

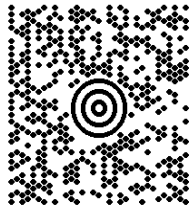
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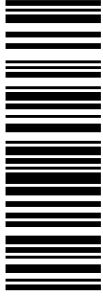
MARY CAULFIELD
978-994-0252
CENTERLINE COMMUNICATIONS
750 WEST CENTER STREET
WEST BRIDGEWATER MA 02379

SHIP TO:

CONNECTICUT SITING COUNCIL
860-827-2935
TEN FRANKLIN SQUARE
NEW BRITAIN CT 06051-2655

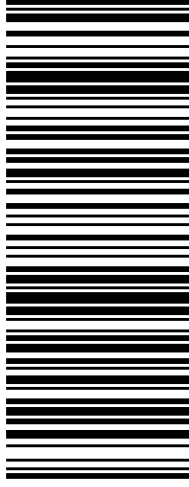


CT 067 9-06



UPS GROUND

TRACKING #: 1Z 9Y4 503 03 1931 1099



BILLING: P/P

Reference#1: CT5266; CSC filed

US 20.0.42. WNTNVS0 99.0A.04./2018



1 OF 1

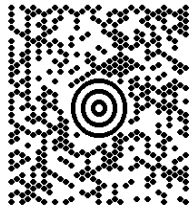
1 LBS

MARY CAULFIELD
978-994-0252
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750 WEST CENTER STREET
WEST BRIDGEWATER MA 02379

SHIP TO:

KENNETH KELLOGG, 1ST SELECTMAN
TOWN OF MONROE
7 FAN HILL ROAD
TOWN HALL

MONROE CT 06468-1847

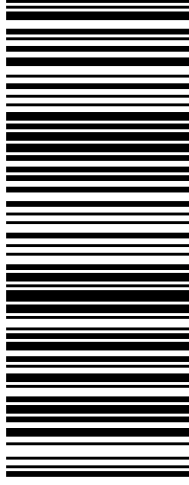


CT 068 0-02



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TRACKING #: 1Z 9Y4 503 03 0153 2106



BILLING: P/P

Reference#1: CT5266; CSC filed w/ 1st Selectman



UPS 20.0.42. WNTNVS0 99.0A.04./2018

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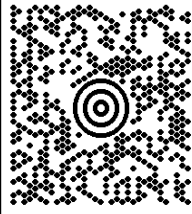
1 LBS

MARY CAULFIELD
978-994-0252
CENTERLINE COMMUNICATIONS
750 WEST CENTER STREET
WEST BRIDGEWATER MA 02379

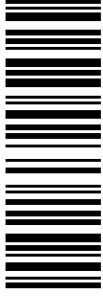
SHIP TO:

WILLIAM AGRESTA, PLANNING & ZONING
TOWN OF MONROE
7 FAN HILL ROAD
TOWN HALL ANNEX

MONROE CT 06468-1847

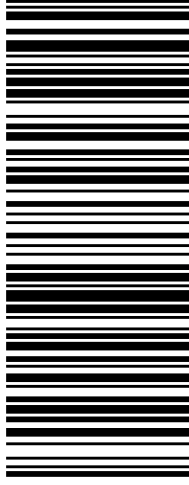


CT 068 0-02



UPS GROUND

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BILLING: P/P

Reference#1: CT5266; CSC filed w/ Planning



UPS 20.0.42. WNTNVS0 99.0A.04./2018

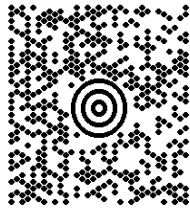
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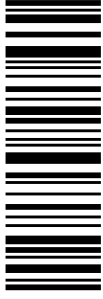
MARY CAULFIELD
978-994-0252
CENTERLINE COMMUNICATIONS
750 WEST CENTER STREET
WEST BRIDGEWATER MA 02379

SHIP TO:

CARLA SHORTER
SBA COMMUNICATIONS CORPORATION
8051 CONGRESS AVENUE
BOCA RATON FL 33487-1307

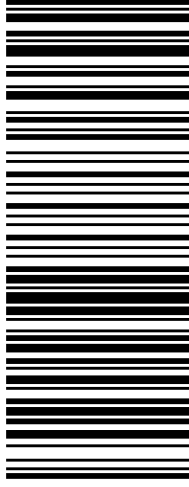


FL 332 6-07



UPS GROUND

TRACKING #: 1Z 9Y4 503 03 0366 7155



BILLING: P/P

Reference#1: CTS266; CSC filing to SBA



US 20.0.42. WNTNVS0 99.0A.04./2018

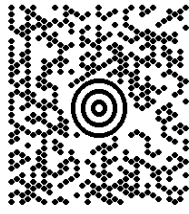
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1 LBS

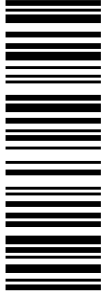
MARY CAULFIELD
978-994-0252
CENTERLINE COMMUNICATIONS
750 WEST CENTER STREET
WEST BRIDGEWATER MA 02379

SHIP TO:

JIM M. KIMBALL
STONE CASTLE INVESTMENTS LLC
1428 MONROE TPKE
MONROE CT 06468-1478

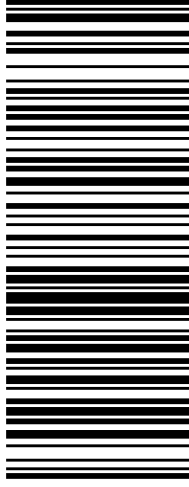


CT 068 0-02



UPS GROUND

TRACKING #: 1Z 9Y4 503 03 1710 0169



BILLING: P/P

Reference#1: CTS266; CSC filing to Property



UPS 20.0.42. WNTNVS0 99.0A.04./2018

Mary Caulfield, Site Acquisition Consultant
c/o New Cingular Wireless, PCS LLC (AT&T)
Centerline Communications, LLC
750 West Center Street, Suite 301
West Bridgewater, MA 02379
Mobile: (978) 994-0252
MCaulfield@centerlinecommunications.com

June 19, 2018

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

**RE: Notice of Exempt Modification // Site Number: CT5266 (Name: Monroe Turnpike)
1428 Monroe Turnpike, Monroe, CT 06468
N 41.3763888888889 // W -73.1863888888889**

Dear Ms. Bachman:

New Cingular Wireless, PCS, LLC (“AT&T”) currently maintains 9 total antennas at the 160-foot mount on the existing 160-foot monopole tower, located at 1428 Monroe Turnpike, Monroe, CT. The tower is owned by SBA Infrastructure, LLC. The property is owned by Jim M. Kimball/Stone Castle Investments LLC. AT&T now intends to replace three (3) of its existing antennas with three (3) new LTE (1900/2300 band) antennas for its LTE upgrade. AT&T also intends to install six (6) new remote radios and one (1) surge arrestor; and certain in-cabinet upgrades at the base.

The current proposal involves an antenna swap only (three for three); no antennas will be added.

Note that this facility was originally approved by the Connecticut Siting Council on February 14, 2002, Docket No. 210.

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies §16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to Kenneth Kellogg, First Selectman for the Town of Monroe, William Agresta, AICP, Director of Planning and Zoning for the Town of Monroe, as well as the tower owner, SBA Infrastructure, LLC, and the ground owner, Jim M. Kimball/Stone Castle Investments LLC.

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

Attached to accommodate this filing are construction drawings dated June 15, 2018 by Infinigy, a structural analysis dated May 4, 2018 by Tower Engineering Solutions and an Emissions Analysis Report dated March 26, 2018 by Centerline Communications, LLC.

1. The proposed modifications will not result in an increase in the height of the existing structure.
2. The proposed modifications will not require the extension of the site boundary.
3. The proposed modifications will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.
4. The operation of the replacement antennas will not increase radio frequency emissions at the facility to a level at or above the Federal Communications Commission safety standard.
5. The proposed modifications will not cause an ineligible change or alteration in the physical or environmental characteristics of the site.
6. The existing structure and its foundation can support the proposed loading, pursuant to the structural analysis by Tower Engineering Solutions, dated May 4, 2018.

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

Sincerely,

Mary Caulfield, Site Acquisition Consultant
c/o New Cingular Wireless, PCS LLC (AT&T)
Centerline Communications, LLC
750 West Center Street, Suite 301
West Bridgewater, MA 02379
Mobile: (978) 994-0252
MCaulfield@centerlinecommunications.com

cc: Kenneth Kellogg, First Selectman, Town of Monroe
William Agresta, AICP, Director of Planning and Zoning, Town of Monroe
SBA Infrastructure LLC, Tower Owner
Jim M. Kimball/ Stone Castle Investments LLC, Property Owner



Tower Engineering Solutions

Phone (972) 483-0607, Fax (972) 975-9615
8445 Freeport Parkway, Suite 375, Irving, Texas 75063

Structural Analysis Report

Existing 159 ft SABRE Monopole
Customer Name: SBA Communications Corp
Customer Site Number: CT13055-A
Customer Site Name: Monroe Turnpike
Carrier Name: AT&T
Carrier Site ID / Name: CT5266 / Monroe-Monroe Turnpike
Site Location: 1428 Monroe Turnpike
Monroe, Connecticut
Fairfield County
Latitude: 41.376463
Longitude: -73.186541

Analysis Result:

Max Structural Usage: 99.1% [Pass]
Max Foundation Usage: 90% [Pass]
Additional Usage Caused by New Mount: +2.94%

Report Prepared By : Haoxuan Lei





Tower Engineering Solutions

Phone (972) 483-0607, Fax (972) 975-9615
8445 Freeport Parkway, Suite 375, Irving, Texas 75063

Structural Analysis Report

Existing 159 ft SABRE Monopole

Customer Name: SBA Communications Corp

Customer Site Number: CT13055-A

Customer Site Name: Monroe Turnpike

Carrier Name: AT&T

Carrier Site ID / Name: CT5266 / Monroe-Monroe Turnpike

Site Location: 1428 Monroe Turnpike

Monroe, Connecticut

Fairfield County

Latitude: 41.376463

Longitude: -73.186541

Analysis Result:

Max Structural Usage: 99.1% [Pass]

Max Foundation Usage: 90% [Pass]

Additional Usage Caused by New Mount: +2.94%

Report Prepared By : Haoxuan Lei

Introduction

The purpose of this report is to summarize the analysis results on the 159 ft SABRE Monopole to support the proposed antennas and transmission lines in addition to those currently installed. Any modification listed under Sources of Information was assumed completed and was included in this analysis.

Sources of Information

Tower Drawings	Sabre Communications Corporation, Job No. 04-05018, dated May 23, 2003
Foundation Drawing	Sabre Communications Corporation, Job No. 04-05018, Drawing No. 04-05018-F1, dated May 23, 2003
Geotechnical Report	Geotechnical Report by Dr. Clarence Welti, P.E., P.C., dated April 25, 2003
Modification Drawings	Mount replacement recommendation provided by Infinigy, dated 04/12/2018

Analysis Criteria

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

Wind Speed Used in the Analysis:	Ultimate Design Wind Speed $V_{ult} = 120.0$ mph (3-Sec. Gust)/ Nominal Design Wind Speed $V_{asd} = 93.0$ mph (3-Sec. Gust)
Wind Speed with Ice:	50 mph (3-Sec. Gust) with 3/4" radial ice concurrent
Operational Wind Speed:	60 mph + 0" Radial ice
Standard/Codes:	ANSI/TIA/EIA 222-G / 2012 IBC / 2016 Connecticut State Building Code
Exposure Category:	C
Structure Class:	II
Topographic Category:	1
Crest Height:	0 ft
Seismic Parameters:	$S_5 = 0.205$, $S_1 = 0.065$

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

Existing Antennas, Mounts and Transmission Lines

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

Items	Elevation (ft.)	Qty.	Antenna Descriptions	Mount Type & Qty.	Transmission Lines ¹	Owner
-	162.0	3	Powerwave 7770 - Panel	Low Profile Platform	(6) 1 5/8" (1) 7/8" (2) 3/4" DC	AT&T
-		3	Powerwave P65-16-XLH-RR - Panel			
-		6	Powerwave LGP21401 - TMA			
-		6	Ericsson RRUS-11 - RRU			
-		1	Raycap DC6-48-60-18-8F			
10		1	Decibel DB404-B - Omni		(1) 1/2" Fiber	Town
11	151.0	3	RFS - APXVSP18-C-A20 - Panel	Low Profile Platform with SitePro HRK-12 Handrail Kit	(4) 1-1/4" Hybrid	Sprint Nextel
12		3	RFS - APXVTM14-C-I20 - Panel			
13		4	RFS - ACU-A20-N - RET			
14		3	Alcatel Lucent - 1900 MHz RRH			
15		3	Alcatel Lucent - 800 MHz RRH			
16		3	Alcatel Lucent - TD-RRH8x20-25 - RRH			
17	3	Alcatel Lucent - 800 MHz Filters				
18	142.5	6	EMS - FR90-16-XXDP - Panel	LP Platform w/ Handrails w/ (3) VSR-MS-B	(24) 1 1/4"	T-Mobile
19		3	RFS - APX16DWV-16DWVS-E-A20 - Panel			
20		3	RFS - APXVAA24_43-U-A20 - Panel			
21		3	RFS - ATMA4P4DBP-1A20 - TMA			
22	3	Andrew - ATSBT-TOP-FM - Bias T				
23	131.0	3	Kathrein 742 213_2110_P45_02.0	Low Profile Platform	(12) 1 5/8" (1) 1 5/8" Hybridflex	Verizon
24		3	Antel BXA-70063/6CF - Panel			
25		3	Antel BXA-171063-12BF - Panel			
26		6	Antel LPA-80063/6CF - Panel			
27		3	Alcatel Lucent RRH2x60-AWS - RRU			
28		6	RFS FD9R6004/2C-3L - Diplexer			
29	1	RFS DB-T1-6Z-8AB-OZ - Distribution Box				
30	110.0	1	Sinclair SCL329-HL - Omni	(1) 4 ft. Standoff	(1) 7/8" ²	Town
31	80.0	1	Sinclair SCL329-HL - Omni	(1) 4 ft. Standoff	(1) 7/8" ²	
32	50.0	1	Decibel 26DB - GPS	(1) 4 ft. Standoff	(1) 1/2" ³	Sprint Nextel

1. Transmission lines installed inside the pole shafts unless otherwise noted.
2. Town has (2) 7/8" coax installed outside the pole shafts in a single row to 110 ft. and 80 ft.
3. Sprint Nextel has (1) 1/2" coax installed outside the pole shafts to 50'

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

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

Items	Elevation (ft)	Qty.	Antenna Descriptions	Mount Type & Qty.	Transmission Lines	Owner
1	162.0	3	Powerwave 7770 - Panel	Platform w/ Handrails (Site Pro 1 - RMQP-496-HK)	(12) 1 5/8" (2) 1/2" Fiber (4) 3/4" DC Power	AT&T
2		3	Powerwave P65-16-XLHH-RR - Panel			
3		3	Quintel QS66512-2 - Panel			
4		6	Powerwave Technologies LGP21401 - TMA			
5		3	Kaelus DBC0061F1V51-2 - Diplexer			
6		3	Ericsson RRUS 11-700			
7		3	Ericsson RRUS 32 B30			
8		3	Ericsson RRUS 32 B2			
9		2	Raycap DC6-48-60-18-8F			

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

Analysis Results

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

	Pole shafts	Anchor Bolts	Base Plate
Max. Usage:	90.3%	99.1%	72.9%
Pass/Fail	Pass	Pass	Pass

Foundations

	Moment (Kip-Ft)	Shear (Kips)
Original Design Reactions	3665.0	31.3
Analysis Reactions	4662.2	37.8
Factored Reactions*	4947.8	42.2
% of Design Reactions	94.2%	89.6%

* Per section 15.5.1 of the TIA-222-G standard, factored reactions were obtained by multiplying a 1.35 factor to the original design reactions.

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

Operational Condition (Rigidity):

Operational characteristics of the tower are found to be within the limits prescribed by ANSI/TIA/EIA 222-G for the installed antennas. The maximum twist/sway at the elevation of the proposed equipment is 2.7507 degrees under the operational wind speed as specified in the Analysis Criteria.

Conclusions

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

Standard Conditions

1. This analysis was performed based on the information supplied to **(TES) Tower Engineering Solutions, LLC**. Verification of the information provided was not included in the Scope of Work for **TES**. The accuracy of the analysis is dependent on the accuracy of the information provided.
2. The analysis is based on the presumption that the tower members and components along with any existing reinforcement items have been correctly and properly designed, manufactured, installed and maintained.
3. All the existing structural members were assumed to be in good condition with no physical damage or deterioration associated with corrosion.
4. An initial tension of 10% of the break strength on all the existing guy wires was assumed in all the structural analyses of guyed towers unless different values were provided by the client. **TES** cannot take responsibility for the deviations in the analysis results because of differences in the initial tension forces of the existing guy wires.
5. Secondary component or connection secondary components, welds and bolts are assumed to be able to carry their intended original design loads. **TES** cannot take responsibility for verification of the adequacy on the connections, bolts and welds present in the structure.
6. The analyses will be performed based on the codes as specified by the client or based on the best knowledge of the engineering staff of **TES**. In the absence of information to the contrary, all work will be performed in accordance with the latest relevant revision of ANSI/TIA-222. If wind speed and/or ice loads are different from the minimum values recommended by the EIA/TIA-222 standard or other codes, **TES** should be notified in writing and the applicable minimum values provided by the client.
7. The configuration of the existing mounts, antennas, coax and other appurtenances were supplied by the customer for the current structural analysis. **TES** has not visited the tower site to verify the adequacy of the information provided. If there is any discrepancy found in the report regarding the existing conditions, **TES** should be notified immediately to evaluate the effect of the discrepancy on the analysis results.
8. The client will assume responsibility for rework associated with the differences in initially provided information, including tower and foundation information, existing and/or proposed equipment and transmission lines.
9. If a feasibility analysis was performed, final acceptance of changed conditions shall be based upon a rigorous structural analysis.

Usage Diagram - Max Ratio 90.30% at 0.0ft

Structure: CT13055-A-SBA
Site Name: Monroe Turnpike
Height: 159.00 (ft)
Base Elev: 0.000 (ft)

Code: EIA/TIA-222-G
Exposure: C
Gh: 1.1

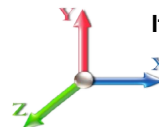
5/4/2018



Page: 1

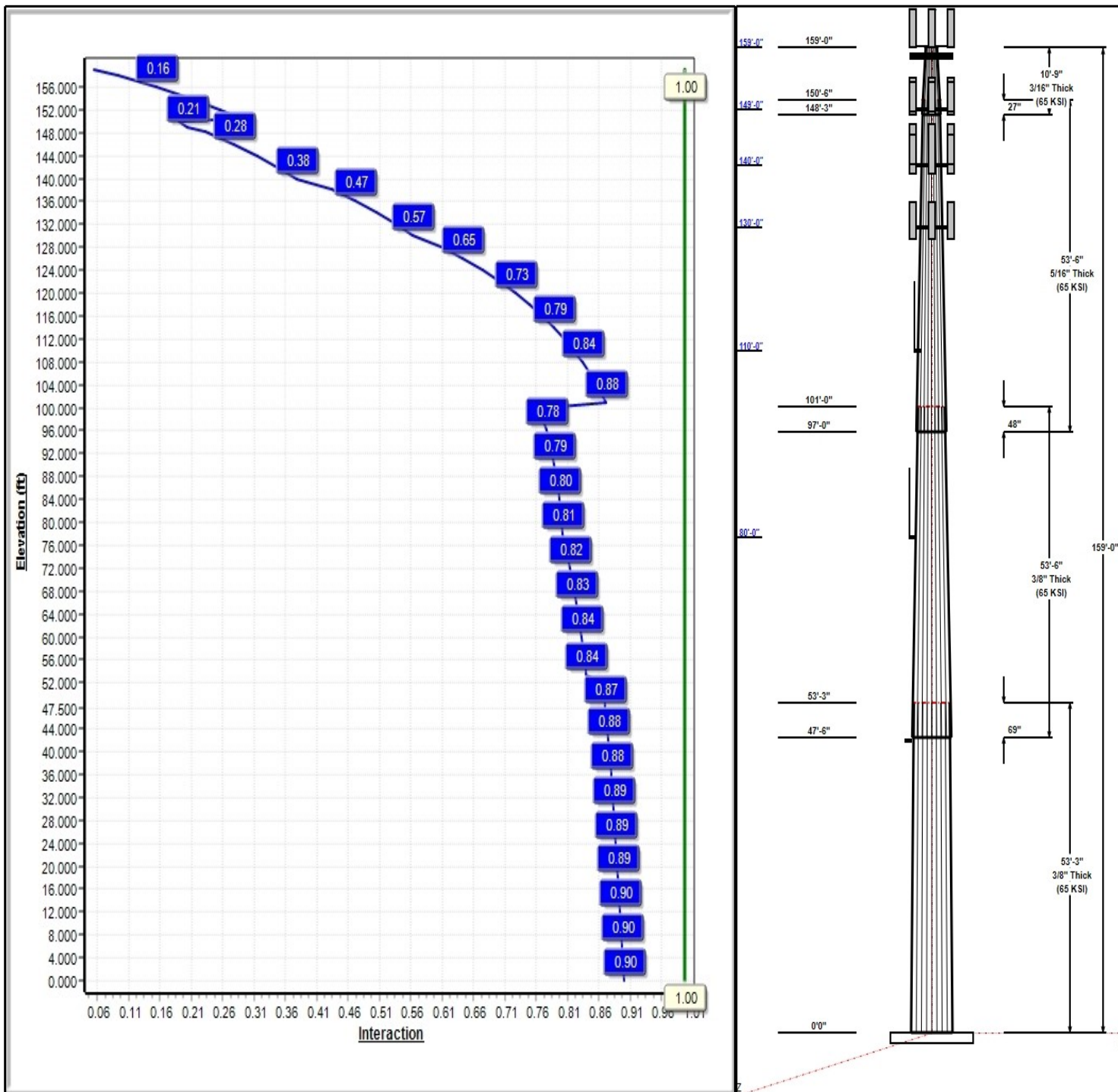
Dead Load Factor: 1.20
Wind Load Factor: 1.60

Load Case : 1.2D + 1.6W 93 mph Wind



Iterations: 29

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Structure: CT13055-A-SBA

Type: Tapered
Site Name: Monroe Turnpike
Height: 159.00 (ft)
Base Elev: 0.00 (ft)

Base Shape: 18 Sided
Taper: 0.28277

5/4/2018

Page: 2



Shaft Properties

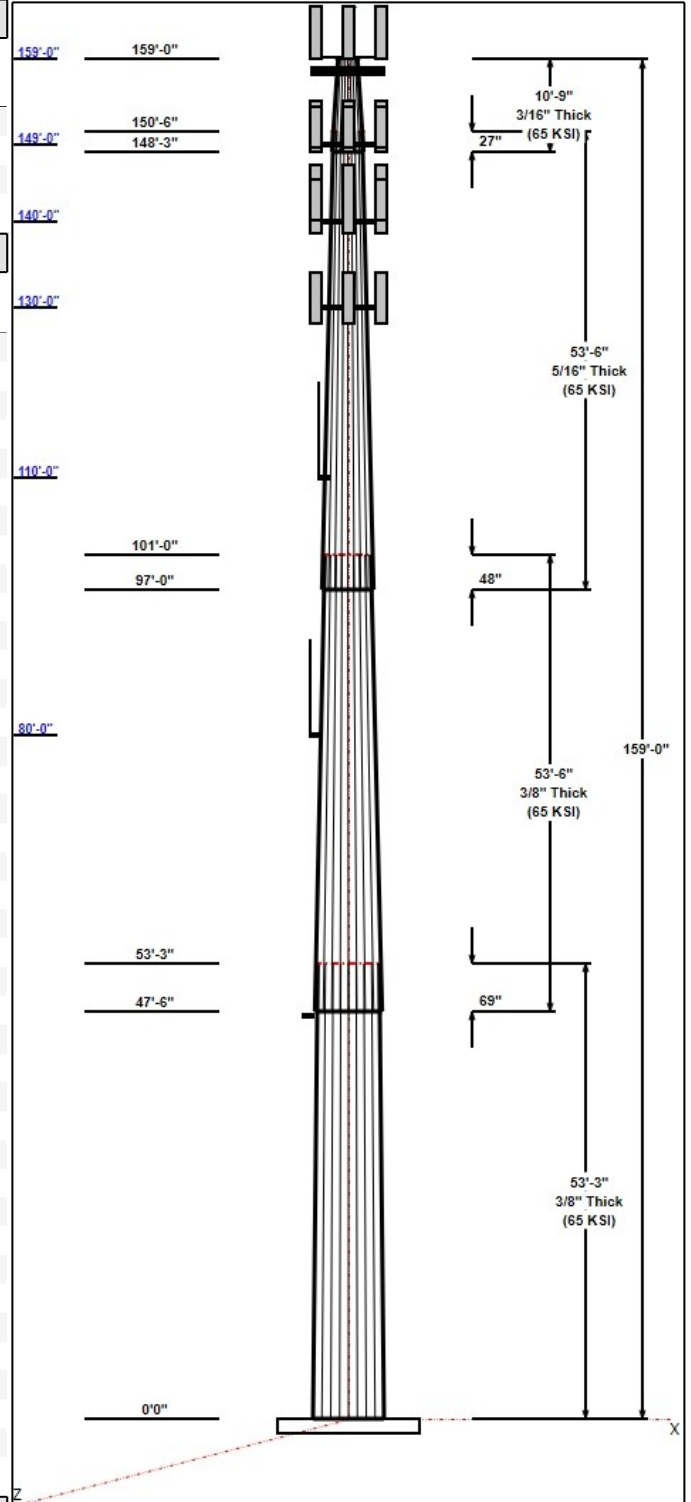
Seq	Length (ft)	Top (in)	Bottom (in)	Thick (in)	Joint Type	Taper	Grade (ksi)
1	53.25	43.15	58.21	0.375		0.28277	65
2	53.50	30.40	45.53	0.375	Slip	0.28277	65
3	53.50	17.03	32.16	0.313	Slip	0.28277	65
4	10.75	15.00	18.04	0.188	Slip	0.28277	65

Discrete Appurtenances

Attach Elev (ft)	Force Elev (ft)	Qty	Description	Carrier
159.00	162.00	3	7770.00	AT&T
159.00	162.00	3	P65-16-XLH-RR	AT&T
159.00	162.00	6	LGP21401	AT&T
159.00	162.00	3	RRUS 11-700	AT&T
159.00	162.00	2	DC6-48-60-18-8F	AT&T
159.00	159.00	1	RMQP-4096-HK Plat. +	AT&T
159.00	162.00	1	DB404-B	Town
159.00	162.00	3	QS66512-2	AT&T
159.00	162.00	3	DBC0061F1V51-2	AT&T
159.00	162.00	3	RRUS 32 B30	AT&T
159.00	162.00	3	RRUS 32 B2	AT&T
149.00	149.00	1	HRK12 (Handrail Kit)	Sprint Nextel
149.00	151.00	3	RFS - APXVTM14-C-I20	Sprint Nextel
149.00	151.00	3	Alcatel Lucent -	Sprint Nextel
149.00	151.00	3	RFS - APXVSP18-C-A20	Sprint Nextel
149.00	151.00	3	Alcatel Lucent - 1900 MHz	Sprint Nextel
149.00	151.00	3	Alcatel Lucent - 800 MHz	Sprint Nextel
149.00	151.00	3	Alcatel Lucent - 800 MHz	Sprint Nextel
149.00	151.00	4	RFS - ACU-A20-N - RET	Sprint Nextel
149.00	149.00	1	Low Profile Platform	Sprint Nextel
140.00	140.00	1	Low Profile Platform w/	T-Mobile
140.00	142.50	6	FR90-16-XXDP	T-Mobile
140.00	142.50	3	APX16DWV-16DWVS-E-A	T-Mobile
140.00	142.50	3	APXVAA24_43-U-A20	T-Mobile
140.00	142.50	3	RFS -	T-Mobile
140.00	142.50	3	Andrew - ATSBT-TOP-FM	T-Mobile
130.00	131.00	3	742 213_2110_P45_02.0	Verizon
130.00	131.00	3	BXA-70063/6CF	Verizon
130.00	131.00	6	LPA-80063/6CF	Verizon
130.00	131.00	3	BXA-171063-12BF	Verizon
130.00	131.00	3	RRH2X60-AWS	Verizon
130.00	131.00	6	FD9R6004/2C-3L -	Verizon
130.00	131.00	1	DB-T1-6Z-8AB-0Z - Distri	Verizon
130.00	130.00	1	Low Profile Platform	Verizon
110.00	115.55	1	SCL329-HL	Town
110.00	110.00	1	4 ft Standoff	Town
80.00	80.00	1	4 ft Standoff	Town
80.00	85.55	1	SCL329-HL	Town
47.00	50.00	1	Decibel 26DB GPS	Sprint Nextel
47.00	47.00	1	4 ft Standoff	Sprint Nextel

Linear Appurtenances

Elev From (ft)	Elev To (ft)	Placement	Description	Carrier
0.00	159.00	Outside	1 5/8" Coax	AT&T
0.00	159.00	Outside	1/2" Fiber	AT&T



Structure: CT13055-A-SBA

Type: Tapered
Site Name: Monroe Turnpike
Height: 159.00 (ft)
Base Elev: 0.00 (ft)

Base Shape: 18 Sided
Taper: 0.28277

5/4/2018

Page: 3



0.00	159.00	Inside	1/2" Fiber	Town
0.00	159.00	Outside	3/4" DC	AT&T
0.00	151.00	Inside	1-1/4" Hybrid	Sprint Nextel
0.00	142.50	Inside	1 1/4" Coax	T-Mobile
0.00	131.00	Inside	1 5/8" Coax	Verizon
0.00	131.00	Inside	1 5/8" Hybriflex	Verizon
0.00	110.00	Outside	7/8" Coax	Town
0.00	80.00	Outside	7/8" Coax	Town
0.00	50.00	Outside	1/2" Coax	Sprint Nextel

Anchor Bolts

Qty	Specifications	Grade (ksi)	Arrangement
14	2.25" 18J	75.0	Radial

Base Plate

Thickness (in)	Specifications (in)	Grade (ksi)	Geometry
2.2500	71.0	60.0	Round

Reactions

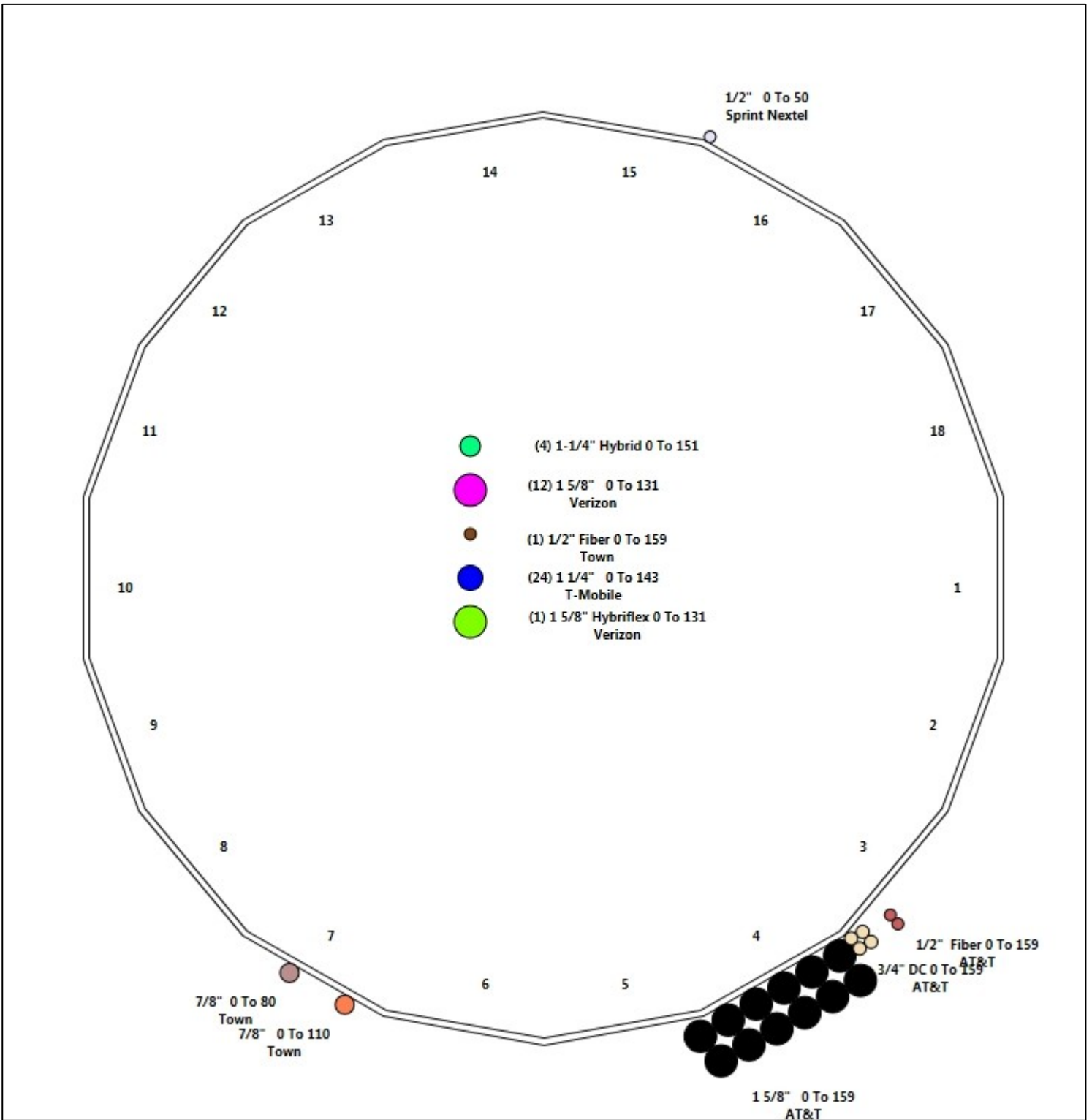
Load Case	Moment (FT-Kips)	Shear (Kips)	Axial (Kips)
1.2D + 1.6W 93 mph Wind	4662.2	37.8	50.6
0.9D + 1.6W 93 mph Wind	4591.5	37.8	37.9
1.2D + 1.0Di + 1.0Wi 50 mph Wind	1445.1	11.5	87.6
1.2D + 1.0E	360.8	2.7	50.6
0.9D + 1.0E	354.8	2.7	38.0
1.0D + 1.0W 60 mph Wind	1205.0	9.8	42.2

Structure: CT13055-A-SBA - Coax Line Placement

Type: Monopole
Site Name: Monroe Turnpike
Height: 159.00 (ft)

5/4/2018

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Shaft Properties

Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (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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Sec. No.	Shape	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Overlap (in)	Weight (lb)
1	18	53.250	0.3750	65		0.00	10,849
2	18	53.500	0.3750	65	Slip	69.00	8,145
3	18	53.500	0.3125	65	Slip	48.00	4,384
4	18	10.750	0.1875	65	Slip	27.00	356
Total Shaft Weight:							23,734

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	58.21	0.00	68.84	29090.28	25.96	155.23	43.15	53.25	50.91	11771.3	18.88	115.0	0.282767
2	45.53	47.50	53.74	13843.68	20.00	121.41	30.40	101.00	35.74	4070.49	12.88	81.07	0.282767
3	32.16	97.00	31.58	4046.51	16.73	102.90	17.03	150.50	16.58	585.32	8.20	54.49	0.282767
4	18.04	148.2	10.62	427.78	15.55	96.21	15.00	159.00	8.81	244.36	12.70	80.00	0.282767

Load Summary

Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (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	159.00	7770.00	3	77.00	5.79	0.77	332.84	7.270	0.80	0.00	3.00
2	159.00	P65-16-XLH-RR	3	102.00	8.53	0.79	367.43	10.417	0.81	0.00	3.00
3	159.00	LGP21401	6	14.10	1.29	0.50	39.25	2.131	0.50	0.00	3.00
4	159.00	RRUS 11-700	3	51.00	2.52	0.67	123.70	3.157	0.67	0.00	3.00
5	159.00	DC6-48-60-18-8F	2	31.80	0.92	1.00	93.99	1.361	1.00	0.00	3.00
6	159.00	RMQP-4096-HK Plat. + HR/Kicker	1	2645.00	48.10	1.00	5430.84	83.901	1.00	0.00	0.00
7	159.00	DB404-B	1	14.00	0.00	1.00	14.01	0.000	1.00	0.00	3.00
8	159.00	QS66512-2	3	111.00	8.13	0.92	339.84	9.437	0.92	0.00	3.00
9	159.00	DBC0061F1V51-2	3	25.40	0.43	0.50	40.02	0.717	0.50	0.00	3.00
10	159.00	RRUS 32 B30	3	60.00	2.74	0.67	148.64	3.473	0.67	0.00	3.00
11	159.00	RRUS 32 B2	3	53.00	2.74	0.67	141.64	3.473	0.67	0.00	3.00
12	149.00	HRK12 (Handrail Kit)	1	261.72	6.75	1.00	572.11	13.342	1.00	0.00	0.00
13	149.00	RFS - APXVTM14-C-I20	3	56.00	6.34	0.78	182.62	7.450	0.81	0.00	2.00
14	149.00	Alcatel Lucent - TD-RRH8x20-25 -	3	70.00	4.05	0.67	167.67	5.463	0.67	0.00	2.00
15	149.00	RFS - APXVSP18-C-A20	3	106.00	8.42	0.83	373.25	10.288	0.85	0.00	2.00
16	149.00	Alcatel Lucent - 1900 MHz RRH	3	44.00	3.80	0.67	153.09	5.189	0.67	0.00	2.00
17	149.00	Alcatel Lucent - 800 MHz RRH	3	53.00	2.49	0.67	126.91	3.633	0.67	0.00	2.00
18	149.00	Alcatel Lucent - 800 MHz Filters	3	8.80	0.78	0.67	26.43	1.426	0.67	0.00	2.00
19	149.00	RFS - ACU-A20-N - RET	4	1.00	0.14	0.50	5.29	0.436	0.50	0.00	2.00
20	149.00	Low Profile Platform	1	1200.00	35.00	1.00	2246.43	64.300	1.00	0.00	0.00
21	140.00	Low Profile Platform w/ Handrails	1	1600.00	34.00	1.00	3685.41	63.465	1.00	0.00	0.00
22	140.00	FR90-16-XXDP	6	18.00	4.36	0.68	115.82	5.339	0.68	0.00	2.50
23	140.00	APX16DWV-16DWVS-E-A20	3	40.70	6.61	0.62	156.95	8.773	0.62	0.00	2.50
24	140.00	APXVAA24_43-U-A20	3	101.40	20.24	0.73	526.20	22.152	0.73	0.00	2.50
25	140.00	RFS - ATMA4P4DBP-1A20 - TMA	3	15.85	1.17	0.67	48.04	1.947	0.67	0.00	2.50
26	140.00	Andrew - ATSBT-TOP-FM - Bias T	3	1.80	0.20	0.67	7.60	0.545	0.67	0.00	2.50
27	130.00	742 213_2110_P45_02.0	3	16.50	3.15	0.72	75.47	4.865	0.72	0.00	1.00
28	130.00	BXA-70063/6CF	3	66.00	7.98	0.75	305.45	9.820	0.78	0.00	1.00
29	130.00	LPA-80063/6CF	6	76.00	10.01	0.95	412.45	11.946	0.95	0.00	1.00
30	130.00	BXA-171063-12BF	3	64.00	5.13	0.88	246.07	6.906	0.90	0.00	1.00
31	130.00	RRH2X60-AWS	3	55.00	3.50	0.67	133.88	4.278	0.67	0.00	1.00
32	130.00	FD9R6004/2C-3L - Diplexer	6	3.10	0.36	0.50	11.01	0.797	0.50	0.00	1.00
33	130.00	DB-T1-6Z-8AB-OZ - Distri box	1	18.90	4.80	0.71	160.23	5.660	0.76	0.00	1.00
34	130.00	Low Profile Platform	1	1200.00	22.00	1.00	2232.25	40.168	1.00	0.00	0.00
35	110.00	SCL329-HL	1	10.40	2.22	1.00	68.54	6.060	1.00	0.00	5.55
36	110.00	4 ft Standoff	1	53.32	3.50	1.00	157.14	11.249	1.00	0.00	0.00
37	80.00	4 ft Standoff	1	53.32	3.50	1.00	153.88	11.006	1.00	0.00	0.00
38	80.00	SCL329-HL	1	10.40	2.22	1.00	66.71	5.940	1.00	0.00	5.55
39	47.00	Decibel 26DB GPS	1	10.00	0.16	1.00	14.94	0.502	1.00	0.00	3.00
40	47.00	4 ft Standoff	1	53.32	3.50	1.00	148.67	10.617	1.00	0.00	0.00
Totals:			106	11,400.53			30,702.69				

Linear Appurtenances

Bottom Elev. (ft)	Top Elev. (ft)	Description	Exposed Width	Exposed
0.00	159.00	(12) 1 5/8" Coax	2.00	Outside

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	159.00	(2) 1/2" Fiber		1.00		Outside					
0.00	159.00	(1) 1/2" Fiber		0.00		Inside					
0.00	159.00	(4) 3/4" DC		1.50		Outside					
0.00	151.00	(4) 1-1/4" Hybrid		0.00		Inside					
0.00	142.50	(24) 1 1/4" Coax		0.00		Inside					
0.00	131.00	(12) 1 5/8" Coax		0.00		Inside					
0.00	131.00	(1) 1 5/8" Hybriflex		0.00		Inside					
0.00	110.00	(1) 7/8" Coax		1.11		Outside					
0.00	80.00	(1) 7/8" Coax		0.00		Outside					
0.00	50.00	(1) 1/2" Coax		0.65		Outside					

Shaft Section Properties

Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (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		0.3750	58.210	68.836	29090.3	25.96	155.23	70.9	984.3	0.0
2.00		0.3750	57.644	68.163	28245.2	25.69	153.72	71.2	965.1	466.2
4.00		0.3750	57.079	67.489	27416.7	25.43	152.21	71.5	946.1	461.6
6.00		0.3750	56.513	66.816	26604.5	25.16	150.70	71.8	927.2	457.0
8.00		0.3750	55.948	66.143	25808.6	24.90	149.19	72.1	908.6	452.4
10.00		0.3750	55.382	65.470	25028.6	24.63	147.69	72.4	890.1	447.9
12.00		0.3750	54.817	64.797	24264.6	24.36	146.18	72.7	871.8	443.3
14.00		0.3750	54.251	64.124	23516.2	24.10	144.67	73.1	853.8	438.7
16.00		0.3750	53.686	63.451	22783.4	23.83	143.16	73.4	835.9	434.1
18.00		0.3750	53.120	62.778	22066.0	23.57	141.65	73.7	818.2	429.5
20.00		0.3750	52.555	62.105	21363.8	23.30	140.15	74.0	800.7	424.9
22.00		0.3750	51.989	61.431	20676.7	23.03	138.64	74.3	783.3	420.4
24.00		0.3750	51.424	60.758	20004.5	22.77	137.13	74.6	766.2	415.8
26.00		0.3750	50.858	60.085	19346.9	22.50	135.62	74.9	749.3	411.2
28.00		0.3750	50.293	59.412	18704.0	22.24	134.11	75.2	732.5	406.6
30.00		0.3750	49.727	58.739	18075.5	21.97	132.61	75.6	715.9	402.0
32.00		0.3750	49.161	58.066	17461.2	21.71	131.10	75.9	699.6	397.5
34.00		0.3750	48.596	57.393	16860.9	21.44	129.59	76.2	683.4	392.9
36.00		0.3750	48.030	56.720	16274.6	21.17	128.08	76.5	667.4	388.3
38.00		0.3750	47.465	56.047	15702.1	20.91	126.57	76.8	651.6	383.7
40.00		0.3750	46.899	55.374	15143.1	20.64	125.06	77.1	636.0	379.1
42.00		0.3750	46.334	54.700	14597.6	20.38	123.56	77.4	620.5	374.6
44.00		0.3750	45.768	54.027	14065.3	20.11	122.05	77.7	605.3	370.0
46.00		0.3750	45.203	53.354	13546.1	19.84	120.54	78.1	590.2	365.4
47.00		0.3750	44.920	53.018	13291.4	19.71	119.79	78.2	582.8	181.0
47.50	Bot - Section 2	0.3750	44.779	52.849	13165.2	19.64	119.41	78.3	579.1	90.1
48.00		0.3750	44.637	52.681	13039.9	19.58	119.03	78.4	575.4	181.1
50.00		0.3750	44.072	52.008	12546.4	19.31	117.52	78.7	560.7	718.5
52.00		0.3750	43.506	51.335	12065.6	19.05	116.02	79.0	546.2	709.4
53.25	Top - Section 1	0.3750	43.903	51.807	12401.4	19.23	117.07	0.0	0.0	438.7
54.00		0.3750	43.691	51.554	12221.0	19.13	116.51	78.9	550.9	131.9
56.00		0.3750	43.125	50.881	11748.6	18.87	115.00	79.2	536.6	348.6
58.00		0.3750	42.559	50.208	11288.4	18.60	113.49	79.5	522.4	344.0
60.00		0.3750	41.994	49.535	10840.5	18.34	111.98	79.8	508.4	339.4
62.00		0.3750	41.428	48.862	10404.6	18.07	110.48	80.1	494.7	334.8
64.00		0.3750	40.863	48.189	9980.5	17.80	108.97	80.5	481.1	330.2
66.00		0.3750	40.297	47.516	9568.1	17.54	107.46	80.8	467.7	325.7
68.00		0.3750	39.732	46.843	9167.2	17.27	105.95	81.1	454.4	321.1
70.00		0.3750	39.166	46.170	8777.7	17.01	104.44	81.4	441.4	316.5
72.00		0.3750	38.601	45.497	8399.3	16.74	102.94	81.7	428.6	311.9
74.00		0.3750	38.035	44.823	8032.0	16.47	101.43	82.0	415.9	307.3
76.00		0.3750	37.470	44.150	7675.6	16.21	99.92	82.3	403.5	302.8
78.00		0.3750	36.904	43.477	7329.8	15.94	98.41	82.5	391.2	298.2
80.00		0.3750	36.339	42.804	6994.6	15.68	96.90	82.5	379.1	293.6
82.00		0.3750	35.773	42.131	6669.8	15.41	95.39	82.5	367.2	289.0
84.00		0.3750	35.208	41.458	6355.2	15.14	93.89	82.5	355.5	284.4
86.00		0.3750	34.642	40.785	6050.7	14.88	92.38	82.5	344.0	279.9
88.00		0.3750	34.076	40.112	5756.0	14.61	90.87	82.5	332.7	275.3
90.00		0.3750	33.511	39.439	5471.1	14.35	89.36	82.5	321.6	270.7
92.00		0.3750	32.945	38.766	5195.7	14.08	87.85	82.5	310.6	266.1

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	32.380	38.092	4929.7	13.81	86.35	82.5	299.9	261.5
96.00		0.3750	31.814	37.419	4673.0	13.55	84.84	82.5	289.3	256.9
97.00	Bot - Section 3	0.3750	31.532	37.083	4548.0	13.42	84.08	82.5	284.1	126.8
98.00		0.3750	31.249	36.746	4425.3	13.28	83.33	82.5	278.9	232.6
100.00		0.3750	30.683	36.073	4186.6	13.02	81.82	82.5	268.7	458.9
101.00	Top - Section 2	0.3125	31.026	30.462	3630.5	16.10	99.28	0.0	0.0	226.3
102.00		0.3125	30.743	30.182	3531.1	15.94	98.38	82.5	226.2	103.2
104.00		0.3125	30.177	29.621	3337.9	15.62	96.57	82.5	217.9	203.5
106.00		0.3125	29.612	29.060	3151.8	15.30	94.76	82.5	209.6	199.7
108.00		0.3125	29.046	28.499	2972.8	14.98	92.95	82.5	201.6	195.9
110.00		0.3125	28.481	27.938	2800.7	14.66	91.14	82.5	193.7	192.0
112.00		0.3125	27.915	27.377	2635.4	14.34	89.33	82.5	185.9	188.2
114.00		0.3125	27.350	26.816	2476.7	14.02	87.52	82.5	178.4	184.4
116.00		0.3125	26.784	26.255	2324.5	13.70	85.71	82.5	170.9	180.6
118.00		0.3125	26.218	25.695	2178.7	13.38	83.90	82.5	163.7	176.8
120.00		0.3125	25.653	25.134	2039.1	13.06	82.09	82.5	156.6	173.0
122.00		0.3125	25.087	24.573	1905.6	12.74	80.28	82.5	149.6	169.1
124.00		0.3125	24.522	24.012	1778.1	12.43	78.47	82.5	142.8	165.3
126.00		0.3125	23.956	23.451	1656.3	12.11	76.66	82.5	136.2	161.5
128.00		0.3125	23.391	22.890	1540.3	11.79	74.85	82.5	129.7	157.7
130.00		0.3125	22.825	22.329	1429.8	11.47	73.04	82.5	123.4	153.9
132.00		0.3125	22.260	21.768	1324.7	11.15	71.23	82.5	117.2	150.1
134.00		0.3125	21.694	21.207	1225.0	10.83	69.42	82.5	111.2	146.2
136.00		0.3125	21.129	20.646	1130.3	10.51	67.61	82.5	105.4	142.4
138.00		0.3125	20.563	20.085	1040.7	10.19	65.80	82.5	99.7	138.6
140.00		0.3125	19.998	19.524	955.9	9.87	63.99	82.5	94.1	134.8
142.00		0.3125	19.432	18.964	875.8	9.55	62.18	82.5	88.8	131.0
144.00		0.3125	18.867	18.403	800.4	9.23	60.37	82.5	83.6	127.1
146.00		0.3125	18.301	17.842	729.4	8.92	58.56	82.5	78.5	123.3
148.00		0.3125	17.735	17.281	662.8	8.60	56.75	82.5	73.6	119.5
148.25	Bot - Section 4	0.3125	17.665	17.211	654.7	8.56	56.53	82.5	73.0	14.7
149.00		0.3125	17.453	17.000	631.0	8.44	55.85	82.5	71.2	70.6
150.00		0.3125	17.170	16.720	600.3	8.28	54.94	82.5	68.9	92.8
150.50	Top - Section 3	0.1875	17.404	10.245	383.7	14.96	92.82	0.0	0.0	45.8
152.00		0.1875	16.979	9.993	356.0	14.56	90.56	82.5	41.3	51.6
154.00		0.1875	16.414	9.656	321.2	14.03	87.54	82.5	38.5	66.9
156.00		0.1875	15.848	9.320	288.8	13.49	84.52	82.5	35.9	64.6
158.00		0.1875	15.283	8.983	258.6	12.96	81.51	82.5	33.3	62.3
159.00		0.1875	15.000	8.815	244.4	12.70	80.00	82.5	32.1	30.3

23733.6

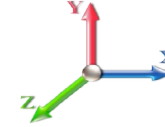
Wind Loading - Shaft

Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (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 + 1.6W 93 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.60



Iterations 29

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	0.85	17.879	19.67	422.34	0.650	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.85	17.879	19.67	418.23	0.663 *	0.000	2.00	9.803	6.50	204.4	0.0	559.4
4.00		1.00	0.85	17.879	19.67	414.13	0.665 *	0.000	2.00	9.708	6.45	203.0	0.0	553.9
6.00		1.00	0.85	17.879	19.67	410.03	0.667 *	0.000	2.00	9.612	6.41	201.6	0.0	548.4
8.00		1.00	0.85	17.879	19.67	405.92	0.669 *	0.000	2.00	9.516	6.36	200.3	0.0	542.9
10.00		1.00	0.85	17.879	19.67	401.82	0.671 *	0.000	2.00	9.421	6.32	198.9	0.0	537.4
12.00		1.00	0.85	17.879	19.67	397.72	0.673 *	0.000	2.00	9.325	6.28	197.5	0.0	531.9
14.00		1.00	0.85	17.879	19.67	393.61	0.675 *	0.000	2.00	9.229	6.23	196.2	0.0	526.4
16.00		1.00	0.86	18.100	19.91	391.91	0.678 *	0.000	2.00	9.134	6.19	197.2	0.0	520.9
18.00		1.00	0.88	18.554	20.41	392.62	0.680 *	0.000	2.00	9.038	6.15	200.7	0.0	515.4
20.00		1.00	0.90	18.971	20.87	392.77	0.683 *	0.000	2.00	8.942	6.10	203.8	0.0	509.9
22.00		1.00	0.92	19.355	21.29	392.46	0.685 *	0.000	2.00	8.846	6.06	206.4	0.0	504.4
24.00		1.00	0.94	19.713	21.68	391.76	0.687 *	0.000	2.00	8.751	6.02	208.7	0.0	498.9
26.00		1.00	0.95	20.048	22.05	390.73	0.690 *	0.000	2.00	8.655	5.97	210.7	0.0	493.4
28.00		1.00	0.97	20.363	22.40	389.41	0.693 *	0.000	2.00	8.559	5.93	212.5	0.0	487.9
30.00		1.00	0.98	20.661	22.73	387.84	0.695 *	0.000	2.00	8.464	5.89	214.0	0.0	482.5
32.00		1.00	1.00	20.944	23.04	386.04	0.698 *	0.000	2.00	8.368	5.84	215.3	0.0	477.0
34.00		1.00	1.01	21.213	23.33	384.05	0.701 *	0.000	2.00	8.272	5.80	216.5	0.0	471.5
36.00		1.00	1.02	21.470	23.62	381.87	0.704 *	0.000	2.00	8.176	5.75	217.5	0.0	466.0
38.00		1.00	1.03	21.715	23.89	379.53	0.707 *	0.000	2.00	8.081	5.71	218.3	0.0	460.5
40.00		1.00	1.04	21.951	24.15	377.03	0.710 *	0.000	2.00	7.985	5.67	219.0	0.0	455.0
42.00		1.00	1.05	22.178	24.40	374.40	0.713 *	0.000	2.00	7.889	5.62	219.5	0.0	449.5
44.00		1.00	1.06	22.396	24.64	371.65	0.716 *	0.000	2.00	7.794	5.58	220.0	0.0	444.0
46.00		1.00	1.07	22.607	24.87	368.78	0.719 *	0.000	2.00	7.698	5.54	220.3	0.0	438.5
47.00	Appurtenance(s)	1.00	1.08	22.709	24.98	367.30	0.722 *	0.000	1.00	3.813	2.75	110.0	0.0	217.2
47.50	Bot - Section 2	1.00	1.08	22.760	25.04	366.56	0.723 *	0.000	0.50	1.898	1.37	55.0	0.0	108.1
48.00		1.00	1.08	22.810	25.09	365.80	0.724 *	0.000	0.50	1.923	1.39	55.9	0.0	217.3
50.00		1.00	1.09	23.007	25.31	362.72	0.726 *	0.000	2.00	7.633	5.54	224.4	0.0	862.3
52.00		1.00	1.10	23.198	25.52	359.55	0.701 *	0.000	2.00	7.538	5.28	215.7	0.0	851.3
53.25	Top - Section 1	1.00	1.11	23.314	25.65	357.52	0.704 *	0.000	1.25	4.662	3.28	134.6	0.0	526.5
54.00		1.00	1.11	23.383	25.72	362.51	0.701 *	0.000	0.75	2.780	1.95	80.2	0.0	158.3
56.00		1.00	1.12	23.562	25.92	359.19	0.703 *	0.000	2.00	7.346	5.17	214.2	0.0	418.3
58.00		1.00	1.13	23.737	26.11	355.79	0.706 *	0.000	2.00	7.251	5.12	214.0	0.0	412.8
60.00		1.00	1.14	23.907	26.30	352.32	0.710 *	0.000	2.00	7.155	5.08	213.7	0.0	407.3
62.00		1.00	1.14	24.073	26.48	348.78	0.713 *	0.000	2.00	7.059	5.04	213.3	0.0	401.8
64.00		1.00	1.15	24.234	26.66	345.17	0.717 *	0.000	2.00	6.963	4.99	212.9	0.0	396.3
66.00		1.00	1.16	24.392	26.83	341.49	0.720 *	0.000	2.00	6.868	4.95	212.4	0.0	390.8
68.00		1.00	1.17	24.545	27.00	337.76	0.724 *	0.000	2.00	6.772	4.90	211.9	0.0	385.3
70.00		1.00	1.17	24.696	27.17	333.97	0.728 *	0.000	2.00	6.676	4.86	211.3	0.0	379.8
72.00		1.00	1.18	24.843	27.33	330.13	0.732 *	0.000	2.00	6.581	4.82	210.6	0.0	374.3
74.00		1.00	1.19	24.986	27.48	326.23	0.736 *	0.000	2.00	6.485	4.77	209.9	0.0	368.8
76.00		1.00	1.19	25.127	27.64	322.28	0.740 *	0.000	2.00	6.389	4.73	209.2	0.0	363.3
78.00		1.00	1.20	25.265	27.79	318.29	0.745 *	0.000	2.00	6.293	4.69	208.4	0.0	357.8
80.00	Appurtenance(s)	1.00	1.21	25.400	27.94	314.25	0.749 *	0.000	2.00	6.198	4.64	207.6	0.0	352.3
82.00		1.00	1.21	25.532	28.09	310.16	0.754 *	0.000	2.00	6.102	4.60	206.7	0.0	346.8
84.00		1.00	1.22	25.662	28.23	306.03	0.759 *	0.000	2.00	6.006	4.56	205.8	0.0	341.3
86.00		1.00	1.23	25.789	28.37	301.86	0.763 *	0.000	2.00	5.911	4.51	204.8	0.0	335.8

Wind Loading - Shaft

Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



88.00	1.00	1.23	25.915	28.51	297.65	0.769 *	0.000	2.00	5.815	4.47	203.8	0.0	330.3
90.00	1.00	1.24	26.037	28.64	293.41	0.774 *	0.000	2.00	5.719	4.43	202.8	0.0	324.8
92.00	1.00	1.24	26.158	28.77	289.12	0.779 *	0.000	2.00	5.623	4.38	201.7	0.0	319.3
94.00	1.00	1.25	26.277	28.90	284.81	0.785 *	0.000	2.00	5.528	4.34	200.6	0.0	313.8
96.00	1.00	1.25	26.394	29.03	280.45	0.791 *	0.000	2.00	5.432	4.29	199.5	0.0	308.3
97.00 Bot - Section 3	1.00	1.26	26.451	29.10	278.26	0.795 *	0.000	1.00	2.680	2.13	99.2	0.0	152.1
98.00	1.00	1.26	26.509	29.16	276.07	0.798 *	0.000	1.00	2.709	2.16	100.9	0.0	279.1
100.00	1.00	1.27	26.621	29.28	271.65	0.803 *	0.000	2.00	5.346	4.29	201.1	0.0	550.7
100.00 Top - Section 2	1.00	1.27	26.677	29.35	269.42	0.808 *	0.000	1.00	2.637	2.13	100.0	0.0	271.6
102.00	1.00	1.27	26.733	29.41	272.74	0.804 *	0.000	1.00	2.613	2.10	98.8	0.0	123.8
104.00	1.00	1.28	26.842	29.53	268.27	0.809 *	0.000	2.00	5.155	4.17	196.9	0.0	244.2
106.00	1.00	1.28	26.950	29.65	263.77	0.815 *	0.000	2.00	5.059	4.13	195.7	0.0	239.6
108.00	1.00	1.29	27.056	29.76	259.24	0.822 *	0.000	2.00	4.964	4.08	194.4	0.0	235.0
110.00 Appurtenance(s)	1.00	1.29	27.161	29.88	254.69	0.830 *	0.000	2.00	4.868	4.04	193.0	0.0	230.5
112.00	1.00	1.30	27.264	29.99	250.10	0.761 *	0.000	2.00	4.772	3.63	174.4	0.0	225.9
114.00	1.00	1.30	27.366	30.10	245.49	0.768 *	0.000	2.00	4.676	3.59	172.9	0.0	221.3
116.00	1.00	1.31	27.466	30.21	240.86	0.774 *	0.000	2.00	4.581	3.55	171.5	0.0	216.7
118.00	1.00	1.31	27.565	30.32	236.20	0.781 *	0.000	2.00	4.485	3.50	170.0	0.0	212.1
120.00	1.00	1.32	27.663	30.43	231.51	0.788 *	0.000	2.00	4.389	3.46	168.4	0.0	207.5
122.00	1.00	1.32	27.760	30.54	226.80	0.796 *	0.000	2.00	4.294	3.42	166.9	0.0	203.0
124.00	1.00	1.32	27.855	30.64	222.07	0.803 *	0.000	2.00	4.198	3.37	165.3	0.0	198.4
126.00	1.00	1.33	27.949	30.74	217.31	0.812 *	0.000	2.00	4.102	3.33	163.8	0.0	193.8
128.00	1.00	1.33	28.042	30.85	212.54	0.820 *	0.000	2.00	4.006	3.29	162.1	0.0	189.2
130.00 Appurtenance(s)	1.00	1.34	28.133	30.95	207.74	0.829 *	0.000	2.00	3.911	3.24	160.5	0.0	184.6
132.00	1.00	1.34	28.224	31.05	202.91	0.838 *	0.000	2.00	3.815	3.20	158.9	0.0	180.1
134.00	1.00	1.35	28.313	31.14	198.07	1.200 *	0.000	2.00	3.719	4.46	222.4	0.0	175.5
136.00	1.00	1.35	28.402	31.24	193.21	1.200 *	0.000	2.00	3.624	4.35	217.4	0.0	170.9
138.00	1.00	1.35	28.489	31.34	188.33	1.200 *	0.000	2.00	3.528	4.23	212.3	0.0	166.3
140.00 Appurtenance(s)	1.00	1.36	28.576	31.43	183.43	1.200 *	0.000	2.00	3.432	4.12	207.1	0.0	161.7
142.00	1.00	1.36	28.661	31.53	178.51	1.200 *	0.000	2.00	3.336	4.00	202.0	0.0	157.2
144.00	1.00	1.37	28.746	31.62	173.57	1.200 *	0.000	2.00	3.241	3.89	196.8	0.0	152.6
146.00	1.00	1.37	28.829	31.71	168.61	1.200 *	0.000	2.00	3.145	3.77	191.5	0.0	148.0
148.00	1.00	1.37	28.912	31.80	163.63	1.200 *	0.000	2.00	3.049	3.66	186.2	0.0	143.4
148.25 Bot - Section 4	1.00	1.37	28.922	31.81	163.01	1.200 *	0.000	0.25	0.374	0.45	22.9	0.0	17.6
149.00 Appurtenance(s)	1.00	1.38	28.953	31.85	161.14	1.200 *	0.000	0.75	1.138	1.37	69.6	0.0	84.7
150.00	1.00	1.38	28.994	31.89	158.64	1.200 *	0.000	1.00	1.497	1.80	91.6	0.0	111.4
150.50 Top - Section 3	1.00	1.38	29.014	31.92	157.39	1.200 *	0.000	0.50	0.739	0.89	45.3	0.0	55.0
152.00	1.00	1.38	29.075	31.98	157.10	1.200 *	0.000	1.50	2.182	2.62	134.0	0.0	62.0
154.00	1.00	1.39	29.155	32.07	152.07	1.200 *	0.000	2.00	2.826	3.39	174.0	0.0	80.2
156.00	1.00	1.39	29.234	32.16	147.03	1.200 *	0.000	2.00	2.730	3.28	168.6	0.0	77.5
158.00	1.00	1.39	29.313	32.24	141.98	1.200 *	0.000	2.00	2.634	3.16	163.1	0.0	74.7
159.00 Appurtenance(s)	1.00	1.40	29.352	32.29	139.44	1.200 *	0.000	1.00	1.281	1.54	79.4	0.0	36.3

* Cf Adjusted by Linear Load Ra Effect

Totals:	159.00	15,852.2	28,480.3
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Discrete Appurtenance Forces

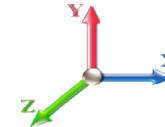
Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.2D + 1.6W 93 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.60



Iterations 29

No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa 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	159.00	DC6-48-60-18-8F	2	29.467	32.414	1.00	1.00	1.84	76.32	0.000	3.000	95.43	0.00	286.28
2	159.00	7770.00	3	29.467	32.414	0.77	1.00	13.31	277.20	0.000	3.000	690.05	0.00	2070.16
3	159.00	P65-16-XLH-RR	3	29.467	32.414	0.71	0.90	18.17	367.20	0.000	3.000	942.42	0.00	2827.25
4	159.00	LGP21401	6	29.467	32.414	0.50	1.00	3.87	101.52	0.000	3.000	200.71	0.00	602.12
5	159.00	RRUS 11-700	3	29.467	32.414	0.67	1.00	5.07	183.60	0.000	3.000	262.69	0.00	788.08
6	159.00	RRUS 32 B2	3	29.467	32.414	0.67	1.00	5.51	190.80	0.000	3.000	285.63	0.00	856.88
7	159.00	DB404-B	1	29.467	32.414	1.00	1.00	0.00	16.80	0.000	3.000	0.00	0.00	0.00
8	159.00	QS66512-2	3	29.467	32.414	0.83	0.90	20.19	399.60	0.000	3.000	1047.36	0.00	3142.08
9	159.00	DBC0061F1V51-2	3	29.467	32.414	0.50	1.00	0.65	91.44	0.000	3.000	33.45	0.00	100.35
10	159.00	RRUS 32 B30	3	29.467	32.414	0.67	1.00	5.51	216.00	0.000	3.000	285.63	0.00	856.88
11	159.00	RMQP-4096-HK Plat. +	1	29.352	32.287	1.00	1.00	48.10	3174.00	0.000	0.000	2484.79	0.00	0.00
12	149.00	RFS - APXVSP18-C-A20	3	29.034	31.938	0.62	0.75	15.71	381.60	0.000	2.000	802.55	0.00	1605.11
13	149.00	HRK12 (Handrail Kit)	1	28.953	31.848	1.00	1.00	6.75	314.06	0.000	0.000	343.96	0.00	0.00
14	149.00	RFS - APXVTM14-C-I20	3	29.034	31.938	0.59	0.75	11.18	201.60	0.000	2.000	571.49	0.00	1142.99
15	149.00	Alcatel Lucent -	3	29.034	31.938	0.50	0.75	6.11	252.00	0.000	2.000	311.99	0.00	623.97
16	149.00	RFS - ACU-A20-N - RET	4	29.034	31.938	0.38	0.75	0.21	4.80	0.000	2.000	10.73	0.00	21.46
17	149.00	Alcatel Lucent - 1900 MHz	3	29.034	31.938	0.50	0.75	5.73	158.40	0.000	2.000	292.73	0.00	585.46
18	149.00	Alcatel Lucent - 800 MHz	3	29.034	31.938	0.50	0.75	3.75	190.80	0.000	2.000	191.81	0.00	383.63
19	149.00	Alcatel Lucent - 800 MHz	3	29.034	31.938	0.50	0.75	1.18	31.68	0.000	2.000	60.09	0.00	120.17
20	149.00	Low Profile Platform	1	28.953	31.848	1.00	1.00	35.00	1440.00	0.000	0.000	1783.50	0.00	0.00
21	140.00	Andrew - ATSBT-TOP-FM	3	28.682	31.551	0.50	0.75	0.30	6.48	0.000	2.500	15.22	0.00	38.05
22	140.00	RFS -	3	28.682	31.551	0.50	0.75	1.76	57.06	0.000	2.500	89.04	0.00	222.59
23	140.00	APXVAA24_43-U-A20	3	28.682	31.551	0.55	0.75	33.24	365.04	0.000	2.500	1678.20	0.00	4195.49
24	140.00	APX16DWV-16DWVS-E-A	3	28.682	31.551	0.46	0.75	9.22	146.52	0.000	2.500	465.48	0.00	1163.70
25	140.00	FR90-16-XXDP	6	28.682	31.551	0.51	0.75	13.34	129.60	0.000	2.500	673.50	0.00	1683.74
26	140.00	Low Profile Platform w/	1	28.576	31.433	1.00	1.00	34.00	1920.00	0.000	0.000	1709.97	0.00	0.00
27	130.00	742 213_2110_P45_02.0	3	28.179	30.997	0.58	0.80	5.44	59.40	0.000	1.000	269.95	0.00	269.95
28	130.00	BXA-70063/6CF	3	28.179	30.997	0.60	0.80	14.33	237.60	0.000	1.000	710.48	0.00	710.48
29	130.00	LPA-80063/6CF	6	28.179	30.997	0.76	0.80	45.50	547.20	0.000	1.000	2256.62	0.00	2256.62
30	130.00	BXA-171063-12BF	3	28.179	30.997	0.70	0.80	10.80	230.40	0.000	1.000	535.50	0.00	535.50
31	130.00	RRH2X60-AWS	3	28.179	30.997	0.54	0.80	5.63	198.00	0.000	1.000	279.12	0.00	279.12
32	130.00	FD9R6004/2C-3L -	6	28.179	30.997	0.40	0.80	0.86	22.32	0.000	1.000	42.85	0.00	42.85
33	130.00	DB-T1-6Z-8AB-0Z - Distri	1	28.179	30.997	0.57	0.80	2.73	22.68	0.000	1.000	135.21	0.00	135.21
34	130.00	Low Profile Platform	1	28.133	30.947	1.00	1.00	22.00	1440.00	0.000	0.000	1089.32	0.00	0.00
35	110.00	4 ft Standoff	1	27.161	29.877	1.00	1.00	3.50	63.98	0.000	0.000	167.31	0.00	0.00
36	110.00	SCL329-HL	1	27.444	30.188	1.00	1.00	2.22	12.48	0.000	5.550	107.23	0.00	595.12
37	80.00	SCL329-HL	1	25.761	28.337	1.00	1.00	2.22	12.48	0.000	5.550	100.65	0.00	558.63
38	80.00	4 ft Standoff	1	25.400	27.940	1.00	1.00	3.50	63.98	0.000	0.000	156.46	0.00	0.00
39	47.00	4 ft Standoff	1	22.709	24.980	1.00	1.00	3.50	63.98	0.000	0.000	139.89	0.00	0.00
40	47.00	Decibel 26DB GPS	1	23.007	25.308	1.00	1.00	0.16	12.00	0.000	3.000	6.48	0.00	19.44

Totals: 13,680.64

21,325.49

Total Applied Force Summary

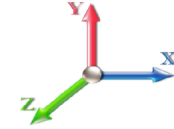
Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.2D + 1.6W 93 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.60



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		204.38	677.00	0.00	0.00
4.00		203.01	671.50	0.00	0.00
6.00		201.64	666.01	0.00	0.00
8.00		200.27	660.51	0.00	0.00
10.00		198.90	655.01	0.00	0.00
12.00		197.53	649.51	0.00	0.00
14.00		196.16	644.02	0.00	0.00
16.00		197.20	638.52	0.00	0.00
18.00		200.73	633.02	0.00	0.00
20.00		203.77	627.53	0.00	0.00
22.00		206.42	622.03	0.00	0.00
24.00		208.73	616.53	0.00	0.00
26.00		210.74	611.04	0.00	0.00
28.00		212.49	605.54	0.00	0.00
30.00		214.01	600.04	0.00	0.00
32.00		215.34	594.54	0.00	0.00
34.00		216.48	589.05	0.00	0.00
36.00		217.45	583.55	0.00	0.00
38.00		218.28	578.05	0.00	0.00
40.00		218.96	572.56	0.00	0.00
42.00		219.52	567.06	0.00	0.00
44.00		219.97	561.56	0.00	0.00
46.00		220.30	556.07	0.00	0.00
47.00	(2) attachments	256.37	351.96	0.00	19.44
47.50		54.96	137.47	0.00	0.00
48.00		55.89	246.68	0.00	0.00
50.00		224.41	979.84	0.00	0.00
52.00		215.74	968.46	0.00	0.00
53.25		134.61	599.71	0.00	0.00
54.00		80.18	202.22	0.00	0.00
56.00		214.22	535.49	0.00	0.00
58.00		213.99	529.99	0.00	0.00
60.00		213.69	524.49	0.00	0.00
62.00		213.33	519.00	0.00	0.00
64.00		212.90	513.50	0.00	0.00
66.00		212.42	508.00	0.00	0.00
68.00		211.87	502.50	0.00	0.00
70.00		211.28	497.01	0.00	0.00
72.00		210.63	491.51	0.00	0.00
74.00		209.93	486.01	0.00	0.00
76.00		209.19	480.52	0.00	0.00
78.00		208.40	475.02	0.00	0.00
80.00	(2) attachments	464.68	545.99	0.00	558.63
82.00		206.69	462.78	0.00	0.00
84.00		205.78	457.28	0.00	0.00
86.00		204.82	451.78	0.00	0.00

Total Applied Force Summary

Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (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		203.83	446.29	0.00	0.00
90.00		202.80	440.79	0.00	0.00
92.00		201.74	435.29	0.00	0.00
94.00		200.64	429.80	0.00	0.00
96.00		199.51	424.30	0.00	0.00
97.00		99.21	210.09	0.00	0.00
98.00		100.89	337.11	0.00	0.00
100.00		201.13	666.66	0.00	0.00
101.00		100.02	329.55	0.00	0.00
102.00		98.84	181.79	0.00	0.00
104.00		196.94	360.15	0.00	0.00
106.00		195.67	355.57	0.00	0.00
108.00		194.37	350.99	0.00	0.00
110.00	(2) attachments	467.58	422.87	0.00	595.12
112.00		174.37	340.58	0.00	0.00
114.00		172.92	336.00	0.00	0.00
116.00		171.45	331.42	0.00	0.00
118.00		169.96	326.84	0.00	0.00
120.00		168.44	322.26	0.00	0.00
122.00		166.90	317.68	0.00	0.00
124.00		165.34	313.10	0.00	0.00
126.00		163.75	308.52	0.00	0.00
128.00		162.15	303.94	0.00	0.00
130.00	(26) attachments	5479.58	3056.95	0.00	4229.74
132.00		158.87	278.48	0.00	0.00
134.00		267.26	257.60	0.00	0.00
136.00		262.35	253.02	0.00	0.00
138.00		257.40	248.44	0.00	0.00
140.00	(19) attachments	4883.80	2868.56	0.00	7303.58
142.00		247.36	239.28	0.00	0.00
144.00		242.28	206.18	0.00	0.00
146.00		237.16	192.10	0.00	0.00
148.00		232.00	187.52	0.00	0.00
148.25		28.60	23.12	0.00	0.00
149.00	(24) attachments	4455.65	3076.21	0.00	4482.79
150.00		114.61	133.42	0.00	0.00
150.50		56.79	66.02	0.00	0.00
152.00		168.53	90.48	0.00	0.00
154.00		220.17	115.18	0.00	0.00
156.00		214.86	112.43	0.00	0.00
158.00		209.51	109.68	0.00	0.00
159.00	(31) attachments	6430.82	5148.29	0.00	11530.09
Totals:		37,794.36	50,601.99	0.00	28,719.38

Linear Appurtenance Segment Forces (Factored)

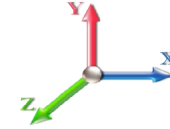
Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.2D + 1.6W 93 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.60



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)
2.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.106	1.019	17.879	0.00	29.95
2.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.106	1.019	17.879	0.00	0.77
2.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.106	1.019	17.879	0.00	3.84
2.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.106	1.019	17.879	0.00	1.25
2.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.106	1.019	17.879	0.00	1.25
2.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.106	1.019	17.879	0.00	0.38
4.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.107	1.022	17.879	0.00	29.95
4.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.107	1.022	17.879	0.00	0.77
4.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.107	1.022	17.879	0.00	3.84
4.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.107	1.022	17.879	0.00	1.25
4.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.107	1.022	17.879	0.00	1.25
4.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.107	1.022	17.879	0.00	0.38
6.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.109	1.026	17.879	0.00	29.95
6.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.109	1.026	17.879	0.00	0.77
6.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.109	1.026	17.879	0.00	3.84
6.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.109	1.026	17.879	0.00	1.25
6.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.026	17.879	0.00	1.25
6.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.109	1.026	17.879	0.00	0.38
8.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.110	1.029	17.879	0.00	29.95
8.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.110	1.029	17.879	0.00	0.77
8.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.110	1.029	17.879	0.00	3.84
8.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.110	1.029	17.879	0.00	1.25
8.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.110	1.029	17.879	0.00	1.25
8.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.110	1.029	17.879	0.00	0.38
10.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.111	1.032	17.879	0.00	29.95
10.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.111	1.032	17.879	0.00	0.77
10.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.111	1.032	17.879	0.00	3.84
10.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.111	1.032	17.879	0.00	1.25
10.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.111	1.032	17.879	0.00	1.25
10.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.111	1.032	17.879	0.00	0.38
12.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.112	1.036	17.879	0.00	29.95
12.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.112	1.036	17.879	0.00	0.77
12.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.112	1.036	17.879	0.00	3.84
12.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.112	1.036	17.879	0.00	1.25
12.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.112	1.036	17.879	0.00	1.25
12.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.112	1.036	17.879	0.00	0.38
14.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.113	1.039	17.879	0.00	29.95
14.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.113	1.039	17.879	0.00	0.77
14.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.113	1.039	17.879	0.00	3.84
14.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.113	1.039	17.879	0.00	1.25
14.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.039	17.879	0.00	1.25
14.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.113	1.039	17.879	0.00	0.38
16.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.114	1.043	18.100	0.00	29.95
16.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.114	1.043	18.100	0.00	0.77
16.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.114	1.043	18.100	0.00	3.84
16.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.114	1.043	18.100	0.00	1.25
16.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.114	1.043	18.100	0.00	1.25

Linear Appurtenance Segment Forces (Factored)

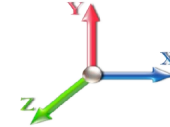
Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.2D + 1.6W 93 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.60



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)
16.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.114	1.043	18.100	0.00	0.38
18.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.115	1.046	18.554	0.00	29.95
18.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.115	1.046	18.554	0.00	0.77
18.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.115	1.046	18.554	0.00	3.84
18.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.115	1.046	18.554	0.00	1.25
18.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.115	1.046	18.554	0.00	1.25
18.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.115	1.046	18.554	0.00	0.38
20.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.117	1.050	18.971	0.00	29.95
20.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.117	1.050	18.971	0.00	0.77
20.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.117	1.050	18.971	0.00	3.84
20.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.117	1.050	18.971	0.00	1.25
20.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.050	18.971	0.00	1.25
20.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.117	1.050	18.971	0.00	0.38
22.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.118	1.054	19.355	0.00	29.95
22.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.118	1.054	19.355	0.00	0.77
22.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.118	1.054	19.355	0.00	3.84
22.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.118	1.054	19.355	0.00	1.25
22.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.054	19.355	0.00	1.25
22.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.118	1.054	19.355	0.00	0.38
24.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.119	1.058	19.713	0.00	29.95
24.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.119	1.058	19.713	0.00	0.77
24.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.119	1.058	19.713	0.00	3.84
24.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.119	1.058	19.713	0.00	1.25
24.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.058	19.713	0.00	1.25
24.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.119	1.058	19.713	0.00	0.38
26.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.121	1.062	20.048	0.00	29.95
26.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.121	1.062	20.048	0.00	0.77
26.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.121	1.062	20.048	0.00	3.84
26.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.121	1.062	20.048	0.00	1.25
26.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.121	1.062	20.048	0.00	1.25
26.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.121	1.062	20.048	0.00	0.38
28.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.122	1.066	20.363	0.00	29.95
28.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.122	1.066	20.363	0.00	0.77
28.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.122	1.066	20.363	0.00	3.84
28.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.122	1.066	20.363	0.00	1.25
28.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.066	20.363	0.00	1.25
28.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.122	1.066	20.363	0.00	0.38
30.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.123	1.070	20.661	0.00	29.95
30.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.123	1.070	20.661	0.00	0.77
30.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.123	1.070	20.661	0.00	3.84
30.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.123	1.070	20.661	0.00	1.25
30.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.070	20.661	0.00	1.25
30.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.123	1.070	20.661	0.00	0.38
32.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.074	20.944	0.00	29.95
32.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.125	1.074	20.944	0.00	0.77
32.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.125	1.074	20.944	0.00	3.84
32.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.125	1.074	20.944	0.00	1.25

Linear Appurtenance Segment Forces (Factored)

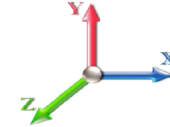
Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.2D + 1.6W 93 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.60



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)
32.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.074	20.944	0.00	1.25
32.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.125	1.074	20.944	0.00	0.38
34.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.126	1.078	21.213	0.00	29.95
34.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.126	1.078	21.213	0.00	0.77
34.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.126	1.078	21.213	0.00	3.84
34.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.126	1.078	21.213	0.00	1.25
34.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.126	1.078	21.213	0.00	1.25
34.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.126	1.078	21.213	0.00	0.38
36.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.128	1.083	21.470	0.00	29.95
36.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.128	1.083	21.470	0.00	0.77
36.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.128	1.083	21.470	0.00	3.84
36.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.128	1.083	21.470	0.00	1.25
36.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.128	1.083	21.470	0.00	1.25
36.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.128	1.083	21.470	0.00	0.38
38.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.129	1.087	21.715	0.00	29.95
38.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.129	1.087	21.715	0.00	0.77
38.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.129	1.087	21.715	0.00	3.84
38.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.129	1.087	21.715	0.00	1.25
38.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.129	1.087	21.715	0.00	1.25
38.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.129	1.087	21.715	0.00	0.38
40.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.131	1.092	21.951	0.00	29.95
40.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.131	1.092	21.951	0.00	0.77
40.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.131	1.092	21.951	0.00	3.84
40.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.131	1.092	21.951	0.00	1.25
40.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.131	1.092	21.951	0.00	1.25
40.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.131	1.092	21.951	0.00	0.38
42.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.132	1.097	22.178	0.00	29.95
42.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.132	1.097	22.178	0.00	0.77
42.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.132	1.097	22.178	0.00	3.84
42.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.132	1.097	22.178	0.00	1.25
42.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.132	1.097	22.178	0.00	1.25
42.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.132	1.097	22.178	0.00	0.38
44.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.134	1.102	22.396	0.00	29.95
44.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.134	1.102	22.396	0.00	0.77
44.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.134	1.102	22.396	0.00	3.84
44.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.134	1.102	22.396	0.00	1.25
44.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.134	1.102	22.396	0.00	1.25
44.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.134	1.102	22.396	0.00	0.38
46.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.136	1.107	22.607	0.00	29.95
46.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.136	1.107	22.607	0.00	0.77
46.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.136	1.107	22.607	0.00	3.84
46.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.136	1.107	22.607	0.00	1.25
46.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.136	1.107	22.607	0.00	1.25
46.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.136	1.107	22.607	0.00	0.38
47.00	1 5/8" Coax	Yes	1.00	0.000	2.00	0.17	0.00	0.137	1.110	22.709	0.00	14.98
47.00	1/2" Fiber	Yes	1.00	0.000	1.00	0.08	0.00	0.137	1.110	22.709	0.00	0.38
47.00	3/4" DC	Yes	1.00	0.000	1.50	0.13	0.00	0.137	1.110	22.709	0.00	1.92

Linear Appurtenance Segment Forces (Factored)

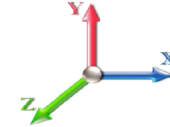
Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.2D + 1.6W 93 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.60



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)
47.00	7/8" Coax	Yes	1.00	0.000	1.11	0.09	0.00	0.137	1.110	22.709	0.00	0.62
47.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.137	1.110	22.709	0.00	0.62
47.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.137	1.110	22.709	0.00	0.19
47.50	1 5/8" Coax	Yes	0.50	0.000	2.00	0.08	0.00	0.137	1.112	22.760	0.00	7.49
47.50	1/2" Fiber	Yes	0.50	0.000	1.00	0.04	0.00	0.137	1.112	22.760	0.00	0.19
47.50	3/4" DC	Yes	0.50	0.000	1.50	0.06	0.00	0.137	1.112	22.760	0.00	0.96
47.50	7/8" Coax	Yes	0.50	0.000	1.11	0.05	0.00	0.137	1.112	22.760	0.00	0.31
47.50	7/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.137	1.112	22.760	0.00	0.31
47.50	1/2" Coax	Yes	0.50	0.000	0.65	0.03	0.00	0.137	1.112	22.760	0.00	0.10
48.00	1 5/8" Coax	Yes	0.50	0.000	2.00	0.08	0.00	0.138	1.114	22.810	0.00	7.49
48.00	1/2" Fiber	Yes	0.50	0.000	1.00	0.04	0.00	0.138	1.114	22.810	0.00	0.19
48.00	3/4" DC	Yes	0.50	0.000	1.50	0.06	0.00	0.138	1.114	22.810	0.00	0.96
48.00	7/8" Coax	Yes	0.50	0.000	1.11	0.05	0.00	0.138	1.114	22.810	0.00	0.31
48.00	7/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.138	1.114	22.810	0.00	0.31
48.00	1/2" Coax	Yes	0.50	0.000	0.65	0.03	0.00	0.138	1.114	22.810	0.00	0.10
50.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.139	1.117	23.007	0.00	29.95
50.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.139	1.117	23.007	0.00	0.77
50.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.139	1.117	23.007	0.00	3.84
50.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.139	1.117	23.007	0.00	1.25
50.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.139	1.117	23.007	0.00	1.25
50.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.139	1.117	23.007	0.00	0.38
52.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.126	1.079	23.198	0.00	29.95
52.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.126	1.079	23.198	0.00	0.77
52.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.126	1.079	23.198	0.00	3.84
52.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.126	1.079	23.198	0.00	1.25
52.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.126	1.079	23.198	0.00	1.25
53.25	1 5/8" Coax	Yes	1.25	0.000	2.00	0.21	0.00	0.128	1.083	23.314	0.00	18.72
53.25	1/2" Fiber	Yes	1.25	0.000	1.00	0.10	0.00	0.128	1.083	23.314	0.00	0.48
53.25	3/4" DC	Yes	1.25	0.000	1.50	0.16	0.00	0.128	1.083	23.314	0.00	2.40
53.25	7/8" Coax	Yes	1.25	0.000	1.11	0.12	0.00	0.128	1.083	23.314	0.00	0.78
53.25	7/8" Coax	Yes	1.25	0.000	0.00	0.00	0.00	0.128	1.083	23.314	0.00	0.78
54.00	1 5/8" Coax	Yes	0.75	0.000	2.00	0.13	0.00	0.126	1.078	23.383	0.00	11.23
54.00	1/2" Fiber	Yes	0.75	0.000	1.00	0.06	0.00	0.126	1.078	23.383	0.00	0.29
54.00	3/4" DC	Yes	0.75	0.000	1.50	0.09	0.00	0.126	1.078	23.383	0.00	1.44
54.00	7/8" Coax	Yes	0.75	0.000	1.11	0.07	0.00	0.126	1.078	23.383	0.00	0.47
54.00	7/8" Coax	Yes	0.75	0.000	0.00	0.00	0.00	0.126	1.078	23.383	0.00	0.47
56.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.127	1.082	23.562	0.00	29.95
56.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.127	1.082	23.562	0.00	0.77
56.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.127	1.082	23.562	0.00	3.84
56.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.127	1.082	23.562	0.00	1.25
56.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.127	1.082	23.562	0.00	1.25
58.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.129	1.087	23.737	0.00	29.95
58.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.129	1.087	23.737	0.00	0.77
58.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.129	1.087	23.737	0.00	3.84
58.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.129	1.087	23.737	0.00	1.25
58.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.129	1.087	23.737	0.00	1.25
60.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.131	1.092	23.907	0.00	29.95

Linear Appurtenance Segment Forces (Factored)

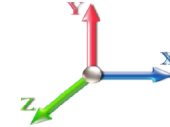
Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.2D + 1.6W 93 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.60



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)
60.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.131	1.092	23.907	0.00	0.77
60.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.131	1.092	23.907	0.00	3.84
60.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.131	1.092	23.907	0.00	1.25
60.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.131	1.092	23.907	0.00	1.25
62.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.132	1.097	24.073	0.00	29.95
62.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.132	1.097	24.073	0.00	0.77
62.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.132	1.097	24.073	0.00	3.84
62.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.132	1.097	24.073	0.00	1.25
62.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.132	1.097	24.073	0.00	1.25
64.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.134	1.103	24.234	0.00	29.95
64.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.134	1.103	24.234	0.00	0.77
64.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.134	1.103	24.234	0.00	3.84
64.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.134	1.103	24.234	0.00	1.25
64.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.134	1.103	24.234	0.00	1.25
66.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.136	1.108	24.392	0.00	29.95
66.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.136	1.108	24.392	0.00	0.77
66.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.136	1.108	24.392	0.00	3.84
66.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.136	1.108	24.392	0.00	1.25
66.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.136	1.108	24.392	0.00	1.25
68.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.138	1.114	24.545	0.00	29.95
68.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.138	1.114	24.545	0.00	0.77
68.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.138	1.114	24.545	0.00	3.84
68.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.138	1.114	24.545	0.00	1.25
68.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.138	1.114	24.545	0.00	1.25
70.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.140	1.120	24.696	0.00	29.95
70.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.140	1.120	24.696	0.00	0.77
70.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.140	1.120	24.696	0.00	3.84
70.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.140	1.120	24.696	0.00	1.25
70.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.140	1.120	24.696	0.00	1.25
72.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.142	1.126	24.843	0.00	29.95
72.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.142	1.126	24.843	0.00	0.77
72.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.142	1.126	24.843	0.00	3.84
72.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.142	1.126	24.843	0.00	1.25
72.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.142	1.126	24.843	0.00	1.25
74.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.144	1.133	24.986	0.00	29.95
74.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.144	1.133	24.986	0.00	0.77
74.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.144	1.133	24.986	0.00	3.84
74.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.144	1.133	24.986	0.00	1.25
74.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.144	1.133	24.986	0.00	1.25
76.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.146	1.139	25.127	0.00	29.95
76.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.146	1.139	25.127	0.00	0.77
76.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.146	1.139	25.127	0.00	3.84
76.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.146	1.139	25.127	0.00	1.25
76.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.146	1.139	25.127	0.00	1.25
78.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.149	1.146	25.265	0.00	29.95
78.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.149	1.146	25.265	0.00	0.77
78.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.149	1.146	25.265	0.00	3.84

Linear Appurtenance Segment Forces (Factored)

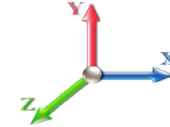
Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.2D + 1.6W 93 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.60



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)
78.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.149	1.146	25.265	0.00	1.25
78.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.149	1.146	25.265	0.00	1.25
80.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.151	1.153	25.400	0.00	29.95
80.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.151	1.153	25.400	0.00	0.77
80.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.151	1.153	25.400	0.00	3.84
80.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.151	1.153	25.400	0.00	1.25
80.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.151	1.153	25.400	0.00	1.25
82.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.153	1.160	25.532	0.00	29.95
82.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.153	1.160	25.532	0.00	0.77
82.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.153	1.160	25.532	0.00	3.84
82.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.153	1.160	25.532	0.00	1.25
84.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.156	1.167	25.662	0.00	29.95
84.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.156	1.167	25.662	0.00	0.77
84.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.156	1.167	25.662	0.00	3.84
84.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.156	1.167	25.662	0.00	1.25
86.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.158	1.175	25.789	0.00	29.95
86.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.158	1.175	25.789	0.00	0.77
86.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.158	1.175	25.789	0.00	3.84
86.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.158	1.175	25.789	0.00	1.25
88.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.161	1.182	25.915	0.00	29.95
88.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.161	1.182	25.915	0.00	0.77
88.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.161	1.182	25.915	0.00	3.84
88.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.161	1.182	25.915	0.00	1.25
90.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.163	1.190	26.037	0.00	29.95
90.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.163	1.190	26.037	0.00	0.77
90.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.163	1.190	26.037	0.00	3.84
90.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.163	1.190	26.037	0.00	1.25
92.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.166	1.199	26.158	0.00	29.95
92.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.166	1.199	26.158	0.00	0.77
92.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.166	1.199	26.158	0.00	3.84
92.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.166	1.199	26.158	0.00	1.25
94.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.169	1.207	26.277	0.00	29.95
94.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.169	1.207	26.277	0.00	0.77
94.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.169	1.207	26.277	0.00	3.84
94.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.169	1.207	26.277	0.00	1.25
96.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.172	1.216	26.394	0.00	29.95
96.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.172	1.216	26.394	0.00	0.77
96.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.172	1.216	26.394	0.00	3.84
96.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.172	1.216	26.394	0.00	1.25
97.00	1 5/8" Coax	Yes	1.00	0.000	2.00	0.17	0.00	0.174	1.223	26.451	0.00	14.98
97.00	1/2" Fiber	Yes	1.00	0.000	1.00	0.08	0.00	0.174	1.223	26.451	0.00	0.38
97.00	3/4" DC	Yes	1.00	0.000	1.50	0.13	0.00	0.174	1.223	26.451	0.00	1.92
97.00	7/8" Coax	Yes	1.00	0.000	1.11	0.09	0.00	0.174	1.223	26.451	0.00	0.62
98.00	1 5/8" Coax	Yes	1.00	0.000	2.00	0.17	0.00	0.176	1.228	26.509	0.00	14.98
98.00	1/2" Fiber	Yes	1.00	0.000	1.00	0.08	0.00	0.176	1.228	26.509	0.00	0.38
98.00	3/4" DC	Yes	1.00	0.000	1.50	0.13	0.00	0.176	1.228	26.509	0.00	1.92
98.00	7/8" Coax	Yes	1.00	0.000	1.11	0.09	0.00	0.176	1.228	26.509	0.00	0.62

Linear Appurtenance Segment Forces (Factored)

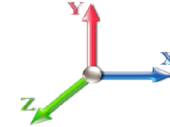
Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.2D + 1.6W 93 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.60



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)
100.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.178	1.235	26.621	0.00	29.95
100.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.178	1.235	26.621	0.00	0.77
100.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.178	1.235	26.621	0.00	3.84
100.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.178	1.235	26.621	0.00	1.25
101.00	1 5/8" Coax	Yes	1.00	0.000	2.00	0.17	0.00	0.181	1.243	26.677	0.00	14.98
101.00	1/2" Fiber	Yes	1.00	0.000	1.00	0.08	0.00	0.181	1.243	26.677	0.00	0.38
101.00	3/4" DC	Yes	1.00	0.000	1.50	0.13	0.00	0.181	1.243	26.677	0.00	1.92
101.00	7/8" Coax	Yes	1.00	0.000	1.11	0.09	0.00	0.181	1.243	26.677	0.00	0.62
102.00	1 5/8" Coax	Yes	1.00	0.000	2.00	0.17	0.00	0.179	1.237	26.733	0.00	14.98
102.00	1/2" Fiber	Yes	1.00	0.000	1.00	0.08	0.00	0.179	1.237	26.733	0.00	0.38
102.00	3/4" DC	Yes	1.00	0.000	1.50	0.13	0.00	0.179	1.237	26.733	0.00	1.92
102.00	7/8" Coax	Yes	1.00	0.000	1.11	0.09	0.00	0.179	1.237	26.733	0.00	0.62
104.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.181	1.244	26.842	0.00	29.95
104.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.181	1.244	26.842	0.00	0.77
104.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.181	1.244	26.842	0.00	3.84
104.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.181	1.244	26.842	0.00	1.25
106.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.185	1.254	26.950	0.00	29.95
106.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.185	1.254	26.950	0.00	0.77
106.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.185	1.254	26.950	0.00	3.84
106.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.185	1.254	26.950	0.00	1.25
108.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.188	1.265	27.056	0.00	29.95
108.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.188	1.265	27.056	0.00	0.77
108.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.188	1.265	27.056	0.00	3.84
108.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.188	1.265	27.056	0.00	1.25
110.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.192	1.276	27.161	0.00	29.95
110.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.192	1.276	27.161	0.00	0.77
110.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.192	1.276	27.161	0.00	3.84
110.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.192	1.276	27.161	0.00	1.25
112.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.157	1.171	27.264	0.00	29.95
112.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.157	1.171	27.264	0.00	0.77
112.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.157	1.171	27.264	0.00	3.84
114.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.160	1.181	27.366	0.00	29.95
114.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.160	1.181	27.366	0.00	0.77
114.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.160	1.181	27.366	0.00	3.84
116.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.164	1.191	27.466	0.00	29.95
116.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.164	1.191	27.466	0.00	0.77
116.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.164	1.191	27.466	0.00	3.84
118.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.167	1.202	27.565	0.00	29.95
118.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.167	1.202	27.565	0.00	0.77
118.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.167	1.202	27.565	0.00	3.84
120.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.171	1.213	27.663	0.00	29.95
120.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.171	1.213	27.663	0.00	0.77
120.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.171	1.213	27.663	0.00	3.84
122.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.175	1.224	27.760	0.00	29.95
122.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.175	1.224	27.760	0.00	0.77
122.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.175	1.224	27.760	0.00	3.84
124.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.179	1.236	27.855	0.00	29.95

Linear Appurtenance Segment Forces (Factored)

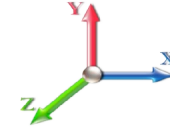
Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.2D + 1.6W 93 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.60



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)
124.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.179	1.236	27.855	0.00	0.77
124.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.179	1.236	27.855	0.00	3.84
126.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.183	1.248	27.949	0.00	29.95
126.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.183	1.248	27.949	0.00	0.77
126.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.183	1.248	27.949	0.00	3.84
128.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.187	1.262	28.042	0.00	29.95
128.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.187	1.262	28.042	0.00	0.77
128.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.187	1.262	28.042	0.00	3.84
130.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.192	1.275	28.133	0.00	29.95
130.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.192	1.275	28.133	0.00	0.77
130.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.192	1.275	28.133	0.00	3.84
132.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.197	1.290	28.224	0.00	29.95
132.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.197	1.290	28.224	0.00	0.77
132.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.197	1.290	28.224	0.00	3.84
134.00	1 5/8" Coax	Yes	2.00	1.200	2.00	0.33	0.40	0.202	0.000	28.313	19.93	29.95
134.00	1/2" Fiber	Yes	2.00	1.200	1.00	0.17	0.20	0.202	0.000	28.313	9.97	0.77
134.00	3/4" DC	Yes	2.00	1.200	1.50	0.25	0.30	0.202	0.000	28.313	14.95	3.84
136.00	1 5/8" Coax	Yes	2.00	1.200	2.00	0.33	0.40	0.207	0.000	28.402	19.99	29.95
136.00	1/2" Fiber	Yes	2.00	1.200	1.00	0.17	0.20	0.207	0.000	28.402	10.00	0.77
136.00	3/4" DC	Yes	2.00	1.200	1.50	0.25	0.30	0.207	0.000	28.402	15.00	3.84
138.00	1 5/8" Coax	Yes	2.00	1.200	2.00	0.33	0.40	0.213	0.000	28.489	20.06	29.95
138.00	1/2" Fiber	Yes	2.00	1.200	1.00	0.17	0.20	0.213	0.000	28.489	10.03	0.77
138.00	3/4" DC	Yes	2.00	1.200	1.50	0.25	0.30	0.213	0.000	28.489	15.04	3.84
140.00	1 5/8" Coax	Yes	2.00	1.200	2.00	0.33	0.40	0.219	0.000	28.576	20.12	29.95
140.00	1/2" Fiber	Yes	2.00	1.200	1.00	0.17	0.20	0.219	0.000	28.576	10.06	0.77
140.00	3/4" DC	Yes	2.00	1.200	1.50	0.25	0.30	0.219	0.000	28.576	15.09	3.84
142.00	1 5/8" Coax	Yes	2.00	1.200	2.00	0.33	0.40	0.225	0.000	28.661	20.18	29.95
142.00	1/2" Fiber	Yes	2.00	1.200	1.00	0.17	0.20	0.225	0.000	28.661	10.09	0.77
142.00	3/4" DC	Yes	2.00	1.200	1.50	0.25	0.30	0.225	0.000	28.661	15.13	3.84
144.00	1 5/8" Coax	Yes	2.00	1.200	2.00	0.33	0.40	0.231	0.000	28.746	20.24	29.95
144.00	1/2" Fiber	Yes	2.00	1.200	1.00	0.17	0.20	0.231	0.000	28.746	10.12	0.77
144.00	3/4" DC	Yes	2.00	1.200	1.50	0.25	0.30	0.231	0.000	28.746	15.18	3.84
146.00	1 5/8" Coax	Yes	2.00	1.200	2.00	0.33	0.40	0.238	0.000	28.829	20.30	29.95
146.00	1/2" Fiber	Yes	2.00	1.200	1.00	0.17	0.20	0.238	0.000	28.829	10.15	0.77
146.00	3/4" DC	Yes	2.00	1.200	1.50	0.25	0.30	0.238	0.000	28.829	15.22	3.84
148.00	1 5/8" Coax	Yes	2.00	1.200	2.00	0.33	0.40	0.246	0.000	28.912	20.35	29.95
148.00	1/2" Fiber	Yes	2.00	1.200	1.00	0.17	0.20	0.246	0.000	28.912	10.18	0.77
148.00	3/4" DC	Yes	2.00	1.200	1.50	0.25	0.30	0.246	0.000	28.912	15.27	3.84
148.25	1 5/8" Coax	Yes	0.25	1.200	2.00	0.04	0.05	0.250	0.000	28.922	2.55	3.74
148.25	1/2" Fiber	Yes	0.25	1.200	1.00	0.02	0.02	0.250	0.000	28.922	1.27	0.10
148.25	3/4" DC	Yes	0.25	1.200	1.50	0.03	0.04	0.250	0.000	28.922	1.91	0.48
149.00	1 5/8" Coax	Yes	0.75	1.200	2.00	0.13	0.15	0.252	0.000	28.953	7.64	11.23
149.00	1/2" Fiber	Yes	0.75	1.200	1.00	0.06	0.07	0.252	0.000	28.953	3.82	0.29
149.00	3/4" DC	Yes	0.75	1.200	1.50	0.09	0.11	0.252	0.000	28.953	5.73	1.44
150.00	1 5/8" Coax	Yes	1.00	1.200	2.00	0.17	0.20	0.256	0.000	28.994	10.21	14.98
150.00	1/2" Fiber	Yes	1.00	1.200	1.00	0.08	0.10	0.256	0.000	28.994	5.10	0.38
150.00	3/4" DC	Yes	1.00	1.200	1.50	0.13	0.15	0.256	0.000	28.994	7.65	1.92

Linear Appurtenance Segment Forces (Factored)

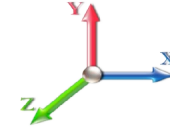
Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.2D + 1.6W 93 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.60



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)
150.50	1 5/8" Coax	Yes	0.50	1.200	2.00	0.08	0.10	0.259	0.000	29.014	5.11	7.49
150.50	1/2" Fiber	Yes	0.50	1.200	1.00	0.04	0.05	0.259	0.000	29.014	2.55	0.19
150.50	3/4" DC	Yes	0.50	1.200	1.50	0.06	0.07	0.259	0.000	29.014	3.83	0.96
152.00	1 5/8" Coax	Yes	1.50	1.200	2.00	0.25	0.30	0.258	0.000	29.075	15.35	22.46
152.00	1/2" Fiber	Yes	1.50	1.200	1.00	0.13	0.15	0.258	0.000	29.075	7.68	0.58
152.00	3/4" DC	Yes	1.50	1.200	1.50	0.19	0.22	0.258	0.000	29.075	11.51	2.88
154.00	1 5/8" Coax	Yes	2.00	1.200	2.00	0.33	0.40	0.265	0.000	29.155	20.52	29.95
154.00	1/2" Fiber	Yes	2.00	1.200	1.00	0.17	0.20	0.265	0.000	29.155	10.26	0.77
154.00	3/4" DC	Yes	2.00	1.200	1.50	0.25	0.30	0.265	0.000	29.155	15.39	3.84
156.00	1 5/8" Coax	Yes	2.00	1.200	2.00	0.33	0.40	0.275	0.000	29.234	20.58	29.95
156.00	1/2" Fiber	Yes	2.00	1.200	1.00	0.17	0.20	0.275	0.000	29.234	10.29	0.77
156.00	3/4" DC	Yes	2.00	1.200	1.50	0.25	0.30	0.275	0.000	29.234	15.44	3.84
158.00	1 5/8" Coax	Yes	2.00	1.200	2.00	0.33	0.40	0.285	0.000	29.313	20.64	29.95
158.00	1/2" Fiber	Yes	2.00	1.200	1.00	0.17	0.20	0.285	0.000	29.313	10.32	0.77
158.00	3/4" DC	Yes	2.00	1.200	1.50	0.25	0.30	0.285	0.000	29.313	15.48	3.84
159.00	1 5/8" Coax	Yes	1.00	1.200	2.00	0.17	0.20	0.293	0.000	29.352	10.33	14.98
159.00	1/2" Fiber	Yes	1.00	1.200	1.00	0.08	0.10	0.293	0.000	29.352	5.17	0.38
159.00	3/4" DC	Yes	1.00	1.200	1.50	0.13	0.15	0.293	0.000	29.352	7.75	1.92
Totals:											616.7	2,875.7

Calculated Forces

Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

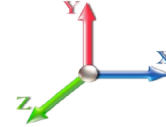


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Load Case: 1.2D + 1.6W 93 mph Wind

Iterations 29

Dead Load Factor 1.20
Wind Load Factor 1.60



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	-50.57	-37.83	0.00	-4662.2	0.00	4662.23	4390.37	2195.18	10447.7	5231.64	0.00	0.000	0.000	0.903
2.00	-49.83	-37.71	0.00	-4586.5	0.00	4586.56	4366.62	2183.31	10288.9	5152.14	0.02	-0.090	0.000	0.902
4.00	-49.10	-37.58	0.00	-4511.1	0.00	4511.15	4342.50	2171.25	10130.4	5072.75	0.08	-0.182	0.000	0.901
6.00	-48.38	-37.46	0.00	-4435.9	0.00	4435.98	4318.00	2159.00	9972.16	4993.49	0.17	-0.275	0.000	0.900
8.00	-47.66	-37.33	0.00	-4361.0	0.00	4361.07	4293.12	2146.56	9814.16	4914.37	0.31	-0.369	0.000	0.899
10.00	-46.94	-37.21	0.00	-4286.4	0.00	4286.41	4267.86	2133.93	9656.46	4835.41	0.49	-0.464	0.000	0.898
12.00	-46.23	-37.08	0.00	-4211.9	0.00	4211.99	4242.22	2121.11	9499.10	4756.61	0.70	-0.561	0.000	0.897
14.00	-45.52	-36.96	0.00	-4137.8	0.00	4137.83	4216.20	2108.10	9342.10	4677.99	0.96	-0.659	0.000	0.896
16.00	-44.82	-36.83	0.00	-4063.9	0.00	4063.92	4189.80	2094.90	9185.49	4599.57	1.26	-0.758	0.000	0.895
18.00	-44.13	-36.70	0.00	-3990.2	0.00	3990.26	4163.03	2081.51	9029.29	4521.36	1.60	-0.859	0.000	0.893
20.00	-43.44	-36.56	0.00	-3916.8	0.00	3916.86	4135.87	2067.94	8873.53	4443.36	1.98	-0.961	0.000	0.892
22.00	-42.75	-36.42	0.00	-3843.7	0.00	3843.73	4108.34	2054.17	8718.25	4365.60	2.40	-1.064	0.000	0.891
24.00	-42.08	-36.28	0.00	-3770.8	0.00	3770.89	4080.43	2040.21	8563.45	4288.09	2.87	-1.169	0.000	0.890
26.00	-41.40	-36.13	0.00	-3698.3	0.00	3698.33	4052.14	2026.07	8409.18	4210.84	3.38	-1.275	0.000	0.889
28.00	-40.73	-35.99	0.00	-3626.0	0.00	3626.06	4023.46	2011.73	8255.45	4133.86	3.94	-1.383	0.000	0.888
30.00	-40.07	-35.83	0.00	-3554.0	0.00	3554.09	3994.42	1997.21	8102.30	4057.17	4.54	-1.492	0.000	0.886
32.00	-39.41	-35.68	0.00	-3482.4	0.00	3482.43	3964.99	1982.49	7949.75	3980.79	5.19	-1.603	0.000	0.885
34.00	-38.76	-35.52	0.00	-3411.0	0.00	3411.07	3935.18	1967.59	7797.83	3904.71	5.89	-1.715	0.000	0.884
36.00	-38.11	-35.36	0.00	-3340.0	0.00	3340.03	3904.99	1952.50	7646.57	3828.97	6.63	-1.829	0.000	0.882
38.00	-37.47	-35.20	0.00	-3269.3	0.00	3269.30	3874.43	1937.21	7495.98	3753.56	7.42	-1.944	0.000	0.881
40.00	-36.83	-35.04	0.00	-3198.9	0.00	3198.90	3843.48	1921.74	7346.10	3678.51	8.26	-2.062	0.000	0.880
42.00	-36.20	-34.87	0.00	-3128.8	0.00	3128.83	3812.16	1906.08	7196.95	3603.83	9.15	-2.180	0.000	0.878
44.00	-35.58	-34.71	0.00	-3059.0	0.00	3059.08	3780.46	1890.23	7048.57	3529.52	10.09	-2.301	0.000	0.876
46.00	-34.97	-34.52	0.00	-2989.6	0.00	2989.67	3748.38	1874.19	6900.97	3455.62	11.08	-2.423	0.000	0.875
47.00	-34.61	-34.28	0.00	-2955.1	0.00	2955.13	3732.20	1866.10	6827.48	3418.81	11.60	-2.486	0.000	0.874
47.50	-34.45	-34.24	0.00	-2937.9	0.00	2937.99	3724.07	1862.03	6790.81	3400.45	11.86	-2.517	0.000	0.874
48.00	-34.16	-34.22	0.00	-2920.8	0.00	2920.87	3715.92	1857.96	6754.19	3382.11	12.13	-2.549	0.000	0.873
50.00	-33.12	-34.02	0.00	-2852.4	0.00	2852.44	3683.08	1841.54	6608.25	3309.03	13.22	-2.675	0.000	0.871
52.00	-32.10	-33.82	0.00	-2784.4	0.00	2784.40	3649.86	1824.93	6463.17	3236.39	14.37	-2.803	0.000	0.869
53.25	-31.47	-33.69	0.00	-2742.1	0.00	2742.12	3673.19	1836.60	6564.80	3287.28	15.11	-2.884	0.000	0.843
54.00	-31.22	-33.65	0.00	-2716.8	0.00	2716.86	3660.74	1830.37	6510.40	3260.04	15.57	-2.934	0.000	0.842
56.00	-30.62	-33.47	0.00	-2649.5	0.00	2649.56	3627.27	1813.63	6365.92	3187.69	16.83	-3.059	0.000	0.840
58.00	-30.03	-33.30	0.00	-2582.6	0.00	2582.62	3593.41	1796.71	6222.36	3115.80	18.13	-3.185	0.000	0.838
60.00	-29.44	-33.12	0.00	-2516.0	0.00	2516.03	3559.18	1779.59	6079.73	3044.38	19.50	-3.314	0.000	0.835
62.00	-28.86	-32.94	0.00	-2449.7	0.00	2449.79	3524.57	1762.29	5938.07	2973.45	20.91	-3.444	0.000	0.832
64.00	-28.29	-32.77	0.00	-2383.9	0.00	2383.90	3489.59	1744.79	5797.40	2903.01	22.38	-3.576	0.000	0.830
66.00	-27.72	-32.59	0.00	-2318.3	0.00	2318.37	3454.22	1727.11	5657.75	2833.08	23.91	-3.710	0.000	0.827
68.00	-27.15	-32.41	0.00	-2253.2	0.00	2253.20	3418.47	1709.24	5519.14	2763.67	25.49	-3.846	0.000	0.824
70.00	-26.59	-32.23	0.00	-2188.3	0.00	2188.39	3382.35	1691.17	5381.61	2694.80	27.13	-3.984	0.000	0.820
72.00	-26.04	-32.05	0.00	-2123.9	0.00	2123.94	3345.84	1672.92	5245.17	2626.49	28.83	-4.124	0.000	0.817
74.00	-25.49	-31.86	0.00	-2059.8	0.00	2059.85	3308.96	1654.48	5109.86	2558.73	30.59	-4.266	0.000	0.813
76.00	-24.95	-31.68	0.00	-1996.1	0.00	1996.12	3271.70	1635.85	4975.70	2491.55	32.40	-4.409	0.000	0.809
78.00	-24.41	-31.50	0.00	-1932.7	0.00	1932.76	3230.14	1615.07	4836.86	2422.03	34.28	-4.555	0.000	0.806
80.00	-23.82	-31.05	0.00	-1869.2	0.00	1869.20	3180.13	1590.07	4687.51	2347.24	36.22	-4.703	0.000	0.804
82.00	-23.30	-30.87	0.00	-1807.0	0.00	1807.09	3130.13	1565.06	4540.49	2273.62	38.22	-4.852	0.000	0.803
84.00	-22.78	-30.69	0.00	-1745.3	0.00	1745.35	3080.12	1540.06	4395.82	2201.18	40.28	-5.004	0.000	0.801
86.00	-22.26	-30.50	0.00	-1683.9	0.00	1683.98	3030.11	1515.05	4253.50	2129.91	42.41	-5.157	0.000	0.798
88.00	-21.75	-30.32	0.00	-1622.9	0.00	1622.97	2980.10	1490.05	4113.51	2059.81	44.60	-5.313	0.000	0.796

Calculated Forces

Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (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	-21.25	-30.14	0.00	-1562.3	0.00	1562.33	2930.09	1465.05	3975.87	1990.89	46.85	-5.470	0.000	0.792
92.00	-20.75	-29.95	0.00	-1502.0	0.00	1502.06	2880.09	1440.04	3840.56	1923.14	49.18	-5.629	0.000	0.789
94.00	-20.26	-29.77	0.00	-1442.1	0.00	1442.16	2830.08	1415.04	3707.61	1856.56	51.57	-5.791	0.000	0.784
96.00	-19.80	-29.57	0.00	-1382.6	0.00	1382.63	2780.07	1390.03	3576.99	1791.15	54.02	-5.954	0.000	0.779
97.00	-19.56	-29.47	0.00	-1353.0	0.00	1353.06	2755.06	1377.53	3512.56	1758.89	55.28	-6.037	0.000	0.777
98.00	-19.17	-29.38	0.00	-1323.5	0.00	1323.59	2730.06	1365.03	3448.72	1726.92	56.55	-6.121	0.000	0.774
100.00	-18.46	-29.15	0.00	-1264.8	0.00	1264.83	2680.05	1340.03	3322.78	1663.86	59.14	-6.287	0.000	0.768
101.00	-18.10	-29.04	0.00	-1235.6	0.00	1235.68	2260.99	1130.50	2846.84	1425.54	60.47	-6.372	0.000	0.875
102.00	-17.86	-28.97	0.00	-1206.6	0.00	1206.64	2242.36	1121.18	2797.13	1400.64	61.81	-6.457	0.000	0.870
104.00	-17.43	-28.79	0.00	-1148.7	0.00	1148.71	2200.69	1100.35	2693.61	1348.81	64.55	-6.647	0.000	0.860
106.00	-17.01	-28.61	0.00	-1091.1	0.00	1091.14	2159.02	1079.51	2592.04	1297.95	67.37	-6.838	0.000	0.849
108.00	-16.59	-28.43	0.00	-1033.9	0.00	1033.93	2117.34	1058.67	2492.43	1248.07	70.27	-7.030	0.000	0.837
110.00	-16.13	-27.97	0.00	-976.48	0.00	976.48	2075.67	1037.84	2394.76	1199.16	73.25	-7.222	0.000	0.823
112.00	-15.72	-27.80	0.00	-920.55	0.00	920.55	2034.00	1017.00	2299.05	1151.23	76.31	-7.415	0.000	0.808
114.00	-15.32	-27.64	0.00	-864.94	0.00	864.94	1992.32	996.16	2205.29	1104.29	79.45	-7.608	0.000	0.792
116.00	-14.92	-27.47	0.00	-809.67	0.00	809.67	1950.65	975.32	2113.48	1058.31	82.67	-7.800	0.000	0.773
118.00	-14.53	-27.31	0.00	-754.72	0.00	754.72	1908.98	954.49	2023.63	1013.32	85.97	-7.992	0.000	0.753
120.00	-14.14	-27.14	0.00	-700.10	0.00	700.10	1867.30	933.65	1935.73	969.30	89.34	-8.182	0.000	0.731
122.00	-13.77	-26.98	0.00	-645.81	0.00	645.81	1825.63	912.81	1849.77	926.26	92.80	-8.369	0.000	0.706
124.00	-13.40	-26.81	0.00	-591.85	0.00	591.85	1783.96	891.98	1765.78	884.20	96.33	-8.554	0.000	0.678
126.00	-13.03	-26.64	0.00	-538.23	0.00	538.23	1742.28	871.14	1683.73	843.12	99.94	-8.735	0.000	0.647
128.00	-12.68	-26.48	0.00	-484.94	0.00	484.94	1700.61	850.30	1603.63	803.01	103.63	-8.911	0.000	0.612
130.00	-10.46	-20.62	0.00	-427.76	0.00	427.76	1658.94	829.47	1525.49	763.88	107.38	-9.080	0.000	0.567
132.00	-10.15	-20.44	0.00	-386.53	0.00	386.53	1617.26	808.63	1449.30	725.73	111.21	-9.242	0.000	0.540
134.00	-9.88	-20.16	0.00	-345.65	0.00	345.65	1575.59	787.79	1375.06	688.55	115.09	-9.399	0.000	0.509
136.00	-9.63	-19.89	0.00	-305.32	0.00	305.32	1533.91	766.96	1302.77	652.35	119.05	-9.551	0.000	0.475
138.00	-9.38	-19.62	0.00	-265.54	0.00	265.54	1492.24	746.12	1232.44	617.13	123.06	-9.694	0.000	0.437
140.00	-7.35	-14.33	0.00	-219.01	0.00	219.01	1450.57	725.28	1164.05	582.89	127.13	-9.829	0.000	0.381
142.00	-7.12	-14.06	0.00	-190.34	0.00	190.34	1408.89	704.45	1097.62	549.63	131.26	-9.951	0.000	0.352
144.00	-6.94	-13.80	0.00	-162.22	0.00	162.22	1367.22	683.61	1033.14	517.34	135.43	-10.065	0.000	0.319
146.00	-6.77	-13.55	0.00	-134.61	0.00	134.61	1325.55	662.77	970.62	486.03	139.65	-10.171	0.000	0.282
148.00	-6.61	-13.29	0.00	-107.52	0.00	107.52	1283.87	641.94	910.04	455.70	143.91	-10.265	0.000	0.242
148.25	-6.59	-13.26	0.00	-104.20	0.00	104.20	1278.66	639.33	902.61	451.97	144.44	-10.276	0.000	0.236
149.00	-4.35	-8.33	0.00	-89.77	0.00	89.77	1263.04	631.52	880.49	440.90	146.05	-10.309	0.000	0.207
150.00	-4.24	-8.20	0.00	-81.44	0.00	81.44	1242.20	621.10	851.42	426.34	148.20	-10.347	0.000	0.195
150.50	-4.18	-8.13	0.00	-77.34	0.00	77.34	761.18	380.59	536.85	268.82	149.28	-10.366	0.000	0.294
152.00	-4.11	-7.95	0.00	-65.14	0.00	65.14	742.42	371.21	510.58	255.67	152.53	-10.418	0.000	0.261
154.00	-4.02	-7.72	0.00	-49.24	0.00	49.24	717.42	358.71	476.59	238.65	156.89	-10.510	0.000	0.212
156.00	-3.94	-7.50	0.00	-33.79	0.00	33.79	692.41	346.21	443.76	222.21	161.28	-10.583	0.000	0.158
158.00	-3.87	-7.27	0.00	-18.80	0.00	18.80	667.41	333.71	412.11	206.36	165.70	-10.635	0.000	0.097
159.00	0.00	-6.43	0.00	-11.53	0.00	11.53	654.91	327.45	396.72	198.65	167.92	-10.652	0.000	0.058

Wind Loading - Shaft

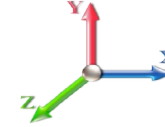
Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 0.9D + 1.6W 93 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.60



Iterations 29

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	0.85	17.879	19.67	422.34	0.650	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.85	17.879	19.67	418.23	0.663 *	0.000	2.00	9.803	6.50	204.4	0.0	419.6
4.00		1.00	0.85	17.879	19.67	414.13	0.665 *	0.000	2.00	9.708	6.45	203.0	0.0	415.4
6.00		1.00	0.85	17.879	19.67	410.03	0.667 *	0.000	2.00	9.612	6.41	201.6	0.0	411.3
8.00		1.00	0.85	17.879	19.67	405.92	0.669 *	0.000	2.00	9.516	6.36	200.3	0.0	407.2
10.00		1.00	0.85	17.879	19.67	401.82	0.671 *	0.000	2.00	9.421	6.32	198.9	0.0	403.1
12.00		1.00	0.85	17.879	19.67	397.72	0.673 *	0.000	2.00	9.325	6.28	197.5	0.0	398.9
14.00		1.00	0.85	17.879	19.67	393.61	0.675 *	0.000	2.00	9.229	6.23	196.2	0.0	394.8
16.00		1.00	0.86	18.100	19.91	391.91	0.678 *	0.000	2.00	9.134	6.19	197.2	0.0	390.7
18.00		1.00	0.88	18.554	20.41	392.62	0.680 *	0.000	2.00	9.038	6.15	200.7	0.0	386.6
20.00		1.00	0.90	18.971	20.87	392.77	0.683 *	0.000	2.00	8.942	6.10	203.8	0.0	382.5
22.00		1.00	0.92	19.355	21.29	392.46	0.685 *	0.000	2.00	8.846	6.06	206.4	0.0	378.3
24.00		1.00	0.94	19.713	21.68	391.76	0.687 *	0.000	2.00	8.751	6.02	208.7	0.0	374.2
26.00		1.00	0.95	20.048	22.05	390.73	0.690 *	0.000	2.00	8.655	5.97	210.7	0.0	370.1
28.00		1.00	0.97	20.363	22.40	389.41	0.693 *	0.000	2.00	8.559	5.93	212.5	0.0	366.0
30.00		1.00	0.98	20.661	22.73	387.84	0.695 *	0.000	2.00	8.464	5.89	214.0	0.0	361.8
32.00		1.00	1.00	20.944	23.04	386.04	0.698 *	0.000	2.00	8.368	5.84	215.3	0.0	357.7
34.00		1.00	1.01	21.213	23.33	384.05	0.701 *	0.000	2.00	8.272	5.80	216.5	0.0	353.6
36.00		1.00	1.02	21.470	23.62	381.87	0.704 *	0.000	2.00	8.176	5.75	217.5	0.0	349.5
38.00		1.00	1.03	21.715	23.89	379.53	0.707 *	0.000	2.00	8.081	5.71	218.3	0.0	345.3
40.00		1.00	1.04	21.951	24.15	377.03	0.710 *	0.000	2.00	7.985	5.67	219.0	0.0	341.2
42.00		1.00	1.05	22.178	24.40	374.40	0.713 *	0.000	2.00	7.889	5.62	219.5	0.0	337.1
44.00		1.00	1.06	22.396	24.64	371.65	0.716 *	0.000	2.00	7.794	5.58	220.0	0.0	333.0
46.00		1.00	1.07	22.607	24.87	368.78	0.719 *	0.000	2.00	7.698	5.54	220.3	0.0	328.9
47.00	Appurtenance(s)	1.00	1.08	22.709	24.98	367.30	0.722 *	0.000	1.00	3.813	2.75	110.0	0.0	162.9
47.50	Bot - Section 2	1.00	1.08	22.760	25.04	366.56	0.723 *	0.000	0.50	1.898	1.37	55.0	0.0	81.1
48.00		1.00	1.08	22.810	25.09	365.80	0.724 *	0.000	0.50	1.923	1.39	55.9	0.0	163.0
50.00		1.00	1.09	23.007	25.31	362.72	0.726 *	0.000	2.00	7.633	5.54	224.4	0.0	646.7
52.00		1.00	1.10	23.198	25.52	359.55	0.701 *	0.000	2.00	7.538	5.28	215.7	0.0	638.4
53.25	Top - Section 1	1.00	1.11	23.314	25.65	357.52	0.704 *	0.000	1.25	4.662	3.28	134.6	0.0	394.8
54.00		1.00	1.11	23.383	25.72	362.51	0.701 *	0.000	0.75	2.780	1.95	80.2	0.0	118.7
56.00		1.00	1.12	23.562	25.92	359.19	0.703 *	0.000	2.00	7.346	5.17	214.2	0.0	313.7
58.00		1.00	1.13	23.737	26.11	355.79	0.706 *	0.000	2.00	7.251	5.12	214.0	0.0	309.6
60.00		1.00	1.14	23.907	26.30	352.32	0.710 *	0.000	2.00	7.155	5.08	213.7	0.0	305.5
62.00		1.00	1.14	24.073	26.48	348.78	0.713 *	0.000	2.00	7.059	5.04	213.3	0.0	301.3
64.00		1.00	1.15	24.234	26.66	345.17	0.717 *	0.000	2.00	6.963	4.99	212.9	0.0	297.2
66.00		1.00	1.16	24.392	26.83	341.49	0.720 *	0.000	2.00	6.868	4.95	212.4	0.0	293.1
68.00		1.00	1.17	24.545	27.00	337.76	0.724 *	0.000	2.00	6.772	4.90	211.9	0.0	289.0
70.00		1.00	1.17	24.696	27.17	333.97	0.728 *	0.000	2.00	6.676	4.86	211.3	0.0	284.9
72.00		1.00	1.18	24.843	27.33	330.13	0.732 *	0.000	2.00	6.581	4.82	210.6	0.0	280.7
74.00		1.00	1.19	24.986	27.48	326.23	0.736 *	0.000	2.00	6.485	4.77	209.9	0.0	276.6
76.00		1.00	1.19	25.127	27.64	322.28	0.740 *	0.000	2.00	6.389	4.73	209.2	0.0	272.5
78.00		1.00	1.20	25.265	27.79	318.29	0.745 *	0.000	2.00	6.293	4.69	208.4	0.0	268.4
80.00	Appurtenance(s)	1.00	1.21	25.400	27.94	314.25	0.749 *	0.000	2.00	6.198	4.64	207.6	0.0	264.2
82.00		1.00	1.21	25.532	28.09	310.16	0.754 *	0.000	2.00	6.102	4.60	206.7	0.0	260.1
84.00		1.00	1.22	25.662	28.23	306.03	0.759 *	0.000	2.00	6.006	4.56	205.8	0.0	256.0
86.00		1.00	1.23	25.789	28.37	301.86	0.763 *	0.000	2.00	5.911	4.51	204.8	0.0	251.9

Wind Loading - Shaft

Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (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	1.00	1.23	25.915	28.51	297.65	0.769 *	0.000	2.00	5.815	4.47	203.8	0.0	247.7
90.00	1.00	1.24	26.037	28.64	293.41	0.774 *	0.000	2.00	5.719	4.43	202.8	0.0	243.6
92.00	1.00	1.24	26.158	28.77	289.12	0.779 *	0.000	2.00	5.623	4.38	201.7	0.0	239.5
94.00	1.00	1.25	26.277	28.90	284.81	0.785 *	0.000	2.00	5.528	4.34	200.6	0.0	235.4
96.00	1.00	1.25	26.394	29.03	280.45	0.791 *	0.000	2.00	5.432	4.29	199.5	0.0	231.3
97.00 Bot - Section 3	1.00	1.26	26.451	29.10	278.26	0.795 *	0.000	1.00	2.680	2.13	99.2	0.0	114.1
98.00	1.00	1.26	26.509	29.16	276.07	0.798 *	0.000	1.00	2.709	2.16	100.9	0.0	209.3
100.00	1.00	1.27	26.621	29.28	271.65	0.803 *	0.000	2.00	5.346	4.29	201.1	0.0	413.0
101.00 Top - Section 2	1.00	1.27	26.677	29.35	269.42	0.808 *	0.000	1.00	2.637	2.13	100.0	0.0	203.7
102.00	1.00	1.27	26.733	29.41	272.74	0.804 *	0.000	1.00	2.613	2.10	98.8	0.0	92.9
104.00	1.00	1.28	26.842	29.53	268.27	0.809 *	0.000	2.00	5.155	4.17	196.9	0.0	183.1
106.00	1.00	1.28	26.950	29.65	263.77	0.815 *	0.000	2.00	5.059	4.13	195.7	0.0	179.7
108.00	1.00	1.29	27.056	29.76	259.24	0.822 *	0.000	2.00	4.964	4.08	194.4	0.0	176.3
110.00 Appurtenance(s)	1.00	1.29	27.161	29.88	254.69	0.830 *	0.000	2.00	4.868	4.04	193.0	0.0	172.8
112.00	1.00	1.30	27.264	29.99	250.10	0.761 *	0.000	2.00	4.772	3.63	174.4	0.0	169.4
114.00	1.00	1.30	27.366	30.10	245.49	0.768 *	0.000	2.00	4.676	3.59	172.9	0.0	166.0
116.00	1.00	1.31	27.466	30.21	240.86	0.774 *	0.000	2.00	4.581	3.55	171.5	0.0	162.5
118.00	1.00	1.31	27.565	30.32	236.20	0.781 *	0.000	2.00	4.485	3.50	170.0	0.0	159.1
120.00	1.00	1.32	27.663	30.43	231.51	0.788 *	0.000	2.00	4.389	3.46	168.4	0.0	155.7
122.00	1.00	1.32	27.760	30.54	226.80	0.796 *	0.000	2.00	4.294	3.42	166.9	0.0	152.2
124.00	1.00	1.32	27.855	30.64	222.07	0.803 *	0.000	2.00	4.198	3.37	165.3	0.0	148.8
126.00	1.00	1.33	27.949	30.74	217.31	0.812 *	0.000	2.00	4.102	3.33	163.8	0.0	145.4
128.00	1.00	1.33	28.042	30.85	212.54	0.820 *	0.000	2.00	4.006	3.29	162.1	0.0	141.9
130.00 Appurtenance(s)	1.00	1.34	28.133	30.95	207.74	0.829 *	0.000	2.00	3.911	3.24	160.5	0.0	138.5
132.00	1.00	1.34	28.224	31.05	202.91	0.838 *	0.000	2.00	3.815	3.20	158.9	0.0	135.0
134.00	1.00	1.35	28.313	31.14	198.07	1.200 *	0.000	2.00	3.719	4.46	222.4	0.0	131.6
136.00	1.00	1.35	28.402	31.24	193.21	1.200 *	0.000	2.00	3.624	4.35	217.4	0.0	128.2
138.00	1.00	1.35	28.489	31.34	188.33	1.200 *	0.000	2.00	3.528	4.23	212.3	0.0	124.7
140.00 Appurtenance(s)	1.00	1.36	28.576	31.43	183.43	1.200 *	0.000	2.00	3.432	4.12	207.1	0.0	121.3
142.00	1.00	1.36	28.661	31.53	178.51	1.200 *	0.000	2.00	3.336	4.00	202.0	0.0	117.9
144.00	1.00	1.37	28.746	31.62	173.57	1.200 *	0.000	2.00	3.241	3.89	196.8	0.0	114.4
146.00	1.00	1.37	28.829	31.71	168.61	1.200 *	0.000	2.00	3.145	3.77	191.5	0.0	111.0
148.00	1.00	1.37	28.912	31.80	163.63	1.200 *	0.000	2.00	3.049	3.66	186.2	0.0	107.6
148.25 Bot - Section 4	1.00	1.37	28.922	31.81	163.01	1.200 *	0.000	0.25	0.374	0.45	22.9	0.0	13.2
149.00 Appurtenance(s)	1.00	1.38	28.953	31.85	161.14	1.200 *	0.000	0.75	1.138	1.37	69.6	0.0	63.5
150.00	1.00	1.38	28.994	31.89	158.64	1.200 *	0.000	1.00	1.497	1.80	91.6	0.0	83.5
150.50 Top - Section 3	1.00	1.38	29.014	31.92	157.39	1.200 *	0.000	0.50	0.739	0.89	45.3	0.0	41.2
152.00	1.00	1.38	29.075	31.98	157.10	1.200 *	0.000	1.50	2.182	2.62	134.0	0.0	46.5
154.00	1.00	1.39	29.155	32.07	152.07	1.200 *	0.000	2.00	2.826	3.39	174.0	0.0	60.2
156.00	1.00	1.39	29.234	32.16	147.03	1.200 *	0.000	2.00	2.730	3.28	168.6	0.0	58.1
158.00	1.00	1.39	29.313	32.24	141.98	1.200 *	0.000	2.00	2.634	3.16	163.1	0.0	56.1
159.00 Appurtenance(s)	1.00	1.40	29.352	32.29	139.44	1.200 *	0.000	1.00	1.281	1.54	79.4	0.0	27.3

* Cf Adjusted by Linear Load Ra Effect

Totals:	159.00	15,852.2	21,360.2
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Discrete Appurtenance Forces

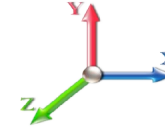
Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 0.9D + 1.6W 93 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.60



Iterations 29

No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa 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	159.00	DC6-48-60-18-8F	2	29.467	32.414	1.00	1.00	1.84	57.24	0.000	3.000	95.43	0.00	286.28
2	159.00	7770.00	3	29.467	32.414	0.77	1.00	13.31	207.90	0.000	3.000	690.05	0.00	2070.16
3	159.00	P65-16-XLH-RR	3	29.467	32.414	0.71	0.90	18.17	275.40	0.000	3.000	942.42	0.00	2827.25
4	159.00	LGP21401	6	29.467	32.414	0.50	1.00	3.87	76.14	0.000	3.000	200.71	0.00	602.12
5	159.00	RRUS 11-700	3	29.467	32.414	0.67	1.00	5.07	137.70	0.000	3.000	262.69	0.00	788.08
6	159.00	RRUS 32 B2	3	29.467	32.414	0.67	1.00	5.51	143.10	0.000	3.000	285.63	0.00	856.88
7	159.00	DB404-B	1	29.467	32.414	1.00	1.00	0.00	12.60	0.000	3.000	0.00	0.00	0.00
8	159.00	QS66512-2	3	29.467	32.414	0.83	0.90	20.19	299.70	0.000	3.000	1047.36	0.00	3142.08
9	159.00	DBC0061F1V51-2	3	29.467	32.414	0.50	1.00	0.65	68.58	0.000	3.000	33.45	0.00	100.35
10	159.00	RRUS 32 B30	3	29.467	32.414	0.67	1.00	5.51	162.00	0.000	3.000	285.63	0.00	856.88
11	159.00	RMQP-4096-HK Plat. +	1	29.352	32.287	1.00	1.00	48.10	2380.50	0.000	0.000	2484.79	0.00	0.00
12	149.00	RFS - APXVSP18-C-A20	3	29.034	31.938	0.62	0.75	15.71	286.20	0.000	2.000	802.55	0.00	1605.11
13	149.00	HRK12 (Handrail Kit)	1	28.953	31.848	1.00	1.00	6.75	235.55	0.000	0.000	343.96	0.00	0.00
14	149.00	RFS - APXVTM14-C-I20	3	29.034	31.938	0.59	0.75	11.18	151.20	0.000	2.000	571.49	0.00	1142.99
15	149.00	Alcatel Lucent -	3	29.034	31.938	0.50	0.75	6.11	189.00	0.000	2.000	311.99	0.00	623.97
16	149.00	RFS - ACU-A20-N - RET	4	29.034	31.938	0.38	0.75	0.21	3.60	0.000	2.000	10.73	0.00	21.46
17	149.00	Alcatel Lucent - 1900 MHz	3	29.034	31.938	0.50	0.75	5.73	118.80	0.000	2.000	292.73	0.00	585.46
18	149.00	Alcatel Lucent - 800 MHz	3	29.034	31.938	0.50	0.75	3.75	143.10	0.000	2.000	191.81	0.00	383.63
19	149.00	Alcatel Lucent - 800 MHz	3	29.034	31.938	0.50	0.75	1.18	23.76	0.000	2.000	60.09	0.00	120.17
20	149.00	Low Profile Platform	1	28.953	31.848	1.00	1.00	35.00	1080.00	0.000	0.000	1783.50	0.00	0.00
21	140.00	Andrew - ATSBT-TOP-FM	3	28.682	31.551	0.50	0.75	0.30	4.86	0.000	2.500	15.22	0.00	38.05
22	140.00	RFS -	3	28.682	31.551	0.50	0.75	1.76	42.80	0.000	2.500	89.04	0.00	222.59
23	140.00	APXVAA24_43-U-A20	3	28.682	31.551	0.55	0.75	33.24	273.78	0.000	2.500	1678.20	0.00	4195.49
24	140.00	APX16DWV-16DWVS-E-A	3	28.682	31.551	0.46	0.75	9.22	109.89	0.000	2.500	465.48	0.00	1163.70
25	140.00	FR90-16-XXDP	6	28.682	31.551	0.51	0.75	13.34	97.20	0.000	2.500	673.50	0.00	1683.74
26	140.00	Low Profile Platform w/	1	28.576	31.433	1.00	1.00	34.00	1440.00	0.000	0.000	1709.97	0.00	0.00
27	130.00	742 213_2110_P45_02.0	3	28.179	30.997	0.58	0.80	5.44	44.55	0.000	1.000	269.95	0.00	269.95
28	130.00	BXA-70063/6CF	3	28.179	30.997	0.60	0.80	14.33	178.20	0.000	1.000	710.48	0.00	710.48
29	130.00	LPA-80063/6CF	6	28.179	30.997	0.76	0.80	45.50	410.40	0.000	1.000	2256.62	0.00	2256.62
30	130.00	BXA-171063-12BF	3	28.179	30.997	0.70	0.80	10.80	172.80	0.000	1.000	535.50	0.00	535.50
31	130.00	RRH2X60-AWS	3	28.179	30.997	0.54	0.80	5.63	148.50	0.000	1.000	279.12	0.00	279.12
32	130.00	FD9R6004/2C-3L -	6	28.179	30.997	0.40	0.80	0.86	16.74	0.000	1.000	42.85	0.00	42.85
33	130.00	DB-T1-6Z-8AB-0Z - Distri	1	28.179	30.997	0.57	0.80	2.73	17.01	0.000	1.000	135.21	0.00	135.21
34	130.00	Low Profile Platform	1	28.133	30.947	1.00	1.00	22.00	1080.00	0.000	0.000	1089.32	0.00	0.00
35	110.00	4 ft Standoff	1	27.161	29.877	1.00	1.00	3.50	47.99	0.000	0.000	167.31	0.00	0.00
36	110.00	SCL329-HL	1	27.444	30.188	1.00	1.00	2.22	9.36	0.000	5.550	107.23	0.00	595.12
37	80.00	SCL329-HL	1	25.761	28.337	1.00	1.00	2.22	9.36	0.000	5.550	100.65	0.00	558.63
38	80.00	4 ft Standoff	1	25.400	27.940	1.00	1.00	3.50	47.99	0.000	0.000	156.46	0.00	0.00
39	47.00	4 ft Standoff	1	22.709	24.980	1.00	1.00	3.50	47.99	0.000	0.000	139.89	0.00	0.00
40	47.00	Decibel 26DB GPS	1	23.007	25.308	1.00	1.00	0.16	9.00	0.000	3.000	6.48	0.00	19.44

Totals: 10,260.48

21,325.49

Total Applied Force Summary

Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

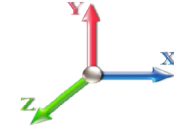


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Load Case: 0.9D + 1.6W 93 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.60



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		204.38	507.75	0.00	0.00
4.00		203.01	503.63	0.00	0.00
6.00		201.64	499.50	0.00	0.00
8.00		200.27	495.38	0.00	0.00
10.00		198.90	491.26	0.00	0.00
12.00		197.53	487.14	0.00	0.00
14.00		196.16	483.01	0.00	0.00
16.00		197.20	478.89	0.00	0.00
18.00		200.73	474.77	0.00	0.00
20.00		203.77	470.64	0.00	0.00
22.00		206.42	466.52	0.00	0.00
24.00		208.73	462.40	0.00	0.00
26.00		210.74	458.28	0.00	0.00
28.00		212.49	454.15	0.00	0.00
30.00		214.01	450.03	0.00	0.00
32.00		215.34	445.91	0.00	0.00
34.00		216.48	441.79	0.00	0.00
36.00		217.45	437.66	0.00	0.00
38.00		218.28	433.54	0.00	0.00
40.00		218.96	429.42	0.00	0.00
42.00		219.52	425.29	0.00	0.00
44.00		219.97	421.17	0.00	0.00
46.00		220.30	417.05	0.00	0.00
47.00	(2) attachments	256.37	263.97	0.00	19.44
47.50		54.96	103.10	0.00	0.00
48.00		55.89	185.01	0.00	0.00
50.00		224.41	734.88	0.00	0.00
52.00		215.74	726.35	0.00	0.00
53.25		134.61	449.78	0.00	0.00
54.00		80.18	151.67	0.00	0.00
56.00		214.22	401.61	0.00	0.00
58.00		213.99	397.49	0.00	0.00
60.00		213.69	393.37	0.00	0.00
62.00		213.33	389.25	0.00	0.00
64.00		212.90	385.12	0.00	0.00
66.00		212.42	381.00	0.00	0.00
68.00		211.87	376.88	0.00	0.00
70.00		211.28	372.76	0.00	0.00
72.00		210.63	368.63	0.00	0.00
74.00		209.93	364.51	0.00	0.00
76.00		209.19	360.39	0.00	0.00
78.00		208.40	356.26	0.00	0.00
80.00	(2) attachments	464.68	409.49	0.00	558.63
82.00		206.69	347.08	0.00	0.00
84.00		205.78	342.96	0.00	0.00
86.00		204.82	338.84	0.00	0.00

Total Applied Force Summary

Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (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		203.83	334.71	0.00	0.00
90.00		202.80	330.59	0.00	0.00
92.00		201.74	326.47	0.00	0.00
94.00		200.64	322.35	0.00	0.00
96.00		199.51	318.22	0.00	0.00
97.00		99.21	157.57	0.00	0.00
98.00		100.89	252.83	0.00	0.00
100.00		201.13	500.00	0.00	0.00
101.00		100.02	247.16	0.00	0.00
102.00		98.84	136.35	0.00	0.00
104.00		196.94	270.12	0.00	0.00
106.00		195.67	266.68	0.00	0.00
108.00		194.37	263.24	0.00	0.00
110.00	(2) attachments	467.58	317.16	0.00	595.12
112.00		174.37	255.44	0.00	0.00
114.00		172.92	252.00	0.00	0.00
116.00		171.45	248.57	0.00	0.00
118.00		169.96	245.13	0.00	0.00
120.00		168.44	241.69	0.00	0.00
122.00		166.90	238.26	0.00	0.00
124.00		165.34	234.82	0.00	0.00
126.00		163.75	231.39	0.00	0.00
128.00		162.15	227.95	0.00	0.00
130.00	(26) attachments	5479.58	2292.72	0.00	4229.74
132.00		158.87	208.86	0.00	0.00
134.00		267.26	193.20	0.00	0.00
136.00		262.35	189.77	0.00	0.00
138.00		257.40	186.33	0.00	0.00
140.00	(19) attachments	4883.80	2151.42	0.00	7303.58
142.00		247.36	179.46	0.00	0.00
144.00		242.28	154.64	0.00	0.00
146.00		237.16	144.07	0.00	0.00
148.00		232.00	140.64	0.00	0.00
148.25		28.60	17.34	0.00	0.00
149.00	(24) attachments	4455.65	2307.16	0.00	4482.79
150.00		114.61	100.06	0.00	0.00
150.50		56.79	49.52	0.00	0.00
152.00		168.53	67.86	0.00	0.00
154.00		220.17	86.38	0.00	0.00
156.00		214.86	84.32	0.00	0.00
158.00		209.51	82.26	0.00	0.00
159.00	(31) attachments	6430.82	3861.22	0.00	11530.09
Totals:		37,794.36	37,951.49	0.00	28,719.38

Linear Appurtenance Segment Forces (Factored)

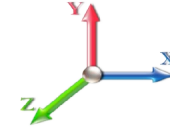
Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 0.9D + 1.6W 93 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.60



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)
2.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.106	1.019	17.879	0.00	22.46
2.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.106	1.019	17.879	0.00	0.58
2.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.106	1.019	17.879	0.00	2.88
2.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.106	1.019	17.879	0.00	0.94
2.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.106	1.019	17.879	0.00	0.94
2.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.106	1.019	17.879	0.00	0.29
4.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.107	1.022	17.879	0.00	22.46
4.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.107	1.022	17.879	0.00	0.58
4.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.107	1.022	17.879	0.00	2.88
4.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.107	1.022	17.879	0.00	0.94
4.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.107	1.022	17.879	0.00	0.94
4.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.107	1.022	17.879	0.00	0.29
6.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.109	1.026	17.879	0.00	22.46
6.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.109	1.026	17.879	0.00	0.58
6.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.109	1.026	17.879	0.00	2.88
6.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.109	1.026	17.879	0.00	0.94
6.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.026	17.879	0.00	0.94
6.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.109	1.026	17.879	0.00	0.29
8.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.110	1.029	17.879	0.00	22.46
8.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.110	1.029	17.879	0.00	0.58
8.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.110	1.029	17.879	0.00	2.88
8.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.110	1.029	17.879	0.00	0.94
8.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.110	1.029	17.879	0.00	0.94
8.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.110	1.029	17.879	0.00	0.29
10.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.111	1.032	17.879	0.00	22.46
10.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.111	1.032	17.879	0.00	0.58
10.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.111	1.032	17.879	0.00	2.88
10.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.111	1.032	17.879	0.00	0.94
10.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.111	1.032	17.879	0.00	0.94
10.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.111	1.032	17.879	0.00	0.29
12.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.112	1.036	17.879	0.00	22.46
12.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.112	1.036	17.879	0.00	0.58
12.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.112	1.036	17.879	0.00	2.88
12.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.112	1.036	17.879	0.00	0.94
12.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.112	1.036	17.879	0.00	0.94
12.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.112	1.036	17.879	0.00	0.29
14.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.113	1.039	17.879	0.00	22.46
14.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.113	1.039	17.879	0.00	0.58
14.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.113	1.039	17.879	0.00	2.88
14.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.113	1.039	17.879	0.00	0.94
14.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.039	17.879	0.00	0.94
14.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.113	1.039	17.879	0.00	0.29
16.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.114	1.043	18.100	0.00	22.46
16.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.114	1.043	18.100	0.00	0.58
16.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.114	1.043	18.100	0.00	2.88
16.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.114	1.043	18.100	0.00	0.94
16.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.114	1.043	18.100	0.00	0.94

Linear Appurtenance Segment Forces (Factored)

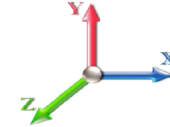
Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 0.9D + 1.6W 93 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.60



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)
16.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.114	1.043	18.100	0.00	0.29
18.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.115	1.046	18.554	0.00	22.46
18.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.115	1.046	18.554	0.00	0.58
18.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.115	1.046	18.554	0.00	2.88
18.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.115	1.046	18.554	0.00	0.94
18.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.115	1.046	18.554	0.00	0.94
18.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.115	1.046	18.554	0.00	0.29
20.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.117	1.050	18.971	0.00	22.46
20.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.117	1.050	18.971	0.00	0.58
20.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.117	1.050	18.971	0.00	2.88
20.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.117	1.050	18.971	0.00	0.94
20.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.050	18.971	0.00	0.94
20.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.117	1.050	18.971	0.00	0.29
22.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.118	1.054	19.355	0.00	22.46
22.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.118	1.054	19.355	0.00	0.58
22.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.118	1.054	19.355	0.00	2.88
22.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.118	1.054	19.355	0.00	0.94
22.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.054	19.355	0.00	0.94
22.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.118	1.054	19.355	0.00	0.29
24.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.119	1.058	19.713	0.00	22.46
24.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.119	1.058	19.713	0.00	0.58
24.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.119	1.058	19.713	0.00	2.88
24.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.119	1.058	19.713	0.00	0.94
24.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.058	19.713	0.00	0.94
24.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.119	1.058	19.713	0.00	0.29
26.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.121	1.062	20.048	0.00	22.46
26.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.121	1.062	20.048	0.00	0.58
26.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.121	1.062	20.048	0.00	2.88
26.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.121	1.062	20.048	0.00	0.94
26.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.121	1.062	20.048	0.00	0.94
26.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.121	1.062	20.048	0.00	0.29
28.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.122	1.066	20.363	0.00	22.46
28.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.122	1.066	20.363	0.00	0.58
28.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.122	1.066	20.363	0.00	2.88
28.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.122	1.066	20.363	0.00	0.94
28.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.066	20.363	0.00	0.94
28.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.122	1.066	20.363	0.00	0.29
30.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.123	1.070	20.661	0.00	22.46
30.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.123	1.070	20.661	0.00	0.58
30.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.123	1.070	20.661	0.00	2.88
30.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.123	1.070	20.661	0.00	0.94
30.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.070	20.661	0.00	0.94
30.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.123	1.070	20.661	0.00	0.29
32.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.074	20.944	0.00	22.46
32.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.125	1.074	20.944	0.00	0.58
32.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.125	1.074	20.944	0.00	2.88
32.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.125	1.074	20.944	0.00	0.94

Linear Appurtenance Segment Forces (Factored)

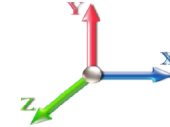
Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 0.9D + 1.6W 93 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.60



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)
32.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.074	20.944	0.00	0.94
32.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.125	1.074	20.944	0.00	0.29
34.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.126	1.078	21.213	0.00	22.46
34.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.126	1.078	21.213	0.00	0.58
34.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.126	1.078	21.213	0.00	2.88
34.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.126	1.078	21.213	0.00	0.94
34.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.126	1.078	21.213	0.00	0.94
34.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.126	1.078	21.213	0.00	0.29
36.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.128	1.083	21.470	0.00	22.46
36.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.128	1.083	21.470	0.00	0.58
36.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.128	1.083	21.470	0.00	2.88
36.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.128	1.083	21.470	0.00	0.94
36.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.128	1.083	21.470	0.00	0.94
36.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.128	1.083	21.470	0.00	0.29
38.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.129	1.087	21.715	0.00	22.46
38.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.129	1.087	21.715	0.00	0.58
38.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.129	1.087	21.715	0.00	2.88
38.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.129	1.087	21.715	0.00	0.94
38.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.129	1.087	21.715	0.00	0.94
38.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.129	1.087	21.715	0.00	0.29
40.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.131	1.092	21.951	0.00	22.46
40.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.131	1.092	21.951	0.00	0.58
40.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.131	1.092	21.951	0.00	2.88
40.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.131	1.092	21.951	0.00	0.94
40.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.131	1.092	21.951	0.00	0.94
40.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.131	1.092	21.951	0.00	0.29
42.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.132	1.097	22.178	0.00	22.46
42.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.132	1.097	22.178	0.00	0.58
42.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.132	1.097	22.178	0.00	2.88
42.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.132	1.097	22.178	0.00	0.94
42.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.132	1.097	22.178	0.00	0.94
42.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.132	1.097	22.178	0.00	0.29
44.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.134	1.102	22.396	0.00	22.46
44.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.134	1.102	22.396	0.00	0.58
44.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.134	1.102	22.396	0.00	2.88
44.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.134	1.102	22.396	0.00	0.94
44.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.134	1.102	22.396	0.00	0.94
44.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.134	1.102	22.396	0.00	0.29
46.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.136	1.107	22.607	0.00	22.46
46.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.136	1.107	22.607	0.00	0.58
46.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.136	1.107	22.607	0.00	2.88
46.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.136	1.107	22.607	0.00	0.94
46.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.136	1.107	22.607	0.00	0.94
46.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.136	1.107	22.607	0.00	0.29
47.00	1 5/8" Coax	Yes	1.00	0.000	2.00	0.17	0.00	0.137	1.110	22.709	0.00	11.23
47.00	1/2" Fiber	Yes	1.00	0.000	1.00	0.08	0.00	0.137	1.110	22.709	0.00	0.29
47.00	3/4" DC	Yes	1.00	0.000	1.50	0.13	0.00	0.137	1.110	22.709	0.00	1.44

Linear Appurtenance Segment Forces (Factored)

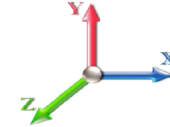
Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 0.9D + 1.6W 93 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.60



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)
47.00	7/8" Coax	Yes	1.00	0.000	1.11	0.09	0.00	0.137	1.110	22.709	0.00	0.47
47.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.137	1.110	22.709	0.00	0.47
47.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.137	1.110	22.709	0.00	0.14
47.50	1 5/8" Coax	Yes	0.50	0.000	2.00	0.08	0.00	0.137	1.112	22.760	0.00	5.62
47.50	1/2" Fiber	Yes	0.50	0.000	1.00	0.04	0.00	0.137	1.112	22.760	0.00	0.14
47.50	3/4" DC	Yes	0.50	0.000	1.50	0.06	0.00	0.137	1.112	22.760	0.00	0.72
47.50	7/8" Coax	Yes	0.50	0.000	1.11	0.05	0.00	0.137	1.112	22.760	0.00	0.23
47.50	7/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.137	1.112	22.760	0.00	0.23
47.50	1/2" Coax	Yes	0.50	0.000	0.65	0.03	0.00	0.137	1.112	22.760	0.00	0.07
48.00	1 5/8" Coax	Yes	0.50	0.000	2.00	0.08	0.00	0.138	1.114	22.810	0.00	5.62
48.00	1/2" Fiber	Yes	0.50	0.000	1.00	0.04	0.00	0.138	1.114	22.810	0.00	0.14
48.00	3/4" DC	Yes	0.50	0.000	1.50	0.06	0.00	0.138	1.114	22.810	0.00	0.72
48.00	7/8" Coax	Yes	0.50	0.000	1.11	0.05	0.00	0.138	1.114	22.810	0.00	0.23
48.00	7/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.138	1.114	22.810	0.00	0.23
48.00	1/2" Coax	Yes	0.50	0.000	0.65	0.03	0.00	0.138	1.114	22.810	0.00	0.07
50.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.139	1.117	23.007	0.00	22.46
50.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.139	1.117	23.007	0.00	0.58
50.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.139	1.117	23.007	0.00	2.88
50.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.139	1.117	23.007	0.00	0.94
50.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.139	1.117	23.007	0.00	0.94
50.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.139	1.117	23.007	0.00	0.29
52.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.126	1.079	23.198	0.00	22.46
52.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.126	1.079	23.198	0.00	0.58
52.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.126	1.079	23.198	0.00	2.88
52.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.126	1.079	23.198	0.00	0.94
52.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.126	1.079	23.198	0.00	0.94
53.25	1 5/8" Coax	Yes	1.25	0.000	2.00	0.21	0.00	0.128	1.083	23.314	0.00	14.04
53.25	1/2" Fiber	Yes	1.25	0.000	1.00	0.10	0.00	0.128	1.083	23.314	0.00	0.36
53.25	3/4" DC	Yes	1.25	0.000	1.50	0.16	0.00	0.128	1.083	23.314	0.00	1.80
53.25	7/8" Coax	Yes	1.25	0.000	1.11	0.12	0.00	0.128	1.083	23.314	0.00	0.59
53.25	7/8" Coax	Yes	1.25	0.000	0.00	0.00	0.00	0.128	1.083	23.314	0.00	0.59
54.00	1 5/8" Coax	Yes	0.75	0.000	2.00	0.13	0.00	0.126	1.078	23.383	0.00	8.42
54.00	1/2" Fiber	Yes	0.75	0.000	1.00	0.06	0.00	0.126	1.078	23.383	0.00	0.22
54.00	3/4" DC	Yes	0.75	0.000	1.50	0.09	0.00	0.126	1.078	23.383	0.00	1.08
54.00	7/8" Coax	Yes	0.75	0.000	1.11	0.07	0.00	0.126	1.078	23.383	0.00	0.35
54.00	7/8" Coax	Yes	0.75	0.000	0.00	0.00	0.00	0.126	1.078	23.383	0.00	0.35
56.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.127	1.082	23.562	0.00	22.46
56.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.127	1.082	23.562	0.00	0.58
56.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.127	1.082	23.562	0.00	2.88
56.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.127	1.082	23.562	0.00	0.94
56.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.127	1.082	23.562	0.00	0.94
58.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.129	1.087	23.737	0.00	22.46
58.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.129	1.087	23.737	0.00	0.58
58.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.129	1.087	23.737	0.00	2.88
58.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.129	1.087	23.737	0.00	0.94
58.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.129	1.087	23.737	0.00	0.94
60.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.131	1.092	23.907	0.00	22.46

Linear Appurtenance Segment Forces (Factored)

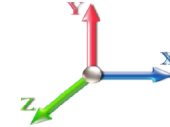
Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 0.9D + 1.6W 93 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.60



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)
60.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.131	1.092	23.907	0.00	0.58
60.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.131	1.092	23.907	0.00	2.88
60.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.131	1.092	23.907	0.00	0.94
60.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.131	1.092	23.907	0.00	0.94
62.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.132	1.097	24.073	0.00	22.46
62.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.132	1.097	24.073	0.00	0.58
62.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.132	1.097	24.073	0.00	2.88
62.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.132	1.097	24.073	0.00	0.94
62.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.132	1.097	24.073	0.00	0.94
64.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.134	1.103	24.234	0.00	22.46
64.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.134	1.103	24.234	0.00	0.58
64.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.134	1.103	24.234	0.00	2.88
64.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.134	1.103	24.234	0.00	0.94
64.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.134	1.103	24.234	0.00	0.94
66.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.136	1.108	24.392	0.00	22.46
66.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.136	1.108	24.392	0.00	0.58
66.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.136	1.108	24.392	0.00	2.88
66.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.136	1.108	24.392	0.00	0.94
66.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.136	1.108	24.392	0.00	0.94
68.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.138	1.114	24.545	0.00	22.46
68.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.138	1.114	24.545	0.00	0.58
68.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.138	1.114	24.545	0.00	2.88
68.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.138	1.114	24.545	0.00	0.94
68.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.138	1.114	24.545	0.00	0.94
70.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.140	1.120	24.696	0.00	22.46
70.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.140	1.120	24.696	0.00	0.58
70.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.140	1.120	24.696	0.00	2.88
70.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.140	1.120	24.696	0.00	0.94
70.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.140	1.120	24.696	0.00	0.94
72.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.142	1.126	24.843	0.00	22.46
72.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.142	1.126	24.843	0.00	0.58
72.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.142	1.126	24.843	0.00	2.88
72.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.142	1.126	24.843	0.00	0.94
72.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.142	1.126	24.843	0.00	0.94
74.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.144	1.133	24.986	0.00	22.46
74.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.144	1.133	24.986	0.00	0.58
74.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.144	1.133	24.986	0.00	2.88
74.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.144	1.133	24.986	0.00	0.94
74.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.144	1.133	24.986	0.00	0.94
76.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.146	1.139	25.127	0.00	22.46
76.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.146	1.139	25.127	0.00	0.58
76.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.146	1.139	25.127	0.00	2.88
76.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.146	1.139	25.127	0.00	0.94
76.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.146	1.139	25.127	0.00	0.94
78.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.149	1.146	25.265	0.00	22.46
78.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.149	1.146	25.265	0.00	0.58
78.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.149	1.146	25.265	0.00	2.88

Linear Appurtenance Segment Forces (Factored)

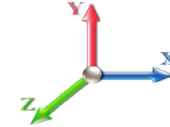
Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 0.9D + 1.6W 93 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.60



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)
78.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.149	1.146	25.265	0.00	0.94
78.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.149	1.146	25.265	0.00	0.94
80.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.151	1.153	25.400	0.00	22.46
80.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.151	1.153	25.400	0.00	0.58
80.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.151	1.153	25.400	0.00	2.88
80.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.151	1.153	25.400	0.00	0.94
80.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.151	1.153	25.400	0.00	0.94
82.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.153	1.160	25.532	0.00	22.46
82.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.153	1.160	25.532	0.00	0.58
82.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.153	1.160	25.532	0.00	2.88
82.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.153	1.160	25.532	0.00	0.94
84.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.156	1.167	25.662	0.00	22.46
84.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.156	1.167	25.662	0.00	0.58
84.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.156	1.167	25.662	0.00	2.88
84.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.156	1.167	25.662	0.00	0.94
86.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.158	1.175	25.789	0.00	22.46
86.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.158	1.175	25.789	0.00	0.58
86.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.158	1.175	25.789	0.00	2.88
86.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.158	1.175	25.789	0.00	0.94
88.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.161	1.182	25.915	0.00	22.46
88.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.161	1.182	25.915	0.00	0.58
88.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.161	1.182	25.915	0.00	2.88
88.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.161	1.182	25.915	0.00	0.94
90.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.163	1.190	26.037	0.00	22.46
90.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.163	1.190	26.037	0.00	0.58
90.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.163	1.190	26.037	0.00	2.88
90.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.163	1.190	26.037	0.00	0.94
92.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.166	1.199	26.158	0.00	22.46
92.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.166	1.199	26.158	0.00	0.58
92.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.166	1.199	26.158	0.00	2.88
92.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.166	1.199	26.158	0.00	0.94
94.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.169	1.207	26.277	0.00	22.46
94.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.169	1.207	26.277	0.00	0.58
94.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.169	1.207	26.277	0.00	2.88
94.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.169	1.207	26.277	0.00	0.94
96.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.172	1.216	26.394	0.00	22.46
96.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.172	1.216	26.394	0.00	0.58
96.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.172	1.216	26.394	0.00	2.88
96.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.172	1.216	26.394	0.00	0.94
97.00	1 5/8" Coax	Yes	1.00	0.000	2.00	0.17	0.00	0.174	1.223	26.451	0.00	11.23
97.00	1/2" Fiber	Yes	1.00	0.000	1.00	0.08	0.00	0.174	1.223	26.451	0.00	0.29
97.00	3/4" DC	Yes	1.00	0.000	1.50	0.13	0.00	0.174	1.223	26.451	0.00	1.44
97.00	7/8" Coax	Yes	1.00	0.000	1.11	0.09	0.00	0.174	1.223	26.451	0.00	0.47
98.00	1 5/8" Coax	Yes	1.00	0.000	2.00	0.17	0.00	0.176	1.228	26.509	0.00	11.23
98.00	1/2" Fiber	Yes	1.00	0.000	1.00	0.08	0.00	0.176	1.228	26.509	0.00	0.29
98.00	3/4" DC	Yes	1.00	0.000	1.50	0.13	0.00	0.176	1.228	26.509	0.00	1.44
98.00	7/8" Coax	Yes	1.00	0.000	1.11	0.09	0.00	0.176	1.228	26.509	0.00	0.47

Linear Appurtenance Segment Forces (Factored)

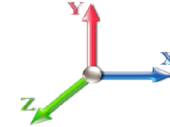
Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 0.9D + 1.6W 93 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.60



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)
100.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.178	1.235	26.621	0.00	22.46
100.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.178	1.235	26.621	0.00	0.58
100.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.178	1.235	26.621	0.00	2.88
100.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.178	1.235	26.621	0.00	0.94
101.00	1 5/8" Coax	Yes	1.00	0.000	2.00	0.17	0.00	0.181	1.243	26.677	0.00	11.23
101.00	1/2" Fiber	Yes	1.00	0.000	1.00	0.08	0.00	0.181	1.243	26.677	0.00	0.29
101.00	3/4" DC	Yes	1.00	0.000	1.50	0.13	0.00	0.181	1.243	26.677	0.00	1.44
101.00	7/8" Coax	Yes	1.00	0.000	1.11	0.09	0.00	0.181	1.243	26.677	0.00	0.47
102.00	1 5/8" Coax	Yes	1.00	0.000	2.00	0.17	0.00	0.179	1.237	26.733	0.00	11.23
102.00	1/2" Fiber	Yes	1.00	0.000	1.00	0.08	0.00	0.179	1.237	26.733	0.00	0.29
102.00	3/4" DC	Yes	1.00	0.000	1.50	0.13	0.00	0.179	1.237	26.733	0.00	1.44
102.00	7/8" Coax	Yes	1.00	0.000	1.11	0.09	0.00	0.179	1.237	26.733	0.00	0.47
104.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.181	1.244	26.842	0.00	22.46
104.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.181	1.244	26.842	0.00	0.58
104.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.181	1.244	26.842	0.00	2.88
104.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.181	1.244	26.842	0.00	0.94
106.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.185	1.254	26.950	0.00	22.46
106.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.185	1.254	26.950	0.00	0.58
106.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.185	1.254	26.950	0.00	2.88
106.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.185	1.254	26.950	0.00	0.94
108.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.188	1.265	27.056	0.00	22.46
108.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.188	1.265	27.056	0.00	0.58
108.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.188	1.265	27.056	0.00	2.88
108.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.188	1.265	27.056	0.00	0.94
110.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.192	1.276	27.161	0.00	22.46
110.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.192	1.276	27.161	0.00	0.58
110.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.192	1.276	27.161	0.00	2.88
110.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.192	1.276	27.161	0.00	0.94
112.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.157	1.171	27.264	0.00	22.46
112.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.157	1.171	27.264	0.00	0.58
112.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.157	1.171	27.264	0.00	2.88
114.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.160	1.181	27.366	0.00	22.46
114.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.160	1.181	27.366	0.00	0.58
114.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.160	1.181	27.366	0.00	2.88
116.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.164	1.191	27.466	0.00	22.46
116.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.164	1.191	27.466	0.00	0.58
116.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.164	1.191	27.466	0.00	2.88
118.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.167	1.202	27.565	0.00	22.46
118.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.167	1.202	27.565	0.00	0.58
118.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.167	1.202	27.565	0.00	2.88
120.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.171	1.213	27.663	0.00	22.46
120.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.171	1.213	27.663	0.00	0.58
120.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.171	1.213	27.663	0.00	2.88
122.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.175	1.224	27.760	0.00	22.46
122.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.175	1.224	27.760	0.00	0.58
122.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.175	1.224	27.760	0.00	2.88
124.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.179	1.236	27.855	0.00	22.46

Linear Appurtenance Segment Forces (Factored)

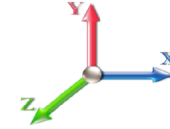
Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 0.9D + 1.6W 93 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.60



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)
124.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.179	1.236	27.855	0.00	0.58
124.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.179	1.236	27.855	0.00	2.88
126.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.183	1.248	27.949	0.00	22.46
126.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.183	1.248	27.949	0.00	0.58
126.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.183	1.248	27.949	0.00	2.88
128.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.187	1.262	28.042	0.00	22.46
128.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.187	1.262	28.042	0.00	0.58
128.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.187	1.262	28.042	0.00	2.88
130.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.192	1.275	28.133	0.00	22.46
130.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.192	1.275	28.133	0.00	0.58
130.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.192	1.275	28.133	0.00	2.88
132.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.197	1.290	28.224	0.00	22.46
132.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.197	1.290	28.224	0.00	0.58
132.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.197	1.290	28.224	0.00	2.88
134.00	1 5/8" Coax	Yes	2.00	1.200	2.00	0.33	0.40	0.202	0.000	28.313	19.93	22.46
134.00	1/2" Fiber	Yes	2.00	1.200	1.00	0.17	0.20	0.202	0.000	28.313	9.97	0.58
134.00	3/4" DC	Yes	2.00	1.200	1.50	0.25	0.30	0.202	0.000	28.313	14.95	2.88
136.00	1 5/8" Coax	Yes	2.00	1.200	2.00	0.33	0.40	0.207	0.000	28.402	19.99	22.46
136.00	1/2" Fiber	Yes	2.00	1.200	1.00	0.17	0.20	0.207	0.000	28.402	10.00	0.58
136.00	3/4" DC	Yes	2.00	1.200	1.50	0.25	0.30	0.207	0.000	28.402	15.00	2.88
138.00	1 5/8" Coax	Yes	2.00	1.200	2.00	0.33	0.40	0.213	0.000	28.489	20.06	22.46
138.00	1/2" Fiber	Yes	2.00	1.200	1.00	0.17	0.20	0.213	0.000	28.489	10.03	0.58
138.00	3/4" DC	Yes	2.00	1.200	1.50	0.25	0.30	0.213	0.000	28.489	15.04	2.88
140.00	1 5/8" Coax	Yes	2.00	1.200	2.00	0.33	0.40	0.219	0.000	28.576	20.12	22.46
140.00	1/2" Fiber	Yes	2.00	1.200	1.00	0.17	0.20	0.219	0.000	28.576	10.06	0.58
140.00	3/4" DC	Yes	2.00	1.200	1.50	0.25	0.30	0.219	0.000	28.576	15.09	2.88
142.00	1 5/8" Coax	Yes	2.00	1.200	2.00	0.33	0.40	0.225	0.000	28.661	20.18	22.46
142.00	1/2" Fiber	Yes	2.00	1.200	1.00	0.17	0.20	0.225	0.000	28.661	10.09	0.58
142.00	3/4" DC	Yes	2.00	1.200	1.50	0.25	0.30	0.225	0.000	28.661	15.13	2.88
144.00	1 5/8" Coax	Yes	2.00	1.200	2.00	0.33	0.40	0.231	0.000	28.746	20.24	22.46
144.00	1/2" Fiber	Yes	2.00	1.200	1.00	0.17	0.20	0.231	0.000	28.746	10.12	0.58
144.00	3/4" DC	Yes	2.00	1.200	1.50	0.25	0.30	0.231	0.000	28.746	15.18	2.88
146.00	1 5/8" Coax	Yes	2.00	1.200	2.00	0.33	0.40	0.238	0.000	28.829	20.30	22.46
146.00	1/2" Fiber	Yes	2.00	1.200	1.00	0.17	0.20	0.238	0.000	28.829	10.15	0.58
146.00	3/4" DC	Yes	2.00	1.200	1.50	0.25	0.30	0.238	0.000	28.829	15.22	2.88
148.00	1 5/8" Coax	Yes	2.00	1.200	2.00	0.33	0.40	0.246	0.000	28.912	20.35	22.46
148.00	1/2" Fiber	Yes	2.00	1.200	1.00	0.17	0.20	0.246	0.000	28.912	10.18	0.58
148.00	3/4" DC	Yes	2.00	1.200	1.50	0.25	0.30	0.246	0.000	28.912	15.27	2.88
148.25	1 5/8" Coax	Yes	0.25	1.200	2.00	0.04	0.05	0.250	0.000	28.922	2.55	2.81
148.25	1/2" Fiber	Yes	0.25	1.200	1.00	0.02	0.02	0.250	0.000	28.922	1.27	0.07
148.25	3/4" DC	Yes	0.25	1.200	1.50	0.03	0.04	0.250	0.000	28.922	1.91	0.36
149.00	1 5/8" Coax	Yes	0.75	1.200	2.00	0.13	0.15	0.252	0.000	28.953	7.64	8.42
149.00	1/2" Fiber	Yes	0.75	1.200	1.00	0.06	0.07	0.252	0.000	28.953	3.82	0.22
149.00	3/4" DC	Yes	0.75	1.200	1.50	0.09	0.11	0.252	0.000	28.953	5.73	1.08
150.00	1 5/8" Coax	Yes	1.00	1.200	2.00	0.17	0.20	0.256	0.000	28.994	10.21	11.23
150.00	1/2" Fiber	Yes	1.00	1.200	1.00	0.08	0.10	0.256	0.000	28.994	5.10	0.29
150.00	3/4" DC	Yes	1.00	1.200	1.50	0.13	0.15	0.256	0.000	28.994	7.65	1.44

Linear Appurtenance Segment Forces (Factored)

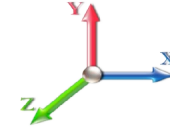
Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 0.9D + 1.6W 93 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.60



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)
150.50	1 5/8" Coax	Yes	0.50	1.200	2.00	0.08	0.10	0.259	0.000	29.014	5.11	5.62
150.50	1/2" Fiber	Yes	0.50	1.200	1.00	0.04	0.05	0.259	0.000	29.014	2.55	0.14
150.50	3/4" DC	Yes	0.50	1.200	1.50	0.06	0.07	0.259	0.000	29.014	3.83	0.72
152.00	1 5/8" Coax	Yes	1.50	1.200	2.00	0.25	0.30	0.258	0.000	29.075	15.35	16.85
152.00	1/2" Fiber	Yes	1.50	1.200	1.00	0.13	0.15	0.258	0.000	29.075	7.68	0.43
152.00	3/4" DC	Yes	1.50	1.200	1.50	0.19	0.22	0.258	0.000	29.075	11.51	2.16
154.00	1 5/8" Coax	Yes	2.00	1.200	2.00	0.33	0.40	0.265	0.000	29.155	20.52	22.46
154.00	1/2" Fiber	Yes	2.00	1.200	1.00	0.17	0.20	0.265	0.000	29.155	10.26	0.58
154.00	3/4" DC	Yes	2.00	1.200	1.50	0.25	0.30	0.265	0.000	29.155	15.39	2.88
156.00	1 5/8" Coax	Yes	2.00	1.200	2.00	0.33	0.40	0.275	0.000	29.234	20.58	22.46
156.00	1/2" Fiber	Yes	2.00	1.200	1.00	0.17	0.20	0.275	0.000	29.234	10.29	0.58
156.00	3/4" DC	Yes	2.00	1.200	1.50	0.25	0.30	0.275	0.000	29.234	15.44	2.88
158.00	1 5/8" Coax	Yes	2.00	1.200	2.00	0.33	0.40	0.285	0.000	29.313	20.64	22.46
158.00	1/2" Fiber	Yes	2.00	1.200	1.00	0.17	0.20	0.285	0.000	29.313	10.32	0.58
158.00	3/4" DC	Yes	2.00	1.200	1.50	0.25	0.30	0.285	0.000	29.313	15.48	2.88
159.00	1 5/8" Coax	Yes	1.00	1.200	2.00	0.17	0.20	0.293	0.000	29.352	10.33	11.23
159.00	1/2" Fiber	Yes	1.00	1.200	1.00	0.08	0.10	0.293	0.000	29.352	5.17	0.29
159.00	3/4" DC	Yes	1.00	1.200	1.50	0.13	0.15	0.293	0.000	29.352	7.75	1.44
Totals:											616.7	2,156.8

Calculated Forces

Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

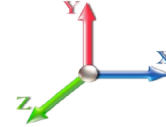


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Load Case: 0.9D + 1.6W 93 mph Wind

Iterations 29

Dead Load Factor 0.90
Wind Load Factor 1.60



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	-37.92	-37.82	0.00	-4591.4	0.00	4591.45	4390.37	2195.18	10447.7	5231.64	0.00	0.000	0.000	0.887
2.00	-37.35	-37.68	0.00	-4515.8	0.00	4515.81	4366.62	2183.31	10288.9	5152.14	0.02	-0.089	0.000	0.885
4.00	-36.79	-37.53	0.00	-4440.4	0.00	4440.45	4342.50	2171.25	10130.4	5072.75	0.08	-0.179	0.000	0.884
6.00	-36.23	-37.39	0.00	-4365.3	0.00	4365.39	4318.00	2159.00	9972.16	4993.49	0.17	-0.271	0.000	0.883
8.00	-35.68	-37.24	0.00	-4290.6	0.00	4290.62	4293.12	2146.56	9814.16	4914.37	0.31	-0.363	0.000	0.882
10.00	-35.13	-37.10	0.00	-4216.1	0.00	4216.14	4267.86	2133.93	9656.46	4835.41	0.48	-0.457	0.000	0.880
12.00	-34.58	-36.95	0.00	-4141.9	0.00	4141.95	4242.22	2121.11	9499.10	4756.61	0.69	-0.552	0.000	0.879
14.00	-34.04	-36.81	0.00	-4068.0	0.00	4068.05	4216.20	2108.10	9342.10	4677.99	0.94	-0.648	0.000	0.878
16.00	-33.50	-36.66	0.00	-3994.4	0.00	3994.43	4189.80	2094.90	9185.49	4599.57	1.24	-0.746	0.000	0.877
18.00	-32.96	-36.51	0.00	-3921.1	0.00	3921.10	4163.03	2081.51	9029.29	4521.36	1.57	-0.845	0.000	0.875
20.00	-32.43	-36.36	0.00	-3848.0	0.00	3848.08	4135.87	2067.94	8873.53	4443.36	1.95	-0.945	0.000	0.874
22.00	-31.90	-36.20	0.00	-3775.3	0.00	3775.36	4108.34	2054.17	8718.25	4365.60	2.36	-1.046	0.000	0.873
24.00	-31.38	-36.04	0.00	-3702.9	0.00	3702.96	4080.43	2040.21	8563.45	4288.09	2.82	-1.149	0.000	0.872
26.00	-30.86	-35.88	0.00	-3630.8	0.00	3630.88	4052.14	2026.07	8409.18	4210.84	3.33	-1.254	0.000	0.870
28.00	-30.35	-35.71	0.00	-3559.1	0.00	3559.12	4023.46	2011.73	8255.45	4133.86	3.88	-1.359	0.000	0.869
30.00	-29.83	-35.54	0.00	-3487.7	0.00	3487.70	3994.42	1997.21	8102.30	4057.17	4.47	-1.466	0.000	0.867
32.00	-29.33	-35.37	0.00	-3416.6	0.00	3416.62	3964.99	1982.49	7949.75	3980.79	5.11	-1.575	0.000	0.866
34.00	-28.82	-35.20	0.00	-3345.8	0.00	3345.88	3935.18	1967.59	7797.83	3904.71	5.79	-1.685	0.000	0.865
36.00	-28.32	-35.02	0.00	-3275.4	0.00	3275.48	3904.99	1952.50	7646.57	3828.97	6.52	-1.797	0.000	0.863
38.00	-27.83	-34.85	0.00	-3205.4	0.00	3205.44	3874.43	1937.21	7495.98	3753.56	7.30	-1.910	0.000	0.861
40.00	-27.34	-34.67	0.00	-3135.7	0.00	3135.75	3843.48	1921.74	7346.10	3678.51	8.13	-2.025	0.000	0.860
42.00	-26.85	-34.49	0.00	-3066.4	0.00	3066.41	3812.16	1906.08	7196.95	3603.83	9.00	-2.142	0.000	0.858
44.00	-26.36	-34.31	0.00	-2997.4	0.00	2997.44	3780.46	1890.23	7048.57	3529.52	9.92	-2.260	0.000	0.857
46.00	-25.90	-34.11	0.00	-2928.8	0.00	2928.82	3748.38	1874.19	6900.97	3455.62	10.89	-2.380	0.000	0.855
47.00	-25.62	-33.86	0.00	-2894.6	0.00	2894.69	3732.20	1866.10	6827.48	3418.81	11.40	-2.441	0.000	0.854
47.50	-25.50	-33.82	0.00	-2877.7	0.00	2877.76	3724.07	1862.03	6790.81	3400.45	11.66	-2.472	0.000	0.853
48.00	-25.28	-33.79	0.00	-2860.8	0.00	2860.85	3715.92	1857.96	6754.19	3382.11	11.92	-2.503	0.000	0.853
50.00	-24.48	-33.59	0.00	-2793.2	0.00	2793.27	3683.08	1841.54	6608.25	3309.03	12.99	-2.626	0.000	0.851
52.00	-23.70	-33.38	0.00	-2726.1	0.00	2726.10	3649.86	1824.93	6463.17	3236.39	14.12	-2.751	0.000	0.849
53.25	-23.22	-33.25	0.00	-2684.3	0.00	2684.38	3673.19	1836.60	6564.80	3287.28	14.85	-2.831	0.000	0.823
54.00	-23.03	-33.19	0.00	-2659.4	0.00	2659.45	3660.74	1830.37	6510.40	3260.04	15.30	-2.880	0.000	0.822
56.00	-22.57	-33.01	0.00	-2593.0	0.00	2593.06	3627.27	1813.63	6365.92	3187.69	16.53	-3.002	0.000	0.820
58.00	-22.11	-32.82	0.00	-2527.0	0.00	2527.04	3593.41	1796.71	6222.36	3115.80	17.82	-3.126	0.000	0.818
60.00	-21.66	-32.63	0.00	-2461.4	0.00	2461.40	3559.18	1779.59	6079.73	3044.38	19.15	-3.252	0.000	0.815
62.00	-21.21	-32.45	0.00	-2396.1	0.00	2396.13	3524.57	1762.29	5938.07	2973.45	20.54	-3.379	0.000	0.812
64.00	-20.76	-32.26	0.00	-2331.2	0.00	2331.24	3489.59	1744.79	5797.40	2903.01	21.98	-3.508	0.000	0.809
66.00	-20.32	-32.07	0.00	-2266.7	0.00	2266.73	3454.22	1727.11	5657.75	2833.08	23.48	-3.639	0.000	0.806
68.00	-19.89	-31.88	0.00	-2202.5	0.00	2202.59	3418.47	1709.24	5519.14	2763.67	25.03	-3.772	0.000	0.803
70.00	-19.45	-31.69	0.00	-2138.8	0.00	2138.83	3382.35	1691.17	5381.61	2694.80	26.64	-3.907	0.000	0.800
72.00	-19.02	-31.50	0.00	-2075.4	0.00	2075.45	3345.84	1672.92	5245.17	2626.49	28.31	-4.044	0.000	0.796
74.00	-18.60	-31.31	0.00	-2012.4	0.00	2012.45	3308.96	1654.48	5109.86	2558.73	30.03	-4.182	0.000	0.792
76.00	-18.18	-31.12	0.00	-1949.8	0.00	1949.83	3271.70	1635.85	4975.70	2491.55	31.81	-4.322	0.000	0.788
78.00	-17.76	-30.93	0.00	-1887.5	0.00	1887.59	3230.14	1615.07	4836.86	2422.03	33.65	-4.465	0.000	0.785
80.00	-17.31	-30.48	0.00	-1825.1	0.00	1825.17	3180.13	1590.07	4687.51	2347.24	35.55	-4.609	0.000	0.783
82.00	-16.91	-30.29	0.00	-1764.2	0.00	1764.22	3130.13	1565.06	4540.49	2273.62	37.51	-4.755	0.000	0.782
84.00	-16.50	-30.10	0.00	-1703.6	0.00	1703.65	3080.12	1540.06	4395.82	2201.18	39.53	-4.903	0.000	0.780
86.00	-16.11	-29.91	0.00	-1643.4	0.00	1643.45	3030.11	1515.05	4253.50	2129.91	41.62	-5.053	0.000	0.777
88.00	-15.71	-29.71	0.00	-1583.6	0.00	1583.65	2980.10	1490.05	4113.51	2059.81	43.76	-5.204	0.000	0.774

Calculated Forces

Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (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	-15.32	-29.52	0.00	-1524.2	0.00	1524.22	2930.09	1465.05	3975.87	1990.89	45.97	-5.358	0.000	0.771
92.00	-14.94	-29.33	0.00	-1465.1	0.00	1465.17	2880.09	1440.04	3840.56	1923.14	48.25	-5.513	0.000	0.767
94.00	-14.55	-29.14	0.00	-1406.5	0.00	1406.51	2830.08	1415.04	3707.61	1856.56	50.59	-5.671	0.000	0.763
96.00	-14.20	-28.94	0.00	-1348.2	0.00	1348.23	2780.07	1390.03	3576.99	1791.15	52.99	-5.830	0.000	0.758
97.00	-14.01	-28.85	0.00	-1319.2	0.00	1319.29	2755.06	1377.53	3512.56	1758.89	54.22	-5.911	0.000	0.756
98.00	-13.71	-28.75	0.00	-1290.4	0.00	1290.44	2730.06	1365.03	3448.72	1726.92	55.47	-5.992	0.000	0.753
100.00	-13.17	-28.52	0.00	-1232.9	0.00	1232.94	2680.05	1340.03	3322.78	1663.86	58.01	-6.155	0.000	0.746
101.00	-12.89	-28.42	0.00	-1204.4	0.00	1204.42	2260.99	1130.50	2846.84	1425.54	59.30	-6.237	0.000	0.851
102.00	-12.70	-28.33	0.00	-1176.0	0.00	1176.01	2242.36	1121.18	2797.13	1400.64	60.62	-6.321	0.000	0.846
104.00	-12.36	-28.15	0.00	-1119.3	0.00	1119.34	2200.69	1100.35	2693.61	1348.81	63.30	-6.506	0.000	0.836
106.00	-12.03	-27.96	0.00	-1063.0	0.00	1063.04	2159.02	1079.51	2592.04	1297.95	66.06	-6.692	0.000	0.825
108.00	-11.70	-27.78	0.00	-1007.1	0.00	1007.12	2117.34	1058.67	2492.43	1248.07	68.90	-6.878	0.000	0.813
110.00	-11.36	-27.31	0.00	-950.97	0.00	950.97	2075.67	1037.84	2394.76	1199.16	71.81	-7.066	0.000	0.799
112.00	-11.03	-27.14	0.00	-896.35	0.00	896.35	2034.00	1017.00	2299.05	1151.23	74.80	-7.254	0.000	0.785
114.00	-10.72	-26.97	0.00	-842.07	0.00	842.07	1992.32	996.16	2205.29	1104.29	77.88	-7.441	0.000	0.769
116.00	-10.41	-26.81	0.00	-788.12	0.00	788.12	1950.65	975.32	2113.48	1058.31	81.02	-7.628	0.000	0.751
118.00	-10.10	-26.64	0.00	-734.51	0.00	734.51	1908.98	954.49	2023.63	1013.32	84.25	-7.815	0.000	0.731
120.00	-9.80	-26.47	0.00	-681.24	0.00	681.24	1867.30	933.65	1935.73	969.30	87.56	-8.000	0.000	0.709
122.00	-9.50	-26.30	0.00	-628.30	0.00	628.30	1825.63	912.81	1849.77	926.26	90.94	-8.182	0.000	0.684
124.00	-9.21	-26.13	0.00	-575.70	0.00	575.70	1783.96	891.98	1765.78	884.20	94.39	-8.362	0.000	0.657
126.00	-8.93	-25.96	0.00	-523.44	0.00	523.44	1742.28	871.14	1683.73	843.12	97.92	-8.538	0.000	0.627
128.00	-8.65	-25.79	0.00	-471.51	0.00	471.51	1700.61	850.30	1603.63	803.01	101.52	-8.709	0.000	0.593
130.00	-7.17	-20.05	0.00	-415.70	0.00	415.70	1658.94	829.47	1525.49	763.88	105.19	-8.874	0.000	0.549
132.00	-6.94	-19.88	0.00	-375.60	0.00	375.60	1617.26	808.63	1449.30	725.73	108.93	-9.031	0.000	0.522
134.00	-6.74	-19.60	0.00	-335.85	0.00	335.85	1575.59	787.79	1375.06	688.55	112.73	-9.184	0.000	0.493
136.00	-6.54	-19.33	0.00	-296.65	0.00	296.65	1533.91	766.96	1302.77	652.35	116.59	-9.331	0.000	0.460
138.00	-6.36	-19.06	0.00	-257.99	0.00	257.99	1492.24	746.12	1232.44	617.13	120.51	-9.470	0.000	0.423
140.00	-5.01	-13.90	0.00	-212.57	0.00	212.57	1450.57	725.28	1164.05	582.89	124.49	-9.601	0.000	0.369
142.00	-4.85	-13.63	0.00	-184.78	0.00	184.78	1408.89	704.45	1097.62	549.63	128.52	-9.719	0.000	0.340
144.00	-4.71	-13.38	0.00	-157.51	0.00	157.51	1367.22	683.61	1033.14	517.34	132.60	-9.830	0.000	0.308
146.00	-4.59	-13.13	0.00	-130.76	0.00	130.76	1325.55	662.77	970.62	486.03	136.72	-9.933	0.000	0.273
148.00	-4.48	-12.88	0.00	-104.51	0.00	104.51	1283.87	641.94	910.04	455.70	140.88	-10.025	0.000	0.233
148.25	-4.46	-12.85	0.00	-101.29	0.00	101.29	1278.66	639.33	902.61	451.97	141.40	-10.036	0.000	0.228
149.00	-2.97	-8.06	0.00	-87.17	0.00	87.17	1263.04	631.52	880.49	440.90	142.97	-10.067	0.000	0.200
150.00	-2.88	-7.93	0.00	-79.12	0.00	79.12	1242.20	621.10	851.42	426.34	145.07	-10.105	0.000	0.188
150.50	-2.84	-7.87	0.00	-75.15	0.00	75.15	761.18	380.59	536.85	268.82	146.13	-10.123	0.000	0.284
152.00	-2.79	-7.69	0.00	-63.35	0.00	63.35	742.42	371.21	510.58	255.67	149.30	-10.173	0.000	0.252
154.00	-2.74	-7.46	0.00	-47.96	0.00	47.96	717.42	358.71	476.59	238.65	153.56	-10.262	0.000	0.205
156.00	-2.68	-7.24	0.00	-33.03	0.00	33.03	692.41	346.21	443.76	222.21	157.85	-10.334	0.000	0.153
158.00	-2.64	-7.02	0.00	-18.55	0.00	18.55	667.41	333.71	412.11	206.36	162.17	-10.385	0.000	0.094
159.00	0.00	-6.43	0.00	-11.53	0.00	11.53	654.91	327.45	396.72	198.65	164.34	-10.402	0.000	0.058

Wind Loading - Shaft

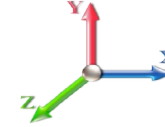
Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 29

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	0.85	5.168	5.68	0.00	1.200	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.85	5.168	5.68	0.00	1.223 *	1.133	2.00	10.181	12.45	70.8	166.9	726.3
4.00		1.00	0.85	5.168	5.68	0.00	1.227 *	1.215	2.00	10.113	12.41	70.5	177.4	731.3
6.00		1.00	0.85	5.168	5.68	0.00	1.231 *	1.265	2.00	10.034	12.35	70.2	183.1	731.5
8.00		1.00	0.85	5.168	5.68	0.00	1.235 *	1.302	2.00	9.950	12.29	69.8	186.8	729.7
10.00		1.00	0.85	5.168	5.68	0.00	1.239 *	1.331	2.00	9.864	12.22	69.5	189.2	726.6
12.00		1.00	0.85	5.168	5.68	0.00	1.243 *	1.356	2.00	9.777	12.15	69.1	190.8	722.7
14.00		1.00	0.85	5.168	5.68	0.00	1.247 *	1.377	2.00	9.688	12.08	68.7	191.9	718.3
16.00		1.00	0.86	5.232	5.76	0.00	1.251 *	1.395	2.00	9.599	12.01	69.1	192.6	713.5
18.00		1.00	0.88	5.363	5.90	0.00	1.256 *	1.412	2.00	9.508	11.94	70.4	192.9	708.3
20.00		1.00	0.90	5.483	6.03	0.00	1.260 *	1.427	2.00	9.418	11.87	71.6	193.0	702.9
22.00		1.00	0.92	5.595	6.15	0.00	1.265 *	1.440	2.00	9.327	11.79	72.6	192.8	697.3
24.00		1.00	0.94	5.698	6.27	0.00	1.269 *	1.453	2.00	9.235	11.72	73.5	192.5	691.4
26.00		1.00	0.95	5.795	6.37	0.00	1.274 *	1.465	2.00	9.143	11.65	74.2	192.0	685.5
28.00		1.00	0.97	5.886	6.47	0.00	1.279 *	1.476	2.00	9.051	11.57	74.9	191.4	679.3
30.00		1.00	0.98	5.972	6.57	0.00	1.284 *	1.486	2.00	8.959	11.50	75.6	190.6	673.1
32.00		1.00	1.00	6.054	6.66	0.00	1.289 *	1.495	2.00	8.866	11.43	76.1	189.8	666.8
34.00		1.00	1.01	6.132	6.74	0.00	1.294 *	1.504	2.00	8.774	11.35	76.6	188.9	660.3
36.00		1.00	1.02	6.206	6.83	0.00	1.299 *	1.513	2.00	8.681	11.28	77.0	187.8	653.8
38.00		1.00	1.03	6.277	6.90	0.00	1.305 *	1.521	2.00	8.588	11.21	77.4	186.7	647.2
40.00		1.00	1.04	6.345	6.98	0.00	1.310 *	1.529	2.00	8.495	11.13	77.7	185.5	640.5
42.00		1.00	1.05	6.410	7.05	0.00	1.316 *	1.537	2.00	8.401	11.06	78.0	184.3	633.8
44.00		1.00	1.06	6.474	7.12	0.00	1.322 *	1.544	2.00	8.308	10.98	78.2	183.0	627.0
46.00		1.00	1.07	6.534	7.19	0.00	1.328 *	1.551	2.00	8.215	10.91	78.4	181.6	620.1
47.00	Appurtenance(s)	1.00	1.08	6.564	7.22	0.00	1.333 *	1.554	1.00	4.072	5.43	39.2	90.5	307.6
47.50	Bot - Section 2	1.00	1.08	6.579	7.24	0.00	1.335 *	1.556	0.50	2.027	2.71	19.6	45.1	153.2
48.00		1.00	1.08	6.593	7.25	0.00	1.336 *	1.557	0.50	2.053	2.74	19.9	45.8	263.1
50.00		1.00	1.09	6.650	7.32	0.00	1.340 *	1.564	2.00	8.155	10.93	80.0	181.7	1044.0
52.00		1.00	1.10	6.705	7.38	0.00	1.294 *	1.570	2.00	8.061	10.43	76.9	180.2	1031.5
53.25	Top - Section 1	1.00	1.11	6.739	7.41	0.00	1.299 *	1.574	1.25	4.990	6.48	48.1	112.0	638.5
54.00		1.00	1.11	6.759	7.43	0.00	1.294 *	1.576	0.75	2.976	3.85	28.6	67.0	225.3
56.00		1.00	1.12	6.811	7.49	0.00	1.298 *	1.581	2.00	7.873	10.22	76.6	177.1	595.4
58.00		1.00	1.13	6.861	7.55	0.00	1.304 *	1.587	2.00	7.780	10.15	76.6	175.5	588.3
60.00		1.00	1.14	6.910	7.60	0.00	1.310 *	1.592	2.00	7.686	10.07	76.6	173.9	581.2
62.00		1.00	1.14	6.958	7.65	0.00	1.317 *	1.598	2.00	7.592	10.00	76.5	172.2	574.0
64.00		1.00	1.15	7.005	7.71	0.00	1.323 *	1.603	2.00	7.498	9.92	76.5	170.5	566.8
66.00		1.00	1.16	7.050	7.76	0.00	1.330 *	1.608	2.00	7.404	9.85	76.4	168.8	559.6
68.00		1.00	1.17	7.095	7.80	0.00	1.337 *	1.612	2.00	7.309	9.77	76.3	167.0	552.3
70.00		1.00	1.17	7.138	7.85	0.00	1.344 *	1.617	2.00	7.215	9.70	76.2	165.2	545.0
72.00		1.00	1.18	7.181	7.90	0.00	1.352 *	1.622	2.00	7.121	9.62	76.0	163.4	537.7
74.00		1.00	1.19	7.222	7.94	0.00	1.359 *	1.626	2.00	7.027	9.55	75.9	161.6	530.4
76.00		1.00	1.19	7.263	7.99	0.00	1.367 *	1.631	2.00	6.933	9.48	75.7	159.7	523.0
78.00		1.00	1.20	7.303	8.03	0.00	1.375 *	1.635	2.00	6.838	9.40	75.5	157.8	515.6
80.00	Appurtenance(s)	1.00	1.21	7.342	8.08	0.00	1.383 *	1.639	2.00	6.744	9.33	75.3	155.9	508.2
82.00		1.00	1.21	7.380	8.12	0.00	1.392 *	1.643	2.00	6.650	9.25	75.1	154.0	500.8
84.00		1.00	1.22	7.418	8.16	0.00	1.400 *	1.647	2.00	6.555	9.18	74.9	152.0	493.4
86.00		1.00	1.23	7.454	8.20	0.00	1.409 *	1.651	2.00	6.461	9.11	74.7	150.1	485.9

Wind Loading - Shaft

Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (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	1.00	1.23	7.491	8.24	0.00	1.419 *	1.655	2.00	6.366	9.03	74.4	148.1	478.4
90.00	1.00	1.24	7.526	8.28	0.00	1.429 *	1.658	2.00	6.272	8.96	74.2	146.1	470.9
92.00	1.00	1.24	7.561	8.32	0.00	1.439 *	1.662	2.00	6.177	8.89	73.9	144.1	463.4
94.00	1.00	1.25	7.595	8.35	0.00	1.449 *	1.666	2.00	6.083	8.81	73.6	142.0	455.9
96.00	1.00	1.25	7.629	8.39	0.00	1.460 *	1.669	2.00	5.988	8.74	73.4	140.0	448.3
97.00 Bot - Section 3	1.00	1.26	7.646	8.41	0.00	1.468 *	1.671	1.00	2.959	4.34	36.5	69.5	221.6
98.00	1.00	1.26	7.662	8.43	0.00	1.474 *	1.672	1.00	2.988	4.40	37.1	70.3	349.4
100.00	1.00	1.27	7.695	8.46	0.00	1.482 *	1.676	2.00	5.905	8.75	74.1	138.5	689.2
101.00 Top - Section 2	1.00	1.27	7.711	8.48	0.00	1.491 *	1.678	1.00	2.917	4.35	36.9	68.7	340.3
102.00	1.00	1.27	7.727	8.50	0.00	1.484 *	1.679	1.00	2.893	4.29	36.5	68.2	192.0
104.00	1.00	1.28	7.759	8.53	0.00	1.493 *	1.682	2.00	5.716	8.53	72.8	134.3	378.5
106.00	1.00	1.28	7.790	8.57	0.00	1.505 *	1.686	2.00	5.621	8.46	72.5	132.1	371.7
108.00	1.00	1.29	7.821	8.60	0.00	1.518 *	1.689	2.00	5.526	8.39	72.2	130.0	365.0
110.00 Appurtenance(s)	1.00	1.29	7.851	8.64	0.00	1.531 *	1.692	2.00	5.432	8.32	71.8	127.9	358.3
112.00	1.00	1.30	7.881	8.67	0.00	1.406 *	1.695	2.00	5.337	7.50	65.0	125.7	351.6
114.00	1.00	1.30	7.910	8.70	0.00	1.417 *	1.698	2.00	5.242	7.43	64.7	123.5	344.8
116.00	1.00	1.31	7.939	8.73	0.00	1.429 *	1.701	2.00	5.148	7.36	64.3	121.3	338.0
118.00	1.00	1.31	7.968	8.76	0.00	1.442 *	1.704	2.00	5.053	7.29	63.9	119.1	331.3
120.00	1.00	1.32	7.996	8.80	0.00	1.455 *	1.707	2.00	4.958	7.21	63.5	116.9	324.5
122.00	1.00	1.32	8.024	8.83	0.00	1.469 *	1.710	2.00	4.863	7.14	63.1	114.7	317.7
124.00	1.00	1.32	8.051	8.86	0.00	1.483 *	1.712	2.00	4.769	7.07	62.6	112.5	310.9
126.00	1.00	1.33	8.079	8.89	0.00	1.498 *	1.715	2.00	4.674	7.00	62.2	110.3	304.1
128.00	1.00	1.33	8.105	8.92	0.00	1.514 *	1.718	2.00	4.579	6.93	61.8	108.0	297.2
130.00 Appurtenance(s)	1.00	1.34	8.132	8.95	0.00	1.530 *	1.720	2.00	4.484	6.86	61.4	105.7	290.4
132.00	1.00	1.34	8.158	8.97	0.00	1.548 *	1.723	2.00	4.389	6.79	61.0	103.5	283.5
134.00	1.00	1.35	8.184	9.00	0.00	1.200 *	1.726	2.00	4.295	5.15	46.4	101.2	276.7
136.00	1.00	1.35	8.210	9.03	0.00	1.200 *	1.728	2.00	4.200	5.04	45.5	98.9	269.8
138.00	1.00	1.35	8.235	9.06	0.00	1.200 *	1.731	2.00	4.105	4.93	44.6	96.6	262.9
140.00 Appurtenance(s)	1.00	1.36	8.260	9.09	0.00	1.200 *	1.733	2.00	4.010	4.81	43.7	94.3	256.0
142.00	1.00	1.36	8.285	9.11	0.00	1.200 *	1.736	2.00	3.915	4.70	42.8	92.0	249.1
144.00	1.00	1.37	8.309	9.14	0.00	1.200 *	1.738	2.00	3.820	4.58	41.9	89.7	242.2
146.00	1.00	1.37	8.333	9.17	0.00	1.200 *	1.741	2.00	3.725	4.47	41.0	87.3	235.3
148.00	1.00	1.37	8.357	9.19	0.00	1.200 *	1.743	2.00	3.630	4.36	40.0	85.0	228.4
148.25 Bot - Section 4	1.00	1.37	8.360	9.20	0.00	1.200 *	1.743	0.25	0.447	0.54	4.9	10.6	28.2
149.00 Appurtenance(s)	1.00	1.38	8.369	9.21	0.00	1.200 *	1.744	0.75	1.356	1.63	15.0	32.0	116.8
150.00	1.00	1.38	8.381	9.22	0.00	1.200 *	1.745	1.00	1.787	2.14	19.8	42.1	153.5
150.50 Top - Section 3	1.00	1.38	8.387	9.23	0.00	1.200 *	1.746	0.50	0.885	1.06	9.8	20.9	75.9
152.00	1.00	1.38	8.404	9.24	0.00	1.200 *	1.748	1.50	2.619	3.14	29.1	61.4	123.4
154.00	1.00	1.39	8.427	9.27	0.00	1.200 *	1.750	2.00	3.409	4.09	37.9	79.6	159.8
156.00	1.00	1.39	8.450	9.30	0.00	1.200 *	1.752	2.00	3.314	3.98	37.0	77.2	154.7
158.00	1.00	1.39	8.473	9.32	0.00	1.200 *	1.754	2.00	3.219	3.86	36.0	74.8	149.5
159.00 Appurtenance(s)	1.00	1.40	8.484	9.33	0.00	1.200 *	1.755	1.00	1.574	1.89	17.6	36.8	73.1

* Cf Adjusted by Linear Load Ra Effect

Totals:	159.00	5,343.1	40,240.4
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Discrete Appurtenance Forces

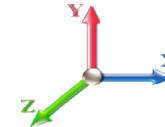
Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 29

No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa 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	159.00	DC6-48-60-18-8F	2	8.518	9.369	1.00	1.00	2.72	165.29	0.000	3.000	25.50	0.00	76.49
2	159.00	7770.00	3	8.518	9.369	0.80	1.00	17.38	277.20	0.000	3.000	162.86	0.00	488.58
3	159.00	P65-16-XLH-RR	3	8.518	9.369	0.73	0.90	22.89	1168.88	0.000	3.000	214.50	0.00	643.50
4	159.00	LGP21401	6	8.518	9.369	0.50	1.00	6.39	209.80	0.000	3.000	59.89	0.00	179.66
5	159.00	RRUS 11-700	3	8.518	9.369	0.67	1.00	6.35	353.69	0.000	3.000	59.45	0.00	178.36
6	159.00	RRUS 32 B2	3	8.518	9.369	0.67	1.00	6.98	456.73	0.000	3.000	65.41	0.00	196.23
7	159.00	DB404-B	1	8.518	9.369	1.00	1.00	0.00	30.81	0.000	3.000	0.00	0.00	0.00
8	159.00	QS66512-2	3	8.518	9.369	0.83	0.90	23.44	1086.13	0.000	3.000	219.64	0.00	658.92
9	159.00	DBC0061F1V51-2	3	8.518	9.369	0.50	1.00	1.08	124.81	0.000	3.000	10.07	0.00	30.22
10	159.00	RRUS 32 B30	3	8.518	9.369	0.67	1.00	6.98	481.93	0.000	3.000	65.41	0.00	196.23
11	159.00	RMQP-4096-HK Plat. +	1	8.484	9.333	1.00	1.00	83.90	5204.84	0.000	0.000	783.00	0.00	0.00
12	149.00	RFS - APXVSP18-C-A20	3	8.392	9.232	0.64	0.75	19.70	1181.84	0.000	2.000	181.85	0.00	363.70
13	149.00	HRK12 (Handrail Kit)	1	8.369	9.206	1.00	1.00	13.34	886.17	0.000	0.000	122.83	0.00	0.00
14	149.00	RFS - APXVTM14-C-I20	3	8.392	9.232	0.61	0.75	13.56	473.75	0.000	2.000	125.19	0.00	250.38
15	149.00	Alcatel Lucent -	3	8.392	9.232	0.50	0.75	8.23	479.00	0.000	2.000	76.02	0.00	152.04
16	149.00	RFS - ACU-A20-N - RET	4	8.392	9.232	0.38	0.75	0.65	16.77	0.000	2.000	6.04	0.00	12.09
17	149.00	Alcatel Lucent - 1900 MHz	3	8.392	9.232	0.50	0.75	7.82	392.07	0.000	2.000	72.22	0.00	144.43
18	149.00	Alcatel Lucent - 800 MHz	3	8.392	9.232	0.50	0.75	5.48	349.23	0.000	2.000	50.56	0.00	101.12
19	149.00	Alcatel Lucent - 800 MHz	3	8.392	9.232	0.50	0.75	2.15	69.57	0.000	2.000	19.85	0.00	39.70
20	149.00	Low Profile Platform	1	8.369	9.206	1.00	1.00	64.30	2186.43	0.000	0.000	591.93	0.00	0.00
21	140.00	Andrew - ATSBT-TOP-FM	3	8.291	9.120	0.50	0.75	0.82	18.78	0.000	2.500	7.49	0.00	18.72
22	140.00	RFS -	3	8.291	9.120	0.50	0.75	2.94	139.37	0.000	2.500	26.77	0.00	66.92
23	140.00	APXVAA24_43-U-A20	3	8.291	9.120	0.55	0.75	36.38	1639.44	0.000	2.500	331.82	0.00	829.54
24	140.00	APX16DWV-16DWVS-E-A	3	8.291	9.120	0.46	0.75	12.24	394.78	0.000	2.500	111.61	0.00	279.03
25	140.00	FR90-16-XXDP	6	8.291	9.120	0.51	0.75	16.34	716.53	0.000	2.500	148.98	0.00	372.45
26	140.00	Low Profile Platform w/	1	8.260	9.086	1.00	1.00	63.46	3405.41	0.000	0.000	576.63	0.00	0.00
27	130.00	742 213_2110_P45_02.0	3	8.145	8.960	0.58	0.80	8.41	184.70	0.000	1.000	75.32	0.00	75.32
28	130.00	BXA-70063/6CF	3	8.145	8.960	0.62	0.80	18.34	981.15	0.000	1.000	164.28	0.00	164.28
29	130.00	LPA-80063/6CF	6	8.145	8.960	0.76	0.80	54.53	3021.90	0.000	1.000	488.56	0.00	488.56
30	130.00	BXA-171063-12BF	3	8.145	8.960	0.72	0.80	14.85	842.02	0.000	1.000	133.05	0.00	133.05
31	130.00	RRH2X60-AWS	3	8.145	8.960	0.54	0.80	6.88	374.33	0.000	1.000	61.63	0.00	61.63
32	130.00	FD9R6004/2C-3L -	6	8.145	8.960	0.40	0.80	1.91	55.99	0.000	1.000	17.14	0.00	17.14
33	130.00	DB-T1-6Z-8AB-0Z - Distri	1	8.145	8.960	0.61	0.80	3.44	164.01	0.000	1.000	30.83	0.00	30.83
34	130.00	Low Profile Platform	1	8.132	8.945	1.00	1.00	40.17	2172.25	0.000	0.000	359.31	0.00	0.00
35	110.00	4 ft Standoff	1	7.851	8.636	1.00	1.00	11.25	137.12	0.000	0.000	97.15	0.00	0.00
36	110.00	SCL329-HL	1	7.933	8.726	1.00	1.00	6.06	53.52	0.000	5.550	52.88	0.00	293.49
37	80.00	SCL329-HL	1	7.446	8.191	1.00	1.00	5.94	51.69	0.000	5.550	48.65	0.00	270.02
38	80.00	4 ft Standoff	1	7.342	8.076	1.00	1.00	11.01	133.87	0.000	0.000	88.89	0.00	0.00
39	47.00	4 ft Standoff	1	6.564	7.220	1.00	1.00	10.62	128.66	0.000	0.000	76.66	0.00	0.00
40	47.00	Decibel 26DB GPS	1	6.650	7.315	1.00	1.00	0.50	15.44	0.000	3.000	3.67	0.00	11.02

Totals: 30,225.90

5,813.53

Total Applied Force Summary

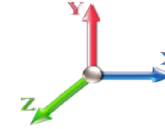
Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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

Dead Load Factor 1.20
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		70.79	926.13	0.00	0.00
4.00		70.53	937.85	0.00	0.00
6.00		70.20	942.31	0.00	0.00
8.00		69.84	943.59	0.00	0.00
10.00		69.46	943.07	0.00	0.00
12.00		69.07	941.35	0.00	0.00
14.00		68.68	938.80	0.00	0.00
16.00		69.12	935.61	0.00	0.00
18.00		70.43	931.93	0.00	0.00
20.00		71.58	927.84	0.00	0.00
22.00		72.58	923.43	0.00	0.00
24.00		73.47	918.75	0.00	0.00
26.00		74.25	913.82	0.00	0.00
28.00		74.94	908.70	0.00	0.00
30.00		75.55	903.39	0.00	0.00
32.00		76.10	897.93	0.00	0.00
34.00		76.58	892.32	0.00	0.00
36.00		77.00	886.59	0.00	0.00
38.00		77.37	880.75	0.00	0.00
40.00		77.69	874.80	0.00	0.00
42.00		77.97	868.75	0.00	0.00
44.00		78.21	862.62	0.00	0.00
46.00		78.41	856.41	0.00	0.00
47.00	(2) attachments	119.51	570.05	0.00	11.02
47.50		19.58	212.41	0.00	0.00
48.00		19.90	322.30	0.00	0.00
50.00		79.96	1281.48	0.00	0.00
52.00		76.95	1261.52	0.00	0.00
53.25		48.05	782.47	0.00	0.00
54.00		28.64	311.74	0.00	0.00
56.00		76.58	826.44	0.00	0.00
58.00		76.58	819.82	0.00	0.00
60.00		76.56	813.14	0.00	0.00
62.00		76.52	806.42	0.00	0.00
64.00		76.45	799.66	0.00	0.00
66.00		76.37	792.86	0.00	0.00
68.00		76.27	786.01	0.00	0.00
70.00		76.16	779.13	0.00	0.00
72.00		76.02	772.21	0.00	0.00
74.00		75.87	765.26	0.00	0.00
76.00		75.70	758.28	0.00	0.00
78.00		75.52	751.27	0.00	0.00
80.00	(2) attachments	212.87	929.79	0.00	270.02
82.00		75.12	726.27	0.00	0.00
84.00		74.90	719.13	0.00	0.00
86.00		74.67	711.97	0.00	0.00

Total Applied Force Summary

Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (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		74.43	704.78	0.00	0.00
90.00		74.18	697.57	0.00	0.00
92.00		73.91	690.34	0.00	0.00
94.00		73.64	683.09	0.00	0.00
96.00		73.35	675.81	0.00	0.00
97.00		36.53	335.40	0.00	0.00
98.00		37.11	463.28	0.00	0.00
100.00		74.09	917.18	0.00	0.00
101.00		36.90	454.36	0.00	0.00
102.00		36.49	306.14	0.00	0.00
104.00		72.83	606.99	0.00	0.00
106.00		72.51	600.54	0.00	0.00
108.00		72.18	594.07	0.00	0.00
110.00	(2) attachments	221.87	778.23	0.00	293.49
112.00		65.04	569.69	0.00	0.00
114.00		64.65	563.14	0.00	0.00
116.00		64.26	556.58	0.00	0.00
118.00		63.86	550.00	0.00	0.00
120.00		63.46	543.41	0.00	0.00
122.00		63.05	536.81	0.00	0.00
124.00		62.64	530.19	0.00	0.00
126.00		62.23	523.56	0.00	0.00
128.00		61.81	516.91	0.00	0.00
130.00	(26) attachments	1391.50	8306.61	0.00	970.81
132.00		60.97	487.29	0.00	0.00
134.00		73.14	464.31	0.00	0.00
136.00		72.37	457.62	0.00	0.00
138.00		71.58	450.91	0.00	0.00
140.00	(19) attachments	1274.09	6758.50	0.00	1566.66
142.00		70.00	437.47	0.00	0.00
144.00		69.19	402.22	0.00	0.00
146.00		68.37	385.97	0.00	0.00
148.00		67.55	379.21	0.00	0.00
148.25		8.37	47.05	0.00	0.00
149.00	(24) attachments	1271.81	6208.19	0.00	1063.47
150.00		33.58	228.99	0.00	0.00
150.50		16.70	113.67	0.00	0.00
152.00		49.83	232.19	0.00	0.00
154.00		65.73	301.92	0.00	0.00
156.00		64.87	296.96	0.00	0.00
158.00		64.01	291.99	0.00	0.00
159.00	(31) attachments	1697.38	9704.52	0.00	2648.18
Totals:		11,526.62	87,610.06	0.00	6,823.65

Linear Appurtenance Segment Forces (Factored)

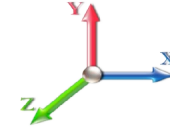
Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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

Dead Load Factor 1.20
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)
2.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.71	0.00	0.106	1.019	5.168	0.00	82.83
2.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.54	0.00	0.106	1.019	5.168	0.00	6.34
2.00	3/4" DC	Yes	2.00	0.000	1.50	0.63	0.00	0.106	1.019	5.168	0.00	12.64
2.00	7/8" Coax	Yes	2.00	0.000	1.11	0.56	0.00	0.106	1.019	5.168	0.00	6.55
2.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.106	1.019	5.168	0.00	6.55
2.00	1/2" Coax	Yes	2.00	0.000	0.65	0.49	0.00	0.106	1.019	5.168	0.00	4.74
4.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.74	0.00	0.107	1.022	5.168	0.00	86.30
4.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.57	0.00	0.107	1.022	5.168	0.00	6.97
4.00	3/4" DC	Yes	2.00	0.000	1.50	0.65	0.00	0.107	1.022	5.168	0.00	13.49
4.00	7/8" Coax	Yes	2.00	0.000	1.11	0.59	0.00	0.107	1.022	5.168	0.00	7.16
4.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.107	1.022	5.168	0.00	7.16
4.00	1/2" Coax	Yes	2.00	0.000	0.65	0.51	0.00	0.107	1.022	5.168	0.00	5.29
6.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.75	0.00	0.109	1.026	5.168	0.00	88.46
6.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.59	0.00	0.109	1.026	5.168	0.00	7.38
6.00	3/4" DC	Yes	2.00	0.000	1.50	0.67	0.00	0.109	1.026	5.168	0.00	14.03
6.00	7/8" Coax	Yes	2.00	0.000	1.11	0.61	0.00	0.109	1.026	5.168	0.00	7.55
6.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.026	5.168	0.00	7.55
6.00	1/2" Coax	Yes	2.00	0.000	0.65	0.53	0.00	0.109	1.026	5.168	0.00	5.64
8.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.77	0.00	0.110	1.029	5.168	0.00	90.06
8.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.60	0.00	0.110	1.029	5.168	0.00	7.68
8.00	3/4" DC	Yes	2.00	0.000	1.50	0.68	0.00	0.110	1.029	5.168	0.00	14.43
8.00	7/8" Coax	Yes	2.00	0.000	1.11	0.62	0.00	0.110	1.029	5.168	0.00	7.84
8.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.110	1.029	5.168	0.00	7.84
8.00	1/2" Coax	Yes	2.00	0.000	0.65	0.54	0.00	0.110	1.029	5.168	0.00	5.91
10.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.78	0.00	0.111	1.032	5.168	0.00	91.34
10.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.61	0.00	0.111	1.032	5.168	0.00	7.93
10.00	3/4" DC	Yes	2.00	0.000	1.50	0.69	0.00	0.111	1.032	5.168	0.00	14.76
10.00	7/8" Coax	Yes	2.00	0.000	1.11	0.63	0.00	0.111	1.032	5.168	0.00	8.08
10.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.111	1.032	5.168	0.00	8.08
10.00	1/2" Coax	Yes	2.00	0.000	0.65	0.55	0.00	0.111	1.032	5.168	0.00	6.13
12.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.79	0.00	0.112	1.036	5.168	0.00	92.40
12.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.62	0.00	0.112	1.036	5.168	0.00	8.14
12.00	3/4" DC	Yes	2.00	0.000	1.50	0.70	0.00	0.112	1.036	5.168	0.00	15.03
12.00	7/8" Coax	Yes	2.00	0.000	1.11	0.64	0.00	0.112	1.036	5.168	0.00	8.29
12.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.112	1.036	5.168	0.00	8.29
12.00	1/2" Coax	Yes	2.00	0.000	0.65	0.56	0.00	0.112	1.036	5.168	0.00	6.32
14.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.79	0.00	0.113	1.039	5.168	0.00	93.32
14.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.63	0.00	0.113	1.039	5.168	0.00	8.32
14.00	3/4" DC	Yes	2.00	0.000	1.50	0.71	0.00	0.113	1.039	5.168	0.00	15.27
14.00	7/8" Coax	Yes	2.00	0.000	1.11	0.64	0.00	0.113	1.039	5.168	0.00	8.46
14.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.039	5.168	0.00	8.46
14.00	1/2" Coax	Yes	2.00	0.000	0.65	0.57	0.00	0.113	1.039	5.168	0.00	6.48
16.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.80	0.00	0.114	1.043	5.232	0.00	94.13
16.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.63	0.00	0.114	1.043	5.232	0.00	8.49
16.00	3/4" DC	Yes	2.00	0.000	1.50	0.72	0.00	0.114	1.043	5.232	0.00	15.48
16.00	7/8" Coax	Yes	2.00	0.000	1.11	0.65	0.00	0.114	1.043	5.232	0.00	8.62
16.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.114	1.043	5.232	0.00	8.62

Linear Appurtenance Segment Forces (Factored)

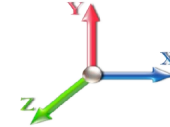
Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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

Dead Load Factor 1.20
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)
16.00	1/2" Coax	Yes	2.00	0.000	0.65	0.57	0.00	0.114	1.043	5.232	0.00	6.62
18.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.80	0.00	0.115	1.046	5.363	0.00	94.85
18.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.64	0.00	0.115	1.046	5.363	0.00	8.63
18.00	3/4" DC	Yes	2.00	0.000	1.50	0.72	0.00	0.115	1.046	5.363	0.00	15.67
18.00	7/8" Coax	Yes	2.00	0.000	1.11	0.66	0.00	0.115	1.046	5.363	0.00	8.76
18.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.115	1.046	5.363	0.00	8.76
18.00	1/2" Coax	Yes	2.00	0.000	0.65	0.58	0.00	0.115	1.046	5.363	0.00	6.75
20.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.81	0.00	0.117	1.050	5.483	0.00	95.51
20.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.64	0.00	0.117	1.050	5.483	0.00	8.77
20.00	3/4" DC	Yes	2.00	0.000	1.50	0.73	0.00	0.117	1.050	5.483	0.00	15.85
20.00	7/8" Coax	Yes	2.00	0.000	1.11	0.66	0.00	0.117	1.050	5.483	0.00	8.89
20.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.050	5.483	0.00	8.89
20.00	1/2" Coax	Yes	2.00	0.000	0.65	0.58	0.00	0.117	1.050	5.483	0.00	6.87
22.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.81	0.00	0.118	1.054	5.595	0.00	96.11
22.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.65	0.00	0.118	1.054	5.595	0.00	8.89
22.00	3/4" DC	Yes	2.00	0.000	1.50	0.73	0.00	0.118	1.054	5.595	0.00	16.01
22.00	7/8" Coax	Yes	2.00	0.000	1.11	0.67	0.00	0.118	1.054	5.595	0.00	9.01
22.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.054	5.595	0.00	9.01
22.00	1/2" Coax	Yes	2.00	0.000	0.65	0.59	0.00	0.118	1.054	5.595	0.00	6.98
24.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.82	0.00	0.119	1.058	5.698	0.00	96.67
24.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.65	0.00	0.119	1.058	5.698	0.00	9.01
24.00	3/4" DC	Yes	2.00	0.000	1.50	0.73	0.00	0.119	1.058	5.698	0.00	16.15
24.00	7/8" Coax	Yes	2.00	0.000	1.11	0.67	0.00	0.119	1.058	5.698	0.00	9.12
24.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.058	5.698	0.00	9.12
24.00	1/2" Coax	Yes	2.00	0.000	0.65	0.59	0.00	0.119	1.058	5.698	0.00	7.08
26.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.82	0.00	0.121	1.062	5.795	0.00	97.18
26.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.65	0.00	0.121	1.062	5.795	0.00	9.11
26.00	3/4" DC	Yes	2.00	0.000	1.50	0.74	0.00	0.121	1.062	5.795	0.00	16.29
26.00	7/8" Coax	Yes	2.00	0.000	1.11	0.67	0.00	0.121	1.062	5.795	0.00	9.22
26.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.121	1.062	5.795	0.00	9.22
26.00	1/2" Coax	Yes	2.00	0.000	0.65	0.60	0.00	0.121	1.062	5.795	0.00	7.18
28.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.83	0.00	0.122	1.066	5.886	0.00	97.66
28.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.66	0.00	0.122	1.066	5.886	0.00	9.21
28.00	3/4" DC	Yes	2.00	0.000	1.50	0.74	0.00	0.122	1.066	5.886	0.00	16.42
28.00	7/8" Coax	Yes	2.00	0.000	1.11	0.68	0.00	0.122	1.066	5.886	0.00	9.32
28.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.066	5.886	0.00	9.32
28.00	1/2" Coax	Yes	2.00	0.000	0.65	0.60	0.00	0.122	1.066	5.886	0.00	7.27
30.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.83	0.00	0.123	1.070	5.972	0.00	98.11
30.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.66	0.00	0.123	1.070	5.972	0.00	9.31
30.00	3/4" DC	Yes	2.00	0.000	1.50	0.75	0.00	0.123	1.070	5.972	0.00	16.54
30.00	7/8" Coax	Yes	2.00	0.000	1.11	0.68	0.00	0.123	1.070	5.972	0.00	9.41
30.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.070	5.972	0.00	9.41
30.00	1/2" Coax	Yes	2.00	0.000	0.65	0.60	0.00	0.123	1.070	5.972	0.00	7.35
32.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.83	0.00	0.125	1.074	6.054	0.00	98.54
32.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.67	0.00	0.125	1.074	6.054	0.00	9.40
32.00	3/4" DC	Yes	2.00	0.000	1.50	0.75	0.00	0.125	1.074	6.054	0.00	16.66
32.00	7/8" Coax	Yes	2.00	0.000	1.11	0.68	0.00	0.125	1.074	6.054	0.00	9.50

Linear Appurtenance Segment Forces (Factored)

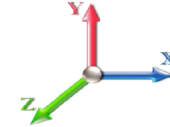
Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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

Dead Load Factor 1.20
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)
32.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.074	6.054	0.00	9.50
32.00	1/2" Coax	Yes	2.00	0.000	0.65	0.61	0.00	0.125	1.074	6.054	0.00	7.43
34.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.83	0.00	0.126	1.078	6.132	0.00	98.94
34.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.67	0.00	0.126	1.078	6.132	0.00	9.48
34.00	3/4" DC	Yes	2.00	0.000	1.50	0.75	0.00	0.126	1.078	6.132	0.00	16.77
34.00	7/8" Coax	Yes	2.00	0.000	1.11	0.69	0.00	0.126	1.078	6.132	0.00	9.58
34.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.126	1.078	6.132	0.00	9.58
34.00	1/2" Coax	Yes	2.00	0.000	0.65	0.61	0.00	0.126	1.078	6.132	0.00	7.51
36.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.84	0.00	0.128	1.083	6.206	0.00	99.32
36.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.67	0.00	0.128	1.083	6.206	0.00	9.56
36.00	3/4" DC	Yes	2.00	0.000	1.50	0.75	0.00	0.128	1.083	6.206	0.00	16.87
36.00	7/8" Coax	Yes	2.00	0.000	1.11	0.69	0.00	0.128	1.083	6.206	0.00	9.66
36.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.128	1.083	6.206	0.00	9.66
36.00	1/2" Coax	Yes	2.00	0.000	0.65	0.61	0.00	0.128	1.083	6.206	0.00	7.58
38.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.84	0.00	0.129	1.087	6.277	0.00	99.69
38.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.67	0.00	0.129	1.087	6.277	0.00	9.64
38.00	3/4" DC	Yes	2.00	0.000	1.50	0.76	0.00	0.129	1.087	6.277	0.00	16.97
38.00	7/8" Coax	Yes	2.00	0.000	1.11	0.69	0.00	0.129	1.087	6.277	0.00	9.74
38.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.129	1.087	6.277	0.00	9.74
38.00	1/2" Coax	Yes	2.00	0.000	0.65	0.62	0.00	0.129	1.087	6.277	0.00	7.65
40.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.84	0.00	0.131	1.092	6.345	0.00	100.03
40.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.68	0.00	0.131	1.092	6.345	0.00	9.71
40.00	3/4" DC	Yes	2.00	0.000	1.50	0.76	0.00	0.131	1.092	6.345	0.00	17.06
40.00	7/8" Coax	Yes	2.00	0.000	1.11	0.69	0.00	0.131	1.092	6.345	0.00	9.81
40.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.131	1.092	6.345	0.00	9.81
40.00	1/2" Coax	Yes	2.00	0.000	0.65	0.62	0.00	0.131	1.092	6.345	0.00	7.71
42.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.85	0.00	0.132	1.097	6.410	0.00	100.37
42.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.68	0.00	0.132	1.097	6.410	0.00	9.79
42.00	3/4" DC	Yes	2.00	0.000	1.50	0.76	0.00	0.132	1.097	6.410	0.00	17.16
42.00	7/8" Coax	Yes	2.00	0.000	1.11	0.70	0.00	0.132	1.097	6.410	0.00	9.88
42.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.132	1.097	6.410	0.00	9.88
42.00	1/2" Coax	Yes	2.00	0.000	0.65	0.62	0.00	0.132	1.097	6.410	0.00	7.78
44.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.85	0.00	0.134	1.102	6.474	0.00	100.69
44.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.68	0.00	0.134	1.102	6.474	0.00	9.85
44.00	3/4" DC	Yes	2.00	0.000	1.50	0.76	0.00	0.134	1.102	6.474	0.00	17.24
44.00	7/8" Coax	Yes	2.00	0.000	1.11	0.70	0.00	0.134	1.102	6.474	0.00	9.94
44.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.134	1.102	6.474	0.00	9.94
44.00	1/2" Coax	Yes	2.00	0.000	0.65	0.62	0.00	0.134	1.102	6.474	0.00	7.84
46.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.85	0.00	0.136	1.107	6.534	0.00	100.99
46.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.68	0.00	0.136	1.107	6.534	0.00	9.92
46.00	3/4" DC	Yes	2.00	0.000	1.50	0.77	0.00	0.136	1.107	6.534	0.00	17.33
46.00	7/8" Coax	Yes	2.00	0.000	1.11	0.70	0.00	0.136	1.107	6.534	0.00	10.01
46.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.136	1.107	6.534	0.00	10.01
46.00	1/2" Coax	Yes	2.00	0.000	0.65	0.63	0.00	0.136	1.107	6.534	0.00	7.90
47.00	1 5/8" Coax	Yes	1.00	0.000	2.00	0.43	0.00	0.137	1.110	6.564	0.00	50.57
47.00	1/2" Fiber	Yes	1.00	0.000	1.00	0.34	0.00	0.137	1.110	6.564	0.00	4.98
47.00	3/4" DC	Yes	1.00	0.000	1.50	0.38	0.00	0.137	1.110	6.564	0.00	8.68

Linear Appurtenance Segment Forces (Factored)

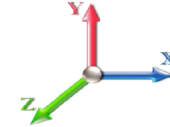
Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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

Dead Load Factor 1.20
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)
47.00	7/8" Coax	Yes	1.00	0.000	1.11	0.35	0.00	0.137	1.110	6.564	0.00	5.02
47.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.137	1.110	6.564	0.00	5.02
47.00	1/2" Coax	Yes	1.00	0.000	0.65	0.31	0.00	0.137	1.110	6.564	0.00	3.96
47.50	1 5/8" Coax	Yes	0.50	0.000	2.00	0.21	0.00	0.137	1.112	6.579	0.00	25.30
47.50	1/2" Fiber	Yes	0.50	0.000	1.00	0.17	0.00	0.137	1.112	6.579	0.00	2.49
47.50	3/4" DC	Yes	0.50	0.000	1.50	0.19	0.00	0.137	1.112	6.579	0.00	4.35
47.50	7/8" Coax	Yes	0.50	0.000	1.11	0.18	0.00	0.137	1.112	6.579	0.00	2.51
47.50	7/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.137	1.112	6.579	0.00	2.51
47.50	1/2" Coax	Yes	0.50	0.000	0.65	0.16	0.00	0.137	1.112	6.579	0.00	1.99
48.00	1 5/8" Coax	Yes	0.50	0.000	2.00	0.21	0.00	0.138	1.114	6.593	0.00	25.32
48.00	1/2" Fiber	Yes	0.50	0.000	1.00	0.17	0.00	0.138	1.114	6.593	0.00	2.50
48.00	3/4" DC	Yes	0.50	0.000	1.50	0.19	0.00	0.138	1.114	6.593	0.00	4.35
48.00	7/8" Coax	Yes	0.50	0.000	1.11	0.18	0.00	0.138	1.114	6.593	0.00	2.52
48.00	7/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.138	1.114	6.593	0.00	2.52
48.00	1/2" Coax	Yes	0.50	0.000	0.65	0.16	0.00	0.138	1.114	6.593	0.00	1.99
50.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.85	0.00	0.139	1.117	6.650	0.00	101.57
50.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.69	0.00	0.139	1.117	6.650	0.00	10.05
50.00	3/4" DC	Yes	2.00	0.000	1.50	0.77	0.00	0.139	1.117	6.650	0.00	17.49
50.00	7/8" Coax	Yes	2.00	0.000	1.11	0.71	0.00	0.139	1.117	6.650	0.00	10.13
50.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.139	1.117	6.650	0.00	10.13
50.00	1/2" Coax	Yes	2.00	0.000	0.65	0.63	0.00	0.139	1.117	6.650	0.00	8.01
52.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.86	0.00	0.126	1.079	6.705	0.00	101.84
52.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.69	0.00	0.126	1.079	6.705	0.00	10.10
52.00	3/4" DC	Yes	2.00	0.000	1.50	0.77	0.00	0.126	1.079	6.705	0.00	17.56
52.00	7/8" Coax	Yes	2.00	0.000	1.11	0.71	0.00	0.126	1.079	6.705	0.00	10.19
52.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.126	1.079	6.705	0.00	10.19
53.25	1 5/8" Coax	Yes	1.25	0.000	2.00	0.54	0.00	0.128	1.083	6.739	0.00	63.76
53.25	1/2" Fiber	Yes	1.25	0.000	1.00	0.43	0.00	0.128	1.083	6.739	0.00	6.34
53.25	3/4" DC	Yes	1.25	0.000	1.50	0.48	0.00	0.128	1.083	6.739	0.00	11.01
53.25	7/8" Coax	Yes	1.25	0.000	1.11	0.44	0.00	0.128	1.083	6.739	0.00	6.39
53.25	7/8" Coax	Yes	1.25	0.000	0.00	0.00	0.00	0.128	1.083	6.739	0.00	6.39
54.00	1 5/8" Coax	Yes	0.75	0.000	2.00	0.32	0.00	0.126	1.078	6.759	0.00	38.29
54.00	1/2" Fiber	Yes	0.75	0.000	1.00	0.26	0.00	0.126	1.078	6.759	0.00	3.81
54.00	3/4" DC	Yes	0.75	0.000	1.50	0.29	0.00	0.126	1.078	6.759	0.00	6.61
54.00	7/8" Coax	Yes	0.75	0.000	1.11	0.27	0.00	0.126	1.078	6.759	0.00	3.84
54.00	7/8" Coax	Yes	0.75	0.000	0.00	0.00	0.00	0.126	1.078	6.759	0.00	3.84
56.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.86	0.00	0.127	1.082	6.811	0.00	102.37
56.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.69	0.00	0.127	1.082	6.811	0.00	10.22
56.00	3/4" DC	Yes	2.00	0.000	1.50	0.78	0.00	0.127	1.082	6.811	0.00	17.71
56.00	7/8" Coax	Yes	2.00	0.000	1.11	0.71	0.00	0.127	1.082	6.811	0.00	10.30
56.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.127	1.082	6.811	0.00	10.30
58.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.86	0.00	0.129	1.087	6.861	0.00	102.61
58.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.70	0.00	0.129	1.087	6.861	0.00	10.27
58.00	3/4" DC	Yes	2.00	0.000	1.50	0.78	0.00	0.129	1.087	6.861	0.00	17.78
58.00	7/8" Coax	Yes	2.00	0.000	1.11	0.71	0.00	0.129	1.087	6.861	0.00	10.35
58.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.129	1.087	6.861	0.00	10.35
60.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.86	0.00	0.131	1.092	6.910	0.00	102.86

Linear Appurtenance Segment Forces (Factored)

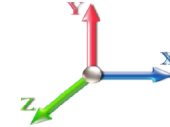
Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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

Dead Load Factor 1.20
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)
60.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.70	0.00	0.131	1.092	6.910	0.00	10.33
60.00	3/4" DC	Yes	2.00	0.000	1.50	0.78	0.00	0.131	1.092	6.910	0.00	17.84
60.00	7/8" Coax	Yes	2.00	0.000	1.11	0.72	0.00	0.131	1.092	6.910	0.00	10.40
60.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.131	1.092	6.910	0.00	10.40
62.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.87	0.00	0.132	1.097	6.958	0.00	103.09
62.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.70	0.00	0.132	1.097	6.958	0.00	10.38
62.00	3/4" DC	Yes	2.00	0.000	1.50	0.78	0.00	0.132	1.097	6.958	0.00	17.91
62.00	7/8" Coax	Yes	2.00	0.000	1.11	0.72	0.00	0.132	1.097	6.958	0.00	10.45
62.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.132	1.097	6.958	0.00	10.45
64.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.87	0.00	0.134	1.103	7.005	0.00	103.32
64.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.70	0.00	0.134	1.103	7.005	0.00	10.43
64.00	3/4" DC	Yes	2.00	0.000	1.50	0.78	0.00	0.134	1.103	7.005	0.00	17.97
64.00	7/8" Coax	Yes	2.00	0.000	1.11	0.72	0.00	0.134	1.103	7.005	0.00	10.50
64.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.134	1.103	7.005	0.00	10.50
66.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.87	0.00	0.136	1.108	7.050	0.00	103.54
66.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.70	0.00	0.136	1.108	7.050	0.00	10.48
66.00	3/4" DC	Yes	2.00	0.000	1.50	0.79	0.00	0.136	1.108	7.050	0.00	18.03
66.00	7/8" Coax	Yes	2.00	0.000	1.11	0.72	0.00	0.136	1.108	7.050	0.00	10.54
66.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.136	1.108	7.050	0.00	10.54
68.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.87	0.00	0.138	1.114	7.095	0.00	103.75
68.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.70	0.00	0.138	1.114	7.095	0.00	10.52
68.00	3/4" DC	Yes	2.00	0.000	1.50	0.79	0.00	0.138	1.114	7.095	0.00	18.09
68.00	7/8" Coax	Yes	2.00	0.000	1.11	0.72	0.00	0.138	1.114	7.095	0.00	10.59
68.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.138	1.114	7.095	0.00	10.59
70.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.87	0.00	0.140	1.120	7.138	0.00	103.96
70.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.71	0.00	0.140	1.120	7.138	0.00	10.57
70.00	3/4" DC	Yes	2.00	0.000	1.50	0.79	0.00	0.140	1.120	7.138	0.00	18.15
70.00	7/8" Coax	Yes	2.00	0.000	1.11	0.72	0.00	0.140	1.120	7.138	0.00	10.64
70.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.140	1.120	7.138	0.00	10.64
72.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.87	0.00	0.142	1.126	7.181	0.00	104.17
72.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.71	0.00	0.142	1.126	7.181	0.00	10.61
72.00	3/4" DC	Yes	2.00	0.000	1.50	0.79	0.00	0.142	1.126	7.181	0.00	18.21
72.00	7/8" Coax	Yes	2.00	0.000	1.11	0.73	0.00	0.142	1.126	7.181	0.00	10.68
72.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.142	1.126	7.181	0.00	10.68
74.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.88	0.00	0.144	1.133	7.222	0.00	104.37
74.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.71	0.00	0.144	1.133	7.222	0.00	10.66
74.00	3/4" DC	Yes	2.00	0.000	1.50	0.79	0.00	0.144	1.133	7.222	0.00	18.27
74.00	7/8" Coax	Yes	2.00	0.000	1.11	0.73	0.00	0.144	1.133	7.222	0.00	10.72
74.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.144	1.133	7.222	0.00	10.72
76.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.88	0.00	0.146	1.139	7.263	0.00	104.56
76.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.71	0.00	0.146	1.139	7.263	0.00	10.70
76.00	3/4" DC	Yes	2.00	0.000	1.50	0.79	0.00	0.146	1.139	7.263	0.00	18.32
76.00	7/8" Coax	Yes	2.00	0.000	1.11	0.73	0.00	0.146	1.139	7.263	0.00	10.77
76.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.146	1.139	7.263	0.00	10.77
78.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.88	0.00	0.149	1.146	7.303	0.00	104.75
78.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.71	0.00	0.149	1.146	7.303	0.00	10.74
78.00	3/4" DC	Yes	2.00	0.000	1.50	0.79	0.00	0.149	1.146	7.303	0.00	18.37

Linear Appurtenance Segment Forces (Factored)

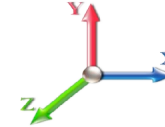
Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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

Dead Load Factor 1.20
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)
78.00	7/8" Coax	Yes	2.00	0.000	1.11	0.73	0.00	0.149	1.146	7.303	0.00	10.81
78.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.149	1.146	7.303	0.00	10.81
80.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.88	0.00	0.151	1.153	7.342	0.00	104.94
80.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.71	0.00	0.151	1.153	7.342	0.00	10.79
80.00	3/4" DC	Yes	2.00	0.000	1.50	0.80	0.00	0.151	1.153	7.342	0.00	18.43
80.00	7/8" Coax	Yes	2.00	0.000	1.11	0.73	0.00	0.151	1.153	7.342	0.00	10.85
80.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.151	1.153	7.342	0.00	10.85
82.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.88	0.00	0.153	1.160	7.380	0.00	105.12
82.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.71	0.00	0.153	1.160	7.380	0.00	10.83
82.00	3/4" DC	Yes	2.00	0.000	1.50	0.80	0.00	0.153	1.160	7.380	0.00	18.48
82.00	7/8" Coax	Yes	2.00	0.000	1.11	0.73	0.00	0.153	1.160	7.380	0.00	10.89
84.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.88	0.00	0.156	1.167	7.418	0.00	105.30
84.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.72	0.00	0.156	1.167	7.418	0.00	10.87
84.00	3/4" DC	Yes	2.00	0.000	1.50	0.80	0.00	0.156	1.167	7.418	0.00	18.53
84.00	7/8" Coax	Yes	2.00	0.000	1.11	0.73	0.00	0.156	1.167	7.418	0.00	10.92
86.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.88	0.00	0.158	1.175	7.454	0.00	105.48
86.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.72	0.00	0.158	1.175	7.454	0.00	10.91
86.00	3/4" DC	Yes	2.00	0.000	1.50	0.80	0.00	0.158	1.175	7.454	0.00	18.58
86.00	7/8" Coax	Yes	2.00	0.000	1.11	0.74	0.00	0.158	1.175	7.454	0.00	10.96
88.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.88	0.00	0.161	1.182	7.491	0.00	105.65
88.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.72	0.00	0.161	1.182	7.491	0.00	10.94
88.00	3/4" DC	Yes	2.00	0.000	1.50	0.80	0.00	0.161	1.182	7.491	0.00	18.63
88.00	7/8" Coax	Yes	2.00	0.000	1.11	0.74	0.00	0.161	1.182	7.491	0.00	11.00
90.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.89	0.00	0.163	1.190	7.526	0.00	105.81
90.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.72	0.00	0.163	1.190	7.526	0.00	10.98
90.00	3/4" DC	Yes	2.00	0.000	1.50	0.80	0.00	0.163	1.190	7.526	0.00	18.67
90.00	7/8" Coax	Yes	2.00	0.000	1.11	0.74	0.00	0.163	1.190	7.526	0.00	11.04
92.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.89	0.00	0.166	1.199	7.561	0.00	105.98
92.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.72	0.00	0.166	1.199	7.561	0.00	11.02
92.00	3/4" DC	Yes	2.00	0.000	1.50	0.80	0.00	0.166	1.199	7.561	0.00	18.72
92.00	7/8" Coax	Yes	2.00	0.000	1.11	0.74	0.00	0.166	1.199	7.561	0.00	11.07
94.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.89	0.00	0.169	1.207	7.595	0.00	106.14
94.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.72	0.00	0.169	1.207	7.595	0.00	11.06
94.00	3/4" DC	Yes	2.00	0.000	1.50	0.81	0.00	0.169	1.207	7.595	0.00	18.77
94.00	7/8" Coax	Yes	2.00	0.000	1.11	0.74	0.00	0.169	1.207	7.595	0.00	11.11
96.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.89	0.00	0.172	1.216	7.629	0.00	106.30
96.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.72	0.00	0.172	1.216	7.629	0.00	11.09
96.00	3/4" DC	Yes	2.00	0.000	1.50	0.81	0.00	0.172	1.216	7.629	0.00	18.81
96.00	7/8" Coax	Yes	2.00	0.000	1.11	0.74	0.00	0.172	1.216	7.629	0.00	11.14
97.00	1 5/8" Coax	Yes	1.00	0.000	2.00	0.45	0.00	0.174	1.223	7.646	0.00	53.19
97.00	1/2" Fiber	Yes	1.00	0.000	1.00	0.36	0.00	0.174	1.223	7.646	0.00	5.55
97.00	3/4" DC	Yes	1.00	0.000	1.50	0.40	0.00	0.174	1.223	7.646	0.00	9.42
97.00	7/8" Coax	Yes	1.00	0.000	1.11	0.37	0.00	0.174	1.223	7.646	0.00	5.58
98.00	1 5/8" Coax	Yes	1.00	0.000	2.00	0.45	0.00	0.176	1.228	7.662	0.00	53.23
98.00	1/2" Fiber	Yes	1.00	0.000	1.00	0.36	0.00	0.176	1.228	7.662	0.00	5.56
98.00	3/4" DC	Yes	1.00	0.000	1.50	0.40	0.00	0.176	1.228	7.662	0.00	9.43
98.00	7/8" Coax	Yes	1.00	0.000	1.11	0.37	0.00	0.176	1.228	7.662	0.00	5.59

Linear Appurtenance Segment Forces (Factored)

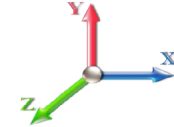
Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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

Dead Load Factor 1.20
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)
100.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.89	0.00	0.178	1.235	7.695	0.00	106.61
100.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.73	0.00	0.178	1.235	7.695	0.00	11.16
100.00	3/4" DC	Yes	2.00	0.000	1.50	0.81	0.00	0.178	1.235	7.695	0.00	18.90
100.00	7/8" Coax	Yes	2.00	0.000	1.11	0.74	0.00	0.178	1.235	7.695	0.00	11.21
101.00	1 5/8" Coax	Yes	1.00	0.000	2.00	0.45	0.00	0.181	1.243	7.711	0.00	53.34
101.00	1/2" Fiber	Yes	1.00	0.000	1.00	0.36	0.00	0.181	1.243	7.711	0.00	5.59
101.00	3/4" DC	Yes	1.00	0.000	1.50	0.40	0.00	0.181	1.243	7.711	0.00	9.46
101.00	7/8" Coax	Yes	1.00	0.000	1.11	0.37	0.00	0.181	1.243	7.711	0.00	5.61
102.00	1 5/8" Coax	Yes	1.00	0.000	2.00	0.45	0.00	0.179	1.237	7.727	0.00	53.38
102.00	1/2" Fiber	Yes	1.00	0.000	1.00	0.36	0.00	0.179	1.237	7.727	0.00	5.60
102.00	3/4" DC	Yes	1.00	0.000	1.50	0.40	0.00	0.179	1.237	7.727	0.00	9.47
102.00	7/8" Coax	Yes	1.00	0.000	1.11	0.37	0.00	0.179	1.237	7.727	0.00	5.62
104.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.89	0.00	0.181	1.244	7.759	0.00	106.90
104.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.73	0.00	0.181	1.244	7.759	0.00	11.23
104.00	3/4" DC	Yes	2.00	0.000	1.50	0.81	0.00	0.181	1.244	7.759	0.00	18.98
104.00	7/8" Coax	Yes	2.00	0.000	1.11	0.75	0.00	0.181	1.244	7.759	0.00	11.28
106.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.90	0.00	0.185	1.254	7.790	0.00	107.05
106.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.73	0.00	0.185	1.254	7.790	0.00	11.26
106.00	3/4" DC	Yes	2.00	0.000	1.50	0.81	0.00	0.185	1.254	7.790	0.00	19.02
106.00	7/8" Coax	Yes	2.00	0.000	1.11	0.75	0.00	0.185	1.254	7.790	0.00	11.31
108.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.90	0.00	0.188	1.265	7.821	0.00	107.19
108.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.73	0.00	0.188	1.265	7.821	0.00	11.29
108.00	3/4" DC	Yes	2.00	0.000	1.50	0.81	0.00	0.188	1.265	7.821	0.00	19.07
108.00	7/8" Coax	Yes	2.00	0.000	1.11	0.75	0.00	0.188	1.265	7.821	0.00	11.34
110.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.90	0.00	0.192	1.276	7.851	0.00	107.33
110.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.73	0.00	0.192	1.276	7.851	0.00	11.33
110.00	3/4" DC	Yes	2.00	0.000	1.50	0.81	0.00	0.192	1.276	7.851	0.00	19.11
110.00	7/8" Coax	Yes	2.00	0.000	1.11	0.75	0.00	0.192	1.276	7.851	0.00	11.37
112.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.90	0.00	0.157	1.171	7.881	0.00	107.47
112.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.73	0.00	0.157	1.171	7.881	0.00	11.36
112.00	3/4" DC	Yes	2.00	0.000	1.50	0.81	0.00	0.157	1.171	7.881	0.00	19.15
114.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.90	0.00	0.160	1.181	7.910	0.00	107.61
114.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.73	0.00	0.160	1.181	7.910	0.00	11.39
114.00	3/4" DC	Yes	2.00	0.000	1.50	0.82	0.00	0.160	1.181	7.910	0.00	19.18
116.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.90	0.00	0.164	1.191	7.939	0.00	107.74
116.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.73	0.00	0.164	1.191	7.939	0.00	11.42
116.00	3/4" DC	Yes	2.00	0.000	1.50	0.82	0.00	0.164	1.191	7.939	0.00	19.22
118.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.90	0.00	0.167	1.202	7.968	0.00	107.87
118.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.73	0.00	0.167	1.202	7.968	0.00	11.45
118.00	3/4" DC	Yes	2.00	0.000	1.50	0.82	0.00	0.167	1.202	7.968	0.00	19.26
120.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.90	0.00	0.171	1.213	7.996	0.00	108.00
120.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.74	0.00	0.171	1.213	7.996	0.00	11.48
120.00	3/4" DC	Yes	2.00	0.000	1.50	0.82	0.00	0.171	1.213	7.996	0.00	19.30
122.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.90	0.00	0.175	1.224	8.024	0.00	108.13
122.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.74	0.00	0.175	1.224	8.024	0.00	11.51
122.00	3/4" DC	Yes	2.00	0.000	1.50	0.82	0.00	0.175	1.224	8.024	0.00	19.33
124.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.90	0.00	0.179	1.236	8.051	0.00	108.26

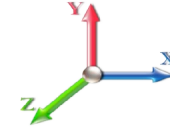
Linear Appurtenance Segment Forces (Factored)

Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (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

Dead Load Factor 1.20
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)
124.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.74	0.00	0.179	1.236	8.051	0.00	11.54
124.00	3/4" DC	Yes	2.00	0.000	1.50	0.82	0.00	0.179	1.236	8.051	0.00	19.37
126.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.91	0.00	0.183	1.248	8.079	0.00	108.38
126.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.74	0.00	0.183	1.248	8.079	0.00	11.56
126.00	3/4" DC	Yes	2.00	0.000	1.50	0.82	0.00	0.183	1.248	8.079	0.00	19.41
128.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.91	0.00	0.187	1.262	8.105	0.00	108.50
128.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.74	0.00	0.187	1.262	8.105	0.00	11.59
128.00	3/4" DC	Yes	2.00	0.000	1.50	0.82	0.00	0.187	1.262	8.105	0.00	19.44
130.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.91	0.00	0.192	1.275	8.132	0.00	108.62
130.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.74	0.00	0.192	1.275	8.132	0.00	11.62
130.00	3/4" DC	Yes	2.00	0.000	1.50	0.82	0.00	0.192	1.275	8.132	0.00	19.48
132.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.91	0.00	0.197	1.290	8.158	0.00	108.74
132.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.74	0.00	0.197	1.290	8.158	0.00	11.65
132.00	3/4" DC	Yes	2.00	0.000	1.50	0.82	0.00	0.197	1.290	8.158	0.00	19.51
134.00	1 5/8" Coax	Yes	2.00	1.200	2.00	0.91	1.09	0.202	0.000	8.184	9.81	108.86
134.00	1/2" Fiber	Yes	2.00	1.200	1.00	0.74	0.89	0.202	0.000	8.184	8.01	11.67
134.00	3/4" DC	Yes	2.00	1.200	1.50	0.83	0.99	0.202	0.000	8.184	8.91	19.54
136.00	1 5/8" Coax	Yes	2.00	1.200	2.00	0.91	1.09	0.207	0.000	8.210	9.85	108.98
136.00	1/2" Fiber	Yes	2.00	1.200	1.00	0.74	0.89	0.207	0.000	8.210	8.05	11.70
136.00	3/4" DC	Yes	2.00	1.200	1.50	0.83	0.99	0.207	0.000	8.210	8.95	19.58
138.00	1 5/8" Coax	Yes	2.00	1.200	2.00	0.91	1.09	0.213	0.000	8.235	9.89	109.09
138.00	1/2" Fiber	Yes	2.00	1.200	1.00	0.74	0.89	0.213	0.000	8.235	8.08	11.73
138.00	3/4" DC	Yes	2.00	1.200	1.50	0.83	0.99	0.213	0.000	8.235	8.99	19.61
140.00	1 5/8" Coax	Yes	2.00	1.200	2.00	0.91	1.09	0.219	0.000	8.260	9.93	109.20
140.00	1/2" Fiber	Yes	2.00	1.200	1.00	0.74	0.89	0.219	0.000	8.260	8.12	11.75
140.00	3/4" DC	Yes	2.00	1.200	1.50	0.83	0.99	0.219	0.000	8.260	9.02	19.64
142.00	1 5/8" Coax	Yes	2.00	1.200	2.00	0.91	1.09	0.225	0.000	8.285	9.97	109.32
142.00	1/2" Fiber	Yes	2.00	1.200	1.00	0.75	0.89	0.225	0.000	8.285	8.15	11.78
142.00	3/4" DC	Yes	2.00	1.200	1.50	0.83	0.99	0.225	0.000	8.285	9.06	19.68
144.00	1 5/8" Coax	Yes	2.00	1.200	2.00	0.91	1.10	0.231	0.000	8.309	10.01	109.43
144.00	1/2" Fiber	Yes	2.00	1.200	1.00	0.75	0.90	0.231	0.000	8.309	8.18	11.81
144.00	3/4" DC	Yes	2.00	1.200	1.50	0.83	1.00	0.231	0.000	8.309	9.10	19.71
146.00	1 5/8" Coax	Yes	2.00	1.200	2.00	0.91	1.10	0.238	0.000	8.333	10.05	109.54
146.00	1/2" Fiber	Yes	2.00	1.200	1.00	0.75	0.90	0.238	0.000	8.333	8.21	11.83
146.00	3/4" DC	Yes	2.00	1.200	1.50	0.83	1.00	0.238	0.000	8.333	9.13	19.74
148.00	1 5/8" Coax	Yes	2.00	1.200	2.00	0.91	1.10	0.246	0.000	8.357	10.09	109.64
148.00	1/2" Fiber	Yes	2.00	1.200	1.00	0.75	0.90	0.246	0.000	8.357	8.25	11.86
148.00	3/4" DC	Yes	2.00	1.200	1.50	0.83	1.00	0.246	0.000	8.357	9.17	19.77
148.25	1 5/8" Coax	Yes	0.25	1.200	2.00	0.11	0.14	0.250	0.000	8.360	1.26	13.71
148.25	1/2" Fiber	Yes	0.25	1.200	1.00	0.09	0.11	0.250	0.000	8.360	1.03	1.48
148.25	3/4" DC	Yes	0.25	1.200	1.50	0.10	0.12	0.250	0.000	8.360	1.15	2.47
149.00	1 5/8" Coax	Yes	0.75	1.200	2.00	0.34	0.41	0.252	0.000	8.369	3.79	41.14
149.00	1/2" Fiber	Yes	0.75	1.200	1.00	0.28	0.34	0.252	0.000	8.369	3.10	4.45
149.00	3/4" DC	Yes	0.75	1.200	1.50	0.31	0.37	0.252	0.000	8.369	3.44	7.42
150.00	1 5/8" Coax	Yes	1.00	1.200	2.00	0.46	0.55	0.256	0.000	8.381	5.06	54.87
150.00	1/2" Fiber	Yes	1.00	1.200	1.00	0.37	0.45	0.256	0.000	8.381	4.14	5.94
150.00	3/4" DC	Yes	1.00	1.200	1.50	0.42	0.50	0.256	0.000	8.381	4.60	9.90

Linear Appurtenance Segment Forces (Factored)

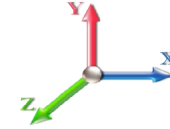
Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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

Dead Load Factor 1.20
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)
150.50	1 5/8" Coax	Yes	0.50	1.200	2.00	0.23	0.27	0.259	0.000	8.387	2.53	27.44
150.50	1/2" Fiber	Yes	0.50	1.200	1.00	0.19	0.22	0.259	0.000	8.387	2.07	2.97
150.50	3/4" DC	Yes	0.50	1.200	1.50	0.21	0.25	0.259	0.000	8.387	2.30	4.95
152.00	1 5/8" Coax	Yes	1.50	1.200	2.00	0.69	0.82	0.258	0.000	8.404	7.62	82.39
152.00	1/2" Fiber	Yes	1.50	1.200	1.00	0.56	0.67	0.258	0.000	8.404	6.23	8.93
152.00	3/4" DC	Yes	1.50	1.200	1.50	0.62	0.75	0.258	0.000	8.404	6.93	14.87
154.00	1 5/8" Coax	Yes	2.00	1.200	2.00	0.92	1.10	0.265	0.000	8.427	10.20	109.96
154.00	1/2" Fiber	Yes	2.00	1.200	1.00	0.75	0.90	0.265	0.000	8.427	8.34	11.93
154.00	3/4" DC	Yes	2.00	1.200	1.50	0.83	1.00	0.265	0.000	8.427	9.27	19.86
156.00	1 5/8" Coax	Yes	2.00	1.200	2.00	0.92	1.10	0.275	0.000	8.450	10.23	110.06
156.00	1/2" Fiber	Yes	2.00	1.200	1.00	0.75	0.90	0.275	0.000	8.450	8.37	11.95
156.00	3/4" DC	Yes	2.00	1.200	1.50	0.83	1.00	0.275	0.000	8.450	9.30	19.89
158.00	1 5/8" Coax	Yes	2.00	1.200	2.00	0.92	1.10	0.285	0.000	8.473	10.27	110.16
158.00	1/2" Fiber	Yes	2.00	1.200	1.00	0.75	0.90	0.285	0.000	8.473	8.40	11.98
158.00	3/4" DC	Yes	2.00	1.200	1.50	0.83	1.00	0.285	0.000	8.473	9.34	19.92
159.00	1 5/8" Coax	Yes	1.00	1.200	2.00	0.46	0.55	0.293	0.000	8.484	5.14	55.11
159.00	1/2" Fiber	Yes	1.00	1.200	1.00	0.38	0.45	0.293	0.000	8.484	4.21	5.99
159.00	3/4" DC	Yes	1.00	1.200	1.50	0.42	0.50	0.293	0.000	8.484	4.68	9.97
Totals:											370.0	11,578.4

Calculated Forces

Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

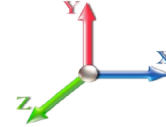


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Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Iterations 29

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	-87.61	-11.55	0.00	-1445.1	0.00	1445.10	4390.37	2195.18	10447.7	5231.64	0.00	0.000	0.000	0.296
2.00	-86.68	-11.52	0.00	-1422.0	0.00	1422.00	4366.62	2183.31	10288.9	5152.14	0.01	-0.028	0.000	0.296
4.00	-85.73	-11.49	0.00	-1398.9	0.00	1398.96	4342.50	2171.25	10130.4	5072.75	0.02	-0.056	0.000	0.296
6.00	-84.78	-11.46	0.00	-1375.9	0.00	1375.98	4318.00	2159.00	9972.16	4993.49	0.05	-0.085	0.000	0.295
8.00	-83.83	-11.43	0.00	-1353.0	0.00	1353.06	4293.12	2146.56	9814.16	4914.37	0.10	-0.114	0.000	0.295
10.00	-82.89	-11.41	0.00	-1330.1	0.00	1330.19	4267.86	2133.93	9656.46	4835.41	0.15	-0.144	0.000	0.295
12.00	-81.94	-11.38	0.00	-1307.3	0.00	1307.38	4242.22	2121.11	9499.10	4756.61	0.22	-0.174	0.000	0.294
14.00	-80.99	-11.35	0.00	-1284.6	0.00	1284.62	4216.20	2108.10	9342.10	4677.99	0.30	-0.204	0.000	0.294
16.00	-80.05	-11.32	0.00	-1261.9	0.00	1261.93	4189.80	2094.90	9185.49	4599.57	0.39	-0.235	0.000	0.293
18.00	-79.11	-11.29	0.00	-1239.2	0.00	1239.29	4163.03	2081.51	9029.29	4521.36	0.49	-0.266	0.000	0.293
20.00	-78.18	-11.26	0.00	-1216.7	0.00	1216.71	4135.87	2067.94	8873.53	4443.36	0.61	-0.298	0.000	0.293
22.00	-77.25	-11.22	0.00	-1194.2	0.00	1194.20	4108.34	2054.17	8718.25	4365.60	0.75	-0.330	0.000	0.292
24.00	-76.33	-11.19	0.00	-1171.7	0.00	1171.76	4080.43	2040.21	8563.45	4288.09	0.89	-0.363	0.000	0.292
26.00	-75.41	-11.15	0.00	-1149.3	0.00	1149.39	4052.14	2026.07	8409.18	4210.84	1.05	-0.396	0.000	0.292
28.00	-74.49	-11.11	0.00	-1127.0	0.00	1127.09	4023.46	2011.73	8255.45	4133.86	1.22	-0.429	0.000	0.291
30.00	-73.58	-11.07	0.00	-1104.8	0.00	1104.87	3994.42	1997.21	8102.30	4057.17	1.41	-0.463	0.000	0.291
32.00	-72.68	-11.03	0.00	-1082.7	0.00	1082.72	3964.99	1982.49	7949.75	3980.79	1.61	-0.498	0.000	0.290
34.00	-71.78	-10.99	0.00	-1060.6	0.00	1060.65	3935.18	1967.59	7797.83	3904.71	1.83	-0.533	0.000	0.290
36.00	-70.89	-10.95	0.00	-1038.6	0.00	1038.67	3904.99	1952.50	7646.57	3828.97	2.06	-0.568	0.000	0.289
38.00	-70.00	-10.91	0.00	-1016.7	0.00	1016.77	3874.43	1937.21	7495.98	3753.56	2.30	-0.604	0.000	0.289
40.00	-69.12	-10.87	0.00	-994.95	0.00	994.95	3843.48	1921.74	7346.10	3678.51	2.57	-0.640	0.000	0.288
42.00	-68.25	-10.82	0.00	-973.21	0.00	973.21	3812.16	1906.08	7196.95	3603.83	2.84	-0.677	0.000	0.288
44.00	-67.38	-10.78	0.00	-951.57	0.00	951.57	3780.46	1890.23	7048.57	3529.52	3.13	-0.715	0.000	0.287
46.00	-66.52	-10.72	0.00	-930.01	0.00	930.01	3748.38	1874.19	6900.97	3455.62	3.44	-0.753	0.000	0.287
47.00	-65.95	-10.61	0.00	-919.28	0.00	919.28	3732.20	1866.10	6827.48	3418.81	3.60	-0.772	0.000	0.287
47.50	-65.73	-10.60	0.00	-913.97	0.00	913.97	3724.07	1862.03	6790.81	3400.45	3.68	-0.782	0.000	0.286
48.00	-65.40	-10.61	0.00	-908.67	0.00	908.67	3715.92	1857.96	6754.19	3382.11	3.77	-0.792	0.000	0.286
50.00	-64.12	-10.55	0.00	-887.46	0.00	887.46	3683.08	1841.54	6608.25	3309.03	4.11	-0.831	0.000	0.286
52.00	-62.85	-10.49	0.00	-866.36	0.00	866.36	3649.86	1824.93	6463.17	3236.39	4.46	-0.871	0.000	0.285
53.25	-62.07	-10.45	0.00	-853.25	0.00	853.25	3673.19	1836.60	6564.80	3287.28	4.69	-0.896	0.000	0.276
54.00	-61.75	-10.45	0.00	-845.41	0.00	845.41	3660.74	1830.37	6510.40	3260.04	4.84	-0.912	0.000	0.276
56.00	-60.92	-10.40	0.00	-824.51	0.00	824.51	3627.27	1813.63	6365.92	3187.69	5.23	-0.951	0.000	0.275
58.00	-60.09	-10.35	0.00	-803.71	0.00	803.71	3593.41	1796.71	6222.36	3115.80	5.63	-0.990	0.000	0.275
60.00	-59.27	-10.30	0.00	-783.01	0.00	783.01	3559.18	1779.59	6079.73	3044.38	6.06	-1.030	0.000	0.274
62.00	-58.46	-10.25	0.00	-762.40	0.00	762.40	3524.57	1762.29	5938.07	2973.45	6.50	-1.071	0.000	0.273
64.00	-57.66	-10.20	0.00	-741.90	0.00	741.90	3489.59	1744.79	5797.40	2903.01	6.95	-1.112	0.000	0.272
66.00	-56.86	-10.15	0.00	-721.49	0.00	721.49	3454.22	1727.11	5657.75	2833.08	7.43	-1.153	0.000	0.271
68.00	-56.06	-10.10	0.00	-701.19	0.00	701.19	3418.47	1709.24	5519.14	2763.67	7.92	-1.196	0.000	0.270
70.00	-55.28	-10.05	0.00	-680.98	0.00	680.98	3382.35	1691.17	5381.61	2694.80	8.43	-1.239	0.000	0.269
72.00	-54.50	-10.00	0.00	-660.88	0.00	660.88	3345.84	1672.92	5245.17	2626.49	8.96	-1.282	0.000	0.268
74.00	-53.73	-9.95	0.00	-640.88	0.00	640.88	3308.96	1654.48	5109.86	2558.73	9.51	-1.326	0.000	0.267
76.00	-52.97	-9.90	0.00	-620.99	0.00	620.99	3271.70	1635.85	4975.70	2491.55	10.07	-1.371	0.000	0.265
78.00	-52.21	-9.84	0.00	-601.20	0.00	601.20	3230.14	1615.07	4836.86	2422.03	10.66	-1.416	0.000	0.264
80.00	-51.28	-9.65	0.00	-581.24	0.00	581.24	3180.13	1590.07	4687.51	2347.24	11.26	-1.462	0.000	0.264
82.00	-50.55	-9.60	0.00	-561.94	0.00	561.94	3130.13	1565.06	4540.49	2273.62	11.88	-1.509	0.000	0.263
84.00	-49.82	-9.54	0.00	-542.75	0.00	542.75	3080.12	1540.06	4395.82	2201.18	12.52	-1.556	0.000	0.263
86.00	-49.10	-9.49	0.00	-523.66	0.00	523.66	3030.11	1515.05	4253.50	2129.91	13.19	-1.603	0.000	0.262
88.00	-48.39	-9.44	0.00	-504.68	0.00	504.68	2980.10	1490.05	4113.51	2059.81	13.87	-1.652	0.000	0.261

Calculated Forces

Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (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	-47.69	-9.38	0.00	-485.81	0.00	485.81	2930.09	1465.05	3975.87	1990.89	14.57	-1.701	0.000	0.260
92.00	-46.99	-9.33	0.00	-467.04	0.00	467.04	2880.09	1440.04	3840.56	1923.14	15.29	-1.750	0.000	0.259
94.00	-46.31	-9.28	0.00	-448.38	0.00	448.38	2830.08	1415.04	3707.61	1856.56	16.04	-1.800	0.000	0.258
96.00	-45.63	-9.21	0.00	-429.83	0.00	429.83	2780.07	1390.03	3576.99	1791.15	16.80	-1.851	0.000	0.256
97.00	-45.29	-9.18	0.00	-420.62	0.00	420.62	2755.06	1377.53	3512.56	1758.89	17.19	-1.877	0.000	0.256
98.00	-44.82	-9.16	0.00	-411.44	0.00	411.44	2730.06	1365.03	3448.72	1726.92	17.59	-1.903	0.000	0.255
100.00	-43.90	-9.09	0.00	-393.11	0.00	393.11	2680.05	1340.03	3322.78	1663.86	18.40	-1.955	0.000	0.253
101.00	-43.44	-9.06	0.00	-384.02	0.00	384.02	2260.99	1130.50	2846.84	1425.54	18.81	-1.981	0.000	0.289
102.00	-43.13	-9.04	0.00	-374.97	0.00	374.97	2242.36	1121.18	2797.13	1400.64	19.23	-2.008	0.000	0.287
104.00	-42.52	-8.99	0.00	-356.89	0.00	356.89	2200.69	1100.35	2693.61	1348.81	20.08	-2.067	0.000	0.284
106.00	-41.91	-8.94	0.00	-338.91	0.00	338.91	2159.02	1079.51	2592.04	1297.95	20.96	-2.126	0.000	0.281
108.00	-41.31	-8.89	0.00	-321.03	0.00	321.03	2117.34	1058.67	2492.43	1248.07	21.86	-2.186	0.000	0.277
110.00	-40.53	-8.68	0.00	-302.96	0.00	302.96	2075.67	1037.84	2394.76	1199.16	22.79	-2.245	0.000	0.272
112.00	-39.96	-8.63	0.00	-285.61	0.00	285.61	2034.00	1017.00	2299.05	1151.23	23.74	-2.305	0.000	0.268
114.00	-39.39	-8.59	0.00	-268.34	0.00	268.34	1992.32	996.16	2205.29	1104.29	24.72	-2.365	0.000	0.263
116.00	-38.83	-8.54	0.00	-251.17	0.00	251.17	1950.65	975.32	2113.48	1058.31	25.73	-2.425	0.000	0.257
118.00	-38.27	-8.49	0.00	-234.09	0.00	234.09	1908.98	954.49	2023.63	1013.32	26.75	-2.484	0.000	0.251
120.00	-37.72	-8.44	0.00	-217.11	0.00	217.11	1867.30	933.65	1935.73	969.30	27.81	-2.543	0.000	0.244
122.00	-37.18	-8.39	0.00	-200.23	0.00	200.23	1825.63	912.81	1849.77	926.26	28.88	-2.601	0.000	0.237
124.00	-36.65	-8.34	0.00	-183.44	0.00	183.44	1783.96	891.98	1765.78	884.20	29.99	-2.658	0.000	0.228
126.00	-36.12	-8.29	0.00	-166.76	0.00	166.76	1742.28	871.14	1683.73	843.12	31.11	-2.714	0.000	0.219
128.00	-35.60	-8.24	0.00	-150.18	0.00	150.18	1700.61	850.30	1603.63	803.01	32.26	-2.769	0.000	0.208
130.00	-27.36	-6.47	0.00	-132.74	0.00	132.74	1658.94	829.47	1525.49	763.88	33.43	-2.821	0.000	0.190
132.00	-26.87	-6.40	0.00	-119.80	0.00	119.80	1617.26	808.63	1449.30	725.73	34.62	-2.872	0.000	0.182
134.00	-26.41	-6.33	0.00	-106.99	0.00	106.99	1575.59	787.79	1375.06	688.55	35.84	-2.920	0.000	0.172
136.00	-25.95	-6.26	0.00	-94.33	0.00	94.33	1533.91	766.96	1302.77	652.35	37.07	-2.967	0.000	0.162
138.00	-25.50	-6.18	0.00	-81.83	0.00	81.83	1492.24	746.12	1232.44	617.13	38.32	-3.011	0.000	0.150
140.00	-18.81	-4.56	0.00	-67.90	0.00	67.90	1450.57	725.28	1164.05	582.89	39.59	-3.053	0.000	0.129
142.00	-18.38	-4.48	0.00	-58.78	0.00	58.78	1408.89	704.45	1097.62	549.63	40.88	-3.090	0.000	0.120
144.00	-17.98	-4.40	0.00	-49.82	0.00	49.82	1367.22	683.61	1033.14	517.34	42.18	-3.126	0.000	0.109
146.00	-17.59	-4.32	0.00	-41.02	0.00	41.02	1325.55	662.77	970.62	486.03	43.50	-3.158	0.000	0.098
148.00	-17.22	-4.24	0.00	-32.38	0.00	32.38	1283.87	641.94	910.04	455.70	44.83	-3.187	0.000	0.085
148.25	-17.17	-4.23	0.00	-31.32	0.00	31.32	1278.66	639.33	902.61	451.97	44.99	-3.190	0.000	0.083
149.00	-11.04	-2.61	0.00	-27.08	0.00	27.08	1263.04	631.52	880.49	440.90	45.49	-3.200	0.000	0.070
150.00	-10.81	-2.57	0.00	-24.47	0.00	24.47	1242.20	621.10	851.42	426.34	46.17	-3.211	0.000	0.066
150.50	-10.70	-2.55	0.00	-23.19	0.00	23.19	761.18	380.59	536.85	268.82	46.50	-3.217	0.000	0.100
152.00	-10.47	-2.49	0.00	-19.36	0.00	19.36	742.42	371.21	510.58	255.67	47.51	-3.232	0.000	0.090
154.00	-10.17	-2.41	0.00	-14.39	0.00	14.39	717.42	358.71	476.59	238.65	48.87	-3.259	0.000	0.075
156.00	-9.88	-2.33	0.00	-9.56	0.00	9.56	692.41	346.21	443.76	222.21	50.24	-3.281	0.000	0.057
158.00	-9.59	-2.25	0.00	-4.90	0.00	4.90	667.41	333.71	412.11	206.36	51.62	-3.295	0.000	0.038
159.00	0.00	-1.70	0.00	-2.65	0.00	2.65	654.91	327.45	396.72	198.65	52.31	-3.299	0.000	0.013

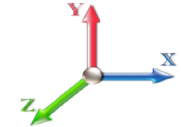
Seismic Segment Forces (Factored)

Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (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 + 1.0E				Iterations 27
Gust Response Factor	1.10	Sds	0.22	Ss 0.20
Dead Load Factor	1.20	Seismic Load Factor	1.00	S1 0.07
Wind Load Factor	0.00	Structure Frequency	0.33	SA 0.03
				Seismic Importance Factor 1.00



Top Elev (ft)	Description	Wz (lb)	a	b	c	Lateral Fs (lb)	R: 1.50
0.00		0.00	0.00	0.00	0.00	0.00	
2.00		466.17	0.00	0.01	0.01	5.41	
4.00		461.59	0.00	0.03	0.01	8.96	
6.00		457.01	0.00	0.04	0.02	11.42	
8.00		452.43	0.00	0.04	0.02	13.17	
10.00		447.85	0.01	0.05	0.03	14.41	
12.00		443.27	0.01	0.06	0.03	15.30	
14.00		438.69	0.01	0.06	0.04	15.92	
16.00		434.11	0.02	0.06	0.04	16.34	
18.00		429.53	0.02	0.07	0.04	16.62	
20.00		424.95	0.03	0.07	0.04	16.79	
22.00		420.37	0.04	0.07	0.04	16.89	
24.00		415.79	0.04	0.07	0.04	16.93	
26.00		411.20	0.05	0.07	0.04	16.93	
28.00		406.62	0.06	0.07	0.04	16.92	
30.00		402.04	0.07	0.07	0.04	16.88	
32.00		397.46	0.08	0.07	0.04	16.84	
34.00		392.88	0.09	0.07	0.04	16.80	
36.00		388.30	0.10	0.07	0.04	16.76	
38.00		383.72	0.11	0.07	0.04	16.71	
40.00		379.14	0.12	0.07	0.03	16.66	
42.00		374.56	0.13	0.07	0.03	16.61	
44.00		369.98	0.14	0.07	0.03	16.54	
46.00		365.40	0.16	0.07	0.03	16.45	
47.00	Appurtenance(s)	244.30	0.17	0.07	0.03	11.03	
47.50	Bot - Section 2	90.06	0.17	0.07	0.03	4.07	
48.00		181.07	0.17	0.07	0.03	8.19	
50.00		718.54	0.19	0.06	0.02	32.61	
52.00		709.38	0.20	0.06	0.02	32.18	
53.25	Top - Section 1	438.71	0.21	0.06	0.02	19.86	
54.00		131.89	0.22	0.06	0.02	5.96	
56.00		348.57	0.23	0.06	0.02	15.60	
58.00		343.99	0.25	0.06	0.02	15.14	
60.00		339.40	0.27	0.05	0.02	14.58	
62.00		334.82	0.29	0.05	0.01	13.89	
64.00		330.24	0.31	0.04	0.01	13.06	
66.00		325.66	0.33	0.04	0.01	12.07	
68.00		321.08	0.35	0.03	0.01	10.91	
70.00		316.50	0.37	0.03	0.01	9.58	
72.00		311.92	0.39	0.02	0.01	8.08	
74.00		307.34	0.41	0.02	0.01	6.42	
76.00		302.76	0.43	0.01	0.01	4.62	
78.00		298.18	0.45	0.00	0.01	2.72	
80.00	Appurtenance(s)	357.32	0.48	-0.01	0.01	0.92	
82.00		289.02	0.50	-0.02	0.01	-1.22	
84.00		284.43	0.53	-0.03	0.01	-3.14	

Seismic Segment Forces (Factored)

Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (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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86.00		279.85	0.55	-0.04	0.01	-4.96
88.00		275.27	0.58	-0.05	0.01	-6.62
90.00		270.69	0.61	-0.05	0.02	-8.08
92.00		266.11	0.63	-0.06	0.02	-9.31
94.00		261.53	0.66	-0.07	0.02	-10.30
96.00		256.95	0.69	-0.08	0.03	-11.04
97.00	Bot - Section 3	126.76	0.70	-0.09	0.03	-5.63
98.00		232.61	0.72	-0.09	0.03	-10.62
100.00		458.92	0.75	-0.10	0.04	-21.79
101.00	Top - Section 2	226.31	0.76	-0.10	0.04	-10.87
102.00		103.18	0.78	-0.11	0.05	-4.99
104.00		203.50	0.81	-0.11	0.06	-9.86
106.00		199.68	0.84	-0.12	0.07	-9.51
108.00		195.86	0.87	-0.12	0.08	-9.00
110.00	Appurtenance(s)	255.76	0.90	-0.12	0.09	-11.10
112.00		188.23	0.94	-0.12	0.10	-7.54
114.00		184.41	0.97	-0.12	0.12	-6.62
116.00		180.59	1.01	-0.11	0.13	-5.58
118.00		176.77	1.04	-0.10	0.15	-4.44
120.00		172.96	1.08	-0.08	0.17	-3.21
122.00		169.14	1.11	-0.06	0.19	-1.89
124.00		165.32	1.15	-0.04	0.22	-0.50
126.00		161.50	1.19	-0.01	0.25	0.96
128.00		157.69	1.22	0.03	0.27	2.47
130.00	Appurtenance(s)	2451.8	1.26	0.07	0.30	64.35
132.00		150.05	1.30	0.12	0.34	5.64
134.00		146.24	1.34	0.18	0.37	7.28
136.00		142.42	1.38	0.25	0.41	8.94
138.00		138.60	1.42	0.33	0.46	10.62
140.00	Appurtenance(s)	2322.0	1.47	0.42	0.50	211.93
142.00		130.97	1.51	0.52	0.55	13.98
144.00		127.15	1.55	0.63	0.60	15.65
146.00		123.33	1.59	0.76	0.66	17.31
148.00		119.51	1.64	0.90	0.72	18.93
148.25	Bot - Section 4	14.67	1.64	0.92	0.73	2.36
149.00	Appurtenance(s)	2549.7	1.66	0.98	0.75	427.75
150.00		92.81	1.68	1.06	0.79	16.46
150.50	Top - Section 3	45.83	1.69	1.10	0.80	8.35
152.00		51.65	1.73	1.23	0.86	10.18
154.00		66.86	1.77	1.42	0.93	14.57
156.00		64.57	1.82	1.63	1.01	15.47
158.00		62.28	1.87	1.86	1.10	16.32
159.00	Appurtenance(s)	4275.6	1.89	1.98	1.14	1170.05
Totals:		35,134.1				2,475.5
						Total Wind: 37,794.4

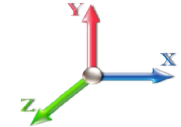
Seismic Base Shear is Less Than 50% of Wind Force - An Analysis is NOT Required

Calculated Forces

Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (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 + 1.0E										Iterations 27
Gust Response Factor	1.10						Sds	0.22		Ss 0.20
Dead Load Factor	1.20	Seismic Load Factor	1.00	Sd1	0.10					S1 0.07
Wind Load Factor	0.00	Structure Frequency	0.33	SA	0.03	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	-50.60	-2.66	0.00	-360.84	0.00	360.84	4390.37	2195.18	10447.7	5231.64	0.00	0.00	0.00	0.080
2.00	-49.92	-2.66	0.00	-355.53	0.00	355.53	4366.62	2183.31	10288.9	5152.14	0.00	-0.01	0.080	0.080
4.00	-49.25	-2.65	0.00	-350.22	0.00	350.22	4342.50	2171.25	10130.4	5072.75	0.01	-0.01	0.080	0.080
6.00	-48.59	-2.65	0.00	-344.91	0.00	344.91	4318.00	2159.00	9972.16	4993.49	0.01	-0.02	0.080	0.080
8.00	-47.93	-2.64	0.00	-339.62	0.00	339.62	4293.12	2146.56	9814.16	4914.37	0.02	-0.03	0.080	0.080
10.00	-47.27	-2.63	0.00	-334.34	0.00	334.34	4267.86	2133.93	9656.46	4835.41	0.04	-0.04	0.080	0.080
12.00	-46.62	-2.62	0.00	-329.07	0.00	329.07	4242.22	2121.11	9499.10	4756.61	0.05	-0.04	0.080	0.080
14.00	-45.98	-2.61	0.00	-323.83	0.00	323.83	4216.20	2108.10	9342.10	4677.99	0.07	-0.05	0.080	0.080
16.00	-45.34	-2.60	0.00	-318.61	0.00	318.61	4189.80	2094.90	9185.49	4599.57	0.10	-0.06	0.080	0.080
18.00	-44.70	-2.59	0.00	-313.40	0.00	313.40	4163.03	2081.51	9029.29	4521.36	0.12	-0.07	0.080	0.080
20.00	-44.08	-2.58	0.00	-308.22	0.00	308.22	4135.87	2067.94	8873.53	4443.36	0.15	-0.07	0.080	0.080
22.00	-43.45	-2.57	0.00	-303.07	0.00	303.07	4108.34	2054.17	8718.25	4365.60	0.19	-0.08	0.080	0.080
24.00	-42.84	-2.56	0.00	-297.93	0.00	297.93	4080.43	2040.21	8563.45	4288.09	0.22	-0.09	0.080	0.080
26.00	-42.23	-2.54	0.00	-292.82	0.00	292.82	4052.14	2026.07	8409.18	4210.84	0.26	-0.10	0.080	0.080
28.00	-41.62	-2.53	0.00	-287.73	0.00	287.73	4023.46	2011.73	8255.45	4133.86	0.31	-0.11	0.080	0.080
30.00	-41.02	-2.52	0.00	-282.67	0.00	282.67	3994.42	1997.21	8102.30	4057.17	0.35	-0.12	0.080	0.080
32.00	-40.42	-2.51	0.00	-277.63	0.00	277.63	3964.99	1982.49	7949.75	3980.79	0.41	-0.13	0.080	0.080
34.00	-39.83	-2.50	0.00	-272.61	0.00	272.61	3935.18	1967.59	7797.83	3904.71	0.46	-0.13	0.080	0.080
36.00	-39.25	-2.48	0.00	-267.62	0.00	267.62	3904.99	1952.50	7646.57	3828.97	0.52	-0.14	0.080	0.080
38.00	-38.67	-2.47	0.00	-262.65	0.00	262.65	3874.43	1937.21	7495.98	3753.56	0.58	-0.15	0.080	0.080
40.00	-38.10	-2.46	0.00	-257.71	0.00	257.71	3843.48	1921.74	7346.10	3678.51	0.65	-0.16	0.080	0.080
42.00	-37.53	-2.45	0.00	-252.78	0.00	252.78	3812.16	1906.08	7196.95	3603.83	0.72	-0.17	0.080	0.080
44.00	-36.97	-2.44	0.00	-247.89	0.00	247.89	3780.46	1890.23	7048.57	3529.52	0.79	-0.18	0.080	0.080
46.00	-36.41	-2.42	0.00	-243.01	0.00	243.01	3748.38	1874.19	6900.97	3455.62	0.87	-0.19	0.080	0.080
47.00	-36.06	-2.41	0.00	-240.59	0.00	240.59	3732.20	1866.10	6827.48	3418.81	0.91	-0.20	0.080	0.080
47.50	-35.92	-2.41	0.00	-239.38	0.00	239.38	3724.07	1862.03	6790.81	3400.45	0.93	-0.20	0.080	0.080
48.00	-35.68	-2.41	0.00	-238.18	0.00	238.18	3715.92	1857.96	6754.19	3382.11	0.95	-0.20	0.080	0.080
50.00	-34.70	-2.38	0.00	-233.37	0.00	233.37	3683.08	1841.54	6608.25	3309.03	1.04	-0.21	0.080	0.080
52.00	-33.73	-2.35	0.00	-228.61	0.00	228.61	3649.86	1824.93	6463.17	3236.39	1.13	-0.22	0.080	0.080
53.25	-33.13	-2.33	0.00	-225.68	0.00	225.68	3673.19	1836.60	6564.80	3287.28	1.19	-0.23	0.078	0.078
54.00	-32.93	-2.32	0.00	-223.94	0.00	223.94	3660.74	1830.37	6510.40	3260.04	1.23	-0.23	0.078	0.078
56.00	-32.39	-2.31	0.00	-219.29	0.00	219.29	3627.27	1813.63	6365.92	3187.69	1.33	-0.24	0.078	0.078
58.00	-31.86	-2.30	0.00	-214.67	0.00	214.67	3593.41	1796.71	6222.36	3115.80	1.43	-0.25	0.078	0.078
60.00	-31.33	-2.29	0.00	-210.07	0.00	210.07	3559.18	1779.59	6079.73	3044.38	1.54	-0.27	0.078	0.078
62.00	-30.82	-2.28	0.00	-205.49	0.00	205.49	3524.57	1762.29	5938.07	2973.45	1.65	-0.28	0.078	0.078
64.00	-30.30	-2.27	0.00	-200.94	0.00	200.94	3489.59	1744.79	5797.40	2903.01	1.77	-0.29	0.078	0.078
66.00	-29.79	-2.26	0.00	-196.40	0.00	196.40	3454.22	1727.11	5657.75	2833.08	1.89	-0.30	0.078	0.078
68.00	-29.29	-2.25	0.00	-191.88	0.00	191.88	3418.47	1709.24	5519.14	2763.67	2.02	-0.31	0.078	0.078
70.00	-28.79	-2.25	0.00	-187.37	0.00	187.37	3382.35	1691.17	5381.61	2694.80	2.15	-0.32	0.078	0.078
72.00	-28.30	-2.24	0.00	-182.88	0.00	182.88	3345.84	1672.92	5245.17	2626.49	2.29	-0.33	0.078	0.078
74.00	-27.81	-2.24	0.00	-178.40	0.00	178.40	3308.96	1654.48	5109.86	2558.73	2.43	-0.35	0.078	0.078
76.00	-27.33	-2.24	0.00	-173.92	0.00	173.92	3271.70	1635.85	4975.70	2491.55	2.58	-0.36	0.078	0.078
78.00	-26.86	-2.24	0.00	-169.45	0.00	169.45	3230.14	1615.07	4836.86	2422.03	2.73	-0.37	0.078	0.078
80.00	-26.31	-2.24	0.00	-164.98	0.00	164.98	3180.13	1590.07	4687.51	2347.24	2.89	-0.38	0.079	0.079
82.00	-25.85	-2.24	0.00	-160.50	0.00	160.50	3130.13	1565.06	4540.49	2273.62	3.06	-0.40	0.079	0.079
84.00	-25.39	-2.24	0.00	-156.02	0.00	156.02	3080.12	1540.06	4395.82	2201.18	3.23	-0.41	0.079	0.079
86.00	-24.94	-2.25	0.00	-151.53	0.00	151.53	3030.11	1515.05	4253.50	2129.91	3.40	-0.42	0.079	0.079

Calculated Forces

Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (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	-24.49	-2.25	0.00	-147.04	0.00	147.04	2980.10	1490.05	4113.51	2059.81	3.58	-0.44	0.080
90.00	-24.05	-2.25	0.00	-142.54	0.00	142.54	2930.09	1465.05	3975.87	1990.89	3.77	-0.45	0.080
92.00	-23.61	-2.25	0.00	-138.04	0.00	138.04	2880.09	1440.04	3840.56	1923.14	3.96	-0.47	0.080
94.00	-23.18	-2.26	0.00	-133.53	0.00	133.53	2830.08	1415.04	3707.61	1856.56	4.16	-0.48	0.080
96.00	-22.76	-2.26	0.00	-129.01	0.00	129.01	2780.07	1390.03	3576.99	1791.15	4.37	-0.50	0.080
97.00	-22.55	-2.26	0.00	-126.76	0.00	126.76	2755.06	1377.53	3512.56	1758.89	4.47	-0.51	0.080
98.00	-22.21	-2.26	0.00	-124.50	0.00	124.50	2730.06	1365.03	3448.72	1726.92	4.58	-0.51	0.080
100.00	-21.54	-2.26	0.00	-119.98	0.00	119.98	2680.05	1340.03	3322.78	1663.86	4.80	-0.53	0.080
101.00	-21.21	-2.26	0.00	-117.72	0.00	117.72	2260.99	1130.50	2846.84	1425.54	4.91	-0.54	0.092
102.00	-21.03	-2.26	0.00	-115.46	0.00	115.46	2242.36	1121.18	2797.13	1400.64	5.02	-0.55	0.092
104.00	-20.67	-2.27	0.00	-110.93	0.00	110.93	2200.69	1100.35	2693.61	1348.81	5.25	-0.56	0.092
106.00	-20.31	-2.27	0.00	-106.40	0.00	106.40	2159.02	1079.51	2592.04	1297.95	5.49	-0.58	0.091
108.00	-19.96	-2.27	0.00	-101.87	0.00	101.87	2117.34	1058.67	2492.43	1248.07	5.74	-0.60	0.091
110.00	-19.54	-2.27	0.00	-97.32	0.00	97.32	2075.67	1037.84	2394.76	1199.16	6.00	-0.62	0.091
112.00	-19.20	-2.28	0.00	-92.78	0.00	92.78	2034.00	1017.00	2299.05	1151.23	6.26	-0.64	0.090
114.00	-18.86	-2.28	0.00	-88.22	0.00	88.22	1992.32	996.16	2205.29	1104.29	6.53	-0.66	0.089
116.00	-18.53	-2.28	0.00	-83.66	0.00	83.66	1950.65	975.32	2113.48	1058.31	6.81	-0.68	0.089
118.00	-18.20	-2.28	0.00	-79.10	0.00	79.10	1908.98	954.49	2023.63	1013.32	7.10	-0.70	0.088
120.00	-17.88	-2.29	0.00	-74.53	0.00	74.53	1867.30	933.65	1935.73	969.30	7.40	-0.72	0.086
122.00	-17.56	-2.29	0.00	-69.96	0.00	69.96	1825.63	912.81	1849.77	926.26	7.70	-0.74	0.085
124.00	-17.25	-2.29	0.00	-65.38	0.00	65.38	1783.96	891.98	1765.78	884.20	8.02	-0.76	0.084
126.00	-16.94	-2.29	0.00	-60.80	0.00	60.80	1742.28	871.14	1683.73	843.12	8.34	-0.78	0.082
128.00	-16.63	-2.29	0.00	-56.22	0.00	56.22	1700.61	850.30	1603.63	803.01	8.67	-0.80	0.080
130.00	-13.58	-2.19	0.00	-51.64	0.00	51.64	1658.94	829.47	1525.49	763.88	9.01	-0.82	0.076
132.00	-13.30	-2.18	0.00	-47.26	0.00	47.26	1617.26	808.63	1449.30	725.73	9.36	-0.84	0.073
134.00	-13.04	-2.18	0.00	-42.90	0.00	42.90	1575.59	787.79	1375.06	688.55	9.71	-0.86	0.071
136.00	-12.78	-2.17	0.00	-38.54	0.00	38.54	1533.91	766.96	1302.77	652.35	10.08	-0.88	0.067
138.00	-12.54	-2.16	0.00	-34.21	0.00	34.21	1492.24	746.12	1232.44	617.13	10.45	-0.90	0.064
140.00	-9.67	-1.90	0.00	-29.90	0.00	29.90	1450.57	725.28	1164.05	582.89	10.83	-0.91	0.058
142.00	-9.43	-1.89	0.00	-26.09	0.00	26.09	1408.89	704.45	1097.62	549.63	11.21	-0.93	0.054
144.00	-9.22	-1.87	0.00	-22.31	0.00	22.31	1367.22	683.61	1033.14	517.34	11.61	-0.95	0.050
146.00	-9.03	-1.85	0.00	-18.57	0.00	18.57	1325.55	662.77	970.62	486.03	12.01	-0.96	0.045
148.00	-8.84	-1.83	0.00	-14.87	0.00	14.87	1283.87	641.94	910.04	455.70	12.41	-0.97	0.040
148.25	-8.82	-1.83	0.00	-14.41	0.00	14.41	1278.66	639.33	902.61	451.97	12.46	-0.97	0.039
149.00	-5.75	-1.35	0.00	-13.04	0.00	13.04	1263.04	631.52	880.49	440.90	12.62	-0.98	0.034
150.00	-5.62	-1.33	0.00	-11.69	0.00	11.69	1242.20	621.10	851.42	426.34	12.82	-0.98	0.032
150.50	-5.55	-1.32	0.00	-11.02	0.00	11.02	761.18	380.59	536.85	268.82	12.92	-0.99	0.048
152.00	-5.46	-1.31	0.00	-9.04	0.00	9.04	742.42	371.21	510.58	255.67	13.24	-0.99	0.043
154.00	-5.35	-1.30	0.00	-6.41	0.00	6.41	717.42	358.71	476.59	238.65	13.66	-1.01	0.034
156.00	-5.24	-1.28	0.00	-3.82	0.00	3.82	692.41	346.21	443.76	222.21	14.08	-1.02	0.025
158.00	-5.13	-1.26	0.00	-1.26	0.00	1.26	667.41	333.71	412.11	206.36	14.51	-1.02	0.014
159.00	0.00	-1.17	0.00	0.00	0.00	0.00	654.91	327.45	396.72	198.65	14.72	-1.02	0.000

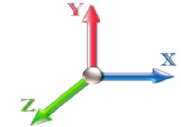
Seismic Segment Forces (Factored)

Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (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 + 1.0E					Iterations 27
Gust Response Factor	1.10			Sds	0.22
Dead Load Factor	0.90	Seismic Load Factor	1.00	Sd1	0.10
Wind Load Factor	0.00	Structure Frequency	0.33	SA	0.03
				Seismic Importance Factor	1.00



Top Elev (ft)	Description	Wz (lb)	a	b	c	Lateral Fs (lb)	R: 1.50
0.00		0.00	0.00	0.00	0.00	0.00	
2.00		466.17	0.00	0.01	0.01	5.41	
4.00		461.59	0.00	0.03	0.01	8.96	
6.00		457.01	0.00	0.04	0.02	11.42	
8.00		452.43	0.00	0.04	0.02	13.17	
10.00		447.85	0.01	0.05	0.03	14.41	
12.00		443.27	0.01	0.06	0.03	15.30	
14.00		438.69	0.01	0.06	0.04	15.92	
16.00		434.11	0.02	0.06	0.04	16.34	
18.00		429.53	0.02	0.07	0.04	16.62	
20.00		424.95	0.03	0.07	0.04	16.79	
22.00		420.37	0.04	0.07	0.04	16.89	
24.00		415.79	0.04	0.07	0.04	16.93	
26.00		411.20	0.05	0.07	0.04	16.93	
28.00		406.62	0.06	0.07	0.04	16.92	
30.00		402.04	0.07	0.07	0.04	16.88	
32.00		397.46	0.08	0.07	0.04	16.84	
34.00		392.88	0.09	0.07	0.04	16.80	
36.00		388.30	0.10	0.07	0.04	16.76	
38.00		383.72	0.11	0.07	0.04	16.71	
40.00		379.14	0.12	0.07	0.03	16.66	
42.00		374.56	0.13	0.07	0.03	16.61	
44.00		369.98	0.14	0.07	0.03	16.54	
46.00		365.40	0.16	0.07	0.03	16.45	
47.00	Appurtenance(s)	244.30	0.17	0.07	0.03	11.03	
47.50	Bot - Section 2	90.06	0.17	0.07	0.03	4.07	
48.00		181.07	0.17	0.07	0.03	8.19	
50.00		718.54	0.19	0.06	0.02	32.61	
52.00		709.38	0.20	0.06	0.02	32.18	
53.25	Top - Section 1	438.71	0.21	0.06	0.02	19.86	
54.00		131.89	0.22	0.06	0.02	5.96	
56.00		348.57	0.23	0.06	0.02	15.60	
58.00		343.99	0.25	0.06	0.02	15.14	
60.00		339.40	0.27	0.05	0.02	14.58	
62.00		334.82	0.29	0.05	0.01	13.89	
64.00		330.24	0.31	0.04	0.01	13.06	
66.00		325.66	0.33	0.04	0.01	12.07	
68.00		321.08	0.35	0.03	0.01	10.91	
70.00		316.50	0.37	0.03	0.01	9.58	
72.00		311.92	0.39	0.02	0.01	8.08	
74.00		307.34	0.41	0.02	0.01	6.42	
76.00		302.76	0.43	0.01	0.01	4.62	
78.00		298.18	0.45	0.00	0.01	2.72	
80.00	Appurtenance(s)	357.32	0.48	-0.01	0.01	0.92	
82.00		289.02	0.50	-0.02	0.01	-1.22	
84.00		284.43	0.53	-0.03	0.01	-3.14	

Seismic Segment Forces (Factored)

Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (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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86.00		279.85	0.55	-0.04	0.01	-4.96
88.00		275.27	0.58	-0.05	0.01	-6.62
90.00		270.69	0.61	-0.05	0.02	-8.08
92.00		266.11	0.63	-0.06	0.02	-9.31
94.00		261.53	0.66	-0.07	0.02	-10.30
96.00		256.95	0.69	-0.08	0.03	-11.04
97.00	Bot - Section 3	126.76	0.70	-0.09	0.03	-5.63
98.00		232.61	0.72	-0.09	0.03	-10.62
100.00		458.92	0.75	-0.10	0.04	-21.79
101.00	Top - Section 2	226.31	0.76	-0.10	0.04	-10.87
102.00		103.18	0.78	-0.11	0.05	-4.99
104.00		203.50	0.81	-0.11	0.06	-9.86
106.00		199.68	0.84	-0.12	0.07	-9.51
108.00		195.86	0.87	-0.12	0.08	-9.00
110.00	Appurtenance(s)	255.76	0.90	-0.12	0.09	-11.10
112.00		188.23	0.94	-0.12	0.10	-7.54
114.00		184.41	0.97	-0.12	0.12	-6.62
116.00		180.59	1.01	-0.11	0.13	-5.58
118.00		176.77	1.04	-0.10	0.15	-4.44
120.00		172.96	1.08	-0.08	0.17	-3.21
122.00		169.14	1.11	-0.06	0.19	-1.89
124.00		165.32	1.15	-0.04	0.22	-0.50
126.00		161.50	1.19	-0.01	0.25	0.96
128.00		157.69	1.22	0.03	0.27	2.47
130.00	Appurtenance(s)	2451.8	1.26	0.07	0.30	64.35
132.00		150.05	1.30	0.12	0.34	5.64
134.00		146.24	1.34	0.18	0.37	7.28
136.00		142.42	1.38	0.25	0.41	8.94
138.00		138.60	1.42	0.33	0.46	10.62
140.00	Appurtenance(s)	2322.0	1.47	0.42	0.50	211.93
142.00		130.97	1.51	0.52	0.55	13.98
144.00		127.15	1.55	0.63	0.60	15.65
146.00		123.33	1.59	0.76	0.66	17.31
148.00		119.51	1.64	0.90	0.72	18.93
148.25	Bot - Section 4	14.67	1.64	0.92	0.73	2.36
149.00	Appurtenance(s)	2549.7	1.66	0.98	0.75	427.75
150.00		92.81	1.68	1.06	0.79	16.46
150.50	Top - Section 3	45.83	1.69	1.10	0.80	8.35
152.00		51.65	1.73	1.23	0.86	10.18
154.00		66.86	1.77	1.42	0.93	14.57
156.00		64.57	1.82	1.63	1.01	15.47
158.00		62.28	1.87	1.86	1.10	16.32
159.00	Appurtenance(s)	4275.6	1.89	1.98	1.14	1170.05

Totals: 35,134.1

2,475.5

Total Wind: 37,794.4

Seismic Base Shear is Less Than 50% of Wind Force - An Analysis is NOT Required

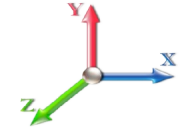
Calculated Forces

Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (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 + 1.0E										Iterations 27
Gust Response Factor 1.10					Sds 0.22					Ss 0.20
Dead Load Factor 0.90			Seismic Load Factor 1.00			Sd1 0.10				S1 0.07
Wind Load Factor 0.00			Structure Frequency 0.33			SA 0.03		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	-37.95	-2.65	0.00	-354.78	0.00	354.78	4390.37	2195.18	10447.7	5231.64	0.00	0.00	0.00	0.076
2.00	-37.44	-2.65	0.00	-349.47	0.00	349.47	4366.62	2183.31	10288.9	5152.14	0.00	0.00	-0.01	0.076
4.00	-36.94	-2.65	0.00	-344.16	0.00	344.16	4342.50	2171.25	10130.4	5072.75	0.01	0.01	-0.01	0.076
6.00	-36.44	-2.64	0.00	-338.86	0.00	338.86	4318.00	2159.00	9972.16	4993.49	0.01	0.01	-0.02	0.076
8.00	-35.94	-2.63	0.00	-333.58	0.00	333.58	4293.12	2146.56	9814.16	4914.37	0.02	0.02	-0.03	0.076
10.00	-35.45	-2.62	0.00	-328.31	0.00	328.31	4267.86	2133.93	9656.46	4835.41	0.04	0.04	-0.04	0.076
12.00	-34.96	-2.61	0.00	-323.07	0.00	323.07	4242.22	2121.11	9499.10	4756.61	0.05	0.05	-0.04	0.076
14.00	-34.48	-2.60	0.00	-317.84	0.00	317.84	4216.20	2108.10	9342.10	4677.99	0.07	0.07	-0.05	0.076
16.00	-34.00	-2.59	0.00	-312.64	0.00	312.64	4189.80	2094.90	9185.49	4599.57	0.10	0.10	-0.06	0.076
18.00	-33.53	-2.58	0.00	-307.47	0.00	307.47	4163.03	2081.51	9029.29	4521.36	0.12	0.12	-0.07	0.076
20.00	-33.06	-2.56	0.00	-302.32	0.00	302.32	4135.87	2067.94	8873.53	4443.36	0.15	0.15	-0.07	0.076
22.00	-32.59	-2.55	0.00	-297.19	0.00	297.19	4108.34	2054.17	8718.25	4365.60	0.18	0.18	-0.08	0.076
24.00	-32.13	-2.54	0.00	-292.09	0.00	292.09	4080.43	2040.21	8563.45	4288.09	0.22	0.22	-0.09	0.076
26.00	-31.67	-2.52	0.00	-287.02	0.00	287.02	4052.14	2026.07	8409.18	4210.84	0.26	0.26	-0.10	0.076
28.00	-31.21	-2.51	0.00	-281.97	0.00	281.97	4023.46	2011.73	8255.45	4133.86	0.30	0.30	-0.11	0.076
30.00	-30.76	-2.50	0.00	-276.95	0.00	276.95	3994.42	1997.21	8102.30	4057.17	0.35	0.35	-0.11	0.076
32.00	-30.32	-2.48	0.00	-271.95	0.00	271.95	3964.99	1982.49	7949.75	3980.79	0.40	0.40	-0.12	0.076
34.00	-29.87	-2.47	0.00	-266.99	0.00	266.99	3935.18	1967.59	7797.83	3904.71	0.45	0.45	-0.13	0.076
36.00	-29.44	-2.46	0.00	-262.04	0.00	262.04	3904.99	1952.50	7646.57	3828.97	0.51	0.51	-0.14	0.076
38.00	-29.00	-2.44	0.00	-257.13	0.00	257.13	3874.43	1937.21	7495.98	3753.56	0.57	0.57	-0.15	0.076
40.00	-28.57	-2.43	0.00	-252.24	0.00	252.24	3843.48	1921.74	7346.10	3678.51	0.64	0.64	-0.16	0.076
42.00	-28.15	-2.42	0.00	-247.38	0.00	247.38	3812.16	1906.08	7196.95	3603.83	0.70	0.70	-0.17	0.076
44.00	-27.73	-2.41	0.00	-242.54	0.00	242.54	3780.46	1890.23	7048.57	3529.52	0.78	0.78	-0.18	0.076
46.00	-27.31	-2.39	0.00	-237.73	0.00	237.73	3748.38	1874.19	6900.97	3455.62	0.85	0.85	-0.19	0.076
47.00	-27.04	-2.38	0.00	-235.34	0.00	235.34	3732.20	1866.10	6827.48	3418.81	0.89	0.89	-0.19	0.076
47.50	-26.94	-2.38	0.00	-234.15	0.00	234.15	3724.07	1862.03	6790.81	3400.45	0.91	0.91	-0.20	0.076
48.00	-26.76	-2.37	0.00	-232.96	0.00	232.96	3715.92	1857.96	6754.19	3382.11	0.93	0.93	-0.20	0.076
50.00	-26.02	-2.34	0.00	-228.22	0.00	228.22	3683.08	1841.54	6608.25	3309.03	1.02	1.02	-0.21	0.076
52.00	-25.29	-2.31	0.00	-223.53	0.00	223.53	3649.86	1824.93	6463.17	3236.39	1.11	1.11	-0.22	0.076
53.25	-24.84	-2.29	0.00	-220.65	0.00	220.65	3673.19	1836.60	6564.80	3287.28	1.17	1.17	-0.22	0.074
54.00	-24.69	-2.29	0.00	-218.93	0.00	218.93	3660.74	1830.37	6510.40	3260.04	1.20	1.20	-0.23	0.074
56.00	-24.29	-2.27	0.00	-214.35	0.00	214.35	3627.27	1813.63	6365.92	3187.69	1.30	1.30	-0.24	0.074
58.00	-23.89	-2.26	0.00	-209.81	0.00	209.81	3593.41	1796.71	6222.36	3115.80	1.40	1.40	-0.25	0.074
60.00	-23.50	-2.25	0.00	-205.28	0.00	205.28	3559.18	1779.59	6079.73	3044.38	1.51	1.51	-0.26	0.074
62.00	-23.11	-2.24	0.00	-200.78	0.00	200.78	3524.57	1762.29	5938.07	2973.45	1.62	1.62	-0.27	0.074
64.00	-22.72	-2.23	0.00	-196.31	0.00	196.31	3489.59	1744.79	5797.40	2903.01	1.74	1.74	-0.28	0.074
66.00	-22.34	-2.22	0.00	-191.85	0.00	191.85	3454.22	1727.11	5657.75	2833.08	1.86	1.86	-0.29	0.074
68.00	-21.97	-2.21	0.00	-187.42	0.00	187.42	3418.47	1709.24	5519.14	2763.67	1.98	1.98	-0.30	0.074
70.00	-21.59	-2.20	0.00	-183.00	0.00	183.00	3382.35	1691.17	5381.61	2694.80	2.11	2.11	-0.32	0.074
72.00	-21.22	-2.20	0.00	-178.59	0.00	178.59	3345.84	1672.92	5245.17	2626.49	2.25	2.25	-0.33	0.074
74.00	-20.86	-2.19	0.00	-174.20	0.00	174.20	3308.96	1654.48	5109.86	2558.73	2.39	2.39	-0.34	0.074
76.00	-20.50	-2.19	0.00	-169.81	0.00	169.81	3271.70	1635.85	4975.70	2491.55	2.53	2.53	-0.35	0.074
78.00	-20.14	-2.19	0.00	-165.43	0.00	165.43	3230.14	1615.07	4836.86	2422.03	2.68	2.68	-0.36	0.075
80.00	-19.73	-2.19	0.00	-161.05	0.00	161.05	3180.13	1590.07	4687.51	2347.24	2.83	2.83	-0.38	0.075
82.00	-19.38	-2.19	0.00	-156.67	0.00	156.67	3130.13	1565.06	4540.49	2273.62	3.00	3.00	-0.39	0.075
84.00	-19.04	-2.19	0.00	-152.29	0.00	152.29	3080.12	1540.06	4395.82	2201.18	3.16	3.16	-0.40	0.075
86.00	-18.70	-2.20	0.00	-147.90	0.00	147.90	3030.11	1515.05	4253.50	2129.91	3.33	3.33	-0.42	0.076

Calculated Forces

Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (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	-18.36	-2.20	0.00	-143.51	0.00	143.51	2980.10	1490.05	4113.51	2059.81	3.51	-0.43	0.076
90.00	-18.03	-2.20	0.00	-139.11	0.00	139.11	2930.09	1465.05	3975.87	1990.89	3.69	-0.44	0.076
92.00	-17.71	-2.20	0.00	-134.71	0.00	134.71	2880.09	1440.04	3840.56	1923.14	3.88	-0.46	0.076
94.00	-17.38	-2.20	0.00	-130.30	0.00	130.30	2830.08	1415.04	3707.61	1856.56	4.08	-0.47	0.076
96.00	-17.07	-2.20	0.00	-125.90	0.00	125.90	2780.07	1390.03	3576.99	1791.15	4.28	-0.49	0.076
97.00	-16.91	-2.21	0.00	-123.69	0.00	123.69	2755.06	1377.53	3512.56	1758.89	4.38	-0.49	0.076
98.00	-16.65	-2.21	0.00	-121.48	0.00	121.48	2730.06	1365.03	3448.72	1726.92	4.48	-0.50	0.076
100.00	-16.15	-2.21	0.00	-117.07	0.00	117.07	2680.05	1340.03	3322.78	1663.86	4.70	-0.52	0.076
101.00	-15.91	-2.21	0.00	-114.86	0.00	114.86	2260.99	1130.50	2846.84	1425.54	4.81	-0.53	0.088
102.00	-15.77	-2.21	0.00	-112.66	0.00	112.66	2242.36	1121.18	2797.13	1400.64	4.92	-0.53	0.087
104.00	-15.50	-2.21	0.00	-108.24	0.00	108.24	2200.69	1100.35	2693.61	1348.81	5.14	-0.55	0.087
106.00	-15.23	-2.21	0.00	-103.82	0.00	103.82	2159.02	1079.51	2592.04	1297.95	5.38	-0.57	0.087
108.00	-14.97	-2.21	0.00	-99.40	0.00	99.40	2117.34	1058.67	2492.43	1248.07	5.62	-0.59	0.087
110.00	-14.65	-2.22	0.00	-94.97	0.00	94.97	2075.67	1037.84	2394.76	1199.16	5.87	-0.61	0.086
112.00	-14.39	-2.22	0.00	-90.53	0.00	90.53	2034.00	1017.00	2299.05	1151.23	6.13	-0.62	0.086
114.00	-14.14	-2.22	0.00	-86.10	0.00	86.10	1992.32	996.16	2205.29	1104.29	6.40	-0.64	0.085
116.00	-13.89	-2.22	0.00	-81.66	0.00	81.66	1950.65	975.32	2113.48	1058.31	6.67	-0.66	0.084
118.00	-13.65	-2.22	0.00	-77.21	0.00	77.21	1908.98	954.49	2023.63	1013.32	6.95	-0.68	0.083
120.00	-13.40	-2.23	0.00	-72.76	0.00	72.76	1867.30	933.65	1935.73	969.30	7.24	-0.70	0.082
122.00	-13.16	-2.23	0.00	-68.31	0.00	68.31	1825.63	912.81	1849.77	926.26	7.54	-0.72	0.081
124.00	-12.93	-2.23	0.00	-63.86	0.00	63.86	1783.96	891.98	1765.78	884.20	7.85	-0.74	0.079
126.00	-12.70	-2.23	0.00	-59.40	0.00	59.40	1742.28	871.14	1683.73	843.12	8.16	-0.76	0.078
128.00	-12.47	-2.23	0.00	-54.94	0.00	54.94	1700.61	850.30	1603.63	803.01	8.49	-0.78	0.076
130.00	-10.18	-2.14	0.00	-50.49	0.00	50.49	1658.94	829.47	1525.49	763.88	8.82	-0.80	0.072
132.00	-9.97	-2.13	0.00	-46.22	0.00	46.22	1617.26	808.63	1449.30	725.73	9.16	-0.82	0.070
134.00	-9.77	-2.12	0.00	-41.96	0.00	41.96	1575.59	787.79	1375.06	688.55	9.50	-0.84	0.067
136.00	-9.58	-2.11	0.00	-37.71	0.00	37.71	1533.91	766.96	1302.77	652.35	9.86	-0.86	0.064
138.00	-9.39	-2.10	0.00	-33.48	0.00	33.48	1492.24	746.12	1232.44	617.13	10.22	-0.88	0.061
140.00	-7.25	-1.86	0.00	-29.27	0.00	29.27	1450.57	725.28	1164.05	582.89	10.59	-0.89	0.055
142.00	-7.07	-1.85	0.00	-25.55	0.00	25.55	1408.89	704.45	1097.62	549.63	10.97	-0.91	0.052
144.00	-6.91	-1.83	0.00	-21.86	0.00	21.86	1367.22	683.61	1033.14	517.34	11.35	-0.92	0.047
146.00	-6.77	-1.81	0.00	-18.20	0.00	18.20	1325.55	662.77	970.62	486.03	11.74	-0.94	0.043
148.00	-6.63	-1.79	0.00	-14.57	0.00	14.57	1283.87	641.94	910.04	455.70	12.14	-0.95	0.037
148.25	-6.61	-1.79	0.00	-14.13	0.00	14.13	1278.66	639.33	902.61	451.97	12.19	-0.95	0.036
149.00	-4.31	-1.32	0.00	-12.78	0.00	12.78	1263.04	631.52	880.49	440.90	12.34	-0.96	0.032
150.00	-4.21	-1.31	0.00	-11.46	0.00	11.46	1242.20	621.10	851.42	426.34	12.54	-0.96	0.030
150.50	-4.16	-1.30	0.00	-10.81	0.00	10.81	761.18	380.59	536.85	268.82	12.64	-0.97	0.046
152.00	-4.09	-1.29	0.00	-8.86	0.00	8.86	742.42	371.21	510.58	255.67	12.95	-0.97	0.040
154.00	-4.01	-1.27	0.00	-6.29	0.00	6.29	717.42	358.71	476.59	238.65	13.36	-0.98	0.032
156.00	-3.92	-1.25	0.00	-3.75	0.00	3.75	692.41	346.21	443.76	222.21	13.77	-0.99	0.023
158.00	-3.84	-1.24	0.00	-1.24	0.00	1.24	667.41	333.71	412.11	206.36	14.19	-1.00	0.012
159.00	0.00	-1.17	0.00	0.00	0.00	0.00	654.91	327.45	396.72	198.65	14.40	-1.00	0.000

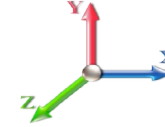
Wind Loading - Shaft

Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (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

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 28

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	0.85	7.442	8.19	272.47	0.650	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.85	7.442	8.19	269.83	0.663 *	0.000	2.00	9.803	6.50	53.2	0.0	466.2
4.00		1.00	0.85	7.442	8.19	267.18	0.665 *	0.000	2.00	9.708	6.45	52.8	0.0	461.6
6.00		1.00	0.85	7.442	8.19	264.53	0.667 *	0.000	2.00	9.612	6.41	52.5	0.0	457.0
8.00		1.00	0.85	7.442	8.19	261.89	0.669 *	0.000	2.00	9.516	6.36	52.1	0.0	452.4
10.00		1.00	0.85	7.442	8.19	259.24	0.671 *	0.000	2.00	9.421	6.32	51.7	0.0	447.9
12.00		1.00	0.85	7.442	8.19	256.59	0.673 *	0.000	2.00	9.325	6.28	51.4	0.0	443.3
14.00		1.00	0.85	7.442	8.19	253.94	0.675 *	0.000	2.00	9.229	6.23	51.0	0.0	438.7
16.00		1.00	0.86	7.534	8.29	252.84	0.678 *	0.000	2.00	9.134	6.19	51.3	0.0	434.1
18.00		1.00	0.88	7.723	8.50	253.30	0.680 *	0.000	2.00	9.038	6.15	52.2	0.0	429.5
20.00		1.00	0.90	7.896	8.69	253.40	0.683 *	0.000	2.00	8.942	6.10	53.0	0.0	424.9
22.00		1.00	0.92	8.056	8.86	253.20	0.685 *	0.000	2.00	8.846	6.06	53.7	0.0	420.4
24.00		1.00	0.94	8.205	9.03	252.75	0.687 *	0.000	2.00	8.751	6.02	54.3	0.0	415.8
26.00		1.00	0.95	8.345	9.18	252.09	0.690 *	0.000	2.00	8.655	5.97	54.8	0.0	411.2
28.00		1.00	0.97	8.476	9.32	251.23	0.693 *	0.000	2.00	8.559	5.93	55.3	0.0	406.6
30.00		1.00	0.98	8.600	9.46	250.22	0.695 *	0.000	2.00	8.464	5.89	55.7	0.0	402.0
32.00		1.00	1.00	8.717	9.59	249.06	0.698 *	0.000	2.00	8.368	5.84	56.0	0.0	397.5
34.00		1.00	1.01	8.829	9.71	247.77	0.701 *	0.000	2.00	8.272	5.80	56.3	0.0	392.9
36.00		1.00	1.02	8.936	9.83	246.37	0.704 *	0.000	2.00	8.176	5.75	56.6	0.0	388.3
38.00		1.00	1.03	9.039	9.94	244.85	0.707 *	0.000	2.00	8.081	5.71	56.8	0.0	383.7
40.00		1.00	1.04	9.137	10.05	243.25	0.710 *	0.000	2.00	7.985	5.67	57.0	0.0	379.1
42.00		1.00	1.05	9.231	10.15	241.55	0.713 *	0.000	2.00	7.889	5.62	57.1	0.0	374.6
44.00		1.00	1.06	9.322	10.25	239.77	0.716 *	0.000	2.00	7.794	5.58	57.2	0.0	370.0
46.00		1.00	1.07	9.410	10.35	237.92	0.719 *	0.000	2.00	7.698	5.54	57.3	0.0	365.4
47.00	Appurtenance(s)	1.00	1.08	9.452	10.40	236.97	0.722 *	0.000	1.00	3.813	2.75	28.6	0.0	181.0
47.50	Bot - Section 2	1.00	1.08	9.473	10.42	236.49	0.723 *	0.000	0.50	1.898	1.37	14.3	0.0	90.1
48.00		1.00	1.08	9.494	10.44	236.00	0.724 *	0.000	0.50	1.923	1.39	14.5	0.0	181.1
50.00		1.00	1.09	9.576	10.53	234.01	0.726 *	0.000	2.00	7.633	5.54	58.4	0.0	718.5
52.00		1.00	1.10	9.656	10.62	231.97	0.701 *	0.000	2.00	7.538	5.28	56.1	0.0	709.4
53.25	Top - Section 1	1.00	1.11	9.704	10.67	230.66	0.704 *	0.000	1.25	4.662	3.28	35.0	0.0	438.7
54.00		1.00	1.11	9.733	10.71	233.88	0.701 *	0.000	0.75	2.780	1.95	20.9	0.0	131.9
56.00		1.00	1.12	9.807	10.79	231.74	0.703 *	0.000	2.00	7.346	5.17	55.7	0.0	348.6
58.00		1.00	1.13	9.880	10.87	229.54	0.706 *	0.000	2.00	7.251	5.12	55.7	0.0	344.0
60.00		1.00	1.14	9.951	10.95	227.30	0.710 *	0.000	2.00	7.155	5.08	55.6	0.0	339.4
62.00		1.00	1.14	10.020	11.02	225.02	0.713 *	0.000	2.00	7.059	5.04	55.5	0.0	334.8
64.00		1.00	1.15	10.087	11.10	222.69	0.717 *	0.000	2.00	6.963	4.99	55.4	0.0	330.2
66.00		1.00	1.16	10.153	11.17	220.32	0.720 *	0.000	2.00	6.868	4.95	55.3	0.0	325.7
68.00		1.00	1.17	10.217	11.24	217.91	0.724 *	0.000	2.00	6.772	4.90	55.1	0.0	321.1
70.00		1.00	1.17	10.279	11.31	215.47	0.728 *	0.000	2.00	6.676	4.86	55.0	0.0	316.5
72.00		1.00	1.18	10.340	11.37	212.98	0.732 *	0.000	2.00	6.581	4.82	54.8	0.0	311.9
74.00		1.00	1.19	10.400	11.44	210.47	0.736 *	0.000	2.00	6.485	4.77	54.6	0.0	307.3
76.00		1.00	1.19	10.459	11.50	207.92	0.740 *	0.000	2.00	6.389	4.73	54.4	0.0	302.8
78.00		1.00	1.20	10.516	11.57	205.35	0.745 *	0.000	2.00	6.293	4.69	54.2	0.0	298.2
80.00	Appurtenance(s)	1.00	1.21	10.572	11.63	202.74	0.749 *	0.000	2.00	6.198	4.64	54.0	0.0	293.6
82.00		1.00	1.21	10.627	11.69	200.10	0.754 *	0.000	2.00	6.102	4.60	53.8	0.0	289.0
84.00		1.00	1.22	10.681	11.75	197.44	0.759 *	0.000	2.00	6.006	4.56	53.5	0.0	284.4
86.00		1.00	1.23	10.734	11.81	194.75	0.763 *	0.000	2.00	5.911	4.51	53.3	0.0	279.9

Wind Loading - Shaft

Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (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	1.00	1.23	10.787	11.87	192.04	0.769 *	0.000	2.00	5.815	4.47	53.0	0.0	275.3
90.00	1.00	1.24	10.838	11.92	189.30	0.774 *	0.000	2.00	5.719	4.43	52.8	0.0	270.7
92.00	1.00	1.24	10.888	11.98	186.53	0.779 *	0.000	2.00	5.623	4.38	52.5	0.0	266.1
94.00	1.00	1.25	10.937	12.03	183.75	0.785 *	0.000	2.00	5.528	4.34	52.2	0.0	261.5
96.00	1.00	1.25	10.986	12.08	180.94	0.791 *	0.000	2.00	5.432	4.29	51.9	0.0	256.9
97.00 Bot - Section 3	1.00	1.26	11.010	12.11	179.52	0.795 *	0.000	1.00	2.680	2.13	25.8	0.0	126.8
98.00	1.00	1.26	11.034	12.14	178.11	0.798 *	0.000	1.00	2.709	2.16	26.2	0.0	232.6
100.00	1.00	1.27	11.081	12.19	175.26	0.803 *	0.000	2.00	5.346	4.29	52.3	0.0	458.9
101.00 Top - Section 2	1.00	1.27	11.104	12.21	173.82	0.808 *	0.000	1.00	2.637	2.13	26.0	0.0	226.3
102.00	1.00	1.27	11.127	12.24	175.96	0.804 *	0.000	1.00	2.613	2.10	25.7	0.0	103.2
104.00	1.00	1.28	11.173	12.29	173.08	0.809 *	0.000	2.00	5.155	4.17	51.2	0.0	203.5
106.00	1.00	1.28	11.218	12.34	170.18	0.815 *	0.000	2.00	5.059	4.13	50.9	0.0	199.7
108.00	1.00	1.29	11.262	12.39	167.25	0.822 *	0.000	2.00	4.964	4.08	50.6	0.0	195.9
110.00 Appurtenance(s)	1.00	1.29	11.305	12.44	164.31	0.830 *	0.000	2.00	4.868	4.04	50.2	0.0	192.0
112.00	1.00	1.30	11.348	12.48	161.36	0.761 *	0.000	2.00	4.772	3.63	45.4	0.0	188.2
114.00	1.00	1.30	11.391	12.53	158.38	0.768 *	0.000	2.00	4.676	3.59	45.0	0.0	184.4
116.00	1.00	1.31	11.432	12.58	155.39	0.774 *	0.000	2.00	4.581	3.55	44.6	0.0	180.6
118.00	1.00	1.31	11.474	12.62	152.39	0.781 *	0.000	2.00	4.485	3.50	44.2	0.0	176.8
120.00	1.00	1.32	11.514	12.67	149.36	0.788 *	0.000	2.00	4.389	3.46	43.8	0.0	173.0
122.00	1.00	1.32	11.554	12.71	146.32	0.796 *	0.000	2.00	4.294	3.42	43.4	0.0	169.1
124.00	1.00	1.32	11.594	12.75	143.27	0.803 *	0.000	2.00	4.198	3.37	43.0	0.0	165.3
126.00	1.00	1.33	11.633	12.80	140.20	0.812 *	0.000	2.00	4.102	3.33	42.6	0.0	161.5
128.00	1.00	1.33	11.672	12.84	137.12	0.820 *	0.000	2.00	4.006	3.29	42.2	0.0	157.7
130.00 Appurtenance(s)	1.00	1.34	11.710	12.88	134.02	0.829 *	0.000	2.00	3.911	3.24	41.8	0.0	153.9
132.00	1.00	1.34	11.748	12.92	130.91	0.838 *	0.000	2.00	3.815	3.20	41.3	0.0	150.1
134.00	1.00	1.35	11.785	12.96	127.79	1.200 *	0.000	2.00	3.719	4.46	57.9	0.0	146.2
136.00	1.00	1.35	11.822	13.00	124.65	1.200 *	0.000	2.00	3.624	4.35	56.5	0.0	142.4
138.00	1.00	1.35	11.858	13.04	121.50	1.200 *	0.000	2.00	3.528	4.23	55.2	0.0	138.6
140.00 Appurtenance(s)	1.00	1.36	11.894	13.08	118.34	1.200 *	0.000	2.00	3.432	4.12	53.9	0.0	134.8
142.00	1.00	1.36	11.930	13.12	115.16	1.200 *	0.000	2.00	3.336	4.00	52.5	0.0	131.0
144.00	1.00	1.37	11.965	13.16	111.98	1.200 *	0.000	2.00	3.241	3.89	51.2	0.0	127.1
146.00	1.00	1.37	12.000	13.20	108.78	1.200 *	0.000	2.00	3.145	3.77	49.8	0.0	123.3
148.00	1.00	1.37	12.034	13.24	105.57	1.200 *	0.000	2.00	3.049	3.66	48.4	0.0	119.5
148.25 Bot - Section 4	1.00	1.37	12.038	13.24	105.17	1.200 *	0.000	0.25	0.374	0.45	6.0	0.0	14.7
149.00 Appurtenance(s)	1.00	1.38	12.051	13.26	103.96	1.200 *	0.000	0.75	1.138	1.37	18.1	0.0	70.6
150.00	1.00	1.38	12.068	13.27	102.35	1.200 *	0.000	1.00	1.497	1.80	23.8	0.0	92.8
150.50 Top - Section 3	1.00	1.38	12.077	13.28	101.54	1.200 *	0.000	0.50	0.739	0.89	11.8	0.0	45.8
152.00	1.00	1.38	12.102	13.31	101.35	1.200 *	0.000	1.50	2.182	2.62	34.9	0.0	51.6
154.00	1.00	1.39	12.135	13.35	98.11	1.200 *	0.000	2.00	2.826	3.39	45.3	0.0	66.9
156.00	1.00	1.39	12.168	13.39	94.86	1.200 *	0.000	2.00	2.730	3.28	43.8	0.0	64.6
158.00	1.00	1.39	12.201	13.42	91.60	1.200 *	0.000	2.00	2.634	3.16	42.4	0.0	62.3
159.00 Appurtenance(s)	1.00	1.40	12.217	13.44	89.96	1.200 *	0.000	1.00	1.281	1.54	20.7	0.0	30.3

* Cf Adjusted by Linear Load Ra Effect

Totals:	159.00	4,123.9	23,733.6
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Discrete Appurtenance Forces

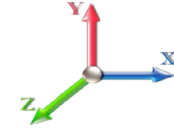
Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 28

No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa 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	159.00	DC6-48-60-18-8F	2	12.265	13.492	1.00	1.00	1.84	63.60	0.000	3.000	24.82	0.00	74.47
2	159.00	7770.00	3	12.265	13.492	0.77	1.00	13.31	231.00	0.000	3.000	179.51	0.00	538.54
3	159.00	P65-16-XLH-RR	3	12.265	13.492	0.71	0.90	18.17	306.00	0.000	3.000	245.17	0.00	735.50
4	159.00	LGP21401	6	12.265	13.492	0.50	1.00	3.87	84.60	0.000	3.000	52.21	0.00	156.64
5	159.00	RRUS 11-700	3	12.265	13.492	0.67	1.00	5.07	153.00	0.000	3.000	68.34	0.00	205.02
6	159.00	RRUS 32 B2	3	12.265	13.492	0.67	1.00	5.51	159.00	0.000	3.000	74.30	0.00	222.91
7	159.00	DB404-B	1	12.265	13.492	1.00	1.00	0.00	14.00	0.000	3.000	0.00	0.00	0.00
8	159.00	QS66512-2	3	12.265	13.492	0.83	0.90	20.19	333.00	0.000	3.000	272.47	0.00	817.40
9	159.00	DBC0061F1V51-2	3	12.265	13.492	0.50	1.00	0.65	76.20	0.000	3.000	8.70	0.00	26.11
10	159.00	RRUS 32 B30	3	12.265	13.492	0.67	1.00	5.51	180.00	0.000	3.000	74.30	0.00	222.91
11	159.00	RMQP-4096-HK Plat. +	1	12.217	13.439	1.00	1.00	48.10	2645.00	0.000	0.000	646.41	0.00	0.00
12	149.00	RFS - APXVSP18-C-A20	3	12.085	13.294	0.62	0.75	15.71	318.00	0.000	2.000	208.78	0.00	417.56
13	149.00	HRK12 (Handrail Kit)	1	12.051	13.256	1.00	1.00	6.75	261.72	0.000	0.000	89.48	0.00	0.00
14	149.00	RFS - APXVTM14-C-I20	3	12.085	13.294	0.59	0.75	11.18	168.00	0.000	2.000	148.67	0.00	297.34
15	149.00	Alcatel Lucent -	3	12.085	13.294	0.50	0.75	6.11	210.00	0.000	2.000	81.16	0.00	162.32
16	149.00	RFS - ACU-A20-N - RET	4	12.085	13.294	0.38	0.75	0.21	4.00	0.000	2.000	2.79	0.00	5.58
17	149.00	Alcatel Lucent - 1900 MHz	3	12.085	13.294	0.50	0.75	5.73	132.00	0.000	2.000	76.15	0.00	152.30
18	149.00	Alcatel Lucent - 800 MHz	3	12.085	13.294	0.50	0.75	3.75	159.00	0.000	2.000	49.90	0.00	99.80
19	149.00	Alcatel Lucent - 800 MHz	3	12.085	13.294	0.50	0.75	1.18	26.40	0.000	2.000	15.63	0.00	31.26
20	149.00	Low Profile Platform	1	12.051	13.256	1.00	1.00	35.00	1200.00	0.000	0.000	463.97	0.00	0.00
21	140.00	Andrew - ATSBT-TOP-FM	3	11.939	13.132	0.50	0.75	0.30	5.40	0.000	2.500	3.96	0.00	9.90
22	140.00	RFS -	3	11.939	13.132	0.50	0.75	1.76	47.55	0.000	2.500	23.16	0.00	57.91
23	140.00	APXVAA24_43-U-A20	3	11.939	13.132	0.55	0.75	33.24	304.20	0.000	2.500	436.58	0.00	1091.44
24	140.00	APX16DWV-16DWVS-E-A	3	11.939	13.132	0.46	0.75	9.22	122.10	0.000	2.500	121.09	0.00	302.73
25	140.00	FR90-16-XXDP	6	11.939	13.132	0.51	0.75	13.34	108.00	0.000	2.500	175.21	0.00	438.02
26	140.00	Low Profile Platform w/	1	11.894	13.084	1.00	1.00	34.00	1600.00	0.000	0.000	444.84	0.00	0.00
27	130.00	742 213_2110_P45_02.0	3	11.729	12.902	0.58	0.80	5.44	49.50	0.000	1.000	70.23	0.00	70.23
28	130.00	BXA-70063/6CF	3	11.729	12.902	0.60	0.80	14.33	198.00	0.000	1.000	184.83	0.00	184.83
29	130.00	LPA-80063/6CF	6	11.729	12.902	0.76	0.80	45.50	456.00	0.000	1.000	587.05	0.00	587.05
30	130.00	BXA-171063-12BF	3	11.729	12.902	0.70	0.80	10.80	192.00	0.000	1.000	139.31	0.00	139.31
31	130.00	RRH2X60-AWS	3	11.729	12.902	0.54	0.80	5.63	165.00	0.000	1.000	72.61	0.00	72.61
32	130.00	FD9R6004/2C-3L -	6	11.729	12.902	0.40	0.80	0.86	18.60	0.000	1.000	11.15	0.00	11.15
33	130.00	DB-T1-6Z-8AB-0Z - Distri	1	11.729	12.902	0.57	0.80	2.73	18.90	0.000	1.000	35.18	0.00	35.18
34	130.00	Low Profile Platform	1	11.710	12.881	1.00	1.00	22.00	1200.00	0.000	0.000	283.38	0.00	0.00
35	110.00	4 ft Standoff	1	11.305	12.436	1.00	1.00	3.50	53.32	0.000	0.000	43.53	0.00	0.00
36	110.00	SCL329-HL	1	11.423	12.565	1.00	1.00	2.22	10.40	0.000	5.550	27.90	0.00	154.82
37	80.00	SCL329-HL	1	10.723	11.795	1.00	1.00	2.22	10.40	0.000	5.550	26.18	0.00	145.32
38	80.00	4 ft Standoff	1	10.572	11.629	1.00	1.00	3.50	53.32	0.000	0.000	40.70	0.00	0.00
39	47.00	4 ft Standoff	1	9.452	10.398	1.00	1.00	3.50	53.32	0.000	0.000	36.39	0.00	0.00
40	47.00	Decibel 26DB GPS	1	9.576	10.534	1.00	1.00	0.16	10.00	0.000	3.000	1.69	0.00	5.06

Totals: 11,400.53

5,547.73

Total Applied Force Summary

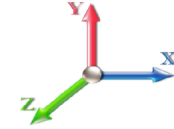
Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.0D + 1.0W 60 mph Wind

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		53.17	564.17	0.00	0.00
4.00		52.81	559.59	0.00	0.00
6.00		52.46	555.00	0.00	0.00
8.00		52.10	550.42	0.00	0.00
10.00		51.74	545.84	0.00	0.00
12.00		51.39	541.26	0.00	0.00
14.00		51.03	536.68	0.00	0.00
16.00		51.30	532.10	0.00	0.00
18.00		52.22	527.52	0.00	0.00
20.00		53.01	522.94	0.00	0.00
22.00		53.70	518.36	0.00	0.00
24.00		54.30	513.78	0.00	0.00
26.00		54.82	509.20	0.00	0.00
28.00		55.28	504.62	0.00	0.00
30.00		55.67	500.03	0.00	0.00
32.00		56.02	495.45	0.00	0.00
34.00		56.32	490.87	0.00	0.00
36.00		56.57	486.29	0.00	0.00
38.00		56.78	481.71	0.00	0.00
40.00		56.96	477.13	0.00	0.00
42.00		57.11	472.55	0.00	0.00
44.00		57.22	467.97	0.00	0.00
46.00		57.31	463.39	0.00	0.00
47.00	(2) attachments	66.69	293.30	0.00	5.06
47.50		14.30	114.56	0.00	0.00
48.00		14.54	205.57	0.00	0.00
50.00		58.38	816.54	0.00	0.00
52.00		56.12	807.05	0.00	0.00
53.25		35.02	499.76	0.00	0.00
54.00		20.86	168.52	0.00	0.00
56.00		55.73	446.24	0.00	0.00
58.00		55.67	441.66	0.00	0.00
60.00		55.59	437.08	0.00	0.00
62.00		55.50	432.50	0.00	0.00
64.00		55.39	427.92	0.00	0.00
66.00		55.26	423.33	0.00	0.00
68.00		55.12	418.75	0.00	0.00
70.00		54.96	414.17	0.00	0.00
72.00		54.79	409.59	0.00	0.00
74.00		54.61	405.01	0.00	0.00
76.00		54.42	400.43	0.00	0.00
78.00		54.21	395.85	0.00	0.00
80.00	(2) attachments	120.89	454.99	0.00	145.32
82.00		53.77	385.65	0.00	0.00
84.00		53.53	381.07	0.00	0.00
86.00		53.28	376.49	0.00	0.00

Total Applied Force Summary

Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (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		53.03	371.91	0.00	0.00
90.00		52.76	367.32	0.00	0.00
92.00		52.48	362.74	0.00	0.00
94.00		52.20	358.16	0.00	0.00
96.00		51.90	353.58	0.00	0.00
97.00		25.81	175.07	0.00	0.00
98.00		26.25	280.92	0.00	0.00
100.00		52.32	555.55	0.00	0.00
101.00		26.02	274.63	0.00	0.00
102.00		25.71	151.50	0.00	0.00
104.00		51.23	300.13	0.00	0.00
106.00		50.90	296.31	0.00	0.00
108.00		50.56	292.49	0.00	0.00
110.00	(2) attachments	121.64	352.40	0.00	154.82
112.00		45.36	283.82	0.00	0.00
114.00		44.99	280.00	0.00	0.00
116.00		44.60	276.18	0.00	0.00
118.00		44.21	272.37	0.00	0.00
120.00		43.82	268.55	0.00	0.00
122.00		43.42	264.73	0.00	0.00
124.00		43.01	260.91	0.00	0.00
126.00		42.60	257.10	0.00	0.00
128.00		42.18	253.28	0.00	0.00
130.00	(26) attachments	1425.49	2547.46	0.00	1100.35
132.00		41.33	232.06	0.00	0.00
134.00		69.53	214.67	0.00	0.00
136.00		68.25	210.85	0.00	0.00
138.00		66.96	207.03	0.00	0.00
140.00	(19) attachments	1270.50	2390.47	0.00	1899.99
142.00		64.35	199.40	0.00	0.00
144.00		63.03	171.82	0.00	0.00
146.00		61.70	160.08	0.00	0.00
148.00		60.35	156.27	0.00	0.00
148.25		7.44	19.26	0.00	0.00
149.00	(24) attachments	1159.12	2563.51	0.00	1166.18
150.00		29.81	111.18	0.00	0.00
150.50		14.77	55.02	0.00	0.00
152.00		43.84	75.40	0.00	0.00
154.00		57.28	95.98	0.00	0.00
156.00		55.90	93.69	0.00	0.00
158.00		54.50	91.40	0.00	0.00
159.00	(31) attachments	1672.95	4290.24	0.00	2999.50
Totals:		9,832.04	42,168.33	0.00	7,471.22

Linear Appurtenance Segment Forces (Factored)

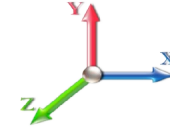
Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 28

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	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.106	1.019	7.442	0.00	24.96
2.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.106	1.019	7.442	0.00	0.64
2.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.106	1.019	7.442	0.00	3.20
2.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.106	1.019	7.442	0.00	1.04
2.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.106	1.019	7.442	0.00	1.04
2.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.106	1.019	7.442	0.00	0.32
4.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.107	1.022	7.442	0.00	24.96
4.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.107	1.022	7.442	0.00	0.64
4.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.107	1.022	7.442	0.00	3.20
4.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.107	1.022	7.442	0.00	1.04
4.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.107	1.022	7.442	0.00	1.04
4.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.107	1.022	7.442	0.00	0.32
6.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.109	1.026	7.442	0.00	24.96
6.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.109	1.026	7.442	0.00	0.64
6.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.109	1.026	7.442	0.00	3.20
6.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.109	1.026	7.442	0.00	1.04
6.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.026	7.442	0.00	1.04
6.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.109	1.026	7.442	0.00	0.32
8.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.110	1.029	7.442	0.00	24.96
8.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.110	1.029	7.442	0.00	0.64
8.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.110	1.029	7.442	0.00	3.20
8.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.110	1.029	7.442	0.00	1.04
8.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.110	1.029	7.442	0.00	1.04
8.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.110	1.029	7.442	0.00	0.32
10.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.111	1.032	7.442	0.00	24.96
10.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.111	1.032	7.442	0.00	0.64
10.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.111	1.032	7.442	0.00	3.20
10.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.111	1.032	7.442	0.00	1.04
10.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.111	1.032	7.442	0.00	1.04
10.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.111	1.032	7.442	0.00	0.32
12.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.112	1.036	7.442	0.00	24.96
12.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.112	1.036	7.442	0.00	0.64
12.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.112	1.036	7.442	0.00	3.20
12.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.112	1.036	7.442	0.00	1.04
12.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.112	1.036	7.442	0.00	1.04
12.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.112	1.036	7.442	0.00	0.32
14.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.113	1.039	7.442	0.00	24.96
14.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.113	1.039	7.442	0.00	0.64
14.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.113	1.039	7.442	0.00	3.20
14.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.113	1.039	7.442	0.00	1.04
14.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.039	7.442	0.00	1.04
14.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.113	1.039	7.442	0.00	0.32
16.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.114	1.043	7.534	0.00	24.96
16.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.114	1.043	7.534	0.00	0.64
16.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.114	1.043	7.534	0.00	3.20
16.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.114	1.043	7.534	0.00	1.04
16.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.114	1.043	7.534	0.00	1.04

Linear Appurtenance Segment Forces (Factored)

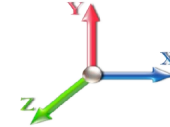
Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 28

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)
16.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.114	1.043	7.534	0.00	0.32
18.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.115	1.046	7.723	0.00	24.96
18.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.115	1.046	7.723	0.00	0.64
18.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.115	1.046	7.723	0.00	3.20
18.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.115	1.046	7.723	0.00	1.04
18.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.115	1.046	7.723	0.00	1.04
18.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.115	1.046	7.723	0.00	0.32
20.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.117	1.050	7.896	0.00	24.96
20.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.117	1.050	7.896	0.00	0.64
20.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.117	1.050	7.896	0.00	3.20
20.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.117	1.050	7.896	0.00	1.04
20.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.050	7.896	0.00	1.04
20.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.117	1.050	7.896	0.00	0.32
22.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.118	1.054	8.056	0.00	24.96
22.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.118	1.054	8.056	0.00	0.64
22.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.118	1.054	8.056	0.00	3.20
22.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.118	1.054	8.056	0.00	1.04
22.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.054	8.056	0.00	1.04
22.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.118	1.054	8.056	0.00	0.32
24.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.119	1.058	8.205	0.00	24.96
24.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.119	1.058	8.205	0.00	0.64
24.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.119	1.058	8.205	0.00	3.20
24.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.119	1.058	8.205	0.00	1.04
24.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.119	1.058	8.205	0.00	1.04
24.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.119	1.058	8.205	0.00	0.32
26.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.121	1.062	8.345	0.00	24.96
26.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.121	1.062	8.345	0.00	0.64
26.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.121	1.062	8.345	0.00	3.20
26.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.121	1.062	8.345	0.00	1.04
26.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.121	1.062	8.345	0.00	1.04
26.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.121	1.062	8.345	0.00	0.32
28.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.122	1.066	8.476	0.00	24.96
28.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.122	1.066	8.476	0.00	0.64
28.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.122	1.066	8.476	0.00	3.20
28.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.122	1.066	8.476	0.00	1.04
28.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.066	8.476	0.00	1.04
28.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.122	1.066	8.476	0.00	0.32
30.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.123	1.070	8.600	0.00	24.96
30.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.123	1.070	8.600	0.00	0.64
30.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.123	1.070	8.600	0.00	3.20
30.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.123	1.070	8.600	0.00	1.04
30.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.123	1.070	8.600	0.00	1.04
30.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.123	1.070	8.600	0.00	0.32
32.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.074	8.717	0.00	24.96
32.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.125	1.074	8.717	0.00	0.64
32.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.125	1.074	8.717	0.00	3.20
32.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.125	1.074	8.717	0.00	1.04

Linear Appurtenance Segment Forces (Factored)

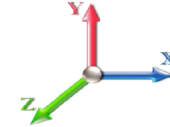
Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 28

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)
32.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.074	8.717	0.00	1.04
32.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.125	1.074	8.717	0.00	0.32
34.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.126	1.078	8.829	0.00	24.96
34.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.126	1.078	8.829	0.00	0.64
34.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.126	1.078	8.829	0.00	3.20
34.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.126	1.078	8.829	0.00	1.04
34.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.126	1.078	8.829	0.00	1.04
34.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.126	1.078	8.829	0.00	0.32
36.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.128	1.083	8.936	0.00	24.96
36.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.128	1.083	8.936	0.00	0.64
36.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.128	1.083	8.936	0.00	3.20
36.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.128	1.083	8.936	0.00	1.04
36.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.128	1.083	8.936	0.00	1.04
36.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.128	1.083	8.936	0.00	0.32
38.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.129	1.087	9.039	0.00	24.96
38.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.129	1.087	9.039	0.00	0.64
38.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.129	1.087	9.039	0.00	3.20
38.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.129	1.087	9.039	0.00	1.04
38.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.129	1.087	9.039	0.00	1.04
38.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.129	1.087	9.039	0.00	0.32
40.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.131	1.092	9.137	0.00	24.96
40.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.131	1.092	9.137	0.00	0.64
40.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.131	1.092	9.137	0.00	3.20
40.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.131	1.092	9.137	0.00	1.04
40.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.131	1.092	9.137	0.00	1.04
40.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.131	1.092	9.137	0.00	0.32
42.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.132	1.097	9.231	0.00	24.96
42.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.132	1.097	9.231	0.00	0.64
42.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.132	1.097	9.231	0.00	3.20
42.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.132	1.097	9.231	0.00	1.04
42.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.132	1.097	9.231	0.00	1.04
42.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.132	1.097	9.231	0.00	0.32
44.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.134	1.102	9.322	0.00	24.96
44.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.134	1.102	9.322	0.00	0.64
44.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.134	1.102	9.322	0.00	3.20
44.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.134	1.102	9.322	0.00	1.04
44.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.134	1.102	9.322	0.00	1.04
44.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.134	1.102	9.322	0.00	0.32
46.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.136	1.107	9.410	0.00	24.96
46.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.136	1.107	9.410	0.00	0.64
46.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.136	1.107	9.410	0.00	3.20
46.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.136	1.107	9.410	0.00	1.04
46.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.136	1.107	9.410	0.00	1.04
46.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.136	1.107	9.410	0.00	0.32
47.00	1 5/8" Coax	Yes	1.00	0.000	2.00	0.17	0.00	0.137	1.110	9.452	0.00	12.48
47.00	1/2" Fiber	Yes	1.00	0.000	1.00	0.08	0.00	0.137	1.110	9.452	0.00	0.32
47.00	3/4" DC	Yes	1.00	0.000	1.50	0.13	0.00	0.137	1.110	9.452	0.00	1.60

Linear Appurtenance Segment Forces (Factored)

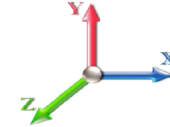
Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 28

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)
47.00	7/8" Coax	Yes	1.00	0.000	1.11	0.09	0.00	0.137	1.110	9.452	0.00	0.52
47.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.137	1.110	9.452	0.00	0.52
47.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.137	1.110	9.452	0.00	0.16
47.50	1 5/8" Coax	Yes	0.50	0.000	2.00	0.08	0.00	0.137	1.112	9.473	0.00	6.24
47.50	1/2" Fiber	Yes	0.50	0.000	1.00	0.04	0.00	0.137	1.112	9.473	0.00	0.16
47.50	3/4" DC	Yes	0.50	0.000	1.50	0.06	0.00	0.137	1.112	9.473	0.00	0.80
47.50	7/8" Coax	Yes	0.50	0.000	1.11	0.05	0.00	0.137	1.112	9.473	0.00	0.26
47.50	7/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.137	1.112	9.473	0.00	0.26
47.50	1/2" Coax	Yes	0.50	0.000	0.65	0.03	0.00	0.137	1.112	9.473	0.00	0.08
48.00	1 5/8" Coax	Yes	0.50	0.000	2.00	0.08	0.00	0.138	1.114	9.494	0.00	6.24
48.00	1/2" Fiber	Yes	0.50	0.000	1.00	0.04	0.00	0.138	1.114	9.494	0.00	0.16
48.00	3/4" DC	Yes	0.50	0.000	1.50	0.06	0.00	0.138	1.114	9.494	0.00	0.80
48.00	7/8" Coax	Yes	0.50	0.000	1.11	0.05	0.00	0.138	1.114	9.494	0.00	0.26
48.00	7/8" Coax	Yes	0.50	0.000	0.00	0.00	0.00	0.138	1.114	9.494	0.00	0.26
48.00	1/2" Coax	Yes	0.50	0.000	0.65	0.03	0.00	0.138	1.114	9.494	0.00	0.08
50.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.139	1.117	9.576	0.00	24.96
50.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.139	1.117	9.576	0.00	0.64
50.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.139	1.117	9.576	0.00	3.20
50.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.139	1.117	9.576	0.00	1.04
50.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.139	1.117	9.576	0.00	1.04
50.00	1/2" Coax	Yes	2.00	0.000	0.65	0.11	0.00	0.139	1.117	9.576	0.00	0.32
52.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.126	1.079	9.656	0.00	24.96
52.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.126	1.079	9.656	0.00	0.64
52.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.126	1.079	9.656	0.00	3.20
52.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.126	1.079	9.656	0.00	1.04
52.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.126	1.079	9.656	0.00	1.04
53.25	1 5/8" Coax	Yes	1.25	0.000	2.00	0.21	0.00	0.128	1.083	9.704	0.00	15.60
53.25	1/2" Fiber	Yes	1.25	0.000	1.00	0.10	0.00	0.128	1.083	9.704	0.00	0.40
53.25	3/4" DC	Yes	1.25	0.000	1.50	0.16	0.00	0.128	1.083	9.704	0.00	2.00
53.25	7/8" Coax	Yes	1.25	0.000	1.11	0.12	0.00	0.128	1.083	9.704	0.00	0.65
53.25	7/8" Coax	Yes	1.25	0.000	0.00	0.00	0.00	0.128	1.083	9.704	0.00	0.65
54.00	1 5/8" Coax	Yes	0.75	0.000	2.00	0.13	0.00	0.126	1.078	9.733	0.00	9.36
54.00	1/2" Fiber	Yes	0.75	0.000	1.00	0.06	0.00	0.126	1.078	9.733	0.00	0.24
54.00	3/4" DC	Yes	0.75	0.000	1.50	0.09	0.00	0.126	1.078	9.733	0.00	1.20
54.00	7/8" Coax	Yes	0.75	0.000	1.11	0.07	0.00	0.126	1.078	9.733	0.00	0.39
54.00	7/8" Coax	Yes	0.75	0.000	0.00	0.00	0.00	0.126	1.078	9.733	0.00	0.39
56.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.127	1.082	9.807	0.00	24.96
56.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.127	1.082	9.807	0.00	0.64
56.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.127	1.082	9.807	0.00	3.20
56.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.127	1.082	9.807	0.00	1.04
56.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.127	1.082	9.807	0.00	1.04
58.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.129	1.087	9.880	0.00	24.96
58.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.129	1.087	9.880	0.00	0.64
58.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.129	1.087	9.880	0.00	3.20
58.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.129	1.087	9.880	0.00	1.04
58.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.129	1.087	9.880	0.00	1.04
60.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.131	1.092	9.951	0.00	24.96

Linear Appurtenance Segment Forces (Factored)

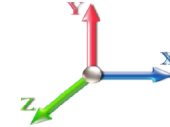
Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 28

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)
60.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.131	1.092	9.951	0.00	0.64
60.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.131	1.092	9.951	0.00	3.20
60.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.131	1.092	9.951	0.00	1.04
60.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.131	1.092	9.951	0.00	1.04
62.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.132	1.097	10.020	0.00	24.96
62.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.132	1.097	10.020	0.00	0.64
62.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.132	1.097	10.020	0.00	3.20
62.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.132	1.097	10.020	0.00	1.04
62.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.132	1.097	10.020	0.00	1.04
64.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.134	1.103	10.087	0.00	24.96
64.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.134	1.103	10.087	0.00	0.64
64.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.134	1.103	10.087	0.00	3.20
64.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.134	1.103	10.087	0.00	1.04
64.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.134	1.103	10.087	0.00	1.04
66.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.136	1.108	10.153	0.00	24.96
66.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.136	1.108	10.153	0.00	0.64
66.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.136	1.108	10.153	0.00	3.20
66.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.136	1.108	10.153	0.00	1.04
66.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.136	1.108	10.153	0.00	1.04
68.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.138	1.114	10.217	0.00	24.96
68.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.138	1.114	10.217	0.00	0.64
68.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.138	1.114	10.217	0.00	3.20
68.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.138	1.114	10.217	0.00	1.04
68.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.138	1.114	10.217	0.00	1.04
70.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.140	1.120	10.279	0.00	24.96
70.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.140	1.120	10.279	0.00	0.64
70.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.140	1.120	10.279	0.00	3.20
70.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.140	1.120	10.279	0.00	1.04
70.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.140	1.120	10.279	0.00	1.04
72.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.142	1.126	10.340	0.00	24.96
72.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.142	1.126	10.340	0.00	0.64
72.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.142	1.126	10.340	0.00	3.20
72.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.142	1.126	10.340	0.00	1.04
72.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.142	1.126	10.340	0.00	1.04
74.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.144	1.133	10.400	0.00	24.96
74.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.144	1.133	10.400	0.00	0.64
74.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.144	1.133	10.400	0.00	3.20
74.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.144	1.133	10.400	0.00	1.04
74.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.144	1.133	10.400	0.00	1.04
76.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.146	1.139	10.459	0.00	24.96
76.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.146	1.139	10.459	0.00	0.64
76.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.146	1.139	10.459	0.00	3.20
76.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.146	1.139	10.459	0.00	1.04
76.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.146	1.139	10.459	0.00	1.04
78.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.149	1.146	10.516	0.00	24.96
78.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.149	1.146	10.516	0.00	0.64
78.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.149	1.146	10.516	0.00	3.20

Linear Appurtenance Segment Forces (Factored)

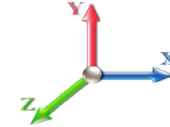
Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 28

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)
78.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.149	1.146	10.516	0.00	1.04
78.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.149	1.146	10.516	0.00	1.04
80.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.151	1.153	10.572	0.00	24.96
80.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.151	1.153	10.572	0.00	0.64
80.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.151	1.153	10.572	0.00	3.20
80.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.151	1.153	10.572	0.00	1.04
80.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.151	1.153	10.572	0.00	1.04
82.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.153	1.160	10.627	0.00	24.96
82.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.153	1.160	10.627	0.00	0.64
82.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.153	1.160	10.627	0.00	3.20
82.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.153	1.160	10.627	0.00	1.04
84.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.156	1.167	10.681	0.00	24.96
84.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.156	1.167	10.681	0.00	0.64
84.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.156	1.167	10.681	0.00	3.20
84.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.156	1.167	10.681	0.00	1.04
86.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.158	1.175	10.734	0.00	24.96
86.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.158	1.175	10.734	0.00	0.64
86.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.158	1.175	10.734	0.00	3.20
86.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.158	1.175	10.734	0.00	1.04
88.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.161	1.182	10.787	0.00	24.96
88.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.161	1.182	10.787	0.00	0.64
88.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.161	1.182	10.787	0.00	3.20
88.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.161	1.182	10.787	0.00	1.04
90.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.163	1.190	10.838	0.00	24.96
90.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.163	1.190	10.838	0.00	0.64
90.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.163	1.190	10.838	0.00	3.20
90.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.163	1.190	10.838	0.00	1.04
92.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.166	1.199	10.888	0.00	24.96
92.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.166	1.199	10.888	0.00	0.64
92.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.166	1.199	10.888	0.00	3.20
92.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.166	1.199	10.888	0.00	1.04
94.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.169	1.207	10.937	0.00	24.96
94.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.169	1.207	10.937	0.00	0.64
94.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.169	1.207	10.937	0.00	3.20
94.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.169	1.207	10.937	0.00	1.04
96.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.172	1.216	10.986	0.00	24.96
96.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.172	1.216	10.986	0.00	0.64
96.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.172	1.216	10.986	0.00	3.20
96.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.172	1.216	10.986	0.00	1.04
97.00	1 5/8" Coax	Yes	1.00	0.000	2.00	0.17	0.00	0.174	1.223	11.010	0.00	12.48
97.00	1/2" Fiber	Yes	1.00	0.000	1.00	0.08	0.00	0.174	1.223	11.010	0.00	0.32
97.00	3/4" DC	Yes	1.00	0.000	1.50	0.13	0.00	0.174	1.223	11.010	0.00	1.60
97.00	7/8" Coax	Yes	1.00	0.000	1.11	0.09	0.00	0.174	1.223	11.010	0.00	0.52
98.00	1 5/8" Coax	Yes	1.00	0.000	2.00	0.17	0.00	0.176	1.228	11.034	0.00	12.48
98.00	1/2" Fiber	Yes	1.00	0.000	1.00	0.08	0.00	0.176	1.228	11.034	0.00	0.32
98.00	3/4" DC	Yes	1.00	0.000	1.50	0.13	0.00	0.176	1.228	11.034	0.00	1.60
98.00	7/8" Coax	Yes	1.00	0.000	1.11	0.09	0.00	0.176	1.228	11.034	0.00	0.52

Linear Appurtenance Segment Forces (Factored)

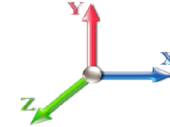
Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 28

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)
100.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.178	1.235	11.081	0.00	24.96
100.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.178	1.235	11.081	0.00	0.64
100.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.178	1.235	11.081	0.00	3.20
100.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.178	1.235	11.081	0.00	1.04
101.00	1 5/8" Coax	Yes	1.00	0.000	2.00	0.17	0.00	0.181	1.243	11.104	0.00	12.48
101.00	1/2" Fiber	Yes	1.00	0.000	1.00	0.08	0.00	0.181	1.243	11.104	0.00	0.32
101.00	3/4" DC	Yes	1.00	0.000	1.50	0.13	0.00	0.181	1.243	11.104	0.00	1.60
101.00	7/8" Coax	Yes	1.00	0.000	1.11	0.09	0.00	0.181	1.243	11.104	0.00	0.52
102.00	1 5/8" Coax	Yes	1.00	0.000	2.00	0.17	0.00	0.179	1.237	11.127	0.00	12.48
102.00	1/2" Fiber	Yes	1.00	0.000	1.00	0.08	0.00	0.179	1.237	11.127	0.00	0.32
102.00	3/4" DC	Yes	1.00	0.000	1.50	0.13	0.00	0.179	1.237	11.127	0.00	1.60
102.00	7/8" Coax	Yes	1.00	0.000	1.11	0.09	0.00	0.179	1.237	11.127	0.00	0.52
104.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.181	1.244	11.173	0.00	24.96
104.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.181	1.244	11.173	0.00	0.64
104.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.181	1.244	11.173	0.00	3.20
104.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.181	1.244	11.173	0.00	1.04
106.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.185	1.254	11.218	0.00	24.96
106.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.185	1.254	11.218	0.00	0.64
106.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.185	1.254	11.218	0.00	3.20
106.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.185	1.254	11.218	0.00	1.04
108.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.188	1.265	11.262	0.00	24.96
108.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.188	1.265	11.262	0.00	0.64
108.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.188	1.265	11.262	0.00	3.20
108.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.188	1.265	11.262	0.00	1.04
110.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.192	1.276	11.305	0.00	24.96
110.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.192	1.276	11.305	0.00	0.64
110.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.192	1.276	11.305	0.00	3.20
110.00	7/8" Coax	Yes	2.00	0.000	1.11	0.19	0.00	0.192	1.276	11.305	0.00	1.04
112.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.157	1.171	11.348	0.00	24.96
112.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.157	1.171	11.348	0.00	0.64
112.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.157	1.171	11.348	0.00	3.20
114.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.160	1.181	11.391	0.00	24.96
114.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.160	1.181	11.391	0.00	0.64
114.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.160	1.181	11.391	0.00	3.20
116.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.164	1.191	11.432	0.00	24.96
116.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.164	1.191	11.432	0.00	0.64
116.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.164	1.191	11.432	0.00	3.20
118.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.167	1.202	11.474	0.00	24.96
118.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.167	1.202	11.474	0.00	0.64
118.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.167	1.202	11.474	0.00	3.20
120.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.171	1.213	11.514	0.00	24.96
120.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.171	1.213	11.514	0.00	0.64
120.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.171	1.213	11.514	0.00	3.20
122.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.175	1.224	11.554	0.00	24.96
122.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.175	1.224	11.554	0.00	0.64
122.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.175	1.224	11.554	0.00	3.20
124.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.179	1.236	11.594	0.00	24.96

Linear Appurtenance Segment Forces (Factored)

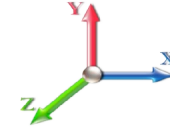
Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 28

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)
124.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.179	1.236	11.594	0.00	0.64
124.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.179	1.236	11.594	0.00	3.20
126.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.183	1.248	11.633	0.00	24.96
126.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.183	1.248	11.633	0.00	0.64
126.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.183	1.248	11.633	0.00	3.20
128.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.187	1.262	11.672	0.00	24.96
128.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.187	1.262	11.672	0.00	0.64
128.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.187	1.262	11.672	0.00	3.20
130.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.192	1.275	11.710	0.00	24.96
130.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.192	1.275	11.710	0.00	0.64
130.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.192	1.275	11.710	0.00	3.20
132.00	1 5/8" Coax	Yes	2.00	0.000	2.00	0.33	0.00	0.197	1.290	11.748	0.00	24.96
132.00	1/2" Fiber	Yes	2.00	0.000	1.00	0.17	0.00	0.197	1.290	11.748	0.00	0.64
132.00	3/4" DC	Yes	2.00	0.000	1.50	0.25	0.00	0.197	1.290	11.748	0.00	3.20
134.00	1 5/8" Coax	Yes	2.00	1.200	2.00	0.33	0.40	0.202	0.000	11.785	5.19	24.96
134.00	1/2" Fiber	Yes	2.00	1.200	1.00	0.17	0.20	0.202	0.000	11.785	2.59	0.64
134.00	3/4" DC	Yes	2.00	1.200	1.50	0.25	0.30	0.202	0.000	11.785	3.89	3.20
136.00	1 5/8" Coax	Yes	2.00	1.200	2.00	0.33	0.40	0.207	0.000	11.822	5.20	24.96
136.00	1/2" Fiber	Yes	2.00	1.200	1.00	0.17	0.20	0.207	0.000	11.822	2.60	0.64
136.00	3/4" DC	Yes	2.00	1.200	1.50	0.25	0.30	0.207	0.000	11.822	3.90	3.20
138.00	1 5/8" Coax	Yes	2.00	1.200	2.00	0.33	0.40	0.213	0.000	11.858	5.22	24.96
138.00	1/2" Fiber	Yes	2.00	1.200	1.00	0.17	0.20	0.213	0.000	11.858	2.61	0.64
138.00	3/4" DC	Yes	2.00	1.200	1.50	0.25	0.30	0.213	0.000	11.858	3.91	3.20
140.00	1 5/8" Coax	Yes	2.00	1.200	2.00	0.33	0.40	0.219	0.000	11.894	5.23	24.96
140.00	1/2" Fiber	Yes	2.00	1.200	1.00	0.17	0.20	0.219	0.000	11.894	2.62	0.64
140.00	3/4" DC	Yes	2.00	1.200	1.50	0.25	0.30	0.219	0.000	11.894	3.93	3.20
142.00	1 5/8" Coax	Yes	2.00	1.200	2.00	0.33	0.40	0.225	0.000	11.930	5.25	24.96
142.00	1/2" Fiber	Yes	2.00	1.200	1.00	0.17	0.20	0.225	0.000	11.930	2.62	0.64
142.00	3/4" DC	Yes	2.00	1.200	1.50	0.25	0.30	0.225	0.000	11.930	3.94	3.20
144.00	1 5/8" Coax	Yes	2.00	1.200	2.00	0.33	0.40	0.231	0.000	11.965	5.26	24.96
144.00	1/2" Fiber	Yes	2.00	1.200	1.00	0.17	0.20	0.231	0.000	11.965	2.63	0.64
144.00	3/4" DC	Yes	2.00	1.200	1.50	0.25	0.30	0.231	0.000	11.965	3.95	3.20
146.00	1 5/8" Coax	Yes	2.00	1.200	2.00	0.33	0.40	0.238	0.000	12.000	5.28	24.96
146.00	1/2" Fiber	Yes	2.00	1.200	1.00	0.17	0.20	0.238	0.000	12.000	2.64	0.64
146.00	3/4" DC	Yes	2.00	1.200	1.50	0.25	0.30	0.238	0.000	12.000	3.96	3.20
148.00	1 5/8" Coax	Yes	2.00	1.200	2.00	0.33	0.40	0.246	0.000	12.034	5.30	24.96
148.00	1/2" Fiber	Yes	2.00	1.200	1.00	0.17	0.20	0.246	0.000	12.034	2.65	0.64
148.00	3/4" DC	Yes	2.00	1.200	1.50	0.25	0.30	0.246	0.000	12.034	3.97	3.20
148.25	1 5/8" Coax	Yes	0.25	1.200	2.00	0.04	0.05	0.250	0.000	12.038	0.66	3.12
148.25	1/2" Fiber	Yes	0.25	1.200	1.00	0.02	0.02	0.250	0.000	12.038	0.33	0.08
148.25	3/4" DC	Yes	0.25	1.200	1.50	0.03	0.04	0.250	0.000	12.038	0.50	0.40
149.00	1 5/8" Coax	Yes	0.75	1.200	2.00	0.13	0.15	0.252	0.000	12.051	1.99	9.36
149.00	1/2" Fiber	Yes	0.75	1.200	1.00	0.06	0.07	0.252	0.000	12.051	0.99	0.24
149.00	3/4" DC	Yes	0.75	1.200	1.50	0.09	0.11	0.252	0.000	12.051	1.49	1.20
150.00	1 5/8" Coax	Yes	1.00	1.200	2.00	0.17	0.20	0.256	0.000	12.068	2.65	12.48
150.00	1/2" Fiber	Yes	1.00	1.200	1.00	0.08	0.10	0.256	0.000	12.068	1.33	0.32
150.00	3/4" DC	Yes	1.00	1.200	1.50	0.13	0.15	0.256	0.000	12.068	1.99	1.60

Linear Appurtenance Segment Forces (Factored)

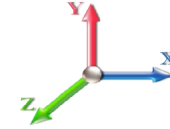
Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 28

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)
150.50	1 5/8" Coax	Yes	0.50	1.200	2.00	0.08	0.10	0.259	0.000	12.077	1.33	6.24
150.50	1/2" Fiber	Yes	0.50	1.200	1.00	0.04	0.05	0.259	0.000	12.077	0.66	0.16
150.50	3/4" DC	Yes	0.50	1.200	1.50	0.06	0.07	0.259	0.000	12.077	1.00	0.80
152.00	1 5/8" Coax	Yes	1.50	1.200	2.00	0.25	0.30	0.258	0.000	12.102	3.99	18.72
152.00	1/2" Fiber	Yes	1.50	1.200	1.00	0.13	0.15	0.258	0.000	12.102	2.00	0.48
152.00	3/4" DC	Yes	1.50	1.200	1.50	0.19	0.22	0.258	0.000	12.102	3.00	2.40
154.00	1 5/8" Coax	Yes	2.00	1.200	2.00	0.33	0.40	0.265	0.000	12.135	5.34	24.96
154.00	1/2" Fiber	Yes	2.00	1.200	1.00	0.17	0.20	0.265	0.000	12.135	2.67	0.64
154.00	3/4" DC	Yes	2.00	1.200	1.50	0.25	0.30	0.265	0.000	12.135	4.00	3.20
156.00	1 5/8" Coax	Yes	2.00	1.200	2.00	0.33	0.40	0.275	0.000	12.168	5.35	24.96
156.00	1/2" Fiber	Yes	2.00	1.200	1.00	0.17	0.20	0.275	0.000	12.168	2.68	0.64
156.00	3/4" DC	Yes	2.00	1.200	1.50	0.25	0.30	0.275	0.000	12.168	4.02	3.20
158.00	1 5/8" Coax	Yes	2.00	1.200	2.00	0.33	0.40	0.285	0.000	12.201	5.37	24.96
158.00	1/2" Fiber	Yes	2.00	1.200	1.00	0.17	0.20	0.285	0.000	12.201	2.68	0.64
158.00	3/4" DC	Yes	2.00	1.200	1.50	0.25	0.30	0.285	0.000	12.201	4.03	3.20
159.00	1 5/8" Coax	Yes	1.00	1.200	2.00	0.17	0.20	0.293	0.000	12.217	2.69	12.48
159.00	1/2" Fiber	Yes	1.00	1.200	1.00	0.08	0.10	0.293	0.000	12.217	1.34	0.32
159.00	3/4" DC	Yes	1.00	1.200	1.50	0.13	0.15	0.293	0.000	12.217	2.02	1.60
Totals:											160.4	2,396.4

Calculated Forces

Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

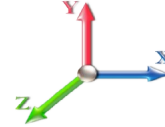


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Load Case: 1.0D + 1.0W 60 mph Wind

Iterations 28

Dead Load Factor 1.00
Wind Load Factor 1.00



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	-42.17	-9.84	0.00	-1204.9	0.00	1204.95	4390.37	2195.18	10447.7	5231.64	0.00	0.000	0.000	0.240
2.00	-41.60	-9.80	0.00	-1185.2	0.00	1185.28	4366.62	2183.31	10288.9	5152.14	0.01	-0.023	0.000	0.240
4.00	-41.03	-9.77	0.00	-1165.6	0.00	1165.67	4342.50	2171.25	10130.4	5072.75	0.02	-0.047	0.000	0.239
6.00	-40.48	-9.73	0.00	-1146.1	0.00	1146.13	4318.00	2159.00	9972.16	4993.49	0.05	-0.071	0.000	0.239
8.00	-39.92	-9.70	0.00	-1126.6	0.00	1126.67	4293.12	2146.56	9814.16	4914.37	0.08	-0.095	0.000	0.239
10.00	-39.37	-9.66	0.00	-1107.2	0.00	1107.28	4267.86	2133.93	9656.46	4835.41	0.13	-0.120	0.000	0.238
12.00	-38.83	-9.62	0.00	-1087.9	0.00	1087.96	4242.22	2121.11	9499.10	4756.61	0.18	-0.145	0.000	0.238
14.00	-38.28	-9.59	0.00	-1068.7	0.00	1068.71	4216.20	2108.10	9342.10	4677.99	0.25	-0.170	0.000	0.238
16.00	-37.75	-9.55	0.00	-1049.5	0.00	1049.54	4189.80	2094.90	9185.49	4599.57	0.32	-0.196	0.000	0.237
18.00	-37.22	-9.52	0.00	-1030.4	0.00	1030.43	4163.03	2081.51	9029.29	4521.36	0.41	-0.222	0.000	0.237
20.00	-36.69	-9.48	0.00	-1011.4	0.00	1011.40	4135.87	2067.94	8873.53	4443.36	0.51	-0.248	0.000	0.237
22.00	-36.17	-9.44	0.00	-992.45	0.00	992.45	4108.34	2054.17	8718.25	4365.60	0.62	-0.275	0.000	0.236
24.00	-35.65	-9.40	0.00	-973.57	0.00	973.57	4080.43	2040.21	8563.45	4288.09	0.74	-0.302	0.000	0.236
26.00	-35.14	-9.36	0.00	-954.77	0.00	954.77	4052.14	2026.07	8409.18	4210.84	0.87	-0.329	0.000	0.235
28.00	-34.63	-9.32	0.00	-936.06	0.00	936.06	4023.46	2011.73	8255.45	4133.86	1.02	-0.357	0.000	0.235
30.00	-34.12	-9.27	0.00	-917.43	0.00	917.43	3994.42	1997.21	8102.30	4057.17	1.17	-0.385	0.000	0.235
32.00	-33.62	-9.23	0.00	-898.88	0.00	898.88	3964.99	1982.49	7949.75	3980.79	1.34	-0.414	0.000	0.234
34.00	-33.13	-9.19	0.00	-880.41	0.00	880.41	3935.18	1967.59	7797.83	3904.71	1.52	-0.443	0.000	0.234
36.00	-32.64	-9.15	0.00	-862.04	0.00	862.04	3904.99	1952.50	7646.57	3828.97	1.71	-0.472	0.000	0.234
38.00	-32.15	-9.10	0.00	-843.75	0.00	843.75	3874.43	1937.21	7495.98	3753.56	1.92	-0.502	0.000	0.233
40.00	-31.67	-9.06	0.00	-825.55	0.00	825.55	3843.48	1921.74	7346.10	3678.51	2.13	-0.532	0.000	0.233
42.00	-31.19	-9.01	0.00	-807.43	0.00	807.43	3812.16	1906.08	7196.95	3603.83	2.36	-0.563	0.000	0.232
44.00	-30.72	-8.97	0.00	-789.41	0.00	789.41	3780.46	1890.23	7048.57	3529.52	2.61	-0.594	0.000	0.232
46.00	-30.25	-8.92	0.00	-771.48	0.00	771.48	3748.38	1874.19	6900.97	3455.62	2.86	-0.626	0.000	0.231
47.00	-29.96	-8.85	0.00	-762.56	0.00	762.56	3732.20	1866.10	6827.48	3418.81	3.00	-0.642	0.000	0.231
47.50	-29.84	-8.84	0.00	-758.13	0.00	758.13	3724.07	1862.03	6790.81	3400.45	3.06	-0.650	0.000	0.231
48.00	-29.64	-8.84	0.00	-753.71	0.00	753.71	3715.92	1857.96	6754.19	3382.11	3.13	-0.658	0.000	0.231
50.00	-28.82	-8.78	0.00	-736.04	0.00	736.04	3683.08	1841.54	6608.25	3309.03	3.41	-0.691	0.000	0.230
52.00	-28.00	-8.73	0.00	-718.47	0.00	718.47	3649.86	1824.93	6463.17	3236.39	3.71	-0.724	0.000	0.230
53.25	-27.50	-8.70	0.00	-707.55	0.00	707.55	3673.19	1836.60	6564.80	3287.28	3.90	-0.745	0.000	0.223
54.00	-27.33	-8.69	0.00	-701.03	0.00	701.03	3660.74	1830.37	6510.40	3260.04	4.02	-0.757	0.000	0.223
56.00	-26.88	-8.64	0.00	-683.66	0.00	683.66	3627.27	1813.63	6365.92	3187.69	4.35	-0.790	0.000	0.222
58.00	-26.44	-8.59	0.00	-666.38	0.00	666.38	3593.41	1796.71	6222.36	3115.80	4.68	-0.822	0.000	0.221
60.00	-25.99	-8.55	0.00	-649.20	0.00	649.20	3559.18	1779.59	6079.73	3044.38	5.04	-0.855	0.000	0.221
62.00	-25.56	-8.50	0.00	-632.11	0.00	632.11	3524.57	1762.29	5938.07	2973.45	5.40	-0.889	0.000	0.220
64.00	-25.13	-8.45	0.00	-615.11	0.00	615.11	3489.59	1744.79	5797.40	2903.01	5.78	-0.923	0.000	0.219
66.00	-24.70	-8.40	0.00	-598.21	0.00	598.21	3454.22	1727.11	5657.75	2833.08	6.18	-0.958	0.000	0.218
68.00	-24.27	-8.36	0.00	-581.40	0.00	581.40	3418.47	1709.24	5519.14	2763.67	6.58	-0.993	0.000	0.217
70.00	-23.86	-8.31	0.00	-564.68	0.00	564.68	3382.35	1691.17	5381.61	2694.80	7.01	-1.028	0.000	0.217
72.00	-23.44	-8.26	0.00	-548.06	0.00	548.06	3345.84	1672.92	5245.17	2626.49	7.45	-1.065	0.000	0.216
74.00	-23.03	-8.22	0.00	-531.54	0.00	531.54	3308.96	1654.48	5109.86	2558.73	7.90	-1.101	0.000	0.215
76.00	-22.63	-8.17	0.00	-515.11	0.00	515.11	3271.70	1635.85	4975.70	2491.55	8.37	-1.138	0.000	0.214
78.00	-22.23	-8.12	0.00	-498.78	0.00	498.78	3230.14	1615.07	4836.86	2422.03	8.85	-1.176	0.000	0.213
80.00	-21.77	-8.00	0.00	-482.39	0.00	482.39	3180.13	1590.07	4687.51	2347.24	9.36	-1.214	0.000	0.212
82.00	-21.38	-7.96	0.00	-466.38	0.00	466.38	3130.13	1565.06	4540.49	2273.62	9.87	-1.252	0.000	0.212
84.00	-21.00	-7.91	0.00	-450.47	0.00	450.47	3080.12	1540.06	4395.82	2201.18	10.41	-1.292	0.000	0.211
86.00	-20.62	-7.86	0.00	-434.65	0.00	434.65	3030.11	1515.05	4253.50	2129.91	10.96	-1.331	0.000	0.211
88.00	-20.24	-7.81	0.00	-418.93	0.00	418.93	2980.10	1490.05	4113.51	2059.81	11.52	-1.371	0.000	0.210

Calculated Forces

Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (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	-19.87	-7.77	0.00	-403.30	0.00	403.30	2930.09	1465.05	3975.87	1990.89	12.10	-1.412	0.000	0.209
92.00	-19.50	-7.72	0.00	-387.77	0.00	387.77	2880.09	1440.04	3840.56	1923.14	12.70	-1.453	0.000	0.208
94.00	-19.14	-7.67	0.00	-372.33	0.00	372.33	2830.08	1415.04	3707.61	1856.56	13.32	-1.495	0.000	0.207
96.00	-18.78	-7.62	0.00	-356.99	0.00	356.99	2780.07	1390.03	3576.99	1791.15	13.96	-1.537	0.000	0.206
97.00	-18.61	-7.60	0.00	-349.37	0.00	349.37	2755.06	1377.53	3512.56	1758.89	14.28	-1.558	0.000	0.205
98.00	-18.32	-7.57	0.00	-341.77	0.00	341.77	2730.06	1365.03	3448.72	1726.92	14.61	-1.580	0.000	0.205
100.00	-17.76	-7.52	0.00	-326.62	0.00	326.62	2680.05	1340.03	3322.78	1663.86	15.28	-1.623	0.000	0.203
101.00	-17.49	-7.49	0.00	-319.10	0.00	319.10	2260.99	1130.50	2846.84	1425.54	15.62	-1.645	0.000	0.232
102.00	-17.33	-7.47	0.00	-311.62	0.00	311.62	2242.36	1121.18	2797.13	1400.64	15.97	-1.667	0.000	0.230
104.00	-17.03	-7.42	0.00	-296.68	0.00	296.68	2200.69	1100.35	2693.61	1348.81	16.68	-1.716	0.000	0.228
106.00	-16.73	-7.38	0.00	-281.83	0.00	281.83	2159.02	1079.51	2592.04	1297.95	17.41	-1.765	0.000	0.225
108.00	-16.43	-7.33	0.00	-267.07	0.00	267.07	2117.34	1058.67	2492.43	1248.07	18.16	-1.815	0.000	0.222
110.00	-16.07	-7.21	0.00	-252.25	0.00	252.25	2075.67	1037.84	2394.76	1199.16	18.93	-1.864	0.000	0.218
112.00	-15.79	-7.17	0.00	-237.82	0.00	237.82	2034.00	1017.00	2299.05	1151.23	19.72	-1.914	0.000	0.214
114.00	-15.50	-7.13	0.00	-223.47	0.00	223.47	1992.32	996.16	2205.29	1104.29	20.53	-1.964	0.000	0.210
116.00	-15.22	-7.09	0.00	-209.21	0.00	209.21	1950.65	975.32	2113.48	1058.31	21.37	-2.014	0.000	0.206
118.00	-14.94	-7.05	0.00	-195.03	0.00	195.03	1908.98	954.49	2023.63	1013.32	22.22	-2.063	0.000	0.200
120.00	-14.67	-7.01	0.00	-180.92	0.00	180.92	1867.30	933.65	1935.73	969.30	23.10	-2.112	0.000	0.195
122.00	-14.40	-6.97	0.00	-166.91	0.00	166.91	1825.63	912.81	1849.77	926.26	23.99	-2.161	0.000	0.188
124.00	-14.14	-6.93	0.00	-152.97	0.00	152.97	1783.96	891.98	1765.78	884.20	24.91	-2.209	0.000	0.181
126.00	-13.88	-6.89	0.00	-139.11	0.00	139.11	1742.28	871.14	1683.73	843.12	25.84	-2.255	0.000	0.173
128.00	-13.62	-6.84	0.00	-125.34	0.00	125.34	1700.61	850.30	1603.63	803.01	26.80	-2.301	0.000	0.164
130.00	-11.13	-5.33	0.00	-110.55	0.00	110.55	1658.94	829.47	1525.49	763.88	27.77	-2.345	0.000	0.151
132.00	-10.89	-5.28	0.00	-99.90	0.00	99.90	1617.26	808.63	1449.30	725.73	28.76	-2.386	0.000	0.144
134.00	-10.68	-5.21	0.00	-89.34	0.00	89.34	1575.59	787.79	1375.06	688.55	29.77	-2.427	0.000	0.137
136.00	-10.47	-5.14	0.00	-78.92	0.00	78.92	1533.91	766.96	1302.77	652.35	30.80	-2.466	0.000	0.128
138.00	-10.26	-5.07	0.00	-68.64	0.00	68.64	1492.24	746.12	1232.44	617.13	31.84	-2.503	0.000	0.118
140.00	-7.93	-3.70	0.00	-56.59	0.00	56.59	1450.57	725.28	1164.05	582.89	32.89	-2.538	0.000	0.103
142.00	-7.73	-3.63	0.00	-49.19	0.00	49.19	1408.89	704.45	1097.62	549.63	33.96	-2.569	0.000	0.095
144.00	-7.56	-3.57	0.00	-41.93	0.00	41.93	1367.22	683.61	1033.14	517.34	35.05	-2.599	0.000	0.087
146.00	-7.40	-3.50	0.00	-34.80	0.00	34.80	1325.55	662.77	970.62	486.03	36.14	-2.626	0.000	0.077
148.00	-7.24	-3.43	0.00	-27.80	0.00	27.80	1283.87	641.94	910.04	455.70	37.25	-2.651	0.000	0.067
148.25	-7.23	-3.43	0.00	-26.94	0.00	26.94	1278.66	639.33	902.61	451.97	37.38	-2.654	0.000	0.065
149.00	-4.72	-2.15	0.00	-23.20	0.00	23.20	1263.04	631.52	880.49	440.90	37.80	-2.662	0.000	0.056
150.00	-4.61	-2.12	0.00	-21.05	0.00	21.05	1242.20	621.10	851.42	426.34	38.36	-2.672	0.000	0.053
150.50	-4.55	-2.10	0.00	-19.99	0.00	19.99	761.18	380.59	536.85	268.82	38.64	-2.677	0.000	0.080
152.00	-4.48	-2.05	0.00	-16.84	0.00	16.84	742.42	371.21	510.58	255.67	39.48	-2.690	0.000	0.072
154.00	-4.39	-1.99	0.00	-12.73	0.00	12.73	717.42	358.71	476.59	238.65	40.62	-2.714	0.000	0.060
156.00	-4.29	-1.93	0.00	-8.75	0.00	8.75	692.41	346.21	443.76	222.21	41.76	-2.733	0.000	0.046
158.00	-4.21	-1.88	0.00	-4.88	0.00	4.88	667.41	333.71	412.11	206.36	42.90	-2.746	0.000	0.030
159.00	0.00	-1.67	0.00	-3.00	0.00	3.00	654.91	327.45	396.72	198.65	43.48	-2.751	0.000	0.015

Final Analysis Summary

Structure: CT13055-A-SBA	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 82



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 + 1.6W 93 mph Wind	37.8	0.00	50.57	0.00	0.00	4662.23
0.9D + 1.6W 93 mph Wind	37.8	0.00	37.92	0.00	0.00	4591.45
1.2D + 1.0Di + 1.0Wi 50 mph Wind	11.5	0.00	87.61	0.00	0.00	1445.10
1.2D + 1.0E	2.7	0.00	50.60	0.00	0.00	360.84
0.9D + 1.0E	2.7	0.00	37.95	0.00	0.00	354.78
1.0D + 1.0W 60 mph Wind	9.8	0.00	42.17	0.00	0.00	1204.95

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 + 1.6W 93 mph Wind	-50.57	-37.83	0.00	-4662.2	0.00	-4662.2	4390.37	2195.1	10447.7	5231.64	0.00	0.903
0.9D + 1.6W 93 mph Wind	-37.92	-37.82	0.00	-4591.4	0.00	-4591.4	4390.37	2195.1	10447.7	5231.64	0.00	0.887
1.2D + 1.0Di + 1.0Wi 50 mph Wind	-87.61	-11.55	0.00	-1445.1	0.00	-1445.1	4390.37	2195.1	10447.7	5231.64	0.00	0.296
1.2D + 1.0E	-21.21	-2.26	0.00	-117.72	0.00	-117.72	2260.99	1130.5	2846.84	1425.54	101.00	0.092
0.9D + 1.0E	-15.91	-2.21	0.00	-114.86	0.00	-114.86	2260.99	1130.5	2846.84	1425.54	101.00	0.088
1.0D + 1.0W 60 mph Wind	-42.17	-9.84	0.00	-1204.9	0.00	-1204.9	4390.37	2195.1	10447.7	5231.64	0.00	0.240

Base Plate Summary

Structure: CT13055-A-SB	Code: EIA/TIA-222-G	5/4/2018
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 83



Reactions	Base Plate	Anchor Bolts
Original Design	Yield (ksi): 60.00	Bolt Circle: 65.00
Moment (kip-ft): 3665.00	Width (in): 71.00	Number Bolts: 14.00
Axial (kip): 41.45	Style: Round	Bolt Type: 2.25" 18J
Shear (kip): 31.29	Polygon Sides: 0.00	Bolt Diameter (in): 2.25
Analysis	Clip Length (in): 0.00	Yield (ksi): 75.00
Moment (kip-ft): 4662.23	Effective Len (in): 17.18	Ultimate (ksi): 100.00
Axial (kip): 87.61	Moment (kip-in): 856.14	Arrangement: Radial
Shear (kip): 37.83	Allow Stress (ksi): 81.00	Cluster Dist (in): 0.00
	Applied Stress (ksi): 0.00	Start Angle (deg): 0.00
Moment Design %: 127.21	Stress Ratio: 0.73	Compression
		Force (kip): 252.18
		Allowable (kip): 260.00
		Ratio: 0.99
		Tension
		Force (kip): 239.66
		Allowable (kip): 260.00
		Ratio: 0.94



Monopole Mat Foundation Design

Date

5/4/2018

Customer Name:	AT&T	EIA/TIA Standard:	EIA-222-G
Site Name:		Structure Height (Ft.):	159
Site Number:	CT13055-A-SBA	Engineer Name:	H. Lei
Engr. Number:	51827	Engineer Login ID:	

Foundation Info Obtained from:

Drawings/Calculations

Structure Type:

Monopole

Analysis or Design?

Analysis

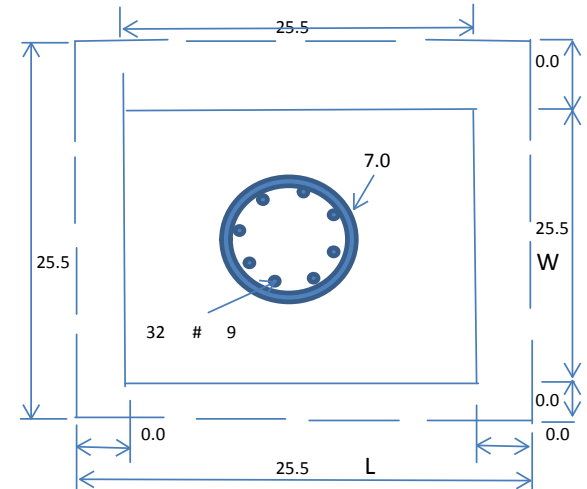
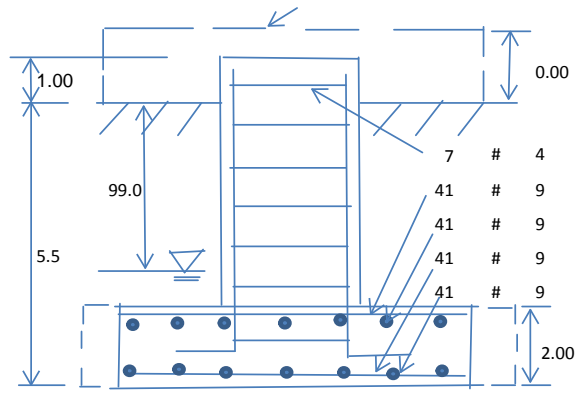
Base Reactions (Factored):

Axial Load (Kips):	50.6	Shear Force (Kips):	37.8
Uplift Force (Kips):	0.0	Moment (Kips-ft):	4662.2

Allowable overstress %: 5.0%

Foundation Geometries:

		Mods required -Yes/No ?:	No
Diameter of Pier (ft.):	7.0	Depth of Base BG (ft.):	5.5
Pier Height A. G. (ft.):	1.00	Thickness of Pad (ft):	2.00
Length of Pad (ft.):	25.5	Width of Pad (ft.):	25.5
Final Length of pad (ft)	25.5	Final width of pad (ft):	25.5
Control Value for Cell D18:	0	Control Value for Cell F18:	0



Material Properties and Rebar Info:

Concrete Strength (psi):	4000	Steel Elastic Modulus:	29000	ksi
Vertical bar yield (ksi)	60	Tie steel yield (ksi):	60	
Vertical Rebar Size #:	9	Tie / Stirrup Size #:	4	
Qty. of Vertical Rebars:	32	Tie Spacing (in):	12.0	
Pad Rebar Yield (Ksi):	60	Pad Steel Rebar Size (#):	9	
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):	41	Qty. of Rebar in Pad (W):	41	
Rebar at the top of the concrete pad:				
Qty. of Rebar in Pad (L):	41	Qty. of Rebar in Pad (W):	41	

Apply 1.35 factor for e/w Per G: 1.35

Soil Design Parameters:

Soil Unit Weight (pcf):	115.0	Soil Buoyant Weight:	50.0	Pcf
Water Table B.G.S. (ft):	99.0	Unit Weight of Water:	62.4	pcf
Ultimate Bearing Pressure (psf):	12000	Ultimate Skin Friction:		Psf
Consider Friction for O.T.M. (Y/N):	No	Consider Friction for bearing (Y/N):	No	
Consider soil hor. resist. for OTM.:	No	Reduction factor on the maximum soil bearing pressure:	1.00	
		Angle from Top of Pad:	30	
		Angle from Bottm of Pad:	25	
		Angle from Bottm of Pad:	25	

Foundation Analysis and Design:

Uplift Strength Reduction Factor:	0.75	Compression Strength Reduction Factor:	0.75
Total Dry Soil Volume (cu. Ft.):	2141.18	Total Dry Soil Weight (Kips):	246.24
Total Buoyant Soil Volume (cu. Ft.):	0.00	Total Buoyant Soil Weight (Kips):	0.00
Total Effective Soil Weight (Kips):	246.24	Weight from the Concrete Block at Top (K):	0.00
Total Dry Concrete Volume (cu. Ft.):	1473.68	Total Dry Concrete Weight (Kips):	221.05
Total Buoyant Concrete Volume (cu. Ft.):	0.00	Total Buoyant Concrete Weight (Kips):	0.00
Total Effective Concrete Weight (Kips):	221.05	Total Vertical Load on Base (Kips):	517.86

Check Soil Capacities:

Calculated Maxium Net Soil Pressure under the base (psf):	3507	<	Allowable Factored Soil Bearing (psf):	9000	0.39	OK!
Allowable Foundation Overturning Resistance (kips-ft.):	6006.9	>	Design Factored Momont (kips-ft):	4908	0.82	OK!
Factor of Safety Against Overturning (O. R. Moment/Design Moment):	1.22					OK!

Load/
Capacity
Ratio

Check the capacities of Reinforceing Concrete:

Strength reduction factor (Flexure and axial tension):	0.90	Strength reduction factor (Shear):	0.75
Strength reduction factor (Axial compression):	0.65	Wind Load Factor on Concrete Design:	1.00

Load/
Capacity
Ratio

(1) Concrete Pier:

Vertical Steel Rebar Area (sq. in./each):	1.00	Tie / Stirrup Area (sq. in./each):	0.20		
Calculated Moment Capacity (Mn,Kips-Ft):	5377.0	> Design Factored Moment (Mu, Kips-Ft)	4832.3	0.90	OK!
Calculated Shear Capacity (Kips):	660.1	> Design Factored Shear (Kips):	37.8	0.06	OK!
Calculated Tension Capacity (Tn, Kips):	1728.0	> Design Factored Tension (Tu Kips):	0.0	0.00	OK!
Calculated Compression Capacity (Pn, Kips):	9741.3	> Design Factored Axial Load (Pu Kips):	50.6	0.01	OK!
Moment & Axial Strength Combination:	0.90	OK! Check Tie Spacing (Design/Required):		1	OK!
Pier Reinforcement Ratio:	0.006	Reinforcement Ratio is satisfied per ACI			

(2).Concrete Pad:

One-Way Design Shear Capacity (L-Direction, Kips):	593.3	> One-Way Factored Shear (L-D. Kips):	309.8	0.52	OK!
One-Way Design Shear Capacity (W-Direction, Kips):	593.3	> One-Way Factored Shear (W-D., Kips)	309.8	0.52	OK!
One-Way Design Shear Capacity (Corner-Corner. Kips):	676.2	> One-Way Factored Shear (C-C, Kips):	332.8	0.49	OK!
Lower Steel Pad Reinforcement Ratio (L-Direct.):	0.0066	OK! Lower Steel Pad Reinf. Ratio (W-Direct	0.0066		
Lower Steel Pad Moment Capacity (L-Direction. Kips-ft):	3552.6	> Moment at Bottom (L-Direct. K-Ft):	1169.1	0.33	OK!
Lower Steel Pad Moment Capacity (W-Direction. Kips-ft):	3552.6	> Moment at Bottom (W-Direct. K-Ft):	1169.1	0.33	OK!
Lower Steel Pad Moment Capacity (Corner-Corner,K-ft):	4949.8	> Moment at Bottom (C-C Dir. K-Ft):	1653.3	0.33	OK!
Upper Steel Pad Reinforcement Ratio (L-Direct.):	0.0066	OK! Upper Steel Reinf. Ratio (W-Direct.):	0.0066		
Upper Steel Pad Moment Capacity (L-Direction. Kips-ft):	3552.6	> Moment at the top (L-Dir Kips-Ft):	298.6	0.08	OK!
Upper Steel Pad Moment Capacity (W-Direction. Kips-ft):	3552.6	> Moment at the top (W-Dir Kips-Ft):	298.6	0.08	OK!
Upper Steel Pad Moment Capacity (Corner-Corner. K-ft):	4949.8	> Moment at the top (C-C Direc. K-Ft):	587.1	0.12	OK!



Radio Frequency Emissions Analysis Report

AT&T Existing Facility

Site ID: CT5266

FA#: 10071137

Monroe Northeast
1428 Monroe Turnpike
Monroe, CT 06468

March 26, 2018

Centerline Communications Project Number: 950012-075

Site Compliance Summary	
Compliance Status:	COMPLIANT
Site total MPE% of FCC general population allowable limit:	6.86 %



March 26, 2018

AT&T Mobility – New England
Attn: John Benedetto, RF Manager
550 Cochituate Road
Suite 550 – 13&14
Framingham, MA 06040

Emissions Analysis for Site: **CT5266 – Monroe Northeast**

Centerline Communications, LLC (“Centerline”) was directed to analyze the proposed AT&T facility located at **1428 Monroe Turnpike, Monroe, CT**, for the purpose of determining whether the emissions from the Proposed AT&T Antenna Installation located on this property are within specified federal limits.

All information used in this report was analyzed as a percentage of current Maximum Permissible Exposure (% MPE) as listed in the FCC OET Bulletin 65 Edition 97-01 and ANSI/IEEE Std C95.1. The FCC regulates Maximum Permissible Exposure in units of microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$). The number of $\mu\text{W}/\text{cm}^2$ calculated at each sample point is called the power density. The exposure limit for power density varies depending upon the frequencies being utilized. Wireless Carriers and Paging Services use different frequency bands each with different exposure limits, therefore it is necessary to report results and limits in terms of percent MPE rather than power density.

All results were compared to the FCC (Federal Communications Commission) radio frequency exposure rules, 47 CFR 1.1307(b)(1) – (b)(3), to determine compliance with the Maximum Permissible Exposure (MPE) limits for General Population/Uncontrolled environments as defined below.

General population/uncontrolled exposure limits apply to situations in which the general population may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general population would always be considered under this category when exposure is not employment related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area.

Population exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$). The general population exposure limits for the 700 and 850 MHz Bands are approximately $467 \mu\text{W}/\text{cm}^2$ and $567 \mu\text{W}/\text{cm}^2$ respectively. The general population exposure limit for the 1900 MHz (PCS), 2100 MHz (AWS) and 2300 MHz (WCS) bands is $1000 \mu\text{W}/\text{cm}^2$. Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.



Occupational/controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general population/uncontrolled limits (see below), as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

Additional details can be found in FCC OET 65.



CALCULATIONS

Calculations were performed for the proposed AT&T Wireless antenna facility located at **1428 Monroe Turnpike, Monroe, CT**, using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. Since AT&T is proposing highly focused directional panel antennas, which project most of the emitted energy out toward the horizon, all calculations were performed assuming a lobe representing the maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB, was focused at the base of the tower. For this report the sample point is the top of a 6-foot person standing at the base of the tower.

Per FCC OET Bulletin No. 65 - Edition 97-01 recommendations to achieve the maximum anticipated value at each sample point, all power levels emitting from the proposed antenna installation are increased by a factor of 2.56 to account for possible in-phase reflections from the surrounding environment. All power values expressed and analyzed are maximum power levels expected to be used on all radios.

All emissions values for additional carriers were taken from the Connecticut Siting Council (CSC) active MPE database. Values in this database are provided by the individual carriers themselves

For each sector the following channel counts, frequency bands and power levels were utilized as shown in *Table 1*:

Technology	Frequency Band	Channel Count	Transmit Power per Channel (W)
LTE	700 MHz	2	40
LTE	1900 MHz (PCS)	4	40
LTE	2300 MHz (WCS)	4	30
UMTS	850 MHz	2	30

Table 1: Channel Data Table



The following antennas listed in *Table 2* were used in the modeling for transmission in the 700 MHz, 850 MHz, 1900 MHz (PCS) and 2300 MHz (WCS) frequency bands. This is based on feedback from the carrier with regards to anticipated antenna selection. Maximum gain values for all antennas are listed in the Inventory and Power Data table below. The maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB, was used for all calculations. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.

Sector	Antenna Number	Antenna Make / Model	Antenna Centerline (ft)
A	1	Powerwave P65-16-XLH-RR	160
A	2	Quintel QS66512-2	160
A	3	Powerwave 7770	160
B	1	Powerwave P65-16-XLH-RR	160
B	2	Quintel QS66512-2	160
B	3	Powerwave 7770	160
C	1	Powerwave P65-16-XLH-RR	160
C	2	Quintel QS66512-2	160
C	3	Powerwave 7770	160

Table 2: Antenna Data

All calculations were done with respect to uncontrolled / general population threshold limits.



RESULTS

Per the calculations completed for the proposed AT&T configurations *Table 3* shows resulting emissions power levels and percentages of the FCC’s allowable general population limit.

Antenna ID	Antenna Make / Model	Frequency Bands	Antenna Gain (dBd)	Channel Count	Total TX Power (W)	ERP (W)	MPE %
Antenna A1	Powerwave P65-16-XLH-RR	700 MHz	12.7	2	80	1,489.67	0.48
Antenna A2	Quintel QS66512-2	1900 MHz (PCS) / 2300 MHz (WCS)	13.85 / 14.85	8	280	7,548.48	1.14
Antenna A3	Powerwave 7770	850 MHz	11.4	2	60	828.23	0.22
Sector A Composite MPE%							1.85
Antenna B1	Powerwave P65-16-XLH-RR	700 MHz	12.7	2	80	1,489.67	0.48
Antenna B2	Quintel QS66512-2	1900 MHz (PCS) / 2300 MHz (WCS)	13.85 / 14.85	8	280	7,548.48	1.14
Antenna B3	Powerwave 7770	850 MHz	11.4	2	60	828.23	0.22
Sector B Composite MPE%							1.85
Antenna C1	Powerwave P65-16-XLH-RR	700 MHz	12.7	2	80	1,489.67	0.48
Antenna C2	Quintel QS66512-2	1900 MHz (PCS) / 2300 MHz (WCS)	13.85 / 14.85	8	280	7,548.48	1.14
Antenna C3	Powerwave 7770	850 MHz	11.4	2	60	828.23	0.22
Sector C Composite MPE%							1.85

Table 3: AT&T Emissions Levels



The Following table (*table 4*) shows all additional carriers on site and their MPE% as recorded in the CSC active MPE database for this facility along with the newly calculated maximum AT&T MPE contributions per this report. FCC OET 65 specifies that for carriers utilizing directional antennas that the highest recorded sector value be used for composite site MPE values due to their greatly reduced emissions contributions in the directions of the adjacent sectors. For this site, all three sectors have the same configuration yielding the same results on all three sectors. *Table 5* below shows a summary for each AT&T Sector as well as the composite MPE value for the site.

Site Composite MPE%	
Carrier	MPE%
AT&T – Max Sector Value	1.85 %
T-Mobile	0.50 %
Sprint	0.36 %
Verizon Wireless	3.77 %
Town of Monroe	0.38 %
Site Total MPE %:	6.86 %

Table 4: All Carrier MPE Contributions

AT&T Sector A Total:	1.85 %
AT&T Sector B Total:	1.85 %
AT&T Sector C Total:	1.85 %
Site Total:	6.86 %

Table 5: Site MPE Summary



FCC OET 65 specifies that for carriers utilizing directional antennas that the highest recorded sector value be used for composite site MPE values due to their greatly reduced emissions contributions in the directions of the adjacent sectors. *Table 6* below details a breakdown by frequency band and technology for the MPE power values for the maximum calculated AT&T sector(s). For this site, all three sectors have the same configuration yielding the same results on all three sectors.

AT&T _ Frequency Band / Technology Max Power Values (Per Sector)	# Channels	Watts ERP (Per Channel)	Height (feet)	Total Power Density ($\mu\text{W}/\text{cm}^2$)	Frequency (MHz)	Allowable MPE ($\mu\text{W}/\text{cm}^2$)	Calculated % MPE
AT&T 700 MHz LTE	2	744.83	160	2.26	700 MHz	467	0.48%
AT&T 1900 MHz (PCS) LTE	4	970.64	160	5.89	1900 MHz (PCS)	1000	0.59%
AT&T 2300 MHz (WCS) LTE	4	916.48	160	5.56	2300 MHz (WCS)	1000	0.56%
AT&T 850 MHz UMTS	2	414.12	160	1.26	850 MHz	567	0.22%
						Total:	1.85%

Table 6: AT&T Maximum Sector MPE Power Values



Summary

All calculations performed for this analysis yielded results that were **within** the allowable limits for general population exposure to RF Emissions.

The anticipated maximum composite contributions from the AT&T facility as well as the site composite emissions value with regards to compliance with FCC's allowable limits for general population exposure to RF Emissions are shown here:

AT&T Sector	Power Density Value (%)
Sector A:	1.85 %
Sector B:	1.85 %
Sector C:	1.85 %
AT&T Maximum Total (per sector):	1.85 %
Site Total:	6.86 %
Site Compliance Status:	COMPLIANT

The anticipated composite MPE value for this site assuming all carriers present is **6.86 %** of the allowable FCC established general population limit sampled at the ground level. This is based upon values listed in the Connecticut Siting Council database for existing carrier emissions.

FCC guidelines state that if a site is found to be out of compliance (over allowable thresholds), that carriers over a 5% contribution to the composite value will require measures to bring the site into compliance. For this facility, the composite values calculated were well within the allowable 100% threshold standard per the federal government.

A handwritten signature in black ink, appearing to read 'Scott Heffernan', is positioned above the printed name.

Scott Heffernan

RF Engineering Director

Centerline Communications, LLC

95 Ryan Drive, Suite 1

Raynham, MA 02767

1428 MONROE TPKE

Location 1428 MONROE TPKE

Map/Lot 145/ 024/ 01/ /

Acct# 14502401

Owner KIMBALL JILL M

Assessment \$496,800

Appraisal \$709,600

PID 16577

Building Count 1

Survey 3171

Affordable

Current Value

Appraisal			
Valuation Year	Improvements	Land	Total
2014	\$536,800	\$172,800	\$709,600

Assessment			
Valuation Year	Improvements	Land	Total
2014	\$375,800	\$121,000	\$496,800

Owner of Record

Owner KIMBALL JILL M

Sale Price \$0

Co-Owner

Certificate

Address 1428 MONROE TPKE
MONROE, CT 06468

Book & Page 1904/0251

Sale Date 12/29/2015

Ownership History

Ownership History				
Owner	Sale Price	Certificate	Book & Page	Sale Date
KIMBALL JILL M	\$0		1904/0251	12/29/2015
STONE CASTLE INVESTMENTS LLC	\$0	1	1789/ 323	07/13/2012
SISTERS OF THE HOLY FAMILY OF NAZARETH U	\$0	2	1603/ 14	07/10/2009

Building Information

Building 1 : Section 1

Year Built: 1936

Living Area: 5,638

Building Attributes	
Field	Description

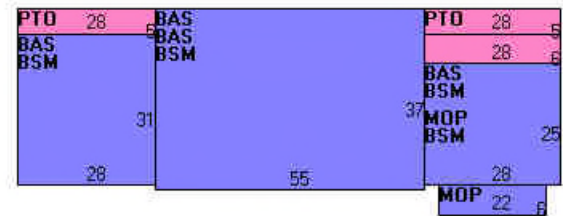
Style	Colonial
Model	Residential
Stories:	2
Occupancy	1
Exterior Wall 1	Stone
Heat Fuel	Oil
Heat Type:	Central A/C
AC Type:	Central AC
Total Bedrooms:	6
Total Bthrms:	4
Total Half Baths:	1
Total Rooms:	14
Fireplaces	5
Basement Gar.	0
Basement	Full
In Law Apt	0

Building Photo



(<http://images.vgsi.com/photos/MonroeCTPhotos//\00\00\66\11>).

Building Layout



FBM[2035]

(<http://images.vgsi.com/photos/MonroeCTPhotos//Sketches/165>).

Building Sub-Areas (sq ft)			Legend
Code	Description	Gross Area	Living Area
BAS	First Floor	5,638	5,638
BSM	Basement	3,771	0
FBM	Finished Basement	2,035	0
MOP	Masonry Open Porch	300	0
PTO	Patio	280	0
		12,024	5,638

Extra Features

Extra Features	Legend
No Data for Extra Features	

Land

Land Use

Use Code 101
Description Single Family
Zone RF2
Neighborhood
Alt Land Approved Category No

Land Line Valuation

Size (Acres) 7.21
Appraised Value \$172,800

Outbuildings

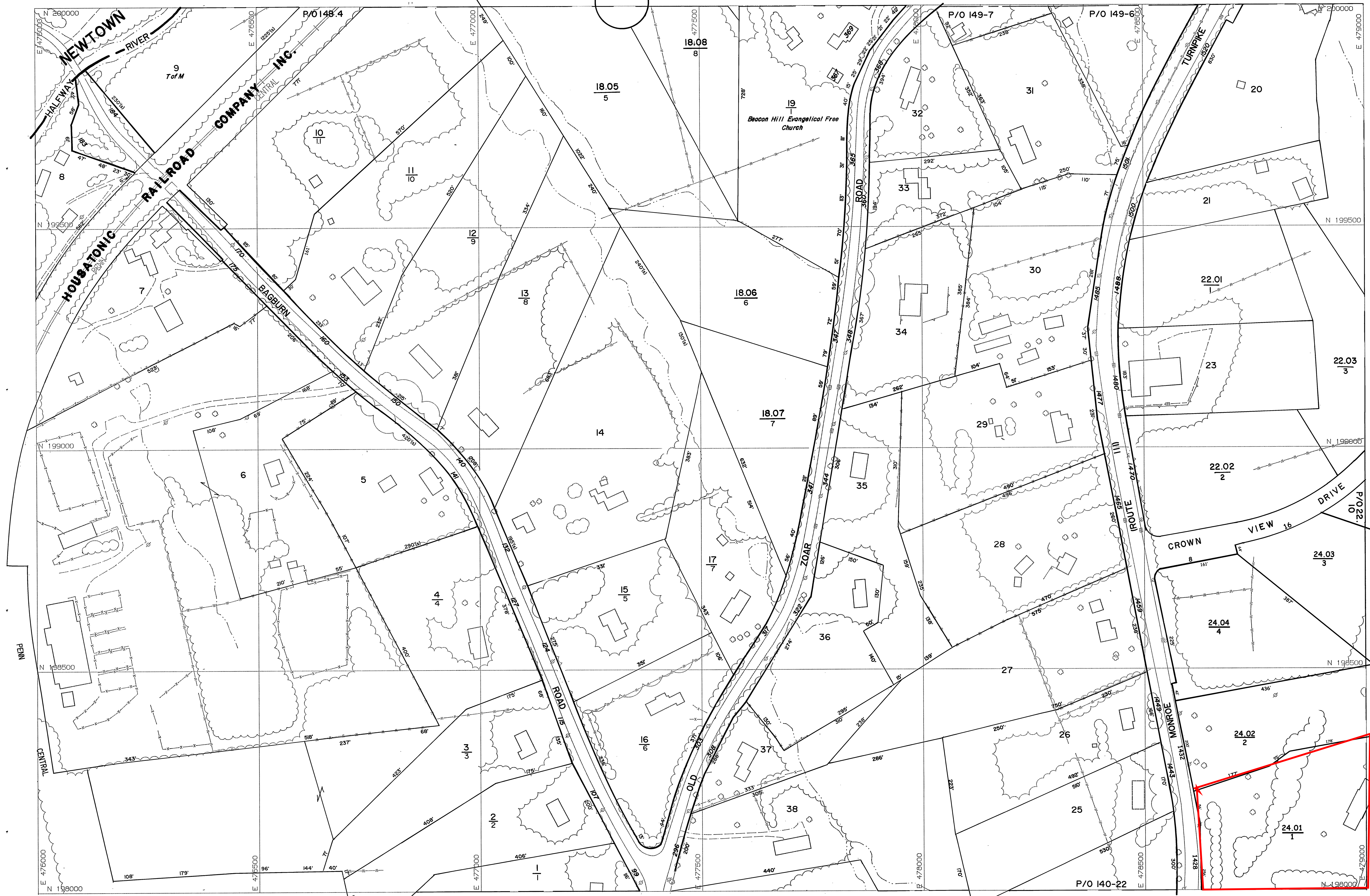
Outbuildings	<u>Legend</u>
No Data for Outbuildings	

Valuation History

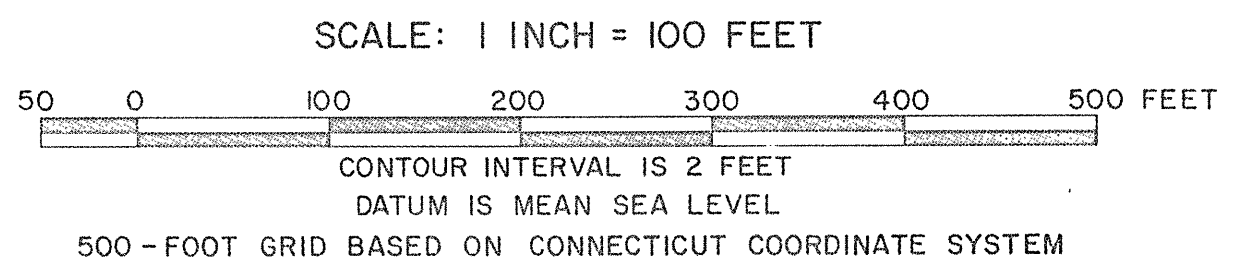
Appraisal			
Valuation Year	Improvements	Land	Total
2017	\$435,300	\$172,800	\$608,100
2015	\$435,300	\$173,300	\$608,600

Assessment			
Valuation Year	Improvements	Land	Total
2017	\$304,700	\$121,000	\$425,700
2015	\$304,700	\$121,300	\$426,000

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COMPILED AND CONTROLLED BY JAMES W. SEWALL COMPANY, OLD TOWN, MAINE
 FROM PHOTOGRAMMETRIC METHODS
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TOWN OF MONROE
 MONROE, CONNECTICUT

149	150
144	145
139	141

GENERAL CONSTRUCTION NOTES:

- FOR THE PURPOSE OF CONSTRUCTION DRAWINGS, THE FOLLOWING DEFINITIONS SHALL APPLY:
GENERAL CONTRACTOR
SUBCONTRACTOR - CONTRACTOR (CONSTRUCTION)
OWNER - AT&T
- ALL SITE WORK SHALL BE COMPLETED AS INDICATED ON THE DRAWINGS AND AT&T PROJECT SPECIFICATIONS.
- GENERAL CONTRACTOR AND SUBCONTRACTOR SHALL VISIT THE SITE AND SHALL FAMILIARIZE HIMSELF WITH ALL CONDITIONS AFFECTING THE PROPOSED WORK AND SHALL MAKE PROVISIONS. GENERAL CONTRACTOR AND SUBCONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING THEMSELVES WITH ALL CONTRACT DOCUMENTS, FIELD CONDITIONS, DIMENSIONS, AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.
- ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. GENERAL CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF WORK.
- ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES, AND APPLICABLE REGULATIONS.
- UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
- PLANS ARE NOT TO BE SCALED. THESE PLANS ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY UNLESS OTHERWISE NOTED. DIMENSIONS SHOWN ARE TO FINISH SURFACES UNLESS OTHERWISE NOTED. SPACING BETWEEN EQUIPMENT IS THE MINIMUM REQUIRED CLEARANCE. THEREFORE, IT IS CRITICAL TO FIELD VERIFY DIMENSIONS, SHOULD THERE BE ANY QUESTIONS REGARDING THE CONTRACT DOCUMENTS, THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A CLARIFICATION FROM THE ARCHITECT/ENGINEER PRIOR TO PROCEEDING WITH THE WORK. DETAILS ARE INTENDED TO SHOW DESIGN INTENT. MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF WORK AND PREPARED BY THE ARCHITECT/ENGINEER PRIOR TO PROCEEDING WITH WORK.
- THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE SPACE FOR APPROVAL BY THE ARCHITECT/ENGINEER PRIOR TO PROCEEDING.
- GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF WORK AREA, ADJACENT AREAS AND BUILDING OCCUPANTS THAT ARE LIKELY TO BE AFFECTED BY THE WORK UNDER THIS CONTRACT. WORK SHALL CONFORM TO ALL OSHA REQUIREMENTS AND THE LOCAL JURISDICTION.
- GENERAL CONTRACTOR SHALL COORDINATE WORK AND SCHEDULE WORK ACTIVITIES WITH OTHER DISCIPLINE.
- ERECTION SHALL BE DONE IN A WORKMANLIKE MANNER BY COMPETENT EXPERIENCED WORKMEN IN ACCORDANCE WITH APPLICABLE CODES AND THE BEST ACCEPTED PRACTICE. ALL MEMBERS SHALL BE LAID PLUMB AND TRUE AS INDICATED ON THE DRAWINGS.
- SEAL PENETRATIONS THROUGH FIRE RATED AREAS WITH UL LISTED MATERIALS APPROVED BY LOCAL JURISDICTION. SUBCONTRACTOR SHALL KEEP AREA CLEAN, HAZARD FREE, AND DISPOSE OF ALL DEBRIS.
- WORK PREVIOUSLY COMPLETED IS REPRESENTED BY LIGHT SHADED LINES AND NOTES. THE SCOPE OF WORK FOR THIS PROJECT IS REPRESENTED BY DARK SHADED LINES AND NOTES. SUBCONTRACTOR SHALL NOTIFY THE GENERAL CONTRACTOR OF ANY EXISTING CONDITIONS THAT DEVIATE FROM THE DRAWINGS PRIOR TO BEGINNING CONSTRUCTION.
- SUBCONTRACTOR SHALL PROVIDE WRITTEN NOTICE TO THE CONSTRUCTION MANAGER 48 HOURS PRIOR TO COMMENCEMENT OF WORK.
- THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
- THE SUBCONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
- GENERAL CONTRACTOR SHALL COORDINATE AND MAINTAIN ACCESS FOR ALL TRADES AND SUBCONTRACTORS TO THE SITE AND/OR BUILDING.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR SECURITY OF THE SITE FOR THE DURATION OF CONSTRUCTION UNTIL JOB COMPLETION.
- THE GENERAL CONTRACTOR SHALL MAINTAIN IN GOOD CONDITION ONE COMPLETE SET OF PLANS WITH ALL REVISIONS, ADDENDA, AND CHANGE ORDERS ON THE PREMISES AT ALL TIMES.
- THE GENERAL CONTRACTOR AND SUBCONTRACTOR SHALL PROVIDE PORTABLE FIRE EXTINGUISHERS WITH A RATING OF NOT LESS THAN 2-A OT 2-A:10-B:C AND SHALL BE WITHIN 25 FEET OF TRAVEL DISTANCE TO ALL PORTIONS OF WHERE THE WORK IS BEING COMPLETED DURING CONSTRUCTION.
- ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY THE ARCHITECT/ENGINEER. EXTREME CAUTION SHOULD BE USED BY THE SUBCONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. SUBCONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS SHALL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION, B) CONFINED SPACE, C) ELECTRICAL SAFETY, D) TRENCHING & EXCAVATION.

- ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED, CAPPED, PLUGGED OR OTHERWISE DISCONNECTED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, AS DIRECTED BY THE RESPONSIBLE ARCHITECT/ENGINEER, AND SUBJECT TO THE APPROVAL OF THE OWNER AND/OR LOCAL UTILITIES.
- THE AREAS OF THE OWNER'S PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION. SUBCONTRACTOR SHALL MINIMIZE DISTURBANCE TO THE EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE FEDERAL AND LOCAL JURISDICTION FOR EROSION AND SEDIMENT CONTROL.
- NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUNDING. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.
- THE SUBGRADE SHALL BE BROUGHT TO A SMOOTH UNIFORM GRADE AND COMPACTED TO 95 PERCENT STANDARD PROCTOR DENSITY UNDER PAVEMENT AND STRUCTURES AND 80 PERCENT STANDARD PROCTOR DENSITY IN OPEN SPACE. ALL TRENCHES IN PUBLIC RIGHT OF WAY SHALL BE BACKFILLED WITH FLOWABLE FILL OR OTHER MATERIAL PRE-APPROVED BY THE LOCAL JURISDICTION.
- ALL NECESSARY RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A LAWFUL MANNER.
- ALL BROCHURES, OPERATING AND MAINTENANCE MANUALS, CATALOGS, SHOP DRAWINGS, AND OTHER DOCUMENTS SHALL BE TURNED OVER TO THE GENERAL CONTRACTOR AT COMPLETION OF CONSTRUCTION AND PRIOR TO PAYMENT.
- SUBCONTRACTOR SHALL SUBMIT A COMPLETE SET OF AS-BUILT REDLINES TO THE GENERAL CONTRACTOR UPON COMPLETION OF PROJECT AND PRIOR TO FINAL PAYMENT.
- SUBCONTRACTOR SHALL LEAVE PREMISES IN A CLEAN CONDITION. THE PROPOSED FACILITY WILL BE UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SEWER SERVICE, AND IS NOT FOR HUMAN HABITAT (NO HANDICAP ACCESS REQUIRED).
- OCCUPANCY IS LIMITED TO PERIODIC MAINTENANCE AND INSPECTION, APPROXIMATELY 2 TIMES PER MONTH, BY AT&T TECHNICIANS.
- NO OUTDOOR STORAGE OR SOLID WASTE CONTAINERS ARE PROPOSED. ALL MATERIAL SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST REVISION OF AT&T MOBILITY GROUNDING STANDARD "TECHNICAL SPECIFICATION FOR CONSTRUCTION OF GSM/GPRS WIRELESS SITES" AND "TECHNICAL SPECIFICATION FOR FACILITY GROUNDING." IN CASE OF A CONFLICT BETWEEN THE CONSTRUCTION SPECIFICATION AND THE DRAWINGS, THE DRAWINGS SHALL GOVERN.
- SUBCONTRACTORS SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS REQUIRED FOR CONSTRUCTION. IF SUBCONTRACTOR CANNOT OBTAIN A PERMIT, THEY MUST NOTIFY THE GENERAL CONTRACTOR IMMEDIATELY.
- SUBCONTRACTOR SHALL REMOVED ALL TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS.
- INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM SITE VISITS AND/OR DRAWINGS PROVIDED BY THE SITE OWNER. CONTRACTORS SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
- NO WHITE STROBE LIGHTS ARE PERMITTED. ANY REQUIRED LIGHTING MUST MEET FAA STANDARDS AND REQUIREMENTS.
- ALL COAXIAL CABLE INSTALLATIONS TO FOLLOW MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS.
- NO SIGNIFICANT NOISE, SMOKE, DUST OR VIBRATIONS WILL RESULT FROM THIS FACILITY. (DISREGARD THIS NOTE IF THIS SITE HAS A GENERATOR)
- NO ADDITIONAL PARKING TO BE PROPOSED. EXISTING ACCESS AND PARKING TO REMAIN, UNLESS NOTED OTHERWISE.
- NO LANDSCAPING IS PROPOSED AT THIS SITE, UNLESS NOTED OTHERWISE.

ELECTRICAL NOTES:

- ELECTRICAL CONTRACTOR SHALL SUPPLY AND INSTALL ANY/ALL ELECTRICAL WORK INDICATED. ANY/ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH DRAWINGS AND ANY/ALL APPLICABLE SPECIFICATIONS. IF ANY PROBLEMS ARE ENCOUNTERED BY COMPLYING WITH THESE REQUIREMENTS, CONTRACTOR SHALL NOTIFY 'CONSTRUCTION MANAGER' AS SOON AS POSSIBLE, AFTER THE DISCOVERY OF THE PROBLEMS, AND SHALL NOT PROCEED WITH THAT PORTION OF WORK, UNTIL THE 'CONSTRUCTION MANAGER' HAS DIRECTED THE CORRECTIVE ACTIONS TO BE TAKEN.
- ELECTRICAL CONTRACTOR SHALL VISIT THE JOB SITE AND FAMILIARIZE HIMSELF WITH ANY/ALL CONDITIONS AFFECTING ELECTRICAL AND COMMUNICATION INSTALLATION AND MAKE PROVISIONS AS TO THE COST THEREOF. ALL EXISTING CONDITIONS OF ELECTRICAL EQUIP., LIGHT FIXTURES, ETC., THAT ARE PART OF THE FINAL SYSTEM, SHALL BE VERIFIED BY THE CONTRACTOR, PRIOR TO THE SUBMITTING OF HIS BID. FAILURE TO COMPLY WITH THIS PARAGRAPH WILL IN NO WAY RELIEVE CONTRACTOR OF PERFORMING ALL WORK NECESSARY FOR A COMPLETE AND WORKING SYSTEM.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE NEC AND ALL CODES AND LOCAL ORDINANCES OF THE LOCAL POWER & TELEPHONE COMPANIES HAVING JURISDICTION AND SHALL INCLUDE BUT NOT BE LIMITED TO:
C - NATIONAL FIRE CODES
A. UL - UNDERWRITERS LABORATORIES
B. NEC - NATIONAL ELECTRICAL CODE
C. NEMA - NATIONAL ELECTRICAL MANUFACTURERS ASSOC.
D. OSHA - OCCUPATIONAL SAFETY AND HEALTH ACT
E. SBC - STANDARD BUILDING CODE

- DO NOT SCALE ELECTRICAL DRAWINGS; REFER TO SITE PLANS AND ELEVATIONS FOR EXACT LOCATIONS OF ALL EQUIPMENT, AND CONFIRM WITH CONSTRUCTION MANAGER ANY SIZES AND LOCATIONS WHEN NEEDED.
- EXISTING SERVICES: CONTRACTOR SHALL NOT INTERRUPT EXISTING SERVICES WITHOUT WRITTEN PERMISSION OF THE OWNER.
- CONTRACTOR SHALL PAY FOR ANY/ALL PERMITS, FEES, INSPECTIONS, AND TESTING. CONTRACTOR IS TO OBTAIN PERMITS AND APPROVED SUBMITTALS PRIOR TO THE WORK BEGINNING OR ORDERING EQUIPMENT.
- THE TERM "PROVIDE" USED IN CONSTRUCTION DOCUMENTS AND SPECIFICATIONS, INDICATES THAT THE CONTRACTOR SHALL FURNISH AND INSTALL.
- CONTRACTOR SHALL CONFIRM WITH LOCAL UTILITY COMPANY ANY/ALL REQUIREMENTS, SUCH AS THE: LUG SIZE RESTRICTIONS, CONDUIT ENTRY, SIZE OF TRANSFORMERS, SCHEDULED DOWNTIME FOR THE OWNERS' CONFIRMATION, ETC... ANY/ALL CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE CONSTRUCTION MANAGER, PRIOR TO BEGINNING ANY WORK.
- MINIMUM WIRE SIZE SHALL BE #12 AWC, NOT INCLUDING CONTROL WIRING, UNLESS NOTED OTHERWISE. ALL CONDUCTORS SHALL BE COPPER WITH THWN INSULATION.
- OUTLET BOXES SHALL BE PRESSED STEEL IN DRY LOCATIONS, CAST ALLOY WITH THREADED HUBS IN WET/DAMP LOCATIONS AND SPECIAL ENCLOSURES FOR OTHER CLASSIFIED AREAS.
- IT IS NOT THE INTENT OF THESE PLANS TO SHOW EVERY MINOR DETAIL OF THE CONSTRUCTION. CONTRACTOR IS EXPECTED TO FURNISH AND INSTALL ALL ITEMS FOR A COMPLETE ELECTRICAL SYSTEM AND PROVIDE ALL REQUIREMENTS FOR THE EQUIPMENT TO BE PLACED IN PROPER WORKING ORDER.
- ELECTRICAL SYSTEM SHALL BE AS COMPLETELY AND EFFECTIVELY GROUNDED, AS REQUIRED BY SPECIFICATIONS, SET FORTY BY AT&T.
- ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR IN A FIRST CLASS, WORKMANLIKE MANNER. THE COMPLETED SYSTEM SHALL BE FULLY OPERATIVE AND SUBJECT TO REGULATORY INSPECTION & APPROVAL BY CONSTRUCTION MANAGER.
- ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF CONSTRUCTION.
- CONTRACTOR SHALL GUARANTEE ANY/ALL MATERIALS AND WORK FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN ONE YEAR FROM DATE OF ACCEPTANCE.
- THE CORRECTION OF ANY DEFECTS SHALL BE COMPLETED WITHOUT ANY ADDITIONAL CHARGE AND SHALL INCLUDE THE REPLACEMENT OR THE REPAIR OF ANY OTHER PHASE OF THE INSTALLATION, WHICH MAY HAVE BEEN DAMAGED THEREIN.
- ADEQUATE AND REQUIRED LIABILITY INSURANCE SHALL BE PROVIDED FOR PROTECTION AGAINST PUBLIC LOSS AND ANY/ALL PROPERTY DAMAGE FOR THE DURATION OF WORK.
- PROVIDE AND INSTALL CONDUIT, CONDUCTORS, PULL WIRES, BOXES, COVER PLATES AND DEVICES FOR ALL OUTLETS AS INDICATED.
- DITCHING AND BACK FILL: CONTRACTOR SHALL PROVIDE FOR ALL UNDERGROUND INSTALLED CONDUIT AND/OR CABLES INCLUDING EXCAVATION, BACKFILLING AND COMPACTION. REFER TO 'FOUNDATION, EXCAVATION, AND BACKFILLING NOTES.'
- MATERIALS, PRODUCTS AND EQUIPMENT, INCLUDING ALL COMPONENTS THEREOF, SHALL BE NEW AND SHALL APPEAR ON THE LIST OF U.L. APPROVED ITEMS AND SHALL MEET OR EXCEED THE REQUIREMENTS OF THE NEC, NEMA, AND IECE.
- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OR MANUFACTURERS CATALOG INFORMATION OF ANY/ALL LIGHTING FIXTURES, SWITCHES, AND ALL OTHER ELECTRICAL ITEMS FOR APPROVAL BY THE CONSTRUCTION MANAGER PRIOR TO INSTALLATION.
- ANY CUTTING OR PATCHING DEEMED NECESSARY FOR ELECTRICAL WORK IS THE ELECTRICAL CONTRACTORS RESPONSIBILITY AND SHALL BE INCLUDED IN THE COST FOR WORK AND PERFORMED TO THE SATISFACTION OF THE 'CONSTRUCTION MANAGER' UPON FINAL ACCEPTANCE.
- THE ELECTRICAL CONTRACTOR SHALL LABEL ALL PANELS WITH ONLY TYPEWRITTEN DIRECTORIES. ALL ELECTRICAL WIRING SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
- DISCONNECT SWITCHES SHALL BE H.P. RATED HEAVY-DUTY, QUICK-MADE AND QUICK-BREAK ENCLOSURES, AS REQUIRED BY EXPOSURE TYPE.
- ALL CONNECTIONS SHALL BE MADE WITH A PROTECTIVE COATING OF AN ANTI-OXIDE COMPOUND SUCH AS "NO-OXIDE A" BY DEARBORNE CHEMICAL CO. COAT ALL WIRE SURFACES BEFORE CONNECTING. EXPOSED COPPER SURFACES, INCLUDING GROUND BARS, SHALL BE TREATED - NO SUBSTITUTIONS.
- RACEWAYS: CONDUIT SHALL BE SCHEDULE 40 PVC MEETING OR EXCEEDING NEMA TC2 - 1990. CONTRACTOR SHALL PLUG AND CAP EACH END OF SPARE AND EMPTY CONDUITS AND PROVIDE TWO SEPARATE PULL STRINGS - 200 LBS TEST POLYETHYLENE CORD. ALL CONDUIT BENDS SHALL BE A MINIMUM OF 2 FT. RADIUS. RGS CONDUITS WHEN SPECIFIED, SHALL MEET UL-6 FOR GALVANIZED STEEL. ALL FITTINGS SHALL BE SUITABLE FOR USE WITH THREADING RIGID CONDUIT. COAT ALL THREADS WITH 'BRITE ZINC' OR 'GOLD CALV.'
- SUPPORT OF ALL ELECTRICAL WORK SHALL BE AS REQUIRED BY NEC.
- CONDUCTORS: CONTRACTOR SHALL USE 98% CONDUCTIVITY COPPER WITH TYPE THWN INSULATION, 800 VOLT, COLOR CODED. USE SOLID CONDUCTORS FOR WIRE UP TO AND INCLUDING NO. 8 AWC. USE STRANDED CONDUCTORS FOR WIRE ABOVE NO. 8 AWC.
- CONNECTORS FOR POWER CONDUCTORS: CONTRACTOR SHALL USE PRESSURE TYPE INSULATED TWIST-ON CONNECTORS FOR NO. 10 AWC AND SMALLER. USE SOLDERLESS MECHANICAL TERMINAL LUGS FOR NO. 8 AWC AND LARGER.
- SERVICES: 240/120V, SINGLE PHASE, 3 WIRE CONNECTION AVAILABLE FROM UTILITY COMPANY. OWNER OR OWNERS AGENT WILL APPLY FOR POWER.

- TELEPHONE SERVICE: CONTRACTOR SHALL PROVIDE EMPTY CONDUITS WITH PULL STRINGS AS INDICATED ON DRAWINGS.
- ELECTRICAL AND TELCO RACEWAYS TO BE BURIED A MINIMUM OF 2' DEPTH.
- CONTRACTOR SHALL PLACE TWO LENGTHS OF WARNING TAPE AT A DEPTH OF 12" BELOW GROUND AND DIRECTLY ABOVE ELECTRICAL AND TELCO SERVICE CONDUITS. CAUTION TAPE TO READ "CAUTION BURIED ELECTRIC" OR "BURIED TELECOMM."
- ALL BOLTS SHALL BE STAINLESS STEEL



GROUNDING NOTES:

- COMPRESSION CONNECTIONS (2), 2 AWG BARE TINNED SOLID COPPER CONDUCTORS TO GROUNDING BAR. ROUTE CONDUCTORS TO BURIED GROUNDING RING AND PROVIDE PARALLEL EXOTHERMIC WELD.
- EC SHALL USE PERMANENT MARKER TO DRAW THE LINES BETWEEN EACH SECTION AND LABEL EACH SECTION ("P," "A," "N," "I") WITH 1" LETTERS.
- ALL HARDWARE 18-8 STAINLESS STEEL, INCLUDING LOCK WASHERS, COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING. ALL HARDWARE SHALL BE STAINLESS STEEL 3/8 INCH DIAMETER OR LARGER.
- FOR GROUND BOND TO STEEL ONLY: INSERT A CADMIUM FLAT WASHER BETWEEN LUG AND STEEL, COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING.
- NUT & WASHER SHALL BE PLACED ON THE FRONT SIDE OF THE GROUNDING BAR AND BOLTED ON THE BACK SIDE.
- NUMBER OF GROUNDING BARS MAY VARY DEPENDING ON THE TYPE OF TOWER, ANTENNA LOCATION, AND CONNECTION ORIENTATION. PROVIDE AS REQUIRED.
- WHEN THE SCOPE OF WORK REQUIRES THE ADDITION OF A GROUNDING BAR TO AN EXISTING TOWER, THE SUBCONTRACTOR SHALL OBTAIN APPROVAL FROM THE TOWER OWNER PRIOR TO MOUNTING THE GROUNDING BAR TO THE TOWER.
- ALL ELECTRICAL AND GROUNDING AT THE CELL SITE SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE (NEC), NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 780 (LATEST EDITION), AND MANUFACTURER.

FOUNDATION, EXCAVATION, & BACKFILL NOTES:

- ALL FINAL GRADED SLOPES SHALL BE A MAXIMUM OF 3 HORIZONTAL TO 1 VERTICAL.
- ALL EXCAVATIONS PREPARED FOR PLACEMENT OF CONCRETE SHALL BE OF UNDISTURBED SOILS, SUBSTANTIALLY HORIZONTAL, AND FREE FROM ANY LOOSE, UNSUITABLE MATERIAL OR FROZEN SOILS, AND WITHOUT THE PRESENCE OF POUNDING WATER. DEWATERING FOR EXCESS GROUND WATER SHALL BE PROVIDED WHEN REQUIRED. COMPACTION OF SOILS UNDER CONCRETE PAD FOUNDATIONS SHALL NOT BE LESS THAN 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY FOR THE SOIL IN ACCORDANCE WITH ASTM D1557.
- CONCRETE FOUNDATIONS SHALL NOT BE PLACED ON ORGANIC OR UNSUITABLE MATERIAL. IF INADEQUATE BEARING CAPACITY IS REACHED AT THE DESIGNED EXCAVATION DEPTH, THE UNSATISFACTORY SOIL SHALL BE EXCAVATED TO ITS FULL DEPTH AND EITHER BE REPLACED WITH MECHANICALLY COMPACTED GRANULAR MATERIAL OR THE EXCAVATION SHALL BE FILLED WITH CONCRETE OF THE SAME TYPE SPECIFIED FOR THE FOUNDATION. CRUSHED STONE MAY BE USED TO STABILIZE THE BOTTOM OF THE EXCAVATION. ANY STONE SUB BASE MATERIAL, IF USED, SHALL NOT SUBSTITUTE FOR REQUIRED THICKNESS OF CONCRETE.
- ALL EXCAVATIONS SHALL BE CLEAN OF UNSUITABLE MATERIAL SUCH AS VEGETATION, TRASH, DEBRIS, AND SO FORTH PRIOR TO BACK FILLING. BACK FILL SHALL CONSIST OF APPROVED MATERIALS SUCH AS EARTH, LOAM, SANDY CLAY, SAND AND GRAVEL, OR SOFT SLURRY, FREE FROM CLODS OR LARGE STONES OVER 2 1/2 MAX DIMENSIONS. ALL BACK FILL SHALL BE PLACED IN COMPACTED LAYERS.
- ALL FILL MATERIALS AND FOUNDATION BACK FILL SHALL BE PLACED IN MAXIMUM 6" THICK LIFTS BEFORE COMPACTION. EACH LIFT SHALL BE WETTED IF REQUIRED AND COMPACTED TO NOT LESS THAN 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY FOR SOIL IN ACCORDANCE WITH ASTM D1557
- NEWLY PLACED CONCRETE FOUNDATIONS SHALL CURE A MINIMUM OF 72 HOURS PRIOR TO BACK FILLING.
- FINISHED GRADING SHALL BE SLOPED TO PROVIDE POSITIVE DRAINAGE AND PREVENT STANDING WATER. THE FINAL (FINISH) ELEVATION OF SLAB FOUNDATIONS SHALL SLOPE AWAY IN ALL DIRECTIONS FROM THE CENTER. FINISH GRADE OF CONCRETE PADS SHALL BE A MAXIMUM OF 4 INCHES ABOVE FINAL FINISH GRADE ELEVATIONS. PROVIDE SURFACE FILL GRAVEL TO ESTABLISH SPECIFIED ELEVATIONS WHERE REQUIRED.
- NEWLY GRADED SURFACE AREAS TO RECEIVE GRAVEL SHALL BE COVERED WITH GEOTEXTILE FABRIC TYPE: TYPAR-3401 AS MANUFACTURED BY "CONSTRUCTION MATERIAL 1-800-239-3841" OR AN APPROVED EQUIVALENT, SHOWN ON PLANS. THE GEOTEXTILE FABRIC SHALL BE BLACK IN COLOR TO CONTROL THE RECURRENCE OF VEGETATIVE GROWTH AND EXTEND TO WITHIN 1 FOOT OUTSIDE THE SITE FENCING OR ELECTRICAL GROUNDING SYSTEM PERIMETER WHICHEVER IS GREATER. ALL FABRIC SHALL BE COVERED WITH A MINIMUM OF 4" DEEP COMPACTED STONE OR GRAVEL AS SPECIFIED. I.E. FDOT TYPE NO.57 FOR FENCED COMPOUND; FDOT TYPE NO. 67 FOR ACCESS DRIVE AREA.
- IN ALL AREAS TO RECEIVE FILL, REMOVE ALL VEGETATION, TOPSOIL, DEBRIS, WET AND UNSATISFACTORY SOIL MATERIALS, OBSTRUCTIONS, AND DELETERIOUS MATERIALS FROM GROUND SURFACE. PLOW STRIP OR BREAK UP SLOPED SURFACES STEEPER THAN 1 VERTICAL TO 4 HORIZONTAL SUCH THAT FILL MATERIAL WILL BIND WITH EXISTING/PREPARED SOIL SURFACE.

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0	ISSUED FOR PERMIT	DATE	06/15/18
No.	Submittal / Revision	App'd	Date

Drawn: **ASW** Date: **03/26/18**
Designed: **ASW** Date: **03/26/18**
Checked: **ASW** Date: **03/26/18**

Project Number: **555-022**

Project Title:
**FA# 10071137
CT5266
MONROE NORTHEAST**

1428 MONROE TURNPIKE
MONROE, CT 06468

Prepared For:
CENTERLINE COMMUNICATIONS

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Drawing Scale:
AS NOTED

Date:
06/15/18

Drawing Title:
GENERAL NOTES

Drawing Number:
C1

10. WHEN SUBGRADE OR PREPARED GROUND SURFACE HAS A DENSITY LESS THAN THAT REQUIRED FOR THE FILL MATERIAL, SCARIFY THE GROUND SURFACE TO DEPTH REQUIRED, PULVERIZE, MOISTURE-CONDITION AND/OR AERATE THE SOILS AND RE-COMPACT TO THE REQUIRED DENSITY PRIOR TO PLACEMENT OR FILLS.
11. IN AREAS WHICH EXISTING GRAVEL SURFACING IS REMOVED OR DISTURBED DURING CONSTRUCTION OPERATIONS, REPLACE GRAVEL SURFACING TO MATCH ADJACENT GRAVEL SURFACING AND RESTORED TO THE SAME THICKNESS AND COMPACTION AS SPECIFIED. ALL RESTORED GRAVEL SURFACING SHALL BE FREE FROM CORRUGATIONS AND WAVES.
12. EXISTING GRAVEL SURFACING MAY BE EXCAVATED SEPARATELY AND REUSED WITH THE CONDITION THAT ANY UNFAVORABLE AMOUNTS OF ORGANIC MATTER, OR OTHER DELETERIOUS MATERIALS ARE REMOVED PRIOR TO REUSE. FURNISH ANY ADDITIONAL GRAVEL RESURFACING MATERIAL AS NEEDED TO PROVIDE A FULL DEPTH COMPACTED SURFACE THROUGHOUT SITE.
13. GRAVEL SUB SURFACE SHALL BE PREPARED TO REQUIRED COMPACTION AND SUBGRADE ELEVATIONS BEFORE GRAVEL SURFACING IS PLACED AND/OR RESTORED. ANY LOOSE OR DISTURBED MATERIALS SHALL BE THOROUGHLY COMPACTED AND ANY DEPRESSIONS IN THE SUBGRADE SHALL BE FILLED AND COMPACTED WITH APPROVED SELECTED MATERIAL. GRAVEL SURFACING MATERIAL SHALL NOT BE USED FOR FILLING DEPRESSIONS IN THE SUBGRADE.
14. PROTECT EXISTING GRAVEL SURFACING AND SUBGRADE IN AREAS WHERE EQUIPMENT LOADS WILL OPERATE. USE PLANKING 'MATTS' OR OTHER SUITABLE PROTECTION DESIGNED TO SPREAD EQUIPMENT LOADS AS MAY BE NECESSARY. REPAIR ANY DAMAGE TO EXISTING GRAVEL SURFACING OR SUB GRADE WHERE SUCH DAMAGE IS DUE TO THE CONTRACTORS OPERATIONS.
15. DAMAGE TO EXISTING STRUCTURES AND/OR UTILITIES RESULTING FROM CONTRACTORS NEGLIGENCE SHALL BE REPAIRED AND/OR REPLACED TO THE OWNERS SATISFACTION AT NO ADDITIONAL COST TO THE CONTRACT.
16. ALL SUITABLE BORROW MATERIAL FOR BACK FILL OF THE SITE SHALL BE INCLUDED IN THE BID. EXCESS TOPSOIL AND UNSUITABLE MATERIAL SHALL BE DISPOSED OF OFF SITE AT LOCATIONS APPROVED BY GOVERNING AGENCIES AT NO ADDITIONAL COST TO THE CONTRACT.

ENVIRONMENTAL NOTES:

1. ALL WORK PERFORMED SHALL BE DONE IN ACCORDANCE WITH ISSUED PERMITS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYMENT OF FINES AND PROPER CLEAN UP FOR AREAS IN VIOLATION.
2. CONTRACTOR AND/OR DEVELOPER SHALL BE RESPONSIBLE FOR CONSTRUCTION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROLS DURING CONSTRUCTION FOR PROTECTION OF ADJACENT PROPERTIES, ROADWAYS AND WATERWAYS AND SHALL BE MAINTAINED IN PLACE THROUGH FINAL JURISDICTIONAL INSPECTION & RELEASE OF SITE.
3. CONTRACTOR SHALL INSTALL/CONSTRUCT ALL NECESSARY SEDIMENT/SILT CONTROL FENCING AND PROTECTIVE MEASURES WITHIN THE LIMITS OF SITE DISTURBANCE PRIOR TO CONSTRUCTION.
4. NO SEDIMENT SHALL BE ALLOWED TO EXIT THE PROPERTY. THE CONTRACTOR IS RESPONSIBLE FOR TAKING ADEQUATE MEASURES FOR CONTROLLING EROSION. ADDITIONAL SEDIMENT CONTROL FENCING MAY BE REQUIRED IN ANY AREAS SUBJECT TO EROSION.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR DAILY INSPECTIONS AND ANY REPAIRS OF ALL SEDIMENT CONTROL MEASURES INCLUDING SEDIMENT REMOVAL AS NECESSARY.
6. CLEARING OF VEGETATION AND TREE REMOVAL SHALL BE ONLY AS PERMITTED AND BE HELD TO A MINIMUM. ONLY TREES NECESSARY FOR CONSTRUCTION OF THE FACILITIES SHALL BE REMOVED.
7. SEEDING AND MULCHING AND/OR SODDING OF THE SITE WILL BE ACCOMPLISHED AS SOON AS POSSIBLE AFTER COMPLETION OF THE PROJECT FACILITIES AFFECTING LAND DISTURBANCE.
8. CONTRACTOR SHALL PROVIDE ALL EROSION AND SEDIMENTATION CONTROL MEASURES AS REQUIRED BY LOCAL, COUNTY AND STATE CODES AND ORDINANCES TO PROTECT EMBANKMENTS FROM SOIL LOSS AND TO PREVENT ACCUMULATION OF SOIL AND SILT IN STREAMS AND DRAINAGE PATHS LEAVING THE CONSTRUCTION AREA. THIS MAY INCLUDE SUCH MEASURES AS SILT FENCES, STRAW BALE SEDIMENT BARRIERS, AND CHECK DAMS.
9. RIP RAP OF SIZES INDICATED SHALL CONSIST OF CLEAN, HARD, SOUND, DURABLE, UNIFORM IN QUALITY STONE FREE OF ANY DETRIMENTAL QUANTITY OF SOFT, FRIABLE, THIN, ELONGATED OR LAMINATED PIECES, DISINTEGRATED MATERIAL, ORGANIC MATTER, OIL, ALKALI, OR OTHER DELETERIOUS SUBSTANCES.

CONCRETE MASONRY NOTES:

1. CONCRETE MASONRY UNITS SHALL BE MEDIUM WEIGHT UNITS CONFORMING TO ASTM C90, GRADE N-1, (F'M=1,500 PSI), MEDIUM WEIGHT (115).
2. MORTAR SHALL BE TYPE "S" (MINIMUM 1,800 PSI AT 28 DAYS).
3. GROUT SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI AT 28 DAYS.
4. ALL CELLS CONTAINING REINFORCING STEEL OR EMBEDDED ITEMS AND ALL CELLS IN RETAINING WALLS AND WALLS BELOW GRADE SHALL BE SOLID GROUTED.
5. ALL HORIZONTAL REINFORCING STEEL SHALL BE PLACED IN BOND BEAM OR LINTEL BEAM UNITS.
6. WHEN GROUTING IS STOPPED FOR ONE HOUR OR LONGER, HORIZONTAL CONSTRUCTION JOINTS SHALL BE FORMED BY STOPPING THE GROUT POUR 1-1/2" BELOW TOP OF THE UPPERMOST UNIT.
7. ALL BOND BEAM BLOCK SHALL BE "DEEP CUT" UNITS.
8. PROVIDE INSPECTION AND CLEAN-OUT HOLES AT BASE OF VERTICAL CELLS HAVING GROUT LIFTS IN EXCESS OF 4'-0" OF HEIGHT.
9. ALL GROUT SHALL BE CONSOLIDATED WITH A MECHANICAL VIBRATOR.
10. CEMENT SHALL BE AS SPECIFIED FOR CONCRETE.
11. REINFORCING BARS - SEE NOTES UNDER "REINFORCING STEEL" FOR REQUIREMENTS.

31. PROVIDE ONE BAR DIAMETER (A MINIMUM OF 1/2") GROUT BETWEEN MAIN REINFORCING AND MASONRY UNITS.
32. LOW LIFT CONSTRUCTION, MAXIMUM GROUT POUR HEIGHT IS 4 FEET.
33. LIFT GROUTED CONSTRUCTION MAY BE USED IN CONFORMANCE WITH PROJECT SPECIFICATIONS AND SECTION 2104.6.1 OF CURRENT BUILDING CODE.
34. ALL CELLS IN CONCRETE BLOCKS SHALL BE FILLED SOLID WITH GROUT, EXCEPT AS NOTED IN THE DRAWINGS OR SPECIFICATIONS.
35. CELLS SHALL BE IN VERTICAL ALIGNMENT, DOWELS IN FOOTINGS SHALL BE SET TO ALIGN WITH CORES CONTAINING REINFORCING STEEL.
36. REFER TO ARCHITECTURAL DRAWINGS FOR SURFACE AND HEIGHT OF UNITS, LAYING PATTERN AND JOINT TYPE.
37. SAND SHALL BE CLEAN, SHARP AND WELL GRADED, FREE FROM INJURIOUS AMOUNTS OF DUST, LUMPS, SHALE, ALKALI OR ORGANIC MATERIAL.
38. BRICK SHALL CONFORM TO ASTM C-62 AND SHALL BE GRADE MW OR BETTER.

STRUCTURAL CONCRETE NOTES:

1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI-301-10
2. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH $f'_c=2,500$ PSI AT 28 DAYS UNLESS NOTED OTHERWISE.
3. REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE.
4. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:

CONCRETE CAST AGAINST EARTH	3 IN.
CONCRETE EXPOSED TO EARTH OR WEATHER:	
#6 AND LARGER	2 IN.
#5 AND SMALLER & WWF	1-1/2 IN.
CONCRETE NOT EXPOSED TO EARTH OR WEATHER, NOR CAST AGAINST THE GROUND:	
SLAB AND WALL	3/4 IN.
BEAMS AND COLUMNS	1-1/2 IN.

5. A 3/4" CHAMFER SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE U.N.O. IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.
6. HOLES TO RECEIVE EXPANSION/WEDGE ANCHORS SHALL BE 1/8" LARGER IN DIAMETER THAN THE ANCHOR BOLD, DOWEL OR ROD AND SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. LOCATE AND AVOID CUTTING EXISTING REBAR WHEN DRILLING HOLES IN ELEVATED CONCRETE SLABS.
7. USE AND INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE PER ICBO & MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURES.

STRUCTURAL STEEL NOTES:

1. ALL STEEL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE AISC MANUAL OF STEEL CONSTRUCTION. STEEL SECTIONS SHALL BE IN ACCORDANCE WITH ASTM AS INDICATED BELOW:
W-SHAPES: ASTM A992, 50 KSI
ANGLES, BARS CHANNELS: ASTM A36, 36 KSI
HSS SECTIONS: ASTM 500, 46 KSI
PIPE SECTIONS: ASTM A53-E, 35 KSI
2. ALL EXTERIOR EXPOSED STEEL AND HARDWARE SHALL BE HOT DIPPED GALVANIZED.
3. ALL WELDING SHALL BE PERFORMED USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC. WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "MANUAL OF STEEL CONSTRUCTION." PAINTED SURFACES SHALL BE TOUCHED UP.
4. BOLTED CONNECTIONS SHALL BE ASTM A325 BEARING TYPE 3/4" Ø CONNECTIONS AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE.
5. NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE 5/8" Ø ASTM A307 BOLTS UNLESS NOTED OTHERWISE.
6. FIELD MODIFICATIONS ARE TO BE COATED WITH ZINC ENRICHED PAINT.

SITE WORK & DRAINAGE:

PART 1 - GENERAL
CLEARING, GRUBBING, STRIPPING, EROSION CONTROL, SURVEY, LAYOUT, SUBGRADE PREPARATION AND FINISH GRADING AS REQUIRED TO COMPLETE THE PROPOSED WORK SHOWN IN THESE PLANS.

1.1 REFERENCES:

- A. DOT (STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR WAY CONSTRUCTION - CURRENT EDITION)
- B. ASTM (AMERICAN SOCIETY FOR TESTING AND MATERIALS)
- C. OSHA (OCCUPATION SAFETY AND HEALTH ADMINISTRATION)

1.2 INSPECTION AND TESTING:

- A. FIELD TESTING OF EARTHWORK COMPACTION AND CONCRETE CYLINDERS
- B. ALL WORK SHALL BE INSPECTED AND RELEASED BY THE GENERAL CONTRACTOR WHO SHALL CARRY OUT THE GENERAL INSPECTION OF THE WORK WITH SPECIFIC CONCERN TO PROPER PERFORMANCE OF THE WORK AS SPECIFIED AND/OR CALLED FOR ON THE DRAWINGS. IT IS THE SUBCONTRACTOR'S RESPONSIBILITY TO REQUEST TIMELY INSPECTIONS PRIOR TO PROCEEDING WITH FURTHER WORK THAT WOULD MAKE PARTS OF WORK INACCESSIBLE OR DIFFICULT TO INSPECT.

1.3 SITE MAINTENANCE AND PROTECTION:

- A. PROVIDE ALL NECESSARY JOB SITE MAINTENANCE FROM COMMENCEMENT OF WORK UNTIL COMPLETION OF THE SUBCONTRACT.
- B. AVOID DAMAGE TO THE SITE AND TO EXISTING FACILITIES, STRUCTURES, TREES, AND SHRUBS DESIGNATED TO REMAIN. TAKE PROTECTIVE MEASURES TO PREVENT EXISTING FACILITIES THAT ARE NOT DESIGNATED FOR REMOVAL FROM BEING DAMAGED BY THE WORK.
- C. KEEP SITE FREE OF ALL PONDING WATER.
- D. PROVIDE EROSION CONTROL MEASURES IN ACCORDANCE WITH STATE DOT AND EPA REQUIREMENTS.
- E. PROVIDE AND MAINTAIN ALL TEMPORARY FENCING, BARRICADES, WARNING SIGNALS AND SIMILAR DEVICES NECESSARY TO PROTECT AGAINST THEFT FROM PROPERTY DURING THE ENTIRE PERIOD OF CONSTRUCTION. REMOVE ALL SUCH DEVICES UPON COMPLETION OF THE WORK.
- F. EXISTING UTILITIES: DO NOT INTERRUPT EXISTING UTILITIES SERVING FACILITIES OCCUPIED BY THE OWNER OR OTHERS, EXCEPT WHEN PERMITTED IN WRITING BY THE ENGINEER, AND THEN ONLY AFTER ACCEPTABLE TEMPORARY UTILITY SERVICES HAVE BEEN PROVIDED.

PROVIDE A MINIMUM 48-HOUR NOTICE TO THE ENGINEER AND RECEIVE WRITTEN NOTICE TO PROCEED BEFORE INTERRUPTING ANY UTILITY SERVICE.

PART 2 - PRODUCTS

- 2.1 SUITABLE BACKFILL: ASTM D2321 (CLASS I, II, III, OR IVA) FREE FROM FROZEN LUMPS, REFUSE, STONES OR ROCKS LARGER THAN 3 INCHES IN ANY DIMENSION OR OTHER MATERIAL THAT MAY MAKE THE INORGANIC MATERIAL UNSUITABLE FOR BACKFILL.
- 2.2 NON-POROUS GRANULAR EMBANKMENT AND BACKFILL: ASTM D2321 (CLASS III, IVA OR IVB) COARSE AGGREGATE. FREE FROM FROZEN LUMPS, REFUSE, STONES, OR ROCKS LARGER THAN 3 INCHES IN ANY DIMENSION OR OTHER MATERIAL THAT MAY MAKE THE INORGANIC MATERIAL UNSUITABLE FOR BACKFILL.
- 2.3 POROUS GRANULAR EMBANKMENT AND BACKFILL: ASTM D2321 (CLASS IA, IB, OR II) COARSE AGGREGATE FREE FROM FROZEN LUMPS, REFUSE, STONES, OR ROCKS LARGER THAN 3 INCHES IN ANY DIMENSION OR OTHER MATERIAL THAT MAY MAKE THE INORGANIC MATERIAL UNSUITABLE FOR BACKFILL.
- 2.4 SELECT STRUCTURAL FILL: GRANULAR FILL MATERIAL MEETING THE REQUIREMENTS OF ASTM E850-95. FOR USE AROUND AND UNDER STRUCTURES WHERE STRUCTURAL FILL MATERIAL ARE REQUIRED.
- 2.5 GRANULAR BEDDING AND TRENCH BACKFILL: WELL-GRADED SAND MEETING THE GRADATION REQUIREMENTS OF ASTM D2487 (SE OR SW-SM).
- 2.6 COARSE AGGREGATE FOR ACCESS ROAD SUB BASE COURSE SHALL CONFORM TO ASTM D2940.
- 2.7 UNSUITABLE MATERIAL: AND MODERATELY PLASTIC SILTS AND CLAYS (LL>45). MATERIAL CONTAINING REFUSE, FROZEN LUMPS, DEMOLISHED BITUMINOUS MATERIAL, VEGETATIVE MATTER, WOOD, STONES IN EXCESS OF 3 INCHES IN ANY DIMENSION, AND DEBRIS AS DETERMINED BY THE CONSTRUCTION MANAGER. TYPICAL THESE WILL BE SOILS CLASSIFIED BY ASTM AS PT, MH, CH, OH, ML, AND OL.
- 2.8 GEOTEXTILE FABRIC: MIRAFI 500X OR APPROVED EQUAL.
- 2.9 PLASTIC MARKING TAPE: SHALL BE ACID AND ALKALI RESISTANT POLYETHYLENE FILM SPECIFICALLY MANUFACTURED FOR MARKING AND LOCATING UNDERGROUND UTILITIES, 6 INCHES WIDE WITH A MINIMUM THICKNESS OF 0.004 INCH. TAPE SHALL HAVE MINIMUM STRENGTH OF 1500 PSI IN BOTH DIRECTIONS AND MANUFACTURED WITH INTEGRAL CONDUCTORS, FOIL BACKING OR OTHER MEANS TO ENABLE DETECTION BY A METAL DETECTOR WHEN BURIED UP TO 3 FEET DEEP. THE METALLIC CORE OF THE TAPE SHALL BE ENCASED IN A PROTECTIVE JACKET OR PROVIDED WITH OTHER MEANS TO PROTECT IT FROM CORROSION. TAPE COLOR SHALL BE RED FOR ELECTRIC UTILITIES AND ORANGE FOR TELECOMMUNICATION UTILITIES.

PART 2 - EXECUTION

3.1 GENERAL:

- A. BEFORE STARTING GENERAL SITE PREPARATION ACTIVITIES, INSTALL EROSION AND SEDIMENT CONTROL MEASURES. THE WORK AREA SHALL BE CONSTRUCTED AND MAINTAINED IN SUCH A CONDITION THAT IN THE EVENT OF RAIN THE SITE WILL BE DRAINED AT ANY TIME.
- B. BEFORE ALL SURVEY, LAYOUT, STAKING, AND MARKING, ESTABLISH AND MAINTAIN ALL LINES, GRADES, ELEVATIONS AND BENCHMARKS NEEDED FOR EXECUTION OF THE WORK.
- C. CLEAR AND GRUB THE AREA WITHIN THE LIMITS OF THE SITE. REMOVE TREES, BRUSH, STUMPS, RUBBISH AND OTHER DEBRIS AND VEGETATION RESTING ON OR PROTRUDING THROUGH THE SURFACE OF THE SITE AREA TO BE CLEARED.
 1. REMOVE THE FOLLOWING MATERIALS TO A DEPTH OF NO LESS THAN 12 INCHES BELOW THE ORIGINAL GROUND SURFACE: ROOTS, STUMPS, AND OTHER DEBRIS, BRUSH, AND REFUSE EMBEDDED IN OR PROTRUDING THROUGH THE GROUND SURFACE, RAKE, DISK OR PLOW THE AREA TO A DEPTH OF NO LESS THAN 6 INCHES, AND REMOVE TO A DEPTH OF 12 INCHES ALL ROOTS AND OTHER DEBRIS THEREBY EXPOSED.
 2. REMOVE TOPSOIL MATERIAL COMPLETELY FROM THE SURFACE UNTIL THE SOIL NO LONGER MEETS THE DEFINITION OF TOPSOIL. AVOID MIXING TOPSOIL WITH SUBSOIL OR OTHER UNDESIRABLE MATERIALS.
 3. EXCEPT WHERE EXCAVATION TO GREATER DEPTH IS INDICATED, FILL DEPRESSIONS RESULTING FROM CLEARING, GRUBBING, AND DEMOLITION WORK COMPLETELY WITH SUITABLE FILL.
 - D. REMOVE FROM THE SITE AND DISPOSE IN AN AUTHORIZED LANDFILL ALL DEBRIS RESULTING FROM CLEARING AND GRUBBING OPERATIONS. BURNING WILL NOT BE PERMITTED.

- E. PRIOR TO EXCAVATING, THOROUGHLY EXAMINE THE AREA TO BE EXCAVATED AND/OR TRENCHED TO VERIFY THE LOCATIONS OF FEATURES INDICATED ON THE DRAWINGS AND TO ASCERTAIN THE EXISTENCE AND LOCATION OF ANY STRUCTURE, UNDERGROUND STRUCTURE, OR OTHER ITEM NOT SHOWN THAT MIGHT INTERFERE WITH THE PROPOSED CONSTRUCTION. NOTIFY THE CONSTRUCTION MANAGER OF ANY OBSTRUCTIONS THAT WILL PREVENT ACCOMPLISHMENT OF THE WORK AS INDICATED ON THE DRAWINGS.
- F. SEPARATE AND STOCK PILE ALL EXCAVATED MATERIALS SUITABLE FOR BACKFILL. ALL EXCESS EXCAVATED AND UNSUITABLE MATERIALS SHALL BE DISPOSED OF OFF-SITE IN A LEGAL MANNER.

3.2 BACKFILL:

- A. AS SOON AS PRACTICAL, AFTER COMPLETING CONSTRUCTION OF THE RELATED STRUCTURE, INCLUDING EXPIRATION OF THE SPECIFIED MINIMUM CURING PERIOD FOR CAST-IN-PLACE CONCRETE, BACKFILL THE EXCAVATION WITH APPROVED MATERIAL TO RESTORE THE REQUIRED FINISHED GRADE.
- B. PRIOR TO PLACING BACKFILL AROUND STRUCTURES, ALL FORMS SHALL BE REMOVED AND THE EXCAVATION CLEANED OF ALL TRASH, DEBRIS, AND UNSUITABLE MATERIALS.
- C. BACKFILL BY PLACING AND COMPACTING SUITABLE BACKFILL MATERIAL OR SELECT GRANULAR BACKFILL MATERIAL WHEN REQUIRED IN UNIFORM HORIZONTAL LAYERS OF NO GREATER THAN 8-INCHES LOOSE THICKNESS AND COMPACTED. WHERE HAND OPERATED COMPACTORS ARE USED, THE FILL MATERIAL SHALL BE PLACED IN LIFTS NOT TO EXCEED 4 INCHES IN LOOSE DEPTH AND COMPACTED.
- D. WHENEVER THE DENSITY TESTING INDICATES THAT THE CONTRACTOR HAS NOT OBTAINED THE SPECIFIED DENSITY, THE SUCCEEDING LAYER SHALL NOT BE PLACED UNTIL THE SPECIFICATION REQUIREMENTS ARE MET UNLESS OTHERWISE AUTHORIZED BY THE GEOTECHNICAL ENGINEER. THE CONTRACTOR SHALL TAKE WHATEVER APPROPRIATE ACTION IS NECESSARY, SUCH AS DISKING AND DRYING, ADDING WATER, OR INCREASING THE COMPACTION EFFORT TO MEET THE MINIMUM COMPACTION REQUIREMENTS.
- E. THOROUGHLY COMPACT EACH LAYER OF BACKFILL TO A MINIMUM 95% OF THE MAXIMUM DRY DENSITY AS PROVIDED BY THE STANDARD PROCTOR TEST, ASTM D 698.

3.3 TRENCH EXCAVATION:

- A. UTILITY TRENCHES SHALL BE EXCAVATED TO THE LINES AND GRADES SHOWN ON THE DRAWINGS OR AS DIRECTED BY THE GENERAL CONTRACTOR. PROVIDE SHORING, SHEETING AND BRACING AS REQUIRED TO PREVENT CAVING OR SLOUGHING OF THE TRENCH WALLS.
- B. EXTEND THE TRENCH WIDTH A MINIMUM OF 6 INCHES BEYOND THE OUTSIDE EDGE OF THE OUTERMOST CONDUIT.
- C. WHEN SOFT YIELDING, OR OTHERWISE UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED, BACKFILL AT THE REQUIRED TRENCH TO A DEPTH OF NO LESS THAN 12 INCHES BELOW THE REQUIRED ELEVATION AND BACKFILL WITH GRANULAR BEDDING MATERIAL.

3.4 TRENCH BACKFILL:

- A. PROVIDE GRANULAR BEDDING MATERIAL IN ACCORDANCE WITH THE DRAWINGS AND THE UTILITY REQUIREMENTS.
- B. NOTIFY THE GENERAL CONTRACTOR 24 HOURS IN ADVANCE OF BACKFILLING.
- C. CONDUCT UTILITY CHECK TESTS BEFORE BACKFILLING. BACKFILL AND COMPACT TRENCH BEFORE ACCEPTANCE TESTING.
- D. PLACE GRANULAR TRENCH BACKFILL UNIFORMLY ON BOTH SIDES OF THE CONDUITS IN 6-INCH UNCOMPACTED LIFTS UNTIL 12 INCHES OVER THE CONDUITS. SOLIDLY RAM AND TAMP BACKFILL INTO SPACE AROUND CONDUITS.
- E. PROTECT CONDUIT FROM LATERAL MOVEMENT, IMPACT DAMAGE, OR UNBALANCED LOADING.
- F. ABOVE THE CONDUIT EMBEDMENT ZONE, PLACE AND COMPACT SATISFACTORY BACKFILL MATERIAL IN 8-INCH MAXIMUM LOOSE THICKNESS LIFTS TO RESTORE THE REQUIRED FINISHED SURFACE GRADE.
- G. COMPACT FINAL TRENCH BACKFILL TO A DENSITY EQUAL TO OR GREATER THAN THAT OF THE EXISTING UNDISTURBED MATERIAL IMMEDIATELY ADJACENT TO THE TRENCH BUT NO LESS THAN A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY AS PROVIDED BY THE STANDARD PROCTOR TEST, ASTM D 698.

3.5 FINISH GRADING:

- A. PERFORM ALL GRADING TO PROVIDE POSITIVE DRAINAGE AWAY FROM STRUCTURES AND SMOOTH, EVEN SURFACE DRAINAGE OF THE ENTIRE AREA WITHIN THE LIMITS OF CONSTRUCTION. GRADING SHALL BE COMPATIBLE WITH ALL SURROUNDING TOPOGRAPHY AND STRUCTURES.
- B. UTILIZE SATISFACTORY FILL MATERIAL RESULTING FROM THE EXCAVATION WORK IN THE CONSTRUCTION OF FILLS, EMBANKMENTS AND FOR REPLACEMENT OF REMOVED UNSUITABLE MATERIALS.
- C. ACHIEVE FINISHED GRADE BY PLACING A MINIMUM OF 4 INCHES OF 1/2" - 3/4" CRUSHED STONE ON TOP SOIL STABILIZER FABRIC.
- D. REPAIR ALL ACCESS ROADS AND SURROUNDING AREAS USED DURING THE COURSE OF THIS WORK TO THEIR ORIGINAL CONDITION.

3.7 ASPHALT PAVING ROAD:

- A. DIVISION 600 - KDOT FLEXIBLE PAVEMENT. (UPDATE PER LOCAL DOT)
- B. SECTION 403 - MODOT ASPHALT CONCRETE PAVEMENT.

INFINIGY

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	Submital / Revision	App'd	Date

Drawn: BMM Date: 03/20/18
Designed: ASW Date: 03/20/18
Checked: ASW Date: 03/20/18

Project Number: 555-022

Project Title: FA# 10071137
CT5266
MONROE NORTHEAST

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MONROE, CT 06468

Prepared For:



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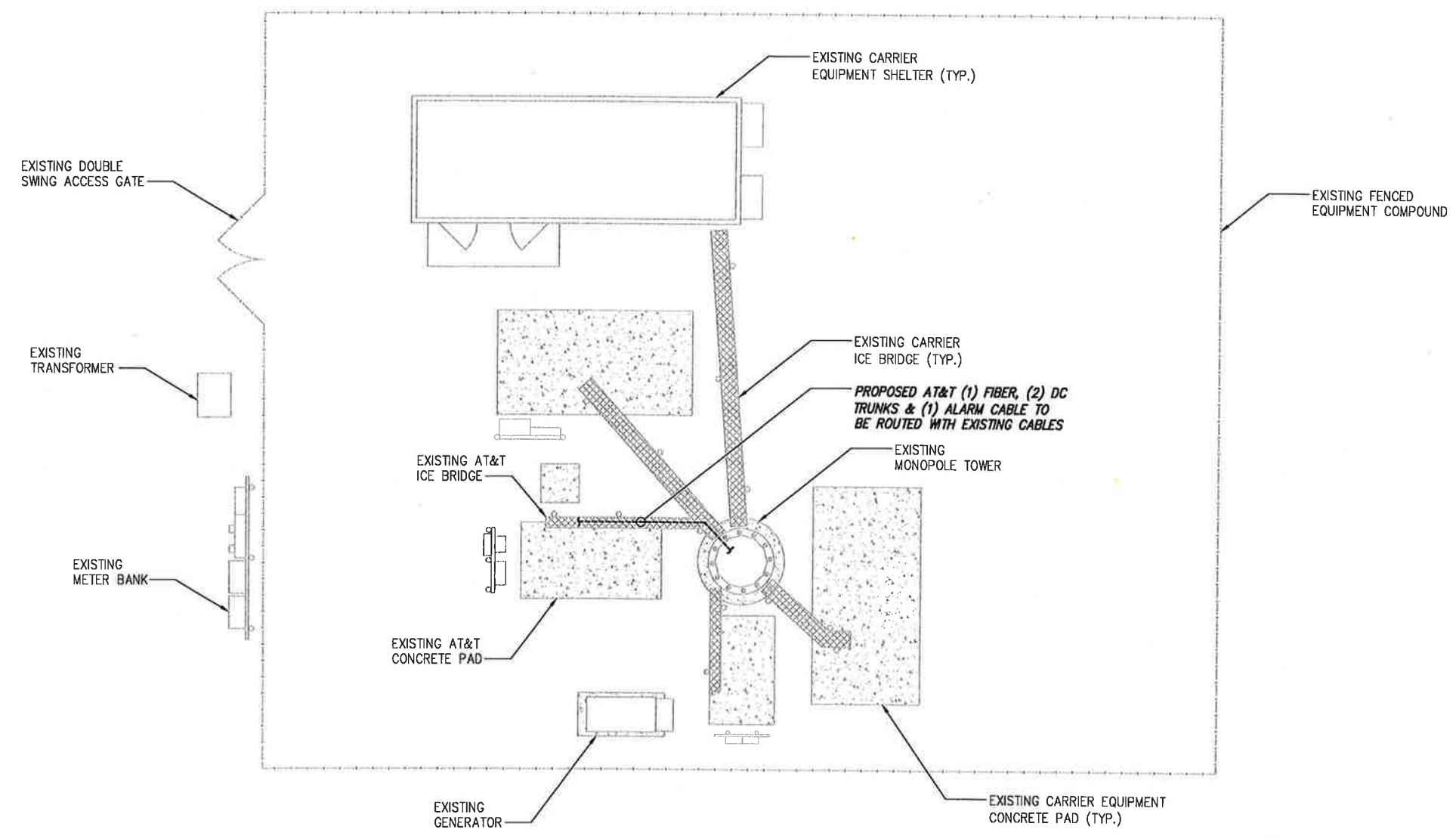
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Drawing Number: G2

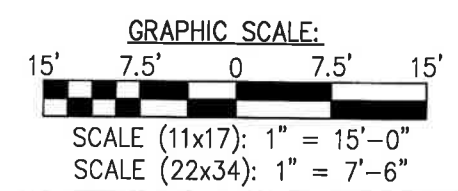
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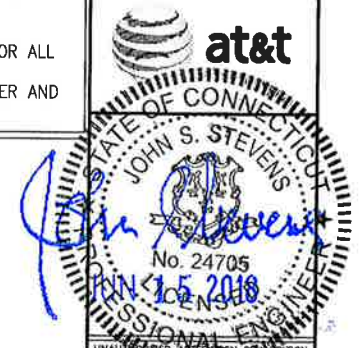
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 3. ROUTE ALL PROPOSED CABLING ON EXISTING CABLE LADDER. ACTUAL ROUTE ON DRAWINGS MAY VARY FROM FIELD LOCATION OF EXISTING CABLE LADDER.
 4. INSTALLER SHALL PROVIDE ALL NECESSARY CONDUITS AND CIRCUITS AS REQUIRED FOR A COMPLETED INSTALLATION AND SHALL COMPLY WITH EQUIPMENT MANUFACTURER'S INSTALLATION REQUIREMENTS.
 5. INSTALLER SHALL PROVIDE ALL STRAIN RELIEF FOR ALL CABLE ASSEMBLIES ROUTING TO THE ANTENNAS. UTILIZATION OF HOISTING GRIPS ON ALL DC POWER AND FIBER OPTIC CABLES SHALL BE UTILIZED.



1 OVERALL SITE PLAN
SCALE: AS NOTED
CALLED NORTH



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Drawn: BIM Date: 03/20/18
Designed: ASW Date: 03/20/18
Checked: ASW Date: 03/20/18

Project Number: 555-022

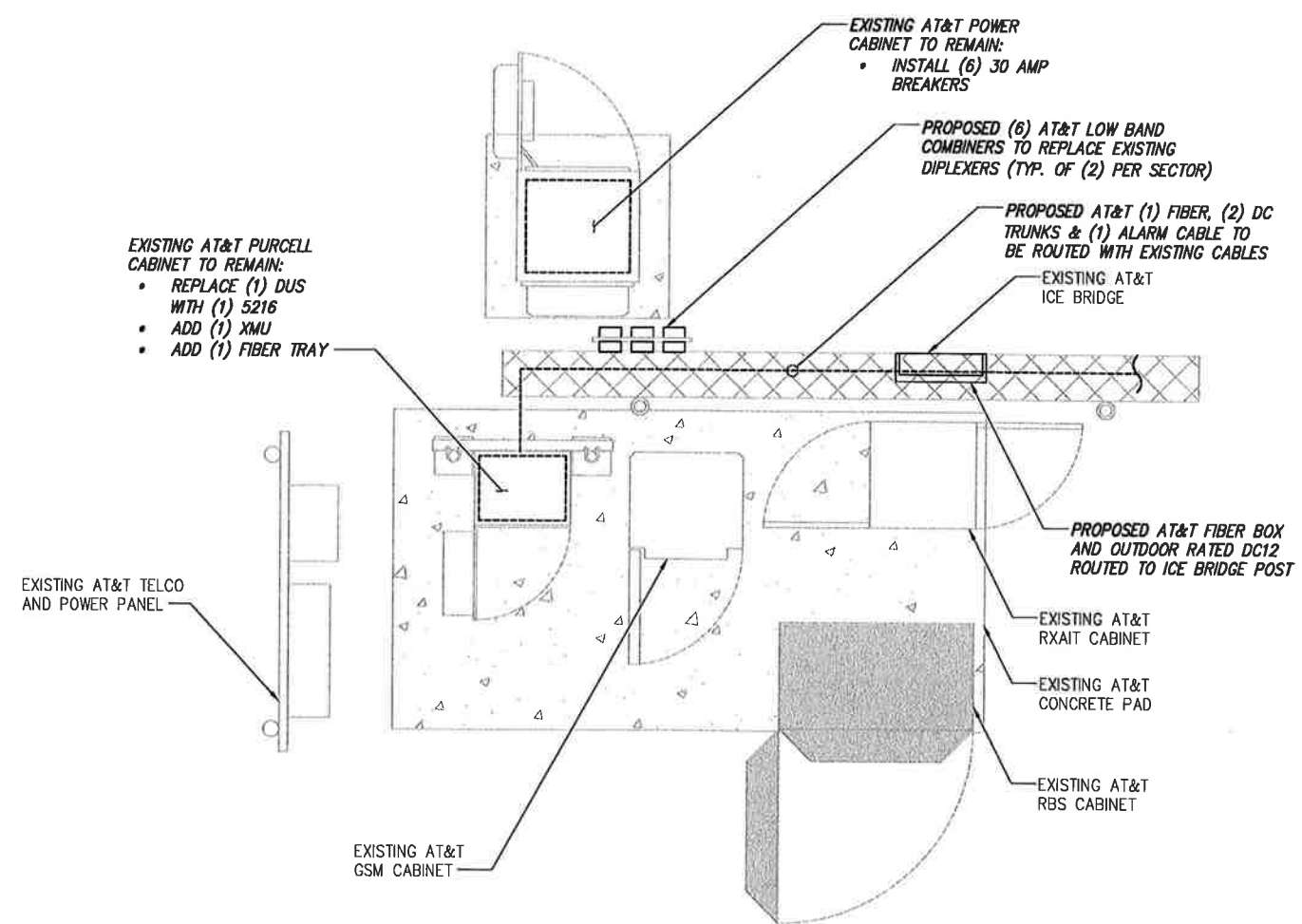
Project Title:
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CT5266
MONROE NORTHEAST
1428 MONROE TURNPIKE
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Prepared For:
CENTERLINE
CONSULTANTS
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COMPOUND PLAN

Drawing Number:
C3



NOTES:
CONTRACTOR TO GROUND ALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

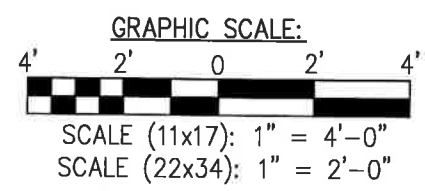
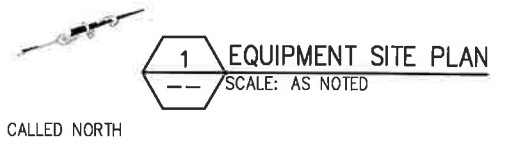
SYMBOL	
⊗	COPPER GROUND ROD
▶	CONNECT PER MANUFACTURER SPECS
■	CADWELD CONNECTION
•	MECHANICAL CONNECTION
▬	GROUND BAR
—	ELECTRICAL CONDUIT
—	GROUND WIRE
—	DC/FIBER LINE

NOTES:

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- ROUTE ALL PROPOSED CABLING ON EXISTING CABLE LADDER. ACTUAL ROUTE ON DRAWINGS MAY VARY FROM FIELD LOCATION OF EXISTING CABLE LADDER.
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- INSTALLER SHALL PROVIDE ALL STRAIN RELIEF FOR ALL CABLE ASSEMBLIES ROUTING TO THE ANTENNAS. UTILIZATION OF HOISTING GRIPS ON ALL DC POWER AND FIBER OPTIC CABLES SHALL BE UTILIZED.

ABBREVIATIONS:

CIGBE	COAX ISOLATED GROUND BAR EXTERNAL
MIGB	MASTER ISOLATED GROUND BAR
SST	SELF SUPPORTING TOWER
GPS	GLOBAL POSITIONING SYSTEM
TYP.	TYPICAL
DWG	DRAWING
BCW	BARE COPPER WIRE
BFG	BELOW FINISH GRADE
PVC	POLYVINYL CHLORIDE
CAB	CABINET
C	CONDUIT
SS	STAINLESS STEEL
G	GROUND
AWG	AMERICAN WIRE GAUGE
RGS	RIGID GALVANIZED STEEL
AHJ	AUTHORITY HAVING JURISDICTION
TLNA	TOWER TOP LOW NOISE AMPLIFIER
UNO	UNLESS NOTED OTHERWISE
EMT	ELECTRICAL METALLIC TUBING
AGL	ABOVE GROUND LEVEL



NOTE:
INFINIGY ENGINEERING HAS NOT CONDUCTED AN ELECTRICAL LOAD STUDY FOR THIS SITE. CONTRACTOR IS TO VERIFY EXISTING ELECTRICAL LOADS PRIOR TO CONSTRUCTION TO ENSURE THERE IS AMPLE SERVICE AVAILABLE TO ACCOMMODATE THE EXISTING AND PROPOSED EQUIPMENT.

ELECTRICAL NOTES:

- ALL ELECTRICAL WORK SHALL CONFORM TO THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (N.E.C.), AND APPLICABLE LOCAL CODES.
- GROUNDING SHALL COMPLY WITH THE ARTICLE 250 OF NATIONAL ELECTRICAL CODE.
- ALL ELECTRICAL ITEMS SHALL BE U.L. APPROVED OR LISTED.
- ALL WIRES SHALL BE AWG MIN #12 THIN COPPER UNLESS NOTED OTHERWISE.
- CONDUCTORS SHALL BE INSTALLED IN SCHEDULE 40 PVC CONDUIT UNLESS NOTED OTHERWISE.
- LABEL AT&T SERVICE DISCONNECTS WITH SWITCH AND PANEL WITH ENGRAVED LAMACOID LABELS, LETTERS 1" IN HEIGHT.
- ROUTE GROUNDING CONDUCTORS ALONG THE SHORTEST AND STRAIGHTEST PATH POSSIBLE. BEND GROUNDING LEADS WITH A MINIMUM 8" RADIUS.
- ENGAGE AN INDEPENDENT TESTING FIRM TO TEST AND VERIFY THAT RESISTANCE DOES NOT EXCEED 5 OHMS TO GROUND. TEST GROUND RING RESISTANCE PRIOR TO MAKING FINAL GROUND CONNECTIONS TO INFRASTRUCTURE AND EQUIPMENT. GROUNDING AND OTHER OPERATIONAL TESTING SHALL BE WITNESSED BY AT&T REPRESENTATIVE.
- PROVIDE PULL BOXES AND JUNCTION BOXES WHERE REQUIRED SO THAT CONDUIT BENDS DO NOT EXCEED 360 DEGREES.
- OBTAIN PERMITS AND PAY FEES RELATED TO ELECTRICAL WORK PERFORMED ON THIS PROJECT. DELIVER COPIES OF ALL PERMITS TO AT&T REPRESENTATIVE.
- SCHEDULE AND ATTEND INSPECTIONS RELATED TO ELECTRICAL WORK REQUIRED BY JURISDICTION HAVING AUTHORITY. CORRECT AND PAY FOR ANY WORK REQUIRED TO PASS ANY FAILED INSPECTION.
- REDLINED AS-BUILTS ARE TO BE DELIVERED TO AN AT&T REPRESENTATIVE.
- PROVIDE TWO COPIES OF OPERATION AND MAINTENANCE MANUALS IN THREE-RING BINDER.
- FURNISH AND INSTALL THE COMPLETE ELECTRICAL SERVICE, TELCO CONDUIT, AND THE COMPLETE GROUNDING SYSTEM.
- ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH ALL APPLICABLE BUILDING CODES AND LOCAL ORDINANCES, INSTALLED IN A NEAT MANNER AND SHALL BE SUBJECT TO APPROVAL BY AN AT&T REPRESENTATIVE.
- CONDUCT A PRE-CONSTRUCTION SITE VISIT AND VERIFY EXISTING SITE CONDITIONS AFFECTING THIS WORK. REPORT ANY OMISSIONS OR DISCREPANCIES FOR CLARIFICATION PRIOR TO THE START OF CONSTRUCTION.
- PROJECT ADJACENT STRUCTURES AND FINISHES FROM DAMAGE, REPAIR TO ORIGINAL CONDITION ANY DAMAGED AREA.
- REMOVE DEBRIS ON A DAILY BASIS. DEBRIS NOT REMOVED IN A TIMELY FASHION WILL BE REMOVED BY OTHERS AND THE RESPONSIBLE SUBCONTRACTOR SHALL BE CHARGED ACCORDINGLY. REMOVAL OF DEBRIS SHALL BE COORDINATED WITH THE OWNER'S REPRESENTATIVE. DEBRIS SHALL BE REMOVED FROM THE PROPERTY AND DISPOSED OF LEGALLY.
- UPON COMPLETION OF WORK, THE SITE SHALL BE CLEAN AND FREE OF DUST AND FINGERPRINTS.
- PRIOR TO ANY TRENCHING, CONTACT LOCAL UTILITY TO VERIFY LOCATION OF ANY EXISTING BURIED SERVICE CONDUITS.
- DOCUMENT GROUND RING INSTALLATION AND CONNECTIONS TO IT WITH PHOTOGRAPHS PRIOR TO BACKFILLING SITE. PRESENT PHOTO ARCHIVE A SITE "PUNCH LIST" WALK TO AT&T'S REPRESENTATIVE.
- ALL ABOVE GRADE CONDUIT TO BE RIGID METALLIC.

GROUNDING NOTES:

- ALL DOWN CONDUCTORS AND GROUND RING AND CONDUCTOR SHALL BE #2 AWG, SOLID, BARE, TINNED COPPER, UNO. ALL CONNECTIONS TO GROUND RING SHALL BE EXOTHERMICALLY WELDED. CONDUCTOR SHALL BE A MINIMUM DEPTH BELOW GRADE OF 30 INCHES OR TO THE LEDGE. MINIMUM BEND RADIUS SHALL BE 8 INCHES. CONDUCTOR SHALL BE AT LEAST 24 INCHES FROM ANY FOUNDATION, UNO.
- WHERE MECHANICAL CONDUCTOR CONNECTIONS ARE SPECIFIED, BOLTED, COMPRESSION-TYPE CLAMPS OR SPLIT-BOLT TYPE CONNECTORS SHALL BE USED. GRIND OFF GALVANIZING IN AFFECTED AREA. EXOTHERMICALLY WELD #2 CONDUCTOR AT 6 INCHES ABOVE GRADE R FOUNDATION, WHICHEVER IS HIGHER. COLD-GALY AFTER. EXOTHERMICALLY WELD OTHER END TO THE GROUND.
- GROUND CONDUCTORS ON EXTERIOR WALL OF SHELTER SHALL BE ENCASED IN 3/4" PVC CONDUIT TO GRADE. MOUNT PVC WITH GALVANIZED "C" CLAMPS. SEAL TOP ENDS.
- FOLLOWING COMPLETION OF WORK, CONDUCT GROUND TEST. SUBMIT WRITTEN TEST TO CONSTRUCTION MANAGER AND PROJECT MANAGER.
- ALL GROUNDING WORK SHALL COMPLY WITH CARRIER(S) STANDARDS.
- GROUNDING REQUIREMENTS SHOWN ON THIS PLAN ARE FOR ITEMS THAT ARE LOCATED NEAR GRADE LEVEL AND THAT NEED TO BE TIED TO THE BELOW GRADE GROUND RING.
- UNLESS NOTED OTHERWISE, ALL GROUNDING SHALL BE IN ACCORDANCE WITH AT&T'S SSEQ DOCUMENTS 3.018.02.004 "BONDING, GROUNDING AND TRANSIENT PROTECTION FOR CELL SITES", AND 3.018.10.002 "SITE RESISTANCE TO EARTH TESTING". ALL GROUNDING SHALL ALSO COMPLY WITH ALL STATE AND LOCAL CODES, AND THE NATIONAL ELECTRICAL CODE (NEC).
- UNLESS NOTED OTHERWISE, ALL GROUNDING CONNECTIONS SHALL BE MADE BY AN EXOTHERMIC WELD.
- RESISTANCE TO EARTH TESTING IS REQUIRED PER AT&T STANDARDS ON ALL NEW SITES.

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Drawn: ASW Date: 03/20/18
Designed: ASW Date: 03/20/18
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Project Number:
555-022

Project Title:
**FA# 10071137
CT5266
MONROE NORTHEAST**

1428 MONROE TURNPIKE
MONROE, CT 06468

Prepared For:
CENTERLINE COMMUNICATIONS

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EQUIPMENT SITE PLAN

Drawing Number:
C4

NOTE:

- INFINIGY ENGINEERING HAS NOT EVALUATED THE EXISTING STRUCTURE FOR THIS SITE, AND ASSUMES NO RESPONSIBILITY FOR ITS STRUCTURAL INTEGRITY. STRUCTURAL ANALYSIS TO BE COMPLETED PRIOR TO INSTALLATION.
- SEE "POST MOD MOUNT ANALYSIS REPORT" COMPLETED BY INFINIGY, DATED 6/7/18. FOR ADDITIONAL MOUNT MODIFICATION DETAILS SEE SHEETS S1-S2.

EXISTING AT&T TMAs TO REMAIN (TYP. OF (2) PER SECTOR, (3) SECTORS TOTAL)

PROPOSED AT&T RRUS-32 B2 (TYP. OF (1) PER SECTOR, (3) SECTORS TOTAL)
 PROPOSED AT&T MOUNT MODIFICATIONS, SEE SHEETS S1-S2 FOR ADDITIONAL DETAILS (TYP. OF EACH SECTOR)

EXISTING AT&T RRUS-11 TO BE REMAIN (TYP. OF (1) PER SECTOR, (3) SECTORS TOTAL)

PROPOSED AT&T DC6 SQUID (TYP. OF 1)
 EXISTING AT&T DC6 SQUID TO REMAIN (TYP. OF 1)

PROPOSED AT&T RRUS-32 (TYP. OF (1) PER SECTOR, (3) SECTORS TOTAL)

PROPOSED AT&T PANEL ANTENNA ON PROPOSED PIPE MOUNT (TYP. OF (1) PER SECTOR, (3) SECTORS TOTAL)

EXISTING AT&T PANEL ANTENNA TO REMAIN (TYP. OF (2) PER SECTOR, (3) SECTORS TOTAL)

EXISTING CARRIER PANEL ANTENNA (TYP.)

PROPOSED AT&T (1) FIBER, (2) DC TRUNKS & (1) ALARM CABLE TO BE ROUTED WITH EXISTING CABLES

EXISTING MONOPOLE TOWER

TOP OF EXISTING MONOPOLE = ±160'-0" AGL

CENTERLINE OF EXISTING AND PROPOSED AT&T PANEL ANTENNAS ±160'-0" AGL

GROUND LEVEL

1 ELEVATION VIEW
 -- NOT TO SCALE

NOTES:

1. EXISTING CONDITIONS INFORMATION BASED ON INFORMATION PROVIDED TO INFINIGY.
2. THESE DRAWINGS DO NOT REFLECT ADEQUACY OF EXISTING OR PROPOSED ANTENNA MOUNTS, MOUNT CONNECTIONS, OR CABLE ATTACHMENTS. INFINIGY DOES NOT ACCEPT LIABILITY FOR ANY OF THESE STRUCTURAL ELEMENTS.
3. ROUTE ALL PROPOSED CABLING ON EXISTING CABLE LADDER. ACTUAL ROUTE ON DRAWINGS MAY VARY FROM FIELD LOCATION OF EXISTING CABLE LADDER.
4. INSTALLER SHALL PROVIDE ALL NECESSARY CONDUITS AND CIRCUITS AS REQUIRED FOR A COMPLETED INSTALLATION AND SHALL COMPLY WITH EQUIPMENT MANUFACTURER'S INSTALLATION REQUIREMENTS.
5. INSTALLER SHALL PROVIDE ALL STRAIN RELIEF FOR ALL CABLE ASSEMBLIES ROUTING TO THE ANTENNAS. UTILIZATION OF HOISTING GRIPS ON ALL DC POWER AND FIBER OPTIC CABLES SHALL BE UTILIZED.

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 1428 MONROE TURNPIKE
 MONROE, CT 06468

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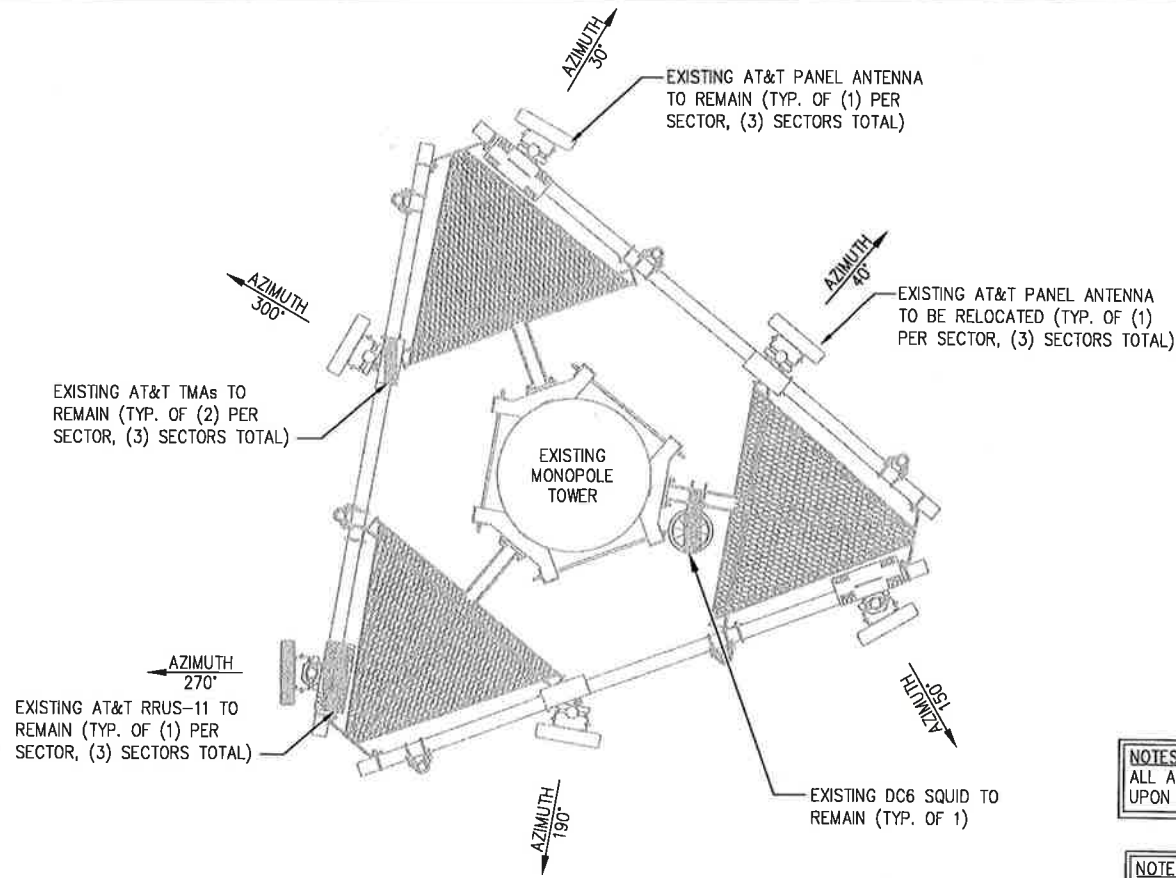
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ELEVATION VIEW

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C5

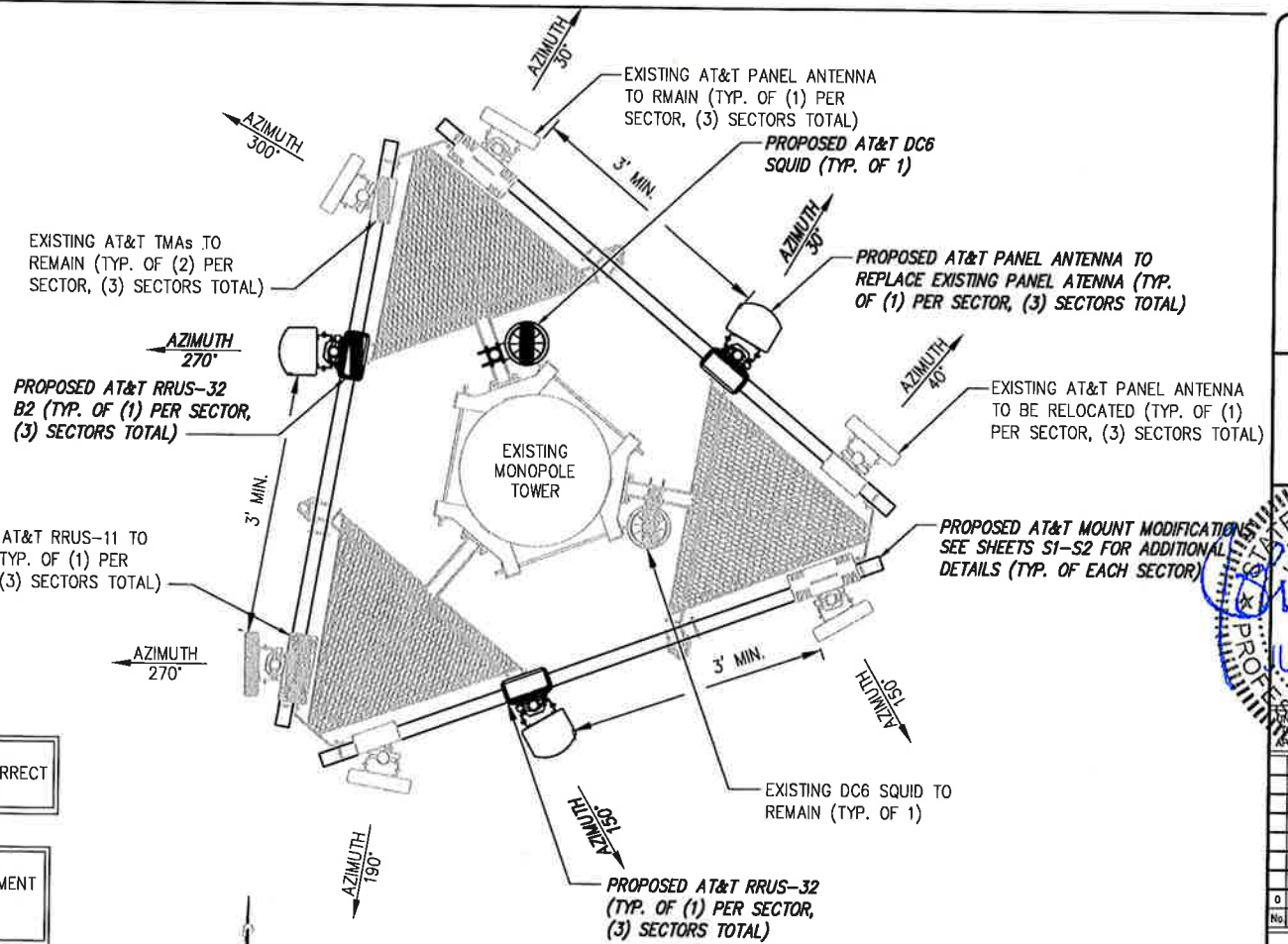


1 ANTENNA ORIENTATION PLAN (EXISTING)
NOT TO SCALE

CALLED NORTH

NOTES:
ALL ANTENNA AZIMUTHS MUST BE CORRECT UPON COMPLETION OF CONSTRUCTION

NOTES:
CONTRACTOR TO GROUND ALL EQUIPMENT AND MOUNTS IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.



2 ANTENNA ORIENTATION PLAN (PROPOSED)
NOT TO SCALE

CALLED NORTH

EXISTING AND PROPOSED ANTENNA, TMA AND DIPLEXER MODEL NUMBERS									
SECTOR	EXISTING/PROPOSED	BAND	ANTENNA	ANTENNA HEIGHT	AZIMUTH	TMA	RRU	FEEDER	RAYCAP
ALPHA	EXISTING	LTE 700	P65-16-XLH-RR	±160'	30°	---	(1) (E) RRUS-11	---	---
	---	---	---	---	---	---	---	---	DC6 SQUID
	PROPOSED	LTE 1900/WCS	QS66512-2	±160'	30°	---	(1) (P) RRUS-32 B2 (1) (P) RRUS-32	(2) 1-5/8 COAX	(1) (P) DC6 SQUID
BETA	EXISTING	UMTS 850	7770	±160'	40°	(2) LGP21401	---	(2) 1-5/8 COAX	(1) (E) DC6 SQUID (1) (P) DC6 SQUID
	---	---	---	---	---	---	---	---	SHARED WITH ALPHA SECTOR
	PROPOSED	LTE 1900/WCS	QS66512-2	±160'	150°	---	(1) (P) RRUS-32 B2 (1) (P) RRUS-32	(2) 1-5/8 COAX	(1) (P) DC6 SQUID
GAMMA	EXISTING	LTE 700	P65-16-XLH-RR	±160'	150°	---	(1) (E) RRUS-11	---	---
	---	---	---	---	---	---	---	---	SHARED WITH ALPHA SECTOR
	PROPOSED	LTE 1900/WCS	QS66512-2	±160'	150°	---	(1) (P) RRUS-32 B2 (1) (P) RRUS-32	(2) 1-5/8 COAX	(1) (P) DC6 SQUID
GAMMA	---	---	---	---	---	---	---	---	SHARED WITH ALPHA SECTOR
	EXISTING	UMTS 850	7770	±160'	190°	(2) LGP21401	---	(2) 1-5/8 COAX	(1) (E) DC6 SQUID (1) (P) DC6 SQUID

PROPOSED RRU AND CABLE SCHEDULE					
SECTOR	FIBER TRUNK	SINGLE FIBER	DC 3-PAIR	DC 1-PAIR	RRU'S
ALPHA		(2) 5 METER		(2) #8 AWG, 15'	(1) (E) RRUS-11 (1) (P) RRUS-32 B2 (1) (P) RRUS-32
BETA	(1) 18P	(2) 5 METER	(2) #8 AWG	(2) #8 AWG, 15'	(1) (E) RRUS-11 (1) (P) RRUS-32 B2 (1) (P) RRUS-32
GAMMA		(2) 5 METER		(2) #8 AWG, 15'	(1) (E) RRUS-11 (1) (P) RRUS-32 B2 (1) (P) RRUS-32

3 RF EQUIPMENT SCHEDULE
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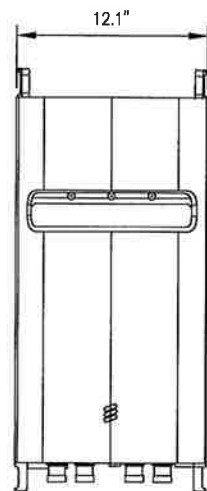
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Drawing Title:
EQUIPMENT DETAILS

Drawing Number:
C6

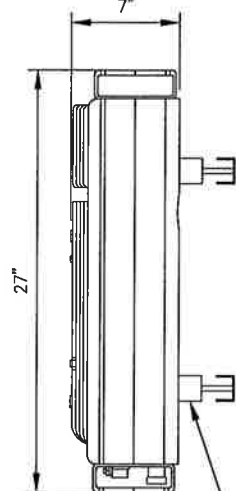


FRONT

RRUS-32 SPECIFICATIONS

- HXWD, (INCHES) : 27.2"x12.1"x7"
- WEIGHT (LBS) : 53
- COLOR : GRAY

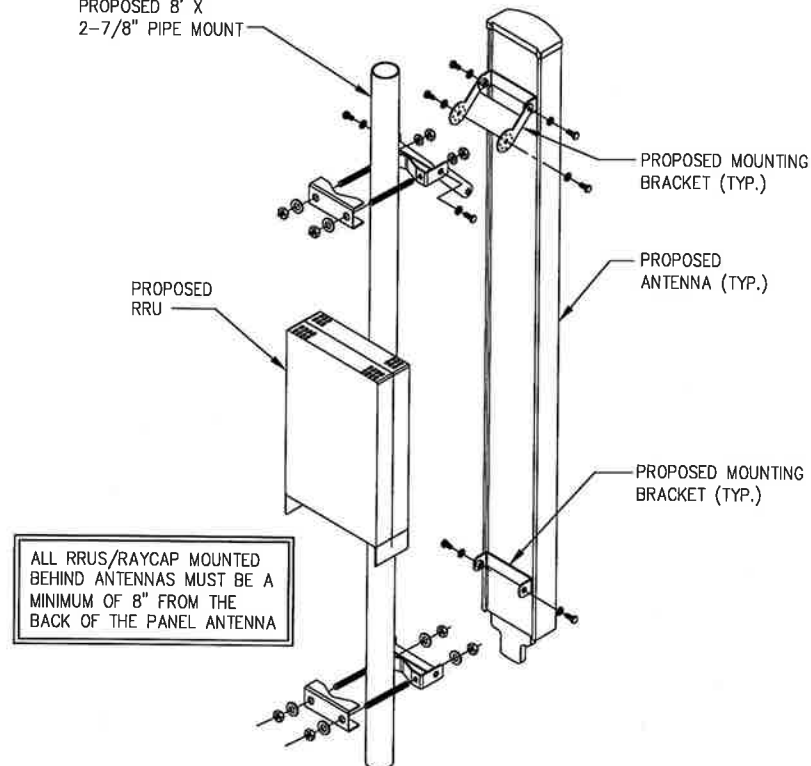
1 RRUS-32 DETAIL
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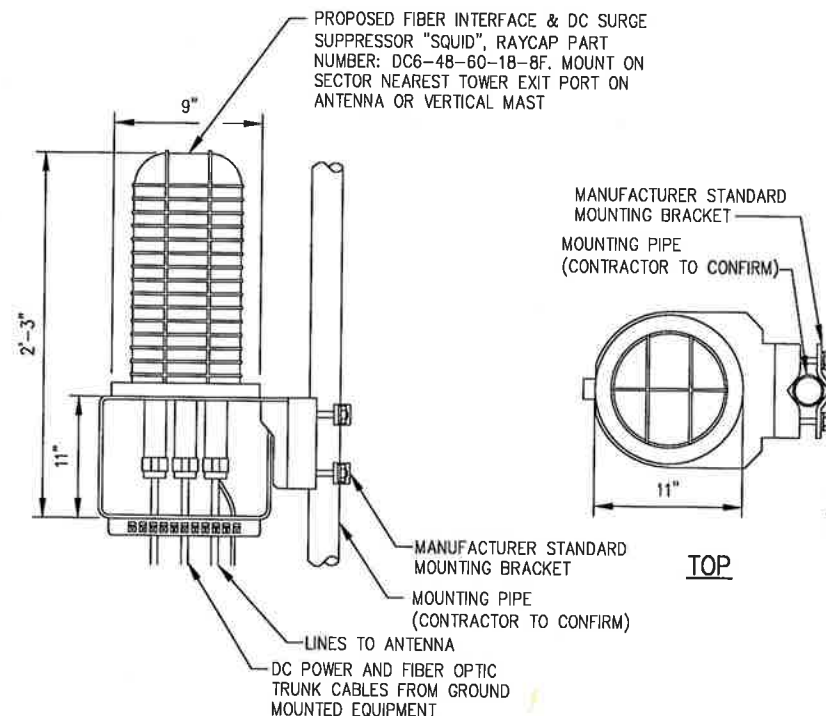
SIDE

MANUFACTURER STANDARD MOUNTING BRACKET

PROPOSED 8' X 2-7/8" PIPE MOUNT

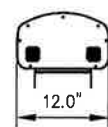


2 MOUNTING DETAIL
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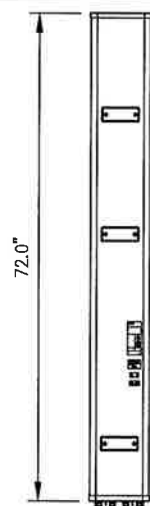


SIDE

3 SQUID DETAIL
NOT TO SCALE



TOP



REAR



SIDE

QUINTEL MODEL NO.: QS66512-2

RADOME MATERIAL: FIBERGLASS, UV RESISTANT
 RADOME COLOR: LIGHT GRAY
 DIMENSIONS, HxWxD: 72.0"x12.0"x9.6"
 WEIGHT, w/ PRE-MOUNTED BRACKETS: 111.0 LBS
 CONNECTOR: 7-16 DIN FEMALE

4 ANTENNA DETAIL
NOT TO SCALE

5 DEATIL NOT USED
NOT TO SCALE

6 DETAIL NOT USED
NOT TO SCALE

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MONROE NORTHEAST
 1428 MONROE TURNPIKE
 MONROE, CT 06468

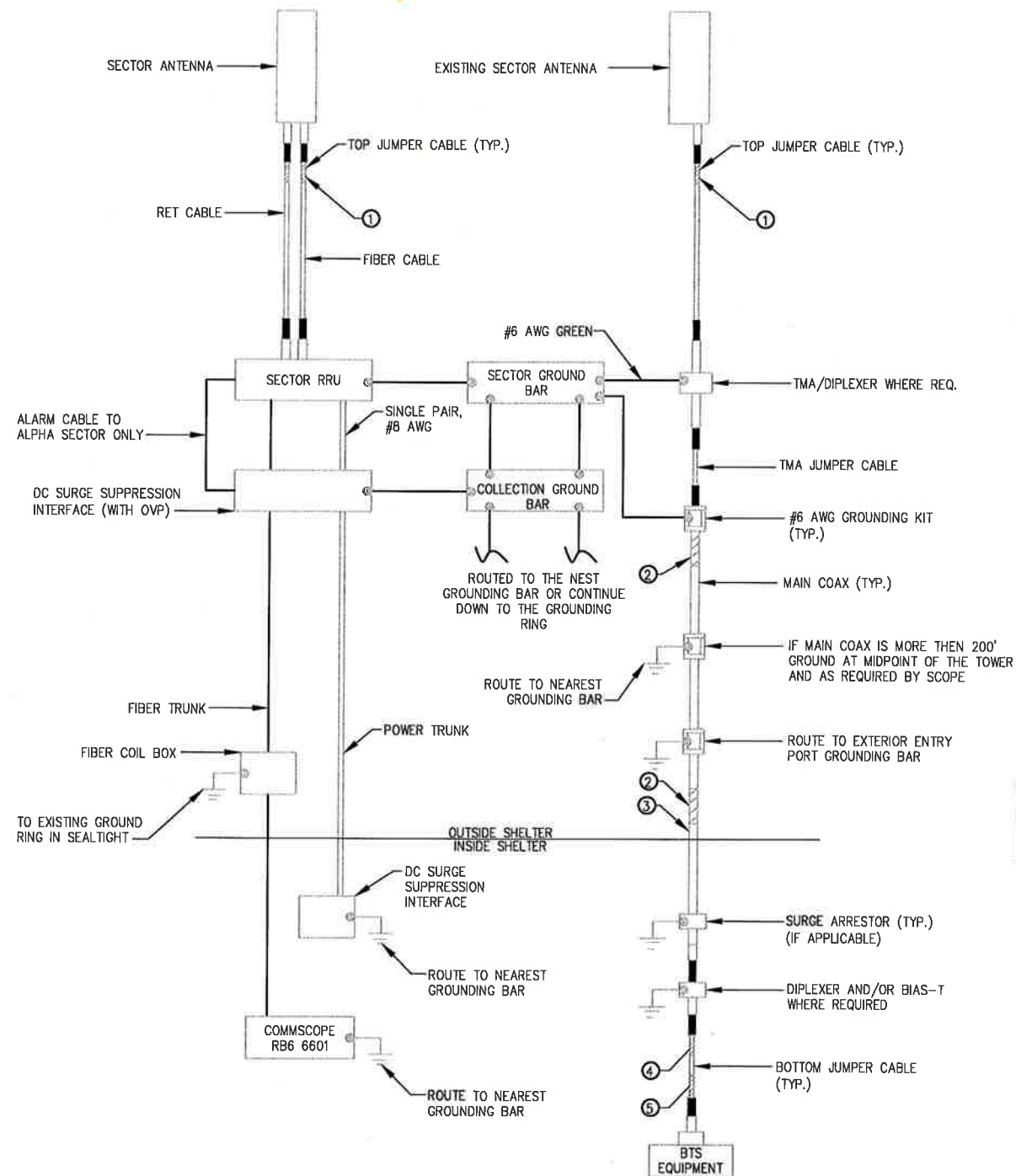
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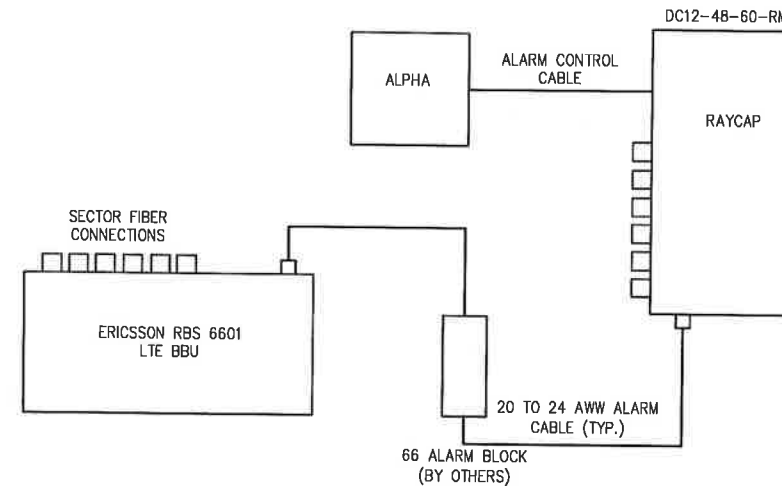
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C7

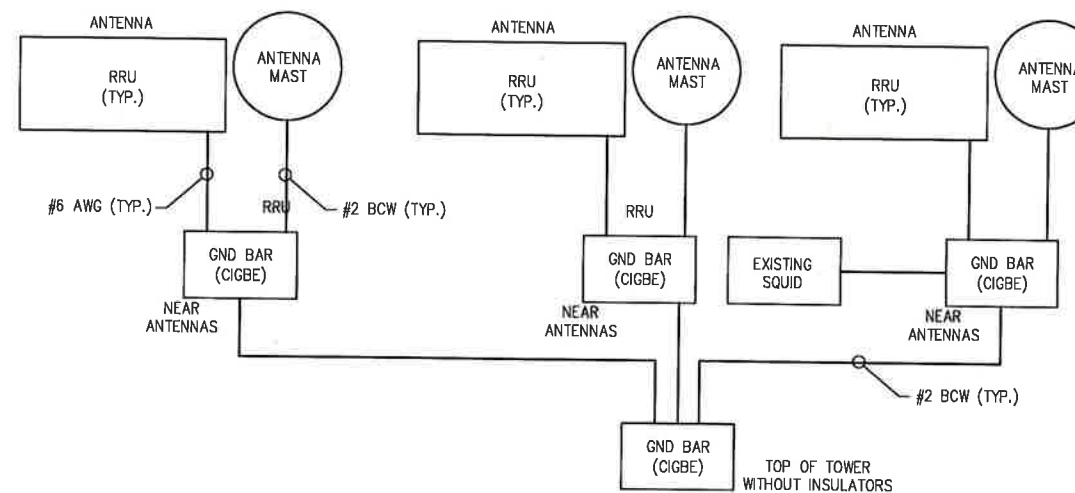
CABLE MARKING LOCATIONS TABLE	
NO.	LOCATIONS
①	EACH TOP JUMPER SHALL BE COLOR CODED WITH ONE (1) SET OF 3" WIDE BANDS
②	EACH MAIN COAX SHALL BE COLOR CODED WITH (1) SET OF 3" WIDE BANDS NEAR THE TOP OF THE JUMPER CONNECTION AND WITH (1) SET OF 3/4" WIDE COLOR BANDS JUST PRIOR TO ENTERING THE BTS OR TRANSMITTER BUILDING
③	CABLE ENTRY PORT ON THE INTERIOR OF THE SHELTER
④	ALL BOTTOM JUMPERS SHALL BE COLOR CODED WITH (1) SET OF 3/4" WIDE BANDS ON EACH END OF THE BOTTOM JUMPER
⑤	ALL BOTTOM JUMPERS SHALL BE COLOR CODED WITH (1) SET OF 3/4" WIDE BANDS ON EACH END OF THE BOTTOM JUMPER



1 CABLE MARKING LOCATIONS DIAGRAM
SCALE: NOT TO SCALE



2 ALARM BLOCK CONNECTIONS
SCALE: NOT TO SCALE



3 SCHEMATIC DIAGRAM GROUNDING SYSTEM
SCALE: NOT TO SCALE

COAX COLOR CODING & IDENTIFICATION NOTES:

- SECTOR ORIENTATION/ AZIMUTH WILL VARY FROM REGION AND IS SITE SPECIFIC. REFER TO RF REPORT FOR EACH SITE TO DETERMINE THE ANTENNA LOCATION AND FUNCTION OF EACH TOWER SECTOR FACE.
- THE ANTENNA SYSTEM COAX SHALL BE LABELED WITH VINYL TAPE EXCEPT IN LOCATIONS WHERE ENVIRONMENTAL CONDITIONS CAUSE PHYSICAL DAMAGE, THEN PHYSICAL TAGS ARE PREFERRED.
- THE STANDARD IS BASED ON EIGHT COLORED TAPES- RED, BLUE, GREEN, YELLOW, ORANGE, BROWN, WHITE AND VIOLET. THESE TAPES MUST BE 3/4" WIDE AND UV RESISTANT SUCH AS SCOTCH 35 VINYL ELECTRICAL COLOR CODING TAPE AND SHOULD BE READILY AVAILABLE TO THE ELECTRICIAN OR SUBCONTRACTOR ON SITE.
- USING COLOR BANDS ON THE CABLES MARK ALL RF CABLE BY SECTOR AND NUMBER AS SHOWN ON "CABLE MARKING COLOR CONVENTION TABLE".
- WHEN AN EXISTING COAXIAL LINE THAT IS INTENDED TO BE A SHARED LINE BETWEEN GSM/3G TDMA IS ENCOUNTERED, THE SUBCONTRACTOR SHALL REMOVE THE COLOR CODING SCHEME AND REPLACE IT WITH THE COLOR CODING AND TAGGING STANDARD THAT IS OUTLINED IN THE CURRENT VERSION OF THE STANDARD. IN THE ABSENCE OF AN EXISTING COLOR CODING AND TAGGING SCHEME, WHEN INSTALLING PROPOSED COAXIAL CABLES, THIS GUIDELINE SHALL BE IMPLEMENTED AT THAT SITE REGARDLESS OF TECHNOLOGY.
- ALL COLOR CODE TAPE SHALL BE 3M-35 AND SHALL BE A MINIMUM OF (3) THREE WRAPS OF TAPE AND SHALL BE NEATLY TRIMMED AND SMOOTHED OUT SO AS TO AVOID ANY UNRAVELING.
- ALL COLOR BANDS INSTALLED AT THE TOP OF THE TOWER SHALL BE A MINIMUM IF 3" WIDE, AND SHALL HAVE A MINIMUM OF 3/4" OF SPACE IN BETWEEN EACH COLOR.
- ALL COLOR CODES SHALL BE INSTALLED AS TO ALIGN NEATLY WITH ONE ANOTHER FROM SIDE TO SIDE.
- IF EXISTING CABLES AT THE SITE ALREADY HAVE A COLOR CODING SCHEME AND THEY ARE NOT INTENDED TO BE REUSED OR SHARED WITH THE GSM TECHNOLOGY, THE EXISTING COLOR CODING SCHEME SHALL REMAIN UNTOUCHED.

CABLE MARKING TAGS:

WHEN USING THE ALTERNATIVE LABELING METHOD, EACH RF CABLE SHALL BE IDENTIFIED WITH A METAL ID TAG MADE OF STAINLESS STEEL OR BRASS. THE TAG SHALL BE 1" 1-1/2" IN DIAMETER WITH 1/4" STAMPED LETTERS AND NUMBERS INDICATING THE SECTOR, ANTENNA POSITION, AND CABLE NUMBER. THE ID MARKING LOCATIONS SHOULD BE AS PER "CABLE MARKING LOCATIONS TABLE". THE TAG SHOULD BE ATTACHED WITH CORROSION PROOF WIRE AROUND THE CABLE AT THE SAME LOCATIONS AS DEFINED ABOVE. THE TAG SHOULD BE LABELED AS SHOWN ON THE "GSM AND UMTS LINE TAG" DETAIL.

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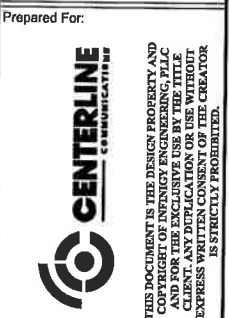
REGISTERED PROFESSIONAL ENGINEER
STATE OF CONNECTICUT
STEPHEN S. STEINHILBER
LICENSE NO. 24705

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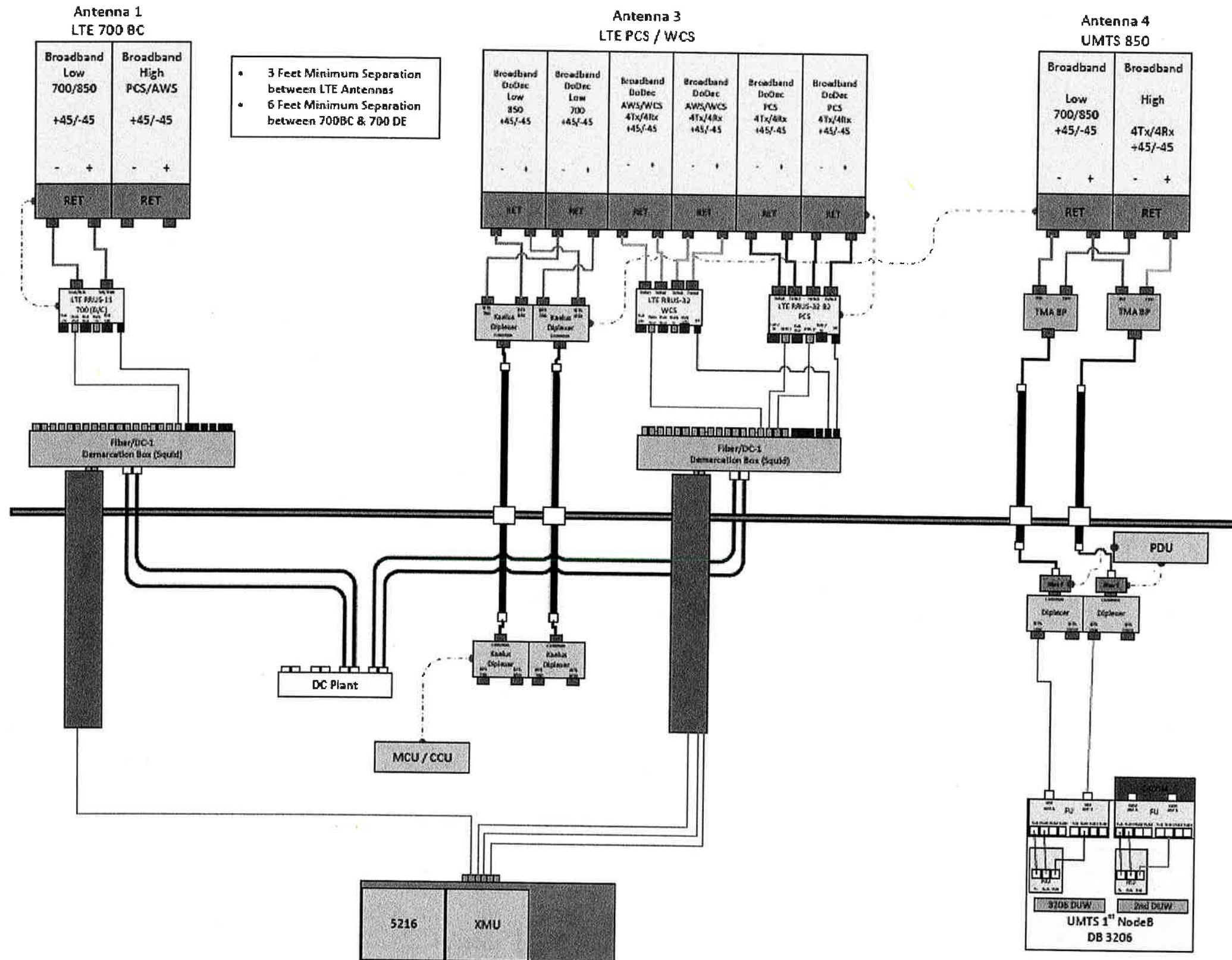
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Date: 06/15/18

Drawing Title
SCHEMATICS, DIAGRAMS & NOTES

Drawing Number
C8



1 PLUMBING DIAGRAM
SCALE: NOT TO SCALE

CONTRACTOR TO REFER TO LATEST RFDS PROVIDED BY AT&T FOR FINAL CONFIGURATION.



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Drawing Title: **PLUMBING DIAGRAM**

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