

<p><b>DOCKET NO. 445</b> - 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 Ridgefield Town Assessor Map Parcel #D08-124, southwest of the intersection of Old Stagecoach Road and Aspen Ledges Road, Ridgefield, Connecticut.</p>	<p>} } }</p>	<p>Connecticut  Siting  Council  August 14, 2014</p>
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**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 February 18, 2014 for the construction, maintenance, and operation of a telecommunications facility, which would include a 150-foot monopole tower, at the intersection of Old Stagecoach Road and Aspen Ledges Road in the Town of Ridgefield, Connecticut. (HT/AT&T 1, pp. 1, 4)
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 has a long term lease agreement with the property owner, Insite Towers, LLC — a national wireless infrastructure company — to develop a wireless telecommunications facility at this site and would be the certificate holder. (HT/AT&T 1, pp. 3, 5)
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/AT&T 1, p. 5)
4. The parties in this proceeding are the co-applicants. The group, Ridgefielders Against the Cell Tower (RACT), is an intervenor. (Transcript, April 24, 2014, 3:00 p.m. [Tr. 1], p. 5)
5. The purpose of the proposed facility would be to enable the Town of Ridgefield’s police, fire and emergency services departments, AT&T and other wireless carriers, to provide reliable emergency communications and wireless services to residents, businesses, schools, municipal facilities, and visitors to northwestern Ridgefield. (HT/AT&T 1, p. 1)
6. Pursuant to CGS § 16-50(b), HT published public notice of its intent to submit this application on January 23 and 30, 2014 in The Ridgefield Press, the publication used for planning and zoning notices in the Town of Ridgefield. (HT/AT&T 1, p. 6; HT/AT&T 2 – Notice of Publication dated January 31, 2014)
7. Pursuant to CGS § 16-50(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 on January 30, 2014. (HT/AT&T 1, p. 6; Attachment 8)
8. HT received mail receipts for all of the letters sent to abutting property owners. (HT/AT&T 4, A1)

9. Pursuant to CGS § 16-50/(b) on February 14, 2014, HT provided copies of its application to all federal, state and local officials and agencies listed therein. (HT/AT&T 1, p. 6; Attachment 9)
10. Pursuant to C.G.S. §16-50gg, upon receipt of the application, the Council sent letters to the Town of Ridgefield on February 18, 2014 as notification that the application was received and is being processed. (record)
11. Pursuant to C.G.S. §16-50m, the Council published legal notice of the date and time of the public hearing in The Danbury News Times on March 26, 2014. (record)
12. HT posted a sign at the proposed site on April 2, 2014. The sign gave the date of the public hearing and contact information for the Council. HT revised the sign on April 14, 2014 to correct the address for the location of the scheduled public hearing. (HT/AT&T 6 – Affidavit of Sign Posting, dated April 8, 2014; HT/AT&T 7 – Affidavit of Corrected Sign Posting, dated April 16, 2014)
13. The Council and its staff, together with representatives of the applicants and the intervenor, conducted an inspection of the proposed site on April 24, 2014 beginning at approximately 2:00 p.m. (Record)
14. HT sought to fly a balloon at the proposed site throughout the day of the Council's field inspection, beginning at 7:40 a.m. However, windy conditions made it difficult to keep a balloon aloft at the height of the proposed tower and several balloons were lost. (Tr. 1, pp. 87-88)
15. Pursuant to CGS § 16-50m, the Council, after giving due notice thereof, held a public hearing on April 24, 2014, beginning at 3:00 p.m. and continuing at 7:00 p.m. in the Large Conference Room of the Ridgefield Town Hall, 400 Main Street in Ridgefield, Connecticut. (Tr. 1, p. 1 ff.)
16. The public hearing was continued on June 3, 2014 beginning at 1:01 p.m. at the Council's offices in New Britain, Connecticut. (Transcript, June 3, 2014, 1:01 p.m. [Tr. 3], p. 170 ff.)
17. The public hearing was further continued on June 17, 2014 beginning at 1:05 p.m. at the Council's offices in New Britain, Connecticut. (Transcript, June 17, 2014, [Tr. 4], p. 331 ff.)

#### **State Agency Comment**

18. Pursuant to C.G.S. § 16-50j (g), on March 21, 2014 and on June 18, 2014, the Council solicited written comments regarding the proposed facility from the following State agencies: Department of Energy and Environmental Protection (CT 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)
19. The DOT responded to the Council's solicitation with no comments. (DOT Letter dated March 14, 2014)
20. The CEQ responded to the Council's solicitation by stating that there was a need for greater specificity regarding residences that are expected to have views of the proposed tower and that "leaf-off" photosimulations are preferable to "leaf-on" simulations. (CEQ letter dated April 17, 2014)

21. The DPH responded to the Council's solicitation with the observation that the proposed site is located within the public water supply watershed of the Saugatuck Reservoir, an active source of public drinking water for the Aquarion Water Company. Included in DPH's letter was a series of recommendations to protect this source of public drinking water. (DPH letter dated April 15, 2014)
22. No other state agencies responded to the Council's solicitation for comments. (Record)

#### **Municipal Consultation**

23. HT and AT&T have individually and collectively consulted with the Town of Ridgefield (Town) for a period of over six years about a tower facility in northwestern Ridgefield. (HT/AT&T 1, pp. 23-24)
24. HT filed a Technical Report with the Town on October 31, 2013. Subsequently, a site walk was held with the Town Planning Director and members of the Town's Planning and Zoning Commission and Inland Wetlands and Watercourses Agency. Representatives of the Applicants also met with the Town's First Selectman, Planning Director, Chairman of the Conservation Commission, and Deputy Director of Emergency Management. In addition, a publicly noticed information session was held at Town Hall in December 2013, after which a copy of the applicant's presentation was posted to the Town's website. (HT/AT&T 1, p. 24)
25. The Town's Conservation Commission submitted a letter to the Council in which it commented on the design criteria of the stormwater control system, the need for monitoring for invasive species, the desirability of a black vinyl coated chain link fence to reduce the visual effect of the compound, and the desirability of landscaping to provide some visibility screening of the compound. (Letter from Ridgefield Conservation Commission, dated March 6, 2014)
26. The Town's Planning and Zoning Commission and its Inland Wetlands Board submitted a letter to the Council in which they re-iterated concerns about stormwater management and the proper deployment of erosion and sedimentation control measures during construction. (Letter from Betty Brosius, Director of Planning, dated March 12, 2014)
27. In response to requests from Town agencies, HT designed a stormwater management system to avoid impacts to wetlands and off-site properties. (HT/AT&T 1, p. 24)
28. HT's project would incorporate specifications of the Town's emergency communications antennas and equipment as coordinated through the Town's Department of Emergency Management. (HT/AT&T 1, p. 24)

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

29. 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/AT&T 1, p. 7; Council Administrative Notice Item No. 4 - Telecommunications Act of 1996)

30. 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)
31. 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)
32. 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)
33. 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)
34. 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**

35. 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. (HT/AT&T 1, p. 12; Council Administrative Notice Item No. 6 - Wireless Communications and Public Safety Act of 1999, as amended)
36. AT&T would provide "Enhanced 911" services from its proposed facility, as required by the 911 Act. (HT/AT&T 1, p. 12)
37. 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/AT&T 1, p. 13)

38. 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/AT&T 1, p. 13)
39. The Town's emergency service agencies have documented gaps in their communications networks in this part of Ridgefield. These gaps impact response times and create difficult communications during emergencies. (HT/AT&T 1, p. 4)
40. The Town's police, fire, and emergency management departments plan to install emergency communications antennas on the proposed tower. These antennas would be a critical element of the Town's emergency communications network, which is undergoing a \$4 million system upgrade. (HT/AT&T 1, p. 11)
41. The Town's Fire Chief and Director of Emergency Management supports the proposed facility as a way to improve cell coverage for 911 calls in the Ridgebury section of Ridgefield. (HT/AT&T 1, Attachment 1, Letter from Town of Ridgefield Fire Department)
42. The Town's Police Chief supports the proposed facility as a way of enhancing the police department's mobile technological abilities. (HT/AT&T 1, Attachment 1, Letter from Ridgefield Police Chief)
43. If the proposed tower is not approved, the Town would have to erect two towers to accomplish its purposes. (Tr. 1, pp. 40-41)
44. 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 five feet at its base and three feet at its top. (HT/AT&T 1, Attachment 3 – Facilities and Equipment Specification)
45. In addition to AT&T's antennas and equipment, the proposed tower would be designed to accommodate four additional wireless carriers and antennas for use by the police and fire department emergency communications of the Town. (HT/AT&T 1, p. 14)
46. The proposed equipment compound would be enclosed by an eight-foot high chain link fence. (HT/AT&T 1, Attachment 3, General Facility Description)
47. AT&T's equipment shelter and generator would have alarm systems. (Tr. 1, pp. 99-100)
48. The setback radius of the proposed tower would encroach on an abutting property to the north that is owned by the Town for open space. (HT/AT&T 1, Attachment 3 – Drawing Sheets SP-1 and A-1)
49. HT would design its tower with a yield point at 56 feet above grade in order to prevent the tower's setback radius from extending onto the abutting property. (Tr. 1, p. 99)

**Existing and Proposed Wireless Coverage**

50. In Fairfield County, AT&T is licensed to use the frequency bands 710-716, 722-728, 704-710, 734-740, and 716-722 in the 700 MHz range; 1850-1865, 1930-194, 1885-1890, and 1965-1970 MHz in the Broadband PCS frequency range; 835-845, 846.5-849, 880-890, and 891.5-894 MHz in the Cellular frequency range; and 2345-2350, 2310-2315, 2355-2360, 2305-2310, 2350-2355, and 2315-2320 MHz in the Broadband/Fixed Wireless frequency range. (HT/AT&T 4, A3)
51. AT&T would initially utilize the 700 and 1900 MHz LTE and 850 and 1900 UMTS frequencies at the proposed facility. (HT/AT&T 4, A4)
52. AT&T has historically designed its GSM and UMTS networks using signal strengths of -74 dBm and -82 dBm as its criteria for reliable in-building and in-vehicle service respectively. As it moves toward LTE technology, AT&T is using signal strengths of -83 and -93 dBm for its 700 MHz LTE frequency and -86 and -96 dBm for its 1900 MHz LTE. (HT/AT&T 4, A6)
53. AT&T's existing signal strength in the area that would be served by the proposed facility ranges from -74 dBm to -120 dBm (the noise floor) at its 850 MHz range. This range of signal strength does not constitute reliable coverage. (HT/AT&T 4, A7)
54. AT&T currently provides coverage to an area of 5.85 square miles within the Town. The proposed facility would enable AT&T to extend its coverage to an additional area of 5.43 square miles in the Town. (See Figures 5 and 6) (HT/AT&T 1, Attachment 1, p. 4)
55. The proposed facility would enable AT&T to provide service to Ridgefield High School, Scotts Ridge Middle School, and Barlow, Scotland and Ridgebury Elementary Schools, Tigher Hollow Fields, Seth Low Pierrepont State Park, and trails and open space used by the public. (HT/AT&T 1, pp. 10-11)
56. AT&T's current coverage area in Ridgefield has a resident population of approximately 4,745 persons. The proposed facility would extend AT&T's coverage to an additional resident population of 5,213 persons. (HT/AT&T 1, Attachment 1, p. 5)
57. AT&T coverage gaps on nearby streets and the distances on these streets that would be covered from the proposed facility are shown in the following table.

Street Name	Existing Coverage Gap (mi.)	Coverage Gap covered at -74 dBm	Coverage Gap covered at -82 dBm
Ledges Road	0.98	0.48	0.90
Ridgebury Road	3.69	0.38	1.24
North Salem Road	3.66	1.93	2.60
Route 116 in Ridgefield	3.66	1.93	2.60
Old Stagecoach Road	1.42	0.45	1.08
Bob Hill Road	0.83	0.04	0.39
Mamasasco Road	1.43	0.82	1.037
Old Sib Road	2.07	1.39	1.97

(HT/AT&T 4, A9)

58. AT&T's antennas at the proposed facility would interact with Connecticut sites identified in the following table. In addition to these sites, AT&T also has two sites located in New York with which this facility would hand off signals.

<b>Hand Off Facility Location</b>	<b>Distance and Direction from Proposed Site</b>
10 Catoonah Street, Ridgefield	3.5 miles, SE
Moses Mountain, Danbury	3.3 miles, NE
119 Mill Plain Road, Danbury	4.4 miles, NW
900 Ridgebury Road, Ridgefield	3.1 miles, N
95 Halpin Lane, Ridgefield	3.7 miles, SE
66 Sugar Hollow Road, Danbury	2.4 miles, E
83 Wooster Heights Road, Danbury	4.0 miles, NE
18 Old Ridgebury Road, Danbury	4.0 miles, N
845 Ethan Allen Highway, Ridgefield	2.6 miles, SE

(HT/AT&T 1, Attachment 1, p. 6; HT/AT&T 4, A5)

59. There may be some areas at the perimeter of the proposed facility's coverage where substandard or nonexistent signal levels would make the hand off of signals with adjacent sites unreliable. (RACT 3.c.1. – Report of David Maxon, p. 5)
60. The proposed facility would leave coverage gaps in the Titicus Valley area and the Ridgebury area, which may require additional facilities to provide coverage. (RACT 3.c.1. – Report of David Maxon, p. 1)
61. 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.

<b>Street Name</b>	<b>Average Daily Traffic (2012)</b>
Ridgebury Road, Ridgefield	11,200
North Salem Road, Ridgefield	9,900
Route 116, Ridgefield	3,400
Bennetts Farm Road, Ridgefield	1,900
Old Stagecoach Road, Ridgefield	1,500
Bob Hill Road, Ridgefield	200

(HT/AT&T 1, Attachment 1, p. 5)

62. The lowest height that would enable AT&T to provide the desired coverage would be 150 feet above ground level (agl). (HT/AT&T 4, A11)

**Site Selection**

63. AT&T's search for a site in this vicinity dates back six or more years. (HT/AT&T 1, p. 1)
64. Numerous wireless carriers and tower companies have explored various siting options in northwestern Ridgefield over the past several years. (HT/AT&T 1, p. 14)

65. There are no tall structures located at higher elevations in the area of Ridgefield that would be served by the proposed facility. (HT/AT&T 1, p. 14)
66. There are 10 telecommunications towers, one power mount, and three roof top installations within approximately four miles of the site search area for HT's proposed facility. None of these existing facilities, however, can provide adequate coverage to northwestern Ridgefield. The existing facilities are listed below.

Tower Owner	Facility Height and Type	Address	Distance and Direction to Facility
AT&T	63' monopole	10 Catoonah, Ridgefield	3.5miles, NW
CL&P	105' power mount	95 Halpin Lane, Ridgefield	3.7 miles, NW
Town of Ridgefield	130' monopole	Governor St., Ridgefield	3.6 miles, NW
WREF	295' guyed lattice	Old Quarry Road Ridgefield	3.1 miles, NW
T-Mobile	100' monopole	845 Ethan Allen Hwy, Ridgefield	2.6 miles, NW
Sprint-Nextel	100' flagpole	746 Danbury Road, Ridgefield	2.3 miles, W
AT&T	106' monopole	66 Sugar Hollow Rd, Danbury	2.4 miles, W
T-Mobile	105' monopole	36 Sugar Hollow Rd, Danbury	2.8 miles, SW
SNET	65' lattice tower	Moses Mountain, Danbury	3.3 miles, SW
Hilton	125' rooftop	18 Old Ridgebury Rd, Danbury	4.0 miles, S
Lee Farm Corp. Park	64' rooftop	83 Wooster Heights, Danbury	3.0 miles, S
Boehringer- ingelheim Pharm.	39' rooftop	900 Ridgebury Rd, Danbury	3.0 miles, S
AT&T	100' stealth	230 Peach Lake Rd, Brewster, NY	4.0 miles, SE
Westchester County	130' lattice tower	Keeler Lane, N. Salem, NY	2.5 miles, NE

(HT/AT&T 1, Attachment 2 – Existing Tower/Cell Site Listing)

67. In addition to the proposed site, AT&T investigated several other parcels as potential sites for its facility. With the exception of the proposed site, all the other properties investigated by AT&T were either unavailable or inappropriate for a telecommunications facility or could not satisfy AT&T's coverage requirements. The other properties AT&T investigated were:
- a) 750 North Salem Road (Ridgefield High School): AT&T considered installing a new light stanchion as a telecommunications tower at the high school, but it is at a much lower elevation than the proposed site and provide less overall coverage.
  - b) Rippowam Road: This property is undeveloped forest land but was rejected by AT&T's radio frequency engineers.

- c) Canterbury Lane (Ridgefield Golf Course): This location was rejected by AT&T's radio frequency engineers.
- d) 602 A&B Ridgebury Road (Ridgebury Congregational Church): AT&T considered installing antennas inside a steeple and erecting a new tower but this location was rejected by AT&T's radio frequency engineers.

(HT/AT&T 1, Attachment 2)

68. In addition to the property on which the proposed facility is located, HT investigated 19 other properties within the search area. These properties were:

- a) Ledges Road, Ridgefield: This is the property for which the Town issued an RFP. Plans for a telecommunications facility on this property were voted down at town meeting.
- b) Old Sib Road (Old Sib Open Space), Ridgefield: A conservation deed restriction on this property prevented the Town from entering into a lease agreement with HT for this location.
- c) 750 North Salem Road (Ridgefield High School), Ridgefield: The Town was not interested in using this property for a telecommunications site.
- d) North Salem Road (Richardson Park), Ridgefield: A deed restriction appears to prevent this property from being used as a telecommunications facility.
- e) 42 Black Pine Ridge, Ridgefield: The owner of this property was not interested in leasing to HT.
- f) Black Pine Ridge Road – Lot 067, Ridgefield: The owner of this property was not interested in leasing to HT.
- g) Black Pine Ridge Road – Lot 070, Ridgefield: The owner of this property was not interested in leasing to HT.
- h) Black Pine Ridge Road – Lot 071, Ridgefield: The owner of this property was not interested in leasing to HT.
- i) Partridge Drive (Ridgebury Slope), Ridgefield: This property is owned by the Town, which was not interested in leasing it to HT.
- j) 120 Old Stagecoach Road, Ridgefield: A conservation easement on this property limits its development.
- k) 224 Ridgebury Road, Ridgefield: The property owner's family decided not to pursue a lease with HT.
- l) Regan Road – Lot 020, Ridgefield: This property is owned by the Ridgefield Land Conservancy, which was not interested in pursuing a lease agreement.

- m) Regan Road – Lot 021, Ridgefield: This property is owned by the Ridgefield Land Conservancy, which was not interested in pursuing a lease agreement.
- n) Barrack Hill Road (Levy Park), Ridgefield: This property is owned by the Town and is used as a park. The Town was not interested in leasing this property, which appears to have a deed restriction preventing its use for other purposes.
- o) Rippowam Road – B10-017, Ridgefield: This property is owned by the Town, which was not interested in leasing it to HT.
- p) 217 Rippowam Road (Sturges Park), Ridgefield: This property is owned by the Town, which was not interested in leasing it to HT.
- q) Rippowam Road – B11-004, Ridgefield: This property was reviewed and determined to be too far away from the targeted coverage area.
- r) Seth Low Mountain Road, Ridgefield: This property is owned by the Ridgefield Land Conservancy, which was not interested in pursuing a lease agreement.
- s) Barlow Mountain Road (Pierrepont State Park), Ridgefield: This parcel is dedicated state parkland and could be used for a telecommunications facility.

(HT/AT&T 1, Attachment 2)

- 69. As part of AT&T's site search, it had several discussions with Town officials about Town-owned properties in the vicinity of Old Stagecoach Road and in the West Mountain area of Ridgefield. Together, AT&T and the Town determined that the properties considered were either deed restricted or would not meet AT&T's requirements for reliable service in northwestern Ridgefield. (HT/AT&T 1, p. 2)
- 70. The Town explored the possibility of acquiring a 28-acre parcel in the Old Stagecoach Road/Ledges Road area that could be utilized, in part, for a wireless telecommunications facility. The Town issued a Request for Proposal (RFP) for a wireless carrier or tower company to develop a facility under a long term lease with the Town. HT responded to this RFP and was selected to be the Town's partner in this project. However, the Town's plan to develop a wireless telecommunications facility on this property was defeated by Town residents at a Town Meeting. (HT/AT&T 1, p. 3)
- 71. Subsequent to the Town Meeting, which voted down the joint Town-HT project, HT investigated a 3.18-acre parcel that abuts the 28-acre parcel previously considered by the Town. This parcel was acquired by Insite Towers, with which HT entered into a lease agreement for a wireless telecommunications facility (HT/AT&T 1, p. 3)
- 72. AT&T would require three sites to achieve the coverage it could achieve from the proposed site. (Tr. 3, p. 252)
- 73. 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 to the large area, with lesser density of usage, that AT&T is seeking to cover from the proposed site. (HT/AT&T 1, p. 13; Tr. 1, pp. 85-86)

### Facility Description

74. The proposed facility is located in the north-central portion of a 3.19 acre parcel located near the intersection of Old Stagecoach Road and Aspen Ledges Road with access on Old Stagecoach Road. The host property is owned by InSite Towers and is currently undeveloped. (See Figures 1 and 2) (HT/AT&T 1, p. 3; Attachment 3 – General Facility Description; Sheet A-1 – Abutters Map)
75. The host property is located within the RAAA zoning district (single family residential with three acre minimum lot size). Telecommunications facilities and towers are permitted in the RAAA zoning district as a special permit use. (HT/AT&T 1, p. 20; HT/AT&T 1, Bulk Filing – Town of Ridgefield Zoning Regulations, p. 3-11)
76. HT would lease a 75-foot by 75-foot parcel (5,625 square feet) on the host property. Within its lease parcel, HT would install a 62-foot by 75-foot (4,650 square feet) compound. The compound would include a 150-foot monopole tower, a 11.5-foot by 20-foot shelter for AT&T's ground equipment and a 10-foot by 12-foot shelter for the town's ground equipment. With the Town's antennas installed at the top of the tower, its overall height would reach 161.5 feet. (HT/AT&T 1, pp. 14-15; Attachment 3)
77. The proposed tower would be located at 41° 19' 49.11" North latitude and 73° 31' 00.55" West longitude. Its elevation at ground level would be approximately 807 feet above mean sea level. (HT/AT&T 1, Attachment 3, Sheet T-1: Title Sheet and Index)
78. AT&T would install 12 antennas at a centerline height of 146 feet on the proposed tower. (HT/AT&T 1, p. 15; Tr. 1, p. 84)
79. The Town would install one two-foot diameter microwave dish at a mounting height of 65 feet, one RFI antenna (11 feet in length) at a mounting height of 150 feet, and one RFI antenna (20.5 feet in length) at a mounting height of 70 feet. (HT/AT&T 4, A14)
80. Vehicular access to the proposed facility would extend from the intersection of Old Stagecoach Road and Aspen Ledges Road over an existing paper street and a right-of-way for the host property for a distance of 650 feet. Currently, what would be used as the access drive is a dirt/gravel driveway. Approximately 260 feet of this existing driveway would be paved, and the remaining distance would be graded and improved with a new gravel surface. (HT/AT&T 1, p. 15)
81. Utility connections would be run underground from a new utility pole to be installed at the intersection of Old Stagecoach Road and Aspen Ledges Road and would generally follow the access drive. (HT/AT&T 1, p. 15; Attachment 3 –Drawing Sheet SP-1: Site Plan)
82. Blasting should not be required for the proposed facility as the majority of necessary earthwork is fill. Any rock removal would be accomplished with standard excavation equipment. (HT/AT&T 4, A2)
83. Construction of the proposed facility would require 190 cubic yards of cut for utility trenching and the importation of 4,500 cubic yards of fill. (HT/AT&T 1, p. 15; Attachment 3 – Site and Facility Description, G. Clearing and Fill Required)

84. No schools or commercial child day care facilities are located within 250 feet of the proposed facility. The nearest school, the Barlow Mountain Elementary School, at 115 Barlow Mountain Road, is approximately 0.5 mile to the southeast. The nearest commercial child day care center (Children's Corner) is located at this elementary school. (HT/AT&T 1, Attachment 5 – Visibility Analysis - Proximity to Schools and Commercial Child Day Care Centers)
85. There are 32 single family residences within 1,000 feet of the proposed facility. (HT/AT&T 1, Attachment 3 – Site Impact Statement)
86. The closest off-site residence is located 264 feet to the northeast at 310 Old Stagecoach Road. It is owned by Harry Manchester. (HT/AT&T 1, Attachment 3 – Site Impact Statement, Sheet A-1 – Abutters Map)
87. Land use within ¼ mile of the proposed site is comprised primarily of single family residential properties and Town-owned open space. (HT/AT&T 1, Attachment 3 – Site and Facility Description)
88. Construction of the proposed facility would take approximately eight weeks. The site preparation stage would take an estimated four to five weeks. Installation of the tower, antennas, and associated equipment would take an additional three weeks. (HT/AT&T 1, p. 25)
89. The estimated cost of the proposed facility is:

Tower and Foundation	\$105,000
Site Development	130,000
Utility Installation	25,000
Facility Installation	45,000
<b>Subtotal: Homeland Towers Cost</b>	<b>\$305,000</b>
Antennas and Equipment	\$250,000
<b>Subtotal: AT&amp;T Costs</b>	<b>\$250,000</b>
<b>Total Estimated Costs</b>	<b>\$555,000</b>

(HT/AT&T 1, pp. 24-25)

#### Backup Power

90. 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. 41)

91. The Panel made the following recommendations:
- a. "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
  - b. 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. 41)

92. 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. 24)

93. The Council's study included consideration of the following matters:
- a. Federal, state and local jurisdictional issues of such backup power requirements, including, but not limited to, siting issues;
  - b. Similar laws or initiatives in other states;
  - c. The technical and legal feasibility of such backup power requirements;
  - d. The environmental issues concerning such backup power; and
  - e. Any other issue concerning backup power that PURA deems relevant to such study.
- (Council Docket No. 432, Council Administrative Notice Item No. 24)

94. The Council reached the following conclusions in the study:
- a. "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
  - b. "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. 24)

95. 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)
96. AT&T's emergency backup power would be provided by a 50 kW diesel generator, which would be capable of running approximately 48 hours based upon a 100% load and 200 gallons of available fuel. At a 50% load, the generator would be capable of running for approximately 86 hours. (HT/AT&T 4, A12)
97. AT&T's diesel generator would include a double-walled belly tank with alarm sensors to warn of leaks. It would include an emergency response kit and a waste drum in addition to the containment system. (Tr. 1, pp. 117-118)

98. For its backup power, the Town of Ridgefield would install a 32 kW propane generator with an approximately 500 gallon fuel tank. The generator would be capable of running 72 hours on a full tank of propane. (Tr. 1, pp. 42-43, p. 75; Tr. 3, p. 247)

### **Environmental Considerations**

99. After reviewing plans for the proposed facility, the State Historic Preservation Office (SHPO) determined that it would have no adverse effect to historic structures eligible for the National Register of Historic Places as long as: 1) the antennas and associated equipment are designed, painted to match adjacent materials, and installed to be as non-visible as possible; and 2) if not in use for six consecutive months, the antennas and equipment are removed by the facility owner within 90 days of the end of the six-month period. SHPO also requested a Phase I archeological study to be performed prior to construction because the western portion of the proposed access road could have the potential to yield contact cultural deposits associated with late eighteenth century use of the region. (HT/AT&T 12, Supplemental Submission dated May 27, 2014, Item 3)
100. HT completed a Phase I archeological reconnaissance survey of the proposed site. (Tr. 3, pp. 247-249; p. 293; HT/AT&T 15, Supplemental Submission dated June 11, 2014)
101. The Office of State Archaeology reviewed the Phase I archeological reconnaissance survey and concluded that the project area does not appear to retain any archaeological integrity and that the proposed project will have no effect on the state's cultural resources. (HT/AT&T 15, Supplemental Submission dated June 11, 2014, Exhibit 1 – Letter from Office of State Archaeology, date May 29, 2014)
102. Upon reviewing HT's materials related to the proposed facility, CT DEEP's Wildlife Division determined that the federal and state endangered bog turtle (*Glyptemys mublenbergii*) and the state species of special concern box turtle (*Terrapene Carolina Carolina*) can occur in the vicinity of this project. As a result, CT DEEP recommends that a herpetologist conduct surveys between April and September to determine if the turtles are present. (HT/AT&T 1, Attachment 6 – January 10, 2014 Letter of Laura Saucier) – see updated CT DEEP letter among HT PFI)
103. Subsequent to the filing of its certificate application, HT received additional correspondence from CT DEEP's Wildlife Division indicating that bog turtles were unlikely to be in the project area. (HT/AT&T 9, Responses to RACT Interrogatories – Attachment 3: Email correspondence from Laura Saucier to Dean Gustafson, dated March 25, 2014)
104. In recognition of the potential presence of turtles, HT would adopt a turtle protective measures program to be incorporated as part of the project's construction protocols. (HT/AT&T 1, p. 17; Attachment 6 – January 29, 2014 Letter of Dean Gustafson)
105. The Northern Slimy Salamander, a state listed threatened species, may be found within the region where the facility is being proposed. However, as the facility would be located on a ridge with a dry, southerly exposure, this salamander is not likely to be found in the vicinity of the proposed site. (RACT 3.h. – Pre-filed testimony of Steven Danzer, p. 6; Tr. 4, p. 412)
106. HT would remove 15 trees with a diameter at breast height of six inches or more to develop the proposed facility. (HT/AT&T 1, Attachment 3 –Tree Inventory)

107. The closest wetland to the proposed facility is located approximately 89 feet west of the tower compound and approximately 40 feet from the nearest grading and areas of disturbance. It consists of a hillside seep associated with a seasonal intermittent watercourse. (HT/AT&T 1, p. 18; Attachment 4 – Wetland Investigation)
108. In order to minimize the potential for significant adverse impacts to the wetland or adjacent parcels, HT has designed and engineered various erosion and stormwater controls to be incorporated in this project. The stormwater controls would maintain or reduce the overall volume of runoff from the project and peak discharges would be the same or less than existing conditions. The stormwater controls were designed in accordance with the 2004 Connecticut Stormwater Quality Manual. (HT/AT&T 1, p. 18; Attachment 4 – Site Drainage Report, p. 6)
109. Throughout the construction period of the proposed facility, 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. (HT/AT&T 1, p. 23)
110. No adverse impacts to the identified wetland areas would be anticipated due the installation of erosion and sedimentation control measures and the stormwater management measures to be incorporated in the design of the proposed facility. (HT/AT&T 1, p. 23)
111. 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/AT&T 1, p. 19 ; Attachment 4 – TOWAIR Determination Results)
112. The proposed facility is not located near any Important Bird Area (IBA), as designated by the National Audubon Society. The closest IBA is the Nature Conservancy's Devil's Den Preserve located in Weston and Redding, approximately 7 miles to the southeast. (HT/AT&T 4, Attachment 3 – Avian Resources Evaluation)
113. 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/AT&T 4, Attachment 3 - Avian Resources Evaluation)
114. The host property of HT's proposed facility is located adjacent to forested conservation land that has the potential to support a variety of forest-dwelling avian species, including migratory Neotropical species that could also be found on the host property. In order to avoid disturbing nesting birds, HT could conduct tree clearing and construction activities outside of the April 15 through July 15 peak nesting period. (HT/AT&T 4, Attachment 3, see #8 of USFWS comply)
115. 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 20.14% 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/AT&T 4, Attachment 2)

### Visibility

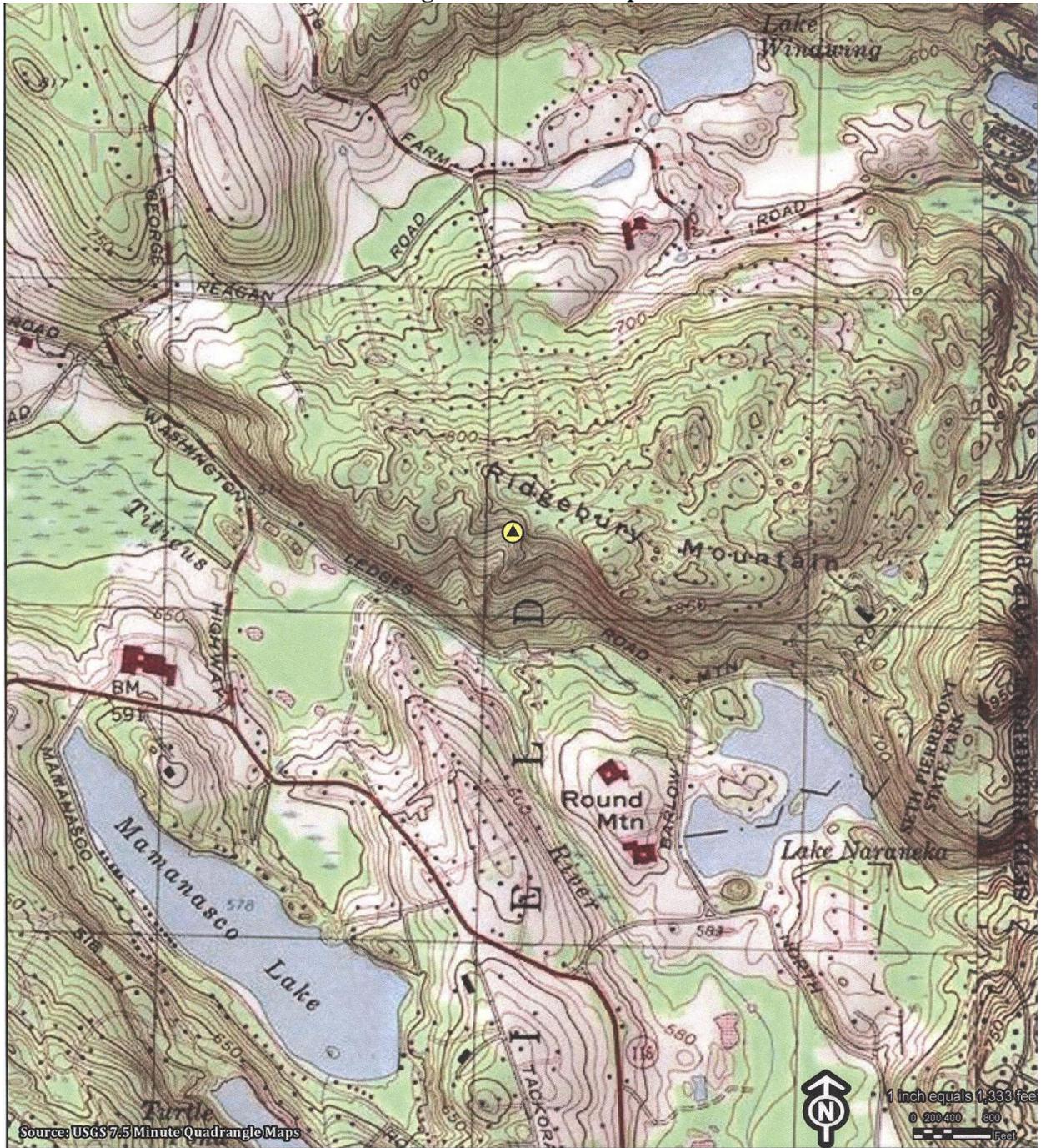
116. HT's proposed tower would be visible above the tree canopy on a year-round basis from approximately 141 acres in the surrounding vicinity. (See Figure 7) (HT/AT&T 1, Attachment 5 – Visibility Analysis Results)
117. The proposed tower would be seasonally visible (during “leaf-off” conditions) from approximately 199± additional acres. (HT/AT&T 1, Attachment 5 – Visibility Analysis Results)
118. Approximately 21 residential properties would have year-round views of at least a portion of the proposed tower. An estimated 40± additional residential properties would have views of at least part of the tower on a seasonal basis.(HT/AT&T 9 – Responses to RACT Interrogatories, A29)
119. Near-range year-round views (within approximately 0.75 mile of the proposed site) would be achieved from select locations along Barlow Mountain Road and Hobby Drive, as well as from locations at the Barlow Mountain Elementary School and Ridgefield High School grounds, and the southern shoreline of the pond at Seth Low Pierrepont State Park. (HT/AT&T 1, Attachment 5 – Visibility Analysis Results)
120. Portions of the western-most trails in Pierrepont State Park would have limited seasonal views of the proposed facility through the trees. (HT/AT&T 1, Attachment 5 – Visibility Analysis Results)
121. Year-round views may be achieved from select locations on the west shore of Mamanasco Lake, which is over one mile to the southwest of the proposed facility site. However, no views of the proposed facility would be likely from the boat launch area at Mamanasco Lake. (HT/AT&T 1, Attachment 5 – Visibility Analysis Results)
122. No views of the proposed facility are anticipated from the trail systems at Kiah's Brook or the Ridgebury Slopes. (HT/AT&T 1, Attachment 5 – Visibility Analysis Results)
123. The visual impact of the tower could be mitigated through the use of a treatment such as painting or camouflage. (Tr. 4, pp. 404-407)
124. Employing a two-tone painting scheme could help reduce the visual impact of the proposed tower. (Tr. 4, pp. 420-422)
125. HT would be willing to work with adjacent landowners to plant some additional landscaping on their properties. (Tr. 4, pp. 408-411)

126. 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.

<u>Location</u>	<u>Visibility</u>	<u>Approx. Portion of (150') Tower Visible</u>	<u>Approx. Distance and Direction to Tower</u>
1 – Barlow Mountain Elementary School	Year-round	50'	3,110 feet, NW
2 – Barlow Mountain Elementary School	Year-round	70'	3,010 feet, NW
3 – Seth Low Pierrepont State Park	Year-round	80'	4,060 feet, NW
4 – 34 Hobby Drive	Year-round	60'	2,380 feet, NE
5 – 96 Hobby Drive	Year-round	70'	1,640 feet, NE
6 – Ridgefield High School	Year-round	40'	3,640 feet, NE
7 – 179 Mamasasco Road	Year-round	30'	5,390 feet, NE
8 – Mamasasco Lake Boat Launch	Not Visible	n/a	5,600 feet, NE
9 – 110 Blue Ridge Road	Year-round	30'	6,180 feet, NE
10 – 20 Tea House Lane	Year-round	20'	6,070 feet, NE
11 – Barlow Mountain Road at Seth Low Pierrepont State Park	Year-round	20'	4,220 feet, NW
12 – Ridgebury Road at Hussars Camp Place	Year-round	20'	6,280 feet, SE

(HT/AT&T 1, Attachment 5 – Visibility Analysis)

Figure 1: Location Map



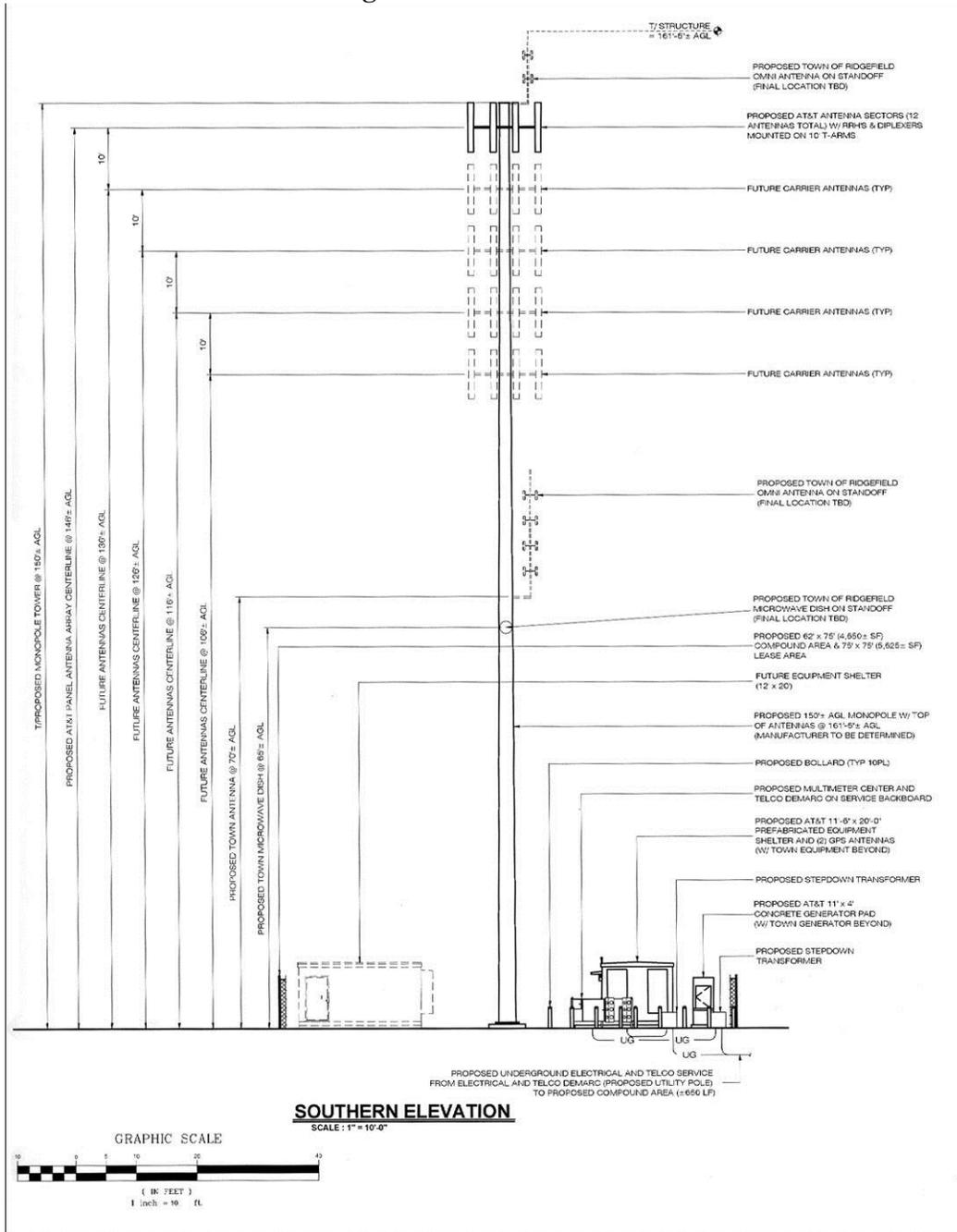
(HT/AT&T 1, Attachment 3)

Figure 2: Aerial Photograph of Proposed Site Location



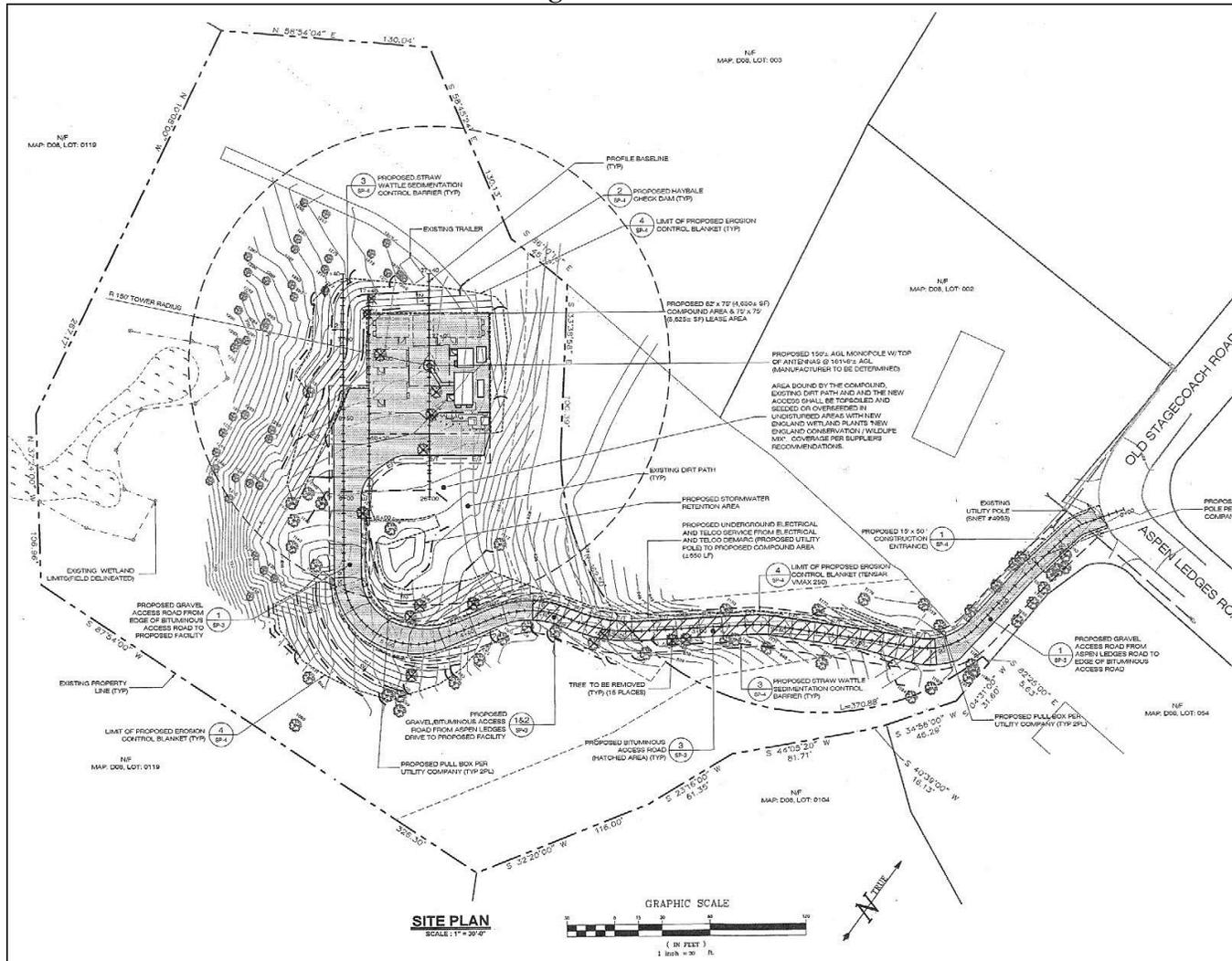
(HT/AT&T 1, Attachment 3)

Figure 3: Tower Elevation



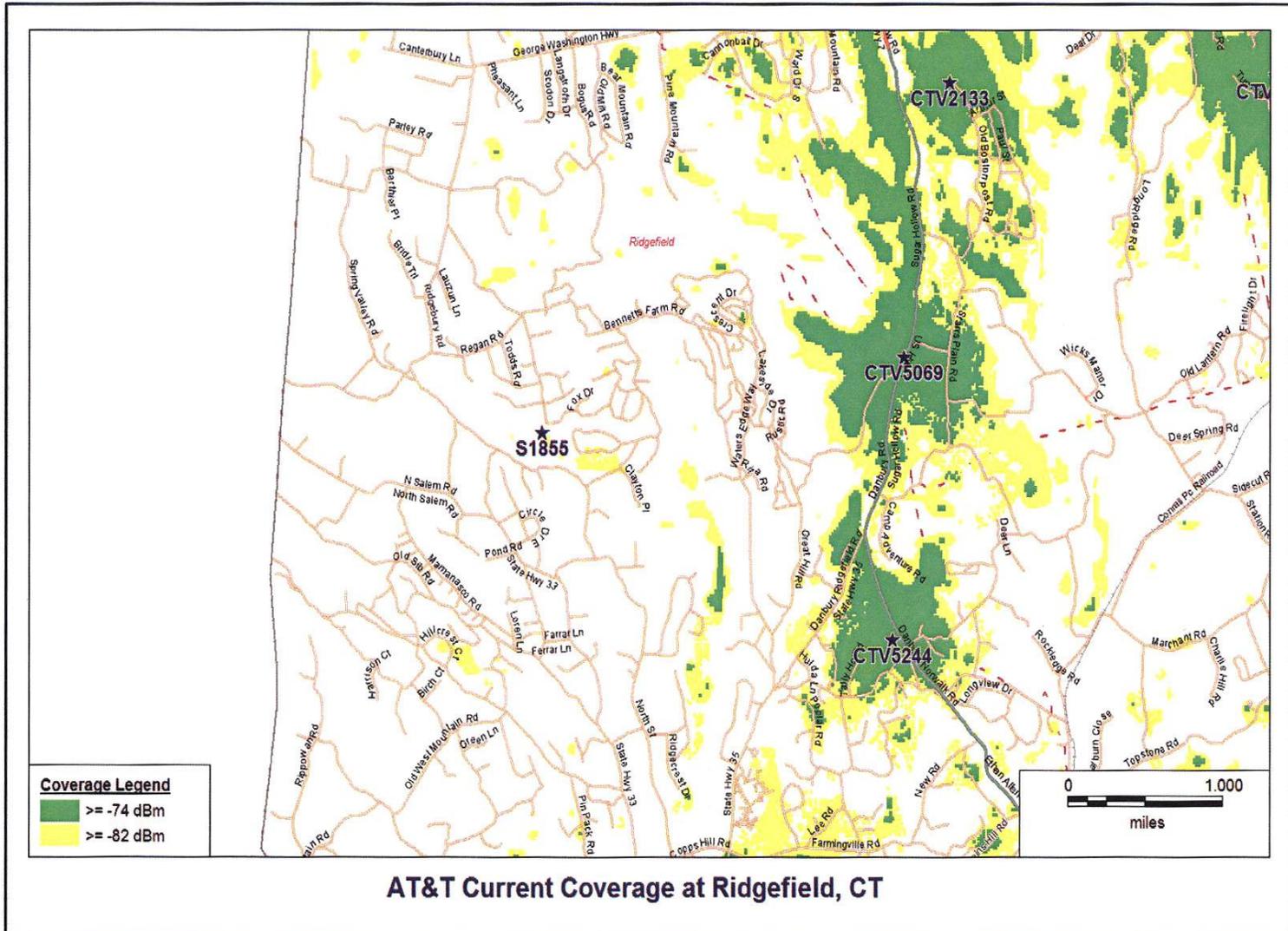
(HT/AT&T 1, Attachment 3 – Sheet SP-2)

Figure 4: Site Plan



(HT/AT&T 1, Attachment 3 – Sheet SP-1)

Figure 5: AT&T Existing Coverage



(HT/AT&T 1, Attachment 1 – Radio Frequency Engineering Report, p. 7)

Figure 6: AT&T Proposed Coverage with Site

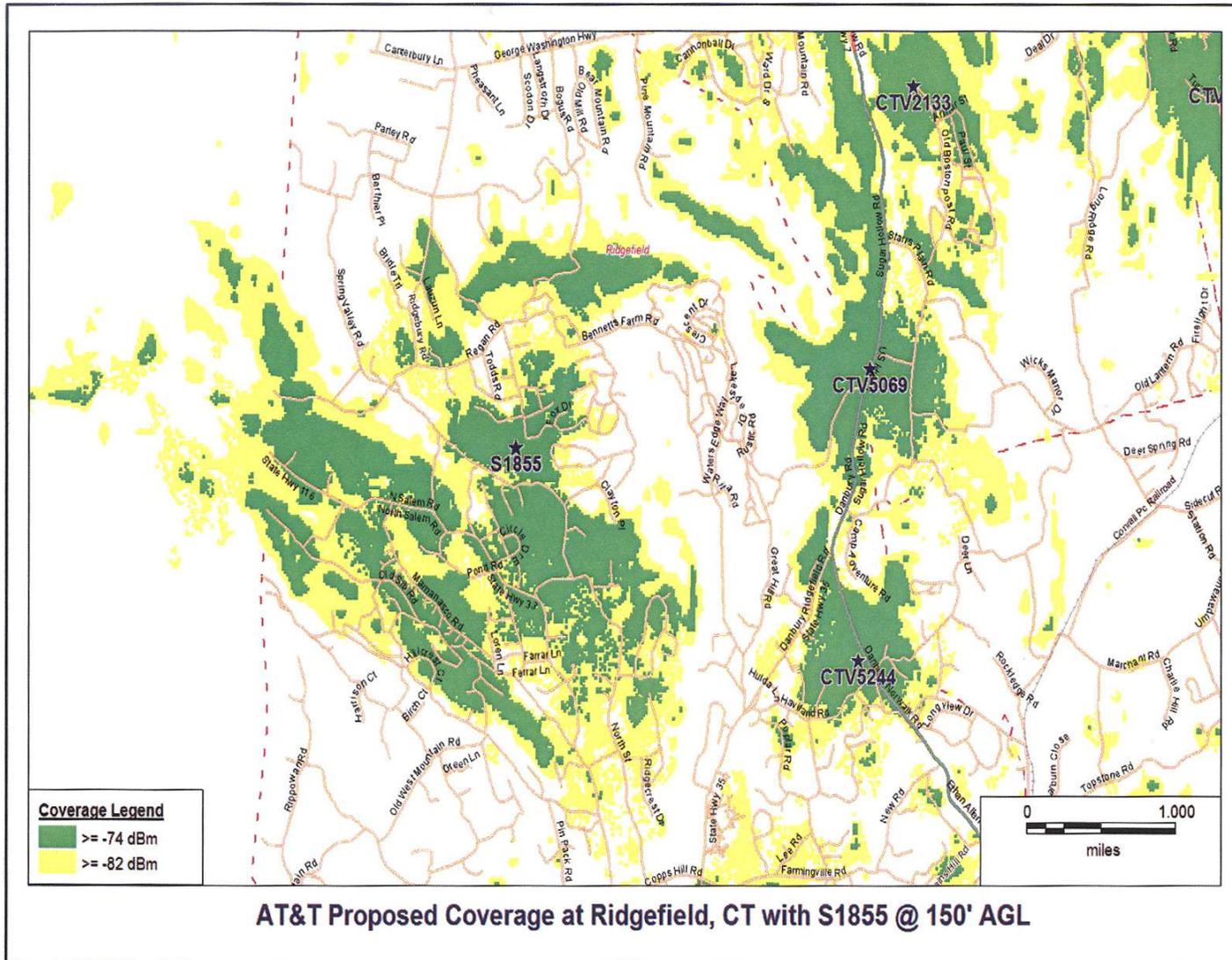
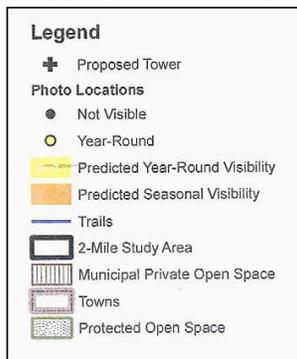
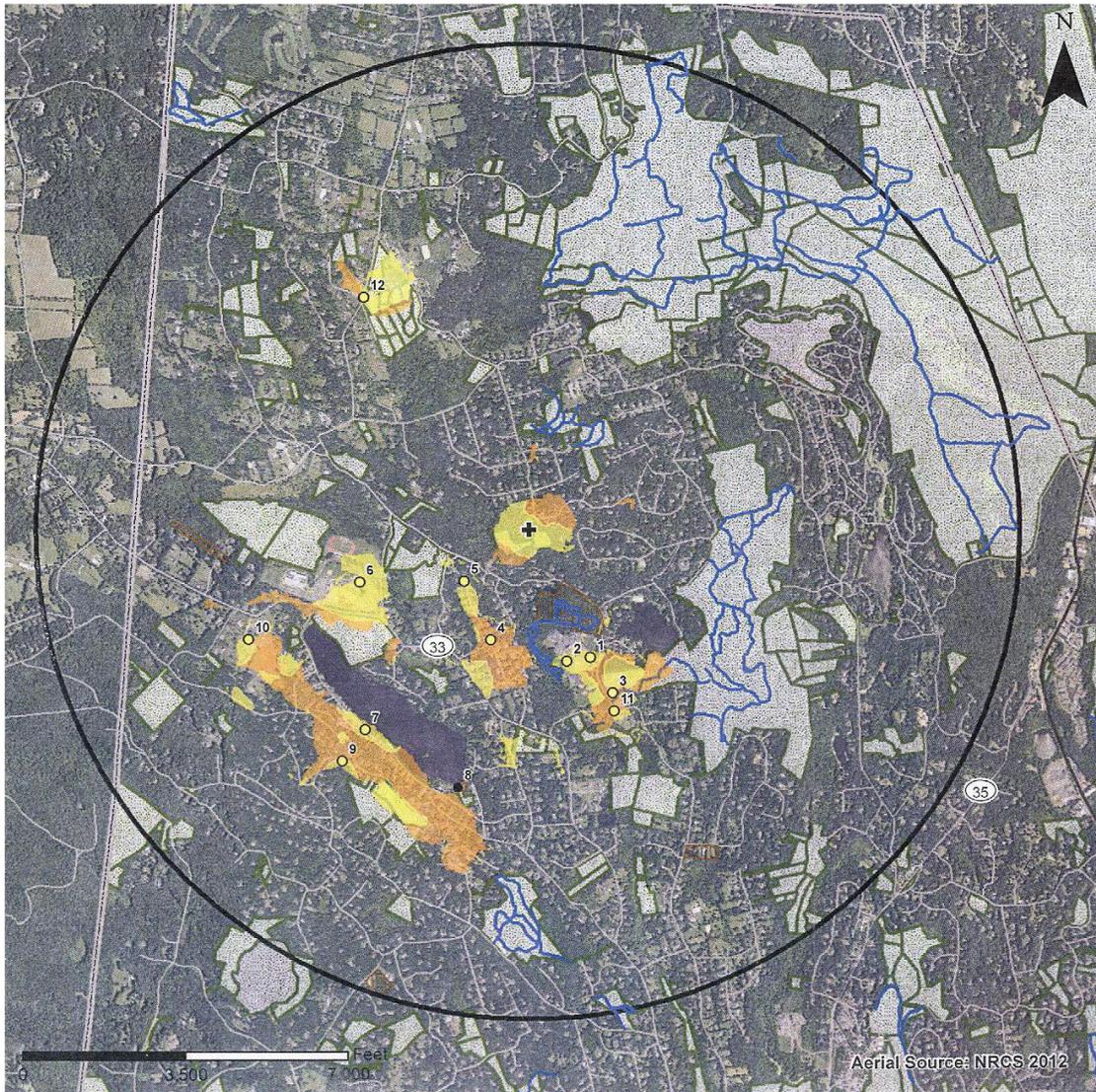


Figure 7: Tower Visibility



(HT/AT&T 1, Attachment 5 – Visibility Analysis)