

Alex Murshteyn, Site Acquisition Consultant
c/o Cellco Partnership d/b/a Verizon Wireless
Centerline Communications, LLC
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July 30, 2018

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

RE: Notice of Exempt Modification // Site: Enfield 4 CT (ATC: 302489)
(77) Town Farm Road, Enfield, CT 06082
N 41.9659 // W 72.5527

Dear Ms. Bachman:

Cellco Partnership d/b/a Verizon Wireless currently maintains 12 antennas at the 130-foot mount on the existing 150-foot monopole tower, located at (77) Town Farm Road (aka 1 Ecology Drive private way), Enfield, CT. The tower is owned by American Tower. The property is owned by the Town of Enfield. Verizon Wireless now intends remove 6 of its antennas to replace with 6 and install them on side-by-side mounts for the LTE (700/850/1900/2100 MHz) replacements for its PCS/AWS/LTE upgrade. Additionally, Verizon Wireless will install 6 new remote radio head units (RRUs), including 3 replacements, to bring the total RRU count to 12; 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 Michael Ludwick, Mayor for the Town of Enfield, its Assistant Town Planner Raquel Ocasio, including for the Planning & Zoning Department and American Tower, the tower owner.

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 July 25, 2017 by A.T. Engineering Service, PLLC, a structural analysis dated July 18, 2018 by A.T. Engineering Service, PLLC and 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 July 18, 2018.

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
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Raynham, MA 02767
Mobile: (508) 821-0159
AMurshteyn@centerlinecommunications.com

Attachments

cc: Michael Ludwick Mayor and Councilor at Large - 1Z9Y45030328689497
Raquel Ocasio, Assistant Town Planner - as P&Z official - 1Z9Y45030325046105
American Tower Corporation - as tower owner - 1Z9Y45030329273933
Town of Enfield - as property owner - see above



AMERICAN TOWER®
CORPORATION

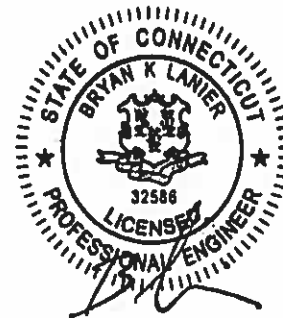
Structural Analysis Report

Structure : 150 ft Monopole
ATC Site Name : Enfd - Enfield, CT
ATC Site Number : 302489
Engineering Number : OAA732957_C3_02
Proposed Carrier : Verizon
Carrier Site Name : ENFIELD 4 CT
Carrier Site Number : PSLC# 467219 - PROJ# 2554737
Site Location : Town Farm Road
Enfield, CT 06082-5152
41.965900,-72.552700
County : HARTFORD
Date : July 18, 2018
Max Usage : 100%
Result : Pass

Prepared By:
Adam Pittman
Structural Engineer II

Adam Pittman

Reviewed By:



Authorized by "EOR"
Jul 19 2018 8:29 AM

cosign

COA: PEC.0001553



Table of Contents

Introduction	1
Supporting Documents	1
Analysis	1
Conclusion.....	1
Existing and Reserved Equipment.....	2
Equipment to be Removed.....	3
Proposed Equipment	3
Structure Usages	4
Foundations	4
Deflection, Twist, and Sway.....	4
Standard Conditions	5
Calculations	Attached



Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 150 ft monopole to reflect the change in loading by Verizon.

Supporting Documents

Tower Drawings	Smith Cullum Acquisition #CT-0025, dated May 14, 2001 ITT Meyer Specification #AT-8935, Type B, dated April 13, 1984
Foundation Drawing	Southern New England Telephone, dated June 6, 1985
Geotechnical Report	MB & A Project #011107, dated June 16, 2001
Modifications	ATC Job #40071639, dated December 6, 2007 ATC Job #48982632, dated April 25, 2012 ATC Job #613768312, dated February 2, 2016

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:	97 mph (3-Second Gust, Vasd) / 125 mph (3-Second Gust, Vult)
Basic Wind Speed w/ Ice:	50 mph (3-Second Gust) w/ 1" radial ice concurrent
Code:	ANSI/TIA-222-G / 2012 IBC / 2016 Connecticut State Building Code
Structure Class:	II
Exposure Category:	C
Topographic Category:	1
Crest Height:	0 ft
Spectral Response:	S _s = 0.18, S ₁ = 0.06
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

Elevation ¹ (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
150.0	154.0	3	Kaelus DBC0061F1V51-2	Platform w/ Handrails	(12) 1 5/8" Coax (4) 0.78" 8 AWG 6 (2) 0.39" Fiber Trunk (1) 2" Conduit (1) 3" Conduit	AT&T Mobility
		3	Powerwave LGP21401			
		2	Raycap DC6-48-60-18-8F ("Squid")			
		3	Ericsson RRUS A2 B2			
		3	Ericsson RRUS 11 (Band 12) (55 lb)			
		3	Ericsson RRUS 32 B30			
		3	Ericsson RRUS-11 (19.7â€œ□)			
		3	Ericsson RRUS-12 B2			
		3	Ericsson Radio 8843			
	3	Powerwave 7770.00				
	151.0	3	CCI OPA-65R-LCUU-H8			
		3	CCI TPA-65R-LCUUUU-H8			
157.0		1	Decibel DB809KE-SY	Spok Holdings		
144.0	144.0	2	Diamond X50A	Stand-Offs	(2) 1/2" Coax	Senet
140.0	140.0	3	Ericsson KRY 112 144/1	Platform w/ Handrails	(12) 1 5/8" Coax (1) 1 1/4" Hybriflex	T-Mobile
		3	Ericsson RRUS-11 (50 lbs.)			
		3	Ericsson AIR 21, 1.3 M, B2A B4P			
		3	Ericsson AIR 21, 1.3M, B4A B2P			
		3	Andrew LNX-6515DS-VTM			
127.0	130.0	6	RFS FD9R6004/2C-3L	Low Profile Platform	(12) 1 5/8" Coax (2) 1 5/8" Hybriflex	Verizon
		3	Alcatel-Lucent B13 RRH4x30-4R 700U			
		3	Alcatel-Lucent B66A RRH 4x45			
		2	RFS DB-T1-6Z-8AB-OZ			
		3	Antel BXA-80080-6CF-EDIN- X			
115.0	115.0	3	76" x 6" Panel	Flush	(6) 1 5/8" Coax	Metro PCS
104.0	111.0	2	DragonWave Horizon Compact	Side Arms	(6) 5/16" Coax (4) 1/2" Coax (4) 1 1/4" Hybriflex (2) 2" Conduit	Clearwire
		2	DragonWave A-ANT-11G-2-C			
	108.0	1	24" x 24" Junction Box			
	104.0	6	Alcatel-Lucent RRH2x50-08			
		3	Alcatel-Lucent 1900MHz RRH (65MHz) w/ solar shield			
		3	Alcatel-Lucent TD-RRH8x20-25 w/ Solar Shield			
		3	KMW ETCR-654L12H6			
64.0	64.0	1	Channel Master Type 120	Leg	(1) 0.28" RG-6	Spok Holdings



Equipment to be Removed

Elevation ¹ (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
127.0	127.0	6	Commscope SBNHH-1D65B	-	-	Verizon
		3	Antel BXA-70063-4CF-EDIN-10			
		3	Alcatel-Lucent 1900MHz 4X45 RRH			

Proposed Equipment

Elevation ¹ (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
127.0	130.0	3	Nokia AirScale RRH 4T4R B5 160W AHCA	Low Profile Platform	-	Verizon
		3	Alcatel-Lucent B25 RRH4x30			
		3	Antel BXA-70063/4CF			
		6	Commscope JAHH-65B-R3B			

¹Mount elevation is defined as height above bottom of steel structure to the bottom of mount, RAD elevation is defined as center of antenna above ground level (AGL).



Structure Usages

Structural Component	Controlling Usage	Pass/Fail
Anchor Bolts	80%	Pass
Shaft	100%	Pass
Base Plate	54%	Pass
Flanges	62%	Pass
Reinforcement	100%	Pass

Foundations

Reaction Component	Analysis Reactions	% of Usage
Moment (Kips-Ft)	3,924.4	94%
Axial (Kips)	127.3	49%
Shear (Kips)	35.4	12%

The structure base reactions resulting from this analysis were found to be acceptable through analysis based on geotechnical and foundation information, therefore no modification or reinforcement of the foundation will be required.

Deflection and Sway*

Antenna Elevation (ft)	Antenna	Carrier	Deflection (ft)	Sway (Rotation) (°)
127.0	Nokia AirScale RRH 4T4R B5 160W AHCA	Verizon	1.795	1.713
	Alcatel-Lucent B25 RRH4x30			
	Antel BXA-70063/4CF			
	Commscope JAHH-65B-R3B			
104.0	DragonWave A-ANT-11G-2-C	Clearwire	1.170	1.411
64.0	Channel Master Type 120	Spok Holdings	0.424	0.738

*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

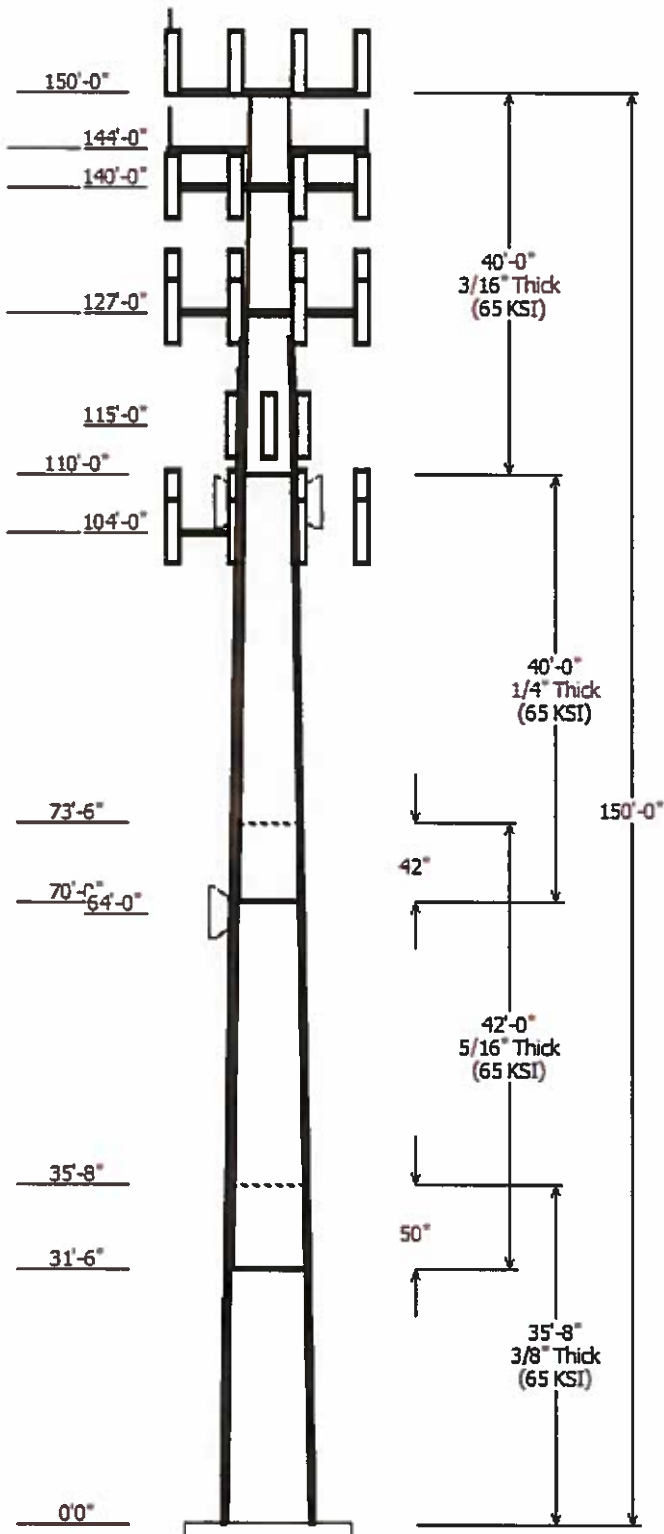
It is the responsibility of the client to ensure that the information provided to A.T. Engineering Service, PLLC and used in the performance of our engineering services is correct and complete.

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.

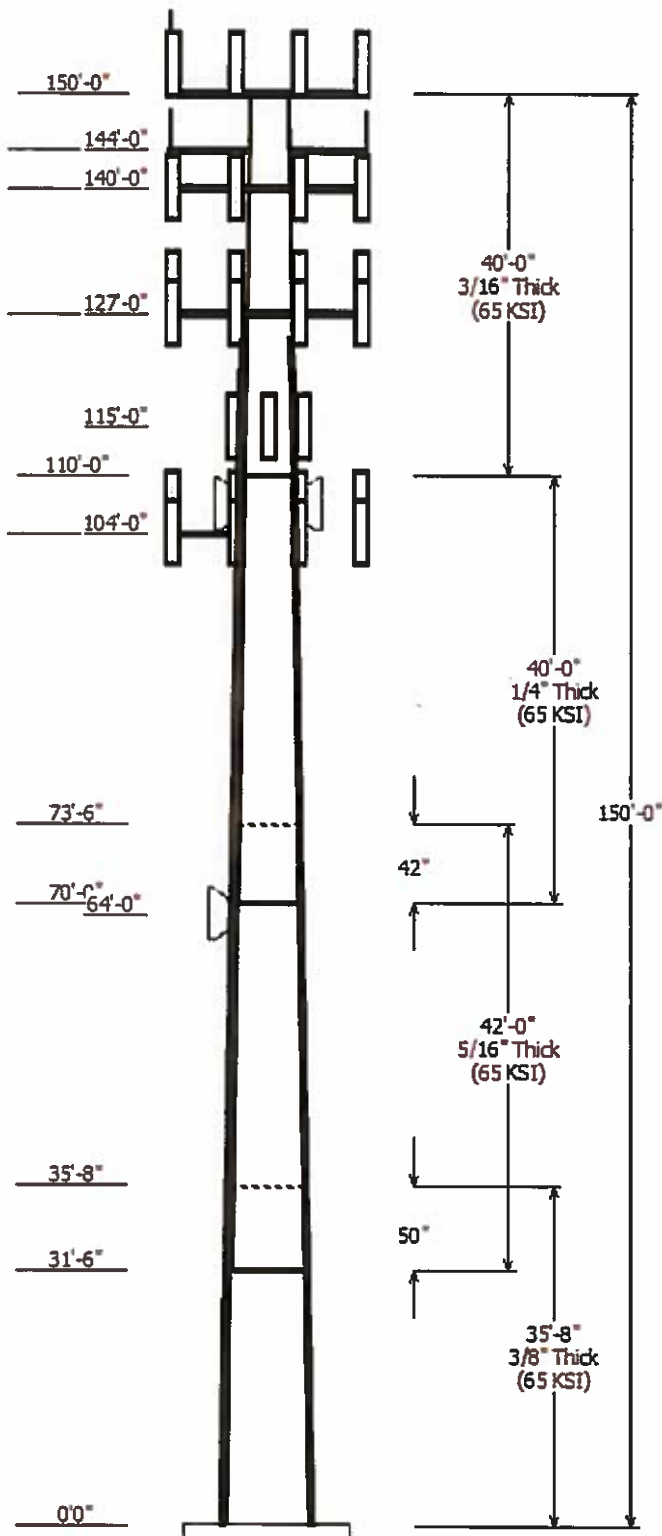
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Job Information	
Pole : 302489	Code: ANSI/TIA-222-G
Location : Enfd - Enfield, CT	
Description :	
Client : VERIZON WIRELESS	Struct Class : II
Shape : 12 Sides	Exposure : C
Height : 150.00 (ft)	Topo : 1
Base Elev (ft): 0.00	
Taper: 0.15670@in/ft)	

Sections Properties								
Shaft Section	Length (ft)	Diameter (In)		Thick Joint (in)	Type	Overlap Length (in)	Steel Shape	Grade (ksi)
		Across Flats Top	Across Flats Bottom					
1	35.667	31.79	37.38	0.375		0.000	12 Sides	65
2	42.000	26.48	33.06	0.313	Slip Joint	50.000	12 Sides	65
3	40.000	21.26	27.53	0.250	Slip Joint	42.000	12 Sides	65
4	40.000	15.00	21.26	0.188	Butt Joint	0.000	12 Sides	65

Discrete Appurtenance			
Attach Elev (ft)	Force Elev (ft)	Qty	Description
150.000	151.000	3	CCI TPA-65R-LCUUUU-H8
150.000	151.000	3	CCI OPA-65R-LCUU-H8
150.000	154.000	3	Ericsson Radio 8843
150.000	154.000	3	Powerwave Allgon LGP21401
150.000	154.000	3	Kaelus DBC0061F1V51-2
150.000	150.000	3	Round Side Arm
150.000	154.000	3	Ericsson RRUS-12 B2
150.000	154.000	3	Ericsson RRUS-11 (19.7")
150.000	154.000	3	Ericsson RRUS 32 B30
150.000	154.000	3	Ericsson RRUS A2 B2
150.000	154.000	3	Ericsson RRUS 11 (Band 12) (55
150.000	154.000	2	Raycap DC6-48-60-18-8F
150.000	154.000	3	Powerwave Allgon 7770.00
150.000	157.000	1	Decibel DB809KE-SY
150.000	150.000	1	Platform w/ Handrails
144.000	144.000	2	Stand-Off
144.000	144.000	2	Diamond X50A
140.000	140.000	3	Ericsson RRUS-11 (50 lbs.)
140.000	140.000	3	Ericsson AIR 21, 1.3 M, B2A B4
140.000	140.000	3	Ericsson AIR 21, 1.3M, B4A B2P
140.000	140.000	3	Ericsson KRY 112 144/1
140.000	140.000	3	Andrew LNX-6515DS-VTM
140.000	140.000	1	Platform w/ Handrails
127.000	127.000	6	Commscope JAHH-65B-R3B
127.000	130.000	3	Antel BXA-70063/4CF
127.000	130.000	3	Alcatel-Lucent B25 RRH4x30
127.000	130.000	3	Nokia AirScale RRH 4T4R B5 160
127.000	130.000	3	Alcatel-Lucent B66A RRH 4x45
127.000	130.000	3	Alcatel-Lucent B13 RRH4x30-
127.000	127.000	2	RFS DB-T1-6Z-8AB-0Z
127.000	127.000	1	Round Low Profile Platform
127.000	127.000	3	Antel BXA-80080-6CF-EDIN- X
127.000	130.000	6	RFS FD9R6004/2C-3L
115.000	115.000	3	76" x 6" Panel
104.000	104.000	3	KMW ETCR-654L12H6
104.000	104.000	3	Alcatel-Lucent TD-RRH8x20-25
104.000	104.000	3	Alcatel-Lucent 1900MHz RRH
104.000	104.000	6	Alcatel-Lucent RRH2x50-08
104.000	104.000	1	Side Arms
104.000	108.000	1	24" x 24" Junction Box
104.000	111.000	2	DragonWave Horizon Compact
104.000	111.000	2	DragonWave A-ANT-11G-2-C
64.000	64.000	1	Channel Master Type 120



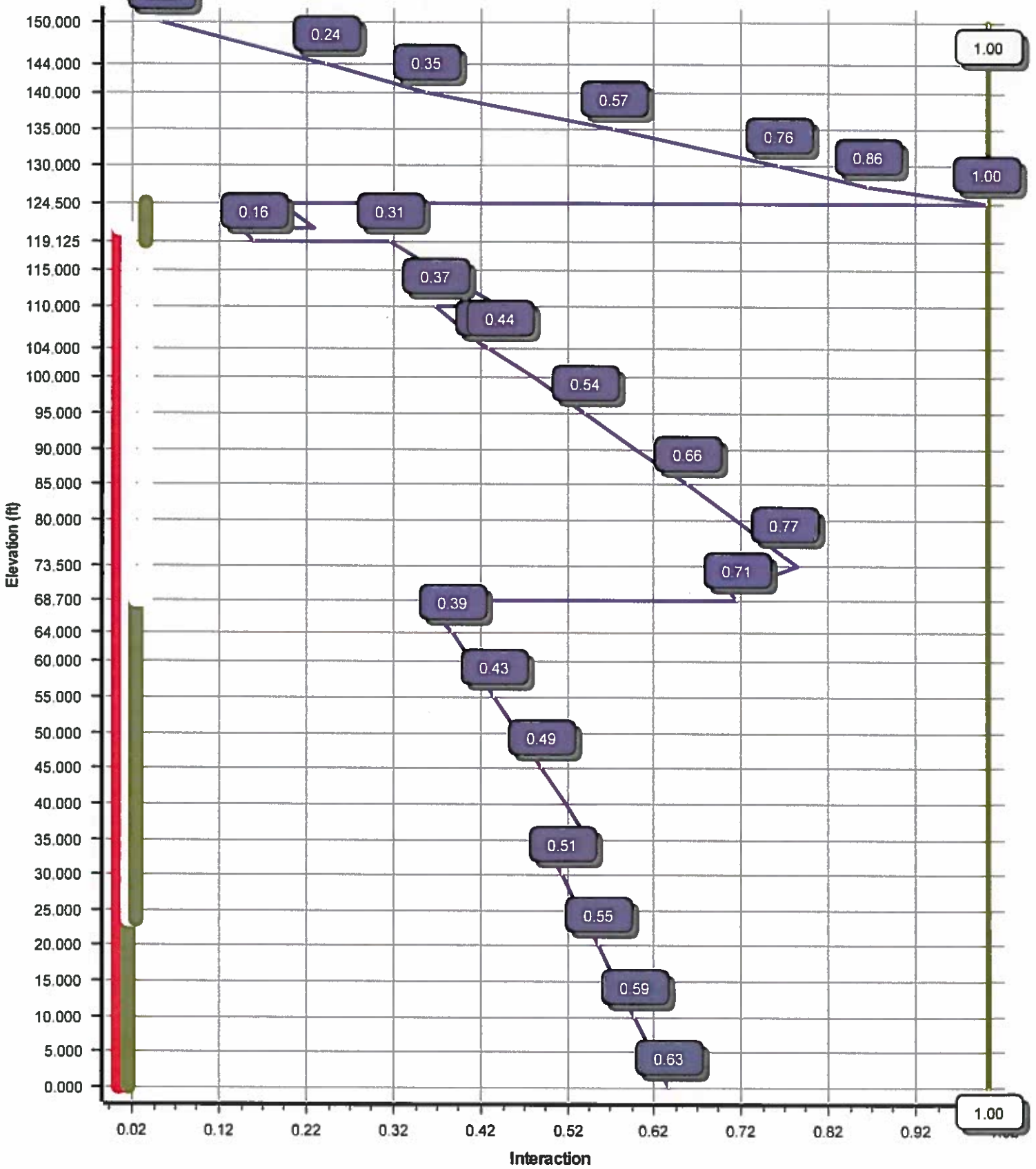
Linear Appurtenance			
Elev (ft)	From To		Exposed To Wind
	From	To	
140.0	150.0	0.39" Fiber Trunk	Yes
140.0	150.0	1 5/8" Coax	Yes
140.0	150.0	3" Conduit	Yes
114.0	129.0	#20 Dywidag bars	Yes
31.000	76.700	#20 Dywidag bars	Yes
10.000	104.0	1 1/4" Hybriflex	Yes
10.000	104.0	1/2" Coax	No
10.000	104.0	2" Conduit	Yes
10.000	104.0	5/16" Coax	No
10.000	64.000	0.28" RG-6	No
10.000	127.0	1 5/8" Coax	Yes
10.000	127.0	1 5/8" Hybriflex	Yes
10.000	140.0	1 1/4" Hybriflex	No
10.000	140.0	1 5/8" Coax	No
10.000	140.0	1 5/8" Coax	Yes
10.000	144.0	1/2" Coax	Yes
10.000	150.0	0.78" 8 AWG 6	No
10.000	150.0	0.78" 8 AWG 6	Yes
10.000	150.0	1 5/8" Coax	No
10.000	150.0	1 5/8" Coax	No
10.000	150.0	2" Conduit	No
0.000	31.000	#20 Dywidag bars	Yes
0.000	115.0	1 5/8" Coax	No
0.000	125.0	#20 Dywidag bars	Yes

Load Cases	
1.2D + 1.6W	97 mph with No Ice
0.9D + 1.6W	97 mph with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi	50 mph with 1.00 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	3924.35	35.38	71.41
0.9D + 1.6W	3732.82	33.89	53.54
1.2D + 1.0Di + 1.0Wi	998.29	8.03	127.34
(1.2 + 0.2Sds) * DL + E ELFM	288.29	2.34	71.11
(1.2 + 0.2Sds) * DL + E EMAM	375.71	3.23	71.11
(0.9 - 0.2Sds) * DL + E ELFM	282.16	2.33	49.56
(0.9 - 0.2Sds) * DL + E EMAM	367.05	3.23	49.56
1.0D + 1.0W	905.01	8.15	59.57

Dish Deflections			
Load Case	Attach Elev (ft)	Deflection (in)	Rotation (deg)
1.0D + 1.0W	64.00	5.084	0.738
1.0D + 1.0W	104.00	14.038	1.411

Load Case : 1.2D + 1.6W
Max Ratio 99.77% at 124.5 ft



Site Number: 302489

Code: ANSI/TIA-222-G © 2007 - 2018 by ATC IP LLC. All rights reserved.

Site Name: Enfd - Enfield, CT

Engineering Number: OAA732957_C3_02

7/18/2018 10:26:40 AM

Customer: VERIZON WIRELESS

Analysis Parameters

Location :	HARTFORD County, CT	Height (ft) :	150
Code :	ANSI/TIA-222-G	Base Diameter (In) :	37.38
Shape :	12 Sides	Top Diameter (In) :	15.00
Pole Type :	Taper	Taper (In/ft) :	0.157
Pole Manufacturer :	ITT Meyer	Rotation (deg) :	0.00

Ice & Wind Parameters

Structure Class:	II	Design Wind Speed Without Ice:	97 mph
Exposure Category:	C	Design Wind Speed With Ice:	50 mph
Topographic Category:	1	Operational Wind Speed:	60 mph
Crest Height:	0 ft	Design Ice Thickness:	1.00 in

Seismic Parameters

Analysis Method:	Equivalent Modal Analysis & Equivalent Lateral Force Methods		
Site Class:	D - Stiff Soil		
Period Based on Rayleigh Method (sec):	2.80		
T _L (sec):	6	p:	1.3
S _s :	0.176	S ₁ :	0.065
F _a :	1.600	F _v :	2.400
S _{ds} :	0.188	S _{d1} :	0.104
		C _s :	0.030
		C _s Max:	0.030
		C _s Min:	0.030

Load Cases

1.2D + 1.6W	97 mph with No Ice
0.9D + 1.6W	97 mph with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi	50 mph with 1.00 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: 302489

Code: ANSI/TIA-222-G

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Site Name: Enfd - Enfield, CT

Engineering Number: OAA732957_C3_02

7/18/2018 10:26:40 AM

Customer: VERIZON WIRELESS

Shaft Section Properties

Sect Info	Length (ft)	Thick (in)	Fy (ksi)	Slip			Bottom						Top							
				Joint Type	Joint Len (in)	Weight (lb)	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)	
1-12	35.667	0.3750	65		0.00	5,014	37.38	0.00	44.68	7810.1	24.03	99.68	31.79	35.67	37.93	4778.9	20.04	84.78	0.156700	
2-12	42.000	0.3125	65	Slip	50.00	4,237	33.06	31.50	32.96	4514.2	25.68	105.82	26.48	73.50	26.34	2303.3	20.03	84.76	0.156700	
3-12	40.000	0.2500	65	Slip	42.00	2,646	27.53	70.00	21.97	2087.4	26.83	110.14	21.26	110.00	16.92	954.0	20.12	85.07	0.156700	
4-12	40.000	0.1875	65	Butt	0.00	1,475	21.26	110.00	12.73	721.9	27.71	113.43	15.00	150.00	8.94	250.5	18.76	80.00	0.156700	
Shaft Weight						13,372														

Discrete Appurtenance Properties

Attach Elev (ft)	Description	Qty	Distance From Face (ft)	Vert Ecc (ft)	Weight (lb)	No Ice EPAa (sf)	Orientation Factor
150.00	CCI OPA-65R-LCUU-H8	3	0.000	1.000	88.00	12.980	0.67
150.00	CCI TPA-65R-LCUUUU-H8	3	0.000	1.000	81.60	13.300	0.69
150.00	Decibel DB809KE-SY	1	0.000	7.000	26.00	3.400	0.90
150.00	Ericsson Radio 8843	3	0.000	4.000	85.00	3.500	0.50
150.00	Ericsson RRUS 11 (Band 12) (55	3	0.000	4.000	55.00	2.520	0.50
150.00	Ericsson RRUS 32 B30	3	0.000	4.000	60.00	2.740	0.50
150.00	Ericsson RRUS A2 B2	3	0.000	4.000	22.00	2.060	0.50
150.00	Ericsson RRUS-11 (19.7")	3	0.000	4.000	51.00	2.790	0.50
150.00	Ericsson RRUS-12 B2	3	0.000	4.000	58.00	3.150	0.50
150.00	Kaelus DBC0061F1V51-2	3	0.000	4.000	25.50	0.510	0.50
150.00	Platform w/ Handrails	1	0.000	0.000	2000.00	27.200	0.90
150.00	Powerwave Allgon 7770.00	3	0.000	4.000	35.00	5.510	0.65
150.00	Powerwave Allgon LGP21401	3	0.000	4.000	14.10	1.100	0.50
150.00	Raycap DC6-48-60-18-8F ("Squid	2	0.000	4.000	31.80	1.280	0.50
150.00	Round Side Arm	3	0.000	0.000	150.00	5.200	0.67
144.00	Diamond X50A	2	0.000	0.000	2.30	1.120	1.00
144.00	Stand-Off	2	0.000	0.000	75.00	2.500	0.75
140.00	Andrew LNX-6515DS-VTM	3	0.000	0.000	51.30	11.430	0.70
140.00	Ericsson AIR 21, 1.3 M, B2A B4	3	0.000	0.000	83.00	6.050	0.71
140.00	Ericsson AIR 21, 1.3M, B4A B2P	3	0.000	0.000	81.50	6.090	0.70
140.00	Ericsson KRY 112 144/1	3	0.000	0.000	11.00	0.410	0.50
140.00	Ericsson RRUS-11 (50 lbs.)	3	0.000	0.000	50.00	2.570	0.50
140.00	Platform w/ Handrails	1	0.000	0.000	2000.00	30.000	0.90
127.00	Alcatel-Lucent B13 RRH4x30-4R	3	0.000	3.000	57.20	2.170	0.50
127.00	Alcatel-Lucent B25 RRH4x30	3	0.000	3.000	53.00	2.120	0.50
127.00	Alcatel-Lucent B66A RRH 4x45	3	0.000	3.000	67.00	2.580	0.50
127.00	Antel BXA-70063/4CF	3	0.000	3.000	9.90	4.710	0.65
127.00	Antel BXA-80080-6CF-EDIN- X	3	0.000	0.000	18.00	5.770	0.73
127.00	Commscope JAHH-65B-R3B	6	0.000	0.000	60.60	9.110	0.69
127.00	Nokia AirScale RRH 4T4R B5 160	3	0.000	3.000	35.30	1.290	0.50
127.00	RFS DB-T1-6Z-8AB-0Z	2	0.000	0.000	44.00	4.800	0.50
127.00	RFS FD9R6004/2C-3L	6	0.000	3.000	2.60	0.370	0.50
127.00	Round Low Profile Platform	1	0.000	0.000	1350.00	21.700	0.90
115.00	76" x 6" Panel	3	0.000	0.000	40.00	5.030	0.69
104.00	24" x 24" Junction Box	1	0.000	4.000	20.00	4.800	0.50
104.00	Alcatel-Lucent 1900MHz RRH (65	3	0.000	0.000	60.00	2.580	0.50
104.00	Alcatel-Lucent RRH2x50-08	6	0.000	0.000	52.90	1.700	0.50
104.00	Alcatel-Lucent TD-RRH8x20-25 w	3	0.000	0.000	70.00	4.050	0.50
104.00	DragonWave A-ANT-11G-2-C	2	0.000	7.000	27.00	4.690	0.80
104.00	DragonWave Horizon Compact	2	0.000	7.000	10.60	0.430	0.50
104.00	KMW ETCR-654L12H6	3	0.000	0.000	84.90	15.710	0.61
104.00	Side Arms	1	0.000	0.000	560.00	8.500	1.00
64.00	Channel Master Type 120	1	0.000	0.000	126.00	20.190	0.90
Totals	Num Loadings:43	118			11651.90		

Site Number: 302489

Code: ANSI/TIA-222-G

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Site Name: Enfd - Enfield, CT

Engineering Number: OAA732957_C3_02

7/18/2018 10:26:40 AM

Customer: VERIZON WIRELESS

Linear Appurtenance Properties

Elev From (ft)	Elev To (ft)	Qty	Description	Coax Diameter (in)	Coax Weight (lb/ft)	Flat	Projected Width (in)	Exposed To Wind	Carrier
10.00	150.00	2	0.78" 8 AWG 6	0.78	0.59	N	0.00	N	AT&T Mobility
10.00	150.00	2	0.78" 8 AWG 6	0.78	0.59	N	0.00	Y	AT&T Mobility
10.00	150.00	3	1 5/8" Coax	1.98	0.82	N	0.00	N	AT&T Mobility
10.00	150.00	1	1 5/8" Coax	1.98	0.00	N	0.00	N	Spok Holdings
10.00	150.00	1	2" Conduit	2.38	3.65	N	0.00	N	AT&T Mobility
140.00	150.00	2	0.39" Fiber Trunk	0.39	0.06	N	0.00	Y	AT&T Mobility
140.00	150.00	8	1 5/8" Coax	1.98	0.82	N	3.96	Y	AT&T Mobility
140.00	150.00	1	3" Conduit	3.50	7.58	N	0.00	Y	AT&T Mobility
10.00	144.00	2	1/2" Coax	0.63	0.15	N	0.00	Y	Senet, INC
10.00	140.01	8	1 5/8" Coax	1.98	0.82	N	0.00	Y	AT&T Mobility
10.00	140.00	1	1 1/4" Hybriflex	1.54	1.00	N	0.00	N	T-Mobile
10.00	140.00	12	1 5/8" Coax	1.98	0.82	N	0.00	N	T-Mobile
114.00	129.00	4	#20 Dywidag bars	2.50	16.70	N	0.08	Y	--
10.00	127.00	12	1 5/8" Coax	1.98	0.82	N	3.96	Y	Verizon
10.00	127.00	2	1 5/8" Hybriflex	1.63	1.61	N	0.00	Y	Verizon
0.00	125.00	4	#20 Dywidag bars	2.50	16.70	N	0.00	Y	--
0.00	115.00	6	1 5/8" Coax	1.98	0.82	N	0.00	N	Metro PCS
10.00	104.00	4	1 1/4" Hybriflex Cable	1.54	1.00	N	0.00	Y	Clearwire
10.00	104.00	4	1/2" Coax	0.63	0.15	N	0.00	N	Clearwire
10.00	104.00	2	2" Conduit	2.35	3.65	N	0.00	Y	Clearwire
10.00	104.00	6	5/16" Coax	0.31	0.05	N	0.00	N	Clearwire
31.00	76.70	4	#20 Dywidag bars	2.50	16.70	N	0.00	Y	--
10.00	64.00	1	0.28" RG-6	0.28	0.03	N	0.00	N	Spok Holdings
0.00	31.00	4	#20 Dywidag bars	2.50	16.70	N	0.00	Y	--

Additional Steel

Elev From (ft)	Elev To (ft)	Qty	Description	Fy (ksi)	Offset (in)	Description	Spacing (in)	Len (in)	Connectors	Continuation?
0.00	121.0	4	SOL #20 All Thread	75	2.19	6" Angle Bracket	27.0	3.31	5/8" A36 U-Bolt	Yes
0.00	23.60	4	SOL #20 All Thread	80	8.28	6" T Bracket	27.0	3.31	5/8" A36 U-Bolt	Yes
23.60	68.70	4	SOL #20 All Thread	80	8.28	6" T Bracket	30.0	3.31	5/8" A36 U-Bolt	Yes
119.1	124.5	3	SOL #20 (15 deg	80	8.28	6" T Bracket	30.0	3.31	5/8" A36 U-Bolt	No

Site Number: 302489

Code: ANSI/TIA-222-G

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Site Name: Enfd - Enfield, CT

Engineering Number: OAA732957_C3_02

7/18/2018 10:26:41 AM

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)	Additional Reinforcing		
												Area (in ²)	Ix (in ⁴)	Weight (lb)
0.00		0.3750	37.380	44.684	7,810.1	24.03	99.68	78.5	403.6	0.0	0.0	39.28	12,96	0.0
5.00		0.3750	36.597	43.737	7,324.4	23.47	97.59	79.1	386.6	0.0	752.2	39.28	12,56	668.0
10.00		0.3750	35.813	42.791	6,859.3	22.91	95.50	79.7	370.0	0.0	736.1	39.28	12,16	668.0
15.00		0.3750	35.029	41.845	6,414.3	22.35	93.41	80.3	353.7	0.0	720.0	39.28	11,77	668.0
20.00		0.3750	34.246	40.899	5,989.0	21.79	91.32	80.9	337.8	0.0	703.9	39.28	11,39	668.0
23.60	Reinf. Top Reinf	0.3750	33.682	40.218	5,694.8	21.39	89.82	81.4	326.6	0.0	496.8	39.28	11,12	481.0
25.00		0.3750	33.462	39.953	5,583.0	21.23	89.23	81.6	322.3	0.0	191.0	39.28	11,01	187.0
30.00		0.3750	32.679	39.007	5,195.7	20.67	87.14	81.9	307.1	0.0	671.7	39.28	10,64	668.0
31.50	Bot - Section 2	0.3750	32.444	38.723	5,083.1	20.50	86.52	81.9	302.7	0.0	198.4	39.28	10,53	200.4
35.00		0.3750	31.895	38.061	4,826.7	20.11	85.05	81.9	292.3	0.0	846.5	39.28	10,57	467.6
35.67	Top - Section 1	0.3125	32.416	32.304	4,249.6	25.12	103.73	77.3	253.3	0.0	159.6	39.28	10,52	89.1
40.00		0.3125	31.737	31.621	3,985.6	24.53	101.56	78.0	242.6	0.0	471.3	39.28	10,20	578.9
45.00		0.3125	30.953	30.833	3,694.9	23.86	99.05	78.7	230.6	0.0	531.3	39.28	9,853	668.0
50.00		0.3125	30.170	30.044	3,418.6	23.19	96.54	79.4	218.9	0.0	517.9	39.28	9,503	668.0
55.00		0.3125	29.386	29.256	3,156.5	22.52	94.04	80.2	207.5	0.0	504.5	39.28	9,159	668.0
60.00		0.3125	28.603	28.467	2,908.1	21.85	91.53	80.9	196.4	0.0	491.0	39.28	8,822	668.0
64.00		0.3125	27.976	27.837	2,719.1	21.31	89.52	81.5	187.8	0.0	383.2	39.28	8,557	534.4
65.00		0.3125	27.819	27.679	2,673.1	21.17	89.02	81.6	185.6	0.0	94.5	39.28	8,491	133.6
68.70	Reinf. Top	0.3125	27.240	27.096	2,507.6	20.68	87.17	81.9	177.8	0.0	344.8	39.28	8,251	494.3
70.00	Bot - Section 3	0.3125	27.036	26.891	2,451.2	20.50	86.52	81.9	175.1	0.0	119.4	19.64	2,879	86.8
73.50	Top - Section 2	0.2500	26.988	21.524	1,964.0	26.25	107.95	76.1	140.6	0.0	575.9	19.64	2,870	233.8
75.00		0.2500	26.752	21.335	1,912.7	25.99	107.01	76.4	138.1	0.0	109.4	19.64	2,830	100.2
80.00		0.2500	25.969	20.704	1,748.0	25.15	103.88	77.3	130.0	0.0	357.6	19.64	2,696	334.0
85.00		0.2500	25.185	20.073	1,593.1	24.31	100.74	78.2	122.2	0.0	346.9	19.64	2,566	334.0
90.00		0.2500	24.402	19.442	1,447.6	23.47	97.61	79.1	114.6	0.0	336.2	19.64	2,439	334.0
95.00		0.2500	23.618	18.812	1,311.2	22.63	94.47	80.0	107.2	0.0	325.4	19.64	2,315	334.0
100.0		0.2500	22.835	18.181	1,183.7	21.79	91.34	80.9	100.1	0.0	314.7	19.64	2,195	334.0
104.0		0.2500	22.208	17.676	1,087.9	21.12	88.83	81.7	94.6	0.0	244.0	19.64	2,101	267.2
105.0		0.2500	22.051	17.550	1,064.7	20.96	88.21	81.9	93.3	0.0	59.9	19.64	2,078	66.8
110.0	Top - Section 3	0.2500	21.268	16.919	954.0	20.12	85.07	81.9	86.7	0.0	293.2	19.64	1,963	334.0
110.0	Bot - Section 4	0.1875	21.268	12.727	721.9	27.71	113.43	74.5	65.6	0.0		19.64	1,963	
115.0		0.1875	20.484	12.254	644.4	26.59	109.25	75.7	60.8	0.0	212.5	19.64	1,853	334.0
119.1	Reinf Bottom	0.1875	19.838	11.864	584.8	25.67	105.80	76.7	56.9	0.0	169.3	19.64	1,764	275.5
120.0		0.1875	19.701	11.781	572.6	25.47	105.07	76.9	56.1	0.0	35.2	32.45	4,143	102.3
121.0	Reinf. Top	0.1875	19.544	11.687	558.9	25.25	104.24	77.2	55.2	0.0	39.9	32.45	4,231	384.1
124.5	Reinf. Top	0.1875	18.996	11.356	512.7	24.47	101.31	78.0	52.1	0.0	137.2	12.81	2,308	175.4
125.0		0.1875	18.917	11.308	506.4	24.35	100.89	78.2	51.7	0.0	19.3			
127.0		0.1875	18.604	11.119	481.4	23.91	99.22	78.6	50.0	0.0	76.3			
130.0		0.1875	18.134	10.835	445.4	23.24	96.71	79.4	47.5	0.0	112.1			
135.0		0.1875	17.350	10.362	389.6	22.12	92.54	80.6	43.4	0.0	180.3			
140.0		0.1875	16.567	9.889	338.6	21.00	88.36	81.8	39.5	0.0	172.3			
144.0		0.1875	15.940	9.511	301.2	20.10	85.01	81.9	36.5	0.0	132.0			
145.0		0.1875	15.783	9.416	292.3	19.88	84.18	81.9	35.8	0.0	32.2			
150.0		0.1875	15.000	8.943	250.5	18.76	80.00	81.9	32.3	0.0	156.2			

13,372.1

13,208.

Site Number: 302489

Code: ANSI/TIA-222-G

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Site Name: Enfd - Enfield, CT

Engineering Number: OAA732957_C3_02

7/18/2018 10:26:41 AM

Customer: VERIZON WIRELESS

Load Case: 1.2D + 1.6W	97 mph with No Ice	25 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		272.1	0.0					0.0	0.0	272.1	0.0	0.0	0.0
5.00		538.5	902.6					0.0	1,632.7	538.5	2,535.3	0.0	0.0
10.00		533.2	883.3					0.0	1,632.7	533.2	2,516.0	0.0	0.0
15.00		537.9	864.0					0.0	1,941.3	537.9	2,805.3	0.0	0.0
20.00		472.8	844.7					0.0	1,941.3	472.8	2,786.0	0.0	0.0
23.60	Reinf. Top Reinf	281.4	596.2					0.0	1,397.7	281.4	1,993.9	0.0	0.0
25.00		368.7	229.2					0.0	543.6	368.7	772.7	0.0	0.0
30.00		376.9	806.1					0.0	1,941.3	376.9	2,747.3	0.0	0.0
31.50	Bot - Section 2	298.6	238.1					0.0	582.4	298.6	820.4	0.0	0.0
35.00		251.1	1,015.8					0.0	1,358.9	251.1	2,374.7	0.0	0.0
35.67	Top - Section 1	302.9	191.5					0.0	258.8	302.9	450.4	0.0	0.0
40.00		568.2	565.6					0.0	1,682.4	568.2	2,248.0	0.0	0.0
45.00		613.5	637.5					0.0	1,941.3	613.5	2,578.8	0.0	0.0
50.00		616.9	621.4					0.0	1,941.3	616.9	2,562.7	0.0	0.0
55.00		618.9	605.4					0.0	1,941.3	618.9	2,546.6	0.0	0.0
60.00		557.6	589.3					0.0	1,941.3	557.6	2,530.5	0.0	0.0
64.00	Appurtenance(s)	309.8	459.8	840.1	0.0	0.0	151.2	0.0	1,553.0	1,149.9	2,164.0	0.0	0.0
65.00		290.9	113.3					0.0	388.2	290.9	501.6	0.0	0.0
68.70	Reinf. Top	309.3	413.8					0.0	1,436.4	309.3	1,850.2	0.0	0.0
70.00	Bot - Section 3	300.4	143.3					0.0	400.5	300.4	543.8	0.0	0.0
73.50	Top - Section 2	313.5	691.1					0.0	1,078.2	313.5	1,769.3	0.0	0.0
75.00		404.2	131.3					0.0	462.1	404.2	593.3	0.0	0.0
80.00		619.7	429.1					0.0	1,275.8	619.7	1,704.9	0.0	0.0
85.00		616.1	416.3					0.0	1,139.5	616.1	1,555.8	0.0	0.0
90.00		611.8	403.4					0.0	1,139.5	611.8	1,542.9	0.0	0.0
95.00		606.9	390.5					0.0	1,139.5	606.9	1,530.0	0.0	0.0
100.00		541.9	377.6					0.0	1,139.5	541.9	1,517.1	0.0	0.0
104.00	Appurtenance(s)	299.3	292.8	2,658.0	0.0	2,703.0	1,940.8	0.0	911.6	2,957.3	3,145.2	0.0	0.0
105.00		355.9	71.9					0.0	213.3	355.9	285.2	0.0	0.0
110.00	Top - Section 3	589.7	351.9					0.0	1,066.5	589.7	1,418.4	0.0	0.0
115.00	Appurtenance(s)	534.7	255.0	435.7	0.0	0.0	144.0	0.0	1,146.6	970.3	1,545.7	0.0	0.0
119.13	Reinf Bottom	292.0	203.1					0.0	1,186.1	292.0	1,389.3	0.0	0.0
120.00		108.8	42.2					0.0	304.2	108.8	346.5	0.0	0.0
121.00	Reinf. Top	243.1	47.9					0.0	668.3	243.1	716.2	0.0	0.0
124.50	Reinf. Top	211.2	164.7					65.5	936.3	276.7	1,100.9	0.0	0.0
125.00		129.7	23.1					9.4	103.7	139.0	126.8	0.0	0.0
127.00	Appurtenance(s)	230.8	91.6	4,367.0	0.0	2,902.7	3,046.1	37.5	254.5	4,635.4	3,392.1	0.0	0.0
130.00		333.5	134.5					0.0	254.5	333.5	389.0	0.0	0.0
135.00		404.9	216.4					0.0	157.0	404.9	373.4	0.0	0.0
140.00	Appurtenance(s)	382.7	206.7	3,685.8	0.0	0.0	3,396.5	0.0	157.0	4,068.5	3,760.2	0.0	0.0
144.00	Appurtenance(s)	229.1	158.4	295.6	0.0	0.0	185.5	74.3	110.6	599.0	454.6	0.0	0.0
145.00		264.6	38.6					18.6	27.3	283.2	65.9	0.0	0.0
150.00	Appurtenance(s)	219.6	187.4	5,938.9	0.0	9,728.9	5,118.2	93.3	136.4	6,251.7	5,442.0	0.0	0.0
Totals:										35,482.8	71,492.9	0.00	0.00

Site Number: 302489

Code: ANSI/TIA-222-G

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Site Name: Enfd - Enfield, CT

Engineering Number: OAA732957_C3_02

7/18/2018 10:26:49 AM

Customer: VERIZON WIRELESS

Load Case: 1.2D + 1.6W

97 mph with No Ice

25 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	-71.41	-35.38	0.00	-3,924.35	0.00	3,924.35	3,157.17	1,578.58	4,812.28	2,376.61	0.00	0.00	0.633
5.00	-68.72	-35.15	0.00	-3,747.46	0.00	3,747.46	3,114.35	1,557.18	4,645.51	2,294.24	0.14	-0.26	0.614
10.00	-66.04	-34.90	0.00	-3,571.72	0.00	3,571.72	3,070.50	1,535.25	4,480.02	2,212.51	0.56	-0.52	0.594
15.00	-63.09	-34.62	0.00	-3,397.22	0.00	3,397.22	3,025.61	1,512.81	4,315.90	2,131.46	1.25	-0.78	0.573
20.00	-60.18	-34.33	0.00	-3,224.15	0.00	3,224.15	2,979.68	1,489.84	4,153.25	2,051.14	2.21	-1.04	0.552
23.60	-58.11	-34.14	0.00	-3,100.55	0.00	3,100.55	2,945.97	1,472.98	4,037.12	1,993.78	3.07	-1.23	0.537
23.60	-58.11	-34.14	0.00	-3,100.55	0.00	3,100.55	2,945.97	1,472.98	4,037.12	1,993.78	3.07	-1.23	0.537
25.00	-57.25	-33.92	0.00	-3,052.76	0.00	3,052.76	2,932.71	1,466.36	3,992.19	1,971.59	3.44	-1.30	0.531
30.00	-54.42	-33.63	0.00	-2,883.15	0.00	2,883.15	2,875.21	1,437.61	3,820.20	1,886.65	4.94	-1.56	0.511
31.50	-53.53	-33.43	0.00	-2,832.70	0.00	2,832.70	2,854.29	1,427.15	3,764.49	1,859.14	5.45	-1.63	0.506
35.00	-51.11	-33.20	0.00	-2,715.70	0.00	2,715.70	2,805.48	1,402.74	3,636.10	1,795.73	6.71	-1.81	0.484
35.67	-50.60	-32.99	0.00	-2,693.57	0.00	2,693.57	2,248.07	1,124.03	2,973.91	1,468.70	6.97	-1.84	0.539
40.00	-48.24	-32.54	0.00	-2,550.60	0.00	2,550.60	2,218.59	1,109.29	2,872.23	1,418.49	8.74	-2.06	0.515
45.00	-45.55	-32.03	0.00	-2,387.89	0.00	2,387.89	2,183.60	1,091.80	2,755.77	1,360.97	11.03	-2.30	0.489
50.00	-42.88	-31.48	0.00	-2,227.77	0.00	2,227.77	2,147.58	1,073.79	2,640.30	1,303.95	13.57	-2.55	0.462
55.00	-40.24	-30.91	0.00	-2,070.37	0.00	2,070.37	2,110.52	1,055.26	2,525.94	1,247.47	16.37	-2.78	0.434
60.00	-37.63	-30.36	0.00	-1,915.83	0.00	1,915.83	2,072.42	1,036.21	2,412.79	1,191.58	19.41	-3.01	0.407
64.00	-35.48	-29.16	0.00	-1,794.40	0.00	1,794.40	2,041.18	1,020.59	2,323.20	1,147.34	22.01	-3.19	0.385
65.00	-34.94	-28.91	0.00	-1,765.24	0.00	1,765.24	2,033.27	1,016.64	2,300.94	1,136.35	22.68	-3.24	0.380
68.70	-33.06	-28.55	0.00	-1,658.29	0.00	1,658.29	1,997.21	998.60	2,211.95	1,092.40	25.25	-3.40	0.361
68.70	-33.06	-28.55	0.00	-1,658.29	0.00	1,658.29	1,997.21	998.60	2,211.95	1,092.40	25.25	-3.40	0.712
70.00	-32.45	-28.32	0.00	-1,621.17	0.00	1,621.17	1,982.10	991.05	2,178.42	1,075.84	26.19	-3.45	0.703
73.50	-30.60	-28.01	0.00	-1,522.05	0.00	1,522.05	1,473.96	736.98	1,624.57	802.32	28.83	-3.75	0.783
75.00	-29.90	-27.71	0.00	-1,480.04	0.00	1,480.04	1,466.28	733.14	1,601.77	791.05	30.03	-3.87	0.767
80.00	-28.05	-27.17	0.00	-1,341.50	0.00	1,341.50	1,440.00	720.00	1,526.12	753.69	34.31	-4.30	0.711
85.00	-26.36	-26.62	0.00	-1,205.63	0.00	1,205.63	1,412.68	706.34	1,451.11	716.65	39.03	-4.70	0.655
90.00	-24.70	-26.04	0.00	-1,072.53	0.00	1,072.53	1,384.32	692.16	1,376.86	679.98	44.16	-5.09	0.598
95.00	-23.08	-25.44	0.00	-942.31	0.00	942.31	1,354.92	677.46	1,303.45	643.72	49.69	-5.46	0.539
100.00	-21.49	-24.87	0.00	-815.10	0.00	815.10	1,324.47	662.24	1,230.99	607.94	55.59	-5.81	0.479
104.00	-18.61	-21.65	0.00	-712.93	0.00	712.93	1,299.37	649.69	1,173.78	579.69	60.55	-6.06	0.427
105.00	-18.30	-21.32	0.00	-691.28	0.00	691.28	1,292.99	646.50	1,159.59	572.68	61.83	-6.13	0.417
110.00	-16.85	-20.66	0.00	-584.65	0.00	584.65	1,247.14	623.57	1,077.81	532.29	68.39	-6.42	0.366
110.00	-16.85	-20.66	0.00	-584.65	0.00	584.65	853.24	426.62	741.79	366.34	68.39	-6.42	0.439
115.00	-15.35	-19.59	0.00	-481.33	0.00	481.33	834.99	417.50	698.71	345.06	75.24	-6.67	0.369
119.13	-13.96	-19.16	0.00	-400.54	0.00	400.54	819.16	409.58	663.43	327.64	81.09	-6.88	0.313
120.00	-13.62	-19.02	0.00	-383.77	0.00	383.77	815.71	407.86	655.98	323.96	82.35	-6.92	0.150
121.00	-12.93	-18.70	0.00	-364.75	0.00	364.75	811.73	405.86	647.49	319.77	83.80	-6.95	0.139
121.00	-12.93	-18.70	0.00	-364.75	0.00	364.75	811.73	405.86	647.49	319.77	83.80	-6.95	0.227
124.50	-11.85	-18.30	0.00	-299.29	0.00	299.29	797.47	398.73	617.91	305.16	88.91	-7.02	0.187
124.50	-11.85	-18.30	0.00	-299.29	0.00	299.29	797.47	398.73	617.91	305.16	88.91	-7.02	0.998
125.00	-11.69	-18.18	0.00	-290.14	0.00	290.14	795.39	397.69	613.71	303.09	89.65	-7.03	0.974
127.00	-8.83	-13.21	0.00	-250.87	0.00	250.87	786.97	393.48	596.95	294.81	92.65	-7.34	0.863
130.00	-8.37	-12.91	0.00	-211.23	0.00	211.23	774.02	387.01	572.00	282.49	97.38	-7.75	0.760
135.00	-7.95	-12.52	0.00	-146.70	0.00	146.70	751.62	375.81	530.94	262.21	105.79	-8.32	0.571
140.00	-4.79	-7.97	0.00	-84.08	0.00	84.08	728.18	364.09	490.64	242.31	114.71	-8.74	0.354
144.00	-4.42	-7.32	0.00	-52.21	0.00	52.21	701.03	350.52	454.07	224.25	122.11	-8.97	0.240
145.00	-4.39	-7.03	0.00	-44.90	0.00	44.90	694.06	347.03	445.03	219.78	123.98	-9.01	0.211
150.00	0.00	-6.25	0.00	-9.73	0.00	9.73	659.19	329.60	401.19	198.13	133.47	-9.15	0.049

Site Number: 302489

Code: ANSI/TIA-222-G

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Site Name: Enfd - Enfield, CT

Engineering Number: OAA732957_C3_02

7/18/2018 10:26:50 AM

Customer: VERIZON WIRELESS

Load Case: 0.9D + 1.6W	97 mph with No Ice (Reduced DL)	25 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		272.1	0.0					0.0	0.0	272.1	0.0	0.0	0.0
5.00		538.5	677.0					0.0	1,224.5	538.5	1,901.5	0.0	0.0
10.00		526.9	662.5					0.0	1,224.5	526.9	1,887.0	0.0	0.0
15.00		523.5	648.0					0.0	1,456.0	523.5	2,104.0	0.0	0.0
20.00		457.3	633.5					0.0	1,456.0	457.3	2,089.5	0.0	0.0
23.60	Reinf. Top Reinf	270.8	447.2					0.0	1,048.3	270.8	1,495.4	0.0	0.0
25.00		352.5	171.9					0.0	407.7	352.5	579.5	0.0	0.0
30.00		359.5	604.5					0.0	1,456.0	359.5	2,060.5	0.0	0.0
31.50	Bot - Section 2	282.9	178.5					0.0	436.8	282.9	615.3	0.0	0.0
35.00		237.5	761.9					0.0	1,019.2	237.5	1,781.0	0.0	0.0
35.67	Top - Section 1	286.3	143.6					0.0	194.1	286.3	337.8	0.0	0.0
40.00		534.9	424.2					0.0	1,261.8	534.9	1,686.0	0.0	0.0
45.00		573.0	478.2					0.0	1,456.0	573.0	1,934.1	0.0	0.0
50.00		571.0	466.1					0.0	1,456.0	571.0	1,922.0	0.0	0.0
55.00		567.5	454.0					0.0	1,456.0	567.5	1,910.0	0.0	0.0
60.00		506.8	441.9					0.0	1,456.0	506.8	1,897.9	0.0	0.0
64.00	Appurtenance(s)	279.9	344.9	840.1	0.0	0.0	113.4	0.0	1,164.8	1,120.0	1,623.0	0.0	0.0
65.00		260.7	85.0					0.0	291.2	260.7	376.2	0.0	0.0
68.70	Reinf. Top	276.6	310.3					0.0	1,077.3	276.6	1,387.6	0.0	0.0
70.00	Bot - Section 3	266.5	107.5					0.0	300.4	266.5	407.8	0.0	0.0
73.50	Top - Section 2	277.9	518.3					0.0	808.7	277.9	1,327.0	0.0	0.0
75.00		356.6	98.4					0.0	346.6	356.6	445.0	0.0	0.0
80.00		542.7	321.9					0.0	956.8	542.7	1,278.7	0.0	0.0
85.00		533.1	312.2					0.0	854.6	533.1	1,166.8	0.0	0.0
90.00		522.8	302.5					0.0	854.6	522.8	1,157.2	0.0	0.0
95.00		511.8	292.9					0.0	854.6	511.8	1,147.5	0.0	0.0
100.00		451.3	283.2					0.0	854.6	451.3	1,137.8	0.0	0.0
104.00	Appurtenance(s)	247.1	219.6	2,658.0	0.0	2,703.0	1,455.6	0.0	683.7	2,905.1	2,358.9	0.0	0.0
105.00		289.8	53.9					0.0	160.0	289.8	213.9	0.0	0.0
110.00	Top - Section 3	475.3	263.9					0.0	799.9	475.3	1,063.8	0.0	0.0
115.00	Appurtenance(s)	422.8	191.3	435.7	0.0	0.0	108.0	0.0	860.0	858.4	1,159.2	0.0	0.0
119.13	Reinf Bottom	227.7	152.3					0.0	889.6	227.7	1,042.0	0.0	0.0
120.00		84.1	31.7					0.0	228.2	84.1	259.8	0.0	0.0
121.00	Reinf. Top	229.8	35.9					0.0	501.2	229.8	537.2	0.0	0.0
124.50	Reinf. Top	211.2	123.5					65.5	702.2	276.7	825.7	0.0	0.0
125.00		129.7	17.4					9.4	77.8	139.0	95.1	0.0	0.0
127.00	Appurtenance(s)	230.8	68.7	4,367.0	0.0	2,902.7	2,284.6	37.5	190.8	4,635.4	2,544.1	0.0	0.0
130.00		333.5	100.9					0.0	190.9	333.5	291.7	0.0	0.0
135.00		404.9	162.3					0.0	117.8	404.9	280.0	0.0	0.0
140.00	Appurtenance(s)	382.7	155.0	3,685.8	0.0	0.0	2,547.4	0.0	117.8	4,068.5	2,820.2	0.0	0.0
144.00	Appurtenance(s)	229.1	118.8	295.6	0.0	0.0	139.1	74.3	83.0	599.0	340.9	0.0	0.0
145.00		264.6	29.0					18.6	20.5	283.2	49.4	0.0	0.0
150.00	Appurtenance(s)	219.6	140.6	5,938.9	0.0	9,728.9	3,838.7	93.3	102.3	6,251.7	4,081.5	0.0	0.0
Totals:										34,043.0	53,619.7	0.00	0.00

Site Number: 302489

Code: ANSI/TIA-222-G

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Site Name: Enfd - Enfield, CT

Engineering Number: OAA732957_C3_02

7/18/2018 10:26:58 AM

Customer: VERIZON WIRELESS

Load Case: 0.9D + 1.6W

97 mph with No Ice (Reduced DL)

25 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	-53.54	-33.89	0.00	-3,732.82	0.00	3,732.82	3,157.17	1,578.58	4,812.28	2,376.61	0.00	0.00	0.600
5.00	-51.50	-33.57	0.00	-3,563.37	0.00	3,563.37	3,114.35	1,557.18	4,645.51	2,294.24	0.13	-0.25	0.581
10.00	-49.47	-33.25	0.00	-3,395.51	0.00	3,395.51	3,070.50	1,535.25	4,480.02	2,212.51	0.53	-0.50	0.562
15.00	-47.23	-32.91	0.00	-3,229.27	0.00	3,229.27	3,025.61	1,512.81	4,315.90	2,131.46	1.19	-0.75	0.543
20.00	-45.03	-32.58	0.00	-3,064.75	0.00	3,064.75	2,979.68	1,489.84	4,153.25	2,051.14	2.10	-0.99	0.523
23.60	-43.47	-32.38	0.00	-2,947.46	0.00	2,947.46	2,945.97	1,472.98	4,037.12	1,993.78	2.92	-1.17	0.509
23.60	-43.47	-32.38	0.00	-2,947.46	0.00	2,947.46	2,945.97	1,472.98	4,037.12	1,993.78	2.92	-1.17	0.509
25.00	-42.81	-32.13	0.00	-2,902.13	0.00	2,902.13	2,932.71	1,466.36	3,992.19	1,971.59	3.27	-1.24	0.503
30.00	-40.67	-31.83	0.00	-2,741.49	0.00	2,741.49	2,875.21	1,437.61	3,820.20	1,886.65	4.70	-1.48	0.484
31.50	-40.00	-31.62	0.00	-2,693.74	0.00	2,693.74	2,854.29	1,427.15	3,764.49	1,859.14	5.18	-1.55	0.479
35.00	-38.17	-31.40	0.00	-2,583.08	0.00	2,583.08	2,805.48	1,402.74	3,636.10	1,795.73	6.38	-1.72	0.458
35.67	-37.78	-31.18	0.00	-2,562.15	0.00	2,562.15	2,248.07	1,124.03	2,973.91	1,468.70	6.63	-1.75	0.510
40.00	-35.99	-30.72	0.00	-2,427.06	0.00	2,427.06	2,218.59	1,109.29	2,872.23	1,418.49	8.31	-1.95	0.488
45.00	-33.96	-30.22	0.00	-2,273.44	0.00	2,273.44	2,183.60	1,091.80	2,755.77	1,360.97	10.49	-2.19	0.463
50.00	-31.94	-29.70	0.00	-2,122.34	0.00	2,122.34	2,147.58	1,073.79	2,640.30	1,303.95	12.91	-2.42	0.438
55.00	-29.95	-29.16	0.00	-1,973.84	0.00	1,973.84	2,110.52	1,055.26	2,525.94	1,247.47	15.56	-2.65	0.412
60.00	-27.98	-28.66	0.00	-1,828.02	0.00	1,828.02	2,072.42	1,036.21	2,412.79	1,191.58	18.45	-2.87	0.387
64.00	-26.36	-27.51	0.00	-1,713.37	0.00	1,713.37	2,041.18	1,020.59	2,323.20	1,147.34	20.93	-3.04	0.366
65.00	-25.95	-27.27	0.00	-1,685.86	0.00	1,685.86	2,033.27	1,016.64	2,300.94	1,136.35	21.57	-3.08	0.361
68.70	-24.54	-26.97	0.00	-1,584.95	0.00	1,584.95	1,997.21	998.60	2,211.95	1,092.40	24.02	-3.23	0.344
68.70	-24.54	-26.97	0.00	-1,584.95	0.00	1,584.95	1,997.21	998.60	2,211.95	1,092.40	24.02	-3.23	0.679
70.00	-24.06	-26.75	0.00	-1,549.89	0.00	1,549.89	1,982.10	991.05	2,178.42	1,075.84	24.91	-3.29	0.670
73.50	-22.66	-26.47	0.00	-1,456.28	0.00	1,456.28	1,473.96	736.98	1,624.57	802.32	27.43	-3.57	0.747
75.00	-22.12	-26.19	0.00	-1,416.58	0.00	1,416.58	1,466.28	733.14	1,601.77	791.05	28.57	-3.69	0.731
80.00	-20.71	-25.70	0.00	-1,285.64	0.00	1,285.64	1,440.00	720.00	1,526.12	753.69	32.65	-4.09	0.680
85.00	-19.41	-25.22	0.00	-1,157.12	0.00	1,157.12	1,412.68	706.34	1,451.11	716.65	37.14	-4.48	0.627
90.00	-18.15	-24.72	0.00	-1,031.04	0.00	1,031.04	1,384.32	692.16	1,376.86	679.98	42.04	-4.86	0.572
95.00	-16.90	-24.21	0.00	-907.47	0.00	907.47	1,354.92	677.46	1,303.45	643.72	47.31	-5.21	0.517
100.00	-15.69	-23.73	0.00	-786.43	0.00	786.43	1,324.47	662.24	1,230.99	607.94	52.95	-5.55	0.460
104.00	-13.58	-20.64	0.00	-688.81	0.00	688.81	1,299.37	649.69	1,173.78	579.69	57.69	-5.79	0.411
105.00	-13.33	-20.37	0.00	-668.17	0.00	668.17	1,292.99	646.50	1,159.59	572.68	58.91	-5.85	0.401
110.00	-12.23	-19.85	0.00	-566.30	0.00	566.30	1,247.14	623.57	1,077.81	532.29	65.19	-6.13	0.353
110.00	-12.23	-19.85	0.00	-566.30	0.00	566.30	853.24	426.62	741.79	366.34	65.19	-6.13	0.423
115.00	-11.10	-18.91	0.00	-467.08	0.00	467.08	834.99	417.50	698.71	345.06	71.74	-6.39	0.356
119.13	-10.05	-18.59	0.00	-389.07	0.00	389.07	819.16	409.58	663.43	327.64	77.34	-6.59	0.302
120.00	-9.79	-18.48	0.00	-372.81	0.00	372.81	815.71	407.86	655.98	323.96	78.55	-6.63	0.145
121.00	-9.27	-18.20	0.00	-354.33	0.00	354.33	811.73	405.86	647.49	319.77	79.94	-6.65	0.134
121.00	-9.27	-18.20	0.00	-354.33	0.00	354.33	811.73	405.86	647.49	319.77	79.94	-6.65	0.218
124.50	-8.47	-17.83	0.00	-290.64	0.00	290.64	797.47	398.73	617.91	305.16	84.83	-6.72	0.180
124.50	-8.47	-17.83	0.00	-290.64	0.00	290.64	797.47	398.73	617.91	305.16	84.83	-6.72	0.965
125.00	-8.34	-17.70	0.00	-281.73	0.00	281.73	795.39	397.69	613.71	303.09	85.53	-6.73	0.942
127.00	-6.30	-12.84	0.00	-243.42	0.00	243.42	786.97	393.48	596.95	294.81	88.41	-7.03	0.835
130.00	-5.94	-12.52	0.00	-204.91	0.00	204.91	774.02	387.01	572.00	282.49	92.94	-7.42	0.734
135.00	-5.62	-12.13	0.00	-142.32	0.00	142.32	751.62	375.81	530.94	262.21	101.01	-7.98	0.551
140.00	-3.37	-7.72	0.00	-81.67	0.00	81.67	728.18	364.09	490.64	242.31	109.57	-8.39	0.342
144.00	-3.10	-7.08	0.00	-50.81	0.00	50.81	701.03	350.52	454.07	224.25	116.68	-8.61	0.231
145.00	-3.08	-6.80	0.00	-43.72	0.00	43.72	694.06	347.03	445.03	219.78	118.48	-8.66	0.204
150.00	0.00	-6.25	0.00	-9.73	0.00	9.73	659.19	329.60	401.19	198.13	127.59	-8.79	0.049

Site Number: 302489

Code: ANSI/TIA-222-G

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Site Name: Enfd - Enfield, CT

Engineering Number: OAA732957_C3_02

7/18/2018 10:26:58 AM

Customer: VERIZON WIRELESS

Load Case: 1.2D + 1.0Di + 1.0Wi

50 mph with 1.00 in Radial Ice

25 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		58.8	0.0					0.0	0.0	58.8	0.0	0.0	0.0
5.00		117.0	1,284.1					0.0	1,802.9	117.0	3,087.0	0.0	0.0
10.00		115.4	1,302.3					0.0	1,824.0	115.4	3,126.3	0.0	0.0
15.00		115.4	1,296.7					0.0	2,727.8	115.4	4,024.5	0.0	0.0
20.00		101.2	1,283.4					0.0	2,758.9	101.2	4,042.3	0.0	0.0
23.60	Reinf. Top Reinf	60.1	914.4					0.0	2,001.6	60.1	2,916.0	0.0	0.0
25.00		78.5	353.6					0.0	781.4	78.5	1,135.0	0.0	0.0
30.00		80.2	1,246.2					0.0	2,803.1	80.2	4,049.3	0.0	0.0
31.50	Bot - Section 2	63.3	370.8					0.0	844.3	63.3	1,215.1	0.0	0.0
35.00		53.1	1,328.7					0.0	1,975.7	53.1	3,304.4	0.0	0.0
35.67	Top - Section 1	64.2	251.3					0.0	377.2	64.2	628.5	0.0	0.0
40.00		120.3	949.4					0.0	2,457.8	120.3	3,407.2	0.0	0.0
45.00		129.3	1,075.5					0.0	2,848.4	129.3	3,923.8	0.0	0.0
50.00		129.4	1,054.0					0.0	2,860.4	129.4	3,914.4	0.0	0.0
55.00		129.2	1,031.9					0.0	2,871.4	129.2	3,903.3	0.0	0.0
60.00		115.9	1,009.2					0.0	2,881.5	115.9	3,890.7	0.0	0.0
64.00	Appurtenance(s)	64.2	791.6	165.5	0.0	0.0	343.7	0.0	2,312.0	229.7	3,447.3	0.0	0.0
65.00		60.0	196.2					0.0	578.9	60.0	775.1	0.0	0.0
68.70	Reinf. Top	63.7	715.6					0.0	2,144.8	63.7	2,860.4	0.0	0.0
70.00	Bot - Section 3	61.5	249.0					0.0	650.5	61.5	899.5	0.0	0.0
73.50	Top - Section 2	64.1	976.3					0.0	1,754.0	64.1	2,730.3	0.0	0.0
75.00		82.6	252.9					0.0	752.9	82.6	1,005.8	0.0	0.0
80.00		126.2	825.5					0.0	2,168.3	126.2	2,993.8	0.0	0.0
85.00		124.6	804.2					0.0	1,996.3	124.6	2,800.4	0.0	0.0
90.00		122.9	782.6					0.0	2,002.4	122.9	2,785.0	0.0	0.0
95.00		121.0	760.7					0.0	2,008.2	121.0	2,768.9	0.0	0.0
100.00		107.2	738.6					0.0	2,013.8	107.2	2,752.4	0.0	0.0
104.00	Appurtenance(s)	59.0	575.8	614.5	0.0	609.5	6,279.6	0.0	1,614.9	673.4	8,470.2	0.0	0.0
105.00		69.6	142.4					0.0	356.7	69.6	499.0	0.0	0.0
110.00	Top - Section 3	114.5	693.9					0.0	1,785.7	114.5	2,479.6	0.0	0.0
115.00	Appurtenance(s)	102.6	587.2	96.9	0.0	0.0	630.4	0.0	1,895.7	199.4	3,113.3	0.0	0.0
119.13	Reinf Bottom	55.5	470.6					0.0	1,893.0	55.5	2,363.5	0.0	0.0
120.00		20.6	98.7					0.0	454.5	20.6	553.3	0.0	0.0
121.00	Reinf. Top	48.9	112.1					0.0	840.3	48.9	952.3	0.0	0.0
124.50	Reinf. Top	43.3	384.0					40.7	1,539.4	84.0	1,923.5	0.0	0.0
125.00		26.7	54.4					5.8	190.0	32.5	244.4	0.0	0.0
127.00	Appurtenance(s)	52.9	215.0	1,076.6	0.0	663.3	8,249.2	23.4	547.7	1,152.9	9,011.8	0.0	0.0
130.00		83.1	315.8					0.0	473.0	83.1	788.8	0.0	0.0
135.00		101.7	507.9					0.0	434.5	101.7	942.4	0.0	0.0
140.00	Appurtenance(s)	89.3	487.8	862.1	0.0	0.0	7,786.3	0.0	435.8	951.3	8,709.9	0.0	0.0
144.00	Appurtenance(s)	48.7	376.6	95.0	0.0	0.0	159.8	31.3	422.4	175.0	958.7	0.0	0.0
145.00		56.9	92.8					7.9	96.4	64.8	189.2	0.0	0.0
150.00	Appurtenance(s)	47.3	447.1	1,404.6	0.0	2,312.8	12,830.1	39.5	482.9	1,491.4	13,760.1	0.0	0.0
Totals:										8,013.50	127,347.	0.00	0.00

Site Number: 302489

Code: ANSI/TIA-222-G

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Site Name: Enfd - Enfield, CT

Engineering Number: OAA732957_C3_02

7/18/2018 10:27:07 AM

Customer: VERIZON WIRELESS

Load Case: 1.2D + 1.0Di + 1.0Wi

50 mph with 1.00 in Radial Ice

25 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 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	-127.34	-8.03	0.00	-998.29	0.00	998.29	3,157.17	1,578.58	4,812.28	2,376.61	0.00	0.00	0.179
5.00	-124.25	-8.06	0.00	-958.13	0.00	958.13	3,114.35	1,557.18	4,645.51	2,294.24	0.04	-0.07	0.175
10.00	-121.11	-8.08	0.00	-917.85	0.00	917.85	3,070.50	1,535.25	4,480.02	2,212.51	0.14	-0.13	0.170
15.00	-117.08	-8.09	0.00	-877.46	0.00	877.46	3,025.61	1,512.81	4,315.90	2,131.46	0.32	-0.20	0.165
20.00	-113.03	-8.08	0.00	-837.02	0.00	837.02	2,979.68	1,489.84	4,153.25	2,051.14	0.57	-0.27	0.160
23.60	-110.11	-8.07	0.00	-807.92	0.00	807.92	2,945.97	1,472.98	4,037.12	1,993.78	0.79	-0.32	0.156
23.60	-110.11	-8.07	0.00	-807.92	0.00	807.92	2,945.97	1,472.98	4,037.12	1,993.78	0.79	-0.32	0.156
25.00	-108.97	-8.07	0.00	-796.62	0.00	796.62	2,932.71	1,466.36	3,992.19	1,971.59	0.88	-0.34	0.155
30.00	-104.91	-8.04	0.00	-756.27	0.00	756.27	2,875.21	1,437.61	3,820.20	1,886.65	1.27	-0.40	0.150
31.50	-103.69	-8.03	0.00	-744.20	0.00	744.20	2,854.29	1,427.15	3,764.49	1,859.14	1.40	-0.42	0.148
35.00	-100.38	-8.00	0.00	-716.09	0.00	716.09	2,805.48	1,402.74	3,636.10	1,795.73	1.73	-0.47	0.143
35.67	-99.75	-7.99	0.00	-710.76	0.00	710.76	2,248.07	1,124.03	2,973.91	1,468.70	1.79	-0.48	0.159
40.00	-96.34	-7.94	0.00	-676.14	0.00	676.14	2,218.59	1,109.29	2,872.23	1,418.49	2.25	-0.53	0.153
45.00	-92.41	-7.88	0.00	-636.44	0.00	636.44	2,183.60	1,091.80	2,755.77	1,360.97	2.85	-0.60	0.146
50.00	-88.48	-7.80	0.00	-597.06	0.00	597.06	2,147.58	1,073.79	2,640.30	1,303.95	3.51	-0.66	0.139
55.00	-84.57	-7.72	0.00	-558.04	0.00	558.04	2,110.52	1,055.26	2,525.94	1,247.47	4.24	-0.73	0.132
60.00	-80.68	-7.63	0.00	-519.44	0.00	519.44	2,072.42	1,036.21	2,412.79	1,191.58	5.04	-0.79	0.124
64.00	-77.23	-7.39	0.00	-488.91	0.00	488.91	2,041.18	1,020.59	2,323.20	1,147.34	5.72	-0.84	0.118
65.00	-76.45	-7.36	0.00	-481.52	0.00	481.52	2,033.27	1,016.64	2,300.94	1,136.35	5.90	-0.85	0.117
68.70	-73.59	-7.29	0.00	-454.29	0.00	454.29	1,997.21	998.60	2,211.95	1,092.40	6.58	-0.90	0.112
68.70	-73.59	-7.29	0.00	-454.29	0.00	454.29	1,997.21	998.60	2,211.95	1,092.40	6.58	-0.90	0.214
70.00	-72.69	-7.28	0.00	-444.81	0.00	444.81	1,982.10	991.05	2,178.42	1,075.84	6.82	-0.91	0.211
73.50	-69.95	-7.24	0.00	-419.35	0.00	419.35	1,473.96	736.98	1,624.57	802.32	7.52	-0.99	0.237
75.00	-68.94	-7.23	0.00	-408.49	0.00	408.49	1,466.28	733.14	1,601.77	791.05	7.84	-1.03	0.233
80.00	-65.93	-7.18	0.00	-372.35	0.00	372.35	1,440.00	720.00	1,526.12	753.69	8.97	-1.14	0.218
85.00	-63.12	-7.12	0.00	-336.47	0.00	336.47	1,412.68	706.34	1,451.11	716.65	10.23	-1.26	0.203
90.00	-60.33	-7.04	0.00	-300.88	0.00	300.88	1,384.32	692.16	1,376.86	679.98	11.61	-1.37	0.187
95.00	-57.55	-6.95	0.00	-265.67	0.00	265.67	1,354.92	677.46	1,303.45	643.72	13.09	-1.47	0.170
100.00	-54.79	-6.86	0.00	-230.90	0.00	230.90	1,324.47	662.24	1,230.99	607.94	14.68	-1.57	0.153
104.00	-46.34	-5.98	0.00	-202.87	0.00	202.87	1,299.37	649.69	1,173.78	579.69	16.03	-1.64	0.136
105.00	-45.83	-5.94	0.00	-196.88	0.00	196.88	1,292.99	646.50	1,159.59	572.68	16.37	-1.66	0.133
110.00	-43.35	-5.81	0.00	-167.19	0.00	167.19	1,247.14	623.57	1,077.81	532.29	18.15	-1.74	0.119
110.00	-43.35	-5.81	0.00	-167.19	0.00	167.19	853.24	426.62	741.79	366.34	18.15	-1.74	0.143
115.00	-40.24	-5.56	0.00	-138.15	0.00	138.15	834.99	417.50	698.71	345.06	20.02	-1.81	0.122
119.13	-37.88	-5.45	0.00	-115.21	0.00	115.21	819.16	409.58	663.43	327.64	21.61	-1.87	0.105
120.00	-37.32	-5.42	0.00	-110.44	0.00	110.44	815.71	407.86	655.98	323.96	21.96	-1.89	0.054
121.00	-36.37	-5.35	0.00	-105.02	0.00	105.02	811.73	405.86	647.49	319.77	22.35	-1.89	0.050
121.00	-36.37	-5.35	0.00	-105.02	0.00	105.02	811.73	405.86	647.49	319.77	22.35	-1.89	0.084
124.50	-34.45	-5.21	0.00	-86.30	0.00	86.30	797.47	398.73	617.91	305.16	23.75	-1.91	0.072
124.50	-34.45	-5.21	0.00	-86.30	0.00	86.30	797.47	398.73	617.91	305.16	23.75	-1.91	0.326
125.00	-34.20	-5.19	0.00	-83.70	0.00	83.70	795.39	397.69	613.71	303.09	23.95	-1.92	0.319
127.00	-25.23	-3.78	0.00	-72.65	0.00	72.65	786.97	393.48	596.95	294.81	24.77	-2.00	0.279
130.00	-24.43	-3.73	0.00	-61.31	0.00	61.31	774.02	387.01	572.00	282.49	26.07	-2.12	0.249
135.00	-23.49	-3.65	0.00	-42.66	0.00	42.66	751.62	375.81	530.94	262.21	28.39	-2.29	0.194
140.00	-14.82	-2.37	0.00	-24.40	0.00	24.40	728.18	364.09	490.64	242.31	30.85	-2.41	0.121
144.00	-13.87	-2.16	0.00	-14.94	0.00	14.94	701.03	350.52	454.07	224.25	32.90	-2.48	0.086
145.00	-13.68	-2.09	0.00	-12.78	0.00	12.78	694.06	347.03	445.03	219.78	33.42	-2.49	0.078
150.00	0.00	-1.49	0.00	-2.31	0.00	2.31	659.19	329.60	401.19	198.13	36.05	-2.53	0.012

Site Number: 302489

Code: ANSI/TIA-222-G

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Site Name: Enfd - Enfield, CT

Engineering Number: OAA732957_C3_02

7/18/2018 10:27:07 AM

Customer: VERIZON WIRELESS

Load Case: 1.0D + 1.0W

Serviceability 60 mph

24 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		65.3	0.0					0.0	0.0	65.3	0.0	0.0	0.0
5.00		129.2	752.2					0.0	1,360.6	129.2	2,112.8	0.0	0.0
10.00		126.5	736.1					0.0	1,360.6	126.5	2,096.7	0.0	0.0
15.00		125.6	720.0					0.0	1,617.7	125.6	2,337.7	0.0	0.0
20.00		109.7	703.9					0.0	1,617.7	109.7	2,321.6	0.0	0.0
23.60	Reinf. Top Reinf	65.0	496.8					0.0	1,164.8	65.0	1,661.6	0.0	0.0
25.00		84.6	191.0					0.0	453.0	84.6	643.9	0.0	0.0
30.00		86.3	671.7					0.0	1,617.7	86.3	2,289.4	0.0	0.0
31.50	Bot - Section 2	67.9	198.4					0.0	485.3	67.9	683.7	0.0	0.0
35.00		57.0	846.5					0.0	1,132.4	57.0	1,978.9	0.0	0.0
35.67	Top - Section 1	68.7	159.6					0.0	215.7	68.7	375.3	0.0	0.0
40.00		128.4	471.3					0.0	1,402.0	128.4	1,873.3	0.0	0.0
45.00		137.5	531.3					0.0	1,617.7	137.5	2,149.0	0.0	0.0
50.00		137.0	517.9					0.0	1,617.7	137.0	2,135.6	0.0	0.0
55.00		136.2	504.5					0.0	1,617.7	136.2	2,122.2	0.0	0.0
60.00		121.6	491.0					0.0	1,617.7	121.6	2,108.8	0.0	0.0
64.00	Appurtenance(s)	67.2	383.2	201.6	0.0	0.0	126.0	0.0	1,294.2	268.8	1,803.4	0.0	0.0
65.00		62.6	94.5					0.0	323.5	62.6	418.0	0.0	0.0
68.70	Reinf. Top	66.4	344.8					0.0	1,197.0	66.4	1,541.8	0.0	0.0
70.00	Bot - Section 3	64.0	119.4					0.0	333.7	64.0	453.1	0.0	0.0
73.50	Top - Section 2	66.7	575.9					0.0	898.5	66.7	1,474.4	0.0	0.0
75.00		85.6	109.4					0.0	385.1	85.6	494.4	0.0	0.0
80.00		130.3	357.6					0.0	1,063.1	130.3	1,420.8	0.0	0.0
85.00		127.9	346.9					0.0	949.6	127.9	1,296.5	0.0	0.0
90.00		125.5	336.2					0.0	949.6	125.5	1,285.7	0.0	0.0
95.00		122.8	325.4					0.0	949.6	122.8	1,275.0	0.0	0.0
100.00		108.3	314.7					0.0	949.6	108.3	1,264.3	0.0	0.0
104.00	Appurtenance(s)	59.3	244.0	637.9	0.0	648.7	1,617.3	0.0	759.7	697.2	2,621.0	0.0	0.0
105.00		69.6	59.9					0.0	177.7	69.6	237.7	0.0	0.0
110.00	Top - Section 3	114.1	293.2					0.0	888.7	114.1	1,182.0	0.0	0.0
115.00	Appurtenance(s)	101.5	212.5	104.6	0.0	0.0	120.0	0.0	955.5	206.0	1,288.0	0.0	0.0
119.13	Reinf Bottom	54.6	169.3					0.0	988.5	54.6	1,157.7	0.0	0.0
120.00		20.2	35.2					0.0	253.5	20.2	288.7	0.0	0.0
121.00	Reinf. Top	55.2	39.9					0.0	556.9	55.2	596.9	0.0	0.0
124.50	Reinf. Top	50.7	137.2					18.0	780.2	68.7	917.5	0.0	0.0
125.00		31.1	19.3					2.6	86.4	33.7	105.7	0.0	0.0
127.00	Appurtenance(s)	55.4	76.3	1,048.1	0.0	696.6	2,538.4	10.3	212.1	1,113.8	2,826.8	0.0	0.0
130.00		80.0	112.1					0.0	212.1	80.0	324.2	0.0	0.0
135.00		97.2	180.3					0.0	130.8	97.2	311.2	0.0	0.0
140.00	Appurtenance(s)	91.8	172.3	884.6	0.0	0.0	2,830.4	0.0	130.8	976.4	3,133.5	0.0	0.0
144.00	Appurtenance(s)	55.0	132.0	71.0	0.0	0.0	154.6	20.8	92.2	146.7	378.8	0.0	0.0
145.00		63.5	32.2					5.2	22.7	68.7	54.9	0.0	0.0
150.00	Appurtenance(s)	52.7	156.2	1,425.3	0.0	2,334.9	4,265.2	26.2	113.6	1,504.2	4,535.0	0.0	0.0
Totals:										8,181.77	59,577.4	0.00	0.00

Site Number: 302489

Code: ANSI/TIA-222-G

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Site Name: Enfd - Enfield, CT

Engineering Number: OAA732957_C3_02

7/18/2018 10:27:16 AM

Customer: VERIZON WIRELESS

Load Case: 1.0D + 1.0W

Serviceability 60 mph

24 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	-59.57	-8.15	0.00	-905.01	0.00	905.01	3,157.17	1,578.58	4,812.28	2,376.61	0.00	0.00	0.153
5.00	-57.45	-8.08	0.00	-864.27	0.00	864.27	3,114.35	1,557.18	4,645.51	2,294.24	0.03	-0.06	0.148
10.00	-55.35	-8.01	0.00	-823.88	0.00	823.88	3,070.50	1,535.25	4,480.02	2,212.51	0.13	-0.12	0.144
15.00	-53.00	-7.93	0.00	-783.84	0.00	783.84	3,025.61	1,512.81	4,315.90	2,131.46	0.29	-0.18	0.139
20.00	-50.67	-7.86	0.00	-744.19	0.00	744.19	2,979.68	1,489.84	4,153.25	2,051.14	0.51	-0.24	0.134
23.60	-49.01	-7.81	0.00	-715.90	0.00	715.90	2,945.97	1,472.98	4,037.12	1,993.78	0.71	-0.28	0.130
23.60	-49.01	-7.81	0.00	-715.90	0.00	715.90	2,945.97	1,472.98	4,037.12	1,993.78	0.71	-0.28	0.130
25.00	-48.36	-7.75	0.00	-704.97	0.00	704.97	2,932.71	1,466.36	3,992.19	1,971.59	0.79	-0.30	0.129
30.00	-46.07	-7.69	0.00	-666.19	0.00	666.19	2,875.21	1,437.61	3,820.20	1,886.65	1.14	-0.36	0.124
31.50	-45.38	-7.64	0.00	-654.67	0.00	654.67	2,854.29	1,427.15	3,764.49	1,859.14	1.26	-0.38	0.123
35.00	-43.40	-7.58	0.00	-627.94	0.00	627.94	2,805.48	1,402.74	3,636.10	1,795.73	1.55	-0.42	0.117
35.67	-43.02	-7.53	0.00	-622.88	0.00	622.88	2,248.07	1,124.03	2,973.91	1,468.70	1.61	-0.43	0.131
40.00	-41.14	-7.43	0.00	-590.23	0.00	590.23	2,218.59	1,109.29	2,872.23	1,418.49	2.02	-0.47	0.125
45.00	-38.98	-7.31	0.00	-553.09	0.00	553.09	2,183.60	1,091.80	2,755.77	1,360.97	2.55	-0.53	0.119
50.00	-36.84	-7.19	0.00	-516.53	0.00	516.53	2,147.58	1,073.79	2,640.30	1,303.95	3.13	-0.59	0.112
55.00	-34.72	-7.06	0.00	-480.58	0.00	480.58	2,110.52	1,055.26	2,525.94	1,247.47	3.78	-0.64	0.106
60.00	-32.60	-6.94	0.00	-445.27	0.00	445.27	2,072.42	1,036.21	2,412.79	1,191.58	4.48	-0.70	0.099
64.00	-30.80	-6.67	0.00	-417.49	0.00	417.49	2,041.18	1,020.59	2,323.20	1,147.34	5.08	-0.74	0.094
65.00	-30.38	-6.61	0.00	-410.82	0.00	410.82	2,033.27	1,016.64	2,300.94	1,136.35	5.24	-0.75	0.093
68.70	-28.84	-6.54	0.00	-386.36	0.00	386.36	1,997.21	998.60	2,211.95	1,092.40	5.84	-0.79	0.088
68.70	-28.84	-6.54	0.00	-386.36	0.00	386.36	1,997.21	998.60	2,211.95	1,092.40	5.84	-0.79	0.172
70.00	-28.38	-6.49	0.00	-377.86	0.00	377.86	1,982.10	991.05	2,178.42	1,075.84	6.05	-0.80	0.170
73.50	-26.90	-6.42	0.00	-355.16	0.00	355.16	1,473.96	736.98	1,624.57	802.32	6.66	-0.87	0.189
75.00	-26.40	-6.36	0.00	-345.53	0.00	345.53	1,466.28	733.14	1,601.77	791.05	6.94	-0.90	0.186
80.00	-24.97	-6.25	0.00	-313.74	0.00	313.74	1,440.00	720.00	1,526.12	753.69	7.93	-1.00	0.173
85.00	-23.67	-6.13	0.00	-282.50	0.00	282.50	1,412.68	706.34	1,451.11	716.65	9.03	-1.09	0.160
90.00	-22.37	-6.02	0.00	-251.83	0.00	251.83	1,384.32	692.16	1,376.86	679.98	10.22	-1.18	0.146
95.00	-21.09	-5.90	0.00	-221.74	0.00	221.74	1,354.92	677.46	1,303.45	643.72	11.51	-1.27	0.132
100.00	-19.83	-5.79	0.00	-192.25	0.00	192.25	1,324.47	662.24	1,230.99	607.94	12.88	-1.35	0.118
104.00	-17.22	-5.04	0.00	-168.46	0.00	168.46	1,299.37	649.69	1,173.78	579.69	14.04	-1.41	0.105
105.00	-16.98	-4.97	0.00	-163.42	0.00	163.42	1,292.99	646.50	1,159.59	572.68	14.34	-1.43	0.103
110.00	-15.80	-4.85	0.00	-138.55	0.00	138.55	1,247.14	623.57	1,077.81	532.29	15.87	-1.49	0.091
110.00	-15.80	-4.85	0.00	-138.55	0.00	138.55	853.24	426.62	741.79	366.34	15.87	-1.49	0.109
115.00	-14.51	-4.62	0.00	-114.31	0.00	114.31	834.99	417.50	698.71	345.06	17.47	-1.56	0.092
119.13	-13.35	-4.54	0.00	-95.25	0.00	95.25	819.16	409.58	663.43	327.64	18.83	-1.61	0.079
120.00	-13.06	-4.52	0.00	-91.27	0.00	91.27	815.71	407.86	655.98	323.96	19.13	-1.62	0.039
121.00	-12.47	-4.45	0.00	-86.76	0.00	86.76	811.73	405.86	647.49	319.77	19.47	-1.62	0.036
121.00	-12.47	-4.45	0.00	-86.76	0.00	86.76	811.73	405.86	647.49	319.77	19.47	-1.62	0.059
124.50	-11.55	-4.35	0.00	-71.20	0.00	71.20	797.47	398.73	617.91	305.16	20.66	-1.64	0.049
124.50	-11.55	-4.35	0.00	-71.20	0.00	71.20	797.47	398.73	617.91	305.16	20.66	-1.64	0.248
125.00	-11.44	-4.32	0.00	-69.02	0.00	69.02	795.39	397.69	613.71	303.09	20.83	-1.64	0.242
127.00	-8.64	-3.14	0.00	-59.68	0.00	59.68	786.97	393.48	596.95	294.81	21.54	-1.71	0.213
130.00	-8.32	-3.07	0.00	-50.26	0.00	50.26	774.02	387.01	572.00	282.49	22.65	-1.81	0.189
135.00	-8.00	-2.98	0.00	-34.92	0.00	34.92	751.62	375.81	530.94	262.21	24.62	-1.95	0.144
140.00	-4.90	-1.90	0.00	-20.03	0.00	20.03	728.18	364.09	490.64	242.31	26.71	-2.05	0.089
144.00	-4.53	-1.74	0.00	-12.43	0.00	12.43	701.03	350.52	454.07	224.25	28.45	-2.10	0.062
145.00	-4.48	-1.67	0.00	-10.69	0.00	10.69	694.06	347.03	445.03	219.78	28.89	-2.11	0.055
150.00	0.00	-1.50	0.00	-2.33	0.00	2.33	659.19	329.60	401.19	198.13	31.13	-2.14	0.012

Site Number: 302489

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Site Name: Enfd - Enfield, CT

Engineering Number: OAA732957_C3_02

7/18/2018 10:27:17 AM

Customer: VERIZON WIRELESS

Equivalent Lateral Forces Method Analysis

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

Spectral Response Acceleration for Short Period (S_g):	0.18
Spectral Response Acceleration at 1.0 Second Period (S_1):	0.06
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}):	0.19
Design Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.10
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):	2.80
Redundancy Factor (p):	1.30
Seismic Force Distribution Exponent (k):	2.00
Total Unfactored Dead Load:	59.58 k
Seismic Base Shear (E):	2.32 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)
42	147.50	270	5,870	0.013	31	334
41	144.50	55	1,147	0.003	6	68
40	142.00	224	4,521	0.010	24	277
39	137.50	303	5,731	0.013	30	375
38	132.50	311	5,463	0.012	29	385
37	128.50	324	5,353	0.012	28	401
36	126.00	288	4,578	0.010	24	357
35	124.75	106	1,645	0.004	9	131
34	122.75	917	13,824	0.031	73	1,135
33	120.50	597	8,666	0.020	45	739
32	119.56	289	4,127	0.009	22	357
31	117.06	1,158	15,865	0.036	83	1,433
30	112.50	1,168	14,783	0.033	78	1,446
29	107.50	1,182	13,659	0.031	72	1,463
28	104.50	238	2,596	0.006	14	294
27	102.00	1,004	10,442	0.024	55	1,242
26	97.50	1,264	12,018	0.027	63	1,565
25	92.50	1,275	10,909	0.025	57	1,578
24	87.50	1,286	9,844	0.022	52	1,591
23	82.50	1,296	8,824	0.020	46	1,604
22	77.50	1,421	8,533	0.019	45	1,758
21	74.25	494	2,726	0.006	14	612
20	71.75	1,474	7,591	0.017	40	1,825

Site Number: 302489

Code: ANSI/TIA-222-G

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Site Name: Enfd - Enfield, CT

Engineering Number: OAA732957_C3_02

7/18/2018 10:27:17 AM

Customer: VERIZON WIRELESS

19	69.35	453	2,179	0.005	11	561
18	66.85	1,542	6,890	0.016	36	1,908
17	64.50	418	1,739	0.004	9	517
16	62.00	1,677	6,448	0.015	34	2,076
15	57.50	2,109	6,972	0.016	37	2,610
14	52.50	2,122	5,849	0.013	31	2,626
13	47.50	2,136	4,818	0.011	25	2,643
12	42.50	2,149	3,882	0.009	20	2,660
11	37.83	1,873	2,681	0.006	14	2,318
10	35.33	375	469	0.001	2	464
9	33.25	1,979	2,188	0.005	11	2,449
8	30.75	684	646	0.001	3	846
7	27.50	2,289	1,731	0.004	9	2,833
6	24.30	644	380	0.001	2	797
5	21.80	1,662	790	0.002	4	2,056
4	17.50	2,322	711	0.002	4	2,873
3	12.50	2,338	365	0.001	2	2,893
2	7.50	2,097	118	0.000	1	2,595
1	2.50	2,113	13	0.000	0	2,615
Kaelus DBC0061F1V51-	150.00	76	1,721	0.004	9	95
Powerwave Allgon LGP	150.00	42	952	0.002	5	52
Raycap DC6-48-60-18-	150.00	64	1,431	0.003	8	79
Ericsson RRUS A2 B2	150.00	66	1,485	0.003	8	82
Ericsson RRUS 11 (Ba	150.00	165	3,713	0.008	19	204
Ericsson RRUS 32 B30	150.00	180	4,050	0.009	21	223
Ericsson RRUS-11 (19	150.00	153	3,443	0.008	18	189
Ericsson RRUS-12 B2	150.00	174	3,915	0.009	21	215
Decibel DB809KE-SY	150.00	26	585	0.001	3	32
Ericsson Radio 8843	150.00	255	5,738	0.013	30	316
Round Side Arm	150.00	450	10,125	0.023	53	557
Powerwave Allgon 777	150.00	105	2,363	0.005	12	130
CCI OPA-65R-LCUU-H8	150.00	264	5,940	0.013	31	327
CCI TPA-65R-LCUUUU-H	150.00	245	5,508	0.012	29	303
Platform w/ Handrail	150.00	2,000	45,000	0.102	236	2,475
Diamond X50A	144.00	5	95	0.000	1	6
Stand-Off	144.00	150	3,110	0.007	16	186
Ericsson KRY 112 144	140.00	33	647	0.001	3	41
Ericsson RRUS-11 (50	140.00	150	2,940	0.007	15	186
Ericsson AIR 21, 1.3	140.00	249	4,880	0.011	26	308
Ericsson AIR 21, 1.3	140.00	244	4,792	0.011	25	303
Andrew LNX-6515DS-VT	140.00	154	3,016	0.007	16	190
Platform w/ Handrail	140.00	2,000	39,200	0.089	206	2,475
RFS FD9R6004/2C-3L	127.00	16	252	0.001	1	19
Nokia AirScale RRH 4	127.00	106	1,708	0.004	9	131
Alcatel-Lucent B25 R	127.00	159	2,565	0.006	13	197
Alcatel-Lucent B13 R	127.00	172	2,768	0.006	15	212
Alcatel-Lucent B66A	127.00	201	3,242	0.007	17	249
Antel BXA-70063/4CF	127.00	30	479	0.001	3	37
RFS DB-T1-6Z-8AB-0Z	127.00	88	1,419	0.003	7	109
Antel BXA-80080-6CF-	127.00	54	871	0.002	5	67
Commscope JAHH-65B-R	127.00	364	5,865	0.013	31	450
Round Low Profile PI	127.00	1,350	21,774	0.049	114	1,671
76" x 6" Panel	115.00	120	1,587	0.004	8	149
DragonWave Horizon C	104.00	21	229	0.001	1	26
Alcatel-Lucent RRH2x	104.00	317	3,433	0.008	18	393
Alcatel-Lucent 1900M	104.00	180	1,947	0.004	10	223
Alcatel-Lucent TD-RR	104.00	210	2,271	0.005	12	260
DragonWave A-ANT-11G	104.00	54	584	0.001	3	67
24" x 24" Junction	104.00	20	216	0.000	1	25
Side Arms	104.00	560	6,057	0.014	32	693
KMW ETCR-654L12H6	104.00	255	2,755	0.006	14	315
Channel Master Type	64.00	126	516	0.001	3	156
		59,577	442,772	1.000	2,324	73,730

Site Number: 302489

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Site Name: Enfd - Enfield, CT

Engineering Number: OAA732957_C3_02

7/18/2018 10:27:17 AM

Customer: VERIZON WIRELESS

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

Seismic (Reduced DL) Equivalent Lateral Forces Method

Segment	Height Above Base (ft)	Weight (lb)	W _z (lb-ft)	C _{vx}	Horizontal Force (lb)	Vertical Force (lb)
42	147.50	270	5,870	0.013	31	233
41	144.50	55	1,147	0.003	6	47
40	142.00	224	4,521	0.010	24	193
39	137.50	303	5,731	0.013	30	261
38	132.50	311	5,463	0.012	29	268
37	128.50	324	5,353	0.012	28	280
36	126.00	288	4,578	0.010	24	249
35	124.75	106	1,645	0.004	9	91
34	122.75	917	13,824	0.031	73	791
33	120.50	597	8,666	0.020	45	515
32	119.56	289	4,127	0.009	22	249
31	117.06	1,158	15,865	0.036	83	998
30	112.50	1,168	14,783	0.033	78	1,007
29	107.50	1,182	13,659	0.031	72	1,019
28	104.50	238	2,596	0.006	14	205
27	102.00	1,004	10,442	0.024	55	866
26	97.50	1,264	12,018	0.027	63	1,090
25	92.50	1,275	10,909	0.025	57	1,100
24	87.50	1,286	9,844	0.022	52	1,109
23	82.50	1,296	8,824	0.020	46	1,118
22	77.50	1,421	8,533	0.019	45	1,225
21	74.25	494	2,726	0.006	14	426
20	71.75	1,474	7,591	0.017	40	1,272
19	69.35	453	2,179	0.005	11	391
18	66.85	1,542	6,890	0.016	36	1,330
17	64.50	418	1,739	0.004	9	360
16	62.00	1,677	6,448	0.015	34	1,447
15	57.50	2,109	6,972	0.016	37	1,819
14	52.50	2,122	5,849	0.013	31	1,830
13	47.50	2,136	4,818	0.011	25	1,842
12	42.50	2,149	3,882	0.009	20	1,853
11	37.83	1,873	2,681	0.006	14	1,616
10	35.33	375	469	0.001	2	324
9	33.25	1,979	2,188	0.005	11	1,707
8	30.75	684	646	0.001	3	590
7	27.50	2,289	1,731	0.004	9	1,975
6	24.30	644	380	0.001	2	555
5	21.80	1,662	790	0.002	4	1,433
4	17.50	2,322	711	0.002	4	2,002
3	12.50	2,338	365	0.001	2	2,016
2	7.50	2,097	118	0.000	1	1,808
1	2.50	2,113	13	0.000	0	1,822
Kaelus DBC0061F1V51-	150.00	76	1,721	0.004	9	66
Powerwave Allgon LGP	150.00	42	952	0.002	5	36
Raycap DC6-48-60-18-	150.00	64	1,431	0.003	8	55
Ericsson RRUS A2 B2	150.00	66	1,485	0.003	8	57
Ericsson RRUS 11 (Ba	150.00	165	3,713	0.008	19	142
Ericsson RRUS 32 B30	150.00	180	4,050	0.009	21	155
Ericsson RRUS-11 (19	150.00	153	3,443	0.008	18	132
Ericsson RRUS-12 B2	150.00	174	3,915	0.009	21	150
Decibel DB809KE-SY	150.00	26	585	0.001	3	22
Ericsson Radio 8843	150.00	255	5,738	0.013	30	220
Round Side Arm	150.00	450	10,125	0.023	53	388
Powerwave Allgon 777	150.00	105	2,363	0.005	12	91
CCI OPA-65R-LCUU-H8	150.00	264	5,940	0.013	31	228
CCI TPA-65R-LCUUUU-H	150.00	245	5,508	0.012	29	211
Platform w/ Handrail	150.00	2,000	45,000	0.102	236	1,725

Site Number: 302489

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Site Name: Enfd - Enfield, CT

Engineering Number: OAA732957_C3_02

7/18/2018 10:27:17 AM

Customer: VERIZON WIRELESS

Diamond X50A	144.00	5	95	0.000	1	4
Stand-Off	144.00	150	3,110	0.007	16	129
Ericsson KRY 112 144	140.00	33	647	0.001	3	28
Ericsson RRUS-11 (50	140.00	150	2,940	0.007	15	129
Ericsson AIR 21, 1.3	140.00	249	4,880	0.011	26	215
Ericsson AIR 21, 1.3	140.00	244	4,792	0.011	25	211
Andrew LNX-6515DS-VT	140.00	154	3,016	0.007	16	133
Platform w/ Handrail	140.00	2,000	39,200	0.089	206	1,725
RFS FD9R6004/2C-3L	127.00	16	252	0.001	1	13
Nokia AirScale RRH 4	127.00	106	1,708	0.004	9	91
Alcatel-Lucent B25 R	127.00	159	2,565	0.006	13	137
Alcatel-Lucent B13 R	127.00	172	2,768	0.006	15	148
Alcatel-Lucent B66A	127.00	201	3,242	0.007	17	173
Antel BX-70063/4CF	127.00	30	479	0.001	3	26
RFS DB-T1-6Z-8AB-0Z	127.00	88	1,419	0.003	7	76
Antel BX-80080-6CF-	127.00	54	871	0.002	5	47
Commscope JAHH-65B-R	127.00	364	5,865	0.013	31	314
Round Low Profile PI	127.00	1,350	21,774	0.049	114	1,164
76" x 6" Panel	115.00	120	1,587	0.004	8	103
DragonWave Horizon C	104.00	21	229	0.001	1	18
Alcatel-Lucent RRH2x	104.00	317	3,433	0.008	18	274
Alcatel-Lucent 1900M	104.00	180	1,947	0.004	10	155
Alcatel-Lucent TD-RR	104.00	210	2,271	0.005	12	181
DragonWave A-ANT-11G	104.00	54	584	0.001	3	47
24" x 24" Junction	104.00	20	216	0.000	1	17
Side Arms	104.00	560	6,057	0.014	32	483
KMW ETCR-654L12H6	104.00	255	2,755	0.006	14	220
Channel Master Type	64.00	126	516	0.001	3	109
		59,577	442,772	1.000	2,324	51,383

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Site Name: Enfd - Enfield, CT

Engineering Number:OAA732957_C3_02

7/18/2018 10:27:17 AM

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	-71.11	-2.34	0.00	-288.29	0.00	288.29	3,157.17	1,578.58	4,812.28	2,376.61	0.00	0.00	0.058
5.00	-68.52	-2.36	0.00	-276.61	0.00	276.61	3,114.35	1,557.18	4,645.51	2,294.24	0.01	-0.02	0.056
10.00	-65.63	-2.38	0.00	-264.82	0.00	264.82	3,070.50	1,535.25	4,480.02	2,212.51	0.04	-0.04	0.054
15.00	-62.75	-2.39	0.00	-252.94	0.00	252.94	3,025.61	1,512.81	4,315.90	2,131.46	0.09	-0.06	0.053
20.00	-60.69	-2.40	0.00	-240.99	0.00	240.99	2,979.68	1,489.84	4,153.25	2,051.14	0.16	-0.08	0.051
23.60	-59.90	-2.41	0.00	-232.34	0.00	232.34	2,945.97	1,472.98	4,037.12	1,993.78	0.23	-0.09	0.050
23.60	-59.90	-2.41	0.00	-232.34	0.00	232.34	2,945.97	1,472.98	4,037.12	1,993.78	0.23	-0.09	0.050
25.00	-57.06	-2.41	0.00	-228.97	0.00	228.97	2,932.71	1,466.36	3,992.19	1,971.59	0.25	-0.10	0.049
30.00	-56.22	-2.41	0.00	-216.93	0.00	216.93	2,875.21	1,437.61	3,820.20	1,886.65	0.37	-0.12	0.047
31.50	-53.77	-2.41	0.00	-213.31	0.00	213.31	2,854.29	1,427.15	3,764.49	1,859.14	0.40	-0.12	0.047
35.00	-53.30	-2.41	0.00	-204.89	0.00	204.89	2,805.48	1,402.74	3,636.10	1,795.73	0.50	-0.14	0.045
35.67	-50.98	-2.40	0.00	-203.28	0.00	203.28	2,248.07	1,124.03	2,973.91	1,468.70	0.52	-0.14	0.050
40.00	-48.32	-2.39	0.00	-192.88	0.00	192.88	2,218.59	1,109.29	2,872.23	1,418.49	0.65	-0.15	0.048
45.00	-45.68	-2.37	0.00	-180.94	0.00	180.94	2,183.60	1,091.80	2,755.77	1,360.97	0.82	-0.17	0.045
50.00	-43.05	-2.34	0.00	-169.10	0.00	169.10	2,147.58	1,073.79	2,640.30	1,303.95	1.01	-0.19	0.043
55.00	-40.44	-2.31	0.00	-157.38	0.00	157.38	2,110.52	1,055.26	2,525.94	1,247.47	1.22	-0.21	0.041
60.00	-38.37	-2.28	0.00	-145.83	0.00	145.83	2,072.42	1,036.21	2,412.79	1,191.58	1.45	-0.23	0.038
64.00	-37.69	-2.27	0.00	-136.71	0.00	136.71	2,041.18	1,020.59	2,323.20	1,147.34	1.64	-0.24	0.036
65.00	-35.79	-2.23	0.00	-134.44	0.00	134.44	2,033.27	1,016.64	2,300.94	1,136.35	1.69	-0.24	0.036
68.70	-35.22	-2.22	0.00	-126.18	0.00	126.18	1,997.21	998.60	2,211.95	1,092.40	1.89	-0.26	0.034
68.70	-35.22	-2.22	0.00	-126.18	0.00	126.18	1,997.21	998.60	2,211.95	1,092.40	1.89	-0.26	0.064
70.00	-33.40	-2.18	0.00	-123.29	0.00	123.29	1,982.10	991.05	2,178.42	1,075.84	1.96	-0.26	0.062
73.50	-32.79	-2.17	0.00	-115.66	0.00	115.66	1,473.96	736.98	1,624.57	802.32	2.16	-0.28	0.070
75.00	-31.03	-2.13	0.00	-112.39	0.00	112.39	1,466.28	733.14	1,601.77	791.05	2.25	-0.29	0.068
80.00	-29.42	-2.09	0.00	-101.74	0.00	101.74	1,440.00	720.00	1,526.12	753.69	2.57	-0.32	0.064
85.00	-27.83	-2.05	0.00	-91.27	0.00	91.27	1,412.68	706.34	1,451.11	716.65	2.93	-0.35	0.059
90.00	-26.25	-1.99	0.00	-81.04	0.00	81.04	1,384.32	692.16	1,376.86	679.98	3.31	-0.38	0.054
95.00	-24.69	-1.93	0.00	-71.08	0.00	71.08	1,354.92	677.46	1,303.45	643.72	3.73	-0.41	0.049
100.00	-23.44	-1.88	0.00	-61.43	0.00	61.43	1,324.47	662.24	1,230.99	607.94	4.18	-0.44	0.044
104.00	-21.15	-1.76	0.00	-53.92	0.00	53.92	1,299.37	649.69	1,173.78	579.69	4.55	-0.46	0.039
105.00	-19.69	-1.68	0.00	-52.17	0.00	52.17	1,292.99	646.50	1,159.59	572.68	4.65	-0.46	0.038
110.00	-18.24	-1.59	0.00	-43.78	0.00	43.78	1,247.14	623.57	1,077.81	532.29	5.14	-0.48	0.034
110.00	-18.24	-1.59	0.00	-43.78	0.00	43.78	853.24	426.62	741.79	366.34	5.14	-0.48	0.041
115.00	-16.66	-1.49	0.00	-35.81	0.00	35.81	834.99	417.50	698.71	345.06	5.66	-0.50	0.034
119.13	-16.30	-1.47	0.00	-29.64	0.00	29.64	819.16	409.58	663.43	327.64	6.10	-0.52	0.030
120.00	-15.57	-1.42	0.00	-28.36	0.00	28.36	815.71	407.86	655.98	323.96	6.20	-0.52	0.016
121.00	-14.43	-1.34	0.00	-26.93	0.00	26.93	811.73	405.86	647.49	319.77	6.31	-0.52	0.015
121.00	-14.43	-1.34	0.00	-26.93	0.00	26.93	811.73	405.86	647.49	319.77	6.31	-0.52	0.025
124.50	-14.30	-1.33	0.00	-22.25	0.00	22.25	797.47	398.73	617.91	305.16	6.69	-0.53	0.022
124.50	-14.30	-1.33	0.00	-22.25	0.00	22.25	797.47	398.73	617.91	305.16	6.69	-0.53	0.091
125.00	-13.94	-1.31	0.00	-21.58	0.00	21.58	795.39	397.69	613.71	303.09	6.75	-0.53	0.089
127.00	-10.40	-1.03	0.00	-18.97	0.00	18.97	786.97	393.48	596.95	294.81	6.98	-0.55	0.078
130.00	-10.02	-1.01	0.00	-15.87	0.00	15.87	774.02	387.01	572.00	282.49	7.33	-0.58	0.069
135.00	-9.64	-0.98	0.00	-10.83	0.00	10.83	751.62	375.81	530.94	262.21	7.97	-0.63	0.054
140.00	-5.86	-0.63	0.00	-5.93	0.00	5.93	728.18	364.09	490.64	242.31	8.64	-0.66	0.033
144.00	-5.61	-0.60	0.00	-3.43	0.00	3.43	701.03	350.52	454.07	224.25	9.20	-0.67	0.023
145.00	-5.27	-0.57	0.00	-2.83	0.00	2.83	694.06	347.03	445.03	219.78	9.34	-0.67	0.020
150.00	0.00	-0.50	0.00	0.00	0.00	0.00	659.19	329.60	401.19	198.13	10.05	-0.68	0.000

Site Number: 302489

Code: ANSI/TIA-222-G

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Site Name: Enfd - Enfield, CT

Engineering Number:OAA732957_C3_02

7/18/2018 10:27:17 AM

Customer: VERIZON WIRELESS

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

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	-49.56	-2.33	0.00	-282.16	0.00	282.16	3,157.17	1,578.58	4,812.28	2,376.61	0.00	0.00	0.053
5.00	-47.75	-2.35	0.00	-270.51	0.00	270.51	3,114.35	1,557.18	4,645.51	2,294.24	0.01	-0.02	0.052
10.00	-45.73	-2.36	0.00	-258.78	0.00	258.78	3,070.50	1,535.25	4,480.02	2,212.51	0.04	-0.04	0.050
15.00	-43.73	-2.37	0.00	-246.98	0.00	246.98	3,025.61	1,512.81	4,315.90	2,131.46	0.09	-0.06	0.048
20.00	-42.30	-2.37	0.00	-235.15	0.00	235.15	2,979.68	1,489.84	4,153.25	2,051.14	0.16	-0.08	0.047
23.60	-41.74	-2.38	0.00	-226.60	0.00	226.60	2,945.97	1,472.98	4,037.12	1,993.78	0.22	-0.09	0.046
23.60	-41.74	-2.38	0.00	-226.60	0.00	226.60	2,945.97	1,472.98	4,037.12	1,993.78	0.22	-0.09	0.046
25.00	-39.77	-2.37	0.00	-223.27	0.00	223.27	2,932.71	1,466.36	3,992.19	1,971.59	0.25	-0.09	0.045
30.00	-39.18	-2.38	0.00	-211.41	0.00	211.41	2,875.21	1,437.61	3,820.20	1,886.65	0.36	-0.11	0.044
31.50	-37.47	-2.37	0.00	-207.84	0.00	207.84	2,854.29	1,427.15	3,764.49	1,859.14	0.39	-0.12	0.043
35.00	-37.15	-2.37	0.00	-199.55	0.00	199.55	2,805.48	1,402.74	3,636.10	1,795.73	0.49	-0.13	0.041
35.67	-35.53	-2.36	0.00	-197.97	0.00	197.97	2,248.07	1,124.03	2,973.91	1,468.70	0.51	-0.13	0.046
40.00	-33.68	-2.34	0.00	-187.75	0.00	187.75	2,218.59	1,109.29	2,872.23	1,418.49	0.63	-0.15	0.044
45.00	-31.83	-2.32	0.00	-176.03	0.00	176.03	2,183.60	1,091.80	2,755.77	1,360.97	0.80	-0.17	0.042
50.00	-30.00	-2.30	0.00	-164.42	0.00	164.42	2,147.58	1,073.79	2,640.30	1,303.95	0.99	-0.19	0.039
55.00	-28.18	-2.26	0.00	-152.94	0.00	152.94	2,110.52	1,055.26	2,525.94	1,247.47	1.19	-0.20	0.037
60.00	-26.74	-2.23	0.00	-141.63	0.00	141.63	2,072.42	1,036.21	2,412.79	1,191.58	1.41	-0.22	0.035
64.00	-26.27	-2.22	0.00	-132.71	0.00	132.71	2,041.18	1,020.59	2,323.20	1,147.34	1.60	-0.23	0.033
65.00	-24.94	-2.18	0.00	-130.50	0.00	130.50	2,033.27	1,016.64	2,300.94	1,136.35	1.65	-0.24	0.033
68.70	-24.55	-2.17	0.00	-122.42	0.00	122.42	1,997.21	998.60	2,211.95	1,092.40	1.84	-0.25	0.031
68.70	-24.55	-2.17	0.00	-122.42	0.00	122.42	1,997.21	998.60	2,211.95	1,092.40	1.84	-0.25	0.059
70.00	-23.27	-2.13	0.00	-119.60	0.00	119.60	1,982.10	991.05	2,178.42	1,075.84	1.91	-0.25	0.058
73.50	-22.85	-2.12	0.00	-112.14	0.00	112.14	1,473.96	736.98	1,624.57	802.32	2.10	-0.27	0.065
75.00	-21.62	-2.08	0.00	-108.96	0.00	108.96	1,466.28	733.14	1,601.77	791.05	2.19	-0.28	0.063
80.00	-20.50	-2.04	0.00	-98.57	0.00	98.57	1,440.00	720.00	1,526.12	753.69	2.51	-0.31	0.059
85.00	-19.39	-1.99	0.00	-88.38	0.00	88.38	1,412.68	706.34	1,451.11	716.65	2.85	-0.34	0.054
90.00	-18.29	-1.93	0.00	-78.44	0.00	78.44	1,384.32	692.16	1,376.86	679.98	3.23	-0.37	0.050
95.00	-17.20	-1.87	0.00	-68.77	0.00	68.77	1,354.92	677.46	1,303.45	643.72	3.63	-0.40	0.045
100.00	-16.34	-1.82	0.00	-59.42	0.00	59.42	1,324.47	662.24	1,230.99	607.94	4.07	-0.43	0.040
104.00	-14.74	-1.70	0.00	-52.15	0.00	52.15	1,299.37	649.69	1,173.78	579.69	4.43	-0.44	0.036
105.00	-13.72	-1.63	0.00	-50.45	0.00	50.45	1,292.99	646.50	1,159.59	572.68	4.53	-0.45	0.035
110.00	-12.71	-1.54	0.00	-42.33	0.00	42.33	1,247.14	623.57	1,077.81	532.29	5.01	-0.47	0.031
110.00	-12.71	-1.54	0.00	-42.33	0.00	42.33	853.24	426.62	741.79	366.34	5.01	-0.47	0.037
115.00	-11.61	-1.45	0.00	-34.61	0.00	34.61	834.99	417.50	698.71	345.06	5.51	-0.49	0.031
119.13	-11.36	-1.42	0.00	-28.64	0.00	28.64	819.16	409.58	663.43	327.64	5.94	-0.50	0.027
120.00	-10.84	-1.37	0.00	-27.39	0.00	27.39	815.71	407.86	655.98	323.96	6.03	-0.51	0.014
121.00	-10.05	-1.30	0.00	-26.02	0.00	26.02	811.73	405.86	647.49	319.77	6.14	-0.51	0.013
121.00	-10.05	-1.30	0.00	-26.02	0.00	26.02	811.73	405.86	647.49	319.77	6.14	-0.51	0.021
124.50	-9.96	-1.29	0.00	-21.48	0.00	21.48	797.47	398.73	617.91	305.16	6.51	-0.51	0.019
124.50	-9.96	-1.29	0.00	-21.48	0.00	21.48	797.47	398.73	617.91	305.16	6.51	-0.51	0.083
125.00	-9.71	-1.26	0.00	-20.84	0.00	20.84	795.39	397.69	613.71	303.09	6.57	-0.51	0.081
127.00	-7.25	-1.00	0.00	-18.32	0.00	18.32	786.97	393.48	596.95	294.81	6.79	-0.54	0.071
130.00	-6.98	-0.97	0.00	-15.31	0.00	15.31	774.02	387.01	572.00	282.49	7.13	-0.57	0.063
135.00	-6.72	-0.95	0.00	-10.45	0.00	10.45	751.62	375.81	530.94	262.21	7.75	-0.61	0.049
140.00	-4.09	-0.60	0.00	-5.72	0.00	5.72	728.18	364.09	490.64	242.31	8.40	-0.64	0.029
144.00	-3.90	-0.58	0.00	-3.31	0.00	3.31	701.03	350.52	454.07	224.25	8.94	-0.65	0.020
145.00	-3.67	-0.55	0.00	-2.73	0.00	2.73	694.06	347.03	445.03	219.78	9.08	-0.65	0.018
150.00	0.00	-0.50	0.00	0.00	0.00	0.00	659.19	329.60	401.19	198.13	9.77	-0.66	0.000

Site Number: 302489

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Site Name: Enfd - Enfield, CT

Engineering Number: OAA732957_C3_02

7/18/2018 10:27:17 AM

Customer: VERIZON WIRELESS

Equivalent Modal Forces Analysis

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

Spectral Response Acceleration for Short Period (S_s):	0.18
Spectral Response Acceleration at 1.0 Second Period (S_1):	0.06
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}):	0.19
Design Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.10
Period Based on Rayleigh Method (sec):	2.80
Redundancy Factor (ρ):	1.30

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)
42	147.50	270	1.828	1.667	1.025	0.316	74	334
41	144.50	55	1.754	1.337	0.900	0.272	13	68
40	142.00	224	1.694	1.099	0.805	0.238	46	277
39	137.50	303	1.588	0.742	0.654	0.181	48	375
38	132.50	311	1.475	0.441	0.513	0.126	34	385
37	128.50	324	1.387	0.260	0.419	0.087	24	401
36	126.00	288	1.334	0.170	0.367	0.065	16	357
35	124.75	106	1.307	0.131	0.343	0.055	5	131
34	122.75	917	1.266	0.076	0.307	0.040	32	1,135
33	120.50	597	1.220	0.024	0.270	0.024	13	739
32	119.56	289	1.201	0.005	0.255	0.018	5	357
31	117.06	1,158	1.151	-0.037	0.220	0.003	3	1,433
30	112.50	1,168	1.063	-0.088	0.165	-0.019	-20	1,446
29	107.50	1,182	0.971	-0.116	0.117	-0.037	-38	1,463
28	104.50	238	0.917	-0.121	0.094	-0.044	-9	294
27	102.00	1,004	0.874	-0.121	0.078	-0.048	-42	1,242
26	97.50	1,264	0.799	-0.112	0.053	-0.050	-54	1,565
25	92.50	1,275	0.719	-0.092	0.034	-0.045	-50	1,578
24	87.50	1,286	0.643	-0.068	0.020	-0.033	-37	1,591
23	82.50	1,296	0.572	-0.043	0.012	-0.017	-19	1,604
22	77.50	1,421	0.505	-0.018	0.007	0.002	2	1,758
21	74.25	494	0.463	-0.003	0.006	0.013	6	612
20	71.75	1,474	0.432	0.008	0.006	0.022	28	1,825
19	69.35	453	0.404	0.017	0.006	0.029	11	561
18	66.85	1,542	0.375	0.026	0.007	0.035	47	1,908
17	64.50	418	0.349	0.033	0.009	0.040	14	517
16	62.00	1,677	0.323	0.040	0.010	0.044	64	2,076
15	57.50	2,109	0.278	0.050	0.014	0.050	91	2,610
14	52.50	2,122	0.232	0.058	0.019	0.052	96	2,626
13	47.50	2,136	0.190	0.064	0.025	0.053	98	2,643
12	42.50	2,149	0.152	0.068	0.030	0.053	98	2,660
11	37.83	1,873	0.120	0.070	0.034	0.052	84	2,318
10	35.33	375	0.105	0.071	0.037	0.051	17	464
9	33.25	1,979	0.093	0.071	0.038	0.051	87	2,449

Site Number: 302489

Code: ANSI/TIA-222-G

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Site Name: Enfd - Enfield, CT

Engineering Number: OAA732957_C3_02

7/18/2018 10:27:17 AM

Customer: VERIZON WIRELESS

8	30.75	684	0.079	0.072	0.040	0.050	30	846
7	27.50	2,289	0.064	0.072	0.041	0.049	98	2,833
6	24.30	644	0.050	0.071	0.042	0.048	27	797
5	21.80	1,662	0.040	0.070	0.042	0.047	68	2,056
4	17.50	2,322	0.026	0.067	0.040	0.045	91	2,873
3	12.50	2,338	0.013	0.059	0.034	0.041	83	2,893
2	7.50	2,097	0.005	0.044	0.025	0.033	59	2,595
1	2.50	2,113	0.001	0.018	0.010	0.015	28	2,615
Kaelus DBC0061F1V51-	150.00	76	1.890	1.980	1.140	0.355	24	95
Powerwave Allgon LGP	150.00	42	1.890	1.980	1.140	0.355	13	52
Raycap DC6-48-60-18-	150.00	64	1.890	1.980	1.140	0.355	20	79
Ericsson RRUS A2 B2	150.00	66	1.890	1.980	1.140	0.355	20	82
Ericsson RRUS 11 (Ba	150.00	165	1.890	1.980	1.140	0.355	51	204
Ericsson RRUS 32 B30	150.00	180	1.890	1.980	1.140	0.355	55	223
Ericsson RRUS-11 (19	150.00	153	1.890	1.980	1.140	0.355	47	189
Ericsson RRUS-12 B2	150.00	174	1.890	1.980	1.140	0.355	54	215
Decibel DB809KE-SY	150.00	26	1.890	1.980	1.140	0.355	8	32
Ericsson Radio 8843	150.00	255	1.890	1.980	1.140	0.355	78	316
Round Side Arm	150.00	450	1.890	1.980	1.140	0.355	138	557
Powerwave Allgon 777	150.00	105	1.890	1.980	1.140	0.355	32	130
CCI OPA-65R-LCUU-HB	150.00	264	1.890	1.980	1.140	0.355	81	327
CCI TPA-65R-LCUUUU-H	150.00	245	1.890	1.980	1.140	0.355	75	303
Platform w/ Handrail	150.00	2,000	1.890	1.980	1.140	0.355	615	2,475
Diamond X50A	144.00	5	1.742	1.287	0.880	0.265	1	6
Stand-Off	144.00	150	1.742	1.287	0.880	0.265	34	186
Ericsson KRY 112 144	140.00	33	1.646	0.929	0.735	0.212	6	41
Ericsson RRUS-11 (50	140.00	150	1.646	0.929	0.735	0.212	28	186
Ericsson AIR 21, 1.3	140.00	249	1.646	0.929	0.735	0.212	46	308
Ericsson AIR 21, 1.3	140.00	244	1.646	0.929	0.735	0.212	45	303
Andrew LNX-6515DS-VT	140.00	154	1.646	0.929	0.735	0.212	28	190
Platform w/ Handrail	140.00	2,000	1.646	0.929	0.735	0.212	368	2,475
RFS FD9R6004/2C-3L	127.00	16	1.355	0.204	0.387	0.074	1	19
Nokia AirScale RRH 4	127.00	106	1.355	0.204	0.387	0.074	7	131
Alcatel-Lucent B25 R	127.00	159	1.355	0.204	0.387	0.074	10	197
Alcatel-Lucent B13 R	127.00	172	1.355	0.204	0.387	0.074	11	212
Alcatel-Lucent B66A	127.00	201	1.355	0.204	0.387	0.074	13	249
Antel BXA-70063/4CF	127.00	30	1.355	0.204	0.387	0.074	2	37
RFS DB-T1-6Z-8AB-OZ	127.00	88	1.355	0.204	0.387	0.074	6	109
Antel BXA-80080-6CF-	127.00	54	1.355	0.204	0.387	0.074	3	67
Commscope JAHH-65B-	127.00	364	1.355	0.204	0.387	0.074	23	450
Round Low Profile PI	127.00	1,350	1.355	0.204	0.387	0.074	86	1,671
76" x 6" Panel	115.00	120	1.111	-0.064	0.194	-0.008	-1	149
DragonWave Horizon C	104.00	21	0.909	-0.122	0.091	-0.045	-1	26
Alcatel-Lucent RRH2x	104.00	317	0.909	-0.122	0.091	-0.045	-12	393
Alcatel-Lucent 1900M	104.00	180	0.909	-0.122	0.091	-0.045	-7	223
Alcatel-Lucent TD-RR	104.00	210	0.909	-0.122	0.091	-0.045	-8	260
DragonWave A-ANT-11G	104.00	54	0.909	-0.122	0.091	-0.045	-2	67
24" x 24" Junction	104.00	20	0.909	-0.122	0.091	-0.045	-1	25
Side Arms	104.00	560	0.909	-0.122	0.091	-0.045	-22	693
KMW ETCR-654L12H6	104.00	255	0.909	-0.122	0.091	-0.045	-10	315
Channel Master Type	64.00	126	0.344	0.034	0.009	0.041	4	156
		59,577	92.041	45.065	35.237	9.551	3,243	73,730

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)
42	147.50	270	1.828	1.667	1.025	0.316	74	233
41	144.50	55	1.754	1.337	0.900	0.272	13	47

Site Number: 302489

Code: ANSI/TIA-222-G

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Site Name: Enfd - Enfield, CT

Engineering Number: OAA732957_C3_02

7/18/2018 10:27:17 AM

Customer: VERIZON WIRELESS

40	142.00	224	1.694	1.099	0.805	0.238	46	193
39	137.50	303	1.588	0.742	0.654	0.181	48	261
38	132.50	311	1.475	0.441	0.513	0.126	34	268
37	128.50	324	1.387	0.260	0.419	0.087	24	280
36	126.00	288	1.334	0.170	0.367	0.065	16	249
35	124.75	106	1.307	0.131	0.343	0.055	5	91
34	122.75	917	1.266	0.076	0.307	0.040	32	791
33	120.50	597	1.220	0.024	0.270	0.024	13	515
32	119.56	289	1.201	0.005	0.255	0.018	5	249
31	117.06	1,158	1.151	-0.037	0.220	0.003	3	998
30	112.50	1,168	1.063	-0.088	0.165	-0.019	-20	1,007
29	107.50	1,182	0.971	-0.116	0.117	-0.037	-38	1,019
28	104.50	238	0.917	-0.121	0.094	-0.044	-9	205
27	102.00	1,004	0.874	-0.121	0.078	-0.048	-42	866
26	97.50	1,264	0.799	-0.112	0.053	-0.050	-54	1,090
25	92.50	1,275	0.719	-0.092	0.034	-0.045	-50	1,100
24	87.50	1,286	0.643	-0.068	0.020	-0.033	-37	1,109
23	82.50	1,296	0.572	-0.043	0.012	-0.017	-19	1,118
22	77.50	1,421	0.505	-0.018	0.007	0.002	2	1,225
21	74.25	494	0.463	-0.003	0.006	0.013	6	426
20	71.75	1,474	0.432	0.008	0.006	0.022	28	1,272
19	69.35	453	0.404	0.017	0.006	0.029	11	391
18	66.85	1,542	0.375	0.026	0.007	0.035	47	1,330
17	64.50	418	0.349	0.033	0.009	0.040	14	360
16	62.00	1,677	0.323	0.040	0.010	0.044	64	1,447
15	57.50	2,109	0.278	0.050	0.014	0.050	91	1,819
14	52.50	2,122	0.232	0.058	0.019	0.052	96	1,830
13	47.50	2,136	0.190	0.064	0.025	0.053	98	1,842
12	42.50	2,149	0.152	0.068	0.030	0.053	98	1,853
11	37.83	1,873	0.120	0.070	0.034	0.052	84	1,616
10	35.33	375	0.105	0.071	0.037	0.051	17	324
9	33.25	1,979	0.093	0.071	0.038	0.051	87	1,707
8	30.75	684	0.079	0.072	0.040	0.050	30	590
7	27.50	2,289	0.064	0.072	0.041	0.049	98	1,975
6	24.30	644	0.050	0.071	0.042	0.048	27	555
5	21.80	1,662	0.040	0.070	0.042	0.047	68	1,433
4	17.50	2,322	0.026	0.067	0.040	0.045	91	2,002
3	12.50	2,338	0.013	0.059	0.034	0.041	83	2,016
2	7.50	2,097	0.005	0.044	0.025	0.033	59	1,808
1	2.50	2,113	0.001	0.018	0.010	0.015	28	1,822
Kaelus DBC0061F1V51-	150.00	76	1.890	1.980	1.140	0.355	24	66
Powerwave Allgon LGP	150.00	42	1.890	1.980	1.140	0.355	13	36
Raycap DC6-48-60-18-	150.00	64	1.890	1.980	1.140	0.355	20	55
Ericsson RRUS A2 B2	150.00	66	1.890	1.980	1.140	0.355	20	57
Ericsson RRUS 11 (Ba	150.00	165	1.890	1.980	1.140	0.355	51	142
Ericsson RRUS 32 B30	150.00	180	1.890	1.980	1.140	0.355	55	155
Ericsson RRUS-11 (19	150.00	153	1.890	1.980	1.140	0.355	47	132
Ericsson RRUS-12 B2	150.00	174	1.890	1.980	1.140	0.355	54	150
Decibel DB809KE-SY	150.00	26	1.890	1.980	1.140	0.355	8	22
Ericsson Radio 8843	150.00	255	1.890	1.980	1.140	0.355	78	220
Round Side Arm	150.00	450	1.890	1.980	1.140	0.355	138	388
Powerwave Allgon 777	150.00	105	1.890	1.980	1.140	0.355	32	91
CCI OPA-65R-LCUU-H8	150.00	264	1.890	1.980	1.140	0.355	81	228
CCI TPA-65R-LCUUUU-H	150.00	245	1.890	1.980	1.140	0.355	75	211
Platform w/ Handrail	150.00	2,000	1.890	1.980	1.140	0.355	615	1,725
Diamond X50A	144.00	5	1.742	1.287	0.880	0.265	1	4
Stand-Off	144.00	150	1.742	1.287	0.880	0.265	34	129
Ericsson KRY 112 144	140.00	33	1.646	0.929	0.735	0.212	6	28
Ericsson RRUS-11 (50	140.00	150	1.646	0.929	0.735	0.212	28	129
Ericsson AIR 21, 1.3	140.00	249	1.646	0.929	0.735	0.212	46	215
Ericsson AIR 21, 1.3	140.00	244	1.646	0.929	0.735	0.212	45	211
Andrew LNX-6515DS-VT	140.00	154	1.646	0.929	0.735	0.212	28	133
Platform w/ Handrail	140.00	2,000	1.646	0.929	0.735	0.212	368	1,725
RFS FD9R6004/2C-3L	127.00	16	1.355	0.204	0.387	0.074	1	13

Site Number: 302489

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7/18/2018 10:27:17 AM

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Nokia AirScale RRH 4	127.00	106	1.355	0.204	0.387	0.074	7	91
Alcatel-Lucent B25 R	127.00	159	1.355	0.204	0.387	0.074	10	137
Alcatel-Lucent B13 R	127.00	172	1.355	0.204	0.387	0.074	11	148
Alcatel-Lucent B66A	127.00	201	1.355	0.204	0.387	0.074	13	173
Antel BXA-70063/4CF	127.00	30	1.355	0.204	0.387	0.074	2	26
RFS DB-T1-6Z-8AB-0Z	127.00	88	1.355	0.204	0.387	0.074	6	76
Antel BXA-80080-6CF-	127.00	54	1.355	0.204	0.387	0.074	3	47
Commscope JAHH-65B-	127.00	364	1.355	0.204	0.387	0.074	23	314
Round Low Profile PI	127.00	1,350	1.355	0.204	0.387	0.074	86	1,164
76" x 6" Panel	115.00	120	1.111	-0.064	0.194	-0.008	-1	103
DragonWave Horizon C	104.00	21	0.909	-0.122	0.091	-0.045	-1	18
Alcatel-Lucent RRH2x	104.00	317	0.909	-0.122	0.091	-0.045	-12	274
Alcatel-Lucent 1900M	104.00	180	0.909	-0.122	0.091	-0.045	-7	155
Alcatel-Lucent TD-RR	104.00	210	0.909	-0.122	0.091	-0.045	-8	181
DragonWave A-ANT-11G	104.00	54	0.909	-0.122	0.091	-0.045	-2	47
24" x 24" Junction	104.00	20	0.909	-0.122	0.091	-0.045	-1	17
Side Arms	104.00	560	0.909	-0.122	0.091	-0.045	-22	483
KMW ETCR-654L12H6	104.00	255	0.909	-0.122	0.091	-0.045	-10	220
Channel Master Type	64.00	126	0.344	0.034	0.009	0.041	4	109
		59,577	92.041	45.065	35.237	9.551	3,243	51,383

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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	-71.11	-3.23	0.00	-375.71	0.00	375.71	3,157.17	1,578.58	4,812.28	2,376.61	0.00	0.00	0.071
5.00	-68.52	-3.20	0.00	-359.56	0.00	359.56	3,114.35	1,557.18	4,645.51	2,294.24	0.01	-0.03	0.069
10.00	-65.62	-3.14	0.00	-343.56	0.00	343.56	3,070.50	1,535.25	4,480.02	2,212.51	0.05	-0.05	0.067
15.00	-62.75	-3.08	0.00	-327.84	0.00	327.84	3,025.61	1,512.81	4,315.90	2,131.46	0.12	-0.08	0.065
20.00	-60.69	-3.03	0.00	-312.46	0.00	312.46	2,979.68	1,489.84	4,153.25	2,051.14	0.21	-0.10	0.063
23.60	-59.89	-3.01	0.00	-301.55	0.00	301.55	2,945.97	1,472.98	4,037.12	1,993.78	0.30	-0.12	0.062
23.60	-59.89	-3.01	0.00	-301.55	0.00	301.55	2,945.97	1,472.98	4,037.12	1,993.78	0.30	-0.12	0.062
25.00	-57.06	-2.93	0.00	-297.34	0.00	297.34	2,932.71	1,466.36	3,992.19	1,971.59	0.33	-0.13	0.061
30.00	-56.21	-2.91	0.00	-282.71	0.00	282.71	2,875.21	1,437.61	3,820.20	1,886.65	0.48	-0.15	0.059
31.50	-53.76	-2.83	0.00	-278.34	0.00	278.34	2,854.29	1,427.15	3,764.49	1,859.14	0.52	-0.16	0.058
35.00	-53.30	-2.82	0.00	-268.44	0.00	268.44	2,805.48	1,402.74	3,636.10	1,795.73	0.65	-0.18	0.056
35.67	-50.98	-2.74	0.00	-266.57	0.00	266.57	2,248.07	1,124.03	2,973.91	1,468.70	0.67	-0.18	0.062
40.00	-48.32	-2.65	0.00	-254.69	0.00	254.69	2,218.59	1,109.29	2,872.23	1,418.49	0.84	-0.20	0.060
45.00	-45.68	-2.56	0.00	-241.44	0.00	241.44	2,183.60	1,091.80	2,755.77	1,360.97	1.07	-0.22	0.058
50.00	-43.05	-2.47	0.00	-228.62	0.00	228.62	2,147.58	1,073.79	2,640.30	1,303.95	1.32	-0.25	0.055
55.00	-40.44	-2.39	0.00	-216.24	0.00	216.24	2,110.52	1,055.26	2,525.94	1,247.47	1.59	-0.27	0.053
60.00	-38.36	-2.33	0.00	-204.30	0.00	204.30	2,072.42	1,036.21	2,412.79	1,191.58	1.89	-0.30	0.050
64.00	-37.69	-2.31	0.00	-194.98	0.00	194.98	2,041.18	1,020.59	2,323.20	1,147.34	2.15	-0.32	0.049
65.00	-35.78	-2.26	0.00	-192.67	0.00	192.67	2,033.27	1,016.64	2,300.94	1,136.35	2.21	-0.32	0.048
68.70	-35.22	-2.26	0.00	-184.29	0.00	184.29	1,997.21	998.60	2,211.95	1,092.40	2.47	-0.34	0.047
68.70	-35.22	-2.26	0.00	-184.29	0.00	184.29	1,997.21	998.60	2,211.95	1,092.40	2.47	-0.34	0.088
70.00	-33.40	-2.23	0.00	-181.35	0.00	181.35	1,982.10	991.05	2,178.42	1,075.84	2.56	-0.35	0.087
73.50	-32.78	-2.23	0.00	-173.55	0.00	173.55	1,473.96	736.98	1,624.57	802.32	2.83	-0.38	0.100
75.00	-31.02	-2.24	0.00	-170.20	0.00	170.20	1,466.28	733.14	1,601.77	791.05	2.95	-0.39	0.098
80.00	-29.42	-2.27	0.00	-159.01	0.00	159.01	1,440.00	720.00	1,526.12	753.69	3.39	-0.44	0.093
85.00	-27.82	-2.32	0.00	-147.66	0.00	147.66	1,412.68	706.34	1,451.11	716.65	3.88	-0.49	0.089
90.00	-26.24	-2.38	0.00	-136.07	0.00	136.07	1,384.32	692.16	1,376.86	679.98	4.42	-0.54	0.084
95.00	-24.68	-2.43	0.00	-124.20	0.00	124.20	1,354.92	677.46	1,303.45	643.72	5.02	-0.59	0.079
100.00	-23.43	-2.48	0.00	-112.02	0.00	112.02	1,324.47	662.24	1,230.99	607.94	5.66	-0.63	0.073
104.00	-21.13	-2.53	0.00	-102.11	0.00	102.11	1,299.37	649.69	1,173.78	579.69	6.20	-0.67	0.068
105.00	-19.67	-2.56	0.00	-99.57	0.00	99.57	1,292.99	646.50	1,159.59	572.68	6.35	-0.68	0.066
110.00	-18.22	-2.58	0.00	-86.76	0.00	86.76	1,247.14	623.57	1,077.81	532.29	7.08	-0.72	0.060
110.00	-18.22	-2.58	0.00	-86.76	0.00	86.76	853.24	426.62	741.79	366.34	7.08	-0.72	0.072
115.00	-16.64	-2.57	0.00	-73.87	0.00	73.87	834.99	417.50	698.71	345.06	7.86	-0.76	0.063
119.13	-16.28	-2.56	0.00	-63.28	0.00	63.28	819.16	409.58	663.43	327.64	8.53	-0.79	0.056
120.00	-15.54	-2.54	0.00	-61.04	0.00	61.04	815.71	407.86	655.98	323.96	8.68	-0.80	0.028
121.00	-14.41	-2.49	0.00	-58.50	0.00	58.50	811.73	405.86	647.49	319.77	8.84	-0.80	0.026
121.00	-14.41	-2.49	0.00	-58.50	0.00	58.50	811.73	405.86	647.49	319.77	8.84	-0.80	0.043
124.50	-14.28	-2.49	0.00	-49.77	0.00	49.77	797.47	398.73	617.91	305.16	9.44	-0.81	0.038
124.50	-14.28	-2.49	0.00	-49.77	0.00	49.77	797.47	398.73	617.91	305.16	9.44	-0.81	0.181
125.00	-13.92	-2.48	0.00	-48.52	0.00	48.52	795.39	397.69	613.71	303.09	9.52	-0.82	0.178
127.00	-10.38	-2.25	0.00	-43.57	0.00	43.57	786.97	393.48	596.95	294.81	9.88	-0.87	0.161
130.00	-9.99	-2.22	0.00	-36.83	0.00	36.83	774.02	387.01	572.00	282.49	10.45	-0.94	0.143
135.00	-9.61	-2.18	0.00	-25.72	0.00	25.72	751.62	375.81	530.94	262.21	11.49	-1.04	0.111
140.00	-5.84	-1.55	0.00	-14.80	0.00	14.80	728.18	364.09	490.64	242.31	12.62	-1.11	0.069
144.00	-5.58	-1.50	0.00	-8.60	0.00	8.60	701.03	350.52	454.07	224.25	13.57	-1.15	0.046
145.00	-5.25	-1.42	0.00	-7.10	0.00	7.10	694.06	347.03	445.03	219.78	13.81	-1.16	0.040
150.00	0.00	-1.31	0.00	0.00	0.00	0.00	659.19	329.60	401.19	198.13	15.04	-1.18	0.000

Site Number: 302489

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Site Name: Enfd - Enfield, CT

Engineering Number: OAA732957_C3_02

7/18/2018 10:27:17 AM

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	-49.56	-3.23	0.00	-367.05	0.00	367.05	3,157.17	1,578.58	4,812.28	2,376.61	0.00	0.00	0.066
5.00	-47.75	-3.19	0.00	-350.93	0.00	350.93	3,114.35	1,557.18	4,645.51	2,294.24	0.01	-0.02	0.064
10.00	-45.73	-3.12	0.00	-335.00	0.00	335.00	3,070.50	1,535.25	4,480.02	2,212.51	0.05	-0.05	0.062
15.00	-43.73	-3.05	0.00	-319.39	0.00	319.39	3,025.61	1,512.81	4,315.90	2,131.46	0.12	-0.07	0.060
20.00	-42.30	-2.99	0.00	-304.16	0.00	304.16	2,979.68	1,489.84	4,153.25	2,051.14	0.21	-0.10	0.058
23.60	-41.74	-2.97	0.00	-293.39	0.00	293.39	2,945.97	1,472.98	4,037.12	1,993.78	0.29	-0.12	0.057
23.60	-41.74	-2.97	0.00	-293.39	0.00	293.39	2,945.97	1,472.98	4,037.12	1,993.78	0.29	-0.12	0.057
25.00	-39.76	-2.88	0.00	-289.23	0.00	289.23	2,932.71	1,466.36	3,992.19	1,971.59	0.32	-0.12	0.056
30.00	-39.17	-2.86	0.00	-274.82	0.00	274.82	2,875.21	1,437.61	3,820.20	1,886.65	0.46	-0.15	0.055
31.50	-37.47	-2.78	0.00	-270.53	0.00	270.53	2,854.29	1,427.15	3,764.49	1,859.14	0.51	-0.15	0.054
35.00	-37.14	-2.77	0.00	-260.81	0.00	260.81	2,805.48	1,402.74	3,636.10	1,795.73	0.63	-0.17	0.052
35.67	-35.53	-2.69	0.00	-258.96	0.00	258.96	2,248.07	1,124.03	2,973.91	1,468.70	0.65	-0.17	0.058
40.00	-33.67	-2.59	0.00	-247.33	0.00	247.33	2,218.59	1,109.29	2,872.23	1,418.49	0.82	-0.19	0.056
45.00	-31.83	-2.50	0.00	-234.36	0.00	234.36	2,183.60	1,091.80	2,755.77	1,360.97	1.04	-0.22	0.053
50.00	-30.00	-2.41	0.00	-221.84	0.00	221.84	2,147.58	1,073.79	2,640.30	1,303.95	1.28	-0.24	0.051
55.00	-28.18	-2.32	0.00	-209.79	0.00	209.79	2,110.52	1,055.26	2,525.94	1,247.47	1.55	-0.27	0.049
60.00	-26.73	-2.26	0.00	-198.16	0.00	198.16	2,072.42	1,036.21	2,412.79	1,191.58	1.84	-0.29	0.047
64.00	-26.26	-2.25	0.00	-189.11	0.00	189.11	2,041.18	1,020.59	2,323.20	1,147.34	2.09	-0.31	0.045
65.00	-24.93	-2.20	0.00	-186.86	0.00	186.86	2,033.27	1,016.64	2,300.94	1,136.35	2.16	-0.31	0.044
68.70	-24.54	-2.19	0.00	-178.73	0.00	178.73	1,997.21	998.60	2,211.95	1,092.40	2.41	-0.33	0.043
68.70	-24.54	-2.19	0.00	-178.73	0.00	178.73	1,997.21	998.60	2,211.95	1,092.40	2.41	-0.33	0.083
70.00	-23.27	-2.16	0.00	-175.89	0.00	175.89	1,982.10	991.05	2,178.42	1,075.84	2.50	-0.34	0.082
73.50	-22.84	-2.16	0.00	-168.32	0.00	168.32	1,473.96	736.98	1,624.57	802.32	2.76	-0.37	0.093
75.00	-21.62	-2.16	0.00	-165.08	0.00	165.08	1,466.28	733.14	1,601.77	791.05	2.87	-0.38	0.092
80.00	-20.50	-2.19	0.00	-154.26	0.00	154.26	1,440.00	720.00	1,526.12	753.69	3.30	-0.43	0.088
85.00	-19.39	-2.24	0.00	-143.29	0.00	143.29	1,412.68	706.34	1,451.11	716.65	3.78	-0.48	0.084
90.00	-18.28	-2.29	0.00	-132.11	0.00	132.11	1,384.32	692.16	1,376.86	679.98	4.30	-0.53	0.079
95.00	-17.19	-2.35	0.00	-120.65	0.00	120.65	1,354.92	677.46	1,303.45	643.72	4.88	-0.57	0.074
100.00	-16.32	-2.39	0.00	-108.91	0.00	108.91	1,324.47	662.24	1,230.99	607.94	5.50	-0.62	0.069
104.00	-14.72	-2.45	0.00	-99.33	0.00	99.33	1,299.37	649.69	1,173.78	579.69	6.03	-0.65	0.064
105.00	-13.70	-2.49	0.00	-96.88	0.00	96.88	1,292.99	646.50	1,159.59	572.68	6.17	-0.66	0.062
110.00	-12.69	-2.50	0.00	-84.45	0.00	84.45	1,247.14	623.57	1,077.81	532.29	6.88	-0.70	0.057
110.00	-12.69	-2.50	0.00	-84.45	0.00	84.45	853.24	426.62	741.79	366.34	6.88	-0.70	0.068
115.00	-11.59	-2.49	0.00	-71.94	0.00	71.94	834.99	417.50	698.71	345.06	7.64	-0.74	0.059
119.13	-11.34	-2.49	0.00	-61.66	0.00	61.66	819.16	409.58	663.43	327.64	8.29	-0.77	0.052
120.00	-10.82	-2.47	0.00	-59.48	0.00	59.48	815.71	407.86	655.98	323.96	8.44	-0.78	0.026
121.00	-10.03	-2.43	0.00	-57.01	0.00	57.01	811.73	405.86	647.49	319.77	8.60	-0.78	0.024
121.00	-10.03	-2.43	0.00	-57.01	0.00	57.01	811.73	405.86	647.49	319.77	8.60	-0.78	0.040
124.50	-9.94	-2.42	0.00	-48.51	0.00	48.51	797.47	398.73	617.91	305.16	9.18	-0.79	0.035
124.50	-9.94	-2.42	0.00	-48.51	0.00	48.51	797.47	398.73	617.91	305.16	9.18	-0.79	0.171
125.00	-9.69	-2.41	0.00	-47.30	0.00	47.30	795.39	397.69	613.71	303.09	9.26	-0.79	0.168
127.00	-7.22	-2.19	0.00	-42.48	0.00	42.48	786.97	393.48	596.95	294.81	9.60	-0.84	0.153
130.00	-6.95	-2.17	0.00	-35.90	0.00	35.90	774.02	387.01	572.00	282.49	10.16	-0.91	0.136
135.00	-6.69	-2.12	0.00	-25.07	0.00	25.07	751.62	375.81	530.94	262.21	11.17	-1.01	0.105
140.00	-4.06	-1.51	0.00	-14.44	0.00	14.44	728.18	364.09	490.64	242.31	12.27	-1.08	0.065
144.00	-3.88	-1.46	0.00	-8.39	0.00	8.39	701.03	350.52	454.07	224.25	13.20	-1.12	0.043
145.00	-3.65	-1.39	0.00	-6.93	0.00	6.93	694.06	347.03	445.03	219.78	13.43	-1.13	0.037
150.00	0.00	-1.31	0.00	0.00	0.00	0.00	659.19	329.60	401.19	198.13	14.63	-1.15	0.000

Site Number: 302489

Code: ANSI/TIA-222-G

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Site Name: Enfd - Enfield, CT

Engineering Number: OAA732957_C3_02

7/18/2018 10:27:17 AM

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	35.38	0.00	71.41	0.00	0.00	3924.35	124.50	1.00
0.9D + 1.6W	33.89	0.00	53.54	0.00	0.00	3732.82	124.50	0.97
1.2D + 1.0Di + 1.0Wi	8.03	0.00	127.34	0.00	0.00	998.29	124.50	0.33
(1.2 + 0.2Sds) * DL + E ELFM	2.34	0.00	71.11	0.00	0.00	288.29	124.50	0.09
(1.2 + 0.2Sds) * DL + E EMAM	3.23	0.00	71.11	0.00	0.00	375.71	124.50	0.18
(0.9 - 0.2Sds) * DL + E ELFM	2.33	0.00	49.56	0.00	0.00	282.16	124.50	0.08
(0.9 - 0.2Sds) * DL + E EMAM	3.23	0.00	49.56	0.00	0.00	367.05	124.50	0.17
1.0D + 1.0W	8.15	0.00	59.57	0.00	0.00	905.01	124.50	0.25

Additional Steel Summary

Elev From (ft)	Elev To (ft)	Member	Intermediate Connectors			Upper Termination Connectors				Lower Termination Connectors				Max Member		
			VQ/I (lb/in)	Shear Applied (kips)	Shear phiVn (kips)	MQ/I (kips)	phiVn (kips)	Num Reqd	Num Actual	MQ/I (kips)	phiVn (kips)	Num Reqd	Num Actual	Pu (kip)	phiPn (kip)	Ratio
0.00	121.	(4) SOL-#20 All Thre	539.3	14.6	16.8	61.5	12.0	6	10	0.0	12.0	0	0	315.3	314.9	1.001
0.00	23.6	(4) SOL-#20 All Thre	265.5	7.2	16.8	0.0	12.0	0	24	0.0	12.0	0	0	321.8	334.7	0.961
23.6	68.7	(4) SOL-#20 All Thre	305.0	9.1	16.8	211.6	12.0	18	24	0.0	12.0	0	0	292.9	330.5	0.886
119.	124.	(3) SOL-#20 (15 deg	525.4	15.8	16.8	103.1	12.0	9	12	83.6	12.0	7	12	124.8	284.5	0.438

Base/Flange Plate	Plate Type	Flange @ 110.0 ft
	Pole Diameter	21.25 in
	Pole Thickness	0.1875 in
	Plate Diameter	28.5 in
	Plate Thickness	1 in
	Plate Fy	60 ksi
	Weld Length	0.1875 in
	ϕ_s Resistance Applied	96.45 k-in 50.47 k-in
Stiffeners	#	

Code Rev. **G**

Moment **584.7 k-ft**
Axial **16.9 k**

Date **7/18/2018**
Engineer **adam.pittman**
Site # **302489**
Carrier **VERIZON WIRELESS**

Required Flange Thickness:
0.72 in OK

Bolts	#	8
	Bolt Circle (R)adial / (S)quare	25.75 in R
	Diameter	1 in
	Hole Diameter	1.125 in
	Type	A325
	Fy	92 ksi
	Fu	120 ksi
	ϕ_s Resistance Applied	54.52 k 33.65 k
Reinforcement	#	4
	DYW. Circle	28 in
	Offset Angle	24 °
	Type	#20
	Diameter	2.5 in
	Fu	100 ksi
ϕ_s Resistance Applied	392.70 k 168.12 k	
Extra Bolts O	#	0

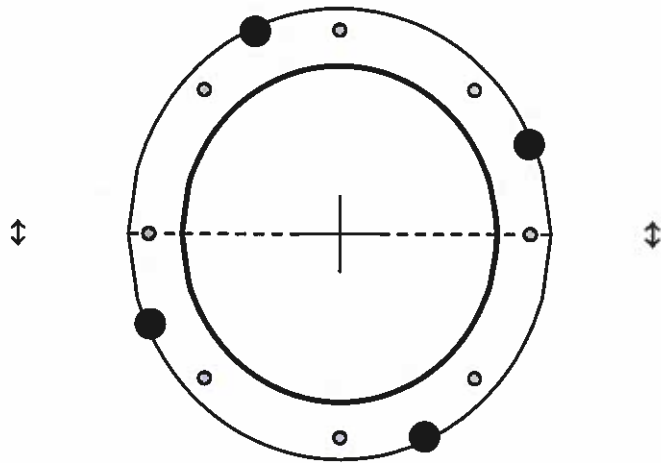


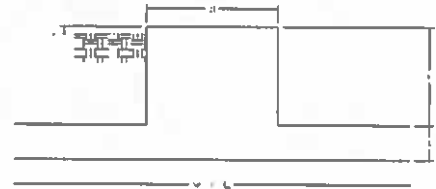
Plate Stress Ratio:
0.52 (Pass)

Bolt Stress Ratio:
0.62 (Pass)

Reinforcement Stress Ratio:
0.43 (Pass)

Site Name: Enfd-Enfield, CT
 Site Number: 302489
 Engineering Number: 0
 Engineer: ASP
 Date: 07/18/18
 Tower Type: MP

Program Last Updated: 5/13/2014



Design Loads (Factored) - Analysis per TIA-222-G Standards

Design / Analysis / Mapping:

Compression/Leg:	127.3 k	Concrete Strength (f_c):	3000 psi
Uplift/Leg:	0.0 k	Pad Tension Steel Depth:	32.00 in
Total Shear:	35.4 k	ϕ_{Shear} :	0.75
Moment:	3924.4 k-ft	$\phi_{\text{Flexure / Tension}}$:	0.90
Tower + Appurtenance Weight:	217.1 k	$\phi_{\text{Compression}}$:	0.65
Depth to Base of Foundation (l + t - h):	8.00 ft	β :	0.85
Diameter of Pier (d):	5.64 ft	Bottom Pad Rebar Size #:	10
Height of Pier above Ground (h):	0.50	# of Bottom Pad Rebar:	34
Width of Pad (W):	18.00 ft	Pad Bottom Steel Area:	43.18 in ²
Length of Pad (L):	18.00 ft	Pad Steel F_y :	60000 psi
Thickness of Pad (t):	3.00 ft	Top Pad Rebar Size #:	10
Tower Leg Center to Center:	0.00 ft	# of Top Pad Rebar:	34
Number of Tower Legs:	1.0 (1 if MP or GT)	Pad Top Steel Area:	43.18 in ²
Tower Center from Mat Center:	0.00 ft	Pier Rebar Size #:	11
Depth Below Ground Surface to Water Table:	99.00 ft	Pier Steel Area (Single Bar):	1.56 in ²
Unit Weight of Concrete:	150.0 pcf	# of Pier Rebar:	52
Unit Weight of Soil Above Water Table:	115.0 pcf	Pier Steel F_y :	60000 psi
Unit Weight of Water:	62.4 pcf	Pier Cage Diameter:	59.7 in
Unit Weight of Soil Below Water Table:	52.6 pcf	Rebar Strain Limit:	0.008
Friction Angle of Uplift:	15.0 Degrees	Steel Elastic Modulus:	29000 ksi
Ultimate Coefficient of Shear Friction:	0.30	Tie Rebar Size #:	4
Ultimate Compressive Bearing Pressure:	24000.0 psf	Tie Steel Area (Single Bar):	0.20 in ²
Ultimate Passive Pressure on Pad Face:	0.0 psf	Tie Spacing:	12 in
$\phi_{\text{Soil and Concrete Weight}}$:	0.9	Tie Steel F_y :	60000 psi
ϕ_{Soil} :	0.75		

Overturning Moment Usage

Design OTM:	4225.1 k-ft
OTM Resistance:	4504.8 k-ft
Design OTM / OTM Resistance:	0.94 Result: OK

Soil Bearing Pressure Usage

Net Bearing Pressure:	8772 psf
Factored Nominal Bearing Pressure:	18000 psf
Net Bearing Pressure/Factored Nominal Bearing Pressure:	0.49 Result: OK
Load Direction Controlling Design Bearing Pressure:	Diagonal to Pad Edge

Sliding Factor of Safety

Total Factored Sliding Resistance:	116.8 k
Sliding Design / Sliding Resistance:	0.30 Result: OK

Base Plate & Anchor Rod Analysis

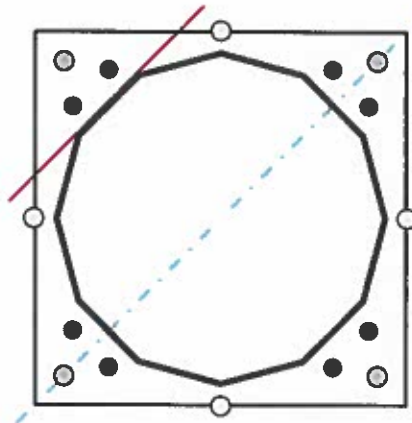
Pole Dimensions		
Number of Sides	12	-
Diameter	37.38	in
Thickness	0.375	in
Orientation Offset		°

Base Reactions		
Moment, Mu	3924.4	k-ft
Axial, Pu	127.3	k
Shear, Vu	35.4	k
Neutral Axis	45	°

Report Capacities		
Component	Capacity	Result
Base Plate	54%	Pass
Anchor Rods	80%	Pass
Dwydags	79%	Pass

Base Plate		
Shape	Square	-
Width	44	in
Thickness	2 1/2	in
Grade	A572-60	-
Yield Strength, Fy	60	ksi
Tensile Strength, Fu	75	ksi
Clip	0	in
Orientation Offset		°
Anchor Rod Detail	d	η=0.5
Clear Distance	3	in
Applied Moment, Mu	1128.0	k
Bending Stress, φMn	2075.2	k

Dwydags Reinforcement		
Quantity	4	-
Bar Size	#20	in
Diameter, ø	2.5	in
Bracket Type	Angle	-
Circle	44.26	in
Orientation Offset	0	°
Applied Force, Pu	309.2	k
Dwydags Bar, φPn	392.7	k



Original Anchor Rods		
Arrangement	Cluster	-
Quantity	8	-
Diameter, ø	2 1/4	in
Bolt Circle	44	in
Grade	A615-75	-
Yield Strength, Fy	75	ksi
Tensile Strength, Fu	100	ksi
Spacing	6.0	in
Orientation Offset	0	°
Applied Force, Pu	189.2	k
Anchor Rods, φPn	259.8	k

Additional Anchor Rods		
Quantity	4	-
Diameter, ø	2.5	in
Bolt Circle	52.4	in
Grade	Other	-
Yield Strength, Fy	80	ksi
Tensile Strength, Fu	100	ksi
Bypass Base?	Yes	-
Orientation Offset	45	°
Applied Force, Pu	240.1	k
Additional Rod, φPn	319.9	k

Calculations for Monopole Base Plate & Anchor Rod Analysis

Reaction Distribution

Reaction	Shear Vu k	Moment Mu k-ft	Factor
Base Forces	35.4	1361.1	0.35
Anchor Rod Forces	35.4	1361.1	0.35
Additional Bolt (Grp1) Forces		1013.6	0.26
Additional Bolt (Grp2) Forces			
Dywidag Forces		1549.7	0.39
Stiffener Forces			

Geometric Properties

Section	Gross Area in ²	Net Area in ²	Individual Inertia in ⁴	Threads per Inch #	Moment of Inertia in ⁴
Pole	43.0992	3.5916	0.1692		7379.37
Bolt	3.9761	3.2477	0.8393	4.5	6294.24
Bolt1	4.9087	3.9988	1.2725	4	5495.00
Bolt2					
Dywidag	4.9087	4.9087	1.9175		4815.65
Stiffener					

Base Plate	
Shape	Square -
Width, W	44 in
Thickness, t	2.5 in
Yield Strength, Fy	60 ksi
Tensile Strength, Fu	75 ksi
Base Plate Chord	23.211 in
Detail Type	d -
Detail Factor	0.50 -
Clear Distance	3 -

Anchor Rods	
Anchor Rod Quantity, N	8 -
Rod Diameter, d	2.25 in
Bolt Circle, BC	44 in
Yield Strength, Fy	75 ksi
Tensile Strength, Fu	100 ksi
Applied Axial, Pu	189.2 k
Applied Shear, Vu	0.0 k
Compressive Capacity, φPn	259.8 k
Tensile Capacity, φRt	0.728 OK
Interaction Capacity	0.728 OK

Base Plate Stiffeners	
Applied Axial Force, Pu	0.0 k
Applied Horizontal Force, Vu	0.00 k

Vertical Weld	
Vert.-to-Stiffener a=e _v /l	#DIV/0! -
Spacing Ratio, k	#DIV/0! -
Weld Coefficient, C	#DIV/0! -
Compressive Capacity, φPn	#DIV/0! k
Vert.-to-Plate a=e _v /l	#DIV/0! -
Spacing Ratio, k	#DIV/0! -
Weld Coefficient, C	#DIV/0! -
Shear Capacity, φVn	#DIV/0! k
P _w /φ _p P _n + V _w /φ _v V _n	-

External Base Plate	
Chord Length AA	24.595 in
Additional AA	0.000 in
Section Modulus, Z	38.430 in ³
Applied Moment, Mu	1128.0 k-ft
Bending Capacity, φMn	2075.2 k-ft
Capacity, Mu/φMn	0.544 OK
Chord Length AB	23.268 in
Additional AB	0.000 in
Section Modulus, Z	36.356 in ³
Applied Moment, Mu	876.8 k-ft
Bending Capacity, φMn	1963.2 k-ft
Capacity, Mu/φMn	0.447 OK
Bend Line Length	0.000 in
Additional Bend Line	0.000 in
Section Modulus, Z	0.000 in ³
Applied Moment, Mu	0.0 k-ft
Bending Capacity, φMn	0.0 k-ft
Capacity, Mu/φMn	

Additional Bolt Group 1	
Bolt Quantity, N	4 -
Bolt Diameter, d	2.5 in
Bolt Circle, BC	52.4 in
Yield Strength, Fy	80 ksi
Tensile Strength, Fu	100 ksi
Applied Axial, Pu	240.1 k
Applied Shear, Vu	0.0 k
Compressive Capacity, φPn	319.9 k
Compressive Capacity, φPn	0.751 OK
Interaction Capacity	0.801 OK

Horizontal Weld	
Horz.-to-Stiffener a=e _s /l	#DIV/0! -
Spacing Ratio, k	#DIV/0! -
Weld Coefficient, C	#DIV/0! -
Effective Fillet	0.000 in
Compressive Capacity, φPn	#DIV/0! k
Horz.-to-Pole a=e _s /l	#DIV/0! -
Spacing Ratio, k	#DIV/0! -
Weld Coefficient, C	#DIV/0! -
Shear Capacity, φVn	#DIV/0! k
P _w /φ _p P _n + V _w /φ _v V _n	-

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, φMn	0.0 k-ft
Capacity, Mu/φMn	

Additional Bolt Group 2	
Bolt Quantity, N	0 -
Bolt Diameter, d	0 in
Bolt Circle, BC	0 in
Yield Strength, Fy	0 ksi
Tensile Strength, Fu	0 ksi
Applied Axial, Pu	0.0 k
Applied Shear, Vu	0.0 k
Compressive Capacity, φPn	0.0 k
Compressive Capacity, φPn	
Interaction Capacity	

Plate Tension	
Gross Cross Section	0.000 in ²
Net Cross Section	0.000 in ²
Tensile Capacity, φTn	0.0 k
Capacity, Tu/φTn	-

Dywidag Reinforcement	
Dywidag Quantity, N	4 -
Dywidag Diameter, d	2.5 in
Bolt Circle, BC	44.26 in
Yield Strength, Fy	80 ksi
Tensile Strength, Fu	100 ksi
Applied Axial, Pu	309.2 k
Compressive Capacity, φPn	392.7 k
Capacity, Pu/φPn	0.787 OK

Plate Compression	
Radius of Gyration	#DIV/0! in ³
kl/r	#DIV/0! -
4.71 √(E/Fy)	0.00 -
Buckling Stress(Fe)	0.0 -
Crit. Buckling Stress(Fcr)	0.0 ksi
Compressive Capacity, φPn	0.0 k
Capacity, Pu/φPn	-

Site Name: Enfield 4, 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	1	5551	5551	130	0.1181	1.0	11.81%
VZW Cellular	869	9	448	4032	130	0.0858	0.579333333	14.81%
VZW Cellular	869	1	3306	3306	130	0.0703	0.579333333	12.14%
VZW AWS	2145	1	8326	8326	130	0.1772	1.0	17.72%
VZW 700	746	1	2262	2262	130	0.0481	0.497333333	9.68%

Total Percentage of Maximum Permissible Exposure

66.16%

*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 C95.1-199;

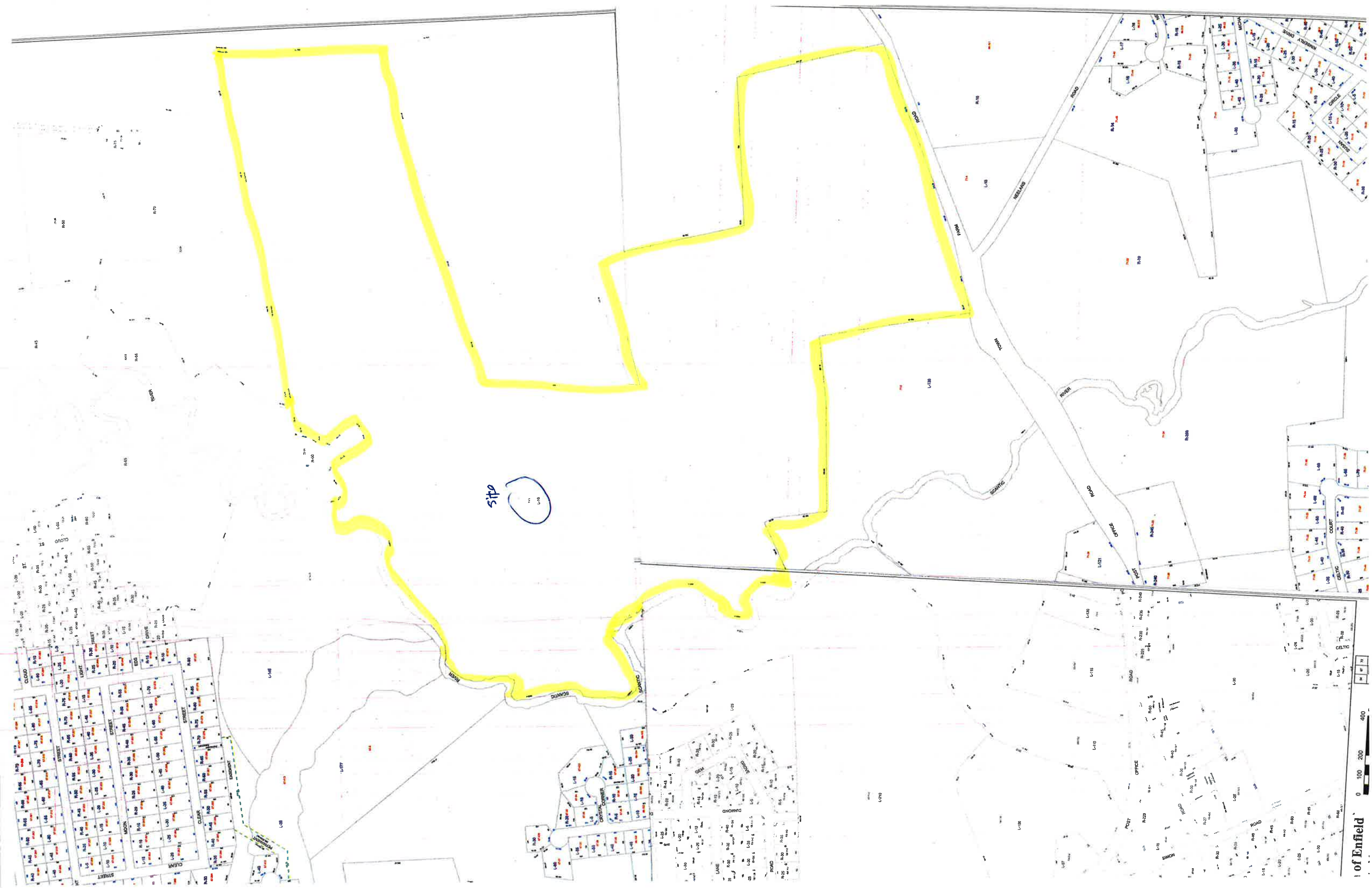
MHz = Megahertz

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.



site



200ft 100 72.557603, 44.967392

77 TOWN FARM RD

Location 77 TOWN FARM RD

Mblu 071/ / 0003/ /

Acct# 002800010010

Owner ENFIELD TOWN OF

Assessment \$1,329,970

Appraisal \$1,899,950

PID 4350

Building Count 1

Fire District 1

Current Value

Appraisal			
Valuation Year	Improvements	Land	Total
2017	\$802,530	\$1,097,420	\$1,899,950

Assessment			
Valuation Year	Improvements	Land	Total
2017	\$561,770	\$768,200	\$1,329,970

Owner of Record

Owner ENFIELD TOWN OF
Co-Owner REFUSE AREA (DUMP)
Address 820 ENFIELD ST
ENFIELD, CT 06082

Sale Price \$0
Certificate 1
Book & Page 0/ 0
Sale Date
Instrument

Ownership History

Ownership History					
Owner	Sale Price	Certificate	Book & Page	Instrument	Sale Date
ENFIELD TOWN OF	\$0	1	0/ 0		

Building Information

Building 1 : Section 1

Year Built: 1970
Living Area: 160
Replacement Cost: \$7,069
Building Percent 56
Good:
Replacement Cost
Less Depreciation: \$3,960

Building Attributes

Field	Description
STYLE	Job Shop
MODEL	Ind/Comm
Grade	Minimum
Stories:	1
Occupancy	1
Exterior Wall 1	Pre-finish Metl
Exterior Wall 2	
Roof Structure	Flat
Roof Cover	Metal/Tin
Interior Wall 1	Minim/Masonry
Interior Wall 2	
Interior Floor 1	Minimum/Plywd
Interior Floor 2	
Heating Fuel	Electric
Heating Type	Electr Basebrd
AC Type	None
Bldg Use	Exempt Comm
Total Rooms	
Total Bedrms	
Total Baths	
Total H Bths	
Extra Fixtures	
1st Floor Use:	
Heat/AC	
Frame Type	Steel
Baths/Plumbing	None
Ceiling/Wall	Ceil Walls
Rooms/Prtns	Average
Wall Height	7
% Comn Wall	

Building Photo



(<http://images.vgsi.com/photos2/EnfieldCTPhotos//\00\01\68\96>)

Building Layout



(<http://images.vgsi.com/photos2/EnfieldCTPhotos//Sketches/435>)

Building Sub-Areas (sq ft)			<u>Legend</u>
Code	Description	Gross Area	Living Area
BAS	First Floor	160	160
		160	160

Building 1 : Section 1

Year Built: 1970
Living Area: 0
Replacement Cost: \$7,069
Building Percent Good: 56
Replacement Cost Less Depreciation: \$3,960

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)	
Bsmt Garage(s)	
Fin Bsmt	
FBM Quality	
Whirlpool(s)	
Walk Out	
Solar	

Building Photo



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

Building Layout

 Building Layout

(<http://images.vgsi.com/photos2/EnfieldCTPhotos//Sketches/435>)

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

Extra Features

Extra Features	Legend
No Data for Extra Features	

Land**Land Use**

Use Code 930
Description Exempt Ind
Zone R88
Neighborhood C500
Alt Land Appr Category No

Land Line Valuation

Size (Acres) 173.6
Frontage 1513
Depth
Assessed Value \$768,200
Appraised Value \$1,097,420

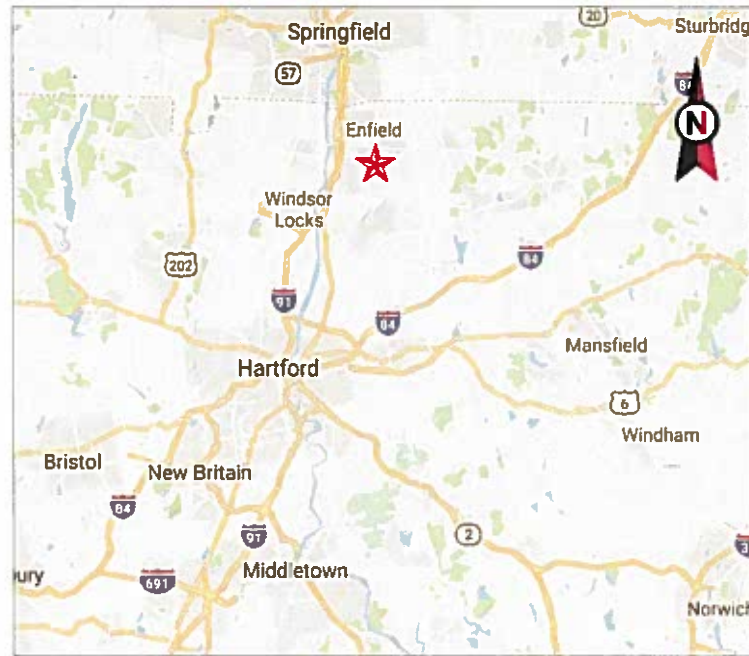
Outbuildings

Outbuildings						Legend
Code	Description	Sub Code	Sub Description	Size	Value	Bldg #
SHD1	Shed	MS	Masonry	100 S.F.	\$820	1
SCL2	SCALES-ELECT			60 TONS	\$23,100	1
TWR2	Cell Twr 2 Carriers			1 UNITS	\$206,250	1
SHD1	Shed	MS	Masonry	140 S.F.	\$1,760	1
TWR4	Cell Twr4 Carriers			1 UNITS	\$562,500	1
FN3	FENCE-8' CHAIN			256 L.F.	\$4,140	1

Valuation History

Appraisal			
Valuation Year	Improvements	Land	Total
2017	\$802,530	\$1,097,420	\$1,899,950
2016	\$802,530	\$1,097,420	\$1,899,950
2015	\$803,870	\$1,097,420	\$1,901,290

Assessment			
Valuation Year	Improvements	Land	Total
2017	\$561,770	\$768,200	\$1,329,970
2016	\$561,770	\$768,200	\$1,329,970
2015	\$562,710	\$768,200	\$1,330,910



VICINITY MAP



AMERICAN TOWER®

ATC SITE NAME: ENFD - ENFIELD
 ATC SITE NUMBER: 302489
 VERIZON SITE NAME: ENFIELD 4 CT
 VERIZON SITE NUMBER: 467219
 SITE ADDRESS: TOWN FARM ROAD
 ENFIELD, CT 06082



LOCATION MAP



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

THESE DRAWINGS AND/OR THE ACCOMPANYING SPECIFICATION AS INSTRUMENTS OR SERVICE ARE THE EXCLUSIVE PROPERTY OF AMERICAN TOWER. THEIR USE AND PUBLICATION SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY ARE PREPARED. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO AMERICAN TOWER OR THE SPECIFIED CARRIER IS STRICTLY PROHIBITED. TITLE TO THESE DOCUMENTS SHALL REMAIN THE PROPERTY OF AMERICAN TOWER WHETHER OR NOT THE PROJECT IS EXECUTED. NEITHER THE ARCHITECT NOR THE ENGINEER WILL BE PROVIDING ON-SITE CONSTRUCTION REVIEW OF THIS PROJECT. CONTRACTOR(S) MUST VERIFY ALL DIMENSIONS AND ADVISE AMERICAN TOWER OF ANY DISCREPANCIES. ANY PRIOR ISSUANCE OF THIS DRAWING IS SUPERSEDED BY THE LATEST VERSION ON FILE WITH AMERICAN TOWER.

REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	EB	07/25/18

ATC SITE NUMBER:

302489

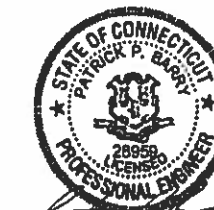
ATC SITE NAME:

ENFD - ENFIELD

SITE ADDRESS:

TOWN FARM ROAD
 ENFIELD, CT 06082

SEAL:




Authorized by "EOR"
 Jul 25 2018 5:09 PM cosign



DRAWN BY:	EB
APPROVED BY:	—
DATE DRAWN:	07/25/18
ATC JOB NO:	12498660
CUSTOMER ID:	ENFIELD 4 CT
CUSTOMER #:	467219

COVER SHEET

SHEET NUMBER:	REVISION:
G-001	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> TOWN FARM ROAD ENFIELD, CT 06082 COUNTY: HARTFORD <u>GEOGRAPHIC COORDINATES:</u> LATITUDE: 41.96591667 LONGITUDE: -72.5527 GROUND ELEVATION: 159' AMSL	THE PROPOSED PROJECT INCLUDES MODIFYING GROUND BASED AND TOWER MOUNTED EQUIPMENT AS INDICATED PER BELOW. REMOVE (6) PANELS, (3) COMBINERS, AND (3) RRU's INSTALL (6) NEW PANELS, (6) RRU's EXISTING (6) PANELS, (3) RRU's, (12) 1-5/8" COAX CABLES, (2) 1-5/8" HYBRID CABLES, AND (1) OVP's TO REMAIN	SHEET NO:	DESCRIPTION:	REV:	DATE:	BY:
		PROJECT NOTES 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	07/25/18	EB
		PROJECT LOCATION DIRECTIONS FROM HARTFORD, CT HEAD EAST ON CENTRAL ROW TOWARD PROSPECT ST. RIGHT ONTO PROSPECT ST. LEFT ONTO BOB STEELE ST. CONT. ONTO GROVE ST. KEEP RIGHT AT THE FORK. MERGE ONTO I-91 N. TAKE EXIT 46 FOR US-5/KING ST. TURN RIGHT ONTO US-5/KING ST. RIGHT ONTO OLIVER RD. RIGHT ONTO POST OFFICE RD. CONT. ONTO TOWN FARM RD. TURN LEFT ONTO ECOLOGY DR. SITE LOCATION WILL BE ON THE LEFT.	G-002	GENERAL NOTES	0	07/25/18	EB
UTILITY COMPANIES POWER COMPANY: EVERSOURCE PHONE: (877) 659-6326 TELEPHONE COMPANY: FRONTIER COMMUNICATIONS PHONE: (800) 376-6843	PROJECT TEAM <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> TOWN OF ENFIELD CT 820 ENFIELD ST ENFIELD, CT. 06082 <u>APPLICANT:</u> VERIZON WIRELESS 99 EAST RIVER DRIVE 9TH FLOOR EAST HARTFORD, CT 06108		C-101	DETAILED SITE PLAN AND TOWER ELEVATION	0	07/25/18	EB
 Know what's below. Call before you dig.			C-501	RF SCHEDULE AND ANTENNA INSTALLATION	0	07/25/18	EB
				C-502	CONSTRUCTION DETAILS	0	07/25/18

GENERAL CONSTRUCTION NOTES:

1. ALL WORK SHALL CONFORM TO ALL CURRENT APPLICABLE FEDERAL, STATE, AND LOCAL CODES, INCLUDING ANSI/EIA/TIA-222, AND COMPLY WITH ATC MASTER 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 NEGLIGENCE ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, OR BY THE ELEMENTS DUE TO NEGLIGENCE 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 1/2" 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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REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	EB	07/25/18

ATC SITE NUMBER:

302489

ATC SITE NAME:

ENFD - ENFIELD

SITE ADDRESS:

TOWN FARM ROAD
 ENFIELD, CT 06082

SEAL:



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DRAWN BY:	EB
APPROVED BY:	—
DATE DRAWN:	07/25/18
ATC JOB NO:	12498660
CUSTOMER ID:	ENFIELD 4 CT
CUSTOMER #:	467219

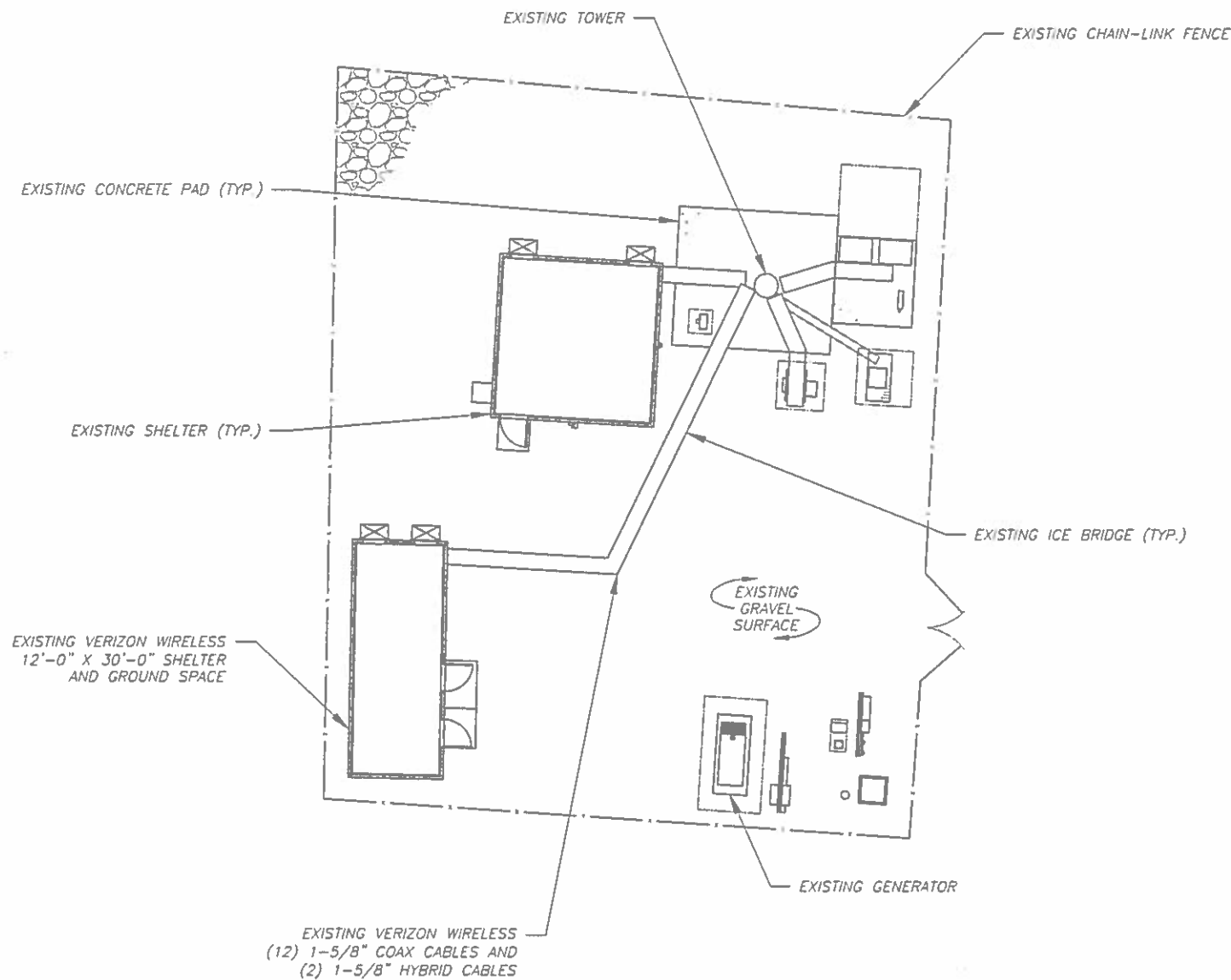
GENERAL NOTES

SHEET NUMBER:	REVISION:
G-002	0

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SITE PLAN NOTES:

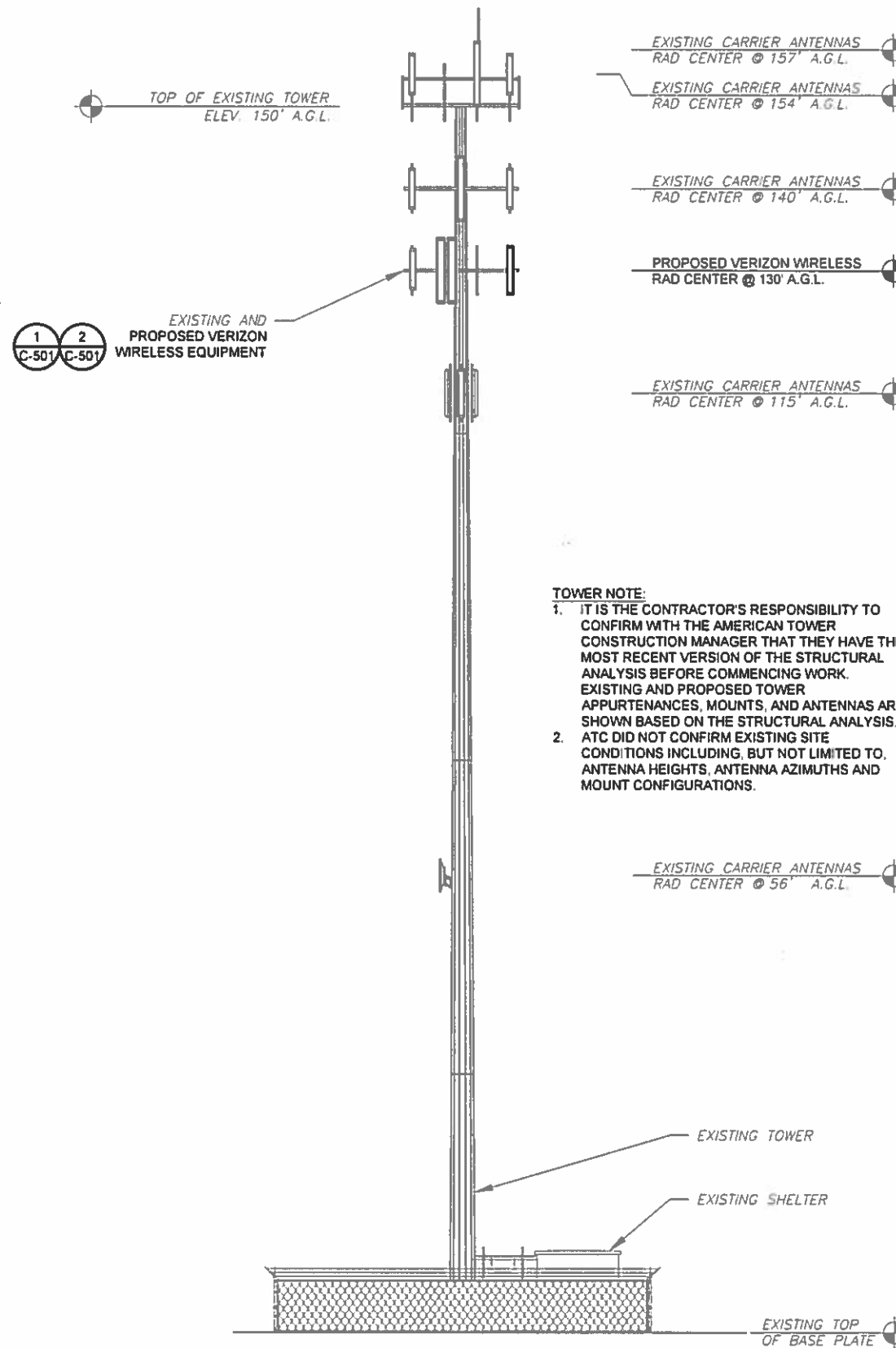
1. THIS SITE PLAN REPRESENTS THE BEST PRESENT KNOWLEDGE AVAILABLE TO THE ENGINEER AT THE TIME OF THIS DESIGN. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO CONSTRUCTION AND VERIFY ALL EXISTING CONDITIONS RELATED TO THE SCOPE OF WORK FOR THIS PROJECT.
2. ICE BRIDGE, CABLE LADDER, COAX PORT, CABLE SUPPORTS, 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.
3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE ATC CONSTRUCTION MANAGER AND LOCAL UTILITY COMPANY FOR THE INSTALLATION OF CONDUITS, CONDUCTORS, BREAKERS, DISCONNECTS, OR ANY OTHER EQUIPMENT REQUIRED FOR ELECTRICAL SERVICE. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH LATEST EDITION OF THE STATE AND NATIONAL CODES, ORDINANCES AND REGULATIONS APPLICABLE TO THIS PROJECT.



1 DETAILED SITE PLAN



SCALE: 1"=20' (11X17)
1"=10' (22X34)



2 TOWER ELEVATION
SCALE: NOT TO SCALE

- TOWER NOTE:**
1. 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.
 2. ATC DID NOT CONFIRM EXISTING SITE CONDITIONS INCLUDING, BUT NOT LIMITED TO, ANTENNA HEIGHTS, ANTENNA AZIMUTHS AND MOUNT CONFIGURATIONS.



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0	FOR CONSTRUCTION	EB	07/25/18

ATC SITE NUMBER:

302489

ATC SITE NAME:

ENFD - ENFIELD

SITE ADDRESS:

TOWN FARM ROAD
ENFIELD, CT 06082

SEAL:



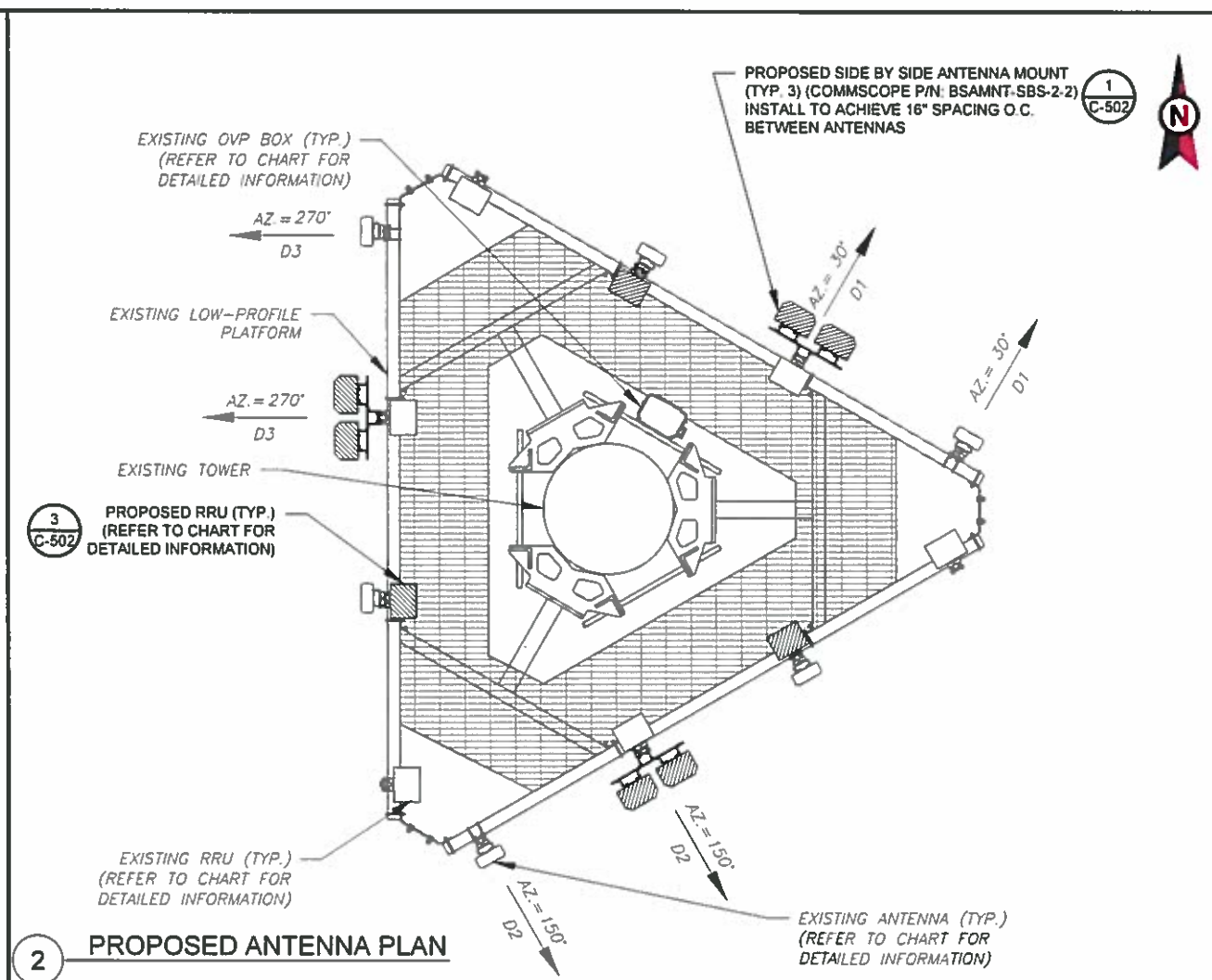
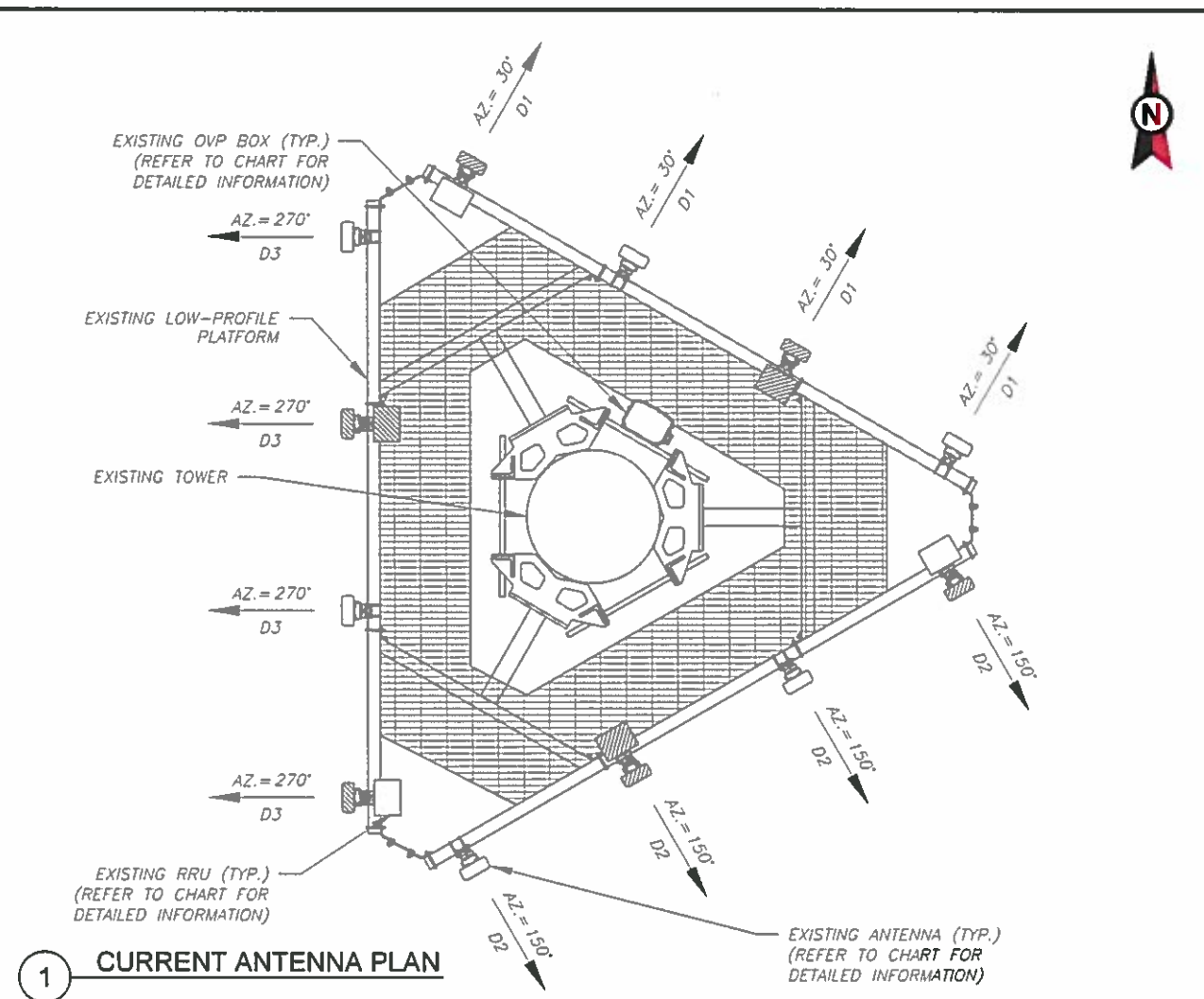
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DATE DRAWN:	07/25/18
ATC JOB NO:	12498660
CUSTOMER ID:	ENFIELD 4 CT
CUSTOMER #:	467219

DETAILED SITE PLAN
AND TOWER ELEVATION

SHEET NUMBER:	REVISION:
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REV.	DESCRIPTION	BY	DATE
0	FOR CONSTRUCTION	EB	07/25/18
1			
2			
3			

ATC SITE NUMBER:
302489

ATC SITE NAME:
ENFD - ENFIELD

SITE ADDRESS:
 TOWN FARM ROAD
 ENFIELD, CT 06082

CURRENT ANTENNA AND RF EQUIPMENT SCHEDULE									
LOCATION			ANTENNA SUMMARY				NON ANTENNA SUMMARY		
SECTOR	RAD	AZ	POS	BAND	MODEL NUMBER	STATUS	POS	MODEL NUMBER	STATUS
D1	130'	30°	1	-	SBNHH-1D65B	RMV	1	B66A RRH 4x45	RMN
			2	-	BXA-70063-4CF-EDIN10	RMN	1	FD9R6004/2C-3L	RMV
			3	-	SBNHH-1D65B	RMV	2	-	-
			4	850 CDMA	BXA-80080-6CF-EDIN-X	RMN	3	B13 RRH4x30-4R	RMN
D2	130'	150°	1	-	SBNHH-1D65B	RMV	1	B66A RRH 4x45	RMN
			2	-	BXA-70063-4CF-EDIN10	RMN	1	FD9R6004/2C-3L	RMV
			3	-	SBNHH-1D65B	RMV	2	-	-
			4	850 CDMA	BXA-80080-6CF-EDIN-X	RMN	3	B13 RRH4x30-4R	RMN
D3	130'	270°	1	-	SBNHH-1D65B	RMV	1	B66A RRH 4x45	RMN
			2	-	BXA-70063-4CF-EDIN10	RMN	1	FD9R6004/2C-3L	RMV
			3	-	SBNHH-1D65B	RMV	2	-	-
			4	850 CDMA	BXA-80080-6CF-EDIN-X	RMN	3	B13 RRH4x30-4R	RMN

NOTES

- BASED ON APPROVED ATC APPLICATION 0AA732957, DATED 05/21/18 CONFIRM WITH VERIZON WIRELESS REP FOR APPLICABLE UPDATES/REVISIONS AND MOST RECENT RFDS.
- ATC HAS NOT YET VERIFIED ANY EXISTING ANTENNA CONFIGURATION OR MOUNT CONFIGURATION. CONTRACTOR TO VERIFY MOUNT CONFIGURATION HAS SUFFICIENT SPACE FOR PROPOSED LESSEE EQUIPMENT (I.E. CLEARANCES, MOUNT PIPE OR SUFFICIENT LENGTH, ETC.) ATC DID NOT ANALYZE ANTENNA MOUNT TO DETERMINE ADEQUATE STRUCTURAL CAPACITY FOR ANY LESSEE LOADING.
- ALL PROPOSED EQUIPMENT INCLUDING ANTENNAS, COAX, ETC. SHALL BE MOUNTED IN ACCORDANCE WITH THE TOWER STRUCTURAL ANALYSIS ON FILE WITH THE ATC CM.
- CONFIRM SPACING OF PROPOSED EQUIPMENT 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).
- CABLE LENGTHS SHOWN ESTIMATE MAXIMUM TYPICAL RUN AND INCORPORATE A 15% SAFETY FACTOR.

PROPOSED ANTENNA AND RF EQUIPMENT SCHEDULE									
LOCATION			ANTENNA SUMMARY				NON ANTENNA SUMMARY		
SECTOR	RAD	AZ	POS	BAND	MODEL NUMBER	STATUS	POS	MODEL NUMBER	STATUS
D1	130'	30°	1	-	BXA-70063/4CF	RMN	1	B66A RRH 4x45	RMN
			2	-	BXA-70063-4CF-EDIN10	RMN	1	-	-
			3	700/850/1900/2100 LTE	(2) JAHH-65B-R3B	ADD	2	B25 RRH4X30	ADD
			4	850 CDMA	BXA-80080-6CF-EDIN-X	RMN	2	RRH 4T4R B5 160W AHCA	ADD
D2	130'	150°	1	-	BXA-70063/4CF	RMN	1	B66A RRH 4x45	RMN
			2	-	BXA-70063-4CF-EDIN10	RMN	1	-	-
			3	700/850/1900/2100 LTE	(2) JAHH-65B-R3B	ADD	2	B25 RRH4X30	ADD
			4	850 CDMA	BXA-80080-6CF-EDIN-X	RMN	2	RRH 4T4R B5 160W AHCA	ADD
D3	130'	270°	1	-	BXA-70063/4CF	RMN	1	B66A RRH 4x45	RMN
			2	-	BXA-70063-4CF-EDIN10	RMN	1	-	-
			3	700/850/1900/2100 LTE	(2) JAHH-65B-R3B	ADD	2	B25 RRH4X30	ADD
			4	850 CDMA	BXA-80080-6CF-EDIN-X	RMN	2	RRH 4T4R B5 160W AHCA	ADD

STATUS ABBREVIATIONS
 RMV: TO BE REMOVED
 RMN: TO REMAIN
 REL: TO BE RELOCATED
 DSC: TO BE DISCONNECTED AND TO REMAIN

3 ANTENNA AND RF EQUIPMENT SCHEDULES

CABLE LENGTHS FOR FIBER AND DC JUMPERS
 FROM FIBER DISTRIBUTION / OVP BOX TO RRU: 20' JUMPERS
 FROM RRU TO COMBINER: 15' JUMPERS
 FROM COMBINER TO ANTENNA: 10' JUMPERS



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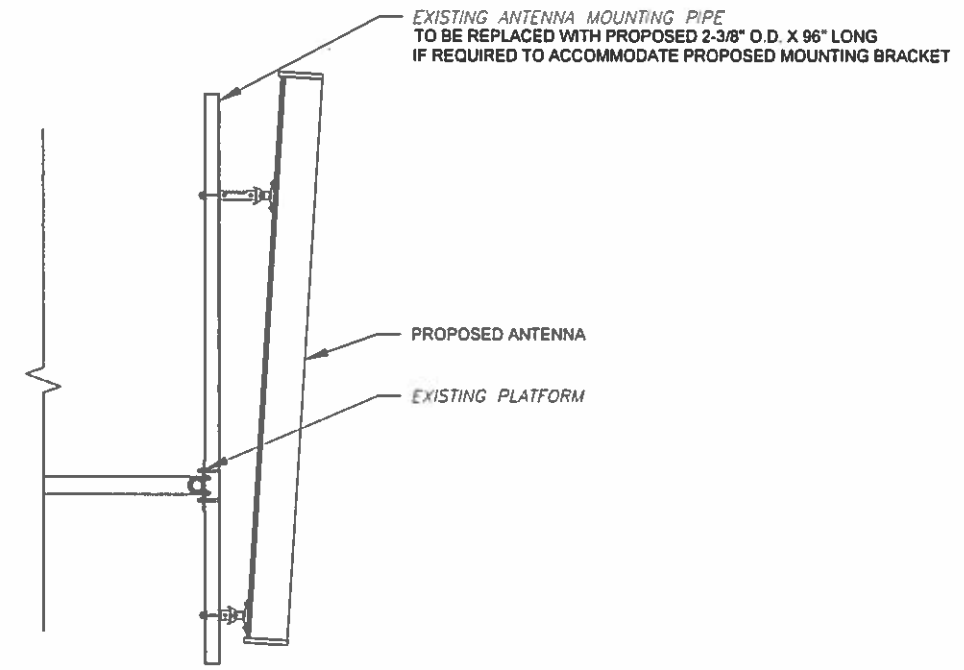
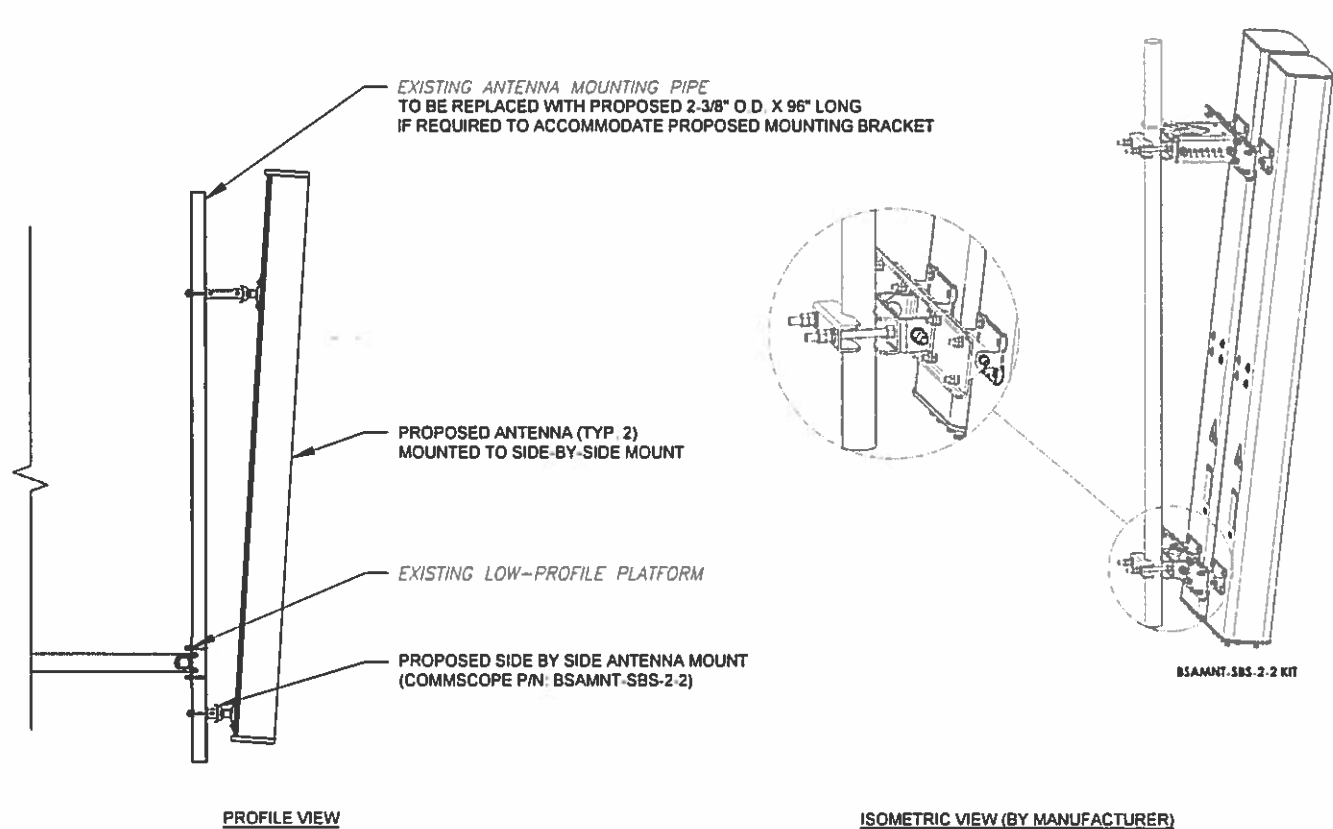
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DATE DRAWN:	07/25/18
ATC JOB NO:	12498660
CUSTOMER ID:	ENFIELD 4 CT
CUSTOMER #:	467219

RF SCHEDULE AND ANTENNA INSTALLATION

SHEET NUMBER:
C-501

REVISION:
0

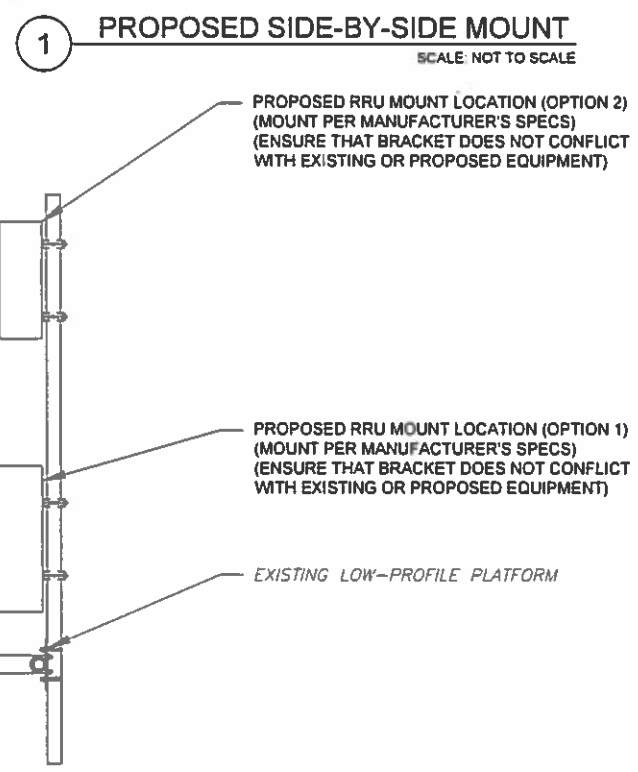
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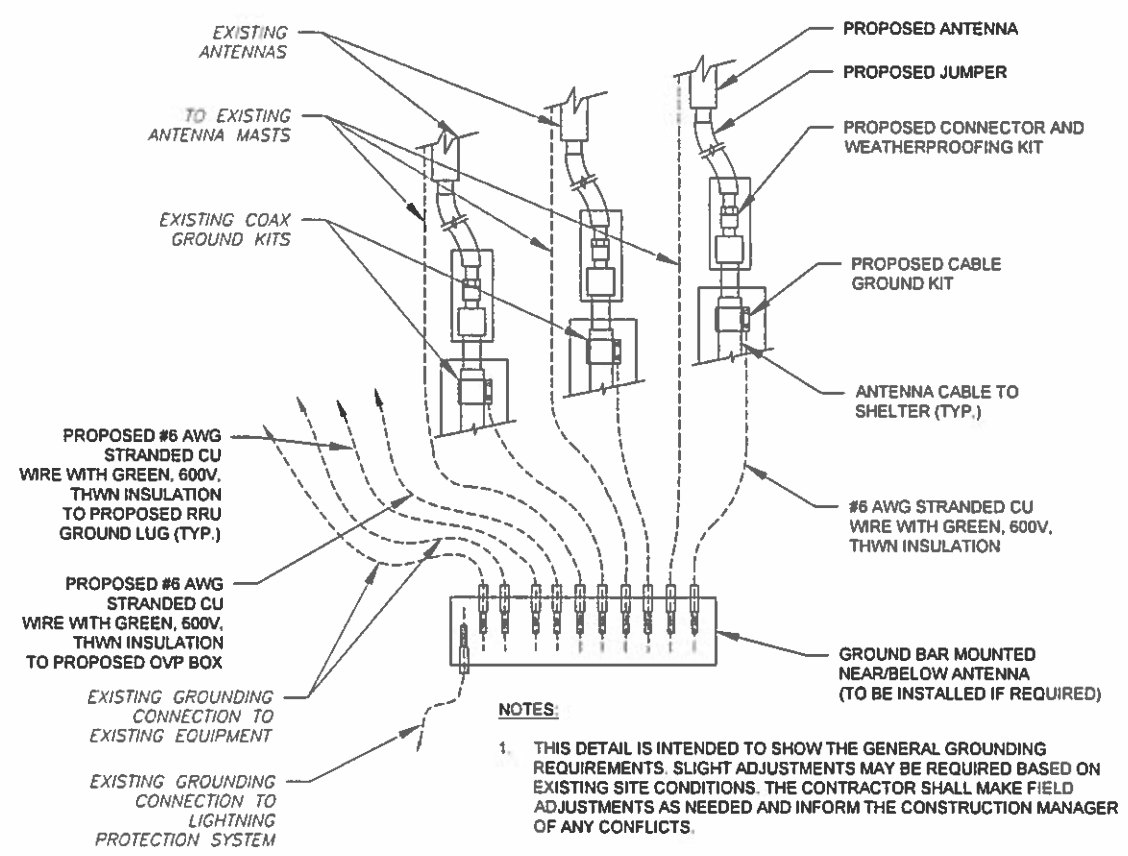
PROFILE VIEW

ISOMETRIC VIEW (BY MANUFACTURER)

2 PROPOSED ANTENNA MOUNTING DETAIL - TYPICAL
SCALE: NOT TO SCALE



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



4 TYPICAL ANTENNA GROUNDING DIAGRAM
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.

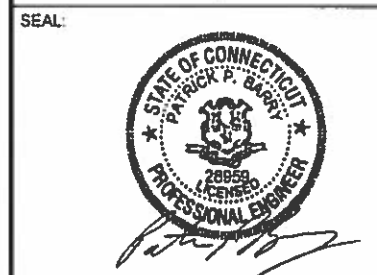


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302489
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DATE DRAWN:	07/25/18
ATC JOB NO:	12498660
CUSTOMER ID:	ENFIELD 4 CT
CUSTOMER #:	467219

**CONSTRUCTION
 DETAILS**

SHEET NUMBER:	REVISION:
C-502	0