

SPRINT NEXTEL CORPORATION'S

APPLICATION FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED FOR A TELECOMMUNICATIONS FACILITY

AT

186 BLACK ROCK TURNPIKE

IN

REDDING, CONNECTICUT

April 3, 2007



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 Hand Delivery

April 3, 2007

Daniel F. Caruso, Chairman
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

RE: Sprint Nextel Corporation's Application for a Certificate / Redding

Dear Chairman Caruso:

Enclosed are an original and twenty-five hard copies and one electronic copy of Sprint Nextel Corporation's application for a certificate of environmental compatibility and public need for the construction of a telecommunications facility in Redding, Connecticut (the "Application").

Enclosed for bulk filing are four full-size copies of the site plan and four copies of the Town of Redding's Zoning Regulations. I have also enclosed a check in the amount of \$1,000.00, representing the filing fee for this Application.

A copy of the Application has been served on the parties required by Conn. Gen. Stat. § 16-501(b). For a list of those parties, see Tab 5 of the Application. If any of those parties would like the site staked out prior to the site walk on the date of the public hearing, I will be pleased to make the appropriate arrangements.

Very truly yours,

BROWN RUDNICK BERLACK ISRAELS LLP

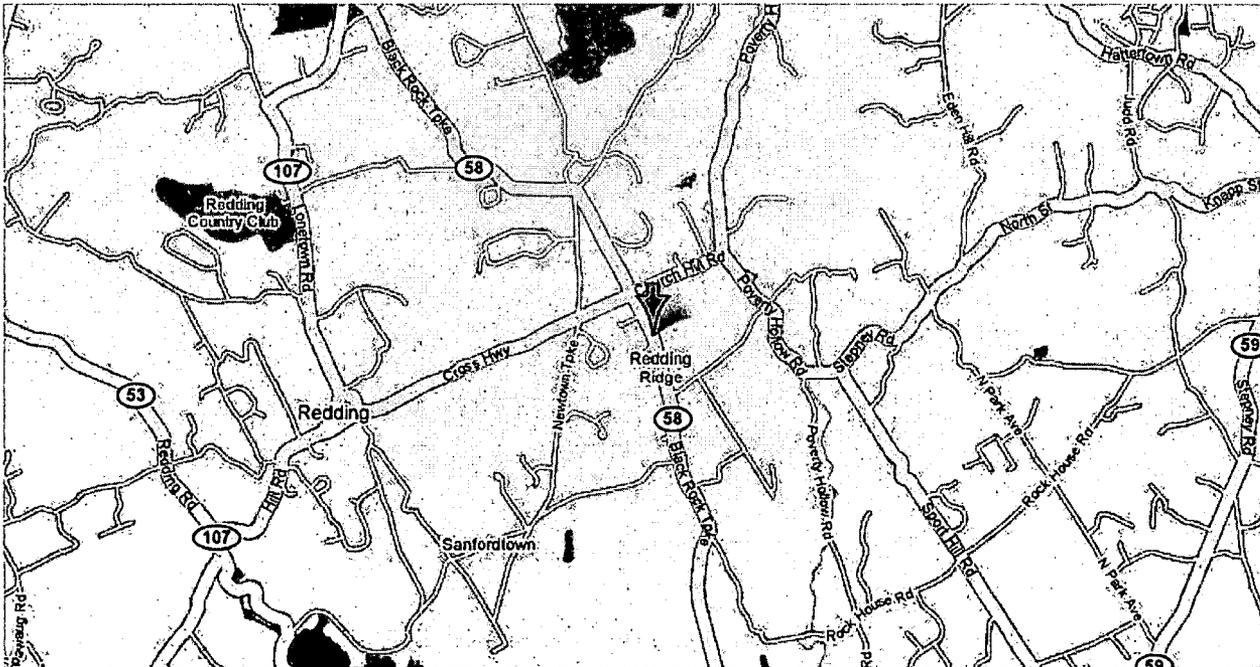
By: 
Thomas J. Regan

40240242 v1 - MERCIECM - 080563/3232

| | |
|---|----|
| OVERVIEW | 2 |
| INTRODUCTION | 3 |
| SECTION 1. PRELIMINARY INFORMATION | 3 |
| A. STATUTORY AUTHORITY | 3 |
| B. LEGAL NAME OF THE APPLICANT | 3 |
| C. CORRESPONDENCE AND SERVICE | 4 |
| D. NOTICE | 4 |
| E. APPLICATION FEE | 4 |
| F. PROOF OF SERVICE | 4 |
| SECTION 2. PURPOSE & GOALS OF THE FACILITY | 5 |
| A. NEED | 5 |
| B. STATEMENT OF BENEFITS | 6 |
| SECTION 3. SITE SEARCH | 7 |
| A. TECHNICAL ALTERNATIVES | 7 |
| B. CANDIDATE SEARCH | 8 |
| C. CONSULTATION WITH THE TOWN OF REDDING | 9 |
| SECTION 4. THE SITE | 10 |
| A. LOCATION & LAND USE | 10 |
| B. ACCESS ROAD | 11 |
| C. MONOPOLE | 12 |
| D. COMPOUND | 12 |
| E. POWER SUPPLY | 13 |
| SECTION 5. COVERAGE | 13 |
| A. HEIGHT JUSTIFICATION | 13 |
| B. FORECAST OF MAXIMUM CAPABILITY | 14 |
| SECTION 6. ENVIRONMENTAL IMPACT | 16 |
| A. MITIGATION MEASURES | 16 |
| (1) Water Resources | 16 |
| (2) Wetlands | 17 |
| (3) Air Quality | 17 |
| (4) Noise | 18 |
| (5) Traffic Pattern | 18 |
| (6) Visibility and Aesthetics | 18 |
| (7) Vegetation & Soil | 19 |
| (8) Wildlife | 20 |
| B. VISUAL RESOURCE EVALUATION | 20 |
| C. BALLOON FLOAT & SIGN DISPLAY | 22 |
| D. SAFETY ANALYSIS | 22 |
| E. NATIONAL ENVIRONMENTAL POLICY ACT REVIEW | 23 |
| (1) DEP Review | 23 |
| (2) Historic Review | 24 |
| CONCLUSION | 26 |
| ATTACHMENTS | 27 |

OVERVIEW

| | |
|---|---|
| Location | 186 Black Rock Turnpike, Redding |
| Property Owner | Redding Fire District No. 1 |
| CDMA or iDEN Site | Adding CDMA Antennas at 120' Relocating Existing 75' iDEN Antennas to 120' |
| CDMA Coverage Objective | Route 58 |
| Monopole Height | 120' / replacing an existing 75' lattice tower |
| CDMA & iDEN Centerline | 120' |
| Compound Size | 35' x 65' |
| Monopole Designed to Accommodate How Many Carriers | 4 |



INTRODUCTION

Sprint Nextel Corporation (“Sprint”) hereby applies to the Connecticut Siting Council (“Council”) for the issuance of a certificate of environmental compatibility and public need for the construction, maintenance and operation of a telecommunication facility (“Facility”) at 186 Black Rock Turnpike in Redding, Connecticut (the “Site”) (collectively, the “Application”). A U.S.G.S. topographic map and aerial photograph identifying the location of the Site are included under Tab 1. Sprint’s proposed 120-foot monopole will replace an existing 75-foot lattice tower.

SECTION 1. PRELIMINARY INFORMATION

A. STATUTORY AUTHORITY

The Application and accompanying attachments are submitted pursuant to Conn. Gen. Stat. § 16-50g et seq., and Conn. Agencies Regs. § 16-50j-1 et seq. The Application follows the format prescribed in the Council’s “Application Guide for Community Antenna Television and Telecommunications Facilities,” dated June 23, 2004 (the “Application Guide”). A copy of the Application Guide, with page number references to the Application, is included under Tab 2.

B. LEGAL NAME OF THE APPLICANT

Sprint Nextel Corporation is a Delaware corporation. Sprint’s principal business offices are located at One International Boulevard, Suite 800, Mahwah, New Jersey 07495. Telephone No. (201) 684-4000.

Sprint is licensed by the Federal Communications Commission (“FCC”) in many major United States trading areas, including Connecticut.

C. CORRESPONDENCE AND SERVICE

All communications and correspondence with regard to this Application should be addressed to:

Thomas J. Regan
Brown Rudnick Berlack Israels LLP
CityPlace I, 38th Floor
185 Asylum Street
Hartford, CT 06103-3402
Phone: 860-509-6522
Fax: 860-509-6501
Email: tregan@brownrudnick.com

D. NOTICE

Pursuant to Conn. Gen. Stat. § 16-50(b), public notice of Sprint's intention to file this Application was published in the Danbury News Times on February 14 & 15, 2007 and in the Redding Pilot February 15, 2007. Affidavits of Publication from both newspapers are included under Tab 3.

On February 9, 2007 all abutting landowners were given notice of the filing of the Application via certified mail. The list of abutters, the letters to the abutters, and the return receipts are included under Tab 4. All return receipts were received.

E. APPLICATION FEE

Pursuant to Conn. Agencies Regs. §16-50v-1a, the filing fee for this Application (\$1,000.00) was paid to the Council at the time of filing.

F. PROOF OF SERVICE

Included under Tab 5 is a list of the individuals and agencies that received a complete copy of this Application via first class mail, pursuant to Conn. Gen. Stat. § 16-50(b).

SECTION 2. PURPOSE & GOALS OF THE FACILITY

A. NEED

The United States Congress, in the Telecommunications Act of 1996, determined that there exists a national need for wireless services such as those provided by Sprint. In making such a determination, the federal government preempted the states' need to make that determination. The Telecommunications Act of 1996 also sought to foster competition in the marketplace and prohibit states from discriminating against functionally equivalent wireless carriers. Therefore, although a particular area may already have wireless coverage provided by a different carrier, Sprint has the right to also offer its services in that same area.

Today, many of Sprint's customers rely on their wireless service to be functional in their homes as well as on the road. As a result, Sprint aims to not only cover the all major roads but the surrounding areas as well, many of which are residential. In this case, Sprint's Radio-Frequency Engineering Department has identified a significant gap in CDMA wireless service along Route 58 and in the surrounding area of Redding. The location and extent of the gap in Sprint's coverage was determined by analyzing the drive test data from surrounding facilities and analyzing call statistics and propagation models. Collectively, this data demonstrates that Sprint's customers are experiencing difficulty originating new calls and they are also experiencing a high number of dropped calls (greater than 2%) in the area. Overall, these factors result in substandard service along Route 58 and the surrounding area of Redding.

B. STATEMENT OF BENEFITS

The addition of a wireless telecommunications facility in this area will have both economic and public welfare benefits. While this Site will benefit wireless subscribers, it will also improve public safety in the area.

Wireless services are beneficial to residents, business people and tourists traveling through Redding. Typically, business people such as deliverymen, repairmen, veterinarians, salesmen, real estate agents and construction personnel find that having cellular service is essential in allowing them to remain accessible while traveling. Even people who do not have cellular service benefit from the ability to easily contact traveling cellular service subscribers.

Not only will Sprint's customers benefit from this Facility, customers of other carriers who do not currently have coverage in the area will also benefit. Sprint is actively marketing space on this Facility to competing wireless providers in order to minimize the proliferation of towers in Redding. To date, no other carriers have expressed an interest in collocating.

Sprint's improved wireless service will also offer a great benefit to the public in that safety and emergency situations can be quickly reported and, in turn, responded to by state or municipal officials. To that end, Sprint is allowing the Town of Redding (the "Town") to use the Facility without charge for its emergency communication needs.

This Facility will also be in compliance with the requirements set forth in the Wireless Communications and Safety Act ("Act") passed by Congress in 1999 (otherwise known as the "Enhance 911" or "E911" requirements). Enhanced 911 service gives emergency dispatchers the ability to answer wireless calls promptly, obtain the caller's mobile number, and pinpoint the calling location. Sprint is currently in the final phase of implementing the E911 requirements.

SECTION 3. SITE SEARCH

A. TECHNICAL ALTERNATIVES

Sprint is a telecommunications company operating two technologies (CDMA and iDEN) at significantly different frequency bands. Sprint's CDMA network operates at 1900 megahertz ("MHz") and Sprint's iDEN network operates in the 800/900 MHz band. The CDMA network is driving the height of this monopole. The iDEN network antennas are currently at 75 feet and will be relocated to 120 feet with the CDMA antennas.

CDMA (code division multiple access) technology is an all-digital system that allows for increased capacity over analog cellular, allowing the system to handle more calls. However, this higher frequency signal limits the geographic area in which a tower is able to transmit to and from because the higher frequency signal degrades quickly in hilly areas and in areas of dense foliage.

Consequently, in order to provide adequate service, significant height must be used for the tower and the mobile to communicate with each other. In some cases, communication from the tower to the mobile can be improved by using higher power at the tower. However, this approach will not improve communication from the mobile to the tower.

The CDMA network does utilize technologies such as repeaters and microcells. A repeater is a low power system which receives (borrows) a signal from an existing site and then amplifies that signal for rebroadcasting in the target area. A microcell is a low power system resembling a smaller version of a cell site. These technologies are useful for filling small gaps in coverage or providing service in buildings, but are severely limited by the amount of coverage they can provide and by their capacity. The current gap in CDMA service in the Redding area is significant; for that reason, technologies such as repeaters and microcells are not viable options

to cover the portions of Route 58 and the surrounding area of Redding that Sprint is looking to cover with this full CDMA site.

B. CANDIDATE SEARCH

After analyzing its significant gap in CDMA coverage in Redding, Sprint used computer modeling to identify an area where a telecommunication facility must be located to provide the requisite coverage. Once the area was defined, Sprint’s Real Estate Department searched for existing buildings, structures and towers in that area suitable for Sprint’s purposes.

In this low density rural area, Sprint did not have many existing structures to investigate. The four that Sprint did investigate are as follows. They are shown on a U.S.G.S. topographic map under Tab 6.

| Candidate | Location | Evaluation |
|--|--|--|
| Redding Fire Department | 186 Black Rock Tpke | Current Candidate |
| First Church of Christ, Congregational | 25 Cross Highway | Does not provide adequate coverage along Route 58. |
| Flagpole | Black Rock Tpke 41-18-50.5 73-21-4.5 | Does not provide adequate coverage south of the site along Route 58. |
| St. Patrick’s Roman Catholic Church | 179 Black Rock Tpke | Provides very little additional coverage to Rt. 58. |

Although the existing lattice tower did not work at its current height of 75 feet, Sprint anticipates that a taller monopole built in its place will have less of an impact than a monopole built on raw land at a different location. For that reason, Sprint did not investigate any raw land parcels in the area.

C. CONSULTATION WITH THE TOWN OF REDDING

On December 13, 2006, Sprint provided notice of the filing of the Application to Natalie T. Ketcham, First Selectman of the Town of Redding (the “60-day notice”). Sprint enclosed a package of materials with that letter including: a radio-frequency engineering information packet, a site plan, a Visual Resource Evaluation Report prepared by Vanasse Hangen Brustlin, Inc. (“VHB”), a letter from the Connecticut Commission on Culture & Tourism and a letter from the Connecticut Department of Environmental Protection. The package is included under Tab 7. Because the site plan and Visual Resource Evaluation Report are substantially similar to those provided later in this Application, they have not been included under Tab 7.

On November 8, 2006, prior to Sprint submitting its 60-day notice, VHB sent the Town, the Redding Historical Society and Mr. Charlie Couch, Town Historian, a tower construction notification letter pursuant to the National Historic Preservation Act. In its letter VHB asked for comments regarding the Facility’s effect upon historic properties in the area. VHB did not receive any comments from the Redding Historical Society or Mr. Couch. On November 25, 2006, Municipal Historian/Archaeologist Kathleen von Jena requested that VHB perform an archaeological reconnaissance survey and a viewshed analysis. In response, on December 11, 2006, VHB provided Ms. von Jena with its original submission to Mr. David Poirier at the State Historic Preservation Office – a Phase 1a Cultural Resources Assessment Survey and 12 Photographic Simulations from historic resources in Town – as well as Mr. Poirier’s “no effect” response letter. The above mentioned correspondence has been included under Tab 8.

At the end of December, after having received the 60-day notice from Brown Rudnick, First Selectman Ketcham requested VHB conduct a second Visual Resource Evaluation during “leaf-off” conditions. On February 20, 2007 Attorney Regan responded and suggested that a

second visual evaluation was not necessary for the following reasons. As part of the 60-day notice the Town received VHB's Visual Resource Evaluation Report (the "Report") prepared by VHB in late October 2006. Because the report was prepared at the end of the fall season and a few severe storms occurred at the end of September and the beginning of October, many leaves had already fallen when VHB's research was conducted. In addition, the Report and its Viewshed Map already address "leaf-off" conditions. Also, as part of VHB's December 11, 2006 correspondence, the Town had already received a copy of the submission to Mr. Poirier which contained twelve additional photographic simulations from properties identified on the Town's historic resources inventory list within a ½ mile of the Site. On March 28, 2007, VHB received an email from First Selectman Ketcham indicating that because the State Historic Preservation Office had already commented on the proposal, the Town had no further comments. The above mentioned correspondence has been included under Tab 9.

SECTION 4. THE SITE

A. LOCATION & LAND USE

The Facility is located on a 0.62-acre parcel located at 186 Black Rock Turnpike in Redding, Connecticut (Map 17, Block 75, Lot 35). The parcel, owned by Redding Fire District 1, is currently occupied by the Redding Firehouse, an existing driveway/parking area and the 75-foot existing lattice tower. The Facility will be located behind (or to the southeast of) the firehouse. The area immediately surrounding the Site is comprised of low density residential parcels. Topography in the area is generally characterized by rolling hills that range in elevation from approximately 350 feet above mean sea level ("AMSL") along the banks of the Aspetuck

River east of Valley Road to approximately 800 feet AMSL. The monopole will be located at 643 AMSL. A site plan is included under Tab 10.¹

The Town Zoning Regulations address wireless communication facilities in Section 5.19 on page 116.2². Although this Facility is not subject to the Town of Redding's local zoning regulations, Sprint's Application to the Council fulfills many of the goals of Town's zoning regulations as they pertain to wireless communication facilities. According to the Zoning Regulations, "the intent of this Section is to balance the public need for adequate wireless telecommunication service with protection for the residential character, natural and cultural environment of the Town of Redding" (page 116.2). In addition, Section 5.19.2 goes on to enumerate more specific goals including (but not limited to): controlling the location so there is not an adverse impact on health and safety; limiting the height of the facility; requiring collocation; protecting scenic and historic areas; and limiting visual impact.

In fact, in this Application, Sprint addresses all those issues: health and safety (p 22); minimum height necessary (p. 13); collocation (p. 6); protection of scenic and historic areas (p. 24); and limiting visual impact (p20). Therefore, although Sprint is not required to comply with the Town of Redding's Zoning requirements, Sprint is, for all practical purposes, achieving the majority of the goals the Town has set forth.

B. ACCESS ROAD

Access to the Site emanates from Black Rock Turnpike and goes through the existing paved parking lot in front of, and to the eastern side of, the firehouse.

¹ Four full-sized site plans have been bulk filed.

² Four copies of the Town of Redding's Zoning Regulations and Inland Wetlands and Watercourses Regulations have been bulk filed.

C. MONOPOLE

The existing 75-foot lattice tower will be removed after the new monopole is constructed. To reduce the visual impact of the Facility, Sprint is constructing the new tower as a monopole rather than a lattice structure. The 120-foot monopole will have space for a total of four carriers. Sprint will be located at the top of the monopole with its antenna centerline at 120 feet. Sprint will have twelve panel antennas mounted on a triangular platform. The antennas will accommodate both the iDEN and CDMA networks. The global positioning system antenna will be attached to the equipment shelter.

The monopole will be designed and constructed in accordance with the American National Standards Institutes/Electronic Industries Association's Manual #222 -- Revision F, "Structural Standards for Steel Antenna Towers and Antenna Support Structures." The exact foundation design, diameter and thickness of the structure will be determined by the manufacturer based on specified loading and soil analyses for the Site.

An ice bridge will connect the monopole to the compound.

D. COMPOUND

The existing 20-foot by 20-foot fenced compound area will be removed. The new compound will be 35 feet by 66 feet and will incorporate the area of the old compound. The compound will be surrounded by an 6-foot high chain link fence with three strands of barbed wire at the top. Inside the compound, Sprint will construct a 11-foot 6-inch by 20-foot equipment pad on piers to transmit and processes both its iDEN and CDMA signals. On the equipment pad will be the power, battery, radio and growth cabinets for both networks. The cabinets will also house wireless switching, processing and monitoring equipment, as well as equipment for power conversions and grounding for surge protection.

The equipment will be of a solid-state nature and will emit negligible amounts of noise. The noise emitted by the equipment, in accordance with Connecticut Department of Environmental Protection ("DEP") standards, will not increase the noise levels at the property boundaries beyond acceptable levels.

A construction schedule and cost estimate for the Facility are included under Tab 11.

E. POWER SUPPLY

The power supply will originate from an existing pole (#1974) on the northern side of the property. It will then be routed overhead to a new pole to be placed in the vicinity of the proposed transformer/CSC cabinet (see site plan sheet Z3). To maintain operations during emergencies involving power outages, the Facility will be equipped with an extensive battery back-up system. According to the manufacturer, the battery has the capacity to power the system for 18 to 24 hours. More realistically, Sprint expects that at a 50 percent load, the battery will last approximately six to eight hours. Typically, Sprint plans for a six-hour power outage. If the power outage exceeds 24 hours, Sprint may locate a diesel powered electrical generator at the Facility on a temporary basis. Emergency power is provided to the switching system via a plug placed in the equipment cabinet.

SECTION 5. COVERAGE

A. HEIGHT JUSTIFICATION

Sprint's Radio-Frequency Engineering Department has identified a critical coverage gap along Route 58 as well as in the immediately surrounding areas of Redding. Sprint's existing signal strength is below -92 dBm in the majority of the area that Sprint is seeking to cover with this site. Sprint considers the minimum acceptable signal level for in-vehicle coverage to be -92 dBm and -87 dBm for in-building coverage. This gap was confirmed using computer software

that measures the signal strength from the facilities in surrounding communities. This gap was also confirmed by drive test data.

For Sprint to fill this deficiency in coverage and allow the Site to work in conjunction with its other surrounding sites, Sprint has determined, after extensive analysis, that the minimum antenna centerline needed is 120 feet. That height ensures adequate signal strength at the periphery of the coverage area. At a lesser height, the coverage provided at the periphery would severely limit Sprint's capability to hand-off calls to adjacent sites. As the traffic at this Site and the surrounding sites increases, the quality of the signal at the periphery will deteriorate and result in dropped calls. Clearly, a network cannot be built effectively relying on the minimum signal strength. Therefore, it is crucial to maintain more than the absolute minimum signal level at this Site.

Two coverage plots have been included under Tab 12. The first plot demonstrates Sprint's current coverage in the area. The second plot demonstrates the coverage provided by the Facility in conjunction with the surrounding sites. Also included under Tab 12 is a table of site information used to generate the coverage plots. Some of the sites listed on that table are outside of the plot view but were included to ensure the coverage plots provide an accurate representation of the coverage in the area.

B. FORECAST OF MAXIMUM CAPABILITY

The digital technology that drives Sprint's PCS network is called code division multiple access technology. CDMA is a "spread spectrum" technology that enables multiple signals to share a single transmission channel, maximizing the use of available bandwidth. Therefore, Sprint's data transmission will not degrade with network usage. Overall, CDMA technology provides for clearer calling, fewer dropped calls, improved security and greater capacity.

By using CDMA technology, Sprint is able to provide a P.02 grade of service. A P.02 grade of service means that a subscriber of the system will be able to place calls ninety-eight percent of the time during the busiest (peak) hours of the day. During non-peak times, the grade of service will be better than P.02.

Cells, which are designed and equipped for a given capacity, will normally operate at much less than full capacity during the growth of the system. Accordingly, Sprint will provide a much better grade of service when the traffic in each cell increases to meet the design loading conditions. As Sprint's digital network evolves, Sprint monitors the actual grade of service on a cell-by-cell basis. Factors affecting the grade of service are:

- call attempts,
- call holding time,
- call distribution over time (average and peak), and
- call distribution over geography (users in weaker coverage areas negatively affect the capacity of the cell).

If the grade of service for any single cell site falls below the desired grade of service, Sprint will take steps to expand its facilities which serve that cell. These steps can include:

- antenna changes,
- cell balancing through call processing parameters and power adjustments, and
- adding channels.

These steps all serve to delay the process of cell splitting. Based on the current and projected number of subscribers as well as current and projected usage patterns, it is anticipated that cell splitting at this location will not be required for at least five years.

SECTION 6. ENVIRONMENTAL IMPACT

A. MITIGATION MEASURES

The selection and design of the Facility has taken into account potential impacts to: wetlands and water resources; air quality; noise; traffic patterns; visibility and aesthetics; vegetation; wildlife; and historic, architectural, archaeological, cultural and recreational resources. The following review demonstrates that the activities proposed by Sprint will not cause a significant change or alteration in the physical and environmental characteristics of the Site.

(1) Water Resources

No adverse impact on water resources is anticipated as a result of the operation of the Facility. The Facility will not require any water usage nor is any wastewater discharge associated with the Facility. Furthermore, there are no water supply or sanitary facilities at the Facility.

The greatest potential for impacts on water resources exist from soil erosion and sedimentation during Site development. Absent control measures, exposed soil surfaces could be vulnerable to erosion from direct precipitation and storm water runoff. Eroded soils could be carried to downstream water courses and/or wetlands and deposition of soil sediments within wetlands or water courses could, in turn, have an adverse impact on wetlands, in-stream flora and fauna and water quality.

Therefore, the plan of development for the Facility will include erosion and sediment control measures designed in accordance with the Connecticut Guidelines for Soil Erosion and Sediment Control. These erosion and sediment control measures will perform one or more of the following functions: minimization of soil exposure, control of runoff, shielding of the soils,

binding of the soils and trapping of sediments. Prior to any land disturbance activities, sediment barriers will be installed downslope of all areas where soil will be exposed. Upon completion of site work, all disturbed areas will be permanently stabilized with seed and mulch.

In addition, the physical structures will be made of common building materials and will not produce any environmentally damaging leachates. No transformers containing polychlorinated biphenyls (PCBs) will be used at the Site.

(2) Wetlands

No wetlands or watercourses were identified within the compound area. The nearest wetland is approximately 60 feet east of the compound. The access area is located within existing developed areas (e.g., paved parking lot, maintained lawn) and the proposed facility replaces an existing lattice tower.

Therefore, Sprint's proposed activity will not directly impact nearby wetlands because the work is in an existing developed/disturbed area. As no direct impacts to federal wetlands are associated with Sprint's proposed activities, no significant change in surface features (e.g., wetland fill, deforestation or water diversion) will result at the Site, in accordance with the National Environmental Policy Act ("NEPA") categorical exclusion list. Further information on the nearby wetlands is provided in the back of the NEPA package included under Tab 15.

(3) Air Quality

No air pollutants will be generated during the normal operation of the Facility. If a power outage occurs which exceeds 24 hours, a diesel powered electrical generator may be brought to the Site. Emergency power is provided to the switching system via a plug placed in the equipment building wall. Since its use will be infrequent, only minimal discharges of the by-

products of combustion (exhaust gases) will occur. These infrequent discharges are not expected to have an adverse impact on air quality.

The only vehicular access to the Site will be for regularly scheduled equipment maintenance and emergency repairs. On average, one trip per month to the Facility is expected. Thus, impacts on air quality from automobile exhaust emissions are expected to be minimal.

(4) Noise

The only noise associated with the Facility will be during the construction of the foundation for the monopole base and during the erection of the pole and antennas. The noise from the construction is anticipated to last approximately six weeks. Noise associated with the use of the portable generator will be infrequent and diminished by the remote location of the Facility and the surrounding vegetation.

(5) Traffic Pattern

During construction, the project will generate a small amount of traffic as workers arrive and depart and materials are delivered. Traffic generation will be comparable to that generated by the construction of a single family house. Upon completion, traffic will be limited to an average of one monthly maintenance and inspection visit. No traffic problems are anticipated.

(6) Visibility and Aesthetics

The aesthetic impacts associated with the Facility have been minimized to the greatest extent possible by locating it in the same spot as an existing tower behind the firehouse. In addition, Sprint is replacing the bulky lattice tower with a monopole which aids in the reduction of visibility to the surrounding community. In addition, the equipment pad and associated ground mounted equipment will be relatively small.

(7) Vegetation & Soil

The Site is characterized as an existing developed area because of the existing firehouse and lattice tower. There is also a maintained lawn area immediately adjacent to the firehouse and lattice tower. A steep fill slope is located nearby to the east with some mature forest habitat associated with the nearby wetland corridor located approximately 60 feet east of the compound. Sprint's development will not require the removal of any trees.

According to the Bedrock Geological Map of Connecticut compiled by John Rogers in 1985, bedrock geology underlying the Site is identified as a light color, foliated granitic gneiss mostly likely of Ordovician age. No bedrock outcrops were observed in the general vicinity of the Site during the reconnaissance. The surficial geology of the property is classified as primarily thin till. Glacial till deposits consist predominantly of nonsorted, nonstratified sediment deposited directly by glaciers, consisting of boulders, gravel, sand, silt, and clay mixed in various proportions. Soils derived from this parent material were generally field confirmed by a professional soil scientist. Soils identified in proximity to the compound are classified as Paxton and Montauk fine sandy loams (soil symbol – 84) with soil alterations (e.g., fill, grading) associated with the firehouse. Paxton and Montauk soils are deep, well drained, moderately coarse textured, glacial till soil developed over compact till.

No wetland soils were identified within the proposed development area. However, wetland soils were identified nearby approximately 60 feet east of the compound. The wetland soils were classified as Leicester, Ridgebury, and Whitman very stony fine sandy loams (soil symbol - 3). These are poorly and very poorly drained, moderately coarse textured glacial till soils.

(8) Wildlife

The proposed development area does not provide significant wildlife habitat due to the existing firehouse and nearby human activity. Although not anticipated to be significant, minor temporary impacts to wildlife that would utilize the nearby forested uplands and wetlands could occur during construction of the Facility. Potential impacts include displacement of wildlife in proximity to the construction primarily due to human activity and construction noise. However, suitable habitat is located in close proximity to the Facility to allow for temporary natural relocation of potential wildlife from the construction zone.

As a result, no long-term impacts on wildlife are anticipated from the proposed development. Since the Site will be unattended, no disturbance of wildlife during operation of the Facility is expected. Additionally, in accordance with the Department of Environmental Protection's Natural Diversity Data Base, there are no known extant populations of Federal or State Endangered, Threatened or Special Concern Species that occur at the Site.

B. VISUAL RESOURCE EVALUATION

In October 2006, Vanasse Hangen Brustlin, Inc. prepared a Visual Resource Evaluation Report for the Facility (Tab 13). The Visual Resource Evaluation Report contains a narrative, photolog documentation map, balloon float photographs, photographic simulations and a viewshed map. The evaluation was conducted to identify specific areas where the Facility is likely to be visible. For the purposes of the evaluation, a 2-mile radius surrounding the Site was chosen as the study area (the "Study Area"). Portions of Route 58 and Route 107 are contained within the Study Area. In total, the Study Area contains roughly 50 linear miles of vehicular roadways.

Surrounding the Study Area are gently rolling hills ranging in elevation from 3500 feet above mean sea level (“AMSL”) along the banks of the Aspetuck River east of Valley Road to approximately 800 feet AMSL atop Sunset Hill to the north. The tree canopy in the area, consisting mainly of mixed deciduous hardwood species interspersed with stands of mature evergreens, covers approximately 87% of the Study Area with an average height of 65 feet. The Study Area also includes approximately 29 acres of surface water.

VHB anticipates year-round visibility to be only 6 acres, or less than one-half of one percent of the Study Area. A significant amount of the year-round visibility occurs along Black Rock Turnpike within the immediate vicinity of the host property. Year-round visibility extends to the south of the Facility along Black Rock Turnpike by approximately 0.18 mile and to the north of the Facility by approximately 200 feet. Generally, these areas of year-round visibility currently have views of the existing 75-foot lattice tower. VHB estimates that approximately 9 residences will have a partial view of the Facility year-round. Many of the properties have a view of the existing lattice tower.

Seasonal visibility is estimated to be an additional 51 acres. The seasonal visibility will also be limited to the immediate vicinity of the host property; mainly along and adjacent to the Black Rock Turnpike corridor. VHB estimates that approximately 12 residences will have limited seasonal views of the Facility with most already having views of the existing lattice tower.

VHB does not anticipate any visibility from any of the locally-designated scenic roads in Redding.

C. BALLOON FLOAT & SIGN DISPLAY

To enable the public to ascertain the visibility of the Facility, Sprint will raise a balloon at the Site with a diameter of at least three feet on the day of the Council's first hearing session on the Application (weather permitting) or at a time otherwise specified by the Council. In addition, Sprint will post a sign on the subject property at least ten business days prior to the public hearing. The sign will be at least 6 feet by 4 feet and will have the Applicant's name, type of facility, height, public hearing date and contact information for the Council.

D. SAFETY ANALYSIS

The Facility will not pose a health threat to the community-at-large or the employees who visit the Site. To verify that the Facility will not pose a health threat, Sprint analyzed the amount of radio-frequency energy emitted by its iDEN and CDMA antennas as well as the Fire Department's antennas (see Tab 14 for the power density analyses). These analyses were performed using a worst case scenario with the antennas on the monopole pointing straight down. Under this worst case scenario, the highest calculated levels of radio-frequency energy are measured at the base of the monopole.

Sprint's analysis determined that the amount of radio-frequency energy emitted by the antennas (known as the power density), as calculated at the base of the monopole, would be 0.0300 milliwatts per centimeter squared ("mW/cm²") for the iDEN antennas, 0.0764 mW/cm² for the CDMA antennas and 0.0056 mW/cm² for the Fire Department antennas. That means that the radio-frequency energy at the Facility will never be greater than 5.29% (iDEN), 7.64% (CDMA), 2.81% (Fire Department) or 15.74% cumulatively of the maximum permissible exposure, which is 1.0 mW/cm² as specified by the FCC. Therefore, Sprint's analyses clearly

shows that the maximum level of radio-frequency energy emitted at the Facility will be well below all applicable health and safety limits.

E. NATIONAL ENVIRONMENTAL POLICY ACT REVIEW

As a licensing agency, the FCC complies with the National Environmental Policy Act by requiring its licensees (including Sprint) to review their proposed actions for environmental consequences. If a licensee's proposed action falls within one of the "listed" categories within NEPA (specifically, 47 CFR §1.1307), the licensee is required to perform an environmental assessment and disclose the results to the FCC. The "listed" categories address issues such as the presence of: wilderness areas and wilderness preserves, endangered or threatened species or critical habitats, historic districts/sites/ buildings/objects, Indian religious sites, flood plains and wetlands.

VHB conducted a NEPA review to investigate any environmental consequences that may arise from Sprint's plans for the Facility in Redding (Tab 15). VHB determined that the Facility is not located in an environmentally sensitive area nor does it fall under any of the NEPA "listed" categories in 47 CFR §1.1307. VHB's NEPA review is included under Tab 15.

(1) DEP Review

As part of the NEPA review, VHB reviewed the Connecticut Department of Environmental Protection's Natural Diversity Database ("NDDDB"). The locations of species and natural communities within this database are based upon data collected over the years by the Natural Resources Center's Geological and Natural History Survey, other units of the DEP, private conversation groups and the scientific community. The locations have been mapped on U.S.G.S. 7.5 minute quadrangle maps for the entire State of Connecticut by the NDDDB Unit. The point locations were generalized for the purposes of distributing data to the general public

while maintaining the confidentiality of the exact species and community locations. The points were moved randomly by up to 500 feet in any direction and then buffered by a ¼ mile. Therefore, the general locations are presented as polygons and the exact location of the species or community falls somewhere within the polygon, and not necessarily in the center of the polygon.

As part of the NEPA compliance process for this Facility, VHB screened the project area for State and Federally listed endangered, threatened, and special concern species and significant communities through the use of the NDDDB. According to the DEP, if the project is not found within a hatched area, or overlapping a lake, pond or wetland that has any hatching, or upstream or downstream (by less than ½ mile) from a hatched area, the project is unlikely to affect any known occurrence of listed species or significant natural community. In addition, according to the DEP, if any part of the project is within one of those areas the project may have a conflict with a species or natural community. In cases of potential conflict (i.e., when one or more of the criteria above are met), VHB submits all applicable information to the DEP for review and comment. In this case, none of the DEP criteria were met and, therefore, no additional coordination with DEP was necessary. On August 17, 2006 VHB received a letter from Ms. Dawn McKay at the DEP stating that there “are no known extant populations of Federal or State Endangered, Threatened or Special Concern Species that occur at the site in question.” That correspondence is included under Tab 15.

(2) Historic Review

As part of the NEPA review, VHB contacted the Connecticut Commission on Culture and Tourism (“CCT”) and requested that the CCT review and comment on Sprint’s plans for the Facility. After extensive review, the CCT determined the project will not have an effect on the

State's historic, architectural or archaeological resources listed on or eligible for the National Register of Historic Places. The correspondence from the CCT is included under Tab 15.

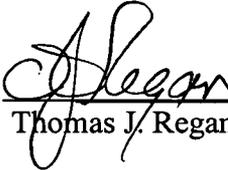
In addition, VHB also received responses from the Delaware Nation, Mashantucket Pequot Tribe and Narragansett Indian Tribal Historic Preservation Office stating that Sprint's proposed telecommunications Facility will not have an effect on properties of traditional cultural importance to Connecticut's Native American community. Correspondence from the three tribes is included under Tab 15.

CONCLUSION

For the reasons described herein, Sprint respectfully requests that the Council issue a certificate of environmental compatibility and public need for the construction, maintenance and operation of a 120-foot telecommunication facility at 186 Black Rock Turnpike in Redding, Connecticut.

Respectfully submitted by:

SPRINT NEXTEL CORPORATION

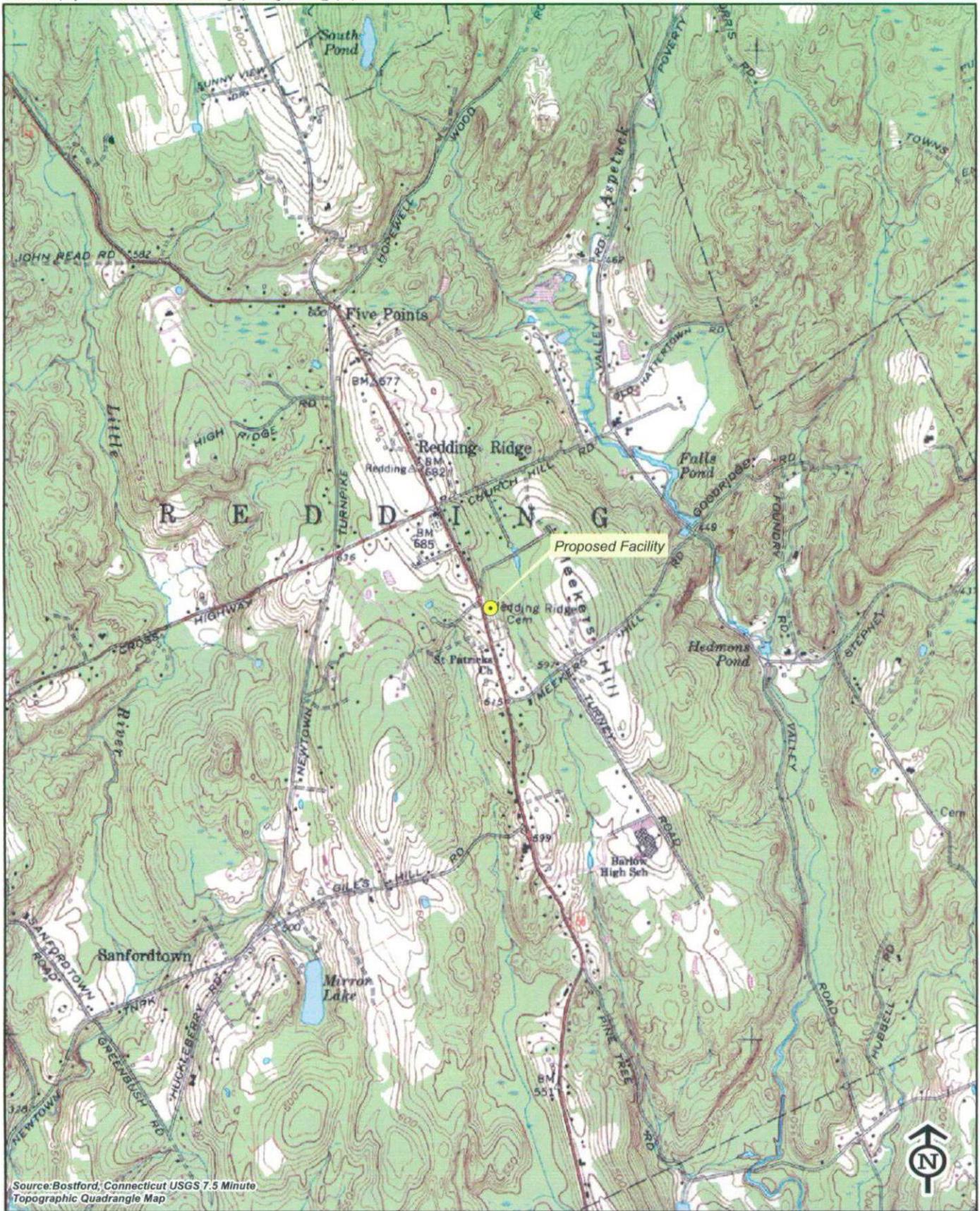


Thomas J. Regan

ATTACHMENTS

1. U.S.G.S. Topographic Map
Aerial Map
2. Application Guide
3. Affidavit of Publication from The News-Times
Affidavit of Publication from the Redding Pilot
4. Abutters List
Letters to Abutters
Return Receipts
5. Proof of Service List
6. U.S.G.S. Topographic Map of Existing Structures in Area
7. 60-day Notice to the Town of Redding
8. VHB's Correspondence with the Town on the SHPO Review
9. Brown Rudnick's Follow-Up Correspondence with the Town
10. Site Plan
11. Construction Schedule
Cost Estimate
12. Coverage Plots
13. Visual Resource Evaluation Report
14. Power Density Analysis Charts
15. NEPA Report

40237289 v1 - MERCIECM - 080563/3233



Source: Bostford, Connecticut USGS 7.5 Minute Topographic Quadrangle Map



Vanasse Hangen Brustlin, Inc.



Quadrangle Location

USGS Topographic Map
 Proposed Sprint PCS
 Telecommunications Facility
 186 Black Rock Turnpike
 Redding, Connecticut





Sources: 2004 Digital Aerial Photograph

Vanasse Hangen Brustlin, Inc.



Quadrangle Location

Aerial Photograph
Proposed Sprint PCS
186 Black Rock Turnpike (Route 58)
Redding, Connecticut

