

# 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)

Daniel F. Caruso

Chairman

April 21, 2008

Jennifer Young Gaudet

Transcend Wireless

479 Route 17 North

Mahwah, NJ 07430

RE: **EM-SPRINT-NEXTEL-085-080303** – Sprint Nextel Corporation notice of intent to modify an existing telecommunications facility located at Moose Hill Road, Monroe, Connecticut.

Dear Ms. Gaudet:

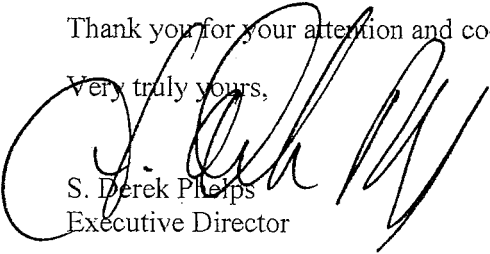
The Connecticut Siting Council (Council) hereby acknowledges your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice dated February 28, 2008, 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,

  
S. Derek Phelps  
Executive Director

SDP/MP

c: Honorable Tom Buzi, First Selectman, Town of Monroe  
Daniel A. Tuba, Town Administrator, Town of Monroe  
CT Architectural Towers



CONNECTICUT SITING COUNCIL

Affirmative Action / Equal Opportunity Employer



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Daniel F. Caruso  
Chairman

March 4, 2008

The Honorable Tom Buzi  
First Selectman  
Town of Monroe  
Town Hall  
7 Fan Hill Road  
Monroe, CT 06468-1800

RE: **EM-SPRINT-NEXTEL-085-080303** – Sprint Nextel Corporation notice of intent to modify an existing telecommunication facility located at Moose Hill Road, Monroe, Connecticut.

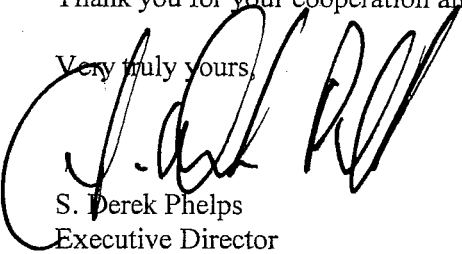
Dear Mr. Buzi:

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.

If you have any questions or comments regarding this proposal, please call me or inform the Council by March 18, 2008.

Thank you for your cooperation and consideration.

Very truly yours,



S. Derek Phelps  
Executive Director

SDP/jb

Enclosure: Notice of Intent

c: Daniel A. Tuba, Planning Administrator, Town of Monroe

**Transcend Wireless**

479 ROUTE 17 NORTH  
2<sup>ND</sup> FLOOR  
MAHWAH, NJ 07430

PHONE: 201.684.0055  
FAX: 201.684.0066

EM-SPRINT-NEXTEL-085-080303

VIA OVERNIGHT DELIVERY

February 28, 2008

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

Re: Sprint Nextel Corporation – exempt modification  
Moose Hill Road, Monroe, Connecticut

Dear Mr. Phelps:

On or about November 20, 2007, Sprint Nextel Corporation (“Sprint”) submitted an exempt modification for proposed changes to the existing facility at 500/550 Moose Hill Road in Monroe (coordinates 41<sup>019</sup>’15.46” N, 73<sup>012</sup>’5.15” W). This letter and attachments, submitted on behalf of Sprint, address a further modification to be undertaken in connection with Sprint’s implementation of WiMAX technology, and constitute notification 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 First Selectman of Monroe.

The changes described in the November 20, 2007 filing will be implemented as described previously. In addition, a second microwave dish, approximately 2.5’ in diameter, will be installed on the existing Sprint platform at a height of approximately 148’. Attached is an elevation drawing depicting the additional microwave dish, documentation of the structural sufficiency of the tower to accommodate the revised antenna configuration including the second dish, and a power density calculation reflecting the further modification to Sprint’s operations at the site.

The changes to the facility do not constitute a modification 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. 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).

RECEIVED  
MAR 03 2008

CONNECTICUT  
SITING COUNCIL

ORIGINAL

Mr. S. Derek Phelps

February 28, 2008

Page 2

1. The height of the overall structure will be unaffected. All Sprint's antennas and dishes will be located on Sprint's platform at the top of the tower, at approximately 148' AGL.
2. The proposed additional dish will not have any effect on the site boundaries. No additional cabinet is required for the microwave dish.
3. The proposed changes will not increase the noise level at the existing facility by six decibels or more. The incremental effect of the additional dish will be negligible.
4. The changes to the facility 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. As indicated on the attached power density calculation, Sprint's operations at the site will result in a power density of 20.8136%; the combined site operations will result in a total power density of 51.06%.

Please feel free to call me at (860) 798-7454 with questions concerning this matter. Thank you for your consideration.

Respectfully yours,



Jennifer Young Gaudet

cc: Honorable Tom Buzi, First Selectman, Town of Monroe  
Attachments

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

# Sprint Nextel Corp.

## ST. JOHNS CEMETERY

**SITE NUMBER: CT01YC108/CT03XC364**  
**500 MOOSE HILL RD**  
**MONROE, CT 06488**  
**FAIRFIELD COUNTY, CONNECTICUT**  
**SITE TYPE: MONOPOLE**

**infinigy**  
 engineering  
 300 Great Oaks Boulevard  
 Suite 312, Albany, NY 12203  
 Office #: (518) 890-0790  
 Fax #: (518) 890-0793

**TRANSCEND  
 WIRELESS, LLC.**

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


UNAUTHORIZED ALTERATION OR ADDITION  
 TO THIS DOCUMENT IS A VIOLATION OF  
 APPLICABLE STATE AND/OR LOCAL LAWS

No.	Submitted / Revision	App'd	Date
2	REVISED PER COMMENTS	DJM	2/20/08
1	REVISED PER COMMENTS	DJM	11/19/07
0	SUBMITTED FOR REVIEW	DJM	11/13/07

Drawn: DJM Date: 11/13/07  
 Designed: DJM Date: 11/13/07  
 Checked: DJM Date: 11/13/07

Project Number  
 204-022

Project Title  
**ST. JOHNS  
 CEMETERY**  
 500 MOOSE HILL RD  
 MONROE, CT 06488

Prepared For  


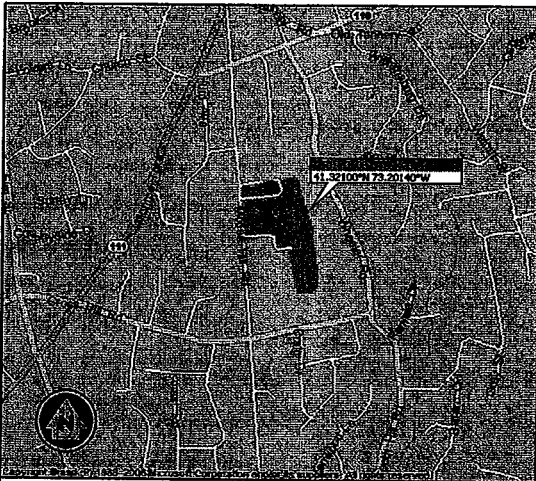
Drawing Scale:  
 AS NOTED  
 Date:  
 11/13/07

Drawing Title  
**TITLE PAGE**

Drawing Number  
**T1**

MINOR MODIFICATION OF EXISTING WIRELESS COMMUNICATION SYSTEM  
 CONSISTING OF ADDITION OF EQUIPMENT CABINET(S), SWAPPING OF  
 EXISTING 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)**

I-91 SOUTH TO EXIT 17/CT-15 SOUTH, TO EXIT 58. MERGE ONTO CT-34  
 W/DERBY AVE. CONTINUE TO FOLLOW CT-34 WEST, TURN LEFT AT  
 BRIDGE STREET, TURN RIGHT AT CT-110/HOWE AVENUE, FOLLOW CT-110  
 TO LEFT AT MOOSE HILL ROAD.

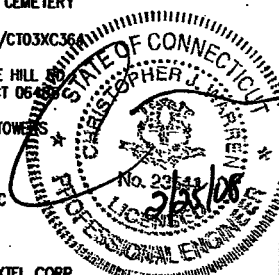
**DRIVING DIRECTIONS:**

SHEET #	TITLE	REV.#	DATE
T1	TITLE PAGE	2	2/20/08
SC-1	OVERALL SITE LAYOUT	2	2/20/08
SC-2	TOWER ELEVATION	2	2/20/08

**SHEET INDEX:**

SITE NAME: ST. JOHNS CEMETERY  
 SITE NUMBER: CT01YC108/CT03XC364  
 SITE ADDRESS: 500 MOOSE HILL RD, MONROE, CT 06488  
 SITE OWNER: OPTASITE TOWERS  
 PARCEL ID: 051 067 0C  
 CURRENT ZONING: RSC  
 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: ±148' AGL  
 GROUND ELEVATION: ±622.4' AMSL  
 LATITUDE (NAD 83): 41° 19' 15.46"N  
 LONGITUDE (NAD 83): 73° 12' 5.15" W

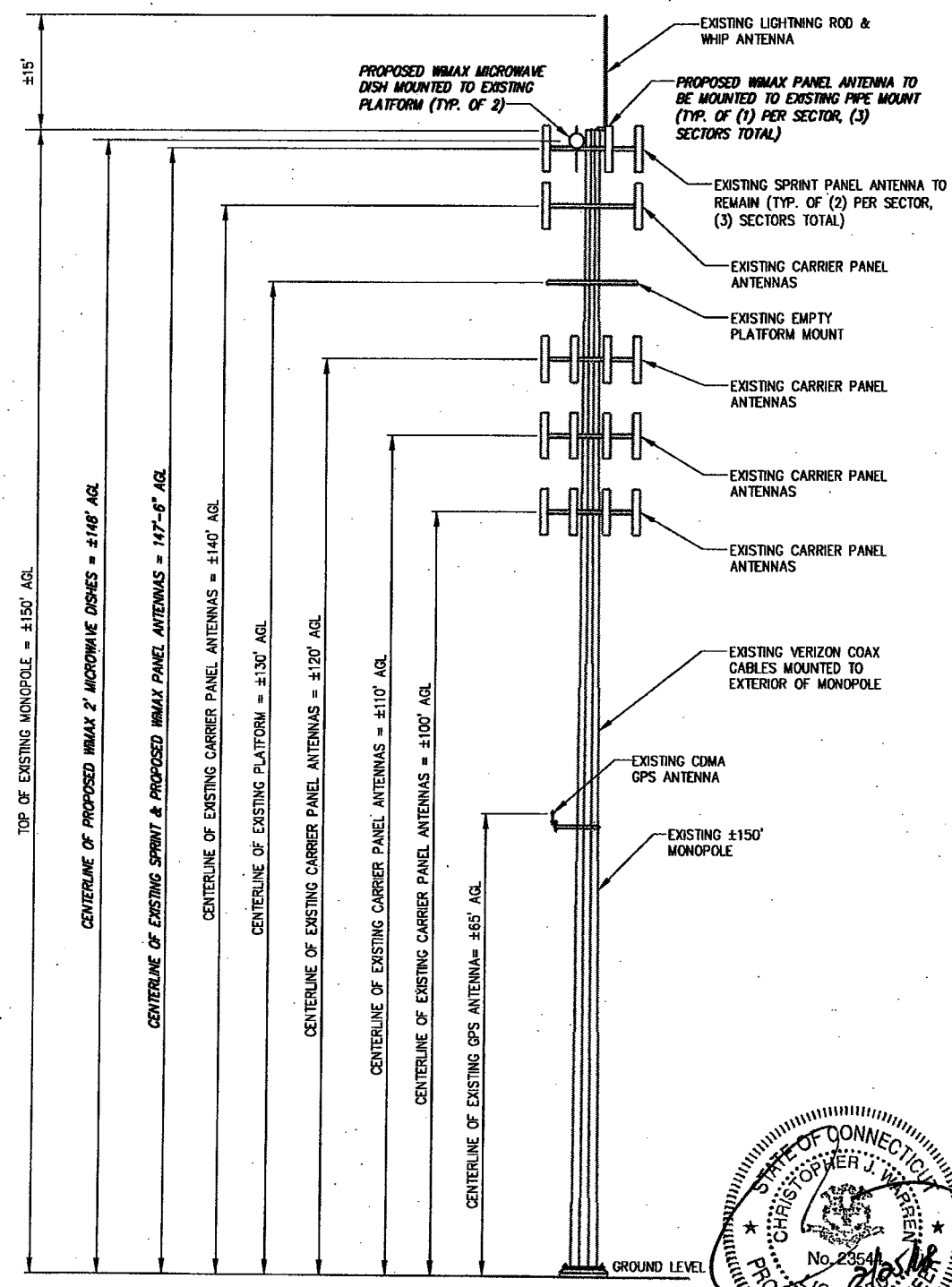
**PROJECT INDEX:**



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File: N:\TRANSCEND\4G - CT\204-022 - CT01YC108-CT03XC364\ACAD\CSC\CSC'S - 204-022.DWG Saved: 2/20/2008 9:50:40 AM Plotted: 2/25/2008 10:10:43 AM User: Darren Weber

FOR ADDITIONAL STRUCTURAL INFORMATION SEE STRUCTURAL ANALYSIS COMPLETED BY ARMOR TOWER, TITLED "SPRINT-NEXTEL CT01YC108-CT03XC364" DATED 2/13/08. INFINIGY ENGINEERING ACCEPTS NO LIABILITY FOR STRUCTURAL INTEGRITY OF THE PROPOSED OR EXISTING INSTALLATION.



**1 MONOPOLE ELEVATION**  
NOT TO SCALE



**infinigy**  
engineering

300 Great Oaks Boulevard  
Suite 312, Albany, NY 12203  
Office #: (518) 880-0760  
Fax #: (518) 890-0783

**TRANSCEND WIRELESS, LLC.**

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

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Drawn: SKB Date: 11/13/07  
Designed: BJW Date: 11/13/07  
Checked: BJW Date: 11/13/07

Project Number: **204-022**

Project Title:  
**ST. JOHNS CEMETERY**  
500 MOOSE HILL RD  
MONROE, CT 06468

Prepared For:  
**Sprint Nextel Corp.**

Drawing Scale:  
AS NOTED  
Date:  
11/13/07

Drawing Title:  
**TOWER ELEVATION**

Drawing Number:  
**SC-2**



February 13, 2008

Darren Weber  
Infinigy Engineering  
300 Great Oaks Blvd, Suite 312  
Albany, NY 12203

RE: Sprint-Nextel CT01YC108-CT03XC364  
Monroe, CT

Darren,

We have completed the structural analysis of the subject tower and **have found it to be acceptably loaded within the scope of this analysis to support the proposed antenna loading.** The tower was analyzed according to the requirements of EIA 222-F standard for Fairfield County for 85 mph (fastest mile) wind speed with no ice and 74 mph wind with ½" ice.

The tower we analyzed is a 149' Sabre monopole tower consisting of (4) all-welded, polygon tubular sections. Tower diameters range from 2'-0" at the top to 4'-11" at the base. Foundation capacities were predicated on supplied as-designed details.

The antenna loading used in the analysis consisted of the following supplied listing:

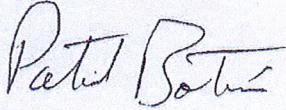
- (1) DB404 (7/8" coax) @ 149' for the town
  - (6) DB948F85T2E-M, (6)1-5/8" coax inside pole, on low-profile platform @ 147' (Existing Sprint)
  - (3) AM-X-WM-17-65-00T, (6)1-5/8" coax outside pole, @ 147' (Proposed Sprint)
  - (2) VHLP2-23 dish (1/2" coax on outside of pole) @ 147' (Proposed Sprint)
  - (9) DB846H80E-SX, (12)1-1/4" coax inside pole, on low-profile platform @ 140' (Reserved Cingular)
  - (1) Vacant low-profile platform @ 130'
  - (12) EMS RR9017-02-DPL2 (24)1-5/8" coax on inside, on low-profile platform @ 120' platform for T-Mobile
  - (12) DB844H90 (12)1-5/8" coax on inside, on low-profile platform @ 110' for Nextel
  - (6) DB844F90A, (6) 948F85T2E-M, (12)1-5/8" coax on outside, on low-profile platform @ 100' for Verizon Wireless.
- Feed lines for the proposed antennas are to be installed 7 lines wide on the outside of the pole.

The results of the analysis showed the anchor bolts being acceptably loaded at 101%. All other tower and foundation elements were loaded within allowable limits.

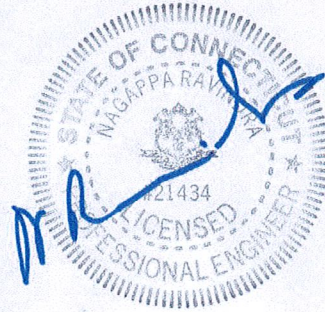
If you have any questions concerning this analysis, please contact us.

Sincerely,

ARMOR TOWER, INC.



Patrick Botimer  
Structural Engineer





**St. John's Cemetery - CT01YC108 (500/550 Moose Hill Road, Monroe, CT) - Siting Council Power Density Calculations**

Sprint Nextel Directional Antennas ESMR - 2657 MHz 147.5'

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	147.5	0.0278517	2.79%
CDMA	1962.5	1.0000	11	411	147.5	0.0746842	7.47%
Microwave	19500	1.0000	2	2512	148	0.0824336	8.24%
Microwave	11500	1.0000	2	708	148	0.0232337	2.32%

From previous filings: per CSC power density data base

Town Antennas (cum.)							
Cingular							receive only
Cingular							1.61%
Verizon							1.91%
Verizon							11.61%
T-Mobile							2.44%
Nextel							6.09%
							6.58%

Total % of CT Standard

51.06%