

# STATE OF CONNECTICUT

#### CONNECTICUT SITING COUNCIL

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November 19, 2010

TO:

Parties and Intervenors

FROM:

Linda Roberts, Executive Director

RE:

**DOCKET NO. 403** - 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 at 174 South

Grand Street, Suffield, Connecticut.

As stated at the hearing in Suffield on September 28, 2010, 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 November 29, 2010.

LR/jbw

Enclosure



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

Status Granted	Document Service	Status Holder (name, address & phone number)	Representative (name, address & phone number)
Applicant	⊠ E-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
	☐ E-mail or ☐ U.S. Mail		
	☐ E-mail or ☐ U.S. Mail		
	☐ E-mail or ☐ U.S. Mail		

DOCKET NO. 403 - 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 at 174 South Grand Street, Suffield, Connecticut.

Council

November 1, 2010

# DRAFT

# **Findings of Fact**

#### Introduction

- 1. Celico Partnership d/b/a Verizon Wireless (Celico), in accordance with provisions of Connecticut General Statutes (CGS) § 16-50g through 16-50aa, applied to the Connecticut Siting Council (Council) on July 9, 2010 for the construction, maintenance, and operation of a telecommunications facility, which would include a 120-foot tall monopole tower, at 174 South Grand Street in the Town of Suffield, Connecticut. (Celico 1, pp. i, 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 is Cellco's sole business in Connecticut. (Cellco 1, p. 5)
- 3. The party in this proceeding is the applicant. (Transcript, September 28, 2010, 3:00 p.m. [Tr. 1], p. 4)
- 4. The purpose of the proposed facility is to provide coverage and capacity relief primarily along portions of Routes 187 and 168 as well as local roads and residential and commercial areas in the southwest portion of Suffield. (Cellco 1, pp. i, 1-2)
- 5. Pursuant to CGS § 16-50m, the Council, after giving due notice thereof, held a public hearing on September 28, 2010, beginning at 3:00 p.m. and continuing at 7:00 p.m. at the Suffield High School Auditorium, 1060 Sheldon Street in West Suffield, Connecticut. (Tr. 1, p. 2 ff.)
- 6. The Council and its staff conducted an inspection of the proposed site on September 28, 2010, beginning at 2:00 p.m. The applicant flew a balloon at the site from 8:00 a.m. until approximately 6:00 p.m. at a height of 120 feet to simulate the proposed monopole tower. A steady breeze and visibility that varied from two miles to less than one mile made for less than ideal conditions for the balloon flight. (Tr. 1, pp. 20-21)
- 7. Pursuant to CGS § 16-50*l*(b), Cellco published public notice of its intent to submit this application on July 7 and 8, 2010 in <u>The Journal Inquirer</u>. (Cellco 1, p. 6; Cellco 3 Affidavit of Publication dated July 28, 2010)

- 8. Pursuant to CGS § 16-50*l*(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. 6; Attachment 4)
- 9. Two of the certified letters Cellco sent to the abutting property owners were returned and marked as "unclaimed." A second notification letter was sent by regular mail to the two property owners from whom return receipts were not received. (Cellco 4, Response 6)
- 10. Pursuant to CGS § 16-50*l* (b), Cellco provided copies of its application to all federal, state and local officials and agencies listed therein. (Cellco 1, p. 6; Attachment 2)
- 11. Verizon posted a sign giving public notice of its pending application on the host property on September 13, 2010. The sign was four feet by six feet in size and included the date of the scheduled public hearing and contact information for the Council. (Cellco 5, Sign Posting Affidavit, dated September 14, 2010)

## **State Agency Comment**

- 12. Pursuant to CGS § 16-50*l*, on August 23 and September 29, 2010, the Council solicited comments on Cellco's application from the following state agencies: Department of Agriculture, Department of Environmental Protection (DEP), Department of Public Health, Council on Environmental Quality, Department of Public Utility Control, Office of Policy and Management, Department of Economic and Community Development, the Department of Transportation, and the Department of Emergency Management and Homeland Security. (CSC Hearing Package dated August 23, 2010; CSC Letter to State Department Heads dated September 29, 2010)
- 13. The Council did not receive comments from any state agencies. (Record)

### **Municipal Consultation**

- 14. On April 22, 2010, Cellco representatives met with Thomas Frenaye, the First Selectman of the Town of Suffield (Town), to commence the sixty day municipal consultation period required by CGS §16-50*l*(e). At this meeting, Cellco provided Mr. Frenaye with copies of technical information summarizing Cellco's proposed telecommunications facility. (Cellco 1, p. 20)
- 15. At the request of Suffield's First Selectman, Cellco hosted a public information meeting at the Suffield Town Hall on May 20, 2010. At the time of this meeting, Cellco was also considering a second tower site off of Mountain Road as an alternative to the site proposed in its application to the Council. Property owners who abut both the proposed site and the alternative site received notification of the public meeting. Public notice of the meeting was published in the Journal Inquirer on May 6, 2010. (Cellco 1, p. 20)

- 16. At the request of the Town, Cellco had discussions about another alternative site at the Town-owned Bruce Park prior to commencing the sixty day municipal consultation period. The Town ultimately withdrew this site from consideration due to use restrictions that would not allow the development of a tower on this parcel. (Cellco 1, p. 20)
- 17. The Town of Suffield expressed an interest in locating emergency services antennas on Cellco's proposed tower. Cellco would provide space on the proposed tower for the town's antennas at no charge. (Tr. 1, pp. 8-9)

#### **Public Need for Service**

- 18. In 1996, the United States Congress recognized a nationwide need for high quality wireless telecommunications services, including cellular telephone service. Through the Federal Telecommunications Act of 1996, Congress seeks to promote competition, encourage technical innovations, and foster lower prices for telecommunications services. (Council Administrative Notice Item No. 7)
- 19. 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; Cellco 1, p. 7)
- 20. The Telecommunications Act of 1996 prohibits local and state bodies from discriminating among providers of functionally equivalent services. (Council Administrative Notice Item No. 7)
- 21. The Telecommunications Act of 1996 prohibits any state or local entity from regulating telecommunications towers on the basis of the environmental effects, which include human health 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)
- 22. In recognition of the public safety benefits enhanced wireless telecommunications networks can provide, Congress enacted the Wireless Communications and Public Safety Act of 1999 (the 911 Act). The purpose of this legislation was to promote public safety by making 9-1-1 the universal emergency assistance number and through the deployment of a seamless, nationwide emergency communications infrastructure that includes wireless communications services. (Cellco 1, p. 8)
- 23. In 2004, Congress enacted the Enhanced 911 (E911) Act for the specific purpose of enhancing and promoting homeland security, public safety, and citizen activated emergency response capabilities. (Cellco 1, p. 8)
- 24. Cellco's antennas at the proposed facility would comply with E911 requirements. (Cellco 4, Response 2)

#### **Existing and Proposed Wireless Coverage**

- 25. Cellco is licensed to operate in the 850 MHz (cellular), 1900 MHz (PCS), and 700 MHz (Long Term Evolution LTE) frequency ranges throughout Connecticut. (Cellco 4, Response 1)
- 26. Cellco's network design thresholds for reliable service are -85 dBm for reliable in-vehicle service and -75 dBm for reliable in-building coverage. (Cellco 4, Response 7)
- 27. Cellco's existing signal strength in the vicinity of the proposed facility ranges from -86 dBm to -100 dBm. (Cellco 4, Response 8)
- 28. In the sectors of the adjacent cell sites that are directed toward the vicinity of the proposed facility, Cellco experiences dropped calls at an average rate of 1.34% and ineffective attempts at an average rate of 1.14%. (Cellco 4, Response 9)
- 29. Cellco attempts to keep its rates of dropped calls and ineffective attempts to below one percent. (Tr. 1, p. 16)
- 30. Cellco currently experiences coverage gaps of 1.19 miles on Route 187 and 1.03 miles on Route 168 at cellular frequencies and 2.62 miles on Route 187 and 3.16 miles on Route 168 at PCS frequencies. (Cellco 4, Response 10)
- 31. In addition to its coverage gaps on Routes 187 and 168, Cellco also experiences coverage gaps on portions of North Stone Street, Ratley Road, Hill Street, and Spruce Street. The proposed facility would provide adequate coverage for many of the gaps on these local streets. (Cellco 4, Response 11)
- 32. From the proposed facility, Cellco would cover 3.53 miles on Route 168 and 3.9 miles on Route 187 at 850 MHz frequencies; 2.7 miles on Route 168 and 3.16 miles on Route 187 at 1900 MHz frequencies; and 3.11 miles on Route 168 and 4.15 miles on Route 187 at 700 MHz frequencies. (Cellco 1, p. 3)
- 33. From the proposed facility, Cellco would cover a total of 11.82 square miles at 850 MHz frequencies; a total of 6.9 square miles at 1900 MHz frequencies; and 13.71 square miles at 700 MHz frequencies. (Cellco 1, p. 3)
- 34. Cellco is searching for a site to the north that would enable Cellco to provide coverage to areas that this proposed facility would not be able to cover. (Tr. 1, pp. 13-14)

35. Cellco's proposed facility would hand off signals with the adjacent facilities identified in the following table.

Site Location	Distance and Direction to Site
44 Fyler Place, Suffield	2.3 miles to east
55 King Spring Road, Windsor Locks	3.5 miles to southeast
116 Newgate Road, East Granby	2.5 miles to southwest
2715 Mountain Road, Suffield	2.2 miles to west
850 South Westfield Road, Agawam, MA	3.8 miles to north
639 North Street, Suffield	2.8 miles to northeast

(Cellco 4, Response 3)

36. The lowest feasible height at which Cellco's antennas could achieve its coverage objectives in the vicinity of the proposed facility is 120 feet above ground level. (Cellco 4, Response 5)

## **Site Selection**

- 37. Cellco initiated its site search process in the vicinity of the proposed site in July 2008. Its search ring was centered on a location at 41° 59' 28.50" north latitude and 72° 42' 17.10" west longitude, near the intersection of Routes 168 and 187 in Suffield. The radius of the search ring was approximately one mile. (Cellco 1, p. 12; Cellco 1, Attachment 8; Cellco 4, Response 13)
- 38. Cellco maintains seven telecommunications facilities within approximately four miles of the proposed site. None of these facilities can provide the service Cellco is seeking to provide in this area of Suffield. Cellco's existing sites are listed in the following table.

Owner/(Cellco Site Name)	Facility Height and Type	Location	Cellco Ant, Ht,	Distance and Direction to Facility
CT Water Co. (Suffield NE)	103' water tank	639 North Street, Suffield	95'	2.8 mi, NE
Crown (Suffield)	100' monopole	44 Fyler Place, Suffield	90'	2.3 mi, E
Cox Cmcns (Suffield South)	100' lattice tower	55 King Spring Rd, Winsor Locks	90'	3.5 mi, SE
CT DOT (East Granby)	75' monopole	Newgate Road, East Granby	75'	2.5 mi, SW
State of CT (Bradley Airport)	Roof-top (parking garage)	Bradley Airport, Windsor Locks	43'	4 mi, S
Crown (Suffield West)	192' monopole	2715 Mountain Rd, Suffield	90'	2.2 mi, NW
National Grid (Agawam 3)	160' monopole	850 S. Westfield Rd, Agawam, MA	137'	3.8 mi, N

(Cellco 1, p. 2; Attachment 8)

- 39. In its site search process, Cellco did not find any existing, non-tower structures of a height that would enable Cellco to provide its desired coverage. (Cellco 1, pp. 11-12)
- 40. Cellco identified and investigated 16 properties in addition to the property on which its proposed site is located. These properties and the determinations of their suitability are listed below.
  - a. <u>Demko Property</u> This is a 6-acre property off of Mountain Road. It was originally included in the technical report Cellco submitted to the Town as an alternate location to the proposed site. Following Cellco's public information meeting of May 20, 2010, the owners of this property informed Cellco that they were no longer interested in having a tower on the property.
  - b. <u>Spaulding School/Bruce Park</u> Cellco explored using a portion of Bruce Park for a site at the Town's request. This location was withdrawn after the Town discovered use restrictions on the property.
  - c. <u>Sunrise Park</u> Cellco explored the use of this park, located off of Mountain Road in West Suffield, at the request of the Town. This location was rejected because it was too far to the west and would not fill Cellco's coverage gaps along Route 187, both north and south of Route 168.
  - d. West Suffield Congregational Church Cellco explored the use of this church's steeple at 1410 Mountain Road. The steeple extends to a height of 50 feet and was rejected as being too low. Cellco would need a minimum height of 100 feet to achieve its coverage objectives at this location.
  - e. <u>Suffield Police Department</u> Cellco explored developing a site at the Police Department at 911 Mountain Road. This location was rejected because it is too far to the east to achieve Cellco's coverage objectives along Routes 187 and 168.
  - f. Suffield Volunteer Fire Department #2 This site is located at 9 Ratley Road (a.k.a. 911 Mountain Road) in West Suffield. Cellco rejected it because development of this site would have significant wetlands impacts.
  - g. <u>Baker Property Site #1</u> This property is located off of North Grand Street in West Suffield. It was rejected because it is too far to the north to enable Cellco to achieve its coverage objectives along Routes 168 and 187.
  - h. <u>Baker Property Site #2</u> This property is located at 1700 Mountain Road in West Suffield. It was rejected because it is located too far to the west to enable Cellco to achieve its coverage objectives along Route 168.
  - i. <u>Dorman Property</u> This property is located at 70 South Grand Street in West Suffield. It was rejected because there are significant wetlands on the property and a tower at this location would be visible from historic structures at the intersection of Routes 168 and 187.

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- j. <u>Suffield High School</u> The school is located off of Sheldon Street. It was rejected because it is too far to the south to enable Cellco to cover the northerly portions of Route 187. In addition, the Town was unwilling to lease space for a facility on this property.
- k. <u>Town Property, Sheldon Street</u> This Town-owned property is located off of Sheldon Street to the east of Suffield High School. It was rejected because it is too far to the east to enable Cellco to achieve its coverage objectives.
- 1. <u>Crosswalk LLC Property</u> This property is located at 426 South Grand Street. This is a small parcel (0.9 acre) occupied by several large commercial buildings. It was rejected because the undeveloped portions of the property contain significant wetlands.
- m. <u>Kuras Farm</u> This property is located at 1901 Mountain Road and is currently leased by Message Center Management for a possible tower site. It was rejected because it is too far to the west to enable Cellco to achieve its coverage objectives.
- n. <u>Reed Property</u>, 1732 <u>Mountain Road</u> The owner of this property did not respond to correspondence from Cellco's real estate representatives.
- o. <u>Sedor Property, Ratley Road</u> The owner of this property did not respond to correspondence from Cellco's real estate representatives.
- p. <u>Beneski Property</u>, 141 <u>South Grand Street</u> After some initial investigation by Cellco, the owner of this property was not interested in leasing space for a tower facility.

(Cellco 1, Attachment 8)

- 41. Cellco could not identify any equally effective technological alternatives to the proposed facility that would provide service of comparable quality. (Cellco 1, p. 11)
- 42. A Distributed Antenna System (DAS) would not be a feasible alternative because the area Cellco is seeking to cover from the proposed site is too large and a system of fiber cables that would be needed does not exist. (Tr. 1, pp. 17-18)

#### **Facility Description**

- 43. Cellco's proposed site is on a 17.57-acre property located at 174 South Grand Street (Route 187). The property is owned by Darian and Robert Paganelli, who use it for a residence. The proposed site is located approximately 1,600 feet southeast of the intersection of Routes 168 and 187 in West Suffield. (See Figures 1 and 2) (Cellco 1, Attachment 1)
- 44. The Paganelli property is zoned R-45, a single-family residential zoning district requiring a minimum lot size of 45,000 square feet. The Suffield Zoning Regulations permit telecommunications towers in residential districts with the issuance of a Special Permit. (Cellco 1, p. 17; Bulk Filing Suffield Zoning Regulations)

- 45. Cellco's proposed facility would be located in the northeasterly section of the Paganelli property. Cellco would lease a 100-foot by 100-foot parcel, within which it would develop a 60-foot by 60-foot gravel compound that would include a 120-foot high monopole tower. The compound would be enclosed by an eight-foot high chain link fence topped with three strands of barbed wire. (Cellco 1, Attachment 1)
- 46. The proposed tower would be located at 41° 59' 13.33" N latitude and 72° 42' 7.52" W longitude. Its elevation at ground level would be approximately 192 feet above mean sea level. (Cellco 1, Attachment 1, p. 4)
- 47. Cellco's proposed tower would be designed 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." The diameter of the tower would be approximately 55 inches at its base and 30 inches at its top. (Cellco 1, Attachment 1, p. 6)
- 48. The proposed tower would be designed to accommodate a minimum of four wireless carriers and municipal public safety antennas. (Cellco 1, p. 12)
- 49. The proposed tower would be designed to accommodate a twenty-foot extension of its height. (Tr. 1, p. 34)
- 50. Cellco would install 15 antennas—six cellular antennas (850 MHz), six PCS antennas (1900 MHz), and three LTE (700 MHz) antennas—at a centerline height of 120 feet on the proposed tower. The top of Cellco's antennas would extend to an overall height of 123 feet above ground level. (Cellco 1, p. 3)
- 51. Cellco would prefer to use a low profile platform to mount its antennas, although it could also utilize T-arm mounts. (Cellco 4, 20)
- 52. Cellco's ground equipment would be housed in a 12-foot by 24-foot shelter located near the base of the tower. Equipment housed in the shelter would include a diesel-fueled generator for emergency backup power. This generator would require an Air Permit from the Connecticut DEP. Cellco would obtain this permit before installing the generator. (Cellco 1, pp. i, 3; Attachment 1, p. 7)
- 53. Diesel fuel for the back-up generator would be stored in a 275-gallon "belly tank" that would be included as part of the generator. This tank would be double-walled and would include a leak detection alarm system. The generator room floor beneath the tank would be lowered and capable of containing 120% of the volume of all generator fluids. The floor would also be equipped with leak detection alarms. (Cellco 4, Response 19)
- 54. The proposed facility would require approximately 410 cubic yards of cut and 50 cubic yards of fill. (Cellco 4, Response 12)
- 55. Vehicular access to the proposed facility would extend from South Grand Street over an existing driveway for a distance of 300 feet and then over a new driveway to be installed by Cellco for a distance of 600 feet. The entire driveway to the site would be graveled. (Cellco 1, Attachment 1, p. 5; Tr. 1, p. 21)

- 56. Utilities for the proposed facility would extend underground from an existing utility pole on South Grand Street to the site. (Cellco 1, p. 3; Tr. 1, p. 11)
- 57. Cellco does not anticipate a need to conduct any blasting to develop the proposed site. (Cellco 4, Response 17)
- 58. The tower's setback radius would extend approximately 16 feet onto adjacent property to the east owned by Pamela and Gary Dorman. (Cellco 1, Attachment 1, Sheets C-1 and C-1A; Cellco 4, Response 21)
- 59. Cellco could design a yield point into the proposed tower in order to eliminate the possibility that it would encroach onto the adjacent property in the event of a collapse. If the tower were to have a yield point, it would be located at approximately 80 feet above ground level. (Tr. 1, pp. 11-12)
- 60. There are 17 residences within 1,000 feet of the proposed facility, including the property owners' residence. (Cellco 1, p. 15).
- 61. The closest off-site residence is located at 128 South Grand Street, approximately 612 feet to the west of the proposed facility. It is owned by Michael and Francine Michael. (Cellco 1, p. 15; Attachment 4)
- 62. Land use in the surrounding vicinity consists primarily of low density residential and active agricultural uses. (Cellco 1, Attachment 1, p. 4)
- 63. The estimated cost of the proposed facility, including antennas, is:

Cell site radio equipment	\$450,000
Tower, coax, and antennas costs	150,000
Power systems costs	20,000
Equipment building costs	50,000
Miscellaneous costs	125,000
Total costs	\$795,000

(Cellco 1, p. 22)

#### **Environmental Considerations**

- 64. The proposed facility would have no effect on archaeological resources listed or eligible for listing in the National Register of Historic Places and no adverse effect on the historic character of West Suffield. (Cellco 1, Attachment 10, Letters from State Historic Preservation Office dated March 2, 2010 and June 4, 2010)
- 65. No federally-listed endangered or threatened species are known to occur in Suffield. (Cellco 1, Attachment 10, Memorandum from Dean Gustafson of Vanasse Hangen Brustlin dated March 29, 2010)

- 66. The DEP Natural Diversity Database indicates that two state species of Special Concern, the eastern meadowlark (Sturnella magna) and the whip-poor-will (Caprimulgus vociferous), occur in the vicinity of Cellco's proposed facility. (Cellco 1, Attachment 10, Letter from DEP Wildlife Division dated August 14, 2009)
- 67. The eastern meadowlark is a grassland-obligate bird and is unlikely to be impacted by Cellco's proposed facility because the host property consists of residential development, forest, and scrub/scrub habitats. (Cellco 1, Attachment 10, Letter of Dean Gustafson of Vanasse Hangen Brustlin dated March 29, 2010)
- 68. The host property provides potentially suitable habitat for the whip-poor-will as forest and scrub/scrub habitat occupies its central and northern portions. Vanasse Hangen Brustlin (VHB), Cellco's environmental consultant, conducted a nocturnal field survey to determine if whip-poor-wills are present in the vicinity of the proposed facility. The survey did not detect the presence of whip-poor-wills. (Cellco 1, Attachment 10, Letter from Dean Gustafson of VHB to DEP dated June 18, 2010)
- 69. Based on the results of VHB's whip-poor-will survey and the presence of owls detected during the survey, DEP's Wildlife Division concluded that it was unlikely that whip-poorwills were in the vicinity of the proposed facility and that there was no need for seasonal restrictions on construction activity. (Cellco 6, Letter from DEP Wildlife Division dated September 20, 2010)
- 70. Cellco's proposed facility is located approximately five miles from the nearest riparian features (the Connecticut River to the east and the Farmington River to the south) that are frequently used by migratory land birds. At its proposed location, Cellco's facility would not impact migratory flyways. (Cellco 4, Tab 3 Migratory Bird Impact Evaluation)
- 71. Cellco's proposed facility is approximately five miles north of the state's nearest Important Bird Area, which is Northwest Park in Windsor. This area was identified by Audubon Connecticut and is located along the Farmington River. (Cellco 4, Tab 3 Migratory Bird Impact Evaluation)
- 72. Cellco's proposed facility would comply with the United States Fish and Wildlife Service's recommended guidelines for minimizing the potential for telecommunications towers to impact bird species. (Cellco 4, Tab 3 Migratory Bird Impact Evaluation)
- 73. In accordance with recommendations made by DEP, the proposed tower would not be lit and lighting for the compound would use down-shielded, dark sky compliant fixtures attached to the equipment shelter and set on a motion sensor and timer. (Cellco 1, Attachment 10, Letter from Dean Gustafson of VHB to DEP dated June 18, 2010, Letter from DEP Wildlife Division dated August 14, 2009)
- 74. Approximately 31 trees would be removed to build the proposed facility. (Cellco 1, Attachment 1, Drawing Sheet C-1A; Tr. 1, p. 20)

- 75. The nearest wetland system is located approximately 75 feet to the east of the proposed facility's access road. There is also a watercourse located 230 feet to the south of the proposed tower's location. (Cellco 1, p. 19; Attachment 11)
- 76. Cellco would establish and maintain appropriate soil erosion and sedimentation control measures, in accordance with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control established by the Connecticut Council for Soil and Water Conservation, in cooperation with the Connecticut Department of Environmental Protection, throughout the construction period of the proposed facility. (Cellco 1, p. 19; Attachment 11)
- 77. With appropriate soil erosion and sedimentation controls in place, development of the proposed facility would not result in any adverse impacts on the nearby wetlands and watercourse. (Cellco 1, p. 19; Attachment 11)
- 78. The proposed tower would not constitute an obstruction or hazard to air navigation and, therefore, would not require any obstruction marking or lighting. (Cellco 1, p. 21; Attachment 12)
- 79. The cumulative worst-case maximum power density from the radio frequency emissions from the operation of all approved antennas and Cellco's proposed antennas is 23.13% 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. (Cellco 1, p. 16)

## **Visibility**

- 80. Cellco's proposed tower would be visible above the tree canopy on a year-round basis from approximately 46 acres in the surrounding vicinity. The main areas of visibility occur along select portions of South Grand Street (Route 187) and the open fields located immediately adjacent to this road, approximately 0.5 mile to the southwest, and approximately 0.2 mile to the northwest. There would also be some areas of visibility along Route 168 east of South Grand Street, approximately 0.3 mile to the north/northeast; along select portions of Hill Street and Sheldon Street located approximately 1.7 miles to the northwest and 0.75 mile to the southeast, respectively; and several smaller areas of visibility located to the west and southwest. Most of these areas are generally open and undeveloped. (Cellco 1, Attachment 9, p. 4)
- 81. Select portions of the Metacomet Trail, a Connecticut Blue Blaze Trail approximately 1.7 miles to the west/southwest, would have year-round views of the proposed tower. At this distance, the proposed tower would appear set into existing vegetation and hillsides. (Cellco 1, Attachment 9, p. 4)

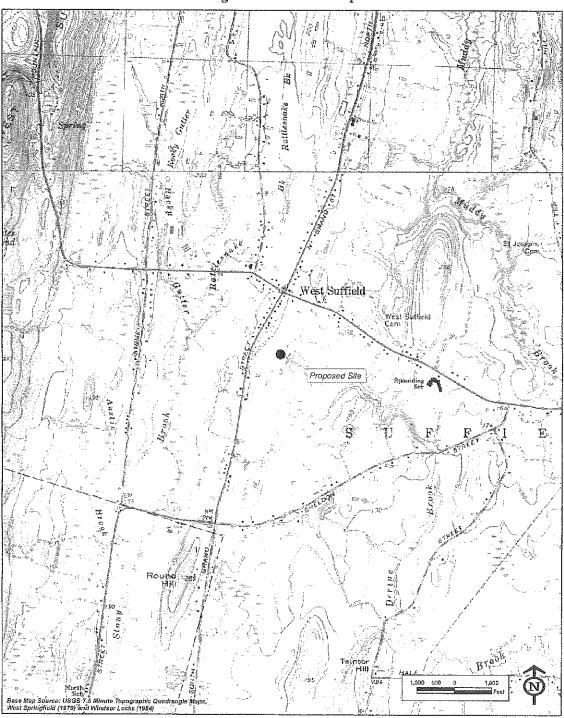
- 82. Approximately 17 residential properties could have at least partial year-round views of the proposed tower. This number includes approximately 12 residences located along South Grand Street; three residences along Sheldon Street; and two residences located along Hill Street. (Cellco 1, Attachment 9, p. 5)
- 83. The proposed tower would be seasonally visible from approximately 98 acres, which would be located within the general vicinity of the proposed facility, including the host property, and areas to the east and west of South Grand Street. (Cellco 1, Attachment 9, p. 5)
- 84. Approximately 20 additional residential properties, including 16 residential properties located along South Grand Street and four residential properties located along Route 168, would have seasonal views of the proposed tower. (Cellco 1, Attachment 9, p. 5)
- 85. The visibility of Cellco's proposed tower from different vantage points in the surrounding vicinity is summarized in the following table. The vantage points listed are identified by their corresponding number in the Visual Resource Evaluation Report contained in Attachment 9 of Cellco's application (Figure 8).

Location	Site Visible	Approx. Portion of (120') Tower Visible	Approx. Distance and Direction to Tower
1 – Route 168, approximately 400 feet east of Route 187	Yes	30'	1,500 feet; SW
2 – 84 South Grand Street (Route 187)	Yes	70'	1,000 feet; SE
3 – 399 South Grand Street (Route 187)	Yes	20'	2,600 feet, NE
4 – 1360 Sheldon Street	Yes	10'	4,100 feet; NW
5 – Hill Street	Yes	15'	8,900 feet; SW
6 – Route 187, north of Route 168	No	n/a	1,700 feet; S
7 – Ratley Road	No	n/a	8,100 feet; SE
8 – 90 Taintor Street	No	n/a	6,600 feet; NW

(Cellco 1, Attachment 9 – Photographic Simulations)

86. There is some potential for limited seasonal visibility from the Town of Suffield's Sunrise Park. However, any views of the proposed tower from the park would be through intervening trees, would be set into the surrounding valley, and would be silhouetted by rising topography and tree canopy to the east of Cellco's site. (Cellco 4, Response 23)

Figure 1: Location Map

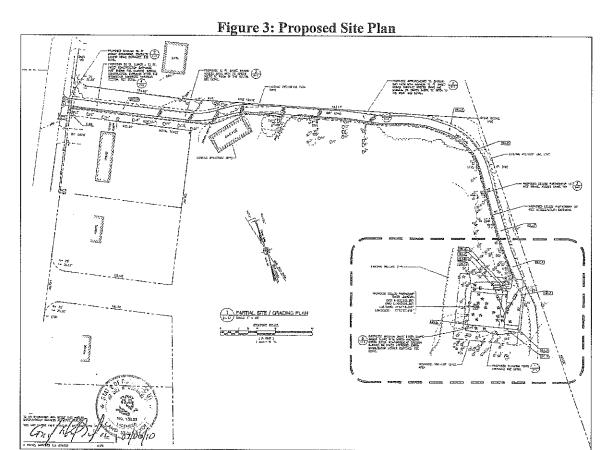


(Cellco 1, p. ii)

Figure 2: Aerial Photo of Proposed Site's Vicinity



(Cellco 1, p. iii)



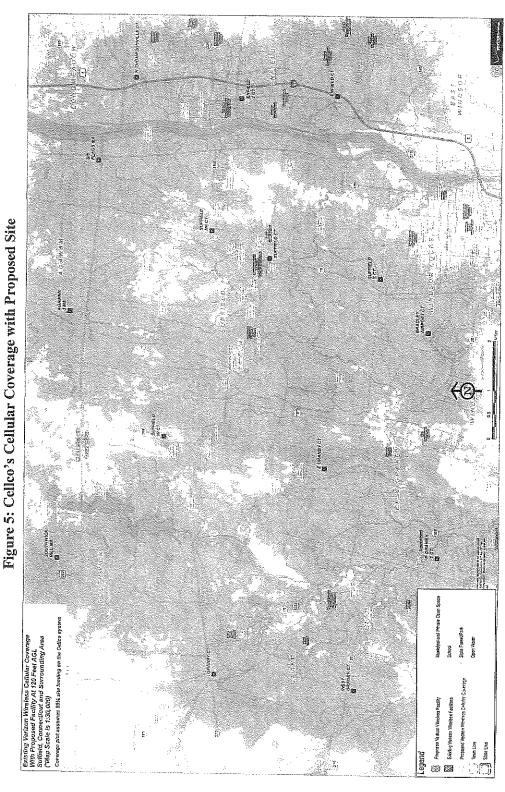
(Cellco 1, Attachment 1, Drawing C-1A)

Coverage plot assumes 55% site loading on the Celloo sys (em State ForestiPark ann aine Existing Verizon Wireless Cellular Coverage Suffield, Connecticut and Surrounding Area ("Wap Scale is 1:30,000) derver cr Estáting Verlann Witseass Cestidas Coneraça Popovee Vedan Waheas Facilly

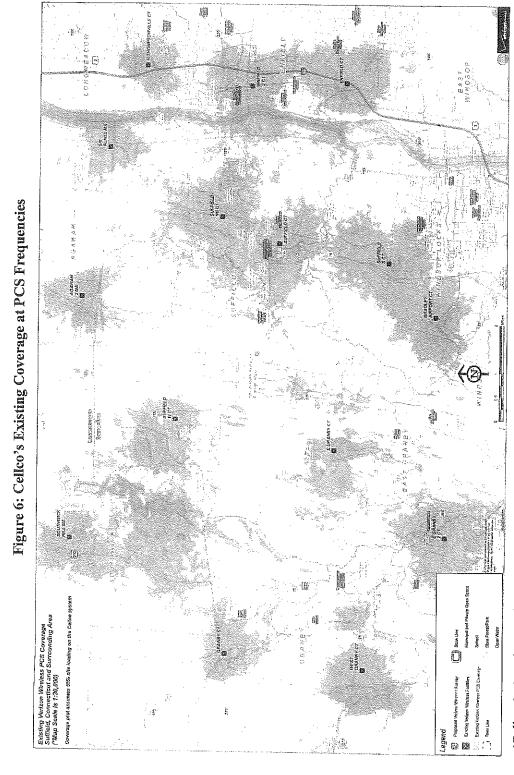
Estatog Vedan Wheless Facilles

Figure 4: Cellco's Existing Coverage at Cellular Frequencies

(Cellco I, Attachment 6)

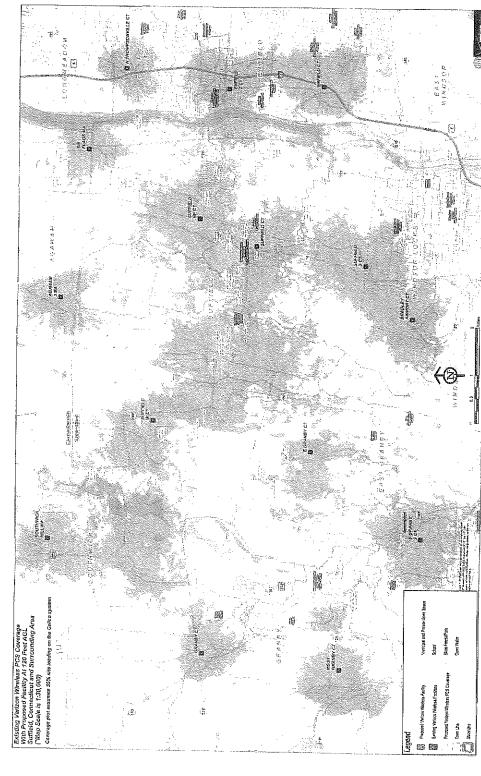


(Cellco 1, Attachment 6)



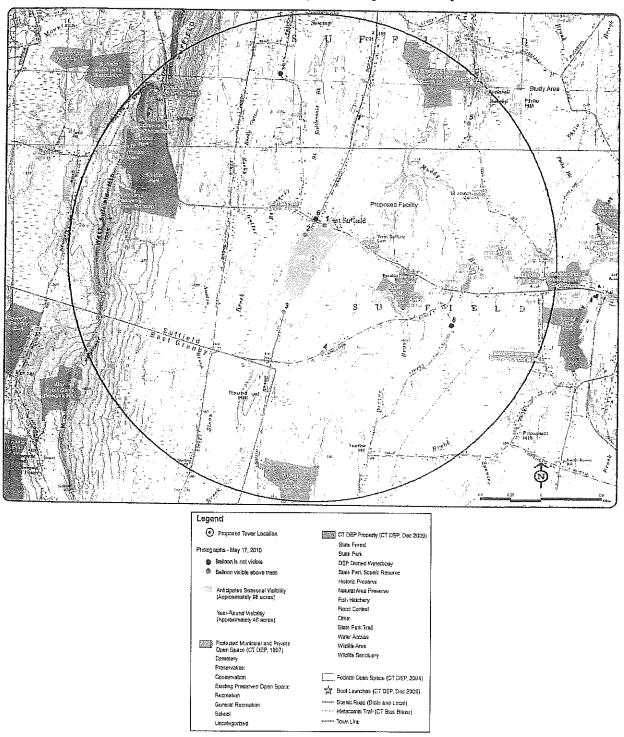
(Cellco 1, Attachment 6)

Figure 7: Cellco's PCS Coverage with Proposed Site



(Cellco 1, Attachment 6)

Figure 8: Visual Analysis of Proposed Facility



(Cellco 1, Attachment 9)