

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051 Phone: (860) 827-2935 Fax: (860) 827-2950 E-Mail: siting.council@ct.gov Internet: ct.gov/csc

February 20, 2009

TO:

Parties and Intervenors

FROM:

S. Derek Phelps, Executive Director

RE:

DOCKET NO. 368 - Cellco Partnership d/b/a Verizon Wireless application for

a Certificate of Environmental Compatibility and Public Need for the

construction, maintenance and operation of a telecommunications facility located

off Sterling Road (Route 14), Plainfield, Connecticut.

By its Decision and Order dated February 19, 2009, the Connecticut Siting Council granted a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a telecommunications facility located off Sterling Road (Route 14), Plainfield, Connecticut.

Enclosed are the Council's Findings of Fact, Opinion, and Decision and Order.

SDP/CDM/laf

Enclosures (3)

c: State Documents Librarian



STATE OF CONNECTICUT)
ss. New Britain, Connecticut	:
COUNTY OF HARTFORD)

I hereby certify that the foregoing is a true and correct copy of the Findings of Fact, Opinion, and Decision and Order issued by the Connecticut Siting Council, State of Connecticut.

ATTEST:

S. Derek Phelps
Executive Director

Connecticut Siting Council

I certify that a copy of the Findings of Fact, Opinion, and Decision and Order in Docket No. 368 has been forwarded by Certified First Class Return Receipt Requested mail, on February 20, 2009, to all parties and intervenors of record as listed on the attached service list, dated August 27, 2008.

ATTEST:

Lisa A. FonfaineFiscal Administrative OfficerConnecticut Siting Council

LIST OF PARTIES AND INTERVENORS $\underline{SERVICE\ LIST}$

	Status Holder	Representative
Status Granted	(name, address & phone number)	(name, address & phone number)
Applicant	Cellco Partnership d/b/a Verizon Wireless	Sandy Carter, Regulatory Manager Verizon Wireless 99 East River Drive East Hartford, CT 06108 Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103-3597 (860) 275-8200
		(800) 273-8200

DOCKET NO. 368 – Cellco Partnership d/b/a Verizon Wireless application for a Certificate of Environmental Compatibility and	}	Connecticut
Public Need for the construction, maintenance and operation of a telecommunications facility located off Sterling Road (Route 14),	}	Siting
Plainfield, Connecticut.	}	Council

February 19, 2009

Findings of Fact

Introduction

- 1. Pursuant to Chapter 277a, Sections 16-50g et seq. of the Connecticut General Statutes (CGS), as amended, and Section 16-50j-1 et seq. of the Regulations of Connecticut State Agencies (RCSA), Cellco Partnership d/b/a Verizon Wireless (Cellco) applied to the Connecticut Siting Council (Council) on August 26, 2008 for the construction, operation, and maintenance of a telecommunications facility to be located off Sterling Road (Route 14) in the Moosup section of the Town of Plainfield, Connecticut. (Cellco 1, pp. i and 1)
- 2. Cellco is a Delaware Partnership with an administrative office located at 99 East River Drive, East Hartford, Connecticut. Cellco is licensed by the Federal Communications Commission (FCC) to operate a wireless telecommunications system in Connecticut. The operation of wireless telecommunications systems and related activities are Cellco's sole business in Connecticut. (Cellco 1, p. 4)
- 3. The party in this proceeding is the applicant. (Transcript 1 [Tr. 1], 3:05 p.m., p. 5)
- 4. The proposed facility would provide coverage and capacity relief along Route 14, as well as local roads in the easterly portion of the Town of Plainfield and the westerly portion of the Town of Sterling. (Cellco 1, p. i and pp. 1-2)
- 5. Pursuant to CGS § 16-50m, the Council, after giving due notice thereof, held a public hearing on December 2, 2008, beginning at 3:05 p.m. and continuing at 7:00 p.m. in the auditorium of the Plainfield Town Hall in Plainfield, Connecticut. (Tr. 1, p. 2 ff.)
- 6. The Council and its staff conducted an inspection of the proposed site on December 2, 2008, beginning at 2:00 p.m. The applicant flew a red balloon of approximately four feet in diameter at the proposed site beginning shortly before 8:00 a.m. until approximately 5:00 p.m. Conditions for the balloon flight were generally favorable with light winds averaging five to ten miles an hour with good visibility for this time of year. (Tr. 1, pp. 15-16)
- 7. Pursuant to CGS § 16-50*l*(b), Cellco had notice of its intent to submit this application published on August 22 and 23, 2008 in <u>The Norwich Bulletin</u>. (Cellco 1, p. 5; Cellco 2, Norwich Bulletin Publisher's Certificate dated September 5, 2008)

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- 8. In accordance with CGS § 16-50/(b), Cellco sent notices of its intent to file an application with the Council to each person appearing of record as owner of property abutting the property on which the site is located. (Cellco 1, p. 5; Attachment 5)
- 9. Cellco received return receipts from all of the abutting property owners to whom it sent notices. (Cellco 4, Response 11)
- 10. Pursuant to CGS § 16-50*l* (b), Cellco provided notice to all federal, state and local officials and agencies listed therein. (Cellco 1, p. 5; Attachment 3)
- 11. Cellco posted a sign advising the general public of its pending application on the host property on November 12, 2008. The sign measured four feet by eight feet. Information on the sign included the date, time, and location of the public hearing and contact information for the Council. (Cellco 3, Sign Posting Affidavit dated November 18, 2008)

State Agency Comment

- 12. Pursuant to CGS § 16-50*l*, the Council solicited comments on Cellco's application from the following state departments and agencies: Department of Agriculture, Department of Environmental Protection, Department of Public Health, Council on Environmental Quality, Department of Public Utility Control, Office of Policy and Management, Department of Economic and Community Development, and the Department of Transportation. The Council's letters requesting comments were sent on October 21, 2008 and December 3, 2008. (CSC Hearing Package dated October 21, 2008; CSC Letter to State Department Heads dated December 3, 2008)
- 13. The Connecticut Department of Agriculture's Agricultural Lands Preservation Director has no objection to the proposed facility. (Email correspondence from Joseph Dippel, dated October 27, 2008)
- 14. The Council on Environmental Quality (CEQ) responded to the Council's solicitation by expressing some concern about the visual impact of the proposed tower on Moosup Pond and tree lines and ridgelines in the area. (CEQ Memorandum dated October 29, 2008)
- 15. The Department of Transportation (ConnDOT) responded to the Council's solicitation by pointing out that Cellco would need to obtain an encroachment permit from ConnDOT should its facility require access to Route 14. (ConnDOT Memorandum dated November 25, 2008)
- 16. Aside from the Department of Agriculture, ConnDOT, and the CEQ, the Council did not receive comments from any other state agencies. (Record)

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Municipal Consultation

- 17. On June 11, 2008, Cellco representatives met with Plainfield First Selectman Paul E. Sweet to commence the required sixty-day municipal consultation process. At this time, First Selectman Sweet was given copies of technical information summarizing Cellco's plans for its proposed facility in the Moosup section of Plainfield. (Cellco 1, p. 18; Tr. 1, p. 14)
- 18. Because the proposed facility is within 2,500 feet of the Town of Sterling, Cellco also submitted copies of its technical information to the Sterling First Selectman, Russell Gray. (Cellco 1, pp. 18-19)
- 19. At the public hearing held on December 2, 2008, First Selectman Sweet expressed the Town of Plainfield's support for Cellco's proposed facility. (Tr. 1, p. 7)
- 20. If the town wanted to place antennas on Cellco's tower, it could do so at no rental charge. (Tr. 1, p. 16)

Public Need for Service

- 21. 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. 7, Telecommunications Act of 1996)
- 22. In issuing cellular licenses, the Federal government has preempted the determination of public need for cellular service by the states, and has established design standards to ensure technical integrity and nationwide compatibility among all systems. (Council Administrative Notice Item No. 7, Telecommunications Act of 1996)
- 23. The Telecommunications Act of 1996 prohibits local and state bodies from discriminating among providers of functionally equivalent services. (Council Administrative Notice No. 7, Telecommunications Act of 1996)
- 24. The Telecommunications Act of 1996 prohibits any state or local agency from regulating telecommunications towers on the basis of the environmental effects of radio frequency emissions to the extent that such towers and equipment comply with FCC's regulations concerning such emissions. This Act also blocks the Council from prohibiting or acting with the effect of prohibiting the provision of personal wireless service. (Council Administrative Notice No. 7, Telecommunications Act of 1996)
- 25. The Wireless Communications and Public Safety Act of 1999 (the WCPS Act) was enacted by the U.S. Congress to promote and enhance public safety by making 911 the universal emergency assistance number and by furthering deployment of wireless 911 capabilities. (Cellco 4, Response 2)

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- 26. To further the goals of the WCPS Act, Congress enacted the Enhanced 911 Act in 2004 (the E911 Act). This act was enacted to promote better public service emergency response capabilities through enhanced 911 services. (Cellco 4, Response 2)
- 27. The antennas and related equipment that Cellco would install at the proposed site would comply with the requirements of the WCPS and E911 Acts. (Cellco 4, Response 2)

Site Selection

- 28. Cellco issued its Moosup search ring in January of 2007. (Cellco 4, Response 16)
- 29. The coverage gaps this proposed facility is intended to fill were identified using best server propagation modeling tools, which were fine-tuned by using base-line drive data. (Cellco 1, Attachment 9, p. 2)
- 30. Cellco maintains three telecommunications facilities on towers within four miles of the proposed facility and has recently been approved to place its antennas on a fourth tower. None of these existing towers can provide the coverage or capacity relief that Cellco would achieve from the proposed facility. The four nearby facilities on which Cellco's antennas are located are identified in the table below.

Location	Facility Owner	Facility Type	Cellco's Antenna Height	Distance and Direction from proposed site
548 Green Hollow	SBA	178'	125 feet	2.5 miles to
Road, Plainfield		monopole		northwest
47-51 Unity Street,	Sprint Nextel	160'	127 feet	2.3 miles to
Plainfield		monopole		west
45 Spaulding Hill	AT&T	150'	110 feet	3.2 miles to
Road, Plainfield		monopole		southwest
Exeter Drive, Sterling	MCF	140'	137 feet	1.5 miles to
		monopole		east

(Cellco 1, Attachment 9)

31. There is one additional tower within the four mile radius of the proposed site. It is located 3.5 miles to the south off of Ekonk Hill Road in Sterling. The tower is 140 feet tall and is owned by the Connecticut Department of Public Safety. Cellco does not have any antennas on this tower. (Cellco 4, Response 6)

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- 32. Cellco investigated five raw land sites in the Plainfield area during the search for a suitable location for its facility. These five sites and the determinations of their suitability are listed below.
 - a. Singh Property Sterling Road, Moosup. This 32.2 acre parcel is the location of the proposed facility.
 - b. Cynthia Young Property Sterling Road, Moosup. This is a vacant 28 acre parcel immediately to the west of the Singh property with frontage on Goshen Road. This site was rejected because access from Goshen Road would require a significant stream crossing and the disruption of adjacent wetland areas.
 - c. George Roy Property Goshen Road, Moosup. This is a vacant 41 acre parcel located to the southwest of the Singh property. This property was rejected because access from Goshen Road would require a significant wetland crossing.
 - d. David and Julie Fontaine Property Sterling Road, Moosup. This is a vacant 15 acre parcel located to the southeast of the Singh property. This property was rejected because of topography difficulties.
 - e. Marion Preston Property 82 Goshen Road, Moosup. This is a 31 acre parcel with frontage on Goshen Road. It is located southwest of the Singh property. The property owner was not interested in leasing space to Cellco.

(Cellco 1, Attachment 9, pp. 2-3)

33. Cellco maintains that there are no viable and available alternative technologies to provide the coverage and service that its proposed facility would provide. (Cellco 1, p. 9)

Site Description

- 34. Cellco's proposed site would be located in the westerly portion of a 32.2 acre parcel off of Sterling Road (Route 14) in the Moosup section of Plainfield. The property is owned by Reepu D. Singh and is undeveloped and heavily wooded. (See Figures 1 and 2) (Cellco 1, pp. i, 2, 16; Attachment 1)
- 35. The Singh property is in an RA-60 Residential zoning district. Wireless telecommunications facilities are permitted in RA-60 zones by special permit. The Plainfield Zoning Regulations establish a hierarchy of preferred locations for telecommunications facilities. Towers taller than 60 feet in residential zones are the least preferred of the locations described in the zoning regulations. Plainfield's zoning regulations require telecommunications facilities to be on a lot with a minimum area of 40,000 square feet, to be not taller than 180 feet, and to have a tower setback equal to the height of the tower. Cellco's proposed facility complies with all of these requirements. (Cellco 1, pp. 16-17)

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- 36. At the proposed location, Cellco would lease a 100-foot by 100-foot parcel within which it would construct a 160-foot monopole telecommunications tower inside a 50-foot by 75-foot enclosed equipment compound. The equipment compound would have a gravel surface and would be enclosed by an eight-foot high chain link fence topped with three strands of barbed wire. (See Figure 3) (Cellco 1, Attachment 1, Drawings C-2 and C-4)
- 37. The tower would be located at 41° 42′ 58.64"N latitude and 71° 51′ 5.902"W longitude. Its elevation at ground level would be approximately 454 feet above mean sea level. (Cellco 1, Attachment 1, p. 4)
- 38. Cellco's tower would be designed to accommodate at least four wireless carriers and town emergency services antennas in accordance with the specifications of the Electronic Industries Association Standard EIA-TIA-222-F "Structural Standards for Steel Antenna Towers and Antenna Support Structures" in accordance with the International Building Code as adopted by the current 2005 Connecticut State Building Code. An analysis of the tower would also be prepared in accordance with the requirements of the latest version of the standard, EIA-TIA-222-G. The more stringent of the two versions would be used for the tower's final design. The tower would have a diameter of approximately 55 inches at its base and 30 inches at its top. (Cellco 1, p. 10, Attachment 1, p. 6; Cellco 4, Response 20)
- 39. Cellco's tower would be designed and built to be extendable by ten to twenty feet. (Tr. 1, pp. 26-27)
- 40. On the tower, Cellco would install 12 panel-type antennas at a centerline height of 157 feet above ground level (agl) on a low profile platform. Cellco's antennas would not extend above the top of the tower. Cellco would also install a 12-foot by 30-foot single-story shelter to house its ground equipment. (Cellco 1, pp. 2, 11; Cellco 4, Response 19)
- 41. Cellco would use a diesel-fueled generator for back up power. The generator would be located in a segregated room within the ground equipment shelter. (Cellco 1, p. 11)
- 42. The generator's 275-gallon fuel tank would be double-bellied and would have a tertiary containment system that would include a moat. (Tr. 1, pp. 18-19, p. 36)
- 43. Development of the proposed site would require 1,300 cubic yards of cut and 1,400 cubic yards of fill. (Cellco 4, Response 15)
- 44. Vehicular access to the proposed facility would extend from Sterling Road over a 12-foot wide driveway that would follow an existing logging road for a distance of approximately 1,100 feet. Of this distance, the first approximately 230 feet of the driveway would be paved with asphalt. The remaining portion of the driveway would be gravel. (Cellco 1, p. i, p. 2; Attachment 1, Sheet C-1; Tr. 1, p. 13)
- 45. Cellco may reconsider paving the first portion of its access road because the grades do not seem steep enough to warrant asphalt pavement. (Tr. 1, p. 17)
- 46. Utilities would be extended to the proposed site underground within the access road easement from the existing overhead service along Sterling Road. Final utility location would be subject to CL&P approval. (Cellco 4, Response 18)

- 47. No blasting is anticipated to develop the proposed site. (Cellco 4, Response 17)
- 48. The proposed tower's setback radius would lie completely within the Singh property. (Cellco 1, Attachment 1, Sheet C-1A)
- 49. The nearest property boundary to the proposed tower's location is approximately 165 feet to the west. The adjacent property at this location is owned by Marion Preston. (Cellco 1, Attachment 1, Sheet C-1A)
- 50. There are approximately six residences within 1,000 feet of the proposed facility. The nearest residence is located 770 feet to the northeast and is owned by James and Alice Carroll. (Cellco 1, p. 13)
- 51. Land use in the vicinity of the proposed site consists of undeveloped woodlands and low-density residential areas. (Cellco 1, Attachment 1, p. 4)
- 52. The estimated cost of the facility, including antennas and radio equipment, is:

Cell site radio equipment	\$450,000
Tower, coax, and antennas costs	150,000
Power systems costs	20,000
Equipment building costs	50,000
Site development and misc. costs	_95,000
Total	\$765,000

(Cellco 1, pp. 20-21)

Environmental Considerations

- 53. The State Historic Preservation Office believes that the proposed facility would have no effect on Connecticut's cultural heritage. (Cellco 1, Attachment 11, Letter from State Historic Preservation Officer dated July 15, 2008)
- 54. No known extant populations of Federal or State Endangered, Threatened or Special Concern Species occur in the vicinity of the proposed site. (Cellco 1, Attachment 11, Letter from Connecticut Department of Environmental Protection dated December 31, 2007)
- 55. There are no wetlands near the proposed site. The nearest wetlands are located more than 500 feet to the west. (Cellco 1, pp. 17-18)
- 56. The area near the proposed tower is heavily wooded, consisting mainly of deciduous hardwood species interspersed with some stands of mature evergreen species. The average tree height is 65 feet. (Cellco 1, Attachment 1, p. 4; Attachment 10, p. 1)
- 57. Approximately 67 trees with a diameter of six inches or more at breast height would be removed to develop the proposed site compound and access road. (Cellco 1, Attachment 1, p. 5)

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- 58. Soil erosion and sedimentation control measures would be established and maintained during construction of the proposed facility in accordance with Connecticut Soil Erosion Control Guidelines, as established by the Council for Soil and Water Conservation. (Cellco 1, p. 18)
- 59. The tower, as proposed, would not constitute an obstruction or hazard to air navigation according to Federal Air Administration standards and would not need obstruction marking or lighting. (Cellco 1, p. 19; Attachment 13)
- 60. The maximum power density from the radio frequency emissions of Cellco's antennas has been calculated to be 11.06% of the standard for Maximum Permissible Exposure, as adopted by the FCC, at the base of the proposed tower. This calculation was based on a methodology prescribed by the FCC Office of Engineering and Technology Bulletin No. 65E, Edition 97-01 (August 1997) that assumes all antennas would be pointed at the base of the tower and all channels would be operating simultaneously. (Cellco 1, p. 15)

Visibility

- 61. The proposed tower would be visible year-round from approximately 88 acres out of a total of 8,032 acres within a two-mile radius study. Areas from which the tower would be visible include the north/northwest portion of Moosup Pond and limited areas of the adjacent shoreline located just over 1.5 miles from the proposed facility, as well as portions of Route 14, Main Street, Parent Hill Road, Lake Street, North Sterling Road, and several roads within the Sterling Ridge Hills subdivision. (Cellco 1, p. 13; Attachment 10, pp. 4-5)
- 62. The tower would be seasonally visible from an additional 9 acres that are located mostly on the host property. (Cellco 1, Attachment 10, p. 5)
- 63. An estimated 28 residential properties would have at least partial year-round views of the proposed tower. This total includes four properties along the north/northwest corner of Moosup Pond, six residences located along Route 14, four properties off Main Street in Sterling, two residences located off Parent Hill Road, two residences located along North Sterling Road, and approximately ten residences located within the Sterling Ridge Hill subdivision, which was under construction at the time this certificate application was submitted. (Cellco 1, Attachment 10, p. 5)
- 64. No residences would have a view of the tower during the "leaf off" times of the year that do not have views of the tower during the "leaf on" seasons. (Cellco 4, Response 21)
- 65. No views of the tower are anticipated from the Moosup Valley State Park Trail, which roughly parallels Route 14 to the north and is approximately 1,600 feet from the proposed site at its closest point. (Cellco 1, Attachment 10, p. 5; Tr. 1, p. 19)

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66. The visibility of the proposed site from different vantage points in the surrounding vicinity is summarized in the following table. The locations of the vantage points listed are identified by their corresponding number in the Visual Resource Evaluation Report contained in Attachment 10 of Cellco's application and Figure 8 of this document.

Location	Site Visible	Approx. Portion of (160') Tower Visible (ft.)	Approx. Distance and Direction to Tower
1 – 22 Sterling Road (Route 14)	Yes	Upper 30'	1320 feet; SE
2 – Lake Street at Route 14	Yes	Upper 70'	6200 feet; SE
3 – 371 Sterling Road	Yes	Upper 50'	5500 feet; SE
4 – 28 Parent Hill Road	Yes	Upper 40'	4500 feet; SE
5 – Sterling Ridge Hills subdivision, Sterling	Yes	Upper 50'	6600 feet; NW
6 – Ann Circle (in Sterling Ridge Hills subdivision), Sterling	Yes	Upper 40'	6100 feet; NW
7 – 214 Main Street, Sterling	Yes	Upper 40'	4900 feet; W
8 – 260 Main Street, Sterling	Yes	Upper 40'	4900 feet; SW
9 – 188 North Sterling Road	Yes	Upper 60'	4000 feet; SW
10 – Moosup Pond	Yes	Upper 40'	8300 feet; SE
11 – Moosup Pond	Yes	Upper 30'	8800 feet; SE
12 – Moosup Pond	Yes	Upper 20'	8400 feet; SE
13 – End of Barber Hill Road	Yes	Upper 30'	4400 feet; NE
14 – Glen Falls Bridge	No		2640 feet; SE
15 – 791 Route 14A, Sterling	No		9500 feet; NW
16 – 318 Sterling Hill Road	No		6300 feet; NE

(Cellco 1, Attachment 10 – Photographic Simulations)

- 67. The tower at Cellco's proposed site would not be visible from Sterling Pond, which is approximately 6,900 feet to the southeast. (Cellco 1, Attachment 10, Viewshed Map)
- 68. The tower located off of Exeter Drive in Sterling is not visible from the vantage points identified as Views 5 through 8 in the Visual Resource Evaluation Report prepared by Vanasse Hangen Brustlin. Intervening vegetation and/or topography obscures potential views of this tower from these locations. (Cellco Post-Hearing Interrogatory Responses, p. 4)

Existing and Proposed Wireless Coverage

- 69. Cellco holds an FCC license to provide both PCS and cellular service in Windham County. (Cellco 1, p. 7)
- 70. In the Plainfield area, Cellco is licensed in the 869-880 and 890-891.5 MHz cellular frequency bands and in the 1970-1980 MHz PCS F Block frequency band. Cellco would install both cellular and PCS antennas at the proposed site. (Cellco 4, Response 1)

- 71. Cellco's facility is being proposed primarily to fill a PCS coverage gap between its existing Plainfield North 2 and Sterling sites. (Tr. 1, p. 20)
- 72. Cellco experiences a 1.72 mile gap in PCS coverage and a 0.18 mile gap in cellular coverage along Route 14 in the Moosup area. (See Figures 4 and 5) (Cellco 1, p. 2)
- 73. Cellco could cover a 3.73 mile portion of Route 14 at PCS frequencies and a 4.02 mile portion of Route 14 at cellular frequencies from the proposed tower. (See Figures 6 and 7) (Cellco 1, p. 2)
- 74. Cellco could cover an overall area of 6.5 square miles at PCS frequencies and an overall area of 13.1 square miles at cellular frequencies from the proposed tower. (Cellco 1, p. 2)
- 75. Cellco's signal strength design thresholds are -85 dBm for in-vehicle service and -75 dBm for in-building service. (Cellco 4, Response 12)
- 76. According to base-line drive data, Cellco's existing signal strength for PCS frequencies, in the area that would be covered from the proposed site, ranges from -86 dBm to -130 dBm, with some areas receiving no signal at all. (Cellco 4, Response 13; Tr. 1, p. 22)
- 77. Cellco could not conduct drive tests at the proposed site due to its inaccessibility. (Cellco 4, Response 14)
- 78. Cellco's antennas at the proposed site would hand off signals with the adjacent Cellco sites identified below:

Site Address	Type of Facility	Site Owner	Distance and Direction from Proposed Site
47-51 Unity Street, Plainfield	160' monopole	Sprint Nextel	2.3 miles to west
(Plainfield North 2 site)			
45 Spaulding Hill Road,	150' monopole	AT&T	3.2 miles to southwest
Plainfield (Plainfield site)			
548 Green Hollow Road,	178' monopole	SBA	2.5 miles to northwest
Plainfield (Plainfield north			
site)			
Exeter Drive, Sterling (Sterling	140' monopole	MCF	1.5 miles to east
site)			

(Cellco 4, Response 7; Tr. 1, pp. 16-17)

79. The lowest height at which Cellco could achieve its PCS coverage objectives from the proposed site is 160 feet agl. Cellco could achieve its cellular coverage objectives from the proposed site with antennas as low as 70 agl. (Cellco 4, Response 9)

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80. In order for Cellco and AT&T to avoid interfering with each other's cellular coverage across the Rhode Island-Connecticut border, the two carriers have entered into a spectrum sharing agreement that limits the frequencies each carrier uses to provide cellular coverage in areas where these signals could cross the states' border. This agreement limits the amount of cellular coverage Cellco can provide in areas close to Rhode Island. Cellco compensates by using more PCS channels to carry voice services. For this reason, Cellco's ability to provide reliable coverage at PCS frequencies is a more important consideration at the proposed site than at other sites farther away from the Rhode Island border. (Cellco 4, Response 9)

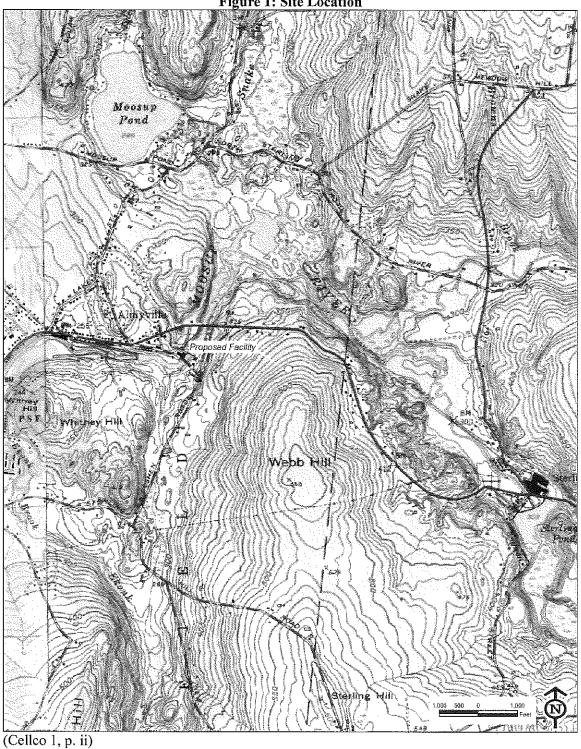
Alternate Location

- 81. In response to a Council inquiry, Cellco investigated an alternate location on the Singh property farther up Webb Hill and approximately 660 feet to the south of the site proposed in the application. The ground elevation of this site would be 513 feet above mean sea level, or approximately 60 feet higher than the application site. (Cellco Post-Hearing Interrogatory Responses, p. 2)
- 82. At this alternate location, Cellco would need to install its antennas at a centerline height of 147 feet to satisfy its coverage objectives in the Moosup area and to provide coverage comparable to that achieved with its antennas at a centerline height of 157 feet at the application site. (Cellco Post-Hearing Interrogatory Responses, p. 2)
- 83. Relocating the proposed tower 660 feet to the south would cause Cellco to lose valuable coverage along Route 14 due to shadowing caused by topography in the area of Whitney Hill to the west. (Cellco Post-Hearing Interrogatory Responses, p. 3; Cellco 1, Attachment 1, p. 2)
- 84. Installing antennas at a centerline height of 137 feet at the alternate location would create a PCS coverage gap of approximately 0.15 miles along Route 14 to the west, in the Whitney Hill area. (Cellco Post-Hearing Interrogatory Responses, p. 3)
- 85. The alternate location would be acceptable to Cellco's landlord. (Cellco Post-Hearing Interrogatory Responses, p. 3)
- 86. The alternate location would require an additional 815 feet of access road and would require the clearing and grading of an additional 28,000 square feet. (Cellco Post-Hearing Interrogatory Responses, pp. 3-4)
- 87. Based upon a site walk on December 17, 2008, the Tribal Historic Preservation Officer of the Narragansett Tribe determined that the alternate location could have the potential to include artifacts of significance to the Narragansett Tribe. The Officer would require additional testing before providing clearance for any ground disturbance. (Cellco Post-Hearing Interrogatory Responses, p. 4)

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- 88. The alternate location would require the removal of an additional 40 trees with a diameter at breast height of six inches or more. (Cellco Post-Hearing Interrogatory Responses, p. 3)
- 89. The alternate location would not result in any wetland disturbance or impact any state or federal rare, threatened, or endangered species, or state species of special concern. (Cellco Post-Hearing Interrogatory Responses, p. 3)
- 90. A 150-foot tall tower at the more southerly location at the higher elevation on Webb Hill would be visible year-round from 131 acres within the surrounding two-mile radius study area. (Cellco Post-Hearing Interrogatory Responses, Attachment 4, p. 2)
- 91. The 150-foot tall tower at the alternate location would generally stand taller above the surrounding tree canopy than the 160-foot tall tower at the lower, application location. (Cellco Post-Hearing Interrogatory Responses, Attachment 4, p. 2)

Figure 1: Site Location





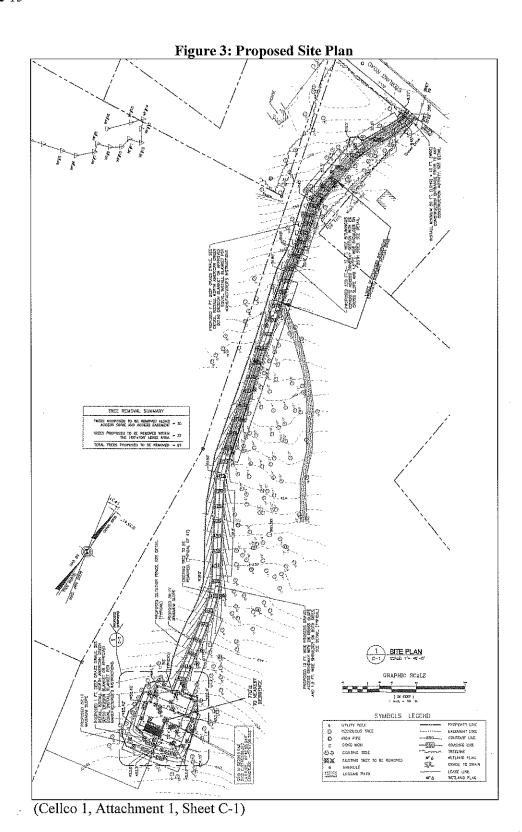
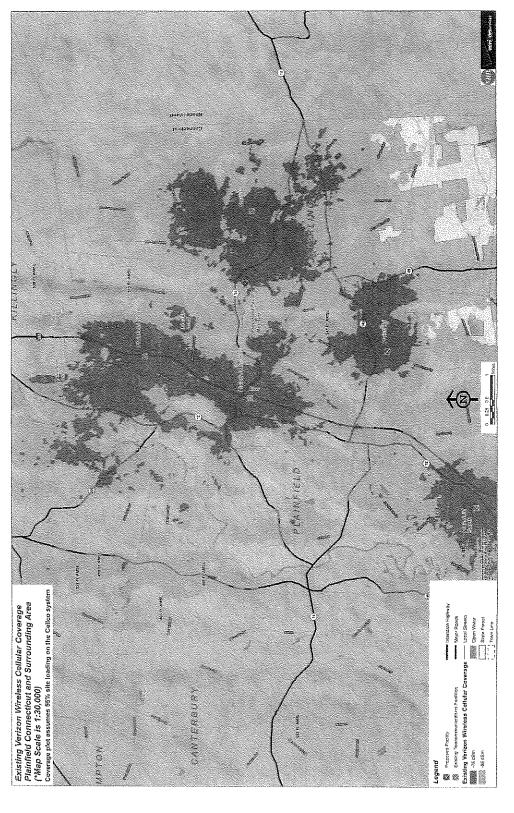
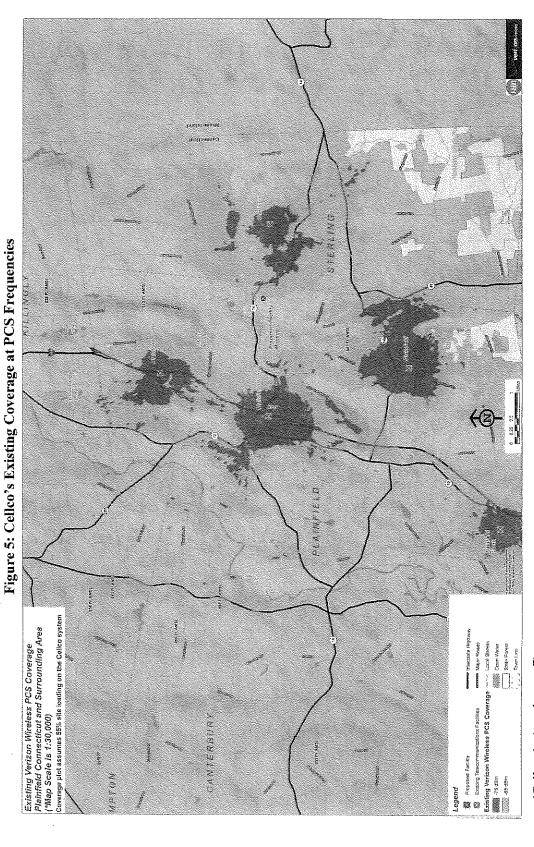


Figure 4: Cellco's Existing Coverage at Cellular Frequencies



(Cellco 1, Attachment 7)



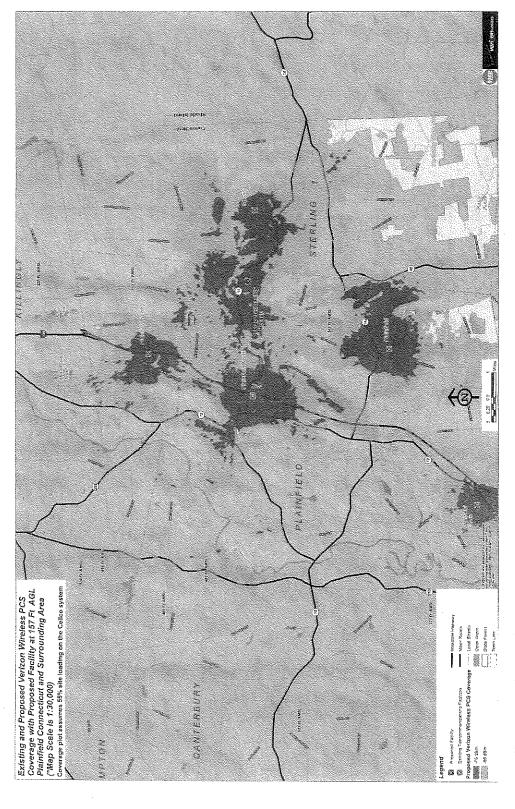
(Cellco 1, Attachment 7)

Existing and Proposed Verizon Wireless Cellular Coverage with Proposed Facility at 157 Ft AGL Plainfield Connecticut and Surrounding Area ("Map Scale is 1:30,000) Soverage plot assumes 55% site loading on the Celico system Entrans Facily
Entrans Processmant Section
Proposed Verizon Wireless Cellular C CANTERBURY

Figure 6: Cellco's Cellular Coverage with Proposed Site

(Cellco 1, Attachment 7)

Figure 7: Cellco's PCS Coverage with Proposed Site



(Cellco 1, Attachment 7)

Figure 8: Visibility Map Legend CT DEP Protected Properties (2007) Proposed Monopole Location (Includes select areas of viability approximately 500 feet around (ncility) Cr Der Protesson Hopertol
State Forest
DEP Graned Waterbody
State Park Scenic Reserve
Historic Preserve
Notural Area Preserve Photographs - June 24, 2008 🖨 Balloon not visible Balloon visible above trees Fish Hatchery Flood Control Citier
Slate Park Trail
Water Access
Withile Area
Wildlife Sanctuacy Protected Municipal and Private Open Space Proporties (1997) Cemulary Preservation Federal Protected Proporties (1897) CT DEP Boat Launches (1994) Scenic Road (State and Local) Consurvation Existing Preserved Open Space Recreation General Recreation School

(Cellco 1, Attachment 10)

Uncalegorized

DOCKET NO. 368 – Cellco Partnership d/b/a Verizon Wireless application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a telecommunications facility located off Sterling Road (Route 14), Plainfield, Connecticut.

Siting

Council

February 19, 2009

Opinion

On August 26, 2008, Cellco Partnership d/b/a Verizon Wireless (Cellco) applied to the Connecticut Siting Council (Council) for a Certificate of Environmental Compatibility and Public Need (Certificate) for the construction, maintenance and operation of a wireless telecommunications facility to be located off of Sterling Road (State Route 14) in the Moosup section of Plainfield, Connecticut. Cellco's purpose in locating a facility at this location would be to provide coverage, particularly PCS coverage, and capacity relief along Route 14, as well as local roads in the easterly portion of the Town of Plainfield and the westerly portion of the Town of Sterling. Cellco was the only party in this proceeding.

Cellco proposes to build a 160-foot monopole tower within a 50-foot by 75-foot compound. The compound would be within a 100-foot by 100-foot parcel leased on a 32.2 acre property owned by Reepu Singh and located in an RA-60 residential zoning district. The compound would be enclosed by an eight-foot high chain link fence. Cellco would install 12 panel antennas on a low-profile, triangular platform at a centerline height of 157 feet. The tower would be designed to accommodate three additional wireless carriers and town emergency services antennas. Vehicular access to the compound would be over a new gravel drive approximately 1,100 feet long. Utilities would be installed underground beside the gravel drive.

The tower's setback radius would be completely contained within the host property.

Cellco's tower would be visible above the tree canopy on a year-round basis from approximately 88 acres in the surrounding vicinity. Areas of visibility include the north/northwest portion of Moosup Pond and limited areas of the adjacent shorelines. The tower would also be visible from portions of Route 14, Main Street, Parent Hill Road, Lake Street, North Sterling Road, and several roads within the Sterling Ridge Hills subdivision. Approximately 28 residences would have at least partial year-round views of the proposed tower. The tower would be seasonally visible from an estimated 9 additional acres, most of which would occur on the host property. No additional residences would have seasonal views. The tower is not expected to be visible from Moosup Valley State Park Trail, Sterling Pond, the Moosup River, and most of the length of Route 14. The tower would be visible only from about 1.2 percent of the area within a two mile radius of the proposed site. Most of the vantage points from which the tower would be visible are up to one and a half miles from the site. At these distances, the tower's visual presence in the landscape would be diminished. Therefore, the visibility of the tower would not be a sufficient reason to deny this application.

Docket 368: Plainfield Opinion Page 2

The proposed facility is located in an area that is heavily wooded, with mainly deciduous hardwood species interspersed with some stands of mature evergreen species. Development of Cellco's facility would require the clearing of 67 trees with a diameter of six inches or more at breast height. The nearest wetlands to the site's location are more than 500 feet to the west.

No known species listed on the Connecticut Department of Environmental Protection's (DEP) Natural Diversity Data Base or significant natural communities would be impacted by the development of this site. The site would not have any effect on historic, architectural, or archaeological resources listed on or eligible for the National Register of Historic Places.

In this proceeding, the Council asked Cellco to investigate the feasibility of locating its facility at an alternate site farther south of the location proposed in its application. The alternate site would be at a higher elevation on Webb Hill. In making its request, the Council sought to determine if a facility at a higher elevation could result in a lower tower with less visual impact without sacrificing coverage. After reviewing the information Cellco presented in response to this request, the Council determined that there were no significant advantages to locating a tower at the alternate, higher location that would outweigh the additional clearing, road grading, and utility installation that would be required. Furthermore, moving the tower to a higher elevation on Webb Hill would increase its visibility.

The Council also considered including, in its Decision and Order, a stipulation that would limit the tower to the height proposed in Cellco's certificate application. Including such a stipulation would be an attempt to limit any additional visual impact to the surrounding area that an increase in the tower's height would create. The Council decided not to include this stipulation. Instead it would consider any future request to raise the height of the tower to accommodate additional carriers as a petition for a declaratory ruling.

Upon reviewing the record of this docket, the Council finds that there is a need for a new tower in this area to fill PCS coverage gaps that Cellco is experiencing. The proposed 160-foot tower would provide Cellco with sufficient coverage to its target service area while allowing space for other telecommunication providers that may wish to locate on the tower in the future. In addition, Cellco would provide space on the tower for no compensation for any municipal emergency service communication antennas, provided such antennas are compatible with the structural integrity of the tower.

According to a methodology prescribed by the FCC Office of Engineering and Technology Bulletin No. 65E, Edition 97-01 (August 1997), the combined radio frequency power density levels of the antennas proposed to be installed on the tower have been calculated to amount to 11.06% of the FCC's Maximum Permissible Exposure, as measured at the base of the tower. This percentage is well below federal and state standards established for the frequencies used by wireless companies. If federal or state standards change, the Council will require that the tower be brought into compliance with such standards. The Council will require that the power densities be recalculated in the event other carriers add antennas to the tower. The Telecommunications Act of 1996 prohibits any state or local agency from regulating telecommunications towers on the basis of the environmental effects of radio frequency emissions to the extent that such towers and equipment comply with FCC's regulations concerning such emissions.

Docket 368: Plainfield Opinion Page 3

Based on the record in this proceeding, the Council finds that the effects associated with the construction, operation, and maintenance of the telecommunications facility at the proposed location, including effects on the natural environment; ecological integrity and balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish and wildlife are not disproportionate either alone or cumulatively with other effects when compared to need, are not in conflict with policies of the State concerning such effects, and are not sufficient reason to deny this application. Therefore, the Council will issue a Certificate for the construction, operation, and maintenance of a 160-foot monopole telecommunications facility off of Sterling Road (State Route 14) in the Moosup section of the Town of Plainfield, Connecticut.

DOCKET NO. 368 – Cellco Partnership d/b/a Verizon Wireless	}	Connecticut
application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a telecommunications facility located off Sterling Road (Route 14),	}	Siting
Plainfield, Connecticut.	}	Council
		February 19, 2009

Decision and Order

Pursuant to the foregoing Findings of Fact and Opinion, the Connecticut Siting Council (Council) finds that the effects associated with the construction, operation, and maintenance of a telecommunications facility, including effects on the natural environment; ecological integrity and balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish and wildlife are not disproportionate, either alone or cumulatively with other effects, when compared to need, are not in conflict with the policies of the State concerning such effects, and are not sufficient reason to deny the application, and therefore directs that a Certificate of Environmental Compatibility and Public Need, as provided by General Statutes § 16-50k, be issued to Cellco Partnership d/b/a Verizon Wireless (Cellco), hereinafter referred to as the Certificate Holder, for a telecommunications facility off of Sterling Road (State Route 14) located in the Moosup section of Plainfield, Connecticut.

The facility shall be constructed, operated, and maintained substantially as specified in the Council's record in this matter, and subject to the following conditions:

- 1. The tower shall be constructed as a monopole, no taller than necessary to provide the proposed telecommunications services, sufficient to accommodate the antennas of Cellco and other entities, both public and private, but such tower shall not exceed a height of 160 feet above ground level. The height at the top of the antennas shall not exceed 160 feet above ground level.
- 2. The Certificate Holder shall prepare a Development and Management (D&M) Plan for this site in compliance with Sections 16-50j-75 through 16-50j-77 of the Regulations of Connecticut State Agencies. The D&M Plan shall be served on the Town of Plainfield for comment, and all parties and intervenors as listed in the service list, and submitted to and approved by the Council prior to the commencement of facility construction and shall include:
 - a final site plan(s) of site development to include specifications for the tower, tower foundation, antennas, equipment compound, radio equipment, access road, utility line, and landscaping; and
 - b) construction plans for site clearing, grading, landscaping, water drainage, and erosion and sedimentation controls consistent with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, as amended.

Docket 368: Plainfield Decision and Order Page 2

- 3. The Certificate Holder shall, prior to the commencement of operation, provide the Council worst-case modeling of the electromagnetic radio frequency power density of all proposed entities' antennas at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin No. 65, August 1997. The Certificate Holder shall ensure a recalculated report of the electromagnetic radio frequency power density be submitted to the Council if and when circumstances in operation cause a change in power density above the levels calculated and provided pursuant to this Decision and Order.
- 4. Upon the establishment of any new State or federal radio frequency standards applicable to frequencies of this facility, the facility granted herein shall be brought into compliance with such standards.
- 5. The Certificate Holder shall permit public or private entities to share space on the proposed tower for fair consideration, or shall provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing.
- 6. The Certificate Holder shall provide reasonable space on the tower for no compensation for any Town of Plainfield public safety services (police, fire and medical services), provided such use can be accommodated and is compatible with the structural integrity of the tower.
- 7. Unless otherwise approved by the Council, if the facility authorized herein is not fully constructed and providing wireless services within eighteen months from the date of the mailing of the Council's Findings of Fact, Opinion, and Decision and Order (collectively called "Final Decision"), this Decision and Order shall be void, and the Certificate Holder shall dismantle the tower and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made. The time between the filing and resolution of any appeals of the Council's Final Decision shall not be counted in calculating this deadline.
- 8. Any request for extension of the time period referred to in Condition 7 shall be filed with the Council not later than 60 days prior to the expiration date of this Certificate and shall be served on all parties and intervenors, as listed in the service list, and the Town of Plainfield. Any proposed modifications to this Decision and Order shall likewise be so served.
- 9. If the facility ceases to provide wireless services for a period of one year, this Decision and Order shall be void, and the Certificate Holder shall dismantle the tower and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made.
- 10. The Certificate Holder shall remove any nonfunctioning antenna and associated antenna mounting equipment within 60 days of the date the antenna ceased to function.
- 11. In accordance with Section 16-50j-77 of the Regulations of Connecticut State Agencies, the Certificate Holder shall provide the Council with written notice two weeks prior to the commencement of site construction activities. In addition, the Certificate Holder shall provide the Council with written notice of the completion of site construction and the commencement of site operation.

Docket 368: Plainfield Decision and Order Page 3

Pursuant to General Statutes § 16-50p, the Council hereby directs that a copy of the Findings of Fact, Opinion, and Decision and Order be served on each person listed below, and notice of issuance shall be published in the Norwich Bulletin.

By this Decision and Order, the Council disposes of the legal rights, duties, and privileges of each party named or admitted to the proceeding in accordance with Section 16-50j-17 of the Regulations of Connecticut State Agencies.

The party to this proceeding is:

Applicant

Cellco Partnership d/b/a Verizon Wireless

Its Representative

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

CERTIFICATION

The undersigned members of the Connecticut Siting Council (Council) hereby certify that they have heard this case, or read the record thereof, in **DOCKET NO. 368** – Cellco Partnership d/b/a Verizon Wireless application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a telecommunications facility located off Sterling Road (Route 14), Plainfield, Connecticut, and voted as follows to approve the proposed telecommunications facility located off Sterling Road (Route 14), Plainfield, Connecticut:

Council Members	Vote Cast
Daniel F. Caruso, Chairman	Yes
Colin C. Tait, Vice Chairman	Yes
Commissioner Donald W. Downes	Absent
Designee: Gerald J. Heffernan Commissioner Gina McCarthy Designee: Brian Golembiewski	Yes
Philip T. Ashton	Absent
Daniel P. Lynch, Jr.	Yes
James J Murphy, Jr.	Yes
Barbara Currier Bell Dr. Barbara Currier Bell	Yes
Edward S. Wilensky	Absent

Dated at New Britain, Connecticut, February 19, 2009



CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051 Phone: (860) 827-2935 Fax: (860) 827-2950 E-Mail: siting.council@ct.gov Internet: ct.gov/csc

February 20, 2009

TO:

Classified/Legal Supervisor

368081020

The Norwich Bulletin 66 Franklin Street Norwich, CT 06360

FROM:

Lisa A. Fontaine, Fiscal Administrative Officer

RE:

DOCKET NO. 368 – Cellco Partnership d/b/a Verizon Wireless application for

a Certificate of Environmental Compatibility and Public Need for the

construction, maintenance and operation of a telecommunications facility located

off Sterling Road (Route 14), Plainfield, Connecticut.

Please publish the attached notice as soon as possible, but not on Saturday, Sunday, or a holiday.

Please send an affidavit of publication and invoice to my attention.

Thank you.

LAF





CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051 Phone: (860) 827-2935 Fax: (860) 827-2950 E-Mail: siting.council@ct.gov Internet: ct.gov/csc

NOTICE

Pursuant to General Statutes § 16-50p (d), the Connecticut Siting Council (Council) announces that, on February 19, 2009, the Council issued Findings of Fact, an Opinion, and a Decision and Order approving an application from Cellco Partnership d/b/a Verizon Wireless for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a telecommunications facility located off Sterling Road (Route 14), Plainfield, Connecticut.. This application record is available for public inspection in the Council's office, Ten Franklin Square, New Britain, Connecticut.





CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051 Phone: (860) 827-2935 Fax: (860) 827-2950 E-Mail: siting.council@ct.gov Internet: ct.gov/csc

February 9, 2007

Sandy Carter Verizon Wireless 99 East River Drive East Hartford, CT 06108

RE: **DOCKET NO. 368** – Cellco Partnership d/b/a Verizon Wireless application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a telecommunications facility located off Sterling Road (Route 14), Plainfield, Connecticut.

Dear Ms. Carter:

By its Decision and Order dated February 19, 2009, the Connecticut Siting Council (Council) granted a Certificate of Environmental Compatibility and Public Need (Certificate) for the construction, maintenance and operation of a telecommunications facility located off Sterling Road (Route 14), Plainfield, Connecticut.

Enclosed are the Council's Certificate, Findings of Fact, Opinion, and Decision and Order.

S. Herek Phelps Executive Director

SDP/CDM/laf

Enclosures (4)

c: Kenneth C. Baldwin, Esq., Robinson & Cole LLP





CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051 Phone: (860) 827-2935 Fax: (860) 827-2950 E-Mail: siting.council@ct.gov Internet: ct.gov/csc

CERTIFICATE

OF

ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED DOCKET NO. 368

Pursuant to General Statutes § 16-50k, as amended, the Connecticut Siting Council hereby issues a Certificate of Environmental Compatibility and Public Need to Cellco Partnership d/b/a Verizon Wireless for the construction, maintenance and operation of a telecommunications facility located off Sterling Road (Route 14), Plainfield, Connecticut. This Certificate is issued in accordance with and subject to the terms and conditions set forth in the Decision and Order of the Council on February 19, 2009.

By order of the Council,

February 19, 2009

Daniel F. Caruso, Chairman

