

#### CONNECTICUT SITING COUNCIL

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August 11, 2010

TO:

Parties and Intervenors

FROM:

S. Derek Phelps, Executive Director

RE:

DOCKET NO. 388 - New Cingular Wireless PCS, LLC (AT&T) application for

a Certificate of Environmental Compatibility and Public Need for the

construction, maintenance and operation of a telecommunications facility located

at 1990 Litchfield Tumpike, Woodbridge, Connecticut.

By its Decision and Order dated July 29, 2010, the Connecticut Siting Council granted a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a telecommunications facility located at 1990 Litchfield Turnpike, Woodbridge, Connecticut.

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

SDP/MP/laf

Enclosures (3)

c: State Documents Librarian



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

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

S. Derek Phelps
Executive Director
Connecticut Siting Council

I certify that a copy of the Findings of Fact, Opinion, and Decision and Order in Docket No. 388 has been forwarded by Certified First Class Return Receipt Requested mail, on August 11, 2010, to all parties and intervenors of record as listed on the attached service list, dated September 24, 2009.

ATTEST:

Lisa Fontaine
Fiscal Administrative Officer
Connecticut Siting Council

Date: September 24, 2009

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

	Document	Status Holder	Representative
Status Granted	Service	(name, address & phone number)	(name, address & phone number)
Applicant	⊠ U.S. Mail	New Cingular Wireless PCS, LLC (AT&T)	Christopher B Fisher, Esq. Daniel M. Laub, Esq. Cuddy & Feder LLP 445 Hamilton Avenue, 14 <sup>th</sup> Floor White Plains, NY 10601 (914) 761-1300 (914) 761-5372 fax

DOCKET NO. 388 - New Cingular Wireless PCS, LLC }

(AT&T) application for a Certificate of Environmental Compatibility and Public Need for the construction, } maintenance and operation of a telecommunications facility located at 1990 Litchfield Turnpike, Woodbridge, Connecticut. }

Connecticut

Siting

Council

# Findings of Fact

#### Introduction

- 1. New Cingular Wireless PCS, LLC (AT&T), in accordance with provisions of Connecticut General Statutes (CGS) § 16-50g through 16-50aa, applied to the Connecticut Siting Council (Council) on September 23, 2009 for the construction, management, and operation of a 170-foot wireless telecommunications facility at 1990 Litchfield Turnpike, Woodbridge, Connecticut. (AT&T 1, p. 1)
- 2. AT&T is a Delaware corporation with an office in Rocky Hill, Connecticut. AT&T is licensed by the Federal Communications Commission (FCC) to construct and operate a personal wireless service system in Connecticut. (AT&T 1, p. 2)
- 3. The party in this proceeding is the applicant. (Transcript 1 01/12/10, 3:05 p.m. [Tr. 1], p. 5)
- 4. The purpose of the proposed facility is to provide AT&T wireless service in northern Woodbridge. (AT&T 1, p. 1)
- 5. Pursuant to CGS § 16-50m, the Council, after giving due notice thereof, held a public hearing on January 12, 2010, beginning at 3:05 p.m. and continuing at 7:00 p.m. at The Center Gymnasium, 4 Meetinghouse Lane, Woodbridge, Connecticut. (Council's Hearing Notice dated November 13, 2009; Tr. 1, p. 2; Transcript 2 01/12/10, 7:00 p.m. [Tr. 2], p. 2)
- 6. The Council and its staff conducted an inspection of the proposed site on January 12, 2010, beginning at 2:00 p.m. During the field inspection, the applicant flew a three-foot diameter red balloon at the proposed site to simulate the height of the proposed tower. Weather conditions during the field review were breezy. Due the weather conditions, the balloon did not reach its intended height of 170 feet above ground level for the majority of the time. The balloon height was reduced by roughly 20 feet due to the wind. The balloon was aloft from approximately 12:00 p.m. to 4:30 p.m. for the convenience of the public. (Council's Hearing Notice dated April 12, 2003; Tr. 1, p. 6)
- 7. Pursuant to CGS § 16-501 (b), public notice of the application was published in <u>The New Haven Register</u> on two occasions. (AT&T 1, p. 3)
- 8. Pursuant to CGS § 16-501 (b), notice of the application was provided to all abutting property owners by certified mail. Return receipts were received from all abutters. (AT&T 1, pp. 3-4, and Attachment 9; AT&T 2, response 5)

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9. Pursuant to CGS § 16-501 (b), AT&T provided notice to all federal, state and local officials and agencies listed therein. (AT&T 1, p. 3 and Attachment 8)

#### **State Agency Comment**

- 10. Pursuant to General Statutes § 16-50j (h), on November 13, 2009, January 26, 2010, and April 1, 2010, the following State agencies were solicited by the Council 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), Department of Agriculture (DOAg), the Department of Transportation (DOT), and Department of Emergency Management and Homeland Security (DEMHS). (Record)
- 11. The Council received comments from the DPH's Drinking Water Section on January 14, 2010. In its comments, DPH indicated that the proposed construction activity is within the West River System watershed for the Lake Dawson reservoir which is owned by the Regional Water Authority (RWA). DPH recommends that AT&T implement the following best management practices to protect the public drinking water:
  - a) No equipment, machinery, or vehicles shall be cleaned, repaired, fueled or stored on the project site. Oil, solvents, or hazardous substances shall be disposed of off the watershed.
  - b) No construction shall take place until water pollution controls and erosion and sedimentation controls are in place. It must be ensured these controls are installed, properly functioning, inspected regularly, and remain in place throughout the project.
  - c) Any malfunctioning or breakdown of erosion and/or sedimentation control devices or water pollution control devices shall be repaired immediately. Construction activities shall be discontinued until repairs have been completed.
  - d) RWA should be allowed to inspect the site during construction activities to make sure all best management practices are being followed.

(DPH Comments dated January 14, 2010)

- 12. The Council received comments from the DOT's Bureau of Engineering and Highway Operations on January 15, 2010 indicating that if the applicant seeks to perform any construction with the Route 69 right-of-way, an encroachment permit would have to be obtained. The District 3 Permit Office would need to review a complete set of construction plans prior to issuing the permit. The District 3 Permit Office would determine the bond amount, insurance coverage, maintenance and protection of traffic, inspection, roadway restoration, and pavement restoration requirements. (DOT Comments dated January 15, 2010)
- 13. The following agencies did not respond with comment on the application: DEP, CEQ, DPUC, OPM, DECD, DOAg, and DEMHS. (Record)

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### **Municipal Consultation**

- 14. AT&T notified the Town of Woodbridgee of the proposal on June 5, 2009 by sending a technical report on June 5, 2009. AT&T subsequently spoke with land use officials in the Town of Woodbridge and appeared before the Planning and Zoning Commission on September 9, 2009. (AT&T 1, p. 14)
- 15. By letter dated October 15, 2009, the First Selectman Edward Maum Sheehy of the Town of Woodbridge (Town) advised the Council that the Board of Selectman recommends that alternative locations be explored for the proposed tower such as:
  - a) Moving the tower away from the proposed location; and
  - b) If the tower must be near the proposed location, consider installing the antennas on other structures in the area such as the RWA Filtration Plant, transmission line towers, existing structures on the subject property such as silos, or design the tower to look more like a tree.

(Town of Woodbridge Comments dated October 15, 2009)

- 16. First Selectman Sheehy made a limited appearance statement at the January 12, 2010 public hearing reiterating the concerns listed in the October 15, 2009 letter and summarizing public comments received by the Town of Woodbridge. (Tr. 1, p. 8)
- 17. Mary Kayne, Chairman of the Woodbridge Conservation Commission, made a limited appearance statement at the January 12, 2010. Ms. Kayne believes that the location of a cell tower adjacent to the designated open space is inconsistent with the philosophy of open space preservation. In addition, Ms. Kayne is concerned that the proposed 170-foot tower will cast its shadow over historic properties, including the Darling House, historically designated kiln and the Offices of the Historical Society. Ms. Kayne stated that the Council should consider alternatives such as more appropriate sites or co-location on existing towers or other utility infrastructure. (Tr. 1, pp. 20-24)
- 18. AT&T investigated the alternatives suggested by the Town. CL&P transmission colocation is not feasible due reasons that are given in item #41 below. AT&T also contacted the RWA and found that they were not interested in a tower on that property. The existing 50-foot silo structure is not high enough to provide adequate coverage. AT&T is open to stealth tower designs such as a "brown stick", but has reservations about a tree tower due to visibility and aesthetics. However, a "brown stick" with flushmounted antennas would require additional tower height. (Tr. 1, pp. 28-30, 46-47, 55, 57-60)
- 19. AT&T Wireless would provide space on the tower for the Town's emergency communication services for no compensation. The Town has not expressed interest in co-locating on the tower at this time. (AT&T 1, Tab 6; Tr. 1, p.70)

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### Federal Designation for Public Need

- 20. The United States Congress, through the adoption of the Telecommunications Act of 1996 (Act), recognized the important public need for high quality telecommunications services throughout the United States. The purpose of the Act was to "provide for a competitive, deregulatory national policy framework designed to accelerate rapidly private sector deployment of advanced telecommunications and information technologies to all Americans." (Council Administrative Notice Item No. 7)
- 21. 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. AT&T is licensed by the FCC to provide personal wireless communication service to New Haven County, Connecticut. (Council Administrative Notice Item No. 7; AT&T 1, p. 4)
- 22. The Act prohibits local and state bodies from discriminating among providers of functionally equivalent services. (Council Administrative Notice Item No. 7)
- 23. The Act 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)
- 24. Congress enacted the Wireless Communications and Public Safety Act of 1999 (the 911 Act). The purpose of the legislation was to promote public safety through the deployment of a seamless, nationwide emergency communications infrastructure that includes wireless communications services. (AT&T 1, pp. 5-6)
- 25. The proposed tower would provide enhanced 911 services to the proposed service area. (AT&T 1, p. 5)

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

- AT&T's seeks to provide coverage to Route 69, Route 63, Route 67, Downs Road, and surrounding areas in northern Woodbridge. (AT&T 1, p. 1; AT&T 3, response 4)
- 27. The proposed facility would be an integral component of AT&T's wireless network in New Haven County. Presently, AT&T has gaps in coverage along Route 69 (Litchfield Turnpike), Route 63, Dillon Road and the surrounding areas in the Town of Woodbridge, as well as locations in Bethany. (AT&T 1, pp. 1, 4)
- 28. AT&T's operating frequencies in the vicinity of the proposed tower include the 850 MHz cellular band, specifically 880-894 MHz, and the 1900 MHz PCS band. At the proposed facility, AT&T would initially install 850 MHz cellular service and expand to 1900 MHz PCS service at some point in the future as needed for capacity. (AT&T 1, Tab 5; AT&T 2, response 11; Pre-filed Testimony of John Blevins dated January 7, 2010)
- 29. AT&T's design signal strength for in-vehicle coverage is -82 dBm. For in-building coverage, it is -74 dBm. (AT&T 2, responses 2 and 3)

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- The existing signal strength in the area that would be covered by the proposed facility varies between -92 dBm and -105 dBm. (AT&T 1, response 1)
- 31. AT&T predicts a 2.0-mile gap in coverage on Route 69, 0.7 miles on Downs Road, 2.2 miles on Route 63, and 0.5 miles on Route 67. This is based on coverage strength lower than -82 dBm, which is considered inadequate for in-vehicle service. Coverage from surrounding sites is depicted on Figure 2. (AT&T 2, response 13)
- 32. The minimum antenna height at which AT&T could achieve its coverage from the proposed facility is 167 feet above ground level (agl). Installing antennas at this height would provide reliable service to the proposed service area. (AT&T 1, p. 4; Tr. 1, pp. 70, 74)
- 33. AT&T's proposed facility would provide 2.0 mile of reliable coverage on Route 69, 0.7 miles on Downs Road, 2.2 miles on Route 63, and 0.5 miles on Route 67. (AT&T 3, response 4)
- 34. Adjacent AT&T Wireless facilities that would interact with the proposed facility are as follows:

Site Address	Facility Type	Structure Height	AT&T Antenna Height	Distance and Direction
9 Meyers Road, Bethany	Self- supporting lattice tower	338 feet	160 feet	2.25 miles to NNE
261 Benham Street, Hamden (a/k/a 93 Old Amity Road)	Guyed lattice tower on rooftop	91 feet	67 feet	2.6 miles to E
142 Baldwin Drive, New Haven	Self- supporting lattice tower	120 feet	80 feet	2 miles to SSE
77 Pease Road, Woodbridge	Monopole	155 feet	153 feet	2.25 miles to SSE
100 Pond Lily Avenue, New Haven	Flagpole	80 feet	29 feet	2.25 miles to SSW

(AT&T 2, response 8)

At -82 dBm, the total area AT&T could cover from the proposed facility with its antennas at a centerline height of 167 feet would be 3 square miles. (AT&T 2, response 14)

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36. Both Cellco Partnership d/b/a Verizon Wireless and Youghiogheny Communications Northeast LLC d/b/a Pocket Wireless have expressed an interest in co-locating on the tower, but neither carrier participated in the proceeding as a party or intervenor. Both carriers would require a minimum antenna height of 140 feet. (Tr. 1, p. 70)

# **Site Selection**

- 37. AT&T established a search ring for the target service area on February 21, 2006. (AT&T 2, response 4)
- 38. The original search ring (SR2124) was approximately 1 mile in diameter and centered north of the proposed site on Downs Road. This search ring was investigated, but no suitable candidate was identified. AT&T's engineers were also pursing another search ring (SR2125) further to the south. It was determined that a 170-foot tower would serve both search areas. (AT&T 2, response 4)
- 39. Four existing towers are located within two miles of the search area. AT&T is located on all four of these existing towers. The locations of the four existing towers are as follows:
  - a) 9 Meyers Road, Bethany AT&T Wireless is located at 160 feet.
  - b) 261 Benham Street, Hamden AT&T Wireless is located at 67 feet.
  - c) 142 Baldwin Drive, New Haven AT&T Wireless is located at 80 feet.
  - d) 77 Pease Road, Woodbridge AT&T is located at 153 feet.
  - e) 100 Pondlily Avenue, New Haven AT&T is located at 29 feet. (AT&T 1, Tab 1)
- 40. After determining there were no suitable structures within the search area, AT&T searched for properties suitable for tower development. AT&T investigated 11 parcels/areas, one of which was selected for site development. The 10 rejected parcels/areas and reasons for their rejection are as follows:
  - a) 756 Amity Road There was no response from the property owner and the site did not meet AT&T's coverage objectives.
  - b) 631 Amity Road The location is too close to an existing site and would not serve the majority of the target area.
  - c) Talmadge Road The site is located too far north and is near an existing site. The site would not meet AT&T's coverage objectives.
  - d) Transmission line #1610 on Hatfield Road The Connecticut Light and Power Company (CL&P) rejected the use of this site for a wireless telecommunications facility.
  - e) 255 Downs Road The property owner was not interested.

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- f) 84 Bethway Road The tower would have to be in excess of 130 feet and located to the rear of the property to meet coverage objectives. The area and height were not acceptable to the property owners.
- g) 91 Bethway Road This site would not meet coverage objectives.
- h) Transmission circuit #3827 CL&P rejected the use of this site for a wireless telecommunications facility.
- 2010 Route 69 and 100 Dillion Road (South Central Regional Water Authority property) – This property contains Class I and Class II watershed lands and passive recreation area. The water company indicated that such land is not available for a wireless telecommunications facility.
- j) Route 69 (Town of Woodbidge Lot 1966) The Town was not interested, as the property is deed-restricted with a conservation easement and public recreation easement.

(AT&T 1, Attachment 2)

- 41. AT&T, in consultation with CL&P, determined that no electrical transmission structures in the search area were viable options, since it could not co-locate on CL&P transmission structures in the search area because of issues regarding the reliability of the New England grid. To install telecommunications equipment on a transmission tower, an outage is necessary. CL&P must schedule any such outages with ISO-New England, the grid operator, according to certain reliability ratings.
  - a) There are no lines in the area with a reliability rating of 1. Outages could be scheduled on such a line reasonably.
  - b) It is also feasible to schedule an outage for a line with a rating of 2. There is a 115-kV line in the area with a reliability rating of 2, assuming only one circuit was turned off. However, a replacement structure would be required to achieve the required height, thus necessitating that both circuits must be de-energized. Thus, the effective reliability rating is 3.
  - c) The remaining transmission lines have ratings of 3 or 4. It is difficult to obtain outages of lines with a rating of 3 or 4.
  - d) Regardless of the reliability ratings, at heights that would be considered co-location such as a 20-foot attachment to an existing structure, there would still not be sufficient height to fully meet AT&T's coverage objectives.
  - e) CL&P will not allow building a telecommunications structure in its transmission right of way.
  - (AT&T 1, Tab 2; AT&T Late Filed Exhibit Tab A; Post Hearing Interrogatories dated June 14, 2010)
- 42. AT&T also determined that electrical transmission structures owned by The United Illuminating Company would not meet coverage objectives. (AT&T Late Filed Exhibit Tab B)

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43. Microcells and repeaters are not viable technological alternatives for providing coverage to the identified coverage gap. Microcells and repeaters are low-power sites that are limited in coverage and capacity. These types of facilities are generally used in situations where the coverage area is less than a half-mile, or for providing service in buildings. (AT&T 1, p. 6)

# **Facility Description**

- The proposed facility is to be located on a 20.78-acre parcel owned by Sarah Shepherd at 1990 Litchfield Turnpike in Woodbridge. (Refer to Figures 1 and 2) (AT&T 1, p. 7)
- 45. The parcel is zoned Residential A. The Town's zoning regulations permit telecommunication towers in Residential A zone, subject to issuance of a Special Permit. Town regulations rank residential zones fifth out of five location preference categories for the placement of telecommunications equipment. (AT&T 1, p. 8; AT&T 1b Zoning Regulations Amendments)
- 46. The tower site is located in the northern half of the subject property. The tower would be located at 41 degrees 22 minutes 23.5 seconds North Latitude and 72 degrees 58 minutes 52.3 seconds West Longitude at an elevation of 290 feet above mean sea level (amsl). (AT&T 1, Tab 3)
- 47. The proposed facility would consist of a 170-foot monopole within a 100-foot by 100-foot leased area. The tower would be four and a half feet wide at the base tapering to approximately 2 feet at the top. The tower would be designed to support four levels of antennas with a 10-foot center-to-center vertical separation. The tower would be constructed in accordance with the American National Standards Institute TIA/EIA-222-G "Structural Standards for Steel Antenna Towers and Antenna Support Structures". (AT&T 1, Tab 3; Tr. 1, p. 94)
- 48. AT&T would install up to six panel antennas at a centerline height of 167 feet agl. The antennas would be attached to a low-profile platform. The total height of the facility with antennas would be 170 feet agl. (AT&T 1, Tab 3)
- 49. T-arm antenna mounts would also be acceptable to AT&T. (AT&T 2, response 9)
- 50. If the antennas were flush-mounted, AT&T would require two levels of three antennas each, resulting in an extra ten feet of tower height. (AT&T 2, response 9)
- 51. If a "brown stick" design is utilized, AT&T and a potential other carrier would each require two antenna levels. This would require additional tower height. (Tr. 1, p. 60)
- 52. T-arm mounts would be compatible with a tree tower design. (Tr. 1, 60)
- 53. A 40-foot by 90-foot equipment compound enclosed by a chain link fence would be established at the base of the tower. The size of the lease area would be able to accommodate the equipment of four wireless carriers. AT&T would install a 12-foot by 20-foot equipment shelter within the compound. (AT&T 1, Tab 3; Tr. 1, p. 22)

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- 54. For emergency backup power, AT&T would rely on battery backup and a permanent diesel generator. The battery system would be used to prevent a "re-boot" condition from occurring during the generator start-up period that typically lasts ten minutes. The generator's fuel tank would contain approximately 210 gallons of fuel, and would consist of a bladder within a steel containment chamber that is designed to contain fuel in the event of a spill. (AT&T 2, response 17; AT&T 3, response 5)
- 55. AT&T's proposed backup generator would meet all applicable noise standards at the subject property boundaries. (AT&T 3, response 6)
- 56. The proposed facility would be unmanned, requiring monthly maintenance visits approximately one hour long. AT&T's equipment would be monitored 24 hours per day, seven days per week from a remote location. (AT&T 1, p. 11)
- 57. Development of the site would require approximately 1,221 cubic yards of cut and 980 cubic yards of fill. (AT&T 2, response 15)
- Vehicular access to the proposed facility would extend north-northwest from Litchfield Turnpike (Route 69) along an approximately 85-foot long existing asphalt driveway to a new 12-foot wide gravel access drive that would extend approximately 895 feet to the proposed compound. (AT&T 1, p. 8 and Tab 3)
- 59. Utilities would extend underground in a northwesterly direction from utility pole #968 on Litchfield Turnpike directly to the proposed compound. The utilities would not follow the path of the proposed access drive (refer to Figure 3). (AT&T 1, p. 13 and Tab 3)
- 60. Exposed ledge was not visible in the vicinity of the tower site during AT&T's field investigation. However, if ledge is encountered during the development of the proposed facility, chipping would be the preferred method of removal rather than blasting. (AT&T 3, response 1; Tr. 2, pp. 75-76)
- 61. The tower setback radius would remain entirely within the subject property. (AT&T 1, Tab 3)
- 62. The nearest property boundary from the proposed tower is approximately 250 feet to the west (South Central Connecticut Regional Water Authority). (AT&T 1, Tab 3)
- 63. There are two residences within 1,000 feet of the proposed tower. (AT&T 1, Tab 3)
- 64. The nearest residence to the proposed tower is located 940 feet to the south. It is owned by Sarah and Richard Sutton. (AT&T 1, Tab 3; AT&T 2, response 7)
- 65. Land use in the surrounding area consists of single family residential homes, water company property and Town-owned open space. (AT&T 1, p. 13)

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66. The estimated construction cost of the proposed facility, not including antennas and radio equipment, is:

Tower and foundation (inc. installation)	\$200,000.00
Monopole	\$135,000.00
Antennas and radio equipment	\$250,000.00
<u>Utility Installation</u>	\$40,000.00

Total \$625,000.00

(AT&T 1, p. 14; AT&T 2, response 10)

# **Environmental Considerations**

- 67. In 2005, the Town of Woodbridge obtained a 38-acre parcel now preserved as Shephard Farm Park. This property abuts the subject property. (AT&T 1, pp. 12 and 13)
- 68. The proposed facility would have no effect upon historic, architectural, or archaeological resources listed on or eligible for the National Register of Historic Places or upon properties of traditional cultural importance to Connecticut's Native American community. (AT&T 1, pp. 9-10)
- 69. AT&T's original correspondence to the State Historic Preservation Officer (SHPO) indicated a proposed height of 150 feet, while AT&T seeks to install a 170-foot tower. SHPO was subsequently advised of this difference by letter dated June 17, 2010. SHPO reviewed the revised height and determined there would be no effect on historic, cultural, architectural, or archeological resources. (AT&T 1, pp. 9-10; AT&T 2, response 6)
- 70. The New England Cement Company Kiln and Quarry site is listed on the National Register of Historic Places. There would be no direct effects to this or other historic buildings. Impacts would be limited to visual effects of the tower. (AT&T Late Filed Exhibit Tab F)
- 71. 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. (AT&T 1, p. 10)
- 72. Trees surrounding the site have heights generally ranging from 70 to 80 feet. Approximately nine trees six inches diameter at breast height would be removed to develop the site. (Tr. 1, pp. 23, 25, and 59)
- 73. The site is not located within wetlands. No wetland soils were noted in the vicinity of the parcel. The closest water body is Lake Dawson, approximately 600 feet southeast of the proposed site. (AT&T 1, pp. 11-12)
- 74. The site is not located within a 100-year or 500-year floodplain. (AT&T 1, p. 12)
- 75. There are no airports within 5 miles of proposed tower site. Obstruction marking and lighting are not required. (AT&T 1, Tab 3)

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76. The cumulative worst-case maximum power density from the radio frequency emissions from the operation of AT&T's proposed antennas is 4.6% 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. (AT&T 1, p. 11)

# **Visibility**

- 77. The tower at the proposed site would be visible year-round from approximately 227 acres within a two-mile radius (refer to Figure 8). The tower would be seasonally visible from approximately 24 acres within a two-mile radius. (AT&T 7)
- 78. The primary areas of year-round visibility would be Lake Dawson and Lake Watrous. These are both public watershed areas. (AT&T 7; DPH Comments dated January 14, 2010; AT&T 1, Tabs 3 and 4)
- 79. A water treatment plant to the northeast of the proposed site as well as several electrical transmission lines west of the site would also be within the year-round visibility area. (AT&T 1, Tabs 3 and 4; Tr. 1, p. 65-66)
- 80. The tower would be visible year-round from six residences on Litchfield Turnpike and seasonally visible from one residence on Litchfield Turnpike. (AT&T 7)

81. Visibility of the proposed tower from roads within a two-mile radius of the site is presented in the table below:

Road	Length of Road Visibility (Seasonal)	Length of Road Visibility (Year-round)	Nearest Distance with Visibility to Site A
Litchfield Turnpike	0.2 miles total (not	0.8 miles total (not	0.1 miles east
(Route 69)	continous)	continuous)	
Brooks Road	None	0.008 miles	1.8 miles northeast
Woodbine Road	None	0.005 miles	1.3 miles south- southeast
Clark Road	None	0.005 miles	0.9 miles southeast
Amity Road	None	0.05 miles	1.2 miles southeast

(AT&T 7)

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82. Visibility of the proposed tower from specific locations within a two-mile radius of the site is presented in the table below:

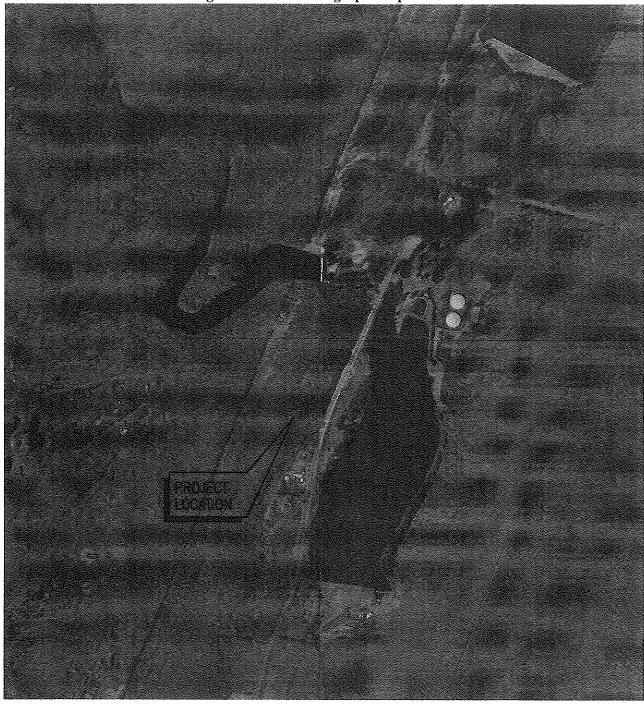
Location	Visible	Approx. Portion of Tower Visible	Approx. Distance to Tower
1. Litchfield Turnpike looking north	Yes	85 feet – through trees	0.80 miles north
2. Litchfield Turnpike looking north	Yes	90 feet - unobstructed	0.41 miles north
3. Intersection of Litchfield Turnpike and Downs Road looking south	Yes	10 feet – above trees	0.78 miles south
4. Brooks Road looking southwest	Yes	70 feet – above trees	1.81 miles southwest
5. Darling House looking north	Yes	80 feet - through trees	0.88 miles north
6. Yeladim Childcare at Jewish Community Center looking northeast	No	None	0.96 miles northeast
7. Route 63 looking northeast	Yes	25 feet – above trees	1.24 miles northeast
8. Route 63 at Trailhead looking southeast	No	None	1.29 miles southeast
9. Blue with Yellow Dot Trail looking southeast	Yes	30 feet – through trees	0.48 miles southeast
10.West Ridge State Park looking northwest	Yes	90 feet – distant and through trees with ridgeline backdrop	1.27 miles northwest
11.Intersection of Power Line Right of Way and West Ridge State Park Blue Trail looking southwest	Yes	60 feet – through trees with ridgeline backdrop	0.88 miles southwest
12.Children's Garden Daycare looking north	No	None	1.98 miles north

- 83. The visibility of the tower from West Rock Ridge State Park is limited to the Regicides Trail (Trail). The tower would be seasonally visible from a total of approximately 1.07 miles of the Trail and visible year-round from a total of approximately 0.04 miles of the trail. Total visibility would be about 27 percent of the trail's length within the study area of a two-mile radius of the tower. (AT&T 7)
- 84. The Regicides Trail has existing views of the electrical transmission structures to the west. (AT&T 1, Tab 4)
- 85. The tower would be seasonally visible from a 0.14 mile portion of the Regional Water Authority Trail. (AT&T 7)
- 86. The tower would be visible from a 0.09 mile portion of the Bishop West Trail. (AT&T 7)
- 87. The nearest scenic road to the site is Baldwin Drive, approximately 0.54 miles east of the proposed tower site. The tower would be seasonally visible from a total of approximately 1.46 miles of Baldwin Drive and visible year-round from a total of approximately 0.35 miles. (AT&T 7)

Docket No. 388: Woodbridge Findings of Fact Page 13 of 21

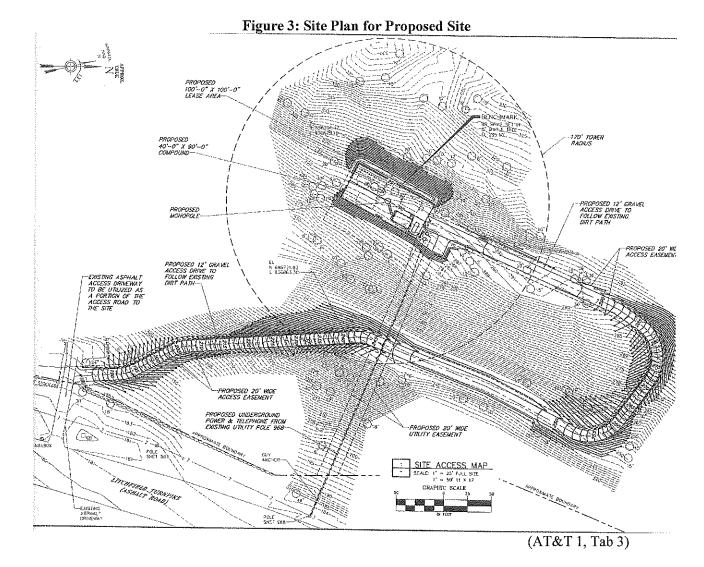
88. The nearest historic site is the New England Cement Company Kiln and Quarry, which is approximately 0.39 miles northeast of the proposed tower site. The tower would be visible year-round from this location. (AT&T 7)

Figure 1: Location Map of Proposed Site PROJECT. LOCATION 1989 USGS TOPO MAP: NEW HAVEN 41072-C8
SCALE: 1" = 2000" 1000 SCALE IN FEET (AT&T 1, Tab 3)



2004 AERIAL PHOTO SCALE: 1" = 1000"

SCALE IN FEET



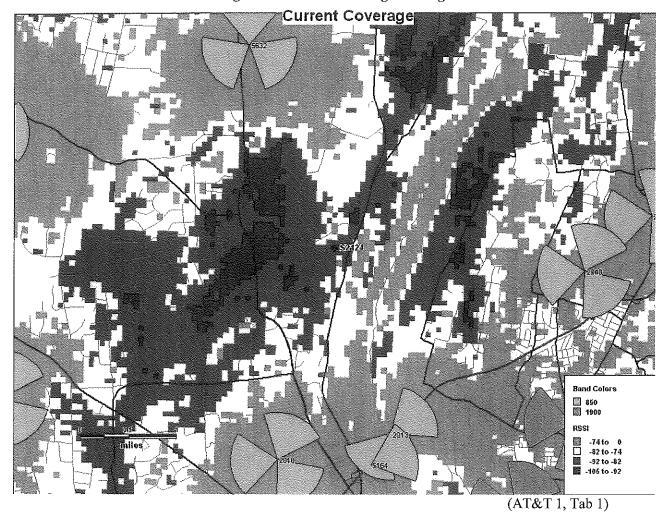


Figure 4: AT&T's Existing Coverage

Current Coverage plus Proposed Site at 170'

Band Colore

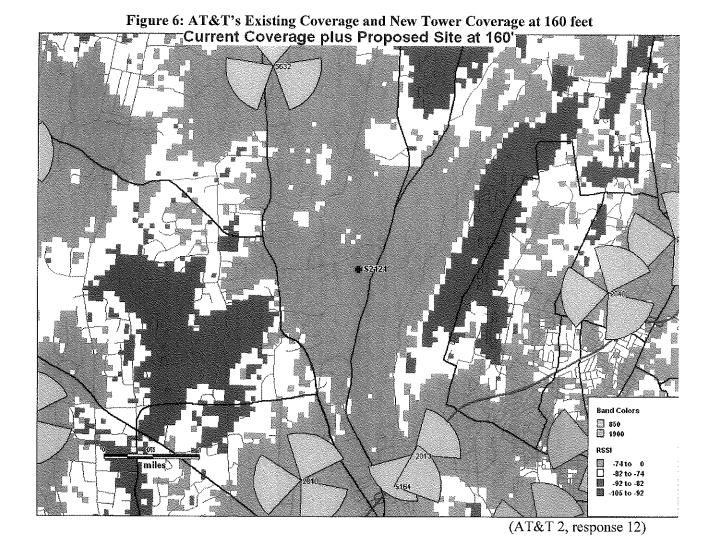
Story

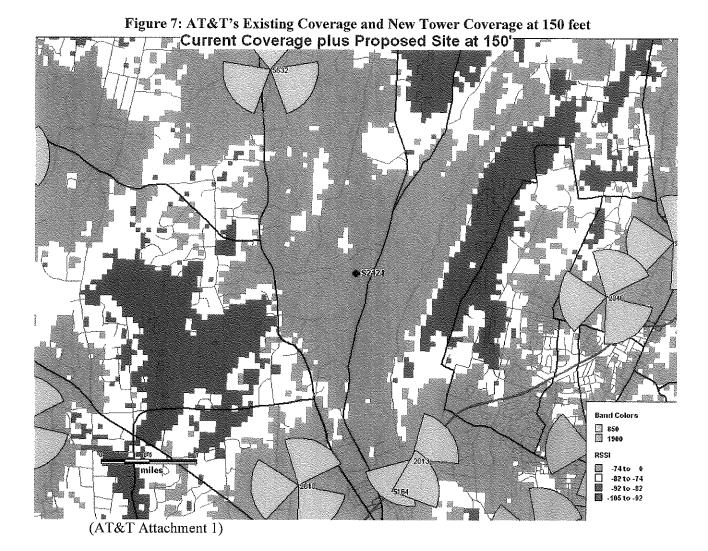
Story

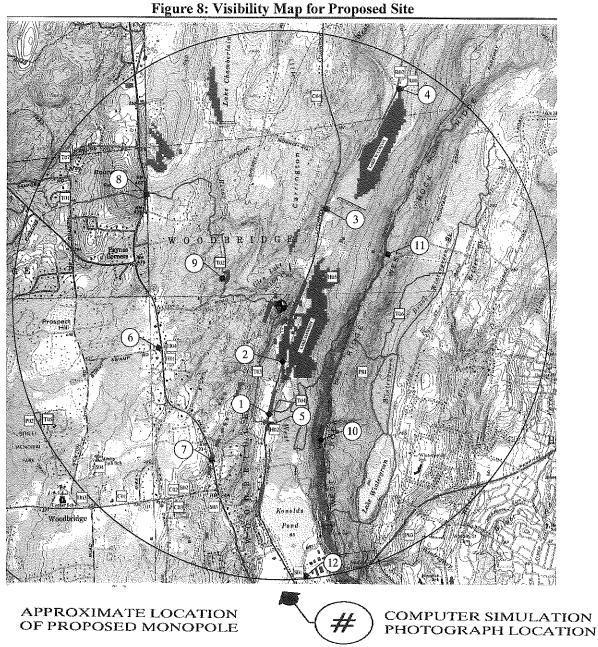
Story

AT&T I, Tab I)

Figure 5: AT&T's Proposed Coverage – Existing Coverage and Proposed Coverage at 170 feet









COMPUTER SIMULATION



APPROXIMATE LIMIT OF SEASONAL TOWER VISIBILITY



APPROXIMATE LIMIT OF YEAR ROUND TOWER VISIBILITY



P# PARK

H# HISTORICAL SITE

s# SCHOOL

TRAIL OR SCENIC ROAD

<b>DOCKET NO. 388</b> - New Cingular Wireless PCS, LLC (AT&T)	}	Connecticut
application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a	}	Siting
telecommunications facility located at 1990 Litchfield Turnpike, Woodbridge, Connecticut.	}	Council
		July 29, 2010

## Opinion

On September 23, 2009, New Cingular Wireless PCS, LLC (AT&T) applied to the Connecticut Siting Council (Council) for a Certificate of Environmental Compatibility and Public Need (Certificate) for the construction, maintenance and operation of a wireless telecommunications facility to be located in the Town of Woodbridge, Connecticut. AT&T is seeking to develop this facility on a 20.78-acre parcel that is owned by Sarah Shepard. AT&T's objective in locating a facility here is to provide service in northern Woodbridge

AT&T established a search ring for the target service area on February 21, 2006. AT&T then searched for existing towers in the area to co-locate on. However, AT&T is already located on the four existing towers located within a two-mile radius. AT&T then investigated 10 raw land sites, including the adjacent water company property, but found that either the property owners were not interested in leasing the property and/or the sites would not meet AT&T's coverage objectives.

Given the significant amount of electrical transmission infrastructure in the area, AT&T also evaluated transmission facilities owned by The Connecticut Light and Power Company (CL&P) and The United Illuminating Company (UI) to see if co-location on such facilities in lieu of a new tower would be feasible. The UI's transmission structures in the area are not tall enough to allow AT&T to meet its coverage objectives. CL&P has one transmission line that would be feasible to access for telecommunications, but only if one of the two circuits were de-energized. Unfortunately, for safety purposes, both circuits would need to be de-energized to perform a telecommunications installation. A complete outage of the line would be very difficult to obtain and very infrequent since outages affect the entire New England grid, not just Connecticut and have to be scheduled via the grid operator, ISO-New England. Lastly, it is not feasible to extend the height of CL&P transmission structures to accommodate AT&T's co-location, and for reliability reasons, CL&P does not allow free-standing telecommunications structures to be built in its ROW. After exhausting co-location and alternative site options, AT&T pursued the proposed site at 1990 Litchfield Turnpike in Woodbridge.

At that site, AT&T proposes to construct a 170-foot monopole within a 40-foot by 90-foot compound. AT&T's ground equipment would be housed within a 12-foot by 20-foot equipment shelter. The tower and compound would be located in the northern half of the host property. No landscaping is proposed for the compound as there is enough mature vegetation in the area to screen it from the nearest neighbors. The tower would be designed to accommodate four levels of antenna installations. The tower setback radius of the proposed 170-foot tower would remain within the boundaries of the Shepard property.

The proposed 170-foot tower would be visible year-round from approximately 227 acres within a two-mile radius. Approximately six residences on Litchfield Turnpike would have year-round views of the proposed tower. Approximately one additional residence on Litchfield Turnpike would have a seasonal view of the tower. Much of the year-round visibility area covers Lake

Opinion Page 2

Dawson and Lake Watrous, which are public water supply reservoirs rather than recreational resources. In addition, utility facilities such as a water treatment plant, and electrical transmission lines are located in the viewshed.

The tower would be visible year-round from the Darling House and the New England Cement Company Kiln and Quarry site. The tower would also be visible year-round from 1.07 miles of the Regicides Trail, 0.14 miles of the Regional Water Authority Trail, and 0.09 miles of the Bishop West Trail.

In order to develop this site, AT&T would remove approximately 9 trees with diameters of six inches or more at breast height. No wetland soils were noted in the vicinity of the parcel. The closest water body is Lake Dawson, approximately 600 feet southeast of the proposed site. 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.

The Council recognizes that there is a need for coverage in this part of the state. However, the Council is also concerned about the visual presence the proposed 170-foot tower would have on Litchfield Turnpike, the nearby hiking trails such as the Regicides Trail, as well as historic sites such as the Darling House and the New England Cement Company Kiln and Quarry site. With this in mind, the Council would like to minimize the height of AT&T's tower as well as the visual profile of the antennas and mounts while still allowing for the possibility of collocations in order to reduce the need for additional towers in this area. Thus, the Council will order that the proposed tower be built to a height of 170 feet, which is the minimum height that would meet AT&T's coverage objectives, and that antennas be flush-mounted. While a flush-mounted configuration may result in a slightly compromised coverage footprint, the Council believes this is outweighed by the visual improvement associated with a narrow antenna-mount profile.

According to a methodology prescribed by the FCC Office of Engineering and Technology Bulletin No. 65E, Edition 97-01 (August 1997), the combined radio frequency power density levels of the antennas proposed to be installed on a 170-foot high tower have been calculated to amount to 4.6% of the FCC's Maximum Permissible Exposure, as measured at the base of the tower. This percentage is well below federal and state standards established for the frequencies used by wireless companies. If federal or state standards change, the Council will require that the tower be brought into compliance with such standards. The Council will require that the power densities be recalculated in the event other carriers add antennas to the tower. The Telecommunications Act of 1996 prohibits any state or local agency from regulating telecommunications towers on the basis of the environmental effects of radio frequency emissions to the extent that such towers and equipment comply with FCC's regulations concerning such emissions.

Based on the record in this proceeding, the Council finds that the effects associated with the construction, maintenance, and operation of the telecommunications facility at the proposed site, including effects on the natural environment; ecological integrity and balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish and wildlife are not disproportionate either alone or cumulatively with other effects when compared to need, are not in conflict with policies of the State concerning such effects, and are not sufficient reason to deny this application. Therefore, the Council will issue a Certificate for the construction, maintenance, and operation of a 170-foot monopole telecommunications facility at 1990 Litchfield Turnpike, Connecticut.

<b>DOCKET NO. 388</b> - New Cingular Wireless PCS, LLC (AT&T)	}	Connecticut
application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a	}	Siting
telecommunications facility located at 1990 Litchfield Turnpike, Woodbridge, Connecticut.	}	Council
•		July 29, 2010

#### **Decision and Order**

Pursuant to the foregoing Findings of Fact and Opinion, the Connecticut Siting Council (Council) finds that the effects associated with the construction, management, and maintenance of a telecommunications facility, including effects on the natural environment; ecological integrity and balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish and wildlife are not disproportionate, either alone or cumulatively with other effects, when compared to need, are not in conflict with the policies of the State concerning such effects, and are not sufficient reason to deny the application, and therefore directs that a Certificate of Environmental Compatibility and Public Need, as provided by General Statutes § 16-50k, be issued to New Cingular Wireless PCS, LLC, hereinafter referred to as the Certificate Holder, for a telecommunications facility located at 1990 Litchfield Turnpike, Woodbridge, Connecticut.

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

- 1. The tower shall be constructed as a monopole with flush-mounted antennas, no taller than necessary to provide the proposed telecommunications services, sufficient to accommodate the antennas of New Cingular Wireless PCS, LLC and other entities, both public and private, but such tower shall not exceed a height of 170 feet above ground level. The height at the top of the Certificate Holder's antennas shall not exceed 170 feet above ground level.
- 2. The Certificate Holder shall prepare a Development and Management (D&M) Plan for this site in compliance with Sections 16-50j-75 through 16-50j-77 of the Regulations of Connecticut State Agencies. The D&M Plan shall be served on the Town of Woodbridge for comment, and all parties and intervenors as listed in the service list, and submitted to and approved by the Council prior to the commencement of facility construction and shall include:
  - a) a final site plan(s) of site development to include specifications for the tower, tower foundation, antennas, equipment compound, radio equipment, access road, utility line, and landscaping; and
  - b) construction plans for site clearing, grading, landscaping, water drainage, and erosion and sedimentation controls consistent with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, as amended.
- 3. Prior to the commencement of operation, the Certificate Holder shall provide the Council worst-case modeling of the electromagnetic radio frequency power density of all proposed entities' antennas at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin No. 65, August 1997. The Certificate Holder shall ensure a recalculated report of the electromagnetic radio frequency power density be submitted to the Council if and when circumstances in operation cause a change in power density above the levels calculated and provided pursuant to this Decision and Order.

Docket No. 388 Decision and Order Page 2

- 4. Upon the establishment of any new State or federal radio frequency standards applicable to frequencies of this facility, the facility granted herein shall be brought into compliance with such standards.
- 5. The Certificate Holder shall permit public or private entities to share space on the proposed tower for fair consideration, or shall provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing.
- 6. The Certificate Holder shall provide reasonable space on the tower for no compensation for any Town of Woodbridge public safety services (police, fire and medical services), provided such use can be accommodated and is compatible with the structural integrity of the tower.
- 7. Unless otherwise approved by the Council, if the facility authorized herein is not fully constructed and providing wireless services within eighteen months from the date of the mailing of the Council's Findings of Fact, Opinion, and Decision and Order (collectively called "Final Decision"), this Decision and Order shall be void, and the Certificate Holder shall dismantle the tower and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made. The time between the filing and resolution of any appeals of the Council's Final Decision shall not be counted in calculating this deadline.
- 8. At least one wireless telecommunications carrier shall install their equipment and shall become operational not later than 120 days after the tower is erected. Authority to monitor and modify this schedule, as necessary, is delegated to the Executive Director. The Certificate Holder shall provide written notice to the Executive Director of any schedule changes as soon as is practicable.
- 9. Any request for extension of the time period referred to in Condition 7 shall be filed with the Council not later than 60 days prior to the expiration date of this Certificate and shall be served on all parties and intervenors, as listed in the service list, and the Town of Woodbridge. Any proposed modifications to this Decision and Order shall likewise be so served.
- 10. If the facility ceases to provide wireless services for a period of one year, this Decision and Order shall be void, and the Certificate Holder shall dismantle the tower and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made.
- 11. The Certificate Holder shall remove any nonfunctioning antenna, and associated antenna mounting equipment, within 60 days of the date the antenna ceased to function.
- 12. In accordance with Section 16-50j-77 of the Regulations of Connecticut State Agencies, the Certificate Holder shall provide the Council with written notice two weeks prior to the commencement of site construction activities. In addition, the Certificate Holder shall provide the Council with written notice of the completion of site construction, and the commencement of site operation.
- 13. The Certificate Holder shall remit timely payments associated with annual assessments and invoices submitted by the Council for expenses attributable to the facility under Conn. Gen. Stat. §16-50v.

Pursuant to General Statutes § 16-50p, the Council hereby directs that a copy of the Findings of Fact, Opinion, and Decision and Order be served on each person listed below, and notice of issuance shall be published in <u>The New Haven Register</u>.

Docket No. 388 Decision and Order Page 3

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

The parties and intervenors to this proceeding are:

# **Applicant**

New Cingular Wireless PCS, LLC (AT&T)

# **Its Representative**

Christopher B Fisher, Esq. Daniel M. Laub, Esq. Cuddy & Feder LLP 445 Hamilton Avenue, 14<sup>th</sup> Floor White Plains, NY 10601

Michele Briggs AT&T 500 Enterprise Drive Rocky Hill, CT 06067-3900

# **CERTIFICATION**

The undersigned members of the Connecticut Siting Council (Council) hereby certify that they have heard this case, or read the record thereof, in **DOCKET NO. 388** - New Cingular Wireless PCS, LLC (AT&T) application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a telecommunications facility located at 1990 Litchfield Turnpike, Woodbridge, Connecticut, and voted as follows to approve the proposed telecommunications facility located at 1990 Litchfield Turnpike, Woodbridge, Connecticut:

Council Members	Vote Cast
Daniel F. Caruso, Chairman	Yes
Colin C. Tait, Vice Chairman	Absent
Commissioner Kevin M. DelGobbo Designee: Larry P. Levesque	Absent
Commissioner Amey Marrella Designee: Brian Golembiewski	Abstain
Philip T. Ashton	Yes
Daniel P. Lynch, Jr.	Yes
James J. Murphy, Jr.	Absent
Barbara Currier Bell  Dr. Barbara Currier Bell	Yes
Edward S. Wilensky Edward S. Wilensky	Yes

Dated at New Britain, Connecticut, July 29, 2010.

# 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
Internet: ct.gov/csc

August 11, 2010

Christopher B Fisher, Esq. Daniel M. Laub, Esq. Cuddy & Feder LLP 445 Hamilton Avenue, 14<sup>th</sup> Floor White Plains, NY 10601

RE: **DOCKET NO. 388** - New Cingular Wireless PCS, LLC (AT&T) application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a telecommunications facility located at 1990 Litchfield Turnpike, Woodbridge, Connecticut.

Dear Attorney Fisher and Attorney Laub:

By its Decision and Order dated July 29, 2010, the Connecticut Siting Council (Council) granted a Certificate of Environmental Compatibility and Public Need (Certificate) for the construction, maintenance and operation of a telecommunications facility located at 1990 Litchfield Turnpike, Woodbridge, Connecticut.

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

S. Derek Phelps
Executive Director

SDP/MP/laf

Very tro

Enclosures (4)





#### CONNECTICUT SITING COUNCIL

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

CERTIFICATE

OF

# ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED DOCKET NO. 388

Pursuant to General Statutes § 16-50k, as amended, the Connecticut Siting Council hereby issues a Certificate of Environmental Compatibility and Public Need to New Cingular Wireless PCS, LLC for the construction, maintenance and operation of a telecommunications facility located at 1990 Litchfield Turnpike, Woodbridge, Connecticut. This Certificate is issued in accordance with and subject to the terms and conditions set forth in the Decision and Order of the Council on July 29, 2010

By order of the Council,

July 29, 2010





# CONNECTICUT SITING COUNCIL

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

August 11, 2010

TO:

Classified/Legal Supervisor

388100112

The New Haven Register

40 Sargent Drive

New Haven, CT 06511

FROM:

Lisa A. Fontaine, Fiscal Administrative Officer

RE:

**DOCKET NO. 388** - New Cingular Wireless PCS, LLC (AT&T) application for

a Certificate of Environmental Compatibility and Public Need for the

construction, maintenance and operation of a telecommunications facility located

at 1990 Litchfield Turnpike, Woodbridge, Connecticut.

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

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

Thank you.

LAF





# CONNECTICUT SITING COUNCIL

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

### NOTICE

Pursuant to General Statutes § 16-50p (e), the Connecticut Siting Council (Council) announces that, on July 29, 2010, the Council issued Findings of Fact, an Opinion, and a Decision and Order approving an application from New Cingular Wireless PCS, LLC (AT&T) for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a telecommunications facility located at 1990 Litchfield Turnpike, Woodbridge, Connecticut. This application record is available for public inspection in the Council's office, Ten Franklin Square, New Britain, Connecticut

