

Alex Murshteyn, Site Acquisition Consultant
c/o Cellco Partnership d/b/a Verizon Wireless
Centerline Communications, LLC
750 West Center Street, Floor 3
West Bridgewater, MA 02379
Mobile: (508) 821-0159
AMurshteyn@centerlinecommunications.com

January 6, 2020

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

**RE: Notice of Exempt Modification // Site: Hawleyville CT (ATC: 302518)
25 Meridian Ridge Drive (5-6 Fairfield Drive), Newtown, CT
N 41.4255 // W -73.3741**

Dear Ms. Bachman:

Cellco Partnership d/b/a Verizon Wireless currently maintains 12 antennas at the 140-foot level on the existing 152-foot monopole tower, located at 25 Meridian Ridge Drive (a/k/a 5-6 Fairfield Drive, Brookfield) in Newtown CT. The Council approved Verizon Wireless use of the tower in 2004. The tower is owned by American Tower. The property is owned by Constantine S. Macricostas c/o Photronics, Inc. Verizon Wireless now intends to replace 6 of its existing antennas and install side-by-side mounts for 6 LTE (700/850/1900/2100/3500 MHz) replacements for its PCS/AWS/LTE/CBRS upgrade. Additionally, Verizon Wireless will install 3 clip-on antennas together with 9 remote radio head units (RRUs), 3 combiners, 1 over-voltage protector (OVP), and remove and upgrade certain cabling; altogether updating leased equipment rights, as reflected by the final configuration outlined in the structural analysis and proposed hereby.

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies §16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to First Selectman Daniel Rosenthal, for the Town of Newtown, to its Director of Planning George Benson, to American Tower, the tower owner, and to the ground owner, Constantine Macricostas c/o Photronics, Inc.

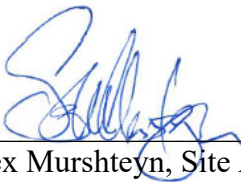
The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2). Enclosed to accommodate this filing are construction drawings dated December 24, 2019, structural analysis dated November 15, 2019 and antenna mount analysis dated December 13, 2019 by A.T. Engineering Service, PLLC, as well as radio frequency

(RF) analysis table showing worst-case RF emission calculation by Verizon Wireless RF Design Engineering.

1. The proposed modifications will not result in an increase in the height of the existing structure.
2. The proposed modifications will not require the extension of the site boundary.
3. The proposed modifications will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.
4. The operation of the new antennas will not increase radio frequency emissions at the facility to a level at or above the Federal Communications Commission safety standard.
5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.
6. The existing structure and its foundation can support the proposed loading, as shown in the attached structural analysis by A.T. Engineering Service, PLLC, dated November 15, 2019 and mount analysis dated December 13, 2019.

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

Sincerely,



Alex Murshteyn, Site Acquisition Consultant
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Centerline Communications, LLC
750 West Center Street, Floor 3
West Bridgewater, MA 02379
Mobile: (508) 821-0159
AMurshteyn@centerlinecommunications.com

Attachments

cc: Daniel Rosenthal, First Selectman, Town of Newtown - as elected official
George Benson, Director of Planning, Land Use Agency, Town of Newtown - as P&Z official
Constantine S. Macricostas c/o Photonics, Inc. - as ground owner
American Tower Corporation - as tower owner

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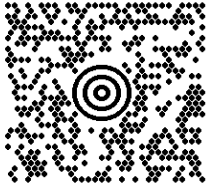

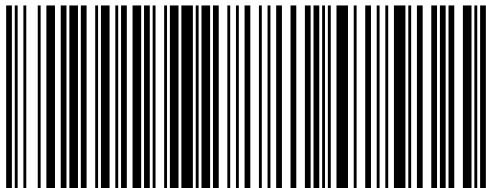

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SHIP TO: DANIEL ROSENTHAL, FIRST SELECTMAN TOWN OF NEWTOWN 3 PRIMROSE STREET NEWTOWN CT 06470-5307		
	CT 068 0-02 	
UPS GROUND TRACKING #: 1Z 9Y4 503 03 3280 0884		
		
BILLING: P/P		
Reference # 1: 302518 aka Hawleyville CT Reference # 2: 12984020 / CSC EM - CEO		CS 21.5-48 WNTINV50 20.0A 10/2019

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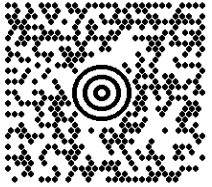



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DWT: 14,11,1		
SHIP TO: GEORGE BENSON, DIRECTOR OF PLANNING LAND USE AGENCY NEWTOWN PLANNING DEPARTMENT 3 PRIMROSE STREET NEWTOWN CT 06470-5307		
	CT 068 0-02 	
UPS GROUND TRACKING #: 1Z 9Y4 503 03 3396 4492		
		
BILLING: P/P		
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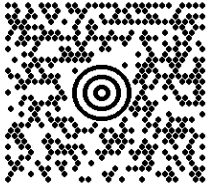

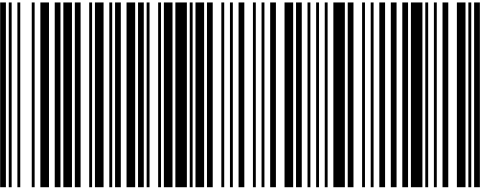

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DWT: 14,11,1		
SHIP TO: CONSTANTINE S. MACRICOSTAS C/O PHOTRONICS INC. 5509 PENNOCK POINT ROAD JUPITER FL 33458-3449		
	FL 334 0-05 	
UPS GROUND TRACKING #: 1Z 9Y4 503 03 2782 1102		
		
BILLING: P/P		
Reference # 1: 302518 aka Hawleyville CT Reference # 2: 12984020 / CSC EM - PO <small>CS 21.5-48. WNTINV50 20.0A 10/2019</small>		

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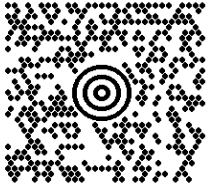

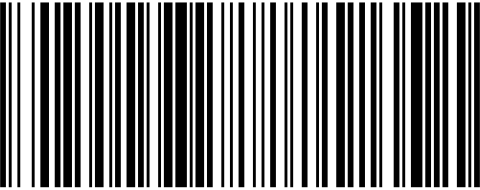

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	MA 018 9-04 	
UPS GROUND TRACKING #: 1Z 9Y4 503 03 3343 0273		
		
BILLING: P/P		
Reference # 1: 283423 aka Naugatuck West CT Reference # 2: 302518 aka Hawleyville CT		
<small>CS 21.5-48 WNTINV50 20.0A 10/2019</small>		

DOCKET NO. 75

AN APPLICATION OF THE SOUTHERN NEW ENGLAND : CONNECTICUT SITING
TELEPHONE COMPANY FOR A CERTIFICATE OF :
ENVIRONMENTAL COMPATIBILITY AND PUBLIC : COUNCIL
NEED FOR CELLULAR TELEPHONE FACILITIES :
IN THE CITY OF DANBURY AND EITHER THE TOWN OF :
BROOKFIELD OR TOWN OF NEWTOWN, CONNECTICUT. : MAY 13, 1987

D E C I S I O N A N D O R D E R

Pursuant to the foregoing opinion, the Connecticut Siting Council (Council) hereby directs that a Certificate of Environmental Compatibility and Public Need, as provided by Section 16-50k of the General Statutes of Connecticut (CGS), be issued to Southern New England Telephone Cellular, Inc., (SNET) for the construction, operation, and maintenance of cellular mobile telephone facilities in the City of Danbury and Town of Newtown, Connecticut. The proposed Brookfield site is rejected.

The facilities shall be constructed, operated, and maintained as specified in the Council's record on this matter, and subject to the following conditions.

1. The Danbury tower, including antennas, shall be no taller than necessary to provide the proposed service, and in no event shall exceed 37 feet.

2. Unless necessary to comply with condition number three, below, no lights shall be installed on these towers.

3. The facilities shall be constructed in accordance with all applicable federal, state, and municipal laws and regulations.

4. The Newtown tower, including antennas, shall be no taller than necessary to provide the proposed service, and in no event shall exceed 167 feet.

5. The certificate holder shall prepare a development and management (D&M) plan for the Newtown site in compliance with sections 16-50j-75 through 16-50j-77 of the Regulations of State Agencies. The D&M plan shall provide for evergreen screening around the outside perimeter of the eight-foot chain link fence which will surround this site.

6. No construction activities shall take place outside the hours of 7:00 A.M. to 7:00 P.M., Monday through Saturday.

7. The certificate holder or its successor shall notify the Council if and when directional antennas or any equipment other than that listed in this application is added to these facilities.

8. The certificate holder or its successor shall permit public or private entities to share space on the Newtown tower, for due consideration, or shall provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing.

9. If these facilities do not provide or permanently cease to provide cellular service following the completion of construction, this Decision and Order shall be void, and the tower and all associated equipment in this application shall be dismantled and removed or reapplication for any new use shall be made to the Council before any such new use is made.

10. Unless otherwise approved by the Council, this Decision and Order shall be void if all construction authorized herein is not completed within three years of the issuance of this Decision and Order, or within three years of the completion of any appeal taken in this Decision.

11. The certificate holder shall comply with any future radio frequency (RF) standards promulgated by state or federal regulatory agencies. Upon the establishment of any new governmental RF standards, the Certificate holder shall bring the facilities granted approval in this Decision into compliance with such standards.

Pursuant to CGS section 16-50p, we hereby direct that a copy of the Decision and Order be served on each person listed below. A notice of the issuance shall be published in the Danbury News-Times, the Brookfield Journal, and the Newtown Bee.

The parties to the proceeding are:

SNET Cellular, Inc.
c/o Peter J. Tyrrell
Senior Attorney
Room 1021
227 Church Street
New Haven, Connecticut 06506

(Applicant)

Town of Newtown
Planning and Zoning Commission

represented by:
Theodore G. Whippie, Chairman
Chairman
Planning and Zoning
Commission
Edmond Town Hall
45 Main Street
Newtown, Connecticut 06470

Metro Mobile CTS of Fairfield
County
(INTERVENOR)

represented by:
Howard L. Slater
Jennifer Young Gaudet
Byrne, Slater, Sandler,
Shulman & Rouse, P.C.
330 Main Street
P.O. Box 3216
Hartford, Connecticut 06103
its attorneys

Fergus W. O'Donnell
28 Whisconier Road
Brookfield, Center, Connecticut 06805

ET0136

C E R T I F I C A T I O N

The undersigned members of the Connecticut Siting Council hereby certify that they have heard this case or read the record thereof, and that we voted as follows:

Dated at New Britain, Connecticut, this 13th day of May 1987.

<u>Council Members</u>	<u>Vote Cast</u>
<u><i>Gloria Dibble Pond</i></u>) Gloria Dibble Pond Chairperson	Yes
_____) Commissioner John Downey Designee: Commissioner Peter G. Boucher	Absent
<u><i>Brian J. Emerick</i></u>) Acting Commissioner John Anderson Designee: Brian Emerick	Yes
<u><i>Owen L. Clark</i></u>) Owen L. Clark	Yes
<u><i>Fred J. Doocy</i></u>) Fred J. Doocy	Yes
_____) Mortimer A. Gelston	Absent
<u><i>James G. Horsfall</i></u>) James G. Horsfall	Yes
<u><i>William Smith</i></u>) William Smith	Yes
_____) Colin C. Tait	Absent



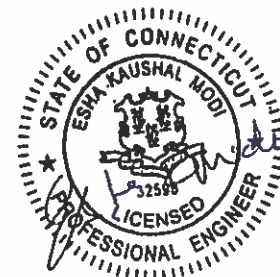
AMERICAN TOWER®
CORPORATION

Structural Analysis Report

Structure : 152 ft Monopole
ATC Site Name : Newtown CT 3, CT
ATC Asset Number : 302518
Engineering Number : 12984020_C3_03
Proposed Carrier : VERIZON WIRELESS
Carrier Site Name : HAWLEYVILLE CT
Carrier Site Number : 469057
Site Location : 6 Fairfield Dr (Brkfld)
Newtown, CT 06470-1216
41.425500, -73.374000
County : Fairfield
Date : November 15, 2019
Max Usage : 58%
Result : Pass

Prepared By:
Kyle MacPetrie
Structural Engineer

Reviewed By:



Authorized by "EOR"
Nov 18 2019 9:33 AM

COA: PEC.0001553



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Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 152 ft monopole to reflect the change in loading by VERIZON WIRELESS.

Supporting Documents

Tower Drawings	EI Job #8238 Rev 2, dated January 30, 2001
Foundation Drawing	EI Job #8238, dated November 17, 2000
Geotechnical Report	Soiltesting Project #G128-5268-98, dated September 8, 1999

Analysis

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

Basic Wind Speed:	93 mph (3-Second Gust, V_{psd}) / 120 mph (3-Second Gust, V_{ult})
Basic Wind Speed w/ Ice:	50 mph (3-Second Gust) w/ 3/4" radial ice concurrent
Code:	ANSI/TIA-222-G / 2015 IBC / 2018 Connecticut State Building Code
Structure Class:	II
Exposure Category:	B
Topographic Category:	1
Crest Height:	0 ft
Spectral Response:	$S_s = 0.21$, $S_1 = 0.07$
Site Class:	D - Stiff Soil

Conclusion

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

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



Existing and Reserved Equipment

Elev. ¹ (ft)	Qty	Antenna	Mount Type	Lines	Carrier
152.0	6	Powerwave Allgon LGP21901	Platform with Handrails	(2) 0.39" (10mm) Fiber Trunk (6) 0.78" (19.7mm) 8 AWG 6 (12) 1 5/8" Coax (3) 2" conduit	AT&T MOBILITY
	12	Powerwave Allgon 7020.00 Dual Band RET			
	6	Kathrein Scala 80010965			
	3	Powerwave Allgon 7770.00			
	1	Raycap DC6-48-60-18-8C-EV			
	3	Ericsson RRUS-12 1900 MHz			
	1	Raycap DC6-48-60-18-8C			
	3	Ericsson RRUS 4478 B14			
	3	CCI DTMAP7819VG12A			
	6	Powerwave Allgon LGP21401			
	1	Raycap DC6-48-60-18-8F			
	3	Ericsson RRUS 4415 B30			
	3	Ericsson RRUS 4449 B5, B12			
151.0	1	Generic 15' Omni		(1) 7/8" Coax	SPOK HOLDINGS, INC.
141.0	1	Generic 2" x 4" GPS	Low Profile Platform	(1) 1/2" Coax	VERIZON WIRELESS
134.0	3	RFS APXVAARR24_43-U-NA20	Low Profile Platform with SitePro1 KRL12 Support Rail Kit	(6) 1 5/8" Coax (3) 1.58" (40.1mm) Hybrid (1) 1 1/4" Hybriflex Cable	T-MOBILE
	3	Ericsson AIR 21			
	3	Ericsson Radio 4449 B12,B71			
	3	KMW AWS Twin Dual 700 Bypass			

Equipment to be Removed

Elev. ¹ (ft)	Qty	Antenna	Mount Type	Lines	Carrier
142.0	6	RFS FD9R6004/1C-3L	-	(12) 1 5/8" Coax	VERIZON WIRELESS
	3	Powerwave Allgon P65-16-XL-2			
	6	Andrew DB846H80E-SX			
	3	Ryma MGD3-800TD			

Proposed Equipment

Elev. ¹ (ft)	Qty	Antenna	Mount Type	Lines	Carrier
140.0	3	Commscope CBC78T-DS-43-2X	Low Profile Platform	(6) 1 5/8" Coax (1) 2.02 (51.2mm) Hybrid	VERIZON WIRELESS
	3	Samsung Outdoor CBRS 20W RRH			
	3	Samsung Outdoor CBRS 20W RRH –Clip-on Antenna			
	3	Samsung B5/B13 RRH-BR04C			
	3	Samsung B2/B66A RRH-BR049			
	1	RFS DB-C1-12C-24AB-0Z			
	6	Andrew DB846H80E-SX			
	6	Commscope JAHH-65B-R3B			

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

Install proposed lines inside the pole shaft.



Structure Usages

Structural Component	Controlling Usage	Pass/Fail
Anchor Bolts	48%	Pass
Shaft	58%	Pass
Base Plate	27%	Pass

Foundations

Reaction Component	Original Design Reactions	Factored Design Reactions*	Analysis Reactions	% of Design
Moment (Kips-Ft)	3,859.3	5,210.1	2,536.2	49%
Shear (Kips)	34.7	46.8	21.9	47%

* The design reactions are factored by 1.35 per ANSI/TIA-222-G, Sec. 15.5.1

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

Deflection and Sway*

Antenna Elevation (ft)	Antenna	Carrier	Deflection (ft)	Sway (Rotation) (°)
140.0	Commscope CBC78T-DS-43-2X	VERIZON WIRELESS	1.195	1.110
	Samsung Outdoor CBRS 20W RRH			
	Samsung Outdoor CBRS 20W RRH -Clip-on Antenna			
	Samsung B5/B13 RRH-BR04C			
	Samsung B2/B66A RRH-BR049			
	RFS DB-C1-12C-24AB-0Z			
	Andrew DB846H80E-SX			
Commscope JAHH-65B-R3B				

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



Standard Conditions

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

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

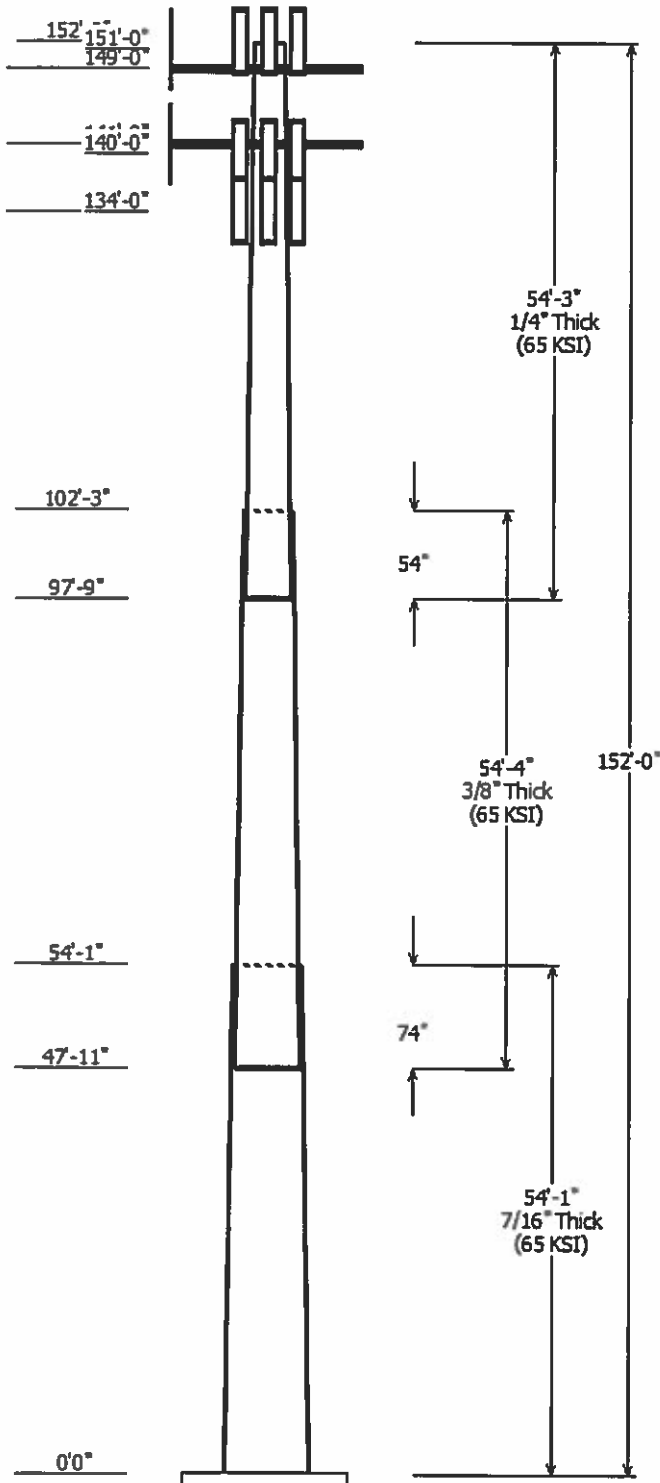
It is the responsibility of the client to ensure that the information provided to A.T. Engineering Service, PLLC and used in the performance of our engineering services is correct and complete.

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

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

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

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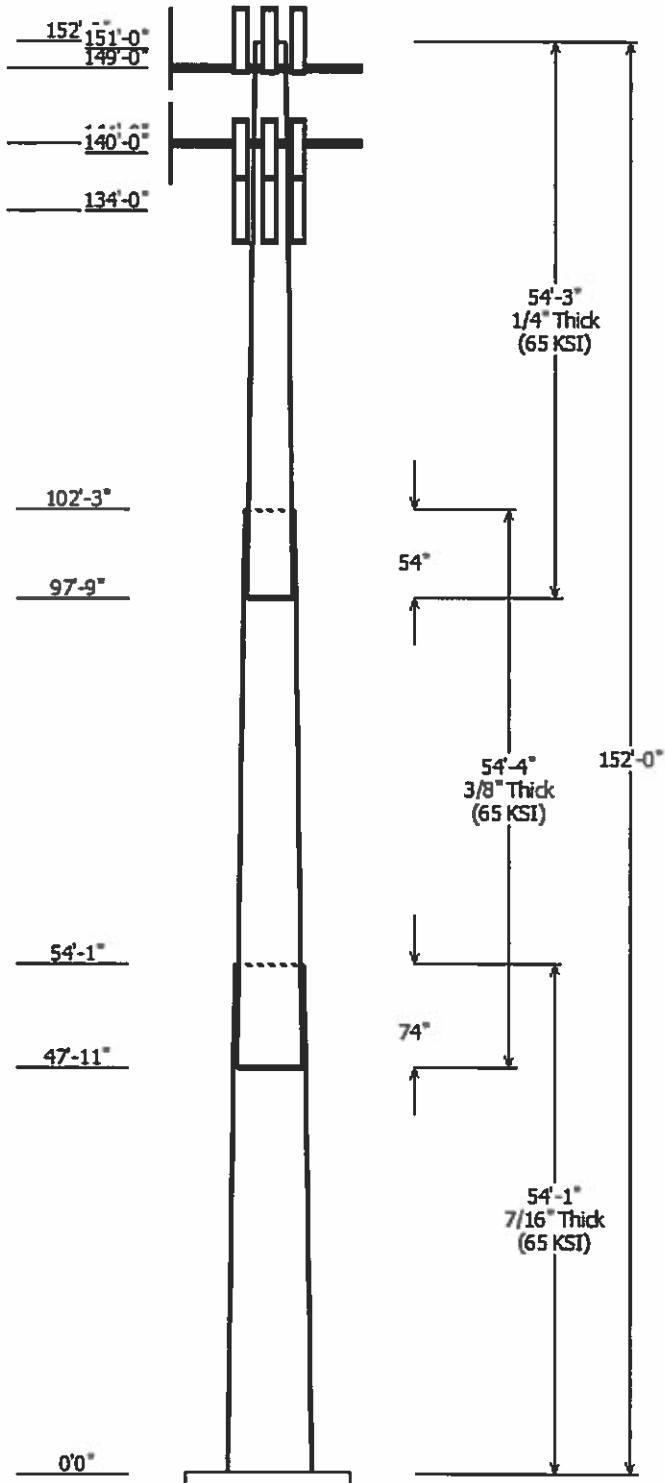


Job Information		
Client : VERIZON WIRELESS	Code: ANSI/TIA-222-G	
Pole : 302518	Struct Class : II	
Location : Newtown CT 3, CT	Exposure : B	
Description : 152 ft EEI Monopole	Topo : 1	
Shape : 18 Sides	Base Elev (ft): 0.00	
Height : 152.00 (ft)	Taper: 0.268092in/ft)	

Sections Properties								
Shaft Section	Length (ft)	Diameter (in)		Thick (in)	Joint Type	Overlap Length (in)	Steel Grade	Shape
		Across Top	Across Bottom					
1	54.083	42.25	56.75	0.438		0.000	18 Sides	65
2	54.333	30.08	44.65	0.375	Slip Joint	74.000	18 Sides	65
3	54.250	17.25	31.79	0.250	Slip Joint	54.000	18 Sides	65

Discrete Appurtenance				
Attach Elev (ft)	Force Elev (ft)	Qty	Description	
152.000	152.000	6	Kathrein Scala 80010965	
152.000	152.000	3	Powerwave Allgon 7770.00	
152.000	152.000	1	Raycap DC6-48-60-18-8C-EV	
152.000	152.000	3	Ericsson RRUS-12 1900 MHz	
152.000	152.000	1	Raycap DC6-48-60-18-8C	
152.000	152.000	3	Ericsson RRUS 4478 B14	
152.000	152.000	3	Ericsson RRUS 4449 B5, B12	
152.000	152.000	3	Ericsson RRUS 4415 B30	
152.000	152.000	1	Raycap DC6-48-60-18-8F	
152.000	152.000	6	Powerwave Allgon LGP21401	
152.000	152.000	3	CCI DTMAPB7819VG12A	
152.000	152.000	12	Powerwave Allgon 7020.00	
152.000	152.000	6	Powerwave Allgon LGP21901	
151.000	151.000	1	Generic 15' Omni	
149.000	149.000	1	Site Pro1 RMQP-496-HK	
141.000	141.000	1	Flat Low Profile Platform	
141.000	141.000	1	Generic 2" x 4" GPS	
140.000	140.000	6	Commscope JAHH-65B-R3B	
140.000	140.000	6	Andrew DB846H80E-SX	
140.000	140.000	1	RFS DB-C1-12C-24AB-0Z	
140.000	140.000	3	Samsung B2/B66A RRH-BR049	
140.000	140.000	3	Samsung B5/B13 RRH-BR04C	
140.000	140.000	3	Samsung Outdoor CBRS 20W	
140.000	140.000	3	Samsung Outdoor CBRS 20W	
140.000	140.000	3	Commscope CBC78T-DS-43-2X	
134.000	134.000	1	Flat Platform with Round	
134.000	134.000	3	RFS APXVAARR24_43-U-NA20	
134.000	134.000	3	Ericsson AIR 21	
134.000	134.000	3	Ericsson Radio 4449 B12,B71	
134.000	132.000	3	KMW AWS Twin Dual 700	

Linear Appurtenance			
Elev (ft)		Description	Exposed To Wind
From	To		
0.000	132.0	1 1/4" Hybriflex	Yes
0.000	134.0	1 5/8" Coax	Yes
0.000	134.0	1.58" (40.1mm)	No
0.000	140.0	1 5/8" Coax	No
0.000	140.0	2.02 (51.2mm)	No
0.000	141.0	1/2" Coax	No
0.000	151.0	7/8" Coax	No
0.000	152.0	0.39" (10mm)	No



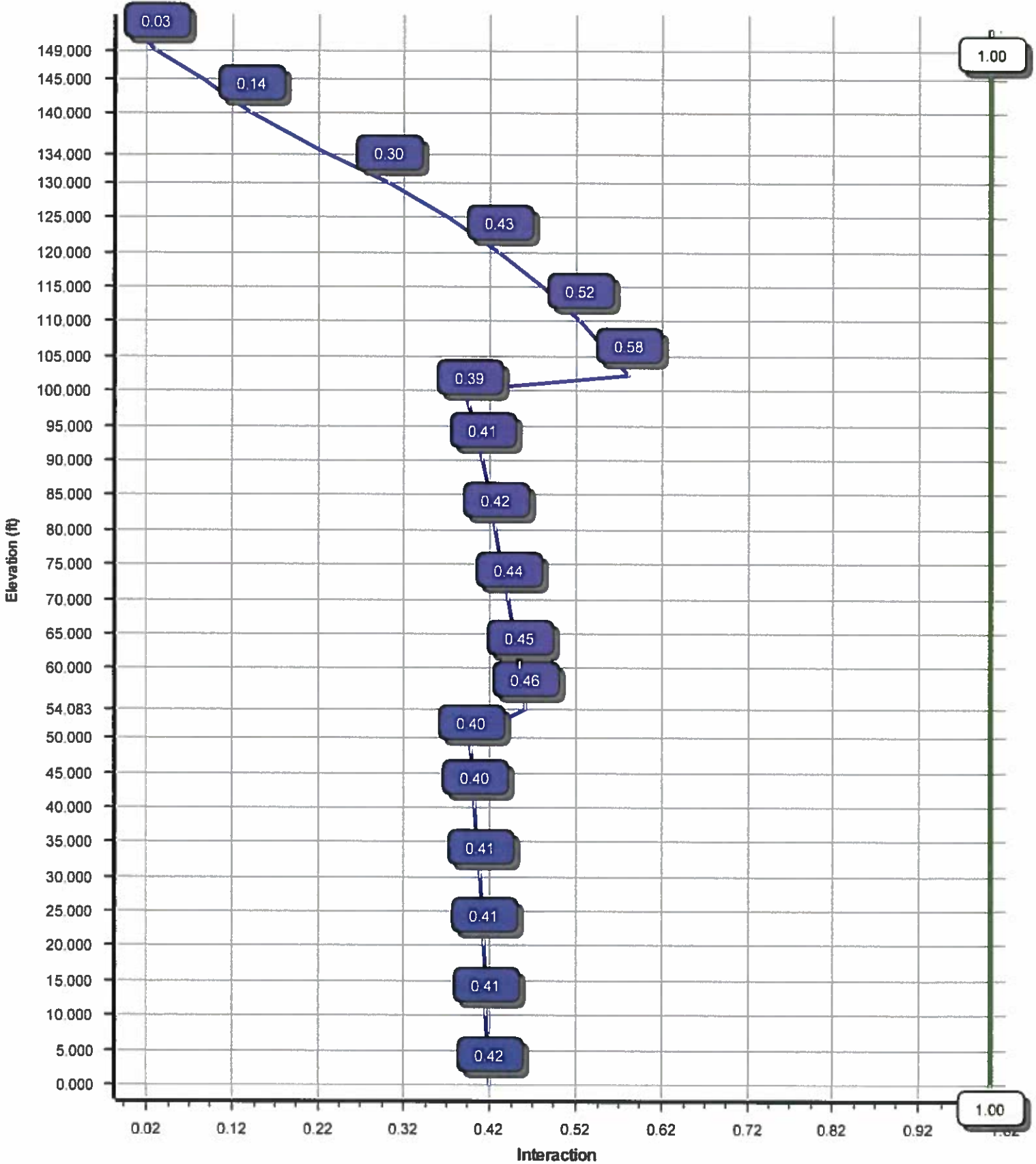
0.000	152.0	0.78" (19.7mm) 8	No
0.000	152.0	1 5/8" Coax	Yes
0.000	152.0	2" conduit	No

Load Cases	
1.2D + 1.6W	93 mph with No Ice
0.9D + 1.6W	93 mph with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi	50 mph with 0.75 in Radial Ice
(1.2 + 0.2Sds) * DL + E	Seismic Equivalent Lateral Forces Method
(1.2 + 0.2Sds) * DL + E	Seismic Equivalent Modal Analysis Method
(0.9 - 0.2Sds) * DL + E	Seismic (Reduced DL) Equivalent Lateral
(0.9 - 0.2Sds) * DL + E	Seismic (Reduced DL) Equivalent Modal
1.0D + 1.0W	Serviceability 60 mph

Reactions			
Load Case	Moment (kip-ft)	Shear (kip)	Axial (kip)
1.2D + 1.6W	2536.16	21.91	48.26
0.9D + 1.6W	2449.20	21.44	36.19
1.2D + 1.0Di + 1.0Wi	1262.49	13.78	72.68
(1.2 + 0.2Sds) * DL + E ELFM	155.89	1.21	48.17
(1.2 + 0.2Sds) * DL + E EMAM	326.07	2.61	48.17
(0.9 - 0.2Sds) * DL + E ELFM	153.63	1.21	33.11
(0.9 - 0.2Sds) * DL + E EMAM	320.89	2.61	33.11
1.0D + 1.0W	572.72	4.99	40.24

Dish Deflections			
Load Case	Attach Elev (ft)	Deflection (in)	Rotation (deg)
	0.00	0.000	0.000

Load Case : 1.2D + 1.6W
Max Ratio 57.82% at 102.2 ft



Site Number: 302518

Code: ANSI/TIA-222-G

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Site Name: Newtown CT 3, CT

Engineering Number: 12984020_C3_03

11/15/2019 3:22:00 PM

Customer: VERIZON WIRELESS

Analysis Parameters

Location :	Fairfield County, CT	Height (ft) :	152
Code :	ANSI/TIA-222-G	Base Diameter (In) :	56.75
Shape :	18 Sides	Top Diameter (In) :	17.25
Pole Type :	Taper	Taper (In/ft) :	0.268
Pole Manufacturer :	EEL	Rotation (deg) :	0.00

Ice & Wind Parameters

Structure Class:	II	Design Wind Speed Without Ice:	93 mph
Exposure Category:	B	Design Wind Speed With Ice:	50 mph
Topographic Category:	1	Operational Wind Speed:	60 mph
Crest Height:	0 ft	Design Ice Thickness:	0.75 in

Seismic Parameters

Analysis Method:	Equivalent Modal Analysis & Equivalent Lateral Force Methods		
Site Class:	D - Stiff Soil		
Period Based on Rayleigh Method (sec):	2.40		
T _L (sec):	6	p:	1
S _s :	0.209	S _r :	0.066
F _s :	1.600	F _v :	2.400
S _{ds} :	0.223	S _{d1} :	0.106
		C _s :	0.030
		C _s Max:	0.030
		C _s Min:	0.030

Load Cases

1.2D + 1.6W	93 mph with No Ice
0.9D + 1.6W	93 mph with No Ice (Reduced DL)
1.2D + 1.0DI + 1.0WI	50 mph with 0.75 in Radial Ice
(1.2 + 0.2S _{ds}) * DL + E ELFM	Seismic Equivalent Lateral Forces Method
(1.2 + 0.2S _{ds}) * DL + E EMAM	Seismic Equivalent Modal Analysis Method
(0.9 - 0.2S _{ds}) * DL + E ELFM	Seismic (Reduced DL) Equivalent Lateral Forces Method
(0.9 - 0.2S _{ds}) * DL + E EMAM	Seismic (Reduced DL) Equivalent Modal Analysis Method
1.0D + 1.0W	Serviceability 60 mph

Site Number: 302518

Code: ANSI/TIA-222-G

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Site Name: Newtown CT 3, CT

Engineering Number:12984020_C3_03

11/15/2019 3:22:00 PM

Customer: VERIZON WIRELESS

Shaft Section Properties

Sect Info	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Slip Len (in)	Joint Len (in)	Weight (lb)	Bottom					Top																	
								Dia (in)	Elev (ft)	Area (in ²)	Ix (in ⁴)	W/t Ratio	D/t Ratio	Dia (in)	Elev (ft)	Area (in ²)	Ix (in ⁴)	W/t Ratio	D/t Ratio	Taper (in/ft)										
1-18	54.083	0.4375	65		0.00		12,538	56.75	0.00	78.19	31328.3	21.46	129.71	42.25	54.08	58.06	12825.1	15.62	96.57	0.268092										
2-18	54.333	0.3750	65	Slip	74.00		8,141	44.65	47.92	52.70	13054.7	19.59	119.08	30.08	102.25	35.36	3944.5	12.74	80.23	0.268092										
3-18	54.250	0.2500	65	Slip	54.00		3,555	31.79	97.75	25.03	3146.6	21.01	127.18	17.25	152.00	13.49	492.5	10.76	69.00	0.268092										
							Shaft Weight	24,234																						

Discrete Appurtenance Properties

Attach Elev (ft)	Description	Qty	Ka	Vert Ecc (ft)	Weight (lb)	No Ice EPAa (sf)	Orientation Factor	Weight (lb)	Ice EPAa (sf)	Orientation Factor
152.00	Powerwave Allgon LGP21901	6	0.75	0.000	5.50	0.200	0.50	13.20	0.520	0.50
152.00	Powerwave Allgon 7020.00 Dual	12	0.75	0.000	2.20	0.340	0.50	12.45	0.752	0.50
152.00	CCI DTMABP7819VG12A	3	0.75	0.000	19.20	0.970	0.50	44.75	1.625	0.50
152.00	Powerwave Allgon LGP21401	6	0.75	0.000	14.10	1.100	0.50	39.13	1.813	0.50
152.00	Raycap DC6-48-60-18-8F	1	0.75	0.000	20.00	1.260	1.00	72.81	1.920	1.00
152.00	Ericsson RRUS 4415 B30	3	0.75	0.000	46.00	1.840	0.50	95.18	2.739	0.50
152.00	Ericsson RRUS 4449 B5, B12	3	0.75	0.000	71.00	1.970	0.50	135.65	2.906	0.50
152.00	Ericsson RRUS 4478 B14	3	0.75	0.000	59.40	2.020	0.67	120.96	2.966	0.67
152.00	Raycap DC6-48-60-18-8C	1	0.75	0.000	16.00	2.030	1.00	74.40	2.792	1.00
152.00	Ericsson RRUS-12 1900 MHz	3	0.75	0.000	60.00	2.700	0.67	134.38	3.777	0.67
152.00	Raycap DC6-48-60-18-8C-EV	1	0.75	0.000	16.00	4.790	1.00	145.53	6.266	1.00
152.00	Powerwave Allgon 7770.00	3	0.75	0.000	35.00	5.510	0.65	35.02	5.514	0.65
152.00	Kathrein Scala 80010965	6	0.75	0.000	97.60	13.810	0.62	365.02	16.869	0.62
151.00	Generic 15' Omni	1	1.00	0.000	40.00	4.500	1.00	153.41	9.855	1.00
149.00	Site Pro1 RMQP-496-HK	1	1.00	0.000	2,448.70	42.400	1.00	4,188.77	63.373	1.00
141.00	Generic 2" x 4" GPS	1	0.80	0.000	5.00	0.040	1.00	7.56	0.161	1.00
141.00	Flat Low Profile Platform	1	1.00	0.000	1,500.00	26.100	1.00	2,144.99	45.106	1.00
140.00	Commscope CBC78T-DS-43-2X	3	0.80	0.000	20.70	0.550	0.50	42.65	1.053	0.50
140.00	Samsung Outdoor CBRS 20W	3	0.80	0.000	18.60	0.860	0.50	42.44	1.485	0.50
140.00	Samsung Outdoor CBRS 20W	3	0.80	0.000	4.40	0.890	0.50	22.28	1.523	0.50
140.00	Samsung B5/B13 RRH-BR04C	3	0.80	0.000	70.30	1.880	0.50	127.12	2.779	0.50
140.00	Samsung B2/B66A RRH-BR049	3	0.80	0.000	84.40	1.880	0.50	147.77	2.779	0.50
140.00	RFS DB-C1-12C-24AB-OZ	1	0.80	0.000	32.00	4.060	1.00	158.25	5.417	1.00
140.00	Andrew DB846H80E-SX	6	0.80	0.000	16.00	5.870	0.73	173.81	6.213	0.73
140.00	Commscope JAHH-65B-R3B	6	0.80	0.000	60.60	9.110	0.69	261.56	11.865	0.69
134.00	KMW AWS Twin Dual 700 Bypass	3	0.75	-2.000	17.40	0.990	0.50	42.14	1.655	0.50
134.00	Ericsson Radio 4449 B12,B71	3	0.75	0.000	74.00	1.640	0.50	129.39	2.475	0.50
134.00	Ericsson AIR 21	3	0.75	0.000	91.00	6.050	0.70	234.63	8.189	0.70
134.00	RFS APXVAARR24_43-U-NA20	3	0.75	0.000	127.90	20.240	0.63	516.29	23.909	0.63
134.00	Flat Platform with Round	1	1.00	0.000	2,000.00	34.800	1.00	3,378.44	58.785	1.00
Totals	Num Loadings:30				96			9,664.80		21,201.70

Linear Appurtenance Properties

Load Case Azimuth (deg) : 70

Elev From (ft)	Elev To (ft)	Qty	Description	Coax Dia (in)	Coax Wt (lb/ft)	Max Coax / Row	Dist Between Rows (in)	Dist Between Cols (in)	Dist Azimuth (deg)	Dist From Face (in)	Dist Exposed To Carrier
0.00	152.00	2	0.39" (10mm) Fiber	0.39	0.06	N	0	0.00	0.00	0	N AT&T MOBILITY
0.00	152.00	6	0.78" (19.7mm) 8 AWG	0.78	0.59	N	0	0.00	0.00	0	N AT&T MOBILITY
0.00	152.00	12	1 5/8" Coax	1.98	0.82	N	6	0.00	0.00	200	Y AT&T MOBILITY
0.00	152.00	3	2" conduit	2.38	3.65	N	0	0.00	0.00	0	N AT&T MOBILITY
0.00	151.00	1	7/8" Coax	1.09	0.33	N	0	0.00	0.00	0	N SPOK HOLDINGS,
0.00	141.00	1	1/2" Coax	0.63	0.15	N	0	0.00	0.00	0	N VERIZON WIRELESS
0.00	140.00	6	1 5/8" Coax	1.98	0.82	N	0	0.00	0.00	0	N VERIZON WIRELESS

Site Number: 302518

Code: ANSI/TIA-222-G

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Site Name: Newtown CT 3, CT

Engineering Number:12984020_C3_03

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Customer: VERIZON WIRELESS

0.00	140.00	1	2.02 (51.2mm) Hybrid	2.02	3.04	N	0	0.00	0.00	0	0.00	N	VERIZON WIRELESS
0.00	134.00	6	1 5/8" Coax	1.98	0.82	N	6	0.00	0.00	80	0.00	Y	T-MOBILE
0.00	134.00	3	1.58" (40.1mm) Hybrid	1.58	1.61	N	0	0.00	0.00	0	0.00	N	T-MOBILE
0.00	132.00	1	1 1/4" Hybriflex Cable	1.54	1.00	N	1	0.00	0.00	112	0.00	Y	T-MOBILE

Site Number: 302518

Code: ANSI/TIA-222-G

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Site Name: Newtown CT 3, CT

Engineering Number:12984020_C3_03

11/15/2019 3:22:00 PM

Customer: VERIZON WIRELESS

Segment Properties (Max Len : 5. ft)

Seg Top Elev (ft)	Description	Thick (in)	Flat Dia (in)	Area (in ²)	Ix (in ⁴)	W/t Ratio	D/t Ratio	F'y (ksi)	S (in ³)	Z (in ³)	Weight (lb)
0.00		0.4375	56.750	78.194	31,328.3	21.46	129.71	76.2	1087.	0.0	0.0
5.00		0.4375	55.410	76.333	29,143.9	20.92	126.65	76.8	1036.	0.0	1,314.6
10.00		0.4375	54.069	74.471	27,063.5	20.38	123.59	77.4	985.9	0.0	1,282.9
15.00		0.4375	52.729	72.610	25,084.5	19.84	120.52	78.1	937.0	0.0	1,251.2
20.00		0.4375	51.388	70.749	23,204.5	19.30	117.46	78.7	889.4	0.0	1,219.5
25.00		0.4375	50.048	68.887	21,420.8	18.76	114.39	79.3	843.0	0.0	1,187.9
30.00		0.4375	48.707	67.026	19,730.9	18.22	111.33	80.0	797.9	0.0	1,156.2
35.00		0.4375	47.367	65.165	18,132.3	17.68	108.27	80.6	754.0	0.0	1,124.5
40.00		0.4375	46.026	63.303	16,622.5	17.14	105.20	81.2	711.3	0.0	1,092.9
45.00		0.4375	44.686	61.442	15,199.0	16.60	102.14	81.9	669.9	0.0	1,061.2
47.92	Bot - Section 2	0.4375	43.904	60.356	14,407.3	16.28	100.35	82.2	646.3	0.0	604.4
50.00		0.4375	43.345	59.581	13,859.1	16.06	99.08	82.5	629.8	0.0	796.4
54.08	Top - Section 1	0.3750	43.001	50.733	11,646.4	18.81	114.67	79.3	533.5	0.0	1,531.3
55.00		0.3750	42.755	50.441	11,446.1	18.69	114.01	79.4	527.3	0.0	157.8
60.00		0.3750	41.414	48.845	10,394.0	18.06	110.44	80.2	494.3	0.0	844.6
65.00		0.3750	40.074	47.250	9,408.4	17.43	106.86	80.9	462.4	0.0	817.5
70.00		0.3750	38.734	45.655	8,487.2	16.80	103.29	81.6	431.6	0.0	790.3
75.00		0.3750	37.393	44.059	7,628.1	16.17	99.71	82.4	401.8	0.0	763.2
80.00		0.3750	36.053	42.464	6,829.1	15.54	96.14	82.6	373.1	0.0	736.0
85.00		0.3750	34.712	40.868	6,087.9	14.91	92.57	82.6	345.4	0.0	708.9
90.00		0.3750	33.372	39.273	5,402.4	14.28	88.99	82.6	318.9	0.0	681.8
95.00		0.3750	32.031	37.677	4,770.4	13.65	85.42	82.6	293.3	0.0	654.6
97.75	Bot - Section 3	0.3750	31.294	36.800	4,444.8	13.30	83.45	82.6	279.8	0.0	348.5
100.0		0.3750	30.691	36.082	4,189.7	13.02	81.84	82.6	268.9	0.0	468.8
102.2	Top - Section 2	0.2500	30.588	24.072	2,799.2	20.16	122.35	77.7	180.2	0.0	459.6
105.0		0.2500	29.850	23.487	2,600.0	19.64	119.40	78.3	171.6	0.0	222.5
110.0		0.2500	28.510	22.423	2,262.5	18.70	114.04	79.4	156.3	0.0	390.6
115.0		0.2500	27.169	21.360	1,955.6	17.75	108.68	80.5	141.8	0.0	372.5
120.0		0.2500	25.829	20.296	1,677.8	16.81	103.32	81.6	127.9	0.0	354.4
125.0		0.2500	24.488	19.233	1,427.6	15.86	97.95	82.6	114.8	0.0	336.3
130.0		0.2500	23.148	18.169	1,203.6	14.92	92.59	82.6	102.4	0.0	318.2
134.0		0.2500	22.076	17.318	1,042.3	14.16	88.30	82.6	93.0	0.0	241.5
135.0		0.2500	21.808	17.105	1,004.3	13.97	87.23	82.6	90.7	0.0	58.6
140.0		0.2500	20.467	16.042	828.4	13.02	81.87	82.6	79.7	0.0	282.0
141.0		0.2500	20.199	15.829	795.9	12.84	80.80	82.6	77.6	0.0	54.2
145.0		0.2500	19.127	14.978	674.3	12.08	76.51	82.6	69.4	0.0	209.7
149.0		0.2500	18.054	14.127	565.8	11.32	72.22	82.6	61.7	0.0	198.1
150.0		0.2500	17.786	13.914	540.6	11.13	71.14	82.6	59.9	0.0	47.7
151.0		0.2500	17.518	13.702	516.2	10.95	70.07	82.6	58.0	0.0	47.0
152.0		0.2500	17.250	13.489	492.5	10.76	69.00	82.6	56.2	0.0	46.3
24,233.9											

Site Number: 302518

Code: ANSI/TIA-222-G

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Site Name: Newtown CT 3, CT

Engineering Number:12984020_C3_03

11/15/2019 3:22:00 PM

Customer: VERIZON WIRELESS

Load Case: 1.2D + 1.6W

93 mph with No Ice

24 Iterations

Gust Response Factor :1.10

Wind Importance Factor 1.00

Dead Load Factor :1.20

Wind Load Factor :1.60

Applied Segment Forces Summary

Seg Elev (ft)	Description	Shaft Forces		Discrete Forces			Linear Forces		Sum of Forces				
		Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Torsion MY (lb-ft)	Moment MZ (lb)
0.00		199.8	0.0					0.0	0.0	199.8	0.0	0.0	0.0
5.00		394.9	1,577.5					0.0	261.8	394.9	1,839.3	0.0	0.0
10.00		385.3	1,539.5					0.0	261.8	385.3	1,801.3	0.0	0.0
15.00		375.8	1,501.5					0.0	261.8	375.8	1,763.3	0.0	0.0
20.00		366.2	1,463.5					0.0	261.8	366.2	1,725.3	0.0	0.0
25.00		356.7	1,425.5					0.0	261.8	356.7	1,687.3	0.0	0.0
30.00		351.2	1,387.5					0.0	261.8	351.2	1,649.3	0.0	0.0
35.00		352.8	1,349.4					0.0	261.8	352.8	1,611.3	0.0	0.0
40.00		356.2	1,311.4					0.0	261.8	356.2	1,573.3	0.0	0.0
45.00		283.1	1,273.4					0.0	261.8	283.1	1,535.3	0.0	0.0
47.92	Bot - Section 2	180.3	725.3					0.0	152.7	180.3	878.0	0.0	0.0
50.00		224.3	955.6					0.0	109.1	224.3	1,064.7	0.0	0.0
54.08	Top - Section 1	181.7	1,837.5					0.0	213.8	181.7	2,051.4	0.0	0.0
55.00		214.0	189.4					0.0	48.0	214.0	237.4	0.0	0.0
60.00		360.0	1,013.5					0.0	261.8	360.0	1,275.4	0.0	0.0
65.00		356.4	981.0					0.0	261.8	356.4	1,242.8	0.0	0.0
70.00		352.8	948.4					0.0	261.8	352.8	1,210.2	0.0	0.0
75.00		350.3	915.8					0.0	261.8	350.3	1,177.7	0.0	0.0
80.00		348.0	883.3					0.0	261.8	348.0	1,145.1	0.0	0.0
85.00		345.0	850.7					0.0	261.8	345.0	1,112.5	0.0	0.0
90.00		341.5	818.1					0.0	261.8	341.5	1,079.9	0.0	0.0
95.00		262.3	785.5					0.0	261.8	262.3	1,047.4	0.0	0.0
97.75	Bot - Section 3	168.9	418.2					0.0	144.0	168.9	562.2	0.0	0.0
100.00		152.3	562.6					0.0	117.8	152.3	680.4	0.0	0.0
102.25	Top - Section 2	167.5	551.6					0.0	117.8	167.5	669.4	0.0	0.0
105.00		256.2	267.0					0.0	144.0	256.2	411.0	0.0	0.0
110.00		326.4	468.7					0.0	261.8	326.4	730.5	0.0	0.0
115.00		320.7	447.0					0.0	261.8	320.7	708.8	0.0	0.0
120.00		314.6	425.2					0.0	261.8	314.6	687.1	0.0	0.0
125.00		308.2	403.5					0.0	261.8	308.2	665.4	0.0	0.0
130.00		272.0	381.8					0.0	261.8	272.0	643.6	0.0	0.0
134.00	Appurtenance(s)	149.0	289.8	3,021.9	0.0	-88.2	3,517.1	0.0	207.1	3,170.9	4,014.0	0.0	0.0
135.00		174.9	70.3					0.0	39.5	174.9	109.7	0.0	0.0
140.00	Appurtenance(s)	174.0	338.4	2,467.4	0.0	0.0	1,304.2	0.0	197.3	2,641.4	1,839.9	0.0	0.0
141.00	Appurtenance(s)	141.6	65.1	1,054.6	0.0	0.0	1,806.0	0.0	29.9	1,196.3	1,901.0	0.0	0.0
145.00		267.2	251.6					0.0	118.9	267.2	370.5	0.0	0.0
149.00	Appurtenance(s)	191.5	237.7	1,738.4	0.0	0.0	2,938.4	126.1	118.9	2,056.1	3,295.1	0.0	0.0
150.00		74.2	57.3					31.6	29.7	105.8	87.0	0.0	0.0
151.00	Appurtenance(s)	73.2	56.4	185.2	0.0	0.0	48.0	31.7	29.7	290.1	134.1	0.0	0.0
152.00	Appurtenance(s)	36.4	55.5	2,869.7	0.0	0.0	1,984.1	31.7	29.3	2,937.8	2,068.9	0.0	0.0
Totals:										22,065.9	48,286.8	0.00	0.00

Site Number: 302518

Code: ANSI/TIA-222-G

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Site Name: Newtown CT 3, CT

Engineering Number:12984020_C3_03

11/15/2019 3:22:03 PM

Customer: VERIZON WIRELESS

Load Case: 1.2D + 1.6W

93 mph with No Ice

24 Iterations

Gust Response Factor :1.10

Wind Importance Factor 1.00

Dead Load Factor :1.20

Wind Load Factor :1.60

Calculated Forces

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 (deg)	Ratio
0.00	-48.26	-21.91	0.00	-2,536.16	0.00	2,536.16	5,359.60	2,679.80	12,402.6	6,210.55	0.00	0.00	0.417
5.00	-46.38	-21.61	0.00	-2,426.60	0.00	2,426.60	5,275.68	2,637.84	11,915.5	5,966.65	0.06	-0.11	0.416
10.00	-44.54	-21.31	0.00	-2,318.55	0.00	2,318.55	5,189.62	2,594.81	11,433.1	5,725.08	0.24	-0.23	0.414
15.00	-42.73	-21.02	0.00	-2,212.00	0.00	2,212.00	5,101.44	2,550.72	10,955.7	5,485.99	0.54	-0.35	0.412
20.00	-40.97	-20.73	0.00	-2,106.93	0.00	2,106.93	5,011.12	2,505.56	10,483.5	5,249.58	0.97	-0.47	0.410
25.00	-39.24	-20.44	0.00	-2,003.30	0.00	2,003.30	4,918.68	2,459.34	10,017.1	5,016.02	1.53	-0.60	0.407
30.00	-37.55	-20.16	0.00	-1,901.09	0.00	1,901.09	4,824.11	2,412.05	9,556.78	4,785.49	2.23	-0.73	0.405
35.00	-35.89	-19.87	0.00	-1,800.31	0.00	1,800.31	4,727.41	2,363.70	9,102.80	4,558.17	3.06	-0.86	0.403
40.00	-34.28	-19.57	0.00	-1,700.98	0.00	1,700.98	4,628.58	2,314.29	8,655.58	4,334.22	4.03	-1.00	0.400
45.00	-32.71	-19.32	0.00	-1,603.13	0.00	1,603.13	4,527.62	2,263.81	8,215.47	4,113.84	5.15	-1.14	0.397
47.92	-31.81	-19.16	0.00	-1,546.78	0.00	1,546.78	4,467.74	2,233.87	7,962.16	3,987.00	5.87	-1.22	0.395
50.00	-30.72	-18.97	0.00	-1,506.85	0.00	1,506.85	4,424.53	2,212.27	7,782.82	3,897.19	6.42	-1.29	0.394
54.08	-28.65	-18.78	0.00	-1,429.40	0.00	1,429.40	3,619.86	1,809.93	6,334.27	3,171.85	7.58	-1.41	0.459
55.00	-28.38	-18.61	0.00	-1,412.19	0.00	1,412.19	3,605.16	1,802.58	6,271.86	3,140.59	7.85	-1.44	0.458
60.00	-27.06	-18.29	0.00	-1,319.17	0.00	1,319.17	3,523.72	1,761.86	5,934.59	2,971.70	9.45	-1.61	0.452
65.00	-25.78	-17.98	0.00	-1,227.71	0.00	1,227.71	3,440.15	1,720.07	5,602.88	2,805.61	11.23	-1.78	0.445
70.00	-24.52	-17.66	0.00	-1,137.82	0.00	1,137.82	3,354.45	1,677.22	5,277.11	2,642.48	13.19	-1.96	0.438
75.00	-23.30	-17.35	0.00	-1,049.49	0.00	1,049.49	3,266.62	1,633.31	4,957.62	2,482.50	15.34	-2.14	0.430
80.00	-22.12	-17.03	0.00	-962.76	0.00	962.76	3,154.85	1,577.42	4,612.87	2,309.86	17.69	-2.33	0.424
85.00	-20.96	-16.71	0.00	-877.61	0.00	877.61	3,036.31	1,518.16	4,271.03	2,138.69	20.23	-2.52	0.417
90.00	-19.84	-16.39	0.00	-794.08	0.00	794.08	2,917.78	1,458.89	3,942.34	1,974.10	22.98	-2.72	0.409
95.00	-18.77	-16.12	0.00	-712.15	0.00	712.15	2,799.25	1,399.62	3,626.81	1,816.10	25.93	-2.92	0.399
97.75	-18.19	-15.96	0.00	-667.81	0.00	667.81	2,734.06	1,367.03	3,458.88	1,732.01	27.65	-3.03	0.392
100.00	-17.49	-15.80	0.00	-631.91	0.00	631.91	2,680.72	1,340.36	3,324.44	1,664.69	29.10	-3.12	0.386
102.25	-16.80	-15.62	0.00	-596.37	0.00	596.37	1,683.04	841.52	2,097.24	1,050.18	30.59	-3.22	0.578
105.00	-16.35	-15.40	0.00	-553.40	0.00	553.40	1,655.06	827.53	2,011.86	1,007.42	32.48	-3.33	0.560
110.00	-15.57	-15.11	0.00	-476.39	0.00	476.39	1,602.55	801.28	1,859.07	930.92	36.12	-3.61	0.522
115.00	-14.81	-14.81	0.00	-400.85	0.00	400.85	1,547.92	773.96	1,709.77	856.15	40.05	-3.89	0.478
120.00	-14.08	-14.51	0.00	-326.79	0.00	326.79	1,491.15	745.57	1,564.29	783.31	44.27	-4.15	0.427
125.00	-13.39	-14.21	0.00	-254.23	0.00	254.23	1,428.88	714.44	1,419.66	710.88	48.75	-4.40	0.367
130.00	-12.72	-13.93	0.00	-183.18	0.00	183.18	1,349.86	674.93	1,266.22	634.05	53.48	-4.62	0.299
134.00	-8.97	-10.45	0.00	-127.46	0.00	127.46	1,286.64	643.32	1,149.79	575.75	57.41	-4.77	0.229
135.00	-8.86	-10.28	0.00	-117.01	0.00	117.01	1,270.84	635.42	1,121.56	561.61	58.41	-4.80	0.216
140.00	-7.24	-7.50	0.00	-65.59	0.00	65.59	1,191.82	595.91	985.67	493.57	63.51	-4.93	0.139
141.00	-5.44	-6.15	0.00	-58.09	0.00	58.09	1,176.01	588.01	959.54	480.48	64.54	-4.95	0.126
145.00	-5.09	-5.86	0.00	-33.48	0.00	33.48	1,112.80	556.40	858.55	429.91	68.71	-5.01	0.083
149.00	-1.99	-3.52	0.00	-10.04	0.00	10.04	1,049.58	524.79	763.17	382.15	72.93	-5.05	0.028
150.00	-1.91	-3.41	0.00	-6.52	0.00	6.52	1,033.78	516.89	740.20	370.65	73.99	-5.06	0.019
151.00	-1.80	-3.11	0.00	-3.11	0.00	3.11	1,017.97	508.99	717.59	359.33	75.04	-5.06	0.010
152.00	0.00	-2.94	0.00	0.00	0.00	0.00	1,002.17	501.08	695.32	348.18	76.10	-5.06	0.000

Site Number: 302518

Code: ANSI/TIA-222-G

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Site Name: Newtown CT 3, CT

Engineering Number:12984020_C3_03

11/15/2019 3:22:03 PM

Customer: VERIZON WIRELESS

Load Case: 0.9D + 1.6W

93 mph with No Ice (Reduced DL)

24 Iterations

Gust Response Factor :1.10

Wind Importance Factor :1.00

Dead Load Factor :0.90

Wind Load Factor :1.60

Applied Segment Forces Summary

Seg Elev (ft)	Description	Shaft Forces		Discrete Forces			Linear Forces			Sum of Forces			
		Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Torsion MY (lb-ft)	Moment MZ (lb)
0.00		199.8	0.0					0.0	0.0	199.8	0.0	0.0	0.0
5.00		394.9	1,183.1					0.0	196.4	394.9	1,379.5	0.0	0.0
10.00		385.3	1,154.6					0.0	196.4	385.3	1,351.0	0.0	0.0
15.00		375.8	1,126.1					0.0	196.4	375.8	1,322.5	0.0	0.0
20.00		366.2	1,097.6					0.0	196.4	366.2	1,294.0	0.0	0.0
25.00		356.7	1,069.1					0.0	196.4	356.7	1,265.5	0.0	0.0
30.00		351.2	1,040.6					0.0	196.4	351.2	1,237.0	0.0	0.0
35.00		352.8	1,012.1					0.0	196.4	352.8	1,208.5	0.0	0.0
40.00		356.2	983.6					0.0	196.4	356.2	1,180.0	0.0	0.0
45.00		283.1	955.1					0.0	196.4	283.1	1,151.5	0.0	0.0
47.92	Bot - Section 2	180.3	544.0					0.0	114.6	180.3	658.5	0.0	0.0
50.00		224.3	716.7					0.0	81.8	224.3	798.6	0.0	0.0
54.08	Top - Section 1	181.7	1,378.1					0.0	160.4	181.7	1,538.5	0.0	0.0
55.00		214.0	142.0					0.0	36.0	214.0	178.0	0.0	0.0
60.00		360.0	760.2					0.0	196.4	360.0	956.5	0.0	0.0
65.00		356.4	735.7					0.0	196.4	356.4	932.1	0.0	0.0
70.00		351.8	711.3					0.0	196.4	351.8	907.7	0.0	0.0
75.00		346.4	686.9					0.0	196.4	346.4	883.3	0.0	0.0
80.00		340.2	662.4					0.0	196.4	340.2	858.8	0.0	0.0
85.00		333.3	638.0					0.0	196.4	333.3	834.4	0.0	0.0
90.00		325.7	613.6					0.0	196.4	325.7	810.0	0.0	0.0
95.00		247.6	589.2					0.0	196.4	247.6	785.5	0.0	0.0
97.75	Bot - Section 3	157.7	313.6					0.0	108.0	157.7	421.6	0.0	0.0
100.00		141.2	421.9					0.0	88.4	141.2	510.3	0.0	0.0
102.25	Top - Section 2	154.6	413.7					0.0	88.4	154.6	502.0	0.0	0.0
105.00		234.3	200.3					0.0	108.0	234.3	308.3	0.0	0.0
110.00		294.7	351.5					0.0	196.4	294.7	547.9	0.0	0.0
115.00		284.4	335.2					0.0	196.4	284.4	531.6	0.0	0.0
120.00		273.7	318.9					0.0	196.4	273.7	515.3	0.0	0.0
125.00		262.6	302.6					0.0	196.4	262.6	499.0	0.0	0.0
130.00		226.9	286.4					0.0	196.4	226.9	482.7	0.0	0.0
134.00	Appurtenance(s)	122.5	217.4	3,021.9	0.0	-88.2	2,637.8	0.0	155.3	3,144.4	3,010.5	0.0	0.0
135.00		140.5	52.7					0.0	29.6	140.5	82.3	0.0	0.0
140.00	Appurtenance(s)	139.0	253.8	2,467.4	0.0	0.0	978.1	0.0	148.0	2,606.4	1,379.9	0.0	0.0
141.00	Appurtenance(s)	110.2	48.8	1,054.6	0.0	0.0	1,354.5	0.0	22.4	1,164.8	1,425.7	0.0	0.0
145.00		241.8	188.7					0.0	89.2	241.8	277.9	0.0	0.0
149.00	Appurtenance(s)	191.5	178.3	1,738.4	0.0	0.0	2,203.8	126.1	89.2	2,056.1	2,471.3	0.0	0.0
150.00		74.2	42.9					31.6	22.3	105.8	65.2	0.0	0.0
151.00	Appurtenance(s)	73.2	42.3	185.2	0.0	0.0	36.0	31.7	22.3	290.1	100.6	0.0	0.0
152.00	Appurtenance(s)	36.4	41.6	2,869.7	0.0	0.0	1,488.1	31.7	22.0	2,937.8	1,551.7	0.0	0.0
Totals:										21,601.8	36,215.1	0.00	0.00

Site Number: 302518

Code: ANSI/TIA-222-G

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Site Name: Newtown CT 3, CT

Engineering Number:12984020_C3_03

11/15/2019 3:22:06 PM

Customer: VERIZON WIRELESS

Load Case: 0.9D + 1.6W

93 mph with No Ice (Reduced DL)

24 Iterations

Gust Response Factor :1.10

Wind Importance Factor 1.00

Dead Load Factor :0.90

Wind Load Factor :1.60

Calculated Forces

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 (deg)	Ratio
0.00	-36.19	-21.44	0.00	-2,449.20	0.00	2,449.20	5,359.60	2,679.80	12,402.6	6,210.55	0.00	0.00	0.401
5.00	-34.77	-21.11	0.00	-2,342.02	0.00	2,342.02	5,275.68	2,637.84	11,915.5	5,966.65	0.06	-0.11	0.399
10.00	-33.38	-20.78	0.00	-2,236.48	0.00	2,236.48	5,189.62	2,594.81	11,433.1	5,725.08	0.23	-0.22	0.397
15.00	-32.02	-20.47	0.00	-2,132.57	0.00	2,132.57	5,101.44	2,550.72	10,955.7	5,485.99	0.53	-0.34	0.395
20.00	-30.69	-20.16	0.00	-2,030.23	0.00	2,030.23	5,011.12	2,505.56	10,483.5	5,249.58	0.94	-0.45	0.393
25.00	-29.38	-19.85	0.00	-1,929.46	0.00	1,929.46	4,918.68	2,459.34	10,017.1	5,016.02	1.48	-0.57	0.391
30.00	-28.11	-19.55	0.00	-1,830.20	0.00	1,830.20	4,824.11	2,412.05	9,556.78	4,785.49	2.15	-0.70	0.388
35.00	-26.86	-19.24	0.00	-1,732.46	0.00	1,732.46	4,727.41	2,363.70	9,102.80	4,558.17	2.95	-0.83	0.386
40.00	-25.64	-18.93	0.00	-1,636.26	0.00	1,636.26	4,628.58	2,314.29	8,655.58	4,334.22	3.89	-0.96	0.383
45.00	-24.46	-18.67	0.00	-1,541.63	0.00	1,541.63	4,527.62	2,263.81	8,215.47	4,113.84	4.97	-1.10	0.380
47.92	-23.78	-18.51	0.00	-1,487.18	0.00	1,487.18	4,467.74	2,233.87	7,962.16	3,987.00	5.66	-1.18	0.378
50.00	-22.96	-18.30	0.00	-1,448.63	0.00	1,448.63	4,424.53	2,212.27	7,782.82	3,897.19	6.19	-1.24	0.377
54.08	-21.40	-18.11	0.00	-1,373.91	0.00	1,373.91	3,619.86	1,809.93	6,334.27	3,171.85	7.30	-1.36	0.439
55.00	-21.20	-17.93	0.00	-1,357.31	0.00	1,357.31	3,605.16	1,802.58	6,271.86	3,140.59	7.57	-1.39	0.438
60.00	-20.20	-17.60	0.00	-1,267.67	0.00	1,267.67	3,523.72	1,761.86	5,934.59	2,971.70	9.10	-1.55	0.432
65.00	-19.23	-17.28	0.00	-1,179.66	0.00	1,179.66	3,440.15	1,720.07	5,602.88	2,805.61	10.82	-1.72	0.426
70.00	-18.28	-16.95	0.00	-1,093.28	0.00	1,093.28	3,354.45	1,677.22	5,277.11	2,642.48	12.70	-1.89	0.419
75.00	-17.36	-16.63	0.00	-1,008.52	0.00	1,008.52	3,266.62	1,633.31	4,957.62	2,482.50	14.78	-2.06	0.412
80.00	-16.46	-16.31	0.00	-925.38	0.00	925.38	3,154.85	1,577.42	4,612.87	2,309.86	17.03	-2.24	0.406
85.00	-15.59	-15.99	0.00	-843.83	0.00	843.83	3,036.31	1,518.16	4,271.03	2,138.69	19.48	-2.43	0.400
90.00	-14.74	-15.68	0.00	-763.87	0.00	763.87	2,917.78	1,458.89	3,942.34	1,974.10	22.13	-2.62	0.392
95.00	-13.93	-15.43	0.00	-685.47	0.00	685.47	2,799.25	1,399.62	3,626.81	1,816.10	24.97	-2.81	0.383
97.75	-13.49	-15.28	0.00	-643.03	0.00	643.03	2,734.06	1,367.03	3,458.88	1,732.01	26.62	-2.92	0.376
100.00	-12.96	-15.13	0.00	-608.65	0.00	608.65	2,680.72	1,340.36	3,324.44	1,664.69	28.01	-3.01	0.371
102.25	-12.45	-14.97	0.00	-574.61	0.00	574.61	1,683.04	841.52	2,097.24	1,050.18	29.45	-3.10	0.555
105.00	-12.10	-14.76	0.00	-533.44	0.00	533.44	1,655.06	827.53	2,011.86	1,007.42	31.27	-3.21	0.537
110.00	-11.50	-14.49	0.00	-459.63	0.00	459.63	1,602.55	801.28	1,859.07	930.92	34.77	-3.48	0.501
115.00	-10.93	-14.22	0.00	-387.19	0.00	387.19	1,547.92	773.96	1,709.77	856.15	38.56	-3.74	0.460
120.00	-10.37	-13.96	0.00	-316.08	0.00	316.08	1,491.15	745.57	1,564.29	783.31	42.62	-4.00	0.411
125.00	-9.84	-13.70	0.00	-246.29	0.00	246.29	1,428.88	714.44	1,419.66	710.88	46.93	-4.24	0.354
130.00	-9.33	-13.47	0.00	-177.79	0.00	177.79	1,349.86	674.93	1,266.22	634.05	51.49	-4.45	0.288
134.00	-6.56	-10.10	0.00	-123.92	0.00	123.92	1,286.64	643.32	1,149.79	575.75	55.28	-4.59	0.221
135.00	-6.48	-9.97	0.00	-113.82	0.00	113.82	1,270.84	635.42	1,121.56	561.61	56.24	-4.62	0.208
140.00	-5.31	-7.26	0.00	-63.99	0.00	63.99	1,191.82	595.91	985.67	493.57	61.15	-4.75	0.134
141.00	-3.98	-5.99	0.00	-56.73	0.00	56.73	1,176.01	588.01	959.54	480.48	62.15	-4.77	0.122
145.00	-3.72	-5.72	0.00	-32.78	0.00	32.78	1,112.80	556.40	858.55	429.91	66.17	-4.84	0.080
149.00	-1.43	-3.47	0.00	-9.88	0.00	9.88	1,049.58	524.79	763.17	382.15	70.24	-4.87	0.027
150.00	-1.37	-3.36	0.00	-6.42	0.00	6.42	1,033.78	516.89	740.20	370.65	71.26	-4.88	0.019
151.00	-1.30	-3.06	0.00	-3.06	0.00	3.06	1,017.97	508.99	717.59	359.33	72.28	-4.88	0.010
152.00	0.00	-2.94	0.00	0.00	0.00	0.00	1,002.17	501.08	695.32	348.18	73.30	-4.88	0.000

Site Number: 302518

Code: ANSI/TIA-222-G

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Site Name: Newtown CT 3, CT

Engineering Number:12984020_C3_03

11/15/2019 3:22:06 PM

Customer: VERIZON WIRELESS

Load Case: 1.2D + 1.0Di + 1.0Wi	50 mph with 0.75 in Radial Ice	24 Iterations
Gust Response Factor :1.10	Ice Dead Load Factor :1.00	Wind Importance Factor :1.00
Dead Load Factor :1.20		Ice Importance Factor :1.00
Wind Load Factor :1.00		

Applied Segment Forces Summary

Seg Elev (ft)	Description	Shaft Forces		Discrete Forces			Linear Forces		Sum of Forces				
		Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Torsion MY (lb-ft)	Moment MZ (lb)
0.00		69.4	0.0					0.0	0.0	69.4	0.0	0.0	0.0
5.00		137.4	1,988.1					289.7	389.5	427.2	2,377.7	0.0	0.0
10.00		134.7	1,988.0					285.2	402.6	420.0	2,390.6	0.0	0.0
15.00		131.8	1,962.7					280.0	409.3	411.8	2,372.0	0.0	0.0
20.00		128.8	1,929.0					274.6	413.9	403.4	2,343.0	0.0	0.0
25.00		125.8	1,891.1					269.1	417.5	394.9	2,308.6	0.0	0.0
30.00		124.2	1,850.4					263.5	420.5	387.7	2,270.9	0.0	0.0
35.00		125.0	1,807.9					264.1	423.0	389.2	2,230.9	0.0	0.0
40.00		126.6	1,763.9					269.1	425.2	395.7	2,189.1	0.0	0.0
45.00		100.8	1,718.9					272.7	427.2	373.5	2,146.0	0.0	0.0
47.92	Bot - Section 2	64.3	983.1					160.2	250.0	224.5	1,233.1	0.0	0.0
50.00		80.1	1,141.6					114.8	178.9	194.9	1,320.5	0.0	0.0
54.08	Top - Section 1	64.9	2,195.4					225.6	351.5	290.5	2,546.9	0.0	0.0
55.00		76.7	269.6					51.4	79.0	128.1	348.7	0.0	0.0
60.00		129.1	1,440.6					280.7	432.0	409.8	1,872.6	0.0	0.0
65.00		128.2	1,398.3					280.4	433.4	408.7	1,831.7	0.0	0.0
70.00		127.0	1,355.5					279.5	434.7	406.5	1,790.2	0.0	0.0
75.00		125.5	1,312.4					277.9	435.9	403.4	1,748.2	0.0	0.0
80.00		123.6	1,268.8					275.8	437.0	399.4	1,705.8	0.0	0.0
85.00		121.6	1,225.0					273.1	438.1	394.7	1,663.1	0.0	0.0
90.00		119.3	1,180.8					270.0	439.1	389.3	1,619.9	0.0	0.0
95.00		90.9	1,136.4					266.5	440.1	357.4	1,576.5	0.0	0.0
97.75	Bot - Section 3	58.1	607.7					144.9	242.4	203.0	850.2	0.0	0.0
100.00		52.1	717.6					117.6	198.6	169.7	916.1	0.0	0.0
102.25	Top - Section 2	57.2	704.1					116.8	198.7	173.9	902.8	0.0	0.0
105.00		86.9	449.7					143.2	243.1	230.1	692.8	0.0	0.0
110.00		109.8	787.8					256.8	442.7	366.5	1,230.6	0.0	0.0
115.00		106.6	753.4					251.9	443.5	358.4	1,196.9	0.0	0.0
120.00		103.2	718.8					246.7	444.3	349.8	1,163.1	0.0	0.0
125.00		99.6	684.0					144.4	445.1	244.0	1,129.1	0.0	0.0
130.00		86.7	649.1					143.1	445.8	229.8	1,094.9	0.0	0.0
134.00	Appurtenance(s)	47.0	495.2	791.9	0.0	-26.6	5,799.4	113.5	349.7	952.5	6,644.2	0.0	0.0
135.00		54.4	121.1					26.7	59.0	81.1	180.1	0.0	0.0
140.00	Appurtenance(s)	53.9	578.8	559.9	0.0	0.0	3,590.1	130.7	295.2	744.4	4,464.0	0.0	0.0
141.00	Appurtenance(s)	43.1	112.7	329.8	0.0	0.0	2,152.6	25.6	49.5	398.5	2,314.8	0.0	0.0
145.00		67.3	433.0					100.3	197.5	167.6	630.6	0.0	0.0
149.00	Appurtenance(s)	41.0	410.3	469.4	0.0	0.0	4,188.8	97.1	197.7	607.5	4,796.8	0.0	0.0
150.00		16.0	99.9					23.8	49.5	39.8	149.4	0.0	0.0
151.00	Appurtenance(s)	15.8	98.5	73.3	0.0	0.0	129.2	23.6	49.5	112.7	277.1	0.0	0.0
152.00	Appurtenance(s)	7.9	97.1	673.0	0.0	0.0	4,020.0	23.4	49.1	704.2	4,166.1	0.0	0.0
Totals:										13,813.5	72,685.5	0.00	0.00

Site Number: 302518

Code: ANSI/TIA-222-G

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Site Name: Newtown CT 3, CT

Engineering Number:12984020_C3_03

11/15/2019 3:22:09 PM

Customer: VERIZON WIRELESS

Load Case: 1.2D + 1.0Di + 1.0Wi

50 mph with 0.75 in Radial Ice

24 Iterations

Gust Response Factor :1.10

Ice Dead Load Factor :1.00

Wind Importance Factor :1.00

Dead Load Factor :1.20

Ice Importance Factor :1.00

Wind Load Factor :1.00

Calculated Forces

Seg	Pu	Vu	Tu	Mu	Mu	Resultant	phi	phi	phi	phi	Total	Rotation	
Elev	FY (-)	FX (-)	MY	MZ	MX	Moment	Pn	Vn	Tn	Mn	Deflect	(deg)	Ratio
(ft)	(kips)	(kips)	(ft-kips)	(ft-kips)	(ft-kips)	(ft-kips)	(kips)	(kips)	(ft-kips)	(ft-kips)	(in)		
0.00	-72.68	-13.78	0.00	-1,262.49	0.00	1,262.49	5,359.60	2,679.80	12,402.6	6,210.55	0.00	0.00	0.217
5.00	-70.29	-13.42	0.00	-1,193.60	0.00	1,193.60	5,275.68	2,637.84	11,915.5	5,966.65	0.03	-0.06	0.213
10.00	-67.89	-13.06	0.00	-1,126.49	0.00	1,126.49	5,189.62	2,594.81	11,433.1	5,725.08	0.12	-0.11	0.210
15.00	-65.50	-12.71	0.00	-1,061.17	0.00	1,061.17	5,101.44	2,550.72	10,955.7	5,485.99	0.27	-0.17	0.206
20.00	-63.15	-12.37	0.00	-997.61	0.00	997.61	5,011.12	2,505.56	10,483.5	5,249.58	0.48	-0.23	0.203
25.00	-60.83	-12.02	0.00	-935.77	0.00	935.77	4,918.68	2,459.34	10,017.1	5,016.02	0.75	-0.29	0.199
30.00	-58.55	-11.69	0.00	-875.65	0.00	875.65	4,824.11	2,412.05	9,556.78	4,785.49	1.08	-0.35	0.195
35.00	-56.31	-11.34	0.00	-817.22	0.00	817.22	4,727.41	2,363.70	9,102.80	4,558.17	1.48	-0.41	0.191
40.00	-54.11	-10.99	0.00	-760.51	0.00	760.51	4,628.58	2,314.29	8,655.58	4,334.22	1.94	-0.47	0.187
45.00	-51.96	-10.64	0.00	-705.57	0.00	705.57	4,527.62	2,263.81	8,215.47	4,113.84	2.47	-0.53	0.183
47.92	-50.72	-10.43	0.00	-674.53	0.00	674.53	4,467.74	2,233.87	7,962.16	3,987.00	2.81	-0.57	0.181
50.00	-49.39	-10.26	0.00	-652.79	0.00	652.79	4,424.53	2,212.27	7,782.82	3,897.19	3.06	-0.60	0.179
54.08	-46.84	-9.97	0.00	-610.89	0.00	610.89	3,619.86	1,809.93	6,334.27	3,171.85	3.60	-0.65	0.206
55.00	-46.49	-9.87	0.00	-601.75	0.00	601.75	3,605.16	1,802.58	6,271.86	3,140.59	3.72	-0.66	0.205
60.00	-44.61	-9.50	0.00	-552.40	0.00	552.40	3,523.72	1,761.86	5,934.59	2,971.70	4.46	-0.74	0.199
65.00	-42.77	-9.12	0.00	-504.92	0.00	504.92	3,440.15	1,720.07	5,602.88	2,805.61	5.27	-0.81	0.192
70.00	-40.98	-8.74	0.00	-459.35	0.00	459.35	3,354.45	1,677.22	5,277.11	2,642.48	6.15	-0.88	0.186
75.00	-39.23	-8.35	0.00	-415.67	0.00	415.67	3,266.62	1,633.31	4,957.62	2,482.50	7.11	-0.95	0.179
80.00	-37.52	-7.97	0.00	-373.90	0.00	373.90	3,154.85	1,577.42	4,612.87	2,309.86	8.15	-1.03	0.174
85.00	-35.85	-7.59	0.00	-334.03	0.00	334.03	3,036.31	1,518.16	4,271.03	2,138.69	9.27	-1.10	0.168
90.00	-34.23	-7.22	0.00	-296.06	0.00	296.06	2,917.78	1,458.89	3,942.34	1,974.10	10.46	-1.17	0.162
95.00	-32.66	-6.86	0.00	-259.98	0.00	259.98	2,799.25	1,399.62	3,626.81	1,816.10	11.73	-1.25	0.155
97.75	-31.81	-6.66	0.00	-241.12	0.00	241.12	2,734.06	1,367.03	3,458.88	1,732.01	12.46	-1.29	0.151
100.00	-30.89	-6.48	0.00	-226.14	0.00	226.14	2,680.72	1,340.36	3,324.44	1,664.69	13.08	-1.32	0.147
102.25	-29.99	-6.31	0.00	-211.55	0.00	211.55	1,683.04	841.52	2,097.24	1,050.18	13.71	-1.36	0.219
105.00	-29.29	-6.10	0.00	-194.20	0.00	194.20	1,655.06	827.53	2,011.86	1,007.42	14.50	-1.40	0.211
110.00	-28.06	-5.75	0.00	-163.71	0.00	163.71	1,602.55	801.28	1,859.07	930.92	16.02	-1.49	0.193
115.00	-26.87	-5.40	0.00	-134.97	0.00	134.97	1,547.92	773.96	1,709.77	856.15	17.63	-1.59	0.175
120.00	-25.71	-5.06	0.00	-107.97	0.00	107.97	1,491.15	745.57	1,564.29	783.31	19.35	-1.68	0.155
125.00	-24.58	-4.81	0.00	-82.69	0.00	82.69	1,428.88	714.44	1,419.66	710.88	21.15	-1.76	0.134
130.00	-23.49	-4.57	0.00	-58.64	0.00	58.64	1,349.86	674.93	1,266.22	634.05	23.03	-1.83	0.110
134.00	-16.88	-3.41	0.00	-40.36	0.00	40.36	1,286.64	643.32	1,149.79	575.75	24.58	-1.87	0.083
135.00	-16.70	-3.33	0.00	-36.95	0.00	36.95	1,270.84	635.42	1,121.56	561.61	24.97	-1.89	0.079
140.00	-12.26	-2.44	0.00	-20.29	0.00	20.29	1,191.82	595.91	985.67	493.57	26.97	-1.93	0.051
141.00	-9.96	-1.97	0.00	-17.85	0.00	17.85	1,176.01	588.01	959.54	480.48	27.38	-1.93	0.046
145.00	-9.33	-1.78	0.00	-9.96	0.00	9.96	1,112.80	556.40	858.55	429.91	29.00	-1.95	0.032
149.00	-4.56	-1.01	0.00	-2.83	0.00	2.83	1,049.58	524.79	763.17	382.15	30.64	-1.96	0.012
150.00	-4.41	-0.97	0.00	-1.82	0.00	1.82	1,033.78	516.89	740.20	370.65	31.06	-1.96	0.009
151.00	-4.14	-0.85	0.00	-0.85	0.00	0.85	1,017.97	508.99	717.59	359.33	31.47	-1.96	0.006
152.00	0.00	-0.70	0.00	0.00	0.00	0.00	1,002.17	501.08	695.32	348.18	31.88	-1.97	0.000

Site Number: 302518

Code: ANSI/TIA-222-G

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Site Name: Newtown CT 3, CT

Engineering Number:12984020_C3_03

11/15/2019 3:22:10 PM

Customer: VERIZON WIRELESS

Load Case: 1.0D + 1.0W	Serviceability 60 mph	23 Iterations
Gust Response Factor :1.10		Wind Importance Factor :1.00
Dead Load Factor :1.00		
Wind Load Factor :1.00		

Applied Segment Forces Summary

Seg Elev (ft)	Description	Shaft Forces		Discrete Forces			Linear Forces		Sum of Forces				
		Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Wind FX (lb)	Dead Load (lb)	Torsion MY (lb-ft)	Moment MZ (lb)
0.00		46.5	0.0					0.0	0.0	46.5	0.0	0.0	0.0
5.00		91.9	1,314.6					0.0	218.2	91.9	1,532.8	0.0	0.0
10.00		89.7	1,282.9					0.0	218.2	89.7	1,501.1	0.0	0.0
15.00		87.5	1,251.2					0.0	218.2	87.5	1,469.4	0.0	0.0
20.00		85.2	1,219.5					0.0	218.2	85.2	1,437.7	0.0	0.0
25.00		83.0	1,187.9					0.0	218.2	83.0	1,406.1	0.0	0.0
30.00		81.8	1,156.2					0.0	218.2	81.8	1,374.4	0.0	0.0
35.00		82.1	1,124.5					0.0	218.2	82.1	1,342.7	0.0	0.0
40.00		82.9	1,092.9					0.0	218.2	82.9	1,311.1	0.0	0.0
45.00		65.9	1,061.2					0.0	218.2	65.9	1,279.4	0.0	0.0
47.92	Bot - Section 2	42.0	604.4					0.0	127.3	42.0	731.7	0.0	0.0
50.00		52.2	796.4					0.0	90.9	52.2	887.3	0.0	0.0
54.08	Top - Section 1	42.3	1,531.3					0.0	178.2	42.3	1,709.5	0.0	0.0
55.00		49.8	157.8					0.0	40.0	49.8	197.8	0.0	0.0
60.00		83.8	844.6					0.0	218.2	83.8	1,062.8	0.0	0.0
65.00		83.0	817.5					0.0	218.2	83.0	1,035.7	0.0	0.0
70.00		81.9	790.3					0.0	218.2	81.9	1,008.5	0.0	0.0
75.00		80.6	763.2					0.0	218.2	80.6	981.4	0.0	0.0
80.00		79.2	736.0					0.0	218.2	79.2	954.2	0.0	0.0
85.00		77.6	708.9					0.0	218.2	77.6	927.1	0.0	0.0
90.00		75.8	681.8					0.0	218.2	75.8	900.0	0.0	0.0
95.00		57.6	654.6					0.0	218.2	57.6	872.8	0.0	0.0
97.75	Bot - Section 3	36.7	348.5					0.0	120.0	36.7	468.5	0.0	0.0
100.00		32.9	468.8					0.0	98.2	32.9	567.0	0.0	0.0
102.25	Top - Section 2	36.0	459.6					0.0	98.2	36.0	557.8	0.0	0.0
105.00		54.5	222.5					0.0	120.0	54.5	342.5	0.0	0.0
110.00		68.6	390.6					0.0	218.2	68.6	608.8	0.0	0.0
115.00		66.2	372.5					0.0	218.2	66.2	590.7	0.0	0.0
120.00		63.7	354.4					0.0	218.2	63.7	572.6	0.0	0.0
125.00		61.1	336.3					0.0	218.2	61.1	554.5	0.0	0.0
130.00		52.8	318.2					0.0	218.2	52.8	536.4	0.0	0.0
134.00	Appurtenance(s)	28.5	241.5	703.4	0.0	-20.5	2,930.9	0.0	172.6	731.9	3,345.0	0.0	0.0
135.00		32.7	58.6					0.0	32.9	32.7	91.5	0.0	0.0
140.00	Appurtenance(s)	32.4	282.0	574.3	0.0	0.0	1,086.8	0.0	164.4	606.7	1,533.2	0.0	0.0
141.00	Appurtenance(s)	25.6	54.2	245.5	0.0	0.0	1,505.0	0.0	24.9	271.1	1,584.2	0.0	0.0
145.00		56.3	209.7					0.0	99.1	56.3	308.8	0.0	0.0
149.00	Appurtenance(s)	44.6	198.1	404.6	0.0	0.0	2,448.7	29.4	99.1	478.6	2,745.9	0.0	0.0
150.00		17.3	47.7					7.4	24.8	24.6	72.5	0.0	0.0
151.00	Appurtenance(s)	17.0	47.0	43.1	0.0	0.0	40.0	7.4	24.8	67.5	111.8	0.0	0.0
152.00	Appurtenance(s)	8.5	46.3	668.0	0.0	0.0	1,653.4	7.4	24.5	683.8	1,724.1	0.0	0.0
Totals:										5,028.09	40,239.0	0.00	0.00

Site Number: 302518

Code: ANSI/TIA-222-G

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Site Name: Newtown CT 3, CT

Engineering Number:12984020_C3_03

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Customer: VERIZON WIRELESS

Load Case: 1.0D + 1.0W

Serviceability 60 mph

23 Iterations

Gust Response Factor :1.10

Wind Importance Factor 1.00

Dead Load Factor :1.00

Wind Load Factor :1.00

Calculated Forces

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 (deg)	Ratio
0.00	-40.24	-4.99	0.00	-572.72	0.00	572.72	5,359.60	2,679.80	12,402.6	6,210.55	0.00	0.00	0.100
5.00	-38.70	-4.92	0.00	-547.77	0.00	547.77	5,275.68	2,637.84	11,915.5	5,966.65	0.01	-0.03	0.099
10.00	-37.20	-4.84	0.00	-523.19	0.00	523.19	5,189.62	2,594.81	11,433.1	5,725.08	0.05	-0.05	0.099
15.00	-35.73	-4.77	0.00	-498.99	0.00	498.99	5,101.44	2,550.72	10,955.7	5,485.99	0.12	-0.08	0.098
20.00	-34.29	-4.70	0.00	-475.14	0.00	475.14	5,011.12	2,505.56	10,483.5	5,249.58	0.22	-0.11	0.097
25.00	-32.88	-4.63	0.00	-451.64	0.00	451.64	4,918.68	2,459.34	10,017.1	5,016.02	0.35	-0.13	0.097
30.00	-31.50	-4.56	0.00	-428.50	0.00	428.50	4,824.11	2,412.05	9,556.78	4,785.49	0.50	-0.16	0.096
35.00	-30.16	-4.49	0.00	-405.70	0.00	405.70	4,727.41	2,363.70	9,102.80	4,558.17	0.69	-0.19	0.095
40.00	-28.85	-4.42	0.00	-383.25	0.00	383.25	4,628.58	2,314.29	8,655.58	4,334.22	0.91	-0.22	0.095
45.00	-27.56	-4.36	0.00	-361.16	0.00	361.16	4,527.62	2,263.81	8,215.47	4,113.84	1.16	-0.26	0.094
47.92	-26.83	-4.32	0.00	-348.44	0.00	348.44	4,467.74	2,233.87	7,962.16	3,987.00	1.33	-0.28	0.093
50.00	-25.94	-4.27	0.00	-339.44	0.00	339.44	4,424.53	2,212.27	7,782.82	3,897.19	1.45	-0.29	0.093
54.08	-24.23	-4.23	0.00	-321.99	0.00	321.99	3,619.86	1,809.93	6,334.27	3,171.85	1.71	-0.32	0.108
55.00	-24.03	-4.19	0.00	-318.11	0.00	318.11	3,605.16	1,802.58	6,271.86	3,140.59	1.77	-0.32	0.108
60.00	-22.97	-4.11	0.00	-297.16	0.00	297.16	3,523.72	1,761.86	5,934.59	2,971.70	2.13	-0.36	0.107
65.00	-21.93	-4.04	0.00	-276.59	0.00	276.59	3,440.15	1,720.07	5,602.88	2,805.61	2.53	-0.40	0.105
70.00	-20.92	-3.97	0.00	-256.39	0.00	256.39	3,354.45	1,677.22	5,277.11	2,642.48	2.97	-0.44	0.103
75.00	-19.94	-3.89	0.00	-236.57	0.00	236.57	3,266.62	1,633.31	4,957.62	2,482.50	3.46	-0.48	0.101
80.00	-18.98	-3.82	0.00	-217.11	0.00	217.11	3,154.85	1,577.42	4,612.87	2,309.86	3.99	-0.53	0.100
85.00	-18.05	-3.75	0.00	-198.02	0.00	198.02	3,036.31	1,518.16	4,271.03	2,138.69	4.56	-0.57	0.099
90.00	-17.15	-3.67	0.00	-179.30	0.00	179.30	2,917.78	1,458.89	3,942.34	1,974.10	5.18	-0.61	0.097
95.00	-16.27	-3.62	0.00	-160.93	0.00	160.93	2,799.25	1,399.62	3,626.81	1,816.10	5.85	-0.66	0.094
97.75	-15.80	-3.58	0.00	-150.99	0.00	150.99	2,734.06	1,367.03	3,458.88	1,732.01	6.23	-0.68	0.093
100.00	-15.24	-3.55	0.00	-142.93	0.00	142.93	2,680.72	1,340.36	3,324.44	1,664.69	6.56	-0.70	0.092
102.25	-14.68	-3.51	0.00	-134.95	0.00	134.95	1,683.04	841.52	2,097.24	1,050.18	6.90	-0.73	0.137
105.00	-14.33	-3.46	0.00	-125.30	0.00	125.30	1,655.06	827.53	2,011.86	1,007.42	7.32	-0.75	0.133
110.00	-13.72	-3.40	0.00	-107.99	0.00	107.99	1,602.55	801.28	1,859.07	930.92	8.15	-0.82	0.125
115.00	-13.13	-3.34	0.00	-90.99	0.00	90.99	1,547.92	773.96	1,709.77	856.15	9.04	-0.88	0.115
120.00	-12.55	-3.28	0.00	-74.30	0.00	74.30	1,491.15	745.57	1,564.29	783.31	9.99	-0.94	0.103
125.00	-12.00	-3.22	0.00	-57.90	0.00	57.90	1,428.88	714.44	1,419.66	710.88	11.00	-0.99	0.090
130.00	-11.46	-3.17	0.00	-41.80	0.00	41.80	1,349.86	674.93	1,266.22	634.05	12.07	-1.04	0.074
134.00	-8.13	-2.37	0.00	-29.14	0.00	29.14	1,286.64	643.32	1,149.79	575.75	12.96	-1.08	0.057
135.00	-8.04	-2.34	0.00	-26.76	0.00	26.76	1,270.84	635.42	1,121.56	561.61	13.19	-1.08	0.054
140.00	-6.52	-1.71	0.00	-15.05	0.00	15.05	1,191.82	595.91	985.67	493.57	14.34	-1.11	0.036
141.00	-4.94	-1.41	0.00	-13.34	0.00	13.34	1,176.01	588.01	959.54	480.48	14.57	-1.12	0.032
145.00	-4.63	-1.35	0.00	-7.71	0.00	7.71	1,112.80	556.40	858.55	429.91	15.52	-1.13	0.022
149.00	-1.89	-0.81	0.00	-2.32	0.00	2.32	1,049.58	524.79	763.17	382.15	16.47	-1.14	0.008
150.00	-1.82	-0.79	0.00	-1.51	0.00	1.51	1,033.78	516.89	740.20	370.65	16.71	-1.14	0.006
151.00	-1.71	-0.72	0.00	-0.72	0.00	0.72	1,017.97	508.99	717.59	359.33	16.95	-1.14	0.004
152.00	0.00	-0.68	0.00	0.00	0.00	0.00	1,002.17	501.08	695.32	348.18	17.19	-1.14	0.000

Site Number: 302518

Code: ANSI/TIA-222-G

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Site Name: Newtown CT 3, CT

Engineering Number: 12984020_C3_03

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Customer: VERIZON WIRELESS

Equivalent Lateral Forces Method Analysis

(Based on ASCE7-10 Chapters 11, 12, 15)

Spectral Response Acceleration for Short Period (S_d):	0.21
Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.07
Long-Period Transition Period (T_L):	6
Importance Factor (I_E):	1.00
Site Coefficient F_a :	1.60
Site Coefficient F_v :	2.40
Response Modification Coefficient (R):	1.50
Design Spectral Response Acceleration at Short Period (S_{ds}):	0.22
Design Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.11
Seismic Response Coefficient (C_s):	0.03
Upper Limit C_s	0.03
Lower Limit C_s	0.03
Period based on Rayleigh Method (sec):	2.40
Redundancy Factor (p):	1.00
Seismic Force Distribution Exponent (k):	1.95
Total Unfactored Dead Load:	40.24 k
Seismic Base Shear (E):	1.21 k

Load Case (1.2 + 0.2Sds) * DL + E ELFM

Seismic Equivalent Lateral Forces Method

Segment	Height Above Base (ft)	Weight (lb)	W_z (lb-ft)	C_{vx}	Horizontal Force (lb)	Vertical Force (lb)
39	151.50	71	1,248	0.005	5	88
38	150.50	72	1,250	0.005	5	89
37	149.50	72	1,247	0.005	5	90
36	147.00	297	4,946	0.018	22	370
35	143.00	309	4,870	0.018	21	384
34	140.50	79	1,206	0.004	5	99
33	137.50	446	6,523	0.024	29	556
32	134.50	91	1,280	0.005	6	114
31	132.00	414	5,588	0.020	25	515
30	127.50	536	6,765	0.025	30	668
29	122.50	554	6,469	0.024	28	690
28	117.50	573	6,160	0.022	27	713
27	112.50	591	5,838	0.021	26	735
26	107.50	609	5,507	0.020	24	758
25	103.63	343	2,885	0.010	13	426
24	101.13	558	4,480	0.016	20	694
23	98.88	567	4,358	0.016	19	706
22	96.38	468	3,426	0.012	15	583
21	92.50	873	5,892	0.021	26	1,086
20	87.50	900	5,452	0.020	24	1,120
19	82.50	927	5,009	0.018	22	1,154
18	77.50	954	4,564	0.017	20	1,188
17	72.50	981	4,122	0.015	18	1,221

Site Number: 302518

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Site Name: Newtown CT 3, CT

Engineering Number:12984020_C3_03

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Customer: VERIZON WIRELESS

16	67.50	1,009	3,686	0.013	16	1,255
15	62.50	1,036	3,258	0.012	14	1,289
14	57.50	1,063	2,842	0.010	12	1,323
13	54.54	198	477	0.002	2	246
12	52.04	1,709	3,765	0.014	17	2,128
11	48.96	887	1,735	0.006	8	1,104
10	46.46	732	1,292	0.005	6	911
9	42.50	1,279	1,899	0.007	8	1,592
8	37.50	1,311	1,525	0.006	7	1,632
7	32.50	1,343	1,182	0.004	5	1,671
6	27.50	1,374	874	0.003	4	1,711
5	22.50	1,406	605	0.002	3	1,750
4	17.50	1,438	379	0.001	2	1,789
3	12.50	1,469	201	0.001	1	1,829
2	7.50	1,501	76	0.000	0	1,868
1	2.50	1,533	9	0.000	0	1,908
Powerwave Allgon LGP	152.00	33	586	0.002	3	41
Powerwave Allgon 702	152.00	26	469	0.002	2	33
CCI DTMABP7819VG12A	152.00	58	1,023	0.004	4	72
Powerwave Allgon LGP	152.00	85	1,503	0.005	7	105
Raycap DC6-48-60-18-	152.00	20	355	0.001	2	25
Ericsson RRUS 4415 B	152.00	138	2,451	0.009	11	172
Ericsson RRUS 4449 B	152.00	213	3,783	0.014	17	265
Ericsson RRUS 4478 B	152.00	178	3,165	0.012	14	222
Raycap DC6-48-60-18-	152.00	16	284	0.001	1	20
Ericsson RRUS-12 190	152.00	180	3,197	0.012	14	224
Raycap DC6-48-60-18-	152.00	16	284	0.001	1	20
Powerwave Allgon 777	152.00	105	1,865	0.007	8	131
Kathrein Scala 80010	152.00	586	10,401	0.038	46	729
Generic 15' Omni	151.00	40	701	0.003	3	50
Site Pro1 RMQP-496-H	149.00	2,449	41,837	0.152	184	3,048
Generic 2" x 4" GPS	141.00	5	77	0.000	0	6
Flat Low Profile Pla	141.00	1,500	23,016	0.084	101	1,867
Commscope CBC78T-DS-	140.00	62	940	0.003	4	77
Samsung Outdoor CBRS	140.00	56	844	0.003	4	69
Samsung Outdoor CBRS	140.00	13	200	0.001	1	16
Samsung B5/B13 RRH-B	140.00	211	3,192	0.012	14	262
Samsung B2/B66A RRH-	140.00	253	3,832	0.014	17	315
RFS DB-C1-12C-24AB-0	140.00	32	484	0.002	2	40
Andrew DB846H80E-SX	140.00	96	1,453	0.005	6	119
Commscope JAHH-65B-R	140.00	364	5,502	0.020	24	453
KMW AWS Twin Dual 70	134.00	52	725	0.003	3	65
Ericsson Radlo 4449	134.00	222	3,085	0.011	14	276
Ericsson AIR 21	134.00	273	3,793	0.014	17	340
RFS APXVAARR24_43-U-	134.00	384	5,332	0.019	23	478
Flat Platform with R	134.00	2,000	27,791	0.101	122	2,489
		40,239	275,062	1.000	1,207	50,081

Load Case (0.9 - 0.2Sds) * DL + E EFLM

Seismic (Reduced DL) Equivalent Lateral Forces Method

Segment	Height Above Base (ft)	Weight (lb)	W _z (lb-ft)	C _{vz}	Horizontal Force (lb)	Vertical Force (lb)
39	151.50	71	1,248	0.005	5	60
38	150.50	72	1,250	0.005	5	61
37	149.50	72	1,247	0.005	5	62
36	147.00	297	4,946	0.018	22	254
35	143.00	309	4,870	0.018	21	264
34	140.50	79	1,206	0.004	5	68
33	137.50	446	6,523	0.024	29	382
32	134.50	91	1,280	0.005	6	78

Site Number: 302518

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Site Name: Newtown CT 3, CT

Engineering Number:12984020_C3_03

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Customer: VERIZON WIRELESS

31	132.00	414	5,588	0.020	25	354
30	127.50	536	6,765	0.025	30	459
29	122.50	554	6,469	0.024	28	474
28	117.50	573	6,160	0.022	27	490
27	112.50	591	5,838	0.021	26	505
26	107.50	609	5,507	0.020	24	521
25	103.63	343	2,885	0.010	13	293
24	101.13	558	4,480	0.016	20	477
23	98.88	567	4,358	0.016	19	485
22	96.38	468	3,426	0.012	15	401
21	92.50	873	5,892	0.021	26	747
20	87.50	900	5,452	0.020	24	770
19	82.50	927	5,009	0.018	22	793
18	77.50	954	4,564	0.017	20	816
17	72.50	981	4,122	0.015	18	839
16	67.50	1,009	3,686	0.013	16	863
15	62.50	1,036	3,258	0.012	14	886
14	57.50	1,063	2,842	0.010	12	909
13	54.54	198	477	0.002	2	169
12	52.04	1,709	3,765	0.014	17	1,462
11	48.96	887	1,735	0.006	8	759
10	46.46	732	1,292	0.005	6	626
9	42.50	1,279	1,899	0.007	8	1,094
8	37.50	1,311	1,525	0.006	7	1,122
7	32.50	1,343	1,182	0.004	5	1,149
6	27.50	1,374	874	0.003	4	1,176
5	22.50	1,406	605	0.002	3	1,203
4	17.50	1,438	379	0.001	2	1,230
3	12.50	1,469	201	0.001	1	1,257
2	7.50	1,501	76	0.000	0	1,284
1	2.50	1,533	9	0.000	0	1,311
Powerwave Allgon LGP	152.00	33	586	0.002	3	28
Powerwave Allgon 702	152.00	26	469	0.002	2	23
CCI DTMABP7819VG12A	152.00	58	1,023	0.004	4	49
Powerwave Allgon LGP	152.00	85	1,503	0.005	7	72
Raycap DC6-48-60-18-	152.00	20	355	0.001	2	17
Ericsson RRUS 4415 B	152.00	138	2,451	0.009	11	118
Ericsson RRUS 4449 B	152.00	213	3,783	0.014	17	182
Ericsson RRUS 4478 B	152.00	178	3,165	0.012	14	152
Raycap DC6-48-60-18-	152.00	16	284	0.001	1	14
Ericsson RRUS-12 190	152.00	180	3,197	0.012	14	154
Raycap DC6-48-60-18-	152.00	16	284	0.001	1	14
Powerwave Allgon 777	152.00	105	1,865	0.007	8	90
Kathrein Scala 80010	152.00	586	10,401	0.038	46	501
Generic 15' Omni	151.00	40	701	0.003	3	34
Site Pro1 RMQP-496-H	149.00	2,449	41,837	0.152	184	2,095
Generic 2" x 4" GPS	141.00	5	77	0.000	0	4
Flat Low Profile Pla	141.00	1,500	23,016	0.084	101	1,283
Commscope CBC78T-DS-	140.00	62	940	0.003	4	53
Samsung Outdoor CBRS	140.00	56	844	0.003	4	48
Samsung Outdoor CBRS	140.00	13	200	0.001	1	11
Samsung B5/B13 RRH-B	140.00	211	3,192	0.012	14	180
Samsung B2/B66A RRH-	140.00	253	3,832	0.014	17	217
RFS DB-C1-12C-24AB-0	140.00	32	484	0.002	2	27
Andrew DB846H80E-SX	140.00	96	1,453	0.005	6	82
Commscope JAHH-65B-R	140.00	364	5,502	0.020	24	311
KMW AWS Twin Dual 70	134.00	52	725	0.003	3	45
Ericsson Radio 4449	134.00	222	3,085	0.011	14	190
Ericsson AIR 21	134.00	273	3,793	0.014	17	234
RFS APXVAARR24_43-U-	134.00	384	5,332	0.019	23	328
Flat Platform with R	134.00	2,000	27,791	0.101	122	1,711
		40,239	275,062	1.000	1,207	34,421

Site Number: 302518

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Site Name: Newtown CT 3, CT

Engineering Number:12984020_C3_03

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Customer: VERIZON WIRELESS

Load Case (1.2 + 0.2Sds) * DL + E ELFM

Seismic Equivalent Lateral Forces Method

Calculated Forces

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 (deg)	Ratio
0.00	-48.17	-1.21	0.00	-155.89	0.00	155.89	5,359.60	2,679.80	12,402.6	6,210.55	0.00	0.00	0.034
5.00	-46.30	-1.21	0.00	-149.84	0.00	149.84	5,275.68	2,637.84	11,915.5	5,966.65	0.00	-0.01	0.034
10.00	-44.48	-1.22	0.00	-143.77	0.00	143.77	5,189.62	2,594.81	11,433.1	5,725.08	0.01	-0.01	0.034
15.00	-42.69	-1.22	0.00	-137.68	0.00	137.68	5,101.44	2,550.72	10,955.7	5,485.99	0.03	-0.02	0.033
20.00	-40.94	-1.22	0.00	-131.56	0.00	131.56	5,011.12	2,505.56	10,483.5	5,249.58	0.06	-0.03	0.033
25.00	-39.23	-1.23	0.00	-125.44	0.00	125.44	4,918.68	2,459.34	10,017.1	5,016.02	0.09	-0.04	0.033
30.00	-37.55	-1.22	0.00	-119.31	0.00	119.31	4,824.11	2,412.05	9,556.78	4,785.49	0.14	-0.05	0.033
35.00	-35.92	-1.22	0.00	-113.19	0.00	113.19	4,727.41	2,363.70	9,102.80	4,558.17	0.19	-0.05	0.032
40.00	-34.33	-1.22	0.00	-107.09	0.00	107.09	4,628.58	2,314.29	8,655.58	4,334.22	0.25	-0.06	0.032
45.00	-33.42	-1.21	0.00	-101.00	0.00	101.00	4,527.62	2,263.81	8,215.47	4,113.84	0.32	-0.07	0.032
47.92	-32.31	-1.21	0.00	-97.46	0.00	97.46	4,467.74	2,233.87	7,962.16	3,987.00	0.37	-0.08	0.032
50.00	-30.19	-1.19	0.00	-94.94	0.00	94.94	4,424.53	2,212.27	7,782.82	3,897.19	0.40	-0.08	0.031
54.08	-29.94	-1.19	0.00	-90.08	0.00	90.08	3,619.86	1,809.93	6,334.27	3,171.85	0.47	-0.09	0.037
55.00	-28.62	-1.18	0.00	-88.99	0.00	88.99	3,605.16	1,802.58	6,271.86	3,140.59	0.49	-0.09	0.036
60.00	-27.33	-1.17	0.00	-83.09	0.00	83.09	3,523.72	1,761.86	5,934.59	2,971.70	0.59	-0.10	0.036
65.00	-26.07	-1.16	0.00	-77.24	0.00	77.24	3,440.15	1,720.07	5,602.88	2,805.61	0.70	-0.11	0.035
70.00	-24.85	-1.14	0.00	-71.46	0.00	71.46	3,354.45	1,677.22	5,277.11	2,642.48	0.82	-0.12	0.034
75.00	-23.66	-1.12	0.00	-65.76	0.00	65.76	3,266.62	1,633.31	4,957.62	2,482.50	0.96	-0.13	0.034
80.00	-22.51	-1.10	0.00	-60.15	0.00	60.15	3,154.85	1,577.42	4,612.87	2,309.86	1.11	-0.15	0.033
85.00	-21.39	-1.08	0.00	-54.65	0.00	54.65	3,036.31	1,518.16	4,271.03	2,138.69	1.27	-0.16	0.033
90.00	-20.30	-1.05	0.00	-49.25	0.00	49.25	2,917.78	1,458.89	3,942.34	1,974.10	1.44	-0.17	0.032
95.00	-19.72	-1.04	0.00	-43.97	0.00	43.97	2,799.25	1,399.62	3,626.81	1,816.10	1.62	-0.18	0.031
97.75	-19.01	-1.02	0.00	-41.11	0.00	41.11	2,734.06	1,367.03	3,458.88	1,732.01	1.73	-0.19	0.031
100.00	-18.32	-1.00	0.00	-38.81	0.00	38.81	2,680.72	1,340.36	3,324.44	1,664.69	1.82	-0.20	0.030
102.25	-17.89	-0.99	0.00	-36.56	0.00	36.56	1,683.04	841.52	2,097.24	1,050.18	1.91	-0.20	0.045
105.00	-17.14	-0.97	0.00	-33.84	0.00	33.84	1,655.06	827.53	2,011.86	1,007.42	2.03	-0.21	0.044
110.00	-16.40	-0.94	0.00	-29.00	0.00	29.00	1,602.55	801.28	1,859.07	930.92	2.26	-0.23	0.041
115.00	-15.69	-0.92	0.00	-24.29	0.00	24.29	1,547.92	773.96	1,709.77	856.15	2.50	-0.24	0.039
120.00	-15.00	-0.89	0.00	-19.70	0.00	19.70	1,491.15	745.57	1,564.29	783.31	2.77	-0.26	0.035
125.00	-14.33	-0.86	0.00	-15.25	0.00	15.25	1,428.88	714.44	1,419.66	710.88	3.04	-0.27	0.031
130.00	-13.81	-0.84	0.00	-10.94	0.00	10.94	1,349.86	674.93	1,266.22	634.05	3.34	-0.29	0.027
134.00	-10.05	-0.63	0.00	-7.60	0.00	7.60	1,286.64	643.32	1,149.79	575.75	3.58	-0.29	0.021
135.00	-9.50	-0.60	0.00	-6.96	0.00	6.96	1,270.84	635.42	1,121.56	561.61	3.64	-0.30	0.020
140.00	-8.05	-0.52	0.00	-3.95	0.00	3.95	1,191.82	595.91	985.67	493.57	3.96	-0.30	0.015
141.00	-5.79	-0.38	0.00	-3.43	0.00	3.43	1,176.01	588.01	959.54	480.48	4.02	-0.31	0.012
145.00	-5.42	-0.36	0.00	-1.89	0.00	1.89	1,112.80	556.40	858.55	429.91	4.28	-0.31	0.009
149.00	-2.28	-0.16	0.00	-0.44	0.00	0.44	1,049.58	524.79	763.17	382.15	4.54	-0.31	0.003
150.00	-2.19	-0.15	0.00	-0.29	0.00	0.29	1,033.78	516.89	740.20	370.65	4.61	-0.31	0.003
151.00	-2.06	-0.14	0.00	-0.14	0.00	0.14	1,017.97	508.99	717.59	359.33	4.67	-0.31	0.002
152.00	0.00	-0.13	0.00	0.00	0.00	0.00	1,002.17	501.08	695.32	348.18	4.74	-0.31	0.000

Site Number: 302518

Code: ANSI/TIA-222-G

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Site Name: Newtown CT 3, CT

Engineering Number:12984020_C3_03

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Customer: VERIZON WIRELESS

Load Case (0.9 - 0.2Sds) * DL + E EFLM

Seismic (Reduced DL) Equivalent Lateral Forces Method

Calculated Forces

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 (deg)	Ratio
0.00	-33.11	-1.21	0.00	-153.63	0.00	153.63	5,359.60	2,679.80	12,402.6	6,210.55	0.00	0.00	0.031
5.00	-31.83	-1.21	0.00	-147.59	0.00	147.59	5,275.68	2,637.84	11,915.5	5,966.65	0.00	-0.01	0.031
10.00	-30.57	-1.21	0.00	-141.53	0.00	141.53	5,189.62	2,594.81	11,433.1	5,725.08	0.01	-0.01	0.031
15.00	-29.34	-1.22	0.00	-135.46	0.00	135.46	5,101.44	2,550.72	10,955.7	5,485.99	0.03	-0.02	0.030
20.00	-28.14	-1.22	0.00	-129.37	0.00	129.37	5,011.12	2,505.56	10,483.5	5,249.58	0.06	-0.03	0.030
25.00	-26.96	-1.22	0.00	-123.29	0.00	123.29	4,918.68	2,459.34	10,017.1	5,016.02	0.09	-0.04	0.030
30.00	-25.81	-1.21	0.00	-117.21	0.00	117.21	4,824.11	2,412.05	9,556.78	4,785.49	0.14	-0.04	0.030
35.00	-24.69	-1.21	0.00	-111.14	0.00	111.14	4,727.41	2,363.70	9,102.80	4,558.17	0.19	-0.05	0.030
40.00	-23.59	-1.20	0.00	-105.09	0.00	105.09	4,628.58	2,314.29	8,655.58	4,334.22	0.25	-0.06	0.029
45.00	-22.97	-1.20	0.00	-99.07	0.00	99.07	4,527.62	2,263.81	8,215.47	4,113.84	0.32	-0.07	0.029
47.92	-22.21	-1.19	0.00	-95.57	0.00	95.57	4,467.74	2,233.87	7,962.16	3,987.00	0.36	-0.08	0.029
50.00	-20.75	-1.18	0.00	-93.08	0.00	93.08	4,424.53	2,212.27	7,782.82	3,897.19	0.39	-0.08	0.029
54.08	-20.58	-1.18	0.00	-88.28	0.00	88.28	3,619.86	1,809.93	6,334.27	3,171.85	0.46	-0.09	0.034
55.00	-19.67	-1.16	0.00	-87.20	0.00	87.20	3,605.16	1,802.58	6,271.86	3,140.59	0.48	-0.09	0.033
60.00	-18.78	-1.15	0.00	-81.37	0.00	81.37	3,523.72	1,761.86	5,934.59	2,971.70	0.58	-0.10	0.033
65.00	-17.92	-1.14	0.00	-75.61	0.00	75.61	3,440.15	1,720.07	5,602.88	2,805.61	0.69	-0.11	0.032
70.00	-17.08	-1.12	0.00	-69.92	0.00	69.92	3,354.45	1,677.22	5,277.11	2,642.48	0.81	-0.12	0.032
75.00	-16.26	-1.10	0.00	-64.31	0.00	64.31	3,266.62	1,633.31	4,957.62	2,482.50	0.94	-0.13	0.031
80.00	-15.47	-1.08	0.00	-58.80	0.00	58.80	3,154.85	1,577.42	4,612.87	2,309.86	1.09	-0.14	0.030
85.00	-14.70	-1.06	0.00	-53.39	0.00	53.39	3,036.31	1,518.16	4,271.03	2,138.69	1.24	-0.16	0.030
90.00	-13.95	-1.03	0.00	-48.09	0.00	48.09	2,917.78	1,458.89	3,942.34	1,974.10	1.41	-0.17	0.029
95.00	-13.55	-1.02	0.00	-42.92	0.00	42.92	2,799.25	1,399.62	3,626.81	1,816.10	1.59	-0.18	0.028
97.75	-13.07	-1.00	0.00	-40.11	0.00	40.11	2,734.06	1,367.03	3,458.88	1,732.01	1.70	-0.19	0.028
100.00	-12.59	-0.98	0.00	-37.86	0.00	37.86	2,680.72	1,340.36	3,324.44	1,664.69	1.79	-0.19	0.027
102.25	-12.30	-0.97	0.00	-35.65	0.00	35.65	1,683.04	841.52	2,097.24	1,050.18	1.88	-0.20	0.041
105.00	-11.78	-0.95	0.00	-32.99	0.00	32.99	1,655.06	827.53	2,011.86	1,007.42	1.99	-0.20	0.040
110.00	-11.27	-0.92	0.00	-28.26	0.00	28.26	1,602.55	801.28	1,859.07	930.92	2.22	-0.22	0.037
115.00	-10.78	-0.90	0.00	-23.65	0.00	23.65	1,547.92	773.96	1,709.77	856.15	2.46	-0.24	0.035
120.00	-10.31	-0.87	0.00	-19.18	0.00	19.18	1,491.15	745.57	1,564.29	783.31	2.71	-0.25	0.031
125.00	-9.85	-0.84	0.00	-14.84	0.00	14.84	1,428.88	714.44	1,419.66	710.88	2.99	-0.27	0.028
130.00	-9.49	-0.81	0.00	-10.65	0.00	10.65	1,349.86	674.93	1,266.22	634.05	3.27	-0.28	0.024
134.00	-6.91	-0.62	0.00	-7.39	0.00	7.39	1,286.64	643.32	1,149.79	575.75	3.51	-0.29	0.018
135.00	-6.53	-0.59	0.00	-6.78	0.00	6.78	1,270.84	635.42	1,121.56	561.61	3.57	-0.29	0.017
140.00	-5.53	-0.51	0.00	-3.84	0.00	3.84	1,191.82	595.91	985.67	493.57	3.88	-0.30	0.012
141.00	-3.98	-0.37	0.00	-3.34	0.00	3.34	1,176.01	588.01	959.54	480.48	3.94	-0.30	0.010
145.00	-3.73	-0.35	0.00	-1.84	0.00	1.84	1,112.80	556.40	858.55	429.91	4.19	-0.30	0.008
149.00	-1.57	-0.15	0.00	-0.43	0.00	0.43	1,049.58	524.79	763.17	382.15	4.45	-0.30	0.003
150.00	-1.51	-0.15	0.00	-0.28	0.00	0.28	1,033.78	516.89	740.20	370.65	4.51	-0.30	0.002
151.00	-1.41	-0.14	0.00	-0.14	0.00	0.14	1,017.97	508.99	717.59	359.33	4.58	-0.30	0.002
152.00	0.00	-0.13	0.00	0.00	0.00	0.00	1,002.17	501.08	695.32	348.18	4.64	-0.30	0.000

Site Number: 302518

Code: ANSI/TIA-222-G

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Site Name: Newtown CT 3, CT

Engineering Number:12984020_C3_03

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Customer: VERIZON WIRELESS

Equivalent Modal Analysis Method

(Based on ASCE7-10 Chapters 11, 12 & 15 and ANSI/TIA-G, section 2.7)

Spectral Response Acceleration for Short Period (S_s):	0.21
Spectral Response Acceleration at 1.0 Second Period (S_1):	0.07
Importance Factor (I_E):	1.00
Site Coefficient F_a :	1.60
Site Coefficient F_v :	2.40
Response Modification Coefficient (R):	1.50
Design Spectral Response Acceleration at Short Period (S_{ds}):	0.22
Design Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.11
Period Based on Rayleigh Method (sec):	2.40
Redundancy Factor (ρ):	1.00

Load Case (1.2 + 0.2Sds) * DL + E EMAM Seismic Equivalent Modal Analysis Method

Segment	Height Above Base (ft)	Weight (lb)	a	b	c	Saz	Horizontal Force (lb)	Vertical Force (lb)
39	151.50	71	1.878	1.915	1.117	0.412	19	88
38	150.50	72	1.853	1.790	1.071	0.394	19	89
37	149.50	72	1.828	1.670	1.027	0.376	18	90
36	147.00	297	1.768	1.396	0.923	0.333	66	370
35	143.00	309	1.673	1.022	0.774	0.269	55	384
34	140.50	79	1.615	0.825	0.690	0.232	12	99
33	137.50	446	1.547	0.623	0.600	0.190	57	556
32	134.50	91	1.480	0.453	0.519	0.152	9	114
31	132.00	414	1.425	0.334	0.458	0.123	34	515
30	127.50	536	1.330	0.164	0.363	0.076	27	668
29	122.50	554	1.228	0.032	0.276	0.032	12	690
28	117.50	573	1.129	-0.052	0.205	-0.003	-1	713
27	112.50	591	1.035	-0.099	0.150	-0.030	-12	735
26	107.50	609	0.945	-0.119	0.106	-0.048	-20	758
25	103.63	343	0.878	-0.121	0.079	-0.056	-13	426
24	101.13	558	0.837	-0.118	0.065	-0.059	-22	694
23	98.88	567	0.800	-0.112	0.054	-0.059	-22	706
22	96.38	468	0.760	-0.103	0.043	-0.057	-18	583
21	92.50	873	0.700	-0.087	0.030	-0.051	-29	1,086
20	87.50	900	0.626	-0.062	0.018	-0.035	-21	1,120
19	82.50	927	0.557	-0.037	0.010	-0.015	-9	1,154
18	77.50	954	0.491	-0.013	0.007	0.006	4	1,188
17	72.50	981	0.430	0.008	0.006	0.026	17	1,221
16	67.50	1,009	0.373	0.026	0.008	0.042	28	1,255
15	62.50	1,036	0.320	0.041	0.011	0.053	37	1,289
14	57.50	1,063	0.270	0.052	0.015	0.060	42	1,323
13	54.54	198	0.243	0.056	0.018	0.062	8	246
12	52.04	1,709	0.222	0.060	0.020	0.063	71	2,128
11	48.96	887	0.196	0.063	0.024	0.063	37	1,104
10	46.46	732	0.177	0.065	0.026	0.063	31	911
9	42.50	1,279	0.148	0.068	0.030	0.062	53	1,592
8	37.50	1,311	0.115	0.070	0.035	0.061	53	1,632
7	32.50	1,343	0.086	0.071	0.039	0.060	53	1,671
6	27.50	1,374	0.062	0.072	0.041	0.058	53	1,711

Site Number: 302518

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Site Name: Newtown CT 3, CT

Engineering Number: 12984020_C3_03

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Customer: VERIZON WIRELESS

5	22.50	1,406	0.041	0.070	0.042	0.056	53	1,750
4	17.50	1,438	0.025	0.066	0.039	0.054	51	1,789
3	12.50	1,469	0.013	0.058	0.034	0.049	48	1,829
2	7.50	1,501	0.005	0.043	0.024	0.039	39	1,868
1	2.50	1,533	0.001	0.018	0.010	0.018	19	1,908
Powerwave Allgon LGP	152.00	33	1.890	1.980	1.140	0.422	9	41
Powerwave Allgon 702	152.00	26	1.890	1.980	1.140	0.422	7	33
CCI DTMAPB7819VG12A	152.00	58	1.890	1.980	1.140	0.422	16	72
Powerwave Allgon LGP	152.00	85	1.890	1.980	1.140	0.422	24	105
Raycap DC6-48-60-18-	152.00	20	1.890	1.980	1.140	0.422	6	25
Ericsson RRUS 4415 B	152.00	138	1.890	1.980	1.140	0.422	39	172
Ericsson RRUS 4449 B	152.00	213	1.890	1.980	1.140	0.422	60	265
Ericsson RRUS 4478 B	152.00	178	1.890	1.980	1.140	0.422	50	222
Raycap DC6-48-60-18-	152.00	16	1.890	1.980	1.140	0.422	4	20
Ericsson RRUS-12 190	152.00	180	1.890	1.980	1.140	0.422	51	224
Raycap DC6-48-60-18-	152.00	16	1.890	1.980	1.140	0.422	4	20
Powerwave Allgon 777	152.00	105	1.890	1.980	1.140	0.422	30	131
Kathrein Scala 80010	152.00	586	1.890	1.980	1.140	0.422	165	729
Generic 15' Omni	151.00	40	1.865	1.852	1.094	0.403	11	50
Site Pro1 RMQP-496-H	149.00	2,449	1.816	1.613	1.005	0.367	600	3,048
Generic 2" x 4" GPS	141.00	5	1.626	0.862	0.706	0.239	1	6
Flat Low Profile Pla	141.00	1,500	1.626	0.862	0.706	0.239	239	1,867
Commscope CBC78T-	140.00	62	1.603	0.789	0.675	0.225	9	77
Samsung Outdoor	140.00	56	1.603	0.789	0.675	0.225	8	69
Samsung Outdoor	140.00	13	1.603	0.789	0.675	0.225	2	16
Samsung B5/B13 RRH-B	140.00	211	1.603	0.789	0.675	0.225	32	262
Samsung B2/B66A RRH-	140.00	253	1.603	0.789	0.675	0.225	38	315
RFS DB-C1-12C-24AB-0	140.00	32	1.603	0.789	0.675	0.225	5	40
Andrew DB846H80E-SX	140.00	96	1.603	0.789	0.675	0.225	14	119
Commscope JAHH-65B-	140.00	364	1.603	0.789	0.675	0.225	54	453
KMW AWS Twin Dual 70	134.00	52	1.469	0.427	0.507	0.146	5	65
Ericsson Radio 4449	134.00	222	1.469	0.427	0.507	0.146	22	276
Ericsson AIR 21	134.00	273	1.469	0.427	0.507	0.146	27	340
RFS APXVAARR24_43-U-	134.00	384	1.469	0.427	0.507	0.146	37	478
Flat Platform with R	134.00	2,000	1.469	0.427	0.507	0.146	195	2,489
		40,239	80.783	49.586	35.268	12.330	2,624	50,081

Load Case (0.9 - 0.2Sds) * DL + E EMAM

Seismic (Reduced DL) Equivalent Modal Analysis Method

Segment	Height Above Base (ft)	Weight (lb)	a	b	c	Saz	Horizontal Force (lb)	Vertical Force (lb)
39	151.50	71	1.878	1.915	1.117	0.412	19	60
38	150.50	72	1.853	1.790	1.071	0.394	19	61
37	149.50	72	1.828	1.670	1.027	0.376	18	62
36	147.00	297	1.768	1.396	0.923	0.333	66	254
35	143.00	309	1.673	1.022	0.774	0.269	55	264
34	140.50	79	1.615	0.825	0.690	0.232	12	68
33	137.50	446	1.547	0.623	0.600	0.190	57	382
32	134.50	91	1.480	0.453	0.519	0.152	9	78
31	132.00	414	1.425	0.334	0.458	0.123	34	354
30	127.50	536	1.330	0.164	0.363	0.076	27	459
29	122.50	554	1.228	0.032	0.276	0.032	12	474
28	117.50	573	1.129	-0.052	0.205	-0.003	-1	490
27	112.50	591	1.035	-0.099	0.150	-0.030	-12	505
26	107.50	609	0.945	-0.119	0.106	-0.048	-20	521
25	103.63	343	0.878	-0.121	0.079	-0.056	-13	293
24	101.13	558	0.837	-0.118	0.065	-0.059	-22	477
23	98.88	567	0.800	-0.112	0.054	-0.059	-22	485
22	96.38	468	0.760	-0.103	0.043	-0.057	-18	401

21	92.50	873	0.700	-0.087	0.030	-0.051	-29	747
20	87.50	900	0.626	-0.062	0.018	-0.035	-21	770
19	82.50	927	0.557	-0.037	0.010	-0.015	-9	793
18	77.50	954	0.491	-0.013	0.007	0.006	4	816
17	72.50	981	0.430	0.008	0.006	0.026	17	839
16	67.50	1,009	0.373	0.026	0.008	0.042	28	863
15	62.50	1,036	0.320	0.041	0.011	0.053	37	886
14	57.50	1,063	0.270	0.052	0.015	0.060	42	909
13	54.54	198	0.243	0.056	0.018	0.062	8	169
12	52.04	1,709	0.222	0.060	0.020	0.063	71	1,462
11	48.96	887	0.196	0.063	0.024	0.063	37	759
10	46.46	732	0.177	0.065	0.026	0.063	31	626
9	42.50	1,279	0.148	0.068	0.030	0.062	53	1,094
8	37.50	1,311	0.115	0.070	0.035	0.061	53	1,122
7	32.50	1,343	0.086	0.071	0.039	0.060	53	1,149
6	27.50	1,374	0.062	0.072	0.041	0.058	53	1,176
5	22.50	1,406	0.041	0.070	0.042	0.056	53	1,203
4	17.50	1,438	0.025	0.066	0.039	0.054	51	1,230
3	12.50	1,469	0.013	0.058	0.034	0.049	48	1,257
2	7.50	1,501	0.005	0.043	0.024	0.039	39	1,284
1	2.50	1,533	0.001	0.018	0.010	0.018	19	1,311
Powerwave Allgon LGP	152.00	33	1.890	1.980	1.140	0.422	9	28
Powerwave Allgon 702	152.00	26	1.890	1.980	1.140	0.422	7	23
CCI DTMAP7819VG12A	152.00	58	1.890	1.980	1.140	0.422	16	49
Powerwave Allgon LGP	152.00	85	1.890	1.980	1.140	0.422	24	72
Raycap DC6-48-60-18-	152.00	20	1.890	1.980	1.140	0.422	6	17
Ericsson RRUS 4415 B	152.00	138	1.890	1.980	1.140	0.422	39	118
Ericsson RRUS 4449 B	152.00	213	1.890	1.980	1.140	0.422	60	182
Ericsson RRUS 4478 B	152.00	178	1.890	1.980	1.140	0.422	50	152
Raycap DC6-48-60-18-	152.00	16	1.890	1.980	1.140	0.422	4	14
Ericsson RRUS-12 190	152.00	180	1.890	1.980	1.140	0.422	51	154
Raycap DC6-48-60-18-	152.00	16	1.890	1.980	1.140	0.422	4	14
Powerwave Allgon 777	152.00	105	1.890	1.980	1.140	0.422	30	90
Kathrein Scala 80010	152.00	586	1.890	1.980	1.140	0.422	165	501
Generic 15' Omni	151.00	40	1.865	1.852	1.094	0.403	11	34
Site Pro1 RMQP-496-H	149.00	2,449	1.816	1.613	1.005	0.367	600	2,095
Generic 2" x 4" GPS	141.00	5	1.626	0.862	0.706	0.239	1	4
Flat Low Profile Pla	141.00	1,500	1.626	0.862	0.706	0.239	239	1,283
Commscope CBC78T-	140.00	62	1.603	0.789	0.675	0.225	9	53
Samsung Outdoor	140.00	56	1.603	0.789	0.675	0.225	8	48
Samsung Outdoor	140.00	13	1.603	0.789	0.675	0.225	2	11
Samsung B5/B13 RRH-B	140.00	211	1.603	0.789	0.675	0.225	32	180
Samsung B2/B66A RRH-	140.00	253	1.603	0.789	0.675	0.225	38	217
RFS DB-C1-12C-24AB-0	140.00	32	1.603	0.789	0.675	0.225	5	27
Andrew DB846H80E-SX	140.00	96	1.603	0.789	0.675	0.225	14	82
Commscope JAHH-65B-	140.00	364	1.603	0.789	0.675	0.225	54	311
KMW AWS Twin Dual 70	134.00	52	1.469	0.427	0.507	0.146	5	45
Ericsson Radio 4449	134.00	222	1.469	0.427	0.507	0.146	22	190
Ericsson AIR 21	134.00	273	1.469	0.427	0.507	0.146	27	234
RFS APXVAARR24_43-U-	134.00	384	1.469	0.427	0.507	0.146	37	328
Flat Platform with R	134.00	2,000	1.469	0.427	0.507	0.146	195	1,711
		40,239	80.783	49.586	35.268	12.330	2,624	34,421

Site Number: 302518

Code: ANSI/TIA-222-G

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Site Name: Newtown CT 3, CT

Engineering Number:12984020_C3_03

11/15/2019 3:22:13 PM

Customer: VERIZON WIRELESS

Load Case (1.2 + 0.2Sds) * DL + E EMAM Seismic Equivalent Modal Analysis Method

Calculated Forces

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 (deg)	Ratio
0.00	-48.17	-2.61	0.00	-326.07	0.00	326.07	5,359.60	2,679.80	12,402.66	6,210.55	0.00	0.00	0.061
5.00	-46.30	-2.58	0.00	-313.01	0.00	313.01	5,275.68	2,637.84	11,915.59	5,966.65	0.01	-0.01	0.061
10.00	-44.47	-2.55	0.00	-300.09	0.00	300.09	5,189.62	2,594.81	11,433.16	5,725.08	0.03	-0.03	0.061
15.00	-42.68	-2.51	0.00	-287.36	0.00	287.36	5,101.44	2,550.72	10,955.70	5,485.99	0.07	-0.04	0.061
20.00	-40.93	-2.46	0.00	-274.82	0.00	274.82	5,011.12	2,505.56	10,483.58	5,249.58	0.13	-0.06	0.061
25.00	-39.22	-2.42	0.00	-262.50	0.00	262.50	4,918.68	2,459.34	10,017.16	5,016.02	0.20	-0.08	0.060
30.00	-37.55	-2.38	0.00	-250.41	0.00	250.41	4,824.11	2,412.05	9,556.78	4,785.49	0.29	-0.09	0.060
35.00	-35.92	-2.33	0.00	-238.53	0.00	238.53	4,727.41	2,363.70	9,102.80	4,558.17	0.40	-0.11	0.060
40.00	-34.33	-2.28	0.00	-226.88	0.00	226.88	4,628.58	2,314.29	8,655.58	4,334.22	0.52	-0.13	0.060
45.00	-33.41	-2.26	0.00	-215.46	0.00	215.46	4,527.62	2,263.81	8,215.47	4,113.84	0.67	-0.15	0.060
47.92	-32.31	-2.23	0.00	-208.87	0.00	208.87	4,467.74	2,233.87	7,962.16	3,987.00	0.76	-0.16	0.060
50.00	-30.18	-2.15	0.00	-204.23	0.00	204.23	4,424.53	2,212.27	7,782.82	3,897.19	0.84	-0.17	0.059
54.08	-29.94	-2.15	0.00	-195.43	0.00	195.43	3,619.86	1,809.93	6,334.27	3,171.85	0.99	-0.19	0.070
55.00	-28.61	-2.11	0.00	-193.46	0.00	193.46	3,605.16	1,802.58	6,271.86	3,140.59	1.03	-0.19	0.070
60.00	-27.32	-2.08	0.00	-182.90	0.00	182.90	3,523.72	1,761.86	5,934.59	2,971.70	1.24	-0.21	0.069
65.00	-26.07	-2.06	0.00	-172.49	0.00	172.49	3,440.15	1,720.07	5,602.88	2,805.61	1.47	-0.24	0.069
70.00	-24.84	-2.05	0.00	-162.19	0.00	162.19	3,354.45	1,677.22	5,277.11	2,642.48	1.74	-0.26	0.069
75.00	-23.66	-2.05	0.00	-151.95	0.00	151.95	3,266.62	1,633.31	4,957.62	2,482.50	2.02	-0.29	0.068
80.00	-22.50	-2.06	0.00	-141.70	0.00	141.70	3,154.85	1,577.42	4,612.87	2,309.86	2.34	-0.32	0.068
85.00	-21.38	-2.09	0.00	-131.38	0.00	131.38	3,036.31	1,518.16	4,271.03	2,138.69	2.69	-0.35	0.068
90.00	-20.29	-2.12	0.00	-120.93	0.00	120.93	2,917.78	1,458.89	3,942.34	1,974.10	3.07	-0.37	0.068
95.00	-19.71	-2.15	0.00	-110.32	0.00	110.32	2,799.25	1,399.62	3,626.81	1,816.10	3.48	-0.41	0.068
97.75	-19.00	-2.17	0.00	-104.42	0.00	104.42	2,734.06	1,367.03	3,458.88	1,732.01	3.71	-0.42	0.067
100.00	-18.31	-2.19	0.00	-99.54	0.00	99.54	2,680.72	1,340.36	3,324.44	1,664.69	3.92	-0.44	0.067
102.25	-17.88	-2.20	0.00	-94.62	0.00	94.62	1,683.04	841.52	2,097.24	1,050.18	4.13	-0.45	0.101
105.00	-17.12	-2.23	0.00	-88.56	0.00	88.56	1,655.06	827.53	2,011.86	1,007.42	4.39	-0.47	0.098
110.00	-16.38	-2.25	0.00	-77.42	0.00	77.42	1,602.55	801.28	1,859.07	930.92	4.91	-0.52	0.093
115.00	-15.67	-2.25	0.00	-66.20	0.00	66.20	1,547.92	773.96	1,709.77	856.15	5.47	-0.56	0.087
120.00	-14.98	-2.24	0.00	-54.94	0.00	54.94	1,491.15	745.57	1,564.29	783.31	6.09	-0.60	0.080
125.00	-14.31	-2.22	0.00	-43.71	0.00	43.71	1,428.88	714.44	1,419.66	710.88	6.74	-0.65	0.072
130.00	-13.79	-2.19	0.00	-32.61	0.00	32.61	1,349.86	674.93	1,266.22	634.05	7.44	-0.68	0.062
134.00	-10.03	-1.85	0.00	-23.86	0.00	23.86	1,286.64	643.32	1,149.79	575.75	8.03	-0.71	0.049
135.00	-9.48	-1.79	0.00	-22.01	0.00	22.01	1,270.84	635.42	1,121.56	561.61	8.18	-0.72	0.047
140.00	-8.03	-1.60	0.00	-13.07	0.00	13.07	1,191.82	595.91	985.67	493.57	8.94	-0.74	0.033
141.00	-5.78	-1.27	0.00	-11.47	0.00	11.47	1,176.01	588.01	959.54	480.48	9.10	-0.75	0.029
145.00	-5.41	-1.20	0.00	-6.38	0.00	6.38	1,112.80	556.40	858.55	429.91	9.73	-0.76	0.020
149.00	-2.28	-0.54	0.00	-1.56	0.00	1.56	1,049.58	524.79	763.17	382.15	10.37	-0.77	0.006
150.00	-2.19	-0.52	0.00	-1.02	0.00	1.02	1,033.78	516.89	740.20	370.65	10.53	-0.77	0.005
151.00	-2.05	-0.49	0.00	-0.49	0.00	0.49	1,017.97	508.99	717.59	359.33	10.69	-0.77	0.003
152.00	0.00	-0.46	0.00	0.00	0.00	0.00	1,002.17	501.08	695.32	348.18	10.85	-0.77	0.000

Site Number: 302518

Code: ANSI/TIA-222-G

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Site Name: Newtown CT 3, CT

Engineering Number:12984020_C3_03

11/15/2019 3:22:13 PM

Customer: VERIZON WIRELESS

Load Case (0.9 - 0.2Sds) * DL + E EMAM Seismic (Reduced DL) Equivalent Modal Analysis Method

Calculated Forces

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 (deg)	Ratio
0.00	-33.11	-2.61	0.00	-320.89	0.00	320.89	5,359.60	2,679.80	12,402.66	6,210.55	0.00	0.00	0.058
5.00	-31.82	-2.58	0.00	-307.85	0.00	307.85	5,275.68	2,637.84	11,915.59	5,966.65	0.01	-0.01	0.058
10.00	-30.57	-2.54	0.00	-294.96	0.00	294.96	5,189.62	2,594.81	11,433.16	5,725.08	0.03	-0.03	0.057
15.00	-29.34	-2.49	0.00	-282.28	0.00	282.28	5,101.44	2,550.72	10,955.70	5,485.99	0.07	-0.04	0.057
20.00	-28.13	-2.45	0.00	-269.81	0.00	269.81	5,011.12	2,505.56	10,483.58	5,249.58	0.12	-0.06	0.057
25.00	-26.96	-2.40	0.00	-257.58	0.00	257.58	4,918.68	2,459.34	10,017.16	5,016.02	0.19	-0.08	0.057
30.00	-25.81	-2.35	0.00	-245.58	0.00	245.58	4,824.11	2,412.05	9,556.78	4,785.49	0.28	-0.09	0.057
35.00	-24.69	-2.30	0.00	-233.82	0.00	233.82	4,727.41	2,363.70	9,102.80	4,558.17	0.39	-0.11	0.057
40.00	-23.59	-2.26	0.00	-222.30	0.00	222.30	4,628.58	2,314.29	8,655.58	4,334.22	0.51	-0.13	0.056
45.00	-22.96	-2.23	0.00	-211.02	0.00	211.02	4,527.62	2,263.81	8,215.47	4,113.84	0.66	-0.15	0.056
47.92	-22.20	-2.19	0.00	-204.51	0.00	204.51	4,467.74	2,233.87	7,962.16	3,987.00	0.75	-0.16	0.056
50.00	-20.74	-2.12	0.00	-199.94	0.00	199.94	4,424.53	2,212.27	7,782.82	3,897.19	0.82	-0.17	0.056
54.08	-20.57	-2.12	0.00	-191.27	0.00	191.27	3,619.86	1,809.93	6,334.27	3,171.85	0.97	-0.18	0.066
55.00	-19.66	-2.08	0.00	-189.33	0.00	189.33	3,605.16	1,802.58	6,271.86	3,140.59	1.01	-0.19	0.066
60.00	-18.78	-2.05	0.00	-178.94	0.00	178.94	3,523.72	1,761.86	5,934.59	2,971.70	1.21	-0.21	0.066
65.00	-17.91	-2.02	0.00	-168.71	0.00	168.71	3,440.15	1,720.07	5,602.88	2,805.61	1.45	-0.23	0.065
70.00	-17.07	-2.01	0.00	-158.60	0.00	158.60	3,354.45	1,677.22	5,277.11	2,642.48	1.70	-0.26	0.065
75.00	-16.26	-2.01	0.00	-148.56	0.00	148.56	3,266.62	1,633.31	4,957.62	2,482.50	1.99	-0.28	0.065
80.00	-15.46	-2.02	0.00	-138.52	0.00	138.52	3,154.85	1,577.42	4,612.87	2,309.86	2.30	-0.31	0.065
85.00	-14.69	-2.04	0.00	-128.41	0.00	128.41	3,036.31	1,518.16	4,271.03	2,138.69	2.64	-0.34	0.065
90.00	-13.94	-2.08	0.00	-118.19	0.00	118.19	2,917.78	1,458.89	3,942.34	1,974.10	3.01	-0.37	0.065
95.00	-13.54	-2.10	0.00	-107.80	0.00	107.80	2,799.25	1,399.62	3,626.81	1,816.10	3.41	-0.40	0.064
97.75	-13.06	-2.12	0.00	-102.04	0.00	102.04	2,734.06	1,367.03	3,458.88	1,732.01	3.64	-0.41	0.064
100.00	-12.58	-2.14	0.00	-97.27	0.00	97.27	2,680.72	1,340.36	3,324.44	1,664.69	3.84	-0.43	0.063
102.25	-12.28	-2.16	0.00	-92.45	0.00	92.45	1,683.04	841.52	2,097.24	1,050.18	4.05	-0.44	0.095
105.00	-11.76	-2.18	0.00	-86.52	0.00	86.52	1,655.06	827.53	2,011.86	1,007.42	4.31	-0.46	0.093
110.00	-11.25	-2.19	0.00	-75.63	0.00	75.63	1,602.55	801.28	1,859.07	930.92	4.81	-0.50	0.088
115.00	-10.76	-2.20	0.00	-64.66	0.00	64.66	1,547.92	773.96	1,709.77	856.15	5.36	-0.55	0.082
120.00	-10.29	-2.19	0.00	-53.66	0.00	53.66	1,491.15	745.57	1,564.29	783.31	5.96	-0.59	0.075
125.00	-9.83	-2.17	0.00	-42.71	0.00	42.71	1,428.88	714.44	1,419.66	710.88	6.61	-0.63	0.067
130.00	-9.47	-2.13	0.00	-31.89	0.00	31.89	1,349.86	674.93	1,266.22	634.05	7.29	-0.67	0.057
134.00	-6.89	-1.81	0.00	-23.36	0.00	23.36	1,286.64	643.32	1,149.79	575.75	7.86	-0.70	0.046
135.00	-6.51	-1.75	0.00	-21.55	0.00	21.55	1,270.84	635.42	1,121.56	561.61	8.01	-0.70	0.044
140.00	-5.51	-1.56	0.00	-12.81	0.00	12.81	1,191.82	595.91	985.67	493.57	8.76	-0.73	0.031
141.00	-3.97	-1.25	0.00	-11.24	0.00	11.24	1,176.01	588.01	959.54	480.48	8.91	-0.73	0.027
145.00	-3.71	-1.18	0.00	-6.25	0.00	6.25	1,112.80	556.40	858.55	429.91	9.53	-0.74	0.018
149.00	-1.56	-0.53	0.00	-1.53	0.00	1.53	1,049.58	524.79	763.17	382.15	10.15	-0.75	0.005
150.00	-1.50	-0.51	0.00	-1.00	0.00	1.00	1,033.78	516.89	740.20	370.65	10.31	-0.75	0.004
151.00	-1.41	-0.48	0.00	-0.48	0.00	0.48	1,017.97	508.99	717.59	359.33	10.47	-0.75	0.003
152.00	0.00	-0.46	0.00	0.00	0.00	0.00	1,002.17	501.08	695.32	348.18	10.63	-0.75	0.000

Site Number: 302518

Code: ANSI/TIA-222-G

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Site Name: Newtown CT 3, CT

Engineering Number:12984020_C3_03

11/15/2019 3:22:13 PM

Customer: VERIZON WIRELESS

Analysis Summary

Load Case	Reactions						Max Usage	
	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)	Elev (ft)	Interaction Ratio
1.2D + 1.6W	21.91	0.00	48.26	0.00	0.00	2536.16	102.25	0.58
0.9D + 1.6W	21.44	0.00	36.19	0.00	0.00	2449.20	102.25	0.55
1.2D + 1.0Di + 1.0Wi	13.78	0.00	72.68	0.00	0.00	1262.49	102.25	0.22
(1.2 + 0.2Sds) * DL + E ELFM	1.21	0.00	48.17	0.00	0.00	155.89	102.25	0.05
(1.2 + 0.2Sds) * DL + E EMAM	2.61	0.00	48.17	0.00	0.00	326.07	102.25	0.10
(0.9 - 0.2Sds) * DL + E ELFM	1.21	0.00	33.11	0.00	0.00	153.63	102.25	0.04
(0.9 - 0.2Sds) * DL + E EMAM	2.61	0.00	33.11	0.00	0.00	320.89	102.25	0.10
1.0D + 1.0W	4.99	0.00	40.24	0.00	0.00	572.72	102.25	0.14

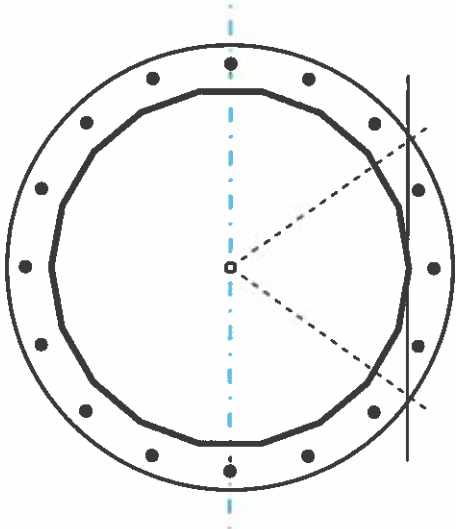
Base Plate & Anchor Rod Analysis

Pole Dimensions		
Number of Sides	18	-
Diameter	56.75	in
Thickness	0.4375	in
Orientation Offset	0	°

Base Reactions		
Moment, Mu	2536.2	k-ft
Axial, Pu	48.3	k
Shear, Vu	21.9	k
Neutral Axis	270	°

Report Capacities		
Component	Capacity	Result
Base Plate	27%	Pass
Anchor Rods	48%	Pass
Dwyidag	-	-

Base Plate		
Shape	Round	-
Diameter, ϕ	72	in
Thickness	2	in
Grade	A871-60	
Yield Strength, Fy	60	ksi
Tensile Strength, Fu	75	ksi
Clip	N/A	in
Orientation Offset	0	°
Anchor Rod Detail	d	$\eta=0.5$
Clear Distance	3	in
Applied Moment, Mu	608.0	k
Bending Stress, ϕMn	2267.5	k



Original Anchor Rods		
Arrangement	Radial	-
Quantity	16	-
Diameter, ϕ	2 1/4	in
Bolt Circle	66	in
Grade	A615-75	
Yield Strength, Fy	75	ksi
Tensile Strength, Fu	100	ksi
Spacing	13.0	in
Orientation Offset	0	°
Applied Force, Pu	122.5	k
Anchor Rods, ϕPn	259.8	k

Calculations for Monopole Base Plate & Anchor Rod Analysis

Reaction Distribution

Reaction	Shear Vu	Moment Mu	Factor
-	k	k-ft	-
Base Forces	21.9	2536.2	1.00
Anchor Rod Forces	21.9	2536.2	1.00
Additional Bolt (Grp1) Forces			
Additional Bolt (Grp2) Forces			
Dywidag Forces			
Stiffener Forces			

Geometric Properties

Section	Gross Area	Net Area	Individual Inertia	Threads per Inch	Moment of Inertia
-	in ²	in ²	in ⁴	#	in ⁴
Pole	77.0062	4.2781	0.2740		30529.20
Bolt	3.9761	3.2477	0.8393	4.5	26307.64
Bolt1					
Bolt2					
Dywidag					
Stiffener					

Base Plate		
Shape	Round	-
Diameter, D	72	in
Thickness, t	2	in
Yield Strength, Fy	60	ksi
Tensile Strength, Fu	75	ksi
Base Plate Chord	44.311	in
Detail Type	d	-
Detail Factor	0.50	-
Clear Distance	3	-

Anchor Rods		
Anchor Rod Quantity, N	16	-
Rod Diameter, d	2.25	in
Bolt Circle, BC	66	in
Yield Strength, Fy	75	ksi
Tensile Strength, Fu	100	ksi
Applied Axial, Pu	122.5	k
Applied Shear, Vu	0.8	k
Compressive Capacity, ϕP_n	259.8	k
Tensile Capacity, ϕR_n	0.472	OK
Interaction Capacity	0.478	OK

External Base Plate		
Chord Length AA	37.990	in
Additional AA	4.000	in
Section Modulus, Z	41.990	in ³
Applied Moment, Mu	608.0	k-ft
Bending Capacity, ϕM_n	2267.5	k-ft
Capacity, Mu/ ϕM_n	0.268	OK

Chord Length AB	36.637	in
Additional AB	4.000	in
Section Modulus, Z	40.637	in ³
Applied Moment, Mu	454.4	k-ft
Bending Capacity, ϕM_n	2194.4	k-ft
Capacity, Mu/ ϕM_n	0.207	OK

Bend Line Length	42.299	in
Additional Bend Line	0.000	in
Section Modulus, Z	42.299	in ³
Applied Moment, Mu	608.0	k-ft
Bending Capacity, ϕM_n	2284.2	k-ft
Capacity, Mu/ ϕM_n	0.266	OK

Internal Base Plate		
Arc Length	0.000	in
Section Modulus, Z	0.000	in ³
Moment Arm	0.000	in
Applied Moment, Mu	0.0	k-ft
Bending Capacity, ϕM_n	0.0	k-ft
Capacity, Mu/ ϕM_n		



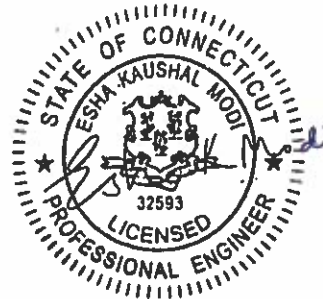
AMERICAN TOWER®
CORPORATION

Antenna Mount Analysis Report

ATC Site Name : Newtown CT 3
ATC Site Number : 302518
Engineering Number : 12984020_C8_05
Mount Elevation : 140 ft
Carrier : Verizon Wireless
Carrier Site Name : HAWLEYVILLE CT
Carrier Site Number : 469057
Site Location : 6 Fairfield Dr (Brkfld)
Newtown, CT 06470-1216
41.42552778 , -73.37404722
County : Fairfield
Date : December 13, 2019
Max Usage : 55%
Result : Pass

Prepared By:
Trevor Ridilla
Structural Engineer I

Reviewed By:



Authorized by "EOR"
13 Dec 2019 01:58:16

COA: PEC.0001553



Table of Contents

Introduction 1

Analysis 1

Conclusion 1

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Mount Layout 2

Equipment Layout 3

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Calculations Attached



Introduction

The purpose of this report is to summarize results of the antenna mount analysis performed for Verizon Wireless at 140 ft.

Analysis

Basic Wind Speed:	93 mph (3-Second Gust, Vasd) / 120 mph (3-Second Gust, Vult)
Basic Wind Speed w/ Ice:	50 mph (3-Second Gust) w/ 3/4" radial ice concurrent
Codes:	ANSI/TIA-222-G / 2015 / 2018 Connecticut State Building Code
Structure Class:	II
Exposure Category:	B
Topographic Category:	1
Crest Height:	0 ft
Spectral Response:	$S_s = 0.209$, $S_1 = 0.066$
Site Class:	D - Stiff Soil
Live Loads:	$L_m = 500$ lbs, $L_v = 250$ lbs

Conclusion

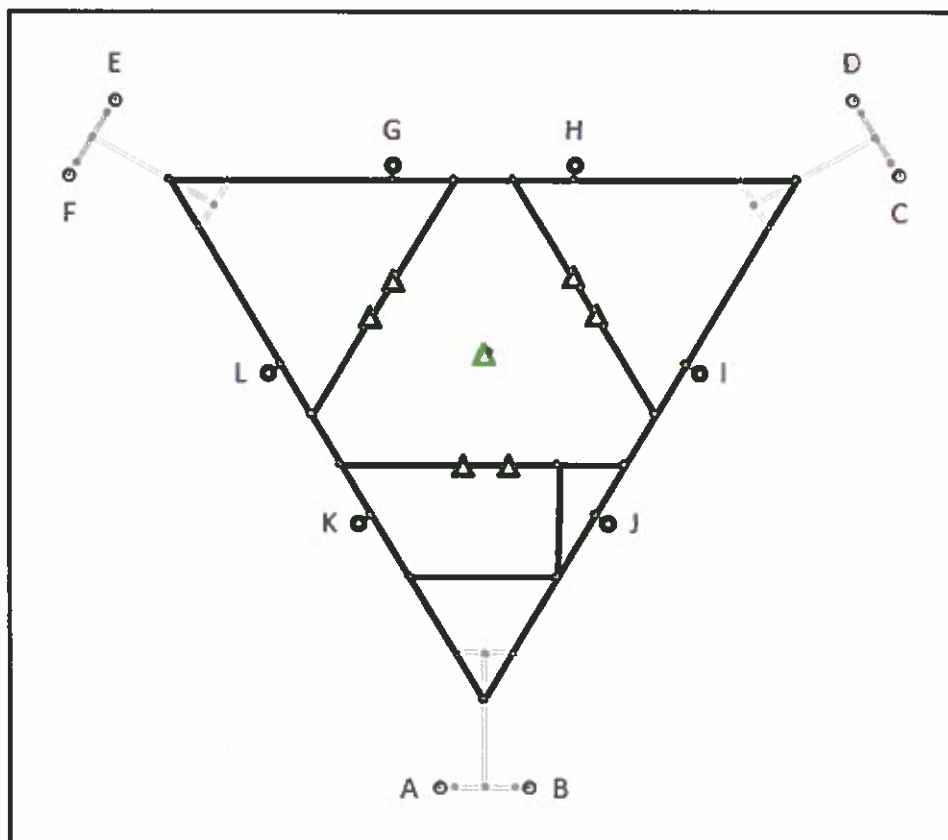
Based on the analysis results, the antenna mount meets the requirements per the applicable codes listed above. The mount can support the equipment as described in this report.

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

Application Loading

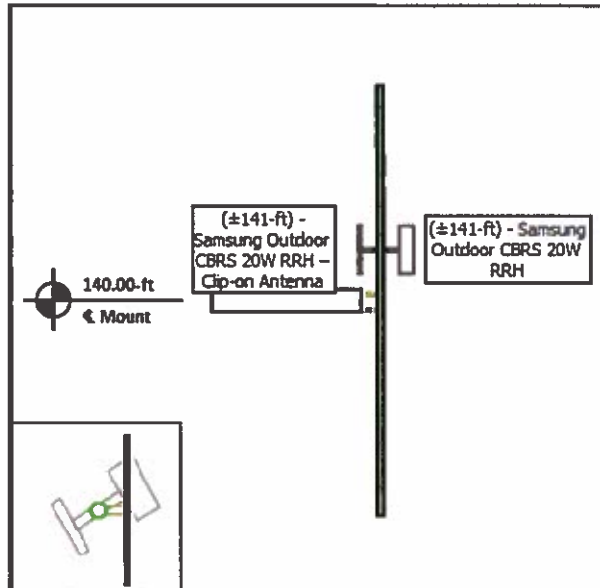
Mount Centerline (ft)	Antenna Centerline (ft)	Qty	Antenna Model
140.0	140.0	1	Generic 2" x 4" GPS
		3	Commscope CBC78T-DS-43-2X
		3	Samsung Outdoor CBRS 20W RRH
		3	Samsung Outdoor CBRS 20W RRH -Clip-on Antenna
		3	Samsung B5/B13 RRH-BR04C
		3	Samsung B2/B66A RRH-BR049
		1	RFS DB-C1-12C-24AB-0Z
		6	Andrew DB846H80E-SX
		6	Commscope JAHH-65B-R3B

Mount Layout

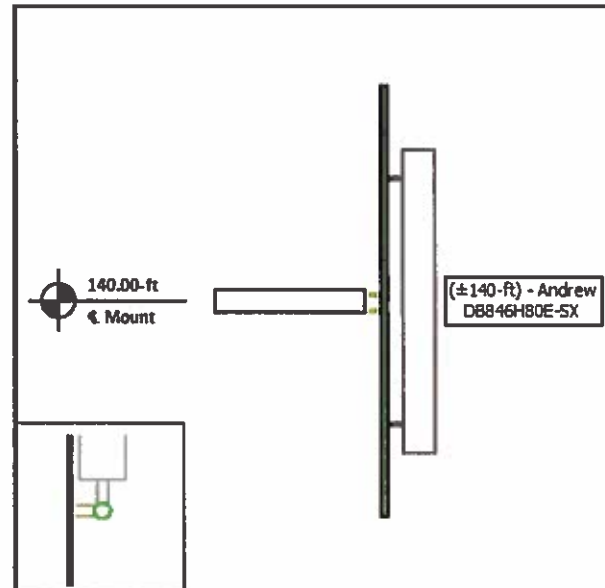


Equipment Layout

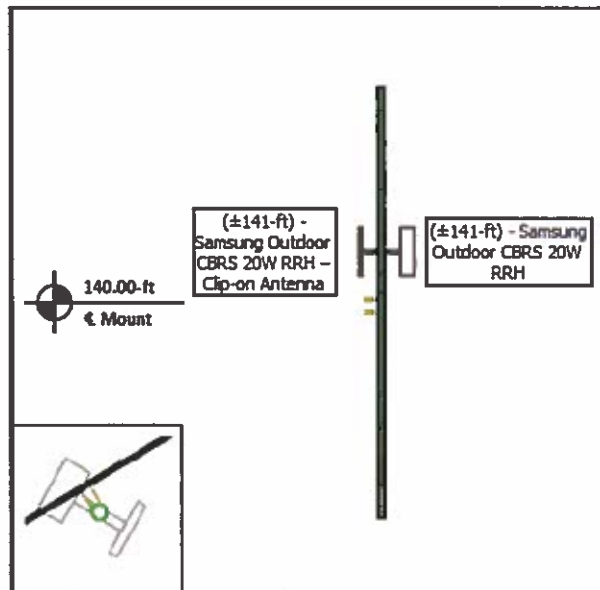
Mount Pipe A



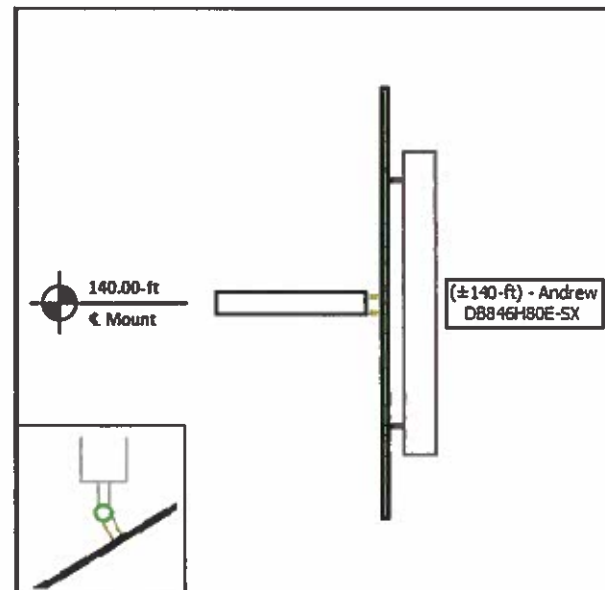
Mount Pipe B



Mount Pipe C

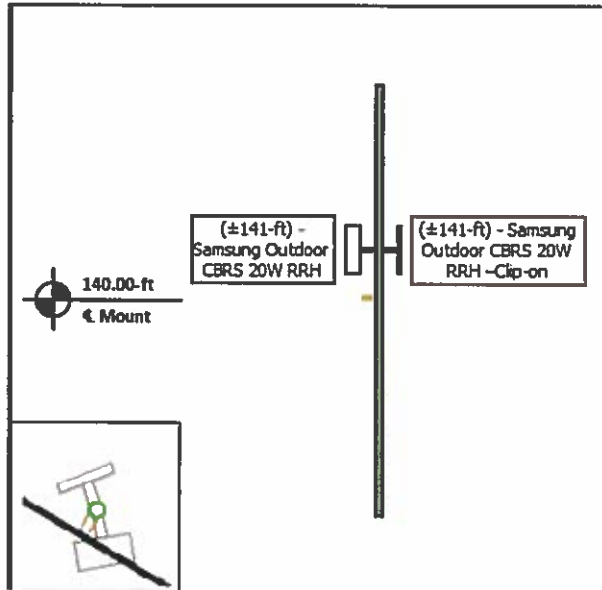


Mount Pipe D

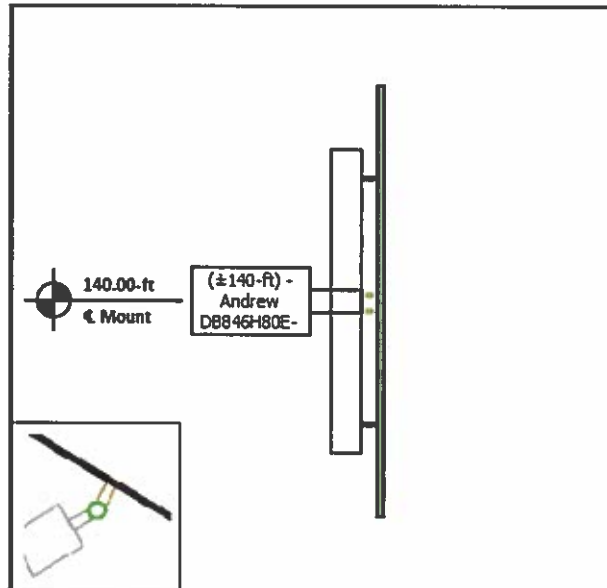


Equipment Layout Cont'd.

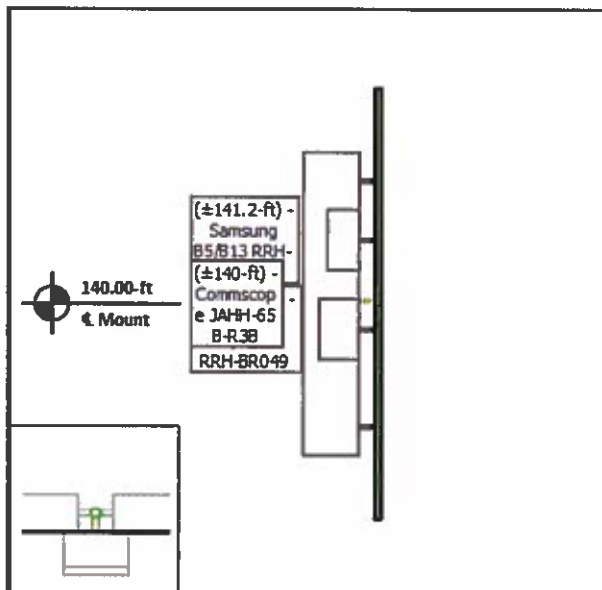
Mount Pipe E



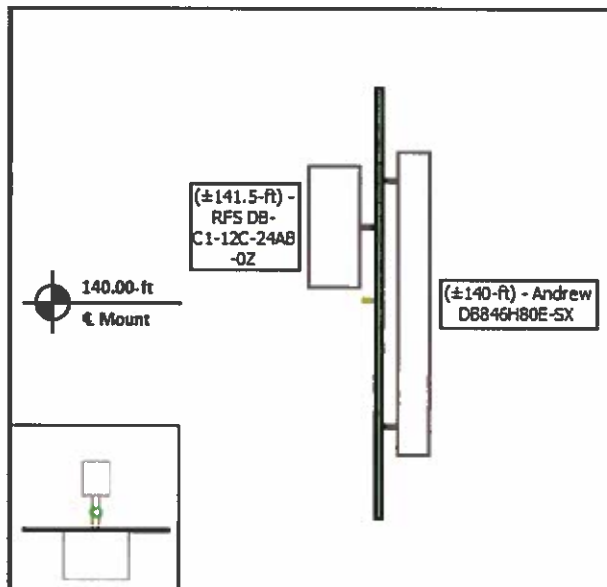
Mount Pipe F



Mount Pipe G

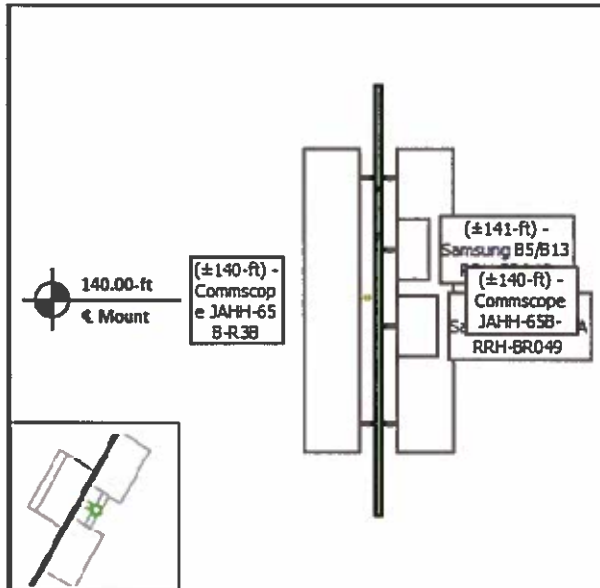


Mount Pipe H

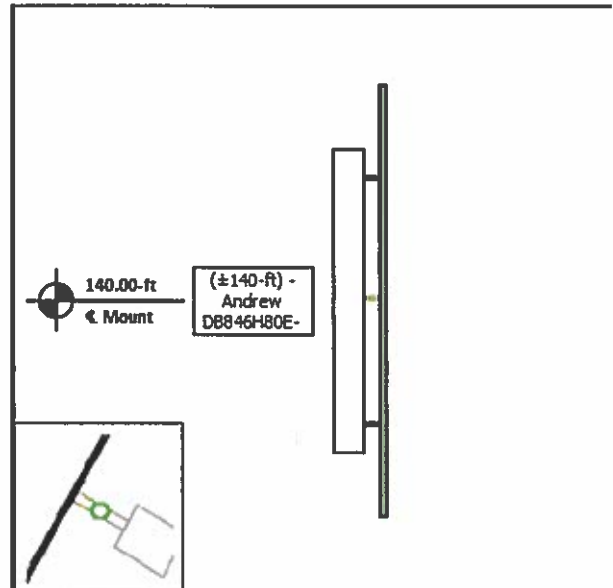


Equipment Layout Cont'd.

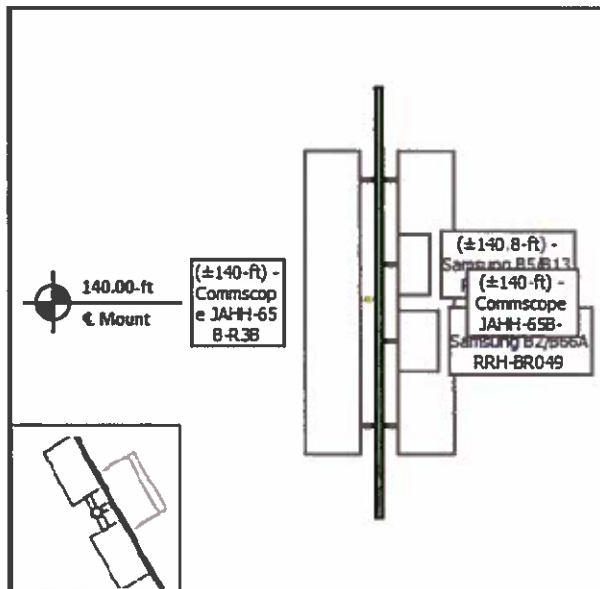
Mount Pipe I



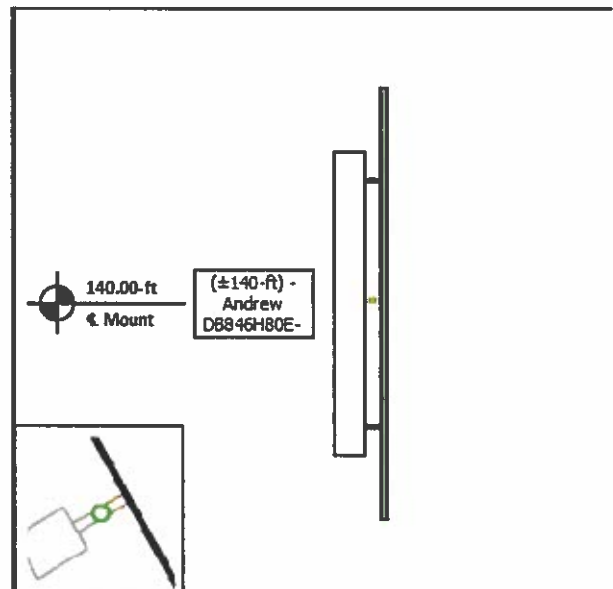
Mount Pipe J



Mount Pipe K



Mount Pipe L





Standard Conditions

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

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

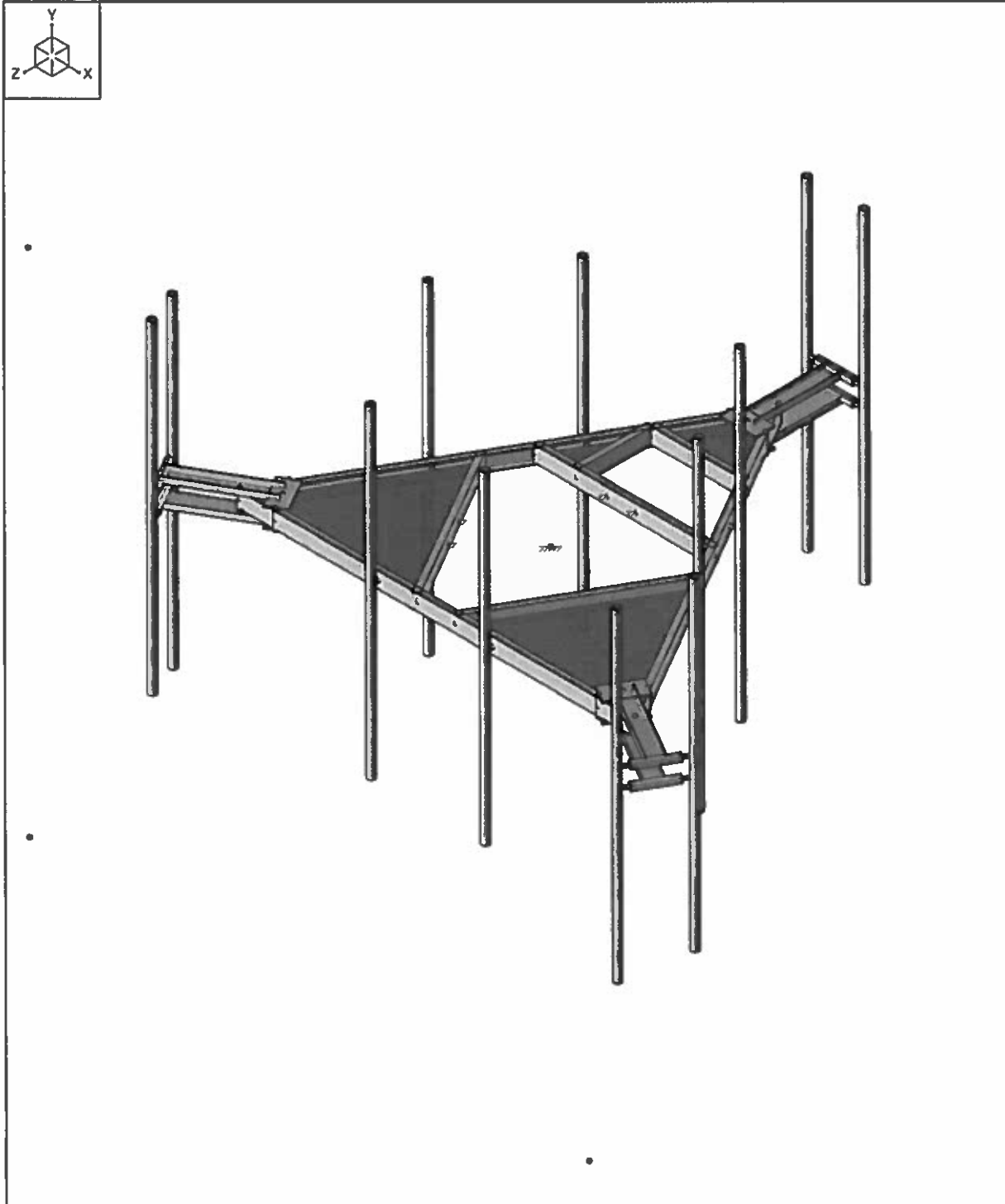
It is the responsibility of the client to ensure that the information provided to A.T. Engineering Service, PLLC and used in the performance of our engineering services is correct and complete.

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

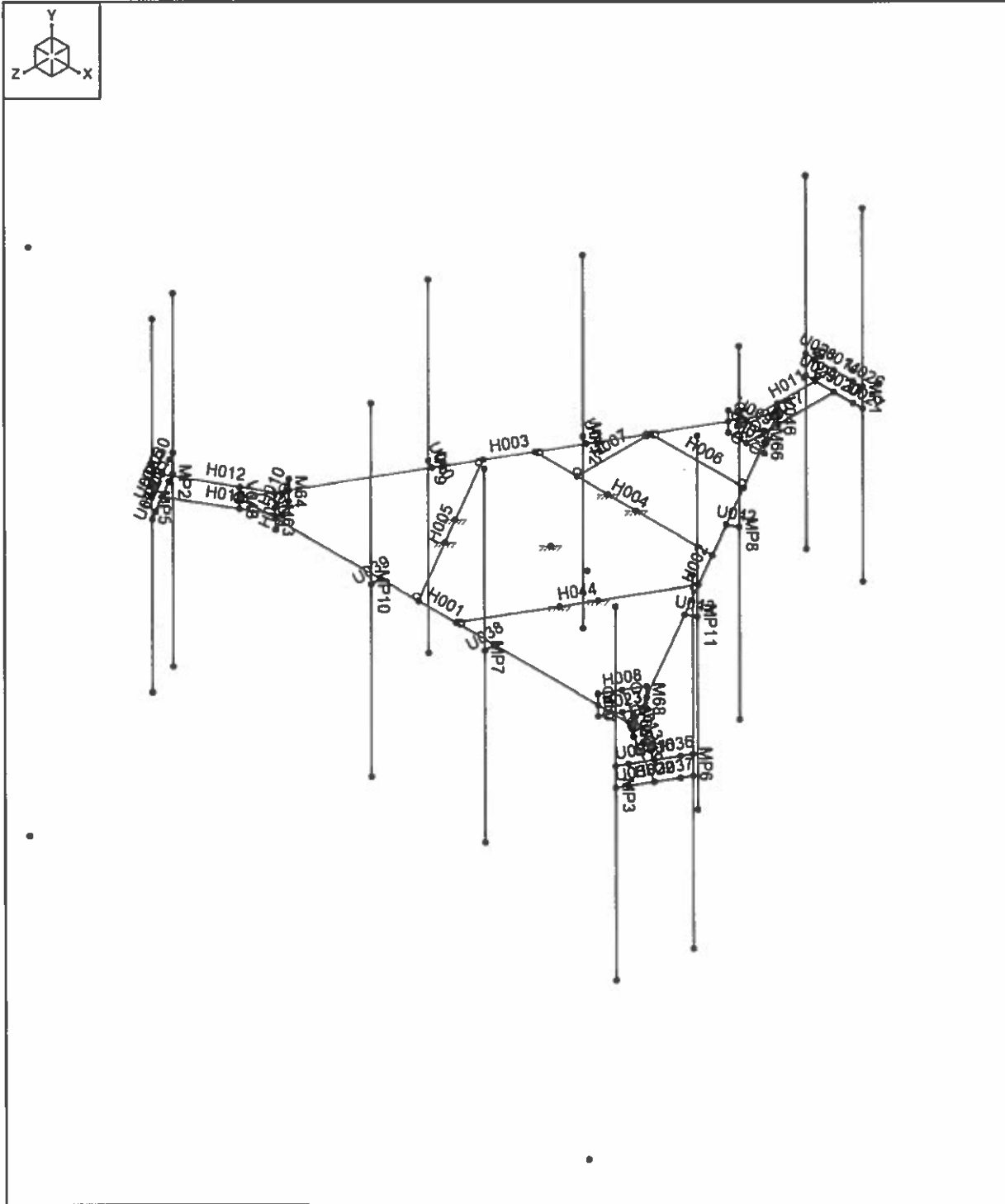
All connections are to be verified for condition and tightness by the installation contractor preceding any changes to the appurtenance mounting system and/or equipment attached to it.

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

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



Results for LC 4, 1.2D + 1.6Wo [60]		
American Tower Corp.	302518, Newtown CT 3	SK-1
Trevor.Ridilla		Dec 13, 2019 at 09:05 AM
12984020_CB_05	3D Rendering	R3D. VERIZON WIRELESS @ 30...

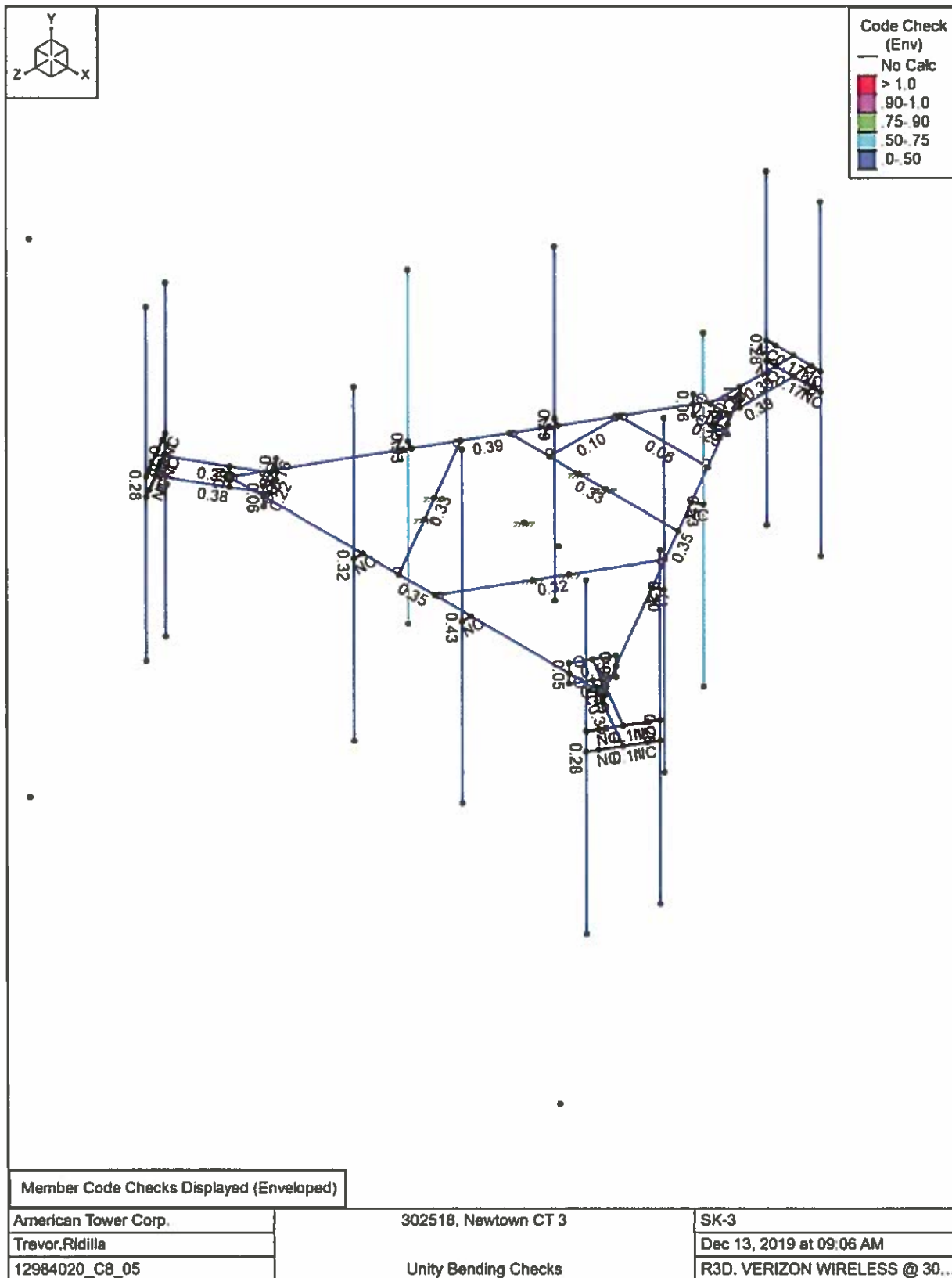


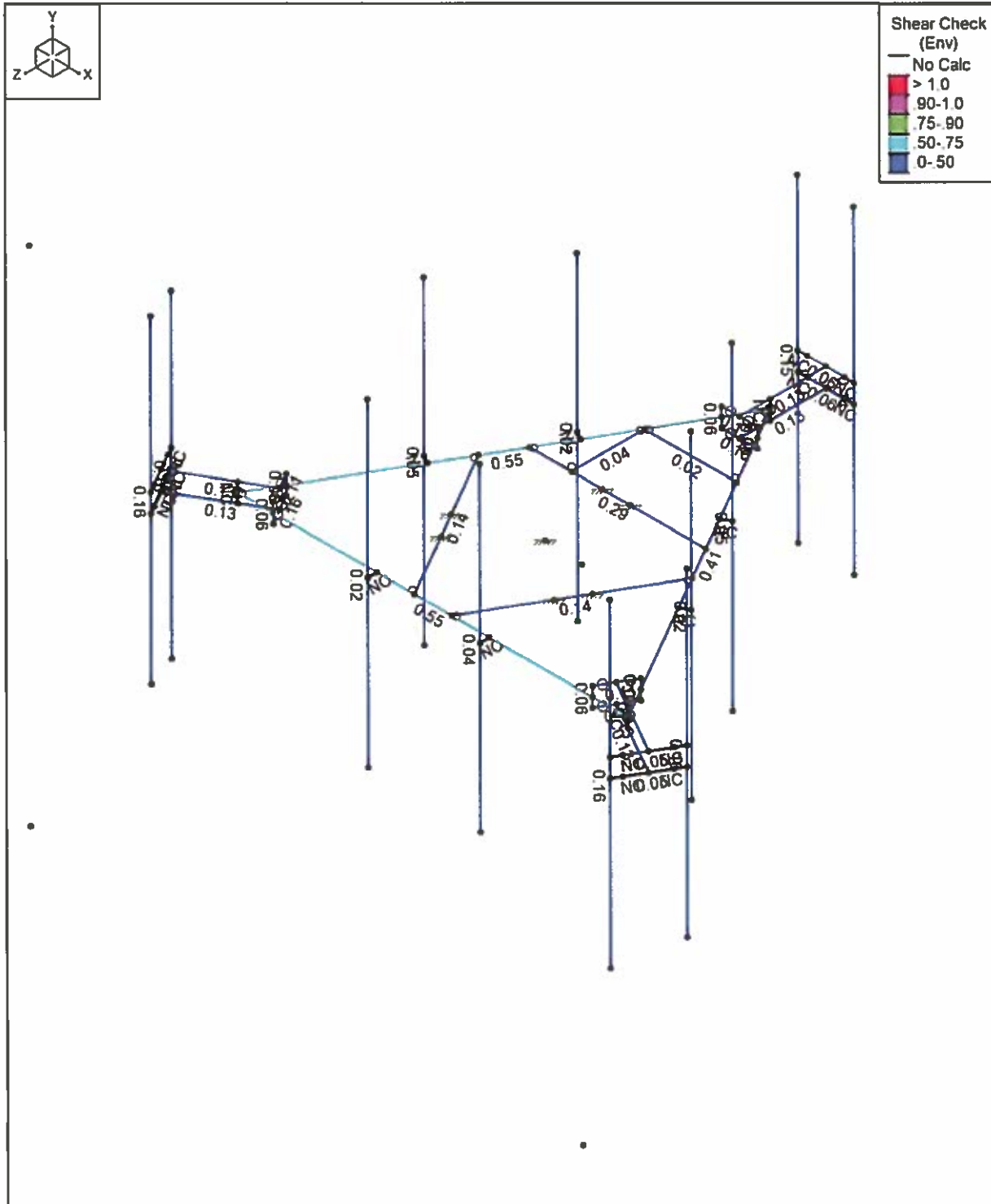
Results for LC 4, 1 2D + 1 6Wo [60]

American Tower Corp.
Trevor.Ridilla
12984020_C8_05

302518, Newtown CT 3
Member Labels

SK-2
Dec 13, 2019 at 09:05 AM
R3D. VERIZON WIRELESS @ 30...





Member Shear Checks Displayed (Enveloped)

American Tower Corp.	302518, Newtown CT 3	SK-4
Trevor.Ridilla		Dec 13, 2019 at 09:08 AM
12984020_C8_05	Shear Checks	R3D. VERIZON WIRELESS @ 30...



Company : American Tower Corp.
 Designer : Trevor.Ridilla
 Job Number : 12984020_C8_05
 Model Name : 302518, Newtown CT 3

12/13/2019
 9:07:27 AM
 Checked By : -

Hot Rolled Steel Properties

	Label	E [psi]	G [psi]	Nu	Therm. C...	Density [l...	Yield [psi]	Ry	Fu [psi]	Rt
1	A36	2.9e+07	1.115e+07	0.3	0.65	490	36000	1.5	58000	1.2
2	A572-50	2.9e+07	1.115e+07	0.3	0.65	490	50000	1.1	65000	1.1
3	A500 Gr...	2.9e+07	1.115e+07	0.3	0.65	527	42000	1.4	58000	1.3
4	A500 Gr...	2.9e+07	1.115e+07	0.3	0.65	527	46000	1.4	58000	1.3
5	A1085	2.9e+07	1.115e+07	0.3	0.65	490	50000	1.1	65000	1.1
6	A53 Gr. B	2.9e+07	1.115e+07	0.3	0.65	490	35000	1.6	60000	1.2
7	A992	2.9e+07	1.115e+07	0.3	0.65	490	50000	1.1	65000	1.1
8	SAE J429...	2.9e+07	1.115e+07	0.3	0.65	490	57000	1.1	74000	1.1

Primary Member Properties

	Label	I Node	J Node	K Node	Rotate(deg)	Section/S...	Type	Design List	Material	Design Rule
1	H001	N004	N003			C5X9	Beam	None	A36	Typical
2	H002	N002	N004			C5X9	Beam	None	A36	Typical
3	H003	N003	N002			C5X9	Beam	None	A36	Typical
4	H004	N006	N010			C5X9	Beam	None	A36	Typical
5	H005	N007	N008			C5X9	Beam	None	A36	Typical
6	H006	N011	N012			C5X9	Beam	None	A36	Typical
7	H007	N013	N012		180	C5X9	Beam	None	A36	Typical
8	H008	N014	N018		90	PL6X0.5	Beam	None	A572-50	Typical
9	H009	N015	N019		90	PL6X0.5	Beam	None	A572-50	Typical
10	H010	N016	N017		90	PL6X0.5	Beam	None	A572-50	Typical
11	H011	N020	N023		270	C5X9	Beam	None	A36	Typical
12	H012	N021	N024		270	C5X9	Beam	None	A36	Typical
13	H013	N022	N025		270	C5X9	Beam	None	A36	Typical
14	H014	N029	N032			HSS2X2X4	Beam	None	A500 Gr...	Typical
15	H015	N030	N033			HSS2X2X4	Beam	None	A500 Gr...	Typical
16	H016	N031	N034			HSS2X2X4	Beam	None	A500 Gr...	Typical
17	H017	N035	N038		90	C5X9	Beam	None	A36	Typical
18	H018	N036	N039		90	C5X9	Beam	None	A36	Typical
19	H019	N037	N040		90	C5X9	Beam	None	A36	Typical
20	H020	N041	N044			HSS2X2X4	Beam	None	A500 Gr...	Typical
21	H021	N042	N045			HSS2X2X4	Beam	None	A500 Gr...	Typical
22	H022	N043	N046			HSS2X2X4	Beam	None	A500 Gr...	Typical
23	H023	N050	N054		90	PL6X0.5	Beam	None	A36	Typical
24	H024	N051	N055		90	PL6X0.5	Beam	None	A36	Typical
25	H025	N052	N053		90	PL6X0.5	Beam	None	A36	Typical
26	U026	N057	N029			(1) 1/2 U-...	Beam	None	A36	Typical
27	U027	N056	N041			(1) 1/2 U-...	Beam	None	A36	Typical
28	U028	N063	N032			(1) 1/2 U-...	Beam	None	A36	Typical
29	U029	N060	N044			(1) 1/2 U-...	Beam	None	A36	Typical
30	U030	N064	N024			(1) 1/2 U-...	Beam	None	A36	Typical
31	U031	N058	N039			(1) 1/2 U-...	Beam	None	A36	Typical
32	U032	N065	N024			(1) 1/2 U-...	Beam	None	A36	Typical
33	U033	N061	N039			(1) 1/2 U-...	Beam	None	A36	Typical
34	U034	N066	N025			(1) 1/2 U-...	Beam	None	A36	Typical
35	U035	N059	N040			(1) 1/2 U-...	Beam	None	A36	Typical
36	U036	N067	N025			(1) 1/2 U-...	Beam	None	A36	Typical
37	U037	N062	N040			(1) 1/2 U-...	Beam	None	A36	Typical
38	U038	N068	N074			(2) 1/2 U-...	Beam	None	A36	Typical
39	U039	N071	N075			(2) 1/2 U-...	Beam	None	A36	Typical
40	U040	N070	N076			(2) 1/2 U-...	Beam	None	A36	Typical
41	U041	N073	N077			(2) 1/2 U-...	Beam	None	A36	Typical
42	U042	N069	N078			(2) 1/2 U-...	Beam	None	A36	Typical
43	U043	N072	N079			(2) 1/2 U-...	Beam	None	A36	Typical
44	H044	N005	N009		180	C5X9	Beam	None	A36	Typical
45	V045	N020	N035			(2) 5/8 U-...	Column	None	A572-50	Typical
46	V046	N026	N047			(2) 5/8 U-...	Column	None	A572-50	Typical
47	V047	N021	N036			(2) 5/8 U-...	Column	None	A572-50	Typical



Company : American Tower Corp.
 Designer : Trevor.Ridilla
 Job Number : 12984020_C8_05
 Model Name : 302518, Newtown CT 3

12/13/2019
 9:07:27 AM
 Checked By :-

Primary Member Properties (Continued)

	Label	I Node	J Node	K Node	Rotate(deg)	Section/S...	Type	Design List	Material	Design Rule
48	V048	N027	N048			(2) 5/8 U-...	Column	None	A572-50	Typical
49	V049	N022	N037			(2) 5/8 U-...	Column	None	A572-50	Typical
50	V050	N028	N049			(2) 5/8 U-...	Column	None	A572-50	Typical
51	MP1	MP1t	MP1b			PIPE 2.0	Column	None	A53 Gr B	Typical
52	MP2	MP2t	MP2b			PIPE 2.0	Column	None	A53 Gr B	Typical
53	MP3	MP3t	MP3b			PIPE 2.0	Column	None	A53 Gr B	Typical
54	MP4	MP4t	MP4b			PIPE 2.0	Column	None	A53 Gr B	Typical
55	MP5	MP5t	MP5b			PIPE 2.0	Column	None	A53 Gr B	Typical
56	MP6	MP6t	MP6b			PIPE 2.0	Column	None	A53 Gr B	Typical
57	MP7	MP7t	MP7b			PIPE 2.0	Column	None	A53 Gr B	Typical
58	MP8	MP8t	MP8b			PIPE 2.0	Column	None	A53 Gr B	Typical
59	MP9	MP9t	MP9b			PIPE 2.0	Column	None	A53 Gr B	Typical
60	MP10	MP10t	MP10b			PIPE 2.0	Column	None	A53 Gr B	Typical
61	MP11	MP11t	MP11b			PIPE 2.0	Column	None	A53 Gr B	Typical
62	MP12	MP12t	MP12b			PIPE 2.0	Column	None	A53 Gr B	Typical
63	M63	N017	N053			(2) 5/8 U-...	Column	Wide Flan...	A36	Typical
64	M64	N016	N052			(2) 5/8 U-...	Column	Wide Flan...	A36	Typical
65	M65	N019	N055			(2) 5/8 U-...	Column	Wide Flan...	A36	Typical
66	M66	N015	N051			(2) 5/8 U-...	Column	Wide Flan...	A36	Typical
67	M67	N014	N050			(2) 5/8 U-...	Column	Wide Flan...	A36	Typical
68	M68	N018	N054			(2) 5/8 U-...	Column	Wide Flan...	A36	Typical

Basic Load Cases

	BLC Desc...	Category	X Gravity	Y Gravity	Z Gravity	Nodal	Point	Distributed	Area(Me...	Surface(P...
1	Dead	DL		-1			37			
2	Ice	IL					37	38		4
3	Wind -Z	WLZ					37		1	
4	Wind -X	WLX					37		1	
5	Wind -Z (L...	WL-Z					37	38	1	
6	Wind -X (L...	WL-X					37	38	1	
7	Wind -Z (...)	WLZP1					37		1	
8	Wind -X (...)	WLXP1					37		1	
9	Ev -Y (Sei...	ELY						38		
10	Eh -Z (Sei...	ELZ						38		
11	Eh -X (Sei...	ELX						38		
12	Lm (1)	LL				1				
13	Lm (2)	LL				1				
14	Lm (3)	LL				1				
15	Lm (4)	LL				1				
16	Lm (5)	LL				1				
17	Lm (6)	LL				1				
18	Lm (7)	LL				1				
19	Lm (8)	LL				1				
20	Lm (9)	LL				1				
21	Lm (10)	LL				1				
22	Lm (11)	LL				1				
23	Lm (12)	LL				1				
24	BLC 3 Tra...	None						60		
25	BLC 4 Tra...	None						54		
26	BLC 5 Tra...	None						60		
27	BLC 6 Tra...	None						54		
28	BLC 7 Tra...	None						60		
29	BLC 8 Tra...	None						54		



Company : American Tower Corp
 Designer : Trevor.Ridilla
 Job Number : 12984020_C8_05
 Model Name : 302518, Newtown CT 3

12/13/2019
 9:07:27 AM
 Checked By :-

Load Combinations

De...	So...	PD...	SR...	BLC Fa...	BLC Fa...	BLC Fa...	BLC Fa...	BLC Fa...	BLC Fa...	BLC Fa...	BLC Fa...	BLC Fa...	BLC Fa...
1	1.4D	Yes	Y	DL	1.4								
2	1.2	Yes	Y	DL	1.2	WLX	0.0	WLZ	1.6				
3	1.2	Yes	Y	DL	1.2	WLX	0.8	WLZ	1.3				
4	1.2	Yes	Y	DL	1.2	WLX	1.3	WLZ	0.8				
5	1.2	Yes	Y	DL	1.2	WLX	1.6	WLZ	0.0				
6	1.2	Yes	Y	DL	1.2	WLX	1.3	WLZ	-0.8				
7	1.2	Yes	Y	DL	1.2	WLX	0.8	WLZ	-1.0				
8	1.2	Yes	Y	DL	1.2	WLX	0.0	WLZ	-1.6				
9	1.2	Yes	Y	DL	1.2	WLX	-0.8	WLZ	-1.0				
10	1.2	Yes	Y	DL	1.2	WLX	-1.0	WLZ	-0.8				
11	1.2	Yes	Y	DL	1.2	WLX	-1.6	WLZ	0.0				
12	1.2	Yes	Y	DL	1.2	WLX	-1.0	WLZ	0.8				
13	1.2	Yes	Y	DL	1.2	WLX	-0.8	WLZ	1.3				
14	0.9	Yes	Y	DL	0.9	WLX	0.0	WLZ	1.6				
15	0.9	Yes	Y	DL	0.9	WLX	0.8	WLZ	1.3				
16	0.9	Yes	Y	DL	0.9	WLX	1.3	WLZ	0.8				
17	0.9	Yes	Y	DL	0.9	WLX	1.6	WLZ	0.0				
18	0.9	Yes	Y	DL	0.9	WLX	1.3	WLZ	-0.8				
19	0.9	Yes	Y	DL	0.9	WLX	0.8	WLZ	-1.0				
20	0.9	Yes	Y	DL	0.9	WLX	0.0	WLZ	-1.6				
21	0.9	Yes	Y	DL	0.9	WLX	-0.8	WLZ	-1.0				
22	0.9	Yes	Y	DL	0.9	WLX	-1.0	WLZ	-0.8				
23	0.9	Yes	Y	DL	0.9	WLX	-1.6	WLZ	0.0				
24	0.9	Yes	Y	DL	0.9	WLX	-1.0	WLZ	0.8				
25	0.9	Yes	Y	DL	0.9	WLX	-0.8	WLZ	1.3				
26	1.2	Yes	Y	DL	1.2	IL	1	W	0.0	W	1		
27	1.2	Yes	Y	DL	1.2	IL	1	W	0.5	W	0.8		
28	1.2	Yes	Y	DL	1.2	IL	1	W	0.8	W	0.5		
29	1.2	Yes	Y	DL	1.2	IL	1	W	1	W	0.0		
30	1.2	Yes	Y	DL	1.2	IL	1	W	0.8	W	-0.5		
31	1.2	Yes	Y	DL	1.2	IL	1	W	0.5	W	-0		
32	1.2	Yes	Y	DL	1.2	IL	1	W	0.0	W	-1		
33	1.2	Yes	Y	DL	1.2	IL	1	W	-0.5	W	-0		
34	1.2	Yes	Y	DL	1.2	IL	1	W	-0	W	-0.5		
35	1.2	Yes	Y	DL	1.2	IL	1	W	-1	W	0.0		
36	1.2	Yes	Y	DL	1.2	IL	1	W	-0	W	0.5		
37	1.2	Yes	Y	DL	1.2	IL	1	W	-0.5	W	0.8		
38	1.2	Yes	Y	DL	1.2	ELY	1	ELZ	1	ELX	0.0		
39	1.2	Yes	Y	DL	1.2	ELY	1	ELZ	0.8	ELX	0.5		
40	1.2	Yes	Y	DL	1.2	ELY	1	ELZ	0.5	ELX	0.8		
41	1.2	Yes	Y	DL	1.2	ELY	1	ELZ	0.0	ELX	1		
42	1.2	Yes	Y	DL	1.2	ELY	1	ELZ	-0.5	ELX	0.8		
43	1.2	Yes	Y	DL	1.2	ELY	1	ELZ	-0	ELX	0.5		
44	1.2	Yes	Y	DL	1.2	ELY	1	ELZ	-1	ELX	0.0		
45	1.2	Yes	Y	DL	1.2	ELY	1	ELZ	-0	ELX	-0.5		
46	1.2	Yes	Y	DL	1.2	ELY	1	ELZ	-0.5	ELX	-0		
47	1.2	Yes	Y	DL	1.2	ELY	1	ELZ	0.0	ELX	-1		
48	1.2	Yes	Y	DL	1.2	ELY	1	ELZ	0.5	ELX	-0		
49	1.2	Yes	Y	DL	1.2	ELY	1	ELZ	0.8	ELX	-0.5		
50	0.9	Yes	Y	DL	0.9	ELY	1	ELZ	1	ELX	0.0		
51	0.9	Yes	Y	DL	0.9	ELY	1	ELZ	0.8	ELX	0.5		
52	0.9	Yes	Y	DL	0.9	ELY	1	ELZ	0.5	ELX	0.8		
53	0.9	Yes	Y	DL	0.9	ELY	1	ELZ	0.0	ELX	1		
54	0.9	Yes	Y	DL	0.9	ELY	1	ELZ	-0.5	ELX	0.8		
55	0.9	Yes	Y	DL	0.9	ELY	1	ELZ	-0	ELX	0.5		
56	0.9	Yes	Y	DL	0.9	ELY	1	ELZ	-1	ELX	0.0		
57	0.9	Yes	Y	DL	0.9	ELY	1	ELZ	-0	ELX	-0.5		
58	0.9	Yes	Y	DL	0.9	ELY	1	ELZ	-0.5	ELX	-0		



Company : American Tower Corp.
 Designer : Trevor.Ridilla
 Job Number : 12984020_C8_05
 Model Name : 302518, Newtown CT 3

12/13/2019
 9:07:27 AM
 Checked By : -

Load Combinations (Continued)

De	So	PD	SR	BLC Fa	BLC Fa	BLC Fa	BLC Fa	BLC Fa	BLC Fa	BLC Fa	BLC Fa	BLC Fa	BLC Fa	BLC Fa
59	0.9	Yes	Y	DL	0.9	ELY	1	ELZ	0.0	ELX	-1			
60	0.9	Yes	Y	DL	0.9	ELY	1	ELZ	0.5	ELX	-0			
61	0.9	Yes	Y	DL	0.9	ELY	1	ELZ	0.8	ELX	-0.5			
62	1.2	Yes	Y	DL	1.2	12	1.5	W	0.0	W	1			
63	1.2	Yes	Y	DL	1.2	12	1.5	W	0.5	W	0.8			
64	1.2	Yes	Y	DL	1.2	12	1.5	W	0.8	W	0.5			
65	1.2	Yes	Y	DL	1.2	12	1.5	W	1	W	0.0			
66	1.2	Yes	Y	DL	1.2	12	1.5	W	0.8	W	-0.5			
67	1.2	Yes	Y	DL	1.2	12	1.5	W	0.5	W	-0			
68	1.2	Yes	Y	DL	1.2	12	1.5	W	0.0	W	-0.5			
69	1.2	Yes	Y	DL	1.2	12	1.5	W	-0.5	W	-0			
70	1.2	Yes	Y	DL	1.2	12	1.5	W	-0	W	-0.5			
71	1.2	Yes	Y	DL	1.2	12	1.5	W	-1	W	0.0			
72	1.2	Yes	Y	DL	1.2	12	1.5	W	-0	W	0.5			
73	1.2	Yes	Y	DL	1.2	12	1.5	W	-0.5	W	0.8			
74	1.2	Yes	Y	DL	1.2	13	1.5	W	0.0	W	1			
75	1.2	Yes	Y	DL	1.2	13	1.5	W	0.5	W	0.8			
76	1.2	Yes	Y	DL	1.2	13	1.5	W	0.8	W	0.5			
77	1.2	Yes	Y	DL	1.2	13	1.5	W	1	W	0.0			
78	1.2	Yes	Y	DL	1.2	13	1.5	W	0.8	W	-0.5			
79	1.2	Yes	Y	DL	1.2	13	1.5	W	0.5	W	-0			
80	1.2	Yes	Y	DL	1.2	13	1.5	W	0.0	W	-0.5			
81	1.2	Yes	Y	DL	1.2	13	1.5	W	-0.5	W	-0			
82	1.2	Yes	Y	DL	1.2	13	1.5	W	-0	W	-0.5			
83	1.2	Yes	Y	DL	1.2	13	1.5	W	-1	W	0.0			
84	1.2	Yes	Y	DL	1.2	13	1.5	W	-0	W	0.5			
85	1.2	Yes	Y	DL	1.2	13	1.5	W	-0.5	W	0.8			
86	1.2	Yes	Y	DL	1.2	14	1.5	W	0.0	W	1			
87	1.2	Yes	Y	DL	1.2	14	1.5	W	0.5	W	0.8			
88	1.2	Yes	Y	DL	1.2	14	1.5	W	0.8	W	0.5			
89	1.2	Yes	Y	DL	1.2	14	1.5	W	1	W	0.0			
90	1.2	Yes	Y	DL	1.2	14	1.5	W	0.8	W	-0.5			
91	1.2	Yes	Y	DL	1.2	14	1.5	W	0.5	W	-0			
92	1.2	Yes	Y	DL	1.2	14	1.5	W	0.0	W	-0.5			
93	1.2	Yes	Y	DL	1.2	14	1.5	W	-0.5	W	-0			
94	1.2	Yes	Y	DL	1.2	14	1.5	W	-0	W	-0.5			
95	1.2	Yes	Y	DL	1.2	14	1.5	W	-1	W	0.0			
96	1.2	Yes	Y	DL	1.2	14	1.5	W	-0	W	0.5			
97	1.2	Yes	Y	DL	1.2	14	1.5	W	-0.5	W	0.8			
98	1.2	Yes	Y	DL	1.2	15	1.5	W	0.0	W	1			
99	1.2	Yes	Y	DL	1.2	15	1.5	W	0.5	W	0.8			
100	1.2	Yes	Y	DL	1.2	15	1.5	W	0.8	W	0.5			
101	1.2	Yes	Y	DL	1.2	15	1.5	W	1	W	0.0			
102	1.2	Yes	Y	DL	1.2	15	1.5	W	0.8	W	-0.5			
103	1.2	Yes	Y	DL	1.2	15	1.5	W	0.5	W	-0			
104	1.2	Yes	Y	DL	1.2	15	1.5	W	0.0	W	-0.5			
105	1.2	Yes	Y	DL	1.2	15	1.5	W	-0.5	W	-0			
106	1.2	Yes	Y	DL	1.2	15	1.5	W	-0	W	-0.5			
107	1.2	Yes	Y	DL	1.2	15	1.5	W	-1	W	0.0			
108	1.2	Yes	Y	DL	1.2	15	1.5	W	-0	W	0.5			
109	1.2	Yes	Y	DL	1.2	15	1.5	W	-0.5	W	0.8			
110	1.2	Yes	Y	DL	1.2	16	1.5	W	0.0	W	1			
111	1.2	Yes	Y	DL	1.2	16	1.5	W	0.5	W	0.8			
112	1.2	Yes	Y	DL	1.2	16	1.5	W	0.8	W	0.5			
113	1.2	Yes	Y	DL	1.2	16	1.5	W	1	W	0.0			
114	1.2	Yes	Y	DL	1.2	16	1.5	W	0.8	W	-0.5			
115	1.2	Yes	Y	DL	1.2	16	1.5	W	0.5	W	-0			
116	1.2	Yes	Y	DL	1.2	16	1.5	W	0.0	W	-0.5			



Company : American Tower Corp.
 Designer : Trevor Ridilla
 Job Number : 12984020_C8_05
 Model Name : 302518, Newtown CT 3

12/13/2019
 9:07:27 AM
 Checked By : -

Load Combinations (Continued)

De...	So...	PD...	SR...	BLC Fa...	BLC Fa...	BLC Fa...	BLC Fa...	BLC Fa...	BLC Fa...	BLC Fa...	BLC Fa...	BLC Fa...	BLC Fa...	BLC Fa...	BLC Fa...
117	1.2...	Yes	Y	DL	1.2	16	1.5	W...	-0.5	W...	-0...				
118	1.2...	Yes	Y	DL	1.2	16	1.5	W...	-0...	W...	-0.5				
119	1.2...	Yes	Y	DL	1.2	16	1.5	W...	-1	W...	0.0				
120	1.2...	Yes	Y	DL	1.2	16	1.5	W...	-0...	W...	0.5				
121	1.2...	Yes	Y	DL	1.2	16	1.5	W...	-0.5	W...	0.8				
122	1.2...	Yes	Y	DL	1.2	17	1.5	W...	0.0	W...	1				
123	1.2...	Yes	Y	DL	1.2	17	1.5	W...	0.5	W...	0.8				
124	1.2...	Yes	Y	DL	1.2	17	1.5	W...	0.8	W...	0.5				
125	1.2...	Yes	Y	DL	1.2	17	1.5	W...	1	W...	0.0				
126	1.2...	Yes	Y	DL	1.2	17	1.5	W...	0.8	W...	-0.5				
127	1.2...	Yes	Y	DL	1.2	17	1.5	W...	0.5	W...	-0...				
128	1.2...	Yes	Y	DL	1.2	17	1.5	W...	0.0	W...	-0.5				
129	1.2...	Yes	Y	DL	1.2	17	1.5	W...	-0.5	W...	-0...				
130	1.2...	Yes	Y	DL	1.2	17	1.5	W...	-0...	W...	-0.5				
131	1.2...	Yes	Y	DL	1.2	17	1.5	W...	-1	W...	0.0				
132	1.2...	Yes	Y	DL	1.2	17	1.5	W...	-0...	W...	0.5				
133	1.2...	Yes	Y	DL	1.2	17	1.5	W...	-0.5	W...	0.8				
134	1.2...	Yes	Y	DL	1.2	18	1.5	W...	0.0	W...	1				
135	1.2...	Yes	Y	DL	1.2	18	1.5	W...	0.5	W...	0.8				
136	1.2...	Yes	Y	DL	1.2	18	1.5	W...	0.8	W...	0.5				
137	1.2...	Yes	Y	DL	1.2	18	1.5	W...	1	W...	0.0				
138	1.2...	Yes	Y	DL	1.2	18	1.5	W...	0.8	W...	-0.5				
139	1.2...	Yes	Y	DL	1.2	18	1.5	W...	0.5	W...	-0...				
140	1.2...	Yes	Y	DL	1.2	18	1.5	W...	0.0	W...	-0.5				
141	1.2...	Yes	Y	DL	1.2	18	1.5	W...	-0.5	W...	-0...				
142	1.2...	Yes	Y	DL	1.2	18	1.5	W...	-0...	W...	-0.5				
143	1.2...	Yes	Y	DL	1.2	18	1.5	W...	-1	W...	0.0				
144	1.2...	Yes	Y	DL	1.2	18	1.5	W...	-0...	W...	0.5				
145	1.2...	Yes	Y	DL	1.2	18	1.5	W...	-0.5	W...	0.8				
146	1.2...	Yes	Y	DL	1.2	19	1.5	W...	0.0	W...	1				
147	1.2...	Yes	Y	DL	1.2	19	1.5	W...	0.5	W...	0.8				
148	1.2...	Yes	Y	DL	1.2	19	1.5	W...	0.8	W...	0.5				
149	1.2...	Yes	Y	DL	1.2	19	1.5	W...	1	W...	0.0				
150	1.2...	Yes	Y	DL	1.2	19	1.5	W...	0.8	W...	-0.5				
151	1.2...	Yes	Y	DL	1.2	19	1.5	W...	0.5	W...	-0...				
152	1.2...	Yes	Y	DL	1.2	19	1.5	W...	0.0	W...	-0.5				
153	1.2...	Yes	Y	DL	1.2	19	1.5	W...	-0.5	W...	-0...				
154	1.2...	Yes	Y	DL	1.2	19	1.5	W...	-0...	W...	-0.5				
155	1.2...	Yes	Y	DL	1.2	19	1.5	W...	-1	W...	0.0				
156	1.2...	Yes	Y	DL	1.2	19	1.5	W...	-0...	W...	0.5				
157	1.2...	Yes	Y	DL	1.2	19	1.5	W...	-0.5	W...	0.8				
158	1.2...	Yes	Y	DL	1.2	20	1.5	W...	0.0	W...	1				
159	1.2...	Yes	Y	DL	1.2	20	1.5	W...	0.5	W...	0.8				
160	1.2...	Yes	Y	DL	1.2	20	1.5	W...	0.8	W...	0.5				
161	1.2...	Yes	Y	DL	1.2	20	1.5	W...	1	W...	0.0				
162	1.2...	Yes	Y	DL	1.2	20	1.5	W...	0.8	W...	-0.5				
163	1.2...	Yes	Y	DL	1.2	20	1.5	W...	0.5	W...	-0...				
164	1.2...	Yes	Y	DL	1.2	20	1.5	W...	0.0	W...	-0.5				
165	1.2...	Yes	Y	DL	1.2	20	1.5	W...	-0.5	W...	-0...				
166	1.2...	Yes	Y	DL	1.2	20	1.5	W...	-0...	W...	-0.5				
167	1.2...	Yes	Y	DL	1.2	20	1.5	W...	-1	W...	0.0				
168	1.2...	Yes	Y	DL	1.2	20	1.5	W...	-0...	W...	0.5				
169	1.2...	Yes	Y	DL	1.2	20	1.5	W...	-0.5	W...	0.8				
170	1.2...	Yes	Y	DL	1.2	21	1.5	W...	0.0	W...	1				
171	1.2...	Yes	Y	DL	1.2	21	1.5	W...	0.5	W...	0.8				
172	1.2...	Yes	Y	DL	1.2	21	1.5	W...	0.8	W...	0.5				
173	1.2...	Yes	Y	DL	1.2	21	1.5	W...	1	W...	0.0				
174	1.2...	Yes	Y	DL	1.2	21	1.5	W...	0.8	W...	-0.5				



Company : American Tower Corp.
 Designer : Trevor.Ridilla
 Job Number : 12984020_C8_05
 Model Name : 302518, Newtown CT 3

12/13/2019
 9:07:27 AM
 Checked By : -

Load Combinations (Continued)

De	So	PD	SR	BLC Fa	BLC Fa	BLC Fa	BLC Fa	BLC Fa	BLC Fa	BLC Fa	BLC Fa	BLC Fa	BLC Fa	BLC Fa
175	1.2	Yes	Y	DL	1.2	21	1.5	W	0.5	W	-0			
176	1.2	Yes	Y	DL	1.2	21	1.5	W	0.0	W	-0.5			
177	1.2	Yes	Y	DL	1.2	21	1.5	W	-0.5	W	-0			
178	1.2	Yes	Y	DL	1.2	21	1.5	W	-0	W	-0.5			
179	1.2	Yes	Y	DL	1.2	21	1.5	W	-1	W	0.0			
180	1.2	Yes	Y	DL	1.2	21	1.5	W	-0	W	0.5			
181	1.2	Yes	Y	DL	1.2	21	1.5	W	-0.5	W	0.8			
182	1.2	Yes	Y	DL	1.2	22	1.5	W	0.0	W	1			
183	1.2	Yes	Y	DL	1.2	22	1.5	W	0.5	W	0.8			
184	1.2	Yes	Y	DL	1.2	22	1.5	W	0.8	W	0.5			
185	1.2	Yes	Y	DL	1.2	22	1.5	W	1	W	0.0			
186	1.2	Yes	Y	DL	1.2	22	1.5	W	0.8	W	-0.5			
187	1.2	Yes	Y	DL	1.2	22	1.5	W	0.5	W	-0			
188	1.2	Yes	Y	DL	1.2	22	1.5	W	0.0	W	-0.5			
189	1.2	Yes	Y	DL	1.2	22	1.5	W	-0.5	W	-0			
190	1.2	Yes	Y	DL	1.2	22	1.5	W	-0	W	-0.5			
191	1.2	Yes	Y	DL	1.2	22	1.5	W	-1	W	0.0			
192	1.2	Yes	Y	DL	1.2	22	1.5	W	-0	W	0.5			
193	1.2	Yes	Y	DL	1.2	22	1.5	W	-0.5	W	0.8			
194	1.2	Yes	Y	DL	1.2	23	1.5	W	0.0	W	1			
195	1.2	Yes	Y	DL	1.2	23	1.5	W	0.5	W	0.8			
196	1.2	Yes	Y	DL	1.2	23	1.5	W	0.8	W	0.5			
197	1.2	Yes	Y	DL	1.2	23	1.5	W	1	W	0.0			
198	1.2	Yes	Y	DL	1.2	23	1.5	W	0.8	W	-0.5			
199	1.2	Yes	Y	DL	1.2	23	1.5	W	0.5	W	-0			
200	1.2	Yes	Y	DL	1.2	23	1.5	W	0.0	W	-0.5			
201	1.2	Yes	Y	DL	1.2	23	1.5	W	-0.5	W	-0			
202	1.2	Yes	Y	DL	1.2	23	1.5	W	-0	W	-0.5			
203	1.2	Yes	Y	DL	1.2	23	1.5	W	-1	W	0.0			
204	1.2	Yes	Y	DL	1.2	23	1.5	W	-0	W	0.5			
205	1.2	Yes	Y	DL	1.2	23	1.5	W	-0.5	W	0.8			

Node Reactions

Node	X [lbs]	LC	Y [lbs]	LC	Z [lbs]	LC	MX [lb-ft]	LC	MY [lb-ft]	LC	MZ [lb-ft]	LC		
1	N001	max	0	205	0	205	0	205	0	205	0	205		
2		min	0	1	0	1	0	1	0	1	0	1		
3	N080	max	963.756	5	1909.4	91	1102.7	12	388.599	85	328.621	4	203.998	85
4		min	-961.417	23	-286.762	74	-1102	18	-3262	86	-328.453	22	-1831	86
5	N081	max	1698.7	16	1941.0	70	436.256	14	45.057	69	356.778	20	3790.9	69
6		min	-1699	22	-249.431	89	-437.971	20	-19.639	123	-356.711	14	-385.002	87
7	N082	max	534.674	15	1954.12	79	1322.0	13	3297.8	81	427.691	12	181.369	62
8		min	-534.577	21	-233.316	73	-1320	7	-279.22	62	-426.922	6	-1955	81
9	N083	max	991.211	5	1930.81	121	1001.5	4	408.37	122	324.651	5	1780.6	117
10		min	-993.538	23	-276.016	126	-1001	10	-3170	117	-324.585	23	-212.248	122
11	N084	max	361.709	8	1905.8	123	1474.6	15	3076.3	124	377.689	21	1825.1	124
12		min	-359.745	2	-276.96	105	-1472.14	21	-389.414	105	-377.929	15	-248.782	105
13	N085	max	1735.0	6	1798.5	100	730.971	13	136.648	99	472.301	13	373.735	118
14		min	-1734	12	-378.354	119	-731.756	19	-29.132	81	-470.863	19	-3682	99
15	Totals:	max	5032.7	5	7230.7	32	4739.8	14						
16		min	-5032	11	1917.9	14	-4739	8						

LRFD

Member	Shape	Code	Loc [in]	LC	Shear	Loc [in]	Dir	LC	phi*P	phi*P	phi*M	phi*M	Cb	Eqn	
1	H001	C5X9	0.354	67.55	29	0.554	55.859	y	134	21454	85536	1909	11518	1.399	H1-1b
2	H002	C5X9	0.348	57.158	10	0.405	68.849	y	186	21454	85536	1909	11790	1.432	H1-1b
3	H003	C5X9	0.388	67.55	6	0.554	55.859	y	165	21454	85536	1909	11853	1.451	H1-1b
4	H004	C5X9	0.333	33.46	109	0.289	33.46	y	99	63439	85536	1909	11853	2.086	H1-1b



Company : American Tower Corp.
 Designer : Trevor.Ridilla
 Job Number : 12984020_C8_05
 Model Name : 302518, Newtown CT 3

12/13/2019
 9:07:27 AM
 Checked By :-

LRFD (Continued)

Member	Shape	Code...	Loc (in)	LC	Shear...	Loc (in)	Dir	LC	phi*P...	phi*P...	phi*M...	phi*M...	Cb	Eqn	
5	H005	C5X9	0.334	23.481	78	0.138	23.481	y	81	63439...	85536	1909...	11853	2.167	H1-1b
6	H006	C5X9	0.062	29.354	2	0.016	14.371	y	79	78860...	85536	1909...	11853	2.03	H1-1b
7	H007	C5X9	0.101	23.383	72	0.037	11.691	y	70	80192...	85536	1909...	11853	1.448	H1-1b
8	H008	PL6X...	0.158	5.677	91	0.115	5.677	y	122	85871...	135000	1406.25	16875	1.547	H1-1b
9	H009	PL6X...	0.161	5.677	71	0.116	5.677	y	71	85871...	135000	1406.25	16875	1.537	H1-1b
10	H010	PL6X...	0.158	5.677	76	0.114	5.677	y	120	85871...	135000	1406.25	16875	1.549	H1-1b
11	H011	C5X9	0.394	9.857	71	0.133	13.916	y	71	71980...	85536	1909...	11853	1.747	H1-1b
12	H012	C5X9	0.386	9.857	75	0.125	13.916	y	76	71980...	85536	1909...	11853	1.751	H1-1b
13	H013	C5X9	0.386	9.857	91	0.126	13.916	y	133	71980...	85536	1909...	11853	1.75	H1-1b
14	H014	HSS2...	0.169	6	73	0.058	6	z	73	61301...	62514	3325.8	3325.8	1.444	H1-1b
15	H015	HSS2...	0.110	6	115	0.048	6	z	114	61301...	62514	3325.8	3325.8	1.412	H1-1b
16	H016	HSS2...	0.111	6	131	0.048	6	z	130	61301...	62514	3325.8	3325.8	1.411	H1-1b
17	H017	C5X9	0.391	9.857	66	0.132	13.916	y	71	71980...	85536	1909...	11853	1.744	H1-1b
18	H018	C5X9	0.384	9.857	81	0.125	13.916	y	79	71980...	85536	1909...	11853	1.752	H1-1b
19	H019	C5X9	0.384	9.857	97	0.125	13.916	y	95	71980...	85536	1909...	11853	1.75	H1-1b
20	H020	HSS2...	0.166	6	71	0.058	0	z	72	61301...	62514	3325.8	3325.8	1.464	H1-1b
21	H021	HSS2...	0.108	6	120	0.048	6	z	120	61301...	62514	3325.8	3325.8	1.438	H1-1b
22	H022	HSS2...	0.109	6	124	0.048	6	z	123	61301...	62514	3325.8	3325.8	1.438	H1-1b
23	H023	PL6X...	0.224	5.677	86	0.161	5.677	y	123	70177...	97200	1012.5	12150	1.546	H1-1b
24	H024	PL6X...	0.228	5.677	70	0.162	5.677	y	71	70177...	97200	1012.5	12150	1.539	H1-1b
25	H025	PL6X...	0.224	5.677	82	0.161	5.677	y	121	70177...	97200	1012.5	12150	1.548	H1-1b
26	H044	C5X9	0.323	23.481	94	0.136	23.481	y	86	63439...	85536	1909...	11853	2.167	H1-1b
27	MP1	PIPE...	0.286	47.813	72	0.143	48.875		100	3087...	32130	1871...	1871...	2.976	H1-1a
28	MP2	PIPE...	0.280	42.5	76	0.160	48.875		121	3087...	32130	1871...	1871...	4.062	H1-1a
29	MP3	PIPE...	0.280	42.5	93	0.160	48.875		124	3087...	32130	1871...	1871...	3.121	H1-1a
30	MP4	PIPE...	0.282	47.813	99	0.145	48.875		72	3087...	32130	1871...	1871...	3	H1-1a
31	MP5	PIPE...	0.282	47.813	115	0.161	48.875		77	3087...	32130	1871...	1871...	2.098	H1-1a
32	MP6	PIPE...	0.284	47.813	131	0.161	48.875		93	3087...	32130	1871...	1871...	2.742	H1-1a
33	MP7	PIPE...	0.425	48.875	8	0.036	49.938		8	3087...	32130	1871...	1871...	1.08	H1-1b
34	MP8	PIPE...	0.526	49.938	11	0.047	49.938		23	3087...	32130	1871...	1871...	1.769	H1-1b
35	MP9	PIPE...	0.527	48.875	5	0.047	49.938		5	3087...	32130	1871...	1871...	1.765	H1-1b
36	MP10	PIPE...	0.318	48.875	175	0.025	48.875		8	3087...	32130	1871...	1871...	2.315	H1-1a
37	MP11	PIPE...	0.298	48.875	192	0.016	49.938		23	3087...	32130	1871...	1871...	2.556	H1-1a
38	MP12	PIPE...	0.288	48.875	196	0.016	49.938		17	3087...	32130	1871...	1871...	2.41	H1-1a
39	M63	(2) 5/...	0.058	3	83	0.059	3		83	39513...	39560.4	4120.2	4120.2	1.404	H1-1b
40	M64	(2) 5/...	0.056	3	113	0.057	3		115	39513...	39560.4	4120.2	4120.2	1.508	H1-1b
41	M65	(2) 5/...	0.059	3	65	0.061	3		72	39513...	39560.4	4120.2	4120.2	1.335	H1-1b
42	M66	(2) 5/...	0.054	3	107	0.056	3		100	39513...	39560.4	4120.2	4120.2	1.33	H1-1b
43	M67	(2) 5/...	0.055	3	125	0.057	3		125	39513...	39560.4	4120.2	4120.2	1.42	H1-1b
44	M68	(2) 5/...	0.059	3	95	0.059	3		87	39513...	39560.4	4120.2	4120.2	1.468	H1-1b

Site Name: HAWLEYVILLE CT
Cumulative Power Density

Operator	Operating Frequency	Number of Trans.	ERP Per Trans.	Total ERP	Distance to Target	Calculated Power Density	Maximum Permissible Exposure*	Fraction of MPE
	(MHz)		(watts)	(watts)	(feet)	(mW/cm ²)	(mW/cm ²)	(%)
VZW PCS	1970	4	1149	4595.76	140	0.0843	1.0	8.43%
VZW Cellular CDMA	869	3	498	1494	140	0.0274	0.5793333333	4.73%
VZW Cellular LTE	880	4	498	1992	140	0.0365	0.5866666667	6.23%
VZW AWS	2145	4	1125	4499.44	140	0.0826	1.0	8.26%
VZW 700	746	4	473	1891.72	140	0.0347	0.4973333333	6.98%
VZW CBRS	3550	4	50	200	140	0.0037	2.3666666667	0.16%

Total Percentage of Maximum Permissible Exposure

34.78%

*Guidelines adopted by the FCC on August 1, 1996, 47 CFR Section 1.13101 based on NCRP Report 86, 1986 and generally on ANSI/IEEE C95.1-19

MHz = Megahertz

mW/cm² = milliwatts per square centimeter

ERP = Effective Radiated Power

Absolute worst case maximum values used, including the following assumptions:

1. closest accessible point is distance from antenna to base of pole;
2. continuous transmission from all available channels at full power for indefinite time period; and,
3. all RF energy is assumed to be directed solely to the base of the pole.

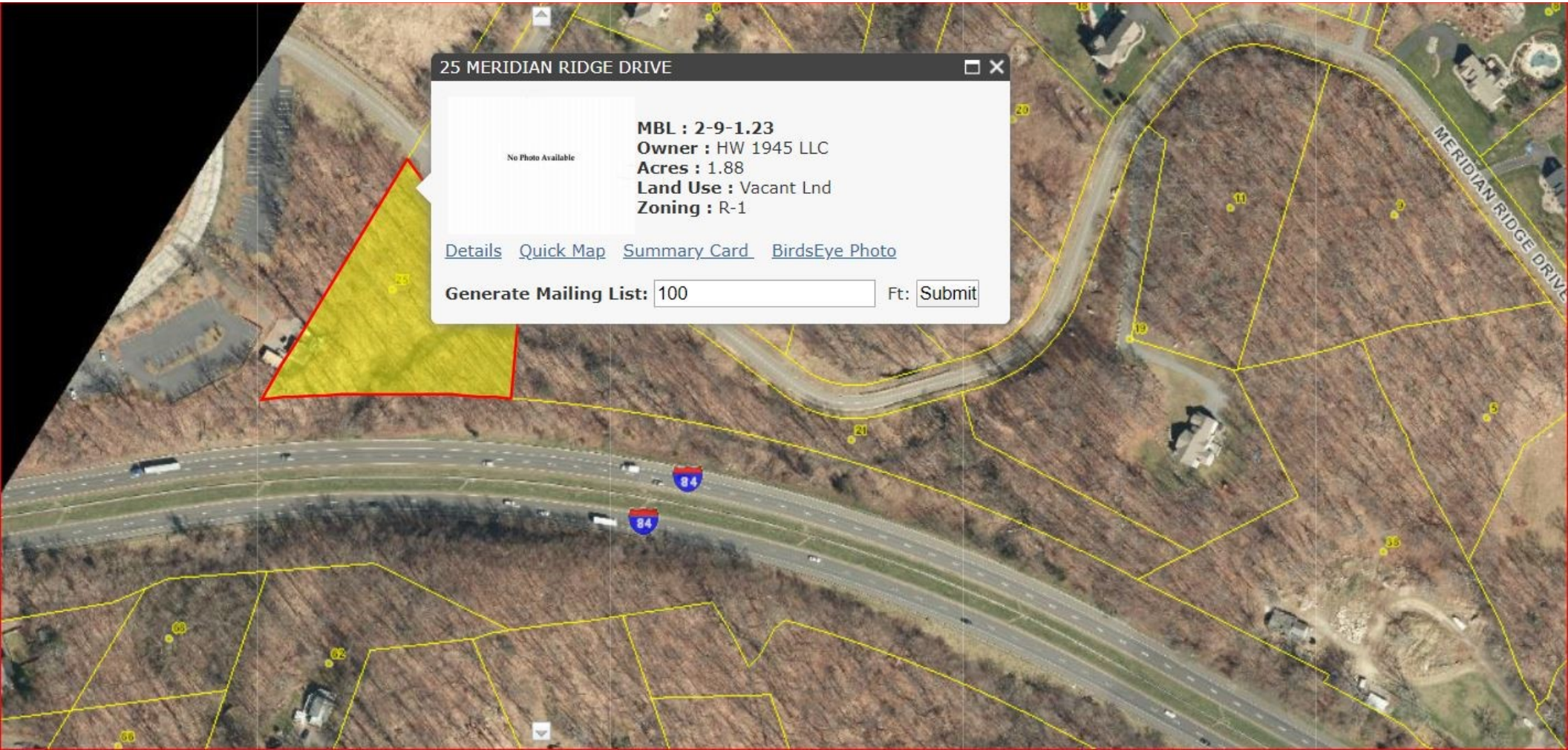
25 MERIDIAN RIDGE DRIVE

No Photo Available

MBL : 2-9-1.23
Owner : HW 1945 LLC
Acres : 1.88
Land Use : Vacant Lnd
Zoning : R-1

[Details](#) [Quick Map](#) [Summary Card](#) [BirdsEye Photo](#)

Generate Mailing List: Ft:





5 FAIRFIELD DR



MBL : G17033
Owner : PHOTRONICS INC
Acres : 5.08
Zoning : IR80
Primary Use : Ind Ld Dv

[Details](#) [Quick Map](#) [Summary Card](#) [VISION](#) [BirdsEye Photo](#)

Generate Mailing List: Ft:

25 MERIDIAN RIDGE DRIVE

Location 25 MERIDIAN RIDGE DRIVE

M/B/L 2/ 9/ 1.23/C /

Acct# 00141100C

Owner MACRICOSTAS CONSTANTINE

Assessment \$332,020

Appraisal \$474,310

PID 15196

Building Count 1

Current Value

Appraisal			
Valuation Year	Improvements	Land	Total
2017	\$114,310	\$360,000	\$474,310

Assessment			
Valuation Year	Improvements	Land	Total
2017	\$80,020	\$252,000	\$332,020

Owner of Record

Owner MACRICOSTAS CONSTANTINE
Co-Owner C/O PROPERTY TAX DEPT
Address P.O. BOX 723597
ATLANTA, GA 31139

Sale Price \$0
Book & Page 713/ 565
Sale Date 06/20/2002

Ownership History

Ownership History			
Owner	Sale Price	Book & Page	Sale Date
MACRICOSTAS CONSTANTINE	\$0	713/ 565	06/20/2002

Building Information

Building 1 : Section 1

Year Built:

Living Area: 0

Building Attributes	
Field	Description
Style	Outbuildings
Model	
Grade:	
Stories	


Occupancy	
Exterior Wall 1	
Exterior Wall 2	
Roof Structure	
Roof Cover	
Interior Wall 1	
Interior Wall 2	
Interior Flr 1	
Interior Flr 2	
Heat Fuel	
Heat Type:	
AC Type:	
Total Bedrooms:	
Full Bthrms:	
Half Baths:	
Extra Fixtures	
Total Rooms:	
Bath Style:	
Kitchen Style:	
Extra Kitchens	
Fireplace(s)	
Extra Opening(s)	
Gas Fireplace(s)	
Blocked FPL(s)	
Woodstove(s)	
SF Fin Bsmt	
Fin Bsmt Qual	
Bsmt Garage	
Int Millwork	
Foundation	
MH Park	

Building Photo



(<http://images.vgsi.com/photos/NewtownCTPhotos//\00\02\10\1>)

Building Layout

 Building Layout

(<http://images.vgsi.com/photos/NewtownCTPhotos//Sketches/15>)

Building Sub-Areas (sq ft)	<u>Legend</u>
No Data for Building Sub-Areas	

Extra Features

Extra Features	<u>Legend</u>
No Data for Extra Features	

Land

Land Use

Land Line Valuation

Use Code 4310
Description CELL SITE
Zone R-1
Neighborhood
Alt Land Appr Category No

Size (Acres) 0
Frontage
Depth
Assessed Value \$252,000
Appraised Value \$360,000

Outbuildings

Outbuildings						Legend
Code	Description	Sub Code	Sub Description	Size	Value	Bldg #
CELL	Cell Tower			1 Units	\$96,000	1
SHD4	Cellular Shed			552 S.F.	\$9,940	1
SHD4	Cellular Shed			405 S.F.	\$7,290	1
FN1	Fence			300 L.F.	\$1,080	1

Valuation History

Appraisal			
Valuation Year	Improvements	Land	Total
2017	\$114,310	\$360,000	\$474,310
2016	\$96,000	\$360,000	\$456,000
2015	\$96,000	\$360,000	\$456,000

Assessment			
Valuation Year	Improvements	Land	Total
2017	\$80,020	\$252,000	\$332,020
2016	\$67,200	\$252,000	\$319,200
2015	\$67,200	\$252,000	\$319,200

5 FAIRFIELD DR

Location 5 FAIRFIELD DR

Mblu G17/ / 033/ /

Acct# 03410000

Owner PHOTRONICS INC

Assessment \$287,690

Appraisal \$410,980

PID 6083

Building Count 1

Current Value

Appraisal			
Valuation Year	Improvements	Land	Total
2018	\$120,450	\$290,530	\$410,980

Assessment			
Valuation Year	Improvements	Land	Total
2018	\$84,320	\$203,370	\$287,690

Owner of Record

Owner PHOTRONICS INC

Sale Price \$530,000

Co-Owner

Certificate

Address 15 SECOR RD
BROOKFIELD, CT 06804

Book & Page 415/0258

Sale Date 06/19/2002

Instrument 08

Ownership History

Ownership History					
Owner	Sale Price	Certificate	Book & Page	Instrument	Sale Date
PHOTRONICS INC	\$530,000		415/0258	08	06/19/2002
MACRICOSTAS CONSTANTINE	\$0		284/ 746		05/19/1994

Building Information

Building 1 : Section 1

Year Built:

Living Area: 0

Building Attributes	
Field	Description
Style	Outbuildings
Model	

Stories:	
Occupancy	
Exterior Wall 1	
Exterior Wall 2	
Roof Structure:	
Roof Cover	
Interior Wall 1	
Interior Wall 2	
Interior Flr 1	
Interior Flr 2	
Heat Fuel	
Heat Type:	
AC Type:	
Total Bedrooms:	
Total Bathrooms	
Total Half Baths:	
Total Xtra Fixtrs:	
Total Rooms:	
Kitchens	
Whirlpool Tub	
Hot Tubs	
Fireplaces	
Fin Bsmt Area	
Fin Bsmt Quality	
Bsmt Garages	

Building Photo



(<http://images.vgsi.com/photos2/BrookfieldCTPhotos//default.jpg>)

Building Layout

Building Layout

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

Extra Features

Extra Features
No Data for Extra Features

Land

Land Use

Use Code 440
Description Ind Ld Dv
Zone IR80

Land Line Valuation

Size (Acres) 5.08
Depth
Assessed Value \$203,370
Appraised Value \$290,530

Outbuildings

--

Outbuildings

Code	Description	Sub Code	Sub Description	Size	Value	Bldg #
PAV1	Paving Asph.			51200 S.F.	\$82,940	1
LT2	Light 2			4 Units	\$7,410	1
LT1	Light 1			24 Units	\$30,100	1

Valuation History**Appraisal**

Valuation Year	Improvements	Land	Total
2018	\$120,450	\$290,530	\$410,980
2017	\$120,450	\$290,530	\$410,980
2015	\$120,450	\$409,060	\$529,510

Assessment

Valuation Year	Improvements	Land	Total
2018	\$84,320	\$203,370	\$287,690
2017	\$84,320	\$203,370	\$287,690
2015	\$84,320	\$286,350	\$370,670

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Business Inquiry

Additional Principals

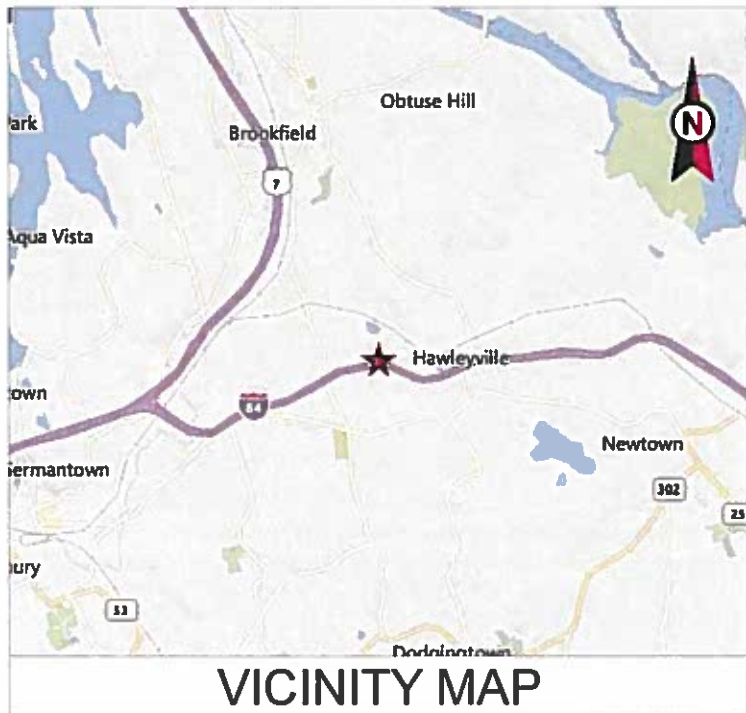
Business ID: 0036597

Business Name:

PHOTRONICS, INC.

Total Number of Principals : 11

Name:	Business Address:	Residence Address:
CONSTANTINE S. MACRICOSTAS CHAIRMAN	15 SECOR ROAD, BROOKFIELD, CT, 06804	5509 PENNOCK POINT ROAD, JUPITER, FL, 33458
RICHELLE E. BURR VP, GENERAL COUNSEL/SECRETARY	15 SECOR ROAD, BROOKFIELD, CT, 06804	7 GREENKNOLL DRIVE, BROOKFIELD, CT, 06804
PETER S. KIRLIN CEO	15 SECOR ROAD, BROOKFIELD, CT, 06804	18 BUTTERNUT RIDGE ROAD, NEWTOWN, CT, 06470
CHRISTOPHER J. PROGLER VICE PRESIDENT, CTO & STRATEGIC PLANNING	601 MILLENNIUM DRIVE, ALLEN, TX, 75013	5901 WOODWIND DRIVE, PLANO, TX, 75093
WALTER M. FIEDEROWICZ DIRECTOR	19 TRADD STREET, CHARLESTON, SC, 29401	19 TRADD STREET, CHARLESTON, SC, 29401
JOSEPH A. FIORITA, JR. DIRECTOR	FIORITA, KORNHAAS & CO., 146 DEER HILL AVENUE, DANBURY, CT, 06810	1 MAPLEVIEW LANE, DANBURY, CT, 06811
GEORGE C. MACRICOSTAS DIRECTOR	930 TAHOE BLVD, #802-525, INCLINE VILLAGE, NV, 89451	930 TAHOE BLVD, #802-525, INCLINE VILLAGE, NV, 89451
MITCHELL G. TYSON DIRECTOR	20 BURROUGHS ROAD, LEXINGTON, MA, 02420	20 BURROUGHS ROAD, LEXINGTON, MA, 02420
LIANG-CHOO HSIA DIRECTOR	13F NO. 9, LANE 30 SECTION 4, CHENG KONG ROAD, NEIHU, TAIPEI, TAIWAN	13F NO. 9, LANE 30 SECTION 4, CHENG KONG ROAD, NEIHU, TAIPEI, TAIWAN
JOHN P. JORDAN SENIOR VICE PRESIDENT, CFO	15 SECOR ROAD, BROOKFIELD, CT, 06804	5 LAKE WIND ROAD, NEW CANAAN, CT, 06840
KANG JYH (FRANK) LEE DIRECTOR	NO 6 LI-HSIN 7TH ROAD, SCIENCE PARK, HSIN-CHU CITY, 30078, TAIWAN	13F #202 CHI-YU ROAD SEC #1, TAIPEI, TAIWAN



VICINITY MAP



AMERICAN TOWER®

ATC SITE NAME: NEWTOWN CT 3
 ATC SITE NUMBER: 302518
 VERIZON SITE NAME: HAWLEYVILLE CT
 VERIZON SITE NUMBER: 469057
 SITE ADDRESS: 6 FAIRFIELD DR (BRKFLD)
 NEWTOWN, CT 06470



LOCATION MAP

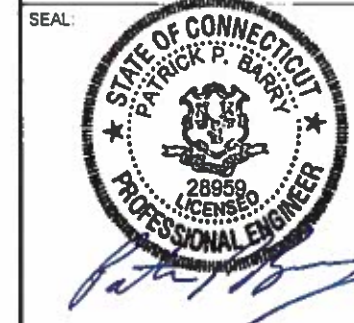
AMERICAN TOWER®
 A.T. ENGINEERING SERVICE, PLLC
 3500 REGENCY PARKWAY
 SUITE 100
 CARY, NC 27518
 PHONE: (919) 468-0112
 COA: PEC.0001553

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REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	MR	12/24/19

ATC SITE NUMBER:
302518
 ATC SITE NAME:
NEWTOWN CT 3

SITE ADDRESS:
 6 FAIRFIELD DR (BRKFLD)
 NEWTOWN CT 06470



Authorized by "EOR"
 Dec 24, 2019
verizon sign

DRAWN BY:	MR
APPROVED BY:	PPB
DATE DRAWN:	12/24/19
ATC JOB NO:	12984020
CUSTOMER ID:	HAWLEYVILLE CT
CUSTOMER #:	469057

COVER SHEET

SHEET NUMBER:
G-001
 REVISION:
0

COMPLIANCE CODE	PROJECT SUMMARY	PROJECT DESCRIPTION	SHEET INDEX				
ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNMENT AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES. 1. INTERNATIONAL BUILDING CODE (IBC) 2. NATIONAL ELECTRIC CODE (NEC) 3. LOCAL BUILDING CODE 4. CITY/COUNTY ORDINANCES	<u>SITE ADDRESS:</u> 6 FAIRFIELD DR (BRKFLD) NEWTOWN, CT 06470 COUNTY: FAIRFIELD <u>GEOGRAPHIC COORDINATES:</u> LATITUDE: 41.42552778 LONGITUDE: -73.37404722 GROUND ELEVATION: 426' AMSL	THE PROPOSED PROJECT INCLUDES MODIFYING GROUND BASED AND TOWER MOUNTED EQUIPMENT AS INDICATED PER BELOW: REMOVE (6) PANELS AND (6) 1-5/8" COAX CABLES INSTALL (9) NEW PANELS, (9) RRU's, (3) DIPLEXERS, (1) 2.02" HYBRID CABLE, AND (1) OVP EXISTING (6) PANELS, AND (6) 1-5/8" COAX CABLES TO REMAIN	SHEET NO:	DESCRIPTION:	REV:	DATE:	BY:
	<u>PROJECT TEAM</u> <u>TOWER OWNER:</u> AMERICAN TOWER 10 PRESIDENTIAL WAY WOBURN, MA 01801 <u>ENGINEER:</u> ATC TOWER SERVICES, LLC 3500 REGENCY PKWY STE 100 CARY, NC 27518 <u>PROPERTY OWNER:</u> CONSTANTINE MACRICOSTAS 5509 PENNOCK POINT RD JUPITER, FL 33458 <u>APPLICANT:</u> VERIZON WIRELESS 20 ALEXANDER DRIVE, 2ND FLOOR WALLINGFORD, CT 06492	<u>PROJECT NOTES</u> 1. THE FACILITY IS UNMANNED. 2. A TECHNICIAN WILL VISIT THE SITE APPROXIMATELY ONCE A MONTH FOR ROUTINE INSPECTION AND MAINTENANCE. 3. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT LAND DISTURBANCE OR EFFECT OF STORM WATER DRAINAGE. 4. NO SANITARY SEWER, POTABLE WATER OR TRASH DISPOSAL IS REQUIRED. 5. HANDICAP ACCESS IS NOT REQUIRED.	G-001	COVER SHEET	0	12/24/19	MR
		<u>PROJECT LOCATION DIRECTIONS</u> I-84 W TO EXIT 9. TURN RIGHT OFF EXIT THEN LEFT ON OLD HAWLEYVILLE RD. AT FORK STAY TO THE RIGHT ONTO SECOR RD. AFTER BRIDGE TURN RIGHT ON FAIRFIELD DR. TOWER IS AHEAD ON RIGHT.	C-002	GENERAL NOTES	0	12/24/19	MR
	<u>UTILITY COMPANIES</u> POWER COMPANY: EVER SOURCE PHONE: (877) 659-6326 TELEPHONE COMPANY: FRONTIER COMMUNICATIONS PHONE: (800) 376-6843	<u>PROJECT LOCATION DIRECTIONS</u> I-84 W TO EXIT 9. TURN RIGHT OFF EXIT THEN LEFT ON OLD HAWLEYVILLE RD. AT FORK STAY TO THE RIGHT ONTO SECOR RD. AFTER BRIDGE TURN RIGHT ON FAIRFIELD DR. TOWER IS AHEAD ON RIGHT.	C-101	DETAILED SITE PLAN	0	12/24/19	MR
	<u>PROJECT LOCATION DIRECTIONS</u> I-84 W TO EXIT 9. TURN RIGHT OFF EXIT THEN LEFT ON OLD HAWLEYVILLE RD. AT FORK STAY TO THE RIGHT ONTO SECOR RD. AFTER BRIDGE TURN RIGHT ON FAIRFIELD DR. TOWER IS AHEAD ON RIGHT.	C-102	TOWER ELEVATION	0	12/24/19	MR	
			C-501	RF SCHEDULE AND ANTENNA INSTALLATION	0	12/24/19	MR
			C-502	CONSTRUCTION DETAILS	0	12/24/19	MR

GENERAL CONSTRUCTION NOTES:

1. ALL WORK SHALL CONFORM TO ALL CURRENT APPLICABLE FEDERAL, STATE, AND LOCAL CODES, INCLUDING ANSIEIA/TIA-222, AND COMPLY WITH ATC CONSTRUCTION SPECIFICATIONS.
2. CONTRACTOR SHALL CONTACT LOCAL 811 FOR IDENTIFICATION OF UNDERGROUND UTILITIES PRIOR TO START OF CONSTRUCTION.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REQUIRED INSPECTIONS.
4. ALL DIMENSIONS TO, OF, AND ON EXISTING BUILDINGS, DRAINAGE STRUCTURES, AND SITE IMPROVEMENTS SHALL BE VERIFIED IN FIELD BY CONTRACTOR WITH ALL DISCREPANCIES REPORTED TO THE ENGINEER.
5. DO NOT CHANGE SIZE OR SPACING OF STRUCTURAL ELEMENTS.
6. DETAILS SHOWN ARE TYPICAL, SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.
7. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
8. CONTRACTOR SHALL BRACE STRUCTURES UNTIL ALL STRUCTURAL ELEMENTS NEEDED FOR STABILITY ARE INSTALLED. THESE ELEMENTS ARE AS FOLLOWS: LATERAL BRACING, ANCHOR BOLTS, ETC.
9. CONTRACTOR SHALL DETERMINE EXACT LOCATION OF EXISTING UTILITIES, GROUNDS DRAINS, DRAIN PIPES, VENTS, ETC. BEFORE COMMENCING WORK.
10. INCORRECTLY FABRICATED, DAMAGED, OR OTHERWISE MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE VERIZON WIRELESS REP PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH REMEDIAL ACTION SHALL REQUIRE WRITTEN APPROVAL BY THE VERIZON WIRELESS REP PRIOR TO PROCEEDING.
11. EACH CONTRACTOR SHALL COOPERATE WITH THE VERIZON WIRELESS REP AND COORDINATE HIS WORK WITH THE WORK OF OTHERS.
12. CONTRACTOR SHALL REPAIR ANY DAMAGE CAUSED BY CONSTRUCTION OF THIS PROJECT TO MATCH EXISTING PRE-CONSTRUCTION CONDITIONS TO THE SATISFACTION OF THE VERIZON WIRELESS CONSTRUCTION MANAGER.
13. ALL CABLE/CONDUIT ENTRY/EXIT PORTS SHALL BE WEATHERPROOFED DURING INSTALLATION USING A SILICONE SEALANT.
14. WHERE EXISTING CONDITIONS DO NOT MATCH THOSE SHOWN IN THIS PLAN SET, CONTRACTOR SHALL NOTIFY THE VERIZON WIRELESS REP IMMEDIATELY.
15. CONTRACTOR SHALL ENSURE ALL SUBCONTRACTORS ARE PROVIDED WITH A COMPLETE AND CURRENT SET OF DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.
16. CONTRACTOR SHALL REMOVE ALL RUBBISH AND DEBRIS FROM THE SITE AT THE END OF EACH DAY.
17. CONTRACTOR SHALL COORDINATE WORK SCHEDULE WITH LANDLORD AND TAKE PRECAUTIONS TO MINIMIZE IMPACT AND DISRUPTION OF OTHER OCCUPANTS OF THE FACILITY.
18. CONTRACTOR SHALL FURNISH VERIZON WIRELESS WITH A PDF MARKED UP AS-BUILT SET OF DRAWINGS UPON COMPLETION OF WORK.
19. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH VERIZON WIRELESS REP TO DETERMINE WHAT, IF ANY, ITEMS WILL BE PROVIDED. ALL ITEMS NOT PROVIDED SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR. CONTRACTOR WILL INSTALL ALL ITEMS PROVIDED.
20. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH VERIZON WIRELESS REP TO DETERMINE IF ANY PERMITS WILL BE OBTAINED BY CONTRACTOR. ALL REQUIRED PERMITS NOT OBTAINED BY VERIZON WIRELESS MUST BE OBTAINED, AND PAID FOR, BY THE CONTRACTOR.
21. CONTRACTOR SHALL INSTALL ALL SITE SIGNAGE IN ACCORDANCE WITH VERIZON WIRELESS SPECIFICATIONS AND REQUIREMENTS.
22. CONTRACTOR SHALL SUBMIT ALL SHOP DRAWINGS TO VERIZON WIRELESS FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
23. ALL EQUIPMENT SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND LOCATED ACCORDING TO VERIZON WIRELESS SPECIFICATIONS, AND AS SHOWN IN THESE PLANS.
24. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
25. CONTRACTOR SHALL NOTIFY VERIZON WIRELESS REP A MINIMUM OF 48 HOURS IN ADVANCE OF POURING CONCRETE OR BACKFILLING ANY UNDERGROUND UTILITIES, FOUNDATIONS OR SEALING ANY WALL, FLOOR OR ROOF PENETRATIONS FOR ENGINEERING REVIEW AND APPROVAL.
26. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SAFETY INCLUDING COMPLIANCE WITH ALL APPLICABLE OSHA STANDARDS AND RECOMMENDATIONS AND SHALL PROVIDE ALL NECESSARY SAFETY DEVICES INCLUDING PPE AND PPM AND CONSTRUCTION DEVICES SUCH AS WELDING AND FIRE PREVENTION, TEMPORARY SHORING, SCAFFOLDING, TRENCH BOXES/SLOPING, BARRIERS, ETC.

27. THE CONTRACTOR SHALL PROTECT AT HIS OWN EXPENSE, ALL EXISTING FACILITIES AND SUCH OF HIS NEW WORK LIABLE TO INJURY DURING THE CONSTRUCTION PERIOD. ANY DAMAGE CAUSED BY NEGLECT ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, OR BY THE ELEMENTS DUE TO NEGLECT ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, EITHER TO THE EXISTING WORK, OR TO HIS WORK OR THE WORK OF ANY OTHER CONTRACTOR, SHALL BE REPAIRED AT HIS EXPENSE TO THE OWNER'S SATISFACTION.
28. ALL WORK SHALL BE INSTALLED IN A FIRST CLASS, NEAT AND WORKMANLIKE MANNER BY MECHANICS SKILLED IN THE TRADE INVOLVED. THE QUALITY OF WORKMANSHIP SHALL BE SUBJECT TO THE APPROVAL OF THE VERIZON WIRELESS REP. ANY WORK FOUND BY THE VERIZON WIRELESS REP TO BE OF INFERIOR QUALITY AND/OR WORKMANSHIP SHALL BE REPLACED AND/OR REWORKED AT CONTRACTOR EXPENSE UNTIL APPROVAL IS OBTAINED.
29. IN ORDER TO ESTABLISH STANDARDS OF QUALITY AND PERFORMANCE, ALL TYPES OF MATERIALS LISTED HEREINAFTER BY MANUFACTURER'S NAMES AND/OR MANUFACTURER'S CATALOG NUMBER SHALL BE PROVIDED BY THESE MANUFACTURERS AS SPECIFIED.

STRUCTURAL STEEL NOTES:

1. STRUCTURAL STEEL SHALL CONFORM TO THE LATEST EDITION OF THE AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS."
2. STRUCTURAL STEEL ROLLED SHAPES, PLATES AND BARS SHALL CONFORM TO THE FOLLOWING ASTM DESIGNATIONS:
 - A. ASTM A-572, GRADE 50 - ALL W SHAPES, UNLESS NOTED OR A992 OTHERWISE
 - B. ASTM A-36 - ALL OTHER ROLLED SHAPES, PLATES AND BARS UNLESS NOTED OTHERWISE.
 - C. ASTM A-500, GRADE B - HSS SECTION (SQUARE, RECTANGULAR, AND ROUND)
 - D. ASTM A-325, TYPE SC OR N - ALL BOLTS FOR CONNECTING STRUCTURAL MEMBERS
 - E. ASTM F-1554 07 - ALL ANCHOR BOLTS, UNLESS NOTED OTHERWISE
3. ALL EXPOSED STRUCTURAL STEEL MEMBERS SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION PER ASTM A123. EXPOSED STEEL HARDWARE AND ANCHOR BOLTS SHALL BE GALVANIZED PER ASTM A153 OR B695.
4. ALL FIELD CUT SURFACES, FIELD DRILLED HOLES AND GROUND SURFACES WHERE EXISTING PAINT OR GALVANIZATION REMOVAL WAS REQUIRED SHALL BE REPAIRED WITH (2) BRUSHED COATS OF ZRC GALVILITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURER'S RECOMMENDATIONS.
5. DO NOT DRILL HOLES THROUGH STRUCTURAL STEEL MEMBERS EXCEPT AS SHOWN AND DETAILED ON STRUCTURAL DRAWINGS.
6. CONNECTIONS:
 - A. ALL WELDING TO BE PERFORMED BY AWS CERTIFIED WELDERS AND CONDUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE AWS WELDING CODE D1.1.
 - B. ALL WELDS SHALL BE INSPECTED VISUALLY. 25% OF WELDS SHALL BE INSPECTED WITH DYE PENETRANT OR MAGNETIC PARTICLE TO MEET THE ACCEPTANCE CRITERIA OF AWS D1.1. REPAIR ALL WELDS AS NECESSARY.
 - C. INSPECTION SHALL BE PERFORMED BY AN AWS CERTIFIED WELD INSPECTOR.
 - D. IT IS THE CONTRACTORS RESPONSIBILITY TO PROVIDE BURNING/WELDING PERMITS AS REQUIRED BY LOCAL GOVERNING AUTHORITY AND IF REQUIRED SHALL HAVE FIRE DEPARTMENT DETAIL FOR ANY WELDING ACTIVITY.
 - E. ALL ELECTRODES TO BE LOW HYDROGEN, MATCHING FILLER METAL, PER AWS D1.1, UNLESS NOTED OTHERWISE.
 - F. MINIMUM WELD SIZE TO BE 0.1875 INCH FILLET WELDS, UNLESS NOTED OTHERWISE.
 - G. PRIOR TO FIELD WELDING GALVANIZING MATERIAL, CONTRACTOR SHALL GRIND OFF GALVANIZING 1/4" BEYOND ALL FIELD WELD SURFACES. AFTER WELD AND WELD INSPECTION IS COMPLETE, REPAIR ALL GROUND AND WELDED SURFACES WITH ZRC GALVILITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURERS RECOMMENDATIONS.



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0	FOR CONSTRUCTION	MR	12/24/19


ATC SITE NUMBER:
302518

ATC SITE NAME:
NEWTOWN CT 3

SITE ADDRESS:
 6 FAIRFIELD DR (BRKFLO)
 NEWTOWN CT 06470

SEAL:



Authorized by "EOR"
 Dec 2019


DRAWN BY:	MR
APPROVED BY:	PPB
DATE DRAWN:	12/24/19
ATC JOB NO:	12984020
CUSTOMER ID:	HAWLEYVILLE CT
CUSTOMER #:	469057

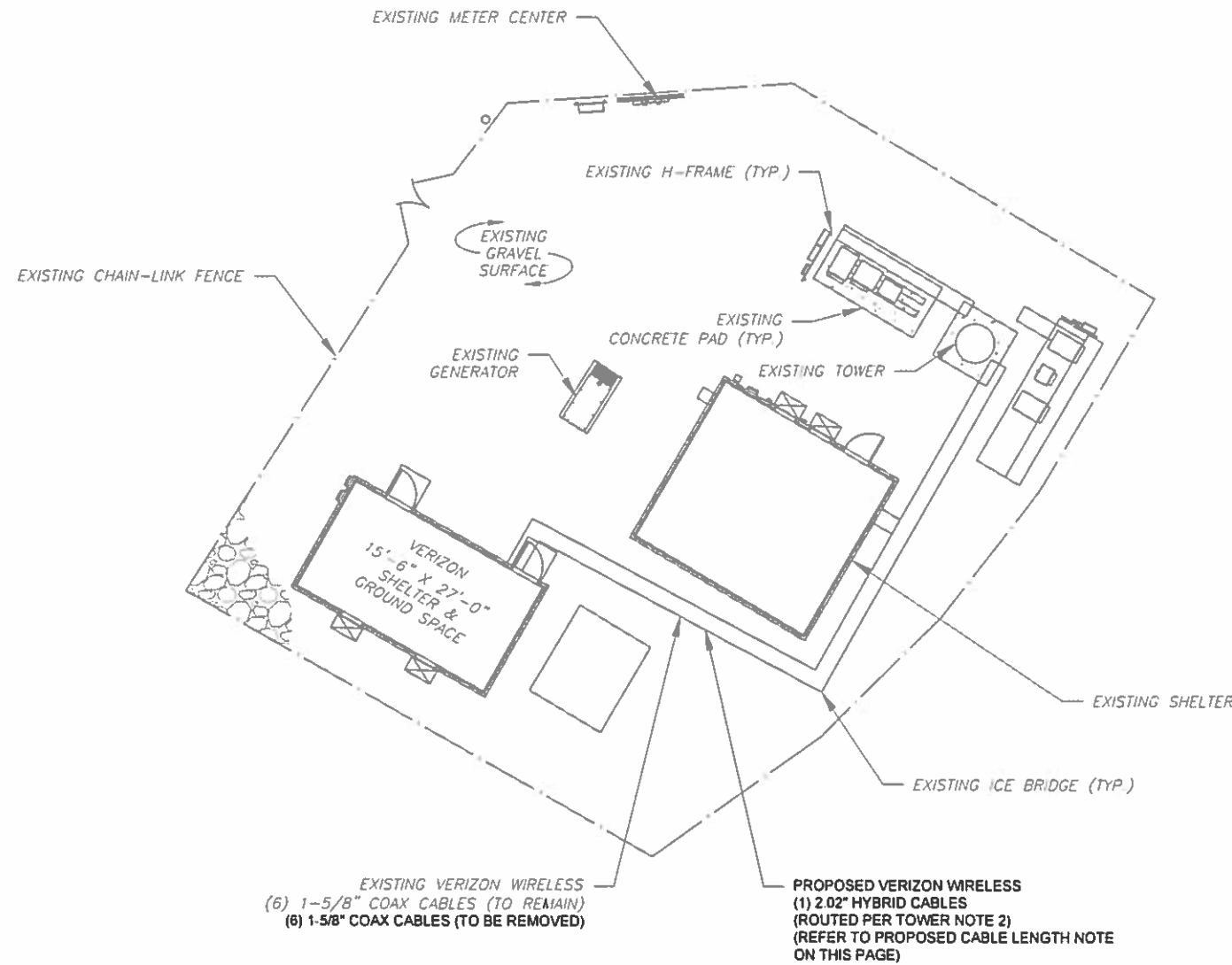
GENERAL NOTES

SHEET NUMBER:	REVISION:
G-002	0

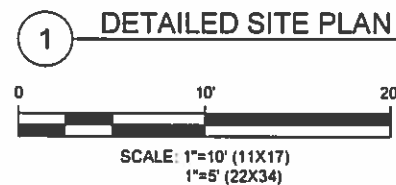
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SITE PLAN NOTES:

1. THIS SITE PLAN REPRESENTS THE BEST PRESENT KNOWLEDGE AVAILABLE TO THE ENGINEER AT THE TIME OF THIS DESIGN. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO CONSTRUCTION AND VERIFY ALL EXISTING CONDITIONS RELATED TO THE SCOPE OF WORK FOR THIS PROJECT.
2. ICE BRIDGE, CABLE LADDER, COAX PORT, CABLE SUPPORTS, AND CABLES ARE SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL CONFIRM THE EXACT LOCATION OF ALL PROPOSED AND EXISTING EQUIPMENT AND STRUCTURES DEPICTED ON THIS PLAN. BEFORE INSTALLING NEW CABLE SUPPORT STRUCTURES, COAX PORTS, OR ANY OTHER EQUIPMENT, CONTRACTOR SHALL VERIFY ALL ASPECTS OF THE COMPONENTS MEET THE ATC SPECIFICATIONS.



PROPOSED CABLE LENGTH:
 ESTIMATED LENGTH OF PROPOSED CABLE IS 216'. ESTIMATED LENGTH OF CABLE IS CALCULATED BY ADDING THE RAD CENTER AND THE DISTANCE FROM THE SHELTER ENTRY PLATE TO THE TOWER (ALONG THE ICE BRIDGE) AND A SAFETY FACTOR MEASUREMENT OF 15% (OF THE TWO PREVIOUS VALUES).




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302518
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NEWTOWN CT 3
 SITE ADDRESS:
 6 FAIRFIELD DR (BRKFLD)
 NEWTOWN CT 06470

SEAL:



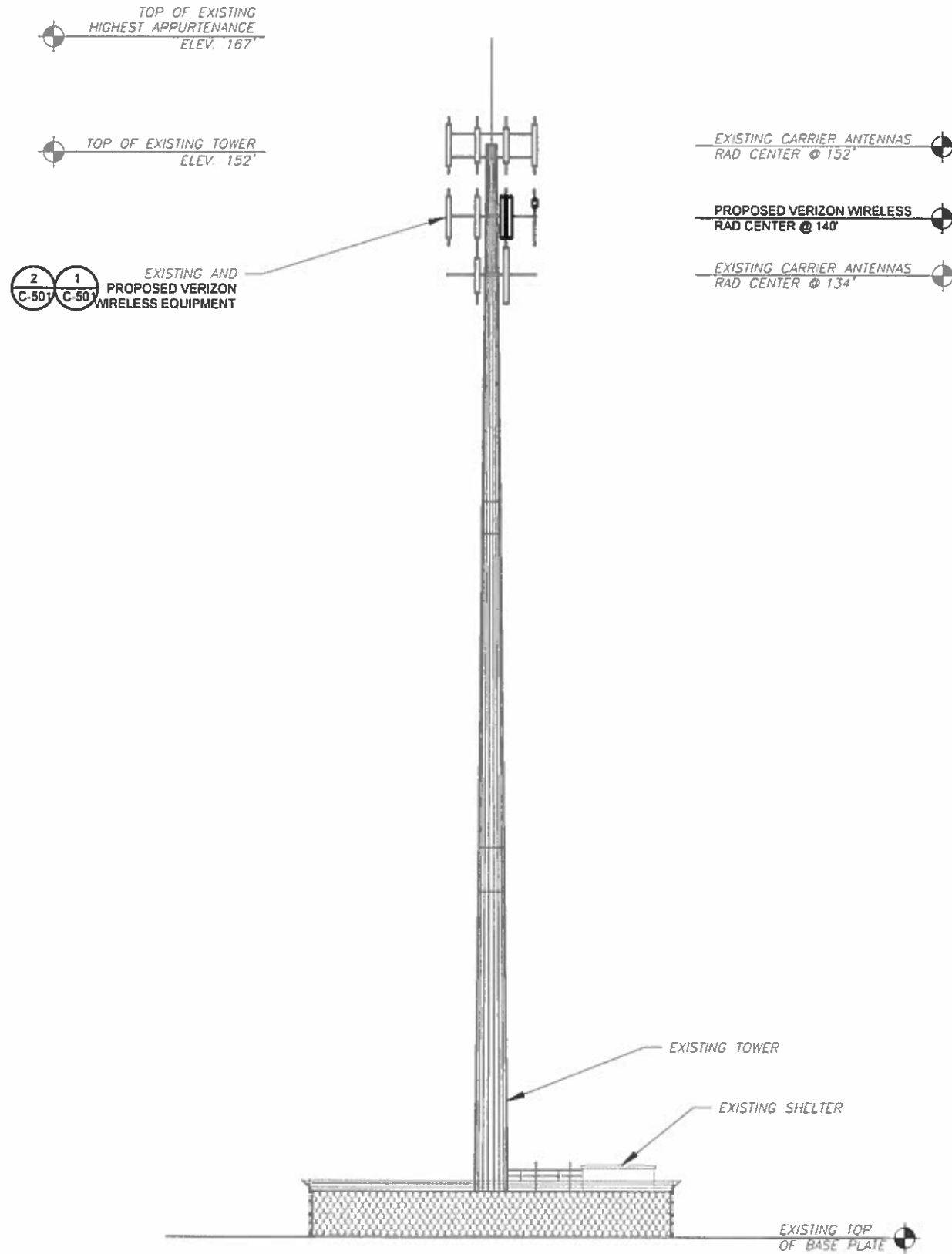
Patrick P. Barry

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DRAWN BY:	MR
APPROVED BY:	PPB
DATE DRAWN:	12/24/19
ATC JOB NO:	12984020
CUSTOMER ID:	HAWLEYVILLE CT
CUSTOMER #:	469057

DETAILED SITE PLAN	
SHEET NUMBER:	REVISION:
C-101	0

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1 TOWER ELEVATION
SCALE: NOT TO SCALE

TOWER NOTE:

- IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM WITH THE AMERICAN TOWER CONSTRUCTION MANAGER THAT THEY HAVE THE MOST RECENT VERSION OF THE STRUCTURAL ANALYSIS BEFORE COMMENCING WORK. EXISTING AND PROPOSED TOWER APPURTENANCES, MOUNTS, AND ANTENNAS ARE SHOWN BASED ON THE STRUCTURAL ANALYSIS.
- ROUTE PROPOSED CABLES ALONG SAME PATH AS EXISTING CABLES AND IN ACCORDANCE WITH STRUCTURAL ANALYSIS. IF ADEQUATE SPACE EXISTS, ROUTE CABLES THROUGH ENTRY PORT HOLE, UP INSIDE OF MONOPOLE, AND THROUGH EXIT PORT HOLE. IF ROUTING OUTSIDE THE MONOPOLE, ATTACH CABLES USING STAND-OFF ADAPTERS MOUNTED TO TOWER USING STAINLESS STEEL BANDING. ADEQUATELY SECURE CABLES USING EITHER APPROPRIATELY SIZED STAINLESS STEEL SNAP-INS OR MOUNTING HARDWARE AND BRACKETS AS SPECIFIED BY CABLE MANUFACTURER.
- ATC DID NOT CONFIRM EXISTING SITE CONDITIONS INCLUDING, BUT NOT LIMITED TO, ANTENNA HEIGHTS, ANTENNA AZIMUTHS AND MOUNT CONFIGURATIONS.
- TOWER ELEVATIONS ARE MEASURED FROM TOP OF BASE PLATE TO MATCH STRUCTURAL ANALYSIS. ELEVATIONS DO NOT REFLECT TRUE ABOVE GROUND LEVEL (A.G.L.)

ANTENNA NOTES:

- ALL ANTENNAS TO BE FURNISHED WITH DOWNTILT BRACKETS. CONTRACTOR TO COORDINATE REQUIRED MECHANICAL DOWNTILT FOR EACH ANTENNA WITH VERIZON RF ENGINEER.
- ANTENNA CENTERLINE HEIGHT IS ABOVE GROUND LEVEL (AGL).
- CONTRACTOR SHALL VERIFY ANTENNA TYPE, AZIMUTH, DOWNTILT, AND ANTENNA NUMBER PER SECTOR WITH CONSTRUCTION MANAGER PRIOR TO CONSTRUCTION.
- ALL PERSONNEL WORKING ON THE TOWER MUST COMPLY WITH VERIZON'S RF EMISSIONS GUIDELINE POLICY.
- CHECK WITH RF ENGINEER FOR LATEST ANTENNA TYPE AND AZIMUTH.
- CONTRACTOR SHALL NOT INSTALL SHRINK WRAP UNTIL AFTER CABLES HAVE BEEN SWEEPED.
- THE USE OF ALTERNATE GROUNDING MEANS (SUCH AS LYNCOLE XIT) SHALL COMPLY WITH O.C.E.I. CONSTRUCTION SPECIFICATIONS AND BUILDING PRACTICES.

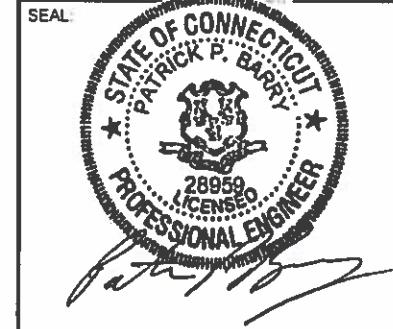


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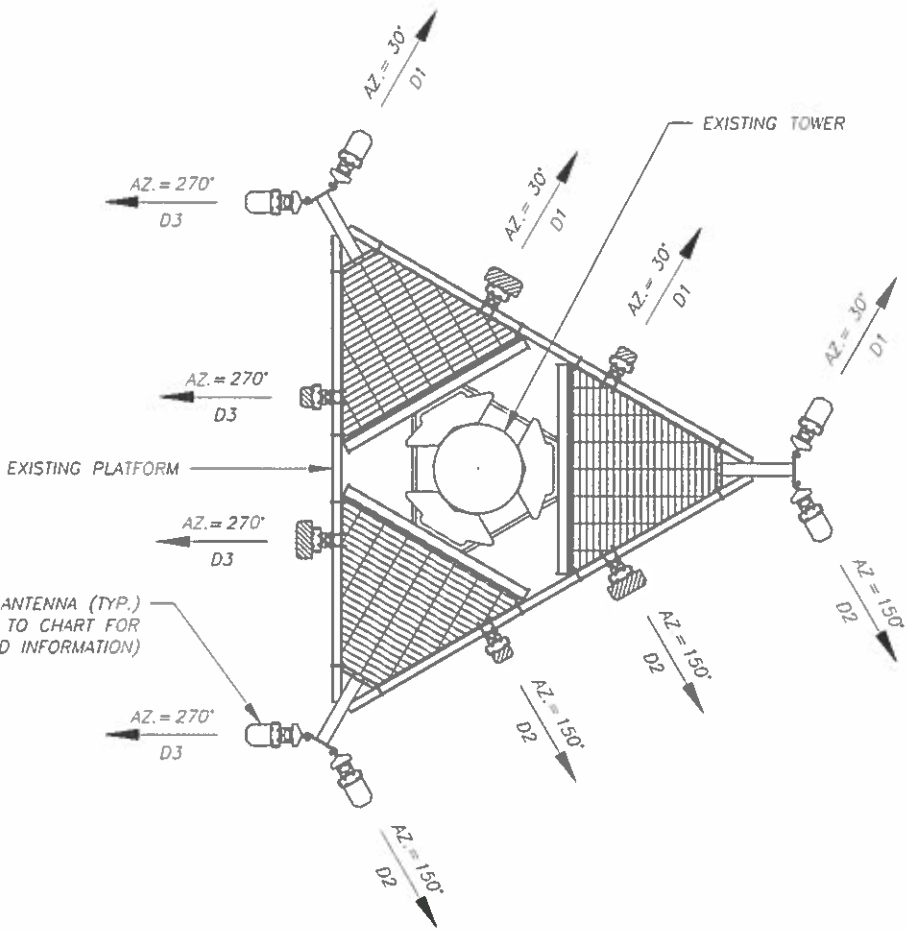


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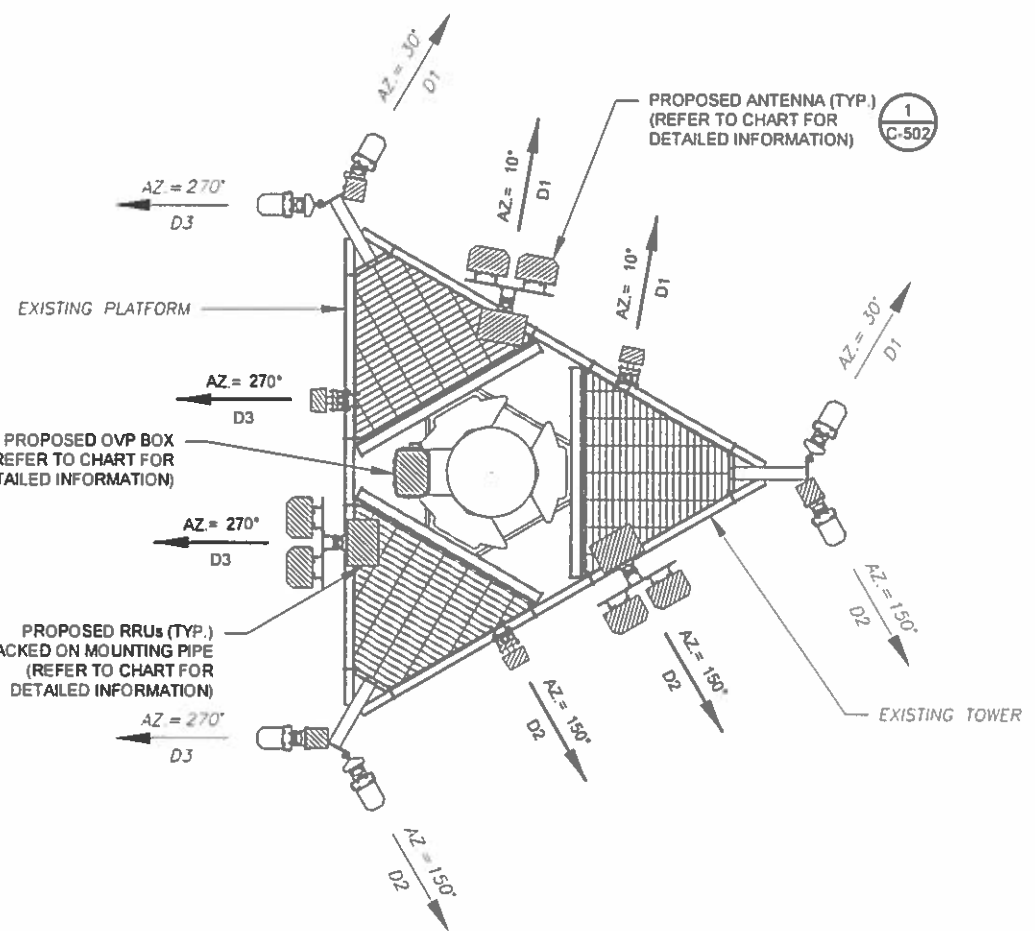
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CUSTOMER #:	469057

TOWER ELEVATION

SHEET NUMBER:	REVISION:
C-102	0



1 CURRENT ANTENNA PLAN



2 FINAL ANTENNA PLAN

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CUSTOMER #:	469057

RF SCHEDULE AND ANTENNA INSTALLATION

SHEET NUMBER:
C-501

REVISION:
0

EXISTING ANTENNA SCHEDULE								
LOCATION			ANTENNA SUMMARY				NON ANTENNA SUMMARY	
SECTOR	RAD	AZ	POS	ANTENNA	BAND	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS
D1	140'	30°	A1	DBB46H80E-SX	850 CDMA	RMN	-	-
			A2	P65-16-XL-2	-	RMV	-	-
			A3	MGD3-800T0	-	RMV	-	-
			A4	DBB46H80E-SX	850 CDMA	RMN	-	-
D2	140'	150°	B1	DBB46H80E-SX	850 CDMA	RMN	-	-
			B2	P65-16-XL-2	-	RMV	-	-
			B3	MGD3-800T0	-	RMV	-	-
			B4	DBB46H80E-SX	850 CDMA	RMN	-	-
D3	140'	270°	C1	DBB46H80E-SX	850 CDMA	RMN	-	-
			C2	P65-16-XL-2	-	RMV	-	-
			C3	MGD3-800T0	-	RMV	-	-
			C4	DBB46H80E-SX	850 CDMA	RMN	-	-

- NOTES
- BASED ON APPROVED ATC APPLICATION 12984020, DATED 10/30/19. CONFIRM WITH VERIZON WIRELESS REP FOR APPLICABLE UPDATES/REVISIONS AND MOST RECENT RFDS FOR NSN CONFIGURATION (CONFIG). GC TO CAP ALL UNUSED PORTS.
 - ATC HAS NOT YET VERIFIED ANY EXISTING ANTENNA CONFIG OR MOUNT CONFIG. CONTRACTOR TO VERIFY MOUNT CONFIG HAS SUFFICIENT SPACE FOR PROPOSED LESSEE EQUIPMENT (EQUIP) (I.E. CLEARANCES, MOUNT PIPE, SUFFICIENT LENGTH, ETC.) ATC DID NOT ANALYZE ANTENNA MOUNT TO DETERMINE ADEQUATE STRUCTURAL CAPACITY FOR ANY LESSEE LOADING.
 - ALL PROPOSED EQUIP INCLUDING ANTENNAS, COAX, ETC. SHALL BE MOUNTED IN ACCORDANCE WITH THE TOWER STRUCTURAL ANALYSIS ON FILE WITH ATC'S CM.
 - CONFIRM SPACING OF PROPOSED EQUIP DOES NOT CAUSE TOWER CONFLICTS NOR IMPEDE TOWER CLIMBING PEGS.
 - POSITIONS START WITH FIRST PIPE ON THE LEFT SIDE (AS VIEWED FROM BEHIND THE MOUNT).

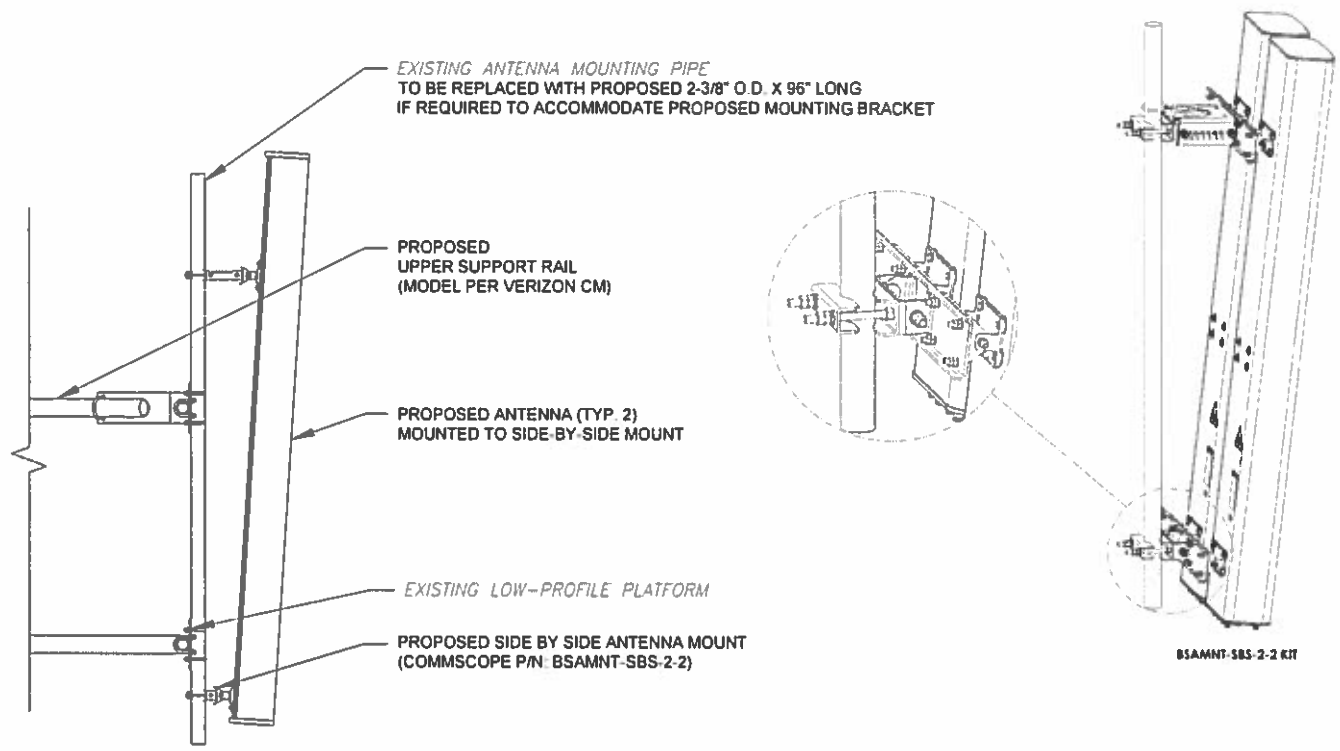
FINAL ANTENNA SCHEDULE								
LOCATION			ANTENNA SUMMARY				NON ANTENNA SUMMARY	
SECTOR	RAD	AZ	POS	ANTENNA	BAND	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS
D1	140'	10°	A1	DBB46H80E-SX	850 CDMA	RMN	CBC78T-DS-43-2X	ADD
			A2	(2) JAHH-65B-R3B	700/850/1900/2100 LTE	ADD	B2/B66A RRH-BR049 & B5/B13 RRH-BR04C	ADD
		30°	A3	OUTDOOR CBRS 20W RRH -CLIP-ON ANTENNA	-	ADD	OUTDOOR CBRS 20W RRH	ADD
			A4	DBB46H80E-SX	850 CDMA	RMN	-	-
D2	140'	150°	B1	DBB46H80E-SX	850 CDMA	RMN	CBC78T-DS-43-2X	ADD
			B2	(2) JAHH-65B-R3B	700/850/1900/2100 LTE	ADD	B2/B66A RRH-BR049 & B5/B13 RRH-BR04C	ADD
			B3	OUTDOOR CBRS 20W RRH -CLIP-ON ANTENNA	-	ADD	OUTDOOR CBRS 20W RRH	ADD
			B4	DBB46H80E-SX	850 CDMA	RMN	-	-
D3	140'	270°	C1	DBB46H80E-SX	850 CDMA	RMN	CBC78T-DS-43-2X	ADD
			C2	(2) JAHH-65B-R3B	700/850/1900/2100 LTE	ADD	B2/B66A RRH-BR049 & B5/B13 RRH-BR04C	ADD
			C3	OUTDOOR CBRS 20W RRH -CLIP-ON ANTENNA	-	ADD	OUTDOOR CBRS 20W RRH	ADD
			C4	DBB46H80E-SX	850 CDMA	RMN	-	-

EXISTING FIBER DISTRIBUTION/OVP BOX		EXISTING CABLING SUMMARY			STATUS ABBREVIATIONS		
MODEL NUMBER	STATUS	COAX	HYBRID	STATUS	RMV:	REL:	DSC:
-	-	(6) 1-5/8"	-	RMN	TO BE REMOVED	TO BE RELOCATED	TO BE DISCONNECTED & REMAIN
-	-	(6) 1-5/8"	-	RMV	TO REMAIN	TO BE ADDED	

3 EQUIPMENT SCHEDULES

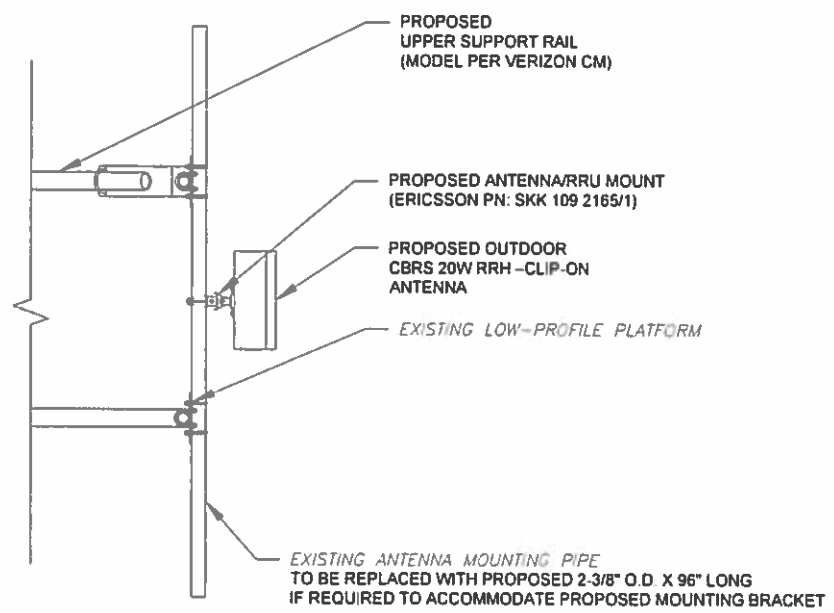
CABLE LENGTHS FOR JUMPERS FIBER DISTRIBUTION/OVP TO RRU: 15' RRU TO ANTENNA: 10'		FINAL FIBER DISTRIBUTION/OVP BOX		FINAL CABLING SUMMARY		
MODEL NUMBER	STATUS	COAX	HYBRID	STATUS		
-	-	(6) 1-5/8"	-	RMN		
DB-C1-12C-24AB-02	ADD	-	(1) 2.02"	ADD		

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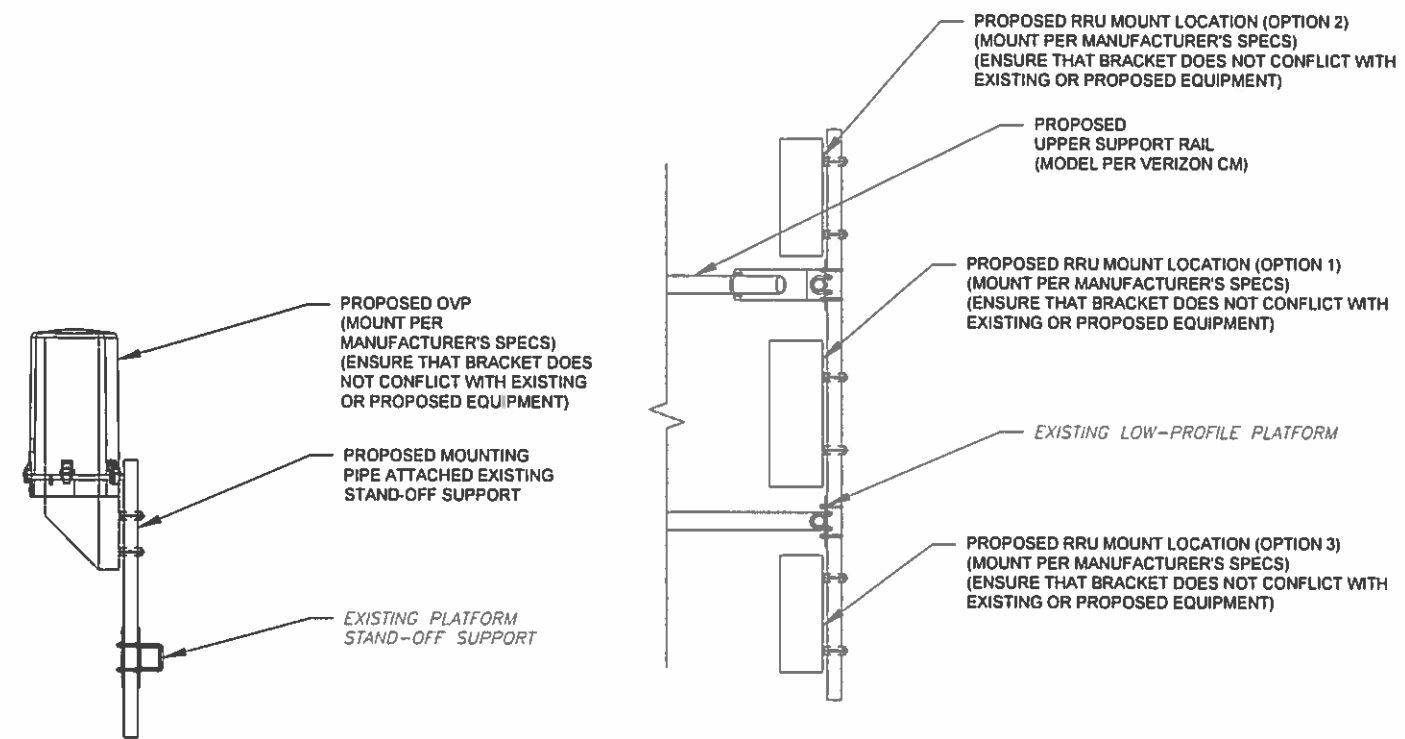


PROFILE VIEW

ISOMETRIC VIEW (BY MANUFACTURER)

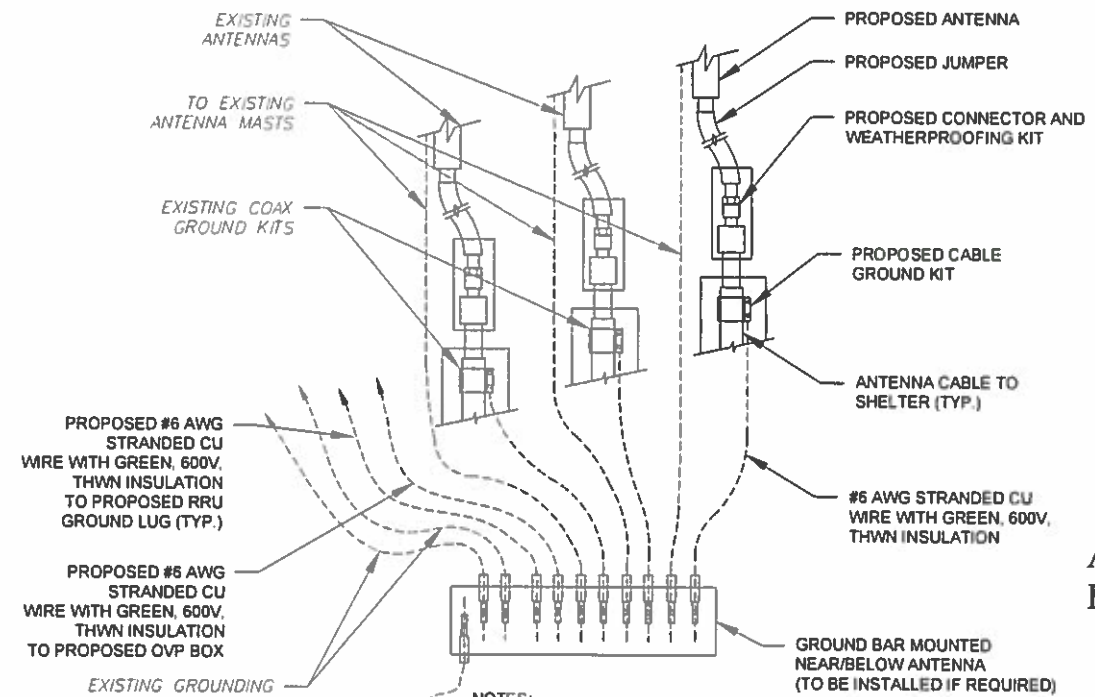


1 PROPOSED SIDE-BY-SIDE MOUNT
SCALE: NOT TO SCALE



2 PROPOSED OVP MOUNTING
SCALE: NOT TO SCALE

3 PROPOSED RRU MOUNTING DETAIL - TYPICAL
SCALE: NOT TO SCALE



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

4 TYPICAL ANTENNA GROUNDING DIAGRAM
SCALE: NOT TO SCALE

AMERICAN TOWER®
A.T. ENGINEERING SERVICE, PLLC
3500 REGENCY PARKWAY
SUITE 100
CARY, NC 27518
PHONE: (919) 468-0112
COA: PEC.0001553

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REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	MR	12/24/19

ATC SITE NUMBER:
302518

ATC SITE NAME:
NEWTOWN CT 3

SITE ADDRESS:
6 FAIRFIELD DR (BRKFLD)
NEWTOWN CT 06470



Authorized by "EOR"
Dec **Verizon** Design

DRAWN BY:	MR
APPROVED BY:	PPB
DATE DRAWN:	12/24/19
ATC JOB NO:	12984020
CUSTOMER ID:	HAWLEYVILLE CT
CUSTOMER #:	469057

CONSTRUCTION DETAILS	
SHEET NUMBER:	REVISION:
C-502	0