

Daniel F. Caruso
Chairman

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

Internet: ct.gov/csc

January 22, 2008

Thomas J. Regan, Esq.
Brown Rudnick Berlack Israels LLP
CityPlace I
185 Asylum Street
Hartford, CT 06103

RE: **EM-SPRINT-NEXTEL-009-071206** – Sprint Nextel Corporation notice of intent to modify an existing telecommunications facility located at 11 Francis J. Clarke Circle, Bethel, Connecticut.

Dear Attorney Regan:

At a public meeting held on January 10, 2008, the Connecticut Siting Council (Council) acknowledged your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies, with the condition that the proposed coax lines are installed inside the monopole shaft.

The proposed modifications are to be implemented as specified here and in your notice dated December 5, 2007, including the placement of all necessary equipment and shelters within the tower compound. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Please be advised that the validity of this action shall expire one year from the date of this letter. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

Thank you for your attention and cooperation.

Very truly yours,

Daniel F. Caruso
Chairman

DFC/MP/cm

c: The Honorable Robert E. Burke, First Selectman, Town of Bethel
Steve Palmer, Planning & Zoning Official, Town of Bethel
SBA



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

Internet: ct.gov/csc

Daniel F. Caruso
Chairman

December 11, 2007

The Honorable Robert E. Burke
First Selectman
Town of Bethel
1 School Street
Bethel Municipal Center
Bethel, CT 06801-2105

RE: **EM-SPRINT-NEXTEL-009-071206** – Sprint Nextel Corporation notice of intent to modify an existing telecommunications facility located at 11 Francis J. Clarke Circle, Bethel, Connecticut.

Dear Mr. Burke:

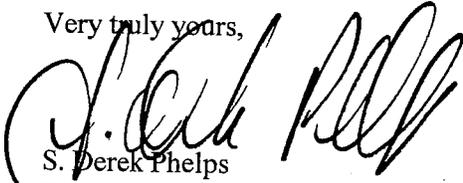
The Connecticut Siting Council (Council) received this request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72.

The Council will consider this item at the next meeting scheduled for January 10, 2008 at 1:30 p.m. in Hearing Room One, Ten Franklin Square, New Britain, Connecticut.

If you have any questions or comments regarding this proposal, please call me or inform the Council by January 9, 2008.

Thank you for your cooperation and consideration.

Very truly yours,



S. Derek Phelps
Executive Director

SDP/jb

Enclosure: Notice of Intent

c: Steve Palmer, Planning & Zoning Official, Town of Bethel

THOMAS J. REGAN
Direct Dial: (860) 509-6522
tregan@brownrudnick.com

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185 Asylum
Street
Hartford
Connecticut
06103
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fax 860.509.6501

Via 1st Class Mail

December 5, 2007

S. Derek Phelps
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

RECEIVED
DEC 6 - 2007

CONNECTICUT
SITING COUNCIL

RE: Sprint Nextel Corporation - Exempt Modification

Dear Mr. Phelps:

Enclosed for filing is Sprint Nextel Corporation's Notice of Exempt Modification for the addition of WiMAX antennas to an existing tower at 11 Francis J. Clarke Circle in Bethel, Connecticut. I have also enclosed a check in the amount of \$500.00 to cover the filing fee. If you have any questions, please feel free to contact me.

Very truly yours,

BROWN RUDNICK BERLACK ISRAELS LLP

By: Thomas J. Regan /cm
Thomas J. Regan

cc: Town of Bethel

40245978 v1 - MERCIECM - 025064/0015

EM-SPRINT-NEXTEL-009-071206

ORIGINAL

In re:

Sprint Nextel Corporation's Notice to Make an : EXEMPT MODIFICATION NO. _____
Exempt Modification to an Existing Facility at :
11 Francis J. Clarke Circle, Bethel, Connecticut. : December 5, 2007

RECEIVED
DEC 6 - 2007

NOTICE OF EXEMPT MODIFICATION

CONNECTICUT
SITING COUNCIL

Pursuant to Conn. Agencies Regs. §§ 16-50j-73 and 16-50j-72(b), Sprint Nextel

Corporation ("Sprint") hereby gives notice to the Connecticut Siting Council ("Council") and the Town of Bethel of Sprint's intent to make an exempt modification to an existing monopole (the "Tower") located at 11 Francis J. Clarke Circle in Bethel, Connecticut. Specifically, Sprint plans to add three WiMAX antennas and two microwave dishes to its current antenna array. Under the Council's regulations (Conn. Agencies Regs. § 16-50j-72(b)), Sprint's plans do not constitute a modification subject to the Council's review because Sprint will not change the height of the Tower, will not extend the boundaries of the compound, will not increase the noise levels at the site, and will not increase the total radio frequency electromagnetic radiation power density at the site to levels above applicable standards.

Sprint is currently undertaking an upgrade to its wireless communications system in Connecticut. As part of the upgrade, Sprint is implementing WiMAX technology to enable enhanced wireless data communications. In order to accomplish the upgrade at this site, Sprint plans to add three WiMAX antennas to the existing antenna configuration, one microwave dish and install additional WiMAX-related electronic equipment at the base of the Tower.

The Tower is a 155-foot monopole located at 11 Francis J. Clarke Circle in Bethel, Connecticut (Latitude 41° 21' 36.25" N, Longitude 73° 25' 30.02" W). The Tower is owned by SBA Tower, Inc. Verizon and AT&T are located on the Tower. Currently, Sprint has six CDMA network antennas located on the Tower (two per sector) with an antenna centerline at 157 feet. The CDMA equipment shelter is located at the base of the Tower within the existing compound. A site plan with the Tower specifications is attached.

Sprint plans to add three KMW-AM-X-WM-17-65-00T (WiMAX) antennas with the same antenna centerline (157 feet) as the existing antennas. In addition, Sprint will install two Andrew VHLP2-23-2WH microwave dishes with a centerline of 157 feet. These installations will require six coaxial cables, 1-5/8" in diameter, and two 1/2" coaxial cables to be installed. To confirm the Tower can support these changes, Sprint commissioned FDH Engineering, Inc. to perform a structural analysis of the Tower (attached). According to the structural analysis, dated November 19, 2007, "the tower meets the requirements of the *ANSI/TIA-222-G* standards. Furthermore...the foundation should have the necessary capacity to support the existing and proposed loading." Sprint has agreed to implement the report's recommendation that the coax lines be installed inside the monopole.

Sprint will also install one WiMAX equipment cabinet inside the existing CDMA equipment shelter. Hence, there will be no need to increase the size of the compound. In addition, Sprint plans to mount a global positioning system (GPS) antenna to the southern side of the existing ice bridge. Furthermore, excluding brief, minor, construction-related noise during the addition of the antennas and the installation of the equipment cabinet, Sprint's changes to the Tower will not increase noise levels at the site.

The addition of the WiMAX antennas and microwave dishes to Sprint's existing antenna array will not adversely impact the health and safety of the surrounding community or the people working on the Tower. The total radio frequency exposure measured around the Tower will be well below the National Council on Radiation Protection and Measurements' ("NCRP") standard adopted by the Federal Communications Commission ("FCC"). The worst-case power density analysis measured at the base of the Tower indicates that the WiMAX and microwave antennas will emit 2.4583% and 0.02% respectively of the NCRP's standard for maximum permissible exposure. A cumulative power density analysis indicates that together, all of the antennas on the Tower will emit only 25.9660% of the NCRP's standard for maximum permissible exposure. Therefore, the power density levels will be well below the FCC mandated radio frequency exposure limits in all locations around the Tower, even with extremely conservative assumptions. The power density analysis is attached.

In conclusion, Sprint's proposed plan to add three WiMAX antennas, two microwave dishes and the associated WiMAX equipment at the site does not constitute a modification subject to the Council's jurisdiction because Sprint will not increase the height of the Tower, will not extend the boundaries of the site, will not increase the noise levels at the site, and the total radio frequency electromagnetic radiation power density will stay within all applicable standards.

See Conn. Agencies Regs. § 16-50j-72.

Sprint Nextel Corporation

By: Thomas J. Regan /cm

Thomas J. Regan
Brown Rudnick Berlack Israels LLP
185 Asylum Street, CityPlace I
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Phone - 860.509.6522
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File: N:\TRANSCEND\4G - CT\204-018 - CT33XC521 - CT1007\ACAD\CSC\CSC'S - 204-018.DWG Saved: 11/27/2007 3:45:37 PM Plotted: 12/3/2007 4:58:26 PM User: Darren Weber

DIG ALERT:
 CALL FOR UNDERGROUND UTILITIES PRIOR TO DIGGING:
 1-800-922-4455
EMERGENCY:
 CALL 911

Sprint Nextel Corp.

ID BETHEL FR

SITE NUMBER: CT01YC384/CT33XC521
11 FRANCIS J CLARKE CIRCLE
BETHEL, CT 06801
FAIRFIELD COUNTY, CONNECTICUT
SITE TYPE: MONOPOLE

infinigy
 engineering
 300 Great Oaks Boulevard
 Suite 312, Albany, NY 12203
 Office #: (518) 690-0790
 Fax #: (518) 690-0793

**TRANSCEND
WIRELESS, LLC.**

479 ROUTE 17 NORTH,
 2ND FLOOR
 MAHWAH, NJ 07430

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No.	Submital / Revision	App'd	Date
1	REVISED PER COMMENTS	DJW	12/3/07
0	SUBMITTED FOR REVIEW	DJW	11/27/07

Drawn: SKB Date: 11/27/07
 Designed: DJW Date: 11/27/07
 Checked: DJW Date: 11/27/07

Project Number
204-018

Project Title
ID BETHEL FR

11 FRANCIS J CLARKE CIRCLE
 BETHEL, CT 06801

Prepared For



Drawing Scale:
AS NOTED

Date:
11/27/07

Drawing Title

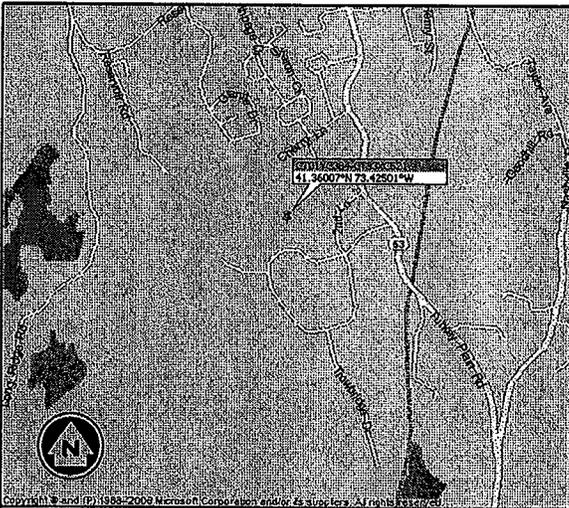
TITLE PAGE

Drawing Number

T1

MINOR MODIFICATION OF EXISTING WIRELESS COMMUNICATION SYSTEM
 CONSISTING OF ADDITION OF EQUIPMENT CABINET(S), ANTENNAS,
 ADDITION OF ASSOCIATED CABLES & ADDITION OF A GPS ANTENNA.
 NO WATER OR SEWER IS REQUIRED. THE SITE IS UNMANNED AND NOT
 FOR HUMAN HABITATION.

PROJECT DESCRIPTION:



VICINITY MAP: (NOT TO SCALE)

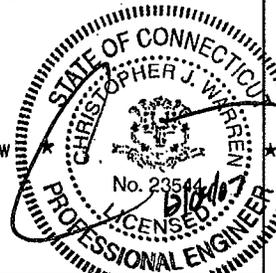
DEPART 100 CORPORATE PLACE. TURN LEFT ONTO WEST ST AND THEN
 IMMEDIATELY RIGHT (EAST) ON TO RAMP. MERGE ON TO I-91. AT EXIT
 18, TAKE RAMP ONTO I-691. TAKE RAMP (LEFT) ONTO I-84. AT EXIT
 8, TAKE RAMP (RIGHT) ONTO ROUTE 6. ROAD CHANGES NAME TO
 NEWTOWN RD. KEEP LEFT ONTO TRIANGLE ST. TURN LEFT (SOUTH)
 ONTO STARR ST. TURN LEFT (EAST) ONTO SOUTH ST (SR-53). KEEP
 RIGHT ONTO GRASSY PLAIN ST (SR-53). TURN RIGHT ONTO FRANCIS J
 CLARKE CIRCLE. SITE IS LOCATED INSIDE THE INDUSTRIAL PARK.

DRIVING DIRECTIONS:

SHEET #	TITLE	REV.#	DATE
T1	TITLE PAGE	1	12/3/07
SC-1	PARTIAL SITE LAYOUT	1	12/3/07
SC-2	MONOPOLE ELEVATION	1	12/3/07

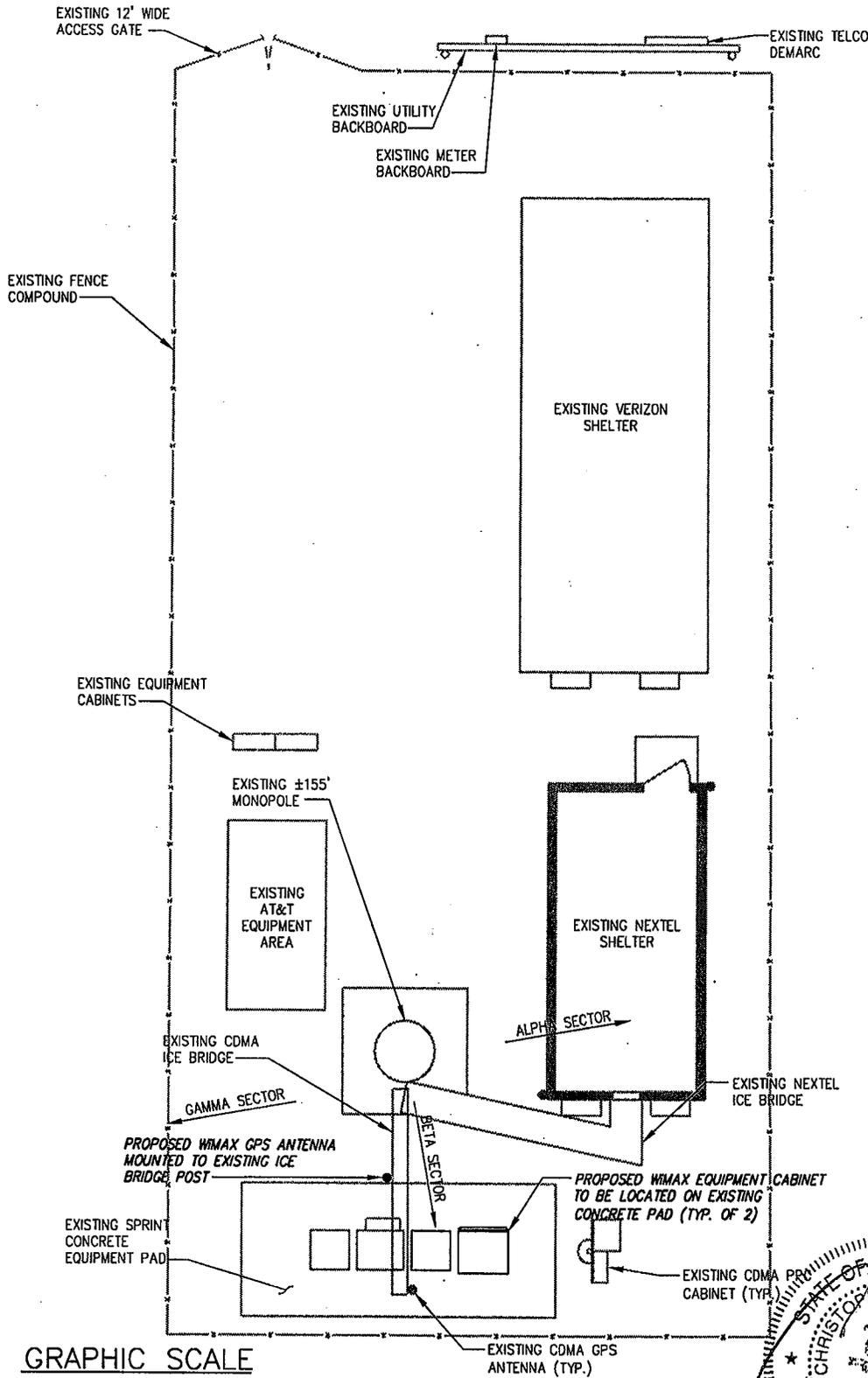
SHEET INDEX:

SITE NAME: ID BETHEL FR
SITE NUMBER: CT01YC384/CT33XC521
SITE ADDRESS: 11 FRANCIS J CLARKE CIRCLE
 BETHEL, CT 06801
SITE OWNER: SBA TOWER, INC.
APPLICANT: SPRINT/NEXTEL CORP
 CROSSROADS CORPORATE CENTER
 INTERNATIONAL BLVD, SUITE 800
 MAHWAH, NJ 07495
APPLICANT REPRESENTATIVE: TRANSCEND WIRELESS, LLC.
 479 ROUTE 17 NORTH, 2nd FLOOR
 MAHWAH, NJ 07430
CENTERLINE: ±157' AGL
GROUND ELEVATION: 411' AMSL
LATITUDE (NAD 83): 41° 21' 36.25"N
LONGITUDE (NAD 83): 73° 25' 30.02" W

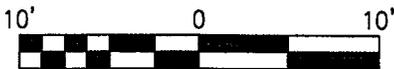


PROJECT INDEX:

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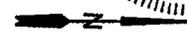
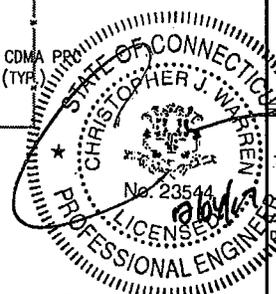
GRAPHIC SCALE



SCALE: 1" = 10'-0"

1 PARTIAL SITE LAYOUT
SCALE: 1" = 10'

BASEMAPPING PREPARED FROM A SITE WALK PERFORMED BY INFINIGY ENGINEERING ON 7/26/07, AND EXISTING CONSTRUCTION DRAWINGS PREPARED BY URS CORPORATION AES, TITLED "BETHEL SBA", DATED 02/2003, AND DOES NOT REPRESENT AN ACTUAL FIELD SURVEY.



infinigy
engineering

300 Great Oaks Boulevard
Suite 312, Albany, NY 12203
Office #: (518) 690-0790
Fax #: (518) 690-0793

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479 ROUTE 17 NORTH,
2ND FLOOR
MAHWAH, NJ 07430

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Designed:	DJW	Date:	11/27/07
Checked:	DJW	Date:	11/27/07

Project Number
204-018

Project Title
ID BETHEL FR

11 FRANCIS J CLARKE CIRCLE
BETHEL, CT 06801

Prepared For



Drawing Scale:
AS NOTED
Date:
11/27/07

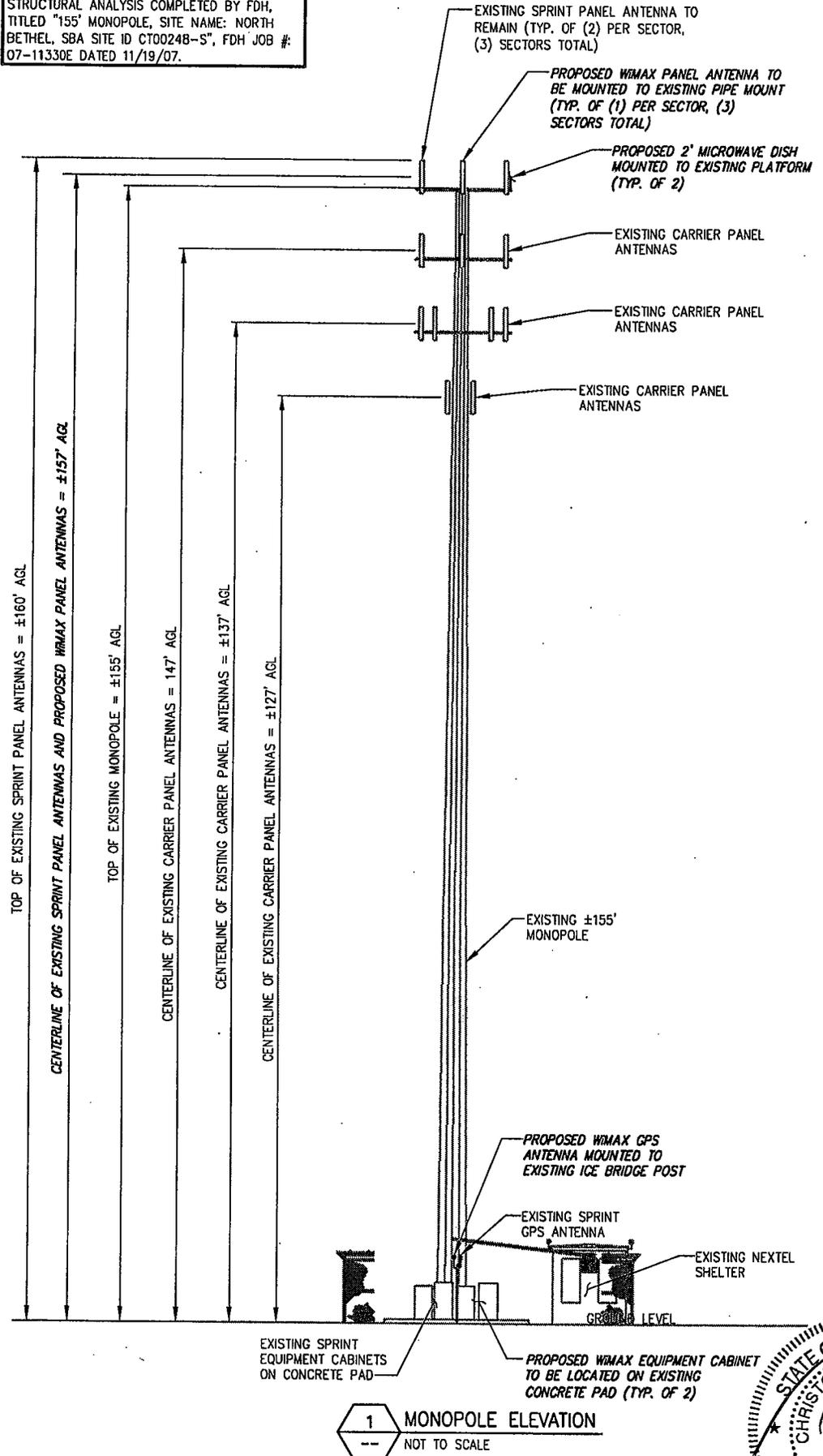
Drawing Title

PARTIAL SITE LAYOUT

Drawing Number

SC-1

FOR ADDITIONAL STRUCTURAL INFORMATION SEE STRUCTURAL ANALYSIS COMPLETED BY FDH, TITLED "155' MONOPOLE, SITE NAME: NORTH BETHEL, SBA SITE ID CT00248-S", FDH JOB #: 07-11330E DATED 11/19/07.



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No.	Submitted / Revision	App'd	Date
1	REVISED PER COMMENTS	D.M.	12/3/07
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 Designed: D.M. Date: 11/27/07
 Checked: D.M. Date: 11/27/07

Project Number 204-018

Project Title
ID BETHEL FR

11 FRANCIS J CLARKE CIRCLE
BETHEL, CT 06801

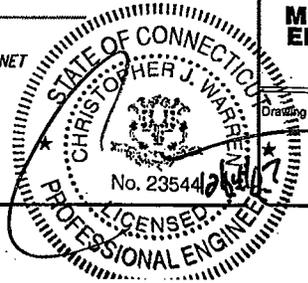
Prepared For
Sprint Nextel Corp.

Drawing Scale:
AS NOTED
Date:
11/27/07

Drawing Title
MONOPOLE ELEVATION

Drawing Number

SC-2





**Structural Analysis for
SBA Network Services**

155' Monopole

**Site Name: North Bethel
Site ID: CT00248-S**

FDH Project Number 07-11330E

Prepared By:

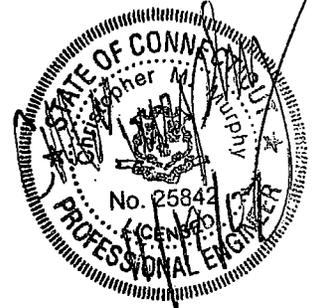
Krystyn Wagner, EI
Project Engineer

Reviewed By:

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

FDH Engineering, Inc.

PO Box 99556
Raleigh, NC 27615
(919)-755-1012
info@fdh-inc.com



November 19, 2007

Prepared pursuant to ANSI/TIA-222-G Structural Standards for Antenna Supporting Structures and Antennas

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EXECUTIVE SUMMARY

At the request of SBA Network Services, FDH Engineering performed a structural analysis of the monopole located in Fairfield, CT to determine whether the tower is structurally adequate to support both the existing and proposed loads, pursuant to the *Structural Standards for Antenna Supporting Structures and Antennas, ANSI/TIA-222-G*. Information pertaining to the existing/proposed antenna loading, current tower geometry, and member sizes was obtained from Summit Manufacturing (Job No. 4071) original design drawings dated October 20, 1998 and SBA Network Services.

The *basic design wind speed* per *ANSI/TIA-222-G* standards is 110 MPH without ice and 50 MPH with $\frac{3}{4}$ " of ice.

Conclusions

With the existing and proposed antennas from Sprint at 157 ft, the tower meets the requirements of the *ANSI/TIA-222-G* standards. Furthermore, provided the foundation was designed and constructed to support the original design reactions, 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 is accurate (i.e., the steel data, tower layout, existing and proposed antenna loading) and that the tower was properly erected and maintained per the original design drawings.

Recommendations

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

1. The proposed coax lines should be installed inside the monopole shaft.

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 this layout, FDH should be contacted to perform a revised analysis.

Table 1 – Appurtenance Loading

Existing Loading:

No.	Centerline Elevation (ft)	Coax and Lines ¹	Carrier	Mount Type	Description
1-9	157	(9) 1-5/8" ^{2,3}	Sprint	13' Low Profile Platform	(3) Decibel DB980H65T2E-M (3) Decibel DB980H90E-M (3) Decibel DB980H65E-M
10-18	147	(9) 1-1/4"	Nextel	13' Low Profile Platform	(9) Decibel DB844H90E-XY
21-30	137	(12) 1-5/8"	Verizon	13' Low Profile Platform	(6) Antel LPA-185090/8CF (6) Antel LPA-80090/4CF
31-33	127	(12) 1-5/8" ⁴	AT&T	(3) 4' Standoffs	(6) Allgon 7250.00

1 The existing coax is located inside the pole's shaft, unless otherwise noted.

2 Currently Sprint has (2) DB980H65T2E-M, (2) DB980H90E-M, (2) DB980H65E-M, and (6) coax installed.

According to information provided by SBA, Sprint may install up to (3) DB980H65T2E-M, (3) DB980H90E-M, (3) DB980H65E-M, and (9) 1-5/8" coax. Analysis performed with total leased loading in place.

3 The current loading for Sprint at 157 ft will be altered. See the proposed loading below.

4 Currently AT&T has (3) Allgon 7250.00 antennas and (6) 1-5/8" coax installed. According to information provided by SBA, AT&T may install up to (6) Allgon 7250.00 antennas and (12) coax. Analysis performed with total leased loading in place.

Proposed Loading:

No.	Centerline Elevation (ft)	Coax and Lines	Carrier	Mount Type	Description
1-14	157	(12) 1-5/8" ¹ (2) 1/2"	Sprint	13' Low Profile Platform	(3) Decibel DB980H65T2E-M (3) Decibel DB980H90E-M (3) Decibel DB980H65E-M (3) KMW-AM-X-WM-17-65-00T (2) Andrew VHLP2-23-2WH

1 This represents the final loading for Sprint at 157 ft. According to information provided by SBA, Sprint will add (3) KMW-AM-X-WM-17-65-00T antennas, (2) Andrew VHLP2-23-2WH dishes, (6) additional 1-5/8" coax, and (2) 1/2" coax for a final loading of (12) antennas, (2) dishes, and (14) coax.

RESULTS

Based on information obtained from the original design drawings, the yield strength of steel for individual members was as follows:

Table 2 - Material Strength

Member Type	Yield Strength
Tower Shaft Sections	65 ksi
Base Plate	50 ksi
Anchor Bolts	75 ksi

Table 3 displays the ratio (as a percentage) of actual 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 105% are considered acceptable.* **Table 4** displays the maximum foundation reactions.

If the assumptions outlined in this report differ from actual field conditions, FDH 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	155 - 120	Pole	TP26x16.5x0.1875	71.8	Pass
L2	120 - 89.5	Pole	TP33.91x24.7429x0.3125	62.6	Pass
L3	89.5 - 44	Pole	TP45.64x32.1306x0.375	61.3	Pass
L4	44 - 0	Pole	TP56.83x43.3286x0.375	65.2	Pass
			Anchor Bolts	OK	Pass
			Base Plate	OK	Pass

Table 4 – Maximum Base Reactions

Load Type	Current Analysis (ANSI/TIA-222-G)	Original Design (TIA/EIA-222-F)
Axial	39.2 k	38.7 k
Shear	28.5 k	32.4 k
Moment	2,868 k-ft	3,850 k-ft

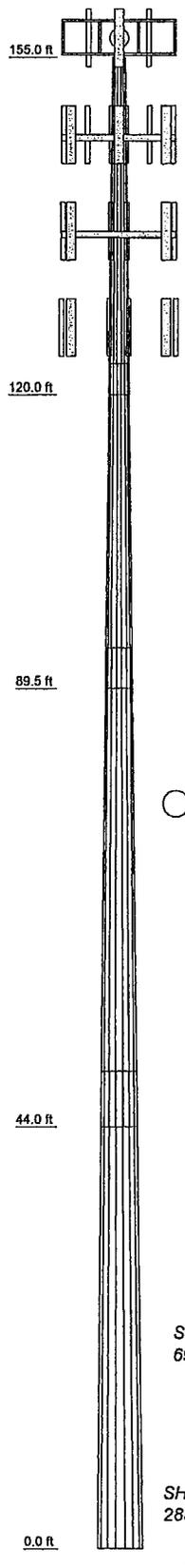
GENERAL COMMENTS

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 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 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.

Section	Length (ft)	Number of Sides	Thickness (in)	Lap Splice (ft)	Top Dia (in)	Bot Dia (in)	Grade	Weight (lb)
1	35.00	18	0.1875	3.25	16.5000	26.0000	A607-65	1492.9
2	33.75	18	0.3125	4.25	24.7429	33.9100	A607-65	3305.0
3	49.75	18	0.3750	5.75	32.1306	45.6400	A607-65	7759.6
4	49.75	18	0.3750	43.3286	56.8300	10015.2	A607-65	22572.7



DESIGNED APPURTENANCE LOADING

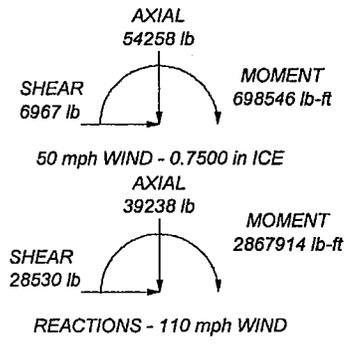
TYPE	ELEVATION	TYPE	ELEVATION
DB980H65T2E-M (Sprint)	157	PIROD 13' Low Profile Platform (Nextel)	147
DB980H65T2E-M (Sprint)	157	(3) DB844H90E-XY (Nextel)	147
DB980H65T2E-M (Sprint)	157	(3) DB844H90E-XY (Nextel)	147
DB980H90E-M (Sprint)	157	(2) LPA-185090/8 (Verizon)	137
DB980H90E-M (Sprint)	157	(2) LPA-80090/4CF (Verizon)	137
DB980H90E-M (Sprint)	157	(2) LPA-80090/4CF (Verizon)	137
DB980H90E-M (Sprint)	157	(2) LPA-80090/4CF (Verizon)	137
DB980H65E-M (Sprint)	157	PIROD 13' Low Profile Platform (Verizon)	137
DB980H65E-M (Sprint)	157	(2) LPA-185090/8 (Verizon)	137
DB980H65E-M (Sprint)	157	(2) LPA-185090/8 (Verizon)	137
DB980H65E-M (Sprint)	157	(2) 7250.00 (ATI)	127
KMW AM-X-WM-17-65-00T (Sprint (Proposed))	157	KMW AM-X-WM-17-65-00T (Sprint (Proposed))	157
KMW AM-X-WM-17-65-00T (Sprint (Proposed))	157	(2) 7250.00 (ATI)	127
KMW AM-X-WM-17-65-00T (Sprint (Proposed))	157	PIROD 4' Side Mount Standoff (1) (ATI)	127
PIROD 13' Low Profile Platform (Sprint)	157	PIROD 4' Side Mount Standoff (1) (ATI)	127
Andrew VHLP2-23-2VWH (Sprint (Proposed))	157	PIROD 4' Side Mount Standoff (1) (ATI)	127
Andrew VHLP2-23-2VWH (Sprint (Proposed))	157	(2) 7250.00 (ATI)	127
Andrew VHLP2-23-2VWH (Sprint (Proposed))	157	(2) 7250.00 (ATI)	127
(3) DB844H90E-XY (Nextel)	147		

MATERIAL STRENGTH

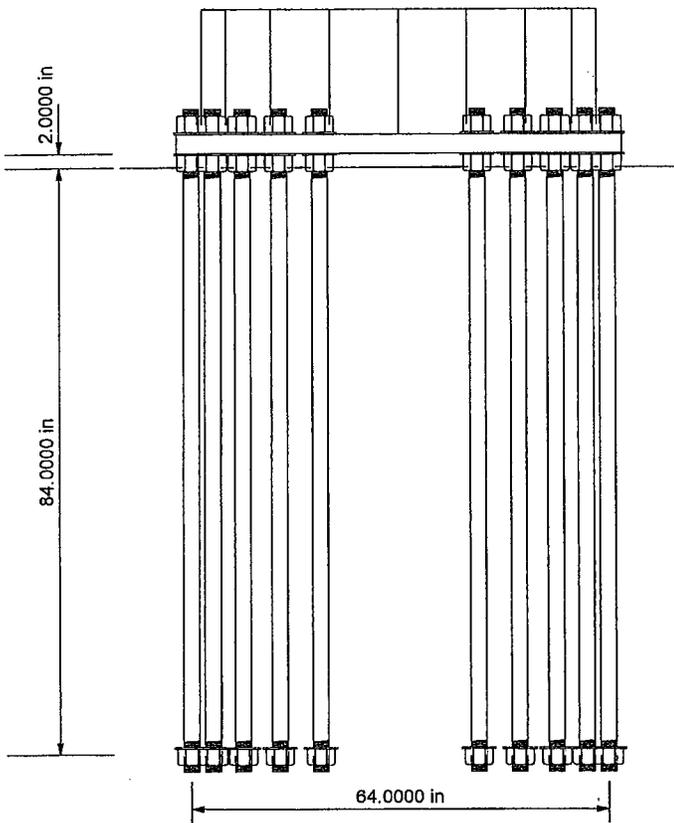
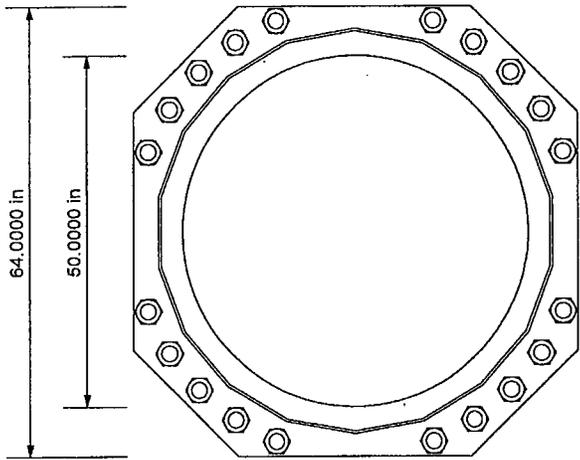
GRADE	Fy	Fu	GRADE	Fy	Fu
A607-65	65 ksi	80 ksi			

TOWER DESIGN NOTES

1. Tower is located in Fairfield County, Connecticut.
2. Tower designed for Exposure C to the TIA-222-G Standard.
3. Tower designed for a 110 mph basic wind in accordance with the TIA-222-G Standard.
4. Tower is also designed for a 50 mph basic wind with 0.75 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60 mph wind.
6. TOWER RATING: 71.8%



<p>FDH Engineering 2730 Rowland Road, Suite 100 Raleigh, NC 27615 Phone: (919) 755-1012 FAX: (919) 755-1031</p>		<p>Job: North Bethel CT00248-S</p>	
		<p>Project: 07-11330E</p>	
<p>Tower Analysis</p>	<p>Client: SBA</p>	<p>Drawn by: Krystyn Wagner</p>	<p>App'd:</p>
	<p>Code: TIA-222-G</p>	<p>Date: 11/20/07</p>	<p>Scale: NTS</p>
		<p>Path:</p>	<p>Dwg No. E-1</p>



FOUNDATION NOTES

1. Plate thickness is 2.7500 in.
2. Plate grade is A572-50.
3. Anchor bolt grade is A615-75.
4. f_c is 4 ksi.

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Tower Analysis	Client: SBA	Drawn by: Krystyn Wagner	App'd:
	Code: TIA-222-G	Date: 11/20/07	Scale: NTS
	Path:		Dwg No. F-1
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ID Bethel FR - CT01YC384 (11 Francis J. Clarke Circle, Bethel, CT) - Siting Council Power Density Calculations										
Sprint Nextel Directional Antennas ESMR - 2657 MHz 157'										
Note: Power densities are in mW/ cm ²										
Transmitters:	Frequency in MHz	CT Standard mW/ cm ²	Number of Channels	ERP (W) per channel	Centerline of Tx antennas AGL (ft.)**	Power density calculated at base of tower				% of CT Standard
WiMAX	2657	1.0000	3	562	157	0.0245831				2.4583%
CDMA	1962.5	1.0000	11	411	157	0.0659194				6.5919%
Microwave	22500	1.0000	2	4.42	157	0.0001289				0.01%
Microwave	22500	1.0000	2	4.42	157	0.0001289				0.01%
From previous filings: per CSC power density data base										
AT&T										2.3000%
Verizon										5.9600%
Verizon										1.4900%
Nextel										7.1400%
Total % of CT Standard										25.9660%