36	Typical
85	M85	N165A	N164B			RIGID	None	None	RIGID	Typical
86	M86	N168	N169A		90	Cross Arm	Beam	Single Angle	A36 Gr.36	Typical
87	M87	N166	N168			Standoff Tab	Beam	RECT	A36 Gr.36	Typical
88	M88A	N169A	N167			Standoff Tab	Beam	RECT	A36 Gr.36	Typical



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project # 23777133
 Model Name : Antenna Mount Analysis

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Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Ratio Opti...	Analysis ...	Inactive	Seismi...
1	M76						Yes				None
2	M80		AIPIN			Compres...	Yes	** NA **			None
3	M83						Yes	** NA **			None
4	M84						Yes				None
5	M12						Yes	** NA **			None
6	M12A						Yes	** NA **			None
7	M28A						Yes				None
8	M15						Yes				None
9	M20						Yes	** NA **			None
10	M21						Yes				None
11	M22						Yes	** NA **			None
12	M23						Yes	** NA **			None
13	M27						Yes				None
14	M32						Yes	** NA **			None
15	M33						Yes				None
16	M34						Yes	** NA **			None
17	M35						Yes	** NA **			None
18	M39						Yes				None
19	M41						Yes	Default			None
20	M43						Yes	Default			None
21	M50						Yes	Default			None
22	M51						Yes	** NA **			None
23	M52						Yes	** NA **			None
24	M36						Yes	Default			None
25	M37						Yes	** NA **			None
26	M38						Yes	** NA **			None
27	M40						Yes	Default			None
28	M41A						Yes	** NA **			None
29	M42						Yes	** NA **			None
30	M41B						Yes	Default			None
31	M42A						Yes	Default			None
32	M44						Yes	** NA **			None
33	M45						Yes	** NA **			None
34	M48						Yes	** NA **			None
35	M49						Yes	** NA **			None
36	M51A						Yes	** NA **			None
37	M52A	OOOXOX					Yes	** NA **			None
38	MP5A						Yes				None
39	MP4A						Yes				None
40	MP3A						Yes				None
41	MP2A						Yes				None
42	MP1A						Yes				None
43	M59						Yes	** NA **			None
44	M60						Yes	** NA **			None
45	M63						Yes	** NA **			None
46	M64						Yes	** NA **			None
47	M66						Yes	** NA **			None
48	M67	OOOXOX					Yes	** NA **			None
49	MP5C						Yes				None
50	MP4C						Yes				None
51	MP3C						Yes				None
52	MP2C						Yes				None
53	MP1C						Yes				None
54	M74						Yes	** NA **			None
55	M75						Yes	** NA **			None
56	M78A						Yes	** NA **			None



Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Ratio	Opti...	Analysis ...	Inactive	Seismi...
57	M79A						Yes	** NA **				None
58	M81						Yes	** NA **				None
59	M82	OOOXOX					Yes	** NA **				None
60	MP5B						Yes					None
61	MP4B						Yes					None
62	MP3B						Yes					None
63	MP2B						Yes					None
64	MP1B						Yes					None
65	M88	OOOXOX					Yes	** NA **				None
66	M77A	OOOXOX					Yes	** NA **				None
67	M78B	OOOXOX					Yes	** NA **				None
68	M79B	OOOXOX					Yes	** NA **				None
69	M80A	OOOXOX					Yes	** NA **				None
70	M81A	OOOXOX					Yes	** NA **				None
71	M82A	OOOXOX					Yes	** NA **				None
72	M83B	OOOXOX					Yes	** NA **				None
73	M84B	OOOXOX					Yes	** NA **				None
74	M85A	OOOXOX					Yes	** NA **				None
75	M86A	OOOXOX					Yes	** NA **				None
76	M87A	OOOXOX					Yes	** NA **				None
77	M89						Yes	** NA **				None
78	M91	OOOOOX	OOOOOX				Yes	Default				None
79	M88B						Yes	Default				None
80	M89A						Yes	Default				None
81	M81B		AIPIN			Compres...	Yes	** NA **				None
82	M82B	OOOOOX	OOOOOX				Yes	Default				None
83	M83A						Yes	Default				None
84	M84A						Yes	Default				None
85	M85		AIPIN			Compres...	Yes	** NA **				None
86	M86	OOOOOX	OOOOOX				Yes	Default				None
87	M87						Yes	Default				None
88	M88A						Yes	Default				None

Member Point Loads (BLC 1 : Antenna D)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	Y	-17.6	2
2	MP3A	My	-0.073	2
3	MP3A	Mz	0	2
4	MP3A	Y	-17.6	2
5	MP3A	Mv	.0073	2
6	MP3A	Mz	0	2
7	MP4A	Y	-43.55	2
8	MP4A	My	-.0325	2
9	MP4A	Mz	.0028	2
10	MP4A	Y	-43.55	4
11	MP4A	My	-.0325	4
12	MP4A	Mz	.0028	4
13	MP4B	Y	-43.55	2
14	MP4B	My	.0163	2
15	MP4B	Mz	-.0283	2
16	MP4B	Y	-43.55	4
17	MP4B	My	.0163	4
18	MP4B	Mz	-.0283	4
19	MP4C	Y	-43.55	2
20	MP4C	My	.0163	2



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
21	MP4C	Mz	.0283	2
22	MP4C	Y	-43.55	4
23	MP4C	My	.0163	4
24	MP4C	Mz	.0283	4
25	MP1A	Y	-6	.5
26	MP1A	My	-.0045	.5
27	MP1A	Mz	0	.5
28	MP1A	Y	-6	4
29	MP1A	My	-.0045	4
30	MP1A	Mz	0	4
31	MP1B	Y	-6	.5
32	MP1B	My	.0022	.5
33	MP1B	Mz	-.0039	.5
34	MP1B	Y	-6	4
35	MP1B	My	.0022	4
36	MP1B	Mz	-.0039	4
37	MP1C	Y	-6	.5
38	MP1C	My	.0022	.5
39	MP1C	Mz	.0039	.5
40	MP1C	Y	-6	4
41	MP1C	My	.0022	4
42	MP1C	Mz	.0039	4
43	MP5A	Y	-6	.5
44	MP5A	My	-.0045	.5
45	MP5A	Mz	0	.5
46	MP5A	Y	-6	4
47	MP5A	My	-.0045	4
48	MP5A	Mz	0	4
49	MP5B	Y	-6	.5
50	MP5B	My	.0022	.5
51	MP5B	Mz	-.0039	.5
52	MP5B	Y	-6	4
53	MP5B	My	.0022	4
54	MP5B	Mz	-.0039	4
55	MP5C	Y	-6	.5
56	MP5C	My	.0022	.5
57	MP5C	Mz	.0039	.5
58	MP5C	Y	-6	4
59	MP5C	My	.0022	4
60	MP5C	Mz	.0039	4
61	MP2A	Y	-70.3	3.5
62	MP2A	My	.0352	3.5
63	MP2A	Mz	0	3.5
64	MP2B	Y	-70.3	3.5
65	MP2B	My	-.0176	3.5
66	MP2B	Mz	.0304	3.5
67	MP2C	Y	-70.3	3.5
68	MP2C	My	-.0176	3.5
69	MP2C	Mz	-.0304	3.5
70	MP3A	Y	-84.4	5.5
71	MP3A	My	.0422	5.5
72	MP3A	Mz	0	5.5
73	MP3B	Y	-84.4	5.5
74	MP3B	My	-.0211	5.5
75	MP3B	Mz	.0365	5.5
76	MP3C	Y	-84.4	5.5
77	MP3C	My	-.0211	5.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
78	MP3C	Mz	-.0365	5.5
79	MP3A	Y	-20	3.5
80	MP3A	My	-.0138	3.5
81	MP3A	Mz	.0146	3.5
82	MP3A	Y	-20	7.5
83	MP3A	My	-.0138	7.5
84	MP3A	Mz	.0146	7.5
85	MP3B	Y	-20	3.5
86	MP3B	My	-.004	3.5
87	MP3B	Mz	-.0197	3.5
88	MP3B	Y	-20	7.5
89	MP3B	My	-.004	7.5
90	MP3B	Mz	-.0197	7.5
91	MP3C	Y	-20	3.5
92	MP3C	My	.019	3.5
93	MP3C	Mz	.0063	3.5
94	MP3C	Y	-20	7.5
95	MP3C	My	.019	7.5
96	MP3C	Mz	.0063	7.5
97	MP3A	Y	-20	3.5
98	MP3A	My	-.0161	3.5
99	MP3A	Mz	-.012	3.5
100	MP3A	Y	-20	7.5
101	MP3A	My	-.0161	7.5
102	MP3A	Mz	-.012	7.5
103	MP3B	Y	-20	3.5
104	MP3B	My	.019	3.5
105	MP3B	Mz	-.0063	3.5
106	MP3B	Y	-20	7.5
107	MP3B	My	.019	7.5
108	MP3B	Mz	-.0063	7.5
109	MP3C	Y	-20	3.5
110	MP3C	My	-.004	3.5
111	MP3C	Mz	.0197	3.5
112	MP3C	Y	-20	7.5
113	MP3C	My	-.004	7.5
114	MP3C	Mz	.0197	7.5

Member Point Loads (BLC 2 : Antenna Di)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP3A	Y	6.6	2
2	MP3A	My	.0027	2
3	MP3A	Mz	0	2
4	MP3A	Y	6.6	2
5	MP3A	My	-.0027	2
6	MP3A	Mz	0	2
7	MP4A	Y	-36.3541	2
8	MP4A	My	-.0272	2
9	MP4A	Mz	.0024	2
10	MP4A	Y	-36.3541	4
11	MP4A	My	-.0272	4
12	MP4A	Mz	.0024	4
13	MP4B	Y	-36.3541	2
14	MP4B	My	.0136	2
15	MP4B	Mz	-.0236	2
16	MP4B	Y	-36.3541	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
17	MP4B	My	.0136	4
18	MP4B	Mz	-.0236	4
19	MP4C	Y	-36.3541	2
20	MP4C	My	.0136	2
21	MP4C	Mz	.0236	2
22	MP4C	Y	-36.3541	4
23	MP4C	My	.0136	4
24	MP4C	Mz	.0236	4
25	MP1A	Y	-41.1357	.5
26	MP1A	My	-.0309	.5
27	MP1A	Mz	0	.5
28	MP1A	Y	-41.1357	4
29	MP1A	My	-.0309	4
30	MP1A	Mz	0	4
31	MP1B	Y	-41.1357	.5
32	MP1B	My	.0154	.5
33	MP1B	Mz	-.0267	.5
34	MP1B	Y	-41.1357	4
35	MP1B	My	.0154	4
36	MP1B	Mz	-.0267	4
37	MP1C	Y	-41.1357	.5
38	MP1C	My	.0154	.5
39	MP1C	Mz	.0267	.5
40	MP1C	Y	-41.1357	4
41	MP1C	My	.0154	4
42	MP1C	Mz	.0267	4
43	MP5A	Y	-41.1357	.5
44	MP5A	My	-.0309	.5
45	MP5A	Mz	0	.5
46	MP5A	Y	-41.1357	4
47	MP5A	My	-.0309	4
48	MP5A	Mz	0	4
49	MP5B	Y	-41.1357	.5
50	MP5B	My	.0154	.5
51	MP5B	Mz	-.0267	.5
52	MP5B	Y	-41.1357	4
53	MP5B	My	.0154	4
54	MP5B	Mz	-.0267	4
55	MP5C	Y	-41.1357	.5
56	MP5C	My	.0154	.5
57	MP5C	Mz	.0267	.5
58	MP5C	Y	-41.1357	4
59	MP5C	My	.0154	4
60	MP5C	Mz	.0267	4
61	MP2A	Y	-41.2376	3.5
62	MP2A	My	.0206	3.5
63	MP2A	Mz	0	3.5
64	MP2B	Y	-41.2376	3.5
65	MP2B	My	-.0103	3.5
66	MP2B	Mz	.0179	3.5
67	MP2C	Y	-41.2376	3.5
68	MP2C	My	-.0103	3.5
69	MP2C	Mz	-.0179	3.5
70	MP3A	Y	-45.8477	5.5
71	MP3A	My	.0229	5.5
72	MP3A	Mz	0	5.5
73	MP3B	Y	-45.8477	5.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
74	MP3B	My	-0.115	5.5
75	MP3B	Mz	.0199	5.5
76	MP3C	Y	-45.8477	5.5
77	MP3C	My	-0.115	5.5
78	MP3C	Mz	-0.199	5.5
79	MP3A	Y	-62.3206	3.5
80	MP3A	My	-.0429	3.5
81	MP3A	Mz	.0455	3.5
82	MP3A	Y	-62.3206	7.5
83	MP3A	My	-.0429	7.5
84	MP3A	Mz	.0455	7.5
85	MP3B	Y	-62.3206	3.5
86	MP3B	My	-.0126	3.5
87	MP3B	Mz	-.0613	3.5
88	MP3B	Y	-62.3206	7.5
89	MP3B	My	-.0126	7.5
90	MP3B	Mz	-.0613	7.5
91	MP3C	Y	-62.3206	3.5
92	MP3C	My	.0594	3.5
93	MP3C	Mz	.0197	3.5
94	MP3C	Y	-62.3206	7.5
95	MP3C	My	.0594	7.5
96	MP3C	Mz	.0197	7.5
97	MP3A	Y	-62.3206	3.5
98	MP3A	My	-.0502	3.5
99	MP3A	Mz	-.0373	3.5
100	MP3A	Y	-62.3206	7.5
101	MP3A	My	-.0502	7.5
102	MP3A	Mz	-.0373	7.5
103	MP3B	Y	-62.3206	3.5
104	MP3B	My	.0594	3.5
105	MP3B	Mz	-.0197	3.5
106	MP3B	Y	-62.3206	7.5
107	MP3B	My	.0594	7.5
108	MP3B	Mz	-.0197	7.5
109	MP3C	Y	-62.3206	3.5
110	MP3C	My	-.0126	3.5
111	MP3C	Mz	.0613	3.5
112	MP3C	Y	-62.3206	7.5
113	MP3C	My	-.0126	7.5
114	MP3C	Mz	.0613	7.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	0	2
2	MP3A	Z	-37.012	2
3	MP3A	Mx	0	2
4	MP3A	X	0	2
5	MP3A	Z	-37.012	2
6	MP3A	Mx	0	2
7	MP4A	X	0	2
8	MP4A	Z	-75.19	2
9	MP4A	Mx	-.0049	2
10	MP4A	X	0	4
11	MP4A	Z	-75.19	4
12	MP4A	Mx	-.0049	4



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project # 23777133
 Model Name : Antenna Mount Analysis

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 Checked By: _____

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
13	MP4B	X	0	2
14	MP4B	Z	-38.41	2
15	MP4B	Mx	.0249	2
16	MP4B	X	0	4
17	MP4B	Z	-38.41	4
18	MP4B	Mx	.0249	4
19	MP4C	X	0	2
20	MP4C	Z	-38.41	2
21	MP4C	Mx	-.0249	2
22	MP4C	X	0	4
23	MP4C	Z	-38.41	4
24	MP4C	Mx	-.0249	4
25	MP1A	X	0	.5
26	MP1A	Z	-50.314	.5
27	MP1A	Mx	0	.5
28	MP1A	X	0	4
29	MP1A	Z	-50.314	4
30	MP1A	Mx	0	4
31	MP1B	X	0	.5
32	MP1B	Z	-90.635	.5
33	MP1B	Mx	.0589	.5
34	MP1B	X	0	4
35	MP1B	Z	-90.635	4
36	MP1B	Mx	.0589	4
37	MP1C	X	0	.5
38	MP1C	Z	-90.635	.5
39	MP1C	Mx	-.0589	.5
40	MP1C	X	0	4
41	MP1C	Z	-90.635	4
42	MP1C	Mx	-.0589	4
43	MP5A	X	0	.5
44	MP5A	Z	-50.314	.5
45	MP5A	Mx	0	.5
46	MP5A	X	0	4
47	MP5A	Z	-50.314	4
48	MP5A	Mx	0	4
49	MP5B	X	0	.5
50	MP5B	Z	-90.635	.5
51	MP5B	Mx	.0589	.5
52	MP5B	X	0	4
53	MP5B	Z	-90.635	4
54	MP5B	Mx	.0589	4
55	MP5C	X	0	.5
56	MP5C	Z	-90.635	.5
57	MP5C	Mx	-.0589	.5
58	MP5C	X	0	4
59	MP5C	Z	-90.635	4
60	MP5C	Mx	-.0589	4
61	MP2A	X	0	3.5
62	MP2A	Z	-59.759	3.5
63	MP2A	Mx	0	3.5
64	MP2B	X	0	3.5
65	MP2B	Z	-39.518	3.5
66	MP2B	Mx	-.0171	3.5
67	MP2C	X	0	3.5
68	MP2C	Z	-39.518	3.5
69	MP2C	Mx	.0171	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
70	MP3A	X	0	5.5
71	MP3A	Z	-59.759	5.5
72	MP3A	Mx	0	5.5
73	MP3B	X	0	5.5
74	MP3B	Z	-45.012	5.5
75	MP3B	Mx	-.0195	5.5
76	MP3C	X	0	5.5
77	MP3C	Z	-45.012	5.5
78	MP3C	Mx	.0195	5.5
79	MP3A	X	0	3.5
80	MP3A	Z	-105.758	3.5
81	MP3A	Mx	-.0771	3.5
82	MP3A	X	0	7.5
83	MP3A	Z	-105.758	7.5
84	MP3A	Mx	-.0771	7.5
85	MP3B	X	0	3.5
86	MP3B	Z	-60.82	3.5
87	MP3B	Mx	.0598	3.5
88	MP3B	X	0	7.5
89	MP3B	Z	-60.82	7.5
90	MP3B	Mx	.0598	7.5
91	MP3C	X	0	3.5
92	MP3C	Z	-60.82	3.5
93	MP3C	Mx	-.0192	3.5
94	MP3C	X	0	7.5
95	MP3C	Z	-60.82	7.5
96	MP3C	Mx	-.0192	7.5
97	MP3A	X	0	3.5
98	MP3A	Z	-105.758	3.5
99	MP3A	Mx	.0633	3.5
100	MP3A	X	0	7.5
101	MP3A	Z	-105.758	7.5
102	MP3A	Mx	.0633	7.5
103	MP3B	X	0	3.5
104	MP3B	Z	-60.82	3.5
105	MP3B	Mx	.0192	3.5
106	MP3B	X	0	7.5
107	MP3B	Z	-60.82	7.5
108	MP3B	Mx	.0192	7.5
109	MP3C	X	0	3.5
110	MP3C	Z	-60.82	3.5
111	MP3C	Mx	-.0598	3.5
112	MP3C	X	0	7.5
113	MP3C	Z	-60.82	7.5
114	MP3C	Mx	-.0598	7.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	15.283	2
2	MP3A	Z	-26.471	2
3	MP3A	Mx	-.0064	2
4	MP3A	X	15.283	2
5	MP3A	Z	-26.471	2
6	MP3A	Mx	.0064	2
7	MP4A	X	29.634	2
8	MP4A	Z	-51.327	2



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
9	MP4A	Mx	-.0255	2
10	MP4A	X	29.634	4
11	MP4A	Z	-51.327	4
12	MP4A	Mx	-.0255	4
13	MP4B	X	13.012	2
14	MP4B	Z	-22.538	2
15	MP4B	Mx	.0195	2
16	MP4B	X	13.012	4
17	MP4B	Z	-22.538	4
18	MP4B	Mx	.0195	4
19	MP4C	X	31.591	2
20	MP4C	Z	-54.716	2
21	MP4C	Mx	-.0237	2
22	MP4C	X	31.591	4
23	MP4C	Z	-54.716	4
24	MP4C	Mx	-.0237	4
25	MP1A	X	31.877	.5
26	MP1A	Z	-55.213	.5
27	MP1A	Mx	-.0239	.5
28	MP1A	X	31.877	4
29	MP1A	Z	-55.213	4
30	MP1A	Mx	-.0239	4
31	MP1B	X	52.038	.5
32	MP1B	Z	-90.132	.5
33	MP1B	Mx	.0781	.5
34	MP1B	X	52.038	4
35	MP1B	Z	-90.132	4
36	MP1B	Mx	.0781	4
37	MP1C	X	31.877	.5
38	MP1C	Z	-55.213	.5
39	MP1C	Mx	-.0239	.5
40	MP1C	X	31.877	4
41	MP1C	Z	-55.213	4
42	MP1C	Mx	-.0239	4
43	MP5A	X	31.877	.5
44	MP5A	Z	-55.213	.5
45	MP5A	Mx	-.0239	.5
46	MP5A	X	31.877	4
47	MP5A	Z	-55.213	4
48	MP5A	Mx	-.0239	4
49	MP5B	X	52.038	.5
50	MP5B	Z	-90.132	.5
51	MP5B	Mx	.0781	.5
52	MP5B	X	52.038	4
53	MP5B	Z	-90.132	4
54	MP5B	Mx	.0781	4
55	MP5C	X	31.877	.5
56	MP5C	Z	-55.213	.5
57	MP5C	Mx	-.0239	.5
58	MP5C	X	31.877	4
59	MP5C	Z	-55.213	4
60	MP5C	Mx	-.0239	4
61	MP2A	X	26.506	3.5
62	MP2A	Z	-45.91	3.5
63	MP2A	Mx	.0133	3.5
64	MP2B	X	16.386	3.5
65	MP2B	Z	-28.381	3.5



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 Model Name : Antenna Mount Analysis

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
66	MP2B	Mx	-0.164	3.5
67	MP2C	X	26.506	3.5
68	MP2C	Z	-45.91	3.5
69	MP2C	Mx	.0133	3.5
70	MP3A	X	27.422	5.5
71	MP3A	Z	-47.496	5.5
72	MP3A	Mx	.0137	5.5
73	MP3B	X	20.048	5.5
74	MP3B	Z	-34.725	5.5
75	MP3B	Mx	-.02	5.5
76	MP3C	X	27.422	5.5
77	MP3C	Z	-47.496	5.5
78	MP3C	Mx	.0137	5.5
79	MP3A	X	43.152	3.5
80	MP3A	Z	-74.741	3.5
81	MP3A	Mx	-.0843	3.5
82	MP3A	X	43.152	7.5
83	MP3A	Z	-74.741	7.5
84	MP3A	Mx	-.0843	7.5
85	MP3B	X	22.844	3.5
86	MP3B	Z	-39.566	3.5
87	MP3B	Mx	.0343	3.5
88	MP3B	X	22.844	7.5
89	MP3B	Z	-39.566	7.5
90	MP3B	Mx	.0343	7.5
91	MP3C	X	45.542	3.5
92	MP3C	Z	-78.882	3.5
93	MP3C	Mx	.0184	3.5
94	MP3C	X	45.542	7.5
95	MP3C	Z	-78.882	7.5
96	MP3C	Mx	.0184	7.5
97	MP3A	X	43.152	3.5
98	MP3A	Z	-74.741	3.5
99	MP3A	Mx	.01	3.5
100	MP3A	X	43.152	7.5
101	MP3A	Z	-74.741	7.5
102	MP3A	Mx	.01	7.5
103	MP3B	X	22.844	3.5
104	MP3B	Z	-39.566	3.5
105	MP3B	Mx	.0343	3.5
106	MP3B	X	22.844	7.5
107	MP3B	Z	-39.566	7.5
108	MP3B	Mx	.0343	7.5
109	MP3C	X	45.542	3.5
110	MP3C	Z	-78.882	3.5
111	MP3C	Mx	-.0867	3.5
112	MP3C	X	45.542	7.5
113	MP3C	Z	-78.882	7.5
114	MP3C	Mx	-.0867	7.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	15.305	2
2	MP3A	Z	-8.836	2
3	MP3A	Mx	-.0064	2
4	MP3A	X	15.305	2



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 Model Name : Antenna Mount Analysis

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
5	MP3A	Z	-8.836	2
6	MP3A	Mx	.0064	2
7	MP4A	X	30.201	2
8	MP4A	Z	-17.436	2
9	MP4A	Mx	-.0237	2
10	MP4A	X	30.201	4
11	MP4A	Z	-17.436	4
12	MP4A	Mx	-.0237	4
13	MP4B	X	33.264	2
14	MP4B	Z	-19.205	2
15	MP4B	Mx	.0249	2
16	MP4B	X	33.264	4
17	MP4B	Z	-19.205	4
18	MP4B	Mx	.0249	4
19	MP4C	X	65.443	2
20	MP4C	Z	-37.783	2
21	MP4C	Mx	0	2
22	MP4C	X	65.443	4
23	MP4C	Z	-37.783	4
24	MP4C	Mx	0	4
25	MP1A	X	78.492	.5
26	MP1A	Z	-45.317	.5
27	MP1A	Mx	-.0589	.5
28	MP1A	X	78.492	4
29	MP1A	Z	-45.317	4
30	MP1A	Mx	-.0589	4
31	MP1B	X	78.492	.5
32	MP1B	Z	-45.317	.5
33	MP1B	Mx	.0589	.5
34	MP1B	X	78.492	4
35	MP1B	Z	-45.317	4
36	MP1B	Mx	.0589	4
37	MP1C	X	43.573	.5
38	MP1C	Z	-25.157	.5
39	MP1C	Mx	0	.5
40	MP1C	X	43.573	4
41	MP1C	Z	-25.157	4
42	MP1C	Mx	0	4
43	MP5A	X	78.492	.5
44	MP5A	Z	-45.317	.5
45	MP5A	Mx	-.0589	.5
46	MP5A	X	78.492	4
47	MP5A	Z	-45.317	4
48	MP5A	Mx	-.0589	4
49	MP5B	X	78.492	.5
50	MP5B	Z	-45.317	.5
51	MP5B	Mx	.0589	.5
52	MP5B	X	78.492	4
53	MP5B	Z	-45.317	4
54	MP5B	Mx	.0589	4
55	MP5C	X	43.573	.5
56	MP5C	Z	-25.157	.5
57	MP5C	Mx	0	.5
58	MP5C	X	43.573	4
59	MP5C	Z	-25.157	4
60	MP5C	Mx	0	4
61	MP2A	X	34.224	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
62	MP2A	Z	-19.759	3.5
63	MP2A	Mx	.0171	3.5
64	MP2B	X	34.224	3.5
65	MP2B	Z	-19.759	3.5
66	MP2B	Mx	-.0171	3.5
67	MP2C	X	51.753	3.5
68	MP2C	Z	-29.88	3.5
69	MP2C	Mx	0	3.5
70	MP3A	X	38.982	5.5
71	MP3A	Z	-22.506	5.5
72	MP3A	Mx	.0195	5.5
73	MP3B	X	38.982	5.5
74	MP3B	Z	-22.506	5.5
75	MP3B	Mx	-.0195	5.5
76	MP3C	X	51.753	5.5
77	MP3C	Z	-29.88	5.5
78	MP3C	Mx	0	5.5
79	MP3A	X	48.929	3.5
80	MP3A	Z	-28.249	3.5
81	MP3A	Mx	-.0543	3.5
82	MP3A	X	48.929	7.5
83	MP3A	Z	-28.249	7.5
84	MP3A	Mx	-.0543	7.5
85	MP3B	X	52.671	3.5
86	MP3B	Z	-30.41	3.5
87	MP3B	Mx	.0192	3.5
88	MP3B	X	52.671	7.5
89	MP3B	Z	-30.41	7.5
90	MP3B	Mx	.0192	7.5
91	MP3C	X	91.987	3.5
92	MP3C	Z	-53.109	3.5
93	MP3C	Mx	.0708	3.5
94	MP3C	X	91.987	7.5
95	MP3C	Z	-53.109	7.5
96	MP3C	Mx	.0708	7.5
97	MP3A	X	48.929	3.5
98	MP3A	Z	-28.249	3.5
99	MP3A	Mx	-.0225	3.5
100	MP3A	X	48.929	7.5
101	MP3A	Z	-28.249	7.5
102	MP3A	Mx	-.0225	7.5
103	MP3B	X	52.671	3.5
104	MP3B	Z	-30.41	3.5
105	MP3B	Mx	.0598	3.5
106	MP3B	X	52.671	7.5
107	MP3B	Z	-30.41	7.5
108	MP3B	Mx	.0598	7.5
109	MP3C	X	91.987	3.5
110	MP3C	Z	-53.109	3.5
111	MP3C	Mx	-.0708	3.5
112	MP3C	X	91.987	7.5
113	MP3C	Z	-53.109	7.5
114	MP3C	Mx	-.0708	7.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
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Member Point Loads (BLC 6 : Antenna Wo (90 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	11.226	2
2	MP3A	Z	0	2
3	MP3A	Mx	-.0047	2
4	MP3A	X	11.226	2
5	MP3A	Z	0	2
6	MP3A	Mx	.0047	2
7	MP4A	X	26.401	2
8	MP4A	Z	0	2
9	MP4A	Mx	-.0197	2
10	MP4A	X	26.401	4
11	MP4A	Z	0	4
12	MP4A	Mx	-.0197	4
13	MP4B	X	63.181	2
14	MP4B	Z	0	2
15	MP4B	Mx	.0237	2
16	MP4B	X	63.181	4
17	MP4B	Z	0	4
18	MP4B	Mx	.0237	4
19	MP4C	X	63.181	2
20	MP4C	Z	0	2
21	MP4C	Mx	.0237	2
22	MP4C	X	63.181	4
23	MP4C	Z	0	4
24	MP4C	Mx	.0237	4
25	MP1A	X	104.075	.5
26	MP1A	Z	0	.5
27	MP1A	Mx	-.0781	.5
28	MP1A	X	104.075	4
29	MP1A	Z	0	4
30	MP1A	Mx	-.0781	4
31	MP1B	X	63.754	.5
32	MP1B	Z	0	.5
33	MP1B	Mx	.0239	.5
34	MP1B	X	63.754	4
35	MP1B	Z	0	4
36	MP1B	Mx	.0239	4
37	MP1C	X	63.754	.5
38	MP1C	Z	0	.5
39	MP1C	Mx	.0239	.5
40	MP1C	X	63.754	4
41	MP1C	Z	0	4
42	MP1C	Mx	.0239	4
43	MP5A	X	104.075	.5
44	MP5A	Z	0	.5
45	MP5A	Mx	-.0781	.5
46	MP5A	X	104.075	4
47	MP5A	Z	0	4
48	MP5A	Mx	-.0781	4
49	MP5B	X	63.754	.5
50	MP5B	Z	0	.5
51	MP5B	Mx	.0239	.5
52	MP5B	X	63.754	4
53	MP5B	Z	0	4
54	MP5B	Mx	.0239	4
55	MP5C	X	63.754	.5
56	MP5C	Z	0	.5
57	MP5C	Mx	.0239	.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
58	MP5C	X	63.754	4
59	MP5C	Z	0	4
60	MP5C	Mx	.0239	4
61	MP2A	X	32.771	3.5
62	MP2A	Z	0	3.5
63	MP2A	Mx	.0164	3.5
64	MP2B	X	53.012	3.5
65	MP2B	Z	0	3.5
66	MP2B	Mx	-.0133	3.5
67	MP2C	X	53.012	3.5
68	MP2C	Z	0	3.5
69	MP2C	Mx	-.0133	3.5
70	MP3A	X	40.097	5.5
71	MP3A	Z	0	5.5
72	MP3A	Mx	.02	5.5
73	MP3B	X	54.844	5.5
74	MP3B	Z	0	5.5
75	MP3B	Mx	-.0137	5.5
76	MP3C	X	54.844	5.5
77	MP3C	Z	0	5.5
78	MP3C	Mx	-.0137	5.5
79	MP3A	X	46.147	3.5
80	MP3A	Z	0	3.5
81	MP3A	Mx	-.0318	3.5
82	MP3A	X	46.147	7.5
83	MP3A	Z	0	7.5
84	MP3A	Mx	-.0318	7.5
85	MP3B	X	91.085	3.5
86	MP3B	Z	0	3.5
87	MP3B	Mx	-.0184	3.5
88	MP3B	X	91.085	7.5
89	MP3B	Z	0	7.5
90	MP3B	Mx	-.0184	7.5
91	MP3C	X	91.085	3.5
92	MP3C	Z	0	3.5
93	MP3C	Mx	.0867	3.5
94	MP3C	X	91.085	7.5
95	MP3C	Z	0	7.5
96	MP3C	Mx	.0867	7.5
97	MP3A	X	46.147	3.5
98	MP3A	Z	0	3.5
99	MP3A	Mx	-.0372	3.5
100	MP3A	X	46.147	7.5
101	MP3A	Z	0	7.5
102	MP3A	Mx	-.0372	7.5
103	MP3B	X	91.085	3.5
104	MP3B	Z	0	3.5
105	MP3B	Mx	.0867	3.5
106	MP3B	X	91.085	7.5
107	MP3B	Z	0	7.5
108	MP3B	Mx	.0867	7.5
109	MP3C	X	91.085	3.5
110	MP3C	Z	0	3.5
111	MP3C	Mx	-.0184	3.5
112	MP3C	X	91.085	7.5
113	MP3C	Z	0	7.5
114	MP3C	Mx	-.0184	7.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	15.305	2
2	MP3A	Z	8.836	2
3	MP3A	Mx	-.0064	2
4	MP3A	X	15.305	2
5	MP3A	Z	8.836	2
6	MP3A	Mx	.0064	2
7	MP4A	X	36.653	2
8	MP4A	Z	21.162	2
9	MP4A	Mx	-.026	2
10	MP4A	X	36.653	4
11	MP4A	Z	21.162	4
12	MP4A	Mx	-.026	4
13	MP4B	X	65.443	2
14	MP4B	Z	37.783	2
15	MP4B	Mx	0	2
16	MP4B	X	65.443	4
17	MP4B	Z	37.783	4
18	MP4B	Mx	0	4
19	MP4C	X	33.264	2
20	MP4C	Z	19.205	2
21	MP4C	Mx	.0249	2
22	MP4C	X	33.264	4
23	MP4C	Z	19.205	4
24	MP4C	Mx	.0249	4
25	MP1A	X	78.492	.5
26	MP1A	Z	45.317	.5
27	MP1A	Mx	-.0589	.5
28	MP1A	X	78.492	4
29	MP1A	Z	45.317	4
30	MP1A	Mx	-.0589	4
31	MP1B	X	43.573	.5
32	MP1B	Z	25.157	.5
33	MP1B	Mx	0	.5
34	MP1B	X	43.573	4
35	MP1B	Z	25.157	4
36	MP1B	Mx	0	4
37	MP1C	X	78.492	.5
38	MP1C	Z	45.317	.5
39	MP1C	Mx	.0589	.5
40	MP1C	X	78.492	4
41	MP1C	Z	45.317	4
42	MP1C	Mx	.0589	4
43	MP5A	X	78.492	.5
44	MP5A	Z	45.317	.5
45	MP5A	Mx	-.0589	.5
46	MP5A	X	78.492	4
47	MP5A	Z	45.317	4
48	MP5A	Mx	-.0589	4
49	MP5B	X	43.573	.5
50	MP5B	Z	25.157	.5
51	MP5B	Mx	0	.5
52	MP5B	X	43.573	4
53	MP5B	Z	25.157	4
54	MP5B	Mx	0	4
55	MP5C	X	78.492	.5
56	MP5C	Z	45.317	.5
57	MP5C	Mx	.0589	.5



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]	
58	MP5C	X	78.492	4
59	MP5C	Z	45.317	4
60	MP5C	Mx	.0589	4
61	MP2A	X	34.224	3.5
62	MP2A	Z	19.759	3.5
63	MP2A	Mx	.0171	3.5
64	MP2B	X	51.753	3.5
65	MP2B	Z	29.88	3.5
66	MP2B	Mx	0	3.5
67	MP2C	X	34.224	3.5
68	MP2C	Z	19.759	3.5
69	MP2C	Mx	-.0171	3.5
70	MP3A	X	38.982	5.5
71	MP3A	Z	22.506	5.5
72	MP3A	Mx	.0195	5.5
73	MP3B	X	51.753	5.5
74	MP3B	Z	29.88	5.5
75	MP3B	Mx	0	5.5
76	MP3C	X	38.982	5.5
77	MP3C	Z	22.506	5.5
78	MP3C	Mx	-.0195	5.5
79	MP3A	X	56.812	3.5
80	MP3A	Z	32.8	3.5
81	MP3A	Mx	-.0152	3.5
82	MP3A	X	56.812	7.5
83	MP3A	Z	32.8	7.5
84	MP3A	Mx	-.0152	7.5
85	MP3B	X	91.987	3.5
86	MP3B	Z	53.109	3.5
87	MP3B	Mx	-.0708	3.5
88	MP3B	X	91.987	7.5
89	MP3B	Z	53.109	7.5
90	MP3B	Mx	-.0708	7.5
91	MP3C	X	52.671	3.5
92	MP3C	Z	30.41	3.5
93	MP3C	Mx	.0598	3.5
94	MP3C	X	52.671	7.5
95	MP3C	Z	30.41	7.5
96	MP3C	Mx	.0598	7.5
97	MP3A	X	56.812	3.5
98	MP3A	Z	32.8	3.5
99	MP3A	Mx	-.0654	3.5
100	MP3A	X	56.812	7.5
101	MP3A	Z	32.8	7.5
102	MP3A	Mx	-.0654	7.5
103	MP3B	X	91.987	3.5
104	MP3B	Z	53.109	3.5
105	MP3B	Mx	.0708	3.5
106	MP3B	X	91.987	7.5
107	MP3B	Z	53.109	7.5
108	MP3B	Mx	.0708	7.5
109	MP3C	X	52.671	3.5
110	MP3C	Z	30.41	3.5
111	MP3C	Mx	.0192	3.5
112	MP3C	X	52.671	7.5
113	MP3C	Z	30.41	7.5
114	MP3C	Mx	.0192	7.5



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project # 23777133
 Model Name : Antenna Mount Analysis

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	15.283	2
2	MP3A	Z	26.471	2
3	MP3A	Mx	-.0064	2
4	MP3A	X	15.283	2
5	MP3A	Z	26.471	2
6	MP3A	Mx	.0064	2
7	MP4A	X	33.359	2
8	MP4A	Z	57.78	2
9	MP4A	Mx	-.0211	2
10	MP4A	X	33.359	4
11	MP4A	Z	57.78	4
12	MP4A	Mx	-.0211	4
13	MP4B	X	31.591	2
14	MP4B	Z	54.716	2
15	MP4B	Mx	-.0237	2
16	MP4B	X	31.591	4
17	MP4B	Z	54.716	4
18	MP4B	Mx	-.0237	4
19	MP4C	X	13.012	2
20	MP4C	Z	22.538	2
21	MP4C	Mx	.0195	2
22	MP4C	X	13.012	4
23	MP4C	Z	22.538	4
24	MP4C	Mx	.0195	4
25	MP1A	X	31.877	.5
26	MP1A	Z	55.213	.5
27	MP1A	Mx	-.0239	.5
28	MP1A	X	31.877	4
29	MP1A	Z	55.213	4
30	MP1A	Mx	-.0239	4
31	MP1B	X	31.877	.5
32	MP1B	Z	55.213	.5
33	MP1B	Mx	-.0239	.5
34	MP1B	X	31.877	4
35	MP1B	Z	55.213	4
36	MP1B	Mx	-.0239	4
37	MP1C	X	52.038	.5
38	MP1C	Z	90.132	.5
39	MP1C	Mx	.0781	.5
40	MP1C	X	52.038	4
41	MP1C	Z	90.132	4
42	MP1C	Mx	.0781	4
43	MP5A	X	31.877	.5
44	MP5A	Z	55.213	.5
45	MP5A	Mx	-.0239	.5
46	MP5A	X	31.877	4
47	MP5A	Z	55.213	4
48	MP5A	Mx	-.0239	4
49	MP5B	X	31.877	.5
50	MP5B	Z	55.213	.5
51	MP5B	Mx	-.0239	.5
52	MP5B	X	31.877	4
53	MP5B	Z	55.213	4
54	MP5B	Mx	-.0239	4
55	MP5C	X	52.038	.5
56	MP5C	Z	90.132	.5
57	MP5C	Mx	.0781	.5



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project # 23777133
 Model Name : Antenna Mount Analysis

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]	
58	MP5C	X	52.038	4
59	MP5C	Z	90.132	4
60	MP5C	Mx	.0781	4
61	MP2A	X	26.506	3.5
62	MP2A	Z	45.91	3.5
63	MP2A	Mx	.0133	3.5
64	MP2B	X	26.506	3.5
65	MP2B	Z	45.91	3.5
66	MP2B	Mx	.0133	3.5
67	MP2C	X	16.386	3.5
68	MP2C	Z	28.381	3.5
69	MP2C	Mx	-.0164	3.5
70	MP3A	X	27.422	5.5
71	MP3A	Z	47.496	5.5
72	MP3A	Mx	.0137	5.5
73	MP3B	X	27.422	5.5
74	MP3B	Z	47.496	5.5
75	MP3B	Mx	.0137	5.5
76	MP3C	X	20.048	5.5
77	MP3C	Z	34.725	5.5
78	MP3C	Mx	-.02	5.5
79	MP3A	X	47.703	3.5
80	MP3A	Z	82.624	3.5
81	MP3A	Mx	.0274	3.5
82	MP3A	X	47.703	7.5
83	MP3A	Z	82.624	7.5
84	MP3A	Mx	.0274	7.5
85	MP3B	X	45.542	3.5
86	MP3B	Z	78.882	3.5
87	MP3B	Mx	-.0867	3.5
88	MP3B	X	45.542	7.5
89	MP3B	Z	78.882	7.5
90	MP3B	Mx	-.0867	7.5
91	MP3C	X	22.844	3.5
92	MP3C	Z	39.566	3.5
93	MP3C	Mx	.0343	3.5
94	MP3C	X	22.844	7.5
95	MP3C	Z	39.566	7.5
96	MP3C	Mx	.0343	7.5
97	MP3A	X	47.703	3.5
98	MP3A	Z	82.624	3.5
99	MP3A	Mx	-.0879	3.5
100	MP3A	X	47.703	7.5
101	MP3A	Z	82.624	7.5
102	MP3A	Mx	-.0879	7.5
103	MP3B	X	45.542	3.5
104	MP3B	Z	78.882	3.5
105	MP3B	Mx	.0184	3.5
106	MP3B	X	45.542	7.5
107	MP3B	Z	78.882	7.5
108	MP3B	Mx	.0184	7.5
109	MP3C	X	22.844	3.5
110	MP3C	Z	39.566	3.5
111	MP3C	Mx	.0343	3.5
112	MP3C	X	22.844	7.5
113	MP3C	Z	39.566	7.5
114	MP3C	Mx	.0343	7.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	0	2
2	MP3A	Z	37.012	2
3	MP3A	Mx	0	2
4	MP3A	X	0	2
5	MP3A	Z	37.012	2
6	MP3A	Mx	0	2
7	MP4A	X	0	2
8	MP4A	Z	75.19	2
9	MP4A	Mx	.0049	2
10	MP4A	X	0	4
11	MP4A	Z	75.19	4
12	MP4A	Mx	.0049	4
13	MP4B	X	0	2
14	MP4B	Z	38.41	2
15	MP4B	Mx	-.0249	2
16	MP4B	X	0	4
17	MP4B	Z	38.41	4
18	MP4B	Mx	-.0249	4
19	MP4C	X	0	2
20	MP4C	Z	38.41	2
21	MP4C	Mx	.0249	2
22	MP4C	X	0	4
23	MP4C	Z	38.41	4
24	MP4C	Mx	.0249	4
25	MP1A	X	0	.5
26	MP1A	Z	50.314	.5
27	MP1A	Mx	0	.5
28	MP1A	X	0	4
29	MP1A	Z	50.314	4
30	MP1A	Mx	0	4
31	MP1B	X	0	.5
32	MP1B	Z	90.635	.5
33	MP1B	Mx	-.0589	.5
34	MP1B	X	0	4
35	MP1B	Z	90.635	4
36	MP1B	Mx	-.0589	4
37	MP1C	X	0	.5
38	MP1C	Z	90.635	.5
39	MP1C	Mx	.0589	.5
40	MP1C	X	0	4
41	MP1C	Z	90.635	4
42	MP1C	Mx	.0589	4
43	MP5A	X	0	.5
44	MP5A	Z	50.314	.5
45	MP5A	Mx	0	.5
46	MP5A	X	0	4
47	MP5A	Z	50.314	4
48	MP5A	Mx	0	4
49	MP5B	X	0	.5
50	MP5B	Z	90.635	.5
51	MP5B	Mx	-.0589	.5
52	MP5B	X	0	4
53	MP5B	Z	90.635	4
54	MP5B	Mx	-.0589	4
55	MP5C	X	0	.5
56	MP5C	Z	90.635	.5
57	MP5C	Mx	.0589	.5



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]	
58	MP5C	X	0	4
59	MP5C	Z	90.635	4
60	MP5C	Mx	.0589	4
61	MP2A	X	0	3.5
62	MP2A	Z	59.759	3.5
63	MP2A	Mx	0	3.5
64	MP2B	X	0	3.5
65	MP2B	Z	39.518	3.5
66	MP2B	Mx	.0171	3.5
67	MP2C	X	0	3.5
68	MP2C	Z	39.518	3.5
69	MP2C	Mx	-.0171	3.5
70	MP3A	X	0	5.5
71	MP3A	Z	59.759	5.5
72	MP3A	Mx	0	5.5
73	MP3B	X	0	5.5
74	MP3B	Z	45.012	5.5
75	MP3B	Mx	.0195	5.5
76	MP3C	X	0	5.5
77	MP3C	Z	45.012	5.5
78	MP3C	Mx	-.0195	5.5
79	MP3A	X	0	3.5
80	MP3A	Z	105.758	3.5
81	MP3A	Mx	.0771	3.5
82	MP3A	X	0	7.5
83	MP3A	Z	105.758	7.5
84	MP3A	Mx	.0771	7.5
85	MP3B	X	0	3.5
86	MP3B	Z	60.82	3.5
87	MP3B	Mx	-.0598	3.5
88	MP3B	X	0	7.5
89	MP3B	Z	60.82	7.5
90	MP3B	Mx	-.0598	7.5
91	MP3C	X	0	3.5
92	MP3C	Z	60.82	3.5
93	MP3C	Mx	.0192	3.5
94	MP3C	X	0	7.5
95	MP3C	Z	60.82	7.5
96	MP3C	Mx	.0192	7.5
97	MP3A	X	0	3.5
98	MP3A	Z	105.758	3.5
99	MP3A	Mx	-.0633	3.5
100	MP3A	X	0	7.5
101	MP3A	Z	105.758	7.5
102	MP3A	Mx	-.0633	7.5
103	MP3B	X	0	3.5
104	MP3B	Z	60.82	3.5
105	MP3B	Mx	-.0192	3.5
106	MP3B	X	0	7.5
107	MP3B	Z	60.82	7.5
108	MP3B	Mx	-.0192	7.5
109	MP3C	X	0	3.5
110	MP3C	Z	60.82	3.5
111	MP3C	Mx	.0598	3.5
112	MP3C	X	0	7.5
113	MP3C	Z	60.82	7.5
114	MP3C	Mx	.0598	7.5



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project # 23777133
 Model Name : Antenna Mount Analysis

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	-15.283	2
2	MP3A	Z	26.471	2
3	MP3A	Mx	.0064	2
4	MP3A	X	-15.283	2
5	MP3A	Z	26.471	2
6	MP3A	Mx	-.0064	2
7	MP4A	X	-29.634	2
8	MP4A	Z	51.327	2
9	MP4A	Mx	.0255	2
10	MP4A	X	-29.634	4
11	MP4A	Z	51.327	4
12	MP4A	Mx	.0255	4
13	MP4B	X	-13.012	2
14	MP4B	Z	22.538	2
15	MP4B	Mx	-.0195	2
16	MP4B	X	-13.012	4
17	MP4B	Z	22.538	4
18	MP4B	Mx	-.0195	4
19	MP4C	X	-31.591	2
20	MP4C	Z	54.716	2
21	MP4C	Mx	.0237	2
22	MP4C	X	-31.591	4
23	MP4C	Z	54.716	4
24	MP4C	Mx	.0237	4
25	MP1A	X	-31.877	.5
26	MP1A	Z	55.213	.5
27	MP1A	Mx	.0239	.5
28	MP1A	X	-31.877	4
29	MP1A	Z	55.213	4
30	MP1A	Mx	.0239	4
31	MP1B	X	-52.038	.5
32	MP1B	Z	90.132	.5
33	MP1B	Mx	-.0781	.5
34	MP1B	X	-52.038	4
35	MP1B	Z	90.132	4
36	MP1B	Mx	-.0781	4
37	MP1C	X	-31.877	.5
38	MP1C	Z	55.213	.5
39	MP1C	Mx	.0239	.5
40	MP1C	X	-31.877	4
41	MP1C	Z	55.213	4
42	MP1C	Mx	.0239	4
43	MP5A	X	-31.877	.5
44	MP5A	Z	55.213	.5
45	MP5A	Mx	.0239	.5
46	MP5A	X	-31.877	4
47	MP5A	Z	55.213	4
48	MP5A	Mx	.0239	4
49	MP5B	X	-52.038	.5
50	MP5B	Z	90.132	.5
51	MP5B	Mx	-.0781	.5
52	MP5B	X	-52.038	4
53	MP5B	Z	90.132	4
54	MP5B	Mx	-.0781	4
55	MP5C	X	-31.877	.5
56	MP5C	Z	55.213	.5
57	MP5C	Mx	.0239	.5



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]	
58	MP5C	X	-31.877	4
59	MP5C	Z	55.213	4
60	MP5C	Mx	.0239	4
61	MP2A	X	-26.506	3.5
62	MP2A	Z	45.91	3.5
63	MP2A	Mx	-.0133	3.5
64	MP2B	X	-16.386	3.5
65	MP2B	Z	28.381	3.5
66	MP2B	Mx	.0164	3.5
67	MP2C	X	-26.506	3.5
68	MP2C	Z	45.91	3.5
69	MP2C	Mx	-.0133	3.5
70	MP3A	X	-27.422	5.5
71	MP3A	Z	47.496	5.5
72	MP3A	Mx	-.0137	5.5
73	MP3B	X	-20.048	5.5
74	MP3B	Z	34.725	5.5
75	MP3B	Mx	.02	5.5
76	MP3C	X	-27.422	5.5
77	MP3C	Z	47.496	5.5
78	MP3C	Mx	-.0137	5.5
79	MP3A	X	-43.152	3.5
80	MP3A	Z	74.741	3.5
81	MP3A	Mx	.0843	3.5
82	MP3A	X	-43.152	7.5
83	MP3A	Z	74.741	7.5
84	MP3A	Mx	.0843	7.5
85	MP3B	X	-22.844	3.5
86	MP3B	Z	39.566	3.5
87	MP3B	Mx	-.0343	3.5
88	MP3B	X	-22.844	7.5
89	MP3B	Z	39.566	7.5
90	MP3B	Mx	-.0343	7.5
91	MP3C	X	-45.542	3.5
92	MP3C	Z	78.882	3.5
93	MP3C	Mx	-.0184	3.5
94	MP3C	X	-45.542	7.5
95	MP3C	Z	78.882	7.5
96	MP3C	Mx	-.0184	7.5
97	MP3A	X	-43.152	3.5
98	MP3A	Z	74.741	3.5
99	MP3A	Mx	-.01	3.5
100	MP3A	X	-43.152	7.5
101	MP3A	Z	74.741	7.5
102	MP3A	Mx	-.01	7.5
103	MP3B	X	-22.844	3.5
104	MP3B	Z	39.566	3.5
105	MP3B	Mx	-.0343	3.5
106	MP3B	X	-22.844	7.5
107	MP3B	Z	39.566	7.5
108	MP3B	Mx	-.0343	7.5
109	MP3C	X	-45.542	3.5
110	MP3C	Z	78.882	3.5
111	MP3C	Mx	.0867	3.5
112	MP3C	X	-45.542	7.5
113	MP3C	Z	78.882	7.5
114	MP3C	Mx	.0867	7.5



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project # 23777133
 Model Name : Antenna Mount Analysis

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	-15.305	2
2	MP3A	Z	8.836	2
3	MP3A	Mx	.0064	2
4	MP3A	X	-15.305	2
5	MP3A	Z	8.836	2
6	MP3A	Mx	-.0064	2
7	MP4A	X	-30.201	2
8	MP4A	Z	17.436	2
9	MP4A	Mx	.0237	2
10	MP4A	X	-30.201	4
11	MP4A	Z	17.436	4
12	MP4A	Mx	.0237	4
13	MP4B	X	-33.264	2
14	MP4B	Z	19.205	2
15	MP4B	Mx	-.0249	2
16	MP4B	X	-33.264	4
17	MP4B	Z	19.205	4
18	MP4B	Mx	-.0249	4
19	MP4C	X	-65.443	2
20	MP4C	Z	37.783	2
21	MP4C	Mx	0	2
22	MP4C	X	-65.443	4
23	MP4C	Z	37.783	4
24	MP4C	Mx	0	4
25	MP1A	X	-78.492	.5
26	MP1A	Z	45.317	.5
27	MP1A	Mx	.0589	.5
28	MP1A	X	-78.492	4
29	MP1A	Z	45.317	4
30	MP1A	Mx	.0589	4
31	MP1B	X	-78.492	.5
32	MP1B	Z	45.317	.5
33	MP1B	Mx	-.0589	.5
34	MP1B	X	-78.492	4
35	MP1B	Z	45.317	4
36	MP1B	Mx	-.0589	4
37	MP1C	X	-43.573	.5
38	MP1C	Z	25.157	.5
39	MP1C	Mx	0	.5
40	MP1C	X	-43.573	4
41	MP1C	Z	25.157	4
42	MP1C	Mx	0	4
43	MP5A	X	-78.492	.5
44	MP5A	Z	45.317	.5
45	MP5A	Mx	.0589	.5
46	MP5A	X	-78.492	4
47	MP5A	Z	45.317	4
48	MP5A	Mx	.0589	4
49	MP5B	X	-78.492	.5
50	MP5B	Z	45.317	.5
51	MP5B	Mx	-.0589	.5
52	MP5B	X	-78.492	4
53	MP5B	Z	45.317	4
54	MP5B	Mx	-.0589	4
55	MP5C	X	-43.573	.5
56	MP5C	Z	25.157	.5
57	MP5C	Mx	0	.5



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]	
58	MP5C	X	-43.573	4
59	MP5C	Z	25.157	4
60	MP5C	Mx	0	4
61	MP2A	X	-34.224	3.5
62	MP2A	Z	19.759	3.5
63	MP2A	Mx	-.0171	3.5
64	MP2B	X	-34.224	3.5
65	MP2B	Z	19.759	3.5
66	MP2B	Mx	.0171	3.5
67	MP2C	X	-51.753	3.5
68	MP2C	Z	29.88	3.5
69	MP2C	Mx	0	3.5
70	MP3A	X	-38.982	5.5
71	MP3A	Z	22.506	5.5
72	MP3A	Mx	-.0195	5.5
73	MP3B	X	-38.982	5.5
74	MP3B	Z	22.506	5.5
75	MP3B	Mx	.0195	5.5
76	MP3C	X	-51.753	5.5
77	MP3C	Z	29.88	5.5
78	MP3C	Mx	0	5.5
79	MP3A	X	-48.929	3.5
80	MP3A	Z	28.249	3.5
81	MP3A	Mx	.0543	3.5
82	MP3A	X	-48.929	7.5
83	MP3A	Z	28.249	7.5
84	MP3A	Mx	.0543	7.5
85	MP3B	X	-52.671	3.5
86	MP3B	Z	30.41	3.5
87	MP3B	Mx	-.0192	3.5
88	MP3B	X	-52.671	7.5
89	MP3B	Z	30.41	7.5
90	MP3B	Mx	-.0192	7.5
91	MP3C	X	-91.987	3.5
92	MP3C	Z	53.109	3.5
93	MP3C	Mx	-.0708	3.5
94	MP3C	X	-91.987	7.5
95	MP3C	Z	53.109	7.5
96	MP3C	Mx	-.0708	7.5
97	MP3A	X	-48.929	3.5
98	MP3A	Z	28.249	3.5
99	MP3A	Mx	.0225	3.5
100	MP3A	X	-48.929	7.5
101	MP3A	Z	28.249	7.5
102	MP3A	Mx	.0225	7.5
103	MP3B	X	-52.671	3.5
104	MP3B	Z	30.41	3.5
105	MP3B	Mx	-.0598	3.5
106	MP3B	X	-52.671	7.5
107	MP3B	Z	30.41	7.5
108	MP3B	Mx	-.0598	7.5
109	MP3C	X	-91.987	3.5
110	MP3C	Z	53.109	3.5
111	MP3C	Mx	.0708	3.5
112	MP3C	X	-91.987	7.5
113	MP3C	Z	53.109	7.5
114	MP3C	Mx	.0708	7.5



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project # 23777133
 Model Name : Antenna Mount Analysis

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	-11.226	2
2	MP3A	Z	0	2
3	MP3A	Mx	.0047	2
4	MP3A	X	-11.226	2
5	MP3A	Z	0	2
6	MP3A	Mx	-.0047	2
7	MP4A	X	-26.401	2
8	MP4A	Z	0	2
9	MP4A	Mx	.0197	2
10	MP4A	X	-26.401	4
11	MP4A	Z	0	4
12	MP4A	Mx	.0197	4
13	MP4B	X	-63.181	2
14	MP4B	Z	0	2
15	MP4B	Mx	-.0237	2
16	MP4B	X	-63.181	4
17	MP4B	Z	0	4
18	MP4B	Mx	-.0237	4
19	MP4C	X	-63.181	2
20	MP4C	Z	0	2
21	MP4C	Mx	-.0237	2
22	MP4C	X	-63.181	4
23	MP4C	Z	0	4
24	MP4C	Mx	-.0237	4
25	MP1A	X	-104.075	.5
26	MP1A	Z	0	.5
27	MP1A	Mx	.0781	.5
28	MP1A	X	-104.075	4
29	MP1A	Z	0	4
30	MP1A	Mx	.0781	4
31	MP1B	X	-63.754	.5
32	MP1B	Z	0	.5
33	MP1B	Mx	-.0239	.5
34	MP1B	X	-63.754	4
35	MP1B	Z	0	4
36	MP1B	Mx	-.0239	4
37	MP1C	X	-63.754	.5
38	MP1C	Z	0	.5
39	MP1C	Mx	-.0239	.5
40	MP1C	X	-63.754	4
41	MP1C	Z	0	4
42	MP1C	Mx	-.0239	4
43	MP5A	X	-104.075	.5
44	MP5A	Z	0	.5
45	MP5A	Mx	.0781	.5
46	MP5A	X	-104.075	4
47	MP5A	Z	0	4
48	MP5A	Mx	.0781	4
49	MP5B	X	-63.754	.5
50	MP5B	Z	0	.5
51	MP5B	Mx	-.0239	.5
52	MP5B	X	-63.754	4
53	MP5B	Z	0	4
54	MP5B	Mx	-.0239	4
55	MP5C	X	-63.754	.5
56	MP5C	Z	0	.5
57	MP5C	Mx	-.0239	.5



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project # 23777133
 Model Name : Antenna Mount Analysis

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]	
58	MP5C	X	-63.754	4
59	MP5C	Z	0	4
60	MP5C	Mx	-.0239	4
61	MP2A	X	-32.771	3.5
62	MP2A	Z	0	3.5
63	MP2A	Mx	-.0164	3.5
64	MP2B	X	-53.012	3.5
65	MP2B	Z	0	3.5
66	MP2B	Mx	.0133	3.5
67	MP2C	X	-53.012	3.5
68	MP2C	Z	0	3.5
69	MP2C	Mx	.0133	3.5
70	MP3A	X	-40.097	5.5
71	MP3A	Z	0	5.5
72	MP3A	Mx	-.02	5.5
73	MP3B	X	-54.844	5.5
74	MP3B	Z	0	5.5
75	MP3B	Mx	.0137	5.5
76	MP3C	X	-54.844	5.5
77	MP3C	Z	0	5.5
78	MP3C	Mx	.0137	5.5
79	MP3A	X	-46.147	3.5
80	MP3A	Z	0	3.5
81	MP3A	Mx	.0318	3.5
82	MP3A	X	-46.147	7.5
83	MP3A	Z	0	7.5
84	MP3A	Mx	.0318	7.5
85	MP3B	X	-91.085	3.5
86	MP3B	Z	0	3.5
87	MP3B	Mx	.0184	3.5
88	MP3B	X	-91.085	7.5
89	MP3B	Z	0	7.5
90	MP3B	Mx	.0184	7.5
91	MP3C	X	-91.085	3.5
92	MP3C	Z	0	3.5
93	MP3C	Mx	-.0867	3.5
94	MP3C	X	-91.085	7.5
95	MP3C	Z	0	7.5
96	MP3C	Mx	-.0867	7.5
97	MP3A	X	-46.147	3.5
98	MP3A	Z	0	3.5
99	MP3A	Mx	.0372	3.5
100	MP3A	X	-46.147	7.5
101	MP3A	Z	0	7.5
102	MP3A	Mx	.0372	7.5
103	MP3B	X	-91.085	3.5
104	MP3B	Z	0	3.5
105	MP3B	Mx	-.0867	3.5
106	MP3B	X	-91.085	7.5
107	MP3B	Z	0	7.5
108	MP3B	Mx	-.0867	7.5
109	MP3C	X	-91.085	3.5
110	MP3C	Z	0	3.5
111	MP3C	Mx	.0184	3.5
112	MP3C	X	-91.085	7.5
113	MP3C	Z	0	7.5
114	MP3C	Mx	.0184	7.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	-15.305	2
2	MP3A	Z	-8.836	2
3	MP3A	Mx	.0064	2
4	MP3A	X	-15.305	2
5	MP3A	Z	-8.836	2
6	MP3A	Mx	-.0064	2
7	MP4A	X	-36.653	2
8	MP4A	Z	-21.162	2
9	MP4A	Mx	.026	2
10	MP4A	X	-36.653	4
11	MP4A	Z	-21.162	4
12	MP4A	Mx	.026	4
13	MP4B	X	-65.443	2
14	MP4B	Z	-37.783	2
15	MP4B	Mx	0	2
16	MP4B	X	-65.443	4
17	MP4B	Z	-37.783	4
18	MP4B	Mx	0	4
19	MP4C	X	-33.264	2
20	MP4C	Z	-19.205	2
21	MP4C	Mx	-.0249	2
22	MP4C	X	-33.264	4
23	MP4C	Z	-19.205	4
24	MP4C	Mx	-.0249	4
25	MP1A	X	-78.492	.5
26	MP1A	Z	-45.317	.5
27	MP1A	Mx	.0589	.5
28	MP1A	X	-78.492	4
29	MP1A	Z	-45.317	4
30	MP1A	Mx	.0589	4
31	MP1B	X	-43.573	.5
32	MP1B	Z	-25.157	.5
33	MP1B	Mx	0	.5
34	MP1B	X	-43.573	4
35	MP1B	Z	-25.157	4
36	MP1B	Mx	0	4
37	MP1C	X	-78.492	.5
38	MP1C	Z	-45.317	.5
39	MP1C	Mx	-.0589	.5
40	MP1C	X	-78.492	4
41	MP1C	Z	-45.317	4
42	MP1C	Mx	-.0589	4
43	MP5A	X	-78.492	.5
44	MP5A	Z	-45.317	.5
45	MP5A	Mx	.0589	.5
46	MP5A	X	-78.492	4
47	MP5A	Z	-45.317	4
48	MP5A	Mx	.0589	4
49	MP5B	X	-43.573	.5
50	MP5B	Z	-25.157	.5
51	MP5B	Mx	0	.5
52	MP5B	X	-43.573	4
53	MP5B	Z	-25.157	4
54	MP5B	Mx	0	4
55	MP5C	X	-78.492	.5
56	MP5C	Z	-45.317	.5
57	MP5C	Mx	-.0589	.5



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project # 23777133
 Model Name : Antenna Mount Analysis

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]	
58	MP5C	X	-78.492	4
59	MP5C	Z	-45.317	4
60	MP5C	Mx	-.0589	4
61	MP2A	X	-34.224	3.5
62	MP2A	Z	-19.759	3.5
63	MP2A	Mx	-.0171	3.5
64	MP2B	X	-51.753	3.5
65	MP2B	Z	-29.88	3.5
66	MP2B	Mx	0	3.5
67	MP2C	X	-34.224	3.5
68	MP2C	Z	-19.759	3.5
69	MP2C	Mx	.0171	3.5
70	MP3A	X	-38.982	5.5
71	MP3A	Z	-22.506	5.5
72	MP3A	Mx	-.0195	5.5
73	MP3B	X	-51.753	5.5
74	MP3B	Z	-29.88	5.5
75	MP3B	Mx	0	5.5
76	MP3C	X	-38.982	5.5
77	MP3C	Z	-22.506	5.5
78	MP3C	Mx	.0195	5.5
79	MP3A	X	-56.812	3.5
80	MP3A	Z	-32.8	3.5
81	MP3A	Mx	.0152	3.5
82	MP3A	X	-56.812	7.5
83	MP3A	Z	-32.8	7.5
84	MP3A	Mx	.0152	7.5
85	MP3B	X	-91.987	3.5
86	MP3B	Z	-53.109	3.5
87	MP3B	Mx	.0708	3.5
88	MP3B	X	-91.987	7.5
89	MP3B	Z	-53.109	7.5
90	MP3B	Mx	.0708	7.5
91	MP3C	X	-52.671	3.5
92	MP3C	Z	-30.41	3.5
93	MP3C	Mx	-.0598	3.5
94	MP3C	X	-52.671	7.5
95	MP3C	Z	-30.41	7.5
96	MP3C	Mx	-.0598	7.5
97	MP3A	X	-56.812	3.5
98	MP3A	Z	-32.8	3.5
99	MP3A	Mx	.0654	3.5
100	MP3A	X	-56.812	7.5
101	MP3A	Z	-32.8	7.5
102	MP3A	Mx	.0654	7.5
103	MP3B	X	-91.987	3.5
104	MP3B	Z	-53.109	3.5
105	MP3B	Mx	-.0708	3.5
106	MP3B	X	-91.987	7.5
107	MP3B	Z	-53.109	7.5
108	MP3B	Mx	-.0708	7.5
109	MP3C	X	-52.671	3.5
110	MP3C	Z	-30.41	3.5
111	MP3C	Mx	-.0192	3.5
112	MP3C	X	-52.671	7.5
113	MP3C	Z	-30.41	7.5
114	MP3C	Mx	-.0192	7.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	-15.283	2
2	MP3A	Z	-26.471	2
3	MP3A	Mx	.0064	2
4	MP3A	X	-15.283	2
5	MP3A	Z	-26.471	2
6	MP3A	Mx	-.0064	2
7	MP4A	X	-33.359	2
8	MP4A	Z	-57.78	2
9	MP4A	Mx	.0211	2
10	MP4A	X	-33.359	4
11	MP4A	Z	-57.78	4
12	MP4A	Mx	.0211	4
13	MP4B	X	-31.591	2
14	MP4B	Z	-54.716	2
15	MP4B	Mx	.0237	2
16	MP4B	X	-31.591	4
17	MP4B	Z	-54.716	4
18	MP4B	Mx	.0237	4
19	MP4C	X	-13.012	2
20	MP4C	Z	-22.538	2
21	MP4C	Mx	-.0195	2
22	MP4C	X	-13.012	4
23	MP4C	Z	-22.538	4
24	MP4C	Mx	-.0195	4
25	MP1A	X	-31.877	.5
26	MP1A	Z	-55.213	.5
27	MP1A	Mx	.0239	.5
28	MP1A	X	-31.877	4
29	MP1A	Z	-55.213	4
30	MP1A	Mx	.0239	4
31	MP1B	X	-31.877	.5
32	MP1B	Z	-55.213	.5
33	MP1B	Mx	.0239	.5
34	MP1B	X	-31.877	4
35	MP1B	Z	-55.213	4
36	MP1B	Mx	.0239	4
37	MP1C	X	-52.038	.5
38	MP1C	Z	-90.132	.5
39	MP1C	Mx	-.0781	.5
40	MP1C	X	-52.038	4
41	MP1C	Z	-90.132	4
42	MP1C	Mx	-.0781	4
43	MP5A	X	-31.877	.5
44	MP5A	Z	-55.213	.5
45	MP5A	Mx	.0239	.5
46	MP5A	X	-31.877	4
47	MP5A	Z	-55.213	4
48	MP5A	Mx	.0239	4
49	MP5B	X	-31.877	.5
50	MP5B	Z	-55.213	.5
51	MP5B	Mx	.0239	.5
52	MP5B	X	-31.877	4
53	MP5B	Z	-55.213	4
54	MP5B	Mx	.0239	4
55	MP5C	X	-52.038	.5
56	MP5C	Z	-90.132	.5
57	MP5C	Mx	-.0781	.5



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]	
58	MP5C	X	-52.038	4
59	MP5C	Z	-90.132	4
60	MP5C	Mx	-.0781	4
61	MP2A	X	-26.506	3.5
62	MP2A	Z	-45.91	3.5
63	MP2A	Mx	-.0133	3.5
64	MP2B	X	-26.506	3.5
65	MP2B	Z	-45.91	3.5
66	MP2B	Mx	-.0133	3.5
67	MP2C	X	-16.386	3.5
68	MP2C	Z	-28.381	3.5
69	MP2C	Mx	.0164	3.5
70	MP3A	X	-27.422	5.5
71	MP3A	Z	-47.496	5.5
72	MP3A	Mx	-.0137	5.5
73	MP3B	X	-27.422	5.5
74	MP3B	Z	-47.496	5.5
75	MP3B	Mx	-.0137	5.5
76	MP3C	X	-20.048	5.5
77	MP3C	Z	-34.725	5.5
78	MP3C	Mx	.02	5.5
79	MP3A	X	-47.703	3.5
80	MP3A	Z	-82.624	3.5
81	MP3A	Mx	-.0274	3.5
82	MP3A	X	-47.703	7.5
83	MP3A	Z	-82.624	7.5
84	MP3A	Mx	-.0274	7.5
85	MP3B	X	-45.542	3.5
86	MP3B	Z	-78.882	3.5
87	MP3B	Mx	.0867	3.5
88	MP3B	X	-45.542	7.5
89	MP3B	Z	-78.882	7.5
90	MP3B	Mx	.0867	7.5
91	MP3C	X	-22.844	3.5
92	MP3C	Z	-39.566	3.5
93	MP3C	Mx	-.0343	3.5
94	MP3C	X	-22.844	7.5
95	MP3C	Z	-39.566	7.5
96	MP3C	Mx	-.0343	7.5
97	MP3A	X	-47.703	3.5
98	MP3A	Z	-82.624	3.5
99	MP3A	Mx	.0879	3.5
100	MP3A	X	-47.703	7.5
101	MP3A	Z	-82.624	7.5
102	MP3A	Mx	.0879	7.5
103	MP3B	X	-45.542	3.5
104	MP3B	Z	-78.882	3.5
105	MP3B	Mx	-.0184	3.5
106	MP3B	X	-45.542	7.5
107	MP3B	Z	-78.882	7.5
108	MP3B	Mx	-.0184	7.5
109	MP3C	X	-22.844	3.5
110	MP3C	Z	-39.566	3.5
111	MP3C	Mx	-.0343	3.5
112	MP3C	X	-22.844	7.5
113	MP3C	Z	-39.566	7.5
114	MP3C	Mx	-.0343	7.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	0	2
2	MP3A	Z	-7.621	2
3	MP3A	Mx	0	2
4	MP3A	X	0	2
5	MP3A	Z	-7.621	2
6	MP3A	Mx	0	2
7	MP4A	X	0	2
8	MP4A	Z	-16.341	2
9	MP4A	Mx	-.0011	2
10	MP4A	X	0	4
11	MP4A	Z	-16.341	4
12	MP4A	Mx	-.0011	4
13	MP4B	X	0	2
14	MP4B	Z	-9.355	2
15	MP4B	Mx	.0061	2
16	MP4B	X	0	4
17	MP4B	Z	-9.355	4
18	MP4B	Mx	.0061	4
19	MP4C	X	0	2
20	MP4C	Z	-9.355	2
21	MP4C	Mx	-.0061	2
22	MP4C	X	0	4
23	MP4C	Z	-9.355	4
24	MP4C	Mx	-.0061	4
25	MP1A	X	0	.5
26	MP1A	Z	-9.79	.5
27	MP1A	Mx	0	.5
28	MP1A	X	0	4
29	MP1A	Z	-9.79	4
30	MP1A	Mx	0	4
31	MP1B	X	0	.5
32	MP1B	Z	-16.458	.5
33	MP1B	Mx	.0107	.5
34	MP1B	X	0	4
35	MP1B	Z	-16.458	4
36	MP1B	Mx	.0107	4
37	MP1C	X	0	.5
38	MP1C	Z	-16.458	.5
39	MP1C	Mx	-.0107	.5
40	MP1C	X	0	4
41	MP1C	Z	-16.458	4
42	MP1C	Mx	-.0107	4
43	MP5A	X	0	.5
44	MP5A	Z	-9.79	.5
45	MP5A	Mx	0	.5
46	MP5A	X	0	4
47	MP5A	Z	-9.79	4
48	MP5A	Mx	0	4
49	MP5B	X	0	.5
50	MP5B	Z	-16.458	.5
51	MP5B	Mx	.0107	.5
52	MP5B	X	0	4
53	MP5B	Z	-16.458	4
54	MP5B	Mx	.0107	4
55	MP5C	X	0	.5
56	MP5C	Z	-16.458	.5
57	MP5C	Mx	-.0107	.5



Company : Colliers Engineering & Design
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Member Point Loads (BLC 15 : Antenna Wi (0 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
58	MP5C	X	0	4
59	MP5C	Z	-16.458	4
60	MP5C	Mx	-.0107	4
61	MP2A	X	0	3.5
62	MP2A	Z	-13.847	3.5
63	MP2A	Mx	0	3.5
64	MP2B	X	0	3.5
65	MP2B	Z	-9.492	3.5
66	MP2B	Mx	-.0041	3.5
67	MP2C	X	0	3.5
68	MP2C	Z	-9.492	3.5
69	MP2C	Mx	.0041	3.5
70	MP3A	X	0	5.5
71	MP3A	Z	-13.847	5.5
72	MP3A	Mx	0	5.5
73	MP3B	X	0	5.5
74	MP3B	Z	-10.691	5.5
75	MP3B	Mx	-.0046	5.5
76	MP3C	X	0	5.5
77	MP3C	Z	-10.691	5.5
78	MP3C	Mx	.0046	5.5
79	MP3A	X	0	3.5
80	MP3A	Z	-27.739	3.5
81	MP3A	Mx	-.0202	3.5
82	MP3A	X	0	7.5
83	MP3A	Z	-27.739	7.5
84	MP3A	Mx	-.0202	7.5
85	MP3B	X	0	3.5
86	MP3B	Z	-21.344	3.5
87	MP3B	Mx	.021	3.5
88	MP3B	X	0	7.5
89	MP3B	Z	-21.344	7.5
90	MP3B	Mx	.021	7.5
91	MP3C	X	0	3.5
92	MP3C	Z	-21.344	3.5
93	MP3C	Mx	-.0067	3.5
94	MP3C	X	0	7.5
95	MP3C	Z	-21.344	7.5
96	MP3C	Mx	-.0067	7.5
97	MP3A	X	0	3.5
98	MP3A	Z	-27.739	3.5
99	MP3A	Mx	.0166	3.5
100	MP3A	X	0	7.5
101	MP3A	Z	-27.739	7.5
102	MP3A	Mx	.0166	7.5
103	MP3B	X	0	3.5
104	MP3B	Z	-21.344	3.5
105	MP3B	Mx	.0067	3.5
106	MP3B	X	0	7.5
107	MP3B	Z	-21.344	7.5
108	MP3B	Mx	.0067	7.5
109	MP3C	X	0	3.5
110	MP3C	Z	-21.344	3.5
111	MP3C	Mx	-.021	3.5
112	MP3C	X	0	7.5
113	MP3C	Z	-21.344	7.5
114	MP3C	Mx	-.021	7.5



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project # 23777133
 Model Name : Antenna Mount Analysis

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	3.218	2
2	MP3A	Z	-5.574	2
3	MP3A	Mx	-.0013	2
4	MP3A	X	3.218	2
5	MP3A	Z	-5.574	2
6	MP3A	Mx	.0013	2
7	MP4A	X	6.658	2
8	MP4A	Z	-11.533	2
9	MP4A	Mx	-.0057	2
10	MP4A	X	6.658	4
11	MP4A	Z	-11.533	4
12	MP4A	Mx	-.0057	4
13	MP4B	X	3.501	2
14	MP4B	Z	-6.064	2
15	MP4B	Mx	.0053	2
16	MP4B	X	3.501	4
17	MP4B	Z	-6.064	4
18	MP4B	Mx	.0053	4
19	MP4C	X	7.03	2
20	MP4C	Z	-12.176	2
21	MP4C	Mx	-.0053	2
22	MP4C	X	7.03	4
23	MP4C	Z	-12.176	4
24	MP4C	Mx	-.0053	4
25	MP1A	X	6.006	.5
26	MP1A	Z	-10.403	.5
27	MP1A	Mx	-.0045	.5
28	MP1A	X	6.006	4
29	MP1A	Z	-10.403	4
30	MP1A	Mx	-.0045	4
31	MP1B	X	9.341	.5
32	MP1B	Z	-16.178	.5
33	MP1B	Mx	.014	.5
34	MP1B	X	9.341	4
35	MP1B	Z	-16.178	4
36	MP1B	Mx	.014	4
37	MP1C	X	6.006	.5
38	MP1C	Z	-10.403	.5
39	MP1C	Mx	-.0045	.5
40	MP1C	X	6.006	4
41	MP1C	Z	-10.403	4
42	MP1C	Mx	-.0045	4
43	MP5A	X	6.006	.5
44	MP5A	Z	-10.403	.5
45	MP5A	Mx	-.0045	.5
46	MP5A	X	6.006	4
47	MP5A	Z	-10.403	4
48	MP5A	Mx	-.0045	4
49	MP5B	X	9.341	.5
50	MP5B	Z	-16.178	.5
51	MP5B	Mx	.014	.5
52	MP5B	X	9.341	4
53	MP5B	Z	-16.178	4
54	MP5B	Mx	.014	4
55	MP5C	X	6.006	.5
56	MP5C	Z	-10.403	.5
57	MP5C	Mx	-.0045	.5



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]	
58	MP5C	X	6.006	4
59	MP5C	Z	-10.403	4
60	MP5C	Mx	-.0045	4
61	MP2A	X	6.198	3.5
62	MP2A	Z	-10.735	3.5
63	MP2A	Mx	.0031	3.5
64	MP2B	X	4.02	3.5
65	MP2B	Z	-6.963	3.5
66	MP2B	Mx	-.004	3.5
67	MP2C	X	6.198	3.5
68	MP2C	Z	-10.735	3.5
69	MP2C	Mx	.0031	3.5
70	MP3A	X	6.398	5.5
71	MP3A	Z	-11.081	5.5
72	MP3A	Mx	.0032	5.5
73	MP3B	X	4.82	5.5
74	MP3B	Z	-8.348	5.5
75	MP3B	Mx	-.0048	5.5
76	MP3C	X	6.398	5.5
77	MP3C	Z	-11.081	5.5
78	MP3C	Mx	.0032	5.5
79	MP3A	X	12.485	3.5
80	MP3A	Z	-21.625	3.5
81	MP3A	Mx	-.0244	3.5
82	MP3A	X	12.485	7.5
83	MP3A	Z	-21.625	7.5
84	MP3A	Mx	-.0244	7.5
85	MP3B	X	9.595	3.5
86	MP3B	Z	-16.619	3.5
87	MP3B	Mx	.0144	3.5
88	MP3B	X	9.595	7.5
89	MP3B	Z	-16.619	7.5
90	MP3B	Mx	.0144	7.5
91	MP3C	X	12.826	3.5
92	MP3C	Z	-22.215	3.5
93	MP3C	Mx	.0052	3.5
94	MP3C	X	12.826	7.5
95	MP3C	Z	-22.215	7.5
96	MP3C	Mx	.0052	7.5
97	MP3A	X	12.485	3.5
98	MP3A	Z	-21.625	3.5
99	MP3A	Mx	.0029	3.5
100	MP3A	X	12.485	7.5
101	MP3A	Z	-21.625	7.5
102	MP3A	Mx	.0029	7.5
103	MP3B	X	9.595	3.5
104	MP3B	Z	-16.619	3.5
105	MP3B	Mx	.0144	3.5
106	MP3B	X	9.595	7.5
107	MP3B	Z	-16.619	7.5
108	MP3B	Mx	.0144	7.5
109	MP3C	X	12.826	3.5
110	MP3C	Z	-22.215	3.5
111	MP3C	Mx	-.0244	3.5
112	MP3C	X	12.826	7.5
113	MP3C	Z	-22.215	7.5
114	MP3C	Mx	-.0244	7.5



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project # 23777133
 Model Name : Antenna Mount Analysis

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	3.522	2
2	MP3A	Z	-2.033	2
3	MP3A	Mx	-.0015	2
4	MP3A	X	3.522	2
5	MP3A	Z	-2.033	2
6	MP3A	Mx	.0015	2
7	MP4A	X	7.52	2
8	MP4A	Z	-4.342	2
9	MP4A	Mx	-.0059	2
10	MP4A	X	7.52	4
11	MP4A	Z	-4.342	4
12	MP4A	Mx	-.0059	4
13	MP4B	X	8.102	2
14	MP4B	Z	-4.677	2
15	MP4B	Mx	.0061	2
16	MP4B	X	8.102	4
17	MP4B	Z	-4.677	4
18	MP4B	Mx	.0061	4
19	MP4C	X	14.214	2
20	MP4C	Z	-8.206	2
21	MP4C	Mx	0	2
22	MP4C	X	14.214	4
23	MP4C	Z	-8.206	4
24	MP4C	Mx	0	4
25	MP1A	X	14.253	.5
26	MP1A	Z	-8.229	.5
27	MP1A	Mx	-.0107	.5
28	MP1A	X	14.253	4
29	MP1A	Z	-8.229	4
30	MP1A	Mx	-.0107	4
31	MP1B	X	14.253	.5
32	MP1B	Z	-8.229	.5
33	MP1B	Mx	.0107	.5
34	MP1B	X	14.253	4
35	MP1B	Z	-8.229	4
36	MP1B	Mx	.0107	4
37	MP1C	X	8.478	.5
38	MP1C	Z	-4.895	.5
39	MP1C	Mx	0	.5
40	MP1C	X	8.478	4
41	MP1C	Z	-4.895	4
42	MP1C	Mx	0	4
43	MP5A	X	14.253	.5
44	MP5A	Z	-8.229	.5
45	MP5A	Mx	-.0107	.5
46	MP5A	X	14.253	4
47	MP5A	Z	-8.229	4
48	MP5A	Mx	-.0107	4
49	MP5B	X	14.253	.5
50	MP5B	Z	-8.229	.5
51	MP5B	Mx	.0107	.5
52	MP5B	X	14.253	4
53	MP5B	Z	-8.229	4
54	MP5B	Mx	.0107	4
55	MP5C	X	8.478	.5
56	MP5C	Z	-4.895	.5
57	MP5C	Mx	0	.5



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]	
58	MP5C	X	8.478	4
59	MP5C	Z	-4.895	4
60	MP5C	Mx	0	4
61	MP2A	X	8.22	3.5
62	MP2A	Z	-4.746	3.5
63	MP2A	Mx	.0041	3.5
64	MP2B	X	8.22	3.5
65	MP2B	Z	-4.746	3.5
66	MP2B	Mx	-.0041	3.5
67	MP2C	X	11.992	3.5
68	MP2C	Z	-6.924	3.5
69	MP2C	Mx	0	3.5
70	MP3A	X	9.259	5.5
71	MP3A	Z	-5.346	5.5
72	MP3A	Mx	.0046	5.5
73	MP3B	X	9.259	5.5
74	MP3B	Z	-5.346	5.5
75	MP3B	Mx	-.0046	5.5
76	MP3C	X	11.992	5.5
77	MP3C	Z	-6.924	5.5
78	MP3C	Mx	0	5.5
79	MP3A	X	17.952	3.5
80	MP3A	Z	-10.364	3.5
81	MP3A	Mx	-.0199	3.5
82	MP3A	X	17.952	7.5
83	MP3A	Z	-10.364	7.5
84	MP3A	Mx	-.0199	7.5
85	MP3B	X	18.484	3.5
86	MP3B	Z	-10.672	3.5
87	MP3B	Mx	.0067	3.5
88	MP3B	X	18.484	7.5
89	MP3B	Z	-10.672	7.5
90	MP3B	Mx	.0067	7.5
91	MP3C	X	24.08	3.5
92	MP3C	Z	-13.902	3.5
93	MP3C	Mx	.0185	3.5
94	MP3C	X	24.08	7.5
95	MP3C	Z	-13.902	7.5
96	MP3C	Mx	.0185	7.5
97	MP3A	X	17.952	3.5
98	MP3A	Z	-10.364	3.5
99	MP3A	Mx	-.0083	3.5
100	MP3A	X	17.952	7.5
101	MP3A	Z	-10.364	7.5
102	MP3A	Mx	-.0083	7.5
103	MP3B	X	18.484	3.5
104	MP3B	Z	-10.672	3.5
105	MP3B	Mx	.021	3.5
106	MP3B	X	18.484	7.5
107	MP3B	Z	-10.672	7.5
108	MP3B	Mx	.021	7.5
109	MP3C	X	24.08	3.5
110	MP3C	Z	-13.902	3.5
111	MP3C	Mx	-.0185	3.5
112	MP3C	X	24.08	7.5
113	MP3C	Z	-13.902	7.5
114	MP3C	Mx	-.0185	7.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	2.882	2
2	MP3A	Z	0	2
3	MP3A	Mx	-.0012	2
4	MP3A	X	2.882	2
5	MP3A	Z	0	2
6	MP3A	Mx	.0012	2
7	MP4A	X	7.074	2
8	MP4A	Z	0	2
9	MP4A	Mx	-.0053	2
10	MP4A	X	7.074	4
11	MP4A	Z	0	4
12	MP4A	Mx	-.0053	4
13	MP4B	X	14.06	2
14	MP4B	Z	0	2
15	MP4B	Mx	.0053	2
16	MP4B	X	14.06	4
17	MP4B	Z	0	4
18	MP4B	Mx	.0053	4
19	MP4C	X	14.06	2
20	MP4C	Z	0	2
21	MP4C	Mx	.0053	2
22	MP4C	X	14.06	4
23	MP4C	Z	0	4
24	MP4C	Mx	.0053	4
25	MP1A	X	18.681	.5
26	MP1A	Z	0	.5
27	MP1A	Mx	-.014	.5
28	MP1A	X	18.681	4
29	MP1A	Z	0	4
30	MP1A	Mx	-.014	4
31	MP1B	X	12.013	.5
32	MP1B	Z	0	.5
33	MP1B	Mx	.0045	.5
34	MP1B	X	12.013	4
35	MP1B	Z	0	4
36	MP1B	Mx	.0045	4
37	MP1C	X	12.013	.5
38	MP1C	Z	0	.5
39	MP1C	Mx	.0045	.5
40	MP1C	X	12.013	4
41	MP1C	Z	0	4
42	MP1C	Mx	.0045	4
43	MP5A	X	18.681	.5
44	MP5A	Z	0	.5
45	MP5A	Mx	-.014	.5
46	MP5A	X	18.681	4
47	MP5A	Z	0	4
48	MP5A	Mx	-.014	4
49	MP5B	X	12.013	.5
50	MP5B	Z	0	.5
51	MP5B	Mx	.0045	.5
52	MP5B	X	12.013	4
53	MP5B	Z	0	4
54	MP5B	Mx	.0045	4
55	MP5C	X	12.013	.5
56	MP5C	Z	0	.5
57	MP5C	Mx	.0045	.5



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]	
58	MP5C	X	12.013	4
59	MP5C	Z	0	4
60	MP5C	Mx	.0045	4
61	MP2A	X	8.04	3.5
62	MP2A	Z	0	3.5
63	MP2A	Mx	.004	3.5
64	MP2B	X	12.395	3.5
65	MP2B	Z	0	3.5
66	MP2B	Mx	-.0031	3.5
67	MP2C	X	12.395	3.5
68	MP2C	Z	0	3.5
69	MP2C	Mx	-.0031	3.5
70	MP3A	X	9.639	5.5
71	MP3A	Z	0	5.5
72	MP3A	Mx	.0048	5.5
73	MP3B	X	12.795	5.5
74	MP3B	Z	0	5.5
75	MP3B	Mx	-.0032	5.5
76	MP3C	X	12.795	5.5
77	MP3C	Z	0	5.5
78	MP3C	Mx	-.0032	5.5
79	MP3A	X	19.256	3.5
80	MP3A	Z	0	3.5
81	MP3A	Mx	-.0133	3.5
82	MP3A	X	19.256	7.5
83	MP3A	Z	0	7.5
84	MP3A	Mx	-.0133	7.5
85	MP3B	X	25.651	3.5
86	MP3B	Z	0	3.5
87	MP3B	Mx	-.0052	3.5
88	MP3B	X	25.651	7.5
89	MP3B	Z	0	7.5
90	MP3B	Mx	-.0052	7.5
91	MP3C	X	25.651	3.5
92	MP3C	Z	0	3.5
93	MP3C	Mx	.0244	3.5
94	MP3C	X	25.651	7.5
95	MP3C	Z	0	7.5
96	MP3C	Mx	.0244	7.5
97	MP3A	X	19.256	3.5
98	MP3A	Z	0	3.5
99	MP3A	Mx	-.0155	3.5
100	MP3A	X	19.256	7.5
101	MP3A	Z	0	7.5
102	MP3A	Mx	-.0155	7.5
103	MP3B	X	25.651	3.5
104	MP3B	Z	0	3.5
105	MP3B	Mx	.0244	3.5
106	MP3B	X	25.651	7.5
107	MP3B	Z	0	7.5
108	MP3B	Mx	.0244	7.5
109	MP3C	X	25.651	3.5
110	MP3C	Z	0	3.5
111	MP3C	Mx	-.0052	3.5
112	MP3C	X	25.651	7.5
113	MP3C	Z	0	7.5
114	MP3C	Mx	-.0052	7.5



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 Designer :
 Job Number : Project # 23777133
 Model Name : Antenna Mount Analysis

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	3.522	2
2	MP3A	Z	2.033	2
3	MP3A	Mx	-.0015	2
4	MP3A	X	3.522	2
5	MP3A	Z	2.033	2
6	MP3A	Mx	.0015	2
7	MP4A	X	8.745	2
8	MP4A	Z	5.049	2
9	MP4A	Mx	-.0062	2
10	MP4A	X	8.745	4
11	MP4A	Z	5.049	4
12	MP4A	Mx	-.0062	4
13	MP4B	X	14.214	2
14	MP4B	Z	8.206	2
15	MP4B	Mx	0	2
16	MP4B	X	14.214	4
17	MP4B	Z	8.206	4
18	MP4B	Mx	0	4
19	MP4C	X	8.102	2
20	MP4C	Z	4.677	2
21	MP4C	Mx	.0061	2
22	MP4C	X	8.102	4
23	MP4C	Z	4.677	4
24	MP4C	Mx	.0061	4
25	MP1A	X	14.253	.5
26	MP1A	Z	8.229	.5
27	MP1A	Mx	-.0107	.5
28	MP1A	X	14.253	4
29	MP1A	Z	8.229	4
30	MP1A	Mx	-.0107	4
31	MP1B	X	8.478	.5
32	MP1B	Z	4.895	.5
33	MP1B	Mx	0	.5
34	MP1B	X	8.478	4
35	MP1B	Z	4.895	4
36	MP1B	Mx	0	4
37	MP1C	X	14.253	.5
38	MP1C	Z	8.229	.5
39	MP1C	Mx	.0107	.5
40	MP1C	X	14.253	4
41	MP1C	Z	8.229	4
42	MP1C	Mx	.0107	4
43	MP5A	X	14.253	.5
44	MP5A	Z	8.229	.5
45	MP5A	Mx	-.0107	.5
46	MP5A	X	14.253	4
47	MP5A	Z	8.229	4
48	MP5A	Mx	-.0107	4
49	MP5B	X	8.478	.5
50	MP5B	Z	4.895	.5
51	MP5B	Mx	0	.5
52	MP5B	X	8.478	4
53	MP5B	Z	4.895	4
54	MP5B	Mx	0	4
55	MP5C	X	14.253	.5
56	MP5C	Z	8.229	.5
57	MP5C	Mx	.0107	.5



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 Designer :
 Job Number : Project # 23777133
 Model Name : Antenna Mount Analysis

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]	
58	MP5C	X	14.253	4
59	MP5C	Z	8.229	4
60	MP5C	Mx	.0107	4
61	MP2A	X	8.22	3.5
62	MP2A	Z	4.746	3.5
63	MP2A	Mx	.0041	3.5
64	MP2B	X	11.992	3.5
65	MP2B	Z	6.924	3.5
66	MP2B	Mx	0	3.5
67	MP2C	X	8.22	3.5
68	MP2C	Z	4.746	3.5
69	MP2C	Mx	-.0041	3.5
70	MP3A	X	9.259	5.5
71	MP3A	Z	5.346	5.5
72	MP3A	Mx	.0046	5.5
73	MP3B	X	11.992	5.5
74	MP3B	Z	6.924	5.5
75	MP3B	Mx	0	5.5
76	MP3C	X	9.259	5.5
77	MP3C	Z	5.346	5.5
78	MP3C	Mx	-.0046	5.5
79	MP3A	X	19.074	3.5
80	MP3A	Z	11.012	3.5
81	MP3A	Mx	-.0051	3.5
82	MP3A	X	19.074	7.5
83	MP3A	Z	11.012	7.5
84	MP3A	Mx	-.0051	7.5
85	MP3B	X	24.08	3.5
86	MP3B	Z	13.902	3.5
87	MP3B	Mx	-.0185	3.5
88	MP3B	X	24.08	7.5
89	MP3B	Z	13.902	7.5
90	MP3B	Mx	-.0185	7.5
91	MP3C	X	18.484	3.5
92	MP3C	Z	10.672	3.5
93	MP3C	Mx	.021	3.5
94	MP3C	X	18.484	7.5
95	MP3C	Z	10.672	7.5
96	MP3C	Mx	.021	7.5
97	MP3A	X	19.074	3.5
98	MP3A	Z	11.012	3.5
99	MP3A	Mx	-.022	3.5
100	MP3A	X	19.074	7.5
101	MP3A	Z	11.012	7.5
102	MP3A	Mx	-.022	7.5
103	MP3B	X	24.08	3.5
104	MP3B	Z	13.902	3.5
105	MP3B	Mx	.0185	3.5
106	MP3B	X	24.08	7.5
107	MP3B	Z	13.902	7.5
108	MP3B	Mx	.0185	7.5
109	MP3C	X	18.484	3.5
110	MP3C	Z	10.672	3.5
111	MP3C	Mx	.0067	3.5
112	MP3C	X	18.484	7.5
113	MP3C	Z	10.672	7.5
114	MP3C	Mx	.0067	7.5



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 Model Name : Antenna Mount Analysis

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	3.218	2
2	MP3A	Z	5.574	2
3	MP3A	Mx	-.0013	2
4	MP3A	X	3.218	2
5	MP3A	Z	5.574	2
6	MP3A	Mx	.0013	2
7	MP4A	X	7.366	2
8	MP4A	Z	12.758	2
9	MP4A	Mx	-.0047	2
10	MP4A	X	7.366	4
11	MP4A	Z	12.758	4
12	MP4A	Mx	-.0047	4
13	MP4B	X	7.03	2
14	MP4B	Z	12.176	2
15	MP4B	Mx	-.0053	2
16	MP4B	X	7.03	4
17	MP4B	Z	12.176	4
18	MP4B	Mx	-.0053	4
19	MP4C	X	3.501	2
20	MP4C	Z	6.064	2
21	MP4C	Mx	.0053	2
22	MP4C	X	3.501	4
23	MP4C	Z	6.064	4
24	MP4C	Mx	.0053	4
25	MP1A	X	6.006	.5
26	MP1A	Z	10.403	.5
27	MP1A	Mx	-.0045	.5
28	MP1A	X	6.006	4
29	MP1A	Z	10.403	4
30	MP1A	Mx	-.0045	4
31	MP1B	X	6.006	.5
32	MP1B	Z	10.403	.5
33	MP1B	Mx	-.0045	.5
34	MP1B	X	6.006	4
35	MP1B	Z	10.403	4
36	MP1B	Mx	-.0045	4
37	MP1C	X	9.341	.5
38	MP1C	Z	16.178	.5
39	MP1C	Mx	.014	.5
40	MP1C	X	9.341	4
41	MP1C	Z	16.178	4
42	MP1C	Mx	.014	4
43	MP5A	X	6.006	.5
44	MP5A	Z	10.403	.5
45	MP5A	Mx	-.0045	.5
46	MP5A	X	6.006	4
47	MP5A	Z	10.403	4
48	MP5A	Mx	-.0045	4
49	MP5B	X	6.006	.5
50	MP5B	Z	10.403	.5
51	MP5B	Mx	-.0045	.5
52	MP5B	X	6.006	4
53	MP5B	Z	10.403	4
54	MP5B	Mx	-.0045	4
55	MP5C	X	9.341	.5
56	MP5C	Z	16.178	.5
57	MP5C	Mx	.014	.5



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]	
58	MP5C	X	9.341	4
59	MP5C	Z	16.178	4
60	MP5C	Mx	.014	4
61	MP2A	X	6.198	3.5
62	MP2A	Z	10.735	3.5
63	MP2A	Mx	.0031	3.5
64	MP2B	X	6.198	3.5
65	MP2B	Z	10.735	3.5
66	MP2B	Mx	.0031	3.5
67	MP2C	X	4.02	3.5
68	MP2C	Z	6.963	3.5
69	MP2C	Mx	-.004	3.5
70	MP3A	X	6.398	5.5
71	MP3A	Z	11.081	5.5
72	MP3A	Mx	.0032	5.5
73	MP3B	X	6.398	5.5
74	MP3B	Z	11.081	5.5
75	MP3B	Mx	.0032	5.5
76	MP3C	X	4.82	5.5
77	MP3C	Z	8.348	5.5
78	MP3C	Mx	-.0048	5.5
79	MP3A	X	13.133	3.5
80	MP3A	Z	22.747	3.5
81	MP3A	Mx	.0075	3.5
82	MP3A	X	13.133	7.5
83	MP3A	Z	22.747	7.5
84	MP3A	Mx	.0075	7.5
85	MP3B	X	12.826	3.5
86	MP3B	Z	22.215	3.5
87	MP3B	Mx	-.0244	3.5
88	MP3B	X	12.826	7.5
89	MP3B	Z	22.215	7.5
90	MP3B	Mx	-.0244	7.5
91	MP3C	X	9.595	3.5
92	MP3C	Z	16.619	3.5
93	MP3C	Mx	.0144	3.5
94	MP3C	X	9.595	7.5
95	MP3C	Z	16.619	7.5
96	MP3C	Mx	.0144	7.5
97	MP3A	X	13.133	3.5
98	MP3A	Z	22.747	3.5
99	MP3A	Mx	-.0242	3.5
100	MP3A	X	13.133	7.5
101	MP3A	Z	22.747	7.5
102	MP3A	Mx	-.0242	7.5
103	MP3B	X	12.826	3.5
104	MP3B	Z	22.215	3.5
105	MP3B	Mx	.0052	3.5
106	MP3B	X	12.826	7.5
107	MP3B	Z	22.215	7.5
108	MP3B	Mx	.0052	7.5
109	MP3C	X	9.595	3.5
110	MP3C	Z	16.619	3.5
111	MP3C	Mx	.0144	3.5
112	MP3C	X	9.595	7.5
113	MP3C	Z	16.619	7.5
114	MP3C	Mx	.0144	7.5



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project # 23777133
 Model Name : Antenna Mount Analysis

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	0	2
2	MP3A	Z	7.621	2
3	MP3A	Mx	0	2
4	MP3A	X	0	2
5	MP3A	Z	7.621	2
6	MP3A	Mx	0	2
7	MP4A	X	0	2
8	MP4A	Z	16.341	2
9	MP4A	Mx	.0011	2
10	MP4A	X	0	4
11	MP4A	Z	16.341	4
12	MP4A	Mx	.0011	4
13	MP4B	X	0	2
14	MP4B	Z	9.355	2
15	MP4B	Mx	-.0061	2
16	MP4B	X	0	4
17	MP4B	Z	9.355	4
18	MP4B	Mx	-.0061	4
19	MP4C	X	0	2
20	MP4C	Z	9.355	2
21	MP4C	Mx	.0061	2
22	MP4C	X	0	4
23	MP4C	Z	9.355	4
24	MP4C	Mx	.0061	4
25	MP1A	X	0	.5
26	MP1A	Z	9.79	.5
27	MP1A	Mx	0	.5
28	MP1A	X	0	4
29	MP1A	Z	9.79	4
30	MP1A	Mx	0	4
31	MP1B	X	0	.5
32	MP1B	Z	16.458	.5
33	MP1B	Mx	-.0107	.5
34	MP1B	X	0	4
35	MP1B	Z	16.458	4
36	MP1B	Mx	-.0107	4
37	MP1C	X	0	.5
38	MP1C	Z	16.458	.5
39	MP1C	Mx	.0107	.5
40	MP1C	X	0	4
41	MP1C	Z	16.458	4
42	MP1C	Mx	.0107	4
43	MP5A	X	0	.5
44	MP5A	Z	9.79	.5
45	MP5A	Mx	0	.5
46	MP5A	X	0	4
47	MP5A	Z	9.79	4
48	MP5A	Mx	0	4
49	MP5B	X	0	.5
50	MP5B	Z	16.458	.5
51	MP5B	Mx	-.0107	.5
52	MP5B	X	0	4
53	MP5B	Z	16.458	4
54	MP5B	Mx	-.0107	4
55	MP5C	X	0	.5
56	MP5C	Z	16.458	.5
57	MP5C	Mx	.0107	.5



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]	
58	MP5C	X	0	4
59	MP5C	Z	16.458	4
60	MP5C	Mx	.0107	4
61	MP2A	X	0	3.5
62	MP2A	Z	13.847	3.5
63	MP2A	Mx	0	3.5
64	MP2B	X	0	3.5
65	MP2B	Z	9.492	3.5
66	MP2B	Mx	.0041	3.5
67	MP2C	X	0	3.5
68	MP2C	Z	9.492	3.5
69	MP2C	Mx	-.0041	3.5
70	MP3A	X	0	5.5
71	MP3A	Z	13.847	5.5
72	MP3A	Mx	0	5.5
73	MP3B	X	0	5.5
74	MP3B	Z	10.691	5.5
75	MP3B	Mx	.0046	5.5
76	MP3C	X	0	5.5
77	MP3C	Z	10.691	5.5
78	MP3C	Mx	-.0046	5.5
79	MP3A	X	0	3.5
80	MP3A	Z	27.739	3.5
81	MP3A	Mx	.0202	3.5
82	MP3A	X	0	7.5
83	MP3A	Z	27.739	7.5
84	MP3A	Mx	.0202	7.5
85	MP3B	X	0	3.5
86	MP3B	Z	21.344	3.5
87	MP3B	Mx	-.021	3.5
88	MP3B	X	0	7.5
89	MP3B	Z	21.344	7.5
90	MP3B	Mx	-.021	7.5
91	MP3C	X	0	3.5
92	MP3C	Z	21.344	3.5
93	MP3C	Mx	.0067	3.5
94	MP3C	X	0	7.5
95	MP3C	Z	21.344	7.5
96	MP3C	Mx	.0067	7.5
97	MP3A	X	0	3.5
98	MP3A	Z	27.739	3.5
99	MP3A	Mx	-.0166	3.5
100	MP3A	X	0	7.5
101	MP3A	Z	27.739	7.5
102	MP3A	Mx	-.0166	7.5
103	MP3B	X	0	3.5
104	MP3B	Z	21.344	3.5
105	MP3B	Mx	-.0067	3.5
106	MP3B	X	0	7.5
107	MP3B	Z	21.344	7.5
108	MP3B	Mx	-.0067	7.5
109	MP3C	X	0	3.5
110	MP3C	Z	21.344	3.5
111	MP3C	Mx	.021	3.5
112	MP3C	X	0	7.5
113	MP3C	Z	21.344	7.5
114	MP3C	Mx	.021	7.5



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project # 23777133
 Model Name : Antenna Mount Analysis

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	-3.218	2
2	MP3A	Z	5.574	2
3	MP3A	Mx	.0013	2
4	MP3A	X	-3.218	2
5	MP3A	Z	5.574	2
6	MP3A	Mx	-.0013	2
7	MP4A	X	-6.658	2
8	MP4A	Z	11.533	2
9	MP4A	Mx	.0057	2
10	MP4A	X	-6.658	4
11	MP4A	Z	11.533	4
12	MP4A	Mx	.0057	4
13	MP4B	X	-3.501	2
14	MP4B	Z	6.064	2
15	MP4B	Mx	-.0053	2
16	MP4B	X	-3.501	4
17	MP4B	Z	6.064	4
18	MP4B	Mx	-.0053	4
19	MP4C	X	-7.03	2
20	MP4C	Z	12.176	2
21	MP4C	Mx	.0053	2
22	MP4C	X	-7.03	4
23	MP4C	Z	12.176	4
24	MP4C	Mx	.0053	4
25	MP1A	X	-6.006	.5
26	MP1A	Z	10.403	.5
27	MP1A	Mx	.0045	.5
28	MP1A	X	-6.006	4
29	MP1A	Z	10.403	4
30	MP1A	Mx	.0045	4
31	MP1B	X	-9.341	.5
32	MP1B	Z	16.178	.5
33	MP1B	Mx	-.014	.5
34	MP1B	X	-9.341	4
35	MP1B	Z	16.178	4
36	MP1B	Mx	-.014	4
37	MP1C	X	-6.006	.5
38	MP1C	Z	10.403	.5
39	MP1C	Mx	.0045	.5
40	MP1C	X	-6.006	4
41	MP1C	Z	10.403	4
42	MP1C	Mx	.0045	4
43	MP5A	X	-6.006	.5
44	MP5A	Z	10.403	.5
45	MP5A	Mx	.0045	.5
46	MP5A	X	-6.006	4
47	MP5A	Z	10.403	4
48	MP5A	Mx	.0045	4
49	MP5B	X	-9.341	.5
50	MP5B	Z	16.178	.5
51	MP5B	Mx	-.014	.5
52	MP5B	X	-9.341	4
53	MP5B	Z	16.178	4
54	MP5B	Mx	-.014	4
55	MP5C	X	-6.006	.5
56	MP5C	Z	10.403	.5
57	MP5C	Mx	.0045	.5



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project # 23777133
 Model Name : Antenna Mount Analysis

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]	
58	MP5C	X	-6.006	4
59	MP5C	Z	10.403	4
60	MP5C	Mx	.0045	4
61	MP2A	X	-6.198	3.5
62	MP2A	Z	10.735	3.5
63	MP2A	Mx	-.0031	3.5
64	MP2B	X	-4.02	3.5
65	MP2B	Z	6.963	3.5
66	MP2B	Mx	.004	3.5
67	MP2C	X	-6.198	3.5
68	MP2C	Z	10.735	3.5
69	MP2C	Mx	-.0031	3.5
70	MP3A	X	-6.398	5.5
71	MP3A	Z	11.081	5.5
72	MP3A	Mx	-.0032	5.5
73	MP3B	X	-4.82	5.5
74	MP3B	Z	8.348	5.5
75	MP3B	Mx	.0048	5.5
76	MP3C	X	-6.398	5.5
77	MP3C	Z	11.081	5.5
78	MP3C	Mx	-.0032	5.5
79	MP3A	X	-12.485	3.5
80	MP3A	Z	21.625	3.5
81	MP3A	Mx	.0244	3.5
82	MP3A	X	-12.485	7.5
83	MP3A	Z	21.625	7.5
84	MP3A	Mx	.0244	7.5
85	MP3B	X	-9.595	3.5
86	MP3B	Z	16.619	3.5
87	MP3B	Mx	-.0144	3.5
88	MP3B	X	-9.595	7.5
89	MP3B	Z	16.619	7.5
90	MP3B	Mx	-.0144	7.5
91	MP3C	X	-12.826	3.5
92	MP3C	Z	22.215	3.5
93	MP3C	Mx	-.0052	3.5
94	MP3C	X	-12.826	7.5
95	MP3C	Z	22.215	7.5
96	MP3C	Mx	-.0052	7.5
97	MP3A	X	-12.485	3.5
98	MP3A	Z	21.625	3.5
99	MP3A	Mx	-.0029	3.5
100	MP3A	X	-12.485	7.5
101	MP3A	Z	21.625	7.5
102	MP3A	Mx	-.0029	7.5
103	MP3B	X	-9.595	3.5
104	MP3B	Z	16.619	3.5
105	MP3B	Mx	-.0144	3.5
106	MP3B	X	-9.595	7.5
107	MP3B	Z	16.619	7.5
108	MP3B	Mx	-.0144	7.5
109	MP3C	X	-12.826	3.5
110	MP3C	Z	22.215	3.5
111	MP3C	Mx	.0244	3.5
112	MP3C	X	-12.826	7.5
113	MP3C	Z	22.215	7.5
114	MP3C	Mx	.0244	7.5



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project # 23777133
 Model Name : Antenna Mount Analysis

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	-3.522	2
2	MP3A	Z	2.033	2
3	MP3A	Mx	.0015	2
4	MP3A	X	-3.522	2
5	MP3A	Z	2.033	2
6	MP3A	Mx	-.0015	2
7	MP4A	X	-7.52	2
8	MP4A	Z	4.342	2
9	MP4A	Mx	.0059	2
10	MP4A	X	-7.52	4
11	MP4A	Z	4.342	4
12	MP4A	Mx	.0059	4
13	MP4B	X	-8.102	2
14	MP4B	Z	4.677	2
15	MP4B	Mx	-.0061	2
16	MP4B	X	-8.102	4
17	MP4B	Z	4.677	4
18	MP4B	Mx	-.0061	4
19	MP4C	X	-14.214	2
20	MP4C	Z	8.206	2
21	MP4C	Mx	0	2
22	MP4C	X	-14.214	4
23	MP4C	Z	8.206	4
24	MP4C	Mx	0	4
25	MP1A	X	-14.253	.5
26	MP1A	Z	8.229	.5
27	MP1A	Mx	.0107	.5
28	MP1A	X	-14.253	4
29	MP1A	Z	8.229	4
30	MP1A	Mx	.0107	4
31	MP1B	X	-14.253	.5
32	MP1B	Z	8.229	.5
33	MP1B	Mx	-.0107	.5
34	MP1B	X	-14.253	4
35	MP1B	Z	8.229	4
36	MP1B	Mx	-.0107	4
37	MP1C	X	-8.478	.5
38	MP1C	Z	4.895	.5
39	MP1C	Mx	0	.5
40	MP1C	X	-8.478	4
41	MP1C	Z	4.895	4
42	MP1C	Mx	0	4
43	MP5A	X	-14.253	.5
44	MP5A	Z	8.229	.5
45	MP5A	Mx	.0107	.5
46	MP5A	X	-14.253	4
47	MP5A	Z	8.229	4
48	MP5A	Mx	.0107	4
49	MP5B	X	-14.253	.5
50	MP5B	Z	8.229	.5
51	MP5B	Mx	-.0107	.5
52	MP5B	X	-14.253	4
53	MP5B	Z	8.229	4
54	MP5B	Mx	-.0107	4
55	MP5C	X	-8.478	.5
56	MP5C	Z	4.895	.5
57	MP5C	Mx	0	.5



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project # 23777133
 Model Name : Antenna Mount Analysis

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]	
58	MP5C	X	-8.478	4
59	MP5C	Z	4.895	4
60	MP5C	Mx	0	4
61	MP2A	X	-8.22	3.5
62	MP2A	Z	4.746	3.5
63	MP2A	Mx	-.0041	3.5
64	MP2B	X	-8.22	3.5
65	MP2B	Z	4.746	3.5
66	MP2B	Mx	.0041	3.5
67	MP2C	X	-11.992	3.5
68	MP2C	Z	6.924	3.5
69	MP2C	Mx	0	3.5
70	MP3A	X	-9.259	5.5
71	MP3A	Z	5.346	5.5
72	MP3A	Mx	-.0046	5.5
73	MP3B	X	-9.259	5.5
74	MP3B	Z	5.346	5.5
75	MP3B	Mx	.0046	5.5
76	MP3C	X	-11.992	5.5
77	MP3C	Z	6.924	5.5
78	MP3C	Mx	0	5.5
79	MP3A	X	-17.952	3.5
80	MP3A	Z	10.364	3.5
81	MP3A	Mx	.0199	3.5
82	MP3A	X	-17.952	7.5
83	MP3A	Z	10.364	7.5
84	MP3A	Mx	.0199	7.5
85	MP3B	X	-18.484	3.5
86	MP3B	Z	10.672	3.5
87	MP3B	Mx	-.0067	3.5
88	MP3B	X	-18.484	7.5
89	MP3B	Z	10.672	7.5
90	MP3B	Mx	-.0067	7.5
91	MP3C	X	-24.08	3.5
92	MP3C	Z	13.902	3.5
93	MP3C	Mx	-.0185	3.5
94	MP3C	X	-24.08	7.5
95	MP3C	Z	13.902	7.5
96	MP3C	Mx	-.0185	7.5
97	MP3A	X	-17.952	3.5
98	MP3A	Z	10.364	3.5
99	MP3A	Mx	.0083	3.5
100	MP3A	X	-17.952	7.5
101	MP3A	Z	10.364	7.5
102	MP3A	Mx	.0083	7.5
103	MP3B	X	-18.484	3.5
104	MP3B	Z	10.672	3.5
105	MP3B	Mx	-.021	3.5
106	MP3B	X	-18.484	7.5
107	MP3B	Z	10.672	7.5
108	MP3B	Mx	-.021	7.5
109	MP3C	X	-24.08	3.5
110	MP3C	Z	13.902	3.5
111	MP3C	Mx	.0185	3.5
112	MP3C	X	-24.08	7.5
113	MP3C	Z	13.902	7.5
114	MP3C	Mx	.0185	7.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	-2.882	2
2	MP3A	Z	0	2
3	MP3A	Mx	.0012	2
4	MP3A	X	-2.882	2
5	MP3A	Z	0	2
6	MP3A	Mx	-.0012	2
7	MP4A	X	-7.074	2
8	MP4A	Z	0	2
9	MP4A	Mx	.0053	2
10	MP4A	X	-7.074	4
11	MP4A	Z	0	4
12	MP4A	Mx	.0053	4
13	MP4B	X	-14.06	2
14	MP4B	Z	0	2
15	MP4B	Mx	-.0053	2
16	MP4B	X	-14.06	4
17	MP4B	Z	0	4
18	MP4B	Mx	-.0053	4
19	MP4C	X	-14.06	2
20	MP4C	Z	0	2
21	MP4C	Mx	-.0053	2
22	MP4C	X	-14.06	4
23	MP4C	Z	0	4
24	MP4C	Mx	-.0053	4
25	MP1A	X	-18.681	.5
26	MP1A	Z	0	.5
27	MP1A	Mx	.014	.5
28	MP1A	X	-18.681	4
29	MP1A	Z	0	4
30	MP1A	Mx	.014	4
31	MP1B	X	-12.013	.5
32	MP1B	Z	0	.5
33	MP1B	Mx	-.0045	.5
34	MP1B	X	-12.013	4
35	MP1B	Z	0	4
36	MP1B	Mx	-.0045	4
37	MP1C	X	-12.013	.5
38	MP1C	Z	0	.5
39	MP1C	Mx	-.0045	.5
40	MP1C	X	-12.013	4
41	MP1C	Z	0	4
42	MP1C	Mx	-.0045	4
43	MP5A	X	-18.681	.5
44	MP5A	Z	0	.5
45	MP5A	Mx	.014	.5
46	MP5A	X	-18.681	4
47	MP5A	Z	0	4
48	MP5A	Mx	.014	4
49	MP5B	X	-12.013	.5
50	MP5B	Z	0	.5
51	MP5B	Mx	-.0045	.5
52	MP5B	X	-12.013	4
53	MP5B	Z	0	4
54	MP5B	Mx	-.0045	4
55	MP5C	X	-12.013	.5
56	MP5C	Z	0	.5
57	MP5C	Mx	-.0045	.5



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]	
58	MP5C	X	-12.013	4
59	MP5C	Z	0	4
60	MP5C	Mx	-.0045	4
61	MP2A	X	-8.04	3.5
62	MP2A	Z	0	3.5
63	MP2A	Mx	-.004	3.5
64	MP2B	X	-12.395	3.5
65	MP2B	Z	0	3.5
66	MP2B	Mx	.0031	3.5
67	MP2C	X	-12.395	3.5
68	MP2C	Z	0	3.5
69	MP2C	Mx	.0031	3.5
70	MP3A	X	-9.639	5.5
71	MP3A	Z	0	5.5
72	MP3A	Mx	-.0048	5.5
73	MP3B	X	-12.795	5.5
74	MP3B	Z	0	5.5
75	MP3B	Mx	.0032	5.5
76	MP3C	X	-12.795	5.5
77	MP3C	Z	0	5.5
78	MP3C	Mx	.0032	5.5
79	MP3A	X	-19.256	3.5
80	MP3A	Z	0	3.5
81	MP3A	Mx	.0133	3.5
82	MP3A	X	-19.256	7.5
83	MP3A	Z	0	7.5
84	MP3A	Mx	.0133	7.5
85	MP3B	X	-25.651	3.5
86	MP3B	Z	0	3.5
87	MP3B	Mx	.0052	3.5
88	MP3B	X	-25.651	7.5
89	MP3B	Z	0	7.5
90	MP3B	Mx	.0052	7.5
91	MP3C	X	-25.651	3.5
92	MP3C	Z	0	3.5
93	MP3C	Mx	-.0244	3.5
94	MP3C	X	-25.651	7.5
95	MP3C	Z	0	7.5
96	MP3C	Mx	-.0244	7.5
97	MP3A	X	-19.256	3.5
98	MP3A	Z	0	3.5
99	MP3A	Mx	.0155	3.5
100	MP3A	X	-19.256	7.5
101	MP3A	Z	0	7.5
102	MP3A	Mx	.0155	7.5
103	MP3B	X	-25.651	3.5
104	MP3B	Z	0	3.5
105	MP3B	Mx	-.0244	3.5
106	MP3B	X	-25.651	7.5
107	MP3B	Z	0	7.5
108	MP3B	Mx	-.0244	7.5
109	MP3C	X	-25.651	3.5
110	MP3C	Z	0	3.5
111	MP3C	Mx	.0052	3.5
112	MP3C	X	-25.651	7.5
113	MP3C	Z	0	7.5
114	MP3C	Mx	.0052	7.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	-3.522	2
2	MP3A	Z	-2.033	2
3	MP3A	Mx	.0015	2
4	MP3A	X	-3.522	2
5	MP3A	Z	-2.033	2
6	MP3A	Mx	-.0015	2
7	MP4A	X	-8.745	2
8	MP4A	Z	-5.049	2
9	MP4A	Mx	.0062	2
10	MP4A	X	-8.745	4
11	MP4A	Z	-5.049	4
12	MP4A	Mx	.0062	4
13	MP4B	X	-14.214	2
14	MP4B	Z	-8.206	2
15	MP4B	Mx	0	2
16	MP4B	X	-14.214	4
17	MP4B	Z	-8.206	4
18	MP4B	Mx	0	4
19	MP4C	X	-8.102	2
20	MP4C	Z	-4.677	2
21	MP4C	Mx	-.0061	2
22	MP4C	X	-8.102	4
23	MP4C	Z	-4.677	4
24	MP4C	Mx	-.0061	4
25	MP1A	X	-14.253	.5
26	MP1A	Z	-8.229	.5
27	MP1A	Mx	.0107	.5
28	MP1A	X	-14.253	4
29	MP1A	Z	-8.229	4
30	MP1A	Mx	.0107	4
31	MP1B	X	-8.478	.5
32	MP1B	Z	-4.895	.5
33	MP1B	Mx	0	.5
34	MP1B	X	-8.478	4
35	MP1B	Z	-4.895	4
36	MP1B	Mx	0	4
37	MP1C	X	-14.253	.5
38	MP1C	Z	-8.229	.5
39	MP1C	Mx	-.0107	.5
40	MP1C	X	-14.253	4
41	MP1C	Z	-8.229	4
42	MP1C	Mx	-.0107	4
43	MP5A	X	-14.253	.5
44	MP5A	Z	-8.229	.5
45	MP5A	Mx	.0107	.5
46	MP5A	X	-14.253	4
47	MP5A	Z	-8.229	4
48	MP5A	Mx	.0107	4
49	MP5B	X	-8.478	.5
50	MP5B	Z	-4.895	.5
51	MP5B	Mx	0	.5
52	MP5B	X	-8.478	4
53	MP5B	Z	-4.895	4
54	MP5B	Mx	0	4
55	MP5C	X	-14.253	.5
56	MP5C	Z	-8.229	.5
57	MP5C	Mx	-.0107	.5



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]	
58	MP5C	X	-14.253	4
59	MP5C	Z	-8.229	4
60	MP5C	Mx	-.0107	4
61	MP2A	X	-8.22	3.5
62	MP2A	Z	-4.746	3.5
63	MP2A	Mx	-.0041	3.5
64	MP2B	X	-11.992	3.5
65	MP2B	Z	-6.924	3.5
66	MP2B	Mx	0	3.5
67	MP2C	X	-8.22	3.5
68	MP2C	Z	-4.746	3.5
69	MP2C	Mx	.0041	3.5
70	MP3A	X	-9.259	5.5
71	MP3A	Z	-5.346	5.5
72	MP3A	Mx	-.0046	5.5
73	MP3B	X	-11.992	5.5
74	MP3B	Z	-6.924	5.5
75	MP3B	Mx	0	5.5
76	MP3C	X	-9.259	5.5
77	MP3C	Z	-5.346	5.5
78	MP3C	Mx	.0046	5.5
79	MP3A	X	-19.074	3.5
80	MP3A	Z	-11.012	3.5
81	MP3A	Mx	.0051	3.5
82	MP3A	X	-19.074	7.5
83	MP3A	Z	-11.012	7.5
84	MP3A	Mx	.0051	7.5
85	MP3B	X	-24.08	3.5
86	MP3B	Z	-13.902	3.5
87	MP3B	Mx	.0185	3.5
88	MP3B	X	-24.08	7.5
89	MP3B	Z	-13.902	7.5
90	MP3B	Mx	.0185	7.5
91	MP3C	X	-18.484	3.5
92	MP3C	Z	-10.672	3.5
93	MP3C	Mx	-.021	3.5
94	MP3C	X	-18.484	7.5
95	MP3C	Z	-10.672	7.5
96	MP3C	Mx	-.021	7.5
97	MP3A	X	-19.074	3.5
98	MP3A	Z	-11.012	3.5
99	MP3A	Mx	.022	3.5
100	MP3A	X	-19.074	7.5
101	MP3A	Z	-11.012	7.5
102	MP3A	Mx	.022	7.5
103	MP3B	X	-24.08	3.5
104	MP3B	Z	-13.902	3.5
105	MP3B	Mx	-.0185	3.5
106	MP3B	X	-24.08	7.5
107	MP3B	Z	-13.902	7.5
108	MP3B	Mx	-.0185	7.5
109	MP3C	X	-18.484	3.5
110	MP3C	Z	-10.672	3.5
111	MP3C	Mx	-.0067	3.5
112	MP3C	X	-18.484	7.5
113	MP3C	Z	-10.672	7.5
114	MP3C	Mx	-.0067	7.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	-3.218	2
2	MP3A	Z	-5.574	2
3	MP3A	Mx	.0013	2
4	MP3A	X	-3.218	2
5	MP3A	Z	-5.574	2
6	MP3A	Mx	-.0013	2
7	MP4A	X	-7.366	2
8	MP4A	Z	-12.758	2
9	MP4A	Mx	.0047	2
10	MP4A	X	-7.366	4
11	MP4A	Z	-12.758	4
12	MP4A	Mx	.0047	4
13	MP4B	X	-7.03	2
14	MP4B	Z	-12.176	2
15	MP4B	Mx	.0053	2
16	MP4B	X	-7.03	4
17	MP4B	Z	-12.176	4
18	MP4B	Mx	.0053	4
19	MP4C	X	-3.501	2
20	MP4C	Z	-6.064	2
21	MP4C	Mx	-.0053	2
22	MP4C	X	-3.501	4
23	MP4C	Z	-6.064	4
24	MP4C	Mx	-.0053	4
25	MP1A	X	-6.006	.5
26	MP1A	Z	-10.403	.5
27	MP1A	Mx	.0045	.5
28	MP1A	X	-6.006	4
29	MP1A	Z	-10.403	4
30	MP1A	Mx	.0045	4
31	MP1B	X	-6.006	.5
32	MP1B	Z	-10.403	.5
33	MP1B	Mx	.0045	.5
34	MP1B	X	-6.006	4
35	MP1B	Z	-10.403	4
36	MP1B	Mx	.0045	4
37	MP1C	X	-9.341	.5
38	MP1C	Z	-16.178	.5
39	MP1C	Mx	-.014	.5
40	MP1C	X	-9.341	4
41	MP1C	Z	-16.178	4
42	MP1C	Mx	-.014	4
43	MP5A	X	-6.006	.5
44	MP5A	Z	-10.403	.5
45	MP5A	Mx	.0045	.5
46	MP5A	X	-6.006	4
47	MP5A	Z	-10.403	4
48	MP5A	Mx	.0045	4
49	MP5B	X	-6.006	.5
50	MP5B	Z	-10.403	.5
51	MP5B	Mx	.0045	.5
52	MP5B	X	-6.006	4
53	MP5B	Z	-10.403	4
54	MP5B	Mx	.0045	4
55	MP5C	X	-9.341	.5
56	MP5C	Z	-16.178	.5
57	MP5C	Mx	-.014	.5



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project # 23777133
 Model Name : Antenna Mount Analysis

July 21, 2023
 12:46 PM
 Checked By: _____

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]	
58	MP5C	X	-9.341	4
59	MP5C	Z	-16.178	4
60	MP5C	Mx	-.014	4
61	MP2A	X	-6.198	3.5
62	MP2A	Z	-10.735	3.5
63	MP2A	Mx	-.0031	3.5
64	MP2B	X	-6.198	3.5
65	MP2B	Z	-10.735	3.5
66	MP2B	Mx	-.0031	3.5
67	MP2C	X	-4.02	3.5
68	MP2C	Z	-6.963	3.5
69	MP2C	Mx	.004	3.5
70	MP3A	X	-6.398	5.5
71	MP3A	Z	-11.081	5.5
72	MP3A	Mx	-.0032	5.5
73	MP3B	X	-6.398	5.5
74	MP3B	Z	-11.081	5.5
75	MP3B	Mx	-.0032	5.5
76	MP3C	X	-4.82	5.5
77	MP3C	Z	-8.348	5.5
78	MP3C	Mx	.0048	5.5
79	MP3A	X	-13.133	3.5
80	MP3A	Z	-22.747	3.5
81	MP3A	Mx	-.0075	3.5
82	MP3A	X	-13.133	7.5
83	MP3A	Z	-22.747	7.5
84	MP3A	Mx	-.0075	7.5
85	MP3B	X	-12.826	3.5
86	MP3B	Z	-22.215	3.5
87	MP3B	Mx	.0244	3.5
88	MP3B	X	-12.826	7.5
89	MP3B	Z	-22.215	7.5
90	MP3B	Mx	.0244	7.5
91	MP3C	X	-9.595	3.5
92	MP3C	Z	-16.619	3.5
93	MP3C	Mx	-.0144	3.5
94	MP3C	X	-9.595	7.5
95	MP3C	Z	-16.619	7.5
96	MP3C	Mx	-.0144	7.5
97	MP3A	X	-13.133	3.5
98	MP3A	Z	-22.747	3.5
99	MP3A	Mx	.0242	3.5
100	MP3A	X	-13.133	7.5
101	MP3A	Z	-22.747	7.5
102	MP3A	Mx	.0242	7.5
103	MP3B	X	-12.826	3.5
104	MP3B	Z	-22.215	3.5
105	MP3B	Mx	-.0052	3.5
106	MP3B	X	-12.826	7.5
107	MP3B	Z	-22.215	7.5
108	MP3B	Mx	-.0052	7.5
109	MP3C	X	-9.595	3.5
110	MP3C	Z	-16.619	3.5
111	MP3C	Mx	-.0144	3.5
112	MP3C	X	-9.595	7.5
113	MP3C	Z	-16.619	7.5
114	MP3C	Mx	-.0144	7.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	0	2
2	MP3A	Z	-2.132	2
3	MP3A	Mx	0	2
4	MP3A	X	0	2
5	MP3A	Z	-2.132	2
6	MP3A	Mx	0	2
7	MP4A	X	0	2
8	MP4A	Z	-4.331	2
9	MP4A	Mx	-.000283	2
10	MP4A	X	0	4
11	MP4A	Z	-4.331	4
12	MP4A	Mx	-.000283	4
13	MP4B	X	0	2
14	MP4B	Z	-2.212	2
15	MP4B	Mx	.0014	2
16	MP4B	X	0	4
17	MP4B	Z	-2.212	4
18	MP4B	Mx	.0014	4
19	MP4C	X	0	2
20	MP4C	Z	-2.212	2
21	MP4C	Mx	-.0014	2
22	MP4C	X	0	4
23	MP4C	Z	-2.212	4
24	MP4C	Mx	-.0014	4
25	MP1A	X	0	.5
26	MP1A	Z	-2.898	.5
27	MP1A	Mx	0	.5
28	MP1A	X	0	4
29	MP1A	Z	-2.898	4
30	MP1A	Mx	0	4
31	MP1B	X	0	.5
32	MP1B	Z	-5.221	.5
33	MP1B	Mx	.0034	.5
34	MP1B	X	0	4
35	MP1B	Z	-5.221	4
36	MP1B	Mx	.0034	4
37	MP1C	X	0	.5
38	MP1C	Z	-5.221	.5
39	MP1C	Mx	-.0034	.5
40	MP1C	X	0	4
41	MP1C	Z	-5.221	4
42	MP1C	Mx	-.0034	4
43	MP5A	X	0	.5
44	MP5A	Z	-2.898	.5
45	MP5A	Mx	0	.5
46	MP5A	X	0	4
47	MP5A	Z	-2.898	4
48	MP5A	Mx	0	4
49	MP5B	X	0	.5
50	MP5B	Z	-5.221	.5
51	MP5B	Mx	.0034	.5
52	MP5B	X	0	4
53	MP5B	Z	-5.221	4
54	MP5B	Mx	.0034	4
55	MP5C	X	0	.5
56	MP5C	Z	-5.221	.5
57	MP5C	Mx	-.0034	.5



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]	
58	MP5C	X	0	4
59	MP5C	Z	-5.221	4
60	MP5C	Mx	-.0034	4
61	MP2A	X	0	3.5
62	MP2A	Z	-3.442	3.5
63	MP2A	Mx	0	3.5
64	MP2B	X	0	3.5
65	MP2B	Z	-2.276	3.5
66	MP2B	Mx	-.000986	3.5
67	MP2C	X	0	3.5
68	MP2C	Z	-2.276	3.5
69	MP2C	Mx	.000986	3.5
70	MP3A	X	0	5.5
71	MP3A	Z	-3.442	5.5
72	MP3A	Mx	0	5.5
73	MP3B	X	0	5.5
74	MP3B	Z	-2.593	5.5
75	MP3B	Mx	-.0011	5.5
76	MP3C	X	0	5.5
77	MP3C	Z	-2.593	5.5
78	MP3C	Mx	.0011	5.5
79	MP3A	X	0	3.5
80	MP3A	Z	-6.092	3.5
81	MP3A	Mx	-.0044	3.5
82	MP3A	X	0	7.5
83	MP3A	Z	-6.092	7.5
84	MP3A	Mx	-.0044	7.5
85	MP3B	X	0	3.5
86	MP3B	Z	-3.503	3.5
87	MP3B	Mx	.0034	3.5
88	MP3B	X	0	7.5
89	MP3B	Z	-3.503	7.5
90	MP3B	Mx	.0034	7.5
91	MP3C	X	0	3.5
92	MP3C	Z	-3.503	3.5
93	MP3C	Mx	-.0011	3.5
94	MP3C	X	0	7.5
95	MP3C	Z	-3.503	7.5
96	MP3C	Mx	-.0011	7.5
97	MP3A	X	0	3.5
98	MP3A	Z	-6.092	3.5
99	MP3A	Mx	.0036	3.5
100	MP3A	X	0	7.5
101	MP3A	Z	-6.092	7.5
102	MP3A	Mx	.0036	7.5
103	MP3B	X	0	3.5
104	MP3B	Z	-3.503	3.5
105	MP3B	Mx	.0011	3.5
106	MP3B	X	0	7.5
107	MP3B	Z	-3.503	7.5
108	MP3B	Mx	.0011	7.5
109	MP3C	X	0	3.5
110	MP3C	Z	-3.503	3.5
111	MP3C	Mx	-.0034	3.5
112	MP3C	X	0	7.5
113	MP3C	Z	-3.503	7.5
114	MP3C	Mx	-.0034	7.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	.88	2
2	MP3A	Z	-1.525	2
3	MP3A	Mx	-.000367	2
4	MP3A	X	.88	2
5	MP3A	Z	-1.525	2
6	MP3A	Mx	.000367	2
7	MP4A	X	1.707	2
8	MP4A	Z	-2.956	2
9	MP4A	Mx	-.0015	2
10	MP4A	X	1.707	4
11	MP4A	Z	-2.956	4
12	MP4A	Mx	-.0015	4
13	MP4B	X	.749	2
14	MP4B	Z	-1.298	2
15	MP4B	Mx	.0011	2
16	MP4B	X	.749	4
17	MP4B	Z	-1.298	4
18	MP4B	Mx	.0011	4
19	MP4C	X	1.82	2
20	MP4C	Z	-3.152	2
21	MP4C	Mx	-.0014	2
22	MP4C	X	1.82	4
23	MP4C	Z	-3.152	4
24	MP4C	Mx	-.0014	4
25	MP1A	X	1.836	.5
26	MP1A	Z	-3.18	.5
27	MP1A	Mx	-.0014	.5
28	MP1A	X	1.836	4
29	MP1A	Z	-3.18	4
30	MP1A	Mx	-.0014	4
31	MP1B	X	2.997	.5
32	MP1B	Z	-5.192	.5
33	MP1B	Mx	.0045	.5
34	MP1B	X	2.997	4
35	MP1B	Z	-5.192	4
36	MP1B	Mx	.0045	4
37	MP1C	X	1.836	.5
38	MP1C	Z	-3.18	.5
39	MP1C	Mx	-.0014	.5
40	MP1C	X	1.836	4
41	MP1C	Z	-3.18	4
42	MP1C	Mx	-.0014	4
43	MP5A	X	1.836	.5
44	MP5A	Z	-3.18	.5
45	MP5A	Mx	-.0014	.5
46	MP5A	X	1.836	4
47	MP5A	Z	-3.18	4
48	MP5A	Mx	-.0014	4
49	MP5B	X	2.997	.5
50	MP5B	Z	-5.192	.5
51	MP5B	Mx	.0045	.5
52	MP5B	X	2.997	4
53	MP5B	Z	-5.192	4
54	MP5B	Mx	.0045	4
55	MP5C	X	1.836	.5
56	MP5C	Z	-3.18	.5
57	MP5C	Mx	-.0014	.5



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]	
58	MP5C	X	1.836	4
59	MP5C	Z	-3.18	4
60	MP5C	Mx	-.0014	4
61	MP2A	X	1.527	3.5
62	MP2A	Z	-2.644	3.5
63	MP2A	Mx	.000764	3.5
64	MP2B	X	.944	3.5
65	MP2B	Z	-1.635	3.5
66	MP2B	Mx	-.000944	3.5
67	MP2C	X	1.527	3.5
68	MP2C	Z	-2.644	3.5
69	MP2C	Mx	.000763	3.5
70	MP3A	X	1.58	5.5
71	MP3A	Z	-2.736	5.5
72	MP3A	Mx	.00079	5.5
73	MP3B	X	1.155	5.5
74	MP3B	Z	-2	5.5
75	MP3B	Mx	-.0012	5.5
76	MP3C	X	1.58	5.5
77	MP3C	Z	-2.736	5.5
78	MP3C	Mx	.00079	5.5
79	MP3A	X	2.486	3.5
80	MP3A	Z	-4.305	3.5
81	MP3A	Mx	-.0049	3.5
82	MP3A	X	2.486	7.5
83	MP3A	Z	-4.305	7.5
84	MP3A	Mx	-.0049	7.5
85	MP3B	X	1.316	3.5
86	MP3B	Z	-2.279	3.5
87	MP3B	Mx	.002	3.5
88	MP3B	X	1.316	7.5
89	MP3B	Z	-2.279	7.5
90	MP3B	Mx	.002	7.5
91	MP3C	X	2.623	3.5
92	MP3C	Z	-4.544	3.5
93	MP3C	Mx	.0011	3.5
94	MP3C	X	2.623	7.5
95	MP3C	Z	-4.544	7.5
96	MP3C	Mx	.0011	7.5
97	MP3A	X	2.486	3.5
98	MP3A	Z	-4.305	3.5
99	MP3A	Mx	.000576	3.5
100	MP3A	X	2.486	7.5
101	MP3A	Z	-4.305	7.5
102	MP3A	Mx	.000576	7.5
103	MP3B	X	1.316	3.5
104	MP3B	Z	-2.279	3.5
105	MP3B	Mx	.002	3.5
106	MP3B	X	1.316	7.5
107	MP3B	Z	-2.279	7.5
108	MP3B	Mx	.002	7.5
109	MP3C	X	2.623	3.5
110	MP3C	Z	-4.544	3.5
111	MP3C	Mx	-.005	3.5
112	MP3C	X	2.623	7.5
113	MP3C	Z	-4.544	7.5
114	MP3C	Mx	-.005	7.5



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project # 23777133
 Model Name : Antenna Mount Analysis

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	.882	2
2	MP3A	Z	-.509	2
3	MP3A	Mx	-.000368	2
4	MP3A	X	.882	2
5	MP3A	Z	-.509	2
6	MP3A	Mx	.000368	2
7	MP4A	X	1.74	2
8	MP4A	Z	-1.004	2
9	MP4A	Mx	-.0014	2
10	MP4A	X	1.74	4
11	MP4A	Z	-1.004	4
12	MP4A	Mx	-.0014	4
13	MP4B	X	1.916	2
14	MP4B	Z	-1.106	2
15	MP4B	Mx	.0014	2
16	MP4B	X	1.916	4
17	MP4B	Z	-1.106	4
18	MP4B	Mx	.0014	4
19	MP4C	X	3.77	2
20	MP4C	Z	-2.176	2
21	MP4C	Mx	0	2
22	MP4C	X	3.77	4
23	MP4C	Z	-2.176	4
24	MP4C	Mx	0	4
25	MP1A	X	4.521	.5
26	MP1A	Z	-2.61	.5
27	MP1A	Mx	-.0034	.5
28	MP1A	X	4.521	4
29	MP1A	Z	-2.61	4
30	MP1A	Mx	-.0034	4
31	MP1B	X	4.521	.5
32	MP1B	Z	-2.61	.5
33	MP1B	Mx	.0034	.5
34	MP1B	X	4.521	4
35	MP1B	Z	-2.61	4
36	MP1B	Mx	.0034	4
37	MP1C	X	2.51	.5
38	MP1C	Z	-1.449	.5
39	MP1C	Mx	0	.5
40	MP1C	X	2.51	4
41	MP1C	Z	-1.449	4
42	MP1C	Mx	0	4
43	MP5A	X	4.521	.5
44	MP5A	Z	-2.61	.5
45	MP5A	Mx	-.0034	.5
46	MP5A	X	4.521	4
47	MP5A	Z	-2.61	4
48	MP5A	Mx	-.0034	4
49	MP5B	X	4.521	.5
50	MP5B	Z	-2.61	.5
51	MP5B	Mx	.0034	.5
52	MP5B	X	4.521	4
53	MP5B	Z	-2.61	4
54	MP5B	Mx	.0034	4
55	MP5C	X	2.51	.5
56	MP5C	Z	-1.449	.5
57	MP5C	Mx	0	.5



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project # 23777133
 Model Name : Antenna Mount Analysis

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]	
58	MP5C	X	2.51	4
59	MP5C	Z	-1.449	4
60	MP5C	Mx	0	4
61	MP2A	X	1.971	3.5
62	MP2A	Z	-1.138	3.5
63	MP2A	Mx	.000986	3.5
64	MP2B	X	1.971	3.5
65	MP2B	Z	-1.138	3.5
66	MP2B	Mx	-.000986	3.5
67	MP2C	X	2.981	3.5
68	MP2C	Z	-1.721	3.5
69	MP2C	Mx	0	3.5
70	MP3A	X	2.245	5.5
71	MP3A	Z	-1.296	5.5
72	MP3A	Mx	.0011	5.5
73	MP3B	X	2.245	5.5
74	MP3B	Z	-1.296	5.5
75	MP3B	Mx	-.0011	5.5
76	MP3C	X	2.981	5.5
77	MP3C	Z	-1.721	5.5
78	MP3C	Mx	0	5.5
79	MP3A	X	2.818	3.5
80	MP3A	Z	-1.627	3.5
81	MP3A	Mx	-.0031	3.5
82	MP3A	X	2.818	7.5
83	MP3A	Z	-1.627	7.5
84	MP3A	Mx	-.0031	7.5
85	MP3B	X	3.034	3.5
86	MP3B	Z	-1.752	3.5
87	MP3B	Mx	.0011	3.5
88	MP3B	X	3.034	7.5
89	MP3B	Z	-1.752	7.5
90	MP3B	Mx	.0011	7.5
91	MP3C	X	5.298	3.5
92	MP3C	Z	-3.059	3.5
93	MP3C	Mx	.0041	3.5
94	MP3C	X	5.298	7.5
95	MP3C	Z	-3.059	7.5
96	MP3C	Mx	.0041	7.5
97	MP3A	X	2.818	3.5
98	MP3A	Z	-1.627	3.5
99	MP3A	Mx	-.0013	3.5
100	MP3A	X	2.818	7.5
101	MP3A	Z	-1.627	7.5
102	MP3A	Mx	-.0013	7.5
103	MP3B	X	3.034	3.5
104	MP3B	Z	-1.752	3.5
105	MP3B	Mx	.0034	3.5
106	MP3B	X	3.034	7.5
107	MP3B	Z	-1.752	7.5
108	MP3B	Mx	.0034	7.5
109	MP3C	X	5.298	3.5
110	MP3C	Z	-3.059	3.5
111	MP3C	Mx	-.0041	3.5
112	MP3C	X	5.298	7.5
113	MP3C	Z	-3.059	7.5
114	MP3C	Mx	-.0041	7.5



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project # 23777133
 Model Name : Antenna Mount Analysis

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	.647	2
2	MP3A	Z	0	2
3	MP3A	Mx	-.00027	2
4	MP3A	X	.647	2
5	MP3A	Z	0	2
6	MP3A	Mx	.00027	2
7	MP4A	X	1.521	2
8	MP4A	Z	0	2
9	MP4A	Mx	-.0011	2
10	MP4A	X	1.521	4
11	MP4A	Z	0	4
12	MP4A	Mx	-.0011	4
13	MP4B	X	3.639	2
14	MP4B	Z	0	2
15	MP4B	Mx	.0014	2
16	MP4B	X	3.639	4
17	MP4B	Z	0	4
18	MP4B	Mx	.0014	4
19	MP4C	X	3.639	2
20	MP4C	Z	0	2
21	MP4C	Mx	.0014	2
22	MP4C	X	3.639	4
23	MP4C	Z	0	4
24	MP4C	Mx	.0014	4
25	MP1A	X	5.995	.5
26	MP1A	Z	0	.5
27	MP1A	Mx	-.0045	.5
28	MP1A	X	5.995	4
29	MP1A	Z	0	4
30	MP1A	Mx	-.0045	4
31	MP1B	X	3.672	.5
32	MP1B	Z	0	.5
33	MP1B	Mx	.0014	.5
34	MP1B	X	3.672	4
35	MP1B	Z	0	4
36	MP1B	Mx	.0014	4
37	MP1C	X	3.672	.5
38	MP1C	Z	0	.5
39	MP1C	Mx	.0014	.5
40	MP1C	X	3.672	4
41	MP1C	Z	0	4
42	MP1C	Mx	.0014	4
43	MP5A	X	5.995	.5
44	MP5A	Z	0	.5
45	MP5A	Mx	-.0045	.5
46	MP5A	X	5.995	4
47	MP5A	Z	0	4
48	MP5A	Mx	-.0045	4
49	MP5B	X	3.672	.5
50	MP5B	Z	0	.5
51	MP5B	Mx	.0014	.5
52	MP5B	X	3.672	4
53	MP5B	Z	0	4
54	MP5B	Mx	.0014	4
55	MP5C	X	3.672	.5
56	MP5C	Z	0	.5
57	MP5C	Mx	.0014	.5



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]	
58	MP5C	X	3.672	4
59	MP5C	Z	0	4
60	MP5C	Mx	.0014	4
61	MP2A	X	1.888	3.5
62	MP2A	Z	0	3.5
63	MP2A	Mx	.000944	3.5
64	MP2B	X	3.054	3.5
65	MP2B	Z	0	3.5
66	MP2B	Mx	-.000764	3.5
67	MP2C	X	3.054	3.5
68	MP2C	Z	0	3.5
69	MP2C	Mx	-.000764	3.5
70	MP3A	X	2.31	5.5
71	MP3A	Z	0	5.5
72	MP3A	Mx	.0012	5.5
73	MP3B	X	3.159	5.5
74	MP3B	Z	0	5.5
75	MP3B	Mx	-.00079	5.5
76	MP3C	X	3.159	5.5
77	MP3C	Z	0	5.5
78	MP3C	Mx	-.00079	5.5
79	MP3A	X	2.658	3.5
80	MP3A	Z	0	3.5
81	MP3A	Mx	-.0018	3.5
82	MP3A	X	2.658	7.5
83	MP3A	Z	0	7.5
84	MP3A	Mx	-.0018	7.5
85	MP3B	X	5.246	3.5
86	MP3B	Z	0	3.5
87	MP3B	Mx	-.0011	3.5
88	MP3B	X	5.246	7.5
89	MP3B	Z	0	7.5
90	MP3B	Mx	-.0011	7.5
91	MP3C	X	5.246	3.5
92	MP3C	Z	0	3.5
93	MP3C	Mx	.005	3.5
94	MP3C	X	5.246	7.5
95	MP3C	Z	0	7.5
96	MP3C	Mx	.005	7.5
97	MP3A	X	2.658	3.5
98	MP3A	Z	0	3.5
99	MP3A	Mx	-.0021	3.5
100	MP3A	X	2.658	7.5
101	MP3A	Z	0	7.5
102	MP3A	Mx	-.0021	7.5
103	MP3B	X	5.246	3.5
104	MP3B	Z	0	3.5
105	MP3B	Mx	.005	3.5
106	MP3B	X	5.246	7.5
107	MP3B	Z	0	7.5
108	MP3B	Mx	.005	7.5
109	MP3C	X	5.246	3.5
110	MP3C	Z	0	3.5
111	MP3C	Mx	-.0011	3.5
112	MP3C	X	5.246	7.5
113	MP3C	Z	0	7.5
114	MP3C	Mx	-.0011	7.5



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project # 23777133
 Model Name : Antenna Mount Analysis

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	.882	2
2	MP3A	Z	.509	2
3	MP3A	Mx	-.000368	2
4	MP3A	X	.882	2
5	MP3A	Z	.509	2
6	MP3A	Mx	.000368	2
7	MP4A	X	2.111	2
8	MP4A	Z	1.219	2
9	MP4A	Mx	-.0015	2
10	MP4A	X	2.111	4
11	MP4A	Z	1.219	4
12	MP4A	Mx	-.0015	4
13	MP4B	X	3.77	2
14	MP4B	Z	2.176	2
15	MP4B	Mx	0	2
16	MP4B	X	3.77	4
17	MP4B	Z	2.176	4
18	MP4B	Mx	0	4
19	MP4C	X	1.916	2
20	MP4C	Z	1.106	2
21	MP4C	Mx	.0014	2
22	MP4C	X	1.916	4
23	MP4C	Z	1.106	4
24	MP4C	Mx	.0014	4
25	MP1A	X	4.521	.5
26	MP1A	Z	2.61	.5
27	MP1A	Mx	-.0034	.5
28	MP1A	X	4.521	4
29	MP1A	Z	2.61	4
30	MP1A	Mx	-.0034	4
31	MP1B	X	2.51	.5
32	MP1B	Z	1.449	.5
33	MP1B	Mx	0	.5
34	MP1B	X	2.51	4
35	MP1B	Z	1.449	4
36	MP1B	Mx	0	4
37	MP1C	X	4.521	.5
38	MP1C	Z	2.61	.5
39	MP1C	Mx	.0034	.5
40	MP1C	X	4.521	4
41	MP1C	Z	2.61	4
42	MP1C	Mx	.0034	4
43	MP5A	X	4.521	.5
44	MP5A	Z	2.61	.5
45	MP5A	Mx	-.0034	.5
46	MP5A	X	4.521	4
47	MP5A	Z	2.61	4
48	MP5A	Mx	-.0034	4
49	MP5B	X	2.51	.5
50	MP5B	Z	1.449	.5
51	MP5B	Mx	0	.5
52	MP5B	X	2.51	4
53	MP5B	Z	1.449	4
54	MP5B	Mx	0	4
55	MP5C	X	4.521	.5
56	MP5C	Z	2.61	.5
57	MP5C	Mx	.0034	.5



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]	
58	MP5C	X	4.521	4
59	MP5C	Z	2.61	4
60	MP5C	Mx	.0034	4
61	MP2A	X	1.971	3.5
62	MP2A	Z	1.138	3.5
63	MP2A	Mx	.000986	3.5
64	MP2B	X	2.981	3.5
65	MP2B	Z	1.721	3.5
66	MP2B	Mx	0	3.5
67	MP2C	X	1.971	3.5
68	MP2C	Z	1.138	3.5
69	MP2C	Mx	-.000986	3.5
70	MP3A	X	2.245	5.5
71	MP3A	Z	1.296	5.5
72	MP3A	Mx	.0011	5.5
73	MP3B	X	2.981	5.5
74	MP3B	Z	1.721	5.5
75	MP3B	Mx	0	5.5
76	MP3C	X	2.245	5.5
77	MP3C	Z	1.296	5.5
78	MP3C	Mx	-.0011	5.5
79	MP3A	X	3.272	3.5
80	MP3A	Z	1.889	3.5
81	MP3A	Mx	-.000877	3.5
82	MP3A	X	3.272	7.5
83	MP3A	Z	1.889	7.5
84	MP3A	Mx	-.000877	7.5
85	MP3B	X	5.298	3.5
86	MP3B	Z	3.059	3.5
87	MP3B	Mx	-.0041	3.5
88	MP3B	X	5.298	7.5
89	MP3B	Z	3.059	7.5
90	MP3B	Mx	-.0041	7.5
91	MP3C	X	3.034	3.5
92	MP3C	Z	1.752	3.5
93	MP3C	Mx	.0034	3.5
94	MP3C	X	3.034	7.5
95	MP3C	Z	1.752	7.5
96	MP3C	Mx	.0034	7.5
97	MP3A	X	3.272	3.5
98	MP3A	Z	1.889	3.5
99	MP3A	Mx	-.0038	3.5
100	MP3A	X	3.272	7.5
101	MP3A	Z	1.889	7.5
102	MP3A	Mx	-.0038	7.5
103	MP3B	X	5.298	3.5
104	MP3B	Z	3.059	3.5
105	MP3B	Mx	.0041	3.5
106	MP3B	X	5.298	7.5
107	MP3B	Z	3.059	7.5
108	MP3B	Mx	.0041	7.5
109	MP3C	X	3.034	3.5
110	MP3C	Z	1.752	3.5
111	MP3C	Mx	.0011	3.5
112	MP3C	X	3.034	7.5
113	MP3C	Z	1.752	7.5
114	MP3C	Mx	.0011	7.5



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project # 23777133
 Model Name : Antenna Mount Analysis

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	.88	2
2	MP3A	Z	1.525	2
3	MP3A	Mx	-.000367	2
4	MP3A	X	.88	2
5	MP3A	Z	1.525	2
6	MP3A	Mx	.000367	2
7	MP4A	X	1.921	2
8	MP4A	Z	3.328	2
9	MP4A	Mx	-.0012	2
10	MP4A	X	1.921	4
11	MP4A	Z	3.328	4
12	MP4A	Mx	-.0012	4
13	MP4B	X	1.82	2
14	MP4B	Z	3.152	2
15	MP4B	Mx	-.0014	2
16	MP4B	X	1.82	4
17	MP4B	Z	3.152	4
18	MP4B	Mx	-.0014	4
19	MP4C	X	.749	2
20	MP4C	Z	1.298	2
21	MP4C	Mx	.0011	2
22	MP4C	X	.749	4
23	MP4C	Z	1.298	4
24	MP4C	Mx	.0011	4
25	MP1A	X	1.836	.5
26	MP1A	Z	3.18	.5
27	MP1A	Mx	-.0014	.5
28	MP1A	X	1.836	4
29	MP1A	Z	3.18	4
30	MP1A	Mx	-.0014	4
31	MP1B	X	1.836	.5
32	MP1B	Z	3.18	.5
33	MP1B	Mx	-.0014	.5
34	MP1B	X	1.836	4
35	MP1B	Z	3.18	4
36	MP1B	Mx	-.0014	4
37	MP1C	X	2.997	.5
38	MP1C	Z	5.192	.5
39	MP1C	Mx	.0045	.5
40	MP1C	X	2.997	4
41	MP1C	Z	5.192	4
42	MP1C	Mx	.0045	4
43	MP5A	X	1.836	.5
44	MP5A	Z	3.18	.5
45	MP5A	Mx	-.0014	.5
46	MP5A	X	1.836	4
47	MP5A	Z	3.18	4
48	MP5A	Mx	-.0014	4
49	MP5B	X	1.836	.5
50	MP5B	Z	3.18	.5
51	MP5B	Mx	-.0014	.5
52	MP5B	X	1.836	4
53	MP5B	Z	3.18	4
54	MP5B	Mx	-.0014	4
55	MP5C	X	2.997	.5
56	MP5C	Z	5.192	.5
57	MP5C	Mx	.0045	.5



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]	
58	MP5C	X	2.997	4
59	MP5C	Z	5.192	4
60	MP5C	Mx	.0045	4
61	MP2A	X	1.527	3.5
62	MP2A	Z	2.644	3.5
63	MP2A	Mx	.000764	3.5
64	MP2B	X	1.527	3.5
65	MP2B	Z	2.644	3.5
66	MP2B	Mx	.000763	3.5
67	MP2C	X	.944	3.5
68	MP2C	Z	1.635	3.5
69	MP2C	Mx	-.000944	3.5
70	MP3A	X	1.58	5.5
71	MP3A	Z	2.736	5.5
72	MP3A	Mx	.00079	5.5
73	MP3B	X	1.58	5.5
74	MP3B	Z	2.736	5.5
75	MP3B	Mx	.00079	5.5
76	MP3C	X	1.155	5.5
77	MP3C	Z	2	5.5
78	MP3C	Mx	-.0012	5.5
79	MP3A	X	2.748	3.5
80	MP3A	Z	4.759	3.5
81	MP3A	Mx	.0016	3.5
82	MP3A	X	2.748	7.5
83	MP3A	Z	4.759	7.5
84	MP3A	Mx	.0016	7.5
85	MP3B	X	2.623	3.5
86	MP3B	Z	4.544	3.5
87	MP3B	Mx	-.005	3.5
88	MP3B	X	2.623	7.5
89	MP3B	Z	4.544	7.5
90	MP3B	Mx	-.005	7.5
91	MP3C	X	1.316	3.5
92	MP3C	Z	2.279	3.5
93	MP3C	Mx	.002	3.5
94	MP3C	X	1.316	7.5
95	MP3C	Z	2.279	7.5
96	MP3C	Mx	.002	7.5
97	MP3A	X	2.748	3.5
98	MP3A	Z	4.759	3.5
99	MP3A	Mx	-.0051	3.5
100	MP3A	X	2.748	7.5
101	MP3A	Z	4.759	7.5
102	MP3A	Mx	-.0051	7.5
103	MP3B	X	2.623	3.5
104	MP3B	Z	4.544	3.5
105	MP3B	Mx	.0011	3.5
106	MP3B	X	2.623	7.5
107	MP3B	Z	4.544	7.5
108	MP3B	Mx	.0011	7.5
109	MP3C	X	1.316	3.5
110	MP3C	Z	2.279	3.5
111	MP3C	Mx	.002	3.5
112	MP3C	X	1.316	7.5
113	MP3C	Z	2.279	7.5
114	MP3C	Mx	.002	7.5



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project # 23777133
 Model Name : Antenna Mount Analysis

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	0	2
2	MP3A	Z	2.132	2
3	MP3A	Mx	0	2
4	MP3A	X	0	2
5	MP3A	Z	2.132	2
6	MP3A	Mx	0	2
7	MP4A	X	0	2
8	MP4A	Z	4.331	2
9	MP4A	Mx	.000283	2
10	MP4A	X	0	4
11	MP4A	Z	4.331	4
12	MP4A	Mx	.000283	4
13	MP4B	X	0	2
14	MP4B	Z	2.212	2
15	MP4B	Mx	-.0014	2
16	MP4B	X	0	4
17	MP4B	Z	2.212	4
18	MP4B	Mx	-.0014	4
19	MP4C	X	0	2
20	MP4C	Z	2.212	2
21	MP4C	Mx	.0014	2
22	MP4C	X	0	4
23	MP4C	Z	2.212	4
24	MP4C	Mx	.0014	4
25	MP1A	X	0	.5
26	MP1A	Z	2.898	.5
27	MP1A	Mx	0	.5
28	MP1A	X	0	4
29	MP1A	Z	2.898	4
30	MP1A	Mx	0	4
31	MP1B	X	0	.5
32	MP1B	Z	5.221	.5
33	MP1B	Mx	-.0034	.5
34	MP1B	X	0	4
35	MP1B	Z	5.221	4
36	MP1B	Mx	-.0034	4
37	MP1C	X	0	.5
38	MP1C	Z	5.221	.5
39	MP1C	Mx	.0034	.5
40	MP1C	X	0	4
41	MP1C	Z	5.221	4
42	MP1C	Mx	.0034	4
43	MP5A	X	0	.5
44	MP5A	Z	2.898	.5
45	MP5A	Mx	0	.5
46	MP5A	X	0	4
47	MP5A	Z	2.898	4
48	MP5A	Mx	0	4
49	MP5B	X	0	.5
50	MP5B	Z	5.221	.5
51	MP5B	Mx	-.0034	.5
52	MP5B	X	0	4
53	MP5B	Z	5.221	4
54	MP5B	Mx	-.0034	4
55	MP5C	X	0	.5
56	MP5C	Z	5.221	.5
57	MP5C	Mx	.0034	.5



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]	
58	MP5C	X	0	4
59	MP5C	Z	5.221	4
60	MP5C	Mx	.0034	4
61	MP2A	X	0	3.5
62	MP2A	Z	3.442	3.5
63	MP2A	Mx	0	3.5
64	MP2B	X	0	3.5
65	MP2B	Z	2.276	3.5
66	MP2B	Mx	.000986	3.5
67	MP2C	X	0	3.5
68	MP2C	Z	2.276	3.5
69	MP2C	Mx	-.000986	3.5
70	MP3A	X	0	5.5
71	MP3A	Z	3.442	5.5
72	MP3A	Mx	0	5.5
73	MP3B	X	0	5.5
74	MP3B	Z	2.593	5.5
75	MP3B	Mx	.0011	5.5
76	MP3C	X	0	5.5
77	MP3C	Z	2.593	5.5
78	MP3C	Mx	-.0011	5.5
79	MP3A	X	0	3.5
80	MP3A	Z	6.092	3.5
81	MP3A	Mx	.0044	3.5
82	MP3A	X	0	7.5
83	MP3A	Z	6.092	7.5
84	MP3A	Mx	.0044	7.5
85	MP3B	X	0	3.5
86	MP3B	Z	3.503	3.5
87	MP3B	Mx	-.0034	3.5
88	MP3B	X	0	7.5
89	MP3B	Z	3.503	7.5
90	MP3B	Mx	-.0034	7.5
91	MP3C	X	0	3.5
92	MP3C	Z	3.503	3.5
93	MP3C	Mx	.0011	3.5
94	MP3C	X	0	7.5
95	MP3C	Z	3.503	7.5
96	MP3C	Mx	.0011	7.5
97	MP3A	X	0	3.5
98	MP3A	Z	6.092	3.5
99	MP3A	Mx	-.0036	3.5
100	MP3A	X	0	7.5
101	MP3A	Z	6.092	7.5
102	MP3A	Mx	-.0036	7.5
103	MP3B	X	0	3.5
104	MP3B	Z	3.503	3.5
105	MP3B	Mx	-.0011	3.5
106	MP3B	X	0	7.5
107	MP3B	Z	3.503	7.5
108	MP3B	Mx	-.0011	7.5
109	MP3C	X	0	3.5
110	MP3C	Z	3.503	3.5
111	MP3C	Mx	.0034	3.5
112	MP3C	X	0	7.5
113	MP3C	Z	3.503	7.5
114	MP3C	Mx	.0034	7.5



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project # 23777133
 Model Name : Antenna Mount Analysis

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	- .88	2
2	MP3A	Z	1.525	2
3	MP3A	Mx	.000367	2
4	MP3A	X	- .88	2
5	MP3A	Z	1.525	2
6	MP3A	Mx	- .000367	2
7	MP4A	X	-1.707	2
8	MP4A	Z	2.956	2
9	MP4A	Mx	.0015	2
10	MP4A	X	-1.707	4
11	MP4A	Z	2.956	4
12	MP4A	Mx	.0015	4
13	MP4B	X	- .749	2
14	MP4B	Z	1.298	2
15	MP4B	Mx	- .0011	2
16	MP4B	X	- .749	4
17	MP4B	Z	1.298	4
18	MP4B	Mx	- .0011	4
19	MP4C	X	-1.82	2
20	MP4C	Z	3.152	2
21	MP4C	Mx	.0014	2
22	MP4C	X	-1.82	4
23	MP4C	Z	3.152	4
24	MP4C	Mx	.0014	4
25	MP1A	X	-1.836	.5
26	MP1A	Z	3.18	.5
27	MP1A	Mx	.0014	.5
28	MP1A	X	-1.836	4
29	MP1A	Z	3.18	4
30	MP1A	Mx	.0014	4
31	MP1B	X	-2.997	.5
32	MP1B	Z	5.192	.5
33	MP1B	Mx	- .0045	.5
34	MP1B	X	-2.997	4
35	MP1B	Z	5.192	4
36	MP1B	Mx	- .0045	4
37	MP1C	X	-1.836	.5
38	MP1C	Z	3.18	.5
39	MP1C	Mx	.0014	.5
40	MP1C	X	-1.836	4
41	MP1C	Z	3.18	4
42	MP1C	Mx	.0014	4
43	MP5A	X	-1.836	.5
44	MP5A	Z	3.18	.5
45	MP5A	Mx	.0014	.5
46	MP5A	X	-1.836	4
47	MP5A	Z	3.18	4
48	MP5A	Mx	.0014	4
49	MP5B	X	-2.997	.5
50	MP5B	Z	5.192	.5
51	MP5B	Mx	- .0045	.5
52	MP5B	X	-2.997	4
53	MP5B	Z	5.192	4
54	MP5B	Mx	- .0045	4
55	MP5C	X	-1.836	.5
56	MP5C	Z	3.18	.5
57	MP5C	Mx	.0014	.5



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project # 23777133
 Model Name : Antenna Mount Analysis

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]	
58	MP5C	X	-1.836	4
59	MP5C	Z	3.18	4
60	MP5C	Mx	.0014	4
61	MP2A	X	-1.527	3.5
62	MP2A	Z	2.644	3.5
63	MP2A	Mx	-.000764	3.5
64	MP2B	X	-.944	3.5
65	MP2B	Z	1.635	3.5
66	MP2B	Mx	.000944	3.5
67	MP2C	X	-1.527	3.5
68	MP2C	Z	2.644	3.5
69	MP2C	Mx	-.000763	3.5
70	MP3A	X	-1.58	5.5
71	MP3A	Z	2.736	5.5
72	MP3A	Mx	-.00079	5.5
73	MP3B	X	-1.155	5.5
74	MP3B	Z	2	5.5
75	MP3B	Mx	.0012	5.5
76	MP3C	X	-1.58	5.5
77	MP3C	Z	2.736	5.5
78	MP3C	Mx	-.00079	5.5
79	MP3A	X	-2.486	3.5
80	MP3A	Z	4.305	3.5
81	MP3A	Mx	.0049	3.5
82	MP3A	X	-2.486	7.5
83	MP3A	Z	4.305	7.5
84	MP3A	Mx	.0049	7.5
85	MP3B	X	-1.316	3.5
86	MP3B	Z	2.279	3.5
87	MP3B	Mx	-.002	3.5
88	MP3B	X	-1.316	7.5
89	MP3B	Z	2.279	7.5
90	MP3B	Mx	-.002	7.5
91	MP3C	X	-2.623	3.5
92	MP3C	Z	4.544	3.5
93	MP3C	Mx	-.0011	3.5
94	MP3C	X	-2.623	7.5
95	MP3C	Z	4.544	7.5
96	MP3C	Mx	-.0011	7.5
97	MP3A	X	-2.486	3.5
98	MP3A	Z	4.305	3.5
99	MP3A	Mx	-.000576	3.5
100	MP3A	X	-2.486	7.5
101	MP3A	Z	4.305	7.5
102	MP3A	Mx	-.000576	7.5
103	MP3B	X	-1.316	3.5
104	MP3B	Z	2.279	3.5
105	MP3B	Mx	-.002	3.5
106	MP3B	X	-1.316	7.5
107	MP3B	Z	2.279	7.5
108	MP3B	Mx	-.002	7.5
109	MP3C	X	-2.623	3.5
110	MP3C	Z	4.544	3.5
111	MP3C	Mx	.005	3.5
112	MP3C	X	-2.623	7.5
113	MP3C	Z	4.544	7.5
114	MP3C	Mx	.005	7.5



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project # 23777133
 Model Name : Antenna Mount Analysis

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	- .882	2
2	MP3A	Z	.509	2
3	MP3A	Mx	.000368	2
4	MP3A	X	- .882	2
5	MP3A	Z	.509	2
6	MP3A	Mx	- .000368	2
7	MP4A	X	-1.74	2
8	MP4A	Z	1.004	2
9	MP4A	Mx	.0014	2
10	MP4A	X	-1.74	4
11	MP4A	Z	1.004	4
12	MP4A	Mx	.0014	4
13	MP4B	X	-1.916	2
14	MP4B	Z	1.106	2
15	MP4B	Mx	-.0014	2
16	MP4B	X	-1.916	4
17	MP4B	Z	1.106	4
18	MP4B	Mx	-.0014	4
19	MP4C	X	-3.77	2
20	MP4C	Z	2.176	2
21	MP4C	Mx	0	2
22	MP4C	X	-3.77	4
23	MP4C	Z	2.176	4
24	MP4C	Mx	0	4
25	MP1A	X	-4.521	.5
26	MP1A	Z	2.61	.5
27	MP1A	Mx	.0034	.5
28	MP1A	X	-4.521	4
29	MP1A	Z	2.61	4
30	MP1A	Mx	.0034	4
31	MP1B	X	-4.521	.5
32	MP1B	Z	2.61	.5
33	MP1B	Mx	-.0034	.5
34	MP1B	X	-4.521	4
35	MP1B	Z	2.61	4
36	MP1B	Mx	-.0034	4
37	MP1C	X	-2.51	.5
38	MP1C	Z	1.449	.5
39	MP1C	Mx	0	.5
40	MP1C	X	-2.51	4
41	MP1C	Z	1.449	4
42	MP1C	Mx	0	4
43	MP5A	X	-4.521	.5
44	MP5A	Z	2.61	.5
45	MP5A	Mx	.0034	.5
46	MP5A	X	-4.521	4
47	MP5A	Z	2.61	4
48	MP5A	Mx	.0034	4
49	MP5B	X	-4.521	.5
50	MP5B	Z	2.61	.5
51	MP5B	Mx	-.0034	.5
52	MP5B	X	-4.521	4
53	MP5B	Z	2.61	4
54	MP5B	Mx	-.0034	4
55	MP5C	X	-2.51	.5
56	MP5C	Z	1.449	.5
57	MP5C	Mx	0	.5



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]	
58	MP5C	X	-2.51	4
59	MP5C	Z	1.449	4
60	MP5C	Mx	0	4
61	MP2A	X	-1.971	3.5
62	MP2A	Z	1.138	3.5
63	MP2A	Mx	-.000986	3.5
64	MP2B	X	-1.971	3.5
65	MP2B	Z	1.138	3.5
66	MP2B	Mx	.000986	3.5
67	MP2C	X	-2.981	3.5
68	MP2C	Z	1.721	3.5
69	MP2C	Mx	0	3.5
70	MP3A	X	-2.245	5.5
71	MP3A	Z	1.296	5.5
72	MP3A	Mx	-.0011	5.5
73	MP3B	X	-2.245	5.5
74	MP3B	Z	1.296	5.5
75	MP3B	Mx	.0011	5.5
76	MP3C	X	-2.981	5.5
77	MP3C	Z	1.721	5.5
78	MP3C	Mx	0	5.5
79	MP3A	X	-2.818	3.5
80	MP3A	Z	1.627	3.5
81	MP3A	Mx	.0031	3.5
82	MP3A	X	-2.818	7.5
83	MP3A	Z	1.627	7.5
84	MP3A	Mx	.0031	7.5
85	MP3B	X	-3.034	3.5
86	MP3B	Z	1.752	3.5
87	MP3B	Mx	-.0011	3.5
88	MP3B	X	-3.034	7.5
89	MP3B	Z	1.752	7.5
90	MP3B	Mx	-.0011	7.5
91	MP3C	X	-5.298	3.5
92	MP3C	Z	3.059	3.5
93	MP3C	Mx	-.0041	3.5
94	MP3C	X	-5.298	7.5
95	MP3C	Z	3.059	7.5
96	MP3C	Mx	-.0041	7.5
97	MP3A	X	-2.818	3.5
98	MP3A	Z	1.627	3.5
99	MP3A	Mx	.0013	3.5
100	MP3A	X	-2.818	7.5
101	MP3A	Z	1.627	7.5
102	MP3A	Mx	.0013	7.5
103	MP3B	X	-3.034	3.5
104	MP3B	Z	1.752	3.5
105	MP3B	Mx	-.0034	3.5
106	MP3B	X	-3.034	7.5
107	MP3B	Z	1.752	7.5
108	MP3B	Mx	-.0034	7.5
109	MP3C	X	-5.298	3.5
110	MP3C	Z	3.059	3.5
111	MP3C	Mx	.0041	3.5
112	MP3C	X	-5.298	7.5
113	MP3C	Z	3.059	7.5
114	MP3C	Mx	.0041	7.5



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project # 23777133
 Model Name : Antenna Mount Analysis

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	-.647	2
2	MP3A	Z	0	2
3	MP3A	Mx	.00027	2
4	MP3A	X	-.647	2
5	MP3A	Z	0	2
6	MP3A	Mx	-.00027	2
7	MP4A	X	-1.521	2
8	MP4A	Z	0	2
9	MP4A	Mx	.0011	2
10	MP4A	X	-1.521	4
11	MP4A	Z	0	4
12	MP4A	Mx	.0011	4
13	MP4B	X	-3.639	2
14	MP4B	Z	0	2
15	MP4B	Mx	-.0014	2
16	MP4B	X	-3.639	4
17	MP4B	Z	0	4
18	MP4B	Mx	-.0014	4
19	MP4C	X	-3.639	2
20	MP4C	Z	0	2
21	MP4C	Mx	-.0014	2
22	MP4C	X	-3.639	4
23	MP4C	Z	0	4
24	MP4C	Mx	-.0014	4
25	MP1A	X	-5.995	.5
26	MP1A	Z	0	.5
27	MP1A	Mx	.0045	.5
28	MP1A	X	-5.995	4
29	MP1A	Z	0	4
30	MP1A	Mx	.0045	4
31	MP1B	X	-3.672	.5
32	MP1B	Z	0	.5
33	MP1B	Mx	-.0014	.5
34	MP1B	X	-3.672	4
35	MP1B	Z	0	4
36	MP1B	Mx	-.0014	4
37	MP1C	X	-3.672	.5
38	MP1C	Z	0	.5
39	MP1C	Mx	-.0014	.5
40	MP1C	X	-3.672	4
41	MP1C	Z	0	4
42	MP1C	Mx	-.0014	4
43	MP5A	X	-5.995	.5
44	MP5A	Z	0	.5
45	MP5A	Mx	.0045	.5
46	MP5A	X	-5.995	4
47	MP5A	Z	0	4
48	MP5A	Mx	.0045	4
49	MP5B	X	-3.672	.5
50	MP5B	Z	0	.5
51	MP5B	Mx	-.0014	.5
52	MP5B	X	-3.672	4
53	MP5B	Z	0	4
54	MP5B	Mx	-.0014	4
55	MP5C	X	-3.672	.5
56	MP5C	Z	0	.5
57	MP5C	Mx	-.0014	.5



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]	
58	MP5C	X	-3.672	4
59	MP5C	Z	0	4
60	MP5C	Mx	-.0014	4
61	MP2A	X	-1.888	3.5
62	MP2A	Z	0	3.5
63	MP2A	Mx	-.000944	3.5
64	MP2B	X	-3.054	3.5
65	MP2B	Z	0	3.5
66	MP2B	Mx	.000764	3.5
67	MP2C	X	-3.054	3.5
68	MP2C	Z	0	3.5
69	MP2C	Mx	.000764	3.5
70	MP3A	X	-2.31	5.5
71	MP3A	Z	0	5.5
72	MP3A	Mx	-.0012	5.5
73	MP3B	X	-3.159	5.5
74	MP3B	Z	0	5.5
75	MP3B	Mx	.00079	5.5
76	MP3C	X	-3.159	5.5
77	MP3C	Z	0	5.5
78	MP3C	Mx	.00079	5.5
79	MP3A	X	-2.658	3.5
80	MP3A	Z	0	3.5
81	MP3A	Mx	.0018	3.5
82	MP3A	X	-2.658	7.5
83	MP3A	Z	0	7.5
84	MP3A	Mx	.0018	7.5
85	MP3B	X	-5.246	3.5
86	MP3B	Z	0	3.5
87	MP3B	Mx	.0011	3.5
88	MP3B	X	-5.246	7.5
89	MP3B	Z	0	7.5
90	MP3B	Mx	.0011	7.5
91	MP3C	X	-5.246	3.5
92	MP3C	Z	0	3.5
93	MP3C	Mx	-.005	3.5
94	MP3C	X	-5.246	7.5
95	MP3C	Z	0	7.5
96	MP3C	Mx	-.005	7.5
97	MP3A	X	-2.658	3.5
98	MP3A	Z	0	3.5
99	MP3A	Mx	.0021	3.5
100	MP3A	X	-2.658	7.5
101	MP3A	Z	0	7.5
102	MP3A	Mx	.0021	7.5
103	MP3B	X	-5.246	3.5
104	MP3B	Z	0	3.5
105	MP3B	Mx	-.005	3.5
106	MP3B	X	-5.246	7.5
107	MP3B	Z	0	7.5
108	MP3B	Mx	-.005	7.5
109	MP3C	X	-5.246	3.5
110	MP3C	Z	0	3.5
111	MP3C	Mx	.0011	3.5
112	MP3C	X	-5.246	7.5
113	MP3C	Z	0	7.5
114	MP3C	Mx	.0011	7.5



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project # 23777133
 Model Name : Antenna Mount Analysis

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	- .882	2
2	MP3A	Z	- .509	2
3	MP3A	Mx	.000368	2
4	MP3A	X	- .882	2
5	MP3A	Z	- .509	2
6	MP3A	Mx	- .000368	2
7	MP4A	X	-2.111	2
8	MP4A	Z	-1.219	2
9	MP4A	Mx	.0015	2
10	MP4A	X	-2.111	4
11	MP4A	Z	-1.219	4
12	MP4A	Mx	.0015	4
13	MP4B	X	-3.77	2
14	MP4B	Z	-2.176	2
15	MP4B	Mx	0	2
16	MP4B	X	-3.77	4
17	MP4B	Z	-2.176	4
18	MP4B	Mx	0	4
19	MP4C	X	-1.916	2
20	MP4C	Z	-1.106	2
21	MP4C	Mx	- .0014	2
22	MP4C	X	-1.916	4
23	MP4C	Z	-1.106	4
24	MP4C	Mx	- .0014	4
25	MP1A	X	-4.521	.5
26	MP1A	Z	-2.61	.5
27	MP1A	Mx	.0034	.5
28	MP1A	X	-4.521	4
29	MP1A	Z	-2.61	4
30	MP1A	Mx	.0034	4
31	MP1B	X	-2.51	.5
32	MP1B	Z	-1.449	.5
33	MP1B	Mx	0	.5
34	MP1B	X	-2.51	4
35	MP1B	Z	-1.449	4
36	MP1B	Mx	0	4
37	MP1C	X	-4.521	.5
38	MP1C	Z	-2.61	.5
39	MP1C	Mx	- .0034	.5
40	MP1C	X	-4.521	4
41	MP1C	Z	-2.61	4
42	MP1C	Mx	- .0034	4
43	MP5A	X	-4.521	.5
44	MP5A	Z	-2.61	.5
45	MP5A	Mx	.0034	.5
46	MP5A	X	-4.521	4
47	MP5A	Z	-2.61	4
48	MP5A	Mx	.0034	4
49	MP5B	X	-2.51	.5
50	MP5B	Z	-1.449	.5
51	MP5B	Mx	0	.5
52	MP5B	X	-2.51	4
53	MP5B	Z	-1.449	4
54	MP5B	Mx	0	4
55	MP5C	X	-4.521	.5
56	MP5C	Z	-2.61	.5
57	MP5C	Mx	- .0034	.5



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]	
58	MP5C	X	-4.521	4
59	MP5C	Z	-2.61	4
60	MP5C	Mx	-.0034	4
61	MP2A	X	-1.971	3.5
62	MP2A	Z	-1.138	3.5
63	MP2A	Mx	-.000986	3.5
64	MP2B	X	-2.981	3.5
65	MP2B	Z	-1.721	3.5
66	MP2B	Mx	0	3.5
67	MP2C	X	-1.971	3.5
68	MP2C	Z	-1.138	3.5
69	MP2C	Mx	.000986	3.5
70	MP3A	X	-2.245	5.5
71	MP3A	Z	-1.296	5.5
72	MP3A	Mx	-.0011	5.5
73	MP3B	X	-2.981	5.5
74	MP3B	Z	-1.721	5.5
75	MP3B	Mx	0	5.5
76	MP3C	X	-2.245	5.5
77	MP3C	Z	-1.296	5.5
78	MP3C	Mx	.0011	5.5
79	MP3A	X	-3.272	3.5
80	MP3A	Z	-1.889	3.5
81	MP3A	Mx	.000877	3.5
82	MP3A	X	-3.272	7.5
83	MP3A	Z	-1.889	7.5
84	MP3A	Mx	.000877	7.5
85	MP3B	X	-5.298	3.5
86	MP3B	Z	-3.059	3.5
87	MP3B	Mx	.0041	3.5
88	MP3B	X	-5.298	7.5
89	MP3B	Z	-3.059	7.5
90	MP3B	Mx	.0041	7.5
91	MP3C	X	-3.034	3.5
92	MP3C	Z	-1.752	3.5
93	MP3C	Mx	-.0034	3.5
94	MP3C	X	-3.034	7.5
95	MP3C	Z	-1.752	7.5
96	MP3C	Mx	-.0034	7.5
97	MP3A	X	-3.272	3.5
98	MP3A	Z	-1.889	3.5
99	MP3A	Mx	.0038	3.5
100	MP3A	X	-3.272	7.5
101	MP3A	Z	-1.889	7.5
102	MP3A	Mx	.0038	7.5
103	MP3B	X	-5.298	3.5
104	MP3B	Z	-3.059	3.5
105	MP3B	Mx	-.0041	3.5
106	MP3B	X	-5.298	7.5
107	MP3B	Z	-3.059	7.5
108	MP3B	Mx	-.0041	7.5
109	MP3C	X	-3.034	3.5
110	MP3C	Z	-1.752	3.5
111	MP3C	Mx	-.0011	3.5
112	MP3C	X	-3.034	7.5
113	MP3C	Z	-1.752	7.5
114	MP3C	Mx	-.0011	7.5



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project # 23777133
 Model Name : Antenna Mount Analysis

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	- .88	2
2	MP3A	Z	-1.525	2
3	MP3A	Mx	.000367	2
4	MP3A	X	- .88	2
5	MP3A	Z	-1.525	2
6	MP3A	Mx	-.000367	2
7	MP4A	X	-1.921	2
8	MP4A	Z	-3.328	2
9	MP4A	Mx	.0012	2
10	MP4A	X	-1.921	4
11	MP4A	Z	-3.328	4
12	MP4A	Mx	.0012	4
13	MP4B	X	-1.82	2
14	MP4B	Z	-3.152	2
15	MP4B	Mx	.0014	2
16	MP4B	X	-1.82	4
17	MP4B	Z	-3.152	4
18	MP4B	Mx	.0014	4
19	MP4C	X	-.749	2
20	MP4C	Z	-1.298	2
21	MP4C	Mx	-.0011	2
22	MP4C	X	-.749	4
23	MP4C	Z	-1.298	4
24	MP4C	Mx	-.0011	4
25	MP1A	X	-1.836	.5
26	MP1A	Z	-3.18	.5
27	MP1A	Mx	.0014	.5
28	MP1A	X	-1.836	4
29	MP1A	Z	-3.18	4
30	MP1A	Mx	.0014	4
31	MP1B	X	-1.836	.5
32	MP1B	Z	-3.18	.5
33	MP1B	Mx	.0014	.5
34	MP1B	X	-1.836	4
35	MP1B	Z	-3.18	4
36	MP1B	Mx	.0014	4
37	MP1C	X	-2.997	.5
38	MP1C	Z	-5.192	.5
39	MP1C	Mx	-.0045	.5
40	MP1C	X	-2.997	4
41	MP1C	Z	-5.192	4
42	MP1C	Mx	-.0045	4
43	MP5A	X	-1.836	.5
44	MP5A	Z	-3.18	.5
45	MP5A	Mx	.0014	.5
46	MP5A	X	-1.836	4
47	MP5A	Z	-3.18	4
48	MP5A	Mx	.0014	4
49	MP5B	X	-1.836	.5
50	MP5B	Z	-3.18	.5
51	MP5B	Mx	.0014	.5
52	MP5B	X	-1.836	4
53	MP5B	Z	-3.18	4
54	MP5B	Mx	.0014	4
55	MP5C	X	-2.997	.5
56	MP5C	Z	-5.192	.5
57	MP5C	Mx	-.0045	.5



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]	
58	MP5C	X	-2.997	4
59	MP5C	Z	-5.192	4
60	MP5C	Mx	-.0045	4
61	MP2A	X	-1.527	3.5
62	MP2A	Z	-2.644	3.5
63	MP2A	Mx	-.000764	3.5
64	MP2B	X	-1.527	3.5
65	MP2B	Z	-2.644	3.5
66	MP2B	Mx	-.000763	3.5
67	MP2C	X	-.944	3.5
68	MP2C	Z	-1.635	3.5
69	MP2C	Mx	.000944	3.5
70	MP3A	X	-1.58	5.5
71	MP3A	Z	-2.736	5.5
72	MP3A	Mx	-.00079	5.5
73	MP3B	X	-1.58	5.5
74	MP3B	Z	-2.736	5.5
75	MP3B	Mx	-.00079	5.5
76	MP3C	X	-1.155	5.5
77	MP3C	Z	-2	5.5
78	MP3C	Mx	.0012	5.5
79	MP3A	X	-2.748	3.5
80	MP3A	Z	-4.759	3.5
81	MP3A	Mx	-.0016	3.5
82	MP3A	X	-2.748	7.5
83	MP3A	Z	-4.759	7.5
84	MP3A	Mx	-.0016	7.5
85	MP3B	X	-2.623	3.5
86	MP3B	Z	-4.544	3.5
87	MP3B	Mx	.005	3.5
88	MP3B	X	-2.623	7.5
89	MP3B	Z	-4.544	7.5
90	MP3B	Mx	.005	7.5
91	MP3C	X	-1.316	3.5
92	MP3C	Z	-2.279	3.5
93	MP3C	Mx	-.002	3.5
94	MP3C	X	-1.316	7.5
95	MP3C	Z	-2.279	7.5
96	MP3C	Mx	-.002	7.5
97	MP3A	X	-2.748	3.5
98	MP3A	Z	-4.759	3.5
99	MP3A	Mx	.0051	3.5
100	MP3A	X	-2.748	7.5
101	MP3A	Z	-4.759	7.5
102	MP3A	Mx	.0051	7.5
103	MP3B	X	-2.623	3.5
104	MP3B	Z	-4.544	3.5
105	MP3B	Mx	-.0011	3.5
106	MP3B	X	-2.623	7.5
107	MP3B	Z	-4.544	7.5
108	MP3B	Mx	-.0011	7.5
109	MP3C	X	-1.316	3.5
110	MP3C	Z	-2.279	3.5
111	MP3C	Mx	-.002	3.5
112	MP3C	X	-1.316	7.5
113	MP3C	Z	-2.279	7.5
114	MP3C	Mx	-.002	7.5



Member Point Loads (BLC 77 : Lm1)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft, %]
1	M45	Y	-500	%100

Member Point Loads (BLC 78 : Lm2)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft, %]
1	M48	Y	-500	%100

Member Point Loads (BLC 79 : Lv1)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft, %]
1	M28A	Y	-250	0

Member Point Loads (BLC 80 : Lv2)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft, %]
1	M28A	Y	-250	%50

Member Point Loads (BLC 81 : Antenna Ev)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft, %]
1	MP3A	Y	-.7697	2
2	MP3A	My	-.000321	2
3	MP3A	Mz	0	2
4	MP3A	Y	-.7697	2
5	MP3A	My	.000321	2
6	MP3A	Mz	0	2
7	MP4A	Y	-1.9046	2
8	MP4A	My	-.0014	2
9	MP4A	Mz	.000124	2
10	MP4A	Y	-1.9046	4
11	MP4A	My	-.0014	4
12	MP4A	Mz	.000124	4
13	MP4B	Y	-1.9046	2
14	MP4B	My	.000714	2
15	MP4B	Mz	-.0012	2
16	MP4B	Y	-1.9046	4
17	MP4B	My	.000714	4
18	MP4B	Mz	-.0012	4
19	MP4C	Y	-1.9046	2
20	MP4C	My	.000714	2
21	MP4C	Mz	.0012	2
22	MP4C	Y	-1.9046	4
23	MP4C	My	.000714	4
24	MP4C	Mz	.0012	4
25	MP1A	Y	-.2624	.5
26	MP1A	My	-.000197	.5
27	MP1A	Mz	0	.5
28	MP1A	Y	-.2624	4
29	MP1A	My	-.000197	4
30	MP1A	Mz	0	4
31	MP1B	Y	-.2624	.5
32	MP1B	My	9.8e-5	.5
33	MP1B	Mz	-.00017	.5
34	MP1B	Y	-.2624	4
35	MP1B	My	9.8e-5	4
36	MP1B	Mz	-.00017	4
37	MP1C	Y	-.2624	.5
38	MP1C	My	9.8e-5	.5
39	MP1C	Mz	.00017	.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
40	MP1C	Y	-.2624	4
41	MP1C	My	9.8e-5	4
42	MP1C	Mz	.00017	4
43	MP5A	Y	-.2624	.5
44	MP5A	My	-.000197	.5
45	MP5A	Mz	0	.5
46	MP5A	Y	-.2624	4
47	MP5A	My	-.000197	4
48	MP5A	Mz	0	4
49	MP5B	Y	-.2624	.5
50	MP5B	My	9.8e-5	.5
51	MP5B	Mz	-.00017	.5
52	MP5B	Y	-.2624	4
53	MP5B	My	9.8e-5	4
54	MP5B	Mz	-.00017	4
55	MP5C	Y	-.2624	.5
56	MP5C	My	9.8e-5	.5
57	MP5C	Mz	.00017	.5
58	MP5C	Y	-.2624	4
59	MP5C	My	9.8e-5	4
60	MP5C	Mz	.00017	4
61	MP2A	Y	-3.0745	3.5
62	MP2A	My	.0015	3.5
63	MP2A	Mz	0	3.5
64	MP2B	Y	-3.0745	3.5
65	MP2B	My	-.000769	3.5
66	MP2B	Mz	.0013	3.5
67	MP2C	Y	-3.0745	3.5
68	MP2C	My	-.000769	3.5
69	MP2C	Mz	-.0013	3.5
70	MP3A	Y	-3.6911	5.5
71	MP3A	My	.0018	5.5
72	MP3A	Mz	0	5.5
73	MP3B	Y	-3.6911	5.5
74	MP3B	My	-.000923	5.5
75	MP3B	Mz	.0016	5.5
76	MP3C	Y	-3.6911	5.5
77	MP3C	My	-.000923	5.5
78	MP3C	Mz	-.0016	5.5
79	MP3A	Y	-.8747	3.5
80	MP3A	My	-.000603	3.5
81	MP3A	Mz	.000638	3.5
82	MP3A	Y	-.8747	7.5
83	MP3A	My	-.000603	7.5
84	MP3A	Mz	.000638	7.5
85	MP3B	Y	-.8747	3.5
86	MP3B	My	-.000177	3.5
87	MP3B	Mz	-.00086	3.5
88	MP3B	Y	-.8747	7.5
89	MP3B	My	-.000177	7.5
90	MP3B	Mz	-.00086	7.5
91	MP3C	Y	-.8747	3.5
92	MP3C	My	.000833	3.5
93	MP3C	Mz	.000277	3.5
94	MP3C	Y	-.8747	7.5
95	MP3C	My	.000833	7.5
96	MP3C	Mz	.000277	7.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
97	MP3A	Y	-8747	3.5
98	MP3A	My	-0.00704	3.5
99	MP3A	Mz	-0.00524	3.5
100	MP3A	Y	-8747	7.5
101	MP3A	My	-0.00704	7.5
102	MP3A	Mz	-0.00524	7.5
103	MP3B	Y	-8747	3.5
104	MP3B	My	.000833	3.5
105	MP3B	Mz	-0.00277	3.5
106	MP3B	Y	-8747	7.5
107	MP3B	My	.000833	7.5
108	MP3B	Mz	-0.00277	7.5
109	MP3C	Y	-8747	3.5
110	MP3C	My	-0.00177	3.5
111	MP3C	Mz	.00086	3.5
112	MP3C	Y	-8747	7.5
113	MP3C	My	-0.00177	7.5
114	MP3C	Mz	.00086	7.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP3A	Z	-1.9243	2
2	MP3A	Mx	0	2
3	MP3A	Z	-1.9243	2
4	MP3A	Mx	0	2
5	MP4A	Z	-4.7615	2
6	MP4A	Mx	-0.00311	2
7	MP4A	Z	-4.7615	4
8	MP4A	Mx	-0.00311	4
9	MP4B	Z	-4.7615	2
10	MP4B	Mx	.0031	2
11	MP4B	Z	-4.7615	4
12	MP4B	Mx	.0031	4
13	MP4C	Z	-4.7615	2
14	MP4C	Mx	-0.0031	2
15	MP4C	Z	-4.7615	4
16	MP4C	Mx	-0.0031	4
17	MP1A	Z	-.656	.5
18	MP1A	Mx	0	.5
19	MP1A	Z	-.656	4
20	MP1A	Mx	0	4
21	MP1B	Z	-.656	.5
22	MP1B	Mx	.000426	.5
23	MP1B	Z	-.656	4
24	MP1B	Mx	.000426	4
25	MP1C	Z	-.656	.5
26	MP1C	Mx	-0.000426	.5
27	MP1C	Z	-.656	4
28	MP1C	Mx	-0.000426	4
29	MP5A	Z	-.656	.5
30	MP5A	Mx	0	.5
31	MP5A	Z	-.656	4
32	MP5A	Mx	0	4
33	MP5B	Z	-.656	.5
34	MP5B	Mx	.000426	.5
35	MP5B	Z	-.656	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
36	MP5B	Mx	.000426	4
37	MP5C	Z	-.656	.5
38	MP5C	Mx	-.000426	.5
39	MP5C	Z	-.656	4
40	MP5C	Mx	-.000426	4
41	MP2A	Z	-7.6861	3.5
42	MP2A	Mx	0	3.5
43	MP2B	Z	-7.6861	3.5
44	MP2B	Mx	-.0033	3.5
45	MP2C	Z	-7.6861	3.5
46	MP2C	Mx	.0033	3.5
47	MP3A	Z	-9.2277	5.5
48	MP3A	Mx	0	5.5
49	MP3B	Z	-9.2277	5.5
50	MP3B	Mx	-.004	5.5
51	MP3C	Z	-9.2277	5.5
52	MP3C	Mx	.004	5.5
53	MP3A	Z	-2.1867	3.5
54	MP3A	Mx	-.0016	3.5
55	MP3A	Z	-2.1867	7.5
56	MP3A	Mx	-.0016	7.5
57	MP3B	Z	-2.1867	3.5
58	MP3B	Mx	.0021	3.5
59	MP3B	Z	-2.1867	7.5
60	MP3B	Mx	.0021	7.5
61	MP3C	Z	-2.1867	3.5
62	MP3C	Mx	-.000691	3.5
63	MP3C	Z	-2.1867	7.5
64	MP3C	Mx	-.000691	7.5
65	MP3A	Z	-2.1867	3.5
66	MP3A	Mx	.0013	3.5
67	MP3A	Z	-2.1867	7.5
68	MP3A	Mx	.0013	7.5
69	MP3B	Z	-2.1867	3.5
70	MP3B	Mx	.000691	3.5
71	MP3B	Z	-2.1867	7.5
72	MP3B	Mx	.000691	7.5
73	MP3C	Z	-2.1867	3.5
74	MP3C	Mx	-.0021	3.5
75	MP3C	Z	-2.1867	7.5
76	MP3C	Mx	-.0021	7.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	1.9243	2
2	MP3A	Mx	-.000802	2
3	MP3A	X	1.9243	2
4	MP3A	Mx	.000802	2
5	MP4A	X	4.7615	2
6	MP4A	Mx	-.0036	2
7	MP4A	X	4.7615	4
8	MP4A	Mx	-.0036	4
9	MP4B	X	4.7615	2
10	MP4B	Mx	.0018	2
11	MP4B	X	4.7615	4
12	MP4B	Mx	.0018	4



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]	
13	MP4C	X	4.7615	2
14	MP4C	Mx	.0018	2
15	MP4C	X	4.7615	4
16	MP4C	Mx	.0018	4
17	MP1A	X	.656	.5
18	MP1A	Mx	-.000492	.5
19	MP1A	X	.656	4
20	MP1A	Mx	-.000492	4
21	MP1B	X	.656	.5
22	MP1B	Mx	.000246	.5
23	MP1B	X	.656	4
24	MP1B	Mx	.000246	4
25	MP1C	X	.656	.5
26	MP1C	Mx	.000246	.5
27	MP1C	X	.656	4
28	MP1C	Mx	.000246	4
29	MP5A	X	.656	.5
30	MP5A	Mx	-.000492	.5
31	MP5A	X	.656	4
32	MP5A	Mx	-.000492	4
33	MP5B	X	.656	.5
34	MP5B	Mx	.000246	.5
35	MP5B	X	.656	4
36	MP5B	Mx	.000246	4
37	MP5C	X	.656	.5
38	MP5C	Mx	.000246	.5
39	MP5C	X	.656	4
40	MP5C	Mx	.000246	4
41	MP2A	X	7.6861	3.5
42	MP2A	Mx	.0038	3.5
43	MP2B	X	7.6861	3.5
44	MP2B	Mx	-.0019	3.5
45	MP2C	X	7.6861	3.5
46	MP2C	Mx	-.0019	3.5
47	MP3A	X	9.2277	5.5
48	MP3A	Mx	.0046	5.5
49	MP3B	X	9.2277	5.5
50	MP3B	Mx	-.0023	5.5
51	MP3C	X	9.2277	5.5
52	MP3C	Mx	-.0023	5.5
53	MP3A	X	2.1867	3.5
54	MP3A	Mx	-.0015	3.5
55	MP3A	X	2.1867	7.5
56	MP3A	Mx	-.0015	7.5
57	MP3B	X	2.1867	3.5
58	MP3B	Mx	-.000442	3.5
59	MP3B	X	2.1867	7.5
60	MP3B	Mx	-.000442	7.5
61	MP3C	X	2.1867	3.5
62	MP3C	Mx	.0021	3.5
63	MP3C	X	2.1867	7.5
64	MP3C	Mx	.0021	7.5
65	MP3A	X	2.1867	3.5
66	MP3A	Mx	-.0018	3.5
67	MP3A	X	2.1867	7.5
68	MP3A	Mx	-.0018	7.5
69	MP3B	X	2.1867	3.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
70	MP3B	Mx	.0021	3.5
71	MP3B	X	2.1867	7.5
72	MP3B	Mx	.0021	7.5
73	MP3C	X	2.1867	3.5
74	MP3C	Mx	-.000442	3.5
75	MP3C	X	2.1867	7.5
76	MP3C	Mx	-.000442	7.5

Member Distributed Loads (BLC 40 : Structure Di)

	Member Label	Direction	Start Magnitude...	End Magnitude[...]	Start Location[ft...]	End Location[ft...]
1	M76	Y	-9.8123	-9.8123	0	%100
2	M84	Y	-11.7669	-11.7669	0	%100
3	M28A	Y	-11.3222	-11.3222	0	%100
4	M15	Y	-9.8123	-9.8123	0	%100
5	M21	Y	-11.7669	-11.7669	0	%100
6	M27	Y	-9.8123	-9.8123	0	%100
7	M33	Y	-11.7669	-11.7669	0	%100
8	M39	Y	-11.3222	-11.3222	0	%100
9	M41	Y	-11.3222	-11.3222	0	%100
10	M43	Y	-6.7658	-6.7658	0	%100
11	M50	Y	-8.8779	-8.8779	0	%100
12	M36	Y	-8.8779	-8.8779	0	%100
13	M40	Y	-8.8779	-8.8779	0	%100
14	M41B	Y	-6.7658	-6.7658	0	%100
15	M42A	Y	-6.7658	-6.7658	0	%100
16	MP5A	Y	-5.0991	-5.0991	0	%100
17	MP4A	Y	-5.0991	-5.0991	0	%100
18	MP3A	Y	-5.0991	-5.0991	0	%100
19	MP2A	Y	-5.0991	-5.0991	0	%100
20	MP1A	Y	-5.0991	-5.0991	0	%100
21	MP5C	Y	-5.0991	-5.0991	0	%100
22	MP4C	Y	-5.0991	-5.0991	0	%100
23	MP3C	Y	-5.0991	-5.0991	0	%100
24	MP2C	Y	-5.0991	-5.0991	0	%100
25	MP1C	Y	-5.0991	-5.0991	0	%100
26	MP5B	Y	-5.0991	-5.0991	0	%100
27	MP4B	Y	-5.0991	-5.0991	0	%100
28	MP3B	Y	-5.0991	-5.0991	0	%100
29	MP2B	Y	-5.0991	-5.0991	0	%100
30	MP1B	Y	-5.0991	-5.0991	0	%100
31	M91	Y	-9.8123	-9.8123	0	%100
32	M88B	Y	-7.5025	-7.5025	0	%100
33	M89A	Y	-7.5025	-7.5025	0	%100
34	M82B	Y	-9.8123	-9.8123	0	%100
35	M83A	Y	-7.5025	-7.5025	0	%100
36	M84A	Y	-7.5025	-7.5025	0	%100
37	M86	Y	-9.8123	-9.8123	0	%100
38	M87	Y	-7.5025	-7.5025	0	%100
39	M88A	Y	-7.5025	-7.5025	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	M76	X	0	0	0	%100
2	M76	Z	0	0	0	%100
3	M84	X	0	0	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Locationft	End Locationft
4	M84	Z	-1.9277	-1.9277	0	%100
5	M28A	X	0	0	0	%100
6	M28A	Z	-38.5545	-38.5545	0	%100
7	M15	X	0	0	0	%100
8	M15	Z	-11.8757	-11.8757	0	%100
9	M21	X	0	0	0	%100
10	M21	Z	-4819	-4819	0	%100
11	M27	X	0	0	0	%100
12	M27	Z	-11.8757	-11.8757	0	%100
13	M33	X	0	0	0	%100
14	M33	Z	-4819	-4819	0	%100
15	M39	X	0	0	0	%100
16	M39	Z	-9.6386	-9.6386	0	%100
17	M41	X	0	0	0	%100
18	M41	Z	-9.6386	-9.6386	0	%100
19	M43	X	0	0	0	%100
20	M43	Z	-16.0644	-16.0644	0	%100
21	M50	X	0	0	0	%100
22	M50	Z	-.241	-.241	0	%100
23	M36	X	0	0	0	%100
24	M36	Z	-.9639	-.9639	0	%100
25	M40	X	0	0	0	%100
26	M40	Z	-.241	-.241	0	%100
27	M41B	X	0	0	0	%100
28	M41B	Z	-4.0161	-4.0161	0	%100
29	M42A	X	0	0	0	%100
30	M42A	Z	-4.0161	-4.0161	0	%100
31	MP5A	X	0	0	0	%100
32	MP5A	Z	-9.1567	-9.1567	0	%100
33	MP4A	X	0	0	0	%100
34	MP4A	Z	-9.1567	-9.1567	0	%100
35	MP3A	X	0	0	0	%100
36	MP3A	Z	-9.1567	-9.1567	0	%100
37	MP2A	X	0	0	0	%100
38	MP2A	Z	-9.1567	-9.1567	0	%100
39	MP1A	X	0	0	0	%100
40	MP1A	Z	-9.1567	-9.1567	0	%100
41	MP5C	X	0	0	0	%100
42	MP5C	Z	-9.1567	-9.1567	0	%100
43	MP4C	X	0	0	0	%100
44	MP4C	Z	-9.1567	-9.1567	0	%100
45	MP3C	X	0	0	0	%100
46	MP3C	Z	-9.1567	-9.1567	0	%100
47	MP2C	X	0	0	0	%100
48	MP2C	Z	-9.1567	-9.1567	0	%100
49	MP1C	X	0	0	0	%100
50	MP1C	Z	-9.1567	-9.1567	0	%100
51	MP5B	X	0	0	0	%100
52	MP5B	Z	-9.1567	-9.1567	0	%100
53	MP4B	X	0	0	0	%100
54	MP4B	Z	-9.1567	-9.1567	0	%100
55	MP3B	X	0	0	0	%100
56	MP3B	Z	-9.1567	-9.1567	0	%100
57	MP2B	X	0	0	0	%100
58	MP2B	Z	-9.1567	-9.1567	0	%100
59	MP1B	X	0	0	0	%100
60	MP1B	Z	-9.1567	-9.1567	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[ft]	End Location[ft]
61	M91	X	0	0	0	%100
62	M91	Z	-20.7477	-20.7477	0	%100
63	M88B	X	0	0	0	%100
64	M88B	Z	-15.4218	-15.4218	0	%100
65	M89A	X	0	0	0	%100
66	M89A	Z	-15.4218	-15.4218	0	%100
67	M82B	X	0	0	0	%100
68	M82B	Z	-5.1869	-5.1869	0	%100
69	M83A	X	0	0	0	%100
70	M83A	Z	-3.8554	-3.8554	0	%100
71	M84A	X	0	0	0	%100
72	M84A	Z	-3.8554	-3.8554	0	%100
73	M86	X	0	0	0	%100
74	M86	Z	-5.1869	-5.1869	0	%100
75	M87	X	0	0	0	%100
76	M87	Z	-3.8554	-3.8554	0	%100
77	M88A	X	0	0	0	%100
78	M88A	Z	-3.8554	-3.8554	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M76	X	1.9793	1.9793	0	%100
2	M76	Z	-3.4282	-3.4282	0	%100
3	M84	X	.7229	.7229	0	%100
4	M84	Z	-1.2521	-1.2521	0	%100
5	M28A	X	14.4579	14.4579	0	%100
6	M28A	Z	-25.0419	-25.0419	0	%100
7	M15	X	1.9793	1.9793	0	%100
8	M15	Z	-3.4282	-3.4282	0	%100
9	M21	X	.7229	.7229	0	%100
10	M21	Z	-1.2521	-1.2521	0	%100
11	M27	X	7.9171	7.9171	0	%100
12	M27	Z	-13.7129	-13.7129	0	%100
13	M33	X	0	0	0	%100
14	M33	Z	0	0	0	%100
15	M39	X	14.4579	14.4579	0	%100
16	M39	Z	-25.0419	-25.0419	0	%100
17	M41	X	0	0	0	%100
18	M41	Z	0	0	0	%100
19	M43	X	6.0241	6.0241	0	%100
20	M43	Z	-10.4341	-10.4341	0	%100
21	M50	X	0	0	0	%100
22	M50	Z	0	0	0	%100
23	M36	X	.3614	.3614	0	%100
24	M36	Z	-.626	-.626	0	%100
25	M40	X	.3614	.3614	0	%100
26	M40	Z	-.626	-.626	0	%100
27	M41B	X	6.0241	6.0241	0	%100
28	M41B	Z	-10.4341	-10.4341	0	%100
29	M42A	X	0	0	0	%100
30	M42A	Z	0	0	0	%100
31	MP5A	X	4.5783	4.5783	0	%100
32	MP5A	Z	-7.9299	-7.9299	0	%100
33	MP4A	X	4.5783	4.5783	0	%100
34	MP4A	Z	-7.9299	-7.9299	0	%100
35	MP3A	X	4.5783	4.5783	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]
36	MP3A	Z	-7.9299	-7.9299	0	%100
37	MP2A	X	4.5783	4.5783	0	%100
38	MP2A	Z	-7.9299	-7.9299	0	%100
39	MP1A	X	4.5783	4.5783	0	%100
40	MP1A	Z	-7.9299	-7.9299	0	%100
41	MP5C	X	4.5783	4.5783	0	%100
42	MP5C	Z	-7.9299	-7.9299	0	%100
43	MP4C	X	4.5783	4.5783	0	%100
44	MP4C	Z	-7.9299	-7.9299	0	%100
45	MP3C	X	4.5783	4.5783	0	%100
46	MP3C	Z	-7.9299	-7.9299	0	%100
47	MP2C	X	4.5783	4.5783	0	%100
48	MP2C	Z	-7.9299	-7.9299	0	%100
49	MP1C	X	4.5783	4.5783	0	%100
50	MP1C	Z	-7.9299	-7.9299	0	%100
51	MP5B	X	4.5783	4.5783	0	%100
52	MP5B	Z	-7.9299	-7.9299	0	%100
53	MP4B	X	4.5783	4.5783	0	%100
54	MP4B	Z	-7.9299	-7.9299	0	%100
55	MP3B	X	4.5783	4.5783	0	%100
56	MP3B	Z	-7.9299	-7.9299	0	%100
57	MP2B	X	4.5783	4.5783	0	%100
58	MP2B	Z	-7.9299	-7.9299	0	%100
59	MP1B	X	4.5783	4.5783	0	%100
60	MP1B	Z	-7.9299	-7.9299	0	%100
61	M91	X	7.7804	7.7804	0	%100
62	M91	Z	-13.476	-13.476	0	%100
63	M88B	X	5.7832	5.7832	0	%100
64	M88B	Z	-10.0167	-10.0167	0	%100
65	M89A	X	5.7832	5.7832	0	%100
66	M89A	Z	-10.0167	-10.0167	0	%100
67	M82B	X	7.7804	7.7804	0	%100
68	M82B	Z	-13.476	-13.476	0	%100
69	M83A	X	5.7832	5.7832	0	%100
70	M83A	Z	-10.0167	-10.0167	0	%100
71	M84A	X	5.7832	5.7832	0	%100
72	M84A	Z	-10.0167	-10.0167	0	%100
73	M86	X	0	0	0	%100
74	M86	Z	0	0	0	%100
75	M87	X	0	0	0	%100
76	M87	Z	0	0	0	%100
77	M88A	X	0	0	0	%100
78	M88A	Z	0	0	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	M76	X	10.2847	10.2847	0	%100
2	M76	Z	-5.9379	-5.9379	0	%100
3	M84	X	.4174	.4174	0	%100
4	M84	Z	-.241	-.241	0	%100
5	M28A	X	8.3473	8.3473	0	%100
6	M28A	Z	-4.8193	-4.8193	0	%100
7	M15	X	0	0	0	%100
8	M15	Z	0	0	0	%100
9	M21	X	1.6695	1.6695	0	%100
10	M21	Z	-.9639	-.9639	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
11	M27	X	10.2847	10.2847	0	%100
12	M27	Z	-5.9379	-5.9379	0	%100
13	M33	X	.4174	.4174	0	%100
14	M33	Z	-.241	-.241	0	%100
15	M39	X	33.3892	33.3892	0	%100
16	M39	Z	-19.2772	-19.2772	0	%100
17	M41	X	8.3473	8.3473	0	%100
18	M41	Z	-4.8193	-4.8193	0	%100
19	M43	X	3.478	3.478	0	%100
20	M43	Z	-2.008	-2.008	0	%100
21	M50	X	.2087	.2087	0	%100
22	M50	Z	-.1205	-.1205	0	%100
23	M36	X	.2087	.2087	0	%100
24	M36	Z	-.1205	-.1205	0	%100
25	M40	X	.8347	.8347	0	%100
26	M40	Z	-.4819	-.4819	0	%100
27	M41B	X	13.9122	13.9122	0	%100
28	M41B	Z	-8.0322	-8.0322	0	%100
29	M42A	X	3.478	3.478	0	%100
30	M42A	Z	-2.008	-2.008	0	%100
31	MP5A	X	7.9299	7.9299	0	%100
32	MP5A	Z	-4.5783	-4.5783	0	%100
33	MP4A	X	7.9299	7.9299	0	%100
34	MP4A	Z	-4.5783	-4.5783	0	%100
35	MP3A	X	7.9299	7.9299	0	%100
36	MP3A	Z	-4.5783	-4.5783	0	%100
37	MP2A	X	7.9299	7.9299	0	%100
38	MP2A	Z	-4.5783	-4.5783	0	%100
39	MP1A	X	7.9299	7.9299	0	%100
40	MP1A	Z	-4.5783	-4.5783	0	%100
41	MP5C	X	7.9299	7.9299	0	%100
42	MP5C	Z	-4.5783	-4.5783	0	%100
43	MP4C	X	7.9299	7.9299	0	%100
44	MP4C	Z	-4.5783	-4.5783	0	%100
45	MP3C	X	7.9299	7.9299	0	%100
46	MP3C	Z	-4.5783	-4.5783	0	%100
47	MP2C	X	7.9299	7.9299	0	%100
48	MP2C	Z	-4.5783	-4.5783	0	%100
49	MP1C	X	7.9299	7.9299	0	%100
50	MP1C	Z	-4.5783	-4.5783	0	%100
51	MP5B	X	7.9299	7.9299	0	%100
52	MP5B	Z	-4.5783	-4.5783	0	%100
53	MP4B	X	7.9299	7.9299	0	%100
54	MP4B	Z	-4.5783	-4.5783	0	%100
55	MP3B	X	7.9299	7.9299	0	%100
56	MP3B	Z	-4.5783	-4.5783	0	%100
57	MP2B	X	7.9299	7.9299	0	%100
58	MP2B	Z	-4.5783	-4.5783	0	%100
59	MP1B	X	7.9299	7.9299	0	%100
60	MP1B	Z	-4.5783	-4.5783	0	%100
61	M91	X	4.492	4.492	0	%100
62	M91	Z	-2.5935	-2.5935	0	%100
63	M88B	X	3.3389	3.3389	0	%100
64	M88B	Z	-1.9277	-1.9277	0	%100
65	M89A	X	3.3389	3.3389	0	%100
66	M89A	Z	-1.9277	-1.9277	0	%100
67	M82B	X	17.968	17.968	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
68	M82B	Z	-10.3738	-10.3738	0	%100
69	M83A	X	13.3557	13.3557	0	%100
70	M83A	Z	-7.7109	-7.7109	0	%100
71	M84A	X	13.3557	13.3557	0	%100
72	M84A	Z	-7.7109	-7.7109	0	%100
73	M86	X	4.492	4.492	0	%100
74	M86	Z	-2.5935	-2.5935	0	%100
75	M87	X	3.3389	3.3389	0	%100
76	M87	Z	-1.9277	-1.9277	0	%100
77	M88A	X	3.3389	3.3389	0	%100
78	M88A	Z	-1.9277	-1.9277	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M76	X	15.8343	15.8343	0	%100
2	M76	Z	0	0	0	%100
3	M84	X	0	0	0	%100
4	M84	Z	0	0	0	%100
5	M28A	X	0	0	0	%100
6	M28A	Z	0	0	0	%100
7	M15	X	3.9586	3.9586	0	%100
8	M15	Z	0	0	0	%100
9	M21	X	1.4458	1.4458	0	%100
10	M21	Z	0	0	0	%100
11	M27	X	3.9586	3.9586	0	%100
12	M27	Z	0	0	0	%100
13	M33	X	1.4458	1.4458	0	%100
14	M33	Z	0	0	0	%100
15	M39	X	28.9159	28.9159	0	%100
16	M39	Z	0	0	0	%100
17	M41	X	28.9159	28.9159	0	%100
18	M41	Z	0	0	0	%100
19	M43	X	0	0	0	%100
20	M43	Z	0	0	0	%100
21	M50	X	.7229	.7229	0	%100
22	M50	Z	0	0	0	%100
23	M36	X	0	0	0	%100
24	M36	Z	0	0	0	%100
25	M40	X	.7229	.7229	0	%100
26	M40	Z	0	0	0	%100
27	M41B	X	12.0483	12.0483	0	%100
28	M41B	Z	0	0	0	%100
29	M42A	X	12.0483	12.0483	0	%100
30	M42A	Z	0	0	0	%100
31	MP5A	X	9.1567	9.1567	0	%100
32	MP5A	Z	0	0	0	%100
33	MP4A	X	9.1567	9.1567	0	%100
34	MP4A	Z	0	0	0	%100
35	MP3A	X	9.1567	9.1567	0	%100
36	MP3A	Z	0	0	0	%100
37	MP2A	X	9.1567	9.1567	0	%100
38	MP2A	Z	0	0	0	%100
39	MP1A	X	9.1567	9.1567	0	%100
40	MP1A	Z	0	0	0	%100
41	MP5C	X	9.1567	9.1567	0	%100
42	MP5C	Z	0	0	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
43	MP4C	X	9.1567	9.1567	0	%100
44	MP4C	Z	0	0	0	%100
45	MP3C	X	9.1567	9.1567	0	%100
46	MP3C	Z	0	0	0	%100
47	MP2C	X	9.1567	9.1567	0	%100
48	MP2C	Z	0	0	0	%100
49	MP1C	X	9.1567	9.1567	0	%100
50	MP1C	Z	0	0	0	%100
51	MP5B	X	9.1567	9.1567	0	%100
52	MP5B	Z	0	0	0	%100
53	MP4B	X	9.1567	9.1567	0	%100
54	MP4B	Z	0	0	0	%100
55	MP3B	X	9.1567	9.1567	0	%100
56	MP3B	Z	0	0	0	%100
57	MP2B	X	9.1567	9.1567	0	%100
58	MP2B	Z	0	0	0	%100
59	MP1B	X	9.1567	9.1567	0	%100
60	MP1B	Z	0	0	0	%100
61	M91	X	0	0	0	%100
62	M91	Z	0	0	0	%100
63	M88B	X	0	0	0	%100
64	M88B	Z	0	0	0	%100
65	M89A	X	0	0	0	%100
66	M89A	Z	0	0	0	%100
67	M82B	X	15.5608	15.5608	0	%100
68	M82B	Z	0	0	0	%100
69	M83A	X	11.5663	11.5663	0	%100
70	M83A	Z	0	0	0	%100
71	M84A	X	11.5663	11.5663	0	%100
72	M84A	Z	0	0	0	%100
73	M86	X	15.5608	15.5608	0	%100
74	M86	Z	0	0	0	%100
75	M87	X	11.5663	11.5663	0	%100
76	M87	Z	0	0	0	%100
77	M88A	X	11.5663	11.5663	0	%100
78	M88A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M76	X	10.2847	10.2847	0	%100
2	M76	Z	5.9379	5.9379	0	%100
3	M84	X	.4174	.4174	0	%100
4	M84	Z	.241	.241	0	%100
5	M28A	X	8.3473	8.3473	0	%100
6	M28A	Z	4.8193	4.8193	0	%100
7	M15	X	10.2847	10.2847	0	%100
8	M15	Z	5.9379	5.9379	0	%100
9	M21	X	.4174	.4174	0	%100
10	M21	Z	.241	.241	0	%100
11	M27	X	0	0	0	%100
12	M27	Z	0	0	0	%100
13	M33	X	1.6695	1.6695	0	%100
14	M33	Z	.9639	.9639	0	%100
15	M39	X	8.3473	8.3473	0	%100
16	M39	Z	4.8193	4.8193	0	%100
17	M41	X	33.3892	33.3892	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Locationft	End Locationft
18	M41	Z	19.2772	19.2772	0	%100
19	M43	X	3.478	3.478	0	%100
20	M43	Z	2.008	2.008	0	%100
21	M50	X	.8347	.8347	0	%100
22	M50	Z	.4819	.4819	0	%100
23	M36	X	.2087	.2087	0	%100
24	M36	Z	.1205	.1205	0	%100
25	M40	X	.2087	.2087	0	%100
26	M40	Z	.1205	.1205	0	%100
27	M41B	X	3.478	3.478	0	%100
28	M41B	Z	2.008	2.008	0	%100
29	M42A	X	13.9122	13.9122	0	%100
30	M42A	Z	8.0322	8.0322	0	%100
31	MP5A	X	7.9299	7.9299	0	%100
32	MP5A	Z	4.5783	4.5783	0	%100
33	MP4A	X	7.9299	7.9299	0	%100
34	MP4A	Z	4.5783	4.5783	0	%100
35	MP3A	X	7.9299	7.9299	0	%100
36	MP3A	Z	4.5783	4.5783	0	%100
37	MP2A	X	7.9299	7.9299	0	%100
38	MP2A	Z	4.5783	4.5783	0	%100
39	MP1A	X	7.9299	7.9299	0	%100
40	MP1A	Z	4.5783	4.5783	0	%100
41	MP5C	X	7.9299	7.9299	0	%100
42	MP5C	Z	4.5783	4.5783	0	%100
43	MP4C	X	7.9299	7.9299	0	%100
44	MP4C	Z	4.5783	4.5783	0	%100
45	MP3C	X	7.9299	7.9299	0	%100
46	MP3C	Z	4.5783	4.5783	0	%100
47	MP2C	X	7.9299	7.9299	0	%100
48	MP2C	Z	4.5783	4.5783	0	%100
49	MP1C	X	7.9299	7.9299	0	%100
50	MP1C	Z	4.5783	4.5783	0	%100
51	MP5B	X	7.9299	7.9299	0	%100
52	MP5B	Z	4.5783	4.5783	0	%100
53	MP4B	X	7.9299	7.9299	0	%100
54	MP4B	Z	4.5783	4.5783	0	%100
55	MP3B	X	7.9299	7.9299	0	%100
56	MP3B	Z	4.5783	4.5783	0	%100
57	MP2B	X	7.9299	7.9299	0	%100
58	MP2B	Z	4.5783	4.5783	0	%100
59	MP1B	X	7.9299	7.9299	0	%100
60	MP1B	Z	4.5783	4.5783	0	%100
61	M91	X	4.492	4.492	0	%100
62	M91	Z	2.5935	2.5935	0	%100
63	M88B	X	3.3389	3.3389	0	%100
64	M88B	Z	1.9277	1.9277	0	%100
65	M89A	X	3.3389	3.3389	0	%100
66	M89A	Z	1.9277	1.9277	0	%100
67	M82B	X	4.492	4.492	0	%100
68	M82B	Z	2.5935	2.5935	0	%100
69	M83A	X	3.3389	3.3389	0	%100
70	M83A	Z	1.9277	1.9277	0	%100
71	M84A	X	3.3389	3.3389	0	%100
72	M84A	Z	1.9277	1.9277	0	%100
73	M86	X	17.968	17.968	0	%100
74	M86	Z	10.3738	10.3738	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
75	M87	X	13.3557	13.3557	0	%100
76	M87	Z	7.7109	7.7109	0	%100
77	M88A	X	13.3557	13.3557	0	%100
78	M88A	Z	7.7109	7.7109	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M76	X	1.9793	1.9793	0	%100
2	M76	Z	3.4282	3.4282	0	%100
3	M84	X	.7229	.7229	0	%100
4	M84	Z	1.2521	1.2521	0	%100
5	M28A	X	14.4579	14.4579	0	%100
6	M28A	Z	25.0419	25.0419	0	%100
7	M15	X	7.9171	7.9171	0	%100
8	M15	Z	13.7129	13.7129	0	%100
9	M21	X	0	0	0	%100
10	M21	Z	0	0	0	%100
11	M27	X	1.9793	1.9793	0	%100
12	M27	Z	3.4282	3.4282	0	%100
13	M33	X	.7229	.7229	0	%100
14	M33	Z	1.2521	1.2521	0	%100
15	M39	X	0	0	0	%100
16	M39	Z	0	0	0	%100
17	M41	X	14.4579	14.4579	0	%100
18	M41	Z	25.0419	25.0419	0	%100
19	M43	X	6.0241	6.0241	0	%100
20	M43	Z	10.4341	10.4341	0	%100
21	M50	X	.3614	.3614	0	%100
22	M50	Z	.626	.626	0	%100
23	M36	X	.3614	.3614	0	%100
24	M36	Z	.626	.626	0	%100
25	M40	X	0	0	0	%100
26	M40	Z	0	0	0	%100
27	M41B	X	0	0	0	%100
28	M41B	Z	0	0	0	%100
29	M42A	X	6.0241	6.0241	0	%100
30	M42A	Z	10.4341	10.4341	0	%100
31	MP5A	X	4.5783	4.5783	0	%100
32	MP5A	Z	7.9299	7.9299	0	%100
33	MP4A	X	4.5783	4.5783	0	%100
34	MP4A	Z	7.9299	7.9299	0	%100
35	MP3A	X	4.5783	4.5783	0	%100
36	MP3A	Z	7.9299	7.9299	0	%100
37	MP2A	X	4.5783	4.5783	0	%100
38	MP2A	Z	7.9299	7.9299	0	%100
39	MP1A	X	4.5783	4.5783	0	%100
40	MP1A	Z	7.9299	7.9299	0	%100
41	MP5C	X	4.5783	4.5783	0	%100
42	MP5C	Z	7.9299	7.9299	0	%100
43	MP4C	X	4.5783	4.5783	0	%100
44	MP4C	Z	7.9299	7.9299	0	%100
45	MP3C	X	4.5783	4.5783	0	%100
46	MP3C	Z	7.9299	7.9299	0	%100
47	MP2C	X	4.5783	4.5783	0	%100
48	MP2C	Z	7.9299	7.9299	0	%100
49	MP1C	X	4.5783	4.5783	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location	End Location
50	MP1C	Z	7.9299	7.9299	0	%100
51	MP5B	X	4.5783	4.5783	0	%100
52	MP5B	Z	7.9299	7.9299	0	%100
53	MP4B	X	4.5783	4.5783	0	%100
54	MP4B	Z	7.9299	7.9299	0	%100
55	MP3B	X	4.5783	4.5783	0	%100
56	MP3B	Z	7.9299	7.9299	0	%100
57	MP2B	X	4.5783	4.5783	0	%100
58	MP2B	Z	7.9299	7.9299	0	%100
59	MP1B	X	4.5783	4.5783	0	%100
60	MP1B	Z	7.9299	7.9299	0	%100
61	M91	X	7.7804	7.7804	0	%100
62	M91	Z	13.476	13.476	0	%100
63	M88B	X	5.7832	5.7832	0	%100
64	M88B	Z	10.0167	10.0167	0	%100
65	M89A	X	5.7832	5.7832	0	%100
66	M89A	Z	10.0167	10.0167	0	%100
67	M82B	X	0	0	0	%100
68	M82B	Z	0	0	0	%100
69	M83A	X	0	0	0	%100
70	M83A	Z	0	0	0	%100
71	M84A	X	0	0	0	%100
72	M84A	Z	0	0	0	%100
73	M86	X	7.7804	7.7804	0	%100
74	M86	Z	13.476	13.476	0	%100
75	M87	X	5.7832	5.7832	0	%100
76	M87	Z	10.0167	10.0167	0	%100
77	M88A	X	5.7832	5.7832	0	%100
78	M88A	Z	10.0167	10.0167	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location	End Location
1	M76	X	0	0	0	%100
2	M76	Z	0	0	0	%100
3	M84	X	0	0	0	%100
4	M84	Z	1.9277	1.9277	0	%100
5	M28A	X	0	0	0	%100
6	M28A	Z	38.5545	38.5545	0	%100
7	M15	X	0	0	0	%100
8	M15	Z	11.8757	11.8757	0	%100
9	M21	X	0	0	0	%100
10	M21	Z	.4819	.4819	0	%100
11	M27	X	0	0	0	%100
12	M27	Z	11.8757	11.8757	0	%100
13	M33	X	0	0	0	%100
14	M33	Z	.4819	.4819	0	%100
15	M39	X	0	0	0	%100
16	M39	Z	9.6386	9.6386	0	%100
17	M41	X	0	0	0	%100
18	M41	Z	9.6386	9.6386	0	%100
19	M43	X	0	0	0	%100
20	M43	Z	16.0644	16.0644	0	%100
21	M50	X	0	0	0	%100
22	M50	Z	.241	.241	0	%100
23	M36	X	0	0	0	%100
24	M36	Z	.9639	.9639	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]	
25	M40	X	0	0	0	0	%100
26	M40	Z	.241	.241	0	0	%100
27	M41B	X	0	0	0	0	%100
28	M41B	Z	4.0161	4.0161	0	0	%100
29	M42A	X	0	0	0	0	%100
30	M42A	Z	4.0161	4.0161	0	0	%100
31	MP5A	X	0	0	0	0	%100
32	MP5A	Z	9.1567	9.1567	0	0	%100
33	MP4A	X	0	0	0	0	%100
34	MP4A	Z	9.1567	9.1567	0	0	%100
35	MP3A	X	0	0	0	0	%100
36	MP3A	Z	9.1567	9.1567	0	0	%100
37	MP2A	X	0	0	0	0	%100
38	MP2A	Z	9.1567	9.1567	0	0	%100
39	MP1A	X	0	0	0	0	%100
40	MP1A	Z	9.1567	9.1567	0	0	%100
41	MP5C	X	0	0	0	0	%100
42	MP5C	Z	9.1567	9.1567	0	0	%100
43	MP4C	X	0	0	0	0	%100
44	MP4C	Z	9.1567	9.1567	0	0	%100
45	MP3C	X	0	0	0	0	%100
46	MP3C	Z	9.1567	9.1567	0	0	%100
47	MP2C	X	0	0	0	0	%100
48	MP2C	Z	9.1567	9.1567	0	0	%100
49	MP1C	X	0	0	0	0	%100
50	MP1C	Z	9.1567	9.1567	0	0	%100
51	MP5B	X	0	0	0	0	%100
52	MP5B	Z	9.1567	9.1567	0	0	%100
53	MP4B	X	0	0	0	0	%100
54	MP4B	Z	9.1567	9.1567	0	0	%100
55	MP3B	X	0	0	0	0	%100
56	MP3B	Z	9.1567	9.1567	0	0	%100
57	MP2B	X	0	0	0	0	%100
58	MP2B	Z	9.1567	9.1567	0	0	%100
59	MP1B	X	0	0	0	0	%100
60	MP1B	Z	9.1567	9.1567	0	0	%100
61	M91	X	0	0	0	0	%100
62	M91	Z	20.7477	20.7477	0	0	%100
63	M88B	X	0	0	0	0	%100
64	M88B	Z	15.4218	15.4218	0	0	%100
65	M89A	X	0	0	0	0	%100
66	M89A	Z	15.4218	15.4218	0	0	%100
67	M82B	X	0	0	0	0	%100
68	M82B	Z	5.1869	5.1869	0	0	%100
69	M83A	X	0	0	0	0	%100
70	M83A	Z	3.8554	3.8554	0	0	%100
71	M84A	X	0	0	0	0	%100
72	M84A	Z	3.8554	3.8554	0	0	%100
73	M86	X	0	0	0	0	%100
74	M86	Z	5.1869	5.1869	0	0	%100
75	M87	X	0	0	0	0	%100
76	M87	Z	3.8554	3.8554	0	0	%100
77	M88A	X	0	0	0	0	%100
78	M88A	Z	3.8554	3.8554	0	0	%100

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

Member Label Direction Start Magnitude End Magnitude Start Location[ft] End Location[ft]



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 Designer :
 Job Number : Project # 23777133
 Model Name : Antenna Mount Analysis

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M76	X	-1.9793	-1.9793	0	%100
2	M76	Z	3.4282	3.4282	0	%100
3	M84	X	-.7229	-.7229	0	%100
4	M84	Z	1.2521	1.2521	0	%100
5	M28A	X	-14.4579	-14.4579	0	%100
6	M28A	Z	25.0419	25.0419	0	%100
7	M15	X	-1.9793	-1.9793	0	%100
8	M15	Z	3.4282	3.4282	0	%100
9	M21	X	-.7229	-.7229	0	%100
10	M21	Z	1.2521	1.2521	0	%100
11	M27	X	-7.9171	-7.9171	0	%100
12	M27	Z	13.7129	13.7129	0	%100
13	M33	X	0	0	0	%100
14	M33	Z	0	0	0	%100
15	M39	X	-14.4579	-14.4579	0	%100
16	M39	Z	25.0419	25.0419	0	%100
17	M41	X	0	0	0	%100
18	M41	Z	0	0	0	%100
19	M43	X	-6.0241	-6.0241	0	%100
20	M43	Z	10.4341	10.4341	0	%100
21	M50	X	0	0	0	%100
22	M50	Z	0	0	0	%100
23	M36	X	-.3614	-.3614	0	%100
24	M36	Z	.626	.626	0	%100
25	M40	X	-.3614	-.3614	0	%100
26	M40	Z	.626	.626	0	%100
27	M41B	X	-6.0241	-6.0241	0	%100
28	M41B	Z	10.4341	10.4341	0	%100
29	M42A	X	0	0	0	%100
30	M42A	Z	0	0	0	%100
31	MP5A	X	-4.5783	-4.5783	0	%100
32	MP5A	Z	7.9299	7.9299	0	%100
33	MP4A	X	-4.5783	-4.5783	0	%100
34	MP4A	Z	7.9299	7.9299	0	%100
35	MP3A	X	-4.5783	-4.5783	0	%100
36	MP3A	Z	7.9299	7.9299	0	%100
37	MP2A	X	-4.5783	-4.5783	0	%100
38	MP2A	Z	7.9299	7.9299	0	%100
39	MP1A	X	-4.5783	-4.5783	0	%100
40	MP1A	Z	7.9299	7.9299	0	%100
41	MP5C	X	-4.5783	-4.5783	0	%100
42	MP5C	Z	7.9299	7.9299	0	%100
43	MP4C	X	-4.5783	-4.5783	0	%100
44	MP4C	Z	7.9299	7.9299	0	%100
45	MP3C	X	-4.5783	-4.5783	0	%100
46	MP3C	Z	7.9299	7.9299	0	%100
47	MP2C	X	-4.5783	-4.5783	0	%100
48	MP2C	Z	7.9299	7.9299	0	%100
49	MP1C	X	-4.5783	-4.5783	0	%100
50	MP1C	Z	7.9299	7.9299	0	%100
51	MP5B	X	-4.5783	-4.5783	0	%100
52	MP5B	Z	7.9299	7.9299	0	%100
53	MP4B	X	-4.5783	-4.5783	0	%100
54	MP4B	Z	7.9299	7.9299	0	%100
55	MP3B	X	-4.5783	-4.5783	0	%100
56	MP3B	Z	7.9299	7.9299	0	%100
57	MP2B	X	-4.5783	-4.5783	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
58	MP2B	Z	7.9299	7.9299	0	%100
59	MP1B	X	-4.5783	-4.5783	0	%100
60	MP1B	Z	7.9299	7.9299	0	%100
61	M91	X	-7.7804	-7.7804	0	%100
62	M91	Z	13.476	13.476	0	%100
63	M88B	X	-5.7832	-5.7832	0	%100
64	M88B	Z	10.0167	10.0167	0	%100
65	M89A	X	-5.7832	-5.7832	0	%100
66	M89A	Z	10.0167	10.0167	0	%100
67	M82B	X	-7.7804	-7.7804	0	%100
68	M82B	Z	13.476	13.476	0	%100
69	M83A	X	-5.7832	-5.7832	0	%100
70	M83A	Z	10.0167	10.0167	0	%100
71	M84A	X	-5.7832	-5.7832	0	%100
72	M84A	Z	10.0167	10.0167	0	%100
73	M86	X	0	0	0	%100
74	M86	Z	0	0	0	%100
75	M87	X	0	0	0	%100
76	M87	Z	0	0	0	%100
77	M88A	X	0	0	0	%100
78	M88A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M76	X	-10.2847	-10.2847	0	%100
2	M76	Z	5.9379	5.9379	0	%100
3	M84	X	-.4174	-.4174	0	%100
4	M84	Z	.241	.241	0	%100
5	M28A	X	-8.3473	-8.3473	0	%100
6	M28A	Z	4.8193	4.8193	0	%100
7	M15	X	0	0	0	%100
8	M15	Z	0	0	0	%100
9	M21	X	-1.6695	-1.6695	0	%100
10	M21	Z	.9639	.9639	0	%100
11	M27	X	-10.2847	-10.2847	0	%100
12	M27	Z	5.9379	5.9379	0	%100
13	M33	X	-.4174	-.4174	0	%100
14	M33	Z	.241	.241	0	%100
15	M39	X	-33.3892	-33.3892	0	%100
16	M39	Z	19.2772	19.2772	0	%100
17	M41	X	-8.3473	-8.3473	0	%100
18	M41	Z	4.8193	4.8193	0	%100
19	M43	X	-3.478	-3.478	0	%100
20	M43	Z	2.008	2.008	0	%100
21	M50	X	-.2087	-.2087	0	%100
22	M50	Z	.1205	.1205	0	%100
23	M36	X	-.2087	-.2087	0	%100
24	M36	Z	.1205	.1205	0	%100
25	M40	X	-.8347	-.8347	0	%100
26	M40	Z	.4819	.4819	0	%100
27	M41B	X	-13.9122	-13.9122	0	%100
28	M41B	Z	8.0322	8.0322	0	%100
29	M42A	X	-3.478	-3.478	0	%100
30	M42A	Z	2.008	2.008	0	%100
31	MP5A	X	-7.9299	-7.9299	0	%100
32	MP5A	Z	4.5783	4.5783	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
33	MP4A	X	-7.9299	-7.9299	0	%100
34	MP4A	Z	4.5783	4.5783	0	%100
35	MP3A	X	-7.9299	-7.9299	0	%100
36	MP3A	Z	4.5783	4.5783	0	%100
37	MP2A	X	-7.9299	-7.9299	0	%100
38	MP2A	Z	4.5783	4.5783	0	%100
39	MP1A	X	-7.9299	-7.9299	0	%100
40	MP1A	Z	4.5783	4.5783	0	%100
41	MP5C	X	-7.9299	-7.9299	0	%100
42	MP5C	Z	4.5783	4.5783	0	%100
43	MP4C	X	-7.9299	-7.9299	0	%100
44	MP4C	Z	4.5783	4.5783	0	%100
45	MP3C	X	-7.9299	-7.9299	0	%100
46	MP3C	Z	4.5783	4.5783	0	%100
47	MP2C	X	-7.9299	-7.9299	0	%100
48	MP2C	Z	4.5783	4.5783	0	%100
49	MP1C	X	-7.9299	-7.9299	0	%100
50	MP1C	Z	4.5783	4.5783	0	%100
51	MP5B	X	-7.9299	-7.9299	0	%100
52	MP5B	Z	4.5783	4.5783	0	%100
53	MP4B	X	-7.9299	-7.9299	0	%100
54	MP4B	Z	4.5783	4.5783	0	%100
55	MP3B	X	-7.9299	-7.9299	0	%100
56	MP3B	Z	4.5783	4.5783	0	%100
57	MP2B	X	-7.9299	-7.9299	0	%100
58	MP2B	Z	4.5783	4.5783	0	%100
59	MP1B	X	-7.9299	-7.9299	0	%100
60	MP1B	Z	4.5783	4.5783	0	%100
61	M91	X	-4.492	-4.492	0	%100
62	M91	Z	2.5935	2.5935	0	%100
63	M88B	X	-3.3389	-3.3389	0	%100
64	M88B	Z	1.9277	1.9277	0	%100
65	M89A	X	-3.3389	-3.3389	0	%100
66	M89A	Z	1.9277	1.9277	0	%100
67	M82B	X	-17.968	-17.968	0	%100
68	M82B	Z	10.3738	10.3738	0	%100
69	M83A	X	-13.3557	-13.3557	0	%100
70	M83A	Z	7.7109	7.7109	0	%100
71	M84A	X	-13.3557	-13.3557	0	%100
72	M84A	Z	7.7109	7.7109	0	%100
73	M86	X	-4.492	-4.492	0	%100
74	M86	Z	2.5935	2.5935	0	%100
75	M87	X	-3.3389	-3.3389	0	%100
76	M87	Z	1.9277	1.9277	0	%100
77	M88A	X	-3.3389	-3.3389	0	%100
78	M88A	Z	1.9277	1.9277	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M76	X	-15.8343	-15.8343	0	%100
2	M76	Z	0	0	0	%100
3	M84	X	0	0	0	%100
4	M84	Z	0	0	0	%100
5	M28A	X	0	0	0	%100
6	M28A	Z	0	0	0	%100
7	M15	X	-3.9586	-3.9586	0	%100



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project # 23777133
 Model Name : Antenna Mount Analysis

July 21, 2023
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 Checked By: _____

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Locationft	End Locationft
8	M15	Z	0	0	0	%100
9	M21	X	-1.4458	-1.4458	0	%100
10	M21	Z	0	0	0	%100
11	M27	X	-3.9586	-3.9586	0	%100
12	M27	Z	0	0	0	%100
13	M33	X	-1.4458	-1.4458	0	%100
14	M33	Z	0	0	0	%100
15	M39	X	-28.9159	-28.9159	0	%100
16	M39	Z	0	0	0	%100
17	M41	X	-28.9159	-28.9159	0	%100
18	M41	Z	0	0	0	%100
19	M43	X	0	0	0	%100
20	M43	Z	0	0	0	%100
21	M50	X	-7.229	-7.229	0	%100
22	M50	Z	0	0	0	%100
23	M36	X	0	0	0	%100
24	M36	Z	0	0	0	%100
25	M40	X	-7.229	-7.229	0	%100
26	M40	Z	0	0	0	%100
27	M41B	X	-12.0483	-12.0483	0	%100
28	M41B	Z	0	0	0	%100
29	M42A	X	-12.0483	-12.0483	0	%100
30	M42A	Z	0	0	0	%100
31	MP5A	X	-9.1567	-9.1567	0	%100
32	MP5A	Z	0	0	0	%100
33	MP4A	X	-9.1567	-9.1567	0	%100
34	MP4A	Z	0	0	0	%100
35	MP3A	X	-9.1567	-9.1567	0	%100
36	MP3A	Z	0	0	0	%100
37	MP2A	X	-9.1567	-9.1567	0	%100
38	MP2A	Z	0	0	0	%100
39	MP1A	X	-9.1567	-9.1567	0	%100
40	MP1A	Z	0	0	0	%100
41	MP5C	X	-9.1567	-9.1567	0	%100
42	MP5C	Z	0	0	0	%100
43	MP4C	X	-9.1567	-9.1567	0	%100
44	MP4C	Z	0	0	0	%100
45	MP3C	X	-9.1567	-9.1567	0	%100
46	MP3C	Z	0	0	0	%100
47	MP2C	X	-9.1567	-9.1567	0	%100
48	MP2C	Z	0	0	0	%100
49	MP1C	X	-9.1567	-9.1567	0	%100
50	MP1C	Z	0	0	0	%100
51	MP5B	X	-9.1567	-9.1567	0	%100
52	MP5B	Z	0	0	0	%100
53	MP4B	X	-9.1567	-9.1567	0	%100
54	MP4B	Z	0	0	0	%100
55	MP3B	X	-9.1567	-9.1567	0	%100
56	MP3B	Z	0	0	0	%100
57	MP2B	X	-9.1567	-9.1567	0	%100
58	MP2B	Z	0	0	0	%100
59	MP1B	X	-9.1567	-9.1567	0	%100
60	MP1B	Z	0	0	0	%100
61	M91	X	0	0	0	%100
62	M91	Z	0	0	0	%100
63	M88B	X	0	0	0	%100
64	M88B	Z	0	0	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
65	M89A	X	0	0	0	%100
66	M89A	Z	0	0	0	%100
67	M82B	X	-15.5608	-15.5608	0	%100
68	M82B	Z	0	0	0	%100
69	M83A	X	-11.5663	-11.5663	0	%100
70	M83A	Z	0	0	0	%100
71	M84A	X	-11.5663	-11.5663	0	%100
72	M84A	Z	0	0	0	%100
73	M86	X	-15.5608	-15.5608	0	%100
74	M86	Z	0	0	0	%100
75	M87	X	-11.5663	-11.5663	0	%100
76	M87	Z	0	0	0	%100
77	M88A	X	-11.5663	-11.5663	0	%100
78	M88A	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	M76	X	-10.2847	-10.2847	0	%100
2	M76	Z	-5.9379	-5.9379	0	%100
3	M84	X	-4.174	-4.174	0	%100
4	M84	Z	-.241	-.241	0	%100
5	M28A	X	-8.3473	-8.3473	0	%100
6	M28A	Z	-4.8193	-4.8193	0	%100
7	M15	X	-10.2847	-10.2847	0	%100
8	M15	Z	-5.9379	-5.9379	0	%100
9	M21	X	-4.174	-4.174	0	%100
10	M21	Z	-.241	-.241	0	%100
11	M27	X	0	0	0	%100
12	M27	Z	0	0	0	%100
13	M33	X	-1.6695	-1.6695	0	%100
14	M33	Z	-.9639	-.9639	0	%100
15	M39	X	-8.3473	-8.3473	0	%100
16	M39	Z	-4.8193	-4.8193	0	%100
17	M41	X	-33.3892	-33.3892	0	%100
18	M41	Z	-19.2772	-19.2772	0	%100
19	M43	X	-3.478	-3.478	0	%100
20	M43	Z	-2.008	-2.008	0	%100
21	M50	X	-.8347	-.8347	0	%100
22	M50	Z	-.4819	-.4819	0	%100
23	M36	X	-.2087	-.2087	0	%100
24	M36	Z	-.1205	-.1205	0	%100
25	M40	X	-.2087	-.2087	0	%100
26	M40	Z	-.1205	-.1205	0	%100
27	M41B	X	-3.478	-3.478	0	%100
28	M41B	Z	-2.008	-2.008	0	%100
29	M42A	X	-13.9122	-13.9122	0	%100
30	M42A	Z	-8.0322	-8.0322	0	%100
31	MP5A	X	-7.9299	-7.9299	0	%100
32	MP5A	Z	-4.5783	-4.5783	0	%100
33	MP4A	X	-7.9299	-7.9299	0	%100
34	MP4A	Z	-4.5783	-4.5783	0	%100
35	MP3A	X	-7.9299	-7.9299	0	%100
36	MP3A	Z	-4.5783	-4.5783	0	%100
37	MP2A	X	-7.9299	-7.9299	0	%100
38	MP2A	Z	-4.5783	-4.5783	0	%100
39	MP1A	X	-7.9299	-7.9299	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
40	MP1A	Z	-4.5783	-4.5783	0	%100
41	MP5C	X	-7.9299	-7.9299	0	%100
42	MP5C	Z	-4.5783	-4.5783	0	%100
43	MP4C	X	-7.9299	-7.9299	0	%100
44	MP4C	Z	-4.5783	-4.5783	0	%100
45	MP3C	X	-7.9299	-7.9299	0	%100
46	MP3C	Z	-4.5783	-4.5783	0	%100
47	MP2C	X	-7.9299	-7.9299	0	%100
48	MP2C	Z	-4.5783	-4.5783	0	%100
49	MP1C	X	-7.9299	-7.9299	0	%100
50	MP1C	Z	-4.5783	-4.5783	0	%100
51	MP5B	X	-7.9299	-7.9299	0	%100
52	MP5B	Z	-4.5783	-4.5783	0	%100
53	MP4B	X	-7.9299	-7.9299	0	%100
54	MP4B	Z	-4.5783	-4.5783	0	%100
55	MP3B	X	-7.9299	-7.9299	0	%100
56	MP3B	Z	-4.5783	-4.5783	0	%100
57	MP2B	X	-7.9299	-7.9299	0	%100
58	MP2B	Z	-4.5783	-4.5783	0	%100
59	MP1B	X	-7.9299	-7.9299	0	%100
60	MP1B	Z	-4.5783	-4.5783	0	%100
61	M91	X	-4.492	-4.492	0	%100
62	M91	Z	-2.5935	-2.5935	0	%100
63	M88B	X	-3.3389	-3.3389	0	%100
64	M88B	Z	-1.9277	-1.9277	0	%100
65	M89A	X	-3.3389	-3.3389	0	%100
66	M89A	Z	-1.9277	-1.9277	0	%100
67	M82B	X	-4.492	-4.492	0	%100
68	M82B	Z	-2.5935	-2.5935	0	%100
69	M83A	X	-3.3389	-3.3389	0	%100
70	M83A	Z	-1.9277	-1.9277	0	%100
71	M84A	X	-3.3389	-3.3389	0	%100
72	M84A	Z	-1.9277	-1.9277	0	%100
73	M86	X	-17.968	-17.968	0	%100
74	M86	Z	-10.3738	-10.3738	0	%100
75	M87	X	-13.3557	-13.3557	0	%100
76	M87	Z	-7.7109	-7.7109	0	%100
77	M88A	X	-13.3557	-13.3557	0	%100
78	M88A	Z	-7.7109	-7.7109	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M76	X	-1.9793	-1.9793	0	%100
2	M76	Z	-3.4282	-3.4282	0	%100
3	M84	X	-7.7229	-7.7229	0	%100
4	M84	Z	-1.2521	-1.2521	0	%100
5	M28A	X	-14.4579	-14.4579	0	%100
6	M28A	Z	-25.0419	-25.0419	0	%100
7	M15	X	-7.9171	-7.9171	0	%100
8	M15	Z	-13.7129	-13.7129	0	%100
9	M21	X	0	0	0	%100
10	M21	Z	0	0	0	%100
11	M27	X	-1.9793	-1.9793	0	%100
12	M27	Z	-3.4282	-3.4282	0	%100
13	M33	X	-7.7229	-7.7229	0	%100
14	M33	Z	-1.2521	-1.2521	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
15	M39	X	0	0	0	%100
16	M39	Z	0	0	0	%100
17	M41	X	-14.4579	-14.4579	0	%100
18	M41	Z	-25.0419	-25.0419	0	%100
19	M43	X	-6.0241	-6.0241	0	%100
20	M43	Z	-10.4341	-10.4341	0	%100
21	M50	X	-.3614	-.3614	0	%100
22	M50	Z	-.626	-.626	0	%100
23	M36	X	-.3614	-.3614	0	%100
24	M36	Z	-.626	-.626	0	%100
25	M40	X	0	0	0	%100
26	M40	Z	0	0	0	%100
27	M41B	X	0	0	0	%100
28	M41B	Z	0	0	0	%100
29	M42A	X	-6.0241	-6.0241	0	%100
30	M42A	Z	-10.4341	-10.4341	0	%100
31	MP5A	X	-4.5783	-4.5783	0	%100
32	MP5A	Z	-7.9299	-7.9299	0	%100
33	MP4A	X	-4.5783	-4.5783	0	%100
34	MP4A	Z	-7.9299	-7.9299	0	%100
35	MP3A	X	-4.5783	-4.5783	0	%100
36	MP3A	Z	-7.9299	-7.9299	0	%100
37	MP2A	X	-4.5783	-4.5783	0	%100
38	MP2A	Z	-7.9299	-7.9299	0	%100
39	MP1A	X	-4.5783	-4.5783	0	%100
40	MP1A	Z	-7.9299	-7.9299	0	%100
41	MP5C	X	-4.5783	-4.5783	0	%100
42	MP5C	Z	-7.9299	-7.9299	0	%100
43	MP4C	X	-4.5783	-4.5783	0	%100
44	MP4C	Z	-7.9299	-7.9299	0	%100
45	MP3C	X	-4.5783	-4.5783	0	%100
46	MP3C	Z	-7.9299	-7.9299	0	%100
47	MP2C	X	-4.5783	-4.5783	0	%100
48	MP2C	Z	-7.9299	-7.9299	0	%100
49	MP1C	X	-4.5783	-4.5783	0	%100
50	MP1C	Z	-7.9299	-7.9299	0	%100
51	MP5B	X	-4.5783	-4.5783	0	%100
52	MP5B	Z	-7.9299	-7.9299	0	%100
53	MP4B	X	-4.5783	-4.5783	0	%100
54	MP4B	Z	-7.9299	-7.9299	0	%100
55	MP3B	X	-4.5783	-4.5783	0	%100
56	MP3B	Z	-7.9299	-7.9299	0	%100
57	MP2B	X	-4.5783	-4.5783	0	%100
58	MP2B	Z	-7.9299	-7.9299	0	%100
59	MP1B	X	-4.5783	-4.5783	0	%100
60	MP1B	Z	-7.9299	-7.9299	0	%100
61	M91	X	-7.7804	-7.7804	0	%100
62	M91	Z	-13.476	-13.476	0	%100
63	M88B	X	-5.7832	-5.7832	0	%100
64	M88B	Z	-10.0167	-10.0167	0	%100
65	M89A	X	-5.7832	-5.7832	0	%100
66	M89A	Z	-10.0167	-10.0167	0	%100
67	M82B	X	0	0	0	%100
68	M82B	Z	0	0	0	%100
69	M83A	X	0	0	0	%100
70	M83A	Z	0	0	0	%100
71	M84A	X	0	0	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[ft]	End Location[ft]
72	M84A	Z	0	0	0	%100
73	M86	X	-7.7804	-7.7804	0	%100
74	M86	Z	-13.476	-13.476	0	%100
75	M87	X	-5.7832	-5.7832	0	%100
76	M87	Z	-10.0167	-10.0167	0	%100
77	M88A	X	-5.7832	-5.7832	0	%100
78	M88A	Z	-10.0167	-10.0167	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M76	X	0	0	0	%100
2	M76	Z	0	0	0	%100
3	M84	X	0	0	0	%100
4	M84	Z	-1.272	-1.272	0	%100
5	M28A	X	0	0	0	%100
6	M28A	Z	-7.619	-7.619	0	%100
7	M15	X	0	0	0	%100
8	M15	Z	-2.9878	-2.9878	0	%100
9	M21	X	0	0	0	%100
10	M21	Z	-.318	-.318	0	%100
11	M27	X	0	0	0	%100
12	M27	Z	-2.9878	-2.9878	0	%100
13	M33	X	0	0	0	%100
14	M33	Z	-.318	-.318	0	%100
15	M39	X	0	0	0	%100
16	M39	Z	-1.9047	-1.9047	0	%100
17	M41	X	0	0	0	%100
18	M41	Z	-1.9047	-1.9047	0	%100
19	M43	X	0	0	0	%100
20	M43	Z	-4.0206	-4.0206	0	%100
21	M50	X	0	0	0	%100
22	M50	Z	-.2625	-.2625	0	%100
23	M36	X	0	0	0	%100
24	M36	Z	-1.0501	-1.0501	0	%100
25	M40	X	0	0	0	%100
26	M40	Z	-.2625	-.2625	0	%100
27	M41B	X	0	0	0	%100
28	M41B	Z	-1.0051	-1.0051	0	%100
29	M42A	X	0	0	0	%100
30	M42A	Z	-1.0051	-1.0051	0	%100
31	MP5A	X	0	0	0	%100
32	MP5A	Z	-2.9153	-2.9153	0	%100
33	MP4A	X	0	0	0	%100
34	MP4A	Z	-2.9153	-2.9153	0	%100
35	MP3A	X	0	0	0	%100
36	MP3A	Z	-2.9153	-2.9153	0	%100
37	MP2A	X	0	0	0	%100
38	MP2A	Z	-2.9153	-2.9153	0	%100
39	MP1A	X	0	0	0	%100
40	MP1A	Z	-2.9153	-2.9153	0	%100
41	MP5C	X	0	0	0	%100
42	MP5C	Z	-2.9153	-2.9153	0	%100
43	MP4C	X	0	0	0	%100
44	MP4C	Z	-2.9153	-2.9153	0	%100
45	MP3C	X	0	0	0	%100
46	MP3C	Z	-2.9153	-2.9153	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
47	MP2C	X	0	0	0	%100
48	MP2C	Z	-2.9153	-2.9153	0	%100
49	MP1C	X	0	0	0	%100
50	MP1C	Z	-2.9153	-2.9153	0	%100
51	MP5B	X	0	0	0	%100
52	MP5B	Z	-2.9153	-2.9153	0	%100
53	MP4B	X	0	0	0	%100
54	MP4B	Z	-2.9153	-2.9153	0	%100
55	MP3B	X	0	0	0	%100
56	MP3B	Z	-2.9153	-2.9153	0	%100
57	MP2B	X	0	0	0	%100
58	MP2B	Z	-2.9153	-2.9153	0	%100
59	MP1B	X	0	0	0	%100
60	MP1B	Z	-2.9153	-2.9153	0	%100
61	M91	X	0	0	0	%100
62	M91	Z	-4.7123	-4.7123	0	%100
63	M88B	X	0	0	0	%100
64	M88B	Z	-3.3377	-3.3377	0	%100
65	M89A	X	0	0	0	%100
66	M89A	Z	-3.3378	-3.3378	0	%100
67	M82B	X	0	0	0	%100
68	M82B	Z	-1.1781	-1.1781	0	%100
69	M83A	X	0	0	0	%100
70	M83A	Z	-.8344	-.8344	0	%100
71	M84A	X	0	0	0	%100
72	M84A	Z	-.8344	-.8344	0	%100
73	M86	X	0	0	0	%100
74	M86	Z	-1.1781	-1.1781	0	%100
75	M87	X	0	0	0	%100
76	M87	Z	-.8344	-.8344	0	%100
77	M88A	X	0	0	0	%100
78	M88A	Z	-.8344	-.8344	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	M76	X	.498	.498	0	%100
2	M76	Z	-.8625	-.8625	0	%100
3	M84	X	.477	.477	0	%100
4	M84	Z	-.8262	-.8262	0	%100
5	M28A	X	2.8571	2.8571	0	%100
6	M28A	Z	-4.9487	-4.9487	0	%100
7	M15	X	.498	.498	0	%100
8	M15	Z	-.8625	-.8625	0	%100
9	M21	X	.477	.477	0	%100
10	M21	Z	-.8262	-.8262	0	%100
11	M27	X	1.9919	1.9919	0	%100
12	M27	Z	-3.45	-3.45	0	%100
13	M33	X	0	0	0	%100
14	M33	Z	0	0	0	%100
15	M39	X	2.8571	2.8571	0	%100
16	M39	Z	-4.9487	-4.9487	0	%100
17	M41	X	0	0	0	%100
18	M41	Z	0	0	0	%100
19	M43	X	1.5077	1.5077	0	%100
20	M43	Z	-2.6114	-2.6114	0	%100
21	M50	X	0	0	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location	End Location
22	M50	Z	0	0	0	%100
23	M36	X	.3938	.3938	0	%100
24	M36	Z	-.6821	-.6821	0	%100
25	M40	X	.3938	.3938	0	%100
26	M40	Z	-.6821	-.6821	0	%100
27	M41B	X	1.5077	1.5077	0	%100
28	M41B	Z	-2.6114	-2.6114	0	%100
29	M42A	X	0	0	0	%100
30	M42A	Z	0	0	0	%100
31	MP5A	X	1.4577	1.4577	0	%100
32	MP5A	Z	-2.5248	-2.5248	0	%100
33	MP4A	X	1.4577	1.4577	0	%100
34	MP4A	Z	-2.5248	-2.5248	0	%100
35	MP3A	X	1.4577	1.4577	0	%100
36	MP3A	Z	-2.5248	-2.5248	0	%100
37	MP2A	X	1.4577	1.4577	0	%100
38	MP2A	Z	-2.5248	-2.5248	0	%100
39	MP1A	X	1.4577	1.4577	0	%100
40	MP1A	Z	-2.5248	-2.5248	0	%100
41	MP5C	X	1.4577	1.4577	0	%100
42	MP5C	Z	-2.5248	-2.5248	0	%100
43	MP4C	X	1.4577	1.4577	0	%100
44	MP4C	Z	-2.5248	-2.5248	0	%100
45	MP3C	X	1.4577	1.4577	0	%100
46	MP3C	Z	-2.5248	-2.5248	0	%100
47	MP2C	X	1.4577	1.4577	0	%100
48	MP2C	Z	-2.5248	-2.5248	0	%100
49	MP1C	X	1.4577	1.4577	0	%100
50	MP1C	Z	-2.5248	-2.5248	0	%100
51	MP5B	X	1.4577	1.4577	0	%100
52	MP5B	Z	-2.5248	-2.5248	0	%100
53	MP4B	X	1.4577	1.4577	0	%100
54	MP4B	Z	-2.5248	-2.5248	0	%100
55	MP3B	X	1.4577	1.4577	0	%100
56	MP3B	Z	-2.5248	-2.5248	0	%100
57	MP2B	X	1.4577	1.4577	0	%100
58	MP2B	Z	-2.5248	-2.5248	0	%100
59	MP1B	X	1.4577	1.4577	0	%100
60	MP1B	Z	-2.5248	-2.5248	0	%100
61	M91	X	1.7671	1.7671	0	%100
62	M91	Z	-3.0607	-3.0607	0	%100
63	M88B	X	1.2516	1.2516	0	%100
64	M88B	Z	-2.1679	-2.1679	0	%100
65	M89A	X	1.2517	1.2517	0	%100
66	M89A	Z	-2.1679	-2.1679	0	%100
67	M82B	X	1.7671	1.7671	0	%100
68	M82B	Z	-3.0607	-3.0607	0	%100
69	M83A	X	1.2516	1.2516	0	%100
70	M83A	Z	-2.1679	-2.1679	0	%100
71	M84A	X	1.2517	1.2517	0	%100
72	M84A	Z	-2.1679	-2.1679	0	%100
73	M86	X	0	0	0	%100
74	M86	Z	0	0	0	%100
75	M87	X	0	0	0	%100
76	M87	Z	0	0	0	%100
77	M88A	X	0	0	0	%100
78	M88A	Z	0	0	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M76	X	2.5875	2.5875	0	%100
2	M76	Z	-1.4939	-1.4939	0	%100
3	M84	X	.2754	.2754	0	%100
4	M84	Z	-.159	-.159	0	%100
5	M28A	X	1.6496	1.6496	0	%100
6	M28A	Z	-.9524	-.9524	0	%100
7	M15	X	0	0	0	%100
8	M15	Z	0	0	0	%100
9	M21	X	1.1015	1.1015	0	%100
10	M21	Z	-.636	-.636	0	%100
11	M27	X	2.5875	2.5875	0	%100
12	M27	Z	-1.4939	-1.4939	0	%100
13	M33	X	.2754	.2754	0	%100
14	M33	Z	-.159	-.159	0	%100
15	M39	X	6.5982	6.5982	0	%100
16	M39	Z	-3.8095	-3.8095	0	%100
17	M41	X	1.6496	1.6496	0	%100
18	M41	Z	-.9524	-.9524	0	%100
19	M43	X	.8705	.8705	0	%100
20	M43	Z	-.5026	-.5026	0	%100
21	M50	X	.2274	.2274	0	%100
22	M50	Z	-.1313	-.1313	0	%100
23	M36	X	.2274	.2274	0	%100
24	M36	Z	-.1313	-.1313	0	%100
25	M40	X	.9094	.9094	0	%100
26	M40	Z	-.5251	-.5251	0	%100
27	M41B	X	3.4819	3.4819	0	%100
28	M41B	Z	-2.0103	-2.0103	0	%100
29	M42A	X	.8705	.8705	0	%100
30	M42A	Z	-.5026	-.5026	0	%100
31	MP5A	X	2.5248	2.5248	0	%100
32	MP5A	Z	-1.4577	-1.4577	0	%100
33	MP4A	X	2.5248	2.5248	0	%100
34	MP4A	Z	-1.4577	-1.4577	0	%100
35	MP3A	X	2.5248	2.5248	0	%100
36	MP3A	Z	-1.4577	-1.4577	0	%100
37	MP2A	X	2.5248	2.5248	0	%100
38	MP2A	Z	-1.4577	-1.4577	0	%100
39	MP1A	X	2.5248	2.5248	0	%100
40	MP1A	Z	-1.4577	-1.4577	0	%100
41	MP5C	X	2.5248	2.5248	0	%100
42	MP5C	Z	-1.4577	-1.4577	0	%100
43	MP4C	X	2.5248	2.5248	0	%100
44	MP4C	Z	-1.4577	-1.4577	0	%100
45	MP3C	X	2.5248	2.5248	0	%100
46	MP3C	Z	-1.4577	-1.4577	0	%100
47	MP2C	X	2.5248	2.5248	0	%100
48	MP2C	Z	-1.4577	-1.4577	0	%100
49	MP1C	X	2.5248	2.5248	0	%100
50	MP1C	Z	-1.4577	-1.4577	0	%100
51	MP5B	X	2.5248	2.5248	0	%100
52	MP5B	Z	-1.4577	-1.4577	0	%100
53	MP4B	X	2.5248	2.5248	0	%100
54	MP4B	Z	-1.4577	-1.4577	0	%100
55	MP3B	X	2.5248	2.5248	0	%100
56	MP3B	Z	-1.4577	-1.4577	0	%100
57	MP2B	X	2.5248	2.5248	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
58	MP2B	Z	-1.4577	-1.4577	0	%100
59	MP1B	X	2.5248	2.5248	0	%100
60	MP1B	Z	-1.4577	-1.4577	0	%100
61	M91	X	1.0202	1.0202	0	%100
62	M91	Z	-.589	-.589	0	%100
63	M88B	X	.7226	.7226	0	%100
64	M88B	Z	-.4172	-.4172	0	%100
65	M89A	X	.7226	.7226	0	%100
66	M89A	Z	-.4172	-.4172	0	%100
67	M82B	X	4.0809	4.0809	0	%100
68	M82B	Z	-2.3561	-2.3561	0	%100
69	M83A	X	2.8906	2.8906	0	%100
70	M83A	Z	-1.6689	-1.6689	0	%100
71	M84A	X	2.8906	2.8906	0	%100
72	M84A	Z	-1.6689	-1.6689	0	%100
73	M86	X	1.0202	1.0202	0	%100
74	M86	Z	-.589	-.589	0	%100
75	M87	X	.7226	.7226	0	%100
76	M87	Z	-.4172	-.4172	0	%100
77	M88A	X	.7226	.7226	0	%100
78	M88A	Z	-.4172	-.4172	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	M76	X	3.9838	3.9838	0	%100
2	M76	Z	0	0	0	%100
3	M84	X	0	0	0	%100
4	M84	Z	0	0	0	%100
5	M28A	X	0	0	0	%100
6	M28A	Z	0	0	0	%100
7	M15	X	.9959	.9959	0	%100
8	M15	Z	0	0	0	%100
9	M21	X	.954	.954	0	%100
10	M21	Z	0	0	0	%100
11	M27	X	.9959	.9959	0	%100
12	M27	Z	0	0	0	%100
13	M33	X	.954	.954	0	%100
14	M33	Z	0	0	0	%100
15	M39	X	5.7142	5.7142	0	%100
16	M39	Z	0	0	0	%100
17	M41	X	5.7142	5.7142	0	%100
18	M41	Z	0	0	0	%100
19	M43	X	0	0	0	%100
20	M43	Z	0	0	0	%100
21	M50	X	.7876	.7876	0	%100
22	M50	Z	0	0	0	%100
23	M36	X	0	0	0	%100
24	M36	Z	0	0	0	%100
25	M40	X	.7876	.7876	0	%100
26	M40	Z	0	0	0	%100
27	M41B	X	3.0154	3.0154	0	%100
28	M41B	Z	0	0	0	%100
29	M42A	X	3.0154	3.0154	0	%100
30	M42A	Z	0	0	0	%100
31	MP5A	X	2.9153	2.9153	0	%100
32	MP5A	Z	0	0	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
33	MP4A	X	2.9153	2.9153	0	%100
34	MP4A	Z	0	0	0	%100
35	MP3A	X	2.9153	2.9153	0	%100
36	MP3A	Z	0	0	0	%100
37	MP2A	X	2.9153	2.9153	0	%100
38	MP2A	Z	0	0	0	%100
39	MP1A	X	2.9153	2.9153	0	%100
40	MP1A	Z	0	0	0	%100
41	MP5C	X	2.9153	2.9153	0	%100
42	MP5C	Z	0	0	0	%100
43	MP4C	X	2.9153	2.9153	0	%100
44	MP4C	Z	0	0	0	%100
45	MP3C	X	2.9153	2.9153	0	%100
46	MP3C	Z	0	0	0	%100
47	MP2C	X	2.9153	2.9153	0	%100
48	MP2C	Z	0	0	0	%100
49	MP1C	X	2.9153	2.9153	0	%100
50	MP1C	Z	0	0	0	%100
51	MP5B	X	2.9153	2.9153	0	%100
52	MP5B	Z	0	0	0	%100
53	MP4B	X	2.9153	2.9153	0	%100
54	MP4B	Z	0	0	0	%100
55	MP3B	X	2.9153	2.9153	0	%100
56	MP3B	Z	0	0	0	%100
57	MP2B	X	2.9153	2.9153	0	%100
58	MP2B	Z	0	0	0	%100
59	MP1B	X	2.9153	2.9153	0	%100
60	MP1B	Z	0	0	0	%100
61	M91	X	0	0	0	%100
62	M91	Z	0	0	0	%100
63	M88B	X	0	0	0	%100
64	M88B	Z	0	0	0	%100
65	M89A	X	0	0	0	%100
66	M89A	Z	0	0	0	%100
67	M82B	X	3.5342	3.5342	0	%100
68	M82B	Z	0	0	0	%100
69	M83A	X	2.5033	2.5033	0	%100
70	M83A	Z	0	0	0	%100
71	M84A	X	2.5033	2.5033	0	%100
72	M84A	Z	0	0	0	%100
73	M86	X	3.5342	3.5342	0	%100
74	M86	Z	0	0	0	%100
75	M87	X	2.5033	2.5033	0	%100
76	M87	Z	0	0	0	%100
77	M88A	X	2.5033	2.5033	0	%100
78	M88A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M76	X	2.5875	2.5875	0	%100
2	M76	Z	1.4939	1.4939	0	%100
3	M84	X	.2754	.2754	0	%100
4	M84	Z	.159	.159	0	%100
5	M28A	X	1.6496	1.6496	0	%100
6	M28A	Z	.9524	.9524	0	%100
7	M15	X	2.5875	2.5875	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Locationft	End Locationft
8	M15	Z	1.4939	1.4939	0	%100
9	M21	X	.2754	.2754	0	%100
10	M21	Z	.159	.159	0	%100
11	M27	X	0	0	0	%100
12	M27	Z	0	0	0	%100
13	M33	X	1.1015	1.1015	0	%100
14	M33	Z	.636	.636	0	%100
15	M39	X	1.6496	1.6496	0	%100
16	M39	Z	.9524	.9524	0	%100
17	M41	X	6.5982	6.5982	0	%100
18	M41	Z	3.8095	3.8095	0	%100
19	M43	X	.8705	.8705	0	%100
20	M43	Z	.5026	.5026	0	%100
21	M50	X	.9094	.9094	0	%100
22	M50	Z	.5251	.5251	0	%100
23	M36	X	.2274	.2274	0	%100
24	M36	Z	.1313	.1313	0	%100
25	M40	X	.2274	.2274	0	%100
26	M40	Z	.1313	.1313	0	%100
27	M41B	X	.8705	.8705	0	%100
28	M41B	Z	.5026	.5026	0	%100
29	M42A	X	3.4819	3.4819	0	%100
30	M42A	Z	2.0103	2.0103	0	%100
31	MP5A	X	2.5248	2.5248	0	%100
32	MP5A	Z	1.4577	1.4577	0	%100
33	MP4A	X	2.5248	2.5248	0	%100
34	MP4A	Z	1.4577	1.4577	0	%100
35	MP3A	X	2.5248	2.5248	0	%100
36	MP3A	Z	1.4577	1.4577	0	%100
37	MP2A	X	2.5248	2.5248	0	%100
38	MP2A	Z	1.4577	1.4577	0	%100
39	MP1A	X	2.5248	2.5248	0	%100
40	MP1A	Z	1.4577	1.4577	0	%100
41	MP5C	X	2.5248	2.5248	0	%100
42	MP5C	Z	1.4577	1.4577	0	%100
43	MP4C	X	2.5248	2.5248	0	%100
44	MP4C	Z	1.4577	1.4577	0	%100
45	MP3C	X	2.5248	2.5248	0	%100
46	MP3C	Z	1.4577	1.4577	0	%100
47	MP2C	X	2.5248	2.5248	0	%100
48	MP2C	Z	1.4577	1.4577	0	%100
49	MP1C	X	2.5248	2.5248	0	%100
50	MP1C	Z	1.4577	1.4577	0	%100
51	MP5B	X	2.5248	2.5248	0	%100
52	MP5B	Z	1.4577	1.4577	0	%100
53	MP4B	X	2.5248	2.5248	0	%100
54	MP4B	Z	1.4577	1.4577	0	%100
55	MP3B	X	2.5248	2.5248	0	%100
56	MP3B	Z	1.4577	1.4577	0	%100
57	MP2B	X	2.5248	2.5248	0	%100
58	MP2B	Z	1.4577	1.4577	0	%100
59	MP1B	X	2.5248	2.5248	0	%100
60	MP1B	Z	1.4577	1.4577	0	%100
61	M91	X	1.0202	1.0202	0	%100
62	M91	Z	.589	.589	0	%100
63	M88B	X	.7226	.7226	0	%100
64	M88B	Z	.4172	.4172	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
65	M89A	X	.7226	.7226	0	%100
66	M89A	Z	.4172	.4172	0	%100
67	M82B	X	1.0202	1.0202	0	%100
68	M82B	Z	.589	.589	0	%100
69	M83A	X	.7226	.7226	0	%100
70	M83A	Z	.4172	.4172	0	%100
71	M84A	X	.7226	.7226	0	%100
72	M84A	Z	.4172	.4172	0	%100
73	M86	X	4.0809	4.0809	0	%100
74	M86	Z	2.3561	2.3561	0	%100
75	M87	X	2.8906	2.8906	0	%100
76	M87	Z	1.6689	1.6689	0	%100
77	M88A	X	2.8906	2.8906	0	%100
78	M88A	Z	1.6689	1.6689	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	M76	X	.498	.498	0	%100
2	M76	Z	.8625	.8625	0	%100
3	M84	X	.477	.477	0	%100
4	M84	Z	.8262	.8262	0	%100
5	M28A	X	2.8571	2.8571	0	%100
6	M28A	Z	4.9487	4.9487	0	%100
7	M15	X	1.9919	1.9919	0	%100
8	M15	Z	3.45	3.45	0	%100
9	M21	X	0	0	0	%100
10	M21	Z	0	0	0	%100
11	M27	X	.498	.498	0	%100
12	M27	Z	.8625	.8625	0	%100
13	M33	X	.477	.477	0	%100
14	M33	Z	.8262	.8262	0	%100
15	M39	X	0	0	0	%100
16	M39	Z	0	0	0	%100
17	M41	X	2.8571	2.8571	0	%100
18	M41	Z	4.9487	4.9487	0	%100
19	M43	X	1.5077	1.5077	0	%100
20	M43	Z	2.6114	2.6114	0	%100
21	M50	X	.3938	.3938	0	%100
22	M50	Z	.6821	.6821	0	%100
23	M36	X	.3938	.3938	0	%100
24	M36	Z	.6821	.6821	0	%100
25	M40	X	0	0	0	%100
26	M40	Z	0	0	0	%100
27	M41B	X	0	0	0	%100
28	M41B	Z	0	0	0	%100
29	M42A	X	1.5077	1.5077	0	%100
30	M42A	Z	2.6114	2.6114	0	%100
31	MP5A	X	1.4577	1.4577	0	%100
32	MP5A	Z	2.5248	2.5248	0	%100
33	MP4A	X	1.4577	1.4577	0	%100
34	MP4A	Z	2.5248	2.5248	0	%100
35	MP3A	X	1.4577	1.4577	0	%100
36	MP3A	Z	2.5248	2.5248	0	%100
37	MP2A	X	1.4577	1.4577	0	%100
38	MP2A	Z	2.5248	2.5248	0	%100
39	MP1A	X	1.4577	1.4577	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
40	MP1A	Z	2.5248	2.5248	0	%100
41	MP5C	X	1.4577	1.4577	0	%100
42	MP5C	Z	2.5248	2.5248	0	%100
43	MP4C	X	1.4577	1.4577	0	%100
44	MP4C	Z	2.5248	2.5248	0	%100
45	MP3C	X	1.4577	1.4577	0	%100
46	MP3C	Z	2.5248	2.5248	0	%100
47	MP2C	X	1.4577	1.4577	0	%100
48	MP2C	Z	2.5248	2.5248	0	%100
49	MP1C	X	1.4577	1.4577	0	%100
50	MP1C	Z	2.5248	2.5248	0	%100
51	MP5B	X	1.4577	1.4577	0	%100
52	MP5B	Z	2.5248	2.5248	0	%100
53	MP4B	X	1.4577	1.4577	0	%100
54	MP4B	Z	2.5248	2.5248	0	%100
55	MP3B	X	1.4577	1.4577	0	%100
56	MP3B	Z	2.5248	2.5248	0	%100
57	MP2B	X	1.4577	1.4577	0	%100
58	MP2B	Z	2.5248	2.5248	0	%100
59	MP1B	X	1.4577	1.4577	0	%100
60	MP1B	Z	2.5248	2.5248	0	%100
61	M91	X	1.7671	1.7671	0	%100
62	M91	Z	3.0607	3.0607	0	%100
63	M88B	X	1.2516	1.2516	0	%100
64	M88B	Z	2.1679	2.1679	0	%100
65	M89A	X	1.2517	1.2517	0	%100
66	M89A	Z	2.1679	2.1679	0	%100
67	M82B	X	0	0	0	%100
68	M82B	Z	0	0	0	%100
69	M83A	X	0	0	0	%100
70	M83A	Z	0	0	0	%100
71	M84A	X	0	0	0	%100
72	M84A	Z	0	0	0	%100
73	M86	X	1.7671	1.7671	0	%100
74	M86	Z	3.0607	3.0607	0	%100
75	M87	X	1.2516	1.2516	0	%100
76	M87	Z	2.1679	2.1679	0	%100
77	M88A	X	1.2517	1.2517	0	%100
78	M88A	Z	2.1679	2.1679	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	M76	X	0	0	0	%100
2	M76	Z	0	0	0	%100
3	M84	X	0	0	0	%100
4	M84	Z	1.272	1.272	0	%100
5	M28A	X	0	0	0	%100
6	M28A	Z	7.619	7.619	0	%100
7	M15	X	0	0	0	%100
8	M15	Z	2.9878	2.9878	0	%100
9	M21	X	0	0	0	%100
10	M21	Z	.318	.318	0	%100
11	M27	X	0	0	0	%100
12	M27	Z	2.9878	2.9878	0	%100
13	M33	X	0	0	0	%100
14	M33	Z	.318	.318	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]
15	M39	X	0	0	0	%100
16	M39	Z	1.9047	1.9047	0	%100
17	M41	X	0	0	0	%100
18	M41	Z	1.9047	1.9047	0	%100
19	M43	X	0	0	0	%100
20	M43	Z	4.0206	4.0206	0	%100
21	M50	X	0	0	0	%100
22	M50	Z	.2625	.2625	0	%100
23	M36	X	0	0	0	%100
24	M36	Z	1.0501	1.0501	0	%100
25	M40	X	0	0	0	%100
26	M40	Z	.2625	.2625	0	%100
27	M41B	X	0	0	0	%100
28	M41B	Z	1.0051	1.0051	0	%100
29	M42A	X	0	0	0	%100
30	M42A	Z	1.0051	1.0051	0	%100
31	MP5A	X	0	0	0	%100
32	MP5A	Z	2.9153	2.9153	0	%100
33	MP4A	X	0	0	0	%100
34	MP4A	Z	2.9153	2.9153	0	%100
35	MP3A	X	0	0	0	%100
36	MP3A	Z	2.9153	2.9153	0	%100
37	MP2A	X	0	0	0	%100
38	MP2A	Z	2.9153	2.9153	0	%100
39	MP1A	X	0	0	0	%100
40	MP1A	Z	2.9153	2.9153	0	%100
41	MP5C	X	0	0	0	%100
42	MP5C	Z	2.9153	2.9153	0	%100
43	MP4C	X	0	0	0	%100
44	MP4C	Z	2.9153	2.9153	0	%100
45	MP3C	X	0	0	0	%100
46	MP3C	Z	2.9153	2.9153	0	%100
47	MP2C	X	0	0	0	%100
48	MP2C	Z	2.9153	2.9153	0	%100
49	MP1C	X	0	0	0	%100
50	MP1C	Z	2.9153	2.9153	0	%100
51	MP5B	X	0	0	0	%100
52	MP5B	Z	2.9153	2.9153	0	%100
53	MP4B	X	0	0	0	%100
54	MP4B	Z	2.9153	2.9153	0	%100
55	MP3B	X	0	0	0	%100
56	MP3B	Z	2.9153	2.9153	0	%100
57	MP2B	X	0	0	0	%100
58	MP2B	Z	2.9153	2.9153	0	%100
59	MP1B	X	0	0	0	%100
60	MP1B	Z	2.9153	2.9153	0	%100
61	M91	X	0	0	0	%100
62	M91	Z	4.7123	4.7123	0	%100
63	M88B	X	0	0	0	%100
64	M88B	Z	3.3377	3.3377	0	%100
65	M89A	X	0	0	0	%100
66	M89A	Z	3.3378	3.3378	0	%100
67	M82B	X	0	0	0	%100
68	M82B	Z	1.1781	1.1781	0	%100
69	M83A	X	0	0	0	%100
70	M83A	Z	.8344	.8344	0	%100
71	M84A	X	0	0	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]
72	M84A	Z	.8344	.8344	0	%100
73	M86	X	0	0	0	%100
74	M86	Z	1.1781	1.1781	0	%100
75	M87	X	0	0	0	%100
76	M87	Z	.8344	.8344	0	%100
77	M88A	X	0	0	0	%100
78	M88A	Z	.8344	.8344	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	M76	X	-498	-498	0	%100
2	M76	Z	.8625	.8625	0	%100
3	M84	X	-477	-477	0	%100
4	M84	Z	.8262	.8262	0	%100
5	M28A	X	-2.8571	-2.8571	0	%100
6	M28A	Z	4.9487	4.9487	0	%100
7	M15	X	-498	-498	0	%100
8	M15	Z	.8625	.8625	0	%100
9	M21	X	-477	-477	0	%100
10	M21	Z	.8262	.8262	0	%100
11	M27	X	-1.9919	-1.9919	0	%100
12	M27	Z	3.45	3.45	0	%100
13	M33	X	0	0	0	%100
14	M33	Z	0	0	0	%100
15	M39	X	-2.8571	-2.8571	0	%100
16	M39	Z	4.9487	4.9487	0	%100
17	M41	X	0	0	0	%100
18	M41	Z	0	0	0	%100
19	M43	X	-1.5077	-1.5077	0	%100
20	M43	Z	2.6114	2.6114	0	%100
21	M50	X	0	0	0	%100
22	M50	Z	0	0	0	%100
23	M36	X	-.3938	-.3938	0	%100
24	M36	Z	.6821	.6821	0	%100
25	M40	X	-.3938	-.3938	0	%100
26	M40	Z	.6821	.6821	0	%100
27	M41B	X	-1.5077	-1.5077	0	%100
28	M41B	Z	2.6114	2.6114	0	%100
29	M42A	X	0	0	0	%100
30	M42A	Z	0	0	0	%100
31	MP5A	X	-1.4577	-1.4577	0	%100
32	MP5A	Z	2.5248	2.5248	0	%100
33	MP4A	X	-1.4577	-1.4577	0	%100
34	MP4A	Z	2.5248	2.5248	0	%100
35	MP3A	X	-1.4577	-1.4577	0	%100
36	MP3A	Z	2.5248	2.5248	0	%100
37	MP2A	X	-1.4577	-1.4577	0	%100
38	MP2A	Z	2.5248	2.5248	0	%100
39	MP1A	X	-1.4577	-1.4577	0	%100
40	MP1A	Z	2.5248	2.5248	0	%100
41	MP5C	X	-1.4577	-1.4577	0	%100
42	MP5C	Z	2.5248	2.5248	0	%100
43	MP4C	X	-1.4577	-1.4577	0	%100
44	MP4C	Z	2.5248	2.5248	0	%100
45	MP3C	X	-1.4577	-1.4577	0	%100
46	MP3C	Z	2.5248	2.5248	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
47	MP2C	X	-1.4577	-1.4577	0	%100
48	MP2C	Z	2.5248	2.5248	0	%100
49	MP1C	X	-1.4577	-1.4577	0	%100
50	MP1C	Z	2.5248	2.5248	0	%100
51	MP5B	X	-1.4577	-1.4577	0	%100
52	MP5B	Z	2.5248	2.5248	0	%100
53	MP4B	X	-1.4577	-1.4577	0	%100
54	MP4B	Z	2.5248	2.5248	0	%100
55	MP3B	X	-1.4577	-1.4577	0	%100
56	MP3B	Z	2.5248	2.5248	0	%100
57	MP2B	X	-1.4577	-1.4577	0	%100
58	MP2B	Z	2.5248	2.5248	0	%100
59	MP1B	X	-1.4577	-1.4577	0	%100
60	MP1B	Z	2.5248	2.5248	0	%100
61	M91	X	-1.7671	-1.7671	0	%100
62	M91	Z	3.0607	3.0607	0	%100
63	M88B	X	-1.2516	-1.2516	0	%100
64	M88B	Z	2.1679	2.1679	0	%100
65	M89A	X	-1.2517	-1.2517	0	%100
66	M89A	Z	2.1679	2.1679	0	%100
67	M82B	X	-1.7671	-1.7671	0	%100
68	M82B	Z	3.0607	3.0607	0	%100
69	M83A	X	-1.2516	-1.2516	0	%100
70	M83A	Z	2.1679	2.1679	0	%100
71	M84A	X	-1.2517	-1.2517	0	%100
72	M84A	Z	2.1679	2.1679	0	%100
73	M86	X	0	0	0	%100
74	M86	Z	0	0	0	%100
75	M87	X	0	0	0	%100
76	M87	Z	0	0	0	%100
77	M88A	X	0	0	0	%100
78	M88A	Z	0	0	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	M76	X	-2.5875	-2.5875	0	%100
2	M76	Z	1.4939	1.4939	0	%100
3	M84	X	-.2754	-.2754	0	%100
4	M84	Z	.159	.159	0	%100
5	M28A	X	-1.6496	-1.6496	0	%100
6	M28A	Z	.9524	.9524	0	%100
7	M15	X	0	0	0	%100
8	M15	Z	0	0	0	%100
9	M21	X	-1.1015	-1.1015	0	%100
10	M21	Z	.636	.636	0	%100
11	M27	X	-2.5875	-2.5875	0	%100
12	M27	Z	1.4939	1.4939	0	%100
13	M33	X	-.2754	-.2754	0	%100
14	M33	Z	.159	.159	0	%100
15	M39	X	-6.5982	-6.5982	0	%100
16	M39	Z	3.8095	3.8095	0	%100
17	M41	X	-1.6496	-1.6496	0	%100
18	M41	Z	.9524	.9524	0	%100
19	M43	X	-.8705	-.8705	0	%100
20	M43	Z	.5026	.5026	0	%100
21	M50	X	-.2274	-.2274	0	%100



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 Designer :
 Job Number : Project # 23777133
 Model Name : Antenna Mount Analysis

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Locationft	End Locationft
22	M50	Z	.1313	.1313	0	%100
23	M36	X	-.2274	-.2274	0	%100
24	M36	Z	.1313	.1313	0	%100
25	M40	X	-.9094	-.9094	0	%100
26	M40	Z	.5251	.5251	0	%100
27	M41B	X	-3.4819	-3.4819	0	%100
28	M41B	Z	2.0103	2.0103	0	%100
29	M42A	X	-.8705	-.8705	0	%100
30	M42A	Z	.5026	.5026	0	%100
31	MP5A	X	-2.5248	-2.5248	0	%100
32	MP5A	Z	1.4577	1.4577	0	%100
33	MP4A	X	-2.5248	-2.5248	0	%100
34	MP4A	Z	1.4577	1.4577	0	%100
35	MP3A	X	-2.5248	-2.5248	0	%100
36	MP3A	Z	1.4577	1.4577	0	%100
37	MP2A	X	-2.5248	-2.5248	0	%100
38	MP2A	Z	1.4577	1.4577	0	%100
39	MP1A	X	-2.5248	-2.5248	0	%100
40	MP1A	Z	1.4577	1.4577	0	%100
41	MP5C	X	-2.5248	-2.5248	0	%100
42	MP5C	Z	1.4577	1.4577	0	%100
43	MP4C	X	-2.5248	-2.5248	0	%100
44	MP4C	Z	1.4577	1.4577	0	%100
45	MP3C	X	-2.5248	-2.5248	0	%100
46	MP3C	Z	1.4577	1.4577	0	%100
47	MP2C	X	-2.5248	-2.5248	0	%100
48	MP2C	Z	1.4577	1.4577	0	%100
49	MP1C	X	-2.5248	-2.5248	0	%100
50	MP1C	Z	1.4577	1.4577	0	%100
51	MP5B	X	-2.5248	-2.5248	0	%100
52	MP5B	Z	1.4577	1.4577	0	%100
53	MP4B	X	-2.5248	-2.5248	0	%100
54	MP4B	Z	1.4577	1.4577	0	%100
55	MP3B	X	-2.5248	-2.5248	0	%100
56	MP3B	Z	1.4577	1.4577	0	%100
57	MP2B	X	-2.5248	-2.5248	0	%100
58	MP2B	Z	1.4577	1.4577	0	%100
59	MP1B	X	-2.5248	-2.5248	0	%100
60	MP1B	Z	1.4577	1.4577	0	%100
61	M91	X	-1.0202	-1.0202	0	%100
62	M91	Z	.589	.589	0	%100
63	M88B	X	-.7226	-.7226	0	%100
64	M88B	Z	.4172	.4172	0	%100
65	M89A	X	-.7226	-.7226	0	%100
66	M89A	Z	.4172	.4172	0	%100
67	M82B	X	-4.0809	-4.0809	0	%100
68	M82B	Z	2.3561	2.3561	0	%100
69	M83A	X	-2.8906	-2.8906	0	%100
70	M83A	Z	1.6689	1.6689	0	%100
71	M84A	X	-2.8906	-2.8906	0	%100
72	M84A	Z	1.6689	1.6689	0	%100
73	M86	X	-1.0202	-1.0202	0	%100
74	M86	Z	.589	.589	0	%100
75	M87	X	-.7226	-.7226	0	%100
76	M87	Z	.4172	.4172	0	%100
77	M88A	X	-.7226	-.7226	0	%100
78	M88A	Z	.4172	.4172	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M76	X	-3.9838	-3.9838	0	%100
2	M76	Z	0	0	0	%100
3	M84	X	0	0	0	%100
4	M84	Z	0	0	0	%100
5	M28A	X	0	0	0	%100
6	M28A	Z	0	0	0	%100
7	M15	X	-.9959	-.9959	0	%100
8	M15	Z	0	0	0	%100
9	M21	X	-.954	-.954	0	%100
10	M21	Z	0	0	0	%100
11	M27	X	-.9959	-.9959	0	%100
12	M27	Z	0	0	0	%100
13	M33	X	-.954	-.954	0	%100
14	M33	Z	0	0	0	%100
15	M39	X	-5.7142	-5.7142	0	%100
16	M39	Z	0	0	0	%100
17	M41	X	-5.7142	-5.7142	0	%100
18	M41	Z	0	0	0	%100
19	M43	X	0	0	0	%100
20	M43	Z	0	0	0	%100
21	M50	X	-.7876	-.7876	0	%100
22	M50	Z	0	0	0	%100
23	M36	X	0	0	0	%100
24	M36	Z	0	0	0	%100
25	M40	X	-.7876	-.7876	0	%100
26	M40	Z	0	0	0	%100
27	M41B	X	-3.0154	-3.0154	0	%100
28	M41B	Z	0	0	0	%100
29	M42A	X	-3.0154	-3.0154	0	%100
30	M42A	Z	0	0	0	%100
31	MP5A	X	-2.9153	-2.9153	0	%100
32	MP5A	Z	0	0	0	%100
33	MP4A	X	-2.9153	-2.9153	0	%100
34	MP4A	Z	0	0	0	%100
35	MP3A	X	-2.9153	-2.9153	0	%100
36	MP3A	Z	0	0	0	%100
37	MP2A	X	-2.9153	-2.9153	0	%100
38	MP2A	Z	0	0	0	%100
39	MP1A	X	-2.9153	-2.9153	0	%100
40	MP1A	Z	0	0	0	%100
41	MP5C	X	-2.9153	-2.9153	0	%100
42	MP5C	Z	0	0	0	%100
43	MP4C	X	-2.9153	-2.9153	0	%100
44	MP4C	Z	0	0	0	%100
45	MP3C	X	-2.9153	-2.9153	0	%100
46	MP3C	Z	0	0	0	%100
47	MP2C	X	-2.9153	-2.9153	0	%100
48	MP2C	Z	0	0	0	%100
49	MP1C	X	-2.9153	-2.9153	0	%100
50	MP1C	Z	0	0	0	%100
51	MP5B	X	-2.9153	-2.9153	0	%100
52	MP5B	Z	0	0	0	%100
53	MP4B	X	-2.9153	-2.9153	0	%100
54	MP4B	Z	0	0	0	%100
55	MP3B	X	-2.9153	-2.9153	0	%100
56	MP3B	Z	0	0	0	%100
57	MP2B	X	-2.9153	-2.9153	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
58	MP2B	Z	0	0	0	%100
59	MP1B	X	-2.9153	-2.9153	0	%100
60	MP1B	Z	0	0	0	%100
61	M91	X	0	0	0	%100
62	M91	Z	0	0	0	%100
63	M88B	X	0	0	0	%100
64	M88B	Z	0	0	0	%100
65	M89A	X	0	0	0	%100
66	M89A	Z	0	0	0	%100
67	M82B	X	-3.5342	-3.5342	0	%100
68	M82B	Z	0	0	0	%100
69	M83A	X	-2.5033	-2.5033	0	%100
70	M83A	Z	0	0	0	%100
71	M84A	X	-2.5033	-2.5033	0	%100
72	M84A	Z	0	0	0	%100
73	M86	X	-3.5342	-3.5342	0	%100
74	M86	Z	0	0	0	%100
75	M87	X	-2.5033	-2.5033	0	%100
76	M87	Z	0	0	0	%100
77	M88A	X	-2.5033	-2.5033	0	%100
78	M88A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M76	X	-2.5875	-2.5875	0	%100
2	M76	Z	-1.4939	-1.4939	0	%100
3	M84	X	-2.2754	-2.2754	0	%100
4	M84	Z	-.159	-.159	0	%100
5	M28A	X	-1.6496	-1.6496	0	%100
6	M28A	Z	-.9524	-.9524	0	%100
7	M15	X	-2.5875	-2.5875	0	%100
8	M15	Z	-1.4939	-1.4939	0	%100
9	M21	X	-.2754	-.2754	0	%100
10	M21	Z	-.159	-.159	0	%100
11	M27	X	0	0	0	%100
12	M27	Z	0	0	0	%100
13	M33	X	-1.1015	-1.1015	0	%100
14	M33	Z	-.636	-.636	0	%100
15	M39	X	-1.6496	-1.6496	0	%100
16	M39	Z	-.9524	-.9524	0	%100
17	M41	X	-6.5982	-6.5982	0	%100
18	M41	Z	-3.8095	-3.8095	0	%100
19	M43	X	-.8705	-.8705	0	%100
20	M43	Z	-.5026	-.5026	0	%100
21	M50	X	-.9094	-.9094	0	%100
22	M50	Z	-.5251	-.5251	0	%100
23	M36	X	-.2274	-.2274	0	%100
24	M36	Z	-.1313	-.1313	0	%100
25	M40	X	-.2274	-.2274	0	%100
26	M40	Z	-.1313	-.1313	0	%100
27	M41B	X	-.8705	-.8705	0	%100
28	M41B	Z	-.5026	-.5026	0	%100
29	M42A	X	-3.4819	-3.4819	0	%100
30	M42A	Z	-2.0103	-2.0103	0	%100
31	MP5A	X	-2.5248	-2.5248	0	%100
32	MP5A	Z	-1.4577	-1.4577	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
33	MP4A	X	-2.5248	-2.5248	0	%100
34	MP4A	Z	-1.4577	-1.4577	0	%100
35	MP3A	X	-2.5248	-2.5248	0	%100
36	MP3A	Z	-1.4577	-1.4577	0	%100
37	MP2A	X	-2.5248	-2.5248	0	%100
38	MP2A	Z	-1.4577	-1.4577	0	%100
39	MP1A	X	-2.5248	-2.5248	0	%100
40	MP1A	Z	-1.4577	-1.4577	0	%100
41	MP5C	X	-2.5248	-2.5248	0	%100
42	MP5C	Z	-1.4577	-1.4577	0	%100
43	MP4C	X	-2.5248	-2.5248	0	%100
44	MP4C	Z	-1.4577	-1.4577	0	%100
45	MP3C	X	-2.5248	-2.5248	0	%100
46	MP3C	Z	-1.4577	-1.4577	0	%100
47	MP2C	X	-2.5248	-2.5248	0	%100
48	MP2C	Z	-1.4577	-1.4577	0	%100
49	MP1C	X	-2.5248	-2.5248	0	%100
50	MP1C	Z	-1.4577	-1.4577	0	%100
51	MP5B	X	-2.5248	-2.5248	0	%100
52	MP5B	Z	-1.4577	-1.4577	0	%100
53	MP4B	X	-2.5248	-2.5248	0	%100
54	MP4B	Z	-1.4577	-1.4577	0	%100
55	MP3B	X	-2.5248	-2.5248	0	%100
56	MP3B	Z	-1.4577	-1.4577	0	%100
57	MP2B	X	-2.5248	-2.5248	0	%100
58	MP2B	Z	-1.4577	-1.4577	0	%100
59	MP1B	X	-2.5248	-2.5248	0	%100
60	MP1B	Z	-1.4577	-1.4577	0	%100
61	M91	X	-1.0202	-1.0202	0	%100
62	M91	Z	-0.589	-0.589	0	%100
63	M88B	X	-0.7226	-0.7226	0	%100
64	M88B	Z	-0.4172	-0.4172	0	%100
65	M89A	X	-0.7226	-0.7226	0	%100
66	M89A	Z	-0.4172	-0.4172	0	%100
67	M82B	X	-1.0202	-1.0202	0	%100
68	M82B	Z	-0.589	-0.589	0	%100
69	M83A	X	-0.7226	-0.7226	0	%100
70	M83A	Z	-0.4172	-0.4172	0	%100
71	M84A	X	-0.7226	-0.7226	0	%100
72	M84A	Z	-0.4172	-0.4172	0	%100
73	M86	X	-4.0809	-4.0809	0	%100
74	M86	Z	-2.3561	-2.3561	0	%100
75	M87	X	-2.8906	-2.8906	0	%100
76	M87	Z	-1.6689	-1.6689	0	%100
77	M88A	X	-2.8906	-2.8906	0	%100
78	M88A	Z	-1.6689	-1.6689	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	M76	X	-0.498	-0.498	0	%100
2	M76	Z	-0.8625	-0.8625	0	%100
3	M84	X	-0.477	-0.477	0	%100
4	M84	Z	-0.8262	-0.8262	0	%100
5	M28A	X	-2.8571	-2.8571	0	%100
6	M28A	Z	-4.9487	-4.9487	0	%100
7	M15	X	-1.9919	-1.9919	0	%100



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project # 23777133
 Model Name : Antenna Mount Analysis

July 21, 2023
 12:46 PM
 Checked By: _____

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Locationft	End Locationft
8	M15	Z	-3.45	-3.45	0	%100
9	M21	X	0	0	0	%100
10	M21	Z	0	0	0	%100
11	M27	X	-.498	-.498	0	%100
12	M27	Z	-.8625	-.8625	0	%100
13	M33	X	-.477	-.477	0	%100
14	M33	Z	-.8262	-.8262	0	%100
15	M39	X	0	0	0	%100
16	M39	Z	0	0	0	%100
17	M41	X	-2.8571	-2.8571	0	%100
18	M41	Z	-4.9487	-4.9487	0	%100
19	M43	X	-1.5077	-1.5077	0	%100
20	M43	Z	-2.6114	-2.6114	0	%100
21	M50	X	-.3938	-.3938	0	%100
22	M50	Z	-.6821	-.6821	0	%100
23	M36	X	-.3938	-.3938	0	%100
24	M36	Z	-.6821	-.6821	0	%100
25	M40	X	0	0	0	%100
26	M40	Z	0	0	0	%100
27	M41B	X	0	0	0	%100
28	M41B	Z	0	0	0	%100
29	M42A	X	-1.5077	-1.5077	0	%100
30	M42A	Z	-2.6114	-2.6114	0	%100
31	MP5A	X	-1.4577	-1.4577	0	%100
32	MP5A	Z	-2.5248	-2.5248	0	%100
33	MP4A	X	-1.4577	-1.4577	0	%100
34	MP4A	Z	-2.5248	-2.5248	0	%100
35	MP3A	X	-1.4577	-1.4577	0	%100
36	MP3A	Z	-2.5248	-2.5248	0	%100
37	MP2A	X	-1.4577	-1.4577	0	%100
38	MP2A	Z	-2.5248	-2.5248	0	%100
39	MP1A	X	-1.4577	-1.4577	0	%100
40	MP1A	Z	-2.5248	-2.5248	0	%100
41	MP5C	X	-1.4577	-1.4577	0	%100
42	MP5C	Z	-2.5248	-2.5248	0	%100
43	MP4C	X	-1.4577	-1.4577	0	%100
44	MP4C	Z	-2.5248	-2.5248	0	%100
45	MP3C	X	-1.4577	-1.4577	0	%100
46	MP3C	Z	-2.5248	-2.5248	0	%100
47	MP2C	X	-1.4577	-1.4577	0	%100
48	MP2C	Z	-2.5248	-2.5248	0	%100
49	MP1C	X	-1.4577	-1.4577	0	%100
50	MP1C	Z	-2.5248	-2.5248	0	%100
51	MP5B	X	-1.4577	-1.4577	0	%100
52	MP5B	Z	-2.5248	-2.5248	0	%100
53	MP4B	X	-1.4577	-1.4577	0	%100
54	MP4B	Z	-2.5248	-2.5248	0	%100
55	MP3B	X	-1.4577	-1.4577	0	%100
56	MP3B	Z	-2.5248	-2.5248	0	%100
57	MP2B	X	-1.4577	-1.4577	0	%100
58	MP2B	Z	-2.5248	-2.5248	0	%100
59	MP1B	X	-1.4577	-1.4577	0	%100
60	MP1B	Z	-2.5248	-2.5248	0	%100
61	M91	X	-1.7671	-1.7671	0	%100
62	M91	Z	-3.0607	-3.0607	0	%100
63	M88B	X	-1.2516	-1.2516	0	%100
64	M88B	Z	-2.1679	-2.1679	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
65	M89A	X	-1.2517	-1.2517	0	%100
66	M89A	Z	-2.1679	-2.1679	0	%100
67	M82B	X	0	0	0	%100
68	M82B	Z	0	0	0	%100
69	M83A	X	0	0	0	%100
70	M83A	Z	0	0	0	%100
71	M84A	X	0	0	0	%100
72	M84A	Z	0	0	0	%100
73	M86	X	-1.7671	-1.7671	0	%100
74	M86	Z	-3.0607	-3.0607	0	%100
75	M87	X	-1.2516	-1.2516	0	%100
76	M87	Z	-2.1679	-2.1679	0	%100
77	M88A	X	-1.2517	-1.2517	0	%100
78	M88A	Z	-2.1679	-2.1679	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	M76	X	0	0	0	%100
2	M76	Z	0	0	0	%100
3	M84	X	0	0	0	%100
4	M84	Z	-.111	-.111	0	%100
5	M28A	X	0	0	0	%100
6	M28A	Z	-2.2207	-2.2207	0	%100
7	M15	X	0	0	0	%100
8	M15	Z	-.684	-.684	0	%100
9	M21	X	0	0	0	%100
10	M21	Z	-.0278	-.0278	0	%100
11	M27	X	0	0	0	%100
12	M27	Z	-.684	-.684	0	%100
13	M33	X	0	0	0	%100
14	M33	Z	-.0278	-.0278	0	%100
15	M39	X	0	0	0	%100
16	M39	Z	-.5552	-.5552	0	%100
17	M41	X	0	0	0	%100
18	M41	Z	-.5552	-.5552	0	%100
19	M43	X	0	0	0	%100
20	M43	Z	-.9253	-.9253	0	%100
21	M50	X	0	0	0	%100
22	M50	Z	-.0139	-.0139	0	%100
23	M36	X	0	0	0	%100
24	M36	Z	-.0555	-.0555	0	%100
25	M40	X	0	0	0	%100
26	M40	Z	-.0139	-.0139	0	%100
27	M41B	X	0	0	0	%100
28	M41B	Z	-.2313	-.2313	0	%100
29	M42A	X	0	0	0	%100
30	M42A	Z	-.2313	-.2313	0	%100
31	MP5A	X	0	0	0	%100
32	MP5A	Z	-.5274	-.5274	0	%100
33	MP4A	X	0	0	0	%100
34	MP4A	Z	-.5274	-.5274	0	%100
35	MP3A	X	0	0	0	%100
36	MP3A	Z	-.5274	-.5274	0	%100
37	MP2A	X	0	0	0	%100
38	MP2A	Z	-.5274	-.5274	0	%100
39	MP1A	X	0	0	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location	End Location
40	MP1A	Z	-.5274	-.5274	0	%100
41	MP5C	X	0	0	0	%100
42	MP5C	Z	-.5274	-.5274	0	%100
43	MP4C	X	0	0	0	%100
44	MP4C	Z	-.5274	-.5274	0	%100
45	MP3C	X	0	0	0	%100
46	MP3C	Z	-.5274	-.5274	0	%100
47	MP2C	X	0	0	0	%100
48	MP2C	Z	-.5274	-.5274	0	%100
49	MP1C	X	0	0	0	%100
50	MP1C	Z	-.5274	-.5274	0	%100
51	MP5B	X	0	0	0	%100
52	MP5B	Z	-.5274	-.5274	0	%100
53	MP4B	X	0	0	0	%100
54	MP4B	Z	-.5274	-.5274	0	%100
55	MP3B	X	0	0	0	%100
56	MP3B	Z	-.5274	-.5274	0	%100
57	MP2B	X	0	0	0	%100
58	MP2B	Z	-.5274	-.5274	0	%100
59	MP1B	X	0	0	0	%100
60	MP1B	Z	-.5274	-.5274	0	%100
61	M91	X	0	0	0	%100
62	M91	Z	-1.1951	-1.1951	0	%100
63	M88B	X	0	0	0	%100
64	M88B	Z	-.8883	-.8883	0	%100
65	M89A	X	0	0	0	%100
66	M89A	Z	-.8883	-.8883	0	%100
67	M82B	X	0	0	0	%100
68	M82B	Z	-.2988	-.2988	0	%100
69	M83A	X	0	0	0	%100
70	M83A	Z	-.2221	-.2221	0	%100
71	M84A	X	0	0	0	%100
72	M84A	Z	-.2221	-.2221	0	%100
73	M86	X	0	0	0	%100
74	M86	Z	-.2988	-.2988	0	%100
75	M87	X	0	0	0	%100
76	M87	Z	-.2221	-.2221	0	%100
77	M88A	X	0	0	0	%100
78	M88A	Z	-.2221	-.2221	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location	End Location
1	M76	X	.114	.114	0	%100
2	M76	Z	-.1975	-.1975	0	%100
3	M84	X	.0416	.0416	0	%100
4	M84	Z	-.0721	-.0721	0	%100
5	M28A	X	.8328	.8328	0	%100
6	M28A	Z	-1.4424	-1.4424	0	%100
7	M15	X	.114	.114	0	%100
8	M15	Z	-.1975	-.1975	0	%100
9	M21	X	.0416	.0416	0	%100
10	M21	Z	-.0721	-.0721	0	%100
11	M27	X	.456	.456	0	%100
12	M27	Z	-.7899	-.7899	0	%100
13	M33	X	0	0	0	%100
14	M33	Z	0	0	0	%100



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project # 23777133
 Model Name : Antenna Mount Analysis

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
15	M39	X	.8328	.8328	0	%100
16	M39	Z	-1.4424	-1.4424	0	%100
17	M41	X	0	0	0	%100
18	M41	Z	0	0	0	%100
19	M43	X	.347	.347	0	%100
20	M43	Z	-.601	-.601	0	%100
21	M50	X	0	0	0	%100
22	M50	Z	0	0	0	%100
23	M36	X	.0208	.0208	0	%100
24	M36	Z	-.0361	-.0361	0	%100
25	M40	X	.0208	.0208	0	%100
26	M40	Z	-.0361	-.0361	0	%100
27	M41B	X	.347	.347	0	%100
28	M41B	Z	-.601	-.601	0	%100
29	M42A	X	0	0	0	%100
30	M42A	Z	0	0	0	%100
31	MP5A	X	.2637	.2637	0	%100
32	MP5A	Z	-.4568	-.4568	0	%100
33	MP4A	X	.2637	.2637	0	%100
34	MP4A	Z	-.4568	-.4568	0	%100
35	MP3A	X	.2637	.2637	0	%100
36	MP3A	Z	-.4568	-.4568	0	%100
37	MP2A	X	.2637	.2637	0	%100
38	MP2A	Z	-.4568	-.4568	0	%100
39	MP1A	X	.2637	.2637	0	%100
40	MP1A	Z	-.4568	-.4568	0	%100
41	MP5C	X	.2637	.2637	0	%100
42	MP5C	Z	-.4568	-.4568	0	%100
43	MP4C	X	.2637	.2637	0	%100
44	MP4C	Z	-.4568	-.4568	0	%100
45	MP3C	X	.2637	.2637	0	%100
46	MP3C	Z	-.4568	-.4568	0	%100
47	MP2C	X	.2637	.2637	0	%100
48	MP2C	Z	-.4568	-.4568	0	%100
49	MP1C	X	.2637	.2637	0	%100
50	MP1C	Z	-.4568	-.4568	0	%100
51	MP5B	X	.2637	.2637	0	%100
52	MP5B	Z	-.4568	-.4568	0	%100
53	MP4B	X	.2637	.2637	0	%100
54	MP4B	Z	-.4568	-.4568	0	%100
55	MP3B	X	.2637	.2637	0	%100
56	MP3B	Z	-.4568	-.4568	0	%100
57	MP2B	X	.2637	.2637	0	%100
58	MP2B	Z	-.4568	-.4568	0	%100
59	MP1B	X	.2637	.2637	0	%100
60	MP1B	Z	-.4568	-.4568	0	%100
61	M91	X	.4481	.4481	0	%100
62	M91	Z	-.7762	-.7762	0	%100
63	M88B	X	.3331	.3331	0	%100
64	M88B	Z	-.577	-.577	0	%100
65	M89A	X	.3331	.3331	0	%100
66	M89A	Z	-.577	-.577	0	%100
67	M82B	X	.4481	.4481	0	%100
68	M82B	Z	-.7762	-.7762	0	%100
69	M83A	X	.3331	.3331	0	%100
70	M83A	Z	-.577	-.577	0	%100
71	M84A	X	.3331	.3331	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
72	M84A	Z	-.577	-.577	0	%100
73	M86	X	0	0	0	%100
74	M86	Z	0	0	0	%100
75	M87	X	0	0	0	%100
76	M87	Z	0	0	0	%100
77	M88A	X	0	0	0	%100
78	M88A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M76	X	.5924	.5924	0	%100
2	M76	Z	-.342	-.342	0	%100
3	M84	X	.024	.024	0	%100
4	M84	Z	-.0139	-.0139	0	%100
5	M28A	X	.4808	.4808	0	%100
6	M28A	Z	-.2776	-.2776	0	%100
7	M15	X	0	0	0	%100
8	M15	Z	0	0	0	%100
9	M21	X	.0962	.0962	0	%100
10	M21	Z	-.0555	-.0555	0	%100
11	M27	X	.5924	.5924	0	%100
12	M27	Z	-.342	-.342	0	%100
13	M33	X	.024	.024	0	%100
14	M33	Z	-.0139	-.0139	0	%100
15	M39	X	1.9232	1.9232	0	%100
16	M39	Z	-1.1104	-1.1104	0	%100
17	M41	X	.4808	.4808	0	%100
18	M41	Z	-.2776	-.2776	0	%100
19	M43	X	.2003	.2003	0	%100
20	M43	Z	-.1157	-.1157	0	%100
21	M50	X	.012	.012	0	%100
22	M50	Z	-.0069	-.0069	0	%100
23	M36	X	.012	.012	0	%100
24	M36	Z	-.0069	-.0069	0	%100
25	M40	X	.0481	.0481	0	%100
26	M40	Z	-.0278	-.0278	0	%100
27	M41B	X	.8013	.8013	0	%100
28	M41B	Z	-.4627	-.4627	0	%100
29	M42A	X	.2003	.2003	0	%100
30	M42A	Z	-.1157	-.1157	0	%100
31	MP5A	X	.4568	.4568	0	%100
32	MP5A	Z	-.2637	-.2637	0	%100
33	MP4A	X	.4568	.4568	0	%100
34	MP4A	Z	-.2637	-.2637	0	%100
35	MP3A	X	.4568	.4568	0	%100
36	MP3A	Z	-.2637	-.2637	0	%100
37	MP2A	X	.4568	.4568	0	%100
38	MP2A	Z	-.2637	-.2637	0	%100
39	MP1A	X	.4568	.4568	0	%100
40	MP1A	Z	-.2637	-.2637	0	%100
41	MP5C	X	.4568	.4568	0	%100
42	MP5C	Z	-.2637	-.2637	0	%100
43	MP4C	X	.4568	.4568	0	%100
44	MP4C	Z	-.2637	-.2637	0	%100
45	MP3C	X	.4568	.4568	0	%100
46	MP3C	Z	-.2637	-.2637	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
47	MP2C	X	.4568	.4568	0	%100
48	MP2C	Z	-.2637	-.2637	0	%100
49	MP1C	X	.4568	.4568	0	%100
50	MP1C	Z	-.2637	-.2637	0	%100
51	MP5B	X	.4568	.4568	0	%100
52	MP5B	Z	-.2637	-.2637	0	%100
53	MP4B	X	.4568	.4568	0	%100
54	MP4B	Z	-.2637	-.2637	0	%100
55	MP3B	X	.4568	.4568	0	%100
56	MP3B	Z	-.2637	-.2637	0	%100
57	MP2B	X	.4568	.4568	0	%100
58	MP2B	Z	-.2637	-.2637	0	%100
59	MP1B	X	.4568	.4568	0	%100
60	MP1B	Z	-.2637	-.2637	0	%100
61	M91	X	.2587	.2587	0	%100
62	M91	Z	-.1494	-.1494	0	%100
63	M88B	X	.1923	.1923	0	%100
64	M88B	Z	-.111	-.111	0	%100
65	M89A	X	.1923	.1923	0	%100
66	M89A	Z	-.111	-.111	0	%100
67	M82B	X	1.035	1.035	0	%100
68	M82B	Z	-.5975	-.5975	0	%100
69	M83A	X	.7693	.7693	0	%100
70	M83A	Z	-.4441	-.4441	0	%100
71	M84A	X	.7693	.7693	0	%100
72	M84A	Z	-.4441	-.4441	0	%100
73	M86	X	.2587	.2587	0	%100
74	M86	Z	-.1494	-.1494	0	%100
75	M87	X	.1923	.1923	0	%100
76	M87	Z	-.111	-.111	0	%100
77	M88A	X	.1923	.1923	0	%100
78	M88A	Z	-.111	-.111	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	M76	X	.9121	.9121	0	%100
2	M76	Z	0	0	0	%100
3	M84	X	0	0	0	%100
4	M84	Z	0	0	0	%100
5	M28A	X	0	0	0	%100
6	M28A	Z	0	0	0	%100
7	M15	X	.228	.228	0	%100
8	M15	Z	0	0	0	%100
9	M21	X	.0833	.0833	0	%100
10	M21	Z	0	0	0	%100
11	M27	X	.228	.228	0	%100
12	M27	Z	0	0	0	%100
13	M33	X	.0833	.0833	0	%100
14	M33	Z	0	0	0	%100
15	M39	X	1.6656	1.6656	0	%100
16	M39	Z	0	0	0	%100
17	M41	X	1.6656	1.6656	0	%100
18	M41	Z	0	0	0	%100
19	M43	X	0	0	0	%100
20	M43	Z	0	0	0	%100
21	M50	X	.0416	.0416	0	%100



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 Designer :
 Job Number : Project # 23777133
 Model Name : Antenna Mount Analysis

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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
22	M50	Z	0	0	0	%100
23	M36	X	0	0	0	%100
24	M36	Z	0	0	0	%100
25	M40	X	.0416	.0416	0	%100
26	M40	Z	0	0	0	%100
27	M41B	X	.694	.694	0	%100
28	M41B	Z	0	0	0	%100
29	M42A	X	.694	.694	0	%100
30	M42A	Z	0	0	0	%100
31	MP5A	X	.5274	.5274	0	%100
32	MP5A	Z	0	0	0	%100
33	MP4A	X	.5274	.5274	0	%100
34	MP4A	Z	0	0	0	%100
35	MP3A	X	.5274	.5274	0	%100
36	MP3A	Z	0	0	0	%100
37	MP2A	X	.5274	.5274	0	%100
38	MP2A	Z	0	0	0	%100
39	MP1A	X	.5274	.5274	0	%100
40	MP1A	Z	0	0	0	%100
41	MP5C	X	.5274	.5274	0	%100
42	MP5C	Z	0	0	0	%100
43	MP4C	X	.5274	.5274	0	%100
44	MP4C	Z	0	0	0	%100
45	MP3C	X	.5274	.5274	0	%100
46	MP3C	Z	0	0	0	%100
47	MP2C	X	.5274	.5274	0	%100
48	MP2C	Z	0	0	0	%100
49	MP1C	X	.5274	.5274	0	%100
50	MP1C	Z	0	0	0	%100
51	MP5B	X	.5274	.5274	0	%100
52	MP5B	Z	0	0	0	%100
53	MP4B	X	.5274	.5274	0	%100
54	MP4B	Z	0	0	0	%100
55	MP3B	X	.5274	.5274	0	%100
56	MP3B	Z	0	0	0	%100
57	MP2B	X	.5274	.5274	0	%100
58	MP2B	Z	0	0	0	%100
59	MP1B	X	.5274	.5274	0	%100
60	MP1B	Z	0	0	0	%100
61	M91	X	0	0	0	%100
62	M91	Z	0	0	0	%100
63	M88B	X	0	0	0	%100
64	M88B	Z	0	0	0	%100
65	M89A	X	0	0	0	%100
66	M89A	Z	0	0	0	%100
67	M82B	X	.8963	.8963	0	%100
68	M82B	Z	0	0	0	%100
69	M83A	X	.6662	.6662	0	%100
70	M83A	Z	0	0	0	%100
71	M84A	X	.6662	.6662	0	%100
72	M84A	Z	0	0	0	%100
73	M86	X	.8963	.8963	0	%100
74	M86	Z	0	0	0	%100
75	M87	X	.6662	.6662	0	%100
76	M87	Z	0	0	0	%100
77	M88A	X	.6662	.6662	0	%100
78	M88A	Z	0	0	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M76	X	.5924	.5924	0	%100
2	M76	Z	.342	.342	0	%100
3	M84	X	.024	.024	0	%100
4	M84	Z	.0139	.0139	0	%100
5	M28A	X	.4808	.4808	0	%100
6	M28A	Z	.2776	.2776	0	%100
7	M15	X	.5924	.5924	0	%100
8	M15	Z	.342	.342	0	%100
9	M21	X	.024	.024	0	%100
10	M21	Z	.0139	.0139	0	%100
11	M27	X	0	0	0	%100
12	M27	Z	0	0	0	%100
13	M33	X	.0962	.0962	0	%100
14	M33	Z	.0555	.0555	0	%100
15	M39	X	.4808	.4808	0	%100
16	M39	Z	.2776	.2776	0	%100
17	M41	X	1.9232	1.9232	0	%100
18	M41	Z	1.1104	1.1104	0	%100
19	M43	X	.2003	.2003	0	%100
20	M43	Z	.1157	.1157	0	%100
21	M50	X	.0481	.0481	0	%100
22	M50	Z	.0278	.0278	0	%100
23	M36	X	.012	.012	0	%100
24	M36	Z	.0069	.0069	0	%100
25	M40	X	.012	.012	0	%100
26	M40	Z	.0069	.0069	0	%100
27	M41B	X	.2003	.2003	0	%100
28	M41B	Z	.1157	.1157	0	%100
29	M42A	X	.8013	.8013	0	%100
30	M42A	Z	.4627	.4627	0	%100
31	MP5A	X	.4568	.4568	0	%100
32	MP5A	Z	.2637	.2637	0	%100
33	MP4A	X	.4568	.4568	0	%100
34	MP4A	Z	.2637	.2637	0	%100
35	MP3A	X	.4568	.4568	0	%100
36	MP3A	Z	.2637	.2637	0	%100
37	MP2A	X	.4568	.4568	0	%100
38	MP2A	Z	.2637	.2637	0	%100
39	MP1A	X	.4568	.4568	0	%100
40	MP1A	Z	.2637	.2637	0	%100
41	MP5C	X	.4568	.4568	0	%100
42	MP5C	Z	.2637	.2637	0	%100
43	MP4C	X	.4568	.4568	0	%100
44	MP4C	Z	.2637	.2637	0	%100
45	MP3C	X	.4568	.4568	0	%100
46	MP3C	Z	.2637	.2637	0	%100
47	MP2C	X	.4568	.4568	0	%100
48	MP2C	Z	.2637	.2637	0	%100
49	MP1C	X	.4568	.4568	0	%100
50	MP1C	Z	.2637	.2637	0	%100
51	MP5B	X	.4568	.4568	0	%100
52	MP5B	Z	.2637	.2637	0	%100
53	MP4B	X	.4568	.4568	0	%100
54	MP4B	Z	.2637	.2637	0	%100
55	MP3B	X	.4568	.4568	0	%100
56	MP3B	Z	.2637	.2637	0	%100
57	MP2B	X	.4568	.4568	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
58	MP2B	Z	.2637	.2637	0	%100
59	MP1B	X	.4568	.4568	0	%100
60	MP1B	Z	.2637	.2637	0	%100
61	M91	X	.2587	.2587	0	%100
62	M91	Z	.1494	.1494	0	%100
63	M88B	X	.1923	.1923	0	%100
64	M88B	Z	.111	.111	0	%100
65	M89A	X	.1923	.1923	0	%100
66	M89A	Z	.111	.111	0	%100
67	M82B	X	.2587	.2587	0	%100
68	M82B	Z	.1494	.1494	0	%100
69	M83A	X	.1923	.1923	0	%100
70	M83A	Z	.111	.111	0	%100
71	M84A	X	.1923	.1923	0	%100
72	M84A	Z	.111	.111	0	%100
73	M86	X	1.035	1.035	0	%100
74	M86	Z	.5975	.5975	0	%100
75	M87	X	.7693	.7693	0	%100
76	M87	Z	.4441	.4441	0	%100
77	M88A	X	.7693	.7693	0	%100
78	M88A	Z	.4441	.4441	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	M76	X	.114	.114	0	%100
2	M76	Z	.1975	.1975	0	%100
3	M84	X	.0416	.0416	0	%100
4	M84	Z	.0721	.0721	0	%100
5	M28A	X	.8328	.8328	0	%100
6	M28A	Z	1.4424	1.4424	0	%100
7	M15	X	.456	.456	0	%100
8	M15	Z	.7899	.7899	0	%100
9	M21	X	0	0	0	%100
10	M21	Z	0	0	0	%100
11	M27	X	.114	.114	0	%100
12	M27	Z	.1975	.1975	0	%100
13	M33	X	.0416	.0416	0	%100
14	M33	Z	.0721	.0721	0	%100
15	M39	X	0	0	0	%100
16	M39	Z	0	0	0	%100
17	M41	X	.8328	.8328	0	%100
18	M41	Z	1.4424	1.4424	0	%100
19	M43	X	.347	.347	0	%100
20	M43	Z	.601	.601	0	%100
21	M50	X	.0208	.0208	0	%100
22	M50	Z	.0361	.0361	0	%100
23	M36	X	.0208	.0208	0	%100
24	M36	Z	.0361	.0361	0	%100
25	M40	X	0	0	0	%100
26	M40	Z	0	0	0	%100
27	M41B	X	0	0	0	%100
28	M41B	Z	0	0	0	%100
29	M42A	X	.347	.347	0	%100
30	M42A	Z	.601	.601	0	%100
31	MP5A	X	.2637	.2637	0	%100
32	MP5A	Z	.4568	.4568	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
33	MP4A	X	.2637	.2637	0	%100
34	MP4A	Z	.4568	.4568	0	%100
35	MP3A	X	.2637	.2637	0	%100
36	MP3A	Z	.4568	.4568	0	%100
37	MP2A	X	.2637	.2637	0	%100
38	MP2A	Z	.4568	.4568	0	%100
39	MP1A	X	.2637	.2637	0	%100
40	MP1A	Z	.4568	.4568	0	%100
41	MP5C	X	.2637	.2637	0	%100
42	MP5C	Z	.4568	.4568	0	%100
43	MP4C	X	.2637	.2637	0	%100
44	MP4C	Z	.4568	.4568	0	%100
45	MP3C	X	.2637	.2637	0	%100
46	MP3C	Z	.4568	.4568	0	%100
47	MP2C	X	.2637	.2637	0	%100
48	MP2C	Z	.4568	.4568	0	%100
49	MP1C	X	.2637	.2637	0	%100
50	MP1C	Z	.4568	.4568	0	%100
51	MP5B	X	.2637	.2637	0	%100
52	MP5B	Z	.4568	.4568	0	%100
53	MP4B	X	.2637	.2637	0	%100
54	MP4B	Z	.4568	.4568	0	%100
55	MP3B	X	.2637	.2637	0	%100
56	MP3B	Z	.4568	.4568	0	%100
57	MP2B	X	.2637	.2637	0	%100
58	MP2B	Z	.4568	.4568	0	%100
59	MP1B	X	.2637	.2637	0	%100
60	MP1B	Z	.4568	.4568	0	%100
61	M91	X	.4481	.4481	0	%100
62	M91	Z	.7762	.7762	0	%100
63	M88B	X	.3331	.3331	0	%100
64	M88B	Z	.577	.577	0	%100
65	M89A	X	.3331	.3331	0	%100
66	M89A	Z	.577	.577	0	%100
67	M82B	X	0	0	0	%100
68	M82B	Z	0	0	0	%100
69	M83A	X	0	0	0	%100
70	M83A	Z	0	0	0	%100
71	M84A	X	0	0	0	%100
72	M84A	Z	0	0	0	%100
73	M86	X	.4481	.4481	0	%100
74	M86	Z	.7762	.7762	0	%100
75	M87	X	.3331	.3331	0	%100
76	M87	Z	.577	.577	0	%100
77	M88A	X	.3331	.3331	0	%100
78	M88A	Z	.577	.577	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M76	X	0	0	0	%100
2	M76	Z	0	0	0	%100
3	M84	X	0	0	0	%100
4	M84	Z	.111	.111	0	%100
5	M28A	X	0	0	0	%100
6	M28A	Z	2.2207	2.2207	0	%100
7	M15	X	0	0	0	%100



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 Designer :
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 Model Name : Antenna Mount Analysis

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Locationft	End Locationft
8	M15	Z	.684	.684	0	%100
9	M21	X	0	0	0	%100
10	M21	Z	.0278	.0278	0	%100
11	M27	X	0	0	0	%100
12	M27	Z	.684	.684	0	%100
13	M33	X	0	0	0	%100
14	M33	Z	.0278	.0278	0	%100
15	M39	X	0	0	0	%100
16	M39	Z	.5552	.5552	0	%100
17	M41	X	0	0	0	%100
18	M41	Z	.5552	.5552	0	%100
19	M43	X	0	0	0	%100
20	M43	Z	.9253	.9253	0	%100
21	M50	X	0	0	0	%100
22	M50	Z	.0139	.0139	0	%100
23	M36	X	0	0	0	%100
24	M36	Z	.0555	.0555	0	%100
25	M40	X	0	0	0	%100
26	M40	Z	.0139	.0139	0	%100
27	M41B	X	0	0	0	%100
28	M41B	Z	.2313	.2313	0	%100
29	M42A	X	0	0	0	%100
30	M42A	Z	.2313	.2313	0	%100
31	MP5A	X	0	0	0	%100
32	MP5A	Z	.5274	.5274	0	%100
33	MP4A	X	0	0	0	%100
34	MP4A	Z	.5274	.5274	0	%100
35	MP3A	X	0	0	0	%100
36	MP3A	Z	.5274	.5274	0	%100
37	MP2A	X	0	0	0	%100
38	MP2A	Z	.5274	.5274	0	%100
39	MP1A	X	0	0	0	%100
40	MP1A	Z	.5274	.5274	0	%100
41	MP5C	X	0	0	0	%100
42	MP5C	Z	.5274	.5274	0	%100
43	MP4C	X	0	0	0	%100
44	MP4C	Z	.5274	.5274	0	%100
45	MP3C	X	0	0	0	%100
46	MP3C	Z	.5274	.5274	0	%100
47	MP2C	X	0	0	0	%100
48	MP2C	Z	.5274	.5274	0	%100
49	MP1C	X	0	0	0	%100
50	MP1C	Z	.5274	.5274	0	%100
51	MP5B	X	0	0	0	%100
52	MP5B	Z	.5274	.5274	0	%100
53	MP4B	X	0	0	0	%100
54	MP4B	Z	.5274	.5274	0	%100
55	MP3B	X	0	0	0	%100
56	MP3B	Z	.5274	.5274	0	%100
57	MP2B	X	0	0	0	%100
58	MP2B	Z	.5274	.5274	0	%100
59	MP1B	X	0	0	0	%100
60	MP1B	Z	.5274	.5274	0	%100
61	M91	X	0	0	0	%100
62	M91	Z	1.1951	1.1951	0	%100
63	M88B	X	0	0	0	%100
64	M88B	Z	.8883	.8883	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
65	M89A	X	0	0	0	%100
66	M89A	Z	.8883	.8883	0	%100
67	M82B	X	0	0	0	%100
68	M82B	Z	.2988	.2988	0	%100
69	M83A	X	0	0	0	%100
70	M83A	Z	.2221	.2221	0	%100
71	M84A	X	0	0	0	%100
72	M84A	Z	.2221	.2221	0	%100
73	M86	X	0	0	0	%100
74	M86	Z	.2988	.2988	0	%100
75	M87	X	0	0	0	%100
76	M87	Z	.2221	.2221	0	%100
77	M88A	X	0	0	0	%100
78	M88A	Z	.2221	.2221	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	M76	X	-.114	-.114	0	%100
2	M76	Z	.1975	.1975	0	%100
3	M84	X	-.0416	-.0416	0	%100
4	M84	Z	.0721	.0721	0	%100
5	M28A	X	-.8328	-.8328	0	%100
6	M28A	Z	1.4424	1.4424	0	%100
7	M15	X	-.114	-.114	0	%100
8	M15	Z	.1975	.1975	0	%100
9	M21	X	-.0416	-.0416	0	%100
10	M21	Z	.0721	.0721	0	%100
11	M27	X	-.456	-.456	0	%100
12	M27	Z	.7899	.7899	0	%100
13	M33	X	0	0	0	%100
14	M33	Z	0	0	0	%100
15	M39	X	-.8328	-.8328	0	%100
16	M39	Z	1.4424	1.4424	0	%100
17	M41	X	0	0	0	%100
18	M41	Z	0	0	0	%100
19	M43	X	-.347	-.347	0	%100
20	M43	Z	.601	.601	0	%100
21	M50	X	0	0	0	%100
22	M50	Z	0	0	0	%100
23	M36	X	-.0208	-.0208	0	%100
24	M36	Z	.0361	.0361	0	%100
25	M40	X	-.0208	-.0208	0	%100
26	M40	Z	.0361	.0361	0	%100
27	M41B	X	-.347	-.347	0	%100
28	M41B	Z	.601	.601	0	%100
29	M42A	X	0	0	0	%100
30	M42A	Z	0	0	0	%100
31	MP5A	X	-.2637	-.2637	0	%100
32	MP5A	Z	.4568	.4568	0	%100
33	MP4A	X	-.2637	-.2637	0	%100
34	MP4A	Z	.4568	.4568	0	%100
35	MP3A	X	-.2637	-.2637	0	%100
36	MP3A	Z	.4568	.4568	0	%100
37	MP2A	X	-.2637	-.2637	0	%100
38	MP2A	Z	.4568	.4568	0	%100
39	MP1A	X	-.2637	-.2637	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
40	MP1A	Z	.4568	.4568	0	%100
41	MP5C	X	-.2637	-.2637	0	%100
42	MP5C	Z	.4568	.4568	0	%100
43	MP4C	X	-.2637	-.2637	0	%100
44	MP4C	Z	.4568	.4568	0	%100
45	MP3C	X	-.2637	-.2637	0	%100
46	MP3C	Z	.4568	.4568	0	%100
47	MP2C	X	-.2637	-.2637	0	%100
48	MP2C	Z	.4568	.4568	0	%100
49	MP1C	X	-.2637	-.2637	0	%100
50	MP1C	Z	.4568	.4568	0	%100
51	MP5B	X	-.2637	-.2637	0	%100
52	MP5B	Z	.4568	.4568	0	%100
53	MP4B	X	-.2637	-.2637	0	%100
54	MP4B	Z	.4568	.4568	0	%100
55	MP3B	X	-.2637	-.2637	0	%100
56	MP3B	Z	.4568	.4568	0	%100
57	MP2B	X	-.2637	-.2637	0	%100
58	MP2B	Z	.4568	.4568	0	%100
59	MP1B	X	-.2637	-.2637	0	%100
60	MP1B	Z	.4568	.4568	0	%100
61	M91	X	-.4481	-.4481	0	%100
62	M91	Z	.7762	.7762	0	%100
63	M88B	X	-.3331	-.3331	0	%100
64	M88B	Z	.577	.577	0	%100
65	M89A	X	-.3331	-.3331	0	%100
66	M89A	Z	.577	.577	0	%100
67	M82B	X	-.4481	-.4481	0	%100
68	M82B	Z	.7762	.7762	0	%100
69	M83A	X	-.3331	-.3331	0	%100
70	M83A	Z	.577	.577	0	%100
71	M84A	X	-.3331	-.3331	0	%100
72	M84A	Z	.577	.577	0	%100
73	M86	X	0	0	0	%100
74	M86	Z	0	0	0	%100
75	M87	X	0	0	0	%100
76	M87	Z	0	0	0	%100
77	M88A	X	0	0	0	%100
78	M88A	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M76	X	-.5924	-.5924	0	%100
2	M76	Z	.342	.342	0	%100
3	M84	X	-.024	-.024	0	%100
4	M84	Z	.0139	.0139	0	%100
5	M28A	X	-.4808	-.4808	0	%100
6	M28A	Z	.2776	.2776	0	%100
7	M15	X	0	0	0	%100
8	M15	Z	0	0	0	%100
9	M21	X	-.0962	-.0962	0	%100
10	M21	Z	.0555	.0555	0	%100
11	M27	X	-.5924	-.5924	0	%100
12	M27	Z	.342	.342	0	%100
13	M33	X	-.024	-.024	0	%100
14	M33	Z	.0139	.0139	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
15	M39	X	-1.9232	-1.9232	0	%100
16	M39	Z	1.1104	1.1104	0	%100
17	M41	X	-.4808	-.4808	0	%100
18	M41	Z	.2776	.2776	0	%100
19	M43	X	-.2003	-.2003	0	%100
20	M43	Z	.1157	.1157	0	%100
21	M50	X	-.012	-.012	0	%100
22	M50	Z	.0069	.0069	0	%100
23	M36	X	-.012	-.012	0	%100
24	M36	Z	.0069	.0069	0	%100
25	M40	X	-.0481	-.0481	0	%100
26	M40	Z	.0278	.0278	0	%100
27	M41B	X	-.8013	-.8013	0	%100
28	M41B	Z	.4627	.4627	0	%100
29	M42A	X	-.2003	-.2003	0	%100
30	M42A	Z	.1157	.1157	0	%100
31	MP5A	X	-.4568	-.4568	0	%100
32	MP5A	Z	.2637	.2637	0	%100
33	MP4A	X	-.4568	-.4568	0	%100
34	MP4A	Z	.2637	.2637	0	%100
35	MP3A	X	-.4568	-.4568	0	%100
36	MP3A	Z	.2637	.2637	0	%100
37	MP2A	X	-.4568	-.4568	0	%100
38	MP2A	Z	.2637	.2637	0	%100
39	MP1A	X	-.4568	-.4568	0	%100
40	MP1A	Z	.2637	.2637	0	%100
41	MP5C	X	-.4568	-.4568	0	%100
42	MP5C	Z	.2637	.2637	0	%100
43	MP4C	X	-.4568	-.4568	0	%100
44	MP4C	Z	.2637	.2637	0	%100
45	MP3C	X	-.4568	-.4568	0	%100
46	MP3C	Z	.2637	.2637	0	%100
47	MP2C	X	-.4568	-.4568	0	%100
48	MP2C	Z	.2637	.2637	0	%100
49	MP1C	X	-.4568	-.4568	0	%100
50	MP1C	Z	.2637	.2637	0	%100
51	MP5B	X	-.4568	-.4568	0	%100
52	MP5B	Z	.2637	.2637	0	%100
53	MP4B	X	-.4568	-.4568	0	%100
54	MP4B	Z	.2637	.2637	0	%100
55	MP3B	X	-.4568	-.4568	0	%100
56	MP3B	Z	.2637	.2637	0	%100
57	MP2B	X	-.4568	-.4568	0	%100
58	MP2B	Z	.2637	.2637	0	%100
59	MP1B	X	-.4568	-.4568	0	%100
60	MP1B	Z	.2637	.2637	0	%100
61	M91	X	-.2587	-.2587	0	%100
62	M91	Z	.1494	.1494	0	%100
63	M88B	X	-.1923	-.1923	0	%100
64	M88B	Z	.111	.111	0	%100
65	M89A	X	-.1923	-.1923	0	%100
66	M89A	Z	.111	.111	0	%100
67	M82B	X	-1.035	-1.035	0	%100
68	M82B	Z	.5975	.5975	0	%100
69	M83A	X	-.7693	-.7693	0	%100
70	M83A	Z	.4441	.4441	0	%100
71	M84A	X	-.7693	-.7693	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
72	M84A	Z	.4441	.4441	0	%100
73	M86	X	-.2587	-.2587	0	%100
74	M86	Z	.1494	.1494	0	%100
75	M87	X	-.1923	-.1923	0	%100
76	M87	Z	.111	.111	0	%100
77	M88A	X	-.1923	-.1923	0	%100
78	M88A	Z	.111	.111	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	M76	X	-.9121	-.9121	0	%100
2	M76	Z	0	0	0	%100
3	M84	X	0	0	0	%100
4	M84	Z	0	0	0	%100
5	M28A	X	0	0	0	%100
6	M28A	Z	0	0	0	%100
7	M15	X	-.228	-.228	0	%100
8	M15	Z	0	0	0	%100
9	M21	X	-.0833	-.0833	0	%100
10	M21	Z	0	0	0	%100
11	M27	X	-.228	-.228	0	%100
12	M27	Z	0	0	0	%100
13	M33	X	-.0833	-.0833	0	%100
14	M33	Z	0	0	0	%100
15	M39	X	-1.6656	-1.6656	0	%100
16	M39	Z	0	0	0	%100
17	M41	X	-1.6656	-1.6656	0	%100
18	M41	Z	0	0	0	%100
19	M43	X	0	0	0	%100
20	M43	Z	0	0	0	%100
21	M50	X	-.0416	-.0416	0	%100
22	M50	Z	0	0	0	%100
23	M36	X	0	0	0	%100
24	M36	Z	0	0	0	%100
25	M40	X	-.0416	-.0416	0	%100
26	M40	Z	0	0	0	%100
27	M41B	X	-.694	-.694	0	%100
28	M41B	Z	0	0	0	%100
29	M42A	X	-.694	-.694	0	%100
30	M42A	Z	0	0	0	%100
31	MP5A	X	-.5274	-.5274	0	%100
32	MP5A	Z	0	0	0	%100
33	MP4A	X	-.5274	-.5274	0	%100
34	MP4A	Z	0	0	0	%100
35	MP3A	X	-.5274	-.5274	0	%100
36	MP3A	Z	0	0	0	%100
37	MP2A	X	-.5274	-.5274	0	%100
38	MP2A	Z	0	0	0	%100
39	MP1A	X	-.5274	-.5274	0	%100
40	MP1A	Z	0	0	0	%100
41	MP5C	X	-.5274	-.5274	0	%100
42	MP5C	Z	0	0	0	%100
43	MP4C	X	-.5274	-.5274	0	%100
44	MP4C	Z	0	0	0	%100
45	MP3C	X	-.5274	-.5274	0	%100
46	MP3C	Z	0	0	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]
47	MP2C	X	-5274	-5274	0	%100
48	MP2C	Z	0	0	0	%100
49	MP1C	X	-5274	-5274	0	%100
50	MP1C	Z	0	0	0	%100
51	MP5B	X	-5274	-5274	0	%100
52	MP5B	Z	0	0	0	%100
53	MP4B	X	-5274	-5274	0	%100
54	MP4B	Z	0	0	0	%100
55	MP3B	X	-5274	-5274	0	%100
56	MP3B	Z	0	0	0	%100
57	MP2B	X	-5274	-5274	0	%100
58	MP2B	Z	0	0	0	%100
59	MP1B	X	-5274	-5274	0	%100
60	MP1B	Z	0	0	0	%100
61	M91	X	0	0	0	%100
62	M91	Z	0	0	0	%100
63	M88B	X	0	0	0	%100
64	M88B	Z	0	0	0	%100
65	M89A	X	0	0	0	%100
66	M89A	Z	0	0	0	%100
67	M82B	X	-8963	-8963	0	%100
68	M82B	Z	0	0	0	%100
69	M83A	X	-6662	-6662	0	%100
70	M83A	Z	0	0	0	%100
71	M84A	X	-6662	-6662	0	%100
72	M84A	Z	0	0	0	%100
73	M86	X	-8963	-8963	0	%100
74	M86	Z	0	0	0	%100
75	M87	X	-6662	-6662	0	%100
76	M87	Z	0	0	0	%100
77	M88A	X	-6662	-6662	0	%100
78	M88A	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	M76	X	-5924	-5924	0	%100
2	M76	Z	-342	-342	0	%100
3	M84	X	-.024	-.024	0	%100
4	M84	Z	-.0139	-.0139	0	%100
5	M28A	X	-.4808	-.4808	0	%100
6	M28A	Z	-.2776	-.2776	0	%100
7	M15	X	-5924	-5924	0	%100
8	M15	Z	-.342	-.342	0	%100
9	M21	X	-.024	-.024	0	%100
10	M21	Z	-.0139	-.0139	0	%100
11	M27	X	0	0	0	%100
12	M27	Z	0	0	0	%100
13	M33	X	-.0962	-.0962	0	%100
14	M33	Z	-.0555	-.0555	0	%100
15	M39	X	-.4808	-.4808	0	%100
16	M39	Z	-.2776	-.2776	0	%100
17	M41	X	-1.9232	-1.9232	0	%100
18	M41	Z	-1.1104	-1.1104	0	%100
19	M43	X	-.2003	-.2003	0	%100
20	M43	Z	-.1157	-.1157	0	%100
21	M50	X	-.0481	-.0481	0	%100



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project # 23777133
 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 Locationft	End Locationft
22	M50	Z	-.0278	-.0278	0	%100
23	M36	X	-.012	-.012	0	%100
24	M36	Z	-.0069	-.0069	0	%100
25	M40	X	-.012	-.012	0	%100
26	M40	Z	-.0069	-.0069	0	%100
27	M41B	X	-.2003	-.2003	0	%100
28	M41B	Z	-.1157	-.1157	0	%100
29	M42A	X	-.8013	-.8013	0	%100
30	M42A	Z	-.4627	-.4627	0	%100
31	MP5A	X	-.4568	-.4568	0	%100
32	MP5A	Z	-.2637	-.2637	0	%100
33	MP4A	X	-.4568	-.4568	0	%100
34	MP4A	Z	-.2637	-.2637	0	%100
35	MP3A	X	-.4568	-.4568	0	%100
36	MP3A	Z	-.2637	-.2637	0	%100
37	MP2A	X	-.4568	-.4568	0	%100
38	MP2A	Z	-.2637	-.2637	0	%100
39	MP1A	X	-.4568	-.4568	0	%100
40	MP1A	Z	-.2637	-.2637	0	%100
41	MP5C	X	-.4568	-.4568	0	%100
42	MP5C	Z	-.2637	-.2637	0	%100
43	MP4C	X	-.4568	-.4568	0	%100
44	MP4C	Z	-.2637	-.2637	0	%100
45	MP3C	X	-.4568	-.4568	0	%100
46	MP3C	Z	-.2637	-.2637	0	%100
47	MP2C	X	-.4568	-.4568	0	%100
48	MP2C	Z	-.2637	-.2637	0	%100
49	MP1C	X	-.4568	-.4568	0	%100
50	MP1C	Z	-.2637	-.2637	0	%100
51	MP5B	X	-.4568	-.4568	0	%100
52	MP5B	Z	-.2637	-.2637	0	%100
53	MP4B	X	-.4568	-.4568	0	%100
54	MP4B	Z	-.2637	-.2637	0	%100
55	MP3B	X	-.4568	-.4568	0	%100
56	MP3B	Z	-.2637	-.2637	0	%100
57	MP2B	X	-.4568	-.4568	0	%100
58	MP2B	Z	-.2637	-.2637	0	%100
59	MP1B	X	-.4568	-.4568	0	%100
60	MP1B	Z	-.2637	-.2637	0	%100
61	M91	X	-.2587	-.2587	0	%100
62	M91	Z	-.1494	-.1494	0	%100
63	M88B	X	-.1923	-.1923	0	%100
64	M88B	Z	-.111	-.111	0	%100
65	M89A	X	-.1923	-.1923	0	%100
66	M89A	Z	-.111	-.111	0	%100
67	M82B	X	-.2587	-.2587	0	%100
68	M82B	Z	-.1494	-.1494	0	%100
69	M83A	X	-.1923	-.1923	0	%100
70	M83A	Z	-.111	-.111	0	%100
71	M84A	X	-.1923	-.1923	0	%100
72	M84A	Z	-.111	-.111	0	%100
73	M86	X	-1.035	-1.035	0	%100
74	M86	Z	-.5975	-.5975	0	%100
75	M87	X	-.7693	-.7693	0	%100
76	M87	Z	-.4441	-.4441	0	%100
77	M88A	X	-.7693	-.7693	0	%100
78	M88A	Z	-.4441	-.4441	0	%100



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 Designer :
 Job Number : Project # 23777133
 Model Name : Antenna Mount Analysis

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M76	X	-.114	-.114	0	%100
2	M76	Z	-.1975	-.1975	0	%100
3	M84	X	-.0416	-.0416	0	%100
4	M84	Z	-.0721	-.0721	0	%100
5	M28A	X	-.8328	-.8328	0	%100
6	M28A	Z	-1.4424	-1.4424	0	%100
7	M15	X	-.456	-.456	0	%100
8	M15	Z	-.7899	-.7899	0	%100
9	M21	X	0	0	0	%100
10	M21	Z	0	0	0	%100
11	M27	X	-.114	-.114	0	%100
12	M27	Z	-.1975	-.1975	0	%100
13	M33	X	-.0416	-.0416	0	%100
14	M33	Z	-.0721	-.0721	0	%100
15	M39	X	0	0	0	%100
16	M39	Z	0	0	0	%100
17	M41	X	-.8328	-.8328	0	%100
18	M41	Z	-1.4424	-1.4424	0	%100
19	M43	X	-.347	-.347	0	%100
20	M43	Z	-.601	-.601	0	%100
21	M50	X	-.0208	-.0208	0	%100
22	M50	Z	-.0361	-.0361	0	%100
23	M36	X	-.0208	-.0208	0	%100
24	M36	Z	-.0361	-.0361	0	%100
25	M40	X	0	0	0	%100
26	M40	Z	0	0	0	%100
27	M41B	X	0	0	0	%100
28	M41B	Z	0	0	0	%100
29	M42A	X	-.347	-.347	0	%100
30	M42A	Z	-.601	-.601	0	%100
31	MP5A	X	-.2637	-.2637	0	%100
32	MP5A	Z	-.4568	-.4568	0	%100
33	MP4A	X	-.2637	-.2637	0	%100
34	MP4A	Z	-.4568	-.4568	0	%100
35	MP3A	X	-.2637	-.2637	0	%100
36	MP3A	Z	-.4568	-.4568	0	%100
37	MP2A	X	-.2637	-.2637	0	%100
38	MP2A	Z	-.4568	-.4568	0	%100
39	MP1A	X	-.2637	-.2637	0	%100
40	MP1A	Z	-.4568	-.4568	0	%100
41	MP5C	X	-.2637	-.2637	0	%100
42	MP5C	Z	-.4568	-.4568	0	%100
43	MP4C	X	-.2637	-.2637	0	%100
44	MP4C	Z	-.4568	-.4568	0	%100
45	MP3C	X	-.2637	-.2637	0	%100
46	MP3C	Z	-.4568	-.4568	0	%100
47	MP2C	X	-.2637	-.2637	0	%100
48	MP2C	Z	-.4568	-.4568	0	%100
49	MP1C	X	-.2637	-.2637	0	%100
50	MP1C	Z	-.4568	-.4568	0	%100
51	MP5B	X	-.2637	-.2637	0	%100
52	MP5B	Z	-.4568	-.4568	0	%100
53	MP4B	X	-.2637	-.2637	0	%100
54	MP4B	Z	-.4568	-.4568	0	%100
55	MP3B	X	-.2637	-.2637	0	%100
56	MP3B	Z	-.4568	-.4568	0	%100
57	MP2B	X	-.2637	-.2637	0	%100



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
58	MP2B	Z	-4568	-4568	0	%100
59	MP1B	X	-2637	-2637	0	%100
60	MP1B	Z	-4568	-4568	0	%100
61	M91	X	-4481	-4481	0	%100
62	M91	Z	-7762	-7762	0	%100
63	M88B	X	-3331	-3331	0	%100
64	M88B	Z	-577	-577	0	%100
65	M89A	X	-3331	-3331	0	%100
66	M89A	Z	-577	-577	0	%100
67	M82B	X	0	0	0	%100
68	M82B	Z	0	0	0	%100
69	M83A	X	0	0	0	%100
70	M83A	Z	0	0	0	%100
71	M84A	X	0	0	0	%100
72	M84A	Z	0	0	0	%100
73	M86	X	-4481	-4481	0	%100
74	M86	Z	-7762	-7762	0	%100
75	M87	X	-3331	-3331	0	%100
76	M87	Z	-577	-577	0	%100
77	M88A	X	-3331	-3331	0	%100
78	M88A	Z	-577	-577	0	%100

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M28A	Y	-4058	-3.4878	0	1.3333
2	M28A	Y	-3.4878	-11.541	1.3333	2.6667
3	M28A	Y	-11.541	-17.9731	2.6667	4
4	M28A	Y	-17.9731	-11.9488	4	5.3333
5	M28A	Y	-11.9488	-4058	5.3333	6.6667
6	M41	Y	-315	-10.5967	6.6667	8
7	M41	Y	-10.5967	-17.5621	8	9.3333
8	M41	Y	-17.5621	-14.0533	9.3333	10.6667
9	M41	Y	-14.0533	-5.513	10.6667	12
10	M41	Y	-5.513	-315	12	13.3333
11	M28A	Y	-14.0703	-12.6535	6.6667	8.3333
12	M28A	Y	-12.6535	-11.6389	8.3333	10
13	M28A	Y	-11.6389	-5.622	10	11.6667
14	M28A	Y	-5.622	.0885	11.6667	13.3333
15	M39	Y	0	-5.417	0	1.3333
16	M39	Y	-5.417	-11.2053	1.3333	2.6667
17	M39	Y	-11.2053	-18.2156	2.6667	4
18	M39	Y	-18.2156	-12.4273	4	5.3333
19	M39	Y	-12.4273	0	5.3333	6.6667
20	M39	Y	-14.0473	-12.6476	6.6667	8.3333
21	M39	Y	-12.6476	-11.6419	8.3333	10
22	M39	Y	-11.6419	-5.6243	10	11.6667
23	M39	Y	-5.6243	.0875	11.6667	13.3333
24	M41	Y	0	-5.4233	0	1.3333
25	M41	Y	-5.4233	-11.237	1.3333	2.6667
26	M41	Y	-11.237	-18.2164	2.6667	4
27	M41	Y	-18.2164	-12.4027	4	5.3333
28	M41	Y	-12.4027	0	5.3333	6.6667
29	M82B	Y	-.2715	-8.2788	0	.3582
30	M82B	Y	-8.2788	-18.4377	.3582	.7164
31	M82B	Y	-18.4377	-15.6589	.7164	1.0746
32	M82B	Y	-15.6589	-4.1426	1.0746	1.4328



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
33	M82B	Y	-4.1426	-2.2715	1.4328	1.791
34	M83A	Y	-5.7996	-8.4292	0	.2222
35	M83A	Y	-8.4292	-13.1859	.2222	.4444
36	M83A	Y	-13.1859	-20.0695	.4444	.6667
37	M86	Y	-2.2726	-4.1423	2.6865	3.0447
38	M86	Y	-4.1423	-13.1707	3.0447	3.4029
39	M86	Y	-13.1707	-15.9533	3.4029	3.7611
40	M86	Y	-15.9533	-8.2878	3.7611	4.1193
41	M86	Y	-8.2878	-.2726	4.1193	4.4775
42	M88A	Y	-20.0464	-13.2004	0	.2223
43	M88A	Y	-13.2004	-8.4584	.2223	.4446
44	M88A	Y	-8.4584	-5.8204	.4446	.6669
45	M91	Y	-4.5575	-10.1614	0	.4477
46	M91	Y	-10.1614	-15.2608	.4477	.8955
47	M91	Y	-15.2608	-8.9543	.8955	1.3433
48	M91	Y	-8.9543	-.3502	1.3433	1.791
49	M88B	Y	-6.1092	-11.9186	0	.3333
50	M88B	Y	-11.9186	-17.728	.3333	.6667
51	M82B	Y	-.1743	-4.0422	2.6865	3.0447
52	M82B	Y	-4.0422	-13.3908	3.0447	3.4029
53	M82B	Y	-13.3908	-16.0554	3.4029	3.7611
54	M82B	Y	-16.0554	-11.4962	3.7611	4.1193
55	M82B	Y	-11.4962	-8.01	4.1193	4.4775
56	M84A	Y	-60.9386	-19.9076	.0774	.0955
57	M84A	Y	-19.9076	.6079	.0955	.1137
58	M84A	Y	.6079	.6079	.1137	.1319
59	M84A	Y	.6079	.6079	.1319	.1501
60	M84A	Y	.6079	.6079	.1501	.1683
61	M84A	Y	.6079	.6079	.1683	.1865
62	M84A	Y	.6079	.6079	.1865	.2047
63	M84A	Y	.6079	.6079	.2047	.2229
64	M84A	Y	.6079	.6079	.2229	.2411
65	M84A	Y	.6079	.6079	.2411	.2593
66	M84A	Y	.6079	.6079	.2593	.2775
67	M84A	Y	.6079	.6079	.2775	.2956
68	M84A	Y	.6079	-24.4536	.2956	.3138
69	M84A	Y	-24.4536	-24.4536	.3138	.332
70	M84A	Y	-24.4536	.6079	.332	.3502
71	M84A	Y	.6079	.6079	.3502	.3684
72	M84A	Y	.6079	.6079	.3684	.3866
73	M84A	Y	.6079	.6079	.3866	.4048
74	M84A	Y	.6079	-44.1106	.4048	.423
75	M84A	Y	-44.1106	-93.8444	.423	.4412
76	M84A	Y	-93.8444	-103.8753	.4412	.4594

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M28A	Y	-.6763	-5.8131	0	1.3333
2	M28A	Y	-5.8131	-19.235	1.3333	2.6667
3	M28A	Y	-19.235	-29.9552	2.6667	4
4	M28A	Y	-29.9552	-19.9147	4	5.3333
5	M28A	Y	-19.9147	-.6763	5.3333	6.6667
6	M41	Y	-.525	-17.6612	6.6667	8
7	M41	Y	-17.6612	-29.2702	8	9.3333
8	M41	Y	-29.2702	-23.4222	9.3333	10.6667
9	M41	Y	-23.4222	-9.1883	10.6667	12



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 Job Number : Project # 23777133
 Model Name : Antenna Mount Analysis

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Locationft	End Locationft
10	M41	Y	-9.1883	-.525	12	13.3333
11	M28A	Y	-23.4504	-21.0892	6.6667	8.3333
12	M28A	Y	-21.0892	-19.3981	8.3333	10
13	M28A	Y	-19.3981	-9.37	10	11.6667
14	M28A	Y	-9.37	.1476	11.6667	13.3333
15	M39	Y	0	-9.0283	0	1.3333
16	M39	Y	-9.0283	-18.6754	1.3333	2.6667
17	M39	Y	-18.6754	-30.3593	2.6667	4
18	M39	Y	-30.3593	-20.7122	4	5.3333
19	M39	Y	-20.7122	0	5.3333	6.6667
20	M39	Y	-23.4121	-21.0794	6.6667	8.3333
21	M39	Y	-21.0794	-19.4032	8.3333	10
22	M39	Y	-19.4032	-9.3738	10	11.6667
23	M39	Y	-9.3738	.1458	11.6667	13.3333
24	M41	Y	0	-9.0389	0	1.3333
25	M41	Y	-9.0389	-18.7284	1.3333	2.6667
26	M41	Y	-18.7284	-30.3607	2.6667	4
27	M41	Y	-30.3607	-20.6712	4	5.3333
28	M41	Y	-20.6712	0	5.3333	6.6667
29	M82B	Y	-.4525	-13.798	0	.3582
30	M82B	Y	-13.798	-30.7295	.3582	.7164
31	M82B	Y	-30.7295	-26.0982	.7164	1.0746
32	M82B	Y	-26.0982	-6.9043	1.0746	1.4328
33	M82B	Y	-6.9043	-.4525	1.4328	1.791
34	M83A	Y	-9.666	-14.0487	0	.2222
35	M83A	Y	-14.0487	-21.9765	.2222	.4444
36	M83A	Y	-21.9765	-33.4492	.4444	.6667
37	M86	Y	-.4543	-6.9039	2.6865	3.0447
38	M86	Y	-6.9039	-21.9512	3.0447	3.4029
39	M86	Y	-21.9512	-26.5888	3.4029	3.7611
40	M86	Y	-26.5888	-13.8129	3.7611	4.1193
41	M86	Y	-13.8129	-.4543	4.1193	4.4775
42	M88A	Y	-33.4107	-22.0007	0	.2223
43	M88A	Y	-22.0007	-14.0974	.2223	.4446
44	M88A	Y	-14.0974	-9.7007	.4446	.6669
45	M91	Y	-7.5958	-16.9356	0	.4477
46	M91	Y	-16.9356	-25.4347	.4477	.8955
47	M91	Y	-25.4347	-14.9238	.8955	1.3433
48	M91	Y	-14.9238	-.5837	1.3433	1.791
49	M88B	Y	-10.182	-19.8643	0	.3333
50	M88B	Y	-19.8643	-29.5467	.3333	.6667
51	M82B	Y	-.2905	-6.737	2.6865	3.0447
52	M82B	Y	-6.737	-22.318	3.0447	3.4029
53	M82B	Y	-22.318	-26.759	3.4029	3.7611
54	M82B	Y	-26.759	-19.1604	3.7611	4.1193
55	M82B	Y	-19.1604	-13.35	4.1193	4.4775
56	M84A	Y	-101.5644	-33.1794	.0774	.0955
57	M84A	Y	-33.1794	1.0131	.0955	.1137
58	M84A	Y	1.0131	1.0131	.1137	.1319
59	M84A	Y	1.0131	1.0131	.1319	.1501
60	M84A	Y	1.0131	1.0131	.1501	.1683
61	M84A	Y	1.0131	1.0131	.1683	.1865
62	M84A	Y	1.0131	1.0131	.1865	.2047
63	M84A	Y	1.0131	1.0131	.2047	.2229
64	M84A	Y	1.0131	1.0131	.2229	.2411
65	M84A	Y	1.0131	1.0131	.2411	.2593
66	M84A	Y	1.0131	1.0131	.2593	.2775



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
67	M84A	Y	1.0131	1.0131	.2775	.2956
68	M84A	Y	1.0131	-40.7561	.2956	.3138
69	M84A	Y	-40.7561	-40.7561	.3138	.332
70	M84A	Y	-40.7561	1.0131	.332	.3502
71	M84A	Y	1.0131	1.0131	.3502	.3684
72	M84A	Y	1.0131	1.0131	.3684	.3866
73	M84A	Y	1.0131	1.0131	.3866	.4048
74	M84A	Y	1.0131	-73.5176	.4048	.423
75	M84A	Y	-73.5176	-156.4074	.423	.4412
76	M84A	Y	-156.4074	-173.1255	.4412	.4594

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M28A	Y	0	-.1459	0	1.3333
2	M28A	Y	-.1459	-.3003	1.3333	2.6667
3	M28A	Y	-.3003	-.203	2.6667	4
4	M28A	Y	-.203	-.0485	4	5.3333
5	M28A	Y	-.0485	0	5.3333	6.6667
6	M41	Y	-.0072	-.0836	6.6667	8
7	M41	Y	-.0836	-.2707	8	9.3333
8	M41	Y	-.2707	-.3176	9.3333	10.6667
9	M41	Y	-.3176	-.1666	10.6667	12
10	M41	Y	-.1666	-.0072	12	13.3333
11	M82B	Y	-.1312	-.2131	0	.8955
12	M82B	Y	-.2131	-.2925	.8955	1.791
13	M82B	Y	-.2925	-.3004	1.791	2.6865
14	M82B	Y	-.3004	-.2166	2.6865	3.582
15	M82B	Y	-.2166	-.1101	3.582	4.4775
16	M83A	Y	-.0531	-.0531	.0757	.6159
17	M84A	Y	-.0598	-.0598	.0719	.5822
18	M28A	Y	-.0266	-.2329	6.6667	8.8889
19	M28A	Y	-.2329	-.2172	8.8889	11.1111
20	M28A	Y	-.2172	-.0266	11.1111	13.3333
21	M39	Y	-.0134	-.2395	0	1.6667
22	M39	Y	-.2395	-.3198	1.6667	3.3333
23	M39	Y	-.3198	-.1475	3.3333	5
24	M39	Y	-.1475	-.0134	5	6.6667
25	M86	Y	-.0409	-.2984	0	1.3433
26	M86	Y	-.2984	-.3107	1.3433	2.6865
27	M86	Y	-.3107	-.0529	2.6865	4.0297
28	M39	Y	-.0266	-.233	6.6667	8.8889
29	M39	Y	-.233	-.2172	8.8889	11.1111
30	M39	Y	-.2172	-.0266	11.1111	13.3333
31	M41	Y	-.0134	-.2402	0	1.6667
32	M41	Y	-.2402	-.3206	1.6667	3.3333
33	M41	Y	-.3206	-.1476	3.3333	5
34	M41	Y	-.1476	-.0134	5	6.6667
35	M91	Y	-.0407	-.2972	0	1.3433
36	M91	Y	-.2972	-.3097	1.3433	2.6865
37	M91	Y	-.3097	-.0532	2.6865	4.0297

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M28A	Z	0	-.3656	0	1.3333
2	M28A	Z	-.3656	-.7526	1.3333	2.6667
3	M28A	Z	-.7526	-.5087	2.6667	4



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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
4	M28A	Z	-5087	-1217	4	5.3333
5	M28A	Z	-1217	0	5.3333	6.6667
6	M41	Z	-0181	-2096	6.6667	8
7	M41	Z	-2096	-6786	8	9.3333
8	M41	Z	-6786	-796	9.3333	10.6667
9	M41	Z	-796	-4177	10.6667	12
10	M41	Z	-4177	-0181	12	13.3333
11	M82B	Z	-3288	-5342	0	8955
12	M82B	Z	-5342	-7333	8955	1.791
13	M82B	Z	-7333	-753	1.791	2.6865
14	M82B	Z	-753	-543	2.6865	3.582
15	M82B	Z	-543	-2761	3.582	4.4775
16	M83A	Z	-1331	-1331	0.757	6.159
17	M84A	Z	-15	-15	0.719	5.822
18	M28A	Z	-0667	-5839	6.6667	8.8889
19	M28A	Z	-5839	-5444	8.8889	11.1111
20	M28A	Z	-5444	-0667	11.1111	13.3333
21	M39	Z	-0337	-6004	0	1.6667
22	M39	Z	-6004	-8016	1.6667	3.3333
23	M39	Z	-8016	-3696	3.3333	5
24	M39	Z	-3696	-0337	5	6.6667
25	M86	Z	-1024	-748	0	1.3433
26	M86	Z	-748	-7788	1.3433	2.6865
27	M86	Z	-7788	-1326	2.6865	4.0297
28	M39	Z	-0667	-584	6.6667	8.8889
29	M39	Z	-584	-5445	8.8889	11.1111
30	M39	Z	-5445	-0667	11.1111	13.3333
31	M41	Z	-0337	-602	0	1.6667
32	M41	Z	-602	-8035	1.6667	3.3333
33	M41	Z	-8035	-3699	3.3333	5
34	M41	Z	-3699	-0337	5	6.6667
35	M91	Z	-1019	-7449	0	1.3433
36	M91	Z	-7449	-7764	1.3433	2.6865
37	M91	Z	-7764	-1333	2.6865	4.0297

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Location[ft]	End Location[ft]
1	M28A	X	0	3656	0	1.3333
2	M28A	X	3656	7526	1.3333	2.6667
3	M28A	X	7526	5087	2.6667	4
4	M28A	X	5087	1217	4	5.3333
5	M28A	X	1217	0	5.3333	6.6667
6	M41	X	0181	2096	6.6667	8
7	M41	X	2096	6786	8	9.3333
8	M41	X	6786	796	9.3333	10.6667
9	M41	X	796	4177	10.6667	12
10	M41	X	4177	0181	12	13.3333
11	M82B	X	3288	5342	0	8955
12	M82B	X	5342	7333	8955	1.791
13	M82B	X	7333	753	1.791	2.6865
14	M82B	X	753	543	2.6865	3.582
15	M82B	X	543	2761	3.582	4.4775
16	M83A	X	1331	1331	0.757	6.159
17	M84A	X	15	15	0.719	5.822
18	M28A	X	0667	5839	6.6667	8.8889
19	M28A	X	5839	5444	8.8889	11.1111

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

	Member Label	Direction	Start Magnitude	End Magnitude	Start Locationft	End Locationft
20	M28A	X	.5444	.0667	11.1111	13.3333
21	M39	X	.0337	.6004	0	1.6667
22	M39	X	.6004	.8016	1.6667	3.3333
23	M39	X	.8016	.3696	3.3333	5
24	M39	X	.3696	.0337	5	6.6667
25	M86	X	.1024	.748	0	1.3433
26	M86	X	.748	.7788	1.3433	2.6865
27	M86	X	.7788	.1326	2.6865	4.0297
28	M39	X	.0667	.584	6.6667	8.8889
29	M39	X	.584	.5445	8.8889	11.1111
30	M39	X	.5445	.0667	11.1111	13.3333
31	M41	X	.0337	.602	0	1.6667
32	M41	X	.602	.8035	1.6667	3.3333
33	M41	X	.8035	.3699	3.3333	5
34	M41	X	.3699	.0337	5	6.6667
35	M91	X	.1019	.7449	0	1.3433
36	M91	X	.7449	.7764	1.3433	2.6865
37	M91	X	.7764	.1333	2.6865	4.0297

Member Area Loads (BLC 39 : Structure D)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N38	N35	N160A	N159D	Y	C-D	-.009
2	N167	N166	N57	N54	Y	A-B	-.009
3	N174A	N175A	N19A	N22	Y	A-B	-.009
4	N164A	N167A	N167	N159D	Y	A-B	-.009
5	N165	N162A	N174A	N160A	Y	A-B	-.009

Member Area Loads (BLC 40 : Structure Di)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N38	N35	N160A	N159D	Y	C-D	-.015
2	N167	N166	N57	N54	Y	A-B	-.015
3	N174A	N175A	N19A	N22	Y	A-B	-.015
4	N164A	N167A	N167	N159D	Y	A-B	-.015
5	N165	N162A	N174A	N160A	Y	A-B	-.015

Member Area Loads (BLC 84 : Structure Ev)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N38	N35	N160A	N159D	Y	Two Way	-.000227
2	N167	N166	N57	N54	Y	Two Way	-.000227
3	N174A	N175A	N19A	N22	Y	Two Way	-.000227

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

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N38	N35	N160A	N159D	Z	Two Way	-.000569
2	N167	N166	N57	N54	Z	Two Way	-.000569
3	N174A	N175A	N19A	N22	Z	Two Way	-.000569

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

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N38	N35	N160A	N159D	X	Two Way	.000569
2	N167	N166	N57	N54	X	Two Way	.000569
3	N174A	N175A	N19A	N22	X	Two Way	.000569



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	N153A ...	1677.894	10	2678.961	13	-359.463	1	6.434	1	1.8	4	.49	4
2	...	-1678.01	4	26.157	7	-5913.407	19	-2.055	7	-1.812	10	-.497	10
3	N25 ...	-357.349	9	2818.621	21	3122.408	13	.884	3	1.872	12	1.518	3
4	...	-5126.357	16	133.751	3	-382.667	6	-3.278	9	-1.883	6	-5.655	9
5	N44 ...	5134.042	22	2711.668	17	3093.138	13	.909	11	1.847	8	5.614	5
6	...	321.037	5	79.809	11	-348.931	8	-3.248	5	-1.852	2	-1.646	11
7	Totals: ...	4767.56	10	7448.256	21	4813.463	1						
8	...	-4767.55	4	2382.356	66	-4813.418	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	M28A L6x3x5	.271	1....	10	.329	7....	z 2	10217.77	87960.9...	2.168	7.325	1.701	H2-1
2	M41 L6x3x5	.266	3....	7	.326	7....	z 18	10217.77	87960.9...	2.568	9.758	2.403	H2-1
3	M39 L6x3x5	.260	12...	12	.315	7....	y 22	10217.77	87960.9...	2.168	7.702	1.892	H2-1
4	MP2A PIPE_2.0	.542	5....	4	.204	5....	7	20866.7...	32130	1.872	1.872	2.246	H1-...
5	MP4A PIPE_2.0	.538	4....	10	.201	4....	7	22601.2...	32130	1.872	1.872	1.488	H1-...
6	M21 PL1/2X7	.385	.674	21	.193	.674	y 16	58633.3...	113400	1.183	16.538	1.293	H1-...
7	M33 PL1/2X7	.389	.674	17	.187	.66	y 24	58633.3...	113400	1.183	16.538	1.294	H1-...
8	M84 PL1/2X7	.380	.674	13	.186	.674	y 18	58633.3...	113400	1.183	16.538	1.293	H1-...
9	MP2C PIPE_2.0	.537	5....	12	.173	5....	3	20866.7...	32130	1.872	1.872	2.243	H1-...
10	MP2B PIPE_2.0	.537	5....	8	.170	5....	11	20866.7...	32130	1.872	1.872	2.252	H1-...
11	MP4B PIPE_2.0	.535	4....	2	.168	4....	12	22601.2...	32130	1.872	1.872	1.461	H1-...
12	MP4C PIPE_2.0	.538	4....	6	.163	4....	3	22601.2...	32130	1.872	1.872	1.534	H1-...
13	MP5C PIPE_2.0	.473	5....	6	.148	3.95	1	22601.2...	32130	1.872	1.872	1.979	H1-...
14	MP5A PIPE_2.0	.475	5....	10	.147	3.95	6	22601.2...	32130	1.872	1.872	2.017	H1-...
15	MP1B PIPE_2.0	.472	4....	8	.145	3.95	7	22601.2...	32130	1.872	1.872	1.912	H1-...
16	MP1A PIPE_2.0	.477	4....	4	.142	3.95	2	22601.2...	32130	1.872	1.872	1.94	H1-...
17	MP5B PIPE_2.0	.471	5....	2	.134	3.95	10	22601.2...	32130	1.872	1.872	2.046	H1-...
18	MP1C PIPE_2.0	.472	4....	12	.131	3.95	10	22601.2...	32130	1.872	1.872	1.961	H1-...
19	M40 PL1/4x5	.532	.854	8	.125	0	y 6	14011.7...	40500	.211	4.219	1.218	H1-...
20	M50 PL1/4x5	.545	0	6	.122	0	y 2	14011.7...	40500	.211	4.219	1.211	H1-...
21	M36 PL1/4x5	.504	0	2	.120	0	y 10	14011.7...	40500	.211	4.215	1.207	H1-...
22	M41B L2.5x2.5x4	.586	6....	3	.110	.552	z 8	2470.509	38556	1.114	1.793	1.419	H2-1
23	M43 L2.5x2.5x4	.726	6....	7	.109	.552	z 12	2470.509	38556	1.114	1.819	1.47	H2-1
24	M42A L2.5x2.5x4	.585	6....	11	.108	.552	z 4	2470.509	38556	1.114	1.785	1.404	H2-1
25	M27 HSS4X4X3	.522	0	17	.107	0	z 8	91274.1...	106812	12.662	12.662	2.71	H1-...
26	M15 HSS4X4X3	.539	0	21	.107	0	z 6	91274.1...	106812	12.662	12.662	2.721	H1-...
27	M76 HSS4X4X3	.515	0	13	.103	0	z 10	91274.1...	106812	12.662	12.662	2.713	H1-...
28	MP3C PIPE_2.0	.605	6....	12	.080	5....	1	9065.408	32130	1.872	1.872	2.695	H1-...
29	MP3A PIPE_2.0	.600	6....	4	.080	5....	5	9065.408	32130	1.872	1.872	2.53	H1-...
30	MP3B PIPE_2.0	.605	6....	8	.080	5....	7	9065.408	32130	1.872	1.872	2.355	H1-...
31	M82B L4X4X4	.689	2....	21	.048	2....	z 19	44696.9...	62532	3.138	6.412	1.325	H2-1
32	M86 L4X4X4	.665	2....	17	.047	2....	z 15	44696.9...	62532	3.138	6.411	1.323	H2-1
33	M91 L4X4X4	.657	2....	13	.045	2....	z 15	44696.9...	62532	3.138	6.411	1.324	H2-1
34	M84A PL5/8x4	.407	.667	22	.026	0	y 19	73029.3...	81000	1.055	6.75	2.248	H1-...
35	M88A PL5/8x4	.398	.667	6	.025	0	y 15	73029.3...	81000	1.055	6.75	1.831	H1-...
36	M87 PL5/8x4	.408	0	16	.025	.667	y 15	73035.5...	81000	1.055	6.75	2.231	H1-...
37	M83A PL5/8x4	.411	0	20	.025	.667	y 19	73035.52	81000	1.055	6.75	2.244	H1-...
38	M89A PL5/8x4	.400	.667	14	.025	0	y 23	73029.3...	81000	1.055	6.75	2.233	H1-...
39	M88B PL5/8x4	.385	0	12	.024	.667	y 15	73035.5...	81000	1.055	6.75	1.854	H1-...

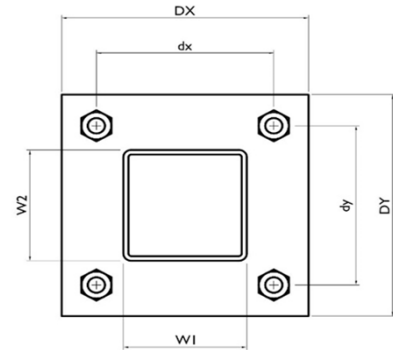
I. Mount-to-Tower Connection Check

Custom Orientation Required

Tower Connection Bolt Checks

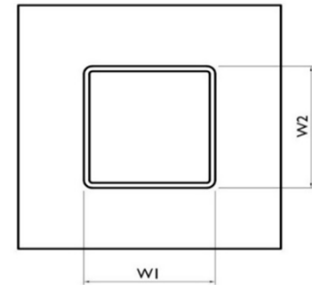
Bolt Orientation

Bolt Quantity per Reaction:	4
d_x (in) (Delta X of typ. bolt config. sketch) :	6
d_y (in) (Delta Y of typ. bolt config. sketch) :	6
Bolt Type:	A325N
Bolt Diameter (in):	0.625
Required Tensile Strength / bolt (kips):	6.4
Required Shear Strength / bolt (kips):	0.5
Tensile Capacity / bolt (kips):	20.7
Shear Capacity / bolt (kips):	12.4
Bolt Overall Utilization:	31.1%



Tower Connection Baseplate Checks

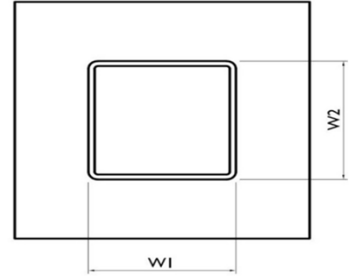
Connecting Standoff Member Shape:	Rect Tube
Weld Stiffener Configuration:	No Stiffeners
Plate Width, D_x (in):	8.5
Plate Height, D_y (in):	8.5
W_1 (in):	4
W_2 (in):	4
Member Thickness (in):	0.18
Stiffener location a_1 (in):	
Stiffener location b_1 (in):	
Stiffener location a_2 (in):	
Stiffener location b_2 (in):	
F_y (ksi, plate):	36
Plate Thickness (in):	0.75
Length of Yield Line, L_y (in):	6.28
Bolt Eccentricity, e (in):	1.58
M_u (kip-in):	10.19
$\Phi * M_n$ (kip-in):	28.62
Plate Bending Utilization:	35.6%



Tower Connection Weld Checks

Weld Shape:
 Weld Stiffener Configuration:
 Weld Size (1/16 in):
 W1 (in):
 W2 (in):
 Weld Total Length (in):
 Z_x (in³/in):
 Z_y (in³/in):
 J_p (in⁴/in):
 c_x (in)
 c_y (in)
 Required combined strength (kip/in):
 Weld Capacity (kip/in):
 Weld Utilization:

Yes
Rectangle
None
4
4
4
16.00
21.33
21.33
85.33
2.18
2.18
2.44
5.57
43.8%



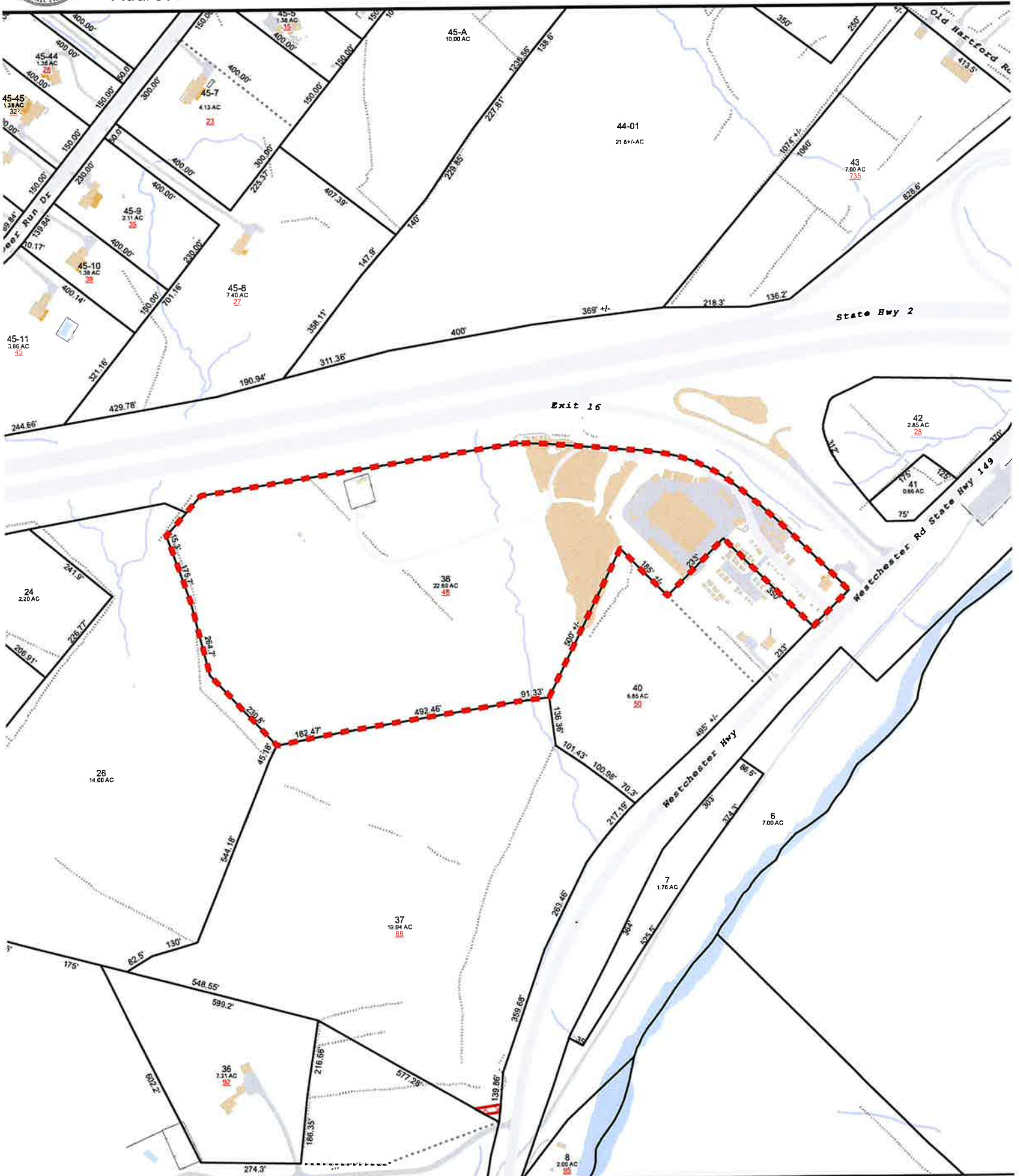
ATTACHMENT 4



Town of Colchester, Connecticut - Assessment Parcel Map

Parcel: 06-12-038-000

Address:



Approximate Scale: 1 inch = 350 feet
0 180 360 540 720 Feet

Map Produced: April 2023 / Grand List: 2022

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



Town of Colchester, CT

Property Report

Map Block Lot

06-12/038-000

PID 3133

Building # 1

Section # 1

Account

M0428100

Property Information

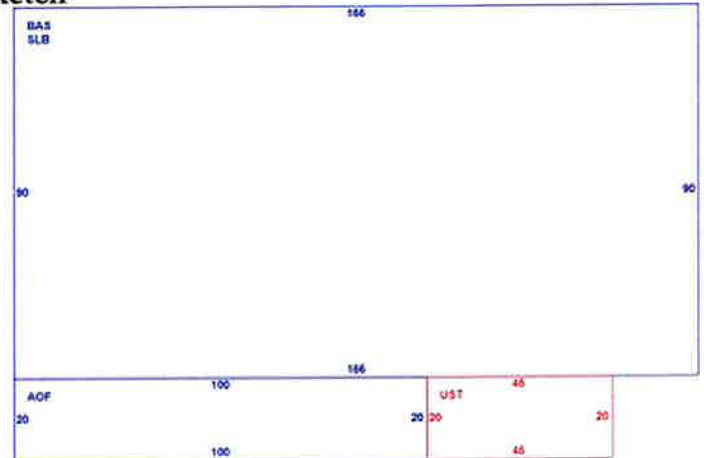
Property Location	48 WESTCHESTER RD
Owner	MARGUS PROPERTIES LLC
Co-Owner	na
Mailing Address	48 WESTCHESTER RD COLCHESTER CT 06415
Land Use	4000 Factory MDL-96
Land Class	I
Zoning Code	AC
Census Tract	

Neighborhood	
Acreage	22.69
Utilities	UNKNOWN
Lot Setting/Desc	UNKNOWN UNKNOWN
Additional Info	

Photo



Sketch



Primary Construction Details

Year Built	1989
Stories	1
Building Style	Pre-Eng Mfg
Building Use	Commercial
Building Condition	
Interior Floors 1	Concrete Slab
Interior Floors 2	Carpet
Total Rooms	
Basement Garages	
Occupancy	1.00
Building Grade	

Bedrooms	0
Full Bathrooms	0
Half Bathrooms	0
Extra Fixtures	0
Bath Style	
Kitchen Style	
Roof Style	Gable
Roof Cover	Enam Mtl Shing
AC Type	Partial
Fireplaces	0

Exterior Walls	Vinyl Siding
Exterior Walls 2	NA
Interior Walls	Drywall
Interior Walls 2	NA
Heating Type	Forced Air-Duc
Heating Fuel	Gas
Sq. Ft. Basement	
Fin BSMT Quality	
Extra Kitchens	

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 3	TOTAL NO. of Pieces Received at Post Office™ 3	Affix Stamp Here Postmark with Date of Receipt. neopost TM 08/17/2023 US POSTAGE \$003.19 ⁰⁰ ZIP 06103 041L12203937 			
	Postmaster, per (name of receiving employee)					
USPS® Tracking Number Firm-specific Identifier	Address (Name, Street, City, State, and ZIP Code™)		Postage	Fee	Special Handling	Parcel Airlift
1.	Andreas Bisbikos, First Selectman Town of Colchester 127 Norwich Avenue Colchester, CT 06415					
2.	Demian Sorrentino, Planning Director Town of Colchester 127 Norwich Avenue Colchester, CT 06415					
3.	Margus Properties LLC 48 Westchester Road Colchester, CT 06415					
4.						
5.						
6.						