



November 3, 2016

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

Re: EM-AT&T-152-160902 – AT&T Notice of Intent to Modify Existing Telecom Facility at 53 Dayton Road, Waterford, CT

Dear Ms. Bachman:

In accordance with your letter dated September 26, 2016 concerning the above-referenced site, enclosed please find a structural analysis run in Rev G.

Please do not hesitate to contact me with any questions or concerns.

Sincerely,

A handwritten signature in blue ink, appearing to read "Sarah Snell", with a stylized flourish at the end.

Sarah Snell
Site Acquisition Specialist
Empire Telecom USA LLC
16 Esquire Rd
Billerica, MA 01862
ssnell@empiretelecomm.com



AMERICAN TOWER®
CORPORATION

Structural Analysis Report

Structure : 180 ft Self Supported Tower
ATC Site Name : Waterford CT, CT
ATC Site Number : 411183
Engineering Number : OAA682429_C3_02
Proposed Carrier : AT&T Mobility
Carrier Site Name : Waterford East
Carrier Site Number : CT5221
Site Location : 53 Dayton Rd.
Waterford, CT 06385-4274
41.377778,-72.141389
County : New London
Date : October 24, 2016
Max Usage : 55%
Result : Pass

Prepared By:
Brendan M. Smith, E.I.
Structural Engineer II

COA: PEC.0001553



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Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 180 ft self supported tower to reflect the change in loading by AT&T Mobility.

Supporting Documents

Tower Drawings	Rohn Drawing #A982166, dated August 20, 1998
Foundation Drawing	Rohn Drawing #A982167-1, dated August 20, 1998
Geotechnical Report	Clarence Welti Site Name Cohenzie Fire Station; Waterford, CT, dated March 24, 1997

Analysis

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

Basic Wind Speed:	105 mph (3-Second Gust, V_{asd}) / 135 mph (3-Second Gust, V_{ult})
Basic Wind Speed w/ Ice:	50 mph (3-Second Gust) w/ 3/4" radial ice concurrent
Code:	ANSI/TIA-222-G / 2012 IBC / 2016 Connecticut State Building Code
Structure Class:	II
Exposure Category:	B
Topographic Category:	1
Spectral Response:	$S_s = 0.16$, $S_1 = 0.06$
Site Class:	D - Stiff Soil

Conclusion

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

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



Existing and Reserved Equipment

Elevation ¹ (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
177.0	187.0	1	15' Omni	Sector Frame	(7) 7/8" Coax	Town Of Waterford Police Dept
	184.0	2	10' Omni			
	182.0	2	8' Omni			
	181.0	2	5' Omni			
	170.0	1	13' Omni			
164.0	165.0	6	Ericsson AIR 21	Sector Frames	(18) 1 5/8" Coax (1) 1 5/8" Hybriflex	T-Mobile
		3	RFS ATMAA1412D-1A20			
	164.0	3	Andrew LNX-6515DS-VTM (50.3 lbs)			
		3	Ericsson RRUS 11 B12			
157.0	160.0	3	CCI HPA-65R-BUU-H8	Sector Frames	(12) 1 5/8" Coax (4) 0.78" 8 AWG 6 (2) 0.39" Fiber Trunk	AT&T Mobility
		3	Powerwave 7770.00			
	157.0	3	Ericsson RRUS-32 (77 lbs)			
		3	Ericsson RRUS-11 (50 lbs.)			
		2	Raycap DC6-48-60-0-8F			
		6	Powerwave LGP21401			
		6	Powerwave LGP13519			
143.0	156.0	1	20' Omni	Side Arm	(1) 1 5/8" Coax	Town Of Waterford Police Dept
132.0	134.0	3	Raycap RRFDC-1064-PF-48	Sector Frames	(18) 1 5/8" Coax (3) 1 1/4" Hybriflex	Verizon
	133.0	1	Antel BXA-70063-6CF-EDIN-2			
		1	Swedcom SACP 2x5516			
	132.0	1	VZW Unused Reserve: 18,557 sq in			
		2	Swedcom SLCP 2x6015			
		2	Antel LPA-80063-4CF-EDIN-X			
		6	48" x 12" x 7" Panel			
		3	Antel BXA-171063-8CF-EDIN-X			
		3	RRH			
		3	Alcatel-Lucent RRH2x40-AWS			
125.0	125.0	6	Kathrein 800 10504	Sector Frames	(6) 1 5/8" Coax	Metro PCS
		1	MicroPulse GPS-QBW-26N			
51.0	51.0	1	GPS	Stand-Off	(1) 1/2" Coax	Verizon



Equipment to be Removed

Elevation ¹ (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
157.0	157.0	1	KMW AM-X-CD-16-65-00T-RET	-	-	AT&T Mobility
		2	Andrew SBNH-1D6565C			
		3	Ericsson RRUS-11			

Proposed Equipment

Elevation ¹ (ft)		Qty	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
157.0	160.0	3	CCI TPA-65R-LCUUUU-H8	Sector Frames	(2) 0.78" 8 AWG 6 (1) 0.39" Fiber Trunk (1) 2" Conduit	AT&T Mobility
	157.0	3	Ericsson RRUS 11 w/ RRUS A2			
		1	Raycap DC6-48-60-0-8F			
		3	Ericsson RRUS 32 B2			
		3	Kathrein 782 10253			

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

Install proposed coax stacked on top of existing AT&T Mobility coax.



Structure Usages

Structural Component	Controlling Usage	Pass/Fail
Legs	44%	Pass
Diagonals	55%	Pass
Horizontals	46%	Pass
Anchor Bolts	24%	Pass
Leg Bolts	30%	Pass

Foundations

Reaction Component	Original Design Reactions	Factored Design Reactions*	Analysis Reactions	% of Design
Uplift (Kips)	621.3	838.8	283.9	34%
Axial (Kips)	732.9	989.4	378.4	38%
Shear (Kips)	141.8	191.4	42.2	22%

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

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

Deflection, Twist and Sway*

Antenna Elevation (ft)	Antenna	Carrier	Deflection (ft)	Twist (°)	Sway (Rotation) (°)
157.0	Kathrein Scala 782 10253	AT&T Mobility	0.127	0.012	0.114
	Raycap DC6-48-60-0-8F				
	Ericsson RRUS 32 B2				
	Ericsson RRUS 11 w/ RRUS A2				
	CCI TPA-65R-LCUUUU-H8				

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



Standard Conditions

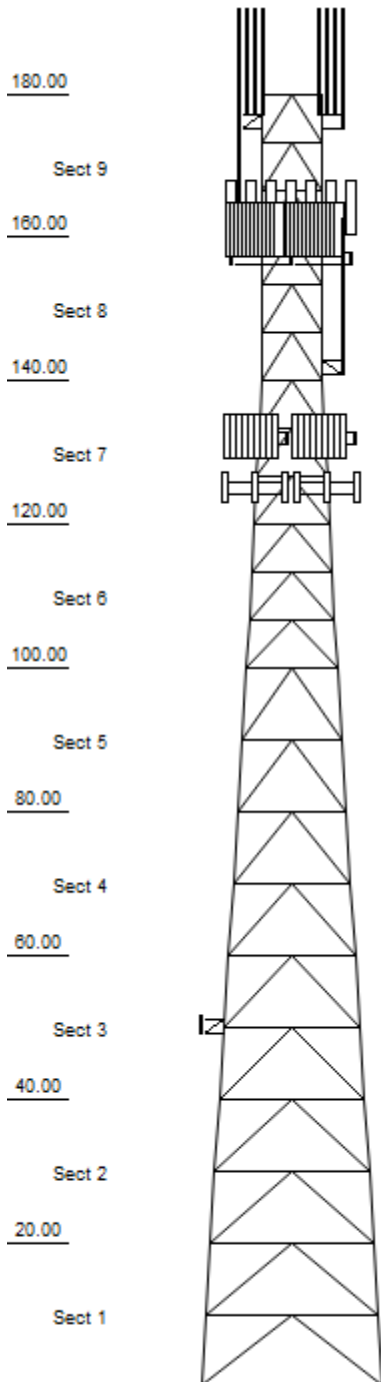
All engineering services are performed on the basis that the information used is current and correct. This information may consist of, but is not necessary limited, to:

- Information supplied by the client regarding the structure itself, antenna, mounts and feed line loading on the structure and its components, or other relevant information.
- Information from drawings in the possession of American Tower Corporation, or generated by field inspections or measurements of the structure.

It is the responsibility of the client to ensure that the information provided to A.T. Engineering Service, PLLC and used in the performance of our engineering services is correct and complete. In the absence of information to the contrary, we assume that all structures were constructed in accordance with the drawings and specifications and that their capacity has not significantly changed from the "as new" condition.

Unless explicitly agreed by both the client and American Tower Corporation, all services will be performed in accordance with the current revision of ANSI/TIA -222. The design basic wind speed will be determined based on the minimum basic wind speed as prescribed in ANSI/TIA-222. Although every effort is taken to ensure that the loading considered is adequate to meet the requirements of all applicable regulatory entities, we can provide no assurance to meet any other local and state codes or requirements. If wind and ice loads or other relevant parameters are to be different from the minimum values recommended by the codes, the client shall specify the exact requirement.

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



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Loads: 105 mph no ice
 50 mph w/ 3/4" radial ice
 Site Class: D Ss: 0.16 S1: 0.06
 60 mph Serviceability

Job Information

Tower : 411183 Location : Waterford CT, CT
 Code : ANSI/TIA-222-G Shape : Triangle Base Width : 25.55 ft
 Client : AT&T Mobility Top Width : 8.50 ft

Sections Properties

Section	Leg Members	Diagonal Members	Horizontal Members
1 - 2	PX 50 ksi 12" DIA PIPE	PST 50 ksi 3-1/2" DIA PIPE	PST 50 ksi 3" DIA PIPE
3 - 4	PX 50 ksi 10" DIA PIPE	PX 50 ksi 3" DIA PIPE	PST 50 ksi 2-1/2" DIA PIPE
5	PX 50 ksi 8" DIA PIPE	PX 50 ksi 3" DIA PIPE	PX 50 ksi 2" DIA PIPE
6	PX 50 ksi 6" DIA PIPE	PST 50 ksi 2-1/2" DIA PIPE	PST 50 ksi 2" DIA PIPE
7	PX 50 ksi 5" DIA PIPE	PST 50 ksi 2-1/2" DIA PIPE	PST 50 ksi 1-1/2" DIA PIPE
8	PST 50 ksi 4" DIA PIPE	PST 50 ksi 2-1/2" DIA PIPE	PST 50 ksi 2" DIA PIPE
9	PST 50 ksi 3" DIA PIPE	PST 50 ksi 2" DIA PIPE	PST 50 ksi 1-1/2" DIA PIPE

Discrete Appurtenance

Elev (ft)	Type	Qty	Description
177.00	Straight Arm	2	Round Side Arm
177.00	Whip	1	15' Omni
177.00	Whip	1	13' Omni
177.00	Whip	2	8' Omni
177.00	Whip	2	5' Omni
177.00	Mounting Frame	1	Round Sector Frame
177.00	Whip	2	10' Omni
164.00	Panel	3	Andrew LNX-6515DS-VTM (50.3 lb)
164.00	Panel	3	Ericsson RRUS 11 B12
164.00	Mounting Frame	3	Round Sector Frame
164.00	Panel	6	Ericsson AIR 21
164.00	Panel	3	RFS ATMAA1412D-1A20
157.00	Panel	3	Ericsson RRUS-32 (77 lbs)
157.00	Panel	3	Ericsson RRUS 11 w/ RRUS A2
157.00	Panel	1	Raycap DC6-48-60-0-8F
157.00	Panel	3	CCI HPA-65R-BUU-H8
157.00	Panel	3	CCI TPA-65R-LCUUUU-H8
157.00	Panel	3	Ericsson RRUS 32 B2
157.00	Mounting Frame	3	Round Sector Frame
157.00	Panel	3	Kathrein Scala 782 10253
157.00	Panel	3	Powerwave Allgon 7770.00
157.00	Panel	3	Ericsson RRUS-11 (50 lbs.)
157.00	Panel	2	Raycap DC6-48-60-0-8F
157.00	Panel	6	Powerwave Allgon LGP21401
157.00	Panel	6	Powerwave Allgon LGP13519
143.00	Whip	1	20' Omni
143.00	Straight Arm	1	Round Side Arm
132.00	Panel	1	VZW Unused Reserve: 18,557 sq
132.00	Mounting Frame	3	Round Sector Frame
132.00	Panel	2	Swedcom SLCP 2x6015
132.00	Panel	1	Amphenol Antel BXA-70063-6CF-E
132.00	Panel	2	Amphenol Antel LPA-80063-4CF-E
132.00	Panel	1	Swedcom SACP 2x5516
132.00	Panel	6	48" x 12" x 7" Panel
132.00	Panel	3	Amphenol Antel BXA-171063-8CF-
132.00	Panel	3	RRH
132.00	Panel	3	Alcatel-Lucent RRH2x40-AWS
132.00	Panel	3	Raycap RRFDC-1064-PF-48
125.00	Mounting Frame	3	Flat Light Sector Frame
125.00	Panel	6	Kathrein Scala 800 10504
125.00	Panel	1	MicroPulse GPS-QBW-26N
51.00	Straight Arm	1	Stand-Off
51.00	Whip	1	GPS

Linear Appurtenance

Elev (ft)	From	To	Qty	Description
	0.00	180.00	1	Empty Waveguide
	30.00	177.00	1	Waveguide

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Job Information		
Tower : 411183	Location : Waterford CT, CT	
Code : ANSI/TIA-222-G	Shape : Triangle	Base Width : 25.55 ft
Client : AT&T Mobility		Top Width : 8.50 ft

30.00	177.00	7	7/8" Coax
30.00	164.00	1	1 5/8" Hybriflex Cab
30.00	164.00	18	1 5/8" Coax
0.00	164.00	1	Waveguide
30.00	157.00	1	Waveguide
30.00	157.00	1	2" Conduit
30.00	157.00	12	1 5/8" Coax
30.00	157.00	2	0.78" 8 AWG 6
30.00	157.00	4	0.78" 8 AWG 6
30.00	157.00	1	0.39" Fiber Trunk
30.00	157.00	2	0.39" Fiber Trunk
30.00	143.00	1	1 5/8" Coax
30.00	132.00	18	1 5/8" Coax
30.00	132.00	3	1 1/4" Hybriflex Cab
30.00	125.00	6	1 5/8" Coax
30.00	51.00	1	1/2" Coax

Global Base Foundation Design Loads			
Load Case	Moment (k-ft)	Vertical (kip)	Horizontal (kip)
DL + WL	7,183.61	161.33	65.76
DL + WL + IL	2,287.28	278.47	21.38

Individual Base Foundation Design Loads		
Vertical (kip)	Uplift (kip)	Horizontal (kip)
378.43	283.88	42.17

Site Number: 411183

Code:

ANSI/TIA-222-G

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Site Name: Waterford CT, CT

Engineering Number: OAA682429_C3_02

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Customer: AT&T Mobility

Analysis Parameters

Location:	New London County, CT	Height (ft):	180
Code:	ANSI/TIA-222-G	Base Elevation (ft):	0.00
Shape:	Triangle	Bottom Face Width (ft):	25.55
Tower Manufacturer:	Rohn	Top Face Width (ft):	8.50
Tower Type:	Self Support	Anchor Bolt Detail Type	c

Ice & Wind Parameters

Structure Class:	II	Design Windspeed Without Ice:	105 mph
Exposure Category:	B	Design Windspeed With Ice:	50 mph
Topographic Category:	1	Operational Windspeed:	60 mph
Crest Height:	0.0 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):	0.83				
T_L (sec):	6	p:	1.3	C_S :	0.038
S_S :	0.163	S_1 :	0.059	C_S , Max:	0.038
F_a :	1.600	F_V :	2.400	C_S , Min:	0.030
S_{ds} :	0.174	S_{d1} :	0.094		

Load Cases

1.2D + 1.6W Normal	105 mph Normal to Face with No Ice
1.2D + 1.6W 60 deg	105 mph 60 degree with No Ice
1.2D + 1.6W 90 deg	105 mph 90 degree with No Ice
1.2D + 1.6W 120 deg	105 mph 120 degree with No Ice
1.2D + 1.6W 180 deg	105 mph 180 degree with No Ice
1.2D + 1.6W 210 deg	105 mph 210 degree with No Ice
1.2D + 1.6W 240 deg	105 mph 240 degree with No Ice
1.2D + 1.6W 300 deg	105 mph 300 degree with No Ice
1.2D + 1.6W 330 deg	105 mph 330 degree with No Ice
0.9D + 1.6W Normal	105 mph Normal to Face with No Ice (Reduced DL)
0.9D + 1.6W 60 deg	105 mph 60 deg with No Ice (Reduced DL)
0.9D + 1.6W 90 deg	105 mph 90 deg with No Ice (Reduced DL)
0.9D + 1.6W 120 deg	105 mph 120 deg with No Ice (Reduced DL)
0.9D + 1.6W 180 deg	105 mph 180 deg with No Ice (Reduced DL)
0.9D + 1.6W 210 deg	105 mph 210 deg with No Ice (Reduced DL)
0.9D + 1.6W 240 deg	105 mph 240 deg with No Ice (Reduced DL)
0.9D + 1.6W 300 deg	105 mph 300 deg with No Ice (Reduced DL)
0.9D + 1.6W 330 deg	105 mph 330 deg with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi Normal	50 mph Normal with 0.75 in Radial Ice
1.2D + 1.0Di + 1.0Wi 60 deg	50 mph 60 deg with 0.75 in Radial Ice
1.2D + 1.0Di + 1.0Wi 90 deg	50 mph 90 deg with 0.75 in Radial Ice

Site Number: 411183
Site Name: Waterford CT, CT
Customer: AT&T Mobility

Code: ANSI/TIA-222-G
Engineering Number: OAA682429_C3_02

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Analysis Parameters

1.2D + 1.0Di + 1.0Wi 120 deg	50 mph 120 deg with 0.75 in Radial Ice
1.2D + 1.0Di + 1.0Wi 180 deg	50 mph 180 deg with 0.75 in Radial Ice
1.2D + 1.0Di + 1.0Wi 210 deg	50 mph 210 deg with 0.75 in Radial Ice
1.2D + 1.0Di + 1.0Wi 240 deg	50 mph 240 deg with 0.75 in Radial Ice
1.2D + 1.0Di + 1.0Wi 300 deg	50 mph 300 deg with 0.75 in Radial Ice
1.2D + 1.0Di + 1.0Wi 330 deg	50 mph 330 deg with 0.75 in Radial Ice
(1.2 + 0.2Sds) * DL + E Normal	Seismic Normal
(1.2 + 0.2Sds) * DL + E 60 deg	Seismic 60 deg
(1.2 + 0.2Sds) * DL + E 90 deg	Seismic 90 deg
(1.2 + 0.2Sds) * DL + E 120 deg	Seismic 120 deg
(1.2 + 0.2Sds) * DL + E 180 deg	Seismic 180 deg
(1.2 + 0.2Sds) * DL + E 210 deg	Seismic 210 deg
(1.2 + 0.2Sds) * DL + E 240 deg	Seismic 240 deg
(1.2 + 0.2Sds) * DL + E 300 deg	Seismic 300 deg
(1.2 + 0.2Sds) * DL + E 330 deg	Seismic 330 deg
(0.9 - 0.2Sds) * DL + E Normal	Seismic (Reduced DL) Normal
(0.9 - 0.2Sds) * DL + E 60 deg	Seismic (Reduced DL) 60 deg
(0.9 - 0.2Sds) * DL + E 90 deg	Seismic (Reduced DL) 90 deg
(0.9 - 0.2Sds) * DL + E 120 deg	Seismic (Reduced DL) 120 deg
(0.9 - 0.2Sds) * DL + E 180 deg	Seismic (Reduced DL) 180 deg
(0.9 - 0.2Sds) * DL + E 210 deg	Seismic (Reduced DL) 210 deg
(0.9 - 0.2Sds) * DL + E 240 deg	Seismic (Reduced DL) 240 deg
(0.9 - 0.2Sds) * DL + E 300 deg	Seismic (Reduced DL) 300 deg
(0.9 - 0.2Sds) * DL + E 330 deg	Seismic (Reduced DL) 330 deg
1.0D + 1.0W Service Normal	Serviceability - 60 mph Wind Normal
1.0D + 1.0W Service 60 deg	Serviceability - 60 mph Wind 60 deg
1.0D + 1.0W Service 90 deg	Serviceability - 60 mph Wind 90 deg
1.0D + 1.0W Service 120 deg	Serviceability - 60 mph Wind 120 deg
1.0D + 1.0W Service 180 deg	Serviceability - 60 mph Wind 180 deg
1.0D + 1.0W Service 210 deg	Serviceability - 60 mph Wind 210 deg
1.0D + 1.0W Service 240 deg	Serviceability - 60 mph Wind 240 deg
1.0D + 1.0W Service 300 deg	Serviceability - 60 mph Wind 300 deg
1.0D + 1.0W Service 330 deg	Serviceability - 60 mph Wind 330 deg

Tower Loading

Discrete Appurtenance Properties 1.2D + 1.6W

Elevation (ft)	Description	Qty	Wt. (lb)	EPA (sf)	Length (ft)	Width (in)	Depth (in)	K _a	Orient. Factor	Vert. Ecc.(ft)	M _u (lb-ft)	Q _z (psf)	F _a (WL) (lb)	P _a (DL) (lb)
177.0	5' Omni	2	10	1.0	5.0	2.0	2.0	1.00	1.00	4.0	305.6	28.09	76	29
177.0	8' Omni	2	25	2.4	8.0	3.0	3.0	1.00	1.00	5.0	918.2	28.13	184	72
177.0	10' Omni	2	25	3.0	10.0	3.0	3.0	1.00	1.00	7.0	1611.9	28.22	230	72
177.0	13' Omni	1	40	3.9	13.0	3.0	3.0	1.00	1.00	-7.0	1024.3	27.59	146	58
177.0	15' Omni	1	40	4.5	15.0	3.0	3.0	1.00	1.00	10.0	1735.1	28.35	174	58
177.0	Round Side Arm	2	150	5.2	0.0	0.0	0.0	0.90	0.90	0.0	0.0	27.91	320	432
177.0	Round Sector Frame	1	300	14.4	0.0	0.0	0.0	1.00	1.00	0.0	0.0	27.91	547	432
164.0	RFS ATMAA1412D-	3	13	1.0	1.0	10.0	4.0	0.80	0.50	1.0	44.6	27.35	45	56
164.0	Ericsson RRUS 11	3	51	2.8	1.6	17.0	7.2	0.80	0.67	0.0	0.0	27.31	167	219
164.0	Ericsson AIR 21	6	91	6.1	4.7	12.0	7.9	0.80	0.69	1.0	745.5	27.35	745	786
164.0	Andrew LNX-	3	50	11.4	8.0	11.9	7.1	0.80	0.70	0.0	0.0	27.31	712	217
164.0	Round Sector Frame	3	300	14.4	0.0	0.0	0.0	0.75	0.67	0.0	0.0	27.31	806	1296
157.0	Kathrein Scala 782	3	3	0.1	0.2	4.2	1.8	0.80	0.50	0.0	0.0	26.97	5	13
157.0	Powerwave Allgon	6	5	0.3	0.4	7.9	2.7	0.80	0.50	0.0	0.0	26.97	30	46
157.0	Powerwave Allgon	6	14	1.1	1.2	9.2	2.6	0.80	0.50	0.0	0.0	26.97	97	122
157.0	Raycap DC6-48-60-0-	2	33	1.2	1.9	11.0	11.0	0.80	1.00	0.0	0.0	26.97	70	94
157.0	Raycap DC6-48-60-0-	1	33	1.2	1.9	11.0	11.0	0.80	1.00	0.0	0.0	26.97	35	47
157.0	Ericsson RRUS-11	3	50	2.6	1.5	17.3	7.2	0.80	0.67	0.0	0.0	26.97	152	216
157.0	Ericsson RRUS 32 B2	3	53	2.7	2.3	12.1	7.0	0.80	0.67	0.0	0.0	26.97	162	229
157.0	Ericsson RRUS 11 w/	3	72	2.8	1.6	17.0	10.6	0.80	0.67	0.0	0.0	26.97	165	311
157.0	Ericsson RRUS-32	3	77	3.3	2.5	13.3	9.5	0.80	0.67	0.0	0.0	26.97	195	333
157.0	Powerwave Allgon	3	35	5.5	4.6	11.0	5.0	0.80	0.65	3.0	950.9	27.12	317	151
157.0	CCI HPA-65R-BUU-H8	3	68	13.0	7.7	14.8	7.4	0.80	0.67	3.0	2309.1	27.12	770	294
157.0	CCI TPA-65R-	3	82	13.3	8.0	14.4	8.6	0.80	0.69	3.0	2436.6	27.12	812	355
157.0	Round Sector Frame	3	300	14.4	0.0	0.0	0.0	0.75	0.75	0.0	0.0	26.97	891	1296
143.0	Round Side Arm	1	150	5.2	0.0	0.0	0.0	1.00	1.00	0.0	0.0	26.26	186	216
143.0	20' Omni	1	55	6.0	20.0	3.0	3.0	1.00	1.00	13.0	2855.7	26.92	220	79
132.0	Raycap RRFDC-1064-	3	14	1.2	1.1	10.2	8.2	0.80	0.50	2.0	97.6	25.78	49	60
132.0	Alcatel-Lucent	3	44	2.2	2.0	10.6	6.7	0.80	0.67	0.0	0.0	25.67	121	190
132.0	RRH	3	45	2.4	2.0	12.0	12.0	0.80	0.67	0.0	0.0	25.67	135	194
132.0	Amphenol Antel BXA-	3	11	2.9	4.0	6.1	4.1	0.80	0.87	0.0	0.0	25.67	214	45
132.0	48" x 12" x 7" Panel	6	35	5.1	4.0	12.0	7.0	0.80	0.79	0.0	0.0	25.67	671	302
132.0	Swedcom SACP	1	16	5.1	4.7	9.7	6.5	0.80	0.86	1.0	122.3	25.72	122	23
132.0	Amphenol Antel LPA-	2	20	6.1	4.0	15.2	13.1	0.80	0.75	0.0	0.0	25.67	257	58
132.0	Amphenol Antel BXA-	1	17	7.6	5.9	11.2	5.2	0.80	0.66	1.0	139.8	25.72	140	24
132.0	Swedcom SLCP	2	30	10.0	6.4	14.0	11.0	0.80	0.91	0.0	0.0	25.67	507	86
132.0	Round Sector Frame	3	300	14.4	0.0	0.0	0.0	0.75	0.75	0.0	0.0	25.67	848	1296
132.0	VZW Unused	1	1807	129.0	2.2	26.5	26.5	1.00	1.00	0.0	0.0	25.67	4502	2601
125.0	MicroPulse GPS-	1	1	0.1	0.4	3.2	3.2	0.80	1.00	0.0	0.0	25.27	2	1
125.0	Kathrein Scala 800	6	18	3.3	4.5	6.1	2.7	0.80	0.78	0.0	0.0	25.27	431	152
125.0	Flat Light Sector	3	400	17.9	0.0	0.0	0.0	0.75	0.75	0.0	0.0	25.27	1038	1728
51.00	GPS	1	10	1.0	1.0	9.0	6.0	1.00	1.00	0.0	0.0	19.56	27	14
51.00	Stand-Off	1	40	1.6	0.0	0.0	0.0	1.00	1.00	0.0	0.0	19.56	43	58
Totals		113	9974	717.7										

Discrete Appurtenance Properties 0.9D + 1.6W

Elevation (ft)	Description	Qty	Wt. (lb)	EPA (sf)	Length (ft)	Width (in)	Depth (in)	K _a	Orient. Factor	Vert. Ecc.(ft)	M _u (lb-ft)	Q _z (psf)	F _a (WL) (lb)	P _a (DL) (lb)
177.0	5' Omni	2	10	1.0	5.0	2.0	2.0	1.00	1.00	4.0	305.6	28.09	76	16
177.0	8' Omni	2	25	2.4	8.0	3.0	3.0	1.00	1.00	5.0	918.2	28.13	184	41
177.0	10' Omni	2	25	3.0	10.0	3.0	3.0	1.00	1.00	7.0	1611.9	28.22	230	41

Site Number: 411183
 Site Name: Waterford CT, CT
 Customer: AT&T Mobility

Code: ANSI/TIA-222-G
 Engineering Number: OAA682429_C3_02

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Tower Loading

177.0	13' Omni	1	40	3.9	13.0	3.0	3.0	1.00	1.00	-7.0	1024.3	27.59	146	32
177.0	15' Omni	1	40	4.5	15.0	3.0	3.0	1.00	1.00	10.0	1735.1	28.35	174	32
177.0	Round Side Arm	2	150	5.2	0.0	0.0	0.0	0.90	0.90	0.0	0.0	27.91	320	243
177.0	Round Sector Frame	1	300	14.4	0.0	0.0	0.0	1.00	1.00	0.0	0.0	27.91	547	243
164.0	RFS ATMAA1412D-	3	13	1.0	1.0	10.0	4.0	0.80	0.50	1.0	44.6	27.35	45	32
164.0	Ericsson RRUS 11	3	51	2.8	1.6	17.0	7.2	0.80	0.67	0.0	0.0	27.31	167	123
164.0	Ericsson AIR 21	6	91	6.1	4.7	12.0	7.9	0.80	0.69	1.0	745.5	27.35	745	442
164.0	Andrew LNX-	3	50	11.4	8.0	11.9	7.1	0.80	0.70	0.0	0.0	27.31	712	122
164.0	Round Sector Frame	3	300	14.4	0.0	0.0	0.0	0.75	0.67	0.0	0.0	27.31	806	729
157.0	Kathrein Scala 782	3	3	0.1	0.2	4.2	1.8	0.80	0.50	0.0	0.0	26.97	5	7
157.0	Powerwave Allgon	6	5	0.3	0.4	7.9	2.7	0.80	0.50	0.0	0.0	26.97	30	26
157.0	Powerwave Allgon	6	14	1.1	1.2	9.2	2.6	0.80	0.50	0.0	0.0	26.97	97	69
157.0	Raycap DC6-48-60-0-	2	33	1.2	1.9	11.0	11.0	0.80	1.00	0.0	0.0	26.97	70	53
157.0	Raycap DC6-48-60-0-	1	33	1.2	1.9	11.0	11.0	0.80	1.00	0.0	0.0	26.97	35	27
157.0	Ericsson RRUS-11	3	50	2.6	1.5	17.3	7.2	0.80	0.67	0.0	0.0	26.97	152	122
157.0	Ericsson RRUS 32 B2	3	53	2.7	2.3	12.1	7.0	0.80	0.67	0.0	0.0	26.97	162	129
157.0	Ericsson RRUS 11 w/	3	72	2.8	1.6	17.0	10.6	0.80	0.67	0.0	0.0	26.97	165	175
157.0	Ericsson RRUS-32	3	77	3.3	2.5	13.3	9.5	0.80	0.67	0.0	0.0	26.97	195	187
157.0	Powerwave Allgon	3	35	5.5	4.6	11.0	5.0	0.80	0.65	3.0	950.9	27.12	317	85
157.0	CCI HPA-65R-BUU-H8	3	68	13.0	7.7	14.8	7.4	0.80	0.67	3.0	2309.1	27.12	770	165
157.0	CCI TPA-65R-	3	82	13.3	8.0	14.4	8.6	0.80	0.69	3.0	2436.6	27.12	812	200
157.0	Round Sector Frame	3	300	14.4	0.0	0.0	0.0	0.75	0.75	0.0	0.0	26.97	891	729
143.0	Round Side Arm	1	150	5.2	0.0	0.0	0.0	1.00	1.00	0.0	0.0	26.26	186	122
143.0	20' Omni	1	55	6.0	20.0	3.0	3.0	1.00	1.00	13.0	2855.7	26.92	220	45
132.0	Raycap RRFDC-1064-	3	14	1.2	1.1	10.2	8.2	0.80	0.50	2.0	97.6	25.78	49	34
132.0	Alcatel-Lucent	3	44	2.2	2.0	10.6	6.7	0.80	0.67	0.0	0.0	25.67	121	107
132.0	RRH	3	45	2.4	2.0	12.0	12.0	0.80	0.67	0.0	0.0	25.67	135	109
132.0	Amphenol Antel BXA-	3	11	2.9	4.0	6.1	4.1	0.80	0.87	0.0	0.0	25.67	214	26
132.0	48" x 12" x 7" Panel	6	35	5.1	4.0	12.0	7.0	0.80	0.79	0.0	0.0	25.67	671	170
132.0	Swedcom SACP	1	16	5.1	4.7	9.7	6.5	0.80	0.86	1.0	122.3	25.72	122	13
132.0	Amphenol Antel LPA-	2	20	6.1	4.0	15.2	13.1	0.80	0.75	0.0	0.0	25.67	257	32
132.0	Amphenol Antel BXA-	1	17	7.6	5.9	11.2	5.2	0.80	0.66	1.0	139.8	25.72	140	14
132.0	Swedcom SLCP	2	30	10.0	6.4	14.0	11.0	0.80	0.91	0.0	0.0	25.67	507	49
132.0	Round Sector Frame	3	300	14.4	0.0	0.0	0.0	0.75	0.75	0.0	0.0	25.67	848	729
132.0	VZW Unused	1	1807	129.0	2.2	26.5	26.5	1.00	1.00	0.0	0.0	25.67	4502	1463
125.0	MicroPulse GPS-	1	1	0.1	0.4	3.2	3.2	0.80	1.00	0.0	0.0	25.27	2	0
125.0	Kathrein Scala 800	6	18	3.3	4.5	6.1	2.7	0.80	0.78	0.0	0.0	25.27	431	86
125.0	Flat Light Sector	3	400	17.9	0.0	0.0	0.0	0.75	0.75	0.0	0.0	25.27	1038	972
51.00	GPS	1	10	1.0	1.0	9.0	6.0	1.00	1.00	0.0	0.0	19.56	27	8
51.00	Stand-Off	1	40	1.6	0.0	0.0	0.0	1.00	1.00	0.0	0.0	19.56	43	32
Totals		113	9974	717.7										

Discrete Appurtenance Properties 1.2D + 1.0Di + 1.0Wi

Elevation (ft)	Description	Qty	Ice Wt (lb)	Ice EPA (sf)	Length (ft)	Width (in)	Depth (in)	K _a	Orient. Factor	Vert. Ecc.(ft)	M _u (lb-ft)	Q _z (psf)	F _a (WL) (lb)	P _a (DL) (lb)
177.0	5' Omni	2	65	2.2	5.0	2.0	2.0	1.00	1.00	4.0	95.1	6.37	24	161
177.0	8' Omni	2	135	4.4	8.0	3.0	3.0	1.00	1.00	5.0	240.7	6.38	48	335
177.0	10' Omni	2	161	6.0	10.0	3.0	3.0	1.00	1.00	7.0	454.4	6.40	65	398
177.0	13' Omni	1	162	9.2	13.0	3.0	3.0	1.00	1.00	-7.0	343.3	6.26	49	204
177.0	15' Omni	1	241	10.0	15.0	3.0	3.0	1.00	1.00	10.0	546.1	6.43	55	299
177.0	Round Side Arm	2	224	8.0	0.0	0.0	0.0	0.90	0.90	0.0	0.0	6.33	69	610
177.0	Round Sector Frame	1	673	31.2	0.0	0.0	0.0	1.00	1.00	0.0	0.0	6.33	168	880
164.0	RFS ATMAA1412D-	3	22	1.7	1.0	10.0	4.0	0.80	0.50	1.0	10.8	6.20	11	89
164.0	Ericsson RRUS 11	3	138	3.5	1.6	17.0	7.2	0.80	0.67	0.0	0.0	6.19	29	535
164.0	Ericsson AIR 21	6	262	7.2	4.7	12.0	7.9	0.80	0.69	1.0	125.1	6.20	125	2016

Tower Loading

164.0	Andrew LNX-	3	318	13.1	8.0	11.9	7.1	0.80	0.70	0.0	0.0	6.19	116	1180
164.0	Round Sector Frame	3	673	31.2	0.0	0.0	0.0	0.75	0.67	0.0	0.0	6.19	248	2640
157.0	Kathrein Scala 782	3	11	0.3	0.2	4.2	1.8	0.80	0.50	0.0	0.0	6.12	2	40
157.0	Powerwave Allgon	6	9	0.6	0.4	7.9	2.7	0.80	0.50	0.0	0.0	6.12	7	72
157.0	Powerwave Allgon	6	24	1.9	1.2	9.2	2.6	0.80	0.50	0.0	0.0	6.12	23	193
157.0	Raycap DC6-48-60-0-	2	121	2.7	1.9	11.0	11.0	0.80	1.00	0.0	0.0	6.12	22	306
157.0	Raycap DC6-48-60-0-	1	121	2.7	1.9	11.0	11.0	0.80	1.00	0.0	0.0	6.12	11	153
157.0	Ericsson RRUS-11	3	131	3.2	1.5	17.3	7.2	0.80	0.67	0.0	0.0	6.12	27	509
157.0	Ericsson RRUS 32 B2	3	141	3.5	2.3	12.1	7.0	0.80	0.67	0.0	0.0	6.12	29	546
157.0	Ericsson RRUS 11 w/	3	174	3.5	1.6	17.0	10.6	0.80	0.67	0.0	0.0	6.12	29	678
157.0	Ericsson RRUS-32	3	174	4.6	2.5	13.3	9.5	0.80	0.67	0.0	0.0	6.12	38	683
157.0	Powerwave Allgon	3	170	6.6	4.6	11.0	5.0	0.80	0.65	3.0	160.6	6.15	54	638
157.0	CCI HPA-65R-BUU-H8	3	359	14.6	7.7	14.8	7.4	0.80	0.67	3.0	368.0	6.15	123	1342
157.0	CCI TPA-65R-	3	394	14.9	8.0	14.4	8.6	0.80	0.69	3.0	388.1	6.15	129	1478
157.0	Round Sector Frame	3	669	31.0	0.0	0.0	0.0	0.75	0.75	0.0	0.0	6.12	272	2623
143.0	Round Side Arm	1	222	7.9	0.0	0.0	0.0	1.00	1.00	0.0	0.0	5.95	40	303
143.0	20' Omni	1	312	13.1	20.0	3.0	3.0	1.00	1.00	13.0	881.4	6.10	68	388
132.0	Raycap RRFDC-1064-	3	65	1.6	1.1	10.2	8.2	0.80	0.50	2.0	19.2	5.84	10	243
132.0	Alcatel-Lucent	3	116	2.8	2.0	10.6	6.7	0.80	0.67	0.0	0.0	5.82	22	450
132.0	RRH	3	145	3.1	2.0	12.0	12.0	0.80	0.67	0.0	0.0	5.82	24	554
132.0	Amphenol Antel BXA-	3	92	3.8	4.0	6.1	4.1	0.80	0.87	0.0	0.0	5.82	39	340
132.0	48" x 12" x 7" Panel	6	173	6.0	4.0	12.0	7.0	0.80	0.79	0.0	0.0	5.82	113	1297
132.0	Swedcom SACP	1	153	6.1	4.7	9.7	6.5	0.80	0.86	1.0	20.8	5.83	21	188
132.0	Amphenol Antel LPA-	2	222	7.2	4.0	15.2	13.1	0.80	0.75	0.0	0.0	5.82	43	543
132.0	Amphenol Antel BXA-	1	188	8.8	5.9	11.2	5.2	0.80	0.66	1.0	23.1	5.83	23	230
132.0	Swedcom SLCP	2	302	11.4	6.4	14.0	11.0	0.80	0.91	0.0	0.0	5.82	82	740
132.0	Round Sector Frame	3	663	30.8	0.0	0.0	0.0	0.75	0.75	0.0	0.0	5.82	257	2604
132.0	VZW Unused	1	3050	217.7	2.2	26.5	26.5	1.00	1.00	0.0	0.0	5.82	1077	4093
125.0	MicroPulse GPS-	1	11	0.3	0.4	3.2	3.2	0.80	1.00	0.0	0.0	5.73	1	13
125.0	Kathrein Scala 800	6	98	4.3	4.5	6.1	2.7	0.80	0.78	0.0	0.0	5.73	78	730
125.0	Flat Light Sector	3	697	32.8	0.0	0.0	0.0	0.75	0.75	0.0	0.0	5.73	270	2798
51.00	GPS	1	43	0.9	1.0	9.0	6.0	1.00	1.00	0.0	0.0	4.44	3	54
51.00	Stand-Off	1	82	2.6	0.0	0.0	0.0	1.00	1.00	0.0	0.0	4.44	10	108
Totals		113	26577	1133.0										

Discrete Appurtenance Properties 1.0D + 1.0W Service

Elevation (ft)	Description	Qty	Wt. (lb)	EPA (sf)	Length (ft)	Width (in)	Depth (in)	K _a	Orient. Factor	Vert. Ecc.(ft)	M _u (lb-ft)	Q _z (psf)	F _a (WL) (lb)	P _a (DL) (lb)
177.0	5' Omni	2	10	1.0	5.0	2.0	2.0	1.00	1.00	4.0	62.4	9.17	16	20
177.0	8' Omni	2	25	2.4	8.0	3.0	3.0	1.00	1.00	5.0	187.4	9.19	37	50
177.0	10' Omni	2	25	3.0	10.0	3.0	3.0	1.00	1.00	7.0	329.0	9.21	47	50
177.0	13' Omni	1	40	3.9	13.0	3.0	3.0	1.00	1.00	-7.0	209.0	9.01	30	40
177.0	15' Omni	1	40	4.5	15.0	3.0	3.0	1.00	1.00	10.0	354.1	9.26	35	40
177.0	Round Side Arm	2	150	5.2	0.0	0.0	0.0	0.90	0.90	0.0	0.0	9.11	65	300
177.0	Round Sector Frame	1	300	14.4	0.0	0.0	0.0	1.00	1.00	0.0	0.0	9.11	112	300
164.0	RFS ATMAA1412D-	3	13	1.0	1.0	10.0	4.0	0.80	0.50	1.0	9.1	8.93	9	39
164.0	Ericsson RRUS 11	3	51	2.8	1.6	17.0	7.2	0.80	0.67	0.0	0.0	8.92	34	152
164.0	Ericsson AIR 21	6	91	6.1	4.7	12.0	7.9	0.80	0.69	1.0	152.1	8.93	152	546
164.0	Andrew LNX-	3	50	11.4	8.0	11.9	7.1	0.80	0.70	0.0	0.0	8.92	145	151
164.0	Round Sector Frame	3	300	14.4	0.0	0.0	0.0	0.75	0.67	0.0	0.0	8.92	165	900
157.0	Kathrein Scala 782	3	3	0.1	0.2	4.2	1.8	0.80	0.50	0.0	0.0	8.81	1	9
157.0	Powerwave Allgon	6	5	0.3	0.4	7.9	2.7	0.80	0.50	0.0	0.0	8.81	6	32
157.0	Powerwave Allgon	6	14	1.1	1.2	9.2	2.6	0.80	0.50	0.0	0.0	8.81	20	85
157.0	Raycap DC6-48-60-0-	2	33	1.2	1.9	11.0	11.0	0.80	1.00	0.0	0.0	8.81	14	66
157.0	Raycap DC6-48-60-0-	1	33	1.2	1.9	11.0	11.0	0.80	1.00	0.0	0.0	8.81	7	33

Site Number: 411183

Code: ANSI/TIA-222-G

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Site Name: Waterford CT, CT

Engineering Number: OAA682429_C3_02

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Customer: AT&T Mobility

Tower Loading

157.0 Ericsson RRUS-11	3	50	2.6	1.5	17.3	7.2	0.80	0.67	0.0	0.0	8.81	31	150
157.0 Ericsson RRUS 32 B2	3	53	2.7	2.3	12.1	7.0	0.80	0.67	0.0	0.0	8.81	33	159
157.0 Ericsson RRUS 11 w/	3	72	2.8	1.6	17.0	10.6	0.80	0.67	0.0	0.0	8.81	34	216
157.0 Ericsson RRUS-32	3	77	3.3	2.5	13.3	9.5	0.80	0.67	0.0	0.0	8.81	40	231
157.0 Powerwave Allgon	3	35	5.5	4.6	11.0	5.0	0.80	0.65	3.0	194.1	8.85	65	105
157.0 CCI HPA-65R-BUU-H8	3	68	13.0	7.7	14.8	7.4	0.80	0.67	3.0	471.2	8.85	157	204
157.0 CCI TPA-65R-	3	82	13.3	8.0	14.4	8.6	0.80	0.69	3.0	497.3	8.85	166	246
157.0 Round Sector Frame	3	300	14.4	0.0	0.0	0.0	0.75	0.75	0.0	0.0	8.81	182	900
143.0 Round Side Arm	1	150	5.2	0.0	0.0	0.0	1.00	1.00	0.0	0.0	8.57	38	150
143.0 20' Omni	1	55	6.0	20.0	3.0	3.0	1.00	1.00	13.0	582.8	8.79	45	55
132.0 Raycap RRFDC-1064-	3	14	1.2	1.1	10.2	8.2	0.80	0.50	2.0	19.9	8.42	10	42
132.0 Alcatel-Lucent	3	44	2.2	2.0	10.6	6.7	0.80	0.67	0.0	0.0	8.38	25	132
132.0 RRH	3	45	2.4	2.0	12.0	12.0	0.80	0.67	0.0	0.0	8.38	27	135
132.0 Amphenol Antel BXA-	3	11	2.9	4.0	6.1	4.1	0.80	0.87	0.0	0.0	8.38	44	32
132.0 48" x 12" x 7" Panel	6	35	5.1	4.0	12.0	7.0	0.80	0.79	0.0	0.0	8.38	137	210
132.0 Swedcom SACP	1	16	5.1	4.7	9.7	6.5	0.80	0.86	1.0	25.0	8.40	25	16
132.0 Amphenol Antel LPA-	2	20	6.1	4.0	15.2	13.1	0.80	0.75	0.0	0.0	8.38	52	40
132.0 Amphenol Antel BXA-	1	17	7.6	5.9	11.2	5.2	0.80	0.66	1.0	28.5	8.40	29	17
132.0 Swedcom SLCP	2	30	10.0	6.4	14.0	11.0	0.80	0.91	0.0	0.0	8.38	104	60
132.0 Round Sector Frame	3	300	14.4	0.0	0.0	0.0	0.75	0.75	0.0	0.0	8.38	173	900
132.0 VZW Unused	1	1807	129.0	2.2	26.5	26.5	1.00	1.00	0.0	0.0	8.38	919	1807
125.0 MicroPulse GPS-	1	1	0.1	0.4	3.2	3.2	0.80	1.00	0.0	0.0	8.25	1	1
125.0 Kathrein Scala 800	6	18	3.3	4.5	6.1	2.7	0.80	0.78	0.0	0.0	8.25	88	106
125.0 Flat Light Sector	3	400	17.9	0.0	0.0	0.0	0.75	0.75	0.0	0.0	8.25	212	1200
51.00 GPS	1	10	1.0	1.0	9.0	6.0	1.00	1.00	0.0	0.0	6.39	5	10
51.00 Stand-Off	1	40	1.6	0.0	0.0	0.0	1.00	1.00	0.0	0.0	6.39	9	40
Totals	113	9974	717.7										

Site Number: 411183

Code: ANSI/TIA-222-G

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Site Name: Waterford CT, CT

Engineering Number: OAA682429_C3_02

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Customer: AT&T Mobility

Tower Loading

Linear Appurtenance Properties

Elev From (ft)	Elev To (ft)	Description	Qty	Width (in)	Weight (lb/ft)	Pct In Block	Spread On Faces	Bundling Arrangement	Cluster Dia (in)	Out Of Zone	Spacing (in)	Orientation Factor	Ka Override
0.00	180.0	Empty Waveguide	1	2.00	6.00	0	3	Individual	0.00	N	1.00	1.00	0.00
30.00	177.0	7/8" Coax	7	1.09	0.33	0	1	Individual	0.00	N	1.00	1.00	0.00
30.00	177.0	Waveguide	1	2.00	6.00	0	1	Individual	0.00	N	1.00	1.00	0.00
0.00	164.0	Waveguide	1	2.00	6.00	0	1	Individual	0.00	N	1.00	1.00	0.00
30.00	164.0	1 5/8" Coax	18	1.98	14.7	67	1	Individual	0.00	N	1.00	1.00	0.00
30.00	164.0	1 5/8" Hybriflex	1	1.98	1.30	0	1	Individual	0.00	N	1.00	1.00	0.00
30.00	157.0	0.39" Fiber Trunk	2	0.39	0.06	0	2	Individual	0.00	N	1.00	1.00	0.01
30.00	157.0	0.39" Fiber Trunk	1	0.39	0.06	0	2	Individual	0.00	N	1.00	1.00	0.01
30.00	157.0	0.78" 8 AWG 6	4	0.78	1.18	0	2	Individual	0.00	N	1.00	1.00	0.00
30.00	157.0	0.78" 8 AWG 6	2	0.78	1.18	0	2	Individual	0.00	N	1.00	1.00	0.01
30.00	157.0	1 5/8" Coax	12	1.98	9.84	0	2	Individual	0.00	N	1.00	1.00	0.00
30.00	157.0	2" Conduit	1	2.38	3.65	0	2	Individual	0.00	N	1.00	1.00	0.00
30.00	157.0	Waveguide	1	2.00	6.00	0	2	Individual	0.00	N	1.00	1.00	0.00
30.00	143.0	1 5/8" Coax	1	1.98	0.82	0	1	Individual	0.00	N	1.00	1.00	0.01
30.00	132.0	1 1/4" Hybriflex	3	1.54	3.00	0	1	Individual	0.00	N	1.00	1.00	0.01
30.00	132.0	1 5/8" Coax	18	1.98	14.7	50	1	Individual	0.00	N	1.00	1.00	0.00
30.00	125.0	1 5/8" Coax	6	1.98	0.82	50	3	Block	0.00	N	1.00	1.00	0.00
30.00	51.00	1/2" Coax	1	0.63	0.15	0	1	Individual	0.00	N	1.00	1.00	0.01

Site Number: 411183

Code: ANSI/TIA-222-G

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Site Name: Waterford CT, CT

Engineering Number: OAA682429_C3_02

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Customer: AT&T Mobility

Equivalent Lateral Force Method

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

Spectral Response Acceleration for Short Period (S_s):	0.16
Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.06
Long-Period Transition Period (T_L - Seconds):	6
Importance Factor (I_p):	1.00
Site Coefficient F_a :	1.60
Site Coefficient F_v :	2.40
Response Modification Coefficient (R):	3.00
Design Spectral Response Acceleration at Short Period (S_{ds}):	0.17
Design Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.09
Seismic Response Coefficient (C_s):	0.04
Upper Limit C_s :	0.04
Lower Limit C_s :	0.03
Period based on Rayleigh Method (sec):	0.83
Redundancy Factor (p):	1.30
Seismic Force Distribution Exponent (k):	1.17
Total Unfactored Dead Load:	134.44 k
Seismic Base Shear (E):	6.59 k

LoadCase (1.2 + 0.2Sds) * DL + E

Seismic

Section	Height Above Base (ft)	Weight (lb)	W_z (lb-ft)	C_{vx}	Horizontal Force (lb)	Vertical Force (lb)
9	170.00	2,643	1,059,77	0.042	275	3,264
8	150.00	9,945	3,445,43	0.136	894	12,279
7	130.00	14,247	4,176,78	0.164	1,084	17,592
6	110.00	17,277	4,167,97	0.164	1,082	21,333
5	90.00	18,799	3,588,15	0.141	931	23,212
4	70.00	19,804	2,819,06	0.111	732	24,453
3	50.00	20,043	1,926,61	0.076	500	24,749
2	30.00	14,168	750,281	0.030	195	17,495
1	10.00	7,543	110,815	0.004	29	9,313
5' Omni	177.00	20	8,406	0.000	2	25
8' Omni	177.00	50	21,014	0.001	5	62
10' Omni	177.00	50	21,014	0.001	5	62
13' Omni	177.00	40	16,812	0.001	4	49
15' Omni	177.00	40	16,812	0.001	4	49
Round Side Arm	177.00	300	126,086	0.005	33	370
Round Sector Frame	177.00	300	126,086	0.005	33	370
RFS ATMAA1412D-1A20	164.00	39	14,995	0.001	4	48
Ericsson RRUS 11 B12	164.00	152	58,481	0.002	15	188
Ericsson AIR 21	164.00	546	209,930	0.008	54	674
Andrew LNX-6515DS-VTM (50.3 lbs)	164.00	151	58,019	0.002	15	186
Round Sector Frame	164.00	900	346,039	0.014	90	1,111
Kathrein Scala 782 10253	157.00	9	3,179	0.000	1	11
Powerwave Allgon LGP13519	157.00	32	11,620	0.000	3	39

Site Number: 411183
 Site Name: Waterford CT, CT
 Customer: AT&T Mobility

Code: ANSI/TIA-222-G
 Engineering Number: OAA682429_C3_02

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Equivalent Lateral Force Method

Powerwave Allgon LGP21401	157.00	85	30,913	0.001	8	104
Raycap DC6-48-60-0-8F	157.00	66	23,971	0.001	6	81
Raycap DC6-48-60-0-8F	157.00	33	11,985	0.000	3	41
Ericsson RRUS-11 (50 lbs.)	157.00	150	54,811	0.002	14	185
Ericsson RRUS 32 B2	157.00	159	58,099	0.002	15	196
Ericsson RRUS 11 w/ RRUS A2	157.00	216	78,927	0.003	20	267
Ericsson RRUS-32 (77 lbs)	157.00	231	84,408	0.003	22	285
Powerwave Allgon 7770.00	157.00	105	38,367	0.002	10	130
CCI HPA-65R-BUU-H8	157.00	204	74,542	0.003	19	252
CCI TPA-65R-LCUUUU-H8	157.00	246	89,999	0.004	23	304
Round Sector Frame	157.00	900	328,864	0.013	85	1,111
Round Side Arm	143.00	150	49,150	0.002	13	185
20' Omni	143.00	55	18,022	0.001	5	68
Raycap RRFDC-1064-PF-48	132.00	42	12,535	0.000	3	52
Alcatel-Lucent RRH2x40-AWS	132.00	132	39,395	0.002	10	163
RRH	132.00	135	40,290	0.002	10	167
Amphenol Antel BXA-171063-8CF-EDIN-X	132.00	32	9,401	0.000	2	39
48" x 12" x 7" Panel	132.00	210	62,673	0.002	16	259
Swedcom SACP 2x5516	132.00	16	4,775	0.000	1	20
Amphenol Antel LPA-80063-4CF-EDIN-X	132.00	40	11,938	0.000	3	49
Amphenol Antel BXA-70063-6CF-EDIN-2	132.00	17	5,074	0.000	1	21
Swedcom SLCP 2x6015	132.00	60	17,907	0.001	5	74
Round Sector Frame	132.00	900	268,600	0.011	70	1,111
VZW Unused Reserve: 18,557 sq in	132.00	1,806	539,139	0.021	140	2,231
MicroPulse GPS-QBW-26N	125.00	1	168	0.000	0	1
Kathrein Scala 800 10504	125.00	106	29,574	0.001	8	130
Flat Light Sector Frame	125.00	1,200	336,068	0.013	87	1,482
GPS	51.00	10	984	0.000	0	12
Stand-Off	51.00	40	3,935	0.000	1	49
<hr/>						
		134,442	25,407,888	1.000	6,593	166,006

LoadCase (0.9 - 0.2Sds) * DL + E

Seismic (Reduced DL)

Section	Height Above Base (ft)	Weight (lb)	W _z (lb-ft)	C _{vx}	Horizontal Force (lb)	Vertical Force (lb)
9	170.00	2,643	1,059,77	0.042	275	2,287
8	150.00	9,945	3,445,43	0.136	894	8,604
7	130.00	14,247	4,176,78	0.164	1,084	12,327
6	110.00	17,277	4,167,97	0.164	1,082	14,949
5	90.00	18,799	3,588,15	0.141	931	16,265
4	70.00	19,804	2,819,06	0.111	732	17,135
3	50.00	20,043	1,926,61	0.076	500	17,342
2	30.00	14,168	750,280	0.030	195	12,259
1	10.00	7,543	110,815	0.004	29	6,526
5' Omni	177.00	20	8,406	0.000	2	17
8' Omni	177.00	50	21,014	0.001	5	43
10' Omni	177.00	50	21,014	0.001	5	43
13' Omni	177.00	40	16,812	0.001	4	35
15' Omni	177.00	40	16,812	0.001	4	35
Round Side Arm	177.00	300	126,086	0.005	33	260
Round Sector Frame	177.00	300	126,086	0.005	33	260
RFS ATMAA1412D-1A20	164.00	39	14,995	0.001	4	34
Ericsson RRUS 11 B12	164.00	152	58,481	0.002	15	132
Ericsson AIR 21	164.00	546	209,930	0.008	54	472

Site Number: 411183

Code:

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Site Name: Waterford CT, CT

Engineering Number: OAA682429_C3_02

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Customer: AT&T Mobility

Equivalent Lateral Force Method

Andrew LNX-6515DS-VTM (50.3 lbs)	164.00	151	58,019	0.002	15	131
Round Sector Frame	164.00	900	346,039	0.014	90	779
Kathrein Scala 782 10253	157.00	9	3,179	0.000	1	8
Powerwave Allgon LGP13519	157.00	32	11,620	0.000	3	28
Powerwave Allgon LGP21401	157.00	85	30,913	0.001	8	73
Raycap DC6-48-60-0-8F	157.00	66	23,971	0.001	6	57
Raycap DC6-48-60-0-8F	157.00	33	11,985	0.000	3	28
Ericsson RRUS-11 (50 lbs.)	157.00	150	54,811	0.002	14	130
Ericsson RRUS 32 B2	157.00	159	58,099	0.002	15	138
Ericsson RRUS 11 w/ RRUS A2	157.00	216	78,927	0.003	20	187
Ericsson RRUS-32 (77 lbs)	157.00	231	84,408	0.003	22	200
Powerwave Allgon 7770.00	157.00	105	38,367	0.002	10	91
CCI HPA-65R-BUU-H8	157.00	204	74,542	0.003	19	177
CCI TPA-65R-LCUUUU-H8	157.00	246	89,999	0.004	23	213
Round Sector Frame	157.00	900	328,864	0.013	85	779
Round Side Arm	143.00	150	49,150	0.002	13	130
20' Omni	143.00	55	18,022	0.001	5	48
Raycap RRFDC-1064-PF-48	132.00	42	12,535	0.000	3	36
Alcatel-Lucent RRH2x40-AWS	132.00	132	39,395	0.002	10	114
RRH	132.00	135	40,290	0.002	10	117
Amphenol Antel BXA-171063-8CF-EDIN-X	132.00	32	9,401	0.000	2	27
48" x 12" x 7" Panel	132.00	210	62,673	0.002	16	182
Swedcom SACP 2x5516	132.00	16	4,775	0.000	1	14
Amphenol Antel LPA-80063-4CF-EDIN-X	132.00	40	11,938	0.000	3	35
Amphenol Antel BXA-70063-6CF-EDIN-2	132.00	17	5,074	0.000	1	15
Swedcom SLCP 2x6015	132.00	60	17,907	0.001	5	52
Round Sector Frame	132.00	900	268,600	0.011	70	779
VZW Unused Reserve: 18,557 sq in	132.00	1,806	539,139	0.021	140	1,563
MicroPulse GPS-QBW-26N	125.00	1	168	0.000	0	1
Kathrein Scala 800 10504	125.00	106	29,574	0.001	8	91
Flat Light Sector Frame	125.00	1,200	336,068	0.013	87	1,038
GPS	51.00	10	984	0.000	0	9
Stand-Off	51.00	40	3,935	0.000	1	35
		134,442	25,407,889	1.000	6,593	116,323

Site Number: 411183

Code: ANSI/TIA-222-G

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Site Name: Waterford CT, CT

Engineering Number: OAA682429_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_{ps}):	0.16
Spectral Response Acceleration at 1.0 Second Period (S_{p1}):	0.06
Importance Factor (I_p):	1.00
Site Coefficient F_a :	1.60
Site Coefficient F_v :	2.40
Response Modification Coefficient (R):	3.00
Design Spectral Response Acceleration at Short Period (S_{ds}):	0.17
Design Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.09
Period Based on Rayleigh Method (sec):	0.83
Redundancy Factor (ρ):	1.30

LoadCase (1.2 + 0.2Sds) * DL + E

Seismic

Section	Height		Seismic				Horizontal Force (lb)	Vertical Force (lb)
	Above Base (ft)	Weight (lb)	a	b	c	S_{az}		
9	170.00	2,643	1.686	1.069	0.793	0.281	322	3,264
8	150.00	9,945	1.312	0.138	0.347	0.137	592	12,279
7	130.00	14,247	0.986	-0.113	0.124	0.072	442	17,592
6	110.00	17,277	0.706	-0.089	0.031	0.054	406	21,333
5	90.00	18,799	0.472	-0.006	0.006	0.051	419	23,212
4	70.00	19,804	0.286	0.048	0.013	0.045	382	24,453
3	50.00	20,043	0.146	0.068	0.031	0.034	291	24,749
2	30.00	14,168	0.053	0.071	0.042	0.024	146	17,495
1	10.00	7,543	0.006	0.047	0.027	0.013	42	9,313
5' Omni	177.00	20	1.828	1.667	1.025	0.353	3	25
8' Omni	177.00	50	1.828	1.667	1.025	0.353	8	62
10' Omni	177.00	50	1.828	1.667	1.025	0.353	8	62
13' Omni	177.00	40	1.828	1.667	1.025	0.353	6	49
15' Omni	177.00	40	1.828	1.667	1.025	0.353	6	49
Round Side Arm	177.00	300	1.828	1.667	1.025	0.353	46	370
Round Sector Frame	177.00	300	1.828	1.667	1.025	0.353	46	370
RFS ATMAA1412D-1A20	164.00	39	1.569	0.685	0.629	0.229	4	48
Ericsson RRUS 11 B12	164.00	152	1.569	0.685	0.629	0.229	15	188
Ericsson AIR 21	164.00	546	1.569	0.685	0.629	0.229	54	674
Andrew LNX-6515DS-VTM (50.3	164.00	151	1.569	0.685	0.629	0.229	15	186
Round Sector Frame	164.00	900	1.569	0.685	0.629	0.229	89	1,111
Kathrein Scala 782 10253	157.00	9	1.438	0.359	0.472	0.178	1	11
Powerwave Allgon LGP13519	157.00	32	1.438	0.359	0.472	0.178	2	39
Powerwave Allgon LGP21401	157.00	85	1.438	0.359	0.472	0.178	7	104
Raycap DC6-48-60-0-8F	157.00	66	1.438	0.359	0.472	0.178	5	81
Raycap DC6-48-60-0-8F	157.00	33	1.438	0.359	0.472	0.178	3	41
Ericsson RRUS-11 (50 lbs.)	157.00	150	1.438	0.359	0.472	0.178	12	185
Ericsson RRUS 32 B2	157.00	159	1.438	0.359	0.472	0.178	12	196
Ericsson RRUS 11 w/ RRUS A2	157.00	216	1.438	0.359	0.472	0.178	17	267
Ericsson RRUS-32 (77 lbs)	157.00	231	1.438	0.359	0.472	0.178	18	285
Powerwave Allgon 7770.00	157.00	105	1.438	0.359	0.472	0.178	8	130
CCI HPA-65R-BUU-H8	157.00	204	1.438	0.359	0.472	0.178	16	252
CCI TPA-65R-LCUUUU-H8	157.00	246	1.438	0.359	0.472	0.178	19	304
Round Sector Frame	157.00	900	1.438	0.359	0.472	0.178	69	1,111
Round Side Arm	143.00	150	1.193	-0.002	0.249	0.107	7	185
20' Omni	143.00	55	1.193	-0.002	0.249	0.107	3	68
Raycap RRFDC-1064-PF-48	132.00	42	1.016	-0.105	0.140	0.075	1	52
Alcatel-Lucent RRH2x40-AWS	132.00	132	1.016	-0.105	0.140	0.075	4	163

Site Number: 411183

Code:

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Site Name: Waterford CT, CT

Engineering Number: OAA682429_C3_02

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Customer: AT&T Mobility

Equivalent Modal Analysis Method

RRH	132.00	135	1.016	-0.105	0.140	0.075	4	167
Amphenol Antel BXA-171063-48" x 12" x 7" Panel	132.00	32	1.016	-0.105	0.140	0.075	1	39
Swedcom SACP 2x5516	132.00	210	1.016	-0.105	0.140	0.075	7	259
Amphenol Antel LPA-80063-4CF-	132.00	16	1.016	-0.105	0.140	0.075	1	20
Amphenol Antel BXA-70063-6CF-	132.00	40	1.016	-0.105	0.140	0.075	1	49
Swedcom SLCP 2x6015	132.00	17	1.016	-0.105	0.140	0.075	1	21
Round Sector Frame	132.00	60	1.016	-0.105	0.140	0.075	2	74
VZW Unused Reserve: 18,557	132.00	900	1.016	-0.105	0.140	0.075	29	1,111
MicroPulse GPS-QBW-26N	132.00	1,806	1.016	-0.105	0.140	0.075	59	2,231
Kathrein Scala 800 10504	125.00	1	0.911	-0.122	0.092	0.064	0	1
Flat Light Sector Frame	125.00	106	0.911	-0.122	0.092	0.064	3	130
GPS	125.00	1,200	0.911	-0.122	0.092	0.064	33	1,482
Stand-Off	51.00	10	0.152	0.068	0.030	0.034	0	12
	51.00	40	0.152	0.068	0.030	0.034	1	49
		134,442	61.586	19.607	20.241	7.938	3,687	166,006

LoadCase (0.9 - 0.2Sds) * DL + E

Seismic (Reduced DL)

Section	Height		a	b	c	S _{az}	Horizontal Force (lb)	Vertical Force (lb)
	Above Base (ft)	Weight (lb)						
9	170.00	2,643	1.686	1.069	0.793	0.281	322	2,287
8	150.00	9,945	1.312	0.138	0.347	0.137	592	8,604
7	130.00	14,247	0.986	-0.113	0.124	0.072	442	12,327
6	110.00	17,277	0.706	-0.089	0.031	0.054	406	14,949
5	90.00	18,799	0.472	-0.006	0.006	0.051	419	16,265
4	70.00	19,804	0.286	0.048	0.013	0.045	382	17,135
3	50.00	20,043	0.146	0.068	0.031	0.034	291	17,342
2	30.00	14,168	0.053	0.071	0.042	0.024	146	12,259
1	10.00	7,543	0.006	0.047	0.027	0.013	42	6,526
5' Omni	177.00	20	1.828	1.667	1.025	0.353	3	17
8' Omni	177.00	50	1.828	1.667	1.025	0.353	8	43
10' Omni	177.00	50	1.828	1.667	1.025	0.353	8	43
13' Omni	177.00	40	1.828	1.667	1.025	0.353	6	35
15' Omni	177.00	40	1.828	1.667	1.025	0.353	6	35
Round Side Arm	177.00	300	1.828	1.667	1.025	0.353	46	260
Round Sector Frame	177.00	300	1.828	1.667	1.025	0.353	46	260
RFS ATMAA1412D-1A20	164.00	39	1.569	0.685	0.629	0.229	4	34
Ericsson RRUS 11 B12	164.00	152	1.569	0.685	0.629	0.229	15	132
Ericsson AIR 21	164.00	546	1.569	0.685	0.629	0.229	54	472
Andrew LNX-6515DS-VTM (50.3	164.00	151	1.569	0.685	0.629	0.229	15	131
Round Sector Frame	164.00	900	1.569	0.685	0.629	0.229	89	779
Kathrein Scala 782 10253	157.00	9	1.438	0.359	0.472	0.178	1	8
Powerwave Allgon LGP13519	157.00	32	1.438	0.359	0.472	0.178	2	28
Powerwave Allgon LGP21401	157.00	85	1.438	0.359	0.472	0.178	7	73
Raycap DC6-48-60-0-8F	157.00	66	1.438	0.359	0.472	0.178	5	57
Raycap DC6-48-60-0-8F	157.00	33	1.438	0.359	0.472	0.178	3	28
Ericsson RRUS-11 (50 lbs.)	157.00	150	1.438	0.359	0.472	0.178	12	130
Ericsson RRUS 32 B2	157.00	159	1.438	0.359	0.472	0.178	12	138
Ericsson RRUS 11 w/ RRUS A2	157.00	216	1.438	0.359	0.472	0.178	17	187
Ericsson RRUS-32 (77 lbs)	157.00	231	1.438	0.359	0.472	0.178	18	200
Powerwave Allgon 7770.00	157.00	105	1.438	0.359	0.472	0.178	8	91
CCI HPA-65R-BUU-H8	157.00	204	1.438	0.359	0.472	0.178	16	177
CCI TPA-65R-LCUUUU-H8	157.00	246	1.438	0.359	0.472	0.178	19	213
Round Sector Frame	157.00	900	1.438	0.359	0.472	0.178	69	779
Round Side Arm	143.00	150	1.193	-0.002	0.249	0.107	7	130
20' Omni	143.00	55	1.193	-0.002	0.249	0.107	3	48
Raycap RRFDC-1064-PF-48	132.00	42	1.016	-0.105	0.140	0.075	1	36
Alcatel-Lucent RRH2x40-AWS	132.00	132	1.016	-0.105	0.140	0.075	4	114
RRH	132.00	135	1.016	-0.105	0.140	0.075	4	117
Amphenol Antel BXA-171063-48" x 12" x 7" Panel	132.00	32	1.016	-0.105	0.140	0.075	1	27
Swedcom SACP 2x5516	132.00	210	1.016	-0.105	0.140	0.075	7	182
Amphenol Antel LPA-80063-4CF-	132.00	16	1.016	-0.105	0.140	0.075	1	14
	132.00	40	1.016	-0.105	0.140	0.075	1	35

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Site Name: Waterford CT, CT

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Customer: AT&T Mobility

Equivalent Modal Analysis Method

Amphenol Antel BXA-70063-6CF-	132.00	17	1.016	-0.105	0.140	0.075	1	15
Swedcom SLCP 2x6015	132.00	60	1.016	-0.105	0.140	0.075	2	52
Round Sector Frame	132.00	900	1.016	-0.105	0.140	0.075	29	779
VZW Unused Reserve: 18,557	132.00	1,806	1.016	-0.105	0.140	0.075	59	1,563
MicroPulse GPS-QBW-26N	125.00	1	0.911	-0.122	0.092	0.064	0	1
Kathrein Scala 800 10504	125.00	106	0.911	-0.122	0.092	0.064	3	91
Flat Light Sector Frame	125.00	1,200	0.911	-0.122	0.092	0.064	33	1,038
GPS	51.00	10	0.152	0.068	0.030	0.034	0	9
Stand-Off	51.00	40	0.152	0.068	0.030	0.034	1	35
		134,442	61.586	19.607	20.241	7.938	3,687	116,323

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Force/Stress Summary

Section: 1		1		Bot Elev (ft): 0.00				Height (ft): 20.000							
		Pu	Len	Bracing %			F'y	Phic	Pn	Num	Shear	Bear	Use		
		(kip)	(ft)	X	Y	Z	(ksi)	(kip)	Bolts	Holes	(kip)	(kip)	%	Controls	
Max Compression Member															
LEG	PX - 12" DIA PIPE	-364.41	10.02	100	100	100	27.8	50.0	816.60	0	0	0.00	0.00	44 Member X	
HORIZ	PST - 3" DIA PIPE	-9.73	12.17	100	100	100	125.9	50.0	31.77	2	0	0.00	40.44	30 Member X	
DIAG	PST - 3-1/2" DIA PIP	-15.11	15.75	100	100	100	141.1	50.0	30.41	3	0	0.00	63.46	49 Member X	
Max Tension Member															
LEG	PX - 12" DIA PIPE	270.82	60	50	65	864.00	0	0	0.00	0	0.00	31		Member	
HORIZ	PST - 3" DIA PIPE	12.04	90	50	65	100.35	2	0	0.00	0	32.43	37		Bolt Bear	
DIAG	PST - 3-1/2" DIA PIP	14.15	90	50	65	120.60	3	0	0.00	0	55.09	25		Bolt Bear	
Max Splice Forces															
		Pu	Load Case	phiRnt	Use	Num	Bolt Type								
		(kip)		(kip)	%	Bolts									
	Top Tension	255.46	0.9D + 1.6W	180	0.00	0									
	Top Compression	345.78	1.2D + 1.6W		0.00	0									
	Bot Tension	286.07	0.9D + 1.6W	180	1453.68	24	24	1" A354-BC							
	Bot Compression	379.83	1.2D + 1.6W		0.00	0									

Section: 2		1		Bot Elev (ft): 20.00				Height (ft): 20.000							
		Pu	Len	Bracing %			F'y	Phic	Pn	Num	Shear	Bear	Use		
		(kip)	(ft)	X	Y	Z	(ksi)	(kip)	Bolts	Holes	(kip)	(kip)	%	Controls	
Max Compression Member															
LEG	PX - 12" DIA PIPE	-330.18	10.03	100	100	100	27.8	50.0	816.53	0	0	0.00	0.00	40 Member X	
HORIZ	PST - 3" DIA PIPE	-9.16	10.88	100	100	100	112.6	50.0	39.73	2	0	0.00	40.44	23 Member X	
DIAG	PST - 3-1/2" DIA PIP	-14.47	15.29	100	100	100	137.0	50.0	32.26	3	0	0.00	63.46	44 Member X	
Max Tension Member															
LEG	PX - 12" DIA PIPE	242.09	60	50	65	864.00	0	0	0.00	0	0.00	28		Member	
HORIZ	PST - 3" DIA PIPE	10.38	90	50	65	100.35	2	0	0.00	0	32.43	32		Bolt Bear	
DIAG	PST - 3-1/2" DIA PIP	12.75	90	50	65	120.60	3	0	0.00	0	55.09	23		Bolt Bear	
Max Splice Forces															
		Pu	Load Case	phiRnt	Use	Num	Bolt Type								
		(kip)		(kip)	%	Bolts									
	Top Tension	228.46	0.9D + 1.6W	180	0.00	0									
	Top Compression	310.35	1.2D + 1.6W		0.00	0									
	Bot Tension	255.46	0.9D + 1.6W	180	872.32	29	16	1 A325							
	Bot Compression	345.78	1.2D + 1.6W		0.00	0									

Site Number: 411183
 Site Name: Waterford CT, CT
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Force/Stress Summary

Section: 3		1		Bot Elev (ft): 40.00				Height (ft): 20.000								
		Pu	Len	Bracing %			F'y	Phic Pn	Num	Shear	Bear					
		(kip)	(ft)	X	Y	Z	(ksi)	(kip)	Boles	Holes	phiRnv	phiRn	Use			
		Load Case		KL/R							(kip)	(kip)	%			
													Controls			
Max Compression Member																
LEG	PX - 10" DIA PIPE	-289.46	1.2D + 1.6W	10.03	100	100	100	33.1	50.0	668.58	0	0	0.00	0.00	43	Member X
HORIZ	PST - 2-1/2" DIA PIP	-9.83	0.9D + 1.6W 90	9.570	100	100	100	121.3	50.0	26.18	2	0	0.00	38.00	37	Member X
DIAG	PX - 3" DIA PIPE	-16.70	1.2D + 1.6W 90	14.28	100	100	100	150.4	50.0	30.17	3	0	0.00	84.24	55	Member X

		Pu	Fy	Fu	Phit Pn	Num	Num	Shear	Bear	Use		
		(kip)	(ksi)	(ksi)	(kip)	Boles	Holes	phiRnv	phiRn	%	Controls	
		Load Case						(kip)	(kip)			
Max Tension Member												
LEG	PX - 10" DIA PIPE	212.28	0.9D + 1.6W 60	50	65	724.50	0	0	0.00	0.00	29	Member
HORIZ	PST - 2-1/2" DIA PIP	11.08	1.2D + 1.6W 90	50	65	76.68	2	0	0.00	30.48	36	Bolt Bear
DIAG	PX - 3" DIA PIPE	14.18	0.9D + 1.6W 90	50	65	135.90	3	0	0.00	73.13	19	Bolt Bear

		Pu	phiRnt	Use	Num		
		(kip)	(kip)	%	Boles	Bolt Type	
		Load Case					
Max Splice Forces							
Top Tension		196.51	0.9D + 1.6W 180	0.00	0	0	
Top Compression		265.22	1.2D + 1.6W	0.00	0		
Bot Tension		228.46	0.9D + 1.6W 180	872.32	26	16 1 A325	
Bot Compression		310.35	1.2D + 1.6W	0.00	0		

Section: 4		1		Bot Elev (ft): 60.00				Height (ft): 20.000								
		Pu	Len	Bracing %			F'y	Phic Pn	Num	Shear	Bear					
		(kip)	(ft)	X	Y	Z	(ksi)	(kip)	Boles	Holes	phiRnv	phiRn	Use			
		Load Case		KL/R							(kip)	(kip)	%			
													Controls			
Max Compression Member																
LEG	PX - 10" DIA PIPE	-243.27	1.2D + 1.6W	10.03	100	100	100	33.2	50.0	668.56	0	0	0.00	0.00	36	Member X
HORIZ	PST - 2-1/2" DIA PIP	-8.91	0.9D + 1.6W 90	8.297	100	100	100	105.1	50.0	34.17	2	0	0.00	38.00	26	Member X
DIAG	PX - 3" DIA PIPE	-16.24	1.2D + 1.6W 90	13.42	100	100	100	141.3	50.0	34.18	3	0	0.00	84.24	47	Member X

		Pu	Fy	Fu	Phit Pn	Num	Num	Shear	Bear	Use		
		(kip)	(ksi)	(ksi)	(kip)	Boles	Holes	phiRnv	phiRn	%	Controls	
		Load Case						(kip)	(kip)			
Max Tension Member												
LEG	PX - 10" DIA PIPE	181.40	0.9D + 1.6W 180	50	65	724.50	0	0	0.00	0.00	25	Member
HORIZ	PST - 2-1/2" DIA PIP	9.95	1.2D + 1.6W 90	50	65	76.68	2	0	0.00	30.48	32	Bolt Bear
DIAG	PX - 3" DIA PIPE	13.58	1.2D + 1.6W 90	50	65	135.90	3	0	0.00	73.13	18	Bolt Bear

		Pu	phiRnt	Use	Num		
		(kip)	(kip)	%	Boles	Bolt Type	
		Load Case					
Max Splice Forces							
Top Tension		163.89	0.9D + 1.6W 180	0.00	0	0	
Top Compression		218.67	1.2D + 1.6W	0.00	0		
Bot Tension		196.51	0.9D + 1.6W 180	654.24	30	12 1 A325	
Bot Compression		265.22	1.2D + 1.6W	0.00	0		

Site Number: 411183
 Site Name: Waterford CT, CT
 Customer: AT&T Mobility

Code: ANSI/TIA-222-G
 Engineering Number: OAA682429_C3_02

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Force/Stress Summary

Section: 5		1		Bot Elev (ft): 80.00				Height (ft): 20.000				Shear		Bear		Use	
Max Compression Member		Pu (kip)	Load Case	Len (ft)	Bracing %			F'y (ksi)	Phic (kip)	Pn Num Bolts	Num Holes	phiRnv (kip)	phiRn (kip)	Use %	Controls		
LEG	PX - 8" DIA PIPE	-194.50	1.2D + 1.6W	10.03	100	100	100	41.8	50.0	507.01	0	0	0.00	0.00	38	Member X	
HORIZ	PX - 2" DIA PIPE	-8.51	0.9D + 1.6W	90	7.035	100	100	100	110.2	50.0	27.40	2	0	0.00	40.81	31	Member X
DIAG	PX - 3" DIA PIPE	-16.72	1.2D + 1.6W	90	12.59	100	100	100	132.6	50.0	38.81	3	0	0.00	84.24	43	Member X

Max Tension Member		Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	Phit (kip)	Pn Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls	
LEG	PX - 8" DIA PIPE	144.81	0.9D + 1.6W	60	50	65	576.00	0	0	0.00	0.00	25	Member
HORIZ	PX - 2" DIA PIPE	9.29	1.2D + 1.6W	90	50	65	66.60	2	0	0.00	32.73	28	Bolt Bear
DIAG	PX - 3" DIA PIPE	14.72	1.2D + 1.6W	90	50	65	135.90	3	0	0.00	73.13	20	Bolt Bear

Max Splice Forces		Pu (kip)	Load Case	phiRnt (kip)	Use %	Num Bolts	Bolt Type	
Top Tension		126.16	0.9D + 1.6W	180	0.00	0	0	
Top Compression		167.52	1.2D + 1.6W		0.00	0		
Bot Tension		163.89	0.9D + 1.6W	180	654.24	25	12 1 A325	
Bot Compression		218.67	1.2D + 1.6W		0.00	0		

Section: 6		1		Bot Elev (ft): 100.0				Height (ft): 20.000				Shear		Bear		Use	
Max Compression Member		Pu (kip)	Load Case	Len (ft)	Bracing %			F'y (ksi)	Phic (kip)	Pn Num Bolts	Num Holes	phiRnv (kip)	phiRn (kip)	Use %	Controls		
LEG	PX - 6" DIA PIPE	-149.15	1.2D + 1.6W	6.68	100	100	100	36.5	50.0	342.89	0	0	0.00	0.00	43	Member X	
HORIZ	PST - 2" DIA PIPE	-8.29	0.9D + 1.6W	90	6.072	100	100	100	92.6	50.0	25.73	2	0	0.00	24.02	32	Member X
DIAG	PST - 2-1/2" DIA PIP	-13.80	1.2D + 1.6W	90	9.257	100	100	100	117.3	50.0	27.97	3	0	0.00	47.50	49	Member X

Max Tension Member		Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	Phit (kip)	Pn Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls	
LEG	PX - 6" DIA PIPE	111.22	0.9D + 1.6W	60	50	65	378.00	0	0	0.00	0.00	29	Member
HORIZ	PST - 2" DIA PIPE	9.00	1.2D + 1.6W	90	50	65	48.15	2	0	0.00	19.22	46	Bolt Bear
DIAG	PST - 2-1/2" DIA PIP	12.41	1.2D + 1.6W	90	50	65	76.68	3	0	0.00	41.17	30	Bolt Bear

Max Splice Forces		Pu (kip)	Load Case	phiRnt (kip)	Use %	Num Bolts	Bolt Type	
Top Tension		82.17	0.9D + 1.6W	180	0.00	0	0	
Top Compression		110.00	1.2D + 1.6W		0.00	0		
Bot Tension		126.16	0.9D + 1.6W	180	436.16	29	8 1 A325	
Bot Compression		167.52	1.2D + 1.6W		0.00	0		

Site Number: 411183
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Force/Stress Summary

Section: 7		1		Bot Elev (ft): 120.0				Height (ft): 20.000							
		Pu	Len	Bracing %			F'y	Phic	Pn	Num	Num	Shear	Bear	Use	
		(kip)	(ft)	X	Y	Z	KL/R	(ksi)	(kip)	Bolts	Holes	phiRnv	phiRn	%	
		Load Case										(kip)	(kip)	Controls	
Max Compression Member															
LEG	PX - 5" DIA PIPE	-91.03	6.68	100	100	100	43.6	50.0	239.34	0	0	0.00	0.00	38	Member X
HORIZ	PST - 1-1/2" DIA PIP	-7.63	5.030	100	100	100	96.9	50.0	18.10	2	0	0.00	22.62	42	Member X
DIAG	PST - 2-1/2" DIA PIP	-13.77	8.566	100	100	100	108.5	50.0	32.40	3	0	0.00	47.50	42	Member X

		Pu	Fy	Fu	Phit	Pn	Num	Num	Shear	Bear	Use	Controls
		(kip)	(ksi)	(ksi)	(kip)	Bolts	Holes	(kip)	phiRnv	phiRn	%	
		Load Case							(kip)	(kip)		
Max Tension Member												
LEG	PX - 5" DIA PIPE	66.87	50	65	274.95	0	0	0.00	0.00	24		Member
HORIZ	PST - 1-1/2" DIA PIP	8.16	50	65	35.96	2	0	0.00	18.10	45		Bolt Bear
DIAG	PST - 2-1/2" DIA PIP	12.55	50	65	76.68	3	0	0.00	41.17	30		Bolt Bear

		Pu	phiRnt	Use	Num	Bolt Type
		(kip)	(kip)	%	Bolts	
Max Splice Forces						
Top Tension		42.15	0.00	0	0	
Top Compression		56.35	0.00	0		
Bot Tension		82.17	327.12	25	6	1 A325
Bot Compression		110.00	0.00	0		

Section: 8		1		Bot Elev (ft): 140.0				Height (ft): 20.000							
		Pu	Len	Bracing %			F'y	Phic	Pn	Num	Num	Shear	Bear	Use	
		(kip)	(ft)	X	Y	Z	KL/R	(ksi)	(kip)	Bolts	Holes	phiRnv	phiRn	%	
		Load Case										(kip)	(kip)	Controls	
Max Compression Member															
LEG	PST - 4" DIA PIPE	-41.16	6.67	100	100	100	53.0	50.0	116.18	0	0	0.00	0.00	35	Member X
HORIZ	PST - 2" DIA PIPE	-4.57	4.325	100	100	100	65.9	50.0	35.03	2	0	0.00	24.02	13	Member X
DIAG	PST - 2-1/2" DIA PIP	-9.62	7.955	100	100	100	100.8	50.0	36.48	3	0	0.00	47.50	26	Member X

		Pu	Fy	Fu	Phit	Pn	Num	Num	Shear	Bear	Use	Controls
		(kip)	(ksi)	(ksi)	(kip)	Bolts	Holes	(kip)	phiRnv	phiRn	%	
		Load Case							(kip)	(kip)		
Max Tension Member												
LEG	PST - 4" DIA PIPE	29.99	50	65	142.65	0	0	0.00	0.00	21		Member
HORIZ	PST - 2" DIA PIPE	5.10	50	65	48.15	2	0	0.00	19.22	26		Bolt Bear
DIAG	PST - 2-1/2" DIA PIP	9.08	50	65	76.68	3	0	0.00	41.17	22		Bolt Bear

		Pu	phiRnt	Use	Num	Bolt Type
		(kip)	(kip)	%	Bolts	
Max Splice Forces						
Top Tension		8.86	0.00	0	0	
Top Compression		15.35	0.00	0		
Bot Tension		42.15	218.08	19	4	1 A325
Bot Compression		56.35	0.00	0		

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Force/Stress Summary

Section: 9		1		Bot Elev (ft): 160.0				Height (ft): 20.000												
													Shear	Bear						
		Pu			Len	Bracing %			F'y	Phic Pn Num	Num	phiRnv	phiRn	Use						
Max Compression Member		(kip)	Load Case	(ft)	X	Y	Z	KL/R	(ksi)	(kip)	Bolts	Holes	(kip)	(kip)	%	Controls				
LEG	PST - 3" DIA PIPE	-7.41	1.2D + 1.6W	6.67	100	100	100	69.0	50.0	70.87	0	0	0.00	0.00	10	Member X				
HORIZ	PST - 1-1/2" DIA PIP	-2.15	1.2D + 1.6W	4.280	100	100	100	82.4	50.0	21.87	2	0	0.00	22.62	9	Member X				
DIAG	PST - 2" DIA PIPE	-4.19	1.2D + 1.6W	7.930	100	100	100	120.9	50.0	16.53	3	0	0.00	36.04	25	Member X				
													Shear	Bear						
		Pu			Fy	Fu	Phit Pn Num	Num	Shear		Bear	Use								
Max Tension Member		(kip)	Load Case	(ksi)	(ksi)	(kip)	Bolts	Holes	(kip)	(kip)	%	Controls								
LEG	PST - 3" DIA PIPE	4.08	0.9D + 1.6W	180	50	65	100.35	0	0	0.00	0.00	4	Member							
HORIZ	PST - 1-1/2" DIA PIP	2.26	1.2D + 1.6W	180	50	65	35.96	2	0	0.00	18.10	12	Bolt Bear							
DIAG	PST - 2" DIA PIPE	3.98	1.2D + 1.6W	210	50	65	48.15	3	0	0.00	31.23	12	Bolt Bear							
													Pu			phiRnt	Use	Num		
Max Splice Forces		(kip)	Load Case			(kip)	%	Bolts	Bolt Type											
Top Tension		0.00			0.00		0	0												
Top Compression		1.23	1.2D + 1.0Di +		0.00		0													
Bot Tension		8.86	0.9D + 1.6W	180	166.24		5	4	7/8 A325											
Bot Compression		15.35	1.2D + 1.6W		0.00		0													

Force/Stress Summary

Deflections and Rotations

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)	Resultant (deg)
105 mph Normal to Face with No Ice	50.00	0.064	0.0040	0.1283	0.1283
105 mph Normal to Face with No Ice	126.67	0.380	0.0070	0.3748	0.3749
105 mph Normal to Face with No Ice	133.33	0.424	0.0132	0.3832	0.3834
105 mph Normal to Face with No Ice	140.00	0.469	0.0179	0.4086	0.4086
105 mph Normal to Face with No Ice	160.00	0.619	0.0250	0.5523	0.5529
105 mph Normal to Face with No Ice	166.67	0.672	0.0278	0.4663	0.4663
105 mph Normal to Face with No Ice	180.00	0.778	0.0315	0.6745	0.6752
105 mph 60 degree with No Ice	50.00	0.064	0.0083	0.1275	0.1278
105 mph 60 degree with No Ice	126.67	0.378	0.0357	0.3691	0.3700
105 mph 60 degree with No Ice	133.33	0.422	0.0447	0.3808	0.3834
105 mph 60 degree with No Ice	140.00	0.466	0.0516	0.3779	0.3814
105 mph 60 degree with No Ice	160.00	0.613	0.0801	0.4059	0.4130
105 mph 60 degree with No Ice	166.67	0.665	0.0906	0.4383	0.4476
105 mph 60 degree with No Ice	180.00	0.768	0.1052	0.3874	0.4012
105 mph 90 degree with No Ice	50.00	0.064	-0.0110	0.1275	0.1280
105 mph 90 degree with No Ice	126.67	0.377	-0.0447	0.3677	0.3704
105 mph 90 degree with No Ice	133.33	0.421	-0.0508	0.3804	0.3826
105 mph 90 degree with No Ice	140.00	0.465	-0.0543	0.3648	0.3658
105 mph 90 degree with No Ice	160.00	0.612	-0.0624	0.3430	0.3486
105 mph 90 degree with No Ice	166.67	0.663	-0.0653	0.4285	0.4324
105 mph 90 degree with No Ice	180.00	0.764	-0.0693	0.2183	0.2289
105 mph 120 degree with No Ice	50.00	0.064	-0.0111	0.1279	0.1280
105 mph 120 degree with No Ice	126.67	0.378	-0.0515	0.3702	0.3715
105 mph 120 degree with No Ice	133.33	0.422	-0.0601	0.3823	0.3836
105 mph 120 degree with No Ice	140.00	0.466	-0.0661	0.3768	0.3779
105 mph 120 degree with No Ice	160.00	0.614	-0.0945	0.4061	0.4161
105 mph 120 degree with No Ice	166.67	0.665	-0.1049	0.4385	0.4497
105 mph 120 degree with No Ice	180.00	0.768	-0.1193	0.3876	0.4043
105 mph 180 degree with No Ice	50.00	0.064	0.0040	0.1281	0.1281
105 mph 180 degree with No Ice	126.67	0.380	0.0071	0.3747	0.3748
105 mph 180 degree with No Ice	133.33	0.424	0.0134	0.3826	0.3828
105 mph 180 degree with No Ice	140.00	0.469	0.0181	0.4095	0.4095
105 mph 180 degree with No Ice	160.00	0.619	0.0253	0.5522	0.5527
105 mph 180 degree with No Ice	166.67	0.672	0.0281	0.4661	0.4661
105 mph 180 degree with No Ice	180.00	0.778	0.0319	0.6744	0.6751
105 mph 210 degree with No Ice	50.00	0.064	0.0071	0.1283	0.1284
105 mph 210 degree with No Ice	126.67	0.379	0.0352	0.3748	0.3749
105 mph 210 degree with No Ice	133.33	0.424	0.0415	0.3836	0.3839
105 mph 210 degree with No Ice	140.00	0.468	0.0463	0.3980	0.4000
105 mph 210 degree with No Ice	160.00	0.617	0.0717	0.5087	0.5118
105 mph 210 degree with No Ice	166.67	0.670	0.0810	0.4567	0.4638
105 mph 210 degree with No Ice	180.00	0.774	0.0940	0.5950	0.5998
105 mph 240 degree with No Ice	50.00	0.064	0.0111	0.1279	0.1280
105 mph 240 degree with No Ice	126.67	0.378	0.0515	0.3702	0.3715
105 mph 240 degree with No Ice	133.33	0.422	0.0601	0.3823	0.3836
105 mph 240 degree with No Ice	140.00	0.466	0.0661	0.3768	0.3779
105 mph 240 degree with No Ice	160.00	0.614	0.0945	0.4061	0.4161
105 mph 240 degree with No Ice	166.67	0.665	0.1049	0.4385	0.4497
105 mph 240 degree with No Ice	180.00	0.768	0.1193	0.3876	0.4043
105 mph 300 degree with No Ice	50.00	0.064	0.0080	0.1275	0.1278
105 mph 300 degree with No Ice	126.67	0.378	0.0259	0.3691	0.3700
105 mph 300 degree with No Ice	133.33	0.422	0.0280	0.3808	0.3834

Force/Stress Summary

105 mph 300 degree with No Ice	140.00	0.466	0.0280	0.3779	0.3814
105 mph 300 degree with No Ice	160.00	0.613	0.0137	0.4059	0.4130
105 mph 300 degree with No Ice	166.67	0.665	0.0083	0.4383	0.4476
105 mph 300 degree with No Ice	180.00	0.768	0.0008	0.3874	0.4012
105 mph 330 degree with No Ice	50.00	0.064	0.0040	0.1281	0.1283
105 mph 330 degree with No Ice	126.67	0.379	0.0096	0.3733	0.3737
105 mph 330 degree with No Ice	133.33	0.424	0.0095	0.3827	0.3848
105 mph 330 degree with No Ice	140.00	0.468	0.0082	0.3997	0.4026
105 mph 330 degree with No Ice	160.00	0.617	-0.0091	0.5085	0.5139
105 mph 330 degree with No Ice	166.67	0.670	-0.0156	0.4569	0.4649
105 mph 330 degree with No Ice	180.00	0.774	-0.0245	0.5947	0.6037
105 mph Normal to Face with No Ice (Reduced DL)	50.00	0.064	0.0040	0.1281	0.1281
105 mph Normal to Face with No Ice (Reduced DL)	126.67	0.379	0.0070	0.3740	0.3741
105 mph Normal to Face with No Ice (Reduced DL)	133.33	0.423	0.0132	0.3823	0.3825
105 mph Normal to Face with No Ice (Reduced DL)	140.00	0.468	0.0180	0.4079	0.4079
105 mph Normal to Face with No Ice (Reduced DL)	160.00	0.618	0.0250	0.5514	0.5519
105 mph Normal to Face with No Ice (Reduced DL)	166.67	0.671	0.0278	0.4653	0.4653
105 mph Normal to Face with No Ice (Reduced DL)	180.00	0.776	0.0315	0.6736	0.6743
105 mph 60 deg with No Ice (Reduced DL)	50.00	0.064	0.0083	0.1274	0.1276
105 mph 60 deg with No Ice (Reduced DL)	126.67	0.377	0.0357	0.3683	0.3693
105 mph 60 deg with No Ice (Reduced DL)	133.33	0.421	0.0447	0.3798	0.3824
105 mph 60 deg with No Ice (Reduced DL)	140.00	0.465	0.0516	0.3770	0.3805
105 mph 60 deg with No Ice (Reduced DL)	160.00	0.612	0.0800	0.4050	0.4121
105 mph 60 deg with No Ice (Reduced DL)	166.67	0.664	0.0905	0.4375	0.4467
105 mph 60 deg with No Ice (Reduced DL)	180.00	0.766	0.1051	0.3866	0.4004
105 mph 90 deg with No Ice (Reduced DL)	50.00	0.064	-0.0110	0.1273	0.1278
105 mph 90 deg with No Ice (Reduced DL)	126.67	0.377	-0.0446	0.3670	0.3697
105 mph 90 deg with No Ice (Reduced DL)	133.33	0.421	-0.0508	0.3795	0.3818
105 mph 90 deg with No Ice (Reduced DL)	140.00	0.464	-0.0543	0.3639	0.3649
105 mph 90 deg with No Ice (Reduced DL)	160.00	0.610	-0.0624	0.3420	0.3477
105 mph 90 deg with No Ice (Reduced DL)	166.67	0.661	-0.0652	0.4276	0.4315
105 mph 90 deg with No Ice (Reduced DL)	180.00	0.763	-0.0693	0.2173	0.2281
105 mph 120 deg with No Ice (Reduced DL)	50.00	0.064	-0.0111	0.1277	0.1278
105 mph 120 deg with No Ice (Reduced DL)	126.67	0.377	-0.0515	0.3694	0.3707
105 mph 120 deg with No Ice (Reduced DL)	133.33	0.421	-0.0600	0.3814	0.3827
105 mph 120 deg with No Ice (Reduced DL)	140.00	0.465	-0.0660	0.3761	0.3770
105 mph 120 deg with No Ice (Reduced DL)	160.00	0.612	-0.0943	0.4052	0.4152
105 mph 120 deg with No Ice (Reduced DL)	166.67	0.664	-0.1047	0.4375	0.4488
105 mph 120 deg with No Ice (Reduced DL)	180.00	0.766	-0.1191	0.3869	0.4035
105 mph 180 deg with No Ice (Reduced DL)	50.00	0.064	0.0040	0.1279	0.1280
105 mph 180 deg with No Ice (Reduced DL)	126.67	0.379	0.0071	0.3740	0.3741
105 mph 180 deg with No Ice (Reduced DL)	133.33	0.423	0.0134	0.3819	0.3821
105 mph 180 deg with No Ice (Reduced DL)	140.00	0.468	0.0181	0.4086	0.4086
105 mph 180 deg with No Ice (Reduced DL)	160.00	0.618	0.0254	0.5513	0.5518
105 mph 180 deg with No Ice (Reduced DL)	166.67	0.671	0.0281	0.4652	0.4652
105 mph 180 deg with No Ice (Reduced DL)	180.00	0.776	0.0320	0.6735	0.6742
105 mph 210 deg with No Ice (Reduced DL)	50.00	0.064	0.0071	0.1281	0.1282
105 mph 210 deg with No Ice (Reduced DL)	126.67	0.378	0.0352	0.3740	0.3741
105 mph 210 deg with No Ice (Reduced DL)	133.33	0.423	0.0415	0.3828	0.3831
105 mph 210 deg with No Ice (Reduced DL)	140.00	0.467	0.0462	0.3973	0.3991
105 mph 210 deg with No Ice (Reduced DL)	160.00	0.616	0.0716	0.5078	0.5109
105 mph 210 deg with No Ice (Reduced DL)	166.67	0.669	0.0809	0.4558	0.4629
105 mph 210 deg with No Ice (Reduced DL)	180.00	0.773	0.0938	0.5941	0.5989
105 mph 240 deg with No Ice (Reduced DL)	50.00	0.064	0.0111	0.1277	0.1278
105 mph 240 deg with No Ice (Reduced DL)	126.67	0.377	0.0515	0.3694	0.3707
105 mph 240 deg with No Ice (Reduced DL)	133.33	0.421	0.0600	0.3814	0.3827
105 mph 240 deg with No Ice (Reduced DL)	140.00	0.465	0.0660	0.3761	0.3770
105 mph 240 deg with No Ice (Reduced DL)	160.00	0.612	0.0943	0.4052	0.4152
105 mph 240 deg with No Ice (Reduced DL)	166.67	0.664	0.1047	0.4375	0.4488

Site Number: 411183

Code:

ANSI/TIA-222-G

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Site Name: Waterford CT, CT

Engineering Number: OAA682429_C3_02

10/24/2016 3:58:35 PM

Customer: AT&T Mobility

Force/Stress Summary

105 mph 240 deg with No Ice (Reduced DL)	180.00	0.766	0.1191	0.3869	0.4035
105 mph 300 deg with No Ice (Reduced DL)	50.00	0.064	0.0080	0.1274	0.1276
105 mph 300 deg with No Ice (Reduced DL)	126.67	0.377	0.0259	0.3683	0.3693
105 mph 300 deg with No Ice (Reduced DL)	133.33	0.421	0.0280	0.3798	0.3824
105 mph 300 deg with No Ice (Reduced DL)	140.00	0.465	0.0280	0.3770	0.3805
105 mph 300 deg with No Ice (Reduced DL)	160.00	0.612	0.0137	0.4050	0.4121
105 mph 300 deg with No Ice (Reduced DL)	166.67	0.664	0.0083	0.4375	0.4467
105 mph 300 deg with No Ice (Reduced DL)	180.00	0.766	0.0009	0.3866	0.4004
105 mph 330 deg with No Ice (Reduced DL)	50.00	0.064	0.0040	0.1279	0.1281
105 mph 330 deg with No Ice (Reduced DL)	126.67	0.378	0.0096	0.3725	0.3730
105 mph 330 deg with No Ice (Reduced DL)	133.33	0.423	0.0095	0.3818	0.3839
105 mph 330 deg with No Ice (Reduced DL)	140.00	0.467	0.0082	0.3988	0.4017
105 mph 330 deg with No Ice (Reduced DL)	160.00	0.616	-0.0090	0.5076	0.5130
105 mph 330 deg with No Ice (Reduced DL)	166.67	0.669	-0.0155	0.4560	0.4640
105 mph 330 deg with No Ice (Reduced DL)	180.00	0.773	-0.0244	0.5938	0.6028
50 mph Normal with 0.75 in Radial Ice	50.00	0.022	0.0015	0.0413	0.0413
50 mph Normal with 0.75 in Radial Ice	126.67	0.118	0.0014	0.1128	0.1129
50 mph Normal with 0.75 in Radial Ice	133.33	0.132	0.0031	0.1161	0.1162
50 mph Normal with 0.75 in Radial Ice	140.00	0.145	0.0043	0.1249	0.1249
50 mph Normal with 0.75 in Radial Ice	160.00	0.191	0.0057	0.1521	0.1523
50 mph Normal with 0.75 in Radial Ice	166.67	0.207	0.0064	0.1416	0.1416
50 mph Normal with 0.75 in Radial Ice	180.00	0.239	0.0075	0.1993	0.1995
50 mph 60 deg with 0.75 in Radial Ice	50.00	0.023	-0.0029	0.0412	0.0412
50 mph 60 deg with 0.75 in Radial Ice	126.67	0.118	-0.0104	0.1110	0.1113
50 mph 60 deg with 0.75 in Radial Ice	133.33	0.132	-0.0118	0.1167	0.1171
50 mph 60 deg with 0.75 in Radial Ice	140.00	0.145	-0.0125	0.1157	0.1162
50 mph 60 deg with 0.75 in Radial Ice	160.00	0.190	0.0129	0.1277	0.1283
50 mph 60 deg with 0.75 in Radial Ice	166.67	0.206	0.0140	0.1333	0.1340
50 mph 60 deg with 0.75 in Radial Ice	180.00	0.237	0.0159	0.1177	0.1188
50 mph 90 deg with 0.75 in Radial Ice	50.00	0.022	-0.0035	0.0412	0.0412
50 mph 90 deg with 0.75 in Radial Ice	126.67	0.118	-0.0130	0.1107	0.1115
50 mph 90 deg with 0.75 in Radial Ice	133.33	0.131	-0.0148	0.1167	0.1170
50 mph 90 deg with 0.75 in Radial Ice	140.00	0.145	-0.0158	0.1118	0.1121
50 mph 90 deg with 0.75 in Radial Ice	160.00	0.189	-0.0173	0.1185	0.1196
50 mph 90 deg with 0.75 in Radial Ice	166.67	0.205	-0.0179	0.1306	0.1315
50 mph 90 deg with 0.75 in Radial Ice	180.00	0.236	-0.0189	0.0724	0.0746
50 mph 120 deg with 0.75 in Radial Ice	50.00	0.022	-0.0031	0.0412	0.0412
50 mph 120 deg with 0.75 in Radial Ice	126.67	0.118	-0.0121	0.1115	0.1118
50 mph 120 deg with 0.75 in Radial Ice	133.33	0.131	-0.0138	0.1165	0.1167
50 mph 120 deg with 0.75 in Radial Ice	140.00	0.145	-0.0149	0.1146	0.1151
50 mph 120 deg with 0.75 in Radial Ice	160.00	0.189	-0.0175	0.1278	0.1288
50 mph 120 deg with 0.75 in Radial Ice	166.67	0.205	-0.0186	0.1335	0.1344
50 mph 120 deg with 0.75 in Radial Ice	180.00	0.236	-0.0204	0.1177	0.1193
50 mph 180 deg with 0.75 in Radial Ice	50.00	0.023	0.0015	0.0413	0.0413
50 mph 180 deg with 0.75 in Radial Ice	126.67	0.119	0.0014	0.1124	0.1125
50 mph 180 deg with 0.75 in Radial Ice	133.33	0.132	0.0031	0.1160	0.1160
50 mph 180 deg with 0.75 in Radial Ice	140.00	0.146	0.0043	0.1254	0.1254
50 mph 180 deg with 0.75 in Radial Ice	160.00	0.191	0.0058	0.1519	0.1520
50 mph 180 deg with 0.75 in Radial Ice	166.67	0.207	0.0064	0.1414	0.1414
50 mph 180 deg with 0.75 in Radial Ice	180.00	0.239	0.0075	0.1990	0.1992
50 mph 210 deg with 0.75 in Radial Ice	50.00	0.022	0.0018	0.0412	0.0413
50 mph 210 deg with 0.75 in Radial Ice	126.67	0.119	0.0073	0.1124	0.1125
50 mph 210 deg with 0.75 in Radial Ice	133.33	0.132	0.0084	0.1160	0.1163
50 mph 210 deg with 0.75 in Radial Ice	140.00	0.146	0.0092	0.1218	0.1222
50 mph 210 deg with 0.75 in Radial Ice	160.00	0.191	0.0111	0.1444	0.1447
50 mph 210 deg with 0.75 in Radial Ice	166.67	0.207	0.0120	0.1388	0.1392
50 mph 210 deg with 0.75 in Radial Ice	180.00	0.238	0.0134	0.1762	0.1764
50 mph 240 deg with 0.75 in Radial Ice	50.00	0.022	0.0031	0.0412	0.0412
50 mph 240 deg with 0.75 in Radial Ice	126.67	0.118	0.0121	0.1115	0.1118

Force/Stress Summary

50 mph 240 deg with 0.75 in Radial Ice	133.33	0.131	0.0138	0.1165	0.1167
50 mph 240 deg with 0.75 in Radial Ice	140.00	0.145	0.0149	0.1146	0.1151
50 mph 240 deg with 0.75 in Radial Ice	160.00	0.189	0.0175	0.1278	0.1288
50 mph 240 deg with 0.75 in Radial Ice	166.67	0.205	0.0186	0.1335	0.1344
50 mph 240 deg with 0.75 in Radial Ice	180.00	0.236	0.0204	0.1177	0.1193
50 mph 300 deg with 0.75 in Radial Ice	50.00	0.023	0.0029	0.0412	0.0412
50 mph 300 deg with 0.75 in Radial Ice	126.67	0.118	0.0104	0.1110	0.1113
50 mph 300 deg with 0.75 in Radial Ice	133.33	0.132	0.0118	0.1167	0.1171
50 mph 300 deg with 0.75 in Radial Ice	140.00	0.145	0.0125	0.1157	0.1162
50 mph 300 deg with 0.75 in Radial Ice	160.00	0.190	0.0125	0.1277	0.1283
50 mph 300 deg with 0.75 in Radial Ice	166.67	0.206	0.0124	0.1333	0.1340
50 mph 300 deg with 0.75 in Radial Ice	180.00	0.237	0.0124	0.1177	0.1188
50 mph 330 deg with 0.75 in Radial Ice	50.00	0.022	0.0016	0.0413	0.0413
50 mph 330 deg with 0.75 in Radial Ice	126.67	0.119	0.0057	0.1124	0.1124
50 mph 330 deg with 0.75 in Radial Ice	133.33	0.132	0.0064	0.1165	0.1168
50 mph 330 deg with 0.75 in Radial Ice	140.00	0.146	0.0067	0.1223	0.1226
50 mph 330 deg with 0.75 in Radial Ice	160.00	0.191	0.0061	0.1444	0.1449
50 mph 330 deg with 0.75 in Radial Ice	166.67	0.207	0.0059	0.1389	0.1392
50 mph 330 deg with 0.75 in Radial Ice	180.00	0.238	0.0055	0.1764	0.1770
Seismic Normal M1	50.00	0.007	0.0008	0.0139	0.0140
Seismic Normal M1	126.67	0.040	0.0019	0.0379	0.0380
Seismic Normal M1	133.33	0.045	0.0019	0.0400	0.0400
Seismic Normal M1	140.00	0.049	0.0020	0.0411	0.0412
Seismic Normal M1	160.00	0.065	0.0019	0.0446	0.0446
Seismic Normal M1	166.67	0.070	0.0018	0.0452	0.0452
Seismic Normal M1	180.00	0.080	0.0018	0.0446	0.0447
Seismic Normal M2	50.00	0.004	0.0004	0.0080	0.0080
Seismic Normal M2	126.67	0.024	0.0011	0.0250	0.0250
Seismic Normal M2	133.33	0.027	0.0011	0.0272	0.0273
Seismic Normal M2	140.00	0.030	0.0012	0.0286	0.0287
Seismic Normal M2	160.00	0.041	0.0011	0.0330	0.0330
Seismic Normal M2	166.67	0.045	0.0011	0.0339	0.0339
Seismic Normal M2	180.00	0.053	0.0010	0.0332	0.0333
Seismic 60 deg M1	50.00	0.007	-0.0008	0.0139	0.0139
Seismic 60 deg M1	126.67	0.040	-0.0018	0.0377	0.0377
Seismic 60 deg M1	133.33	0.045	-0.0019	0.0400	0.0400
Seismic 60 deg M1	140.00	0.049	-0.0019	0.0410	0.0410
Seismic 60 deg M1	160.00	0.064	-0.0018	0.0442	0.0442
Seismic 60 deg M1	166.67	0.069	-0.0017	0.0447	0.0447
Seismic 60 deg M1	180.00	0.080	-0.0016	0.0443	0.0443
Seismic 60 deg M2	50.00	0.004	-0.0004	0.0081	0.0081
Seismic 60 deg M2	126.67	0.024	-0.0011	0.0250	0.0250
Seismic 60 deg M2	133.33	0.027	-0.0011	0.0275	0.0275
Seismic 60 deg M2	140.00	0.030	-0.0012	0.0289	0.0289
Seismic 60 deg M2	160.00	0.041	-0.0011	0.0331	0.0331
Seismic 60 deg M2	166.67	0.045	-0.0011	0.0338	0.0339
Seismic 60 deg M2	180.00	0.053	-0.0010	0.0334	0.0334
Seismic 90 deg M1	50.00	0.007	-0.0009	0.0140	0.0140
Seismic 90 deg M1	126.67	0.040	-0.0022	0.0380	0.0380
Seismic 90 deg M1	133.33	0.045	-0.0022	0.0402	0.0402
Seismic 90 deg M1	140.00	0.049	-0.0023	0.0413	0.0413
Seismic 90 deg M1	160.00	0.065	-0.0022	0.0446	0.0446
Seismic 90 deg M1	166.67	0.070	-0.0021	0.0451	0.0452
Seismic 90 deg M1	180.00	0.080	-0.0021	0.0447	0.0447
Seismic 90 deg M2	50.00	0.004	-0.0005	0.0081	0.0081
Seismic 90 deg M2	126.67	0.024	-0.0013	0.0250	0.0250
Seismic 90 deg M2	133.33	0.027	-0.0013	0.0274	0.0275
Seismic 90 deg M2	140.00	0.030	-0.0013	0.0288	0.0288
Seismic 90 deg M2	160.00	0.041	-0.0013	0.0331	0.0331

Force/Stress Summary

Seismic 90 deg M2	166.67	0.045	-0.0012	0.0339	0.0339
Seismic 90 deg M2	180.00	0.053	-0.0012	0.0333	0.0333
Seismic 120 deg M1	50.00	0.007	0.0008	0.0139	0.0139
Seismic 120 deg M1	126.67	0.040	-0.0018	0.0376	0.0377
Seismic 120 deg M1	133.33	0.045	-0.0019	0.0397	0.0397
Seismic 120 deg M1	140.00	0.049	-0.0019	0.0408	0.0408
Seismic 120 deg M1	160.00	0.064	-0.0018	0.0441	0.0442
Seismic 120 deg M1	166.67	0.069	-0.0017	0.0447	0.0447
Seismic 120 deg M1	180.00	0.080	-0.0016	0.0442	0.0442
Seismic 120 deg M2	50.00	0.004	0.0004	0.0080	0.0080
Seismic 120 deg M2	126.67	0.024	-0.0011	0.0250	0.0250
Seismic 120 deg M2	133.33	0.027	-0.0011	0.0272	0.0273
Seismic 120 deg M2	140.00	0.030	-0.0012	0.0286	0.0287
Seismic 120 deg M2	160.00	0.041	-0.0011	0.0330	0.0330
Seismic 120 deg M2	166.67	0.045	-0.0011	0.0339	0.0339
Seismic 120 deg M2	180.00	0.053	-0.0010	0.0332	0.0333
Seismic 180 deg M1	50.00	0.007	0.0008	0.0140	0.0140
Seismic 180 deg M1	126.67	0.040	0.0019	0.0380	0.0380
Seismic 180 deg M1	133.33	0.045	0.0019	0.0403	0.0403
Seismic 180 deg M1	140.00	0.049	0.0020	0.0414	0.0414
Seismic 180 deg M1	160.00	0.065	0.0019	0.0447	0.0447
Seismic 180 deg M1	166.67	0.070	0.0018	0.0451	0.0451
Seismic 180 deg M1	180.00	0.080	0.0018	0.0448	0.0448
Seismic 180 deg M2	50.00	0.004	0.0004	0.0081	0.0081
Seismic 180 deg M2	126.67	0.024	0.0011	0.0250	0.0250
Seismic 180 deg M2	133.33	0.027	0.0011	0.0275	0.0275
Seismic 180 deg M2	140.00	0.030	0.0012	0.0289	0.0289
Seismic 180 deg M2	160.00	0.041	0.0011	0.0331	0.0331
Seismic 180 deg M2	166.67	0.045	0.0011	0.0338	0.0339
Seismic 180 deg M2	180.00	0.053	0.0010	0.0334	0.0334
Seismic 210 deg M1	50.00	0.007	0.0004	0.0139	0.0139
Seismic 210 deg M1	126.67	0.040	0.0011	0.0377	0.0377
Seismic 210 deg M1	133.33	0.045	0.0011	0.0399	0.0399
Seismic 210 deg M1	140.00	0.049	0.0011	0.0410	0.0410
Seismic 210 deg M1	160.00	0.064	0.0010	0.0442	0.0442
Seismic 210 deg M1	166.67	0.069	0.0010	0.0447	0.0447
Seismic 210 deg M1	180.00	0.080	0.0009	0.0443	0.0443
Seismic 210 deg M2	50.00	0.004	0.0002	0.0081	0.0081
Seismic 210 deg M2	126.67	0.024	0.0006	0.0250	0.0250
Seismic 210 deg M2	133.33	0.027	0.0007	0.0274	0.0275
Seismic 210 deg M2	140.00	0.030	0.0007	0.0288	0.0288
Seismic 210 deg M2	160.00	0.041	0.0006	0.0331	0.0331
Seismic 210 deg M2	166.67	0.045	0.0006	0.0339	0.0339
Seismic 210 deg M2	180.00	0.053	0.0006	0.0333	0.0333
Seismic 240 deg M1	50.00	0.007	0.0008	0.0139	0.0139
Seismic 240 deg M1	126.67	0.040	0.0018	0.0376	0.0377
Seismic 240 deg M1	133.33	0.045	0.0019	0.0397	0.0397
Seismic 240 deg M1	140.00	0.049	0.0019	0.0408	0.0408
Seismic 240 deg M1	160.00	0.064	0.0018	0.0441	0.0442
Seismic 240 deg M1	166.67	0.069	0.0017	0.0447	0.0447
Seismic 240 deg M1	180.00	0.080	0.0016	0.0442	0.0442
Seismic 240 deg M2	50.00	0.004	0.0004	0.0080	0.0080
Seismic 240 deg M2	126.67	0.024	0.0011	0.0250	0.0250
Seismic 240 deg M2	133.33	0.027	0.0011	0.0272	0.0273
Seismic 240 deg M2	140.00	0.030	0.0012	0.0286	0.0287
Seismic 240 deg M2	160.00	0.041	0.0011	0.0330	0.0330
Seismic 240 deg M2	166.67	0.045	0.0011	0.0339	0.0339
Seismic 240 deg M2	180.00	0.053	0.0010	0.0332	0.0333
Seismic 300 deg M1	50.00	0.007	0.0008	0.0139	0.0139

Site Number: 411183

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Site Name: Waterford CT, CT

Engineering Number: OAA682429_C3_02

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Customer: AT&T Mobility

Force/Stress Summary

Seismic 300 deg M1	126.67	0.040	0.0018	0.0377	0.0377
Seismic 300 deg M1	133.33	0.045	0.0019	0.0400	0.0400
Seismic 300 deg M1	140.00	0.049	0.0019	0.0410	0.0410
Seismic 300 deg M1	160.00	0.064	0.0018	0.0442	0.0442
Seismic 300 deg M1	166.67	0.069	0.0017	0.0447	0.0447
Seismic 300 deg M1	180.00	0.080	0.0016	0.0443	0.0443
Seismic 300 deg M2	50.00	0.004	0.0004	0.0081	0.0081
Seismic 300 deg M2	126.67	0.024	0.0011	0.0250	0.0250
Seismic 300 deg M2	133.33	0.027	0.0011	0.0275	0.0275
Seismic 300 deg M2	140.00	0.030	0.0012	0.0289	0.0289
Seismic 300 deg M2	160.00	0.041	0.0011	0.0331	0.0331
Seismic 300 deg M2	166.67	0.045	0.0011	0.0338	0.0339
Seismic 300 deg M2	180.00	0.053	0.0010	0.0334	0.0334
Seismic 330 deg M1	50.00	0.007	0.0004	0.0139	0.0139
Seismic 330 deg M1	126.67	0.040	0.0011	0.0377	0.0377
Seismic 330 deg M1	133.33	0.045	0.0011	0.0399	0.0399
Seismic 330 deg M1	140.00	0.049	0.0011	0.0410	0.0410
Seismic 330 deg M1	160.00	0.064	0.0010	0.0442	0.0442
Seismic 330 deg M1	166.67	0.069	0.0010	0.0447	0.0447
Seismic 330 deg M1	180.00	0.080	0.0009	0.0443	0.0443
Seismic 330 deg M2	50.00	0.004	0.0002	0.0081	0.0081
Seismic 330 deg M2	126.67	0.024	0.0006	0.0250	0.0250
Seismic 330 deg M2	133.33	0.027	0.0007	0.0274	0.0275
Seismic 330 deg M2	140.00	0.030	0.0007	0.0288	0.0288
Seismic 330 deg M2	160.00	0.041	0.0006	0.0331	0.0331
Seismic 330 deg M2	166.67	0.045	0.0006	0.0339	0.0339
Seismic 330 deg M2	180.00	0.053	0.0006	0.0333	0.0333
Seismic (Reduced DL) Normal M1	50.00	0.007	0.0008	0.0139	0.0139
Seismic (Reduced DL) Normal M1	126.67	0.040	0.0019	0.0378	0.0378
Seismic (Reduced DL) Normal M1	133.33	0.045	0.0019	0.0398	0.0398
Seismic (Reduced DL) Normal M1	140.00	0.049	0.0019	0.0409	0.0410
Seismic (Reduced DL) Normal M1	160.00	0.064	0.0019	0.0444	0.0445
Seismic (Reduced DL) Normal M1	166.67	0.070	0.0018	0.0450	0.0450
Seismic (Reduced DL) Normal M1	180.00	0.080	0.0018	0.0445	0.0445
Seismic (Reduced DL) Normal M2	50.00	0.004	0.0004	0.0080	0.0080
Seismic (Reduced DL) Normal M2	126.67	0.024	0.0011	0.0249	0.0249
Seismic (Reduced DL) Normal M2	133.33	0.027	0.0011	0.0271	0.0271
Seismic (Reduced DL) Normal M2	140.00	0.030	0.0012	0.0285	0.0285
Seismic (Reduced DL) Normal M2	160.00	0.041	0.0011	0.0329	0.0329
Seismic (Reduced DL) Normal M2	166.67	0.045	0.0010	0.0338	0.0338
Seismic (Reduced DL) Normal M2	180.00	0.053	0.0010	0.0331	0.0331
Seismic (Reduced DL) 60 deg M1	50.00	0.007	-0.0008	0.0138	0.0138
Seismic (Reduced DL) 60 deg M1	126.67	0.040	-0.0018	0.0375	0.0375
Seismic (Reduced DL) 60 deg M1	133.33	0.044	-0.0019	0.0396	0.0396
Seismic (Reduced DL) 60 deg M1	140.00	0.049	-0.0019	0.0407	0.0407
Seismic (Reduced DL) 60 deg M1	160.00	0.064	-0.0018	0.0441	0.0441
Seismic (Reduced DL) 60 deg M1	166.67	0.069	-0.0017	0.0445	0.0446
Seismic (Reduced DL) 60 deg M1	180.00	0.079	-0.0016	0.0441	0.0441
Seismic (Reduced DL) 60 deg M2	50.00	0.004	-0.0004	0.0080	0.0080
Seismic (Reduced DL) 60 deg M2	126.67	0.024	-0.0011	0.0249	0.0249
Seismic (Reduced DL) 60 deg M2	133.33	0.027	-0.0011	0.0272	0.0272
Seismic (Reduced DL) 60 deg M2	140.00	0.030	-0.0012	0.0286	0.0286
Seismic (Reduced DL) 60 deg M2	160.00	0.041	-0.0011	0.0330	0.0330
Seismic (Reduced DL) 60 deg M2	166.67	0.045	-0.0010	0.0337	0.0338
Seismic (Reduced DL) 60 deg M2	180.00	0.053	-0.0010	0.0332	0.0332
Seismic (Reduced DL) 90 deg M1	50.00	0.007	-0.0009	0.0139	0.0139
Seismic (Reduced DL) 90 deg M1	126.67	0.040	-0.0022	0.0378	0.0378
Seismic (Reduced DL) 90 deg M1	133.33	0.045	-0.0022	0.0399	0.0399
Seismic (Reduced DL) 90 deg M1	140.00	0.049	-0.0022	0.0410	0.0411

Site Number: 411183

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Site Name: Waterford CT, CT

Engineering Number: OAA682429_C3_02

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Customer: AT&T Mobility

Force/Stress Summary

Seismic (Reduced DL) 90 deg M1	160.00	0.064	-0.0022	0.0445	0.0445
Seismic (Reduced DL) 90 deg M1	166.67	0.070	-0.0021	0.0450	0.0450
Seismic (Reduced DL) 90 deg M1	180.00	0.080	-0.0020	0.0445	0.0446
Seismic (Reduced DL) 90 deg M2	50.00	0.004	-0.0005	0.0080	0.0080
Seismic (Reduced DL) 90 deg M2	126.67	0.024	-0.0013	0.0249	0.0249
Seismic (Reduced DL) 90 deg M2	133.33	0.027	-0.0013	0.0272	0.0272
Seismic (Reduced DL) 90 deg M2	140.00	0.030	-0.0013	0.0286	0.0286
Seismic (Reduced DL) 90 deg M2	160.00	0.041	-0.0013	0.0330	0.0330
Seismic (Reduced DL) 90 deg M2	166.67	0.045	-0.0012	0.0338	0.0338
Seismic (Reduced DL) 90 deg M2	180.00	0.053	-0.0012	0.0332	0.0332
Seismic (Reduced DL) 120 deg M1	50.00	0.007	0.0008	0.0138	0.0138
Seismic (Reduced DL) 120 deg M1	126.67	0.040	-0.0018	0.0375	0.0376
Seismic (Reduced DL) 120 deg M1	133.33	0.044	-0.0019	0.0395	0.0395
Seismic (Reduced DL) 120 deg M1	140.00	0.049	-0.0019	0.0406	0.0406
Seismic (Reduced DL) 120 deg M1	160.00	0.064	-0.0018	0.0440	0.0440
Seismic (Reduced DL) 120 deg M1	166.67	0.069	-0.0017	0.0446	0.0446
Seismic (Reduced DL) 120 deg M1	180.00	0.079	-0.0016	0.0440	0.0441
Seismic (Reduced DL) 120 deg M2	50.00	0.004	0.0004	0.0080	0.0080
Seismic (Reduced DL) 120 deg M2	126.67	0.024	-0.0011	0.0249	0.0249
Seismic (Reduced DL) 120 deg M2	133.33	0.027	-0.0011	0.0271	0.0271
Seismic (Reduced DL) 120 deg M2	140.00	0.030	-0.0012	0.0285	0.0285
Seismic (Reduced DL) 120 deg M2	160.00	0.041	-0.0011	0.0329	0.0329
Seismic (Reduced DL) 120 deg M2	166.67	0.045	-0.0010	0.0338	0.0338
Seismic (Reduced DL) 120 deg M2	180.00	0.053	-0.0010	0.0331	0.0331
Seismic (Reduced DL) 180 deg M1	50.00	0.007	0.0008	0.0139	0.0139
Seismic (Reduced DL) 180 deg M1	126.67	0.040	0.0019	0.0378	0.0378
Seismic (Reduced DL) 180 deg M1	133.33	0.045	0.0019	0.0400	0.0400
Seismic (Reduced DL) 180 deg M1	140.00	0.049	0.0019	0.0411	0.0411
Seismic (Reduced DL) 180 deg M1	160.00	0.064	0.0019	0.0445	0.0445
Seismic (Reduced DL) 180 deg M1	166.67	0.070	0.0018	0.0450	0.0450
Seismic (Reduced DL) 180 deg M1	180.00	0.080	0.0018	0.0446	0.0446
Seismic (Reduced DL) 180 deg M2	50.00	0.004	0.0004	0.0080	0.0080
Seismic (Reduced DL) 180 deg M2	126.67	0.024	0.0011	0.0249	0.0249
Seismic (Reduced DL) 180 deg M2	133.33	0.027	0.0011	0.0272	0.0272
Seismic (Reduced DL) 180 deg M2	140.00	0.030	0.0012	0.0286	0.0286
Seismic (Reduced DL) 180 deg M2	160.00	0.041	0.0011	0.0330	0.0330
Seismic (Reduced DL) 180 deg M2	166.67	0.045	0.0010	0.0337	0.0338
Seismic (Reduced DL) 180 deg M2	180.00	0.053	0.0010	0.0332	0.0332
Seismic (Reduced DL) 210 deg M1	50.00	0.007	0.0004	0.0138	0.0139
Seismic (Reduced DL) 210 deg M1	126.67	0.040	0.0011	0.0375	0.0376
Seismic (Reduced DL) 210 deg M1	133.33	0.044	0.0011	0.0396	0.0396
Seismic (Reduced DL) 210 deg M1	140.00	0.049	0.0011	0.0407	0.0407
Seismic (Reduced DL) 210 deg M1	160.00	0.064	0.0010	0.0441	0.0441
Seismic (Reduced DL) 210 deg M1	166.67	0.069	0.0010	0.0446	0.0446
Seismic (Reduced DL) 210 deg M1	180.00	0.079	0.0009	0.0441	0.0441
Seismic (Reduced DL) 210 deg M2	50.00	0.004	0.0002	0.0080	0.0080
Seismic (Reduced DL) 210 deg M2	126.67	0.024	0.0006	0.0249	0.0249
Seismic (Reduced DL) 210 deg M2	133.33	0.027	0.0007	0.0272	0.0272
Seismic (Reduced DL) 210 deg M2	140.00	0.030	0.0007	0.0286	0.0286
Seismic (Reduced DL) 210 deg M2	160.00	0.041	0.0006	0.0330	0.0330
Seismic (Reduced DL) 210 deg M2	166.67	0.045	0.0006	0.0338	0.0338
Seismic (Reduced DL) 210 deg M2	180.00	0.053	0.0006	0.0332	0.0332
Seismic (Reduced DL) 240 deg M1	50.00	0.007	0.0008	0.0138	0.0138
Seismic (Reduced DL) 240 deg M1	126.67	0.040	0.0018	0.0375	0.0376
Seismic (Reduced DL) 240 deg M1	133.33	0.044	0.0019	0.0395	0.0395
Seismic (Reduced DL) 240 deg M1	140.00	0.049	0.0019	0.0406	0.0406
Seismic (Reduced DL) 240 deg M1	160.00	0.064	0.0018	0.0440	0.0440
Seismic (Reduced DL) 240 deg M1	166.67	0.069	0.0017	0.0446	0.0446
Seismic (Reduced DL) 240 deg M1	180.00	0.079	0.0016	0.0440	0.0441

Site Number: 411183

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Site Name: Waterford CT, CT

Engineering Number: OAA682429_C3_02

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Customer: AT&T Mobility

Force/Stress Summary

Seismic (Reduced DL) 240 deg M2	50.00	0.004	0.0004	0.0080	0.0080
Seismic (Reduced DL) 240 deg M2	126.67	0.024	0.0011	0.0249	0.0249
Seismic (Reduced DL) 240 deg M2	133.33	0.027	0.0011	0.0271	0.0271
Seismic (Reduced DL) 240 deg M2	140.00	0.030	0.0012	0.0285	0.0285
Seismic (Reduced DL) 240 deg M2	160.00	0.041	0.0011	0.0329	0.0329
Seismic (Reduced DL) 240 deg M2	166.67	0.045	0.0010	0.0338	0.0338
Seismic (Reduced DL) 240 deg M2	180.00	0.053	0.0010	0.0331	0.0331
Seismic (Reduced DL) 300 deg M1	50.00	0.007	0.0008	0.0138	0.0138
Seismic (Reduced DL) 300 deg M1	126.67	0.040	0.0018	0.0375	0.0375
Seismic (Reduced DL) 300 deg M1	133.33	0.044	0.0019	0.0396	0.0396
Seismic (Reduced DL) 300 deg M1	140.00	0.049	0.0019	0.0407	0.0407
Seismic (Reduced DL) 300 deg M1	160.00	0.064	0.0018	0.0441	0.0441
Seismic (Reduced DL) 300 deg M1	166.67	0.069	0.0017	0.0445	0.0446
Seismic (Reduced DL) 300 deg M1	180.00	0.079	0.0016	0.0441	0.0441
Seismic (Reduced DL) 300 deg M2	50.00	0.004	0.0004	0.0080	0.0080
Seismic (Reduced DL) 300 deg M2	126.67	0.024	0.0011	0.0249	0.0249
Seismic (Reduced DL) 300 deg M2	133.33	0.027	0.0011	0.0272	0.0272
Seismic (Reduced DL) 300 deg M2	140.00	0.030	0.0012	0.0286	0.0286
Seismic (Reduced DL) 300 deg M2	160.00	0.041	0.0011	0.0330	0.0330
Seismic (Reduced DL) 300 deg M2	166.67	0.045	0.0010	0.0337	0.0338
Seismic (Reduced DL) 300 deg M2	180.00	0.053	0.0010	0.0332	0.0332
Seismic (Reduced DL) 330 deg M1	50.00	0.007	0.0004	0.0138	0.0139
Seismic (Reduced DL) 330 deg M1	126.67	0.040	0.0011	0.0375	0.0376
Seismic (Reduced DL) 330 deg M1	133.33	0.044	0.0011	0.0396	0.0396
Seismic (Reduced DL) 330 deg M1	140.00	0.049	0.0011	0.0407	0.0407
Seismic (Reduced DL) 330 deg M1	160.00	0.064	0.0010	0.0441	0.0441
Seismic (Reduced DL) 330 deg M1	166.67	0.069	0.0010	0.0446	0.0446
Seismic (Reduced DL) 330 deg M1	180.00	0.079	0.0009	0.0441	0.0441
Seismic (Reduced DL) 330 deg M2	50.00	0.004	0.0002	0.0080	0.0080
Seismic (Reduced DL) 330 deg M2	126.67	0.024	0.0006	0.0249	0.0249
Seismic (Reduced DL) 330 deg M2	133.33	0.027	0.0007	0.0272	0.0272
Seismic (Reduced DL) 330 deg M2	140.00	0.030	0.0007	0.0286	0.0286
Seismic (Reduced DL) 330 deg M2	160.00	0.041	0.0006	0.0330	0.0330
Seismic (Reduced DL) 330 deg M2	166.67	0.045	0.0006	0.0338	0.0338
Seismic (Reduced DL) 330 deg M2	180.00	0.053	0.0006	0.0332	0.0332
Serviceability - 60 mph Wind Normal	50.00	0.013	0.0008	0.0264	0.0264
Serviceability - 60 mph Wind Normal	126.67	0.078	0.0013	0.0771	0.0771
Serviceability - 60 mph Wind Normal	133.33	0.087	0.0026	0.0790	0.0790
Serviceability - 60 mph Wind Normal	140.00	0.096	0.0036	0.0840	0.0841
Serviceability - 60 mph Wind Normal	160.00	0.127	0.0049	0.1136	0.1137
Serviceability - 60 mph Wind Normal	166.67	0.138	0.0054	0.0961	0.0961
Serviceability - 60 mph Wind Normal	180.00	0.160	0.0061	0.1385	0.1386
Serviceability - 60 mph Wind 60 deg	50.00	0.013	-0.0019	0.0263	0.0263
Serviceability - 60 mph Wind 60 deg	126.67	0.078	-0.0073	0.0759	0.0760
Serviceability - 60 mph Wind 60 deg	133.33	0.087	-0.0082	0.0787	0.0790
Serviceability - 60 mph Wind 60 deg	140.00	0.096	-0.0087	0.0780	0.0784
Serviceability - 60 mph Wind 60 deg	160.00	0.126	0.0093	0.0836	0.0840
Serviceability - 60 mph Wind 60 deg	166.67	0.137	0.0100	0.0903	0.0908
Serviceability - 60 mph Wind 60 deg	180.00	0.158	0.0110	0.0797	0.0804
Serviceability - 60 mph Wind 90 deg	50.00	0.013	-0.0022	0.0263	0.0263
Serviceability - 60 mph Wind 90 deg	126.67	0.078	-0.0089	0.0756	0.0761
Serviceability - 60 mph Wind 90 deg	133.33	0.087	-0.0102	0.0786	0.0788
Serviceability - 60 mph Wind 90 deg	140.00	0.096	-0.0108	0.0753	0.0755
Serviceability - 60 mph Wind 90 deg	160.00	0.126	-0.0122	0.0708	0.0719
Serviceability - 60 mph Wind 90 deg	166.67	0.136	-0.0126	0.0883	0.0890
Serviceability - 60 mph Wind 90 deg	180.00	0.157	-0.0132	0.0454	0.0472
Serviceability - 60 mph Wind 120 deg	50.00	0.013	-0.0020	0.0263	0.0264
Serviceability - 60 mph Wind 120 deg	126.67	0.078	-0.0082	0.0760	0.0762
Serviceability - 60 mph Wind 120 deg	133.33	0.087	-0.0094	0.0787	0.0789

Site Number: 411183
 Site Name: Waterford CT, CT
 Customer: AT&T Mobility

Code: ANSI/TIA-222-G
 Engineering Number: OAA682429_C3_02

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Force/Stress Summary

Serviceability - 60 mph Wind 120 deg	140.00	0.096	-0.0101	0.0773	0.0775
Serviceability - 60 mph Wind 120 deg	160.00	0.126	-0.0121	0.0837	0.0844
Serviceability - 60 mph Wind 120 deg	166.67	0.137	-0.0127	0.0904	0.0910
Serviceability - 60 mph Wind 120 deg	180.00	0.158	-0.0137	0.0797	0.0806
Serviceability - 60 mph Wind 180 deg	50.00	0.013	0.0008	0.0264	0.0264
Serviceability - 60 mph Wind 180 deg	126.67	0.078	0.0014	0.0769	0.0770
Serviceability - 60 mph Wind 180 deg	133.33	0.087	0.0026	0.0787	0.0787
Serviceability - 60 mph Wind 180 deg	140.00	0.096	0.0036	0.0845	0.0845
Serviceability - 60 mph Wind 180 deg	160.00	0.127	0.0049	0.1135	0.1136
Serviceability - 60 mph Wind 180 deg	166.67	0.138	0.0054	0.0959	0.0959
Serviceability - 60 mph Wind 180 deg	180.00	0.160	0.0062	0.1384	0.1385
Serviceability - 60 mph Wind 210 deg	50.00	0.013	0.0012	0.0264	0.0264
Serviceability - 60 mph Wind 210 deg	126.67	0.078	0.0050	0.0769	0.0769
Serviceability - 60 mph Wind 210 deg	133.33	0.087	0.0057	0.0787	0.0788
Serviceability - 60 mph Wind 210 deg	140.00	0.096	0.0061	0.0820	0.0823
Serviceability - 60 mph Wind 210 deg	160.00	0.127	0.0076	0.1046	0.1046
Serviceability - 60 mph Wind 210 deg	166.67	0.138	0.0081	0.0940	0.0944
Serviceability - 60 mph Wind 210 deg	180.00	0.159	0.0088	0.1221	0.1221
Serviceability - 60 mph Wind 240 deg	50.00	0.013	0.0020	0.0263	0.0264
Serviceability - 60 mph Wind 240 deg	126.67	0.078	0.0082	0.0760	0.0762
Serviceability - 60 mph Wind 240 deg	133.33	0.087	0.0094	0.0787	0.0789
Serviceability - 60 mph Wind 240 deg	140.00	0.096	0.0101	0.0773	0.0775
Serviceability - 60 mph Wind 240 deg	160.00	0.126	0.0121	0.0837	0.0844
Serviceability - 60 mph Wind 240 deg	166.67	0.137	0.0127	0.0904	0.0910
Serviceability - 60 mph Wind 240 deg	180.00	0.158	0.0137	0.0797	0.0806
Serviceability - 60 mph Wind 300 deg	50.00	0.013	0.0019	0.0263	0.0263
Serviceability - 60 mph Wind 300 deg	126.67	0.078	0.0073	0.0759	0.0760
Serviceability - 60 mph Wind 300 deg	133.33	0.087	0.0082	0.0787	0.0790
Serviceability - 60 mph Wind 300 deg	140.00	0.096	0.0087	0.0780	0.0784
Serviceability - 60 mph Wind 300 deg	160.00	0.126	0.0090	0.0836	0.0840
Serviceability - 60 mph Wind 300 deg	166.67	0.137	0.0091	0.0903	0.0908
Serviceability - 60 mph Wind 300 deg	180.00	0.158	0.0092	0.0797	0.0804
Serviceability - 60 mph Wind 330 deg	50.00	0.013	0.0011	0.0264	0.0264
Serviceability - 60 mph Wind 330 deg	126.67	0.078	0.0040	0.0768	0.0769
Serviceability - 60 mph Wind 330 deg	133.33	0.087	0.0045	0.0790	0.0791
Serviceability - 60 mph Wind 330 deg	140.00	0.096	0.0047	0.0824	0.0826
Serviceability - 60 mph Wind 330 deg	160.00	0.127	0.0046	0.1046	0.1049
Serviceability - 60 mph Wind 330 deg	166.67	0.138	0.0045	0.0941	0.0944
Serviceability - 60 mph Wind 330 deg	180.00	0.159	0.0044	0.1221	0.1225