Connecticut Siting Council

APPLICATION OF CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS

TOWN OF BRANFORD

BRANFORD SOUTH FACILITY

DOCKET NO.

DECEMBER 10, 2010



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EXECUTIVE SUMMARY

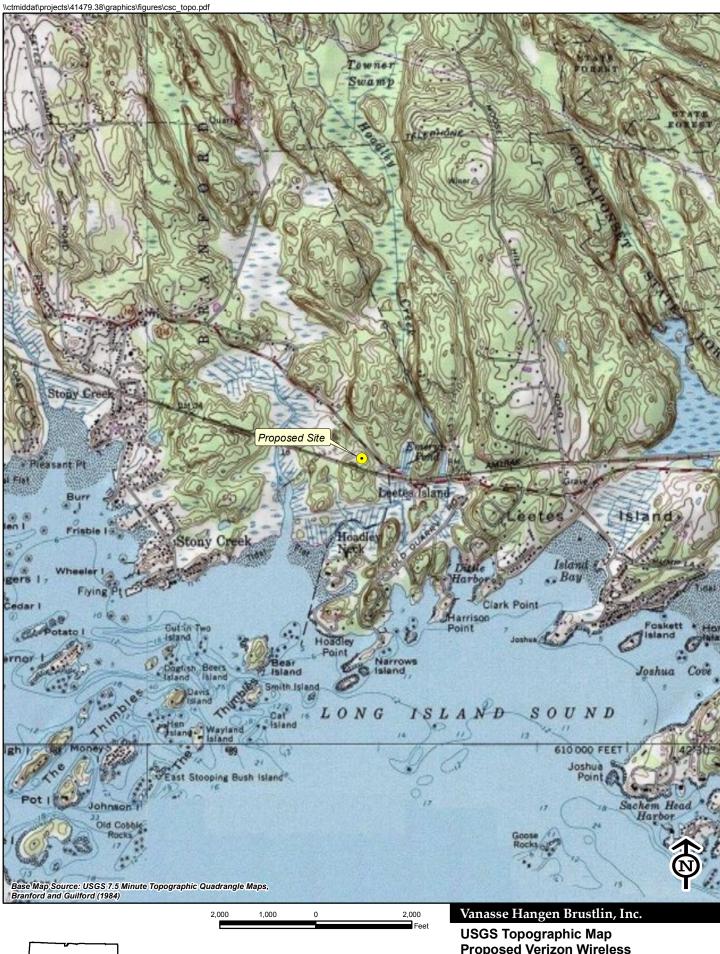
Cellco Partnership d/b/a Verizon Wireless ("Cellco" or "Applicant"), proposes to construct a wireless telecommunications facility in the southeast portion of the Town of Branford (the "Branford South Facility"). The Branford South Facility will allow Cellco to provide wireless services along portions of Route 146, the Amtrak rail line and local roads, as well as residential, commercial and recreational land uses in the area. Cellco's existing Guilford South cell site, an existing water tank installation off Sachems Head Road in Guilford and proposed Branford West cell site, a recently approved T-Mobile tower at 123 Pine Orchard Road in Branford, cannot provide service to the area Cellco intends to serve with its Branford South Facility.

The Branford South Facility would be located on an approximately 19 acre parcel at 723 Leetes Island Road in Branford. At this site, Cellco proposes the construction of a telecommunications tower disguised as a rustic-style water tank. The water tank structure will be designed to support antennas of T-Mobile at the 80-foot level; Cellco at the 90-foot level; and AT&T at the 100-foot level. The pitched roof of the simulated tank will extend to an overall height of 109 feet. The simulated tank wall will be made of an RF transparent material.

Cellco will install a total of fifteen (15) panel-type antennas inside the water tank structure. Radio equipment associated with Cellco's antennas and a diesel-fueled back-up generator will be located in a 12' x 24' shelter. Cellco's shelter will be located within a portion of an L-shaped shed-like structure designed to house and screen all ground-mounted equipment. Space inside the shelter would also be made available to T-Mobile and AT&T. The tower and equipment shelter will be located within a 57' x 57' fenced compound. Vehicle access to the

facility compound would extend from Leetes Island Road a distance of approximately 375 feet.

Utilities will extend underground from existing service along Leetes Island Road.





Quadrangle Location

USGS Topographic Map
Proposed Verizon Wireless
Telecommunications Facility
Branford South
723 Leetes Island Road
Branford, Connecticut



Quadrangle Location

Aerial Photograph Proposed Verizon Wireless Telecommunications Facility Branford South 723 Leetes Island Road Branford, Connecticut

STATE OF CONNECTICUT CONNECTICUT SITING COUNCIL

IN RE:	•

APPLICATION OF CELLCO PARTNERSHIP : DOCKET NO. ____

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 AT 723 LEETES ISLAND ROAD, BRANFORD,

CONNECTICUT : DECEMBER 10, 2010

APPLICATION FOR CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED

I. <u>INTRODUCTION</u>

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 "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 a Certificate of Environmental Compatibility and Public Need ("Certificate") for the construction, maintenance, and operation of a wireless telecommunications tower disguised as a rustic-style water tank at 723 Leetes Island Road in the southeast portion of the Town of Branford, Connecticut (the "Branford South Facility"). The proposed Branford South Facility would provide reliable wireless telecommunications services along portions of Route

146, the Amtrak rail line and local roads, as well as residential, commercial and recreational areas in southeast Branford and southwest Guilford. These gaps in reliable service exist at both cellular and PCS frequencies between Cellco's existing Guilford South facility and its proposed Branford West facility.¹

Cellco currently maintains three (3) wireless facilities within four (4) miles of the proposed Branford South Facility, identified as its Guilford South, Guilford 2 and Branford 3 cell sites. Cellco's existing Guilford South facility consists of antennas located at the 85-foot level of a 88-foot water tank off Sachems Head Road in Guilford. The Guilford South facility is located approximately two miles east of the proposed Branford South Facility. Cellco's existing Guilford 2 cell site consists of antennas located at the 120-foot level of an existing 150-foot tower at 1919 Boston Post Road in Guilford. The Guilford 2 facility is located approximately 2.8 miles northeast of the Branford South Facility. Cellco's existing Branford 3 cell site consists of antennas at the 116-foot level of an existing 150-foot tower at 21 Acorn Road in Branford. The Branford 3 facility is located approximately 2.5 miles northwest of the Branford South Facility. Cellco's proposed Branford West facility will consist of antennas installed at the 92-foot level on the recently approved 125-foot tower at 123 Pine Orchard Road in Branford. The Branford West facility is located approximately 3.3 miles to the west of the Branford South Facility.

The proposed Branford South Facility would be located on an approximately 19 acre parcel at 723 Leetes Island Road in Branford. At this site, Cellco would construct a telecommunications tower disguised as a rustic-style water tank. The top of the water tank's

¹ Cellco intends to install antennas at the 92-foot level on the recently approved T-Mobile tower at 123 Pine Orchard Road in Branford. This T-Mobile tower was approved in Council Docket No. 386 on February 25, 2010.

pitched roof will extend to a height of 109 feet above ground level.² Cellco would install a total of fifteen (15) panel-type antennas (six (6) cellular (850 MHz) antennas; six (6) PCS (1900 MHz) antennas and three (3) LTE (700 MHz) antennas) at a centerline height of 90 feet above ground level ("AGL"). T-Mobile would install its antennas at the 80-foot level and AT&T would install its antennas at the 100-foot level inside the water tank structure. Both T-Mobile and AT&T intend to intervene in this docket and present the Council with details of each carriers' need and proposed installation.

Equipment associated with Cellco's antennas and a diesel-fueled back-up generator would be located in a 12' x 24' shelter. Cellco's shelter, together with the equipment of other wireless carries sharing the Branford South Facility, will be installed in an L-shaped multi-carrier shed-like structure located near the base of the water tank. All facility improvements will be located within a 57' x 57' fenced compound. Vehicular access to the facility would extend from Leetes Island Road over a gravel driveway, a distance of approximately 375 feet. Utilities will extend underground from existing service along Leetes Island Road along the gravel access driveway to the site compound.

Cellco's Branford South Facility will provide reliable wireless service to a 2.4 mile portion of Route 146, a 2.3 mile portion of the Amtrak rail line, and an overall area of 46.9 square miles at 850 MHz frequencies; a 1.5 mile portion of Route 146, a 1.5 mile portion of the Amtrak rail line, and an overall area of 7.1 square miles at 1900 MHz frequencies; and a 2.5 mile portion of Route 146, a 2.5 mile portion of the Amtrak rail line, and an overall area of 50.8

² As discussed in more detail in Section III.D.6.e below, the Connecticut State Historic Preservation Officer determined that the Branford South Facility would have "no adverse effect" on the Route 146 National Register Historic District as long as the water tank structure does not exceed 109 feet in height.

square miles at 700 MHz frequencies. The larger normal overall coverage footprint at 850 MHz and 700 MHz is directly attributable to that portion of the coverage area that extends over Long Island Sound.

The proposed facility is located in the Town's R-5 (Residence) zone district. The water tank structure and facility compound have been designed to accommodate Cellco, AT&T and T-Mobile antennas and associated equipment. Cellco is proposing to install a single multi-carrier shed-like structure to house its radio and related equipment, including (a) receiving, transmitting, switching, processing and performance monitoring equipment; and (b) automatic heating and cooling equipment. Cellco will also install a diesel-fueled back-up generator in a segregated generator room within its equipment shelter, for use during power outages and periodically for maintenance purposes. The multi-carrier shelter has been designed to blend in with the residential/agricultural character of the area and will provide some screening near the base of the water tank.

The water tank tower and equipment shelter would be enclosed by an 8-foot high security fence and gate. Cellco's equipment room 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. Cellco's 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 <u>Attachment 1</u>, is a factual summary and project plans for the proposed Branford South Facility. This summary, along with the other attachments submitted as

part of this Application, contain all of the site-specific information required by statute and the regulations of the Council.

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). 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. Operation of the wireless telecommunications systems and related activities are Cellco's sole business in the State of Connecticut.

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:

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 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 \$1,250 accompanies this Application in the form of a check payable to the Council.

II. SERVICE AND NOTICE REQUIRED BY C.G.S. SECTION 16-50*l*(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*l*(b). A certificate of service, along with a list of the parties served with a copy of the Application, is included as Attachment 2.

Notice of Cellco's intent to submit this Application was published on December 6 and December 7, 2010, by Cellco in the *New Haven Register* pursuant to C.G.S. Section 16-50*l*(b). A copy of the published legal notice is included as <u>Attachment 3</u>. An Affidavit of Publication will be submitted as soon as it is available.

Attachment 4 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 land on which the facility would be located in accordance with C.G.S. Section 16-50<u>l</u>(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 facility proposed to be installed in Branford.

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.

The proposed Branford South Facility would be part of Cellco's 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 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.

Recognizing the public safety benefits that enhanced wireless telecommunications networks can provide, the United States, Congress also enacted the Wireless Communications and Public Safety Act of 1999 to promote and enhance public safety by making 911 the universal emergency assistance number, furthering the deployment of wireless 911 capabilities and further encouraging the construction and operation of seamless, ubiquitous and reliable wireless networks. In 2004, Congress enacted the Enhanced 911 Act for the specific purpose of enhancing and promoting Homeland Security, public safety and citizen activated emergency response capabilities. These goals and other related responsibilities imposed on wireless service providers can only be satisfied if Cellco maintains a ubiquitous and reliable wireless network.

Included as <u>Attachment 5</u> is a copy of the FCC's authorization issued to Cellco for its wireless services in New Haven County, 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 Branford South Facility 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 New Haven County, Cellco holds an FCC License to provide wireless services in the 850 MHz, 1900 MHz and 700 MHz frequency ranges. 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 coverage in portions of southeast Branford and the surrounding areas from its existing cell sites in Branford and Guilford. Plots showing coverage from Cellco's existing facilities and proposed Branford South Facility alone and together with the coverage from the proposed Branford South Facility are included as Attachment 6.

2. System Design and Equipment

a. System Design

Cellco's wireless system in general and the proposed Branford South 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 emitted.

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 <u>Attachment 7</u>.

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. <u>Cell Site Selection</u>

The goal in selecting cell sites such as the one proposed in southeast Branford is to locate a facility in such a manner as to allow it to build and to operate a high-quality wireless system with the least environmental impact. The Applicant has determined that the proposed facility design and location will satisfy this goal and is necessary to resolve existing wireless service problems and to provide high-quality reliable service primarily along portions of Route 146, the Amtrak rail line and local roads as well as residential, commercial and recreational land uses in southeast Branford and portions of southwest Guilford.

The methodology of cell site selection for a wireless system generally limits the search for possible locations to specific locations on the overall grid for the area. A list of existing towers or other non-tower structures considered is included in <u>Attachment 8</u>. Cellco currently shares the existing towers, utilizes existing structures and plans to share a recently approved tower in the area.

Each of these sites are identified on the coverage maps included in <u>Attachment 6</u>. Cellco cannot satisfy its coverage objectives for its Branford South search area from these existing and proposed cell sites. Cellco also regularly investigates the use of existing, non-tower structures in an area, when available, as an alternative to building a new tower. No existing non-tower structures of suitable height exist in southeast Branford. Cellco initiated a site search process in southeast Branford in March, 2009.

Cellco's original Branford South search area was located to the west of the current Branford South Facility location. The original Branford South search area was designed to connect with a established Guilford South search area, which was also originally located to the west of the now existing Guilford South facility. In late 2009, Cellco identified the existing Sachems Head Road water tank as a potential cell site location that would fulfill most of its need for service in its Guilford South search area. At about the same time, T-Mobile was pursuing its Siting Council approval for a tower site at 123 Pine Orchard Road in Branford. The use of the existing water tank structure, and the introduction of a new tower site at 123 Pine Orchard Road, resulted in a shift, of the Guilford South and Branford South search areas to the east.

The Branford South Facility would provide coverage to the area between the Guilford South water tank location and the proposed T-Mobile tower site at 123 Pine Orchard Road, eliminating significant coverage gaps along State Route 146 and portions of the Amtrak rail corridor. 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

The Applicant intends to design and develop the Branford South Facility water tank tower and compound to be shared by Cellco, AT&T and T-Mobile. This type of tower sharing arrangement will reduce, if not eliminate, the need for these other carriers to develop a separate tower in this same area in the future. As of the date of this filing the Town of Branford has not expressed any interest in sharing the proposed structure. As discussed in more detail in Section III.D.6.e below, future efforts to share the Branford South Facility water tank structure may be limited due to conditions imposed by the State Historic Preservation Officer.

D. Cell Site Information

1. Site Facilities

At the proposed cell site, Cellco would construct a 109-foot tall telecommunications tower disguised as a rustic-style water tank. Cellco will install fifteen (15) panel-type directional antennas at the 90-foot level inside the water tank. T-Mobile will install its antennas at the 80-foot level and AT&T will install its antennas at the 100-foot level. (See Project Plans and water tank design drawings included in Attachment 1). Cellco will install its standard 12' x 24' shelter inside a portion of a multi-carrier shed-like structure located near the base of the water tank. Cellco's shelter will house receiving, transmitting, switching, processing and performance monitoring equipment and the required heating and cooling equipment. A diesel-fueled generator would also be installed in a segregated generator room within Cellco's shelter for use during power outages and periodically for maintenance purposes. The tower and multi-carrier equipment shed would be located within a 57' x 57' compound area and surrounded by an 8-foot high security fence and gate. (See Attachment 1).

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, reliable wireless service in portions of southeast Branford and southwest Guilford.³ The Branford South 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 the Applicant 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 proposed

³ 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.

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 Branford South 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 telecommunications facility, 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 facility. Similarly, visual impact of a facility can be further reduced through the proper use of alternative tower structures; so-called "stealth installations" like the rustic-style water tank described in this application. These types of disguised telecommunications structures can help reduce, if not eliminate altogether, visual impacts normally associated with these facilities. Attachment 9 contains Visual Resource Evaluation Report, prepared by VHB, Inc. (the "VHB Report") for the proposed facility. This report includes photosimulations for the Council's review and consideration.

(1) <u>Visibility</u>

According to the VHB Report, areas where the water tank structure would be visible above the tree canopy comprise approximately 1,197 acres or approximately 15% of the 8,042 acre study area. A vast majority (97%) of this area, however, is over portions of Long Island Sound.

Approximately 25 acres of year-round visibility is anticipated over a salt marsh area, to the

northwest of the proposed Branford South Facility. Partial year-round views also extend to select portions of Leetes Island Road to the northwest and to the east of the facility location. Areas where seasonal views are anticipated comprise of approximately 27 additional acres and are generally located in the area immediately surrounding the Branford South Facility. Select portions of two residential properties in the area will have year-round views and seven residential properties will have seasonal views. There are seven (7) residences within 1,000 feet of the Branford South Facility. The closest residence is located at 742-762 Leetes Island Road, approximately 410 feet to the east. This parcel is listed on Cellco's abutting properties list included in Attachment 4 of this Application.

Weather permitting, the Applicant will raise balloons with a diameter of at least three (3) feet at the proposed tower location 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 the 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"). Information on

the USFWS and DEP reviews regarding impacts on known populations of Federal or State Endangered, Threatened or Special Concern Species occurring at the proposed site are included in Attachment 10.

According to the USFWS letter dated January 4, 2010 (the "USFWS letter"), and Dean Gustafson's memorandum dated December 3, 2010, the Roseate Tern, a federally endangered species is known to occur in Branford, Connecticut. In accordance with the USFWS letter, further review may allow applicants to conclude that suitable habitat for a species will not be affected by the proposed telecommunications facility development. Further investigation of the Property was conducted and it was determined that Roseate Tern habitat does not exist at the Branford South Facility location.

In correspondence dated September 9, 2009, the DEP identified the federal and State endangered Roseate Tern and the State special concern species, Maritime Sunflower Borer Moth, as occurring "in the vicinity" of the Property. Upon further investigation, Dean Gustafson determined that the portion of the Property where the Branford South Facility would be constructed is significantly distant from the preferred habitat and would not, therefore, have an adverse effect on the Roseate Tern or Maritime Sunflower Borer Moth. Copies of the DEP correspondence and the related habitat survey are included in Attachment 10.

Also included in <u>Attachment 10</u> is correspondence from the SHPO confirming that the proposed facility will have <u>no adverse effect</u> on the Route 146 National Register Historic District.

The SHPO's determination, however, is limited to a water tank structure with a maximum height of 109 feet, to the top of its pitch roof.

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 asked C-Squared Systems to produce a Calculated Radio Frequency Emissions Report (the "RF Report") for the proposed Branford South Facility according to the methodology prescribed by the FCC Office of Engineering and Technology Bulletin No. 65, Edition 97-01 (August 1997) ("OET Bulletin 65"). As indicated in the report, the highest composite percent of the FCC's maximum permissible exposure (MPE) occurs at a point approximately 527 feet from the base of the water tank tower. The calculations indicate that the maximum percent MPE for Cellco, AT&T and T-Mobile antennas at the site would be 2.47% of the Standard. A copy of the RF Report is included in Attachment 11.

d. Other Environmental Issues

No sanitary facilities are required or proposed as a part of this application. The operations at the Branford South Facility 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, 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, either alone or cumulatively with other effects, is sufficient reason to deny this Application.

4. Consistency with Local Land Use Controls

The Council Application Guide for Community Antenna Television and Telecommunication Facilities, as amended on April, 2010, requires the inclusion of a narrative summary of the project's consistency with the Town's Plan of Conservation and Development (the

"Plan"), Zoning Regulations and Inland Wetlands 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 Branford South Facility would be located on an approximately 19 acre parcel owned by James J. Medlyn. The parcel is zoned Residential 5 (R-5) and is currently used for agricultural purposes by the owner. Cellco is unaware of any plans by the owner to change the existing use of the Property.

b. Branford Plan of Conservation and Development

The Town of Branford 2008 Plan of Conservation & Development (the "Plan"), does not identify telecommunications towers as a land use consistent or inconsistent with the general planning and conservation policies of the Town of Branford. The Plan does, however, identify wireless services as being available in Branford but recognizes that wireless service remains "poor" in some areas of Town. Four (4) copies of the Plan were filed, in bulk, with the Council.

c. Branford Zoning Regulations

According to the Town's Zoning Map, the Property is located in the R-5 zone district.

According to Schedule A of Section 24 of the Branford Zoning Regulations, telecommunications facilities are not permitted in the R-5 zone.

Even though the telecommunications facility described in this application is not permitted in the R-5 zone the facility does satisfy the general purposes of the Town's communications towers, antenna and telecommunications facility regulations. Section 36.12 of the Zoning Regulations describe the Town's desire to (1) accommodate telecommunications facilities while regulating their location and number; (2) minimize any adverse visual effects of these facilities through proper design, siting and screening; (3) encourage the shared or joint use of

telecommunications facilities; and (4) reduce the number of telecommunications facilities needed in the future. Cellco respectfully submits that the Branford South Facility satisfies these general purpose statements in the Branford Zoning Regulations.

According to the Branford zoning map, the Property also lies within the coastal zone boundary. Section 45 of the Branford Zoning Regulations subjects all uses of land, buildings and other structures within the Coastal Management District to coastal site plan review standards. Even though these requirements are pre-empted by the Council's exclusive jurisdiction, Cellco has evaluated the Branford South Facility for consistency with the Connecticut Coastal Zone Management Act. A copy of this analysis is included in Attachment 13. This analysis concludes that the Branford South Facility, while located in the coastal boundary, is not likely to have an "adverse impact on coastal resources". Four (4) copies of the Branford Zoning Regulations were filed, in bulk, with the Council.

d. Inland Wetlands and Watercourses Regulations

The Branford Inland Wetlands and Watercourses Regulations (the "Wetland Regulations") define Regulated Activity as any operation within, or use of, a wetland or watercourse or the removal of deposition of material or any obstruction, construction, alteration or pollution of such a wetland or watercourse. Four (4) copies of the Branford Wetland Regulations were filed, in bulk, with the Council.

Dean Gustafson, Professional Soil Scientist with VHB, Inc., conducted a field investigation and completed a wetland compliance memorandum for development of the proposed Branford South Facility. The closest wetland area is located approximately 150 feet to the northeast of the proposed Branford South Facility compound. A portion of the access

driveway extends to within approximately 13 feet of a wetland boundary adjacent to Leetes Island Road. Construction of the Branford South Facility will have no impact on these nearby wetlands area. Copies of Mr. Gustafson's wetland report and the wetlands compliance memorandum are included in 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, the Applicant 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 ("FIRM"), Map Number 090073 0008C (Map Effective: April 18, 1983), the proposed Branford South Facility would be located in Flood Zone C (unshaded). A copy of the FIRM is also included in Attachment 14.

5. Local Input

Section 16-50*l*(e) of the Connecticut General Statutes, as amended, requires local input on matters before the Council. Cellco representatives met with First Selectman Anthony DaRos and members of the Branford Telecommunications Committee on July 21, 2010. At this meeting, Cellco discussed its plans for development of the Branford South Facility, its search for alternative locations in southeast Branford and its plans for future cell site development throughout the Town.

Because the Branford South Facility is located near Route 146, a State designated scenic road and a National Register Historic District, the SHPO requested that Cellco also meet with the

Branford/Guilford Scenic Roads Advisory Committee ("SRAC") and solicit its comments on the Branford South proposal. Cellco representatives made a presentation to the SRAC on September 14, 2010. During its presentation, Cellco described its need for service in the area, the visual impact of a facility and its intention to design the facility in such a manner to fit in with the historic character of the area. The SRAC was supportive of the rustic-style water tank design but expressed concerns for scale of the structure if the facility were to expand beyond the 109-foot structure as proposed.⁴

On October 8, 2010, Cellco commenced the Council's local input process by meeting with members of the Branford Telecommunications Committee and providing the Town with certain technical information regarding the proposed Branford South Facility. Representatives of T-Mobile and AT&T were also invited to attend the October 8, 2010 meeting to discuss their need for the proposed water tank facility and future need for service in Branford.

Because the Branford South Facility is located within 2,500 feet of the Guilford/Branford boundary, copies of Cellco's Technical Report were also submitted to Guilford's First Selectman, Joseph S. Mazza.

6. <u>Consultations With State and Federal Officials</u>

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

⁴ As discussed further in Section III.D.6.e below, the SHPO addressed the SRAC's concern for height of the structure by limiting the structure to 109 feet. A copy of the SRAC's October 18, 2010 e-mail to the SHPO and the SHPO's determination of "no adverse effect" are included in <u>Attachment 10</u>.

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 it does with all of its tower applications, Cellco conducted an air-space analysis for the proposed facility to determine if the proposed tower would constitute an obstruction or hazard to air navigation. This analysis has confirmed, pursuant to FAA standards and guidelines, the proposed water tank structure would not constitute an obstruction or hazard to air navigation. Therefore, no obstruction marking or lighting would be required. A copy of the Federal Airways and Airspace Summary Report is included in <u>Attachment 15</u>.

c. United States Fish and Wildlife Service

According to the USFWS, the Roseate Tern, a federally-listed endangered species, is known to occur in the Town of Branford. As discussed in Section III.D.3.b above, Roseate Tern habitat is significantly distant from the proposed tower site, and therefore, no adverse effect on this species is anticipated. (See <u>Attachment 10</u>).

d. Connecticut Department of Environmental Protection

(1) Environmental and Geographic Information Center

As discussed above, the DEP determined that there are no known extent populations of Federal or State Endangered, Threatened or Special Concern Species that occur at the Property. (See correspondence contained behind <u>Attachment 10</u>).

(2) 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 Branford South Facility.

e. Connecticut State Historic Preservation Officer

As discussed above, <u>Attachment 10</u> also includes the SHPO's determination that the development of the Branford South Facility will have <u>no adverse effect</u> on the Route 146 National Register Historic District, provided the structure does not exceed an overall height of 109 feet. Even with this height restriction the proposed Branford South Facility will help satisfy the needs of three wireless carriers in southeast Branford.

E. Estimated Cost and Schedule

1. Overall Estimated Costs

The total estimated cost of construction for the Branford South Facility is \$895, 000.

This estimate includes:

(1)	Cell site radio equipment of approximately	\$450,000
(2)	Water tank tower, coax and antenna costs of approximately	305,000
(3)	Power systems costs of approximately	20,000
(4)	Equipment building and shelter costs of approximately	50,000
(5)	Miscellaneous costs (including site preparation and installation) of approximately	105,000

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, Cellco submits that the establishment of the Branford South Facility will not have any substantial adverse environmental effects. A public need exists for high quality reliable wireless service in the Town of Branford and throughout New Haven 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.

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

Respectfully submitted,

CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS

Bv:

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