

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

IN RE: :
: :
APPLICATION OF CELLCO PARTNERSHIP : DOCKET NO. 415
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 87 :
WEST QUASSET ROAD, WOODSTOCK, :
CONNECTICUT : JUNE 20, 2011

**CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS
PROPOSED FINDINGS OF FACT**

Introduction

1. Cellco Partnership d/b/a Verizon Wireless (“Cellco”), in accordance with the provisions of Connecticut General Statutes (“CGS”) §§ 16-50g et. seq., applied to the Connecticut Siting Council (“Council”) on January 28, 2011 for the construction, maintenance, and operation of an 150-foot tower at 87 West Quasset Road (“Property”) in Woodstock, Connecticut (“Woodstock Facility”). (Cellco 1, p. 1).
2. Cellco is a Delaware corporation with its administrative office at 99 East River Drive, East Hartford, Connecticut. Cellco is licensed by the Federal Communications Commission (FCC) to construct and operate a personal wireless service system in the 850 MHz (cellular), 1900 MHz (PCS) and 700 MHz (LTE) frequency ranges, throughout Connecticut. (Cellco 1, p. 4).
3. Cellco currently maintains and operates a wireless facility in the southeast portion of the Property. Due to structural limitations of the existing tower, Cellco only provides wireless service in its 850 MHz (cellular) frequency range. (Cellco 1, pp. 10-11).
4. In order to utilize all of its licensed frequencies and provide its customers with a full array of wireless services, Cellco needs to develop a new telecommunications facility in the area. (Cellco 1, pp. 10-11, Tab 1).
5. The purpose of the proposed replacement facility is to provide wireless services to Cellco customers in the cellular, PCS and LTE frequency ranges along portions of Routes 171 and 169, and local roads, as well as residential, agricultural and commercial areas in southeast Woodstock. (Cellco 1, pp. 1-2, Tab 6).

6. The proposed facility is capable of being shared by three additional wireless carriers and municipal emergency service providers, if a need exists. (Cellco 1, p. 11, Tab 1).
7. Notice of Cellco's intent to file the application was sent to all abutting property owners by certified mail. Cellco received return receipts from all but one of the abutters notified. The notice letter that was returned "unclaimed" was resent by regular mail. (Cellco 1, p. 5, Tab 4; Cellco 4, Q. 3).
8. Public notice of Cellco's intent to file the application was published in the *Norwich Bulletin* on January 26 and 27, 2011. (Cellco 1, p. 5; Cellco 2).
9. Pursuant to CGS § 16-50m, the Council held a public hearing on May 26, 2011, beginning at 3:00 p.m. and continuing at 7:00 p.m. at the Woodstock Town Hall, 415 Route 169, Woodstock, Connecticut. (Transcript 1 – 5/26/11, 3:00 p.m. [Tr. 1], p. 2; Transcript 2 – 5/26/11, 7:00 p.m. [Tr. 2], p. 2).
10. The Council and its staff conducted an inspection of the proposed site on May 26, 2011, beginning at 2:00 p.m. The applicant flew a balloon at the site between the hours of 12:00 p.m. and 6:00 p.m. as directed by the Council. (Tr. 1, p. 14; Tr. 2, p. 3).
11. Cellco installed a four-foot by six-foot sign at the Property on May 10, 2011. The sign presented information regarding the project and public hearing in accordance with the Council's application guidelines. (Cellco 5).
12. Pursuant to CGS § 16-50l(b), Cellco provided a copy of its application to all federal, state and local officials and agencies listed therein. (Cellco 1, p. 5, Tab 2).

State Agency Comment

13. Pursuant to General Statutes § 16-50j(h), the following State agencies were solicited to submit written comments regarding the proposed facility: Department of Environmental Protection (DEP), Department of Public Health, Council on Environmental Quality, Department of Public Utility Control, Office of Policy and Management, Department of Economic and Community Development, Department of Transportation and Department of Agriculture, and Department of Emergency Management and Homeland Security. (Record).
14. No State Agencies offered any comments of the Application. (Record).

Municipal Consultation

15. Cellco representatives met with the Woodstock First Selectman to discuss details of the tower replacement proposal at 87 West Quasset Road on September 17, 2010. Cellco submitted technical information about the proposed replacement facility. (Cellco 1, pp. 19-20; Cellco 1.c.; Cellco 3).

16. On October 25, 2010, Cellco representatives appeared before the Woodstock Telecommunications Task Force to discuss its plans to relocate the Woodstock Facility. (Cellco 1, pp. 19-20; Cellco 1.b.; Cellco 3).
17. Cellco offered the Town free space on the tower for municipal emergency service antennas if a need exists. In its November 22, 2010 letter to the Council, the PZC asked that space on the tower be reserved for future public safety use. (Cellco 1; Cellco 3; Tr. 1, p. 17).

Public Need for Wireless Services

18. In 1996, the United States Congress recognized a nationwide need for high quality wireless telecommunications services, including cellular telephone service. Through the Federal Telecommunications Act of 1996, Congress seeks to promote competition, encourage technical innovations, and foster lower prices for telecommunications services. (Council Administrative Notice, Item No. 8).
19. In issuing wireless licenses, the Federal government has preempted the determination of public need for wireless services by the states, and has established design standards to ensure technical integrity and nationwide compatibility among all systems. Cellco is licensed by the FCC to provide wireless service throughout Connecticut in the 850 MHz (cellular), 1900 MHz (PCS) and 700 MHz (LTE) frequency ranges. (Council Administrative Notice Item No. 8; Cellco 1).
20. The Telecommunications Act of 1996 prohibits local and state entities from discriminating among providers of functionally equivalent services. (Council Administrative Notice Item No. 8).
21. The Telecommunications Act of 1996, a Federal law passed by the United States Congress, prohibits any state or local entity from regulating the placement of wireless telecommunications facilities on the basis of environmental effects, including human health effects, of radio frequency emissions to the extent that such facilities comply with FCC's regulations concerning such emissions. This Act also bans the Council from prohibiting or acting with the effect of prohibiting the provision of personal wireless service. (Council Administrative Notice Item No. 8).
22. In an effort to ensure the benefits of wireless technologies to all Americans, Congress enacted the Wireless Communications and Public Safety Act of 1999. The purpose of this legislation was to promote public safety through the deployment of a seamless, nationwide emergency communications infrastructure that includes wireless communications services. (Council Administrative Notice Item No. 9).

Cellco – Existing and Proposed Wireless Coverage

23. Cellco proposes to provide cellular, PCS and LTE services from the proposed site along portions of Routes 171 and 169 and local roads, as well as residential, agricultural and commercial areas in southeast Woodstock. (Cellco 1, pp. 1-3, 8, Tab 6).

24. Cellco currently provides only cellular service from two omni-directional whip antennas attached to a 150-foot lattice tower on the Property owned by American Tower Corporation (“ATC”). (Cellco 1, pp 10-11, Tab 1; Tr. 1, pp. 30-31).
25. The ATC tower is not structurally capable of supporting Cellco’s standard array of cellular, PCS and LTE antennas. ATC was unable to obtain all of the necessary property rights to rebuild the existing tower on the Property. (Cellco 1, pp. 10-11; Tr. 1, p. 35).
26. Cellco currently provides reliable cellular service along Route 171 and 169 and local roads, as well as residential, agricultural and commercial areas in southeast Woodstock. (Cellco 1, Tab 6).
27. Cellco’s existing signal level in the proposed service area, at PCS frequencies ranges from -86 dBm to -105 dBm. (Cellco 4, Q. 6).
28. To provide reliable service, Cellco designs its network to operate at a minimum signal level threshold of -85 dBm for in-vehicle service and -75 dBm for in-building service. (Cellco 4, Q. 5).
29. Installing cellular, PCS and LTE antennas at the proposed centerline height of 147 feet above ground level (agl) would provide Cellco customers the following reliable service to the proposed service area:

Coverage Type (-85 dBm)	Route 171	Route 169	Overall Square Miles
<i>Cellular</i>	3.5	3.6	14.8
<i>PCS</i>	2.3	3.0	7.5
<i>LTE</i>	3.6	3.7	15.6

(Cellco 1, p. 2).

Site Selection and Alternatives Considered

30. Cellco established a search area in southeast Woodstock in March of 2009. (Cellco 1, Tab 8).
31. Cellco maintains two (2) existing facilities within approximately four (4) miles of the Property. Coverage from these existing facilities does not extend to the areas in southeast Woodstock that Cellco intends to serve with the proposed replacement facility. (Cellco 1, Tab 6 and Tab 8).
32. Cellco investigated a total of five properties in the area as potential alternative cell site locations, including two municipal parcels. There are no buildings of suitable height in the Woodstock search area that might have been suitable for use as a telecommunications facility. (Cellco 1, Tab 8).

Existing ATC Tower

33. ATC currently maintains a 150-foot low-profile lattice tower at the Property. Cellco maintains two whip antennas at the top of the ATC tower. (Cellco 1, Tab 8).
34. The ATC tower is not structurally capable of supporting Cellco's full array of cellular, PCS and LTE antennas. (Cellco 1, pp. 10-11; Tr. 1, p. 35).
35. ATC was unable to obtain the necessary property rights to rebuild the existing tower in the southeast portion of the Property. (Cellco 1, pp. 10-11).
36. ATC has not determined whether it will remove the existing tower from the Property if the proposed tower is approved. (Cellco 4, Q. 9).

Facility Description

37. The proposed Woodstock Facility would be located on an approximately 29.5 acre parcel at 87 West Quasset Road in Woodstock. (Cellco 1, p. 3).
38. The property is owned by Quasset Hill Farm LLC. (Cellco 1, Tab 1, Tab 16).
39. The property is zoned Community District. (Cellco 1, p. 17).
40. The property is currently used for agricultural purposes. (Cellco 1, Tabs 1 and 8).
41. Land use within a quarter-mile of the site limited to agricultural uses and low-density residential. (Cellco 1, Tabs 1 and 9).
42. Cellco proposes to construct a 150-foot tall tower in the central portion of the Property. The proposed tower is capable of supporting multiple carriers and local emergency service providers antennas. The tower would be constructed in accordance with the Electronic Industries Association standard EIA/TIA-222-F. (Cellco 1, Tab 1).
43. Cellco proposes to install fifteen (15) panel antennas at the 147-foot level on the tower. (Cellco 1, p. 3, Tab 1).
44. Cellco would install a 12' x 24' shelter to house its radio equipment and diesel fueled back-up generator. The Woodstock Facility compound area will be surrounded by an eight-foot security fence and gate. (Cellco 1, pp. 2-3, Tab 1).
45. Vehicular access to the site would extend from Quasset Hill Road along existing farm roads to the cell site. (Cellco 1, pp. 2-3, Tab 1).
46. Underground utilities would extend from the existing service along West Quasset Road to the proposed tower location. (Cellco 1, pp. 2-3, Tab 1).
47. Once the cell site is operational, Cellco's maintenance personnel will visit the cell site on a monthly basis. (Cellco 1, p. 4).

48. The estimated construction cost of the facility is:

Cell site radio equipment	\$450,000
Tower, coax and antennas	100,000
Power systems	40,000
Equipment building	50,000
Miscellaneous (including site preparation and installation)	<u>190,000</u>
Total estimated cost	\$830,000

(Cellco 1, pp. 21-22).

Environmental Concerns

49. The proposed facility would have no effect on historic, architectural or archeological resources listed in or eligible for the National Register of Historic Places. (Cellco 1, p. 21, Tab 10).
50. According to the U.S. Fish and Wildlife Service there are no federally-listed endangered or threatened species known to occur in Woodstock, Connecticut. (Cellco 1, pp. 20-21, Tab 10).
51. The DEP determined that there are no extant populations of Federal or State endangered, threatened or special concern species that occur at the subject site. (Cellco 1, p. 21, Tab 10).
52. Development of the replacement facility compound would not directly impact any wetlands or watercourses. The proposed access driveway will cross an existing drainage ditch approximately 75 feet south of the tower compound. This ditch is a regulated intermittent watercourse. Construction of the access drive will result in a direct impact of 500 square feet of this intermittent watercourse. (Cellco 1, pp. 18-19, Tab 1, Tab 12; Tr. 1, p. 10).
53. Site construction will require total cut of approximately 510 cubic yards of material and 93 cubic yards of fill. (Cellco 4, Q. 4).
54. The site is within the Flood Zone C (unshaded), designated by the Federal Emergency Management Agency as an area of minimal flooding. (Cellco 1, p. 19, Tab 13).
55. Aircraft hazard obstruction marking or lighting of the tower is not required or proposed. (Cellco 1, p. 20, Tab 14).
56. The worst-case maximum power density from the radio frequency emissions from the operation of the proposed Cellco antennas is calculated to be 17.44% of the standard for Maximum Permissible Exposure, as adopted by the FCC, at the base of the proposed tower. This calculation was based on methodology prescribed by the FCC Office of Engineering and Technology Bulletin No. 65E, Edition 97-01 (August 1997). (Cellco 1, pp. 15-16, Tab 11).

Visibility

57. The proposed replacement tower would be visible year-round, above the tree canopy from approximately 179 acres within a two-mile radius of the site. (Cellco 1, p. 14, Tab 9).
58. Areas where seasonal views of the proposed replacement tower are expected, comprise approximately 205 additional acres generally located in the area immediately surrounding the site. This area is predominantly undeveloped and used for agricultural purposes. (Cellco 1, p. 14, Tab 9).