

CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS

Connecticut Siting Council

APPLICATION OF MCF COMMUNICATIONS **bg**, INC. AND
CELLCO PARTNERSHIP
D/B/A VERIZON WIRELESS

TOWN OF THOMPSON

THOMPSON 2 FACILITY

DOCKET NO. _____

FEBRUARY 22, 2008



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9. Antenna and Equipment Specifications
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11. Visual Analysis Report
12. State and Federal Agency Reviews
13. Wetland and Watercourse Delineation Reports
14. Federal Airways & Airspace Summary Reports
15. Site Lease Agreements

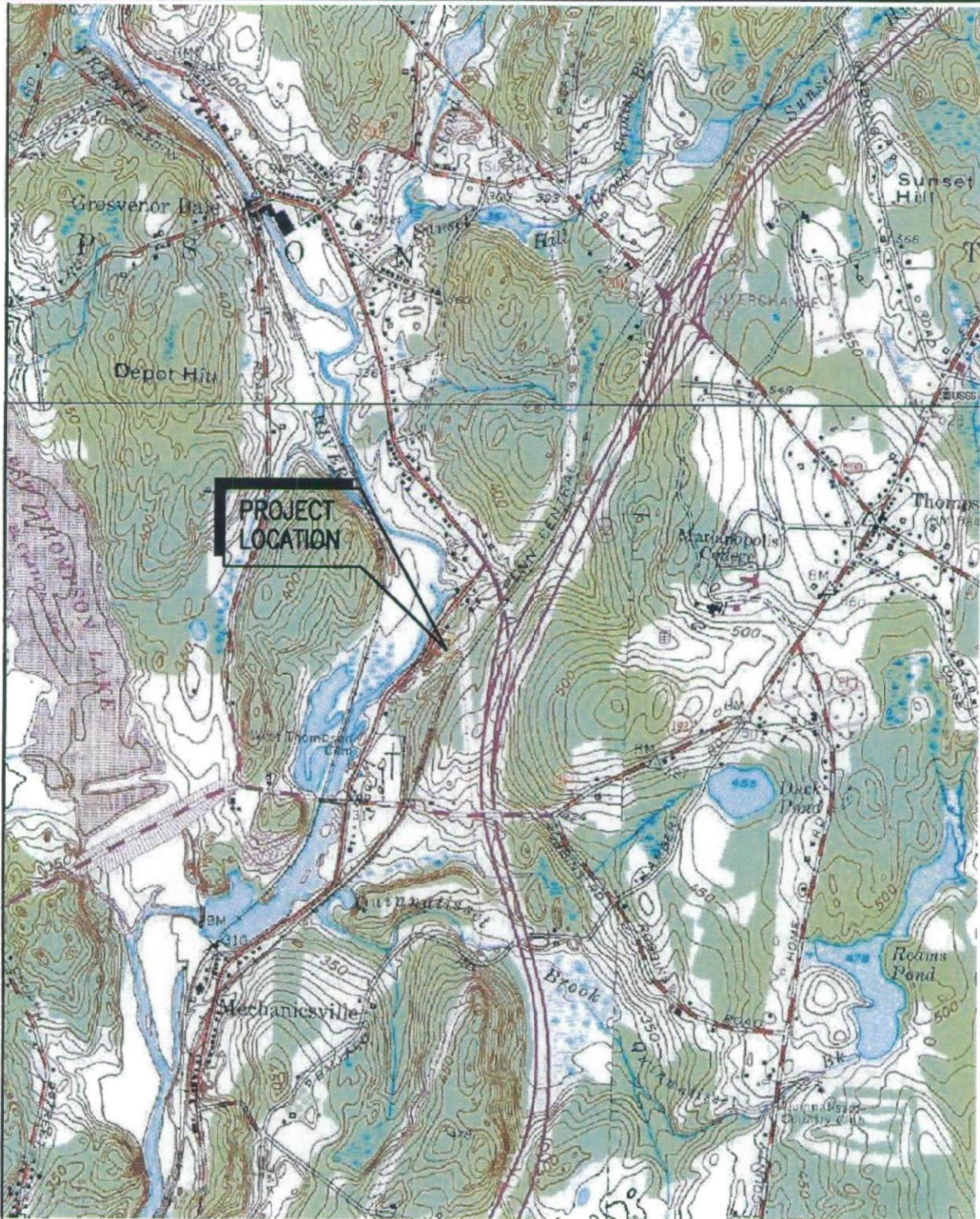
EXECUTIVE SUMMARY

MCF Communications bg, Inc. (“MCF”) and Cellco Partnership d/b/a Verizon Wireless (“Cellco”) (collectively the “Applicant”) propose to construct a telecommunications tower and related facility at one of two locations in the North Grosvenordale section of the Town of Thompson, Connecticut (the “Thompson 2 Facility”). The proposed Thompson 2 Facility would provide Cellco customers with much needed Personal Communications Service (“PCS”) and cellular coverage along Interstate 395 (“I-395”) and State Routes 200, 193 and 12, as well as local roads in the southerly Thompson area.

The first alternative site (the “Site A Facility”) is located on a 1.98 acre parcel at 347 Riverside Drive (Route 12). The Site A Facility would consist of a 140-foot telecommunications tower within a 100’ x 100’ leased area. Cellco would install a total of twelve (12) panel-type antennas at the 137-foot level on the tower. The top of Cellco’s antennas would extend to a height of 140 feet above ground level (“AGL”). Equipment associated with the antennas would be located in a 12’ x 30’ shelter which would be installed on the ground near the base of the tower. Access to the Site A Facility would extend from Riverside Drive over a portion of an existing gravel driveway, a distance of approximately 205 feet, then over a new gravel driveway an additional distance of approximately 20 feet to the site compound. Both the tower and leased area are designed to accommodate additional carriers.

The second alternative site (the “Site B Facility”) is located on a 3.43 acre parcel at 407 Riverside Drive (Route 12). The Site B Facility would consist of a 140-foot telecommunications tower within a 100’ x 100’ leased area in the easterly portion of the parcel. Cellco would install a total of twelve (12) panel-type antennas at the 137-foot level on the tower. The top of Cellco’s

antennas would extend to a height of 140 feet AGL. Equipment associated with the antennas would be located in a 12' x 30' shelter installed on the ground near the base of the tower. Access to the Site B Facility would extend from Riverside Drive over a portion of an existing gravel driveway, a distance of approximately 230 feet then over a new gravel driveway an additional distance of approximately 235 feet to the site compound. Both the tower and leased area are designed to accommodate additional carriers.



1 USGS TOPO MAP: PUTNAM 41071-H8
 SCALE: 1" = 2000'
 0 1000 2000
 SCALE IN FEET



Site A

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 OFFICE: (978) 687-2536
 FAX: (978) 258-8850

SITE NAME:
THOMPSON 98 A

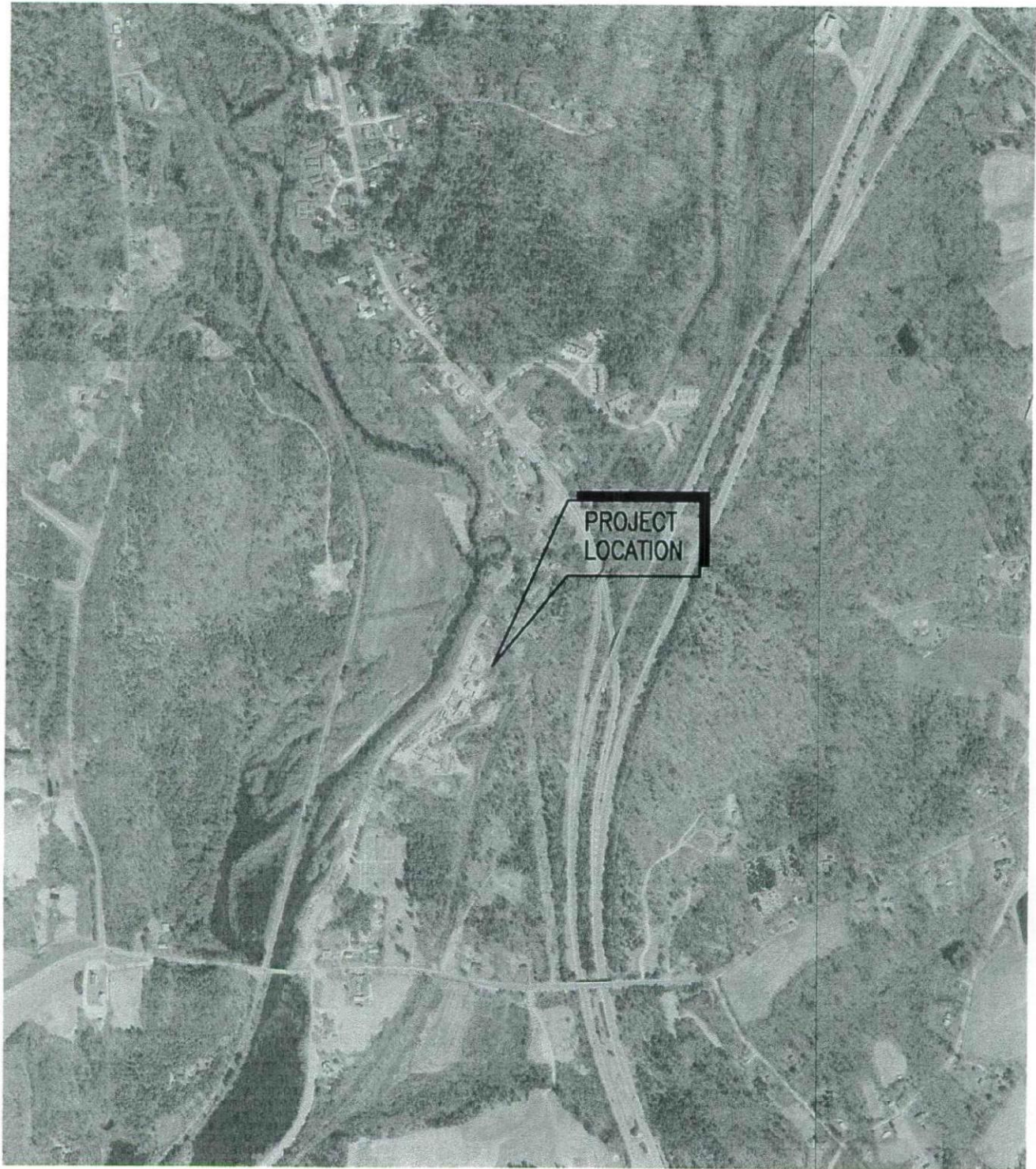
SITE ADDRESS:
**347 RIVERSIDE DRIVE
 NORTH GROSVENORDALE, CT
 06255
 WINDHAM COUNTY**

SHEET TITLE:
USGS TOPO MAP

DATE:
07/06/07

REVISION:
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File: 14857-1007-1.dwg, Plot: 14857-1007-1.dwg, Date: 07/06/07, Time: 10:44:10 AM, Plotter: HP DesignJet 2400, Plot Size: 11x17, Plot Scale: 1"=2000'



1 **2004 AERIAL PHOTO**
 SCALE: 1" = 1000'
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 SCALE IN FEET



Site A

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MCF Communications, Inc.

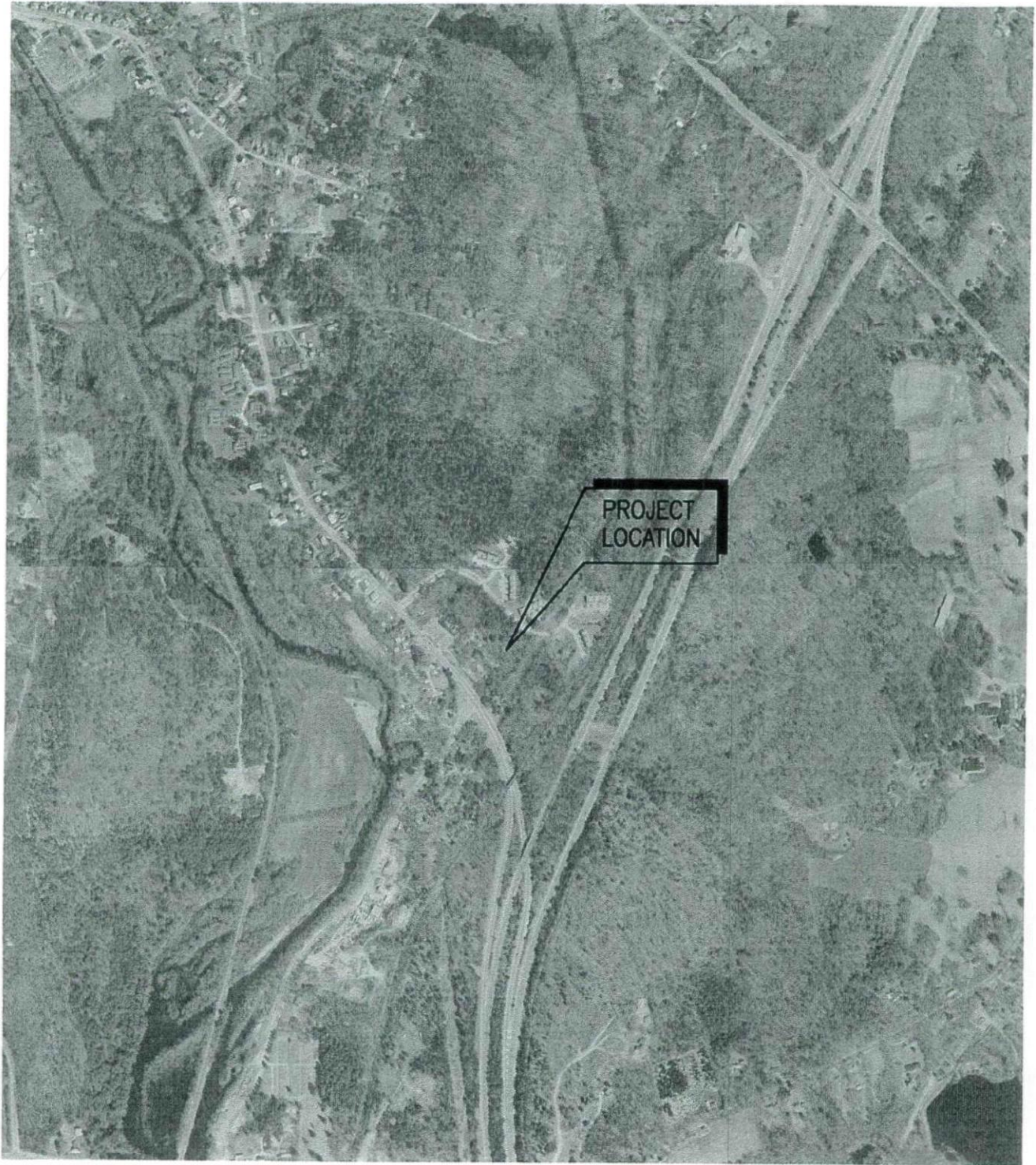
733 TURNPIKE STREET, SUITE 105
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 FAX: (978) 258-8850

SITE NAME:
THOMPSON 98 A
 SITE ADDRESS:
**347 RIVERSIDE DRIVE
 NORTH GROSVENORDALE, CT
 06255
 WINDHAM COUNTY**

SHEET TITLE:
AERIAL PHOTO

DATE:
07/06/07

REVISION:
0



1 2004 AERIAL PHOTO
 SCALE: 1" = 1000'
 0 500 1000
 SCALE IN FEET



Site B

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SITE NAME:
 THOMPSON 98 B
 SITE ADDRESS:
 407 RIVERSIDE DRIVE
 NORTH GROSVENORDALE, CT
 06255
 WINDHAM COUNTY

SHEET TITLE:
 AERIAL PHOTO

DATE:
 07/06/07

REVISION:
 0

**STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL**

IN RE: :
 :
 :
APPLICATION OF MCF COMMUNICATIONS : **DOCKET NO. ____**
bg, INC. AND CELLCO PARTNERSHIP D/B/A :
VERIZON WIRELESS FOR A CERTIFICATE :
OF ENVIRONMENTAL COMPATIBILITY :
AND PUBLIC NEED FOR THE :
CONSTRUCTION, MAINTENANCE AND :
OPERATION OF A WIRELESS :
TELECOMMUNICATIONS FACILITY IN THE :
TOWN OF THOMPSON, CONNECTICUT : **FEBRUARY 22, 2008**

**APPLICATION FOR CERTIFICATE OF
ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED**

I. INTRODUCTION

A. Authority and Purpose

This Application and the accompanying attachments (collectively, the “Application”) is submitted by MCF Communications bg, Inc. (“MCF”) and Cellco Partnership d/b/a Verizon Wireless (“Cellco”) (collectively the “Applicant”), pursuant to Chapter 277a, Sections 16-50g et seq. of the Connecticut General Statutes (“C.G.S.”), as amended, and Sections 16-50j-1 et seq. of the Regulations of Connecticut State Agencies (“R.C.S.A.”), as amended. The Application requests from the Connecticut Siting Council (“Council”) a Certificate of Environmental Compatibility and Public Need (“Certificate”) for the construction, maintenance, and operation of a wireless telecommunications facility at one of two locations in the North Grosvenordale section of the Town of Thompson (“Town” or “Thompson”), Connecticut (the “Thompson 2 Facility”). The proposed Thompson 2 Facility would provide Cellco customers with much

needed cellular and PCS coverage along I-395 and State Routes 200, 193 and 12, as well as local roads in the southerly portion of Thompson. Cellco currently experiences significant gaps in coverage, most significantly at PCS frequencies but also at cellular frequencies, between its existing Thompson cell site to the north (Cellco's antennas at the 237-foot and 227-foot levels of the 250-foot guyed-lattice tower at 61 Lowell Davis Road in Thompson); and its existing Putnam cell site to the south (Cellco's antennas at the 146-foot level of the 180-foot tower at 154 Sayle Avenue in Putnam).

In this Application, Cellco intends to construct a tower at one of two proposed alternative site locations in Thompson. Either of the proposed alternative cell sites would satisfy Cellco's Thompson 2 Facility coverage objectives. The first alternative site (the "Site A Facility") is located on a 1.98 acre parcel at 347 Riverside Drive (Route 12), owned by Rene B. and Mary V. Santerre, Trustees (the "Site A Property"). The Site A Facility is located in the Town's Commercial zone district. The Site A Facility would consist of a 140-foot telecommunications tower within a 100' x 100' leased area and a 70' x 70' facility compound in the center of the parcel. Cellco would install a total of twelve (12) panel-type antennas at the 137-foot level on the tower. The top of Cellco's antennas would extend to a height of 140 feet above ground level ("AGL"). Equipment associated with the antennas would be located in a 12' x 30' shelter which would be installed on the ground near the base of the tower. Access to the Site A Facility would extend from Riverside Drive over a portion of an existing gravel driveway, a distance of approximately 205 feet then over a new gravel driveway an additional distance of approximately 20 feet to the site compound. Both the tower and leased area are designed to accommodate additional carriers. Project plans for the Site A Facility are included in Attachment 1.

From the Site A Facility, Cellco would provide coverage, at cellular frequencies, to an approximately 2.86 mile portion of I-395, an approximately 1.51 mile portion of Route 200, an approximately 0.85 mile portion of Route 193, an approximately 3.28 mile portion of Route 12, and an overall area of 7.3 square miles. At PCS frequencies, Cellco would provide an approximately 2.66 mile portion of I-395, an approximately 1.2 mile portion of Route 200, an approximately 0.6 mile portion of Route 193, an approximately 2.65 mile portion of Route 12, and an overall area of 3.0 square miles.

The second alternative site (the “Site B Facility”) is located on a 3.43 acre parcel at 407 Riverside Drive (Route 12) owned by David F. Rogers (the “Site B Property”). The Site B Facility is located in the in the Town’s R-20 Residential zone district. The Site B Facility would consist of a 140-foot telecommunications tower within a 100’ x 100’ leased area in the easterly portion of the parcel. Cellco would install a total of twelve (12) panel-type antennas at the 137-foot level on the tower. The top of Cellco’s antennas would extend to a height of 140 feet AGL. Equipment associated with the antennas would be located in a 12’ x 30’ shelter installed on the ground near the base of the tower. Access to the Site B Facility would extend from Riverside Drive over a portion of an existing gravel driveway, a distance of approximately 230 feet, then over a new gravel driveway an additional distance of approximately 235 feet to the site compound. Both the tower and leased area are designed to accommodate additional carriers. Project plans for the Site B Facility are included in Attachment 2.

From the Site B Facility Cellco would provide coverage, at cellular frequencies, to an approximately 3.12 mile portion of I-395, an approximately 1.0 mile portion of Route 200, an approximately 1.2 mile portion of Route 193, an approximately 3.3 mile portion of Route 12 and an overall area of 7.0 square miles. At PCS frequencies, Cellco would provide an approximately

2.75 mile portion of I-395, an approximately 0.89 mile portion of Route 200, an approximately 0.8 mile portion of Route 193, an approximately 2.88 mile portion of Route 12, and an overall area of 3.1 square miles.

Cellco's equipment building at either alternative location would house radio and related equipment including (a) receiving, transmitting, switching, processing and performance monitoring equipment; and (b) automatic heating and cooling equipment. A back-up generator would also be installed within the equipment building for use during power outages and periodically for maintenance purposes. The tower and equipment shelter would be enclosed by an 8-foot high security fence and gate. Cellco's equipment building would be equipped with a silent intrusion and systems alarm and will be monitored on a 24-hour basis to receive and to respond to incoming alarms or other technical problems. The equipment building would remain unstaffed, except as required for maintenance. Once the cell site is operational, maintenance personnel will visit the cell site on a monthly basis. More frequent visits may be required if there are problems with the cell site equipment.

Included in this Application as Attachments 1 and 2, are factual summaries and project plans for the proposed Site A and Site B Facilities. This summary, along with the other attachments submitted as part of this Application, contains all of the site-specific information required by statute and the regulations of the Council.

In accordance with Paragraph I(F) of the Council's "Application Guide" for Community Antenna Television and Telecommunication Towers, a copy of the Application Guide is included as Attachment 3. The Application Guide contains references to the specific pages of this Application and the attachments where the information required under Section VI of the Application Guide may be found.

B. The Applicant

MCF is a stock corporation organized and existing under the laws of the Commonwealth of Massachusetts, with offices located at 733 Turnpike Street, North Andover Massachusetts 01845. MCF develops, owns, manages and markets communication facilities throughout New England. If approved, MCF will own the Thompson 2 Facility.

Cellco is a Delaware Partnership with an administrative office located at 99 East River Drive, East Hartford, CT, 06108. Cellco is licensed by the Federal Communications Commission (“FCC”) to operate a wireless telecommunications system in the State of Connecticut within the meaning of C.G.S. Section 16-50i(a)(6). Operation of the wireless telecommunications systems and related activities are Cellco’s sole business in the State of Connecticut. Cellco has extensive national experience in the development, construction and operation of wireless telecommunications systems and the provision of wireless telecommunications service to the public.

Correspondence and/or communications regarding this Application may be addressed to:

Brad Gannon
MCF Communications bg, Inc.
733 Turnpike Street, Suite 105
North Andover, Massachusetts 01845

Sandy Carter, Regulatory Manager
Verizon Wireless
99 East River Drive
East Hartford, Connecticut 06108

A copy of all such correspondence or communications should also be sent to the

Applicant’s attorneys:

Robinson & Cole LLP
280 Trumbull Street
Hartford, Connecticut 06103-3597
(860) 275-8200
Attention: Kenneth C. Baldwin, Esq.

C. Application Fee

The estimated total construction cost for the Thompson 2 Facility would be less than Five Million (\$5,000,000.00) Dollars. Pursuant to Section 16-50v-1a(b) of the Regulations of Connecticut State Agencies, an application fee of \$1,000 accompanies this Application in the form of a check payable to the Connecticut Siting Council.

II. SERVICE AND NOTICE REQUIRED BY C.G.S. SECTION 16-50l(b)

Copies of this Application have been sent by certified mail, return receipt requested, to municipal, regional, state and federal officials, pursuant to C.G.S. Section 16-50l(b). A certificate of service, along with a list of the parties served with a copy of the Application, is included as Attachment 4.

Notice of Cellco's intent to submit this Application was published on February 18 and 19, 2008, by the Applicant in the *Norwich Bulletin* pursuant to C.G.S. Section 16-50l(b). A copy of the published legal notice is included as Attachment 5. A copy of the publisher's affidavit or certificate of publication will be submitted to the Council as soon as it is available.

Attachment 6 contains a certification that notices were sent to each person appearing of record as an owner of property that may be considered to abut either the Site A Property or Site B Property in accordance with C.G.S. Section 16-50l(b), as well as a list of the property owners to whom such notice was sent and a sample notice letter.

III. REQUIRED INFORMATION: PROPOSED WIRELESS FACILITY

The purpose of this section is to provide an overview and general description of the wireless facility proposed to be installed.

A. General Information

Prior to the 1980's, mobile telephone service was characterized by insufficient frequency availability, inefficient use of available frequencies and poor quality of service. These limitations generally resulted in problems of congestion, blocking of transmissions, interference, lack of coverage and relatively high cost. Consequently, the Federal Communication Commission ("FCC"), in its Report and Order released May 4, 1981 in FCC Docket No. 79-318, recognized the public need for technical improvement, wide-area coverage, high quality service and a degree of competition in mobile telephone service.

More recently, the federal Telecommunications Act of 1996 (the "Act") emphasized and expanded on these aspects of the FCC's 1981 decision. Among other things, the Act recognized an important nationwide public need for high-quality wireless telecommunication services of all varieties. The Act also expressly promotes competition and seeks to reduce regulation in all aspects of the telecommunications industry in order to foster lower prices for consumers and to encourage the rapid deployment of new telecommunications technologies.

Cellco's proposed Thompson 2 Facility would be part of the expanding wireless telecommunications network envisioned by the Act and has been developed to help meet these nationwide goals. In particular, Cellco's system has been designed, and the cell site proposed in this Application has been selected, so as to maximize the geographical coverage and quality of service while minimizing the total number of cell sites required.

Because the FCC and the United States Congress have determined that there is a pressing public need for high-quality telecommunications service nationwide, the federal government has preempted the determination of public need by states and municipalities, including the Council, with respect to public need for the service to be provided by the proposed facility. In addition, the

FCC has promulgated regulations containing technical standards for wireless systems, including design standards, in order to ensure the technical integrity of each system and nationwide compatibility among all systems. State and local regulation of these matters is likewise preempted. The FCC has also exercised its jurisdiction over and preempted state and local regulation with respect to radio frequency interference issues by establishing regulations in this area as well.

Pursuant to FCC authorizations, Cellco has constructed and currently operates a wireless system throughout Connecticut. This system, together with Cellco's system throughout its east coast and nationwide markets, has been designed and constructed to operate as one integrated, contiguous system, consistent with Cellco's business policy of developing compatibility and continuity of service on a regional and national basis.

Included as Attachment 7 is the FCC's authorization issued to Cellco for its cellular and PCS wireless services in Connecticut. The FCC's rules permit a licensee to modify its system, including the addition of new cell sites, without prior approval by the FCC, as long as the licensee's authorized service area is not enlarged. The Thompson 2 Facility proposed in this Application would not enlarge Cellco's authorized service area.

B. Public Need and System Design

1. Public Need

As noted above, the Act has pre-empted any state or local determination of public need for wireless services. In Windham County, Cellco holds an FCC License to provide wireless services at both cellular and PCS frequencies. Pursuant to its FCC Licenses, Cellco has developed and continues to develop a network of cell sites to serve the demand for wireless service in the area. Cellco's network currently experiences significant gaps in coverage along I-

395, and State Routes 200, 193 and 12, as well as local roads in the southerly portion of Thompson at both cellular and PCS frequencies. (See Attachment 8).

2. System Design and Equipment

a. System Design

Cellco's wireless system in general and the proposed Thompson 2 Facility have been designed and would be developed to allow Cellco to achieve and to maintain high quality service without interruption from dropped calls and interference.

The system design provides for frequency reuse and hand-off, is capable of orderly expansion and is compatible with other wireless systems. The resulting quality of service compares favorably with the quality of service provided by conventional wireline telephone service. The wireless system is designed to assure a true cellular configuration of base transmitters and receivers in order to cover the proposed service area effectively while providing the highest quality of service possible. Cell site transmissions are carefully tailored to the FCC's technical standards with respect to coverage and interference and to minimize the amount of power that is radiated. System modulation is narrowband frequency modulation for all voice channels at 30 kilohertz ("kHz").

Mobile telephone switching offices ("MTSOs") in Windsor and Wallingford are interconnected and operate Cellco's wireless systems in Connecticut as a single network, offering the subscriber uninterrupted use of the system while traveling throughout the State. This network is further interconnected with the local exchange company ("LEC") and inter-lata (long distance) carriers network.

Cellco has designed its wireless system in conformity with applicable standards and constraints for wireless systems. Cellco's system is also designed to minimize the need for additional cell sites in the absence of additional demand or unforeseen circumstances.

b. Cellular System Equipment

The key elements of the cellular system are the two MTSOs located in Windsor and Wallingford and the various connector cell sites around the state. Cellco's CDMA wireless networks are deployed on two platforms: the earlier AUTOPLEX system, using Series II base stations, and the newer FLEXENT CDMA system, using smaller, more compact modular base stations. Because the Series II base stations are no longer manufactured, the newer CDMA systems, using smaller, more compact modular base stations are used for all current installations.

The major electronic components of each cell site are radio frequency transmission and receiving equipment and cell site controller equipment. Cellco's cellular system uses Lucent Flexent® Modular Cell 4.0B cell site equipment to provide complete cell site control and performance monitoring. This equipment is capable of expanding in modules to meet system growth needs. The cell site equipment primarily provides for: message control on the calling channel; call setup and supervision; radio frequency equipment control; internal diagnostics; response to remote and local test commands; data from the mobile or portable unit in both directions and on all channels; scan receiver control; transmission of power control commands; rescanning of all timing; and commands and voice channel assignment. Additional information with respect to the Lucent Flexent® Modular Cell 4.0B equipment is contained in Attachment 9.

3. Technological Alternatives

Cellco submits that there are no equally effective technological alternatives to the proposal contained herein. In fact, Cellco's wireless system represents state-of-the-art technology offering high-quality service. Cellco is aware of no viable and currently available alternatives to its system design for carriers licensed by the FCC.

C. Site Selection and Tower Sharing

1. Cell Site Selection

Cellco's goal in selecting cell sites such as the one proposed in Thompson is to locate its facilities in such a manner as to allow it to build and to operate a high-quality wireless system with the least environmental impact. Cellco has determined that either of the proposed Thompson 2 Facility locations (Site A or Site B) will satisfy this goal and is necessary to resolve existing coverage problems and to provide high-quality uninterrupted service along a significant portion of I-395, State Routes 200, 193 and 12, as well as local roads in Thompson between its existing Putnam cell site to the south and Thompson cell site to the north.

From the Site A Facility, Cellco would be able to provide cellular coverage to an approximately 2.86 mile portion of I-395, an approximately 1.51 mile portion of Route 200, an approximately 0.85 mile portion of Route 193, an approximately 3.28 mile portion of Route 12, and an overall area of approximately 7.3 square miles. At PCS frequencies, Cellco would provide an approximately 2.66 mile portion of I-395, an approximately 1.2 mile portion of Route 200, an approximately 0.6 mile portion of Route 193, an approximately 2.65 mile portion of Route 12, and an overall area of approximately 3.0 square miles.

From the Site B Facility, Cellco would be able to provide cellular coverage to an approximately 3.12 mile portion of I-395, an approximately 1.0 mile portion of Route 200, an approximately 1.2 mile portion of Route 193, an approximately 3.3 mile portion of Route 12, and an overall area of approximately 7.0 square miles. At PCS frequencies, Cellco would provide an approximately 2.75 mile portion of I-395, an approximately 0.89 mile portion of Route 200, an approximately 0.8 mile portion of Route 193, an approximately 2.88 mile portion of Route 12, and an overall area of approximately 3.1 square miles.

Cellco currently uses many of the existing towers in the immediate area, including those sites identified on the coverage maps as the Putnam, Thompson and Quinnebaug cell sites. (See Attachment 8). None of these existing towers, however, can help to resolve the existing coverage problems identified above along I-395, and State Routes 200, 193 and 12 in Thompson. (A list of tower sites within four (4) miles of the Thompson 2 Facility is also included as part of Attachment 10).

2. Tower Sharing

MCF will design and build the Thompson 2 Facility so that it could be shared by other wireless carriers. This type of tower sharing arrangement would potentially reduce, if not eliminate, the need for other carriers to build separate towers in this same area in the future. MCF would also make space on its tower available to the Town's public safety entities if such a need exists.

D. Cell Site Information

1. Site Facilities

Use of either the Site A or Site B Facilities would require the construction of a new tower. Cellco would install twelve (12) panel-type antennas at the 137-foot level on either tower. The total height of the tower with appurtenances would not exceed 140 feet AGL.

Cellco would install a 12' x 30' single-story equipment shelter near the base of the approved tower to house Cellco's receiving, transmitting, switching, processing and performance monitoring equipment and the required heating and cooling equipment. A back-up generator would be installed within the equipment shelter for use during power outages and periodically for maintenance purposes. The tower and equipment shelter would be surrounded by an 8-foot high security fence and gate. (See Attachments 1 and 2).

Cellco's equipment shelter would be equipped with silent intrusion and systems alarms.

Cellco personnel will be available on a 24-hour basis to receive and to respond to incoming alarms.

The equipment building will remain unstaffed, except as required for periodic maintenance purposes.

2. Overall Costs and Benefits

Aside from the limited visual impacts discussed further below, the Applicant believes that there are no significant costs attendant to the construction, maintenance, and operation of the proposed cell site. In fact, the public will benefit substantially from its increased ability to receive high-quality mobile and portable wireless service in the Thompson area.¹ The Thompson 2 Facility would be a part of a communications system that addresses the public need identified by the FCC and the United States Congress for high-quality, competitive mobile and portable wireless service. Moreover, the proposed cell site would be part of a system designed to limit the need for additional cell sites in the future.

The overall costs to MCF and Cellco for development of the proposed cell site are set forth in Section III.E. of the Application.

3. Environmental Compatibility

Pursuant to Section 16-50p of the General Statutes, in its review of the Application, the Council is required to find and to determine, among other things, the nature of the probable environmental impact, including a specification of every significant adverse effect of the facility,

¹ Businesses across the State have become more dependent on wireless telecommunication services. The public safety benefits of wireless telephone service are illustrated by the improved Connecticut State Police 911 emergency calling system. The 911 emergency calling system is available statewide to all wireless telephone users. Numerous other emergency service organizations have turned to wireless telephone service for use during natural disasters and severe storms when wireline service is interrupted or unavailable. As a deterrent to crime, the general public will further benefit from the Cellular Telecommunications Industry Association's donation of more than 50,000 cellular phones to "Neighborhood Watch" groups nationwide.

whether alone or cumulatively with other effects, on, and conflicting with the policies of the state concerning the natural environment, ecological balance, public health and safety, scenic, historic and recreational values, forests and parks, air and water purity and fish and wildlife.

a. Primary Facility Impact is Visual

The wireless system of which the proposed Thompson 2 Facility will be a part has been designed to meet the public need for high-quality reliable wireless service while minimizing any potential adverse environmental impact. In part because there are few, if any other adverse impacts, the primary impact of facilities such as this is visual. This visual impact will vary from location to location around a tower, depending upon factors such as vegetation, topography, the distance of nearby properties from the tower and the location of buildings and roadways in a “sight line” toward the tower.

Attachment 11 contains a detailed Visual Analysis Report (“Visual Report”), prepared by Clough Harbour & Associates LLP, Inc. (“CHA”) that assesses the visual impact of both the Site A and Site B Facilities. According to the CHA Report, for the Site A Facility, year-round visual impact of the proposed Thompson 2 Facility tower will be restricted to a 22.5 acre area (0.28% of the two-mile radius study area) and seasonal impacts are restricted to an area of an additional 5.6 acres for a total of 28.1 acres (0.35% of the study area) for the Site A Facility. For the Site B, CHA anticipates that the tower will be visible year-round from an approximately 33 acre area (0.4% of the two-mile radius study area). Seasonal impacts of Site B are restricted to an additional 6 acres for a total of 39 acres (0.48% of the study area) for the Site B Facility. (See Attachment 11 – Visual Analysis Report).

There are nine residences within 1,000 feet of the proposed Site A Facility, the closest of which is located approximately 188 feet to the northwest of the Site A tower site. There are 25

residences within 1,000 feet of the proposed Site B Facility. The closest off-site residence is located approximately 216 feet to the southwest of the proposed tower site. The Site B lessor's residence is located 209 feet to the west. The nearest condominium building on adjacent property is located 264 feet to the north.

Weather permitting, MCF will raise a balloon with a diameter of at least three (3) feet at each of the proposed cell sites on the day of the Council's hearing on this Application, or at a time otherwise specified by the Council.

b. Solicitation of Agency Comments

Section 16-50j of the General Statutes requires the Council to consult with and to solicit comments on the Application from the Commissioners of the Departments of Environmental Protection, Public Health, Public Utility Control, Economic Development, and Transportation, the Council on Environmental Quality, and the Office of Policy and Management. In addition to the Council's solicitation of comments, MCF has, as a part of its National Environmental Policy Act ("NEPA") Checklist, solicited comments on the proposed Site A and Site B Facilities from the U.S. Department of the Interior, Fish and Wildlife Service ("USFWS") and the Connecticut Historic Commission, State Historic Preservation Officer ("SHPO"). In addition, CHA has reviewed the Connecticut Department of Environmental Protection ("DEP") Natural Diversity Data Base ("NDDB") and determined that the project will not impact any known occurrences of listed species or significant natural communities and, therefore, DEP review is not required. Attachment 12 contains the USFWS and SHPO response letters, as well as the DEP/NDDB resources map indicating that the Thompson 2 Facility is outside those areas designated by the DEP as having listed species or natural communities. The USFWS response also confirms that no known populations of Federal or State Endangered, Threatened or Special Concern Species occur at the

proposed Site A or Site B Facility locations. The SHPO has confirmed that both the Site A and Site B Facilities at the proposed site location will have no effect on historical, architectural or archeological resources listed on or eligible for the National Register of Historic Places.

This review by state administrative agencies furnishes ample expert opinion on the potential environmental impacts from the facility proposed in the Application, in the context of the criteria which the Council must consider.

c. Non-Ionizing Radio Frequency Radiation

In August 1996, the FCC adopted a hybrid ANSI/NCRP Standard for exposure to Radio Frequency (“RF”) emissions from telecommunications facilities like the one proposed in this Application. The ANSI Standard was adopted by the State of Connecticut in C.G.S. Section 22a-162 and Section 22a-162a “for the purpose of preventing possible harmful effects in human beings from exposure to electromagnetic fields in the frequency range of 300 Kilohertz (kHz) to 100 Gigahertz (GHz). . . .”

To ensure compliance with the applicable standards, Cellco has performed maximum power density calculations for the proposed cell site according to the methodology prescribed by the FCC Office of Engineering and Technology Bulletin No. 65E, Edition 97-01 (August 1997) (“OET Bulletin 65”). The calculation is a conservative, worst-case approximation for RF power density levels at the closest accessible point to the antennas, in this case the base of the tower, and with all antennas transmitting simultaneously on all channels at full power. The calculations indicate that the maximum power density level for Cellco antennas at the 137-foot level, at either Site A or Site B, would be 8.33% of the Standard at the proposed Facility.

d. Other Environmental Issues

No sanitary facilities are required for the proposed Property. The facilities and operations at the proposed Property will not cause any significant air, water, noise or other environmental impacts, or hazard to human health.

Based on agency comments received and its own analysis, the Applicant submits that the proposed facility will have no significant adverse effect on scenic, natural, historic or recreational features, and that none of the potential effects from the facility alone or cumulatively with other effects is sufficient reason to deny this Application.

As discussed above, Cellco will install a back-up generator inside a segregated 10' x 12' generator room within its equipment shelter. Adequate safeguards have been designed into Cellco's generator system and room that eliminate, to the greatest extent possible, the potential for environmental impacts associated with the generator. For example, the generator maintains a double-walled fuel tank with leak detection. The generator's operating and leak detection systems are monitored 24/7 by Cellco.

In addition to the safeguards built into the generator unit itself, the concrete floor of the generator room in the equipment shelter is recessed, several inches, creating a bowl-like effect. The floor area inside the generator room is capable of containing the capacity of 120% of all generator fluids (fuel and oil). Leak detection alarms are also installed in the generator room floor and are monitored remotely. All refueling operations occur inside the generator room. Cellco contracts with Clean Harbors Environmental Service to respond to any spills at its cell sites within six (6) hours of an event. Each generator is exercised weekly to ensure that it is operating properly and is inspected and maintained on a regular basis.

4. Consistency with Local Land Use Controls

The Connecticut Siting Council Application Guide for Community Antenna Television and Telecommunication Facilities, as amended on February 16, 2007, requires the inclusion of a narrative summary of the project's consistency with the Town's Plan of Development and Zoning Regulations, as well as a description of planned and existing uses of the site location and surrounding properties.

a. Planned and Existing Land Uses

The proposed Site A Facility would be located in the central portion of a 1.98 acre parcel owned by Rene B. and Mary V. Santerre, Trustees. This parcel is currently used by a masonry products business. The Site A Facility is located in the Town's Commercial zone district and is bounded by residential uses in a commercial zone to the north, commercial uses to the south, commercial uses in a residential zone to the west, and residential property to the east.

The proposed Site B Facility would be located in the southerly portion of a 3.43 acre parcel owned by David F. Rogers. This parcel is currently used by Mr. Rogers for residential purposes. The Site B Facility is located in the Town's R-20 Residential zone district and is bounded by multi-family housing (condominiums) to the east and south, residential uses to the west along Riverside Drive, and a medical office building to the north.

b. Thompson Plan of Conservation and Development

The Town of Thompson Plan of Development Adopted December 1999 (the "Plan"), does not specifically identify telecommunications towers as a land use consistent or inconsistent with the general planning policies of the Town of Thompson.

c. Town of Thompson Zoning Regulations

Article IX, Section 7 of the Town of Thompson Zoning Regulations (the “Zoning Regulations”) includes requirements for the establishment of Wireless Telecommunications Facilities. (See Bulk File – Town of Thompson Zoning Regulations). According to the Thompson Zoning Map the Site A Facility is located in the Commercial zone district and the Site B Facility is located in the R-20 Residential zone district. Applications for wireless facilities under the Town’s jurisdiction are subject to approval of a special permit and site plan application by the Thompson Planning and Zoning Commission. Subsection 7.2 of the Zoning Regulations establishes five siting preferences for telecommunications facilities including:

- a. The siting of an alternative facility on an existing or approved tower;
- b. The siting of an alternative facility on an existing non-residential building, water tank or other similar structure;
- c. The siting of a new tower on a parcel already occupied by existing towers;
- d. The siting of a new tower in a commercial or industrial zone; and
- e. The siting of a new tower in a residential zone.

The Zoning Regulations also require property line setbacks for towers equal to the setback in the zone or height of the tower, whichever is greater; the use of a monopole design in residential zones; and the applicant to accommodate tower sharing, among other things.

d. Inland Wetland and Water Course Regulations

The Thompson Inland Wetland and Watercourses (“IWW”) Regulations regulate activity within identified wetland or watercourse areas and those upland areas within 100 feet of a wetland or watercourse or within 200 feet of the 10 especially noteworthy wetlands and/or

watercourses in Thompson, as identified on the Town's Wetland Inventory Map. Four (4) copies of the Thompson IWW Regulations were filed, in bulk, with the Council.

Soil and Wetland Scientists with Kleinfelder East, Inc. conducted a field investigation at both the Site A and Site B Facilities. No wetland or watercourse areas were observed or identified within 200 feet of the Site A Facility leased area. The closest wetland areas are located to the northwest across Riverside Road, associated with the French River. The closest wetland area to the Site B Facility is located approximately 122 feet to the southeast of the site compound beneath and adjacent to the existing CL&P electric right-of-way. (See Plan Sheet A-02 included in Attachment 2). This wetland area will not be impacted by site development activity. Copies of the Kleinfelder reports are included in Attachment 13.

In accordance with the Connecticut Soil Erosion Control Guidelines, as established by the Council for Soil and Water Conservation, adequate and appropriate soil erosion and sedimentation control measures will be established and maintained throughout the cell site construction period. In addition, Cellco will employ appropriate construction management practices to ensure that no pollutants would be discharged to any nearby watercourse or wetland areas or to area groundwater during the construction process.

According to the Federal Emergency Management Agency Flood Insurance Rate Map, Community Panel Number 0901170012B (effective November 1, 1984), the Site A Facility would not be located in flood zone C, an area of minimal flooding.

According to the Federal Emergency Management Agency Flood Insurance Rate Map, Community Panel Number 0901170012B (effective November 1, 1984), the Site B Facility would not be located in flood zone C, an area of minimal flooding.

5. Local Input

Section 16-50I(e) of the Connecticut General Statutes, as amended, requires local input on matters before the Council. MCF and Cellco commenced the Council's application process with the filing of a technical report with the Thompson First Selectman, Lawrence Groh, Jr. on December 7, 2007. Copies of the Thompson 2 technical report were filed in bulk with this Application.

6. Consultations With State and Federal Officials

Attachment 12 and Section III.D. of the Application describe MCF's and CHA's consultations with state and federal officials regarding Cellco's proposed Thompson 2 Facility.

a. Federal Communications Commission

The FCC did not review this particular proposal. As discussed above, FCC approval is not required where the authorized service area is not enlarged.

b. Federal Aviation Administration

As with all of its tower applications, MCF and Cellco have conducted the appropriate air-space analysis for the proposed Thompson 2 Facility to determine if either proposed tower would constitute an obstruction or hazard to air navigation. This analysis has confirmed, pursuant to FAA standards, that neither the Site A or Site B Facility towers would constitute an obstruction or hazard to air navigation and therefore no obstruction marking or lighting would be required. A copy of the Federal Airway & Airspace Summary Report is included in Attachment 14.

c. United States Fish and Wildlife Service

According to the USFWS, telecommunications facilities are not likely to adversely affect any federally-listed or proposed species provided the facility complies with certain evaluation criteria. (See June 2, 2007 letter from Anthony P. Tur, USFWS Endangered Species Specialist,

New England Field Office - Attachment 12). A review of the list of threatened and endangered species locations attached to Mr. Tur's letter confirms that no federally-listed endangered or threatened species are known to occur in Windham County, Connecticut.

d. Connecticut Department of Environmental Protection

(1) Environmental and Geographic Information Center

As discussed above, based on a review of the DEP/NDDDB, the project will not impact any known occurrences of State listed species or significant natural communities.

(2) Bureau of Air Management

Pursuant to R.C.S.A. § 22a-174-3, Cellco's on-site emergency back-up generator proposed as a part of this Application will require the issuance of a permit from the DEP Bureau of Air Management. As proposed, this emergency generator will be run only during the interruption of utility service to the cell site and periodically as required for maintenance purposes. Cellco will obtain the necessary permit prior to installing the generator at the Thompson 2 Facility.

e. Connecticut State Historic Preservation Officer

As discussed above, Attachment 12 also includes the SHPO's determination that the Site A or Site B Facilities will have no effect on historic, architectural or archeological resources listed on or eligible for the National Register of Historic Places.

E. Estimated Cost and Schedule

1. Overall Estimated Costs

The total estimated cost of construction of the proposed Site A Facility is \$745,000. This estimate includes:

- | | | |
|-----|------------------------------------------------|-----------|
| (1) | Cell site radio equipment of approximately | \$450,000 |
| (2) | Tower, coax and antenna costs of approximately | 150,000 |

(3)	Power systems costs of approximately	20,000
(4)	Equipment building costs of approximately	50,000
(5)	Miscellaneous costs (including site preparation and installation) of approximately	75,000

The total estimated cost of construction of the proposed Site B Facility is \$780,000. This estimate includes:

(1)	Cell site radio equipment of approximately	\$450,000
(2)	Tower, coax and antenna costs of approximately	150,000
(3)	Power systems costs of approximately	20,000
(4)	Equipment building costs of approximately	50,000
(5)	Miscellaneous costs (including site preparation and installation) of approximately	110,000

2. Overall Scheduling

Site preparation and engineering would commence following Council approval of Cellco’s Development and Maintenance (“D&M”) Plan and are expected to be completed within two to four weeks. Due to the delivery schedules of the manufacturers, installation of the building and installation of the tower are expected to take an additional two weeks. Equipment installation is expected to take an additional two weeks after installation of the building and installation of the tower. Cell site integration and system testing is expected to require two weeks after equipment installation.

IV. CONCLUSION

Based on the facts contained in this Application, the Applicant submits that the establishment of the Thompson 2 Facility, at either Site A or Site B will not have any substantial

adverse environmental effects. A public need exists for high quality mobile and portable wireless service in the Town of Thompson in Windham County, as determined by the FCC and the United States Congress, and a competitive framework for providing such service has been established by the FCC and the Telecommunications Act of 1996. Cellco submits that the public need far outweighs any possible environmental effects resulting from the construction of the proposed cell site. Moreover, the cell site proposed in this Application will help to provide a level of service in the area that is commensurate with the public demand currently and in the foreseeable future.

WHEREFORE, Cellco respectfully requests that the Council grant this Application for a Certificate of Environmental Compatibility and Public Need for the proposed Thompson 2 Facility.

Respectfully submitted,

MCF COMMUNICATIONS bg, INC.
AND
CELLCO PARTNERSHIP D/B/A VERIZON
WIRELESS

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