

CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS

# Connecticut Siting Council

---

APPLICATION OF CELLCO PARTNERSHIP  
D/B/A VERIZON WIRELESS

TOWN OF WOODSTOCK

WOODSTOCK NORTHWEST FACILITY

DOCKET NO. \_\_\_\_\_  
OCTOBER 26, 2007



## TABLE OF CONTENTS

EXECUTIVE SUMMARY .....	i
SITE LOCATION MAP .....	ii
AERIAL PHOTO .....	iii
I. INTRODUCTION .....	1
A. Authority and Purpose .....	1
B. The Applicant .....	4
C. Application Fee.....	5
II. SERVICE AND NOTICE REQUIRED BY C.G.S. SECTION 16-50/(b).....	5
III. REQUIRED INFORMATION: PROPOSED WIRELESS FACILITY .....	6
A. General Information.....	6
B. Public Need and System Design .....	8
1. Public Need .....	8
2. System Design and Equipment .....	8
a. System Design .....	8
b. Cellular System Equipment.....	9
3. Technological Alternatives .....	10
C. Site Selection and Tower Sharing .....	10
1. Cell Site Selection .....	10
2. Tower Sharing .....	11
D. Cell Site Information .....	11
1. Site Facilities .....	11
2. Overall Costs and Benefits.....	12
3. Environmental Compatibility .....	13
a. Primary Facility Impact is Visual .....	13
b. Environmental Reviews and Agency Comments .....	14
c. Non-Ionizing Radio Frequency Radiation .....	15
d. Other Environmental Issues .....	15
4. Consistency with Local Land Use Controls .....	16
a. Planned and Existing Land Uses.....	16
b. Plan of Conservation and Development.....	16
c. Zoning Regulations.....	16
d. Inland Wetland and Water Course Regulations.....	17

5.	Local Input.....	17
6.	Consultations With State and Federal Officials .....	18
	a. Federal Communications Commission .....	18
	b. Federal Aviation Administration.....	19
	c. United States Fish and Wildlife Service .....	19
	d. Connecticut Department of Environmental Protection Bureau of Air Management.....	19
	e. Connecticut State Historic Preservation Officer.....	20
E.	Estimated Cost and Schedule .....	20
	1. Overall Estimated Costs.....	20
	2. Overall Scheduling.....	20

IV.	CONCLUSION.....	21
-----	-----------------	----

## LIST OF ATTACHMENTS

1. Woodstock Northwest Facility – Factual Summary and Project Plans
2. Connecticut Siting Council Application Guide
3. Certificate of Service of Application on Government Officials and List of Officials Served
4. Legal Notice in the *Norwich Bulletin*
5. Notice to Landowners; List of Abutting Landowners; Certificate of Service
6. Federal Communications Commission Authorization
7. Coverage Maps – Location of Proposed and Surrounding Cell Sites
8. Antenna and Equipment Specifications
9. Site Search Summary
10. Visual Impact Evaluation Report
11. Environmental Reviews/State Agency Comments
12. Wetland Impact Report and Soils Report
13. Federal Airways & Airspace Summary Report
14. Lease Agreement between Cellco Partnership and E. Michael Walsh and Sandra M. Walsh

## EXECUTIVE SUMMARY

Cellco Partnership d/b/a Verizon Wireless (“Cellco”) proposes to construct a telecommunications tower and related facility on an approximately 53.6-acre wooded parcel located north of Old Turnpike Road and east of Route 198 in the Town of Woodstock, Connecticut (the “Woodstock NW Facility”). The proposed Woodstock NW Facility will provide much needed coverage in the Town of Woodstock, particularly along the Routes 198, 197 and 171, as well as local roads in the area.

At this site Cellco intends to construct a 140-foot tall monopole tower. At the top of the tower Cellco will install twelve panel-type antennas (six cellular and six PCS). Cellco would also install a 12' x 30' equipment shelter located near the base of the tower to house its radio equipment and a back-up generator. Access to the Woodstock NW Facility would extend from Route 198 over a 12-foot wide gravel driveway, a distance of approximately 1,776 feet to the cell site. The access driveway will follow an existing woods road for a significant portion of its length. This woods road will be improved as a part of the telecommunications facility proposal.





Base Map Source: USGS 7.5 Minute Topographic Quadrangle  
 Map, Eastford, Connecticut (1983)  
 North: Ashford



Quadrangle Location

Vanasse Hangen Brustlin, Inc.

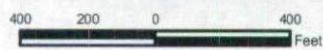
USGS Topographic Map  
 Proposed Verizon Wireless  
 Telecommunications Facility  
 Woodstock Northwest  
 Route 198  
 Woodstock, Connecticut







Base Map Source: 2006 Color Aerial Photograph with 1 foot Resolution



Quadrangle Location

Vanasse Hangen Brustlin, Inc.

Aerial Photograph  
Proposed Verizon Wireless  
Telecommunications Facility  
Woodstock Northwest  
Route 198  
Woodstock, Connecticut





**STATE OF CONNECTICUT  
CONNECTICUT SITING COUNCIL**

<b>IN RE:</b>	:	
	:	
<b>APPLICATION OF CELLCO</b>	:	<b>DOCKET NO. _____</b>
<b>PARTNERSHIP D/B/A VERIZON</b>	:	
<b>WIRELESS FOR A CERTIFICATE OF</b>	:	
<b>ENVIRONMENTAL COMPATIBILITY</b>	:	
<b>AND PUBLIC NEED FOR THE</b>	:	
<b>CONSTRUCTION, MAINTENANCE AND</b>	:	
<b>OPERATION OF A WIRELESS</b>	:	
<b>TELECOMMUNICATIONS FACILITY</b>	:	
<b>OFF ROUTE 198 IN WOODSTOCK,</b>	:	
<b>CONNECTICUT</b>	:	<b>OCTOBER 26, 2007</b>

**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 Cellco Partnership d/b/a Verizon Wireless (“Cellco” or 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 that the Connecticut Siting Council (“Council”) issue Certificate of Environmental Compatibility and Public Need (“Certificate”) for the construction, maintenance, and operation of a wireless telecommunications facility, in the northwesterly portion of the Town of Woodstock, Connecticut (the “Woodstock NW Facility”). The proposed Woodstock NW Facility would provide for much needed coverage along State



Routes 198, 197 and 171, as well as local roads in the northwest portion of Woodstock. Cellco currently offers little or no wireless coverage at all in the northwest portion of Woodstock. What little coverage Cellco has in the area comes from its existing Woodstock cell site; Cellco antennas at the 134-foot level on a 150-foot lattice tower at 87 West Quasset Road in Woodstock (the “Woodstock” cell site). The proposed Woodstock NW Facility will provide reliable service to a 3.3 mile portion of Route 198, a 4.7 mile portion of Route 197 and a 2.5 mile portion of Route 171 at cellular frequencies and a 2.4 mile portion of Route 198 and a 2.8 mile portion of Route 197 at PCS frequencies. PCS coverage from the Woodstock NW Facility will not reach Route 171. The Woodstock NW Facility will provide coverage to an overall area of 10.2 square miles at cellular frequencies and 3.5 square miles at PCS frequencies.

The Woodstock NW Facility would be located within a 100’ x 100’ leased area in the central portion of a 53.6-acre parcel located north of Old Turnpike Road and east of Route 198 in Woodstock (the “Property”).<sup>1</sup> This site is located in the Town’s Community District zone<sup>2</sup> and is a vacant wooded parcel. Cellco proposes to construct a 140-foot self-supporting monopole telecommunications tower at this site. At the top of the tower, Cellco would install a total of twelve (12) panel-type antennas (six cellular and six PCS) with their centerline at 137 feet above ground level (“AGL”). Antennas would be attached to either a triangular antenna platform, low profile antenna platform or T-Arms. The top of Cellco’s antennas will not extend above the height of the tower. Equipment associated with the antennas would be located in a 12’ x 30’ shelter installed near the base of the tower. Access to the cell site would extend from Route 198

---

<sup>1</sup> The owners of the Property, Michael and Sandra Walsh own several adjacent parcels including their residential property at 129 Old Turnpike Road. The proposed tower site, however, is located on a separate 53.6-acre parcel with street frontage and direct access to Route 198.

over a gravel access driveway, a distance of approximately 1,776 feet to the cell site. The gravel driveway will follow an existing woods road on the Property from Route 198 to the cell site. Widening, regrading and resurfacing of the access driveway will be required to accommodate Cellco's needs. Both the tower and leased area will be designed to accommodate additional carriers. Prior to filing this Application, Cellco contacted representatives for Sprint/Nextel, T-Mobile and AT&T and alerted them of Cellco's plans to file this application. As of the date of the filing of this Application, AT&T and T-Mobile responded that both companies have a need for a facility in northwest Woodstock and would be interested in sharing the Cellco tower. Given current constraints on the T-Mobile and AT&T build programs, however, neither could commit, at this time, to share the Woodstock NW Facility. Sprint Nextel has not responded to Cellco regarding this site.

The equipment shelter would house Cellco's radio and related equipment, including (a) receiving, transmitting, switching, processing and performance monitoring equipment; and (b) automatic heating and cooling equipment. A diesel-fueled generator would also be installed within a portion of the equipment building for use during power outages and periodically for maintenance purposes. The 210 gallon diesel fuel tank is included as a part of the generator unit. The fuel tank is double-walled and maintains a leak detection monitoring system.

The tower and equipment shelter would be enclosed by an 8-foot high security fence and gate, which would be screened. 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,

---

<sup>2</sup> With the exception of designated industrial areas located in the southerly portion of the Town, all areas of the Town of Woodstock maintain the same Community District zoning designation.



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 Attachment 1 is a factual summary and project plans for the proposed Woodstock NW Facility. 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 2. 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**

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:

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 Woodstock NW Facility would be less than \$5,000,000. Therefore, 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 16-50(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 16-50(b). A certificate of service, along with a list of the parties served with a copy of the Application, is included as Attachment 3.

Notice of Cellco's intent to submit this Application was published on October 23 and 24, 2007, by Cellco in the *Norwich Bulletin* pursuant to C.G.S. Section 16-50(b). A copy of the published legal notice is included as Attachment 4. A copy of the publisher's affidavit or certificate of publication will be submitted to the Council as soon as it is available.



Attachment 5 contains a certification that notices were sent to each person appearing of record as an owner of property that may be considered to abut the Property in accordance with C.G.S. Section 16-50(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 at the Property.

#### **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 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 Woodstock NW 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 sites proposed in

this Application have 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 wireless 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 6 is a copy of the FCC's authorization issued to Cellco for its wireless service 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 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 Personal Communication System (“PCS”) and cellular service. 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 provides very limited service in Woodstock provided by Cellco’s existing cell site at 87 West Quasset Road. Cellco recently received Council approval to share the existing tower at 215 Coatney Hill Road (EM-VER-169-070831). Coverage from both the West Quasset Road and Coatney Hill Road sites is shown as existing and approved coverage on the plots included behind Attachment 7.

Even with these two cell site locations, Cellco experiences significant coverage gap along the major roads in northwest Woodstock, including Routes 198, 197 and 171.

**2. System Design and Equipment**

**a. System Design**

Cellco’s wireless system in general and the proposed Woodstock NW Facility, in particular, have been designed and developed to allow Cellco to achieve and to maintain high quality, reliable wireless 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.

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 8.

### **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 here is to locate its facility 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 the proposed Woodstock NW Facility will satisfy this goal and is necessary to resolve existing significant coverage problems and to provide high-quality reliable service along Routes 198, 197 and 171, as well as local roads in northwest Woodstock.

The methodology of cell site selection for Cellco's wireless system generally limits the search for possible locations to a specific area on the overall grid for the area. A list of existing towers or other non-tower structures considered is included in Attachment 9. Cellco currently shares or plans to share the existing towers in the immediate area, including those sites identified on the coverage maps as the Woodstock and Union West cell sites, recently approved Coatney Hill cell site, and proposed Woodstock North cell site. (See Attachment 7). None of these existing or

proposed sites can resolve the coverage problems along Routes 198, 197 or 171 in northwest Woodstock. Cellco also regularly investigates the use of existing, non-tower structures in an area as an alternative to building a new tower. No existing non-tower structures of suitable height exist in northwest Woodstock. The site search summary together with the site information contained in Attachment 1 support Cellco's position that the site selected represents the most feasible alternative of the sites investigated.

## **2. Tower Sharing**

Cellco will design the Woodstock NW Facility tower so that it could be shared by a minimum of four carriers. The proposed facility compound was also designed to accommodate the equipment of other carriers. This type of tower sharing arrangement would reduce, if not eliminate, the need for these other carriers to develop a separate tower in this same area in the future. As mentioned above, both T-Mobile and AT&T are interested in the Woodstock NW Facility, but, due to limitations in their build programs, neither carrier is able to participate in this proceeding nor commit to share the proposed tower.

The Town of Woodstock has asked Cellco to reserve space on the tower for its municipal service and emergency service antennas and Cellco has agreed to do so at no cost to the Town. Cellco has also agreed to make ground space in the facility compound available to the Town.

## **D. Cell Site Information**

### **1. Site Facilities**

At the Woodstock NW Facility, Cellco would construct a new 140-foot tall tower and install twelve (12) panel-type directional antennas at the top of the tower. The top of Cellco's antennas would not extend above the top of the tower. Cellco would install a 12' x 30' single-story equipment shelter near the base of the tower to house Cellco's receiving, transmitting, switching,

processing and performance monitoring equipment and the required heating and cooling equipment. A diesel-fueled back-up generator would be installed within a segregated room in Cellco's 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, which would be screened by landscaping. (See Attachment 1).

The 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, Cellco 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, reliable wireless service in the northwest Woodstock area.<sup>3</sup> The Woodstock NW 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 Cellco for development of the proposed cell site are set forth in Section III.E. of the Application.

---

<sup>3</sup> 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.

**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 Woodstock NW Facility, 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 Woodstock NW Facility would 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. Similarly, visual impact of a tower facility can be further reduced through the proper use of alternative tower structures; so-called “stealth installations.” Where appropriate, telecommunications towers camouflaged as trees, flagpoles, and bell towers, to name a few, can help to further reduce visual impacts associated with these structures. While not proposed in this Application, the Council may determine that some type of stealth installation may be appropriate at this site. Attachment 10 contains a detailed Visual Resource Evaluation Report, prepared by VHB, Inc. (the “VHB Report”) that assesses the visual impact of the proposed tower and includes photosimulations of the tower at this site for the Council’s consideration. Overall, VHB concludes



that areas where the tower would be visible above the tree canopy are limited to approximately 56 acres, or less than 1% of the 8,042-acre study area. A majority of this visibility (34 of the 56 acres) occurs over open water on Black Pond to the southeast of the tower location. Seasonal views of the tower are limited to an additional 78 acres of the study area.

There are no residences within 1,000 feet of the Woodstock NW Facility. The closest residence is located approximately 1,100 feet to the west.

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

**b. Environmental Reviews and 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, Energy Division. In addition to the Council's solicitation of comments, Cellco, as a part of its National Environmental Policy Act ("NEPA") Checklist, solicits comments on the proposed facility from the U.S. Department of the Interior, Fish and Wildlife Service ("USFWS"), Environmental and Geographic Information Center of the Connecticut Department of Environmental Protection ("DEP") and the Connecticut Historical Commission, State Historic Preservation Officer ("SHPO"). USFWS and DEP comments regarding impacts on known populations of Federal or State Endangered, Threatened or Special Concern Species occurring at the proposed site are included in Attachment 11. The SHPO has received Cellco's request for review of the proposed site for potential impact on historic, architectural or archeological resources listed on or eligible for the National Register of

Historic Places Connecticut's cultural heritage. A copy of the SHPO's response will be forwarded to the Council as soon as it is received.

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**

The FCC has adopted a standard for exposure to Radio Frequency ("RF") emissions from telecommunications facilities like the one proposed in this Application. 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 would be 8.67% of the Standard at the Woodstock NW Facility.

**d. Other Environmental Issues**

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

Based on agency comments received and field investigations by Cellco's project team, Cellco 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.

#### **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 Woodstock NW Facility would be located on a 53.6-acre parcel owned by Michael and Sandra Walsh. The Property is in the Town's Community District zone. The 53.6-acre Property is vacant land and heavily-wooded. The Property is surrounded by other vacant wooded parcels, and low-density residential land uses along Old Turnpike Road and Route 198.

##### **b. Plan of Conservation and Development**

The 2002 Town of Woodstock Plan of Conservation and Development (the "Plan"), does not specifically identify telecommunications towers or facilities as a land use consistent or inconsistent with the general planning or conservation policies of the Town of Woodstock.

##### **c. Zoning Regulations**

According to Article 1, Section 4 of the Town Zoning Regulations ("Zoning Regulations"), the Woodstock NW Facility is located in an area designated "Community District". Pursuant to Article 1, Section 17 of the Zoning Regulations, wireless communications facilities are permitted in the Community District zone subject to Special Permit and Site Plan approval. The Woodstock NW Facility will comply with the General Standards set forth in Article 1, Section 17.3 of the Zoning Regulations. For example, the tower is the minimum height required; the tower's entire fall zone remains within the owners 53.6-acre subject parcel; no

lights or signage is proposed; and the tower will be designed to accommodate a minimum of three additional carriers.

**d. Inland Wetland and Water Course Regulations**

According to site surveys and a wetlands delineation report prepared by Dean Gustafson of VHB, Inc., the proposed cell site compound location does not contain any wetland areas that would be impacted by the proposed development activity. The existing woods road presently crosses through a portion of an on-site wetland area and an intermittent watercourse, approximately 480 feet east of Route 198. The access driveway improvements, associated with the Cellco proposal will require an upgrade to this existing wetland crossing, including the replacement of the existing 12-inch culvert with two 24-inch culverts and the placement of additional fill to provide a stable road base. (See Wetlands Inspection Report – Attachment 12).

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 0901200015B (November 1, 1984), the Woodstock NW Facility is located in 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. On July 9, 2007, Cellco representatives met with Town of Woodstock



First Selectwoman Margaret Wholean and Town Planner and Zoning Enforcement Officer Delia Fey to discuss the proposal. First Selectman Wholean received copies of technical information summarizing Cellco's plans to establish a telecommunications facility in Woodstock.<sup>4</sup> On August 13, 2007, Cellco appeared at a public meeting and formally presented the Woodstock NW Facility proposal. Notice of this meeting was sent to abutting landowners and published on August 3<sup>rd</sup> and 10<sup>th</sup> in the *Woodstock Villager*. The meeting was attended by the First Selectwoman, Chair of the Planning and Zoning Commission, the Town Planner and approximately 25 members of the general public. Following this meeting Cellco was contacted by Josh Bottone, Chief for the Bungay Fire Brigade ("BFB") located in the westerly portion of Woodstock. Chief Bottone confirmed that he may be interested in installing emergency antennas on the proposed tower at some point in the future, but was more interested in the improved cell phone service the facility would provide. According to Chief Bottone, the BFB has become very dependant on cell phone communications in its role as an emergency service provider.

**6. Consultations With State and Federal Officials**

Attachment 10 and Section III.D. of the Application describe Cellco's consultations with state and federal officials regarding the proposed Woodstock NW 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.

---

<sup>4</sup> The Technical Report submitted to the Town proposes the construction of a 150-foot tower at the Site. Since that time, Cellco has pursued co-location opportunities on adjacent tower sites to the north off Route 198 and east off Coatney Hill Road. Following a more detailed evaluation of these adjacent sites, Cellco was able to reduce its proposed tower height to 140 feet.

**b. Federal Aviation Administration**

As with all of its tower applications, Cellco has conducted the appropriate air-space analysis for the Woodstock NW Facility to determine if the proposed tower would constitute an obstruction or hazard to air navigation.<sup>5</sup> Cellco's analysis and a subsequent analysis from Aviation Systems, Inc. has determined, pursuant to FAA standards, that a structure taller than 106 feet at this location would need to be filed with the FAA. According to Aviation Systems, Inc., a 140-foot structure, as proposed in this Application should receive "routine [FAA] approval". A copy of the Federal Airway & Airspace Summary Report and the Aviation Systems, Inc. Report are included in Attachment 13. In accordance with these reports, notification of the proposed site development activity was filed with the FAA. Comments from the FAA will be forwarded to the Council when received.

**c. United States Fish and Wildlife Service**

According to the United States Department of the Interior, Fish and Wildlife Service, no federally-listed or proposed, threatened or endangered species or critical habitat under its jurisdiction are known to occur at the Property. (See Attachment 11).

**d. Connecticut Department of Environmental Protection Bureau of Air Management**

Pursuant to R.C.S.A. § 22a-174-3, the 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 facility.

---

<sup>5</sup> At the time the original air-space analysis was completed the proposed overall structure height was 153 feet. The Aviation Systems, Inc. report references the revised structure height of 140 feet.

e. **Connecticut State Historic Preservation Officer**

As discussed above, a request for review has been submitted to the SHPO requesting determination on the effect the proposed Woodstock NW Facility may have on historic, architectural, or archeological resources listed on or eligible for the National Register of Historic Places. A copy of the SHPO's response will be forwarded to the Council upon receipt.

E. **Estimated Cost and Schedule**

1. **Overall Estimated Costs**

The total estimated cost of construction of the proposed Woodstock NW Facility is approximately Nine Hundred Fifty Thousand Dollars \$950,000.00.

This estimate includes:

(1)	Cell site radio equipment of approximately	\$ 450,000
(2)	Tower, coax and antenna costs of approximately	200,000
(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	230,000

2. **Overall Scheduling**

Site preparation and engineering would commence following Council approval of Celco'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, Cellco submits that the establishment of the Woodstock NW Facility will not have any substantial adverse environmental effects. A public need exists for high quality reliable wireless service 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 Woodstock NW Facility. Moreover, the Woodstock NW Facility 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 Woodstock NW Facility.

Respectfully submitted,

CELLCO PARTNERSHIP D/B/A VERIZON  
WIRELESS

By: 

Kenneth C. Baldwin, Esq.  
Robinson & Cole LLP  
280 Trumbull Street  
Hartford, Connecticut 06103-3597  
(860) 275-8200  
Attorneys for the Applicant