

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

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March 15, 2012

TO:

Parties and Intervenors

FROM:

Linda Roberts, Executive Director

RE:

PETITION NO. 1010 - New Cingular Wireless PCS, LLC petition for a

declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the proposed installation of an concealed tower on a water tank and associated equipment at a water treatment plant located at 455 Valley

Road, Greenwich, Connecticut.

As stated at the hearing in New Britain on February 22, 2012, after the Connecticut Siting Council (Council) issues its draft findings of fact, parties and intervenors may identify errors or inconsistencies between the Council's draft findings of fact and the record; however, no new information, evidence, argument, or reply briefs will be considered by the Council.

Parties and Intervenors may file written comments with the Council on the Draft Findings of Fact issued on this docket by March 23, 2012.

LR/CW/cm

Enclosure



petition No. 1010 - New Cingular Wireless PCS, LLC }

petition for a declaratory ruling that no Certificate of
Environmental Compatibility and Public Need is required for the }

proposed installation of an concealed tower on a water tank and associated equipment at a water treatment water plant located at }

455 Valley Road, Greenwich, Connecticut.

Connecticut

Connecticut

March 8, 2012

DRAFT Findings of Fact

Introduction

- 1. On October 5, 2011, New Cingular Wireless PCS, LLC (AT&T), in accordance with provisions of Connecticut General Statutes (C.G.S) § 16-50k, submitted a Petition for a declaratory ruling (Petition) that a Certificate of Environmental Compatibility and Public Need is not required for the proposed installation of a concealed tower facility on top of an existing water tank at an Aquarion Water Company plant located at 455 Valley Road in Greenwich, Connecticut. (AT&T 1, p. 1)
- 2. The party in this proceeding is the Petitioner. The intervenor is a group consisting of Lee Higgins, Kaori Higgins, Peter Janis, Elizabeth Janis, Richard Kosinski and Susan Kosinski (collectively "Intervenors"). (Transcript 1, February 9, 2012, 3:09 p.m. [Tr. 1], p. 5)
- 3. The proposed facility would provide AT&T with coverage in the Cos Cob section of Greenwich and Stamford specifically along Valley Road, Westover Road, Palmer Hill Road and nearby residences. (AT&T 1, p. 7)
- 4. In 2001, SNET Mobility, LLC (SNET), a predecessor of AT&T, applied to the Town of Greenwich Planning and Zoning Commission (P&Z) for the installation of an antenna attachment on the existing 46.5-foot water tank that is being considered in Petition No. 1010. SNET had proposed to install antennas on galvanized pipe frames that would be spot welded to the top of the water tank in three sectors with a total of 12 panel antennas, extending to a height of 52 feet above ground level. SNET received approval for that installation from the Greenwich P&Z and the Greenwich Inland Wetlands Agency. SNET did not go forward with the antenna installation. (AT&T 3, pp. 1, 2)
- 5. Pursuant to C.G.S. § 16-50m (c), the Council published public notice of the hearing the <u>Greenwich Time</u> and the <u>Connecticut Post</u> on December 19, 2011. (record; Tr. 1, p. 5)
- 6. On November 10, 2011, the Petitioner provided notice of the proposed project to all abutting property owners by certified mail. (AT&T 2, Tab 4)
- 7. The Petitioner placed a four-foot by six-foot sign at 455 Valley Road, on January 26, 2012. The sign contained information regarding the proposed project and Council's public hearing. (record; AT&T 6, sign posting affidavit)
- 8. Pursuant to C.G.S. § 16-50m, the Council, after giving due notice thereof, held a public hearing on February 9, 2012, beginning at 3:00 p.m. and continuing at 7:00 p.m. in the Cone Conference Room of Greenwich Town Hall, 100 Field Point Road, Greenwich, Connecticut. (Tr. 1, p. 3; Transcript 2, February 9, 2012, 7:00 p.m. [Tr. 2], p. 3)

- 9. The Council and its staff conducted an inspection of the proposed site on February 9, 2012, beginning at 2:00 p.m. During the field inspection, the Petitioner flew a balloon at the proposed site to simulate the height of the proposed structure. The balloon was aloft on and off from 8:00 a.m. to 12:00 p.m. At approximately 12:00 p.m. the Petitioner raised a balloon at approximately 75 feet west of the water tank to allow the balloon to remain afloat. Weather conditions were windy and the balloon was not able to achieve the height of the proposed installation. (Tr. 1, pp. 17, 18, 29)
- 10. The Council held a continued public hearing on February 22, 2012 at the Office of the Connecticut Siting Council, Ten Franklin Square, New Britain, Connecticut. (Transcript 3, February 22, 2012, 1:05 p.m. [Tr. 3], p. 3)

State Agency Comment

- 11. Pursuant to C.G.S. § 16-50j (h), on December 16, 2011 and February 23, 2012, the following State agencies were solicited by the Council to submit written comments regarding the proposed facility: Department of Energy and Environmental Protection; Department of Public Health; Council on Environmental Quality; Public Utility Regulatory Authority; Office of Policy and Management; Department of Economic and Community Development; Department of Agriculture; Department of Transportation (DOT); and Department of Emergency Management and Homeland Security. (record)
- 12. On January 20, 2012, the Council received a response from the DOT stating it had no comment on the proposed project. (DOT Comments dated January 20, 2012)
- 13. No other state agencies commented on the proposed project. (record)

Existing and Proposed Wireless Coverage -AT&T

- 14. AT&T is licensed by the Federal Communication Commission (FCC) to provide wireless communications services throughout Connecticut. (AT&T 1, p. 2)
- 15. AT&T would provide service to the target using Cellular (800 MHz band), Personal Communications Services (PCS) (1900 MHz band), and Long-term Evolution (LTE) (700 MHz band) frequencies. (AT&T 4, R. 3)
- 16. There is an existing coverage gap in the North Mianus section of Greenwich, including Valley Road and Westover Road in Stamford. The target area has a currently has a signal level of between -82 dBm and -100 dBm. Refer Figure 4. (AT&T 5, Tab 2; Tr. 1, pp. 16, 17)
- 17. At a height of 60 feet above ground level (agl), using cellular frequencies, the proposed site would provide approximately 0.69 square miles of coverage for in-building coverage (at > -74 dBm) and 0.75 square miles for in-vehicle coverage (at > -82 dBm). Refer to Figure 5. (AT&T 5, Tab 2)
- 18. At a height of 60 feet agl, using cellular frequencies, the proposed site would provide coverage to approximately 0.29 miles along Mianus Road, 0.13 miles along Mimosa Drive, 0.09 miles along Palmer Hill Road, 0.16 along Sheephill Road, 0.3 miles along Valley Road and 0.85 miles along Westover Road, all at ≥ -82 dBm. (AT&T 5, Tab 2)
- 19. A reduction in the height of AT&T's antennas would result in significant gaps in coverage along Westover Road in Stamford. (Tr. 1, pp. 16, 17)

20. The existing white pine trees adjacent to the water tank structure would have some impact on proposed coverage. At angles where the proposed antennas would align with the existing trees the signal would be blocked but coverage would still be adequate for the target area. (Tr. 3, pp. 9, 10)

Existing Water Treatment Plant

- 21. The proposed facility would be located on an existing water tank located on a 2.6-acre parcel adjacent to the Mianus River, owned by Aquarion Water Company of Connecticut (Aquarion). The property is currently used as a water treatment plant. Refer to Figure 1. (AT&T 1, p. 2)
- 22. The parcel was initially developed in 1954 and currently contains control buildings, garages, filtration tanks, and a water supply tank. (AT&T 1, p. 2)
- 23. The existing water tank is a 30-foot diameter cylindrical steel structure with a domed top painted dark green. The overall height of the facility is 46 feet 6 inches (51 feet to the top of the existing vent). (AT&T 1, p. 2)
- 24. At the location of the water tank, Valley Road is approximately 10 feet above the base of the tank. (Tr. 3, p. 45)

Facility Description

- 25. AT&T proposes to construct a tower on top of the existing water tank. The first portion of the proposed tower would extend the full circumference of the water tank to an overall height of 49 feet agl. The second portion would consist of a 15-foot diameter cylindrical structure that would extend to 64 feet agl. Refer to Figure 2. (AT&T 1, p. 2)
- 26. The proposed tower would be concealed with fiberglass panels that would be painted to match the existing water tank. (AT&T 1, p. 2)
- 27. AT&T would install up to 12 panel antennas at a centerline height of 60 feet agl and other equipment within the concealed structure. (AT&T 1, p. 2)
- 28. AT&T would install equipment within a 10-foot by 15-foot equipment shelter within a 20-foot by 20-foot lease area southwest of the existing water tank. The shelter would have a pitched roof and brick-like exterior to match the existing buildings on the water plant property. (AT&T 1, p. 3, Tab B; Tr. 3, p. 35)
- 29. AT&T could install landscaping, including eight to ten-foot trees, within its lease area on the Valley Road side of the equipment shelter to provide screening. AT&T would have to consult with and get the permission of Aquarion to plant any trees outside of the lease area. (Tr. 1, p. 11; Tr. 3, pp. 35, 43, 44)
- 30. AT&T would use a battery backup system to provide power in the event of a power outage. The charge on the batter would last for approximately 8 to 12 hours depending on site usage. Battery life is checked monthly. (AT&T 4, R. 6; Tr. 1, p. 11)
- 31. If a power outage exceeds 8 to 12 hours in duration, AT&T would attempt to acquire a temporary backup generator. (Tr. 1, p. 11)
- 32. Access to the proposed site would be via the existing Aquarion parking lot. Utilities to the site would extend from The Connecticut Light and Power Company pole #6468. The utility pole is immediately adjacent to the proposed equipment shelter. (AT&T 1, Tab B; Tr. 1, p. 54)

- 33. The site would be accessed by a sport utility type vehicle once a month for maintenance. (Tr. 1, p. 36)
- 34. There are 76 residences within a 1,000-foot radius of the site. (AT&T 4, R. 2)
- 35. The nearest residence is located at 460 Valley Road, approximately 154 feet northwest of the proposed site. (AT&T 4, R. 1)
- 36. Vegetation surrounding the water tank is higher than the water tank itself. The white pine trees immediately adjacent to the existing structure are approximately 90 to 100 feet tall. (Intervenors 2, A. 9; Tr. 3, p. 8)
- 37. AT&T assumed that the existing water tank was empty when performing an overturning analysis on the structure as a worst-case scenario. If the tank contained water, it would increase the stability of the structure. (Tr. 1, p. 52)

Environmental Considerations

- 38. The host property parcel includes a significant paved area and buildings that extend to the edge of the Mianus River. The edge of the river and associated wetlands are well defined and delineated. (AT&T 1, p. 6)
- 39. No aviation hazard marking or lighting would be required for the proposed tower by the Federal Aviation Administration. (AT&T 5, Tab 1)
- 40. The proposed project would have no effect on historic, architectural or archaeological resources. (AT&T 2, Tab 3)
- 41. The proposed project would have no known impact on extant populations of federal or state-listed Endangered, Threatened or Special Concern Species. (AT&T 4, R. 5; Tr. 1, p. 27)
- 42. The proposed facility is located on Class II watershed land. Wireless facilities at water tank locations that are owned by water companies are allowed per CGS § 25-32(f). (AT&T 7, revised R. 7)
- 43. If a temporary backup generator were to be used at the proposed site during a prolonged power outage, AT&T could place the generator downstream of the public water supply intake on the Aquarion property. AT&T could use a portable propane generator for temporary backup power, which would allow any fuel spilled from the equipment to evaporate rather than flow into the water supply. (Tr. 1, pp. 58, 61)
- 44. The nearest wetland would be approximately 55 feet from the closest corner of the proposed equipment shelter. (Tr. 1, p. 28)
- 45. AT&T would install all appropriate sediment and erosion control measures for the proposed project to minimize any potential wetland impact, in accordance with the 2002 Connecticut Soil Erosion and Control Guidelines. (AT&T 1, p. 6; Tr. 1, p. 28; Tr. 3, p. 21)
- 46. There are approximately 80 wireless telecommunications locations on water tank sites within Connecticut. (AT&T 4, R. 7)

- 47. The tower setback radius of the proposed installation would extend approximately 14 feet onto Valley Road to the west of the tank location. The tower setback radius would not encroach upon any other property boundaries. (AT&T 1, Tab B)
- 48. There are three eastern white pine trees in close proximity to the existing water tank. The white pine tree species is prone to breakage. The closest tree to the tank exhibits poor form and is prone to failure from wind, snow or ice loading. The three trees may be pruned to promote tree health and minimize potential for failure but maintenance of the nearest white pine may be ineffective. AT&T would coordinate with Aquarion regarding the removal of the nearest white pine. (AT&T 2, Tab 2; Tr. 1, p. 12)
- 49. The proposed facility including the equipment shelter would be located within a FEMA-designated Zone X (unshaded) area. The area of the proposed site has a 0.2 percent annual chance of flooding. The facility would be located immediately outside of a FEMA-designated Zone X (shaded) areas, which has a moderate flood hazard and is between the limits of the 100-year and 500-year floods. (AT&T 4, R. 4)
- 50. The air conditioning unit at the proposed site would be the sole source of noise during daily operations. If the proposed project were approved, AT&T would submit the specifications for the air conditioning unit to be located at the proposed site and determine compliance with Department of Energy and Environmental Protection noise regulations for the Development and Management Plan. (Tr. 1, p. 34; Tr. 3, pp. 8, 30)
- 51. The cumulative worst-case maximum power density from the radio frequency emissions from the operation of AT&T's proposed antennas is approximately 8.7% of the standard for Maximum Permissible Exposure, as adopted by the FCC, at the base of the water tank. This calculation was based on methodology prescribed by the FCC Office of Engineering and Technology Bulletin No. 65E, Edition 97-01 (August 1997) that assumes all antennas would be pointed at the base of the tower and all channels would be operating simultaneously, which creates the highest possible power density levels. Under normal operation, the antennas would be oriented outward, directing radio frequency emissions away from the tower, thus resulting in significantly lower power density levels in areas around the tower. (AT&T 1, Tab F)

Visibility

- 52. The proposed facility would be visible year round from approximately 12.2 acres within a two-mile radius of the site. The proposed facility would be visible to 19 residences located within two miles of the proposed site. Residences that would have year-round views of the proposed installation include one on Chestnut Street, five on North Street, four on River Road, two on South Street, six on Valley Road and one on Walnut Street. Refer to Figure 6. (AT&T 1, Tab C)
- 53. The proposed facility would be seasonally visible during leaf-off conditions from an additional 3.48 acres within a two-mile radius of the proposed facility. The proposed facility would be seasonally visible from six residences including two on Park Street and four on Valley Road. (AT&T 1, Tab C)

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

Location	Visible	Approx. Portion of Tower Visible	Approx. Distance to Tower	
1. Intersection of South Street and	Yes	year round - through	0.11 miles southwest	
Valley Road		trees		
2. Intersection of Valley Road and Park Street	Yes	seasonal - through trees	0.07 miles southwest	
3. North Street	Yes	year round - through trees	0.05 miles southwest	
4. Valley Road (Refer to Figure 3)	Yes	above trees	0.01 miles northwest	
5. Intersection of North Street and Chestnut Street	Yes	above trees	0.10 miles southwest	
6. Valley Road	Yes	seasonal — through trees	0.12 miles northeast	
7. River Road	Yes	year round - through trees	0.08 miles southeast	
8. Mianus River Natural Park	No	-	0.32 miles south	
9. Mianus River Park Trails	No	_	0.47 miles north	
10. Westover Elementary School	No	<u>-</u>	1.29 miles southeast	
11.Scalzi Park and J.M. Wright Technical High School	No	-	1.73 miles southeast	
12. Stillmeadow School	No	-	1.05 miles east	
13. Roxbury School	No	-	1.6 miles northeast	
14. Beth-El Cemetery	No	-	1.82 miles north	
15. Fort Stamford	No		1.13 miles north	
16. North Mianus School	No	-	0.74 miles south	
17. Central Middle School	No	•	1.89 miles southwest	
18. The Stanwich School	No	- <u>-</u>	1.33 miles northwest	

(AT&T 1, Tab C)

^{55.} The proposed facility would not be visible from historic properties, parks, or schools. (AT&T 1, p. 5)

^{56.} The relative elevation, color, design and existing tree cover in the area of the proposed facility would provide screening that would make the facility difficult to see from many locations within Greenwich. (AT&T 1, p. 5)

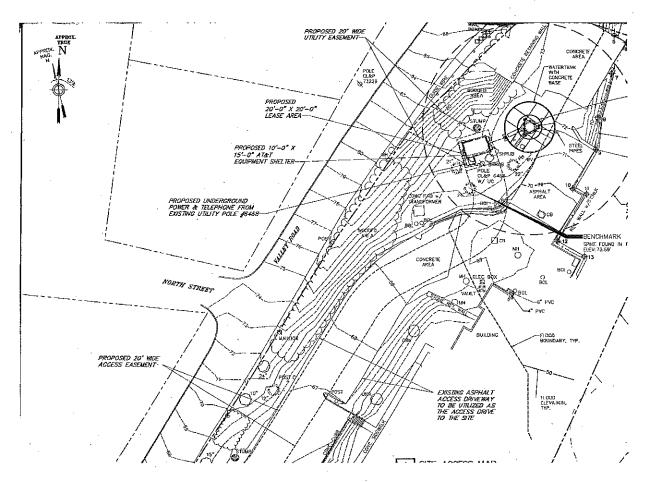


Figure 1. Site plan for the proposed facility. (AT&T 1, Tab B)

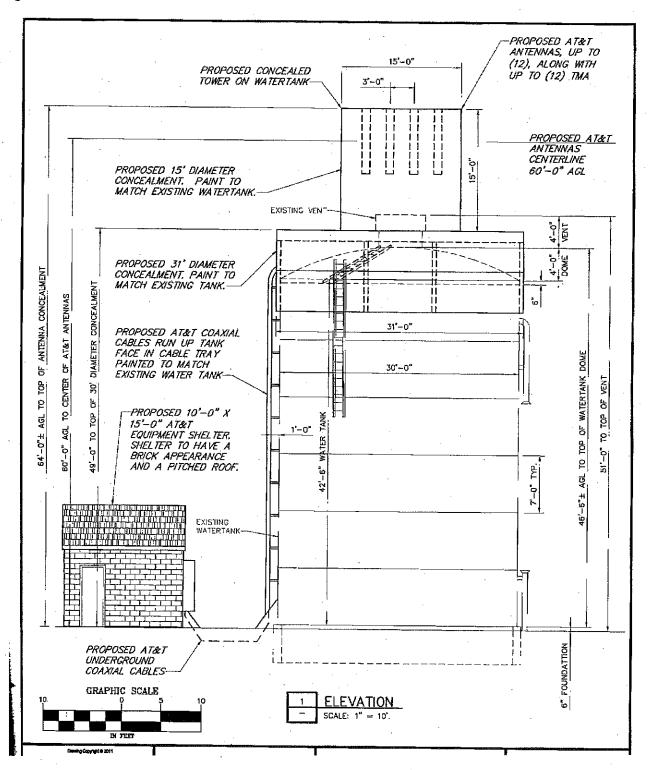


Figure 2. Drawing showing water tank and proposed tower installation. (AT&T 1, Tab B)



Photosim for conceptual purposes only - actual antenna and equipment locations to be determined based on final engineering design

Figure 3. Photosimulation showing what the proposed facility would look like from Valley Road in Greenwich. (View #4 on viewshed map and table in Finding #54). (NAT/AT&T 4)

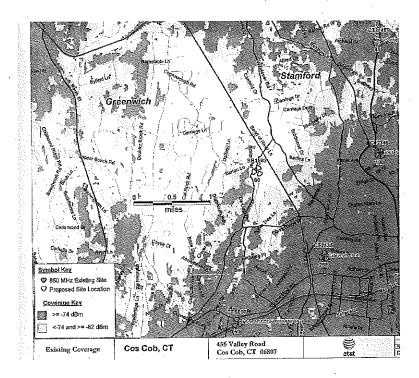


Figure 4. Existing AT&T coverage in the area of the proposed site. (AT&T 1, Tab G)

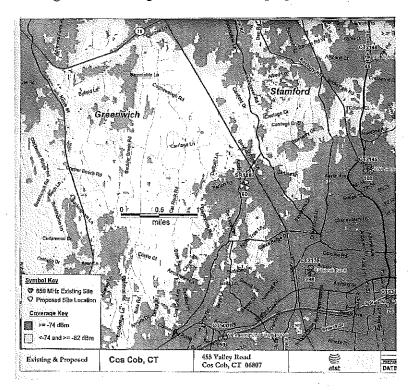


Figure 5. Plot showing existing AT&T coverage and coverage from the proposed site at 60 feet agl. (AT&T 1, Tab G)

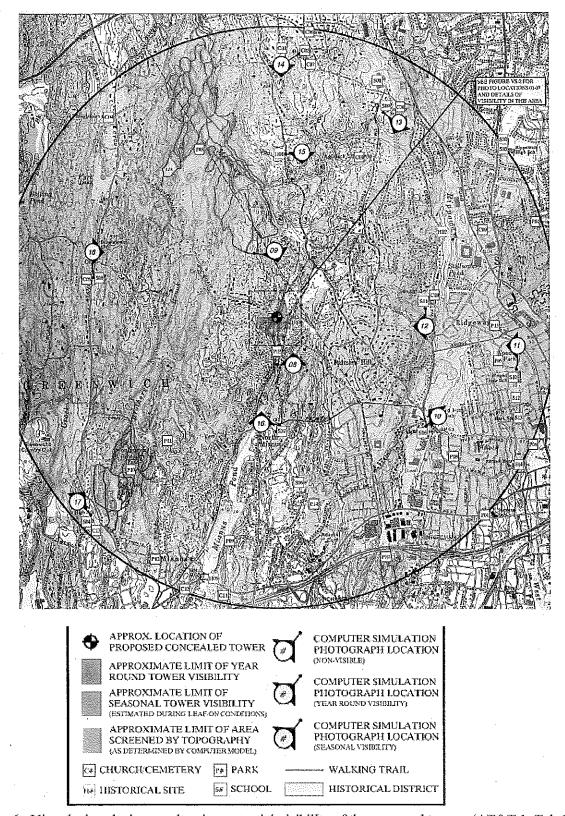


Figure 6. Viewshed analysis map showing potential visibility of the proposed tower. (AT&T 1, Tab C)

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