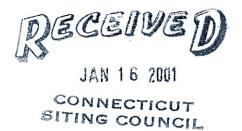
Request of Sprint PCS for approval of the shared use of the existing telecommunications facility located at 330 Middletown Road, Columbia, Connecticut.



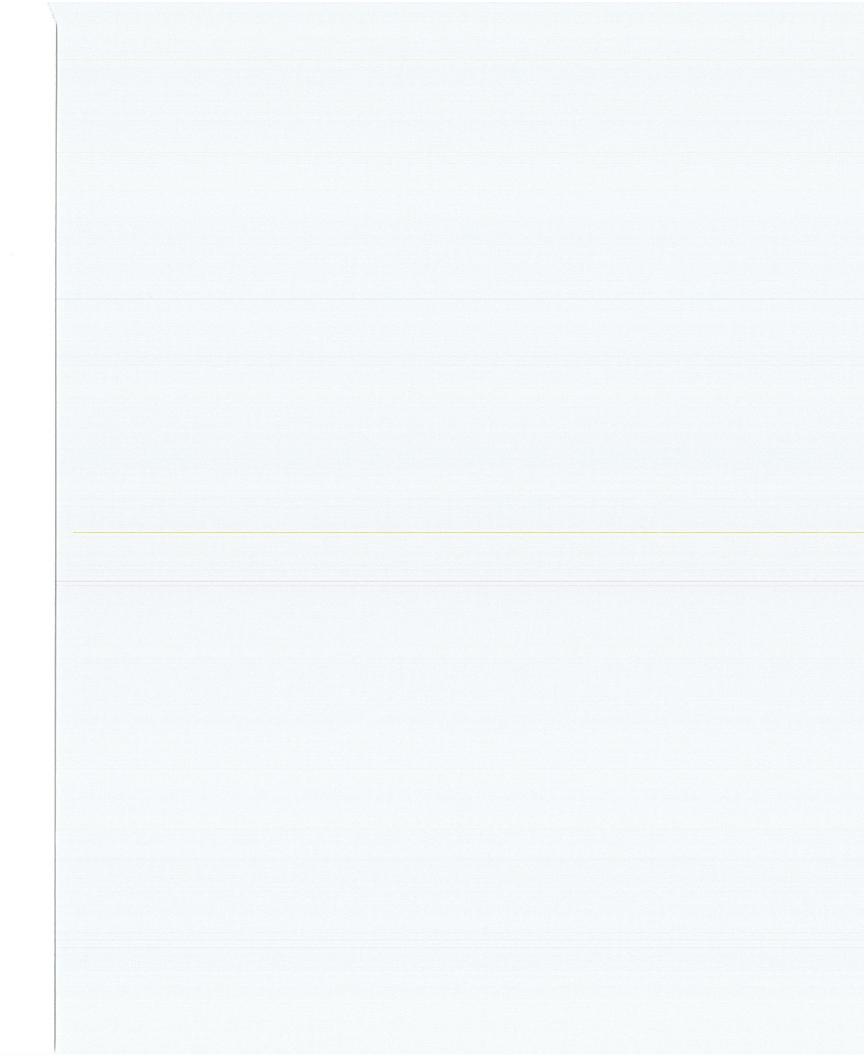
Dated: January 15, 2001 in Milford, CT

### Introduction

Sprint Spectrum, L.P. ("Sprint PCS") seeks to share a telecommunications tower located at 330 Middletown Road, Columbia Connecticut ("Facility") and owned by Nextel Communications of the Mid-Atlantic, 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 330 Middletown Road, Columbia, Connecticut (See location map attached as Exhibit A.) The site currently supports a 120 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 Columbia. This Facility is the most viable co-location 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 Columbia area.

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

Tower at an antenna centerline of 108 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 108 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:

### I. 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 December 29, 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 Columbia.
- 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 .145648mW/cm^2 and the MPE is 14.56 %, which results in a total percentage of maximum permissible exposure of 18.67 %, 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.

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 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.

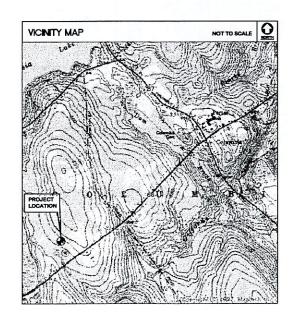




## WIRELESS COMMUNICATIONS FACILITY SITE No.: CT33XC014 COLUMBIA NEXTEL 330 MIDDLETOWN ROAD COLUMBIA, CONNECTICUT 06237

### PROJECT SUMMARY SITE NAME: NEXTEL COLLUMBIA SITE AUBER: CT33XC014 SITE ADDRESS: 330 MIDDLETOWN ROAD (ROUTE 66 SOUTH) COLLUMBIA, CONNECTICUT 06237 SITE OWNER: NEXTEL COMMUNICATIONS OF THE MID—ATLANTIC, INC DEA NEXTEL COMMUNICATIONS 100 CORPORATE PLUCE ROCKY HILL, CONNECTICUT 06067 (860) 883—6688 RICK NELLER PROPERTY OWNER: JOHN & ALEXANDER PEXASIGI 330 MIDDLETOWN ROAD (ROUTE 66 SOUTH) COLLUMBIA, CONNECTICUT 06237 (860) 228—0281 (JOHN PEXARSKI) TENANT: SPRINT SPECTRUM LP 9 BARNES INDUSTRIAL ROAD WALLINGFORD, CONNECTICUT 06492 (203) 294–5600 CENTER OF TOWER: LATITUDE: 41' 41' 2.3.3" LONGTIDE: 72' 19' 29.9" FOUNDATION ELEVATION: 635' AMSL

# GENERAL NOTES 1. PROPOSED ANTENNA AND MOUNTING PLATFORM ELEVATIONS WERE PROMDED BY SPRINT PCS. EXISTING PLATFORM HEIGHT INFORMATION PROVIDED BY THE SITE OWNER. 2. COMPOUND LAYOUT IS BASED ON INFORMATION OBTAINED IN FROM DRAWING C-3 DATED 03/28/00 BY TECTONIC CONSULTING ENGINEERS FOR NEXTEL. 3. UNDERGROUND UTILITY LOCATIONS ARE SCHEMATIC AND ARE PRESUMED BASED ON SITE LAYOUT AND DRAWING E-3 DATED 03/28/00 BY TECTONIC CONSULTING ENGINEERS FOR NEXTEL. 4. ALL MATERIL, SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF SPRINT SPECTRUM (SSLP) "STANDARD CONSTRUCTION SPECIFICATIONS" IN ASSE OF A CONFLICT RETWEEN SIZE YSTANDARD PRACTICES SHALL GOVERN. CASE OF A CONFLICT BETWEEN SIZE YSTANDARD PRACTICES SHALL GOVERN. 5. FOR ADDITIONAL NOTES AND DETAILS REFER TO THE ACCOMPANYING DRAWINGS. STEE DIRECTIONS - TAKE I-91 NORTH TO EXIT 25 (ROUTE 3) - FOLLOW ROUTE 3 TO END (EXIT 6) - FOLLOW ROUTE 66 EAST 7.5 MILES SITE IS ON THE LEFT



	NDEX	
SHT. NO.	DESCRIPTION	REV.
T-1	TITLE SHEET	0
SC-1	COMPOUND PLAN AND ELEVATION	0

LEGEND

SYMBOL

DESCRIPTION

SECTION OR DETAIL, NUMBER SHEET WHERE DETAIL/SECTION OCCURS

Natcomm, L.L.C.
63-2 North Brainford Road
Brainford, Connecticut 16405
Tel. (203) 488-8587
Consulting Engineer-Project Management
Configuration-Mechanical-Bectrical

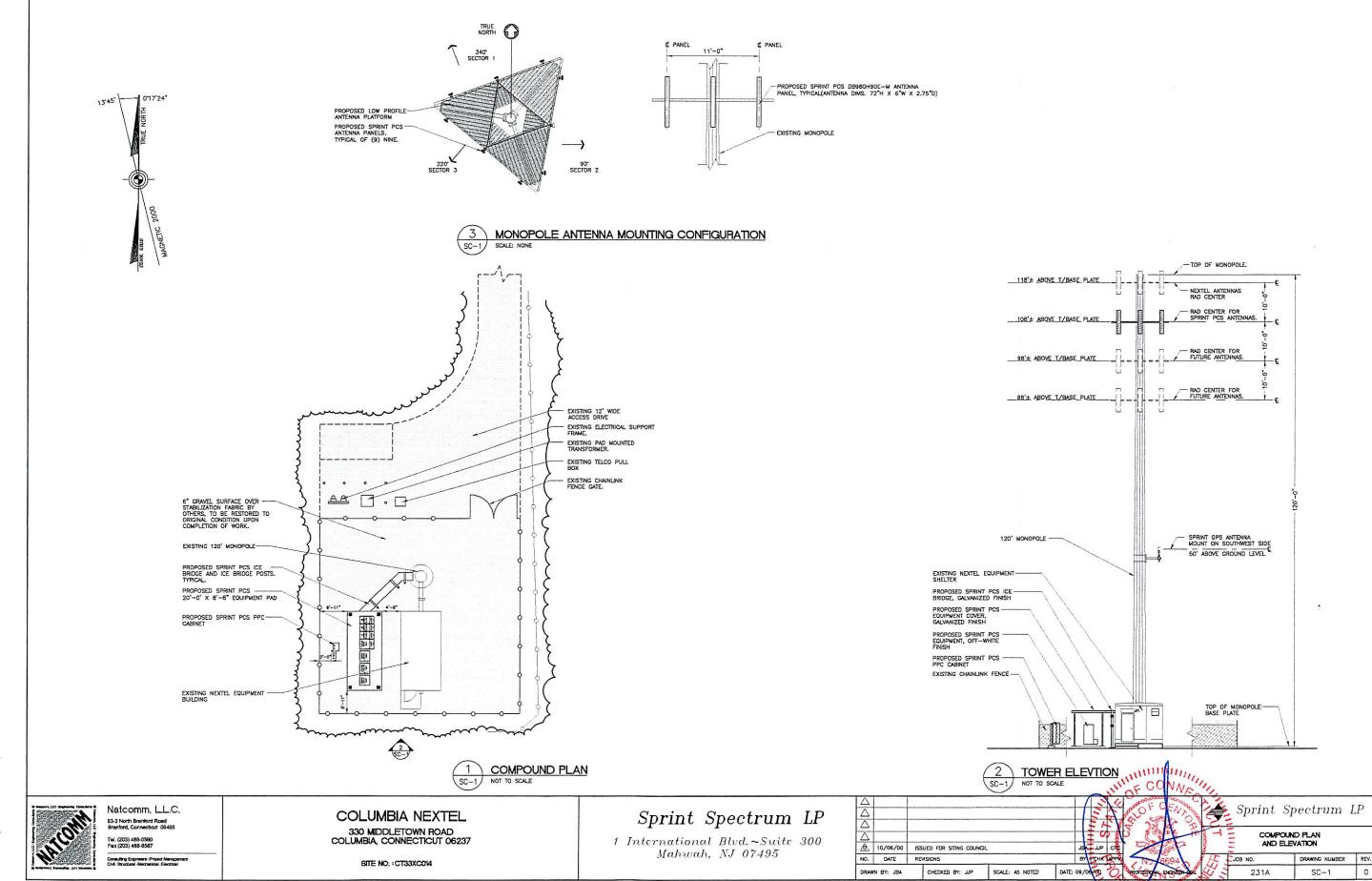
COLUMBIA NEXTEL
330 MIDDLETOWN ROAD
COLUMBIA, CONNECTICUT 06237

SITE NO. : CT33XC014

### Sprint Spectrum LP

1 International Blvd.~Suite 300 Mahwah, NJ 07495

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**Consulting Engineers** 

December 29, 2000

Mr. Steve Orkoulas Sprint PCS 1 International Boulevard, Suite 300 Mahwah, NJ 07495

Re.: Sprint ~ Site No. CT33XC014
330 Middletown Road, Columbia, Connecticut
Natcomm, LLC Project No. 231A

Dear Mr. Orkoulas:

We have completed a review of the structural assessment and loading conditions for the existing NEXTEL Communications tower at the above referenced site. The review was performed to determine the adequacy of the 118 ft. self supported monopole tower for carrying additional loads from the proposed Sprint antennas and mounting platform. The analysis is in compliance with local codes and regulations.

The calculations are based on the proposed equipment being installed at 108 ft. above the tower base plate elevation. The dead loads of the existing, proposed and future equipment, as well as live loads from wind forces and ice build-up on the tower and equipment were considered.

Review of the structural analysis report completed by Paul J. Ford and Company dated February 2, 2000 has shown that the tower is adequate to support the proposed equipment loading. The structural report specifies a total of 12 generic antennas (Model No. ALP 9212-N) at four elevations (118 ft., 108 ft., 98 ft. & 88 ft.). The proposed Sprint model to be installed is DB980H90E-M with a maximum of 3 antennas per sector. The number of antennas has therefore been reduced from the design value of 12 to a total of 9 at the 108 ft. elevation. Additionally, the existing NEXTEL antenna model at the 118 ft. elevation is DB844H105 (E)-SX.

A comparison of the specifications for the different antenna models has shown that the existing NEXTEL equipment and the proposed Sprint equipment will impose less wind load on the tower than the design values and will ultimately reduce the overturning moment at the base of the structure. This evaluation is based on information provided by the antenna manufacturers. The maximum antenna-mounting platform shall be a 14' low profile platform.

In conclusion, the existing monopole tower located at 330 Middletown Road, Columbia, CT is suitable for installation of the proposed Sprint equipment as described above. If there are any questions regarding this matter, please feel free to call.

Sincerely

Walter E. Pierson, P.E. Project Engineer

c.c. J. Pintek, Natcomm, LLC. C.F. Centore, Natcomm, LLC. CONNECTION OF THE PROPERTY OF

(203) 488-0580 • Fax (203) 488-8587 • www.natcommllc.com 63-2 North Branford Rd. Branford, CT 06405

CT33XC014 - Nextel Tower, Columbia, CT
Cumulative Worst Case Power Density Analysis of Sprint PCS and Nextel Antennas

Operator		Operating Distance Frequency to Target		Maximum Permissable Exposure*	Fraction of MPE
	(MHz)	(feet)	(mW/cm^2)	(mW/cm^2)	(%)
Nextel	851	118	0.023269	0.57	4.10%
Sprint PCS	1962.5	108	0.145648	1.00	14.56%

Total Percentage of Maximum Permissible Exposure

18.67%

CT33XC014 - Nextel Tower, Columbia, CT
Worst Case Power Density Analysis of Sprint PCS Antennas @ Base of Tower. Assumes Max ERP & No Antenna Pattern Adjustment

Operating Frequency	Number of	Effectives Radiated P Dower (ERP)	Total ERP	Antenna Heran	Distance Projectace of Convertices)	(edcuated Power Density	Maximum Maximum Permissable	WATE
(VIII)							L posure posu	
1962.5	11	429	4719	108	0	0.145648	1	14.5648%
1962.5	11	429	4719	108	50	0.119941	1	11.9941%
1962.5	11	429	4719	108	100	0.078418	1	7.8418%
1962.5	11	429	4719	108	150	0.049726	1	4.9726%
1962.5	11	429	4719	108	200	0.032882	1	3.2882%
1962.5	11	429	4719	108	250	0.022907	1	2.2907%
1962.5	11	429	4719	108	300	0.016710	1	1.6710%
1962.5	11	429	4719	108	350	0.012662	1	1.2662%
1962.5	11	429	4719	108	400	0.009896	1	0.9896%
1962.5	11	429	4719	108	450	0.007932	1	0.7932%
1962.5	11	429	4719	108	500	0.006492	1	0.6492%

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