

Filed by: Kri Pelletier, Property Specialist - SBA Communications 134 Flanders Rd., Suite 125, Westborough, MA 01581 508.251.0720 x 3804 - kpelletier@sbasite.com

March 14, 2018

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

Notice of Exempt Modification 206 Everett Road, Easton, CT 06612 41 17 25.2 N / -73 16 57.6 W Sprint #: CT03XC362\_DOMU

RE: Incomplete-em-sprint-046-180202-incltr-everett rd

Dear Ms. Bachman:

Per Council's request under Incomplete Notice-EM-Sprint-046-180202-incltr-everett rd, attached, please find an updated Structural Analysis Report.

In accordance with R.C.S.A. § 16.50j-73, a copy of this letter and the Report is being sent to the Town of Easton's First Selectman, Adam Dunsby, and Zoning Enforcement Officer, Phillip Doremus, as well as to the property owner, Joan & David Barney, Dorothy Barney Life Estate. (Separate notice is not being sent to tower owner, as it belongs to SBA.)

Please let us know if you need anything further.

Sincerely,

Kri Pelletier

**Property Specialist** 

SBA COMMUNICATIONS CORPORATION

134 Flanders Rd., Suite 125

Westborough, MA 01581

508.251.0720 x3804 + T

508.366.2610 + F

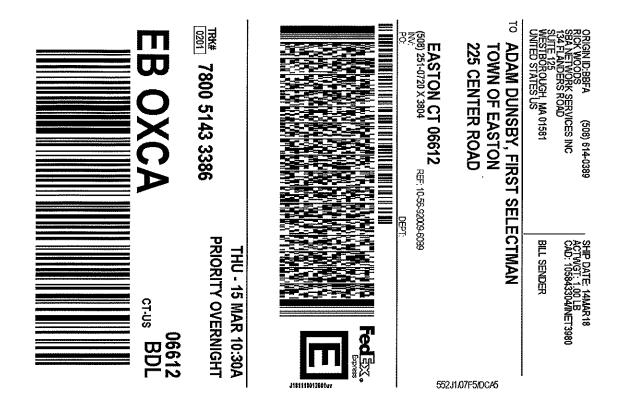
203.446.7700 + C

kpelletier@sbasite.com

Attachments



Adam Dunsby, First Selectman / with attachments
 *Town of Easton, 225 Center Road, Easton, CT 06612* Phillip Doremus, Zoning Enforcement Officer / with attachments
 *Town of Easton, 225 Center Road, Easton, CT 06612* 
 Joan & David Barney, Dorothy Barney Life Estate / with attachments
 108 Hiram Hill Rd., Monroe, CT 06468



Warning: Use only the printed original label for shipping, Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of

warning: Use only the printed original label for shipping, Using a photocopy of ruls label for shipping purposes is frauduent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is \$1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

<sup>1.</sup> Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.



Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of \$100 per

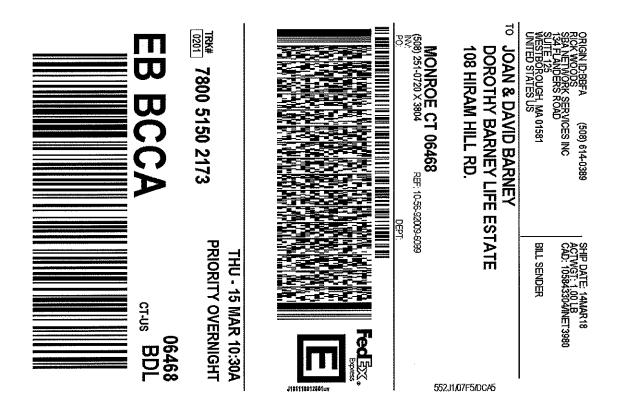
package, whether the result of loss, damage, delay, non-delivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or specimental, or sequential, or seq limits, see current FedEx Service Guide

After printing this label:

1. Use the "Print" button on this page to print your label to your laser or inkjet printer.

2. Fold the printed page along the horizontal line.

3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.



After printing this label:

Use the 'Print' button on this page to print your label to your laser or inkjet printer.
 Fold the printed page along the horizontal line.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudurent and cound result in additional original label for shipping. Using a photocopy of this label for shipping purposes is fraudurent and cound result in additional charges, along with the carcellation of your your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income finitency's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is \$1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

<sup>3.</sup> Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.



### 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

Kri Pelletier Property Specialist SBA Communications 134 Flanders Road, Suite 125 Westborough, MA 01581

RE: **EM-SPRINT-046-180202** – Sprint notice of intent to modify an existing telecommunications facility located at 206 Everett Road, Easton, Connecticut.

Dear Ms. Pelletier:

The Connecticut Siting Council (Council) received a notice of intent to modify the above-referenced facility on February 2, 2018.

According to Section 16-50j-71 of the Regulations of Connecticut State Agencies, "...any modification, as defined in Section 16-50j-2a of the Regulations of Connecticut State Agencies, to an existing tower site, except as specified in Sections 16-50j-72 and 16-50j-88 of the Regulations of Connecticut State Agencies, may have a substantial adverse environmental effect."

Staff has reviewed this exempt modification request for completeness and has identified a discrepancy between the Structural Analysis Report dated October 25, 2017 and the site plan sheet numbers A-2 and S-1 and Mount Augmentation site plan that are dated January 26 and January 16, 2018, respectively. Provide an Updated Structural Analysis Report that accounts for the data referenced in the above referenced site plans which requires installing additional mount hardware.

Therefore, the exempt modification request is incomplete at this time. The Council recommends that SBA provide an Updated Structural Analysis Report including the additional mount hardware on or before March 19, 2018. If additional time is needed to gather the requested information, please submit a written request for an extension of time prior to March 19, 2018.

This notice of incompletion shall have the effect of tolling the Federal Communications Commission (FCC) 60-day timeframe in accordance with Paragraph 217 of the FCC Wireless Infrastructure Report and Order issued on October 21, 2014 (FCC 14-153).

Thank you for your attention to this matter. Should you have any questions, please feel free to contact me at 860-827-2951.

Sincerely,

Melanie Bachman Executive Director

MAB/FC

c: The Honorable Adam W. Dunsby, First Selectman, Town of Easton Phillip Doremus, Zoning Enforcement Officer, Town of Easton Joan and David Barney, Property owner

&\EM\$\_T\$\1\_BYTOWN\Easton\EverettRd\\$PRINT\em-sprint-046-180202\_incompleteltr\_E

CONNECTICUT SITING COUNCIL
Affirmative Action / Faual Opportunity Employe



## **Tower Engineering Solutions**

Phone (972) 483-0607, Fax (972) 975-9615 8445 Freeport Parkway, Suite 375, Irving, Texas 75063

# **Structural Analysis Report**

**Existing 158 ft PennSummit Monopole** 

**Customer Name: SBA Communications Corp** 

**Customer Site Number: CT46131-A** 

**Customer Site Name: Easton-Everetts Rd** 

**Carrier Name: Sprint Nextel** 

Carrier Site ID / Name: CT03XC362 / Easton-Everetts Rd

**Site Location: 206 Everett Road** 

**Easton, Connecticut** 

**Fairfield County** 

Latitude: 41.290333

Longitude: -73.282666

### **Analysis Result:**

Max Structural Usage: 100.0% [Pass]

Max Foundation Usage: 92.0% [Pass]

Additional Usage Caused by Mount Modification: + 3.6%

Report Prepared by: Matthew Baker

#### Introduction

The purpose of this report is to summarize the analysis results on the 158 ft PennSummit Monopole to support the proposed antennas and transmission lines in addition to those currently installed. Any modification listed under Sources of Information was assumed completed and was included in this analysis.

### **Sources of Information**

Tower Drawings	Paul J. Ford for PennSummit Tubular, Job #29202-0378, Design #5951, Dated 12/19/02
Foundation Drawing	Paul J. Ford for PennSummit Tubular, Job #29202-0378, Design #5951, Dated 12/19/02
Geotechnical Report	Tectonic Engineering Consultants W.O. #1170.C912, Dated 03/30/00
Modification Drawings	Vertical Solutions Project #131141.01 As-Builts, Dated 11/06/2013

### **Analysis Criteria**

The rigorous analysis was performed in accordance with the requirements and stipulations of the ANSI/TIA/EIA 222-G. In accordance with this standard, the structure was analyzed using **TESPoles**, a proprietary analysis software. The program considers the structure as an elastic 3-D model with secondorder effects and temperature effects incorporated in the analysis. The analysis was performed using multiple wind directions.

Wind Speed Used in the Analysis: Ultimate Design Wind Speed Vult = 130.0 mph (3-Sec. Gust)/

Nominal Design Wind Speed V<sub>asd</sub> = 101.0 mph (3-Sec. Gust)

50 mph (3-Sec. Gust) with 3/4" radial ice concurrent Wind Speed with Ice:

**Operational Wind Speed:** 60 mph + 0" Radial ice

Standard/Codes: ANSI/TIA/EIA 222-G / 2012 IBC / 2016 Connecticut State

**Building Code** 

O ft

**Exposure Category:** C

Structure Class: Ш **Topographic Category:** 1

Seismic Parameters:  $S_S = 0.212, S_1 = 0.066$ 

This structural analysis is based upon the tower being classified as a Structure Class II; however, if a different classification is required subsequent to the date hereof, the tower classification will be changed to meet such requirement and a new structural analysis will be run.

**Crest Height:** 

# **Existing Antennas, Mounts and Transmission Lines**

The table below summarizes the antennas, mounts and transmission lines that were considered in the analysis as existing on the tower.

Items	Elevation (ft)	Qty.	Antenna Descriptions	Mount Type & Qty.	Transmission Lines	Owner
-	-		KMW - ETCR-654L12H6 - Panel			
-		3	RFS - ACU-A20-N - RET			
-	158.5	3	ALU - 1900 MHz - RRU	Low Profile Platform w/	(4) 1 1 /4!! Tile on	Consider t
-	136.3	6	ALU - 800 MHz - RRU	Collar Mount	(4) 1 1/4" Fiber	Sprint Nextel
-	5	3	ALU - TD-RRH8x20-25 - RRU			
-		3	Alu - 800 Filters			
-	149.0	12	Decibel - DB844H90E-XY - Panel	Low Profile Platform	(12) 1 1/4"	
9	138.0	6	RFS - APX16DWV-16DWVS-E-A20 - Panel	Low Profile Platform w/ Handrail and V-Brace tie-back	(12) 1 1/4"	T-Mobile
10		3	RFS - APXV18-206516S-A20 - Panel			
11		3	Commscope - LNX-6515DS-A1M - Panel			
12		3	Ericsson - KRY 112 144/1 - TMA			
13		3	Kathrein - 782 11056 - Bias T	2		
14		6	Andrew - DB846F65ZAXY – Panel	Low Profile Platform	(6) 1 5/8" (2) 1 5/8" Fiber	Verizon
15		6	Andrew - JAHH-65B-R3B - Panel			
16	128.0	3	Alcatel Lucent - RRH2x60-700 - RRH			
17		3	Alcatel Lucent - RRH4X45-AWS - RRH		(2) 1 3/6 Fiber	
18		2	RFS - DB-T1-6Z-8AB-0Z - SP			
19	118.0	3	Powerwave - P65-16-XLH-RR – Panel		(42) 4 4 (4)	
20		6	Powerwave - 7770 - Panel	Low Profile Platform	(12) 1 1/4" (1) 3/8" RET (2) 5/8" DC inside	AT&T
21		6	Powerwave - LGP21401 - TMA			
22		3	Powerwave - TT19-08BP111-001 - TMA			
23		6	Ericsson - RRUS-11 - RRU		(1) 3" Innerduct	
24	1		Raycap - DC6-48-60-18 - SP		(±/5, iiiileidact	
-	75.0	1	GPS	Pipe Mount	(1) 1/2"	Sprint

### <u>Proposed Carrier's Final Configuration of Antennas, Mounts and Transmission Lines</u>

Information pertaining to the proposed carrier's final configuration of antennas and transmission lines was provided by SBA Communications Corp. The proposed antennas and lines are listed below.

Items	Elevation (ft)	Qty.	Antenna Descriptions	Mount Type & Qty.	Transmission Lines	Owner
1		3	RFS - APXVSPP18-C-A20 - Panel	01 -1 -6 /		
2	2	3	Commscope - DT465B-2XR - Panel	Low Profile Platform w/		
3		3	RFS - ACU-A20-N - RET	Collar Mount, Handrail		
4	158.5 3 6	3	ALU - 1900 MHz - RRU	Kit (SitePro HRK14-U) and Platform	(4) 1 1/4" Fiber	Consider
5		6	ALU - 800 MHz - RRU	Reinforcement Kit	58 377 ax	Sprint Nextel
6		3   AIII_TD_DDH8v20_25_DDII		(SitePro PRK-1245L)		Nexter
7		3	Alu - 800 Filters	(SICCITOTING 1243L)		
8	149.0	12	Decibel - DB844H90E-XY - Panel*	Low Profile Platform*	(12) 1 1/4"*	
25	75.0	1	GPS	Pipe Mount	(1) 1/2"	

<sup>\*</sup>Equipment has been decommissioned but remains installed.

See the attached coax layout for the line placement considered in the analysis.

### **Analysis Results**

The results of the structural analysis, performed for the wind and ice loading and antenna equipment as defined above, are summarized as the following:

	Pole shafts	Anchor Bolts	Base Plate
Max. Usage:	100.0%	81.0%	74.3%
Pass/Fail	Pass	Pass	Pass

### **Foundations**

	Moment (Kip-Ft)	Shear (Kips)	Axial (Kips)
Analysis Reactions	5165.1	43.2	56.9

The foundation has been investigated using the supplied documents and soils report and was found adequate. Therefore, no modification to the foundation will be required.

### **Operational Condition (Rigidity):**

Operational characteristics of the tower are found to be within the limits prescribed by ANSI/TIA/EIA 222-G for the installed antennas. The maximum twist/sway at the elevation of the proposed equipment is 1.6562 degrees under the operational wind speed as specified in the Analysis Criteria.

# **Conclusions**

Based on the analysis results, the existing structure and its foundation were found to be adequate to safely support the existing and proposed equipment and meet the minimum requirements per the ANSI/TIA/EIA 222-G Standard under the design basic wind speed as specified in the Analysis Criteria.

# **Standard Conditions**

- 1. This analysis was performed based on the information supplied to (TES) Tower Engineering Solutions, LLC. Verification of the information provided was not included in the Scope of Work for TES. The accuracy of the analysis is dependent on the accuracy of the information provided.
- The analysis is based on the presumption that the tower members and components along with any existing reinforcement items have been correctly and properly designed, manufactured, installed and maintained.
- 3. All the existing structural members were assumed to be in good condition with no physical damage or deterioration associated with corrosion.
- 4. An initial tension of 10% of the break strength on all the existing guy wires was assumed in all the structural analyses of guyed towers unless different values were provided by the client. **TES** cannot take responsibility for the deviations in the analysis results because of differences in the initial tension forces of the existing guy wires.
- 5. Secondary component or connection secondary components, welds and bolts are assumed to be able to carry their intended original design loads. **TES** cannot take responsibility for verification of the adequacy on the connections, bolts and welds present in the structure.
- 6. The analyses will be performed based on the codes as specified by the client or based on the best knowledge of the engineering staff of TES. In the absence of information to the contrary, all work will be performed in accordance with the latest relevant revision of ANSI/TIA-222. If wind speed and/or ice loads are different from the minimum values recommended by the EIA/TIA-222 standard or other codes, TES should be notified in writing and the applicable minimum values provided by the client.
- 7. The configuration of the existing mounts, antennas, coax and other appurtenances were supplied by the customer for the current structural analysis. TES has not visited the tower site to verify the adequacy of the information provided. If there is any discrepancy found in the report regarding the existing conditions, TES should be notified immediately to evaluate the effect of the discrepancy on the analysis results.
- 8. The client will assume responsibility for rework associated with the differences in initially provided information, including tower and foundation information, existing and/or proposed equipment and transmission lines.
- 9. If a feasibility analysis was performed, final acceptance of changed conditions shall be based upon a rigorous structural analysis.