

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

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November 20, 2009

TO:

Parties and Intervenors

FROM:

S. Derek Phelps, Executive Director

RE:

DOCKET NO. 382 - 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 of Lane Street, Huntington (Shelton), Connecticut.

As stated at the hearing in Shelton on October 6, 2009, 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 Monday, November 30, 2009.

SDP/RDM/laf

Enclosure



Docket No. 382 Page 1 of 1

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

Status Cuantal	Document Service	Status Holder	Representative
Status Granted	Service	(name, address & phone number)	(name, address & phone number)
Applicant	E-mail U.S. Mail	Cellco Partnership d/b/a Verizon Wireless	Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103-3597 (860) 275-8200 (860) 275-8299 fax kbaldwin@rc.com Sandy Carter, Regulatory Manager Verizon Wireless 99 East River Drive East Hartford, CT 06108 Alexandria.carter@verizonwireless.com
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DOCKET NO. 382 – 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 Lane Street, Huntington (Shelton), Connecticut.

Connecticut

Siting

Council

November 12, 2009

DRAFT Findings of Fact

Introduction

- 1. Cellco Partnership d/b/a Verizon Wireless (Cellco), in accordance with the provisions of Connecticut General Statutes (CGS) §§ 16-50g through 16-50aa, applied to the Connecticut Siting Council (Council) on July 15, 2009 for the construction, operation, and maintenance of a 127-foot wireless telecommunications facility located at the Brownson Country Club in the Huntington section of Shelton, Connecticut. (Cellco 1, pp. 1-2)
- 2. Cellco is a Delaware corporation with an office in East Hartford, Connecticut. Cellco is licensed by the Federal Communications Commission (FCC) to construct and operate a personal wireless service system in Connecticut. (Cellco 1, p. 4)
- 3. The party in this proceeding is the applicant. (Transcript 1 10/06/09, 3:10 p.m. [Tr. 1], p. 5)
- 4. The purpose of the proposed facility is to provide wireless service for Cellco to Route 108, Huntington Street, and surrounding areas in the Huntington center area of Shelton. (Cellco 1, p. 2; Cellco 8)
- 5. Pursuant to CGS § 16-50m, the Council, after giving due notice thereof, held a public hearing on October 6, 2009, beginning at 3:10 p.m. and continuing at 7:00 p.m. at the Shelton Town Hall, 54 Hill Street, Shelton, Connecticut. (Tr. 1, p. 2; Transcript 2 10/06/09, 7:10 p.m. [Tr. 2], p. 2)
- 6. The Council and its staff conducted an inspection of the proposed site on October 6, 2009, beginning at 2:00 p.m. The applicant flew a four-foot diameter balloon at the site from 12:00 p.m. to simulate the height of the proposed tower. Favorable weather conditions were present generally in the early afternoon where the balloon reached the intended height of 127 feet above ground level (agl). (Tr. 2, pp. 30-31)
- 7. Notice of the application was provided to all abutting property owners by certified mail. Sixty five notices were not signed for and were returned. Cellco sent a second notice to these abutters by regular mail. Public notice of the application was published in the <u>Connecticut Post</u> on July 9 and 10, 2009. (Cellco 1, Tab 5; Cellco 2; Cellco 4, Q. 1)
- 8. Cellco installed a four-foot by six-foot sign on Lane Street at the location of the proposed access road entrance. Information on the sign included a project description, hearing and contact information. (Cellco 5)
- 9. Pursuant to CGS § 16-50l(b), AT&T provided notice to all federal, state and local officials and agencies listed therein. (Cellco 1, Tab 3)

State Agency Comment

- 10. Pursuant to General Statutes § 16-50j(h), on August 28, 2009 and October 7, 2009, 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), the Department of Transportation (DOT) and the Department of Agriculture (DOAg). (Record)
- 11. The Council received a written response from the DOT's Bureau of Engineering and Highway Operations on September 30, 2009, stating that the DOT has no comment. (Record)
- 12. No response was received from the DPH, DOAg, DEP, CEQ, DPUC, OPM, or DECD. (Record)

Municipal Consultation

- 13. Cellco met with the Mayor of Shelton, Mark Lauretti, and the Shelton Director of Planning, Rick Schultz, on January 28, 2009 to discuss the project. (Cellco 1, p. 21)
- 14. At the City's request, Cellco hosted a public information meeting at the Shelton Community Center on March 3, 2009. (Cellco 1, p. 21)
- 15. The City did not comment on the proposal. (Cellco 4, Q. 13; Tr. 1, pp. 67-68)

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. Cellco is licensed by the FCC to provide wireless service to Fairfield County. (Council Administrative Notice Item No. 7; Cellco 1, p. 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)
- 20. In an effort to ensure the benefits of wireless technologies to all Americans, Congress enacted the Wireless Communications and Public Safety Act of 1999. The purpose of this legislation was to

promote public safety through the deployment of a seamless, nationwide emergency communications infrastructure that includes wireless communications services. (Cellco 1, p. 7)

21. Cellco would be able to provide enhanced 911 services to the target service area. (Cellco 1, p. 7)

Site Selection

- 22. Cellco established a search ring for the target service area in September of 2006. The search included identification of potential structures that could be used for telecommunications purposes and the examination of area properties, including municipal parcels, to identify potential telecommunications sites. (Cellco 1, Tab 9)
- 23. Cellco is located on the nearest existing tower facilities to the proposed site, including facilities at Video Lane in Trumbull, Old Kings Highway in Shelton, 70 Platt Road in Shelton, and off Perry Hill Road in Shelton. The nearest facility is the Perry Hill Road location, 1.2 miles northeast of the proposed site. Coverage from these sites does not extend to the target service area. (Cellco 1, Tab 9; Cellco 8; Tr. 1, pp. 10-11)
- 24. Cellco did not identify any structures suitable to provide coverage to the target service area. (Cellco 1, Tab 9)
- 25. After determining there were no viable structures within the search area, Cellco searched for properties suitable for tower development. Cellco investigated eight different sites and selected one for tower development. The seven rejected sites and reasons for their rejection are as follows:
 - a) Brownson Country Club (clubhouse area) too close to established neighborhood, lack of screening;
 - b) Brownson Country Club (north of 11th green) wetland impacts:
 - c) Huntington Fire Station town not interested in lease;
 - d) St. Paul's Episcopal Church, Huntington— existing steeple too short, replacement steeple would alter the historic nature of church which is in a designated historic district;
 - e) Huntington Congregational Church, Huntington— existing steeple too short, replacement steeple would alter the historic nature of church which is in a designated historic district;
 - Shelton Land Trust property on Lane Street, Huntington land use restrictions, environmental impacts;
 - g) St. Lawrence Church, Huntington church does not have a steeple, very open area with no screening from adjacent residences.

(Cellco 1, Tab 9; Cellco 4, Q. 3, Q. 4; Tr. 1, pp. 67-68; Tr. 2, pp. 25, 27-28)

Facility Description

- 26. The proposed facility is located on the southern portion of the Harry Brownson Country Club, south of the 11th fairway. The southern portion of the country club totals 55 acres and is developed as a golf course (refer to Figures 1 & 2). (Cellco 1, Tab 12; Tr. 2, p. 31)
- 27. The parcel is zoned residential, R-1. (Cellco 1, p. 17)
- 28. Cellco proposes to construct a 127-foot tree tower at the site composed of a 120-foot monopole with simulated branches extending to a height of 127 feet agl. (Cellco 1, p. 2, Tab 1)
- 29. The tower would be designed to support four levels of platform-mounted antennas. The antennas and platforms would be concealed within the simulated branches. (Cellco 1, Tab 1)

- 30. Cellco proposes to construct a 40-foot by 66-foot equipment compound within a 100-foot by 100-foot lease area at the base of the tower, sufficient space to accommodate four telecommunication carriers. The compound would be enclosed by an eight-foot high chain link fence lined with black vinyl privacy slats. (Cellco 1, Tab 1)
- 31. Access to the compound would be from a 1,680-foot access drive extending northeast from Lane Street. The access drive would originate across from residential property at 31 Lane Street on a 12-foot wide new gravel drive that would cross the 11th fairway for 560 feet. After crossing the fairway, the access drive would follow an existing paved golf cart path west for 1,120 feet to the site. The existing paved cart path would be widened to 12 feet. Cellco would attempt to minimize the width of the access road to the greatest extent possible. (Cellco 1, Tab 1; Tr. 1, pp. 16, 40, 53-55)
- 32. The entrance to the access road on Lane Street would be gated with metal bar gate. The gate could be designed to blend in with the character of the neighborhood. (Tr. 2, p. 36)
- 33. Cellco anticipates a technician would visit the site every four to six weeks to service equipment. In winter, the road would be plowed if snow accumulates to a depth of three inches or more. (Tr. 2, pp. 28-29)
- 34. Underground utilities would service the compound from existing service on Lane Street. The utilities would be installed adjacent to the access road within a 20-foot wide access road/utility easement. (Cellco 1, Tab 1; Tr. 1, p. 24)
- 35. Cellco proposes to install up to 15 panel antennas on a platform at a centerline height of 120 feet agl. (Cellco 1, Tab 1)
- 36. Cellco proposes to install a 12-foot by 30-foot equipment shelter on a concrete pad within the compound. Emergency power would be provided by a diesel generator located within the shelter. Diesel fuel for the generator is stored in a double walled fuel tank under the generator unit. The floor of the shelter is designed to capture any fuel that could leak out of the fuel tank. (Cellco 1, Tab 1; Tr. 1, pp. 22-23)
- 37. The tower is approximately 185 feet east of the nearest property boundary at 64 Lane Street (Cwanek Property). (Cellco 1, Tab 1)
- 38. The tower radius would be contained within the site property. (Cellco, Tab 1)
- 39. The tower is approximately 360 feet northeast of the nearest residence at 68 Lane Street (Dobson Property). (Cellco 1, Tab 1)
- 40. There are 11 single family residences (Lane Street and Old Shelton Road) and 48 condominium units, (Aspetuck Village) within 1,000 feet of the tower site. (Cellco 1, Tab 1)
- 41. Land use within a quarter-mile of the site consists of a mix of single and multi-family residential, commercial properties, open space and a golf course. (Cellco 1, Tab 1)
- 42. The tower site is located at an elevation of 306 feet above mean sea level (amsl). Surrounding terrain consists of sloping ridges to the north and east and a shallow valley to the south and west. Huntington center is located 0.4 miles west of the proposed site. (Cellco 1, Tab 1)

43. The estimated construction cost of the facility is:

Radio equipment	\$450,000.
Site development	135,000.
Tower, coax, antennas	150,000.
Equipment building	50,000.
Power systems	20,000.
Total estimated cost	\$805,000.
(Cellco 1, p. 23)	

Environmental Concerns

- 44. The proposed facility would have no adverse effect on historic, architectural or archeological resources listed in or eligible for the National Register of Historic Places. (Cellco 1, p. 22, Tab 11)
- 45. The site is not within any designated area indicating the presence of Federally threatened or endangered species or State endangered, threatened or special concern species. (Cellco 1, p. 22)
- 46. Twenty trees with a diameter of six inches or greater at breast height would be removed to develop the site. All of the trees would be removed to develop the compound and short access way extending from the existing cart path. (Cellco 1, Tab 1; Tr. 1, p. 15)
- 47. Development of the compound would impact two small, previously disturbed wetlands located between the compound site and the existing cart path. The wetlands, designated as Wetland 1 and Wetland 2, are isolated in nature, lack vegetative diversity, and are damaged through vehicle impaction and brush dumping. (Tr. 1, pp. 17-20, 38)
- 48. The project would require the filling of all of Wetland 1 (850 square feet), and 160 square feet of Wetland 2 which totals 260 square feet. (Tr. 1, pp. 19-20)
- 49. Relocating the compound access way slightly west to minimize wetland impacts would require the clearing of mature woodland. The woodland, containing several mature oaks and understory species, provides wildlife habitat and visual screening and is more environmentally beneficial than the two wetland areas that would be impacted by site development. (Cellco 7; Tr. 1, pp. 74-76)
- 50. Upgrading the existing paved cart path to an access road would require the replacement of an existing culvert with an 11-foot wide concrete bridge structure where the path extends between two existing ponds along the 11th fairway. The bridge structure would create an open channel between the two ponds. Approximately 500 square feet of impacts would occur to the pond edges and at the channel crossing. The flow characteristics between the two ponds would not be altered. (Cellco 1, Tab 12; Tr. 1, pp. 18-19)
- 51. Approximately 330 cubic yards of cut and 315 cubic yards of fill would be required for site development. Site blasting is not anticipated. (Cellco 4, Q. 5)
- 52. Aircraft hazard obstruction marking or lighting of the tower is not required or proposed. (Cellco 1, pp. 21-22, Tab 13)
- 53. The cumulative worst-case maximum power density from the radio frequency emissions from the operation of the proposed Cellco antennas is calculated to be 26.7% 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, which creates the highest possible power density levels. Under normal operation, the antennas would be oriented outward, directing radio frequency emissions away from the tower, thus resulting in significantly lower power density levels in areas around the tower base. (Cellco 1, p. 16; Cellco 4, p. 14)

Visibility

- 57. The proposed tower would be visible year-round from approximately 17 acres within a two mile radius of the proposed site (refer to Figure 3), mostly from the area within a quarter mile of the site. The tower would be seasonally visible from an additional 29 acres. (Cellco 1, Tab 10)
- 58. Visibility of the proposed tower from specific locations within a two-mile radius of the site is as follows:

Specific Location and Area Receptors	Visible	Approximate Portion of Tower Visible	Approx. Distance from Tower*
Lawn Cemetery off Lane Street Entire cemetery would have view. (refer to Figure 4)	Yes	65 feet – unobstructed	0.3 miles west
Church Street at Huntington Green Spot views from this area.	Yes	30 feet – unobstructed	0.4 miles west
Huntington Street/Lane Street intersection. 0.2 mile section of road.	Yes	30 feet – unobstructed	0.4 miles west
Lane Street across from Lawn Cemetery Spot views along road.	Yes	65 feet - unobstructed	0.3 miles southwest
Huntington Street at #155 Four homes with views of tower. Spot views along road.	Yes	45 feet- unobstructed	0.4 miles southwest
Land Trust parcel off Lane Street Open field areas.	Yes	65 feet – unobstructed	0.3 miles south
Ironwood Trail (Aspetuck village condominiums) 15 units with views in complex.	Yes	80 feet – through trees	0.2 miles east
Brownson Country Club/Aspetuck Village property boundary (Wolf Run) 15 units with views in complex.	Yes	80 feet – through trees	0.1 miles east
Old Pent Road (by #64 Lane Street) Residence at 68 Lane Street would have similar view. (refer to Figure 5)	Yes	127 feet – through trees, includes compound.	0.2 miles west
Lane Street (across from # 62) Spot view along road, front yard.	Yes	40 feet - through trees	0.2 miles southwest

(Cellco 1, Tab 10; Tr. 1, pp. 21-22, 27-32)

^{* 0.1} mile = 528 feet.

- 59. The tower would not be visible from any known hiking trails maintained by the DEP or the Connecticut Forest and Parks Association. The tower would be visible from an open field area of a land trust parcel off Lane Street, 0.3 miles south of the site. (Cellco 1, Tab 10)
- 60. The tower would be visible year-round from spot locations within the Huntington Center Historic District, an area generally extending in a linear north-south orientation from the Huntington Green to the Farmill River. The green is approximately 0.4 miles west of the site. The State Historic Preservation Officer viewed a balloon fly which simulated the height of the proposed tower on September 28, 2008, and determined the proposed facility would have no effect on cultural resources listed or eligible for the National Register of Historic Places. (Cellco 1, Tab 10, Tab 11; Cellco 4, Tab 1; Tr. 1, pp. 24-25, 34-35)
- 61. The tower would be visible from spot locations along Lane Street, a town-designated scenic road 0.2 miles southwest of the site. (Cellco 1, Tab 10; Tr. 1, pp. 71-74)

Cellco - Existing and Proposed Wireless Coverage

- 62. Cellco proposes to operate both cellular (800 MHz) and PCS (1900 MHz) equipment at the site. Cellco is also licensed to operate in the 700 MHz frequency band but has not yet deployed this service in Connecticut. Cellco would install 700 MHz equipment in the future. (Cellco 1, p. 8, Tab 1; Cellco 4, Q. 8; Tr. 1, pp. 87-88)
- 63. Cellco designs and operates at the following signal level thresholds: in-vehicle service is -85 dBm and in-building service is -75 dBm. (Cellco 1, p. 8, Tab 1; Cellco 4, Q. 8; Tr. 1, pp. 87-88)
- 64. Cellco currently has no reliable, continuous coverage in the target service area where existing coverage ranges from -90 to -110 dBm (refer to Figures 6 & 8). Verizon currently experiences a 3% drop call rate. Verizon is seeking to reduce the drop call rate to less than 1%. (Cellco 8; Tr. 1, pp. 91-92)
- 65. Installing antennas at 120 feet agl would provide reliable cellular and PCS service to Route 108 for 2.6 miles and 1.8 miles, respectively (refer to Figures 7 & 9). (Cellco 4, Q. 10; Tr. 1, pp. 11-13)
- 66. The site would provide a cellular coverage footprint of 6.3 square miles and a PCS coverage footprint of 2.7 miles. (Cellco 4, Q. 10)
- 67. Reducing the antenna height to 110 feet agl would cause a slight degradation of coverage along the periphery of the cellular footprint for in-building coverage and a degradation of coverage for 0.2 miles along Route 108 south of the site for PCS service. (Cellco 4, Q. 10; Cellco 8)

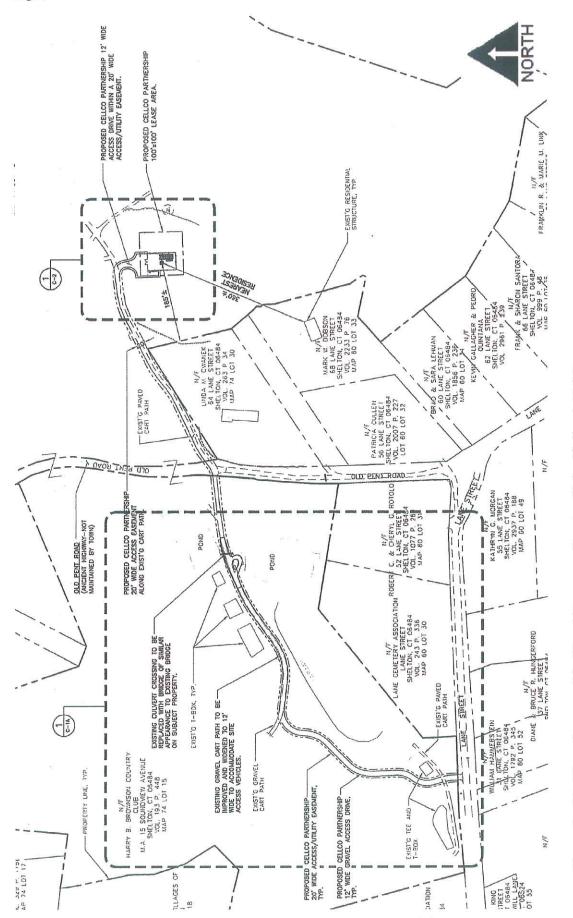


Figure 1: Site Plan of proposed facility at Brownson Country Club. (Cellco 1, Tab 2



Figure 2: Location of site at Brownson Country Club. (Cellco 1, p. iii)

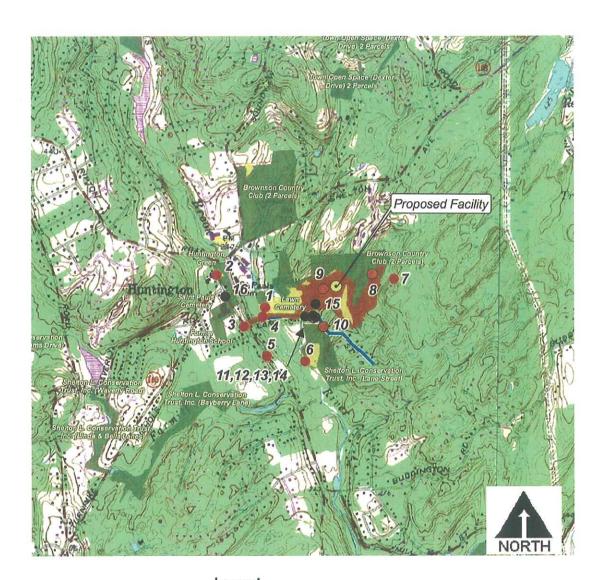




Figure 3: Projected visibility of proposed site. (Cellco 1, Tab 10)

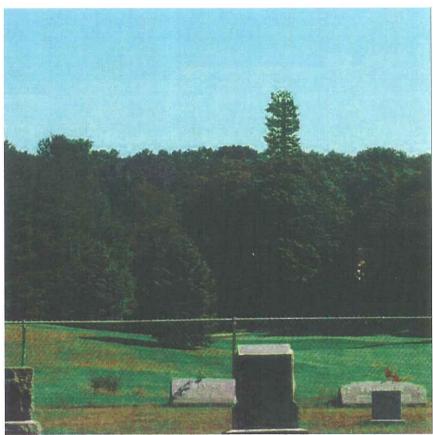


Figure 4: Photo-simulation of proposed "tree tower" from Lawn Cemetery. (Cellco 1, Tab 10)



Figure 5: Photo-simulation of proposed tree tower from #64 Lane Street (Cellco 1, Tab 10)

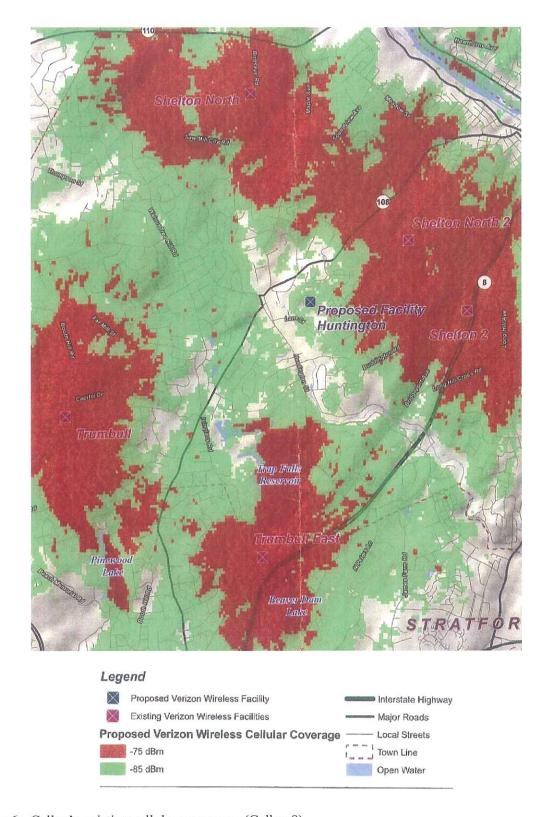


Figure 6: Cellco's existing cellular coverage. (Cellco 8)

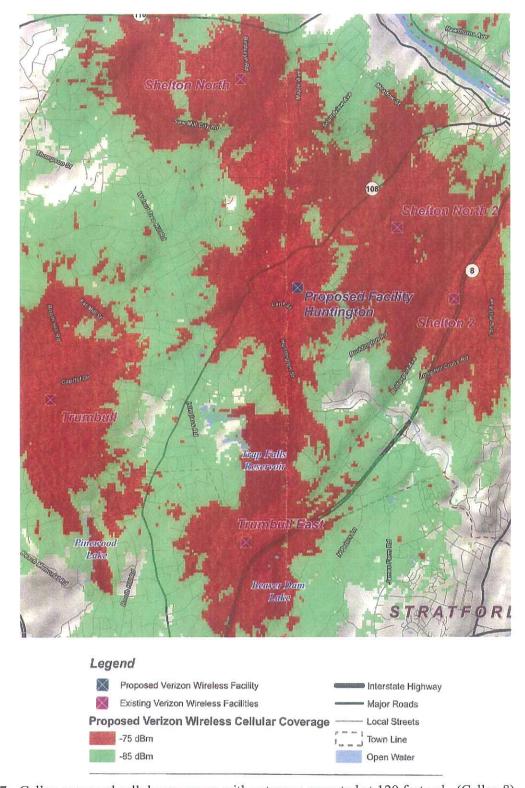


Figure 7: Cellco proposed cellular coverage with antennas mounted at 120 feet agl. (Cellco 8)

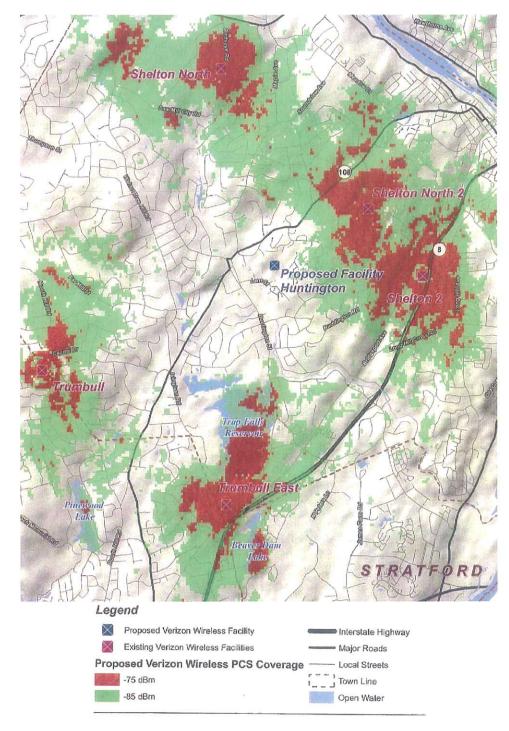


Figure 8: Cellco's existing PCS coverage. (Cellco 8)

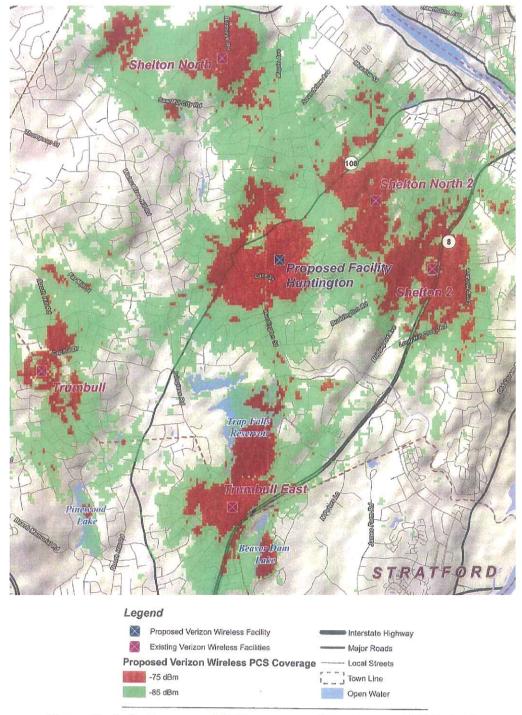


Figure 9: Cellco's proposed PCS coverage with antennas at 120 feet agl. (Cellco 8)