DOCKET NO. 441 – Homeland Towers, LLC and New Cingular
Wireless PCS, LLC application for a Certificate of Environmental
Compatibility and Public Need for the construction, maintenance,
and operation of a telecommunications facility located at 10
Blackville Road, Washington, Connecticut.

Connecticut

Siting

Council

February 14, 2014

### DRAFT

#### **Findings of Fact**

### Introduction

- 1. Homeland Towers LLC (HT) and New Cingular Wireless PCS, LLC (AT&T), in accordance with provisions of Connecticut General Statutes (CGS) § 16-50g, et seq., applied to the Connecticut Siting Council (Council) on September 17, 2013 for the construction, maintenance, and operation of a telecommunications facility, which would include a 135-foot monopine tower, at 10 Blackville Road in the Town of Washington, Connecticut. (HT 1, p. 1)
- 2. HT is a Connecticut corporation with offices located at 22 Shelter Rock Lane, Danbury, Connecticut. It owns and operates tower facilities in New York and is developing tower sites in Connecticut. HT would construct, maintain and own the proposed facility and would be the certificate holder. (HT 1, p. 3)
- 3. AT&T is a Delaware limited liability company with an office at 500 Enterprise Drive, Rocky Hill, Connecticut. It is licensed by the Federal Communications Commission (FCC) to construct and operate a personal wireless services system within the meaning of CGS Section 16-50i(a)(6). (HT 1, p. 3)
- 4. The parties in this proceeding are the co-applicants and the Town of Washington (Town). Daniel Soule, representing Litchfield County Dispatch (LCD), is an intervenor. (Transcript, December 3, 2013, 3:04 p.m. [Tr. 1], pp. 5, 8)
- 5. The purpose of the proposed facility would be to enable AT&T, and other wireless carriers, to provide reliable wireless services to residents, businesses, schools, municipal facilities, and visitors to Washington Depot, a historic hamlet within the Town of Washington. (HT 1, pp. 1-2)
- 6. Pursuant to CGS § 16-50*l*(b), HT published public notice of its intent to submit this application on September 11 and 15, 2013 in <u>The Voices</u>, the publication used for planning and zoning notices in the Town of Washington. (HT 1, p. 4; HT 3 Affidavits of Publication dated September 11 and 15, 2013)
- 7. Pursuant to CGS § 16-50*l*(b), HT sent notices of its intent to file an application with the Council to each person appearing of record as an owner of property abutting the property on which the proposed facility is located. (HT 1, p. 5; Attachment 8)
- 8. HT received return receipts for the abutter notices from all but one of the abutting property owners. HT sent an additional notice to this owner via first class mail. (HT 2, A1)

- 9. Pursuant to CGS § 16-50*l* (b), HT provided copies of its application to all federal, state and local officials and agencies listed therein. (HT 1, p. 4; Attachment 8)
- 10. HT posted a sign at the proposed site on November 13, 2013. The sign gave the date of the public hearing and contact information for the Council. (HT 4 Applicants' Supplemental Submission of November 26, 2013: Affidavit of Sign Posting)
- 11. Pursuant to CGS § 16-50m, the Council, after giving due notice thereof, held a public hearing on December 3, 2013, beginning at 3:04 p.m. and continuing at 7:00 p.m. in the Main Hall of the Bryan Memorial Town Hall, 2 Bryan Plaza in Washington, Connecticut. (Tr. 1, p. 2 ff.)
- 12. The public hearing was continued at the offices of the Council at Ten Franklin Square in New Britain on January 9, 2014 beginning at 1:05 p.m. (Transcript, January 9, 2014, 1:05 p.m. [Tr. 3], pp. 137 ff.)
- 13. The Council and its staff conducted an inspection of the proposed site on December 3, 2013, beginning at approximately 2:00 p.m. (Record)
- 14. The applicant flew a balloon at the proposed site from 7:30 a.m. until approximately 4:00 p.m. The balloon was flown at a tethered height of 140 feet. Weather conditions were favorable for the balloon flight for most of the day with calm winds and good visibility. (Tr. 1, pp. 54-55)

### **State Agency Comment**

- 15. Pursuant to C.G.S. § 16-50j (h), on October 18, 2013 and on January 10, 2014, the Council solicited written comments regarding the proposed facility from the following State agencies: Department of Energy and Environmental Protection (DEEP); Department of Public Health (DPH); Council on Environmental Quality (CEQ); Public Utilities Regulatory Authority (PURA); Office of Policy and Management (OPM); Department of Economic and Community Development (DECD); Department of Agriculture (DOAg); Department of Transportation (DOT); Department of Emergency Management and Public Protection (DESPP); and Connecticut Airport Authority. (Record)
- 16. DOT responded to the Council's solicitation with the observation that some the utility work associated with the proposed facility would occur within the State right-of-way on State Route 109 (Blackville Road) and would require a Highway Encroachment Permit. (DOT Letter dated November 12, 2013)
- 17. No other state agencies responded to the Council's solicitation of comments. (Record)

### **Municipal Consultation**

- 18. Prior to HT's application submittal to the Council, the Town had been investigating siting a tower that could serve Washington Depot for several years. In the course of its investigation, the Town determined that there were few, if any, viable alternatives to the proposed site at the Town garage at 10 Blackville Road. (HT 1, Attachment 7, Letter from Mark Lyon, Washington First Selectman, dated September 6, 2013)
- 19. At a Special Town Meeting held on March 9, 2013, the Washington Board of Selectmen was authorized to execute a ground lease agreement for a wireless telecommunications facility with HT. (HT 1, Attachment 7, Minutes of Special Town Meeting and Approval Resolution)
- 20. At a special meeting held on September 5, 2013, the Town's Board of Selectmen requested that the Council waive the 90-day municipal review period. The reason for this request was that the Town had been having discussions with HT for a time dating to 2011 and was satisfied that its process had exceeded the normal consultation period and had allowed for the consideration of matters not typically included in the municipal consultation process. (HT 1, Attachment 7, Letter from Mark Lyon, Washington First Selectman, dated September 6, 2013, September 5, 2013 Minutes of Board of Selectmen Special Meeting)

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

- 21. In 1996, the United States Congress recognized a nationwide need for high quality wireless telecommunications services in part through the adoption of the Federal Telecommunications Act (Act). A core 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." (HT 1, p. 5; Council Administrative Notice Item No. 4 Telecommunications Act of 1996)
- 22. 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. 4 Telecommunications Act of 1996)
- 23. The Telecommunications Act of 1996 prohibits local and state bodies from discriminating among providers of functionally equivalent services. (Council Administrative Notice Item No. 4 Telecommunications Act of 1996)
- 24. 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. 4 Telecommunications Act of 1996)

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- 25. In December 2009, President Barack Obama recognized cell phone towers as critical infrastructure vital to the United States. The Department of Homeland Security, in collaboration with other Federal stakeholders, State, local, and tribal governments, and private sector partners, has developed the National Infrastructure Protection Plan (NIPP) to establish a framework for securing our resources and maintaining their resilience from all hazards during an event or emergency. (Council Administrative Notice Item No. 11 Barack Obama Presidential Proclamation 8460, Critical Infrastructure Protection)
- 26. Pursuant to the tower-sharing policy of the State of Connecticut under C.G.S. §16-50aa, if the Council finds that a request for shared use of a facility by a municipality or other person, firm, corporation or public agency is technically, legally, environmentally and economically feasible, and the Council finds that the request for shared use of a facility meets public safety concerns, the Council shall issue an order approving such shared use to avoid the unnecessary proliferation of towers in the state. (Conn. Gen. Stat. §16-50aa)

## **Public Safety**

- 27. The Wireless Communications and Public Safety Act of 1999 (911 Act) was enacted by Congress to promote and enhance public safety by making 9-1-1 the universal emergency assistance number, by furthering deployment of wireless 9-1-1 capabilities, and by encouraging construction and operation of seamless ubiquitous and reliable networks for wireless services. (Council Administrative Notice Item No. 6 Wireless Communications and Public Safety Act of 1999, as amended)
- 28. AT&T would provide "Enhanced 911" services from its proposed facility, as required by the 911 Act. (HT 1, p. 10)
- 29. Pursuant to the Warning, Alert and Response Network Act (WARN), the FCC established the Personal Localized Alerting Network (PLAN), which requires wireless service providers to issue text message alerts from the President of the United States, the U.S. Department of Homeland Security, the Federal Emergency Management Agency and the National Weather Service. The proposed facility would be able to transmit such alerts. (HT 1, pp. 10-11)
- 30. In 2009, Connecticut became the first state in the nation to establish a statewide emergency notification system. The CT Alert ENS system utilizes the state Enhanced 911 services database to allow the Connecticut Department of homeland Security and Connecticut State Police to provide targeted alerts to the public and local emergency response personnel alike during life-threatening emergencies. (HT 1, p. 10)
- 31. HT's proposed tower would be designed in accordance with the specifications of the American National Standards Institute EIA/TIA-222-F "Structural Standards for Steel Antenna Towers and Antenna Support Structures" and the 2003 International Building Code with 2005 Connecticut Amendment. The diameter of the tower would be approximately 4 ½ feet at its base and two feet at its top. (HT 1, Attachment 3 Facilities and Equipment Specification)
- 32. The proposed equipment compound would be enclosed by an eight-foot high chain link fence. (HT 1, pp. 12-13)

- 33. The setback radius of the proposed tower would lie completely within the host property. (HT 1, Attachment 3 Site Impact Statement)
- 34. The Town garage property is secured by a locked gate at the property's driveway. (Tr. 3, pp. 158-159)

# **Existing and Proposed Wireless Coverage**

- 35. In Litchfield County, AT&T is licensed to provide service on the cellular B-Band frequency, the Personal Communications Service (PCS) A3 Block frequency, and on Lower C, the Lower E, and the Lower B frequencies in the 700 megahertz (MHz) range. (HT 2, A3)
- 36. The RF design criterion for in-building service on AT&T's network is -74 dBm. For in-vehicle service, the criterion is -82 dBm. (HT 2, A5)
- 37. Existing signal strengths for AT&T's network in this area vary between the noise floor (between 100 and -130 dBm) and levels beneath the criteria for acceptable service. (Tr. 1, p. 20)
- 38. The following table shows the lengths of existing coverage on roads in the vicinity of the proposed facility and the lengths of coverage that would be possible from the proposed facility.

Street Name	<b>Existing Coverage</b>	New Coverage
Green Hill Road	None	0.25 miles
Calhoun Street	0.2 mile	2.4 miles
Bee Brook Road	None	1.9 miles
Blackville Road	None	1.6 miles
Church Hill Road	0.6 mile	1.8 miles
Foulois Road	None	0.2 mile
River Road	None	1.1 miles
Cook Street	None	0.4 mile
Sabbaday Lane	None	0.5 mile

(HT 2, A8)

39. AT&T's proposed facility would hand off signals with the adjacent facilities identified in the following table.

Hand Off Facility Location	Distance and Direction from Proposed Site
399 Chestnut Land Road, New Milford	2.8 miles, SW
6 Mountain Road, Washington	3.0 miles, NW

(HT 2, A4)

40. AT&T currently provides coverage to an area of 4.29 square miles within the Town. The proposed facility would enable AT&T to extend its coverage to an additional area of 3.7 square miles in the Town. (HT 1, Attachment 1, p. 4)

- 41. AT&T's current coverage area in Washington has a resident population of approximately 408 persons. The proposed facility would extend AT&T's coverage to an additional resident population of 411 persons. (HT 1, Attachment 1, p. 5)
- 42. Town roads that lie within the area that would be covered by the proposed facility experience the average daily traffic volumes shown in the chart below.

Street Name	Average Daily Traffic
	(2012)
Green Hill Road, Washington	4,500
Calhoun Street, Washington	3,900
Bee Brook Road, Washington	3,800
Blackville Road, Washington	2,000
Church Hill Road, Washington	2,000

(HT 1, Attachment 1, p. 5)

43. The lowest height that would enable AT&T to provide the desired coverage would be 126 feet above ground level (agl). At lower heights, some areas of substandard service would begin to appear where customers would experience dropped calls, lower transmission speeds, or unintelligible communication. (HT 2, A10)

# **Site Selection**

44. There are three telecommunications facilities within approximately four miles of the site search area for HT's proposed facility. None of these existing facilities, however, can provide adequate coverage for the area that would be covered by the proposed facility. The three existing facilities are listed below.

<b>Tower Owner</b>	Facility Height and Type	Address	Distance and Direction to Facility
Crown Castle	160' monopole	399 Chestnut Land Road, New Milford	2.8 miles, NE
Verizon	170' monopole	6 Mountain Rd, Washington	3.0 miles, SE
CL&P	247' self- supporting lattice	26 Chapin Rd, New Milford	3.9 miles, NE

(HT 1, Attachment 1 – Existing Tower/Cell Site Listing)

- 45. In addition to the Town garage property, HT investigated two other parcels as potential sites for its facility. The respective owners of these parcels offered their properties as potential facility sites. The two properties were:
  - a) <u>88 Bee Brook Road</u>: HT determined that this parcel was too small (1.42 acres) to site a wireless facility, and it is 90 feet lower in ground elevation (505 feet versus 596 feet) than the Town garage site.

b) <u>118 Bee Brook Road</u>: HT determined that this parcel was too small (1.45 acres) to site a wireless facility, and it is 75 feet lower in ground elevation (521 feet versus 596 feet) than the Town garage site.

(HT 1, Attachment 2)

- 46. Due to the lack of coverage in Washington Depot, AT&T and other carriers have been searching for possible sites in this area for several years. (HT 1, p. 12)
- 47. The Town and a number of its various agencies including the Planning Commission, Conservation Commission and Board of Selectmen, have been considering the siting of a tower at the Town garage property since 2010. (HT 1, p. 12)
- 48. During its process to site a tower that would provide wireless service to Washington Depot, the Town reviewed information from AT&T and other carriers, hired a radiofrequency consultant, and reviewed visual and environmental studies and other information pertinent to its process. (HT 1, p. 12)
- 49. During its own search for a facility to provide coverage for Washington Depot, HT was unable to identify any tall, non-tower structures or any other existing structures that would be suitable for a wireless telecommunications facility. (HT 1, Attachment 2)
- 50. Alternative telecommunications technologies such as repeaters, microcell transmitters, distributed antenna systems and other types of transmitting technologies are not a practicable or feasible means of providing service within Washington Depot. (HT 1, p. 11; Tr. 1, p. 29)

# **Facility Description**

- 51. The proposed facility is located in the north-central portion of a 17.3 acre parcel located at 10 Blackville Road and owned by the Town. The property is used as a municipal garage and maintenance facility. (See Figures 1, 2 and 3) (HT 1, p. 1; Attachment 3 General Facility Description; Sheet A-1 Abutters Map)
- 52. The Town garage property is located within the B-2 Washington Depot Business District zoning district. Telecommunications facilities and towers are permitted in the B-2 zoning district as a special permit use. (HT 1, p. 17; HT X, Bulk Filing Town of Washington Zoning Regulations, p. 24)
- 53. HT would lease a 65-foot by 80-foot parcel (5,200 square feet) on the Town garage property. Within its lease parcel, HT would install a 65-foot by 67-foot (4,355 square feet) compound. The compound would include a 135-foot monopole tower designed to look like a pine tree and a 12-foot by 20-foot shelter for AT&T's ground equipment. The overall height of the tower with its artificial pine branches in place would reach 140 feet. (HT 1, pp. 12-13; Attachment 3; Tr. 1, p. 19)
- 54. The proposed tower would be located at 41° 38′ 47.52″ North latitude and 73° 18′ 57.79″ West longitude. Its elevation at ground level would be approximately 596 feet above mean sea level. (HT 1, Attachment 3, Sheet T-1: Title Sheet and Index)

- 55. In addition to AT&T's antennas and equipment, the proposed tower would be designed to accommodate four other wireless carriers and antennas for use by public safety companies such as LCD that provide emergency communications in the Town. (HT 1, p. 12)
- 56. AT&T would install 12 antennas, which would employ frequencies in the 700 MHz, 850 MHz, and 1900 MHz ranges, at a centerline height of 126 feet on the proposed tower. (Tr. 1, p. 15)
- 57. LCD would place two five-foot omnidirectional antennas at the top of the tower. They would extend to an overall height of 140 feet above ground level. LCD would also place a five-foot omnidirectional antenna at a mounting elevation of 76 feet. (HT 1, Attachment 3, Sheet SP-2; Tr. 1, p. 19)
- 58. Vehicular access to the proposed facility would extend from Blackville Road for a distance of approximately 1,455 feet through an existing parking lot and over an existing driveway and then for approximately 23 feet over a new extension of the existing driveway to be installed by HT. (HT 1, p. 13)
- 59. Utility connections would be run underground from an off-site utility pole on Blackville Road to the proposed facility. The route of the underground utilities would follow a 20-foot wide easement for an approximate distance of 515 feet and then follow the existing and extended driveways to the facility. (HT 1, p. 13; Attachment 3, Sheet SP-1)
- 60. Ledge is prominent in the area where AT&T's tower would be located. Should ledge be encountered during the excavation for the tower foundation, mechanical removal would be preferred. If mechanical removal is unsuccessful, blasting would be utilized as needed. (HT 2, A2)
- 61. For trenching of the utility connections, 420 cubic yards of material would be removed, and the facility's compound area would require 250 cubic yards of fill material. (HT 1, Attachment 4 Environmental Assessment Statement)
- 62. No schools or commercial child day care facilities are located within 250 feet of the proposed facility. Two schools (Washington Primary School on School Street and Devereux Glenholme School on Sabbaday Lane) are located approximately 0.5 mile to the southwest and southeast, respectively. The nearest commercial child day care center (Judea Nursery School) is located at 6 Kirby Road, approximately 1.1 miles to the south. (HT 1, Attachment 5 Proximity to Schools and Commercial Child Day Care Centers)
- 63. There are 11 single family residences within 1,000 feet of the proposed facility. (HT 1, Attachment 3 Site Impact Statement)
- 64. The closest off-site residence is located 217 feet to the west at 44 Bee Brook Road. It is owned by Margo Dow Faulkner. (HT 1, Attachment 3 Site Impact Statement, Sheet A-1 Abutters Map)
- 65. Land use within ½ mile of the proposed site is comprised primarily of residential properties, although there are a few commercial properties to the west and south. (HT 1, Attachment 3 Site Evaluation Report)

66. The estimated cost of the proposed facility is:

Tower and Foundation	\$165,000
Site Development	133,000
Utility Installation	30,000
Facility Installation	50,000
<b>Subtotal: Homeland Towers Cost</b>	\$378,000

Antennas and Equipment \$250,000 **Subtotal: AT&T Costs** \$250,000

Total Estimated Costs \$628,000

(HT 1, p. 25)

## **Backup Power**

- 67. In response to two significant storm events in 2011, Governor Malloy formed a Two Storm Panel (Panel) that was charged with an objective review and evaluation of Connecticut's approach to the prevention, planning and mitigation of impacts associated with emergencies and natural disasters that can reasonably be anticipated to impact the state. Two of the Panel's findings are as follows: "Wireless telecommunications service providers were not prepared to serve residential and business customers during a power outage. Certain companies had limited backup generator capacity;" and "The failure of a large portion of Connecticut's telecommunications system during the two storms is a life safety issue." (Final Report of the Two Storm Panel, Council Administrative Notice Item No. 37)
- 68. The Panel made the following recommendations: "State regulatory bodies should review telecommunications services currently in place to verify that the vendors have sufficient generator and backhaul capacity to meet the emergency needs of consumers and businesses:" and "The Connecticut Siting Council should require continuity of service plans for any cellular tower to be erected. In addition, where possible, the Siting Council should issue clear and uniform standards for issues including, but not limited to, generators, battery backups, backhaul capacity, response times for existing cellular towers." (Final Report of the Two Storm Panel, Council Administrative Notice Item No. 37)
- 69. In response to the findings and recommendations of the Panel, Public Act 12-148, An Act Enhancing Emergency Preparedness and Response, codified at C.G.S. §16-50ll, required the Council, in consultation and coordination with the Department of Energy and Environmental Protection, the Department of Emergency Services and Public Protection and the Public Utilities Regulatory Authority (PURA), to study the feasibility of requiring backup power for telecommunications towers and antennas as the reliability of such telecommunications service is considered to be in the public interest and necessary for the public health and safety. The study was completed on January 24, 2013. (Council Docket No. 432, Council Administrative Notice Item No. 22)

- 70. The Council's study included consideration of the following matters: Federal, state and local jurisdictional issues of such backup power requirements, including, but not limited to, siting issues; Similar laws or initiatives in other states; The technical and legal feasibility of such backup power requirements; The environmental issues concerning such backup power; and Any other issue concerning backup power that PURA deems relevant to such study. (Council Docket No. 432, Council Administrative Notice Item No. 22)
- 71. The Council reached the following conclusions in the study: "Sharing a backup source is feasible for CMRS providers, within certain limits. Going forward, the Council will explore this option in applications for new tower facilities;" and "The Council will continue to urge reassessment and implementation of new technologies to improve network operations overall, including improvements in backup power." (Council Docket No. 432, Council Administrative Notice Item No. 22)
- 72. According to R.C.S.A. §22a-69-1.8, noise created as a result of, or relating to, an emergency, such as an emergency backup generator, are exempt from the State Noise Control Regulations. (R.C.S.A. §22a-69-1.8)
- 73. AT&T's emergency backup power would be provided by a fixed diesel generator. (HT 1, pp. 12-13)
- 74. AT&T's backup generator would be able to run approximately 48 hours before needing to be refueled. (HT 2, A11)
- 75. The Town requested that the Council consider requiring HT to supply a single backup power generator for all currently proposed and any future tenants on the tower. (Town 1)
- 76. HT would be willing to install a generator to provide backup power for LCD. (Tr. 3, pp. 146-148)

### **Environmental Considerations**

- 77. After reviewing plans for this proposed facility, the State Historic Preservation Office (SHPO) concluded that, although the facility will overlap the Calhoun Street/Ives Road National Register of Historic Places District and will be partially visible from portions of the District year-round, it will have a conditional, no adverse effect on cultural resources, with the conditions that 1) the monopine tower and associated equipment will be designed, painted to match adjacent materials, and installed to be as non-visible as possible; and 2) if not in service for six consecutive months, the tower and equipment shall be removed by the telecommunications facility owner within 90 days of the end of such six-month period. (HT 1, Attachment 6 June 11, 2013 Letter from SHPO)
- 78. No threatened, endangered or special concern species have been identified on the site of the Town Garage or immediate area. (HT 1, p. 15; HT 4 Supplemental Submission 11/26/13: DEEP NDDB Letter)
- 79. HT would remove 20 trees with a diameter at breast height of six inches or more to develop the proposed facility. (HT 1, Attachment 3 –Tree Inventory; Tr. 1, p. 13)

- 80. Two wetland areas are located in the vicinity of the proposed facility. A rip-rap armored drainage swale is located approximately 540 feet to the south on the Town's property, and a man-made pond feature is located approximately 390 feet to the north partially on the Town's property. (HT 1, p. 24; Attachment 4 Wetlands Delineation Report)
- 81. The man-made pond to the north of the proposed facility provides a locally significant permanent body of water for herpetofauna habitat and can be classified as vernal pool habitat. (Homeland Towers Post-Hearing Submission dated December 19, 2013, Attachment 4)
- 82. HT 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 Energy and Environmental Protection, throughout the construction period of the proposed facility. (HT 1, p. 24)
- 83. No adverse impacts to the identified wetland areas would be anticipated due to the separating distances and the installation of erosion and sedimentation control measures. (HT 1, Attachment 4 Wetlands Delineation Report)
- 84. The proposed tower at this site would not constitute an obstruction or hazard to air navigation and would not require any obstruction marking or lighting. (HT 1, p. 16; Attachment 4 TOWAIR Determination Results)
- 85. The nearest Connecticut Critical Habitat to the proposed facility is located approximately seven miles to the northeast in Litchfield. (HT 1, Attachment 4 Avian Resources Evaluation)
- 86. The proposed facility is not located near any Important Bird Area (IBA), as designated by Audubon Connecticut. The closest IBA is the White Memorial Foundation located in Litchfield and Morris, approximately 5.5 miles to the northeast. (HT 1, Attachment 4 Avian Resources Evaluation)
- 87. HT's proposed facility would comply with the recommendations of the United States Fish and Wildlife Service's *Interim Guidance on the Siting, Construction, Operation and Decommissioning of Communications Towers*. (HT 1, Attachment 4 Avian Resources Evaluation)
- 88. The cumulative worst-case maximum power density from the radio frequency emissions from the operation of AT&T's proposed antennas at the base of the proposed tower would be 13.38% of the standard for the General Public/Uncontrolled 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. (HT 2, Applicants' Responses to Siting Council Interrogatories, Response A12)

### Visibility

- 89. HT's proposed tower would be visible above the tree canopy on a year-round basis from approximately 95 acres in the surrounding vicinity. (See Figure 6) (HT 1, Attachment 5 Visibility Analysis Results)
- 90. The proposed tower would be seasonally visible (during "leaf-off" conditions) from approximately 75 additional acres. A large amount of this acreage is open agricultural land and low-lying marsh to the south/southwest at a distance of one mile and beyond. (HT 1, Attachment 5 Visibility Analysis Results)
- 91. The majority of the areas from which the proposed tower would be visible year-round or on a seasonal basis are located south, west, and northwest of the proposed tower. (HT 1, Attachment 5 Visibility Analysis Results)
- 92. The visibility of the 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 Analysis Report contained in Attachment 5 of HT's application.

Location	Vigibility	Annuar Doution	Anney Distance and
Location	<u>Visibility</u>	Approx. Portion	Approx. Distance and
		of (130') Tower	<u>Direction to Tower</u>
		<u>Visible</u>	
1 – Parsonage Lane	Seasonal	10'	4,170 feet, NW
2 – Moody Bridge Road West	Seasonal	20'	4,950 feet, NE
3 – Washington Primary School	Year-round	20'	4,010 feet, NE
4 – Steeples Road	Year-round	20'	4,330 feet, NE
5 – Bee Brook Road (Route 47)	Year-round	70'	1,480 feet, NE
6 – Intersection of Bee Brook Road and	Year-round	40'	950 feet, N
Blackville Road (Route 109)			
7 – Blackville Road – adjacent to host	Seasonal	30'	900 feet, NW
property			
8 – Bee Brook Road (Route 47)	Year-round	30'	1,480 feet, SE
9 – Bee Brook Road (Route 47)	Year-round	40'	1,950 feet, SE
10 – Bee Brook Road (Route 47)	Year-round	40'	2,430 feet, SE
11 – Bee Brook Road (Route 47)	Year-round	20'	2,900 feet, SE
12 – Calhoun Street	Year-round	40'	3,330 feet, SE
13 – Calhoun Street	Year-round	40'	3,590 feet, SE
14 – Calhoun Street	Seasonal	30'	4,010 feet, SE
15 – Ives Road	Seasonal	30'	4,590 feet, SE
16 – Calhoun Street	Seasonal	20'	4,280 feet, SE
17 – Calhoun Street	Seasonal	20'	4,800 feet, SE
18 – Hidden Valley Preserve – Pinnacle	Seasonal	40'	3,170 feet, S

(HT 1, Attachment 5 – Visibility Analysis)

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- 93. Some seasonal views of the proposed tower would be possible from select locations on elevated private properties to the southeast. These views would be restricted to upper portions of the monopine, which would be set into the valley where its profile would not extend above the tree line. (HT 1, Attachment 5 Visibility Analysis Results)
- 94. Seasonal views of the proposed tower may be achieved from portions of the Hidden Valley Preserve trail system, including the Pinnacle. (HT 1, Attachment 5 Visibility Analysis Results)
- 95. No views of the proposed tower would be achieved from the Steep Rock Preserve, including Steep Rock Summit. (HT 1, Attachment 5 Visibility Analysis Results)
- 96. The proposed facility would not be visible from Maricostas Preserve, including the Lookout and Waramaug's Rock. (HT 1, Attachment 5 Visibility Analysis Results)

Robin 14 Hill 12 The Pinnacle 0 WYKEHAM AD Fenn Hill Bell Hill Lower Church Hill Washington Plumb Hill SCALE: 1" = 2000'±

**Figure 1: Location Map** 

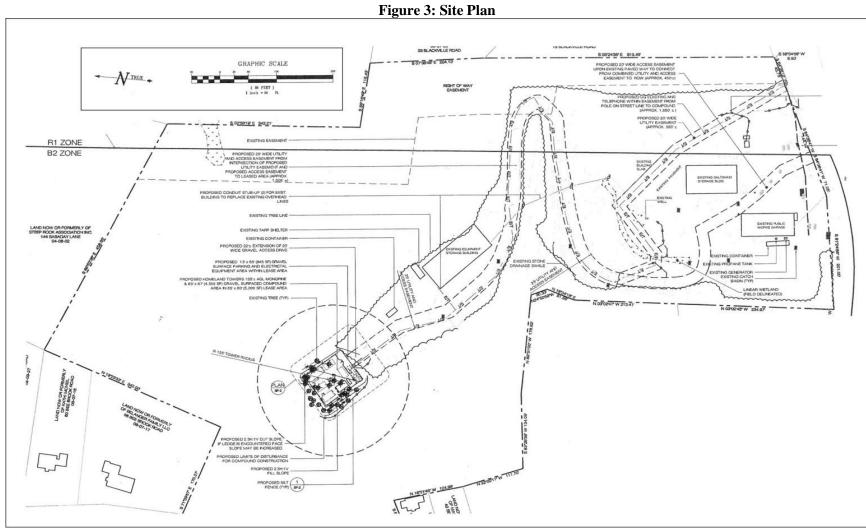
(HT 1, Attachment 3, Sheet T-1)

Site Location Map
Aerial Base 1 inch equals 417 feet Base Map Source: 2010 Bing Color Aerial Photograph with 1-foot Resolution

Figure 2: Aerial Photograph of Site Location

(HT 1, Attachment 3)

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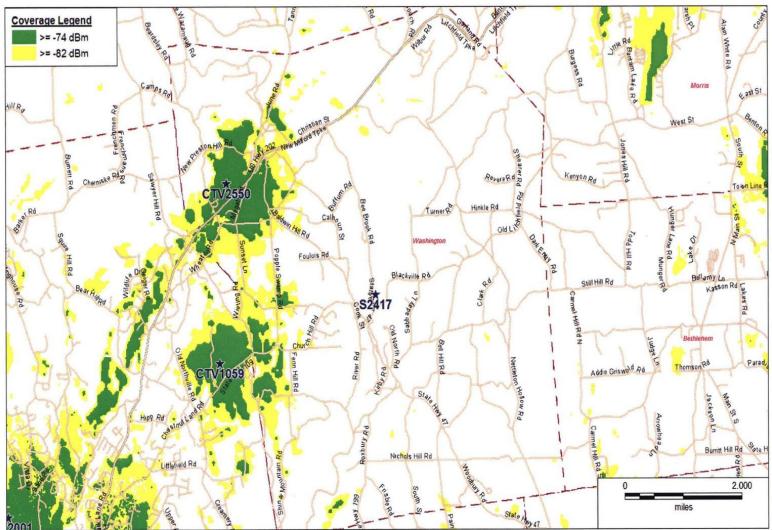
(HT 1, Attachment 3, Sheet SP-1)

(HT 1, Attachment 3, Sheet SP-2)

**Figure 4: Tower Elevation** T/STRUCTURE (2) PROPOSED LCD WHIP ANTENNAS ON STANDOFFS (12) PROPOSED AT&T PANEL -ANTENNAS W/ APPURTENANCES ON 10' T-ARMS 10# FUTURE CARRIER ANTENNAS (TYP) 101 FUTURE CARRIER ANTENNAS (TYP) APPROXIMATE TREE LINE (97'± AGL) 101 FUTURE CARRIER ANTENNAS (TYP) 10# FUTURE CARRER ANTENNAS (TYP) OVERALL HEIGHT OF MONOPINE @ 140± AGL (/PROPOSED AT&T ANTENNAS @ 126'±± FUTURE ANTENNAS CENTERLINE @ 116'± ± AGL T/TOWER @ 136'± ± AGL FUTURE ANTENNAS CENTERLINE @ 106 ± # AGL PROPOSED 135'± AGL MONOPINE W/ TOP OF STRUCTURE @ 140'± AGL FUTURE ANTENNAS CENTERLINE @ 96'± ± AGL FUTURE ANTENNAS CENTERLINE @ 86'± ± AGL MOUNTING FOR (1) PROPOSED LCD ANTENNA @ 76'±± AGL PROPOSED CSC CABINET PROPOSED AT&T 12%20' EQUIPMENT -SHELTER W/ 4%11' GENERATOR PAD & LCD 12%20' EQUIPMENT SHELTER (BEYOND) PROPOSED STEPDOWN TRANSFORMER PROPOSED TELCO AND ELECTRIC FROM STREETLINE AND TO MULTIMETER PROPOSED BOLLARD (TYP 11PL) PROPOSED MULTIMETER CENTER PROPOSED MONOPOLE FOUNDATION TO BE DESIGNED BY MANUFACTURER PROPOSED 65 × 80' (5,200 SF) LEASE AREA & 65 × 67' (4,355 SF) CHAIN LINK FENCED COMPOUND AREA

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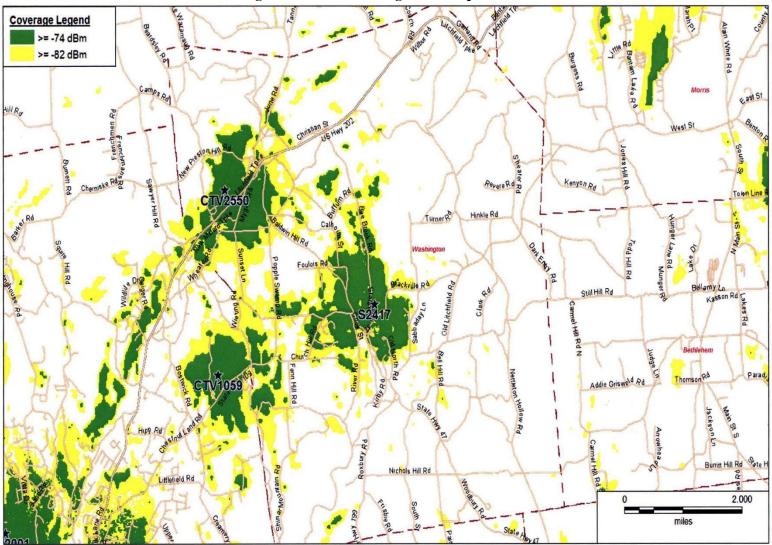
Figure 5: Existing AT&T Coverage in Washington



(HT 1, Attachment 1, p. 7)

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Figure 6: AT&T Coverage with Proposed Site



(HT 1, Attachment 1, p. 8)

Hidden Valley Prese Legend ♣ Proposed Tower Photo Points Predicted Year-Round Visibility Predicted Seasonal Visibility

Municipal Private Open Space

Protected Open Space

2-Mile Study Area

National Register Historic Districts

Figure 7: Tower Visibility

(HT 1, Attachment 5 – Visibility Analysis)