



Daniel F. Caruso  
Chairman

# STATE OF 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](mailto:siting.council@ct.gov)

Internet: [ct.gov/csc](http://ct.gov/csc)

January 23, 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.

---

As stated at the hearing in Plainfield on December 2, 2008, after the Council issues its draft findings of fact, parties and intervenors may identify errors or inconsistencies between the Council's draft findings of fact and the record; however, no new information, evidence, argument, or reply briefs will be considered by the Council.

Parties and Intervenors may file written comments with the Connecticut Siting Council on the Draft Findings of Fact issued on this docket by February 12, 2009.

SDP/laf

Enclosure

**LIST OF PARTIES AND INTERVENORS**  
**SERVICE LIST**

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

**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 } Siting  
telecommunications facility located off Sterling Road (Route 14), }  
Plainfield, Connecticut. } Council

January 14, 2009

## **DRAFT**

### **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(b), Cellco had notice of its intent to submit this application published on August 22 and 23, 2008 in The Norwich Bulletin. (Cellco 1, p. 5; Cellco 2, Norwich Bulletin Publisher's Certificate dated September 5, 2008)

8. In accordance with CGS § 16-507(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 § 16-507 (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 § 16-507, 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 recommended that the Council adopt a rating system to assess a proposed tower's visual impact on scenic factors deserving of special consideration such as publicly accessed recreation areas and tree lines, ridgelines, and hilltops. (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)

### **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 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)

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 enhance 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.

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

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 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)

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        |
| <u>Site development and misc. costs</u> | <u>95,000</u> |
| 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)

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. Cellco would have to obtain a permit from the Connecticut Department of Environmental Protection for the potential air emissions of its back-up emergency generator. Cellco would obtain this permit before installation of the generator. (Cellco 1, Attachment 1, p. 7)
60. 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)
61. 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

62. The proposed tower would be visible year-round from approximately 88 acres within a two-mile radius. Areas from which the tower would be visible include the north/northwest portion of Moosup Pond and limited areas of the 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)
63. 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)
64. 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)
65. There are no residences that 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)
66. 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)

67. 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.

| <u>Location</u>                                      | <u>Site Visible</u> | <u>Approx. Portion of (160') Tower Visible (ft.)</u> | <u>Approx. Distance and Direction to Tower</u> |
|--|---------------------|--|--|
| 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                 | Yes                 | Upper 50'  | 6600 feet; NW                                  |
| 6 – Ann Circle (in Sterling Ridge Hills subdivision) | Yes                 | Upper 40'  | 6100 feet; NW                                  |
| 7 – 214 Main Street                                  | Yes                 | Upper 40'  | 4900 feet; W                                   |
| 8 – 260 Main Street                                  | 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                                   | No                  |  | 9500 feet; NW                                  |
| 16 – 318 Sterling Hill Road                          | No                  |  | 6300 feet; NE                                  |

(Cellco 1, Attachment 10 – Photographic Simulations)

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 (Plainfield North 2 site)  | 160' monopole    | Sprint Nextel | 2.4 miles to west                         |
| 45 Spaulding Hill Road, Plainfield (Plainfield site)      | 150' monopole    | AT&T          | 3.2 miles to southwest                    |
| 548 Green Hollow Road, Plainfield (Plainfield north site) | 178' monopole    | SBA           | 2.5 miles to northwest                    |
| Exeter Drive, Sterling (Sterling site)                    | 140' monopole    | MCF           | 1.5 miles to east                         |

(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)

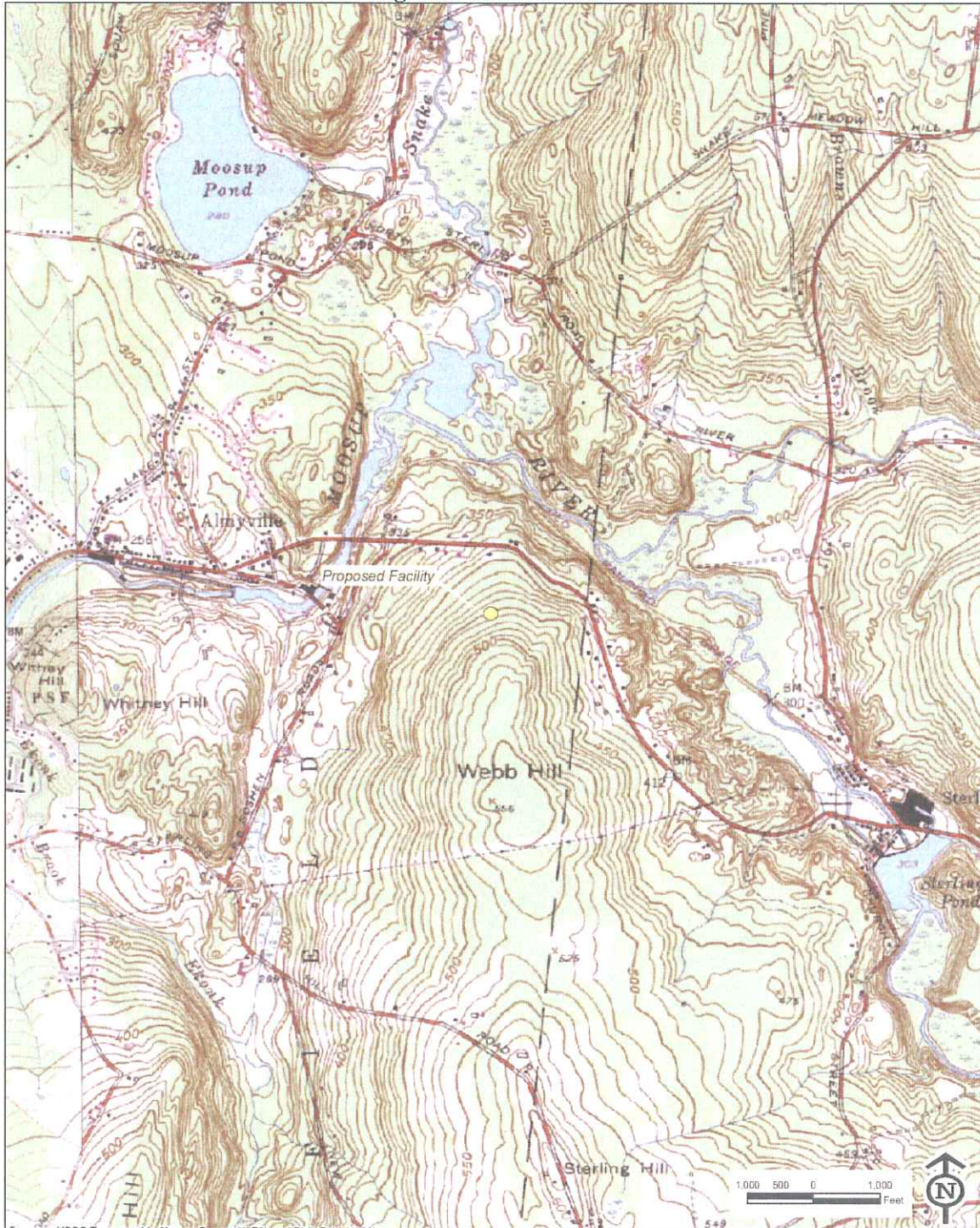
80. In order for Cellco and AT&T to avoid interfering with each other's cellular coverage across the Rhode Island-Connecticut border, the two carriers have entered into a spectrum sharing agreement that limits the frequencies each carrier uses to provide cellular coverage in areas where these signals could cross the states' border. This agreement, however, 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. At the December 2, 2008 public hearing, the Council asked Cellco about the feasibility of moving the location of the proposed facility farther to the south to a higher elevation on Webb Hill. (Tr. 1, pp. 73 ff.)
82. In response to the Council's inquiry, Cellco investigated a site 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 about 60 feet higher than the application site. (Cellco Post-Hearing Interrogatory Responses, p. 2)
83. 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)
84. 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)
85. 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)
86. The alternate location would be acceptable to Cellco's landlord. (Cellco Post-Hearing Interrogatory Responses, p. 3)
87. 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)
88. 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)

89. 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)
90. 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)
91. 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)
92. 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



(Cellco 1, p. ii)

**Figure 2: Aerial Photograph of Proposed and Alternate Sites**

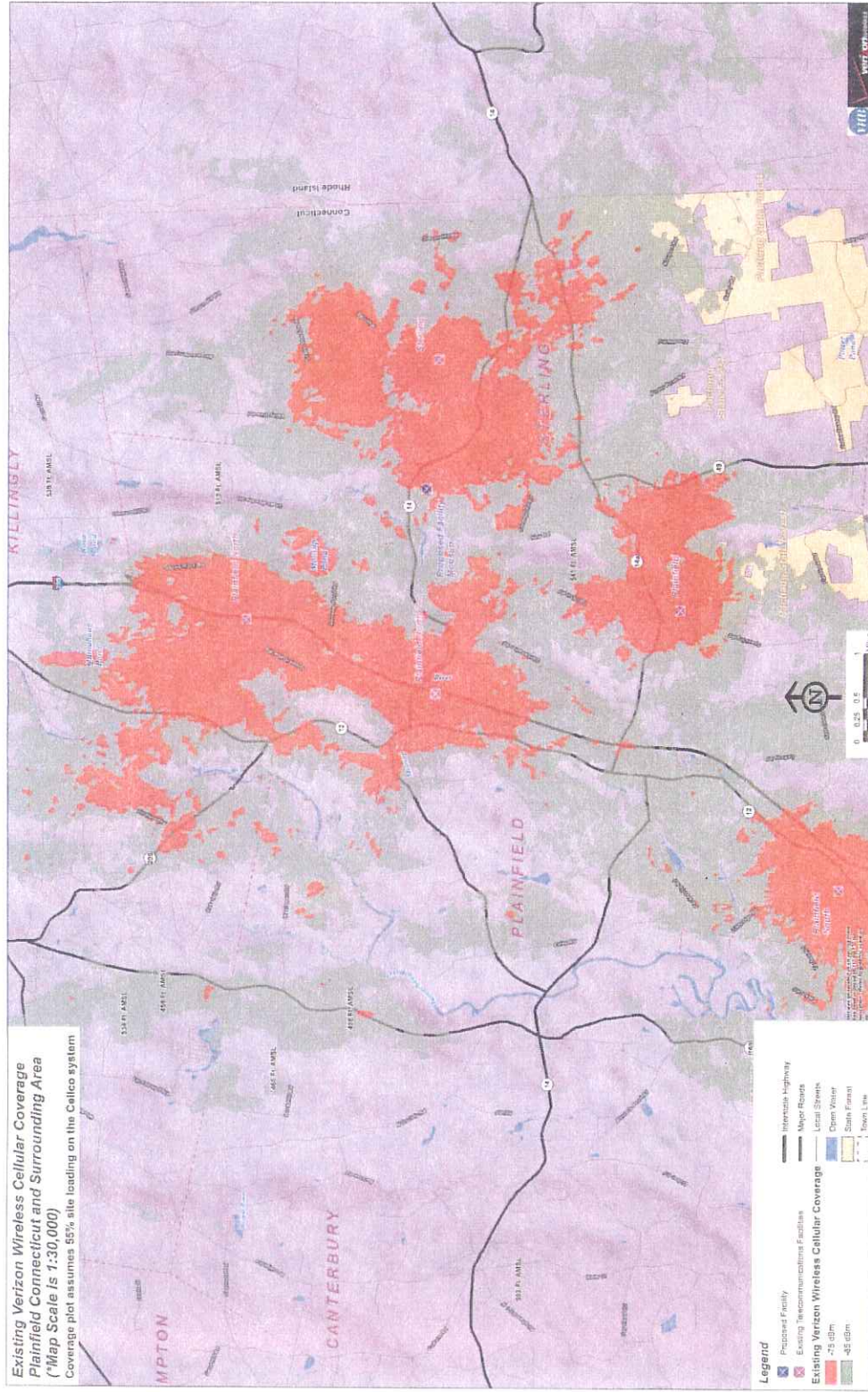


(Cellco Post-Hearing Interrogatory Responses, dated December 18, 2008)





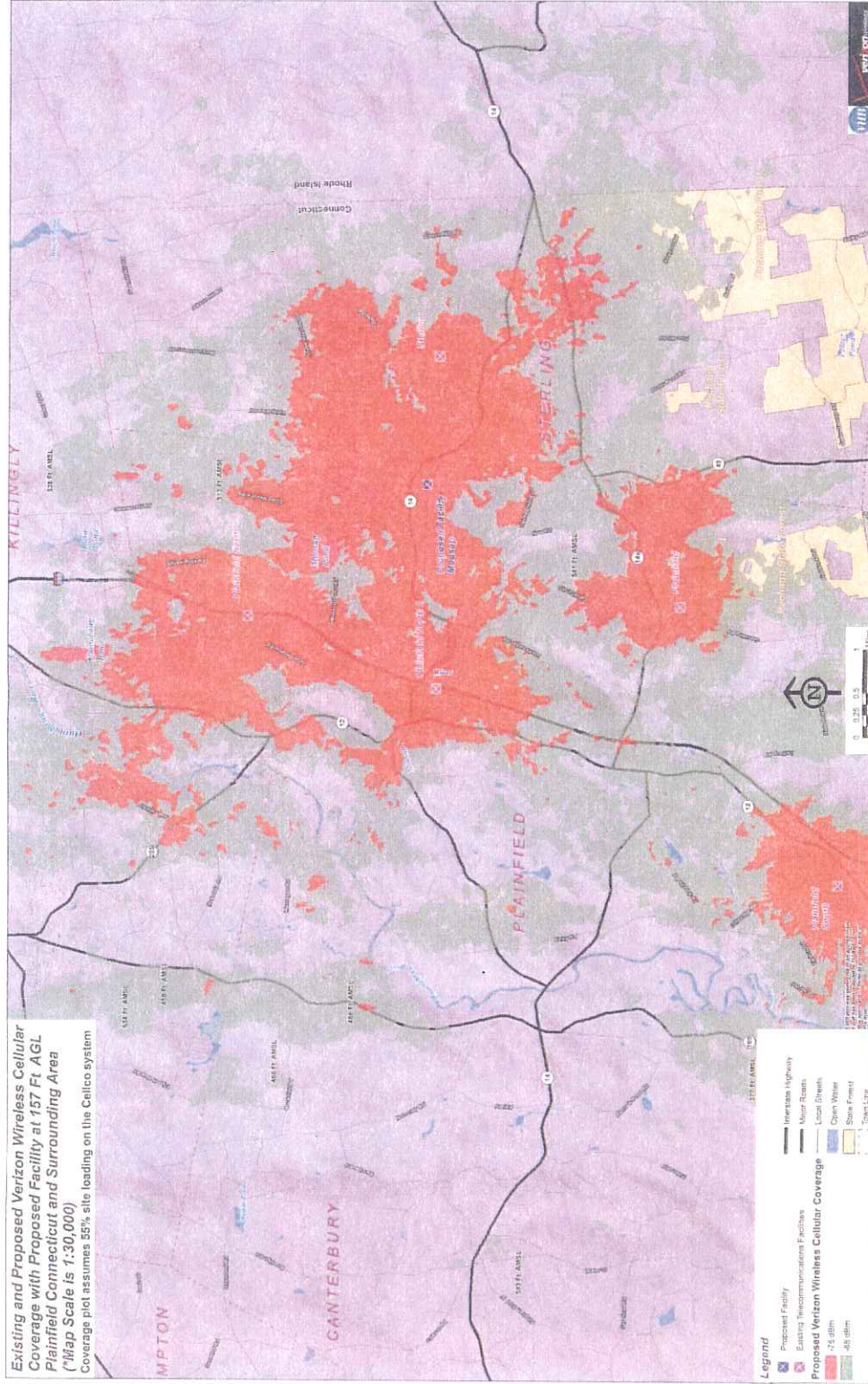
Figure 4: Cellco's Existing Coverage at Cellular Frequencies



(Cellco I, Attachment 7)

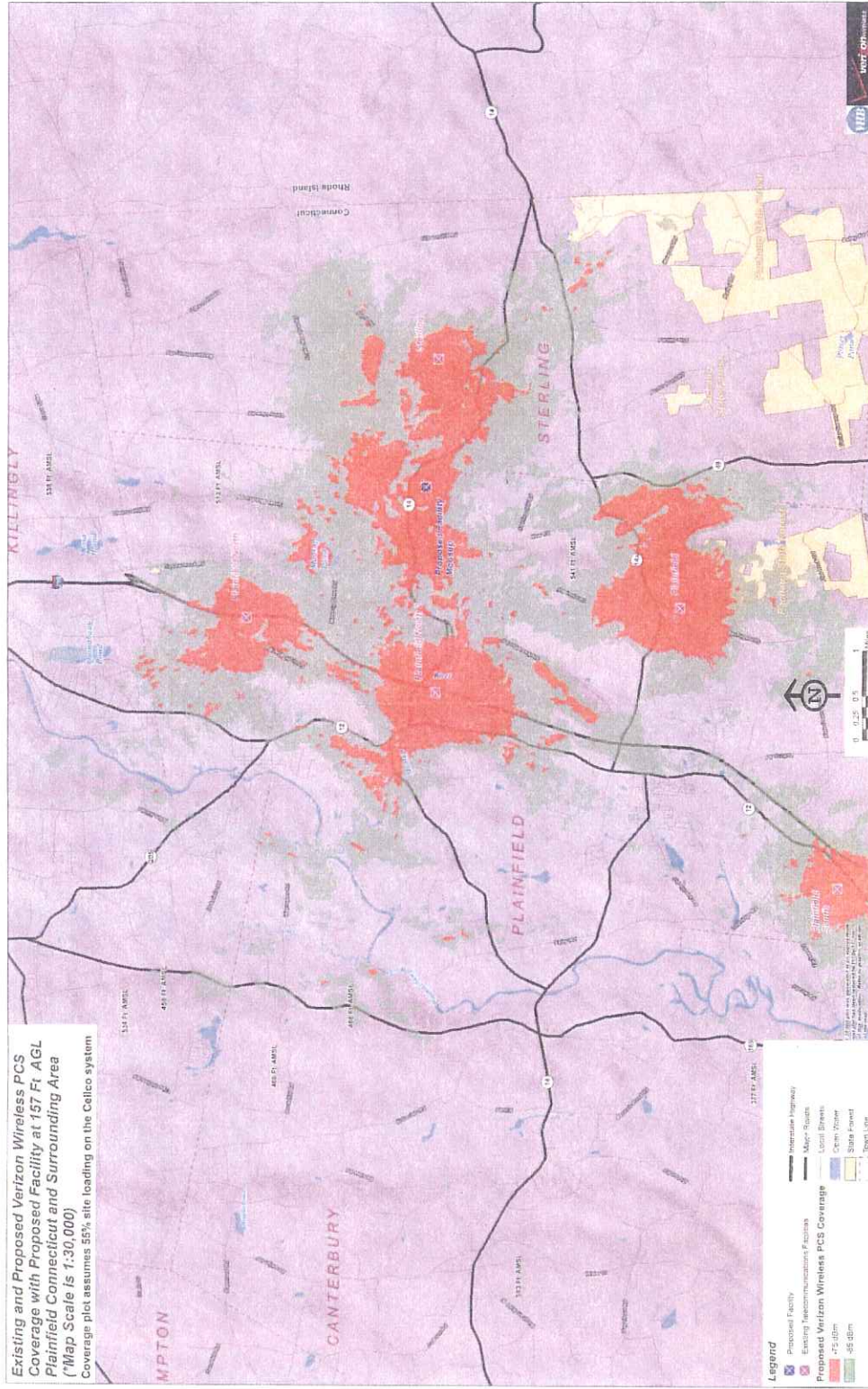


Figure 6: Cellco's Cellular Coverage with Proposed Site



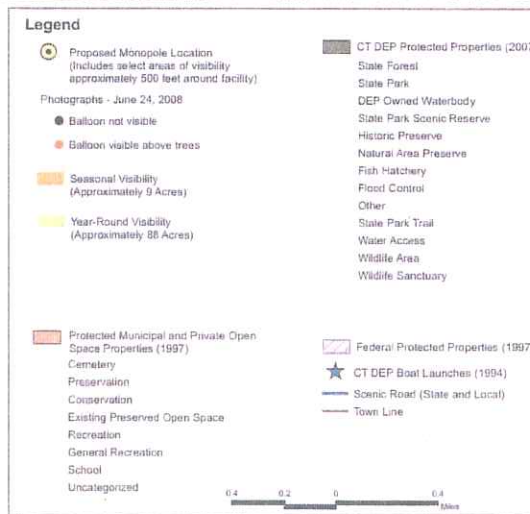
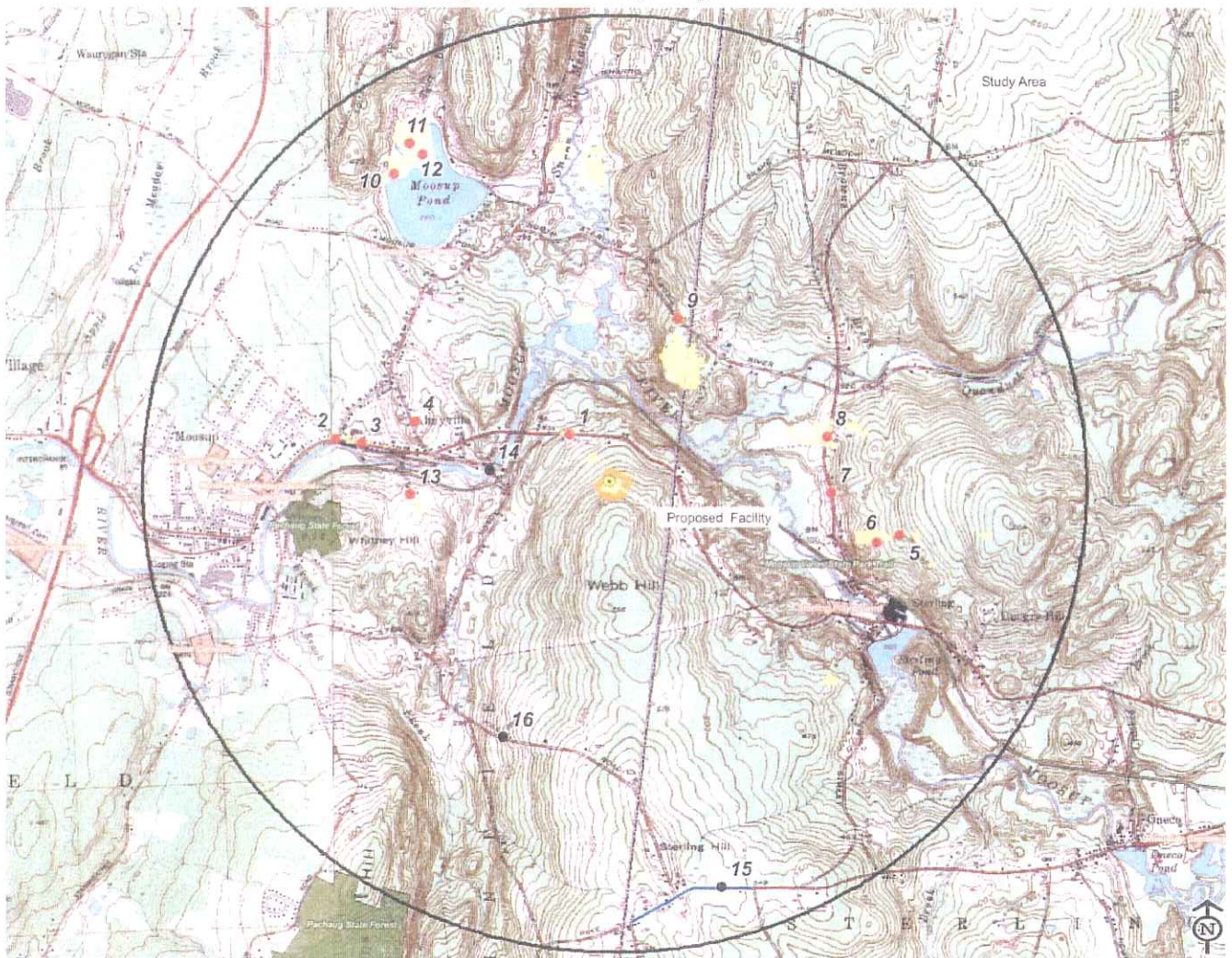
(Cellco 1, Attachment 7)

Figure 7: Cellco's PCS Coverage with Proposed Site



(Cellco 1, Attachment 7)

Figure 8: Visibility Map



(Cellco 1, Attachment 10)