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STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051
Phone: (860) 827-2935 Fax: (860) 827-2950
E-Mail: siting.council@ct.gov
www.ct.gov/csc

September 22, 2015

Julie D. Kohler, Esq. Cohen and Wolf, P.C. 1115 Broad Street Bridgeport, CT 06604

RE:

DOCKET NO. 458 – Florida Tower Partners LLC d/b/a North Atlantic Towers Application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation, of a telecommunications facility at one of two locations at Bethel Tax Assessor's Map 65, Block 57, Lot 122, 62-64 Codfish Hill Road, Bethel, Connecticut.

Dear Attorney Kohler:

By its Decision and Order dated September 17, 2015, the Connecticut Siting Council (Council) granted a Certificate of Environmental Compatibility and Public Need (Certificate) to Florida Tower Partners LLC d/b/a North Atlantic Towers for the construction, maintenance, and operation, of a telecommunications facility located at proposed Site 2 at 62-64 Codfish Hill Road, Bethel, Connecticut.

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

Very truly yours,

Robert Stein Chairman

RS/RDM/cm

Enclosures (4)

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



STATE OF CONNECTICUT)	
ss. New Britain, Connecticut	:	September 22, 2015
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 A. 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. 458 has been forwarded by Certified First Class Return Receipt Requested mail, on September 22, 2015, to all parties and intervenors of record as listed on the attached service list, dated June 29, 2015.

ATTEST:

Carriann Mulcahy Secretary II

Connecticut Siting Council

Date: June 29, 2015

Docket No. 458 Page 1 of 1

LIST OF PARTIES AND INTERVENORS <u>SERVICE LIST</u>

Status Granted	Document Service	Status Holder (name, address & phone number)	Representative (name, address & phone number)
Applicant	⊠ E-Mail	Florida Tower Partners LLC d/b/a North Atlantic Towers	Julie D. Kohler, Esq. Cohen and Wolf, P.C. 1115 Broad Street Bridgeport, CT 06604 203-368-0211 jkohler@cohenandwolf.com
Intervenor (Approved on April 30, 2015)	⊠ E-Mail	Codfish Hill Environmental Trust	Keith R. Ainsworth, Esq. Evans Feldman & Ainsworth, L.L.C. 261 Bradley Street P.O. Box 1694 New Haven, CT 06507-1694 (230) 772-4900 (203) 782-1356 fax krainsworth@snet.net
Intervenor (Approved May 28, 2015)	⊠ E-Mail	Cellco Partnership d/b/a Verizon Wireless	Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103-3597 (860) 275-8200 kbaldwin@rc.com



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E-Mail: siting.council@ct.gov
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September 22, 2015

TO:

Classified/Legal Supervisor

458150918

The Danbury News Times

333 Main Street Danbury, CT 06810

FROM:

Carriann Mulcahy, Secretary II

RE:

DOCKET NO. 458 – Florida Tower Partners LLC d/b/a North Atlantic Towers Application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation, of a telecommunications facility at one of two locations at Bethel Tax Assessor's Map 65, Block 57, Lot 122, 62-64

Codfish Hill Road, Bethel, Connecticut.

Please publish the attached notice as soon as possible, but not on Saturday, Sunday, or a holiday.

Please send an affidavit of publication and invoice to my attention.

Thank you.

CM





STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

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E-Mail: siting.council@ct.gov
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NOTICE

Pursuant to General Statutes § 16-50p (a), the Connecticut Siting Council (Council) announces that, on September 17, 2015, the Council issued Findings of Fact, an Opinion, and a Decision and Order approving an application from Florida Tower Partners LLC d/b/a North Atlantic Towers for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation, of a telecommunications facility located at proposed Site 2 at 62-64 Codfish Hill Road, Bethel, Connecticut. This application record is available for public inspection in the Council's office, Ten Franklin Square, New Britain, Connecticut.



DOCKET NO. 458 – Florida Tower Partners LLC d/b/a North

Atlantic Towers Application for a Certificate of Environmental
Compatibility and Public Need for the construction, maintenance,
and operation, of a telecommunications facility at one of two
locations at Bethel Tax Assessor's Map 65, Block 57, Lot 122, 6264 Codfish Hill Road, Bethel, Connecticut.

Connecticut

September 17, 2015

Findings of Fact

Introduction

- 1. Florida Tower Partners LLC d/b/a North Atlantic Towers (NAT) in accordance with provisions of Connecticut General Statutes (C.G.S.) § 16-50g, et seq, applied to the Connecticut Siting Council (Council) on March 19, 2015 for a Certificate of Environmental Compatibility and Public Need (Certificate) for the construction, maintenance, and operation of a wireless telecommunications facility at one of two locations at 62-64 Codfish Hill Road in Bethel, Connecticut. (NAT 1, pp. 1-2)
- 2. NAT proposes to construct a 120-foot monopole at Site 1 or a 150-foot monopole at Site 2 (refer to Figure 1). (NAT 1, pp. 1-2)
- 3. NAT is a Delaware limited liability company with an administrative office located at 1001 3rd Avenue West, Bradenton, Florida. (NAT 1, p. 5)
- 4. The party in this proceeding is the applicant. The intervenors are the Codfish Hill Environmental Trust (CHET) and Cellco Partnership d/b/a Verizon Wireless (Cellco). (Transcript 1, June 2, 2015, 3:00 p.m. [Tr. 1], p. 5)
- 5. New Cingular Wireless PCS, LLC (AT&T) was originally an intervenor to the proceeding, seeking to locate on the proposed facility. AT&T participated in the public hearing held on June 2, 2015. AT&T subsequently withdrew its intervention without prejudice on June 26, 2015 for various business reasons. (Tr. 1, p. 5; AT&T 1; AT&T correspondence dated June 26, 2015)
- 6. The purpose of the proposed facility is to provide wireless services for Cellco in the eastern section of Bethel and western section of Newtown. (Cellco 4, response 5)
- 7. Pursuant to C.G.S § 16-50 (b), NAT published public notice of its intent to submit this application on March 4 and March 5, 2015 in *The News-Times*. (NAT 1, Attachment C)
- 8. Pursuant to C.G.S § 16-50/(b), NAT sent notices of its intent to file an application with the Council to each person appearing of record as owner of property abutting the property on which the sites are located. Proof of service of notice was not received for six abutters. NAT resent notice to these abutters by first class mail. (NAT 1, p. 7; Attachment D; NAT 3, response 1)
- 9. On March 19, 2015, NAT provided notice to all federal, state and local officials and agencies listed in C.G.S. § 16-50/(b). (NAT 1, Attachment B)
- 10. Upon receipt of the application, the Council sent a letter to the Town of Bethel (Town) on March 20, 2015 as notification that the application was received and is being processed in accordance with C.G.S. §16-50gg. (Record)
- 11. During a regular Council meeting on April 16, 2015, the application was deemed complete pursuant to Connecticut Regulations of State Agencies (R.C.S.A.) § 16-50/-1a and the public hearing schedule was approved by the Council. (Record)

- 12. Pursuant to C.G.S. §16-50m, on April 21, 2015, the Council published legal notice of the date and time of the public hearing in *The News-Times*. (Record)
- 13. Pursuant to C.G.S. §16-50m, on April 17, 2105, the Council sent a letter to the Town to provide notification of the scheduled public hearing and to invite the Town to participate in the proceeding. (Record)
- 14. In compliance with the R.C.S.A. §16-50j-21, on May 15, 2015, NAT installed a four-foot by six-foot sign on the property fronting Codfish Hill Road. The sign presented information regarding the project and the Council's public hearing. (NAT 2)
- 15. The Council and its staff conducted an inspection of the two proposed sites on June 2, 2015, beginning at 2:00 p.m. On the day of the field inspection, the applicant flew a four-foot diameter balloon at each of the two proposed sites from approximately 7:45 a.m. to approximately 6:00 p.m. The balloons were tethered to line so they would fly at the original heights proposed in the application; 150 feet above ground level (agl) at Site 1 and 170 feet agl at Site 2. Weather conditions were favorable for the balloon fly until early afternoon, when winds began to increase and light rain began to fall. (Council Hearing Procedure Memo dated April 28, 2015; Tr. 1, pp. 14-16, 84-85)
- 16. Pursuant to C.G.S. § 16-50m, the Council, after giving due notice thereof, held a public hearing on June 2, 2015, beginning with the evidentiary portion of the hearing at 3:05 p.m. and continuing with the public comment session at 7:05 p.m. at the Bethel Town Hall, 1 School Street, Bethel, Connecticut. (Council's Hearing Notice dated April 17, 2015; Tr. 1 p. 2; Transcript 2 June 2, 2015, 7:05 p.m. [Tr. 2], p. 2)
- 17. The Council continued the evidentiary hearing on July 14, 2015, beginning at 11:12 a.m. at the Council's offices at 10 Franklin Square, New Britain, Connecticut. (Council's Continued Hearing Memo dated June 3, 2015; Transcript 3 July 14, 2015, 11:00 a.m. [Tr. 3], p. 1)

State Agency Comment

- 18. Pursuant to C.G.S. § 16-50j (g), on April 17, 2015 and July 15, 2015, 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; Council on Environmental Quality; Public Utilities Regulatory Authority; Office of Policy and Management; Department of Economic and Community Development; Department of Agriculture; Department of Transportation (DOT); Connecticut Airport Authority; State Historic Preservation Office; and Department of Emergency Services and Public Protection (DESPP). (Record)
- 19. On April 21, 2015, the DOT responded with a written "no comment" letter. The DPH responded on April 29, 2015 stating that the site does not appear to be located within a public water supply source water area. (DOT correspondence dated April 21, 2015; DPH comments received April 29, 2015)
- 20. No other state agencies submitted comments to the Council regarding the proposal. (Record)

Municipal Consultation

21. Pursuant to C.G.S. § 16-50/f), on June 28, 2013, NAT commenced the 90-day pre-application municipal consultation process by submitting a technical report to the Bethel First Selectman, Matt Knickerbocker. The technical report contained information regarding a single proposed site on the property at Site 1. (NAT 1, p. 34)

- 22. On July 25, 2013, NAT met with First Selectman Knickerbocker, Land Use Director Steven Palmer, and Assistant Zoning Director/Inland Wetlands Agent Beth Cavagna to discuss the project. At the meeting, NAT agreed to redesign the proposed access drive to avoid a wetland. (NAT 1, p. 34)
- 23. NAT attended a public information meeting that was held in Bethel on December 5, 2013. (NAT 1, p. 34)
- 24. On December 16, 2013, the Town sent a letter to NAT requesting that the proposed facility be relocated to a more central location of the property so that the proposed facility would not disproportionately affect residential properties abutting the site. The proposed site was located in the eastern portion of the property near Twin Maple Drive. The Town also requested that NAT examine other properties for telecommunication use. (NAT 1, p. 34; Tr. 3, pp. 58-59)
- 25. On January 22, 2015, NAT met with Mr. Palmer and Ms. Cavagna to update the Town regarding the proposed filing of the application to the Council. At this time, NAT indicated two sites are proposed with Site 1 being the original proposed location and Site 2 being an alternate location more centrally located on the property. (NAT 1, pp. 34-35)
- 26. On April 20, 2015, First Selectman Knickerbocker provided written comment to the Council, requesting that the Council deny the project and that NAT seek alternative locations for a facility. (Town of Bethel letter dated April 20, 2015)

Public Need for Service

- 27. 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)
- 28. 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. Cellco is licensed by the Federal Communications Commission (FCC) to provide personal wireless communication service to Connecticut wireless markets, including the proposed service area. (Council Administrative Notice Item No. 4; Cellco 2, response 1)
- 29. Section 253 of the Telecommunications Act of 1996 prohibits any state or local statute or regulation, or other state or local legal requirement from prohibiting or having the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service. (Council Administrative Notice Item No. 4)
- 30. Section 704 of the Telecommunications Act of 1996 prohibits local and state entities from discriminating among providers of functionally equivalent services and from prohibiting or having the effect of prohibiting the provision of personal wireless services. This section also requires state or local governments to act on applications within a reasonable period of time and to make any denial of an application in writing supported by substantial evidence in a written record. (Council Administrative Notice Item No. 4)

- 31. Section 704 of the Telecommunications Act of 1996 also prohibits any state or local entity from regulating telecommunications towers on the basis of the environmental effects of radio frequency emissions, which include effects on human health and wildlife, to the extent that such towers and equipment comply with FCC's regulations concerning such emissions. (Council Administrative Notice Item No. 4)
- 32. In February 2009, as part of the American Recovery and Reinvestment Act, Congress directed the FCC to develop a National Broadband Plan to ensure every American has "access to broadband capability." Congress also required that this plan include a detailed strategy for achieving affordability and maximizing use of broadband to advance "consumer welfare, civic participation, public safety and homeland security, community development, health care delivery, energy independence and efficiency, education, employee training, private sector investment, entrepreneurial activity, job creation and economic growth, and other national purposes." (Council Administrative Notice Item No. 19)
- 33. Section 706 of the Telecommunications Act of 1996 requires each state commission with regulatory jurisdiction over telecommunications services to encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans, including elementary and secondary schools, by utilizing regulating methods that promote competition in the local telecommunications market and remove barriers to infrastructure investment. (Council Administrative Notice Item No. 4)
- 34. 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)
- 35. In February 2012, Congress adopted the Middle Class Tax Relief and Job Creation Act to advance wireless broadband service for both public safety and commercial users. The Act established the First Responder Network Authority to oversee the construction and operation of a nationwide public safety wireless broadband network. Section 6409 of the Act contributes to the twin goals of commercial and public safety wireless broadband deployment through several measures that promote rapid deployment of the network facilities needed for the provision of broadband wireless services. (Council Administrative Notice Item No. 8)
- 36. In June 2012, President Barack Obama issued an Executive Order to accelerate broadband infrastructure deployment declaring that broadband access is a crucial resource essential to the nation's global competitiveness, driving job creation, promoting innovation, expanding markets for American businesses and affording public safety agencies the opportunity for greater levels of effectiveness and interoperability. (Council Administrative Notice Item No. 12)
- 37. Pursuant to Section 6409(a) of the Middle Class Tax Relief and Job Creation Act of 2012, also referred to as the Spectrum Act, a state or local government may not deny and shall approve any request for collocation, removal or replacement of equipment on an existing wireless tower provided that this does not constitute a substantial change in the physical dimensions of the tower. The Federal Communications Commission defines a substantial change in the physical dimensions of a tower as follows:
 - a) An increase in the existing height of the tower by more than 10% or by the height of one additional antenna array with separation from the nearest existing antenna not to exceed twenty feet, whichever is greater. Changes in height should be measured from the dimensions of the tower, inclusive of originally approved appurtenances and any modifications that were approved prior to the passage of the Spectrum Act.

- b) Adding an appurtenance to the body of the tower that would protrude from the edge of the tower more than twenty feet, or more than the width of the tower structure at the level of the appurtenance, whichever is greater.
- c) Installation of more than the standard number of new equipment cabinets for the technology involved, but not to exceed four, or more than one new equipment shelter.
- d) A change that entails any excavation or deployment outside the current site.
- e) A change that would defeat the concealment elements of the tower.
- f) A change that does not comply with conditions associated with the siting approval of the construction or modification of the tower, provided however that this limitation does not apply to any modification that is non-compliant only in a manner that would exceed the thresholds identified in (a) (d).

(Council Administrative Notice Item No. 8; Council Administrative Notice Item No. 12)

38. According to state policy, 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 if the Council also 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. (C.G.S. §16-50aa)

Public Safety

- 39. The Wireless Communications and Public Safety Act of 1999 (911 Act) was enacted by Congress to promote and enhance public safety by making 9-1-1 the universal emergency assistance number, by furthering deployment of wireless 9-1-1 capabilities, and by encouraging construction and operation of seamless ubiquitous and reliable networks for wireless services. (Council Administrative Notice Item No. 6)
- 40. Following the enactment of the 911 Act, the FCC mandated wireless carriers to provide enhanced 911 services (E911) that allow public safety dispatchers to determine a wireless caller's geographical location within several hundred feet. (Council Administrative Notice Item No. 7)
- 41. Cellco would be able to support text-to-911 services nationwide in areas where municipal Public Safety Answering Points support text-to-911 technology. Text-to-911 will extend emergency services to those who are deaf, hard of hearing, have a speech disability, or are in situations where a voice call to 911 may be dangerous or impossible. However, even after a carrier upgrades its network, a user's ability to text to 911 is limited by the ability of the local 911 call center to accept a text message. The FCC does not have the authority to regulate 911 call centers; therefore, it cannot require them to accept text messages. (Council Administrative Notice No. 20; Cellco 2, response 7)
- 42. Pursuant to the Warning, Alert and Response Network Act of 2006, "Wireless Emergency Alerts" (WEA) is a public safety system that allows customers who own certain wireless phone models and other enabled mobile devices to receive geographically-targeted, text-like messages alerting them of imminent threats to safety in their area. WEA complements the existing Emergency Alert System that is implemented by the FCC and FEMA at the federal level through broadcasters and other media service providers, including wireless carriers. (Council Administrative Notice No. 5)
- 43. The tower would be constructed in accordance with the 2009 State Building Code. If the facility were approved by the Council, tower structural details would be submitted as part of the Development and Management Plan for the project. (NAT 1, Exhibit E & F)
- 44. The proposed equipment compound would be surrounded by an anti-climb eight-foot high chain-link fence. (NAT 1, p. 31)

- 45. Although site blasting is not anticipated to construct either site, any blasting that is required would be properly notified and conducted in accordance with appropriate safety requirements. (Tr. 1, pp. 51-52)
- 46. The proposed towers would not constitute an obstruction or hazard to air navigation and would not require any obstruction marking or lighting. (NAT 1, p. 31)

Existing and Proposed Wireless Services -Cellco

- 47. Four existing Cellco facilities are currently providing service to portions of the eastern Bethel western Newtown area. The locations and the Cellco identification name of these facilities are listed below:
 - a) 38 Spring Hill Road, Bethel (Bethel) Cellco is located at 95 feet on a 125-foot tower;
 - b) 8 Ferris Road, Newtown (Newtown West) Cellco is located at 98 feet on a 120-foot tower;
 - c) Sky Edge Drive, Bethel (Bethel North) Cellco is located at 167 feet on a powermount attached to a 150-foot electric transmission structure; and
 - d) <u>48 Newtown Road, Danbury (Germantown)</u> Cellco is located at 90 feet on a 110-foot tower. (Council Administrative Notice No. 24; Cellco 3, response 1)
- 48. Cellco's proposed installation, identified by Cellco as "Bethel East", would provide service to existing wireless service gaps as well as provide capacity relief to adjacent Cellco facilities. (Cellco 3, response 1; Tr. 4, pp. 295-297)
- 49. Prior to AT&T withdrawing from the proceeding, Cellco originally proposed to locate at the 140-foot level of the Site 1 facility and the 160-foot level of the Site 2 facility, 10 feet below AT&T's proposed antennas. (Cellco 2, response 5)
- 50. After AT&T withdrew from the proceeding, Cellco proposes to locate at the minimum height required to meet their service needs: 120 feet at Site 1 and 150 feet at Site 2. The antenna heights are different because there is a 30-foot difference in ground elevation between the two sites. The overall height of the antennas would be the same, 717 feet above mean sea level (amsl), resulting in little difference in Cello's projected service between the two sites. (Cellco 4, response 5; Tr. 3, pp. 67, 104-105)
- 51. Cellco would deploy 700 MHz (long-term evolution LTE) and 2100 MHz (advanced wireless service AWS) services at the "Bethel East" facility. Both the 700 MHz and 2100 MHz frequencies would provide LTE data and voice services. (Cellco 2, response 3)
- 52. Cellco would also install antennas capable of providing 850 MHz and 1900 MHz equipment to provide Code Division Multiple Access (CDMA) voice and data services. (Cellco 2, response 1, response 3; Tr. 3, pp. 99-100)
- 53. Cellco's LTE service design threshold is 120 dB Reverse Link Operational Path Loss (RLOPL) to establish a minimum reliable service footprint. Cellco's design threshold for its CDMA network is -85 dBm. (Cellco 2, response 4)
- 54. The 700 MHz frequency is the base of Cellco's LTE network, as it would provide service to a larger area than the 2100 MHz network. The 2100 MHz frequency is used for additional LTE capacity within the service footprint. (Tr. 3, pp. 98-99)
- 55. Cellco's minimum antenna heights are based on the 700 MHz frequency. (Tr. 3, p. 100)

56. The table below presents Cellco's existing service gaps along major roads in the site area.

	Existing Service gaps (miles)				
Frequency	Route 302	Route 58	Old Hawleyville Rd.	Plumtrees Rd.	
700 MHz	0.65	0.10	0.70	0.30	
850 MHz	1.10	0.30	0.85	0.40	
1900 MHz	1.50	0.55	1.20	0.50	
2100 MHZ	1.70	0.65	1.45	0.60	

Refer to Figures 2 & 4 for 700 & 2100 MHz maps. (Cellco 3, response 2)

- 57. Average daily traffic counts performed by the CT DOT in 2013 for roadways in Bethel within the proposed service area indicate 3,900 vehicles on the eastern end of Plumtrees Road, 7,800 vehicles on Old Hawleyville Road at Plumtrees Road, 7,800 vehicles on Route 302 at Wolfpits Road and 6,200 vehicles on the south end of Route 58. (CHET Administrative Notice Item No. 1)
- 58. The table below indicates the coverage Cellco anticipates from the proposed facility at its different licensed frequencies:

<u> </u>	Projected Service (square miles)		
Frequency	Site 1	Site 2	
700 MHz	15.22	15.87	
850 MHz	8.07	8.14	
1900 MHz	7.23	7.09	
2100 MHZ	6.73	6.97	

Refer to Figures 3 & 5 for 700 MHz and 2100 MHz maps. (Cellco 3, response 2; Cellco 4, response 6)

- 59. The "Bethel East" would provide service to the identified service gaps in the 700 MHz and 850 MHz frequencies on Route 302, Route 58, Old Hawleyville Road, Plumtrees Road and surrounding areas. Necessary coverage would also be provided for the 1900 MHz and 2100 MHz frequencies but some service gaps would still remain after deployment due to the limited range of these frequencies, particularly to the north of the site in the Plumtrees Road and Old Hawleyville Road areas. (Cellco 2, response 5; Cellco 3, response 2; Cellco 4, Attachment 1; Tr. 3, pp. 98-100)
- 60. The "Bethel East" facility would also provide capacity relief to Cellco's adjacent sites, particularly to the 700 MHz LTE alpha sector at the "Bethel" site, which has already reached capacity even though 2100 MHz equipment is also deployed. Service from this sector extends into the Codfish Hill area. (Cellco 2, response 5; Cellco 4, response 3; Tr. 3, pp. 100-101, 107)
- 61. If the "Bethel East" facility is deployed, Cellco would adjust the frequency service patterns on adjacent Cellco sites to provide necessary capacity relief and reduce potential service interference to adjacent sites. (Tr. 3, pp. 103-104)

Site Selection

- 62. NAT initiated a site search in the Bethel-Newtown area in June 2010. (NAT 1, p. 2)
- As a tower infrastructure provider, NAT performs its own radio-frequency modeling to identify potential service needs for telecommunication carriers. Although NAT's radio-frequency modeling is not specific to one carrier, it can identify areas where wireless service is deficient for carriers, allowing NAT to search for suitable properties for tower development. (NAT 1, Attachment H; Tr. 3, pp. 62-64)

- 64. Once AT&T determined NAT was already looking for suitable parcels for a facility in the Bethel-Newtown area, AT&T worked directly with NAT to find a suitable site. (NAT 1, p. 2; Tr. 1, pp. 35-36)
- 65. NAT and AT&T did not find any existing towers or other sufficiently tall structures within the search area suitable to use as a telecommunications facility. (NAT 1, Attachment H)
- 66. In addition to the proposed site, NAT and AT&T investigated 13 other properties for telecommunications use but determined they were not suitable, as follows:
 - a) 89 Codfish Hill Road landowner not interested;
 - b) <u>67 Codfish Hill Road</u> landowner not interested;
 - c) 49 Codfish Hill Road landowner not interested;
 - d) 47 Codfish Hill Road landowner not interested;
 - e) 55 Codfish Hill Road landowner not interested;
 - f) Codfish Hill Road (map 78 Block 55 Lot 29-4 landowner not interested;
 - g) 57 Codfish Hill Road landowner not interested;
 - h) 41 Shelley Road property is too small to host a facility. Site did not work for AT&T;
 - i) 86 Dodgingtown Road property is too small to host a facility. Site did not work for AT&T;
 - j) <u>214 Sugar Street, Newtown</u> site suggested by Town but a lease could not be obtained. Site did not work for AT&T;
 - k) 131 Taunton Hill Road, Newtown electric transmission structure suggested by Town but location did not work for AT&T;
 - l) 61 Dodgingtown Road, Newtown landowner not interested; and
 - m) 55 Dodgingtown Road, Newtown volunteer fire department property is too small to host a facility.

(NAT 1 – Attachment H; Tr. 3, pp. 92-93)

- 67. Cellco identified a need for a facility in the Bethel/Newtown area in 2013. A formal search area for available properties did not commence at that time due to budget constraints. (Cellco 2, response 10; Tr. 3, pp. 110-111)
- 68. Once Cellco learned about the proposed site, Cellco performed a radio frequency analysis and determined the site was suitable for their network needs. Cellco did not investigate other sites as this site met their service requirement. (Tr. 3, pp. 110-111, 113)
- 69. A Distributed Antenna System is not feasible for Cellco as it could only accommodate certain frequencies and would not be able to support network expansion. (Tr. 3, pp. 111-112)
- 70. Microcells and repeaters were not considered by Cellco as the as both proposed towers met their service needs. A smaller facility would not be able to provide as much service when compared to the proposed towers. (Tr. 3, pp. 110-111)
- 71. After the property lease was secured, NAT contacted all of the telecommunication carriers regarding the availability of the subject property. Only Cellco and AT&T expressed interest in the site. (Cellco 1, AT&T 1; Tr. 3, pp. 64-65)
- 72. On April 17, 2015, the Council sent notice to the telecommunications carriers indicating that the Council received an application for a facility at the proposed site and requesting notification if the carrier intends to locate on the facility in the foreseeable future. No response to the Council's inquiry was received. (Record)

Site Property and Proposed Facility Description

- 73. The proposed sites are located on an approximate 49-acre parcel at 62-64 Codfish Hill Road. The property, owned by Claudia Stone, is located on the north side of Codfish Hill Road. (NAT 1, p. 2, Attachment E)
- 74. The property owner's residence is located on the parcel, adjacent to Codfish Hill Road. The remaining areas of the property consist of woodland, wetlands, and old fields. (NAT 1, p. 4 aerial photograph; NAT 7 response 4)
- 75. The property is zoned residential, with a minimum gross lot area of 80,000 square feet (R-80). (NAT 1, Attachment E; NAT 7, response 2)
- 76. The property owner is amenable to constructing a facility at either proposed site. (NAT 1, Tab Q)

Proposed Site 1

- 77. Proposed Site 1 is located on the eastern portion of the parcel, in a wooded area adjacent to an old field. (NAT 1, p. 4 aerial photograph, Attachment E)
- 78. The proposed tower site is at an elevation of 596 feet amsl. (NAT 1, Attachment E)
- 79. NAT would construct a 120-foot monopole at the site, capable of supporting a tower extension to facilitate potential future tower sharing. (NAT 8; Tr. 3, pp. 68-69)
- 80. NAT would construct a 75-foot by 75-foot equipment compound within a 100-foot by 100-foot lease area. The compound would be enclosed by an eight-foot high chain link fence of one and one quarter inch mesh. (NAT 8, Tr. 3, p. 27)
- 81. Cellco would install 12 panel antennas and associated remote radio heads on an antenna platform at the 120-foot level of the tower. The antennas would extend to a height of 123 feet agl. (NAT 8)
- 82. Cellco would install a 12-foot by 26-foot equipment shelter within the compound to house its radio equipment and emergency power generator. (NAT 8; Cellco 2, response 12; Tr. 3, p. 96)
- 83. NAT would construct an approximate 12-foot wide, 1,650-foot long access drive to the tower site, generally following existing dirt roads on the property. (NAT 1, Attachment E)
- 84. Utility connections servicing the compound would be installed underground along the access drive, originating from existing service on Codfish Hill Road. (NAT 1, Attachment E; Tr. 1, p. 19)
- 85. Land use within a quarter-mile of the tower site consists of undeveloped woodland and fields on the host property, residential and dedicated open space. (NAT 1, p. 32; NAT 7, response 1, Attachment E)
- 86. The property owner's residence is located approximately 1,120 feet south of the proposed tower site. (NAT 1, Attachment E)
- 87. There are 15 residential dwellings within 1,000 feet of the site. The nearest residence is approximately 495 feet south of the site, located at 74 Codfish Hill Road. (NAT 1, Attachment E; NAT 3, response 4)

- 88. The nearest property boundary from the proposed tower is approximately 330 feet to the south at 74 Codfish Hill Road. The property at 80 Codfish Hill Road, abutting both the host property and 74 Codfish Hill Road is approximately 340 feet south of the tower site. (NAT 1, Attachment E)
- 89. The estimated construction cost of the proposed Site 1 facility is as follows:

Tower/foundation	\$ 85,000.
Utilities	45,000.
Site development	160,000
Cellco's equipment	300,000.
Total Site 1 Cost	\$590,000.
(NAT 1, p. 36) 1	

Proposed Site 2

- 90. Proposed Site 2 is located in a wooded area in the central portion of the parcel. An old field area is located east of the site. (NAT 1, p. 4 aerial photograph, Attachment F)
- 91. The proposed tower site is at an elevation of 567 feet amsl. (NAT 1, Attachment F)
- 92. NAT would construct a 150-foot monopole at the site, capable of supporting a tower extension to facilitate potential future tower sharing. (NAT 9; Tr. 3, pp. 68-69)
- 93. NAT would construct a 75-foot by 75-foot equipment compound within a 100-foot by 100-foot lease area. The compound would be enclosed by an eight-foot high chain link fence of one and one quarter inch mesh. (NAT 9; Tr. 3, p. 27)
- 94. Cellco would install 12 panel antennas and associated remote radio heads on an antenna platform at the 150-foot level of the tower. The antennas would extend to a height of 153 feet agl. (NAT 9)
- 95. Cellco would install a 12-foot by 26-foot equipment shelter within the compound to house its radio equipment and emergency power generator. (NAT 9; Cellco 2, response 12; Tr. 3, p. 96)
- 96. NAT would construct a 12-foot wide, 860-foot long access drive to the tower site. The gravel drive would generally follow an existing dirt road on the property that extends from Codfish Hill Road. (NAT 1, p. 9, Attachment F)
- 97. Utility connections servicing the compound would be installed underground along the access drive, originating from existing service on Codfish Hill Road. (NAT 1, Attachment F; Tr. 1, p. 19)
- 98. Land use within a quarter-mile of the tower site consists of undeveloped woodland and fields on the host property, residential and dedicated open space. (NAT 1, p. 32, NAT 7, response 1, Attachment E)
- 99. The property owner's residence is located approximately 610 feet south of the proposed tower site. (NAT 1, Attachment F)
- 100. There are 10 residential dwellings within 1,000 feet of the site. The nearest residence is approximately 610 feet southeast of the site, located at 74 Codfish Hill Road. (NAT 1, Attachment F) ; NAT 3, response 4)

- 101. The nearest property boundary from the proposed tower is approximately 475 feet to the southeast at 74 Codfish Hill Road. (NAT 1, Attachment F; Tr. 1, p. 72)
- 102. The estimated construction cost of the proposed Site 2 facility is as follows:

Tower/foundation	\$ 95,000.
Utilities	35,000.
Site development	125,000
Cellco's equipment	300,000.
77 (18) 0.0	#FFF 000

Total Site 2 Cost (NAT 1, p. 37)

\$555,000.

Emergency Backup Power

- 103. In response to two significant storm events in 2011, Governor Malloy formed a Two Storm Panel (Panel) that was charged with an objective review and evaluation of Connecticut's approach to the prevention, planning and mitigation of impacts associated with emergencies and natural disasters that can reasonably be anticipated to impact the state. (Council Administrative Notice Item No. 40)
- 104. In accordance with CGS §16-50ll, the Council, in consultation and coordination with DEEP, DESPP and the Public Utilities Regulatory Authority, studied the feasibility of requiring backup power for telecommunications towers and antennas, as the reliability of such telecommunications service is considered to be in the public interest and necessary for the public health and safety. The study was completed on January 24, 2013. (Council Administrative Notice Item No. 25)
- 105. The Council reached the following conclusions in the study:
 - a) "Sharing a backup source is feasible for CMRS [mobile radio service] providers, within certain limits. Going forward, the Council will explore this option in applications for new tower facilities;" and
 - b) "The Council will continue to urge reassessment and implementation of new technologies to improve network operations overall, including improvements in backup power."
 (Council Administrative Notice Item No. 25)
- 106. Cellco proposes to install a 35-kilowatt diesel-fueled back-up generator in their equipment shelter. The generator could run for up to 68 hours assuming a full fuel tank and normal Cellco facility operating conditions. (Cellco 3, response 4)
- 107. According to R.C.S.A. §22a-69-1.8, noise created as a result of, or relating to, an emergency, such as an emergency backup generator, is exempt from the State Noise Control Regulations. (R.C.S.A. §22a-69-1.8)

Environmental Considerations

- 108. The State Historic Preservation Office reviewed the project and determined the project would have no effect on historic properties or cultural resources. There are no properties or districts listed on the National Register of Historic Places within a half-mile of the site property. (NAT 1, Attachment J, Attachment L)
- 109. Development of Site 1 would require the removal of 67 trees with a diameter of six inches at breast height. NAT could reconfigure the middle section of the proposed access drive to avoid removing five large trees that border an old field area. (NAT 1, Attachment E; NAT 7, response 3; Tr. 1, pp. 16-18)

- 110. Development of Site 2 would require the removal of 63 trees with a diameter of six inches at breast height. (NAT 1, Attachment E; NAT 7, response 3)
- 111. Five wetlands were delineated on the site property near the project area (refer to Figure 8). Wetland delineation methodology was consistent with both the Connecticut Inland Wetlands and Watercourse Act and the Army Corp of Engineers Wetland Delineation Manual and associated regional supplement. (NAT Attachment N)
- 112. The nearest wetland to the proposed Site 1 compound area is 180 feet to the north. This wetland, identified as Wetland 2, is a forested hillside seep wetland system with soil saturation occurring at or near the surface. Two wetlands, Wetlands 3 and 4, are located approximately 85 feet from the Site 1 access drive development area. Wetland 3, located south of the access drive, consists of an eroded channel in an old farm road that functions as a seep and incised intermittent watercourse. Wetland 4 is a forested hillside seep that is seasonally saturated. (NAT 1, Attachment N)
- 113. The nearest wetland to the Site 2 development area is Wetland 3, approximately 48 feet to the south. A second wetland, Wetland 4 is approximately 50 feet northwest of the compound development area. (NAT 1 Attachment F, Attachment N)
- 114. The wetlands proximate to both sites do not exhibit vernal pool characteristics. The nearest vernal pool may occur in a depressional wetland area 750 feet northwest of Site 2. (Tr. 3, pp. 44-45)
- 115. There is no significant difference in wetland impacts between the two sites. (Tr. 3, pp. 42-43)
- 116. The property contains numerous rock outcroppings. NAT anticipates to remove rock using chipping or by heavy machinery. If bedrock is too shallow to accommodate the underground utilities at normal trenching depths, NAT could encase the conduits in concrete to reduce the amount of rock excavation necessary for the excavation. (Tr. 1, pp. 52-55)
- 117. Throughout the construction period of the proposed facility, NAT would implement and maintain appropriate soil erosion and sedimentation control measures, in accordance with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control established by the Connecticut Council for Soil and Water Conservation, in cooperation with the DEEP. (NAT 1, p. 26)
- 118. Neither site is within a designated Federal Emergency Management Agency flood zone. (NAT 1, p. 26)
- 119. At both sites, NAT would install level spreaders as part of the access drive design to direct and reduce the flow rate of storm water to maintain drainage natural patterns. (NAT 1, Attachment E, Attachment F; Tr. 1, pp. 52-54; 100-102)
- 120. The property is in proximity to known records of the eastern box turtle and the wood turtle, both State species of special concern. NAT would implement a Turtle Protection Program for both species that includes DEEP-recommended construction practices to reduce impact to turtle populations. (NAT 1, Attachment L)
- 121. There are no DEEP designated critical habitats near the sites. The nearest critical habitat is a palustrine flood plain forest associated with Limekiln Brook, approximately 2.25 miles to the northwest. (NAT 1, Attachment M)

- 122. The proposed facilities are not located near an Important Bird Area (IBA), as designated by the National Audubon Society. The nearest IBA to the proposed tower site is the Devil's Den property in Redding approximately 6.8 miles southwest of the host property. Given the distance between the site and the IBA, no adverse impact to the IBA is expected. (NAT 1, Attachment M)
- 123. The proposed facilities would comply with the United States Fish and Wildlife Service guidelines for minimizing the potential for telecommunications towers to impact bird species, including a tower height less than 199 feet, no lights on the tower, and no guy wires. Recent studies have shown that towers less than 300 feet high rarely result in migratory bird collisions. (Council Administrative Notice No. 14; NAT 1, Attachment M)
- 124. Site construction would require the removal of trees and mature vegetation that has the potential to support breeding birds protected by the Migratory Bird Treaty Act. To reduce potential disturbance during periods of high bird activity, it is recommended that construction activities not occur from April 15 through July 15. (NAT 1, Attachment L, p. 5)
- 125. The equipment shelter would have air conditioning units. Noise from the air conditioning units would comply with State noise control criteria. The Site 2 location would have less of a noise impact to area receptors than Site 1 as it is more centrally located on the parcel. (Tr. 3, pp. 90-91)
- 126. The cumulative worst-case maximum power density from the radio frequency emissions from the operation of proposed antennas operated by Cellco is 34.2 percent and 17.4 percent of the standard for the General Public/Uncontrolled Maximum Permissible Exposure, as adopted by the FCC, at the base of the proposed Site 1 and Site 2 towers, respectively. 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 telecommunication carrier 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 telecommunication carriers 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. (Council Administrative Notice Item No. 2; Cellco 4, Attachment 2)

Visibility

127. Based on field reconnaissance and computer modeling, the estimated visibility of the proposed towers within a two-mile radius of each site is as follows:

Parameter	Site 1 (120 feet agl)	Site 2 (150 feet agl)
Year-round visibility (acres)	77	139
Additional seasonal visibility (acres)	321	264
Residential dwellings with year-round views	24	11

Tree heights in the site area are variable, with taller specimens ranging from 60 to 90 feet agl. (NAT 10, p. 2; Tr. 1, p. 29; Tr. 3, pp. 33-34)

128. The visibility model indicates Site 2 would be visible from a larger area than Site 1 by 62 acres. Most of this additional acreage occurs within 1,300 feet of Site 2, notably along Codfish Hill Road southwest of the site, from the fields on the host property, north off property near Settlers Road, and from the Bethel High School area over a mile west of the site property. (NAT 10)

- 129. A majority of near views from off-parcel locations are through intervening trees. At a distance of three-quarters of a mile, larger openings appear in the surrounding tree canopy allowing for unobstructed views of both facilities from certain locations. (NAT 10; Tr. 3, p. 34)
- 130. There would be little difference in far distance views of the towers above the tree canopy as the overall height of both towers are the same above ground (717 feet above mean sea level). Most of the differences in visibility would be from near-view areas. (Tr. 3, pp. 87-90)
- 131. Potential visibility of the proposed 120-foot Site 1 facility from specific locations within a two-mile radius of the site is presented in the table below:

Specific Location	Photo location on Map*	Approx. Portion of Facility Visible	Approx. Distance & Direction to Tower
#39 Shelly Road	1	Year-round – 20 feet	0.9 mile south
Adjacent to #10 Lime Kiln Court	2	Not visible	0.7 mile south
Adjacent to #3 Race Brook Drive	3	Seasonal – top of tower	0.7 mile southwest
Boulder Creek Road cul-de- sac	4	Seasonal – 30 feet	0.9 mile southwest
Adjacent to #5 Rooster Ridge Road	5	Not visible	0.8 mile southwest
Adjacent to #10 Aunt Patty's Lane East	6	Year-round 15 feet	0.9 mile northwest
Adjacent to #15 Twin Maple Drive	7	Seasonal – 15 feet	0.2 mile west
Hillside Court cul-de-sac	8	Seasonal – barely discernible through trees	0.2 mile south
Adjacent to #33 Windaway Road	9	Not visible	0.3 mile east
Adjacent to #37 Codfish Hill Road	10	Seasonal – 20 feet	0.2 mile north
Ichabod Road	11	Not visible	0.4 mile northeast
Adjacent to #12 Ichabod Road	12	Seasonal – 15 feet	0.5 mile northeast
Codfish Hill Road and Wolf Pits Road	13	Seasonal – 20 feet	0.6 mile northeast
Adjacent to #9 Wolf Pits Road	14	Year-round - 35 feet	0.7 mile east
Governor's Lane	15	Seasonal – barely discernible against hillside	1.2 mile northeast
Adjacent to #62 Midway Drive	16	Seasonal - 50 feet	1.2 mile east
Bethel High School	17	Year-round – 15 feet	1.2 mile southeast
Adjacent to #66 Linda Lane	18	Seasonal – barely discernible through trees	0.6 mile southeast
Allen Way cul-de-sac	19	Seasonal – 25 feet	0.6 mile southeast
Adjacent to #7 Kellogg Road	20	Seasonal – top of tower	0.7 mile southeast
			

^{*}Map with photo-locations attached as Figure 9. (NAT 10, Attachment 9; Cellco 3 response 14)

132. Potential visibility of the proposed 150-foot Site 2 facility from specific locations within a two-mile radius of the site is presented in the table below:

Specific Location	Photo location on Map*	Approx. Portion of Facility Visible	Approx. Distance & Direction to Tower
#39 Shelly Road	1	Year-round – 20 feet	1.0 mile southwest
Adjacent to #10 Lime Kiln Court	2	Not visible	0.8 mile south
Adjacent to #3 Race Brook Drive	3	Not visible	0.7 mile southwest
Boulder Creek Road cul-de- sac	4	Seasonal – top of tower	1.0 mile southwest
Adjacent to #5 Rooster Ridge Road	5	Not visible	0.9 mile southwest
Adjacent to #10 Aunt Patty's Lane East	6	Not visible	0.8 mile northwest
Adjacent to #15 Twin Maple Drive	7	Not visible	0.2 mile west
Adjacent to #6 Hillside Court	8	Not visible	0.3 mile southwest
Adjacent to #35 Windaway Road	9	Seasonal – 60 feet	0.3 mile southeast
Windaway Road	10	Seasonal – 50 feet	0.3 mile southeast
Unnamed Road off Codfish Hill Road	11	Seasonal – top of tower	0.3 mile northwest
Adjacent to #4 Ichabod Road	12	Seasonal 40 feet	0.5 mile northeast
Ichabod Road	13	Seasonal – 40 feet	0.4 mile northeast
Codfish Hill Road and Wolf Pits Road	14	Seasonal - 30 feet	0.6 mile northeast
Adjacent to #18 Wolf Pits Road	15	Year-round – 55 feet	0.7 mile east
Adjacent to #140 Hoyts Hill Road	16	Year-round – 60 feet	1.1 mile northeast
Bethel High School	17	Year-round – 35 feet	1.3 mile southeast
Adjacent to #11 Judd Lane	18	Year-round 40 feet	1.3 mile southeast
Adjacent to #64 Linda Lane	19	Year-round – 50 feet	0.7 mile southeast
Adjacent to #20 Kellogg Rd.	20	Seasonal – 15 feet	0.6 mile southeast
Adjacent to #9 Wolf Pits Road	No photo	Year-round – 35 feet	0.7 mile southeast

^{*}Map with photo-locations attached as Figure 9. (NAT 10, Tr. 1, pp. 70-71; Tr. 3, pp. 87-90)

- 133. The Site 2 location offers more screening than Site 1 when viewed from Twin Maple Drive as it is 725 feet farther west than Site 1. (NAT 1, p. 4b; Tr. 3, pp. 87-88)
- 134. The Site 2 location is closer to and more visible from the property owner's residence than Site 1. (NAT 10)
- 135. The Site 1 location would be generally less visible than Site 2 from surrounding areas because it is 30 feet shorter in height. (Tr. 3, pp. 52-53, 77-78, 86)

- 136. The nearest residence to Site 1, 74 Codfish Hill Road, may have limited seasonal views of the compound area. The tower itself would be visible during leaf-off conditions. The upper portion of the Site 2 facility would be visible through the trees from this property during leaf-off conditions (refer to Figure 1). (Tr. 1, pp. 21-24; Tr. 3, pp. 52-53)
- 137. During preliminary analysis for the preparation of the application, NAT performed a balloon float of Site 1 in November 30, 2013. Although NAT did not notify area residents of the balloon fly, CHET members that reside at 80-82 Codfish Hill Road, 86 Codfish Hill Road, 8 Twin Maple Drive, and 12 Twin Maple Drive observed the balloon through intervening trees from their properties. (Tr. 3, pp. 13 20, 28-30)
- 138. During the balloon fly held as part of the Council's proceeding on June 2, 2015, CHET members that reside at 8 Twin Maple Drive and 12 Twin Maple Drive observed the Site 1 balloon (flown at 150 feet) from their properties through an opening in the intervening tree canopy. (Tr. 3, pp. 14-20)
- 139. A monopine at either site would be beneficial for near tower views, especially when viewed through existing vegetation. When viewed from a distance from select locations, a monopine at either site would extend significantly above the existing tree canopy. At far distances, a monopine would be indistinguishable from a real tree. (Tr. 3, pp. 30-32, 55, 60-63)
- 140. CHET favors a monopine configuration, as it would blend in with the tree canopy in respect to near and intermediate views, offering meaningful visual relief to nearby residences with views of the facility. (Tr. 3, pp. 20-22; 30-31)
- 141. CHET would favor a tower that reduces the visual mass of the antennas, such as a flagpole type tower. (CHET 4, response 11)
- 142. A tower and antennas with a dark color finish would be of benefit for locations where the tower can be viewed through intervening vegetation. (Tr. 1, pp. 37-38)
- 143. There are no "blue blazed" hiking trails maintained by the Connecticut Forest and Parks Association within two miles of the site. There would be no views of the proposed sites from the hiking trails within Huntington State Park, approximately 1.7 miles south of the host property (NAT 10; Council Administrative Notice Item No. 55)
- 144. There are no Town or State scenic roads within two miles of the site. (NAT 10; Tr. 3, pp. 34-35)
- Pursuant to C.G.S § 16-50p(a)(3)(G), no schools or commercial day care centers are within 250 feet of the host property. The nearest school is Bethel High School, located 1.25 miles west of the host property. The nearest commercial daycare is located at 26 Dodgingtown Road, approximately 0.87 mile to the west. (NAT 1, Attachment I)

12 Twin Maple Dr. 62-64 Codfish Hill Rd. property line Site 1 62-64 Codfish Hill Rd residence 74 Codfish Hill Rd. (NAT 1, p. 4b)

Figure 1 - Aerial Photograph of Proposed Site Locations

BETHEL NORTH C GERMANTOWN CT Tayler Ho NEWTOWN WEST BETTEL BETHEL EAST CT SITE 2 CONTROLL CONTROLL CONTROLL CONTROL CON BETHEL CT 58 Legend Proposed Verizon Wireless Facility Existing Verizon Wireless Facilities

1 inch = 0.7 mile

Figure 2 - Cellco Existing 700 MHz service

(Cellco 2, Attachment 1)

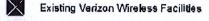
Existing Surrounding Wireless 700 MHz Coverage

BETHEL NORTH CT GERMANTOWN CT NEWTOWN WEST 型 alle Mar-BETHEL EAST CT SITE 1 AT 120' AGL BETHEL CONTRACTOR BETHEL CT

Figure 3 - Cellco Existing and Proposed 700 MHz service

Legend









1 inch = 0.7 mile

Projected Service from Site 1 shown. Service from Site 2 would be similar.

(Cellco 4, Attachment 1; Tr. 3, pp. 104-105)

BETHEL NORTH GERMANTOWN C X BETHELLEAST CT (SITE BETHEL EAST CT SITE 2 BETHEL CT

Figure 4 – Cellco Existing 2100 MHz service

Legend

X

Proposed Verizon Wireless Facility



Existing Verizon Wireless Facilities



Existing Surrounding Wireless 2100 MHz Coverage



1 inch = 0.7 miles

(Cellco 2, Attachment 1)

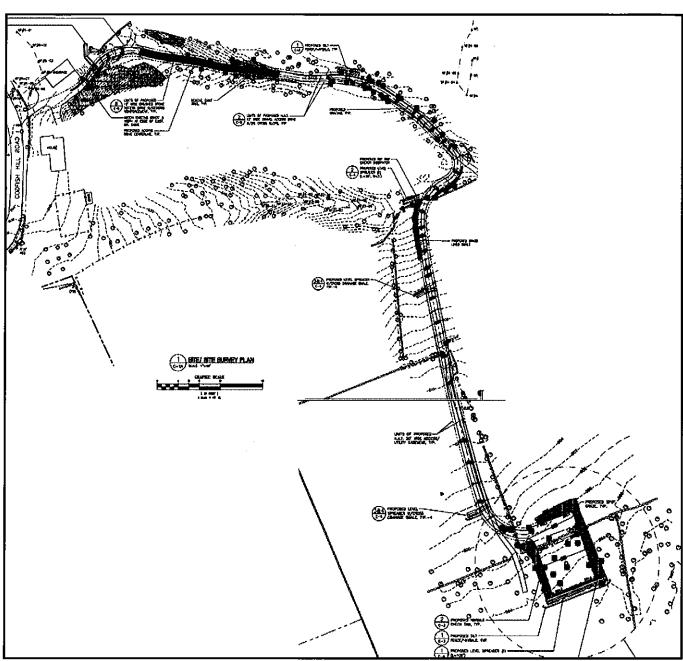
BETHEL NORTH Cap. BETHEL EAST CT SITE 1 AT 120' AGL Bernel BETHEL CT Legend Proposed Verizon Wireless Facility Existing Verizon Wire'ess Facilities Existing Surrounding Wireless 2100 MHz Coverage Proposed Facility Wireless 2100 MHz Coverage 1 inch = 0.7 miles.

Figure 5 - Cellco Existing and Proposed 2100 MHz service

Projected Service from Site 1 shown. Service from Site 2 would be similar.

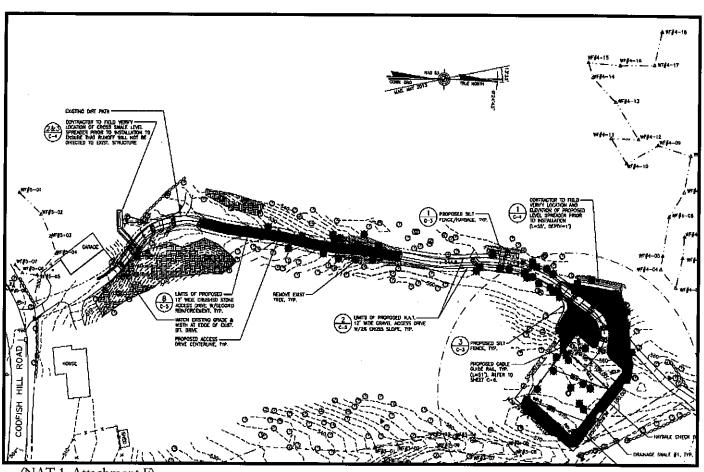
(Cellco 4, Attachment 1; Tr. 3, pp. 104-105

Figure 6 - Site 1 Layout



(NAT 1, Attachment E)

Figure 7 – Site 2 Layout



(NAT 1, Attachment F)

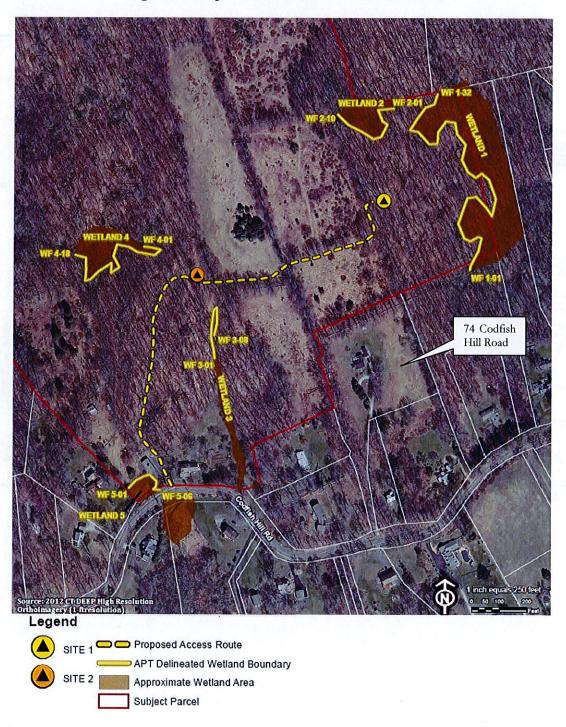
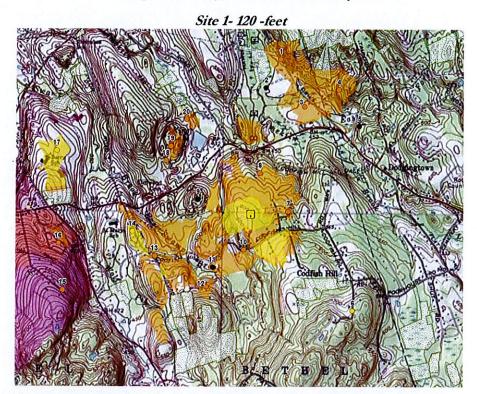
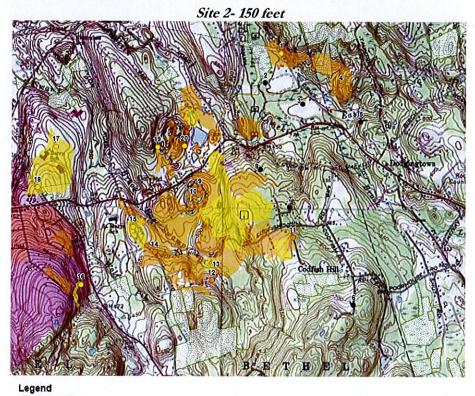


Figure 8 - Proposed Sites with delineated wetlands

(NAT 1, Attachment L wetland report)

Figure 9 - Projected Tower Visibility





Predicted Seasonal Visibility
Predicted Year-Round Visibility

0.6 inch = 0.25 mile (NAT 10)

Not Visible

DOCKET NO. 458 – Florida Tower Partners LLC d/b/a }

North Atlantic Towers Application for a Certificate of
Environmental Compatibility and Public Need for the }

construction, maintenance, and operation, of a telecommunications facility at one of two locations at Bethel Tax }

Assessor's Map 65, Block 57, Lot 122, 62-64 Codfish Hill Road,
Bethel, Connecticut.

Connecticut

September 17, 2015

Opinion

On March 19, 2015, Florida Tower Partners LLC d/b/a North Atlantic Towers (NAT) 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 to be located at one of two locations at 62-64 Codfish Hill Road in Bethel, Connecticut. The purpose of the proposed facility is to provide reliable wireless service in the eastern section of Bethel and western section of Newtown. The intervenors in this proceeding are Cellco, which would locate at the proposed facility, and the Codfish Hill Environmental Trust.

The proposed sites were initially developed by NAT in collaboration with New Cingular Wireless PCS, LLC (AT&T) who intervened in the proceeding but withdrew its intervenor status due to business reasons. Initially, NAT and AT&T separately established search areas for a facility in the eastern Bethel-western Newtown region in 2010, and subsequently worked together to find a suitable location for a telecommunications facility. Properties were examined within the search area that could support a telecommunications tower. The property selection process included an analysis of the properties' physical characteristics as well as an evaluation of radio frequency performance from the property. If a parcel was determined to be suitable for a telecommunications tower, the land owner has to be willing to negotiate a lease. Besides the host property, NAT/AT&T examined 13 other properties for a telecommunications facility, including locations recommended by the Town of Bethel, but none of these other locations were feasible. Cellco intervened after the application was filed with the Council, stating that either proposed site would meet its wireless service needs.

The proposed sites are located on a 49-acre residentially-zoned parcel at 62-64 Codfish Hill Road. The property, located on the north side of Codfish Hill Road, consists of a mix of woodlands, wetlands and old fields. The property owner's residence is located on the parcel, adjacent to Codfish Hill Road.

Proposed Site 1 is located in a wooded area on the eastern portion of the parcel. NAT would construct a 120-foot monopole and an associated 75-foot by 75-foot equipment compound in this location. The nearest property boundary from the proposed tower is approximately 330 feet to the south. There are 15 residential dwellings within 1,000 feet of the site and the property owner's residence is located approximately 1,120 feet south of the site.

Proposed Site 2 is located in a more central area of the property, in a wooded area adjacent to an old field. NAT would construct a 150-foot monopole and an associated 75-foot by 75-foot equipment compound in this location. The nearest property boundary from the proposed tower is approximately 475 feet to the southeast. There are 10 residential dwellings within 1,000 feet of the site and the property owner's residence is located approximately 610 feet south of the site.

Access to both sites begins at the paved driveway serving the property owner's residence along Codfish Hill Road. From the residence, the access drive to both sites would generally follow an existing dirt road through wooded areas on the property, with the longer access drive to Site 1 cutting across a field area. The dirt road would be re-graded, widened to 12 feet and surfaced with gravel. The Site 1 driveway would be 1,650 feet long whereas the Site 2 driveway would be 860 feet long. Utility connections would be routed underground within the access drive, originating from a utility pole on Codfish Hill Road. In the event of a power outage, Cellco would rely on a diesel-fueled emergency power generator installed within its equipment shelter to provide up to 68 hours of power before the generator would need refueling.

As for Cellco's wireless service needs, Cellco currently operates four facilities that provide service to portions of the eastern Bethel - western Newtown area; however, Cellco, through radio frequency propagation modeling demonstrated a need to provide wireless service to several existing service gaps in the area and has presented a need to offload capacity from adjacent sites created by high volumes of customer data traffic. At either proposed site, Cellco would deploy 700 MHz (long-term evolution - LTE) and 2100 MHz (advanced wireless service - AWS) services. Both the 700 MHz and 2100 MHz frequencies would provide LTE data and voice services. Cellco would also install antennas capable of providing 850 MHz and 1900 MHz equipment to provide Code Division Multiple Access (CDMA) voice and data services. Cellco would need an antenna height of 120 feet at proposed Site 1 and 150 feet at proposed Site 2 to meet wireless service objectives.

Either of the proposed sites would meet Cellco's objectives by providing reliable 700 MHz and 850 MHz wireless service to identified service gaps on Route 302, Route 58, Old Hawleyville Road, Plumtrees Road and surrounding areas. Necessary service would also be provided for the 1900 MHz and 2100 MHz networks but some service gaps would still remain after deployment due to the limited range of these frequencies. The proposed facility would also provide capacity relief to Cellco's adjacent sites, particularly to the 700 MHz alpha sector at Cellco's 38 Spring Hill Road, Bethel facility which has already reached capacity. After reviewing the record, the Council finds a need for wireless service in the area that would be served by the proposed facility.

Cellco would install an equipment shelter within the compound. Noise from the equipment shelter's air conditioning units would comply with State noise control criteria. The Site 2 location would have less of a noise impact to area receptors than Site 1 as it is more centrally located on the parcel.

Development of either site would require the removal of a similar amount of trees with a diameter of six inches or greater at breast height: 67 trees for Site 1 and 63 trees at Site 2. NAT could reconfigure the proposed Site 1 access drive to avoid the removal of five large trees adjacent to an old field area.

The host property is proximate to known records of the eastern box turtle and the wood turtle, both State listed species of special concern. NAT would implement a Turtle Protection Program for both species that includes Department of Energy and Environmental Protection recommended construction practices to reduce the potential for construction related impacts to turtle populations that may occur in the vicinity of the site.

Docket 458 Opinion Page 3

Five wetlands were identified on the host property, generally located within wooded areas between the old field areas. None of the wetlands exhibited vernal pool characteristics. The access drives to both sites would pass within 85 feet of wetland resources. The Site 1 compound development area is approximately 180 feet south of the nearest wetland whereas the Site 2 development area is approximately 50 feet north and southeast of the nearest wetland areas. There is no significant difference in regards to construction related impact between the two proposed sites. To protect wetland resources during construction, NAT would implement and maintain appropriate soil erosion and sedimentation control measures in accordance with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control.

Although the proposed facilities comply with the United States Fish and Wildlife Service guidelines for minimizing the potential for telecommunications towers to impact bird species, site construction would require the removal of trees and mature vegetation that could support breeding birds protected by the federal Migratory Bird Treaty Act. To reduce the potential of disturbance to breeding birds, the Council will order that tree clearing activities not occur from April 15 through July 15.

The State Historic Preservation Office reviewed the project and determined that development of either site would have no effect on historic properties or cultural resources. There are no properties or districts listed on the National Register of Historic Places within a half-mile of the site property.

The visual impact of both sites is similar as both proposed sites are located within mature wooded areas on the parcel that serve to screen the facility from near view areas. Visibility modeling of areas within two-miles of each site indicates Site 1 would be visible year-round from 77 acres and seasonally visible from an additional 321 acres. Site 2 would be visible year-round from 139 acres and seasonally visible from an additional 264 acres. Although the Site 1 location has less of a land area with year-round visibility than Site 2, it would be visible year-round within three quarters of a mile from 12 more residences than Site 2. During the hearing, the Council inquired about the suitability of designing the tower as a monopine, but upon further consideration, the Council finds that a monopine would appear bulky and more prominent than a monopole, especially when viewed from areas where the tower extends well above the tree canopy.

After reviewing Cellco's wireless service needs and the environmental and visibility impacts of both proposed sites, the Council finds Site 2 preferable as it is more centrally located on the parcel, a location recommended by the Town during the pre-application municipal consultation process, offering more screening from a majority of the surrounding roads and residential areas surrounding the parcel than Site 1. Site 2 is also closer and more visible to the property owner's residence than Site 1. Development of Site 2 would also minimize disturbance to the property as it requires a shorter access drive and avoids disturbance to the woodland and adjacent wetlands on the east side of the property.

According to a methodology prescribed by the FCC Office of Engineering and Technology Bulletin No. 65E, Edition 97-01 (August 1997), the worst-case radio frequency power density levels of Cellco's proposed antennas would be 17.4 percent of the FCC's General Public/Uncontrolled Maximum Permissible Exposure, as measured at the base of the Site 2 tower. This percentage is below federal standards established for the frequencies used by wireless companies. If federal 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. Regarding potential

Docket 458 Opinion Page 4

harm to wildlife from radio emission: this, like the matter of potential hazard to human health, is a matter of federal jurisdiction. The Council's role is to ensure that the proposed tower meets federal permissible exposure limits.

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 at proposed Site 2, 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 150-foot monopole telecommunications facility at Site 2 at 62-64 Codfish Hill Road, and deny the certification of Site 1.

Atlantic Towers Application for a Certificate of Environmental
Compatibility and Public Need for the construction, maintenance, and operation, of a telecommunications facility at one of two locations at Bethel Tax Assessor's Map 65, Block 57, Lot 122, 62-64 }
Codfish Hill Road, Bethel, Connecticut.

Connecticut

Siting

Council

September 17, 2015

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 Florida Tower Partners LLC d/b/a North Atlantic Towers, hereinafter referred to as the Certificate Holder, for a telecommunications facility at Site 2, located at 62-64 Codfish Hill Road, Bethel, Connecticut. The Council denies certification of Site 1 located at 62-64 Codfish Hill Road, Bethel, 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 Site 2 tower shall be constructed as a monopole at a height of 150 above ground level to provide the proposed wireless services, sufficient to accommodate the antennas of Cellco Partnership d/b/a Verizon Wireless and other entities, both public and private. The height of the tower may be extended after the date of this Decision and Order pursuant to regulations of the Federal Communications Commission.
- 2. The Certificate Holder shall prepare a Development and Management (D&M) Plan for Site 2 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 Bethel 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) final site plan(s) for development of the facility to include specifications for the tower, tower foundation, antennas, equipment compound including, but not limited to, fence with less than two inch mesh, radio equipment, access road, utility line, emergency backup generator that employ the governing standard in the State of Connecticut for tower design in accordance with the currently adopted International Building Code;
 - 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;
 - provisions for a Turtle Protection Program for the wood turtle and box turtle that includes DEEP-recommended construction practices to reduce potential impact to turtle populations; and
 - d) avoidance of tree clearing activities from April 15 through July 15.

- 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 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 filling 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 Bethel.
- 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 within 90 days from the one year period of cessation of service. The Certificate Holder may submit a written request to the Council for an extension of the 90 day period not later than 60 days prior to the expiration of the 90 day period.
- 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.
- 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 June 29, 2015, 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. 458** – Florida Tower Partners LLC d/b/a North Atlantic Towers Application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation, of a telecommunications facility at one of two locations at Bethel Tax Assessor's Map 65, Block 57, Lot 122, 62-64 Codfish Hill Road, Bethel, Connecticut, and voted as follows to approve the proposed Site 2, located at 62-64 Codfish Hill Road, Bethel, Connecticut, and deny certification of the proposed Site 1 at 62-64 Codfish Hill Road, Bethel, Connecticut:

Council Members	Vote Cast
Robert Stein, Chairman	Yes
James J. Murphy, Jr., Vice Chairman	Absent
// Celler /	Yes
Chairman Arthur House Designee: Michael Caron	
Commissioner Robert Klee Designee: Robert Hannon	Yes
Philip T. Ashton	Yes
Daniel P. Lynch, Jr.	Yes
Dr. Michael W. Klemens	Yes

Dated at New Britain, Connecticut, September 17, 2015.