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

December 9, 2013

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

RE: **EM-VER-046-131121** – Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at 206 Everett Road, Easton, 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:

- The proposed coax and accessory equipment shall be installed in accordance with the recommendations made in the Structural Analysis Report prepared by FDH Engineering dated October 21, 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 November 20, 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 Adam W. Dunsby, First Selectman, Town of Easton
Robert Maquat, Planning & Zoning Official, Town of Easton
Sean Gormley, SBA

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

July 1, 2015

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

Re: **EM-VER-046-131121 – Cellco Partnership d/b/a Verizon Wireless**
206 Everett Road, Easton, Connecticut

Dear Ms. Bachman:

On December 9, 2013, the Siting Council acknowledged receipt of Cellco's notice of intent to modify its telecommunications facility at 206 Everett Road in Easton, Connecticut. The modifications involved the replacement of certain antennas and coax cable.

As a condition of that acknowledgement, Cellco was required to provide the Council with a letter stating that the installation complied with the engineer's recommendations. Attached is a Professional Engineer's Certification Letter verifying compliance with the structural recommendations. 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

Copy to:
Tim Parks

CENTEK engineering

Centered on Solutions℠

June 30, 2015

Mr. Tim Parks
Verizon Wireless
99 East River Drive
East Hartford, Connecticut 06108

Re: Tower Modification Certification

Project: **Verizon Easton North 2**
206 Everett Road, Easton, CT

Tower Owner: **SBA Communications**
5900 Broken Sound Pkwy NW, Boca Raton, FL

Engineer: **FDH Engineering**
6521 Meridien Drive, Raleigh, NC

Centek Project No.: 15003.034

CSC Exempt Mod Reference No.: EM-VER-046-131121

Dear Mr. Parks,

We are providing this "Existing Telecommunications Facility Tower 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. 13SDWD1400) dated October 21, 2013:

- Review of the FDH structural analysis report dated 10/21/2013.
- Field observations by Centek personnel of the coax and accessory equipment installation on 05/21/2015 which determined all coax lines and accessory equipment were installed in general compliance with the recommendations of the structural analysis report prepared by FDH Engineering on 10/21/2013.

The structural analysis prepared by FDH Engineering demonstrates the tower will not exceed 100 percent of the post construction structural rating. 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. This certification is not a review of the adequacy or effectiveness of the referenced structural analysis.

Sincerely,

Carlo F. Centore, PE
Principal - Structural Engineer

ROBINSON & COLE LLP

KENNETH C. BALDWIN

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

Also admitted in Massachusetts

November 20, 2013

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

Re: **Notice of Exempt Modification – Facility Modification**
206 Everett Road, Easton, Connecticut

Dear Ms. Bachman:

Cellco Partnership d/b/a Verizon Wireless ("Cellco") currently maintains twelve (12) antennas at the 128-foot level of the existing 158-foot tower at 206 Everett Road in Easton. The tower is owned by SBA. The Council approved Cellco's use of this tower in 2009. Cellco now intends to replace one (1) of its existing antennas with one (1) model BXA-70063-6BF antenna at the same height on the tower. Included in Attachment 1 is the specification sheet for Cellco's proposed replacement antenna.

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 Adam W. Dunsby, First Selectman of the Town of Easton. A copy of this letter is also being sent to Alfred Barney, the owner of the property where 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 antenna will be located at the 128-foot level on the 158-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) safety standard. A cumulative RF emissions calculation for the modified facility is included in Attachment 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 included in Attachment 3). Contrary to Recommendation No. 1 on page 3 of the Structural Analysis, Cellco does not propose any modification to its coax cable location or configuration. Cellco's existing cables are installed as shown in "Figure 1" of the Structural Analysis.

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:
Adam W. Dunsby, Easton First Selectman
Alfred Barney
Sandy M. Carter

ATTACHMENT 1

BXA-70063-6BF-EDIN-X

X-Pol | FET Panel | 63° | 14.5 dBd

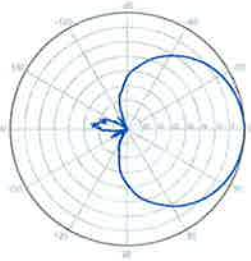
Replace "X" with desired electrical downtilt.

Antenna is also available with N connector(s). Replace "EDIN" with "N" 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 N connectors	300 W	
Lightning protection	Direct Ground	
Connector(s)	2 Ports / EDIN or N / Female / Bottom	
Mechanical Characteristics		
Dimensions Length x Width x Depth	1742 x 285 x 135 mm	68.6 x 11.2 x 5.3 in
Depth with z-brackets	175 mm	6.9 in
Weight without mounting brackets	8.7 kg	19.2 lbs
Survival wind speed	> 201 km/hr	> 125 mph
Wind area	Front: 0.50 m² Side: 0.24 m²	Front: 5.3 ft² Side: 2.5 ft²
Wind load @ 161 km/hr (100 mph)	Front: 733 N Side: 386 N	Front: 164 lbf Side: 88 lbf

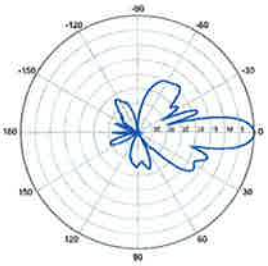
Mounting Options	Part Number	Fits Pipe Diameter	Weight
3-Point Mounting & Downtilt Bracket Kit	36210008	40-115 mm 1.57-4.5 in	6.9 kg 15.2 lbs
Concealment Configurations	For concealment configurations, order BXA-70063-6BF-EDIN-X-FP		

BXA-70063-6BF-EDIN-X



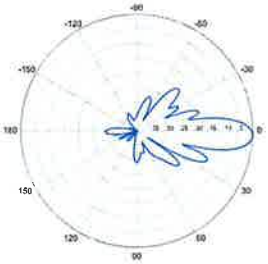
Horizontal | 750 MHz

BXA-70063-6BF-EDIN-0

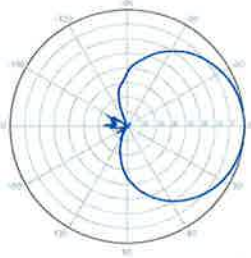


0° | Vertical | 750 MHz

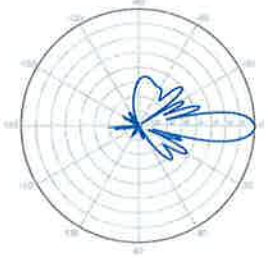
BXA-70063-6BF-EDIN-2



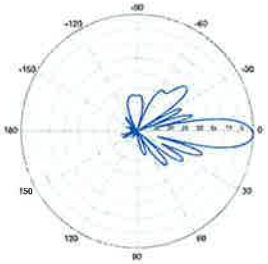
2° | Vertical | 750 MHz



Horizontal | 850 MHz



0° | Vertical | 850 MHz

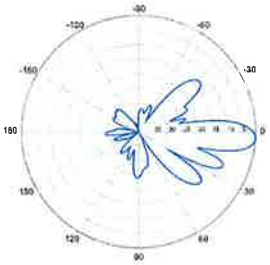


2° | Vertical | 850 MHz

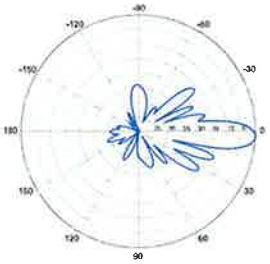
BXA-70063-6BF-EDIN-X

X-Pol | FET Panel | 63° | 14.5 dBd

BXA-70063-6BF-EDIN-3

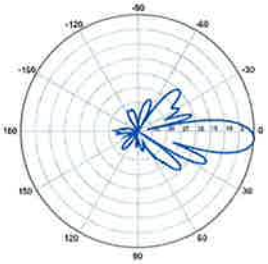


3° | Vertical | 750 MHz

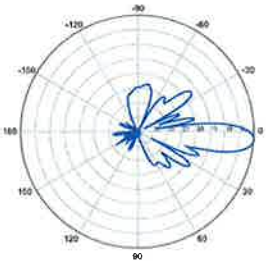


3° | Vertical | 850 MHz

BXA-70063-6BF-EDIN-4

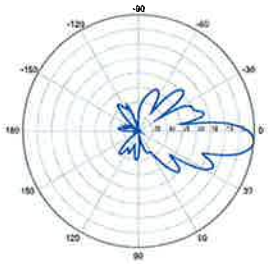


4° | Vertical | 750 MHz

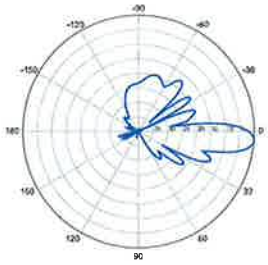


4° | Vertical | 850 MHz

BXA-70063-6BF-EDIN-5

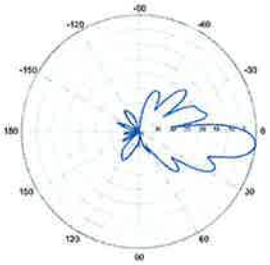


5° | Vertical | 750 MHz

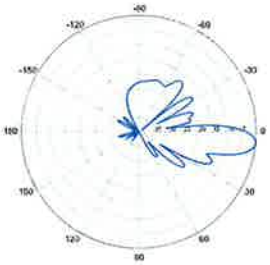


5° | Vertical | 850 MHz

BXA-70063-6BF-EDIN-6

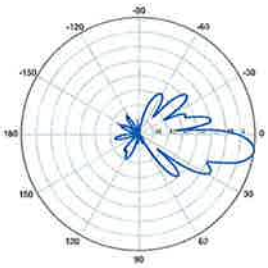


6° | Vertical | 750 MHz

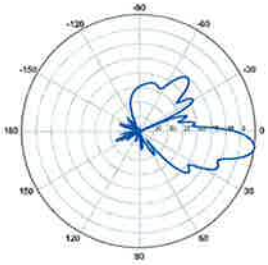


6° | Vertical | 850 MHz

BXA-70063-6BF-EDIN-8

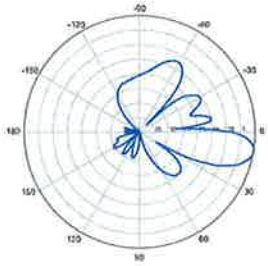


8° | Vertical | 750 MHz

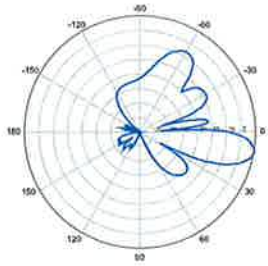


8° | Vertical | 850 MHz

BXA-70063-6BF-EDIN-10



10° | Vertical | 750 MHz



10° | Vertical | 850 MHz

ATTACHMENT 2

	General	Power	Density					
Site Name: Easton N 2								
Tower Height: Verizon @ 128ft								
CARRIER	**# OF CHAN.**	**WATTS ERP**	**HEIGHT**	**CALC. POWER DENS**	**FREQ.**	**MAX. PERMISS. EXP.**	**FRACTION MPE**	**Total**
*VoiceStream	8	284	138	0.0429	1935	1.0000	4.29%	
*Sprint CDMA/LTE	2	693	158	0.0200	1900	1.0000	2.00%	
*Sprint CDMA/LTE	1	390	158	0.0056	850	0.5667	0.99%	
*AT&T GSM	6	296	118	0.0459	880	0.5867	7.82%	
*AT&T GSM	3	427	118	0.0331	1900	1.0000	3.31%	
*AT&T UMTS	1	500	118	0.0129	880	0.5867	2.20%	
*AT&T UMTS	1	500	118	0.0129	1900	1.0000	1.29%	
*AT&T LTE	1	500	118	0.0129	740	0.4933	2.62%	
*Nextel	9	100	148	0.0148	851	0.5673	2.60%	
Verizon PCS	**15**	**430**	**128**	**0.1416**	**1970**	**1.0000**	**14.16%**	
Verizon Cellular	**9**	**399**	**128**	**0.0788**	**869**	**0.5793**	**13.60%**	
Verizon AWS	**1**	**1750**	**128**	**0.0384**	**2145**	**1.0000**	**3.84%**	
Verizon 700	**1**	**750**	**128**	**0.0165**	**698**	**0.4653**	**3.54%**	
								62.25%
* Source: Siting Council								

ATTACHMENT 3

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

Structural Analysis for SBA Network Services, Inc.

158' Monopole Tower

SBA Site Name: Easton-Everetts Road
SBA Site ID: CT46131-A-00
Verizon Site Name: Easton North 2

FDH Project Number 13SDWD1400

Analysis Results

Tower Components	96.8%	Sufficient
Foundation	94.7%	Sufficient

Prepared By:

Adam Bryan, EI
Project Engineer

Reviewed By:

Bradley Newman, PE
Senior Project Engineer
CT PE License No. 29630

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

October 21, 2013

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

TABLE OF CONTENTS

EXECUTIVE SUMMARY

At the request of SBA Network Services, Inc., FDH Engineering, Inc. performed a structural analysis of the monopole located in Easton, 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, foundation dimensions, current tower geometry, geotechnical data, and member sizes was obtained from:

- Paul J. Ford and Company (Job No. 29202-0378) original design drawings dated December 19, 2002
- Paul J. Ford and Company (Job No. 29202-0378) foundation design drawings dated December 19, 2002
- Tectonic Engineering Consultants P.C. (W.O. 1170.C912) Geotechnical Investigation dated March 30, 2000
- Vertical Solutions, Inc. (Project No. 130023, Revision 0) tower modification drawings dated January 15, 2013
- Vertical Solutions, Inc. (Project No. 130023, Revision 0) Rigorous Structural Analysis Report dated January 16, 2013
- 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 128 ft, the tower meets the requirements of the *TIA/EIA-222-F* standards and *2005 CBC* provided the **Recommendations** listed below are satisfied. Furthermore, provided the foundation was designed per the original design drawings (see Paul J. Ford and Company Job No 29202-0378) and the given existing soil parameters (see Tectonic Engineering Consultants P.C. W.O. 1170.C912), 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. If necessary, the proposed coax may be installed outside the pole shaft double stacked.
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	Feedlines[1]	Carrier	Mount Elevation (ft)	Mount Type
158.5	(6) Decibel DB980F90E-M (3) RFS APXVSPP18-C-A20	(6) 1-5/8"	Sprint/Nextel	158.5	(1) Low Profile Platform
156.5	(3) ALU 1900MHz RRH (25 MHz) RRUs (3) ALU 800MHz RRHs w/ External Notch Filters (6) ALU 1900 MHz ACU-A20-N RETs (3) ALU 800 MHz ACU-A20-N RETs	(3) 1-1/4"		156.5	(1) Collar Mount
149	(12) Decibel DB844H90E-XY	(12) 1-1/4"		149	(1) Low Profile Platform
138	(9) EMS RR90-17-02DP (6) TMAs	(18) 1-1/4"	T-Mobile	138	(1) Low Profile Platform
128[2]	(3) Swedcom SLCP 2X6014 (3) Antel BXA-171063-12BF (6) RFS FD9R6004/2CL-3CL Diplexers (6) Decibel DB846F65ZAXY	(12) 1-5/8"	Verizon	128	(1) Low Profile Platform
118	(3) Powerwave P65-16-XLH-RR (6) Powerwave 7770.00 (6) Powerwave LGP21401 TMAs (3) Powerwave TT19-08BP111-001 TMAs (6) Ericsson RRUS-11 RRUs (1) Raycap DC6-48-60-18-8F Surge Arrestor	(12) 1-1/4" (1) 3/8" RET (2) 5/8" DC	AT&T	118	(1) Low Profile Platform
75	(1) GPS	(1) 1/2"	Sprint/Nextel	75	(1) Pipe Mount

1. Feedlines installed inside pole's shaft unless otherwise noted.
2. Verizon currently has (12) 1-5/8" coax installed outside the pole's shaft double stacked.

Proposed Loading:

Antenna Elevation (ft)	Description	Feedlines	Carrier	Mount Elevation (ft)	Mount Type
128	(2) Swedcom SLCP 2X6014 (6) Decibel DB846F65ZAXY (3) Antel BXA-171063-12BF (1) Antel BXA-70063/6BF (6) RFS FD9R6004/2CL-3CL Diplexers	(12) 1-5/8"	Verizon	128	(1) 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	65 ksi & 60 ksi
Base Plate	50 ksi
Anchor Bolts	75 ksi
Flange Plate	50 ksi
Flange Bolts	Fu = 120 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. *Note: Capacities up to 100% are considered acceptable.* **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	158 - 123	Pole	TP31.112x24x0.2188	56.0	Pass
	123	Flange Bolts	(12) 1.25" Ø w/ BC = 35"	56.2	Pass
	123	Flange Plate	PL 39" Ø x 1.5" thk.	36.3	Pass
L2	123 - 79	Pole	TP40.053x31.112x0.3125	89.3	Pass
L3	79 - 39	Pole	TP47.555x38.412x0.375	90.7	Pass
L4	39 - 0	Pole w/ Mods	TP54.73x45.5859x0.375	96.8	Pass
		Anchor Bolts	(16) 2.25" Ø w/ BC = 62"	95.1	Pass
		Base Plate	60" SQ PL x 3.25" thk.	82.4	Pass

*Capacities include a 1/3 allowable stress increase for wind.

Table 4 - Maximum Base Reactions

Base Reactions	Current Analysis* *(TIA/EIA-222-F)*	Original Design *(TIA/EIA-222-F)*
Axial	46 k	30 k
Shear	35 k	27 k
Moment	3,892 k-ft	2,888 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

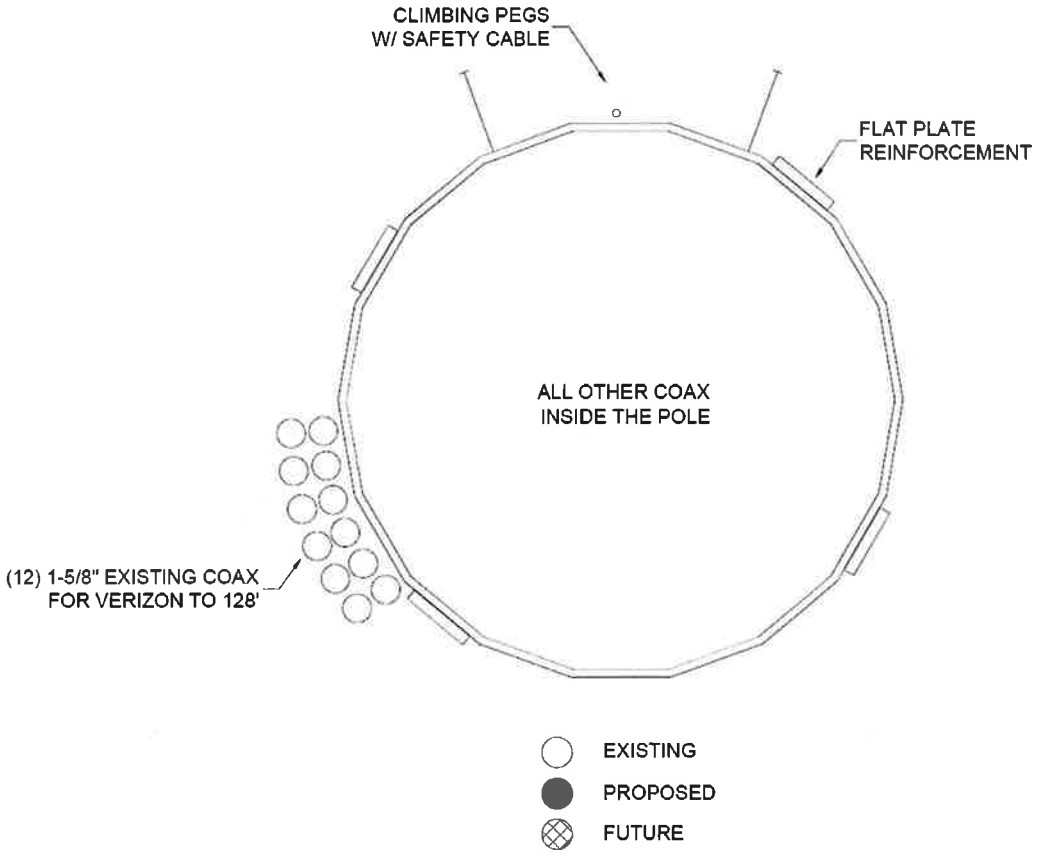
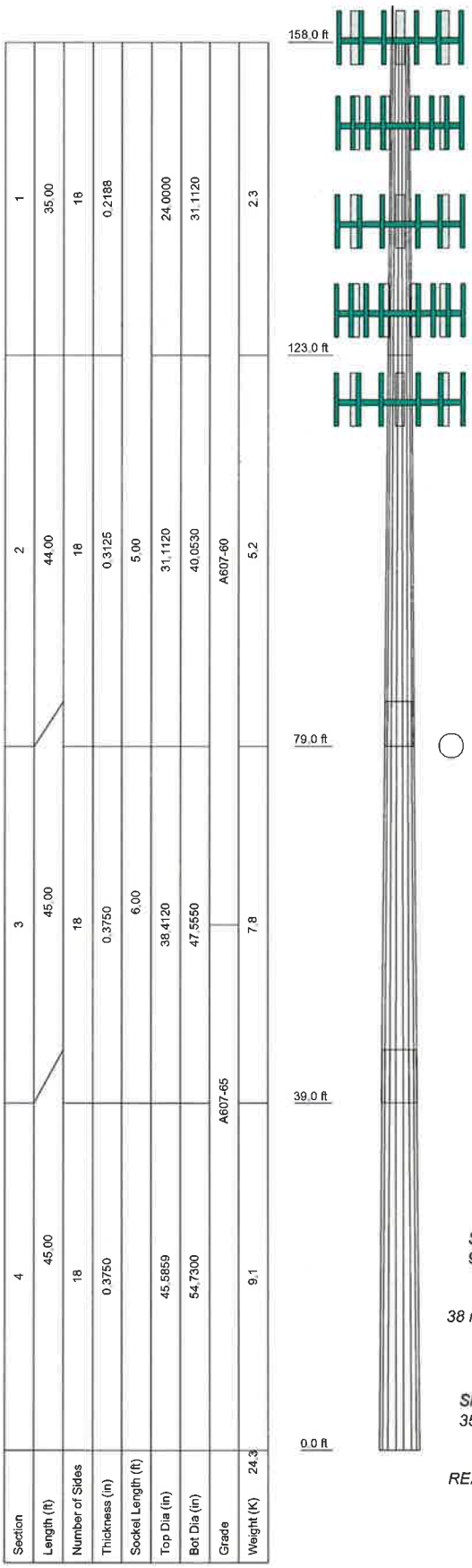


Figure 1—Assumed Coax Layout



Section	1	2	3	4
Length (ft)	35.00	44.00	45.00	45.00
Number of Sides	18	18	18	18
Thickness (in)	0.2188	0.3125	0.3750	0.3750
Socket Length (ft)		5.00	6.00	
Top Dia (in)	24.0000	31.1120	38.4120	45.5859
Bot Dia (in)	31.1120	40.0530	47.5550	54.7300
Grade	A607-60		A607-65	
Weight (K)	2.3	5.2	7.8	9.1

AXIAL 68 K
SHEAR 9 K
MOMENT 1011 kip-ft
TORQUE 0 kip-ft
38 mph WIND - 0.7500 in ICE

AXIAL 46 K
SHEAR 35 K
MOMENT 3892 kip-ft
TORQUE 2 kip-ft
REACTIONS - 85 mph WIND

DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
(2) DB980F90E-M w/ Mount Pipe	158.5	(2) DB846F65ZAXY w/ Mount Pipe	128
(2) DB980F90E-M w/ Mount Pipe	158.5	BXA-171063-12BF w/ Mount Pipe	128
(2) DB980F90E-M w/ Mount Pipe	158.5	BXA-171063-12BF w/ Mount Pipe	128
APXVSPP18-C-A20 w/Mount Pipe	158.5	BXA-70063/6BF w/ Mount Pipe	128
APXVSPP18-C-A20 w/Mount Pipe	158.5	(2) FD9R6004/2CL-3CL Diplexer	128
APXVSPP18-C-A20 w/Mount Pipe	158.5	(2) FD9R6004/2CL-3CL Diplexer	128
Low Profile Platform	158.5	(2) FD9R6004/2CL-3CL Diplexer	128
Lightning Rod	158	Low Profile Platform	128
1900MHz RRH (25 MHz)	156.5	BXA-171063-12BF w/ Mount Pipe	128
1900MHz RRH (25 MHz)	156.5	SLCP 2X6014 w/Mount Pipe	128
1900MHz RRH (25 MHz)	156.5	SLCP 2X6014 w/Mount Pipe	128
800MHz RRH w/ External Notch Filter	156.5	(2) DB846F65ZAXY w/ Mount Pipe	128
800MHz RRH w/ External Notch Filter	156.5	(2) DB846F65ZAXY w/ Mount Pipe	128
800MHz RRH w/ External Notch Filter	156.5	P65-16-XLH-RR w/Mount Pipe	118
(2) 1900 MHz ACU-A20-N RET	156.5	P65-16-XLH-RR w/Mount Pipe	118
(2) 1900 MHz ACU-A20-N RET	156.5	P65-16-XLH-RR w/Mount Pipe	118
(2) 1900 MHz ACU-A20-N RET	156.5	(2) 7770.00 w/Mount Pipe	118
800 MHz ACU-A20-N RET	156.5	(2) 7770.00 w/Mount Pipe	118
800 MHz ACU-A20-N RET	156.5	(2) 7770.00 w/Mount Pipe	118
800 MHz ACU-A20-N RET	156.5	(2) LGP21401 TMA	118
Collar Mount	156.5	(2) LGP21401 TMA	118
(4) DB844H90E-XY w/ Mount Pipe	149	(2) LGP21401 TMA	118
(4) DB844H90E-XY w/ Mount Pipe	149	TT19-08BP111-001 TMA	118
(4) DB844H90E-XY w/ Mount Pipe	149	TT19-08BP111-001 TMA	118
Low Profile Platform	149	TT19-08BP111-001 TMA	118
(3) RR90-17-02DP w/Mount Pipe	138	(2) RRUS-11	118
(3) RR90-17-02DP w/Mount Pipe	138	(2) RRUS-11	118
(3) RR90-17-02DP w/Mount Pipe	138	(2) RRUS-11	118
(2) TMA	138	DC6-48-60-18-8F Surge Arrestor	118
(2) TMA	138	Low Profile Platform	118
(2) TMA	138	GPS	75
Low Profile Platform	138	Pipe Mount	75

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A607-60	60 ksi	75 ksi	A607-65	65 ksi	80 ksi

TOWER DESIGN NOTES

1. Tower is located in Fairfield 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.

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Phone: 919-7551012
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Tower Analysis

Job: Easton-Everetts Road, CT46131-A-00			
Project: 13SDWD1400			
Client: SBA Network Services, Inc.	Drawn by: Adam Bryan	App'd:	
Code: TIA/EIA-222-F	Date: 10/21/13	Scale: NTS	
Path:		Dwg No. E-1	