

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

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June 22, 2012

TO:

Parties and Intervenors

FROM:

Linda Roberts, Executive Director Roberts

RE:

DOCKET NO. 423 – North Atlantic 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 off of Route 198,

Woodstock, Connecticut.

By its Decision and Order dated June 21, 2012, the Connecticut Siting Council granted a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a telecommunications facility located off of Route 198, Woodstock, Connecticut.

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

LR/cm

Enclosures (3)

c: Christopher B Fisher, Esq. Lucia Chiocchio, Esq. State Documents Librarian



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

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

ATTEST:

Linda Roberts
Executive Director
Connecticut Siting Council

I certify that a copy of the Findings of Fact, Opinion, and Decision and Order in Docket No. 423 has been forwarded by Certified First Class Return Receipt Requested mail on June 22, 2012, to all parties and intervenors of record as listed on the attached service list, dated October 20, 2011.

ATTEST:

Carriann Mulcahy Secretary II Connecticut Siting Council

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

	Document	Status Holder	Representative
Status Granted	Service	(name, address & phone number)	(name, address & phone number)
Applicant	⊠ U.S. Mail	New Cingular Wireless PCS, LLC & North Atlantic Towers, LLC	Christopher B Fisher, Esq. Lucia Chiocchio, Esq. Cuddy & Feder LLP 445 Hamilton Avenue, 14 th Floor White Plains, NY 10601 (914) 761-1300 (914) 761-5372 fax
			cfisher@cuddyfeder.com lchiocchio@cuddyfeder.com
			Michele Briggs AT&T 500 Enterprise Drive Rocky Hill, CT 06067-3900 michele.g.briggs@cingular.com
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	U.S. Mail		
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DOCKET NO. 423 – North Atlantic Towers, LLC, and New	}	Connecticut
Cingular Wireless PCS, LLC Application for a Certificate of		~
Environmental Compatibility and Public Need for the	}	Siting
construction, maintenance, and operation of a		Council
telecommunications facility located off Route 198, Woodstock,	}	Council
Connecticut.	Ju	me 21, 2012

Findings of Fact

Introduction

- 1. North Atlantic Towers, LLC (NAT) and New Cingular Wireless PCS, LLC (AT&T), in accordance with provisions of Connecticut General Statutes (C.G.S.) § 16-50g, et. seq., applied to the Connecticut Siting Council (Council) on October 20, 2011 for the construction, maintenance and operation of a 150-foot wireless telecommunications facility off Route 198 in Woodstock, Connecticut. (NAT/AT&T 1, p. 2)
- 2. Florida Tower Partners d/b/a North Atlantic Towers, LLC is a Delaware limited liability company with an office in Florida. NAT would construct and maintain the facility and be the Certificate Holder. (NAT/AT&T 1, p. 3; Tr. 1, p. 23)
- 3. AT&T is a Delaware limited liability company with an office in Connecticut. AT&T is licensed by the Federal Communications Commission (FCC) to construct and operate in a cellular system in Connecticut. (NAT/AT&T 1, p. 3)
- 4. The parties in this proceeding are the NAT and AT&T. (Transcript 1-3:00 p.m. [Tr. 1], p. 4)
- 5. Pursuant to C.G.S. § 16-501 (b), public notice of the application was published in the <u>Woodstock Villager</u> on September 30, 2011 and October 7, 2011. (NAT/AT&T 5, Affidavit of Publication)
- 6. Pursuant to C.G.S. § 16-50l(b), notice of the application was provided to all abutting property owners by certified mail. Notice was unclaimed by Kevin Reagan and Thomas Harvey, the owners of 350 Route 198. An additional notice was sent to those property owners via first class mail. (NAT/AT&T 1, p. 5; Tab 10; NAT/AT&T 2, Response 1)
- 7. Pursuant to C.G.S. § 16-50l (b), NAT provided notice to all federal, state and local officials and agencies listed therein. (NAT/AT&T 1, p. 4)
- 8. The purpose of the proposed facility is to provide coverage in the western and southwestern portions of the Town of Woodstock along Route 198, Route 171 and the surrounding area. (NAT/AT&T 1, p. 1)
- 9. Pursuant to C.G.S. § 16-50m, the Council, after giving due notice thereof, held a public hearing on January 10, 2012, beginning at 3:00 p.m. and continuing at 7:00 p.m. at the Woodstock Town Hall, Room # 1, Lower Level, 415 Route 169, Woodstock, Connecticut. (Council's Hearing Notice dated December 2, 2011; Tr. 1, p. 2; Transcript 2 7:00 p.m. [Tr. 2], p. 2)

- 10. The Council and its staff conducted an inspection of the proposed site on January 10, beginning at 2:00 p.m. During the field inspection, the applicant flew a red balloon at the proposed site to simulate the height of the proposed tower. The tether was anchored at a location 21.5 feet east of the proposed tower location due to the tree canopy surrounding the proposed site. Due to windy conditions on the day of the field review, the balloon was aloft intermittently from 7:45 a.m. until 4:02 p.m. (NAT/AT&T 10, Response 15)
- 11. On March 8, 2012, the Council held a continued evidentiary hearing at the offices of the Connecticut Siting Council, Ten Franklin Square, New Britain, Connecticut. (Transcript 3 1:05 p.m. [Tr. 3], p. 2)

State Agency Comment

- 12. Pursuant to C.G.S. § 16-50j (h), on December 2, 2011 and March 8, 2012, the following State agencies were solicited by the Council to submit written comments regarding the proposed facility: Department of Energy and Environmental Protection (DEEP); Department of Public Health (DPH); Council on Environmental Quality (CEQ); Public Utility Regulatory Authority (PURA); Office of Policy and Management (OPM); Department of Economic and Community Development (DECD); Department of Agriculture (DOAg); Department of Transportation (DOT); and Department of Emergency Management and Homeland Security (DEMHS). (Record)
- 13. On December 8, 2011, the Council received comments from the Drinking Water Section of DPH. DPH identified that the proposed project is within Willimantic Reservoir Watershed, the public water supply watershed of the Mansfield Hollow Reservoir. DPH recommends protection of the drinking water resource by:
 - a. Installing and maintaining erosion and sedimentation controls;
 - b. Identifying a party for maintenance, inspection, repair, replacement and installation of new controls as necessary;
 - c. Servicing machinery outside of the public water supply watershed;
 - d. Refueling machinery and vehicles on an impervious pad with a secondary containment system;
 - e. Not storing fuel or other hazardous materials in the water supply watershed. If any fuel or hazardous materials must be kept within the watershed during working hours, it should be stored on an impervious surface with secondary containment;
 - f. Keeping a fuel spill remediation kit on-site to quickly contain and clean spills;
 - g. Consulting with Windham Water Works System prior to commencement of the project; and
 - h. Allowing Windham Water Works System personnel to periodically inspect the project to ensure that drinking water quality is not adversely impacted.
 (DPH Comments, received December 8, 2011)

- 14. The applicants responded to DPH's letter on December 20, 2011, making the following suggestions for inclusion in a Development and Management Plan, if the proposed project is approved:
 - a. Erosion and sedimentation controls would be designed in accordance with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control. These controls would be inspected once every seven days and after significant rainfall events. The inspections would be documented and copies provided to the Windham Water Works System.
 - b. A spill containment kit would be kept onsite during construction of the proposed project. In addition, a waste drum would be onsite to allow for the proper disposal of any spill kit materials. Procedures in the event of the occurrence of a spill have been established, which includes notice to the Windham Water Works System.
 - c. Servicing of machinery should be completed outside of the public water supply watershed. Refueling of vehicles or machinery should be done on an impervious pad with secondary containment designed to contain fuels.

(NAT/AT&T 4; Tr. 1, p. 20)

- 15. On January 4, 2012, the Council received a letter from the Department of Transportation stating that it has no comment on the proposed project. (DOT comments, received January 4, 2012)
- 16. No other state agencies responded with comments on the proposed project. (Record)

Municipal Consultation

- 17. The applicants had communications with the Town of Woodstock Telecommunications Taskforce in September 2010. A meeting with the Telecommunications Taskforce was held in October 2010, which did not yield any recommendations or suggestions. (NAT/AT&T 1, p. 23)
- 18. On March 7, 2011, a technical report was provided to the Woodstock First Selectman, Allen D. Walker. On May 9, 2011, the Telecommunications Taskforce coordinated another meeting and provided comments to the Applicants. The Telecommunications Taskforce recommended collocation on an existing tower at Sherman Road and a proposed tower on Swedetown Road, approximately 2.78 miles and 3.5 miles distant from the proposed site, respectively. The Taskforce also asked about visibility of the proposed site from Chamberlain Mill (a town-designated historic site) and Barber Road (a town-designated scenic road). (NAT/AT&T 1, pp. 23, 24)
- 19. In response to the town's request, AT&T determined that locating at the Sherman Road and Swedetown Road sites would not provide adequate coverage to the coverage gap in this area of Woodstock. (NAT/AT&T 1, p. 24)
- 20. The proposed tower would not be visible from the Chamberlain Mill historical property, which is approximately 1.9 miles from the proposed site. The top of the tower would be visible from the westernmost portion of Barber Road. (NAT/AT&T 1, p. 24)
- 21. NAT would provide space on the proposed tower to accommodate Town emergency services antennas and equipment at the site at no cost. (NAT/AT&T 1, p. 13)

Public Need for Service

- 22. 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. 4)
- 23. 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 Federal Communications Commission (FCC) to provide personal wireless communication service to Connecticut. (Council Administrative Notice Item No. 4; NAT/AT&T 1, p. 3)
- 24. The Telecommunications Act of 1996 prohibits local and state entities from discriminating among providers of functionally equivalent services. (Council Administrative Notice Item No. 4)
- 25. 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)
- 26. 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. 5)
- 27. In compliance with the 911 Act, AT&T would provide "Enhanced 911" services from the proposed facility. (Council Administrative Notice Item No. 6; NAT/AT&T 1, p. 10)
- 28. Pursuant to the Warning, Alert and Response Network Act of 2006, the FCC has established a Personal Localized Alerting Network (PLAN) that is to begin in April 2012. PLAN will require wireless communication providers to issue text message alerts from federal bodies including the President of the United States. The system would allow the public to receive e-mails and text messages on mobile devices based on geographic location. (NAT/AT&T 1, p. 11)
- 29. The proposed facility would enable the public to receive such "reverse 911" emergency notifications. (NAT/AT&T 1, p. 11)
- 30. 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 resources and maintaining their resilience from all hazards during an event or emergency. (Council Administrative Notice Item No. 9 -Barack Obama Presidential Proclamation 8460, Critical Infrastructure Protection)

31. 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)

Existing and Proposed Wireless Coverage - AT&T

- 32. AT&T operates in the 850 MHz (cellular) and 1900 MHz (PCS) frequency bands and at a signal level service design in this area of -74 dBm for in-building coverage and -82 dBm for in-vehicle. AT&T also owns the 700 MHz (LTE) frequency but is currently not using the frequency. (NAT/AT&T 2, Response 7, Response 8)
- 33. The proposed site is needed to provide coverage to an area that currently has no service. The existing signal level threshold in the area of the proposed site is -110 dBm and below. Refer to Figure 2. (NAT/AT&T 2, Response 5; Tr. 1, p. 22)
- 34. At 147 feet above ground level (agl), AT&T's coverage footprint could provide service to approximately 779 area residents at -74 dBm and 806 area residents at -82 dBm. At 97 feet agl, AT&T's coverage footprint could provide service to approximately 629 area residents at -74 dBm and 545 area residents at -82 dBm. The lower height would result in an approximately 19 percent reduction in population covered at -74 dBm and an approximately 32 percent reduction in population covered at -82 dBm. Population estimates are based on data from 2000 United States Census and are not necessarily the number of AT&T customers living within the coverage footprint of the site. (NAT/AT&T 1, Tab 1; NAT/AT&T 2, Response 14)
- 35. The length of the existing coverage gaps on main roads within the project area, assuming that AT&T antennas are located on all facilities for which it has approval, are:

Street	Gap
Route 198	1.96 miles
Route 171	1.94 miles
Eastford Road	1.09 miles
Boston Turnpike	1.03 miles
Route 197	0.24 miles

(NAT/AT&T 10, Response 40)

36. The coverage footprint (in square miles) from the proposed site with antennas at 147 feet agl (refer to Figure 3) and 107 feet agl (Refer to Figure 4) are:

Signal Level	147 feet agl	107 feet agl
-74 dBm (PCS)	7.52 mi ²	6.37 mi ²
-82 dBm (PCS)	9.7 mi^2	$8.58 \mathrm{mi}^2$
-74 dBm (cellular)	5.9 mi ²	2.95 mi ²
-82 dBm (cellular)	6.04 mi ²	3.82 mi ²
-74 dBm (LTE)	7.11 mi ²	3.36 mi^2
-82 dBm (LTE)	5.58 mi ²	3.34 mi ²

(NAT/AT&T 10, Response 41)

37. At 147 feet agl on the proposed tower, AT&T would provide the following coverage along main roads:

Street	Coverage (≥-82 dBm)
Route 198	1.96 miles
Route 171	1.85 miles
Eastford Road	0.78 miles
Boston Turnpike	0.13 miles
Route 197	0.12 miles

(NAT/AT&T 1, Tab 1)

- 38. AT&T's minimum coverage needs could be met by installing antennas at the 110-foot level of the proposed site. At the 110-foot level, AT&T would be able to provide coverage to the major roads in the area but would have a smaller coverage footprint versus locating at the 150-foot level. (Tr. 1, p. 48)
- 39. The proposed site would hand off signals to nearby sites, including:

Location	Antenna Height agl	Approximate Distance from Sites
107 Stickney Hill Road, Union	113 feet	6.5 miles northwest
82 Tyrone Road, Pomfret	154 feet	7.3 miles northeast
36 Janowski Road/Ference Road, Ashford	140 feet	5.9 miles northwest
353 Pumpkin Hill Road, Ashford	225 feet	6.6 miles southwest
215 Coatney Hill Road, Woodstock	150 feet	3.6 miles northeast
62 Babbitt Hill Road, Pomfret	130 feet	6.8 miles southeast
38 Old Route 44, Eastford	150 feet	4.8 miles south
1050 Buckley Highway, Stafford Springs	120 feet	5.5 miles northwest
229-231 Ashford Center Road, Ashford	167 feet	4.9 miles southwest
Sherman Road, Woodstock	127 feet	2.78 miles northwest

(NAT/AT&T 1, Tab 1; NAT/AT&T 2, Response 4; Tr. 1, p. 18; Tr. 3, p. 22)

40. The overall dropped call rate in the area of the proposed site is 0.83 percent. The dropped call rate does not reflect the fact that some users become familiar with areas of little or no coverage and do not attempt making a call in that area; call attempts that do not reach a cell site; low quality calls when the person on the other end of the line cannot hear the caller. (NAT/AT&T 10, Response 39)

Site Selection

41. NAT established a site search in the target service area in southwestern Woodstock in December 2009. AT&T established its site search in February 2010. (NAT/AT&T 1, Tab 2; NAT/AT&T 2, Response 2)

- 42. The applicants investigated potential locations that are between 1.5 and 2 miles away from the proposed site. (Tr. 1, pp. 44, 45)
- 43. The applicants did not find any existing structures suitable for providing coverage to the area. (NAT/AT&T 1, p. 12)
- 44. There is one tower located two miles from the proposed site, which is a 75-foot guyed lattice tower located at Perrin Road in Woodstock. AT&T is not located on this structure and, due to the height and distance of the tower, installation of AT&T equipment at the site would not provide adequate coverage to the target service area. There are no other towers within a two-mile radius of the proposed site. (NAT/AT&T 1, Tab 2; NAT/AT&T 10, Response 37; Tr. 2, p. 26)
- 45. After determining that no suitable facilities or structures exist within the search area, the applicants searched for potential new tower locations. The applicants investigated 11 parcels for potential tower development, one of which was selected as the proposed site. The investigated parcels and reason for rejection are:
 - a. 26 Kenyonville Road rejected by radio frequency engineers.
 - b. (parcel 5789/37/16A) Route 171 property owner was not interested in development of a tower site on property
 - c. 384 Route 198 property owners did not respond to inquiries from the Applicants
 - d. 88 Kenyonville Road rejected by radio frequency engineers
 - e. 254 Crystal Pond Road rejected by radio frequency engineers
 - f. 279 Route 198 property owned by the Connecticut DOT, would not meet coverage objectives (see Finding of Fact #46 below)
 - g. 1745 Route 171 rejected by radio frequency engineers
 - h. A Yale University owned parcel on Route 171 rejected by radio frequency engineers
 - i. Route 171; 150 Center Pike, Eastford rejected by radio frequency engineers
 - j. 606 Route 198 rejected by radio frequency engineers (NAT/AT&T 1, Tab 2)
- 46. AT&T investigated the use of a Connecticut DOT property for the installation of a facility. Antennas mounted at a centerline height of 197 feet agl on the DOT property would leave coverage gaps to the north of the proposed site and along Route 198. (NAT/AT&T 10, Response 1)
- 47. AT&T investigated the use of Town of Woodstock-owned property on Hawkins Road. Antennas mounted at a centerline height of 197 feet agl on the town property would leave coverage gaps to the north of the proposed site and along Route 198. (NAT/AT&T 10, Response 2)
- 48. AT&T may locate antennas on an approved Verizon tower to be located at 87 West Quassett Road in Woodstock at some point in the future, but coverage from that site would not overlap with coverage from the site proposed. (NAT/AT&T 10, Response 12)
- 49. Repeaters, microcells and distributed antenna systems are not viable technological alternatives for providing service to the identified coverage gap. These technologies are designed to cover small areas, such as commercial buildings, shopping malls, and tunnels or highways. (NAT/AT&T 1, pp. 11, 12)

Facility Description

50. The proposed site is located on an approximately 128-acre undeveloped and wooded parcel owned by Woodstock Tower Partners, LLC adjoining Route 198 (Map 5789, Block 37, Lot 24). The proposed site is depicted in Figure 1. (NAT/AT&T 1, p. 13, Tab 3; NAT/AT&T 2, Response 18)

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- 51. The host property is in the "Community" zoning district. Woodstock Zoning Regulations have designated all lands within the town that are not in the Woodstock Industrial Park District or in the Village Green District as the Community District. (Woodstock Zoning Regulations; NAT/AT&T 1, p. 14)
- 52. The proposed tower would be located within a 100-foot by 100-foot leased area in the southeastern corner of the property at an elevation of 795 feet above mean sea level. (NAT/AT&T 1, p. 13, Tab 3)
- 53. The proposed facility would consist of a 150-foot monopole within a 75-foot by 75-foot fenced compound. The proposed tower would be 4 feet wide at the base tapering to 2 feet at the top. It would be constructed in accordance with the American National Standards Institute TIA/EIA-222-F "Structural Standards for Steel Antenna Towers and Antenna Support Structures." (NAT/AT&T 1, p. 14, Tab 3)
- 54. The proposed tower would accommodate six carriers including AT&T. AT&T would install up to 12 panel antennas at a centerline height of 147 feet above ground level (agl). (NAT/AT&T 1, pp. 2, 14; Tr. 1, pp. 41, 42)
- 55. A six-foot chain link fence would surround the proposed equipment compound. (NAT/AT&T 1, p. 14)
- 56. A 210-gallon diesel generator would be installed at the site for emergency backup power. It would provide power for AT&T's equipment for two days. (NAT/AT&T 10, Response 7; Tr. 3, p. 17)
- 57. The proposed design of the facility and access road is to balance cut and fill by using soils that are removed from one area to fill another area where necessary. Construction of the proposed site and access road would require approximately 400 cubic yards of cut and fill. (NAT/AT&T 2, Response 26; Tr. 3, p. 7)
- 58. The proposed host property is landlocked and does not have any direct access to a public roadway; therefore, access was originally proposed to have extended from Route 198 south over an adjacent parcel. It would begin on a property owned by Kevin Reagan and Thomas Harvey north of the proposed site at 530 Route 198. The road would have extended over an existing paved driveway for approximately 425 feet then continue approximately 4,265 feet along a new gravel drive. (NAT/AT&T 1, Tab 3, Tab 10; NAT/AT&T 2, Response 21)
- 59. The originally proposed access road would have required the installation of culverts located at three locations along the roadway. (NAT/AT&T 1, p. 14, Tab 6)
- 60. The applicants proposed a revised access road that would extend 2,550 feet from Route 171 to the south southeast over property owned by Michael Farley. The revised access road is shown in Figure 1. (NAT/AT&T 10, Response 4)
- 61. The revised access road would require the installation of culverts at two locations along the roadway. (NAT/AT&T 10, Tab 2, Wetland Delineation Report)
- 62. The turn radii and slope of the proposed access road were designed to accommodate access by emergency vehicles. (NAT/AT&T 10, Response 33)
- 63. The applicants originally proposed utilities to be installed overhead along the access road but are willing to install utilities underground. They would run along the edge of the proposed access road. (Tr. 1, p. 19)

- 64. Construction of the proposed access drive would likely require a hammer drill for rock removal. (NAT/AT&T 2, Response 28)
- 65. The tower setback radius would remain on the host property. The southern and eastern property boundaries are approximately 150 feet from the proposed tower location. (NAT/AT&T 1, Tab 3; Tr. 1, p. 15)
- 66. There are no residences within 1,000 feet of the proposed tower. The nearest residence to the proposed tower is approximately 2,000 feet to the east on property at 382 Route 198, owned by Robert & John Wrobel. (NAT/AT&T 2, Response 16)
- 67. Land use in the area surrounding the proposed site consists of low-density single-family residential homes and open space. (NAT/AT&T 1, p. 22)
- 68. The estimated cost of construction of the proposed facility, including antennas, and the originally proposed access road is:

Tower & Foundation	\$ 95,000.
Site Development	65,000.
Utility Installation	50,000.
Facility Installation	195,000.
Antennas and Equipment	250,000.
Total	\$ 655,000.

(NAT/AT&T 1, p. 25)

- 69. The cost of a monopine structure is approximately \$80,000. The cost of a comparable monopole structure is approximately \$30,000. (Tr. 1, p. 72)
- 70. The revised access road would cost approximately \$60,000 less than the cost provided in Finding of Fact #68. (Tr. 3, p. 9)
- 71. Installation of underground utilities would cost \$30,000 more than the overhead utilities proposed in the application. (NAT/AT&T 10, Response 6; Tr. 3, p. 19)

Environmental Considerations

- 72. The proposed facility would have no effect upon historic, architectural, or archaeological resources listed on or eligible for the National Register of Historic Places. (NAT/AT&T 1, Tab 7)
- 73. No Federal or State-listed endangered or threatened species or State Species of Special Concern are known to occur in the area of the proposed site and access road. (NAT/AT&T 1, p. 17)
- 74. The average height of the tree canopy in the area of the proposed site is approximately 75 feet. (Tr. 1, p. 23)
- 75. The proposed facility including the originally proposed access road would have required the removal of approximately 466 trees six inches or greater in diameter at breast height (dbh). Approximately 166 trees six inches or greater dbh would be removed for the construction of the proposed facility using the revised access road. (NAT/AT&T 2, Response 10; NAT/AT&T 10, Response 13; Tr. 3, p. 5)

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- 76. The revised access road would cross two wetland areas. Wetland 1 is a groundwater-fed linear wetland approximately 0.24 miles west of Route 171. Wetland 2 is located approximately 0.07 miles west of Route 171 at the bottom of a topographic valley and collects both surface water and groundwater. The Wetland 1 and Wetland 2 crossings would consist of the installation of a road base and elliptical culverts with a total of approximately 3,100 square feet of wetland disturbance. An 18-inch elliptical culvert would be installed across Wetland 1. A 36-inch elliptical culvert would be installed across Wetland 2. (NAT/AT&T 10, Tab 2, Wetland Delineation Report)
- 77. The stormwater design plan for the revised access road would include roadside swales that would direct water to stone berm level spreaders. The swales would be stone-lined in areas where the slope exceeds 12 percent and grass-lined in more shallow sloped areas. (NAT/AT&T 10, Response 31)
- 78. The proposed water crossings would require NAT to obtain an Army Corps of Engineers (ACOE) Category 1 Programmatic General Permit for Minimal Impacts Projects. (NAT/AT&T 1, pp. 17, 18)
- 79. The ACOE permit includes conditions that the proposed culverts:
 - a. be backfilled with natural substrate material to match upstream and downstream streambed substrate.
 - b. not impede the passage of fish and other aquatic organisms.
 - c. allow for continuous flow of 50-year storm events.
 - d. not be within a Federal Emergency Management Agency designated floodplain.
 - e. not impact threatened or endangered species.
 - f. not impact vernal pools.

(NAT/AT&T 1, p. 18)

- 80. The revised access drive would disturb between 2,500 and 3,100 square feet of wetland and watercourse area. Wetland disturbance along the originally proposed access road would be approximately double the amount for the revised access road. (NAT/AT&T 10, Response 25; Tr. 3, pp. 8, 9)
- 81. The construction of the revised access drive would result in a total of approximately two acres of temporary and permanent land disturbance. The construction of the originally proposed access drive would result in approximately five acres of temporary and permanent land disturbance. (NAT/AT&T 10, Response 13; Response 29)
- 82. The proposed site and access road are not within a Federal Emergency Management Agency designated 100-year or 500-year floodplain. (NAT/AT&T 1, p. 19)
- 83. The proposed tower would not require aviation marking and/or lighting. (NAT/AT&T 1, Tab 3)
- 84. Calculated noise levels at the nearest properties boundaries (both to the south and east) from the proposed equipment compound, which are approximately 150 feet away, is 54.71 dB. From the nearest residential structure the calculated noise levels from the proposed equipment would be 33.13 dB. (NAT/AT&T 10, Response 10)

85. The cumulative worst-case maximum power density from the radio frequency emissions from the operation of AT&T's proposed antennas is 5.96% 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. (NAT/AT&T 1, Tab 4)

Visibility

- 86. The proposed 150-foot tower would be visible year-round from approximately 134 acres within a two-mile radius of the site. Approximately half of the year round visibility of the proposed tower is over the open water of Lake Bungee and Witches Woods Lake. Refer to Figure 5 and Figure 8. (NAT/AT&T 1, Tab 5; NAT/AT&T 10, Response 34)
- 87. The proposed 150-foot tower would be seasonally visible from an additional approximately five acres within a two-mile radius of the site. Areas of additional seasonal visibility include portions of Indian Spring Road; Shaw Road; Route 171; Route 198; and Barber Road. (NAT/AT&T 1, Tab 5; NAT/AT&T 10, Response 34)
- 88. A 110-foot tower located at the proposed site would be visible year-round from approximately 92 acres within a two-mile radius of the proposed site, approximately half of which is over the open water of Lake Bungee and Witches Woods Lake. Refer to Figure 6 and Figure 7. (NAT/AT&T 10, Response 34)
- 89. A 110-foot tower located at the proposed site would be seasonally visible from an additional three acres within a two-mile radius of the site. (NAT/AT&T 10, Response 34)
- 90. Seasonal visibility of the proposed tower would not be significantly greater than year-round visibility due to the density of intervening vegetation. (Tr. 1, p. 24)
- 91. The proposed 150-foot tower would not be visible from the historic Chamberlain Mill site, which is approximately 1.9 miles from the proposed site. (NAT/AT&T 1, Tab 5)
- 92. The proposed 150-foot tower would not be visible from the Stoggy Hollow Restaurant and General Store approximately 0.54 miles northeast of the site. (NAT/AT&T 1, Tab 5)
- 93. The proposed 150-foot tower would be visible year-round from the westernmost 550-foot section of Barber Road. The residences at 4 Barber Road and 15 Barber Road, approximately 0.6 miles northeast of the site, are expected to have year-round views of the proposed tower. (NAT/AT&T 1, Tab 5; NAT/AT&T 3, updated Visual Report)
- 94. The proposed 150-foot tower would be visible year-round from a portion of the Shaw Road Triangle along an approximately 400-foot section of Shaw Road from Route 171 westward and along an approximately 320-foot section of Route 171 from Shaw Road southwestward. This area is approximately 0.5 miles away from the proposed site. (NAT/AT&T 1, Tab 5; NAT/AT&T 3, updated Visual Report)

- 95. The proposed 150-foot tower is not expected to result in significant visual impacts to important cultural or environmental resources within the Quinebaug and Shetucket Rivers Valley National Heritage Corridor, which encompasses the Town of Woodstock. (NAT/AT&T 10, Response 35)
- 96. Construction of a 110-foot tower at the proposed site would reduce potential visibility of the structure to the surrounding area. (NAT/AT&T 3, p. 5)
- 97. NAT could construct the proposed facility as a monopine. A 150-foot monopine at the proposed site would significantly extend above the surrounding tree canopy. A 110-foot monopine would extend only slightly above the tree canopy and blend into the surrounding area. (NAT/AT&T 3; Tr. 1, p. 27)
- 98. A monopine design would require a six to ten foot extension on the top of the tower to give the structure the appearance of a tree. Refer to Figure 9 and Figure 10. (Tr. 1, p. 28)
- 99. The visibility of a monopole at the proposed site at 150 feet and 110 feet from specific locations within a two-mile radius of the site is presented in the table below.

Location	Approximate visibility at 150 feet	Approximate visibility at 110 feet	Distance & direction from site
1. 3 Barber Road	45 feet above trees	Not visible (monopine would be visible)	0.51 miles ENE
2. Driveway at 15 Shaw Road	45 feet above trees	Not visible (monopine would be visible)	0.49 miles NE
3. 3 Shaw Road	45 feet above trees	Not visible (monopine would be visible)	0.53 miles ENE
4. Intersection of Shaw Road and Route 171	50 feet above trees	10 feet above trees	0.55 miles ENE
5. Shaw Road	50 feet above trees	5 feet above trees - seasonally	0.51 miles ENE
6. 15 Shaw Road	30 feet through trees	Not visible	0.48 miles ENE
7. 1651 Route 171	50 feet above trees	10 feet above trees	0.54 miles ENE
8. 4 Barber Road	50 feet above trees	10 feet above trees	0.52 miles ENE
9. 15 Barber Road	60 feet above trees	20 feet above trees	0.56 miles ENE
10. Driveway at 22 & 24 Barber Road	Not visible	Not visible	0.58 miles east
11. East of driveway for 22 & 24 Barber Road	45 feet above trees	Not visible (monopine would be visible)	0.58 miles east
12. Driveway at 30 Barber Road	50 feet through trees	Not visible	0.59 miles east
13. East of driveway at 30 Barber Road	Not visible	Not visible	0.6 miles ENE
14. Intersection of Barber Road and Route 171	50 feet above trees	10 feet - seasonally	0.52 miles ENE
15. Route 198 between Route 171 and Shaw Road	15 feet – among trees	Not visible	0.44 miles ENE
16. Intersection of Shaw Road and Route 198	Not visible	Not visible	0.45 miles NE

Not visible	Not visible	0.44 miles NE
Not visible	Not visible	0.54 miles NNE
55 feet above trees	15 feet above trees	1.1 miles NNE
40 feet above trees	Not visible	1 mile NNE
Not visible	Not visible	1.9 miles NNW
Not visible	Not visible	NW
50 feet above trees	10 feet above trees	1.26 miles NNE
Not visible	Not visible	1.78 miles NNE
40 feet above trees	Not visible	0.77 miles NE
35 feet above trees	Not visible	0.91 miles NE
35 feet – seasonally	Not visible	0.86 miles NE
45 feet – seasonally	Not visible (monopine	0.38 miles
70.077.0	would be visible)	ESE
	Not visible 55 feet above trees 40 feet above trees Not visible Not visible 50 feet above trees Not visible 40 feet above trees 35 feet above trees 35 feet above trees 35 feet - seasonally 45 feet - seasonally	Not visible So feet above trees 15 feet above trees 40 feet above trees Not visible Not visible Not visible Not visible Not visible Not visible 10 feet above trees Not visible Not visible Not visible Not visible Not visible 40 feet above trees Not visible 40 feet above trees Not visible 35 feet above trees Not visible 35 feet - seasonally Not visible (monopine would be visible)

(NAT/AT&T 1, Tab 5; NAT/AT&T 3, updated visual report; NAT/AT&T 10, Response 36)

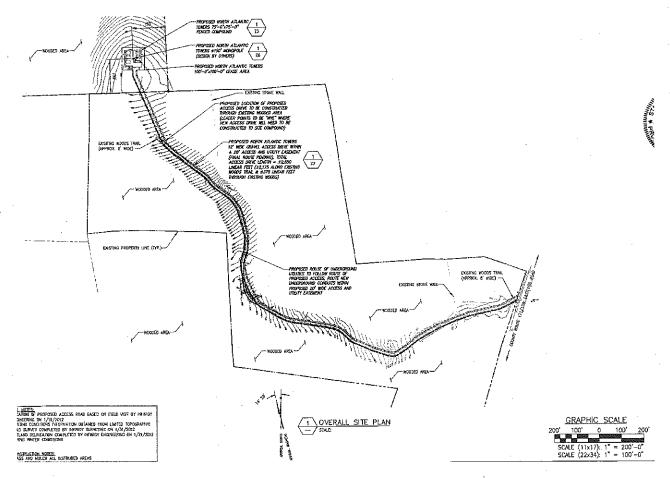


Figure 1. Site plan for proposed site and access road. (NAT/AT&T 10, Tab 6)

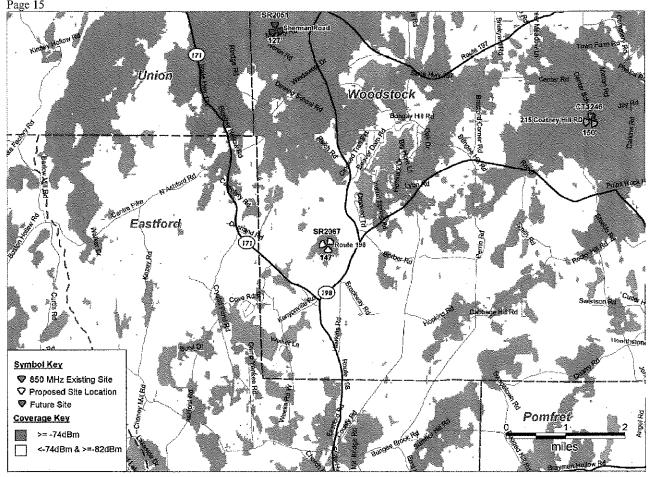


Figure 2. Existing AT&T coverage in the area of the proposed site. (NAT/AT&T 1, Tab 1)

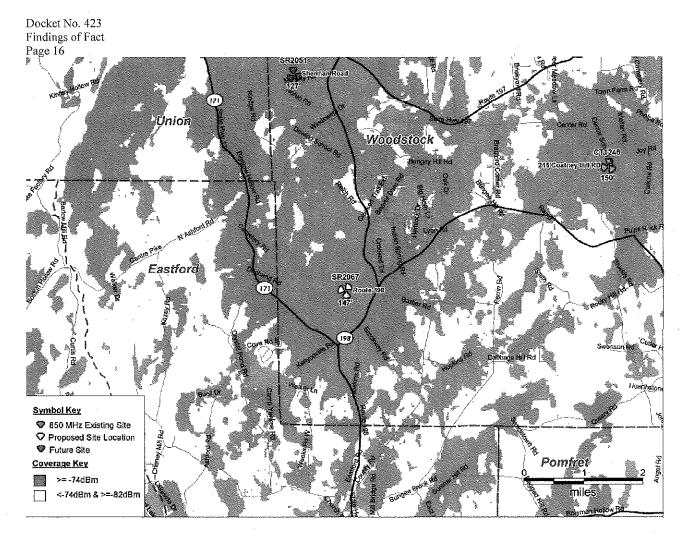


Figure 3. AT&T's existing coverage and coverage from the proposed site at 150 feet agl. (NAT/AT&T 1, Tab 1)

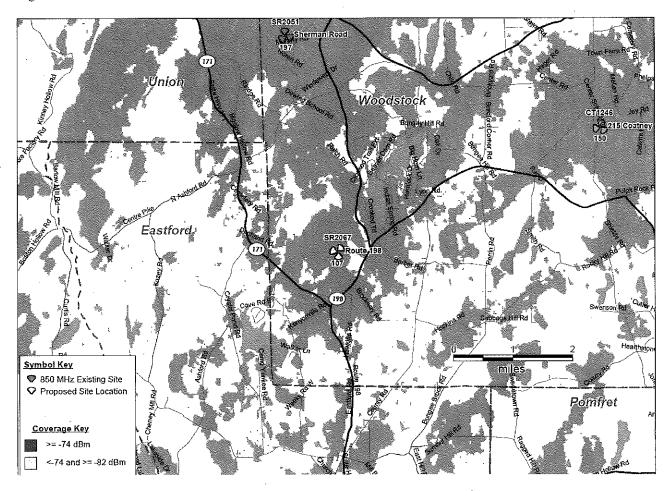
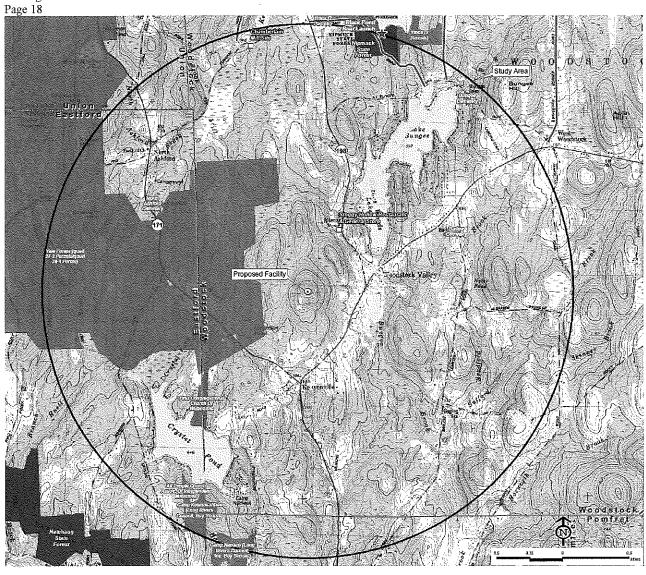


Figure 4. AT&T's existing coverage and coverage from the proposed site at 110 feet agl. (NAT/AT&T 10, Tab 1)



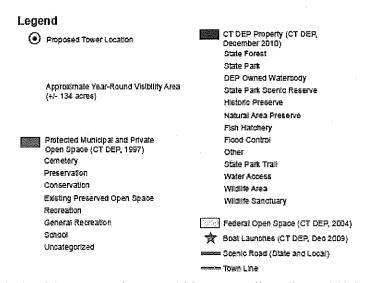


Figure 5. Viewshed analysis of the proposed tower within a two-mile radius at 150 feet. (NAT/AT&T 1, Tab 5)

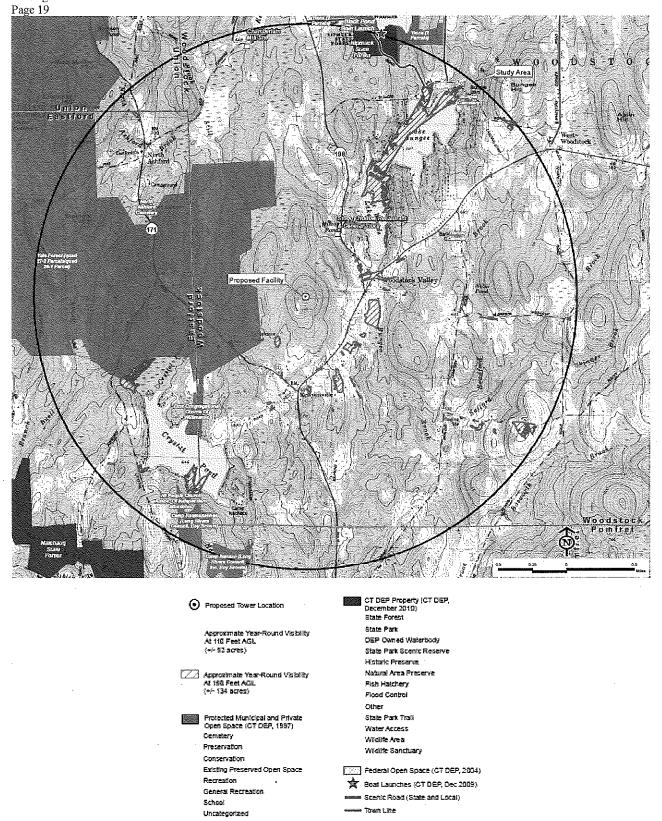


Figure 6. Viewshed analysis of the proposed tower at 110 feet and 150 feet within a two-mile radius. (NAT/AT&T 10, Tab 8)

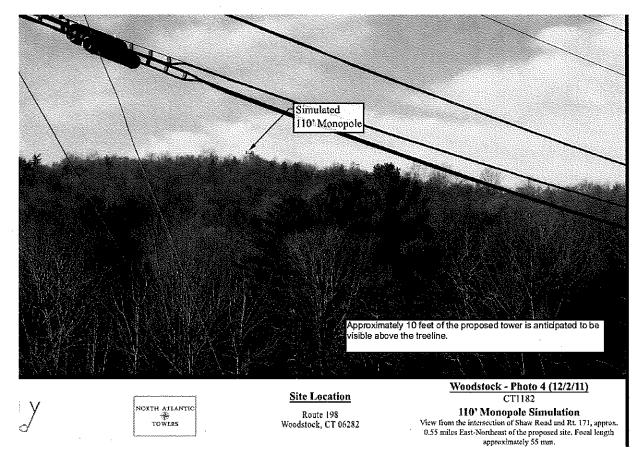


Figure 7. Photosimulation of a 110-foot monopole at the proposed site. (NAT/AT&T 10, Tab 5)

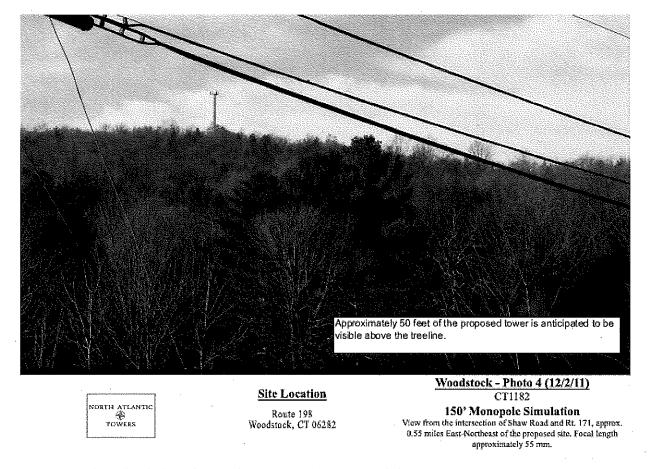


Figure 8. Photosimulation of a 150-foot tower at the proposed site. (NAT/AT&T 10, Tab 5)

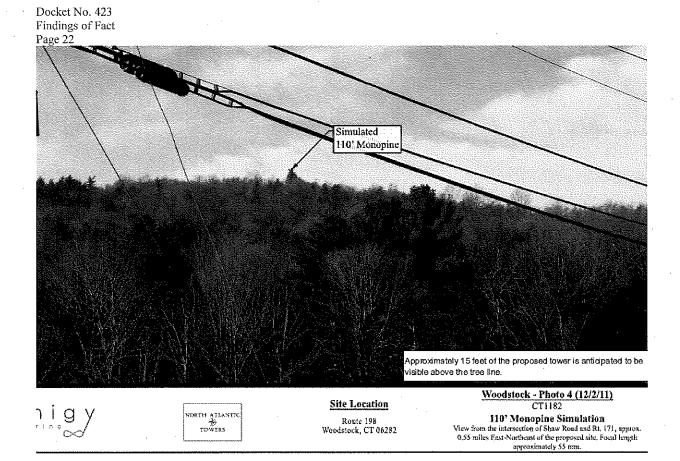


Figure 9. Photosimulation of a 110-foot tower designed as a monopine at the proposed site. (NAT/AT&T 10, Tab 5)

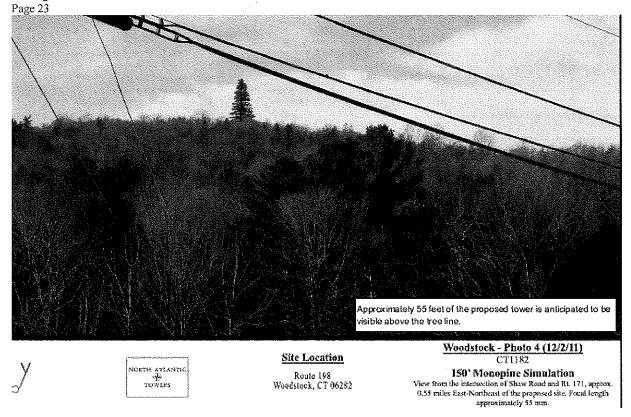


Figure 10. Photosimulation of a 150-foot tower designed as a monopine at the proposed site. (NAT/AT&T 10, Tab 5)

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telecommunications facility located off Route 198, Woodstock,	} ·	Council
Connecticut.		
·		June 21, 2012

Opinion

On October 20, 2011, North Atlantic Towers, LLC (NAT) and New Cingular Wireless PCS, LLC (AT&T) applied to the Connecticut Siting Council for a Certificate of Environmental Compatibility and Public Need (Certificate) for the construction, maintenance and operation of a wireless telecommunications facility to be located off Route 198 in Woodstock, Connecticut. The proposed facility would provide AT&T with coverage in the western and southwestern portions of Woodstock along Route 198, Route 171 and the surrounding area.

The proposed compound would be located within a 75-foot by 75-foot fenced area in the southeastern corner of an approximately 128-acre parcel owned by Woodstock Tower Partners, LLC located off of Route 198. The host parcel is undeveloped, wooded, and landlocked (with no access to a public road). The applicants originally proposed a 4,690-foot access road extending southwest from Route 198 through an adjacent property at 530 Route 198. During the proceeding, the applicants revised the proposed access road. The new access road would extend 2,550 feet from Route 171 northwest over an adjacent parcel owned by Michael Farley along Route 171.

The applicants propose the installation of a 150-foot monopole designed to accommodate the antennas of six carriers, including AT&T. As an alternative, the monopole could be designed as a monopine tower.

There are no residences within a 1,000-foot radius of the proposed tower. The nearest residence is approximately 2,000 feet to the east at 382 Route 198, owned by Robert & John Wrobel.

The Council finds that there is a need for a tower at the proposed site because AT&T has no coverage in the area. While a 150-foot tower at the proposed site provides AT&T with coverage along Route 171, Route 198 and much of the surrounding area, a tower height of 110 feet would be adequate for AT&T to provide coverage to the main roadways in the area.

No other carriers intervened in the proceeding to demonstrate a need for the tower.

At 150 feet, the tower would be visible year-round from 134 acres within a two-mile radius of the site, approximately half of which is over open water on Lake Bungee and Witches Woods Lake. The 150-foot tower would be seasonally visible from an additional five acres.

At 110 feet, the proposed tower would be visible year-round from 92 acres within a two-mile radius of the site, with approximately half over the open water of Lake Bungee and Witches Woods Lake.

Whether a tower at the proposed site were 150 feet high or 110 feet, it would be visible from many of the same locations within a two-mile radius; however, a 110-foot tower would extend just above the treetops from most locations. Therefore, the Council finds that a 110-foot tower at the proposed site would have less visual impact on the surrounding area, while still meeting the coverage needs of AT&T. Furthermore, the Council rejects a monopine design alternative for the facility, since, as depicted in the photosimulations, the visual impact of a monopine would not differ significantly from that of a plain monopole with antennas.

The revised access road would cross two wetland areas, requiring the installation of a road base and two elliptical culverts. The construction of this road would result in approximately 3,100 square feet of wetland disturbance. Overall, construction of the proposed site and new access road would require the removal of 166 trees six inches or greater in diameter at breast height. In comparison, the original access road would require three culverts, the removal of 300 more trees, and a total disturbance to inland wetlands double that of the revised access road. Therefore, the Council will order that the revised access road be developed.

No Federal or State-listed endangered or threatened species or State Species of Special Concern are known to occur in the area of the proposed site and access road.

The proposed facility would have no effect upon historic, architectural, or archaeological resources listed on or eligible for the National Register of Historic Places.

According to a methodology prescribed by the FCC Office of Engineering and Technology Bulletin No. 65E, Edition 97-01 (August 1997), the worst-case combined radio frequency power density levels of the antennas proposed to be installed on the tower have been calculated by Council staff to amount to 5.96% of the FCC's Maximum Permissible Exposure, as measured at the base of the tower. This percentage is well below federal and state standards established for the frequencies used by wireless companies. If federal or state standards change, the Council will require that the tower be brought into compliance with such standards. The Council will require that the power densities be recalculated in the event other carriers add antennas to the tower. The Telecommunications Act of 1996 prohibits any state or local agency from regulating telecommunications towers on the basis of the environmental effects of radio frequency emissions to the extent that such towers and equipment comply with FCC's regulations concerning such emissions.

Based on the record in this proceeding, the Council finds that the effects associated with the construction, maintenance, and operation of the proposed telecommunications facility, including effects on the natural environment; ecological integrity and balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish and wildlife are not disproportionate either alone or cumulatively with other effects when compared to need, are not in conflict with policies of the State concerning such effects, and are not sufficient reason to deny this application. Therefore, the Council will issue a Certificate for the construction, maintenance, and operation of a 110-foot monopole telecommunications facility at the proposed site located off Route 198 in Woodstock.

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Connecticut.		June 21 2012

Decision and Order

Pursuant to the foregoing Findings of Fact and Opinion, the Connecticut Siting Council (Council) finds that the effects associated with the construction, maintenance, and operation of a telecommunications facility, including effects on the natural environment; ecological integrity and balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish and wildlife are not disproportionate, either alone or cumulatively with other effects, when compared to need, are not in conflict with the policies of the State concerning such effects, and are not sufficient reason to deny the application, and therefore directs that a Certificate of Environmental Compatibility and Public Need, as provided by General Statutes § 16-50k, be issued to North Atlantic Towers, LLC, hereinafter referred to as the Certificate Holder, for a telecommunications facility off Route 198 in Woodstock, Connecticut.

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

- 1. The tower shall be constructed as a monopole, no taller than necessary to provide the proposed telecommunications services, sufficient to accommodate the antennas of AT&T and other entities, both public and private, but such tower shall not exceed a height of 110 feet above ground level. The height at the top of AT&T's antennas shall not exceed 110 feet above ground level.
- 2. The revised access road from Route 171 shall be used for construction and operation of the site.
- 3. The Certificate Holder shall prepare a Development and Management (D&M) Plan for this site in compliance with Sections 16-50j-75 through 16-50j-77 of the Regulations of Connecticut State Agencies. The D&M Plan shall be served on the Town of Woodstock for comment, and all parties and intervenors as listed in the service list, and submitted to and approved by the Council prior to the commencement of facility construction and shall include:
 - a. a final site plan(s) of site development to include specifications for the tower, tower foundation, antennas, equipment compound, radio equipment, access road, utility line, and landscaping; and
 - b. construction plans for site clearing, grading, landscaping, water drainage, and erosion and sedimentation controls consistent with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, as amended.
- 4. Prior to the commencement of operation, the Certificate Holder shall provide the Council worst-case modeling of the electromagnetic radio frequency power density of all proposed entities' antennas at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin No. 65, August 1997. The Certificate Holder shall ensure a recalculated report of the electromagnetic radio frequency power density be submitted to the Council if and when circumstances in operation cause a change in power density above the levels calculated and provided pursuant to this Decision and Order.

- 5. Upon the establishment of any new State or federal radio frequency standards applicable to frequencies of this facility, the facility granted herein shall be brought into compliance with such standards.
- 6. The Certificate Holder shall permit public or private entities to share space on the proposed tower for fair consideration, or shall provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing.
- 7. Unless otherwise approved by the Council, if the facility authorized herein is not fully constructed with at least one fully operational wireless telecommunications carrier providing wireless service within eighteen months from the date of the mailing of the Council's Findings of Fact, Opinion, and Decision and Order (collectively called "Final Decision"), this Decision and Order shall be void, and the Certificate Holder shall dismantle the tower and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made. The time between the filing and resolution of any appeals of the Council's Final Decision shall not be counted in calculating this deadline. Authority to monitor and modify this schedule, as necessary, is delegated to the Executive Director. The Certificate Holder shall provide written notice to the Executive Director of any schedule changes as soon as is practicable.
- 8. Any request for extension of the time period referred to in Condition 7 shall be filed with the Council not later than 60 days prior to the expiration date of this Certificate and shall be served on all parties and intervenors, as listed in the service list, and the Town of Woodstock. Any proposed modifications to this Decision and Order shall likewise be so served.
- 9. If the facility ceases to provide wireless services for a period of one year, this Decision and Order shall be void, and the Certificate Holder shall dismantle the tower and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made.
- 10. Any nonfunctioning antenna, and associated antenna mounting equipment, on this facility shall be removed within 60 days of the date the antenna ceased to function.
- 11. In accordance with Section 16-50j-77 of the Regulations of Connecticut State Agencies, the Certificate Holder shall provide the Council with written notice two weeks prior to the commencement of site construction activities. In addition, the Certificate Holder shall provide the Council with written notice of the completion of site construction, and the commencement of site operation.
- 12. The Certificate Holder shall remit timely payments associated with annual assessments and invoices submitted by the Council for expenses attributable to the facility under Conn. Gen. Stat. §16-50v.
- 13. This Certificate may be transferred in accordance with Conn. Gen. Stat. §16-50k(b), provided both the Certificate Holder/transferor and the transferee are current with payments to the Council for their respective annual assessments and invoices under Conn. Gen. Stat. §16-50v. In addition, both the Certificate Holder/transferor and the transferee shall provide the Council a written agreement as to the entity responsible for any quarterly assessment charges under Conn. Gen. Stat. §16-50v(b)(2) that may be associated with this facility.

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- 14. The Certificate Holder shall maintain the facility and associated equipment, including but not limited to, the tower, tower foundation, antennas, equipment compound, radio equipment, access road, utility line and landscaping in a reasonable physical and operational condition that is consistent with this Decision and Order and a Development and Management Plan to be approved by the Council.
- 15. If the Certificate Holder is a wholly-owned subsidiary of a corporation or other entity and is sold/transferred to another corporation or other entity, the Council shall be notified of such sale and/or transfer and of any change in contact information for the individual or representative responsible for management and operations of the Certificate Holder within 30 days of the sale and/or transfer.

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

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

The parties and intervenors to this proceeding are:

Applicant

New Cingular Wireless PCS, LLC & North Atlantic Towers, LLC

Its Representative

Christopher B. Fisher, Esq. Lucia Chiocchio, Esq. Cuddy & Feder LLP

CERTIFICATION

The undersigned members of the Connecticut Siting Council (Council) hereby certify that they have heard this case, or read the record thereof, in **DOCKET NO. 423** – North Atlantic 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 off of Route 198, Woodstock, Connecticut, and voted as follows to approve the proposed site:

Council Members	Vote Cast
Robert Stein, Chairman	Yes
Colin C. Tait, Vice Chairman	Absent
Chairman Arthur House Designee: Larry P. Levesque	Absent
Bu Jolewbeush Commissioner Dan Esty Designee: Brian Golembiewski	Yes
Philip T. Ashton	Yes
Daniel P. Lynch, Jr.	Yes
James J. Murphy, July	Yes
Barbara Currier Bell Dr. Barbara Currier Bell	Yes
Edward S. Wilensky Edward S. Wilensky	Yes

Dated at New Britain, Connecticut, June 21, 2012.