

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

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

June 9, 1997

Larry Woods
Site Development Manager
Sprint PCS
9 Barnes Industrial Road
Wallingford, CT 06492

Re:

Sprint PCS notice of intent to modify an existing telecommunications facility located on Olcott

Street in Manchester, Connecticut.

Dear Mr. Woods:

At a public meeting held on June 3, 1997, the Connecticut Siting Council (Council) acknowledged your notice to modify an existing telecommunications facility in Manchester, Connecticut, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modification is to be implemented as specified in your notice dated May 6, 1997, and addendum dated June 3, 1997. The modification is 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 frequency 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 change has been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequency now used and proposed for use on this tower. 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 Science and Technology, Bulletin No. 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.

All work must be in conformance with the Connecticut Guidelines for Soil Erosion and Sediment Control, as amended, including the placement of silt fence on each side of the trench, hand-digging of the trench, removal of any stockpiled soil within one day, stabilization of exposed ground areas within one day, and completion of trench backfilling within 21 days.

Thank you for your attention and cooperation.

Very truly yours,

Mortimer A. Gelston

Chairman

c: Honorable Stephen T. Cassano, Mayor of Manchester l:\siting\em\sprint\mnchstr\dc060397.doc



Town of Manchester

41 Center Stroot . P.O. Dox 191

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STEPHEN T. GASNANG, MAYOR Amaria di Negri, Deputiy mayor Agan C. Humrmay-Mimahan, Seuretary

DIRECTORS
TIMBUTHY H. DRUKER
ADELINO M. CORLING
ED HACHADOURIAN
JOSH M. HOWROYO
JAMES E. MORANCEY
CLIFTON E. THOMPSON

June 4, 1997

Mr. Joel M. Rinebold Executive Director Connecticut Siting Council 10 Franklin Square New Britain, CT 06051

RH;

Proposed Sprint PCS Installation -Olcott Street, Manchester, CT Your Letter Dated May 28, 1997

Dear Mr. Rinebold:

Pursuant to your letter dated May 28, 1997, I am submitting comments provided by the Town's Director of Planning, Mr. Mark Pellegrini, regarding the proposed modifications to the existing telecommunications facility located on Olcott Street in Manchester.

Vory unily youls,

Richard J. Sartor General Manager

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Enclosure

TOWN OF MANCHESTER PLANNING DEPARTMENT

TO:

Richard Sartor, General Manager

FROM: Mark Pellegrini, Director of Planning and Economic Development

and Economic Development

DATE:

June 3, 1997

RE:

Proposed Sprint PCS Installation

Onto NU Towers at Olcott Street

We have reviewed the proposal that Sprint has submitted to the Connecticut Siting Council to alter an existing NU utility tower and install PCS equipment, including underground wire installation, at NU's site on Olcott Street. The use is permitted in the Industrial zone and would meet all the requirements of the zoning regulations based on our review of the plans.

There is a wetlands streambelt area which runs through the NU property in this location, and it appears that the excavation for the underground utilities and installation of a fence and concrete pad may occur either within the wetlands themselves or within the 50 foot nonwetland regulated area. This would require a wetlands permit from the town Planning and Zoning Commission/ Inland Wetlands Agency. Also, if the disturbance associated with the installation involves more than one-half acre of earth then an erosion and sedimentation control plan will also need to be approved by the Planning and Zoning Commission.

MP/s F:NISERS\SIIARONOP\MARK\MEMOS\SARTOR I

GENERAL MANAGER'S OFF.

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

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

May 22, 1997

Stephen M. Howard Sprint PCS 9 Barnes Industrial Road Wallingford, CT 06492

RE: Sprint PCS notice of intent to modify an existing telecommunications facility located on Olcott Street in Manchester, Connecticut.

Dear Mr. Howard:

Please be advised that Connecticut Siting Council (Council) staff will be conducting a field inspection of the above referenced facility site on Friday, May 23, 1997, at 10:00 a.m.

Sprint PCS personnel will be necessary for this field review.

If there are any questions regarding this matter, please contact me at the Council's office.

Very truly yours,

Executive Secretary

SJM/RKE/ss

c: Andrew Gagner, CL&P





Sprint PCS[™]

Engineering & Operations 9 Barnes Industrial Road Wallingford, Connecticut 06492 Telephone: 203 294 5600 Fax: 203 294 5647

May 6, 1997

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

Re: Notice of Intent to make exempt changes to an existing tower facility - Northeast

Utilities Service Company - Manchester Site

Dear Mr. Gelston:

Enclosed please find twenty (20) copies of a Notice of Intent to make exempt changes to an existing tower facility owned and operated by Northeast Utilities Service Company in Manchester, CT.

Please do not hesitate to call me with any questions or comments.

Sincerely,

Larry Woods

Site Development Manager

cc: Linda Carroll, Northeast Utilities

Mayor Stephen Cassano, Town of Manchester (w/o enclosure)

Joel Rinebold, Connecticut Siting Council

RECEIVED

MAY 08 1997

CONNECTICUT SITING COUNCIL

Sprint PCS

9 Barnes Industrial Road Wallingford, Connecticut 06492 Telephone: 203 294 5600

Fax: 203 294 5647



MAY 08 1997

CONNECTICUT SITING COUNCIL

May 6, 1997

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

RE: Notice of intent to make exempt changes to an existing tower facility Northeast Utilities Service Company - Manchester Site

Dear Chairman Gelston:

Enclosed is a notice of intent to modify and make exempt changes to the structure and associated equipment for facilities owned and operated by Northeast Utilities Service Company on Olcott Street in Manchester, Connecticut.

The proposed modifications can be generally described as the addition of a "cellular type" PCS antenna array by Sprint Spectrum, L.P. (Sprint PCS) to the existing structure and related support equipment within the existing yard at the base of the structure.

Sprint PCS is the "B block" "Wideband PCS" license holder for the 2 GHz PCS frequencies for the greater New York City coverage area which includes the entire state of Connecticut. The Sprint PCS wireless service is a voice-data system which will be capable of providing to the consumer state of the art communications service with privacy to users, and the convenience of a pager, answering machine and modem in one phone.

Sprint PCS proposes to install nine (9) Allgon 7184.05 structure mounted antennas, each measuring approximately 51.2" x 5.5" x 2.6", mounted in three sectorized arrays of three (3) antennas each, and a GPS antenna Andrew Kit # 407517689.

The attached pages detail the required information for this location. As shown in the attachments, the proposed addition meets all the necessary criteria for exempt changes established in the Regulations of Connecticut State Agencies §16-50j-72 (b) (2), for the following listed reasons. The proposed antennas will not increase the power density above the ANSI standards at the site boundary. The proposed antennas will be mounted below the top of the existing structure. The height of the structure will not be increased. The boundaries of the site will not be extended. Finally, the proposed changes will not require the addition of guy

wires to the structure, therefore, noise levels at the site boundary will not be increased by six (6) decibels or more.

We have attached a copy of the U.S.Geological Survey map indicating the site location ("Exhibit A"), a site plan and an elevation sketch of the structure showing the proposed antenna locations ("Exhibit B"), and a structural evaluation ("Exhibit C").

Please record me as the contact for the Sprint PCS in this matter and in all correspondence from the Council. Counsel for Sprint PCS is Elias A. Alexiandes, of Hurwitz & Sagarin P.C., 147 North Broad Street, P.O. Box 112, Milford CT 06460, (203) 877-8000; they request that they receive copies of all notices and correspondence. Technical questions to Sprint PCS may be directed to me, at Sprint PCS, 9 Barnes Industrial Road, Wallingford, CT 06492, (203) 294-5634.

Thank you in advance for your cooperation.

Sincerely,

Larry Woods

Site Development Manager

cc: Linda Carroll, Northeast Utilities
Elias A. Alexiandes, Hurwitz & Sagarin P.C.
Stephen Cassano, Mayor
Joel Rinebold, Conn. Siting Council

Notice of Intent to Make Exempt Changes RE: Northeast Utilities Service Company Olcott Street, Manchester Site

Pursuant to Section 16-50j-72 (b) (2), as amended, of the Regulations of Connecticut State Agencies, the Northeast Utilities Service Company hereby notifies the Connecticut Siting Council that it intends to make changes to an existing communications facility by adding PCS antennas specified below to an existing structure. These antennas will be owned, operated and maintained by Sprint Spectrum, L.P. (Sprint PCS). Associated equipment will be located at the base of the structure within enclosed cabinetry. The site is located on Olcott Street in Manchester, Connecticut.

Background

The proposed changes are at the site of a self-supporting 200' lattice type structure owned and operated by Northeast Utilities Service Company. The structure is currently used by Northeast Utilities Service Company to provide service to the Manchester area.

Discussion

Sprint PCS proposes to install nine (9) Allgon 7184.05 structure mounted antennas, each measuring approximately 51.2" x 5.5" x 2.6". Antennas will be mounted in three sectorized arrays of three (3) antennas each, separated by 120°. Antenna center lines will be mounted at 120' above ground level. In addition a GPS antenna, Andrew Kit # 407517689 will be installed at a height of 60' above ground level.

The public need for "Wideband PCS" facilities has been determined by the Federal Communications Commission (FCC) which has determined that this service shall be provided by up to six competing companies with overlapping coverage areas. Sprint PCS proposes to mount antennae at 120' AGL, on the existing Northeast Utilities Service Company structure located on Olcott Street in Manchester, Connecticut. This location will be used to provide coverage to the surrounding areas of Manchester. Coverage will include three (3) miles of I-384, three (3) miles of I-84, one (1) mile of Rt. 44 (Middle Turnpike), and two (2) miles of Alt. 44 (Center Street). The proposed antenna installation would become a part of Sprint PCS's wireless voice and data network which is currently nonexistent.

The proposed changes meet all the necessary criteria for exceptions under Section 16-50j-72(b)(2) of the regulations of Connection State Agencies and therefore do not constitute a "modification":

- 1. The changes do not increase the structure height. All new antennas will be mounted below the top of the existing structure. See elevation attached hereto as Exhibit B.
- 2. The changes do not extend the boundaries of the site. All additional equipment

will be located within existing boundaries of the structure site as reflected in the site plan attached hereto as Exhibit B.

- 3. As seen in Exhibit C, the structure is structurally sufficient to support the existing and proposed antennas. Therefore, guy wires will not be added to the structure, and noise levels at the site boundary will not increase by six decibels or more.
- 4. The operation of the additional antennas will not increase the total radio frequency electromagnetic power density at the site to a level at or above applicable standards, as demonstrated on the power density chart below:

Power Density Analysis

Tower Density Analysis												
Operating Frequency	Number of Trans.	ERP Per Trans.	Total Effective Radiated Power	Distance to Target	Calculated Power Density	Maximum Permissible Exposure*	Fraction of MPE					
(MHZ)		(watts)	(watts)	(feet)	(mW/cm^2)	(mW/cm^2)	(%)					
6825	1	575	575	160	0.0081	4.55	0.18%					
6765	1	437	437	195	0.0041	4.51	0.09%					
6865	1	3162	3162	190	0.0315	4.58	0.69%					
4820	1	120	120	207	0.0010	3.21	0.03%					
4790	1	120	120	207	0.0010	3.19	0.03%					

Total Percentage of Maximum Permissible Exposure Before Sprint

1.02%

Sprint's Contribution:

		1957.5	11	122	1342	120	0.0335	1.305	2.57%
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Total Percentage of Maximum Permissible Exposure After Sprint

3.59%

These levels have been calculated at the structure base, which represents the maximum exposure for the operation of this facility (i.e. calculated at the closest publicly accessible point within the broadcast field of the facility). The calculations have been performed in accordance with the methodology prescribed by the FCC Office of Science and Technology Bulletin No. 65 ("OST Bulletin 65").

^{*} IEEE C95.1 - 1991 (Revision of ANSI C95.1-1982)

Conclusion

The proposed additions do not constitute a "modification" of an existing facility as defined in the Connecticut General Statutes §16-50i (d). The height of the existing structure will not be increased, nor will the boundaries of the site be extended. Additionally, noise levels at the site boundary will not be increased by six (6) decibels or more, and the total radio frequency electromagnetic radiation will not be increased to above the standard set forth in §22 (a)-162 of the Connecticut General Statutes. This addition will not have a substantially adverse environmental effect.

For these reasons, Sprint PCS requests that the Council acknowledge that this Notice of Modification meets the Council's exemption criteria.

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EXHIBIT A

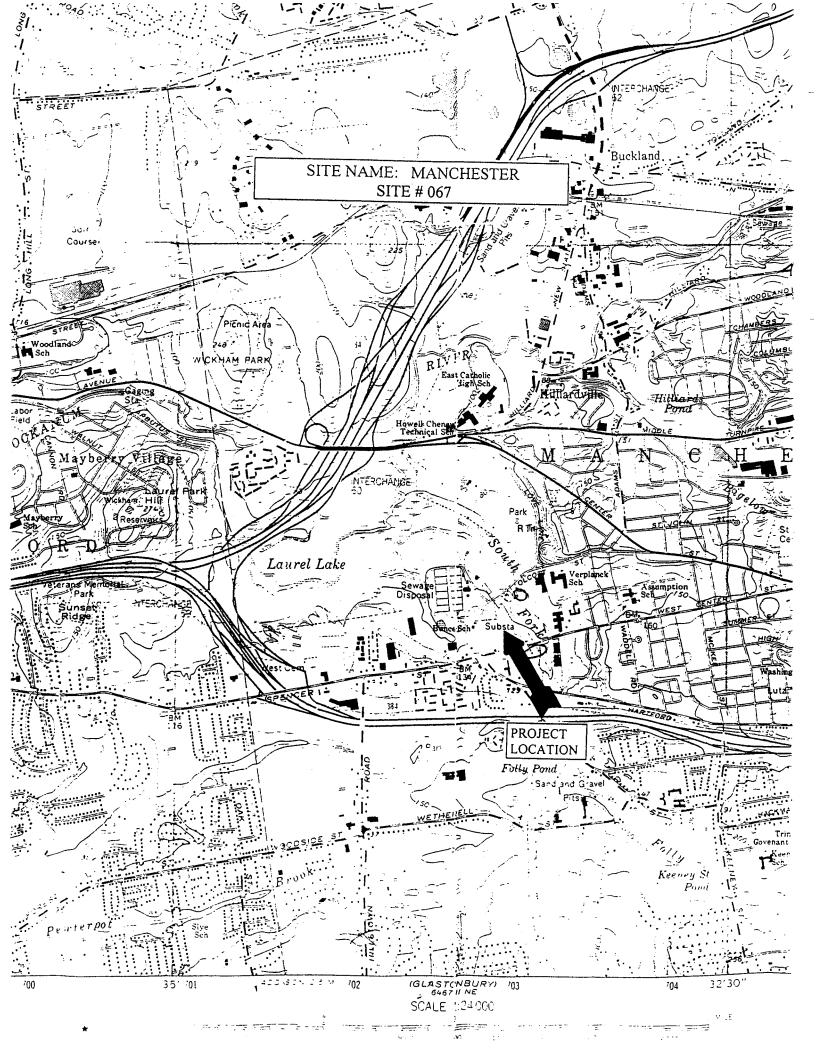


EXHIBIT B

EXHIBIT C



CLOUGH, HARBOUR & ASSOCIATES LLP ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS

III WINNERS CIRCLE
P.O. BOX 5269, ALBANY, NEW YORK 12205-0268
TEL: 518-453-4500 • FAX: 518-458-1795
January 6, 1997

THOMAS L. O'BRIEN, P.E. Permer

Mr. Andy White Sprint PCS 9 Barnes Industrial Road Wallingford, CT 06492

Re: Sprint PCS: Structural Analysis of the K-Mart Plaza/Manchester Tower

Located at 250 Olcott Street in Manchester, Connecticut

Sprint Site No. CT03XC067A CHA Project No.: 5950.41,67

Dear Andy:

MJK/mjk Enclosure

As requested and agreed to, Clough, Harbour & Associates LLP has performed a structural analysis of the superstructure for the above referenced tower. Our analysis is based on antenna information provided by Sprint PCS and our field inspection. With this information, we were able to conclude that the tower is structurally capable of supporting the existing and proposed loads.

The data presented above was modified for the addition of the Sprint defined PCS antenna array at an elevation of 120 feet above grade. Our analysis assumes that at this elevation a new nine (9) panel array with nine (9) 1-5/8 inch diameter coaxial cables will be added. Our analysis also includes data for all existing antennas as noted during our field inspection. The existing antenna projected area, elevation, coaxial cable size, and orientation have been summarized in our analysis.

With this information and the current code, ANSI/TIA/EIA-222-F, Structural Standards for Steel Antenna Towers and Antenna Supporting Structures, an analysis was performed to determine the structural integrity of the tower. Based on the data provided, section properties, member strengths, projected areas, and applicable loads were calculated. Knowing the projected area of the tower and all of its appurtenances, wind loads were calculated with and without the code defined ice load. These wind and ice loads were then reduced to member forces in the tower components. The member forces were then compared to the maximum allowable stress for each member type.

These calculations indicate that the tower, loaded as indicated above and modified as stated above, is structurally sound and capable of supporting the applied loads from the addition of a nine (9) panel array and the related mounting hardware and coaxial cable.

As requested, we have included a copy of the structural analysis calculations referenced above for your review and use. If you have any questions or if I can be of further assistance, please call me.

Very truly yours,

CLOUGH, HARBOUR & ASSOCIATES LLP ENGINEERS, SURVEYORS, PLANNERS

& LAYDSCAPE ARCHITECTS

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Thomas L. O'Brien, P.E. Partner

Offices Throughout the Eastern United States

"Satisfying Our Clients by Meeting Their Needs Through Dedicated People Committed to Total Quality."



Sprint PCS

Engineering & Operations 9 Barnes Industrial Road Wallingford, Connecticut 06492

Telephone: 203 294 5600 Fax: 203 294 5647

May 6, 1997

Mayor Stephen Cassano Town of Manchester 41 Center Street Manchester, CT 06040

Re: Notice of Intent to make exempt changes to an existing tower facility - Northeast Utilities Service Company - Manchester Site

Dear Mayor Cassano:

Enclosed please find one (1) copy of a Notice of Intent to make exempt changes to an existing tower facility owned and operated by Northeast Utilities Service Company in Manchester, CT.

Please do not hesitate to call me with any questions or comments.

Sincerely,

Larry Woods

Site Development Manager

cc: Linda Carroll, Northeast Utilities (w/o enclosure)

Mortimer Gelston, Connecticut Siting Council (w/o enclosure)

Joel Rinebold, Connecticut Siting Council (w/o enclosure)

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CONNECTICUT SITING COUNCIL