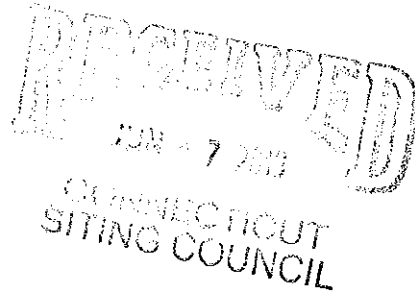


EM-VER-002-130607

280 Trumbull Street  
Hartford, CT 06103-3597  
Main (860) 275-8200  
Fax (860) 275-8299  
kbaldwin@rc.com  
Direct (860) 275-8345

Also admitted in Massachusetts

June 6, 2013



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

Re: **Notice of Exempt Modification – Facility Modification**  
**401 Wakelee Avenue, Ansonia, Connecticut**

Dear Ms. Bachman:

Cellco Partnership d/b/a Verizon Wireless (“Cellco”) currently maintains twelve (12) antennas at the 179-foot level of the existing 196-foot tower at 401 Wakelee Avenue in Ansonia. The tower is owned by American Tower Corporation. The Council approved Cellco’s use of this tower in 2001. Cellco now intends to replace six (6) of its existing antennas with three (3) model BXA-80080-4CF cellular antennas and three (3) model BXA-171063-8CF AWS antennas at the same height on the tower. Cellco also intends to install six (6) coax cable diplexers behind its antennas. Attached behind Tab 1 are the specifications for the replacement antennas and cable diplexers.



Law Offices

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WHITE PLAINS

NEW YORK CITY

ALBANY

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www.rc.com

Please accept this letter as notification pursuant to R.C.S.A. § 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to James Della Volpe, Ansonia’s Mayor. The City of Ansonia is the owner of the property on which the tower is located.

The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2).

1. The proposed modifications will not result in an increase in the height of the existing tower. Cellco’s replacement antennas and diplexers will be located at the 179-foot level of the existing 196-foot tower.

# ROBINSON & COLE<sup>LLP</sup>

Melanie A. Bachman  
June 6, 2013  
Page 2

2. The proposed modifications will not involve any change to ground-mounted equipment and, therefore, will not require the extension of the site boundary.

3. The proposed modifications will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.

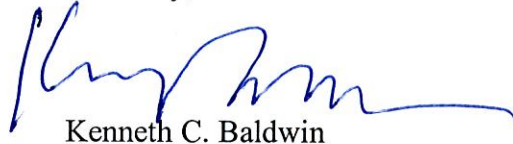
4. The operation of the replacement antennas will not increase radio frequency (RF) emissions at the facility to a level at or above the Federal Communications Commission (FCC) safety standard. A cumulative General Power Density table for Cellco's modified facility is included behind Tab 2.

5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.

6. The tower and its foundation can support Cellco's proposed antenna modifications. (*See Structural Analysis Report attached behind Tab 3*).

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

Sincerely,



Kenneth C. Baldwin

Enclosures

Copy to:

James Della Volpe, Ansonia Mayor  
Sandy M. Carter





Mixed Sources  
Sustainable Forestry  
Certification  
by the Forest Stewardship Council





## BXA-80080-4CF-EDIN-X

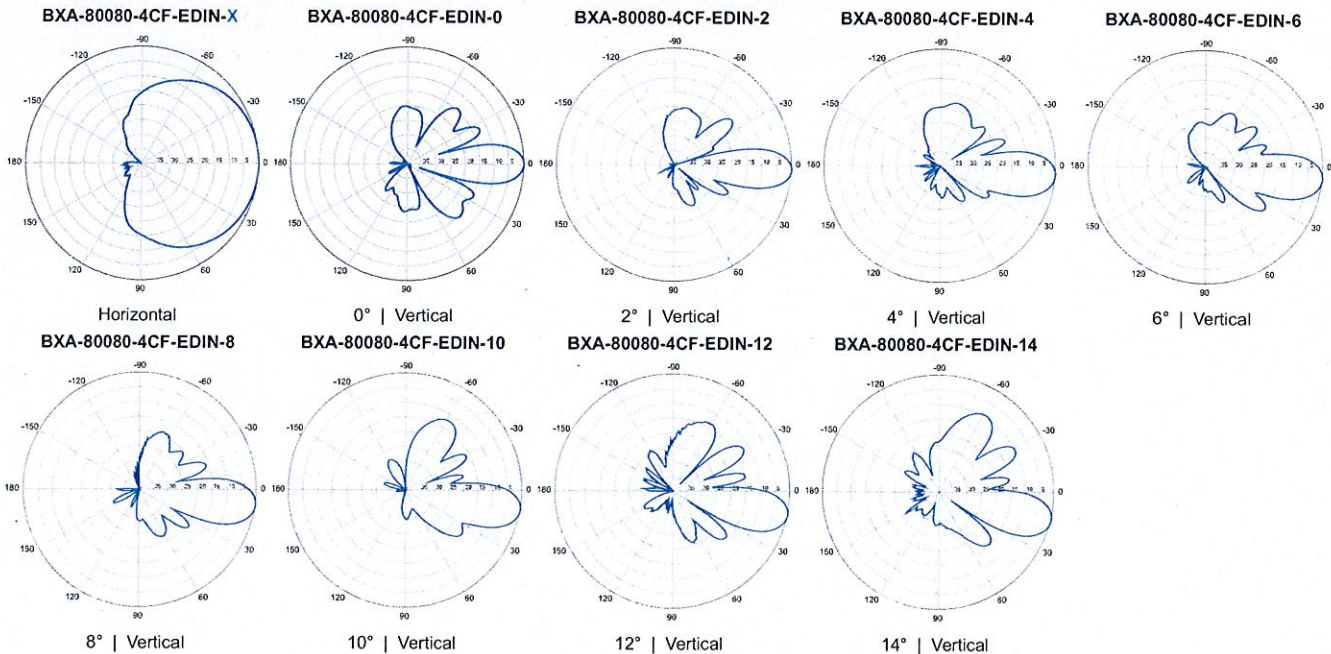
X-Pol | FET Panel | 80° | 12.0 dBd

Replace "X" with desired electrical downtilt.

Antenna is also available with NE connector(s). Replace "EDIN" with "NE" in the model number when ordering.



Electrical Characteristics	
Frequency bands	806-900 MHz*
*Optional frequency band for iDEN	806-941 MHz (specify when ordering)
Polarization	±45°
Horizontal beamwidth	80°
Vertical beamwidth	15°
Gain	12.0 dBd (14.1 dBi)
Electrical downtilt (X)	0, 2, 4, 6, 8, 10, 12, 14
Impedance	50Ω
VSWR	≤1.4:1
Upper sidelobe suppression (0°)	-13.1 dB
Front-to-back ratio (+/-30°)	-36.7 dB
Null fill	5% (-26.02 dB)
Isolation between ports	< -30 dB
Input power with EDIN connectors	500 W
Input power with NE connectors	300 W
Lightning protection	Direct Ground
Connector(s)	2 Ports / EDIN or NE / Female / Center (Back)
Mechanical Characteristics	
Dimensions Length x Width x Depth	1206 x 204 x 151 mm      47.5 x 8.0 x 5.9 in
Depth with z-brackets	196 mm      7.7 in
Weight without mounting brackets	5.4 kg      12 lbs
Survival wind speed	> 201 km/hr      > 125 mph
Wind area	Front: 0.25 m <sup>2</sup> Side: 0.18 m <sup>2</sup> Front: 2.6 ft <sup>2</sup> Side: 1.9 ft <sup>2</sup>
Wind load @ 161 km/hr (100 mph)	Front: 351 N    Side: 280 N      Front: 79 lbf    Side: 61 lbf
Mounting Options	
	Part Number      Fits Pipe Diameter      Weight
2-Point Mounting & Downtilt Bracket Kit	36210006      40-115 mm 1.57-4.5 in      4.1 kg    9 lbs
Concealment Configurations	For concealment configurations, order BXA-80080-4CF-EDIN-X-FP



Quoted performance parameters are provided to offer typical or range values only and may vary as a result of normal manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to product may be made without notice.



## BXA-171063-8CF-EDIN-X

X-Pol | FET Panel | 63° | 17.4 dBi

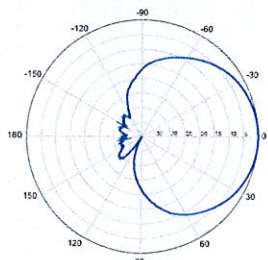
Replace "X" with desired electrical downtilt.

Antenna is also available with NE connector(s). Replace "EDIN" with "NE" in the model number when ordering.

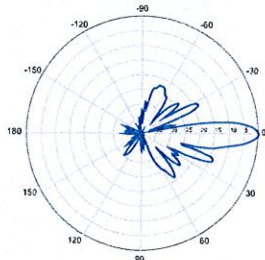


Electrical Characteristics	1710-2170 MHz			
Frequency bands	1710-1880 MHz	1850-1990 MHz	1920-2170 MHz	
Polarization	±45°	±45°	±45°	
Horizontal beamwidth	68°	65°	60°	
Vertical beamwidth	7°	7°	7°	
Gain	14.5 dBd / 16.6 dBi	14.9 dBd / 17.0 dBi	15.3 dBd / 17.4 dBi	
Electrical downtilt (X)	0, 2, 4, 8			
Impedance	50Ω			
VSWR	≤1.5:1			
First upper sidelobe	< -17 dB			
Front-to-back ratio	> 30 dB			
In-band isolation	> 25 dB			
IM3 (20W carrier)	< -150 dBc			
Input power	300 W			
Lightning protection	Direct Ground			
Connector(s)	2 Ports / EDIN or NE / Female / Center (Back)			
Operating temperature	-40° to +60° C / -40° to +140° F			
Mechanical Characteristics				
Dimensions Length x Width x Depth	1225 x 154 x 105 mm	48.2 x 6.1 x 4.1 in		
Depth with t-brackets	133 mm	5.2 in		
Weight without mounting brackets	4.2 kg	9.2 lbs		
Survival wind speed	296 km/hr	184 mph		
Wind area	Front: 0.19 m <sup>2</sup> Side: 0.14 m <sup>2</sup>	Front: 2.0 ft <sup>2</sup> Side: 1.5 ft <sup>2</sup>		
Wind load @ 161 km/hr (100 mph)	Front: 281 N Side: 223 N	Front: 63 lbf Side: 50 lbf		
Mounting Options	Part Number	Fits Pipe Diameter		Weight
2-Point Mounting Bracket Kit	26799997	50-102 mm	2.0-4.0 in	2.3 kg 5 lbs
2-Point Mounting & Downtilt Bracket Kit	26799999	50-102 mm	2.0-4.0 in	3.6 kg 8 lbs
Concealment Configurations	For concealment configurations, order BXA-171063-8CF-EDIN-X-FP			

BXA-171063-8CF-EDIN-X

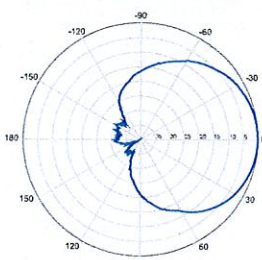


Horizontal | 1710-1880 MHz  
BXA-171063-8CF-EDIN-0

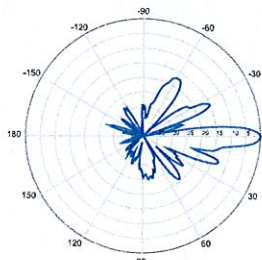


0° | Vertical | 1710-1880 MHz

BXA-171063-8CF-EDIN-X

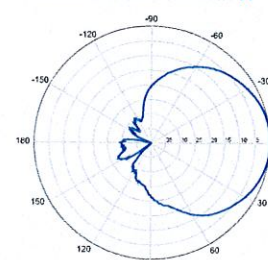


Horizontal | 1850-1990 MHz  
BXA-171063-8CF-EDIN-0

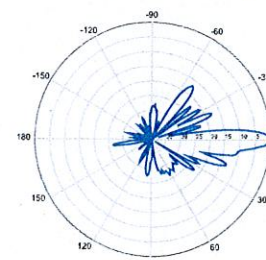


0° | Vertical | 1850-1990 MHz

BXA-171063-8CF-EDIN-X



Horizontal | 1920-2170 MHz  
BXA-171063-8CF-EDIN-0



0° | Vertical | 1920-2170 MHz

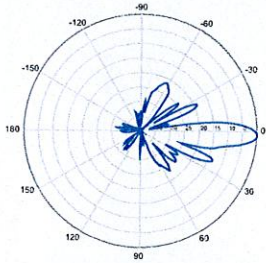
Quoted performance parameters are provided to offer typical or range values only and may vary as a result of normal manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to product may be made without notice.



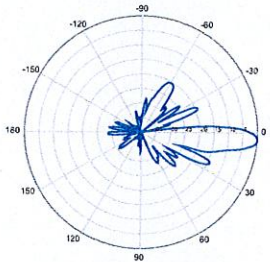
## BXA-171063-8CF-EDIN-X

X-Pol | FET Panel | 63° | 17.4 dBi

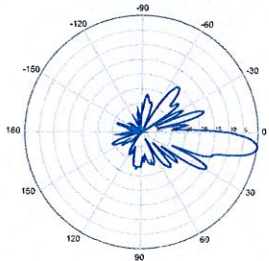
**BXA-171063-8CF-EDIN-2**



2° | Vertical | 1710-1880 MHz  
**BXA-171063-8CF-EDIN-4**

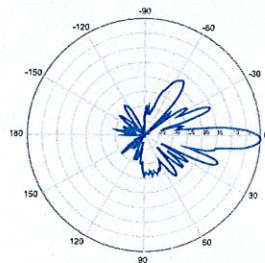


4° | Vertical | 1710-1880 MHz  
**BXA-171063-8CF-EDIN-8**

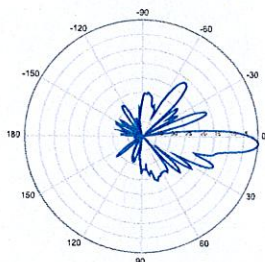


8° | Vertical | 1710-1880 MHz

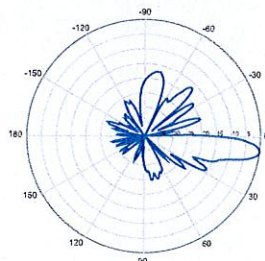
**BXA-171063-8CF-EDIN-2**



2° | Vertical | 1850-1990 MHz  
**BXA-171063-8CF-EDIN-4**

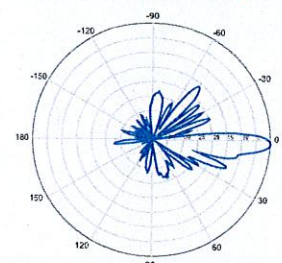


4° | Vertical | 1850-1990 MHz  
**BXA-171063-8CF-EDIN-8**

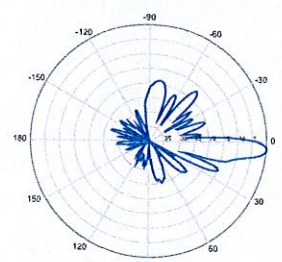


8° | Vertical | 1850-1990 MHz

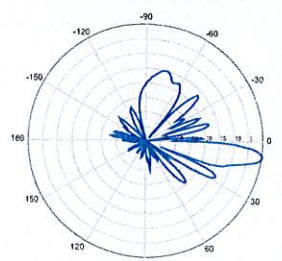
**BXA-171063-8CF-EDIN-2**



2° | Vertical | 1920-2170 MHz  
**BXA-171063-8CF-EDIN-4**



4° | Vertical | 1920-2170 MHz  
**BXA-171063-8CF-EDIN-8**



8° | Vertical | 1920-2170 MHz

Quoted performance parameters are provided to offer typical or range values only and may vary as a result of normal manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to product may be made without notice.

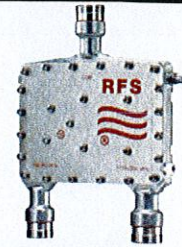




## ShareLite Wideband Diplexer – In-line 698-960 MHz/1710-2200 MHz, DC pass in high frequency path

## Product Description

The ShareLite FD9R6004 Series of diplexers are designed to enable feeder sharing between systems in the 698-960 MHz range and in the 1710-2200 MHz range. The diplexer is equipped with in-line connector placement so it can be installed in the BTS cabinet or at the tower top. This is especially valuable in crowded sites or when the feeders are not easily accessible. Due to its wideband design, the FD9R6004 Series can accommodate many combining solutions between 698-960 MHz and 1710-2200 MHz systems such as LTE 700 MHz, Cellular 800 MHz with PCS, GSM900 with GSM1800, or GSM900 with UMTS. This diplexer features a highly selective filter. It provides a high level of isolation between ports, while keeping the insertion loss on both paths at an extremely low level. The FD9R6004 diplexers are available with various DC pass options, helpful in configurations with or without the Tower Mount Amplifiers installed.



## Features/Benefits

- LTE ready design
- Extremely Low Insertion Loss
- High level of Rejection between bands – Protection against interferences
- Extremely High Power Handling Capability
- Integrated DC block/bypass versions available
- Very compact & small size design – Easy installation and reduced tower load
- In-line long-neck connectors for easy connection & waterproofing
- Exceptional reliability & environmental protection (IP 67)
- Equipped with 1 \* Breathable Vent – Prevent any humidity inside the product
- Mounting hardware for Wall and Pole mount provided (P/N SEM2-1A)
- Grounding already provided through the mounting bracket
- Kit available for easy dual mount

## Technical Specifications

Product Type	Diplexer/Cross Band Coupler
Application	LTE700, GSM900, UMTS, GSM1800, Cellular 800, PCS
Frequency Range 1, MHz	698-960
Frequency Range 2, MHz	1710-2200
Configuration	Sharelite Single diplexer, outdoor, DC pass in the 1710-2170MHz path, with mounting hardware SEM2-1A
Mounting	Wall Mounting: With 4 screws (maximum 6mm diameter); Pole Mounting: With included clamp set 40-110mm (1.57-4.33)
Return Loss All Ports Min/Typ, dB	19/23
Power Handling Continuous, Max, W	1250 at common port; 750 in low frequency path & 500 in high frequency path
Power Handling Peak, Max, W	15000 in low frequency path & 8000 in high frequency path
Impedance, Ohms	50
Insertion Loss, Path 1, dB	0.07 typ.
Insertion Loss, Path 2, dB	0.13 typ.
Rejection Between Bands Min/Typ, dB	58/64@698-960MHz; 57/70@1710-2200MHz
IMP Level at the COM Port, Typ, dBm	-112 @ 2x43
DC Pass in Low Frequency Path	No
DC Pass in High Frequency Path	Yes
Temperature Range, °C (°F)	-40 to +60 (-40 to +140)
Environmental	ETSI 300-019-2-4 Class 4.1E
Ingress Protection	IP 67
Lightning Protection	EN/IEC61000-4-5 Level 4
Connectors	In-line long-neck 7-16-Female
Weight, kg (lb)	1.2 (2.6)
Shipping Weight, kg (lb)	3.2 (7) for 2 * single units in 1 * box, 9.8 (21.6) for 6 * units = 3 * Boxes in 1 * overwrap
Dimensions, H x W x D, mm (in)	147 x 164 x 37 (5.8 x 6.5 x 1.5)
Shipping Dimensions, H x W x D, mm (in)	254 x 406 x 82 (10 x 16 x 3.2) for 2 * Single Units in 1 * box, 280 x 406 x 241 (11 x 16 x 9.5) for 6 * units = 3 * Boxes in 1 * overwrap
Volume, L	0.43
Housing	Aluminum

## Notes



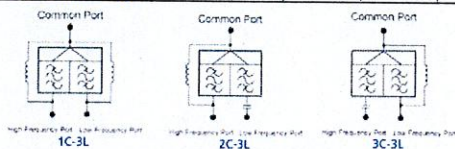


ShareLite Wideband Diplexer – In-line 698-960 MHz/1710-2200 MHz, DC pass in high frequency path

Other Documentation

FD9R6004/2C-3L Installation Instructions: Wideband\_Diplexer\_Installation\_Rev5.pdf

Selection Guide Diplexer		698-960 / 1710-2200MHz			
	Model Number	Full DC Pass	DC Pass High Band	DC Pass Low Band	Mounting Hardware Included
Single	FD9R6004/1C-3L				X
	FD9R6004/2C-3L				X
	FD9R6004/3C-3L				X
Dual	KIT-FD9R6004/1C-DL				X
	KIT-FD9R6004/2C-DL				X
	KIT-FD9R6004/3C-DL				X



The FD9R6004 Series is upgradeable to a Dual Diplexer kit by means of 2 diplexers and mounting hardware kits SEM2-1A and SEM2-3

Mounting Hardware and Ground Cable Ordering Information	
Model Number	Description
SEM2-1A	Mounting Hardware, Pole mount c40-110mm (included with the Single and Dual Diplexer) Wall Screws M6 (Not included with the product)
SEM2-3	Assembly kit for 2 pcs of FD9R6004xC-3L (Can be ordered separately but included with the Dual Diplexer Kit)
CA020-2	Ground Cable, 2m, includes lugs (Optional)
CA030-2	Ground Cable, 2m, includes lugs (Optional)
SEM6	Mounting Hardware for 6 Diplexers, Tower Base (Optional)

All information contained in the present datasheet is subject to confirmation at time of ordering



MIXED SOURCES  
Manufacturing - Call no. SF 620 92200  
PSC 20 1980-1990

		General		Power		Density									
Site Name: Ansonia															
Tower Height: Verizon @ 179ft															
CARRIER	# OF CHAN.	WATTS ERP	HEIGHT	CALC. POWER DENS	FREQ.	MAX. PERMISS. EXP.	FRACTION MPE	Total							
*AT&T UMTS	2	565	167	0.0146	880	0.5867	2.48%								
*AT&T UMTS	2	875	167	0.0226	1900	1.0000	2.26%								
*AT&T GSM	1	647	167	0.0083	880	0.5867	1.42%								
*AT&T GSM	4	813	167	0.0419	1900	1.0000	4.19%								
*AT&T LTE	1	1615	167	0.0208	734	0.4893	4.26%								
*Pocket (now MetroPCS)	3	631	157	0.0276	2130	1.0000	2.76%								
*Clearwire	2	153	194	0.0029	2496	1.0000	0.29%								
*Clearwire	1	211	194	0.0020	11 GHz	1.0000	0.20%								
*Sprint CDMA/LTE	4	778	184.5	0.0329	1900	1.0000	3.29%								
*Sprint CDMA/LTE	1	438	184.5	0.0046	850	0.5667	0.82%								
*Sprint Nextel iDEN	12	100	194	0.0115	851	0.5673	2.02%								
*Sprint Nextel WiMAX	3	562	194	0.0161	2657	1.0000	1.61%								
*T-Mobile GSM	8	144	148	0.0189	1945	1.0000	1.89%								
*T-Mobile UMTS	2	677	148	0.0222	2100	1.0000	2.22%								
Verizon PCS	14	296	179	0.0465	1970	1.0000	4.65%								
Verizon Cellular	9	274	179	0.0277	869	0.5793	4.78%								
Verizon AWS	1	1750	179	0.0196	2145	1.0000	1.96%								
Verizon 700	1	1000	179	0.0112	698	0.4653	2.41%								
								33.16%							
* Source: Siting Council															







**AMERICAN TOWER®**  
CORPORATION

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## Structural Analysis Report

**Structure** : 196 ft Self Supported Tower  
**ATC Site Name** : Ansonia Wakelee, CT  
**ATC Site Number** : 302470  
**Engineering Number** : 52486628  
**Proposed Carrier** : Verizon  
**Carrier Site Name** : Ansoania, CT  
**Carrier Site Number** : N/A  
**Site Location** : 401 Wakelee Ave  
Ansonia, CT 06401-1226  
41.356069,-73.092000  
**County** : New Haven  
**Date** : May 30, 2013  
**Max Usage** : 92%  
**Result** : Pass

Amir H. Tabarestani, E.I.  
Design Engineer



6/3/13





Eng. Number 52486628  
May 30, 2013

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Conclusion.....	1
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Structure Usages .....	3
Foundations .....	3
Deflection, Twist, and Sway.....	3
Standard Conditions .....	4
Calculations .....	Attached



### Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 196 ft self supported tower to reflect the change in loading by Verizon.

### Supporting Documents

<b>Tower Drawings</b>	Rohn Drawing #A991899 dated July 7, 1999
<b>Foundation Drawing</b>	Rohn Drawing #A992523-1, dated September 22, 1999
<b>Geotechnical Report</b>	Tectonic Engineering Consultants W.O. #1170C754, dated May 20, 1999

### Analysis

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

<b>Basic Wind Speed:</b>	105 mph (3-Second Gust)
<b>Basic Wind Speed w/ Ice:</b>	50 mph (3-Second Gust) w/ 3/4" radial ice concurrent
<b>Code:</b>	ANSI/TIA-222-G / 2003 IBC w/ 2005 CT Supplement & 2009 CT Amendment
<b>Structure Class:</b>	II
<b>Exposure Category:</b>	B
<b>Topographic Category:</b>	1

### 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 me via email at [amir.tabarestani@americantower.com](mailto:amir.tabarestani@americantower.com) or call 919-466-5046.





**Existing and Reserved Equipment**

Mount Elev. <sup>1</sup> (ft)	Qty.	Antenna	Mount Type	Lines	Carrier
194.0	3	Argus LLPX310R	Sector Frames	(6) 5/16" Coax (2) 3" Conduit (2) 1/2" Coax	Clearwire
	2	DragonWave A-ANT-18G-2-C			
	3	NextNet BTS-2500			
	2	DragonWave Horizon Compact			
	3	KMW TTA (HB-X-WM-17-65-00T)			
	3	72" x 12" Panels			
	9	48" x 12" Panels			
183.0	2	Powerwave P40-16-XLPP-RRR	Sector Frames	(6) 7/8" Coax (3) 1 1/4" Hybriflex	Sprint Nextel
	6	Andrew DB980H90E-M			
	1	RFS APXVSP18-C-A20			
	3	Alcatel-Lucent 800 MHz RRH			
	3	Alcatel-Lucent 1900 MHz 4x45 RRH			
179.0	6	RFS FD9R6004/2C-3L	Sector Frames	(12) 1 5/8" Coax	Verizon
	3	Powerwave P65-16-XL-2			
	3	Ryma MGD3-800TX			
167.0	9	72" x 12" Panel	Sector Frames	(2) 0.78" 8 AWG 6 (12) 1 5/8" Coax (1) 3" Conduit (1) 0.39" Cable	AT&T Mobility
	3	36" x 8" x 6" Panel			
	6	Ericsson RRUS 11			
	1	Raycap DC6-48-60-18-8F			
	9	14" x 9" TTA			
157.0	3	Kathrein 742 213	Leg	(6) 1 5/8" Coax	Metro PCS
148.0	3	Ericsson KRY 112 144/1	Sector Frames	(12) 1 5/8" Coax (1) 1 1/4" Hybriflex	T-Mobile
	3	Ericsson AIR 21, 1.3M, B4A B2P			
	3	Ericsson AIR 21, 1.3M, B2A B4P			
125.0	2	Motorola PTP54600	Leg	(2) 1/4" Coax	City Of Ansonia
104.0	2	2" x 8" GPS	Side Arm	(2) 1/2" Coax	Sprint Nextel
82.0	1	10' Omni	Side Arm	(1) 1/2" Coax	Ansonia Fire Dept.
76.0	1	PCTEL GPS-TMG-HR-26N	Side Arm	(1) 1/2" Coax	Sprint Nextel

**Proposed Equipment**

Elevation <sup>1</sup> (ft)		Qty.	Antenna	Mount Type	Lines	Carrier
Mount	RAD					
179.0	182.0	6	RFS FD9R6004/2C-3L	Sector Frames	-	Verizon
		3	Antel BXA-171063-8CF-EDIN-X			
		3	Antel BXA-80080/4CF			

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





**Structure Usages**

Structural Component	Controlling Usage	Pass/Fail
Legs	92%	Pass
Diagonals	92%	Pass
Horizontals	13%	Pass
Anchor Bolts	59%	Pass
Leg Bolts	74%	Pass

**Foundations**

Reaction Component	Original Design Reactions	Factored Design Reactions*	Analysis Reactions	% of Design
Uplift (Kips)	301.1	406.5	354.1	87%
Axial (Kips)	343.0	463.1	406.8	88%
Shear (Kips)	36.3	49.0	41.2	84%

\* 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)	Deflection (ft)	Twist (°)	Sway (Rotation) (°)
179.0	1.116	0.022	0.749

\*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 ATC Tower Services, Inc. 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.

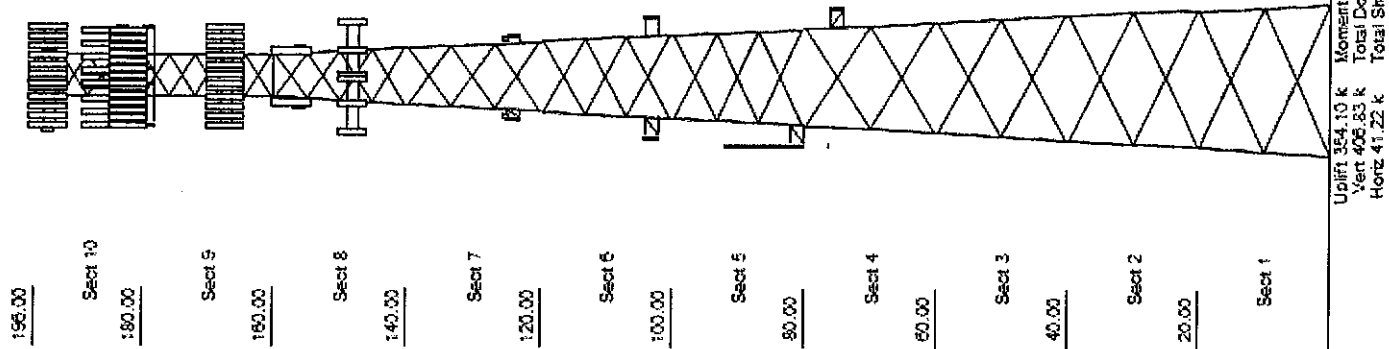
Unless explicitly agreed by both the client and American Tower Corporation, all services will be performed in accordance with the current revision of ANSI/TIA -222. The design basic wind speed will be determined based on the minimum basic wind speed as prescribed in ANSI/TIA-222. Although every effort 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. ATC Tower Services, Inc. is not responsible for the conclusions, opinions and recommendations made by others based on the information we supply.

Job Information	
Tower : 302470	Location : Ansonia Wakelee, CT
Code : ANS/TTA-222 Rev G	Shape : Triangle
Client : Verizon	Base Width : 23.00 ft
	Top Width : 6.65 ft

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Loads: 105 mph no ice  
 50 mph w / 3/4" radial ice  
 60 mph Serviceability  
 105 mph Serviceability



Sections Properties		
Section	Leg Members	Horizontal Members
1	PX 50 ksi 8" DIA PIPE	SAE 50 ksi 4X4X0.25
2	PSP 50 ksi ROHN 8 EHS	SAE 50 ksi 4X4X0.25
3	PSP 50 ksi ROHN 8 EHS	SAE 50 ksi 3.5X3.5X0.25
4	PX 50 ksi 6" DIA PIPE	SAE 50 ksi 3.5X3.5X0.25
5	PSP 50 ksi ROHN 6 EHS	SAE 50 ksi 3X3X0.25
6 - 7	PX 50 ksi 5" DIA PIPE	SAE 36 ksi 2.5X2.5X0.25
8	PX 50 ksi 4" DIA PIPE	SAE 36 ksi 2X2X0.25
9	PX 50 ksi 3" DIA PIPE	SAE 36 ksi 2X2X0.1875
10	PST 50 ksi 2-1/2" DIA PIPE	SAE 36 ksi 1.75X1.75X0.1875
		SAE 36 ksi 2X2X0.125
		SAE 36 ksi 2X2X0.125

Discrete Appurtenance		
Elev (ft)	Type	Qty Description
194.00	Panel	3 Agus LLPX310R
194.00	Dish	2 DragonWave A-ANT-18G-2-C
194.00	Panel	3 NextNet BTS-2500
194.00	Panel	2 DragonWave Horizon Compact
194.00	Mounting Frame	3 KMW TTA (HB-X-WM-17-65-00T)
194.00	Panel	3 Round Sector Frames
194.00	Panel	3 72" x 12" Panels
183.00	Panel	2 48" x 12" Panels
183.00	Panel	2 Powerwave P40-16-XLPP-RRR
183.00	Panel	6 Andrew DB989H90E-M
183.00	Panel	1 RFS APXVSP18-C-A20
183.00	Panel	3 Alcatel-Lucent 800 MHz RRH
183.00	Panel	3 Alcatel-Lucent 1900 MHz 4x45 R
179.00	Mounting Frame	3 Round Sector Frames
179.00	Panel	6 RFS FD9R6004/2C-3L
179.00	Panel	3 Antel BXA-171063-8CF-EDIN-X
179.00	Panel	3 Antel BXA-80080/4CF
179.00	Panel	6 RFS FD9R6004/2C-3L
179.00	Mounting Frame	3 Flat Light Sector Frames
179.00	Panel	3 Powerwave P65-16-XL-2
179.00	Panel	3 Rymisa MSD3-800TX
167.00	Panel	9 72" x 12" Panel
167.00	Panel	3 36" x 8" x 6" Panel
167.00	Panel	6 Ericsson RRUS 11
167.00	Panel	1 Raycap DC6-48-60-18-8F
167.00	Mounting Frame	3 Round Sector Frames
167.00	Panel	9 14" x 9" TTA
157.00	Panel	3 Kathrein 742.213
148.00	Panel	3 Ericsson KRY112.144/1
148.00	Panel	3 Ericsson AFR 21, 1.3M, B4A B2P
148.00	Panel	3 Ericsson AFR 21, 1.3M, B2A B4P
148.00	Mounting Frame	3 Round Sector Frame
125.00	Panel	2 Motorola PTP54600
104.00	Straight Arm	2 Side Arms
104.00	Whip	2 2' x 8" GPS
82.00	Straight Arm	1 Side Arm
82.00	Whip	1 10' Omni
76.00	Straight Arm	1 Side Arm
76.00	Panel	1 PC-TEL GPS-TMC-HR-26N

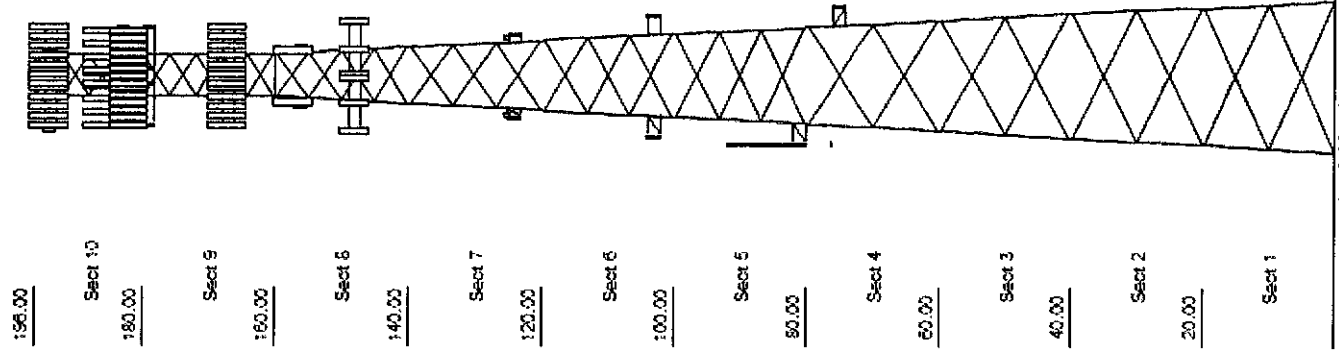
Linear Appurtenance				
Elev (ft)	From	To	Qty	Description
8.000	194.00	194.00	2	Wave Guide
8.000	194.00	194.00	6	5/16" Coax
8.000	194.00	194.00	2	3" Conduit
8.000	194.00	194.00	2	1/2" Coax
8.000	194.00	194.00	6	1 5/8" Coax

Uoiffa 394.10 k Moment  
 Vert 408.83 k Total Down  
 Horiz 41.22 k Total Shear 57.45 k



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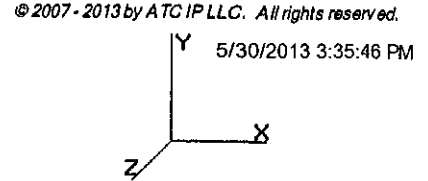
Job Information			
Tower : 302470	Location : Ansonia Wakelee, CT	Base Width : 23.00 ft	Top Width : 6.65 ft
Code : ANSITIA-222 Rev G	Shape : Triangle		
Client : Verizon			



156.00	Sect 10	8,000	194.00	10	1 1/4" Coax
180.00		5,000	194.00	1	Climbing Ladder
		8,000	183.00	1	Wave Guide
		8,000	183.00	6	7/8" Coax
		8,000	183.00	3	1 1/4" Hybriflex
		8,000	179.00	6	1 5/8" Coax
		8,000	179.00	6	1 5/8" Coax
		8,000	167.00	1	Wave Guide
		8,000	167.00	1	3" Conduit
		8,000	167.00	12	1 5/8" Coax
		8,000	167.00	2	0.78" 8 AWG 6
		8,000	167.00	1	0.39" Cable
		8,000	157.00	1	Waveguide
		8,000	157.00	6	1 5/8" Coax
		8,000	148.00	1	Wave Guide
		8,000	148.00	12	1 5/8" Coax
		8,000	148.00	1	1 1/4" Hybriflex
		8,000	125.00	2	1/4" Coax
		8,000	104.00	2	1/2" Coax
		8,000	82.000	1	1/2" Coax
		8,000	76.000	1	1/2" Coax

Uplift 354.10 k Moment 7,678.85 ft-k  
 Vert 426.83 k Total Down 63.56 k  
 Horiz 41.22 k Total Shear 67.46 k

Site Number: 302470  
 Location: Ansonia Wakelee, CT  
 Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure : B  
 Topo : 1



**Section Forces**

**LoadCase 1.2D + 1.6W Normal**

105.00 mph Normal to Face with No Ice

Gust Response Factor : 0.85  
 Dead Load Factor : 1.20  
 Wind Load Factor : 1.60

Wind Importance Factor : 1.00

Sect Seq	Height (ft)	qz (psf)	Total Area		Ice Area		Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Linear Area (sqft)	Total Weight (lb)	Ice Weight (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
			Flat (sqft)	Round (sqft)	Round (sqft)	Round (sqft)													
10	188.0	28.39	9.82	7.67	0.00	0.16	2.74	1.00	1.00	0.00	14.18	34.61	0.00	1,618.3	0.0	1,501.14	1,189.5	2,690.68	
9	170.0	27.59	12.47	11.67	0.00	0.17	2.69	1.00	1.00	0.00	17.49	107.84	0.00	3,135.9	0.0	1,766.70	2,797.7	4,564.44	
8	150.0	26.62	12.83	15.03	0.00	0.17	2.70	1.00	1.00	0.00	19.28	150.76	0.00	4,436.9	0.0	1,883.38	3,914.5	5,797.94	
7	130.0	25.55	14.16	18.57	0.00	0.16	2.74	1.00	1.00	0.00	22.02	167.42	0.00	5,282.0	0.0	2,096.22	4,132.3	6,228.59	
6	110.0	24.36	16.35	18.58	0.00	0.14	2.80	1.00	1.00	0.00	24.05	168.28	0.00	5,440.7	0.0	2,233.19	3,960.3	6,193.52	
5	90.0	23.01	22.17	22.12	0.00	0.15	2.76	1.00	1.00	0.00	31.47	168.39	0.00	6,018.6	0.0	2,716.49	3,742.0	6,458.51	
4	70.0	21.41	21.08	22.12	0.00	0.13	2.84	1.00	1.00	0.00	30.14	170.17	0.00	6,370.8	0.0	2,493.12	3,520.1	6,013.29	
3	50.0	19.45	22.98	28.80	0.00	0.14	2.81	1.00	1.00	0.00	34.88	170.38	0.00	6,846.6	0.0	2,595.59	3,201.5	5,797.10	
2	30.0	16.81	28.71	28.80	0.00	0.14	2.81	1.00	1.00	0.00	40.61	170.38	0.00	7,255.5	0.0	2,611.27	2,766.7	5,378.02	
1	10.0	16.79	31.13	28.80	0.00	0.13	2.84	1.00	1.00	0.00	42.93	102.73	0.00	7,094.7	0.0	2,783.75	1,672.3	4,456.10	
															53,500.0	0.0	53,578.19		

**LoadCase 1.2D + 1.6W 60 deg**

105.00 mph 60 deg with No Ice

Gust Response Factor : 0.85  
 Dead Load Factor : 1.20  
 Wind Load Factor : 1.60

Wind Importance Factor : 1.00

Sect Seq	Height (ft)	qz (psf)	Total Area		Ice Area		Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Linear Area (sqft)	Total Weight (lb)	Ice Weight (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
			Flat (sqft)	Round (sqft)	Round (sqft)	Round (sqft)													
10	188.0	28.39	9.82	7.67	0.00	0.16	2.74	0.80	1.00	0.00	12.22	34.61	0.00	1,618.3	0.0	1,293.18	1,189.5	2,482.72	
9	170.0	27.59	12.47	11.67	0.00	0.17	2.69	0.80	1.00	0.00	15.00	107.84	0.00	3,135.9	0.0	1,514.76	2,797.7	4,312.50	
8	150.0	26.62	12.83	15.03	0.00	0.17	2.70	0.80	1.00	0.00	16.72	150.76	0.00	4,436.9	0.0	1,632.73	3,914.5	5,547.30	
7	130.0	25.55	14.16	18.57	0.00	0.16	2.74	0.80	1.00	0.00	19.19	167.42	0.00	5,282.0	0.0	1,826.65	4,132.3	5,959.02	
6	110.0	24.36	16.35	18.58	0.00	0.14	2.80	0.80	1.00	0.00	20.78	168.28	0.00	5,440.7	0.0	1,929.55	3,960.3	5,889.88	
5	90.0	23.01	22.17	22.12	0.00	0.15	2.76	0.80	1.00	0.00	27.04	168.39	0.00	6,018.6	0.0	2,333.73	3,742.0	6,075.75	
4	70.0	21.41	21.08	22.12	0.00	0.13	2.84	0.80	1.00	0.00	25.93	170.17	0.00	6,370.8	0.0	2,144.37	3,520.1	5,664.54	
3	50.0	19.45	22.98	28.80	0.00	0.14	2.81	0.80	1.00	0.00	30.29	170.38	0.00	6,846.6	0.0	2,253.54	3,201.5	5,455.06	
2	30.0	16.81	28.71	28.80	0.00	0.14	2.81	0.80	1.00	0.00	34.87	170.38	0.00	7,255.5	0.0	2,242.01	2,766.7	5,008.76	
1	10.0	16.79	31.13	28.80	0.00	0.13	2.84	0.80	1.00	0.00	36.70	102.73	0.00	7,094.7	0.0	2,380.02	1,672.3	4,052.37	
															53,500.0	0.0	50,447.90		

**LoadCase 1.2D + 1.6W 90 deg**

105.00 mph 90 deg with No Ice

Gust Response Factor : 0.85  
 Dead Load Factor : 1.20  
 Wind Load Factor : 1.60

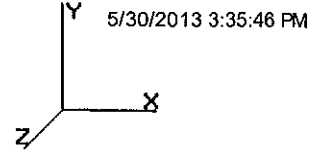
Wind Importance Factor : 1.00

Sect Seq	Height (ft)	qz (psf)	Total Area		Ice Area		Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Linear Area (sqft)	Total Weight (lb)	Ice Weight (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
			Flat (sqft)	Round (sqft)	Round (sqft)	Round (sqft)													
10	188.0	28.39	9.82	7.67	0.00	0.16	2.74	0.85	1.00	0.00	12.71	34.61	0.00	1,618.3	0.0	1,345.17	1,189.5	2,534.71	



Site Number: 302470  
 Location: Ansonia Wakelee, CT  
 Code: ANSI/TIA-222 Rev G  
 Struct Class: II  
 Exposure: B  
 Topo: 1

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**Section Forces**

9	170.0	27.59	12.47	11.67	0.00	0.17	2.69	0.85	1.00	0.00	15.62	107.84	0.00	3,135.9	0.0	1,577.75	2,797.7	4,375.49
8	150.0	26.62	12.83	15.03	0.00	0.17	2.70	0.85	1.00	0.00	17.36	150.76	0.00	4,436.9	0.0	1,695.39	3,914.5	5,609.96
7	130.0	25.55	14.16	18.57	0.00	0.16	2.74	0.85	1.00	0.00	19.90	167.42	0.00	5,282.0	0.0	1,894.05	4,132.3	6,026.41
6	110.0	24.36	16.35	18.58	0.00	0.14	2.80	0.85	1.00	0.00	21.59	168.28	0.00	5,440.7	0.0	2,005.46	3,960.3	5,965.79
5	90.00	23.01	22.17	22.12	0.00	0.15	2.76	0.85	1.00	0.00	28.14	168.39	0.00	6,018.6	0.0	2,429.42	3,742.0	6,171.44
4	70.00	21.41	21.08	22.12	0.00	0.13	2.84	0.85	1.00	0.00	26.98	170.17	0.00	6,370.8	0.0	2,231.56	3,520.1	5,751.72
3	50.00	19.45	22.98	28.80	0.00	0.14	2.81	0.85	1.00	0.00	31.44	170.38	0.00	6,846.6	0.0	2,339.06	3,201.5	5,540.57
2	30.00	16.81	28.71	28.80	0.00	0.14	2.81	0.85	1.00	0.00	36.30	170.38	0.00	7,255.5	0.0	2,334.33	2,766.7	5,101.07
1	10.00	16.79	31.13	28.80	0.00	0.13	2.84	0.85	1.00	0.00	38.26	102.73	0.00	7,094.7	0.0	2,480.95	1,672.3	4,153.30
														53,500.0	0.0	51,230.47		

**LoadCase 0.9D + 1.6W Normal**

**105.00 mph Normal to Face with No Ice (Reduced DL)**

Gust Response Factor : 0.85  
 Dead Load Factor : 0.90  
 Wind Load Factor : 1.60

Wind Importance Factor : 1.00

Seq	Wind Sect	Height (ft)	qz (psf)	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Linear Area (sqft)	Total Weight (lb)	Ice Weight (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
10	188.0	28.39	9.82	9.82	7.67	0.00	0.16	2.74	1.00	1.00	0.00	14.18	34.61	0.00	1,213.8	0.0	1,501.14	1,189.5	2,690.68
9	170.0	27.59	12.47	12.47	11.67	0.00	0.17	2.69	1.00	1.00	0.00	17.49	107.84	0.00	2,351.9	0.0	1,766.70	2,797.7	4,564.44
8	150.0	26.62	12.83	12.83	15.03	0.00	0.17	2.70	1.00	1.00	0.00	19.28	150.76	0.00	3,327.7	0.0	1,883.38	3,914.5	5,797.94
7	130.0	25.55	14.16	14.16	18.57	0.00	0.16	2.74	1.00	1.00	0.00	22.02	167.42	0.00	3,961.5	0.0	2,096.22	4,132.3	6,228.59
6	110.0	24.36	16.35	16.35	18.58	0.00	0.14	2.80	1.00	1.00	0.00	24.05	168.28	0.00	4,080.5	0.0	2,233.19	3,960.3	6,193.52
5	90.00	23.01	22.17	22.17	22.12	0.00	0.15	2.76	1.00	1.00	0.00	31.47	168.39	0.00	4,513.9	0.0	2,716.49	3,742.0	6,458.51
4	70.00	21.41	21.08	21.08	22.12	0.00	0.13	2.84	1.00	1.00	0.00	30.14	170.17	0.00	4,778.1	0.0	2,493.12	3,520.1	6,013.29
3	50.00	19.45	22.98	22.98	28.80	0.00	0.14	2.81	1.00	1.00	0.00	34.88	170.38	0.00	5,134.9	0.0	2,595.59	3,201.5	5,797.10
2	30.00	16.81	28.71	28.71	28.80	0.00	0.14	2.81	1.00	1.00	0.00	40.61	170.38	0.00	5,441.6	0.0	2,611.27	2,766.7	5,378.02
1	10.00	16.79	31.13	31.13	28.80	0.00	0.13	2.84	1.00	1.00	0.00	42.93	102.73	0.00	5,321.0	0.0	2,783.75	1,672.3	4,456.10
														40,125.0	0.0	53,578.19			

**LoadCase 0.9D + 1.6W 60 deg**

**105.00 mph 60 deg with No Ice (Reduced DL)**

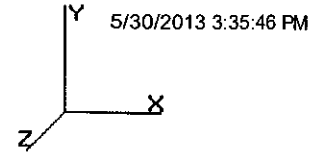
Gust Response Factor : 0.85  
 Dead Load Factor : 0.90  
 Wind Load Factor : 1.60

Wind Importance Factor : 1.00

Seq	Wind Sect	Height (ft)	qz (psf)	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Linear Area (sqft)	Total Weight (lb)	Ice Weight (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
10	188.0	28.39	9.82	9.82	7.67	0.00	0.16	2.74	0.80	1.00	0.00	12.22	34.61	0.00	1,213.8	0.0	1,293.18	1,189.5	2,482.72
9	170.0	27.59	12.47	12.47	11.67	0.00	0.17	2.69	0.80	1.00	0.00	15.00	107.84	0.00	2,351.9	0.0	1,514.76	2,797.7	4,312.50
8	150.0	26.62	12.83	12.83	15.03	0.00	0.17	2.70	0.80	1.00	0.00	16.72	150.76	0.00	3,327.7	0.0	1,632.73	3,914.5	5,547.30
7	130.0	25.55	14.16	14.16	18.57	0.00	0.16	2.74	0.80	1.00	0.00	19.19	167.42	0.00	3,961.5	0.0	1,826.65	4,132.3	5,959.02
6	110.0	24.36	16.35	16.35	18.58	0.00	0.14	2.80	0.80	1.00	0.00	20.78	168.28	0.00	4,080.5	0.0	1,929.55	3,960.3	5,889.88
5	90.00	23.01	22.17	22.17	22.12	0.00	0.15	2.76	0.80	1.00	0.00	27.04	168.39	0.00	4,513.9	0.0	2,333.73	3,742.0	6,075.75
4	70.00	21.41	21.08	21.08	22.12	0.00	0.13	2.84	0.80	1.00	0.00	25.93	170.17	0.00	4,778.1	0.0	2,144.37	3,520.1	5,664.54
3	50.00	19.45	22.98	22.98	28.80	0.00	0.14	2.81	0.80	1.00	0.00	30.29	170.38	0.00	5,134.9	0.0	2,253.54	3,201.5	5,455.06
2	30.00	16.81	28.71	28.71	28.80	0.00	0.14	2.81	0.80	1.00	0.00	34.87	170.38	0.00	5,441.6	0.0	2,242.01	2,766.7	5,008.76
1	10.00	16.79	31.13	31.13	28.80	0.00	0.13	2.84	0.80	1.00	0.00	36.70	102.73	0.00	5,321.0	0.0	2,380.02	1,672.3	4,052.37
														40,125.0	0.0	50,447.90			

Site Number: 302470  
 Location: Ansonia Wakelee, CT  
 Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure : B  
 Topo : 1

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### Section Forces

**LoadCase 0.9D + 1.6W 90 deg**

105.00 mph 90 deg with No Ice (Reduced DL)

Gust Response Factor : 0.85  
 Dead Load Factor : 0.90  
 Wind Load Factor : 1.60

Wind Importance Factor : 1.00

Sect Seq	Height (ft)	Wind qz (psf)	Total Area			Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Ice Weight		Struct Force (lb)	Linear Force (lb)	Total Force (lb)	
			Flat (sqft)	Round Area (sqft)	Ice Round Area (sqft)								Total (lb)	Ice (lb)				
10	188.0	28.39	9.82	7.67	0.00	0.16	2.74	0.85	1.00	0.00	12.71	34.61	0.00	1,213.8	0.0	1,345.17	1,189.5	2,534.71
9	170.0	27.59	12.47	11.67	0.00	0.17	2.69	0.85	1.00	0.00	15.62	107.84	0.00	2,351.9	0.0	1,577.75	2,797.7	4,375.49
8	150.0	26.62	12.83	15.03	0.00	0.17	2.70	0.85	1.00	0.00	17.36	150.76	0.00	3,327.7	0.0	1,695.39	3,914.5	5,609.96
7	130.0	25.55	14.16	18.57	0.00	0.16	2.74	0.85	1.00	0.00	19.90	167.42	0.00	3,961.5	0.0	1,894.05	4,132.3	6,026.41
6	110.0	24.36	16.35	18.58	0.00	0.14	2.80	0.85	1.00	0.00	21.59	168.28	0.00	4,080.5	0.0	2,005.46	3,960.3	5,965.79
5	90.00	23.01	22.17	22.12	0.00	0.15	2.76	0.85	1.00	0.00	28.14	168.39	0.00	4,513.9	0.0	2,429.42	3,742.0	6,171.44
4	70.00	21.41	21.08	22.12	0.00	0.13	2.84	0.85	1.00	0.00	26.98	170.17	0.00	4,778.1	0.0	2,231.56	3,520.1	5,751.72
3	50.00	19.45	22.98	28.80	0.00	0.14	2.81	0.85	1.00	0.00	31.44	170.38	0.00	5,134.9	0.0	2,339.06	3,201.5	5,540.57
2	30.00	16.81	28.71	28.80	0.00	0.14	2.81	0.85	1.00	0.00	36.30	170.38	0.00	5,441.6	0.0	2,334.33	2,766.7	5,101.07
1	10.00	16.79	31.13	28.80	0.00	0.13	2.84	0.85	1.00	0.00	38.26	102.73	0.00	5,321.0	0.0	2,480.95	1,672.3	4,153.30
													40,125.0	0.0			51,230.47	

**LoadCase 1.2D + 1.0Di + 1.0Wi Normal**

50.00 mph Normal with 0.75 in Radial Ice

Gust Response Factor : 0.85  
 Dead Load Factor : 1.20  
 Wind Load Factor : 1.00  
 Ice Dead Load Factor : 1.00

Wind Importance Factor : 1.00  
 Ice Importance Factor : 1.00

Sect Seq	Height (ft)	Wind qz (psf)	Total Area			Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Ice Weight		Struct Force (lb)	Linear Force (lb)	Total Force (lb)	
			Flat (sqft)	Round Area (sqft)	Ice Round Area (sqft)								Total (lb)	Ice (lb)				
10	188.0	6.44	7.86	30.08	29.93	0.33	2.22	1.00	1.00	1.79	30.73	52.99	22.69	5,224.7	3,606.4	373.67	369.41	743.09
9	170.0	6.26	9.98	37.08	34.68	0.32	2.24	1.00	1.00	1.77	38.06	144.86	148.13	11,520.4	8,384.5	453.30	1,034.2	1,487.51
8	150.0	6.04	12.83	50.06	35.03	0.37	2.12	1.00	1.00	1.75	44.09	200.76	200.59	15,141.8	10,705.	480.26	1,326.4	1,806.67
7	130.0	5.79	14.16	50.35	31.78	0.30	2.28	1.00	1.00	1.72	44.39	224.53	207.54	16,659.3	11,377.	499.25	1,443.2	1,942.44
6	110.0	5.52	16.35	52.79	34.21	0.27	2.37	1.00	1.00	1.69	47.56	224.54	215.64	17,028.0	11,587.	528.76	1,435.4	1,964.24
5	90.00	5.22	22.17	58.62	36.50	0.27	2.37	1.00	1.00	1.66	56.84	223.64	221.74	18,213.1	12,194.	596.25	1,376.9	1,973.20
4	70.00	4.86	21.08	53.00	30.88	0.22	2.52	1.00	1.00	1.62	51.75	224.19	226.64	18,139.9	11,769.	539.09	1,346.7	1,885.82
3	50.00	4.41	22.98	60.53	31.73	0.22	2.53	1.00	1.00	1.56	58.00	222.79	221.83	18,634.8	11,788.	549.66	1,205.9	1,755.55
2	30.00	3.81	28.71	60.76	31.96	0.21	2.55	1.00	1.00	1.49	63.77	220.45	213.27	18,897.8	11,642.	527.18	1,017.9	1,545.10
1	10.00	3.81	31.13	59.05	30.25	0.20	2.61	1.00	1.00	1.33	65.01	130.66	117.76	14,924.4	7,829.7	548.74	586.09	1,134.83
													154,384.2	100,884.			16,238.45	

**LoadCase 1.2D + 1.0Di + 1.0Wi 60 deg**

50.00 mph 60 deg with 0.75 in Radial Ice

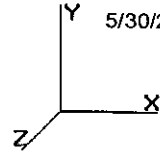
Gust Response Factor : 0.85  
 Dead Load Factor : 1.20  
 Wind Load Factor : 1.00  
 Ice Dead Load Factor : 1.00

Wind Importance Factor : 1.00  
 Ice Importance Factor : 1.00

Sect Seq	Height (ft)	Wind qz (psf)	Total Area			Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Ice Weight		Struct Force (lb)	Linear Force (lb)	Total Force (lb)	
			Flat (sqft)	Round Area (sqft)	Ice Round Area (sqft)								Total (lb)	Ice (lb)				
10	188.0	6.44	7.86	30.08	29.93	0.33	2.22	0.80	1.00	1.79	29.16	52.99	22.69	5,224.7	3,606.4	354.57	369.41	723.98

Site Number: 302470  
 Location: Ansonia Wakelee, CT  
 Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure : B  
 Topo : 1

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**Section Forces**

9	170.0	6.26	9.98	37.08	34.68	0.32	2.24	0.80	1.00	1.77	36.07	144.86	148.13	11,520.4	8,384.5	429.54	1,034.2	1,463.74	
8	150.0	6.04	12.83	50.06	35.03	0.37	2.12	0.80	1.00	1.75	41.52	200.76	200.59	15,141.8	10,705.	452.30	1,326.4	1,778.72	
7	130.0	5.79	14.16	50.35	31.78	0.30	2.28	0.80	1.00	1.72	41.56	224.53	207.54	16,659.3	11,377.	467.40	1,443.2	1,910.59	
6	110.0	5.52	16.35	52.79	34.21	0.27	2.37	0.80	1.00	1.69	44.29	224.54	215.64	17,028.0	11,587.	492.41	1,435.4	1,927.89	
5	90.00	5.22	22.17	58.62	36.50	0.27	2.37	0.80	1.00	1.66	52.40	223.64	221.74	18,213.1	12,194.	549.73	1,376.9	1,926.68	
4	70.00	4.86	21.08	53.00	30.88	0.22	2.52	0.80	1.00	1.62	47.54	224.19	226.64	18,139.9	11,769.	495.16	1,346.7	1,841.90	
3	50.00	4.41	22.98	60.53	31.73	0.22	2.53	0.80	1.00	1.56	53.40	222.79	221.83	18,634.8	11,788.	506.09	1,205.9	1,711.99	
2	30.00	3.81	28.71	60.76	31.96	0.21	2.55	0.80	1.00	1.49	58.03	220.45	213.27	18,897.8	11,642.	479.71	1,017.9	1,497.63	
1	10.00	3.81	31.13	59.05	30.25	0.20	2.61	0.80	1.00	1.33	58.79	130.66	117.76	14,924.4	7,829.7	496.19	586.09	1,082.28	
															154,384.2	100,884.			15,865.40

**LoadCase 1.2D + 1.0Di + 1.0Wi 90 deg**

50.00 mph 90 deg with 0.75 in Radial Ice

Gust Response Factor : 0.85  
 Dead Load Factor : 1.20  
 Wind Load Factor : 1.00

Ice Dead Load Factor : 1.00

Wind Importance Factor : 1.00  
 Ice Importance Factor : 1.00

Sect Seq	Wind Height (ft)	qz (psf)	Total			Ice Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Ice			Struct Force (lb)	Linear Force (lb)	Total Force (lb)		
			Flat Area (sqft)	Total Round Area (sqft)	Total Round Area (sqft)							Linear Area (sqft)	Linear Area (sqft)	Total Weight (lb)				Ice Weight (lb)	
10	188.0	6.44	7.86	30.08	29.93	0.33	2.22	0.85	1.00	1.79	29.56	52.99	22.69	5,224.7	3,606.4	359.34	369.41	728.76	
9	170.0	6.26	9.98	37.08	34.68	0.32	2.24	0.85	1.00	1.77	36.57	144.86	148.13	11,520.4	8,384.5	435.48	1,034.2	1,469.68	
8	150.0	6.04	12.83	50.06	35.03	0.37	2.12	0.85	1.00	1.75	42.17	200.76	200.59	15,141.8	10,705.	459.29	1,326.4	1,785.70	
7	130.0	5.79	14.16	50.35	31.78	0.30	2.28	0.85	1.00	1.72	42.27	224.53	207.54	16,659.3	11,377.	475.36	1,443.2	1,918.55	
6	110.0	5.52	16.35	52.79	34.21	0.27	2.37	0.85	1.00	1.69	45.11	224.54	215.64	17,028.0	11,587.	501.50	1,435.4	1,936.98	
5	90.00	5.22	22.17	58.62	36.50	0.27	2.37	0.85	1.00	1.66	53.51	223.64	221.74	18,213.1	12,194.	561.36	1,376.9	1,938.31	
4	70.00	4.86	21.08	53.00	30.88	0.22	2.52	0.85	1.00	1.62	48.59	224.19	226.64	18,139.9	11,769.	506.15	1,346.7	1,852.88	
3	50.00	4.41	22.98	60.53	31.73	0.22	2.53	0.85	1.00	1.56	54.55	222.79	221.83	18,634.8	11,788.	516.98	1,205.9	1,722.88	
2	30.00	3.81	28.71	60.76	31.96	0.21	2.55	0.85	1.00	1.49	59.46	220.45	213.27	18,897.8	11,642.	491.57	1,017.9	1,509.50	
1	10.00	3.81	31.13	59.05	30.25	0.20	2.61	0.85	1.00	1.33	60.35	130.66	117.76	14,924.4	7,829.7	509.33	586.09	1,095.42	
															154,384.2	100,884.			15,958.66

**LoadCase 1.0D + 1.0W Service Normal**

Serviceability - 60.00 Wind Normal

Gust Response Factor : 0.85  
 Dead Load Factor : 1.00  
 Wind Load Factor : 1.00

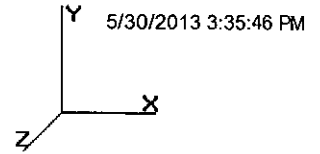
Wind Importance Factor : 1.00

Sect Seq	Wind Height (ft)	qz (psf)	Total			Ice Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Ice			Struct Force (lb)	Linear Force (lb)	Total Force (lb)		
			Flat Area (sqft)	Total Round Area (sqft)	Total Round Area (sqft)							Linear Area (sqft)	Linear Area (sqft)	Total Weight (lb)				Ice Weight (lb)	
10	188.0	9.27	9.82	7.67	0.00	0.16	2.74	1.00	1.00	0.00	14.18	34.61	0.00	1,348.6	0.0	306.36	242.76	549.12	
9	170.0	9.01	12.47	11.67	0.00	0.17	2.69	1.00	1.00	0.00	19.12	107.84	0.00	2,613.3	0.0	394.21	563.94	958.15	
8	150.0	8.69	12.83	15.03	0.00	0.17	2.70	1.00	1.00	0.00	21.40	150.76	0.00	3,697.4	0.0	426.46	778.62	1,205.08	
7	130.0	8.34	14.16	18.57	0.00	0.16	2.74	1.00	1.00	0.00	24.72	167.42	0.00	4,401.7	0.0	480.19	843.34	1,323.53	
6	110.0	7.96	16.35	18.58	0.00	0.14	2.80	1.00	1.00	0.00	26.88	168.28	0.00	4,533.9	0.0	509.37	808.23	1,317.60	
5	90.00	7.51	22.17	22.12	0.00	0.15	2.76	1.00	1.00	0.00	31.47	168.39	0.00	5,015.5	0.0	554.39	763.68	1,318.06	
4	70.00	6.99	21.08	22.12	0.00	0.13	2.84	1.00	1.00	0.00	33.60	170.17	0.00	5,309.0	0.0	567.18	718.40	1,285.58	
3	50.00	6.35	22.98	28.80	0.00	0.14	2.81	1.00	1.00	0.00	34.88	170.38	0.00	5,705.5	0.0	529.71	653.37	1,183.08	
2	30.00	5.49	28.71	28.80	0.00	0.14	2.81	1.00	1.00	0.00	40.61	170.38	0.00	6,046.2	0.0	532.91	564.64	1,097.56	
1	10.00	5.48	31.13	28.80	0.00	0.13	2.84	1.00	1.00	0.00	42.93	102.73	0.00	5,912.3	0.0	568.11	341.30	909.41	
															44,583.4	0.0			11,147.16



Site Number: 302470  
 Location: Ansonia Wakelee, CT  
 Code: ANSI/TIA-222 Rev G  
 Struct Class: II  
 Exposure: B  
 Topo: 1

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### Section Forces

**LoadCase 1.0D + 1.0W Service 60 deg**

Serviceability - 60.00 Wind 60 deg

Gust Response Factor : 0.85  
 Dead Load Factor : 1.00  
 Wind Load Factor : 1.00

Wind Importance Factor : 1.00

Sect Seq	Height (ft)	qz (psf)	Total Area		Ice Area		Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Ice Linear Area (sqft)	Total Weight (lb)	Ice Weight (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
			Flat (sqft)	Round (sqft)	Round (sqft)	Round (sqft)													
10	188.0	9.27	9.82	7.67	0.00	0.16	2.74	0.80	1.00	0.00	12.22	34.61	0.00	1,348.6	0.0	263.92	242.76	506.68	
9	170.0	9.01	12.47	11.67	0.00	0.17	2.69	0.80	1.00	0.00	16.63	107.84	0.00	2,613.3	0.0	342.79	563.94	906.73	
8	150.0	8.69	12.83	15.03	0.00	0.17	2.70	0.80	1.00	0.00	18.83	150.76	0.00	3,697.4	0.0	375.30	778.62	1,153.92	
7	130.0	8.34	14.16	18.57	0.00	0.16	2.74	0.80	1.00	0.00	21.89	167.42	0.00	4,401.7	0.0	425.18	843.34	1,268.52	
6	110.0	7.96	16.35	18.58	0.00	0.14	2.80	0.80	1.00	0.00	23.61	168.28	0.00	4,533.9	0.0	447.41	808.23	1,255.64	
5	90.00	7.51	22.17	22.12	0.00	0.15	2.76	0.80	1.00	0.00	27.04	168.39	0.00	5,015.5	0.0	476.27	763.68	1,239.95	
4	70.00	6.99	21.08	22.12	0.00	0.13	2.84	0.80	1.00	0.00	29.39	170.17	0.00	5,309.0	0.0	496.00	718.40	1,214.40	
3	50.00	6.35	22.98	28.80	0.00	0.14	2.81	0.80	1.00	0.00	30.29	170.38	0.00	5,705.5	0.0	459.91	653.37	1,113.28	
2	30.00	5.49	28.71	28.80	0.00	0.14	2.81	0.80	1.00	0.00	34.87	170.38	0.00	6,046.2	0.0	457.55	564.64	1,022.20	
1	10.00	5.48	31.13	28.80	0.00	0.13	2.84	0.80	1.00	0.00	36.70	102.73	0.00	5,912.3	0.0	485.72	341.30	827.01	
														44,583.4	0.0				

**LoadCase 1.0D + 1.0W Service 90 deg**

105.00 Serviceability - 60.00 Wind 90 deg

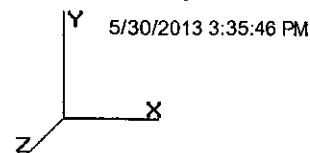
Gust Response Factor : 0.85  
 Dead Load Factor : 1.00  
 Wind Load Factor : 1.00

Wind Importance Factor : 1.00

Sect Seq	Height (ft)	qz (psf)	Total Area		Ice Area		Sol Ratio	Cf	Df	Dr	Ice Thick (in)	Eff Area (sqft)	Linear Area (sqft)	Ice Linear Area (sqft)	Total Weight (lb)	Ice Weight (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)
			Flat (sqft)	Round (sqft)	Round (sqft)	Round (sqft)													
10	188.0	28.39	9.82	7.67	0.00	0.16	2.74	0.85	1.00	0.00	12.71	34.61	0.00	1,348.6	0.0	840.73	743.46	1,584.19	
9	170.0	27.59	12.47	11.67	0.00	0.17	2.69	0.85	1.00	0.00	15.62	107.84	0.00	2,613.3	0.0	986.09	1,748.5	2,734.68	
8	150.0	26.62	12.83	15.03	0.00	0.17	2.70	0.85	1.00	0.00	17.36	150.76	0.00	3,697.4	0.0	1,059.62	2,446.6	3,506.22	
7	130.0	25.55	14.16	18.57	0.00	0.16	2.74	0.85	1.00	0.00	19.90	167.42	0.00	4,401.7	0.0	1,183.78	2,582.7	3,766.51	
6	110.0	24.36	16.35	18.58	0.00	0.14	2.80	0.85	1.00	0.00	21.59	168.28	0.00	4,533.9	0.0	1,253.41	2,475.2	3,728.62	
5	90.00	23.01	22.17	22.12	0.00	0.15	2.76	0.85	1.00	0.00	28.14	168.39	0.00	5,015.5	0.0	1,518.39	2,338.7	3,857.15	
4	70.00	21.41	21.08	22.12	0.00	0.13	2.84	0.85	1.00	0.00	26.98	170.17	0.00	5,309.0	0.0	1,394.72	2,200.1	3,594.83	
3	50.00	19.45	22.98	28.80	0.00	0.14	2.81	0.85	1.00	0.00	31.44	170.38	0.00	5,705.5	0.0	1,461.91	2,000.9	3,462.85	
2	30.00	16.81	28.71	28.80	0.00	0.14	2.81	0.85	1.00	0.00	36.30	170.38	0.00	6,046.2	0.0	1,458.95	1,729.2	3,188.17	
1	10.00	16.79	31.13	28.80	0.00	0.13	2.84	0.85	1.00	0.00	38.26	102.73	0.00	5,912.3	0.0	1,550.59	1,045.2	2,595.81	
														44,583.4	0.0				

Site Number: 302470  
 Location: Ansonia Wakelee, CT  
 Code: ANSI/TIA-222 Rev G  
 Struct Class: II  
 Exposure: B  
 Topo: 1

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### Tower Loading

#### Discrete Appurtenance Properties

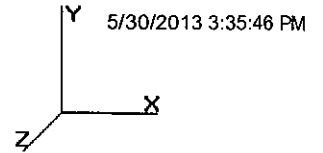
Attach Elev (ft)	Description	Qty	No Ice		Ice		Len (ft)	Width (in)	Depth (in)	Ka	Orientation Factor	Vert Ecc (ft)
			Weight (lb)	CaAa (sf)	Weight (lb)	CaAa (sf)						
194.0	Argus LLPX310R	3	28.60	4.290	38.81	5.822	3.500	11.80	4.500	0.80	0.73	0.000
194.0	DragonWave A-ANT-18G-2-C	2	27.10	5.680	127.12	7.708	2.170	0.000	0.000	0.80	1.00	0.000
194.0	NextNet BTS-2500	3	35.00	1.820	47.50	2.470	1.583	11.30	5.100	0.80	0.50	0.000
194.0	DragonWave Horizon	2	10.60	0.360	14.38	0.488	0.392	9.300	9.300	0.80	0.50	0.000
194.0	KMW TTA (HB-X-WM-17-65-	3	15.90	0.560	21.58	0.760	1.325	7.300	3.700	0.80	0.50	0.000
194.0	Round Sector Frames	3	300.00	14.400	677.01	31.365	0.000	0.000	0.000	0.75	0.75	0.000
194.0	72" x 12" Panels	3	40.00	8.130	54.28	11.033	6.000	12.00	6.000	0.80	0.67	0.000
194.0	48" x 12" Panels	9	30.00	5.070	40.71	6.880	4.000	12.00	6.000	0.80	0.67	0.000
183.0	Powerwave P40-16-XLPP-	2	64.00	9.070	279.33	10.346	4.500	20.00	6.500	0.80	0.69	2.000
183.0	Andrew DB980H90E-M	6	8.50	3.900	105.35	4.974	5.000	6.300	3.000	0.80	0.79	2.000
183.0	RFS APXVSP18-C-A20	1	57.00	8.020	262.15	9.346	6.000	11.80	7.000	0.80	1.00	2.000
183.0	Alcatel-Lucent 800 MHz RRH	3	53.00	2.130	142.87	2.761	1.640	13.00	10.80	0.80	0.67	2.000
183.0	Alcatel-Lucent 1900 MHz	3	60.00	2.320	157.84	3.010	2.090	11.10	10.70	0.80	0.67	2.000
183.0	Round Sector Frames	3	300.00	14.400	621.31	24.682	0.000	0.000	0.000	0.75	0.75	0.000
179.0	RFS FD9R6004/2C-3L	6	3.10	0.310	16.54	0.586	0.483	6.500	1.500	0.80	0.50	3.000
179.0	Antel BXA-171063-8CF-EDIN-X	3	10.50	2.940	95.19	3.819	4.040	6.100	4.100	0.80	0.87	3.000
179.0	Antel BXA-80080/4CF	3	14.30	4.800	143.95	5.773	4.010	11.20	5.900	0.80	0.80	3.000
179.0	RFS FD9R6004/2C-3L	6	3.10	0.310	16.54	0.586	0.483	6.500	1.500	0.80	0.50	3.000
179.0	Flat Light Sector Frames	3	400.00	17.900	705.37	33.210	0.000	0.000	0.000	0.75	0.75	0.000
179.0	Powerwave P65-16-XL-2	3	33.00	8.130	217.53	9.447	6.000	12.00	5.000	0.80	0.75	3.000
179.0	Ryma MGD3-800TX	3	15.40	3.340	20.84	4.521	4.530	6.300	3.500	0.80	0.82	3.000
167.0	72" x 12" Panel	9	45.00	8.130	239.56	9.447	6.000	12.00	6.000	0.80	0.67	0.000
167.0	36" x 8" x 6" Panel	3	25.00	2.580	109.90	3.323	3.000	8.000	6.000	0.80	0.67	0.000
167.0	Ericsson RRUS 11	6	55.00	2.520	136.67	3.174	1.480	17.00	7.200	0.80	0.67	0.000
167.0	Raycap DC6-48-60-18-8F	1	31.80	2.280	126.19	2.862	2.000	11.00	11.00	0.80	1.00	0.000
167.0	Round Sector Frames	3	300.00	14.400	618.10	24.579	0.000	0.000	0.000	0.75	0.75	0.000
167.0	14" x 9" TTA	9	10.00	1.050	13.53	1.198	1.167	9.000	6.000	0.80	0.50	0.000
157.0	Kathrein 742 213	3	22.00	5.140	134.99	6.407	6.370	6.100	2.700	1.00	0.78	0.000
148.0	Ericsson KRY 112 144/1	3	11.00	0.350	27.39	0.635	0.580	6.100	2.700	0.80	0.50	0.000
148.0	Ericsson AIR 21, 1.3M, B4A	3	81.50	6.090	250.49	7.193	4.670	12.10	7.900	0.80	0.85	0.000
148.0	Ericsson AIR 21, 1.3M, B2A	3	83.00	6.050	252.04	7.148	4.670	12.00	8.000	0.80	0.86	0.000
148.0	Round Sector Frame	3	300.00	14.400	668.59	30.986	0.000	0.000	0.000	0.75	0.75	0.000
125.0	Motorola PTP54600	2	12.10	1.750	16.26	2.352	1.210	14.50	3.800	1.00	0.73	0.000
104.0	Side Arms	2	200.00	2.000	267.68	2.271	0.000	0.000	0.000	1.00	0.85	0.000
104.0	2" x 8" GPS	2	0.26	0.140	0.40	0.466	0.670	2.000	2.000	0.90	1.00	0.000
82.00	Side Arm	1	200.00	2.000	266.33	2.265	0.000	0.000	0.000	1.00	1.00	0.000
82.00	10' Omni	1	25.00	3.000	33.29	3.995	10.00	3.000	3.000	1.00	1.00	5.000
76.00	Side Arm	1	200.00	2.000	264.69	2.259	0.000	0.000	0.000	1.00	1.00	0.000
76.00	PCTEL GPS-TMG-HR-26N	1	0.60	0.080	9.99	0.313	0.417	3.200	3.200	1.00	1.00	0.000
<b>Totals</b>		<b>129</b>	<b>8710.32</b>		<b>21684.53</b>					<b>Number of Appurtenances : 39</b>		

#### 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
5.00	194.0	Climbing Ladder	1	2.00	6.90	0	Lin App	Individual	0.00	N	1.00	1.00	0.00
8.00	194.0	1 1/4" Coax	10	1.55	0.63	70	3	Block	0.00	N	0.00	1.00	0.00

Site Number: 302470  
 Location: Ansonia Wakelee, CT  
 Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure : B  
 Topo : 1

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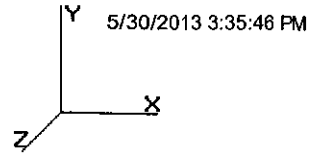
**Tower Loading**

8.00	194.0	1 5/8" Coax	6	1.98	0.82	50	3	Block	0.00	N	0.00	1.00	0.00
8.00	194.0	1/2" Coax	2	0.63	0.15	0	2	Individual	0.00	N	1.00	1.00	0.00
8.00	194.0	3" Conduit	2	3.00	7.58	0	Lin App	Individual	0.00	N	1.00	1.00	0.00
8.00	194.0	5/16" Coax	6	0.00	0.04	50	2	Block	0.00	N	0.00	0.00	0.01
8.00	194.0	Wave Guide	2	1.00	5.00	50	3	Block	0.00	N	0.00	1.00	0.00
8.00	183.0	1 1/4" Hybriflex	3	0.00	1.00	0	Lin App	Individual	0.00	N	0.00	1.00	0.00
8.00	183.0	7/8" Coax	6	1.09	0.33	0	2	Cluster	9.84	N	0.00	1.00	0.00
8.00	183.0	Wave Guide	1	1.00	5.00	0	2	Individual	0.00	N	0.00	1.00	0.00
8.00	179.0	1 5/8" Coax	6	1.98	0.82	0	3	Individual	0.00	N	0.00	1.00	0.01
8.00	179.0	1 5/8" Coax	6	1.98	0.82	0	Lin App	Individual	0.00	N	1.00	1.00	0.00
8.00	167.0	0.39" Cable	1	0.39	0.07	0	Lin App	Individual	0.00	N	0.00	1.00	0.00
8.00	167.0	0.78" 8 AWG 6	2	0.78	0.59	0	Lin App	Individual	0.00	N	0.00	1.00	0.00
8.00	167.0	1 5/8" Coax	12	1.98	0.82	0	1	Cluster	12.25	N	0.00	1.00	0.00
8.00	167.0	3" Conduit	1	3.50	7.58	0	Lin App	Individual	0.00	N	1.00	1.00	0.00
8.00	167.0	Wave Guide	1	1.00	5.00	0	1	Individual	0.00	N	0.00	1.00	0.00
8.00	157.0	1 5/8" Coax	6	1.98	0.82	0	1	Cluster	7.81	N	0.00	1.00	0.00
8.00	157.0	Waveguide	1	0.00	6.00	0	Lin App	Individual	0.00	N	1.00	1.00	0.00
8.00	148.0	1 1/4" Hybriflex	1	1.54	1.00	0	Lin App	Individual	0.00	N	1.00	1.00	0.01
8.00	148.0	1 5/8" Coax	12	1.98	0.82	50	3	Block	0.00	N	0.00	1.00	0.00
8.00	148.0	Wave Guide	1	1.00	5.00	0	3	Individual	0.00	N	0.00	1.00	0.00
8.00	125.0	1/4" Coax	2	0.34	0.06	0	1	Individual	0.00	N	0.00	1.00	0.00
8.00	104.0	1/2" Coax	2	0.00	0.15	0	3	Individual	0.00	N	0.00	1.00	0.00
8.00	82.00	1/2" Coax	1	0.63	0.15	0	1	Individual	0.00	N	0.00	1.00	0.00
8.00	76.00	1/2" Coax	1	0.63	0.15	0	2	Individual	0.00	N	0.00	1.00	0.00



Site Number: 302470  
 Location: Ansonia Wakelee, CT  
 Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure : B  
 Topo : 1

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**Force/Stress Summary**

**Section: 1 15N25 Bot Elev (ft): 0.00 Height (ft): 20.000**

		Force	Len	Bracing %			Fy	phi	Num		Shear	Bear	Use		
		(kip)	(ft)	X	Y	Z	(ksi)	Pn	Num	Holes	phiRnv	phiRn	%	Controls	
Max Compression Member		Load Case						(kip)	Bo	Ho	(kip)	(kip)			
LEG	PX - 8" DIA PIPE	-397.97 1.2D + 1.6W	9.77	100	100	100	40.7	50.0	0	0	0.00	0.00	77	Member X	
HORIZ		0.00	0.000	0	0	0	0.0	0.0	0	0	0.00	0.00	0		
DIAG	SAE - 4X4X0.25	-12.39 1.2D + 1.6W 90	23.62	50	50	50	178.3	43.5	1	1	17.89	23.40	89	Member Z	

Max Tension Member		Force	Fy	Fu	phi	Pn	Num	Num	Shear	Bear	Use		
		(kip)	(ksi)	(ksi)	(kip)	Bo	Ho	Cap	Cap	(kip)	%	Controls	
		Load Case						(kip)	(kip)				
LEG	PX - 8" DIA PIPE	356.01 0.9D + 1.6W 60	50	65	576.00	0	0	0.00	0.00	61	Member		
HORIZ		0.00	0	0	0.00	0	0	0.00	0.00	0			
DIAG	SAE - 4X4X0.25	12.15 1.2D + 1.6W 90	50	65	62.93	1	1	0.00	23.40	19	Member		

Max Splice Forces		Force	Capacity	Use	Num		
		(kip)	(kip)	%	Bo	Bolt Type	
		Load Case					
Top Tension		324.63 0.9D + 1.6W 60	0.00	0	0		
Top Compression		372.26 1.2D + 1.6W	0.00	0			
Bot Tension		356.01 0.9D + 1.6W 60	605.70	59	10 1" A354-BC		
Bot Compression		408.05 1.2D + 1.6W	0.00	0			

**Section: 2 14N46 Bot Elev (ft): 20.00 Height (ft): 20.000**

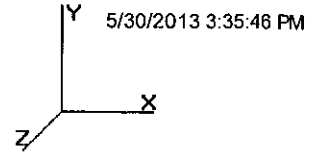
		Force	Len	Bracing %			Fy	phi	Num		Shear	Bear	Use		
		(kip)	(ft)	X	Y	Z	(ksi)	Pn	Num	Holes	phiRnv	phiRn	%	Controls	
Max Compression Member		Load Case						(kip)	Bo	Ho	(kip)	(kip)			
LEG	PSP - ROHN 8 EHS	-360.75 1.2D + 1.6W	9.77	100	100	100	40.1	50.0	0	0	0.00	0.00	92	Member X	
HORIZ		0.00	0.000	0	0	0	0.0	0.0	0	0	0.00	0.00	0		
DIAG	SAE - 4X4X0.25	-11.95 1.2D + 1.6W 90	22.69	50	50	50	171.3	43.5	1	1	17.89	23.40	79	Member Z	

Max Tension Member		Force	Fy	Fu	phi	Pn	Num	Num	Shear	Bear	Use		
		(kip)	(ksi)	(ksi)	(kip)	Bo	Ho	Cap	Cap	(kip)	%	Controls	
		Load Case						(kip)	(kip)				
LEG	PSP - ROHN 8 EHS	324.97 0.9D + 1.6W 60	50	65	437.40	0	0	0.00	0.00	74	Member		
HORIZ		0.00	0	0	0.00	0	0	0.00	0.00	0			
DIAG	SAE - 4X4X0.25	11.61 1.2D + 1.6W 90	50	65	62.93	1	1	0.00	23.40	18	Member		

Max Splice Forces		Force	Capacity	Use	Num		
		(kip)	(kip)	%	Bo	Bolt Type	
		Load Case					
Top Tension		290.75 0.9D + 1.6W 60	0.00	0	0		
Top Compression		332.54 1.2D + 1.6W	0.00	0			
Bot Tension		324.63 0.9D + 1.6W 60	436.16	74	8 1 A325		
Bot Compression		372.26 1.2D + 1.6W	0.00	0			

Site Number: 302470  
 Location: Ansonia Wakelee, CT  
 Code: ANSI/TIA-222 Rev G  
 Struct Class: II  
 Exposure: B  
 Topo: 1

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### Force/Stress Summary

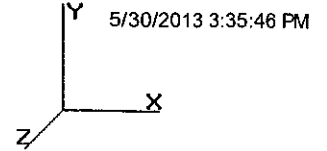
Section: 3		13N88		Bot Elev (ft): 40.00				Height (ft): 20.000							
Max Compression Member		Force (kip)	Load Case	Len (ft)	Bracing %			F'y (ksi)	phi Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG	PSP - ROHN 8 EHS	-321.52	1.2D + 1.6W	9.77	100	100	100	40.1	50.0	388.78	0	0	0.00	0.00	82 Member X
HORIZ		0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0
DIAG	SAE - 3.5X3.5X0.25	-10.79	1.2D + 1.6W 90	20.87	50	50	50	180.5	49.5	11.72	1	1	17.89	23.40	92 Member Z
Max Tension Member		Force (kip)	Load Case	Fy (ksi)	Fu (ksi)	phi Pn (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls			
LEG	PSP - ROHN 8 EHS	291.23	0.9D + 1.6W 60	50	65	437.40	0	0	0.00	0.00	66	Member			
HORIZ		0.00		0	0	0.00	0	0	0.00	0.00	0				
DIAG	SAE - 3.5X3.5X0.25	10.55	1.2D + 1.6W 90	50	65	53.79	1	1	0.00	23.40	19	Member			
Max Splice Forces		Force (kip)	Load Case	Capacity (kip)	Use %	Num Bolts		Bolt Type							
Top Tension		257.34	0.9D + 1.6W 60	0.00	0	0									
Top Compression		293.38	1.2D + 1.6W	0.00	0										
Bot Tension		290.75	0.9D + 1.6W 60	436.16	67	8		1 A325							
Bot Compression		332.54	1.2D + 1.6W	0.00	0										

Section: 4		12N50		Bot Elev (ft): 60.00				Height (ft): 20.000							
Max Compression Member		Force (kip)	Load Case	Len (ft)	Bracing %			F'y (ksi)	phi Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG	PX - 6" DIA PIPE	-281.79	1.2D + 1.6W	9.77	100	100	100	53.4	50.0	306.88	0	0	0.00	0.00	91 Member X
HORIZ		0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0
DIAG	SAE - 3.5X3.5X0.25	-10.55	1.2D + 1.6W 90	19.04	50	50	50	164.6	49.5	14.08	1	1	17.89	23.40	74 Member Z
Max Tension Member		Force (kip)	Load Case	Fy (ksi)	Fu (ksi)	phi Pn (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls			
LEG	PX - 6" DIA PIPE	257.70	0.9D + 1.6W 60	50	65	378.00	0	0	0.00	0.00	68	Member			
HORIZ		0.00		0	0	0.00	0	0	0.00	0.00	0				
DIAG	SAE - 3.5X3.5X0.25	10.29	1.2D + 1.6W 90	50	65	53.79	1	1	0.00	23.40	19	Member			
Max Splice Forces		Force (kip)	Load Case	Capacity (kip)	Use %	Num Bolts		Bolt Type							
Top Tension		221.04	0.9D + 1.6W 60	0.00	0	0									
Top Compression		251.44	1.2D + 1.6W	0.00	0										
Bot Tension		257.34	0.9D + 1.6W 60	436.16	59	8		1 A325							
Bot Compression		293.38	1.2D + 1.6W	0.00	0										

Site Number: 302470  
 Location: Ansonia Wakelee, CT  
 Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure : B  
 Topo : 1

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### Force/Stress Summary

**Section: 5    11N223                      Bot Elev (ft): 80.00                      Height (ft): 20.000**

Max Compression Member	Force (kip)	Load Case	Len (ft)	Bracing %			Fy (ksi)	phi Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
				X	Y	Z								
LEG PSP - ROHN 6 EHS	-242.50	1.2D + 1.6W	6.51	100	100	100	35.1	50.0	275.92	0	0	0.00	0.00	87 Member X
HORIZ	0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0
DIAG SAE - 3X3X0.25	-9.59	1.2D + 1.6W 90	15.90	50	50	50	161.2	50.0	12.52	1	1	17.89	23.40	76 Member Z

Max Tension Member	Force (kip)	Load Case	Fy (ksi)	Fu (ksi)	phi Pn (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls
LEG PSP - ROHN 6 EHS	221.37	0.9D + 1.6W 60	50	65	301.95	0	0	0.00	0.00	73	Member
HORIZ	0.00		0	0	0.00	0	0	0.00	0.00	0	
DIAG SAE - 3X3X0.25	9.39	1.2D + 1.6W 90	50	65	44.65	1	1	0.00	23.40	21	Member

Max Splice Forces	Force (kip)	Load Case	Capacity (kip)	Use %	Num Bolts	Bolt Type
Top Tension	182.14	0.9D + 1.6W 60	0.00	0	0	
Top Compression	207.01	1.2D + 1.6W	0.00	0		
Bot Tension	221.04	0.9D + 1.6W 60	327.12	68	6	1 A325
Bot Compression	251.44	1.2D + 1.6W	0.00	0		

**Section: 6    10N152                      Bot Elev (ft): 100.0                      Height (ft): 20.000**

Max Compression Member	Force (kip)	Load Case	Len (ft)	Bracing %			Fy (ksi)	phi Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
				X	Y	Z								
LEG PX - 5" DIA PIPE	-198.85	1.2D + 1.6W	6.51	100	100	100	42.5	50.0	240.98	0	0	0.00	0.00	82 Member X
HORIZ	0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0
DIAG SAE - 2.5X2.5X0.25	-8.15	1.2D + 1.6W 90	14.13	50	50	50	172.8	36.0	9.01	1	1	12.43	17.40	90 Member Z

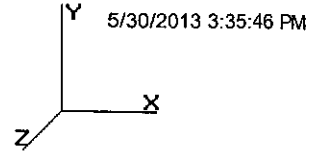
Max Tension Member	Force (kip)	Load Case	Fy (ksi)	Fu (ksi)	phi Pn (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls
LEG PX - 5" DIA PIPE	182.45	0.9D + 1.6W 60	50	65	274.95	0	0	0.00	0.00	66	Member
HORIZ	0.00		0	0	0.00	0	0	0.00	0.00	0	
DIAG SAE - 2.5X2.5X0.25	8.19	1.2D + 1.6W 90	36	58	32.71	1	1	0.00	17.40	25	Member

Max Splice Forces	Force (kip)	Load Case	Capacity (kip)	Use %	Num Bolts	Bolt Type
Top Tension	144.01	0.9D + 1.6W 60	0.00	0	0	
Top Compression	164.04	1.2D + 1.6W	0.00	0		
Bot Tension	182.14	0.9D + 1.6W 60	327.12	56	6	1 A325
Bot Compression	207.01	1.2D + 1.6W	0.00	0		



Site Number: 302470  
 Location: Ansonia Wakelee, CT  
 Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure : B  
 Topo : 1

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### Force/Stress Summary

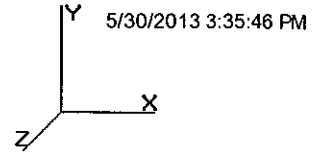
Section: 7		9N216		Bot Elev (ft): 120.0				Height (ft): 20.000								
Max Compression Member		Force (kip)	Load Case	Len (ft)	Bracing %			F'y (ksi)	Fy (ksi)	phi Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG	PX - 5" DIA PIPE	-155.18	1.2D + 1.6W	6.51	100	100	100	42.5	50.0	240.99	0	0	0.00	0.00	64	Member X
HORIZ		0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0	
DIAG	SAE - 2.5X2.5X0.25	-7.85	1.2D + 1.6W 90	12.33	50	50	50	150.7	36.0	11.83	1	1	12.43	17.40	66	Member Z
Max Tension Member		Force (kip)	Load Case	Fy (ksi)	Fu (ksi)	phi Pn (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls				
LEG	PX - 5" DIA PIPE	144.23	0.9D + 1.6W 60	50	65	274.95	0	0	0.00	0.00	52	Member				
HORIZ		0.00		0	0	0.00	0	0	0.00	0.00	0					
DIAG	SAE - 2.5X2.5X0.25	7.99	1.2D + 1.6W 90	36	58	32.71	1	1	0.00	17.40	24	Member				
Max Splice Forces		Force (kip)	Load Case	Capacity (kip)	Use %	Num Bolts	Bolt Type									
Top Tension		101.38	0.9D + 1.6W 60	0.00	0	0										
Top Compression		117.09	1.2D + 1.6W	0.00	0											
Bot Tension		144.01	0.9D + 1.6W 60	218.08	66	4	1 A325									
Bot Compression		164.04	1.2D + 1.6W	0.00	0											

Section: 8		A780252		Bot Elev (ft): 140.0				Height (ft): 20.000								
Max Compression Member		Force (kip)	Load Case	Len (ft)	Bracing %			F'y (ksi)	Fy (ksi)	phi Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG	PX - 4" DIA PIPE	-110.30	1.2D + 1.6W	4.88	100	100	100	39.6	50.0	176.95	0	0	0.00	0.00	62	Member X
HORIZ	SAE - 2X2X0.125	-0.35	1.2D + 1.6W 60	6.760	100	100	100	203.8	36.0	2.61	1	1	12.43	8.70	13	Member Z
DIAG	SAE - 2X2X0.25	-6.59	1.2D + 1.6W 90	9.847	50	50	50	151.1	36.0	9.30	1	1	12.43	17.40	70	Member Z
Max Tension Member		Force (kip)	Load Case	Fy (ksi)	Fu (ksi)	phi Pn (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls				
LEG	PX - 4" DIA PIPE	101.64	0.9D + 1.6W 60	50	65	198.45	0	0	0.00	0.00	51	Member				
HORIZ	SAE - 2X2X0.125	0.23	1.2D + 1.6W	36	58	12.60	1	1	0.00	8.70	1	Member				
DIAG	SAE - 2X2X0.25	6.57	1.2D + 1.6W 90	36	58	24.55	1	1	0.00	17.40	26	Member				
Max Splice Forces		Force (kip)	Load Case	Capacity (kip)	Use %	Num Bolts	Bolt Type									
Top Tension		57.59	0.9D + 1.6W 60	0.00	0	0										
Top Compression		68.59	1.2D + 1.6W	0.00	0											
Bot Tension		101.38	0.9D + 1.6W 60	218.08	46	4	1 A325									
Bot Compression		117.09	1.2D + 1.6W	0.00	0											

Site Number: 302470  
 Location: Ansonia Wakelee, CT  
 Code: ANSI/TIA-222 Rev G  
 Struct Class: II  
 Exposure: B  
 Topo: 1

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### Force/Stress Summary

**Section: 9    A780178                      Bot Elev (ft): 160.0                      Height (ft): 20.000**

Max Compression Member		Force (kip)	Load Case	Len (ft)	Bracing %			Fy (ksi)	phi Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG	PX - 3" DIA PIPE	-61.23	1.2D + 1.6W	3.90	100	100	100	41.1	50.0	120.14	0	0	0.00	0.00	50 Member X
HORIZ		0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0
DIAG	SAE - 2X2X0.1875	-7.16	1.2D + 1.6W 90	7.798	50	50	50	119.1	36.0	10.98	2	1	24.86	26.10	65 Member Z

Max Tension Member		Force (kip)	Load Case	Fy (ksi)	Fu (ksi)	phi Pn (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls
LEG	PX - 3" DIA PIPE	57.30	0.9D + 1.6W 60	50	65	135.90	0	0	0.00	0.00	42	Member
HORIZ		0.00		0	0	0.00	0	0	0.00	0.00	0	
DIAG	SAE - 2X2X0.1875	7.06	1.2D + 1.6W 90	36	58	18.74	2	1	0.00	26.10	37	Member

Max Splice Forces		Force (kip)	Load Case	Capacity (kip)	Use %	Num Bolts	Bolt Type
Top Tension		10.07	0.9D + 1.6W 60	0.00	0	0	
Top Compression		14.76	1.2D + 1.6W	0.00	0		
Bot Tension		57.59	0.9D + 1.6W 60	166.24	35	4	7/8 A325
Bot Compression		68.59	1.2D + 1.6W	0.00	0		

**Section: 10    A780178                      Bot Elev (ft): 180.0                      Height (ft): 16.000**

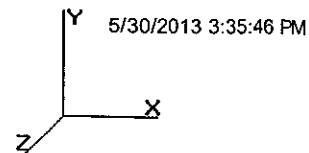
Max Compression Member		Force (kip)	Load Case	Len (ft)	Bracing %			Fy (ksi)	phi Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG	PST - 2-1/2" DIA PIP	-14.61	1.2D + 1.6W	0.25	100	100	100	3.2	50.0	76.62	0	0	0.00	0.00	19 Member X
HORIZ	SAE - 2X2X0.125	-0.35	1.2D + 1.6W 90	6.646	100	100	100	200.4	36.0	2.70	1	1	12.43	8.70	13 Member Z
DIAG	SAE - 1.75X1.75X0.18	-3.31	1.2D + 1.6W	7.757	50	50	50	135.7	36.0	7.62	1	1	12.43	13.05	43 Member Z

Max Tension Member		Force (kip)	Load Case	Fy (ksi)	Fu (ksi)	phi Pn (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls
LEG	PST - 2-1/2" DIA PIP	10.17	0.9D + 1.6W 60	50	65	76.68	0	0	0.00	0.00	13	Member
HORIZ	SAE - 2X2X0.125	0.37	1.2D + 1.6W 60	36	58	12.60	1	1	0.00	8.70	2	Member
DIAG	SAE - 1.75X1.75X0.18	2.90	1.2D + 1.6W 60	36	58	15.67	1	1	0.00	13.05	18	Member

Max Splice Forces		Force (kip)	Load Case	Capacity (kip)	Use %	Num Bolts	Bolt Type
Top Tension		0.00		0.00	0	0	
Top Compression		0.35	1.2D + 1.0Di +	0.00	0		
Bot Tension		10.07	0.9D + 1.6W 60	120.40	8	4	3/4 A325
Bot Compression		14.76	1.2D + 1.6W	0.00	0		

Site Number: 302470  
 Location: Ansonia Wakelee, CT  
 Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure : B  
 Topo : 1

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### Support Forces Summary

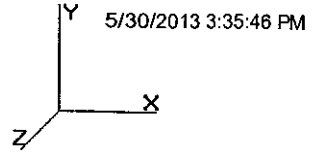
Load Case	Node	FX (kip)	FY (kip)	FZ (kip)	(-) = Uplift (+) = Down
1.0D + 1.0W Service 90 deg	1b	-17.98	-184.48	-8.66	
	1a	-19.80	220.01	9.77	
	1	-2.92	17.77	-1.11	
1.0D + 1.0W Service 60 deg	1b	-5.90	-59.04	-3.41	
	1a	-4.83	56.11	1.84	
	1	-0.82	56.23	-5.10	
1.0D + 1.0W Service Normal	1b	-2.17	-22.03	-2.27	
	1a	2.17	-22.03	-2.27	
	1	0.00	97.36	-9.41	
1.2D + 1.0Di + 1.0Wi 90 deg	1b	-8.49	-33.29	-4.11	
	1a	-9.03	151.83	4.43	
	1	-1.36	59.27	-0.33	
1.2D + 1.0Di + 1.0Wi 60 deg	1b	-9.41	-47.25	-5.43	
	1a	-5.70	112.47	1.95	
	1	-1.16	112.58	-5.91	
1.2D + 1.0Di + 1.0Wi Normal	1b	-4.05	5.18	-3.73	
	1a	4.05	5.18	-3.73	
	1	0.00	167.44	-11.69	
0.9D + 1.6W 90 deg	1b	-29.52	-307.43	-14.27	
	1a	-30.91	339.40	15.22	
	1	-4.68	16.00	-0.96	
0.9D + 1.6W 60 deg	1b	-32.46	-354.10	-18.73	
	1a	-19.33	200.74	6.64	
	1	-3.92	201.33	-20.07	
0.9D + 1.6W Normal	1b	-14.41	-176.48	-13.29	
	1a	14.41	-176.48	-13.29	
	1	0.00	400.93	-40.87	
1.2D + 1.6W 90 deg	1b	-29.23	-302.59	-14.11	
	1a	-31.21	345.22	15.40	
	1	-4.67	21.32	-1.30	
1.2D + 1.6W 60 deg	1b	-32.18	-349.33	-18.57	
	1a	-19.62	206.34	6.82	
	1	-3.91	206.94	-20.42	
1.2D + 1.6W Normal	1b	-14.13	-171.44	-13.12	
	1a	14.13	-171.44	-13.12	
	1	0.00	406.83	-41.22	

Max Uplift:	354.10 (kip)	Moment:	7,678.88 (ft-kip)	1.2D + 1.6W Normal
Max Down:	406.83 (kip)	Total Down:	63.95 (kip)	
Max Shear:	41.22 (kip)	Total Shear:	67.46 (kip)	



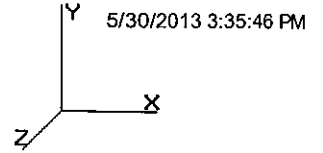
**Site Number:** 302470  
**Location:** Ansonia Wakelee, CT  
**Code:** ANSI/TIA-222 Rev G  
**Struct Class:** II  
**Exposure:** B  
**Topo:** 1

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Site Number: 302470  
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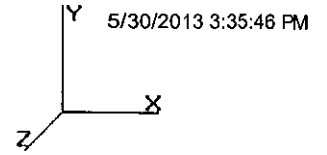


### Deflections and Rotations

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)
Serviceability - 60.00 Wind 60 deg	79.75	0.0658	0.0051	0.1062
	80.25	0.0667	0.0051	0.1065
	106.75	0.1206	0.0068	0.1351
	126.75	0.1740	0.0082	0.1650
	150.00	0.2491	0.0099	0.2055
	154.88	0.2667	0.0101	0.2076
	168.05	0.3182	0.0125	0.2349
	179.75	0.3669	0.0144	0.2584
	184.19	0.3857	0.0150	0.2289
	192.06	0.4189	0.0150	0.2415
Serviceability - 60.00 Wind Normal	79.75	0.0682	0.0037	0.1084
	80.25	0.0692	0.0037	0.1092
	106.75	0.1249	0.0046	0.1396
	126.75	0.1799	0.0051	0.1701
	150.00	0.2572	0.0053	0.2123
	154.88	0.2755	0.0051	0.2147
	168.05	0.3286	0.0049	0.2434
	179.75	0.3790	0.0039	0.2947
	184.19	0.3988	0.0036	0.2640
	192.06	0.4333	0.0036	0.2524
105.00 Serviceability - 60.00 Wind 90 deg	79.75	0.1999	0.0094	0.3168
	80.25	0.2027	0.0094	0.3179
	106.75	0.3666	0.0121	0.4113
	126.75	0.5288	0.0142	0.5018
	150.00	0.7573	0.0166	0.6238
	154.88	0.8109	0.0170	0.6352
	168.05	0.9677	0.0199	0.7159
	179.75	1.1156	0.0216	0.7489
	184.19	1.1727	0.0224	0.6688
	192.06	1.2738	0.0225	0.7351
105.00 mph 60 deg with No Ice (Reduced DL)	79.75	0.3175	0.0401	0.5074
	80.25	0.3220	0.0403	0.5097
	106.75	0.5823	0.0598	0.6536
	126.75	0.8399	0.0789	0.7989
	150.00	1.2029	0.1086	0.9949
	154.88	1.2883	0.1158	1.0089
	168.05	1.5374	0.1615	1.1391
	179.75	1.7730	0.2095	1.2550
	184.19	1.8643	0.2266	1.1099
	192.06	2.0252	0.2280	1.1713
105.00 mph 60 deg with No Ice	79.75	0.3180	0.0401	0.5087
	80.25	0.3225	0.0404	0.5109
	106.75	0.5834	0.0600	0.6550
	126.75	0.8416	0.0792	0.8008
	150.00	1.2055	0.1089	0.9974
	154.88	1.2911	0.1161	1.0115
	168.05	1.5409	0.1619	1.1421
	179.75	1.7770	0.2101	1.2585

Site Number: 302470  
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 Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
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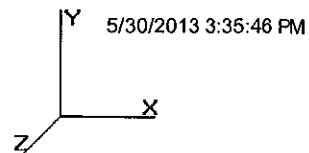


	184.19	1.8687	0.2272	1.1129
	192.06	2.0299	0.2286	1.1744
105.00 mph 90 deg with No Ice (Reduced DL)	79.75	0.3197	0.0150	0.5062
	80.25	0.3243	0.0151	0.5084
	106.75	0.5864	0.0195	0.6576
	126.75	0.8457	0.0230	0.8021
	150.00	1.2110	0.0270	0.9971
	154.88	1.2966	0.0278	1.0153
	168.05	1.5473	0.0326	1.1443
	179.75	1.7837	0.0353	1.1967
	184.19	1.8750	0.0370	1.0690
	192.06	2.0363	0.0372	1.1749
105.00 mph 90 deg with No Ice	79.75	0.3202	0.0151	0.5070
	80.25	0.3248	0.0151	0.5092
	106.75	0.5874	0.0195	0.6591
	126.75	0.8474	0.0231	0.8040
	150.00	1.2136	0.0271	0.9996
	154.88	1.2994	0.0279	1.0179
	168.05	1.5508	0.0327	1.1473
	179.75	1.7878	0.0354	1.2004
	184.19	1.8793	0.0371	1.0721
	192.06	2.0411	0.0373	1.1781
105.00 mph Normal to Face with No Ice (Reduced	79.75	0.3293	0.0176	0.5289
	80.25	0.3340	0.0176	0.5319
	106.75	0.6033	0.0216	0.6757
	126.75	0.8697	0.0242	0.8252
	150.00	1.2456	0.0248	1.0307
	154.88	1.3337	0.0240	1.0426
	168.05	1.5928	0.0228	1.1821
	179.75	1.8382	0.0169	1.4340
	184.19	1.9345	0.0163	1.2838
	192.06	2.1024	0.0161	1.2271
105.00 mph Normal to Face with No Ice	79.75	0.3298	0.0176	0.5296
	80.25	0.3346	0.0176	0.5327
	106.75	0.6044	0.0217	0.6772
	126.75	0.8714	0.0243	0.8272
	150.00	1.2482	0.0249	1.0334
	154.88	1.3366	0.0241	1.0453
	168.05	1.5964	0.0229	1.1853
	179.75	1.8424	0.0170	1.4380
	184.19	1.9390	0.0164	1.2871
	192.06	2.1073	0.0162	1.2304
50.00 mph 60 deg with 0.75 in Radial Ice	79.75	0.0924	0.0071	0.1487
	80.25	0.0938	0.0072	0.1488
	106.75	0.1670	0.0093	0.1831
	126.75	0.2389	0.0112	0.2219
	150.00	0.3392	0.0134	0.2729
	154.88	0.3624	0.0137	0.2754
	168.05	0.4305	0.0166	0.3105
	179.75	0.4944	0.0188	0.3395
	184.19	0.5193	0.0195	0.3044
	192.06	0.5629	0.0196	0.3173
50.00 mph 90 deg with 0.75 in Radial Ice	79.75	0.0924	0.0040	0.1470
	80.25	0.0937	0.0040	0.1471



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50.00 mph Normal with 0.75 in Radial Ice

106.75	0.1673	0.0050	0.1839
126.75	0.2393	0.0059	0.2222
150.00	0.3398	0.0067	0.2734
154.88	0.3630	0.0068	0.2775
168.05	0.4313	0.0078	0.3110
179.75	0.4953	0.0082	0.3301
184.19	0.5200	0.0084	0.2978
192.06	0.5637	0.0083	0.3177
79.75	0.0928	0.0056	0.1450
80.25	0.0941	0.0056	0.1462
106.75	0.1686	0.0069	0.1860
126.75	0.2415	0.0077	0.2246
150.00	0.3435	0.0082	0.2780
154.88	0.3669	0.0080	0.2805
168.05	0.4364	0.0081	0.3158
179.75	0.5015	0.0073	0.3713
184.19	0.5270	0.0070	0.3333
192.06	0.5715	0.0069	0.3250
192.06	0.0000	0.0000	0.0000



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: [siting.council@ct.gov](mailto:siting.council@ct.gov)

[www.ct.gov/csc](http://www.ct.gov/csc)

June 12, 2013

The Honorable James T. DellaVolpe  
Mayor  
City of Ansonia  
City Hall  
253 Main Street  
Ansonia, CT 06401-1866

RE: **EM-VER -002-130607** – Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at 401 Wakelee Avenue, Ansonia, Connecticut.

Dear Mayor DellaVolpe:

The Connecticut Siting Council (Council) received a request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72, a copy of which has already been provided to you.

If you have any questions or comments regarding the proposal, please call me or inform the Council by June 26, 2013.

Thank you for your cooperation and consideration.

Very truly yours,

Melanie Bachman  
Acting Executive Director

MB/jb

c: James Tanner, Zoning Enforcement Officer, City of Ansonia



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July 11, 2013

Kenneth C. Baldwin, Esq.  
Robinson & Cole LLP  
280 Trumbull Street  
Hartford, CT 06103

RE: **EM-VER-002-130607** – Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at 401 Wakelee Avenue, Ansonia, Connecticut.

Dear Attorney Baldwin:

The Connecticut Siting Council (Council) hereby acknowledges your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies with the following conditions:

- Any deviation from the proposed modification as specified in this notice and supporting materials with the Council shall render this acknowledgement invalid;
- Any material changes to this modification as proposed shall require the filing of a new notice with the Council;
- Within 45 days after completion of construction, the Council shall be notified in writing that construction has been completed;
- The validity of this action shall expire one year from the date of this letter; and
- The applicant may file a request for an extension of time beyond the one year deadline provided that such request is submitted to the Council not less than 60 days prior to the expiration;

The proposed modifications including the placement of all necessary equipment and shelters within the tower compound are to be implemented as specified here and in your notice dated June 6, 2013. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Please be advised that the validity of this action shall expire one year from the date of this letter. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Thank you for your attention and cooperation.

Very truly yours,

Melanie A. Bachman  
Acting Executive Director

MAB/CDM/jb

c: The Honorable James T. DellaVolpe, Mayor, City of Ansonia  
James Tanner, Zoning Enforcement Officer, City of Ansonia  
American Tower





KENNETH C. BALDWIN

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Hartford, CT 06103-3597  
Main (860) 275-8200  
Fax (860) 275-8299  
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Direct (860) 275-8345

Also admitted in Massachusetts

December 17, 2014

RECEIVED  
DEC 19 2014

ORIGINAL

CONNECTICUT  
SITING COUNCIL

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

Re: **EM-VER-002-130607 – 401 Wakelee Avenue, Ansonia, Connecticut**  
**EM-VER-043-130916 – 866 Main Street, East Hartford, Connecticut**  
**EM-VER-034-140123 – 48 Newtown Road, Danbury, Connecticut**  
**EM-VER-064-131120 – 305 West Service Road, Hartford, Connecticut**  
**EM-VER-064-130220 – 439-455 Homestead Avenue, Hartford, Connecticut**  
**EM-VER-064-131108 – 223 Brainard Road, Hartford, Connecticut**  
**EM-VER-078-131004 – 82 North Eagleville Road, Mansfield, Connecticut**  
**EM-VER-155-130806 – 570 New Park Avenue, West Hartford, Connecticut**  
**EM-VER-156-130524 – 668 Jones Hill Road, West Haven, Connecticut**  
**EM-VER-159-131017 – 100 Great Meadow Road, Wethersfield, Connecticut**

## Completion of Construction Activity

Dear Ms. Bachman:

The purpose of this letter is to notify the Siting Council that construction activity associated with the above-referenced Cellco Partnership d/b/a Verizon Wireless telecommunications facilities has been completed.

If you have any questions or need any additional information regarding these facilities please do not hesitate to contact me.

Sincerely,



Kenneth C. Baldwin

Copy to:  
Sandy M. Carter