THE AMERICAN

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

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September 11, 2013

Daniel M. Laub, Esq. Cuddy & Feder LLP 445 Hamilton Avenue, 14th Floor White Plains, NY 10601

RE: **DOCKET NO. 437** – 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 111 Second Hill Road, Bridgewater, Connecticut.

Dear Attorney Laub:

By its Decision and Order dated September 5, 2013, the Connecticut Siting Council (Council) granted a Certificate of Environmental Compatibility and Public Need (Certificate) for the construction, maintenance, and operation of a telecommunications facility located at 111 Second Hill Road, Bridgewater, Connecticut.

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

Very truly yours,

Melanie Bachman

Acting Executive Director

MB/cm

Enclosures (4)

c: Parties and Intervenors (without Certificate enclosure)
State Documents Librarian (without Certificate enclosure)



STATE OF CONNECTICUT)
ss. New Britain, Connecticut	9
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:

Melanie Bachman Acting Executive Director Connecticut Siting Council

I certify that a copy of the Findings of Fact, Opinion, and Decision and Order in Docket No. 437 has been forwarded by Certified First Class Return Receipt Requested mail on September 11, 2013, to all parties and intervenors of record as listed on the attached service list, dated March 6, 2013.

ATTEST:

Carriann Mulcahy Secretary II Connecticut Siting Council pocket No. 437 – 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 111 Second Hill Road, Bridgewater, Connecticut.

September 5, 2013

Findings of Fact

Introduction

- 1. 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 March 5, 2013 for the construction, maintenance, and operation of a 160-foot wireless telecommunications facility at 111 Second Hill Road in Bridgewater, Connecticut (refer to Figure 1). (AT&T 1, pp. 1-2)
- 2. AT&T is a Delaware limited liability company with an office at 500 Enterprise Drive, Rocky Hill, Connecticut. The company's member corporation is licensed by the Federal Communications Commission (FCC) to construct and operate a personal wireless services system. The company does not conduct any other business in the State of Connecticut other than the provision of wireless services under FCC rules and regulations. (AT&T 1, p. 3)
- 3. The party in this proceeding is AT&T. (Transcript 1, June 25, 2013-3:00 p.m. [Tr. 1], p. 3)
- 4. The purpose of the proposed facility is to provide reliable wireless telecommunications services along Route 67, Route 133 and adjacent areas in the northern part of Bridgewater. (AT&T 1, p. 1, Tab 1)
- 5. Pursuant to C.G.S. § 16-50m, the Council, after giving due notice thereof, held a public hearing on June 25, 2013, beginning at 3:00 p.m. and continuing at 7:00 p.m. at the Burnham School, 80 Main Street South, Bridgewater, Connecticut. (Council's Hearing Notice dated April 5, 2013)
- 6. The Council and its staff conducted an inspection of the proposed site on June 25, 2013, beginning at 2:00 p.m. During the field inspection, AT&T flew a 4-foot diameter red balloon to simulate the height of the proposed tower. The string was set to a height of 160 feet. The weather was breezy so a few balloons were lost and replaced, and the string was angled at times. (Transcript 2, June 25, 2013-7:00 p.m. [Tr. 2], pp. 19-21)
- 7. Pursuant to C.G.S. § 16-50*l* (b), public notice of the application was published in the <u>Housatonic Times</u> on February 22 and March 1, 2013. (AT&T's Letter of March 20, 2013)
- 8. Pursuant to C.G.S. § 16-50*l*(b), notice of the application was provided to all abutting property owners by certified mail. All return receipts were received. (AT&T 2, response 1)
- 9. Pursuant to C.G.S. § 16-50*l* (b), AT&T provided notice to all federal, state and local officials and agencies listed therein. (AT&T 1, p. 4)

State Agency Comment

10. Pursuant to C.G.S. § 16-50j (h), on April 5, 2013 and June 26, 2013, 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 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); and Department of Emergency Management and Public Protection (DESPP). (Record)

11. No agencies responded to the Council's solicitation. (Record)

Municipal Consultation

- 12. AT&T notified the Town of Bridgewater of the proposal in February 2011. (AT&T 1, p. 19)
- 13. During the consultation period, AT&T was considering another site in Bridgewater to serve the southern end of town. This site, the subject of Docket 412 (Wewaka Brook Road), had a different search ring. The Town became a party in that proceeding and requested that both sites be considered at the same time. (Council Administrative Notice Item 22; AT&T 1, pp. 2, 19)
- 14. The technical report for the Second Hill Road Site was submitted into the record for Docket 412 on March 31, 2011. (Council Administrative Notice 22)
- 15. Due to funding priorities, AT&T did not submit the subject application until 2013, after Docket 412 was approved by the Council. (AT&T 1, pp. 2, 19)
- 16. The Town did not request a meeting regarding this proposal. (Tr. 1, p. 44)
- 17. The First Selectman of the Town of Bridgewater, William Stuart, made a limited appearance statement into the record at the June 25, 2013 hearing stating that Second Hill Road is a Town-designated scenic road and the tower, if approved, should feature a stealth application so that it blends in with the surroundings. (Tr. 2, pp. 8-10, 15-16)

Public Need for Service

- 18. 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)
- 19. 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 throughout the State. (Council Administrative Notice Item No. 4; AT&T 1, p. 9)
- 20. The Telecommunications Act of 1996 prohibits local and state entities from discriminating among providers of functionally equivalent services. (Council Administrative Notice Item No. 4)
- 21. 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)

- 22. 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. Approximately 70 percent of 9-1-1 calls are made with a wireless device. (Council Administrative Notice Item No. 6; AT&T 1, p. 8)
- 23. Following the enactment of the 911 Act, the FCC mandated wireless carriers to provide enhanced 911 services (E911) to allow public safety dispatchers to determine a wireless caller's geographical location within several hundred feet. The proposed facility would become a component of AT&T's E911 network in this part of the state. (Council Administrative Notice Item No. 6; AT&T 1, p. 9)
- 24. 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 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)
- 25. 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

- 26. AT&T's proposed facility would provide 850 MHz (cellular), 1900 MHz (PCS), and 700 MHz (LTE) service. (AT&T 1, Tab 4)
- 27. AT&T designs its system for -82 dBm in-vehicle coverage and -74 dBm in-building coverage. (AT&T 2, Tab 1)
- 28. AT&T's existing signal strength in the proposed service area ranges from less than -100 dBm to -82 dBm. (AT&T 2, response 5)
- 29. Existing AT&T sites, including the Council approved Docket 412 (Wewaka Brook Road, Bridgewater) and Docket 428 (Southbury Road, Roxbury) sites, cannot reliably provide coverage to the proposed service area. The proposed site would hand off to these sites as well as to an AT&T site at 4 Elkington Farm Road in New Milford. (AT&T 1, Tab 1)
- 30. AT&T has identified an in-building coverage gap of 22 square miles and an in-vehicle coverage gap of 14.8 square miles in north Bridgewater and surrounding areas, including the Route 67, Route 133, Christian Road, and Clapboard Road areas. The coverage gap data includes coverage from the approved Docket 412 site as well as a Council-approved site in Roxbury that was the subject of Docket 428 (refer to figure 3). (AT&T 1, Tab 1; AT&T 2, response 6)

- 31. The proposed site, with AT&T antennas installed at a height of 157 feet above ground level (agl), would provide 10.7 square miles of in-building and 8.3 square miles of in-vehicle coverage to the north part of Bridgewater, including the Route 67 area, Christian Road, Clapboard Road and the town center area along Route 133 that contains the town hall and The Burnham School (refer to Figure 4). (AT&T 1, Tab 1; Council Administrative Notice 53)
- 32. Coverage from the proposed site and surrounding AT&T sites would not be able to serve the southwest area of Bridgewater or areas in western Roxbury. AT&T has no current plan to serve these areas. (Tr. 1, p. 50)
- Reducing the tower height by 10 feet would reduce reliable coverage and hand-off capability along Route 67 near the Roxbury town line and along Route 133 south of Route 67. The terrain of the surrounding area is hilly, presenting coverage issues if the tower was lower. (AT&T 1, Tab 3; Tr. 1, pp. 45, 48)

Site Selection

- 34. AT&T began its search for a site to serve its coverage needs in early 2009. The ring was centered near the intersection of Route 67 and Route 133 in Bridgewater (refer to Figure 1). (AT&T 1, p. 1)
- 35. AT&T identified an existing structure operated by the DOT at 96-110 Second Hill Road that consists of a 110-foot steel pole. AT&T examined the structure and determined it would need replacement to accommodate its antennas. AT&T did not pursue this location after determining the DOT parcel was too small (0.13-acre) with no screening to adjacent properties or along Second Hill Road. (AT&T 1, Tab 2; Council Administrative Notice 22)
- 36. In addition to the DOT tower, AT&T investigated 29 locations in the north Bridgewater area prior to selecting the proposed site. The locations were rejected due to lack of landowner interest or the inability to meet coverage objectives. (AT&T 1, Tab 2)
- 37. Although the proposed site is at the north edge of the search ring, the site meets coverage objectives because the topography is high with broad valleys, allowing coverage to extend onto adjacent hillsides as well as down into the intervening valleys. (AT&T 1, Tab 1; AT&T 2, response 1; Tr. 1, p. 49)
- 38. Providing coverage via a distributed antenna system, repeater, or microcell is not practical given the limited service area for each of these systems. These systems are employed for limited, targeted areas such as within buildings, highway underpasses or in urban environments. (AT&T 1, p. 11)

Facility Description

- 39. The proposed facility would be located on a 4.5-acre residentially developed parcel owned by Robert Reibe at 111 Second Hill Road (refer to Figure 2). The property is located on the east side of Second Hill Road. (AT&T 1, p. 12, Tab 2)
- 40. The site property is along the crest of Second Hill, a landform that extends in a north-south direction and features steep slopes to the south, east, and west. (AT&T 1, Tab 5)
- 41. The property is zoned R-3, residential. (AT&T 1, p. 13)

- 42. The proposed tower site is located in the wooded, northeast corner of the parcel, adjacent to a Connecticut Light and Power Company easement that traverses the north portion of the property in an east-west direction (refer to Figure 5). No CL&P infrastructure exists within the easement. (AT&T 1, Tab 3)
- 43. There are six residences within 1,000 feet of the tower site. (AT&T 1, Tab 3)
- 44. The nearest residence to the tower site is approximately 475 feet to the west (Schumas Property). (AT&T 1, Tab 3)
- 45. The nearest property lines to the proposed tower site are approximately 110 feet to the east (Hargrove Property) and approximately 110 feet to the north (Foyer Property). Both of these properties are under development restrictions. The tower setback radius would extend onto both of these properties by 50 feet. (AT&T 1, Tab 3; AT&T late file of July 10, 2013)
- 46. There are no schools or licensed day-care facilities within 250 feet of the proposed facility. (AT&T 1, Tab 3)
- 47. A new 350-foot long access drive extending from Second Hill Road would be constructed to the tower site. It would extend through a wooded area along the edge of the CL&P right-of-way. (AT&T 1, p. 13, Tab 3; Tr. 1, p. 10)
- 48. The access drive would be finished with gravel and extend through a lightly wooded area of the property. (AT&T 1, Tab 3)
- 49. AT&T would construct a 160-foot monopole at the site. The proposed tower would be capable of supporting four levels of platform-mounted antennas. (AT&T 1, Tab 3)
- 50. AT&T would install 12 panel antennas on a low-profile antenna platform at a centerline height of 157 feet agl. (AT&T 1, Tab 3)
- 51. No other carriers have indicated interest in the proposed site. (Tr. 1, p. 40; Record)
- 52. The tower would be located within a 45-foot by 90-foot equipment compound. (AT&T 1, Tab 3)
- 53. The compound would be enclosed by an eight-foot tall chain link fence. (AT&T 1, Tab 3)
- 54. Utility service to the compound would be installed underground along the access road from an existing utility pole on Second Hill Road. (AT&T 1, tab 3)
- 55. An emergency diesel generator would be located on a concrete pad within the compound. The generator would be capable of supplying approximately 48-hours of run time before refueling. (AT&T 1, Tab 3; AT&T 2, response 9)
- 56. The estimated construction cost of the facility is:

Radio equipment and antennas	\$250,000.
Site development/installation	138,000.
Tower and foundation	90,000.
Utilities	30,000.

Total estimated cost \$508,000 (AT&T 1, p. 19)

Environmental Concerns

- 57. Representatives from the State Historic Preservation Office (SHPO) visited the farm at 95 Second Hill Road, abutting the site to the south, to view a balloon fly conducted by AT&T on May 3, 2012. The farm is under consideration for the National Register of Historic Places. SHPO concluded development of the proposed site would have no adverse effect on historic, architectural or archeological resources listed in or eligible for the National Register of Historic Places. (AT&T 1, Tab 6; Tr. 1, p. 24)
- The proposed site is in proximity to known locations of the wood turtle, a State species of special concern and the American Kestrel, a State threatened species. (AT&T 2, response 4)
- 59. The wood turtle winters in riparian areas and uses adjacent fields, powerline cuts, and woodland as summer habitat. AT&T would develop a turtle protection program prior to construction that would be submitted to DEEP and the Council for comment. Similar protection plans have been developed for other projects within the State. (AT&T 2, response 4)
- 60. The American Kestrel would most likely be found utilizing the open field habitat to the north and south of the project site. The kestrel nests in tree cavities at the edges of open field areas. AT&T would perform a kestrel nest survey for completion in summer 2013 and submit the results to DEEP for comment. AT&T would implement any DEEP recommendations. (AT&T 2, response 4; Tr. 1, p. 13)
- 61. The proposed access road and compound would be located in a wooded strip of land between field areas to the north and south. Approximately 70 trees and shrubs would be cleared to develop the site. The woodland area does offer edge habitat for certain bird species. (AT&T 1, Tab 3; Tr. 1, pp. 13-14)
- 62. The landowner is not willing to re-locate the proposed access drive immediately adjacent to the wooded strip because such re-location would be over his maintained lawn area. (Tr. 1, p. 11)
- 63. Runoff from the site would be controlled using two separate grass drainage swales on the south side of the access drive. The upper swale would discharge north of an existing garage on the property. The lower swale, below the existing garage, would discharge onto Second Hill Road. A new catch basin would be installed in the road adjacent to the swale outlet. The catch basin would be connected to an existing underground drainage system. (AT&T late file of July 11, 2013; Tr. 1, pp. 24-25)
- 64. A wetland area is located immediately north of the access road entrance. This wetland extends north along Second Hill Road. It is dominated by shrub species, many of which are invasive. Construction would not directly impact this area. (AT&T 1, Tab 3. Tab 4)
- 65. Erosion and sedimentation controls consistent with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, as amended, and other best management practices would be established and maintained during construction. (AT&T 1, Tab 4)
- 66. Aircraft hazard obstruction marking or lighting of the tower would not be required. (AT&T 1, p. 16)
- 67. The nearest Important Bird Area, a National Audubon Society designation that recognizes unique habitats that stand out from the surrounding landscape and typically support vulnerable or special concern species, is approximately 4.5 miles southwest of the proposed site in Roxbury. (Council Administrative Notice 52; AT&T 2, Tab 5)

- 68. The design of the proposed tower would comply with recommended guidelines of the United States Fish and Wildlife Service for minimizing the potential for telecommunications towers to impact bird species. The guidelines recommend that towers be less than 199 feet tall, avoid the use of aviation lighting, and avoid guy wires as tower supports. (Council Administrative Notice 13; AT&T 2, response 12)
- 69. The cumulative worst-case maximum power density from the radio frequency emissions from the operation of the proposed AT&T antennas is calculated to be 6.9% of the standard for the General Public/Uncontrolled Maximum Permissible Exposure, as adopted by the FCC, at the base of the proposed 160-foot tower. This calculation was based on methodology prescribed by the FCC Office of Engineering and Technology Bulletin No. 65E, Edition 97-01 (August 1997) that assumes all antennas would be pointed at the base of the tower and all channels would be operating simultaneously, which creates the highest possible power density levels. Under normal operation, the antennas would be oriented outward, directing radio frequency emissions away from the tower, thus resulting in significantly lower power density levels in areas around the tower base. (AT&T 1, Tab 4)

Visibility

- 70. The proposed tower would be visible year-round above the tree canopy from approximately 112 acres within a two-mile radius of the proposed site (refer to Figure 6). Most of this visibility is from fields on abutting property north and south of the site. The tree canopy in the study area is estimated to be 65 feet in height. (AT&T 1, Tab 5)
- 71. Second Hill Road is a Town-designated scenic road. Intermittent seasonal and year-round views of the tower would occur from this road for approximately a half-mile along the crest of Second Hill. Open views would mainly occur across open fields. (Tr. 1, pp. 21-23)
- 72. Other roads within 0.75 miles that would have year-round views of the tower include sections of Curtis Road, approximately 0.6 miles south of the site at its closest point, and a short section of Hatch Road, approximately 0.5 miles southwest of the site. (AT&T 1, Tab 5)
- 73. Approximately 19 residences within two miles of the site would have year-round views of the tower above the tree canopy. Ten of these residences are within 0.75 miles of the site. An additional 12 residences within 0.75 miles would have seasonal views of the tower. (AT&T 1, Tab 5)
- 74. The abutting residential property to the west, 120 Second Hill Road, would be able to view the upper portions of the tower. (Tr. 1, p. 15)
- 75. The abutting residential property to the southwest, 100 Second Hill Road, would have seasonal views of the tower. (Tr. 1, p. 20)
- 76. The abutting farm property to the south, 95 Second Hill Road, would have unobstructed views of most of the tower from the rear yard of the farm residence, where there is little intervening vegetation. AT&T proposes to plant several spruce trees along the south edge of the compound to provide screening from this area. (AT&T 1, Tab 3)
- 77. Several species of mature trees along the north side of the site property provide screening to 120 Second Hill Road and Second Hill Road itself. Several of these trees, mostly the white spruce and

catalpa species are in poor health. AT&T, with consent from the landowner, would plant spruce trees to enhance screening. (Tr. 1, pp. 10, 15-17; AT&T Late file of July 23, 2013)

78. Visibility of the proposed tower from specific locations within a two-mile radius of the site is as follows:

Specific Location	Photo location on Map*	Approx. Portion of Tower Visible	Approx. Distance (miles)/Direction from Tower
Adjacent to # Sarah Sanford Road	1	Barely discernible through trees	1.93/south
Main Street north of Sarah Sanford Rd.	2	Barely discernible through trees	1.9/south
Curtis Road, north of #94	3	100 feet above trees	1.1/southwest
Curtis Road south of Stackhouse Lane	4	80 feet above trees	1.0/southwest
Curtis Road, north of #204	5	90 feet above trees	0.63/southwest
Hatch Road by #35-39 ^	6	60 feet above trees	0.55/southwest
Cedar Hill Road	7	60 feet through trees	0.44/west
Second Hill Road, adjacent to #96 ^	8	80 feet above trees	0.13/south
Second Hill Road across field	9	80 feet above trees	0.11/north
Second Hill Road across field	10	90 feet above trees	0.27/north
Standish Drive, Adjacent to #3	11	60 feet above trees	0.95/north
Jefferson Drive, adjacent to #12 ^	12	90 feet above trees	0.92/north
Revere Road, adjacent to #20	13	60 feet through trees	0.75/northeast
Bluestone Road	14	60 feet above trees	1.4/northeast
Beaver Pond Lane	15	100 feet above trees	1.5/northeast

^{*} Map is attached as Figure 6.

- 79. Lover's Leap State Park is located approximately 1.8 miles southwest of the site. The proposed tower would not be visible from this location. (AT&T 1, Tab 5)
- 80. A preserve owned by the Sunny Valley Foundation is located approximately 1.7 miles southwest of the site. Within the preserve, a hiking trail maintained by the Connecticut Forest and Parks Association accesses a vista with views oriented to the west, away from the tower. (Council Administrative Notice 50)
- 81. Development rights to the abutting agricultural land north and south of the site property have been obtained by the State. Although the land is protected from development, these properties are not accessible to the public. (AT&T late file of July 11, 2013)
- 82. Installing a tower with a flush-mount design to reduce visibility would require the tower to be 30 feet taller to accommodate AT&T's coverage needs and accommodate all of their antennas, since only three antennas could be mounted at each tower level. A tower with a flush-mount design could impede co-location opportunities for other carriers. (AT&T 2, response 8)

[^] Photosimulation of tower from this location attached.

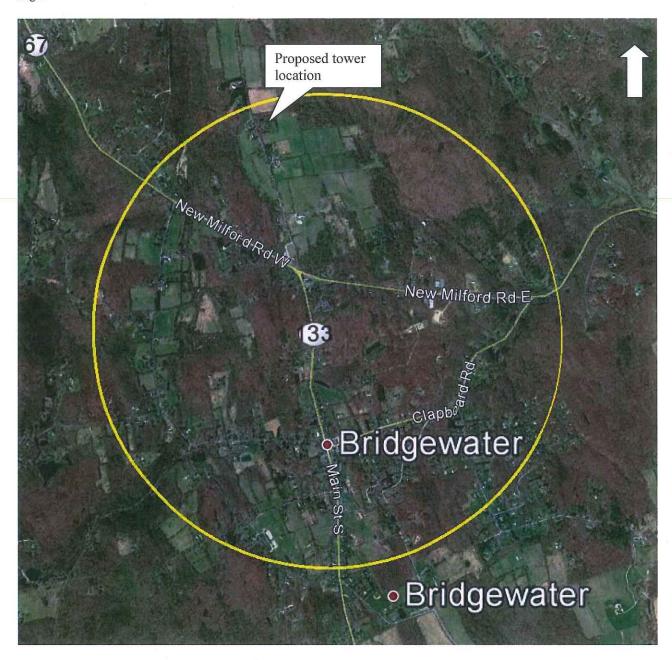


Figure 1: Site Location at 111 Second Hill Road, Bridgewater. Yellow circle is approximate search ring area. (AT&T 2, Tab 1)



Figure 2: Proposed tower location at 111 Second Hill Road. Property boundaries shown in red. Approximate location of tower access drive shown in purple. (AT&T 1, Tab 3, AT&T 2, Tab 1)

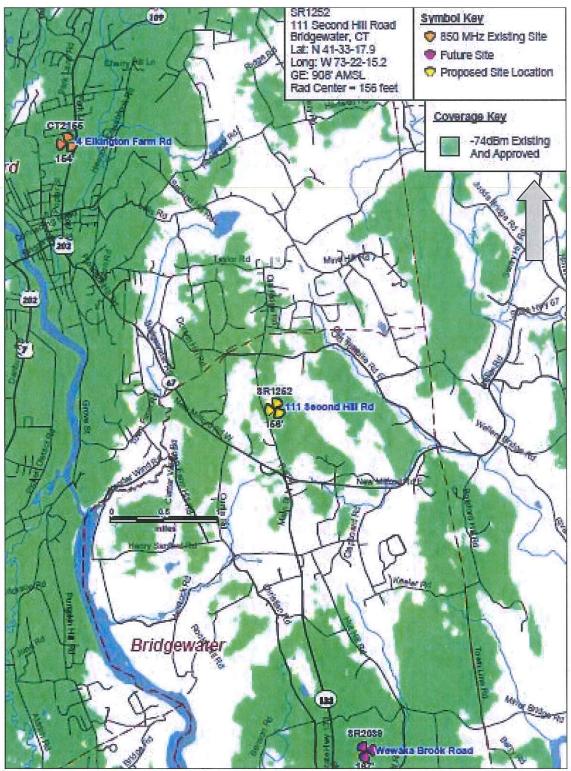


Figure 3: Existing AT&T coverage including the approved AT&T site at Wewaka Brook Road. (AT&T 2, Tab 4)

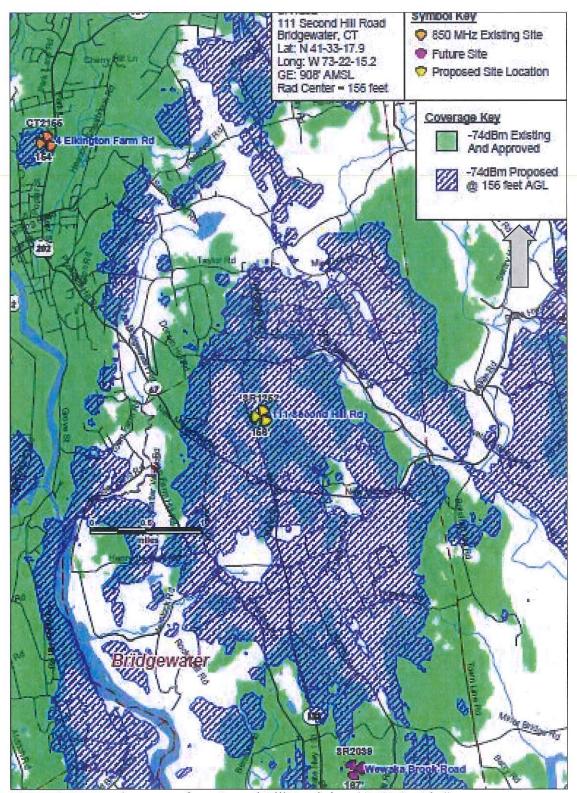


Figure 4: Proposed coverage from Second Hill Road site. (AT&T2, Tab 4)

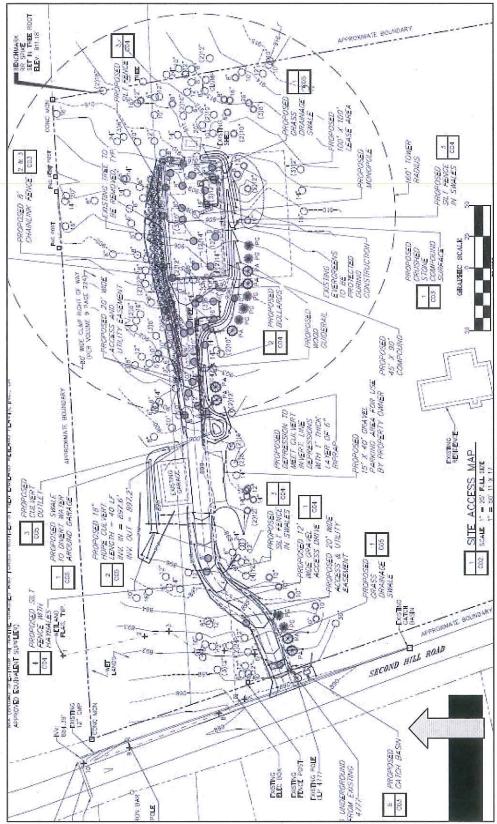


Figure 5: Proposed site plan. (AT&T Late file of July 23, 2013)

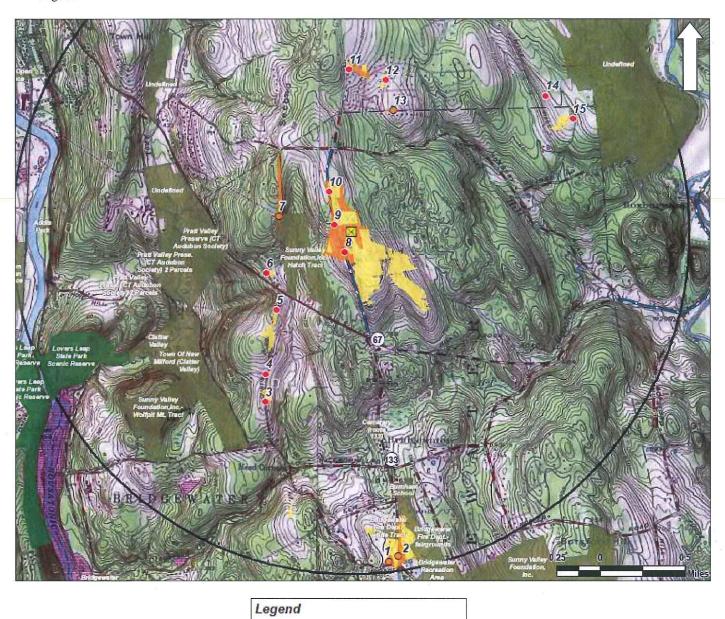


Figure 6: Projected visiblity of the 160-foot tower. (AT&T 1, Tab 5)

Proposed Facility

Photos - March 30, 2011 and May 3, 2012

Balloon Visible Through Trees

Balloon Visible Above Trees



Photo simulation of proposed 160-foot tower. Visibility map location 8. Adjacent to #96 Second Hill Road (DOT tower location), 0.13 miles from site. (AT&T 1, Tab 5)



Photo simulation of proposed 160-foot tower. Visibility map location 6. Adjacent to #35-39 Hatch Road, 0.5 miles from site. (AT&T 1, Tab 5)



Photo simulation of proposed 160-foot tower. Visibility map location 12. Adjacent to #11 Jefferson Drive, 0.92 miles from site. (AT&T 1, Tab 5)

DOCKET NO. 437 – New Cingular Wireless PCS, LLC	}	Connecticut
application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a	}	Siting
telecommunications facility located at 111 Second Hill Road,		
Bridgewater, Connecticut.	}	Council
		September 5, 2013

Opinion

On March 5, 2013, New Cingular Wireless PCS LLC (AT&T) applied to the Connecticut Siting Council (Council) for a Certificate of Environmental Compatibility and Public Need (Certificate) for the construction, maintenance and operation of a wireless telecommunications facility located at 111 Second Hill Road in Bridgewater, Connecticut. AT&T's objective for this facility would be to provide service along Route 67, Route 133 and adjacent areas in northern Bridgewater and western Roxbury.

AT&T proposes to construct a 160-foot monopole on a 4.5-acre residentially developed parcel on the east side of Second Hill Road. The tower site would be located in the wooded, northeast corner of the parcel, adjacent to a Connecticut Light and Power Company easement that traverses the northern portion of the property. The nearest property lines to the proposed tower site are approximately 110 feet east and north. The nearest off-parcel residence is 475 feet west of the tower. There are no schools or licensed day-care facilities within 250 feet of the tower.

AT&T proposes to install 12 panel antennas on a low-profile antenna platform at the 157-foot level of the tower. Additional space for tower sharing would be available for three other telecommunication providers. A fenced compound would be established at the base of the tower. An emergency diesel generator would be located within the compound, capable of supplying a 48-hour run time before refueling is necessary.

AT&T proposes to operate 850 MHz (cellular), 1900 MHz (PCS), and 700 MHz (LTE) service equipment at the site. AT&T does not have reliable coverage to the proposed service area, defined by AT&T as less than -82 dBm for roadways and -74 dBm for residential areas. AT&T's existing signal strength in the proposed service area ranges from less than -100 dBm to -82 dBm. The Council notes an AT&T facility now under construction in the southern part of Bridgewater on Wewaka Hill Road would not provide coverage to the northern part of Bridgewater, the objective of the proposed facility.

The proposed site would provide AT&T with 10.7 square miles of in-building and 8.3 square miles of invehicle coverage to the north part of Bridgewater, including the Route 67 area, Christian Road, Clapboard Road and the town center area along Route 133 that contains the town hall and The Burnham School.

Based on an examination of AT&T's coverage objectives and previous site search encompassing various properties in Bridgewater, the Council finds a need for the 160-foot tower at the site. The Council notes the existing 110-foot Department of Transportation (DOT) communications pole on Second Hill Road is not a suitable location for a new facility, given that the existing pole would need replacement and the open nature of the small DOT parcel would offer no screening to abutting residences.

Access to the tower compound would be from a new 350-foot long access drive extending from Second Hill Road along the edge of the CL&P right-of-way to the tower site. Utility service to the tower compound would be installed underground along the access road from an existing utility pole on Second Hill Road. Development of the access drive and tower compound would require the removal of approximately 70 trees and shrubs located within a wooded strip of land along the CL&P easement.

Docket No. 437 Opinion Page 2

Development of the site would not directly affect any wetlands. A drainage system has been designed to convey storm water flows into a new catch basin on Second Hill Road.

The site is in the area of known records of the American Kestrel, a State threatened species. Upon recommendation by the Connecticut Department of Energy and Environmental Protection (DEEP), AT&T planned to perform a survey for kestrel nests in and adjacent to the project site and submit the results to DEEP for comment. AT&T would implement any recommendations from DEEP to protect this species, and detail such implementation in its D&M Plan.

The site is also in an area with known records of the wood turtle, a State species of special concern. To reduce potential impacts to wood turtles that may be in the project area, AT&T would develop a turtle protection program prior to construction that would be submitted to DEEP for comment, and included in its D&M Plan. Similar protection plans have been developed for other projects within the State.

Year-round views of the tower within a half-mile of the site would mostly occur from open fields north and south of the tower site. Although these fields are part the State's farmland preservation program and are considered open space, public access is not permitted. Year-round views of the tower from residential properties within the half-mile radius would be mitigated by planting spruce trees along the south edge of the compound and at other points on the landowner's property appropriate to provide screening. At an historic farm on Second Hill Road that abuts the site to the south, representatives from SHPO observed a balloon-fly simulating the tower height and determined the tower would have no effect on this resource. Otherwise, given the hilly terrain of the area, the tower would be distantly visible year-round from a few residential areas and road sections more than a half-mile to two miles away.

Mixed seasonal and year-round views of the tower would occur from Second Hill Road, a town-designated scenic road, for approximately a half-mile as it runs along the crest of Second Hill. These views would be intermittent, however. Additionally, AT&T has developed a landscape plan that includes evergreen trees and shrub species along the proposed access drive as well as within the compound area to provide visual screening of the equipment compound from Second Hill Road north and south of the tower site.

As for stealth applications at this site, a flush-mount design in which antennas are mounted close to the tower to minimize the tower profile could limit the type and quantity of antennas a carrier could install. This limitation, in turn, could cause a tower to be extended to meet any future collocators' coverage and service needs. Although other stealth designs were not discussed in detail during the proceeding, the Council does not find this particular location suitable for a tree tower or faux silo, since the overall dimensions of such a structure would make it appear bulky and out of place relative to its surroundings.

According to a methodology prescribed by the FCC Office of Engineering and Technology Bulletin No. 65E, Edition 97-01 (August 1997), the combined radio frequency power density levels of AT&T's antennas proposed to be installed on the tower have been calculated to amount to 6.9% of the FCC's General Public/Uncontrolled 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. The Council will require that the power densities be recalculated in the event other carriers add antennas to the tower, including the Town's emergency communication antennas. Also, if federal or state standards change, the Council will require that the tower be brought into compliance with such standards. 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.

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Based on the record in this proceeding, the Council finds that the effects associated with the construction, operation, and maintenance of the telecommunications facility at the proposed site, 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, operation, and maintenance of a 160-foot monopole telecommunications facility at the proposed site.

DOCKET NO. 437 — 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 111 Second Hill Road, Bridgewater, Connecticut.

September 5, 2013

Decision and Order

Pursuant to Connecticut General Statutes §16-50p and 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 New Cingular Wireless PCS, LLC, hereinafter referred to as the Certificate Holder, for a telecommunications facility at 111 Second Hill Road, Bridgewater, 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 the Certificate Holder and other entities, both public and private, but such tower shall not exceed a height of 160 feet above ground level. The height at the top of the Certificate Holder's antennas shall not exceed 160 feet above ground level.
- 2. 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 Bridgewater 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;
 - 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; and
 - c) protective measures for the wood turtle and American Kestrel.
- 3. 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.

- 4. 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.
- 5. 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.
- 6. 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.
- 7. Any request for extension of the time period referred to in Condition 6 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 Bridgewater. Any proposed modifications to this Decision and Order shall likewise be so served.
- 8. 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.
- 9. 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.
- 10. 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.
- 11. 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.
- 12. 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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- 13. 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.
- 14. 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.
- 15. This Certificate may be surrendered by the Certificate Holder upon written notification and approval by the Council.

We hereby direct that a copy of the Findings of Fact, Opinion, and Decision and Order be served on each person listed in the Service List, dated March 6, 2013, and notice of issuance published in the News Times.

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.

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. 437** – 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 111 Second Hill Road, Bridgewater, Connecticut, and voted as follows to approve the proposed facility located at 111 Second Hill Road, Bridgewater, Connecticut:

Council Members	Vote Cast
Robert Stein, Chairman	Abstain
James J. Murphy, Jr., Vice Chairman	Yes
	Absent
Chairman Arthur House Designee: Larry Levesque	
Commissioner Daniel Bsty	Yes
Designee: Robert Hannon	
Philip T. Ashton	Yes
Daniel P. Lynch, Jr.	Yes
Bawban Currier Bell Dr. Barbara Currier Bell	Yes
Edward S. Wilensky	Yes

Dated at New Britain, Connecticut, September 5, 2013.