



AMERICAN TOWER®
CORPORATION

Structural Analysis Report

Structure : 150 ft Monopole
ATC Site Name : Dublin OH, OH
ATC Asset Number : 307538
Engineering Number : 13619927_C3_02
Proposed Carrier : AT&T MOBILITY
Carrier Site Name : MROWP052577
Carrier Site Number : OHL03059
Site Location : 5580 Shier Rings Rd
Dublin, OH 43016-1277
40.097000,-83.140200
County : Franklin
Date : April 14, 2021
Max Usage : 114%
Result : Fail

Prepared By:
Zachary S. Blackford
Structural Engineer

Reviewed By:



COA: COA.02041



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Introduction

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

Supporting Documents

Tower Drawings	Valmont #DC0720Z, dated January 2, 1991
Foundation Drawing	Popowych Project #9067, November 13, 1990
Geotechnical Report	ATEC File #22-03228, dated December 24, 1990
Modifications	ATC PProject #OAA717362_C6_03, dated February 21, 2018

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:	90 mph (3-Second Gust, V_{asd}) / 115 mph (3-Second Gust, V_{ult})
Basic Wind Speed w/ Ice:	40 mph (3-Second Gust) w/ 3/4" radial ice concurrent
Code:	ANSI/TIA-222-G / 2015 IBC / 2017 Ohio Building Code
Structure Class:	II
Exposure Category:	B
Topographic Category:	1
Crest Height:	0 ft
Spectral Response:	$S_s = 0.12, S_1 = 0.06$
Site Class:	D - Stiff Soil

Conclusion

Based on the analysis results, the structure does not meet the requirements per the applicable codes listed above. The tower and foundation can support the equipment as described in this report after the modifications listed below are completed:

- Reinforce anchor rods

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
153.0	3	Raycap DC6-48-60-18-8F ("Squid")	Platform with Handrails	(2) 0.39" (10mm) Fiber Trunk (1) 0.78" (19.7mm) 8 AWG 6 (12) 1 5/8" Coax (1) 7/8" Coax	AT&T MOBILITY
	3	Nokia AirScale Dual RRH 4T4R B25/66 320W AHFIB (66.1lbs)			
	3	Nokia AirScale Dual RRH 4T4R B12/14 320W AHLBA w/ cover			
	3	Commscope SBNHH-1D65C (66.1lb)			
	6	Commscope NNH4-65C-R6 (102.1 lbs)			
	3	Nokia AirScale RRH 4T4R B5 160W AHCA			
	3	Alcatel-Lucent RRH4x25-WCS (91lb)			
143.0	6	Generic 56" x 6" Panel	Low Profile Platform	(3) 1 5/8" Coax	OTHER
	1	Generic TTA			

Equipment to be Removed

Elev. ¹ (ft)	Qty	Antenna	Mount Type	Lines	Carrier
153.0	3	Commscope SBJAH4-1D65C-DL	-	(5) 0.78" (19.7mm) 8 AWG 6	AT&T MOBILITY

Proposed Equipment

Elev. ¹ (ft)	Qty	Antenna	Mount Type	Lines	Carrier
153.0	3	Nokia AEQK AirScale MAA 64T64R 192AE n77 200W	Platform with Handrails	(6) 0.96" (24.3mm) Cable	AT&T MOBILITY

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

Install proposed lines inside the pole shaft.



Structure Usages

Structural Component	Controlling Usage	Pass/Fail
Anchor Bolts	114%	Fail
Shaft	103%	Pass
Base Plate	40%	Pass
Reinforcement	99%	Pass

Foundations

Reaction Component	Analysis Reactions	% of Usage
Moment (Kips-Ft)	2,142.1	62%
Axial (Kips)	32.3	13%
Shear (Kips)	19.6	41%

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) (°)
150.0	Nokia AEQK AirScale MAA 64T64R 192AE n77 200W	AT&T MOBILITY	3.685	2.777

*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 ATC Tower Services LLC 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 ATC Tower Services LLC

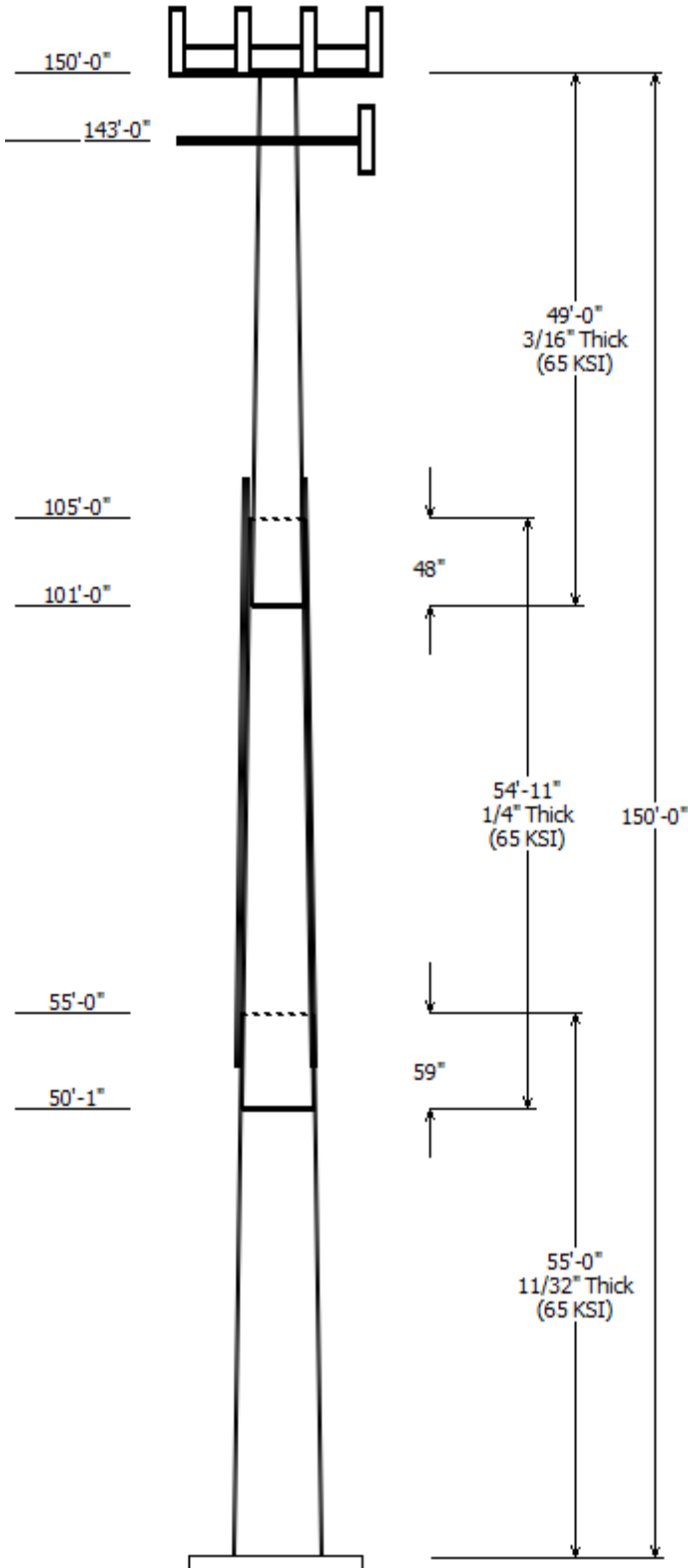
It is the responsibility of the client to ensure that the information provided to ATC Tower Services LLC and used in the performance of our engineering services is correct and complete.

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 ATC Tower Services LLC, 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. ATC Tower Services LLC is not responsible for the conclusions, opinions and recommendations made by others based on the information supplied herein.

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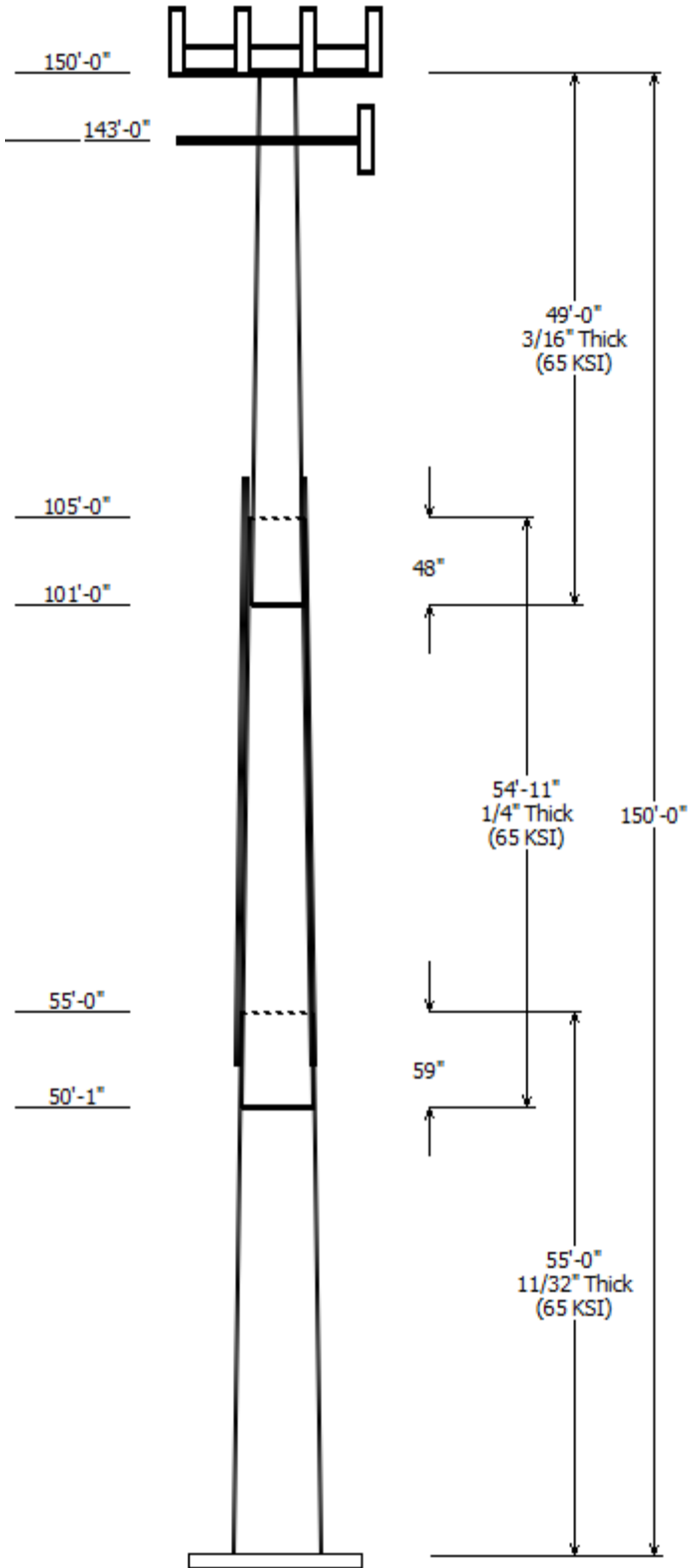
Job Information	
Client : AT&T MOBILITY	Code: ANSI/TIA-222-G
Pole : 307538	
Location : Dublin OH, OH	
Description : 150 ft Valmont Monopole	Struct Class : II
Shape : 12 Sides	Exposure : B
Height : 150.00 (ft)	Topo : 1
Base Elev (ft): 0.00	
Taper: 0.155974in/ft)	

Sections Properties							
Shaft Section	Length (ft)	Diameter (in)		Thick (in)	Joint Type	Overlap Length (in)	Steel Grade
		Across Top	Flats Bottom				
1	55.000	28.92	37.50	0.344		0.000	12 Sides 65
2	54.917	21.62	30.18	0.250	Slip Joint	59.000	12 Sides 65
3	49.000	14.97	22.62	0.188	Slip Joint	48.000	12 Sides 65

Discrete Appurtenance			
Attach Elev (ft)	Force Elev (ft)	Qty	Description
150.000	153.000	6	Commscope NNH4-65C-R6
150.000	153.000	3	Commscope SBNHH-1D65C
150.000	150.000	3	Generic Flat Side Arm
150.000	153.000	3	Nokia AEQK AirScale MAA
150.000	153.000	3	Alcatel-Lucent RRH4x25-WCS
150.000	153.000	3	Nokia AirScale Dual RRH 4T4R B
150.000	153.000	3	Nokia AirScale Dual RRH 4T4R B
150.000	153.000	3	Raycap DC6-48-60-18-8F
150.000	153.000	3	Nokia AirScale RRH 4T4R B5 160
150.000	150.000	1	Round Platform w/ Handrails
143.000	143.000	1	Round Low Profile Platform
143.000	143.000	6	Generic 56" x 6" Panel
143.000	143.000	1	Generic TTA

Linear Appurtenance			
Elev (ft) From	To	Description	Exposed To Wind
43.500	113.5	#20 Dywidag	Yes
43.500	113.5	#20 Dywidag	Yes
43.500	113.5	#20 Dywidag	Yes
43.500	113.5	#20 Dywidag	Yes
0.000	150.0	0.39" (10mm)	Yes
0.000	150.0	0.78" (19.7mm) 8	Yes
0.000	150.0	0.96" (24.3mm)	No
0.000	150.0	1 5/8" Coax	No
0.000	150.0	1 5/8" Coax	No
0.000	150.0	7/8" Coax	No

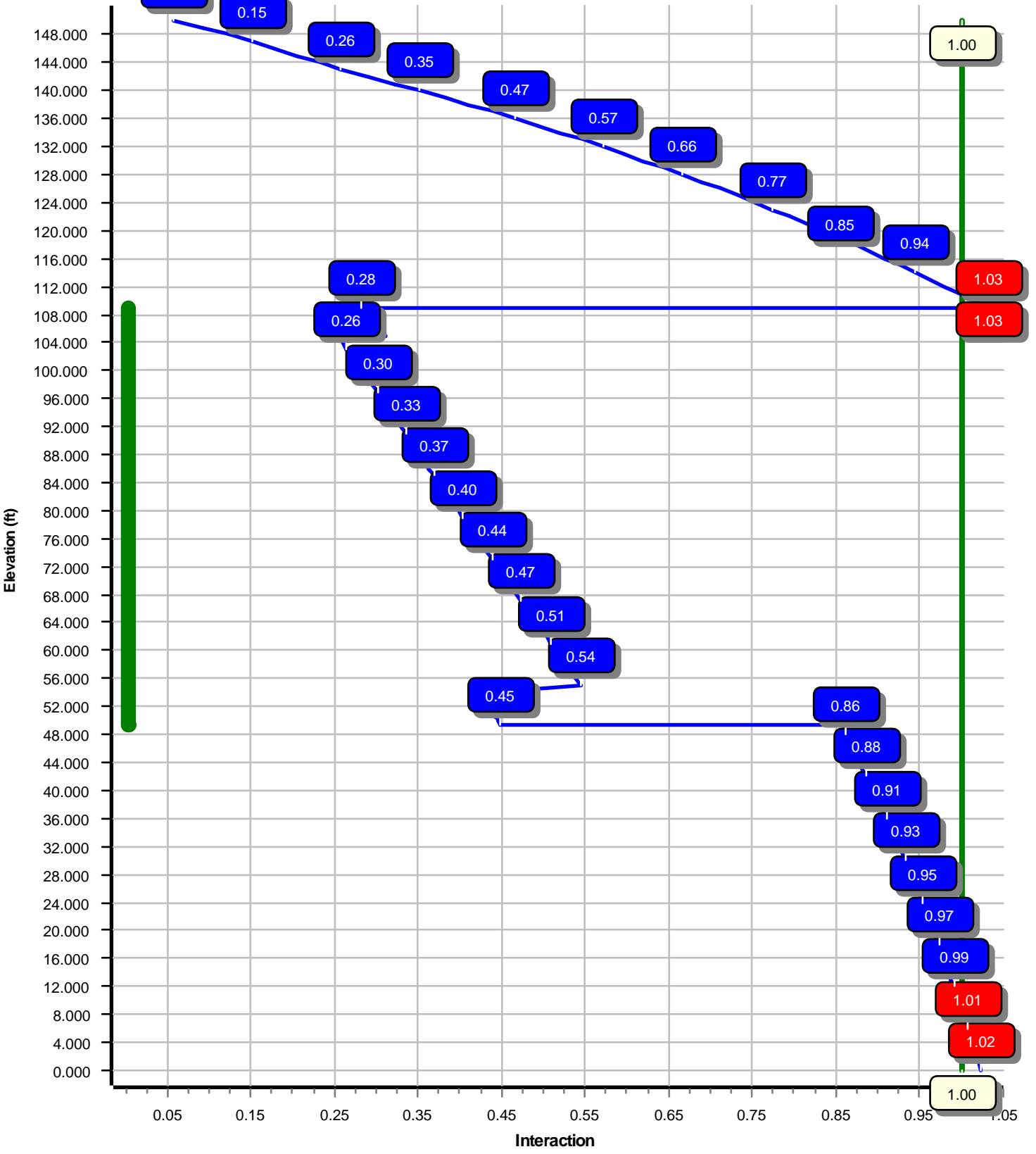
Load Cases	
1.2D + 1.6W	90 mph with No Ice
0.9D + 1.6W	90 mph with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi	40 mph with 0.75 in Radial Ice
(1.2 + 0.2Sds) * DL + E	Seismic Equivalent Lateral Forces Method
(1.2 + 0.2Sds) * DL + E	Seismic Equivalent Modal Analysis Method
(0.9 - 0.2Sds) * DL + E	Seismic (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	2142.08	19.57	32.34
0.9D + 1.6W	2085.22	19.56	24.25
1.2D + 1.0Di + 1.0Wi	557.96	5.08	49.05
(1.2 + 0.2Sds) * DL + E ELFM	113.28	0.81	32.87
(1.2 + 0.2Sds) * DL + E EMAM	184.47	1.26	32.87
(0.9 - 0.2Sds) * DL + E ELFM	109.36	0.81	23.41
(0.9 - 0.2Sds) * DL + E EMAM	177.79	1.26	23.41
1.0D + 1.0W	525.10	4.86	26.96

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 103.06% at 108.9 ft



Site Number: 307538

Code: ANSI/TIA-222-G

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Site Name: Dublin OH, OH

Engineering Number:13619927_C3_02

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Customer: AT&T MOBILITY

Analysis Parameters

Location :	Franklin County, OH	Height (ft) :	150
Code :	ANSI/TIA-222-G	Base Diameter (in) :	37.50
Shape :	12 Sides	Top Diameter (in) :	14.98
Pole Type :	Taper	Taper (in/ft) :	0.156
Pole Manufacturer :	Valmont	Rotation (deg) :	0.00

Ice & Wind Parameters

Structure Class:	II	Design Wind Speed Without Ice:	90 mph
Exposure Category:	B	Design Wind Speed With Ice:	40 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): 3.56

T _L (sec):	12	p:	1	C _s :	0.030
S _s :	0.124	S ₁ :	0.062	C _s Max:	0.030
F _a :	1.600	F _v :	2.400	C _s Min:	0.030
S _{ds} :	0.132	S _{d1} :	0.099		

Load Cases

1.2D + 1.6W	90 mph with No Ice
0.9D + 1.6W	90 mph with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi	40 mph with 0.75 in Radial Ice
(1.2 + 0.2S _{ds}) * DL + E ELFM	Seismic Equivalent Lateral Forces Method
(1.2 + 0.2S _{ds}) * DL + E EMAM	Seismic Equivalent Modal Analysis Method
(0.9 - 0.2S _{ds}) * DL + E ELFM	Seismic (Reduced DL) Equivalent Lateral Forces Method
(0.9 - 0.2S _{ds}) * DL + E EMAM	Seismic (Reduced DL) Equivalent Modal Analysis Method
1.0D + 1.0W	Serviceability 60 mph

Site Number: 307538

Code: ANSI/TIA-222-G

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Site Name: Dublin OH, OH

Engineering Number:13619927_C3_02

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Customer: AT&T MOBILITY

Shaft Section Properties

Sect Info	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	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)
1-12	55.000	0.3438	65		0.00	6,809	37.50	0.00	41.13	7247.4	26.55	109.09	28.92	55.00	31.63	3297.4	19.86	84.14	0.155973
2-12	54.917	0.2500	65	Slip	59.00	3,859	30.18	50.08	24.10	2757.2	29.68	120.75	21.62	105.00	17.21	1003.2	20.50	86.49	0.155973
3-12	49.000	0.1875	65	Slip	48.00	1,874	22.62	101.00	13.54	870.1	29.65	120.65	14.97	150.00	8.93	249.4	18.73	79.89	0.155973
Shaft Weight						12,542													

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
150.00	Nokia AirScale RRH 4T4R B5	3	0.75	3.000	35.30	1.286	0.50	74.69	2.040	0.50
150.00	Raycap DC6-48-60-18-8F	3	0.75	3.000	31.80	1.470	1.00	93.60	2.170	1.00
150.00	Nokia AirScale Dual RRH 4T4R	3	0.75	3.000	66.10	2.218	0.50	124.08	3.236	0.50
150.00	Nokia AirScale Dual RRH 4T4R	3	0.75	3.000	101.40	3.683	0.68	328.83	4.996	0.68
150.00	Alcatel-Lucent RRH4x25-WCS	3	0.75	3.000	91.00	3.835	0.75	210.83	5.264	0.75
150.00	Nokia AEQK AirScale MAA	3	0.75	3.000	99.20	4.351	0.66	215.50	5.754	0.66
150.00	Generic Flat Side Arm	3	1.00	0.000	187.50	6.300	1.00	320.96	9.421	1.00
150.00	Commscope SBNHH-1D65C	3	0.75	3.000	66.10	11.380	0.70	295.03	14.612	0.70
150.00	Commscope NNH4-65C-R6	6	0.75	3.000	102.10	17.073	0.64	430.92	20.766	0.64
150.00	Round Platform w/ Handrails	1	1.00	0.000	2,000.00	27.200	1.00	3,298.01	51.686	1.00
143.00	Generic TTA	1	0.80	0.000	10.00	1.200	1.00	45.90	1.923	1.00
143.00	Generic 56" x 6" Panel	6	0.80	0.000	30.00	3.440	0.68	96.17	5.299	0.68
143.00	Round Low Profile Platform	1	1.00	0.000	1,500.00	21.700	1.00	2,145.90	40.840	1.00
Totals	Num Loadings:13	39			6,337.80			13,643.00		

Linear Appurtenance Properties

Load Case Azimuth (deg) :

Elev From (ft)	Elev To (ft)	Qty	Description	Coax Dia (in)	Coax Wt (lb/ft)	Max Coax / Flat	Dist Between Rows (in)	Dist Between Cols (in)	Dist Azimuth (deg)	Dist From Face (in)	Dist Exposed To Wind Carrier
0.00	150.00	2	0.39" (10mm) Fiber	0.39	0.06	N	1	0.00	0.00	210	Y AT&T MOBILITY
0.00	150.00	1	0.78" (19.7mm) 8 AWG	0.78	0.59	N	1	0.00	0.00	190	Y AT&T MOBILITY
0.00	150.00	6	0.96" (24.3mm) Cable	0.96	0.88	N	0	0.00	0.00	0	N AT&T MOBILITY
0.00	150.00	12	1 5/8" Coax	1.98	0.82	N	0	0.00	0.00	0	N AT&T MOBILITY
0.00	150.00	3	1 5/8" Coax	1.98	0.82	N	0	0.00	0.00	0	N OTHER
0.00	150.00	1	7/8" Coax	1.09	0.33	N	0	0.00	0.00	0	N AT&T MOBILITY
43.50	113.50	1	#20 Dywidag	4.00	4.68	N	1	0.00	0.00	180	Y
43.50	113.50	1	#20 Dywidag	4.00	4.68	N	1	0.00	0.00	270	Y
43.50	113.50	1	#20 Dywidag	4.00	4.68	N	1	0.00	0.00	0	Y
43.50	113.50	1	#20 Dywidag	4.00	4.68	N	1	0.00	0.00	90	Y

Additional Steel

Elev From (ft)	Elev To (ft)	Qty	Description	Fy (ksi)	Offset (in)	Intermediate Connections			Connectors	Continuation?
						Description	Spacing (in)	Len (in)		
49.42	108.9	4	SOL #20 All Thread	80	2.19	6" Angle Bracket	30.0	3.31	5/8" A36 U-Bolt	No

Segment Properties (Max Len : 1.ft)

Seg Top Elev (ft)	Description	Thick (in)	Flat Dia (in)	Area (in ²)	Ix (in ⁴)	W/t Ratio	D/t Ratio	F'y (ksi)	S (in ³)	Z (in ³)	Weight (lb)	Additional Reinforcing		
												Area (in ²)	Ix (in ⁴)	Weight (lb)
0.00		0.3438	37.500	41.127	7,247.4	26.55	109.09	75.8	373.4	0.0	0.0			
1.00		0.3438	37.344	40.955	7,156.5	26.43	108.64	75.9	370.2	0.0	139.7			
2.00		0.3438	37.188	40.782	7,066.4	26.31	108.18	76.0	367.1	0.0	139.1			
3.00		0.3438	37.032	40.609	6,977.0	26.19	107.73	76.2	364.0	0.0	138.5			
4.00		0.3438	36.876	40.437	6,888.4	26.07	107.28	76.3	360.9	0.0	137.9			
5.00		0.3438	36.720	40.264	6,800.5	25.94	106.82	76.4	357.8	0.0	137.3			
6.00		0.3438	36.564	40.091	6,713.4	25.82	106.37	76.6	354.7	0.0	136.7			
7.00		0.3438	36.408	39.919	6,627.1	25.70	105.91	76.7	351.6	0.0	136.1			
8.00		0.3438	36.252	39.746	6,541.5	25.58	105.46	76.8	348.6	0.0	135.5			
9.00		0.3438	36.096	39.574	6,456.6	25.46	105.01	76.9	345.6	0.0	135.0			
10.00		0.3438	35.940	39.401	6,372.5	25.34	104.55	77.1	342.5	0.0	134.4			
11.00		0.3438	35.784	39.228	6,289.1	25.21	104.10	77.2	339.5	0.0	133.8			
12.00		0.3438	35.628	39.056	6,206.4	25.09	103.65	77.3	336.5	0.0	133.2			
13.00		0.3438	35.472	38.883	6,124.4	24.97	103.19	77.5	333.5	0.0	132.6			
14.00		0.3438	35.316	38.710	6,043.2	24.85	102.74	77.6	330.6	0.0	132.0			
15.00		0.3438	35.160	38.538	5,962.7	24.73	102.28	77.7	327.6	0.0	131.4			
16.00		0.3438	35.004	38.365	5,883.0	24.61	101.83	77.9	324.7	0.0	130.8			
17.00		0.3438	34.848	38.192	5,803.9	24.48	101.38	78.0	321.7	0.0	130.3			
18.00		0.3438	34.692	38.020	5,725.5	24.36	100.92	78.1	318.8	0.0	129.7			
19.00		0.3438	34.537	37.847	5,647.9	24.24	100.47	78.3	315.9	0.0	129.1			
20.00		0.3438	34.381	37.674	5,571.0	24.12	100.02	78.4	313.0	0.0	128.5			
21.00		0.3438	34.225	37.502	5,494.7	24.00	99.56	78.5	310.2	0.0	127.9			
22.00		0.3438	34.069	37.329	5,419.2	23.88	99.11	78.7	307.3	0.0	127.3			
23.00		0.3438	33.913	37.157	5,344.3	23.76	98.65	78.8	304.4	0.0	126.7			
24.00		0.3438	33.757	36.984	5,270.2	23.63	98.20	78.9	301.6	0.0	126.1			
25.00		0.3438	33.601	36.811	5,196.7	23.51	97.75	79.1	298.8	0.0	125.6			
26.00		0.3438	33.445	36.639	5,124.0	23.39	97.29	79.2	296.0	0.0	125.0			
27.00		0.3438	33.289	36.466	5,051.9	23.27	96.84	79.3	293.2	0.0	124.4			
28.00		0.3438	33.133	36.293	4,980.5	23.15	96.39	79.5	290.4	0.0	123.8			
29.00		0.3438	32.977	36.121	4,909.7	23.03	95.93	79.6	287.6	0.0	123.2			
30.00		0.3438	32.821	35.948	4,839.7	22.90	95.48	79.7	284.9	0.0	122.6			
31.00		0.3438	32.665	35.775	4,770.3	22.78	95.02	79.9	282.1	0.0	122.0			
32.00		0.3438	32.509	35.603	4,701.5	22.66	94.57	80.0	279.4	0.0	121.4			
33.00		0.3438	32.353	35.430	4,633.5	22.54	94.12	80.1	276.7	0.0	120.9			
34.00		0.3438	32.197	35.257	4,566.1	22.42	93.66	80.3	274.0	0.0	120.3			
35.00		0.3438	32.041	35.085	4,499.3	22.30	93.21	80.4	271.3	0.0	119.7			
36.00		0.3438	31.885	34.912	4,433.2	22.17	92.76	80.5	268.6	0.0	119.1			
37.00		0.3438	31.729	34.740	4,367.8	22.05	92.30	80.7	265.9	0.0	118.5			
38.00		0.3438	31.573	34.567	4,303.0	21.93	91.85	80.8	263.3	0.0	117.9			
39.00		0.3438	31.417	34.394	4,238.8	21.81	91.40	80.9	260.6	0.0	117.3			
40.00		0.3438	31.261	34.222	4,175.3	21.69	90.94	81.1	258.0	0.0	116.7			
41.00		0.3438	31.105	34.049	4,112.4	21.57	90.49	81.2	255.4	0.0	116.2			
42.00		0.3438	30.949	33.876	4,050.2	21.44	90.03	81.3	252.8	0.0	115.6			
43.00		0.3438	30.793	33.704	3,988.6	21.32	89.58	81.5	250.2	0.0	115.0			
44.00		0.3438	30.637	33.531	3,927.6	21.20	89.13	81.6	247.7	0.0	114.4			
45.00		0.3438	30.481	33.358	3,867.3	21.08	88.67	81.7	245.1	0.0	113.8			
46.00		0.3438	30.325	33.186	3,807.5	20.96	88.22	81.9	242.6	0.0	113.2			
47.00		0.3438	30.169	33.013	3,748.4	20.84	87.77	81.9	240.0	0.0	112.6			
48.00		0.3438	30.013	32.840	3,689.9	20.72	87.31	81.9	237.5	0.0	112.0			
49.00		0.3438	29.857	32.668	3,632.0	20.59	86.86	81.9	235.0	0.0	111.5			
49.42	Reinf Bottom	0.3438	29.792	32.596	3,608.1	20.54	86.67	81.9	234.0	0.0	46.3			
50.00		0.3438	29.701	32.495	3,574.7	20.47	86.40	81.9	232.5	0.0	64.6	19.64	3,292	39.0
50.08	Bot - Section 2	0.3438	29.688	32.481	3,570.0	20.46	86.37	81.9	232.3	0.0	9.2	19.64	3,290	5.6
51.00		0.3438	29.545	32.323	3,518.1	20.35	85.95	81.9	230.0	0.0	176.1	19.64	3,355	61.2
52.00		0.3438	29.389	32.150	3,462.0	20.23	85.50	81.9	227.6	0.0	191.1	19.64	3,326	66.8
53.00		0.3438	29.233	31.977	3,406.5	20.11	85.04	81.9	225.1	0.0	190.1	19.64	3,298	66.8
54.00		0.3438	29.077	31.805	3,351.7	19.99	84.59	81.9	222.7	0.0	189.1	19.64	3,270	66.8
55.00	Top - Section 1	0.2500	29.421	23.483	2,550.7	28.85	117.69	73.2	167.5	0.0	188.1	19.64	3,242	66.8

Site Number: 307538

Code: ANSI/TIA-222-G

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Site Name: Dublin OH, OH

Engineering Number:13619927_C3_02

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Customer: AT&T MOBILITY

119.0	0.1875	19.814	11.850	582.6	25.64	105.68	76.8	56.8	0.0	40.5
120.0	0.1875	19.658	11.755	568.8	25.41	104.84	77.0	55.9	0.0	40.2
121.0	0.1875	19.502	11.661	555.3	25.19	104.01	77.2	55.0	0.0	39.8
122.0	0.1875	19.346	11.567	541.9	24.97	103.18	77.5	54.1	0.0	39.5
123.0	0.1875	19.190	11.473	528.8	24.74	102.35	77.7	53.2	0.0	39.2
124.0	0.1875	19.034	11.379	515.9	24.52	101.52	78.0	52.4	0.0	38.9
125.0	0.1875	18.878	11.285	503.2	24.30	100.68	78.2	51.5	0.0	38.6
126.0	0.1875	18.722	11.190	490.7	24.08	99.85	78.5	50.6	0.0	38.2
127.0	0.1875	18.566	11.096	478.4	23.85	99.02	78.7	49.8	0.0	37.9
128.0	0.1875	18.410	11.002	466.3	23.63	98.19	78.9	48.9	0.0	37.6
129.0	0.1875	18.254	10.908	454.5	23.41	97.36	79.2	48.1	0.0	37.3
130.0	0.1875	18.098	10.814	442.8	23.18	96.53	79.4	47.3	0.0	37.0
131.0	0.1875	17.942	10.720	431.3	22.96	95.69	79.7	46.4	0.0	36.6
132.0	0.1875	17.787	10.625	420.1	22.74	94.86	79.9	45.6	0.0	36.3
133.0	0.1875	17.631	10.531	409.0	22.52	94.03	80.2	44.8	0.0	36.0
134.0	0.1875	17.475	10.437	398.1	22.29	93.20	80.4	44.0	0.0	35.7
135.0	0.1875	17.319	10.343	387.4	22.07	92.37	80.6	43.2	0.0	35.4
136.0	0.1875	17.163	10.249	376.9	21.85	91.53	80.9	42.4	0.0	35.0
137.0	0.1875	17.007	10.155	366.7	21.62	90.70	81.1	41.6	0.0	34.7
138.0	0.1875	16.851	10.060	356.5	21.40	89.87	81.4	40.9	0.0	34.4
139.0	0.1875	16.695	9.966	346.6	21.18	89.04	81.6	40.1	0.0	34.1
140.0	0.1875	16.539	9.872	336.9	20.96	88.21	81.9	39.4	0.0	33.8
141.0	0.1875	16.383	9.778	327.3	20.73	87.37	81.9	38.6	0.0	33.4
142.0	0.1875	16.227	9.684	318.0	20.51	86.54	81.9	37.9	0.0	33.1
143.0	0.1875	16.071	9.590	308.8	20.29	85.71	81.9	37.1	0.0	32.8
144.0	0.1875	15.915	9.495	299.8	20.06	84.88	81.9	36.4	0.0	32.5
145.0	0.1875	15.759	9.401	291.0	19.84	84.05	81.9	35.7	0.0	32.2
146.0	0.1875	15.603	9.307	282.3	19.62	83.22	81.9	35.0	0.0	31.8
147.0	0.1875	15.447	9.213	273.8	19.40	82.38	81.9	34.2	0.0	31.5
148.0	0.1875	15.291	9.119	265.5	19.17	81.55	81.9	33.5	0.0	31.2
149.0	0.1875	15.135	9.025	257.4	18.95	80.72	81.9	32.9	0.0	30.9
150.0	0.1875	14.979	8.930	249.4	18.73	79.89	81.9	32.2	0.0	30.5

12,541.6

3,976.0

Site Number: 307538

Code: ANSI/TIA-222-G

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Site Name: Dublin OH, OH

Engineering Number:13619927_C3_02

4/14/2021 6:24:56 PM

Customer: AT&T MOBILITY

Load Case: 1.2D + 1.6W	90 mph with No Ice	39 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		39.2	0.0					0.0	0.0	39.2	0.0	0.0	0.0
1.00		78.2	167.6					0.0	22.3	78.2	189.9	0.0	0.0
2.00		77.9	166.9					0.0	22.3	77.9	189.2	0.0	0.0
3.00		77.5	166.2					0.0	22.3	77.5	188.5	0.0	0.0
4.00		77.2	165.5					0.0	22.3	77.2	187.8	0.0	0.0
5.00		76.9	164.8					0.0	22.3	76.9	187.1	0.0	0.0
6.00		76.6	164.1					0.0	22.3	76.6	186.4	0.0	0.0
7.00		76.2	163.4					0.0	22.3	76.2	185.7	0.0	0.0
8.00		75.9	162.6					0.0	22.3	75.9	185.0	0.0	0.0
9.00		75.6	161.9					0.0	22.3	75.6	184.3	0.0	0.0
10.00		75.3	161.2					0.0	22.3	75.3	183.6	0.0	0.0
11.00		74.9	160.5					0.0	22.3	74.9	182.9	0.0	0.0
12.00		74.6	159.8					0.0	22.3	74.6	182.2	0.0	0.0
13.00		74.3	159.1					0.0	22.3	74.3	181.5	0.0	0.0
14.00		73.9	158.4					0.0	22.3	73.9	180.8	0.0	0.0
15.00		73.6	157.7					0.0	22.3	73.6	180.1	0.0	0.0
16.00		73.3	157.0					0.0	22.3	73.3	179.4	0.0	0.0
17.00		73.0	156.3					0.0	22.3	73.0	178.6	0.0	0.0
18.00		72.6	155.6					0.0	22.3	72.6	177.9	0.0	0.0
19.00		72.3	154.9					0.0	22.3	72.3	177.2	0.0	0.0
20.00		72.0	154.2					0.0	22.3	72.0	176.5	0.0	0.0
21.00		71.7	153.5					0.0	22.3	71.7	175.8	0.0	0.0
22.00		71.3	152.8					0.0	22.3	71.3	175.1	0.0	0.0
23.00		71.0	152.1					0.0	22.3	71.0	174.4	0.0	0.0
24.00		70.7	151.4					0.0	22.3	70.7	173.7	0.0	0.0
25.00		70.4	150.7					0.0	22.3	70.4	173.0	0.0	0.0
26.00		70.0	150.0					0.0	22.3	70.0	172.3	0.0	0.0
27.00		69.7	149.3					0.0	22.3	69.7	171.6	0.0	0.0
28.00		69.4	148.6					0.0	22.3	69.4	170.9	0.0	0.0
29.00		69.0	147.8					0.0	22.3	69.0	170.2	0.0	0.0
30.00		68.9	147.1					0.0	22.3	68.9	169.5	0.0	0.0
31.00		69.1	146.4					0.0	22.3	69.1	168.8	0.0	0.0
32.00		69.4	145.7					0.0	22.3	69.4	168.1	0.0	0.0
33.00		69.7	145.0					0.0	22.3	69.7	167.4	0.0	0.0
34.00		69.9	144.3					0.0	22.3	69.9	166.7	0.0	0.0
35.00		70.2	143.6					0.0	22.3	70.2	166.0	0.0	0.0
36.00		70.4	142.9					0.0	22.3	70.4	165.3	0.0	0.0
37.00		70.6	142.2					0.0	22.3	70.6	164.5	0.0	0.0
38.00		70.8	141.5					0.0	22.3	70.8	163.8	0.0	0.0
39.00		71.0	140.8					0.0	22.3	71.0	163.1	0.0	0.0
40.00		71.1	140.1					0.0	22.3	71.1	162.4	0.0	0.0
41.00		71.3	139.4					0.0	22.3	71.3	161.7	0.0	0.0
42.00		71.4	138.7					0.0	22.3	71.4	161.0	0.0	0.0
43.00		78.7	138.0					0.0	22.3	78.7	160.3	0.0	0.0
44.00		85.9	137.3					21.6	33.6	107.6	170.8	0.0	0.0
45.00		86.1	136.6					21.7	44.8	107.8	181.4	0.0	0.0
46.00		86.2	135.9					21.9	44.8	108.0	180.7	0.0	0.0
47.00		86.2	135.2					22.0	44.8	108.3	180.0	0.0	0.0

Site Number: 307538

Code: ANSI/TIA-222-G

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Site Name: Dublin OH, OH

Engineering Number:13619927_C3_02

4/14/2021 6:25:04 PM

Customer: AT&T MOBILITY

Load Case: 1.2D + 1.6W		90 mph with No Ice				39 Iterations			
Gust Response Factor :1.10						Wind Importance Factor 1.00			
Dead Load Factor :1.20									
Wind Load Factor :1.60									

48.00		86.3	134.5	22.2	44.8	108.5	179.3	0.0	0.0
49.00		61.2	133.7	22.3	44.8	83.5	178.6	0.0	0.0
49.42	Reinf Bottom	43.2	55.5	9.3	18.7	52.5	74.2	0.0	0.0
50.00		28.8	77.5	13.1	72.9	41.9	150.4	0.0	0.0
50.08	Bot - Section 2	43.9	11.1	1.9	10.4	45.8	21.5	0.0	0.0
51.00		84.3	211.3	20.7	114.6	104.9	325.8	0.0	0.0
52.00		88.0	229.3	22.7	125.0	110.6	354.3	0.0	0.0
53.00		88.0	228.1	22.8	125.0	110.8	353.1	0.0	0.0
54.00		88.0	226.9	22.9	125.0	110.9	351.8	0.0	0.0
55.00	Top - Section 1	88.0	225.7	23.0	125.0	111.0	350.6	0.0	0.0
56.00		88.0	95.6	23.2	125.0	111.1	220.6	0.0	0.0
57.00		87.9	95.1	23.3	125.0	111.2	220.1	0.0	0.0
58.00		87.9	94.6	23.4	125.0	111.3	219.6	0.0	0.0
59.00		87.9	94.1	23.5	125.0	111.4	219.1	0.0	0.0
60.00		87.8	93.6	23.6	125.0	111.4	218.5	0.0	0.0
61.00		87.7	93.1	23.7	125.0	111.5	218.0	0.0	0.0
62.00		87.7	92.6	23.9	125.0	111.5	217.5	0.0	0.0
63.00		87.6	92.0	24.0	125.0	111.5	217.0	0.0	0.0
64.00		87.5	91.5	24.1	125.0	111.6	216.5	0.0	0.0
65.00		87.4	91.0	24.2	125.0	111.6	216.0	0.0	0.0
66.00		87.3	90.5	24.3	125.0	111.6	215.5	0.0	0.0
67.00		87.2	90.0	24.4	125.0	111.6	215.0	0.0	0.0
68.00		87.0	89.5	24.5	125.0	111.5	214.4	0.0	0.0
69.00		86.9	89.0	24.6	125.0	111.5	213.9	0.0	0.0
70.00		86.8	88.5	24.7	125.0	111.5	213.4	0.0	0.0
71.00		86.6	87.9	24.8	125.0	111.4	212.9	0.0	0.0
72.00		86.4	87.4	24.9	125.0	111.4	212.4	0.0	0.0
73.00		86.3	86.9	25.0	125.0	111.3	211.9	0.0	0.0
74.00		86.1	86.4	25.1	125.0	111.2	211.4	0.0	0.0
75.00		85.9	85.9	25.2	125.0	111.1	210.9	0.0	0.0
76.00		85.7	85.4	25.3	125.0	111.0	210.3	0.0	0.0
77.00		85.6	84.9	25.4	125.0	110.9	209.8	0.0	0.0
78.00		85.4	84.4	25.5	125.0	110.8	209.3	0.0	0.0
79.00		85.2	83.8	25.6	125.0	110.7	208.8	0.0	0.0
80.00		84.9	83.3	25.7	125.0	110.6	208.3	0.0	0.0
81.00		84.7	82.8	25.8	125.0	110.5	207.8	0.0	0.0
82.00		84.5	82.3	25.9	125.0	110.3	207.3	0.0	0.0
83.00		84.3	81.8	25.9	125.0	110.2	206.8	0.0	0.0
84.00		84.0	81.3	26.0	125.0	110.1	206.2	0.0	0.0
85.00		83.8	80.8	26.1	125.0	109.9	205.7	0.0	0.0
86.00		83.5	80.3	26.2	125.0	109.7	205.2	0.0	0.0
87.00		83.3	79.7	26.3	125.0	109.6	204.7	0.0	0.0
88.00		83.0	79.2	26.4	125.0	109.4	204.2	0.0	0.0
89.00		82.7	78.7	26.5	125.0	109.2	203.7	0.0	0.0
90.00		82.5	78.2	26.6	125.0	109.0	203.2	0.0	0.0
91.00		82.2	77.7	26.6	125.0	108.8	202.7	0.0	0.0
92.00		81.9	77.2	26.7	125.0	108.6	202.1	0.0	0.0
93.00		81.6	76.7	26.8	125.0	108.4	201.6	0.0	0.0
94.00		81.3	76.2	26.9	125.0	108.2	201.1	0.0	0.0
95.00		81.0	75.6	27.0	125.0	108.0	200.6	0.0	0.0
96.00		80.7	75.1	27.1	125.0	107.8	200.1	0.0	0.0
97.00		80.4	74.6	27.1	125.0	107.6	199.6	0.0	0.0
98.00		80.1	74.1	27.2	125.0	107.3	199.1	0.0	0.0
99.00		79.8	73.6	27.3	125.0	107.1	198.6	0.0	0.0
100.00		79.5	73.1	27.4	125.0	106.8	198.0	0.0	0.0
101.00	Bot - Section 3	79.8	72.6	27.4	125.0	107.3	197.5	0.0	0.0
102.00		80.1	127.2	27.5	125.0	107.7	252.1	0.0	0.0

Site Number: 307538

Code: ANSI/TIA-222-G

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Site Name: Dublin OH, OH

Engineering Number:13619927_C3_02

4/14/2021 6:25:04 PM

Customer: AT&T MOBILITY

Load Case: 1.2D + 1.6W		90 mph with No Ice						39 Iterations					
Gust Response Factor :1.10				Wind Importance Factor 1.00									
Dead Load Factor :1.20													
Wind Load Factor :1.60													
103.00		79.8	126.3		27.6	125.0	107.4	251.2	0.0	0.0			
104.00		79.5	125.4		27.7	125.0	107.1	250.3	0.0	0.0			
105.00	Top - Section 2	79.1	124.5		27.8	125.0	106.9	249.4	0.0	0.0			
106.00		78.8	53.6		27.8	125.0	106.6	178.5	0.0	0.0			
107.00		78.4	53.2		27.9	125.0	106.3	178.2	0.0	0.0			
108.00		75.6	52.8		28.0	125.0	103.6	177.8	0.0	0.0			
108.94	Reinf. Top	38.9	49.2		26.3	117.2	65.2	166.3	0.0	0.0			
109.00		41.2	3.3		1.8	2.8	42.9	6.1	0.0	0.0			
110.00		77.3	52.0		28.1	44.8	105.5	96.8	0.0	0.0			
111.00		77.0	51.7		28.2	44.8	105.2	96.5	0.0	0.0			
112.00		76.6	51.3		28.3	44.8	104.9	96.1	0.0	0.0			
113.00		76.2	50.9		28.3	44.8	104.6	95.7	0.0	0.0			
114.00		69.5	50.5		28.4	33.6	98.0	84.1	0.0	0.0			
115.00		62.9	50.1		0.0	22.3	62.9	72.5	0.0	0.0			
116.00		62.5	49.7		0.0	22.3	62.5	72.1	0.0	0.0			
117.00		62.2	49.3		0.0	22.3	62.2	71.7	0.0	0.0			
118.00		61.9	49.0		0.0	22.3	61.9	71.3	0.0	0.0			
119.00		61.6	48.6		0.0	22.3	61.6	70.9	0.0	0.0			
120.00		61.2	48.2		0.0	22.3	61.2	70.5	0.0	0.0			
121.00		60.9	47.8		0.0	22.3	60.9	70.2	0.0	0.0			
122.00		60.5	47.4		0.0	22.3	60.5	69.8	0.0	0.0			
123.00		60.2	47.0		0.0	22.3	60.2	69.4	0.0	0.0			
124.00		59.8	46.7		0.0	22.3	59.8	69.0	0.0	0.0			
125.00		59.5	46.3		0.0	22.3	59.5	68.6	0.0	0.0			
126.00		59.1	45.9		0.0	22.3	59.1	68.2	0.0	0.0			
127.00		58.8	45.5		0.0	22.3	58.8	67.8	0.0	0.0			
128.00		58.4	45.1		0.0	22.3	58.4	67.5	0.0	0.0			
129.00		58.0	44.7		0.0	22.3	58.0	67.1	0.0	0.0			
130.00		57.7	44.3		0.0	22.3	57.7	66.7	0.0	0.0			
131.00		57.3	44.0		0.0	22.3	57.3	66.3	0.0	0.0			
132.00		56.9	43.6		0.0	22.3	56.9	65.9	0.0	0.0			
133.00		56.5	43.2		0.0	22.3	56.5	65.5	0.0	0.0			
134.00		56.2	42.8		0.0	22.3	56.2	65.2	0.0	0.0			
135.00		55.8	42.4		0.0	22.3	55.8	64.8	0.0	0.0			
136.00		55.4	42.0		0.0	22.3	55.4	64.4	0.0	0.0			
137.00		55.0	41.7		0.0	22.3	55.0	64.0	0.0	0.0			
138.00		54.6	41.3		0.0	22.3	54.6	63.6	0.0	0.0			
139.00		54.2	40.9		0.0	22.3	54.2	63.2	0.0	0.0			
140.00		53.8	40.5		0.0	22.3	53.8	62.8	0.0	0.0			
141.00		53.4	40.1		0.0	22.3	53.4	62.5	0.0	0.0			
142.00		53.0	39.7		0.0	22.3	53.0	62.1	0.0	0.0			
143.00	Appurtenance(s)	52.6	39.3	1,286.0	0.0	0.0	2,028.0	0.0	22.3	1,338.6	2,089.7	0.0	0.0
144.00		52.2	39.0		0.0	0.0	0.0	0.0	22.3	52.2	61.3	0.0	0.0
145.00		51.8	38.6		0.0	0.0	0.0	0.0	22.3	51.8	60.9	0.0	0.0
146.00		51.4	38.2		0.0	0.0	0.0	0.0	22.3	51.4	60.5	0.0	0.0
147.00		51.0	37.8		0.0	0.0	0.0	0.0	22.3	51.0	60.2	0.0	0.0
148.00		50.6	37.4		0.0	0.0	0.0	0.0	22.3	50.6	59.8	0.0	0.0
149.00		50.1	37.0		0.0	0.0	0.0	0.0	22.3	50.1	59.4	0.0	0.0
150.00	Appurtenance(s)	25.0	36.7	5,368.2	0.0	10,783.9	5,577.4	0.0	22.3	5,393.1	5,636.4	0.0	0.0
Totals:								19,582.7	32,350.5	0.00	0.00		

Load Case: 1.2D + 1.6W

90 mph with No Ice

39 Iterations

Gust Response Factor :1.10
 Dead Load Factor :1.20
 Wind Load Factor :1.60

Wind 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	-32.34	-19.57	0.00	-2,142.08	0.00	2,142.08	2,804.10	1,402.05	4,295.35	2,121.31	0.00	0.00	1.022
1.00	-32.12	-19.53	0.00	-2,122.51	0.00	2,122.51	2,797.21	1,398.61	4,266.65	2,107.14	0.01	-0.08	1.019
2.00	-31.90	-19.50	0.00	-2,102.98	0.00	2,102.98	2,790.29	1,395.14	4,237.98	2,092.98	0.04	-0.17	1.016
3.00	-31.68	-19.47	0.00	-2,083.48	0.00	2,083.48	2,783.32	1,391.66	4,209.34	2,078.83	0.08	-0.25	1.014
4.00	-31.47	-19.44	0.00	-2,064.00	0.00	2,064.00	2,776.32	1,388.16	4,180.73	2,064.70	0.14	-0.34	1.011
5.00	-31.25	-19.41	0.00	-2,044.57	0.00	2,044.57	2,769.27	1,384.63	4,152.14	2,050.59	0.22	-0.42	1.009
6.00	-31.04	-19.38	0.00	-2,025.16	0.00	2,025.16	2,762.18	1,381.09	4,123.59	2,036.49	0.32	-0.51	1.006
7.00	-30.82	-19.34	0.00	-2,005.78	0.00	2,005.78	2,755.05	1,377.52	4,095.07	2,022.40	0.44	-0.59	1.003
8.00	-30.61	-19.31	0.00	-1,986.44	0.00	1,986.44	2,747.88	1,373.94	4,066.58	2,008.33	0.57	-0.68	1.000
9.00	-30.40	-19.28	0.00	-1,967.12	0.00	1,967.12	2,740.66	1,370.33	4,038.12	1,994.27	0.72	-0.76	0.998
10.00	-30.19	-19.25	0.00	-1,947.84	0.00	1,947.84	2,733.41	1,366.70	4,009.69	1,980.24	0.89	-0.85	0.995
11.00	-29.98	-19.22	0.00	-1,928.60	0.00	1,928.60	2,726.11	1,363.06	3,981.30	1,966.21	1.08	-0.94	0.992
12.00	-29.77	-19.18	0.00	-1,909.38	0.00	1,909.38	2,718.78	1,359.39	3,952.94	1,952.21	1.28	-1.02	0.989
13.00	-29.56	-19.15	0.00	-1,890.20	0.00	1,890.20	2,711.40	1,355.70	3,924.62	1,938.22	1.51	-1.11	0.986
14.00	-29.35	-19.12	0.00	-1,871.05	0.00	1,871.05	2,703.98	1,351.99	3,896.34	1,924.25	1.75	-1.20	0.983
15.00	-29.14	-19.09	0.00	-1,851.93	0.00	1,851.93	2,696.52	1,348.26	3,868.09	1,910.30	2.01	-1.29	0.980
16.00	-28.93	-19.05	0.00	-1,832.85	0.00	1,832.85	2,689.02	1,344.51	3,839.88	1,896.37	2.29	-1.37	0.977
17.00	-28.73	-19.02	0.00	-1,813.80	0.00	1,813.80	2,681.48	1,340.74	3,811.71	1,882.46	2.58	-1.46	0.974
18.00	-28.52	-18.99	0.00	-1,794.78	0.00	1,794.78	2,673.89	1,336.95	3,783.58	1,868.57	2.90	-1.55	0.971
19.00	-28.32	-18.95	0.00	-1,775.79	0.00	1,775.79	2,666.27	1,333.13	3,755.48	1,854.69	3.23	-1.64	0.968
20.00	-28.11	-18.92	0.00	-1,756.84	0.00	1,756.84	2,658.60	1,329.30	3,727.43	1,840.84	3.59	-1.73	0.965
21.00	-27.91	-18.89	0.00	-1,737.92	0.00	1,737.92	2,650.89	1,325.45	3,699.43	1,827.01	3.96	-1.82	0.962
22.00	-27.71	-18.85	0.00	-1,719.04	0.00	1,719.04	2,643.14	1,321.57	3,671.46	1,813.20	4.35	-1.91	0.959
23.00	-27.51	-18.82	0.00	-1,700.18	0.00	1,700.18	2,635.35	1,317.68	3,643.54	1,799.41	4.76	-2.00	0.955
24.00	-27.31	-18.78	0.00	-1,681.37	0.00	1,681.37	2,627.52	1,313.76	3,615.66	1,785.64	5.19	-2.09	0.952
25.00	-27.11	-18.75	0.00	-1,662.58	0.00	1,662.58	2,619.65	1,309.83	3,587.83	1,771.90	5.63	-2.18	0.949
26.00	-26.91	-18.72	0.00	-1,643.83	0.00	1,643.83	2,611.74	1,305.87	3,560.05	1,758.17	6.10	-2.27	0.945
27.00	-26.71	-18.68	0.00	-1,625.12	0.00	1,625.12	2,603.78	1,301.89	3,532.31	1,744.47	6.58	-2.36	0.942
28.00	-26.51	-18.65	0.00	-1,606.43	0.00	1,606.43	2,595.79	1,297.89	3,504.62	1,730.80	7.09	-2.45	0.939
29.00	-26.32	-18.61	0.00	-1,587.79	0.00	1,587.79	2,587.75	1,293.88	3,476.97	1,717.15	7.61	-2.54	0.935
30.00	-26.12	-18.58	0.00	-1,569.17	0.00	1,569.17	2,579.67	1,289.84	3,449.38	1,703.52	8.15	-2.63	0.931
31.00	-25.92	-18.54	0.00	-1,550.60	0.00	1,550.60	2,571.55	1,285.78	3,421.84	1,689.92	8.71	-2.72	0.928
32.00	-25.73	-18.51	0.00	-1,532.05	0.00	1,532.05	2,563.39	1,281.70	3,394.34	1,676.34	9.29	-2.81	0.924
33.00	-25.54	-18.47	0.00	-1,513.54	0.00	1,513.54	2,555.19	1,277.59	3,366.90	1,662.79	9.89	-2.91	0.920
34.00	-25.34	-18.43	0.00	-1,495.07	0.00	1,495.07	2,546.95	1,273.47	3,339.51	1,649.26	10.51	-3.00	0.917
35.00	-25.15	-18.40	0.00	-1,476.64	0.00	1,476.64	2,538.66	1,269.33	3,312.18	1,635.76	11.15	-3.09	0.913
36.00	-24.96	-18.36	0.00	-1,458.25	0.00	1,458.25	2,530.34	1,265.17	3,284.90	1,622.29	11.81	-3.18	0.909
37.00	-24.77	-18.32	0.00	-1,439.89	0.00	1,439.89	2,521.97	1,260.98	3,257.67	1,608.84	12.48	-3.28	0.905
38.00	-24.58	-18.28	0.00	-1,421.58	0.00	1,421.58	2,513.56	1,256.78	3,230.50	1,595.42	13.18	-3.37	0.901
39.00	-24.39	-18.24	0.00	-1,403.30	0.00	1,403.30	2,505.11	1,252.56	3,203.38	1,582.03	13.89	-3.46	0.897
40.00	-24.21	-18.19	0.00	-1,385.06	0.00	1,385.06	2,496.62	1,248.31	3,176.33	1,568.67	14.63	-3.56	0.893
41.00	-24.02	-18.15	0.00	-1,366.87	0.00	1,366.87	2,488.09	1,244.04	3,149.33	1,555.33	15.38	-3.65	0.889
42.00	-23.83	-18.11	0.00	-1,348.72	0.00	1,348.72	2,479.52	1,239.76	3,122.39	1,542.03	16.16	-3.75	0.884

Load Case: 1.2D + 1.6W				90 mph with No Ice				39 Iterations					
Gust Response Factor :1.10								Wind Importance Factor 1.00					
Dead Load Factor :1.20													
Wind Load Factor :1.60													
43.00	-23.65	-18.06	0.00	-1,330.61	0.00	1,330.61	2,470.90	1,235.45	3,095.51	1,528.75	16.95	-3.84	0.880
44.00	-23.46	-17.98	0.00	-1,312.55	0.00	1,312.55	2,462.25	1,231.12	3,068.68	1,515.51	17.77	-3.93	0.876
45.00	-23.25	-17.90	0.00	-1,294.57	0.00	1,294.57	2,453.55	1,226.78	3,041.93	1,502.29	18.60	-4.03	0.871
46.00	-23.05	-17.82	0.00	-1,276.67	0.00	1,276.67	2,444.81	1,222.41	3,015.23	1,489.11	19.45	-4.12	0.867
47.00	-22.85	-17.73	0.00	-1,258.86	0.00	1,258.86	2,433.40	1,216.70	2,985.36	1,474.36	20.33	-4.22	0.863
48.00	-22.65	-17.65	0.00	-1,241.13	0.00	1,241.13	2,420.67	1,210.34	2,954.04	1,458.89	21.22	-4.31	0.860
49.00	-22.46	-17.58	0.00	-1,223.48	0.00	1,223.48	2,407.94	1,203.97	2,922.88	1,443.50	22.13	-4.41	0.857
49.42	-22.37	-17.54	0.00	-1,216.16	0.00	1,216.16	2,402.64	1,201.32	2,909.95	1,437.12	22.52	-4.45	0.856
50.00	-22.22	-17.50	0.00	-1,205.92	0.00	1,205.92	2,395.22	1,197.61	2,891.89	1,428.20	23.07	-4.50	0.446
50.08	-22.19	-17.46	0.00	-1,204.47	0.00	1,204.47	2,394.16	1,197.08	2,889.32	1,426.93	23.14	-4.51	0.445
51.00	-21.86	-17.35	0.00	-1,188.46	0.00	1,188.46	2,382.49	1,191.25	2,861.07	1,412.98	24.01	-4.55	0.436
52.00	-21.50	-17.23	0.00	-1,171.12	0.00	1,171.12	2,369.77	1,184.88	2,830.41	1,397.83	24.97	-4.60	0.433
53.00	-21.15	-17.11	0.00	-1,153.89	0.00	1,153.89	2,357.04	1,178.52	2,799.92	1,382.77	25.94	-4.65	0.430
54.00	-20.79	-16.98	0.00	-1,136.79	0.00	1,136.79	2,344.32	1,172.16	2,769.59	1,367.80	26.92	-4.70	0.426
55.00	-20.44	-16.86	0.00	-1,119.80	0.00	1,119.80	1,548.01	774.00	1,862.94	920.03	27.91	-4.75	0.544
56.00	-20.21	-16.75	0.00	-1,102.94	0.00	1,102.94	1,543.56	771.78	1,847.57	912.45	28.90	-4.80	0.538
57.00	-19.98	-16.64	0.00	-1,086.19	0.00	1,086.19	1,539.08	769.54	1,832.21	904.86	29.91	-4.85	0.532
58.00	-19.76	-16.53	0.00	-1,069.55	0.00	1,069.55	1,534.55	767.28	1,816.87	897.28	30.93	-4.90	0.526
59.00	-19.53	-16.42	0.00	-1,053.02	0.00	1,053.02	1,529.98	764.99	1,801.53	889.71	31.97	-4.96	0.520
60.00	-19.31	-16.31	0.00	-1,036.60	0.00	1,036.60	1,525.38	762.69	1,786.21	882.14	33.01	-5.01	0.514
61.00	-19.09	-16.19	0.00	-1,020.30	0.00	1,020.30	1,520.73	760.36	1,770.89	874.58	34.07	-5.07	0.508
62.00	-18.87	-16.08	0.00	-1,004.10	0.00	1,004.10	1,516.03	758.02	1,755.59	867.02	35.13	-5.12	0.502
63.00	-18.65	-15.97	0.00	-988.02	0.00	988.02	1,511.30	755.65	1,740.30	859.47	36.21	-5.17	0.496
64.00	-18.43	-15.85	0.00	-972.06	0.00	972.06	1,506.53	753.26	1,725.03	851.93	37.30	-5.23	0.490
65.00	-18.21	-15.74	0.00	-956.20	0.00	956.20	1,501.71	750.86	1,709.77	844.39	38.39	-5.28	0.484
66.00	-17.99	-15.63	0.00	-940.46	0.00	940.46	1,496.86	748.43	1,694.53	836.87	39.50	-5.33	0.478
67.00	-17.77	-15.51	0.00	-924.84	0.00	924.84	1,491.96	745.98	1,679.31	829.35	40.63	-5.38	0.472
68.00	-17.55	-15.40	0.00	-909.33	0.00	909.33	1,487.02	743.51	1,664.10	821.84	41.76	-5.44	0.466
69.00	-17.34	-15.28	0.00	-893.93	0.00	893.93	1,482.04	741.02	1,648.91	814.33	42.90	-5.49	0.460
70.00	-17.12	-15.16	0.00	-878.65	0.00	878.65	1,477.02	738.51	1,633.74	806.84	44.05	-5.54	0.455
71.00	-16.91	-15.05	0.00	-863.49	0.00	863.49	1,471.96	735.98	1,618.59	799.36	45.22	-5.59	0.449
72.00	-16.69	-14.93	0.00	-848.44	0.00	848.44	1,466.86	733.43	1,603.46	791.89	46.39	-5.64	0.443
73.00	-16.48	-14.81	0.00	-833.51	0.00	833.51	1,461.71	730.86	1,588.35	784.42	47.58	-5.69	0.437
74.00	-16.27	-14.70	0.00	-818.70	0.00	818.70	1,456.52	728.26	1,573.26	776.97	48.77	-5.74	0.431
75.00	-16.06	-14.58	0.00	-804.01	0.00	804.01	1,451.30	725.65	1,558.20	769.54	49.98	-5.79	0.425
76.00	-15.85	-14.46	0.00	-789.43	0.00	789.43	1,446.03	723.01	1,543.16	762.11	51.20	-5.84	0.420
77.00	-15.64	-14.34	0.00	-774.97	0.00	774.97	1,440.72	720.36	1,528.14	754.69	52.42	-5.89	0.414
78.00	-15.43	-14.22	0.00	-760.63	0.00	760.63	1,435.37	717.68	1,513.15	747.29	53.66	-5.94	0.408
79.00	-15.22	-14.10	0.00	-746.40	0.00	746.40	1,429.98	714.99	1,498.19	739.90	54.91	-5.99	0.402
80.00	-15.01	-13.99	0.00	-732.30	0.00	732.30	1,424.54	712.27	1,483.25	732.52	56.17	-6.04	0.396
81.00	-14.81	-13.87	0.00	-718.31	0.00	718.31	1,419.07	709.54	1,468.35	725.16	57.44	-6.09	0.391
82.00	-14.60	-13.75	0.00	-704.45	0.00	704.45	1,413.56	706.78	1,453.47	717.81	58.72	-6.14	0.385
83.00	-14.39	-13.63	0.00	-690.70	0.00	690.70	1,408.00	704.00	1,438.62	710.48	60.00	-6.19	0.379
84.00	-14.19	-13.51	0.00	-677.08	0.00	677.08	1,402.40	701.20	1,423.80	703.16	61.30	-6.23	0.374
85.00	-13.99	-13.39	0.00	-663.57	0.00	663.57	1,396.76	698.38	1,409.01	695.86	62.61	-6.28	0.368
86.00	-13.78	-13.27	0.00	-650.18	0.00	650.18	1,391.08	695.54	1,394.25	688.57	63.93	-6.33	0.362
87.00	-13.58	-13.15	0.00	-636.92	0.00	636.92	1,385.36	692.68	1,379.53	681.30	65.26	-6.37	0.356
88.00	-13.38	-13.03	0.00	-623.77	0.00	623.77	1,379.60	689.80	1,364.84	674.04	66.59	-6.42	0.351
89.00	-13.18	-12.90	0.00	-610.75	0.00	610.75	1,373.79	686.90	1,350.18	666.80	67.94	-6.47	0.345

Site Number: 307538

Code: ANSI/TIA-222-G

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Site Name: Dublin OH, OH

Engineering Number:13619927_C3_02

4/14/2021 6:25:04 PM

Customer: AT&T MOBILITY

Load Case: 1.2D + 1.6W				90 mph with No Ice				39 Iterations					
Gust Response Factor :1.10								Wind Importance Factor 1.00					
Dead Load Factor :1.20													
Wind Load Factor :1.60													
90.00	-12.98	-12.78	0.00	-597.84	0.00	597.84	1,367.95	683.97	1,335.56	659.58	69.30	-6.51	0.339
91.00	-12.78	-12.66	0.00	-585.06	0.00	585.06	1,362.06	681.03	1,320.97	652.38	70.66	-6.56	0.334
92.00	-12.58	-12.54	0.00	-572.40	0.00	572.40	1,356.14	678.07	1,306.43	645.19	72.04	-6.60	0.328
93.00	-12.39	-12.42	0.00	-559.85	0.00	559.85	1,350.17	675.08	1,291.91	638.03	73.43	-6.65	0.323
94.00	-12.19	-12.30	0.00	-547.43	0.00	547.43	1,344.16	672.08	1,277.44	630.88	74.82	-6.69	0.317
95.00	-11.99	-12.18	0.00	-535.14	0.00	535.14	1,338.11	669.05	1,263.01	623.75	76.22	-6.74	0.311
96.00	-11.80	-12.06	0.00	-522.96	0.00	522.96	1,332.01	666.01	1,248.61	616.64	77.64	-6.78	0.306
97.00	-11.60	-11.93	0.00	-510.91	0.00	510.91	1,325.88	662.94	1,234.26	609.56	79.06	-6.82	0.300
98.00	-11.41	-11.81	0.00	-498.97	0.00	498.97	1,319.70	659.85	1,219.95	602.49	80.49	-6.86	0.295
99.00	-11.22	-11.69	0.00	-487.16	0.00	487.16	1,313.49	656.74	1,205.68	595.44	81.93	-6.91	0.289
100.00	-11.03	-11.57	0.00	-475.47	0.00	475.47	1,307.23	653.62	1,191.45	588.41	83.37	-6.95	0.284
101.00	-10.83	-11.45	0.00	-463.90	0.00	463.90	1,300.93	650.47	1,177.27	581.41	84.83	-6.99	0.278
102.00	-10.59	-11.31	0.00	-452.46	0.00	452.46	1,294.59	647.30	1,163.14	574.43	86.30	-7.03	0.268
103.00	-10.35	-11.18	0.00	-441.14	0.00	441.14	1,286.70	643.35	1,147.69	566.80	87.77	-7.07	0.263
104.00	-10.10	-11.05	0.00	-429.96	0.00	429.96	1,277.44	638.72	1,131.15	558.63	89.25	-7.11	0.258
105.00	-9.86	-10.92	0.00	-418.91	0.00	418.91	869.30	434.65	782.14	386.27	90.74	-7.15	0.309
106.00	-9.69	-10.80	0.00	-407.98	0.00	407.98	865.94	432.97	773.50	382.00	92.24	-7.19	0.302
107.00	-9.52	-10.68	0.00	-397.18	0.00	397.18	862.54	431.27	764.87	377.74	93.74	-7.23	0.295
108.00	-9.35	-10.56	0.00	-386.50	0.00	386.50	859.11	429.55	756.25	373.48	95.26	-7.27	0.288
108.94	-9.19	-10.48	0.00	-376.59	0.00	376.59	855.84	427.92	748.17	369.49	96.69	-7.31	0.282
108.94	-9.19	-10.48	0.00	-376.59	0.00	376.59	855.84	427.92	748.17	369.49	96.69	-7.31	1.031
109.00	-9.17	-10.45	0.00	-375.94	0.00	375.94	855.63	427.81	747.63	369.23	96.78	-7.31	1.030
110.00	-9.07	-10.35	0.00	-365.49	0.00	365.49	852.10	426.05	739.02	364.98	98.32	-7.45	1.013
111.00	-8.96	-10.26	0.00	-355.14	0.00	355.14	848.54	424.27	730.43	360.73	99.90	-7.59	0.996
112.00	-8.85	-10.16	0.00	-344.88	0.00	344.88	844.94	422.47	721.84	356.49	101.50	-7.74	0.978
113.00	-8.75	-10.07	0.00	-334.71	0.00	334.71	841.29	420.65	713.27	352.26	103.13	-7.88	0.961
114.00	-8.65	-9.98	0.00	-324.64	0.00	324.64	837.61	418.80	704.71	348.03	104.79	-8.02	0.944
115.00	-8.57	-9.93	0.00	-314.66	0.00	314.66	833.88	416.94	696.16	343.81	106.48	-8.16	0.926
116.00	-8.48	-9.88	0.00	-304.73	0.00	304.73	830.11	415.06	687.63	339.59	108.19	-8.29	0.908
117.00	-8.39	-9.83	0.00	-294.85	0.00	294.85	826.30	413.15	679.11	335.39	109.94	-8.43	0.890
118.00	-8.31	-9.77	0.00	-285.03	0.00	285.03	822.45	411.23	670.61	331.19	111.71	-8.57	0.871
119.00	-8.23	-9.72	0.00	-275.25	0.00	275.25	818.56	409.28	662.13	327.00	113.52	-8.70	0.852
120.00	-8.14	-9.67	0.00	-265.53	0.00	265.53	814.63	407.31	653.66	322.82	115.35	-8.83	0.833
121.00	-8.06	-9.62	0.00	-255.86	0.00	255.86	810.65	405.33	645.21	318.64	117.20	-8.96	0.813
122.00	-7.98	-9.56	0.00	-246.25	0.00	246.25	806.64	403.32	636.78	314.48	119.09	-9.09	0.793
123.00	-7.90	-9.51	0.00	-236.68	0.00	236.68	802.58	401.29	628.37	310.33	120.99	-9.22	0.773
124.00	-7.82	-9.46	0.00	-227.17	0.00	227.17	798.48	399.24	619.98	306.18	122.93	-9.34	0.752
125.00	-7.75	-9.40	0.00	-217.71	0.00	217.71	794.34	397.17	611.61	302.05	124.89	-9.46	0.731
126.00	-7.67	-9.35	0.00	-208.31	0.00	208.31	790.16	395.08	603.26	297.93	126.88	-9.58	0.709
127.00	-7.59	-9.30	0.00	-198.96	0.00	198.96	785.94	392.97	594.94	293.82	128.89	-9.70	0.687
128.00	-7.52	-9.24	0.00	-189.66	0.00	189.66	781.68	390.84	586.64	289.72	130.92	-9.82	0.665
129.00	-7.44	-9.19	0.00	-180.42	0.00	180.42	777.38	388.69	578.37	285.63	132.98	-9.93	0.642
130.00	-7.37	-9.13	0.00	-171.23	0.00	171.23	773.03	386.52	570.12	281.56	135.06	-10.04	0.618
131.00	-7.30	-9.08	0.00	-162.10	0.00	162.10	768.64	384.32	561.90	277.50	137.17	-10.15	0.594
132.00	-7.23	-9.03	0.00	-153.02	0.00	153.02	764.22	382.11	553.70	273.45	139.29	-10.25	0.570
133.00	-7.16	-8.97	0.00	-143.99	0.00	143.99	759.75	379.87	545.53	269.42	141.44	-10.35	0.544
134.00	-7.09	-8.91	0.00	-135.02	0.00	135.02	755.24	377.62	537.39	265.40	143.61	-10.45	0.519
135.00	-7.02	-8.86	0.00	-126.11	0.00	126.11	750.69	375.34	529.28	261.39	145.80	-10.54	0.492
136.00	-6.96	-8.80	0.00	-117.25	0.00	117.25	746.09	373.05	521.20	257.40	148.00	-10.63	0.465

Site Number: 307538

Code: ANSI/TIA-222-G

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Site Name: Dublin OH, OH

Engineering Number:13619927_C3_02

4/14/2021 6:25:04 PM

Customer: AT&T MOBILITY

Load Case: 1.2D + 1.6W

90 mph with No Ice

39 Iterations

Gust Response Factor :1.10

Wind Importance Factor 1.00

Dead Load Factor :1.20

Wind Load Factor :1.60

137.00	-6.89	-8.75	0.00	-108.45	0.00	108.45	741.46	370.73	513.16	253.43	150.23	-10.72	0.438
138.00	-6.83	-8.69	0.00	-99.70	0.00	99.70	736.79	368.39	505.14	249.47	152.47	-10.80	0.409
139.00	-6.76	-8.64	0.00	-91.01	0.00	91.01	732.07	366.03	497.16	245.53	154.72	-10.87	0.380
140.00	-6.70	-8.58	0.00	-82.37	0.00	82.37	727.31	363.66	489.21	241.60	157.00	-10.95	0.351
141.00	-6.64	-8.52	0.00	-73.79	0.00	73.79	720.73	360.36	480.10	237.10	159.28	-11.01	0.321
142.00	-6.58	-8.46	0.00	-65.27	0.00	65.27	713.79	356.89	470.85	232.53	161.58	-11.07	0.290
143.00	-4.78	-6.75	0.00	-56.81	0.00	56.81	706.85	353.42	461.68	228.01	163.89	-11.13	0.256
144.00	-4.73	-6.69	0.00	-50.06	0.00	50.06	699.90	349.95	452.61	223.52	166.21	-11.18	0.231
145.00	-4.67	-6.63	0.00	-43.36	0.00	43.36	692.96	346.48	443.62	219.09	168.54	-11.22	0.205
146.00	-4.62	-6.58	0.00	-36.73	0.00	36.73	686.02	343.01	434.73	214.69	170.88	-11.26	0.178
147.00	-4.57	-6.52	0.00	-30.15	0.00	30.15	679.08	339.54	425.92	210.35	173.23	-11.29	0.150
148.00	-4.51	-6.46	0.00	-23.64	0.00	23.64	672.14	336.07	417.21	206.04	175.58	-11.32	0.122
149.00	-4.46	-6.40	0.00	-17.18	0.00	17.18	665.20	332.60	408.58	201.78	177.94	-11.34	0.092
150.00	0.00	-5.39	0.00	-10.78	0.00	10.78	658.26	329.13	400.05	197.57	180.31	-11.36	0.055

Site Number: 307538

Code: ANSI/TIA-222-G

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Site Name: Dublin OH, OH

Engineering Number:13619927_C3_02

4/14/2021 6:25:05 PM

Customer: AT&T MOBILITY

Load Case: 0.9D + 1.6W	90 mph with No Ice (Reduced DL)	39 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		39.2	0.0					0.0	0.0	39.2	0.0	0.0	0.0
1.00		78.2	125.7					0.0	16.8	78.2	142.4	0.0	0.0
2.00		77.9	125.2					0.0	16.8	77.9	141.9	0.0	0.0
3.00		77.5	124.6					0.0	16.8	77.5	141.4	0.0	0.0
4.00		77.2	124.1					0.0	16.8	77.2	140.9	0.0	0.0
5.00		76.9	123.6					0.0	16.8	76.9	140.3	0.0	0.0
6.00		76.6	123.0					0.0	16.8	76.6	139.8	0.0	0.0
7.00		76.2	122.5					0.0	16.8	76.2	139.3	0.0	0.0
8.00		75.9	122.0					0.0	16.8	75.9	138.7	0.0	0.0
9.00		75.6	121.5					0.0	16.8	75.6	138.2	0.0	0.0
10.00		75.3	120.9					0.0	16.8	75.3	137.7	0.0	0.0
11.00		74.9	120.4					0.0	16.8	74.9	137.2	0.0	0.0
12.00		74.6	119.9					0.0	16.8	74.6	136.6	0.0	0.0
13.00		74.3	119.3					0.0	16.8	74.3	136.1	0.0	0.0
14.00		73.9	118.8					0.0	16.8	73.9	135.6	0.0	0.0
15.00		73.6	118.3					0.0	16.8	73.6	135.0	0.0	0.0
16.00		73.3	117.8					0.0	16.8	73.3	134.5	0.0	0.0
17.00		73.0	117.2					0.0	16.8	73.0	134.0	0.0	0.0
18.00		72.6	116.7					0.0	16.8	72.6	133.5	0.0	0.0
19.00		72.3	116.2					0.0	16.8	72.3	132.9	0.0	0.0
20.00		72.0	115.6					0.0	16.8	72.0	132.4	0.0	0.0
21.00		71.7	115.1					0.0	16.8	71.7	131.9	0.0	0.0
22.00		71.3	114.6					0.0	16.8	71.3	131.3	0.0	0.0
23.00		71.0	114.1					0.0	16.8	71.0	130.8	0.0	0.0
24.00		70.7	113.5					0.0	16.8	70.7	130.3	0.0	0.0
25.00		70.4	113.0					0.0	16.8	70.4	129.8	0.0	0.0
26.00		70.0	112.5					0.0	16.8	70.0	129.2	0.0	0.0
27.00		69.7	111.9					0.0	16.8	69.7	128.7	0.0	0.0
28.00		69.4	111.4					0.0	16.8	69.4	128.2	0.0	0.0
29.00		69.0	110.9					0.0	16.8	69.0	127.6	0.0	0.0
30.00		68.9	110.4					0.0	16.8	68.9	127.1	0.0	0.0
31.00		69.1	109.8					0.0	16.8	69.1	126.6	0.0	0.0
32.00		69.4	109.3					0.0	16.8	69.4	126.1	0.0	0.0
33.00		69.7	108.8					0.0	16.8	69.7	125.5	0.0	0.0
34.00		69.9	108.2					0.0	16.8	69.9	125.0	0.0	0.0
35.00		70.2	107.7					0.0	16.8	70.2	124.5	0.0	0.0
36.00		70.4	107.2					0.0	16.8	70.4	123.9	0.0	0.0
37.00		70.6	106.7					0.0	16.8	70.6	123.4	0.0	0.0
38.00		70.8	106.1					0.0	16.8	70.8	122.9	0.0	0.0
39.00		71.0	105.6					0.0	16.8	71.0	122.4	0.0	0.0
40.00		71.1	105.1					0.0	16.8	71.1	121.8	0.0	0.0
41.00		71.3	104.5					0.0	16.8	71.3	121.3	0.0	0.0
42.00		71.4	104.0					0.0	16.8	71.4	120.8	0.0	0.0
43.00		78.7	103.5					0.0	16.8	78.7	120.2	0.0	0.0
44.00		85.9	103.0					21.6	25.2	107.6	128.1	0.0	0.0
45.00		86.1	102.4					21.7	33.6	107.8	136.0	0.0	0.0
46.00		86.2	101.9					21.9	33.6	108.0	135.5	0.0	0.0
47.00		86.2	101.4					22.0	33.6	108.3	135.0	0.0	0.0

Site Number: 307538

Code: ANSI/TIA-222-G

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Site Name: Dublin OH, OH

Engineering Number:13619927_C3_02

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Customer: AT&T MOBILITY

Load Case: 0.9D + 1.6W		90 mph with No Ice (Reduced DL)					39 Iterations		
Gust Response Factor :1.10							Wind Importance Factor 1.00		
Dead Load Factor :0.90									
Wind Load Factor :1.60									

48.00		86.3	100.8	22.2	33.6	108.5	134.4	0.0	0.0
49.00		61.2	100.3	22.3	33.6	83.5	133.9	0.0	0.0
49.42	Reinf Bottom	43.2	41.6	9.3	14.0	52.5	55.6	0.0	0.0
50.00		28.8	58.1	13.1	54.7	41.9	112.8	0.0	0.0
50.08	Bot - Section 2	43.9	8.3	1.9	7.8	45.8	16.1	0.0	0.0
51.00		84.3	158.5	20.7	85.9	104.9	244.4	0.0	0.0
52.00		88.0	172.0	22.7	93.7	110.6	265.7	0.0	0.0
53.00		88.0	171.1	22.8	93.7	110.8	264.8	0.0	0.0
54.00		88.0	170.2	22.9	93.7	110.9	263.9	0.0	0.0
55.00	Top - Section 1	88.0	169.2	23.0	93.7	111.0	263.0	0.0	0.0
56.00		88.0	71.7	23.2	93.7	111.1	165.5	0.0	0.0
57.00		87.9	71.3	23.3	93.7	111.2	165.1	0.0	0.0
58.00		87.9	71.0	23.4	93.7	111.3	164.7	0.0	0.0
59.00		87.9	70.6	23.5	93.7	111.4	164.3	0.0	0.0
60.00		87.8	70.2	23.6	93.7	111.4	163.9	0.0	0.0
61.00		87.7	69.8	23.7	93.7	111.5	163.5	0.0	0.0
62.00		87.7	69.4	23.9	93.7	111.5	163.1	0.0	0.0
63.00		87.6	69.0	24.0	93.7	111.5	162.8	0.0	0.0
64.00		87.5	68.6	24.1	93.7	111.6	162.4	0.0	0.0
65.00		87.4	68.3	24.2	93.7	111.6	162.0	0.0	0.0
66.00		87.3	67.9	24.3	93.7	111.6	161.6	0.0	0.0
67.00		87.2	67.5	24.4	93.7	111.6	161.2	0.0	0.0
68.00		87.0	67.1	24.5	93.7	111.5	160.8	0.0	0.0
69.00		86.9	66.7	24.6	93.7	111.5	160.5	0.0	0.0
70.00		86.8	66.3	24.7	93.7	111.5	160.1	0.0	0.0
71.00		86.6	66.0	24.8	93.7	111.4	159.7	0.0	0.0
72.00		86.4	65.6	24.9	93.7	111.4	159.3	0.0	0.0
73.00		86.3	65.2	25.0	93.7	111.3	158.9	0.0	0.0
74.00		86.1	64.8	25.1	93.7	111.2	158.5	0.0	0.0
75.00		85.9	64.4	25.2	93.7	111.1	158.1	0.0	0.0
76.00		85.7	64.0	25.3	93.7	111.0	157.8	0.0	0.0
77.00		85.6	63.6	25.4	93.7	110.9	157.4	0.0	0.0
78.00		85.4	63.3	25.5	93.7	110.8	157.0	0.0	0.0
79.00		85.2	62.9	25.6	93.7	110.7	156.6	0.0	0.0
80.00		84.9	62.5	25.7	93.7	110.6	156.2	0.0	0.0
81.00		84.7	62.1	25.8	93.7	110.5	155.8	0.0	0.0
82.00		84.5	61.7	25.9	93.7	110.3	155.5	0.0	0.0
83.00		84.3	61.3	25.9	93.7	110.2	155.1	0.0	0.0
84.00		84.0	61.0	26.0	93.7	110.1	154.7	0.0	0.0
85.00		83.8	60.6	26.1	93.7	109.9	154.3	0.0	0.0
86.00		83.5	60.2	26.2	93.7	109.7	153.9	0.0	0.0
87.00		83.3	59.8	26.3	93.7	109.6	153.5	0.0	0.0
88.00		83.0	59.4	26.4	93.7	109.4	153.1	0.0	0.0
89.00		82.7	59.0	26.5	93.7	109.2	152.8	0.0	0.0
90.00		82.5	58.7	26.6	93.7	109.0	152.4	0.0	0.0
91.00		82.2	58.3	26.6	93.7	108.8	152.0	0.0	0.0
92.00		81.9	57.9	26.7	93.7	108.6	151.6	0.0	0.0
93.00		81.6	57.5	26.8	93.7	108.4	151.2	0.0	0.0
94.00		81.3	57.1	26.9	93.7	108.2	150.8	0.0	0.0
95.00		81.0	56.7	27.0	93.7	108.0	150.5	0.0	0.0
96.00		80.7	56.3	27.1	93.7	107.8	150.1	0.0	0.0
97.00		80.4	56.0	27.1	93.7	107.6	149.7	0.0	0.0
98.00		80.1	55.6	27.2	93.7	107.3	149.3	0.0	0.0
99.00		79.8	55.2	27.3	93.7	107.1	148.9	0.0	0.0
100.00		79.5	54.8	27.4	93.7	106.8	148.5	0.0	0.0
101.00	Bot - Section 3	79.8	54.4	27.4	93.7	107.3	148.1	0.0	0.0
102.00		80.1	95.4	27.5	93.7	107.7	189.1	0.0	0.0

Site Number: 307538

Code: ANSI/TIA-222-G

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Site Name: Dublin OH, OH

Engineering Number:13619927_C3_02

4/14/2021 6:25:13 PM

Customer: AT&T MOBILITY

Load Case: 0.9D + 1.6W		90 mph with No Ice (Reduced DL)						39 Iterations					
Gust Response Factor :1.10								Wind Importance Factor 1.00					
Dead Load Factor :0.90													
Wind Load Factor :1.60													
103.00		79.8	94.7			27.6	93.7	107.4	188.4	0.0	0.0		
104.00		79.5	94.0			27.7	93.7	107.1	187.8	0.0	0.0		
105.00	Top - Section 2	79.1	93.4			27.8	93.7	106.9	187.1	0.0	0.0		
106.00		78.8	40.2			27.8	93.7	106.6	133.9	0.0	0.0		
107.00		78.4	39.9			27.9	93.7	106.3	133.6	0.0	0.0		
108.00		75.6	39.6			28.0	93.7	103.6	133.3	0.0	0.0		
108.94	Reinf. Top	38.9	36.9			26.3	87.9	65.2	124.7	0.0	0.0		
109.00		41.2	2.4			1.8	2.1	42.9	4.5	0.0	0.0		
110.00		77.3	39.0			28.1	33.6	105.5	72.6	0.0	0.0		
111.00		77.0	38.7			28.2	33.6	105.2	72.3	0.0	0.0		
112.00		76.6	38.5			28.3	33.6	104.9	72.1	0.0	0.0		
113.00		76.2	38.2			28.3	33.6	104.6	71.8	0.0	0.0		
114.00		69.5	37.9			28.4	25.2	98.0	63.1	0.0	0.0		
115.00		62.9	37.6			0.0	16.8	62.9	54.3	0.0	0.0		
116.00		62.5	37.3			0.0	16.8	62.5	54.1	0.0	0.0		
117.00		62.2	37.0			0.0	16.8	62.2	53.8	0.0	0.0		
118.00		61.9	36.7			0.0	16.8	61.9	53.5	0.0	0.0		
119.00		61.6	36.4			0.0	16.8	61.6	53.2	0.0	0.0		
120.00		61.2	36.1			0.0	16.8	61.2	52.9	0.0	0.0		
121.00		60.9	35.9			0.0	16.8	60.9	52.6	0.0	0.0		
122.00		60.5	35.6			0.0	16.8	60.5	52.3	0.0	0.0		
123.00		60.2	35.3			0.0	16.8	60.2	52.0	0.0	0.0		
124.00		59.8	35.0			0.0	16.8	59.8	51.7	0.0	0.0		
125.00		59.5	34.7			0.0	16.8	59.5	51.5	0.0	0.0		
126.00		59.1	34.4			0.0	16.8	59.1	51.2	0.0	0.0		
127.00		58.8	34.1			0.0	16.8	58.8	50.9	0.0	0.0		
128.00		58.4	33.8			0.0	16.8	58.4	50.6	0.0	0.0		
129.00		58.0	33.5			0.0	16.8	58.0	50.3	0.0	0.0		
130.00		57.7	33.3			0.0	16.8	57.7	50.0	0.0	0.0		
131.00		57.3	33.0			0.0	16.8	57.3	49.7	0.0	0.0		
132.00		56.9	32.7			0.0	16.8	56.9	49.4	0.0	0.0		
133.00		56.5	32.4			0.0	16.8	56.5	49.2	0.0	0.0		
134.00		56.2	32.1			0.0	16.8	56.2	48.9	0.0	0.0		
135.00		55.8	31.8			0.0	16.8	55.8	48.6	0.0	0.0		
136.00		55.4	31.5			0.0	16.8	55.4	48.3	0.0	0.0		
137.00		55.0	31.2			0.0	16.8	55.0	48.0	0.0	0.0		
138.00		54.6	31.0			0.0	16.8	54.6	47.7	0.0	0.0		
139.00		54.2	30.7			0.0	16.8	54.2	47.4	0.0	0.0		
140.00		53.8	30.4			0.0	16.8	53.8	47.1	0.0	0.0		
141.00		53.4	30.1			0.0	16.8	53.4	46.8	0.0	0.0		
142.00		53.0	29.8			0.0	16.8	53.0	46.6	0.0	0.0		
143.00	Appurtenance(s)	52.6	29.5	1,286.0	0.0	0.0	1,521.0	0.0	16.8	1,338.6	1,567.3	0.0	0.0
144.00		52.2	29.2					0.0	16.8	52.2	46.0	0.0	0.0
145.00		51.8	28.9					0.0	16.8	51.8	45.7	0.0	0.0
146.00		51.4	28.6					0.0	16.8	51.4	45.4	0.0	0.0
147.00		51.0	28.4					0.0	16.8	51.0	45.1	0.0	0.0
148.00		50.6	28.1					0.0	16.8	50.6	44.8	0.0	0.0
149.00		50.1	27.8					0.0	16.8	50.1	44.5	0.0	0.0
150.00	Appurtenance(s)	25.0	27.5	5,368.2	0.0	10,783.9	4,183.0	0.0	16.8	5,393.1	4,227.3	0.0	0.0
Totals:								19,582.7	24,262.9	0.00	0.00		

Site Number: 307538

Code: ANSI/TIA-222-G

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Site Name: Dublin OH, OH

Engineering Number:13619927_C3_02

4/14/2021 6:25:13 PM

Customer: AT&T MOBILITY

Load Case: 0.9D + 1.6W			90 mph with No Ice (Reduced DL)					39 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	-24.25	-19.56	0.00	-2,085.22	0.00	2,085.22	2,804.10	1,402.05	4,295.35	2,121.31	0.00	0.00	0.992
1.00	-24.08	-19.52	0.00	-2,065.66	0.00	2,065.66	2,797.21	1,398.61	4,266.65	2,107.14	0.01	-0.08	0.989
2.00	-23.91	-19.47	0.00	-2,046.14	0.00	2,046.14	2,790.29	1,395.14	4,237.98	2,092.98	0.03	-0.16	0.986
3.00	-23.74	-19.43	0.00	-2,026.67	0.00	2,026.67	2,783.32	1,391.66	4,209.34	2,078.83	0.08	-0.25	0.984
4.00	-23.57	-19.38	0.00	-2,007.24	0.00	2,007.24	2,776.32	1,388.16	4,180.73	2,064.70	0.14	-0.33	0.981
5.00	-23.40	-19.34	0.00	-1,987.86	0.00	1,987.86	2,769.27	1,384.63	4,152.14	2,050.59	0.22	-0.41	0.978
6.00	-23.24	-19.30	0.00	-1,968.52	0.00	1,968.52	2,762.18	1,381.09	4,123.59	2,036.49	0.31	-0.49	0.975
7.00	-23.07	-19.25	0.00	-1,949.23	0.00	1,949.23	2,755.05	1,377.52	4,095.07	2,022.40	0.42	-0.58	0.972
8.00	-22.90	-19.21	0.00	-1,929.97	0.00	1,929.97	2,747.88	1,373.94	4,066.58	2,008.33	0.55	-0.66	0.970
9.00	-22.74	-19.16	0.00	-1,910.77	0.00	1,910.77	2,740.66	1,370.33	4,038.12	1,994.27	0.70	-0.74	0.967
10.00	-22.57	-19.12	0.00	-1,891.60	0.00	1,891.60	2,733.41	1,366.70	4,009.69	1,980.24	0.86	-0.83	0.964
11.00	-22.41	-19.08	0.00	-1,872.48	0.00	1,872.48	2,726.11	1,363.06	3,981.30	1,966.21	1.05	-0.91	0.961
12.00	-22.25	-19.03	0.00	-1,853.41	0.00	1,853.41	2,718.78	1,359.39	3,952.94	1,952.21	1.25	-0.99	0.958
13.00	-22.08	-18.99	0.00	-1,834.38	0.00	1,834.38	2,711.40	1,355.70	3,924.62	1,938.22	1.46	-1.08	0.955
14.00	-21.92	-18.94	0.00	-1,815.39	0.00	1,815.39	2,703.98	1,351.99	3,896.34	1,924.25	1.70	-1.16	0.952
15.00	-21.76	-18.90	0.00	-1,796.45	0.00	1,796.45	2,696.52	1,348.26	3,868.09	1,910.30	1.95	-1.25	0.949
16.00	-21.60	-18.86	0.00	-1,777.55	0.00	1,777.55	2,689.02	1,344.51	3,839.88	1,896.37	2.22	-1.33	0.946
17.00	-21.44	-18.81	0.00	-1,758.69	0.00	1,758.69	2,681.48	1,340.74	3,811.71	1,882.46	2.51	-1.42	0.942
18.00	-21.28	-18.77	0.00	-1,739.88	0.00	1,739.88	2,673.89	1,336.95	3,783.58	1,868.57	2.82	-1.51	0.939
19.00	-21.12	-18.72	0.00	-1,721.11	0.00	1,721.11	2,666.27	1,333.13	3,755.48	1,854.69	3.14	-1.59	0.936
20.00	-20.96	-18.68	0.00	-1,702.39	0.00	1,702.39	2,658.60	1,329.30	3,727.43	1,840.84	3.49	-1.68	0.933
21.00	-20.80	-18.63	0.00	-1,683.71	0.00	1,683.71	2,650.89	1,325.45	3,699.43	1,827.01	3.85	-1.76	0.930
22.00	-20.65	-18.59	0.00	-1,665.08	0.00	1,665.08	2,643.14	1,321.57	3,671.46	1,813.20	4.23	-1.85	0.926
23.00	-20.49	-18.55	0.00	-1,646.49	0.00	1,646.49	2,635.35	1,317.68	3,643.54	1,799.41	4.62	-1.94	0.923
24.00	-20.33	-18.50	0.00	-1,627.94	0.00	1,627.94	2,627.52	1,313.76	3,615.66	1,785.64	5.04	-2.02	0.920
25.00	-20.18	-18.46	0.00	-1,609.44	0.00	1,609.44	2,619.65	1,309.83	3,587.83	1,771.90	5.47	-2.11	0.916
26.00	-20.02	-18.41	0.00	-1,590.98	0.00	1,590.98	2,611.74	1,305.87	3,560.05	1,758.17	5.92	-2.20	0.913
27.00	-19.87	-18.37	0.00	-1,572.57	0.00	1,572.57	2,603.78	1,301.89	3,532.31	1,744.47	6.39	-2.29	0.909
28.00	-19.72	-18.33	0.00	-1,554.20	0.00	1,554.20	2,595.79	1,297.89	3,504.62	1,730.80	6.88	-2.38	0.906
29.00	-19.56	-18.28	0.00	-1,535.88	0.00	1,535.88	2,587.75	1,293.88	3,476.97	1,717.15	7.39	-2.46	0.902
30.00	-19.41	-18.24	0.00	-1,517.59	0.00	1,517.59	2,579.67	1,289.84	3,449.38	1,703.52	7.92	-2.55	0.899
31.00	-19.26	-18.19	0.00	-1,499.36	0.00	1,499.36	2,571.55	1,285.78	3,421.84	1,689.92	8.46	-2.64	0.895
32.00	-19.11	-18.15	0.00	-1,481.17	0.00	1,481.17	2,563.39	1,281.70	3,394.34	1,676.34	9.02	-2.73	0.891
33.00	-18.96	-18.10	0.00	-1,463.02	0.00	1,463.02	2,555.19	1,277.59	3,366.90	1,662.79	9.60	-2.82	0.887
34.00	-18.81	-18.05	0.00	-1,444.92	0.00	1,444.92	2,546.95	1,273.47	3,339.51	1,649.26	10.20	-2.91	0.884
35.00	-18.66	-18.01	0.00	-1,426.87	0.00	1,426.87	2,538.66	1,269.33	3,312.18	1,635.76	10.82	-3.00	0.880
36.00	-18.51	-17.96	0.00	-1,408.86	0.00	1,408.86	2,530.34	1,265.17	3,284.90	1,622.29	11.46	-3.09	0.876
37.00	-18.37	-17.91	0.00	-1,390.90	0.00	1,390.90	2,521.97	1,260.98	3,257.67	1,608.84	12.12	-3.18	0.872
38.00	-18.22	-17.86	0.00	-1,372.99	0.00	1,372.99	2,513.56	1,256.78	3,230.50	1,595.42	12.79	-3.27	0.868
39.00	-18.07	-17.81	0.00	-1,355.13	0.00	1,355.13	2,505.11	1,252.56	3,203.38	1,582.03	13.48	-3.36	0.864
40.00	-17.93	-17.76	0.00	-1,337.32	0.00	1,337.32	2,496.62	1,248.31	3,176.33	1,568.67	14.20	-3.45	0.860
41.00	-17.78	-17.71	0.00	-1,319.56	0.00	1,319.56	2,488.09	1,244.04	3,149.33	1,555.33	14.93	-3.54	0.856
42.00	-17.64	-17.66	0.00	-1,301.84	0.00	1,301.84	2,479.52	1,239.76	3,122.39	1,542.03	15.68	-3.63	0.852

Site Number: 307538

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Site Name: Dublin OH, OH

Engineering Number:13619927_C3_02

4/14/2021 6:25:13 PM

Customer: AT&T MOBILITY

Load Case: 0.9D + 1.6W				90 mph with No Ice (Reduced DL)								39 Iterations	
Gust Response Factor :1.10												Wind Importance Factor 1.00	
Dead Load Factor :0.90													
Wind Load Factor :1.60													

43.00	-17.50	-17.60	0.00	-1,284.18	0.00	1,284.18	2,470.90	1,235.45	3,095.51	1,528.75	16.45	-3.72	0.847
44.00	-17.35	-17.51	0.00	-1,266.58	0.00	1,266.58	2,462.25	1,231.12	3,068.68	1,515.51	17.24	-3.81	0.843
45.00	-17.19	-17.42	0.00	-1,249.07	0.00	1,249.07	2,453.55	1,226.78	3,041.93	1,502.29	18.05	-3.90	0.839
46.00	-17.04	-17.34	0.00	-1,231.64	0.00	1,231.64	2,444.81	1,222.41	3,015.23	1,489.11	18.87	-3.99	0.834
47.00	-16.88	-17.24	0.00	-1,214.31	0.00	1,214.31	2,433.40	1,216.70	2,985.36	1,474.36	19.72	-4.08	0.831
48.00	-16.73	-17.15	0.00	-1,197.06	0.00	1,197.06	2,420.67	1,210.34	2,954.04	1,458.89	20.58	-4.18	0.828
49.00	-16.58	-17.08	0.00	-1,179.91	0.00	1,179.91	2,407.94	1,203.97	2,922.88	1,443.50	21.47	-4.27	0.824
49.42	-16.52	-17.04	0.00	-1,172.80	0.00	1,172.80	2,402.64	1,201.32	2,909.95	1,437.12	21.84	-4.31	0.823
50.00	-16.40	-16.99	0.00	-1,162.86	0.00	1,162.86	2,395.22	1,197.61	2,891.89	1,428.20	22.37	-4.36	0.428
50.08	-16.38	-16.95	0.00	-1,161.44	0.00	1,161.44	2,394.16	1,197.08	2,889.32	1,426.93	22.45	-4.36	0.428
51.00	-16.13	-16.84	0.00	-1,145.90	0.00	1,145.90	2,382.49	1,191.25	2,861.07	1,412.98	23.29	-4.41	0.420
52.00	-15.86	-16.73	0.00	-1,129.06	0.00	1,129.06	2,369.77	1,184.88	2,830.41	1,397.83	24.21	-4.45	0.416
53.00	-15.59	-16.61	0.00	-1,112.33	0.00	1,112.33	2,357.04	1,178.52	2,799.92	1,382.77	25.15	-4.50	0.413
54.00	-15.32	-16.49	0.00	-1,095.73	0.00	1,095.73	2,344.32	1,172.16	2,769.59	1,367.80	26.10	-4.55	0.410
55.00	-15.06	-16.37	0.00	-1,079.24	0.00	1,079.24	1,548.01	774.00	1,862.94	920.03	27.06	-4.60	0.522
56.00	-14.89	-16.26	0.00	-1,062.87	0.00	1,062.87	1,543.56	771.78	1,847.57	912.45	28.02	-4.64	0.516
57.00	-14.72	-16.15	0.00	-1,046.61	0.00	1,046.61	1,539.08	769.54	1,832.21	904.86	29.00	-4.69	0.511
58.00	-14.55	-16.04	0.00	-1,030.47	0.00	1,030.47	1,534.55	767.28	1,816.87	897.28	29.99	-4.75	0.505
59.00	-14.38	-15.92	0.00	-1,014.43	0.00	1,014.43	1,529.98	764.99	1,801.53	889.71	30.99	-4.80	0.499
60.00	-14.21	-15.81	0.00	-998.51	0.00	998.51	1,525.38	762.69	1,786.21	882.14	32.00	-4.85	0.493
61.00	-14.04	-15.70	0.00	-982.69	0.00	982.69	1,520.73	760.36	1,770.89	874.58	33.02	-4.90	0.487
62.00	-13.87	-15.59	0.00	-966.99	0.00	966.99	1,516.03	758.02	1,755.59	867.02	34.05	-4.95	0.482
63.00	-13.71	-15.47	0.00	-951.41	0.00	951.41	1,511.30	755.65	1,740.30	859.47	35.09	-5.00	0.476
64.00	-13.54	-15.36	0.00	-935.93	0.00	935.93	1,506.53	753.26	1,725.03	851.93	36.14	-5.06	0.470
65.00	-13.38	-15.25	0.00	-920.57	0.00	920.57	1,501.71	750.86	1,709.77	844.39	37.21	-5.11	0.464
66.00	-13.21	-15.13	0.00	-905.33	0.00	905.33	1,496.86	748.43	1,694.53	836.87	38.28	-5.16	0.459
67.00	-13.05	-15.02	0.00	-890.19	0.00	890.19	1,491.96	745.98	1,679.31	829.35	39.37	-5.21	0.453
68.00	-12.89	-14.90	0.00	-875.17	0.00	875.17	1,487.02	743.51	1,664.10	821.84	40.46	-5.26	0.447
69.00	-12.72	-14.79	0.00	-860.27	0.00	860.27	1,482.04	741.02	1,648.91	814.33	41.57	-5.31	0.442
70.00	-12.56	-14.67	0.00	-845.48	0.00	845.48	1,477.02	738.51	1,633.74	806.84	42.68	-5.36	0.436
71.00	-12.40	-14.56	0.00	-830.81	0.00	830.81	1,471.96	735.98	1,618.59	799.36	43.81	-5.41	0.430
72.00	-12.24	-14.44	0.00	-816.25	0.00	816.25	1,466.86	733.43	1,603.46	791.89	44.94	-5.46	0.425
73.00	-12.08	-14.33	0.00	-801.80	0.00	801.80	1,461.71	730.86	1,588.35	784.42	46.09	-5.50	0.419
74.00	-11.92	-14.21	0.00	-787.47	0.00	787.47	1,456.52	728.26	1,573.26	776.97	47.25	-5.55	0.413
75.00	-11.76	-14.10	0.00	-773.26	0.00	773.26	1,451.30	725.65	1,558.20	769.54	48.41	-5.60	0.408
76.00	-11.61	-13.98	0.00	-759.17	0.00	759.17	1,446.03	723.01	1,543.16	762.11	49.59	-5.65	0.402
77.00	-11.45	-13.86	0.00	-745.19	0.00	745.19	1,440.72	720.36	1,528.14	754.69	50.78	-5.70	0.397
78.00	-11.29	-13.75	0.00	-731.32	0.00	731.32	1,435.37	717.68	1,513.15	747.29	51.98	-5.75	0.391
79.00	-11.14	-13.63	0.00	-717.57	0.00	717.57	1,429.98	714.99	1,498.19	739.90	53.18	-5.79	0.385
80.00	-10.98	-13.51	0.00	-703.94	0.00	703.94	1,424.54	712.27	1,483.25	732.52	54.40	-5.84	0.380
81.00	-10.83	-13.40	0.00	-690.43	0.00	690.43	1,419.07	709.54	1,468.35	725.16	55.63	-5.89	0.374
82.00	-10.67	-13.28	0.00	-677.03	0.00	677.03	1,413.56	706.78	1,453.47	717.81	56.86	-5.93	0.369
83.00	-10.52	-13.16	0.00	-663.75	0.00	663.75	1,408.00	704.00	1,438.62	710.48	58.11	-5.98	0.363
84.00	-10.37	-13.04	0.00	-650.59	0.00	650.59	1,402.40	701.20	1,423.80	703.16	59.36	-6.03	0.358
85.00	-10.21	-12.93	0.00	-637.55	0.00	637.55	1,396.76	698.38	1,409.01	695.86	60.63	-6.07	0.352
86.00	-10.06	-12.81	0.00	-624.62	0.00	624.62	1,391.08	695.54	1,394.25	688.57	61.90	-6.12	0.347
87.00	-9.91	-12.69	0.00	-611.81	0.00	611.81	1,385.36	692.68	1,379.53	681.30	63.19	-6.16	0.341
88.00	-9.76	-12.57	0.00	-599.12	0.00	599.12	1,379.60	689.80	1,364.84	674.04	64.48	-6.21	0.336
89.00	-9.61	-12.46	0.00	-586.54	0.00	586.54	1,373.79	686.90	1,350.18	666.80	65.78	-6.25	0.330

Load Case: 0.9D + 1.6W	90 mph with No Ice (Reduced DL)								39 Iterations				
Gust Response Factor :1.10									Wind Importance Factor 1.00				
Dead Load Factor :0.90													
Wind Load Factor :1.60													

90.00	-9.46	-12.34	0.00	-574.09	0.00	574.09	1,367.95	683.97	1,335.56	659.58	67.09	-6.29	0.325
91.00	-9.32	-12.22	0.00	-561.75	0.00	561.75	1,362.06	681.03	1,320.97	652.38	68.41	-6.34	0.319
92.00	-9.17	-12.10	0.00	-549.53	0.00	549.53	1,356.14	678.07	1,306.43	645.19	69.74	-6.38	0.314
93.00	-9.02	-11.99	0.00	-537.42	0.00	537.42	1,350.17	675.08	1,291.91	638.03	71.08	-6.42	0.309
94.00	-8.87	-11.87	0.00	-525.44	0.00	525.44	1,344.16	672.08	1,277.44	630.88	72.43	-6.47	0.303
95.00	-8.73	-11.75	0.00	-513.57	0.00	513.57	1,338.11	669.05	1,263.01	623.75	73.78	-6.51	0.298
96.00	-8.58	-11.63	0.00	-501.82	0.00	501.82	1,332.01	666.01	1,248.61	616.64	75.15	-6.55	0.293
97.00	-8.44	-11.51	0.00	-490.19	0.00	490.19	1,325.88	662.94	1,234.26	609.56	76.52	-6.59	0.287
98.00	-8.29	-11.40	0.00	-478.68	0.00	478.68	1,319.70	659.85	1,219.95	602.49	77.90	-6.63	0.282
99.00	-8.15	-11.28	0.00	-467.28	0.00	467.28	1,313.49	656.74	1,205.68	595.44	79.29	-6.67	0.277
100.00	-8.01	-11.16	0.00	-456.00	0.00	456.00	1,307.23	653.62	1,191.45	588.41	80.69	-6.71	0.271
101.00	-7.87	-11.04	0.00	-444.84	0.00	444.84	1,300.93	650.47	1,177.27	581.41	82.10	-6.75	0.266
102.00	-7.68	-10.92	0.00	-433.80	0.00	433.80	1,294.59	647.30	1,163.14	574.43	83.52	-6.79	0.256
103.00	-7.50	-10.79	0.00	-422.88	0.00	422.88	1,286.70	643.35	1,147.69	566.80	84.94	-6.83	0.251
104.00	-7.32	-10.67	0.00	-412.09	0.00	412.09	1,277.44	638.72	1,131.15	558.63	86.37	-6.87	0.247
105.00	-7.14	-10.55	0.00	-401.42	0.00	401.42	869.30	434.65	782.14	386.27	87.81	-6.90	0.295
106.00	-7.01	-10.43	0.00	-390.87	0.00	390.87	865.94	432.97	773.50	382.00	89.26	-6.94	0.288
107.00	-6.89	-10.31	0.00	-380.45	0.00	380.45	862.54	431.27	764.87	377.74	90.71	-6.98	0.281
108.00	-6.76	-10.20	0.00	-370.13	0.00	370.13	859.11	429.55	756.25	373.48	92.17	-7.02	0.275
108.94	-6.64	-10.12	0.00	-360.57	0.00	360.57	855.84	427.92	748.17	369.49	93.55	-7.05	0.269
108.94	-6.64	-10.12	0.00	-360.57	0.00	360.57	855.84	427.92	748.17	369.49	93.55	-7.05	0.984
109.00	-6.63	-10.08	0.00	-359.94	0.00	359.94	855.63	427.81	747.63	369.23	93.65	-7.06	0.983
110.00	-6.55	-9.99	0.00	-349.86	0.00	349.86	852.10	426.05	739.02	364.98	95.13	-7.19	0.967
111.00	-6.47	-9.89	0.00	-339.87	0.00	339.87	848.54	424.27	730.43	360.73	96.65	-7.33	0.950
112.00	-6.38	-9.79	0.00	-329.98	0.00	329.98	844.94	422.47	721.84	356.49	98.20	-7.47	0.934
113.00	-6.30	-9.69	0.00	-320.19	0.00	320.19	841.29	420.65	713.27	352.26	99.77	-7.60	0.917
114.00	-6.23	-9.60	0.00	-310.50	0.00	310.50	837.61	418.80	704.71	348.03	101.37	-7.74	0.900
115.00	-6.17	-9.55	0.00	-300.90	0.00	300.90	833.88	416.94	696.16	343.81	103.00	-7.87	0.883
116.00	-6.10	-9.49	0.00	-291.36	0.00	291.36	830.11	415.06	687.63	339.59	104.66	-8.00	0.866
117.00	-6.03	-9.43	0.00	-281.87	0.00	281.87	826.30	413.15	679.11	335.39	106.35	-8.13	0.848
118.00	-5.97	-9.38	0.00	-272.43	0.00	272.43	822.45	411.23	670.61	331.19	108.06	-8.26	0.830
119.00	-5.90	-9.32	0.00	-263.06	0.00	263.06	818.56	409.28	662.13	327.00	109.79	-8.39	0.812
120.00	-5.84	-9.27	0.00	-253.73	0.00	253.73	814.63	407.31	653.66	322.82	111.56	-8.51	0.794
121.00	-5.78	-9.21	0.00	-244.46	0.00	244.46	810.65	405.33	645.21	318.64	113.35	-8.64	0.775
122.00	-5.71	-9.16	0.00	-235.25	0.00	235.25	806.64	403.32	636.78	314.48	115.16	-8.76	0.756
123.00	-5.65	-9.10	0.00	-226.09	0.00	226.09	802.58	401.29	628.37	310.33	117.00	-8.88	0.736
124.00	-5.59	-9.05	0.00	-216.99	0.00	216.99	798.48	399.24	619.98	306.18	118.87	-9.00	0.716
125.00	-5.53	-8.99	0.00	-207.95	0.00	207.95	794.34	397.17	611.61	302.05	120.76	-9.12	0.696
126.00	-5.47	-8.93	0.00	-198.96	0.00	198.96	790.16	395.08	603.26	297.93	122.68	-9.23	0.675
127.00	-5.42	-8.88	0.00	-190.02	0.00	190.02	785.94	392.97	594.94	293.82	124.61	-9.35	0.654
128.00	-5.36	-8.82	0.00	-181.14	0.00	181.14	781.68	390.84	586.64	289.72	126.57	-9.46	0.633
129.00	-5.30	-8.77	0.00	-172.32	0.00	172.32	777.38	388.69	578.37	285.63	128.56	-9.56	0.611
130.00	-5.25	-8.71	0.00	-163.55	0.00	163.55	773.03	386.52	570.12	281.56	130.56	-9.67	0.588
131.00	-5.19	-8.66	0.00	-154.84	0.00	154.84	768.64	384.32	561.90	277.50	132.59	-9.77	0.565
132.00	-5.14	-8.60	0.00	-146.19	0.00	146.19	764.22	382.11	553.70	273.45	134.64	-9.87	0.542
133.00	-5.09	-8.54	0.00	-137.59	0.00	137.59	759.75	379.87	545.53	269.42	136.71	-9.97	0.518
134.00	-5.03	-8.49	0.00	-129.04	0.00	129.04	755.24	377.62	537.39	265.40	138.79	-10.06	0.493
135.00	-4.98	-8.43	0.00	-120.55	0.00	120.55	750.69	375.34	529.28	261.39	140.90	-10.15	0.468
136.00	-4.93	-8.38	0.00	-112.12	0.00	112.12	746.09	373.05	521.20	257.40	143.02	-10.23	0.443

Site Number: 307538

Code: ANSI/TIA-222-G

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Site Name: Dublin OH, OH

Engineering Number:13619927_C3_02

4/14/2021 6:25:13 PM

Customer: AT&T MOBILITY

Load Case: 0.9D + 1.6W

90 mph with No Ice (Reduced DL)

39 Iterations

Gust Response Factor :1.10

Wind Importance Factor 1.00

Dead Load Factor :0.90

Wind Load Factor :1.60

137.00	-4.89	-8.32	0.00	-103.74	0.00	103.74	741.46	370.73	513.16	253.43	145.16	-10.32	0.416
138.00	-4.84	-8.27	0.00	-95.42	0.00	95.42	736.79	368.39	505.14	249.47	147.32	-10.39	0.390
139.00	-4.79	-8.21	0.00	-87.15	0.00	87.15	732.07	366.03	497.16	245.53	149.49	-10.47	0.362
140.00	-4.74	-8.15	0.00	-78.95	0.00	78.95	727.31	363.66	489.21	241.60	151.68	-10.53	0.334
141.00	-4.70	-8.10	0.00	-70.79	0.00	70.79	720.73	360.36	480.10	237.10	153.88	-10.60	0.306
142.00	-4.66	-8.04	0.00	-62.69	0.00	62.69	713.79	356.89	470.85	232.53	156.10	-10.66	0.277
143.00	-3.36	-6.44	0.00	-54.65	0.00	54.65	706.85	353.42	461.68	228.01	158.32	-10.71	0.245
144.00	-3.32	-6.38	0.00	-48.22	0.00	48.22	699.90	349.95	452.61	223.52	160.56	-10.76	0.221
145.00	-3.28	-6.32	0.00	-41.83	0.00	41.83	692.96	346.48	443.62	219.09	162.80	-10.80	0.196
146.00	-3.24	-6.27	0.00	-35.51	0.00	35.51	686.02	343.01	434.73	214.69	165.05	-10.84	0.170
147.00	-3.20	-6.21	0.00	-29.24	0.00	29.24	679.08	339.54	425.92	210.35	167.31	-10.87	0.144
148.00	-3.16	-6.15	0.00	-23.03	0.00	23.03	672.14	336.07	417.21	206.04	169.58	-10.90	0.117
149.00	-3.13	-6.10	0.00	-16.88	0.00	16.88	665.20	332.60	408.58	201.78	171.85	-10.92	0.089
150.00	0.00	-5.39	0.00	-10.78	0.00	10.78	658.26	329.13	400.05	197.57	174.13	-10.93	0.055

Site Number: 307538

Code: ANSI/TIA-222-G

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Site Name: Dublin OH, OH

Engineering Number:13619927_C3_02

4/14/2021 6:25:13 PM

Customer: AT&T MOBILITY

Load Case: 1.2D + 1.0Di + 1.0Wi	40 mph with 0.75 in Radial Ice	38 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		6.1	0.0					0.0	0.0	6.1	0.0	0.0	0.0
1.00		12.2	216.6					13.4	24.6	25.6	241.2	0.0	0.0
2.00		12.2	221.5					13.4	25.0	25.6	246.5	0.0	0.0
3.00		12.2	223.5					13.4	25.3	25.6	248.7	0.0	0.0
4.00		12.2	224.6					13.4	25.4	25.5	250.0	0.0	0.0
5.00		12.1	225.2					13.3	25.5	25.5	250.7	0.0	0.0
6.00		12.1	225.5					13.3	25.6	25.4	251.1	0.0	0.0
7.00		12.1	225.6					13.2	25.7	25.3	251.3	0.0	0.0
8.00		12.0	225.5					13.2	25.8	25.2	251.3	0.0	0.0
9.00		12.0	225.4					13.2	25.8	25.2	251.2	0.0	0.0
10.00		11.9	225.1					13.1	25.9	25.1	251.0	0.0	0.0
11.00		11.9	224.8					13.1	26.0	25.0	250.8	0.0	0.0
12.00		11.9	224.5					13.0	26.0	24.9	250.5	0.0	0.0
13.00		11.8	224.0					13.0	26.1	24.8	250.1	0.0	0.0
14.00		11.8	223.6					12.9	26.1	24.7	249.7	0.0	0.0
15.00		11.7	223.1					12.9	26.1	24.6	249.2	0.0	0.0
16.00		11.7	222.5					12.9	26.2	24.5	248.7	0.0	0.0
17.00		11.7	222.0					12.8	26.2	24.5	248.2	0.0	0.0
18.00		11.6	221.4					12.8	26.3	24.4	247.7	0.0	0.0
19.00		11.6	220.8					12.7	26.3	24.3	247.1	0.0	0.0
20.00		11.5	220.2					12.7	26.3	24.2	246.5	0.0	0.0
21.00		11.5	219.5					12.6	26.4	24.1	245.9	0.0	0.0
22.00		11.4	218.8					12.6	26.4	24.0	245.2	0.0	0.0
23.00		11.4	218.2					12.5	26.4	23.9	244.6	0.0	0.0
24.00		11.3	217.5					12.5	26.4	23.8	243.9	0.0	0.0
25.00		11.3	216.7					12.4	26.5	23.7	243.2	0.0	0.0
26.00		11.3	216.0					12.4	26.5	23.6	242.5	0.0	0.0
27.00		11.2	215.3					12.3	26.5	23.5	241.8	0.0	0.0
28.00		11.2	214.5					12.3	26.5	23.4	241.1	0.0	0.0
29.00		11.1	213.8					12.2	26.6	23.4	240.3	0.0	0.0
30.00		11.1	213.0					12.2	26.6	23.3	239.6	0.0	0.0
31.00		11.1	212.2					12.2	26.6	23.3	238.8	0.0	0.0
32.00		11.2	211.4					12.3	26.6	23.5	238.1	0.0	0.0
33.00		11.2	210.7					12.3	26.6	23.6	237.3	0.0	0.0
34.00		11.3	209.9					12.4	26.7	23.7	236.5	0.0	0.0
35.00		11.3	209.0					12.4	26.7	23.8	235.7	0.0	0.0
36.00		11.4	208.2					12.5	26.7	23.9	234.9	0.0	0.0
37.00		11.4	207.4					12.5	26.7	24.0	234.1	0.0	0.0
38.00		11.5	206.6					12.6	26.7	24.0	233.3	0.0	0.0
39.00		11.5	205.7					12.6	26.8	24.1	232.5	0.0	0.0
40.00		11.5	204.9					12.7	26.8	24.2	231.7	0.0	0.0
41.00		11.6	204.1					12.7	26.8	24.3	230.9	0.0	0.0
42.00		11.6	203.2					12.7	26.8	24.3	230.0	0.0	0.0
43.00		11.6	202.4					12.8	26.8	24.4	229.2	0.0	0.0
44.00		11.6	201.5					14.6	47.1	26.3	248.6	0.0	0.0
45.00		11.7	200.6					16.5	67.4	28.2	268.0	0.0	0.0
46.00		11.7	199.8					16.6	67.4	28.3	267.2	0.0	0.0
47.00		11.7	198.9					16.6	67.5	28.3	266.4	0.0	0.0

Site Number: 307538

Code: ANSI/TIA-222-G

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Site Name: Dublin OH, OH

Engineering Number:13619927_C3_02

4/14/2021 6:25:21 PM

Customer: AT&T MOBILITY

Load Case: 1.2D + 1.0Di + 1.0Wi			40 mph with 0.75 in Radial Ice				38 Iterations		
Gust Response Factor :1.10		Ice Dead Load Factor :1.00		Wind Importance Factor :1.00				Ice Importance Factor :1.00	
Dead Load Factor :1.20									
Wind Load Factor :1.00									
48.00		11.7	198.0	16.7	67.5	28.4	265.5	0.0	0.0
49.00		8.3	197.1	16.7	67.6	25.0	264.7	0.0	0.0
49.42	Reinf Bottom	5.9	81.9	7.0	28.2	12.9	110.1	0.0	0.0
50.00		3.9	114.4	9.8	86.2	13.7	200.7	0.0	0.0
50.08	Bot - Section 2	6.0	16.3	1.4	12.3	7.4	28.6	0.0	0.0
51.00		11.5	270.0	15.4	135.6	26.9	405.5	0.0	0.0
52.00		12.0	293.2	16.9	147.9	28.8	441.1	0.0	0.0
53.00		12.0	291.8	16.9	148.0	28.9	439.7	0.0	0.0
54.00		12.0	290.3	16.9	148.0	28.9	438.4	0.0	0.0
55.00	Top - Section 1	12.0	288.9	17.0	148.1	28.9	437.0	0.0	0.0
56.00		12.0	158.7	17.2	148.1	29.2	306.8	0.0	0.0
57.00		12.0	158.0	17.2	148.2	29.2	306.2	0.0	0.0
58.00		12.0	157.3	17.2	148.2	29.2	305.5	0.0	0.0
59.00		12.0	156.6	17.3	148.3	29.3	304.8	0.0	0.0
60.00		12.0	155.8	17.3	148.3	29.3	304.2	0.0	0.0
61.00		12.0	155.1	17.3	148.4	29.3	303.5	0.0	0.0
62.00		12.0	154.4	17.3	148.4	29.3	302.8	0.0	0.0
63.00		12.0	153.6	17.4	148.5	29.4	302.1	0.0	0.0
64.00		12.0	152.9	17.4	148.5	29.4	301.4	0.0	0.0
65.00		12.0	152.2	17.4	148.6	29.4	300.8	0.0	0.0
66.00		12.0	151.4	17.4	148.6	29.4	300.1	0.0	0.0
67.00		12.0	150.7	17.4	148.7	29.4	299.4	0.0	0.0
68.00		12.0	150.0	17.4	148.7	29.4	298.7	0.0	0.0
69.00		12.0	149.2	17.4	148.8	29.4	298.0	0.0	0.0
70.00		11.9	148.5	17.5	148.8	29.4	297.3	0.0	0.0
71.00		11.9	147.7	17.5	148.8	29.4	296.6	0.0	0.0
72.00		11.9	147.0	17.5	148.9	29.4	295.8	0.0	0.0
73.00		11.9	146.2	17.5	148.9	29.4	295.1	0.0	0.0
74.00		11.9	145.5	17.5	149.0	29.4	294.4	0.0	0.0
75.00		11.9	144.7	17.5	149.0	29.4	293.7	0.0	0.0
76.00		11.9	143.9	17.5	149.1	29.3	293.0	0.0	0.0
77.00		11.8	143.2	17.5	149.1	29.3	292.3	0.0	0.0
78.00		11.8	142.4	17.5	149.1	29.3	291.5	0.0	0.0
79.00		11.8	141.6	17.5	149.2	29.3	290.8	0.0	0.0
80.00		11.8	140.9	17.5	149.2	29.3	290.1	0.0	0.0
81.00		11.8	140.1	17.5	149.2	29.2	289.4	0.0	0.0
82.00		11.7	139.3	17.5	149.3	29.2	288.6	0.0	0.0
83.00		11.7	138.6	17.5	149.3	29.2	287.9	0.0	0.0
84.00		11.7	137.8	17.5	149.4	29.2	287.2	0.0	0.0
85.00		11.7	137.0	17.5	149.4	29.1	286.4	0.0	0.0
86.00		11.7	136.2	17.4	149.4	29.1	285.7	0.0	0.0
87.00		11.6	135.5	17.4	149.5	29.1	284.9	0.0	0.0
88.00		11.6	134.7	17.4	149.5	29.0	284.2	0.0	0.0
89.00		11.6	133.9	17.4	149.5	29.0	283.4	0.0	0.0
90.00		11.5	133.1	17.4	149.6	28.9	282.7	0.0	0.0
91.00		11.5	132.3	17.4	149.6	28.9	281.9	0.0	0.0
92.00		11.5	131.6	17.4	149.6	28.9	281.2	0.0	0.0
93.00		11.5	130.8	17.4	149.7	28.8	280.4	0.0	0.0
94.00		11.4	130.0	17.3	149.7	28.8	279.7	0.0	0.0
95.00		11.4	129.2	17.3	149.7	28.7	278.9	0.0	0.0
96.00		11.4	128.4	17.3	149.8	28.7	278.2	0.0	0.0
97.00		11.3	127.6	17.3	149.8	28.6	277.4	0.0	0.0
98.00		11.3	126.8	17.3	149.8	28.6	276.7	0.0	0.0
99.00		11.3	126.0	17.3	149.9	28.5	275.9	0.0	0.0
100.00		11.2	125.2	17.2	149.9	28.5	275.1	0.0	0.0
101.00	Bot - Section 3	11.3	124.4	17.2	149.9	28.5	274.4	0.0	0.0
102.00		11.3	179.6	17.2	150.0	28.5	329.5	0.0	0.0

Site Number: 307538

Code: ANSI/TIA-222-G

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Site Name: Dublin OH, OH

Engineering Number:13619927_C3_02

4/14/2021 6:25:21 PM

Customer: AT&T MOBILITY

Load Case: 1.2D + 1.0Di + 1.0Wi			40 mph with 0.75 in Radial Ice				38 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													
103.00		11.3	178.4		17.2	150.0	28.5	328.4	0.0	0.0			
104.00		11.3	177.2		17.1	150.0	28.4	327.2	0.0	0.0			
105.00	Top - Section 2	11.2	176.0		17.1	150.1	28.3	326.1	0.0	0.0			
106.00		11.2	104.8		17.3	150.1	28.4	254.9	0.0	0.0			
107.00		11.1	104.2		17.2	150.1	28.4	254.3	0.0	0.0			
108.00		10.8	103.5		17.2	150.1	28.0	253.6	0.0	0.0			
108.94	Reinf. Top	5.5	96.4		16.1	140.8	21.7	237.2	0.0	0.0			
109.00		5.9	6.4		1.1	4.4	6.9	10.8	0.0	0.0			
110.00		11.0	102.1		17.2	70.0	28.2	172.2	0.0	0.0			
111.00		11.0	101.5		17.1	70.1	28.1	171.5	0.0	0.0			
112.00		10.9	100.8		17.1	70.1	28.0	170.9	0.0	0.0			
113.00		10.9	100.1		17.1	70.1	28.0	170.2	0.0	0.0			
114.00		10.9	99.4		14.5	48.9	25.4	148.3	0.0	0.0			
115.00		10.8	98.7		12.0	27.6	22.8	126.3	0.0	0.0			
116.00		10.8	98.1		12.0	27.6	22.7	125.7	0.0	0.0			
117.00		10.7	97.4		11.9	27.6	22.6	125.0	0.0	0.0			
118.00		10.7	96.7		11.9	27.6	22.5	124.3	0.0	0.0			
119.00		10.6	96.0		11.8	27.6	22.5	123.6	0.0	0.0			
120.00		10.6	95.3		11.8	27.6	22.4	122.9	0.0	0.0			
121.00		10.5	94.6		11.7	27.6	22.3	122.3	0.0	0.0			
122.00		10.5	93.9		11.7	27.6	22.2	121.6	0.0	0.0			
123.00		10.5	93.2		11.6	27.6	22.1	120.9	0.0	0.0			
124.00		10.4	92.6		11.6	27.7	22.0	120.2	0.0	0.0			
125.00		10.4	91.9		11.5	27.7	21.9	119.5	0.0	0.0			
126.00		10.3	91.2		11.5	27.7	21.8	118.8	0.0	0.0			
127.00		10.3	90.5		11.4	27.7	21.7	118.2	0.0	0.0			
128.00		10.2	89.8		11.4	27.7	21.6	117.5	0.0	0.0			
129.00		10.2	89.1		11.3	27.7	21.5	116.8	0.0	0.0			
130.00		10.1	88.4		11.3	27.7	21.4	116.1	0.0	0.0			
131.00		10.1	87.7		11.2	27.7	21.3	115.4	0.0	0.0			
132.00		10.0	87.0		11.2	27.7	21.2	114.7	0.0	0.0			
133.00		10.0	86.3		11.1	27.7	21.1	114.0	0.0	0.0			
134.00		9.9	85.6		11.1	27.7	21.0	113.3	0.0	0.0			
135.00		9.9	84.9		11.0	27.7	20.9	112.6	0.0	0.0			
136.00		9.8	84.2		10.9	27.7	20.7	112.0	0.0	0.0			
137.00		9.7	83.5		10.9	27.7	20.6	111.3	0.0	0.0			
138.00		9.7	82.8		10.8	27.7	20.5	110.6	0.0	0.0			
139.00		9.6	82.1		10.8	27.8	20.4	109.9	0.0	0.0			
140.00		9.6	81.4		10.7	27.8	20.3	109.2	0.0	0.0			
141.00		9.5	80.7		10.7	27.8	20.2	108.5	0.0	0.0			
142.00		9.5	80.0		10.6	27.8	20.1	107.8	0.0	0.0			
143.00	Appurtenance(s)	9.4	79.3	279.6	0.0	0.0	2,951.5	10.5	27.8	299.5	3,058.6	0.0	0.0
144.00		9.4	78.6		10.5	27.8	19.8	106.4	0.0	0.0			
145.00		9.3	77.9		10.4	27.8	19.7	105.7	0.0	0.0			
146.00		9.3	77.2		10.4	27.8	19.6	105.0	0.0	0.0			
147.00		9.2	76.5		10.3	27.8	19.5	104.3	0.0	0.0			
148.00		9.1	75.8		10.2	27.8	19.4	103.6	0.0	0.0			
149.00		9.1	75.1		10.2	27.8	19.3	102.9	0.0	0.0			
150.00	Appurtenance(s)	4.5	74.3	946.7	0.0	1,701.0	10,911.5	10.1	27.8	961.4	11,013.7	0.0	0.0
							Totals:	5,079.48	49,053.3	0.00	0.00		

Load Case: 1.2D + 1.0Di + 1.0Wi

40 mph with 0.75 in Radial Ice

38 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	-49.05	-5.08	0.00	-557.96	0.00	557.96	2,804.10	1,402.05	4,295.35	2,121.31	0.00	0.00	0.281
1.00	-48.81	-5.07	0.00	-552.88	0.00	552.88	2,797.21	1,398.61	4,266.65	2,107.14	0.00	-0.02	0.280
2.00	-48.56	-5.07	0.00	-547.80	0.00	547.80	2,790.29	1,395.14	4,237.98	2,092.98	0.01	-0.04	0.279
3.00	-48.31	-5.06	0.00	-542.74	0.00	542.74	2,783.32	1,391.66	4,209.34	2,078.83	0.02	-0.07	0.278
4.00	-48.06	-5.05	0.00	-537.68	0.00	537.68	2,776.32	1,388.16	4,180.73	2,064.70	0.04	-0.09	0.278
5.00	-47.81	-5.04	0.00	-532.63	0.00	532.63	2,769.27	1,384.63	4,152.14	2,050.59	0.06	-0.11	0.277
6.00	-47.55	-5.04	0.00	-527.58	0.00	527.58	2,762.18	1,381.09	4,123.59	2,036.49	0.08	-0.13	0.276
7.00	-47.30	-5.03	0.00	-522.54	0.00	522.54	2,755.05	1,377.52	4,095.07	2,022.40	0.11	-0.15	0.276
8.00	-47.05	-5.02	0.00	-517.51	0.00	517.51	2,747.88	1,373.94	4,066.58	2,008.33	0.15	-0.18	0.275
9.00	-46.79	-5.01	0.00	-512.49	0.00	512.49	2,740.66	1,370.33	4,038.12	1,994.27	0.19	-0.20	0.274
10.00	-46.54	-5.01	0.00	-507.48	0.00	507.48	2,733.41	1,366.70	4,009.69	1,980.24	0.23	-0.22	0.273
11.00	-46.29	-5.00	0.00	-502.47	0.00	502.47	2,726.11	1,363.06	3,981.30	1,966.21	0.28	-0.24	0.273
12.00	-46.04	-4.99	0.00	-497.47	0.00	497.47	2,718.78	1,359.39	3,952.94	1,952.21	0.33	-0.27	0.272
13.00	-45.78	-4.98	0.00	-492.48	0.00	492.48	2,711.40	1,355.70	3,924.62	1,938.22	0.39	-0.29	0.271
14.00	-45.53	-4.98	0.00	-487.50	0.00	487.50	2,703.98	1,351.99	3,896.34	1,924.25	0.46	-0.31	0.270
15.00	-45.28	-4.97	0.00	-482.52	0.00	482.52	2,696.52	1,348.26	3,868.09	1,910.30	0.52	-0.33	0.269
16.00	-45.03	-4.96	0.00	-477.55	0.00	477.55	2,689.02	1,344.51	3,839.88	1,896.37	0.60	-0.36	0.269
17.00	-44.78	-4.95	0.00	-472.59	0.00	472.59	2,681.48	1,340.74	3,811.71	1,882.46	0.67	-0.38	0.268
18.00	-44.53	-4.94	0.00	-467.64	0.00	467.64	2,673.89	1,336.95	3,783.58	1,868.57	0.76	-0.40	0.267
19.00	-44.28	-4.94	0.00	-462.70	0.00	462.70	2,666.27	1,333.13	3,755.48	1,854.69	0.84	-0.43	0.266
20.00	-44.03	-4.93	0.00	-457.76	0.00	457.76	2,658.60	1,329.30	3,727.43	1,840.84	0.93	-0.45	0.265
21.00	-43.79	-4.92	0.00	-452.84	0.00	452.84	2,650.89	1,325.45	3,699.43	1,827.01	1.03	-0.47	0.264
22.00	-43.54	-4.91	0.00	-447.92	0.00	447.92	2,643.14	1,321.57	3,671.46	1,813.20	1.13	-0.50	0.264
23.00	-43.29	-4.90	0.00	-443.01	0.00	443.01	2,635.35	1,317.68	3,643.54	1,799.41	1.24	-0.52	0.263
24.00	-43.05	-4.89	0.00	-438.11	0.00	438.11	2,627.52	1,313.76	3,615.66	1,785.64	1.35	-0.54	0.262
25.00	-42.80	-4.89	0.00	-433.21	0.00	433.21	2,619.65	1,309.83	3,587.83	1,771.90	1.47	-0.57	0.261
26.00	-42.56	-4.88	0.00	-428.33	0.00	428.33	2,611.74	1,305.87	3,560.05	1,758.17	1.59	-0.59	0.260
27.00	-42.31	-4.87	0.00	-423.45	0.00	423.45	2,603.78	1,301.89	3,532.31	1,744.47	1.72	-0.61	0.259
28.00	-42.07	-4.86	0.00	-418.59	0.00	418.59	2,595.79	1,297.89	3,504.62	1,730.80	1.85	-0.64	0.258
29.00	-41.83	-4.85	0.00	-413.73	0.00	413.73	2,587.75	1,293.88	3,476.97	1,717.15	1.98	-0.66	0.257
30.00	-41.59	-4.84	0.00	-408.88	0.00	408.88	2,579.67	1,289.84	3,449.38	1,703.52	2.12	-0.69	0.256
31.00	-41.35	-4.83	0.00	-404.03	0.00	404.03	2,571.55	1,285.78	3,421.84	1,689.92	2.27	-0.71	0.255
32.00	-41.11	-4.82	0.00	-399.20	0.00	399.20	2,563.39	1,281.70	3,394.34	1,676.34	2.42	-0.73	0.254
33.00	-40.87	-4.81	0.00	-394.38	0.00	394.38	2,555.19	1,277.59	3,366.90	1,662.79	2.58	-0.76	0.253
34.00	-40.63	-4.80	0.00	-389.56	0.00	389.56	2,546.95	1,273.47	3,339.51	1,649.26	2.74	-0.78	0.252
35.00	-40.39	-4.79	0.00	-384.76	0.00	384.76	2,538.66	1,269.33	3,312.18	1,635.76	2.90	-0.81	0.251
36.00	-40.16	-4.78	0.00	-379.97	0.00	379.97	2,530.34	1,265.17	3,284.90	1,622.29	3.08	-0.83	0.250
37.00	-39.92	-4.77	0.00	-375.18	0.00	375.18	2,521.97	1,260.98	3,257.67	1,608.84	3.25	-0.85	0.249
38.00	-39.69	-4.76	0.00	-370.41	0.00	370.41	2,513.56	1,256.78	3,230.50	1,595.42	3.43	-0.88	0.248
39.00	-39.45	-4.75	0.00	-365.65	0.00	365.65	2,505.11	1,252.56	3,203.38	1,582.03	3.62	-0.90	0.247
40.00	-39.22	-4.74	0.00	-360.89	0.00	360.89	2,496.62	1,248.31	3,176.33	1,568.67	3.81	-0.93	0.246
41.00	-38.99	-4.73	0.00	-356.15	0.00	356.15	2,488.09	1,244.04	3,149.33	1,555.33	4.01	-0.95	0.245
42.00	-38.75	-4.72	0.00	-351.43	0.00	351.43	2,479.52	1,239.76	3,122.39	1,542.03	4.21	-0.98	0.244

Load Case: 1.2D + 1.0Di + 1.0Wi				40 mph with 0.75 in Radial Ice				38 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													
43.00	-38.52	-4.71	0.00	-346.71	0.00	346.71	2,470.90	1,235.45	3,095.51	1,528.75	4.42	-1.00	0.242
44.00	-38.27	-4.69	0.00	-342.00	0.00	342.00	2,462.25	1,231.12	3,068.68	1,515.51	4.63	-1.02	0.241
45.00	-38.00	-4.68	0.00	-337.31	0.00	337.31	2,453.55	1,226.78	3,041.93	1,502.29	4.85	-1.05	0.240
46.00	-37.74	-4.66	0.00	-332.64	0.00	332.64	2,444.81	1,222.41	3,015.23	1,489.11	5.07	-1.07	0.239
47.00	-37.47	-4.64	0.00	-327.98	0.00	327.98	2,433.40	1,216.70	2,985.36	1,474.36	5.30	-1.10	0.238
48.00	-37.20	-4.62	0.00	-323.34	0.00	323.34	2,420.67	1,210.34	2,954.04	1,458.89	5.53	-1.12	0.237
49.00	-36.94	-4.60	0.00	-318.71	0.00	318.71	2,407.94	1,203.97	2,922.88	1,443.50	5.77	-1.15	0.236
49.42	-36.82	-4.60	0.00	-316.80	0.00	316.80	2,402.64	1,201.32	2,909.95	1,437.12	5.87	-1.16	0.236
50.00	-36.62	-4.58	0.00	-314.11	0.00	314.11	2,395.22	1,197.61	2,891.89	1,428.20	6.01	-1.17	0.124
50.08	-36.59	-4.58	0.00	-313.73	0.00	313.73	2,394.16	1,197.08	2,889.32	1,426.93	6.03	-1.17	0.124
51.00	-36.19	-4.55	0.00	-309.53	0.00	309.53	2,382.49	1,191.25	2,861.07	1,412.98	6.26	-1.19	0.122
52.00	-35.75	-4.52	0.00	-304.98	0.00	304.98	2,369.77	1,184.88	2,830.41	1,397.83	6.51	-1.20	0.121
53.00	-35.31	-4.49	0.00	-300.46	0.00	300.46	2,357.04	1,178.52	2,799.92	1,382.77	6.76	-1.21	0.120
54.00	-34.87	-4.46	0.00	-295.97	0.00	295.97	2,344.32	1,172.16	2,769.59	1,367.80	7.02	-1.22	0.119
55.00	-34.43	-4.43	0.00	-291.50	0.00	291.50	1,548.01	774.00	1,862.94	920.03	7.27	-1.24	0.152
56.00	-34.12	-4.40	0.00	-287.07	0.00	287.07	1,543.56	771.78	1,847.57	912.45	7.54	-1.25	0.150
57.00	-33.82	-4.38	0.00	-282.67	0.00	282.67	1,539.08	769.54	1,832.21	904.86	7.80	-1.26	0.148
58.00	-33.51	-4.35	0.00	-278.29	0.00	278.29	1,534.55	767.28	1,816.87	897.28	8.06	-1.28	0.147
59.00	-33.21	-4.32	0.00	-273.94	0.00	273.94	1,529.98	764.99	1,801.53	889.71	8.33	-1.29	0.145
60.00	-32.90	-4.29	0.00	-269.62	0.00	269.62	1,525.38	762.69	1,786.21	882.14	8.61	-1.31	0.143
61.00	-32.60	-4.26	0.00	-265.33	0.00	265.33	1,520.73	760.36	1,770.89	874.58	8.88	-1.32	0.142
62.00	-32.29	-4.24	0.00	-261.07	0.00	261.07	1,516.03	758.02	1,755.59	867.02	9.16	-1.33	0.140
63.00	-31.99	-4.21	0.00	-256.83	0.00	256.83	1,511.30	755.65	1,740.30	859.47	9.44	-1.35	0.138
64.00	-31.69	-4.18	0.00	-252.63	0.00	252.63	1,506.53	753.26	1,725.03	851.93	9.72	-1.36	0.137
65.00	-31.39	-4.15	0.00	-248.45	0.00	248.45	1,501.71	750.86	1,709.77	844.39	10.01	-1.37	0.135
66.00	-31.09	-4.12	0.00	-244.30	0.00	244.30	1,496.86	748.43	1,694.53	836.87	10.30	-1.39	0.133
67.00	-30.79	-4.09	0.00	-240.18	0.00	240.18	1,491.96	745.98	1,679.31	829.35	10.59	-1.40	0.132
68.00	-30.49	-4.06	0.00	-236.09	0.00	236.09	1,487.02	743.51	1,664.10	821.84	10.89	-1.42	0.130
69.00	-30.19	-4.03	0.00	-232.03	0.00	232.03	1,482.04	741.02	1,648.91	814.33	11.19	-1.43	0.129
70.00	-29.90	-4.00	0.00	-228.00	0.00	228.00	1,477.02	738.51	1,633.74	806.84	11.49	-1.44	0.127
71.00	-29.60	-3.97	0.00	-224.00	0.00	224.00	1,471.96	735.98	1,618.59	799.36	11.79	-1.46	0.125
72.00	-29.30	-3.94	0.00	-220.03	0.00	220.03	1,466.86	733.43	1,603.46	791.89	12.10	-1.47	0.124
73.00	-29.01	-3.91	0.00	-216.09	0.00	216.09	1,461.71	730.86	1,588.35	784.42	12.41	-1.48	0.122
74.00	-28.71	-3.88	0.00	-212.18	0.00	212.18	1,456.52	728.26	1,573.26	776.97	12.72	-1.50	0.120
75.00	-28.42	-3.85	0.00	-208.30	0.00	208.30	1,451.30	725.65	1,558.20	769.54	13.03	-1.51	0.119
76.00	-28.13	-3.82	0.00	-204.45	0.00	204.45	1,446.03	723.01	1,543.16	762.11	13.35	-1.52	0.117
77.00	-27.83	-3.79	0.00	-200.63	0.00	200.63	1,440.72	720.36	1,528.14	754.69	13.67	-1.53	0.116
78.00	-27.54	-3.76	0.00	-196.84	0.00	196.84	1,435.37	717.68	1,513.15	747.29	13.99	-1.55	0.114
79.00	-27.25	-3.73	0.00	-193.08	0.00	193.08	1,429.98	714.99	1,498.19	739.90	14.32	-1.56	0.112
80.00	-26.96	-3.69	0.00	-189.36	0.00	189.36	1,424.54	712.27	1,483.25	732.52	14.65	-1.57	0.111
81.00	-26.67	-3.66	0.00	-185.66	0.00	185.66	1,419.07	709.54	1,468.35	725.16	14.98	-1.59	0.109
82.00	-26.38	-3.63	0.00	-182.00	0.00	182.00	1,413.56	706.78	1,453.47	717.81	15.31	-1.60	0.107
83.00	-26.10	-3.60	0.00	-178.37	0.00	178.37	1,408.00	704.00	1,438.62	710.48	15.65	-1.61	0.106
84.00	-25.81	-3.57	0.00	-174.77	0.00	174.77	1,402.40	701.20	1,423.80	703.16	15.98	-1.62	0.104
85.00	-25.52	-3.54	0.00	-171.20	0.00	171.20	1,396.76	698.38	1,409.01	695.86	16.33	-1.63	0.103
86.00	-25.24	-3.50	0.00	-167.66	0.00	167.66	1,391.08	695.54	1,394.25	688.57	16.67	-1.65	0.101
87.00	-24.95	-3.47	0.00	-164.16	0.00	164.16	1,385.36	692.68	1,379.53	681.30	17.02	-1.66	0.100
88.00	-24.67	-3.44	0.00	-160.69	0.00	160.69	1,379.60	689.80	1,364.84	674.04	17.36	-1.67	0.098
89.00	-24.39	-3.41	0.00	-157.25	0.00	157.25	1,373.79	686.90	1,350.18	666.80	17.72	-1.68	0.096

Load Case: 1.2D + 1.0Di + 1.0Wi				40 mph with 0.75 in Radial Ice				38 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													
90.00	-24.10	-3.38	0.00	-153.84	0.00	153.84	1,367.95	683.97	1,335.56	659.58	18.07	-1.69	0.095
91.00	-23.82	-3.34	0.00	-150.46	0.00	150.46	1,362.06	681.03	1,320.97	652.38	18.43	-1.71	0.093
92.00	-23.54	-3.31	0.00	-147.12	0.00	147.12	1,356.14	678.07	1,306.43	645.19	18.78	-1.72	0.092
93.00	-23.26	-3.28	0.00	-143.81	0.00	143.81	1,350.17	675.08	1,291.91	638.03	19.15	-1.73	0.090
94.00	-22.98	-3.25	0.00	-140.53	0.00	140.53	1,344.16	672.08	1,277.44	630.88	19.51	-1.74	0.088
95.00	-22.70	-3.21	0.00	-137.28	0.00	137.28	1,338.11	669.05	1,263.01	623.75	19.87	-1.75	0.087
96.00	-22.43	-3.18	0.00	-134.07	0.00	134.07	1,332.01	666.01	1,248.61	616.64	20.24	-1.76	0.085
97.00	-22.15	-3.15	0.00	-130.89	0.00	130.89	1,325.88	662.94	1,234.26	609.56	20.61	-1.77	0.084
98.00	-21.87	-3.11	0.00	-127.74	0.00	127.74	1,319.70	659.85	1,219.95	602.49	20.99	-1.78	0.082
99.00	-21.60	-3.08	0.00	-124.63	0.00	124.63	1,313.49	656.74	1,205.68	595.44	21.36	-1.80	0.081
100.00	-21.32	-3.05	0.00	-121.55	0.00	121.55	1,307.23	653.62	1,191.45	588.41	21.74	-1.81	0.079
101.00	-21.05	-3.01	0.00	-118.50	0.00	118.50	1,300.93	650.47	1,177.27	581.41	22.12	-1.82	0.078
102.00	-20.72	-2.98	0.00	-115.49	0.00	115.49	1,294.59	647.30	1,163.14	574.43	22.50	-1.83	0.075
103.00	-20.39	-2.94	0.00	-112.51	0.00	112.51	1,286.70	643.35	1,147.69	566.80	22.88	-1.84	0.074
104.00	-20.07	-2.91	0.00	-109.56	0.00	109.56	1,277.44	638.72	1,131.15	558.63	23.27	-1.85	0.072
105.00	-19.74	-2.87	0.00	-106.65	0.00	106.65	869.30	434.65	782.14	386.27	23.66	-1.86	0.086
106.00	-19.49	-2.84	0.00	-103.78	0.00	103.78	865.94	432.97	773.50	382.00	24.05	-1.87	0.085
107.00	-19.23	-2.81	0.00	-100.94	0.00	100.94	862.54	431.27	764.87	377.74	24.44	-1.88	0.083
108.00	-18.98	-2.77	0.00	-98.13	0.00	98.13	859.11	429.55	756.25	373.48	24.83	-1.89	0.081
108.94	-18.74	-2.75	0.00	-95.53	0.00	95.53	855.84	427.92	748.17	369.49	25.21	-1.90	0.079
108.94	-18.74	-2.75	0.00	-95.53	0.00	95.53	855.84	427.92	748.17	369.49	25.21	-1.90	0.280
109.00	-18.73	-2.75	0.00	-95.36	0.00	95.36	855.63	427.81	747.63	369.23	25.23	-1.90	0.280
110.00	-18.56	-2.72	0.00	-92.62	0.00	92.62	852.10	426.05	739.02	364.98	25.63	-1.93	0.276
111.00	-18.39	-2.70	0.00	-89.89	0.00	89.89	848.54	424.27	730.43	360.73	26.04	-1.97	0.271
112.00	-18.21	-2.68	0.00	-87.19	0.00	87.19	844.94	422.47	721.84	356.49	26.46	-2.01	0.266
113.00	-18.04	-2.66	0.00	-84.52	0.00	84.52	841.29	420.65	713.27	352.26	26.88	-2.04	0.261
114.00	-17.89	-2.64	0.00	-81.86	0.00	81.86	837.61	418.80	704.71	348.03	27.31	-2.08	0.257
115.00	-17.77	-2.62	0.00	-79.22	0.00	79.22	833.88	416.94	696.16	343.81	27.75	-2.11	0.252
116.00	-17.64	-2.60	0.00	-76.61	0.00	76.61	830.11	415.06	687.63	339.59	28.20	-2.15	0.247
117.00	-17.52	-2.59	0.00	-74.00	0.00	74.00	826.30	413.15	679.11	335.39	28.65	-2.18	0.242
118.00	-17.39	-2.57	0.00	-71.42	0.00	71.42	822.45	411.23	670.61	331.19	29.11	-2.22	0.237
119.00	-17.27	-2.55	0.00	-68.85	0.00	68.85	818.56	409.28	662.13	327.00	29.58	-2.25	0.232
120.00	-17.14	-2.53	0.00	-66.30	0.00	66.30	814.63	407.31	653.66	322.82	30.05	-2.28	0.226
121.00	-17.02	-2.52	0.00	-63.77	0.00	63.77	810.65	405.33	645.21	318.64	30.53	-2.31	0.221
122.00	-16.90	-2.50	0.00	-61.25	0.00	61.25	806.64	403.32	636.78	314.48	31.02	-2.35	0.216
123.00	-16.78	-2.48	0.00	-58.75	0.00	58.75	802.58	401.29	628.37	310.33	31.52	-2.38	0.210
124.00	-16.66	-2.46	0.00	-56.27	0.00	56.27	798.48	399.24	619.98	306.18	32.02	-2.41	0.205
125.00	-16.54	-2.44	0.00	-53.81	0.00	53.81	794.34	397.17	611.61	302.05	32.53	-2.44	0.199
126.00	-16.42	-2.43	0.00	-51.37	0.00	51.37	790.16	395.08	603.26	297.93	33.04	-2.47	0.193
127.00	-16.30	-2.41	0.00	-48.94	0.00	48.94	785.94	392.97	594.94	293.82	33.56	-2.50	0.187
128.00	-16.18	-2.39	0.00	-46.53	0.00	46.53	781.68	390.84	586.64	289.72	34.09	-2.53	0.181
129.00	-16.07	-2.37	0.00	-44.15	0.00	44.15	777.38	388.69	578.37	285.63	34.62	-2.55	0.175
130.00	-15.95	-2.35	0.00	-41.78	0.00	41.78	773.03	386.52	570.12	281.56	35.16	-2.58	0.169
131.00	-15.83	-2.33	0.00	-39.43	0.00	39.43	768.64	384.32	561.90	277.50	35.70	-2.61	0.163
132.00	-15.72	-2.31	0.00	-37.10	0.00	37.10	764.22	382.11	553.70	273.45	36.25	-2.63	0.156
133.00	-15.61	-2.29	0.00	-34.78	0.00	34.78	759.75	379.87	545.53	269.42	36.80	-2.66	0.150
134.00	-15.49	-2.27	0.00	-32.49	0.00	32.49	755.24	377.62	537.39	265.40	37.36	-2.68	0.143
135.00	-15.38	-2.25	0.00	-30.22	0.00	30.22	750.69	375.34	529.28	261.39	37.92	-2.70	0.136
136.00	-15.27	-2.23	0.00	-27.97	0.00	27.97	746.09	373.05	521.20	257.40	38.49	-2.72	0.129

Site Number: 307538

Code: ANSI/TIA-222-G

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Site Name: Dublin OH, OH

Engineering Number:13619927_C3_02

4/14/2021 6:25:22 PM

Customer: AT&T MOBILITY

Load Case: 1.2D + 1.0Di + 1.0Wi				40 mph with 0.75 in Radial Ice				38 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													
137.00	-15.16	-2.21	0.00	-25.74	0.00	25.74	741.46	370.73	513.16	253.43	39.06	-2.74	0.122
138.00	-15.05	-2.19	0.00	-23.53	0.00	23.53	736.79	368.39	505.14	249.47	39.64	-2.76	0.115
139.00	-14.94	-2.17	0.00	-21.34	0.00	21.34	732.07	366.03	497.16	245.53	40.22	-2.78	0.107
140.00	-14.83	-2.15	0.00	-19.17	0.00	19.17	727.31	363.66	489.21	241.60	40.81	-2.80	0.100
141.00	-14.72	-2.13	0.00	-17.03	0.00	17.03	720.73	360.36	480.10	237.10	41.39	-2.81	0.092
142.00	-14.61	-2.10	0.00	-14.90	0.00	14.90	713.79	356.89	470.85	232.53	41.98	-2.83	0.085
143.00	-11.57	-1.66	0.00	-12.80	0.00	12.80	706.85	353.42	461.68	228.01	42.58	-2.84	0.073
144.00	-11.47	-1.63	0.00	-11.14	0.00	11.14	699.90	349.95	452.61	223.52	43.17	-2.85	0.066
145.00	-11.36	-1.61	0.00	-9.51	0.00	9.51	692.96	346.48	443.62	219.09	43.77	-2.86	0.060
146.00	-11.26	-1.59	0.00	-7.90	0.00	7.90	686.02	343.01	434.73	214.69	44.37	-2.87	0.053
147.00	-11.16	-1.56	0.00	-6.32	0.00	6.32	679.08	339.54	425.92	210.35	44.97	-2.88	0.046
148.00	-11.05	-1.54	0.00	-4.75	0.00	4.75	672.14	336.07	417.21	206.04	45.57	-2.88	0.040
149.00	-10.95	-1.52	0.00	-3.22	0.00	3.22	665.20	332.60	408.58	201.78	46.18	-2.89	0.032
150.00	0.00	-0.96	0.00	-1.70	0.00	1.70	658.26	329.13	400.05	197.57	46.78	-2.89	0.009

Site Number: 307538

Code: ANSI/TIA-222-G

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Site Name: Dublin OH, OH

Engineering Number:13619927_C3_02

4/14/2021 6:25:22 PM

Customer: AT&T MOBILITY

Load Case: 1.0D + 1.0W	Serviceability 60 mph	37 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		9.7	0.0					0.0	0.0	9.7	0.0	0.0	0.0
1.00		19.4	139.7					0.0	18.6	19.4	158.3	0.0	0.0
2.00		19.4	139.1					0.0	18.6	19.4	157.7	0.0	0.0
3.00		19.3	138.5					0.0	18.6	19.3	157.1	0.0	0.0
4.00		19.2	137.9					0.0	18.6	19.2	156.5	0.0	0.0
5.00		19.1	137.3					0.0	18.6	19.1	155.9	0.0	0.0
6.00		19.0	136.7					0.0	18.6	19.0	155.3	0.0	0.0
7.00		18.9	136.1					0.0	18.6	18.9	154.7	0.0	0.0
8.00		18.9	135.5					0.0	18.6	18.9	154.2	0.0	0.0
9.00		18.8	135.0					0.0	18.6	18.8	153.6	0.0	0.0
10.00		18.7	134.4					0.0	18.6	18.7	153.0	0.0	0.0
11.00		18.6	133.8					0.0	18.6	18.6	152.4	0.0	0.0
12.00		18.5	133.2					0.0	18.6	18.5	151.8	0.0	0.0
13.00		18.5	132.6					0.0	18.6	18.5	151.2	0.0	0.0
14.00		18.4	132.0					0.0	18.6	18.4	150.6	0.0	0.0
15.00		18.3	131.4					0.0	18.6	18.3	150.0	0.0	0.0
16.00		18.2	130.8					0.0	18.6	18.2	149.5	0.0	0.0
17.00		18.1	130.3					0.0	18.6	18.1	148.9	0.0	0.0
18.00		18.1	129.7					0.0	18.6	18.1	148.3	0.0	0.0
19.00		18.0	129.1					0.0	18.6	18.0	147.7	0.0	0.0
20.00		17.9	128.5					0.0	18.6	17.9	147.1	0.0	0.0
21.00		17.8	127.9					0.0	18.6	17.8	146.5	0.0	0.0
22.00		17.7	127.3					0.0	18.6	17.7	145.9	0.0	0.0
23.00		17.6	126.7					0.0	18.6	17.6	145.3	0.0	0.0
24.00		17.6	126.1					0.0	18.6	17.6	144.8	0.0	0.0
25.00		17.5	125.6					0.0	18.6	17.5	144.2	0.0	0.0
26.00		17.4	125.0					0.0	18.6	17.4	143.6	0.0	0.0
27.00		17.3	124.4					0.0	18.6	17.3	143.0	0.0	0.0
28.00		17.2	123.8					0.0	18.6	17.2	142.4	0.0	0.0
29.00		17.2	123.2					0.0	18.6	17.2	141.8	0.0	0.0
30.00		17.1	122.6					0.0	18.6	17.1	141.2	0.0	0.0
31.00		17.2	122.0					0.0	18.6	17.2	140.6	0.0	0.0
32.00		17.2	121.4					0.0	18.6	17.2	140.1	0.0	0.0
33.00		17.3	120.9					0.0	18.6	17.3	139.5	0.0	0.0
34.00		17.4	120.3					0.0	18.6	17.4	138.9	0.0	0.0
35.00		17.4	119.7					0.0	18.6	17.4	138.3	0.0	0.0
36.00		17.5	119.1					0.0	18.6	17.5	137.7	0.0	0.0
37.00		17.5	118.5					0.0	18.6	17.5	137.1	0.0	0.0
38.00		17.6	117.9					0.0	18.6	17.6	136.5	0.0	0.0
39.00		17.6	117.3					0.0	18.6	17.6	135.9	0.0	0.0
40.00		17.7	116.7					0.0	18.6	17.7	135.4	0.0	0.0
41.00		17.7	116.2					0.0	18.6	17.7	134.8	0.0	0.0
42.00		17.7	115.6					0.0	18.6	17.7	134.2	0.0	0.0
43.00		19.6	115.0					0.0	18.6	19.6	133.6	0.0	0.0
44.00		21.4	114.4					5.4	28.0	26.7	142.4	0.0	0.0
45.00		21.4	113.8					5.4	37.3	26.8	151.1	0.0	0.0
46.00		21.4	113.2					5.4	37.3	26.9	150.6	0.0	0.0
47.00		21.4	112.6					5.5	37.3	26.9	150.0	0.0	0.0

Site Number: 307538

Code: ANSI/TIA-222-G

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Site Name: Dublin OH, OH

Engineering Number:13619927_C3_02

4/14/2021 6:25:30 PM

Customer: AT&T MOBILITY

Load Case: 1.0D + 1.0W		Serviceability 60 mph				37 Iterations			
Gust Response Factor :1.10						Wind Importance Factor 1.00			
Dead Load Factor :1.00									
Wind Load Factor :1.00									

48.00		21.5	112.0	5.5	37.3	27.0	149.4	0.0	0.0
49.00		15.2	111.5	5.5	37.3	20.7	148.8	0.0	0.0
49.42	Reinf Bottom	10.7	46.3	2.3	15.6	13.1	61.8	0.0	0.0
50.00		7.2	64.6	3.3	60.8	10.4	125.4	0.0	0.0
50.08	Bot - Section 2	10.9	9.2	0.5	8.7	11.4	17.9	0.0	0.0
51.00		20.9	176.1	5.1	95.5	26.1	271.5	0.0	0.0
52.00		21.9	191.1	5.6	104.1	27.5	295.2	0.0	0.0
53.00		21.9	190.1	5.7	104.1	27.5	294.2	0.0	0.0
54.00		21.9	189.1	5.7	104.1	27.6	293.2	0.0	0.0
55.00	Top - Section 1	21.9	188.1	5.7	104.1	27.6	292.2	0.0	0.0
56.00		21.9	79.7	5.8	104.1	27.6	183.8	0.0	0.0
57.00		21.9	79.3	5.8	104.1	27.6	183.4	0.0	0.0
58.00		21.8	78.8	5.8	104.1	27.7	183.0	0.0	0.0
59.00		21.8	78.4	5.8	104.1	27.7	182.6	0.0	0.0
60.00		21.8	78.0	5.9	104.1	27.7	182.1	0.0	0.0
61.00		21.8	77.6	5.9	104.1	27.7	181.7	0.0	0.0
62.00		21.8	77.1	5.9	104.1	27.7	181.3	0.0	0.0
63.00		21.8	76.7	6.0	104.1	27.7	180.8	0.0	0.0
64.00		21.7	76.3	6.0	104.1	27.7	180.4	0.0	0.0
65.00		21.7	75.8	6.0	104.1	27.7	180.0	0.0	0.0
66.00		21.7	75.4	6.0	104.1	27.7	179.6	0.0	0.0
67.00		21.7	75.0	6.1	104.1	27.7	179.1	0.0	0.0
68.00		21.6	74.6	6.1	104.1	27.7	178.7	0.0	0.0
69.00		21.6	74.1	6.1	104.1	27.7	178.3	0.0	0.0
70.00		21.6	73.7	6.1	104.1	27.7	177.9	0.0	0.0
71.00		21.5	73.3	6.2	104.1	27.7	177.4	0.0	0.0
72.00		21.5	72.9	6.2	104.1	27.7	177.0	0.0	0.0
73.00		21.4	72.4	6.2	104.1	27.7	176.6	0.0	0.0
74.00		21.4	72.0	6.2	104.1	27.6	176.1	0.0	0.0
75.00		21.4	71.6	6.3	104.1	27.6	175.7	0.0	0.0
76.00		21.3	71.1	6.3	104.1	27.6	175.3	0.0	0.0
77.00		21.3	70.7	6.3	104.1	27.6	174.9	0.0	0.0
78.00		21.2	70.3	6.3	104.1	27.5	174.4	0.0	0.0
79.00		21.2	69.9	6.4	104.1	27.5	174.0	0.0	0.0
80.00		21.1	69.4	6.4	104.1	27.5	173.6	0.0	0.0
81.00		21.1	69.0	6.4	104.1	27.5	173.2	0.0	0.0
82.00		21.0	68.6	6.4	104.1	27.4	172.7	0.0	0.0
83.00		20.9	68.2	6.4	104.1	27.4	172.3	0.0	0.0
84.00		20.9	67.7	6.5	104.1	27.4	171.9	0.0	0.0
85.00		20.8	67.3	6.5	104.1	27.3	171.4	0.0	0.0
86.00		20.8	66.9	6.5	104.1	27.3	171.0	0.0	0.0
87.00		20.7	66.4	6.5	104.1	27.2	170.6	0.0	0.0
88.00		20.6	66.0	6.6	104.1	27.2	170.2	0.0	0.0
89.00		20.6	65.6	6.6	104.1	27.1	169.7	0.0	0.0
90.00		20.5	65.2	6.6	104.1	27.1	169.3	0.0	0.0
91.00		20.4	64.7	6.6	104.1	27.1	168.9	0.0	0.0
92.00		20.4	64.3	6.6	104.1	27.0	168.5	0.0	0.0
93.00		20.3	63.9	6.7	104.1	26.9	168.0	0.0	0.0
94.00		20.2	63.5	6.7	104.1	26.9	167.6	0.0	0.0
95.00		20.1	63.0	6.7	104.1	26.8	167.2	0.0	0.0
96.00		20.1	62.6	6.7	104.1	26.8	166.7	0.0	0.0
97.00		20.0	62.2	6.7	104.1	26.7	166.3	0.0	0.0
98.00		19.9	61.7	6.8	104.1	26.7	165.9	0.0	0.0
99.00		19.8	61.3	6.8	104.1	26.6	165.5	0.0	0.0
100.00		19.7	60.9	6.8	104.1	26.6	165.0	0.0	0.0
101.00	Bot - Section 3	19.8	60.5	6.8	104.1	26.7	164.6	0.0	0.0
102.00		19.9	106.0	6.8	104.1	26.8	210.1	0.0	0.0

Site Number: 307538

Code: ANSI/TIA-222-G

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Site Name: Dublin OH, OH

Engineering Number:13619927_C3_02

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Customer: AT&T MOBILITY

Load Case: 1.0D + 1.0W			Serviceability 60 mph				37 Iterations						
Gust Response Factor :1.10									Wind Importance Factor 1.00				
Dead Load Factor :1.00													
Wind Load Factor :1.00													
103.00		19.8	105.2				6.9	104.1	26.7	209.4	0.0	0.0	
104.00		19.8	104.5				6.9	104.1	26.6	208.6	0.0	0.0	
105.00	Top - Section 2	19.7	103.7				6.9	104.1	26.6	207.9	0.0	0.0	
106.00		19.6	44.6				6.9	104.1	26.5	148.8	0.0	0.0	
107.00		19.5	44.3				6.9	104.1	26.4	148.5	0.0	0.0	
108.00		18.8	44.0				7.0	104.1	25.8	148.1	0.0	0.0	
108.94	Reinf. Top	9.7	41.0				6.5	97.6	16.2	138.6	0.0	0.0	
109.00		10.2	2.7				0.4	2.3	10.7	5.1	0.0	0.0	
110.00		19.2	43.4				7.0	37.3	26.2	80.7	0.0	0.0	
111.00		19.1	43.0				7.0	37.3	26.1	80.4	0.0	0.0	
112.00		19.0	42.7				7.0	37.3	26.1	80.1	0.0	0.0	
113.00		18.9	42.4				7.0	37.3	26.0	79.7	0.0	0.0	
114.00		17.3	42.1				7.1	28.0	24.3	70.1	0.0	0.0	
115.00		15.6	41.8				0.0	18.6	15.6	60.4	0.0	0.0	
116.00		15.5	41.4				0.0	18.6	15.5	60.1	0.0	0.0	
117.00		15.5	41.1				0.0	18.6	15.5	59.7	0.0	0.0	
118.00		15.4	40.8				0.0	18.6	15.4	59.4	0.0	0.0	
119.00		15.3	40.5				0.0	18.6	15.3	59.1	0.0	0.0	
120.00		15.2	40.2				0.0	18.6	15.2	58.8	0.0	0.0	
121.00		15.1	39.8				0.0	18.6	15.1	58.5	0.0	0.0	
122.00		15.0	39.5				0.0	18.6	15.0	58.1	0.0	0.0	
123.00		15.0	39.2				0.0	18.6	15.0	57.8	0.0	0.0	
124.00		14.9	38.9				0.0	18.6	14.9	57.5	0.0	0.0	
125.00		14.8	38.6				0.0	18.6	14.8	57.2	0.0	0.0	
126.00		14.7	38.2				0.0	18.6	14.7	56.9	0.0	0.0	
127.00		14.6	37.9				0.0	18.6	14.6	56.5	0.0	0.0	
128.00		14.5	37.6				0.0	18.6	14.5	56.2	0.0	0.0	
129.00		14.4	37.3				0.0	18.6	14.4	55.9	0.0	0.0	
130.00		14.3	37.0				0.0	18.6	14.3	55.6	0.0	0.0	
131.00		14.2	36.6				0.0	18.6	14.2	55.3	0.0	0.0	
132.00		14.1	36.3				0.0	18.6	14.1	54.9	0.0	0.0	
133.00		14.1	36.0				0.0	18.6	14.1	54.6	0.0	0.0	
134.00		14.0	35.7				0.0	18.6	14.0	54.3	0.0	0.0	
135.00		13.9	35.4				0.0	18.6	13.9	54.0	0.0	0.0	
136.00		13.8	35.0				0.0	18.6	13.8	53.7	0.0	0.0	
137.00		13.7	34.7				0.0	18.6	13.7	53.3	0.0	0.0	
138.00		13.6	34.4				0.0	18.6	13.6	53.0	0.0	0.0	
139.00		13.5	34.1				0.0	18.6	13.5	52.7	0.0	0.0	
140.00		13.4	33.8				0.0	18.6	13.4	52.4	0.0	0.0	
141.00		13.3	33.4				0.0	18.6	13.3	52.1	0.0	0.0	
142.00		13.2	33.1				0.0	18.6	13.2	51.7	0.0	0.0	
143.00	Appurtenance(s)	13.1	32.8	319.6	0.0	0.0	1,690.0	0.0	18.6	332.7	1,741.4	0.0	0.0
144.00		13.0	32.5					0.0	18.6	13.0	51.1	0.0	0.0
145.00		12.9	32.2					0.0	18.6	12.9	50.8	0.0	0.0
146.00		12.8	31.8					0.0	18.6	12.8	50.5	0.0	0.0
147.00		12.7	31.5					0.0	18.6	12.7	50.1	0.0	0.0
148.00		12.6	31.2					0.0	18.6	12.6	49.8	0.0	0.0
149.00		12.5	30.9					0.0	18.6	12.5	49.5	0.0	0.0
150.00	Appurtenance(s)	6.2	30.5	1,334.2	0.0	2,680.2	4,647.8	0.0	18.6	1,340.4	4,697.0	0.0	0.0
Totals:									4,867.05	26,958.7	0.00	0.00	

Site Number: 307538

Code: ANSI/TIA-222-G

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Site Name: Dublin OH, OH

Engineering Number:13619927_C3_02

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Customer: AT&T MOBILITY

Load Case: 1.0D + 1.0W

Serviceability 60 mph

37 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	-26.96	-4.86	0.00	-525.10	0.00	525.10	2,804.10	1,402.05	4,295.35	2,121.31	0.00	0.00	0.257
1.00	-26.80	-4.85	0.00	-520.24	0.00	520.24	2,797.21	1,398.61	4,266.65	2,107.14	0.00	-0.02	0.256
2.00	-26.64	-4.84	0.00	-515.39	0.00	515.39	2,790.29	1,395.14	4,237.98	2,092.98	0.01	-0.04	0.256
3.00	-26.48	-4.83	0.00	-510.54	0.00	510.54	2,783.32	1,391.66	4,209.34	2,078.83	0.02	-0.06	0.255
4.00	-26.32	-4.82	0.00	-505.71	0.00	505.71	2,776.32	1,388.16	4,180.73	2,064.70	0.03	-0.08	0.254
5.00	-26.16	-4.81	0.00	-500.89	0.00	500.89	2,769.27	1,384.63	4,152.14	2,050.59	0.05	-0.10	0.254
6.00	-26.01	-4.80	0.00	-496.08	0.00	496.08	2,762.18	1,381.09	4,123.59	2,036.49	0.08	-0.12	0.253
7.00	-25.85	-4.79	0.00	-491.28	0.00	491.28	2,755.05	1,377.52	4,095.07	2,022.40	0.11	-0.15	0.252
8.00	-25.69	-4.78	0.00	-486.49	0.00	486.49	2,747.88	1,373.94	4,066.58	2,008.33	0.14	-0.17	0.252
9.00	-25.54	-4.77	0.00	-481.71	0.00	481.71	2,740.66	1,370.33	4,038.12	1,994.27	0.18	-0.19	0.251
10.00	-25.38	-4.76	0.00	-476.94	0.00	476.94	2,733.41	1,366.70	4,009.69	1,980.24	0.22	-0.21	0.250
11.00	-25.23	-4.75	0.00	-472.17	0.00	472.17	2,726.11	1,363.06	3,981.30	1,966.21	0.26	-0.23	0.249
12.00	-25.08	-4.74	0.00	-467.42	0.00	467.42	2,718.78	1,359.39	3,952.94	1,952.21	0.31	-0.25	0.249
13.00	-24.92	-4.73	0.00	-462.68	0.00	462.68	2,711.40	1,355.70	3,924.62	1,938.22	0.37	-0.27	0.248
14.00	-24.77	-4.72	0.00	-457.95	0.00	457.95	2,703.98	1,351.99	3,896.34	1,924.25	0.43	-0.29	0.247
15.00	-24.62	-4.71	0.00	-453.23	0.00	453.23	2,696.52	1,348.26	3,868.09	1,910.30	0.49	-0.31	0.246
16.00	-24.47	-4.70	0.00	-448.51	0.00	448.51	2,689.02	1,344.51	3,839.88	1,896.37	0.56	-0.34	0.246
17.00	-24.32	-4.69	0.00	-443.81	0.00	443.81	2,681.48	1,340.74	3,811.71	1,882.46	0.63	-0.36	0.245
18.00	-24.17	-4.68	0.00	-439.12	0.00	439.12	2,673.89	1,336.95	3,783.58	1,868.57	0.71	-0.38	0.244
19.00	-24.02	-4.67	0.00	-434.44	0.00	434.44	2,666.27	1,333.13	3,755.48	1,854.69	0.79	-0.40	0.243
20.00	-23.87	-4.66	0.00	-429.76	0.00	429.76	2,658.60	1,329.30	3,727.43	1,840.84	0.88	-0.42	0.242
21.00	-23.72	-4.65	0.00	-425.10	0.00	425.10	2,650.89	1,325.45	3,699.43	1,827.01	0.97	-0.44	0.242
22.00	-23.57	-4.64	0.00	-420.45	0.00	420.45	2,643.14	1,321.57	3,671.46	1,813.20	1.07	-0.47	0.241
23.00	-23.43	-4.63	0.00	-415.80	0.00	415.80	2,635.35	1,317.68	3,643.54	1,799.41	1.17	-0.49	0.240
24.00	-23.28	-4.62	0.00	-411.17	0.00	411.17	2,627.52	1,313.76	3,615.66	1,785.64	1.27	-0.51	0.239
25.00	-23.14	-4.61	0.00	-406.55	0.00	406.55	2,619.65	1,309.83	3,587.83	1,771.90	1.38	-0.53	0.238
26.00	-22.99	-4.60	0.00	-401.93	0.00	401.93	2,611.74	1,305.87	3,560.05	1,758.17	1.49	-0.55	0.237
27.00	-22.85	-4.59	0.00	-397.33	0.00	397.33	2,603.78	1,301.89	3,532.31	1,744.47	1.61	-0.58	0.237
28.00	-22.70	-4.58	0.00	-392.74	0.00	392.74	2,595.79	1,297.89	3,504.62	1,730.80	1.74	-0.60	0.236
29.00	-22.56	-4.57	0.00	-388.15	0.00	388.15	2,587.75	1,293.88	3,476.97	1,717.15	1.86	-0.62	0.235
30.00	-22.42	-4.56	0.00	-383.58	0.00	383.58	2,579.67	1,289.84	3,449.38	1,703.52	2.00	-0.64	0.234
31.00	-22.27	-4.55	0.00	-379.01	0.00	379.01	2,571.55	1,285.78	3,421.84	1,689.92	2.13	-0.67	0.233
32.00	-22.13	-4.54	0.00	-374.46	0.00	374.46	2,563.39	1,281.70	3,394.34	1,676.34	2.28	-0.69	0.232
33.00	-21.99	-4.53	0.00	-369.91	0.00	369.91	2,555.19	1,277.59	3,366.90	1,662.79	2.42	-0.71	0.231
34.00	-21.85	-4.52	0.00	-365.38	0.00	365.38	2,546.95	1,273.47	3,339.51	1,649.26	2.57	-0.73	0.230
35.00	-21.71	-4.51	0.00	-360.86	0.00	360.86	2,538.66	1,269.33	3,312.18	1,635.76	2.73	-0.76	0.229
36.00	-21.57	-4.50	0.00	-356.35	0.00	356.35	2,530.34	1,265.17	3,284.90	1,622.29	2.89	-0.78	0.228
37.00	-21.43	-4.49	0.00	-351.84	0.00	351.84	2,521.97	1,260.98	3,257.67	1,608.84	3.06	-0.80	0.227
38.00	-21.29	-4.48	0.00	-347.35	0.00	347.35	2,513.56	1,256.78	3,230.50	1,595.42	3.23	-0.82	0.226
39.00	-21.16	-4.47	0.00	-342.87	0.00	342.87	2,505.11	1,252.56	3,203.38	1,582.03	3.40	-0.85	0.225
40.00	-21.02	-4.46	0.00	-338.40	0.00	338.40	2,496.62	1,248.31	3,176.33	1,568.67	3.58	-0.87	0.224
41.00	-20.88	-4.45	0.00	-333.95	0.00	333.95	2,488.09	1,244.04	3,149.33	1,555.33	3.77	-0.89	0.223
42.00	-20.75	-4.43	0.00	-329.50	0.00	329.50	2,479.52	1,239.76	3,122.39	1,542.03	3.96	-0.92	0.222

Site Number: 307538

Code: ANSI/TIA-222-G

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Site Name: Dublin OH, OH

Engineering Number:13619927_C3_02

4/14/2021 6:25:30 PM

Customer: AT&T MOBILITY

Load Case: 1.0D + 1.0W				Serviceability 60 mph				37 Iterations					
Gust Response Factor :1.10								Wind Importance Factor 1.00					
Dead Load Factor :1.00													
Wind Load Factor :1.00													
43.00	-20.61	-4.42	0.00	-325.07	0.00	325.07	2,470.90	1,235.45	3,095.51	1,528.75	4.15	-0.94	0.221
44.00	-20.47	-4.40	0.00	-320.65	0.00	320.65	2,462.25	1,231.12	3,068.68	1,515.51	4.35	-0.96	0.220
45.00	-20.32	-4.38	0.00	-316.25	0.00	316.25	2,453.55	1,226.78	3,041.93	1,502.29	4.55	-0.99	0.219
46.00	-20.16	-4.36	0.00	-311.87	0.00	311.87	2,444.81	1,222.41	3,015.23	1,489.11	4.76	-1.01	0.218
47.00	-20.01	-4.34	0.00	-307.51	0.00	307.51	2,433.40	1,216.70	2,985.36	1,474.36	4.98	-1.03	0.217
48.00	-19.86	-4.31	0.00	-303.17	0.00	303.17	2,420.67	1,210.34	2,954.04	1,458.89	5.20	-1.05	0.216
49.00	-19.71	-4.30	0.00	-298.86	0.00	298.86	2,407.94	1,203.97	2,922.88	1,443.50	5.42	-1.08	0.215
49.42	-19.65	-4.29	0.00	-297.07	0.00	297.07	2,402.64	1,201.32	2,909.95	1,437.12	5.51	-1.09	0.215
50.00	-19.53	-4.28	0.00	-294.57	0.00	294.57	2,395.22	1,197.61	2,891.89	1,428.20	5.65	-1.10	0.112
50.08	-19.51	-4.27	0.00	-294.21	0.00	294.21	2,394.16	1,197.08	2,889.32	1,426.93	5.67	-1.10	0.112
51.00	-19.24	-4.24	0.00	-290.30	0.00	290.30	2,382.49	1,191.25	2,861.07	1,412.98	5.88	-1.11	0.110
52.00	-18.94	-4.21	0.00	-286.06	0.00	286.06	2,369.77	1,184.88	2,830.41	1,397.83	6.11	-1.13	0.109
53.00	-18.65	-4.18	0.00	-281.85	0.00	281.85	2,357.04	1,178.52	2,799.92	1,382.77	6.35	-1.14	0.108
54.00	-18.35	-4.15	0.00	-277.67	0.00	277.67	2,344.32	1,172.16	2,769.59	1,367.80	6.59	-1.15	0.108
55.00	-18.06	-4.12	0.00	-273.52	0.00	273.52	1,548.01	774.00	1,862.94	920.03	6.83	-1.16	0.137
56.00	-17.88	-4.09	0.00	-269.40	0.00	269.40	1,543.56	771.78	1,847.57	912.45	7.08	-1.17	0.136
57.00	-17.69	-4.07	0.00	-265.31	0.00	265.31	1,539.08	769.54	1,832.21	904.86	7.32	-1.19	0.134
58.00	-17.51	-4.04	0.00	-261.24	0.00	261.24	1,534.55	767.28	1,816.87	897.28	7.57	-1.20	0.133
59.00	-17.33	-4.01	0.00	-257.20	0.00	257.20	1,529.98	764.99	1,801.53	889.71	7.83	-1.21	0.131
60.00	-17.14	-3.98	0.00	-253.19	0.00	253.19	1,525.38	762.69	1,786.21	882.14	8.08	-1.23	0.130
61.00	-16.96	-3.96	0.00	-249.21	0.00	249.21	1,520.73	760.36	1,770.89	874.58	8.34	-1.24	0.128
62.00	-16.78	-3.93	0.00	-245.25	0.00	245.25	1,516.03	758.02	1,755.59	867.02	8.60	-1.25	0.127
63.00	-16.60	-3.90	0.00	-241.32	0.00	241.32	1,511.30	755.65	1,740.30	859.47	8.86	-1.26	0.125
64.00	-16.42	-3.87	0.00	-237.42	0.00	237.42	1,506.53	753.26	1,725.03	851.93	9.13	-1.28	0.124
65.00	-16.24	-3.84	0.00	-233.55	0.00	233.55	1,501.71	750.86	1,709.77	844.39	9.40	-1.29	0.122
66.00	-16.06	-3.82	0.00	-229.71	0.00	229.71	1,496.86	748.43	1,694.53	836.87	9.67	-1.30	0.121
67.00	-15.88	-3.79	0.00	-225.89	0.00	225.89	1,491.96	745.98	1,679.31	829.35	9.95	-1.32	0.119
68.00	-15.70	-3.76	0.00	-222.11	0.00	222.11	1,487.02	743.51	1,664.10	821.84	10.22	-1.33	0.118
69.00	-15.52	-3.73	0.00	-218.35	0.00	218.35	1,482.04	741.02	1,648.91	814.33	10.50	-1.34	0.116
70.00	-15.34	-3.70	0.00	-214.62	0.00	214.62	1,477.02	738.51	1,633.74	806.84	10.79	-1.35	0.115
71.00	-15.17	-3.67	0.00	-210.91	0.00	210.91	1,471.96	735.98	1,618.59	799.36	11.07	-1.37	0.113
72.00	-14.99	-3.65	0.00	-207.24	0.00	207.24	1,466.86	733.43	1,603.46	791.89	11.36	-1.38	0.112
73.00	-14.81	-3.62	0.00	-203.59	0.00	203.59	1,461.71	730.86	1,588.35	784.42	11.65	-1.39	0.111
74.00	-14.64	-3.59	0.00	-199.98	0.00	199.98	1,456.52	728.26	1,573.26	776.97	11.94	-1.40	0.109
75.00	-14.46	-3.56	0.00	-196.39	0.00	196.39	1,451.30	725.65	1,558.20	769.54	12.24	-1.42	0.108
76.00	-14.29	-3.53	0.00	-192.83	0.00	192.83	1,446.03	723.01	1,543.16	762.11	12.54	-1.43	0.106
77.00	-14.11	-3.50	0.00	-189.30	0.00	189.30	1,440.72	720.36	1,528.14	754.69	12.84	-1.44	0.105
78.00	-13.94	-3.47	0.00	-185.80	0.00	185.80	1,435.37	717.68	1,513.15	747.29	13.14	-1.45	0.103
79.00	-13.76	-3.44	0.00	-182.33	0.00	182.33	1,429.98	714.99	1,498.19	739.90	13.44	-1.46	0.102
80.00	-13.59	-3.41	0.00	-178.89	0.00	178.89	1,424.54	712.27	1,483.25	732.52	13.75	-1.48	0.100
81.00	-13.42	-3.38	0.00	-175.47	0.00	175.47	1,419.07	709.54	1,468.35	725.16	14.06	-1.49	0.099
82.00	-13.24	-3.36	0.00	-172.09	0.00	172.09	1,413.56	706.78	1,453.47	717.81	14.38	-1.50	0.097
83.00	-13.07	-3.33	0.00	-168.73	0.00	168.73	1,408.00	704.00	1,438.62	710.48	14.69	-1.51	0.096
84.00	-12.90	-3.30	0.00	-165.41	0.00	165.41	1,402.40	701.20	1,423.80	703.16	15.01	-1.52	0.095
85.00	-12.73	-3.27	0.00	-162.11	0.00	162.11	1,396.76	698.38	1,409.01	695.86	15.33	-1.54	0.093
86.00	-12.56	-3.24	0.00	-158.84	0.00	158.84	1,391.08	695.54	1,394.25	688.57	15.65	-1.55	0.092
87.00	-12.39	-3.21	0.00	-155.60	0.00	155.60	1,385.36	692.68	1,379.53	681.30	15.98	-1.56	0.090
88.00	-12.22	-3.18	0.00	-152.40	0.00	152.40	1,379.60	689.80	1,364.84	674.04	16.31	-1.57	0.089
89.00	-12.05	-3.15	0.00	-149.22	0.00	149.22	1,373.79	686.90	1,350.18	666.80	16.64	-1.58	0.087

Site Number: 307538

Code: ANSI/TIA-222-G

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Site Name: Dublin OH, OH

Engineering Number:13619927_C3_02

4/14/2021 6:25:30 PM

Customer: AT&T MOBILITY

Load Case: 1.0D + 1.0W				Serviceability 60 mph				37 Iterations					
Gust Response Factor :1.10								Wind Importance Factor 1.00					
Dead Load Factor :1.00													
Wind Load Factor :1.00													
90.00	-11.88	-3.12	0.00	-146.07	0.00	146.07	1,367.95	683.97	1,335.56	659.58	16.97	-1.59	0.086
91.00	-11.71	-3.09	0.00	-142.95	0.00	142.95	1,362.06	681.03	1,320.97	652.38	17.30	-1.60	0.085
92.00	-11.54	-3.06	0.00	-139.85	0.00	139.85	1,356.14	678.07	1,306.43	645.19	17.64	-1.61	0.083
93.00	-11.37	-3.03	0.00	-136.79	0.00	136.79	1,350.17	675.08	1,291.91	638.03	17.98	-1.63	0.082
94.00	-11.21	-3.00	0.00	-133.76	0.00	133.76	1,344.16	672.08	1,277.44	630.88	18.32	-1.64	0.080
95.00	-11.04	-2.97	0.00	-130.76	0.00	130.76	1,338.11	669.05	1,263.01	623.75	18.67	-1.65	0.079
96.00	-10.87	-2.94	0.00	-127.79	0.00	127.79	1,332.01	666.01	1,248.61	616.64	19.01	-1.66	0.078
97.00	-10.71	-2.91	0.00	-124.84	0.00	124.84	1,325.88	662.94	1,234.26	609.56	19.36	-1.67	0.076
98.00	-10.54	-2.88	0.00	-121.93	0.00	121.93	1,319.70	659.85	1,219.95	602.49	19.71	-1.68	0.075
99.00	-10.38	-2.85	0.00	-119.04	0.00	119.04	1,313.49	656.74	1,205.68	595.44	20.06	-1.69	0.073
100.00	-10.21	-2.83	0.00	-116.19	0.00	116.19	1,307.23	653.62	1,191.45	588.41	20.42	-1.70	0.072
101.00	-10.05	-2.80	0.00	-113.36	0.00	113.36	1,300.93	650.47	1,177.27	581.41	20.77	-1.71	0.071
102.00	-9.84	-2.76	0.00	-110.57	0.00	110.57	1,294.59	647.30	1,163.14	574.43	21.13	-1.72	0.068
103.00	-9.63	-2.73	0.00	-107.81	0.00	107.81	1,286.70	643.35	1,147.69	566.80	21.49	-1.73	0.067
104.00	-9.42	-2.70	0.00	-105.07	0.00	105.07	1,277.44	638.72	1,131.15	558.63	21.86	-1.74	0.066
105.00	-9.21	-2.67	0.00	-102.37	0.00	102.37	869.30	434.65	782.14	386.27	22.22	-1.75	0.079
106.00	-9.06	-2.64	0.00	-99.70	0.00	99.70	865.94	432.97	773.50	382.00	22.59	-1.76	0.077
107.00	-8.92	-2.61	0.00	-97.06	0.00	97.06	862.54	431.27	764.87	377.74	22.96	-1.77	0.075
108.00	-8.77	-2.58	0.00	-94.45	0.00	94.45	859.11	429.55	756.25	373.48	23.33	-1.78	0.073
108.94	-8.63	-2.56	0.00	-92.03	0.00	92.03	855.84	427.92	748.17	369.49	23.68	-1.79	0.072
108.94	-8.63	-2.56	0.00	-92.03	0.00	92.03	855.84	427.92	748.17	369.49	23.68	-1.79	0.259
109.00	-8.62	-2.55	0.00	-91.87	0.00	91.87	855.63	427.81	747.63	369.23	23.70	-1.79	0.259
110.00	-8.54	-2.53	0.00	-89.31	0.00	89.31	852.10	426.05	739.02	364.98	24.08	-1.82	0.255
111.00	-8.46	-2.51	0.00	-86.78	0.00	86.78	848.54	424.27	730.43	360.73	24.47	-1.86	0.251
112.00	-8.38	-2.48	0.00	-84.28	0.00	84.28	844.94	422.47	721.84	356.49	24.86	-1.89	0.246
113.00	-8.30	-2.46	0.00	-81.79	0.00	81.79	841.29	420.65	713.27	352.26	25.26	-1.93	0.242
114.00	-8.23	-2.44	0.00	-79.33	0.00	79.33	837.61	418.80	704.71	348.03	25.67	-1.96	0.238
115.00	-8.17	-2.43	0.00	-76.89	0.00	76.89	833.88	416.94	696.16	343.81	26.08	-1.99	0.233
116.00	-8.11	-2.41	0.00	-74.47	0.00	74.47	830.11	415.06	687.63	339.59	26.50	-2.03	0.229
117.00	-8.05	-2.40	0.00	-72.06	0.00	72.06	826.30	413.15	679.11	335.39	26.93	-2.06	0.225
118.00	-7.99	-2.39	0.00	-69.66	0.00	69.66	822.45	411.23	670.61	331.19	27.36	-2.09	0.220
119.00	-7.93	-2.37	0.00	-67.27	0.00	67.27	818.56	409.28	662.13	327.00	27.81	-2.13	0.215
120.00	-7.87	-2.36	0.00	-64.90	0.00	64.90	814.63	407.31	653.66	322.82	28.26	-2.16	0.211
121.00	-7.81	-2.35	0.00	-62.54	0.00	62.54	810.65	405.33	645.21	318.64	28.71	-2.19	0.206
122.00	-7.75	-2.33	0.00	-60.19	0.00	60.19	806.64	403.32	636.78	314.48	29.17	-2.22	0.201
123.00	-7.69	-2.32	0.00	-57.85	0.00	57.85	802.58	401.29	628.37	310.33	29.64	-2.25	0.196
124.00	-7.63	-2.31	0.00	-55.53	0.00	55.53	798.48	399.24	619.98	306.18	30.12	-2.28	0.191
125.00	-7.58	-2.30	0.00	-53.22	0.00	53.22	794.34	397.17	611.61	302.05	30.60	-2.31	0.186
126.00	-7.52	-2.28	0.00	-50.93	0.00	50.93	790.16	395.08	603.26	297.93	31.09	-2.34	0.180
127.00	-7.46	-2.27	0.00	-48.65	0.00	48.65	785.94	392.97	594.94	293.82	31.58	-2.37	0.175
128.00	-7.41	-2.26	0.00	-46.38	0.00	46.38	781.68	390.84	586.64	289.72	32.08	-2.40	0.170
129.00	-7.35	-2.24	0.00	-44.12	0.00	44.12	777.38	388.69	578.37	285.63	32.59	-2.43	0.164
130.00	-7.29	-2.23	0.00	-41.88	0.00	41.88	773.03	386.52	570.12	281.56	33.10	-2.45	0.158
131.00	-7.24	-2.22	0.00	-39.65	0.00	39.65	768.64	384.32	561.90	277.50	33.61	-2.48	0.152
132.00	-7.18	-2.20	0.00	-37.43	0.00	37.43	764.22	382.11	553.70	273.45	34.14	-2.51	0.146
133.00	-7.13	-2.19	0.00	-35.23	0.00	35.23	759.75	379.87	545.53	269.42	34.66	-2.53	0.140
134.00	-7.07	-2.18	0.00	-33.04	0.00	33.04	755.24	377.62	537.39	265.40	35.20	-2.55	0.134
135.00	-7.02	-2.16	0.00	-30.86	0.00	30.86	750.69	375.34	529.28	261.39	35.73	-2.58	0.127
136.00	-6.96	-2.15	0.00	-28.70	0.00	28.70	746.09	373.05	521.20	257.40	36.28	-2.60	0.121

Site Number: 307538

Code: ANSI/TIA-222-G

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Site Name: Dublin OH, OH

Engineering Number:13619927_C3_02

4/14/2021 6:25:30 PM

Customer: AT&T MOBILITY

Load Case: 1.0D + 1.0W				Serviceability 60 mph				37 Iterations					
Gust Response Factor :1.10								Wind Importance Factor 1.00					
Dead Load Factor :1.00													
Wind Load Factor :1.00													
137.00	-6.91	-2.14	0.00	-26.55	0.00	26.55	741.46	370.73	513.16	253.43	36.82	-2.62	0.114
138.00	-6.86	-2.12	0.00	-24.42	0.00	24.42	736.79	368.39	505.14	249.47	37.37	-2.64	0.107
139.00	-6.81	-2.11	0.00	-22.30	0.00	22.30	732.07	366.03	497.16	245.53	37.93	-2.66	0.100
140.00	-6.75	-2.09	0.00	-20.19	0.00	20.19	727.31	363.66	489.21	241.60	38.49	-2.68	0.093
141.00	-6.70	-2.08	0.00	-18.09	0.00	18.09	720.73	360.36	480.10	237.10	39.05	-2.69	0.086
142.00	-6.65	-2.07	0.00	-16.01	0.00	16.01	713.79	356.89	470.85	232.53	39.61	-2.71	0.078
143.00	-4.93	-1.65	0.00	-13.95	0.00	13.95	706.85	353.42	461.68	228.01	40.18	-2.72	0.068
144.00	-4.87	-1.64	0.00	-12.29	0.00	12.29	699.90	349.95	452.61	223.52	40.75	-2.73	0.062
145.00	-4.82	-1.62	0.00	-10.66	0.00	10.66	692.96	346.48	443.62	219.09	41.33	-2.74	0.056
146.00	-4.77	-1.61	0.00	-9.03	0.00	9.03	686.02	343.01	434.73	214.69	41.90	-2.75	0.049
147.00	-4.72	-1.60	0.00	-7.42	0.00	7.42	679.08	339.54	425.92	210.35	42.48	-2.76	0.042
148.00	-4.68	-1.58	0.00	-5.83	0.00	5.83	672.14	336.07	417.21	206.04	43.06	-2.77	0.035
149.00	-4.63	-1.57	0.00	-4.25	0.00	4.25	665.20	332.60	408.58	201.78	43.64	-2.77	0.028
150.00	0.00	-1.34	0.00	-2.68	0.00	2.68	658.26	329.13	400.05	197.57	44.22	-2.78	0.014

Site Number: 307538

Code: ANSI/TIA-222-G

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Site Name: Dublin OH, OH

Engineering Number:13619927_C3_02

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Customer: AT&T MOBILITY

Equivalent Lateral Forces Method Analysis

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

Spectral Response Acceleration for Short Period (S_s):	0.12
Spectral Response Acceleration at 1.0 Second Period (S_1):	0.06
Long-Period Transition Period (T_L):	12
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}):	0.13
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):	3.56
Redundancy Factor (p):	1.00
Seismic Force Distribution Exponent (k):	2.00
Total Unfactored Dead Load:	26.96 k
Seismic Base Shear (E):	0.81 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)
153	149.50	49	1,099	0.004	4	60
152	148.50	49	1,091	0.004	3	61
151	147.50	50	1,084	0.004	3	61
150	146.50	50	1,076	0.004	3	61
149	145.50	50	1,068	0.004	3	62
148	144.50	51	1,060	0.004	3	62
147	143.50	51	1,052	0.004	3	63
146	142.50	51	1,044	0.004	3	63
145	141.50	52	1,036	0.004	3	63
144	140.50	52	1,028	0.004	3	64
143	139.50	52	1,019	0.004	3	64
142	138.50	53	1,011	0.004	3	65
141	137.50	53	1,002	0.004	3	65
140	136.50	53	994	0.004	3	65
139	135.50	54	985	0.004	3	66
138	134.50	54	976	0.004	3	66
137	133.50	54	968	0.004	3	67
136	132.50	55	959	0.004	3	67
135	131.50	55	950	0.004	3	67
134	130.50	55	941	0.004	3	68
133	129.50	56	932	0.004	3	68
132	128.50	56	923	0.004	3	69
131	127.50	56	914	0.004	3	69

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Site Name: Dublin OH, OH

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Customer: AT&T MOBILITY

130	126.50	57	905	0.004	3	69
129	125.50	57	896	0.004	3	70
128	124.50	57	886	0.003	3	70
127	123.50	57	877	0.003	3	71
126	122.50	58	868	0.003	3	71
125	121.50	58	858	0.003	3	71
124	120.50	58	849	0.003	3	72
123	119.50	59	839	0.003	3	72
122	118.50	59	830	0.003	3	72
121	117.50	59	820	0.003	3	73
120	116.50	60	811	0.003	3	73
119	115.50	60	801	0.003	3	74
118	114.50	60	792	0.003	3	74
117	113.50	70	903	0.004	3	86
116	112.50	80	1,009	0.004	3	98
115	111.50	80	995	0.004	3	98
114	110.50	80	982	0.004	3	99
113	109.50	81	968	0.004	3	99
112	108.97	5	60	0.000	0	6
111	108.47	139	1,631	0.006	5	170
110	107.50	148	1,712	0.007	5	182
109	106.50	148	1,684	0.007	5	182
108	105.50	149	1,656	0.007	5	182
107	104.50	208	2,270	0.009	7	255
106	103.50	209	2,235	0.009	7	256
105	102.50	209	2,200	0.009	7	257
104	101.50	210	2,165	0.009	7	258
103	100.50	165	1,663	0.007	5	202
102	99.50	165	1,634	0.006	5	202
101	98.50	165	1,605	0.006	5	203
100	97.50	166	1,577	0.006	5	203
99	96.50	166	1,549	0.006	5	204
98	95.50	167	1,521	0.006	5	205
97	94.50	167	1,493	0.006	5	205
96	93.50	168	1,465	0.006	5	206
95	92.50	168	1,438	0.006	5	206
94	91.50	168	1,410	0.006	4	207
93	90.50	169	1,383	0.005	4	207
92	89.50	169	1,356	0.005	4	208
91	88.50	170	1,329	0.005	4	208
90	87.50	170	1,303	0.005	4	209
89	86.50	171	1,276	0.005	4	209
88	85.50	171	1,250	0.005	4	210
87	84.50	171	1,224	0.005	4	210
86	83.50	172	1,198	0.005	4	211
85	82.50	172	1,173	0.005	4	211
84	81.50	173	1,147	0.005	4	212
83	80.50	173	1,122	0.004	4	212
82	79.50	174	1,097	0.004	3	213
81	78.50	174	1,072	0.004	3	213
80	77.50	174	1,048	0.004	3	214
79	76.50	175	1,023	0.004	3	214
78	75.50	175	999	0.004	3	215
77	74.50	176	975	0.004	3	216
76	73.50	176	952	0.004	3	216
75	72.50	177	928	0.004	3	217
74	71.50	177	905	0.004	3	217
73	70.50	177	882	0.003	3	218
72	69.50	178	859	0.003	3	218
71	68.50	178	837	0.003	3	219
70	67.50	179	814	0.003	3	219
69	66.50	179	792	0.003	3	220
68	65.50	180	770	0.003	2	220
67	64.50	180	749	0.003	2	221

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Customer: AT&T MOBILITY

66	63.50	180	727	0.003	2	221
65	62.50	181	706	0.003	2	222
64	61.50	181	686	0.003	2	222
63	60.50	182	665	0.003	2	223
62	59.50	182	645	0.003	2	223
61	58.50	183	625	0.002	2	224
60	57.50	183	605	0.002	2	224
59	56.50	183	585	0.002	2	225
58	55.50	184	566	0.002	2	225
57	54.50	292	868	0.003	3	358
56	53.50	293	839	0.003	3	360
55	52.50	294	811	0.003	3	361
54	51.50	295	783	0.003	2	362
53	50.54	272	694	0.003	2	333
52	50.04	18	45	0.000	0	22
51	49.71	125	310	0.001	1	154
50	49.21	62	150	0.001	0	76
49	48.50	149	350	0.001	1	182
48	47.50	149	337	0.001	1	183
47	46.50	150	324	0.001	1	184
46	45.50	151	312	0.001	1	185
45	44.50	151	299	0.001	1	185
44	43.50	142	269	0.001	1	175
43	42.50	134	241	0.001	1	164
42	41.50	134	231	0.001	1	165
41	40.50	135	221	0.001	1	165
40	39.50	135	211	0.001	1	166
39	38.50	136	202	0.001	1	167
38	37.50	137	192	0.001	1	167
37	36.50	137	183	0.001	1	168
36	35.50	138	174	0.001	1	169
35	34.50	138	165	0.001	1	170
34	33.50	139	156	0.001	0	170
33	32.50	139	147	0.001	0	171
32	31.50	140	139	0.001	0	172
31	30.50	141	131	0.001	0	172
30	29.50	141	123	0.000	0	173
29	28.50	142	115	0.000	0	174
28	27.50	142	108	0.000	0	175
27	26.50	143	100	0.000	0	175
26	25.50	144	93	0.000	0	176
25	24.50	144	87	0.000	0	177
24	23.50	145	80	0.000	0	178
23	22.50	145	74	0.000	0	178
22	21.50	146	67	0.000	0	179
21	20.50	147	62	0.000	0	180
20	19.50	147	56	0.000	0	180
19	18.50	148	51	0.000	0	181
18	17.50	148	45	0.000	0	182
17	16.50	149	41	0.000	0	183
16	15.50	149	36	0.000	0	183
15	14.50	150	32	0.000	0	184
14	13.50	151	27	0.000	0	185
13	12.50	151	24	0.000	0	185
12	11.50	152	20	0.000	0	186
11	10.50	152	17	0.000	0	187
10	9.50	153	14	0.000	0	188
9	8.50	154	11	0.000	0	188
8	7.50	154	9	0.000	0	189
7	6.50	155	7	0.000	0	190
6	5.50	155	5	0.000	0	191
5	4.50	156	3	0.000	0	191
4	3.50	157	2	0.000	0	192
3	2.50	157	1	0.000	0	193

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Customer: AT&T MOBILITY

2	1.50	158	0	0.000	0	193
1	0.50	158	0	0.000	0	194
Nokia AirScale RRH 4	150.00	106	2,383	0.009	8	130
Raycap DC6-48-60-18-	150.00	95	2,147	0.008	7	117
Nokia AirScale Dual	150.00	198	4,462	0.018	14	243
Nokia AirScale Dual	150.00	304	6,845	0.027	22	373
Alcatel-Lucent RRH4x	150.00	273	6,143	0.024	20	335
Nokia AEQK AirScale	150.00	298	6,696	0.026	21	365
Generic Flat Side Ar	150.00	563	12,656	0.050	40	690
Commscope SBNHH-1D65	150.00	198	4,462	0.018	14	243
Commscope NNH4-65C-R	150.00	613	13,783	0.054	44	751
Round Platform w/ Ha	150.00	2,000	45,000	0.177	144	2,453
Generic TTA	143.00	10	204	0.001	1	12
Generic 56" x 6" Pan	143.00	180	3,681	0.015	12	221
Round Low Profile PI	143.00	1,500	30,674	0.121	98	1,840
		26,959	253,566	1.000	809	33,064

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

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)
153	149.50	49	1,099	0.004	4	43
152	148.50	49	1,091	0.004	3	43
151	147.50	50	1,084	0.004	3	44
150	146.50	50	1,076	0.004	3	44
149	145.50	50	1,068	0.004	3	44
148	144.50	51	1,060	0.004	3	44
147	143.50	51	1,052	0.004	3	45
146	142.50	51	1,044	0.004	3	45
145	141.50	52	1,036	0.004	3	45
144	140.50	52	1,028	0.004	3	45
143	139.50	52	1,019	0.004	3	46
142	138.50	53	1,011	0.004	3	46
141	137.50	53	1,002	0.004	3	46
140	136.50	53	994	0.004	3	47
139	135.50	54	985	0.004	3	47
138	134.50	54	976	0.004	3	47
137	133.50	54	968	0.004	3	47
136	132.50	55	959	0.004	3	48
135	131.50	55	950	0.004	3	48
134	130.50	55	941	0.004	3	48
133	129.50	56	932	0.004	3	49
132	128.50	56	923	0.004	3	49
131	127.50	56	914	0.004	3	49
130	126.50	57	905	0.004	3	49
129	125.50	57	896	0.004	3	50
128	124.50	57	886	0.003	3	50
127	123.50	57	877	0.003	3	50
126	122.50	58	868	0.003	3	51
125	121.50	58	858	0.003	3	51
124	120.50	58	849	0.003	3	51
123	119.50	59	839	0.003	3	51
122	118.50	59	830	0.003	3	52
121	117.50	59	820	0.003	3	52
120	116.50	60	811	0.003	3	52
119	115.50	60	801	0.003	3	52
118	114.50	60	792	0.003	3	53
117	113.50	70	903	0.004	3	61
116	112.50	80	1,009	0.004	3	70
115	111.50	80	995	0.004	3	70

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Customer: AT&T MOBILITY

114	110.50	80	982	0.004	3	70
113	109.50	81	968	0.004	3	71
112	108.97	5	60	0.000	0	4
111	108.47	139	1,631	0.006	5	121
110	107.50	148	1,712	0.007	5	129
109	106.50	148	1,684	0.007	5	130
108	105.50	149	1,656	0.007	5	130
107	104.50	208	2,270	0.009	7	182
106	103.50	209	2,235	0.009	7	182
105	102.50	209	2,200	0.009	7	183
104	101.50	210	2,165	0.009	7	184
103	100.50	165	1,663	0.007	5	144
102	99.50	165	1,634	0.006	5	144
101	98.50	165	1,605	0.006	5	145
100	97.50	166	1,577	0.006	5	145
99	96.50	166	1,549	0.006	5	145
98	95.50	167	1,521	0.006	5	146
97	94.50	167	1,493	0.006	5	146
96	93.50	168	1,465	0.006	5	146
95	92.50	168	1,438	0.006	5	147
94	91.50	168	1,410	0.006	4	147
93	90.50	169	1,383	0.005	4	148
92	89.50	169	1,356	0.005	4	148
91	88.50	170	1,329	0.005	4	148
90	87.50	170	1,303	0.005	4	149
89	86.50	171	1,276	0.005	4	149
88	85.50	171	1,250	0.005	4	149
87	84.50	171	1,224	0.005	4	150
86	83.50	172	1,198	0.005	4	150
85	82.50	172	1,173	0.005	4	151
84	81.50	173	1,147	0.005	4	151
83	80.50	173	1,122	0.004	4	151
82	79.50	174	1,097	0.004	3	152
81	78.50	174	1,072	0.004	3	152
80	77.50	174	1,048	0.004	3	152
79	76.50	175	1,023	0.004	3	153
78	75.50	175	999	0.004	3	153
77	74.50	176	975	0.004	3	153
76	73.50	176	952	0.004	3	154
75	72.50	177	928	0.004	3	154
74	71.50	177	905	0.004	3	155
73	70.50	177	882	0.003	3	155
72	69.50	178	859	0.003	3	155
71	68.50	178	837	0.003	3	156
70	67.50	179	814	0.003	3	156
69	66.50	179	792	0.003	3	156
68	65.50	180	770	0.003	2	157
67	64.50	180	749	0.003	2	157
66	63.50	180	727	0.003	2	158
65	62.50	181	706	0.003	2	158
64	61.50	181	686	0.003	2	158
63	60.50	182	665	0.003	2	159
62	59.50	182	645	0.003	2	159
61	58.50	183	625	0.002	2	159
60	57.50	183	605	0.002	2	160
59	56.50	183	585	0.002	2	160
58	55.50	184	566	0.002	2	161
57	54.50	292	868	0.003	3	255
56	53.50	293	839	0.003	3	256
55	52.50	294	811	0.003	3	257
54	51.50	295	783	0.003	2	258
53	50.54	272	694	0.003	2	237
52	50.04	18	45	0.000	0	16
51	49.71	125	310	0.001	1	110

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Customer: AT&T MOBILITY

50	49.21	62	150	0.001	0	54
49	48.50	149	350	0.001	1	130
48	47.50	149	337	0.001	1	130
47	46.50	150	324	0.001	1	131
46	45.50	151	312	0.001	1	132
45	44.50	151	299	0.001	1	132
44	43.50	142	269	0.001	1	124
43	42.50	134	241	0.001	1	117
42	41.50	134	231	0.001	1	117
41	40.50	135	221	0.001	1	118
40	39.50	135	211	0.001	1	118
39	38.50	136	202	0.001	1	119
38	37.50	137	192	0.001	1	119
37	36.50	137	183	0.001	1	120
36	35.50	138	174	0.001	1	120
35	34.50	138	165	0.001	1	121
34	33.50	139	156	0.001	0	121
33	32.50	139	147	0.001	0	122
32	31.50	140	139	0.001	0	122
31	30.50	141	131	0.001	0	123
30	29.50	141	123	0.000	0	123
29	28.50	142	115	0.000	0	124
28	27.50	142	108	0.000	0	124
27	26.50	143	100	0.000	0	125
26	25.50	144	93	0.000	0	125
25	24.50	144	87	0.000	0	126
24	23.50	145	80	0.000	0	126
23	22.50	145	74	0.000	0	127
22	21.50	146	67	0.000	0	127
21	20.50	147	62	0.000	0	128
20	19.50	147	56	0.000	0	129
19	18.50	148	51	0.000	0	129
18	17.50	148	45	0.000	0	130
17	16.50	149	41	0.000	0	130
16	15.50	149	36	0.000	0	131
15	14.50	150	32	0.000	0	131
14	13.50	151	27	0.000	0	132
13	12.50	151	24	0.000	0	132
12	11.50	152	20	0.000	0	133
11	10.50	152	17	0.000	0	133
10	9.50	153	14	0.000	0	134
9	8.50	154	11	0.000	0	134
8	7.50	154	9	0.000	0	135
7	6.50	155	7	0.000	0	135
6	5.50	155	5	0.000	0	136
5	4.50	156	3	0.000	0	136
4	3.50	157	2	0.000	0	137
3	2.50	157	1	0.000	0	137
2	1.50	158	0	0.000	0	138
1	0.50	158	0	0.000	0	138
Nokia AirScale RRH 4	150.00	106	2,383	0.009	8	93
Raycap DC6-48-60-18-	150.00	95	2,147	0.008	7	83
Nokia AirScale Dual	150.00	198	4,462	0.018	14	173
Nokia AirScale Dual	150.00	304	6,845	0.027	22	266
Alcatel-Lucent RRH4x	150.00	273	6,143	0.024	20	238
Nokia AEQK AirScale	150.00	298	6,696	0.026	21	260
Generic Flat Side Ar	150.00	563	12,656	0.050	40	491
Commscope SBNHH-1D65	150.00	198	4,462	0.018	14	173
Commscope NNH4-65C-R	150.00	613	13,783	0.054	44	535
Round Platform w/ Ha	150.00	2,000	45,000	0.177	144	1,747
Generic TTA	143.00	10	204	0.001	1	9
Generic 56" x 6" Pan	143.00	180	3,681	0.015	12	157
Round Low Profile PI	143.00	1,500	30,674	0.121	98	1,310

Site Number: 307538

Code: ANSI/TIA-222-G

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Site Name: Dublin OH, OH

Engineering Number:13619927_C3_02

4/14/2021 6:25:31 PM

Customer: AT&T MOBILITY

26,959

253,566

1.000

809

23,550

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	-32.87	-0.81	0.00	-113.28	0.00	113.28	2,804.10	1,402.05	4,295.35	2,121.31	0.00	0.00	0.065
1.00	-32.68	-0.81	0.00	-112.48	0.00	112.48	2,797.21	1,398.61	4,266.65	2,107.14	0.00	0.00	0.065
2.00	-32.48	-0.81	0.00	-111.66	0.00	111.66	2,790.29	1,395.14	4,237.98	2,092.98	0.00	-0.01	0.065
3.00	-32.29	-0.82	0.00	-110.85	0.00	110.85	2,783.32	1,391.66	4,209.34	2,078.83	0.00	-0.01	0.065
4.00	-32.10	-0.82	0.00	-110.04	0.00	110.04	2,776.32	1,388.16	4,180.73	2,064.70	0.01	-0.02	0.065
5.00	-31.91	-0.82	0.00	-109.22	0.00	109.22	2,769.27	1,384.63	4,152.14	2,050.59	0.01	-0.02	0.065
6.00	-31.72	-0.82	0.00	-108.40	0.00	108.40	2,762.18	1,381.09	4,123.59	2,036.49	0.02	-0.03	0.065
7.00	-31.53	-0.83	0.00	-107.57	0.00	107.57	2,755.05	1,377.52	4,095.07	2,022.40	0.02	-0.03	0.065
8.00	-31.34	-0.83	0.00	-106.75	0.00	106.75	2,747.88	1,373.94	4,066.58	2,008.33	0.03	-0.04	0.065
9.00	-31.15	-0.83	0.00	-105.92	0.00	105.92	2,740.66	1,370.33	4,038.12	1,994.27	0.04	-0.04	0.064
10.00	-30.97	-0.83	0.00	-105.09	0.00	105.09	2,733.41	1,366.70	4,009.69	1,980.24	0.05	-0.05	0.064
11.00	-30.78	-0.83	0.00	-104.26	0.00	104.26	2,726.11	1,363.06	3,981.30	1,966.21	0.06	-0.05	0.064
12.00	-30.60	-0.84	0.00	-103.42	0.00	103.42	2,718.78	1,359.39	3,952.94	1,952.21	0.07	-0.05	0.064
13.00	-30.41	-0.84	0.00	-102.59	0.00	102.59	2,711.40	1,355.70	3,924.62	1,938.22	0.08	-0.06	0.064
14.00	-30.23	-0.84	0.00	-101.75	0.00	101.75	2,703.98	1,351.99	3,896.34	1,924.25	0.09	-0.06	0.064
15.00	-30.04	-0.84	0.00	-100.91	0.00	100.91	2,696.52	1,348.26	3,868.09	1,910.30	0.11	-0.07	0.064
16.00	-29.86	-0.85	0.00	-100.06	0.00	100.06	2,689.02	1,344.51	3,839.88	1,896.37	0.12	-0.07	0.064
17.00	-29.68	-0.85	0.00	-99.22	0.00	99.22	2,681.48	1,340.74	3,811.71	1,882.46	0.14	-0.08	0.064
18.00	-29.50	-0.85	0.00	-98.37	0.00	98.37	2,673.89	1,336.95	3,783.58	1,868.57	0.16	-0.08	0.064
19.00	-29.32	-0.85	0.00	-97.52	0.00	97.52	2,666.27	1,333.13	3,755.48	1,854.69	0.17	-0.09	0.064
20.00	-29.14	-0.85	0.00	-96.67	0.00	96.67	2,658.60	1,329.30	3,727.43	1,840.84	0.19	-0.09	0.063
21.00	-28.96	-0.86	0.00	-95.81	0.00	95.81	2,650.89	1,325.45	3,699.43	1,827.01	0.21	-0.10	0.063
22.00	-28.78	-0.86	0.00	-94.96	0.00	94.96	2,643.14	1,321.57	3,671.46	1,813.20	0.23	-0.10	0.063
23.00	-28.60	-0.86	0.00	-94.10	0.00	94.10	2,635.35	1,317.68	3,643.54	1,799.41	0.26	-0.11	0.063
24.00	-28.43	-0.86	0.00	-93.24	0.00	93.24	2,627.52	1,313.76	3,615.66	1,785.64	0.28	-0.11	0.063
25.00	-28.25	-0.86	0.00	-92.38	0.00	92.38	2,619.65	1,309.83	3,587.83	1,771.90	0.30	-0.12	0.063
26.00	-28.07	-0.87	0.00	-91.51	0.00	91.51	2,611.74	1,305.87	3,560.05	1,758.17	0.33	-0.12	0.063
27.00	-27.90	-0.87	0.00	-90.65	0.00	90.65	2,603.78	1,301.89	3,532.31	1,744.47	0.35	-0.13	0.063
28.00	-27.72	-0.87	0.00	-89.78	0.00	89.78	2,595.79	1,297.89	3,504.62	1,730.80	0.38	-0.13	0.063
29.00	-27.55	-0.87	0.00	-88.91	0.00	88.91	2,587.75	1,293.88	3,476.97	1,717.15	0.41	-0.14	0.062
30.00	-27.38	-0.87	0.00	-88.04	0.00	88.04	2,579.67	1,289.84	3,449.38	1,703.52	0.44	-0.14	0.062
31.00	-27.21	-0.87	0.00	-87.17	0.00	87.17	2,571.55	1,285.78	3,421.84	1,689.92	0.47	-0.15	0.062
32.00	-27.04	-0.88	0.00	-86.30	0.00	86.30	2,563.39	1,281.70	3,394.34	1,676.34	0.50	-0.15	0.062
33.00	-26.87	-0.88	0.00	-85.42	0.00	85.42	2,555.19	1,277.59	3,366.90	1,662.79	0.53	-0.16	0.062
34.00	-26.70	-0.88	0.00	-84.54	0.00	84.54	2,546.95	1,273.47	3,339.51	1,649.26	0.57	-0.16	0.062
35.00	-26.53	-0.88	0.00	-83.67	0.00	83.67	2,538.66	1,269.33	3,312.18	1,635.76	0.60	-0.17	0.062
36.00	-26.36	-0.88	0.00	-82.79	0.00	82.79	2,530.34	1,265.17	3,284.90	1,622.29	0.64	-0.17	0.061
37.00	-26.19	-0.88	0.00	-81.91	0.00	81.91	2,521.97	1,260.98	3,257.67	1,608.84	0.68	-0.18	0.061
38.00	-26.02	-0.88	0.00	-81.02	0.00	81.02	2,513.56	1,256.78	3,230.50	1,595.42	0.72	-0.19	0.061
39.00	-25.86	-0.88	0.00	-80.14	0.00	80.14	2,505.11	1,252.56	3,203.38	1,582.03	0.75	-0.19	0.061
40.00	-25.69	-0.89	0.00	-79.26	0.00	79.26	2,496.62	1,248.31	3,176.33	1,568.67	0.80	-0.20	0.061
41.00	-25.53	-0.89	0.00	-78.37	0.00	78.37	2,488.09	1,244.04	3,149.33	1,555.33	0.84	-0.20	0.061
42.00	-25.36	-0.89	0.00	-77.48	0.00	77.48	2,479.52	1,239.76	3,122.39	1,542.03	0.88	-0.21	0.060
43.00	-25.19	-0.89	0.00	-76.60	0.00	76.60	2,470.90	1,235.45	3,095.51	1,528.75	0.92	-0.21	0.060
44.00	-25.00	-0.89	0.00	-75.71	0.00	75.71	2,462.25	1,231.12	3,068.68	1,515.51	0.97	-0.22	0.060
45.00	-24.82	-0.89	0.00	-74.82	0.00	74.82	2,453.55	1,226.78	3,041.93	1,502.29	1.01	-0.22	0.060
46.00	-24.64	-0.89	0.00	-73.93	0.00	73.93	2,444.81	1,222.41	3,015.23	1,489.11	1.06	-0.23	0.060

47.00	-24.45	-0.89	0.00	-73.04	0.00	73.04	2,433.40	1,216.70	2,985.36	1,474.36	1.11	-0.23	0.060
48.00	-24.27	-0.89	0.00	-72.15	0.00	72.15	2,420.67	1,210.34	2,954.04	1,458.89	1.16	-0.24	0.059
49.00	-24.19	-0.89	0.00	-71.25	0.00	71.25	2,407.94	1,203.97	2,922.88	1,443.50	1.21	-0.25	0.059
49.42	-24.04	-0.89	0.00	-70.88	0.00	70.88	2,402.64	1,201.32	2,909.95	1,437.12	1.23	-0.25	0.059
50.00	-24.02	-0.89	0.00	-70.36	0.00	70.36	2,395.22	1,197.61	2,891.89	1,428.20	1.26	-0.25	0.032
50.08	-23.68	-0.89	0.00	-70.29	0.00	70.29	2,394.16	1,197.08	2,889.32	1,426.93	1.27	-0.25	0.032
51.00	-23.32	-0.89	0.00	-69.47	0.00	69.47	2,382.49	1,191.25	2,861.07	1,412.98	1.32	-0.25	0.031
52.00	-22.96	-0.88	0.00	-68.58	0.00	68.58	2,369.77	1,184.88	2,830.41	1,397.83	1.37	-0.26	0.031
53.00	-22.60	-0.88	0.00	-67.70	0.00	67.70	2,357.04	1,178.52	2,799.92	1,382.77	1.42	-0.26	0.031
54.00	-22.24	-0.88	0.00	-66.82	0.00	66.82	2,344.32	1,172.16	2,769.59	1,367.80	1.48	-0.26	0.031
55.00	-22.02	-0.88	0.00	-65.94	0.00	65.94	1,548.01	774.00	1,862.94	920.03	1.53	-0.26	0.039
56.00	-21.79	-0.87	0.00	-65.07	0.00	65.07	1,543.56	771.78	1,847.57	912.45	1.59	-0.27	0.039
57.00	-21.57	-0.87	0.00	-64.19	0.00	64.19	1,539.08	769.54	1,832.21	904.86	1.64	-0.27	0.039
58.00	-21.34	-0.87	0.00	-63.32	0.00	63.32	1,534.55	767.28	1,816.87	897.28	1.70	-0.27	0.038
59.00	-21.12	-0.87	0.00	-62.45	0.00	62.45	1,529.98	764.99	1,801.53	889.71	1.76	-0.28	0.038
60.00	-20.90	-0.87	0.00	-61.59	0.00	61.59	1,525.38	762.69	1,786.21	882.14	1.82	-0.28	0.037
61.00	-20.68	-0.86	0.00	-60.72	0.00	60.72	1,520.73	760.36	1,770.89	874.58	1.88	-0.28	0.037
62.00	-20.45	-0.86	0.00	-59.86	0.00	59.86	1,516.03	758.02	1,755.59	867.02	1.94	-0.29	0.037
63.00	-20.23	-0.86	0.00	-58.99	0.00	58.99	1,511.30	755.65	1,740.30	859.47	2.00	-0.29	0.036
64.00	-20.01	-0.86	0.00	-58.13	0.00	58.13	1,506.53	753.26	1,725.03	851.93	2.06	-0.29	0.036
65.00	-19.79	-0.85	0.00	-57.28	0.00	57.28	1,501.71	750.86	1,709.77	844.39	2.12	-0.30	0.036
66.00	-19.57	-0.85	0.00	-56.42	0.00	56.42	1,496.86	748.43	1,694.53	836.87	2.18	-0.30	0.035
67.00	-19.35	-0.85	0.00	-55.57	0.00	55.57	1,491.96	745.98	1,679.31	829.35	2.25	-0.30	0.035
68.00	-19.13	-0.85	0.00	-54.72	0.00	54.72	1,487.02	743.51	1,664.10	821.84	2.31	-0.31	0.034
69.00	-18.92	-0.84	0.00	-53.88	0.00	53.88	1,482.04	741.02	1,648.91	814.33	2.37	-0.31	0.034
70.00	-18.70	-0.84	0.00	-53.03	0.00	53.03	1,477.02	738.51	1,633.74	806.84	2.44	-0.31	0.034
71.00	-18.48	-0.84	0.00	-52.19	0.00	52.19	1,471.96	735.98	1,618.59	799.36	2.50	-0.32	0.033
72.00	-18.27	-0.83	0.00	-51.35	0.00	51.35	1,466.86	733.43	1,603.46	791.89	2.57	-0.32	0.033
73.00	-18.05	-0.83	0.00	-50.52	0.00	50.52	1,461.71	730.86	1,588.35	784.42	2.64	-0.32	0.033
74.00	-17.83	-0.83	0.00	-49.69	0.00	49.69	1,456.52	728.26	1,573.26	776.97	2.71	-0.32	0.032
75.00	-17.62	-0.82	0.00	-48.86	0.00	48.86	1,451.30	725.65	1,558.20	769.54	2.77	-0.33	0.032
76.00	-17.40	-0.82	0.00	-48.04	0.00	48.04	1,446.03	723.01	1,543.16	762.11	2.84	-0.33	0.031
77.00	-17.19	-0.82	0.00	-47.22	0.00	47.22	1,440.72	720.36	1,528.14	754.69	2.91	-0.33	0.031
78.00	-16.98	-0.81	0.00	-46.40	0.00	46.40	1,435.37	717.68	1,513.15	747.29	2.98	-0.34	0.031
79.00	-16.76	-0.81	0.00	-45.59	0.00	45.59	1,429.98	714.99	1,498.19	739.90	3.05	-0.34	0.030
80.00	-16.55	-0.81	0.00	-44.78	0.00	44.78	1,424.54	712.27	1,483.25	732.52	3.13	-0.34	0.030
81.00	-16.34	-0.80	0.00	-43.97	0.00	43.97	1,419.07	709.54	1,468.35	725.16	3.20	-0.35	0.029
82.00	-16.13	-0.80	0.00	-43.17	0.00	43.17	1,413.56	706.78	1,453.47	717.81	3.27	-0.35	0.029
83.00	-15.92	-0.79	0.00	-42.37	0.00	42.37	1,408.00	704.00	1,438.62	710.48	3.34	-0.35	0.029
84.00	-15.71	-0.79	0.00	-41.58	0.00	41.58	1,402.40	701.20	1,423.80	703.16	3.42	-0.35	0.028
85.00	-15.50	-0.78	0.00	-40.79	0.00	40.79	1,396.76	698.38	1,409.01	695.86	3.49	-0.36	0.028
86.00	-15.29	-0.78	0.00	-40.01	0.00	40.01	1,391.08	695.54	1,394.25	688.57	3.57	-0.36	0.027
87.00	-15.08	-0.77	0.00	-39.23	0.00	39.23	1,385.36	692.68	1,379.53	681.30	3.64	-0.36	0.027
88.00	-14.87	-0.77	0.00	-38.45	0.00	38.45	1,379.60	689.80	1,364.84	674.04	3.72	-0.37	0.027
89.00	-14.66	-0.76	0.00	-37.68	0.00	37.68	1,373.79	686.90	1,350.18	666.80	3.80	-0.37	0.026
90.00	-14.46	-0.76	0.00	-36.92	0.00	36.92	1,367.95	683.97	1,335.56	659.58	3.87	-0.37	0.026
91.00	-14.25	-0.75	0.00	-36.16	0.00	36.16	1,362.06	681.03	1,320.97	652.38	3.95	-0.37	0.025
92.00	-14.04	-0.75	0.00	-35.40	0.00	35.40	1,356.14	678.07	1,306.43	645.19	4.03	-0.38	0.025
93.00	-13.84	-0.74	0.00	-34.65	0.00	34.65	1,350.17	675.08	1,291.91	638.03	4.11	-0.38	0.025
94.00	-13.63	-0.74	0.00	-33.91	0.00	33.91	1,344.16	672.08	1,277.44	630.88	4.19	-0.38	0.024
95.00	-13.43	-0.73	0.00	-33.17	0.00	33.17	1,338.11	669.05	1,263.01	623.75	4.27	-0.39	0.024
96.00	-13.22	-0.73	0.00	-32.44	0.00	32.44	1,332.01	666.01	1,248.61	616.64	4.35	-0.39	0.023
97.00	-13.02	-0.72	0.00	-31.71	0.00	31.71	1,325.88	662.94	1,234.26	609.56	4.43	-0.39	0.023
98.00	-12.82	-0.72	0.00	-30.99	0.00	30.99	1,319.70	659.85	1,219.95	602.49	4.52	-0.39	0.023

99.00	-12.62	-0.71	0.00	-30.27	0.00	30.27	1,313.49	656.74	1,205.68	595.44	4.60	-0.40	0.022
100.00	-12.41	-0.70	0.00	-29.56	0.00	29.56	1,307.23	653.62	1,191.45	588.41	4.68	-0.40	0.022
101.00	-12.16	-0.70	0.00	-28.86	0.00	28.86	1,300.93	650.47	1,177.27	581.41	4.76	-0.40	0.021
102.00	-11.90	-0.69	0.00	-28.16	0.00	28.16	1,294.59	647.30	1,163.14	574.43	4.85	-0.40	0.021
103.00	-11.64	-0.68	0.00	-27.48	0.00	27.48	1,286.70	643.35	1,147.69	566.80	4.93	-0.41	0.020
104.00	-11.39	-0.67	0.00	-26.80	0.00	26.80	1,277.44	638.72	1,131.15	558.63	5.02	-0.41	0.020
105.00	-11.21	-0.66	0.00	-26.13	0.00	26.13	869.30	434.65	782.14	386.27	5.11	-0.41	0.024
106.00	-11.02	-0.66	0.00	-25.46	0.00	25.46	865.94	432.97	773.50	382.00	5.19	-0.41	0.024
107.00	-10.84	-0.65	0.00	-24.81	0.00	24.81	862.54	431.27	764.87	377.74	5.28	-0.42	0.023
108.00	-10.67	-0.65	0.00	-24.15	0.00	24.15	859.11	429.55	756.25	373.48	5.37	-0.42	0.023
108.94	-10.67	-0.65	0.00	-23.55	0.00	23.55	855.84	427.92	748.17	369.49	5.45	-0.42	0.022
108.94	-10.67	-0.65	0.00	-23.55	0.00	23.55	855.84	427.92	748.17	369.49	5.45	-0.42	0.076
109.00	-10.57	-0.64	0.00	-23.51	0.00	23.51	855.63	427.81	747.63	369.23	5.45	-0.42	0.076
110.00	-10.47	-0.64	0.00	-22.87	0.00	22.87	852.10	426.05	739.02	364.98	5.54	-0.43	0.075
111.00	-10.37	-0.64	0.00	-22.22	0.00	22.22	848.54	424.27	730.43	360.73	5.63	-0.44	0.074
112.00	-10.27	-0.64	0.00	-21.59	0.00	21.59	844.94	422.47	721.84	356.49	5.73	-0.45	0.073
113.00	-10.19	-0.63	0.00	-20.95	0.00	20.95	841.29	420.65	713.27	352.26	5.82	-0.46	0.072
114.00	-10.11	-0.63	0.00	-20.32	0.00	20.32	837.61	418.80	704.71	348.03	5.92	-0.47	0.070
115.00	-10.04	-0.63	0.00	-19.68	0.00	19.68	833.88	416.94	696.16	343.81	6.02	-0.47	0.069
116.00	-9.97	-0.63	0.00	-19.05	0.00	19.05	830.11	415.06	687.63	339.59	6.12	-0.48	0.068
117.00	-9.89	-0.63	0.00	-18.42	0.00	18.42	826.30	413.15	679.11	335.39	6.22	-0.49	0.067
118.00	-9.82	-0.63	0.00	-17.80	0.00	17.80	822.45	411.23	670.61	331.19	6.32	-0.50	0.066
119.00	-9.75	-0.62	0.00	-17.17	0.00	17.17	818.56	409.28	662.13	327.00	6.43	-0.51	0.064
120.00	-9.68	-0.62	0.00	-16.55	0.00	16.55	814.63	407.31	653.66	322.82	6.54	-0.52	0.063
121.00	-9.60	-0.62	0.00	-15.93	0.00	15.93	810.65	405.33	645.21	318.64	6.64	-0.52	0.062
122.00	-9.53	-0.62	0.00	-15.31	0.00	15.31	806.64	403.32	636.78	314.48	6.76	-0.53	0.060
123.00	-9.46	-0.62	0.00	-14.69	0.00	14.69	802.58	401.29	628.37	310.33	6.87	-0.54	0.059
124.00	-9.39	-0.61	0.00	-14.07	0.00	14.07	798.48	399.24	619.98	306.18	6.98	-0.55	0.058
125.00	-9.32	-0.61	0.00	-13.46	0.00	13.46	794.34	397.17	611.61	302.05	7.10	-0.56	0.056
126.00	-9.25	-0.61	0.00	-12.85	0.00	12.85	790.16	395.08	603.26	297.93	7.21	-0.56	0.055
127.00	-9.18	-0.61	0.00	-12.24	0.00	12.24	785.94	392.97	594.94	293.82	7.33	-0.57	0.053
128.00	-9.12	-0.60	0.00	-11.63	0.00	11.63	781.68	390.84	586.64	289.72	7.45	-0.58	0.052
129.00	-9.05	-0.60	0.00	-11.03	0.00	11.03	777.38	388.69	578.37	285.63	7.58	-0.58	0.050
130.00	-8.98	-0.60	0.00	-10.43	0.00	10.43	773.03	386.52	570.12	281.56	7.70	-0.59	0.049
131.00	-8.91	-0.60	0.00	-9.83	0.00	9.83	768.64	384.32	561.90	277.50	7.82	-0.60	0.047
132.00	-8.85	-0.59	0.00	-9.23	0.00	9.23	764.22	382.11	553.70	273.45	7.95	-0.60	0.045
133.00	-8.78	-0.59	0.00	-8.64	0.00	8.64	759.75	379.87	545.53	269.42	8.08	-0.61	0.044
134.00	-8.71	-0.59	0.00	-8.05	0.00	8.05	755.24	377.62	537.39	265.40	8.20	-0.62	0.042
135.00	-8.65	-0.58	0.00	-7.46	0.00	7.46	750.69	375.34	529.28	261.39	8.33	-0.62	0.040
136.00	-8.58	-0.58	0.00	-6.88	0.00	6.88	746.09	373.05	521.20	257.40	8.46	-0.63	0.038
137.00	-8.52	-0.58	0.00	-6.30	0.00	6.30	741.46	370.73	513.16	253.43	8.60	-0.63	0.036
138.00	-8.45	-0.57	0.00	-5.72	0.00	5.72	736.79	368.39	505.14	249.47	8.73	-0.64	0.034
139.00	-8.39	-0.57	0.00	-5.15	0.00	5.15	732.07	366.03	497.16	245.53	8.86	-0.64	0.032
140.00	-8.32	-0.57	0.00	-4.57	0.00	4.57	727.31	363.66	489.21	241.60	9.00	-0.64	0.030
141.00	-8.26	-0.56	0.00	-4.01	0.00	4.01	720.73	360.36	480.10	237.10	9.13	-0.65	0.028
142.00	-8.20	-0.56	0.00	-3.44	0.00	3.44	713.79	356.89	470.85	232.53	9.27	-0.65	0.026
143.00	-6.06	-0.42	0.00	-2.88	0.00	2.88	706.85	353.42	461.68	228.01	9.41	-0.65	0.021
144.00	-6.00	-0.42	0.00	-2.46	0.00	2.46	699.90	349.95	452.61	223.52	9.54	-0.66	0.020
145.00	-5.94	-0.42	0.00	-2.04	0.00	2.04	692.96	346.48	443.62	219.09	9.68	-0.66	0.018
146.00	-5.88	-0.41	0.00	-1.62	0.00	1.62	686.02	343.01	434.73	214.69	9.82	-0.66	0.016
147.00	-5.82	-0.41	0.00	-1.21	0.00	1.21	679.08	339.54	425.92	210.35	9.96	-0.66	0.014
148.00	-5.76	-0.40	0.00	-0.80	0.00	0.80	672.14	336.07	417.21	206.04	10.10	-0.66	0.012
149.00	-5.70	-0.40	0.00	-0.40	0.00	0.40	665.20	332.60	408.58	201.78	10.24	-0.66	0.011
150.00	0.00	-0.33	0.00	0.00	0.00	0.00	658.26	329.13	400.05	197.57	10.37	-0.66	0.000

Site Number: 307538

Code: ANSI/TIA-222-G

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Site Name: Dublin OH, OH

Engineering Number:13619927_C3_02

4/14/2021 6:25:31 PM

Customer: AT&T MOBILITY

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	-23.41	-0.81	0.00	-109.36	0.00	109.36	2,804.10	1,402.05	4,295.35	2,121.31	0.00	0.00	0.060
1.00	-23.27	-0.81	0.00	-108.55	0.00	108.55	2,797.21	1,398.61	4,266.65	2,107.14	0.00	0.00	0.060
2.00	-23.14	-0.81	0.00	-107.74	0.00	107.74	2,790.29	1,395.14	4,237.98	2,092.98	0.00	-0.01	0.060
3.00	-23.00	-0.81	0.00	-106.93	0.00	106.93	2,783.32	1,391.66	4,209.34	2,078.83	0.00	-0.01	0.060
4.00	-22.86	-0.81	0.00	-106.12	0.00	106.12	2,776.32	1,388.16	4,180.73	2,064.70	0.01	-0.02	0.060
5.00	-22.73	-0.82	0.00	-105.31	0.00	105.31	2,769.27	1,384.63	4,152.14	2,050.59	0.01	-0.02	0.060
6.00	-22.59	-0.82	0.00	-104.49	0.00	104.49	2,762.18	1,381.09	4,123.59	2,036.49	0.02	-0.03	0.059
7.00	-22.46	-0.82	0.00	-103.68	0.00	103.68	2,755.05	1,377.52	4,095.07	2,022.40	0.02	-0.03	0.059
8.00	-22.32	-0.82	0.00	-102.86	0.00	102.86	2,747.88	1,373.94	4,066.58	2,008.33	0.03	-0.03	0.059
9.00	-22.19	-0.82	0.00	-102.04	0.00	102.04	2,740.66	1,370.33	4,038.12	1,994.27	0.04	-0.04	0.059
10.00	-22.06	-0.82	0.00	-101.22	0.00	101.22	2,733.41	1,366.70	4,009.69	1,980.24	0.05	-0.04	0.059
11.00	-21.92	-0.82	0.00	-100.39	0.00	100.39	2,726.11	1,363.06	3,981.30	1,966.21	0.06	-0.05	0.059
12.00	-21.79	-0.83	0.00	-99.57	0.00	99.57	2,718.78	1,359.39	3,952.94	1,952.21	0.07	-0.05	0.059
13.00	-21.66	-0.83	0.00	-98.74	0.00	98.74	2,711.40	1,355.70	3,924.62	1,938.22	0.08	-0.06	0.059
14.00	-21.53	-0.83	0.00	-97.91	0.00	97.91	2,703.98	1,351.99	3,896.34	1,924.25	0.09	-0.06	0.059
15.00	-21.40	-0.83	0.00	-97.08	0.00	97.08	2,696.52	1,348.26	3,868.09	1,910.30	0.10	-0.07	0.059
16.00	-21.27	-0.83	0.00	-96.25	0.00	96.25	2,689.02	1,344.51	3,839.88	1,896.37	0.12	-0.07	0.059
17.00	-21.14	-0.83	0.00	-95.42	0.00	95.42	2,681.48	1,340.74	3,811.71	1,882.46	0.13	-0.08	0.059
18.00	-21.01	-0.84	0.00	-94.59	0.00	94.59	2,673.89	1,336.95	3,783.58	1,868.57	0.15	-0.08	0.058
19.00	-20.88	-0.84	0.00	-93.75	0.00	93.75	2,666.27	1,333.13	3,755.48	1,854.69	0.17	-0.09	0.058
20.00	-20.75	-0.84	0.00	-92.91	0.00	92.91	2,658.60	1,329.30	3,727.43	1,840.84	0.19	-0.09	0.058
21.00	-20.63	-0.84	0.00	-92.08	0.00	92.08	2,650.89	1,325.45	3,699.43	1,827.01	0.20	-0.09	0.058
22.00	-20.50	-0.84	0.00	-91.24	0.00	91.24	2,643.14	1,321.57	3,671.46	1,813.20	0.22	-0.10	0.058
23.00	-20.37	-0.84	0.00	-90.40	0.00	90.40	2,635.35	1,317.68	3,643.54	1,799.41	0.25	-0.10	0.058
24.00	-20.25	-0.84	0.00	-89.56	0.00	89.56	2,627.52	1,313.76	3,615.66	1,785.64	0.27	-0.11	0.058
25.00	-20.12	-0.84	0.00	-88.71	0.00	88.71	2,619.65	1,309.83	3,587.83	1,771.90	0.29	-0.11	0.058
26.00	-20.00	-0.85	0.00	-87.87	0.00	87.87	2,611.74	1,305.87	3,560.05	1,758.17	0.32	-0.12	0.058
27.00	-19.87	-0.85	0.00	-87.02	0.00	87.02	2,603.78	1,301.89	3,532.31	1,744.47	0.34	-0.12	0.058
28.00	-19.75	-0.85	0.00	-86.18	0.00	86.18	2,595.79	1,297.89	3,504.62	1,730.80	0.37	-0.13	0.057
29.00	-19.62	-0.85	0.00	-85.33	0.00	85.33	2,587.75	1,293.88	3,476.97	1,717.15	0.40	-0.13	0.057
30.00	-19.50	-0.85	0.00	-84.48	0.00	84.48	2,579.67	1,289.84	3,449.38	1,703.52	0.42	-0.14	0.057
31.00	-19.38	-0.85	0.00	-83.63	0.00	83.63	2,571.55	1,285.78	3,421.84	1,689.92	0.45	-0.14	0.057
32.00	-19.26	-0.85	0.00	-82.78	0.00	82.78	2,563.39	1,281.70	3,394.34	1,676.34	0.48	-0.15	0.057
33.00	-19.13	-0.85	0.00	-81.93	0.00	81.93	2,555.19	1,277.59	3,366.90	1,662.79	0.52	-0.15	0.057
34.00	-19.01	-0.85	0.00	-81.08	0.00	81.08	2,546.95	1,273.47	3,339.51	1,649.26	0.55	-0.16	0.057
35.00	-18.89	-0.85	0.00	-80.23	0.00	80.23	2,538.66	1,269.33	3,312.18	1,635.76	0.58	-0.16	0.056
36.00	-18.77	-0.85	0.00	-79.38	0.00	79.38	2,530.34	1,265.17	3,284.90	1,622.29	0.62	-0.17	0.056
37.00	-18.65	-0.85	0.00	-78.52	0.00	78.52	2,521.97	1,260.98	3,257.67	1,608.84	0.65	-0.17	0.056
38.00	-18.54	-0.86	0.00	-77.67	0.00	77.67	2,513.56	1,256.78	3,230.50	1,595.42	0.69	-0.18	0.056
39.00	-18.42	-0.86	0.00	-76.81	0.00	76.81	2,505.11	1,252.56	3,203.38	1,582.03	0.73	-0.18	0.056
40.00	-18.30	-0.86	0.00	-75.96	0.00	75.96	2,496.62	1,248.31	3,176.33	1,568.67	0.77	-0.19	0.056
41.00	-18.18	-0.86	0.00	-75.10	0.00	75.10	2,488.09	1,244.04	3,149.33	1,555.33	0.81	-0.19	0.056
42.00	-18.07	-0.86	0.00	-74.24	0.00	74.24	2,479.52	1,239.76	3,122.39	1,542.03	0.85	-0.20	0.055
43.00	-17.94	-0.86	0.00	-73.38	0.00	73.38	2,470.90	1,235.45	3,095.51	1,528.75	0.89	-0.20	0.055
44.00	-17.81	-0.86	0.00	-72.53	0.00	72.53	2,462.25	1,231.12	3,068.68	1,515.51	0.93	-0.21	0.055
45.00	-17.68	-0.86	0.00	-71.67	0.00	71.67	2,453.55	1,226.78	3,041.93	1,502.29	0.98	-0.21	0.055
46.00	-17.55	-0.86	0.00	-70.81	0.00	70.81	2,444.81	1,222.41	3,015.23	1,489.11	1.02	-0.22	0.055

47.00	-17.42	-0.86	0.00	-69.95	0.00	69.95	2,433.40	1,216.70	2,985.36	1,474.36	1.07	-0.22	0.055
48.00	-17.29	-0.86	0.00	-69.09	0.00	69.09	2,420.67	1,210.34	2,954.04	1,458.89	1.12	-0.23	0.055
49.00	-17.23	-0.86	0.00	-68.23	0.00	68.23	2,407.94	1,203.97	2,922.88	1,443.50	1.16	-0.24	0.054
49.42	-17.12	-0.86	0.00	-67.88	0.00	67.88	2,402.64	1,201.32	2,909.95	1,437.12	1.19	-0.24	0.054
50.00	-17.11	-0.86	0.00	-67.38	0.00	67.38	2,395.22	1,197.61	2,891.89	1,428.20	1.21	-0.24	0.029
50.08	-16.87	-0.86	0.00	-67.30	0.00	67.30	2,394.16	1,197.08	2,889.32	1,426.93	1.22	-0.24	0.029
51.00	-16.61	-0.85	0.00	-66.52	0.00	66.52	2,382.49	1,191.25	2,861.07	1,412.98	1.27	-0.24	0.028
52.00	-16.35	-0.85	0.00	-65.67	0.00	65.67	2,369.77	1,184.88	2,830.41	1,397.83	1.32	-0.25	0.028
53.00	-16.10	-0.85	0.00	-64.82	0.00	64.82	2,357.04	1,178.52	2,799.92	1,382.77	1.37	-0.25	0.028
54.00	-15.84	-0.84	0.00	-63.97	0.00	63.97	2,344.32	1,172.16	2,769.59	1,367.80	1.42	-0.25	0.028
55.00	-15.68	-0.84	0.00	-63.13	0.00	63.13	1,548.01	774.00	1,862.94	920.03	1.47	-0.25	0.036
56.00	-15.52	-0.84	0.00	-62.28	0.00	62.28	1,543.56	771.78	1,847.57	912.45	1.53	-0.26	0.035
57.00	-15.36	-0.84	0.00	-61.44	0.00	61.44	1,539.08	769.54	1,832.21	904.86	1.58	-0.26	0.035
58.00	-15.20	-0.84	0.00	-60.61	0.00	60.61	1,534.55	767.28	1,816.87	897.28	1.64	-0.26	0.035
59.00	-15.04	-0.83	0.00	-59.77	0.00	59.77	1,529.98	764.99	1,801.53	889.71	1.69	-0.27	0.034
60.00	-14.88	-0.83	0.00	-58.94	0.00	58.94	1,525.38	762.69	1,786.21	882.14	1.75	-0.27	0.034
61.00	-14.73	-0.83	0.00	-58.10	0.00	58.10	1,520.73	760.36	1,770.89	874.58	1.80	-0.27	0.034
62.00	-14.57	-0.83	0.00	-57.27	0.00	57.27	1,516.03	758.02	1,755.59	867.02	1.86	-0.28	0.033
63.00	-14.41	-0.83	0.00	-56.44	0.00	56.44	1,511.30	755.65	1,740.30	859.47	1.92	-0.28	0.033
64.00	-14.25	-0.82	0.00	-55.62	0.00	55.62	1,506.53	753.26	1,725.03	851.93	1.98	-0.28	0.033
65.00	-14.10	-0.82	0.00	-54.79	0.00	54.79	1,501.71	750.86	1,709.77	844.39	2.04	-0.28	0.032
66.00	-13.94	-0.82	0.00	-53.97	0.00	53.97	1,496.86	748.43	1,694.53	836.87	2.10	-0.29	0.032
67.00	-13.78	-0.82	0.00	-53.16	0.00	53.16	1,491.96	745.98	1,679.31	829.35	2.16	-0.29	0.032
68.00	-13.63	-0.81	0.00	-52.34	0.00	52.34	1,487.02	743.51	1,664.10	821.84	2.22	-0.29	0.031
69.00	-13.47	-0.81	0.00	-51.53	0.00	51.53	1,482.04	741.02	1,648.91	814.33	2.28	-0.30	0.031
70.00	-13.32	-0.81	0.00	-50.72	0.00	50.72	1,477.02	738.51	1,633.74	806.84	2.34	-0.30	0.031
71.00	-13.16	-0.80	0.00	-49.91	0.00	49.91	1,471.96	735.98	1,618.59	799.36	2.41	-0.30	0.030
72.00	-13.01	-0.80	0.00	-49.11	0.00	49.11	1,466.86	733.43	1,603.46	791.89	2.47	-0.31	0.030
73.00	-12.85	-0.80	0.00	-48.30	0.00	48.30	1,461.71	730.86	1,588.35	784.42	2.54	-0.31	0.030
74.00	-12.70	-0.79	0.00	-47.51	0.00	47.51	1,456.52	728.26	1,573.26	776.97	2.60	-0.31	0.029
75.00	-12.55	-0.79	0.00	-46.71	0.00	46.71	1,451.30	725.65	1,558.20	769.54	2.67	-0.31	0.029
76.00	-12.39	-0.79	0.00	-45.92	0.00	45.92	1,446.03	723.01	1,543.16	762.11	2.73	-0.32	0.028
77.00	-12.24	-0.78	0.00	-45.13	0.00	45.13	1,440.72	720.36	1,528.14	754.69	2.80	-0.32	0.028
78.00	-12.09	-0.78	0.00	-44.35	0.00	44.35	1,435.37	717.68	1,513.15	747.29	2.87	-0.32	0.028
79.00	-11.94	-0.78	0.00	-43.57	0.00	43.57	1,429.98	714.99	1,498.19	739.90	2.93	-0.33	0.027
80.00	-11.79	-0.77	0.00	-42.79	0.00	42.79	1,424.54	712.27	1,483.25	732.52	3.00	-0.33	0.027
81.00	-11.64	-0.77	0.00	-42.02	0.00	42.02	1,419.07	709.54	1,468.35	725.16	3.07	-0.33	0.027
82.00	-11.49	-0.77	0.00	-41.25	0.00	41.25	1,413.56	706.78	1,453.47	717.81	3.14	-0.33	0.026
83.00	-11.34	-0.76	0.00	-40.48	0.00	40.48	1,408.00	704.00	1,438.62	710.48	3.21	-0.34	0.026
84.00	-11.19	-0.76	0.00	-39.72	0.00	39.72	1,402.40	701.20	1,423.80	703.16	3.28	-0.34	0.026
85.00	-11.04	-0.75	0.00	-38.97	0.00	38.97	1,396.76	698.38	1,409.01	695.86	3.35	-0.34	0.025
86.00	-10.89	-0.75	0.00	-38.21	0.00	38.21	1,391.08	695.54	1,394.25	688.57	3.43	-0.35	0.025
87.00	-10.74	-0.74	0.00	-37.46	0.00	37.46	1,385.36	692.68	1,379.53	681.30	3.50	-0.35	0.025
88.00	-10.59	-0.74	0.00	-36.72	0.00	36.72	1,379.60	689.80	1,364.84	674.04	3.57	-0.35	0.024
89.00	-10.44	-0.73	0.00	-35.98	0.00	35.98	1,373.79	686.90	1,350.18	666.80	3.65	-0.35	0.024
90.00	-10.30	-0.73	0.00	-35.25	0.00	35.25	1,367.95	683.97	1,335.56	659.58	3.72	-0.36	0.023
91.00	-10.15	-0.72	0.00	-34.52	0.00	34.52	1,362.06	681.03	1,320.97	652.38	3.80	-0.36	0.023
92.00	-10.00	-0.72	0.00	-33.79	0.00	33.79	1,356.14	678.07	1,306.43	645.19	3.87	-0.36	0.023
93.00	-9.86	-0.71	0.00	-33.08	0.00	33.08	1,350.17	675.08	1,291.91	638.03	3.95	-0.36	0.022
94.00	-9.71	-0.71	0.00	-32.36	0.00	32.36	1,344.16	672.08	1,277.44	630.88	4.02	-0.37	0.022
95.00	-9.56	-0.70	0.00	-31.65	0.00	31.65	1,338.11	669.05	1,263.01	623.75	4.10	-0.37	0.022
96.00	-9.42	-0.70	0.00	-30.95	0.00	30.95	1,332.01	666.01	1,248.61	616.64	4.18	-0.37	0.021
97.00	-9.27	-0.69	0.00	-30.25	0.00	30.25	1,325.88	662.94	1,234.26	609.56	4.26	-0.37	0.021
98.00	-9.13	-0.69	0.00	-29.56	0.00	29.56	1,319.70	659.85	1,219.95	602.49	4.34	-0.38	0.021

Site Name: Dublin OH, OH

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99.00	-8.98	-0.68	0.00	-28.87	0.00	28.87	1,313.49	656.74	1,205.68	595.44	4.42	-0.38	0.020
100.00	-8.84	-0.68	0.00	-28.19	0.00	28.19	1,307.23	653.62	1,191.45	588.41	4.49	-0.38	0.020
101.00	-8.66	-0.67	0.00	-27.51	0.00	27.51	1,300.93	650.47	1,177.27	581.41	4.58	-0.38	0.019
102.00	-8.47	-0.66	0.00	-26.85	0.00	26.85	1,294.59	647.30	1,163.14	574.43	4.66	-0.39	0.019
103.00	-8.29	-0.65	0.00	-26.19	0.00	26.19	1,286.70	643.35	1,147.69	566.80	4.74	-0.39	0.018
104.00	-8.11	-0.64	0.00	-25.53	0.00	25.53	1,277.44	638.72	1,131.15	558.63	4.82	-0.39	0.018
105.00	-7.98	-0.64	0.00	-24.89	0.00	24.89	869.30	434.65	782.14	386.27	4.90	-0.39	0.022
106.00	-7.85	-0.63	0.00	-24.25	0.00	24.25	865.94	432.97	773.50	382.00	4.98	-0.40	0.021
107.00	-7.72	-0.63	0.00	-23.62	0.00	23.62	862.54	431.27	764.87	377.74	5.07	-0.40	0.021
108.00	-7.60	-0.62	0.00	-22.99	0.00	22.99	859.11	429.55	756.25	373.48	5.15	-0.40	0.020
108.94	-7.60	-0.62	0.00	-22.41	0.00	22.41	855.84	427.92	748.17	369.49	5.23	-0.40	0.020
108.94	-7.60	-0.62	0.00	-22.41	0.00	22.41	855.84	427.92	748.17	369.49	5.23	-0.40	0.070
109.00	-7.53	-0.62	0.00	-22.37	0.00	22.37	855.63	427.81	747.63	369.23	5.24	-0.40	0.069
110.00	-7.46	-0.61	0.00	-21.76	0.00	21.76	852.10	426.05	739.02	364.98	5.32	-0.41	0.068
111.00	-7.39	-0.61	0.00	-21.14	0.00	21.14	848.54	424.27	730.43	360.73	5.41	-0.42	0.067
112.00	-7.32	-0.61	0.00	-20.53	0.00	20.53	844.94	422.47	721.84	356.49	5.50	-0.43	0.066
113.00	-7.25	-0.61	0.00	-19.92	0.00	19.92	841.29	420.65	713.27	352.26	5.59	-0.44	0.065
114.00	-7.20	-0.61	0.00	-19.31	0.00	19.31	837.61	418.80	704.71	348.03	5.68	-0.45	0.064
115.00	-7.15	-0.60	0.00	-18.71	0.00	18.71	833.88	416.94	696.16	343.81	5.78	-0.45	0.063
116.00	-7.10	-0.60	0.00	-18.10	0.00	18.10	830.11	415.06	687.63	339.59	5.87	-0.46	0.062
117.00	-7.04	-0.60	0.00	-17.50	0.00	17.50	826.30	413.15	679.11	335.39	5.97	-0.47	0.061
118.00	-6.99	-0.60	0.00	-16.90	0.00	16.90	822.45	411.23	670.61	331.19	6.07	-0.48	0.060
119.00	-6.94	-0.60	0.00	-16.30	0.00	16.30	818.56	409.28	662.13	327.00	6.17	-0.49	0.058
120.00	-6.89	-0.59	0.00	-15.71	0.00	15.71	814.63	407.31	653.66	322.82	6.27	-0.49	0.057
121.00	-6.84	-0.59	0.00	-15.12	0.00	15.12	810.65	405.33	645.21	318.64	6.38	-0.50	0.056
122.00	-6.79	-0.59	0.00	-14.53	0.00	14.53	806.64	403.32	636.78	314.48	6.48	-0.51	0.055
123.00	-6.74	-0.59	0.00	-13.94	0.00	13.94	802.58	401.29	628.37	310.33	6.59	-0.52	0.053
124.00	-6.69	-0.58	0.00	-13.35	0.00	13.35	798.48	399.24	619.98	306.18	6.70	-0.52	0.052
125.00	-6.64	-0.58	0.00	-12.77	0.00	12.77	794.34	397.17	611.61	302.05	6.81	-0.53	0.051
126.00	-6.59	-0.58	0.00	-12.18	0.00	12.18	790.16	395.08	603.26	297.93	6.92	-0.54	0.049
127.00	-6.54	-0.58	0.00	-11.61	0.00	11.61	785.94	392.97	594.94	293.82	7.04	-0.55	0.048
128.00	-6.49	-0.57	0.00	-11.03	0.00	11.03	781.68	390.84	586.64	289.72	7.15	-0.55	0.046
129.00	-6.44	-0.57	0.00	-10.46	0.00	10.46	777.38	388.69	578.37	285.63	7.27	-0.56	0.045
130.00	-6.39	-0.57	0.00	-9.88	0.00	9.88	773.03	386.52	570.12	281.56	7.38	-0.56	0.043
131.00	-6.35	-0.57	0.00	-9.32	0.00	9.32	768.64	384.32	561.90	277.50	7.50	-0.57	0.042
132.00	-6.30	-0.56	0.00	-8.75	0.00	8.75	764.22	382.11	553.70	273.45	7.62	-0.58	0.040
133.00	-6.25	-0.56	0.00	-8.19	0.00	8.19	759.75	379.87	545.53	269.42	7.74	-0.58	0.039
134.00	-6.20	-0.56	0.00	-7.63	0.00	7.63	755.24	377.62	537.39	265.40	7.87	-0.59	0.037
135.00	-6.16	-0.55	0.00	-7.07	0.00	7.07	750.69	375.34	529.28	261.39	7.99	-0.59	0.035
136.00	-6.11	-0.55	0.00	-6.52	0.00	6.52	746.09	373.05	521.20	257.40	8.12	-0.60	0.034
137.00	-6.06	-0.55	0.00	-5.97	0.00	5.97	741.46	370.73	513.16	253.43	8.24	-0.60	0.032
138.00	-6.02	-0.54	0.00	-5.42	0.00	5.42	736.79	368.39	505.14	249.47	8.37	-0.61	0.030
139.00	-5.97	-0.54	0.00	-4.87	0.00	4.87	732.07	366.03	497.16	245.53	8.50	-0.61	0.028
140.00	-5.93	-0.54	0.00	-4.33	0.00	4.33	727.31	363.66	489.21	241.60	8.63	-0.62	0.026
141.00	-5.88	-0.53	0.00	-3.79	0.00	3.79	720.73	360.36	480.10	237.10	8.75	-0.62	0.024
142.00	-5.84	-0.53	0.00	-3.26	0.00	3.26	713.79	356.89	470.85	232.53	8.88	-0.62	0.022
143.00	-4.32	-0.40	0.00	-2.73	0.00	2.73	706.85	353.42	461.68	228.01	9.02	-0.62	0.018
144.00	-4.27	-0.40	0.00	-2.33	0.00	2.33	699.90	349.95	452.61	223.52	9.15	-0.63	0.017
145.00	-4.23	-0.39	0.00	-1.93	0.00	1.93	692.96	346.48	443.62	219.09	9.28	-0.63	0.015
146.00	-4.19	-0.39	0.00	-1.54	0.00	1.54	686.02	343.01	434.73	214.69	9.41	-0.63	0.013
147.00	-4.14	-0.39	0.00	-1.15	0.00	1.15	679.08	339.54	425.92	210.35	9.54	-0.63	0.012
148.00	-4.10	-0.38	0.00	-0.76	0.00	0.76	672.14	336.07	417.21	206.04	9.67	-0.63	0.010
149.00	-4.06	-0.38	0.00	-0.38	0.00	0.38	665.20	332.60	408.58	201.78	9.81	-0.63	0.008
150.00	0.00	-0.33	0.00	0.00	0.00	0.00	658.26	329.13	400.05	197.57	9.94	-0.63	0.000

Site Number: 307538

Code: ANSI/TIA-222-G

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Site Name: Dublin OH, OH

Engineering Number:13619927_C3_02

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Customer: AT&T MOBILITY

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):	0.12
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}):	0.13
Design Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.10
Period Based on Rayleigh Method (sec):	3.56
Redundancy Factor (ρ):	1.00

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

Segment	Height Above Base (ft)	Weight (lb)	a	b	c	Saz	Horizontal Force (lb)	Vertical Force (lb)
153	149.50	49	1.877	1.914	1.116	0.245	8	60
152	148.50	49	1.852	1.787	1.070	0.234	8	61
151	147.50	50	1.828	1.667	1.025	0.223	7	61
150	146.50	50	1.803	1.551	0.982	0.213	7	61
149	145.50	50	1.778	1.442	0.940	0.203	7	62
148	144.50	51	1.754	1.337	0.900	0.193	7	62
147	143.50	51	1.730	1.238	0.861	0.183	6	63
146	142.50	51	1.706	1.144	0.823	0.173	6	63
145	141.50	52	1.682	1.055	0.787	0.164	6	63
144	140.50	52	1.658	0.970	0.752	0.155	5	64
143	139.50	52	1.635	0.890	0.718	0.146	5	64
142	138.50	53	1.611	0.814	0.686	0.137	5	65
141	137.50	53	1.588	0.742	0.654	0.129	5	65
140	136.50	53	1.565	0.674	0.624	0.120	4	65
139	135.50	54	1.542	0.611	0.595	0.112	4	66
138	134.50	54	1.520	0.550	0.566	0.105	4	66
137	133.50	54	1.497	0.494	0.539	0.097	4	67
136	132.50	55	1.475	0.441	0.513	0.090	3	67
135	131.50	55	1.453	0.391	0.488	0.083	3	67
134	130.50	55	1.431	0.344	0.464	0.076	3	68
133	129.50	56	1.409	0.301	0.441	0.069	3	68
132	128.50	56	1.387	0.260	0.419	0.062	2	69
131	127.50	56	1.366	0.222	0.397	0.056	2	69
130	126.50	57	1.344	0.186	0.377	0.050	2	69
129	125.50	57	1.323	0.154	0.357	0.044	2	70
128	124.50	57	1.302	0.123	0.338	0.039	1	70
127	123.50	57	1.281	0.095	0.320	0.033	1	71
126	122.50	58	1.261	0.069	0.302	0.028	1	71
125	121.50	58	1.240	0.046	0.286	0.023	1	71
124	120.50	58	1.220	0.024	0.270	0.018	1	72
123	119.50	59	1.200	0.004	0.254	0.014	1	72
122	118.50	59	1.180	-0.014	0.240	0.010	0	72
121	117.50	59	1.160	-0.030	0.226	0.005	0	73
120	116.50	60	1.140	-0.045	0.213	0.002	0	73

119	115.50	60	1.121	-0.058	0.200	-0.002	0	74
118	114.50	60	1.101	-0.069	0.188	-0.006	0	74
117	113.50	70	1.082	-0.079	0.176	-0.009	0	86
116	112.50	80	1.063	-0.088	0.165	-0.012	-1	98
115	111.50	80	1.044	-0.096	0.154	-0.015	-1	98
114	110.50	80	1.026	-0.103	0.144	-0.017	-1	99
113	109.50	81	1.007	-0.108	0.135	-0.020	-1	99
112	108.97	5	0.997	-0.111	0.130	-0.021	0	6
111	108.47	139	0.988	-0.113	0.126	-0.022	-2	170
110	107.50	148	0.971	-0.116	0.117	-0.024	-2	182
109	106.50	148	0.953	-0.119	0.109	-0.026	-3	182
108	105.50	149	0.935	-0.120	0.101	-0.027	-3	182
107	104.50	208	0.917	-0.121	0.094	-0.029	-4	255
106	103.50	209	0.900	-0.122	0.087	-0.030	-4	256
105	102.50	209	0.883	-0.121	0.081	-0.031	-4	257
104	101.50	210	0.865	-0.120	0.075	-0.031	-4	258
103	100.50	165	0.848	-0.119	0.069	-0.032	-4	202
102	99.50	165	0.832	-0.117	0.063	-0.032	-4	202
101	98.50	165	0.815	-0.115	0.058	-0.032	-4	203
100	97.50	166	0.799	-0.112	0.053	-0.032	-4	203
99	96.50	166	0.782	-0.108	0.049	-0.032	-4	204
98	95.50	167	0.766	-0.105	0.045	-0.031	-3	205
97	94.50	167	0.750	-0.101	0.041	-0.031	-3	205
96	93.50	168	0.734	-0.097	0.037	-0.030	-3	206
95	92.50	168	0.719	-0.092	0.034	-0.029	-3	206
94	91.50	168	0.703	-0.088	0.030	-0.027	-3	207
93	90.50	169	0.688	-0.083	0.028	-0.026	-3	207
92	89.50	169	0.673	-0.078	0.025	-0.024	-3	208
91	88.50	170	0.658	-0.073	0.022	-0.023	-3	208
90	87.50	170	0.643	-0.068	0.020	-0.021	-2	209
89	86.50	171	0.629	-0.063	0.018	-0.019	-2	209
88	85.50	171	0.614	-0.058	0.016	-0.017	-2	210
87	84.50	171	0.600	-0.053	0.015	-0.014	-2	210
86	83.50	172	0.586	-0.048	0.013	-0.012	-1	211
85	82.50	172	0.572	-0.043	0.012	-0.010	-1	211
84	81.50	173	0.558	-0.037	0.010	-0.007	-1	212
83	80.50	173	0.544	-0.032	0.009	-0.005	-1	212
82	79.50	174	0.531	-0.027	0.009	-0.002	0	213
81	78.50	174	0.518	-0.023	0.008	0.000	0	213
80	77.50	174	0.505	-0.018	0.007	0.003	0	214
79	76.50	175	0.492	-0.013	0.007	0.005	1	214
78	75.50	175	0.479	-0.008	0.006	0.007	1	215
77	74.50	176	0.466	-0.004	0.006	0.010	1	216
76	73.50	176	0.454	0.000	0.006	0.012	1	216
75	72.50	177	0.442	0.005	0.006	0.014	2	217
74	71.50	177	0.429	0.009	0.006	0.016	2	217
73	70.50	177	0.418	0.013	0.006	0.018	2	218
72	69.50	178	0.406	0.016	0.006	0.020	2	218
71	68.50	178	0.394	0.020	0.007	0.022	3	219
70	67.50	179	0.383	0.023	0.007	0.024	3	219
69	66.50	179	0.371	0.027	0.008	0.025	3	220
68	65.50	180	0.360	0.030	0.008	0.027	3	220
67	64.50	180	0.349	0.033	0.009	0.028	3	221
66	63.50	180	0.339	0.036	0.009	0.029	3	221
65	62.50	181	0.328	0.039	0.010	0.030	4	222
64	61.50	181	0.318	0.041	0.011	0.031	4	222
63	60.50	182	0.307	0.044	0.012	0.032	4	223
62	59.50	182	0.297	0.046	0.012	0.033	4	223
61	58.50	183	0.287	0.048	0.013	0.033	4	224
60	57.50	183	0.278	0.050	0.014	0.034	4	224
59	56.50	183	0.268	0.052	0.015	0.035	4	225
58	55.50	184	0.259	0.054	0.016	0.035	4	225
57	54.50	292	0.250	0.055	0.017	0.035	7	358
56	53.50	293	0.240	0.057	0.018	0.036	7	360

Site Number: 307538

Code: ANSI/TIA-222-G

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Site Name: Dublin OH, OH

Engineering Number:13619927_C3_02

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Customer: AT&T MOBILITY

55	52.50	294	0.232	0.058	0.019	0.036	7	361
54	51.50	295	0.223	0.060	0.020	0.036	7	362
53	50.54	272	0.215	0.061	0.021	0.036	7	333
52	50.04	18	0.210	0.061	0.022	0.036	0	22
51	49.71	125	0.208	0.062	0.022	0.036	3	154
50	49.21	62	0.203	0.062	0.023	0.036	2	76
49	48.50	149	0.198	0.063	0.024	0.036	4	182
48	47.50	149	0.190	0.064	0.025	0.036	4	183
47	46.50	150	0.182	0.065	0.026	0.036	4	184
46	45.50	151	0.174	0.066	0.027	0.036	4	185
45	44.50	151	0.166	0.066	0.028	0.036	4	185
44	43.50	142	0.159	0.067	0.029	0.036	3	175
43	42.50	134	0.152	0.068	0.030	0.036	3	164
42	41.50	134	0.145	0.068	0.031	0.036	3	165
41	40.50	135	0.138	0.069	0.032	0.036	3	165
40	39.50	135	0.131	0.069	0.033	0.036	3	166
39	38.50	136	0.125	0.070	0.034	0.036	3	167
38	37.50	137	0.118	0.070	0.035	0.035	3	167
37	36.50	137	0.112	0.070	0.036	0.035	3	168
36	35.50	138	0.106	0.071	0.036	0.035	3	169
35	34.50	138	0.100	0.071	0.037	0.035	3	170
34	33.50	139	0.094	0.071	0.038	0.035	3	170
33	32.50	139	0.089	0.071	0.039	0.035	3	171
32	31.50	140	0.083	0.072	0.039	0.034	3	172
31	30.50	141	0.078	0.072	0.040	0.034	3	172
30	29.50	141	0.073	0.072	0.040	0.034	3	173
29	28.50	142	0.068	0.072	0.041	0.034	3	174
28	27.50	142	0.064	0.072	0.041	0.034	3	175
27	26.50	143	0.059	0.072	0.041	0.033	3	175
26	25.50	144	0.055	0.071	0.042	0.033	3	176
25	24.50	144	0.050	0.071	0.042	0.033	3	177
24	23.50	145	0.046	0.071	0.042	0.033	3	178
23	22.50	145	0.043	0.070	0.042	0.033	3	178
22	21.50	146	0.039	0.070	0.041	0.032	3	179
21	20.50	147	0.035	0.069	0.041	0.032	3	180
20	19.50	147	0.032	0.069	0.041	0.032	3	180
19	18.50	148	0.029	0.068	0.040	0.031	3	181
18	17.50	148	0.026	0.067	0.040	0.031	3	182
17	16.50	149	0.023	0.066	0.039	0.031	3	183
16	15.50	149	0.020	0.064	0.038	0.030	3	183
15	14.50	150	0.018	0.063	0.037	0.029	3	184
14	13.50	151	0.015	0.061	0.036	0.029	3	185
13	12.50	151	0.013	0.059	0.034	0.028	3	185
12	11.50	152	0.011	0.056	0.033	0.027	3	186
11	10.50	152	0.009	0.054	0.031	0.026	3	187
10	9.50	153	0.008	0.051	0.029	0.025	3	188
9	8.50	154	0.006	0.047	0.027	0.024	2	188
8	7.50	154	0.005	0.044	0.025	0.022	2	189
7	6.50	155	0.004	0.040	0.022	0.020	2	190
6	5.50	155	0.003	0.035	0.019	0.018	2	191
5	4.50	156	0.002	0.030	0.016	0.016	2	191
4	3.50	157	0.001	0.024	0.013	0.013	1	192
3	2.50	157	0.001	0.018	0.010	0.010	1	193
2	1.50	158	0.000	0.011	0.006	0.007	1	193
1	0.50	158	0.000	0.004	0.002	0.002	0	194
Nokia AirScale RRH 4	150.00	106	1.890	1.980	1.140	0.251	18	130
Raycap DC6-48-60-18-	150.00	95	1.890	1.980	1.140	0.251	16	117
Nokia AirScale Dual	150.00	198	1.890	1.980	1.140	0.251	33	243
Nokia AirScale Dual	150.00	304	1.890	1.980	1.140	0.251	51	373
Alcatel-Lucent RRH4x	150.00	273	1.890	1.980	1.140	0.251	46	335
Nokia AEQK AirScale	150.00	298	1.890	1.980	1.140	0.251	50	365
Generic Flat Side Ar	150.00	563	1.890	1.980	1.140	0.251	94	690
Commscope SBNHH-	150.00	198	1.890	1.980	1.140	0.251	33	243
Commscope NNH4-65C-	150.00	613	1.890	1.980	1.140	0.251	102	751

Site Number: 307538

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Site Name: Dublin OH, OH

Engineering Number:13619927_C3_02

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Customer: AT&T MOBILITY

Round Platform w/ Ha	150.00	2,000	1.890	1.980	1.140	0.251	334	2,453
Generic TTA	143.00	10	1.718	1.191	0.842	0.178	1	12
Generic 56" x 6" Pan	143.00	180	1.718	1.191	0.842	0.178	21	221
Round Low Profile PI	143.00	1,500	1.718	1.191	0.842	0.178	178	1,840
		26,959	119.965	45.379	38.173	8.040	1,259	33,064

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)
153	149.50	49	1.877	1.914	1.116	0.245	8	43
152	148.50	49	1.852	1.787	1.070	0.234	8	43
151	147.50	50	1.828	1.667	1.025	0.223	7	44
150	146.50	50	1.803	1.551	0.982	0.213	7	44
149	145.50	50	1.778	1.442	0.940	0.203	7	44
148	144.50	51	1.754	1.337	0.900	0.193	7	44
147	143.50	51	1.730	1.238	0.861	0.183	6	45
146	142.50	51	1.706	1.144	0.823	0.173	6	45
145	141.50	52	1.682	1.055	0.787	0.164	6	45
144	140.50	52	1.658	0.970	0.752	0.155	5	45
143	139.50	52	1.635	0.890	0.718	0.146	5	46
142	138.50	53	1.611	0.814	0.686	0.137	5	46
141	137.50	53	1.588	0.742	0.654	0.129	5	46
140	136.50	53	1.565	0.674	0.624	0.120	4	47
139	135.50	54	1.542	0.611	0.595	0.112	4	47
138	134.50	54	1.520	0.550	0.566	0.105	4	47
137	133.50	54	1.497	0.494	0.539	0.097	4	47
136	132.50	55	1.475	0.441	0.513	0.090	3	48
135	131.50	55	1.453	0.391	0.488	0.083	3	48
134	130.50	55	1.431	0.344	0.464	0.076	3	48
133	129.50	56	1.409	0.301	0.441	0.069	3	49
132	128.50	56	1.387	0.260	0.419	0.062	2	49
131	127.50	56	1.366	0.222	0.397	0.056	2	49
130	126.50	57	1.344	0.186	0.377	0.050	2	49
129	125.50	57	1.323	0.154	0.357	0.044	2	50
128	124.50	57	1.302	0.123	0.338	0.039	1	50
127	123.50	57	1.281	0.095	0.320	0.033	1	50
126	122.50	58	1.261	0.069	0.302	0.028	1	51
125	121.50	58	1.240	0.046	0.286	0.023	1	51
124	120.50	58	1.220	0.024	0.270	0.018	1	51
123	119.50	59	1.200	0.004	0.254	0.014	1	51
122	118.50	59	1.180	-0.014	0.240	0.010	0	52
121	117.50	59	1.160	-0.030	0.226	0.005	0	52
120	116.50	60	1.140	-0.045	0.213	0.002	0	52
119	115.50	60	1.121	-0.058	0.200	-0.002	0	52
118	114.50	60	1.101	-0.069	0.188	-0.006	0	53
117	113.50	70	1.082	-0.079	0.176	-0.009	0	61
116	112.50	80	1.063	-0.088	0.165	-0.012	-1	70
115	111.50	80	1.044	-0.096	0.154	-0.015	-1	70
114	110.50	80	1.026	-0.103	0.144	-0.017	-1	70
113	109.50	81	1.007	-0.108	0.135	-0.020	-1	71
112	108.97	5	0.997	-0.111	0.130	-0.021	0	4
111	108.47	139	0.988	-0.113	0.126	-0.022	-2	121
110	107.50	148	0.971	-0.116	0.117	-0.024	-2	129
109	106.50	148	0.953	-0.119	0.109	-0.026	-3	130
108	105.50	149	0.935	-0.120	0.101	-0.027	-3	130
107	104.50	208	0.917	-0.121	0.094	-0.029	-4	182
106	103.50	209	0.900	-0.122	0.087	-0.030	-4	182
105	102.50	209	0.883	-0.121	0.081	-0.031	-4	183

104	101.50	210	0.865	-0.120	0.075	-0.031	-4	184
103	100.50	165	0.848	-0.119	0.069	-0.032	-4	144
102	99.50	165	0.832	-0.117	0.063	-0.032	-4	144
101	98.50	165	0.815	-0.115	0.058	-0.032	-4	145
100	97.50	166	0.799	-0.112	0.053	-0.032	-4	145
99	96.50	166	0.782	-0.108	0.049	-0.032	-4	145
98	95.50	167	0.766	-0.105	0.045	-0.031	-3	146
97	94.50	167	0.750	-0.101	0.041	-0.031	-3	146
96	93.50	168	0.734	-0.097	0.037	-0.030	-3	146
95	92.50	168	0.719	-0.092	0.034	-0.029	-3	147
94	91.50	168	0.703	-0.088	0.030	-0.027	-3	147
93	90.50	169	0.688	-0.083	0.028	-0.026	-3	148
92	89.50	169	0.673	-0.078	0.025	-0.024	-3	148
91	88.50	170	0.658	-0.073	0.022	-0.023	-3	148
90	87.50	170	0.643	-0.068	0.020	-0.021	-2	149
89	86.50	171	0.629	-0.063	0.018	-0.019	-2	149
88	85.50	171	0.614	-0.058	0.016	-0.017	-2	149
87	84.50	171	0.600	-0.053	0.015	-0.014	-2	150
86	83.50	172	0.586	-0.048	0.013	-0.012	-1	150
85	82.50	172	0.572	-0.043	0.012	-0.010	-1	151
84	81.50	173	0.558	-0.037	0.010	-0.007	-1	151
83	80.50	173	0.544	-0.032	0.009	-0.005	-1	151
82	79.50	174	0.531	-0.027	0.009	-0.002	0	152
81	78.50	174	0.518	-0.023	0.008	0.000	0	152
80	77.50	174	0.505	-0.018	0.007	0.003	0	152
79	76.50	175	0.492	-0.013	0.007	0.005	1	153
78	75.50	175	0.479	-0.008	0.006	0.007	1	153
77	74.50	176	0.466	-0.004	0.006	0.010	1	153
76	73.50	176	0.454	0.000	0.006	0.012	1	154
75	72.50	177	0.442	0.005	0.006	0.014	2	154
74	71.50	177	0.429	0.009	0.006	0.016	2	155
73	70.50	177	0.418	0.013	0.006	0.018	2	155
72	69.50	178	0.406	0.016	0.006	0.020	2	155
71	68.50	178	0.394	0.020	0.007	0.022	3	156
70	67.50	179	0.383	0.023	0.007	0.024	3	156
69	66.50	179	0.371	0.027	0.008	0.025	3	156
68	65.50	180	0.360	0.030	0.008	0.027	3	157
67	64.50	180	0.349	0.033	0.009	0.028	3	157
66	63.50	180	0.339	0.036	0.009	0.029	3	158
65	62.50	181	0.328	0.039	0.010	0.030	4	158
64	61.50	181	0.318	0.041	0.011	0.031	4	158
63	60.50	182	0.307	0.044	0.012	0.032	4	159
62	59.50	182	0.297	0.046	0.012	0.033	4	159
61	58.50	183	0.287	0.048	0.013	0.033	4	159
60	57.50	183	0.278	0.050	0.014	0.034	4	160
59	56.50	183	0.268	0.052	0.015	0.035	4	160
58	55.50	184	0.259	0.054	0.016	0.035	4	161
57	54.50	292	0.250	0.055	0.017	0.035	7	255
56	53.50	293	0.240	0.057	0.018	0.036	7	256
55	52.50	294	0.232	0.058	0.019	0.036	7	257
54	51.50	295	0.223	0.060	0.020	0.036	7	258
53	50.54	272	0.215	0.061	0.021	0.036	7	237
52	50.04	18	0.210	0.061	0.022	0.036	0	16
51	49.71	125	0.208	0.062	0.022	0.036	3	110
50	49.21	62	0.203	0.062	0.023	0.036	2	54
49	48.50	149	0.198	0.063	0.024	0.036	4	130
48	47.50	149	0.190	0.064	0.025	0.036	4	130
47	46.50	150	0.182	0.065	0.026	0.036	4	131
46	45.50	151	0.174	0.066	0.027	0.036	4	132
45	44.50	151	0.166	0.066	0.028	0.036	4	132
44	43.50	142	0.159	0.067	0.029	0.036	3	124
43	42.50	134	0.152	0.068	0.030	0.036	3	117
42	41.50	134	0.145	0.068	0.031	0.036	3	117
41	40.50	135	0.138	0.069	0.032	0.036	3	118

Site Number: 307538

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Site Name: Dublin OH, OH

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Customer: AT&T MOBILITY

40	39.50	135	0.131	0.069	0.033	0.036	3	118
39	38.50	136	0.125	0.070	0.034	0.036	3	119
38	37.50	137	0.118	0.070	0.035	0.035	3	119
37	36.50	137	0.112	0.070	0.036	0.035	3	120
36	35.50	138	0.106	0.071	0.036	0.035	3	120
35	34.50	138	0.100	0.071	0.037	0.035	3	121
34	33.50	139	0.094	0.071	0.038	0.035	3	121
33	32.50	139	0.089	0.071	0.039	0.035	3	122
32	31.50	140	0.083	0.072	0.039	0.034	3	122
31	30.50	141	0.078	0.072	0.040	0.034	3	123
30	29.50	141	0.073	0.072	0.040	0.034	3	123
29	28.50	142	0.068	0.072	0.041	0.034	3	124
28	27.50	142	0.064	0.072	0.041	0.034	3	124
27	26.50	143	0.059	0.072	0.041	0.033	3	125
26	25.50	144	0.055	0.071	0.042	0.033	3	125
25	24.50	144	0.050	0.071	0.042	0.033	3	126
24	23.50	145	0.046	0.071	0.042	0.033	3	126
23	22.50	145	0.043	0.070	0.042	0.033	3	127
22	21.50	146	0.039	0.070	0.041	0.032	3	127
21	20.50	147	0.035	0.069	0.041	0.032	3	128
20	19.50	147	0.032	0.069	0.041	0.032	3	129
19	18.50	148	0.029	0.068	0.040	0.031	3	129
18	17.50	148	0.026	0.067	0.040	0.031	3	130
17	16.50	149	0.023	0.066	0.039	0.031	3	130
16	15.50	149	0.020	0.064	0.038	0.030	3	131
15	14.50	150	0.018	0.063	0.037	0.029	3	131
14	13.50	151	0.015	0.061	0.036	0.029	3	132
13	12.50	151	0.013	0.059	0.034	0.028	3	132
12	11.50	152	0.011	0.056	0.033	0.027	3	133
11	10.50	152	0.009	0.054	0.031	0.026	3	133
10	9.50	153	0.008	0.051	0.029	0.025	3	134
9	8.50	154	0.006	0.047	0.027	0.024	2	134
8	7.50	154	0.005	0.044	0.025	0.022	2	135
7	6.50	155	0.004	0.040	0.022	0.020	2	135
6	5.50	155	0.003	0.035	0.019	0.018	2	136
5	4.50	156	0.002	0.030	0.016	0.016	2	136
4	3.50	157	0.001	0.024	0.013	0.013	1	137
3	2.50	157	0.001	0.018	0.010	0.010	1	137
2	1.50	158	0.000	0.011	0.006	0.007	1	138
1	0.50	158	0.000	0.004	0.002	0.002	0	138
Nokia AirScale RRH 4	150.00	106	1.890	1.980	1.140	0.251	18	93
Raycap DC6-48-60-18-	150.00	95	1.890	1.980	1.140	0.251	16	83
Nokia AirScale Dual	150.00	198	1.890	1.980	1.140	0.251	33	173
Nokia AirScale Dual	150.00	304	1.890	1.980	1.140	0.251	51	266
Alcatel-Lucent RRH4x	150.00	273	1.890	1.980	1.140	0.251	46	238
Nokia AEQK AirScale	150.00	298	1.890	1.980	1.140	0.251	50	260
Generic Flat Side Ar	150.00	563	1.890	1.980	1.140	0.251	94	491
Commscope SBNHH-	150.00	198	1.890	1.980	1.140	0.251	33	173
Commscope NNH4-65C-	150.00	613	1.890	1.980	1.140	0.251	102	535
Round Platform w/ Ha	150.00	2,000	1.890	1.980	1.140	0.251	334	1,747
Generic TTA	143.00	10	1.718	1.191	0.842	0.178	1	9
Generic 56" x 6" Pan	143.00	180	1.718	1.191	0.842	0.178	21	157
Round Low Profile PI	143.00	1,500	1.718	1.191	0.842	0.178	178	1,310
		26,959	119.965	45.379	38.173	8.040	1,259	23,550

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	-32.87	-1.26	0.00	-184.47	0.00	184.47	2,804.10	1,402.05	4,295.35	2,121.31	0.00	0.00	0.099
1.00	-32.68	-1.26	0.00	-183.21	0.00	183.21	2,797.21	1,398.61	4,266.65	2,107.14	0.00	-0.01	0.099
2.00	-32.48	-1.27	0.00	-181.95	0.00	181.95	2,790.29	1,395.14	4,237.98	2,092.98	0.00	-0.01	0.099
3.00	-32.29	-1.27	0.00	-180.68	0.00	180.68	2,783.32	1,391.66	4,209.34	2,078.83	0.01	-0.02	0.099
4.00	-32.10	-1.27	0.00	-179.41	0.00	179.41	2,776.32	1,388.16	4,180.73	2,064.70	0.01	-0.03	0.098
5.00	-31.91	-1.27	0.00	-178.14	0.00	178.14	2,769.27	1,384.63	4,152.14	2,050.59	0.02	-0.04	0.098
6.00	-31.72	-1.27	0.00	-176.87	0.00	176.87	2,762.18	1,381.09	4,123.59	2,036.49	0.03	-0.04	0.098
7.00	-31.53	-1.28	0.00	-175.59	0.00	175.59	2,755.05	1,377.52	4,095.07	2,022.40	0.04	-0.05	0.098
8.00	-31.34	-1.28	0.00	-174.32	0.00	174.32	2,747.88	1,373.94	4,066.58	2,008.33	0.05	-0.06	0.098
9.00	-31.15	-1.28	0.00	-173.04	0.00	173.04	2,740.66	1,370.33	4,038.12	1,994.27	0.06	-0.07	0.098
10.00	-30.97	-1.28	0.00	-171.76	0.00	171.76	2,733.41	1,366.70	4,009.69	1,980.24	0.08	-0.07	0.098
11.00	-30.78	-1.28	0.00	-170.48	0.00	170.48	2,726.11	1,363.06	3,981.30	1,966.21	0.09	-0.08	0.098
12.00	-30.59	-1.28	0.00	-169.20	0.00	169.20	2,718.78	1,359.39	3,952.94	1,952.21	0.11	-0.09	0.098
13.00	-30.41	-1.28	0.00	-167.92	0.00	167.92	2,711.40	1,355.70	3,924.62	1,938.22	0.13	-0.10	0.098
14.00	-30.23	-1.28	0.00	-166.63	0.00	166.63	2,703.98	1,351.99	3,896.34	1,924.25	0.15	-0.10	0.098
15.00	-30.04	-1.29	0.00	-165.35	0.00	165.35	2,696.52	1,348.26	3,868.09	1,910.30	0.17	-0.11	0.098
16.00	-29.86	-1.29	0.00	-164.06	0.00	164.06	2,689.02	1,344.51	3,839.88	1,896.37	0.20	-0.12	0.098
17.00	-29.68	-1.29	0.00	-162.78	0.00	162.78	2,681.48	1,340.74	3,811.71	1,882.46	0.23	-0.13	0.098
18.00	-29.50	-1.29	0.00	-161.49	0.00	161.49	2,673.89	1,336.95	3,783.58	1,868.57	0.25	-0.14	0.097
19.00	-29.32	-1.29	0.00	-160.20	0.00	160.20	2,666.27	1,333.13	3,755.48	1,854.69	0.28	-0.14	0.097
20.00	-29.14	-1.29	0.00	-158.92	0.00	158.92	2,658.60	1,329.30	3,727.43	1,840.84	0.31	-0.15	0.097
21.00	-28.96	-1.29	0.00	-157.63	0.00	157.63	2,650.89	1,325.45	3,699.43	1,827.01	0.35	-0.16	0.097
22.00	-28.78	-1.29	0.00	-156.34	0.00	156.34	2,643.14	1,321.57	3,671.46	1,813.20	0.38	-0.17	0.097
23.00	-28.60	-1.29	0.00	-155.05	0.00	155.05	2,635.35	1,317.68	3,643.54	1,799.41	0.42	-0.18	0.097
24.00	-28.42	-1.29	0.00	-153.76	0.00	153.76	2,627.52	1,313.76	3,615.66	1,785.64	0.46	-0.19	0.097
25.00	-28.25	-1.29	0.00	-152.47	0.00	152.47	2,619.65	1,309.83	3,587.83	1,771.90	0.49	-0.19	0.097
26.00	-28.07	-1.29	0.00	-151.18	0.00	151.18	2,611.74	1,305.87	3,560.05	1,758.17	0.54	-0.20	0.097
27.00	-27.90	-1.29	0.00	-149.89	0.00	149.89	2,603.78	1,301.89	3,532.31	1,744.47	0.58	-0.21	0.097
28.00	-27.72	-1.29	0.00	-148.60	0.00	148.60	2,595.79	1,297.89	3,504.62	1,730.80	0.62	-0.22	0.097
29.00	-27.55	-1.29	0.00	-147.31	0.00	147.31	2,587.75	1,293.88	3,476.97	1,717.15	0.67	-0.23	0.096
30.00	-27.38	-1.29	0.00	-146.02	0.00	146.02	2,579.67	1,289.84	3,449.38	1,703.52	0.72	-0.24	0.096
31.00	-27.20	-1.29	0.00	-144.73	0.00	144.73	2,571.55	1,285.78	3,421.84	1,689.92	0.77	-0.24	0.096
32.00	-27.03	-1.29	0.00	-143.43	0.00	143.43	2,563.39	1,281.70	3,394.34	1,676.34	0.82	-0.25	0.096
33.00	-26.86	-1.29	0.00	-142.14	0.00	142.14	2,555.19	1,277.59	3,366.90	1,662.79	0.88	-0.26	0.096
34.00	-26.69	-1.29	0.00	-140.85	0.00	140.85	2,546.95	1,273.47	3,339.51	1,649.26	0.93	-0.27	0.096
35.00	-26.52	-1.29	0.00	-139.56	0.00	139.56	2,538.66	1,269.33	3,312.18	1,635.76	0.99	-0.28	0.096
36.00	-26.36	-1.29	0.00	-138.27	0.00	138.27	2,530.34	1,265.17	3,284.90	1,622.29	1.05	-0.29	0.096
37.00	-26.19	-1.29	0.00	-136.98	0.00	136.98	2,521.97	1,260.98	3,257.67	1,608.84	1.11	-0.30	0.096
38.00	-26.02	-1.29	0.00	-135.69	0.00	135.69	2,513.56	1,256.78	3,230.50	1,595.42	1.17	-0.31	0.095
39.00	-25.85	-1.29	0.00	-134.39	0.00	134.39	2,505.11	1,252.56	3,203.38	1,582.03	1.24	-0.31	0.095
40.00	-25.69	-1.29	0.00	-133.10	0.00	133.10	2,496.62	1,248.31	3,176.33	1,568.67	1.30	-0.32	0.095
41.00	-25.52	-1.29	0.00	-131.81	0.00	131.81	2,488.09	1,244.04	3,149.33	1,555.33	1.37	-0.33	0.095
42.00	-25.36	-1.29	0.00	-130.52	0.00	130.52	2,479.52	1,239.76	3,122.39	1,542.03	1.44	-0.34	0.095
43.00	-25.19	-1.29	0.00	-129.23	0.00	129.23	2,470.90	1,235.45	3,095.51	1,528.75	1.51	-0.35	0.095
44.00	-25.00	-1.29	0.00	-127.94	0.00	127.94	2,462.25	1,231.12	3,068.68	1,515.51	1.59	-0.36	0.095
45.00	-24.81	-1.29	0.00	-126.65	0.00	126.65	2,453.55	1,226.78	3,041.93	1,502.29	1.67	-0.37	0.094
46.00	-24.63	-1.29	0.00	-125.36	0.00	125.36	2,444.81	1,222.41	3,015.23	1,489.11	1.74	-0.38	0.094

Site Number: 307538

Code: ANSI/TIA-222-G

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Site Name: Dublin OH, OH

Engineering Number:13619927_C3_02

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Customer: AT&T MOBILITY

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	-23.41	-1.26	0.00	-177.79	0.00	177.79	2,804.10	1,402.05	4,295.35	2,121.31	0.00	0.00	0.092
1.00	-23.27	-1.26	0.00	-176.53	0.00	176.53	2,797.21	1,398.61	4,266.65	2,107.14	0.00	-0.01	0.092
2.00	-23.14	-1.26	0.00	-175.27	0.00	175.27	2,790.29	1,395.14	4,237.98	2,092.98	0.00	-0.01	0.092
3.00	-23.00	-1.26	0.00	-174.01	0.00	174.01	2,783.32	1,391.66	4,209.34	2,078.83	0.01	-0.02	0.092
4.00	-22.86	-1.26	0.00	-172.75	0.00	172.75	2,776.32	1,388.16	4,180.73	2,064.70	0.01	-0.03	0.092
5.00	-22.73	-1.26	0.00	-171.48	0.00	171.48	2,769.27	1,384.63	4,152.14	2,050.59	0.02	-0.04	0.092
6.00	-22.59	-1.27	0.00	-170.22	0.00	170.22	2,762.18	1,381.09	4,123.59	2,036.49	0.03	-0.04	0.092
7.00	-22.46	-1.27	0.00	-168.95	0.00	168.95	2,755.05	1,377.52	4,095.07	2,022.40	0.04	-0.05	0.092
8.00	-22.32	-1.27	0.00	-167.69	0.00	167.69	2,747.88	1,373.94	4,066.58	2,008.33	0.05	-0.06	0.092
9.00	-22.19	-1.27	0.00	-166.42	0.00	166.42	2,740.66	1,370.33	4,038.12	1,994.27	0.06	-0.06	0.092
10.00	-22.06	-1.27	0.00	-165.15	0.00	165.15	2,733.41	1,366.70	4,009.69	1,980.24	0.07	-0.07	0.091
11.00	-21.92	-1.27	0.00	-163.89	0.00	163.89	2,726.11	1,363.06	3,981.30	1,966.21	0.09	-0.08	0.091
12.00	-21.79	-1.27	0.00	-162.62	0.00	162.62	2,718.78	1,359.39	3,952.94	1,952.21	0.11	-0.09	0.091
13.00	-21.66	-1.27	0.00	-161.36	0.00	161.36	2,711.40	1,355.70	3,924.62	1,938.22	0.13	-0.09	0.091
14.00	-21.53	-1.27	0.00	-160.09	0.00	160.09	2,703.98	1,351.99	3,896.34	1,924.25	0.15	-0.10	0.091
15.00	-21.40	-1.26	0.00	-158.82	0.00	158.82	2,696.52	1,348.26	3,868.09	1,910.30	0.17	-0.11	0.091
16.00	-21.27	-1.26	0.00	-157.56	0.00	157.56	2,689.02	1,344.51	3,839.88	1,896.37	0.19	-0.12	0.091
17.00	-21.14	-1.26	0.00	-156.29	0.00	156.29	2,681.48	1,340.74	3,811.71	1,882.46	0.22	-0.12	0.091
18.00	-21.01	-1.26	0.00	-155.03	0.00	155.03	2,673.89	1,336.95	3,783.58	1,868.57	0.24	-0.13	0.091
19.00	-20.88	-1.26	0.00	-153.77	0.00	153.77	2,666.27	1,333.13	3,755.48	1,854.69	0.27	-0.14	0.091
20.00	-20.75	-1.26	0.00	-152.50	0.00	152.50	2,658.60	1,329.30	3,727.43	1,840.84	0.30	-0.15	0.091
21.00	-20.62	-1.26	0.00	-151.24	0.00	151.24	2,650.89	1,325.45	3,699.43	1,827.01	0.33	-0.15	0.091
22.00	-20.50	-1.26	0.00	-149.98	0.00	149.98	2,643.14	1,321.57	3,671.46	1,813.20	0.37	-0.16	0.090
23.00	-20.37	-1.26	0.00	-148.72	0.00	148.72	2,635.35	1,317.68	3,643.54	1,799.41	0.40	-0.17	0.090
24.00	-20.24	-1.26	0.00	-147.46	0.00	147.46	2,627.52	1,313.76	3,615.66	1,785.64	0.44	-0.18	0.090
25.00	-20.12	-1.26	0.00	-146.20	0.00	146.20	2,619.65	1,309.83	3,587.83	1,771.90	0.48	-0.19	0.090
26.00	-19.99	-1.26	0.00	-144.94	0.00	144.94	2,611.74	1,305.87	3,560.05	1,758.17	0.52	-0.19	0.090
27.00	-19.87	-1.26	0.00	-143.69	0.00	143.69	2,603.78	1,301.89	3,532.31	1,744.47	0.56	-0.20	0.090
28.00	-19.74	-1.26	0.00	-142.43	0.00	142.43	2,595.79	1,297.89	3,504.62	1,730.80	0.60	-0.21	0.090
29.00	-19.62	-1.26	0.00	-141.17	0.00	141.17	2,587.75	1,293.88	3,476.97	1,717.15	0.65	-0.22	0.090
30.00	-19.50	-1.25	0.00	-139.92	0.00	139.92	2,579.67	1,289.84	3,449.38	1,703.52	0.69	-0.23	0.090
31.00	-19.37	-1.25	0.00	-138.66	0.00	138.66	2,571.55	1,285.78	3,421.84	1,689.92	0.74	-0.23	0.090
32.00	-19.25	-1.25	0.00	-137.41	0.00	137.41	2,563.39	1,281.70	3,394.34	1,676.34	0.79	-0.24	0.089
33.00	-19.13	-1.25	0.00	-136.16	0.00	136.16	2,555.19	1,277.59	3,366.90	1,662.79	0.84	-0.25	0.089
34.00	-19.01	-1.25	0.00	-134.91	0.00	134.91	2,546.95	1,273.47	3,339.51	1,649.26	0.89	-0.26	0.089
35.00	-18.89	-1.25	0.00	-133.66	0.00	133.66	2,538.66	1,269.33	3,312.18	1,635.76	0.95	-0.27	0.089
36.00	-18.77	-1.25	0.00	-132.41	0.00	132.41	2,530.34	1,265.17	3,284.90	1,622.29	1.01	-0.28	0.089
37.00	-18.65	-1.25	0.00	-131.16	0.00	131.16	2,521.97	1,260.98	3,257.67	1,608.84	1.07	-0.28	0.089
38.00	-18.53	-1.25	0.00	-129.91	0.00	129.91	2,513.56	1,256.78	3,230.50	1,595.42	1.13	-0.29	0.089
39.00	-18.41	-1.25	0.00	-128.67	0.00	128.67	2,505.11	1,252.56	3,203.38	1,582.03	1.19	-0.30	0.089
40.00	-18.30	-1.24	0.00	-127.42	0.00	127.42	2,496.62	1,248.31	3,176.33	1,568.67	1.25	-0.31	0.089
41.00	-18.18	-1.24	0.00	-126.18	0.00	126.18	2,488.09	1,244.04	3,149.33	1,555.33	1.32	-0.32	0.088
42.00	-18.06	-1.24	0.00	-124.93	0.00	124.93	2,479.52	1,239.76	3,122.39	1,542.03	1.39	-0.33	0.088
43.00	-17.94	-1.24	0.00	-123.69	0.00	123.69	2,470.90	1,235.45	3,095.51	1,528.75	1.46	-0.34	0.088
44.00	-17.80	-1.24	0.00	-122.45	0.00	122.45	2,462.25	1,231.12	3,068.68	1,515.51	1.53	-0.34	0.088
45.00	-17.67	-1.24	0.00	-121.21	0.00	121.21	2,453.55	1,226.78	3,041.93	1,502.29	1.60	-0.35	0.088
46.00	-17.54	-1.24	0.00	-119.98	0.00	119.98	2,444.81	1,222.41	3,015.23	1,489.11	1.68	-0.36	0.088

Site Number: 307538

Code: ANSI/TIA-222-G

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Site Name: Dublin OH, OH

Engineering Number:13619927_C3_02

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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	19.57	0.00	32.34	0.00	0.00	2142.08	108.94	1.03
0.9D + 1.6W	19.56	0.00	24.25	0.00	0.00	2085.22	0.00	0.99
1.2D + 1.0Di + 1.0Wi	5.08	0.00	49.05	0.00	0.00	557.96	0.00	0.28
(1.2 + 0.2Sds) * DL + E ELFM	0.81	0.00	32.87	0.00	0.00	113.28	108.94	0.08
(1.2 + 0.2Sds) * DL + E EMAM	1.26	0.00	32.87	0.00	0.00	184.47	108.94	0.14
(0.9 - 0.2Sds) * DL + E ELFM	0.81	0.00	23.41	0.00	0.00	109.36	108.94	0.07
(0.9 - 0.2Sds) * DL + E EMAM	1.26	0.00	23.41	0.00	0.00	177.79	108.94	0.14
1.0D + 1.0W	4.86	0.00	26.96	0.00	0.00	525.10	108.94	0.26

Site Number: 307538

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Site Name: Dublin OH, OH

Engineering Number:13619927_C3_02

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Customer: AT&T MOBILITY

Additional Steel Summary

Elev From (ft)	Elev To (ft)	Member	Intermediate Connectors				Max Member		
			VQ/I (lb/in)	Shear Applied (kips)	Shear phiVn (kips)	Ratio	Pu (kip)	phiPn (kip)	Ratio
49.42	108.94	(4) SOL-#20 All Thread Bar	270.6	8.1	16.8	0.483	207.5	330.5	0.628

Elev From (ft)	Elev To (ft)	Member	Upper Termination Connectors				Lower Termination Connectors					
			MQ/I (kips)	phiVn (kips)	Num Reqd	Num Actual	Ratio	MQ/I (kips)	phiVn (kips)	Num Reqd	Num Actual	Ratio
49.42	108.94	(4) SOL-#20 All Thread Bar	116.0	12.0	10	12	0.806	189.9	12.0	16	16	0.989

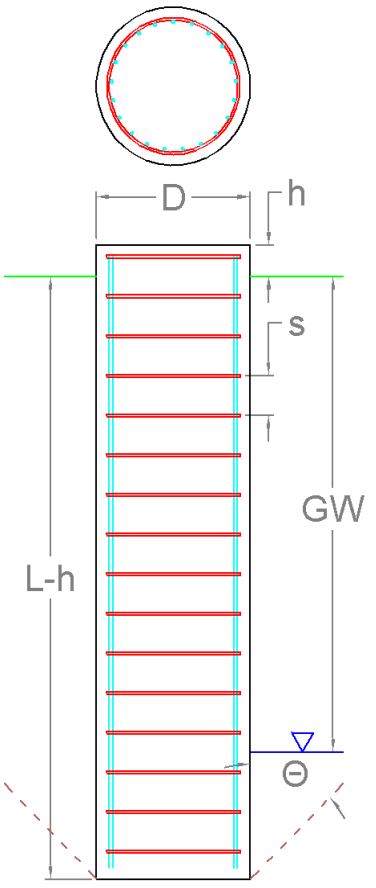
Pier Foundation Analysis (ANSI/TIA-222-G)

Foundation Analysis Parameters			
Pier Diameter	D	6.00	ft
Pier Embedment	$L-h$	30.8	ft
Pier Height above Ground	H	0.70	ft
Water Table Depth [BGL]	GW	11	ft
Pullout Angle	Θ	30	°
Unit Weight of Concrete		150	pcf
Uplift Skin Friction Factor		1.000	

Reactions		
Moment, M_u	2,142.1	k-ft
Shear, V_u	19.6	k
Axial, P_u	32.3	k
Uplift, T_u	0.0	k

Soil Properties						
Layer Depth (ft)		Unit Weight	Cohesion	Friction Angle	Ultimate Skin Friction	Ultimate Bearing Pressure
TOP	BTM	pcf	psf	°	psf	psf
2.5	5.0	110	0	0	0	0
5.0	7.5	122	2,400	0	0	0
7.5	11.0	122	2,509	0	1,065	0
11.0	15.0	123	3,273	0	1,755	0
15.0	20.0	123	3,414	0	1,807	0
20.0	25.0	123	3,658	0	1,891	0
25.0	30.0	124	4,022	0	2,006	0
30.0	35.0	124	4,027	0	2,008	0
35.0	40.0	125	4,056	0	2,017	38,698

Soil Strength Capacities		
Volume of Concrete	890.6	ft ³
Weight of Concrete [Buoyancy Considered]	98.7	k
Average Soil Unit Weight	71.8	pcf
Skin Friction Resistance	770.4	k
Compressive Bearing Resistance	0.0	k
Pullout Weight [Minus Concrete Weight]	1,103.5	k
Compressive Force, P_u	72.1	k
Nominal Compressive Capacity, $\phi_s P_n$	577.8	k
$P_u / \phi_s P_n$	12.5%	
Total Lateral Resistance	4,112.6	k
Inflection Point [BGL]	19.9	ft
Moment at Inflection Point, M_D	2,546.8	k-ft
Nominal Moment Capacity, $\phi_s M_n$	19,262.1	k-ft
$M_D / \phi_s M_n$	13.2%	



Pier Strength Capacities

Concrete Compressive Strength, f'_c	3,000	psi
Rebar Size #	11	
Rebar Area (Single)	1.56	in ²
Rebar Quantity	16	
Rebar Yield Strength, F_y	60	ksi
Vertical Rebar Clear Cover	3	in
Tie Rebar Size #	5	
Tie Rebar Area (Single)	0.31	in ²
Tie Rebar Spacing	18.0	in
Tie Rebar Yield Strength, F_y	60	ksi
Rebar Cage Diameter	63.34	in
Strength Bending/Tension Reduction Factor, ϕ_B	0.90	
Strength Shear Reduction Factor, ϕ_V	0.75	
Strength Compression Reduction Factor, ϕ_C	0.65	
Steel Elastic Modulus	29,000	ksi
Design Moment, M_u	2,156.6	k-ft
Moment Capacity, $\phi_B M_n$	3,492.3	k-ft
$M_u / \phi_B M_n$	61.8%	
Design Shear, V_u	172.7	k
Shear Capacity, $\phi_V V_n$	425.1	k
$V_u / \phi_V V_n$	40.6%	
Design Compression, P_u	72.1	k
Compression Capacity, $\phi_P P_n$	6,144.5	k
$P_u / \phi_P P_n$	1.2%	
Bending Reinforcement Ratio	0.006	





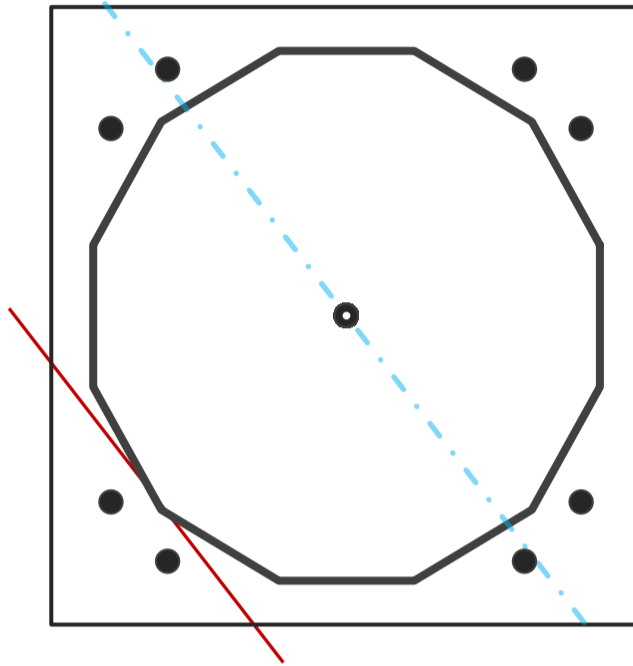
Base Plate & Anchor Rod Analysis

Pole Dimensions		
Number of Sides	12	-
Diameter	37.5	in
Thickness	11/32	in
Orientation Offset	15	°

Base Reactions		
Moment, Mu	2,142.1	k-ft
Axial, Pu	32.3	k
Shear, Vu	19.6	k
Neutral Axis	129	°

Report Capacities		
Component	Capacity	Result
Base Plate	40%	Pass
Anchor Rods	114%	Fail
Dwyidag	-	-

Base Plate		
Shape	Square	-
Width	44	in
Thickness	3 1/2	in
Grade	A871-60	
Yield Strength, Fy	60	ksi
Tensile Strength, Fu	75	ksi
Clip	0	in
Orientation Offset		°
Anchor Rod Detail	c	$\eta=0.55$
Clear Distance	N/A	in
Applied Moment, Mu	1636.0	k
Bending Stress, ϕMn	4047.6	k



Original Anchor Rods		
Arrangement	Cluster	-
Quantity	8	-
Diameter, ϕ	2 1/4	in
Bolt Circle	44	in
Grade	A615-75	
Yield Strength, Fy	75	ksi
Tensile Strength, Fu	100	ksi
Spacing	6.0	in
Orientation Offset		°
Applied Force, Pu	295.7	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	19.6	2142.1	1.00
Anchor Rod Forces	19.6	2142.1	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	39.6977	3.3081	0.1311		6852.24
Bolt	3.9761	3.2477	0.8393	4.5	6294.24
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	Square	-
Width, W	44	in
Thickness, t	3.5	in
Yield Strength, Fy	60	ksi
Tensile Strength, Fu	75	ksi
Base Plate Chord	23.016	in
Detail Type	c	-
Detail Factor	0.55	-
Clear Distance	N/A	-

Anchor Rods		
Anchor Rod Quantity, N	8	-
Rod Diameter, d	2.25	in
Bolt Circle, BC	44	in
Yield Strength, Fy	75	ksi
Tensile Strength, Fu	100	ksi
Applied Axial, Pu	295.7	k
Applied Shear, Vu	0.1	k
Compressive Capacity, ϕP_n	259.8	k
Tensile Capacity, ϕR_n	1.138	NG
Interaction Capacity	1.139	NG

External Base Plate		
Chord Length AA	24.475	in
Additional AA	0.000	in
Section Modulus, Z	74.956	in ³
Applied Moment, Mu	1636.0	k-ft
Bending Capacity, ϕM_n	4047.6	k-ft
Capacity, Mu/ ϕM_n	0.404	OK
Chord Length AB	23.144	in
Additional AB	0.000	in
Section Modulus, Z	70.878	in ³
Applied Moment, Mu	1247.8	k-ft
Bending Capacity, ϕM_n	3827.4	k-ft
Capacity, Mu/ ϕM_n	0.326	OK
Bend Line Length	0.000	in
Additional Bend Line	0.000	in
Section Modulus, Z	0.000	in ³
Applied Moment, Mu	0.0	k-ft
Bending Capacity, ϕM_n	0.0	k-ft
Capacity, Mu/ ϕM_n		

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