## STATE OF CONNECTICUT



CONNECTICUT SITING COUNCIL

Ten Franklin Square New Britain, Connecticut 06051 Phone: (860) 827-2935 Fax: (860) 827-2950

Julie M. Cashin, Esq. Hurwitz & Sagarin, LLC 147 North Broad Street P.O. Box 112 Milford, CT 06460-0112

RE:

TS-SPRINT-049-001116 - Sprint PCS request for an order to approve tower sharing at an existing telecommunications facility located at 188 Moody Street, Enfield, Connecticut.

Dear Attorney Cashin:

At a public meeting held November 30, 2000, the Connecticut Siting Council (Council) ruled that the shared use of this existing tower site is technically, legally, environmentally, and economically feasible and meets public safety concerns, and therefore, in compliance with General Statutes § 16-50aa, the Council has ordered the shared use of this facility to avoid the unnecessary proliferation of tower structures. 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. Any additional change to this facility may require an explicit request to this agency pursuant to General Statutes § 16-50aa or notice pursuant to Regulations of Connecticut State Agencies Section 16-50j-73, as applicable. Such request or notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point 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.

This decision applies only to this request for tower sharing and is not applicable to any other request or construction.

The proposed shared use is to be implemented as specified in your letter dated November 16, 2000.

Thank you for your attention and cooperation.

Very truly yours,

Mortimer A. Gelston

Chairman

MAG/laf

 c: Honorable Mary Lou Strom, Mayor, Town of Enfield Mr. Scott A. Shanley, Town Manager, Town of Enfield Ronald C. Clark, Nextel Communications Chris Pescatore, Sprint PCS

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# TOWN OF ENFIELD



December 4, 2000

Mortimer A. Gelston, Chairman Connecticut Siting Council 10 Franklin Square New Britain, CT 06051

CONNECTICUT SITING COUNCIL

Re:

Sprint Spectrum L.P. Request for Co-location at 188 Moody Road , Enfield

Dear Mr. Gelston:

I have reviewed the notice mailed to the Town of Enfield by Julie Cashin of Hurwitz and Sagarin, LLC. On November 16, 2000. My review indicates that the proposed activity at the existing 188 Moody Road facility is within the parameters of the Enfield Planning and Zoning Commission approval for a telecommunications facility at this site.

It is my anticipation that there will be no objections to the proposed plans as long as there are no changes to the layout that was presented for our review.

Thank you for the opportunity to comment.

Please feel free to call me if you have any questions.

Sincerely,

José Giner

Director of Planning & Community Development

cc:

Scott Shanley, Town Manager

Enfield Planning and Zoning Commission







## HURWITZ & SAGARIN LLC

November 21, 2000

Telecopier



NOV 2 2 2000

CONNECTICUT SITING COUNCIL

Mr. Paul Aresta Connecticut Siting Council 10 Franklin Square New Britain, Connecticut 06051

Re:

220 Winthrop Road, Deep River, Connecticut

188 Moody Street, Enfield, Connecticut

Dear Paul:

Enclosed please find the power density calculations for the Nextel facilities at the above referenced sites.

Please call me if you have any questions.

Very truly yours,

JULIE M. CASHIN dsw/enc.

DICTATED BUT NOT READ

CT33XC257 - Nextel Tower, Enfield, CT Worst Case Power Density Analysis of Nextel Antennas @ Base of Tower. Assumes Max ERP & No Antenna Pattern Adjustment

Employee Company of the Company of t	CONTRACTOR				_							
		1.7626%	1.6364%	1.3469%	1.0402%	0.7888%	0.6018%	0.4666%	0.3687%	0.2968%	0.2431%	0.2022%
Maximum	Exposure	0.56733	0.56733	0.56733	0.56733	0.56733	0.56733	0.56733	0.56733	0.56733	0.56733	0.56733
Citentatie Power Bensia	(mWemž)	0.010000	0.009284	0.007642	0.005902	0.004475	0.003414	0.002647	0.002092	0.001684	0.001379	0.001147
Desended From Best of	Trown (Read)	0	50	100	150	200	250	300	350	400	450	200
Aurema Feight		180	180	180	180	180	180	180	180	180	180	180
Trogram		006	006	900	900	006	006	900	006	006	006	006
* Lifective Ridikted Rower (BIRP)	Transmitter (Wajirs)	100	100	100	100	100	100	100	100	100	100	100
ijo zagluliju.		6	6	6	0	6	6	6	6	6	6	ნ
Supposition (I)	Ø en en	851	851	851	851	851	851	851	851	851	851	851

\*Requirements set forth in OET Bulletin 65. Based on NCRP Report No. 86 and ANSI/IEEE C95.1-1992

CT33XC544 - Nextel Tower, Deep River, CT Worst Case Power Density Analysis of Nextel Antennas @ Base of Tower. Assumes Max ERP & No Antenna Pattern Adjustment

OMBE	1.8025%	1.6707%	1.3701%	1.0540%	%29520	0.6064%	0.4693%	0.3704%	0.7979%	0.223.9%	0.2027%
Maximum Permissable Exposure	0.56733	0.56733	0.56733	0.56733	0.56733	0.56733	0.56733	0.56733	0.56733	0.56733	0.56733
Calellated Power Density (mW/en2):	0.010226	0.009478	0.007773	0.005980	0.004520	0.003440	0.002663	0.002101	0.001690	0.001384	0.001150
Disjance Brom Base of Trower (Teet)	0	50	100	150	200	250	300	350	400	450	500
Ameune Heigh	178	178	178	178	178	178	178	178	178	178	178
Total DRP	006	006	006	006	006	900	006	900	006	006	006
Effective Radiated ower (ERP) Per Per (Watts)	100	100	100	100	100	100	100	100	100	100	100
Number of A	တ	6	6	တ	6	6	<u>.</u>	တ	6	6	6
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\*Requirements set forth in OET Bulletin 65. Based on NCRP Report No. 86 and ANSI/IEEE C95.1-1992



## STATE OF CONNECTICUT

#### CONNECTICUT SITING COUNCIL

Ten Franklin Square New Britain, Connecticut 06051 Phone: (860) 827-2935 Fax: (860) 827-2950

November 17, 2000

Honorable Mary Lou Strom Mayor Town of Enfield 820 Enfield Street Enfield, CT 06082

RE:

TS-SPRINT-049-001116 - Sprint PCS request for an order to approve tower sharing at an existing telecommunications facility located at 188 Moody Street, Enfield, Connecticut.

Dear Mayor Strom:

The Connecticut Siting Council (Council) received this request for tower sharing, pursuant to Connecticut General Statutes § 16-50aa.

The Council will consider this item at the next meeting scheduled for November 30, 2000, at 2:00 p.m. in Hearing Room Two, Ten Franklin Square, New Britain, Connecticut.

Please call me or inform the Council if you have any questions or comments regarding this proposal.

Thank you for your cooperation and consideration.

Very truly yours,

Joel M. Rinebold Executive Director

JMR/laf

Enclosure: Notice of Tower Sharing

c: Mr. Scott A. Shanley, Town Manager, Town of Enfield

# HURWITZ & SAGARIN LLC

TS-SPRINT-049-001116

November 16, 2000

Via Hand Delivery

Mr. Mortimer A. Gelston, Chairman Connecticut Siting Council 10 Franklin Square New Britain, Connecticut 06051

Dear Chairman Gelston:

On behalf of the applicant, Sprint Spectrum L.P. ("Sprint PCS") I am pleased to submit this Tower Sharing Proposal for the shared use of the existing Nextel telecommunications facility located at 188 Moody Street, Enfield, Connecticut.

Enclosed are one (1) original and twenty (20) copies of this Tower Sharing Proposal requesting shared use of this facility. A check in the amount of \$500.00 to cover the filing fee is also enclosed. The Mayor of the Town of Enfield has been sent notice of this Tower Sharing Proposal by certified mail.

Sincerely,

JULIE M. CASHIN, ESQ.

JMC/dsw

**Enclosures** 

cc:

MaryLou Strom, Mayor

Julie M. Cashin-

Chris Pescatore, Sprint

Steven Howard, Nextel Communications CONNECTICUT

Request of Sprint PCS requesting approval for the shared use of the existing telecommunications facility located at 188 Moody Street, Enfield Connecticut.

Dated: November 16, 2000 in Milford, CT



#### **Introduction**

Sprint Spectrum, L.P. ("Sprint PCS") seeks to share a telecommunications tower located at 188 Moody Street, Enfield Connecticut ("Facility") and owned by Nextel Communications, Inc. ("Nextel") of 100 Corporate Place, Rocky Hill, Connecticut. Sprint PCS hereby requests a finding from the Connecticut Siting Council ("Council") that the shared use of this Facility is technically, legally, environmentally and economically feasible and meets public safety concerns in accordance with Section 16-50aa of the Connecticut General Statutes ("C.G.S."), and an order approving the proposed shared use of the Facility.

#### Background

The subject site, owned by Nextel, is located at 188 Moody Street, Enfield,

Connecticut. (See location map attached as Exhibit A.) The site currently supports a 178 foot steel self-supporting monopole ("Existing Tower") and appurtenant equipment building.

#### Tower Sharing Proposal

The purpose of this Tower Sharing Proposal is to utilize an existing facility rather than to construct a new tower in the Town of Enfield. This Facility is the most viable colocation opportunity for Sprint PCS in the area. Sprint PCS has entered into a lease agreement with Nextel for placement of antennas and associated equipment.

#### A. Existing Tower as a "Facility"

For the purposes of this Tower Sharing Proposal and pursuant to Section 16-50aa of the Connecticut General Statutes, "... Facility means a tower owned or operated for a commercial or public purpose by a person, firm, corporation or a public agency which uses such tower for transmitting or receiving signals in the electromagnetic spectrum pursuant to a Federal Communications Commission license." The Existing Tower was built to support multiple carriers. Sprint PCS will be the second carrier to locate on the Existing Tower.

#### B. Project Description

Sprint PCS is licensed by the Federal Communications Commission ("FCC") to provide PCS wireless service throughout the State of Connecticut, including the Plymouth area.

Sprint proposes to install as many as nine (9) panel antennas on the Existing

Tower at an antenna centerline of 168 feet and a small global positioning system (GPS)

antenna at an antenna height of 50 feet AGL. (See Tower Elevation attached hereto as

Exhibit A). A low profile platform with PCS antennas mounted on it will be attached to
the Existing Tower with an antenna rad center of 168 feet. The base station equipment
associated with the antennas would be located near the base of the Existing Tower.

#### C. Compliance with C.G.S. § 16-50aa

Pursuant to C.G.S. § 16-50aa, "The General Assembly finds that the sharing of towers for fair consideration whenever technically, legally, environmentally and economically feasible, and whenever such sharing meets public safety concerns, will avoid the unnecessary proliferation of towers and is in the public interest." A discussion of how the proposed co-location by Sprint PCS will be in conformance with C.G.S. § 16-50aa is outlined below:

#### 1. Technical Analysis

Sprint PCS has reviewed the technical parameters of the existing communications facilities and determined it is extremely unlikely that the proposed Sprint PCS antennas will result in interference, due to the sectorized positioning of the antenna, vertical separation, and low power. Sprint PCS does not intend to cause interference, and will correct any interference in the unlikely event that it does occur.

The Existing Tower was designed to accommodate multiple carriers. An engineering letter dated November 10, 2000 evidencing the structural capability of the Existing Tower to accommodate the proposed Sprint installation is attached hereto as Exhibit B. As indicated in the letter, the Existing Tower is capable of supporting the installation proposed by Sprint PCS.

#### 2. Legal Feasibility

Sprint PCS has entered into a lease agreement with Nextel for the purposes of locating antenna on the Existing Tower and associated equipment adjacent to the base of the Existing Tower. The Council has the authority pursuant to C.G.S. §16-50aa to issue orders approving the proposed shared use of the Facility by Sprint PCS.

#### 3. Environmental Feasibility

The proposed shared use would have a minimal environmental effect for the following reasons:

- This proposed shared use will not increase the height of the Existing Tower.
- This proposed shared use will not expand the compound area beyond that already approved by the Town of Enfield.
- The proposed installations by Sprint PCS will have an insignificant visual impact and will not cause any significant change or alteration in the physical or environmental characteristics of the Site.
- This proposed shared use will not increase noise levels at the Facility site boundary by six decibels.
  - This proposed shared use, including operation of the Sprint PCS antennas, will not increase the total radio frequency electromagnetic radiation of the power density measured at the site to or above the standard adopted by the Federal Communications Commission. The engineering exhibit attached as Exhibit C evidences the worst-case power density for the proposed installation, calculated at the base of the Existing Tower, is .039874mW/cm^2 and the MPE is 3.9874 %, which results in a total percentage of maximum permissible exposure of 5.75 %, based on the NCRP standard. These calculations show that Sprint PCS will be well below the FCC-mandated limits in all locations around the Existing Tower, even with extremely conservative assumptions.

 The proposed installations by Sprint PCS will not require any water or sanitary facilities, or generate air emissions or discharges to water bodies.
 After construction is complete, the proposed Sprint PCS installation will not generate any traffic other than periodic maintenance visits.

The proposed installation would have a de minimis visual impact, and would not cause any significant change or alteration in the physical or environmental characteristics of the existing facility. The proposed shared use of the Existing Tower by Sprint PCS is thus environmentally feasible.

#### 4. Economic Feasibility

As previously mentioned, Sprint PCS and Nextel have agreed upon acceptable terms and entered into a lease agreement with one another. The proposed shared use of the Facility is therefore economically feasible.

#### 5. Public Safety Concerns

There are no known public safety concerns associated with this Tower Sharing
Proposal. As stated above, the Existing Tower will be structurally capable of supporting
the Sprint PCS antennas. Sprint PCS anticipates that the provision of new or improved
phone service made possible by the shared use of the Facility will enhance the safety and
welfare of area residents.

#### Conclusions

The above Tower Sharing Proposal satisfies all of the criteria set forth in Section 16-50aa of the Connecticut General Statutes, including technical, legal, environmental and economic feasibility, and meets public safety concerns. Sprint PCS respectfully requests that the Council issue an order approving the proposed shared use.

CT33XC257 - Nextel Tower, Enfield, CT
Worst Case Power Density Analysis of Sprint PCS Antennas @ Base of Tower. Assumes Max ERP & No Antenna Pattern Adjustment

Operating Frequency (MHz)	i Niimher at	Effective Radiated Power (ERP) Per Transmitter (Watts)	Total ERP (Watts)	Antenna Height (Feet)	Distance From Base of Tower (Feet)	Calculated Power Density (mW/cm2)	Maximum Permissable Exposure*	%МРЕ
1962.5	11	291	3201	170	0	0.039874	1	3.9874%
1962.5	11	291	3201	170	50	0.036699	1	3.6699%
1962.5	11	291	3201	170	100	0.029624	1	2.9624%
1962.5	11	291	3201	170	150	0.022419	1	2.2419%
1962.5	11	291	3201	170	200	0.016725	1	1.6725%
1962.5	11	291	3201	170	250	0.012608	1	1.2608%
1962.5	11	291	3201	170	300	0.009692	1	0.9692%
1962.5	11	291	3201	170	350	0.007611	1	0.7611%
1962.5	11	291	3201	170	400	0.006100	1	0.6100%
1962.5	11	291	3201	170	450	0.004980	1	0.4980%
1962.5	11	291	3201	170	500	0.004132	1	0.4132%

<sup>\*</sup>Requirements set forth in OET Bulletin 65. Based on NCRP Report No. 86 and ANSI/IEEE C95.1-1992

CT33XC257 - Nextel Tower, Enfield, CT Cumulative Worst Case Power Density Analysis of Sprint PCS and Nextel Antennas

Operator	Operating Frequency		Power	Maximum Permissable Exposure*	Fraction of MPE	
	(MHz)	(feet)	(mW/cm^2)	(mW/cm^2)	(%)	
Nextel	851	180	0.010000	0.57	1.76%	
Sprint PCS	1962.5	170	0.039874	1.00	3.99%	

Total Percentage of Maximum Permissible Exposure

5.75%

### Goodkind & O'Dea, Inc.

Consulting Engineers and Planners

59 Elm Street, Suite 101 New Haven, CT 06510-2047 203/776-2277 Fax: 203/776-2288

gkod.newhaven@goodkindinc.com

November 10, 2000

Sprint PCS Crossroads Corporate Center 1 International Boulevard, Suite 800 Mahway, NJ 07495

Attention: Steve Orkoulas

Re:

CT 33XC257

Claryville - Nextel

Nextel Monopole, Sprint Structural Certification

#### Dear Steve:

We are in receipt of a copy of signed and sealed structural design computations and details for a 178' tall monopole and concrete caisson foundation, prepared by Paul J. Ford and Company - Professional Engineer, Kevin P. Bauman, Connecticut License No. 17391, their Job No. 29200-155 for Summitt Manufacturing, LLC, Summit's Job No. 6197.

Computations reference TIA/EIA-222-F, 1996, as the basis of design. The design is prepared for the monopole to support 4 Low Profile platforms and 12 antennas on each platform.

It is our understanding that Sprint PCS will be occupying the second or 168' platform location.

Based upon the attached design computations and diagrams, Goodkind & O'Dea certifies the monopole, as referenced, is designed to be structurally capable of supporting a low profile antenna platform and Nine (9) Sprint panel antennas and Nine (9) 1 5/8" coaxial antenna cables at the proposed 168' mounting height on the monopole.

Mr. Steve Orkoulas November 10, 2000 Page 2 of 2

Please don't hesitate to contact me if you have any questions.

Sincerely,

Goodkind & O'Dea, Inc.

Francis D. Kobylenski

Project Manager

cc: Julie Cashin

Hurwitz & Sagarin, P.C.

FDK:msj 1:\projects\2443\546\Site #257.wpd



# WIRELESS COMMUNICATION FACILITY

SITE # CT33XC257
CLARYVILLE, CT

#### PROJECT INFORMATION

SITE NAME:

**CLARYVILLE** 

SITE NUMBER:

CT33XC257

DATE PREPARED:

JUNE 30, 2000

TYPE OF BUILD:

**CO-LOCATION** 

SITE ADDRESS:

188 MOODY STREET

ENFIELD, CT 06082

COUNTY:

**TOLLAND** 

MAP/BLOCK

MAP 100, LOT 12

LATITUDE: LONGITUDE: 42° 00' 07"N 72° 31' 20"W

SITE OWNER:

NEXTEL COMMUNICATIONS 100 CORPORATE PLACE ROCKY HILL, CT, 06067 CONTACT: STEVE HOWARD PHONE:(860)513-5458

SITE CONTACT:

NETWORK BUILDING AND CONSULTING

ALEX TYURIN (860)654-0698

APPLICANT:

SPRINT PCS

CROSSROADS CORPORATE CENTER 1 INTERNATIONAL BLVD., 8TH FLOOR

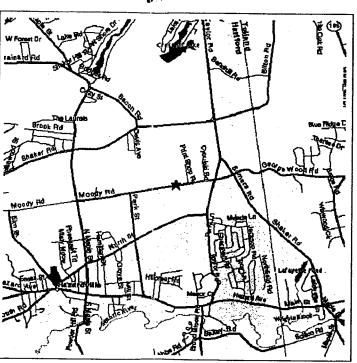
**MAHWAH. NJ 07494** 

**CONSTRUCTION MGR.:** 

PINNACLE SITE DEVELOPMENT, INC 41 SEQUIN DRIVE, 2ND FLOOR GLASTONBURY, CT 06033 CONTACT: JOHN TIERNEY PHONE: 860/659-9250

ARCHITECT/ENGINEER:

S E A CONSULTANTS, INC. 2080 SILAS DEANE HIGHWAY., SUITE 302 ROCKY HILL, CT 06067 CONTACT: ALAN PELLETIER PHONE: 860/563-7775 x138 July 2000



LOCUS PLAN





S E A Consultants Inc. Science/Engineering/Architecture

CAMBRIDGE, MASSACHUSETTS CONCORD, NEW HAMPSHIRE

ROCKY HILL, CONNECTICUT ROCHESTER, NEW YORK

LIST OF DRAWINGS

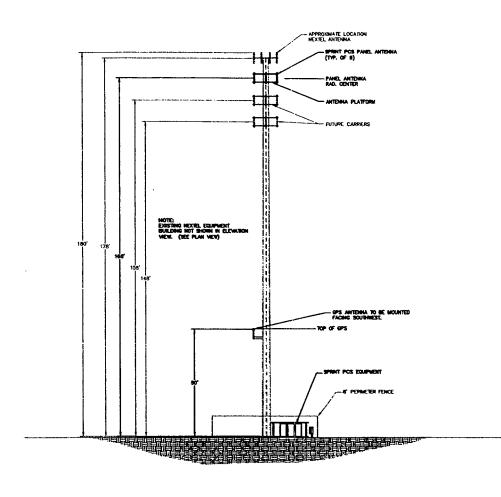
SHEET NO.

**DRAWING TITLE** 

**CSC257** 

**CONNECTICUT SITING COUNCIL** 





## NORTHEAST ELEVATION

SEA Consultants Inc.
Engineers/Architects
CAMBRIDGE, MASSACHUSETTS ROCKY HILL, CONNECTICUT

1888 MOODY STREET ENFIELD, CT 06082

♣ Sprint PCS

HARTFORD MTA SITE NO. CT33XC257

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SPRINT PCS PROJECT CLARYVILLE CONNECTICUT SITING COUNCIL

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