Robinson+Cole

KENNETH C. BALDWIN

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

ORIGINAL

December 9, 2014

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

Re: **EM-VER-115-130607 – Cellco Partnership d/b/a Verizon Wireless**
178 New Haven Road, Prospect, Connecticut

Dear Ms. Bachman:

On July 11, 2013, the Siting Council acknowledged receipt of Cellco's notice of intent to modify its telecommunications facility at 178 New Haven Road in Prospect. The modification involved the replacement of certain antennas.

As a condition of the acknowledgement, Cellco was required to provide the Council with a letter stating that the recommendations specified in the structural report were implemented. Attached is a Tower Modification Certification Letter verifying that these conditions have been satisfied. All construction associated with these modifications has now been completed.

If you have any questions please do not hesitate to contact me.

Sincerely,

Kenneth C. Baldwin

Attachment
Copy to:
Sandy M. Carter
Brian Ragozzine
Mark Gauger

CENTEK engineering

Centered on Solutions℠

January 10 , 2014

Mr. Mark Gauger
Verizon Wireless
99 East River Drive
East Hartford, Connecticut 06108

Re: Existing Telecommunications Facility Tower Modification Certification Letter

Project:	**Verizon ~ Prospect** 178 New Haven Road Prospect, CT
Tower Owner:	**SBA Communications Corporation** 5900 Broken Sound Parkway NW Boca Raton, Florida 33487
Engineer:	**FDH Engineering** 2730 Rowland Ave Raleigh, NC 27615

Centek Project No.: 13008.052

Dear Mr. Gauger,

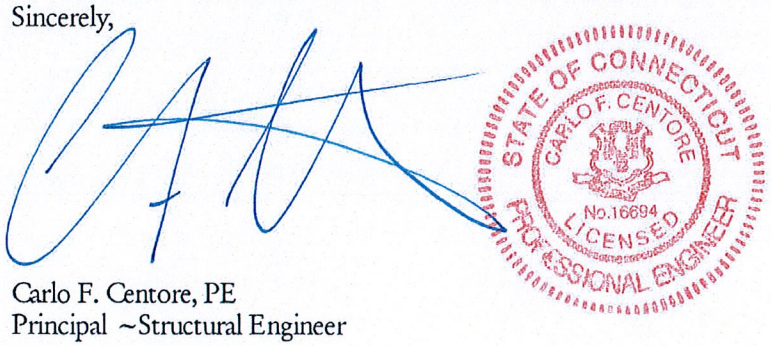
We are providing this "Existing Telecommunications Facility Tower Modification Certification Letter" with regard to the antenna upgrade by Verizon Wireless at the above referenced project.

The following are the basis for substantiating compliance with the FDH Engineering Structural Analysis Report (FDH Project No. 1327001400 (R1)) dated July 12, 2013:

- Review of the FDH Structural Analysis Report dated 04/30/2013.
- Field observations by Centek personnel of the coax installation on 11/23/2013 which determined all coax lines and diplexers were installed in general compliance with the recommendations of the structural analysis report prepared by FDH on 04/30/2013.

The work under this Contract has been reviewed and found, to the Engineer's best knowledge, information and belief, to be completed in general compliance with the documents referenced above.

Sincerely,



Carlo F. Centore, PE
Principal ~Structural Engineer

CC: Rachel Mayo, Tim Parks

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
www.ct.gov/csc

July 11, 2013

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

RE: **EM-VER -115-130607** – Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at 178 New Haven Road, Prospect, 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:

- Verizon shall follow the installation recommendations made in the Structural Analysis Report prepared by FDH Engineering dated April 30, 2013 and stamped by Christopher Murphy;
- Within 45 days following completion of the antenna installation, Verizon shall provide documentation certified by a professional engineer that its installation complied with the recommendations of the structural analysis;
- 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.

CSC
CONNECTICUT SITING COUNCIL

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 Robert J. Chatfield, Mayor, Town of Prospect
William J. Donovan, Zoning Enforcement Officer, Town of Prospect
Sean Gormley, SBA

ROBINSON & COLE

EM-VER-115-130607

KENNETH C. BALDWIN

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

Re: **Notice of Exempt Modification – Facility Modification**
178 New Haven Road, Prospect, Connecticut

Dear Ms. Bachman:

Cellco Partnership d/b/a Verizon Wireless ("Cellco") currently maintains twelve (12) wireless telecommunications antennas at the 132-foot level on the existing 157-foot tower at the above-referenced address. The tower is owned by SBA. The Council approved Cellco's use of this tower in 1999. Cellco now intends to replace three (3) of its existing antennas with three (3) model BXA-70063-6CF LTE antennas at the 132-foot level. Attached behind Tab 1 are the specifications for Cellco's replacement antennas.

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 Robert J. Chatfield, Mayor for the Town of Prospect. A copy of this letter is also being sent to Joseph P. and Victor A. Visockis, the owners 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 will be located at the 132-foot level on the 157-foot tower.

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 modified facility will not increase radio frequency (RF) emissions at the facility to a level at or above the Federal Communications Commission (FCC) adopted safety standard. A 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 modifications. (*See* Structural Analysis attached behind Tab 3). Contrary to recommendation number 1 on page 3 of the Structural Analysis, Cellco does not intend to install any new coax cables as a part of this modification proposal.

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:
Robert J. Chatfield, Prospect Mayor
Joseph P. and Victor A. Visockis
Sandy M. Carter

BXA-70063-6CF-EDIN-X

X-Pol | FET Panel | 63° | 14.5 dBd

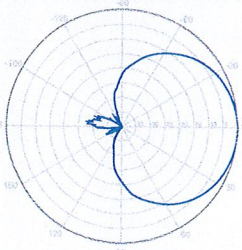
Replace "X" with desired electrical downtilt.

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

Electrical Characteristics	696-900 MHz	
Frequency bands	696-806 MHz	806-900 MHz
Polarization	±45°	
Horizontal beamwidth	65°	63°
Vertical beamwidth	13°	11°
Gain	14.0 dBd (16.1 dBi)	14.5 dBd (16.6 dBi)
Electrical downtilt (X)	0, 2, 3, 4, 5, 6, 8, 10	
Impedance	50Ω	
VSWR	≤1.35:1	
Upper sidelobe suppression (0°)	-18.3 dB	-18.2 dB
Front-to-back ratio (+/-30°)	-33.4 dB	-36.3 dB
Null fill	5% (-26.02 dB)	
Isolation between ports	< -25 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	1804 x 285 x 132 mm	71.0 x 11.2 x 5.2 in
Depth with z-brackets	172 mm	6.8 in
Weight without mounting brackets	7.9 kg	17 lbs
Survival wind speed	> 201 km/hr	> 125 mph
Wind area	Front: 0.51 m² Side: 0.24 m²	Front: 5.5 ft² Side: 2.6 ft²
Wind load @ 161 km/hr (100 mph)	Front: 759 N Side: 391 N	Front: 169 lbf Side: 89 lbf

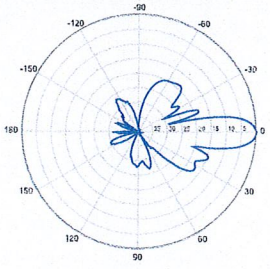
Mounting Options	Part Number	Fits Pipe Diameter	Weight
3-Point Mounting & Downtilt Bracket Kit	36210008	40-115 mm 1.57-4.5 in	6.9 kg 15.2 lbs
Concealment Configurations	For concealment configurations, order BXA-70063-6CF-EDIN-X-FP		

BXA-70063-6CF-EDIN-X



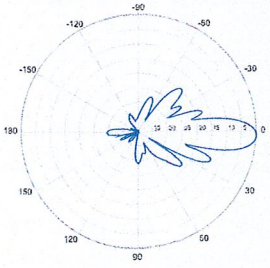
Horizontal | 750 MHz

BXA-70063-6CF-EDIN-0

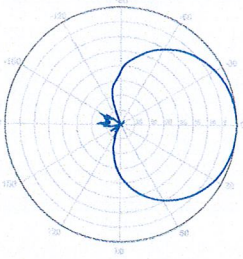


0° | Vertical | 750 MHz

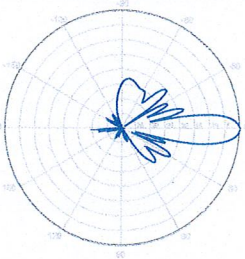
BXA-70063-6CF-EDIN-2



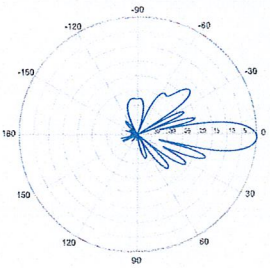
2° | Vertical | 750 MHz



Horizontal | 850 MHz



0° | Vertical | 850 MHz

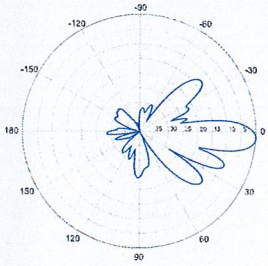


2° | Vertical | 850 MHz

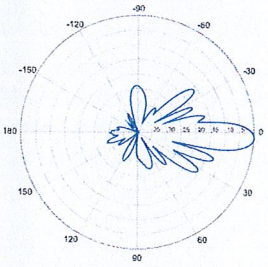
BXA-70063-6CF-EDIN-X

X-Pol | FET Panel | 63° | 14.5 dBd

BXA-70063-6CF-EDIN-3

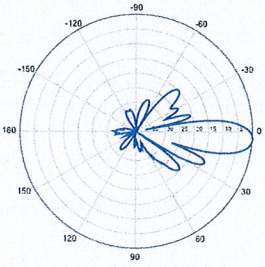


3° | Vertical | 750 MHz

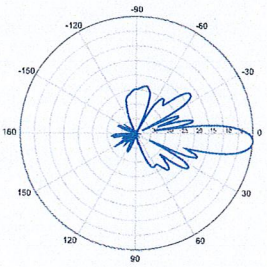


3° | Vertical | 850 MHz

BXA-70063-6CF-EDIN-4

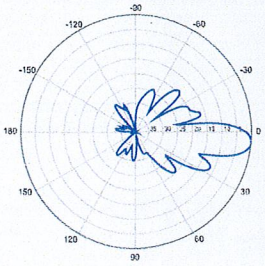


4° | Vertical | 750 MHz

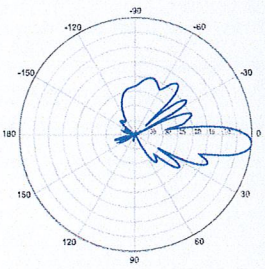


4° | Vertical | 850 MHz

BXA-70063-6CF-EDIN-5

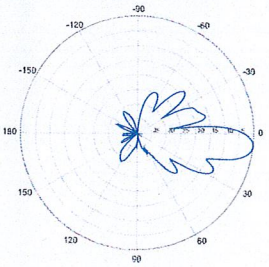


5° | Vertical | 750 MHz

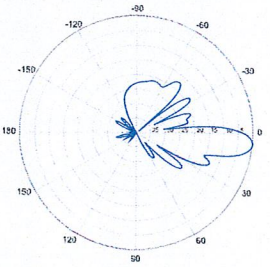


5° | Vertical | 850 MHz

BXA-70063-6CF-EDIN-6

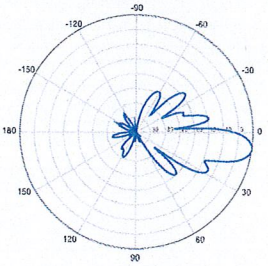


6° | Vertical | 750 MHz

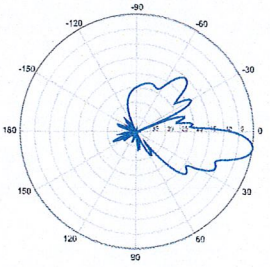


6° | Vertical | 850 MHz

BXA-70063-6CF-EDIN-8

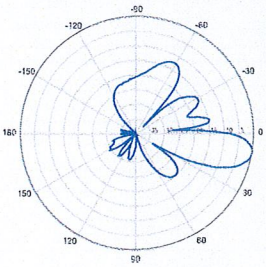


8° | Vertical | 750 MHz

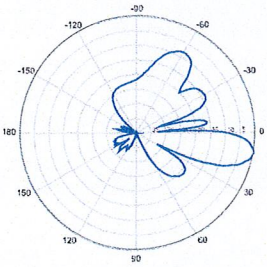


8° | Vertical | 850 MHz

BXA-70063-6CF-EDIN-10



10° | Vertical | 750 MHz



10° | Vertical | 850 MHz

	General	Power	Density					
Site Name: Prospect								
Tower Height: Verizon @ 132ft								
CARRIER	**# OF CHAN.**	**WATTS ERP**	**HEIGHT**	**CALC. POWER DENS**	**FREQ.**	**MAX. PERMISS. EXP.**	**FRACTION MPE**	**Total**
*AT&T UMTS	2	565	158	0.0163	880	0.5867	2.77%	
*AT&T UMTS	2	1077	158	0.0310	1900	1.0000	3.10%	
*AT&T GSM	1	538	158	0.0077	880	0.5867	1.32%	
*AT&T GSM	4	934	158	0.0538	1900	1.0000	5.38%	
*AT&T LTE	1	1375	158	0.0198	734	0.4893	4.05%	
*Pocket (now MetroPCS)	3	631	100	0.0681	2130	1.0000	6.81%	
*Nextel	9	100	142	0.0160	851	0.5673	2.83%	
Verizon PCS	**14**	**266**	**132**	**0.0768**	**1970**	**1.0000**	**7.68%**	
Verizon Cellular	**9**	**267**	**132**	**0.0496**	**869**	**0.5793**	**8.56%**	
Verizon AWS	**1**	**1750**	**132**	**0.0361**	**2145**	**1.0000**	**3.61%**	
Verizon 700	**1**	**871**	**132**	**0.0180**	**698**	**0.4653**	**3.86%**	
								49.98%
* Source: Siting Council								

FDH Engineering, Inc., 6521 Meridien Drive Raleigh, NC 27616, Ph. 919.755.1012

Structural Analysis for SBA Network Services, Inc.

157' Monopole Tower

SBA Site Name: Prospect
SBA Site ID: CT00252-S-03
Verizon Site Name: Prospect

FDH Project Number 1327001400 (R1)

Analysis Results

Tower Components	97.2%	Sufficient
Foundation	58.6%	Sufficient

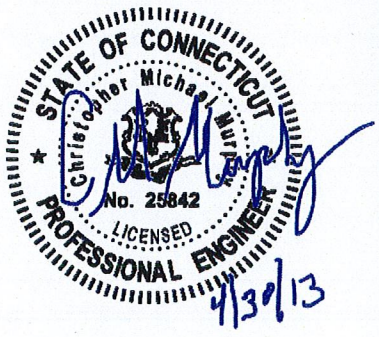
Prepared By:

Adam Bryan, EI
Project Engineer I

Reviewed By:

Christopher M Murphy, PE
President
CT PE License No. 25842

FDH Engineering, Inc.
6521 Meridien Drive
Raleigh, NC 27616
(919) 755-1012
info@fdh-inc.com



April 30, 2013

Prepared pursuant to TIA/EIA-222-F Structural Standards for Steel Antenna Towers and Antenna Supporting Structures and 2005 Connecticut State Building Code (CBC)

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EXECUTIVE SUMMARY

At the request of SBA Network Services, Inc., FDH Engineering, Inc. performed a structural analysis of the monopole located in Prospect, CT to determine whether the tower is structurally adequate to support both the existing and proposed loads pursuant to the *Structural Standards for Steel Antenna Towers and Antenna Supporting Structures, TIA/EIA-222-F* and *2005 Connecticut Building Code (CBC)*. Information pertaining to the existing/proposed antenna loading, current tower geometry, foundation dimensions, geotechnical data, and member sizes was obtained from:

- Fred A. Nudd Corporation (Project No. 6820) original design drawings dated May 20, 1999
- SAGE Environmental, Inc. (Project No. M130) geotechnical engineering report dated May 5, 1998
- Semaan Engineering Solutions (Project No. CT-00252S) Structural Analysis and Modification Package dated April 18, 2002
- FDH, Inc. (Job No. 08-09035T) TIA Inspection Report dated January 9, 2009
- FDH Engineering, Inc. (Project No. 10-01014E N1) Dispersive Wave Propagation Testing and Rebar Investigation of an Existing Tower Foundation dated May 11, 2010
- SBA Network Services, Inc.

The *basic design wind speed* per the *TIA/EIA-222-F* standards and *2005 CBC* is 85 mph without ice and 38 mph with 3/4" radial ice. Ice is considered to increase in thickness with height.

Conclusions

With the existing and proposed antennas from Verizon in place at 132 ft, the tower meets the requirements of the *TIA/EIA-222-F* standards and *2005 CBC* provided the **Recommendations** listed below are satisfied. Furthermore, given the foundation dimensions (see FDH Engineering, Inc. Project No. 10-01014E N1) and given soil parameters (see SAGE Environmental, Inc. Project No. M130), the foundation should have the necessary capacity to support the existing and proposed loading. For a more detailed description of the analysis of the tower, see the **Results** section of this report.

Our structural analysis has been performed assuming all information provided to FDH Engineering, Inc. is accurate (i.e., the steel data, tower layout, existing antenna loading, and proposed antenna loading) and that the tower has been properly erected and maintained per the original design drawings.

Recommendations

To ensure the requirements of the *TIA/EIA-222-F* standards and *2005 CBC* are met with the existing and proposed loading in place, we have the following recommendations:

1. The proposed coax should be installed inside the monopole's shaft.
2. The existing diplexers should be installed directly behind the existing and proposed panel antennas.

APPURTENANCE LISTING

The proposed and existing antennas with their corresponding cables/coax lines are shown in **Table 1**. *If the actual layout determined in the field deviates from the layout, FDH Engineering, Inc. should be contacted to perform a revised analysis.*

Table 1 - Appurtenance Loading

Existing Loading:

Antenna Elevation (ft)	Description	Coax and Lines[1]	Carrier	Mount Elevation (ft)	Mount Type
158.5	(6) Andrew SBNH-1D6565C (3) Kathrein 800-10121 (6) CCI DTMABP 7819VG12A TMAs (6) Kathrein 860-10025 RETs (6) Powerwave LGP21901 Diplexers	(12) 1-1/4" (7) 1/2" (1) 10mm Fiber[2] (2) DC Cables[2]	AT&T	157	(1) 16' Low Profile Platform
155.5	(6) Andrew RRUS11 RRUs (1) Raycap Dome DC6-48-60-18-8-F Surge Arrestor			155.5	(1) Valmont Ring Mount
140	(9) Decibel DB844H90E-XY	(9) 1-5/8"	Nextel	140	(3) 12.5' T-Frames
132	(6) Decibel DB844F65ZAXY (3) Powerwave P65-16-XL-2 (3) Rymsa MGD3-800T0 (6) RFS FD9R6004/2C-3L Diplexers	(12) 1-5/8"	Verizon	132	(1) 14' Low Profile Platform
100	(3) Kathrein 742 213	(6) 1-5/8"	Pocket	100	(3) Pipe Mounts

1. Coax installed inside pole's shaft unless otherwise noted.
2. AT&T has (1) 10 mm Fiber and (2) DC Cables installed inside (1) 3" Flexible Conduit inside the pole shaft

Proposed Loading:

Antenna Elevation (ft)	Description	Coax and Lines	Carrier	Mount Elevation (ft)	Mount Type
132	(3) Antel BXA-70063/6CF-2	(12) 1-5/8"	Verizon	132	(1) 14' Low Profile Platform

RESULTS

The following yield strength of steel for individual members was used for analysis:

Table 2 - Material Strength

Member Type	Yield Strength
Tower Shaft Sections	42 ksi
Channel Reinforcement	65 ksi
Base Plate	36 ksi
Anchor Bolts	Fu = 90 ksi and 150 ksi

Table 3 displays the summary of the ratio (as a percentage) of force in the member to their capacities. Values greater than 100% indicate locations where the maximum force in the member exceeds its capacity. **Table 4** displays the maximum foundation reactions.

If the assumptions outlined in this report differ from actual field conditions, FDH Engineering, Inc. should be contacted to perform a revised analysis. Furthermore, as no information pertaining to the allowable twist and sway requirements for the existing or proposed appurtenances was provided, deflection and rotation were not taken into consideration when performing this analysis.

See the **Appendix** for detailed modeling information.

Table 3 - Summary of Working Percentage of Structural Components

Section No.	Elevation ft	Component Type	Size	% Capacity*	Pass Fail
L1	157 - 110	Pole	TP34.3125x18x0.25	86.0	Pass
L2	110 - 95	Pole w/ Mod	TP38.6563x32.0771x0.25	69.0	Pass
L3	95 - 75	Pole w/ Mod	TP45.1875x38.6563x0.3125	75.9	Pass
L4	75 - 71	Pole w/ Mod	TP45.825x42.6031x0.3125	82.1	Pass
L5	71 - 65	Pole w/ Mod	TP58.875x45.825x0.375	84.1	Pass
	65 - 50	Pole		88.2	Pass
	50 - 31	Pole w/ Mod		78.1	Pass
L6	31 - 20	Pole w/ Mod	TP61.649x55.515x0.375	70.6	Pass
L7	20 - 15	Pole w/ Mod	TP68.1875x61.649x0.4375	72.7	Pass
	15 – 0	Pole		83.7	Pass
		Anchor Bolts**	(6) 1.375" Ø w/ BC = 92"	74.9	Pass
		Anchor Bolts	(18) 2" Ø w/ BC = 62"	83.6	Pass
		Base Plate	67.3125" Ø PL x 1.75" thk.	97.2	Pass

* Capacities include 1/3 allowable increase for wind.
** Semaan Engineering Solutions specifies that the modified anchor bolts were to be pre-tensioned to 120 kips. This analysis assumes this work was performed and the anchor bolts have 120 kip capacity.

Table 4 - Maximum Base Reactions

Base Reactions	Current Analysis* *(TIA/EIA-222-F)*	Original Design *(TIA/EIA-222-F)*
Axial	41 k	45 k
Shear	36 k	34 k
Moment	3,561 k-ft	3,435 k-ft

* Foundation determined adequate per independent analysis.

GENERAL COMMENTS

This engineering analysis is based upon the theoretical capacity of the structure. It is not a condition assessment of the tower and its foundation. It is the responsibility of SBA Network Services, Inc. to verify that the tower modeled and analyzed is the correct structure (with accurate antenna loading information) modeled. If there are substantial modifications to be made or the assumptions made in this analysis are not accurate, FDH Engineering, Inc. should be notified immediately to perform a revised analysis.

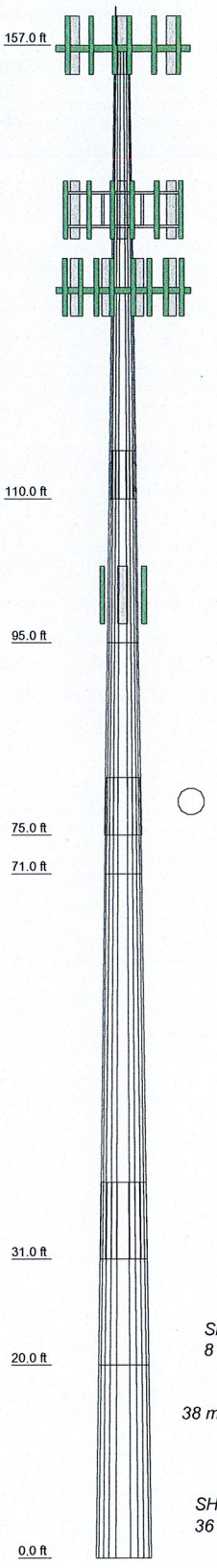
LIMITATIONS

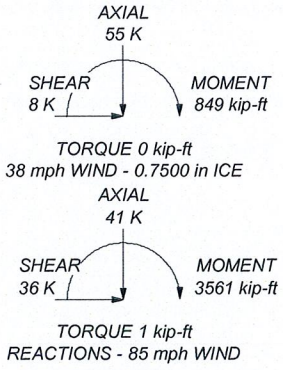
All opinions and conclusions are considered accurate to a reasonable degree of engineering certainty based upon the evidence available at the time of this report. All opinions and conclusions are subject to revision based upon receipt of new or additional/updated information. All services are provided exercising a level of care and diligence equivalent to the standard and care of our profession. No other warranty or guarantee, expressed or implied, is offered. Our services are confidential in nature and we will not release this report to any other party without the client's consent. The use of this engineering work is limited to the express purpose for which it was commissioned and it may not be reused, copied, or distributed for any other purpose without the written consent of FDH Engineering, Inc.

APPENDIX

Section	1	2	3	4	5	6	7
Length (ft)	47.00	20.00	20.00	10.00	40.00	19.00	20.00
Number of Sides	12	12	12	12	12	12	12
Thickness (in)	0.2500	0.2500	0.3125	0.3125	0.3750	0.3750	0.4375
Socket Length (ft)	5.00		6.00		8.00		
Top Dia (in)	18.0000	32.0771	38.6563	42.6031	45.8250	55.5150	61.6490
Bot Dia (in)	34.3125	38.6563	45.1875	45.8250	58.8750	61.6490	68.1875
Grade	A36M-42						
Weight (K)	3.3	1.9	2.8	1.5	8.5	4.5	6.2

28.9





DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
Lightning Rod	157	Valmont Ring Mount MNT	155.5
16' LP Platform	157	(3) DB844H90E-XY w/Mount Pipe	140
(2) SBNH-1D6565C w/ Mount Pipe	157	(3) DB844H90E-XY w/Mount Pipe	140
(2) SBNH-1D6565C w/ Mount Pipe	157	(3) DB844H90E-XY w/Mount Pipe	140
(2) SBNH-1D6565C w/ Mount Pipe	157	(3) 12.5' T-Frames	140
800 10121 w/ Mount Pipe	157	(2) DB844F65ZAXY w/Mount Pipe	132
800 10121 w/ Mount Pipe	157	(2) DB844F65ZAXY w/Mount Pipe	132
800 10121 w/ Mount Pipe	157	(2) DB844F65ZAXY w/Mount Pipe	132
(2) DTMABP7819VG12A TMA	157	BXA-70063/6CF-2 w/ Mount Pipe	132
(2) DTMABP7819VG12A TMA	157	BXA-70063/6CF-2 w/ Mount Pipe	132
(2) DTMABP7819VG12A TMA	157	BXA-70063/6CF-2 w/ Mount Pipe	132
(2) 860 10025 RET	157	MGD3-800T0 w/ mount pipe	132
(2) 860 10025 RET	157	MGD3-800T0 w/ mount pipe	132
(2) 860 10025 RET	157	MGD3-800T0 w/ mount pipe	132
(2) LGP21901	157	(2) FD9R6004/2C-3L Diplexer	132
(2) LGP21901	157	(2) FD9R6004/2C-3L Diplexer	132
(2) LGP21901	157	(2) FD9R6004/2C-3L Diplexer	132
(2) RRUS-11	155.5	14' LP Platform	132
(2) RRUS-11	155.5	742 213 w/ mount pipe	100
(2) RRUS-11	155.5	742 213 w/ mount pipe	100
DC6-48-60-18-8F Surge Arrestor	155.5	742 213 w/ mount pipe	100

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A36M-42	42 ksi	60 ksi			

TOWER DESIGN NOTES

1. Tower is located in New Haven County, Connecticut.
2. Tower designed for a 85 mph basic wind in accordance with the TIA/EIA-222-F Standard.
3. Tower is also designed for a 38 mph basic wind with 0.75 in ice. Ice is considered to increase in thickness with height.
4. Deflections are based upon a 50 mph wind.
5. Tower model shown for analysis purposes only. See the modification drawings (Semaan Engineering Solutions, Inc. Project No. CT-00252S) for actual tower layout.

FDH Engineering, Inc.
6521 Meridien Drive, Suite 107
Raleigh, NC 27616
Phone: 919-7551012
FAX: 919-7551031
Tower Analysis

Job: Prospect, CT00252-S-03			
Project: 1327001400 (R1)			
Client: SBA Network Services, Inc.	Drawn by: Adam Bryan	App'd:	
Code: TIA/EIA-222-F	Date: 04/30/13	Scale: NTS	
Path:		Dwg No. E-1	