



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](mailto:siting.council@ct.gov)

Internet: [ct.gov/csc](http://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-002-071219** – Sprint Nextel Corporation notice of intent to modify an existing telecommunications facility located at 401 Wakelee Avenue, Ansonia, 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.

The proposed modifications are to be implemented as specified here and in your notice dated December 18, 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 James T. DellaVolpe, Mayor, City of Ansonia  
Peter Crabtree, Zoning Enforcement Officer, City of Ansonia  
American Tower Corporation

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

CityPlace I  
185 Asylum  
Street  
Hartford  
Connecticut  
06103  
tel 860.509.6500  
fax 860.509.6501

*Via Federal Express*

December 18, 2007

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

RECEIVED  
DEC 19 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 401 Wakelee Avenue in Ansonia, 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  
Thomas J. Regan

cc: Town of Ansonia via 1<sup>st</sup> Class Mail

# 40247031 v1 - MERCIECM - 025064/0015



CONNECTICUT SITING COUNCIL  
EM-SPRINT-NEXTEL-002-071219

ORIGINAL  
RECEIVED  
DEC 19 2007

In re:

Sprint Nextel Corporation's Notice to Make an Exempt Modification to an Existing Facility at 401 Wakelee Avenue in Ansonia, Connecticut. : EXEMPT MODIFICATION NO. \_\_\_\_\_  
: December 18, 2007

**NOTICE OF EXEMPT MODIFICATION**

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 Ansonia of Sprint's intent to make an exempt modification to an existing lattice tower (the "Tower") located at 401 Wakelee Avenue in Ansonia, Connecticut. Specifically, Sprint plans to add WiMAX antennas and new iDEN antennas to its current iDEN antenna platform. 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 one of its existing iDEN antenna platform and install additional WiMAX-related electronic equipment at the base of the Tower.

The Tower is a 196-foot lattice tower located at 401 Wakelee Avenue in Ansonia, Connecticut (Latitude 41.3561°, Longitude -73.0917°). The Tower is owned by American Tower Corporation. Currently, Sprint has twelve iDEN network antennas located at the top of

the Tower with an antenna centerline at 194 feet and nine CDMA antennas located directly below the iDEN antennas with a centerline at 188 feet. The 12-foot by 20-foot iDEN equipment shelter is located at the base of the Tower within the existing compound. A short ice bridge connects the iDEN equipment shelter and the Tower. Cingular, T-Mobile, Verizon and the Ansonia Fire Department also have antennas on the Tower. A site plan with the Tower specifications is attached.

On both the alpha and gamma sectors of the platform, Sprint will continue to have four antennas. On both the alpha and gamma sectors, one iDEN antenna will be removed and replaced with one KMW-AM-X-WM-17-65-00T (WiMAX) antenna. On the beta sector, all four existing iDEN antennas will be removed. Sprint will then add two dual pole iDEN antennas to the beta sector and one WiMAX antenna, for a total of three antennas in the beta sector (one less than the existing array). All of the replacement antennas will have the same centerline as the old antennas, 194 feet. This installation will require six coaxial cables, 1-5/8" in diameter to be installed. To confirm the Tower can support these changes, Sprint commissioned American Tower Corporation to perform a structural analysis of the Tower (attached). According to the structural analysis, dated November 27, 2007, the "tower and foundation *are adequate* to support the [] loads in conformance with specified requirements" (emphasis in the original).

Sprint will also install one WiMAX equipment cabinet inside the existing iDEN 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 western side of the existing ice bridge. Therefore, excluding brief, minor, construction-related noise during the replacement 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 removal and replacement of Sprint's antennas 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 antennas and iDEN antennas will emit 1.61% and 2.02% 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 22.82% 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 remove and replace antennas on this Tower 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.*

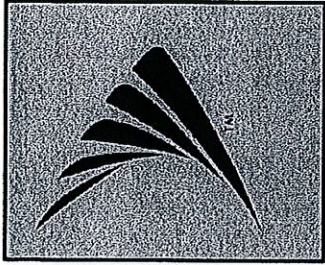
Sprint Nextel Corporation

By: 

Thomas J. Regan  
Brown Rudnick Berlack Israels LLP  
185 Asylum Street, CityPlace I  
Hartford, CT 06103-3402  
Email - tregan@brownrudnick.com  
Phone - 860.509.6522  
Fax - 860.509.6622



# Sprint Nextel Corp.



**Sprint Nextel Corp.**  
1 INTERNATIONAL BLVD.,  
SUITE 800  
MAHWAH, NJ 07495

TRANSCEND WIRELESS, LLC  
479 ROUTE 17 NORTH,  
2ND FLOOR  
MAHWAH, NJ 07430

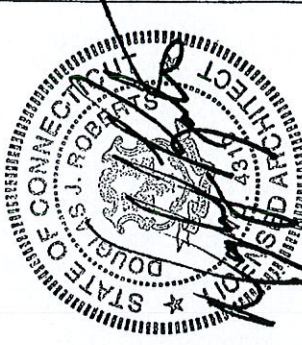
A&E FIRM

## URS CORPORATION AES

500 ENTERPRISE DRIVE, SUITE 3B  
ROCKY HILL, CONNECTICUT  
1-(860)-529-8882

NO.	DATE	REVISIONS	BY	CHK/APP'D
A	12/13/07	SITING COUNCIL	RRH/PJS/AA	
A	12/12/07	REVIEW	RRH/PJS/AA	

NOT TO SCALE DESIGNED BY: PJS DRAWN BY: RRH  
A&E SEAL



**ANSONIA - WAKELEE AVENUE**

**CT01YC264/NCT0754  
401 WAKELEE AVENUE  
ANSONIA, CT 06401**

PROJECT NO.  
TWT-056  
DRAWING NAME  
T-1  
DATE  
12/12/07  
SHEET NO./REV  
1 OF 3  
A

# ANSONIA - WAKELEE AVENUE

## CT01YC264/NCT0754

### 401 WAKELEE AVENUE

### ANSONIA, CT 06401

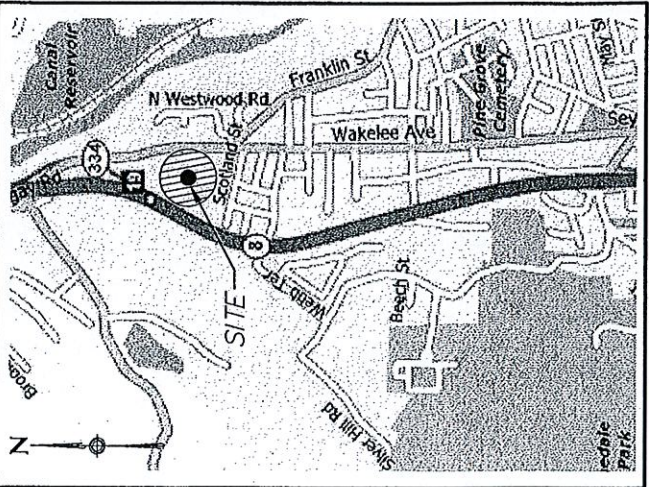
#### SHEET INDEX

SHT. NO.	DESCRIPTION
T-1	TITLE SHEET - GENERAL NOTES AND LEGENDS
SC-1	COMPOUND PLAN
SC-2	TOWER ELEVATION

#### DRIVING DIRECTIONS

FROM 100 CORPORATE PLACE, ROCKY HILL, CT:  
START OUT GOING SOUTH ON CORPORATE PL TOWARD WEST ST.  
TURN LEFT ONTO WEST ST.  
MERGE ONTO I-91 S TOWARD NEW HAVEN.  
MERGE ONTO CT-15 S / WILBUR CROSS PKWY VIA EXIT 17.  
MERGE ONTO CT-34 W VIA EXIT 58 TOWARD DERBY.  
MERGE ONTO CT-8 N TOWARD WATERBURY.  
TAKE THE WAKELEE AVENUE / CT-334 EXIT- EXIT 19.  
TURN RIGHT ONTO WAKELEE AVE / CT-334.  
END AT 401 WAKELEE AVE  
ANSONIA, CT 06401, US

#### PROJECT INDEX



#### PROJECT INDEX

SITE NUMBER:	CT01YC264/NCT0754
SITE NAME:	ANSONIA - WAKELEE AVENUE
SITE ADDRESS:	401 WAKELEE AVENUE ANSONIA, CT 06401
APPLICANT:	SPRINT NEXTEL CORP. 1 INTERNATIONAL BLVD, SUITE 800 MAHWAH, NJ 07495
CONTACT:	JASON DEIBERT (347) 284-8617
PROPERTY OWNER:	AMERICAN TOWER CORPORATION
JURISDICTION:	CONNECTICUT SITING COUNCIL
LATITUDE:	41.3561°
LONGITUDE:	-73.0917°



**Sprint Nextel Corp.**  
 1 INTERNATIONAL BLVD.,  
 SUITE 800  
 MAHWAH, NJ 07495

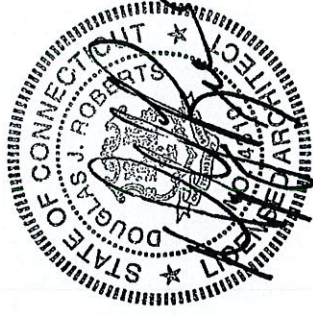
TRANSCEND WIRELESS, LLC  
 479 ROUTE 17 NORTH,  
 2ND FLOOR  
 MAHWAH, NJ 07430

A&E FIRM

**URS CORPORATION A/E/S**  
 500 ENTERPRISE DRIVE, SUITE 3B  
 ROCKY HILL, CONNECTICUT  
 1-(860)-529-8882

NO.	DATE	REVISIONS	BY	CHK/APP'D
1	12/13/07	SITING COUNCIL	RRH/PJS AA	
2	12/12/07	REVIEW	RRH/PJS AA	
NOT TO SCALE DESIGNED BY: PJS DRAWN BY: RRH				

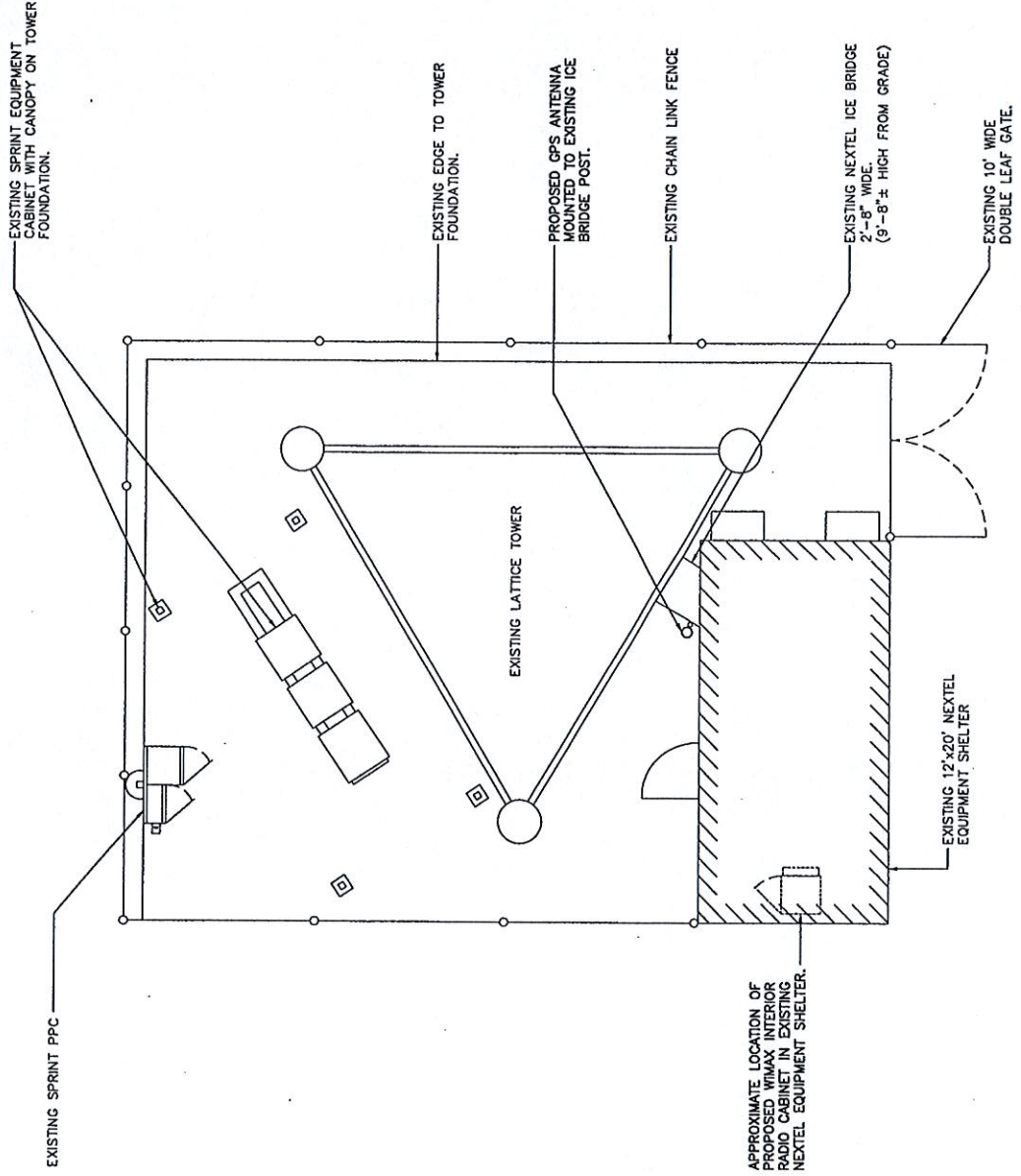
A&E SEAL



**ANSONIA - WAKELEE AVENUE**

**CT01YC264/NCT0754**  
 401 WAKELEE AVENUE  
 ANSONIA, CT 06401

PROJECT NO.	DRAWING NAME	DATE	SHEET NO./REV
TW1-036	SC-1	12/12/07	2 OF 3
			A



NORTH  **1** COMPOUND PLAN  
 SC-1 SCALE: 1" = 20'-0"

**Sprint Nextel Corp.**  
 1 INTERNATIONAL BLVD.,  
 SUITE 800  
 MAHWAH, NJ 07495

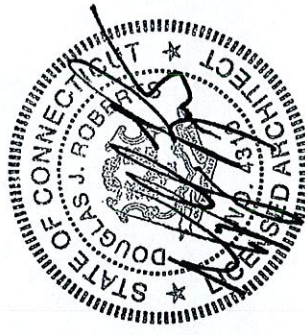
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 479 ROUTE 17 NORTH,  
 2ND FLOOR  
 MAHWAH, NJ 07430

**URS CORPORATION AES**  
 500 ENTERPRISE DRIVE, SUITE 3B  
 ROCKY HILL, CONNECTICUT  
 1-(860)-529-8882

A&E FIRM

NO.	DATE	REVISIONS	BY	CHK/APPT
1	12/13/07	SITING COUNCIL	RRH/PJS/AA	
2	12/12/07	REVIEW	RRH/PJS/AA	

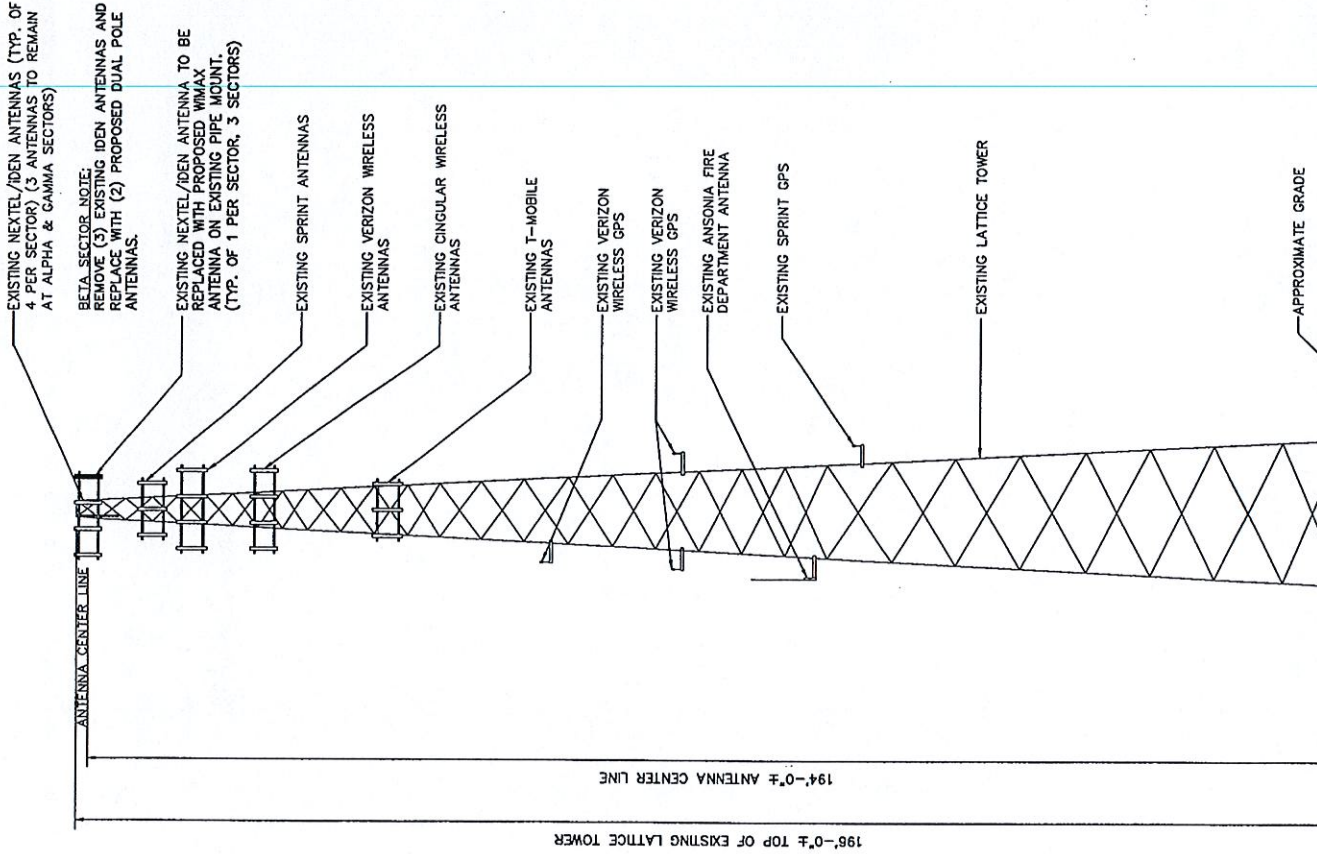
NOT TO SCALE | DESIGNED BY: PJS | DRAWN BY: RRH  
 A&E SEAL



**ANSONIA - WAKELEE AVENUE**

**CT01YC264/NCT0754**  
 401 WAKELEE AVENUE  
 ANSONIA, CT 06401

PROJECT NO.	DRAWING NAME	DATE	SHEET NO./REV
TW1-036	SC-2	12/12/07	3 OF 3
36917296			A



**1 TOWER ELEVATION**  
 SCALE: 1" = 30'-0"





Level 1 Structural Evaluation <sup>1</sup>		
ATC Site Number & Name	302470, Ansonia Wakelee	Engineering ID: 41117813
Carrier Site Number & Name	CT01YC264 CT0754, Ansonia Wakelee	
Site Address	401 Wakelee Ave Ansonia, Connecticut 06401 New Haven County	
Tower Description	196 ft Rohn Self Support Tower	
Standards & Codes <sup>2</sup>	ANSI/TIA/EIA-222-F (1996) 85 mph w/ 0" radial ice 74 mph w/ 1/2" radial ice	2003 International Building Code w/ Connecticut Supplements 90 mph w/ 0" radial ice

**Table 1: Existing and Proposed Antenna Configuration**

HEIGHT (ft)	ANTENNA	CARRIER	COAX	STATUS
194	(9) Decibel DB844H90E-XY on Sector Frame Mounts	Nextel <sup>b</sup>	(9) 1 1/4" (12) 1-5/8"	Existing
194	(3) KMW AM-X-WM-17-65-00T (3) KMW KMDAPS2050000 on Sector Frame Mounts	Nextel <sup>b</sup>	(6) 1 5/8"	Proposed
188	(6) Decibel DB950F65E-M on Sector Frame Mounts	Sprint	(6) 1-5/8"	Existing
178	(6) Decibel 948F85T2E-M (6) Decibel DB844H90 on Sector Frame Mounts	Verizon	(12) 1-5/8"	Existing
167	(6) CSS DUO1417-8686 (6) ADC TMDD1900 (3) Powerwave 7770-1 (3) Powerwave LGP13519 on Sector Frame Mounts	Cingular	(12) 1-1/4"	Existing
148	(6) EMS 5' Panels on Sector Frame Mounts	T-Mobile	(12) 1-5/8"	Existing
124	(1) GPS Antenna on Side Arm Mount	Verizon	(1) 1/2"	Existing
104	(2) GPS Antenna on Side Arm Mounts	Verizon	(2) 1/2"	Existing
82	(1) 9.5' Omni on Stand Off Mount	Ansonia Fire Dept.	(1) 1/2"	Existing
76	(1) GPS Antenna on Side Arm Mount	Sprint	(1) 1/2"	Existing

<sup>a</sup> Coax to be installed on an empty tower face.

<sup>b</sup> Sprint Nextel is allowed an equipment configuration not to exceed (9) 48" x 12" and (3) 72" x 12" panels w/ (12) 1-5/8" coax.



302470-DRS

11/27/2007

Page 2 of 2

The subject tower and foundation *are adequate* to support the above stated loads in conformance with specified requirements.<sup>3</sup>



I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Connecticut.

<sup>1</sup> The existing and proposed loads of *Table 1* are compared to the tower's current design capacity or previous analysis.

<sup>2</sup> The design wind criteria are compared to the current code requirements.

<sup>3</sup> The tower should be re-evaluated as future loads are added or if actual loads are found different from those mentioned in *Table 1*.



**CT01YC264 (401 Wakelee Avenue, Ansonia, CT) - Siting Council Power Density Calculations**

Sprint Nextel Directional Antennas ESMR - 2657 MHz 194'		Note: Power densities are in mW/ cm <sup>2</sup>					
Transmitters:	Frequency in MHz	CT Standard mW/ cm <sup>2</sup>	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	194	0.0161002	1.61%
iDEN	851	0.5673	12	100	194	0.0114592	2.02%
From previous filings: per CSC power density data base							
Cingular UMTS							1.10%
Cingular GSM							5.20%
Cingular GSM							1.10%
Sprint							4.11%
Verizon							3.48%
Verizon							0.97%
T-Mobile							3.23%
<b>Total % of CT Standard</b>							<b>22.82%</b>



# STATE OF CONNECTICUT

## CONNECTICUT SITING COUNCIL

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Daniel F. Caruso  
Chairman

December 19, 2007

The Honorable James T. DellaVolpe  
Mayor  
City of Ansonia  
City Hall  
253 Main Street  
Ansonia, CT 06401-1866

RE: **EM-SPRINT-NEXTEL-002-071219** – Sprint Nextel Corporation notice of intent to modify an existing telecommunications facility located at 401 Wakelee Avenue, Ansonia, Connecticut.

Dear Mayor DellaVolpe:

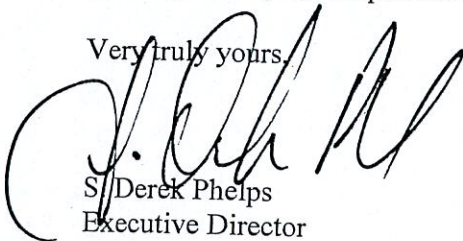
The Connecticut Siting Council (Council) received this request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72.

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: Peter Crabtree, Zoning Enforcement Officer, City of Ansonia