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# STATE OF CONNECTICUT

## CONNECTICUT SITING COUNCIL

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August 29, 2008

TO: Parties and Intervenors

FROM: S. Derek Phelps, Executive Director

RE: **DOCKET NO. 361-** 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 Norfolk Road (Route 44), Winchester, Connecticut.

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As stated at the hearing in Winchester on July 8, 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 September 8, 2008.

SDP/RDM/jb

Enclosure



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

<b>Status Granted</b>	<b>Status Holder (name, address &amp; phone number)</b>	<b>Representative (name, address &amp; phone number)</b>
<b>Applicant</b>	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



<p><b>DOCKET NO. 361-</b> 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 Norfolk Road (Route 44), Winchester, Connecticut.</p>	<p>} Connecticut          } Siting          } Council          } August 18, 2008</p>
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**DRAFT Findings of Fact**

**Introduction**

1. Cellco Partnership d/b/a Verizon Wireless (Verizon), in accordance with the provisions of General Statutes §§ 16-50g through 16-50aa, applied to the Connecticut Siting Council (Council) on April 10, 2008 for the construction, operation, and maintenance of a wireless telecommunications facility off Route 44 in Winchester, Connecticut. (Verizon 1, pp. 1-2)
2. Verizon is a Delaware Partnership with an administrative office located at 99 East River Drive in East Hartford, Connecticut. Verizon is licensed by the Federal Communication Commission (FCC) to operate wireless telecommunications services in the State of Connecticut. (Verizon 1, p. 4)
3. The party in this proceeding is the applicant. (Transcript 1 – 07/08/08, 3:00 p.m. [Tr. 1], p. 5)
4. The purpose of the proposed facility is to provide wireless service to Route 44, Route 183 and local roads west of the Winsted section of Winchester. (Verizon 1, pp. 1-2; Tab 7)
5. Pursuant to General Statutes § 16-50m, the Council, after giving due notice thereof, held a public hearing on July 8, 2008, beginning at 3:00 p.m. and continuing at 7:00 p.m. at the Winchester Town Hall, 338 Main Street, Winchester, Connecticut. (Council's Hearing Notice dated May 28, 2008; Tr. 1, p. 2; Transcript 2 – 07/08/08, 7:00 p.m. [Tr. 2], p. 2)
6. The Council and its staff conducted an inspection of the proposed site on July 8, 2008, beginning at 2:00 p.m. The applicant flew a balloon from 8:40 a.m. to 5:00 p.m. at the site to simulate the height of the proposed tower. The balloon reached its intended height during the morning hours. Breezy conditions prevailed during the afternoon, preventing the balloon from reaching the intended height during the field review. (Council's Hearing Notice dated May 28, 2008; Tr. 2, pp. 24-25)
7. Notice of the application was provided to all abutting property owners by certified mail. Public notice of the application was published in the Republican-American on April 7 and 8, 2008. (Verizon 1, p. 5, Verizon 2)
8. A four-foot by six-foot sign describing the proposed project was installed on the property prior to the July 8, 2008 hearing. (Verizon 6)
9. Pursuant to CGS § 16-50l(b), Verizon provided notice to all federal, state and local officials and agencies listed therein. (Verizon 1, p. 5)

### State Agency Comment

10. Pursuant to General Statutes § 16-50j (h), on May 28, 2008, the following State agencies were solicited to submit written comments regarding the proposed facility: Department of Environmental Protection (DEP), Department of Public Health (DPH), Council on Environmental Quality (CEQ), Department of Public Utility Control (DPUC), Office of Policy and Management (OPM), Department of Economic and Community Development (DECD), and the Department of Transportation (DOT). (Record)
11. The Council received a written, no comment response from the DOT's Bureau of Engineering and Highway Operations on June 26, 2008. (Record)
12. No response was received from the DEP, DPH, CEQ, DPUC, OPM, or DECD. (Record)

### Municipal Consultation

13. Prior to the submission of the application to the Council, Verizon met with the Town Manager Owen Quinn, and Town Planner Charles Karno, on October 10, 2007 to discuss the proposal. (Verizon 1, pp. 18-19; Tr. 1, pp. 23-24)
14. The town expressed no concerns to Verizon regarding the proposal and did not request a public hearing in Town prior to submission of the application. (Tr. 1, p. 24)
15. The town did not respond to Verizon's offer of use of the tower for municipal services. (Tr. 1, p. 51)

### Public Need for Service

16. 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)
17. 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)
18. The Telecommunications Act of 1996 prohibits local and state entities from discriminating among providers of functionally equivalent services. (Council Administrative Notice Item No. 7)
19. The Telecommunications Act of 1996, a Federal law passed by the United States Congress, prohibits any state or local entity 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 Item No. 7)

### Site Selection

20. Verizon established a search area for the site in June of 2006 that focused on three distinct hills north and northwest of Winsted. (Verizon 1, Tab 9; Verizon 3, Q. 2)
21. Verizon did not identify any suitable structures within the search area. (Verizon 1, Tab 7)
22. During the site search, Verizon examined the proposed site property and three properties owned by the Knights of Columbus on Marshall Street and Colebrook Road. Verizon rejected the three Knights of Columbus properties due to inadequate coverage to the target service area. (Verizon 1, Tab 9)
23. The nearest existing tower facility to the search area is approximately 2.2 miles to the northwest at 161 Pinney Road in Colebrook. Verizon is located at the 117-foot level of this 150-foot monopole. This site does not provide adequate coverage to the target service area. (Verizon 1, Tab 7, Tab 9; Verizon 8)

### Site Description

24. The proposed facility is located on a 58-acre parcel owned by Win 21 LLC on the north side of Route 44. (Verizon 1, pp. 2, 16, Tab 1)
25. The property is identified in the Town Assessor's record as Map 16, Block 152, Lot 26-1. (Verizon 1, p. 2, Tab 1)
26. The parcel is zoned Rural, RU-2. (Verizon 1, p. 16)
27. The undeveloped parcel consists of a heavily wooded hillside that slopes upward from Route 44. Numerous logging roads traverse the property. (Verizon 1, p. 16, Tab 1)
28. The tower site is located near the summit of a hill at a ground elevation of 1,145 feet above mean sea level (amsl). (Verizon 1, Tab 1)
29. Verizon proposes to construct a 150-foot monopole at the site. It would be designed to support four levels of antennas with a 10-foot center-to-center vertical separation. (Verizon 1, Tab 1)
30. Verizon proposes to install 12 panel antennas on a platform at a centerline height of 150 feet agl. (Verizon 1, Tab 1)
31. Verizon proposes to construct a 55-foot by 75-foot equipment compound within a 100-foot by 100-foot lease area at the base of the tower. An eight-foot high chain link fence topped with barbed wire would enclose the compound. Within the compound, Verizon proposes to install a 12-foot by 30-foot equipment shelter. (Verizon 1, Tab 1)
32. Access to the site would be from a 1,268-foot gravel road extending from Route 44. The road would follow 815 feet of existing logging roads. (Verizon 1, Tab 1)
33. The average grade of the access road is 16%. Two sections of the access road, one 205 feet and the other 275 feet, would maintain a grade of 24%. To control erosion, Verizon proposes to pave all portions of the road that exceed 10%, which is approximately 600 feet of the road. (Tr. 1, pp. 12, 28-31; Tr. 2, p. 41)

34. The access road drainage system would include three roadside drainage channels, two culverts, and three level spreaders. Stormwater would be collected by the channels and/or culverts and then discharged over the level spreaders. (Verizon 3, Q. 8, Tr. 1, p. 13)
35. An access gate would be installed at the entrance to the access road. (Verizon 1, p. 32)
36. Utilities would be obtained from existing service on Route 44. Verizon would install one new utility pole at the beginning of the access drive to connect to the existing service. From the pole, utilities would be routed underground along the access road to the site. (Verizon 1, Tab 1)
37. The nearest abutting property from the tower site is approximately 450 feet to the northeast, owned by the Estate of Jonathan Ells. (Verizon 1, Tab 1)
38. The nearest residence to the proposed tower site is approximately 1,840 feet to the north. (Verizon 1, Tab 1)
39. Land use within a quarter-mile of the site is consists of state forest, flood control infrastructure, undeveloped land and low density residential. (Verizon 1, Tab 1)
40. The estimated construction cost of the facility is:

Cell site radio equipment	450,000.
Tower, coax, and antenna	150,000.
Utilities	20,000.
Equipment building	50,000.
<u>Site preparation, facility installation</u>	<u>225,000.</u>
Total estimated cost	\$895,000.

(Verizon 1, pp. 20-21)

#### Environmental Concerns

41. The proposed facility would have no effect on historic, architectural, or archaeological resources listed on or eligible for the National Register of Historic Places. (Verizon 1, Tab 11)
42. The proposed site is within the range of the bog turtle and small whorled pogonia, both federally threatened species. The site parcel does not contain any appropriate habitat to support either species. (Verizon 1, Tab 11; Verizon 3, Q. 14)
43. The site is within the range of the Roadside Skipper, a State threatened species. No suitable habitat was identified within the proposed work area. Some habitat is present along Route 44, on either side of the access road entrance. (Verizon 1, Tab 11, Tr. 1, pp. 13-14)
44. To enhance wildlife habitat, Verizon would include plant species favored by the Roadside Skipper in their erosion stabilization seed mix. (Tr. 1, p. 14)
45. Approximately 30 trees greater than six inches at breast height would be removed to develop the site. (Verizon 1, Tab 1; Tr. 2, p. 41)
46. No wetlands or watercourses would be directly impacted by site construction. The nearest wetland to any construction area is approximately 50 feet north of the proposed roadway. (Verizon 1, pp. 17-18)



- 47. The tower would not require aircraft hazard obstruction marking or lighting. (Verizon 1, p. 19, Tab 13)
- 48. The cumulative maximum power density from the radio frequency emissions of the proposed Verizon antennas is calculated to be 20.1% 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) that assumes all antennas would be pointed at the base of the tower and all channels would be operating simultaneously. (Verizon 1, p. 15; Verizon 4; Tr. 1, p. 10)

Visibility

- 49. The tree canopy height immediately surrounding the site area is approximately 65 feet. (Tr. 2, p. 44)
- 50. The proposed tower would be visible year-round above the tree canopy from approximately 33 acres within a two-mile radius of the site (refer to Figure 2). The tower would be seasonally visible from an additional 4 acres. (Verizon 1, Tab 10)
- 51. The visibility analysis concluded the proposed tower would be visible year-round from five residential properties, including three properties on Colebrook Road approximately a half mile to the northeast, and two properties on Old Colebrook Road approximately two miles to the north. (Verizon 1, Tab 10)
- 52. Visibility of the proposed tower from specific locations within a two-mile radius of the site is as follows:

Location	Visible	Approximate Portion of Tower Visible	Distance from Tower
Route 44 southeast of site	Yes	70 feet – unobstructed.	0.35 mile southeast
Route 44 at Mad River Dam	Yes	30 feet – through trees.	0.1 mile south
Route 44 west of site	Yes	60 feet – unobstructed.	0.35 mile west
Colebrook Road, adjacent to #225	Yes	60 feet – unobstructed.	0.5 mile east
#207 Colebrook Road	Yes	80 feet - unobstructed	0.5 mile east
#201 Colebrook Road	Yes	80 feet unobstructed	0.5 mile east
Mad River Access Area	Yes	35 feet – unobstructed.	0.3 mile south
Winchester Road at Crystal Lake	No	-	1.7 miles south
Crown Street, Winsted	No	-	1.6 miles southeast
Route 44, Winsted	No	-	1.1 miles southeast
Route 44 at Danbury Corner Road	No	-	0.9 mile northwest

(Verizon 1, Tab 10; Tr. 2, pp. 9-13, 31, 34; Record)

- 53. The upper 30 to 75 feet of the tower would be visible above the tree canopy from a 0.25-mile section of Route 44 immediately west of the site. Algonquin State Forest borders both sides of Route 44 in this area. (Verizon 1, Tab 10)
- 54. The upper 40 feet of the tower would be visible above the tree canopy from a 0.1-mile section of Route 44 immediately southeast of the site. Surrounding property is undeveloped with the Algonquin State Forest occurring to the south of Route 44. (Verizon 1, Tab 10)

55. The tower would not be visible from any hiking trails maintained by the DEP or the Connecticut Forest and Parks Association. (Verizon 1, Tab 10; Tr. 1, p. 23)
56. The tower would be visible from the northwest shore of a small pond within the Algonquin State Forest adjacent to the site. There are no developed recreation areas along the perimeter of the pond. (Verizon 1, Tab 10; Tr. 1, pp. 23, 31, 44-45)
57. The tower would be visible from a short section of the state forest access road that extends into a flood control basin southwest of the site. There are no developed recreational areas within this area of the state forest. (Verizon, Tab 10; Tr. 1, p. 23)
58. Verizon would be willing to install a simulated pine tree tower at the site. The tree would extend above the treeline by 90 feet in some areas. Most of the surrounding trees are hardwood species. (Tr. 2, pp. 32-33)

#### **Verizon - Existing and Proposed Wireless Coverage**

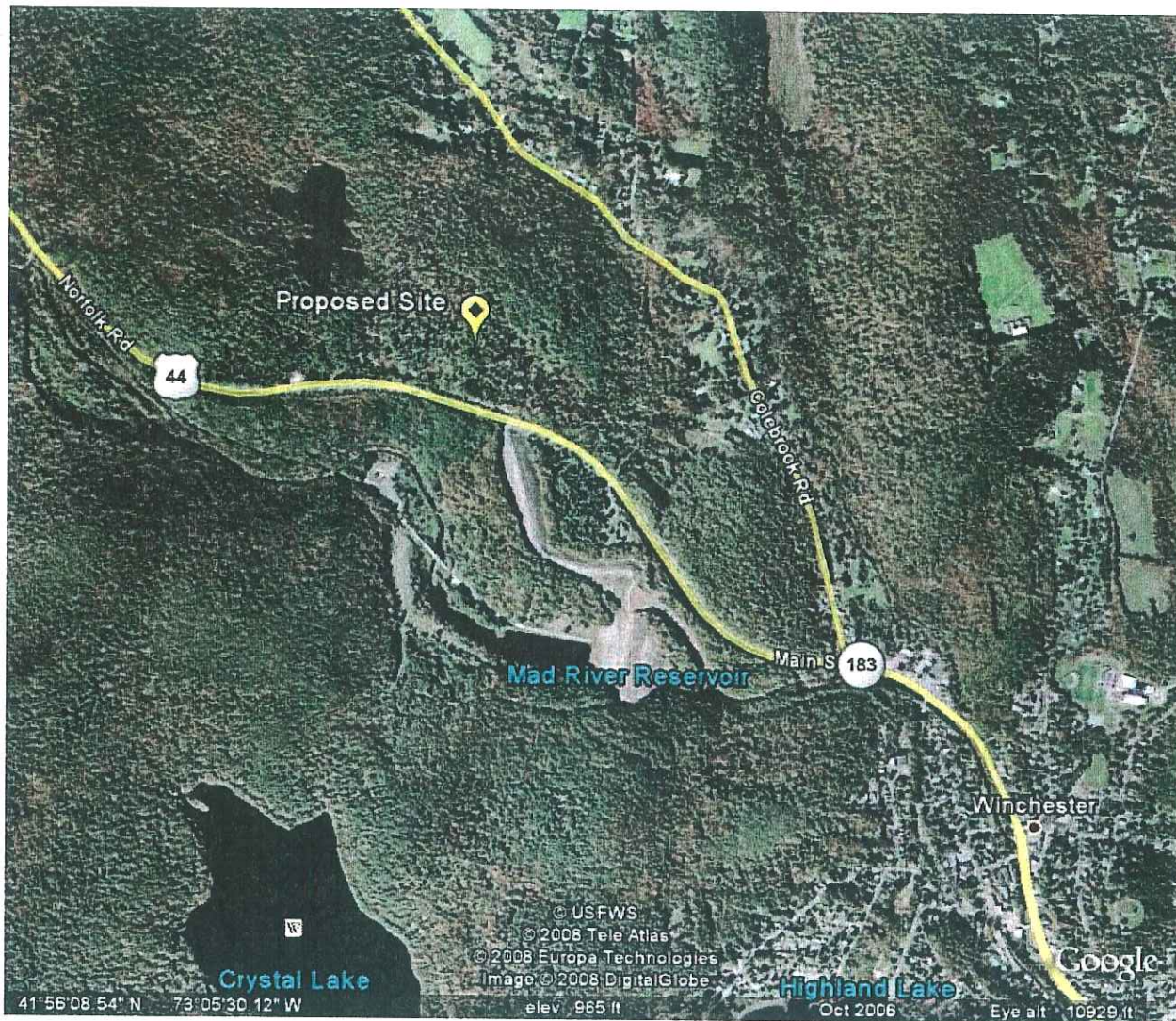
59. Verizon proposes to operate 800 MHz (cellular) and 1900 MHz (PCS) equipment at this site. Verizon is designing the site using a signal level threshold of -85 dBm for in vehicle coverage and -75 dBm for in-building coverage with 99% reliability. (Verizon 4, p. 2; Tr. 1, p. 15-16)
60. Verizon currently has no reliable, continuous cellular or PCS coverage on Route 44 immediate northwest of Winsted (refer to Figures 3 & 6). Limited cellular coverage from Verizon's "Colebrook Southwest" (Verizon at 125 feet agl) and "Winchester East" (Verizon at 117 feet agl) facilities extends along this section of Route 44. (Verizon 1, Tab 7; Verizon 4)
61. The proposed site would provide 3.0 miles of PCS and 3.4 miles of cellular coverage to Route 44, and 1.7 miles of PCS and 3.5 miles of cellular coverage to Route 183 (refer to Figures 4 & 7). (Verizon 1, p. 2, Verizon 4)
62. Reducing the antenna height to 130 feet would cause coverage to degrade for 0.4 miles on Route 44 west of the site (refer to Figure 5). PCS coverage would also degrade for 0.1 mile on Route 183 north of the site. Lowering the antenna height would not affect cellular coverage on Routes 44 and 183. (Verizon 3, Q. 20; Verizon 3; Tr. 1, pp. 17-18)

#### **Alternate Tower Locations**

63. At the request of the Council, Verizon provided a late file exhibit on August 7, 2008 to determine the feasibility of relocating the site further west on the parcel. (Tr. 1, pp. 41-42)
64. Verizon examined three potential alternative locations (Alt. 1, Alt. 2, Alt. 3) further west on the property. (Verizon late file, August 7 2008, p. 2)

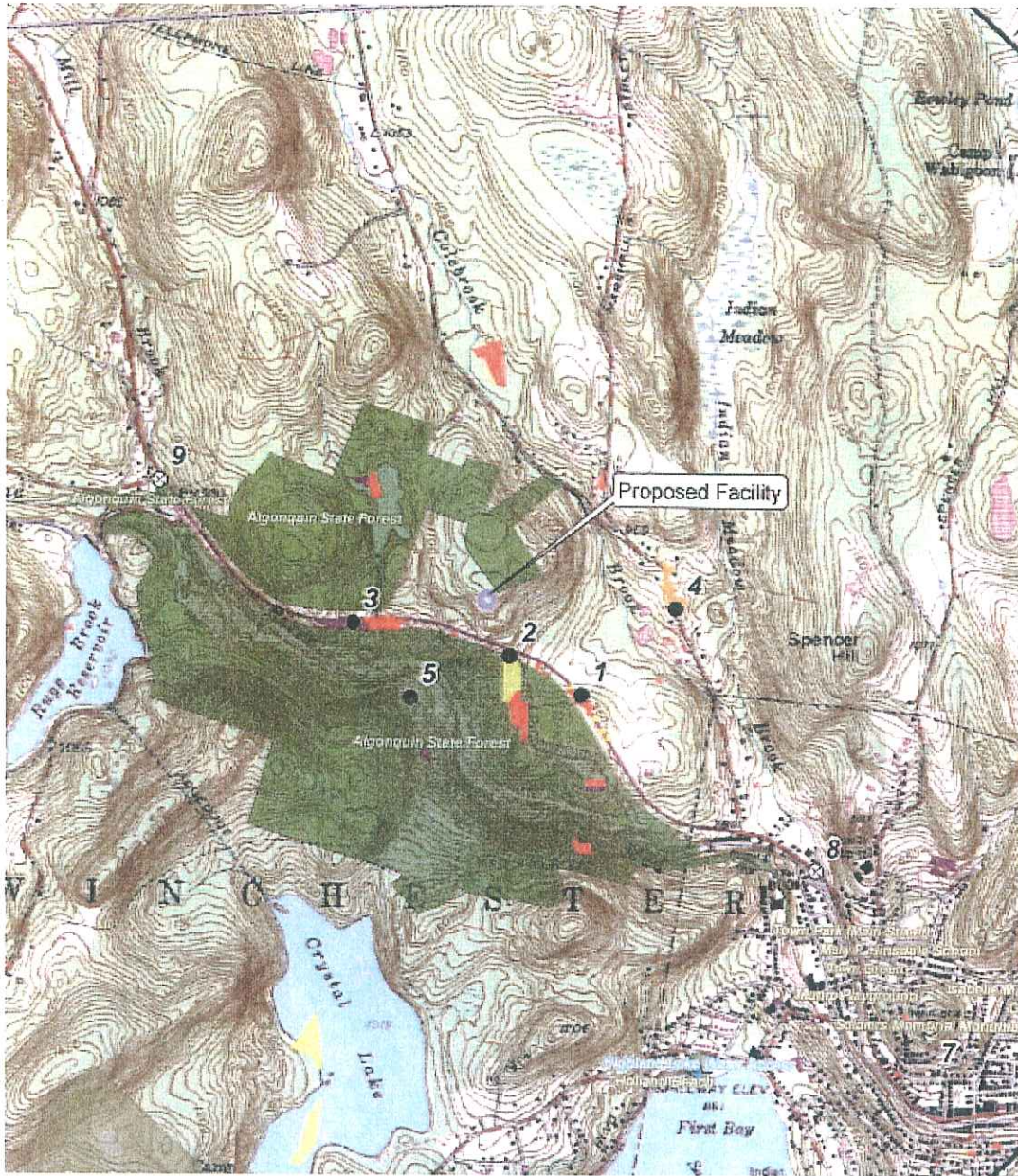
65. Alternative 1, located near the top of the ridgeline, approximately 200 feet to the west of the proposed site, did not have any site development issues. A tower height of 180 feet was analyzed and determined to be unsuitable since PCS coverage gaps totaling 0.25 mile would occur on Route 44 and 183. Additionally, a 180-foot tower in the Alternative 1 location would essentially have the same visibility impact to residences along Route 183 as the proposed 150-foot tower. (Verizon late file, August 7 2008, pp. 2-3, Tabs 1, 2, 3)
66. Alternative 2, located on a shallow sloping ridge approximately 500 feet west of the proposed site, was rejected since a tower over 200 feet in height would be required to provide similar coverage to provided by the proposed 150-foot tower. (Verizon late file, August 7 2008, p. 2)
67. Alternative 3, located on a shallow sloping ridge approximately 750 feet west of the proposed site, was rejected due to steep grades need to access the site and the presence of a seasonal, intermittent watercourse in the site area. (Verizon late file, August 7 2008, p. 2, Tab 1)

Figure 1 – Location of Site



(Verizon 1, p. iii)

Figure 2 – Projected Site Visibility



**Legend**

- Proposed Monopine  
(Includes select areas of visibility within approximately 500 feet around facility)

Photos - November 27, 2007

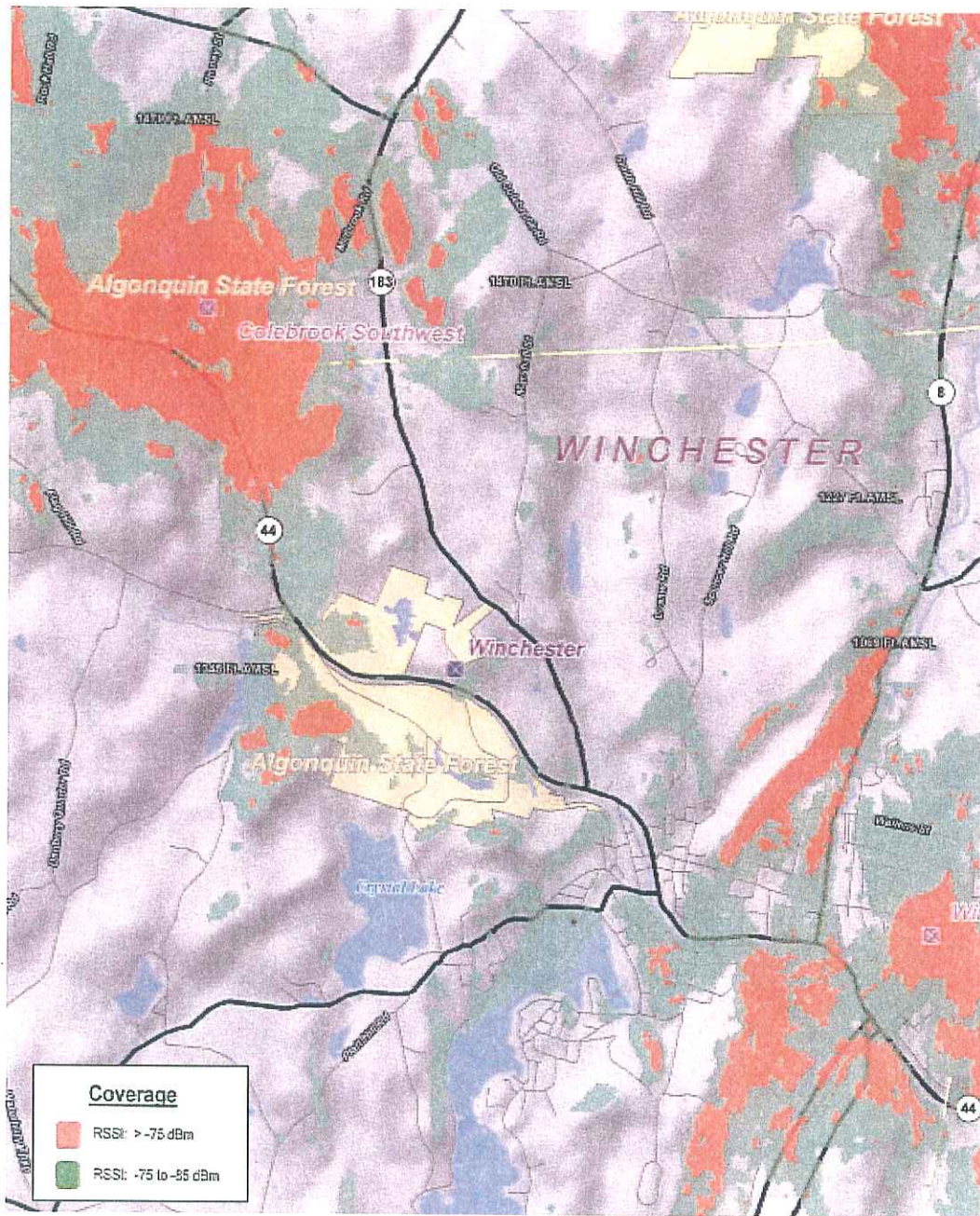
- Balloon Visible
- ⊙ Balloon Not Visible

- Anticipated Seasonal Visibility  
(Approximately 4 Acres)

**Approx. % of Monopole Visible (Year-Round)**

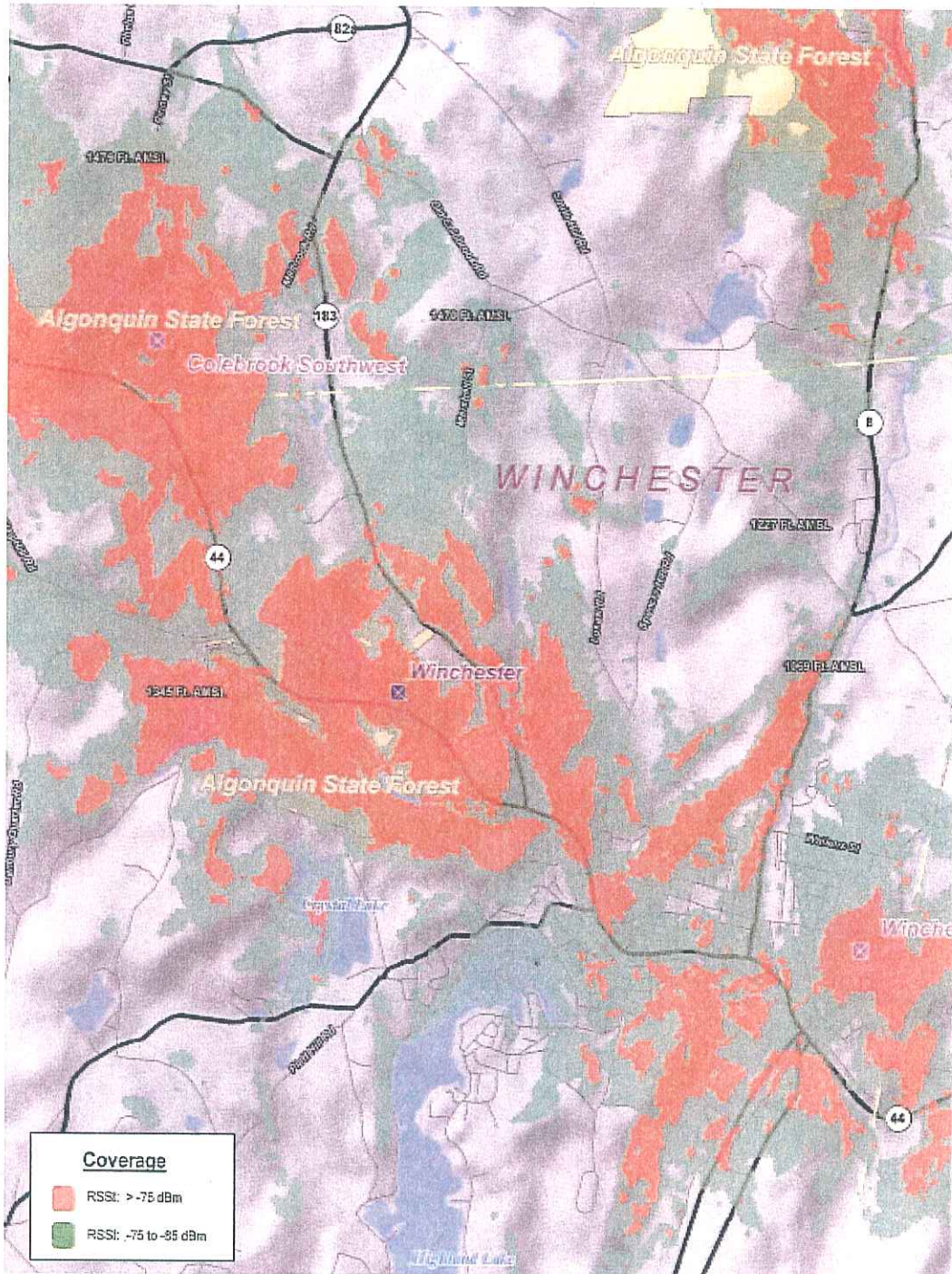
- Tree Line View - 11 Acres
- Upper 25% - 17 Acres
- 50% - 4 Acres
- Entire Facility Visible - 1 Acre

Figure 3 - Existing Verizon PCS Coverage



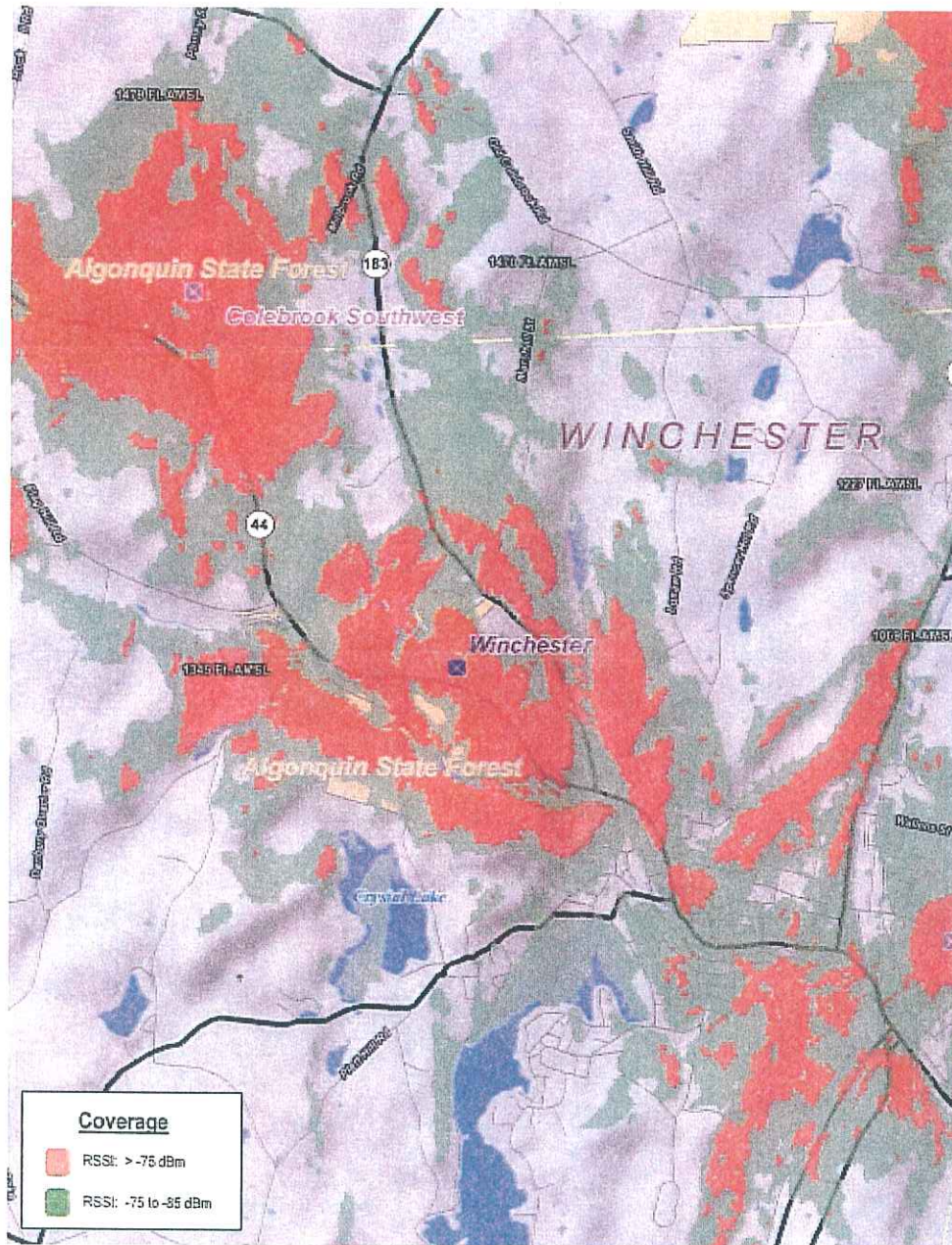
(Verizon 1, Tab 7)

Figure 4 – Proposed Verizon PCS Coverage at 150 feet



(Verizon 1, Tab 7)

Figure 5 – Proposed Verizon PCS Coverage at 130 feet



(Verizon 3, Q. 20)



Figure 6 – Existing Verizon Cellular Coverage

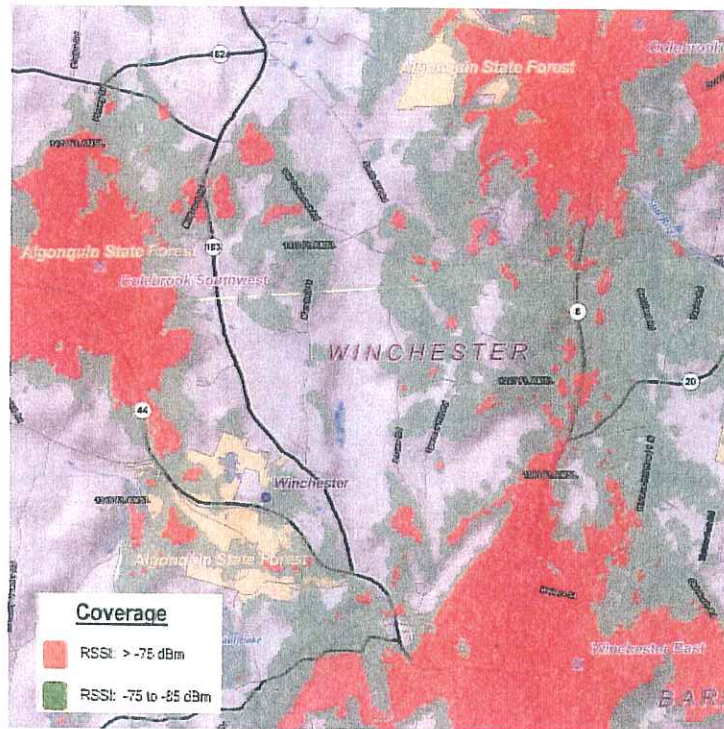
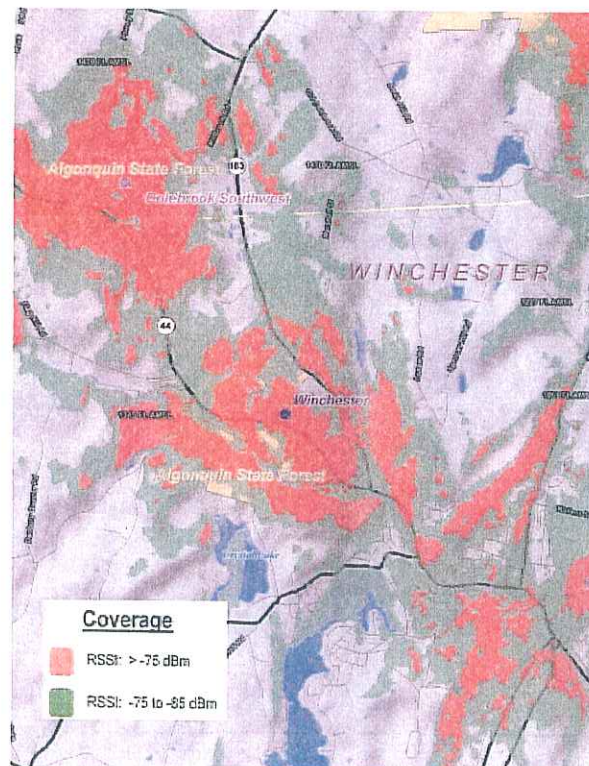


Figure 7 – Proposed Verizon Cellular Coverage at 150 feet



(Verizon 4)

