June 19, 2014

David Martin and
Members of the Siting Council
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

RE: Notice of Exempt Modification
8 Ferris Road
Newtown, CT 06470
Sprint Site #: NV2.5_CT13XC245
N 41° 23' 23.06"
W -73° 20' 17.56"

Dear Mr. Martin and Members of the Siting Council:

On behalf of Sprint Spectrum, SBA Communications is submitting an exempt modification application to the Connecticut Siting council for modification of existing equipment at a tower facility located at 8 Ferris Road, Newtown, CT.

The 8 Ferris Road facility consists of a 118' MONOPOLE Tower owned and operated by SBA 2012 TC Assets, LLC. In order to accommodate technological changes and enhance system performance in the State of Connecticut, Sprint Spectrum plans to modify the equipment configurations at many of its existing cell sites. Please accept this letter and attachments as notification, pursuant to R.C.S.A. Section 16-50j-73, of construction which constitutes an exempt modification pursuant to R.C.S.A. Section 16-50j-72(b)(2). In compliance with R.C.S.A. Section 16-50j-73, a copy of this letter and attachments is being sent to the chief elected official of the municipality in which the affected cell site is located.

As part of Sprint's Network Vision modification project, Sprint desires to upgrade their equipment to meet the new standards of 4G technology. The new equipment will allow customers to download files and browse the internet at a high rate of speed while also allowing their phones to be compatible with the latest 4G technology.

Attached is a summary of the planned modifications, including power density calculations reflecting the change in Sprint's operations at the site along with the required fee of $625.

The changes to the facility do not constitute modifications as defined in Connecticut General Statutes ("C.G.S.") Section 16-50i(d) because the general physical characteristics of the facility will not be

significantly changed or altered. Rather, the planned changes to the facility fall squarely within those activities explicitly provided for in R.C.S.A. Section 16-50j-72(b)(2).

1. The overall height of the structure will be unaffected.

2. The proposed changes will not extend the site boundaries. There will be no effect on the site compound other than the new equipment cabinets.

3. The proposed changes will not increase the noise level at the existing facility by six decibels or more.

4. The changes in radio frequency power density will not increase the calculated "worst case" power density for the combined operations at the site to a level at or above the applicable standard for uncontrolled environments as calculated for a mixed frequency site.

For the foregoing reasons, SBA Communications on behalf of Sprint Spectrum, respectfully submits that he proposed changes at the referenced site constitute exempt modifications under R.C.S.A. Section 16-50j-72(b)(2).

Please feel free to call me at (508) 251-0720 x 3804 with any questions you may have concerning this matter.

Thank you,

Kri Pelletier
SBA Communications Corporation
33 Boston Post Road West Suite 320
Marlborough, MA 01752
508-251-0720 x 3804 + T
508-251-1755 + F
203-446-7700 + C
kpelletier@sbasite.com

Sprint Spectrum
Equipment Modification

8 Ferris Road, Newtown, CT
Site number CT13XC245

Tower Owner: SBA 2012 TC Assets, LLC

Equipment Configuration: MONOPOLE Tower

Current and/or approved:

Elevation 107':

- (3) ALU 1900 4x45 65 MHz RRHs
- (3) ALU 800 MHz 2x50W RRHs
- (3) ALU 800 MHz External Notch Filters
- (4) RFS ACU-A20-N RETs
- (3) 1-1/4" Fiber lines

Elevation 105':

- (3) RFS APXVSPP18-C-A20

Planned Modifications:

Elevation 107':

- (3) ALU 1900 4x45 65 MHz RRHs
- (3) ALU 800 MHz 2x50W RRHs
- (3) ALU 800 MHz External Notch Filters
- (4) RFS ACU-A20-N RETs
- (3) 1-1/4" Fiber

Elevation 105':

- (3) RFS APXVSPP18-C-A20
- (3) RFS APXVTM14-C-I20
- (1) 1-1/4" Fiber

Structural Information:

The attached structural analysis demonstrates that the tower and foundation will have adequate structural capacity to accommodate the proposed modifications.

Power Density:

The anticipated Maximum Composite contributions from the Sprint facility are 4.97% of the allowable FCC established general public limit. The anticipated composite MPE value for this site assuming all carriers present is 79.25% of the allowable FCC established general public limit sampled at the ground level.

Site Composite MPE %	
Carrier	MPE %
Sprint	4.97%
Nextel	4.10%
Verizon Wireless	29.05%
AT&T	33.33%
T-Mobile	7.80%
Total Site MPE %	79.25%

June 19, 2014

E. Patricia Llodra
First Selectman
Town of Newtown
Town Hall
3 Primrose Street
Newtown, CT 06470

RE: Telecommunications Facility @ 8 Ferris Road, Newtown, CT

Dear Ms. Llodra,

In order to accommodate technological changes and enhance system performance in the State of Connecticut, Sprint Spectrum will be changing its equipment configuration at certain cell sites.

As required by Regulations of Connecticut State Agencies (R.C.S.A.) Section 16-50j-73, the Connecticut Siting Council has been notified of the changes and will review Sprint's proposal. Please accept this letter as notification under Section 16-50j-73 of construction which constitutes an exempt modification pursuant to R.C.S.A. Section 16-50j-72(b)(2).

The accompanying letter to the Siting Council fully describes Sprint's proposal for the referenced cell site. However, if you have any questions or require any further information on our plans or the Siting Council's procedures, please call me at (508) 251-0720 x 3804.

Thank you,

Kri Pelletier
SBA Communications Company
33 Boston Post Road West, Suite 320
Marlborough, MA 01752
508-251-0720 x 3804 + T
508-251-1755 + F
203-446-7700 + C
kpelletier@sbasite.com

June 19, 2014

Erich and Patricia Gertsch
8 Ferris Road
Newtown CT 06470-1758

RE: Telecommunications Facility @ 8 Ferris Road, Newtown, CT

Dear Mr. & Mrs. Gertsch,

In order to accommodate technological changes and enhance system performance in the State of Connecticut, Sprint Spectrum will be changing its equipment configuration at certain cell sites.

As required by Regulations of Connecticut State Agencies (R.C.S.A.) Section 16-50j-73, the Connecticut Siting Council has been notified of the changes and will review Sprint's proposal. Please accept this letter as notification under Section 16-50j-73 of construction which constitutes an exempt modification pursuant to R.C.S.A. Section 16-50j-72(b)(2).

The accompanying letter to the Siting Council fully describes Sprint's proposal for the referenced cell site. However, if you have any questions or require any further information on our plans or the Siting Council's procedures, please call me at (508) 251-0720 x 3804.

Thank you,

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EBI Consulting
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RADIO FREQUENCY FCC REGULATORY COMPLIANCE MAXIMUM PERMISSIBLE EXPOSURE (MPE) ASSESSMENT

Sprint Existing Facility

Site ID: CT13XC245

Dodgington / Nextel Tower

8 Ferris Road
Newtown, CT 06470

June 16, 2014

EBI Project Number: 62143386

21 B Street · Burlington, MA 01803 · Tel: (781) 273.2500 · Fax: (781) 273.3311

EBI Consulting
environmental | engineering | due diligence

June 16, 2014

Sprint
Attn: RF Engineering Manager
1 International Boulevard, Suite 800
Mahwah, NJ 07495

Re: Radio Frequency Maximum Permissible Exposure (MPE) Assessment for Site:
CT13XC245 - Dodgington / Nextel Tower

Site Total: 79.25% - MPE% in full compliance

EBI Consulting was directed to analyze the proposed upgrades to the existing Sprint facility located at 8 Ferris Road, Newtown, CT, for the purpose of determining whether the radio frequency (RF) exposure levels from the proposed Sprint equipment upgrades on this property are within specified federal limits.

All information used in this report was analyzed as a percentage of current Maximum Permissible Exposure (% MPE) as listed in the FCC OET Bulletin 65 Edition 97-01and ANSI/IEEE Std C95.1. The FCC regulates Maximum Permissible Exposure in units of microwatts per square centimeter (µW/cm2). The number of µW/cm2 calculated at each sample point is called the power density. The exposure limit for power density varies depending upon the frequencies being utilized. Wireless Carriers and Paging Services use different frequency bands each with different exposure limits, therefore it is necessary to report results and limits in terms of percent MPE rather than power density.

All results were compared to the FCC (Federal Communications Commission) radio frequency exposure rules, 47 CFR 1.1307(b)(1) – (b)(3), to determine compliance with the Maximum Permissible Exposure (MPE) limits for General Population/Uncontrolled environments as defined below.

General population/uncontrolled exposure limits apply to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general public would always be considered under this category when exposure is not employment related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area.

Public exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter ($\mu W/cm^2$). The general population exposure limit for the cellular band (850 MHz Band) is approximately 567 $\mu W/cm^2$, and the general population exposure limit for the 1900 MHz and 2500 MHz bands is 1000 $\mu W/cm^2$. Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.

Occupational/controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general population/uncontrolled limits (see below), as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

Additional details can be found in FCC OET 65.

CALCULATIONS

Calculations were done for the proposed upgrades to the existing Sprint Wireless antenna facility located at 8 Ferris Road, Newtown, CT, using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. All calculations were performed assuming a lobe representing the maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB, was focused at the base of the tower. For this report the sample point is the top of a 6 foot person standing at the base of the tower.

For all calculations, all emissions were calculated using the following assumptions:

1) 2 channels in the 1900 MHz Band were considered for each sector of the proposed installation.
2) 1 channel in the 800 MHz Band was considered for each sector of the proposed installation
3) 2 channels in the 2500 MHz Band were considered for each sector of the proposed installation.
4) All radios at the proposed installation were considered to be running at full power and were uncombined in their RF transmissions paths per carrier prescribed configuration. Per FCC OET Bulletin No. 65 - Edition 97-01 recommendations to achieve the maximum anticipated value at each sample point, all power levels emitting from the proposed antenna installation are increased by a factor of 2.56 to account for possible in-phase reflections from the surrounding environment. This is rarely the case, and if so, is never continuous.
5) For the following calculations the sample point was the top of a six foot person standing at the base of the tower. The maximum gain of the antenna per the antenna manufactures supplied specifications minus 10 dB was used in this direction. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.

6) The antennas used in this modeling are the RFS APXVSPP18-C-A20 and the RFS APXVTM14-C-I20. This is based on feedback from the carrier with regards to anticipated antenna selection. The RFS APXVSPP18-C-A20 has a 15.9 dBd gain value at its main lobe at 1900 MHz and 13.4 dBd at its main lobe for 850 MHz. The RFS APXVTM14-C-I20 has a 15.9 dBd gain value at its main lobe at 2500 MHz. The maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB, was used for all calculations. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.
7) The antenna mounting height centerline for the proposed antennas is **105 feet** above ground level (AGL).
8) Emissions values for additional carriers were taken from the Connecticut Siting Council active database. Values in this database are provided by the individual carriers themselves.

All calculation were done with respect to uncontrolled / general public threshold limits

Site ID	CT13XC245 - Dodgington / Nextel Tower
Site Addresss	8 Ferris Road, Newtown, CT, 06470
Site Type	Monopole

Sector 1

Antenna Number	Antenna Make	Antenna Model	Radio Type	Frequency Band	Technology	Power Out Per Channel (Watts)	Number of Channels	Composite Power	Antenna Gain (10 db reduction)	Antenna Height (ft)	analysis height	Cable Size	Cable Loss (dB)	Additional Loss (dB)	ERP	Power Density Percentage
1a	RFS	APXVSPP18-C-A20	RRH	1900 MHz	CDMA / LTE	20	2	40	5.9	105	99	1/2 "	0.5	0	138.69	0.51%
1a	RFS	APXVSPP18-C-A20	RRH	850 MHz	CDMA / LTE	20	1	20	3.4	105	99	1/2 "	0.5	0	39.00	0.25%
1B	RFS	APXVTMM14-C-120	RRH	2500 MHz	CDMA / LTE	20	2	40	5.9	105	99	1/2 "	0.5	0	138.69	0.90%
														Sector total Power Density Value:		1.66%

Sector 2

Antenna Number	Antenna Make	Antenna Model	Radio Type	Frequency Band	Technology	Power Out Per Channel (Watts)	Number of Channels	Composite Power	Antenna Gain (10 db reduction)	Antenna Height (ft)	analysis height	Cable Size	Cable Loss (dB)	Additional Loss (dB)	ERP	Power Density Percentage
2a	RFS	APXVSPP18-C-A20	RRH	1900 MHz	CDMA / LTE	20	2	40	5.9	105	99	1/2 "	0.5	0	138.69	0.51%
2a	RFS	APXVSPP18-C-A20	RRH	850 MHz	CDMA / LTE	20	1	20	3.4	105	99	1/2 "	0.5	0	39.00	0.25%
2B	RFS	APXVTMM14-C-120	RRH	2500 MHz	CDMA / LTE	20	2	40	5.9	105	99	1/2 "	0.5	0	138.69	0.90%
														Sector total Power Density Value:		1.66%

Sector 3

Antenna Number	Antenna Make	Antenna Model	Radio Type	Frequency Band	Technology	Power Out Per Channel (Watts)	Number of Channels	Composite Power	Antenna Gain (10 db reduction)	Antenna Height (ft)	analysis height	Cable Size	Cable Loss (dB)	Additional Loss (dB)	ERP	Power Density Percentage
3a	RFS	APXVSPP18-C-A20	RRH	1900 MHz	CDMA / LTE	20	2	40	5.9	105	99	1/2 "	0.5	0	138.69	0.51%
3a	RFS	APXVSPP18-C-A20	RRH	850 MHz	CDMA / LTE	20	1	20	3.4	105	99	1/2 "	0.5	0	39.00	0.25%
3B	RFS	APXVTMM14-C-120	RRH	2500 MHz	CDMA / LTE	20	2	40	5.9	105	99	1/2 "	0.5	0	138.69	0.90%
														Sector total Power Density Value:		1.66%

Site Composite MPE %	
Carrier	MPE %
Sprint	4.97%
Nextel	4.10%
Verizon Wireless	29.05%
AT&T	33.33%
T-Mobile	7.80%
Total Site MPE %	**79.25%**

EBI Consulting
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Summary

All calculations performed for this analysis yielded results that were well within the allowable limits for general public Maximum Permissible Exposure (MPE) to radio frequency energy.

The anticipated Maximum Composite contributions from the Sprint facility are **4.97% (1.66% from sector 1, 1.66% from sector 2 and 1.66% from sector 3)** of the allowable FCC established general public limit considering all three sectors simultaneously sampled at the ground level.

The anticipated composite MPE value for this site assuming all carriers present is **79.25%** of the allowable FCC established general public limit sampled at 6 feet above ground level. This total composite site value is based upon MPE values listed in the Connecticut Siting Council database for existing carrier emissions.

FCC guidelines state that if a site is found to be out of compliance (over allowable thresholds), that carriers over a 5% contribution to the composite value will require measures to bring the site into compliance. For this facility, the composite values calculated were well within the allowable 100% threshold standard per the federal government.

Scott Heffernan
RF Engineering Director

EBI Consulting
21 B Street
Burlington, MA 01803

Structural Analysis for SBA Network Services, Inc.

118' Monopole Tower

SBA Site Name: Newtown Ferris Rd
SBA Site ID: CT46132-A-05
Sprint Site ID: CT13XC245
Sprint Site Name: Sprint Phase 2

FDH Project Number 1462H91400

Analysis Results

Tower Components	95.5%	Sufficient
Foundation	63.6%	Sufficient

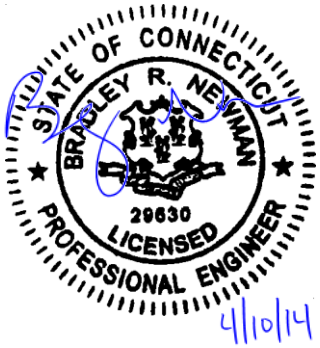
Prepared By:

Kevin C. Diaz, EI
Project Engineer

Reviewed By:

Bradley Newman, PE
Senior Project Engineer

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



April 10, 2014

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

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 Newtown, 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 Cuilding Coded (CBC)*. Information pertaining to the existing/proposed antenna loading, current tower geometry, geotechnical data, and member sizes was obtained from:

- Vertical Solutions, Inc. (Project No. 110591.01 Rev 0) Rigorous Structural Analysis dated May 23, 2010
- Engineered Endeavors, Inc. (Project No. 5189 Rev I) Design Calculations for a Spread Footer Foundation dated August 20, 1999
- Applied Earth Technologies (Job No. 4677) Report on Subsurface Investigation dated June 7, 1999
- Vertical Solutions, Inc. (Project No. 100188.08) modification drawings dated May 7, 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 Sprint in place at 107 ft and 105 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 constructed per the original design drawings (see Engineered Endeavors, Inc. Project No. 5189 Rev I), and give the soil parameters (see Applied Earth Technologies Job No. 4677), the foundation should have the necessary capacity to support both the proposed and existing 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 feed lines should be installed inside the pole's shaft.
2. RRU/RRH Stipulation: The proposed equipment may be installed in any arrangement as determined by the client.

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	Feed Lines[1]	Carrier	Mount Elevation (ft)	Mount Type
130	(1) Decibel DB222 Dipole	(12) 7/8"	Town of Newtown	118	(1) Low-Profile Platform
119.42	(1) Telewave ANT150D Dipole				
118.8	(9) Decibel DB844H90E-XY		Sprint		
107	(3) ALU 1900 4x45 65 MHz RRHs (3) ALU 800 MHz 2x50W RRHs (3) ALU 800 MHz External Notch Filters (4) RFS ACU-A20-N RETs	(3) 1-1/4" Fiber	Sprint	107	(1) Universal Ring Mount
105	(3) RFS APXVSPP18-C-A20			105	(1) Low-Profile Platform
98	(3) Powerwave P65-16-XL-2 (4) Andrew DB846H80E-SX (2) RFS APL868013 (3) RYMSA MGD3-800TX	(12) 1-5/8"	Verizon	98	(1) Low-Profile Platform
91	(3) Powerwave 7770.00 (3) Powerwave P65-16-XLH-RR (6) Powerwave LGP21401 TMAs (6) Ericsson RRUS-11 RRUs (1) Raycap Surge Arrestor	(12) 7/8" (2) 5/8" DC (1) 3/8" Fiber	AT&T	91	(1) Low-Profile Platform
81	(6) RFS APX16DWV-16DWV (6) Remec S20057A1 TMAs	(24) 7/8"	T-Mobile	81	(1) Low-Profile Platform
75	(1) GPS	(1) 1/2"[2]	Sprint[2]	75	Direct

1. Feed lines installed inside the pole's shaft unless otherwise noted.
2. (1) 1/2" feed line by Sprint to 75' is installed outside the pole's shaft.

Proposed Loading:

Antenna Elevation (ft)	Description	Feed Lines	Carrier	Mount Elevation (ft)	Mount Type
107	(3) ALU 1900 4x45 65 MHz RRHs (3) ALU 800 MHz 2x50W RRHs (3) ALU 800 MHz External Notch Filters (3) Alcatel Lucent TD-RRH8x20-25 RRUs (4) RFS ACU-A20-N RETs	(3) 1-1/4" Fiber (1) 1-1/4"	Sprint	107	(1) Universal Ring Mount
105	(3) RFS APXVSPP18-C-A20 (3) RFS APXVTM14-C-I20			105	(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
Base Plate Stiffeners	50 ksi
Base Plate	60 ksi
Anchor Bolts	75 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	118 - 91.29	Pole	TP23.22x17x0.188	49.6	Pass
L2	91.29 - 45.13	Pole	TP33.48x22.0476x0.313	90.0	Pass
L3	45.13 - 0	Pole	TP45.19x31.7587x0.375	82.0	Pass
		Anchor Bolts	(12) 2.25" Ø on 52" BC	79.9	Pass
		Base Plate	PL 58" Ø x 1.75" Thk.**	95.5	Pass
		Base Plate Stiffeners	PL 7" x 16" x 1/2" Thk.	62.9	Pass

*Capacities include a 1/3 allowable stress increase for wind per *TIA/EIA-222-F* standards.
**Base Plate diameter is assumed.

Table 4 - Maximum Base Reactions

Base Reactions	Current Analysis* *(TIA/EIA-222-F)*
Axial	26 k
Shear	23 k
Moment	2,052 k-ft

*Foundation determined adequate per independent analysis.

GENERAL COMMENTS

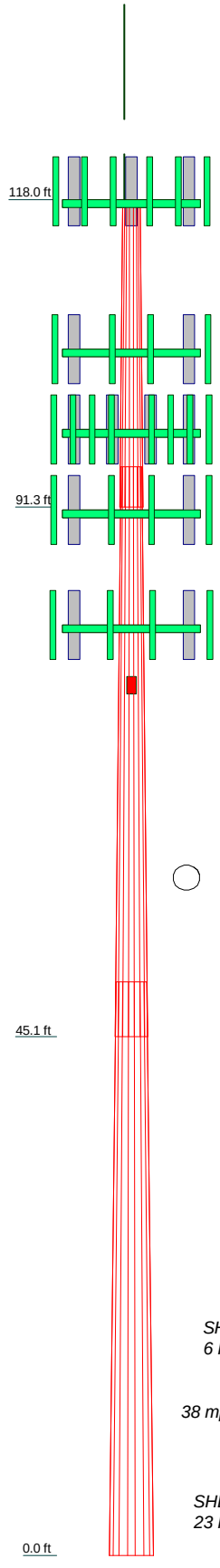
This engineering analysis is based upon the theoretical capacity of the structure. It is not a condition assessment of the tower and its foundation. It is the responsibility of SBA Network Services, Inc. to verify that the tower modeled and analyzed is the correct structure (with accurate antenna loading 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.

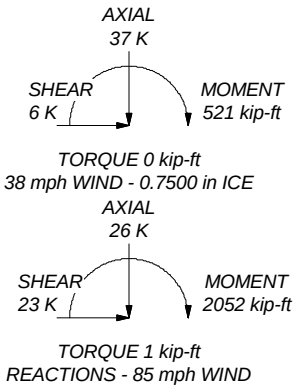
LIMITATIONS

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	Length (ft)	Number of Sides	Thickness (in)	Socket Length (ft)	Top Dia (in)	Bot Dia (in)	Grade	Weight (K)
1	26.71	18	0.1880	3.42	17.0000	23.2200		1.1
2	49.58	18	0.3130	4.75	22.0476	33.4800	A572-65	4.6
3	49.88	18	0.3750		31.7587	45.1900		7.7
								13.4





DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
Lightning Rod	118	P65-16-XL-2 w/Mount Pipe	98
DB222 Dipole	118	(2) DB846H80E-SX w/ Mount Pipe	98
ANT150D Dipole	118	DB846H80E-SX w/ Mount Pipe	98
Pipe Mount	118	DB846H80E-SX w/ Mount Pipe	98
(3) DB844H90E-XY w/ Mount Pipe	118	APL868013 w/ Mount Pipe	98
(3) DB844H90E-XY w/ Mount Pipe	118	APL868013 w/ Mount Pipe	98
(3) DB844H90E-XY w/ Mount Pipe	118	MGD3-800TX w/Mount Pipe	98
(1) Low-Profile Platform	118	MGD3-800TX w/Mount Pipe	98
ALU 1900 4x45 65 MHz RRH	107	MGD3-800TX w/Mount Pipe	98
ALU 1900 4x45 65 MHz RRH	107	(1) Low-Profile Platform	98
ALU 1900 4x45 65 MHz RRH	107	Raycap Surge Arrestor	91
ALU 800 MHz 2x50W RRH	107	(1) Low-Profile Platform	91
ALU 800 MHz 2x50W RRH	107	(2) RRUS-11	91
ALU 800 MHz 2x50W RRH	107	7770.00 w/Mount Pipe	91
800 MHz External Notch Filter	107	7770.00 w/Mount Pipe	91
800 MHz External Notch Filter	107	7770.00 w/Mount Pipe	91
800 MHz External Notch Filter	107	P65-16-XLH-RR w/Mount Pipe	91
TD-RRH8x20-25	107	P65-16-XLH-RR w/Mount Pipe	91
TD-RRH8x20-25	107	P65-16-XLH-RR w/Mount Pipe	91
TD-RRH8x20-25	107	(2) LGP21401 TMA	91
(2) ACU-A20-N RET	107	(2) LGP21401 TMA	91
ACU-A20-N RET	107	(2) LGP21401 TMA	91
ACU-A20-N RET	107	(2) RRUS-11	91
(1) RRH Collar Mount	107	(2) RRUS-11	91
APXVSPP18-C-A20 w/Mount Pipe	105	(2) Remec S20057A1 TMAs	81
APXVSPP18-C-A20 w/Mount Pipe	105	(2) Remec S20057A1 TMAs	81
APXVSPP18-C-A20 w/Mount Pipe	105	(1) Low-Profile Platform	81
APXVTM14-C-I20 w/ Mount Pipe	105	(2) APX16DWV-16DWVw/ Mount Pipe	81
APXVTM14-C-I20 w/ Mount Pipe	105	(2) APX16DWV-16DWVw/ Mount Pipe	81
APXVTM14-C-I20 w/ Mount Pipe	105	(2) APX16DWV-16DWVw/ Mount Pipe	81
(1) Low-Profile Platform	105	(2) Remec S20057A1 TMAs	81
P65-16-XL-2 w/Mount Pipe	98	GPS	75
P65-16-XL-2 w/Mount Pipe	98		

MATERIAL STRENGTH

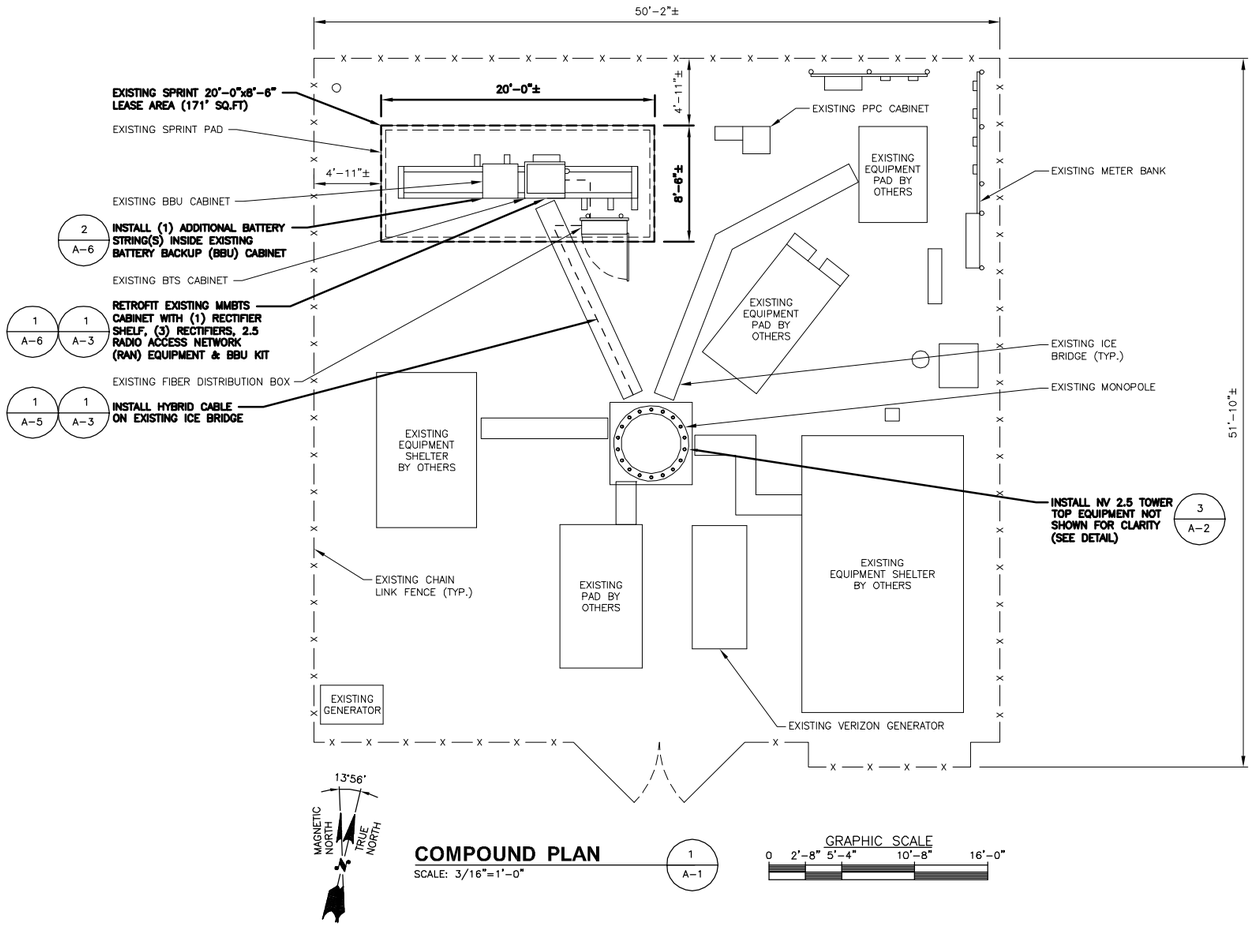
GRADE	Fy	Fu	GRADE	Fy	Fu
A572-65	65 ksi	80 ksi			

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.
5. TOWER RATING: 90%

FDH Engineering, Inc.
6521 Meridien Drive
Raleigh, North Carolina 27616
Phone: (919)755-1012
FAX: (919)755-1031
Tower Analysis

Job: Newtown Ferris Rd, CT46132-A-05			
Project: 1462H91400			
Client: SBA Network Services, Inc.	Drawn by: KDiaz		App'd:
Code: TIA/EIA-222-F	Date: 04/10/14		Scale: NTS
Path:			Dwg No. E-1



COMPOUND PLAN 1 A-1
SCALE: 3/16"=1'-0"

SOURCE: HDG 04-01-14

RAN EQUIPMENT PHOTO DETAIL 2 A-1
SCALE: N.T.S.

Sprint
1 INTERNATIONAL BLVD, SUITE 800
MAHWAH, NJ 07495
TEL: (800) 357-7641

SBA
SBA COMMUNICATIONS CORP.
33 BOSTON POST ROAD WEST, SUITE 320
MARLBOROUGH, MA 01752 TEL: (508) 251-0720

Hudson Design Group LLC
1600 OSGOOD STREET
BUILDING 20 NORTH, SUITE 3090 TEL: (978) 557-5553
N. ANDOVER, MA 01845 FAX: (978) 336-5586

STATE OF CONNECTICUT
DANIEL P. HAMM
No. 24178
LICENSED PROFESSIONAL ENGINEER

CHECKED BY: KB

APPROVED BY: DPH

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
0	05/14/14	ISSUED FOR CONSTRUCTION	SF

SITE NUMBER:
CT13XC245-A

SITE NAME:
DODGINGTOWN/NEXTEL TOWER

SITE ADDRESS:
8 FERRIS ROAD
NEWTON, CT 06470

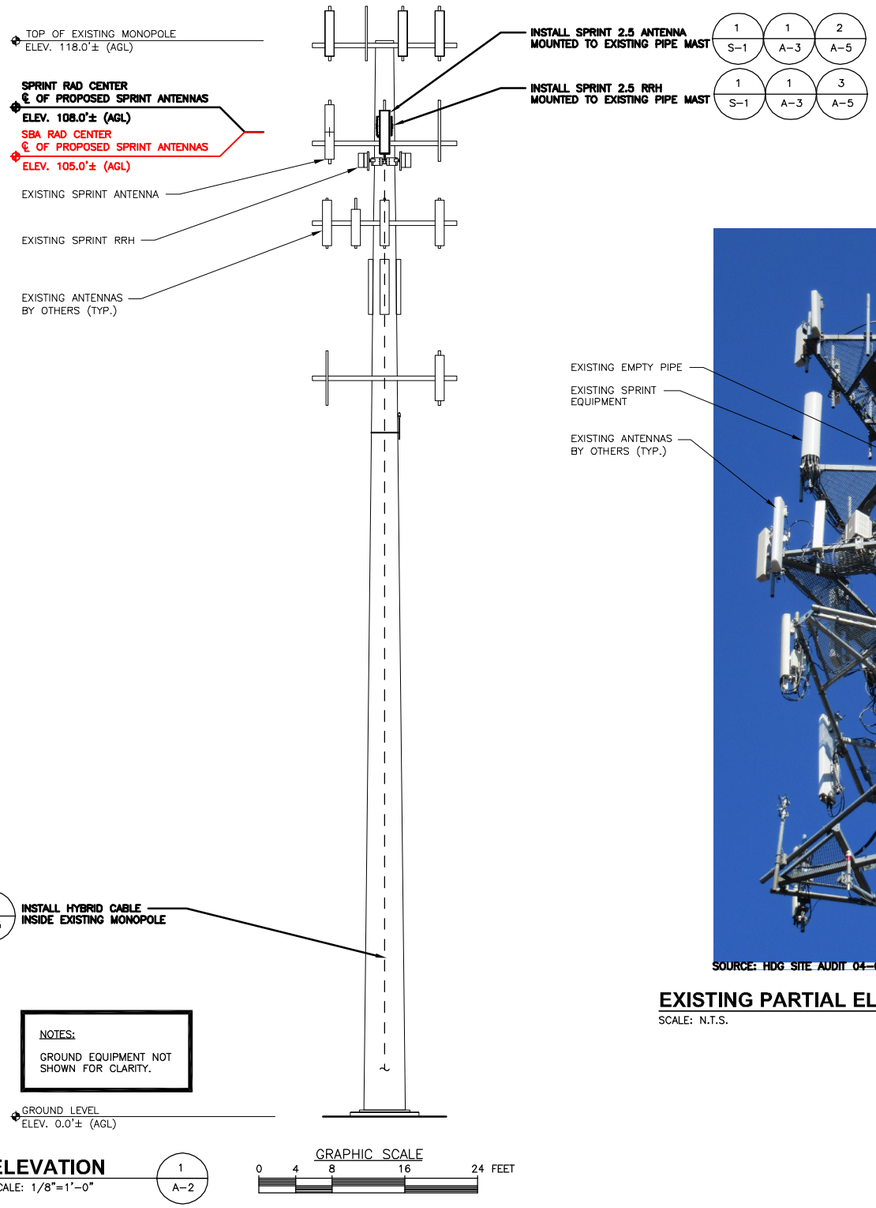
SHEET TITLE
COMPOUND PLAN

SHEET NUMBER
A-1

SPECIAL CONSTRUCTION NOTE:
SPRINT TOWER TOP WORK IS CONTINGENT ON THE FOLLOWING:
* COMPLETION OF A GLOBAL STRUCTURAL STABILITY ANALYSIS (PROVIDED BY TOWER OWNER).
* COMPLETION OF AN ANTENNA/RRH MOUNT STRUCTURAL ASSESSMENT (PROVIDED BY A&E VENDOR).
* GC SHALL FURNISH, INSTALL AND COMPLETE ALL REQUIRED STRUCTURAL MODIFICATIONS AS INDICATED IN BEFORE-MENTIONED ANALYSIS AND ASSESSMENT.
* SBA COMMUNICATIONS CORPORATION SHALL PROVIDE WRITTEN ACCEPTANCE/APPROVAL FOR THE COMPLETION OF ALL TOWER/FOUNDATION STRUCTURAL MODIFICATIONS INCLUDING (AS NECESSARY) CONTROLLED CONSTRUCTION INSPECTIONS, SHOP-DRAWING APPROVALS, MATERIALS TEST RESULTS, AND FINAL ENGINEER'S AFFIDAVIT.

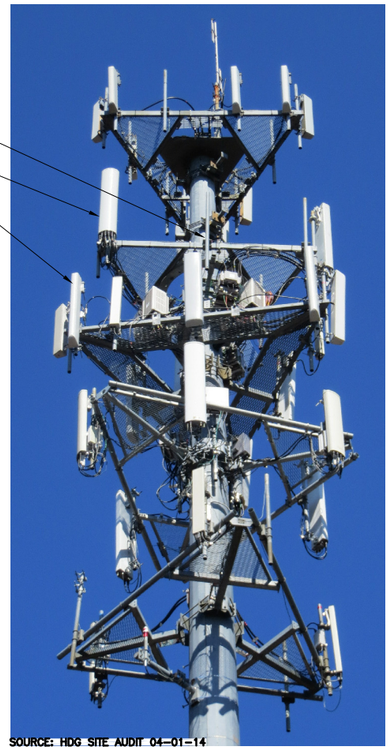
NOTE:
EXISTING AZIMUTHS FROM SPRINT SITE AUDIT DATED 03/03/14

NOTE:
SPRINT RAD CENTER SHOWN IN RED TEXT BASED ON SBA-PROVIDED COLLOCATION APPLICATION, EQUIPMENT DATABASE, AND STRUCTURAL ANALYSIS. THE SBA-PROVIDED ANTENNA RAD CENTER SHALL SUPERSEDE ANY CONFLICTING INFORMATION DERIVED FROM THE SPRINT NV 2.5 RFDS.



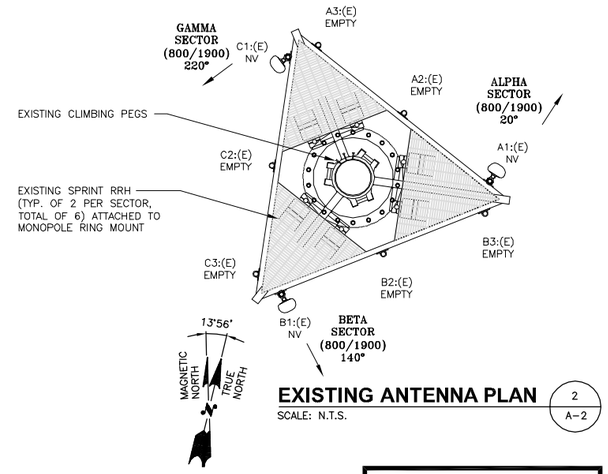
ELEVATION
SCALE: 1/8"=1'-0" (1 / A-2)

GRAPHIC SCALE
0 4 8 16 24 FEET



SOURCE: HDG SITE AUDIT 04-01-14

EXISTING PARTIAL ELEVATION PHOTO DETAIL
SCALE: N.T.S.

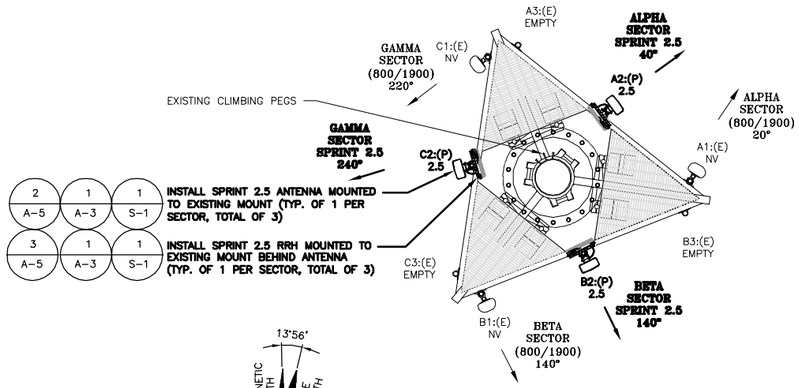


EXISTING ANTENNA PLAN
SCALE: N.T.S. (2 / A-2)

SPECIAL WORK NOTE:
JUMPERS FROM 2.5 RRH TO 2.5 ANTENNA CAN NOT EXCEED 15'. NOTIFY SPRINT CONSTRUCTION MANAGER OF ANY DISCREPANCY.

NOTE:
VERIFY PROPOSED AZIMUTHS WITH RF ENGINEER PRIOR TO INSTALLATION.

ANTENNA STATUS LEGEND:
- EMPTY - EMPTY PIPE
- (E) - EXISTING
- (P) - INSTALL
- NV - SPRINT ANTENNA MODEL APXVSPP18-C-A20
- 2.5 - SPRINT ANTENNA



PROPOSED ANTENNA PLAN
SCALE: N.T.S. (3 / A-2)

Sprint
1 INTERNATIONAL BLVD, SUITE 800
MAHWAH, NJ 07495
TEL: (800) 357-7641

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STATE OF CONNECTICUT
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SUBMITTALS

REV.	DATE	DESCRIPTION	BY
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CT13XC245-A

SITE NAME:
DODGINGTOWN/NEXTEL TOWER

SITE ADDRESS:
8 FERRIS ROAD
NEWTON, CT 06470

SHEET TITLE
ELEVATION AND ANTENNA PLANS

SHEET NUMBER
A-2