



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

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E-Mail: siting.council@ct.gov

www.ct.gov/csc

VIA ELECTRONIC MAIL

February 25, 2020

Mark Roberts
QC Development
P.O. Box 916
Storrs, CT 06268

RE: **EM-CING-105-200203** – New Cingular Wireless PCS, LLC (AT&T) notice of intent to modify an existing telecommunications facility located at 125 Mile Creek Road, Old Lyme, Connecticut.

Dear Mr. Roberts:

The Connecticut Siting Council (Council) is in receipt of your correspondence of February 18, 2020 and February 20, 2020 submitted in response to the Council's February 5, 2020 notification of an incomplete request for exempt modification with regard to the above-referenced matter.

The submission renders the request for exempt modification complete and the Council will process the request in accordance with the Federal Communications Commission 60-day timeframe.

Thank you for your attention and cooperation.

Sincerely,

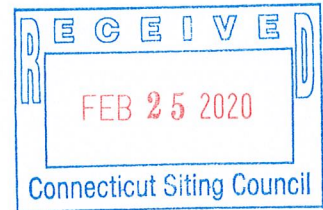
Melanie A. Bachman
Executive Director

MAB/IN/emr



Mark Roberts

From: Mark Roberts
Sent: Thursday, February 20, 2020 8:34 PM
To: Robidoux, Evan
Subject: RE: Corrected attachments for Bozrah & Old Lyme
Attachments: CT2235_Structural Analysis (Passing)_12.5.19.pdf
Importance: High



Hello Evan – and here is the signed/stamped ATC Structural for Mile Creek Rd, Old Lyme. A hard copy (minus the calcs) will follow by mail.

Thanks

Mark Roberts
QC Development
860-670-9068

EM - CINS - 105 - 200203

From: Mark Roberts
Sent: Tuesday, February 18, 2020 9:28 AM
To: Robidoux, Evan <Evan.Robidoux@ct.gov>
Subject: RE: Corrected attachments for Bozrah & Old Lyme
Importance: High

Hello Evan – I have inherited these two pending filings from Greg Milano The mailing deficiencies were corrected last week, but I'm not certain that you were notified due to the transition. Please see the attached mailing labels and associated incomplete letters.

Please disregard if you already received these from Greg and let me know if you have any further questions. Lastly, please confirm if you are able to send me the decision letters via e-mail instead of Greg?

Thanks

Mark Roberts
QC Development
860-670-9068

From: Greg Milano <g milano@saigrp.com>
Sent: Tuesday, February 11, 2020 10:57 AM
To: Mark Roberts <mark.roberts@qcdevelopment.net>
Subject: FW: Corrected attachments for Bozrah & Old Lyme

From: Robidoux, Evan <Evan.Robidoux@ct.gov>
Sent: Thursday, February 6, 2020 12:00 PM
To: Greg Milano <g milano@saigrp.com>



AMERICAN TOWER®
CORPORATION

Structural Analysis Report

Structure : 170.5 ft Monopole
ATC Site Name : Old Lyme South CT, CT
ATC Asset Number : 411178
Engineering Number : OAA754039_C3_01
Proposed Carrier : AT&T MOBILITY
Carrier Site Name : OLD LYME-MILE CREEK
Carrier Site Number : CT2235
Site Location : 125 Mile Creek Road
OLD LYME, CT 06371-1718
41.305700,-72.297400
County : New London
Date : November 8, 2019
Max Usage : 54%
Result : Pass

Prepared By:
Hussam Al Tahan, E.I.
Structural Engineer I

Hussam Al Tahan

Reviewed By:

COA: PEC.0001553



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Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 170.5 ft monopole to reflect the change in loading by AT&T MOBILITY.

Supporting Documents

Tower Drawings	EI Project #11723 Rev 1, dated September 19, 2003 Mapping by TEP Job #68269-80551, dated April 25, 2016
Foundation Drawing	EI Project #11723 Rev 1, dated October 21, 2003
Geotechnical Report	Clarence Welts Site #CT54XC701, dated October 17, 2003

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:	105 mph (3-Second Gust, V_{asd}) / 135 mph (3-Second Gust, V_{ult})
Basic Wind Speed w/ Ice:	50 mph (3-Second Gust) w/ 3/4" radial ice concurrent
Code:	ANSI/TIA-222-G / 2015 IBC / 2018 Connecticut State Building Code
Structure Class:	II
Exposure Category:	B
Topographic Category:	1
Crest Height:	0 ft
Spectral Response:	$S_s = 0.16$, $S_1 = 0.06$
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

Elev. ¹ (ft)	Qty	Antenna	Mount Type	Lines	Carrier
177.0	1	Generic 12' Dipole	Flush	(7) 1/2" Coax	TOWN OF OLD LYME, CT
176.0	1	Decibel DB201-A			
171.0	1	Generic E-911 GPS	T-Arm w/ Reinforcement	(4) 1 5/8" (1.63"-41.3mm) Fiber (9) 1 5/8" Coax (1) 1/2" Coax	T-MOBILE
	3	Ericsson KRY 112 144/1			
	3	Ericsson Radio 4449 B12,B71			
	3	RFS APXVAARR24_43-U-NA20			
	3	Ericsson AIR 21, 1.3M, B4A B2P			
	3	Ericsson AIR 21, 1.3 M, B2A B4P			
161.0	6	Commscope SBNHH-1D65B	Low Profile Platform	(18) 1 5/8" Coax (2) 1 5/8" Hybriflex	VERIZON WIRELESS
	3	Alcatel-Lucent RRH2X60-1900			
	3	Alcatel-Lucent RRH2x60 700			
	2	Amphenol Antel LPA-80080-6CF-EDIN-2			
	4	RFS APL866513-42T0			
	1	Antel BXA-70063-4CF-EDIN-10			
	2	RFS DB-T1-6Z-8AB-0Z			
	2	Antel BXA-70063/6CF_			
	1	VZW Unused Reserve: 520 sq in			
	3	Alcatel-Lucent B66 RRH4x45			
149.0	3	Alcatel-Lucent TD-RRH8x20-25 w/ Solar Shield	Low Profile Platform	(4) 1 1/4" Hybriflex Cable (6) 1 5/8" Coax (1) 1/2" Coax	SPRINT NEXTEL
	3	Alcatel-Lucent 1900 MHz 4X45 RRH			
	6	Alcatel-Lucent RRH2x50-08			
	1	Generic GPS			
	3	RFS APXVTM14-ALU-I20			
	3	Commscope NNVV-65B-R4			
140.0	6	Powerwave Allgon TT19-08BP111-001	-	(1) 0.39" (10mm) Fiber Trunk (2) 0.78" (19.7mm) 8 AWG 6 (12) 1 5/8" Coax (1) 2" conduit	AT&T MOBILITY
	1	Raycap DC6-48-60-18-8F ("Squid")			
	3	Powerwave Allgon 7770.00			
111.0	1	Generic 12' Dipole	Stand-Off	(2) 1/2" Coax	TOWN OF OLD LYME, CT
74.0	1	Generic GPS	Stand-Off	(1) 1/2" Coax	SPRINT NEXTEL
	1	Generic GPS			

Equipment to be Removed

Elev. ¹ (ft)	Qty	Antenna	Mount Type	Lines	Carrier
140.0	6	KMW AM-X-CD-14-65-00T-RET	Low Profile Platform	-	AT&T MOBILITY
	6	Ericsson RRUS-11			



Proposed Equipment

Elev. ¹ (ft)	Qty	Antenna	Mount Type	Lines	Carrier
140.0	3	Ericsson RRUS 8843 B2, B66A	Platform w/ Handrails (SitePro1 P/N PRK-1245L w/ handrail kit, SitePro1 P/N HRK14-3HD, or approved equal)	(1) 0.39" (10mm) Fiber Trunk (3) 0.78" (19.7mm) 8 AWG 6 (1) 2" conduit	AT&T MOBILITY
	3	Ericsson RRUS 4478 B14 (15")			
	3	Ericsson RRUS 4449 B5, B12			
	1	Raycap DC9-48-60-24-8C-EV			
	6	CCI DMP65R-BU4D			

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

Install proposed coax inside the pole shaft.

Structure Usages

Structural Component	Controlling Usage	Pass/Fail
Anchor Bolts	43%	Pass
Shaft	54%	Pass
Base Plate	46%	Pass
Flange	13%	Pass

Foundations

Reaction Component	Analysis Reactions	% of Usage
Moment (Kips-Ft)	4,460.4	43%
Axial (Kips)	71.2	13%
Shear (Kips)	36.5	18%

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) (°)
140.0	Ericsson RRUS 8843 B2, B66A	AT&T MOBILITY	0.757	0.631
	Ericsson RRUS 4478 B14 (15")			
	Ericsson RRUS 4449 B5, B12			
	Raycap DC9-48-60-24-8C-EV			
	CCI DMP65R-BU4D			

*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:

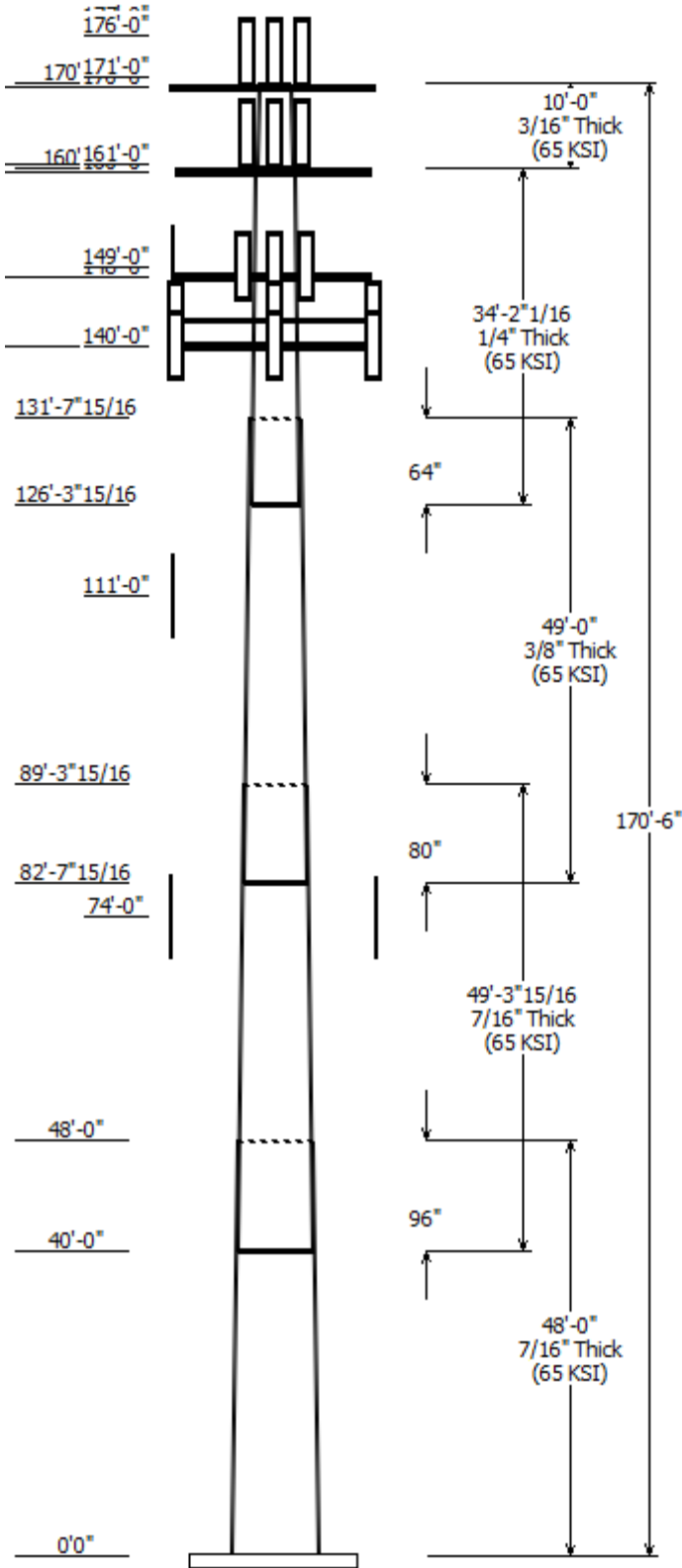
- Information supplied by the client regarding antenna, mounts and feed line loading
- Information from drawings, design and analysis documents, and field notes in the possession of A.T. Engineering Service, PLLC

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.

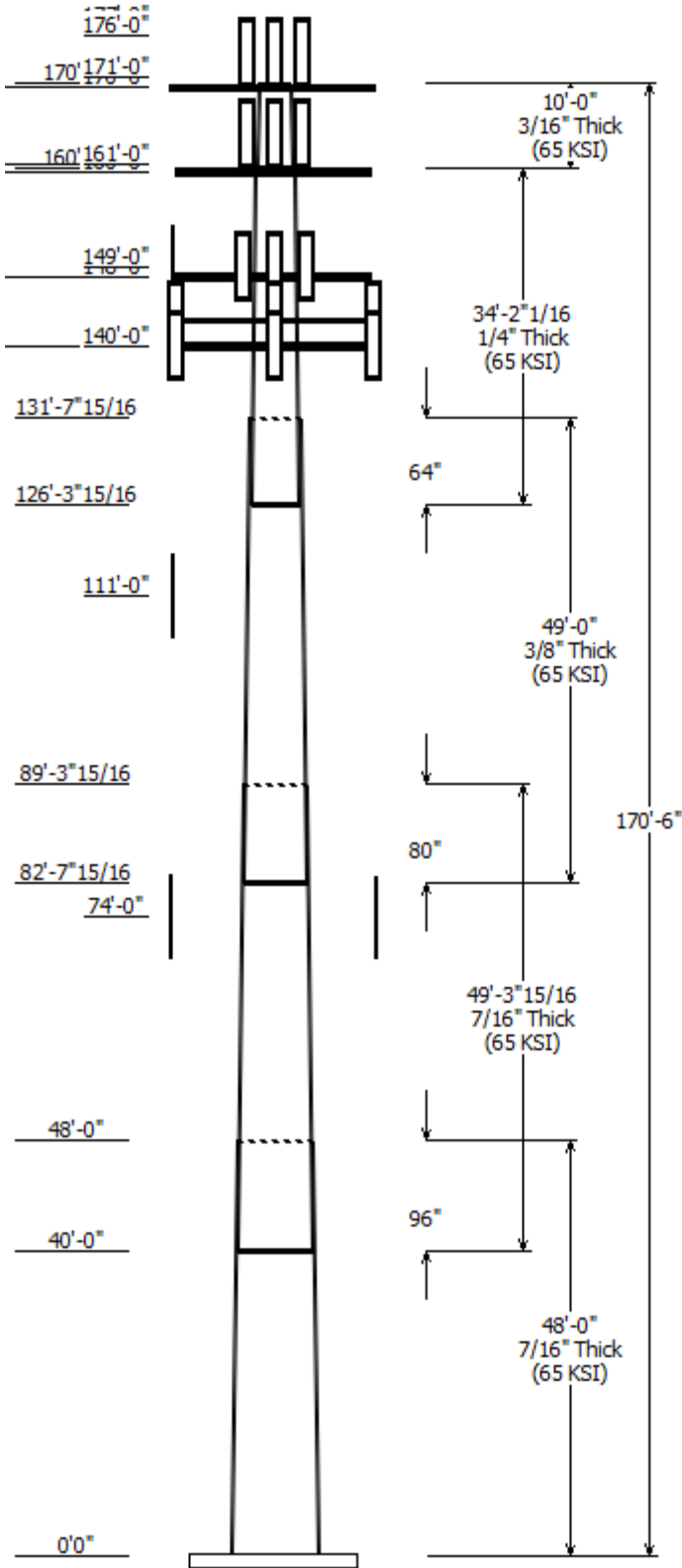
All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. A.T. Engineering Service, PLLC is not responsible for the conclusions, opinions and recommendations made by others based on the information supplied herein.



Job Information	
Client : AT&T MOBILITY	Code: ANSI/TIA-222-G
Pole : 411178	
Location : Old Lyme South CT, CT	
Description : 170.5 ft Monopole	Struct Class : II
Shape : 18 Sides	Exposure : B
Height : 170.50 (ft)	Topo : 1
Base Elev (ft): 0.00	
Taper: 0.26246 (in/ft)	

Sections Properties						
Shaft Section	Length (ft)	Diameter (in)		Joint Type	Overlap Length (in)	Steel Grade (ksi)
		Across Flats Top	Across Flats Bottom			
1	48.000	56.28	69.00	0.438	0.000	18 Sides 65
2	49.330	46.20	59.27	0.438	96.000	18 Sides 65
3	49.000	35.73	48.71	0.375	80.000	18 Sides 65
4	34.170	28.59	37.64	0.250	64.000	18 Sides 65
5	10.000	26.00	27.50	0.188	0.000	18 Sides 65

Discrete Appurtenance			
Attach Elev (ft)	Force Elev (ft)	Qty	Description
177.000	183.500	1	Generic 12' Dipole
176.000	181.500	1	Decibel DB201-A
171.000	171.500	1	Generic E-911 GPS
170.500	171.000	3	RFS APXVAARR24_43-U-NA20
170.500	171.000	3	Ericsson AIR 21, 1.3M, B4A B2P
170.500	171.000	3	Ericsson AIR 21, 1.3 M, B2A B4
170.500	171.000	3	Ericsson Radio 4449 B12,B71
170.500	171.000	3	Ericsson KRY 112 144/1
170.000	170.000	3	Round T-Arm
161.000	162.000	2	Amphenol Antel LPA-80080-
161.000	162.000	6	Commscope SBNHH-1D65B
161.000	162.000	2	Antel BXA-70063/6CF_
161.000	162.000	2	RFS DB-T1-6Z-8AB-0Z
161.000	162.000	1	Antel BXA-70063-4CF-EDIN-10
161.000	162.000	4	RFS APL866513-42T0
161.000	162.000	3	Alcatel-Lucent B66 RRH4x45
161.000	162.000	3	Alcatel-Lucent RRH2x60 700
161.000	162.000	3	Alcatel-Lucent RRH2X60-1900
161.000	161.000	1	VZW Unused Reserve: 520 sq
160.000	160.000	1	Flat Low Profile Platform
149.000	149.000	3	Commscope NNVV-65B-R4
149.000	149.000	3	RFS APXVTM14-ALU-I20
149.000	149.000	3	Alcatel-Lucent TD-RRH8x20-25
149.000	149.000	3	Alcatel-Lucent 1900 MHz 4X45
149.000	149.000	6	Alcatel-Lucent RRH2x50-08
149.000	149.000	1	Generic GPS
148.000	148.000	1	Flat Low Profile Platform
140.000	140.000	1	Generic Flat Platform with Han
140.000	140.000	6	CCI DMP65R-BU4D
140.000	143.000	3	Powerwave Allgon 7770.00
140.000	140.000	1	Raycap DC9-48-60-24-8C-EV
140.000	140.000	3	Ericsson RRUS 4449 B5, B12
140.000	140.000	3	Ericsson RRUS 4478 B14 (15")
140.000	140.000	3	Ericsson RRUS 8843 B2, B66A
140.000	143.000	1	Raycap DC6-48-60-18-8F
140.000	143.000	6	Powerwave Allgon TT19-
111.000	111.000	1	Generic 12' Dipole
74.000	74.000	1	Generic GPS
74.000	74.000	1	Generic GPS



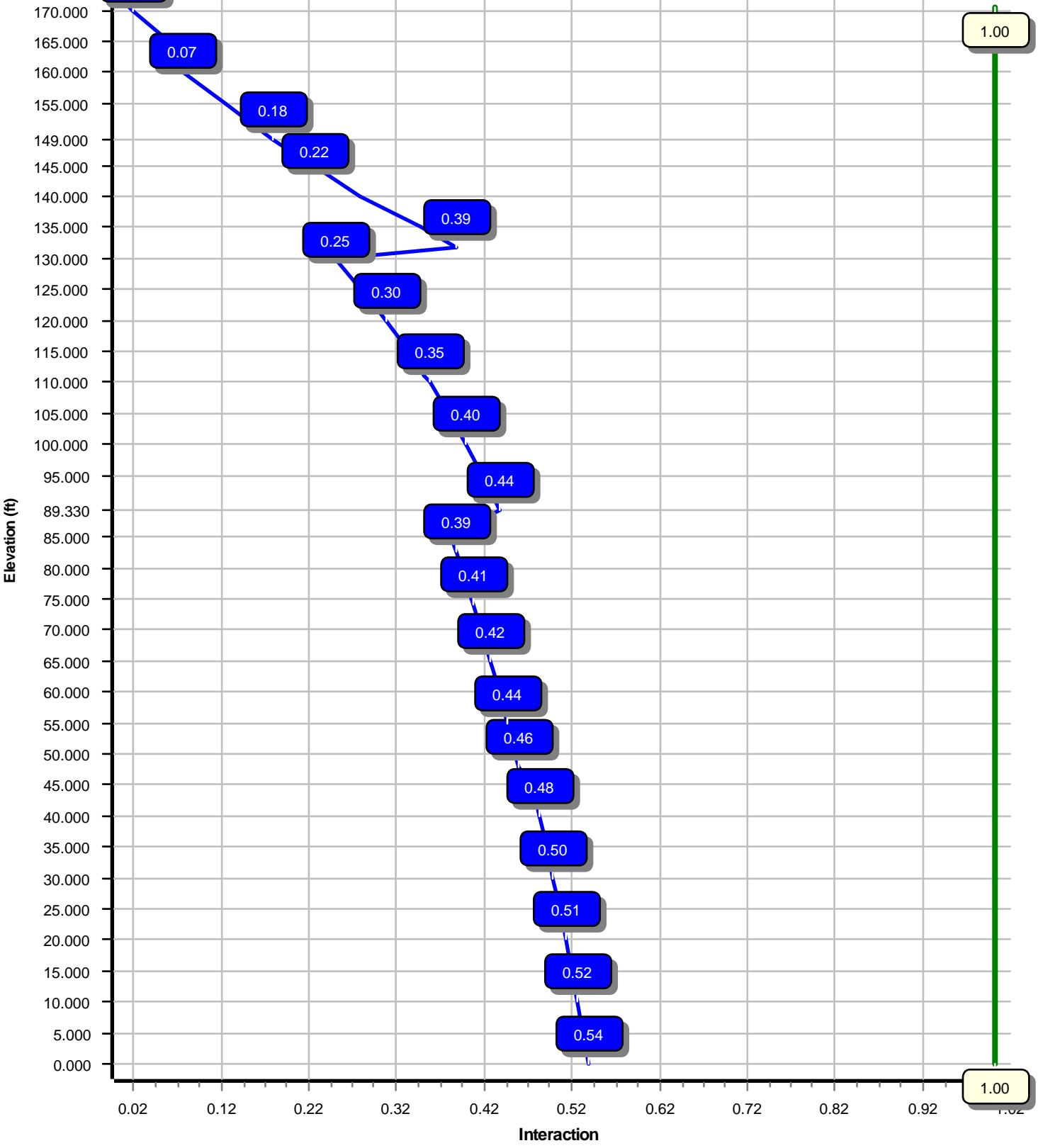
Linear Appurtenance			
Elev (ft)		Description	Exposed To Wind
From	To		
0.000	74.000	1/2" Coax	No
0.000	111.0	1/2" Coax	No
0.000	140.0	0.39" (10mm)	No
0.000	140.0	0.39" (10mm)	No
0.000	140.0	0.78" (19.7mm) 8	No
0.000	140.0	0.78" (19.7mm) 8	No
0.000	140.0	1 5/8" Coax	No
0.000	140.0	2" conduit	No
0.000	140.0	2" conduit	No
0.000	149.0	1 1/4" Hybriflex	No
0.000	149.0	1 5/8" Coax	No
0.000	149.0	1/2" Coax	No
0.000	161.0	1 5/8" Coax	No
0.000	161.0	1 5/8" Hybriflex	No
0.000	162.0	1 5/8" Coax	No
0.000	171.0	1 5/8" (1.63"-	No
0.000	171.0	1 5/8" Coax	Yes
0.000	171.0	1 5/8" Coax	No
0.000	171.0	1/2" Coax	No
0.000	176.0	1/2" Coax	No
0.000	176.0	1/2" Coax	No
0.000	177.0	1/2" Coax	No

Load Cases	
1.2D + 1.6W	105 mph with No Ice
0.9D + 1.6W	105 mph with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi	50 mph with 0.75 in Radial Ice
(1.2 + 0.2Sds) * DL + E	Seismic Equivalent Lateral Forces Method
(1.2 + 0.2Sds) * DL + E	Seismic Equivalent Modal Analysis Method
(0.9 - 0.2Sds) * DL + E	Seismic (Reduced DL) Equivalent Lateral
(0.9 - 0.2Sds) * DL + E	Seismic (Reduced DL) Equivalent Modal
1.0D + 1.0W	Serviceability 60 mph

Reactions			
Load Case	Moment (kip-ft)	Shear (kip)	Axial (kip)
1.2D + 1.6W	4460.41	36.51	71.21
0.9D + 1.6W	4418.48	36.48	53.40
1.2D + 1.0Di + 1.0Wi	1149.91	9.69	100.70
(1.2 + 0.2Sds) * DL + E ELFM	236.95	1.78	70.91
(1.2 + 0.2Sds) * DL + E EMAM	278.30	2.19	70.91
(0.9 - 0.2Sds) * DL + E ELFM	234.55	1.78	49.75
(0.9 - 0.2Sds) * DL + E EMAM	275.29	2.19	49.75
1.0D + 1.0W	809.43	6.66	59.37

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

Load Case : 1.2D + 1.6W
Max Ratio 53.57% at 0.0 ft



Site Number: 411178

Code: ANSI/TIA-222-G

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Site Name: Old Lyme South CT, CT

Engineering Number: OAA754039_C3_01

11/8/2019 3:27:49 PM

Customer: AT&T MOBILITY

Analysis Parameters

Location :	New London County, CT	Height (ft) :	170.5
Code :	ANSI/TIA-222-G	Base Diameter (in) :	69.00
Shape :	18 Sides	Top Diameter (in) :	26.00
Pole Type :	Custom	Taper (in/ft) :	0.262
Pole Manufacturer :	EEl	Rotation (deg) :	0.00

Ice & Wind Parameters

Structure Class:	II	Design Wind Speed Without Ice:	105 mph
Exposure Category:	B	Design Wind Speed With Ice:	50 mph
Topographic Category:	1	Operational Wind Speed:	60 mph
Crest Height:	0 ft	Design Ice Thickness:	0.75 in

Seismic Parameters

Analysis Method: Equivalent Modal Analysis & Equivalent Lateral Force Methods

Site Class: D - Stiff Soil

Period Based on Rayleigh Method (sec): 2.13

T_L (sec):	6	p :	1	C_s :	0.030
S_s :	0.160	S_1 :	0.060	C_s Max:	0.030
F_a :	1.600	F_v :	2.400	C_s Min:	0.030
S_{ds} :	0.171	S_{d1} :	0.096		

Load Cases

1.2D + 1.6W	105 mph with No Ice
0.9D + 1.6W	105 mph with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi	50 mph with 0.75 in Radial Ice
(1.2 + 0.2Sds) * DL + E ELFM	Seismic Equivalent Lateral Forces Method
(1.2 + 0.2Sds) * DL + E EMAM	Seismic Equivalent Modal Analysis Method
(0.9 - 0.2Sds) * DL + E ELFM	Seismic (Reduced DL) Equivalent Lateral Forces Method
(0.9 - 0.2Sds) * DL + E EMAM	Seismic (Reduced DL) Equivalent Modal Analysis Method
1.0D + 1.0W	Serviceability 60 mph

Site Number: 411178

Code: ANSI/TIA-222-G

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Site Name: Old Lyme South CT, CT

Engineering Number: OAA754039_C3_01

11/8/2019 3:27:49 PM

Customer: AT&T MOBILITY

Shaft Section Properties

Sect Info	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Slip Joint Len (in)	Weight (lb)	Bottom						Top							
							Dia (in)	Elev (ft)	Area (in ²)	Ix (in ⁴)	W/t Ratio	D/t Ratio	Dia (in)	Elev (ft)	Area (in ²)	Ix (in ⁴)	W/t Ratio	D/t Ratio	Taper (in/ft)	
1-18	48.000	0.4375	65		0.00	14,108	69.00	0.00	95.20	56543.5	26.40	157.71	56.28	48.00	77.54	30550.4	21.27	128.64	0.265000	
2-18	49.330	0.4375	65	Slip	96.00	12,191	59.27	40.00	81.70	35734.3	22.48	135.49	46.20	89.33	63.55	16816.1	17.21	105.61	0.265000	
3-18	49.000	0.3750	65	Slip	80.00	8,305	48.71	82.66	57.54	16990.6	21.50	129.92	35.73	131.66	42.08	6647.9	15.39	95.29	0.265000	
4-18	34.170	0.2500	65	Slip	64.00	3,033	37.64	126.33	29.67	5243.4	25.14	150.59	28.59	160.50	22.49	2282.4	18.76	114.37	0.265000	
5-18	10.000	0.1875	65	Butt	0.00	538	27.50	160.50	16.25	1531.9	24.45	146.67	26.00	170.50	15.36	1293.1	23.04	138.67	0.150000	
Shaft Weight						38,174														

Discrete Appurtenance Properties

Attach Elev (ft)	Description	Qty	Ka	Vert Ecc (ft)	Weight (lb)	No Ice EPAa (sf)	Orientation Factor	Weight (lb)	Ice EPAa (sf)	Orientation Factor
177.00	Generic 12' Dipole	1	1.00	6.500	40.00	4.510	1.00	175.32	11.773	1.00
176.00	Decibel DB201-A	1	1.00	5.500	25.00	3.130	1.00	125.74	13.811	1.00
171.00	Generic E-911 GPS	1	0.80	0.500	5.00	0.580	1.00	31.00	1.029	1.00
170.50	Ericsson KRY 112 144/1	3	0.80	0.500	11.00	0.350	0.50	21.92	0.761	0.50
170.50	Ericsson Radio 4449 B12,B71	3	0.80	0.500	74.00	1.640	0.50	130.82	2.497	0.50
170.50	Ericsson AIR 21, 1.3 M, B2A B4P	3	0.80	0.500	83.00	6.050	0.71	231.11	8.244	0.71
170.50	Ericsson AIR 21, 1.3M, B4A B2P	3	0.80	0.500	81.50	6.090	0.70	229.06	8.286	0.70
170.50	RFS APXVAARR24_43-U-NA20	3	0.80	0.500	127.90	20.240	0.63	526.30	24.003	0.63
170.00	Round T-Arm w/Reinforcement	3	0.75	0.000	405.00	9.700	0.67	748.03	18.053	0.67
161.00	Alcatel-Lucent RRH2X60-1900	3	0.80	1.000	43.00	1.880	0.50	98.83	2.828	0.50
161.00	Alcatel-Lucent RRH2x60 700	3	0.80	1.000	56.70	2.150	0.67	125.37	3.161	0.67
161.00	Alcatel-Lucent B66 RRH4x45	3	0.80	1.000	67.00	2.580	0.67	138.49	3.717	0.67
161.00	VZW Unused Reserve: 520 sq in	1	0.80	0.000	209.00	3.610	0.90	355.91	6.148	0.90
161.00	RFS APL866513-42T0	4	0.80	1.000	15.70	4.050	0.76	125.66	5.926	0.76
161.00	Antel BXA-70063-4CF-EDIN-10	1	0.80	1.000	9.90	4.710	1.00	112.46	6.567	1.00
161.00	RFS DB-T1-6Z-8AB-OZ	2	0.80	1.000	44.00	4.800	0.72	170.99	6.234	0.72
161.00	Antel BXA-70063/6CF_	2	0.80	1.000	17.00	7.570	0.73	159.69	10.353	0.73
161.00	Commscope SBNHH-1D65B	6	0.80	1.000	50.70	8.170	0.69	227.79	11.024	0.69
161.00	Amphenol Antel LPA-80080-6CF-	2	0.80	1.000	21.00	8.630	0.71	190.60	11.390	0.71
160.00	Flat Low Profile Platform	1	1.00	0.000	1,500.00	26.100	1.00	2,152.40	45.325	1.00
149.00	Generic GPS	1	0.80	0.000	10.00	0.900	1.00	39.29	1.540	1.00
149.00	Alcatel-Lucent RRH2x50-08	6	0.80	0.000	52.90	1.700	0.50	112.22	2.563	0.50
149.00	Alcatel-Lucent 1900 MHz 4X45	3	0.80	0.000	60.00	2.320	0.67	140.67	3.401	0.67
149.00	Alcatel-Lucent TD-RRH8x20-25	3	0.80	0.000	70.00	4.050	0.61	164.61	5.380	0.61
149.00	RFS APXVTM14-ALU-I20	3	0.80	0.000	56.20	6.340	0.66	194.04	8.520	0.66
149.00	Commscope NNVV-65B-R4	3	0.80	0.000	77.40	12.270	0.64	328.94	15.077	0.64
148.00	Flat Low Profile Platform	1	1.00	0.000	1,500.00	26.100	1.00	2,147.69	45.186	1.00
140.00	Powerwave Allgon TT19-	6	0.80	3.000	16.00	0.550	0.50	36.06	1.055	0.50
140.00	Raycap DC6-48-60-18-8F	1	0.80	3.000	31.80	1.470	1.00	93.09	2.164	1.00
140.00	Ericsson RRUS 8843 B2, B66A	3	0.80	0.000	72.00	1.640	0.50	132.89	2.480	0.50
140.00	Ericsson RRUS 4478 B14 (15")	3	0.80	0.000	59.40	1.650	0.50	108.77	2.492	0.50
140.00	Ericsson RRUS 4449 B5, B12	3	0.80	0.000	71.00	1.970	0.50	135.02	2.897	0.50
140.00	Raycap DC9-48-60-24-8C-EV	1	0.80	0.000	16.00	4.790	1.00	144.24	6.252	1.00
140.00	Powerwave Allgon 7770.00	3	0.80	3.000	35.00	5.510	0.65	168.74	6.555	0.65
140.00	CCI DMP65R-BU4D	6	0.80	0.000	67.90	8.280	0.62	247.31	10.291	0.62
140.00	Generic Flat Platform with	1	1.00	0.000	2,500.00	42.400	1.00	4,264.70	63.233	1.00
111.00	Generic 12' Dipole	1	1.00	0.000	40.00	4.510	1.00	169.59	11.466	1.00
74.00	Generic GPS	1	1.00	0.000	10.00	0.900	1.00	37.24	1.495	1.00
74.00	Generic GPS	1	1.00	0.000	10.00	0.900	1.00	37.24	1.495	1.00
Totals	Num Loadings:39	99			11,608.80			26,042.26		

Site Number: 411178

Code: ANSI/TIA-222-G

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Site Name: Old Lyme South CT, CT

Engineering Number: OAA754039_C3_01

11/8/2019 3:27:49 PM

Customer: AT&T MOBILITY

Linear Appurtenance Properties Load Case Azimuth (deg) : 0

Elev From (ft)	Elev To (ft)	Qty	Description	Coax Dia (in)	Coax Wt (lb/ft)	Max Coax / Flat Row	Dist Between Rows (in)	Dist Between Cols (in)	Azimuth (deg)	Dist From Face (in)	Exposed To Wind	Carrier
0.00	177.00	2	1/2" Coax	0.63	0.15	N 0	0.00	0.00	0	0.00	N	TOWN OF OLD
0.00	176.00	4	1/2" Coax	0.63	0.15	N 0	0.00	0.00	0	0.00	N	TOWN OF OLD
0.00	176.00	1	1/2" Coax	0.63	0.15	N 0	0.00	0.00	0	0.00	N	TOWN OF OLD
0.00	171.00	4	1 5/8" (1.63"-41.3mm)	1.63	1.61	N 0	0.00	0.00	0	0.00	N	T-MOBILE
0.00	171.00	6	1 5/8" Coax	1.98	0.82	N 6	1.00	1.00	90	1.00	Y	T-MOBILE
0.00	171.00	3	1 5/8" Coax	1.98	0.82	N 0	0.00	0.00	0	0.00	N	T- MOBILE
0.00	171.00	1	1/2" Coax	0.63	0.15	N 0	0.00	0.00	0	0.00	N	T-MOBILE
0.00	162.00	6	1 5/8" Coax	1.98	0.82	N 0	0.00	0.00	0	0.00	N	VERIZON WIRELESS
0.00	161.00	12	1 5/8" Coax	1.98	0.82	N 0	0.00	0.00	0	0.00	N	VERIZON WIRELESS
0.00	161.00	2	1 5/8" Hybriflex	1.98	1.30	N 0	0.00	0.00	0	0.00	N	VERIZON WIRELESS
0.00	149.00	4	1 1/4" Hybriflex Cable	1.54	1.00	N 0	0.00	0.00	0	0.00	N	SPRINT NEXTEL
0.00	149.00	6	1 5/8" Coax	1.98	0.82	N 0	0.00	0.00	0	0.00	N	SPRINT NEXTEL
0.00	149.00	1	1/2" Coax	0.63	0.15	N 0	0.00	0.00	0	0.00	N	SPRINT NEXTEL
0.00	140.00	1	0.39" (10mm) Fiber	0.39	0.06	N 0	0.00	0.00	0	0.00	N	AT&T MOBILITY
0.00	140.00	1	0.39" (10mm) Fiber	0.39	0.06	N 0	0.00	0.00	0	0.00	N	AT&T MOBILITY
0.00	140.00	2	0.78" (19.7mm) 8 AWG	0.78	0.59	N 0	0.00	0.00	0	0.00	N	AT&T MOBILITY
0.00	140.00	3	0.78" (19.7mm) 8 AWG	0.78	0.59	N 0	0.00	0.00	0	0.00	N	AT&T MOBILITY
0.00	140.00	12	1 5/8" Coax	1.98	0.82	N 0	0.00	0.00	0	0.00	N	AT&T MOBILITY
0.00	140.00	1	2" conduit	2.38	3.65	N 0	0.00	0.00	0	0.00	N	AT&T MOBILITY
0.00	140.00	1	2" conduit	2.38	3.65	N 0	0.00	0.00	0	0.00	N	AT&T MOBILITY
0.00	111.00	2	1/2" Coax	0.63	0.15	N 0	0.00	0.00	0	0.00	N	TOWN OF OLD
0.00	74.00	1	1/2" Coax	0.63	0.15	N 0	0.00	0.00	0	0.00	N	SPRINT NEXTEL

Segment Properties (Max Len : 5. ft)

Seg Top Elev (ft)	Description	Thick (in)	Flat Dia (in)	Area (in ²)	Ix (in ⁴)	W/t Ratio	D/t Ratio	F'y (ksi)	S (in ³)	Z (in ³)	Weight (lb)
0.00		0.4375	69.000	95.204	56,543.5	26.40	157.71	70.4	1614.	0.0	0.0
5.00		0.4375	67.675	93.364	53,328.2	25.86	154.69	71.0	1552.	0.0	1,604.1
10.00		0.4375	66.350	91.524	50,237.2	25.33	151.66	71.6	1491.	0.0	1,572.8
15.00		0.4375	65.025	89.685	47,268.1	24.80	148.63	72.2	1431.	0.0	1,541.5
20.00		0.4375	63.700	87.845	44,418.3	24.26	145.60	72.9	1373.	0.0	1,510.2
25.00		0.4375	62.375	86.005	41,685.3	23.73	142.57	73.5	1316.	0.0	1,478.9
30.00		0.4375	61.050	84.165	39,066.9	23.19	139.54	74.1	1260.	0.0	1,447.6
35.00		0.4375	59.725	82.325	36,560.5	22.66	136.51	74.7	1205.	0.0	1,416.3
40.00	Bot - Section 2	0.4375	58.400	80.485	34,163.6	22.13	133.49	75.4	1152.	0.0	1,385.0
45.00		0.4375	57.075	78.645	31,873.9	21.59	130.46	76.0	1099.	0.0	2,728.1
48.00	Top - Section 1	0.4375	57.155	78.757	32,009.1	21.62	130.64	76.0	1103.	0.0	1,606.8
50.00		0.4375	56.625	78.021	31,120.1	21.41	129.43	76.2	1082.	0.0	533.5
55.00		0.4375	55.300	76.181	28,970.0	20.88	126.40	76.8	1031.	0.0	1,311.8
60.00		0.4375	53.975	74.341	26,921.3	20.34	123.37	77.5	982.4	0.0	1,280.5
65.00		0.4375	52.650	72.501	24,971.6	19.81	120.34	78.1	934.2	0.0	1,249.2
70.00		0.4375	51.325	70.661	23,118.3	19.28	117.31	78.7	887.2	0.0	1,217.9
74.00		0.4375	50.265	69.189	21,703.5	18.85	114.89	79.2	850.4	0.0	951.8
75.00		0.4375	50.000	68.821	21,359.1	18.74	114.29	79.4	841.4	0.0	234.8
80.00		0.4375	48.675	66.981	19,691.4	18.21	111.26	80.0	796.8	0.0	1,155.3
82.66	Bot - Section 3	0.4375	47.969	66.001	18,839.7	17.92	109.64	80.3	773.6	0.0	602.6
85.00		0.4375	47.350	65.142	18,112.9	17.67	108.23	80.6	753.4	0.0	975.9
89.33	Top - Section 2	0.3750	46.953	55.437	15,195.2	20.67	125.21	77.1	637.4	0.0	1,774.9
90.00		0.3750	46.775	55.226	15,022.1	20.58	124.73	77.2	632.6	0.0	126.1
95.00		0.3750	45.450	53.649	13,771.5	19.96	121.20	77.9	596.8	0.0	926.2
100.0		0.3750	44.125	52.072	12,592.4	19.34	117.67	78.7	562.1	0.0	899.4
105.0		0.3750	42.800	50.495	11,482.6	18.71	114.13	79.4	528.4	0.0	872.5
110.0		0.3750	41.475	48.918	10,440.0	18.09	110.60	80.1	495.8	0.0	845.7
111.0		0.3750	41.210	48.602	10,239.4	17.97	109.89	80.3	489.4	0.0	165.9
115.0		0.3750	40.150	47.340	9,462.5	17.47	107.07	80.9	464.2	0.0	652.9
120.0		0.3750	38.825	45.763	8,548.0	16.85	103.53	81.6	433.6	0.0	792.0
125.0		0.3750	37.500	44.186	7,694.4	16.22	100.00	82.3	404.1	0.0	765.2
126.3	Bot - Section 4	0.3750	37.148	43.767	7,477.3	16.06	99.06	82.5	396.5	0.0	199.0
130.0		0.3750	36.175	42.609	6,899.6	15.60	96.47	82.6	375.7	0.0	905.1
131.6	Top - Section 3	0.2500	36.234	28.552	4,671.1	24.15	144.94	73.0	253.9	0.0	402.3
135.0		0.2500	35.350	27.851	4,335.2	23.52	141.40	73.7	241.5	0.0	320.2
140.0		0.2500	34.025	26.799	3,862.5	22.59	136.10	74.8	223.6	0.0	464.9
145.0		0.2500	32.700	25.748	3,425.5	21.65	130.80	75.9	206.3	0.0	447.0
148.0		0.2500	31.905	25.117	3,179.9	21.09	127.62	76.6	196.3	0.0	259.6
149.0		0.2500	31.640	24.907	3,100.7	20.91	126.56	76.8	193.0	0.0	85.1
150.0		0.2500	31.375	24.697	3,022.8	20.72	125.50	77.0	189.8	0.0	84.4
155.0		0.2500	30.050	23.645	2,653.0	19.78	120.20	78.1	173.9	0.0	411.2
160.0		0.2500	28.725	22.594	2,314.6	18.85	114.90	79.2	158.7	0.0	393.4
160.5	Top - Section 4	0.2500	28.592	22.489	2,282.4	18.76	114.37	79.3	157.2	0.0	38.4
160.5	Bot - Section 5	0.1875	27.500	16.254	1,531.9	24.45	146.67	72.6	109.7	0.0	
161.0		0.1875	27.425	16.209	1,519.3	24.38	146.27	72.7	109.1	0.0	27.6
165.0		0.1875	26.825	15.852	1,421.1	23.82	143.07	73.4	104.3	0.0	218.2
170.0		0.1875	26.075	15.406	1,304.4	23.11	139.07	74.2	98.5	0.0	265.9
170.5		0.1875	26.000	15.361	1,293.1	23.04	138.67	74.3	98.0	0.0	26.2
											38,174.1

Load Case: 1.2D + 1.6W	105 mph with No Ice	23 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		310.4	0.0					0.0	0.0	310.4	0.0	0.0	0.0
5.00		614.8	1,925.0					0.0	372.7	614.8	2,297.6	0.0	0.0
10.00		602.8	1,887.4					0.0	372.7	602.8	2,260.1	0.0	0.0
15.00		590.7	1,849.8					0.0	372.7	590.7	2,222.5	0.0	0.0
20.00		578.7	1,812.3					0.0	372.7	578.7	2,184.9	0.0	0.0
25.00		566.6	1,774.7					0.0	372.7	566.6	2,147.4	0.0	0.0
30.00		561.2	1,737.2					0.0	372.7	561.2	2,109.8	0.0	0.0
35.00		567.1	1,699.6					0.0	372.7	567.1	2,072.2	0.0	0.0
40.00	Bot - Section 2	580.5	1,662.0					0.0	372.7	580.5	2,034.7	0.0	0.0
45.00		472.3	3,273.7					0.0	372.7	472.3	3,646.4	0.0	0.0
48.00	Top - Section 1	296.9	1,928.2					0.0	223.6	296.9	2,151.8	0.0	0.0
50.00		417.5	640.2					0.0	149.1	417.5	789.2	0.0	0.0
55.00		597.7	1,574.1					0.0	372.7	597.7	1,946.8	0.0	0.0
60.00		598.0	1,536.6					0.0	372.7	598.0	1,909.2	0.0	0.0
65.00		596.9	1,499.0					0.0	372.7	596.9	1,871.7	0.0	0.0
70.00		535.2	1,461.4					0.0	372.7	535.2	1,834.1	0.0	0.0
74.00	Appurtenance(s)	296.3	1,142.1	77.0	0.0	0.0	24.0	0.0	298.1	373.4	1,464.2	0.0	0.0
75.00		353.3	281.8					0.0	74.4	353.3	356.1	0.0	0.0
80.00		449.8	1,386.3					0.0	371.8	449.8	1,758.1	0.0	0.0
82.66	Bot - Section 3	293.5	723.1					0.0	198.0	293.5	921.1	0.0	0.0
85.00		391.7	1,171.1					0.0	173.7	391.7	1,344.9	0.0	0.0
89.33	Top - Section 2	292.8	2,129.9					0.0	321.9	292.8	2,451.9	0.0	0.0
90.00		328.2	151.4					0.0	49.8	328.2	201.2	0.0	0.0
95.00		574.3	1,111.4					0.0	371.8	574.3	1,483.2	0.0	0.0
100.00		565.8	1,079.2					0.0	371.8	565.8	1,451.0	0.0	0.0
105.00		556.5	1,047.0					0.0	371.8	556.5	1,418.8	0.0	0.0
110.00		330.4	1,014.8					0.0	371.8	330.4	1,386.6	0.0	0.0
111.00	Appurtenance(s)	270.7	199.1	216.7	0.0	0.0	48.0	0.0	74.4	487.4	321.5	0.0	0.0
115.00		481.3	783.5					0.0	296.0	481.3	1,079.5	0.0	0.0
120.00		524.5	950.4					0.0	370.0	524.5	1,320.4	0.0	0.0
125.00		327.3	918.2					0.0	370.0	327.3	1,288.2	0.0	0.0
126.33	Bot - Section 4	255.7	238.8					0.0	98.4	255.7	337.2	0.0	0.0
130.00		271.7	1,086.1					0.0	271.6	271.7	1,357.7	0.0	0.0
131.66	Top - Section 3	250.3	482.7					0.0	123.1	250.3	605.8	0.0	0.0
135.00		409.9	384.2					0.0	246.9	409.9	631.1	0.0	0.0
140.00	Appurtenance(s)	480.3	557.9	4,535.7	0.0	1,718.7	4,516.1	0.0	370.0	5,016.0	5,443.9	0.0	0.0
145.00		375.3	536.4					0.0	248.7	375.3	785.1	0.0	0.0
148.00	Appurtenance(s)	184.2	311.6	1,361.4	0.0	0.0	1,800.0	0.0	149.2	1,545.7	2,260.8	0.0	0.0
149.00	Appurtenance(s)	91.0	102.1	2,265.6	0.0	0.0	1,341.8	0.0	49.7	2,356.5	1,493.7	0.0	0.0
150.00		267.5	101.3					0.0	38.9	267.5	140.1	0.0	0.0
155.00		436.8	493.5					0.0	194.3	436.8	687.8	0.0	0.0
160.00	Appurtenance(s)	235.6	472.0	1,392.1	0.0	0.0	1,800.0	0.0	194.3	1,627.7	2,466.3	0.0	0.0
160.50	Top - Section 4	41.5	46.0					0.0	19.4	41.5	65.5	0.0	0.0
161.00	Appurtenance(s)	183.1	33.1	4,138.1	0.0	3,999.2	1,500.0	0.0	19.4	4,321.2	1,552.6	0.0	0.0
165.00		364.1	261.8					0.0	78.0	364.1	339.8	0.0	0.0
170.00	Appurtenance(s)	221.4	319.1	793.6	0.0	0.0	1,458.0	0.0	90.1	1,015.0	1,867.2	0.0	0.0
170.50	Appurtenance(s)	20.0	31.4	2,910.0	0.0	1,455.0	1,358.6	0.0	9.0	2,930.0	1,399.1	0.0	0.0

Site Number: 411178

Code: ANSI/TIA-222-G

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Site Name: Old Lyme South CT, CT

Engineering Number: OAA754039_C3_01

11/8/2019 3:27:55 PM

Customer: AT&T MOBILITY

Load Case: 1.2D + 1.6W

105 mph with No Ice

23 Iterations

Gust Response Factor :1.10

Wind Importance Factor :1.00

Dead Load Factor :1.20

Wind Load Factor :1.60

Totals: 36,302.4 71,158.7 0.00 0.00

Load Case: 1.2D + 1.6W

105 mph with No Ice

23 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	-71.21	-36.51	0.00	-4,460.41	0.00	4,460.41	6,027.96	3,013.98	17,007.2	8,516.24	0.00	0.00	0.536
5.00	-68.84	-36.03	0.00	-4,277.87	0.00	4,277.87	5,964.25	2,982.12	16,500.1	8,262.35	0.06	-0.11	0.529
10.00	-66.51	-35.55	0.00	-4,097.74	0.00	4,097.74	5,898.45	2,949.22	15,994.5	8,009.14	0.24	-0.22	0.523
15.00	-64.22	-35.07	0.00	-3,920.00	0.00	3,920.00	5,830.57	2,915.29	15,490.5	7,756.77	0.53	-0.34	0.517
20.00	-61.97	-34.61	0.00	-3,744.63	0.00	3,744.63	5,760.62	2,880.31	14,988.5	7,505.43	0.94	-0.45	0.510
25.00	-59.76	-34.14	0.00	-3,571.60	0.00	3,571.60	5,688.58	2,844.29	14,489.0	7,255.28	1.48	-0.57	0.503
30.00	-57.59	-33.68	0.00	-3,400.88	0.00	3,400.88	5,614.46	2,807.23	13,992.1	7,006.49	2.14	-0.69	0.496
35.00	-55.45	-33.20	0.00	-3,232.48	0.00	3,232.48	5,538.27	2,769.13	13,498.4	6,759.23	2.92	-0.81	0.488
40.00	-53.35	-32.71	0.00	-3,066.47	0.00	3,066.47	5,459.99	2,729.99	13,008.0	6,513.68	3.83	-0.93	0.481
45.00	-49.66	-32.26	0.00	-2,902.93	0.00	2,902.93	5,379.63	2,689.82	12,521.4	6,270.01	4.87	-1.05	0.472
48.00	-47.48	-31.97	0.00	-2,806.15	0.00	2,806.15	5,384.54	2,692.27	12,550.6	6,284.66	5.56	-1.13	0.455
50.00	-46.65	-31.61	0.00	-2,742.21	0.00	2,742.21	5,351.87	2,675.93	12,357.0	6,187.71	6.05	-1.18	0.452
55.00	-44.65	-31.07	0.00	-2,584.15	0.00	2,584.15	5,268.72	2,634.36	11,875.9	5,946.82	7.35	-1.30	0.443
60.00	-42.69	-30.52	0.00	-2,428.81	0.00	2,428.81	5,183.50	2,591.75	11,399.4	5,708.21	8.78	-1.43	0.434
65.00	-40.77	-29.96	0.00	-2,276.24	0.00	2,276.24	5,096.20	2,548.10	10,927.8	5,472.05	10.34	-1.55	0.424
70.00	-38.89	-29.45	0.00	-2,126.44	0.00	2,126.44	5,006.81	2,503.41	10,461.4	5,238.51	12.04	-1.68	0.414
74.00	-37.41	-29.07	0.00	-2,008.64	0.00	2,008.64	4,933.81	2,466.91	10,092.3	5,053.69	13.49	-1.78	0.405
75.00	-37.02	-28.76	0.00	-1,979.56	0.00	1,979.56	4,915.35	2,457.68	10,000.6	5,007.77	13.86	-1.80	0.403
80.00	-35.23	-28.31	0.00	-1,835.77	0.00	1,835.77	4,821.81	2,410.90	9,545.79	4,779.99	15.82	-1.93	0.391
82.66	-34.29	-28.03	0.00	-1,760.36	0.00	1,760.36	4,771.13	2,385.57	9,306.02	4,659.93	16.92	-2.00	0.385
85.00	-32.92	-27.64	0.00	-1,694.87	0.00	1,694.87	4,726.18	2,363.09	9,097.16	4,555.34	17.91	-2.06	0.379
89.33	-30.45	-27.29	0.00	-1,575.20	0.00	1,575.20	3,846.41	1,923.21	7,360.18	3,685.56	19.83	-2.17	0.436
90.00	-30.22	-27.00	0.00	-1,556.92	0.00	1,556.92	3,836.63	1,918.32	7,313.25	3,662.06	20.14	-2.19	0.433
95.00	-28.70	-26.43	0.00	-1,421.94	0.00	1,421.94	3,762.45	1,881.23	6,965.41	3,487.88	22.51	-2.33	0.416
100.00	-27.21	-25.87	0.00	-1,289.78	0.00	1,289.78	3,686.20	1,843.10	6,621.98	3,315.91	25.03	-2.47	0.397
105.00	-25.76	-25.32	0.00	-1,160.41	0.00	1,160.41	3,607.86	1,803.93	6,283.29	3,146.32	27.69	-2.61	0.376
110.00	-24.35	-24.96	0.00	-1,033.83	0.00	1,033.83	3,527.44	1,763.72	5,949.70	2,979.27	30.50	-2.75	0.354
111.00	-24.03	-24.48	0.00	-1,008.88	0.00	1,008.88	3,511.11	1,755.55	5,883.62	2,946.18	31.08	-2.77	0.349
115.00	-22.92	-24.00	0.00	-910.95	0.00	910.95	3,444.94	1,722.47	5,621.53	2,814.94	33.45	-2.88	0.330
120.00	-21.58	-23.45	0.00	-790.97	0.00	790.97	3,360.36	1,680.18	5,299.14	2,653.51	36.53	-3.01	0.305
125.00	-20.28	-23.08	0.00	-673.72	0.00	673.72	3,273.70	1,636.85	4,982.86	2,495.14	39.75	-3.13	0.276
126.33	-19.93	-22.83	0.00	-643.02	0.00	643.02	3,250.30	1,625.15	4,899.81	2,453.55	40.63	-3.16	0.268
130.00	-18.57	-22.50	0.00	-559.24	0.00	559.24	3,165.67	1,582.83	4,644.73	2,325.82	43.09	-3.25	0.247
131.66	-17.96	-22.23	0.00	-521.82	0.00	521.82	1,875.92	937.96	2,776.25	1,390.19	44.23	-3.28	0.385
135.00	-17.31	-21.82	0.00	-447.63	0.00	447.63	1,848.21	924.11	2,667.57	1,335.77	46.55	-3.35	0.345
140.00	-12.15	-16.51	0.00	-336.83	0.00	336.83	1,804.96	902.48	2,506.10	1,254.91	50.13	-3.48	0.275
145.00	-11.36	-16.10	0.00	-254.27	0.00	254.27	1,759.62	879.81	2,346.60	1,175.04	53.84	-3.59	0.223
148.00	-9.19	-14.42	0.00	-205.96	0.00	205.96	1,731.42	865.71	2,251.99	1,127.67	56.11	-3.65	0.188
149.00	-7.85	-11.98	0.00	-191.53	0.00	191.53	1,721.85	860.93	2,220.65	1,111.98	56.88	-3.67	0.177
150.00	-7.72	-11.71	0.00	-179.55	0.00	179.55	1,712.20	856.10	2,189.41	1,096.33	57.65	-3.68	0.168
155.00	-7.05	-11.24	0.00	-121.00	0.00	121.00	1,662.70	831.35	2,034.89	1,018.96	61.54	-3.75	0.123
160.00	-4.69	-9.45	0.00	-64.82	0.00	64.82	1,611.13	805.56	1,883.37	943.08	65.50	-3.80	0.072
160.50	-4.63	-9.41	0.00	-60.09	0.00	60.09	1,605.85	802.93	1,868.39	935.58	65.90	-3.81	0.067

Site Number: 411178

Code: ANSI/TIA-222-G

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Site Name: Old Lyme South CT, CT

Engineering Number: OAA754039_C3_01

11/8/2019 3:27:55 PM

Customer: AT&T MOBILITY

Load Case: 1.2D + 1.6W

105 mph with No Ice

23 Iterations

Gust Response Factor :1.10

Wind Importance Factor :1.00

Dead Load Factor :1.20

Wind Load Factor :1.60

160.50	-4.63	-9.41	0.00	-60.09	0.00	60.09	1,062.64	531.32	1,193.75	597.76	65.90	-3.81	0.105
161.00	-3.36	-4.99	0.00	-51.39	0.00	51.39	1,060.93	530.47	1,188.54	595.15	66.30	-3.81	0.090
165.00	-3.05	-4.61	0.00	-31.41	0.00	31.41	1,047.03	523.52	1,146.95	574.33	69.51	-3.84	0.058
170.00	-1.25	-3.47	0.00	-8.37	0.00	8.37	1,029.05	514.53	1,095.30	548.46	73.54	-3.86	0.017
170.50	0.00	-3.38	0.00	-6.64	0.00	6.64	1,027.22	513.61	1,090.15	545.89	73.94	-3.86	0.012

Load Case: 0.9D + 1.6W	105 mph with No Ice (Reduced DL)	23 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		310.4	0.0					0.0	0.0	310.4	0.0	0.0	0.0
5.00		614.8	1,443.7					0.0	279.5	614.8	1,723.2	0.0	0.0
10.00		602.8	1,415.6					0.0	279.5	602.8	1,695.0	0.0	0.0
15.00		590.7	1,387.4					0.0	279.5	590.7	1,666.9	0.0	0.0
20.00		578.7	1,359.2					0.0	279.5	578.7	1,638.7	0.0	0.0
25.00		566.6	1,331.0					0.0	279.5	566.6	1,610.5	0.0	0.0
30.00		561.2	1,302.9					0.0	279.5	561.2	1,582.4	0.0	0.0
35.00		567.1	1,274.7					0.0	279.5	567.1	1,554.2	0.0	0.0
40.00	Bot - Section 2	580.5	1,246.5					0.0	279.5	580.5	1,526.0	0.0	0.0
45.00		472.3	2,455.3					0.0	279.5	472.3	2,734.8	0.0	0.0
48.00	Top - Section 1	296.9	1,446.1					0.0	167.7	296.9	1,613.8	0.0	0.0
50.00		417.5	480.1					0.0	111.8	417.5	591.9	0.0	0.0
55.00		597.7	1,180.6					0.0	279.5	597.7	1,460.1	0.0	0.0
60.00		598.0	1,152.4					0.0	279.5	598.0	1,431.9	0.0	0.0
65.00		596.9	1,124.3					0.0	279.5	596.9	1,403.8	0.0	0.0
70.00		535.2	1,096.1					0.0	279.5	535.2	1,375.6	0.0	0.0
74.00	Appurtenance(s)	296.3	856.6	77.0	0.0	0.0	18.0	0.0	223.6	373.4	1,098.2	0.0	0.0
75.00		353.3	211.3					0.0	55.8	353.3	267.1	0.0	0.0
80.00		449.8	1,039.7					0.0	278.8	449.8	1,318.6	0.0	0.0
82.66	Bot - Section 3	293.5	542.3					0.0	148.5	293.5	690.9	0.0	0.0
85.00		391.7	878.4					0.0	130.3	391.7	1,008.7	0.0	0.0
89.33	Top - Section 2	292.8	1,597.4					0.0	241.5	292.8	1,838.9	0.0	0.0
90.00		328.2	113.5					0.0	37.4	328.2	150.9	0.0	0.0
95.00		574.3	833.6					0.0	278.8	574.3	1,112.4	0.0	0.0
100.00		565.8	809.4					0.0	278.8	565.8	1,088.2	0.0	0.0
105.00		556.5	785.3					0.0	278.8	556.5	1,064.1	0.0	0.0
110.00		330.4	761.1					0.0	278.8	330.4	1,039.9	0.0	0.0
111.00	Appurtenance(s)	270.7	149.3	216.7	0.0	0.0	36.0	0.0	55.8	487.4	241.1	0.0	0.0
115.00		481.3	587.6					0.0	222.0	481.3	809.6	0.0	0.0
120.00		524.5	712.8					0.0	277.5	524.5	990.3	0.0	0.0
125.00		327.3	688.7					0.0	277.5	327.3	966.1	0.0	0.0
126.33	Bot - Section 4	255.7	179.1					0.0	73.8	255.7	252.9	0.0	0.0
130.00		271.7	814.6					0.0	203.7	271.7	1,018.2	0.0	0.0
131.66	Top - Section 3	250.3	362.0					0.0	92.3	250.3	454.4	0.0	0.0
135.00		409.9	288.2					0.0	185.2	409.9	473.3	0.0	0.0
140.00	Appurtenance(s)	480.3	418.4	4,535.7	0.0	1,718.7	3,387.1	0.0	277.5	5,016.0	4,082.9	0.0	0.0
145.00		375.3	402.3					0.0	186.5	375.3	588.8	0.0	0.0
148.00	Appurtenance(s)	184.2	233.7	1,361.4	0.0	0.0	1,350.0	0.0	111.9	1,545.7	1,695.6	0.0	0.0
149.00	Appurtenance(s)	91.0	76.6	2,265.6	0.0	0.0	1,006.4	0.0	37.3	2,356.5	1,120.3	0.0	0.0
150.00		267.5	76.0					0.0	29.1	267.5	105.1	0.0	0.0
155.00		436.8	370.1					0.0	145.7	436.8	515.8	0.0	0.0
160.00	Appurtenance(s)	235.6	354.0	1,392.1	0.0	0.0	1,350.0	0.0	145.7	1,627.7	1,849.7	0.0	0.0
160.50	Top - Section 4	41.2	34.5					0.0	14.6	41.2	49.1	0.0	0.0
161.00	Appurtenance(s)	180.2	24.9	4,138.1	0.0	3,999.2	1,125.0	0.0	14.6	4,318.3	1,164.4	0.0	0.0
165.00		356.5	196.4					0.0	58.5	356.5	254.9	0.0	0.0
170.00	Appurtenance(s)	216.0	239.3	793.6	0.0	0.0	1,093.5	0.0	67.6	1,009.6	1,400.4	0.0	0.0
170.50	Appurtenance(s)	19.4	23.6	2,910.0	0.0	1,455.0	1,019.0	0.0	6.8	2,929.4	1,049.3	0.0	0.0

Site Number: 411178

Code: ANSI/TIA-222-G

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Site Name: Old Lyme South CT, CT

Engineering Number: OAA754039_C3_01

11/8/2019 3:28:01 PM

Customer: AT&T MOBILITY

Load Case: 0.9D + 1.6W

105 mph with No Ice (Reduced DL)

23 Iterations

Gust Response Factor :1.10

Wind Importance Factor :1.00

Dead Load Factor :0.90

Wind Load Factor :1.60

Totals: 36,285.6 53,369.0 0.00 0.00

Load Case: 0.9D + 1.6W

105 mph with No Ice (Reduced DL)

23 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	-53.40	-36.48	0.00	-4,418.48	0.00	4,418.48	6,027.96	3,013.98	17,007.2	8,516.24	0.00	0.00	0.528
5.00	-51.60	-35.96	0.00	-4,236.11	0.00	4,236.11	5,964.25	2,982.12	16,500.1	8,262.35	0.06	-0.11	0.521
10.00	-49.84	-35.45	0.00	-4,056.32	0.00	4,056.32	5,898.45	2,949.22	15,994.5	8,009.14	0.23	-0.22	0.515
15.00	-48.11	-34.94	0.00	-3,879.09	0.00	3,879.09	5,830.57	2,915.29	15,490.5	7,756.77	0.52	-0.33	0.508
20.00	-46.41	-34.45	0.00	-3,704.37	0.00	3,704.37	5,760.62	2,880.31	14,988.5	7,505.43	0.93	-0.45	0.502
25.00	-44.73	-33.96	0.00	-3,532.14	0.00	3,532.14	5,688.58	2,844.29	14,489.0	7,255.28	1.46	-0.56	0.495
30.00	-43.09	-33.47	0.00	-3,362.36	0.00	3,362.36	5,614.46	2,807.23	13,992.1	7,006.49	2.11	-0.68	0.488
35.00	-41.47	-32.97	0.00	-3,195.02	0.00	3,195.02	5,538.27	2,769.13	13,498.4	6,759.23	2.89	-0.80	0.480
40.00	-39.88	-32.45	0.00	-3,030.18	0.00	3,030.18	5,459.99	2,729.99	13,008.0	6,513.68	3.79	-0.92	0.473
45.00	-37.10	-31.99	0.00	-2,867.93	0.00	2,867.93	5,379.63	2,689.82	12,521.4	6,270.01	4.82	-1.04	0.464
48.00	-35.46	-31.71	0.00	-2,771.95	0.00	2,771.95	5,384.54	2,692.27	12,550.6	6,284.66	5.50	-1.12	0.448
50.00	-34.83	-31.33	0.00	-2,708.54	0.00	2,708.54	5,351.87	2,675.93	12,357.0	6,187.71	5.98	-1.17	0.444
55.00	-33.32	-30.77	0.00	-2,551.89	0.00	2,551.89	5,268.72	2,634.36	11,875.9	5,946.82	7.27	-1.29	0.436
60.00	-31.84	-30.21	0.00	-2,398.04	0.00	2,398.04	5,183.50	2,591.75	11,399.4	5,708.21	8.69	-1.41	0.426
65.00	-30.38	-29.64	0.00	-2,247.00	0.00	2,247.00	5,096.20	2,548.10	10,927.8	5,472.05	10.23	-1.53	0.417
70.00	-28.97	-29.12	0.00	-2,098.80	0.00	2,098.80	5,006.81	2,503.41	10,461.4	5,238.51	11.91	-1.66	0.407
74.00	-27.85	-28.75	0.00	-1,982.31	0.00	1,982.31	4,933.81	2,466.91	10,092.3	5,053.69	13.34	-1.76	0.398
75.00	-27.56	-28.42	0.00	-1,953.56	0.00	1,953.56	4,915.35	2,457.68	10,000.6	5,007.77	13.71	-1.78	0.396
80.00	-26.20	-27.98	0.00	-1,811.45	0.00	1,811.45	4,821.81	2,410.90	9,545.79	4,779.99	15.64	-1.91	0.385
82.66	-25.49	-27.69	0.00	-1,736.94	0.00	1,736.94	4,771.13	2,385.57	9,306.02	4,659.93	16.73	-1.98	0.378
85.00	-24.46	-27.30	0.00	-1,672.25	0.00	1,672.25	4,726.18	2,363.09	9,097.16	4,555.34	17.71	-2.04	0.372
89.33	-22.60	-26.96	0.00	-1,554.05	0.00	1,554.05	3,846.41	1,923.21	7,360.18	3,685.56	19.61	-2.15	0.428
90.00	-22.43	-26.66	0.00	-1,535.99	0.00	1,535.99	3,836.63	1,918.32	7,313.25	3,662.06	19.91	-2.16	0.425
95.00	-21.27	-26.09	0.00	-1,402.70	0.00	1,402.70	3,762.45	1,881.23	6,965.41	3,487.88	22.26	-2.30	0.408
100.00	-20.15	-25.53	0.00	-1,272.23	0.00	1,272.23	3,686.20	1,843.10	6,621.98	3,315.91	24.74	-2.44	0.389
105.00	-19.05	-24.97	0.00	-1,144.57	0.00	1,144.57	3,607.86	1,803.93	6,283.29	3,146.32	27.38	-2.58	0.369
110.00	-17.99	-24.62	0.00	-1,019.71	0.00	1,019.71	3,527.44	1,763.72	5,949.70	2,979.27	30.15	-2.71	0.348
111.00	-17.75	-24.14	0.00	-995.08	0.00	995.08	3,511.11	1,755.55	5,883.62	2,946.18	30.72	-2.74	0.343
115.00	-16.91	-23.66	0.00	-898.51	0.00	898.51	3,444.94	1,722.47	5,621.53	2,814.94	33.06	-2.85	0.324
120.00	-15.90	-23.12	0.00	-780.23	0.00	780.23	3,360.36	1,680.18	5,299.14	2,653.51	36.11	-2.97	0.299
125.00	-14.93	-22.76	0.00	-664.64	0.00	664.64	3,273.70	1,636.85	4,982.86	2,495.14	39.29	-3.09	0.271
126.33	-14.66	-22.51	0.00	-634.37	0.00	634.37	3,250.30	1,625.15	4,899.81	2,453.55	40.15	-3.12	0.263
130.00	-13.64	-22.19	0.00	-551.77	0.00	551.77	3,165.67	1,582.83	4,644.73	2,325.82	42.59	-3.21	0.242
131.66	-13.18	-21.93	0.00	-514.86	0.00	514.86	1,875.92	937.96	2,776.25	1,390.19	43.71	-3.24	0.378
135.00	-12.69	-21.51	0.00	-441.69	0.00	441.69	1,848.21	924.11	2,667.57	1,335.77	46.00	-3.31	0.338
140.00	-8.88	-16.28	0.00	-332.40	0.00	332.40	1,804.96	902.48	2,506.10	1,254.91	49.54	-3.44	0.270
145.00	-8.29	-15.89	0.00	-250.98	0.00	250.98	1,759.62	879.81	2,346.60	1,175.04	53.20	-3.55	0.219
148.00	-6.69	-14.24	0.00	-203.33	0.00	203.33	1,731.42	865.71	2,251.99	1,127.67	55.44	-3.60	0.184
149.00	-5.71	-11.82	0.00	-189.08	0.00	189.08	1,721.85	860.93	2,220.65	1,111.98	56.20	-3.62	0.174
150.00	-5.62	-11.55	0.00	-177.26	0.00	177.26	1,712.20	856.10	2,189.41	1,096.33	56.96	-3.64	0.165
155.00	-5.12	-11.09	0.00	-119.51	0.00	119.51	1,662.70	831.35	2,034.89	1,018.96	60.81	-3.71	0.121
160.00	-3.38	-9.34	0.00	-64.07	0.00	64.07	1,611.13	805.56	1,883.37	943.08	64.72	-3.76	0.070
160.50	-3.33	-9.30	0.00	-59.39	0.00	59.39	1,605.85	802.93	1,868.39	935.58	65.11	-3.76	0.066

Site Number: 411178

Code: ANSI/TIA-222-G

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Site Name: Old Lyme South CT, CT

Engineering Number: OAA754039_C3_01

11/8/2019 3:28:01 PM

Customer: AT&T MOBILITY

Load Case: 0.9D + 1.6W

105 mph with No Ice (Reduced DL)

23 Iterations

Gust Response Factor :1.10

Wind Importance Factor :1.00

Dead Load Factor :0.90

Wind Load Factor :1.60

160.50	-3.33	-9.30	0.00	-59.39	0.00	59.39	1,062.64	531.32	1,193.75	597.76	65.11	-3.76	0.103
161.00	-2.45	-4.92	0.00	-50.74	0.00	50.74	1,060.93	530.47	1,188.54	595.15	65.50	-3.76	0.088
165.00	-2.22	-4.54	0.00	-31.08	0.00	31.08	1,047.03	523.52	1,146.95	574.33	68.67	-3.79	0.056
170.00	-0.89	-3.44	0.00	-8.36	0.00	8.36	1,029.05	514.53	1,095.30	548.46	72.65	-3.81	0.016
170.50	0.00	-3.38	0.00	-6.64	0.00	6.64	1,027.22	513.61	1,090.15	545.89	73.05	-3.81	0.012

Load Case: 1.2D + 1.0Di + 1.0Wi	50 mph with 0.75 in Radial Ice	22 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		83.9	0.0					0.0	0.0	83.9	0.0	0.0	0.0
5.00		166.6	2,424.7					12.6	453.9	179.2	2,878.6	0.0	0.0
10.00		163.9	2,435.5					13.4	460.6	177.3	2,896.2	0.0	0.0
15.00		161.0	2,416.0					13.8	464.1	174.8	2,880.1	0.0	0.0
20.00		158.1	2,386.5					14.0	466.5	172.1	2,853.0	0.0	0.0
25.00		155.1	2,351.9					14.2	468.3	169.3	2,820.2	0.0	0.0
30.00		153.9	2,314.0					14.4	469.8	168.3	2,783.9	0.0	0.0
35.00		155.8	2,274.0					14.9	471.1	170.7	2,745.1	0.0	0.0
40.00	Bot - Section 2	159.7	2,232.3					15.7	472.3	175.3	2,704.6	0.0	0.0
45.00		130.0	3,847.0					16.4	473.3	146.4	4,320.3	0.0	0.0
48.00	Top - Section 1	81.8	2,270.7					10.1	284.4	92.0	2,555.1	0.0	0.0
50.00		115.2	867.7					6.9	189.8	122.1	1,057.5	0.0	0.0
55.00		165.2	2,133.9					17.6	475.0	182.8	2,608.9	0.0	0.0
60.00		165.6	2,088.4					18.2	475.8	183.7	2,564.2	0.0	0.0
65.00		165.5	2,042.3					18.7	476.5	184.2	2,518.8	0.0	0.0
70.00		148.7	1,995.7					19.2	477.1	167.9	2,472.8	0.0	0.0
74.00	Appurtenance(s)	82.4	1,563.8	18.1	0.0	0.0	61.5	15.7	382.1	116.3	2,007.4	0.0	0.0
75.00		98.4	387.0					4.0	95.4	102.4	482.4	0.0	0.0
80.00		125.4	1,901.1					20.2	477.4	145.6	2,378.5	0.0	0.0
82.66	Bot - Section 3	81.9	994.8					10.9	254.5	92.9	1,249.3	0.0	0.0
85.00		109.5	1,410.9					9.7	223.4	119.1	1,634.3	0.0	0.0
89.33	Top - Section 2	81.9	2,565.7					18.2	414.3	100.1	2,980.0	0.0	0.0
90.00		92.0	218.8					2.8	64.1	94.8	282.9	0.0	0.0
95.00		161.1	1,602.1					21.4	479.0	182.6	2,081.1	0.0	0.0
100.00		159.1	1,558.7					21.8	479.4	180.9	2,038.1	0.0	0.0
105.00		156.9	1,515.0					22.2	479.9	179.1	1,994.9	0.0	0.0
110.00		93.3	1,471.2					22.6	480.3	115.9	1,951.5	0.0	0.0
111.00	Appurtenance(s)	76.6	290.1	78.1	0.0	0.0	151.8	4.6	96.1	159.3	537.9	0.0	0.0
115.00		136.5	1,139.2					18.4	383.2	154.8	1,522.4	0.0	0.0
120.00		149.1	1,382.7					23.3	479.3	172.4	1,862.0	0.0	0.0
125.00		93.2	1,338.2					23.6	479.7	116.9	1,817.9	0.0	0.0
126.33	Bot - Section 4	73.0	349.8					6.3	127.7	79.3	477.5	0.0	0.0
130.00		77.6	1,389.3					17.6	352.4	95.2	1,741.7	0.0	0.0
131.66	Top - Section 3	71.7	618.9					8.0	159.8	79.7	778.6	0.0	0.0
135.00		117.6	651.5					16.2	320.6	133.9	972.1	0.0	0.0
140.00	Appurtenance(s)	138.3	945.3	894.1	0.0	318.2	7,534.7	24.6	480.8	1,057.0	8,960.7	0.0	0.0
145.00		108.4	910.8					24.9	359.8	133.3	1,270.7	0.0	0.0
148.00	Appurtenance(s)	53.3	531.6	334.0	0.0	0.0	2,147.7	15.1	216.1	402.5	2,895.4	0.0	0.0
149.00	Appurtenance(s)	26.4	175.0	425.0	0.0	0.0	2,824.7	5.1	72.0	456.5	3,071.7	0.0	0.0
150.00		77.8	173.6					5.1	61.2	82.9	234.8	0.0	0.0
155.00		127.4	841.5					25.5	306.1	152.9	1,147.6	0.0	0.0
160.00	Appurtenance(s)	68.9	806.7	342.6	0.0	0.0	2,152.4	25.8	306.4	437.3	3,265.5	0.0	0.0
160.50	Top - Section 4	12.1	79.4					2.6	30.7	14.7	110.1	0.0	0.0
161.00	Appurtenance(s)	53.2	65.2	813.7	0.0	780.2	3,801.6	2.6	30.7	869.5	3,897.5	0.0	0.0
165.00		105.4	513.8					20.9	167.9	126.3	681.7	0.0	0.0
170.00	Appurtenance(s)	63.9	626.6	209.3	0.0	0.0	2,244.1	26.4	202.8	299.6	3,073.5	0.0	0.0
170.50	Appurtenance(s)	5.8	62.1	525.2	0.0	262.6	2,997.5	2.7	20.3	533.6	3,079.9	0.0	0.0

Site Number: 411178

Code: ANSI/TIA-222-G

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Site Name: Old Lyme South CT, CT

Engineering Number: OAA754039_C3_01

11/8/2019 3:28:07 PM

Customer: AT&T MOBILITY

Load Case: 1.2D + 1.0Di + 1.0Wi

50 mph with 0.75 in Radial Ice

22 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

Totals: 9,537.29 101,139. 0.00 0.00

Load Case: 1.2D + 1.0Di + 1.0Wi

50 mph with 0.75 in Radial Ice

22 Iterations

Gust Response Factor :1.10
 Dead Load Factor :1.20
 Wind Load Factor :1.00

Ice Dead Load Factor :1.00

Wind Importance Factor :1.00
 Ice Importance 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	-100.70	-9.69	0.00	-1,149.91	0.00	1,149.91	6,027.96	3,013.98	17,007.2	8,516.24	0.00	0.00	0.152
5.00	-97.82	-9.55	0.00	-1,101.48	0.00	1,101.48	5,964.25	2,982.12	16,500.1	8,262.35	0.02	-0.03	0.150
10.00	-94.92	-9.42	0.00	-1,053.71	0.00	1,053.71	5,898.45	2,949.22	15,994.5	8,009.14	0.06	-0.06	0.148
15.00	-92.03	-9.29	0.00	-1,006.60	0.00	1,006.60	5,830.57	2,915.29	15,490.5	7,756.77	0.14	-0.09	0.146
20.00	-89.17	-9.16	0.00	-960.15	0.00	960.15	5,760.62	2,880.31	14,988.5	7,505.43	0.24	-0.12	0.143
25.00	-86.35	-9.03	0.00	-914.34	0.00	914.34	5,688.58	2,844.29	14,489.0	7,255.28	0.38	-0.15	0.141
30.00	-83.56	-8.90	0.00	-869.19	0.00	869.19	5,614.46	2,807.23	13,992.1	7,006.49	0.55	-0.18	0.139
35.00	-80.81	-8.76	0.00	-824.70	0.00	824.70	5,538.27	2,769.13	13,498.4	6,759.23	0.75	-0.21	0.137
40.00	-78.10	-8.62	0.00	-780.89	0.00	780.89	5,459.99	2,729.99	13,008.0	6,513.68	0.98	-0.24	0.134
45.00	-73.78	-8.49	0.00	-737.79	0.00	737.79	5,379.63	2,689.82	12,521.4	6,270.01	1.25	-0.27	0.131
48.00	-71.22	-8.40	0.00	-712.33	0.00	712.33	5,384.54	2,692.27	12,550.6	6,284.66	1.43	-0.29	0.127
50.00	-70.16	-8.30	0.00	-695.52	0.00	695.52	5,351.87	2,675.93	12,357.0	6,187.71	1.55	-0.30	0.126
55.00	-67.55	-8.14	0.00	-654.01	0.00	654.01	5,268.72	2,634.36	11,875.9	5,946.82	1.88	-0.33	0.123
60.00	-64.98	-7.98	0.00	-613.31	0.00	613.31	5,183.50	2,591.75	11,399.4	5,708.21	2.25	-0.36	0.120
65.00	-62.46	-7.81	0.00	-573.42	0.00	573.42	5,096.20	2,548.10	10,927.8	5,472.05	2.65	-0.40	0.117
70.00	-59.99	-7.66	0.00	-534.36	0.00	534.36	5,006.81	2,503.41	10,461.4	5,238.51	3.08	-0.43	0.114
74.00	-57.98	-7.54	0.00	-503.75	0.00	503.75	4,933.81	2,466.91	10,092.3	5,053.69	3.45	-0.45	0.111
75.00	-57.49	-7.45	0.00	-496.21	0.00	496.21	4,915.35	2,457.68	10,000.6	5,007.77	3.55	-0.46	0.111
80.00	-55.11	-7.31	0.00	-458.94	0.00	458.94	4,821.81	2,410.90	9,545.79	4,779.99	4.04	-0.49	0.107
82.66	-53.86	-7.22	0.00	-439.47	0.00	439.47	4,771.13	2,385.57	9,306.02	4,659.93	4.32	-0.51	0.106
85.00	-52.23	-7.11	0.00	-422.60	0.00	422.60	4,726.18	2,363.09	9,097.16	4,555.34	4.58	-0.52	0.104
89.33	-49.25	-6.99	0.00	-391.82	0.00	391.82	3,846.41	1,923.21	7,360.18	3,685.56	5.06	-0.55	0.119
90.00	-48.96	-6.91	0.00	-387.13	0.00	387.13	3,836.63	1,918.32	7,313.25	3,662.06	5.14	-0.56	0.118
95.00	-46.88	-6.74	0.00	-352.57	0.00	352.57	3,762.45	1,881.23	6,965.41	3,487.88	5.74	-0.59	0.114
100.00	-44.84	-6.56	0.00	-318.87	0.00	318.87	3,686.20	1,843.10	6,621.98	3,315.91	6.38	-0.63	0.108
105.00	-42.84	-6.39	0.00	-286.06	0.00	286.06	3,607.86	1,803.93	6,283.29	3,146.32	7.05	-0.66	0.103
110.00	-40.89	-6.26	0.00	-254.13	0.00	254.13	3,527.44	1,763.72	5,949.70	2,979.27	7.76	-0.69	0.097
111.00	-40.35	-6.11	0.00	-247.87	0.00	247.87	3,511.11	1,755.55	5,883.62	2,946.18	7.91	-0.70	0.096
115.00	-38.83	-5.95	0.00	-223.43	0.00	223.43	3,444.94	1,722.47	5,621.53	2,814.94	8.51	-0.73	0.091
120.00	-36.97	-5.78	0.00	-193.66	0.00	193.66	3,360.36	1,680.18	5,299.14	2,653.51	9.29	-0.76	0.084
125.00	-35.15	-5.65	0.00	-164.78	0.00	164.78	3,273.70	1,636.85	4,982.86	2,495.14	10.10	-0.79	0.077
126.33	-34.67	-5.57	0.00	-157.27	0.00	157.27	3,250.30	1,625.15	4,899.81	2,453.55	10.32	-0.80	0.075
130.00	-32.93	-5.46	0.00	-136.83	0.00	136.83	3,165.67	1,582.83	4,644.73	2,325.82	10.94	-0.82	0.069
131.66	-32.15	-5.38	0.00	-127.75	0.00	127.75	1,875.92	937.96	2,776.25	1,390.19	11.22	-0.82	0.109
135.00	-31.18	-5.24	0.00	-109.81	0.00	109.81	1,848.21	924.11	2,667.57	1,335.77	11.81	-0.84	0.099
140.00	-22.23	-4.06	0.00	-83.29	0.00	83.29	1,804.96	902.48	2,506.10	1,254.91	12.70	-0.87	0.079
145.00	-20.96	-3.92	0.00	-62.99	0.00	62.99	1,759.62	879.81	2,346.60	1,175.04	13.63	-0.90	0.066
148.00	-18.07	-3.47	0.00	-51.24	0.00	51.24	1,731.42	865.71	2,251.99	1,127.67	14.21	-0.91	0.056
149.00	-15.01	-2.97	0.00	-47.77	0.00	47.77	1,721.85	860.93	2,220.65	1,111.98	14.40	-0.92	0.052
150.00	-14.78	-2.88	0.00	-44.81	0.00	44.81	1,712.20	856.10	2,189.41	1,096.33	14.59	-0.92	0.050
155.00	-13.63	-2.71	0.00	-30.40	0.00	30.40	1,662.70	831.35	2,034.89	1,018.96	15.57	-0.94	0.038
160.00	-10.37	-2.22	0.00	-16.83	0.00	16.83	1,611.13	805.56	1,883.37	943.08	16.56	-0.95	0.024
160.50	-10.26	-2.21	0.00	-15.72	0.00	15.72	1,605.85	802.93	1,868.39	935.58	16.66	-0.95	0.023

Site Number: 411178

Code: ANSI/TIA-222-G

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Site Name: Old Lyme South CT, CT

Engineering Number: OAA754039_C3_01

11/8/2019 3:28:07 PM

Customer: AT&T MOBILITY

Load Case: 1.2D + 1.0Di + 1.0Wi

50 mph with 0.75 in Radial Ice

22 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

160.50	-10.26	-2.21	0.00	-15.72	0.00	15.72	1,062.64	531.32	1,193.75	597.76	16.66	-0.95	0.036
161.00	-6.38	-1.27	0.00	-13.83	0.00	13.83	1,060.93	530.47	1,188.54	595.15	16.76	-0.96	0.029
165.00	-5.70	-1.14	0.00	-8.74	0.00	8.74	1,047.03	523.52	1,146.95	574.33	17.57	-0.96	0.021
170.00	-2.63	-0.79	0.00	-3.06	0.00	3.06	1,029.05	514.53	1,095.30	548.46	18.58	-0.97	0.008
170.50	0.00	-0.74	0.00	-2.66	0.00	2.66	1,027.22	513.61	1,090.15	545.89	18.68	-0.97	0.005

Load Case: 1.0D + 1.0W	Serviceability 60 mph	21 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		56.7	0.0					0.0	0.0	56.7	0.0	0.0	0.0
5.00		112.3	1,604.1					0.0	310.6	112.3	1,914.7	0.0	0.0
10.00		110.1	1,572.8					0.0	310.6	110.1	1,883.4	0.0	0.0
15.00		107.9	1,541.5					0.0	310.6	107.9	1,852.1	0.0	0.0
20.00		105.7	1,510.2					0.0	310.6	105.7	1,820.8	0.0	0.0
25.00		103.5	1,478.9					0.0	310.6	103.5	1,789.5	0.0	0.0
30.00		102.5	1,447.6					0.0	310.6	102.5	1,758.2	0.0	0.0
35.00		103.5	1,416.3					0.0	310.6	103.5	1,726.9	0.0	0.0
40.00	Bot - Section 2	106.0	1,385.0					0.0	310.6	106.0	1,695.6	0.0	0.0
45.00		86.2	2,728.1					0.0	310.6	86.2	3,038.7	0.0	0.0
48.00	Top - Section 1	54.2	1,606.8					0.0	186.3	54.2	1,793.1	0.0	0.0
50.00		76.2	533.5					0.0	124.2	76.2	657.7	0.0	0.0
55.00		109.1	1,311.8					0.0	310.6	109.1	1,622.3	0.0	0.0
60.00		109.2	1,280.5					0.0	310.6	109.2	1,591.0	0.0	0.0
65.00		109.0	1,249.2					0.0	310.6	109.0	1,559.7	0.0	0.0
70.00		97.7	1,217.9					0.0	310.6	97.7	1,528.4	0.0	0.0
74.00	Appurtenance(s)	54.1	951.8	14.1	0.0	0.0	20.0	0.0	248.4	68.2	1,220.2	0.0	0.0
75.00		64.5	234.8					0.0	62.0	64.5	296.8	0.0	0.0
80.00		82.1	1,155.3					0.0	309.8	82.1	1,465.1	0.0	0.0
82.66	Bot - Section 3	53.6	602.6					0.0	165.0	53.6	767.6	0.0	0.0
85.00		71.5	975.9					0.0	144.8	71.5	1,120.7	0.0	0.0
89.33	Top - Section 2	53.5	1,774.9					0.0	268.3	53.5	2,043.2	0.0	0.0
90.00		59.9	126.1					0.0	41.5	59.9	167.7	0.0	0.0
95.00		104.9	926.2					0.0	309.8	104.9	1,236.0	0.0	0.0
100.00		103.3	899.4					0.0	309.8	103.3	1,209.2	0.0	0.0
105.00		101.6	872.5					0.0	309.8	101.6	1,182.3	0.0	0.0
110.00		60.3	845.7					0.0	309.8	60.3	1,155.5	0.0	0.0
111.00	Appurtenance(s)	49.4	165.9	39.6	0.0	0.0	40.0	0.0	62.0	89.0	267.9	0.0	0.0
115.00		87.9	652.9					0.0	246.6	87.9	899.6	0.0	0.0
120.00		95.8	792.0					0.0	308.3	95.8	1,100.3	0.0	0.0
125.00		59.8	765.2					0.0	308.3	59.8	1,073.5	0.0	0.0
126.33	Bot - Section 4	46.7	199.0					0.0	82.0	46.7	281.0	0.0	0.0
130.00		49.6	905.1					0.0	226.3	49.6	1,131.4	0.0	0.0
131.66	Top - Section 3	45.7	402.3					0.0	102.6	45.7	504.8	0.0	0.0
135.00		74.8	320.2					0.0	205.7	74.8	525.9	0.0	0.0
140.00	Appurtenance(s)	87.7	464.9	828.2	0.0	313.8	3,763.4	0.0	308.3	915.9	4,536.6	0.0	0.0
145.00		68.5	447.0					0.0	207.3	68.5	654.3	0.0	0.0
148.00	Appurtenance(s)	33.6	259.6	248.6	0.0	0.0	1,500.0	0.0	124.4	282.2	1,884.0	0.0	0.0
149.00	Appurtenance(s)	16.6	85.1	413.7	0.0	0.0	1,118.2	0.0	41.5	430.3	1,244.8	0.0	0.0
150.00		48.8	84.4					0.0	32.4	48.8	116.8	0.0	0.0
155.00		79.8	411.2					0.0	161.9	79.8	573.1	0.0	0.0
160.00	Appurtenance(s)	43.0	393.4	254.2	0.0	0.0	1,500.0	0.0	161.9	297.2	2,055.3	0.0	0.0
160.50	Top - Section 4	7.5	38.4					0.0	16.2	7.5	54.5	0.0	0.0
161.00	Appurtenance(s)	32.9	27.6	755.6	0.0	730.3	1,250.0	0.0	16.2	788.5	1,293.8	0.0	0.0
165.00		65.1	218.2					0.0	65.0	65.1	283.2	0.0	0.0
170.00	Appurtenance(s)	39.4	265.9	144.9	0.0	0.0	1,215.0	0.0	75.1	184.3	1,556.0	0.0	0.0
170.50	Appurtenance(s)	3.5	26.2	531.4	0.0	265.7	1,132.2	0.0	7.5	534.9	1,165.9	0.0	0.0

Site Number: 411178

Code: ANSI/TIA-222-G

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Site Name: Old Lyme South CT, CT

Engineering Number: OAA754039_C3_01

11/8/2019 3:28:13 PM

Customer: AT&T MOBILITY

Load Case: 1.0D + 1.0W

Serviceability 60 mph

21 Iterations

Gust Response Factor :1.10

Wind Importance Factor :1.00

Dead Load Factor :1.00

Wind Load Factor :1.00

Totals: 6,625.73 59,298.9 0.00 0.00

Load Case: 1.0D + 1.0W

Serviceability 60 mph

21 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	-59.37	-6.66	0.00	-809.43	0.00	809.43	6,027.96	3,013.98	17,007.2	8,516.24	0.00	0.00	0.105
5.00	-57.45	-6.57	0.00	-776.13	0.00	776.13	5,964.25	2,982.12	16,500.1	8,262.35	0.01	-0.02	0.104
10.00	-55.57	-6.48	0.00	-743.29	0.00	743.29	5,898.45	2,949.22	15,994.5	8,009.14	0.04	-0.04	0.102
15.00	-53.71	-6.39	0.00	-710.91	0.00	710.91	5,830.57	2,915.29	15,490.5	7,756.77	0.10	-0.06	0.101
20.00	-51.89	-6.30	0.00	-678.99	0.00	678.99	5,760.62	2,880.31	14,988.5	7,505.43	0.17	-0.08	0.099
25.00	-50.10	-6.21	0.00	-647.50	0.00	647.50	5,688.58	2,844.29	14,489.0	7,255.28	0.27	-0.10	0.098
30.00	-48.34	-6.12	0.00	-616.45	0.00	616.45	5,614.46	2,807.23	13,992.1	7,006.49	0.39	-0.12	0.097
35.00	-46.61	-6.03	0.00	-585.84	0.00	585.84	5,538.27	2,769.13	13,498.4	6,759.23	0.53	-0.15	0.095
40.00	-44.91	-5.94	0.00	-555.68	0.00	555.68	5,459.99	2,729.99	13,008.0	6,513.68	0.70	-0.17	0.094
45.00	-41.87	-5.86	0.00	-525.99	0.00	525.99	5,379.63	2,689.82	12,521.4	6,270.01	0.88	-0.19	0.092
48.00	-40.08	-5.80	0.00	-508.42	0.00	508.42	5,384.54	2,692.27	12,550.6	6,284.66	1.01	-0.20	0.088
50.00	-39.42	-5.74	0.00	-496.81	0.00	496.81	5,351.87	2,675.93	12,357.0	6,187.71	1.10	-0.21	0.088
55.00	-37.79	-5.64	0.00	-468.13	0.00	468.13	5,268.72	2,634.36	11,875.9	5,946.82	1.33	-0.24	0.086
60.00	-36.20	-5.53	0.00	-439.95	0.00	439.95	5,183.50	2,591.75	11,399.4	5,708.21	1.59	-0.26	0.084
65.00	-34.64	-5.43	0.00	-412.28	0.00	412.28	5,096.20	2,548.10	10,927.8	5,472.05	1.88	-0.28	0.082
70.00	-33.11	-5.34	0.00	-385.13	0.00	385.13	5,006.81	2,503.41	10,461.4	5,238.51	2.18	-0.30	0.080
74.00	-31.89	-5.27	0.00	-363.78	0.00	363.78	4,933.81	2,466.91	10,092.3	5,053.69	2.45	-0.32	0.078
75.00	-31.59	-5.21	0.00	-358.51	0.00	358.51	4,915.35	2,457.68	10,000.6	5,007.77	2.51	-0.33	0.078
80.00	-30.12	-5.13	0.00	-332.46	0.00	332.46	4,821.81	2,410.90	9,545.79	4,779.99	2.87	-0.35	0.076
82.66	-29.36	-5.08	0.00	-318.80	0.00	318.80	4,771.13	2,385.57	9,306.02	4,659.93	3.07	-0.36	0.075
85.00	-28.23	-5.01	0.00	-306.94	0.00	306.94	4,726.18	2,363.09	9,097.16	4,555.34	3.25	-0.37	0.073
89.33	-26.19	-4.94	0.00	-285.26	0.00	285.26	3,846.41	1,923.21	7,360.18	3,685.56	3.60	-0.39	0.084
90.00	-26.02	-4.89	0.00	-281.95	0.00	281.95	3,836.63	1,918.32	7,313.25	3,662.06	3.65	-0.40	0.084
95.00	-24.78	-4.79	0.00	-257.50	0.00	257.50	3,762.45	1,881.23	6,965.41	3,487.88	4.08	-0.42	0.080
100.00	-23.57	-4.68	0.00	-233.57	0.00	233.57	3,686.20	1,843.10	6,621.98	3,315.91	4.54	-0.45	0.077
105.00	-22.39	-4.58	0.00	-210.15	0.00	210.15	3,607.86	1,803.93	6,283.29	3,146.32	5.02	-0.47	0.073
110.00	-21.23	-4.52	0.00	-187.23	0.00	187.23	3,527.44	1,763.72	5,949.70	2,979.27	5.53	-0.50	0.069
111.00	-20.97	-4.43	0.00	-182.71	0.00	182.71	3,511.11	1,755.55	5,883.62	2,946.18	5.63	-0.50	0.068
115.00	-20.07	-4.34	0.00	-164.99	0.00	164.99	3,444.94	1,722.47	5,621.53	2,814.94	6.06	-0.52	0.064
120.00	-18.96	-4.24	0.00	-143.27	0.00	143.27	3,360.36	1,680.18	5,299.14	2,653.51	6.62	-0.55	0.060
125.00	-17.89	-4.18	0.00	-122.05	0.00	122.05	3,273.70	1,636.85	4,982.86	2,495.14	7.21	-0.57	0.054
126.33	-17.61	-4.13	0.00	-116.49	0.00	116.49	3,250.30	1,625.15	4,899.81	2,453.55	7.36	-0.57	0.053
130.00	-16.48	-4.08	0.00	-101.32	0.00	101.32	3,165.67	1,582.83	4,644.73	2,325.82	7.81	-0.59	0.049
131.66	-15.97	-4.03	0.00	-94.54	0.00	94.54	1,875.92	937.96	2,776.25	1,390.19	8.02	-0.60	0.077
135.00	-15.45	-3.95	0.00	-81.11	0.00	81.11	1,848.21	924.11	2,667.57	1,335.77	8.44	-0.61	0.069
140.00	-10.92	-2.99	0.00	-61.04	0.00	61.04	1,804.96	902.48	2,506.10	1,254.91	9.09	-0.63	0.055
145.00	-10.26	-2.92	0.00	-46.08	0.00	46.08	1,759.62	879.81	2,346.60	1,175.04	9.76	-0.65	0.045
148.00	-8.38	-2.61	0.00	-37.33	0.00	37.33	1,731.42	865.71	2,251.99	1,127.67	10.17	-0.66	0.038
149.00	-7.14	-2.17	0.00	-34.71	0.00	34.71	1,721.85	860.93	2,220.65	1,111.98	10.31	-0.66	0.035
150.00	-7.03	-2.12	0.00	-32.54	0.00	32.54	1,712.20	856.10	2,189.41	1,096.33	10.45	-0.67	0.034
155.00	-6.45	-2.04	0.00	-21.94	0.00	21.94	1,662.70	831.35	2,034.89	1,018.96	11.16	-0.68	0.025
160.00	-4.40	-1.71	0.00	-11.76	0.00	11.76	1,611.13	805.56	1,883.37	943.08	11.88	-0.69	0.015
160.50	-4.35	-1.71	0.00	-10.90	0.00	10.90	1,605.85	802.93	1,868.39	935.58	11.95	-0.69	0.014

Site Number: 411178

Code: ANSI/TIA-222-G

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Site Name: Old Lyme South CT, CT

Engineering Number: OAA754039_C3_01

11/8/2019 3:28:13 PM

Customer: AT&T MOBILITY

Load Case: 1.0D + 1.0W

Serviceability 60 mph

21 Iterations

Gust Response Factor :1.10

Wind Importance Factor :1.00

Dead Load Factor :1.00

Wind Load Factor :1.00

160.50	-4.35	-1.71	0.00	-10.90	0.00	10.90	1,062.64	531.32	1,193.75	597.76	11.95	-0.69	0.022
161.00	-3.06	-0.90	0.00	-9.31	0.00	9.31	1,060.93	530.47	1,188.54	595.15	12.02	-0.69	0.019
165.00	-2.78	-0.83	0.00	-5.70	0.00	5.70	1,047.03	523.52	1,146.95	574.33	12.60	-0.70	0.013
170.00	-1.23	-0.63	0.00	-1.53	0.00	1.53	1,029.05	514.53	1,095.30	548.46	13.33	-0.70	0.004
170.50	0.00	-0.62	0.00	-1.21	0.00	1.21	1,027.22	513.61	1,090.15	545.89	13.41	-0.70	0.002

Equivalent Lateral Forces Method Analysis

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

Spectral Response Acceleration for Short Period (S_s):	0.16
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}):	0.17
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):	2.13
Redundancy Factor (ρ):	1.00
Seismic Force Distribution Exponent (k):	1.82
Total Unfactored Dead Load:	59.37 k
Seismic Base Shear (E):	1.78 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)
46	170.25	34	379	0.002	3	42
45	167.50	341	3,723	0.016	28	421
44	163.00	283	2,942	0.012	22	349
43	160.75	44	444	0.002	3	54
42	160.25	55	549	0.002	4	67
41	157.50	555	5,420	0.023	40	685
40	152.50	573	5,277	0.022	39	707
39	149.50	117	1,037	0.004	8	144
38	148.50	127	1,110	0.005	8	156
37	146.50	384	3,287	0.014	24	474
36	142.50	654	5,326	0.022	40	807
35	137.50	773	5,899	0.025	44	954
34	133.33	526	3,794	0.016	28	649
33	130.83	505	3,519	0.015	26	623
32	128.17	1,131	7,597	0.032	56	1,396
31	125.67	281	1,821	0.008	14	347
30	122.50	1,073	6,640	0.028	49	1,325
29	117.50	1,100	6,310	0.026	47	1,358
28	113.00	900	4,806	0.020	36	1,110
27	110.50	228	1,169	0.005	9	281
26	107.50	1,155	5,638	0.023	42	1,426
25	102.50	1,182	5,291	0.022	39	1,459
24	97.50	1,209	4,941	0.021	37	1,492

23	92.50	1,236	4,591	0.019	34	1,525
22	89.67	168	589	0.002	4	207
21	87.17	2,043	6,813	0.028	51	2,522
20	83.83	1,121	3,482	0.014	26	1,383
19	81.33	768	2,257	0.009	17	947
18	77.50	1,465	3,946	0.016	29	1,808
17	74.50	297	744	0.003	6	366
16	72.00	1,200	2,828	0.012	21	1,481
15	67.50	1,528	3,204	0.013	24	1,886
14	62.50	1,560	2,843	0.012	21	1,925
13	57.50	1,591	2,493	0.010	19	1,964
12	52.50	1,622	2,155	0.009	16	2,002
11	49.00	658	771	0.003	6	812
10	46.50	1,793	1,911	0.008	14	2,213
9	42.50	3,039	2,750	0.011	20	3,750
8	37.50	1,696	1,222	0.005	9	2,093
7	32.50	1,727	960	0.004	7	2,131
6	27.50	1,758	722	0.003	5	2,170
5	22.50	1,789	510	0.002	4	2,208
4	17.50	1,821	329	0.001	2	2,247
3	12.50	1,852	182	0.001	1	2,286
2	7.50	1,883	73	0.000	1	2,324
1	2.50	1,915	10	0.000	0	2,363
Generic 12' Dipole	170.50	40	451	0.002	3	49
Decibel DB201-A	170.50	25	282	0.001	2	31
Generic E-911 GPS	170.50	5	56	0.000	0	6
Ericsson KRY 112 144	170.50	33	372	0.002	3	41
Ericsson Radio 4449	170.50	222	2,503	0.010	19	274
Ericsson AIR 21, 1.3	170.50	249	2,807	0.012	21	307
Ericsson AIR 21, 1.3	170.50	244	2,756	0.011	20	302
RFS APXVAARR24_43-U-	170.50	384	4,326	0.018	32	474
Round T-Arm w/Reinfo	170.00	1,215	13,625	0.057	101	1,499
Alcatel-Lucent RRH2X	161.00	129	1,311	0.005	10	159
Alcatel-Lucent RRH2x	161.00	170	1,728	0.007	13	210
Alcatel-Lucent B66 R	161.00	201	2,042	0.009	15	248
VZW Unused Reserve:	161.00	209	2,123	0.009	16	258
RFS APL866513-42T0	161.00	63	638	0.003	5	78
Antel BXA-70063-4CF-	161.00	10	101	0.000	1	12
RFS DB-T1-6Z-8AB-0Z	161.00	88	894	0.004	7	109
Antel BXA-70063/6CF_	161.00	34	345	0.001	3	42
Commscope SBNHH-1D65	161.00	304	3,090	0.013	23	375
Amphenol Antel LPA-8	161.00	42	427	0.002	3	52
Flat Low Profile Pla	160.00	1,500	15,068	0.063	112	1,851
Generic GPS	149.00	10	88	0.000	1	12
Alcatel-Lucent RRH2x	149.00	317	2,802	0.012	21	392
Alcatel-Lucent 1900	149.00	180	1,589	0.007	12	222
Alcatel-Lucent TD-RR	149.00	210	1,854	0.008	14	259
RFS APXVTM14-ALU-I20	149.00	169	1,488	0.006	11	208
Commscope NNVV-65B-R	149.00	232	2,050	0.009	15	287
Flat Low Profile Pla	148.00	1,500	13,079	0.054	97	1,851
Powerwave Allgon TT1	140.00	96	757	0.003	6	118
Raycap DC6-48-60-18-	140.00	32	251	0.001	2	39
Ericsson RRUS 8843 B	140.00	216	1,703	0.007	13	267
Ericsson RRUS 4478 B	140.00	178	1,405	0.006	10	220
Ericsson RRUS 4449 B	140.00	213	1,679	0.007	12	263
Raycap DC9-48-60-24-	140.00	16	126	0.001	1	20
Powerwave Allgon 777	140.00	105	828	0.003	6	130
CCI DMP65R-BU4D	140.00	407	3,211	0.013	24	503
Generic Flat Platfor	140.00	2,500	19,706	0.082	146	3,085
Generic 12' Dipole	111.00	40	207	0.001	2	49
Generic GPS	74.00	10	25	0.000	0	12
Generic GPS	74.00	10	25	0.000	0	12
		59,369	240,116	1.000	1,783	73,269

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

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)
46	170.25	34	379	0.002	3	29
45	167.50	341	3,723	0.016	28	295
44	163.00	283	2,942	0.012	22	245
43	160.75	44	444	0.002	3	38
42	160.25	55	549	0.002	4	47
41	157.50	555	5,420	0.023	40	481
40	152.50	573	5,277	0.022	39	496
39	149.50	117	1,037	0.004	8	101
38	148.50	127	1,110	0.005	8	110
37	146.50	384	3,287	0.014	24	332
36	142.50	654	5,326	0.022	40	567
35	137.50	773	5,899	0.025	44	669
34	133.33	526	3,794	0.016	28	455
33	130.83	505	3,519	0.015	26	437
32	128.17	1,131	7,597	0.032	56	980
31	125.67	281	1,821	0.008	14	243
30	122.50	1,073	6,640	0.028	49	930
29	117.50	1,100	6,310	0.026	47	953
28	113.00	900	4,806	0.020	36	779
27	110.50	228	1,169	0.005	9	197
26	107.50	1,155	5,638	0.023	42	1,001
25	102.50	1,182	5,291	0.022	39	1,024
24	97.50	1,209	4,941	0.021	37	1,047
23	92.50	1,236	4,591	0.019	34	1,070
22	89.67	168	589	0.002	4	145
21	87.17	2,043	6,813	0.028	51	1,769
20	83.83	1,121	3,482	0.014	26	970
19	81.33	768	2,257	0.009	17	665
18	77.50	1,465	3,946	0.016	29	1,269
17	74.50	297	744	0.003	6	257
16	72.00	1,200	2,828	0.012	21	1,039
15	67.50	1,528	3,204	0.013	24	1,323
14	62.50	1,560	2,843	0.012	21	1,351
13	57.50	1,591	2,493	0.010	19	1,378
12	52.50	1,622	2,155	0.009	16	1,405
11	49.00	658	771	0.003	6	569
10	46.50	1,793	1,911	0.008	14	1,553
9	42.50	3,039	2,750	0.011	20	2,631
8	37.50	1,696	1,222	0.005	9	1,468
7	32.50	1,727	960	0.004	7	1,495
6	27.50	1,758	722	0.003	5	1,522
5	22.50	1,789	510	0.002	4	1,549
4	17.50	1,821	329	0.001	2	1,577
3	12.50	1,852	182	0.001	1	1,604
2	7.50	1,883	73	0.000	1	1,631
1	2.50	1,915	10	0.000	0	1,658
Generic 12' Dipole	170.50	40	451	0.002	3	35
Decibel DB201-A	170.50	25	282	0.001	2	22
Generic E-911 GPS	170.50	5	56	0.000	0	4
Ericsson KRY 112 144	170.50	33	372	0.002	3	29
Ericsson Radio 4449	170.50	222	2,503	0.010	19	192
Ericsson AIR 21, 1.3	170.50	249	2,807	0.012	21	216
Ericsson AIR 21, 1.3	170.50	244	2,756	0.011	20	212
RFS APXVAARR24_43-U-	170.50	384	4,326	0.018	32	332
Round T-Arm w/Reinfo	170.00	1,215	13,625	0.057	101	1,052
Alcatel-Lucent RRH2X	161.00	129	1,311	0.005	10	112
Alcatel-Lucent RRH2x	161.00	170	1,728	0.007	13	147

Site Number: 411178

Code: ANSI/TIA-222-G

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Site Name: Old Lyme South CT, CT

Engineering Number: OAA754039_C3_01

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Customer: AT&T MOBILITY

Alcatel-Lucent B66 R	161.00	201	2,042	0.009	15	174
VZW Unused Reserve:	161.00	209	2,123	0.009	16	181
RFS APL866513-42T0	161.00	63	638	0.003	5	54
Antel BXA-70063-4CF-	161.00	10	101	0.000	1	9
RFS DB-T1-6Z-8AB-0Z	161.00	88	894	0.004	7	76
Antel BXA-70063/6CF_	161.00	34	345	0.001	3	29
Commscope SBNHH-1D65	161.00	304	3,090	0.013	23	263
Amphenol Antel LPA-8	161.00	42	427	0.002	3	36
Flat Low Profile Pla	160.00	1,500	15,068	0.063	112	1,299
Generic GPS	149.00	10	88	0.000	1	9
Alcatel-Lucent RRH2x	149.00	317	2,802	0.012	21	275
Alcatel-Lucent 1900	149.00	180	1,589	0.007	12	156
Alcatel-Lucent TD-RR	149.00	210	1,854	0.008	14	182
RFS APXVTM14-ALU-I20	149.00	169	1,488	0.006	11	146
Commscope NNVV-65B-R	149.00	232	2,050	0.009	15	201
Flat Low Profile Pla	148.00	1,500	13,079	0.054	97	1,299
Powerwave Allgon TT1	140.00	96	757	0.003	6	83
Raycap DC6-48-60-18-	140.00	32	251	0.001	2	28
Ericsson RRUS 8843 B	140.00	216	1,703	0.007	13	187
Ericsson RRUS 4478 B	140.00	178	1,405	0.006	10	154
Ericsson RRUS 4449 B	140.00	213	1,679	0.007	12	184
Raycap DC9-48-60-24-	140.00	16	126	0.001	1	14
Powerwave Allgon 777	140.00	105	828	0.003	6	91
CCI DMP65R-BU4D	140.00	407	3,211	0.013	24	353
Generic Flat Platfor	140.00	2,500	19,706	0.082	146	2,165
Generic 12' Dipole	111.00	40	207	0.001	2	35
Generic GPS	74.00	10	25	0.000	0	9
Generic GPS	74.00	10	25	0.000	0	9
		59,369	240,116	1.000	1,783	51,406

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	-70.91	-1.78	0.00	-236.95	0.00	236.95	6,027.96	3,013.98	17,007.2	8,516.24	0.00	0.00	0.040
5.00	-68.58	-1.79	0.00	-228.03	0.00	228.03	5,964.25	2,982.12	16,500.1	8,262.35	0.00	-0.01	0.039
10.00	-66.30	-1.80	0.00	-219.08	0.00	219.08	5,898.45	2,949.22	15,994.5	8,009.14	0.01	-0.01	0.039
15.00	-64.05	-1.80	0.00	-210.09	0.00	210.09	5,830.57	2,915.29	15,490.5	7,756.77	0.03	-0.02	0.038
20.00	-61.84	-1.80	0.00	-201.09	0.00	201.09	5,760.62	2,880.31	14,988.5	7,505.43	0.05	-0.02	0.038
25.00	-59.67	-1.80	0.00	-192.08	0.00	192.08	5,688.58	2,844.29	14,489.0	7,255.28	0.08	-0.03	0.037
30.00	-57.54	-1.80	0.00	-183.07	0.00	183.07	5,614.46	2,807.23	13,992.1	7,006.49	0.11	-0.04	0.036
35.00	-55.45	-1.80	0.00	-174.07	0.00	174.07	5,538.27	2,769.13	13,498.4	6,759.23	0.16	-0.04	0.036
40.00	-51.70	-1.78	0.00	-165.09	0.00	165.09	5,459.99	2,729.99	13,008.0	6,513.68	0.21	-0.05	0.035
45.00	-49.48	-1.77	0.00	-156.19	0.00	156.19	5,379.63	2,689.82	12,521.4	6,270.01	0.26	-0.06	0.034
48.00	-48.67	-1.76	0.00	-150.89	0.00	150.89	5,384.54	2,692.27	12,550.6	6,284.66	0.30	-0.06	0.033
50.00	-46.67	-1.75	0.00	-147.36	0.00	147.36	5,351.87	2,675.93	12,357.0	6,187.71	0.32	-0.06	0.033
55.00	-44.70	-1.73	0.00	-138.61	0.00	138.61	5,268.72	2,634.36	11,875.9	5,946.82	0.39	-0.07	0.032
60.00	-42.78	-1.72	0.00	-129.95	0.00	129.95	5,183.50	2,591.75	11,399.4	5,708.21	0.47	-0.08	0.031
65.00	-40.89	-1.69	0.00	-121.37	0.00	121.37	5,096.20	2,548.10	10,927.8	5,472.05	0.55	-0.08	0.030
70.00	-39.41	-1.67	0.00	-112.90	0.00	112.90	5,006.81	2,503.41	10,461.4	5,238.51	0.65	-0.09	0.029
74.00	-39.02	-1.67	0.00	-106.21	0.00	106.21	4,933.81	2,466.91	10,092.3	5,053.69	0.72	-0.10	0.029
75.00	-37.21	-1.64	0.00	-104.54	0.00	104.54	4,915.35	2,457.68	10,000.6	5,007.77	0.74	-0.10	0.028
80.00	-36.26	-1.63	0.00	-96.33	0.00	96.33	4,821.81	2,410.90	9,545.79	4,779.99	0.85	-0.10	0.028
82.66	-34.88	-1.60	0.00	-92.01	0.00	92.01	4,771.13	2,385.57	9,306.02	4,659.93	0.91	-0.11	0.027
85.00	-32.36	-1.55	0.00	-88.27	0.00	88.27	4,726.18	2,363.09	9,097.16	4,555.34	0.96	-0.11	0.026
89.33	-32.15	-1.54	0.00	-81.57	0.00	81.57	3,846.41	1,923.21	7,360.18	3,685.56	1.06	-0.12	0.030
90.00	-30.63	-1.51	0.00	-80.54	0.00	80.54	3,836.63	1,918.32	7,313.25	3,662.06	1.08	-0.12	0.030
95.00	-29.14	-1.47	0.00	-73.00	0.00	73.00	3,762.45	1,881.23	6,965.41	3,487.88	1.21	-0.12	0.029
100.00	-27.68	-1.43	0.00	-65.64	0.00	65.64	3,686.20	1,843.10	6,621.98	3,315.91	1.34	-0.13	0.027
105.00	-26.25	-1.39	0.00	-58.47	0.00	58.47	3,607.86	1,803.93	6,283.29	3,146.32	1.48	-0.14	0.026
110.00	-25.97	-1.38	0.00	-51.52	0.00	51.52	3,527.44	1,763.72	5,949.70	2,979.27	1.63	-0.15	0.025
111.00	-24.81	-1.35	0.00	-50.13	0.00	50.13	3,511.11	1,755.55	5,883.62	2,946.18	1.66	-0.15	0.024
115.00	-23.45	-1.30	0.00	-44.75	0.00	44.75	3,444.94	1,722.47	5,621.53	2,814.94	1.78	-0.15	0.023
120.00	-22.13	-1.25	0.00	-38.27	0.00	38.27	3,360.36	1,680.18	5,299.14	2,653.51	1.95	-0.16	0.021
125.00	-21.78	-1.23	0.00	-32.03	0.00	32.03	3,273.70	1,636.85	4,982.86	2,495.14	2.12	-0.16	0.019
126.33	-20.38	-1.17	0.00	-30.39	0.00	30.39	3,250.30	1,625.15	4,899.81	2,453.55	2.16	-0.17	0.019
130.00	-19.76	-1.15	0.00	-26.08	0.00	26.08	3,165.67	1,582.83	4,644.73	2,325.82	2.29	-0.17	0.017
131.66	-19.11	-1.12	0.00	-24.18	0.00	24.18	1,875.92	937.96	2,776.25	1,390.19	2.35	-0.17	0.028
135.00	-18.16	-1.07	0.00	-20.45	0.00	20.45	1,848.21	924.11	2,667.57	1,335.77	2.47	-0.17	0.025
140.00	-12.71	-0.80	0.00	-15.08	0.00	15.08	1,804.96	902.48	2,506.10	1,254.91	2.66	-0.18	0.019
145.00	-12.23	-0.77	0.00	-11.10	0.00	11.10	1,759.62	879.81	2,346.60	1,175.04	2.85	-0.18	0.016
148.00	-10.22	-0.66	0.00	-8.78	0.00	8.78	1,731.42	865.71	2,251.99	1,127.67	2.96	-0.19	0.014
149.00	-8.70	-0.58	0.00	-8.12	0.00	8.12	1,721.85	860.93	2,220.65	1,111.98	3.00	-0.19	0.012
150.00	-7.99	-0.53	0.00	-7.54	0.00	7.54	1,712.20	856.10	2,189.41	1,096.33	3.04	-0.19	0.012
155.00	-7.31	-0.49	0.00	-4.87	0.00	4.87	1,662.70	831.35	2,034.89	1,018.96	3.24	-0.19	0.009
160.00	-5.39	-0.37	0.00	-2.42	0.00	2.42	1,611.13	805.56	1,883.37	943.08	3.45	-0.19	0.006
160.50	-5.34	-0.37	0.00	-2.23	0.00	2.23	1,605.85	802.93	1,868.39	935.58	3.47	-0.19	0.006
160.50	-5.34	-0.37	0.00	-2.23	0.00	2.23	1,062.64	531.32	1,193.75	597.76	3.47	-0.19	0.009
161.00	-3.44	-0.24	0.00	-2.05	0.00	2.05	1,060.93	530.47	1,188.54	595.15	3.49	-0.19	0.007
165.00	-3.02	-0.21	0.00	-1.07	0.00	1.07	1,047.03	523.52	1,146.95	574.33	3.65	-0.20	0.005
170.00	0.00	0.00	0.00	0.00	0.00	0.00	1,029.05	514.53	1,095.30	548.46	3.85	-0.20	0.000

Site Number: 411178

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Site Name: Old Lyme South CT, CT

Engineering Number: OAA754039_C3_01

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Customer: AT&T MOBILITY

170.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,027.22	513.61	1,090.15	545.89	3.87	-0.20	0.000
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Load Case (0.9 - 0.2Sds) * DL + E ELMF

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	-49.75	-1.78	0.00	-234.55	0.00	234.55	6,027.96	3,013.98	17,007.2	8,516.24	0.00	0.00	0.036
5.00	-48.12	-1.79	0.00	-225.63	0.00	225.63	5,964.25	2,982.12	16,500.1	8,262.35	0.00	-0.01	0.035
10.00	-46.51	-1.79	0.00	-216.69	0.00	216.69	5,898.45	2,949.22	15,994.5	8,009.14	0.01	-0.01	0.035
15.00	-44.94	-1.79	0.00	-207.74	0.00	207.74	5,830.57	2,915.29	15,490.5	7,756.77	0.03	-0.02	0.034
20.00	-43.39	-1.79	0.00	-198.77	0.00	198.77	5,760.62	2,880.31	14,988.5	7,505.43	0.05	-0.02	0.034
25.00	-41.86	-1.79	0.00	-189.81	0.00	189.81	5,688.58	2,844.29	14,489.0	7,255.28	0.08	-0.03	0.034
30.00	-40.37	-1.79	0.00	-180.85	0.00	180.85	5,614.46	2,807.23	13,992.1	7,006.49	0.11	-0.04	0.033
35.00	-38.90	-1.78	0.00	-171.91	0.00	171.91	5,538.27	2,769.13	13,498.4	6,759.23	0.15	-0.04	0.032
40.00	-36.27	-1.76	0.00	-162.99	0.00	162.99	5,459.99	2,729.99	13,008.0	6,513.68	0.20	-0.05	0.032
45.00	-34.72	-1.75	0.00	-154.17	0.00	154.17	5,379.63	2,689.82	12,521.4	6,270.01	0.26	-0.06	0.031
48.00	-34.15	-1.75	0.00	-148.92	0.00	148.92	5,384.54	2,692.27	12,550.6	6,284.66	0.29	-0.06	0.030
50.00	-32.74	-1.73	0.00	-145.42	0.00	145.42	5,351.87	2,675.93	12,357.0	6,187.71	0.32	-0.06	0.030
55.00	-31.36	-1.72	0.00	-136.76	0.00	136.76	5,268.72	2,634.36	11,875.9	5,946.82	0.39	-0.07	0.029
60.00	-30.01	-1.70	0.00	-128.17	0.00	128.17	5,183.50	2,591.75	11,399.4	5,708.21	0.47	-0.08	0.028
65.00	-28.69	-1.67	0.00	-119.69	0.00	119.69	5,096.20	2,548.10	10,927.8	5,472.05	0.55	-0.08	0.028
70.00	-27.65	-1.65	0.00	-111.32	0.00	111.32	5,006.81	2,503.41	10,461.4	5,238.51	0.64	-0.09	0.027
74.00	-27.38	-1.65	0.00	-104.70	0.00	104.70	4,933.81	2,466.91	10,092.3	5,053.69	0.71	-0.09	0.026
75.00	-26.11	-1.62	0.00	-103.05	0.00	103.05	4,915.35	2,457.68	10,000.6	5,007.77	0.73	-0.10	0.026
80.00	-25.44	-1.60	0.00	-94.95	0.00	94.95	4,821.81	2,410.90	9,545.79	4,779.99	0.84	-0.10	0.025
82.66	-24.47	-1.58	0.00	-90.67	0.00	90.67	4,771.13	2,385.57	9,306.02	4,659.93	0.90	-0.11	0.025
85.00	-22.70	-1.53	0.00	-86.98	0.00	86.98	4,726.18	2,363.09	9,097.16	4,555.34	0.95	-0.11	0.024
89.33	-22.56	-1.52	0.00	-80.37	0.00	80.37	3,846.41	1,923.21	7,360.18	3,685.56	1.05	-0.11	0.028
90.00	-21.49	-1.49	0.00	-79.35	0.00	79.35	3,836.63	1,918.32	7,313.25	3,662.06	1.07	-0.12	0.027
95.00	-20.44	-1.45	0.00	-71.91	0.00	71.91	3,762.45	1,881.23	6,965.41	3,487.88	1.19	-0.12	0.026
100.00	-19.42	-1.41	0.00	-64.65	0.00	64.65	3,686.20	1,843.10	6,621.98	3,315.91	1.32	-0.13	0.025
105.00	-18.42	-1.37	0.00	-57.58	0.00	57.58	3,607.86	1,803.93	6,283.29	3,146.32	1.46	-0.14	0.023
110.00	-18.22	-1.36	0.00	-50.72	0.00	50.72	3,527.44	1,763.72	5,949.70	2,979.27	1.61	-0.14	0.022
111.00	-17.41	-1.33	0.00	-49.36	0.00	49.36	3,511.11	1,755.55	5,883.62	2,946.18	1.64	-0.14	0.022
115.00	-16.45	-1.28	0.00	-44.06	0.00	44.06	3,444.94	1,722.47	5,621.53	2,814.94	1.76	-0.15	0.020
120.00	-15.52	-1.23	0.00	-37.67	0.00	37.67	3,360.36	1,680.18	5,299.14	2,653.51	1.92	-0.16	0.019
125.00	-15.28	-1.21	0.00	-31.53	0.00	31.53	3,273.70	1,636.85	4,982.86	2,495.14	2.09	-0.16	0.017
126.33	-14.30	-1.16	0.00	-29.92	0.00	29.92	3,250.30	1,625.15	4,899.81	2,453.55	2.13	-0.16	0.017
130.00	-13.86	-1.13	0.00	-25.68	0.00	25.68	3,165.67	1,582.83	4,644.73	2,325.82	2.26	-0.17	0.015
131.66	-13.41	-1.10	0.00	-23.80	0.00	23.80	1,875.92	937.96	2,776.25	1,390.19	2.32	-0.17	0.024
135.00	-12.74	-1.06	0.00	-20.13	0.00	20.13	1,848.21	924.11	2,667.57	1,335.77	2.44	-0.17	0.022
140.00	-8.91	-0.78	0.00	-14.85	0.00	14.85	1,804.96	902.48	2,506.10	1,254.91	2.62	-0.18	0.017
145.00	-8.58	-0.76	0.00	-10.93	0.00	10.93	1,759.62	879.81	2,346.60	1,175.04	2.81	-0.18	0.014
148.00	-7.17	-0.65	0.00	-8.65	0.00	8.65	1,731.42	865.71	2,251.99	1,127.67	2.93	-0.18	0.012
149.00	-6.10	-0.57	0.00	-8.00	0.00	8.00	1,721.85	860.93	2,220.65	1,111.98	2.97	-0.19	0.011
150.00	-5.61	-0.53	0.00	-7.43	0.00	7.43	1,712.20	856.10	2,189.41	1,096.33	3.00	-0.19	0.010
155.00	-5.13	-0.48	0.00	-4.80	0.00	4.80	1,662.70	831.35	2,034.89	1,018.96	3.20	-0.19	0.008
160.00	-3.78	-0.36	0.00	-2.38	0.00	2.38	1,611.13	805.56	1,883.37	943.08	3.40	-0.19	0.005
160.50	-3.74	-0.36	0.00	-2.20	0.00	2.20	1,605.85	802.93	1,868.39	935.58	3.42	-0.19	0.005
160.50	-3.74	-0.36	0.00	-2.20	0.00	2.20	1,062.64	531.32	1,193.75	597.76	3.42	-0.19	0.007
161.00	-2.42	-0.24	0.00	-2.02	0.00	2.02	1,060.93	530.47	1,188.54	595.15	3.44	-0.19	0.006
165.00	-2.12	-0.21	0.00	-1.06	0.00	1.06	1,047.03	523.52	1,146.95	574.33	3.60	-0.19	0.004
170.00	0.00	0.00	0.00	0.00	0.00	0.00	1,029.05	514.53	1,095.30	548.46	3.80	-0.19	0.000

Site Number: 411178

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Site Name: Old Lyme South CT, CT

Engineering Number: OAA754039_C3_01

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Customer: AT&T MOBILITY

170.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,027.22	513.61	1,090.15	545.89	3.82	-0.19	0.000
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Equivalent Modal Analysis Method

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

Spectral Response Acceleration for Short Period (S_s):	0.16
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}):	0.17
Design Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.10
Period Based on Rayleigh Method (sec):	2.13
Redundancy Factor (p):	1.00

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

Segment	Height Above Base (ft)	Weight (lb)	a	b	c	Saz	Horizontal Force (lb)	Vertical Force (lb)
46	170.25	34	1.884	1.951	1.130	0.325	7	42
45	167.50	341	1.824	1.650	1.019	0.291	66	421
44	163.00	283	1.727	1.229	0.857	0.239	45	349
43	160.75	44	1.680	1.048	0.784	0.215	6	54
42	160.25	55	1.670	1.010	0.769	0.210	8	67
41	157.50	555	1.613	0.819	0.688	0.183	68	685
40	152.50	573	1.512	0.531	0.557	0.137	52	707
39	149.50	117	1.453	0.392	0.489	0.113	9	144
38	148.50	127	1.434	0.351	0.467	0.105	9	156
37	146.50	384	1.395	0.275	0.427	0.090	23	474
36	142.50	654	1.320	0.149	0.354	0.063	28	807
35	137.50	773	1.229	0.034	0.277	0.035	18	954
34	133.33	526	1.156	-0.033	0.223	0.015	5	649
33	130.83	505	1.113	-0.062	0.195	0.005	2	623
32	128.17	1,131	1.068	-0.086	0.168	-0.004	-3	1,396
31	125.67	281	1.027	-0.102	0.145	-0.011	-2	347
30	122.50	1,073	0.976	-0.115	0.120	-0.019	-13	1,325
29	117.50	1,100	0.898	-0.122	0.086	-0.026	-19	1,358
28	113.00	900	0.830	-0.117	0.063	-0.028	-17	1,110
27	110.50	228	0.794	-0.111	0.052	-0.027	-4	281
26	107.50	1,155	0.751	-0.101	0.041	-0.025	-19	1,426
25	102.50	1,182	0.683	-0.082	0.027	-0.019	-15	1,459
24	97.50	1,209	0.618	-0.059	0.017	-0.010	-8	1,492
23	92.50	1,236	0.556	-0.037	0.010	0.001	1	1,525
22	89.67	168	0.523	-0.024	0.008	0.007	1	207
21	87.17	2,043	0.494	-0.014	0.007	0.013	17	2,522
20	83.83	1,121	0.457	-0.001	0.006	0.019	14	1,383
19	81.33	768	0.430	0.008	0.006	0.024	12	947
18	77.50	1,465	0.390	0.021	0.007	0.030	29	1,808
17	74.50	297	0.361	0.030	0.008	0.034	7	366
16	72.00	1,200	0.337	0.036	0.009	0.036	29	1,481
15	67.50	1,528	0.296	0.046	0.013	0.040	40	1,886
14	62.50	1,560	0.254	0.055	0.017	0.042	44	1,925
13	57.50	1,591	0.215	0.061	0.021	0.043	45	1,964

12	52.50	1,622	0.179	0.065	0.026	0.043	46	2,002
11	49.00	658	0.156	0.067	0.029	0.042	19	812
10	46.50	1,793	0.141	0.069	0.031	0.042	50	2,213
9	42.50	3,039	0.117	0.070	0.035	0.041	84	3,750
8	37.50	1,696	0.091	0.071	0.038	0.040	46	2,093
7	32.50	1,727	0.069	0.072	0.041	0.039	45	2,131
6	27.50	1,758	0.049	0.071	0.042	0.038	45	2,170
5	22.50	1,789	0.033	0.069	0.041	0.037	44	2,208
4	17.50	1,821	0.020	0.064	0.038	0.034	41	2,247
3	12.50	1,852	0.010	0.055	0.032	0.030	37	2,286
2	7.50	1,883	0.004	0.040	0.022	0.023	28	2,324
1	2.50	1,915	0.000	0.016	0.009	0.010	13	2,363
Generic 12' Dipole	170.50	40	1.890	1.980	1.140	0.328	9	49
Decibel DB201-A	170.50	25	1.890	1.980	1.140	0.328	5	31
Generic E-911 GPS	170.50	5	1.890	1.980	1.140	0.328	1	6
Ericsson KRY 112 144	170.50	33	1.890	1.980	1.140	0.328	7	41
Ericsson Radio 4449	170.50	222	1.890	1.980	1.140	0.328	48	274
Ericsson AIR 21, 1.3	170.50	249	1.890	1.980	1.140	0.328	54	307
Ericsson AIR 21, 1.3	170.50	244	1.890	1.980	1.140	0.328	53	302
RFS APXVAARR24_43-U-	170.50	384	1.890	1.980	1.140	0.328	84	474
Round T-Arm w/Reinfo	170.00	1,215	1.879	1.922	1.119	0.321	260	1,499
Alcatel-Lucent RRH2X	161.00	129	1.685	1.067	0.792	0.218	19	159
Alcatel-Lucent RRH2x	161.00	170	1.685	1.067	0.792	0.218	25	210
Alcatel-Lucent B66 R	161.00	201	1.685	1.067	0.792	0.218	29	248
VZW Unused Reserve:	161.00	209	1.685	1.067	0.792	0.218	30	258
RFS APL866513-42T0	161.00	63	1.685	1.067	0.792	0.218	9	78
Antel BXA-70063-4CF-	161.00	10	1.685	1.067	0.792	0.218	1	12
RFS DB-T1-6Z-8AB-0Z	161.00	88	1.685	1.067	0.792	0.218	13	109
Antel BXA-70063/6CF_	161.00	34	1.685	1.067	0.792	0.218	5	42
Commscope SBNHH-	161.00	304	1.685	1.067	0.792	0.218	44	375
Amphenol Antel LPA-8	161.00	42	1.685	1.067	0.792	0.218	6	52
Flat Low Profile Pla	160.00	1,500	1.664	0.992	0.761	0.207	207	1,851
Generic GPS	149.00	10	1.443	0.371	0.478	0.109	1	12
Alcatel-Lucent RRH2x	149.00	317	1.443	0.371	0.478	0.109	23	392
Alcatel-Lucent 1900	149.00	180	1.443	0.371	0.478	0.109	13	222
Alcatel-Lucent TD-RR	149.00	210	1.443	0.371	0.478	0.109	15	259
RFS APXVTM14-ALU-I20	149.00	169	1.443	0.371	0.478	0.109	12	208
Commscope NNVV-	149.00	232	1.443	0.371	0.478	0.109	17	287
Flat Low Profile Pla	148.00	1,500	1.424	0.331	0.457	0.101	101	1,851
Powerwave Allgon TT1	140.00	96	1.274	0.086	0.314	0.048	3	118
Raycap DC6-48-60-18-	140.00	32	1.274	0.086	0.314	0.048	1	39
Ericsson RRUS 8843 B	140.00	216	1.274	0.086	0.314	0.048	7	267
Ericsson RRUS 4478 B	140.00	178	1.274	0.086	0.314	0.048	6	220
Ericsson RRUS 4449 B	140.00	213	1.274	0.086	0.314	0.048	7	263
Raycap DC9-48-60-24-	140.00	16	1.274	0.086	0.314	0.048	1	20
Powerwave Allgon 777	140.00	105	1.274	0.086	0.314	0.048	3	130
CCI DMP65R-BU4D	140.00	407	1.274	0.086	0.314	0.048	13	503
Generic Flat Platfor	140.00	2,500	1.274	0.086	0.314	0.048	80	3,085
Generic 12' Dipole	111.00	40	0.801	-0.112	0.054	-0.027	-1	49
Generic GPS	74.00	10	0.356	0.031	0.008	0.034	0	12
Generic GPS	74.00	10	0.356	0.031	0.008	0.034	0	12
		59,369	92.420	42.071	34.592	9.122	2,198	73,269

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)
46	170.25	34	1.884	1.951	1.130	0.325	7	29
45	167.50	341	1.824	1.650	1.019	0.291	66	295

44	163.00	283	1.727	1.229	0.857	0.239	45	245
43	160.75	44	1.680	1.048	0.784	0.215	6	38
42	160.25	55	1.670	1.010	0.769	0.210	8	47
41	157.50	555	1.613	0.819	0.688	0.183	68	481
40	152.50	573	1.512	0.531	0.557	0.137	52	496
39	149.50	117	1.453	0.392	0.489	0.113	9	101
38	148.50	127	1.434	0.351	0.467	0.105	9	110
37	146.50	384	1.395	0.275	0.427	0.090	23	332
36	142.50	654	1.320	0.149	0.354	0.063	28	567
35	137.50	773	1.229	0.034	0.277	0.035	18	669
34	133.33	526	1.156	-0.033	0.223	0.015	5	455
33	130.83	505	1.113	-0.062	0.195	0.005	2	437
32	128.17	1,131	1.068	-0.086	0.168	-0.004	-3	980
31	125.67	281	1.027	-0.102	0.145	-0.011	-2	243
30	122.50	1,073	0.976	-0.115	0.120	-0.019	-13	930
29	117.50	1,100	0.898	-0.122	0.086	-0.026	-19	953
28	113.00	900	0.830	-0.117	0.063	-0.028	-17	779
27	110.50	228	0.794	-0.111	0.052	-0.027	-4	197
26	107.50	1,155	0.751	-0.101	0.041	-0.025	-19	1,001
25	102.50	1,182	0.683	-0.082	0.027	-0.019	-15	1,024
24	97.50	1,209	0.618	-0.059	0.017	-0.010	-8	1,047
23	92.50	1,236	0.556	-0.037	0.010	0.001	1	1,070
22	89.67	168	0.523	-0.024	0.008	0.007	1	145
21	87.17	2,043	0.494	-0.014	0.007	0.013	17	1,769
20	83.83	1,121	0.457	-0.001	0.006	0.019	14	970
19	81.33	768	0.430	0.008	0.006	0.024	12	665
18	77.50	1,465	0.390	0.021	0.007	0.030	29	1,269
17	74.50	297	0.361	0.030	0.008	0.034	7	257
16	72.00	1,200	0.337	0.036	0.009	0.036	29	1,039
15	67.50	1,528	0.296	0.046	0.013	0.040	40	1,323
14	62.50	1,560	0.254	0.055	0.017	0.042	44	1,351
13	57.50	1,591	0.215	0.061	0.021	0.043	45	1,378
12	52.50	1,622	0.179	0.065	0.026	0.043	46	1,405
11	49.00	658	0.156	0.067	0.029	0.042	19	569
10	46.50	1,793	0.141	0.069	0.031	0.042	50	1,553
9	42.50	3,039	0.117	0.070	0.035	0.041	84	2,631
8	37.50	1,696	0.091	0.071	0.038	0.040	46	1,468
7	32.50	1,727	0.069	0.072	0.041	0.039	45	1,495
6	27.50	1,758	0.049	0.071	0.042	0.038	45	1,522
5	22.50	1,789	0.033	0.069	0.041	0.037	44	1,549
4	17.50	1,821	0.020	0.064	0.038	0.034	41	1,577
3	12.50	1,852	0.010	0.055	0.032	0.030	37	1,604
2	7.50	1,883	0.004	0.040	0.022	0.023	28	1,631
1	2.50	1,915	0.000	0.016	0.009	0.010	13	1,658
Generic 12' Dipole	170.50	40	1.890	1.980	1.140	0.328	9	35
Decibel DB201-A	170.50	25	1.890	1.980	1.140	0.328	5	22
Generic E-911 GPS	170.50	5	1.890	1.980	1.140	0.328	1	4
Ericsson KRY 112 144	170.50	33	1.890	1.980	1.140	0.328	7	29
Ericsson Radio 4449	170.50	222	1.890	1.980	1.140	0.328	48	192
Ericsson AIR 21, 1.3	170.50	249	1.890	1.980	1.140	0.328	54	216
Ericsson AIR 21, 1.3	170.50	244	1.890	1.980	1.140	0.328	53	212
RFS APXVAARR24_43-U-	170.50	384	1.890	1.980	1.140	0.328	84	332
Round T-Arm w/Reinfo	170.00	1,215	1.879	1.922	1.119	0.321	260	1,052
Alcatel-Lucent RRH2X	161.00	129	1.685	1.067	0.792	0.218	19	112
Alcatel-Lucent RRH2x	161.00	170	1.685	1.067	0.792	0.218	25	147
Alcatel-Lucent B66 R	161.00	201	1.685	1.067	0.792	0.218	29	174
VZW Unused Reserve:	161.00	209	1.685	1.067	0.792	0.218	30	181
RFS APL866513-42T0	161.00	63	1.685	1.067	0.792	0.218	9	54
Antel BXA-70063-4CF-	161.00	10	1.685	1.067	0.792	0.218	1	9
RFS DB-T1-6Z-8AB-0Z	161.00	88	1.685	1.067	0.792	0.218	13	76
Antel BXA-70063/6CF_	161.00	34	1.685	1.067	0.792	0.218	5	29
Commscope SBNHH-	161.00	304	1.685	1.067	0.792	0.218	44	263
Amphenol Antel LPA-8	161.00	42	1.685	1.067	0.792	0.218	6	36
Flat Low Profile Pla	160.00	1,500	1.664	0.992	0.761	0.207	207	1,299

Site Number: 411178

Code: ANSI/TIA-222-G

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Site Name: Old Lyme South CT, CT

Engineering Number: OAA754039_C3_01

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Customer: AT&T MOBILITY

Generic GPS	149.00	10	1.443	0.371	0.478	0.109	1	9
Alcatel-Lucent RRH2x	149.00	317	1.443	0.371	0.478	0.109	23	275
Alcatel-Lucent 1900	149.00	180	1.443	0.371	0.478	0.109	13	156
Alcatel-Lucent TD-RR	149.00	210	1.443	0.371	0.478	0.109	15	182
RFS APXVTM14-ALU-I20	149.00	169	1.443	0.371	0.478	0.109	12	146
Commscope NNVV-	149.00	232	1.443	0.371	0.478	0.109	17	201
Flat Low Profile Pla	148.00	1,500	1.424	0.331	0.457	0.101	101	1,299
Powerwave Allgon TT1	140.00	96	1.274	0.086	0.314	0.048	3	83
Raycap DC6-48-60-18-	140.00	32	1.274	0.086	0.314	0.048	1	28
Ericsson RRUS 8843 B	140.00	216	1.274	0.086	0.314	0.048	7	187
Ericsson RRUS 4478 B	140.00	178	1.274	0.086	0.314	0.048	6	154
Ericsson RRUS 4449 B	140.00	213	1.274	0.086	0.314	0.048	7	184
Raycap DC9-48-60-24-	140.00	16	1.274	0.086	0.314	0.048	1	14
Powerwave Allgon 777	140.00	105	1.274	0.086	0.314	0.048	3	91
CCI DMP65R-BU4D	140.00	407	1.274	0.086	0.314	0.048	13	353
Generic Flat Platfor	140.00	2,500	1.274	0.086	0.314	0.048	80	2,165
Generic 12' Dipole	111.00	40	0.801	-0.112	0.054	-0.027	-1	35
Generic GPS	74.00	10	0.356	0.031	0.008	0.034	0	9
Generic GPS	74.00	10	0.356	0.031	0.008	0.034	0	9
		59,369	92.420	42.071	34.592	9.122	2,198	51,406

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	-70.91	-2.19	0.00	-278.30	0.00	278.30	6,027.96	3,013.98	17,007.20	8,516.24	0.00	0.00	0.044
5.00	-68.58	-2.17	0.00	-267.35	0.00	267.35	5,964.25	2,982.12	16,500.18	8,262.35	0.00	-0.01	0.044
10.00	-66.30	-2.14	0.00	-256.51	0.00	256.51	5,898.45	2,949.22	15,994.50	8,009.14	0.01	-0.01	0.043
15.00	-64.05	-2.11	0.00	-245.81	0.00	245.81	5,830.57	2,915.29	15,490.52	7,756.77	0.03	-0.02	0.043
20.00	-61.84	-2.07	0.00	-235.28	0.00	235.28	5,760.62	2,880.31	14,988.58	7,505.43	0.06	-0.03	0.042
25.00	-59.67	-2.03	0.00	-224.94	0.00	224.94	5,688.58	2,844.29	14,489.01	7,255.28	0.09	-0.04	0.041
30.00	-57.54	-1.99	0.00	-214.78	0.00	214.78	5,614.46	2,807.23	13,992.17	7,006.49	0.13	-0.04	0.041
35.00	-55.45	-1.95	0.00	-204.82	0.00	204.82	5,538.27	2,769.13	13,498.40	6,759.23	0.18	-0.05	0.040
40.00	-51.69	-1.87	0.00	-195.06	0.00	195.06	5,459.99	2,729.99	13,008.03	6,513.68	0.24	-0.06	0.039
45.00	-49.48	-1.82	0.00	-185.70	0.00	185.70	5,379.63	2,689.82	12,521.41	6,270.01	0.31	-0.07	0.039
48.00	-48.67	-1.81	0.00	-180.23	0.00	180.23	5,384.54	2,692.27	12,550.67	6,284.66	0.35	-0.07	0.038
50.00	-46.67	-1.76	0.00	-176.61	0.00	176.61	5,351.87	2,675.93	12,357.05	6,187.71	0.38	-0.07	0.037
55.00	-44.70	-1.72	0.00	-167.79	0.00	167.79	5,268.72	2,634.36	11,875.99	5,946.82	0.46	-0.08	0.037
60.00	-42.78	-1.68	0.00	-159.18	0.00	159.18	5,183.50	2,591.75	11,399.48	5,708.21	0.55	-0.09	0.036
65.00	-40.89	-1.64	0.00	-150.77	0.00	150.77	5,096.20	2,548.10	10,927.86	5,472.05	0.65	-0.10	0.036
70.00	-39.41	-1.62	0.00	-142.55	0.00	142.55	5,006.81	2,503.41	10,461.47	5,238.51	0.76	-0.11	0.035
74.00	-39.02	-1.61	0.00	-136.08	0.00	136.08	4,933.81	2,466.91	10,092.37	5,053.69	0.85	-0.11	0.035
75.00	-37.21	-1.58	0.00	-134.47	0.00	134.47	4,915.35	2,457.68	10,000.67	5,007.77	0.88	-0.12	0.034
80.00	-36.26	-1.57	0.00	-126.56	0.00	126.56	4,821.81	2,410.90	9,545.79	4,779.99	1.00	-0.12	0.034
82.66	-34.88	-1.56	0.00	-122.37	0.00	122.37	4,771.13	2,385.57	9,306.02	4,659.93	1.07	-0.13	0.034
85.00	-32.36	-1.54	0.00	-118.72	0.00	118.72	4,726.18	2,363.09	9,097.16	4,555.34	1.14	-0.13	0.033
89.33	-32.15	-1.54	0.00	-112.06	0.00	112.06	3,846.41	1,923.21	7,360.18	3,685.56	1.26	-0.14	0.039
90.00	-30.63	-1.54	0.00	-111.03	0.00	111.03	3,836.63	1,918.32	7,313.25	3,662.06	1.28	-0.14	0.038
95.00	-29.13	-1.55	0.00	-103.33	0.00	103.33	3,762.45	1,881.23	6,965.41	3,487.88	1.44	-0.15	0.037
100.00	-27.67	-1.56	0.00	-95.59	0.00	95.59	3,686.20	1,843.10	6,621.98	3,315.91	1.60	-0.16	0.036
105.00	-26.25	-1.58	0.00	-87.78	0.00	87.78	3,607.86	1,803.93	6,283.29	3,146.32	1.78	-0.17	0.035
110.00	-25.97	-1.59	0.00	-79.86	0.00	79.86	3,527.44	1,763.72	5,949.70	2,979.27	1.97	-0.18	0.034
111.00	-24.81	-1.61	0.00	-78.27	0.00	78.27	3,511.11	1,755.55	5,883.62	2,946.18	2.00	-0.19	0.034
115.00	-23.45	-1.62	0.00	-71.85	0.00	71.85	3,444.94	1,722.47	5,621.53	2,814.94	2.16	-0.19	0.032
120.00	-22.12	-1.64	0.00	-63.73	0.00	63.73	3,360.36	1,680.18	5,299.14	2,653.51	2.37	-0.20	0.031
125.00	-21.78	-1.64	0.00	-55.55	0.00	55.55	3,273.70	1,636.85	4,982.86	2,495.14	2.59	-0.21	0.029
126.33	-20.38	-1.64	0.00	-53.37	0.00	53.37	3,250.30	1,625.15	4,899.81	2,453.55	2.65	-0.22	0.028
130.00	-19.76	-1.64	0.00	-47.36	0.00	47.36	3,165.67	1,582.83	4,644.73	2,325.82	2.82	-0.22	0.027
131.66	-19.11	-1.63	0.00	-44.64	0.00	44.64	1,875.92	937.96	2,776.25	1,390.19	2.90	-0.23	0.042
135.00	-18.15	-1.61	0.00	-39.20	0.00	39.20	1,848.21	924.11	2,667.57	1,335.77	3.06	-0.23	0.039
140.00	-12.70	-1.44	0.00	-31.14	0.00	31.14	1,804.96	902.48	2,506.10	1,254.91	3.31	-0.24	0.032
145.00	-12.23	-1.42	0.00	-23.93	0.00	23.93	1,759.62	879.81	2,346.60	1,175.04	3.57	-0.25	0.027
148.00	-10.22	-1.30	0.00	-19.67	0.00	19.67	1,731.42	865.71	2,251.99	1,127.67	3.74	-0.26	0.023
149.00	-8.70	-1.20	0.00	-18.37	0.00	18.37	1,721.85	860.93	2,220.65	1,111.98	3.79	-0.26	0.022
150.00	-7.99	-1.15	0.00	-17.17	0.00	17.17	1,712.20	856.10	2,189.41	1,096.33	3.85	-0.26	0.020
155.00	-7.31	-1.08	0.00	-11.42	0.00	11.42	1,662.70	831.35	2,034.89	1,018.96	4.13	-0.27	0.016
160.00	-5.39	-0.85	0.00	-6.03	0.00	6.03	1,611.13	805.56	1,883.37	943.08	4.41	-0.28	0.010
160.50	-5.33	-0.85	0.00	-5.60	0.00	5.60	1,605.85	802.93	1,868.39	935.58	4.44	-0.28	0.009
160.50	-5.33	-0.85	0.00	-5.60	0.00	5.60	1,062.64	531.32	1,193.75	597.76	4.44	-0.28	0.014
161.00	-3.44	-0.61	0.00	-5.18	0.00	5.18	1,060.93	530.47	1,188.54	595.15	4.47	-0.28	0.012
165.00	-3.02	-0.54	0.00	-2.72	0.00	2.72	1,047.03	523.52	1,146.95	574.33	4.70	-0.28	0.008
170.00	0.00	0.00	0.00	0.00	0.00	0.00	1,029.05	514.53	1,095.30	548.46	5.00	-0.28	0.000

Site Number: 411178

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Site Name: Old Lyme South CT, CT

Engineering Number: OAA754039_C3_01

11/8/2019 3:28:14 PM

Customer: AT&T MOBILITY

170.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,027.22	513.61	1,090.15	545.89	5.03	-0.28	0.000
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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	-49.75	-2.19	0.00	-275.29	0.00	275.29	6,027.96	3,013.98	17,007.20	8,516.24	0.00	0.00	0.041
5.00	-48.12	-2.17	0.00	-264.36	0.00	264.36	5,964.25	2,982.12	16,500.18	8,262.35	0.00	-0.01	0.040
10.00	-46.51	-2.13	0.00	-253.53	0.00	253.53	5,898.45	2,949.22	15,994.50	8,009.14	0.01	-0.01	0.040
15.00	-44.94	-2.10	0.00	-242.86	0.00	242.86	5,830.57	2,915.29	15,490.52	7,756.77	0.03	-0.02	0.039
20.00	-43.39	-2.06	0.00	-232.38	0.00	232.38	5,760.62	2,880.31	14,988.58	7,505.43	0.06	-0.03	0.038
25.00	-41.86	-2.02	0.00	-222.08	0.00	222.08	5,688.58	2,844.29	14,489.01	7,255.28	0.09	-0.04	0.038
30.00	-40.37	-1.98	0.00	-211.99	0.00	211.99	5,614.46	2,807.23	13,992.17	7,006.49	0.13	-0.04	0.037
35.00	-38.90	-1.94	0.00	-202.11	0.00	202.11	5,538.27	2,769.13	13,498.40	6,759.23	0.18	-0.05	0.037
40.00	-36.27	-1.85	0.00	-192.43	0.00	192.43	5,459.99	2,729.99	13,008.03	6,513.68	0.24	-0.06	0.036
45.00	-34.72	-1.81	0.00	-183.15	0.00	183.15	5,379.63	2,689.82	12,521.41	6,270.01	0.30	-0.07	0.036
48.00	-34.15	-1.79	0.00	-177.74	0.00	177.74	5,384.54	2,692.27	12,550.67	6,284.66	0.34	-0.07	0.035
50.00	-32.74	-1.74	0.00	-174.16	0.00	174.16	5,351.87	2,675.93	12,357.05	6,187.71	0.38	-0.07	0.034
55.00	-31.36	-1.70	0.00	-165.43	0.00	165.43	5,268.72	2,634.36	11,875.99	5,946.82	0.46	-0.08	0.034
60.00	-30.01	-1.66	0.00	-156.93	0.00	156.93	5,183.50	2,591.75	11,399.48	5,708.21	0.55	-0.09	0.033
65.00	-28.69	-1.62	0.00	-148.63	0.00	148.63	5,096.20	2,548.10	10,927.86	5,472.05	0.64	-0.10	0.033
70.00	-27.65	-1.59	0.00	-140.52	0.00	140.52	5,006.81	2,503.41	10,461.47	5,238.51	0.75	-0.11	0.032
74.00	-27.38	-1.59	0.00	-134.14	0.00	134.14	4,933.81	2,466.91	10,092.37	5,053.69	0.84	-0.11	0.032
75.00	-26.11	-1.56	0.00	-132.56	0.00	132.56	4,915.35	2,457.68	10,000.67	5,007.77	0.87	-0.11	0.032
80.00	-25.44	-1.55	0.00	-124.76	0.00	124.76	4,821.81	2,410.90	9,545.79	4,779.99	0.99	-0.12	0.031
82.66	-24.47	-1.53	0.00	-120.63	0.00	120.63	4,771.13	2,385.57	9,306.02	4,659.93	1.06	-0.13	0.031
85.00	-22.70	-1.52	0.00	-117.05	0.00	117.05	4,726.18	2,363.09	9,097.16	4,555.34	1.12	-0.13	0.030
89.33	-22.56	-1.52	0.00	-110.49	0.00	110.49	3,846.41	1,923.21	7,360.18	3,685.56	1.25	-0.14	0.036
90.00	-21.49	-1.51	0.00	-109.47	0.00	109.47	3,836.63	1,918.32	7,313.25	3,662.06	1.27	-0.14	0.035
95.00	-20.44	-1.52	0.00	-101.90	0.00	101.90	3,762.45	1,881.23	6,965.41	3,487.88	1.42	-0.15	0.035
100.00	-19.42	-1.54	0.00	-94.29	0.00	94.29	3,686.20	1,843.10	6,621.98	3,315.91	1.58	-0.16	0.034
105.00	-18.41	-1.56	0.00	-86.59	0.00	86.59	3,607.86	1,803.93	6,283.29	3,146.32	1.76	-0.17	0.033
110.00	-18.22	-1.56	0.00	-78.80	0.00	78.80	3,527.44	1,763.72	5,949.70	2,979.27	1.94	-0.18	0.032
111.00	-17.40	-1.58	0.00	-77.24	0.00	77.24	3,511.11	1,755.55	5,883.62	2,946.18	1.98	-0.18	0.031
115.00	-16.45	-1.60	0.00	-70.92	0.00	70.92	3,444.94	1,722.47	5,621.53	2,814.94	2.14	-0.19	0.030
120.00	-15.52	-1.61	0.00	-62.93	0.00	62.93	3,360.36	1,680.18	5,299.14	2,653.51	2.34	-0.20	0.028
125.00	-15.28	-1.61	0.00	-54.87	0.00	54.87	3,273.70	1,636.85	4,982.86	2,495.14	2.56	-0.21	0.027
126.33	-14.30	-1.61	0.00	-52.72	0.00	52.72	3,250.30	1,625.15	4,899.81	2,453.55	2.62	-0.21	0.026
130.00	-13.86	-1.61	0.00	-46.80	0.00	46.80	3,165.67	1,582.83	4,644.73	2,325.82	2.79	-0.22	0.025
131.66	-13.40	-1.61	0.00	-44.12	0.00	44.12	1,875.92	937.96	2,776.25	1,390.19	2.86	-0.22	0.039
135.00	-12.73	-1.59	0.00	-38.75	0.00	38.75	1,848.21	924.11	2,667.57	1,335.77	3.02	-0.23	0.036
140.00	-8.91	-1.43	0.00	-30.81	0.00	30.81	1,804.96	902.48	2,506.10	1,254.91	3.27	-0.24	0.029
145.00	-8.58	-1.40	0.00	-23.69	0.00	23.69	1,759.62	879.81	2,346.60	1,175.04	3.53	-0.25	0.025
148.00	-7.17	-1.29	0.00	-19.48	0.00	19.48	1,731.42	865.71	2,251.99	1,127.67	3.69	-0.26	0.021
149.00	-6.10	-1.19	0.00	-18.20	0.00	18.20	1,721.85	860.93	2,220.65	1,111.98	3.74	-0.26	0.020
150.00	-5.60	-1.14	0.00	-17.00	0.00	17.00	1,712.20	856.10	2,189.41	1,096.33	3.80	-0.26	0.019
155.00	-5.12	-1.07	0.00	-11.32	0.00	11.32	1,662.70	831.35	2,034.89	1,018.96	4.07	-0.27	0.014
160.00	-3.78	-0.85	0.00	-5.98	0.00	5.98	1,611.13	805.56	1,883.37	943.08	4.36	-0.27	0.009
160.50	-3.74	-0.84	0.00	-5.55	0.00	5.55	1,605.85	802.93	1,868.39	935.58	4.38	-0.27	0.008
160.50	-3.74	-0.84	0.00	-5.55	0.00	5.55	1,062.64	531.32	1,193.75	597.76	4.38	-0.27	0.013
161.00	-2.41	-0.61	0.00	-5.13	0.00	5.13	1,060.93	530.47	1,188.54	595.15	4.41	-0.27	0.011
165.00	-2.12	-0.54	0.00	-2.70	0.00	2.70	1,047.03	523.52	1,146.95	574.33	4.64	-0.28	0.007
170.00	0.00	0.00	0.00	0.00	0.00	0.00	1,029.05	514.53	1,095.30	548.46	4.93	-0.28	0.000

Site Number: 411178

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Site Name: Old Lyme South CT, CT

Engineering Number: OAA754039_C3_01

11/8/2019 3:28:14 PM

Customer: AT&T MOBILITY

170.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,027.22	513.61	1,090.15	545.89	4.96	-0.28	0.000
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Site Number: 411178

Code: ANSI/TIA-222-G

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Site Name: Old Lyme South CT, CT

Engineering Number: OAA754039_C3_01

11/8/2019 3:28:14 PM

Customer: AT&T MOBILITY

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	36.51	0.00	71.21	0.00	0.00	4460.41	0.00	0.54
0.9D + 1.6W	36.48	0.00	53.40	0.00	0.00	4418.48	0.00	0.53
1.2D + 1.0Di + 1.0Wi	9.69	0.00	100.70	0.00	0.00	1149.91	0.00	0.15
(1.2 + 0.2Sds) * DL + E ELFM	1.78	0.00	70.91	0.00	0.00	236.95	0.00	0.04
(1.2 + 0.2Sds) * DL + E EMAM	2.19	0.00	70.91	0.00	0.00	278.30	0.00	0.04
(0.9 - 0.2Sds) * DL + E ELFM	1.78	0.00	49.75	0.00	0.00	234.55	0.00	0.04
(0.9 - 0.2Sds) * DL + E EMAM	2.19	0.00	49.75	0.00	0.00	275.29	0.00	0.04
1.0D + 1.0W	6.66	0.00	59.37	0.00	0.00	809.43	0.00	0.10



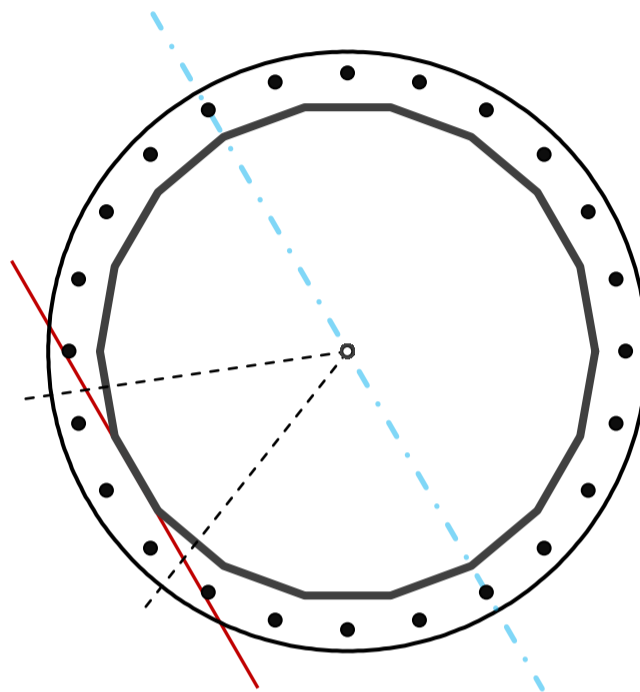
Base Plate & Anchor Rod Analysis

Pole Dimensions		
Number of Sides	18	-
Diameter	69	in
Thickness	0.4375	in
Orientation Offset		°

Base Reactions		
Moment, Mu	4460.4	k-ft
Axial, Pu	71.2	k
Shear, Vu	36.5	k
Neutral Axis	120	°

Report Capacities		
Component	Capacity	Result
Base Plate	43%	Pass
Anchor Rods	46%	Pass
Dwyidag	-	-

Base Plate		
Shape	Round	-
Diameter, ϕ	85	in
Thickness	2 1/4	in
Grade	A572-60	
Yield Strength, Fy	60	ksi
Tensile Strength, Fu	75	ksi
Clip	N/A	in
Orientation Offset		°
Anchor Rod Detail	d	$\eta=0.5$
Clear Distance	3	in
Applied Moment, Mu	989.8	k
Bending Stress, ϕMn	2289.0	k



Original Anchor Rods		
Arrangement	Radial	-
Quantity	24	-
Diameter, ϕ	2 1/4	in
Bolt Circle	79	in
Grade	A615-75	
Yield Strength, Fy	75	ksi
Tensile Strength, Fu	100	ksi
Spacing	10.3	in
Orientation Offset		°
Applied Force, Pu	119.3	k
Anchor Rods, ϕPn	259.8	k

Calculations for Monopole Base Plate & Anchor Rod Analysis

Reaction Distribution

Reaction	Shear Vu	Moment Mu	Factor
-	k	k-ft	-
Base Forces	36.5	4460.4	1.00
Anchor Rod Forces	36.5	4460.4	1.00
Additional Bolt (Grp1) Forces	0.0	0.0	0.00
Additional Bolt (Grp2) Forces	0.0	0.0	0.00
Dywidag Forces	0.0	0.0	0.00
Stiffener Forces	0.0	0.0	0.00

Geometric Properties

Section	Gross Area	Net Area	Individual Inertia	Threads per Inch	Moment of Inertia
-	in ²	in ²	in ⁴	#	in ⁴
Pole	93.7578	5.2088	0.3334		55098.28
Bolt	3.9761	3.2477	0.8393	4.5	57225.51
Bolt1	0.0000	0.0000	0.0000	0	0.00
Bolt2	0.0000	0.0000	0.0000	0	0.00
Dywidag	0.0000	0.0000	0.0000		0.00
Stiffener	0.0000	0.0000	0.0000		0.00

Base Plate

Shape	Round	-
Diameter, D	85	in
Thickness, t	2.25	in
Yield Strength, Fy	60	ksi
Tensile Strength, Fu	75	ksi
Base Plate Chord	49.639	in
Detail Type	d	-
Detail Factor	0.50	-
Clear Distance	3	-

Anchor Rods

Anchor Rod Quantity, N	24	-
Rod Diameter, d	2.25	in
Bolt Circle, BC	79	in
Yield Strength, Fy	75	ksi
Tensile Strength, Fu	100	ksi
Applied Axial, Pu	119.3	k
Applied Shear, Vu	0.6	k
Compressive Capacity, ϕP_n	259.8	k
Tensile Capacity, ϕR_n	0.459	OK
Interaction Capacity	0.464	OK

External Base Plate

Chord Length AA	42.973	in
Additional AA	4.500	in
Section Modulus, Z	60.083	in ³
Applied Moment, Mu	989.8	k-ft
Bending Capacity, ϕM_n	3244.5	k-ft
Capacity, Mu/ ϕM_n	0.305	OK

Chord Length AB	41.202	in
Additional AB	4.500	in
Section Modulus, Z	57.841	in ³
Applied Moment, Mu	802.8	k-ft
Bending Capacity, ϕM_n	3123.4	k-ft
Capacity, Mu/ ϕM_n	0.257	OK

Bend Line Length	33.493	in
Additional Bend Line	0.000	in
Section Modulus, Z	42.390	in ³
Applied Moment, Mu	989.8	k-ft
Bending Capacity, ϕM_n	2289.0	k-ft
Capacity, Mu/ ϕM_n	0.432	OK

Internal Base Plate

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

Flange Plate Analysis

Flange Plate	Plate Type	Flange	@ 161 ft
	Pole Diameter	29	in
	Pole Thickness	0.25	in
	Plate Diameter	36	in
	Plate Thickness	1	in
	Plate Fy	60	ksi
	Weld Length	0.25	in
	f _s Resistance	81.84	k-in
	Applied	8.19	k-in

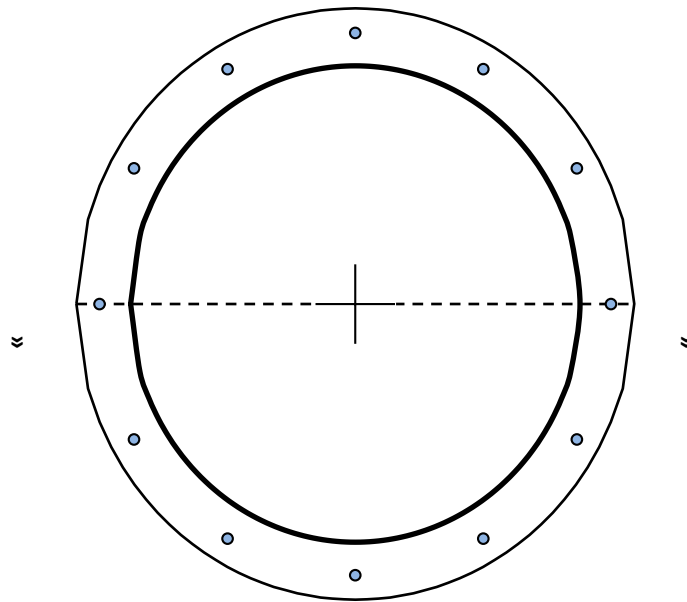
Code Rev.	G
Moment	60.1 k-ft
Axial	4.6 k

Date	11/8/2019
Engineer	HAT
Site #	411178
Carrier	AT&T

Required Flange Thickness:
0.32 in OK

Stiffeners	#	
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Bolts	#	12	
	Bolt Circle	33	in
	(R)adial / (S)quare	R	
	Bolt Gap	6	in
	Diameter	1	in
	Hole Diameter	1.125	in
	Type	A325	
	Fy	92	ksi
	Fu	120	ksi
	f _s Resistance	54.52	k
Applied	6.90	k	



Reinforcement	#	
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Plate Stress Ratio:
10% Pass

Bolt Stress Ratio:
13% Pass

Extra Bolts O	#	
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Site Name: Old Lyme South CT, CT
Site Number: 411178
Tower Type: MP
Design Loads (Factored) - Analysis per TIA-222-G Standards

Monolithic Mat & Pier Foundation Analysis

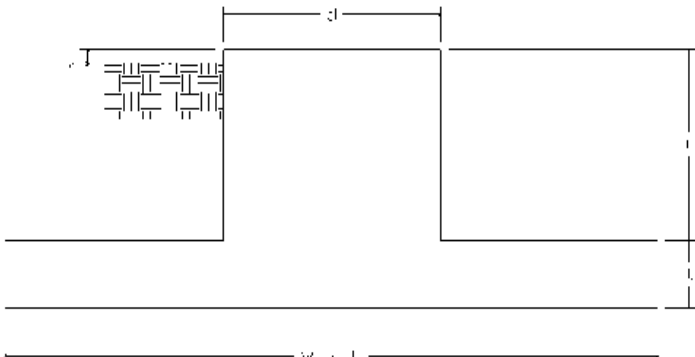
Foundation Analysis Parameters		
Design / Analysis / Mapping:	Analysis	-
Compression/Leg:	71.2	k
Uplift/Leg:	0.0	k
Total Shear:	36.5	k
Moment:	4,460.4	k-ft
Tower + Appurtenance Weight:	71.2	k
Depth to Base of Foundation (l + t - h):	7	ft
Diameter of Pier (d):	8.5	ft
Length of Pier (l):	4.5	ft
Height of Pier above Ground (h):	1	ft
Width of Pad (W):	31	ft
Length of Pad (L):	31	ft
Thickness of Pad (t):	3.5	ft
Tower Leg Center to Center:	0	ft
Number of Tower Legs:	1	-
Tower Center from Mat Center:	0	ft
Depth Below Ground Surface to Water Table:	99	ft
Unit Weight of Concrete:	150	pcf
Unit Weight of Soil Above Water Table:	125	pcf
Unit Weight of Water:	62.4	pcf
Unit Weight of Soil Below Water Table:	62.6	pcf
Friction Angle of Uplift:	15	°
Coefficient of Shear Friction:	0.6	-
Ultimate Compressive Bearing Pressure:	12,000	psf
Ultimate Passive Pressure on Pad Face:	0	psf
$f_{\text{Soil and Concrete Weight}}$:	0.9	-
f_{Soil} :	0.75	-

Foundation Steel Parameters		
Concrete Strength (f_c'):	4,000	psi
Pad Tension Steel Depth:	38.0	in
Dead Load Factor:	0.9	-
f_{Shear} :	0.75	-
$f_{\text{Flexure / Tension}}$:	0.9	-
$f_{\text{Compression}}$:	0.65	-
b:	0.85	-
Bottom Pad Rebar Size #:	9	-
# of Bottom Pad Rebar:	54	-
Pad Bottom Steel Area:	54.00	in ²
Pad Steel F_y :	60,000	psi
Top Pad Rebar Size #:	9	-
# of Top Pad Rebar:	27	-
Pad Top Steel Area:	27.00	in ²
Pier Rebar Size #:	9	-
Pier Steel Area (Single Bar):	1.00	in ²
# of Pier Rebar:	52	-
Pier Steel F_y :	60,000	psi
Pier Cage Diameter:	94.0	in
Rebar Strain Limit:	0.008	-
Steel Elastic Modulus:	29,000	ksi
Tie Rebar Size #:	4	-
Tie Steel Area (Single Bar):	0.20	in ²
Tie Spacing:	12	in
Tie Steel F_y :	60,000	psi

Overturning Moment Usage		
Design OTM:	4752.5	k-ft
OTM Resistance:	14643.1	k-ft
Design OTM / OTM Resistance:	32%	Pass

Soil Bearing Pressure Usage		
Net Bearing Pressure:	1208	psf
Factored Nominal Bearing Pressure:	9000	psf
Factored Nominal (Net) Bearing Pressure:	13%	Pass
Load Direction Controlling Design Bearing Pressure:	Diagonal to Pad Edge	

Sliding Factor of Safety		
Ultimate Friction Resistance:	598.7	k
Ultimate Passive Pressure Resistance:	0.0	k
Total Factored Sliding Resistance:	449.0	k
Sliding Design / Sliding Resistance:	8%	Pass



Pad Strength Capacity			
Factored One Way Shear (V_u):	240.9	k	
One Way Shear Capacity (fV_c):	1341.1	k	ACI11.3.1.1
V_u / fV_c :	18%	Pass	
Load Direction Controlling Shear Capacity:	Parallel to Pad Edge		
Lower Steel Pad Factored Moment (M_u):	1920.6	k-ft	
Lower Steel Pad Moment Capacity (fM_n):	8969.4	k-ft	ACI10.3
M_u / fM_n :	21%	Pass	
Load Direction Controlling Flexural Capacity:	Parallel to Pad Edge		
Upper Steel Pad Factored Moment (M_u):	1170.3	k-ft	
Upper Steel Pad Moment Capacity (fM_n):	4550.9	k-ft	
M_u / fM_n :	26%	Pass	
Lower Pad Flexural Reinforcement Ratio:	0.0038		OK - Minimum Reinforcement Ratio Met - ACI10.5.1
Upper Pad Flexural Reinforcement Ratio:	0.0019		OK - Minimum Reinforcement Ratio Met - ACI10.5.1
Pad Shrinkage Reinforcement Ratio:	0.0057		OK - Shrinkage Reinforcement Ratio Met - ACI7.12.2.1
Lower Pad Reinforcement Spacing:	7	in	Pad Reinforcing Spacing OK - ACI7.12.2.2 & 10.5.4
Upper Pad Reinforcement Spacing:	14	in	Pad Reinforcing Spacing OK - ACI7.12.2.2 & 10.5.4
Factored Punching Shear (V_u):	0.0	k	
Nominal Punching Shear Capacity (f_cV_n):	3171.1	k	ACI11.12.2.1
V_u / fV_c :	0%	Pass	

Pier Strength Capacity			
Factored Moment in Pier (M_u):	4624.7	k-ft	
Pier Moment Capacity (fM_n):	10755.0	k-ft	
M_u / fM_n :	43%	Pass	
Factored Shear in Pier (V_u):	36.5	k	
Pier Shear Capacity (fV_n):	901.0	k	
V_u / fV_c :	4%	Pass	
Pier Shear Reinforcement Ratio:	0.0002		OK - No Ties Necessary for Shear - ACI11.5.6.1
Factored Tension in Pier (T_u):	0.0	k	
Pier Tension Capacity (fT_n):	2808.0	k	
T_u / fT_n :	0%	Pass	
Factored Compression in Pier (P_u):	71.2	k	
Pier Compression Capacity (fP_n):	14354.9	k	ACI10.3.6.2
P_u / fP_n :	0%	Pass	
Pier Compression Reinforcement Ratio:	0.006		OK - Reinforcement Ratio Met - ACI10.9.1 & 10.8.4
Minimum Depth to Develop Vertical Rebar:	22	in	ACI12.2.3
Minimum Hook Development Length:	15	in	ACI12.5
Minimum Mat Thickness / Edge Distance from Pier:	18.0	in	
Minimum Foundation Depth:	3.10	ft	
$M_u/f_B M_n + T_u/f_T T_n$:	43%	Pass	

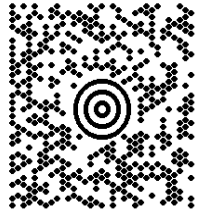
1 OF 1

1 LBS

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SHIP TO:

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6034210470
TODD AND REBECCA MACHNIK
126 MILE CREEK ROAD
OLD LYME CT 06371

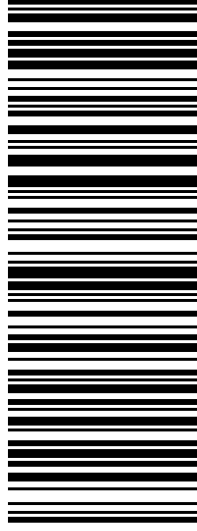


CT 063 5-02



UPS GROUND

TRACKING #: 1Z 9V0 F66 03 9287 5909



BILLING: P/P

Reference No. 1: CT-103-20001 CT2235

XOL 20.01.33

NV45 83.0A 12/2019



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