AT&T Wireless PCS, LLC application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and management of a telecommunications facility located at 1990 Litchfield Turnpike Woodbridge, Connecticut

Docket 388

April 26, 2010

# **AT&T Proposed Findings of Fact**

## Introduction

- 1. New Cingular Wireless PCS, LLC ("AT&T"), in accordance with the 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, maintenance, operation and management of a 170-foot wireless telecommunications tower facility located at 1990 Litchfield Turn Pike (Route 69), Woodbridge, Connecticut. (Transcript 1 01/12/10, 3:05 p.m. [Tr. 1], p. 3).
- 2. AT&T is a Delaware limited liability company with an office at 500 Enterprise Drive, Rocky Hill, Connecticut 06067. AT&T's member corporation is licensed by the Federal Communications Commission ("FCC") to construct and operate a personal wireless services system, which has been interpreted as a "cellular system", within the meaning of CGS Section 16-50i(a)(6). (AT&T Application [App.], p. 2)
- 3. The purpose of the proposed facility is to rectify an existing coverage gap along Routes 69 (Litchfield Turnpike), Route 63, Dillon Road and the surrounding areas in the Town of Woodbridge. (AT&T App., p. 4)
- 4. Notice of the application was sent to all abutting property owners by certified mail on September 09, 2009. (AT&T App., Tab 9). Certificates of service were received back from all of the abutting property owners. (AT&T Pre-Hearing Interrogatory Responses, Set I, A5).
- 5. AT&T installed a four-foot by six-foot sign at the entrance to the property on December 28, 2009. (Pre-Filed Testimony of Kevin Dey, Q4). The sign presented information regarding the project and public hearing. (AT&T App., Tab 9).
- 6. Pursuant to CGS § 16-50l(b), AT&T provided notice to all federal, state and local officials and agencies listed therein. (AT&T App., Tab 9).
- 7. Pursuant to CGS § 16-50m, the Council 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 Meeting House Lane, Woodbridge, Connecticut. (Tr. 1, p. 2; Transcript 2 01/12/10, 7:00 p.m. [Tr. 2], p. 2).
- 8. The Council and its staff conducted an inspection of the proposed site on January 12, 2010, beginning at 2:00 p.m. The applicant flew a red weather balloon at least three feet in diameter at the site from 12:00 p.m. to 4:30 p.m. to simulate the height of the proposed tower. (Tr. 1, p. 95). The balloon was flown at its intended height of 170 feet above ground level ("AGL") during the field review, but it was a breezy day and for the majority of the time the balloon did not reach its maximum height. (Tr. 1, p. 95-96). As such, the Council has also relied on photographic visual analyses which were conducted by the Applicant. (AT&T Bulk Filing, Tab 5 Visual Analysis Report; AT&T App., Tab 4 Visual Analysis Report).

#### **Municipal Consultation**

- 9. AT&T submitted a technical report to Edward Maum Sheehy, the First Selectman of the Town of Woodbridge, on June 05, 2009. (AT&T App., Tab 5). On July 6, 2009, AT&T participated in a meeting with the Woodbridge Planning & Zoning Commission, at which the proposed facility was informally discussed. (AT&T App., p. 14, Tab 6; Pre-Filed Testimony of Kevin Dey, 3A).
- 10. AT&T has offered rent-free space to the Town to install emergency communications antennas on the proposed tower facility. The Town has not expressed interest in collocating on the tower. (AT&T App., Tab 6; Tr. 1, p. 70)

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

- 11. 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; AT&T App., p. 4; Tr. 1, p. 4)
- 12. 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 wireless service to New Haven County. (Council Administrative Notice Item No. 7; AT&T App., p. 4).
- 13. The Telecommunications Act of 1996 prohibits local and state entities from discriminating among providers of functionally equivalent services. (Council Administrative Notice Item No. 7; Tr. 1, p. 4-5; Tr. 2, p. 5).
- 14. 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; Tr. 1, p. 4; Tr. 2, p. 5).
- 15. 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. (Council Administrative Notice Item No. 7; AT&T App., p. 5).
- 16. As an outgrowth of the 911 Act, the Federal Communications Commission has mandated that wireless carriers provide enhanced 911 services (E911) as part of their communications networks. (AT&T App., p. 5).
- 17. The site will provide enhanced 911 services to the proposed service area. (AT&T App., p. 5)
- 18. The proposed facility would be an integral component of AT&T's wireless network in New Haven County. (AT&T App., p. 1, 4). Presently, AT&T has gaps in coverage along Routes 69 (Litchfield Turnpike), Route 63, Dillon Road and the surrounding areas in the Town of Woodbridge, as well as locations in Bethany. (AT&T App., p. 4)

# AT&T - Existing and Proposed Wireless Coverage

- 22. AT&T's operating frequencies in this part of the state 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 the 1900 MHz PCS service to provide additional capacity as needed. (AT&T Bulk Filing, Tab 5 Power Density Calculation Letter; AT&T Pre-Hearing Interrogatory Responses, Set I, A11; Pre-Filed Testimony of John Blevins, A4).
- 23. AT&T designs and operates at the following signal level thresholds: in-vehicle service is -82 dBm and in-building service is -74 dBm. (AT&T Pre-Hearing Interrogatory Responses, Set I, A3).
- 24. AT&T currently has gaps in coverage in the northern portion of the Town of Woodbridge along Route 69 (Litchfield Turnpike), Route 63, Dillon Road, and the surrounding area including northern Woodbridge, with signal levels ranging from -92 dBm to -105 dBm. (AT&T Bulk Filing, Tab 5, p. 3; AT&T Pre-Hearing Interrogatory Responses, Set I, A1). The proposed service area is primarily zoned for residential uses, farming, public institutions and utilities, and open space areas. (AT&T App., p. 8, 12-13; AT&T Bulk Filing, Tab 5, p. 8; Woodbridge Zoning Regulations, 3.12; Woodbridge Plan of Conservation and Development, p. 41)
- 25. The minimum height at which AT&T could achieve its coverage objectives from the proposed facility is 167 feet AGL. (Tr. 1, p. 70) Installing antennas at 167 feet AGL would provide reliable service to the proposed service area and provide capacity relief to adjacent facilities. (AT&T App., p. 4; Tr. 1, p. 70, 74).
- 26. Installing antennas at a lower height, such as 160 or 150 feet would leave a gap in coverage resulting in dropped calls along Route 63. (Tr. 1, p. 71). Reliable coverage along Route 63 as well as Route 69 are the primary objectives of implementing this site and is the basis for the proposed 167 foot antenna height. (AT&T App., p. 4).
- 27. Coverage strength lower than -82 dBm is considered inadequate for reliable in-car service. The individual lengths of existing coverage gaps for cellular are as follows: 2 miles along Route 69, 0.7 miles on Downs Road and 2.2 miles along Route 63 and 0.5 miles on Route 67. (AT&T Pre-Hearing Interrogatory Responses, Set I, A13).
- 28. At a signal strength of -82 dBm, AT&T would be able to provide full coverage for the foregoing coverage gaps, including 2 miles on Route 69, 0.7 miles on Downs Road, 2.2 miles on Route 63 and 0.5 miles on Route 67. (AT&T Pre-Hearing Interrogatory Responses, Set II, A4).
- 29. At -82 dBm, the total area AT&T could cover from the proposed facility, with its antennas at a centerline height of 167 feet, is 3 square miles. (AT&T Pre-Hearing Interrogatory Responses, Set I, A14).
- 30. From the proposed facility, AT&T's antennas would hand off to adjacent sites located at 9 Meyers Road, Bethany (Site 5632), 261 Benham Street, Hamden (Site 2040), 142 Baldwin Drive, New Haven (Site 2013), 77 Pease Road, Woodbridge, (Site 2010), and 100 Pond Lilly Road, New Haven, (Site 5164). (AT&T App., Tab 1; AT&T Pre-Hearing Interrogatory Responses, Set I, A8).

## **Site Selection**

- 31. AT&T began its investigation of the area with benchmark data on a gap in its wireless coverage in north and eastern areas of the Town of Woodbridge, and then established a "site search are" in the general geographical location where the installation of a wireless facility would address the identified coverage need problem while still allowing for orderly integration of a site into AT&T's network, based on the engineering criteria of hand-off, frequency reuse and interference. (AT&T App., p. 6).
- 32. AT&T's search ring was first established in northern Woodbridge on February 21, 2006. (AT&T Pre-Hearing Interrogatory Responses, Set I, A4). AT&T's site search was the result of AT&T's awareness of a lack of wireless coverage along Routes 69 (Litchfield Turnpike), Route 63, Dillon Road and the surrounding areas. (AT&T App., p. 4).
- 33. The original search ring SR2124 (a ring approximately one (1) mile in diameter) was centered north of the proposed site on Downs Road which was investigated but no suitable candidate identified. AT&T radio frequency engineers subsequently conducted propagation studies for a location farther south to achieve the objectives of an adjacent search ring called SR2125 (a ring approximately 0.8 of a mile in diameter) but at 170' it was apparent that this site would provide service to both SR2125 and SR2124, obviating the need for two sites. AT&T identified this site as SR2124 for internal purposes and both aforementioned search rings are depicted in Tab 2 of the Application given the related searches. (AT&T Pre-Hearing Interrogatory Responses, Set I, A4).
- 34. In this particular area of Woodbridge, there are no communications towers to service AT&T's gap in coverage. (AT&T Bulk Filing, Tab 5, p. 5; AT&T App., Tab 2).
- 35. The search included identification of potential structures that could be used for telecommunications purposes and the examination of area properties to identify potential telecommunications sites. (AT&T Bulk Filing, Tab 5, p. 5; AT&T App., Tab 2).
- 36. Connecticut Light & Power (CL&P) utility lines are located just north and west of the proposed facility. (AT&T App., 7). Consultation with CL&P revealed that nearby high tension power lines were not viable siting options. (AT&T Bulk Filing, Tab 5, p. 5; AT&T App., Tab 2; AT&T Supplemental Responses to Citing Council Public Hearing Questions [AT&T Supplement], A1).
- 37. In April of 2008, AT&T made an application to CL&P regarding the possible use of the subject power lines as a siting location. (Tr. 1, p. 28). In response, CL&P advised AT&T to seek other siting opportunities due to the priority of this transmission line as critical for the reliability for the New England Bulk Power System, and the need to avoid outages at this location. (AT&T App., 7; Tr. 1, p. 29).
- 38. Use of CL&P infrastructure in the subject area of Woodbridge is not a viable alternative because of federal energy reliability requirements that impact availability, timing, costs and other terms and conditions that would impact both CL&P and AT&T's independent utility networks and associated reliability. (AT&T Supplement, A1.a; Tr. 1, p. 30, 37).
- 39. There is also United Illuminating Company (UI) transmission line infrastructure extending from Route 69/Litchfield Turnpike to the north and east of the proposed site. AT&T's in-house and outside consulting radiofrequency engineers evaluated the line as both an antenna attachment or a taller replacement tower. In all cases, use of UI infrastructure could not provide comparable or adequate coverage due to intervening terrain (i.e. the ridge on which the proposed tower and CL&P lines are

located) and would leave gaps in coverage along Routes 63 and 67 to the west. (AT&T Supplement, A2; C2 Systems Letter, dated March 4, 2010)

- 40. UI's ROW traverses Class I and II watershed and state forest lands associated with West Rock State Park. As a matter of state law, telecommunications tower facilities are prohibited on such lands under C.G.S. § ; 25-32; C.G.S. §23-25; CSC Administrative Notice 16. (AT&T Supplement, A2).
- 41. AT&T identified an existing silo on the Shepherd Farm parcel that is immediately adjacent to Route 69/Litchfield Turnpike. (AT&T Supplement, A4). The existing silo is 40' in height and in an advanced state of disrepair with no cap on it. The structure is not tall enough nor located at a sufficient ground elevation to be used as an antenna support structure and meet the AT&T engineering objectives. (AT&T Supplement, A4; Tr. 1, p. 55-56).
- 42. No existing structures suitable for the installation of a telecommunications facility were identified. (AT&T Bulk Filing, Tab 5, p. 5; AT&T App., Tab 2).
- 43. Determining there were no viable structures within the search area, AT&T identified and investigated ten (10) potential sites/areas in and near the Woodbridge site search area. (AT&T Bulk Filing, Tab 5, p. 5; AT&T App., Tab 2).
- 44. On January 26, 2010, counsel for AT&T corresponded by electronic mail with the South Central Connecticut Regional Water Authority ("SCCRWA") asking whether any of its considerable land holdings in the West River System and Lake Dawson Reservoir area were Class III lands. In a response dated January 27, 2010, Dianne Tompkins of SCCRWA noted that all of its land holdings were Class I or II and none were Class III. As such, she verified AT&T's prior testimony that none of the watershed lands in the area were legally available tower sites as a matter of state law. (AT&T Supplement, A3; Tr. 1, p. 46-48).
- 45. The SCCRWA's filtration plant, pump station and two homes are not prohibited from wireless attachment use under state law as administered by the Department of Public Health. However, all of the water company infrastructure noted is situated at a low height and on the valley floor along Route 69/Litchfield Turnpike such that it would not work as a radiofrequency engineering matter in this particular instance. (AT&T Supplement, A3).
- 46. Repeaters, microcell transmitters, distributed antenna systems and other types of transmitting technologies would not be practicable or feasible means of providing to providing service within the target area for this site, which contains a significant wide area coverage gap. There are no equally effective and feasible technological alternatives to the construction of the proposed tower. (AT&T App., p 6)

## **Facility Description**

- 47. The proposed facility would be located in the central-north portion of a 20.78 acre parcel owned by Sarah Shepherd at 1990 Litchfield Turnpike in Woodbridge. The majority of the property consists of wooded land, but contains 1 residence located approximately 390 feet from the proposed facility. The property has also been used as a working diary farm for over 100 years. (AT&T Bulk Filing, Tab 5, p. 8, Visual Analysis Report; AT&T App., p. 1-2, 7, 12-13, and Tab 4 Visual Analysis Report).
- 48. The Shepherd property is zoned Residential 'A', a residential zoning district that requires a 1.5 acre minimum lot size. The regulations do not address the siting of wireless telecommunications facilities,

- however, public utilities are permitted in RA zones subject to approval of the Town Plan and Zoning Commission. (AT&T App., p. 8, 13; Woodbridge Zoning Regulations, 3.12).
- 49. Land uses in the vicinity surrounding the proposed facility consists primarily of open space, utility lines, watershed lands and power supply with a few single family residences. (AT&T Bulk Filing, Tab 5, p. 8; AT&T App., p. 13).
- 50. AT&T's proposed facility would consist of a new self-supporting 170 foot monopole tower, erected within a 40 foot by 90 foot compound in a 100 foot by 100 foot lease area; and the compound would be enclosed by an 8 foot chain link fence. The area within the tower compound would accommodate AT&T's equipment and provide for future shared use of the facility by other carriers. (AT&T Bulk Filing, Tab 5, p. 7; AT&T App., p. 8, Sheet C02 Revised July 07, 2009; AT&T App., Tab 6).
- 51. The proposed chain-link fence surrounding the compound will not contain barbed wire. (AT&T Supplement, A16).
- 52. The proposed facility would be located at 41° 22' 23.5" north latitude and 72° 58' 52.3" west longitude. Its ground elevation would be 335 feet above average mean sea level ("AMSL"). AT&T Bulk Filing, Tab 5, p. 8).
- 53. The proposed tower would be designed in accordance with American National Standards Institute TIA/EIA-222-F "Structural Standards for Steel Antenna Towers and Antenna Support Structures" and the 2003 International Building Code with 2005 Connecticut Amendment. The foundation design would be based on soil conditions at the site. The details of the tower and foundation design would be provided as part of the final D&M plan. (AT&T Bulk Filing, Tab 5, p. 10).
- 54. AT&T will install up to 6 panel antennas at the 167' centerline height on the tower together with an associated 12' x 20' radio equipment shelter at the tower base on a concrete pad within the tower compound. (AT&T Bulk Filing, Tab 5, p. 7; AT&T App., p. 8, Tab 3).
- 55. In the event of a power failure, AT&T's proposed emergency backup power plans for the proposed Facility relies on battery backup and a permanent diesel generator. AT&T would have a battery backup required to prevent the Facilities from experiencing a "re-boot" condition during the generator start-up delay period that typically lasts ten minutes. The generator's fuel tanks would contain approximately 210 gallons of fuel, and would consist of a bladder within a steel containment chamber and is designed to contain fuel in the unlikely event of a fuel spill. (AT&T Pre-Hearing Interrogatory Responses, Set I, A5, A17).
- 56. AT&T's proposed backup generator will meet all applicable noise standards at the subject property boundaries. (AT&T Pre-Hearing Interrogatory Responses, Set II, A6).
- 57. The proposed facility would be unmanned, requiring monthly maintenance visits approximately one hour long. AT&T's equipment would be monitored 24 hours a day, seven days a week from a remote location. (AT&T App., p. 11)
- 58. Development of the proposed facility would require approximately 1,221 cubic yards of cut and 980 cubic yards of fill. (AT&T Pre-Hearing Interrogatory Responses, Set I, A15).
- 59. Access to the compound would extend to the north-northwest from Litchfield Turnpike (Route 69) approximately 85 feet over the existing driveway to a new 12 foot wide gravel access drive

- approximately 985 feet to the proposed equipment compound. (AT&T Bulk Filing, Tab 5, p. 7, 12; AT&T App., p. 8) with some drainage improvements engineered and included in a D&M filing.
- 60. Utility service to the proposed facility, including electric and telephone services, would be extended underground from an existing offsite utility pole to the proposed facility, and would not follow the new access drive to the site. (AT&T Bulk Filing, Tab 5, p. 7, 12; AT&T App., p. 8).
- 61. Youghiogheny Communications Northeast, LLC d/b/a Pocket Wireless has expressed interest in the 140-foot level of the tower as a minimum height. (Pocket Wireless Comment letter dated November 19, 2009; Tr. 1, p. 79).
- 62. Verizon has also expressed interest in the 140-foot level of the tower as a minimum height. (Tr. 1, p. 79).
- 63. The tower setback radius would not extend or encroach onto any adjacent properties in the event of tower failure, but rather would be completely contained within the host property. (AT&T Bulk Filing, Tab 5, Sheets C01-C02; AT&T App., Tab 3, Sheets C01-C02).
- 64. Exposed ledge was not visible on the property in the vicinity of the proposed facility at the time of AT&T's field investigation. The presence of ledge will be confirmed upon completion of a geotechnical investigation. If ledge is encountered, chipping is preferred to blasting. (AT&T Pre-Hearing Interrogatories, Set II, A1).
- 65. The nearest off-site residence is identified as 1978 Litchfield Turnpike and is 940' south of the proposed tower. (AT&T Pre-Hearing Interrogatory Responses, Set I, A7).
- 66. The total estimated cost of construction for the proposed facility is \$375,000.00, excluding the costs of antennas and related radio equipment. In particular, this estimate includes:

a. Tower and foundation (including installation)
b. Site development
c. Utility installation
\$200,000.00
\$135,000.00
\$40,000.00

(AT&T App., p. 14; AT&T Pre-Hearing Interrogatory Responses, Set I, A10; Tr. 1, p. 95).

67. The estimated cost of AT&T's antennas and related radio equipment would be approximately \$250,000.00. (AT&T Pre-Hearing Interrogatory Responses, Set I, A10; Tr. 1, p. 1).

## **Environmental Review**

- 68. 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. (AT&T App., p. 9-10). On January 15, 2009, the Connecticut State Historic Preservation Office ("SHPO") issued a letter indicating that a facility in the proposed location would have no effect on cultural resources. (AT&T App., p. 9-10, Tab 5).
- 69. AT&T's original correspondence to SHPO indicated a proposed tower height of 150 feet, while the application is for 170 feet. SHPO was subsequently advised of this difference by letter dated June 17, 2009. SHPO reviewed the revised height and once again determined that the proposed facility will have no effect on cultural resources. (AT&T Pre-Hearing Interrogatory Responses, Set I, A6).

- 70. AT&T has also confirmed with the SHPO that the location of a local kiln listed on the National Register of Historic Places is near the SCCRWA lands on the east side of Route 69/Litchfield Turnpike. There is another kiln on the west side of Route 69/Litchfield Turnpike which was the subject of various public comments. March 3, 2010 correspondence from AT&T's historic consultants confirmed that location on the west site of Route 69 is not on the National Register of Historic Places. There will be no impacts, visual or otherwise, to either location.
- 71. SHPO made a "No Adverse Effect" determination for purposes of Section 106 of the National Historic Preservation Act and any national and state historic resources in the area of the proposed tower facility. (AT&T App, Tab 5; AT&T Supplement, A7; Tr. 2, p. 64).
- 72. 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 App., p. 10).
- 73. Federal, State and local databases indicate that the site is not located within a wetlands mapped on the National Wetland's Inventory and not within a 100-year of 500-year flood zone. No wetlands soils were noted in or around the parcel and the closest water body is Lake Dawson located 600' southeast of the site. Thus, development of the site would not directly affect any wetlands or watercourses; and no water flow and/or water quality changes are anticipated as a result of the construction or operation of the proposed facility. (AT&T Bulk Filing, Tab 5, p. 8, 11).
- 74. Erosion and sedimentation controls and other best management practices would be established and maintained for the duration of site construction. (AT&T Bulk Filing, Tab 5, p. 11; AT&T App., Tab 3).
- 75. Development of the proposed facility would require the removal of 17 trees with a diameter at breast height of 6 inches or larger within the area of the proposed access road and compound. (AT&T Bulk Filing, Tab 5; AT&T App., Tab 3).
- 76. AT&T has received a determination from the FAA that the proposed facility would not be a hazard to air navigation and that marking and lighting of the tower not be necessary. This determination is for a tower up to approximately 170 feet (or 58.1 meters) tall. (AT&T Bulk Filing, Tab 5; AT&T App., Tab 3).
- 77. The cumulative worst-case maximum power density from the radio frequency emissions from the operation of the proposed AT&T antennas is calculated to be 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 base. (AT&T Bulk Filing, Tab 5; AT&T App., p. 11, Tab 3).

## **Visibility**

- 78. The visual impact of the proposed facility is not substantial. Areas of visibility are expected primarily over 2 local lakes identified as Lake Watrous and Lake Dawson that are part of watershed lands. (AT&T App., 9).
- 79. The year round visual impact to the surrounding community within a 2 mile radius is limited to approximately 2.8%, or 227 acres, of the total study area; and topography and vegetation will serve to

- screen or otherwise limit visibility of the tower from large portion of the viewshed. A small portion of the study area, approximately 0.3 % of the area or 24 acres, would have seasonal views of the tower. (AT&T Bulk Filing, p. 12, Tab 5; AT&T App., p. 9, Tab 3).
- 80. The remainder of the 2 mile radius study area is screened by topography (4,188 acres, 52%) and vegetation (3,614 acres, 44.9%). (AT&T Bulk Filing, Tab 5, p. 11-12, Visual Analysis Report; AT&T App., Tab 3, Tab 4 Visual Analysis Report).
- 81. The limit of year round visibility includes the area surrounding the following public streets: (1) 2200 foot stretch, (2) 980 foot stretch and (3) 1040 foot stretch along Litchfield Turnpike; a (4) 40 foot stretch on Brooks Road; a (5) 25 foot stretch on Woodbine Road; and (6) 25 foot stretch on Clark Road that correspond to the overhead line right of way. (AT&T Bulk Filing, Tab 5 Visual Resource Analysis; AT&T App., Tab 4 Visual Resource Analysis).
- 82. The proposed monopole will be visible year round at a distance from 6 residences all located along Litchfield Turnpike. (AT&T Bulk Filing, Tab 5 Visual Resource Analysis; AT&T App., Tab 4 Visual Resource Analysis).
- 83. The proposed monopole may be seen at a distance from the (1) Darling House; (2) Brooks Road; and (3) portions of Bishop West Trails and (4) West Rock Ridge State Park Trails. (AT&T Bulk Filing, Tab 5 Visual Resource Analysis; AT&T App., Tab 4 Visual Resource Analysis; Tr. 1, p. 96-97).
- 84. Starting at Dillon Road, the Bishop West Trails cross under the CL&P transmission lines and then traverses adjacent properties south. This trail is not part of the Blue Blaze trail system as set forth in the Connecticut Walk Book. (AT&T Supplement, A6)
- 85. The limit of seasonal visibility includes the area surrounding the following public streets: (1) 1040 foot stretch of Litchfield Turnpike; and a (2) 75 foot stretch along Litchfield Turnpike. (AT&T Bulk Filing, Tab 5 Visual Resource Analysis; AT&T App., Tab 4 Visual Resource Analysis)
- 86. The proposed monopole will be visible seasonally from 1 residence located along Litchfield Turnpike at a significant distance. (AT&T Bulk Filing, Tab 5 Visual Resource Analysis; AT&T App., Tab 4 Visual Resource Analysis).
- 87. There is no significant change in visibility associated with a 10' reduction in the height of the proposed 170' tower. (AT&T Supplement, A5).
- 88. Visibility of the proposed tower from specific locations within a 2 mile radius of the site is summarized in the following table:

Specific Location and Area Receptors	Visible	Approximate Portion of Tower Visible	Approx. Distance and Direction to Tower*
1. Litchfield Turnpike	Yes	Upper 20 feet - Year Round	4,225 feet - North
		Upper 85 feet - Seasonally	
2. Litchfield Turnpike	Yes	Upper 90 feet - Year Round	2,170 feet - North
3. Intersection of Litchfield &	Yes	Upper 15 feet -Year Round	4,140 feet - South
Downs Road			
4. Brooks Road	Yes	Upper 70 feet - Year Round	9,540 feet - Southwest
5. Darling House	Yes	Upper 10 feet - Year Round	4,630 feet - North
		Upper 80 feet - Seasonally	
6. Yeladim Childcare Jewish	No	None	5,090 feet - Northeast

Community Center			
7. Route 63	Yes	Upper 15 feet - Year Round Upper 25 feet - Seasonally	6,560 feet - Northeast
8. Route 63 at Trailhead	No	None	6,790 feet - Southeast
9. Blue with Yellow Dot Trail	Yes	Upper 35 feet - Seasonally	2,550 feet - Southeast
10. West Ridge State Park (Scenic Outlook #2)	Yes	Upper 90 feet - Year Round (with ridgeline/power line backdrop)	6,690 feet - Northwest
11. Intersection of Power Line Right of Way & West Ridge State Park Blue Trail	Yes	Upper 60 feet - Year Round (with ridgeline backdrop)	4,650 feet - Southwest
12.Children's Garden Daycare	No	None	10, 460 feet - North

(AT&T App., Tab 4 - Visual Analysis Report)